500M (000140-), 520M (110000-) and 540M Loaders Operator’s Manual (Export Edition)

JOHN DEERE

OPERATOR'S MANUAL

500M (000140-), 520M (110000-) and 540M Loaders (Export)

OMPXX17352 ISSUE A6 (ENGLISH)

John Deere Mexico
Export Edition
PRINTED IN U.S.A.

Introduction

Foreword

READ THIS MANUAL carefully to learn how to operate and service your machine correctly. Failure to do so could result in personal injury or equipment damage. This manual and safety signs on your machine may also be available in other languages. See www.techpubs.deere.com (Ag&Turf/JDPS), www.johndeeretechinfo.com (C&F), or your John Deere dealer to order.

THIS MANUAL SHOULD BE CONSIDERED a permanent part of your machine and should remain with the machine when you sell it.

MEASUREMENTS in this manual are given in both metric and customary U.S. unit equivalents. Use only correct replacement parts and fasteners. Metric and inch fasteners may require a specific metric or inch wrench.

RIGHT-HAND AND LEFT-HAND sides are determined by facing in the direction of forward travel.

WRITE PRODUCT IDENTIFICATION NUMBERS (PIN) in the Specification or Machine Numbers section. Accurately record all the numbers to help in tracing the machine should it be stolen. PIN information is helpful when ordering parts. File the identification numbers in a secure place off the machine.

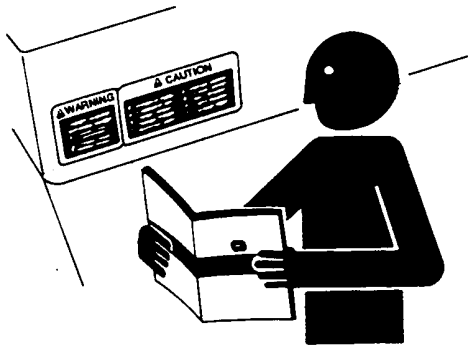
WARRANTY is provided as part of John Deere's support program for customers who operate and maintain their equipment as described in this manual. The warranty is explained on the warranty certificate or statement which you should have received at time of purchase.

This warranty provides you the assurance that John Deere will back its products where defects appear within the warranty period. In some circumstances, John Deere also provides field improvements, often without charge to the customer, even if the product is out of warranty. Should the equipment be abused, or modified to change its performance beyond the original factory specifications, the warranty will become void and field improvements may be denied. Setting fuel delivery above specifications or otherwise overpowering machines will result in such action.

If you are not the original owner of this machine, it is in your interest to contact your local John Deere dealer to inform them of this unit's serial number. This will help John Deere notify you of any issues or product improvements.

DX,IFC1-19-03APR09

John Deere Is at Your Service



TS201—UN—15APR13

Customer satisfaction is important to John Deere.

Our dealers strive to provide you with prompt, efficient parts, and service:

• Maintenance and service parts to support your equipment.

• Trained service technicians and the necessary diagnostic and repair tools to service your equipment.

• **John Deere replacement parts, repair services, and information for maintenance or repair are available. For more information, please visit deere.com or deere.ca.**

DX,IFC,JDS-19-30SEP25

Trademarks

Trademarks	
TouchSet™	Trademark of Deere & Company
CommandARM™	Trademark of Deere & Company
Grease-Gard™	Trademark of Deere & Company

YMTKZV1,1764587247004-19-01DEC25

Contents

Continued on next page

Original Instructions. All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

Product View

APY88260—UN—08DEC23

500M Non-Self-Leveling Loader Shown

APY88261—UN—08DEC23

520M Non-Self-Leveling Loader Shown

APY93020—UN—25JAN24

540M Mechanical Self-Leveling Loader Shown

uuf6xgz,1701948257957-19-25JAN24

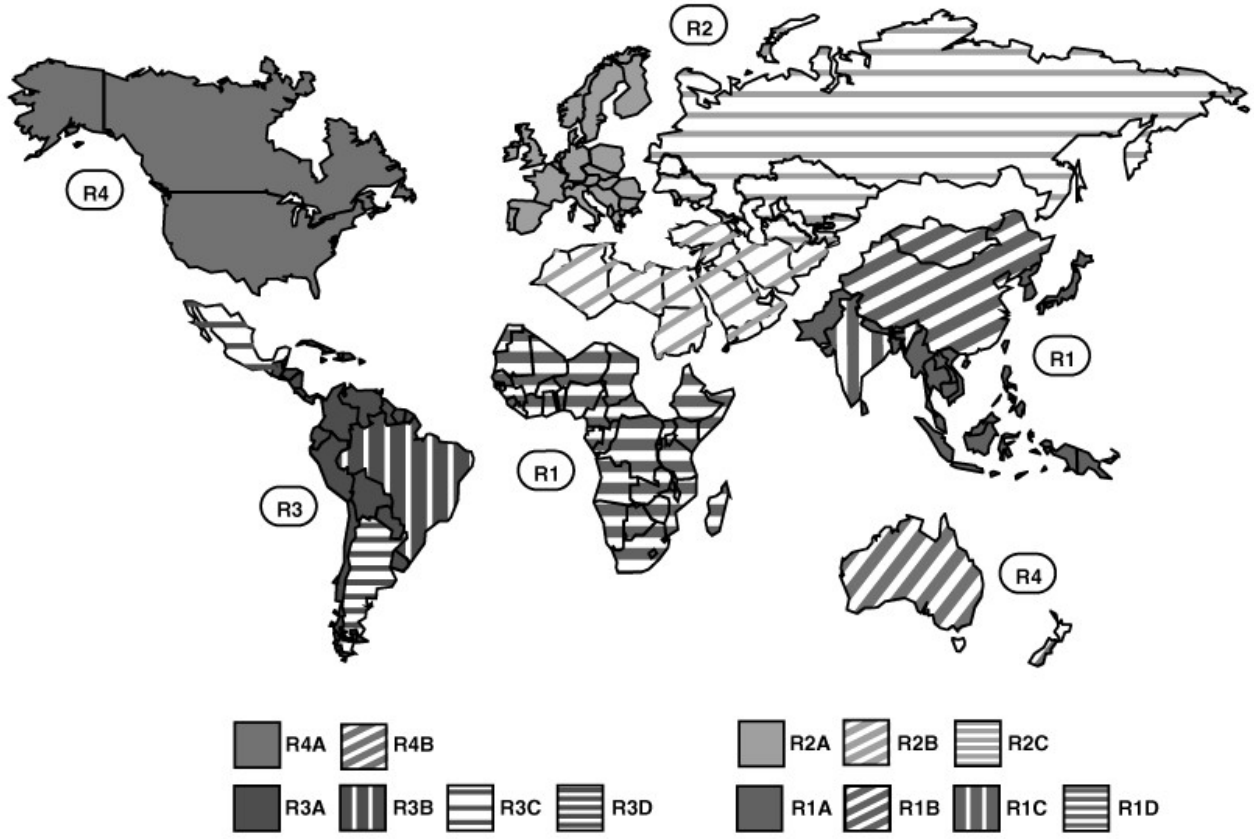
Abbreviations

The following abbreviations are used in this manual:

- 2WD: Two-Wheel Drive
- MFWD: Mechanical Front-Wheel Drive
- PIN: Product Identification Number
- ROPS: Roll-Over Protective Structure
- SCV: Selective Control Valve (Tractor Hydraulics)

OUO6064,0001FA4-19-09NOV17

Regions and Country Versions



RXA0150915—UN—01FEB16

R1—Asia and Sub-Saharan Africa
R1A—Far East, Sri Lanka and Pakistan
R1B—China
R1C—India
R1D—Sub-Saharan Africa
R2—Europe, North Africa, Mid East, CIS
R2A—European Union (EU 28+)
R2B—North Africa and North Middle East (NANME)
R2C—Common Wealth of Independent States (CIS)
R3—Central and South America
R3A—Latin America (JDLA)
R3B—Brazil
R3C—Mexico
R3D—Argentina
R4—North America
R4A—USA and Canada
R4B—Oceania (Australia and New Zealand)

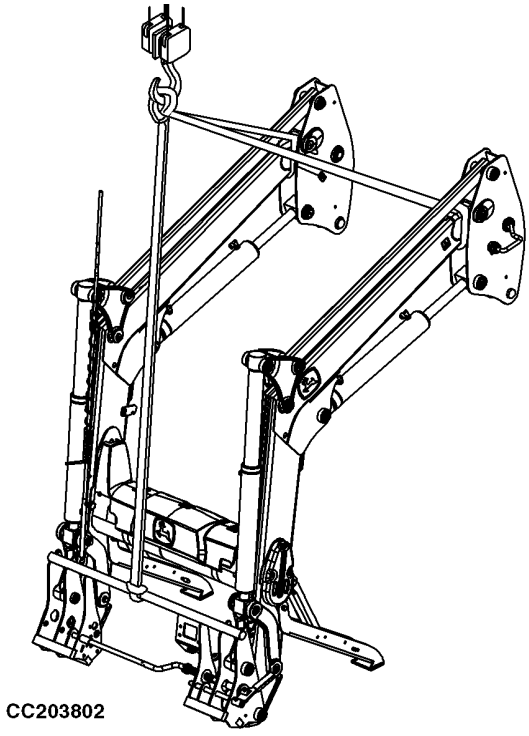
Regions 1, 2 and 3 equipment is traditionally manufactured with Economic Commission for Europe (ECE) features or systems.	**Region 4 equipment is traditionally manufactured with Society of Automotive Engineers (SAE) features or systems.**
Drive and signal lighting, traffic signs, safety signs, and braking features are some of the systems that differ between ECE and SAE. For example, Text-Free (pictorial only) safety signs are used for ECE while Text with Picture safety signs are used on SAE. Use information above, if equipment information is identified by regions, countries, trade federations, industry standards, or governmental regulations. *NOTE: Australia and New Zealand (R4B) are available as either region 4 and/or region 2 configurations, only using text-free safety signs.*	

OUO6064,0001FA3-19-09NOV17

To the Dealer

W22174—UN—14FEB12

(A) (Both Booms and Torque Tube)



CC203802—UN—16JUL13

520M and 540M Loaders

IMPORTANT: Prevent possible machine damage. Ensure decal adhesion. Before applying new decals, clean all dirt, grease, oil, moisture, and decal remover (if used) from application area. Surface temperature must be greater than 15°C (60°F) for best adhesion.

NOTE: Use images to identify decal locations. Perform these steps for each decal replacement:

1. *Remove paper backing from the new decal.*
2. *Align decal and press one edge of new decal onto loader.*
3. *Smooth out air pockets while slowly pressing across the decal to the opposite edge. Ensure complete decal adhesion.*

NOTE: Hoist point decals (A) are required for European CEN countries, but are optional for all other countries.

Inspect condition of hoist decals (A), replace as necessary in locations shown.

OUO6064,0001A07-19-23MAY23

To the Dealer (Australia)

WARNING

If operated incorrectly this machine could cause serious injury or death.
Read tractor and loader Operator's Manuals before operating for first time.
Refer to loader Operator's Manual for Rated Operating Load.
Follow all safety warnings on machine and in manuals.
Ensure all people are clear before operating.
Sound tractor horn before starting engine.
Lower loader, stop engine and remove key before working on machine.
Do not leave loader unattended whilst raised or with engine running.
Look up and avoid contact with overhead electrical wires or other objects.

W08186—19—12SEP06

(A)

W22749—UN—30JUL12

Left-Hand Side Boom

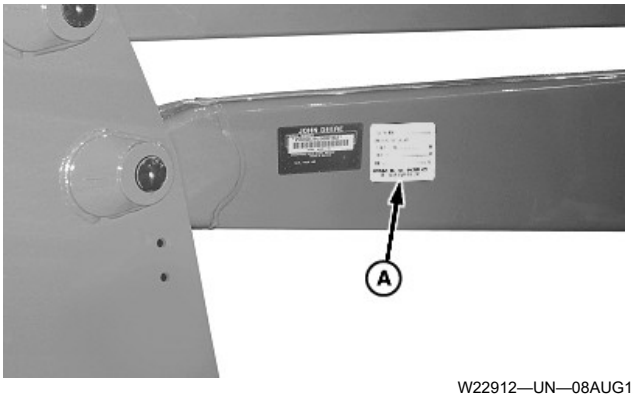
NOTE: This decal is required by the Australian Code of Practice for the manufacture and supply of front end loaders for use on agricultural tractors in Australia.

Complete the Dealer Record, Pre-Delivery, and Delivery checklists of the Operator's Manual with the purchaser.

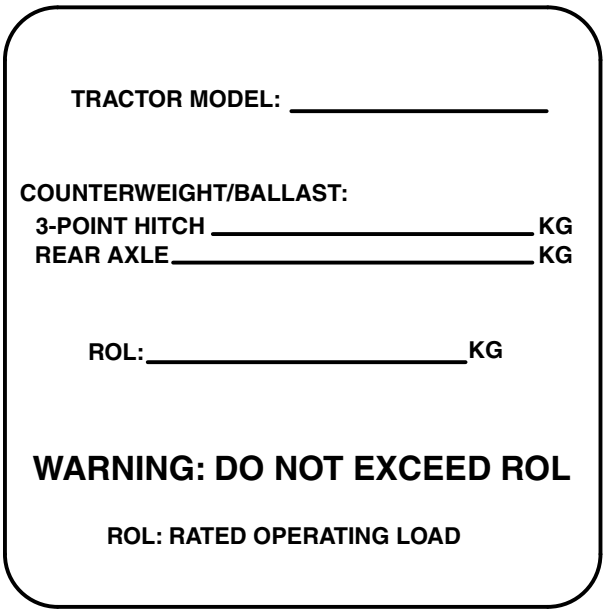
1. Both the purchaser and dealer need to sign the document.
2. Make a copy of the completed and signed checklist.
   - Original will remain in the purchaser's Operator's Manual.
   - Dealer retains the copy.

OUO6064,0001E3A-19-23MAY23

Record Tractor Information (Australia)



W22912—UN—08AUG12



W21913—UN—25JAN12

A—Identification Plate

The tractor information plate (A) is required by the NSW Australian Code of Practice. Identification plate is located on the loader next to the serial number plate. Verify that accurate tractor information is recorded on the plate and record the information here. (See Prepare Tractor section for tractor set-up information.) If loader is installed on a different tractor, update the information on this page and replace and update the plate. See a John Deere dealer or other service provider.

OUO6064,0001E3B-19-07AUG25

Recognize Safety Information

T81389—UN—28JUN13

This is a safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.

DX,ALERT-19-03OCT22

Understand Signal Words

TS187—19—30SEP88

DANGER; The signal word DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

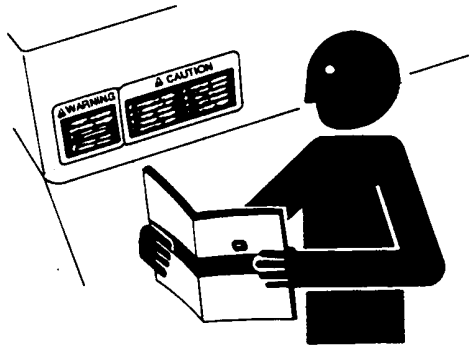
WARNING; The signal word WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION; The signal word CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury. CAUTION may also be used to alert against unsafe practices associated with events which could lead to personal injury.

A signal word—DANGER, WARNING, or CAUTION—is used with the safety-alert symbol. DANGER identifies the most serious hazards. DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.

DX,SIGNAL-19-05OCT16

Follow Safety Instructions



TS201—UN—15APR13

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your John Deere dealer.

There can be additional safety information contained on parts and components sourced from suppliers that is not reproduced in this operator's manual.

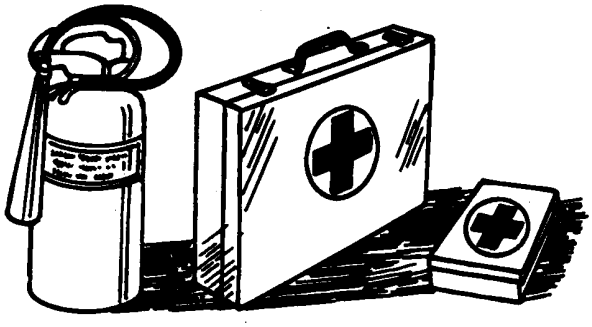
Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

If you do not understand any part of this manual and need assistance, contact your John Deere dealer.

DX,READ-19-01AUG22

Prepare for Emergencies



TS291—UN—15APR13

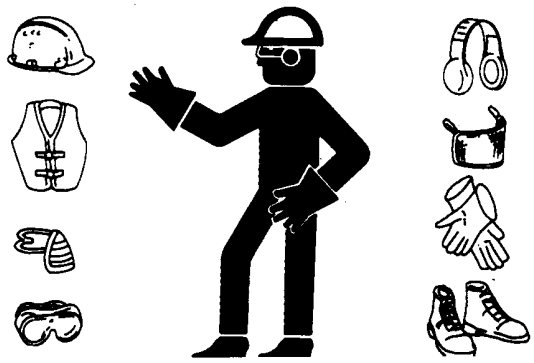
Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.

DX,FIRE2-19-03MAR93

Wear Protective Clothing



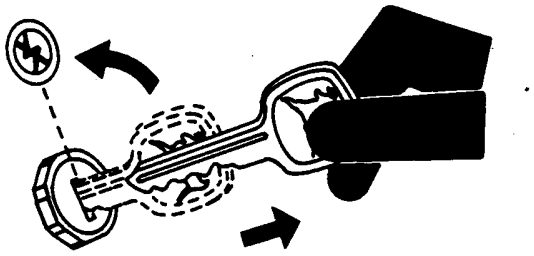
TS206—UN—15APR13

Wear close fitting clothing and safety equipment appropriate to the job.

Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.

DX,WEAR2-19-03MAR93

Park Machine Safely



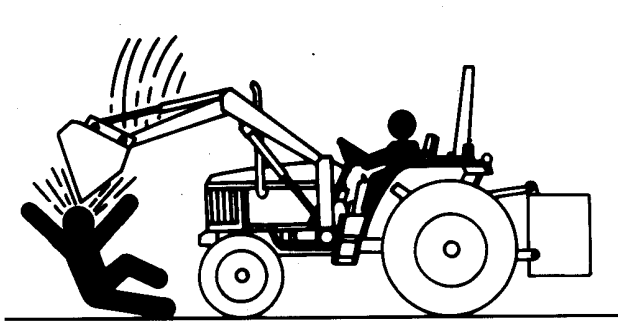
TS230—UN—24MAY89

Before working on the machine:

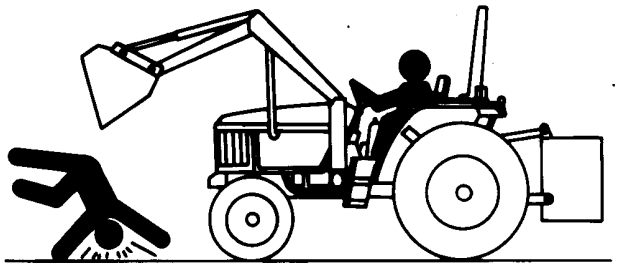
- Lower all equipment to the ground.
- Stop the engine and secure the machine. If equipped, remove the key before leaving the machine unattended.
- Disconnect the battery ground strap.
- Hang a "DO NOT OPERATE" tag in operator station.

DX,PARK-19-25NOV25

Protect People and Animals



TS1698—UN—10JUL12



TS1699—UN—10JUL12

Never allow anyone to walk or work under a raised loader.

Be sure that people, livestock, or pets are not standing near machine while operating.

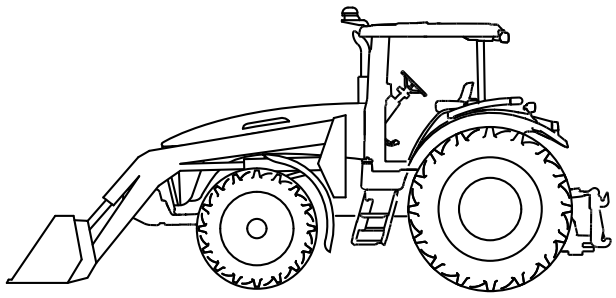
Do not use the loader for a work platform.

Do not lift or carry anyone on loader or in bucket or attachment.

Lower loader to the ground before leaving operator's station.

DX,WW,LOADER2-19-18SEP12

Operating the Loader Tractor Safely



TS1692—UN—09NOV09

When operating a machine with a loader application,

reduce speed as required to ensure good tractor and loader stability.

To avoid tractor rollover and damage to front tires and tractor, do not carry load with your loader at a speed over 10 km/h (6 mph).

To avoid tractor damage do not use a front loader or a sprayer tank if the tractor is equipped with a 3 Meter Front Axle.

Never allow anyone to walk or work under a raised loader.

Do not use loader as a work platform.

Do not lift or carry anyone on loader, in bucket, or on implement or attachment.

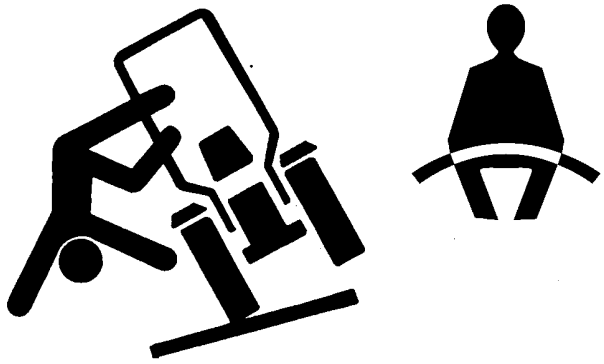
Lower loader to ground before leaving operators station.

The Rollover Protective Structure (ROPS) or cab roof, if equipped, may not provide sufficient protection from load falling onto the operators station. To prevent loads from falling onto the operators station, always use appropriate implements for specific applications (that is, manure forks, round bale forks, round bale grippers, and clampers).

Ballast tractor in accordance to Ballast Recommendations in PREPARE TRACTOR section.

DX,WW,LOADER-19-18SEP12

Use Seat Belt Properly



TS1729—UN—24MAY13

Avoid crushing injury or death during rollover.

This machine is equipped with a rollover protective structure (ROPS). USE a seat belt when you operate with a ROPS.

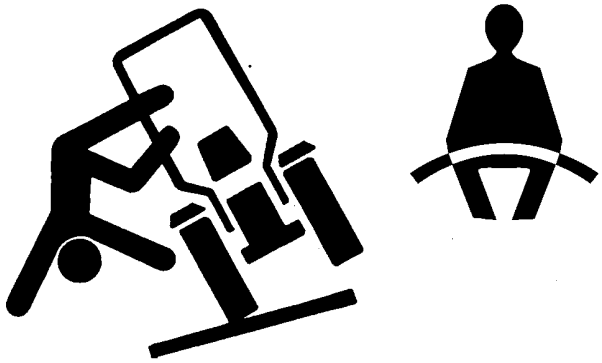
- Hold the latch and pull the seat belt across the body.
- Insert the latch into the buckle. Listen for a click.
- Tug on the seat belt latch to make sure that the belt is securely fastened.
- Snug the seat belt across the hips.

Replace entire seat belt if mounting hardware, buckle, belt, or retractor show signs of damage.

Inspect seat belt and mounting hardware at least once a year. Look for signs of loose hardware or belt damage, such as cuts, fraying, extreme or unusual wear, discoloration, or abrasion. Replace only with replacement parts that meet specifications for your machine.

DX,ROPS1-19-22AUG13

Use Foldable ROPS and Seat Belt Properly



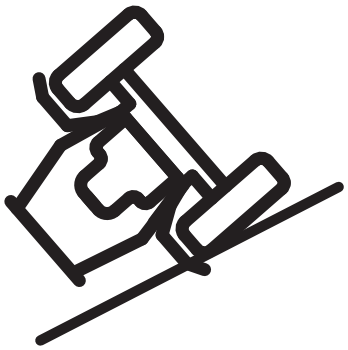
TS1729—UN—24MAY13

Avoid crushing injury or death during rollover.

- If this machine is equipped with a foldable rollover protective structure (ROPS), keep the ROPS in the fully extended and locked position. USE a seat belt when you operate with a ROPS in the fully extended position.
  - Hold the latch and pull the seat belt across the body.
  - Insert the latch into the buckle. Listen for a click.
  - Tug on the seat belt to make sure that the belt is securely fastened.
  - Snug the seat belt across the hips.
- If this machine is operated with the ROPS folded (for example, to enter a low building), drive with extreme caution. DO NOT USE a seat belt with the ROPS folded.
- Return the ROPS to the raised, fully extended position as soon as the machine is operated under normal conditions.

DX,FOLDROPS-19-22AUG13

Use Caution on Slopes, Uneven Terrain, and Rough Ground



RXA0103437—UN—01JUL09

Avoid holes, ditches, and obstructions which cause the tractor to tip, especially on slopes. Avoid sharp uphill turns.

Driving forward out of a ditch, mired condition, or up a steep slope could cause the tractor to tip over rearward. Back out of these situations if possible.

Danger of overturn increases greatly with narrow tread setting, at high speed.

Not all conditions that can cause a tractor to overturn are listed. Be alert for any situation in which stability may be compromised.

Slopes are a major factor related to loss-of-control and tip-over accidents, which can result in severe injury or death. Operation on all slopes requires extra caution.

Uneven terrain or rough ground can cause loss-of-control and tip-over accidents, which can result in severe injury or death. Operation on uneven terrain or rough ground requires extra caution.

Never drive near the edge of a gully, drop-off, ditch, steep embankment, or a body of water. The machine could suddenly roll over if a wheel goes over the edge or the ground caves in

Choose a low ground speed so you will not have to stop or shift while on a slope.

Avoid starting, stopping, or turning on a slope. If the tires lose traction, disengage the PTO and proceed slowly, straight down the slope.

Keep all movement on slopes slow and gradual. Do not make sudden changes in speed or direction, which could cause the machine to roll over.

DX,WW,SLOPE-19-28FEB17

Avoid Injury or Death from Falling Loads

TS1700—UN—10JUL12

CAUTION: Handling loads that exceed rollback capacity rating may cause relief valve to open and loader to dump if attachment is dumped below 0° horizontal. (See ROUND BALE HANDLING CAPACITIES in Specifications section.)

Improper use of loader to handle round bales or other material can result in injury to the tractor operator from:

- Bale rolling back down the loader boom onto the operator's station.
- Load spilling back from attachment onto operator's station.

The risk of the load falling onto the driver is increased when the load is moved in the raised position, especially if the loader is used to lift pallets or bales with the load raised above the driving position.

The rollover protective structure (ROPS) provides only partial protection from a load falling onto the driving position and additional protection can only be achieved by the use of attachments which are specially designed to prevent the load falling onto the driving position.

To help prevent personal injury or death caused by falling loads:

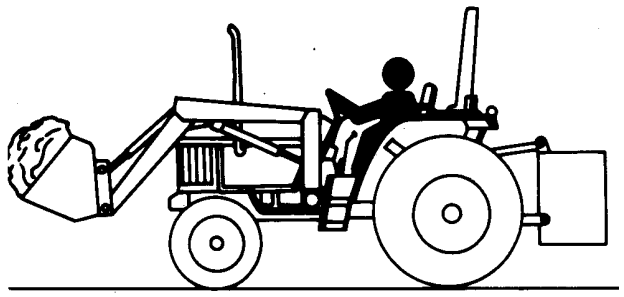
- DO NOT handle round bales unless loader is equipped with an approved bale handling device.

Otherwise, the bale can fall on the operator when the loader is raised.

- Only use attachments designed for handled material.
- To avoid handling and stability problems, do not exceed the manufacturer's rated capacity of the tractor.
- The tractor must have maximum rear ballast and maximum tread width. (Refer to your tractor Operator's Manual.)
- Carry loads low, drive slowly, maintain adequate visibility and ground clearance at all times.
- Handle raised loads with caution.
- Jerky operation causes tractor-loader instability. Operate the loader controls smoothly.
- When handling round bales on a slope, approach the bale with tractor facing uphill.

DX,WW,LOADER3-19-18SEP12

Carry Materials Safely



TS1701—UN—10JUL12

Be sure anyone operating the loader is aware of safe operation and potential hazards.

Refer to the tractor Operator's Manual for safe operational practices.

Do not exceed lift capacity of loader.

Be sure tractor is ballasted correctly.

Carry load low at all times.

If tractor is equipped with 4WD, be sure it is engaged during loader operation.

Stop loader gradually when lowering or lifting loads.

To help prevent loss of control, do not use "FLOAT" position to lower loader.

Avoid handling loose or shiftable loads.

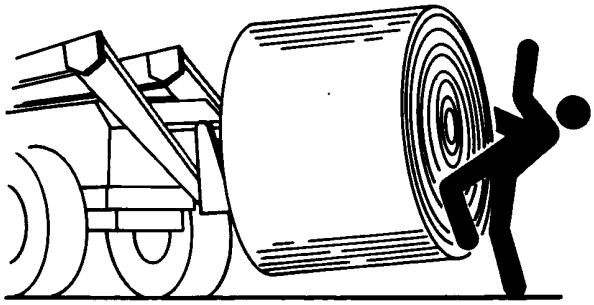
Further reduce ground speed when traveling over rough ground or when making turns.

Drive slowly through gates and doors.

Multi-function control lever operation can be locked out to prevent unintentional movement (See Tractor Operator's Manual CONTROL SECTION).

DX,WW,LOADER4-19-18SEP12

Transporting Round Bales Safely



TS1702—UN—10JUL12

Read the decals attached to both the loader and the round bale spear.

To help prevent personal injury or accident caused from a bale falling off the spear, carry the bale low and slightly rolled back. Travel slowly over rough ground.

Carrying large loads may reduce visibility. Use extra caution.

DO NOT handle bales that exceed bale weight.

See specifications section of manual for load capacities.

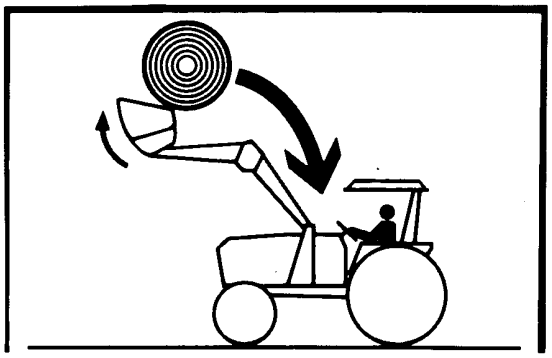
When handling round bales on a slope, always approach the bale with the tractor facing uphill.

Do not transport round bales on public road or highway.

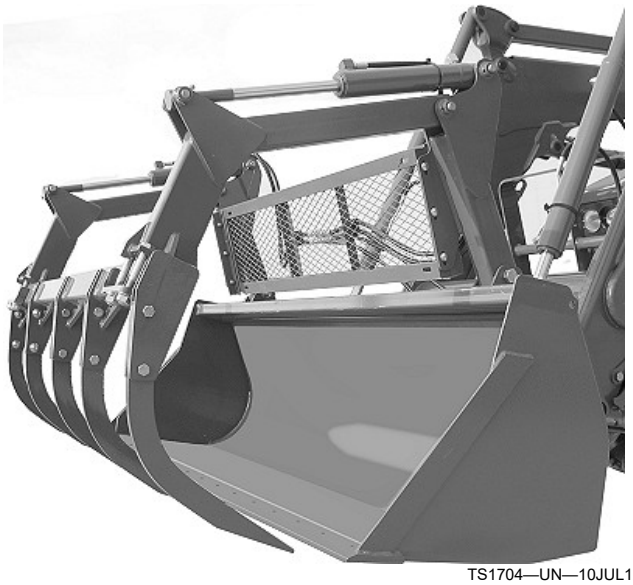
DX,WW,LOADER5-19-18SEP12

Operate Grapple (If Equipped)

Avoid Injury or Death from Falling Round Bales



TS1703—UN—10JUL12

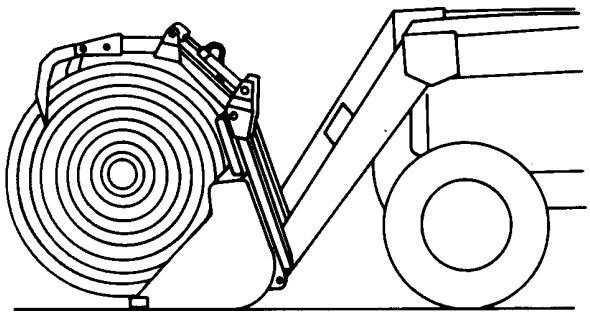


TS1704—UN—10JUL12

CAUTION: Avoid personal injury or death caused by falling loads:

- **DO NOT handle round bales unless loader is equipped with an approved bale handling attachment. A bale can fall on the operator when the loader is raised, if a bale handling attachment is not used.**
- **Ensure detent on tractor hydraulic selective control lever is locked out. (See ADJUST TIMED DETENT if equipped in Prepare the Tractor section or refer to procedure in tractor Operator's Manual.)**
- **Handle raised loads with caution.**
- **Carry loads low and drive slowly.**

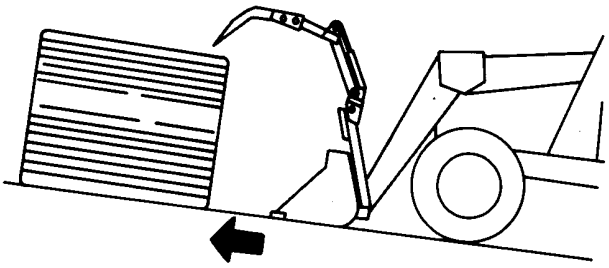
How to Pick Up a Round Bale



TS1717—UN—11JUL12

1. Approach bale with grapple open, bucket level, and bucket close to the ground.
2. Maneuver the bucket under bale until bale is against grapple frame.
3. Close grapple, then raise and roll back bale just high enough to provide ground clearance for transport.

How to Pick Up a Round Bale on a Slope



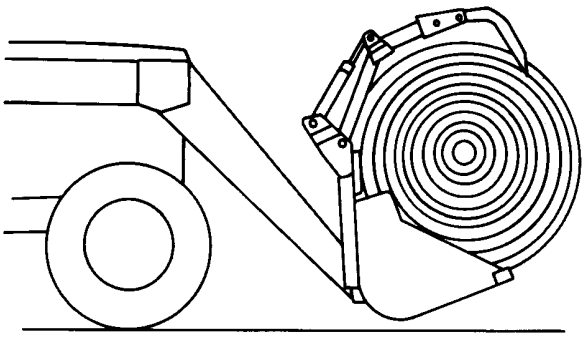
TS1718—UN—11JUL12

CAUTION: Avoid injury caused by tractor rollover when handling round bales on a slope. Avoid traveling across a slope whenever possible. Drive UP a slope to pick up a bale and back DOWN a slope in reverse. Move bale with the loader positioned as close to the ground as possible.

Avoid injury caused by impact from a bale rolling down a slope. Never use the tractor or loader to stop a rolling bale.

1. Approach a bale with tractor facing uphill, with grapple open, and with bucket level and close to ground.
2. Maneuver the bucket under bale until bale is against grapple frame.
3. Close grapple.
4. Raise and roll back bale just high enough to provide ground clearance for transport.
5. Select low tractor speed before moving or turning on a slope.

How to Transport a Round Bale

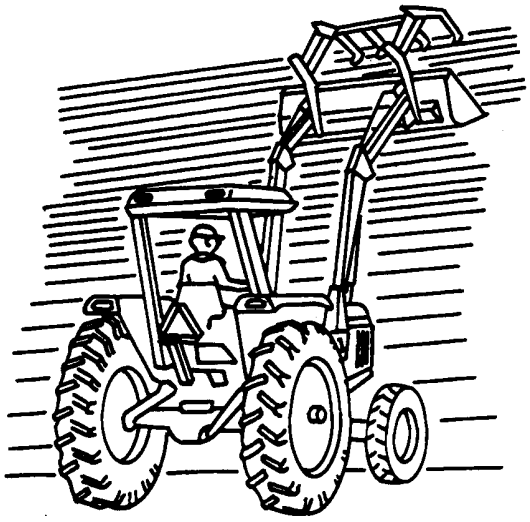


TS1719—UN—11JUL12

CAUTION: Avoid personal injury or accident caused from a bale falling off the loader. Carry the bale low and slightly rolled back. Travel slowly over rough ground.

Handling bales that exceed rollback capacity rating may cause relief valve to open and loader to dump if attachment is dumped below 0° horizontal. (See ROUND BALE HANDLING CAPACITIES in Specifications section.)

How to Remove Material from a Pile



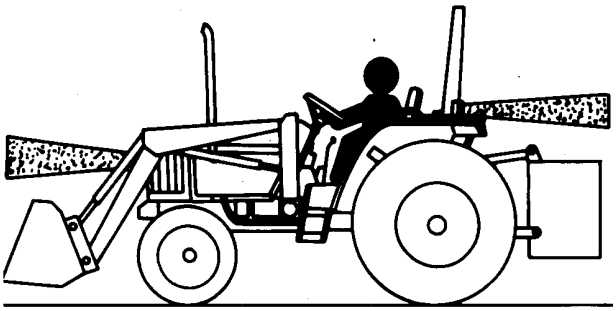
TS1720—UN—11JUL12

IMPORTANT: Avoid grapple and loader damage. Do not use the grapple teeth to dig material out of a pile. The grapple is only designed to clamp material in a bucket. Use the bucket, not the grapple, to break material loose.

1. If possible, remove material from top of pile first.
2. Use loader bucket to break material loose. Equip bucket with tines for better loosening action in packed silage.
3. After material is loosened, close grapple.

DX,WW,LOADER6-19-18SEP12

Driving on Public Roads



TS1707—UN—10JUL12

While driving tractor and loader, follow these precautions:

- Carry loads close to the ground to aid visibility and to lower center of gravity.
- Allow for additional length of loader on tractor while turning.
- Balance loads so weight is evenly distributed and load is stable.
- Drive slowly if carrying materials. Rough conditions may cause material to spill.
- Avoid carrying materials wider than the bucket or tractor.
- LOCK OUT MULTI-FUNCTION CONTROL LEVER TO PREVENT UNINTENTIONAL MOVEMENT (See Tractor Operator's Manual CONTROL SECTION).

DX,WW,LOADER8-19-18SEP12

Operating Loader with Attachments from Other Manufacturers

John Deere loaders are designed to be used with John Deere attachments.

John Deere accepts no liability for damage or injury resulting from the use of attachments from other manufacturers, these risks must be borne solely by the user.

If using attachments from other manufacturers which are made compatible with John Deere loader carriers, the loader specifications may be affected as follows:

1. **Attachment latching**

   If using attachments from other manufacturers, always ensure that attachment is securely fitted on John Deere carrier prior to operating.

2. **Self-leveling**

   Always check self-leveling reaction before operating John Deere loader with attachments from other manufacturers.

   If self leveling does not respond as expected, the

attachment level must be controlled manually using the appropriate lever to avoid falling loads.

3. **Interference**

   Check for interference and take necessary action to avoid them.

4. **Maximum roll back and dump angles**

   Roll back and dump angle can be affected.

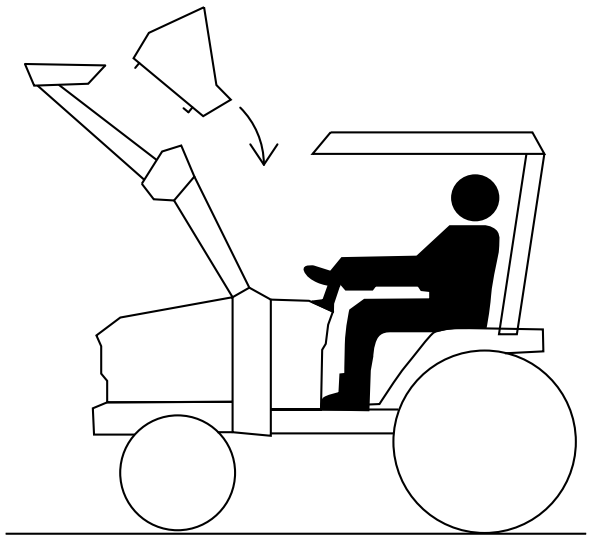
   Avoid loads spilling back from the attachment by leveling the attachment manually using control lever, if necessary.

5. **Loader specifications**

   All the specifications of the loader may be affected.

DX,WW,LOADER9-19-18SEP12

Operate Bucket/Attachment Safely



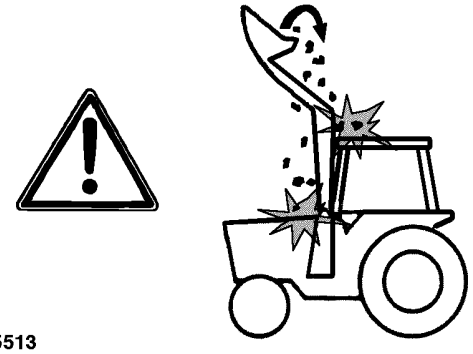
TS1708—UN—10JUL12

CAUTION: To avoid personal injury, make sure bucket/attachment is properly secured to carrier.

Before operating loader, always make sure that bucket/attachment is properly secured to carrier. (See ATTACH THE BUCKET OR ATTACHMENT in Operate Loader section.)

DX,WW,LOADER10-19-18SEP12

Operating Non-Self-Levelling Loaders



CC015513

TS1709—UN—10JUL12

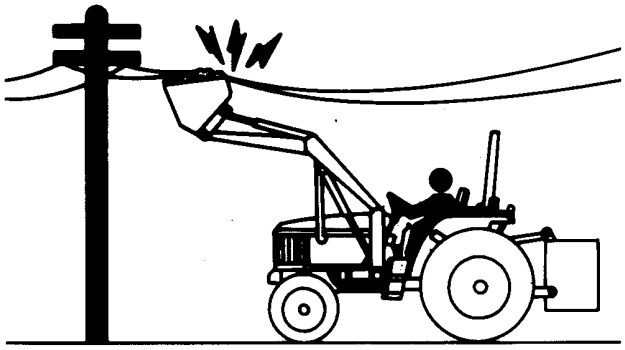
To help prevent personal injury by loads spilling/falling over back of bucket, do not tilt bucket toward tractor with loader in raised position.

Manually level the bucket while raising loader.

Learn how to operate the Non-Self-Levelling (NSL) loader.

DX,WW,LOADER11-19-18SEP12

Avoid Power Lines



TS1710—UN—10JUL12

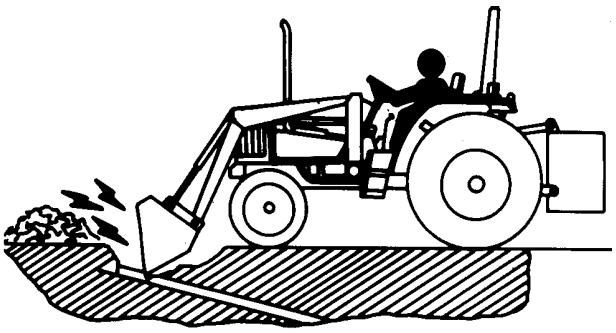
Serious injury or death can result if tractor or loader contacts electric lines.

Check height clearance before raising loader.

Do not leave the operator's seat if any part of tractor or loader contacts lines.

DX,WW,LOADER12-19-18SEP12

Dig Safely



TS1711—UN—10JUL12

Before digging, check location of cables, gas lines, and water mains.

Do not leave the operator's seat if any part of tractor or loader contacts cables.

DX,WW,LOADER13-19-18SEP12

Detach Loader Safely

TS1712—UN—10JUL12

Detached loader can fall and cause serious injury or death.

Detach the loader on a hard, level surface. Some loaders require parking stand(s) to be installed for stability when parked. Follow detach loader instructions. See procedure in your tractor Operator’s Manual, DETACH LOADER Section.

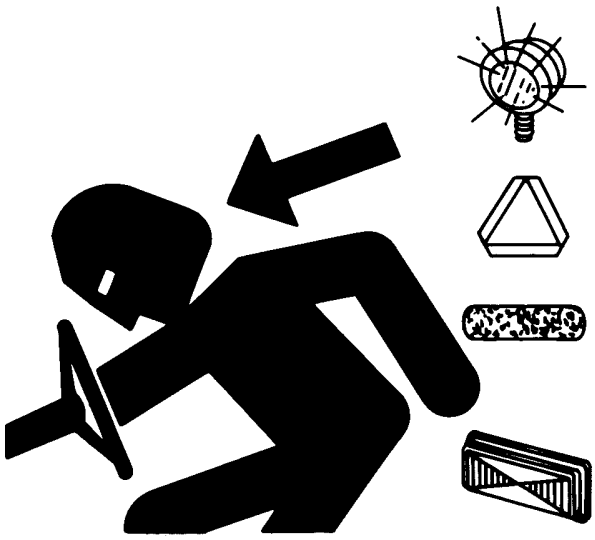
To prevent falling, store the loader securely.

Before disconnecting hydraulic hoses, relieve all hydraulic pressure. (See procedure in your tractor Operator's Manual, DETACH LOADER Section.)

Keep playing children and bystanders away from detached loader.

DX,WW,LOADER14-19-18SEP12

Use Safety Lights and Devices



TS951—UN—12APR90

Prevent collisions between other road users, slow moving tractors with attachments or towed equipment, and self-propelled machines on public roads. Frequently check for traffic from the rear, especially in turns, and use turn signal lights.

Use headlights, flashing warning lights, and turn signals day and night. Follow local regulations for equipment lighting and marking. Keep lighting and marking visible, clean, and in good working order. Replace or repair lighting and marking that has been damaged or lost.

DX,FLASH-19-07JUL99

Practice Safe Maintenance

TS218—UN—23AUG88

Understand service procedure before doing work. Keep area clean and dry.

Never lubricate, service, or adjust machine while it is moving. Keep hands, feet, and clothing away from power-driven parts. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground. Stop the engine and secure the machine. If equipped, remove the key, disconnect the battery, and allow machine to cool.

Securely support any machine elements that must be raised for service work.

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.

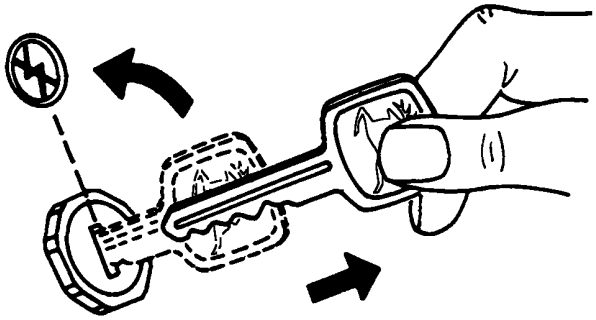
On self-propelled equipment, disconnect battery ground cable (-) before making adjustments on electrical systems or welding on machine.

On towed implements, disconnect wiring harnesses from tractor before servicing electrical system components or welding on machine.

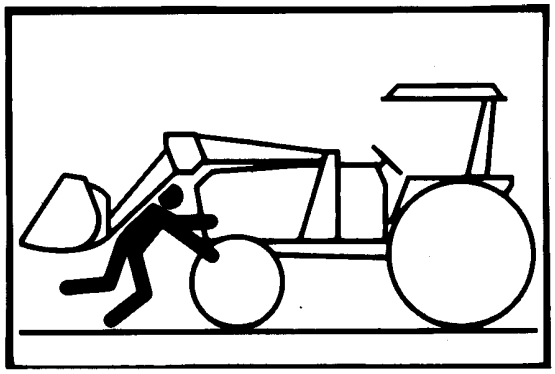
Falling while cleaning or working at height can cause serious injury. Use a ladder or platform to easily reach each location. Use sturdy and secure footholds and handholds.

DX,SERV-19-20JAN26

Service Loader Safely



TS1713—UN—10JUL12



TS1714—UN—10JUL12

Always engage parking brake or place transmission in **PARK**, lower loader to the ground, shut off tractor engine and remove key before servicing the loader.

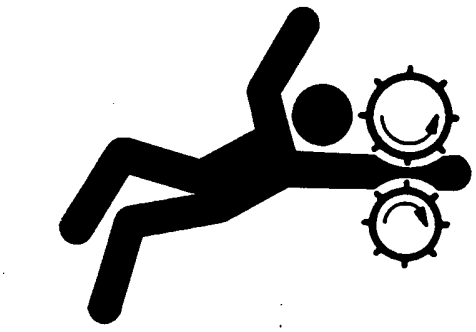
Do not walk or perform service under a raised loader, bucket or attachment unless it is securely blocked or held in position. (See SERVICE LOADER AND/OR TRACTOR SAFELY [LOADER ATTACHED] in Service section.

Keep all parts in good condition and properly installed. Repair any damage immediately and repair or replace any worn or broken parts.

Before disconnecting hydraulic hoses, relieve all hydraulic pressure. (See procedure in your tractor Operator's Manual and RELIEVE HYDRAULIC PRESSURE SAFELY in Service section.)

DX,WW,LOADER15-19-18SEP12

Service Machines Safely



TS228—UN—23AUG88

Tie long hair behind your head. Do not wear a necktie, scarf, loose clothing, or necklace when you work near machine tools or moving parts. If these items were to get caught, severe injury could result.

Remove rings and other jewelry to prevent electrical shorts and entanglement in moving parts.

DX,LOOSE-19-04JUN90

Service Accumulator Systems Safely

TS281—UN—15APR13

Escaping fluid or gas from systems with pressurized accumulators that are used in air conditioning, hydraulic, and air brake systems can cause serious injury. Extreme heat can cause the accumulator to burst, and pressurized lines can be accidentally cut. Do not weld or use a torch near a pressurized accumulator or pressurized line.

Relieve pressure from the pressurized system before removing accumulator.

Relieve pressure from the hydraulic system before removing accumulator. Never attempt to relieve hydraulic system or accumulator pressure by loosening a fitting.

Accumulators cannot be repaired.

DX,WW,ACCLA2-19-22AUG03

Avoid Heating Near Pressurized Fluid Lines

TS953—UN—15MAY90

Flammable spray can be generated by heating near pressurized fluid lines, resulting in severe burns to yourself and bystanders. Do not heat by welding, soldering, or using a torch near pressurized fluid lines or other flammable materials. Pressurized lines can accidentally burst when heat goes beyond the immediate flame area.

DX,TORCH-19-10DEC04

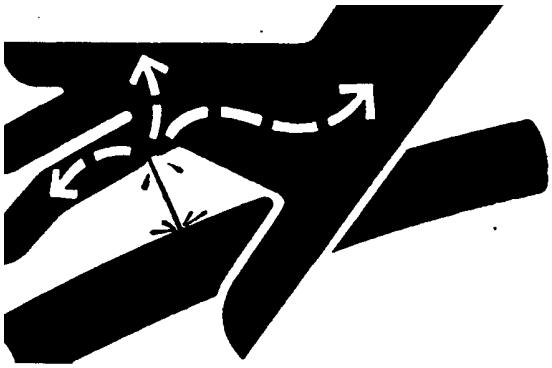
Check Hoses for Damage

Hydraulic hoses can fail due to physical damage, kinks, age and exposure.

Check hoses regularly. Replace damaged hoses if necessary. (Refer to Lubrication and Maintenance section.)

DX,WW,LOADER16-19-18SEP12

Avoid High-Pressure Fluids



X9811—UN—23AUG88

Inspect hydraulic hoses periodically–at least once per year–for leakage, kinking, cuts, cracks, abrasion, blisters, corrosion, exposed wire braid or any other signs of wear or damage.

Replace worn or damaged hose assemblies immediately with John Deere approved replacement parts.

Escaping fluid under pressure can penetrate the skin causing serious injury.

Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. Protect hands and body from high-pressure fluids.

In case of accidental skin injection, seek immediate surgical treatment.

DX,FLUID-19-05NOV25

Remove Paint Before Welding or Heating

TS220—UN—15APR13

Avoid potentially toxic fumes and dust.

Hazardous fumes can be generated when paint is heated by welding, soldering, or using a torch.

Remove paint before heating:

- Remove paint a minimum of 100 mm (4 in.) from area to be affected by heating. If paint cannot be removed, wear an approved respirator before heating or welding.
- If you sand or grind paint, avoid breathing the dust. Wear an approved respirator.
- If you use solvent or paint stripper, remove stripper with soap and water before welding. Remove solvent or paint stripper containers and other flammable material from area. Allow fumes to disperse at least 15 minutes before welding or heating.

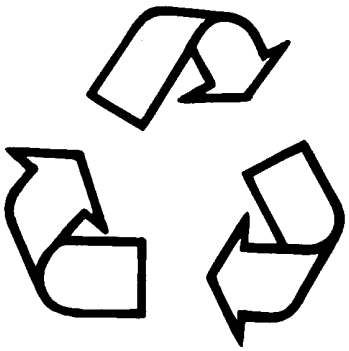
Do not use a chlorinated solvent in areas where welding will take place.

Do all work in an area that is well ventilated to carry toxic fumes and dust away.

Dispose of paint and solvent properly.

DX,PAINT-19-24JUL02

Decommissioning — Proper Recycling and Disposal of Fluids and Components



TS1133—UN—15APR13

Safety and environmental stewardship measures must be taken into account when decommissioning a machine and/or component. These measures include the following:

- Use appropriate tools and personal protective equipment such as clothing, gloves, face shields or glasses, during the removal or handling of objects and materials.
- Follow instructions for specialized components.
- Release stored energy by lowering suspended machine elements, relaxing springs, disconnecting the battery or other electrical power, and releasing pressure in hydraulic components, accumulators, and other similar systems.
- Minimize exposure to components which may have residue from agricultural chemicals, such as fertilizers and pesticides. Handle and dispose of these components appropriately.
- Carefully drain engines, fuel tanks, radiators, hydraulic cylinders, reservoirs, and lines before recycling components. Use leak-proof containers when draining fluids. Do not use food or beverage containers.
- Do not pour waste fluids onto the ground, down a drain, or into any water source.
- Observe all national, state, and local laws, regulations, or ordinances governing the handling or disposal of waste fluids (example: oil, fuel, coolant, brake fluid); filters; batteries; and, other substances or parts. Burning of flammable fluids or components in other than specially designed incinerators may be prohibited by law and could result in exposure to harmful fumes or ashes.
- Service and dispose of air conditioning systems appropriately. Government regulations may require a certified service center to recover and recycle air conditioning refrigerants which could damage the atmosphere if allowed to escape.
- Evaluate recycling options for tires, metal, plastic, glass, rubber, and electronic components which may be recyclable, in part or completely.

- Contact your local environmental or recycling center, or your John Deere dealer for information on the proper way to recycle or dispose of waste.

DX,DRAIN-19-01JUN15

Safety Signs

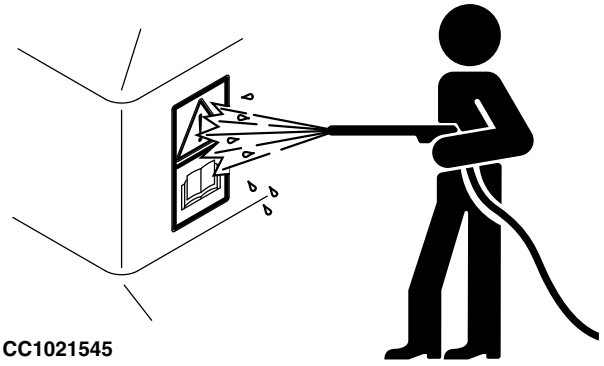
Pictorial Safety Signs

TS231—19—07OCT88

At several important places of this machine safety signs are affixed intended to signify potential danger. The hazard is identified by a pictorial in a warning triangle. An adjacent pictorial provides information how to avoid personal injury. These safety signs, their placement on the machine and a brief explanatory text are shown below.

FX,WBZ-19-19NOV91

Avoid High-Pressure Spray on Safety Decals



CC1021545

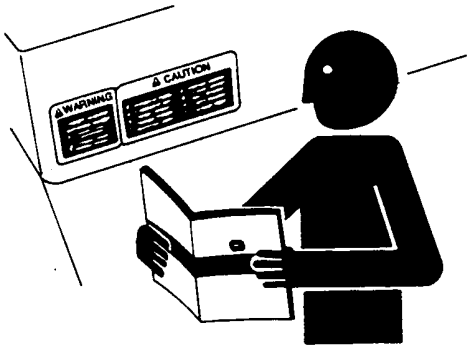
CC1021545—UN—23APR02

Pressurized water can remove or damage safety decals. Avoid directing high-pressure spray on safety decals.

Immediately replace missing or damaged safety decals. See regular spare part channels to order.

OUO6038,0001F04-19-26NOV25

Replace Safety Signs



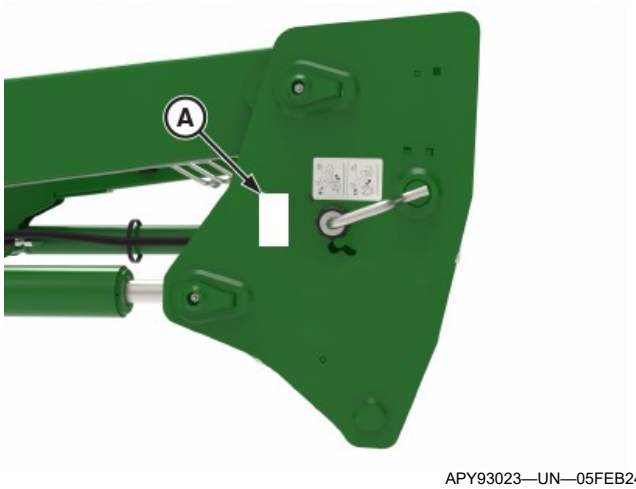
TS201—UN—15APR13

Replace missing or damaged safety signs. Use this operator’s manual for correct safety sign placement.

There can be additional safety information contained on parts and components sourced from suppliers that is not reproduced in this operator's manual.

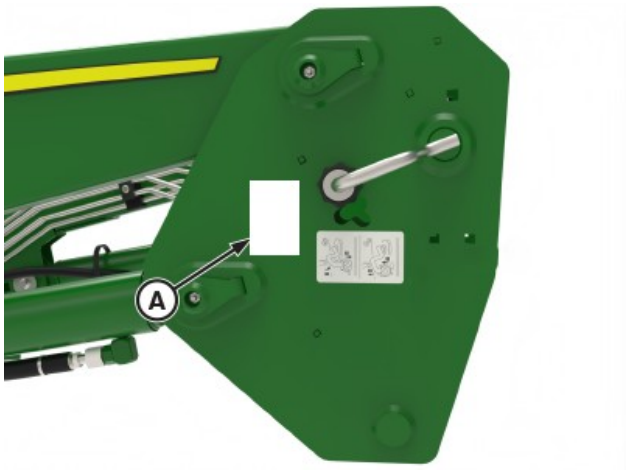
DX,SIGNS-19-18AUG09

Mast, Left-Hand Side (520M and 500M Loader)



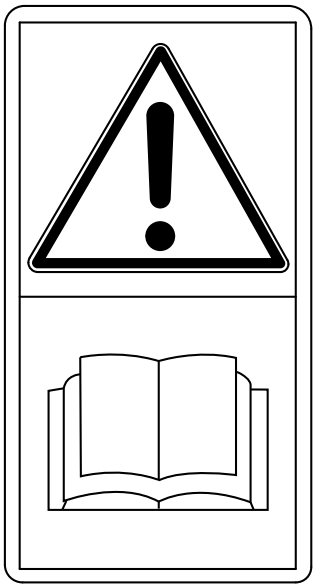
APY93023—UN—05FEB24

520M NSL Left-Hand Side Shown



APY93024—UN—05FEB24

500M NSL Left-Hand Side Shown



W07157—UN—06DEC04

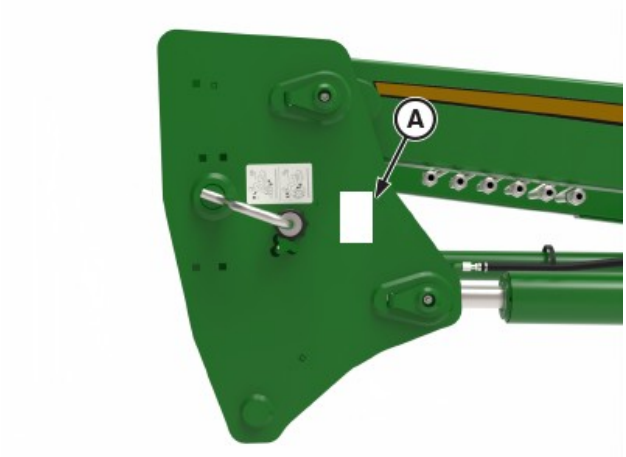
(A)

(A)—Caution: Avoid the risk of injury.

This Operator's Manual contains important information necessary for safe machine operation and explanation of safety signs. Carefully observe all safety rules to avoid accidents.

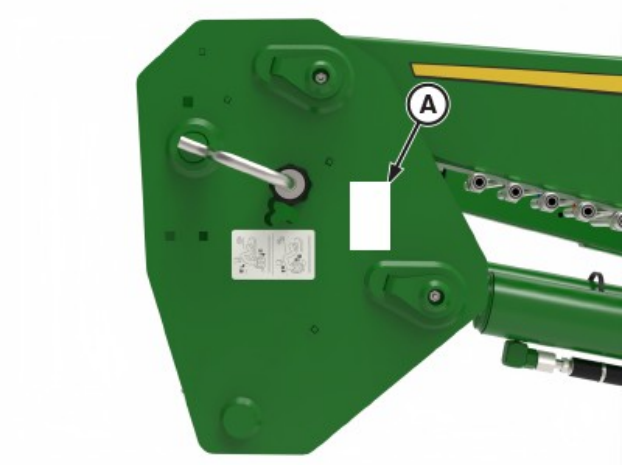
uuf6xgz,1701951937315-19-05FEB24

Mast, Right-Hand Side (520M and 500M Loader)



APY93025—UN—05FEB24

520M NSL Right-Hand Side Shown



APY93026—UN—05FEB24

500M NSL Right-Hand Side Shown

W06755—UN—17MAR04

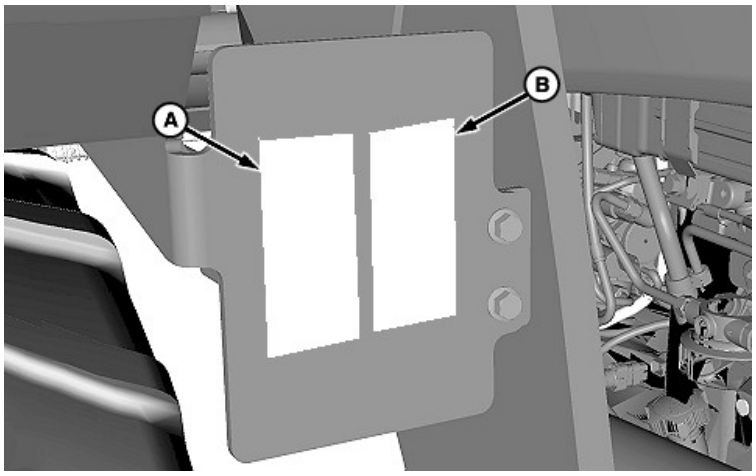
(A)

(A)—Warning: Avoid injury from falls.

Keep riders off attachment. Do not use loader as a work platform. Do not lift or carry anyone on loader or in bucket or attachment.

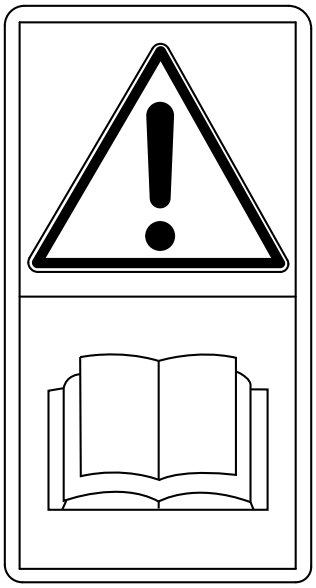
uuf6xgz,1701951937238-19-05FEB24

Toolbox Bracket—Optional (520M and 500M Loader)



W27967—UN—08MAY17

Optional Toolbox Bracket—Left-Hand Side



W07157—UN—06DEC04

(A) Decal

W06755—UN—17MAR04

(B) Decal

(A)—Caution: Avoid the risk of injury.

This Operator's Manual contains important information necessary for safe machine operation and explanation of safety signs. Carefully observe all safety rules to avoid accidents.

(B)—Warning: Avoid injury from falls.

Keep riders off attachment. Do not use loader as a work platform. Do not lift or carry anyone on loader or in bucket or attachment.

uuf6xgz,1701952030309-19-07DEC23

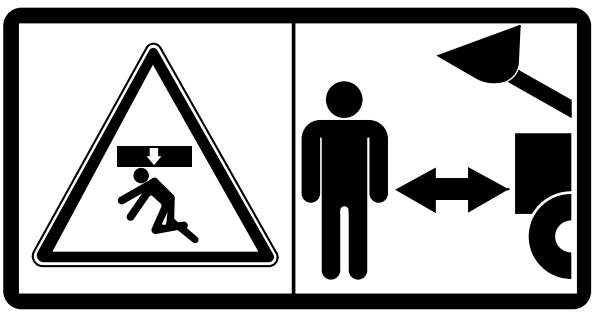
Boom (520M and 500M Loader)

APY93027—UN—05FEB24

520M NSL Left-Hand Side Boom Shown

APY93028—UN—05FEB24

500M NSL Left-Hand Side Boom Shown



W06756—UN—17MAR04

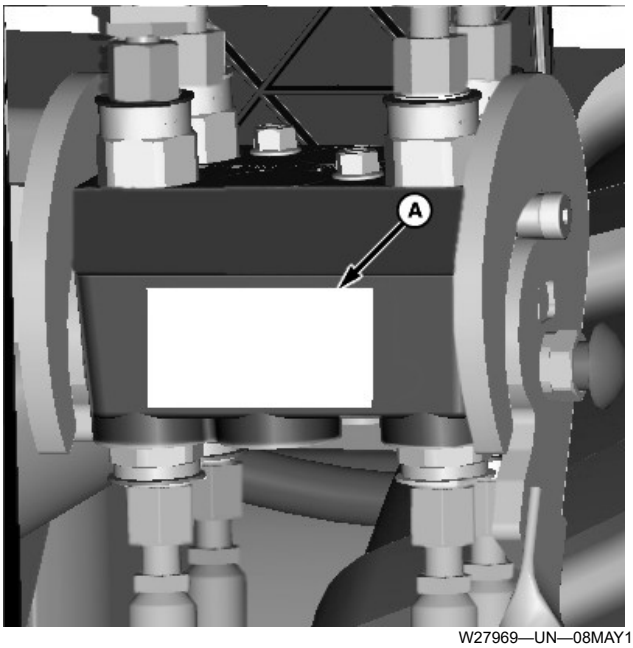
(A) Both Booms

(A)—Warning: Avoid injury from crushing.

Maintain safe distance from raised loader. Never allow anyone to walk or work under a raised loader. Be sure that bystanders are not standing near the machine while operating.

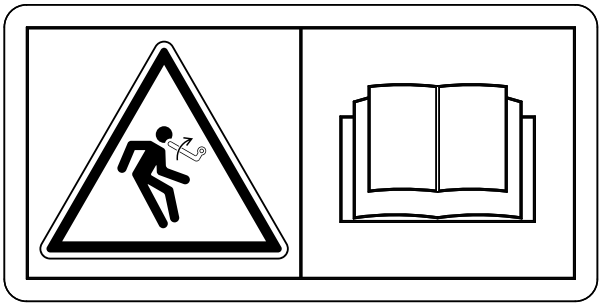
uuf6xgz,1701952030279-19-05FEB24

Multicoupler (520M and 500M Loader)



W27969—UN—08MAY17

Multicoupler



W24460—UN—24OCT13

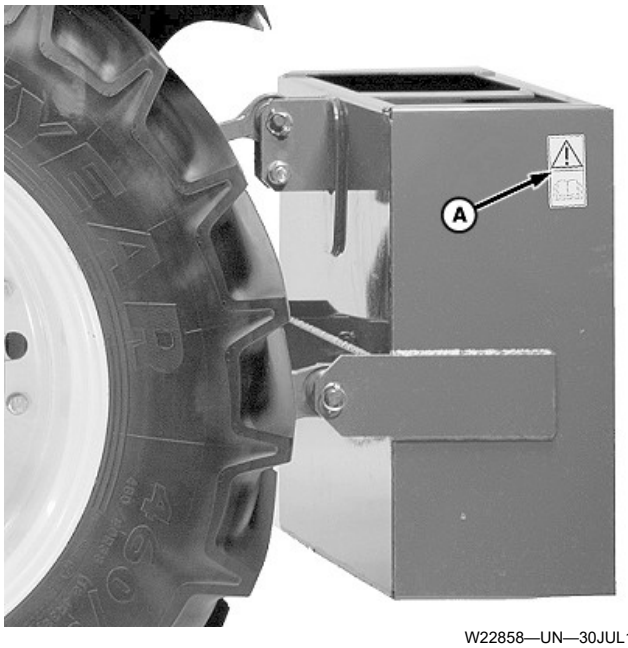
(A)

(A)—Caution: Avoid injury from being struck.

To avoid injury from rotating handle, release hydraulic pressure before unlatching coupler.

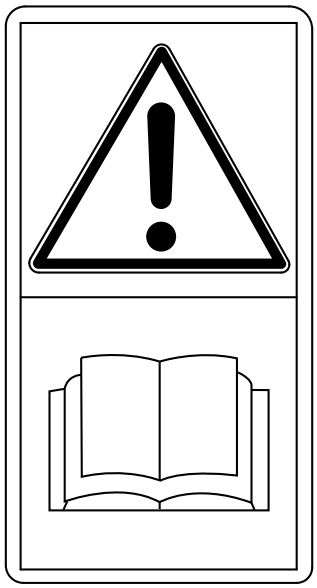
uuf6xgz,1701952030234-19-07DEC23

Ballast Box (520M and 500M Loader)



W22858—UN—30JUL12

Ballast Box



W07157—UN—06DEC04

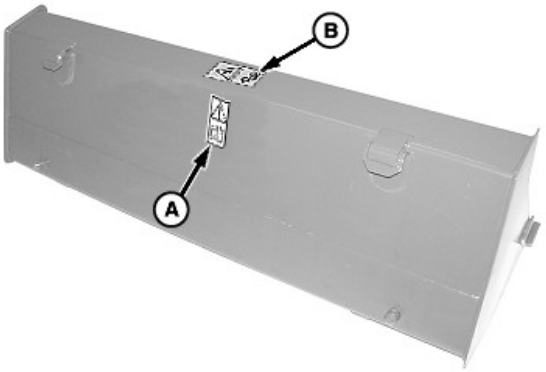
(A)

(A)—Caution: Avoid the risk of injury.

This Operator's Manual contains important information necessary for safe machine operation and explanation of safety signs. Carefully observe all safety rules to avoid accidents.

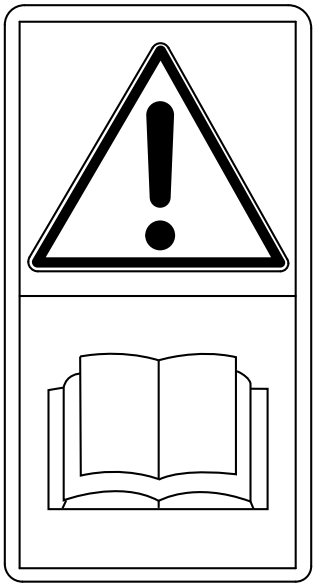
uuf6xgz,1701952030163-19-07DEC23

Bucket (520M and 500M Loader)



W23715—UN—30MAY13

Bucket



W07157—UN—06DEC04

(A)

W06755—UN—17MAR04

(B)

(A)—Caution: Avoid the risk of injury.

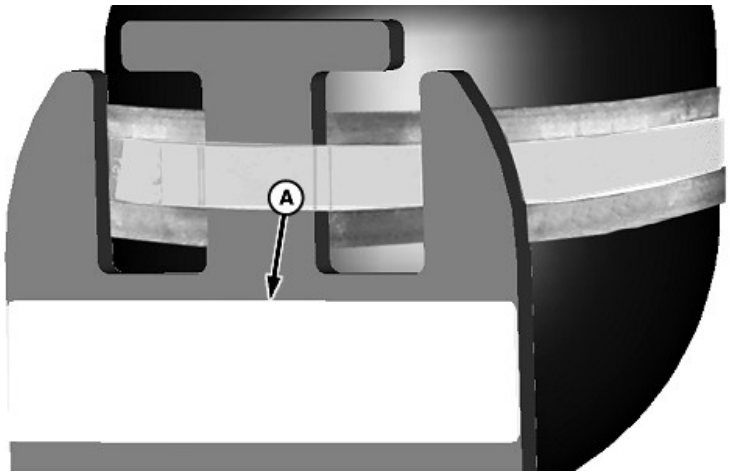
This Operator's Manual contains important information necessary for safe machine operation and explanation of safety signs. Carefully observe all safety rules to avoid accidents.

(B)—Warning: Avoid injury from falls.

Keep riders off attachment. Do not use loader as a work platform. Do not lift or carry anyone on loader or in bucket or attachment.

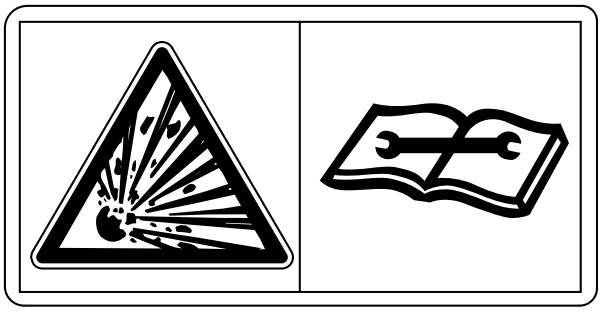
uuf6xgz,1701952030118-19-07DEC23

Accumulator (520M Loader)



W27091—UN—08OCT15

Accumulator



W22995—UN—06SEP12

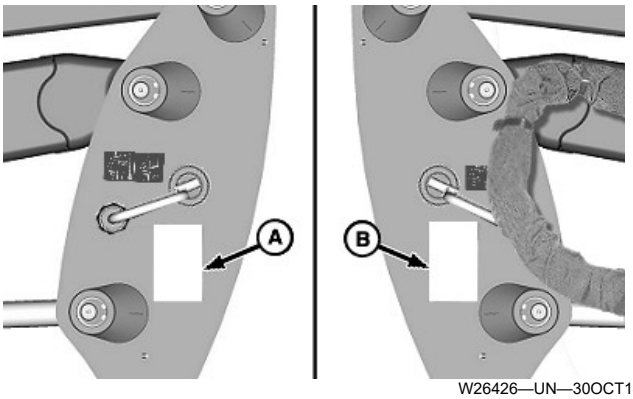
(A)

(A)—Caution: Avoid crushing and fluid injection.

Releasing pressure may cause machine movement and exposure to fluid under pressure. See a John Deere dealer or other service provider for instruction on relieving pressure before servicing system.

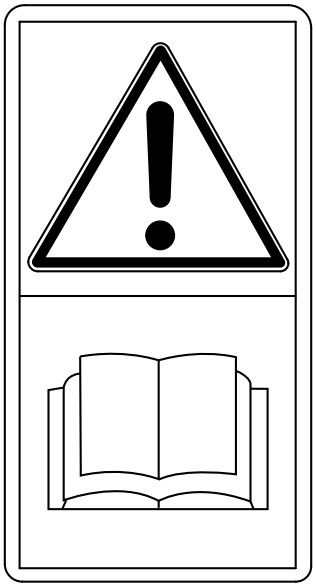
uuf6xgz,1701952030068-19-07AUG25

Masts (540M Loader)



W26426—UN—30OCT14

Left-Hand Side and Right-Hand Side Masts



W07157—UN—06DEC04

(A) Left-Hand Side Mast

W06755—UN—17MAR04

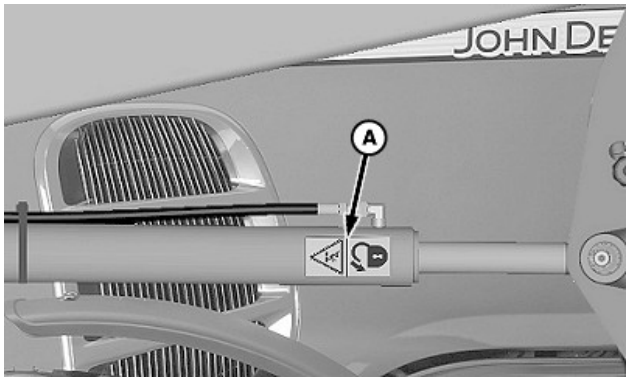
(B) Right-Hand Side Mast

(A)—Caution: Avoid the risk of injury.

This Operator's Manual contains important information necessary for safe machine operation and explanation of safety signs. Carefully observe all safety rules to avoid accidents.

OUO6064,0002142-19-02FEB18

Service Locks—Australia Only (540M Loader)



W22857—UN—30JUL12

Both Boom Cylinders

W21935—UN—10FEB12

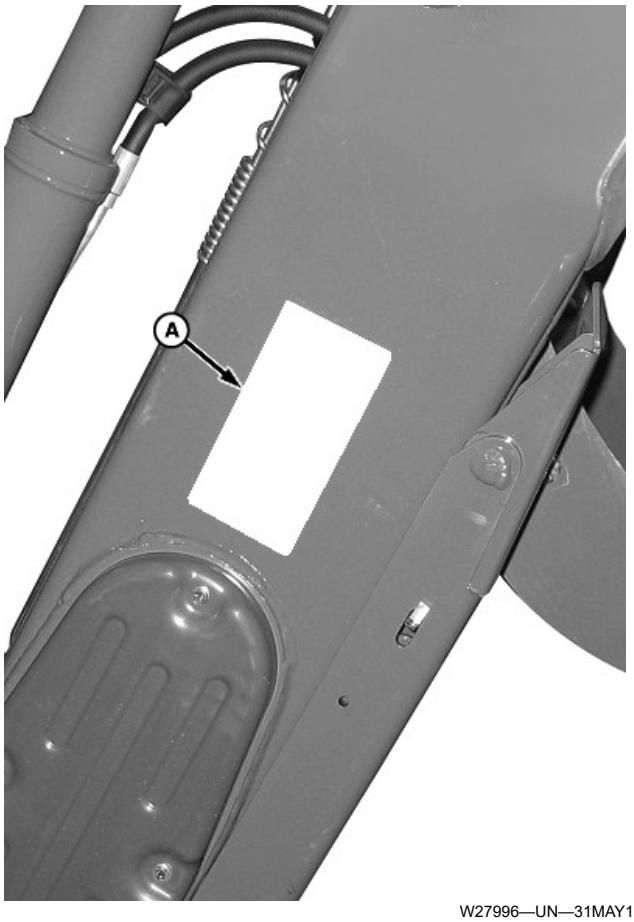
(A)

(A)—Warning: Avoid injury from falling loader.

Install service locks before working on loader in raised position.

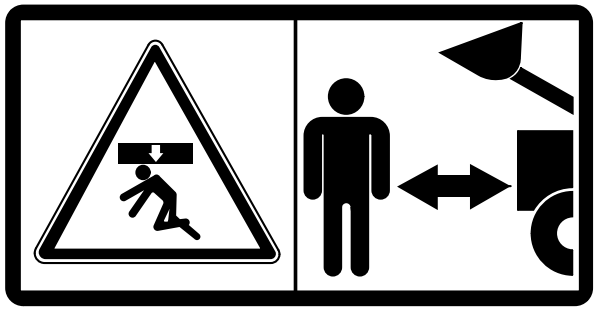
OUO6064,0002140-19-06JUN18

Boom (540M Loader)



W27996—UN—31MAY17

Left-Hand Side Boom Shown



W06756—UN—17MAR04

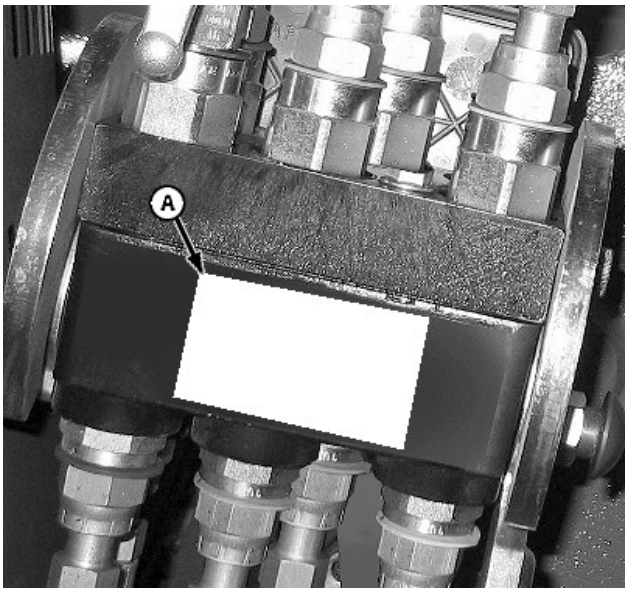
(A) Both Booms

(A)—Warning: Avoid injury from crushing.

Maintain safe distance from raised loader. Never allow anyone to walk or work under a raised loader. Be sure that bystanders are not standing near the machine while operating.

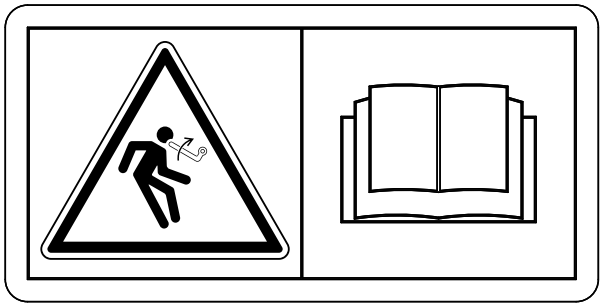
OUO6064,0002141-19-08FEB18

Multicoupler (540M Loader)



W27997—UN—31MAY17

Multicoupler



W24460—UN—24OCT13

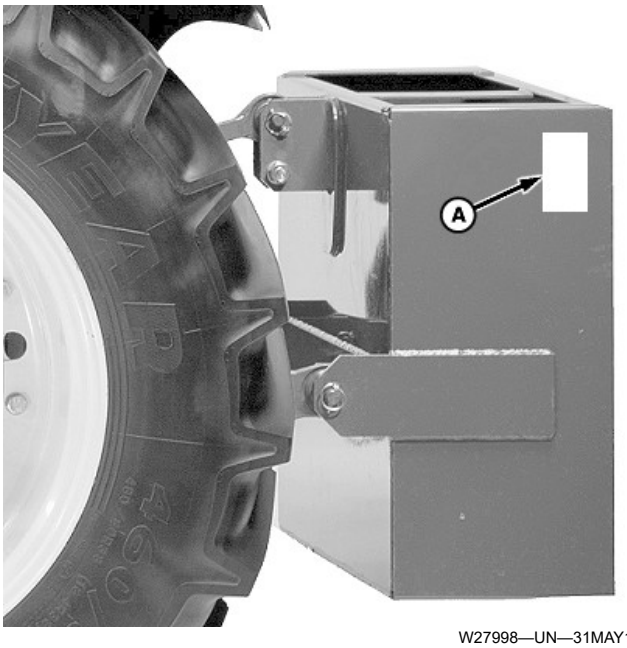
(A)

(A)—Caution: Avoid injury from being struck.

To avoid injury from rotating handle, release hydraulic pressure before unlatching coupler.

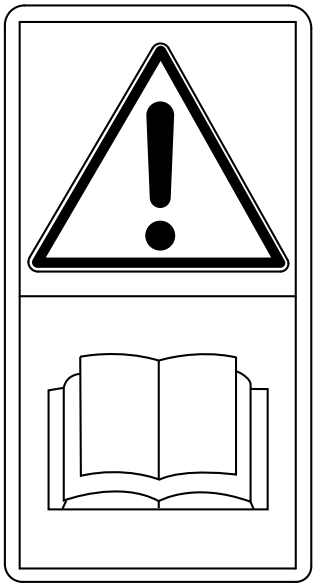
OUO6064,0002143-19-02FEB18

Ballast Box (540M Loader)



W27998—UN—31MAY17

Ballast Box



W07157—UN—06DEC04

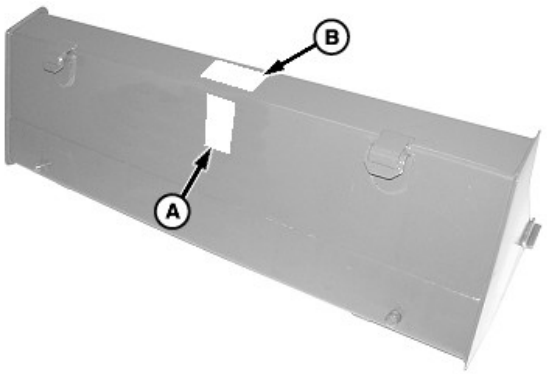
(A)

(A)—Caution: Avoid the risk of injury.

This Operator's Manual contains important information necessary for safe machine operation and explanation of safety signs. Carefully observe all safety rules to avoid accidents.

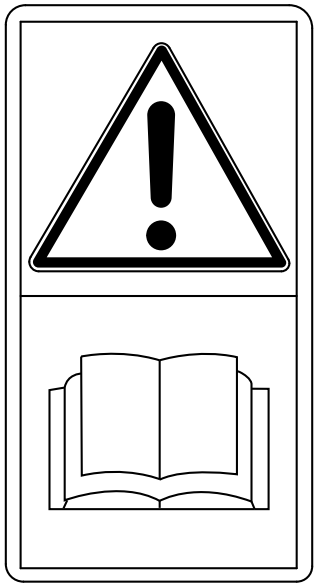
OUO6064,0002144-19-08FEB18

Bucket (540M Loader)



W27999—UN—31MAY17

Bucket



W07157—UN—06DEC04

(A)

W06755—UN—17MAR04

(B)

(A)—Caution: Avoid the risk of injury.

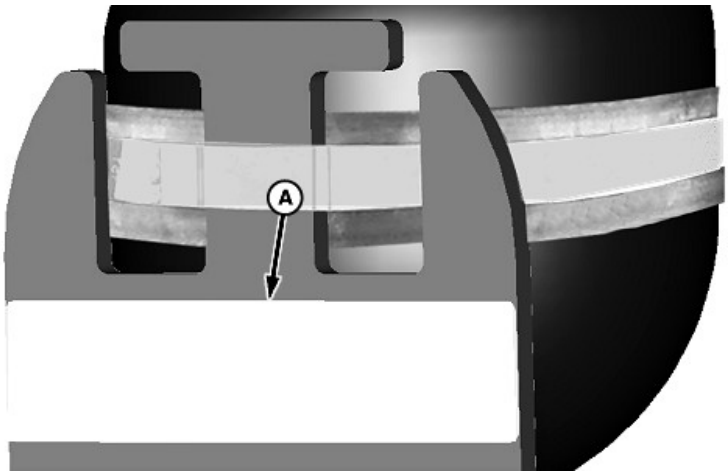
This Operator's Manual contains important information necessary for safe machine operation and explanation of safety signs. Carefully observe all safety rules to avoid accidents.

(B)—Warning: Avoid injury from falls.

Keep riders off attachment. Do not use loader as a work platform. Do not lift or carry anyone on loader or in bucket or attachment.

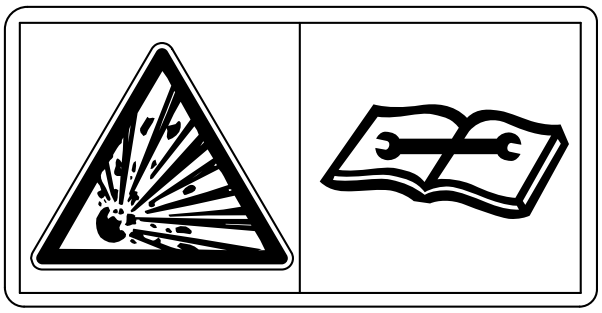
OUO6064,0002145-19-02FEB18

Accumulator (540M Loader)



W27091—UN—08OCT15

Accumulator



W22995—UN—06SEP12

(A)

(A)—Caution: Avoid crushing and fluid injection.

Releasing pressure may cause machine movement and exposure to fluid under pressure. See dealer for instruction on relieving pressure before servicing system.

OUO6064,0002146-19-02FEB18

Application Charts

Approved Tractors—500M Loaders

CAUTION: Prevent possible injury or death caused by a tractor rollover. Be sure that the tractor is equipped with a rollover protective structure (ROPS) and an approved seat belt.

NOTE: Consult a John Deere dealer or other service provider for the most up-to-date tractor and loader compatibility.

Mechanical Self-Leveling and Non-Self-Leveling Loaders—Tractor Model Series		
5E (3-Cylinder, FT4, MY23)	**5E (3-Cylinder, T2)**	**FT4**
5050E[a]	-	5075EN[a]
5050E MFWD	-	
5060E[a]	5055E[a]	
5060E MFWD	5055E MFWD	
5067E[a]	5065E[a]	
5067E MFWD	5065E MFWD	
5075E[a]	5075E[a]	
5075E MFWD	5075E MFWD	
MFWD - Mechanical Front Wheel Drive **MY** - Tractor Model Year **IT4** - Interim Tier 4 Tractor Engines **FT4** - Full Tier 4 Tractor Engines		

[a] *Compatible with Non Self-Leveling Loaders Only*

uuf6xgz,1701952327930-19-07AUG25

Approved Tractors—520M Loaders

CAUTION: Prevent possible injury or death caused by a tractor rollover. Be sure that the tractor is equipped with a rollover protective structure (ROPS) and an approved seat belt.

NOTE: Consult a John Deere dealer or other service provider for the most up-to-date tractor and loader compatibility.

Mechanical Self-Leveling and Non-Self-Leveling Loaders—Tractor Model Series													
5E (4-Cylinder, FT4)	**5E (4-Cylinder, IT4)**	**5E (4-Cylinder T0-T2)**	**5E (3-Cylinder, non FT4)**	**5E (4-Cylinder, non IT4, MY13 and earlier)**	**5E (3-Cylinder, FT4, MY23)**	**5E (3-Cylinder, FT4, MY14—MY22)**	**5E (3-Cylinder, T2)**	**5025**	**5020**	**5015**	**5010**	**5E 3-Cylinder Montenegro & Argentina**	**5E 4-Cylinder (Montenegro)**
5085E	5085E	5076E	5045E MFWD	5083E	5050E[a]			5225	5220	5415	5210	5060E[a]	5078E[a]
5085E MFWD	5085E MFWD	5076E MFWD	5055E MFWD	5083E MFWD	5050E MFWD			5225 MFWD	5220 MFWD	5415 MFWD	5210 MFWD	5070E[a]	5090E[a]
5090E MFWD	5100E	5076EN	5075E MFWD	5083E-N[a]	5060E[a]	5055E[a]	5055E[a]	5325	5320	5615	5310	5080E	
5100E	5100E MFWD	5076EN MFWD		5083E-N[a] MFWD	5060E MFWD	5055E MFWD	5055E MFWD	5325 MFWD	5320 MFWD	5615 MFWD	5310 MFWD		
5100E MFWD		5082E		5093E	5067E[a]	5065E[a]	5065E[a]	5325N	5420	5715	5410		
5090EL		5082E MFWD		5093E MFWD	5067E MFWD	5065E MFWD	5065E MFWD	5325N MFWD	5420 MFWD	5715 MFWD	5410 MFWD		
		5090E		5093E-N[a]	5075E[a]	5075E[a]	5075E[a]	5425	5520		5410N		
		5090E MFWD		5093E-N[a] MFWD	5075E MFWD	5075E MFWD	5075E MFWD	5425 MFWD	5520 MFWD		5410N MFWD		

Mechanical Self-Leveling and Non-Self-Leveling Loaders—Tractor Model Series													
5E (4-Cylinder, FT4)	**5E (4-Cylinder, IT4)**	**5E (4-Cylinder T0-T2)**	**5E (3-Cylinder, non FT4)**	**5E (4-Cylinder, non IT4, MY13 and earlier)**	**5E (3-Cylinder, FT4, MY23)**	**5E (3-Cylinder, FT4, MY14—MY22)**	**5E (3-Cylinder, T2)**	**5025**	**5020**	**5015**	**5010**	**5E 3-Cylinder Montenegro & Argentina**	**5E 4-Cylinder (Montenegro)**
		5090EN		5101E				5525	5520N		5510		
		5090EN MFWD		5101E MFWD				5525 MFWD	5520N MFWD		5510 MFWD		
		5076EL		5101E-N[a]				5625			5510N		
		5090EL		5101E-N[a] MFWD				5625 MFWD			5510N MFWD		
		5076EL MFWD											
		5090EL MFWD											
MFWD - Mechanical Front Wheel Drive **MY** - Tractor Model Year **IT4** - Interim Tier 4 Tractor Engines **FT4** - Full Tier 4 Tractor Engines													

[a] *Compatible with Non Self-Leveling Loaders Only*

vxuv1jb,1730865715931-19-07AUG25

Approved Tractors—540M Loaders

CAUTION: Prevent possible injury or death caused by a tractor rollover. Be sure that the tractor is equipped with a rollover protective structure (ROPS) and an approved seat belt.

NOTE: Consult a John Deere dealer or other service provider for the most up-to-date tractor and loader compatibilities.

Mechanical Self-Leveling and Non Self-Leveling Loaders—6 Series Tractor Models									
6R	**6M**	**6ML**	**6E (FT4)**	**6E (T0-T3) 4-Cylinder**	**6E (T0) 6-Cylinder**	**6D (IT4, MY13 and newer)**	**6D (MY12 and prior)**	**6030**	**6020**
6105R	6105M	6105ML	6105E MFWD	6100E MFWD	6125E (002000-) 4WD	6105D	6100D	6230	6220
6105R MFWD	6105M MFWD	6105ML MFWD	6120E MFWD	6105E MFWD	6140E 4WD	6105D MFWD	6100D MFWD	6230 MFWD	6220 MFWD
6115R	6115M	6115ML	6135E MFWD	6110E MFWD		6115D	6115D	6230P	6320
6115R MFWD	6115M MFWD	6115ML MFWD		6115E MFWD		6115D MFWD	6115D MFWD	6230P MFWD	6320 MFWD
6125R	6125M	6125ML		6120E MFWD		6130D MFWD	6130D MFWD	6330	6420
6125R MFWD	6125M MFWD	6125ML MFWD		6125E (-001999) 4WD		6140D MFWD	6140D MFWD	6330 MFWD	6420 MFWD
				6130E MFWD				6330P	
								6330P MFWD	
								6430	
								6430 MFWD	
								6430P	
								6430P MFWD	

Mechanical Self-Leveling and Non Self-Leveling Loaders—6 Series Tractor Models									
6R	**6M**	**6ML**	**6E (FT4)**	**6E (T0-T3) 4-Cylinder**	**6E (T0) 6-Cylinder**	**6D (IT4, MY13 and newer)**	**6D (MY12 and prior)**	**6030**	**6020**
MFWD - Mechanical Front Wheel Drive **P** - Premium									

Mechanical Self-Leveling and Non Self-Leveling Loaders—6 Series Tractor Models (Continued)						
6015	**6010**	**6005**	**6403 (from serial number 040000-) 4Cyl**	**6603 6 Cyl (from serial number 040000-) and 6803 6Cyl**	**6000**	**6B[a]**
6215	6110	6205	6403 (040000-) MFWD	6603 (040000-) MFWD	6200	6095B
6215 MFWD	6110 MFWD	6205 MFWD		6803 MFWD	6200 MFWD	6110B
6415	6210	6405			6300	6120B
6415 MFWD	6210 MFWD	6405 MFWD			6300 MFWD	6135B
	6310	6505			6400	
	6310 MFWD	6505 MFWD			6400 MFWD	
	6410					
	6410 MFWD					
MFWD - Mechanical Front Wheel Drive						

[a] *Compatible only with Self-Leveling Loaders*

Mechanical Self-Leveling and Non Self-Leveling Loaders—5 Series Tractor Models								
5ML (FT4)	**5ML**	**5M (FT4)**	**5M (IT4)**	**5M (T3)**	**5E (FT4)[a]**	**5E (IT4)[a]**	**5E (T3)[a]**	**5025[a]**
5100ML	5105ML	5075M	5065M	5075M	5085E	5085E	5083E MFWD	5225
5105ML	5105ML MFWD	5075M MFWD	5065M MFWD	5075M MFWD	5085E MFWD	5085E MFWD	5093E MFWD	5225 MFWD
5115ML	5115ML	5085M	5085M		5090E MFWD	5100E	5101E MFWD	5325
5120ML	5115ML MFWD	5085M MFWD	5085M MFWD		5090EL	5100E MFWD		5325 MFWD
5125ML		5090M	5095M		5100E			5425
5130ML		5090M MFWD	5095M MFWD		5100E MFWD			5425 MFWD
		5100M	5100M					5525
		5100M MFWD	5100M MFWD					5525 MFWD
		5115M	5105M					5625 MFWD
		5115M MFWD	5105M MFWD					
			5115M MFWD					
	MFWD - Mechanical Front Wheel Drive							

[a] *Compatible Only with Non Self-Leveling Loader*

uuf6xgz,1701952327314-19-07AUG25

Tractor Front Tires, Load Index, Turn Angle, and Tread Setting

Refer to your tractor tire manufacture on-line information and tractor Operator's Manual information concerning tire size, loads, and tread settings. Visit the John Deere

public website or contact a John Deere dealer or other service provider for any additional details.

SF04007,0000B4A-19-07AUG25

Prepare the Tractor

Prepare the tractor as follows:

- Install/Check the rollover protective structure on the tractor (if equipped). (See the tractor Operator's Manual for more information.)
- Ballast the tractor for loader operation. (See Install Hitch Pin Bushing on Ballast Box for Category 1 Quick Hitch, Attach Ballast Box to Tractor with Quick Hitch and with 3-Point Hitch, and Rear Ballast in this section.)
- Remove front ballast from the tractor. (See Remove Front Weights in this section.)
- If wheel setting is adjustable, move wheels to the widest setting. (See the tractor Operator's Manual for more information.)
- Check the front and rear wheel mounting hardware. (See the tractor Operator's Manual for more information.)
- Check and adjust the tire pressure. (See the tractor Operator's Manual for more information.)
- Refer to the tractor Operator's Manual for hydraulic controls, SCV detent and flow settings necessary for operating the loader.
- Refer to the tractor Operator's Manual for details on the multi-function lever.
- Do not use a tractor with a tricycle-type (narrow) front axle.

YMTKZV1,1764587733060-19-02DEC25

Rear Ballast

CAUTION: Prevent possible injury or death from a machine rollover. Add the necessary amount of ballast to the tractor. The amount of ballast listed is the minimum required for normal loader operation. For some operations, additional ballast can be required to maximize stability.

IMPORTANT: Prevent possible tractor damage. Use hitch ballast. Without hitch ballast, the front axles or other components can be overloaded during loader operation.

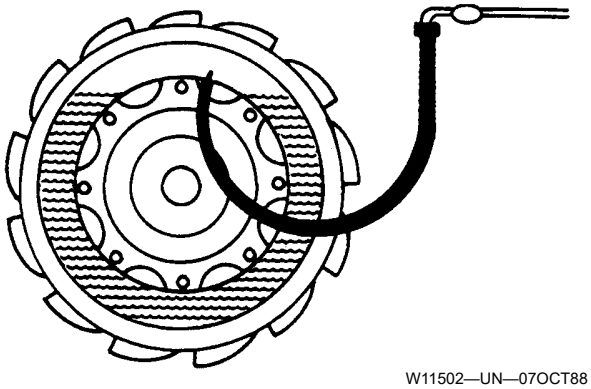
Proper ballasting is an important factor in tractor/loader stability and performance. Maximum productivity can be achieved only if the tractor weight is appropriate for the job. Additional counterweight requirements will vary with loader attachments and equipment application.

Ballasting is adding weight to the tractor to enhance functionality, including durability, traction, and stability. It ensures reliable, productive, and safe performance.

The system (tractor/loader) always requires counterbalanced. Depending on the system, there are three possible areas where ballast may need to be added. They can be one or a combination of the following: Fluid in the tires, rear wheel weights, and a 3-point hitch ballast.

To determine how to ballast a tractor when using a loader, always refer to the Specifications section in this Operator's Manual.

Always refer to the safety and operating information in the Safety section of this Operator's Manual for operating the loader in terms of safety and stability.



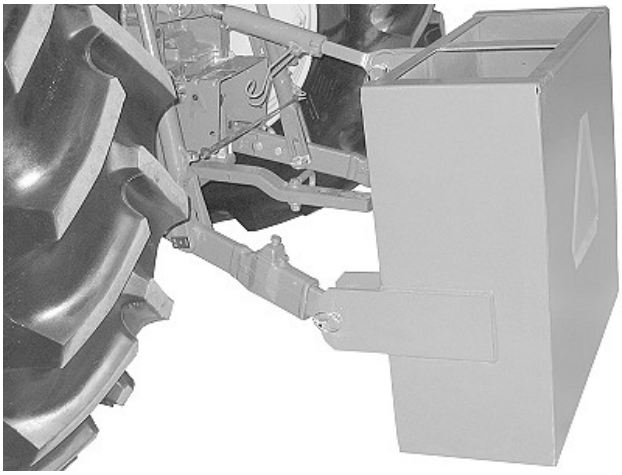
W11502—UN—07OCT88

Fluid Filled Rear Tires

NOTE: When using fluid in the rear wheels for ballasting, do not fill the tires more than 75% allowing for expansion. Use a mixture of 1.6 kg (3.5 lb) of calcium chloride to 4 L (1 gal) of water when filling the rear tires.

W28398—UN—12MAR18

Rear Wheel Weights



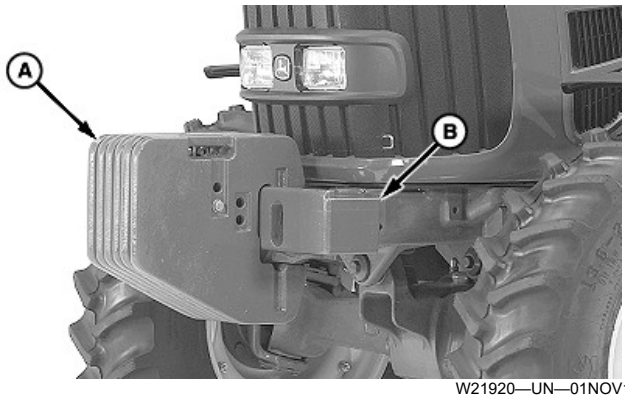
W28412—UN—17MAY18

Ballast Box and 3-Point Hitch

NOTE: Adding duals to the rear axle can also add to the ballasting weight and provide additional tread width for stability. Refer to the tractor Operator's Manual for more information on dual tire compatibility.

YMTKZV1,1764587748838-19-02DEC25

Remove Front Weights



W21920—UN—01NOV11

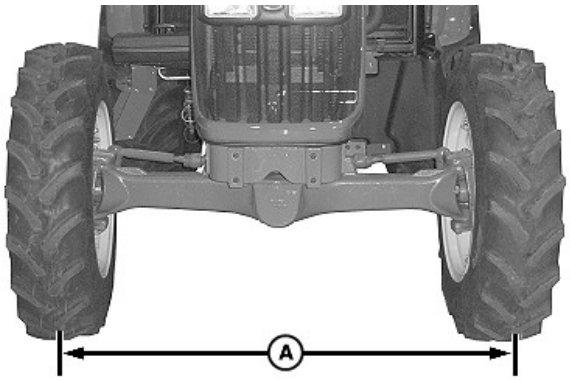
A—Weight
B—Weight Support

IMPORTANT: To prevent damage to the tractor or loader, remove the front tractor weight (A) if equipped.

Remove the front tractor weights (A), if equipped. Weight support (B) can remain on the tractor.

OUO6038,0002024-19-23MAY23

Front Tread Setting



W21919—UN—01NOV11

A—Tread Setting

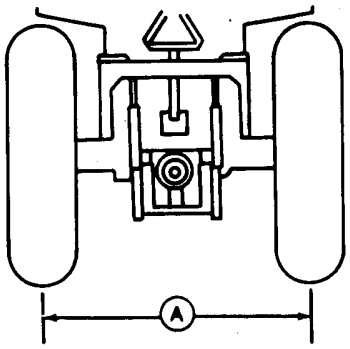
Adjust the tread setting (A) distance from the tire center-to-tire center to at least 1825 mm (72 in). Wider spacing can be used. Do not exceed the maximum width recommended in the tractor Operator's Manual for loaders.

See the tractor Operator's Manual for adjustment details.

NOTE: For 12.4-24 front tires the tread setting must be 1700 mm (67 in). For 5E 3-cylinder tractors with 11.2-24 and 12.4-24 front tires, please add the required oscillation and steering restrictions.

OUO6038,0002023-19-23MAY23

Rear Tread Settings



W00851—UN—04JUN93

A—Tread Setting

CAUTION: Prevent possible injury or death from a machine rollover. To maximize stability, use the widest distance from the tire center-to-tire center. (See Minimum Rear Ballast Requirements and Tire Rating in this section.)

Minimum tread setting (A) distance, tire center-to-tire center is 1825 mm (72 in).

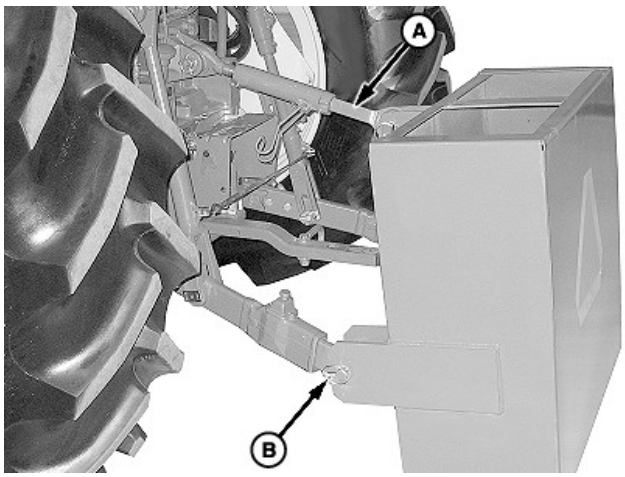
See the tractor Operator's Manual for more information.

OUO6038,0001FCB-19-10AUG22

Attach Ballast Box to Tractor Hitch

CAUTION: Prevent possible injury from tractor instability. Attach the ballast box BEFORE attaching the loader. Prevent possible injury or machine damage. Whenever the ballast box is attached, put the transmission in the PARK position and check the full range of the hitch for interference or binding. DO NOT stand between the tractor and ballast box.

Three-Point Hitch

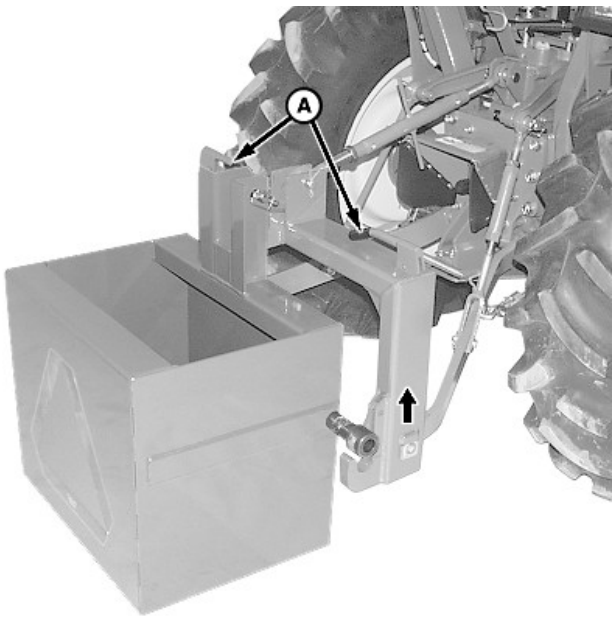


W28000—UN—01JUN17

A—Center Link Mounting Hardware
B—Quick-Lock Pin (2 used)

1. Back up the tractor to the ballast box with the hitch points approximately in alignment.
2. Engage tractor park brake and/or place the transmission in PARK.
3. Shut off engine and remove ignition key.
4. Attach tractor draft links. Fasten with quick-lock pins (B) (stored on the tractor draft links).
5. Align center link with the upper hole in the ballast box mounting straps and install the center link mounting hardware (A).
6. Start tractor engine.
7. Slowly raise the ballast box. Check for interference. Lower the hitch to the ground and adjust the center link and/or lift links if necessary. See the tractor Operator's Manual for more information.

Quick Coupler Hitch



W28409—UN—27APR18

A—Latch Lever (2 used)

1. Slowly lower the hitch until the quick coupler hooks are lower than the hitch pins.
2. Back up the tractor to the ballast box.

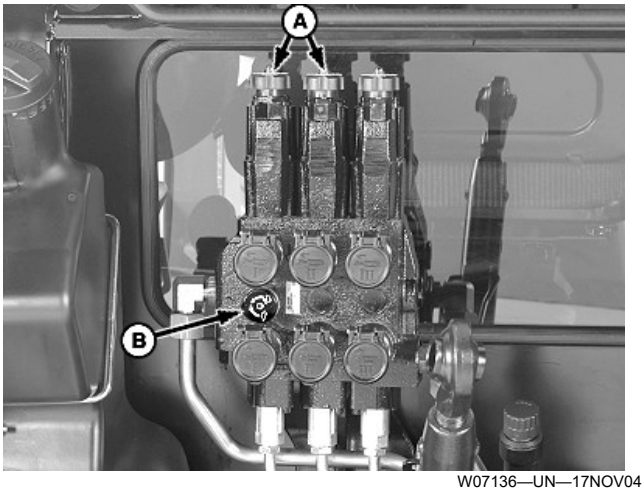
IMPORTANT: Prevent possible machine damage. Check the spring loaded clips on the quick coupler to be sure that the latches are free and working properly.

3. Make sure that the latch levers (A) are down (as shown).
4. Slowly pull hitch lever to engage the hitch pins in the hooks. Raise the ballast box and check for interference. Lower the ballast box to the ground and adjust if necessary.

OUO6064,0001DDB-19-25MAY18

Adjust Mechanical Selective Control Valve Detent Selector and Flow Control

CAUTION: Prevent possible injury or death caused by objects falling on the operator. Selective control valves have an automatic cylinder extend position (detent) that must be locked out for loader operation. Unintentional movement of the control lever to the detent position can cause the loader to raise to full height unexpectedly and cause the load to fall back on the operator.



W07136—UN—17NOV04

5025 Series Deluxe Valve Shown

A—Selector Knob
B—Flow Control Knob

See the tractor Operator's Manual for information on performing the following procedures:

1. Adjusting detent selector knobs (A) to the loader position.
2. Adjusting valve flow control knob (B) for fastest rate of operation.

OUO6038,000202A-19-23MAY23

Adjust Tractor Flow Rate and Timed Detent —540M Loaders

Adjust Electronic Independent Control Valve (E-ICV) Functions on 6X30 Premium Tractors

Set the E-ICV functions to LOADER or set the detent shutoff times to zero. Reduce hydraulic flow levels for smooth operation. See the tractor Operator's Manual for more information.

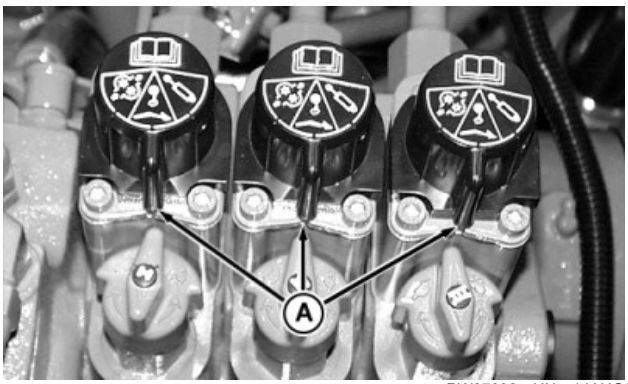
To determine if valve calibration is necessary, check the tractor Operator's Manual.

The following values are adjustable for the E-ICV extend and retract functions:

- Flow rate
- Automatic shutoff time

See the tractor Operator's Manual for more information.

Adjust Timed Detent on 6000 Series Tractors



RW27032—UN—14AUG00

Rear of Tractor—Viewed From Cab

A—No Detent Position

CAUTION: Prevent possible injury or death caused by objects falling on the operator. Selective Control Valves (SCV) have an automatic cylinder extend position (detent), DO NOT use the detent position for loader operation. Unintentional movement of the controls to the detent position causes the loader to raise to full height and the load to fall back on the operator.

- Mechanical (SCV) levers:
  - Make sure that the controls knobs are positioned as shown (A).
  - See the tractor Operator's Manual for more information.
- Electronic multi-function lever:
  - Set automatic shutoff time to **infinity** (no automatic shutoff).
  - See the tractor Operator's Manual for information.

Adjust E-ICV Flow Rate and Shutoff Time on 6X20, and 6X30 Series Tractors

CAUTION: Prevent possible injury or death caused by objects falling on the operator. Unintentional movement of the controls to detent position causes the loader to raise to full height and the load to fall back on the operator.

IMPORTANT: Prevent possible machine damage. DO NOT use excessive operating speeds. When set properly, full extension or retraction of the cylinders takes at least 2 seconds.

Check and adjust the values before operating the loader:

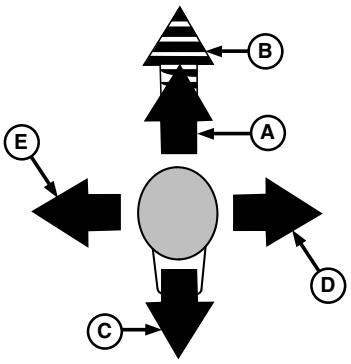
- Maximum flow: Adjust flow rate to 10 (full). If the loader is moving too fast, lower to a more desired setting.

- Automatic shutoff time: Set to **infinity** (no automatic shutoff).

See the tractor Operator's Manual for more information.

OUO6064,0001D56-19-25MAY18

Operate Loader with Multi-Function Lever



W06245—UN—17JUN03

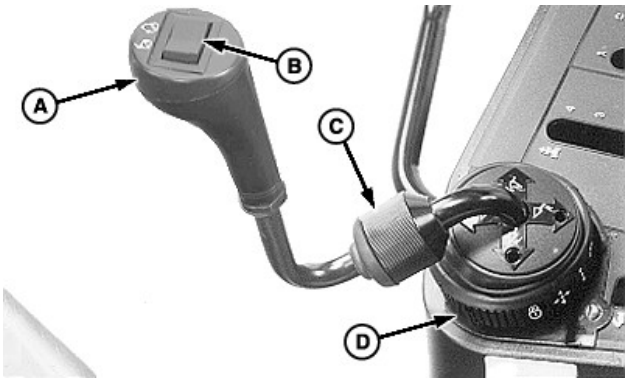
Operate the loader from the operator seat only. Remain at controls until all the operating cycles are completed.

Lever returns to the NEUTRAL position by itself from all positions except FLOAT. Pull back the lever to release from FLOAT.

Key	Lever Movement	Loader Operation
A	Forward	Boom Lower
B	Locked Forward	Boom Float
C	Back	Boom Raise
D	To Right-Hand Side	Bucket/Attachment Dump
E	To Left-Hand Side	Bucket/Attachment Roll Back

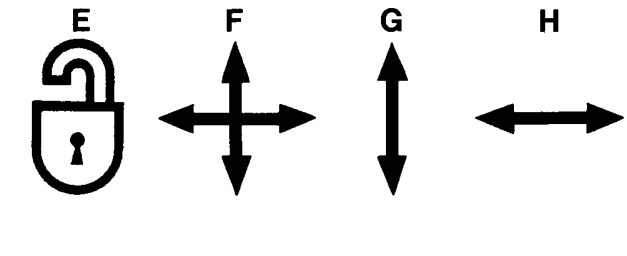
NOTE: Two loader operations, such as RAISE and ROLL BACK can happen at the same time. The operation that requires the least hydraulic force moves first due to oil flow limitations.

Mechanical Multi-Function Lever—Style A (Early Version)



W08190—UN—19SEP06

Third-Function Shown



LX007831—UN—15AUG94

Symbols on Locking Ring

A—Lever
B—Switch, Third-Function (optional)
C—Locking Collar
D—Locking Ring
E—Lever Locked
F—Lever Not Locked
G—Lever Locked to Left and Right
H—Lever Locked to Front and Rear

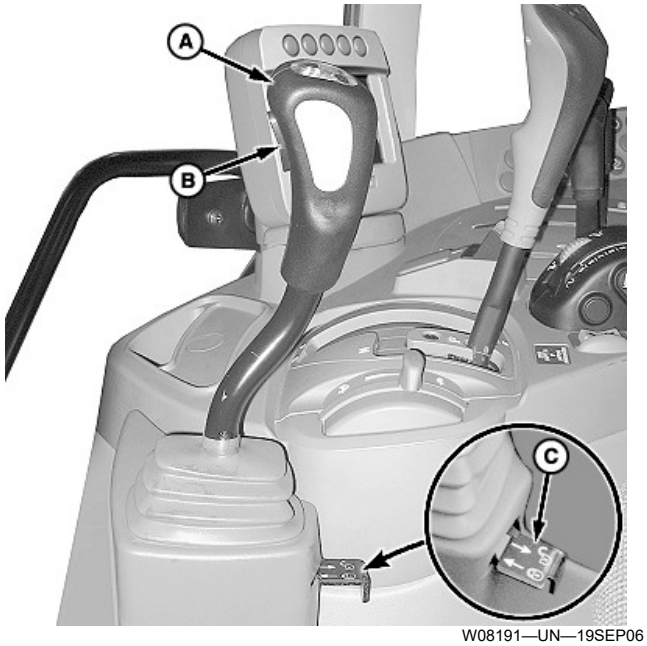
Lever (A) can be locked in NEUTRAL to prevent unintentional movement.

Locking collar (C) can be used to secure the lever in one of two positions.

If the lever is not required for operation, move the locking ring (D) to position (E) and slacken off the locking collar (C). Swing the lever to the right and tighten the locking collar (C). Locking ring (D) can be used to lock out various lever movements.

Operate an attachment, such as a grapple, using the third-function switch (B).

Mechanical Multi-Function Lever—Style B (Later Version)



W08191—UN—19SEP06

Third-Function Shown

A—Lever

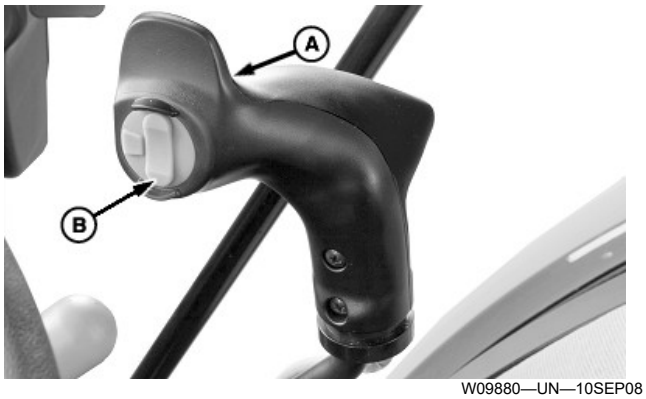
B—Switch, Third-Function (optional)
C—Transport Lock

Engaging the transport lock (C) locks the lever (A) to prevent unintentional loader movement.

Operate an attachment, such as a grapple, using the third-function switch (B).

Refer to the tractor Operator's Manual for more information.

Mechanical Multi-Function Lever—Style C (Current Version)



W09880—UN—10SEP08

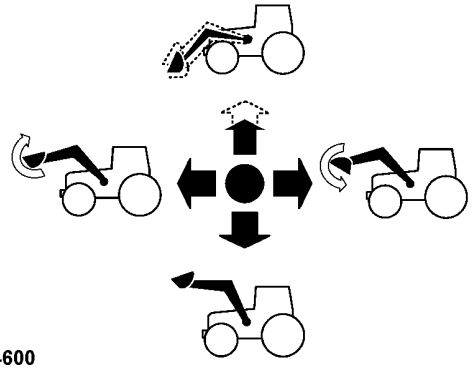
A—Lever
B—Switch, Third-Function (optional)

Operate an attachment, such as a grapple, using the third-function switch (B) on the lever (A).

Refer to the tractor Operator's Manual for more information.

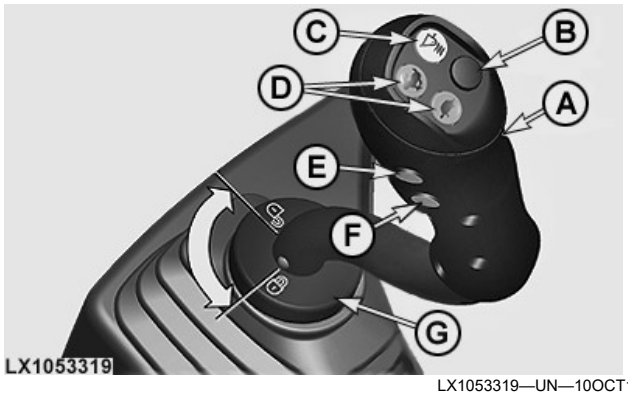
OUO6064,0000C15-19-25MAY18

Operate Loader with Mechanical Multi-Function Lever—540M Loaders (6M and 6R Series Tractors)

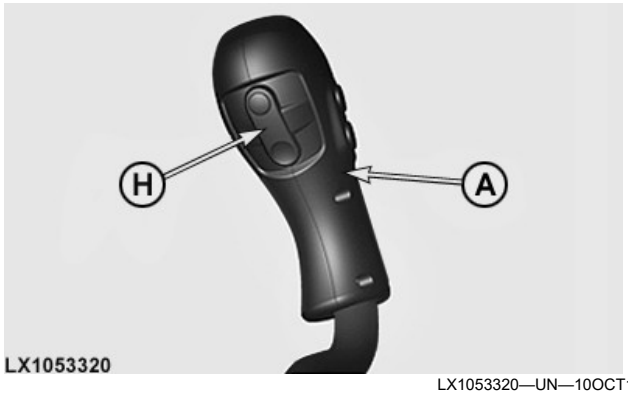


LX1054600

LX1054600—UN—10OCT11



LX1053319—UN—10OCT11



LX1053320—UN—10OCT11

A—Lever
B—(Not Used)
C—Button, Loader Suspension System
D—Switch, Gear Shift (2 used)
E—(Not Used)
F—(Not Used)
G—Locking Ring, Transport Lock
H—Rocker Switch, Third-Function

Basic Loader Functions	
Lever Movement	**Loader Operation**
Back	Boom Raise
Forward	Boom Lower
Locked Forward (Detent)	Boom Float
Left	Bucket Rollback
Right	Bucket Dump

Advanced functions and programming:

Lever (A) permits the operation of two control valves at the same time. An optional third control valve is actuated using rocker switch (H).

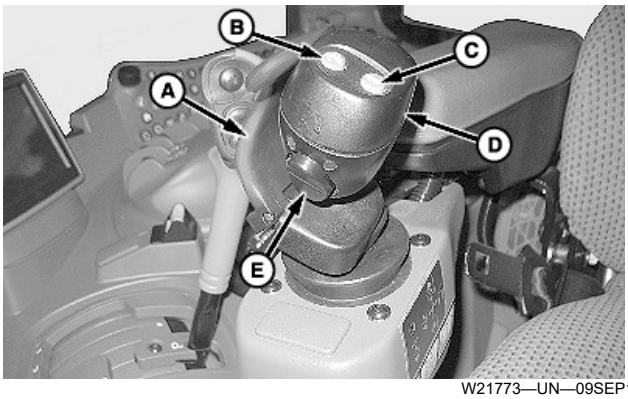
Button (C) turns on and off the optional loader suspension system.

Switches (D) allow the operator to shift transmission.

CAUTION: Prevent possible injury and machine damage caused by unexpected loader movement while the tractor is moving. The multi-function lever must be locked. Turn the locking ring (G) and check that the lever cannot be moved.

OUO6064,0001D57-19-23MAY23

Operate Loader with Electronic Multi-Function Lever—540M Loaders (6R Series Tractors)



W21773—UN—09SEP11

A—Interlock Switch Actuator
B—Switch, Fifth Function
C—Switch, Fourth Function
D—Lever
E—Switch, Third Function

IMPORTANT: Prevent possible machine damage. Before operating the loader, verify that detent positions are set to front-loader operation. See the tractor Operator's Manual for more information. Lockout the multi-function lever before the tractor is transported with a load.

NOTE: In cold weather, there can be brief periods when the loader does not operate. If the temperature drops below 0°C (32°F), hydraulic valves operate slowly. At temperatures below -25°C (-13°F), hydraulic valves stop functioning. To warm up the hydraulic system, activate several of the loader functions.

Lever (D) permits operation of two SCVs at the same time. Rocker switch (E) controls an optional SCV for a third-function.

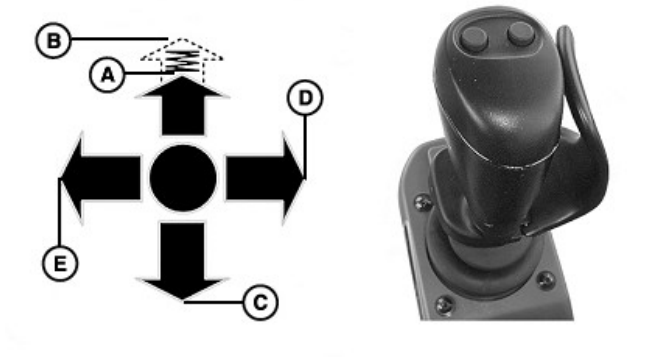
Switches (B and C) operate fourth and fifth functions, such as opening and closing a grapple attachment.

Interlock switch actuator (A) prevents accidental actuation of the lever. The lever only operates when the actuator is open (the operator's hand must hold it open). Three things can activate a lockout feature. To deactivate lockout, place the lever in the neutral position and remove hand from the lever.

Lockout activates when one of the following conditions is met:

1. Interlock switch is open, but the lever does not move for 10 minutes.
2. Lever is not in neutral when the interlock switch is opened.
3. Interlock switch is open when the tractor is started.

Electronic Multi-Function Lever



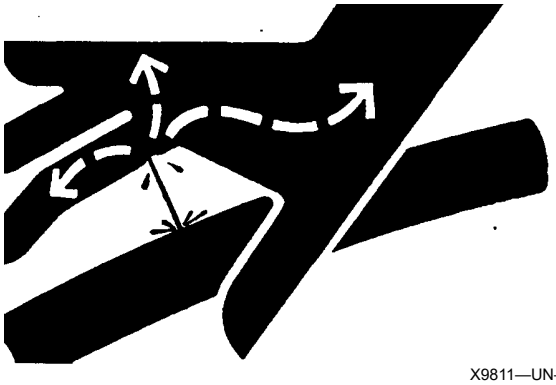
W23282—UN—17DEC12

A—Boom Lower
B—Float Position
C—Boom Raise
D—Bucket Dump
E—Bucket Rollback

Electronic Multi-Function Lever Functions:	
(A)	Boom lower: Slowly push the lever forward until resistance is felt.
(B)	Float position: Push the lever all the way forward.
(C)	Boom raise: Pull back the lever.
(D)	Bucket dump: Push the lever to the right until resistance is felt. To vibrate the bucket, push the lever all the way right twice in quick succession then hold right.
(E)	Bucket rollback: Push the lever left.

OUO6064,0001D58-19-23MAY23

Relieve Hydraulic Pressure



X9811—UN—23AUG88

CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Protect hands and body from high-pressure fluids. (See additional information, Avoid High-Pressure Fluids, in Safety section.)

NOTE: Refer to the procedures for disconnecting the hydraulic hoses in the tractor Operator's Manual for more information.

Relieve hydraulic pressure:

1. Park the tractor and lower the loader until flat on the ground.
2. Shut off the engine.

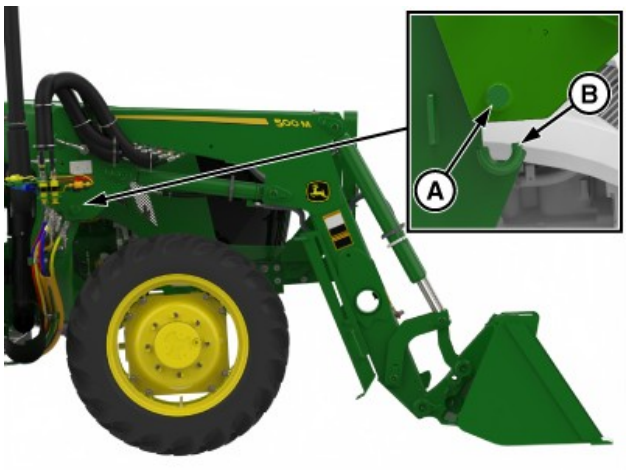
NOTE: Shut off the engine and return the key to the ON position for electronically operated control valves (tractor or loader with a third-function).

3. Move the loader controls (including the third-function control when necessary) in all possible positions several times making sure that the controls are returned back to the NEUTRAL position.
4. Place the key in the OFF position.

OUO6064,000187A-19-25MAY18

Attach and Detach Loader

Attach Loader—520M and 500M Loaders



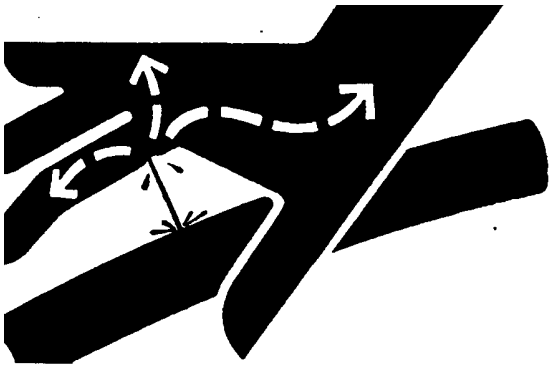
APY88267—UN—23JAN24

A—Pin (1 on per side)
B—Saddle (1 on per side)

CAUTION: Prevent possible injury. DO NOT allow bystanders nearby while attaching the loader. Only the tractor operator can attach the loader.

IMPORTANT: Prevent possible hydraulic hose damage. Make sure that loader hydraulic hoses DO NOT interfere with the tractor when attaching the loader.

1. Center the tractor between loader masts, stopping when both mounting frame saddles (B) are positioned under pins (A) on the loader masts.

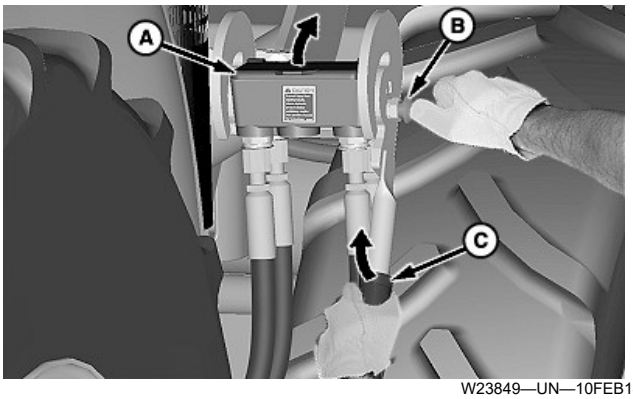


X9811—UN—23AUG88

CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Protect hands and body from high-pressure fluids. (See additional information, Avoid High-Pressure Fluids, in Safety section.) Prevent possible injury from unexpected loader movements. Lower the loader to the ground before relieving the hydraulic pressure. Lock out the loader controls before attaching the loader.

2. Place the transmission in PARK and shut off the engine.
3. Relieve the hydraulic pressure. (See Relieve Hydraulic Pressure in Controls section.)
4. Lock out the loader controls. See the tractor Operator's Manual for more information.

NOTE: Controls vary by tractor and options.

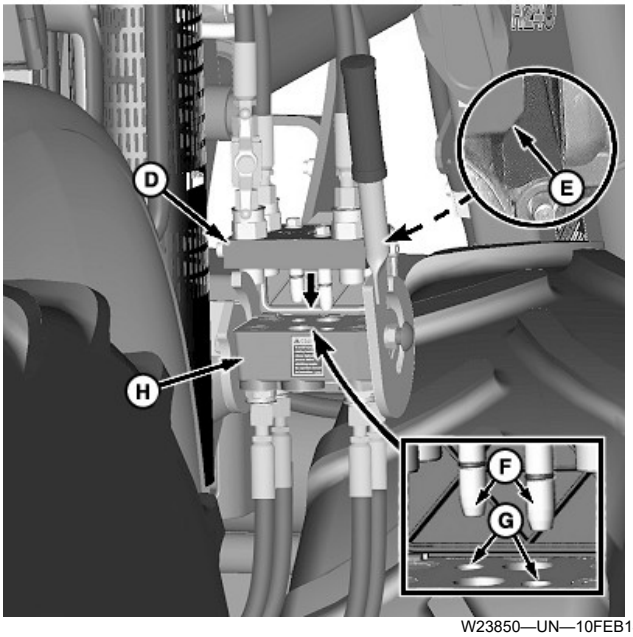


W23849—UN—10FEB14

Multicoupler

A—Cover
B—Knob
C—Handle

5. Connect hydraulics using a multicoupler:
   a. Push in the knob (B) and rotate the handle (C) upward. Lift the cover (A).

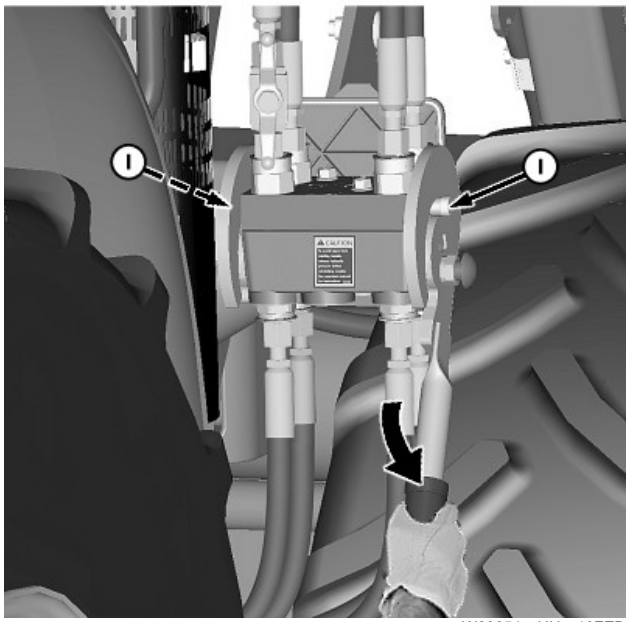


W23850—UN—10FEB14

D—Coupler, Loader Half
E—Chamfered Edge
F—Locating Pin (2 used)
G—Hole (2 used)
H—Coupler, Tractor Half

   b. Insert the loader coupler (D) (with the

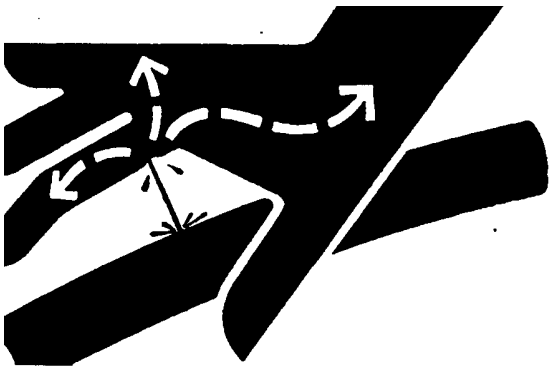
chamfered edge [E] toward the cover) onto the tractor coupler (H). Make sure that the locating pins (F) on the loader coupler fit into the corresponding holes (G) in the tractor coupler.



W23851—UN—10FEB14

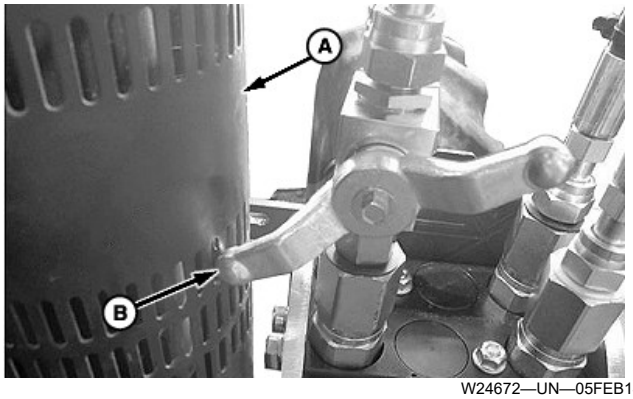
I—Pin (1 per side)

c. Rotate the handle downward to engage pins (I) and lock coupler halves together.

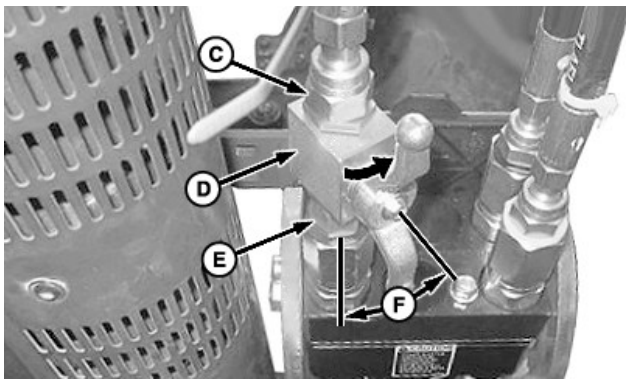


X9811—UN—23AUG88

CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Protect hands and body from high-pressure fluids. See additional information, Avoid High-Pressure Fluids, in Safety section.



W24672—UN—05FEB14



W24673—UN—13FEB14

A—Exhaust Shroud
B—Valve Handle
C—Hose Fitting
D—Shutoff Valve
E—Fitting
F—Angle, 30—40° Degrees

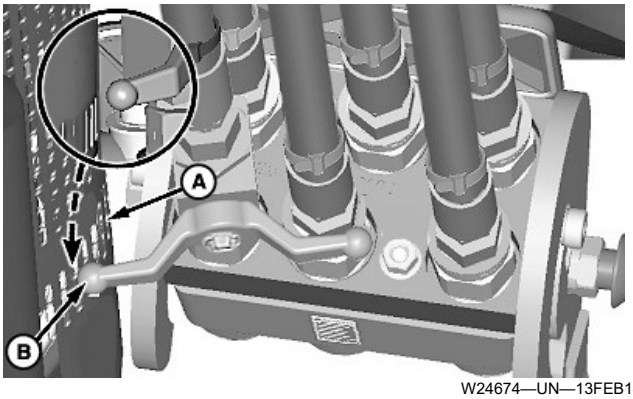
IMPORTANT: Prevent possible machine damage. On some tractors, the shutoff valve handle (B) contacts the tractor exhaust shroud (A) when the shutoff valve is closed. Reposition the shutoff valve if necessary as follows:

a. Place the transmission in PARK and shut off the engine.

b. Relieve the hydraulic pressure. (See Relieve Hydraulic Pressure in the Controls section.)

c. Slightly loosen fittings (C and E).

d. Turn shutoff valve (D) 30—40° degrees (F), as shown.



W24674—UN—13FEB14

Valve Handle Clearance—Three-Function Shown

A—Exhaust Shroud
B—Valve Handle

e. Rotate the valve handle (B) and verify that there is adequate clearance between the handle and the exhaust shroud (A) and adjacent fittings.

f. Tighten fittings to specification.

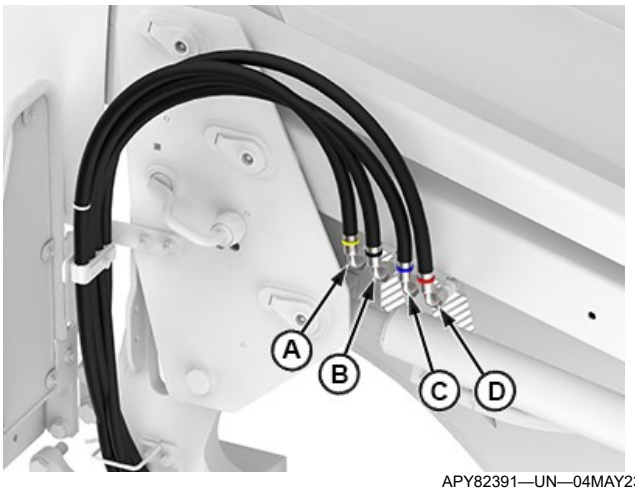
Specification	
Fitting—Torque	50 N·m (37 lb·ft)

7. Connect hydraulic hoses:

NOTE: Identify the hoses by color-coded tie straps, installed on both ends near fittings.

Colors identify the hydraulic function.

IMPORTANT: Avoid fittings interference for optimal use of machine.



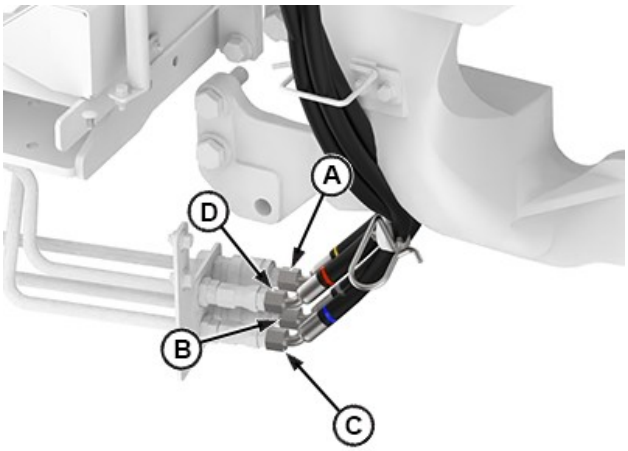
APY82391—UN—04MAY23

Two-Function Hose Kit (Loader Connection)

Assemble and install four hydraulic hoses to the loader lines by matching color-coded tie straps on hoses with the color-coded tie straps on the loader lines as shown. Tighten fittings to specification.

NOTE: Assemble two hoses per hose guard, using two heavy duty zip ties as fastening method. Combine all the hoses together using an additional pair of heavy duty zip ties as shown and position the hoses at 90 °.

Key	Hose Tie Band Color	Hydraulic Function
A	Yellow	Bucket Cylinder—Head End
B	Black	Bucket Cylinder—Rod End
C	Blue	Lift Cylinder—Head End
D	Red	Lift Cylinder—Rod End

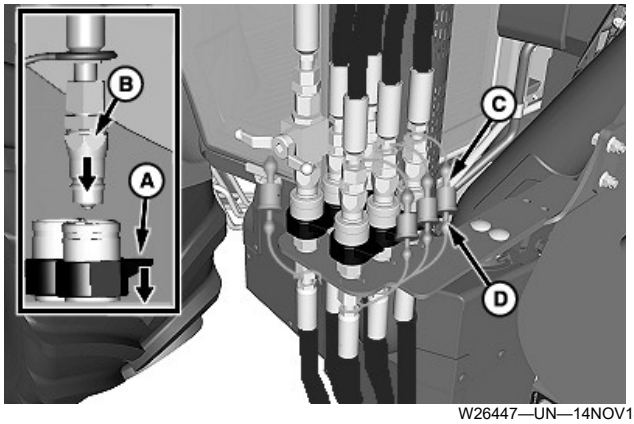


APY82392—UN—04MAY23

Two-Function Hose Kit (Mid-SCV Connection)

8. Assemble and install four hydraulic hoses by matching color-coded tie bands on hose ends with corresponding fittings (A—D) on mid-mount valve. Tighten fittings to specification. (Use table to match color and function.)

Key	Hose Tie Band Color	Hydraulic Function
A	Yellow	Bucket Cylinder—Head End
B	Black	Bucket Cylinder—Rod End
C	Blue	Lift Cylinder—Head End
D	Red	Lift Cylinder—Rod End



W26447—UN—14NOV14

Mid-Mount Couplers

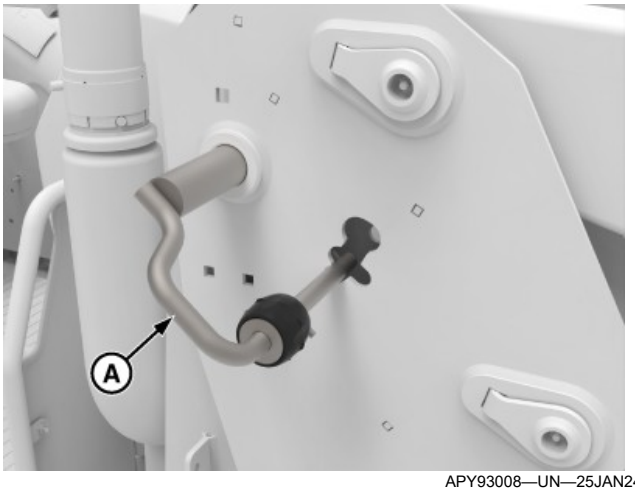
A—Coupler, Female
B—Coupler, Male
C—Cap
D—Plug

⚠ CAUTION: Prevent possible injury from unexpected loader movement. Hose connections must be correct for the loader to respond as expected when controls are moved.

IMPORTANT: Prevent possible hydraulic system contamination. Before connecting coupler halves make sure that fittings are free of dirt and debris. Verify that hoses are not twisted or kinked.

NOTE: Hose connections have color-coded caps and plugs. If caps and plugs are missing, see Identify Hose Connections in the Service section.

9. Connect hydraulics using mid-mount couplers:
   a. Push and hold the collar on the female coupler (A).
   b. Match the color-coded cap on the hose end with the same color-coded plug on the coupler. Insert the hydraulic hose with the male coupler (B) into the female coupler.
   c. Release the collar on the female coupler.
   d. Connect the color-coded cap (C) and plug (D) together.
   e. Repeat connections for all the couplers.



APY93008—UN—25JAN24

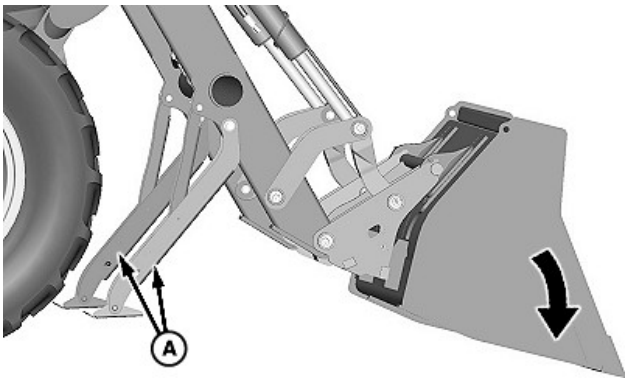
Right-Hand Side Shown

A—Mast Pin (1 per side)

10. Make sure that mast pins (A) on both sides are retracted (pulled out) as shown.

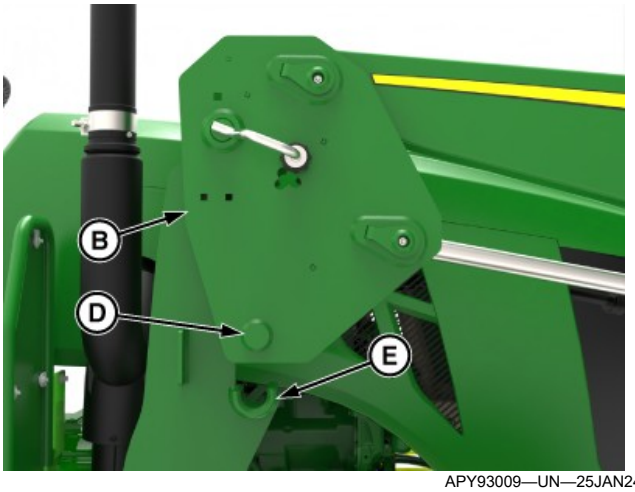
APY88268—UN—28JAN24

Dump Bucket (500M)



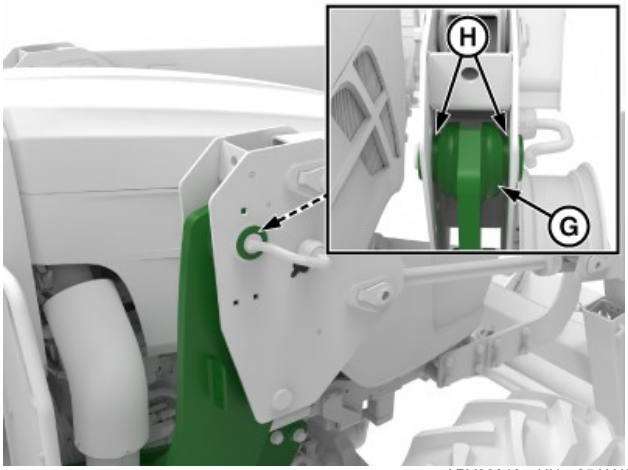
W27955—UN—08MAY17

Dump Bucket (520M)



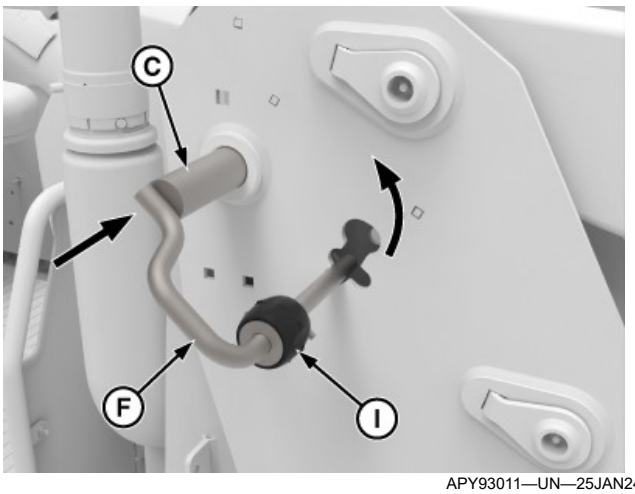
APY93009—UN—25JAN24

Right-Hand Side Shown

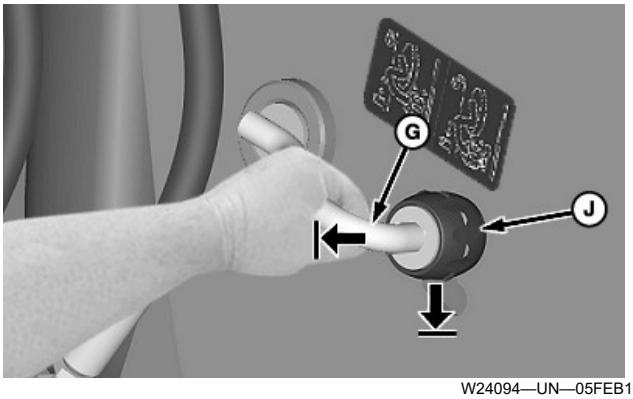


APY93010—UN—25JAN24

Install Pin



APY93011—UN—25JAN24



W24094—UN—05FEB14

Rotate Handle

A—Parking Stand (1 per side)
B—Mast (1 per side)
C—Mast Pin (1 per side)
D—Pin (1 per side)
E—Saddle (1 each side)
F—Handle (1 per side)
G—Cradle (2 per side)
H—Bushing (2 per side)
I—Knob (1 per side)

11. Start the engine.
12. Place the transmission in NEUTRAL.
13. Unlock the loader controls. See the tractor Operator's Manual for more information.

NOTE: Controls vary by tractor and options.

14. Extend the bucket cylinders until the mast (B) lowers, pins (D) are engaged in saddles (E) on both sides, and the parking stands (A) are slightly off the ground.

    Retract the lift cylinders until the mast bushings (H) are seated in cradles (G) on both the mounting frames.

    Place the transmission in PARK and shut off the engine.

    Install mast pins (C) on both sides of the loader:

    a. Push in the mast pin and rotate the handle (F) upward until the knob locks into the mast.

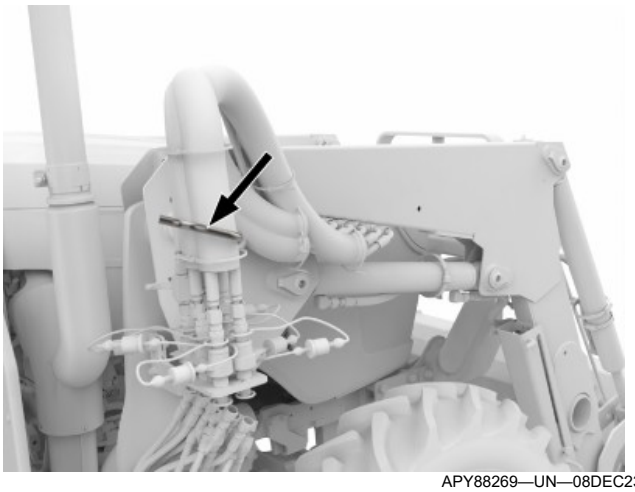
    b. Make sure that the knob (I) is securely locked in the top hole of the mast. Pull on the pin handle while attempting to rotate downward.

    NOTE: If the handle does not move, the knob is locked.

IMPORTANT: Prevent possible hydraulic hose damage from excessive contact with the tractor exhaust. Position the hose bundle so that hoses loop down in between the hose bracket and boom.

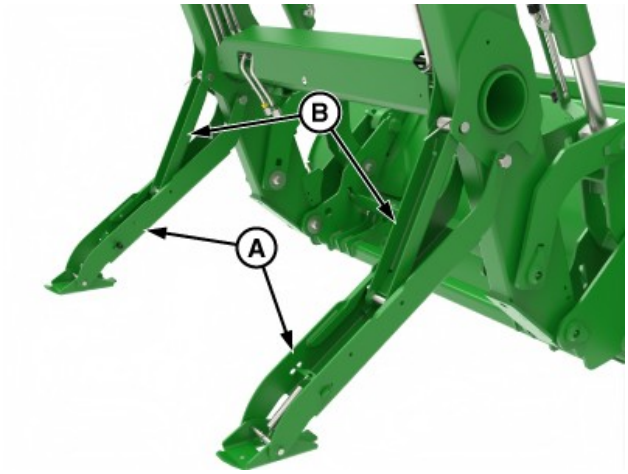
15. Position the hose bundle so that the hoses loop

down in between the hose bracket and boom as shown.



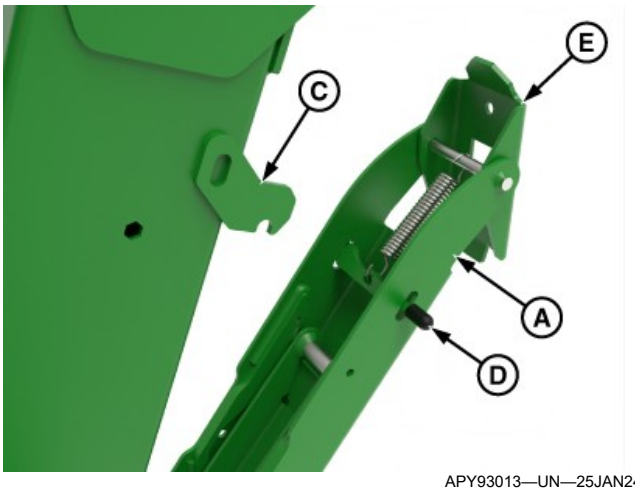
APY88269—UN—08DEC23

Hose Bracket

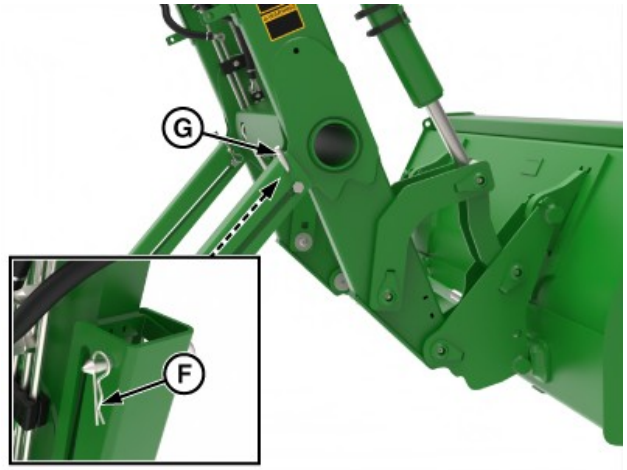


APY93012—UN—25JAN24

520M Right-Hand Side Shown



APY93013—UN—25JAN24



APY88270—UN—28JAN24

500M Right-Hand Side Shown

A—Parking Stand (1 per side)
B—Support (1 per side)
C—Latch Plate (1 each side)
D—Latch (1 each side)
E—Foot Plate (1 each side)
F—Pin
G—Latch Pin

CAUTION: Prevent possible injury. Keep hands and fingers away from sides of the parking stand (A) and foot plate (E) when storing parking stands.

16. Store loader parking stands: 520M
    a. Pull out the support (B) and slide down the parking stand (A).
    b. Lift the parking stand and push upward toward the bottom of the boom.
    c. Push the parking stand inward until the latch (D) engages the latch plate (C), locking the parking stand in place.
    d. Repeat on the opposite side.

    Store loader parking stands: 500M
    a. Remove pin (F).
    b. Hold the parking stand handle with one hand, and remove the latch pin (G).
    c. Lift the parking stand and push upward toward the bottom of the boom.
    d. Push the parking stand inward and secure with the latch pin (G)locking the parking stand in place.
    e. Repeat on the opposite side.
17. Check loader operation and performance.

uuf6xgz,1701952576294-19-25JAN24

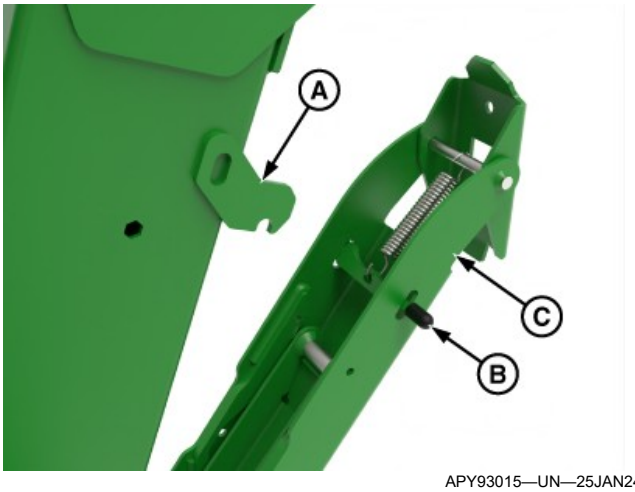
Detach Loader—520M and 500M Loaders

W14000—UN—05OCT88

CAUTION: Prevent possible injury from a falling loader. Always detach the loader on a hard, level surface. Loader MUST be equipped with a bucket or attachment. DO NOT allow bystanders nearby while detaching the loader. Only the tractor operator can detach the loader.

APY93014—UN—25JAN24

1. Dump bucket 40° as shown.
2. Lower the loader to the ground, applying slight downward pressure. Do not raise the front tires off the ground.
3. Place the transmission in PARK and shut off the engine.

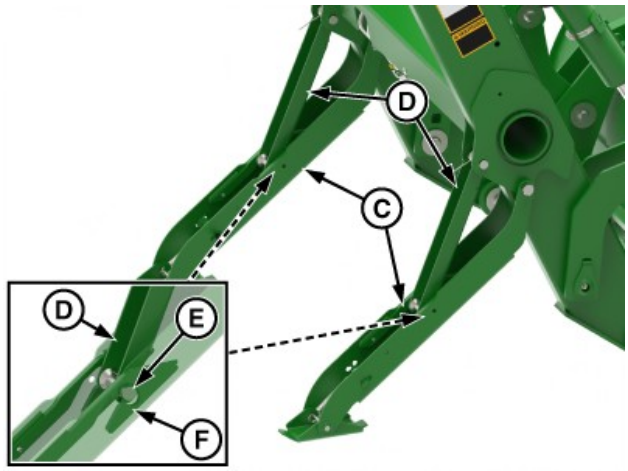


APY93015—UN—25JAN24

Parking Stand

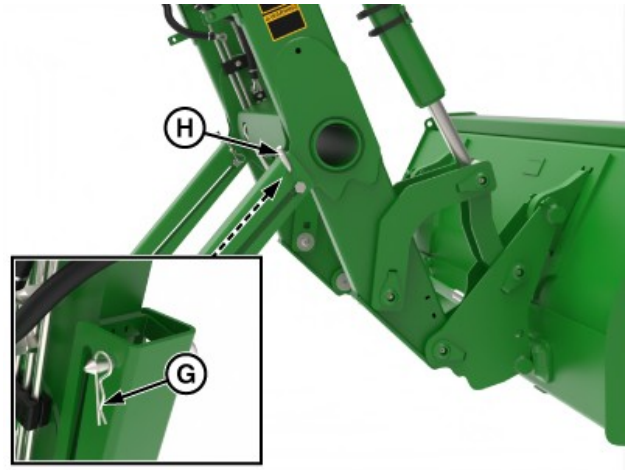
A—Latch Plate (1 per side)
B—Latch (1 per side)
C—Parking Stand (1 per side)

4. Lower parking stands: 520M
   a. Push down on the latch (B) releasing the parking stand (C) from the latch plate (A).



APY93016—UN—25JAN24

520M Parking Stand



APY88271—UN—28JAN24

500M Parking Stand

C—Parking Stand (1 per side)
D—Support (1 per side)
E—Pin (1 per side)
F—Hook (2 per parking stand)
G—Pin (1 per side)
H—Latch Pin (1 per side)

b. Lower the parking stand (C) until the pin (E) on the support (D) rests in hooks (F) inside the parking stand.

c. Repeat on the opposite side.

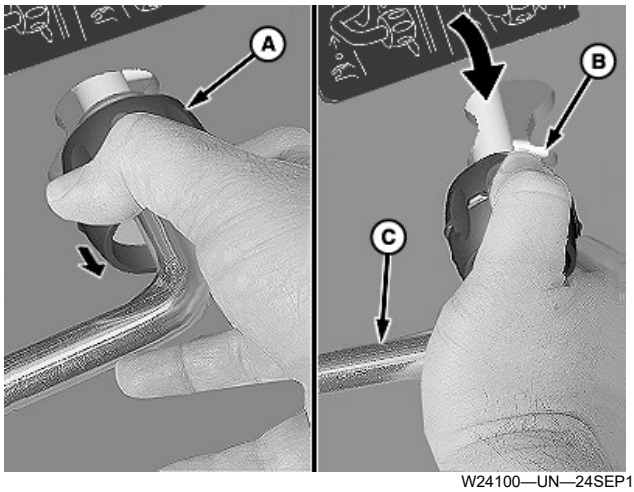
Lower parking stands: 500M

a. Remove pin (F).

b. Hold the parking stand handle with one hand, and remove the latch pin (G).

c. Lower the parking stand (C) completely down, and secure with the latch pin (G) locking the parking stand in place.

d. Repeat on the opposite side.



W24100—UN—24SEP13

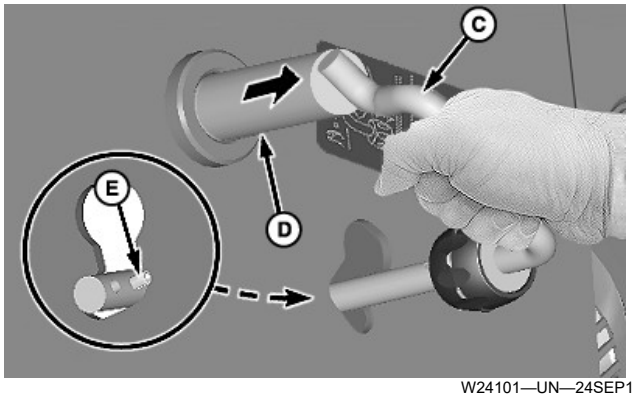
A—Knob
B—Pin
C—Handle

NOTE: It is not necessary to remove mast pins from the loader. If pins are removed and the hole alignment is lost, slightly extend and retract bucket cylinders to realign.

5. Disengage mast pins as follows:

   a. Pull back the knob (A) from the mast.

   b. Rotate the handle (C) downward until the pin (B) is aligned with the bottom hole in the mast.



W24101—UN—24SEP13

Left-Hand Side Shown

C—Handle
D—Mast Pin
E—Stop

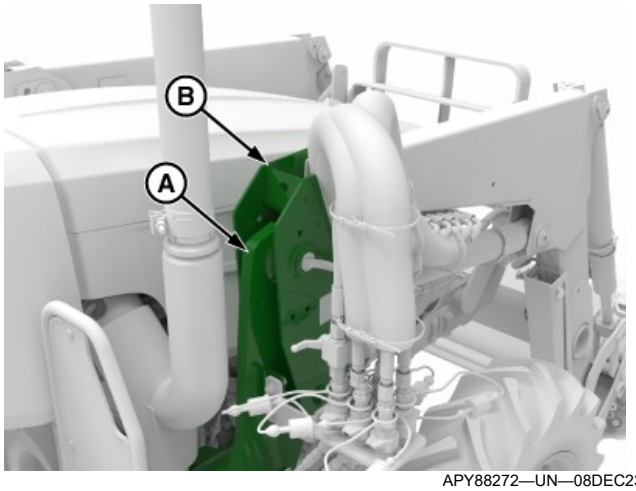
IMPORTANT: Prevent possible pin damage. Make sure that pins are fully disengaged from mounting frames before detaching.

   c. Pull the handle (C) and mast pin (D) until the stop (E) rests against the inside surface of the mast, as shown.

   d. Repeat on the opposite side.

6. Start the engine.

7. Place the transmission in NEUTRAL.



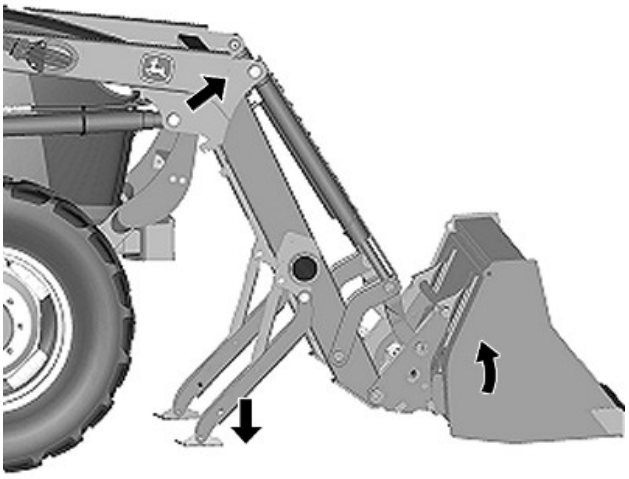
APY88272—UN—08DEC23

Right-Hand Side Shown

A—Mounting Frame (1 per side)
B—Mast (1 per side)

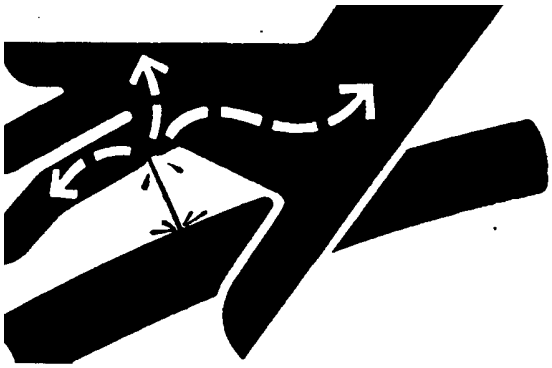
8. Extend lift cylinders until masts (B) move forward approximately 50 mm (2 in) away from mounting frames (A).

NOTE: If further clearance is necessary, slightly extend lift cylinders while retracting bucket cylinders.



W27981—UN—26MAY17

9. Retract bucket cylinders until the parking stands contact the ground. Continue to retract bucket cylinders until the loader lifts out of mounting frames. Drive ahead as necessary to keep the hoses slack.

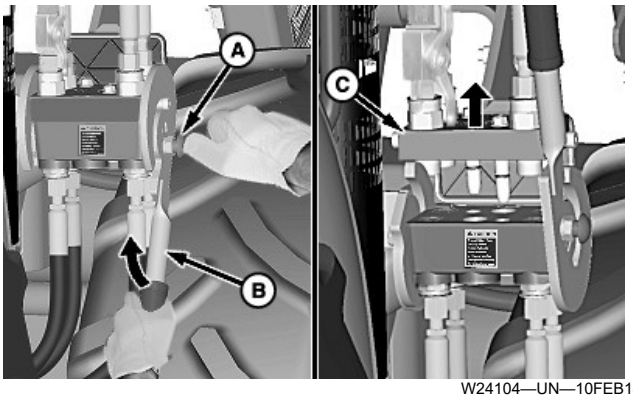


X9811—UN—23AUG88

CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Protect hands and body from high-pressure fluids. See additional information, Avoid High-Pressure Fluids, in Safety section. Prevent possible injury from unexpected movement. Lower the loader to the ground before relieving the hydraulic pressure. Lock out the loader controls before detaching the loader.

10. Place the transmission in PARK and shut off the engine.
11. Relieve the hydraulic pressure. (See Relieve Hydraulic Pressure in Controls section.)
12. Lock out the loader controls. See the tractor Operator's Manual for more information.

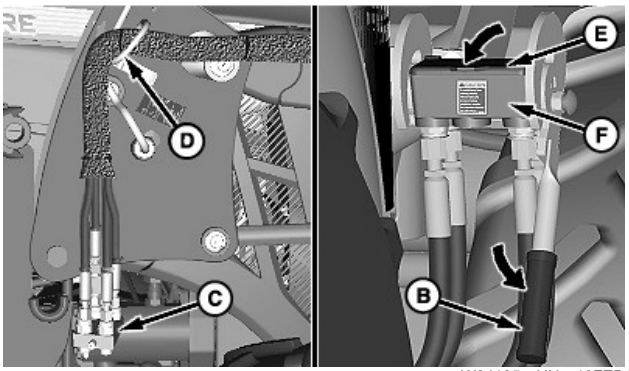
NOTE: Controls vary by tractor and options.



W24104—UN—10FEB14

A—Knob
B—Handle
C—Coupler, Loader Half

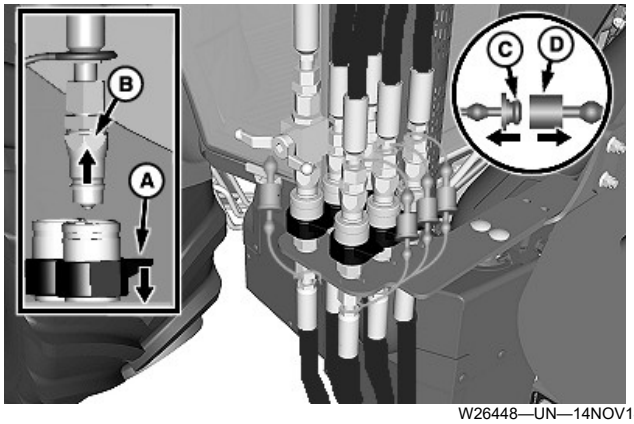
13. Disconnect hydraulics using a multicoupler:
    a. Push in the knob (A) and rotate the handle (B) upward to disconnect the loader coupler (C).



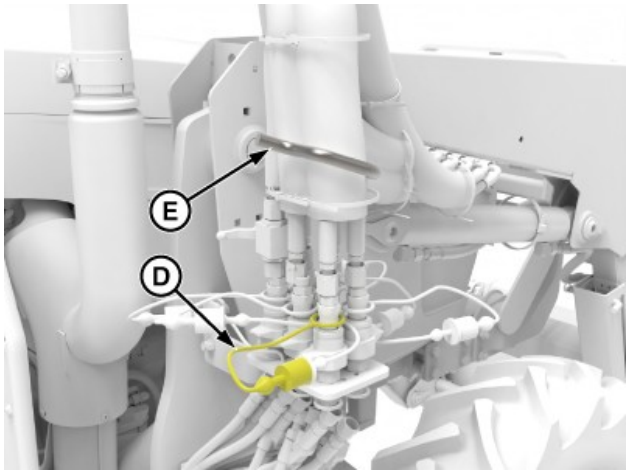
W24105—UN—10FEB14

C—Coupler, Loader Half
D—Hose Support
E—Cover
F—Coupler, Tractor Half

    b. Hang hoses with the loader coupler (C) from the hose holder (D) as shown.
    c. Close the protective cover (E) on the tractor coupler (F) and rotate the handle downward until locked.



W26448—UN—14NOV14



APY88273—UN—08DEC23

A—Coupler, Male
B—Coupler, Female
C—Plug (4 or 6 used)
D—Cap (4 or 6 used)
E—Hose Holder

14. Disconnect hydraulics using mid-mount couplers:
    a. Push and hold the collar on the female coupler (B).
    b. Disconnect the male coupler (A).
    c. Release the collar on the female coupler.
    d. Place the cap (D) on the hose end and insert the plug (C) into the coupler.
    e. Repeat steps for the remaining hose connections.
    f. Hang hoses with couplers from the hose holder (E) as shown.
15. Place the transmission in REVERSE and move away from the loader.

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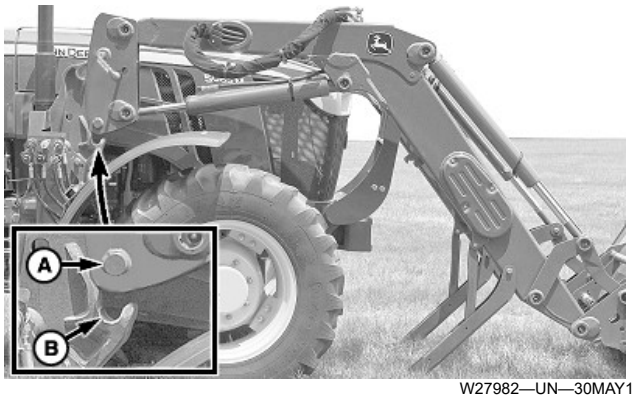
Attach Loader—540M Loaders

CAUTION: Prevent possible injury. DO NOT allow bystanders nearby while attaching the loader. Only the tractor operator can attach the loader.

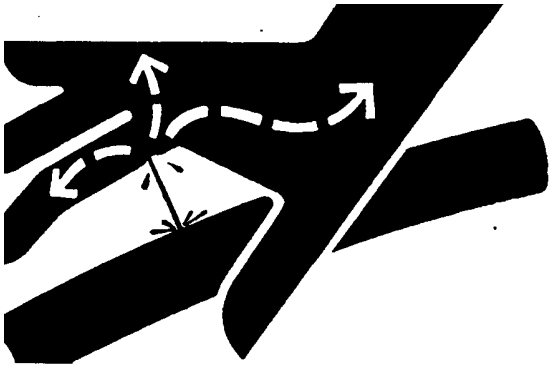


W27982—UN—30MAY17

A—Pin (1 per side)
B—Saddle (1 per side)

IMPORTANT: Prevent possible hydraulic hose damage. Make sure that the loader hydraulic hoses DO NOT interfere with the tractor when attaching the loader.

1. Center the tractor between the loader masts, stopping when both mounting frame saddles (B) are positioned under pins (A) on the loader masts.



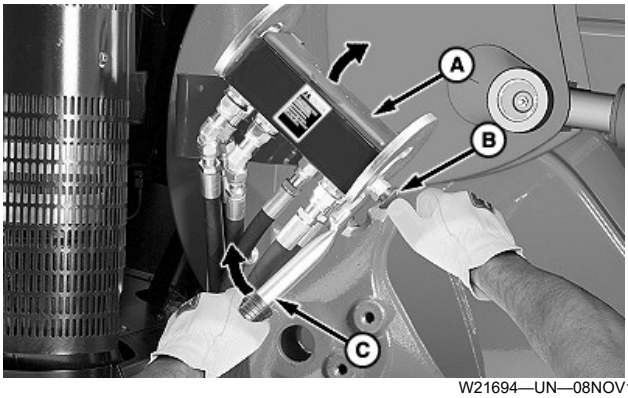
X9811—UN—23AUG88

CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Protect hands and body from high-pressure fluids. (See additional information, Avoid High-Pressure Fluids, in Safety section.) Prevent possible injury from unexpected loader movement. Lower the loader to the ground before relieving hydraulic pressure. Lock out the loader controls before attaching the loader.

2. Place the transmission in PARK and shut off the engine.

3. Relieve the hydraulic pressure. (See Relieve Hydraulic Pressure in Controls section.)
4. Lock out the loader controls. See the tractor Operator's Manual for more information.

NOTE: Loader controls vary by tractor and options.

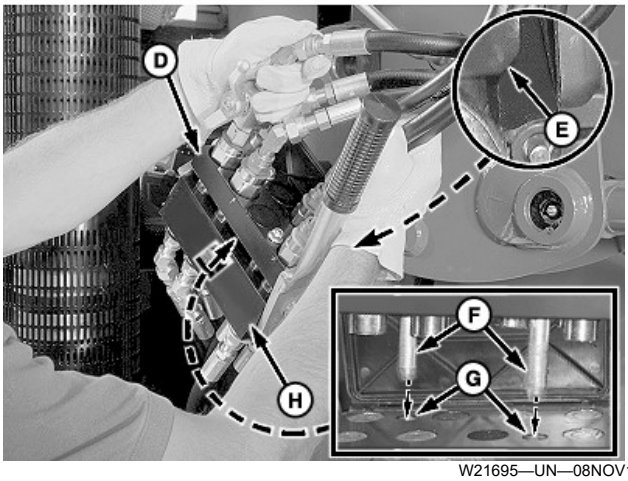


W21694—UN—08NOV11

Multicoupler

A—Cover
B—Knob
C—Handle

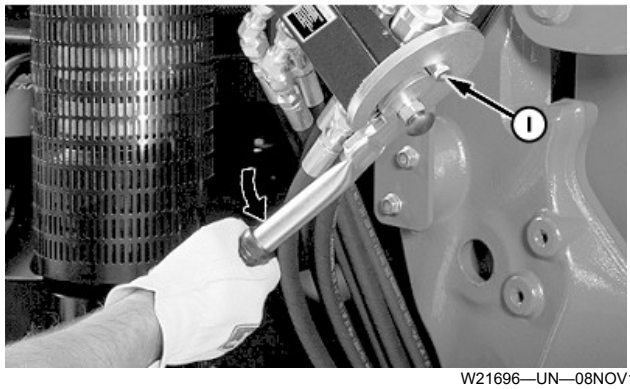
5. Connect hydraulics using a multicoupler:
   a. Push IN the knob (B) and rotate the handle (C) upward. Raise the cover (A).



W21695—UN—08NOV11

D—Coupler, Loader Half
E—Chamfered Edge
F—Locating Pin (2 used)
G—Hole (2 used)
H—Coupler, Tractor Half

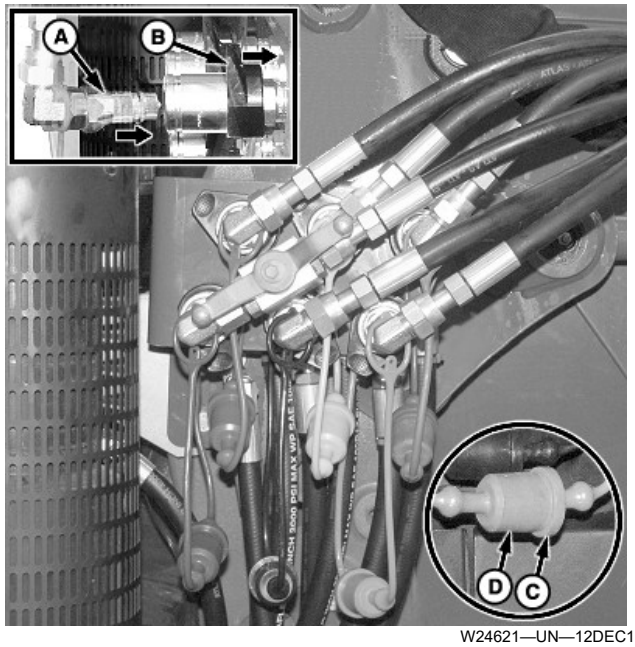
   b. Insert the loader coupler (D) (chamfered edge [E] toward the cover) onto the tractor coupler (H).
   c. Make sure that the locating pins (F) on the loader coupler fit into the corresponding holes (G) in the tractor coupler (H).



W21696—UN—08NOV11

I—Pin (1 per side)

   d. Rotate the handle downward to engage pins (I) and lock the coupler halves together.



W24621—UN—12DEC13

Mid-Mount Couplers

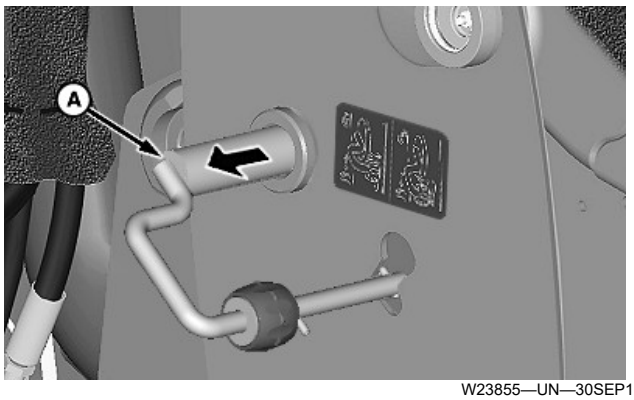
A—Coupler, Male
B—Coupler, Female
C—Plug
D—Cap

CAUTION: Prevent possible injury from unexpected loader movement. Hose connections must be correct for the loader to respond as expected when controls are moved.

IMPORTANT: Prevent possible hydraulic system contamination. Before connecting the coupler halves make sure that fittings are free of dirt and debris. Verify that hoses are not twisted or kinked.

NOTE: Hose connections have color-coded caps and plugs. If caps and plugs are missing, see Identify Hose Connections in Service section.

6. Connect hydraulics using mid-mount couplers:
   a. Push and hold the collar on the female coupler (B).
   b. Match the color-coded cap on the hose end with the same color-coded plug on the coupler.
   c. Insert the hydraulic hose with the male coupler (A) into the female coupler.
   d. Release the collar on the female coupler.
   e. Connect the color-coded plug (C) and cap (D) together.
   f. Repeat connection procedures for all couplers.



W23855—UN—30SEP13

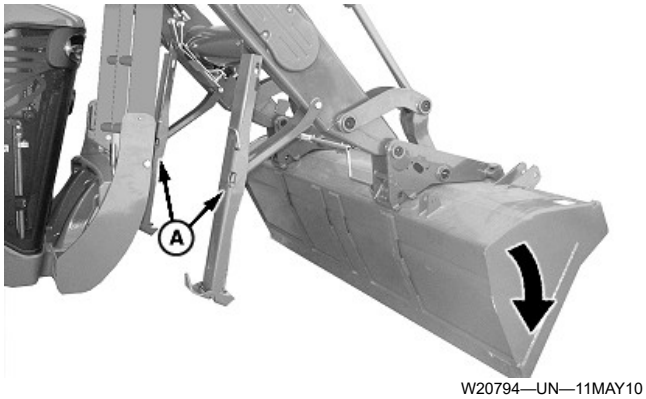
Right-Hand Side Shown

A—Mast Pin (1 per side)

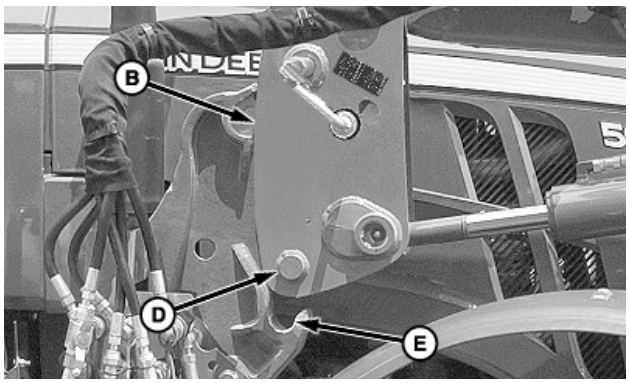
7. Make sure that the mast pins (A) on both sides are retracted (pulled out) as shown.
8. Start the engine.
9. Place the transmission in NEUTRAL.
10. Unlock the loader controls. See the tractor Operator's Manual for more information.

NOTE: Loader controls vary by tractor and options.

- Tractors with SCV fingertip controls: Press the transport lock switch.
- Tractors with a multi-function lever: Press the transport lock switch.

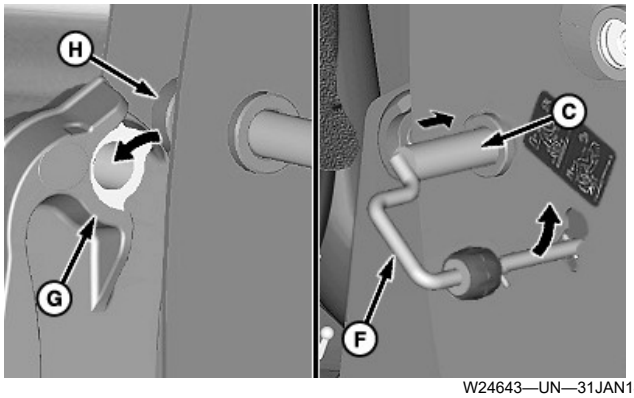


W20794—UN—11MAY10

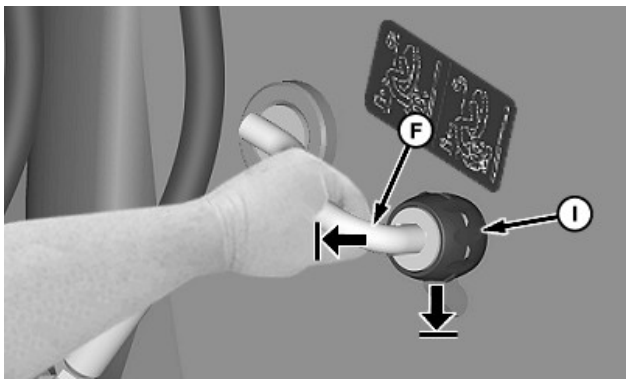


W28404—UN—16APR18

Right-Hand Side Shown



W24643—UN—31JAN14



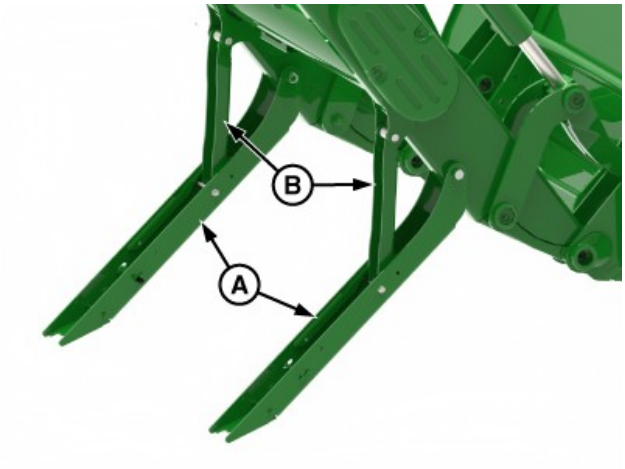
W28408—UN—26APR18

A—Parking Stand (1 per side)
B—Mast (1 per side)
C—Mast Pin (1 per side)
D—Pin (1 per side)
E—Saddle (1 per side)
F—Handle (1 per side)

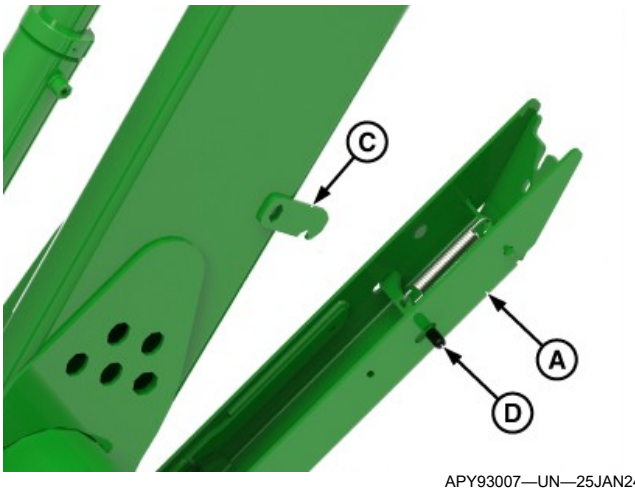
G—Cradle (2 per side)
H—Bushing (2 per side)
I—Knob (1 per side)

11. Extend the bucket cylinders until the mast (B) lowers, pins (D) are engaged in saddles (E) on both sides, and the parking stands (A) are slightly off the ground.
12. Retract the lift cylinders until the mast bushings (H) are seated in cradles (G) on both the mounting frames.
13. Place the transmission in PARK and shut off the engine.
14. Install the mast pins (C) on both sides of the loader:
    a. Push in the mast pin and rotate the handle (F) upward until the knob locks into the mast.
    b. Make sure that the knob (I) is securely locked in the top hole of the mast. Pull on the pin handle while attempting to rotate downward.

    NOTE: If the handle does not move, the knob is locked.



APY93006—UN—25JAN24
Right-Hand Side Shown



APY93007—UN—25JAN24

A—Parking Stand (1 per side)
B—Support (1 per side)
C—Latch Plate
D—Latch
E—Foot Plate

CAUTION: Prevent possible injury, keep hands and fingers away from sides of the parking stand (A) and foot plate (E) when storing the parking stands.

NOTE: Original parking stands with a foot plate shown. Later versions do not include the foot plate.

15. Store loader parking stands:
    a. Pull out the support (B) and slide down the parking stand (A).
    b. Lift the parking stand and push upward toward the bottom of the boom.
    c. Push the parking stand inward until the latch (D) engages the latch plate (C), locking the parking stand in place.
    d. Repeat on the opposite side.
16. Check loader operation and performance.

rd91939,1706213684048-19-25JAN24

Detach Loader—540M Loaders

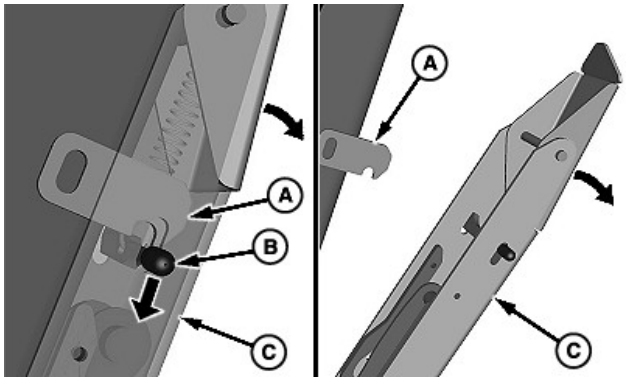
W14000—UN—05OCT88

CAUTION: To prevent possible injury when storing the parking stands, keep hands and fingers away from sides of the parking stand (A) and foot plate (E).

W27983—UN—30MAY17

1. Position the bucket 40° as shown.
2. Lower the loader to the ground, applying slight downward pressure. Do not raise the front tires off the ground.
3. Place the transmission in PARK and shut off the engine.

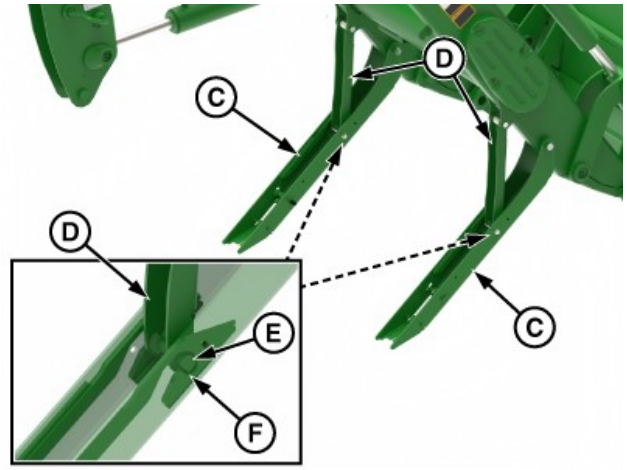
NOTE: Original parking stands with a foot plate shown. Later versions do not include the foot plate.



W21699—UN—15AUG11

A—Latch Plate (1 each side)
B—Latch (1 per side)
C—Parking Stand (1 per side)

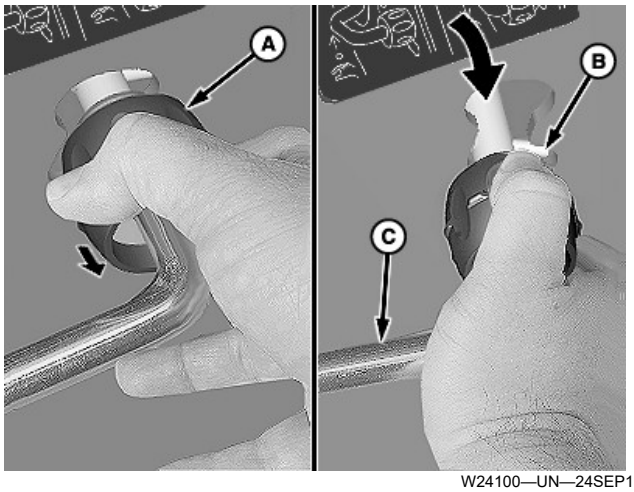
4. Lower parking stands:
   a. Push down the latch (B) releasing the parking stand (C) from the latch plate (A).



APY93017—UN—25JAN24

C—Parking Stand (1 per side)
D—Support (1 per side)
E—Pin (1 per side)
F—Hook (2 per parking stand)

   b. Lower the parking stand (C) until the pin (E) on the support (D) is engaged in hooks (F) inside the parking stand.
   c. Repeat on the opposite side.

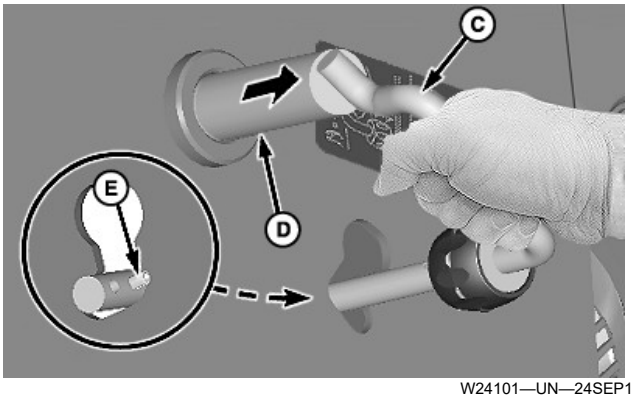


W24100—UN—24SEP13

A—Knob
B—Pin
C—Handle

NOTE: It is not necessary to remove the mast pins from the loader. If pins are removed and the hole alignment is lost, slightly extend and retract the bucket cylinders to realign.

5. Disengage mast pins as follows:
   a. Pull back the knob (A) from the mast.
   b. Rotate the handle (C) downward until the pin (B) is aligned with the bottom hole in the mast.



W24101—UN—24SEP13

Left-Hand Side Shown

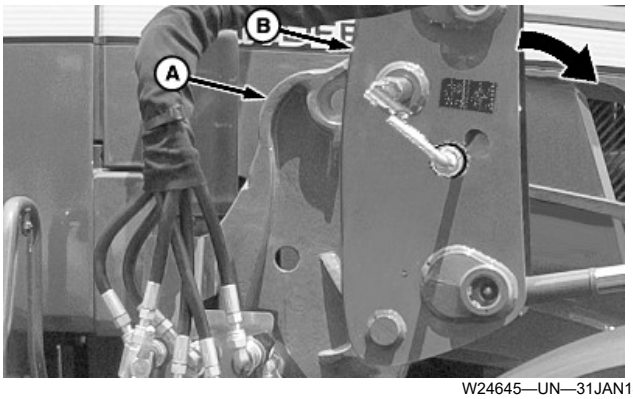
C—Handle
D—Pin
E—Stop

IMPORTANT: Prevent possible pin damage. Make sure that pins are fully disengaged from the mounting frames before detaching.

c. Pull the handle (C) and mast pin (D) until the stop (E) rests against the inside surface of the mast, as shown.

d. Repeat on the opposite side.

6. Start the engine.
7. Place the transmission in NEUTRAL.



W24645—UN—31JAN14

Right-Hand Side Shown

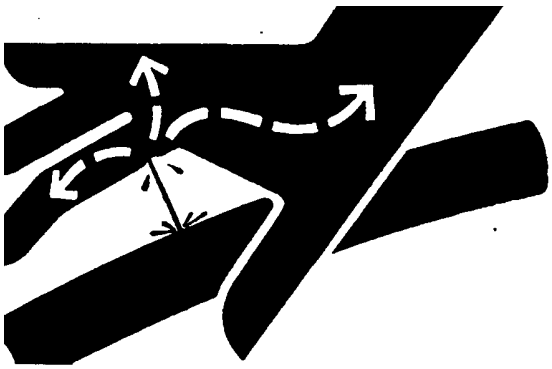
A—Mounting Frame (1 per side)
B—Mast (1 per side)

8. Extend the lift cylinders until masts (B) move forward approximately 50 mm (2 in) away from the mounting frames (A).

NOTE: If further clearance is necessary, slightly extend the lift cylinders while retracting the bucket cylinders.

W27984—UN—30MAY17

9. Retract the bucket cylinders until the parking stands contact the ground. Continue to retract the bucket cylinders until the loader lifts out of the mounting frames. Drive ahead as necessary to keep the hoses slack.

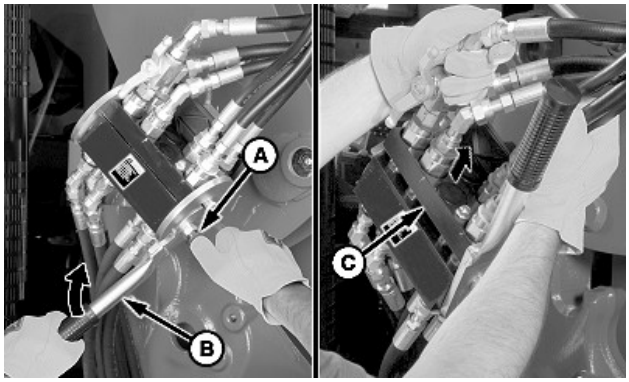


X9811—UN—23AUG88

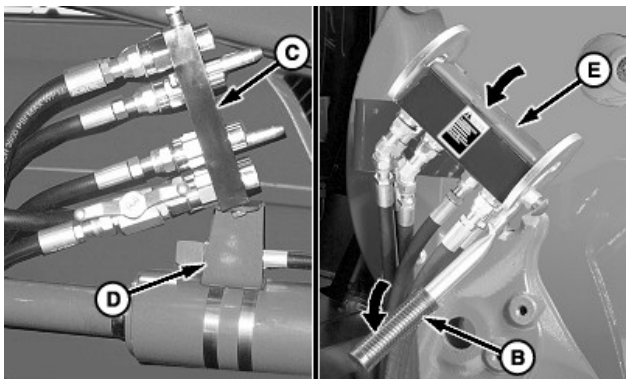
CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Protect hands and body from high-pressure fluids. (See additional information, Avoid High-Pressure Fluids, in Safety section.) Prevent possible injury from unexpected loader movement. Lower the loader to the ground before relieving the hydraulic pressure. Lock out the loader controls before detaching the loader.

10. Place the transmission in PARK and shut off engine.
11. Relieve the hydraulic pressure. (See Relieve Hydraulic Pressure in Controls section.)
12. Lock out the loader controls. See the tractor Operator's Manual for more information.

NOTE: Loader controls vary by tractor and options.



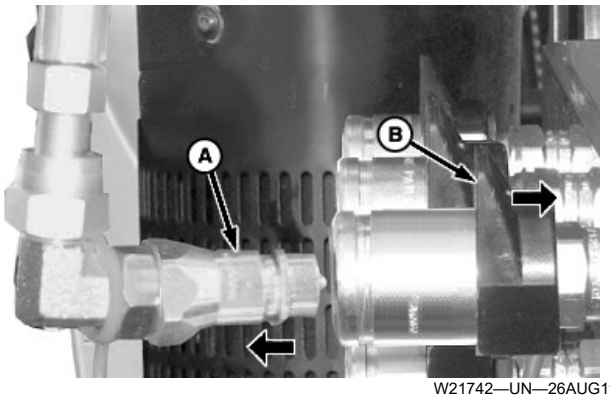
W24647—UN—31JAN14



W21734—UN—08NOV11

A—Knob
B—Handle
C—Coupler, Loader Half
D—Storage Bracket
E—Cover

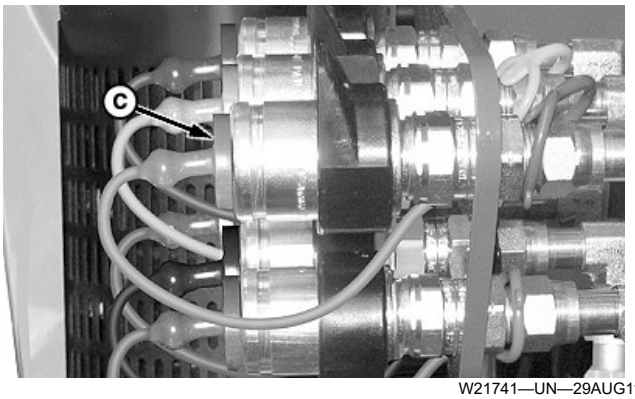
13. Disconnect hydraulics using a multicoupler:
    a. Push in the knob (A) and rotate the handle (B) upward to disconnect couplers.
    b. Place the loader coupler (C), as shown, on the storage bracket (D) on the right-hand side lift cylinder.
    c. Close the protective cover (E) and rotate the handle downward until locked.



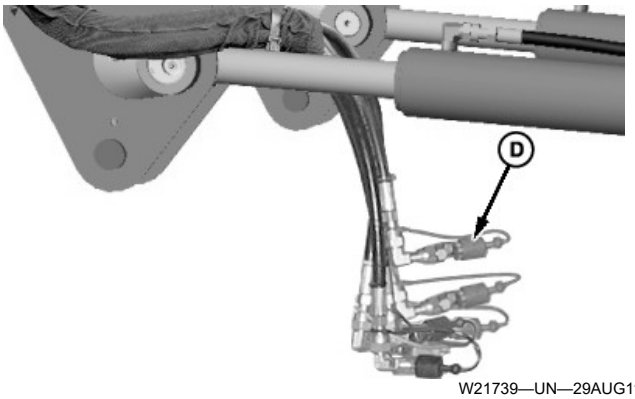
W21742—UN—26AUG11

A—Coupler, Male
B—Coupler, Female

14. Disconnect hydraulics using mid-mount couplers:
    a. Push and hold the collar on the female coupler (B).
    b. Disconnect the male coupler (A).
    c. Release the collar on the female coupler.



W21741—UN—29AUG11



W21739—UN—29AUG11

C—Plug (4 or 6 used)
D—Cap (4 or 6 used)

    d. Place the cap (D) on the hose end and the plug (C) into the coupler.
    e. Repeat steps for the remaining hose connections.
    f. Place hoses on the lift cylinder as shown. Do not lay hoses on the ground.

15. Place the transmission in REVERSE and move away from the loader.

rd91939,1706213683847-19-25JAN24

Attach and Detach Bucket or Attachment

Attachments Available

John Deere and Frontier attachments are available for this loader. See regular spare part channels for purchasing the approved attachments.

NOTE: When ordering an attachment or bundle, make sure to request the Installation Instructions and operating information.

Installation Instructions can be obtained via regular spare part channels or online via techpubs.deere.com.

OUO6038,0001EFE-19-26NOV25

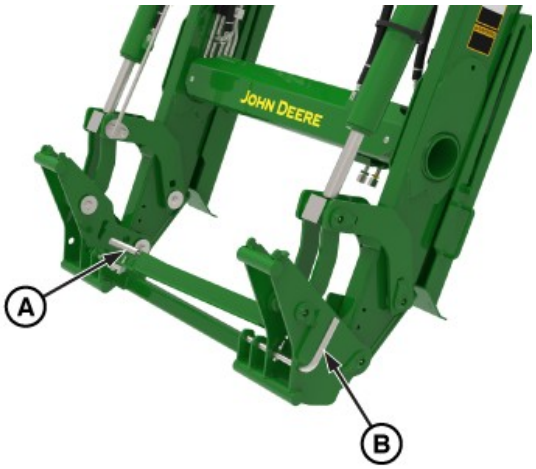
Attach Bucket or Attachment—520M and 500M Loaders

Global Carrier

CAUTION: Prevent possible injury, DO NOT allow bystanders near the loader while attaching the bucket or attachment. Only the tractor operator can attach the bucket or attachment.

NOTE: Attaching procedure is the same for all attachments. Bucket attachment shown.

1. Clean the debris off the latching mechanism, carrier, and attaching points.
2. Extend the bucket cylinders to position the carrier forward.

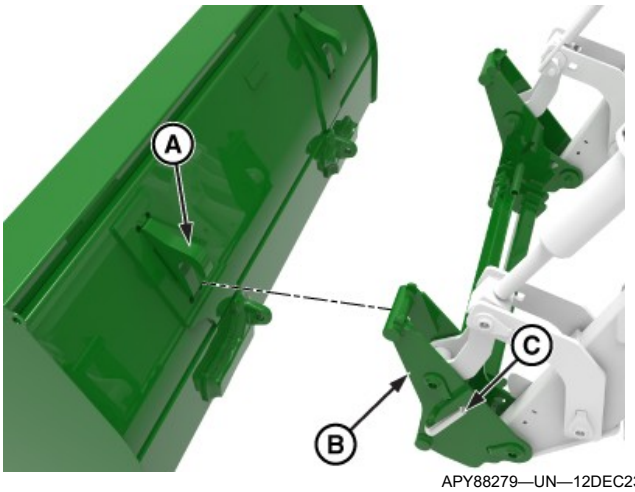


APY88274—UN—11DEC23

Latch Handle

A—Pin
B—Handle

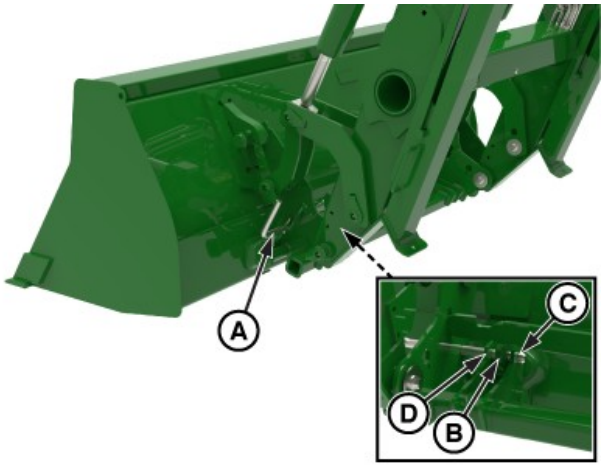
3. Shut off engine and remove ignition key.
4. Pull the latch handle (B) outward and clockwise until the pin (A) rests against the carrier frame and is locked in the UNLATCHED position.
5. Extend the bucket cylinders to position the carrier arms downward.



APY88279—UN—12DEC23

A—Hook (1 per side)
B—Carrier Arm (1 per side)
C—Handle

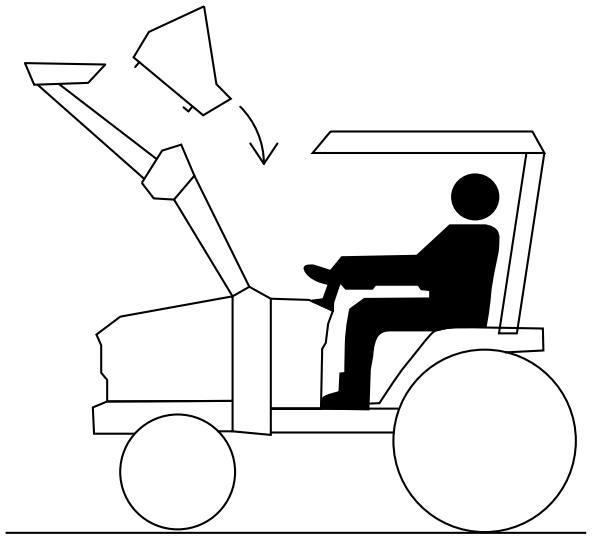
6. Drive forward and center the carrier arms (B) under hooks (A) on the bucket.
7. Extend the lift cylinders until the carrier arms (B) engages hooks on both sides of the bucket.



APY88275—UN—11DEC23

A—Handle
B—Bracket, Attachment (1 per side)
C—Rod
D—Tab

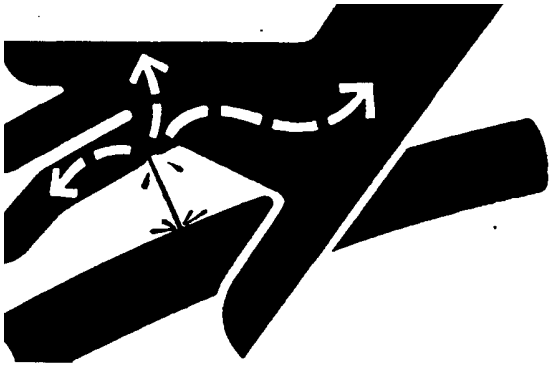
8. Retract the bucket cylinders. Rod (C) contacts tab (D) and releases the latching mechanism, allowing pins (A) to slide into brackets (B) on the bucket.



W08424—UN—14DEC06

CAUTION: Prevent possible injury or death from a falling bucket or attachment. DO NOT operate the loader without making sure that the latch pins (A) are engaged with the bucket or attachment. Failure to engage pins can cause the bucket or attachment to detach from the loader.

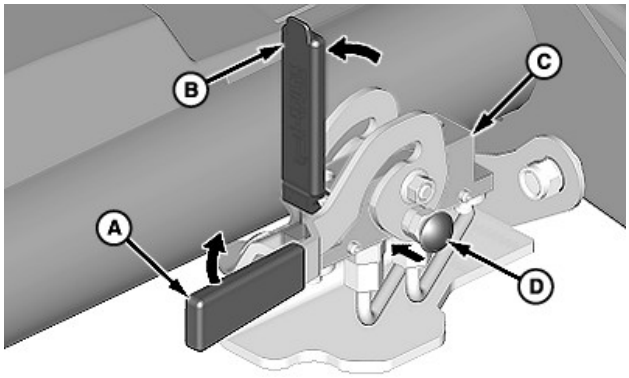
9. Check pin engagement with the bucket:
   a. Position the loader approximately 300 mm (12 in) from the ground and extend the bucket cylinders until the front edge of the bucket contacts the ground.
   b. Continue to apply pressure against the ground verifying that pins (A) are engaged with the bucket.



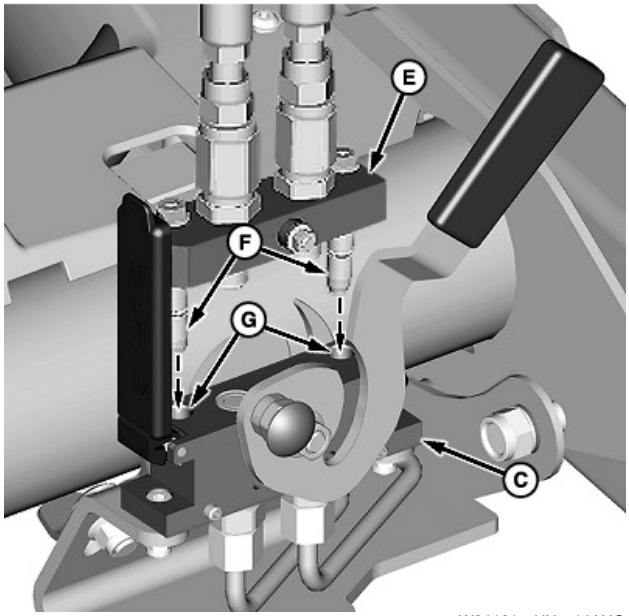
X9811—UN—23AUG88

CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Protect hands and body from high-pressure fluids. (See additional information, Avoid High-Pressure Fluids, in Safety section.)

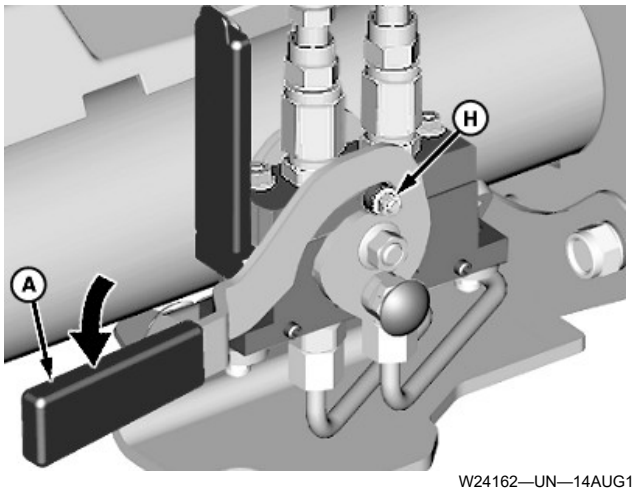
10. Level the bucket and lower flat on the ground.
11. Relieve the hydraulic pressure. (See Relieve Hydraulic Pressure in Controls section.)



W24160—UN—13AUG13



W24161—UN—14AUG13



W24162—UN—14AUG13

A—Lever
B—Cover
C—Coupler, Loader
D—Red Knob
E—Coupler, Attachment

F—Pin (2 used)
G—Hole (2 used)
H—Pin (1 each side)

NOTE: Applicable for loaders machines with third function only.

If equipped with a hydraulic-operated attachment, such as a grapple, connect hydraulics as follows:

Multicoupler configuration:

a. Raise the cover (B).

b. Push IN the red knob (D) and rotate the lever (A) upward, as shown.

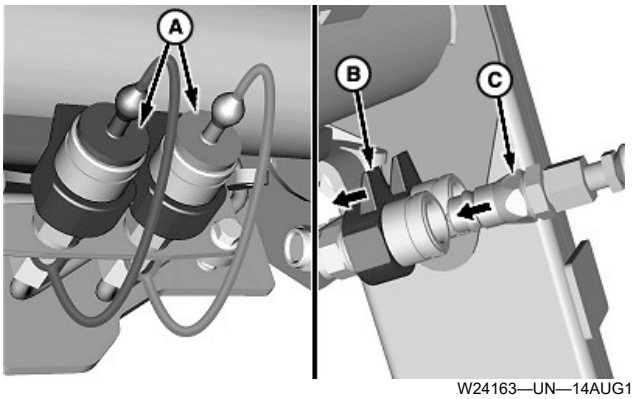
IMPORTANT: To prevent possible coupler damage, multicoupler halves must be aligned properly.

c. Insert the attachment coupler half (E) into the loader coupler (C). Make sure that the locating pins (F) on the attachment coupler fit into the corresponding holes (G) in the loader coupler.

d. Rotate the lever (A) downward to engage pins (H) and lock the coupler halves together.

NOTE: Hose connections are identified by matching the color-coded cap on the hose end with the same color-coded plug on the hydraulic lines:

- *(A) Attachment Cylinder—Rod End (Green)*
- *(B) Attachment Cylinder—Head End (Orange)*



W24163—UN—14AUG13

A—Plug (2 used)
B—Coupler, Female
C—Coupler, Male

13. Quick coupler configuration:

a. Remove plugs (A) from the female couplers (B).

b. Push and hold the collar on the female coupler.

c. Insert the male coupler (C) into the female coupler.

d. Release the collar on the female coupler.

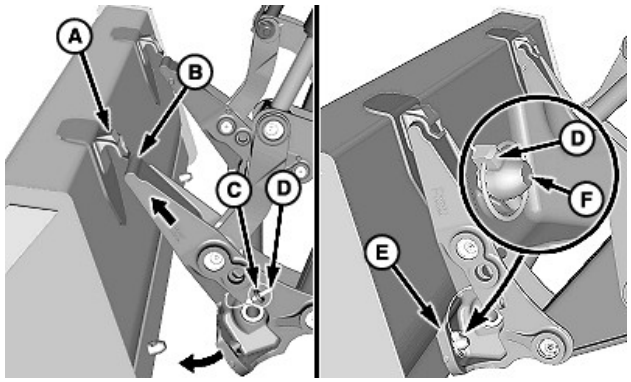
e. Repeat steps for the remaining hose connection.

f. Connect the color-coded caps and plugs together.

500-Style Carrier

CAUTION: Prevent possible injury. DO NOT allow bystanders near the loader while attaching the bucket or attachment. Only the tractor operator can attach the bucket or attachment.

NOTE: Attaching procedure is the same for all attachments. Bucket attachment shown.



W24175—UN—28AUG13

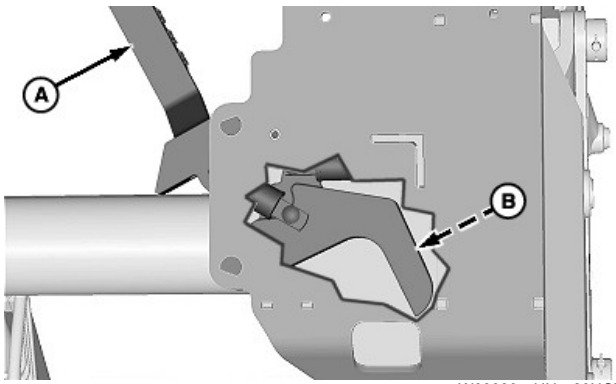
A—Hook (1 each side)
B—Carrier
C—Storage Position
D—Quick Lock Pin (1 each side)
E—Carrier Strap (1 each side)
F—Bucket Pin (1 each side)

1. Extend the bucket cylinders to position the carrier (B) forward.
2. Align tops of the carrier with hooks (A).
3. Raise the loader until the carrier engages hooks, then retract the bucket cylinders until the bucket rests against the carrier.

CAUTION: Prevent possible injury. Make sure that the bucket or attachment is properly secured to the carrier.

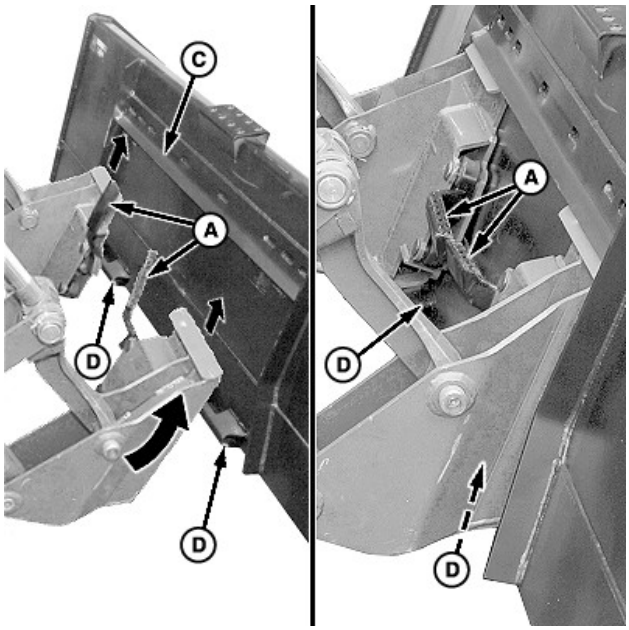
4. Raise the loader and check that the carrier straps (E) engage the bucket pins (F) on both sides.
5. Place the transmission in PARK and shut off the engine.
6. Remove the quick lock pins (D) from the storage position (C).
7. Install the quick lock pins (D) through the bucket pins (F).

Skid-Steer Carrier



W08389—UN—29NOV06

Left-Hand Lock Pin



W08390—UN—28NOV06

W24172—UN—28AUG13

Tilt Bucket or Attachment Forward

A—Latch Handle (1 each side)
B—Lock Pin (1 each side)
C—Lip
D—Latch (1 each side)

CAUTION: Prevent possible injury. DO NOT allow bystanders near the loader while attaching the bucket or attachment. Only the tractor operator can attach the bucket or attachment.

IMPORTANT: Prevent possible machine damage. Make sure that both latch handles (A) are up and lock pins (B) are retracted.

NOTE: Attaching procedure is the same for all attachments. Bucket attachment shown.

1. Raise both latch handles (A) into the UP (unlatched) position.
2. Raise the loader off the ground.
3. Extend the bucket cylinders to position the carrier forward.
4. Drive forward and raise the loader until the carrier plates are positioned under the lip (C) on the bucket. Retract the bucket cylinders until the bucket rests against the carrier.

NOTE: Bucket must rest against the carrier plates.

5. Lower the loader to the ground and shut off the engine.
6. Lower the latch handles (A) to engage pins (B) with latches (D) on the bucket.

CAUTION: Prevent possible injury. Make sure that the bucket or attachment is properly secured to the carrier.

7. Extent the bucket cylinders to apply pressure against the ground to verify that pins (B) are engaged in latches (D) of the bucket.

NOTE: If bucket or attachment is not securely attached to the skid steer carrier, repeat the repeat procedure.

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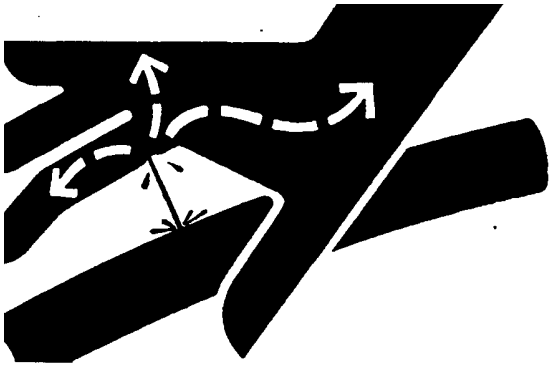
Detach Bucket or Attachment—520M and 500M Loaders

Global Carrier



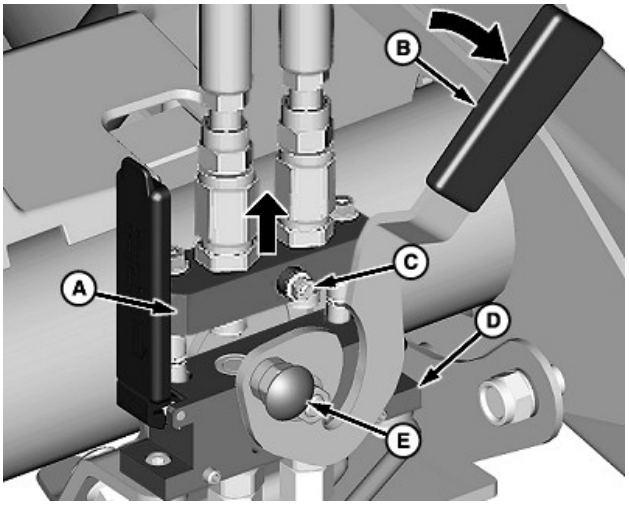
X9811—UN—23AUG88

Avoid Hydraulic Leaks

CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Protect hands and body from high-pressure fluids. (See additional information, Avoid High-Pressure Fluids, in Safety section.) Prevent possible injury. DO NOT allow bystanders near the loader while detaching the bucket or attachment. Only the tractor operator can detach the bucket or attachment.

NOTE: Detaching procedure is the same for all attachments. Bucket attachment shown.

1. Close the grapple or attachment. Level the bucket and lower to the ground.
2. Relieve the hydraulic pressure. (See Relieve Hydraulic Pressure in Controls section.)

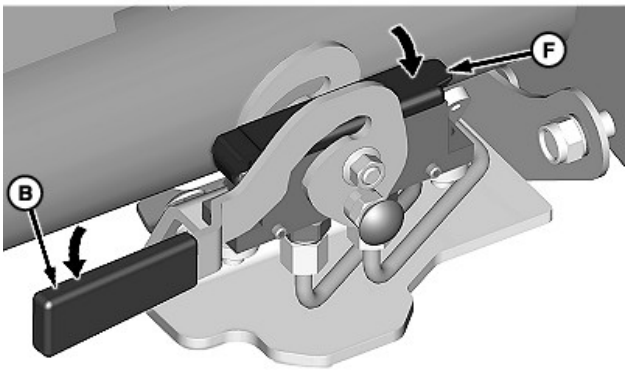


W24164—UN—26AUG13

Disconnect Couplers

W24304—UN—18OCT13

Hay Grapple Attachment Shown



W24165—UN—18OCT13

Close Cover

A—Coupler, Attachment
B—Lever
C—Pin (1 each side)
D—Coupler, Loader
E—Red Knob
F—Cover

3. If equipped with a hydraulic-operated attachment, such as a grapple, disconnect hydraulics as follows:

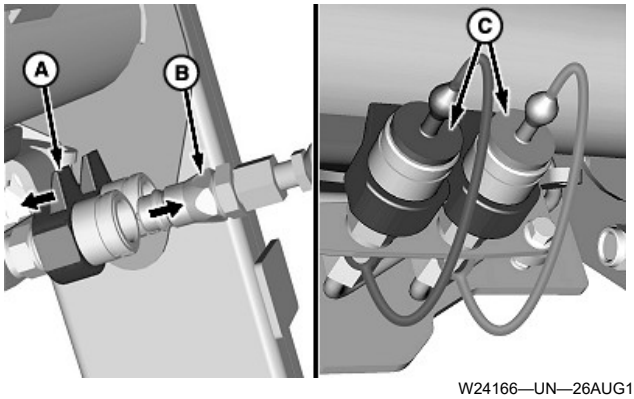
   Multicoupler configuration:

   a. Push in the red knob (E) and rotate the lever (B) upward to disengage pins (C) and separate the coupler halves.

   b. Remove the attachment coupler (A) from the loader coupler (D). Place the coupler with hoses on the attachment as shown.

   IMPORTANT: Prevent possible interference with tractor components. Lever (B) must be in the locked (DOWN) position when the attachment coupler half is removed. Lower the cover (F) to protect the connection surface of the loader coupler.

   c. Close the cover (F) and rotate the lever (B) downward to lock in place.

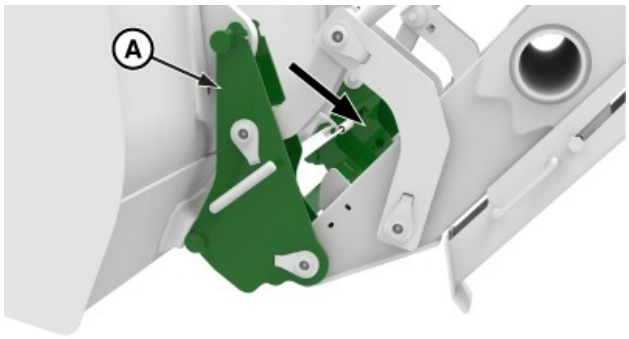


W24166—UN—26AUG13

Disconnect Couplers

A—Coupler, Female
B—Coupler, Male
C—Plug (2 used)

4. Quick coupler configuration:
   a. Push and hold the collar on the female coupler (A).
   b. Disconnect the male coupler (B).
   c. Release the collar on the female coupler.
   d. Place the cap on the male hose end and insert the plug (C) into the female coupler.
   e. Repeat steps for the remaining hose connections.



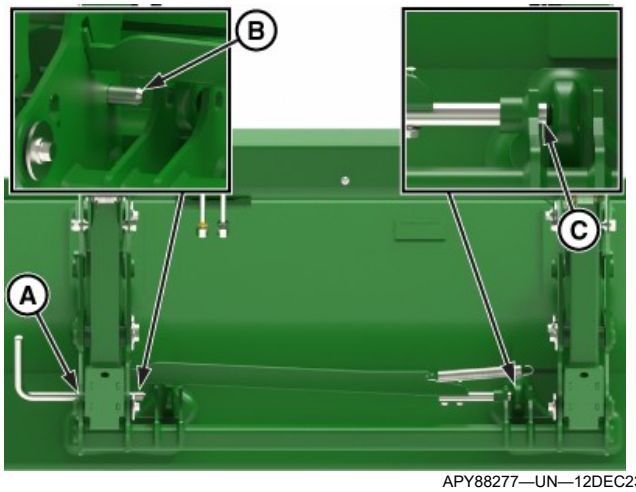
APY88276—UN—11DEC23

Roll Back Carrier

A—Carrier

NOTE: Ensure complete bucket rollback, for proper clamping.

Retract the bucket cylinders until the bucket is resting on the carrier (A) as shown.



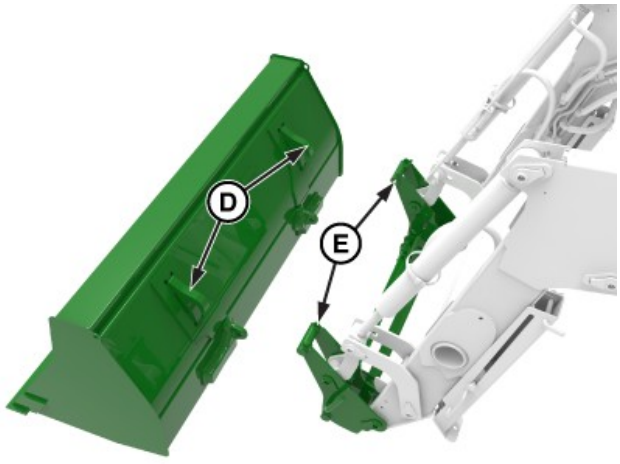
APY88277—UN—12DEC23

Latch Pins Retracted (Underside)

A—Handle
B—Pin, Left-Hand Side
C—Pin, Right-Hand Side

6. Place the transmission in PARK and shut off the engine.
7. Pull the latch handle (A) outward and clockwise to disengage the latch pins (B and C) from the bucket.

NOTE: Latch handle (A) remains open and ready for latching.



APY88278—UN—12DEC23

D—Hook (1 each side)
E—Carrier Arm (1 each side)

8. Place the transmission in NEUTRAL.
9. Extend the bucket cylinders and lower the loader to the ground allowing the carrier arms (E) to clear hooks (D) on the bucket.

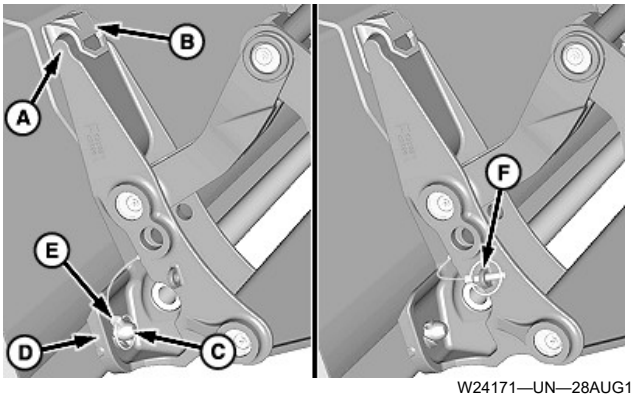
CAUTION: Prevent possible injury from a pinching hazard. If not immediately attaching the loader to another attachment, fully roll back the carrier to engage the latch pins in the carrier.

10. Place the transmission in REVERSE and back away from the bucket.

500-Style Carrier

CAUTION: Prevent possible injury. DO NOT allow bystanders near the loader while detaching the bucket or attachment. Only the tractor operator can detach the bucket or attachment.

NOTE: Detaching procedure is the same for all attachments. Bucket attachment shown.



W24171—UN—28AUG13

Left-Hand Side Shown

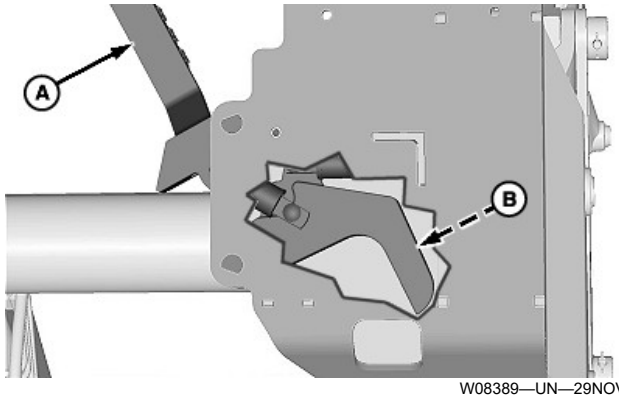
A—Carrier
B—Hook (1 each side)
C—Pin, Bucket (1 each side)
D—Strap (1 each side)
E—Pin, Quick Lock (1 each side)
F—Storage Position (1 each side)

1. Retract the bucket cylinders and raise the loader approximately 460 mm (18 in) from the ground.
2. Place the transmission in PARK and shut off the engine.
3. Remove the quick lock pin (E) from each side of the bucket.
4. Store pins in the storage position (F).
5. Extend the bucket cylinders until the pin (C) releases from the carrier strap (D) on each side of the bucket.
6. Lower the loader, place the transmission in REVERSE and move away from the bucket. Carrier (A) releases from hooks (B) on each side of the bucket.

Skid-Steer Carrier

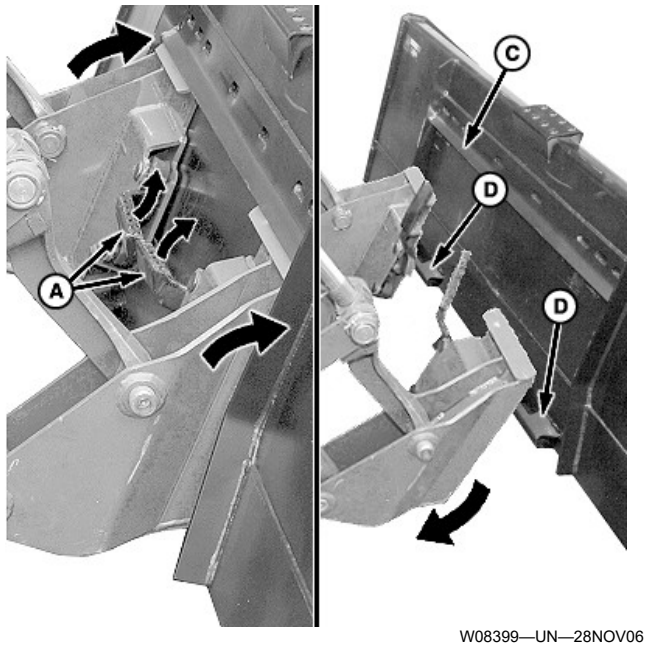
CAUTION: Prevent possible injury. DO NOT allow bystanders near the loader while detaching the bucket or attachment. Only the tractor operator can detach the bucket or attachment.

NOTE: Detaching procedure is the same for all attachments. Bucket attachment shown.



W08389—UN—29NOV06

Left-Hand Lock Pin



W08399—UN—28NOV06

A—Latch Handle (1 each side)
B—Lock Pin (1 each side)
C—Lip
D—Latch (1 each side)

1. Position the machine on a flat, level surface. Level the bucket and lower the loader to the ground.
2. Place the transmission in PARK and shut off the engine.

IMPORTANT: Prevent possible machine damage. Make sure that both latch handles (A) are up and lock pins (B) are fully retracted.

3. Raise both latch handles (A) to the UP (unlatched) position.
4. Place the transmission in NEUTRAL. Extend the bucket cylinders until the carrier releases from the lip (C) on the bucket and clears the bottom latches (D).
5. Place the transmission in REVERSE and back away from the bucket.

uuf6xgz,1701953490111-19-25JAN24

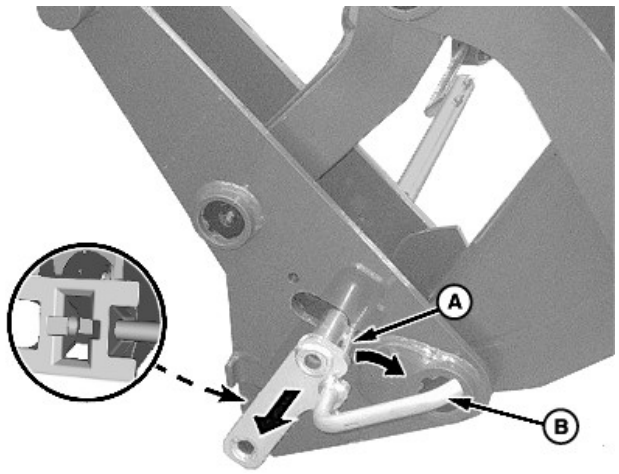
Attach Bucket or Attachment—540M Loaders

Global Carrier

CAUTION: Prevent possible injury. DO NOT allow bystanders near the loader while attaching the bucket or attachment. Only the tractor operator can attach the bucket or attachment.

NOTE: Attaching procedure is the same for all attachments. Bucket attachment shown.

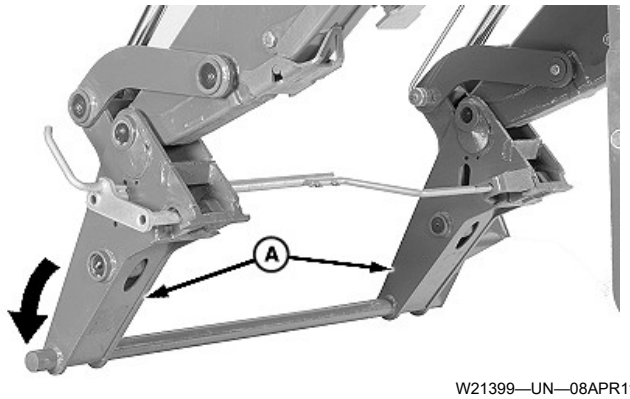
1. Clean the debris off the latching mechanism, carrier, and attaching points.
2. Extend the bucket cylinders to position the carrier forward.



W20907—UN—16JUL10

A—Pin
B—Handle

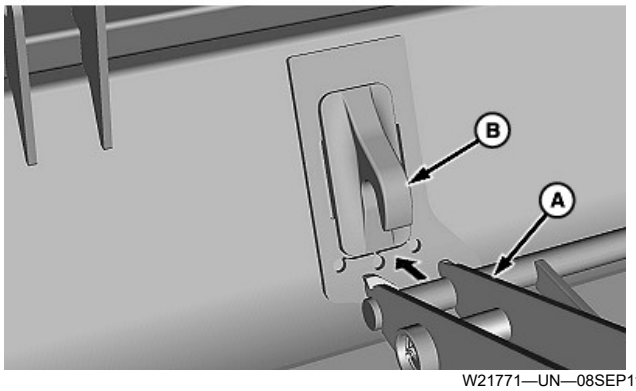
3. Shut off the engine and remove the ignition key.
4. Pull the latch handle (B) outward and clockwise until the pin (A) rests against the carrier frame and is locked in the UNLATCHED position.



W21399—UN—08APR11

A—Carrier Arm (1 each side)

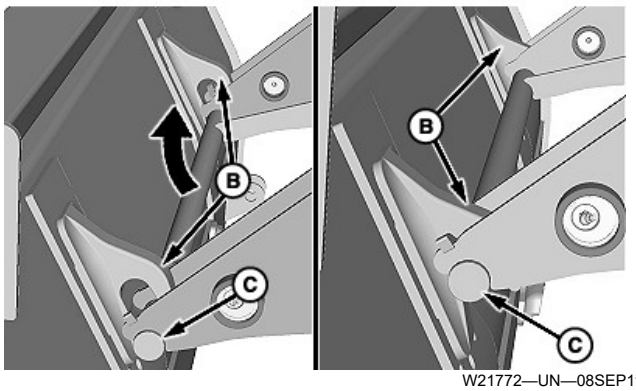
5. Extend the bucket cylinders to position the carrier arms (A) downward.



W21771—UN—08SEP11

A—Carrier Arm (1 per side)
B—Hook (1 per side)

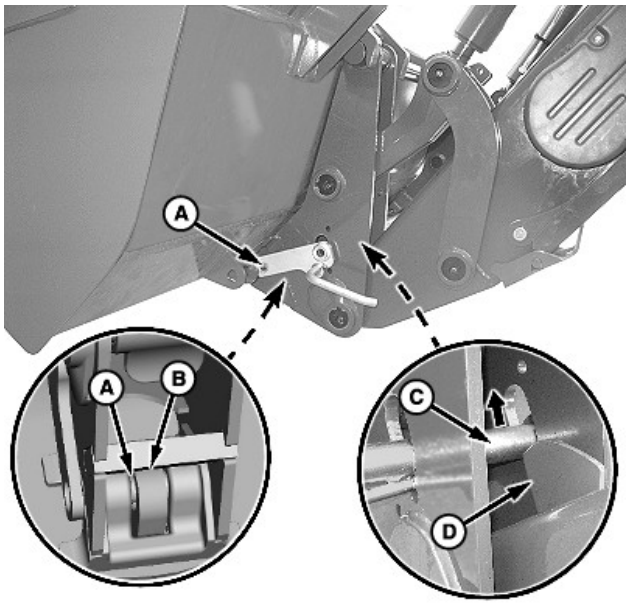
6. Drive forward and center the carrier arms (A) under hooks (B) on the bucket.



W21772—UN—08SEP11

B—Hook (1 per side)
C—Bar

7. Extend the lift cylinders until the bar (C) engages hooks (B) on both sides of the bucket.

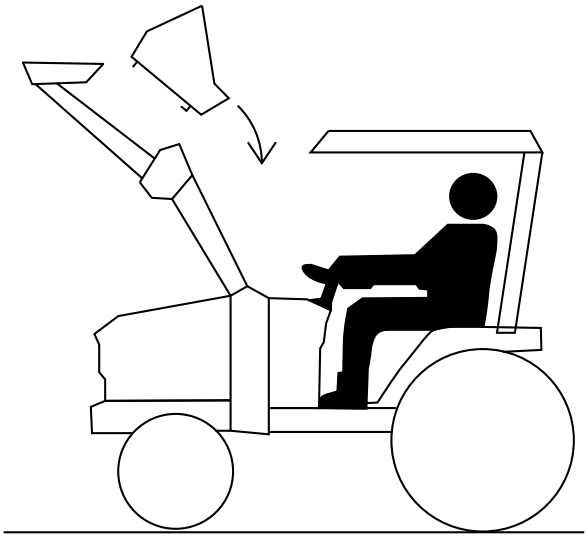


W20910—UN—19MAY10

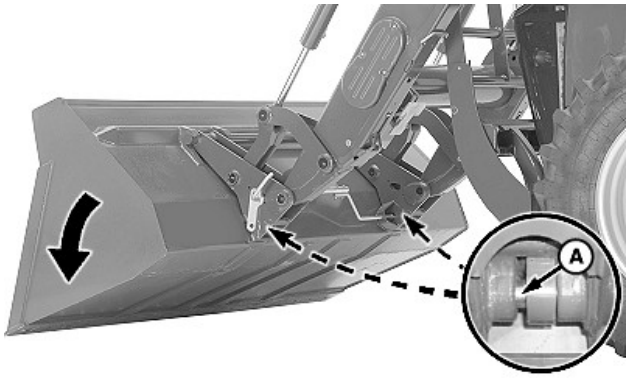
A—Pin (1 per side)
B—Bracket, Attachment (1 per side)

C—Rod
D—Tab

8. Retract the bucket cylinders. Rod (C) contacts the tab (D) and releases the latching mechanism, allowing pins (A) to slide into brackets (B) on the bucket.



W08424—UN—14DEC06

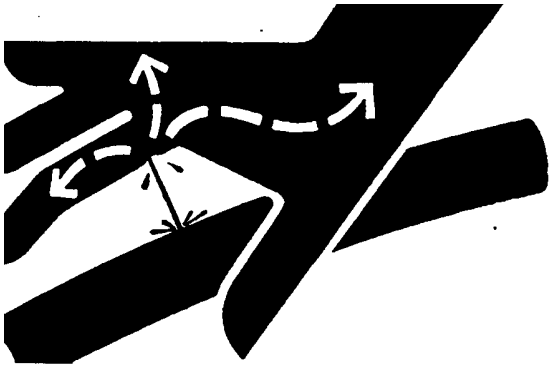


W21119—UN—20OCT10

A—Latch Pin (1 per side)

⚠ CAUTION: Prevent possible injury or death from a falling bucket or attachment. DO NOT operate the loader without making sure that the latch pins (A) are engaged with the bucket or attachment. Failure to engage pins causes the bucket or attachment to detach from the loader.

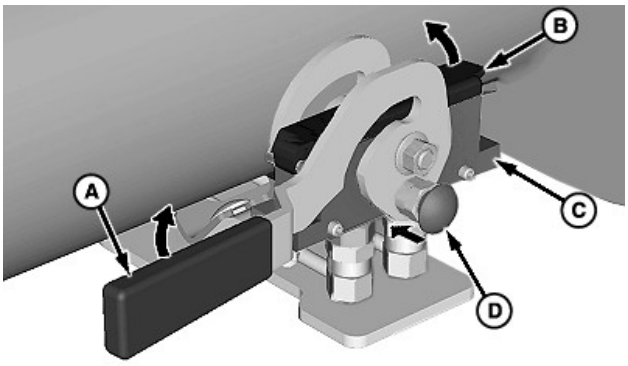
9. Check the pin engagement with the bucket:
   a. Position the loader approximately 300 mm (12 in) from the ground and extend the bucket cylinders until the front edge of the bucket contacts the ground.
   b. Continue to apply pressure against the ground, verifying pins (A) are engaged with the bucket.



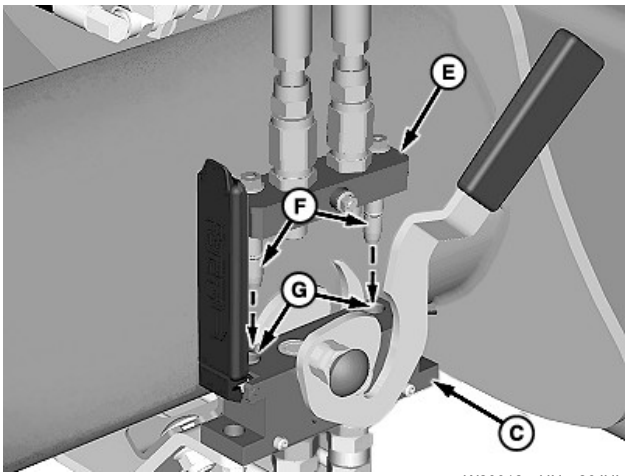
X9811—UN—23AUG88

⚠ CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Protect hands and body from high-pressure fluids. (See additional information, Avoid High-Pressure Fluids, in Safety section.)

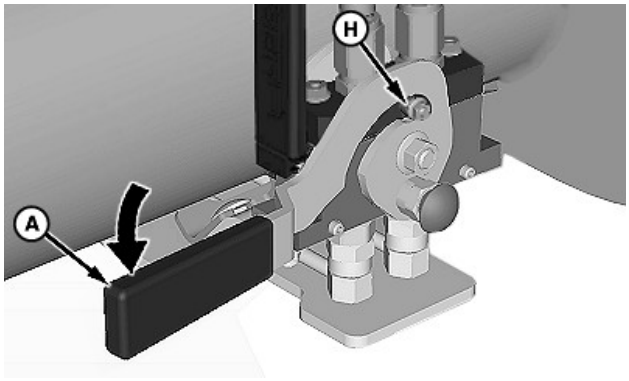
10. Level the bucket and lower flat on the ground.
11. Relieve the hydraulic pressure. (See Relieve Hydraulic Pressure in Controls section.)



W20911—UN—09JUL10



W20912—UN—26JUL10



W20913—UN—09JUL10

A—Lever
B—Cover
C—Coupler, Loader
D—Red Knob
E—Coupler, Attachment
F—Pin (2 used)
G—Hole (2 used)
H—Pin (1 each side)

12. If equipped with a hydraulic-operated attachment, such as a grapple, connect hydraulics as follows:

    Multicoupler configuration:

    a. Raise the cover (B).

    b. Push IN the red knob (D) and rotate the lever (A) upward, as shown.

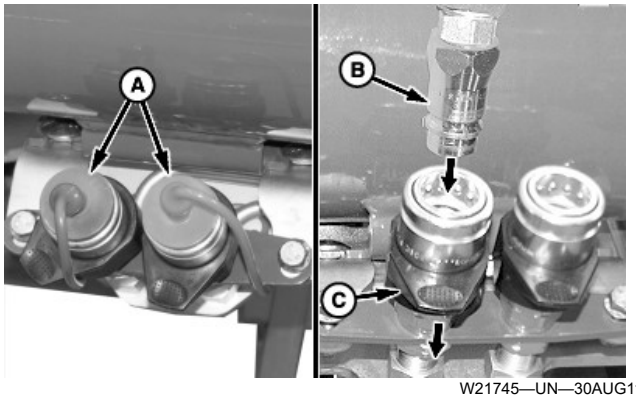
    IMPORTANT: Prevent coupler damage. Multicoupler halves must be aligned properly.

    c. Insert the attachment coupler half (E) into the loader coupler (C). Make sure that the locating pins (F) on the attachment coupler fit into the corresponding holes (G) in the loader coupler.

    d. Rotate the lever (A) downward to engage pins (H) and lock the coupler halves together.

NOTE: Hose connections are identified by matching the color-coded cap on the hose end with the same color-coded plug on the hydraulic lines:

- *(A) Attachment Cylinder—Rod End (Green)*
- *(B) Attachment Cylinder—Head End (Orange)*



W21745—UN—30AUG11

A—Plug (2 used)
B—Coupler, Male
C—Coupler, Female

13. Quick coupler configuration:

    a. Remove plugs (A) from female couplers (C).

    b. Push and hold the collar on the female coupler.

    c. Insert the male coupler (B) into the female coupler.

    d. Release the collar on the female coupler.

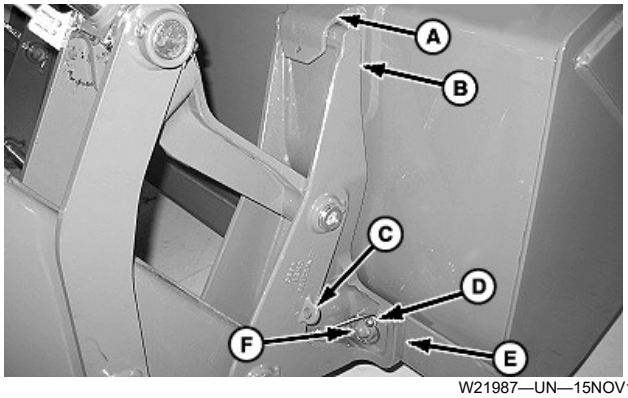
    e. Repeat steps for the remaining hose connections.

    f. Connect the color-coded caps and plugs together.

500-Style Carrier

⚠ CAUTION: Prevent possible injury. DO NOT allow bystanders near loader while attaching bucket or attachment. Only the tractor operator can attach bucket or attachment.

NOTE: Attaching procedure is the same for all attachments. Bucket attachment shown.



W21987—UN—15NOV11

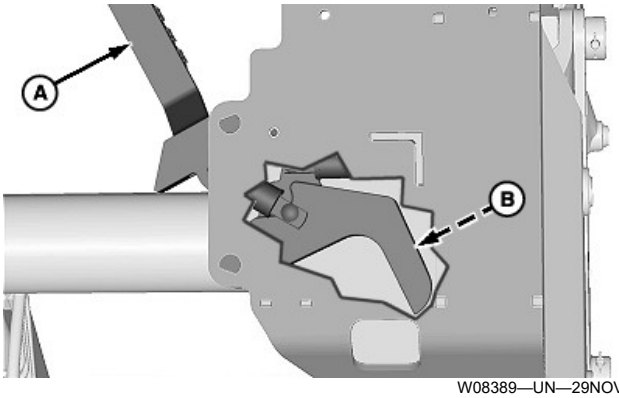
A—Hook (1 each side)
B—Carrier
C—Storage Position
D—Quick-Lock Pin (1 each side)
E—Carrier Strap (1 each side)
F—Bucket Pin (1 each side)

1. Extend the bucket cylinders to position the carrier (B) forward.
2. Align tops of the carrier with hooks (A).
3. Raise the loader until the carrier engages hooks, then retract the bucket cylinders until the bucket rests against the carrier.

CAUTION: Prevent possible injury. Make sure that the bucket or attachment is properly secured to the carrier.

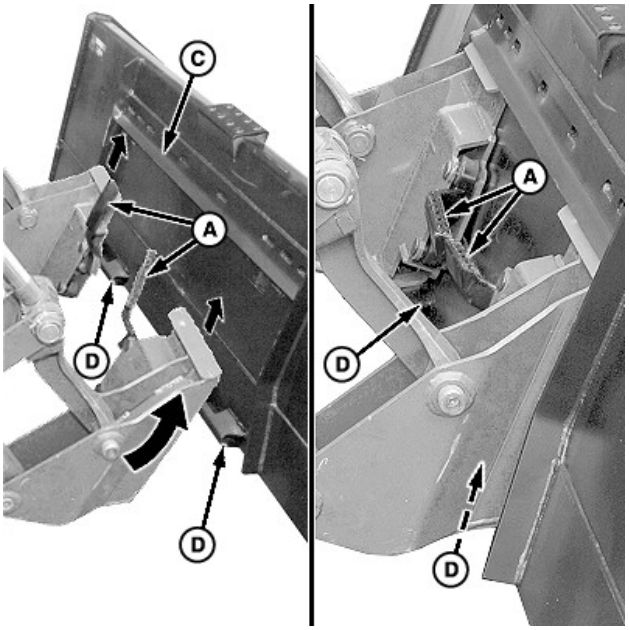
4. Raise the loader and check that the carrier straps (E) engage the bucket pins (F) on both sides.
5. Place the transmission in PARK and shut off the engine.
6. Remove the quick-lock pins (D) from the storage position (C).
7. Install the quick-lock pins (D) through the bucket pins (F).

Skid-Steer Carrier



W08389—UN—29NOV06

Left-Hand Lock Pin



W08390—UN—28NOV06

W21995—UN—22NOV11

Tilt Bucket or Attachment Forward

A—Latch Handle (1 each side)
B—Lock Pin (1 each side)
C—Lip
D—Latch (1 each side)

CAUTION: Prevent possible injury. DO NOT allow bystanders near the loader while attaching the bucket or attachment. Only the tractor operator can attach the bucket or attachment.

IMPORTANT: Prevent possible machine damage. Make sure that both latch handles (A) are up and lock pins (B) are retracted.

NOTE: Attaching procedure is the same for all attachments. Bucket attachment shown.

1. Raise both latch handles (A) into the UP (unlatched) position.
2. Raise the loader off the ground.
3. Extend the bucket cylinders to position the carrier forward.

4. Drive forward and raise the loader until the carrier plates are positioned under the lip (C) on the bucket. Retract the bucket cylinders until the bucket rests against the carrier.

NOTE: Bucket must rest against the carrier plates.

5. Lower the loader to the ground and shut off the engine.
6. Lower the latch handles (A) to engage pins (B) with latches (D) on the bucket.

CAUTION: Prevent possible injury. Make sure that the bucket or attachment is properly secured to the carrier.

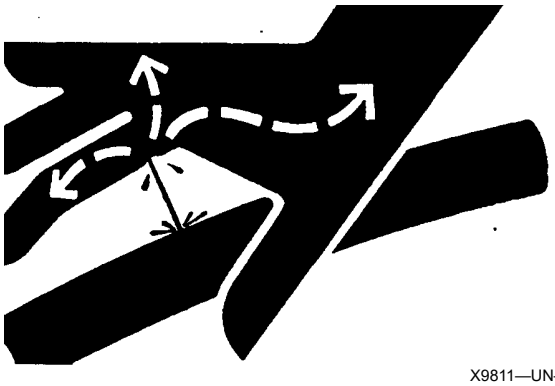
7. Extend the bucket cylinders to apply pressure against the ground verifying that pins (B) are engaged in latches (D) of the bucket.

NOTE: If the bucket or attachment is not securely attached to the skid steer carrier, repeat the attaching steps.

OUO6064,0001CEE-19-25MAY23

Detach Bucket or Attachment—540M Loaders

Global Carrier

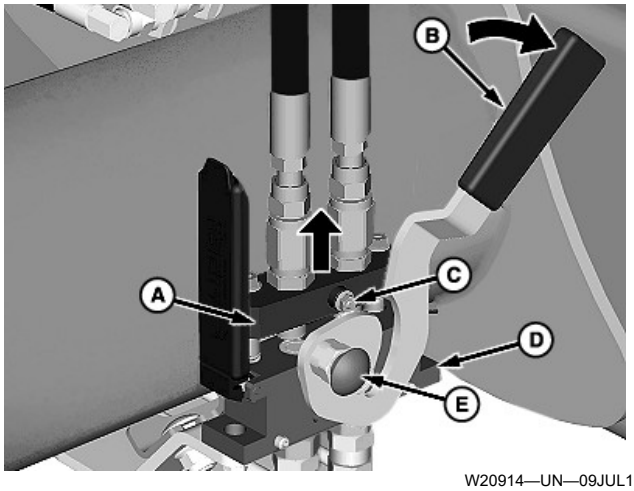


X9811—UN—23AUG88

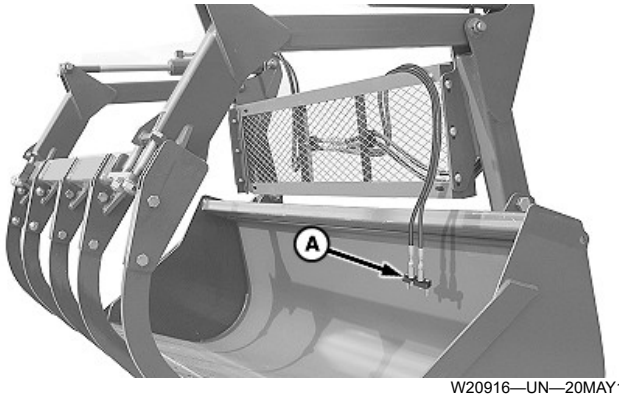
CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Protect hands and body from high-pressure fluids. (See additional information, Avoid High-Pressure Fluids, in Safety section.) Prevent possible injury, DO NOT allow bystanders near the loader while detaching the bucket or attachment. Only the tractor operator can detach the bucket or attachment.

NOTE: Detaching procedure is the same for all attachments. Bucket attachment shown.

1. Close the grapple or attachment. Level the bucket and lower to the ground.
2. Relieve the hydraulic pressure. (See Relieve Hydraulic Pressure in Controls section.)

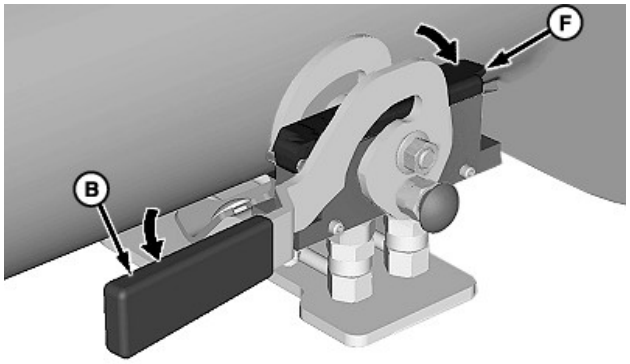


W20914—UN—09JUL10



W20916—UN—20MAY10

Grapple Attachment Shown



W20915—UN—09JUL10

A—Coupler, Attachment
B—Lever
C—Pin (1 each side)
D—Coupler, Loader
E—Red Knob
F—Cover

3. If equipped with a hydraulic-operated attachment, such as a grapple, disconnect hydraulics as follows:

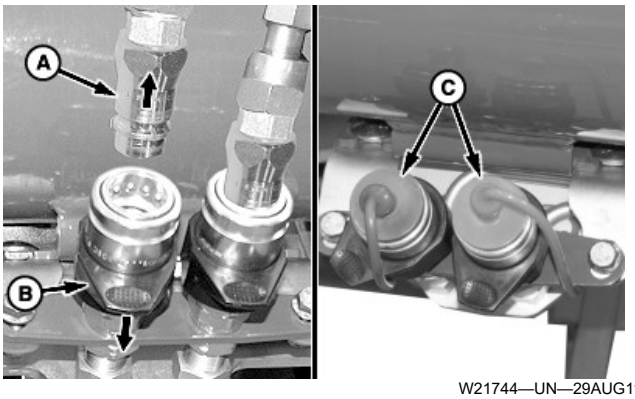
   Multicoupler configuration:

a. Push in the red knob (E) and rotate the lever (B) upward to disengage pins (C) and separate the coupler halves.

b. Remove the attachment coupler (A) from the loader coupler (D). Place the coupler with hoses on the attachment as shown.

IMPORTANT: Prevent possible interference with tractor components. Lever (B) must be in the locked (DOWN) position when the attachment coupler half is removed. Lower the cover (F) to protect the connection surface of the loader coupler.

c. Close the cover (F) and rotate the lever (B) downward to lock in place.



W21744—UN—29AUG11

A—Coupler, Male
B—Coupler, Female
C—Plug (2 used)

4. Quick coupler configuration:

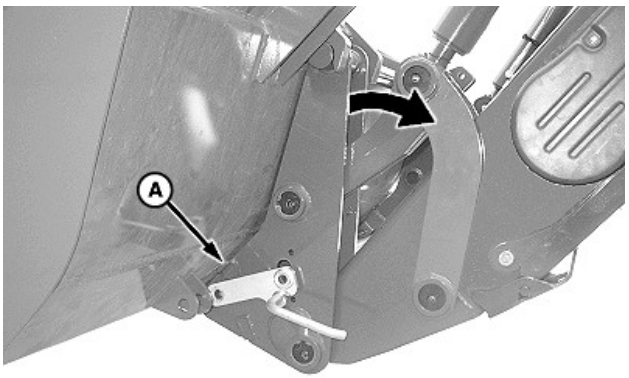
a. Push and hold the collar on the female coupler (B).

b. Disconnect the male coupler (A).

c. Release the collar on the female coupler.

d. Place the cap on the male hose end and insert the plug (C) into the female coupler.

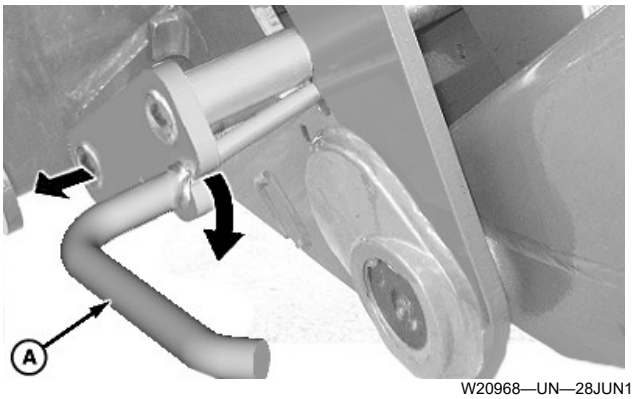
e. Repeat for the remaining hose connections.



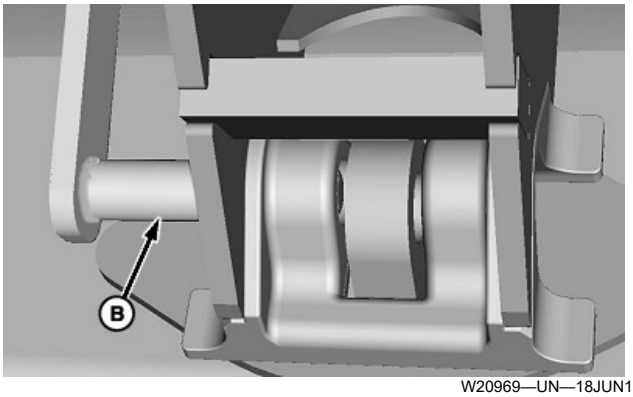
W21993—UN—17NOV11

A—Carrier

5. Retract the bucket cylinders until the bucket is resting on the carrier (A) as shown.



W20968—UN—28JUN10



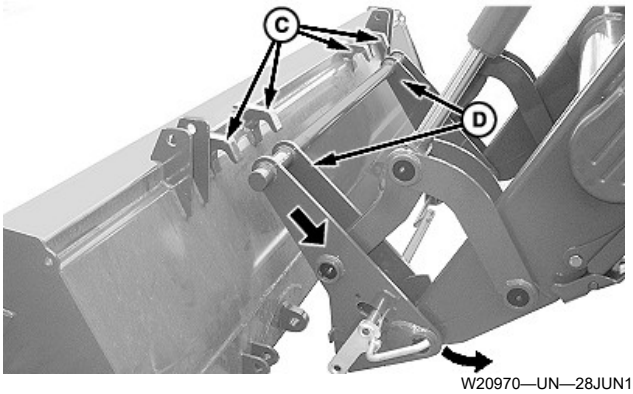
W20969—UN—18JUN10

A—Handle
B—Pin (1 each side)

6. Place the transmission in PARK and shut off the engine.

7. Pull the latch handle (A) outward and clockwise to disengage the latch pins (B) from the bucket.

NOTE: Latch handle (A) remains open and ready for latching.



W20970—UN—28JUN10

C—Hook (2 each side)
D—Carrier Arm (1 each side)

8. Place the transmission in NEUTRAL.

9. Extend the bucket cylinders and lower the loader to

the ground allowing the carrier arms (D) to clear hooks (C) on the bucket.

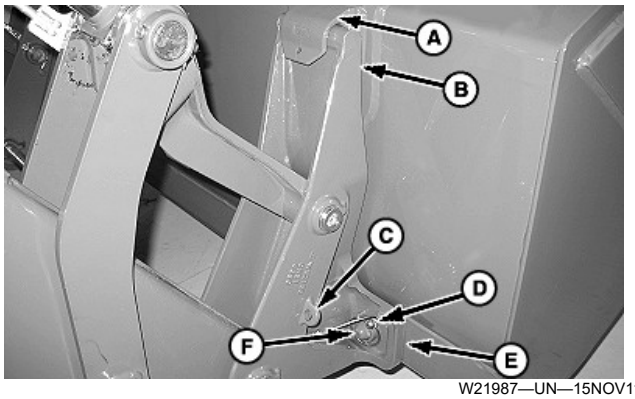
CAUTION: Prevent possible injury from a pinching hazard. If not immediately attaching to another attachment, fully roll back the carrier to engage the latch pins.

10. Place the transmission in REVERSE and back away from the bucket.

500-Style Carrier

CAUTION: Prevent possible injury. DO NOT allow bystanders near the loader while detaching the bucket or attachment. Only the tractor operator can detach the bucket or attachment.

NOTE: Detaching procedure is the same for all attachments. Bucket attachment shown.



W21987—UN—15NOV11

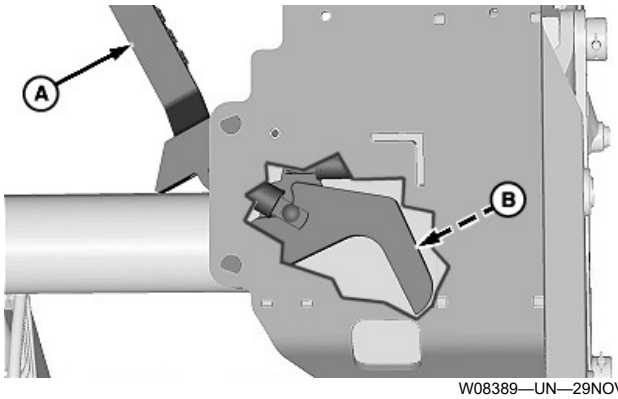
A—Hook (1 each side)
B—Carrier
C—Storage Position (1 each side)
D—Pin, Quick Lock (1 each side)
E—Strap (1 each side)
F—Pin, Bucket (1 each side)

1. Retract the bucket cylinders and raise the loader approximately 460 mm (18 in) from the ground.
2. Place the transmission in PARK and shut off the engine.
3. Remove the quick lock pin (D) from each side of the bucket.
4. Store pins in the storage position (C).
5. Extend the bucket cylinders until the pin (F) releases from the carrier strap (E) on each side of the bucket.
6. Lower the loader, place the transmission in REVERSE and move away from the bucket. Carrier (B) releases from hooks (A) on each side of the bucket.

Skid-Steer Carrier

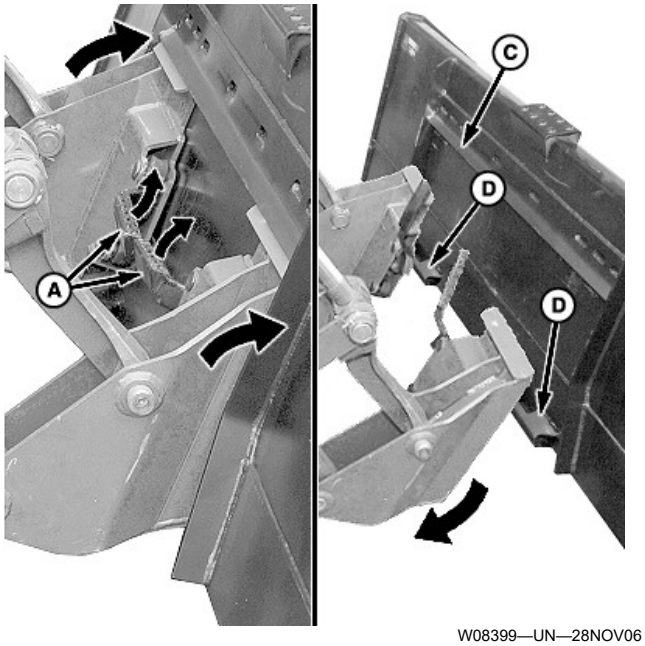
CAUTION: Prevent possible injury. DO NOT allow bystanders near the loader while detaching the bucket or attachment. Only the tractor operator can detach the bucket or attachment.

NOTE: Detaching procedure is the same for all attachments. Bucket attachment shown.



W08389—UN—29NOV06

Left-Hand Lock Pin



W08399—UN—28NOV06

A—Latch Handle (1 each side)
B—Lock Pin (1 each side)
C—Lip
D—Latch (1 each side)

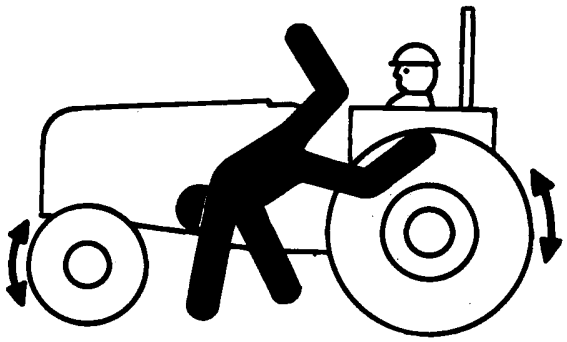
1. Position the machine on a flat, level surface. Level the bucket and lower the loader to the ground.
2. Place the transmission in PARK and shut off the engine.

IMPORTANT: Prevent possible machine damage. Make sure that both latch handles (A) are up and lock pins (B) are fully retracted.

3. Raise both latch handles (A) to the UP (unlatched) position.
4. Place the transmission in NEUTRAL. Extend the bucket cylinders until the carrier releases from the lip (C) on the bucket and clears the bottom latches (D).
5. Place the transmission in REVERSE and back away from the bucket.

OUO6064,0001CEF-19-25MAY18

Keep Riders Off Machine



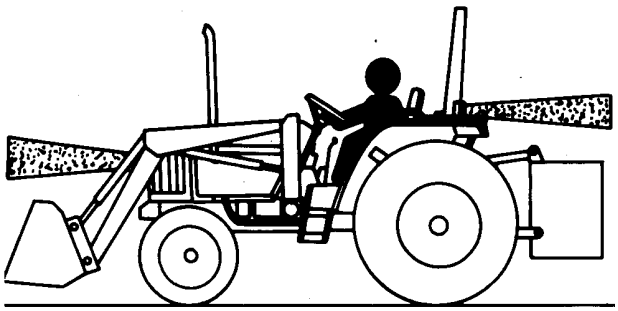
TS290—UN—23AUG88

Only allow the operator on the machine. Keep riders off.

Riders on machine are subject to injury such as being struck by foreign objects and being thrown off of the machine. Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner.

DX,RIDER-19-03MAR93

Driving on Public Roads



TS1707—UN—10JUL12

While driving tractor and loader, follow these precautions:

- Carry loads close to the ground to aid visibility and to lower center of gravity.
- Allow for additional length of loader on tractor while turning.
- Balance loads so weight is evenly distributed and load is stable.
- Drive slowly if carrying materials. Rough conditions may cause material to spill.
- Avoid carrying materials wider than the bucket or tractor.
- LOCK OUT MULTI-FUNCTION CONTROL LEVER TO PREVENT UNINTENTIONAL MOVEMENT (See Tractor Operator's Manual CONTROL SECTION).

DX,WW,LOADER8-19-18SEP12

Carry Loads

W24173—UN—28AUG13

CAUTION: Prevent possible injury or death. When transporting a load, use the tractor accessory lights and devices for an adequate warning to operators of other vehicles. Check local governmental regulations. Various safety devices are available from a John Deere dealer or other service providers. Keep safety items in good condition. Replace missing or damaged items. Reduce speed as required to ensure good tractor and loader stability.

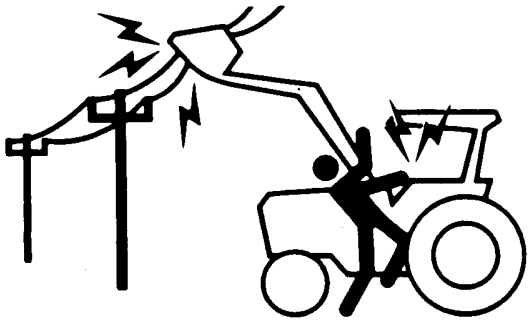
IMPORTANT: Due to capacity limitations of some tires, reduce the load size before traveling at transport speed.

NOTE: When transporting a load, make sure to lockout the multi-function lever. (See Controls section for more information.)

OUO6064,0001B18-19-07AUG25

Operate Loader

Raise and Lower Loader



TS685—UN—21SEP89

CAUTION: Prevent possible injury or death from electrical contact. Beware of the lift clearance when raising the loader to maximum height. Beware of low electrical wires when the loader is raised. DO NOT leave the tractor seat if any part of the tractor or loader contacts cables. DO NOT move the loader multi-function lever to the FLOAT position for lowering the loader. Loss of control results and the loader falls rapidly to the ground due to its own weight.

IMPORTANT: Prevent possible machine damage. Start and stop the loader gradually when lowering heavy loads. Never drop a loaded bucket or attachment and "catch" hydraulically. Stopping a load after it has gained downward momentum can damage the tractor or loader.

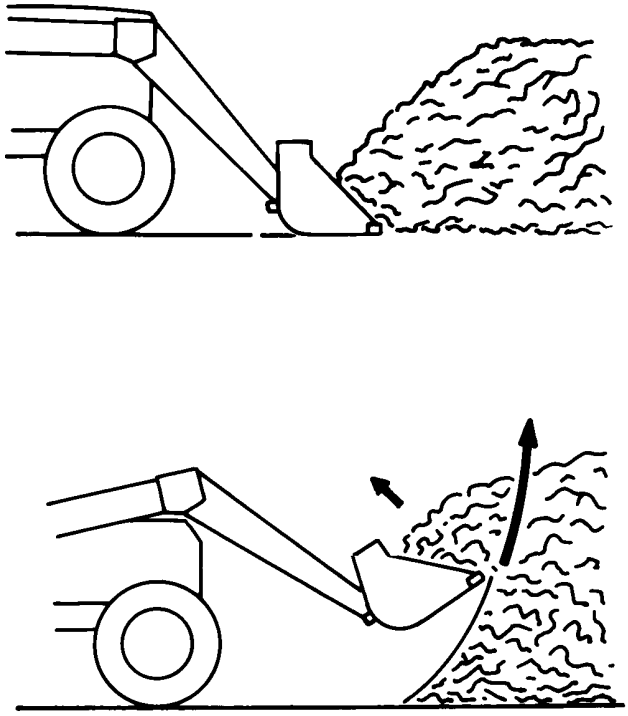
To raise the loader, move the multi-function lever backward to start the movement.

To lower the loader, move the multi-function lever forward to start the movement.

To lower the loader with a heavy load, gradually move the multi-function lever forward to start the movement.

OUO6064,0001DE3-19-25MAY18

Remove Material from a Pile



W01783—UN—07JAN97

1. Approach and enter the pile with the bucket level. If the pile is high, remove the top first.

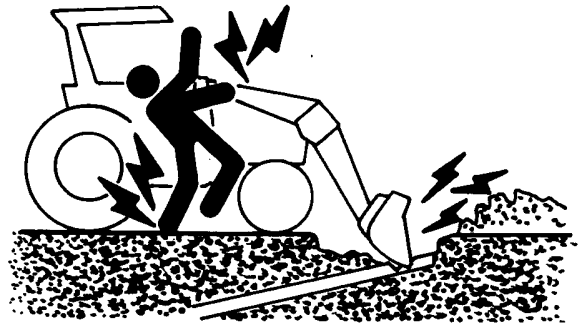
NOTE: Bucket top is parallel to the bottom. Bucket is level when the top is level.

2. Use a combined motion of moving forward slowly, lifting and rolling back to fill the bucket.

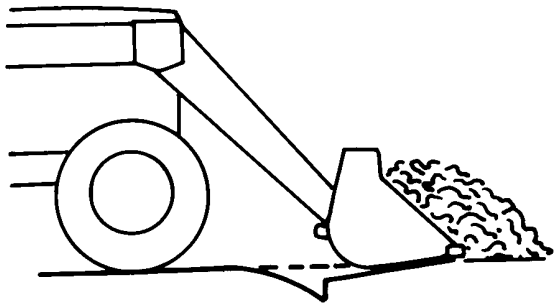
NOTE: Overfilling the bucket in heavy or packed material can cause the loader to stall. If the loader stalls, back up or take less material.

OUO6064,0001DE4-19-30MAY17

Dig



W00272—UN—04DEC91



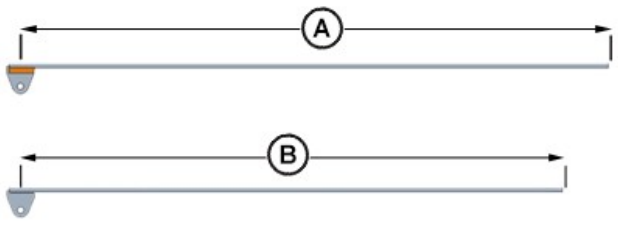
W01782—UN—07JAN97

CAUTION: Prevent possible injury or death from electrical shock. Check underground utility locations before digging. DO NOT leave the operator's seat if any part of the loader contacts the cables. Back away from the cable before getting off the tractor.

1. Angle the bucket slightly below level and move forward slowly.
2. Control depth of cut by adjusting the bucket angle.

OUO6064,0001DE5-19-01JUN23

Bucket Level Indicator Length



APY93029—UN—06FEB24

Bucket Level Indicator Length

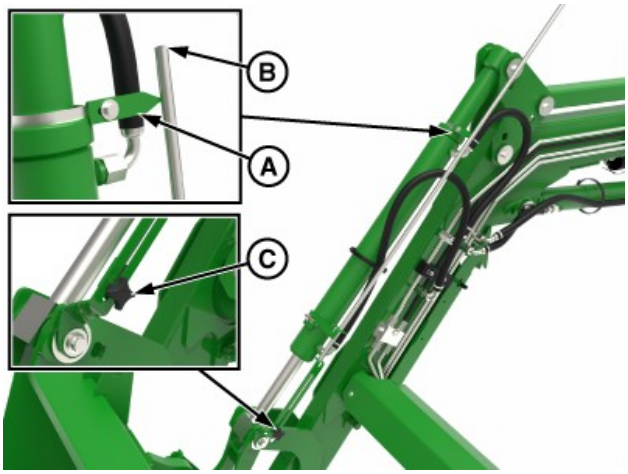
A—Length for NSL
B—Length for MSL

	500M	520M
NSL	1068 mm (42 in)	1031 mm (41 in)
MSL	985.5 mm (39 in)	1159 mm (46 in)

NOTE: ***500M NSL does not require cut, should come to specified length.***

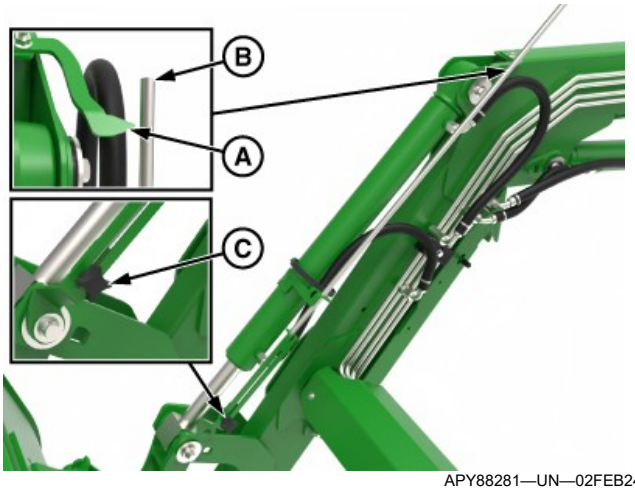
rd91939,1707239245452-19-09FEB24

Level Bucket—520M Loaders



APY88280—UN—02FEB24

520M Mechanical Self-Leveling Loader



APY88281—UN—02FEB24

520M Non-Self-Leveling Loader

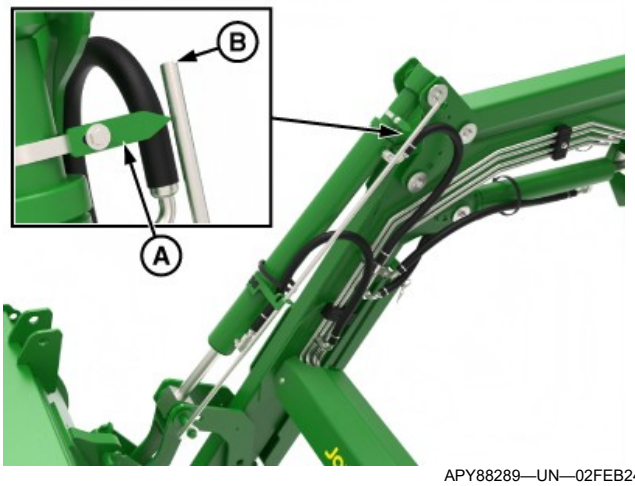
A—Arrow
B—Indicator Rod
C—Knob

Bucket or attachment is level when the top of indicator rod (B) is even with the point of arrow (A).

NOTE: Use knob (C) if any adjustments are needed for different attachments.

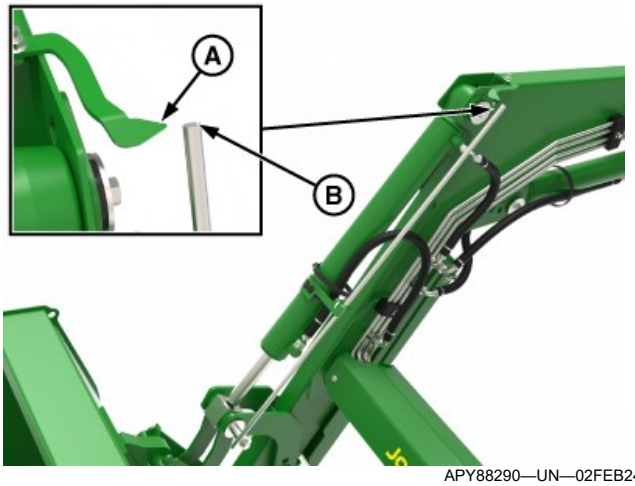
rd91939,1702388726307-19-12DEC23

Level Bucket—500M Loaders



APY88289—UN—02FEB24

500M Mechanical Self-Leveling Loader



APY88290—UN—02FEB24

500M Non-Self-Leveling Loader

A—Arrow
B—Indicator Rod

Bucket or attachment is level when the top of indicator rod (B) is even with the point of arrow (A).

rd91939,1702388726364-19-12DEC23

Level Bucket—540M Loaders

W20919—UN—29SEP10

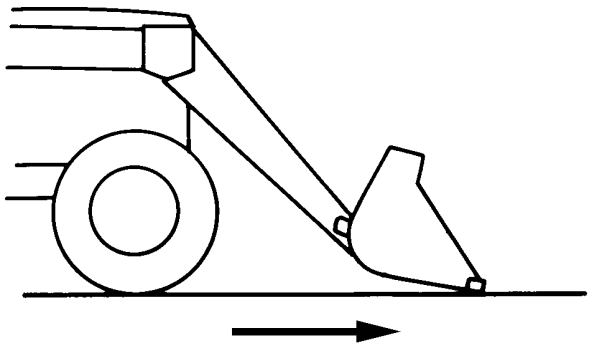
A—Rod
B—Coil Cluster, First
C—Coil Cluster, Second

Level indicator rod (A) is even with the second coil cluster (C) when bucket is level.

Attachment such as a pallet fork, is level when top of rod is aligned with the first coil cluster (B).

OUO6064,0001E3D-19-18JUL17

Level and Scrape Forward



W01785—UN—07JAN97

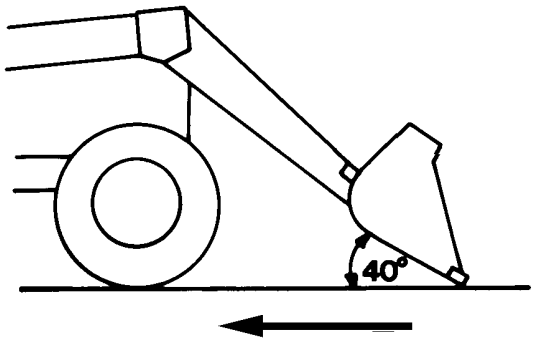
IMPORTANT: Prevent possible damage to the bucket cutting edge while scraping forward. Position the bucket level or just below level. To reduce wear on the cutting edge and damage to concrete, place the multi-function lever in the FLOAT position when scraping concrete.

To level or scrape forward, position the bucket level or slightly below level.

Using FLOAT reduces down pressure and wear on the cutting edge when scraping concrete. Using FLOAT also reduces damage to the concrete surface.

OUO6064,0001DE7-19-30MAY17

Level in Reverse



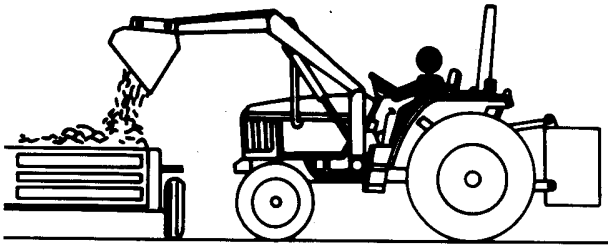
W01786—UN—07JAN97

IMPORTANT: Prevent possible damage to the bucket cutting edge while leveling in reverse. Position the bucket less than 40° below level. To reduce down pressure, place the multi-function lever in the FLOAT position.

1. Position the bucket 40° or less below level.
2. Use FLOAT to reduce down pressure.
3. Back up slowly.

OUO6064,0001DE8-19-30MAY17

Dump Bucket



W01144—UN—12AUG93

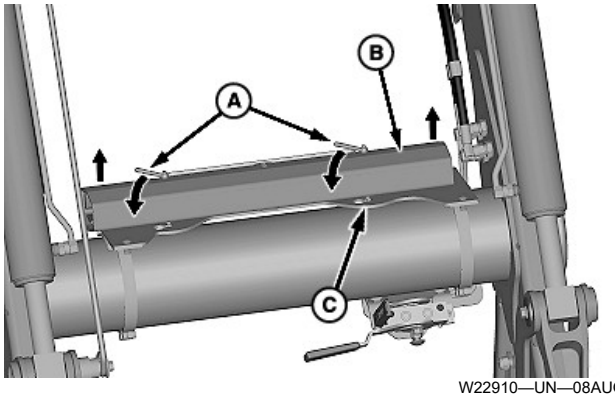
To dump the bucket or attachment, move the multi-function lever to the right.

OUO6064,0001DE9-19-30MAY17

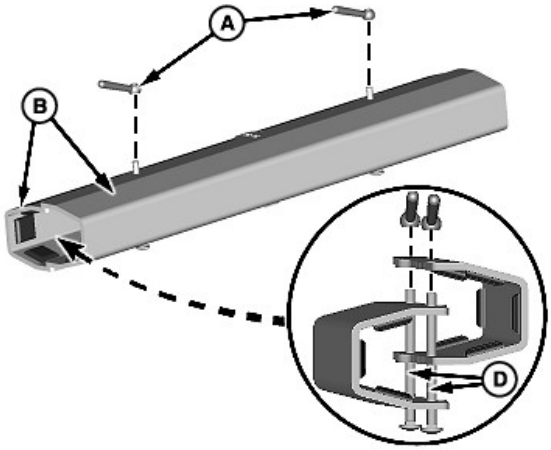
Use Service Locks—540M Loaders (Australia)

Install Service Locks

1. Lower the loader to the ground.
2. Remove any load from the bucket or attachment.
3. Place the transmission in PARK and shut off the engine.



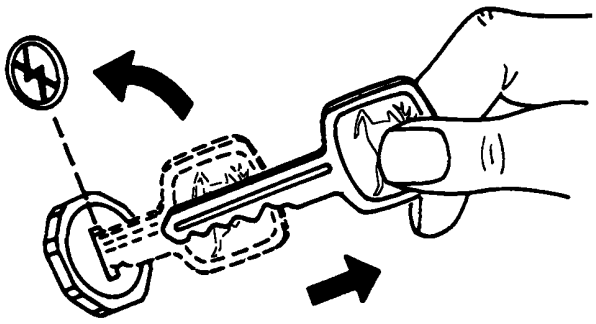
W22910—UN—08AUG12



W22911—UN—08AUG12

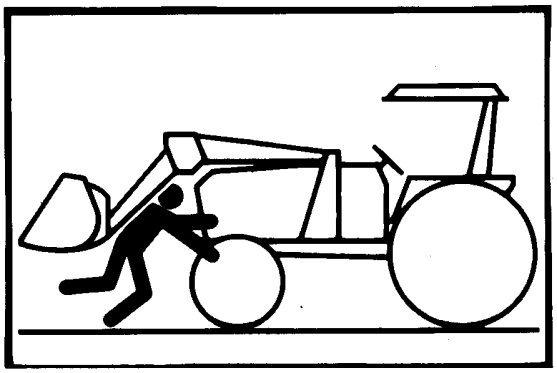
A—Handle (2 used)
B—Service Lock (2 used)
C—Storage Bracket
D—Round-Head Bolt (2 used)

4. Turn handles (A) to loosen the mounting hardware.
5. Remove the service locks (B) by sliding them out of the from holes in the storage bracket (C).
6. Remove and retain handles (A) and round-head bolts (D) to separate the service locks.
7. Raise the loader to maximum height.



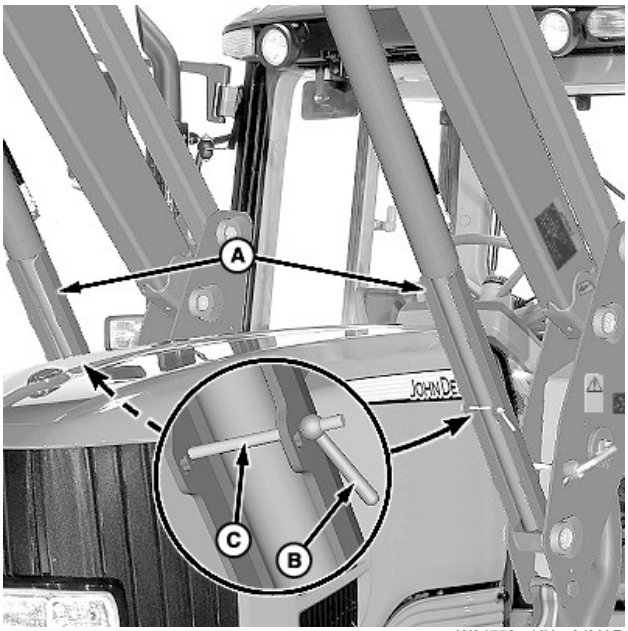
E50093—UN—08AUG01

8. Shut off the engine.



W00278—UN—04DEC91

CAUTION: Prevent possible injury or death. DO NOT stand under a raised loader. Place the service lock around the boom cylinder rod while standing to the side of the tractor and loader.



W24758—UN—04MAR14

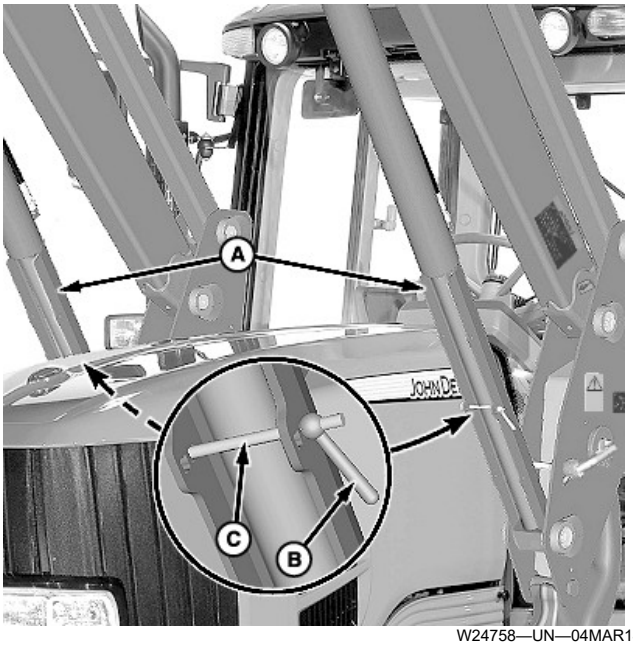
A—Service Lock (1 per side)
B—Round-Head Bolt (1 per side)
C—Handle (1 each side)

9. Position the service locks (A) over the cylinder rods on each side as shown.
10. Install the round-head bolts (C) and handles (B) as shown. Tighten handles hand-tight.
11. To relieve pressure, dump the bucket or attachment.

IMPORTANT: Avoid machine damage. DO NOT lower the loader onto the service locks with hydraulic pressure applied or with a load in the bucket.

12. Relieve the pressure in the lift cylinders until cylinders are resting on the service locks. (See the tractor Operator's Manual for more information).

Remove and Store Service Locks

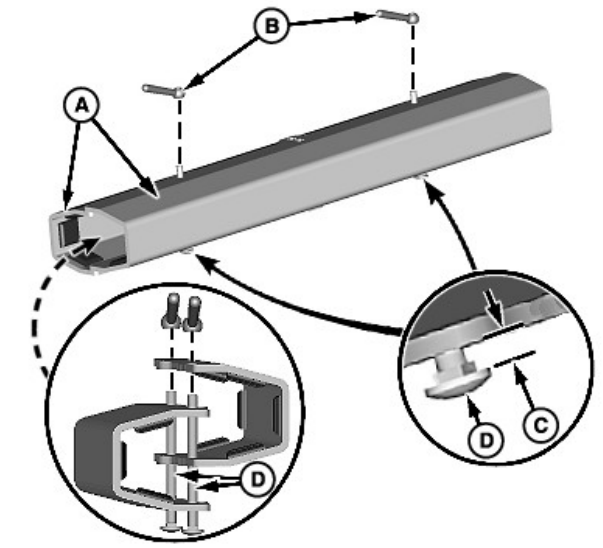


W24758—UN—04MAR14

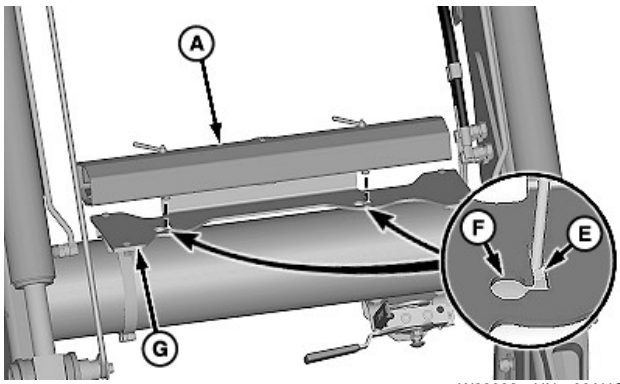
A—Service Lock (2 used)
B—Handle (1 each side)
C—Round-Head Bolt (1 each side)

CAUTION: Prevent possible injury or death. DO NOT stand under a raised loader. Place the service lock around the boom cylinder rod while standing to the side of the tractor and loader.

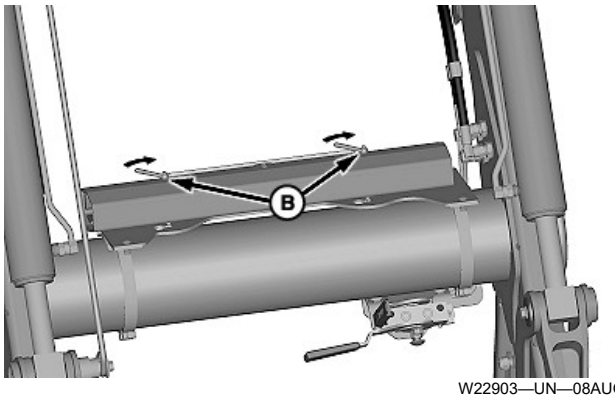
1. Raise the loader to maximum height.
2. Shut off the engine.
3. Remove handles (B) and round-head bolts (C).
4. Remove the service locks (A).
5. Lower the loader to the ground.



W22901—UN—08AUG12



W22902—UN—08AUG12



W22903—UN—08AUG12

A—Service Lock (2 used)
B—Handle (2 used)
C—Distance, 10 mm (0.40 in)
D—Round-Head Bolt (2 used)
E—Hole (1 each side)
F—Slot (1 each side)
G—Storage Bracket

IMPORTANT: Leave handles (B) and round-head bolts (D) loose to allow enough distance (C) between the head of bolts and underside of the service locks (A).

6. Assemble the service locks (A) together using the round-head bolts (D) and handles (B) as shown.
7. Install the service locks (A) onto the storage bracket (G) by inserting the heads of the round-head bolts into holes (F) and sliding into slots (E) as shown. Tighten handles (B) hand-tight.

OUO6064,0001D2A-19-01JUN23

Park Tractor with Loader Attached

CAUTION: Prevent possible injury or death. Always park the tractor equipped with a loader and attachment with the loader lowered to the ground and the attachment in a safe position. Close the grapple and store the bale fork or pallet forks with the tines pointed down, or against a bale, building, or other stable object. Prevent possible injury due to residual hydraulic pressure in the accumulators. Always relieve hydraulic pressure when parking the loader by engaging the multi-function lever into the FLOAT position.

NOTE: If parking the tractor and loader for an extended period, refer to Prepare Loader for Storage in Storage section.

Always park the tractor with a loader attached as follows:

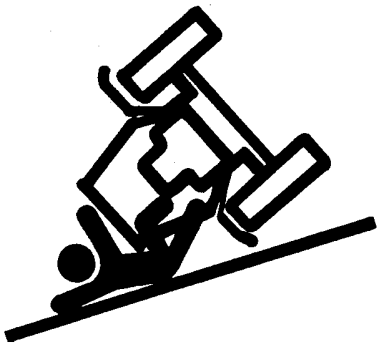
- Lower the loader to the ground.
- Engage the multi-function lever into the FLOAT position.
- Place the transmission in PARK.
- Shut off engine and remove ignition key.

CAUTION: Never leave the tractor unattended while the engine is still running or the loader is raised.

OUO6038,0001ED0-19-01JUN23

Operate Bale Spear (If Equipped)

Avoid Injury or Death from Roll-over Accidents



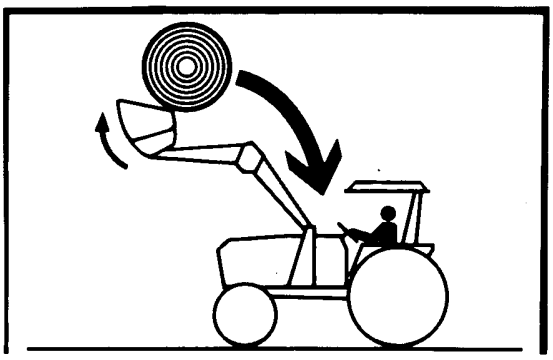
RW13093—UN—07DEC88

CAUTION: Prevent possible injury or death caused by rollover accidents when handling round bales:

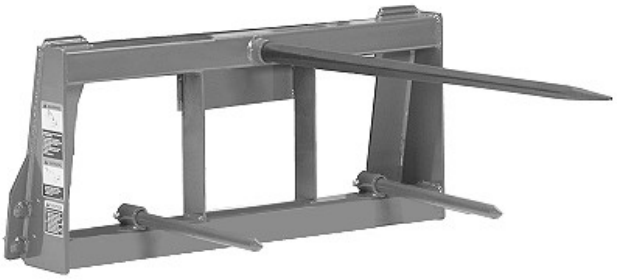
- **Equip the tractor with a rollover protective structure (ROPS).**
- **Wear a seat belt.**
- **DO NOT handle bales that exceed the bale weight of 341 kg (750 lb).**
- **Be sure that the tractor tire spacing and rear ballast is correct before using the loader.**
- **Stop the loader gradually when lowering or lifting loads.**
- **When handling round bales on a slope, always approach the bale with the tractor facing uphill.**

OUO6038,0002213-19-12JUN23

Avoid Injury or Death from Falling Round or Large Square Bales



W00226—UN—04DEC91



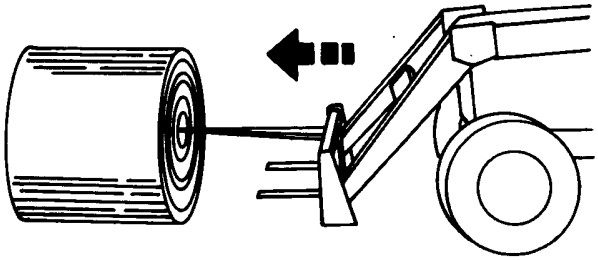
W23845—UN—23JUL13

CAUTION: Prevent possible injury or death from falling bales:

- **DO NOT handle round or square bales unless the loader is equipped with an approved bale handling attachment.**
- **Handle raised loads with caution.**
- **Carry loads low and drive slowly.**

OUO6038,00021FA-19-07AUG25

Pick up a Round Bale

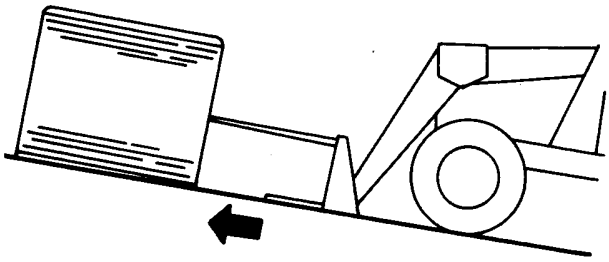


W00268—UN—04DEC91

1. Approach the bale with the bale spear level and centered on the bale.
2. Push the spear into the bale until the bale is against the frame.
3. Raise and roll the bale back high enough to provide the ground clearance necessary for transport.

OUO6038,000023C-19-17MAY18

Pick up a Round Bale on a Slope



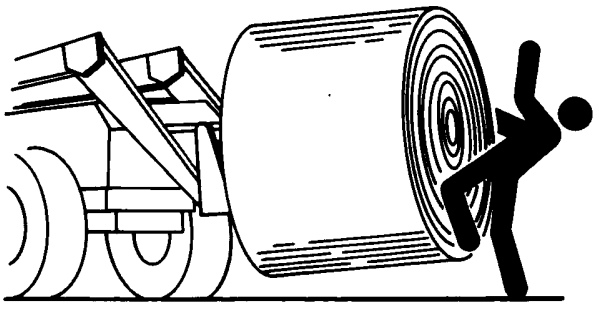
W00270—UN—04DEC91

CAUTION: Prevent possible injury caused by a tractor rollover when handling round bales on a slope. Avoid traveling across the slope whenever possible. Drive UP the slope to pick up the bale and DOWN in reverse. Move the bale as close to the ground as possible. Prevent possible injury caused by being struck by a rolling bale. NEVER use the tractor or loader to stop a rolling bale.

1. Approach the bale with the tractor facing up hill, spear level, and centered on the bale.
2. Push the spear into the bale until the bale is against the frame.
3. Raise and roll the bale back high enough to provide the ground clearance necessary for transport.
4. Be sure to select a low tractor speed before turning, if transporting a bale across a slope is necessary.

OUO6038,000023D-19-25MAY18

Transport a Round Bale



W00273—UN—04DEC91

CAUTION: Prevent possible injury or accident caused from a bale falling off the spear. Carry the bale low and slightly rolled back. Travel slowly over rough ground. DO NOT lift a bale that exceeds 341 kg (750 lb). DO NOT carry a bale that is more than 1.5 m (60 in) in diameter which can reduce visibility:

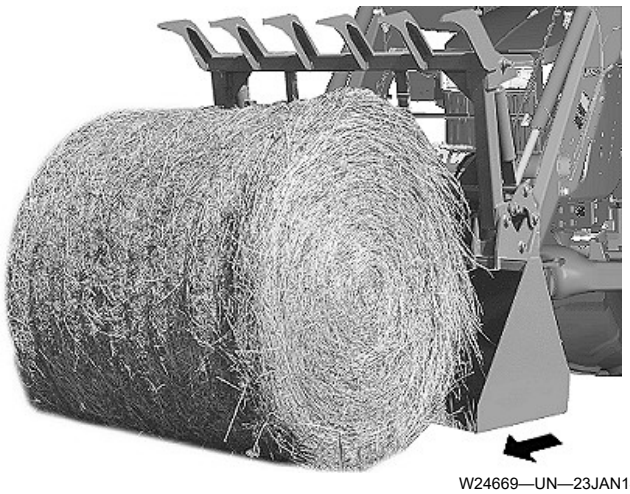
- **DO NOT handle bales that exceed a bale weight of 341 kg (750 lb).**
- **When handling round bales on a slope, always approach the bale with the tractor facing uphill.**
- **To help prevent personal injury because of lack of visibility, do not handle bales that exceed a diameter of 1.5 m (60 in). Carry the bale low.**

For more information and specifications, refer to separate Operator and Parts Manual supplied with bale spear.

OUO6038,0002214-19-01FEB18

Operate Grapple (If Equipped)

Operate Bale Grapple

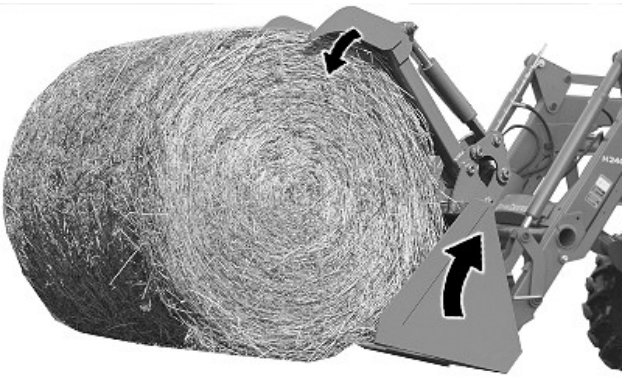


W24669—UN—23JAN14

CAUTION: Prevent possible injury or accident caused from a bale falling off the loader. Carry the bale low and slightly rolled back. Travel slowly over rough ground.

NOTE: Refer to Safety section for additional information on proper operation of the bale grapple.

1. Approach the bale with the grapple open, bucket level and close to the ground.
2. Slide the front edge of the bucket under the bale until the bale is against the grapple frame.



W24670—UN—23JAN14

3. Close the grapple, raise, and roll back the bale high enough to provide ground clearance for transport.

OUO6038,000225C-19-02FEB18

Operate Hay Grapple

W23846—UN—04SEP13

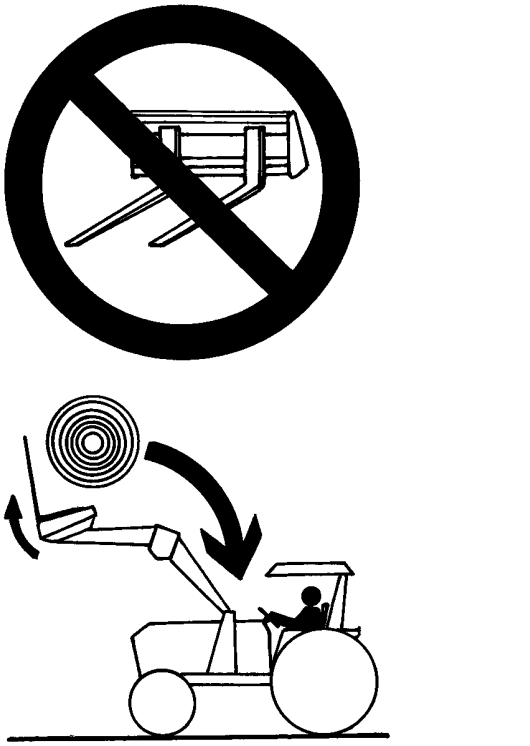
CAUTION: Prevent possible injury or death. The hay grapple is not approved for transporting hay bales. Use a bale fork or bale grapple attachment to handle hay bales.

1. Approach the hay with the spears level and the grapple open.
2. Push spears into the hay until against the frame.
3. Close the grapple onto the material.
4. Raise and roll back high enough to provide ground clearance for transport.

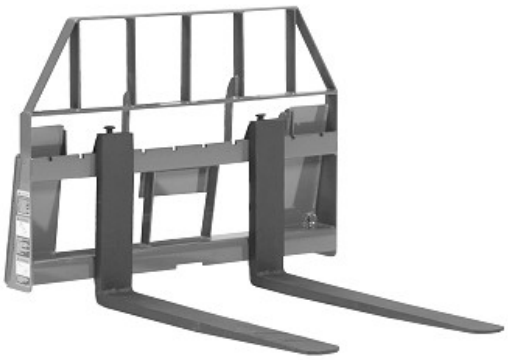
OUO6038,00021F7-19-01FEB18

Operate Forklift (If Equipped)

Operate Forklift



W02873—UN—03JUL98



W09377—UN—01APR08

Fixed-Tine Forklift Shown

CAUTION: Prevent possible injury or death from a bale falling on the operator. DO NOT handle round bales with a forklift. Prevent possible injury or death from a falling pallet box, bin, or hamper. DO NOT handle stacked pallet boxes if the backstop does not contact the top pallet box.

1. Approach the load so that the weight is centered between the fork tines. The heaviest side closest to the fork frame and not near the tips of the fork tines.
2. Before lifting the load, make certain that the fork tines are completely under the load and level.

CAUTION: Prevent possible injury or death. If the load appears unstable, lower and reposition the tines to achieve full stability.

3. Lift the load slightly to make sure that the load is stable.

IMPORTANT: During the load handling:

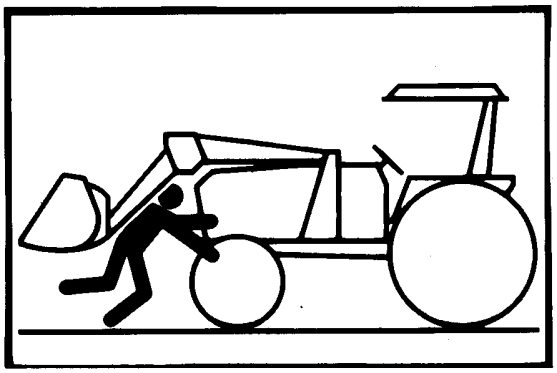
- **Keep the fork tines level.**
- **Stop and start the tractor gradually.**
- **Slow down before turning and avoid any obstacles, bumps, or holes.**
- **Check the load frequently to ensure stability.**

4. Raise the load to the MINIMUM height required for the terrain.

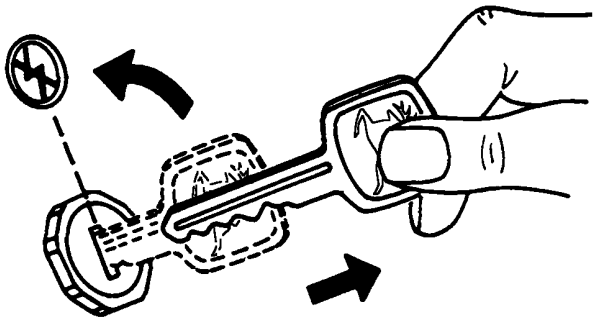
For more information and specifications, refer to separate Operator and Parts Manuals supplied with the forklift.

OUO6038,0001DAC-19-29MAY18

Lubricate and Maintain Loader Safely—520M Loader



W00278—UN—04DEC91



E50093—UN—08AUG01

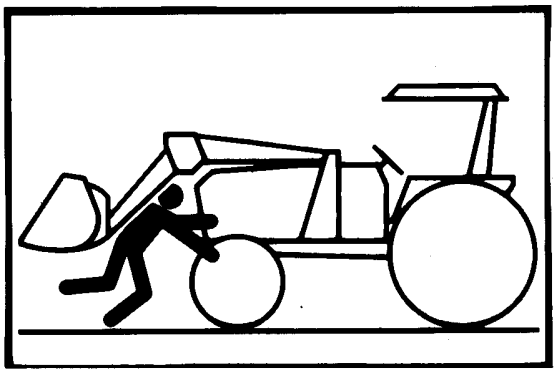
CAUTION: Prevent possible injury from accidental lowering of the loader. DO NOT perform service around the front of the tractor with the loader elevated and unsupported. Before lubricating or servicing the loader or tractor, perform the following:

1. **Place the transmission in PARK.**
2. **Relieve hydraulic pressure. (See Relieve Hydraulic Pressure in Controls section.)**
3. **Shut off engine and remove ignition key.**

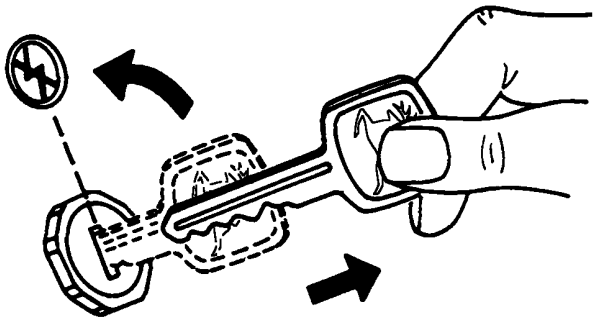
NOTE: If servicing the tractor requires the loader to be elevated (see Service Loader and Tractor Safely (Loader Attached) in Service section).

OUO6064,0001D2D-19-30APR18

Lubricate and Maintain Loader Safely—540M Loader (Australia Only)



W00278—UN—04DEC91



E50093—UN—08AUG01

W24761—UN—04MAR14

Service Locks Installed

CAUTION: Prevent possible injury from accidental lowering of the loader. DO NOT perform service around the front of the tractor with the loader elevated and unsupported. Before lubricating or servicing the loader or tractor, perform the following:

1. **Place the transmission in PARK.**
2. **Lower the loader to the ground or fully raise the loader and install service locks (A) on both boom cylinders. (See Use Service Locks in Operate Loader section.)**
3. **Relieve hydraulic pressure. (See Relieve Hydraulic Pressure in Controls section.)**
4. **Shut off engine and remove ignition key.**

NOTE: If servicing the tractor requires the loader to be elevated (see Service Loader and Tractor Safely (Loader Attached) in Service section).

OUO6064,0001D2E-19-06JUN18

Perform Lubrication and Maintenance

IMPORTANT: The recommended service intervals are based on normal/average conditions. Severe or unusual conditions may require more frequent lubrication.

Perform each lubrication and service illustrated in this section before and after storage.

Clean lubrication fittings before using grease gun. Replace lost or broken fittings immediately. If a new fitting fails to take grease, remove and check for failure of adjoining parts.

Using tractor hour meter as a guide, perform services at the hourly intervals indicated on following pages.

OUO6038,000146F-19-17SEP01

Observe Lubrication Symbols

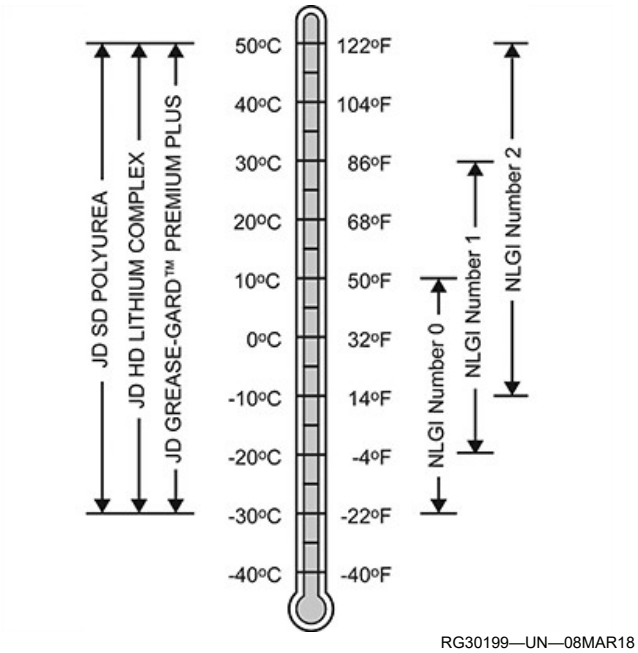
W21026—UN—02JUL10

Lubricate with John Deere SD POLYUREA GREASE or an equivalent SAE multipurpose-type grease (unless otherwise specified) at hourly intervals indicated on the symbols.

OUO6038,0001F0D-19-02JUL10

Multipurpose Extreme Pressure (EP) Grease

IMPORTANT: For automated lubrication systems different ambient air temperatures need to be considered.



RG30199—UN—08MAR18

Greases for Air Temperature Ranges

Use grease based on NLGI consistency numbers and the expected air temperature range during the service interval.

John Deere SD Polyurea Grease is preferred.

The following greases are also recommended:

- John Deere HD Lithium Complex Grease
- John Deere Grease-Gard™ Premium Plus

Other greases may be used if they meet the following:

- NLGI Performance Classification GC-LB
- ISO-L-X-BDHB 2 or DIN KP 2 N-10 Lithium Complex, Non-Synthetic Base Oil (100 to 220 mm2/s @ 40°C)

IMPORTANT: Some types of thickeners, base oils, and additives used in greases are not compatible with others. Mixing greases should be avoided. Consult your grease supplier before mixing different types of grease.

DX,GREA1-19-13JAN18

Grease-Gard is a trademark of Deere & Company

Service Intervals

Service procedure	First 3 and 10 Hours	Every 10 Hours	Every 50 Hours	Every 100 Hours or Monthly	Every 6 Years
Tighten the axle housing and kingpin cap screws.	•		•		
Lubricate fittings on each side of the loader.	•	•			
Clean and lubricate latch pins on both sides of the carrier.		•			
Grapple—Lubricate fittings on the back of both pivot arms of the grapple. Apply grease, oil, or spray to cylinder pivots.		•			
Check condition of hydraulic hoses.				•	
Tighten the drive link hardware.				•	
Tighten the mounting frame hardware on both sides.	•				
Replace hydraulic hoses.					•

OUO6064,0001AFE-19-30APR18

First 3 and 10 Hours

First 3 Hours

☐ Tighten the axle housing and kingpin cap screws. (See procedure in Every 50 Hours in this section.)

☐ Tighten the mounting frame hardware on both sides. (See procedure in Every 50 Hours in this section.)

First 10 Hours

☐ Tighten the axle housing and kingpin cap screws. (See procedure in Every 50 Hours in this section.)

☐ Tighten the mounting frame hardware on both sides. (See procedure in Every 50 Hours in this section.)

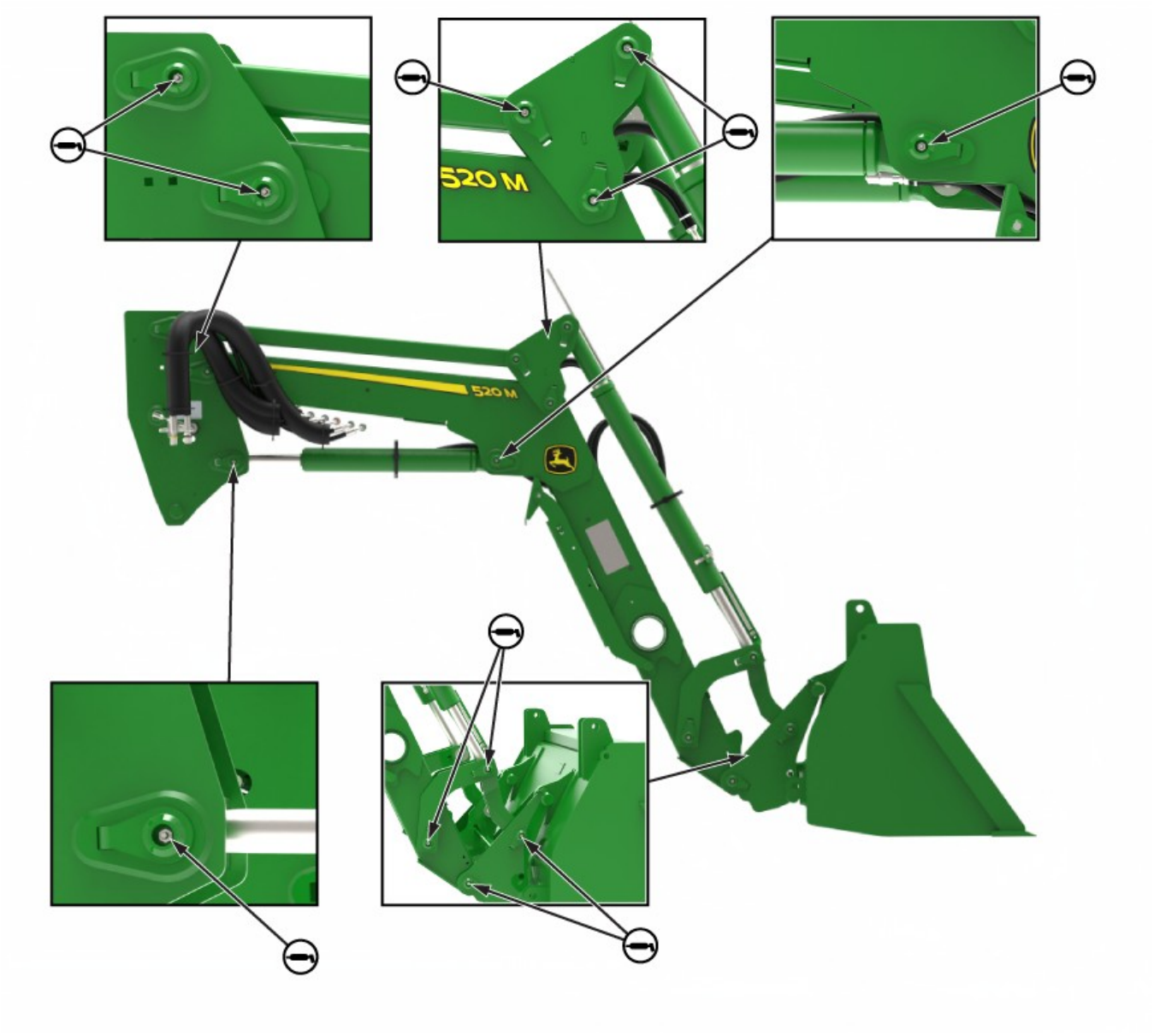
☐ Lubricate fittings on each side of the loader. (See procedure in Every 10 Hours in this section.)

☐ Lubricate the bucket latch pins (if equipped). (See procedure in Every 10 Hours in this section.)

OUO6038,0001ED4-19-30APR18

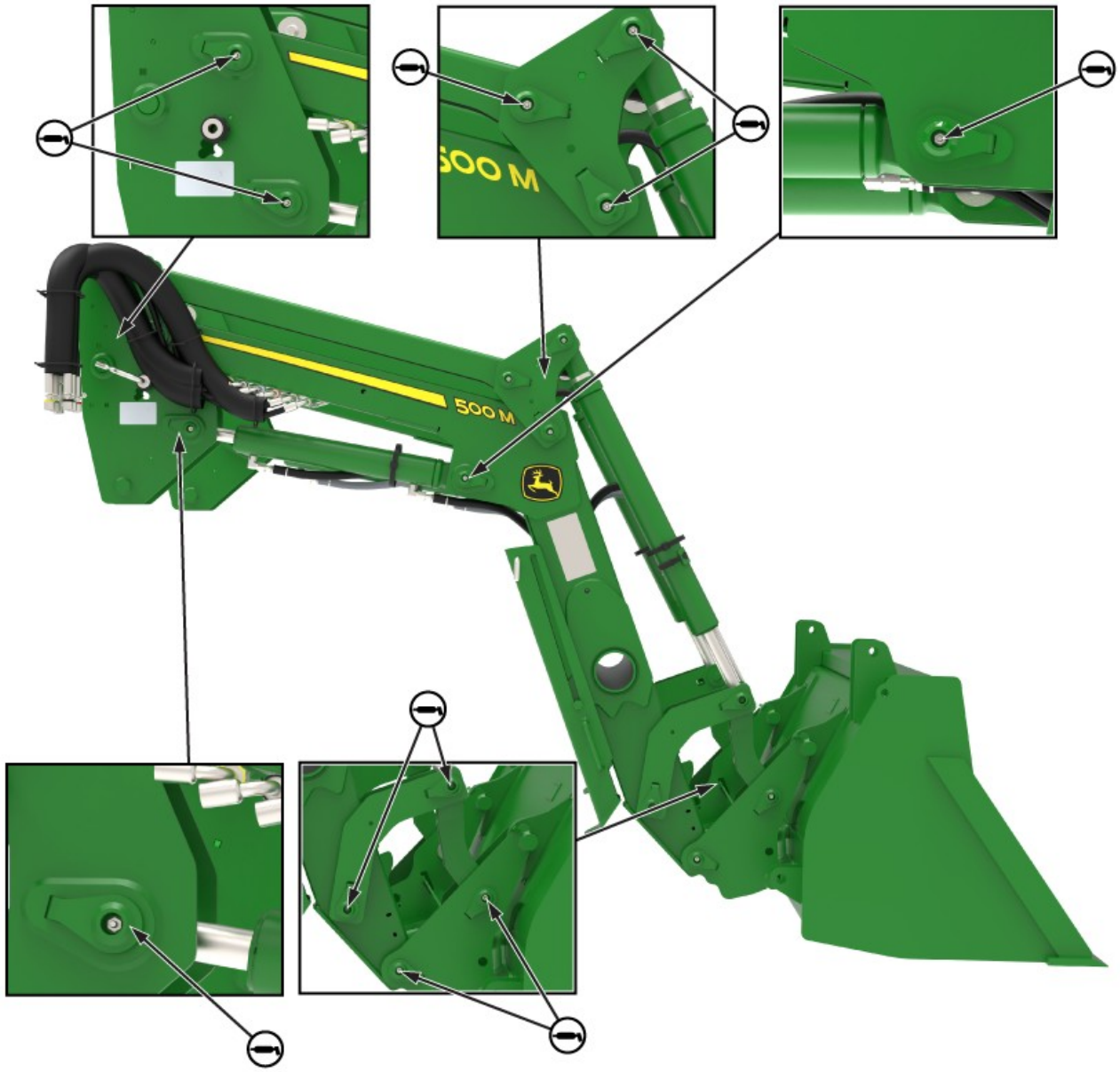
Every 10 Hours—500M and 520M Loaders

Mechanical Self-Leveling Loaders



APY88282—UN—29JAN24

Lubrication Points (520M MSL)



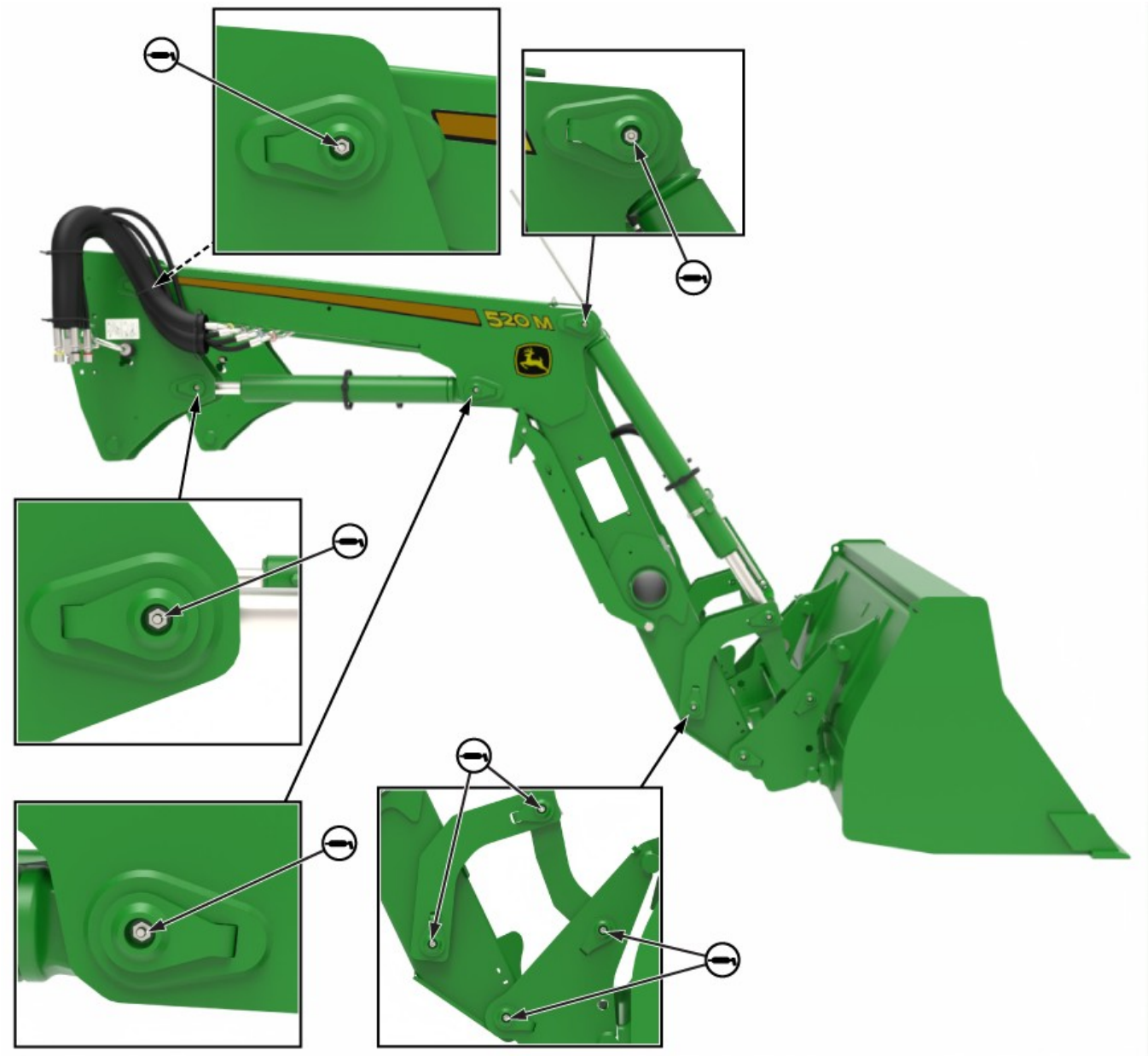
APY88283—UN—29JAN24

Lubrication Points (500M MSL)

NOTE: To access all the lubrication points, roll back the bucket or attachment and lower the loader to the ground.

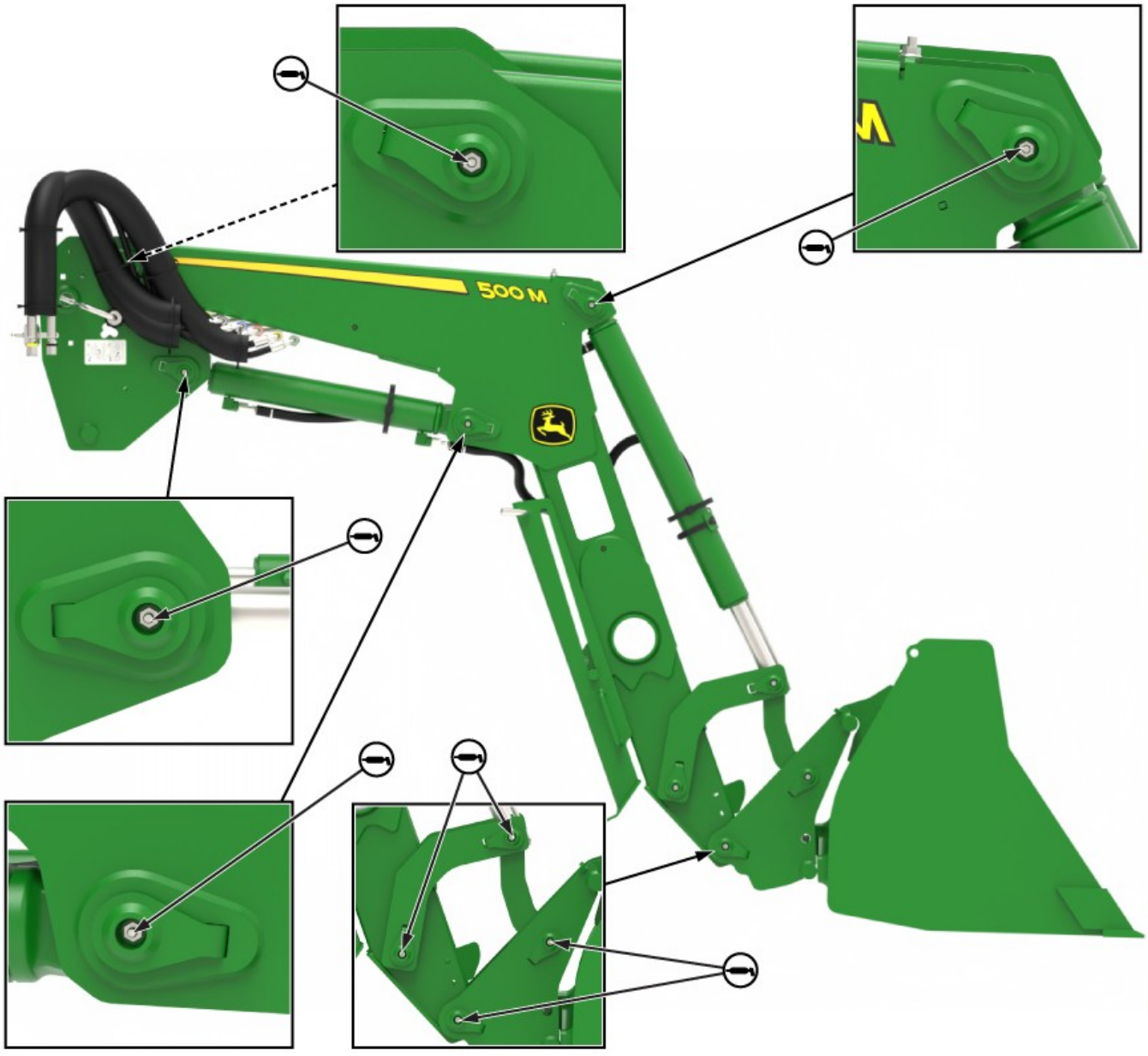
Lubricate 22 fittings, 11 on each side of the loader.

Non Self-Leveling Loaders



APY88284—UN—29JAN24

Lubrication Points (520M NSL)



Lubrication Points (500M NSL)

NOTE: To access all the lubrication points, roll back the bucket or attachment and lower the loader to the ground.

Lubricate 16 fittings, 8 on each side of the loader.

Latch Pins

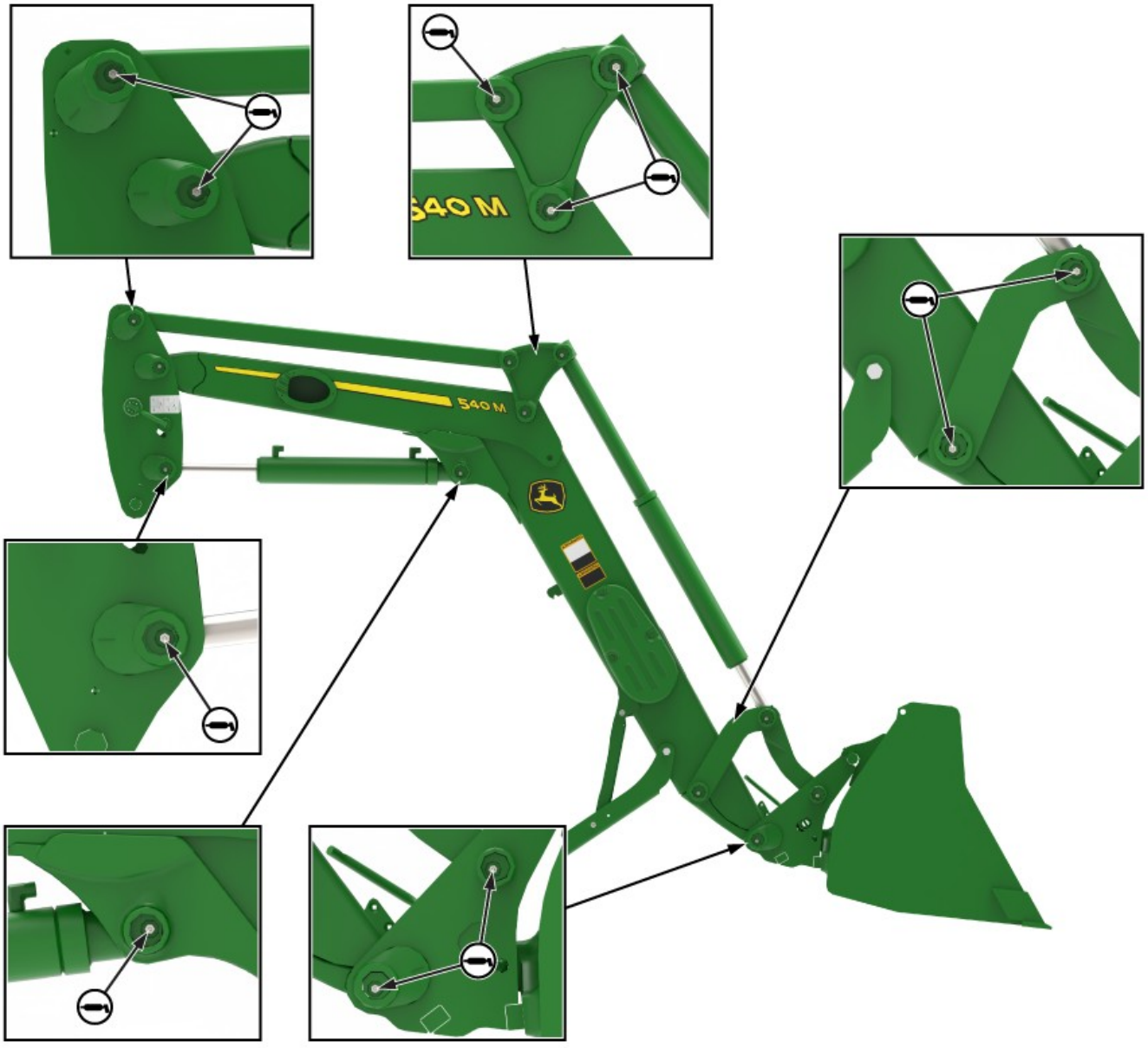
APY88286—UN—12DEC23

Clean and lubricate latch pins on both sides of the carrier. Make sure that the pins engage freely.

uuf6xgz,1701953650383-19-29JAN24

Every 10 Hours—540M Loaders

Mechanical Self-Leveling Loaders



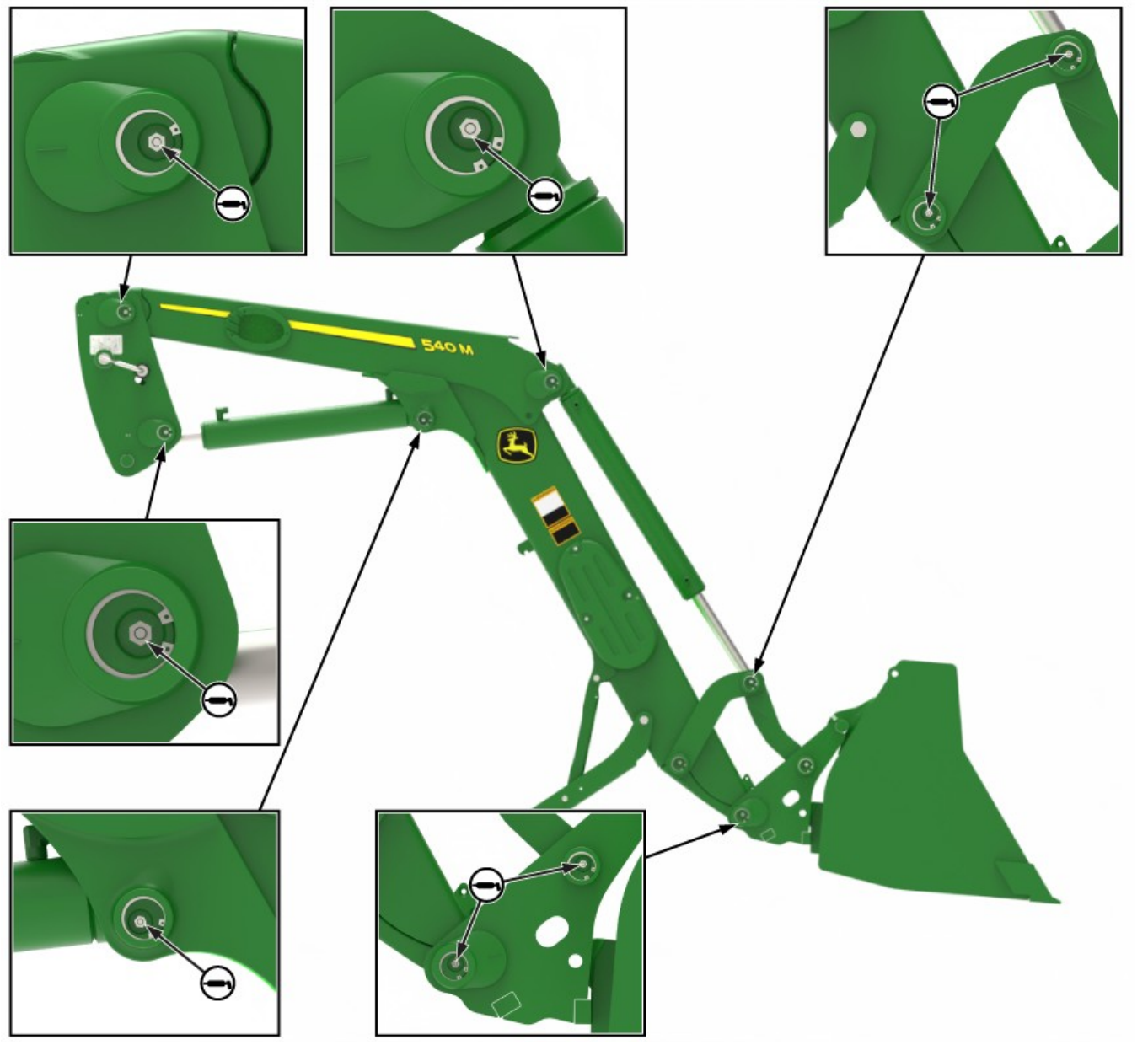
APY93021—UN—29JAN24

Lubrication Points

NOTE: To access all the lubrication points, roll back the bucket or attachment and lower the loader to the ground.

Lubricate 22 fittings, 11 on each side of the loader.

Non Self-Leveling Loaders

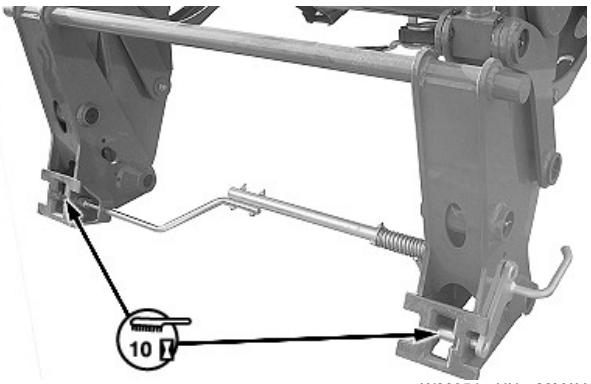


Lubrication Points

NOTE: To access all the lubrication points, roll back the bucket or attachment and lower the loader to the ground.

Lubricate 16 fittings, 8 on each side of the loader.

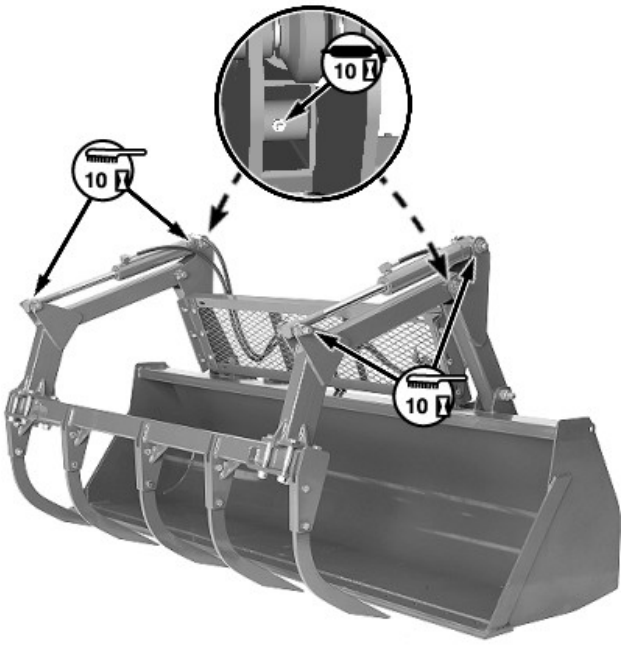
Latch Pins



W20954—UN—26MAY10

Clean and lubricate latch pins on both sides of the carrier. Make sure that the pins engage freely.

Grapple



W28399—UN—26MAR18

Lubricate fittings on the back of both pivot arms.

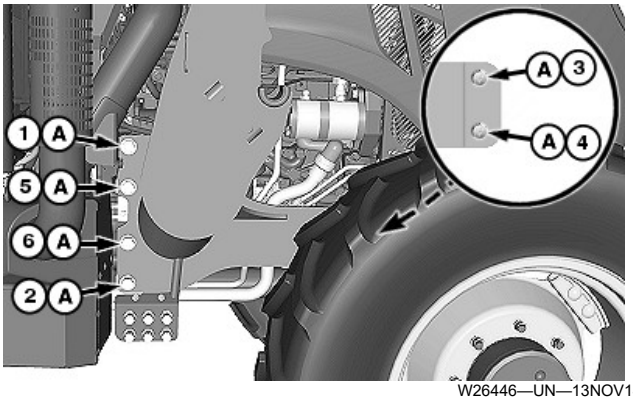
Apply grease, oil, or spray lubricant to the cylinder pivots.

rd91939,1706521178844-19-29JAN24

Every 50 Hours—520M and 500M Loaders

Tighten Mounting Frame Cap Screws

5085E, 5090E, 5090EL, and 5100E Tractors:



W26446—UN—13NOV14

Torque Sequence (right-hand side shown)

A—Cap Screw, M20 (6 each side)

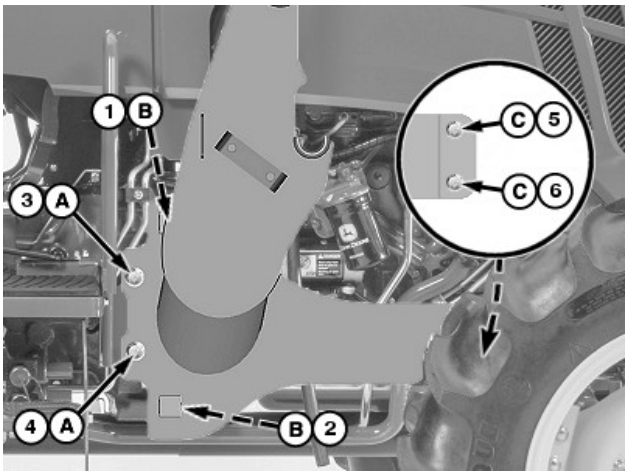
IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tighten loader mounting frame cap screws (A) after the first 10 hours of operation and again after every 50 hours.

Tighten cap screws to specifications in the torque sequence shown.

Specification

Cap Screw (A)—Torque. . . . . 530 N·m (400 lb·ft)

5083E, 5093E, 5101E, 5603, 5425, 5525, and 5625 Tractors:



W24498—UN—12SEP14

Torque Sequence (right-hand side shown)

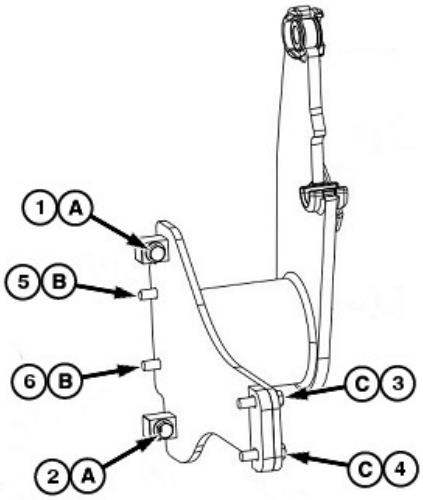
A—Cap Screw, M20 (2 each side)
B—Cap Screw, M20 (2 each side)
C—Cap Screw, M20 (2 each side)

IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tighten loader mounting frame cap screws (A—C) after the first 10 hours of operation and again after every 50 hours.

Tighten cap screws to specifications in the torque sequence shown.

Specification	
Cap Screw (A)—Torque	530 N·m (400 lb·ft)
Cap Screw (B and C)—Torque	610 N·m (450 lb·ft)

5082E and 5090E Tractors (12F-12R transmission tractors built in Mexico):



W28957—UN—03DEC20

Torque Sequence (left-hand side shown)

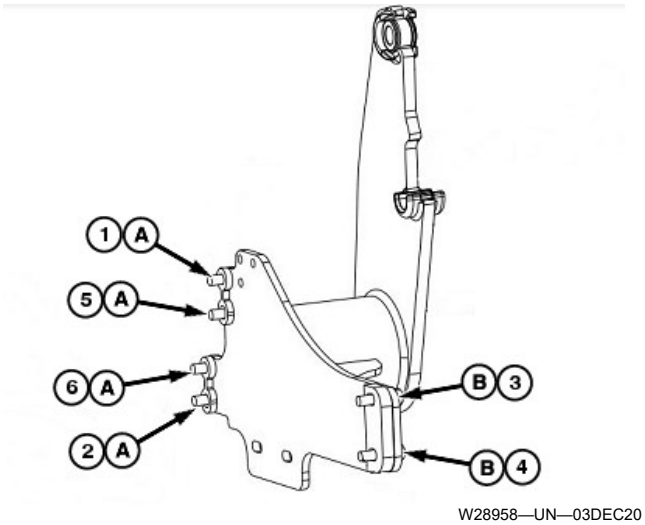
A—Cap Screw, M20 (2 each side)
B—Cap Screw, M20 (2 each side)
C—Cap Screw, M20 (2 each side)

IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tighten loader mounting frame cap screws (A—C) after the first 10 hours of operation and again after every 50 hours.

Tighten cap screws to specifications in the torque sequence shown.

Specification	
Cap Screw (A)—Torque	530 N·m (400 lb·ft)
Cap Screw (B and C)—Torque	610 N·m (450 lb·ft)

5415, 5615, 5715, 5076E, 5082E, and 5090E Tractors (9F-3R transmission tractors built in Mexico):



W28958—UN—03DEC20

Torque Sequence (left-hand side shown)

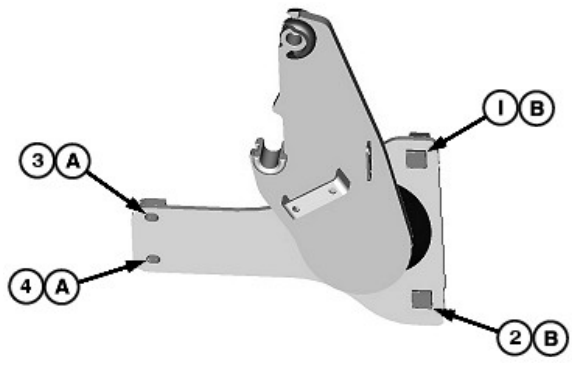
A—Cap Screw, M20 (2 each side)
B—Cap Screw, M20 (2 each side)

IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tighten loader mounting frame cap screws (A and B) after the first 10 hours of operation and again after every 50 hours.

Tighten cap screws to specifications in the torque sequence shown.

Specification	
Cap Screw (A)—Torque	530 N·m (400 lb·ft)
Cap Screw (B)—Torque	610 N·m (450 lb·ft)

5083EN, 5093EN, and 5101EN Tractors:



W26259—UN—31JUL14

Torque Sequence (left-hand side shown)

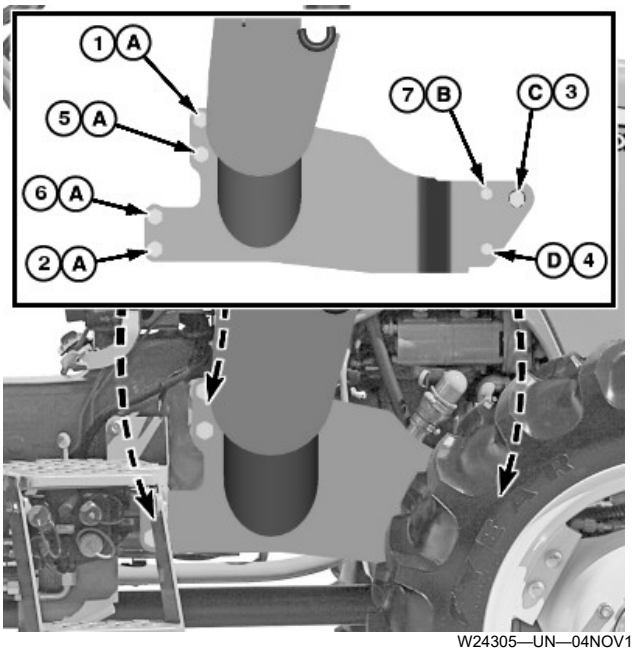
A—Cap Screw, M20 (2 each side)
B—Cap Screw, M20 (2 each side)

IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tighten loader mounting frame cap screws (A and B) after the first 10 hours of operation and again after every 50 hours.

Tighten cap screws to specifications in the torque sequence shown.

Specification	
Cap Screw (A)—Torque	530 N·m (400 lb·ft)
Cap Screw (B)—Torque	610 N·m (450 lb·ft)

5045E, 5055E, 5065E, 5075E (Non-FT4 Models; MY13 and earlier), 5103, 5203, 5303, 5403, 5210, 5220, 5310, and 5320 Tractors:



W24305—UN—04NOV13

Torque Sequence (right-hand side shown)

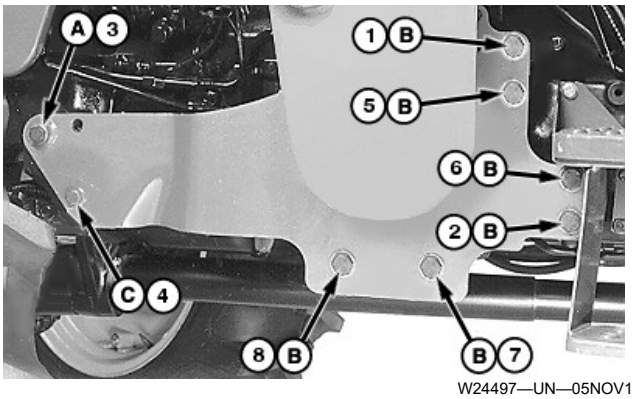
A—Cap Screw, M20 (4 each side)
B—Cap Screw, M16 (1 each side)
C—Cap Screw, M16 (1 each side)
D—Cap Screw, M16 (1 each side)

IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tighten loader mounting frame cap screws (A—D) after the first 10 hours of operation and again after every 50 hours.

Tighten cap screws to specifications in the torque sequence shown.

Specification	
Cap Screw (A)—Torque	530 N·m (400 lb·ft)
Cap Screw (B, C, and D)—Torque	275 N·m (200 lb·ft)

5410, 5410N, 5420, 5510, 5510N, 5520, and 5520N Tractors:



W24497—UN—05NOV13

Torque Sequence (left-hand side shown)

A—Cap Screw, M16 (1 each side)
B—Cap Screw, M20 (6 each side)
C—Cap Screw, M16 (1 each side)

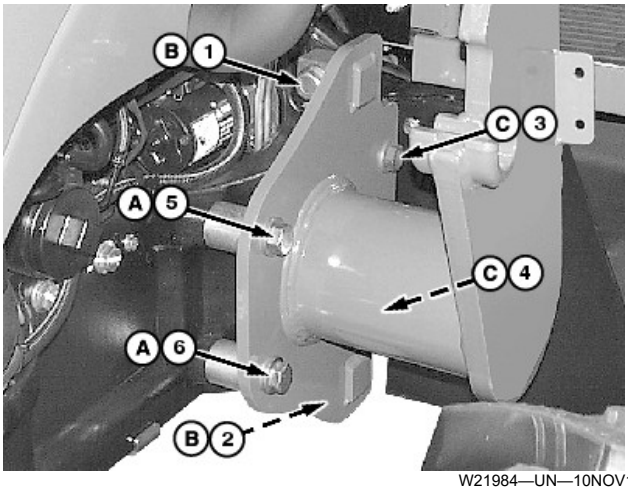
IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tighten loader mounting frame cap screws (A—C) after the first 10 hours of operation and again after every 50 hours.

NOTE: Two bottom cap screws (B) are not used on narrow "N" tractors.

Tighten cap screws to specifications in the torque sequence shown.

Specification	
Cap Screw (A and C)—Torque	275 N·m (200 lb·ft)
Cap Screw (B)—Torque	530 N·m (390 lb·ft)

5225, 5325, and 5325N Five-Cylinder Tractors:



W21984—UN—10NOV11

Torque Sequence (left-hand side shown)

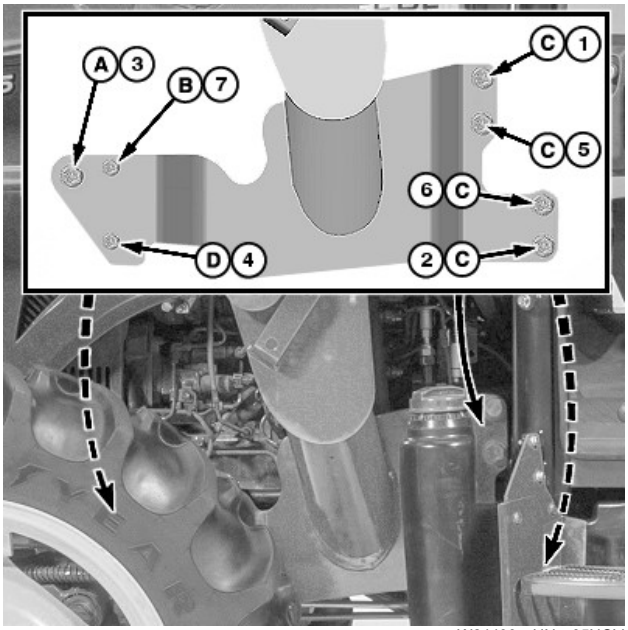
A—Cap Screw, M20 (2 each side)
B—Cap Screw, M20 (2 each side)
C—Cap Screw, M20 (2 each side)

IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tightening loader mounting frame cap screws (A—C) after the first 3 hours of loader operation is critical. Tighten again after 10 hours and again after every 50 hours.

Tighten cap screws to specifications in the torque sequence shown.

Specification	
Cap Screw (A and B)—Torque	610 N·m (450 lb·ft)
Cap Screw (C)—Torque	530 N·m (390 lb·ft)

5045E, 5055E, 5065E, and 5075E (FT4 MY16 and Earlier Three-Cylinder) Tractors:



W24499—UN—05NOV13

Torque Sequence (left-hand side shown)

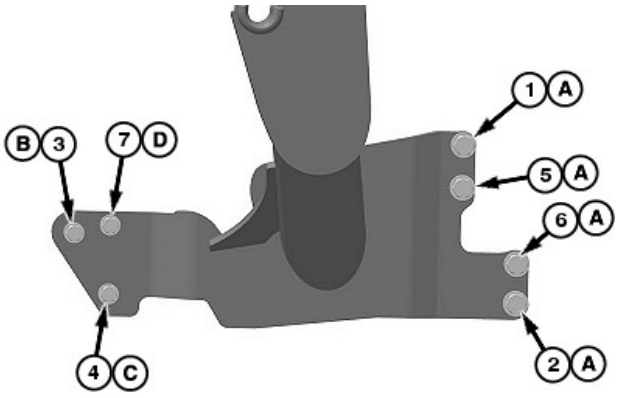
A—Cap Screw, M16 (1 each side)
B—Cap Screw, M16 (1 each side)
C—Cap Screw, M20 (4 each side)
D—Cap Screw, M16 (1 each side)

IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tighten loader mounting frame cap screws (A—D) after the first 10 hours of operation and again after every 50 hours.

Tighten cap screws to specifications in the torque sequence shown.

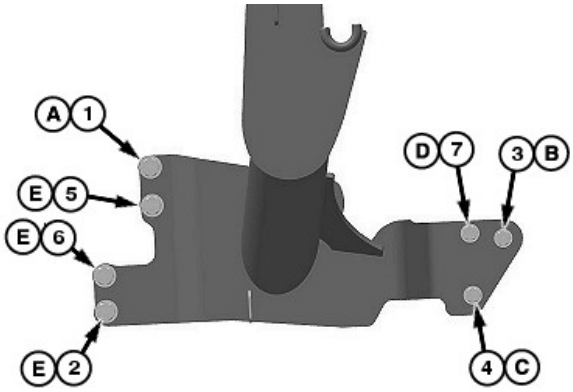
Specification	
Cap Screw (A, B, and D)—Torque	275 N·m (200 lb·ft)
Cap Screw (C)—Torque	530 N·m (390 lb·ft)

5045E, 5055E, 5065E, and 5075E (FT4 MY17 Three-Cylinder) Tractors:



W27691—UN—23JUN17

Torque Sequence (left-hand side)



W28137—UN—06JUL17

Torque Sequence (right-hand side)

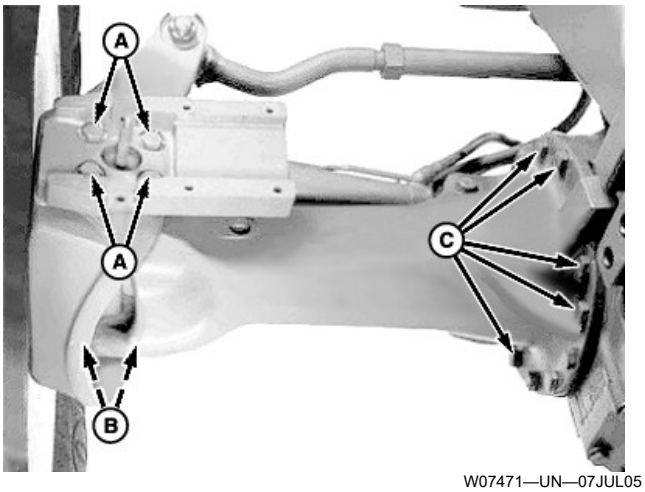
A—Cap Screw, M20 x 65 (1 each side)
B—Cap Screw, M16 x 70 (1 each side)
C—Cap Screw, M16 x 50 (1 each side)
D—Cap Screw, M16 x 50 (1 each side)
E—Cap Screw, M20 x 70 (3 each side)

IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tighten loader mounting frame cap screws (A—E) after the first 10 hours of operation and again after every 50 hours.

Tighten cap screws to specifications in the torque sequence shown.

Specification	
Cap Screw (A and E)—Torque	530 N·m (390 lb·ft)
Cap Screw (B, C, and D)—Torque	275 N·m (200 lb·ft)

Tighten MFWD Axle Housing and Kingpin Mounting Cap Screw



W07471—UN—07JUL05

Right-Hand Side Axle Housing (viewed from the front)

A—Cap Screw (4 each side)
B—Cap Screw (4 each side)
C—Cap Screw (13 used)

1. Tighten kingpin mounting cap screws (A and B), on both sides, to specification.

Specification	
Kingpin Mounting Cap Screw (A and B)—Torque	620 N·m (457 lb·ft)

2. Tighten 13 right-hand side axle housing-to-differential case cap screws (C) to specification.

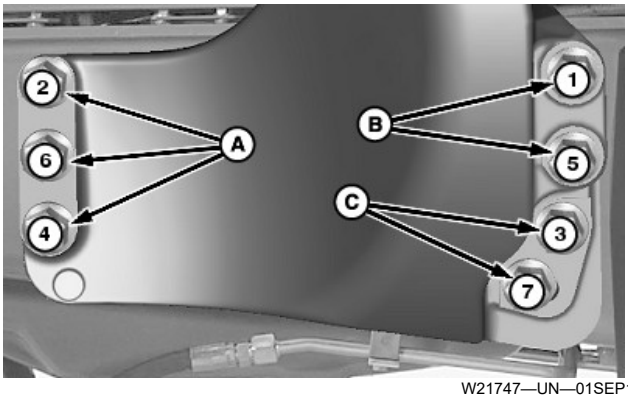
Specification	
Axle Housing-to-Differential Case Cap Screw (C)—Torque	310 N·m (229 lb·ft)

uuf6xgz,1701953722161-19-07DEC23

Every 50 Hours—540M Loaders

Tighten Mounting Frame Hardware

6105M, 6115M, 6125M, 6105R, 6115R, 6125R, 5M Series, 5100M, 6030 Series, 6030P Series, 6020 Series, 6010 Series, 6000 Series, 6X05 Series, and 6X15 Series Tractors:



W21747—UN—01SEP11

Torque Sequence (left-hand side shown)

A—Cap Screw (3 each side)
B—Cap Screw and Washer (2 each side)
C—Cap Screw (2 each side)

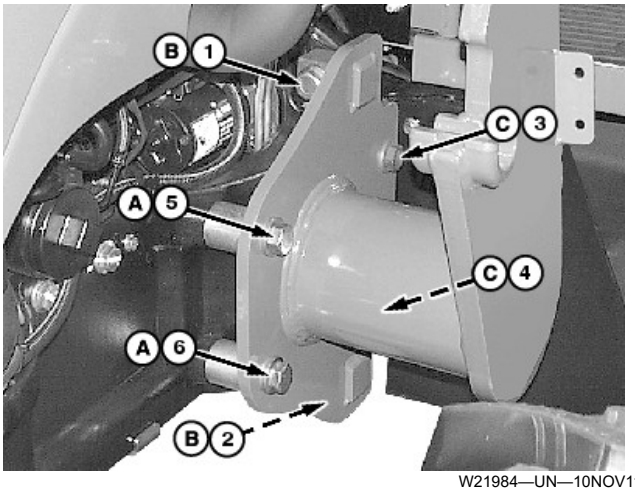
IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tightening the loader mounting frame hardware after the first 3 hours of loader operation is critical. Tighten again after 10 hours and again after every 50 hours.

Tighten seven cap screws (A, B, and C), on both sides, to specification using the tightening sequence shown.

Specification	
Cap Screw (A)—Torque	620 N·m (457 lb·ft)
Cap Screw (B)—Torque	620 N·m (457 lb·ft)
Cap Screw (C)—Torque	580 N·m (428 lb·ft)

5225 and 5325 Tractors:

IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tightening the loader mounting frame hardware after the first 3 hours of loader operation is critical. Tighten again after 10 hours and again after every 50 hours.



W21984—UN—10NOV11

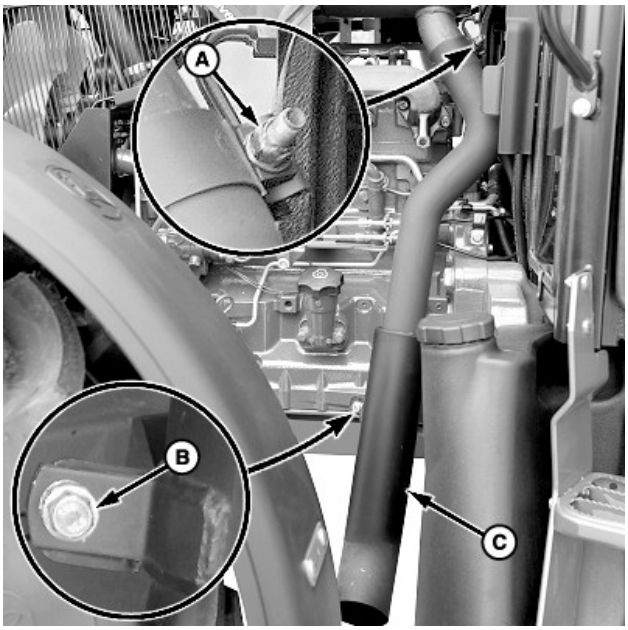
Torque Sequence (left-hand side shown)

A—Cap Screw, M20 x 100 (2 each side)
B—Cap Screw, M20 x 90 (2 each side)
C—Cap Screw, M20 x 55 (2 each side)

Tighten cap screws to specifications in the torque sequence shown.

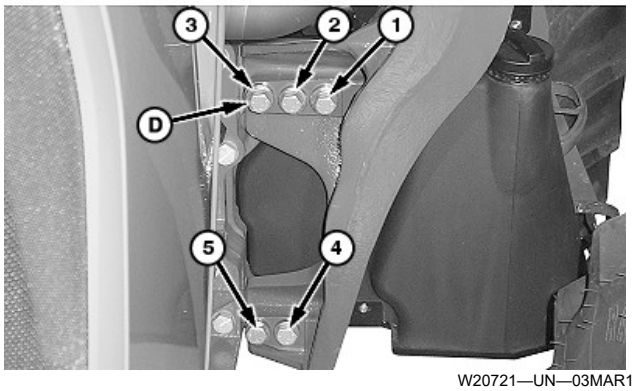
Specification	
Cap Screw (A and B)—Torque	610 N·m (450 lb·ft)
Cap Screw (C)—Torque	530 N·m (390 lb·ft)

5065M, 5075M, 5085M, 5095M, 5100M (Augusta), 5105M, and 5115M MFWD Tractors, 5100ML, 5115ML, and 5125ML (FT4) Tractors:



W20720—UN—03MAR10

Side Exhaust—Left-Hand Side (if equipped)



W20721—UN—03MAR10

A—Hardware, Clamp
B—Hardware, Support Bracket
C—Exhaust Pipe
D—Cap Screw (5 each side)

IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tightening the loader mounting frame hardware after the first 3 hours of loader operation is critical. Tighten again after 10 hours and again after every 50 hours.

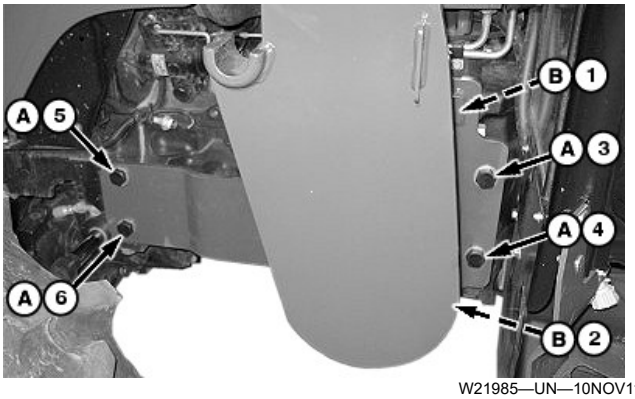
NOTE: Side-discharge exhaust pipe (C) (if equipped) must be removed to access the left-hand mounting frame cap screws.

1. Remove the left-hand side-discharge exhaust pipe (C), if equipped:
   a. Loosen clamp hardware (A).
   b. Remove and retain support bracket hardware (B) and exhaust pipe (C).
2. Tighten hardware to specification in the sequence shown.

Specification	
Cap Screw (D)—Torque	625 N·m (460 lb·ft)

3. Install side-discharge exhaust pipe (C), if equipped. Position pipe as shown, tighten clamp hardware (A) and fasten the pipe to the support bracket using hardware (B).

5X25 Series and 5E Series Tractors:



W21985—UN—10NOV11

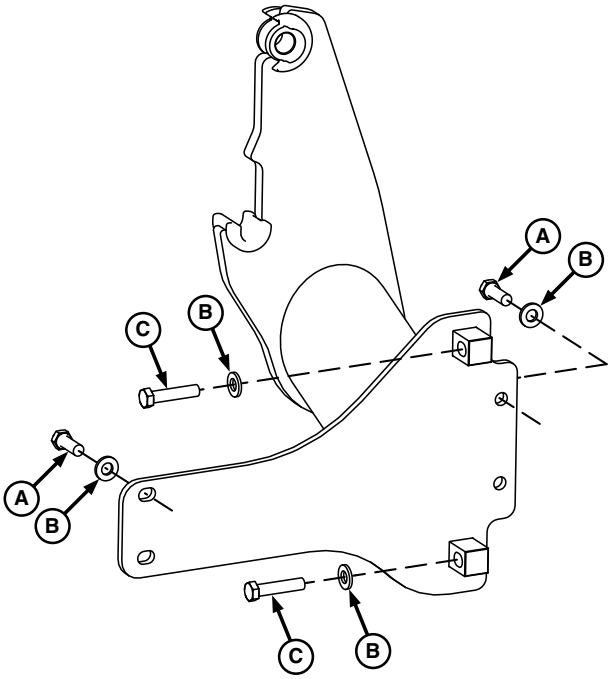
A—Cap Screw, M20 x 55 (4 each side)
B—Cap Screw, M20 x 90 (2 each side)

IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tightening the loader mounting frame hardware after the first 3 hours of loader operation is critical. Tighten again after 10 hours and again after every 50 hours.

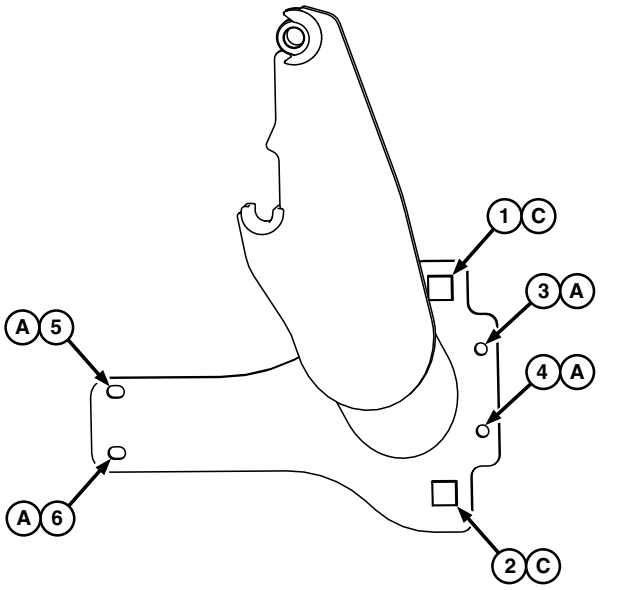
Tighten hardware to specifications in the sequence shown.

	Specification
Cap Screw (A)—Torque	530 N·m (390 lb·ft)
Cap Screw (B)—Torque	610 N·m (450 lb·ft)

5E (IT4) Series Tractors:



W23261—UN—17DEC12



W23262—UN—17DEC12

A—Cap Screw, M20 x 55 (4 each side)
B—Washer, 21.4 x 42 x 5 (6 each side)
C—Cap Screw, M20 x 90 (2 each side)

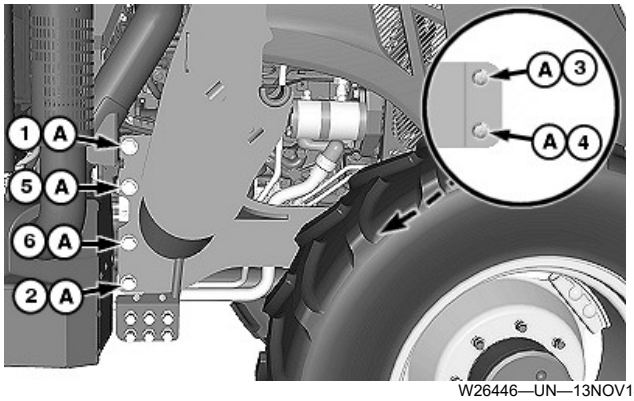
IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tightening the loader mounting frame hardware after the first 3 hours of loader operation is critical. Tighten again after 10 hours and again after every 50 hours.

NOTE: It can be necessary to remove the engine oil filter and fuel filter to allow access to mounting frame hardware for torquing. (Refer to the Tractor Operator's manual for removal and installation procedures.)

Tighten hardware to specifications in the sequence shown.

	Specification
Cap Screw (A)—Torque	530 N·m (390 lb·ft)
Cap Screw (C)—Torque	610 N·m (450 lb·ft)

5085E, 5090E, and 5100E Tractors:



W26446—UN—13NOV14

Torque Sequence (right-hand side shown)

A—Cap Screw, M20 (6 each side)

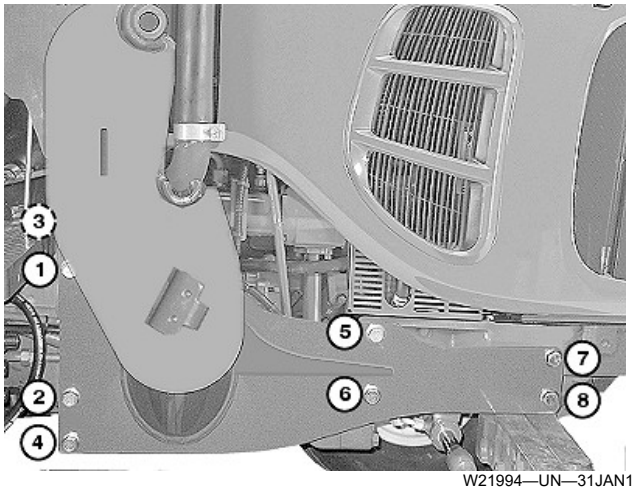
IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tighten loader mounting frame cap screws (A) after the first 10 hours of operation and again after every 50 hours.

Tighten cap screws to specifications in the torque sequence shown.

Specification

Cap Screw (A)—Torque. . . . . 530 N·m (400 lb·ft)

6D (MY12 and prior) Series Tractors:



W21994—UN—31JAN12

6D (T3) Series Tractors (Right-Hand Side Shown)

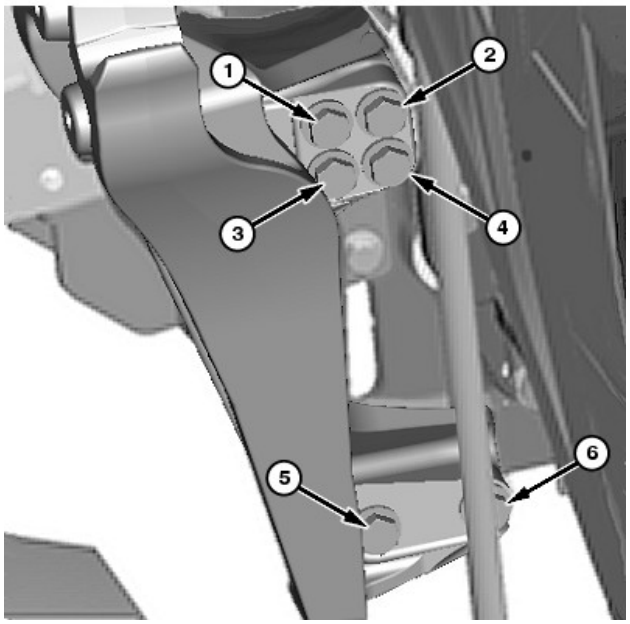
IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tightening the loader mounting frame hardware after the first 3 hours of loader operation is critical. Tighten again after 10 hours and again after every 50 hours.

Tighten hardware to specification in the sequence shown.

Specification

Cap Screw—Torque. . . . . 580 N·m (428 lb·ft)

6E and 6D (IT4; MY13 and newer) Series Tractors:



W22979—UN—14SEP12

6E and 6D (IT4; MY13 and newer) Series Tractors (right-hand side shown)

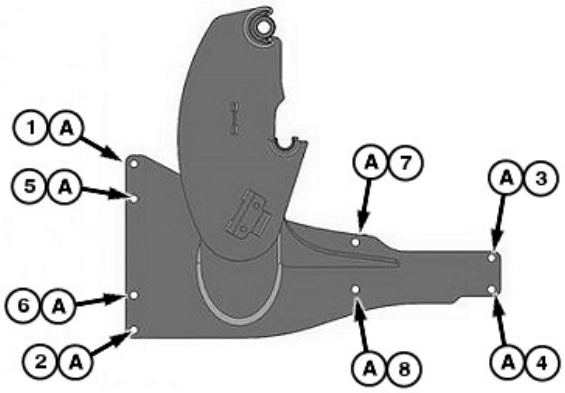
IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tightening the loader mounting frame hardware after the first 3 hours of loader operation is critical. Tighten again after 10 hours and again after every 50 hours.

Tighten hardware to specification in the sequence shown.

Specification

Cap Screw—Torque. . . . . 580 N·m (428 lb·ft)

6100E, 6110E, 6115E, 6125E, and 6130E Tractors, 6403 and 6603 (built in Mexico) Tractors:



W28961—UN—16DEC20

Right-Hand Side Shown

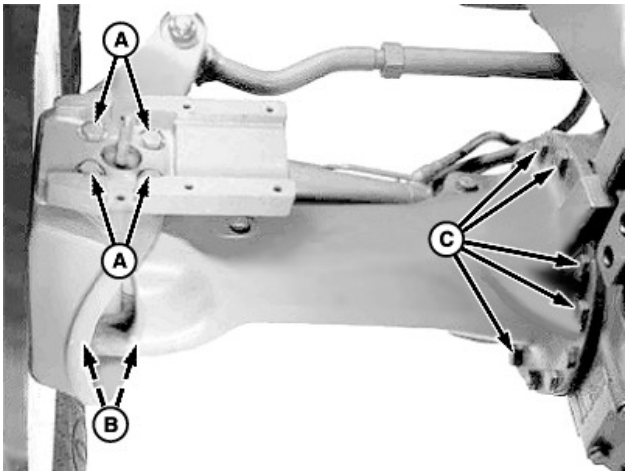
IMPORTANT: Prevent possible damage to the tractor or loader caused by operating with loose mounting frames. Tightening the loader mounting frame hardware after the first 3 hours of loader operation is critical. Tighten again after 10 hours and again after every 50 hours.

Tighten hardware to specification in the sequence shown.

Specification

Cap Screw—Torque. . . . . 580 N·m (428 lb·ft)

Tighten MFWD Axle Housing and Kingpin Mounting Hardware



W07471—UN—07JUL05

Right-Hand Side Axle Housing (viewed from the front)

A—Cap Screw (4 each side)
B—Cap Screw (4 each side)
C—Cap Screw (13 used)

Tighten kingpin mounting cap screws (A and B), on both sides, to specification.

Specification

Kingpin Mounting Cap Screw (A and B)—Torque. . . . . 620 N·m (457 lb·ft)

Tighten 13 right-hand side axle housing-to-differential case cap screws (C) to specification.

Specification

Axle Housing-to-Differential Case Cap Screw (C)—Torque. . . . . 310 N·m (229 lb·ft)

OUO6064,000321F-19-09DEC21

Every 100 Hours or Monthly—Check Hydraulic Hoses

Check the condition of the exposed hydraulic hoses every 100 hours or monthly, whichever comes first.

Check more often if working in rough conditions.

OUO6038,0001F01-19-30APR18

Every 6 Years—Replace Hydraulic Hoses

APY88287—UN—12DEC23

A—Hydraulic Hose, Loader (4 or 6 used)
B—Hydraulic Hose, Tractor (4 or 6 used)

Due to the wear on hydraulic hoses (A and B) over time, it is recommended to replace hoses every 6 years.

In some countries, regulations make this recommendation mandatory.

See a John Deere dealer or other service provider for inspection and replacement of the hydraulic hoses.

uuf6xgz,1701953805197-19-07AUG25

Hydraulic

Symptom	Problem	Solution
Slow or jerky operation.	Cold hydraulic oil.	Run engine and cycle loader.
		Use low viscosity hydraulic oil in cold weather. (See the tractor Operator's Manual or a John Deere dealer or other service provider.)
	Low hydraulic oil level.	See the tractor Operator's Manual.
	Selective control valve output set low.	Increase to fastest rate. (See the tractor Operator's Manual.)
	Engine speed too slow.	Increase engine speed.
	Internal cylinder leakage.	Test cylinders for internal leaks. Install cylinder repair kit. (See a John Deere dealer or other service provider.)
	Faulty tractor hydraulic system.	See the tractor Operator's Manual or a John Deere dealer or other service provider.
	Faulty load sensing signal.	See a John Deere dealer or other service provider.
	”Flow checking” or faulty quick-connect coupler.	Replace coupler. (See a John Deere dealer or other service provider.)
	Overloading bucket or attachment.	Reduce load. (See how lift capacity is determined in Specifications section.)
	Shut off valve near multicoupler is partially closed.	Turn handle of shut off valve counterclockwise to fully open.
Oil leaks.	Loose connections.	Tighten fittings.
	Defective seal in fittings located on top of torque tube.	Inspect fittings for leaks. Replace O-rings and seals if necessary. (See a John Deere dealer or other service provider.)
	External cylinder leakage.	Install cylinder repair kit. (See a John Deere dealer or other service provider.)
Lack of lift capacity	Load is greater than loader lift capacity.	See how lift capacity is determined in Specifications section.
	Internal lift cylinder leakage.	Test cylinders for internal leaks. Install cylinder repair kit. (See a John Deere dealer or other service provider.)

Symptom	Problem	Solution
Heavily loaded loader lowers when control is moved to raise position.	Control valve not working properly.	Repair control valve. (See a John Deere dealer or other service provider.)
Heavily loaded bucket or attachment dumps when control is moved to roll back position.	Control valve not working properly.	Repair control valve. (See a John Deere dealer or other service provider.)
Loader operation does not correspond with control lever movement.	Hydraulic hoses connected wrong.	Correct hose connections. (See Identify Hose Connections in Service section.)
	Defective quick-connect coupler.	Replace coupler. (See a John Deere dealer or other service provider.)
Loader settles from raised position.	Internal leak in control valve or cylinder.	Test for leaks. Install repair kit. (See a John Deere dealer or other service provider.)
	Internal leak in multicoupler.	Repair or replace multicoupler. (See a John Deere dealer or other service provider.)
	Defective seal in fittings located on top of torque tube.	Inspect fittings for leaks. Replace O-rings and seals if necessary. (See a John Deere dealer or other service provider.)

OUO6038,0002212-19-28JUL25

Bucket

Symptom	Problem	Solution
Excessive wear on bucket cutting edge.	Too much down pressure when scraping on concrete surface.	Replace cutting edge.
		Use FLOAT position.
		Use heavy duty bucket equipped with reversible bolt-on cutting edge attachment.
Bucket cutting edge bent down.	Edge has contacted a solid object while scraping forward with bucket dumped more than 15° below level.	Position bucket 0—15° below level to protect the cutting edge while scraping forward.
	Lifting loads concentrated on bucket edge.	Distribute loads over wider area.
Bucket cutting edge bent up.	Edge has contacted a solid object while scraping or leveling rearward with bucket dumped more than 40° below level.	Position bucket at 40° or less below level to protect cutting edge while leveling rearward. Use FLOAT to reduce down pressure.

OUO6038,0001ED8-19-30APR18

Mast Pin

Symptom	Problem	Solution
Mast pin does not remain in locked position.	Spring inside knob is broken or missing.	Repair or replace mast pin assembly. (See a John Deere dealer or other service provider.)
	Knob worn or broken.	Replace knob or mast pin assembly. (See a John Deere dealer or other service provider.)

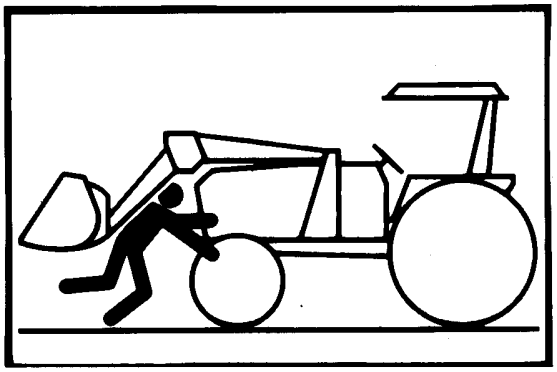
OUO6038,0001F2F-19-07AUG25

Service Loader and Tractor Safely (Loader Attached)—520M Loaders

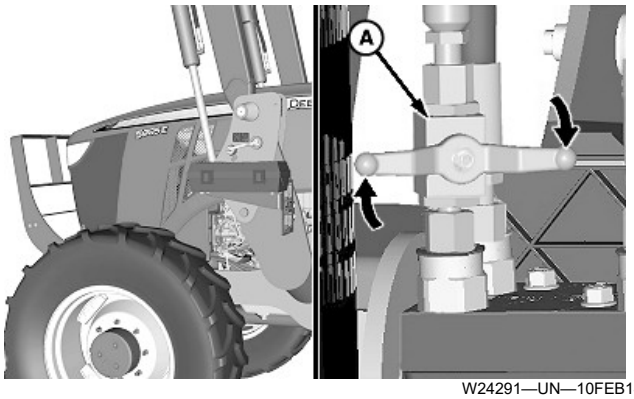
Normally, the engine compartment and the front of the tractor can be accessed with the bucket flat on the ground. However, due to tractor size and tire variations, servicing the tractor or loader can require the loader to be elevated.

Depending on the loader and attachment configuration, do one of the following:

- If servicing the tractor or loader requires the loader to be elevated, perform the following:



W00278—UN—04DEC91



W24291—UN—10FEB14

A—Handle, Shut Off Valve

CAUTION: Prevent possible injury or death from accidental lowering of the loader. DO NOT perform service around the front of the tractor with the loader elevated unless the shutoff valve is closed, locking the loader into an elevated position. The shutoff valve is not to be used alone to lock the loader in the elevated position for servicing the tractor. Support the loader with floor stands, or lifting straps, or chains connected to an overhead hoist.

NOTE: The shutoff valve is on the loader half of the multicoupler on the right-hand side of the loader.

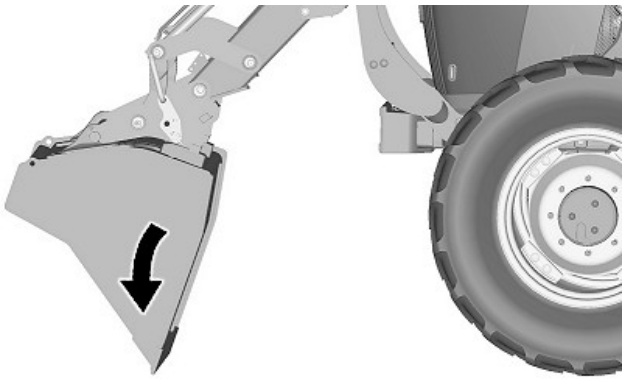
a. Raise the loader to the desired height and support the elevated loader with floor stands, or lifting straps, or chains connected to an overhead hoist.

b. Place the transmission in PARK.

c. Shut off engine and remove ignition key.

d. Turn the valve handle (A) clockwise to lock the loader in the elevated position.

- If the loader is not required to be elevated for servicing the tractor or loader, perform the following:



W24292—UN—23SEP13

CAUTION: Prevent possible injury or death from accidental lowering of the loader. DO NOT perform service around the front of the tractor unless the loader is safely secured.

a. Place the transmission in PARK.

b. Roll back the bucket until the front edge is facing the ground.

c. Relieve the hydraulic pressure. (See Relieve Hydraulic Pressure in Controls section.)

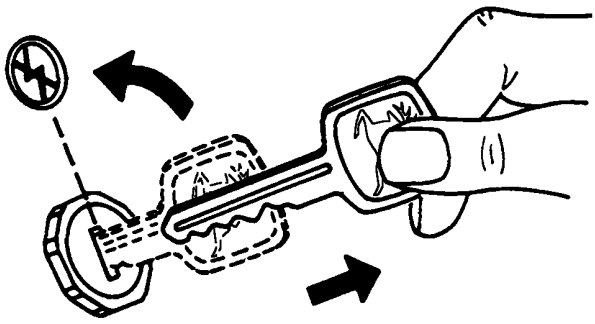
OUO6064,0001DFC-19-25MAY18

Service Loader or Tractor Safely (Loader Attached)—540M Loader (Australia Only)

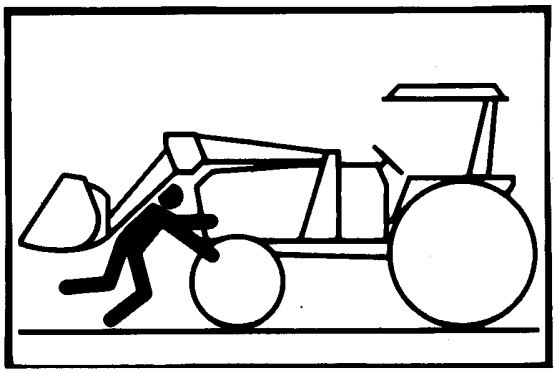
Normally, the engine compartment and the front of the tractor can be accessed with the bucket flat on ground. However, due to tractor size and tire variations, servicing the tractor or loader can require the loader to be fully elevated.

W24761—UN—04MAR14

Service Locks Installed



E50093—UN—08AUG01



W00278—UN—04DEC91

A—Service Locks

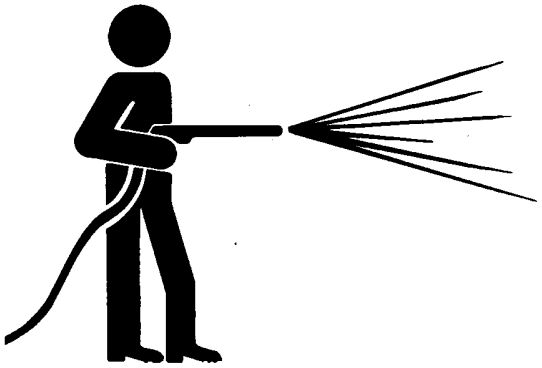
CAUTION: Prevent possible injury or death from accidental lowering of the loader. DO NOT perform service around the front of the tractor with the loader elevated and unsupported. Before servicing the loader or tractor, perform the following:

IMPORTANT: Prevent possible machine damage. DO NOT lower the loader onto the service locks with hydraulic pressure or with a load in the bucket.

1. Engage the park brake or place the transmission in PARK.
2. Lower the loader to the ground or fully raise the loader and install the service locks (A) on both boom cylinders. (See Use Service Locks in Operate Loader section.)
3. Relieve the hydraulic pressure. (See Relieve Hydraulic Pressure in Controls section.)

OUO6064,0001D33-19-06JUN18

Work in Clean Area



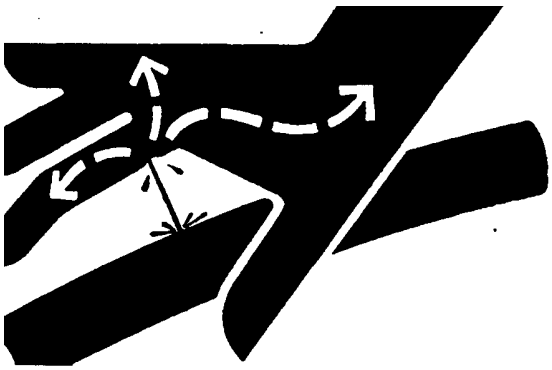
T6642EJ—UN—18OCT88

Before starting a job:

- Clean work area and machine.
- Make sure you have all necessary tools to do your job.
- Have the right parts on hand.
- Read all instructions thoroughly; do not attempt shortcuts.

DX,CLEAN-19-04JUN90

Avoid High-Pressure Fluids



X9811—UN—23AUG88

Inspect hydraulic hoses periodically–at least once per year–for leakage, kinking, cuts, cracks, abrasion, blisters, corrosion, exposed wire braid or any other signs of wear or damage.

Replace worn or damaged hose assemblies immediately with John Deere approved replacement parts.

Escaping fluid under pressure can penetrate the skin causing serious injury.

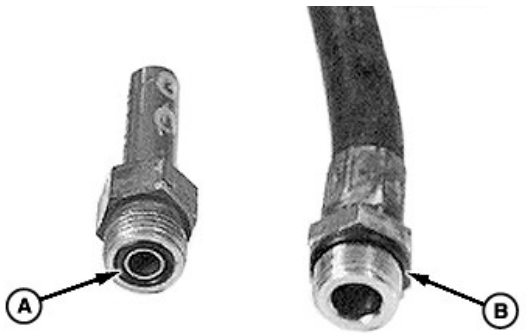
Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. Protect hands and body from high-pressure fluids.

In case of accidental skin injection, seek immediate surgical treatment.

DX,FLUID-19-05NOV25

O-Ring Installation



W14815—UN—03OCT01

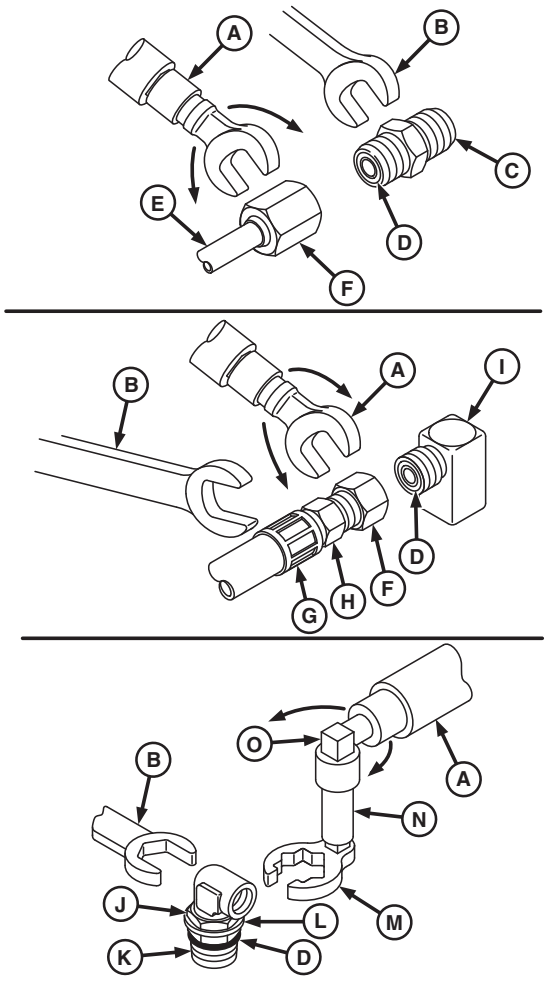
A—Groove
B—Seat

1. Inspect groove (A) and/or seat (B).
2. Flat face O-ring seal: Apply petroleum jelly to the O-ring and place in the groove.

   O-ring boss: Install the O-ring carefully over the threads.
3. Install fittings by hand until snug, position adjustable fittings by unscrewing no more than one turn.
4. Tighten according to specifications. (See Tighten Hydraulic Fittings and Hoses in this section.)

OUO6038,0001EDC-19-30APR18

Tighten Hydraulic Fittings and Hoses



W28605—UN—25JUL19

A—Torque Wrench
B—Open-End Wrench
C—Union
D—O-Ring
E—Metal Line
F—Swivel Nut
G—Hose Connection
H—Back-Up Nut
I—Fitting
J—Jam Nut
K—Angle Fitting
L—Washer
M—Crowfoot
N—Extension
O—Drive

IMPORTANT: Kinking or twisting hoses during installation shortens the hose life drastically. Be sure to follow proper procedure.

Tighten the fitting or the nut to torque value shown. Use one wrench to hold the body and one to tighten the nut.

For a hose, it can be necessary to use three wrenches to prevent twist; one on the body, one on the nut, and one on the hose fitting.

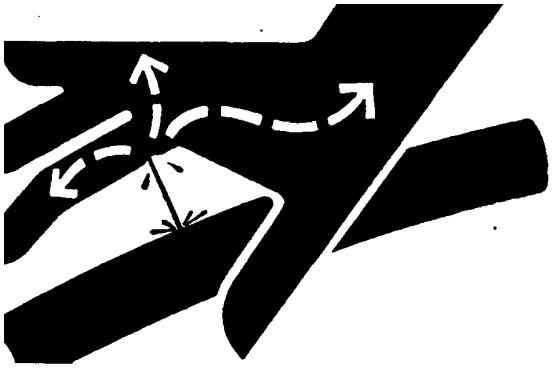
Flat Face O-Ring Seal — Specification

M14 Fitting—Torque	16 N•m (142 lb·in)
M22 or 11/16-16 Fitting—Torque	24 N•m (212 lb·in)
13/16-16 Fitting—Torque	50 N•m (37 lb·ft)
7/8-14 Fitting—Torque	62 N•m (46 lb·ft)
M27 Fitting—Torque	69 N•m (51 lb·ft)

OUO6038,0001EDD-19-14AUG19

Replace Hydraulic Hoses, Couplers, Tubing, and Connectors

CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Protect hands and body from high-pressure fluids. (See additional information, Avoid High-Pressure Fluids, in Safety section.)



X9811—UN—23AUG88

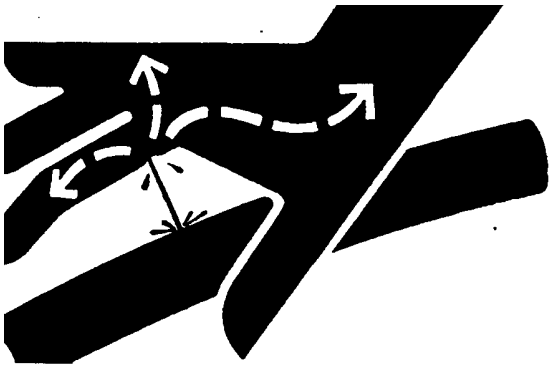
1. Relieve the hydraulic pressure. (See Relieve Hydraulic Pressure in Controls section.)

IMPORTANT: Prevent possible machine damage. DO NOT twist hydraulic tubes, use two wrenches when removing or connecting hoses to the tubes.

2. Remove clamps and tie bands as required. Tie bands cannot be used again.
3. Remove and replace hydraulic components.
4. To avoid contact with the loader frame, route or tie hoses.
5. Cycle the loader and check for leaks.
6. Check the tractor hydraulic oil level. See the tractor Operator's Manual for more information.

OUO6064,00019B2-19-25MAY18

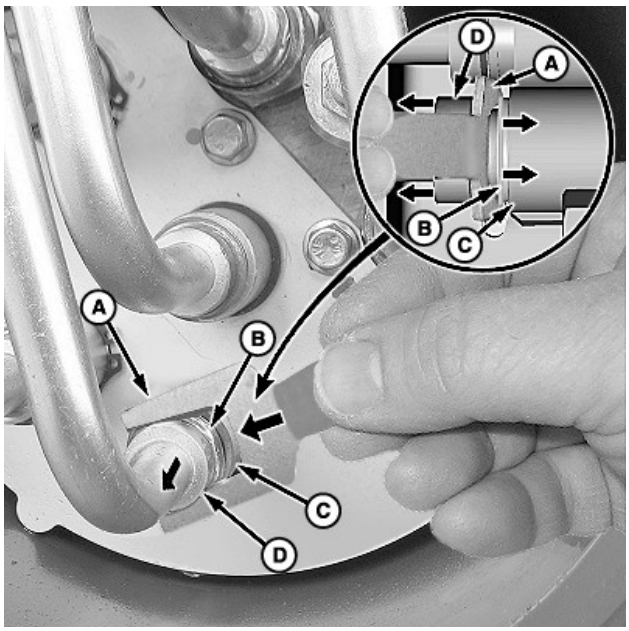
Plug-In Type Hydraulic Fittings—540M Loaders



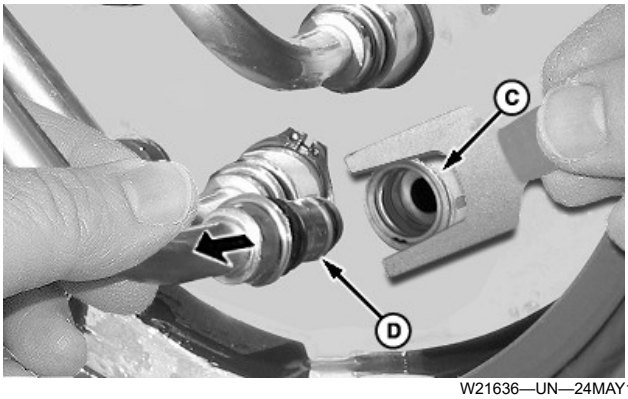
X9811—UN—23AUG88

CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Protect hands and body from high-pressure fluids. (See additional information, Avoid High-Pressure Fluids, in Safety section.)

1. Relieve the hydraulic pressure. (See Relieve Hydraulic Pressure in Controls section.)



W21635—UN—24MAY11



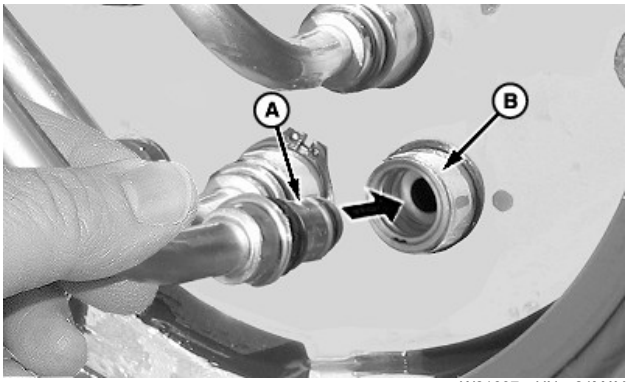
W21636—UN—24MAY11

A—Removal Tool
B—Sleeve
C—Fitting
D—Plug

IMPORTANT: Prevent possible machine damage. DO NOT use the removal tool (A) to pry fittings apart.

NOTE: The hydraulic fittings located inside booms and the torque tube require a special tool (A) for removal. It is available via regular special tool order channels.

2. Release the plug (D) from the fitting (C), by inserting the removal tool (A) between the collar of the plug (D) and sleeve (B) on the fitting (C).
3. Replace O-rings and seals if needed. Replacement parts can be obtained via regular spare part channels.



W21637—UN—24MAY11

A—Plug
B—Fitting

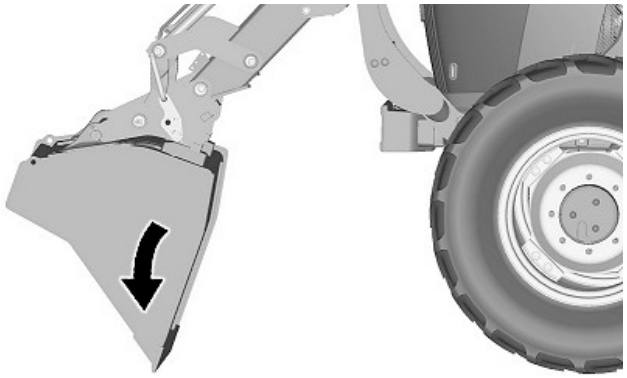
4. Apply small amount of oil to the O-ring on the plug (A).

NOTE: Plugs have color-coded markings that correspond with color-coded markings near each fitting. (If markings are not visible (see Identify Loader Oil Line Connections in this section).

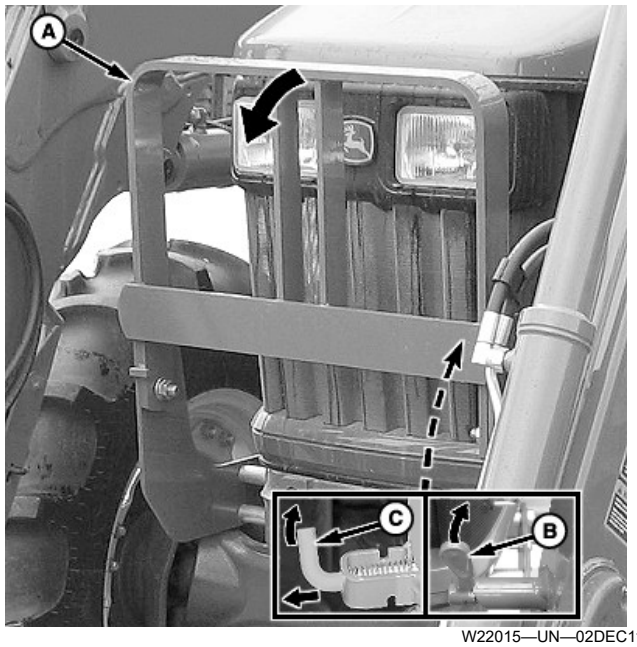
5. Insert the plug with the color-coded marking into the corresponding color-coded fitting (B) and push IN until fully seated.

OUO6064,0001CF5-19-07AUG25

Access Front of Tractor (Hood Guard with Latch Pin)



W24292—UN—23SEP13



W22015—UN—02DEC11

A—Hood Guard
B—Latch Pin, Rotating Type
C—Latch Pin, Pull Type

CAUTION: Prevent possible injury. If unable to access the front of the tractor with the loader attached, either remove the loader or raise the loader. If the loader is raised for access, lock the loader into position using the shutoff valve. Support the loader using floor stands or lifting straps or chains connected to an overhead hoist. (See Service Loader and/or Tractor Safely [Loader Attached] in this section.)

1. Start the engine and raise the boom.

2. Roll back the bucket until the front edge is facing the ground.
3. Lower the boom to the ground and shut off the engine.

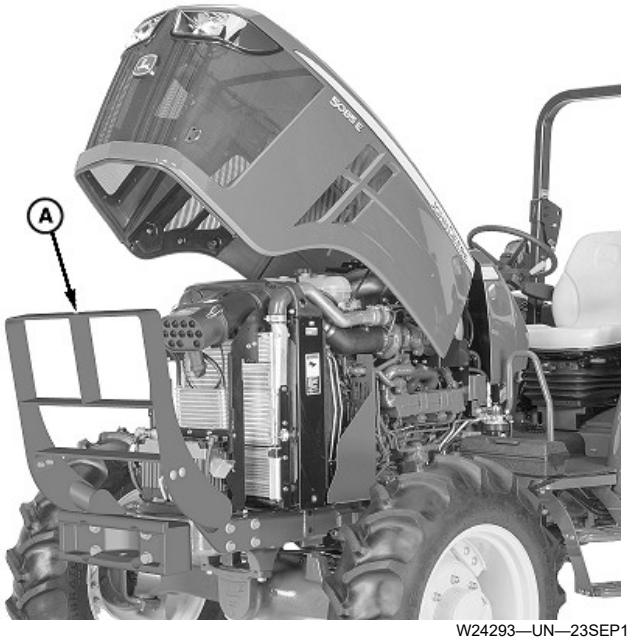
CAUTION: Prevent possible injury. Weight of the hood guard (A) can be as much as 38 kg (84 lb). Use caution when handling the hood guard as it can drop suddenly when lowered.

NOTE: Depending on the tractor, the hood guard has either a rotating-type latch pin (B) or pull-type latch pin (C).

4. Rotate or pull out and rotate the latch pin (B or C) and slowly rotate the hood guard (A) forward to access the engine compartment.

OUO6064,0000C18-19-30APR18

Access Front of Tractor (Rigid Hood Guards)



W24293—UN—23SEP13

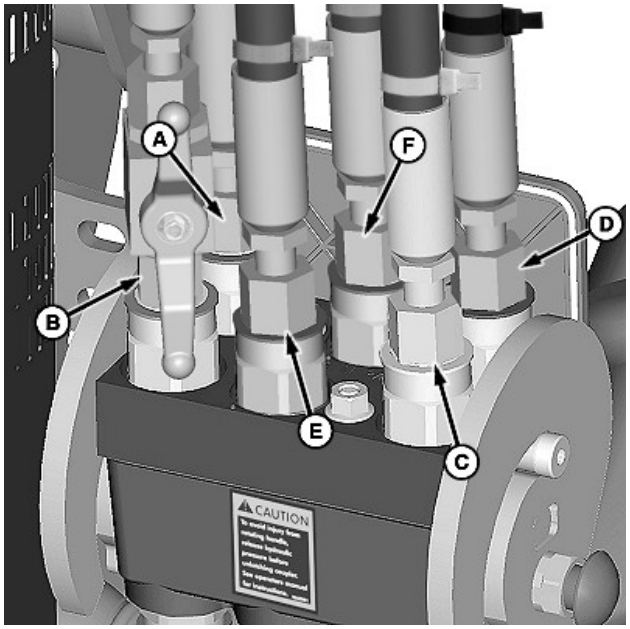
A—Hood Guard

CAUTION: Prevent possible injury or death. If unable to access the front of the tractor with the loader attached, either remove the loader or raise the loader. If the loader is raised for access, lock the loader into position using shutoff valve and support the loader using floor stands or lifting straps or chains connected to an overhead hoist. (See Service Loader and Tractor Safely [Loader Attached] in this section.)

Hood guard (A) does not fold down. Hood can be raised with the hood guard in place.

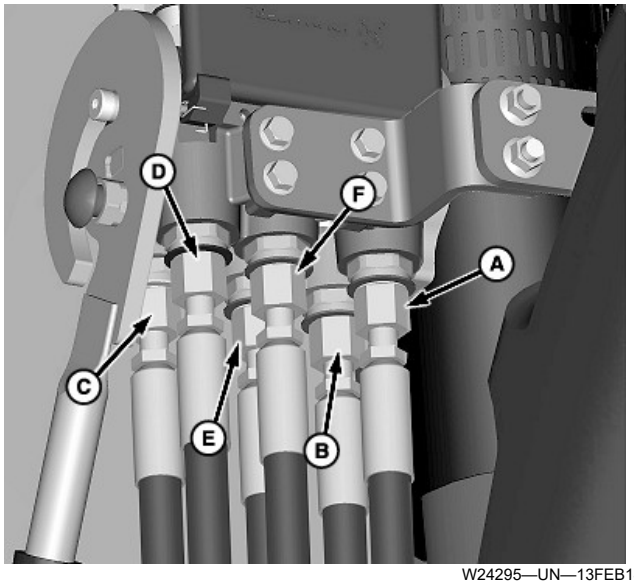
OUO6064,0000C19-19-30APR18

Identify Hose Connections—520M Loaders (Loader-to-Multicoupler)



W24294—UN—10FEB14

Multicoupler—Loader Half



W24295—UN—13FEB14

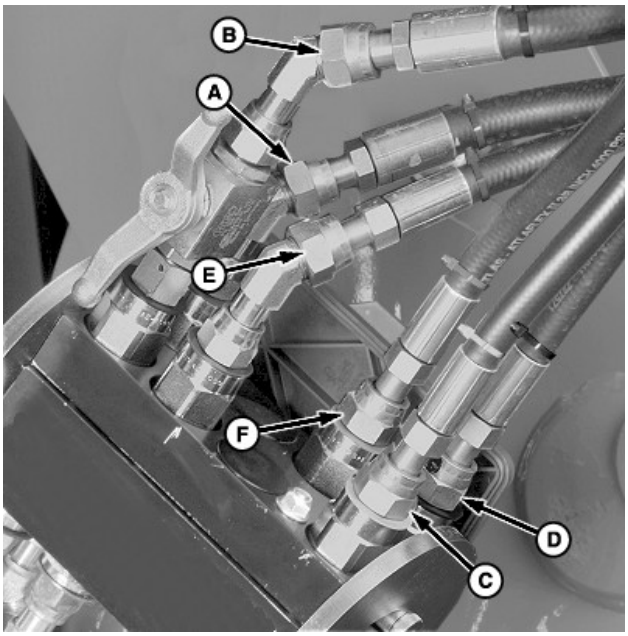
Multicoupler—Tractor Half

NOTE: Identify hydraulic hoses by the color-coded tie bands near each fitting.

Key	Color	Hydraulic Function
A	Red	Lift Cylinder—Rod End
B	Blue	Lift Cylinder—Head End
C	Yellow	Bucket Cylinder—Head End
D	Black	Bucket Cylinder—Rod End
E	Green	Attachment Cylinder—Rod End
F	Orange	Attachment Cylinder—Head End

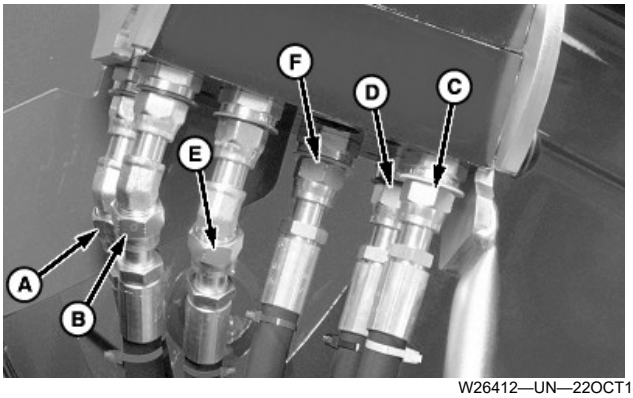
OUO6064,0001CF6-19-18JUL17

Identify Hose Connections—540M Loaders (Loader-to-Multicoupler)



W26411—UN—22OCT14

Multicoupler—Loader Half



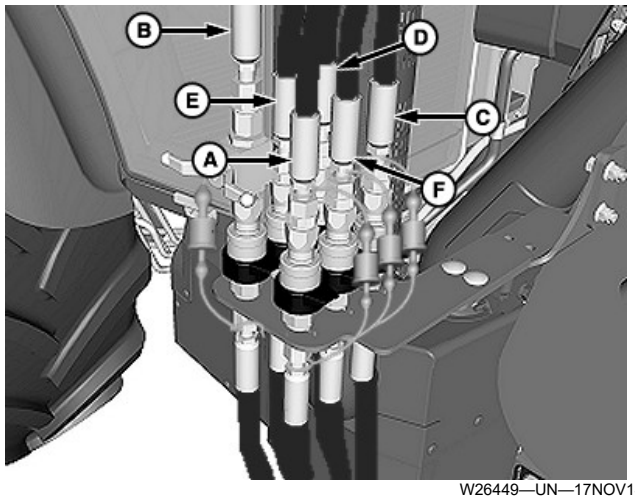
W26412—UN—22OCT14

Multicoupler—Tractor Half

Key	Color	Hydraulic Function
A	Red	Lift Cylinder—Rod End
B	Blue	Lift Cylinder—Head End
C	Yellow	Bucket Cylinder—Head End
D	Black	Bucket Cylinder—Rod End
E	Green	Attachment Cylinder—Rod End
F	Orange	Attachment Cylinder—Head End

OUO6064,0001CF7-19-18JUL17

Identify Hose Connections—520M Loaders (Loader-to-Mid-Mount Couplers)



W26449—UN—17NOV14

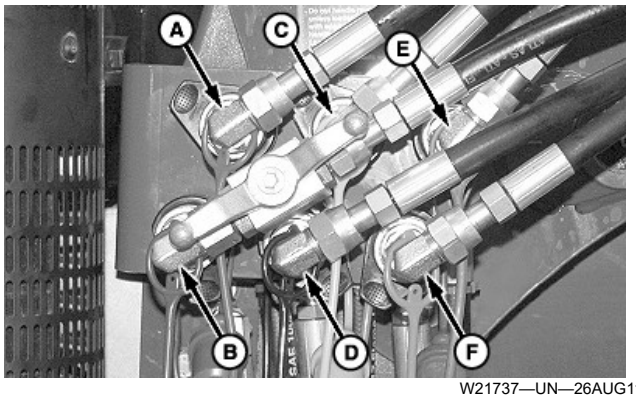
Mid-Mount Couplers

NOTE: Identify hydraulic hoses by the color-coded tie bands near each fitting and the color-coded caps and plugs on each hose.

Key	Color	Hydraulic Function
A	Red	Lift Cylinder—Rod End
B	Blue	Lift Cylinder—Head End
C	Yellow	Bucket Cylinder—Head End
D	Black	Bucket Cylinder—Rod End
E	Green	Attachment Cylinder—Rod End
F	Orange	Attachment Cylinder—Head End

OUO6064,0001CF8-19-18JUL17

Identify Hose Connections—540M Loaders (Loader-to-Mid-Mount Couplers)



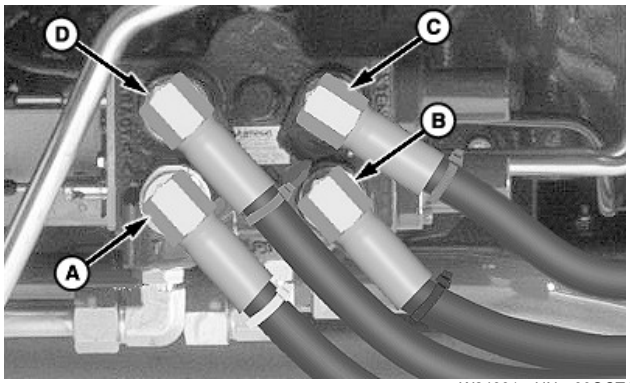
W21737—UN—26AUG11

Mid-Mount Couplers

Key	Color	Hydraulic Function
A	Red	Lift Cylinder—Rod End
B	Blue	Lift Cylinder—Head End
C	Yellow	Bucket Cylinder—Head End
D	Black	Bucket Cylinder—Rod End
E	Green	Attachment Cylinder—Rod End
F	Orange	Attachment Cylinder—Head End

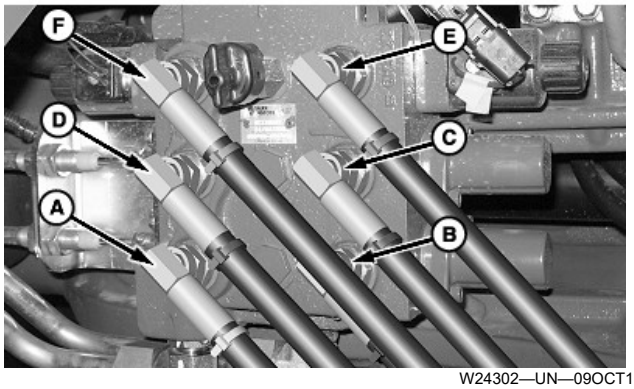
OUO6064,0001CF9-19-18JUL17

Identify Hose Connections—520M Loaders



W24301—UN—09OCT13

Two-Function Mid-Mount Valve



W24302—UN—09OCT13

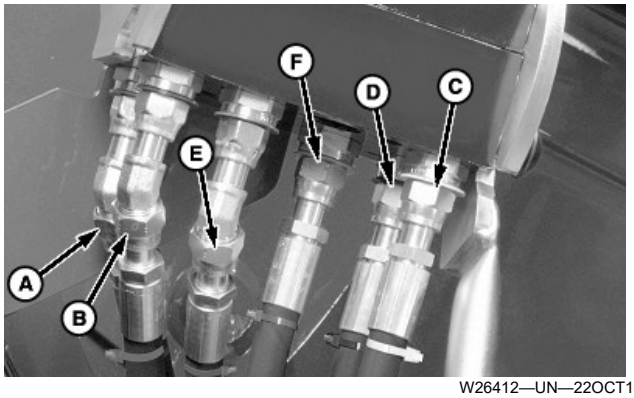
Third-Function Mid-Mount Valve

NOTE: Identify hydraulic hoses by the color-coded tie bands near each fitting.

Key	Color	Hydraulic Function
A	Yellow	Bucket Cylinder—Head End
B	Black	Bucket Cylinder—Rod End
C	Blue	Lift Cylinder—Head End
D	Red	Lift Cylinder—Rod End
E	Green	Attachment Cylinder—Head End
F	Orange	Attachment Cylinder—Rod End

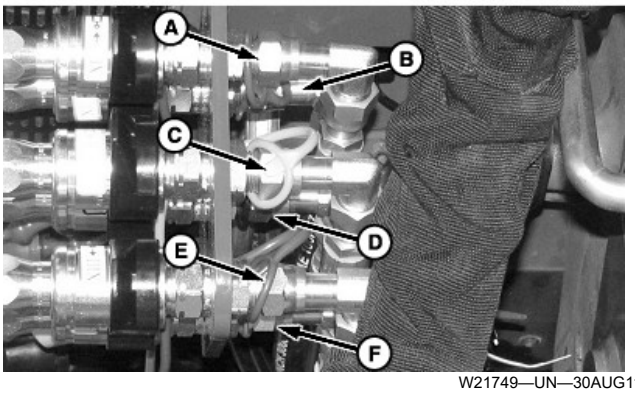
OUO6064,0001E84-19-18JUL17

Identify Hose Connections—540M Loaders



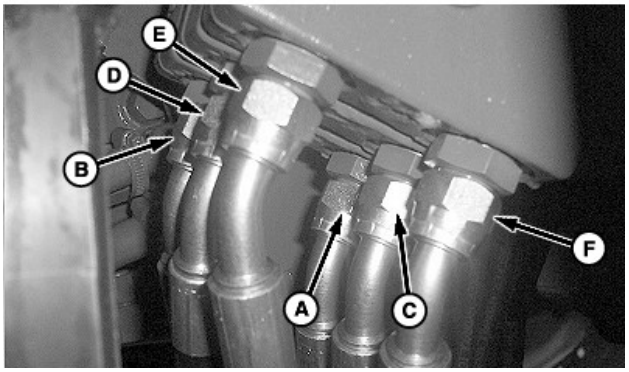
W26412—UN—22OCT14

Multicoupler—Tractor Half



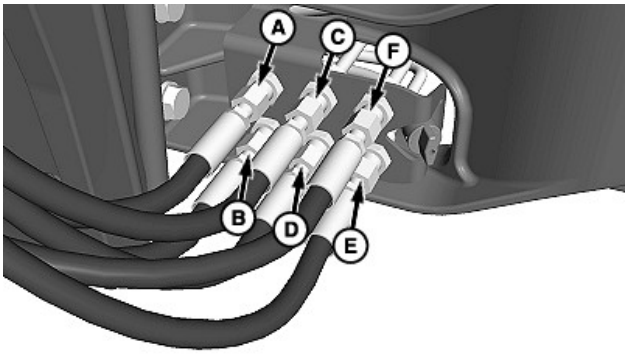
W21749—UN—30AUG11

Hoses at Rear of Mid-Mount Couplers



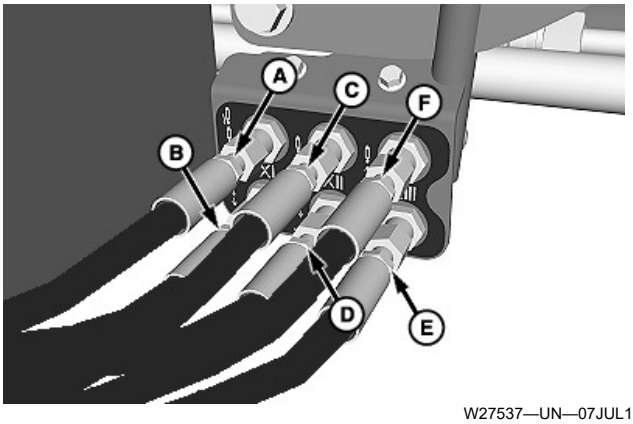
W21746—UN—13SEP11

Hoses at Mid-Mount Valve



W27536—UN—07JUL16

Hoses at Mid-Mount Valve Bracket (5M FT4 series tractors)



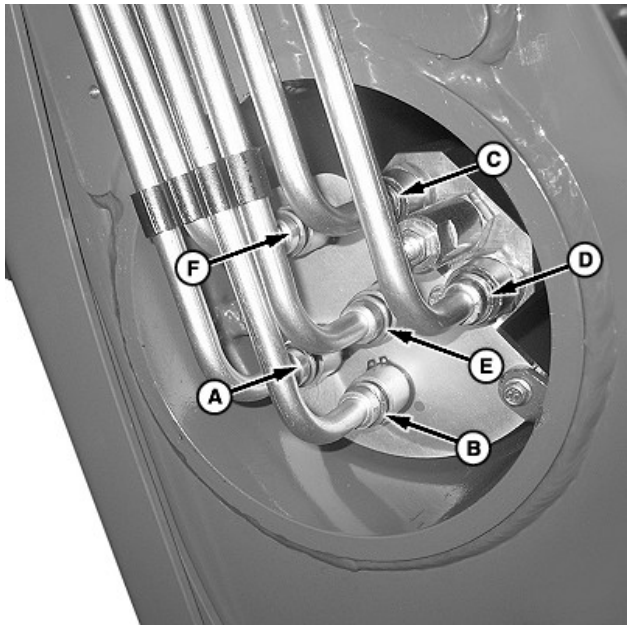
W27537—UN—07JUL16

Hoses at Mid-Mount Valve Bracket (5E FT4 series tractors)

Key	Color	SCV Section	Hydraulic Function
A	Red	I (Retract)	Lift Cylinder—Rod End
B	Blue	I (Extend)	Lift Cylinder—Head End
C	Yellow	II (Retract)	Bucket Cylinder—Head End
D	Black	II (Extend)	Bucket Cylinder—Rod End
E	Green	III (Extend)	Attachment Cylinder—Rod End
F	Orange	III (Retract)	Attachment Cylinder—Head End

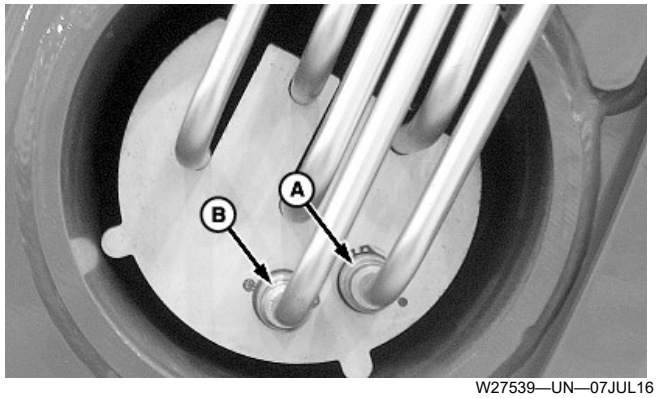
OUO6064,0001CFB-19-18JUL17

Identify Loader Oil Line Connections—540M Loaders



W27538—UN—07JUL16

Right-Hand Side



W27539—UN—07JUL16

Left-Hand Side

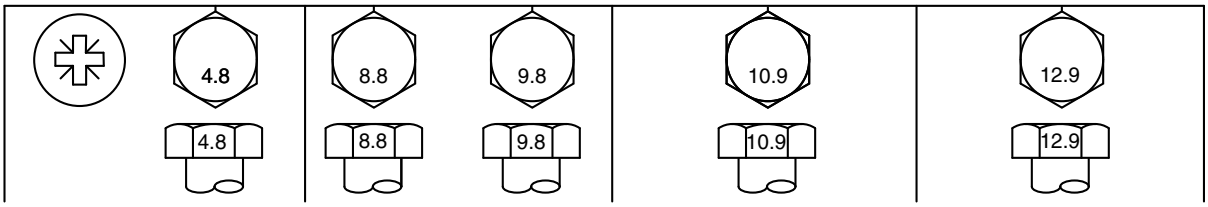
Key	Color	Hydraulic Function
A	Red	Lift Cylinder—Rod End
B	Blue	Lift Cylinder—Head End

Key	Color	Hydraulic Function
C	Yellow	Bucket Cylinder—Head End
D	Black	Bucket Cylinder—Rod End
E	Green	Attachment Cylinder—Rod End

Key	Color	Hydraulic Function
F	Orange	Attachment Cylinder—Head End

OUO6064,0001CFC-19-18JUL17

Metric Bolt and Screw Torque Values



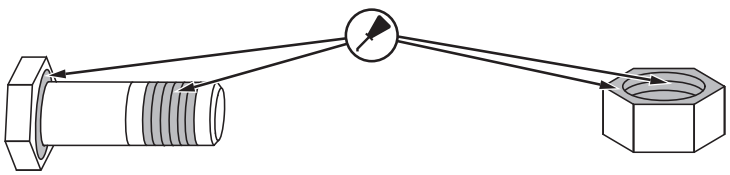
TS1742—UN—31MAY18

Bolt or Screw Size	Class 4.8				Class 8.8 or 9.8				Class 10.9				Class 12.9			
	Hex Head[a]		Flange Head[b]		Hex Head[a]		Flange Head[b]		Hex Head[a]		Flange Head[b]		Hex Head[a]		Flange Head[b]	
	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in
M6	3.6	31.9	3.9	34.5	6.7	59.3	7.3	64.6	9.8	86.7	10.8	95.6	11.5	102	12.6	112
									N·m	lb·ft	N·m	lb·ft	N·m	lb·ft	N·m	lb·ft
M8	8.6	76.1	9.4	83.2	16.2	143	17.6	156	23.8	17.6	25.9	19.1	27.8	20.5	30.3	22.3
			N·m	lb·ft	N·m	lb·ft	N·m	lb·ft								
M10	16.9	150	18.4	13.6	31.9	23.5	34.7	25.6	46.8	34.5	51	37.6	55	40.6	60	44.3
	N·m	lb·ft														
M12	—	—	—	—	55	40.6	61	45	81	59.7	89	65.6	95	70.1	105	77.4
M14	—	—	—	—	87	64.2	96	70.8	128	94.4	141	104	150	111	165	122
M16	—	—	—	—	135	99.6	149	110	198	146	219	162	232	171	257	190
M18	—	—	—	—	193	142	214	158	275	203	304	224	322	245	356	263
M20	—	—	—	—	272	201	301	222	387	285	428	316	453	334	501	370
M22	—	—	—	—	365	263	405	299	520	384	576	425	608	448	674	497
M24	—	—	—	—	468	345	518	382	666	491	738	544	780	575	864	637
M27	—	—	—	—	683	504	758	559	973	718	1080	797	1139	840	1263	932
M30	—	—	—	—	932	687	1029	759	1327	979	1466	1081	1553	1145	1715	1265
M33	—	—	—	—	1258	928	1398	1031	1788	1319	1986	1465	2092	1543	2324	1714
M36	—	—	—	—	1617	1193	1789	1319	2303	1699	2548	1879	2695	1988	2982	2199

The nominal torque values listed are for general use only with the assumed wrenching accuracy of 20%, such as a manual torque wrench.
DO NOT use these values if a different torque value or tightening procedure is given for a specific application.
For lock nuts, for stainless steel fasteners, or for nuts on U-bolts, see the tightening instructions for the specific application.

Replace fasteners with the same or higher property class. If higher property class fasteners are used, tighten these to the strength of the original.

- Make sure that fastener threads are clean.
- Apply a thin coat of Hy-Gard™ or equivalent oil under the head and on the threads of the fastener, as shown in the following image.
- Be conservative with the amount of oil to reduce the potential for hydraulic lockup in blind holes due to excessive oil.
- Properly start thread engagement.



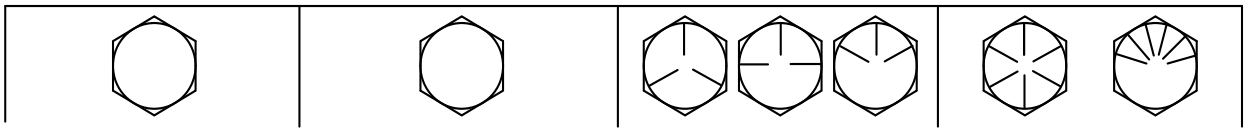
TS1741—UN—22MAY18

Bolt or Screw Size	Class 4.8		Class 8.8 or 9.8		Class 10.9		Class 12.9	
	Hex Head[a]	Flange Head[b]	Hex Head[a]	Flange Head[b]	Hex Head[a]	Flange Head[b]	Hex Head[a]	Flange Head[b]

[a]Hex head column values are valid for ISO 4014 and ISO 4017 hex head, ISO 4162 hex socket head, and ISO 4032 hex nuts.
[b]Hex flange column values are valid for ASME B18.2.3.9M, ISO 4161, or EN 1665 hex flange products.

DX,TORQ2-19-09MAY22

Unified Inch Bolt and Screw Torque Values



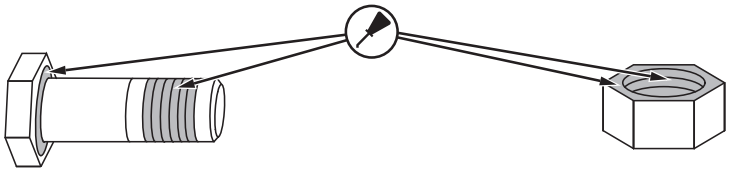
TS1671—UN—01MAY03

Bolt or Screw Size	SAE Grade 1[a]				SAE Grade 2[b]				SAE Grade 5, 5.1 or 5.2				SAE Grade 8 or 8.2			
	Hex Head[c]		Flange Head[d]		Hex Head[c]		Flange Head[d]		Hex Head[c]		Flange Head[d]		Hex Head[c]		Flange Head[d]	
	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in
1/4	3.1	27.3	3.2	28.4	5.1	45.5	5.3	47.3	7.9	70.2	8.3	73.1	11.2	99.2	11.6	103
													N·m	lb·ft	N·m	lb·ft
5/16	6.1	54.1	6.5	57.7	10.2	90.2	10.9	96.2	15.7	139	16.8	149	22.2	16.4	23.7	17.5
									N·m	lb·ft	N·m	lb·ft				
3/8	10.5	93.6	11.5	102	17.6	156	19.2	170	27.3	20.1	29.7	21.9	38.5	28.4	41.9	30.9
					N·m	lb·ft	N·m	lb·ft								
7/16	16.7	148	18.4	163	27.8	20.5	30.6	22.6	43	31.7	47.3	34.9	60.6	44.7	66.8	49.3
	N·m	lb·ft	N·m	lb·ft												
1/2	25.9	19.1	28.2	20.8	43.1	31.8	47	34.7	66.6	49.1	72.8	53.7	94	69.3	103	75.8
9/16	36.7	27.1	40.5	29.9	61.1	45.1	67.5	49.8	94.6	69.8	104	77	134	98.5	148	109
5/8	51	37.6	55.9	41.2	85	62.7	93.1	68.7	131	96.9	144	106	186	137	203	150
3/4	89.5	66	98	72.3	149	110	164	121	230	170	252	186	325	240	357	263
7/8	144	106	157	116	144	106	157	116	370	273	405	299	522	385	572	422
1	216	159	236	174	216	159	236	174	556	410	609	449	785	579	860	634
1-1/8	305	225	335	247	305	225	335	247	685	505	751	554	1110	819	1218	898
1-1/4	427	315	469	346	427	315	469	346	957	706	1051	775	1552	1145	1703	1256
1-3/8	564	416	618	456	564	416	618	456	1264	932	1386	1022	2050	1512	2248	1658
1-1/2	743	548	815	601	743	548	815	601	1665	1228	1826	1347	2699	1991	2962	2185

The nominal torque values listed are for general use only with the assumed wrenching accuracy of 20%, such as a manual torque wrench.
DO NOT use these values if a different torque value or tightening procedure is given for a specific application.
For lock nuts, for stainless steel fasteners, or for nuts on U-bolts, see the tightening instructions for the specific application.

Replace fasteners with the same or higher property class. If higher property class fasteners are used, tighten these to the strength of the original.

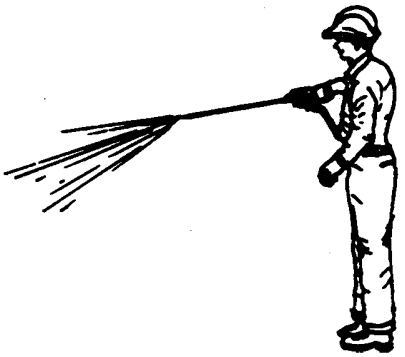
- Make sure that fastener threads are clean.
- Apply a thin coat of Hy-Gard™ or equivalent oil under the head and on the threads of the fastener, as shown in the following image.
- Be conservative with the amount of oil to reduce the potential for hydraulic lockup in blind holes due to excessive oil.
- Properly start thread engagement.

Bolt or Screw Size	SAE Grade 1[a]		SAE Grade 2[b]		SAE Grade 5, 5.1 or 5.2		SAE Grade 8 or 8.2	
	Hex Head[c]	Flange Head[d]	Hex Head[c]	Flange Head[d]	Hex Head[c]	Flange Head[d]	Hex Head[c]	Flange Head[d]
 TS1741—UN—22MAY18								

[a]*Grade 1 applies for hex cap screws over 6 in (152 mm) long, and for all other types of bolts and screws of any length.*
[b]*Grade 2 applies for hex cap screws (not hex bolts) up to 6 in (152 mm) long.*
[c]*Hex head column values are valid for ISO 4014 and ISO 4017 hex head, ISO 4162 hex socket head, and ISO 4032 hex nuts.*
[d]*Hex flange column values are valid for ASME B18.2.3.9M, ISO 4161, or EN 1665 hex flange products.*

DX,TORQ1-19-09MAY22

Prepare Loader for Storage



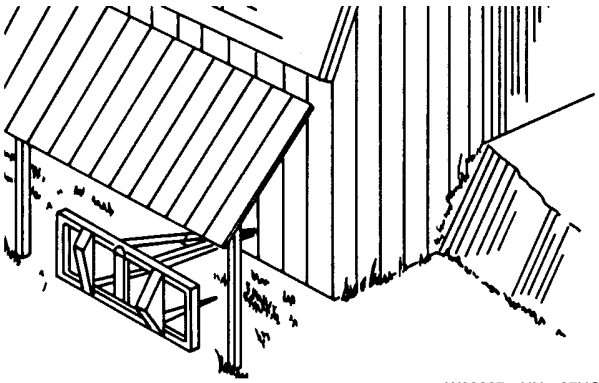
T5813AM—UN—09FEB89

- Clean the loader thoroughly. Dirt attracts moisture which causes rust.
- Avoid directing high-pressure spray on the cylinders. Pressurized water can damage cylinders.
- Replace missing or damaged parts including hoses, hardware, and decals. See a John Deere dealer or other service provider.
- Remove any peeled paint and rust. Apply paint to areas where needed.
- Lubricate all the grease fittings. (See Lubrication and Maintenance section.)

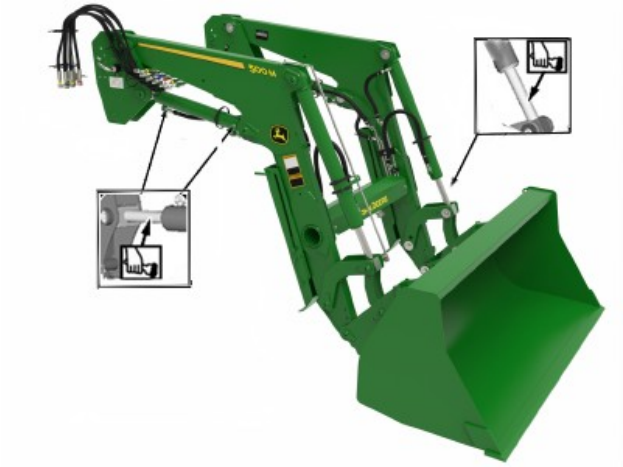
OUO6038,0001EE9-19-05AUG25

Store Loader and Attachments

W14000—UN—05OCT88



W00267—UN—27NOV91



APY88291—UN—07JAN24

CAUTION: Prevent possible injury or death from a loader fall or rollover. Securely store the loader with a bucket or attachment attached to prevent falling. Keep playing children and bystanders away from the storage area. Prevent possible injury from exposed fork tines, always store the bale fork with the tines pointed down, or against a bale, building, or other stable object.

NOTE: Loader can be stored attached or detached from the tractor.

For an attached loader:

Store the loader in a dry, protected place. If the loader is stored outside, cover with a waterproof material.

Retract all hydraulic cylinders, if possible. If not, apply grease to any exposed cylinder rods to prevent rust from forming.

For a detached loader:

- Park and detach the loader in dry and protected place. (See Detach Loader in Attach and Detach Loader section.)
- Hang hydraulic hoses from the holder on the right-hand mast. Install protective caps on couplers, or place the multicoupler in a watertight bag.
- To prevent rust from forming, apply grease to all exposed cylinder rods and pivot pins.
- Store pivot pins in masts on both sides.

uuf6xgz,1701953858031-19-12DEC23

Specification Parameters

IMPORTANT: To avoid damage to the tractor front axle, reference the tractor Operator's Manual for the maximum permissible front axle load during loader operation.

Dimensional specifications are based on static loaded tire radius, front, and rear.

All loader specifications are theoretically calculated specifications. Lift capacities and other specifications vary from tractor to tractor due to using different tires.

Lift capacities are measured at bucket pivot point and 800 mm (31.5 in) in front of pivot. Objects such as round bales or bins on a forklift, displace the weight ahead of this point, decreasing lift capacity.

Per ASABE EP562, a min. rear tread setting of 1150.8 mm (45.3 in) is recommended. Ballast weights are based on this tread setting.

For fluid filled rear tires: Fill tires 3/4 full using a calcium chloride mixture of 1.6 kg (3.5 lb) per 4 L (1 gal) of water.

For rear wheel weights: Each weight is 27 kg (60 lb).

If the loader is equipped with a pallet fork, an additional 85 kg (187 lb) of ballast is required.

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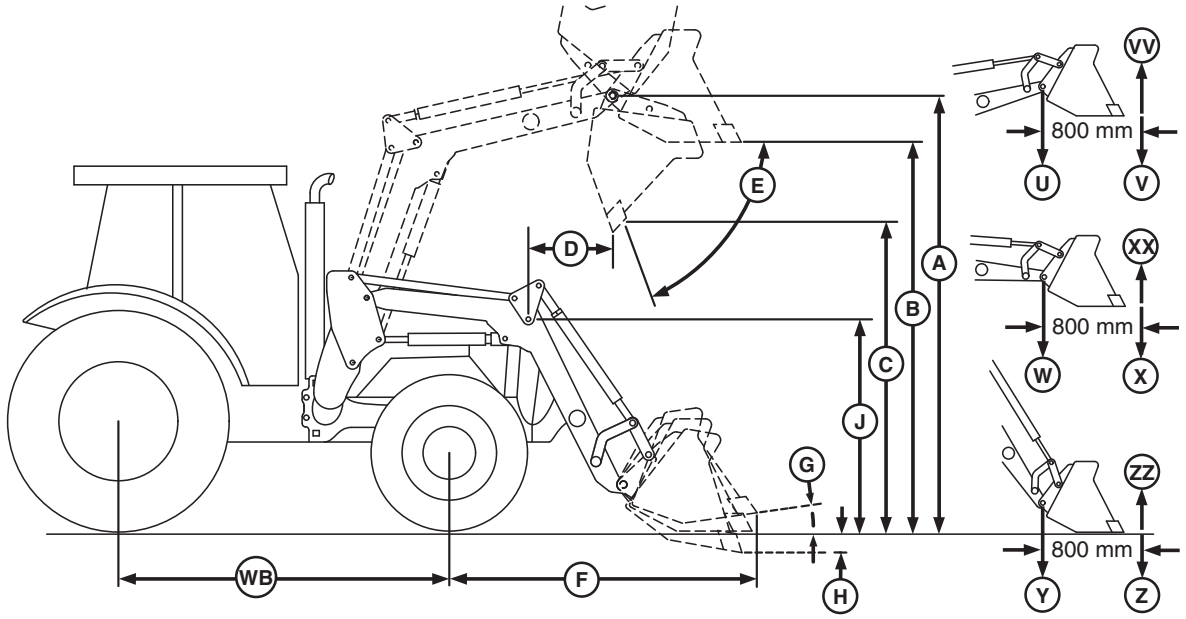
500M Mechanical Self-Leveling Loader Specifications on 5075E, (5E, 3 Cylinder) T2 Tractor



W28413—UN—11JUN18

Model 5075E, (5E, 3 Cylinder) T2 Tractor[a]		
	Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	3-Point Hitch 1200 kg (2645 lb)	3-Point Hitch 1200 kg (2645 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.	
Front Tires	9.5 - 24	
Rear Tires	16.9-28	
Heavy Duty Materials Bucket		
Width	1850 mm (73 in)	
Length	—	
Mass	220 kg (485 lb)	
Hydraulic System		
Rated Flow	45 L/min (12 gal/min)	
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)	
Cycle Times (in seconds)		
Loader Raise Time	4	
Loader Lower Time	3	
Bucket Dump Time	6.3	
Bucket Rollback Time	4.6	
Lift Height (Maximum)		
To Pivot Pin (A)	3218 mm (127 in)	
Clearance		
Bucket Level (B)	3022 mm (119 in)	
Bucket Dumped (C)	2355 mm (93 in)	
Digging Depth (H)	121 mm (4.8 in)	

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	473 mm (19 in)
Bucket on Ground with Bucket Leveled (F)	2173 mm (86 in)
Angles (Maximum)	
Dump (E)	53°
Dump at Ground	110°
Rollback (G)	42°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1235 kg (2722 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1347 kg (2969 lb)
To 1500 mm (59 in) (W) at Pivot Pin	1493 kg (3291 lb)
Breakout Force	
At Pivot Pin (Y)	1836 kg-force (4047 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	1511 kg-force (3330 lbf)
Bucket Rollback Force	
At maximum height (VV)	2064 kg-force (4549 lbf)
At 1500 mm (59 in) lift height (XX)	3509 kg-force (7734 lbf)
At Ground Level Line (ZZ)	3466 kg-force (7639 lbf)

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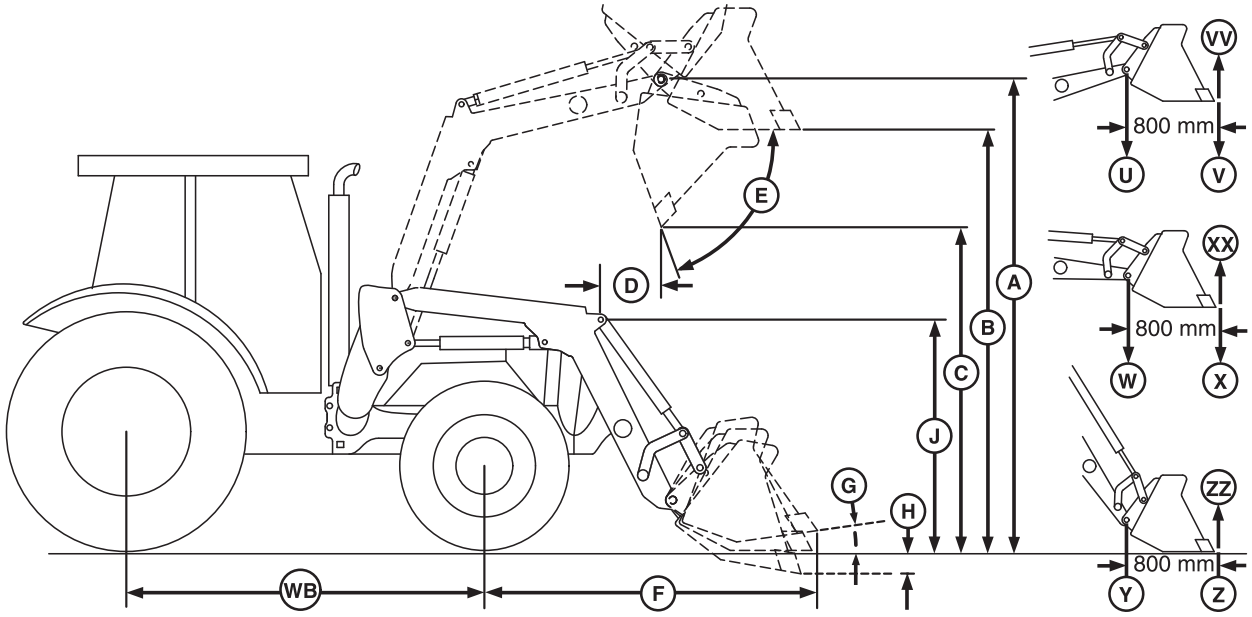
500M Non Self-Leveling Loader Specifications on 5075E, (5E, 3 Cylinder) T2 Tractor



W28414—UN—11JUN18

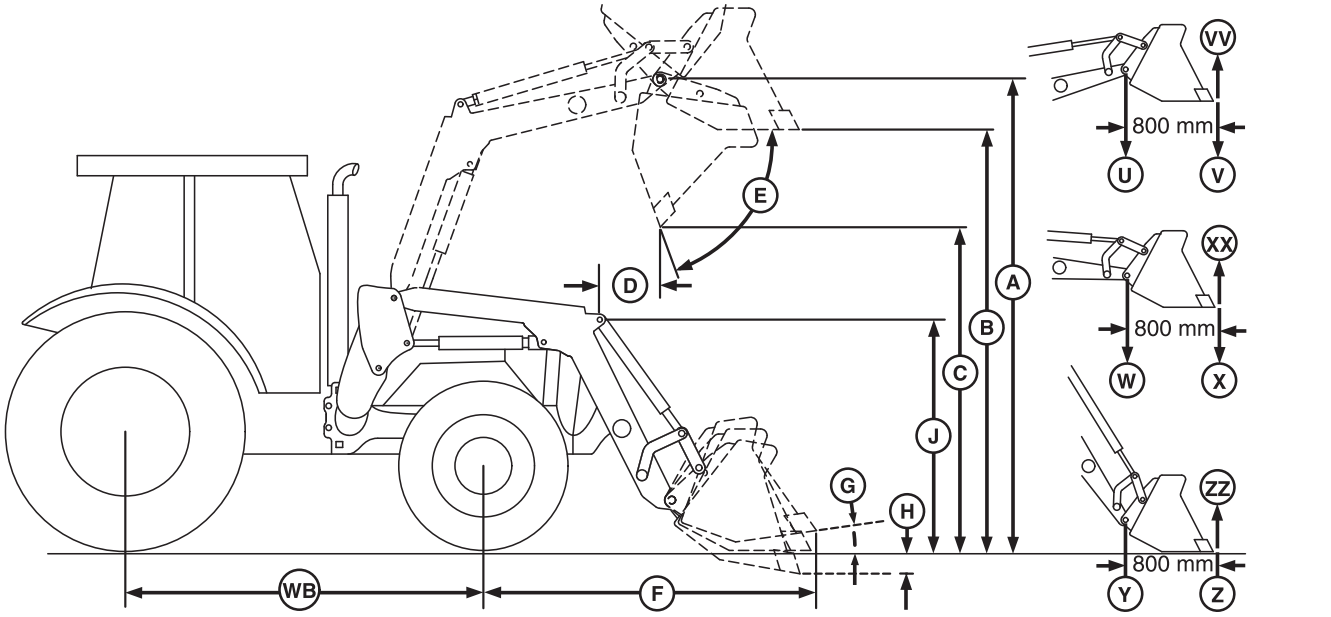
Model 5075E, (5E, 3 Cylinder) T2 Tractor[a]		
	Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	3-Point Hitch 760 kg (1676 lb)	3-Point Hitch 760 kg (1676 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.	
Front Tires	9.5 - 24	
Rear Tires	16.9-28	
Heavy Duty Materials Bucket		
Width	1850 mm (73 in)	
Length	—	
Mass	220 kg (485 lb)	
Hydraulic System		
Rated Flow	45 L/min (12 gal/min)	
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)	
Cycle Times (in seconds)		
Loader Raise Time	4.5	
Loader Lower Time	3.3	
Bucket Dump Time	6.6	
Bucket Rollback Time	4.8	
Lift Height (Maximum)		
To Pivot Pin (A)	3175 mm (125 in)	
Clearance		
Bucket Level (B)	2977 mm (117 in)	
Bucket Dumped (C)	2310 mm (91 in)	
Digging Depth (H)	115 mm (4.5 in)	

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	811 mm (32 in)
Bucket on Ground with Bucket Leveled (F)	2168 mm (85 in)
Angles (Maximum)	
Dump (E)	53°
Dump at Ground	148°
Rollback (G)	42°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1595 kg (3516 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	957kg (2110 lb)
To 1500 mm (59 in) (W) at Pivot Pin	1653 kg (3644 lb)
Breakout Force	
At Pivot Pin (Y)	1738 kg-force (3832 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	1138 kg-force (2509 lbf)
Bucket Rollback Force	
At maximum height (VV)	1786 kg-force (3937 lbf)
At 1500 mm (59 in) lift height (XX)	3267 kg-force (7202 lbf)
At Ground Level Line (ZZ)	3352 kg-force (7389 lbf)

rd91939,1706726349142-19-08FEB24

500M Non Self-Leveling Loader Specifications on 5075E, (5E, 3-Cylinder, FT4) MY23 Tractor



W28414—UN—11JUN18

Model 5075E, (5E, 3-Cylinder, FT4) MY23 Tractor[a]		
	Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	3-Point Hitch 760 kg (1676 lb)	3-Point Hitch 760 kg (1676 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.	
Front Tires	11.2-24	
Rear Tires	16.9-28	
Heavy Duty Materials Bucket		
Width	1850 mm (73 in)	
Length	—	
Mass	220 kg (485 lb)	
Hydraulic System		
Rated Flow	43 L/min (11.3 gal/min)	
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)	
Cycle Times (in seconds)		
Loader Raise Time	4.5	
Loader Lower Time	3.3	
Bucket Dump Time	6.6	
Bucket Rollback Time	4.8	
Lift Height (Maximum)		
To Pivot Pin (A)	3181 mm (125 in)	
Clearance		
Bucket Level (B)	2984 mm (117 in)	
Bucket Dumped (C)	2317 mm (91 in)	
Digging Depth (H)	107 mm (4.2 in)	

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	581 mm (23 in)
Bucket on Ground with Bucket Leveled (F)	2164 mm (85 in)
Angles (Maximum)	
Dump (E)	53°
Dump at Ground	148°
Rollback (G)	42°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1618 kg (3567 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	967 kg (2131 lb)
To 1500 mm (59 in) (W) at Pivot Pin	1655 kg (3648 lb)
Breakout Force	
At Pivot Pin (Y)	1720 kg-force (3791 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	1127 kg-force (2484 lbf)
Bucket Rollback Force	
At maximum height (VV)	1773 kg-force (3908 lbf)
At 1500 mm (59 in) lift height (XX)	3266 kg-force (7198 lbf)
At Ground Level Line (ZZ)	3354 kg-force (7392 lbf)

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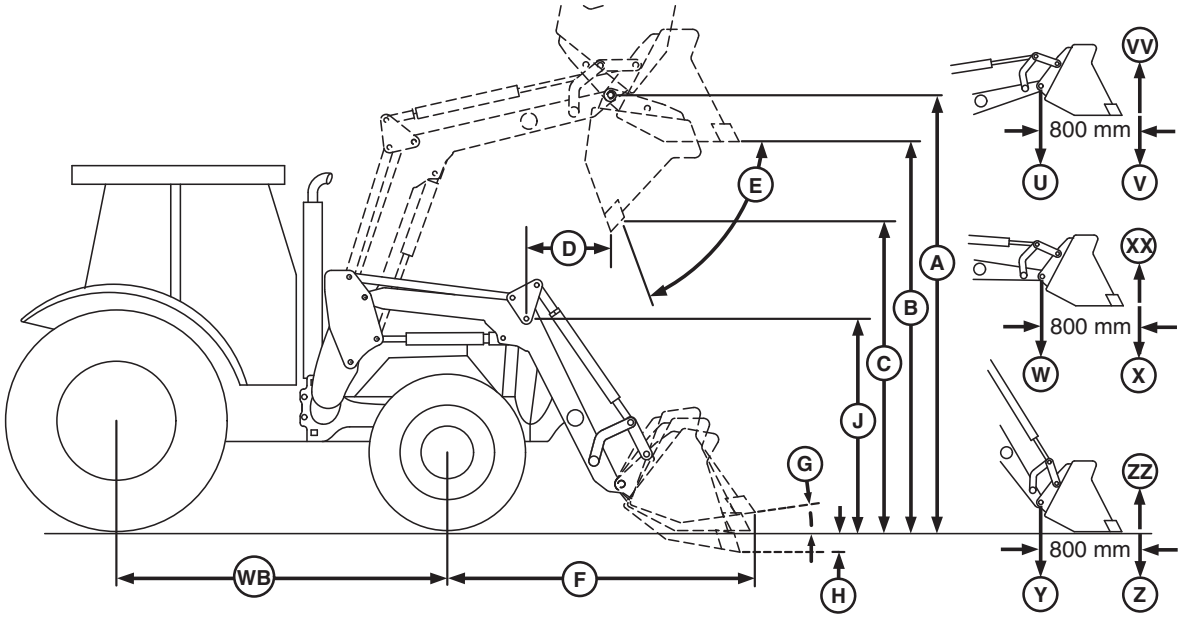
500M Mechanical Self-Leveling Loader Specifications on 5075E, (5E, 3-Cylinder, FT4) MY23 Tractor



W28413—UN—11JUN18

Model 5075E, (5E, 3-Cylinder, FT4) MY23 Tractor[a]		
	Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	3-Point Hitch 1200 kg (2645 lb)	3-Point Hitch 1200 kg (2645 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.	
Front Tires	11.2-24	
Rear Tires	16.9-28	
Heavy Duty Materials Bucket		
Width	1850 mm (73 in)	
Length	—	
Mass	220 kg (485 lb)	
Hydraulic System		
Rated Flow	43 L/min (11.3 gal/min)	
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)	
Cycle Times (in seconds)		
Loader Raise Time	4.1	
Loader Lower Time	3	
Bucket Dump Time	6.3	
Bucket Rollback Time	4.6	
Lift Height (Maximum)		
To Pivot Pin (A)	3230 mm (127 in)	
Clearance		
Bucket Level (B)	3034 mm (119 in)	
Bucket Dumped (C)	2366 mm (93 in)	
Digging Depth (H)	107 mm (4.2 in)	

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	509 mm (20 in)
Bucket on Ground with Bucket Leveled (F)	2164 mm (85 in)
Angles (Maximum)	
Dump (E)	53°
Dump at Ground	109°
Rollback (G)	42°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1262 kg (2781 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1388 kg (3059 lb)
To 1500 mm (59 in) (W) at Pivot Pin	1498 kg (3302 lb)
Breakout Force	
At Pivot Pin (Y)	1820 kg-force (4011 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	1494 kg-force (3293 lbf)
Bucket Rollback Force	
At maximum height (VV)	2049 kg-force (4516 lbf)
At 1500 mm (59 in) lift height (XX)	3509 kg-force (7734 lbf)
At Ground Level Line (ZZ)	3469 kg-force (7646 lbf)

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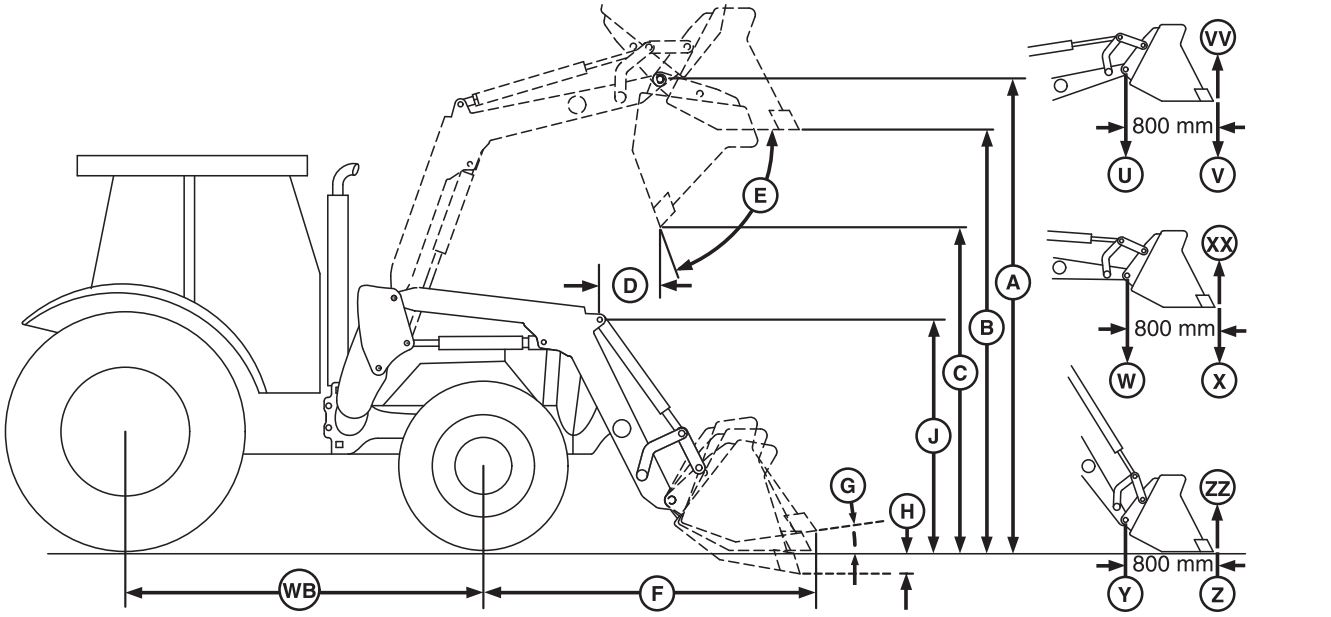
500M Non Self-Leveling Loader Specifications on 5075EN, (5EN FT4) MY23 Tractor



W28414—UN—11JUN18

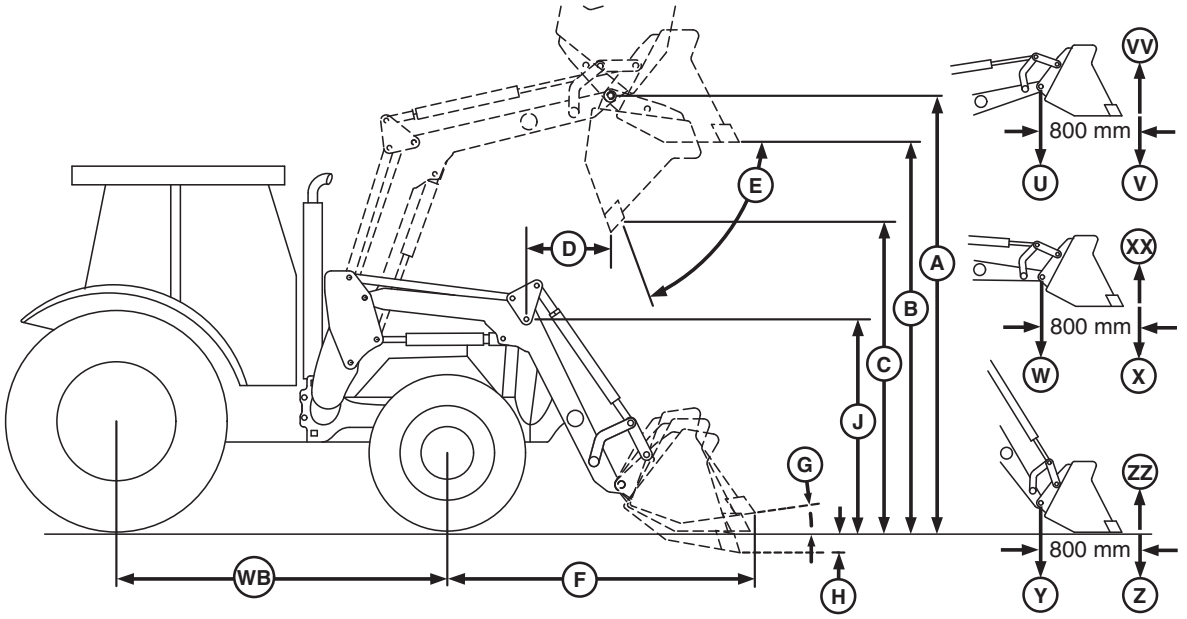
Model 5075EN (5EN FT4) MY23 Tractor[a]		
	Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	3-Point Hitch 850 kg (1874 lb)	3-Point Hitch 900 kg (1984 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.	
Front Tires	9.5-16	
Rear Tires	14.9-24	
Heavy Duty Materials Bucket		
Width	1850 mm (73 in)	
Length	—	
Mass	220 kg (485 lb)	
Hydraulic System		
Rated Flow	43 L/min (11.3 gal/min)	
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)	
Cycle Times (in seconds)		
Loader Raise Time	4.3	
Loader Lower Time	3.1	
Bucket Dump Time	6.6	
Bucket Rollback Time	4.8	
Lift Height (Maximum)		
To Pivot Pin (A)	3050 mm (120 in)	
Clearance		
Bucket Level (B)	2860 mm (113 in)	
Bucket Dumped (C)	2192 mm (86 in)	
Digging Depth (H)	236 mm (9.3 in)	

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	586 mm (23 in)
Bucket on Ground with Bucket Leveled (F)	2369 mm (93 in)
Angles (Maximum)	
Dump (E)	53°
Dump at Ground	148°
Rollback (G)	42°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1545 kg (3406 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	936 kg (2063 lb)
To 1500 mm (59 in) (W) at Pivot Pin	1633 kg (3599 lb)
Breakout Force	
At Pivot Pin (Y)	1789 kg-force (3943 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	1191 kg-force (2625 lbf)
Bucket Rollback Force	
At maximum height (VV)	1815 kg-force (4000 lbf)
At 1500 mm (59 in) lift height (XX)	3214 kg-force (7084 lbf)
At Ground Level Line (ZZ)	3413 kg-force (7522 lbf)

rd91939,1706726348823-19-08FEB24

520M Mechanical Self-Leveling Loader Specifications on 5090EL (FT4) MFWD Tractor



W28413—UN—11JUN18

Tractor Model 5090EL[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 800 kg (1764 lb)	3-Point Hitch 800 kg (1764 lb) Plus Rear Axle 350 kg (772 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	12.5/80-18		
Rear Tires	480/65R24		
Materials Bucket			
Width	1850 mm (73 in)		
Mass	178 kg (392 lb)		
Hydraulic System			
Rated Flow	43 L/min (11 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	4.5		
Loader Lower Time	3.1		
Bucket Dump Time	3.6		
Bucket Rollback Time	3.6		
Lift Height (Maximum)			
To Pivot Pin (A)	3303 mm (130 in)		
Clearance			
Bucket Level (B)	3108 mm (122 in)		
Bucket Dumped (C)	2488 mm (98 in)		
Digging Depth (H)	110 mm (4 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	554 mm (22 in)
Bucket on Ground with Bucket Leveled (F)	2205 mm (87 in)
Angles (Maximum)	
Dump (E)	52°
Dump at Ground	107°
Rollback (G)	45°
Lift Capacity	
To Maximum Height (A) at Pivot Point (U)	1240 kg (2734 lb)
To Maximum Height (A) at 800 mm (31.5 in) Ahead of Pivot Point (V)	1438 kg (3170 lb)
To 1500 mm (59 in) at Pivot Point (W)	1625 kg (3583 lb)
To 1500 mm (59 in) at 800 mm (31.5 in) Ahead of Pivot Point (X)	1574 kg (3470 lb)
Breakout Force	
At Pivot Point (Y)	2089 kg-force (4605 lbf)
800 mm (31.5 in) Ahead of Pivot Point (Z)	1778 kg-force (3920 lbf)
Bucket Rollback Force	
At maximum height (VV)	1783 kg-force (3931 lbf)
At 1500 mm (59 in) lift height (XX)	3050 kg-force (6724 lbf)
At Ground Level Line (ZZ)	3087 kg-force (6806 lbf)

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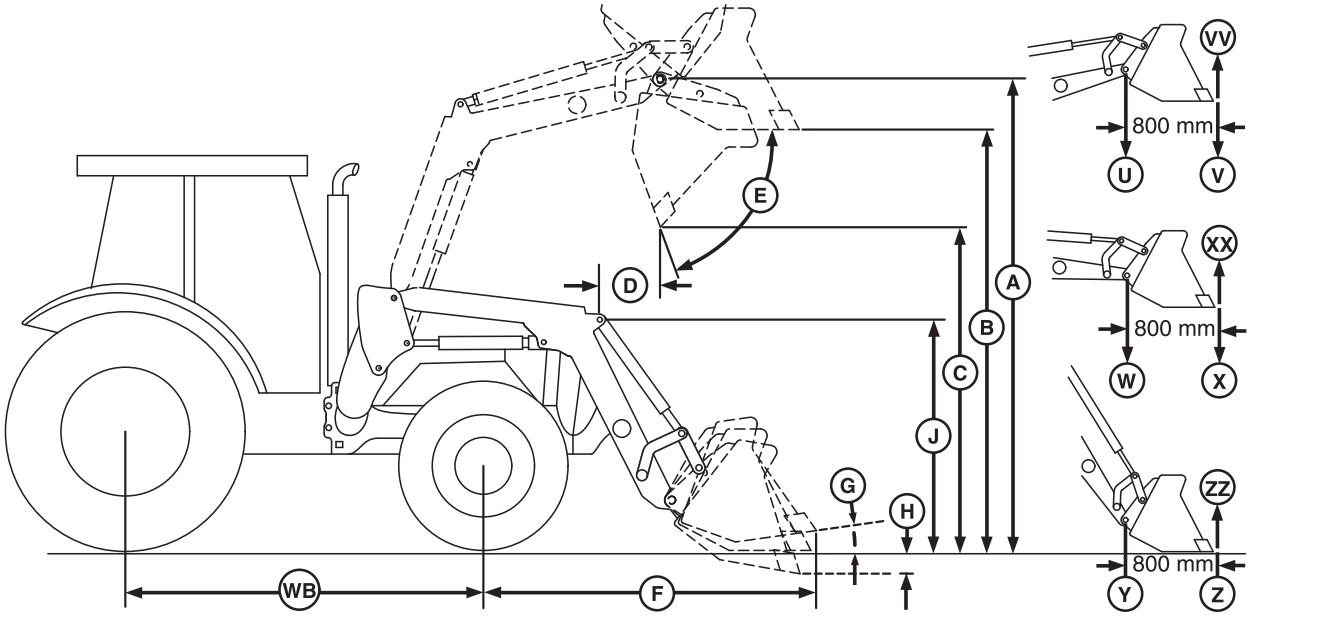
520M Non Self-Leveling Loader Specifications on 5090EL (FT4) MFWD Tractor



W28414—UN—11JUN18

Tractor Model 5090EL[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 450 kg (992 lb)	3-Point Hitch 450 kg (992 lb) Plus Rear Axle 350 kg (772 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	12.5/80-18		
Rear Tires	480/65R24		
Materials Bucket			
Width	1850 mm (73 in)		
Mass	178 kg (392 lb)		
Hydraulic System			
Rated Flow	43 L/min (11 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	3.7		
Loader Lower Time	2.5		
Bucket Dump Time	3.1		
Bucket Rollback Time	1.9		
Lift Height (Maximum)			
To Pivot Pin (A)	3302 mm (130 in)		
Clearance			
Bucket Level (B)	3107 mm (122 in)		
Bucket Dumped (C)	2451 mm (96 in)		
Digging Depth (H)	112 mm (4 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	552 mm (22 in)
Bucket on Ground with Bucket Leveled (F)	2203 mm (87 in)
Angles (Maximum)	
Dump (E)	59°
Dump at Ground	146°
Rollback (G)	48°
Lift Capacity	
To Maximum Height at Pivot Point (U)	1856 kg (4092 lb)
To Maximum Height at 800 mm (31.5 in) Ahead of Pivot Point (V)	1190 kg (2623 lb)
To 1500 mm (59 in) at Pivot Point (W)	2027 kg (4469 lb)
To 1500 mm (59 in) at 800 mm (31.5 in) Ahead of Pivot Point (X)	1496 kg (3298 lb)
Breakout Force	
At Pivot Point (Y)	2262 kg-force (4987 lbf)
800 mm (31.5 in) Ahead of Pivot Point (Z)	1566 kg-force (3452 lbf)
Bucket Rollback Force	
At maximum height (VV)	1184 kg-force (2610 lbf)
At 1500 mm (59 in) lift height (XX)	2141 kg-force (4720 lbf)
At Ground Level Line (ZZ)	2258 kg-force (4978 lbf)

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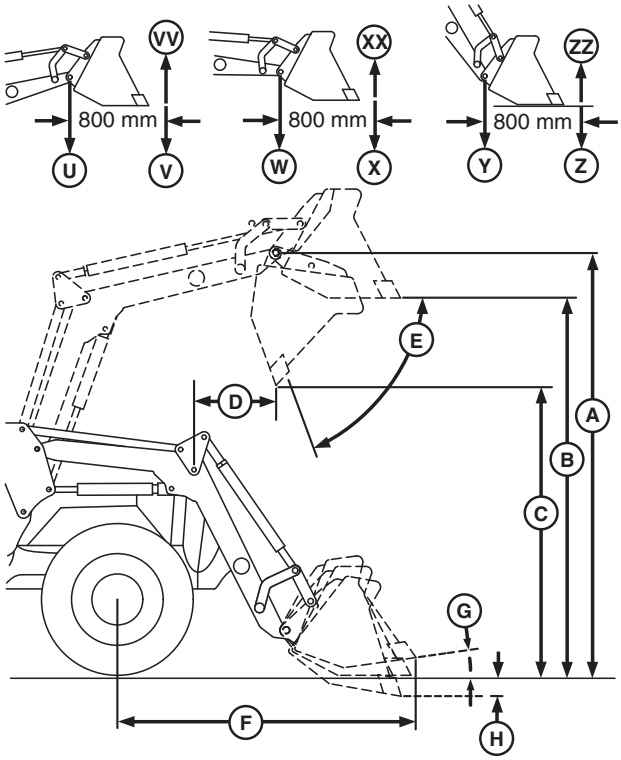
520M Mechanical Self-Leveling Loader Specifications on 5076EL and 5090EL (T0—T2 4- Cylinder) MFWD Tractors



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5076EL and 5090EL (T0—T2 4- Cylinder) MFWD Tractors [a]	
Front Tires	12.5/80-18
Rear Tires	16.9-24
Heavy Duty Materials Bucket	
Width	1850 mm (73 in)
Mass	178 kg (392 lb)
Hydraulic System	
Rated flow	60 l/pm (16 gal/min)
Maximum pressure	19 498 kPa (195 bar) (2828 psi)
Cycle Times (in seconds)	
Loader raise time	3.1
Loader lower time	2.1
Bucket dump time	3.3
Bucket rollback time	2.2
Lift Height (Maximum)	
To pivot pin (A)	3278 mm (129 in)
Clearance	
Bucket level (B)	3084 mm (121 in)
Bucket dumped (C)	2519 mm (99 in)
Digging depth (H)	131 mm (5 in)
Reach	
At maximum lift height with bucket dumped (D)	889 mm (35 in)
Bucket on ground with bucket leveled (F)	2185 mm (86 in)

5076EL and 5090EL (T0—T2 4- Cylinder) MFWD Tractors [a]	
Angles (Maximum)	
Dump (E)	57°
Dump at ground	107°
Rollback (G)	47°
Lift Capacity	
Full height (U) at pivot pin	1207 kg (2661 lb)
Full height (V) at 800 mm ahead of pivot pin	1413 kg (3115 lb)
Lift height (W) at 1500 mm (59 in) at pivot pin	1570 kg (3461 lb)
Lift height (X) at 1500 mm (59 in) at 800 mm (59 in) ahead of pivot pin	1528 kg (3369 lb)
Breakout Force	
At pivot pin (Y)	2024 kgf (4462 lbf)
At 800 mm (31.5 in) (I) ahead of pivot pin (Z)	1732 kgf (3818 lbf)
Bucket Rollback Force	
At maximum height (VV)	1830 kgf (4035 lbf)
At 1500 mm (59 in) lift height (XX)	3086 kgf (6804 lbf)
At ground level line (ZZ)	3134 kgf (6909 lbf)

[a] *(Specifications and design subject to change without notice)*

5076EL and 5090EL (T0—T2 4- Cylinder) MFWD Tractors [a]		
	Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	—	3-Point Hitch 1204 kg (2654 lb)
	—	Rear Axle 192 kg (423 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		

[a] *(Specifications and design subject to change without notice)*

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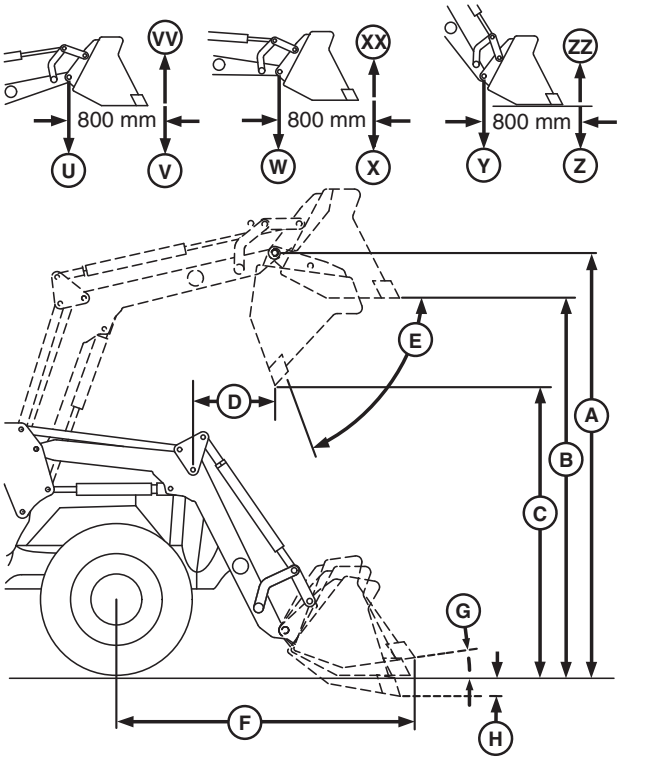
520M Non Self-Leveling Loader Specifications on 5076EL and 5090EL (T0—T2 4-Cylinder) MFWD Tractors



APY94160—UN—29AUG24

5076EL and 5090EL (T0—T2 4-Cylinder) MFWD Tractors[a]	
Front Tires	12.5/80-18
Rear Tires	16.9-24
Heavy Duty Materials Bucket	
Width	1850 mm (73 in)
Mass	178 kg (392 lb)
Hydraulic System	
Rated flow	60 l/min (16 gal/min)
Maximum pressure	19 498 kPa (195 bar) (2828 psi)
Cycle Times (in seconds)	
Loader raise time	3.5
Loader lower time	2.4
Bucket dump time	4
Bucket rollback time	2.4
Lift Height (Maximum)	
To pivot pin (A)	3280 mm (129 in)
Clearance	
Bucket level (B)	3085 mm (122 in)
Bucket dumped (C)	2521 mm (99 in)
Digging depth (H)	136 mm (5 in)
Reach	
At maximum lift height with bucket dumped (D)	890 mm (35 in)
Bucket on ground with bucket leveled (F)	2188 mm (86 in)

5076EL and 5090EL (T0—T2 4-Cylinder) MFWD Tractors[a]	
Angles (Maximum)	
Dump (E)	57°
Dump at ground	144°
Rollback (G)	47°
Lift Capacity	
Full height (U) at pivot pin	1638 kg (3612 lb)
Full height (V) at 800 mm ahead of pivot pin	1049 kg (2312 lb)
Lift height (W) at 1500 mm (59 in) at pivot pin	1757 kg (3874 lb)
Lift height (X) at 1500 mm (59 in) at 800 mm (59 in) ahead of pivot pin	1297 kg (2860 lb
Breakout Force	
At pivot pin (Y)	1957 kgf (4315 lbf)
At 800 mm (31.5 in) (I) ahead of pivot pin (Z)	1360 kgf (2898 lbf)
Bucket Rollback Force	
At maximum height (VV)	1127 kgf (2485 lbf)
At 1500 mm (59 in) lift height (XX)	2103 kgf (4636 lbf)
At ground level line (ZZ)	2249 kgf (4959 lbf)

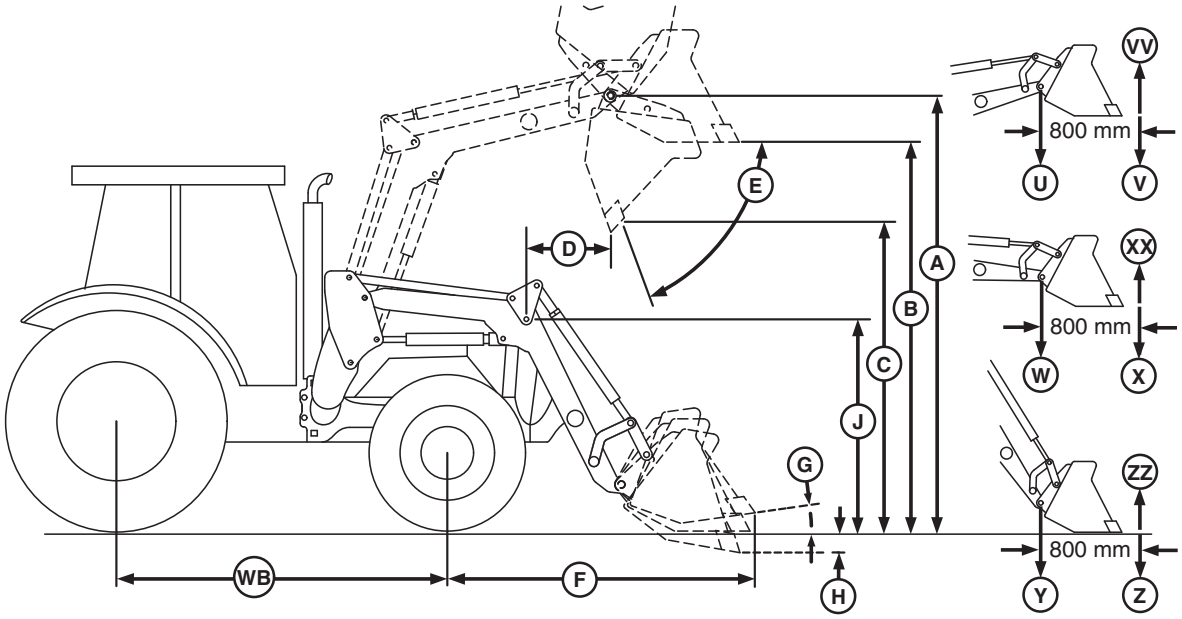
[a] *(Specifications and design subject to change without notice)*

5076EL and 5090EL (T0—T2 4-Cylinder) MFWD Tractors[a]		
	Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	—	3-Point Hitch 1204 kg (2654 lb)
	—	Rear Axle 192 kg (423 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		

[a] *(Specifications and design subject to change without notice)*

vxuv1jb,1731490729271-19-18NOV24

520M Mechanical Self-Leveling Loader Specifications on 5100E (IT4) MFWD Tractor



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Tractor Model 5100E[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 650 kg (1433 lb)	Not Applicable
	Option 2	3-Point Hitch 500 kg (1103 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 500 kg (1103 lb) Plus Rear Axle 550 kg (1213 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	12.4 R24		
Rear Tires	18.4 R30		
Materials Bucket			
Width	1850 mm (73 in)		
Mass	178 kg (392 lb)		
Hydraulic System			
Rated Flow	43 L/min (11 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	3.3		
Loader Lower Time	2.2		
Bucket Dump Time	2.6		
Bucket Rollback Time	2.6		
Lift Height (Maximum)			
To Pivot Pin (A)	3343 mm (132 in)		
Clearance			
Bucket Level (B)	3148 mm (124 in)		
Bucket Dumped (C)	2516 mm (99 in)		
Digging Depth (H)	93 mm (4 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	839 mm (33 in)
Bucket on Ground with Bucket Leveled (F)	2172 mm (86 in)
Angles (Maximum)	
Dump (E)	54°
Dump at Ground	109°
Rollback (G)	43°
Lift Capacity	
To Maximum Height (A) at Pivot Point (U)	1182 kg (2606 lb)
To Maximum Height (A) at 800 mm (31.5 in) Ahead of Pivot Point (V)	1280 kg (2822 lb)
To 1500 mm (59 in) at Pivot Point (W)	1611 kg (3552 lb)
To 1500 mm (59 in) at 800 mm (31.5 in) Ahead of Pivot Point (X)	1584 kg (3492 lb)
Breakout Force	
At Pivot Point (Y)	2174 kg-force (4793 lbf)
800 mm (31.5 in) Ahead of Pivot Point (Z)	1836 kg-force (4048 lbf)
Bucket Rollback Force	
At maximum height (VV)	1884 kg-force (4154 lbf)
At 1500 mm (59 in) lift height (XX)	3095 kg-force (6823 lbf)
At Ground Level Line (ZZ)	3058 kg-force (6742 lbf)

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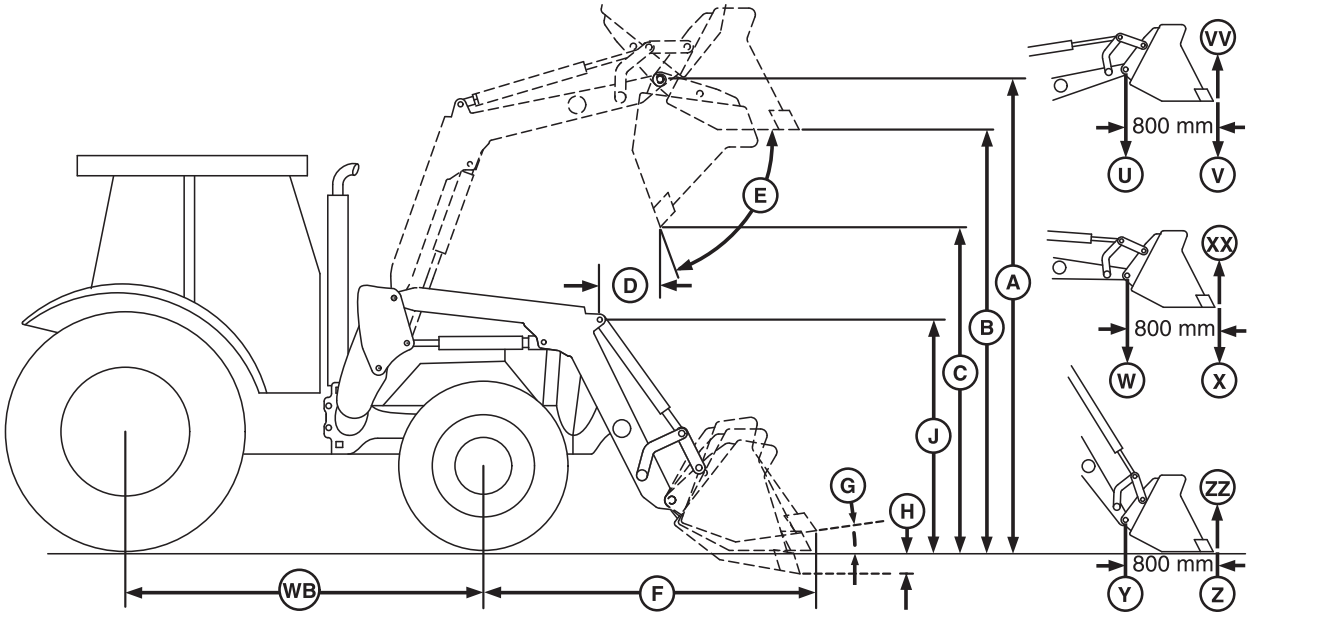
520M Non Self-Leveling Loader Specifications on 5100E (IT4) MFWD Tractor



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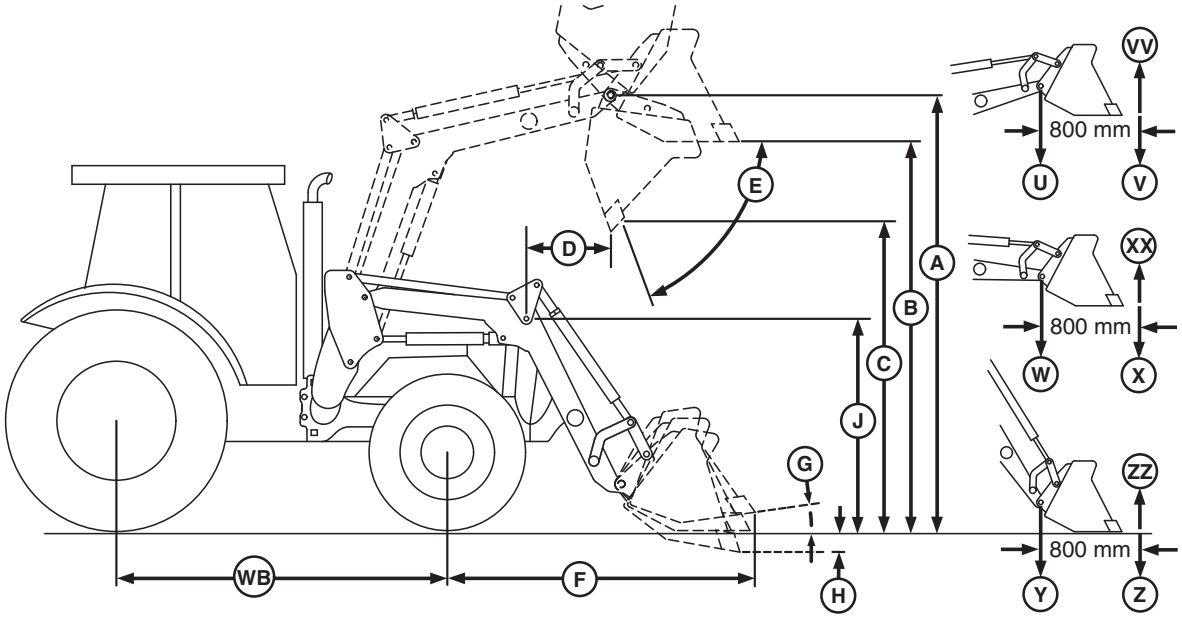
Tractor Model 5100E[a]			
		Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	**Option 1**	3-Point Hitch 400 kg (882 lb)	Not Applicable
	Option 2	3-Point Hitch 300 kg (662 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 300 kg (662 lb) Plus Rear Axle 550 kg (1213 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	12.4 R24		
Rear Tires	18.4 R30		
Materials Bucket			
Width	1850 mm (73 in)		
Mass	178 kg (392 lb)		
Hydraulic System			
Rated Flow	43 L/min (11 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	3.7		
Loader Lower Time	2.5		
Bucket Dump Time	3.1		
Bucket Rollback Time	1.9		
Lift Height (Maximum)			
To Pivot Pin (A)	3369 mm (133 in)		
Clearance			
Bucket Level (B)	3174 mm (125 in)		
Bucket Dumped (C)	2546 mm (100 in)		
Digging Depth (H)	50 mm (2 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	784 mm (31 in)
Bucket on Ground with Bucket Leveled (F)	2153 mm (85 in)
Angles (Maximum)	
Dump (E)	54°
Dump at Ground	143°
Rollback (G)	45°
Lift Capacity	
To Maximum Height at Pivot Point (U)	1610 kg (3549 lb)
To Maximum Height at 800 mm (31.5 in) Ahead of Pivot Point (V)	1074 kg (2368 lb)
To 1500 mm (59 in) at Pivot Point (W)	1858 kg (4096 lb)
To 1500 mm (59 in) at 800 mm (31.5 in) Ahead of Pivot Point (X)	1367 kg (3014 lb)
Breakout Force	
At Pivot Point (Y)	2145 kg-force (4729 lbf)
800 mm (31.5 in) Ahead of Pivot Point (Z)	1468 kg-force (3236 lbf)
Bucket Rollback Force	
At maximum height (VV)	1265 kg-force (2789 lbf)
At 1500 mm (59 in) lift height (XX)	2211 kg-force (4874 lbf)
At Ground Level Line (ZZ)	2273 kg-force (5011 lbf)

OUO6064,0001CFE-19-06JUN18

520M Mechanical Self-Leveling Loader Specifications on 5050E, 5060E, 5067E, and 5075E MY23 Three-Cylinder (FT4) MFWD Tractors



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Model 5050E, 5060E, 5067E, and 5075E MY23 Three-Cylinder (FT4) MFWD Tractors[a]			
*NOTE: **Option 1 not applicable for 12.4 - R24 front tires***		**Cab Tractors**	**Open Operator Station Tractors**
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1400 kg (3087 lb)	3-Point Hitch 1400 kg (3087 lb)
	Option 2	3-Point Hitch 1300 kg (2867 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 1300 kg (2867 lb) Plus Rear Axle 550 kg (1213 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	11.2-R24		
Rear Tires	16.9-R30		
Materials Bucket			
Width	1850 mm (73 in)		
Mass	245 kg (540 lb)		
Hydraulic System			
Rated Flow	43 L/min (11 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (In Seconds)			
Loader Raise Time	4.4		
Loader Lower Time	3.0		
Bucket Dump Time	6.5		
Bucket Rollback Time	4.4		
Lift Height (Maximum)			
To Pivot Pin (A)	3334 mm (131 in)		
Clearance			
Bucket Level (B)	3137 mm (124 in)		

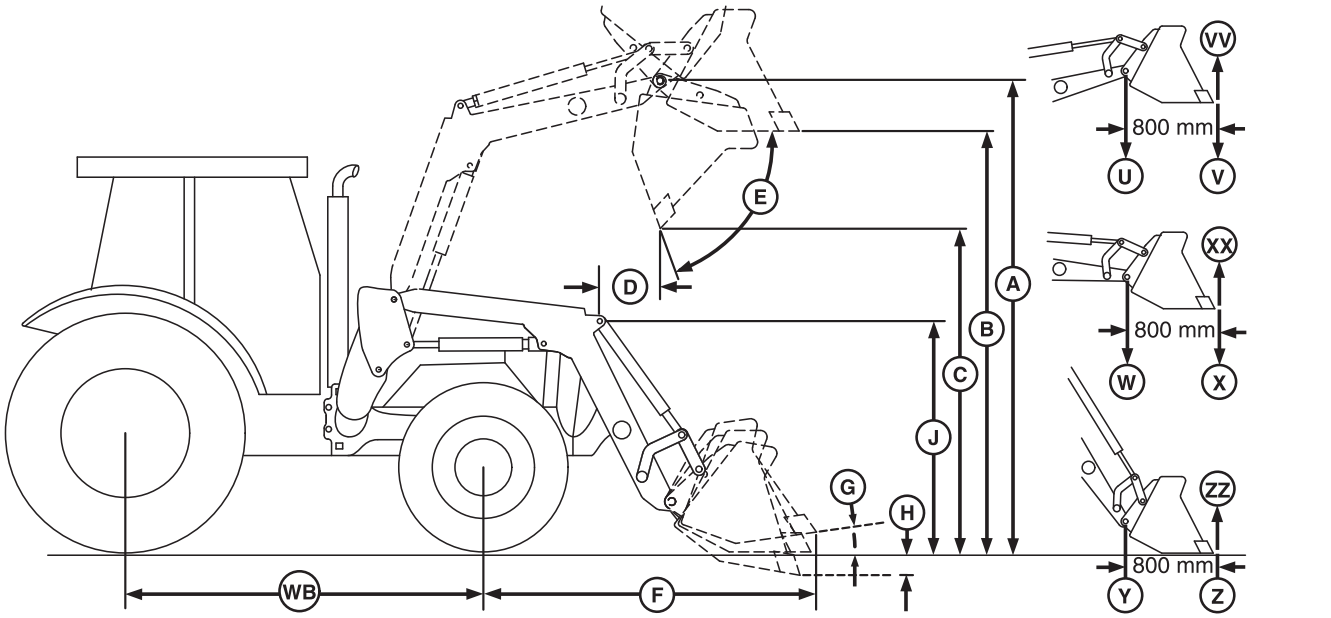
Model 5050E, 5060E, 5067E, and 5075E MY23 Three-Cylinder (FT4) MFWD Tractors[a]	
Bucket Dumped (C)	2470 mm (97 in)
Digging Depth (H)	87 mm (3 in)

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	907 mm (36 in)
Bucket on Ground with Bucket Leveled (F)	2412 mm (95 in)
Angles (Maximum)	
Dump (E)	59°
Dump at Ground	108°
Rollback (G)	44°
Lift Capacity	
To Maximum Height at Pivot Point (U)	1116 kg (2460 lb)
To Maximum Height at 800 mm (31.5 in) Ahead of Pivot Point (V)	1290 kg (2844 lb)
To 1500 mm (59 in) at Pivot Point (W)	1537 kg (3389 lb)
To 1500 mm (59 in) at 800 mm (31.5 in) Ahead of Pivot Point (X)	1491 kg (3286 lb)
Breakout Force	
At Pivot Point (Y)	2050 kgf (4520 lbf)
800 mm (31.5 in) Ahead of Pivot Point (Z)	1738 kgf (3832 lbf)
Bucket Rollback Force	
At maximum height (VV)	1815 kgf (4002 lbf)
At 1500 mm (59 in) lift height (XX)	3073 kgf (6774 lbf)
At Ground Level Line (ZZ)	3059 kgf (6745 lbf)

OUO6064,0001CFF-19-10AUG22

520M Non-Self-Leveling Loader Specifications on 5050E, 5060E, 5067E, and 5075E MY23 Three-Cylinder (FT4) MFWD Tractors



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Model 5050E, 5060E, 5067E, and 5075E MY23 Three-Cylinder (FT4) MFWD Tractors[a]			
*NOTE: **Option 1 not applicable for 12.4 - R24 front tires***		**Cab Tractors**	**Open Operator Station Tractors**
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb)	3-Point Hitch 1000 kg (2205 lb)
	Option 2	3-Point Hitch 800 kg (1764 lb) Plus Rear Axle 300 kg (662 lb)	3-Point Hitch 800 kg (1764 lb) Plus Rear Axle 650 kg (1433 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	11.2 - R24		
Rear Tires	16.9 - R30		
Materials Bucket			
Width	1850 mm (73 in)		
Mass	245 kg (540 lb)		
Hydraulic System			
Rated Flow	43 L/min (11 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (In Seconds)			
Loader Raise Time	5.0		
Loader Lower Time	3.3		
Bucket Dump Time	5.5		
Bucket Rollback Time	3.3		
Lift Height (Maximum)			
To Pivot Pin (A)	3334 mm (131 in)		
Clearance			
Bucket Level (B)	3138 mm (124 in)		

Model 5050E, 5060E, 5067E, and 5075E MY23 Three-Cylinder (FT4) MFWD Tractors[a]	
Bucket Dumped (C)	2470 mm (97 in)
Digging Depth (H)	90 mm (4 in)

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	907 mm (36 in)
Bucket on Ground with Bucket Leveled (F)	2412 mm (95 in)
Angles (Maximum)	
Dump (E)	59°
Dump at Ground	147°
Rollback (G)	44°
Lift Capacity	
To Maximum Height at Pivot Point (U)	1513 kg (3335 lb)
To Maximum Height at 800 mm (31.5 in) Ahead of Pivot Point (V)	980 kg (2160 lb)
To 1500 mm (59 in) at Pivot Point (W)	1712 kg (3774 lb)
To 1500 mm (59 in) at 800 mm (31.5 in) Ahead of Pivot Point (X)	1263 kg (2785 lb)
Breakout Force	
At Pivot Point (Y)	1955 kgf (4310 lbf)
800 mm (31.5 in) Ahead of Pivot Point (Z)	1341 kgf (2957 lbf)
Bucket Rollback Force	
At maximum height (VV)	1184 kgf (2609 lbf)
At 1500 mm (59 in) lift height (XX)	2132 kgf (4699 lbf)
At Ground Level Line (ZZ)	2203 kgf (4857 lbf)

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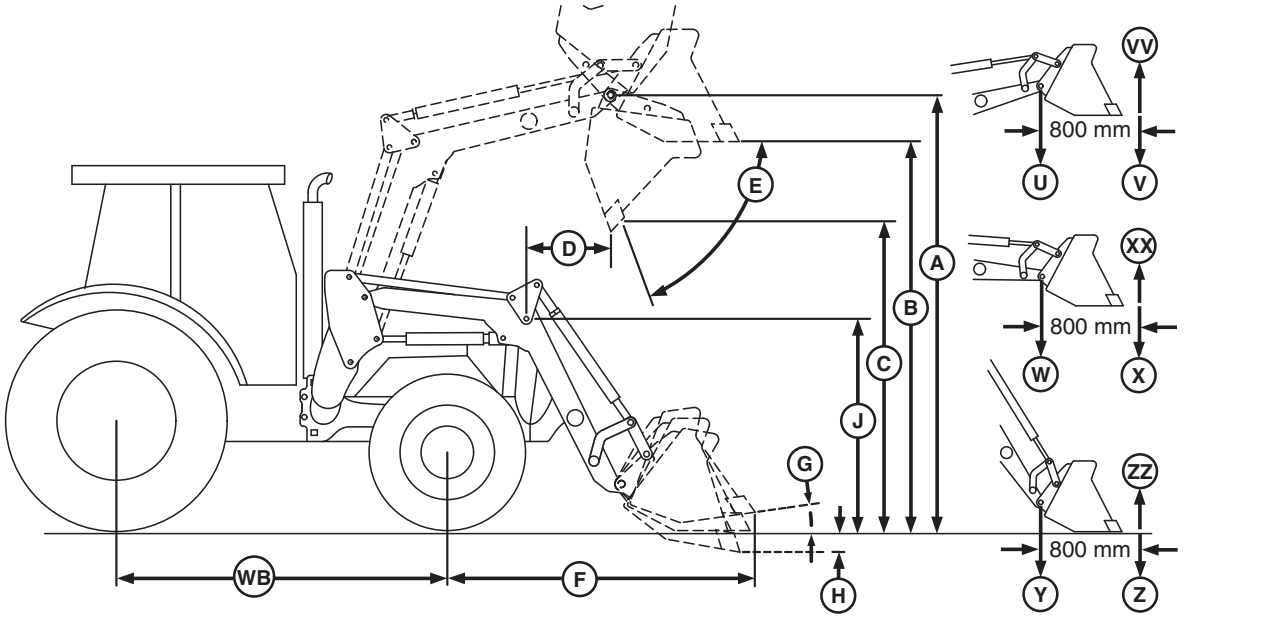
520M Mechanical Self-Leveling Loader Specifications on 5055E, 5065E, and 5075E Three-Cylinder (T2/T3) MFWD Tractors



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Model 5055E, 5065E, and 5075E Three-Cylinder (T3) MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 1450 kg (3197 lb)	Not Applicable
	Option 2	3-Point Hitch 1250 kg (2756 lb) Plus Rear Axle 400 kg (882 lb)	3-Point Hitch 1250 kg (2756 lb) Plus Rear Axle 750 kg (1654 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	12.4 R24		
Rear Tires	16.9 R30		
Materials Bucket			
Width	1850 mm (73 in)		
Mass	178 kg (392 lb)		
Hydraulic System			
Rated Flow	43 L/min (11 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	4.4		
Loader Lower Time	3		
Bucket Dump Time	4.6		
Bucket Rollback Time	3.1		
Lift Height (Maximum)			
To Pivot Pin (A)	3330 mm (131 in)		
Clearance			
Bucket Level (B)	3136 mm (124 in)		
Bucket Dumped (C)	2571 mm (101 in)		

Model 5055E, 5065E, and 5075E Three-Cylinder (T3) MFWD Tractors[a]	
Digging Depth (H)	82 mm (3 in)

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	752 mm (30 in)
Bucket on Ground with Bucket Leveled (F)	2156 mm (85 in)
Angles (Maximum)	
Dump (E)	58°
Dump at Ground	107°
Rollback (G)	45°
Lift Capacity	
To Maximum Height at Pivot Point (U)	1186 kg (2615 lb)
To Maximum Height at 800 mm (31.5 in) Ahead of Pivot Point (V)	1378 kg (3037 lb)
To 1500 mm (59 in) at Pivot Point (W)	1582 kg (3487 lb)
To 1500 mm (59 in) at 800 mm (31.5 in) Ahead of Pivot Point (X)	1533 kg (3379 lb)
Breakout Force	
At Pivot Point (Y)	2066 kg-force (4555 lbf)
800 mm (31.5 in) Ahead of Pivot Point (Z)	1752 kg-force (3863 lbf)
Bucket Rollback Force	
At maximum height (VV)	1845 kg-force (4068 lbf)
At 1500 mm (59 in) lift height (XX)	3109 kg-force (6854 lbf)
At Ground Level Line (ZZ)	3104 kg-force (6843 lbf)

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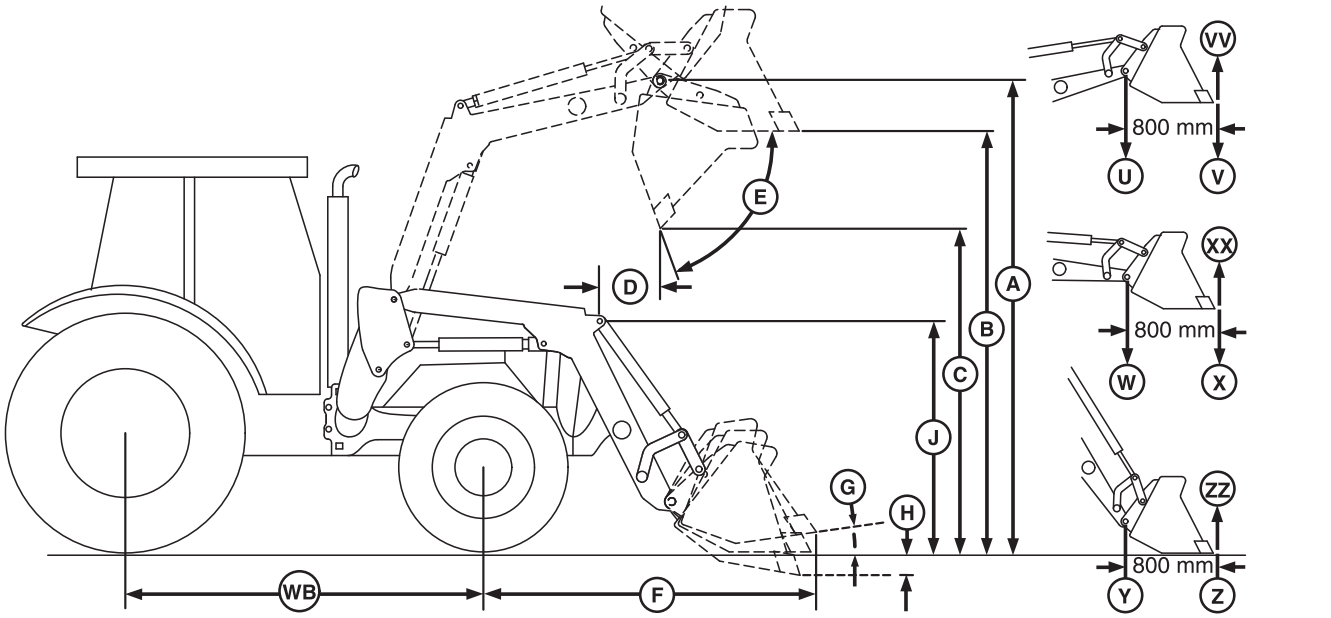
520M Non Self-Leveling Loader Specifications on 5055E, 5065E, and 5075E Three-Cylinder (T2/T3) MFWD Tractors



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Model 5055E, 5065E, and 5075E Three-Cylinder (T3) MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 1050 kg (2315 lb)	Not Applicable
	Option 2	3-Point Hitch 950 kg (2094 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 950 kg (2094 lb) Plus Rear Axle 550 kg (1213 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	12.4R24		
Rear Tires	16.9R30		
Materials Bucket			
Width	1850 mm (73 in)		
Mass	178 kg (392 lb)		
Hydraulic System			
Rated Flow	43 L/min (11 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	5		
Loader Lower Time	3.3		
Bucket Dump Time	5.5		
Bucket Rollback Time	3.3		
Lift Height (Maximum)			
To Pivot Pin (A)	3332 mm (131 in)		
Clearance			
Bucket Level (B)	3138 mm (124 in)		
Bucket Dumped (C)	2573 mm (101 in)		

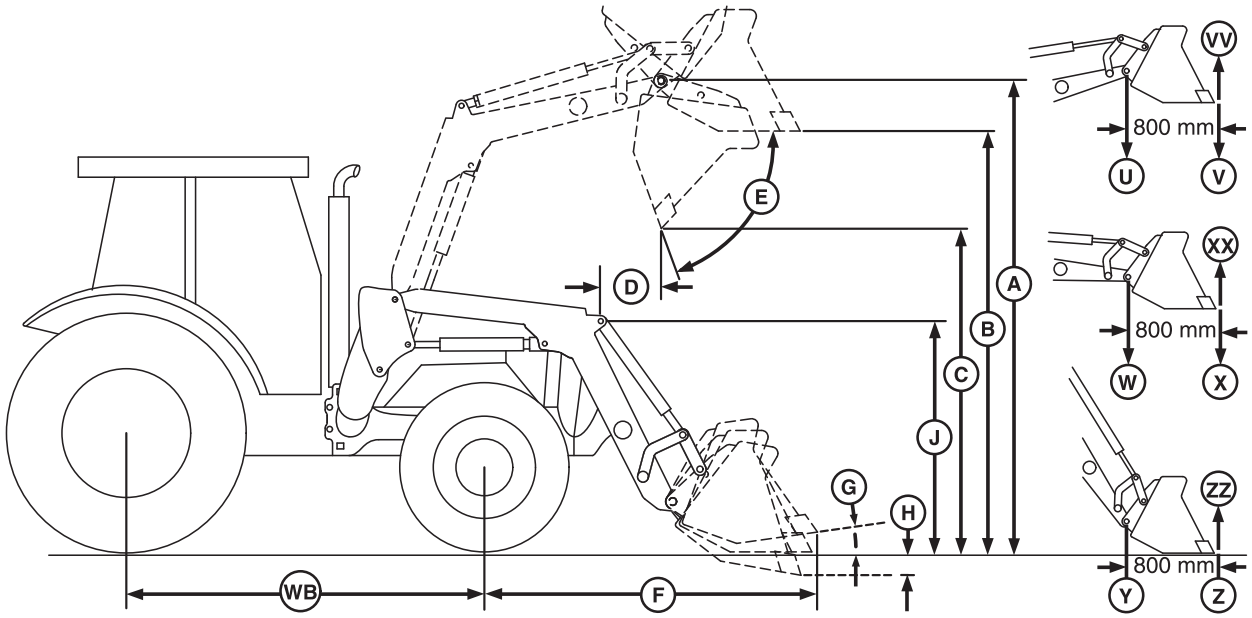
Model 5055E, 5065E, and 5075E Three-Cylinder (T3) MFWD Tractors[a]	
Digging Depth (H)	86 mm (3 in)

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	752 mm (30 in)
Bucket on Ground with Bucket Leveled (F)	2158 mm (85 in)
Angles (Maximum)	
Dump (E)	58°
Dump at Ground	146°
Rollback (G)	45°
Lift Capacity	
To Maximum Height at Pivot Point (U)	1613 kg (3557 lb)
To Maximum Height at 800 mm (31.5 in) Ahead of Pivot Point (V)	1037 kg (2287 lb)
To 1500 mm (59 in) at Pivot Point (W)	1765 kg (3891 lb)
To 1500 mm (59 in) at 800 mm (31.5 in) Ahead of Pivot Point (X)	1302 kg (2871 lb)
Breakout Force	
At Pivot Point (Y)	1977 kg-force (4359 lbf)
800 mm (31.5 in) Ahead of Pivot Point (Z)	1362 kg-force (3002 lbf)
Bucket Rollback Force	
At maximum height (VV)	1138 kg-force (2508 lbf)
At 1500 mm (59 in) lift height (XX)	2126 kg-force (4687 lbf)
At Ground Level Line (ZZ)	2230 kg-force (4917 lbf)

rd91939,1707384632588-19-08FEB24

520M Non-Self-Leveling Loader Specifications on 5055E, 5065E, and 5075E, 5E, Three-Cylinder (FT4) MFWD, MY22 and Earlier Tractors



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Model 5055E, 5065E, and 5075E, 5E, Three-Cylinder (FT4) MFWD, MY22 and Earlier Tractors[a]			
*NOTE: **Option 1 not applicable for 12.4 - R24 front tires***		**Cab Tractors**	**Open Operator Station Tractors**
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb)	3-Point Hitch 1000 kg (2205 lb)
	Option 2	3-Point Hitch 800 kg (1764 lb) Plus Rear Axle 300 kg (662 lb)	3-Point Hitch 800 kg (1764 lb) Plus Rear Axle 650 kg (1433 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	320/85 R24 BKT (12.4 R24)		
Rear Tires	420/85R30 BTK (16.9)		
Materials Bucket			
Width	1850 mm (73 in)		
Mass	245 kg (540 lb)		
Hydraulic System			
Rated Flow	43 L/min (11 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (In Seconds)			
Loader Raise Time	5.1		
Loader Lower Time	3.4		
Bucket Dump Time	4.3		
Bucket Rollback Time	2.6		
Lift Height (Maximum)			
To Pivot Pin (A)	3352 mm (132 in)		
Clearance			
Bucket Level (B)	3157 mm (124 in)		

Model 5055E, 5065E, and 5075E, 5E, Three-Cylinder (FT4) MFWD, MY22 and Earlier Tractors[a]	
Bucket Dumped (C)	2520 mm (99 in)
Digging Depth (H)	-73 mm (-3 in)

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1038 mm (41 in)
Bucket on Ground with Bucket Leveled (F)	2248 mm (89 in)
Angles (Maximum)	
Dump (E)	-55°
Dump at Ground	-144°
Rollback (G)	44°
Lift Capacity	
To Maximum Height at Pivot Point (U)	1598 kg (3523 lb)
To Maximum Height at 800 mm (31.5 in) Ahead of Pivot Point (V)	1040 kg (2293 lb)
To 1500 mm (59 in) at Pivot Point (W)	1828 kg (4030 lb)
To 1500 mm (59 in) at 800 mm (31.5 in) Ahead of Pivot Point (X)	1349 kg (2974 lb)
Breakout Force	
At Pivot Point (Y)	2105 kgf (4641 lbf)
800 mm (31.5 in) Ahead of Pivot Point (Z)	1437 kgf (3168 lbf)
Bucket Rollback Force	
At maximum height (VV)	1209 kgf (2665 lbf)
At 1500 mm (59 in) lift height (XX)	2151 kgf (4742 lbf)
At Ground Level Line (ZZ)	2191 kgf (4830 lbf)

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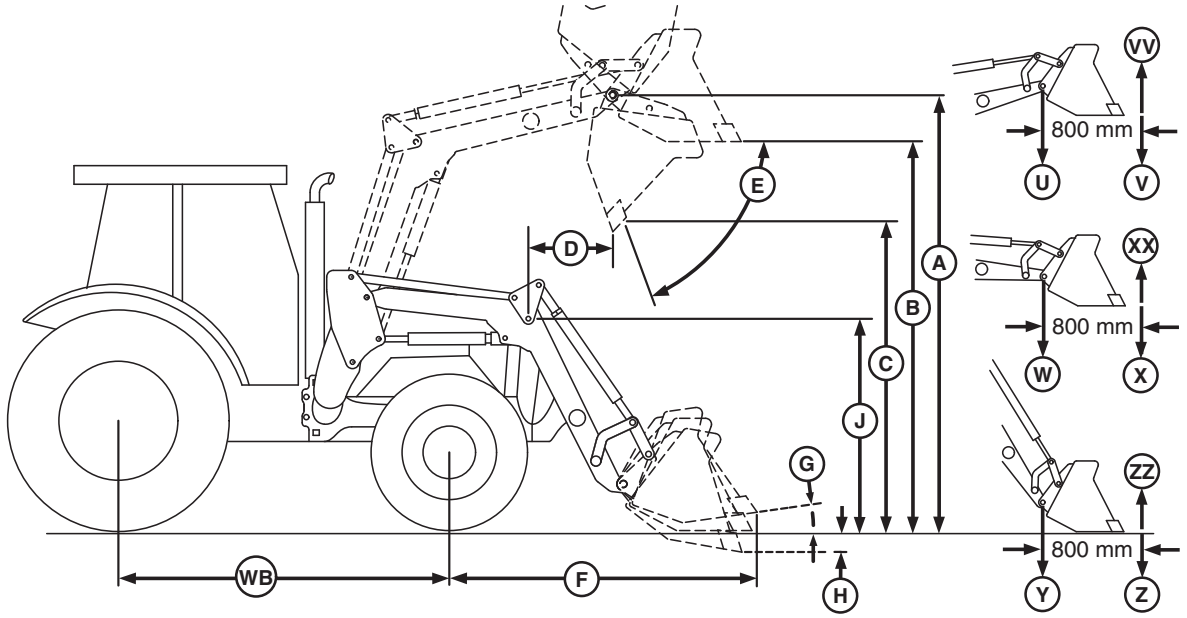
520M Mechanical Self-Leveling Loader Specifications on 5055E, 5065E, and 5075E, 5E, Three-Cylinder (FT4) MFWD, MY22 and Earlier Tractors



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Model 5055E, 5065E, and 5075E, 5E, Three-Cylinder (FT4) MFWD, MY22 and Earlier Tractors[a]			
*NOTE: **Option 1 Not applicable for 12.4 - R24 front tires***		**Cab Tractors**	**Open Operator Station Tractors**
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1400 kg (3087 lb)	3-Point Hitch 1400 kg (3087 lb)
	Option 2	3-Point Hitch 1300 kg (2867 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 1300 kg (2867 lb) Plus Rear Axle 550 kg (1213 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	320/85 R24 BKT (12.4 R24)		
Rear Tires	420/85R30 BTK (16.9)		
Materials Bucket			
Width	1850 mm (73 in)		
Mass	178 kg (392 lb)		
Hydraulic System			
Rated Flow	43 L/min (11 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (In Seconds)			
Loader Raise Time	4.5		
Loader Lower Time	3.1		
Bucket Dump Time	3.6		
Bucket Rollback Time	3.6		
Lift Height (Maximum)			
To Pivot Pin (A)	3351 mm (132 in)		
Clearance			
Bucket Level (B)	3157 mm (124 in)		

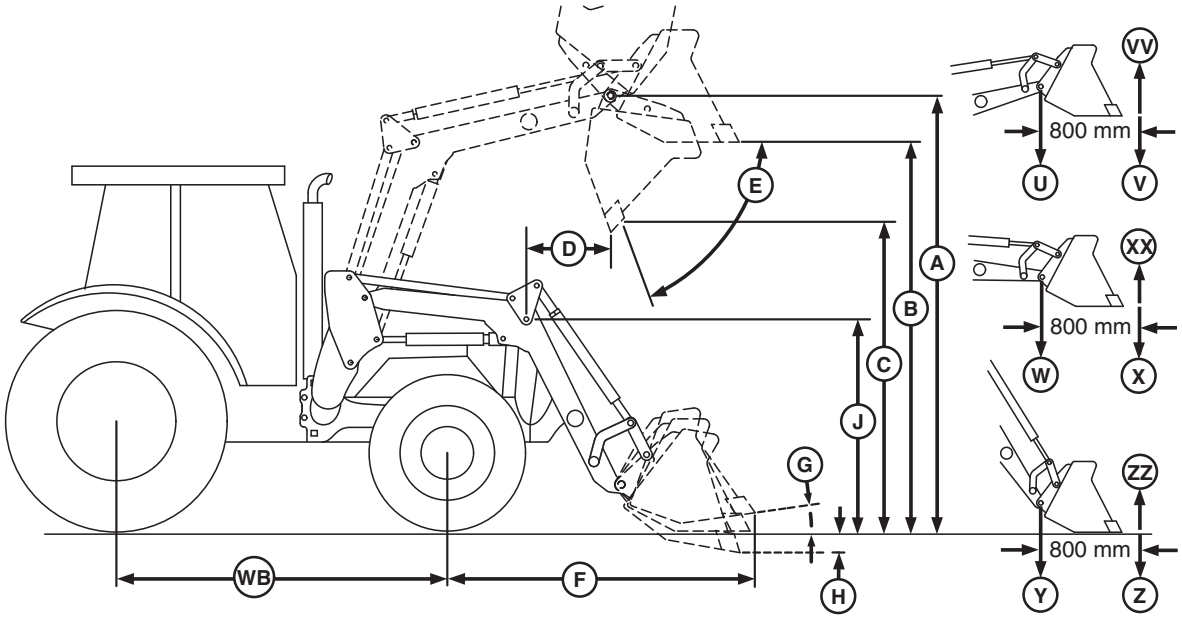
Model 5055E, 5065E, and 5075E, 5E, Three-Cylinder (FT4) MFWD, MY22 and Earlier Tractors[a]	
Bucket Dumped (C)	2523 mm (99 in)
Digging Depth (H)	-69 mm (-2.7 in)

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1039 mm (41 in)
Bucket on Ground with Bucket Leveled (F)	2248 mm (89 in)
Angles (Maximum)	
Dump (E)	-55°
Dump at Ground	-109°
Rollback (G)	42°
Lift Capacity	
To Maximum Height at Pivot Point (U)	1170 kg (2579 lb)
To Maximum Height at 800 mm (31.5 in) Ahead of Pivot Point (V)	1319 kg (2908 lb)
To 1500 mm (59 in) at Pivot Point (W)	1636 kg (3607 lb)
To 1500 mm (59 in) at 800 mm (31.5 in) Ahead of Pivot Point (X)	1579 kg (3481 lb)
Breakout Force	
At Pivot Point (Y)	2169 kgf (4782 lbf)
800 mm (31.5 in) Ahead of Pivot Point (Z)	1838 kgf (4052 lbf)
Bucket Rollback Force	
At maximum height (VV)	1837 kgf (4050 lbf)
At 1500 mm (59 in) lift height (XX)	3084 kgf (6799 lbf)
At Ground Level Line (ZZ)	3033 kgf (6687 lbf)

rd91939,1706875788171-19-08FEB24

520M Mechanical Self-Leveling Loader Specifications on 5093E (T3) MFWD Tractor



W28413—UN—11JUN18

Tractor Model 5093E (T3) MFWD[a]			
		Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	**Option 1**	3-Point Hitch 750 kg (1654 lb)	Not Applicable
	Option 2	3-Point Hitch 450 kg (992 lb) Plus Rear Axle 300 kg (662 lb)	3-Point Hitch 450 kg (992 lb) Plus Rear Axle 650 kg (1433 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	12.4 R24		
Rear Tires	16.9 R30		
Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	178 kg (392 lb)		
Hydraulic System			
Rated Flow	43 L/min (11 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	3.3		
Loader Lower Time	2.2		
Bucket Dump Time	2.6		
Bucket Rollback Time	2.6		
Lift Height (Maximum)			
To Pivot Pin (A)	3370 mm (133 in)		
Clearance			
Bucket Level (B)	3175 mm (125 in)		
Bucket Dumped (C)	2551 mm (100 in)		

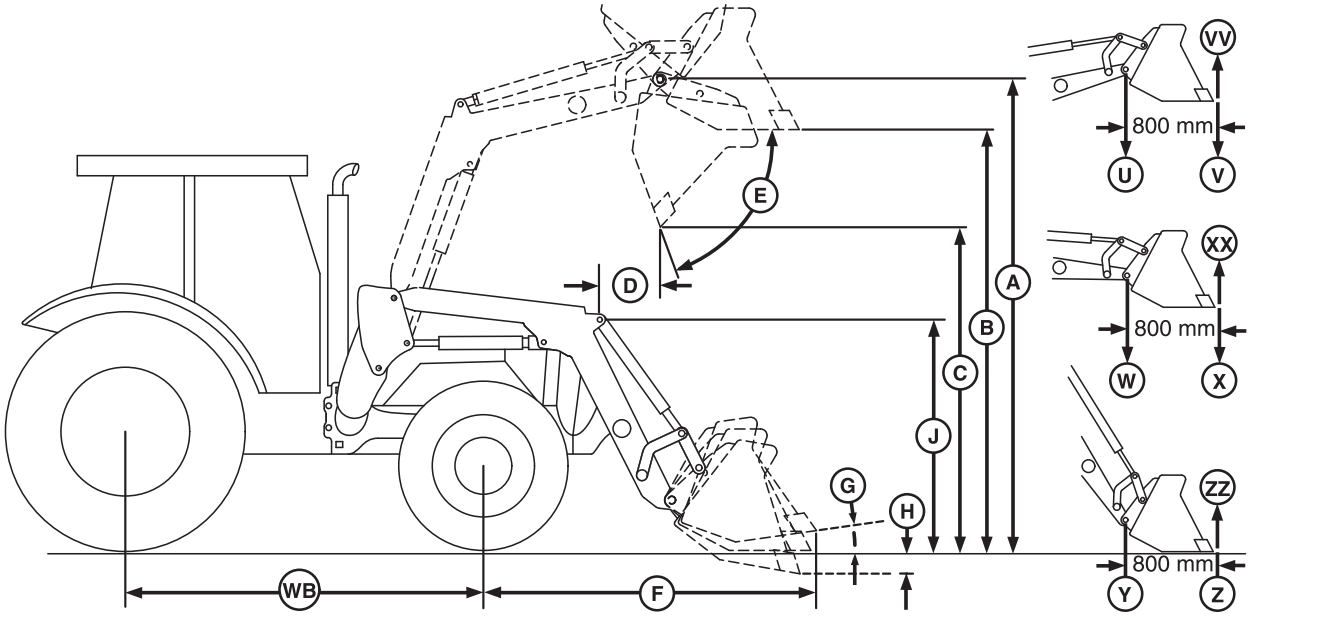
Tractor Model 5093E (T3) MFWD[a]	
Digging Depth (H)	46 mm (2 in)

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	781 mm (31 in)
Bucket on Ground with Bucket Leveled (F)	2152 mm (85 in)
Angles (Maximum)	
Dump (E)	53°
Dump at Ground	107°
Rollback (G)	43°
Lift Capacity	
To Maximum Height at Pivot Point (U)	1219 kg (2687 lb)
To Maximum Height at 800 mm (31.5 in) Ahead of Pivot Point (V)	1404 kg (3095 lb)
To 1500 mm (59 in) at Pivot Point (W)	1638 kg (3611 lb)
To 1500 mm (59 in) at 800 mm (31.5 in) Ahead of Pivot Point (X)	1580 kg (3483 lb)
Breakout Force	
At Pivot Point (Y)	2128 kg-force (4691 lbf)
800 mm (31.5 in) Ahead of Pivot Point (Z)	1789 kg-force (3944 lbf)
Bucket Rollback Force	
At maximum height (VV)	1780 kg-force (3924 lbf)
At 1500 mm (59 in) lift height (XX)	3062 kg-force (6751 lbf)
At Ground Level Line (ZZ)	3034 kg-force (6689 lbf)

OUO6064,0001D01-19-06JUN18

520M Non Self-Leveling Loader Specifications on 5093E (T3) MFWD Tractor



W28414—UN—11JUN18

Tractor Model 5093E (T3) MFWD[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 500 kg (1103 lb)	Not Applicable
	Option 2	3-Point Hitch 300 kg (662 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 300 kg (662 lb) Plus Rear Axle 550 kg (1213 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	12.4 R24		
Rear Tires	16.9 R30		
Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	178 kg (392 lb)		
Hydraulic System			
Rated Flow	43 L/min (11 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	3.7		
Loader Lower Time	2.5		
Bucket Dump Time	3.1		
Bucket Rollback Time	1.9		
Lift Height (Maximum)			
To Pivot Pin (A)	3370 mm (133 in)		
Clearance			
Bucket Level (B)	3175 mm (125 in)		
Bucket Dumped (C)	2548 mm (100 in)		

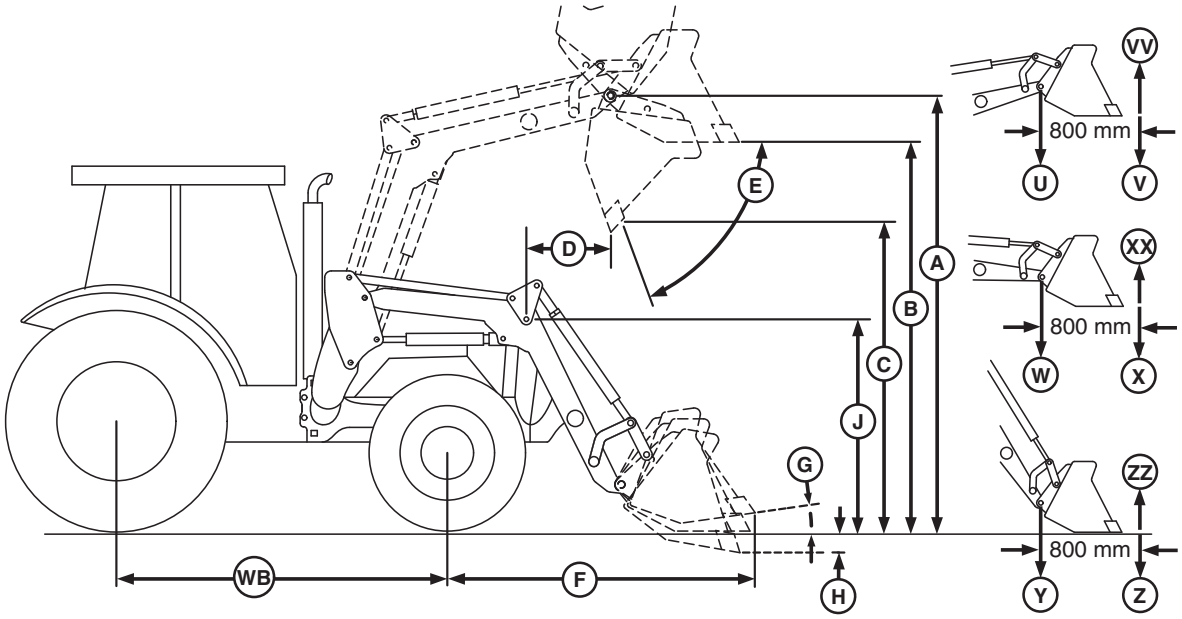
Tractor Model 5093E (T3) MFWD[a]	
Digging Depth (H)	49 mm (2 in)

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	781 mm (31 in)
Bucket on Ground with Bucket Leveled (F)	2152 mm (85 in)
Angles (Maximum)	
Dump (E)	53°
Dump at Ground	143°
Rollback (G)	45°
Lift Capacity	
To Maximum Height at Pivot Point (U)	1653 kg (3644 lb)
To Maximum Height at 800 mm (31.5 in) Ahead of Pivot Point (V)	1064 kg (2346 lb)
To 1500 mm (59 in) at Pivot Point (W)	1825 kg (4023 lb)
To 1500 mm (59 in) at 800 mm (31.5 in) Ahead of Pivot Point (X)	1401 kg (3089 lb)
Breakout Force	
At Pivot Point (Y)	2046 kg-force (4511 lbf)
800 mm (31.5 in) Ahead of Pivot Point (Z)	1401 kg-force (3089 lbf)
Bucket Rollback Force	
At maximum height (VV)	1175 kg-force (2590 lbf)
At 1500 mm (59 in) lift height (XX)	2140 kg-force (4718 lbf)
At Ground Level Line (ZZ)	2195 kg-force (4839 lbf)

OUO6064,0001D02-19-06JUN18

520M Mechanical Self-Leveling Loader Specifications on 5520 MFWD Tractor



W28413—UN—11JUN18

Model 5520 Tractor[a]			
		Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1050 kg (2315 lb)	Not Applicable
	Option 2	3-Point Hitch 900 kg (1984 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 900 kg (1984 lb) Plus Rear Axle 550 kg (1213 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	320-85 R24		
Rear Tires	420-85 R30		
Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	178 kg (392 lb)		
Hydraulic System			
Rated Flow	43 L/min (11 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	3.3		
Loader Lower Time	2.2		
Bucket Dump Time	2.6		
Bucket Rollback Time	2.6		
Lift Height (Maximum)			
To Pivot Pin (A)	3234 mm (127 in)		
Clearance			
Bucket Level (B)	3039 mm (120 in)		
Bucket Dumped (C)	2415 mm (95 in)		

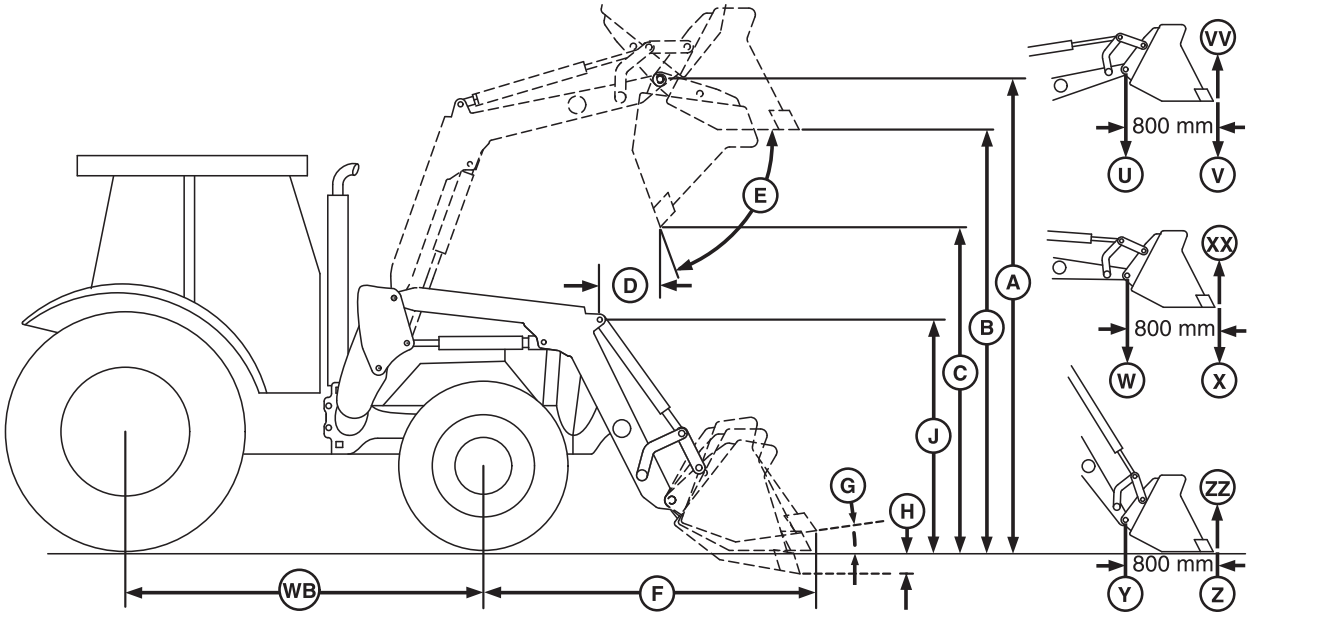
Model 5520 Tractor[a]	
Digging Depth (H)	182 mm (7 in)

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	760 mm (30 in)
Bucket on Ground with Bucket Leveled (F)	2164 mm (85 in)
Angles (Maximum)	
Dump (E)	53°
Dump at Ground	106°
Rollback (G)	47°
Lift Capacity	
To Maximum Height at Pivot Point (U)	1219 kg (2687 lb)
To Maximum Height at 800 mm (31.5 in) Ahead of Pivot Point (V)	1404 kg (3095 lb)
To 1500 mm (59 in) at Pivot Point (W)	1598 kg (3523 lb)
To 1500 mm (59 in) at 800 mm (31.5 in) Ahead of Pivot Point (X)	1555 kg (3428 lb)
Breakout Force	
At Pivot Point (Y)	2060 kg-force (4542 lbf)
800 mm (31.5 in) Ahead of Pivot Point (Z)	1774 kg-force (3911 lbf)
Bucket Rollback Force	
At maximum height (VV)	1780 kg-force (3924 lbf)
At 1500 mm (59 in) lift height (XX)	3014 kg-force (6645 lbf)
At Ground Level Line (ZZ)	3092 kg-force (6817 lbf)

OUO6064,0001D05-19-06JUN18

520M Non Self-Leveling Loader Specifications on 5520 MFWD Tractor



W28414—UN—11JUN18

Model 5520 Tractor[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 600 kg (1323 lb)	Not Applicable
	Option 2	3-Point Hitch 450 kg (992 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 450 kg (992 lb) Plus Rear Axle 550 kg (1213 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	12.4R24		
Rear Tires	16.9R30		
Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	178 kg (392 lb)		
Hydraulic System			
Rated Flow	43 L/min (11 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	3.7		
Loader Lower Time	2.5		
Bucket Dump Time	3.1		
Bucket Rollback Time	1.9		
Lift Height (Maximum)			
To Pivot Pin (A)	3234 mm (127 in)		
Clearance			
Bucket Level (B)	3039 mm (120 in)		
Bucket Dumped (C)	2412 mm (95 in)		

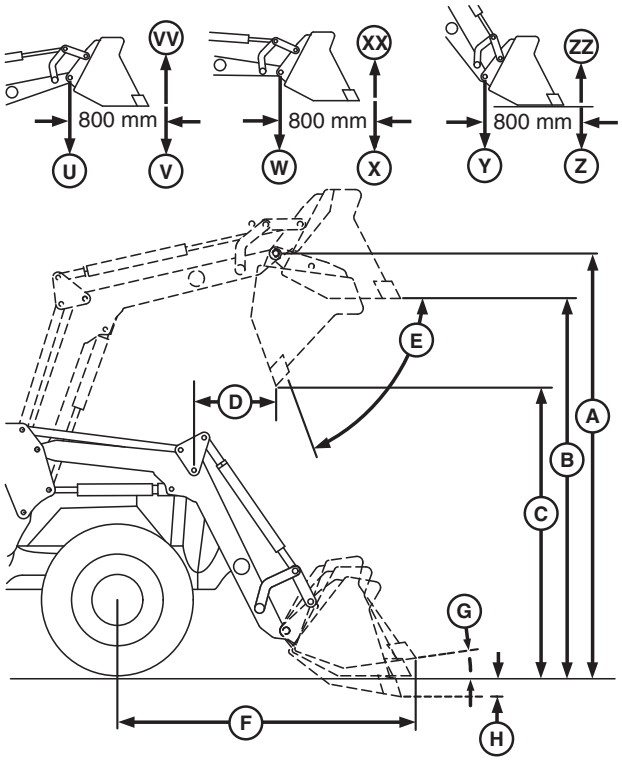
Model 5520 Tractor[a]	
Digging Depth (H)	185 mm (7 in)

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	759 mm (30 in)
Bucket on Ground with Bucket Leveled (F)	2164 mm (85 in)
Angles (Maximum)	
Dump (E)	54°
Dump at Ground	139°
Rollback (G)	49°
Lift Capacity	
To Maximum Height at Pivot Point (U)	1665 kg (3671 lb)
To Maximum Height at 800 mm (31.5 in) Ahead of Pivot Point (V)	1071 kg (2361 lb)
To 1500 mm (59 in) at Pivot Point (W)	1825 kg (4023 lb)
To 1500 mm (59 in) at 800 mm (31.5 in) Ahead of Pivot Point (X)	1347 kg (2970 lb)
Breakout Force	
At Pivot Point (Y)	2043 kg-force (4504 lbf)
800 mm (31.5 in) Ahead of Pivot Point (Z)	1424 kg-force (3139 lbf)
Bucket Rollback Force	
At maximum height (VV)	1179 kg-force (2599 lbf)
At 1500 mm (59 in) lift height (XX)	2100 kg-force (4630 lbf)
At Ground Level Line (ZZ)	2242 kg-force (4943 lbf)

OUO6064,0001D06-19-06JUN18

520M Mechanical Self-Leveling Loader Specifications on 5415, 5615, 5715, 5076E, 5082E, and 5090E (T0—T2 4-Cylinder) MFWD Tractors



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Model 5415, 5615, 5715, 5076E, 5082E, and 5090E (T0—T2 4-Cylinder) MFWD Tractors[a]	
Front Tires	12.4 R24
Rear Tires	16.9 R30
Heavy Duty Materials Bucket	
Width	1850 mm (73 in)
Mass	178 kg (392 lb)
Hydraulic System	
Rated flow	60 l/min (16 gal/min)
Maximum pressure	19 498 kPa (195 bar) (2828 psi)
Cycle Times (in seconds)	
Loader raise time	3.2
Loader lower time	2.2
Bucket dump time	3.3
Bucket rollback time	2.2
Lift Height (Maximum)	
To pivot pin (A)	3343 mm (132 in)
Clearance	
Bucket level (B)	3148 mm (124 in)
Bucket dumped (C)	2584 mm (102 in)
Digging depth (H)	70 mm (3 in)
Reach	
At maximum lift height with bucket dumped (D)	688 mm (27 in)
Bucket on ground with bucket leveled (F)	2135 mm (84 in)

Model 5415, 5615, 5715, 5076E, 5082E, and 5090E (T0—T2 4-Cylinder) MFWD Tractors[a]	
Angles (Maximum)	
Dump (E)	58°
Dump at ground	107°
Rollback (G)	44°
Lift Capacity	
Full height (U) at pivot pin	1183 kg (2608 lb)
Full height (V) at 800 mm ahead of pivot pin	1372 kg (3025 lb)
Lift height (W) at 1500 mm (59 in) at pivot pin	1585 kg (3493 lb)
Lift height (X) at 1500 mm (59 in) at 800 mm (59 in) ahead of pivot pin	1534 kg (3383 lb)
Breakout Force	
At pivot pin (Y)	2076 kgf (4576 lbf)
At 800 mm (31.5 in) (I) ahead of pivot pin (Z)	1756 kgf (3871 lbf)
Bucket Rollback Force	
At maximum height (VV)	1848 kgf (4073 lbf)
At 1500 mm (59 in) lift height (XX)	3114 kgf (6864 lbf)
At ground level line (ZZ)	3097 kgf (6827 lbf)

[a] *(Specifications and design subject to change without notice)*

Model 5415, 5615 and 5715 (T0—T2 4-Cylinder) MFWD Tractors[a]		
	Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	—	3-Point Hitch 1460 kg (3219 lb)
	—	Rear Axle 192 kg (423 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		

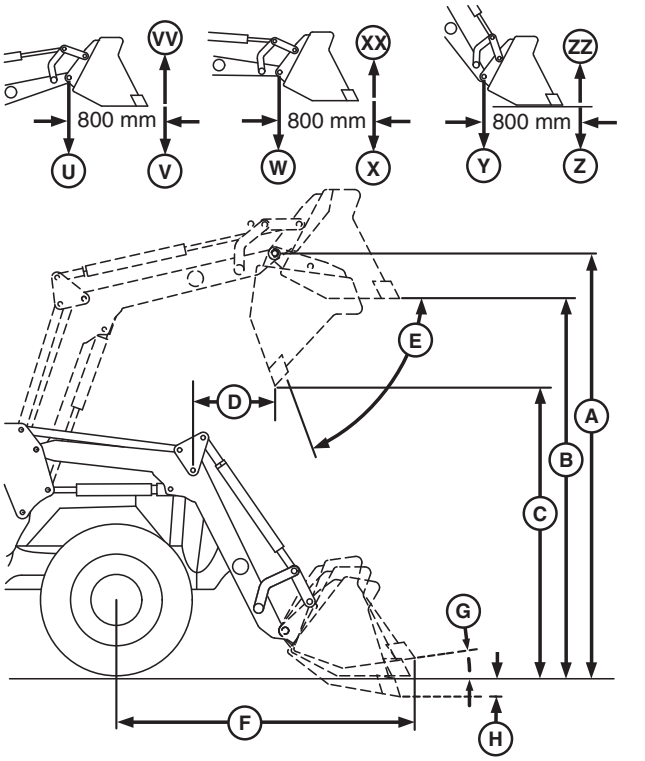
[a] *(Specifications and design subject to change without notice)*

Model 5076E, 5082E, and 5090E (T0—T2 4-Cylinder) MFWD Tractors[a]		
	Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	3-Point Hitch 1204 kg (2654 lb)	3-Point Hitch 1204 kg (2654 lb)
	Rear Axle 192 kg (423 lb)	Rear Axle 192 kg (423 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		

[a] *(Specifications and design subject to change without notice)*

vxuv1jb,1731491328202-19-18NOV24

520M Non Self-Leveling Loader Specifications on 5415, 5615, 5715, 5076E, 5082E, and 5090E (T0—T2 4- Cylinder) MFWD Tractors



APY94160—UN—29AUG24

Model 5415, 5615, 5715, 5076E, 5082E, and 5090E (T0—T2 4-Cylinder) MFWD Tractors[a]	
Front Tires	12.4 R24
Rear Tires	16.9 R30
Heavy Duty Materials Bucket	
Width	1850 mm (73 in)
Mass	178 kg (392.4 lb)
Hydraulic System	
Rated flow	60 l/min (16 gal/min)
Maximum pressure	19 498 kPa (195 bar) (2828 psi)
Cycle Times (in seconds)	
Loader raise time	3.6
Loader lower time	2.4
Bucket dump time	4
Bucket rollback time	2.3
Lift Height (Maximum)	
To pivot pin (A)	3345 mm (132 in)
Clearance	
Bucket level (B)	3150 mm (124 in)
Bucket dumped (C)	2586 mm (102 in)
Digging depth (H)	74 mm (3 in)
Reach	
At maximum lift height with bucket dumped (D)	689 mm (27 in)
Bucket on ground with bucket leveled (F)	2137 mm (84 in)
Angles (Maximum)	
Dump (E)	58°
Dump at ground	147°
Rollback (G)	44°
Lift Capacity	
Full height (U) at pivot pin	1609 kg (3548 lb)
Full height (V) at 800 mm ahead of pivot pin	1035 kg (2282 lb)
Lift height (W) at 1500 mm (59 in) at pivot pin	1767 kg (3895 lb)
Lift height (X) at 1500 mm (59 in) at 800 mm (59 in) ahead of pivot pin	1304 kg (2874 lb)
Breakout Force	
At pivot pin (Y)	1981 kgf (4367 lbf)
At 800 mm (31.5 in) (I) ahead of pivot pin (Z)	1361 kgf (3002 lbf)
Bucket Rollback Force	
At maximum height (VV)	1140 kgf (2512 lbf)
At 1500 mm (59 in) lift height (XX)	2131 kgf (4698 lbf)
At ground level line (ZZ)	2225 kgf (4905 lbf)

[a] *(Specifications and design subject to change without notice)*

Model 5415, 5615 and 5715 (T0—T2 4-Cylinder) MFWD Tractors[a]		
	Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	—	3-Point Hitch 1460 kg (3219 lb)
	—	Rear Axle 192 kg (423 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		

[a] *(Specifications and design subject to change without notice)*

Model 5076E, 5082E, and 5090E (T0—T2 4-Cylinder) MFWD Tractors[a]		
	Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	3-Point Hitch 1204 kg (2654 lb)	3-Point Hitch 1204 kg (2654 lb)
	Rear Axle 192 kg (423 lb)	Rear Axle 192 kg (423 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		

[a] *(Specifications and design subject to change without notice)*

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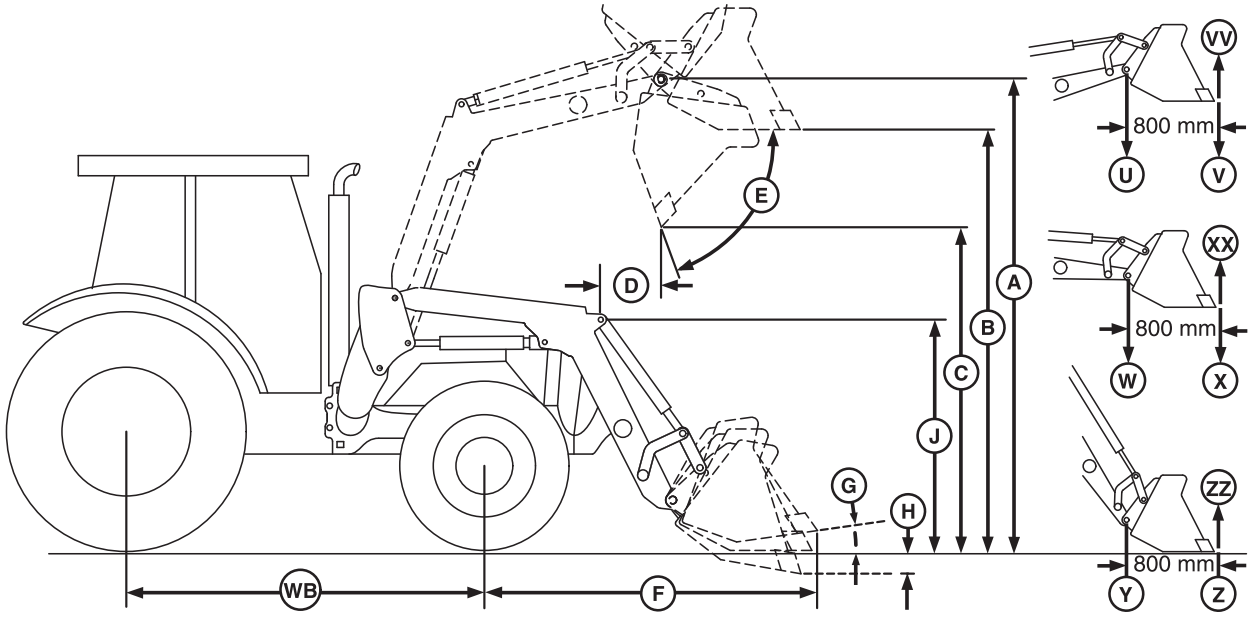
520M Non Self-Leveling Loader Specifications on 5076EN and 5090EN Tractors



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Tractor Models 5076EN and 5090EN[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 1200 kg (2646 lb)	3-Point Hitch 1200 kg (2646 lb)
	Option 2	3-Point Hitch 1200 kg (2646 lb)	3-Point Hitch 500 kg (1103 lb) Plus Rear Axle 300 kg (662 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	9.5R16		
Rear Tires	14.9R24		
Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	178 kg (392.4 lb)		
Hydraulic System			
Rated Flow	70 l/min (19 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (In Seconds)			
Loader Raise Time	2.9		
Loader Lower Time	2		
Bucket Dump Time	3.4		
Bucket Rollback Time	2		
Lift Height (Maximum)			
To Pivot Pin (A)	3184 mm (125 in)		
Clearance			
Bucket Level (B)	2989 mm (118 in)		
Bucket Dumped (C)	2425 mm (96 in)		

Tractor Models 5076EN and 5090EN[a]	
Digging Depth (H)	215 mm (9 in)

[a] *Specifications and design subject to change without notice.*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	931 mm (37 in)
Bucket on Ground with Bucket Leveled (F)	2337 mm (92 in)
Angles (Maximum)	
Dump (E)	61°
Dump at Ground	144°
Rollback (G)	49°
Lift Capacity	
To Maximum Height at Pivot Point (U)	1604 kg (3536 lb)
To Maximum Height at 800 mm (31.5 in) Ahead of Pivot Point (V)	1044 kg (2302 lb)
To 1500 mm (59 in) at Pivot Point (W)	1774 kg (3911 lb)
To 1500 mm (59 in) at 800 mm (31.5 in) Ahead of Pivot Point (X)	1310 kg (2888 lb)
Breakout Force	
At Pivot Point (Y)	2050 kgf (4520 lbf)
800 mm (31.5 in) Ahead of Pivot Point (Z)	1431 kgf (3155 lbf)
Bucket Rollback Force	
At maximum height (VV)	1172 kgf (2584 lbf)
At 1500 mm (59 in) lift height (XX)	2090 kgf (4608 lbf)
At Ground Level Line (ZZ)	2260 kgf (4983 lbf)

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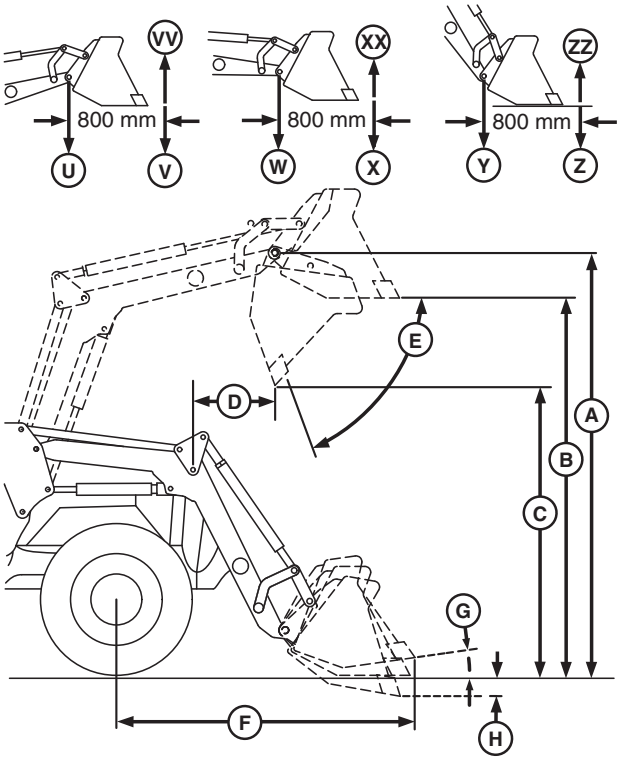
520M Non Self-Leveling Loader Specifications on 5078E and 5090E Tractors



APY94160—UN—29AUG24

Model 5078E and 5090E Tractors [a]	
Front Tires	12.4R24 R1
Rear Tires	18.4R30 R1
Heavy Duty Materials Bucket	
Width	—
Mass	178 kg (392 lb)
Hydraulic System	
Rated flow	190 L/min (50 gal/min)
Maximum pressure	19 995 kPa (200 bar) (2900 psi)
Cycle Times (in seconds)	
Loader raise time	4.61
Loader lower time	3.1
Bucket dump time	4.94
Bucket rollback time	2.95
Lift Height (Maximum)	
To pivot pin (A)	3368 mm (133 in)
Clearance	
Bucket level (B)	3172 mm (125 in)
Bucket dumped (C)	2503 mm (99 in)
Digging depth (H)	-53 mm (-2 in)
Reach	
At maximum lift height with bucket dumped (D)	685 mm (27 in)
Bucket on ground with bucket leveled (F)	2303 mm (91 in)

Model 5078E and 5090E Tractors [a]	
Angles (Maximum)	
Dump (E)	-57.98°
Dump at ground	-147.68°
Rollback (G)	43.36°
Lift Capacity	
Full height (U) at pivot pin	1598 kg (3523 lb)
Full height (V) at 800 mm ahead of pivot pin	1029 kg (2269 lb)
Lift height (W) at 1500 mm (59 in) at pivot pin	1776 kg (3916 lb)
Lift height (X) at 1500 mm (59 in) at 800 mm (59 in) ahead of pivot pin	1311 kg (2889 lb)
Breakout Force	
At pivot pin (Y)	1993 kgf (4395 lbf)
At 800 mm (31.5 in) (I) ahead of pivot pin (Z)	1365 kgf (3010 lbf)
Bucket Rollback Force	
At maximum height (VV)	1203 kgf (2652 lbf)
At 1500 mm (59 in) lift height (XX)	2195 kgf (4840 lbf)
At ground level line (ZZ)	2259 kgf (4980 lbf)

[a] *(Specifications and design subject to change without notice)*

Tractor Rear Ballast		
Model 5078E Tractors[a]		
	3-Point Hitch	**Rear Axle**
Cab Tractors	800 kg (1764 lb)	—
Open Operator Station Tractors	800 kg (1764 lb)	—
NOTE: Rear axle ballast is based on steel wheels. For cast wheels, reduce the requirement by 220 kg (485 lb) per wheel.		

[a] *(Specifications and design subject to change without notice)*

Tractor Rear Ballast		
Model 5090E Tractors[a]		
	3-Point Hitch	**Rear Axle**
Cab Tractors	650 kg (1433 lb)	—
Open Operator Station Tractors	650 kg (1433 lb)	—
NOTE: Rear axle ballast is based on steel wheels. For cast wheels, reduce the requirement by 220 kg (485 lb) per wheel.		

[a] *(Specifications and design subject to change without notice)*

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520M Mechanical Self-Leveling Loader Specifications on 5085E, 5090E, and 5100E (FT4) MFWD Tractors

Model 5085E, 5090E, and 5100E (FT4) MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 800 kg (1764 lb)	3-Point Hitch 800 kg (1764 lb)
	Option 2	Not Applicable	3-Point Hitch 800 kg (1764 lb) Plus Rear Axle 350 kg (772 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,0002490-19-06NOV24

520M Non-Self-Leveling Loader Specifications on 5085E, 5090E, and 5100E (FT4) MFWD Tractors

Model 5085E, 5090E, and 5100E (FT4) MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 450 kg (992 lb)	3-Point Hitch 450 kg (992 lb)
	Option 2	Not Applicable	3-Point Hitch 450 kg (992 lb) Plus Rear Axle 350 kg (772 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,0002491-19-06NOV24

520M Mechanical Self-Leveling Loader Specifications on 5085E (IT4) MFWD Tractor

Model 5085E (IT4) MFWD Tractor[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 650 kg (1433 lb)	Not Applicable
	Option 2	3-Point Hitch 500 kg (1103 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 500 kg (1103 lb) Plus Rear Axle 550 kg (1213 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,0002492-19-06NOV24

520M Non Self-Leveling Loader Specifications on 5085E (IT4) MFWD Tractor

Model 5085E (IT4) MFWD Tractor[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 400 kg (882 lb)	Not Applicable
	Option 2	3-Point Hitch 300 kg (662 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 300 kg (662 lb) Plus Rear Axle 550 kg (1213 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,0002493-19-06NOV24

520M Mechanical Self-Leveling Loader Specifications on 5082E, 5083E, 5083EN, 5090E, 5093EN, 5101E, and 5101EN (T3) MFWD Tractors

Model 5082E, 5083E, 5083EN, 5090E, 5093EN, 5101E, and 5101EN (T3) MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 750 kg (1654 lb)	Not Applicable
	Option 2	3-Point Hitch 450 kg (992 lb) Plus Rear Axle 300 kg (662 lb)	3-Point Hitch 450 kg (992 lb) Plus Rear Axle 650 kg (1433 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,0002494-19-06NOV24

520M Non Self-Leveling Loader Specifications on 5082E, 5083E, 5083EN, 5090E, 5093EN, 5101E, and 5101EN (T3) MFWD Tractors

Model 5082E, 5083E, 5083EN, 5090E, 5093EN, 5101E, and 5101EN (T3) MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 500 kg (1103 lb)	Not Applicable
	Option 2	3-Point Hitch 300 kg (662 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 300 kg (662 lb) Plus Rear Axle 550 kg (1213 lb)

Model 5082E, 5083E, 5083EN, 5090E, 5093EN, 5101E, and 5101EN (T3) MFWD Tractors[a]
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.

[a](Specifications and design subject to change without notice)

OUO6064,0002495-19-06NOV24

520M Mechanical Self-Leveling Loader Specifications on 5420 MFWD Tractor

Model 5420 MFWD Tractor[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 1050 kg (1433 lb)	Not Applicable
	Option 2	3-Point Hitch 900 kg (1985 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 900 kg (1985 lb) Plus Rear Axle 550 kg (1213 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a](Specifications and design subject to change without notice)

OUO6064,0002496-19-06NOV24

520M Non Self-Leveling Loader Specifications on 5420 MFWD Tractor

Model 5420 MFWD Tractor[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 600 kg (1323 lb)	Not Applicable
	Option 2	3-Point Hitch 450 kg (992 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 450 kg (992 lb) Plus Rear Axle 550 kg (1213 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a](Specifications and design subject to change without notice)

OUO6064,0002497-19-06NOV24

520M Mechanical Self-Leveling Loader Specifications on 5520, 5320, and 5410 MFWD Tractors

Model 5520, 5320, and 5410 MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 1400 kg (3087 lb)	Not Applicable
	Option 2	3-Point Hitch 1300 kg (2867 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 1300 kg (2867 lb) Plus Rear Axle 550 kg (1213 lb)

Model 5520, 5320, and 5410 MFWD Tractors[a]
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.

[a](Specifications and design subject to change without notice)

OUO6064,0002498-19-06NOV24

520M Non Self-Leveling Loader Specifications on 5520, 5320, and 5410 MFWD Tractors

Model 5520, 5320, and 5410 MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 1000 kg (2203 lb)	Not Applicable
	Option 2	3-Point Hitch 800 kg (1764 lb) Plus Rear Axle 300 kg (662 lb)	3-Point Hitch 800 kg (1764 lb) Plus Rear Axle 650 kg (1433 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a](Specifications and design subject to change without notice)

OUO6064,0002499-19-06NOV24

520M Mechanical Self-Leveling Loader Specifications on 5103, 5203, 5210, 5310, 5303, and 5403 MFWD Tractors

Model 5103, 5203, 5210, 5310, 5303, and 5403 MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 1450 kg (3197 lb)	Not Applicable
	Option 2	3-Point Hitch 1250 kg (2756 lb) Plus Rear Axle 400 kg (882 lb)	3-Point Hitch 1250 kg (2756 lb) Plus Rear Axle 750 kg (1654 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a](Specifications and design subject to change without notice)

OUO6064,000249A-19-06NOV24

520M Non Self-Leveling Loader Specifications on 5103, 5203, 5210, 5310, 5303, and 5403 MFWD Tractors

Model 5103, 5203, 5210, 5310, 5303, and 5403 MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 1050 kg (2315 lb)	Not Applicable
	Option 2	3-Point Hitch 950 kg (2095 lb)	3-Point Hitch 950 kg (2095 lb)

Model 5103, 5203, 5210, 5310, 5303, and 5403 MFWD Tractors[a]			
		Plus Rear Axle 200 kg (441 lb)	Plus Rear Axle 550 kg (1213 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,000249B-19-06NOV24

520M Mechanical Self-Leveling Loader Specifications on 5225, 5235, 5235N, 5425, 5510, 5525, 5520N, and 5625 MFWD Tractors

Model 5225, 5235, 5235N, 5425, 5510, 5525, 5520N, and 5625 MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 750 kg (1654 lb)	Not Applicable
	Option 2	3-Point Hitch 450 kg (992 lb) Plus Rear Axle 300 kg (662 lb)	3-Point Hitch 450 kg (992 lb) Plus Rear Axle 650 kg (1433 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,000249C-19-06NOV24

520M Non Self-Leveling Loader Specifications on 5225, 5235, 5235N, 5425, 5510, 5525, 5520N, and 5625 MFWD Tractors

Model 5225, 5235, 5235N, 5425, 5510, 5525, 5520N, and 5625 MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 500 kg (1103 lb)	Not Applicable
	Option 2	3-Point Hitch 300 kg (662 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 300 kg (662 lb) Plus Rear Axle 550 kg (1213 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,000249D-19-06NOV24

520M Mechanical Self-Leveling Loader Specifications on 5X05 PS Series Tractors

Model 5X05 PS Series Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 1050 kg (2315 lb)	3-Point Hitch 1050 kg (2315 lb)
	Option 2	3-Point Hitch 900 kg (1985 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 900 kg (1985 lb) Plus Rear Axle 550 kg (1213 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,0003268-19-06NOV24

520M Non Self-Leveling Loader Specifications on 5X05 PS Series Tractors

Model 5X05 PS Series Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 600 kg (1323 lb)	3-Point Hitch 600 kg (1323 lb)
	Option 2	3-Point Hitch 450 kg (992 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 450 kg (992 lb) Plus Rear Axle 550 kg (1213 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,0003269-19-06NOV24

520M Mechanical Self-Leveling Loader Specifications on 5X25 Series (T0—T2) Tractors

Model 5X25 Series (T0—T2) Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 1200 kg (2646 lb)	3-Point Hitch 1200 kg (2646 lb)
	Option 2	3-Point Hitch 900 kg (1985 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 1000 kg (2205 lb) Plus Rear Axle 300 kg (662 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,000326A-19-06NOV24

520M Non Self-Leveling Loader Specifications on 5X25 Series (T0—T2) Tractors

Model 5X25 Series (T0—T2) Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 850 kg (1874 lb)	3-Point Hitch 850 kg (1874 lb)
	Option 2	3-Point Hitch 500 kg (1103 lb) Plus Rear Axle 200 kg (441 lb)	3-Point Hitch 700 kg (1544 lb) Plus Rear Axle 300 kg (662 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,000326B-19-06NOV24

520M Non Self-Leveling Loader Specifications on 5415, 5615 and 5715 (T0—T2 4-Cylinder) 2WD Tractors

Model 5415, 5615 and 5715 (T0—T2 4-Cylinder) 2WD Tractors[a]		
	Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	3-Point Hitch 1000 kg (2204 lb)	3-Point Hitch 1000 kg (2204 lb)
	—	—
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		

[a] *(Specifications and design subject to change without notice)*

vxuv1jb,1730869782088-19-18NOV24

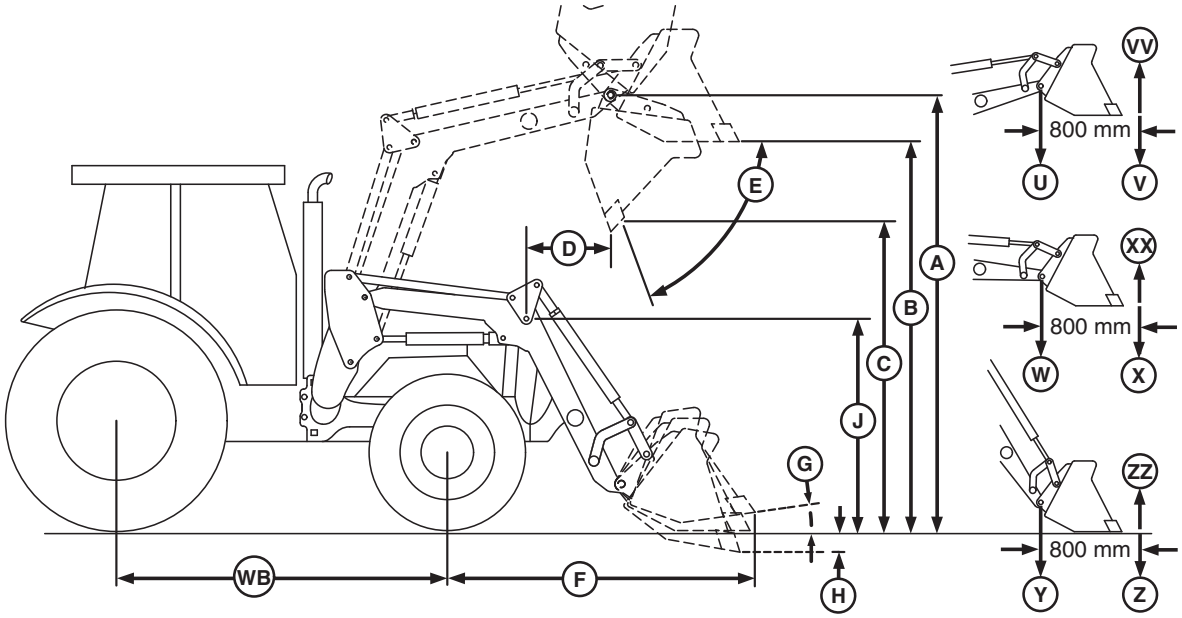
520M Non Self-Leveling Loader Specifications on 5076E, 5082E and 5090E (T0—T2 4-Cylinder) 2WD Tractors

Model 5076E, 5082E and 5090E (T0—T2 4-Cylinder) 2WD Tractors[a]		
	Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	3-Point Hitch 1000 kg (2204 lb)	3-Point Hitch 1000 kg (2204 lb)
	—	—
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		

[a] *(Specifications and design subject to change without notice)*

vxuv1jb,1730869933889-19-18NOV24

520M Mechanical Self-Leveling Loader Specifications on 5080E MY19 Three-Cylinder MFWD Tractors



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Model 5080E MY19 Three-Cylinder MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option1**	3-Point Hitch 1300 kg (2866 lb)	3-Point Hitch 1300 kg (2866 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	9.5-24 R1		
Rear Tires	18.4-30 R1		
Materials Bucket			
Width	1850 mm (73 in)		
Mass	-		
Hydraulic System			
Rated Flow	43 L/min (12 gal/min)		
Maximum Pressure	20000 kPa (200 bar) (2901 psi)		
Cycle Times (In Seconds)			
Loader Raise Time	4.4		
Loader Lower Time	3.0		
Bucket Dump Time	6.5		
Bucket Rollback Time	4.4		
Lift Height (Maximum)			
To Pivot Pin (A)	3332 mm (131 in)		
Clearance			
Bucket Level (B)	3136 mm (124 in)		
Bucket Dumped (C)	2467 mm (97 in)		
Digging Depth (H)	-85 mm (-3 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	856 mm (34 in)
Bucket on Ground with Bucket Leveled (F)	2307 mm (91 in)
Angles (Maximum)	
Dump (E)	-58°
Dump at Ground	-107°
Rollback (G)	45°
Lift Capacity	
To Maximum Height at Pivot Point (U)	1607 kg (3543 lb)
To Maximum Height at 800 mm (31.5 in) ahead of Pivot Point (V)	1396 kg (3078 lb)
To 1500 mm (59 in) at Pivot Point (W)	1591 kg (3508 lb)
To 1500 mm (59 in) at 800 mm (31.5 in) ahead of Pivot Point (X)	1544 kg (3404 lb)
Breakout Force	
At Pivot Point (Y)	2083 kgf (4592 lbf)
At 800 mm (31.5 in) ahead of Pivot Point (Z)	1767 kgf (3896 lbf)
Bucket Rollback Force	
At maximum height (VV)	1840 kgf (4057 lbf)
At 1500 mm (59 in) lift height (XX)	3147 kgf (6938 lbf)
At Ground Level Line (ZZ)	3159 kgf (6964 lbf)

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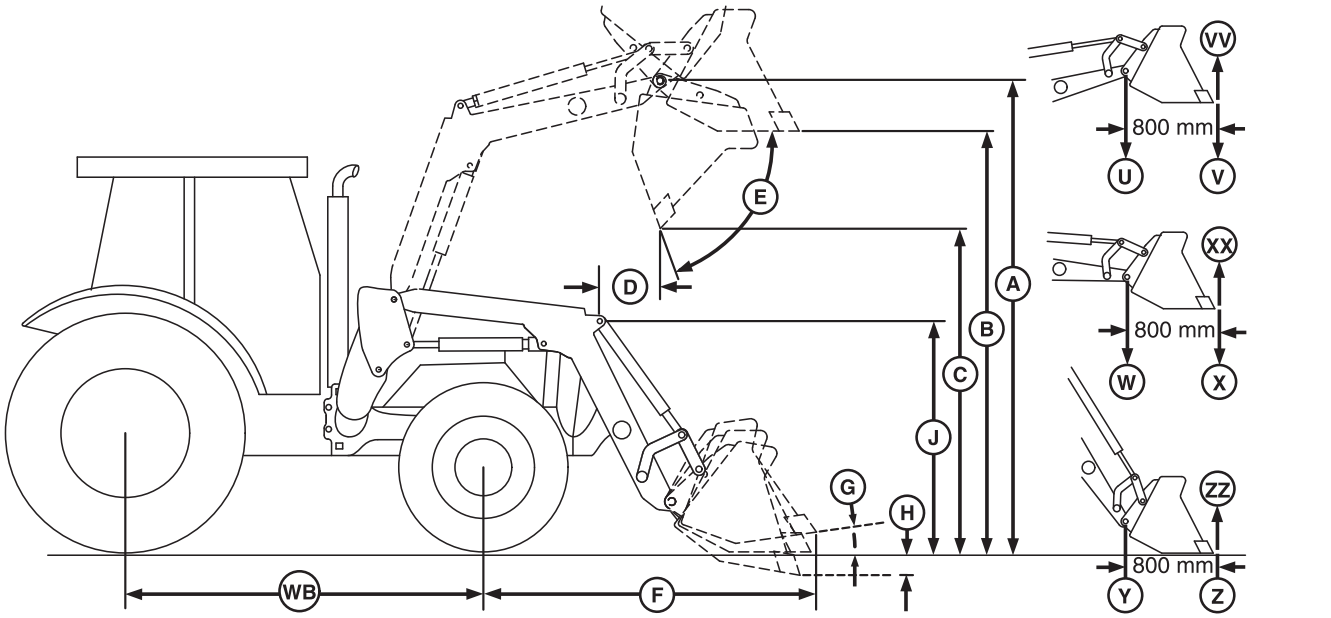
520M Non-Self-Leveling Loader Specifications on 5060E, 5070E, and 5080E MY19 Three-Cylinder MFWD Tractors



W28414—UN—11JUN18

Model 5060E, 5070E, and 5080E MY19 Three-Cylinder MFWD Tractors [a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 1100 kg (2425 lb)	3-Point Hitch 1100 kg (2425 lb)
	Option 2	3-Point Hitch 900 kg (1984 lb) Plus Rear Axle 400 kg (882 lb)	3-Point Hitch 900 kg (1984 lb) Plus Rear Axle 400 kg (882 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	9.5-24 R1		
Rear Tires	18.4-30 R1		
Materials Bucket			
Width	1850 mm (73 in)		
Mass	-		
Hydraulic System			
Rated Flow	43 L/min (11 gal/min)		
Maximum Pressure	20000 kPa (200 bar) (2901 psi)		
Cycle Times (In Seconds)			
Loader Raise Time	5.0		
Loader Lower Time	3.3		
Bucket Dump Time	5.4		
Bucket Rollback Time	3.2		
Lift Height (Maximum)			
To Pivot Pin (A)	3332 mm (131 in)		
Clearance			
Bucket Level (B)	3136 mm (124 in)		
Bucket Dumped (C)	2468 mm (97 in)		

Model 5060E, 5070E, and 5080E MY19 Three-Cylinder MFWD Tractors [a]	
Digging Depth (H)	-88 mm (-4 in)

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	856 mm (34 in)
Bucket on Ground with Bucket Leveled (F)	2307 mm (91 in)
Angles (Maximum)	
Dump (E)	-58°
Dump at Ground	-146°
Rollback (G)	45°
Lift Capacity	
To Maximum Height at Pivot Point (U)	1607 kg (3543 lb)
To Maximum Height at 800 mm (31.5 in) ahead of Pivot Point (V)	1033 kg (2277 lb)
To 1500 mm (59 in) at Pivot Point (W)	1770 kg (3902 lb)
To 1500 mm (59 in) at 800 mm (31.5 in) ahead of Pivot Point (X)	1306 kg (2879 lb)
Breakout Force	
At Pivot Point (Y)	1985 kgf (4376 lbf)
800 mm (31.5 in) ahead of Pivot Point (Z)	1368 kgf (3016 lbf)
Bucket Rollback Force	
At maximum height (VV)	1199 kgf (2643 lbf)
At 1500 mm (59 in) lift height (XX)	2182 kgf (4181 lbf)
At Ground Level Line (ZZ)	2274 kgf (5013 lbf)

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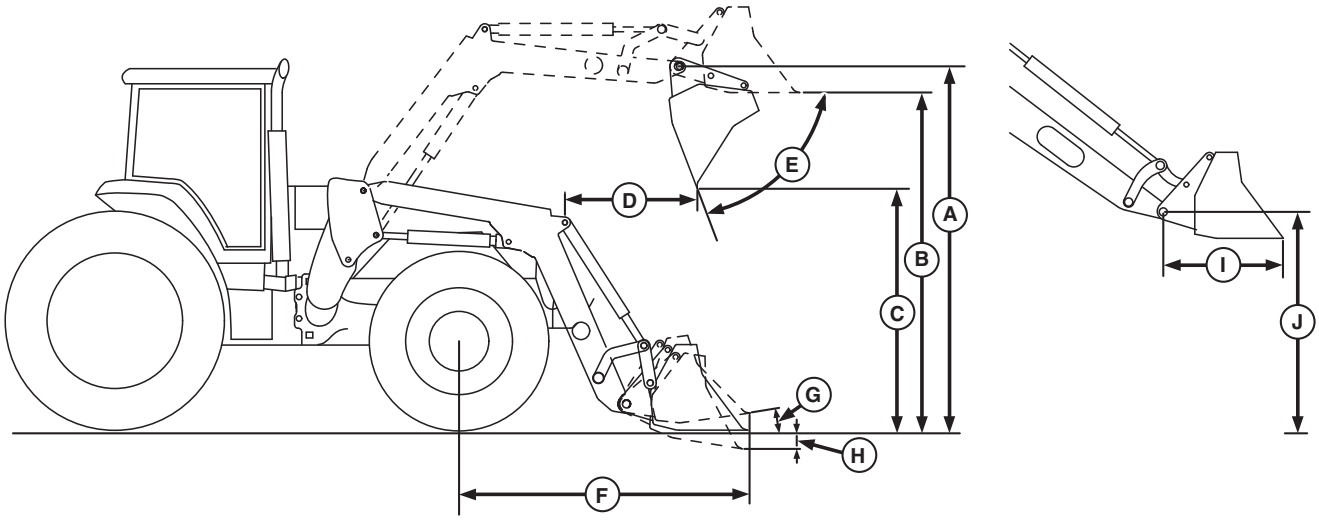
540M Non Self-Leveling Loader Specifications on 5090EL (FT4) MFWD Tractor



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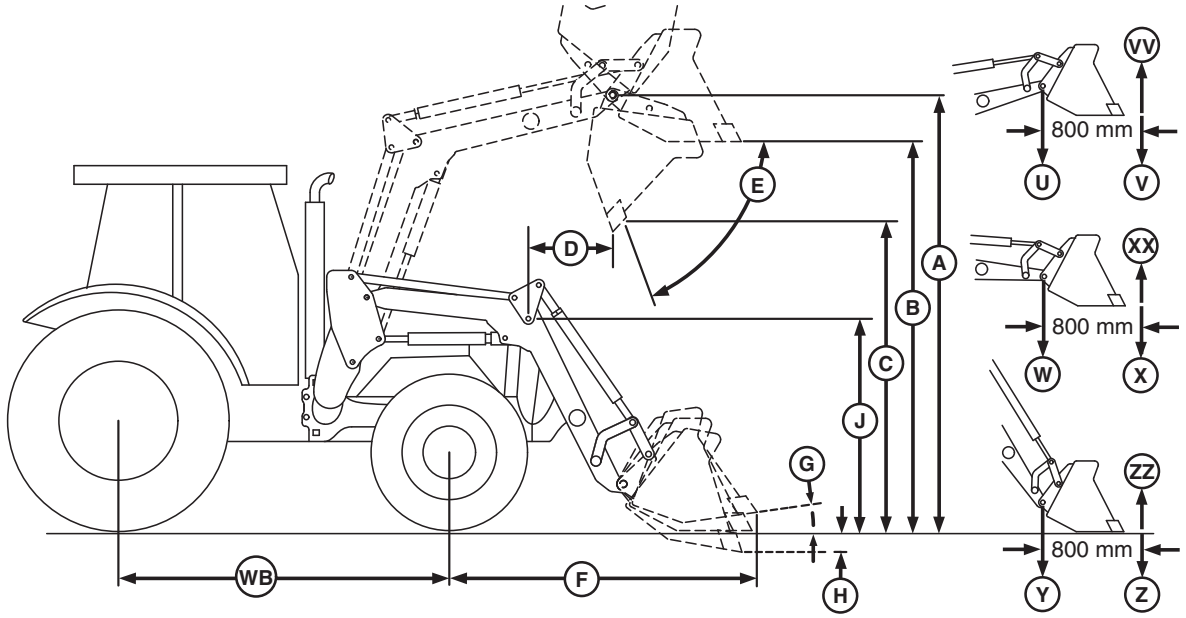
Model 5090EL (FT4) MFWD Tractor[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 800 kg (1764 lb)	3-Point Hitch 800 kg (1764 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	12.5/80-18		
Rear Tires	480/65R24		
Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	178 kg (392 lb)		
Hydraulic System			
Rated Flow	43 L/min (11 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	5.0		
Loader Lower Time	3.7		
Bucket Dump Time	3.8		
Bucket Rollback Time	2.6		
Lift Height (Maximum)			
To Pivot Pin (A)	3471 mm (137 in)		
Clearance			
Bucket Level (B)	3276 mm (129 in)		
Bucket Dumped (C)	2480 mm (98 in)		
Digging Depth (H)	146 mm (6 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	846 mm (33 in)
Bucket on Ground with Bucket Leveled (F)	2644 mm (104 in)
Angles (Maximum)	
Dump (E)	61°
Dump at Ground	141°
Rollback (G)	53°
Lift Capacity	
To Maximum Height at Pivot Point (A)	1767 kg (3896 lb)
To Maximum Height (A) at 800 mm (31.5 in) Ahead of Pivot Point (I)	1205 kg (2657 lb)
To 1500 mm (59 in) (J) at Pivot Point	2322 kg (5119 lb)
Breakout Force	
At Pivot Point	2945 kg-force (6493 lbf)
800 mm (31.5 in) (J) Ahead of Pivot Point	2157 kg-force (4755 lbf)

OUO6064,00023AE-19-28JUL25

540M Mechanical Self-Leveling Loader Specifications on 5100ML, 5105ML, 5115ML, 5120ML, and 5125ML, 5130ML (FT4) MFWD Tractors



W28413—UN—11JUN18

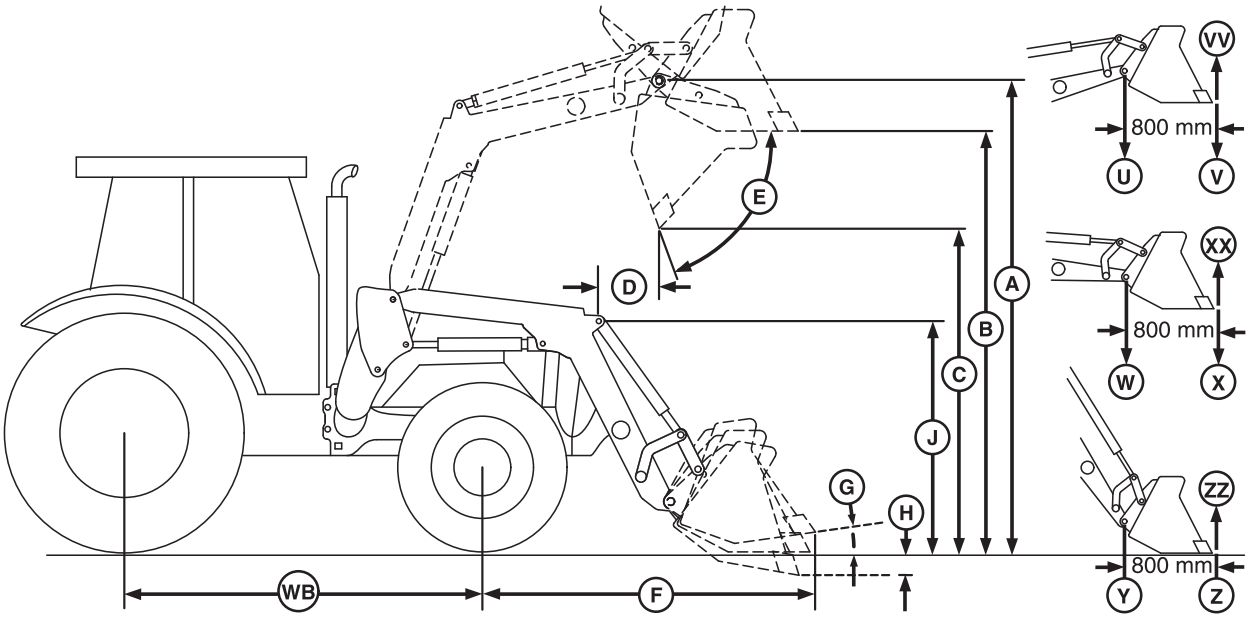
Model 5100ML, 5115ML, and 5125ML (FT4) MFWD Tractors[a]			
		Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1200 kg (2646 lb)	3-Point Hitch 1200 kg (2646 lb) Plus Rear Axle 150 kg (331 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	11.2R24		
Rear Tires	16.9R30		
Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	72 L/min (19 gal/min)		
Maximum Pressure	20 000 kPa (200 bar) (2901 psi)		
Cycle Times (in seconds)			
Loader Raise Time	3.5		
Loader Lower Time	2.7		
Bucket Dump Time	2.2		
Bucket Rollback Time	2.2		
Lift Height (Maximum)			
To Pivot Pin (A)	3500 (138 in)		
Clearance			
Bucket Level (B)	3306 mm (130 in)		
Bucket Dumped (C)	2460 mm (97 in)		
Digging Depth (H)	126 mm (5 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	956 mm (38 in)
Bucket on Ground with Bucket Leveled (F)	2560 mm (101 in)
Angles (Maximum)	
Dump (E)	75°
Dump at Ground	97°
Rollback (G)	42°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1421 kg (3133 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1527 kg (3366 lb)
To 1500 mm (59 in) (W) at Pivot Pin	1988 kg (4383 lb)
Breakout Force	
At Pivot Pin (Y)	2598 kg-force (5728 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2281 kg-force (5029 lbf)

rd91939,1706088552141-19-24JAN24

540M Non Self-Leveling Loader Specifications on 5100ML, 5105ML, 5115ML, 5120ML, and 5125ML, 5130ML (FT4) MFWD Tractors



W28414—UN—11JUN18

Model 5100ML, 5115ML, and 5125ML (FT4) MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 600 kg (1323 lb)	3-Point Hitch 700 kg (1544 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	11.2R24		
Rear Tires	16.9R30		
Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	72 L/min (19 gal/min)		
Maximum Pressure	20 000 kPa (200 bar) (2901 psi)		
Cycle Times (in seconds)			
Loader Raise Time	4.2		
Loader Lower Time	3.1		
Bucket Dump Time	3.2		
Bucket Rollback Time	2.2		
Lift Height (Maximum)			
To Pivot Pin (A)	3505 (138 in)		
Clearance			
Bucket Level (B)	3310 mm (130 in)		
Bucket Dumped (C)	2465 mm (97 in)		
Digging Depth (H)	125 mm (5 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	951 mm (37 in)
Bucket on Ground with Bucket Leveled (F)	2560 mm (101 in)
Angles (Maximum)	
Dump (E)	74°
Dump at Ground	155°
Rollback (G)	44°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1720 kg (3792 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1191 kg (2626 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2404 kg (5300 lb)
Breakout Force	
At Pivot Pin (Y)	3157 kg-force (6960 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2290 kg-force (5049 lbf)

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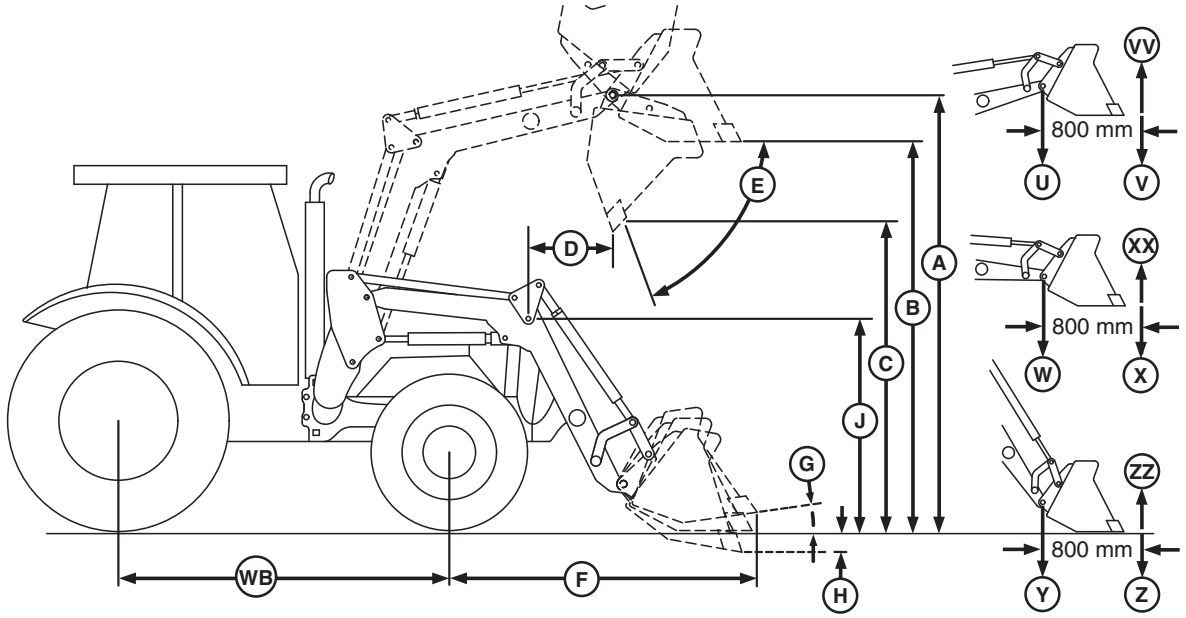
540M Mechanical Self-Leveling Loader Specifications on 5085M, 5095M, 5100M, 5105M, and 5115M (IT4 and T3) MFWD Tractors



W28413—UN—11JUN18

Model 5085M, 5095M, 5100M, 5105M, and 5115M (IT4 and T3) MFWD Tractors[a]			
		Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb) Plus Rear Axle 360 kg (794 lb)	3-Point Hitch 1000 kg (2205 lb) Plus Rear Axle 360 kg (794 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	12.4R24		
Rear Tires	16.9R30		
Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	70 L/min (18 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	3.70		
Loader Lower Time	2.80		
Bucket Dump Time	2.20		
Bucket Rollback Time	2.20		
Lift Height (Maximum)			
To Pivot Pin (A)	3501 (138 in)		
Clearance			
Bucket Level (B)	3307 mm (130 in)		
Bucket Dumped (C)	2462 mm (97 in)		

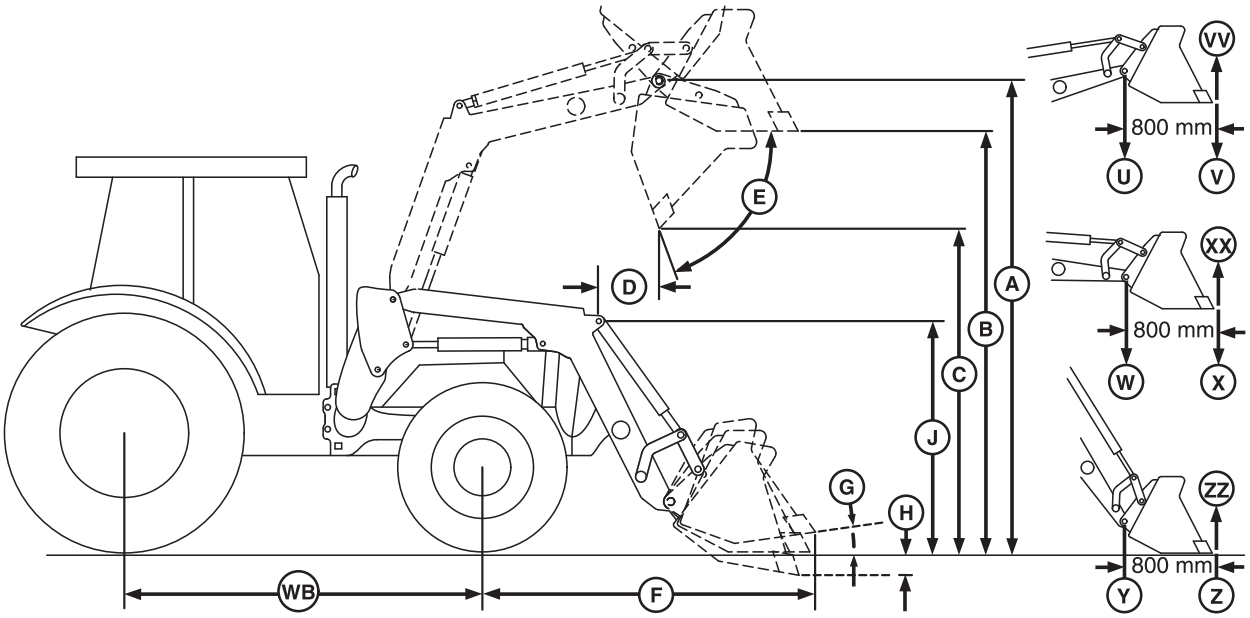
Model 5085M, 5095M, 5100M, 5105M, and 5115M (IT4 and T3) MFWD Tractors[a]	
Digging Depth (H)	123 mm (5 in)

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1048 mm (41 in)
Bucket on Ground with Bucket Leveled (F)	2560 mm (101 in)
Angles (Maximum)	
Dump (E)	73°
Dump at Ground	99°
Rollback (G)	43°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1390 kg (3058 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1501 kg (3302 lb)
To 1500 mm (59 in) (W) at Pivot Pin	1927 kg (4239 lb)
Breakout Force	
At Pivot Pin (Y)	2506 kg-force (5513 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2201 kg-force (4842 lbf)

OUO6064,0001D07-19-04JAN23

540M Non Self-Leveling Loader Specifications on 5085M, 5095M, 5100M, 5105M, and 5115M (IT4 and T3) MFWD Tractors



W28414—UN—11JUN18

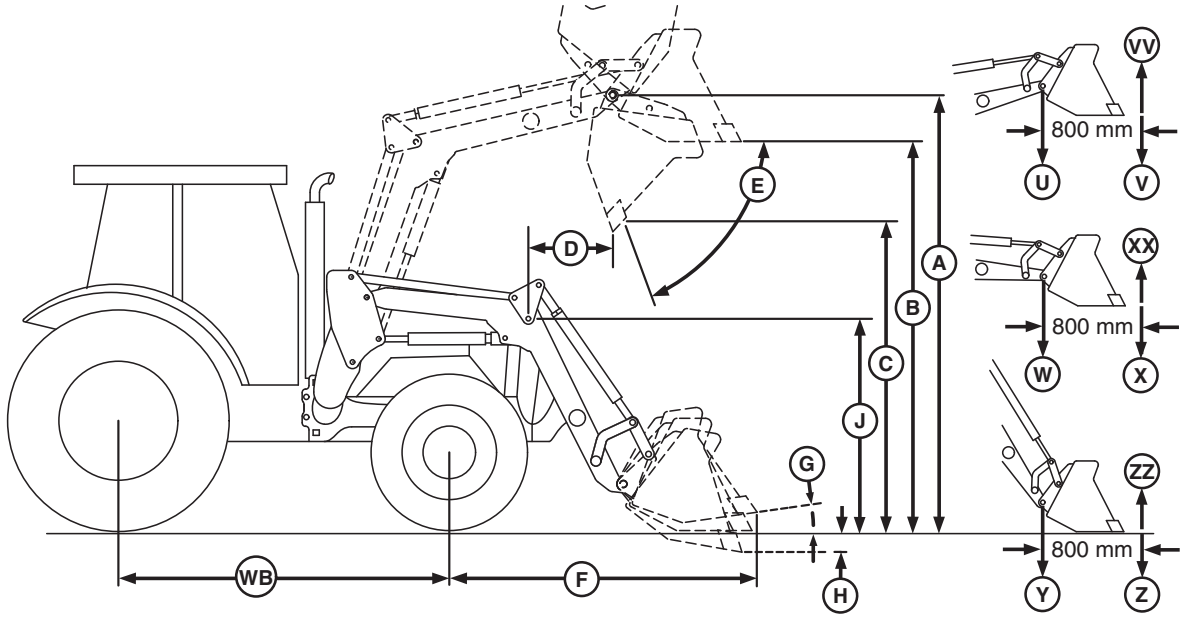
Model 5085M, 5095M, 5100M, 5105M, and 5115M (IT4 and T3) MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 730 kg (1610 lb)	3-Point Hitch 730 kg (1610 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	12.4R24		
Rear Tires	16.9R30		
Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	70 L/min (18.5 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	4.30		
Loader Lower Time	3.20		
Bucket Dump Time	3.30		
Bucket Rollback Time	2.20		
Lift Height (Maximum)			
To Pivot Pin (A)	3506 (138 in)		
Clearance			
Bucket Level (B)	3312 mm (130 in)		
Bucket Dumped (C)	2467 mm (97 in)		
Digging Depth (H)	122 mm (5 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1043 mm (41 in)
Bucket on Ground with Bucket Leveled (F)	2560 mm (101 in)
Angles (Maximum)	
Dump (E)	73°
Dump at Ground	155°
Rollback (G)	44°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1670 kg (3674 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1153 kg (2537 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2325 kg (5115 lb)
Breakout Force	
At Pivot Pin (Y)	3039 kg-force (6686 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2207 kg-force (4855 lbf)

OUO6064,0001D08-19-04JAN23

540M Mechanical Self-Leveling Loader Specifications on 5085M, 5090M, 5100M, and 5115M (FT4) MFWD Tractors



W28413—UN—11JUN18

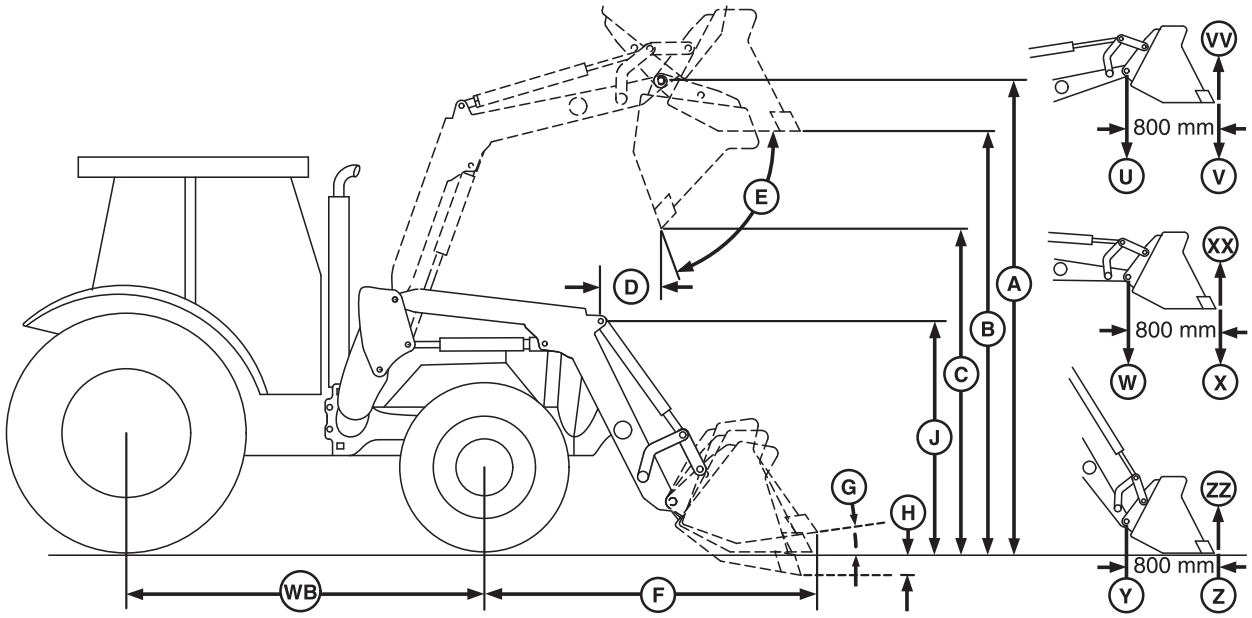
Model 5085M, 5090M, 5100M, and 5115M (FT4) MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1200 kg (2646 lb)	3-Point Hitch 1200 kg (2646 lb) Plus Rear Axle 150 kg (331 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	12.4R24		
Rear Tires	16.9R30		
Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	70 L/min (18 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	3.70		
Loader Lower Time	2.80		
Bucket Dump Time	2.20		
Bucket Rollback Time	2.20		
Lift Height (Maximum)			
To Pivot Pin (A)	3501 (138 in)		
Clearance			
Bucket Level (B)	3307 mm (130 in)		
Bucket Dumped (C)	2462 mm (97 in)		
Digging Depth (H)	123 mm (5 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1048 mm (41 in)
Bucket on Ground with Bucket Leveled (F)	2560 mm (101 in)
Angles (Maximum)	
Dump (E)	73°
Dump at Ground	99°
Rollback (G)	43°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1390 kg (3058 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1501 kg (3302 lb)
To 1500 mm (59 in) (W) at Pivot Pin	1927 kg (4239 lb)
Breakout Force	
At Pivot Pin (Y)	2506 kg-force (5513 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2201 kg-force (4842 lbf)

OUO6064,0001D09-19-04JAN23

540M Non Self-Leveling Loader Specifications on 5085M, 5090M, 5100M, and 5115M (FT4) MFWD Tractors



W28414—UN—11JUN18

Model 5085M, 5090M, 5100M, and 5115M (FT4) MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 600 kg (1323 lb)	3-Point Hitch 700 kg (1544 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	12.4R24		
Rear Tires	16.9R30		
Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	70 L/min (18.5 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	4.30		
Loader Lower Time	3.20		
Bucket Dump Time	3.30		
Bucket Rollback Time	2.20		
Lift Height (Maximum)			
To Pivot Pin (A)	3506 (138 in)		
Clearance			
Bucket Level (B)	3312 mm (130 in)		
Bucket Dumped (C)	2467 mm (97 in)		
Digging Depth (H)	122 mm (5 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1043 mm (41 in)
Bucket on Ground with Bucket Leveled (F)	2560 mm (101 in)
Angles (Maximum)	
Dump (E)	73°
Dump at Ground	155°
Rollback (G)	44°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1670 kg (3674 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1153 kg (2537 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2325 kg (5115 lb)
Breakout Force	
At Pivot Pin (Y)	3039 kg-force (6686 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2207 kg-force (4855 lbf)

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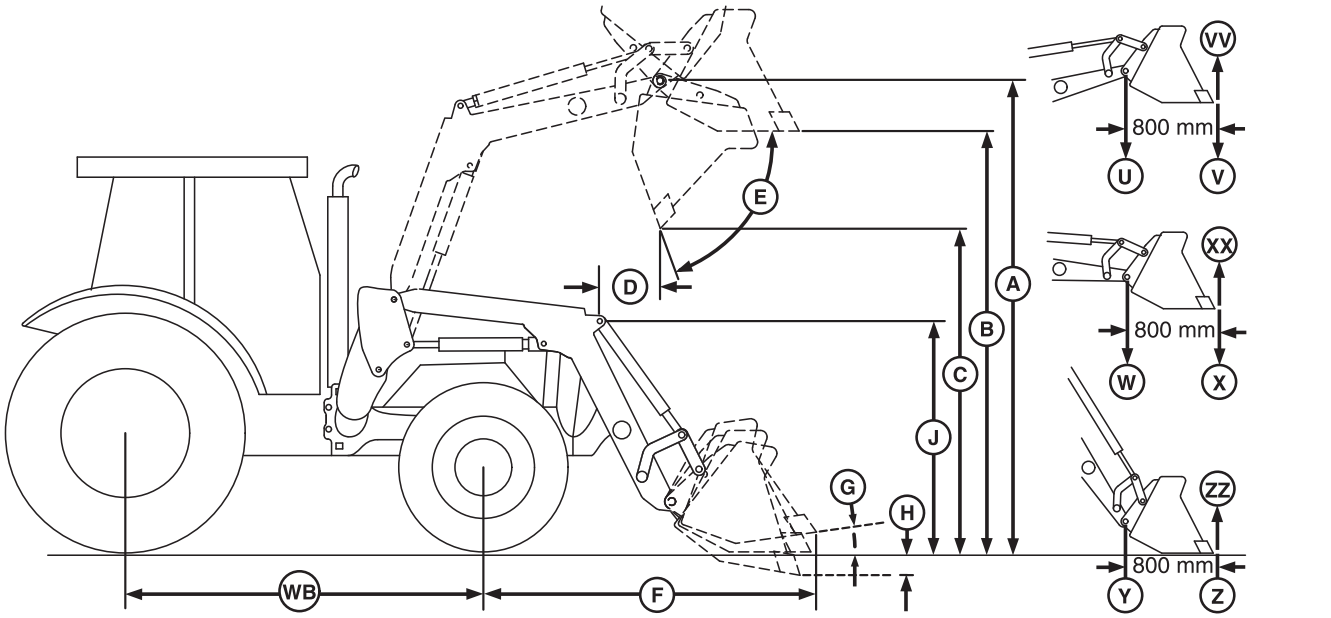
540M Non Self-Leveling Loader Specifications on 5083E, 5093E, and 5101E (T3) MFWD Tractors



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Model 5083E, 5093E, and 5101E (T3) MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 800 kg (1764 lb)	3-Point Hitch 800 kg (1764 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	12.4R24		
Rear Tires	16.9R30		
Heavy Duty Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	60 L/min (16 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	6.90		
Loader Lower Time	5.20		
Bucket Dump Time	5.30		
Bucket Rollback Time	3.60		
Lift Height (Maximum)			
To Pivot Pin (A)	3482 mm (137 in)		
Clearance			
Bucket Level (B)	3288 mm (129 in)		
Bucket Dumped (C)	2444 mm (96 in)		
Digging Depth (H)	142 mm (6 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1048 mm (41 in)
Bucket on Ground with Bucket Leveled (F)	2567 mm (101 in)
Angles (Maximum)	
Dump (E)	73°
Dump at Ground	153°
Rollback (G)	45°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1763 kg (3879 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1212 kg (2666 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2322 kg (5108 lb)
Breakout Force	
At Pivot Pin (Y)	2964 kg-force (6521 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2162 kg-force (4756 lbf)

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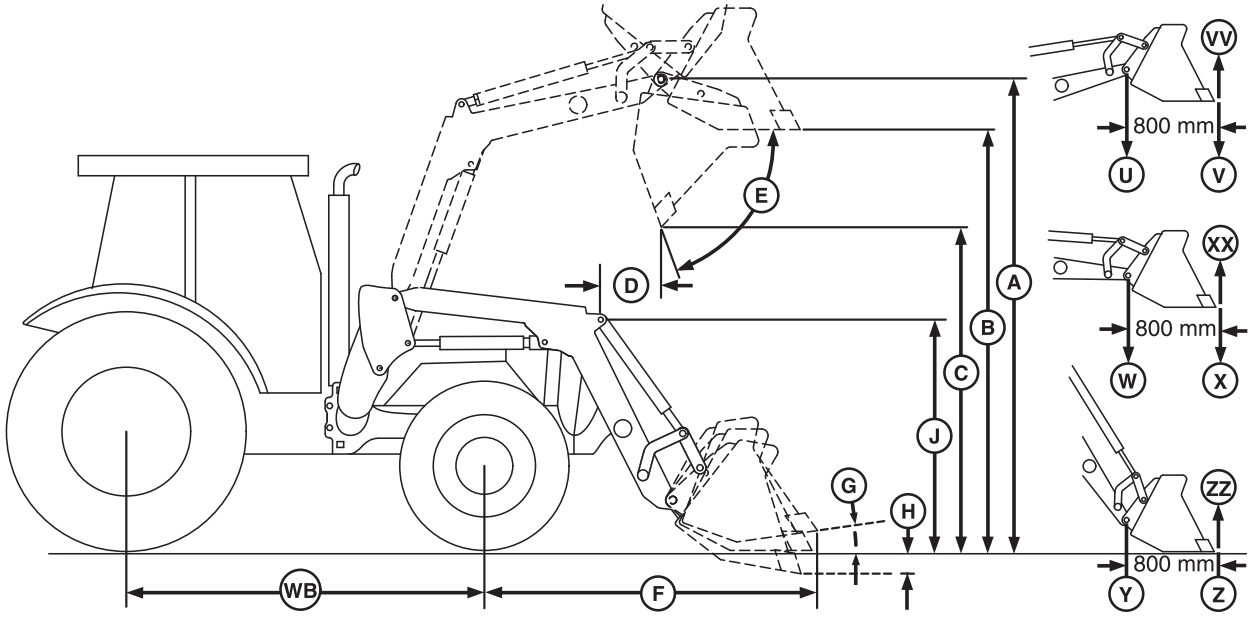
540M Non Self-Leveling Loader Specifications on 5085E (FT4 and IT4) MFWD Tractor



W28414—UN—11JUN18

Model 5085E (FT4 and IT4) MFWD Tractor[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 800 kg (1764 lb)	3-Point Hitch 800 kg (1764 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	12.4R24		
Rear Tires	16.9R30		
Heavy Duty Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	60 L/min (16 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	6.90		
Loader Lower Time	5.20		
Bucket Dump Time	5.30		
Bucket Rollback Time	3.60		
Lift Height (Maximum)			
To Pivot Pin (A)	3482 mm (137 in)		
Clearance			
Bucket Level (B)	3288 mm (129 in)		
Bucket Dumped (C)	2444 mm (96 in)		
Digging Depth (H)	143 mm (6 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1110 mm (44 in)
Bucket on Ground with Bucket Leveled (F)	2627 mm (103 in)
Angles (Maximum)	
Dump (E)	73°
Dump at Ground	153°
Rollback (G)	45°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1703 kg (3754 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1171 kg (2582 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2250 kg (4960 lb)
Breakout Force	
At Pivot Pin (Y)	2885 kg-force (6360 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2104 kg-force (4639 lbf)

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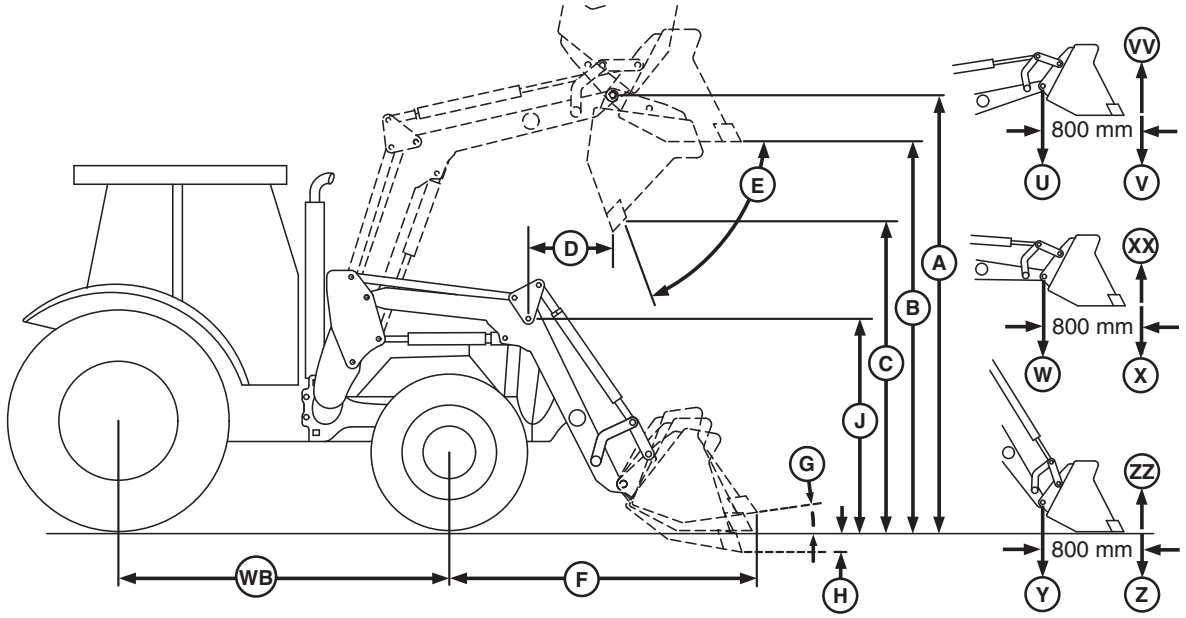
540M Mechanical Self-Leveling Loader Specifications on 6105R, 6115R, and 6125R MFWD Tractors



W28413—UN—11JUN18

Model 6105R, 6115R, and 6125R MFWD Tractors[a]			
		Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb)	3-Point Hitch 1000 kg (2205 lb)
	Option 2	Rear Axle Only 1300 kg (2867 lb)	Rear Axle Only 1800 kg (3087 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	13.6R24		
Rear Tires	18.4R34		
Heavy Duty Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	114 L/min (30 gal/min)		
Maximum Pressure	20 100 kPa (200 bar) (2900 psi)		
Cycle Times (in seconds)			
Loader Raise Time	2.23		
Loader Lower Time	1.67		
Bucket Dump Time	1.36		
Bucket Rollback Time	1.36		
Lift Height (Maximum)			
To Pivot Pin (A)	3564 mm (140 in)		
Clearance			
Bucket Level (B)	3369 mm (133 in)		
Bucket Dumped (C)	2524 mm (99 in)		

Model 6105R, 6115R, and 6125R MFWD Tractors[a]	
Digging Depth (H)	60 mm (2 in)

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	877 mm (35 in)
Bucket on Ground with Bucket Leveled (F)	2358 mm (93 in)
Angles (Maximum)	
Dump (E)	73°
Dump at Ground	96°
Rollback (G)	43°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1381 kg (3038 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1493 kg (3285 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2011 kg (4424 lb)
Breakout Force	
At Pivot Pin (Y)	2654 kg-force (5839 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2314 kg-force (5091 lbf)

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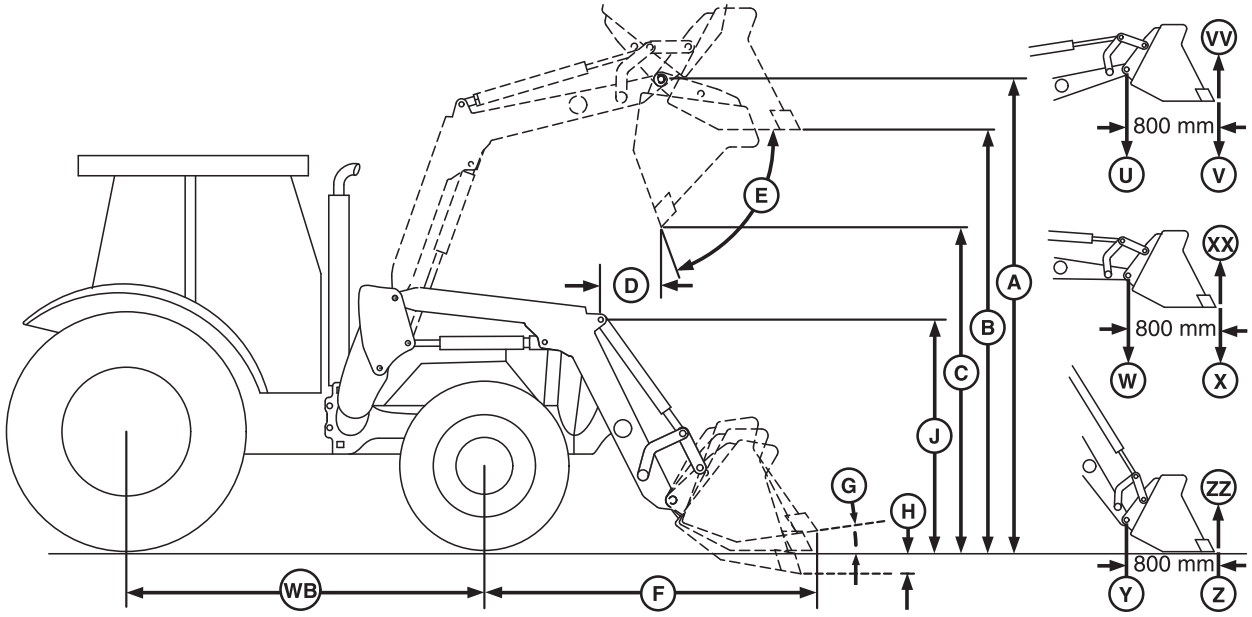
540M Non Self-Leveling Loader Specifications on 6105R, 6115R, and 6125R MFWD Tractors



W28414—UN—11JUN18

Model 6105R, 6115R, and 6125R MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 800 kg (1764 lb)	3-Point Hitch 800 kg (1764 lb)
	Option 2	Rear Axle Only 900 kg (1985 lb)	Rear Axle Only 1400 kg (3087 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	13.6R24		
Rear Tires	18.4R34		
Heavy Duty Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	114 L/min (30 gal/min)		
Maximum Pressure	20 100 kPa (200 bar) (2900 psi)		
Cycle Times (in seconds)			
Loader Raise Time	2.62		
Loader Lower Time	1.96		
Bucket Dump Time	2.03		
Bucket Rollback Time	1.36		
Lift Height (Maximum)			
To Pivot Pin (A)	3568 mm (140 in)		
Clearance			
Bucket Level (B)	3374 mm (133 in)		
Bucket Dumped (C)	2529 mm (100 in)		
Digging Depth (H)	60 mm (2 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	872 mm (34 in)
Bucket on Ground with Bucket Leveled (F)	2358 mm (93 in)
Angles (Maximum)	
Dump (E)	73°
Dump at Ground	156°
Rollback (G)	43°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1732 kg (3810 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1195 kg (2629 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2425 kg (5335 lb)
Breakout Force	
At Pivot Pin (Y)	3176 kg-force (6987 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2294 kg-force (5047 lbf)

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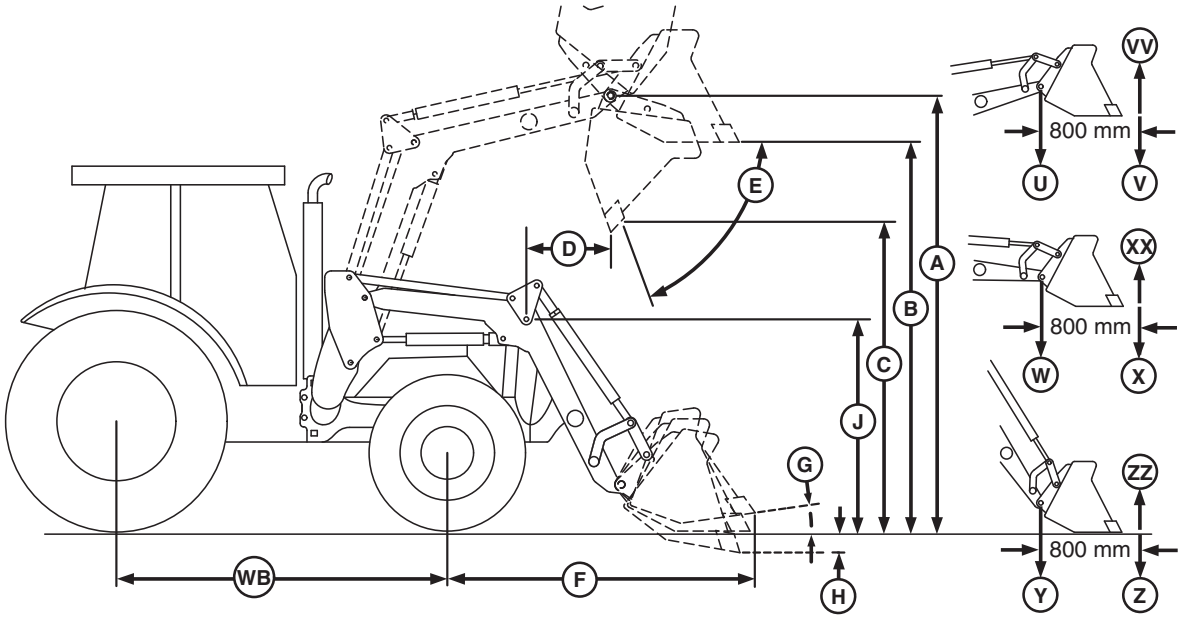
540M Mechanical Self-Leveling Loader Specifications on 6430 Premium MFWD Tractor



W28413—UN—11JUN18

Model 6430P MFWD Tractor[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 1000 kg (2205 lb)	3-Point Hitch 1000 kg (2205 lb)
	Option 2	Rear Axle Only 1300 kg (2867 lb)	Rear Axle Only 1800 kg (3087 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	13.6R24		
Rear Tires	18.4R34		
Heavy Duty Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	110 L/min (29 gal/min)		
Maximum Pressure	19 995 kPa (200 bar) (2900 psi)		
Cycle Times (in seconds)			
Loader Raise Time	2.40		
Loader Lower Time	1.80		
Bucket Dump Time	1.40		
Bucket Rollback Time	1.40		
Lift Height (Maximum)			
To Pivot Pin (A)	3548 mm (140 in)		
Clearance			
Bucket Level (B)	3354 mm (132 in)		
Bucket Dumped (C)	2507 mm (99 in)		
Digging Depth (H)	60 mm (2 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1122 mm (44 in)
Bucket on Ground with Bucket Leveled (F)	2422 mm (95 in)
Angles (Maximum)	
Dump (E)	73°
Dump at Ground	96°
Rollback (G)	43°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1362 kg (3996 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1464 kg (3221 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2004 kg (4409 lb)
Breakout Force	
At Pivot Pin (Y)	2662 kg-force (5856 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2325 kg-force (5115 lbf)

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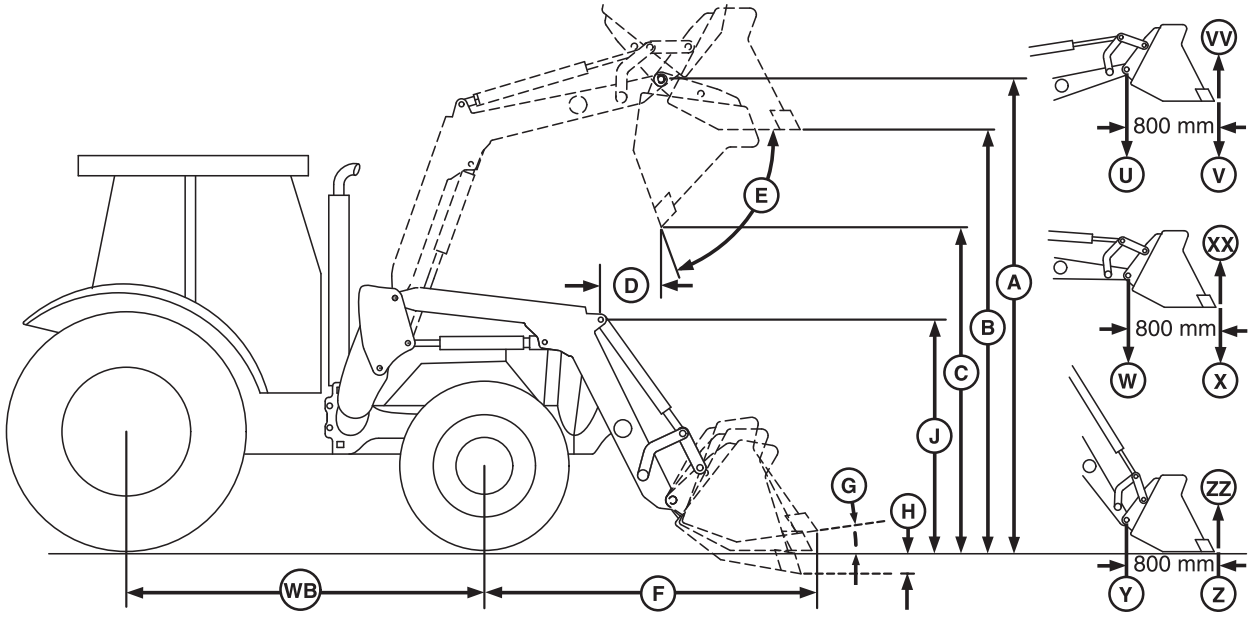
540M Non Self-Leveling Loader Specifications on 6430 Premium MFWD Tractor



W28414—UN—11JUN18

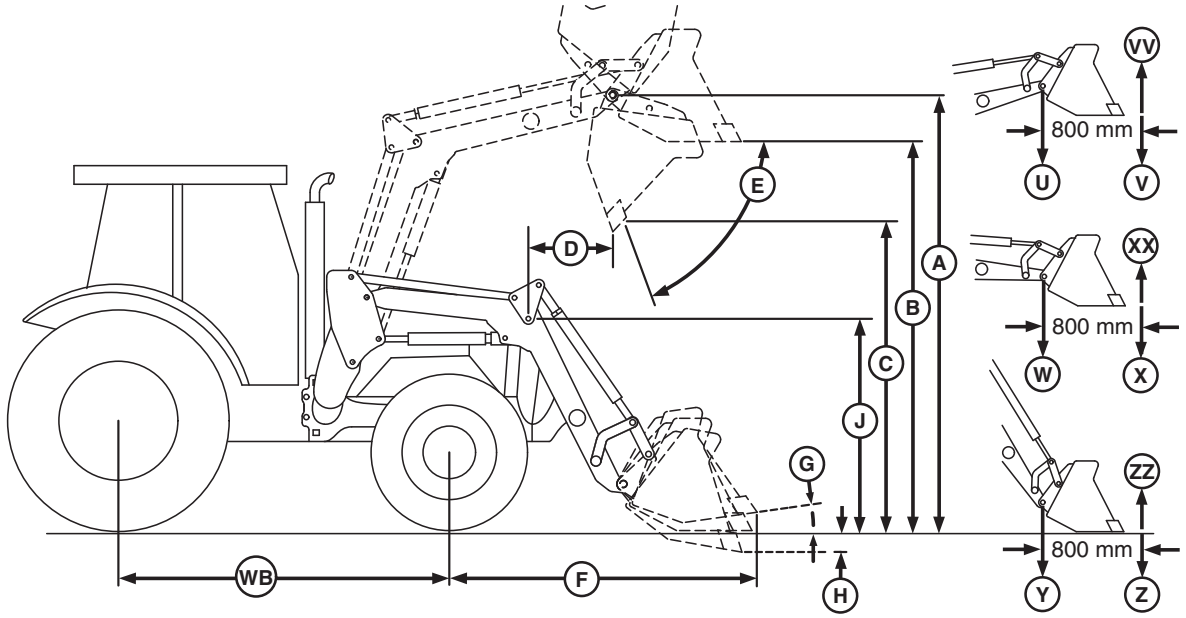
Model 6430P MFWD Tractor[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 450 kg (992 lb)	3-Point Hitch 450 kg (992 lb)
	Option 2	Rear Axle Only 775 kg (1709 lb)	Rear Axle Only 1275 kg (2811 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	13.6R24		
Rear Tires	18.4R34		
Heavy Duty Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	110 L/min (29 gal/min)		
Maximum Pressure	19 995 kPa (200 bar) (2900 psi)		
Cycle Times (in seconds)			
Loader Raise Time	2.70		
Loader Lower Time	2.00		
Bucket Dump Time	2.10		
Bucket Rollback Time	1.40		
Lift Height (Maximum)			
To Pivot Pin (A)	3533 mm (139 in)		
Clearance			
Bucket Level (B)	3339 mm (131 in)		
Bucket Dumped (C)	2493 mm (98 in)		
Digging Depth (H)	60 mm (2 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1136 mm (45 in)
Bucket on Ground with Bucket Leveled (F)	2420 mm (95 in)
Angles (Maximum)	
Dump (E)	73°
Dump at Ground	156°
Rollback (G)	43°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1566 kg (3445 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1088 kg (2394 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2296 kg (5051 lb)
Breakout Force	
At Pivot Pin (Y)	3076 kg-force (6767 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2222 kg-force (4888 lbf)

OUO6064,0001D10-19-04JAN23

540M Mechanical Self-Leveling Loader Specifications on 6100D, 6115D, 6130D, and 6140D (T3) MFWD Tractors



W28413—UN—11JUN18

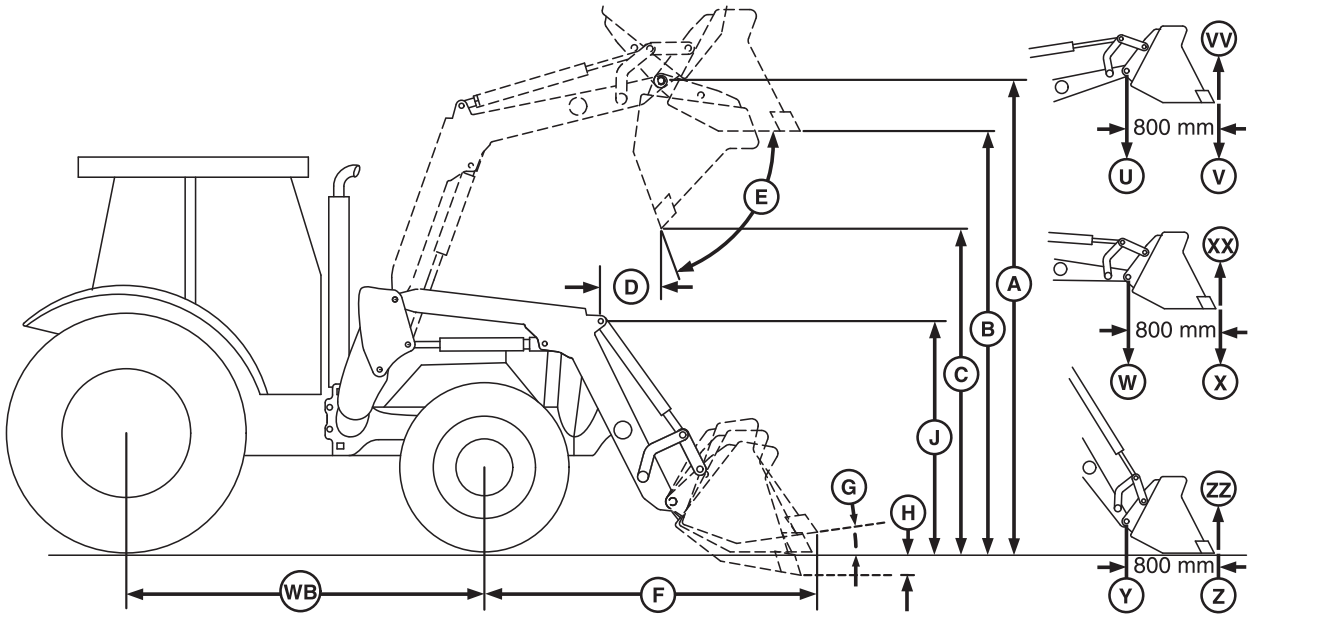
Model 6100D, 6115D, 6130D, and 6140D (T3) Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 750 kg (1654 lb)	3-Point Hitch 750 kg (1654 lb)
	Option 2	Rear Axle Only 1300 kg (2867 lb)	Rear Axle Only 1800 kg (3087 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	14.9R24		
Rear Tires	18.4R38		
Heavy Duty Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	67 L/min (18 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	3.40		
Loader Lower Time	2.60		
Bucket Dump Time	2.00		
Bucket Rollback Time	2.00		
Lift Height (Maximum)			
To Pivot Pin (A)	3540 mm (139 in)		
Clearance			
Bucket Level (B)	3346 mm (132 in)		
Bucket Dumped (C)	2500 mm (98 in)		
Digging Depth (H)	86 mm (3 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	968 mm (38 in)
Bucket on Ground with Bucket Leveled (F)	2324 mm (91 in)
Angles (Maximum)	
Dump (E)	72°
Dump at Ground	96°
Rollback (G)	43°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1315 kg (2893 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1414 kg (3111 lb)
To 1500 mm (59 in) (W) at Pivot Pin	1938 kg (4264 lb)
Breakout Force	
At Pivot Pin (Y)	2577 kg-force (5669 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2252 kg-force (4954 lbf)

OUO6064,0001D11-19-04JAN23

540M Non Self-Leveling Loader Specifications on 6100D, 6115D, 6130D, and 6140D (T3) MFWD Tractors



W28414—UN—11JUN18

Model 6100D, 6115D, 6130D, and 6140D (T3) Tractors[a]			
		Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	**Option 1**	3-Point Hitch 400 kg (882 lb)	3-Point Hitch 400 kg (882 lb)
	Option 2	Rear Axle Only 700 kg (1544 lb)	Rear Axle Only 1200 kg (2646 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	14.9R24		
Rear Tires	18.4R38		
Heavy Duty Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	67 L/min (18 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	4.30		
Loader Lower Time	3.20		
Bucket Dump Time	3.30		
Bucket Rollback Time	2.20		
Lift Height (Maximum)			
To Pivot Pin (A)	3525 mm (139 in)		
Clearance			
Bucket Level (B)	3330 mm (131 in)		
Bucket Dumped (C)	2484 mm (98 in)		
Digging Depth (H)	86 mm (3 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	985 mm (39 in)
Bucket on Ground with Bucket Leveled (F)	2483 mm (98 in)
Angles (Maximum)	
Dump (E)	72°
Dump at Ground	155°
Rollback (G)	44°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1629 kg (3584 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1132 kg (2490 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2329 kg (5124 lb)
Breakout Force	
At Pivot Pin (Y)	3094 kg-force (6807 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2236 kg-force (4919 lbf)

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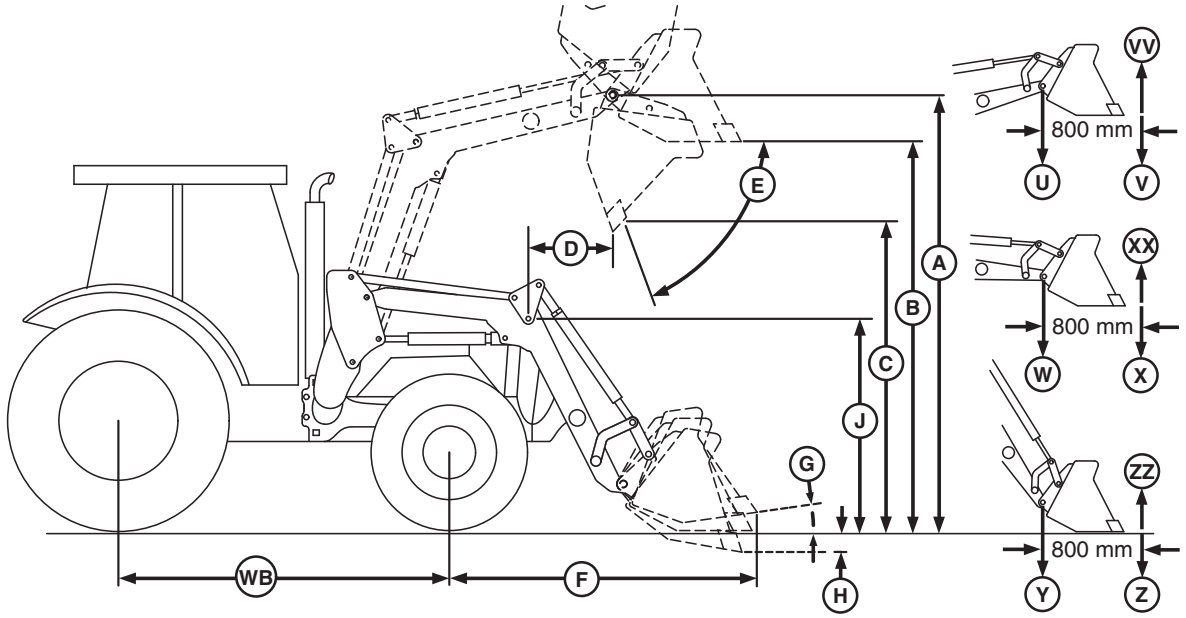
540M Mechanical Self-Leveling Loader Specifications on 6105D, 6115D, 6130D, and 6140D (IT4) MFWD Tractors



W28413—UN—11JUN18

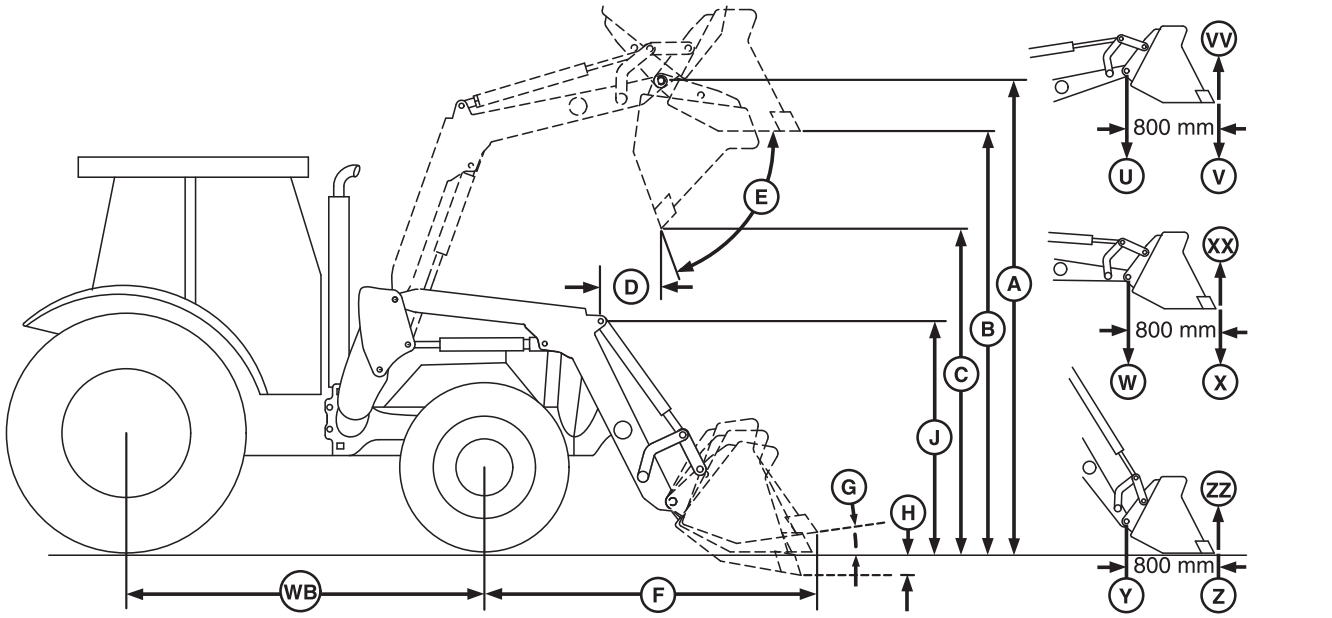
Model 6105D, 6115D, 6130D, and 6140D (IT4) Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	Option 1	3-Point Hitch 1000 kg (2205 lb)	3-Point Hitch 1000 kg (2205 lb)
	Option 2	Rear Axle Only 1450 kg (3197 lb)	Rear Axle Only 1950 kg (4300 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	14.9R24		
Rear Tires	18.4R38		
Heavy Duty Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	76 L/min (20 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	3.36		
Loader Lower Time	2.52		
Bucket Dump Time	2.05		
Bucket Rollback Time	2.05		
Lift Height (Maximum)			
To Pivot Pin (A)	3578 mm (141 in)		
Clearance			
Bucket Level (B)	3383 mm (133 in)		
Bucket Dumped (C)	2538 mm (100 in)		
Digging Depth (H)	47 mm (2 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1011 mm (40 in)
Bucket on Ground with Bucket Leveled (F)	2426 mm (96 in)
Angles (Maximum)	
Dump (E)	74°
Dump at Ground	96°
Rollback (G)	42°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1373 kg (3021 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1481 kg (3258 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2015 kg (4433 lb)
Breakout Force	
At Pivot Pin (Y)	2671 kg-force (5876 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2325 kg-force (5115 lbf)

OUO6064,0001D13-19-04JAN23

540M Non Self-Leveling Loader Specifications on 6105D, 6115D, 6130D, and 6140D (IT4) MFWD Tractors



W28414—UN—11JUN18

Model 6105D, 6115D, 6130D, and 6140D (IT4) Tractors[a]			

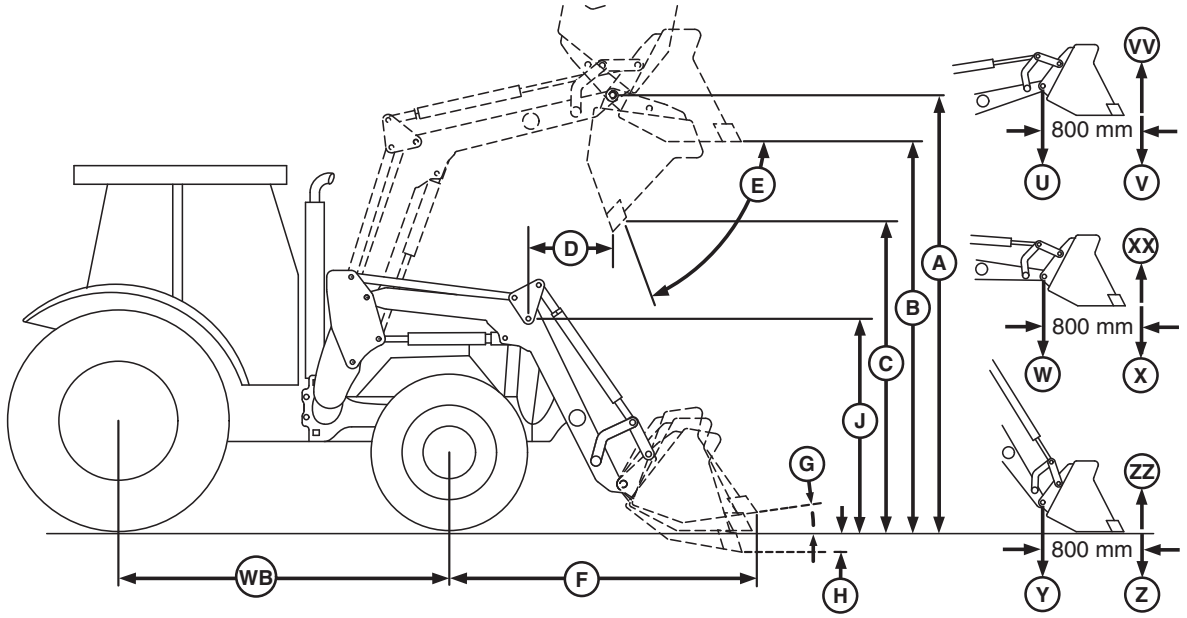
[a] *(Specifications and design subject to change without notice)*

Model 6105D, 6115D, 6130D, and 6140D (IT4) Tractors[a]			
		Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	**Option 1**	3-Point Hitch 500 kg (1103 lb)	3-Point Hitch 500 kg (1103 lb)
	Option 2	Rear Axle Only 750 kg (1654 lb)	Rear Axle Only 1250 kg (2756 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	14.9R24		
Rear Tires	18.4R38		
Heavy Duty Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	75 L/min (20 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	3.94		
Loader Lower Time	2.96		
Bucket Dump Time	3.05		
Bucket Rollback Time	2.05		
Lift Height (Maximum)			
To Pivot Pin (A)	3562 mm (140 in)		
Clearance			
Bucket Level (B)	3368 mm (133 in)		
Bucket Dumped (C)	2521 mm (99 in)		
Digging Depth (H)	69 mm (3 in)		

Model 6105D, 6115D, 6130D, and 6140D (IT4) Tractors[a]	
Reach	
At Maximum Lift Height with Bucket Dumped (D)	1028 mm (40 in)
Bucket on Ground with Bucket Leveled (F)	2428 mm (96 in)
Angles (Maximum)	
Dump (E)	75°
Dump at Ground	157°
Rollback (G)	42°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1643 kg (3615 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1139 kg (2506 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2346 kg (5161 lb)
Breakout Force	
At Pivot Pin (Y)	3111 kg-force (6844 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2243 kg-force (4935 lbf)

OUO6064,0001D14-19-13JUN23

540M Mechanical Self-Leveling Loader Specifications on 6100E, 6105E, 6110E, 6115E, 6120E, 6125E (-001999), and 6130E (T0—T3) 4CYL MFWD Tractors



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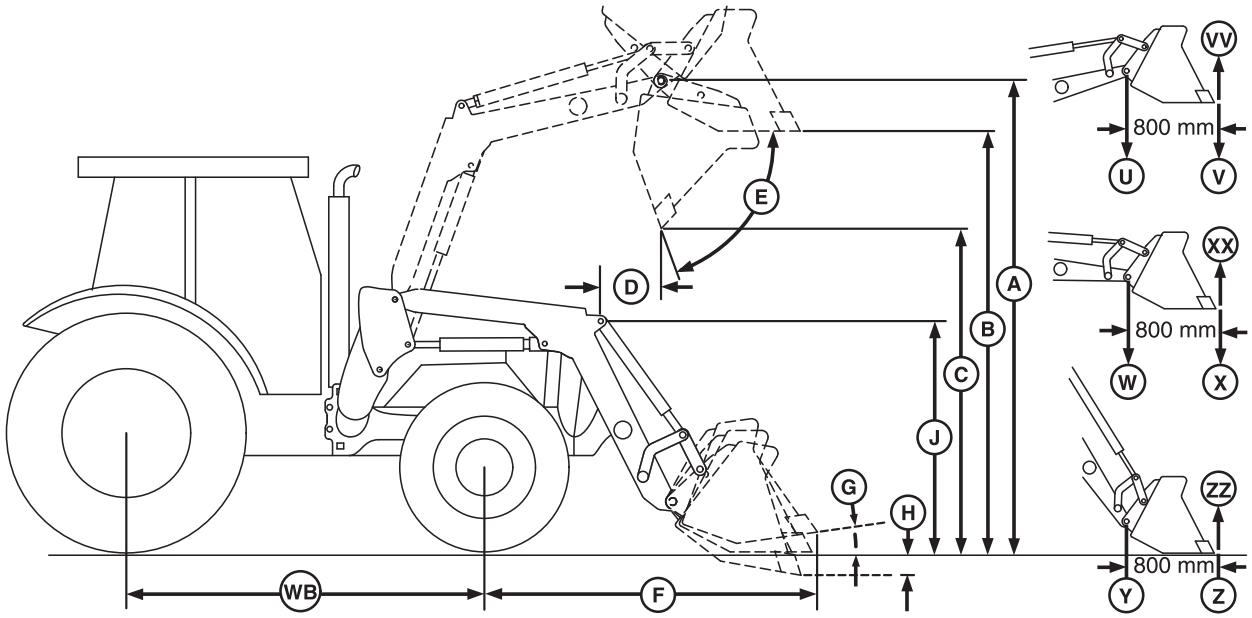
Models 6100E, 6105E, 6110E, 6115E, 6120E, 6125E (-001999), and 6130E (T0—T3) 4CYL MFWD Tractors[a]		
		Cab Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1244 kg (2743 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.	
Front Tires	14.9R24	
Rear Tires	18.4R38	
Materials Bucket		
Width	1850 mm (73 in)	
Length	—	
Mass	236 kg (520 lb)	
Hydraulic System		
Rated Flow	80 L/min (21 gal/min)	
Maximum Pressure	20 100 kPa (200 bar) (2900 psi)	
Cycle Times (In Seconds)		
Loader Raise Time	4.2	
Loader Lower Time	3.2	
Bucket Dump Time	2.6	
Bucket Rollback Time	2.6	
Lift Height (Maximum)		
To Pivot Pin (A)	3595 mm (142 in)	
Clearance		
Bucket Level (B)	3397 mm (134 in)	
Bucket Dumped (C)	2554 mm (101 in)	
Digging Depth (H)	33 mm (1 in)	

[a] *Specifications and design subject to change without notice.*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1229 mm (48 in)
Bucket on Ground with Bucket Leveled (F)	2437 mm (96 in)
Angles (Maximum)	
Dump (E)	74°
Dump at Ground	94°
Rollback (G)	42°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1341 kg (2955 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1461 kg (3220 lb)
To 1500 mm (59 in) (W) at Pivot Pin	1969 kg (4339 lb)
Breakout Force	
At Pivot Pin (Y)	2609 kgf (5750 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2266 kgf (4994 lbf)

OUO6064,0003173-19-15JUN23

540M Non Self-Leveling Loader Specifications on 6100E, 6105E, 6110E, 6115E, 6125E (-001999), and 6130E (T0—T3) 4CYL MFWD Tractors



W28414—UN—11JUN18

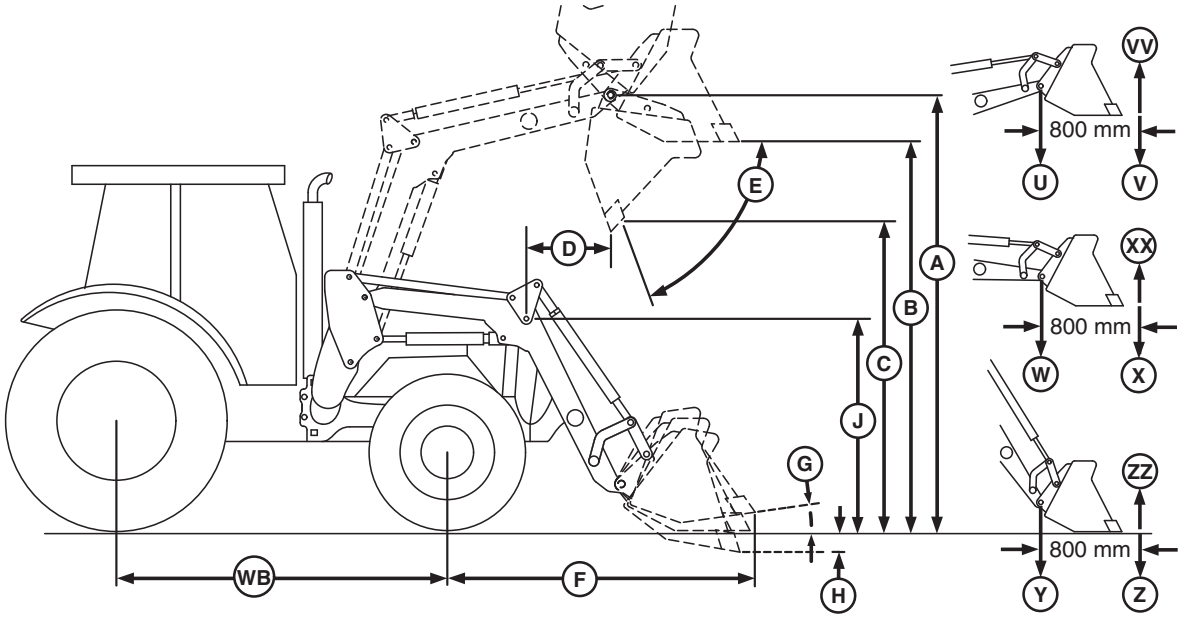
Models 6100E, 6105E, 6110E, 6115E, 6120E, 6125E (-001999), and 6130E (T0—T3) 4CYL MFWD Tractors[a]		
		Cab Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 700 kg (1544 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.	
Front Tires	14.9R24	
Rear Tires	18.4R38	
Materials Bucket		
Width	1850 mm (73 in)	
Length	—	
Mass	236 kg (520 lb)	
Hydraulic System		
Rated Flow	80 L/min (21 gal/min)	
Maximum Pressure	20 100 kPa (200 bar) (2900 psi)	
Cycle Times (in seconds)		
Loader Raise Time	5.0	
Loader Lower Time	3.7	
Bucket Dump Time	2.6	
Bucket Rollback Time	2.6	
Lift Height (Maximum)		
To Pivot Pin (A)	3619 mm (143 in)	
Clearance		
Bucket Level (B)	3422 mm (135 in)	
Bucket Dumped (C)	2620 mm (103 in)	
Digging Depth (H)	17 mm (1 in)	

[a] *Specifications and design subject to change without notice.*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	874 mm (34 in)
Bucket on Ground with Bucket Leveled (F)	2183 mm (86 in)
Angles (Maximum)	
Dump (E)	63°
Dump at Ground	146°
Rollback (G)	48°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1599 kg (3524 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1100 kg (2424 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2291 kg (5049 lb)
Breakout Force	
At Pivot Pin (Y)	3008 kgf (6629 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2166 kgf (4773 lbf)

OUO6064,0003174-19-15JUN23

540M Mechanical Self-Leveling Loader Specifications on 6135E, 6105E, 6120E (FT4) MFWD Tractor



W28413—UN—11JUN18

Model 6135E, 6105E, 6120E (FT4) Tractor[a]			
		Cab Tractors	**Open Operator Station Tractors**
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb)	3-Point Hitch 1000 kg (2205 lb)
	Option 2	Rear Axle Only 1450 kg (3197 lb)	Rear Axle Only 1950 kg (4300 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	14.9R24		
Rear Tires	18.4R38		
Heavy Duty Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	76 L/min (20 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	3.36		
Loader Lower Time	2.52		
Bucket Dump Time	2.05		
Bucket Rollback Time	2.05		
Lift Height (Maximum)			
To Pivot Pin (A)	3578 mm (141 in)		
Clearance			
Bucket Level (B)	3383 mm (133 in)		
Bucket Dumped (C)	2538 mm (100 in)		
Digging Depth (H)	47 mm (2 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1011 mm (40 in)
Bucket on Ground with Bucket Leveled (F)	2426 mm (96 in)
Angles (Maximum)	
Dump (E)	74°
Dump at Ground	96°
Rollback (G)	42°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1373 kg (3021 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1481 kg (3258 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2015 kg (4433 lb)
Breakout Force	
At Pivot Pin (Y)	2671 kg-force (5876 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2325 kg-force (5115 lbf)

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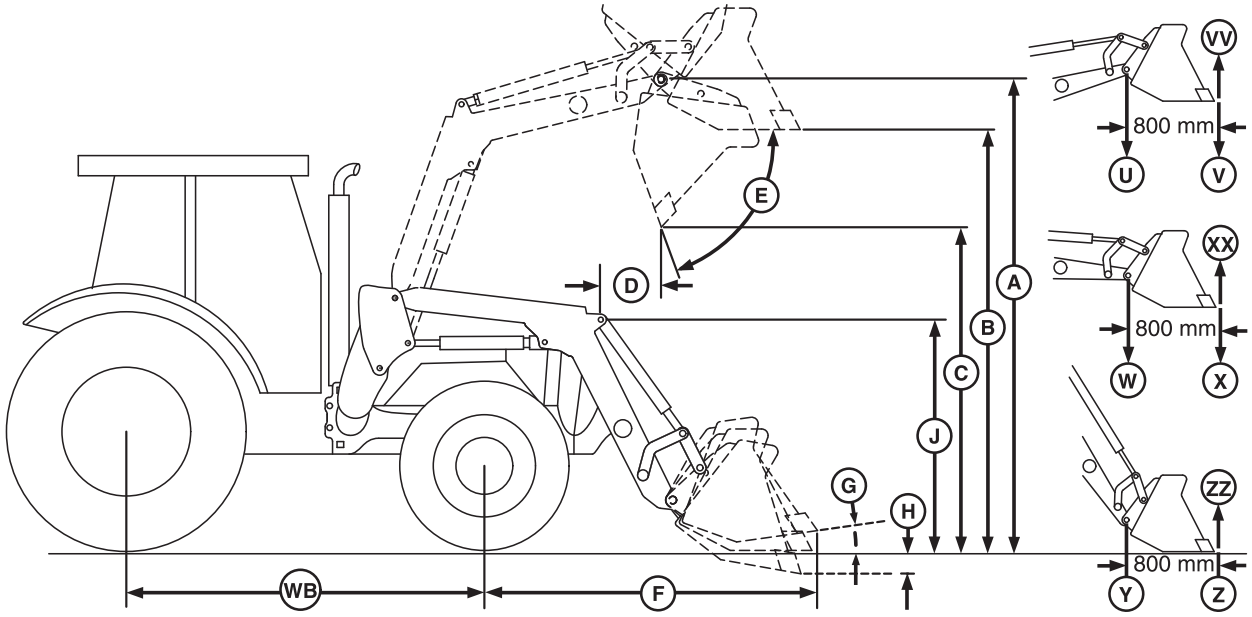
540M Non Self-Leveling Loader Specifications on 6135E, 6105E, 6120E (FT4) MFWD Tractor



W28414—UN—11JUN18

Model 6135E, 6105E, 6120E (FT4) Tractor[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 500 kg (1103 lb)	3-Point Hitch 500 kg (1103 lb)
	Option 2	Rear Axle Only 750 kg (1654 lb)	Rear Axle Only 1250 kg (2756 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	14.9R24		
Rear Tires	18.4R38		
Heavy Duty Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	75 L/min (20 gal/min)		
Maximum Pressure	19 498 kPa (195 bar) (2828 psi)		
Cycle Times (in seconds)			
Loader Raise Time	3.94		
Loader Lower Time	2.96		
Bucket Dump Time	3.05		
Bucket Rollback Time	2.05		
Lift Height (Maximum)			
To Pivot Pin (A)	3562 mm (140 in)		
Clearance			
Bucket Level (B)	3368 mm (133 in)		
Bucket Dumped (C)	2521 mm (99 in)		
Digging Depth (H)	69 mm (3 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1028 mm (40 in)
Bucket on Ground with Bucket Leveled (F)	2428 mm (96 in)
Angles (Maximum)	
Dump (E)	75°
Dump at Ground	157°
Rollback (G)	42°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1643 kg (3615 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1139 kg (2506 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2346 kg (5161 lb)
Breakout Force	
At Pivot Pin (Y)	3111 kg-force (6844 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2243 kg-force (4935 lbf)

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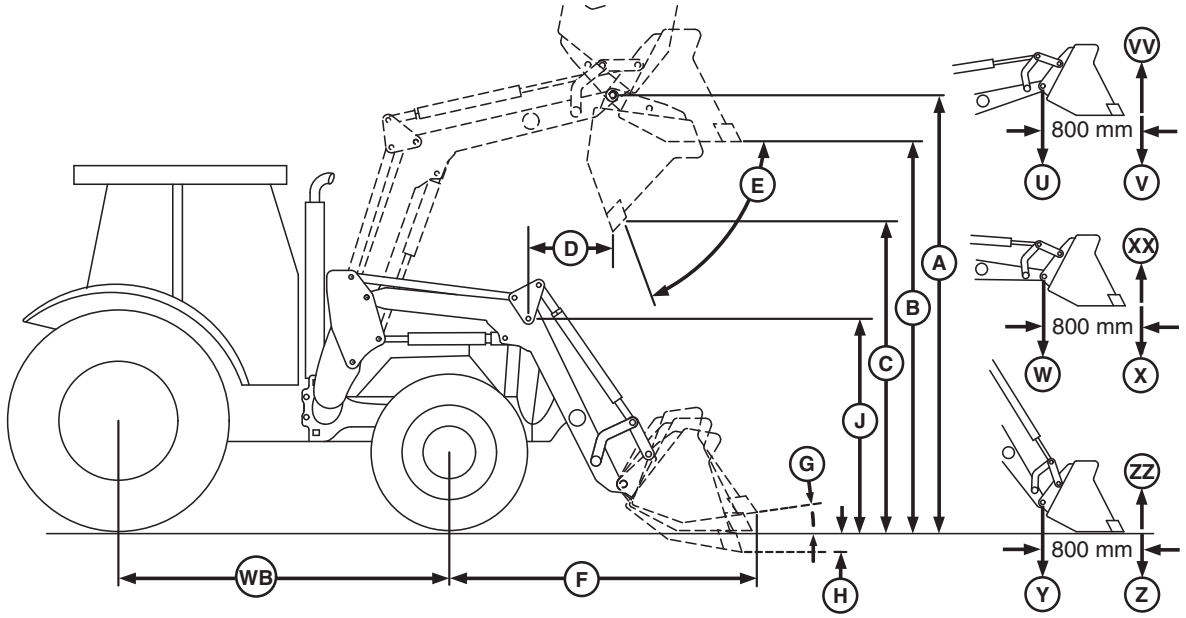
540M Mechanical Self-Leveling Loader Specifications on 6105M, 6115M, and 6125M MFWD Tractors



W28413—UN—11JUN18

Model 6105M, 6115M, and 6125M MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1100 kg (2426 lb)	3-Point Hitch 1000 kg (2205 lb)
	Option 2	Rear Axle Only 1400 kg (3087 lb)	Rear Axle Only 1900 kg (4190 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	13.6R24		
Rear Tires	18.4R34		
Heavy Duty Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	80 L/min (21 gal/min)		
Maximum Pressure	20 100 kPa (200 bar) (2900 psi)		
Cycle Times (in seconds)			
Loader Raise Time	3.18		
Loader Lower Time	2.39		
Bucket Dump Time	1.94		
Bucket Rollback Time	1.94		
Lift Height (Maximum)			
To Pivot Pin (A)	3567 mm (140 in)		
Clearance			
Bucket Level (B)	3372 mm (133 in)		
Bucket Dumped (C)	2528 mm (100 in)		
Digging Depth (H)	57 mm (2 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	874 mm (34 in)
Bucket on Ground with Bucket Leveled (F)	2355 mm (93 in)
Angles (Maximum)	
Dump (E)	74°
Dump at Ground	95°
Rollback (G)	43°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1383 kg (3049 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1496 kg (3298 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2012 kg (4436 lb)
Breakout Force	
At Pivot Pin (Y)	2655 kg-force (5853 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2314 kg-force (5101 lbf)

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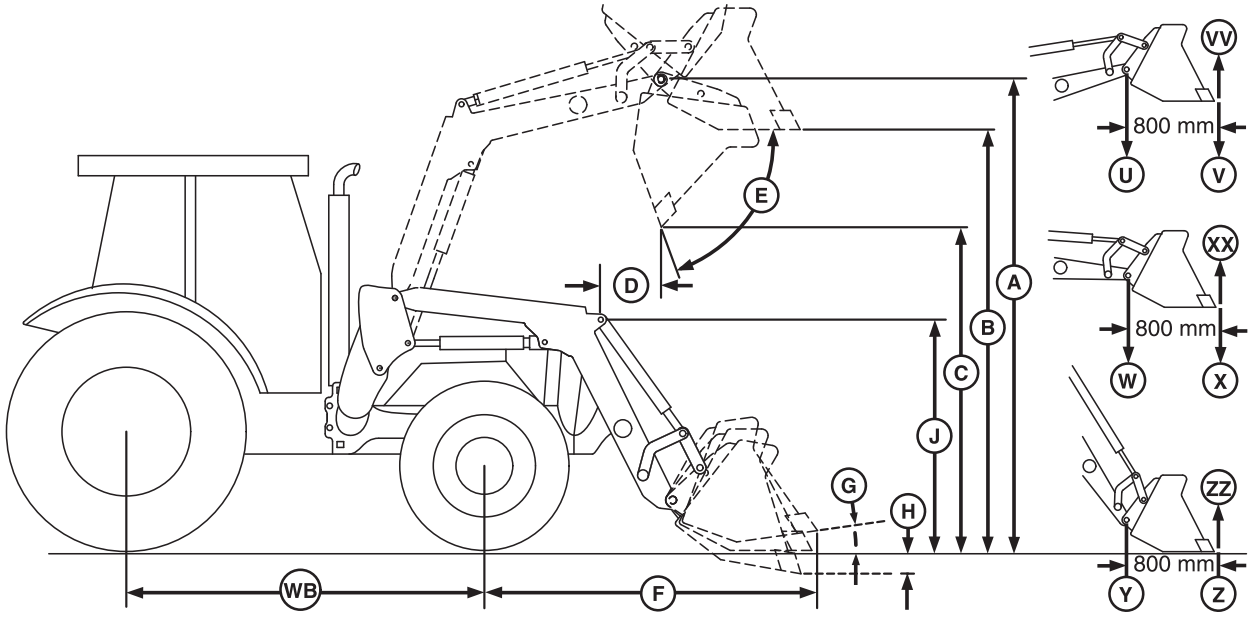
540M Non Self-Leveling Loader Specifications on 6105M, 6115M, and 6125M MFWD Tractors



W28414—UN—11JUN18

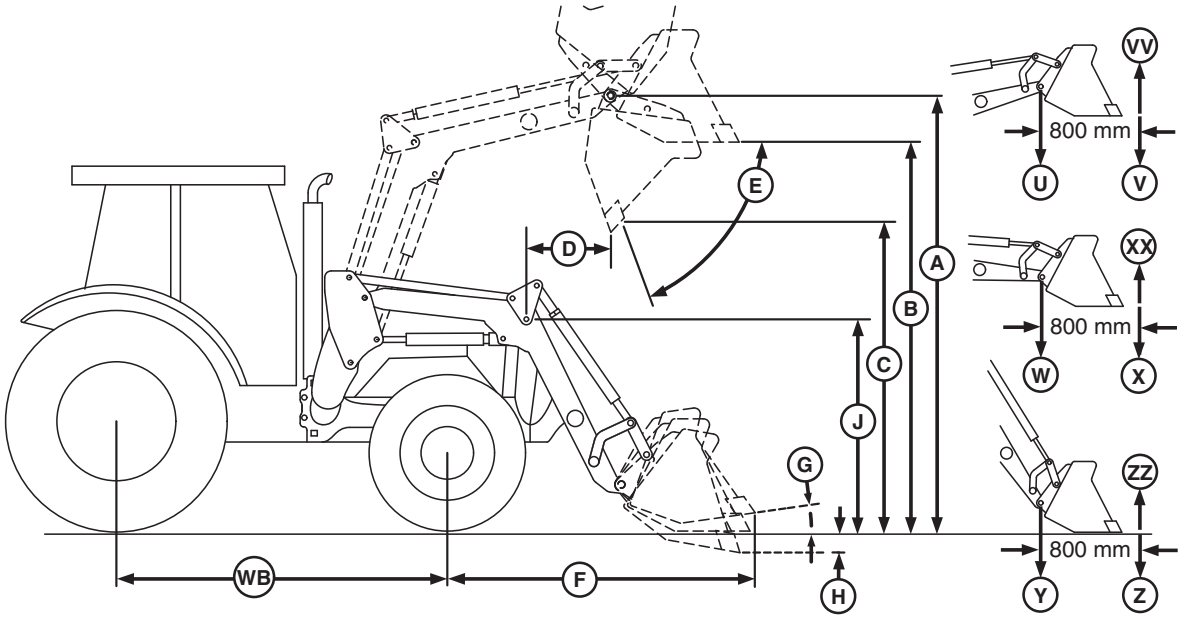
Model 6105M, 6115M, and 6125M MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 900 kg (1985 lb)	3-Point Hitch 900 kg (1985 lb)
	Option 2	Rear Axle Only 1000 kg (2205 lb)	Rear Axle Only 1500 kg (3308 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.		
Front Tires	13.6R24		
Rear Tires	18.4R34		
Heavy Duty Materials Bucket			
Width	1850 mm (73 in)		
Length	—		
Mass	228 kg (502 lb)		
Hydraulic System			
Rated Flow	80 L/min (21 gal/min)		
Maximum Pressure	20 100 kPa (200 bar) (2900 psi)		
Cycle Times (in seconds)			
Loader Raise Time	3.73		
Loader Lower Time	2.80		
Bucket Dump Time	2.89		
Bucket Rollback Time	1.94		
Lift Height (Maximum)			
To Pivot Pin (A)	3571 mm (141 in)		
Clearance			
Bucket Level (B)	3377 mm (133 in)		
Bucket Dumped (C)	2532 mm (100 in)		
Digging Depth (H)	55 mm (2 in)		

[a] *(Specifications and design subject to change without notice)*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	869 mm (34 in)
Bucket on Ground with Bucket Leveled (F)	2355 mm (93 in)
Angles (Maximum)	
Dump (E)	73°
Dump at Ground	156°
Rollback (G)	43°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1734 kg (3823 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1196 kg (2637 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2426 kg (5348 lb)
Breakout Force	
At Pivot Pin (Y)	3176 kg-force (7002 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2294 kg-force (5057 lbf)

OUO6064,0001D18-19-04JAN23

540M Mechanical Self-Leveling Loader Specifications on 6403 Merit Succesor 4 Cyl Tractor



W28413—UN—11JUN18

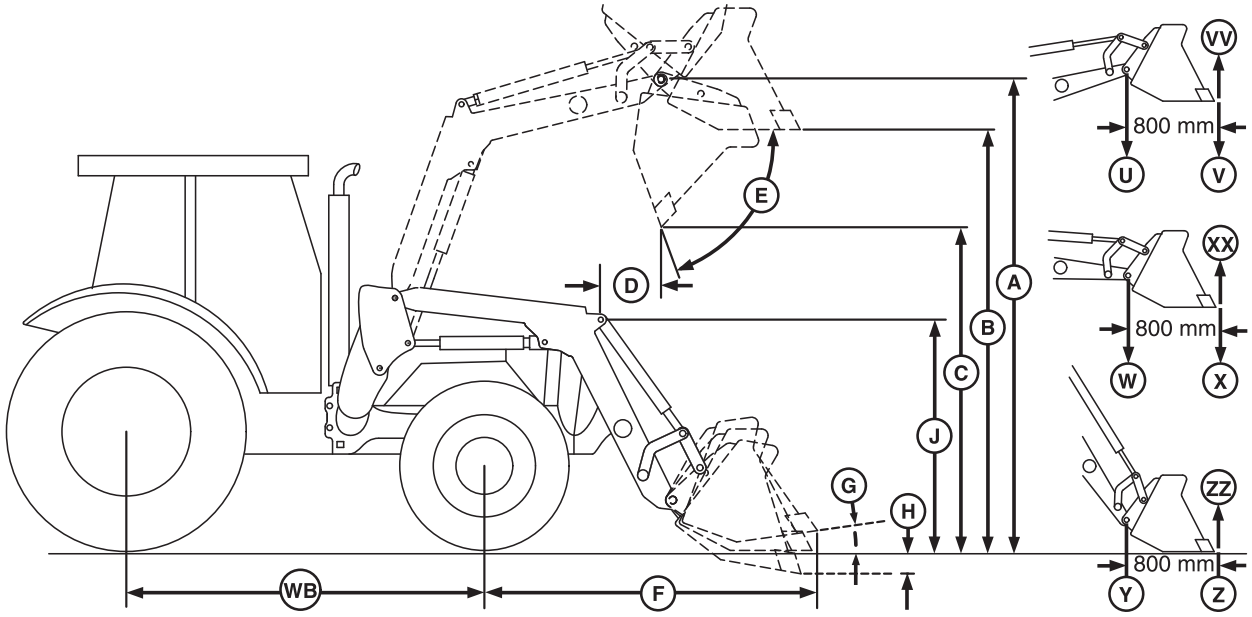
Model 6403 Merit Succesor 4 Cyl Tractor[a]		
		Cab Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1100 kg (2426 lb) Plus Rear Axle 550 kg (1213 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.	
Front Tires	14.9 R24	
Rear Tires	18.4 R39	
Materials Bucket		
Width	1850 mm (73 in)	
Length	—	
Mass	228 kg (503 lb)	
Hydraulic System		
Rated Flow	80 L/min (21 gal/min)	
Maximum Pressure	20 100 kPa (200 bar) (2900 psi)	
Cycle Times (In Seconds)		
Loader Raise Time	4.2	
Loader Lower Time	3.2	
Bucket Dump Time	2.6	
Bucket Rollback Time	2.6	
Lift Height (Maximum)		
To Pivot Pin (A)	3558 mm (140 in)	
Clearance		
Bucket Level (B)	3360 mm (132 in)	
Bucket Dumped (C)	2517 mm (99 in)	
Digging Depth (H)	72 mm (3 in)	

[a] *Specifications and design subject to change without notice.*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1249 mm (49 in)
Bucket on Ground with Bucket Leveled (F)	2462 mm (97 in)
Angles (Maximum)	
Dump (E)	75°
Dump at Ground	95°
Rollback (G)	43°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1382 kg (3049 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1496 kg (3298 lb)
To 1500 mm (59 in) (W) at Pivot Pin	1955 kg (4309 lb)
Breakout Force	
At Pivot Pin (Y)	2570 kgf (5664 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2242 kgf (4941 lbf)

OUO6064,000313D-19-15JUN23

540M Non Self-Leveling Loader Specifications on 6403 Merit Succesor 4 Cyl Tractor



W28414—UN—11JUN18

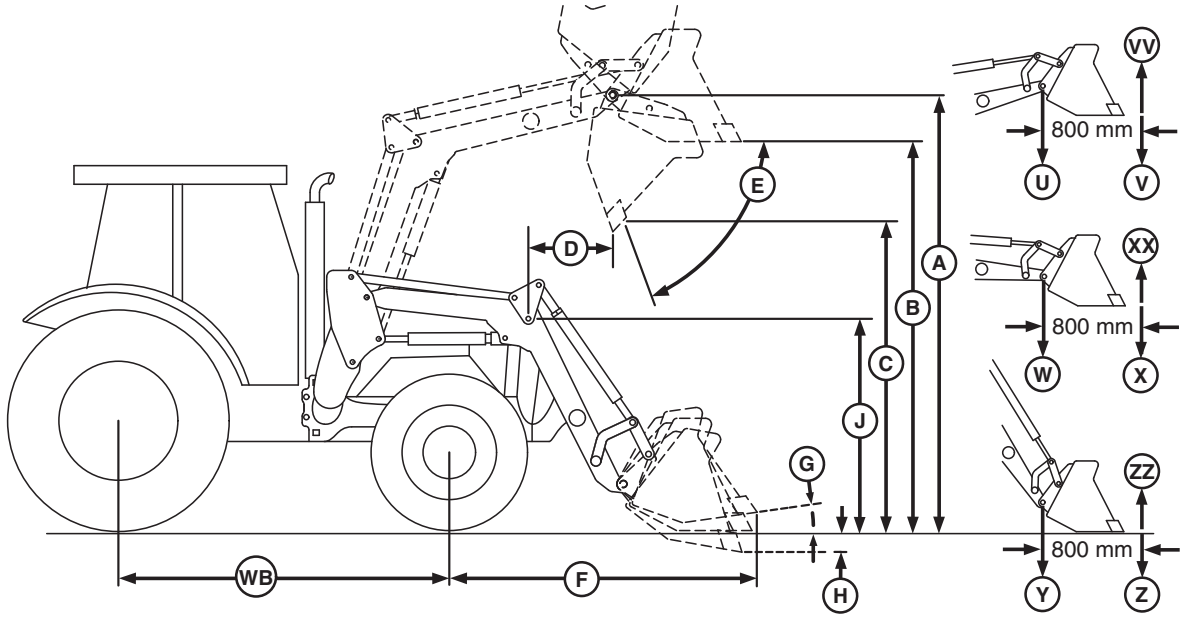
Model 6403 Merit Succesor 4 Cyl Tractor[a]		
		Cab Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.	
Front Tires	14.9 R24	
Rear Tires	18.4 R38	
Materials Bucket		
Width	1850 mm (73 in)	
Length	—	
Mass	228 kg (503 lb)	
Hydraulic System		
Rated Flow	80 L/min (21 gal/min)	
Maximum Pressure	20 100 kPa (200 bar) (2900 psi)	
Cycle Times (In Seconds)		
Loader Raise Time	5.0	
Loader Lower Time	3.7	
Bucket Dump Time	2.6	
Bucket Rollback Time	2.6	
Lift Height (Maximum)		
To Pivot Pin (A)	3583 mm (141 in)	
Clearance		
Bucket Level (B)	3385 mm (133 in)	
Bucket Dumped (C)	2580 mm (102 in)	
Digging Depth (H)	48 mm (2 in)	

[a] *Specifications and design subject to change without notice.*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1223 mm (48 in)
Bucket on Ground with Bucket Leveled (F)	2460 mm (97 in)
Angles (Maximum)	
Dump (E)	63°
Dump at Ground	145°
Rollback (G)	49°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1135 kg (2502 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1135 kg (2502 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2278 kg (5021 lb)
Breakout Force	
At Pivot Pin (Y)	2974 kgf (6555 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2145 kgf (4728 lbf)

OUO6064,000313E-19-15JUN23

540M Mechanical Self-Leveling Loader Specifications on 6603 and 6803 Merit Succesor 6 Cyl Tractors



W28413—UN—11JUN18

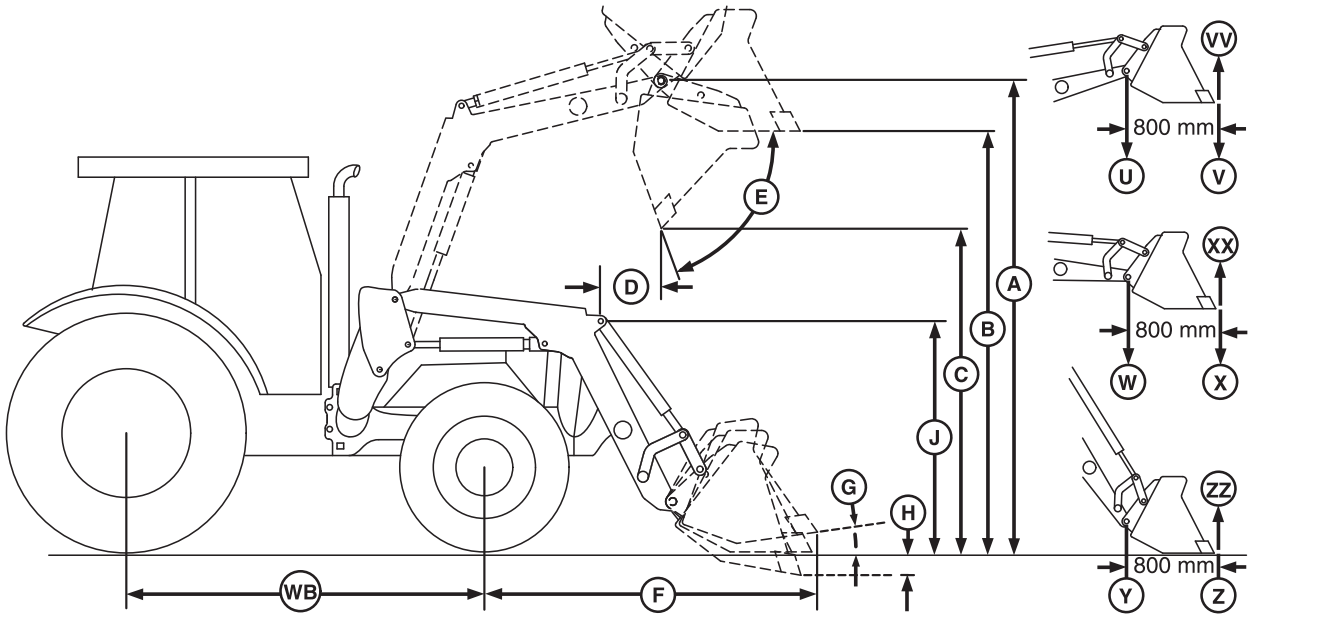
Models 6603 and 6803 Merit Succesor 6 Cyl Tractors[a]		
		Cab Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.	
Front Tires	14.9 R24	
Rear Tires	18.4 R38	
Materials Bucket		
Width	1850 mm (73 in)	
Length	—	
Mass	236 kg (520 lb)	
Hydraulic System		
Rated Flow	80 L/min (21 gal/min)	
Maximum Pressure	20 100 kPa (200 bar) (2900 psi)	
Cycle Times (In Seconds)		
Loader Raise Time	4.1	
Loader Lower Time	3.1	
Bucket Dump Time	3.9	
Bucket Rollback Time	2.6	
Lift Height (Maximum)		
To Pivot Pin (A)	3556 mm (140 in)	
Clearance		
Bucket Level (B)	3362 mm (132 in)	
Bucket Dumped (C)	2694 mm (106 in)	
Digging Depth (H)	-71 mm (-3 in)	

[a] *Specifications and design subject to change without notice.*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1132 mm (45 in)
Bucket on Ground with Bucket Leveled (F)	2404 mm (95 in)
Angles (Maximum)	
Dump (E)	-75°
Dump at Ground	-97°
Rollback (G)	42°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1347 kg (2967 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1556 kg (3429 lb)
To 1500 mm (59 in) (W) at Pivot Pin	1936 kg (4266 lb)
Breakout Force	
At Pivot Pin (Y)	2590 kgf (5707 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2307 kgf (5084 lbf)

OUO6064,0003170-19-15JUN23

540M Non Self-Leveling Loader Specifications on 6603 and 6803 Merit Succesor 6 Cyl Tractor



W28414—UN—11JUN18

Model 6603 and 6803 Merit Succesor 6 Cyl Tractors[a]		
		Cab Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 600 kg (1323 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.	
Front Tires	14.9 R24	
Rear Tires	18.4 R38	
Materials Bucket		
Width	1850 mm (73 in)	
Length	—	
Mass	236 kg (520 lb)	
Hydraulic System		
Rated Flow	80 L/min (21 gal/min)	
Maximum Pressure	20 100 kPa (200 bar) (2900 psi)	
Cycle Times (In Seconds)		
Loader Raise Time	4.8	
Loader Lower Time	3.6	
Bucket Dump Time	4.7	
Bucket Rollback Time	3.2	
Lift Height (Maximum)		
To Pivot Pin (A)	3551 mm (140 in)	
Clearance		
Bucket Level (B)	3353 mm (132 in)	
Bucket Dumped (C)	2685 mm (106 in)	

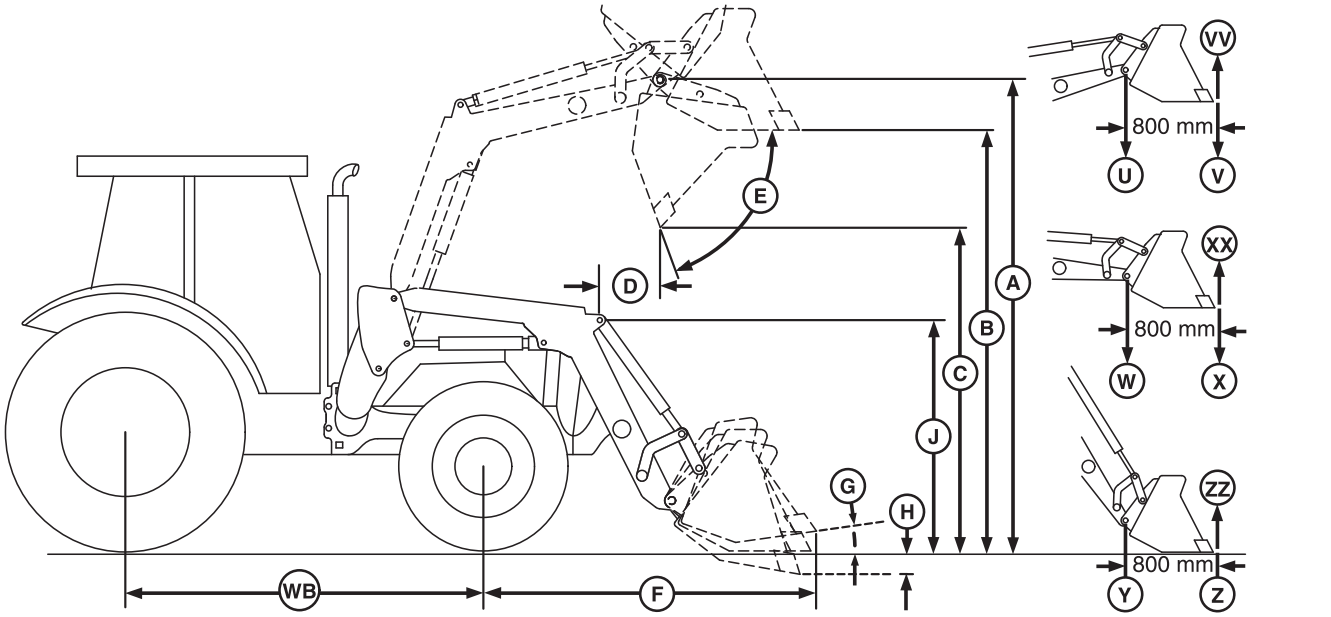
Model 6603 and 6803 Merit Succesor 6 Cyl Tractors[a]	
Digging Depth (H)	-99 mm (-4in)

[a] *Specifications and design subject to change without notice.*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1137 mm (45 in)
Bucket on Ground with Bucket Leveled (F)	2411 mm (95 in)
Angles (Maximum)	
Dump (E)	-64°
Dump at Ground	-145°
Rollback (G)	49°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1503 kg (3312 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1043 kg (2299 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2216 kg (4884lb)
Breakout Force	
At Pivot Pin (Y)	2998 kgf (6608 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2163 kgf (4767 lbf)

OUO6064,0003172-19-15JUN23

540M Mechanical Self-Leveling Loader Specifications on 6125E (002000-) and 6140E T0 6 Cyl Tractor



W28414—UN—11JUN18

Loader Dimensions

Models 6125E (002000-) and 6140E T0 6 Cyl Tractor[a]		
		Cab Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.	
Front Tires	14.9R24	
Rear Tires	18.4 R38	
Materials Bucket		
Width	1850 mm (73 in)	
Length	—	
Mass	236 kg (520 lb)	
Hydraulic System		
Rated Flow	80 L/min (21 gal/min)	
Maximum Pressure	20 100 kPa (200 bar) (2900 psi)	
Cycle Times (In Seconds)		
Loader Raise Time	3.7	
Loader Lower Time	2.8	
Bucket Dump Time	3.5	
Bucket Rollback Time	2.3	
Lift Height (Maximum)		
To Pivot Pin (A)	3556 mm (140 in)	
Clearance		
Bucket Level (B)	3362 mm (133 in)	
Bucket Dumped (C)	2694 mm (106 in)	

Models 6125E (002000-) and 6140E T0 6 Cyl Tractor[a]	
Digging Depth (H)	-71 mm (-3 in)

[a] *Specifications and design subject to change without notice.*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1132 mm (45 in)
Bucket on Ground with Bucket Leveled (F)	2404 mm (95 in)
Angles (Maximum)	
Dump (E)	-74°
Dump at Ground	-96°
Rollback (G)	42°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1394 kg (3072 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1611 kg (3549 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2001 kg (4409 lb)
Breakout Force	
At Pivot Pin (Y)	2673 kgf (5891 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2381 kgf (5248 lbf)

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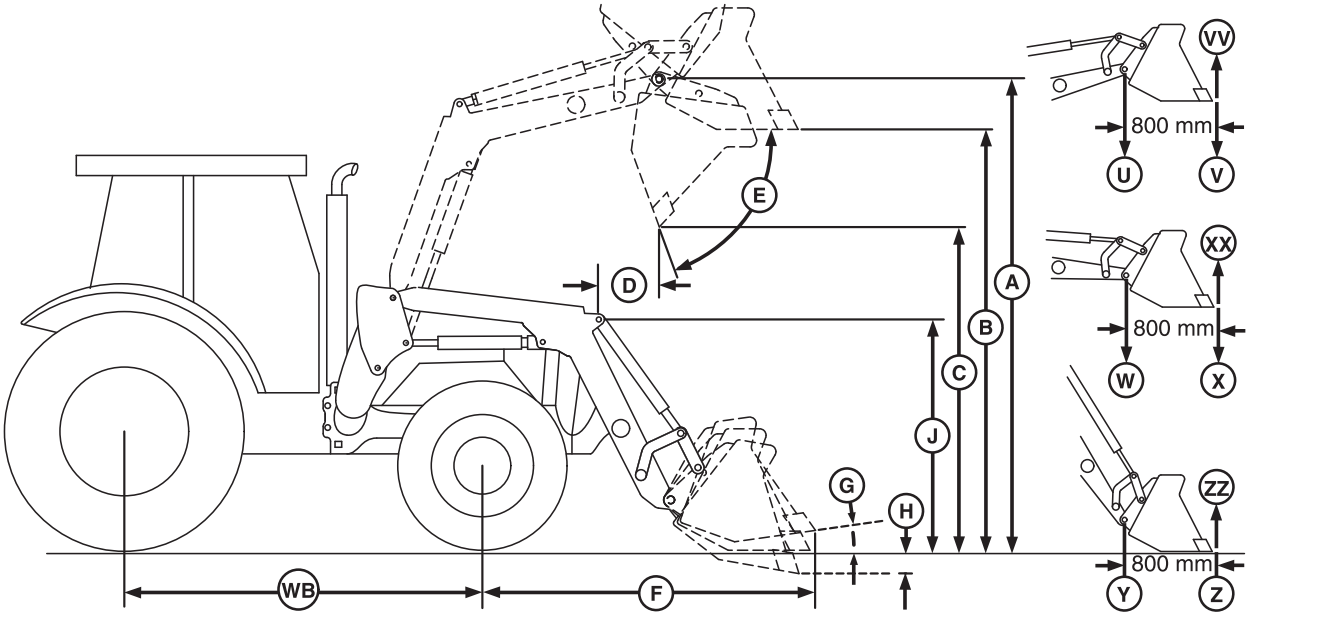
540M Non Self-Leveling Loader Specifications on 6125E (002000-) and 6140E T0 6 Cyl Tractor



W28414—UN—11JUN18

Model 6125E (002000-) and 6140E T0 6 Cyl Tractorl [a]		
		Cab Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.	
Front Tires	14.9R24	
Rear Tires	18.4 R38	
Materials Bucket		
Width	1850 mm (73 in)	
Length	—	
Mass	236 kg (520 lb)	
Hydraulic System		
Rated Flow	80 L/min (21 gal/min)	
Maximum Pressure	20 100 kPa (200 bar) (2900 psi)	
Cycle Times (In Seconds)		
Loader Raise Time	4.3	
Loader Lower Time	3.2	
Bucket Dump Time	4.2	
Bucket Rollback Time	2.8	
Lift Height (Maximum)		
To Pivot Pin (A)	3551 mm (140 in)	
Clearance		
Bucket Level (B)	3553 mm (132 in)	
Bucket Dumped (C)	2685 mm (106 in)	
Digging Depth (H)	-99 mm (-4 in)	

[a] *Specifications and design subject to change without notice.*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1137 mm (45 in)
Bucket on Ground with Bucket Leveled (F)	5411 mm (95 in)
Angles (Maximum)	
Dump (E)	-75°
Dump at Ground	-156°
Rollback (G)	43°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1558 kg (3434 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1082 kg (2385 lb)
To 1500 mm (59 in) (W) at Pivot Pin	2291 kg (5049 lb)
Breakout Force	
At Pivot Pin (Y)	3095 kgf (6822 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2233 kgf (4921 lbf)

gnyxrm7,1686244250151-19-15JUN23

540M Non Self-Leveling Loader Specifications on 5090E and 5100E (IT4 and FT4) MFWD Tractors

Model 5090E and 5100E (IT4 and FT4) Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 800 kg (1764 lb)	3-Point Hitch 800 kg (1764 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,0002468-19-06NOV24

540M Mechanical Self-Leveling Loader Specifications on 5085M, 5090M, 5100M, and 5115M (FT4) 2WD Tractors

Model 5085M, 5090M, 5100M, and 5115M (FT4) 2WD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1200 kg (2646 lb) Plus Rear Axle 300 kg (662 lb)	3-Point Hitch 1200 kg (2646 lb) Plus Rear Axle 650 kg (1433 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,000246B-19-06NOV24

540M Non Self-Leveling Loader Specifications on 5085M, 5090M, 5100M, and 5115M (FT4) 2WD Tractors

Model 5085M, 5090M, 5100M, and 5115M (FT4) 2WD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 820 kg (1808 lb)	3-Point Hitch 820 kg (1808 lb) Plus Rear Axle 350 kg (772 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,000246C-19-06NOV24

540M Mechanical Self-Leveling Loader Specifications on 5085M, 5095M, 5100M, 5105M, and 5115M (IT4 and T3) 2WD Tractors

Model 5085M, 5095M, 5100M, 5105M, and 5115M (IT4 and T3) 2WD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb) Plus Rear Axle 270 kg (595 lb)	3-Point Hitch 1000 kg (2205 lb) Plus Rear Axle 620 kg (1367 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,000246D-19-06NOV24

540M Non Self-Leveling Loader Specifications on 5085M, 5095M, 5100M, 5105M, and 5115M (IT4 and T3) 2WD Tractors

Model 5085M, 5095M, 5100M, 5105M, and 5115M (IT4 and T3) 2WD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb)	3-Point Hitch 1000 kg (2205 lb) Plus Rear Axle 350 kg (772 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,000246E-19-06NOV24

540M Mechanical Self-Leveling Loader Specifications on 6105R, 6115R, and 6125R 2WD Tractors

Model 6105R, 6115R, and 6125R 2WD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1150 kg (2536 lb)	3-Point Hitch 1150 kg (2536 lb) Plus Rear Axle 350 kg (772 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,000246F-19-06NOV24

540M Non Self-Leveling Loader Specifications on 6105R, 6115R, and 6125R 2WD Tractors

Model 6105R, 6115R, and 6125R 2WD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 900 kg (1985 lb)	3-Point Hitch 900 kg (1985 lb) 3-Point Hitch 350 kg (772 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,0002470-19-06NOV24

540M Mechanical Self-Leveling Loader Specifications on 6030 2WD Tractor

Model 6030 2WD Tractor[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb)	3-Point Hitch 1000 kg (2205 lb) Plus Rear Axle 350 kg (772 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,0002471-19-06NOV24

540M Non Self-Leveling Loader Specifications on 6030 2WD Tractor

Model 6030 2WD Tractor[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 900 kg (1985 lb)	3-Point Hitch 900 kg (1985 lb) Plus Rear Axle 350 kg (772 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,0002472-19-06NOV24

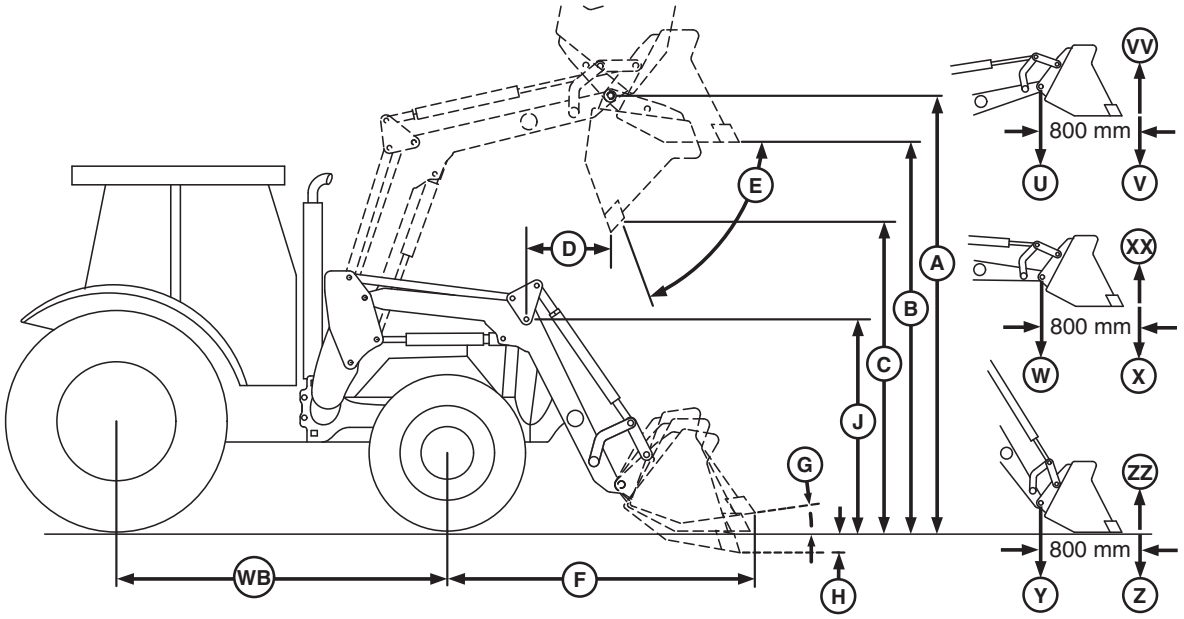
540M Mechanical Self-Leveling Loader Specifications on 6100D, 6115D, 6130D and 6140D (T3) 2WD Tractors

Model 6100D, 6115D, 6130D and 6140D (T3) 2WD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 800 kg (1764 lb)	3-Point Hitch 800 kg (1764 lb) Plus Rear Axle 350 kg (772 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,0002473-19-06NOV24

540M Mechanical Self-Leveling Loader Specifications on 6095B Tractor



W28413—UN—11JUN18

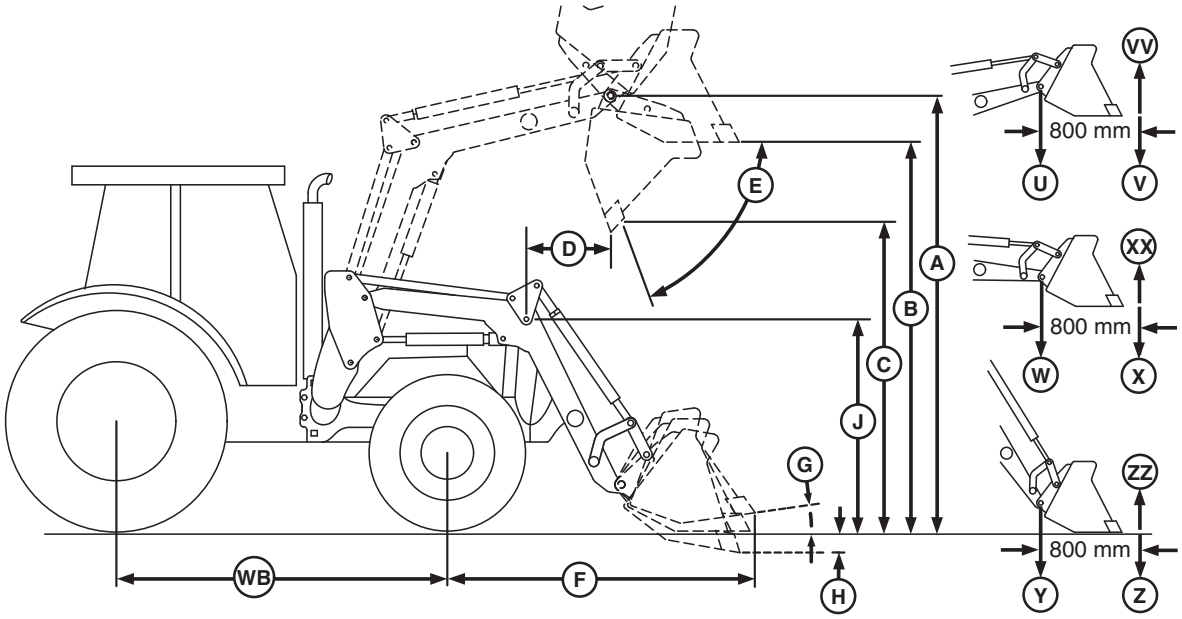
Tractor Model 6095B[a]		
		Cab Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.	
Front Tires	14.9 R24	
Rear Tires	18.4 R38	
Materials Bucket		
Width	1850 mm (73 in)	
Length	—	
Mass	228 kg (503 lb)	
Hydraulic System		
Rated Flow	80 L/min (21 gal/min)	
Maximum Pressure	20 100 kPa (200 bar) (2900 psi)	
Cycle Times (In Seconds)		
Loader Raise Time	5.0	
Loader Lower Time	3.7	
Bucket Dump Time	2.6	
Bucket Rollback Time	2.6	
Lift Height (Maximum)		
To Pivot Pin (A)	3583 mm (141 in)	
Clearance		
Bucket Level (B)	3385 mm (133 in)	
Bucket Dumped (C)	2580 mm (102 in)	
Digging Depth (H)	-194 mm (8 in)	

[a] *Specifications and design subject to change without notice.*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	871 mm (34 in)
Bucket on Ground with Bucket Leveled (F)	2609 mm (103 in)
Angles (Maximum)	
Dump (E)	-73°
Dump at Ground	-94°
Rollback (G)	44°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1100 kg (2425 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1100 kg (2425 lb)
To 1500 mm (59 in) (at std pnt)	1100 kg (2425 lb)
To 1500 mm (59 in) (W) at Pivot Pin	1100 kg (2425 lb)
Breakout Force	
At Pivot Pin (Y)	1100 kgf (2425 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	1100 kgf (2425 lbf)
Bucket Rollback Force	
To Maximum Height (at std pnt)	1569 kgf (3458 lbf)
To 1500 mm (59 in) (at std pnt)	2893 kgf (6376 lbf)
At GND (at std pnt)	3011 kgf (6637 lbf)

uuf6xgz,1672637891649-19-26SEP23

540M Mechanical Self-Leveling Loader Specifications on 6110B Tractor



W28413—UN—11JUN18

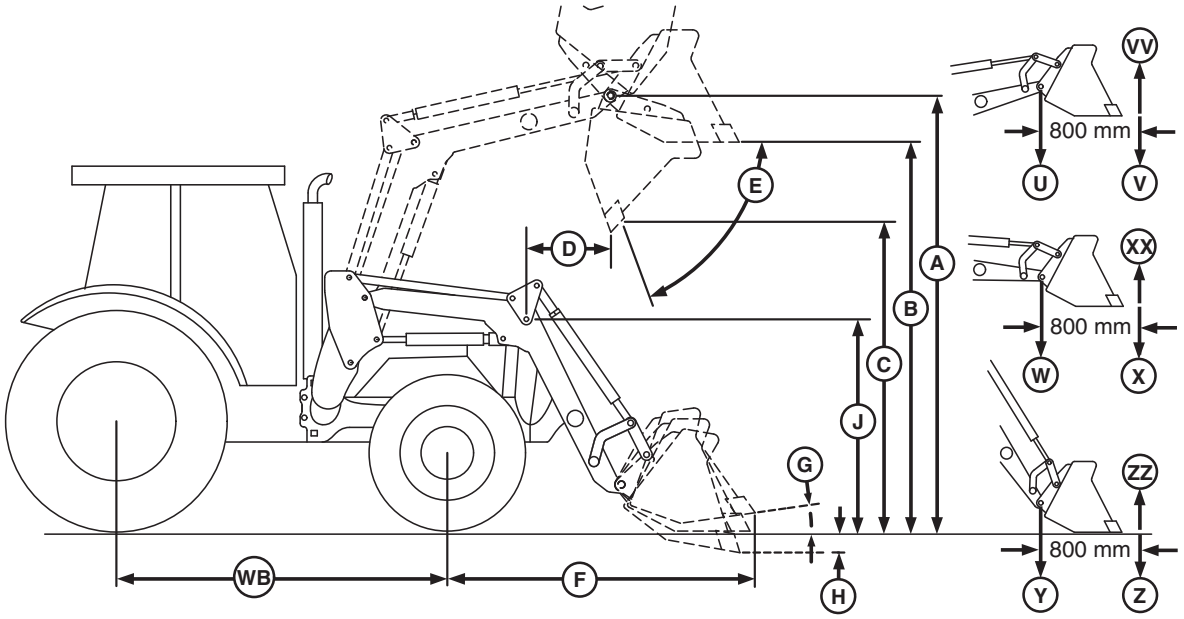
Tractor Model 6110B[a]		
		Cab Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.	
Front Tires	14.9 R24	
Rear Tires	18.4 R38	
Materials Bucket		
Width	1850 mm (73 in)	
Length	—	
Mass	228 kg (503 lb)	
Hydraulic System		
Rated Flow	80 L/min (21 gal/min)	
Maximum Pressure	20 100 kPa (200 bar) (2900 psi)	
Cycle Times (In Seconds)		
Loader Raise Time	5.0	
Loader Lower Time	3.7	
Bucket Dump Time	2.6	
Bucket Rollback Time	2.6	
Lift Height (Maximum)		
To Pivot Pin (A)	3583 mm (141 in)	
Clearance		
Bucket Level (B)	3385 mm (133 in)	
Bucket Dumped (C)	2580 mm (102 in)	
Digging Depth (H)	-194 mm (8 in)	

[a] *Specifications and design subject to change without notice.*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1058 mm (42 in)
Bucket on Ground with Bucket Leveled (F)	2456 mm (96 in)
Angles (Maximum)	
Dump (E)	-74°
Dump at Ground	-96°
Rollback (G)	42°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1100 kg (2425 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1100 kg (2425 lb)
To 1500 mm (59 in) (at std pnt)	1100 kg (2425 lb)
To 1500 mm (59 in) (W) at Pivot Pin	1100 kg (2425 lb)
Breakout Force	
At Pivot Pin (Y)	1100 kgf (2425 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	1100 kgf (2425 lbf)
Bucket Rollback Force	
To Maximum Height (at std pnt)	1593 kgf (3511 lbf)
To 1500 mm (59 in) (at std pnt)	2922 kgf (6440 lbf)
At GND (at std pnt)	2985 kgf (6579 lbf)

uuf6xgz,1672642441221-19-26SEP23

540M Mechanical Self-Leveling Loader Specifications on 6120B Tractor



W28413—UN—11JUN18

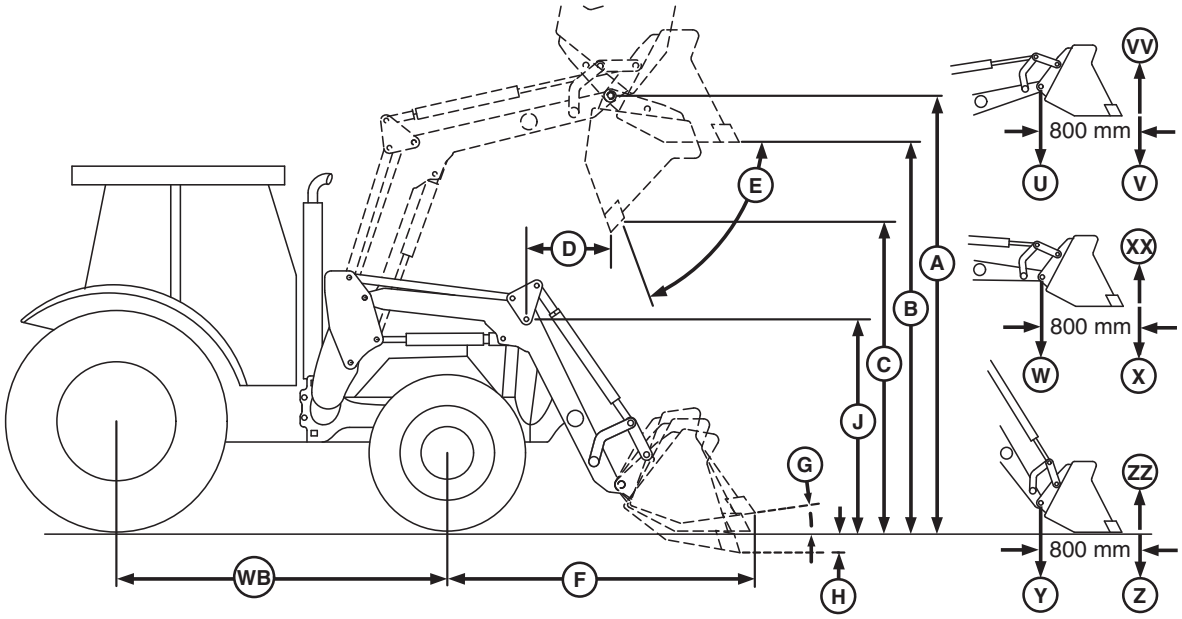
Tractor Model 6120B[a]		
		Cab Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.	
Front Tires	14.9 R24	
Rear Tires	18.4 R38	
Materials Bucket		
Width	1850 mm (73 in)	
Length	—	
Mass	228 kg (503 lb)	
Hydraulic System		
Rated Flow	80 L/min (21 gal/min)	
Maximum Pressure	20 100 kPa (200 bar) (2900 psi)	
Cycle Times (In Seconds)		
Loader Raise Time	5.0	
Loader Lower Time	3.7	
Bucket Dump Time	2.6	
Bucket Rollback Time	2.6	
Lift Height (Maximum)		
To Pivot Pin (A)	3583 mm (141 in)	
Clearance		
Bucket Level (B)	3385 mm (133 in)	
Bucket Dumped (C)	2580 mm (102 in)	
Digging Depth (H)	-120 mm (5 in)	

[a] *Specifications and design subject to change without notice.*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1374 mm (54 in)
Bucket on Ground with Bucket Leveled (F)	2721 mm (107 in)
Angles (Maximum)	
Dump (E)	-76°
Dump at Ground	-98°
Rollback (G)	41°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1421 kg (3132 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1624 kg (3579 lb)
To 1500 mm (59 in) (at std pnt)	1949 kg (4296 lb)
To 1500 mm (59 in) (W) at Pivot Pin	1982 kg (4369 lb)
Breakout Force	
At Pivot Pin (Y)	2634 kgf (5806 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2359 kgf (5200 lbf)
Bucket Rollback Force	
To Maximum Height (at std pnt)	1721 kgf (3793 lbf)
To 1500 mm (59 in) (at std pnt)	3027 kgf (6672 lbf)
At GND (at std pnt)	3113 kgf (6861 lbf)

uuf6xgz,1672643133684-19-26SEP23

540M Mechanical Self-Leveling Loader Specifications on 6135B Tractor



W28413—UN—11JUN18

Tractor Model 6135B[a]		
		Cab Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb)
	Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.	
Front Tires	14.9 R24	
Rear Tires	18.4 R38	
Materials Bucket		
Width	1850 mm (73 in)	
Length	—	
Mass	228 kg (503 lb)	
Hydraulic System		
Rated Flow	80 L/min (21 gal/min)	
Maximum Pressure	20 100 kPa (200 bar) (2900 psi)	
Cycle Times (In Seconds)		
Loader Raise Time	5.0	
Loader Lower Time	3.7	
Bucket Dump Time	2.6	
Bucket Rollback Time	2.6	
Lift Height (Maximum)		
To Pivot Pin (A)	3583 mm (141 in)	
Clearance		
Bucket Level (B)	3385 mm (133 in)	
Bucket Dumped (C)	2580 mm (102 in)	
Digging Depth (H)	-120 mm (5 in)	

[a] *Specifications and design subject to change without notice.*

Reach	
At Maximum Lift Height with Bucket Dumped (D)	1374 mm (54 in)
Bucket on Ground with Bucket Leveled (F)	2721 mm (107 in)
Angles (Maximum)	
Dump (E)	-76°
Dump at Ground	-98°
Rollback (G)	41°
Lift Capacity	
To Maximum Height (U) at Pivot Pin	1421 kg (3132 lb)
To Maximum Height (V) at 800 mm (31.5 in) (I) Ahead of Pivot Pin	1624 kg (3579 lb)
To 1500 mm (59 in) (at std pnt)	1949 kg (4296 lb)
To 1500 mm (59 in) (W) at Pivot Pin	1982 kg (4369 lb)
Breakout Force	
At Pivot Pin (Y)	2634 kgf (5806 lbf)
800 mm (31.5 in) (I) Ahead of Pivot Pin (Z)	2359 kgf (5200 lbf)
Bucket Rollback Force	
To Maximum Height (at std pnt)	1721 kgf (3793 lbf)
To 1500 mm (59 in) (at std pnt)	3027 kgf (6672 lbf)
At GND (at std pnt)	3113 kgf (6861 lbf)

uuf6xgz,1672644069904-19-26SEP23

540M Non Self-Leveling Loader Specifications on 6100D, 6115D, 6130D and 6140D (T3) 2WD Tractors

Model 6100D, 6115D, 6130D and 6140D (T3) 2WD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 400 kg (882 lb)	3-Point Hitch 400 kg (882 lb) Plus Rear Axle 350 kg (772 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,0002475-19-06NOV24

540M Mechanical Self-Leveling Loader Specifications on 6105M, 6115M, and 6125M 2WD Tractors

Model 6105M, 6115M, and 6125M 2WD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1250 kg (2756 lb)	3-Point Hitch 1250 kg (2756 lb) Plus Rear Axle 350 kg (772 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,0002476-19-06NOV24

540M Non Self-Leveling Loader Specifications on 6105M, 6115M, and 6125M 2WD Tractors

Model 6105M, 6115M, and 6125M 2WD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb)	3-Point Hitch 1000 kg (2205 lb) Plus Rear Axle 350 kg (772 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

OUO6064,0002477-19-06NOV24

540M Mechanical Self-Leveling Loader Specifications on Merit Successor 6403 4CYL MFWD Tractors

Model Merit Successor 6403 4CYL MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1100 kg (2426 lb) Plus Rear Axle 550 kg (1213 lb)	3-Point Hitch 1100 kg (2426lb) Plus Rear Axle 350 kg (772 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

t82hfw1,1686761497962-19-06NOV24

540M Non Self-Leveling Loader Specifications on Merit Successor 6403 4CYL MFWD Tractors

Model Merit Successor 6403 4CYL MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb)	3-Point Hitch 1000 kg (2205 lb) Plus Rear Axle 350 kg (772 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

t82hfw1,1686761502588-19-06NOV24

540M Mechanical Self-Leveling Loader Specifications on Merit Successor 6603 and 6803 6CYL MFWD Tractors

Model Merit Successor 6603 and 6803 6CYL MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1244 kg (2743 lb) Plus Rear Axle 700 kg (1544 lb)	3-Point Hitch 1244 kg (2743 lb) Plus Rear Axle 450 kg (992 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

t82hfw1,1686761609935-19-06NOV24

540M Non Self-Leveling Loader Specifications on Merit Successor 6603 and 6803 6CYL MFWD Tractors

Model Merit Successor 6603 and 6803 6CYL MFWD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 600 kg (1323 lb)	3-Point Hitch 600 kg (1323 lb) Plus Rear Axle 450 kg (992 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

t82hfw1,1686761880261-19-06NOV24

540M Mechanical Self-Leveling Loader Specifications on 6100E, 6105E, 6110E, 6115E, 6120E(-001999) and 6130E 4CYL 4WD Tractors

Models 6100E, 6105E, 6110E, 6115E, 6120E(-001999) and 6130E 4CYL 4WD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1244 kg (2743 lb)	3-Point Hitch 1244 kg (2743 lb) Plus Rear Axle 350 kg (772 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

t82hfw1,1686761607201-19-06NOV24

540M Non Self-Leveling Loader Specifications on 6100E, 6105E, 6110E, 6115E, 6120E(-001999) and 6130E 4CYL 4WD Tractors

Models 6100E, 6105E, 6110E, 6115E, 6120E(-001999) and 6130E 4CYL 4WD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 700 kg (1544 lb)	3-Point Hitch 700 kg (1544 lb) Plus Rear Axle 350 kg (772 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

t82hfw1,1686761874939-19-06NOV24

540M Mechanical Self-Leveling Loader Specifications on 6125E (002000-) and 6140E 6CYL 4WD Tractors

Models 6125E (002000-) and 6140E 6CYL 4WD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 1000 kg (2205 lb)	3-Point Hitch 1000 kg (2205 lb) Plus Rear Axle 450 kg (992 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

t82hfw1,1686761603579-19-06NOV24

540M Non Self-Leveling Loader Specifications on 6125E (002000-) and 6140E 6CYL 4WD Tractors

Models 6125E (002000-) and 6140E 6CYL 4WD Tractors[a]			
		Cab Tractors	Open Operator Station Tractors
Minimum Rear Ballast	**Option 1**	3-Point Hitch 700 kg (1544 lb)	3-Point Hitch 700 kg (1544 lb) Plus Rear Axle 450 kg (992 lb)
Note: Ballast calculations based on steel wheels. If cast wheels are used, it further improves stability.			

[a] *(Specifications and design subject to change without notice)*

t82hfw1,1686761871990-19-06NOV24

520M Mechanical Self-Leveling Loader Round Bale Handling Capacities on Three-Cylinder FT4 Tractors

CAUTION: Prevent possible injury or death. If the attachment is dumped below 0° horizontal, bales that exceed the rollback capacity rating can cause the relief valve to open and the loader to dump.

NOTE: Rollback values are the minimum calculated value between a fully dumped to a level bucket with the loader raised.

Single Bale Spear			
Lift Capacity			
Bale Size Diameter x Length mm (in)	**Bale Orientation**		
	From End kg (lb)	From Side kg (lb)	Standing Up kg (lb)
1219 x 1219 (48 x 48) 1524 x 1219 (60 x 48)	1212 (2670)	—	—
1524 x 1524 (60 x 60)	1211 (2667)	—	—
Rollback Capacity			
1219 x 1219 (48 x 48) 1524 x 1219 (60 x 48)	1805 (3976)	—	—
1524 x 1524 (60 x 60)	1563 (3443)	—	—

Double Bale Spear			
Lift Capacity			
Bale Size Diameter x Length mm (in)	**Bale Orientation**		
	From End kg (lb)	From Side kg (lb)	Standing Up kg (lb)
1219 x 1219 (48 x 48) 1524 x 1219 (60 x 48)	1184 (2608)	—	—
1524 x 1524 (60 x 60)	1183 (2606)	—	—
Rollback Capacity			
1219 x 1219 (48 x 48) 1524 x 1219 (60 x 48)	1753 (3861)	—	—
1524 x 1524 (60 x 60)	1521 (3350)	—	—

Heavy Duty Bucket and Grapple			
Lift Capacity			
Bale Size Diameter x Length mm (in)	**Bale Orientation**		
	From End kg (lb)	From Side kg (lb)	Standing Up kg (lb)
1219 x 1219 (48 x 48)	—	1147 (2526)	—
1219 x 1524 (48 x 60)	—	—	—
1524 x 1219 (60 x 48)	—	—	—
1524 x 1524 (60 x 60)	—	—	—
Rollback Capacity			
1219 x 1219 (48 x 48)	—	441 (971)	—
1219 x 1524 (48 x 60)	—	—	—
1524 x 1219 (60 x 48)	—	—	—
1524 x 1524 (60 x 60)	—	—	—

520M Non Self-Leveling Loader Round Bale Handling Capacities on Three-Cylinder FT4 Tractors

CAUTION: Prevent possible injury or death. If the attachment is dumped below 0° horizontal, bales that exceed the rollback capacity rating can cause the relief valve to open and the loader to dump.

NOTE: Rollback values are the minimum calculated value between a fully dumped to a level bucket with the loader raised.

Single Bale Spear			
Lift Capacity			
Bale Size Diameter x Length mm (in)	**Bale Orientation**		
	From End kg (lb)	From Side kg (lb)	Standing Up kg (lb)
1219 x 1219 (48 x 48) 1524 x 1219 (60 x 48)	1026 (2260)	—	—
1524 x 1524 (60 x 60)	966 (2128)	—	—
Rollback Capacity			
1219 x 1219 (48 x 48) 1524 x 1219 (60 x 48)	1226 (2700)	—	—
1524 x 1524 (60 x 60)	1062 (2339)	—	—

Double Bale Spear			
Lift Capacity			
Bale Size Diameter x Length mm (in)	**Bale Orientation**		
	From End kg (lb)	From Side kg (lb)	Standing Up kg (lb)
1219 x 1219 (48 x 48) 1524 x 1219 (60 x 48)	995 (2192)	—	—
1524 x 1524 (60 x 60)	938 (2066)	—	—
Rollback Capacity			
1219 x 1219 (48 x 48) 1524 x 1219 (60 x 48)	1226 (2700)	—	—
1524 x 1524 (60 x 60)	1062 (2339)	—	—

Heavy Duty Bucket and Grapple			
Lift Capacity			
Bale Size Diameter x Length mm (in)	**Bale Orientation**		
	From End kg (lb)	From Side kg (lb)	Standing Up kg (lb)
1219 x 1219 (48 x 48)	—	682 (1502)	—
1219 x 1524 (48 x 60)	—	—	—
1524 x 1219 (60 x 48)	—	—	—
1524 x 1524 (60 x 60)	—	—	—
Rollback Capacity			
1219 x 1219 (48 x 48)	—	167 (368)	—
1219 x 1524 (48 x 60)	—	—	—
1524 x 1219 (60 x 48)	—	—	—
1524 x 1524 (60 x 60)	—	—	—

OUO6064,0001D1B-19-02FEB18

500M Mechanical Self-Leveling Loader Round Bale Handling Capacities on Three-Cylinder FT4 Tractors

CAUTION: Prevent possible injury or death. If the attachment is dumped below 0° horizontal, bales that exceed the rollback capacity rating can cause the relief valve to open and the loader to dump.

NOTE: Rollback values are the minimum calculated value between a fully dumped to a level bucket with the loader raised.

Heavy Duty Bucket and Grapple			
Lift Capacity			
Bale Size Diameter x Length mm (in)	**Bale Orientation**		
	From End kg (lb)	From Side kg (lb)	Standing Up kg (lb)
1219 x 1828 (48 x 72)	—	1000 (2204)	—
Rollback Capacity			
1219 x 1828 (48 x 72)	—	420 (925)	—

rd91939,1707126848686-19-12FEB24

500M Non Self-Leveling Loader Round Bale Handling Capacities on Three-Cylinder FT4 Tractors

CAUTION: Prevent possible injury or death. If the attachment is dumped below 0° horizontal, bales that exceed the rollback capacity rating can cause the relief valve to open and the loader to dump.

NOTE: Rollback values are the minimum calculated value between a fully dumped to a level bucket with the loader raised.

Heavy Duty Bucket and Grapple			
Lift Capacity			
Bale Size Diameter x Length mm (in)	**Bale Orientation**		
	From End kg (lb)	From Side kg (lb)	Standing Up kg (lb)
1219 x 1828 (48 x 72)	—	430 (927)	—
Rollback Capacity			
1219 x 1828 (48 x 72)	—	150 (330)	—

rd91939,1707126848567-19-12FEB24

520M Mechanical Self-Leveling Loader Round Bale Handling Capacities on Four-Cylinder IT4 and FT4 Tractors

CAUTION: Prevent possible injury or death. If the attachment is dumped below 0° horizontal, bales that exceed the rollback capacity rating can cause the relief valve to open and the loader to dump.

NOTE: Rollback values are the minimum calculated value between a fully dumped to a level bucket with the loader raised.

Single Bale Spear			
Lift Capacity			
Bale Size Diameter x Length mm (in)	**Bale Orientation**		
	From End kg (lb)	From Side kg (lb)	Standing Up kg (lb)
1219 x 1219 (48 x 48) 1524 x 1219 (60 x 48)	1222 (2692)	—	—
1524 x 1524 (60 x 60)	1221 (2689)	—	—
Rollback Capacity			
1219 x 1219 (48 x 48) 1524 x 1219 (60 x 48)	1800 (3965)	—	—
1524 x 1524 (60 x 60)	1558 (3432)	—	—

Double Bale Spear			
Lift Capacity			
Bale Size Diameter x Length mm (in)	**Bale Orientation**		
	From End kg (lb)	From Side kg (lb)	Standing Up kg (lb)
1219 x 1219 (48 x 48) 1524 x 1219 (60 x 48)	1194 (2630)	—	—
1524 x 1524 (60 x 60)	1193 (2628)	—	—
Rollback Capacity			
1219 x 1219 (48 x 48) 1524 x 1219 (60 x 48)	1747 (3848)	—	—
1524 x 1524 (60 x 60)	1517 (3341)	—	—

Heavy Duty Bucket and Grapple			
Lift Capacity			
Bale Size Diameter x Length mm (in)	**Bale Orientation**		
	From End kg (lb)	From Side kg (lb)	Standing Up kg (lb)
1219 x 1219 (48 x 48)	—	1074 (2366)	—
1219 x 1524 (48 x 60)	—	—	—
1524 x 1219 (60 x 48)	—	—	—
1524 x 1524 (60 x 60)	—	—	—
Rollback Capacity			
1219 x 1219 (48 x 48)	—	452 (996)	—
1219 x 1524 (48 x 60)	—	—	—
1524 x 1219 (60 x 48)	—	—	—
1524 x 1524 (60 x 60)	—	—	—

520M Non Self-Leveling Loader Round Bale Handling Capacities on Four-Cylinder IT4 and FT4 Tractors

CAUTION: Prevent possible injury or death. If the attachment is dumped below 0° horizontal, bales that exceed the rollback capacity rating can cause the relief valve to open and the loader to dump.

NOTE: Rollback values are the minimum calculated value between a fully dumped to a level bucket with the loader raised.

Single Bale Spear			
Lift Capacity			
Bale Size Diameter x Length mm (in)	**Bale Orientation**		
	From End kg (lb)	From Side kg (lb)	Standing Up kg (lb)
1219 x 1219 (48 x 48) 1524 x 1219 (60 x 48)	1028 (2264)	—	—
1524 x 1524 (60 x 60)	969 (2134)	—	—
Rollback Capacity			
1219 x 1219 (48 x 48) 1524 x 1219 (60 x 48)	1225 (2698)	—	—
1524 x 1524 (60 x 60)	1061 (2337)	—	—

Double Bale Spear			
Lift Capacity			
Bale Size Diameter x Length mm (in)	**Bale Orientation**		
	From End kg (lb)	From Side kg (lb)	Standing Up kg (lb)
1219 x 1219 (48 x 48) 1524 x 1219 (60 x 48)	998 (2198)	—	—
1524 x 1524 (60 x 60)	940 (2070)	—	—
Rollback Capacity			
1219 x 1219 (48 x 48) 1524 x 1219 (60 x 48)	1187 (2615)	—	—
1524 x 1524 (60 x 60)	1030 (2269)	—	—

Heavy Duty Bucket and Grapple			
Lift Capacity			
Bale Size Diameter x Length mm (in)	**Bale Orientation**		
	From End kg (lb)	From Side kg (lb)	Standing Up kg (lb)
1219 x 1219 (48 x 48)	—	707 (1557)	—
1219 x 1524 (48 x 60)	—	—	—
1524 x 1219 (60 x 48)	—	—	—
1524 x 1524 (60 x 60)	—	—	—
Rollback Capacity			
1219 x 1219 (48 x 48)	—	157 (346)	—
1219 x 1524 (48 x 60)	—	—	—
1524 x 1219 (60 x 48)	—	—	—
1524 x 1524 (60 x 60)	—	—	—

540M Loader Round Bale Handling Capacities

CAUTION: Prevent possible injury or death. If the attachment is dumped below 0° horizontal, bales that exceed the rollback capacity rating can cause the relief valve to open and the loader to dump.

NOTE: Rollback values are the minimum calculated value between a fully dumped to a level bucket with the loader raised. Specifications are based on a 540M self-leveling loader installed on a 5115M tractor.

Single Bale Spear			
Lift Capacity			
Bale Size Diameter x Length mm (in)	**Bale Orientation**		
	From End kg (lb)	From Side kg (lb)	Standing Up kg (lb)
1219 x 1219 (48 x 48) 1524 x 1219 (60 x 48)	1467 (3227)	—	—
1524 x 1524 (60 x 60)	1462 (3216)	—	—
Rollback Capacity			
1219 x 1219 (48 x 48)	1062 (2336)	—	—
1524 x 1219 (60 x 48)	986 (2169)	—	—
1524 x 1524 (60 x 60)	917 (2017)	—	—

Heavy Duty Bucket and Grapple			
Lift Capacity			
Bale Size Diameter x Length mm (in)	**Bale Orientation**		
	From End kg (lb)	From Side kg (lb)	Standing Up kg (lb)
1219 x 1219 (48 x 48)	1251 (2751)	1238 (2724)	1251 (2751)
1219 x 1524 (48 x 60)	1266 (2785)	1238 (2724)	1248 (2746)
1524 x 1219 (60 x 48)	1248 (2746)	1256 (2763)	1266 (2785)
1524 x 1524 (60 x 60)	1264 (2781)	1256 (2763)	1264 (2781)
Rollback Capacity			
1219 x 1219 (48 x 48)	260 (572)	305 (672)	260 (572)
1219 x 1524 (48 x 60)	243 (534)	305 (672)	190 (418)
1524 x 1219 (60 x 48)	190 (418)	208 (458)	243 (534)
1524 x 1524 (60 x 60)	185 (406)	208 (458)	185 (406)

OUO6064,0001D19-19-25MAY18

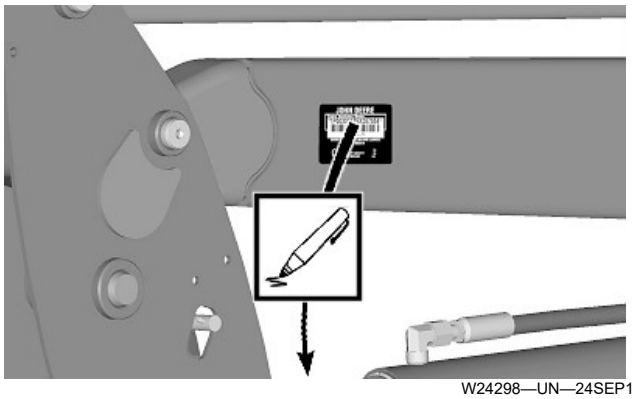
Round Bale Sizes and Weights

Round Bale Sizes and Weights		
Bale Size Diameter x Length mm (in)	**Maximum Weight** kg (lb)	**Material**
1219 x 1219 (48 x 48)	341 (750)	Dry Hay
1524 x 1219 (60 x 48)	499 (1100)	Dry Hay
1524 x 1219 (60 x 48)	795 (1750)	Silage
1524 x 1524 (60 x 60)	658 (1450)	Dry Hay

OUO6064,0001CAE-19-08MAY17

Serial Number

Record Product Identification Number



W24298—UN—24SEP13

Each machine has the identification label shown. The letters and numbers on the label identify a component or assembly. ALL the characters are necessary for ordering parts, identify a machine for any John Deere product support program, or trace the machine if stolen. When ordering parts, always furnish model and serial number as given on the serial number label. It assists giving you prompt and efficient service.

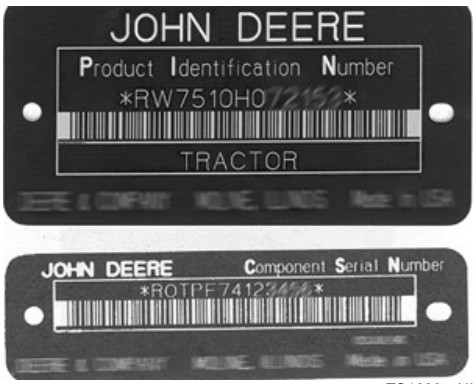
Loader serial number label is on the inside of the left-hand boom.

Record the serial number in the space provided.

Product Identification (Serial) Number:

OUO6038,0002209-19-07AUG25

Keep Proof of Ownership

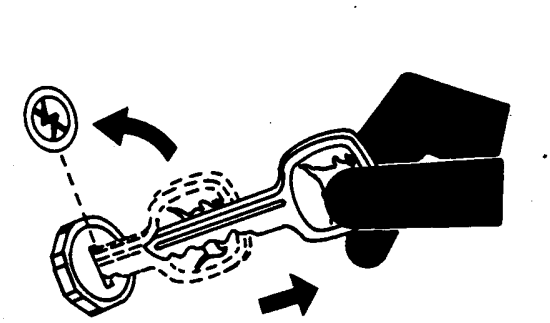


TS1680—UN—09DEC03

1. Maintain in a secure location an up-to-date inventory of all product and component serial numbers.
2. Regularly verify that identification plates have not been removed. Report any evidence of tampering to law enforcement agencies and order duplicate plates.
3. Other steps you can take:
   - Mark your machine with your own numbering system
   - Take color photographs from several angles of each machine

DX,SECURE1-19-18NOV03

Keep Machines Secure



TS230—UN—24MAY89

1. Install vandal-proof devices.
2. When machine is in storage:
   - Lower equipment to the ground
   - Set wheels to widest position to make loading more difficult
   - Remove any keys and batteries
3. When parking indoors, put large equipment in front of exits and lock your storage buildings.
4. When parking outdoors, store in a well-lighted and fenced area.
5. Make note of suspicious activity and report any thefts immediately to law enforcement agencies.
6. Notify your John Deere dealer of any losses.

DX,SECURE2-19-18NOV03

CE Approval Specification

EC Declaration of Conformity—520M Loaders

Deere & Company
Moline, Illinois U.S.A.

The person named below declares that

Machine type: Front End Loader
Model: 520M

fulfills all relevant provisions and essential requirements of the following directive:

Directive	Number	Certification Method
Machinery Directive	2006/42/EC	Self-certification, per Article 5 of the Directive

Name and address of the person in the European Community authorized to compile the technical construction file:

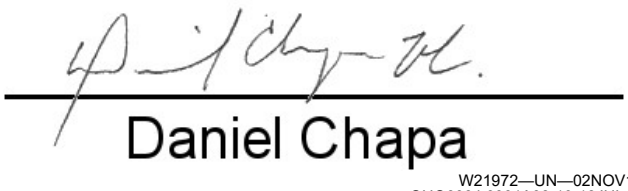
Brigitte Birk
John Deere GmbH & Co. KG
Mannheim Regional Center
John Deere Strasse 70
D-68163 Mannheim

Place of declaration: Monterrey, N.L., Mexico
Date of declaration: 08 May 2017
Manufacturing unit: Industrias John Deere S.A. de C.V.

Name: Daniel Chapa
Title: Manager, Loader Product Engineering

CE

DXCE01—UN—28APR09



W21972—UN—02NOV11
OUO6064,0001A08-19-18JUL17

EC Declaration of Conformity—540M Loaders

Deere & Company
Moline, Illinois U.S.A.

The person named below declares that

Machine type: Front End Loader
Model: 540M

fulfills all relevant provisions and essential requirements of the following directive:

Directive	Number	Certification Method
Machinery Directive	2006/42/EC	Self-certification, per Article 5 of the Directive

Name and address of the person in the European Community authorized to compile the technical construction file:

Brigitte Birk
John Deere GmbH & Co. KG
Mannheim Regional Center
John Deere Strasse 70
D-68163 Mannheim

Place of declaration: Monterrey, N.L., Mexico
Date of declaration: 08 May 2017
Manufacturing unit: Industrias John Deere S.A. de C.V.

Name: Daniel Chapa
Title: Manager, Loader Product Engineering

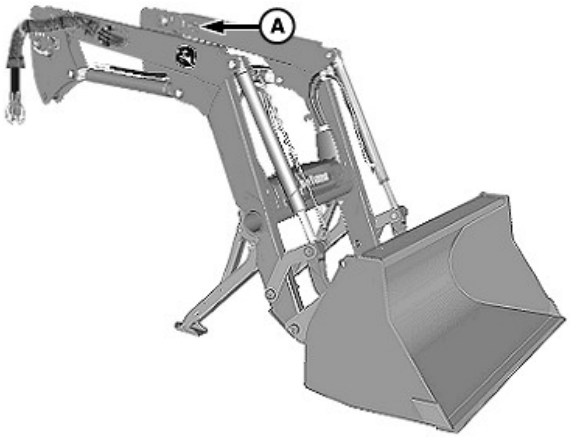
CE

DXCE01—UN—28APR09

Daniel Chapa

W21972—UN—02NOV11
OUO6064,0001DFF-19-07FEB18

CE Label



W28001—UN—01JUN17

A—Serial Number/CE Label

CE information is included on the loader serial number label (A), on the inside of the left-hand boom.

This label is part of the identification for the loader. It indicates that this loader conforms with the applicable requirements of the Machine Directive 2006/42/EC.

OUO6064,0001A09-19-12JUN18

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John Deere Service Keeps You On The Job

John Deere Parts

TS100—UN—23AUG88

We help minimize downtime by putting genuine John Deere parts in your hands in a hurry.

That's why we maintain a large and varied inventory—to stay a jump ahead of your needs.

DX,IBC,A-19-04JUN90

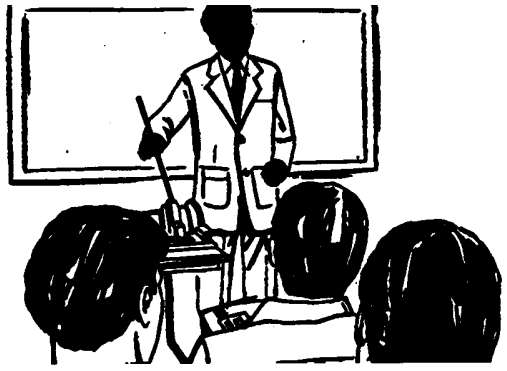
The Right Tools

TS101—UN—23AUG88

Precision tools and testing equipment enable our Service Department to locate and correct troubles quickly . . . to save you time and money.

DX,IBC,B-19-04JUN90

Well-Trained Technicians



TS102—UN—23AUG88

School is never out for John Deere service technicians.

Training schools are held regularly to be sure our personnel know your equipment and how to maintain it.

Result?

Experience you can count on!

DX,IBC,C-19-04JUN90

Prompt Service

TS103—UN—23AUG88

Our goal is to provide prompt, efficient care when you want it and where you want it.

We can make repairs at your place or at ours, depending on the circumstances: see us, depend on us.

JOHN DEERE SERVICE SUPERIORITY: We'll be around when you need us.

DX,IBC,D-19-04JUN90