

Sabre Yard Tractors

1842GV and 1842HV

1848GV and 1848HV

Serial No. (020,001-)



OPERATOR'S MANUAL

John Deere
Worldwide Commercial And
Consumer Equipment Division
OMM138147 J8

North American Version
Litho in U.S.A.

English

INTRODUCTION

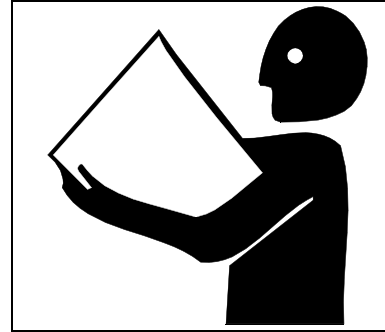
THANK YOU for purchasing a John Deere product.

Read this manual and your attachment manual thoroughly. Failure to do so could result in personal injury or equipment damage.



WARNING: The Engine Exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

CALIFORNIA Proposition 65 Warning



This manual should be considered a permanent part of your machine and should remain with the machine when you sell it.

Product 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 product warranty is explained on the warranty certificate you received from your dealer.

Measurements in this manual are metric units and their U.S. customary equivalents. RIGHT-HAND and LEFT-HAND sides are determined by facing in the direction the machine will travel when going forward. When you see a broken line arrow (----->), it indicates the part it is pointing to is hidden.

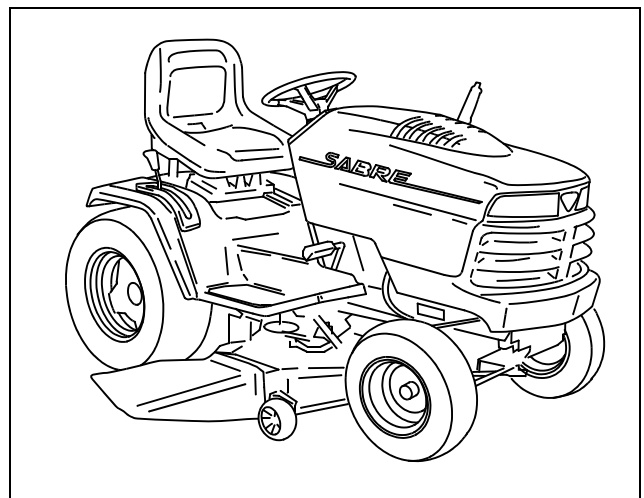
Record identification numbers below. Be sure to record all the numbers to help in tracing the machine if it is stolen. You also need to give these numbers to your dealer when you order parts.

DATE OF PURCHASE: _____

DEALER NAME: _____

DEALER PHONE: _____

Sabre® is a registered trademark of Deere & Company



INTRODUCTION

Vehicle Serial Number:

--	--	--	--	--	--	--	--	--	--	--	--

Located on Rear of Tractor



Briggs & Stratton Engine Information

Model

--	--	--	--	--	--

Type

--	--	--	--	--	--

Code

--	--	--	--	--	--	--	--

Located on Engine

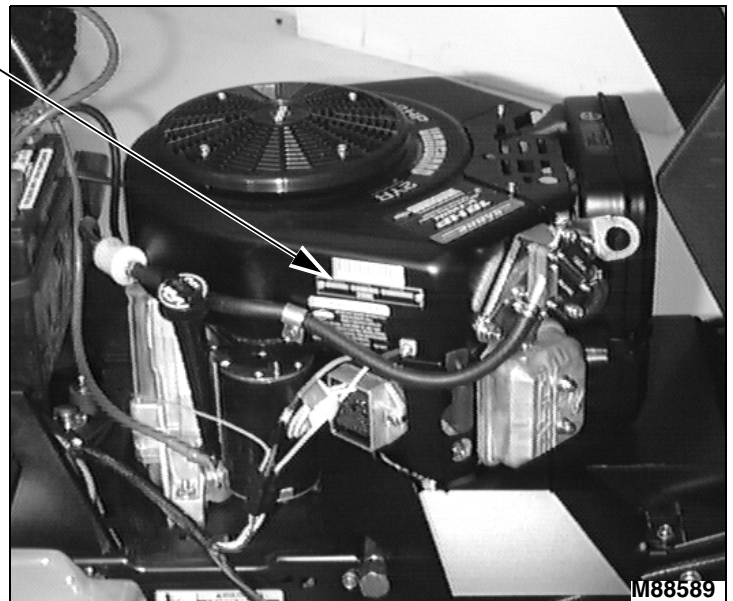


TABLE OF CONTENTS

Assembly	1
Safety Signs.....	8
Controls	11
Operating the Machine	13
Operating the Mower	30
Replacement Parts	37
Service Machine Safely	39
Service Interval Chart.....	41
Service Engine	43
Service Transmission.....	48
Service Mower	49
Service Electrical.....	56
Service Miscellaneous.....	61
Removing Mower	69
Installing Mower.....	71
Troubleshooting	72
Storing Machine.....	77
Specifications.....	80
Warranty	83
Index	89
Service Literature	93

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John Deere Worldwide Commercial and
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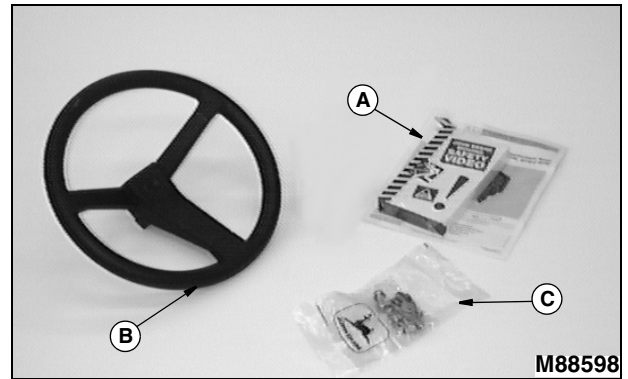
OMM138147 J8

ASSEMBLY

1842GV and 1842HV Only - Box of Parts

NOTE: *If you are missing any parts see the Replacement Parts section for additional service part numbers.*

- | | | |
|---|------------------------------------|----------|
| A | Sabre Operator's Manual | M135884 |
| | Safety Video | M134321 |
| B | Steering Wheel | AM121918 |
| C | Bag of Hardware | H63686 |
| | • 1 - Shoulder bolt-Steering Wheel | M87404 |
| | • 1 - Nut- Steering Wheel | M63662 |
| | • 1 - Washer- Steering Wheel | 24H1721 |
| | • 2 - M8x16 Bolts- Battery | 19M7775 |
| | • 2 - M8x16 Nut- Battery | 14M7303 |
| | • 2 - Keys | M127340 |

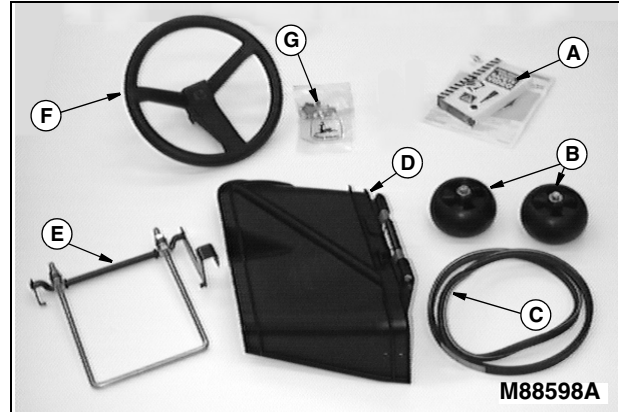


ASSEMBLY

1848GV and 1848HV Only - Box of Parts

NOTE: If you are missing any parts see the Replacement Parts section for additional service part numbers.

A	Sabre Operator's Manual Safety Video	M135884 M134321
B	Mower Gage Wheels (2)	M111489
C	Mower Drive Belt	M110312
D	Mower Discharge Chute with: Chute Pin Chute Spring Chute Hinge	M123859 M112899 M83410 M83411
E	Front Lift Rod Assembly: Rod Welded Pivot Clevis (2) Spacers (2) Lock Nuts (2) Jam Nuts (2)	M132735 AM119811 M113014 M110875 M85540 14M7275
F	Steering Wheel	AM121918
G	Bag of Hardware • 2 - Bolts • 2 - Nuts • 2 - Bushings • 2 - Washers • 1 - Shoulder Bolt-Steering Wheel • 1 - Nut-Steering Wheel • 1 - Washer-Steering Wheel • 2 - M8x16 Bolts-Battery • 2 - M8x16 Nut-Battery • 2 - M8x20 Bolts-Chute • 2 - M8x20 Nuts-Chute • 2 - Keys	H63686 19M7274 14M7396 M111491 M110698 M87404 M63662 24H1721 19M7775 14M7303 03M7184 14M7464 M127340



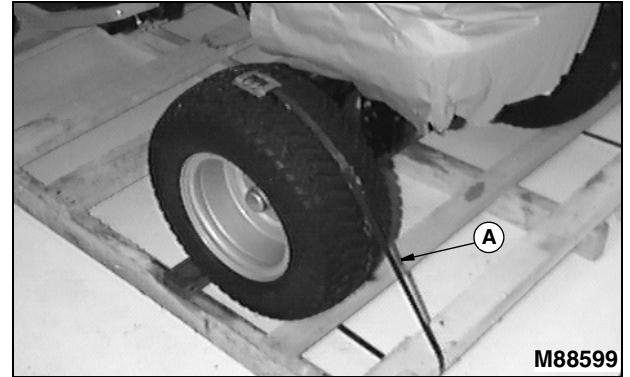
ASSEMBLY

Remove Packaging

CAUTION: Avoid eye injury. Wear eye protection when removing wire bands. Wire bands are under tension and could snap when removed.

Remove plastic and paper.

Remove wire bands (A) from front and rear tires.



1848GV and 1848HV Only - Remove Mower Deck from Side of Crate

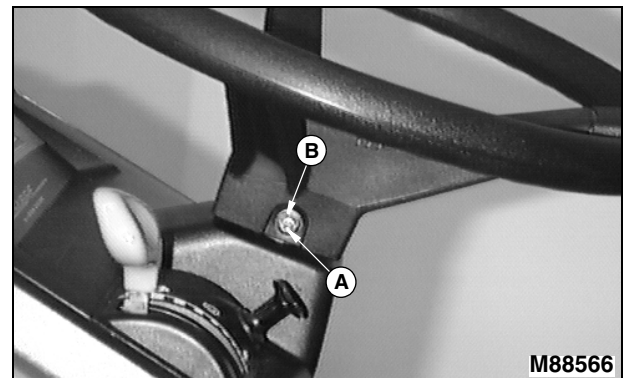
CAUTION: •Mower Deck is heavy. To avoid injury, use a hoist or safe lifting device when removing mower deck from crate.
•Mower Blades are sharp. Always wear gloves when handling mower deck.

1. Remove two bolts (A) from crate.
2. Using a hoist or a safe lifting device, remove mower deck from crate.



Install Steering Wheel

1. Put front wheels in the straight forward position.
2. Lubricate the steering shaft.
3. Install steering wheel with Sabre logo in the upright position.
4. Install shoulder bolt (A). Drive bolt in until head of bolt contacts steering wheel.
5. Install washer and nut (B).
6. Tighten lock nut until it is snug. Do not tighten lock nut to pull washer or head of bolt into steering wheel.



Remove Tractor from Crate

1. GEAR MODEL: Put transmission shift lever in N (Neutral).
AUTOMATIC MODEL: Pull out free-wheeling lever (A).
2. Carefully push tractor off crate.
3. Lock park brake.
4. AUTOMATIC MODEL: Push free-wheeling lever (A) IN before operating tractor.



ASSEMBLY

Connect and Check Battery



CAUTION: Prevent Battery Explosions:

- Keep sparks, lighted matches, and open flame away from the top of battery. Battery gas can explode.
- Never check battery charge by placing a metal object across the posts. Use a voltmeter or hydrometer.
- Do not charge a frozen battery; it may explode. Warm battery to 16° C (60° F)



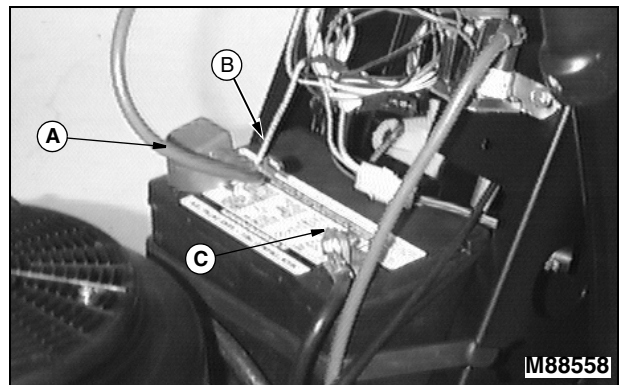
IMPORTANT: This battery comes fully charged. If the mower is not used by the Service Expiration Date indicated on the battery, charge the battery. (See Charging the Battery in the Service - Electrical section.)



CAUTION: DO NOT attempt to open, add fluid or service battery. Any attempt to do so will void warranty and lead to possible injury.

NOTE: Do not remove the **BLACK negative (-)** protective cap at this time.

1. Remove and discard the RED positive (+) protective cap from the positive (+) battery terminal.
2. Connect blue harness wire (B) and RED positive (+) cable (A) to battery. Apply petroleum jelly or silicone spray to terminal to prevent corrosion. Make sure connection is tight. Install the red terminal cover.
3. Remove and discard the BLACK (-) protective cap from the negative battery terminal.
4. Connect black negative (-) cable (C) to battery. Apply petroleum jelly or silicone spray to terminal to prevent corrosion. Make sure connection is tight.

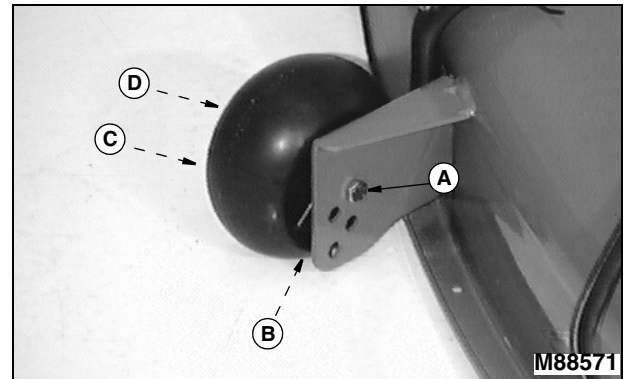


ASSEMBLY

1848GV and 1848HV Only - Assemble and Install Mower Deck

Install Rear Gage Wheels

1. Install rear gage wheels, one on each side, using bolt (A), bushing (B), washer (C), and tighten with nut (D).
2. Adjust gage wheels after mower deck is installed. (See Adjust Mower Gage Wheels in Operating the Mower section.)



Install Mower Deck

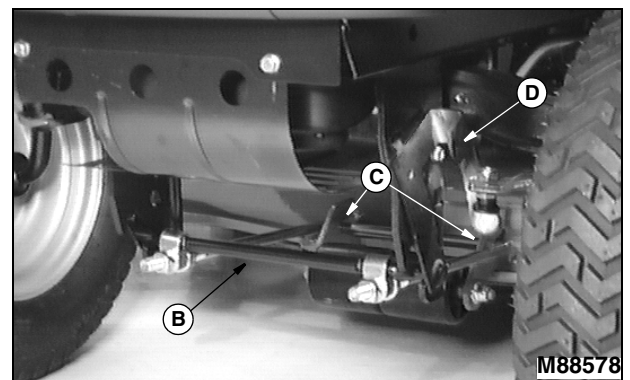
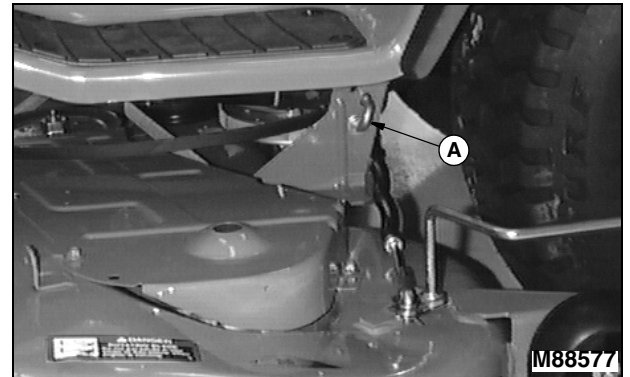


CAUTION: Avoid injury, before installing mower on machine: **STOP** engine. Remove key. Wait for all moving parts to **STOP**.

Avoid injury from loaded spring: LOCK lift lever before installing mower.

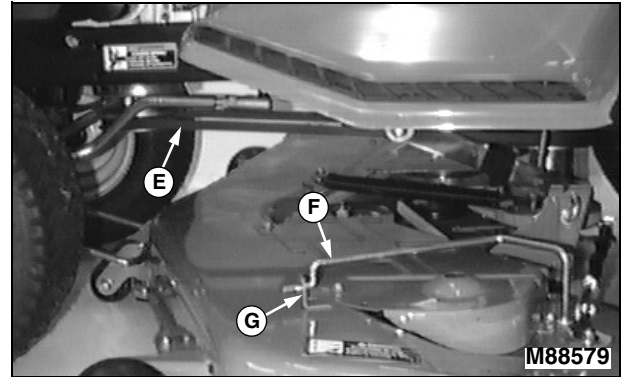
Avoid injury from spring loaded rod: Make sure you have a tight grip on drive belt tension rod when installing.

1. STOP engine, LOCK park brake, push PTO switch down to DISENGAGE, turn key to the OFF position, and remove key.
2. Raise mower lift lever to TRANSPORT (upper) position.
3. Slide mower under the tractor.
4. Put wood blocks under each side of mower.
5. Put mower lift lever in the MOWING (lower) position.
6. Install rear draft arms, one on each side of tractor, to mower lift brackets with spring loaded J-pins (A).
7. Put front lift rod assembly (B) in slotted brackets (C) on mower deck and install the front lift rod assembly to the front of the tractor frame.
8. Push up on lever (D) and lock into tractor frame.



ASSEMBLY

9. Put mower drive belt (E) on engine drive sheave.
10. Push drive belt tension rod (F) into bracket (G).
11. Raise mower lift lever to TRANSPORT (upper) position.
12. Remove wood blocks from both sides of mower.
13. Level mower. (See Leveling Mower in Operating the Mower section.)



Install Mower Discharge Chute

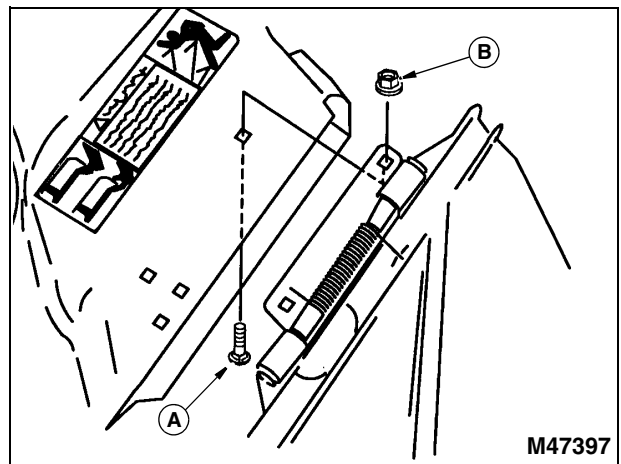


CAUTION: To avoid injury:-NEVER operate mower without chute in place.

-Hold chute firmly on mower deck when installing, mower discharge chute is spring loaded.

-After installing chute on deck check to make sure hinge on chute is working properly by opening chute and releasing it. Chute **MUST** spring back to the LOWERED position.

1. Install mower discharge chute to mower deck with two M8 x 20 bolts (A) and lock nuts (B).
2. Tighten nuts to 20 N•m (15 ft-lb).



Break-In Electric PTO Clutch

1. Start engine and push throttle lever (A) up to full throttle (🐘) position.
2. With no load on mower, ENGAGE PTO (B) and allow mower to run for 10 seconds.
3. DISENGAGE PTO and wait 10 seconds.
4. Repeat Step 2 for 12-15 cycles.
5. PTO clutch is now properly burnished.



ASSEMBLY

Check Machine Safety System

Perform safety system check to make sure the electronic safety interlock circuit is functioning properly. Perform all six Tests. (See Testing Safety System in the Operating section)

Checking Tire Pressure



CAUTION: Explosive separation of a tire and rim parts can cause serious injury or death:

- Do not attempt to mount a tire without the proper equipment and experience to perform the job.
- Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure. Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure resulting in a tire explosion. Welding can structurally weaken or deform the wheel.
- When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly.
- Check tires for low pressure, cuts, bubbles, damaged rims or missing lug bolts and nuts.



1. Check tires for damage.
2. Check tire pressure with an accurate gauge.
3. Add or remove air, if necessary:

Tire Size	Pressure-kPa (psi)
Front: 16 x 6.5	97 kPa (14 psi)
Rear: 23 x 9.5	83 kPa (12 psi)

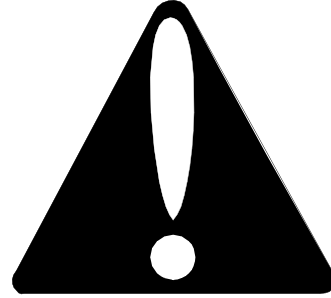
SAFETY SIGNS

Safety-Alert Symbol

Read and recognize safety information. Be alert to the potential for personal injury when you see this safety-alert symbol.

On your machine safety labels, the words DANGER, WARNING, and CAUTION are used with this safety-alert symbol. DANGER identifies the most serious hazards.

In this manual, the word CAUTION and this symbol call attention to safety messages.



Machine Safety Labels

DANGER

ROTATING BLADES CUT OFF ARMS AND LEGS

- Do not mow when children or others are around
- Do not mow in reverse
- Look down and behind before and while backing
- Never carry children

WARNING

AVOID SERIOUS INJURY OR DEATH

- Drive up and down slopes, not across
- Avoid sudden turns
- If machine stops going uphill, stop blade and back down slowly
- Keep safety devices (guards, shields, and switches) in place and working
- Read operator's manual
- When leaving machine:
 - Stop engine
 - Set park brake
 - Remove key



SAFETY SIGNS

WARNING

LOADED SPRING

LOCK LIFT LEVER FORWARD BEFORE CHANGING ATTACHMENTS

Picture Note: One decal on each side of tractor frame



DANGER/POISON

SHIELD EYES.

EXPLOSIVE GASES CAN CAUSE BLINDNESS OR INJURY.

NO

- SPARKS
- FLAMES
- SMOKING

SULFURIC ACID CAN CAUSE BLINDNESS OR SEVERE BURNS

FLUSH EYES IMMEDIATELY WITH WATER.

GET MEDICAL HELP FAST.

MAINTENANCE-FREE

KEEP OUT OF THE REACH OF CHILDREN. DO NOT TIP. DO NOT OPEN BATTERY!

Picture Note: Located on Battery



SAFETY SIGNS

DANGER

ROTATING BLADE

DO NOT PUT HANDS OR FEET UNDER OR INTO MOWER WHEN ENGINE IS RUNNING

THROWN OBJECTS

BEFORE MOWING, CLEAR AREA OF OBJECTS THAT MAY BE THROWN BY BLADE

DO NOT OPERATE MOWER WITHOUT DISCHARGE CHUTE OR ENTIRE GRASS CATCHER IN PLACE



DANGER

ROTATING BLADE

DO NOT PUT HANDS OR FEET UNDER OR INTO MOWER WHEN ENGINE IS RUNNING

Picture Note: Located on Left-Hand side of deck



Certification Label

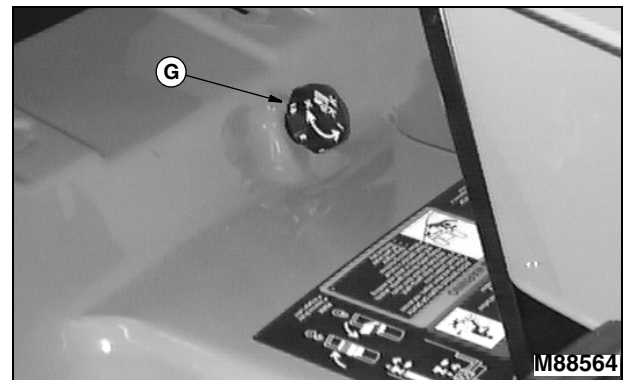
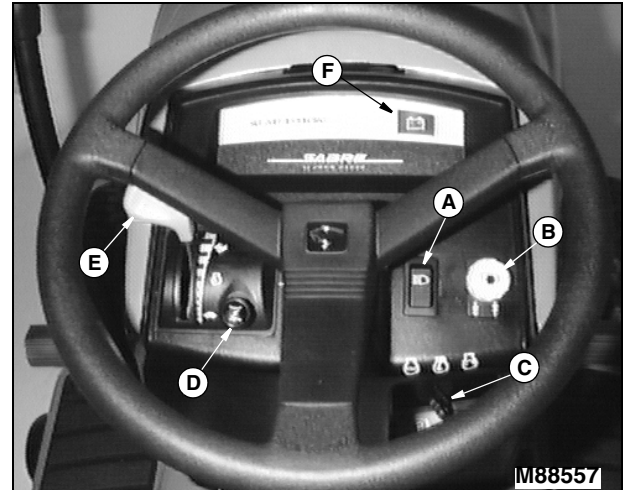
This OPEI label on your mower indicates that this model has been certified by an independent laboratory for compliance with American National Standard B-71.1-1996, "Safety Specifications" for Power Lawn Mowers, Lawn and Garden Tractors, and Lawn Tractors.



CONTROLS

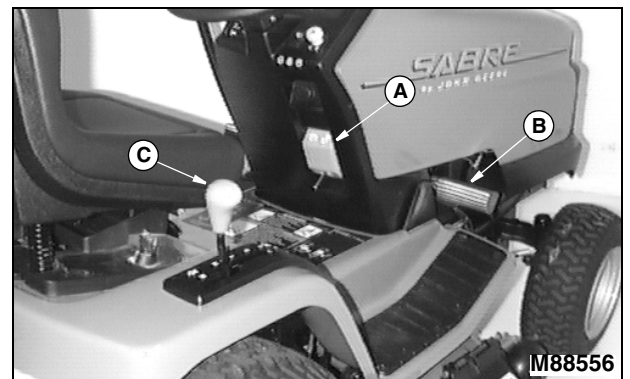
Console Controls

- A - Light Switch
- B - PTO Switch/RIO Switch
- C - Key Switch
- D - Choke Knob
- E - Throttle Lever
- F - Battery Discharge Light
- G - Cut Height Adjustment Lever



Foot and Panel Controls (Gear Models, 1842GV and 1848GV)

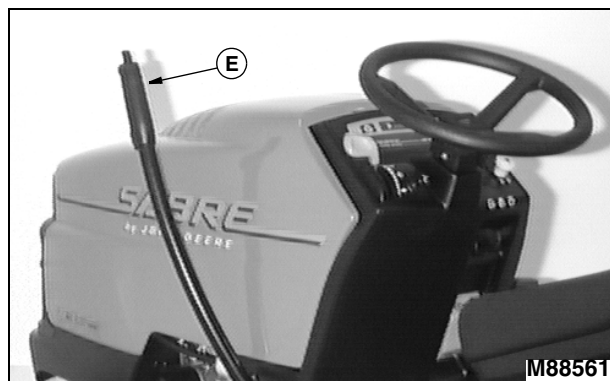
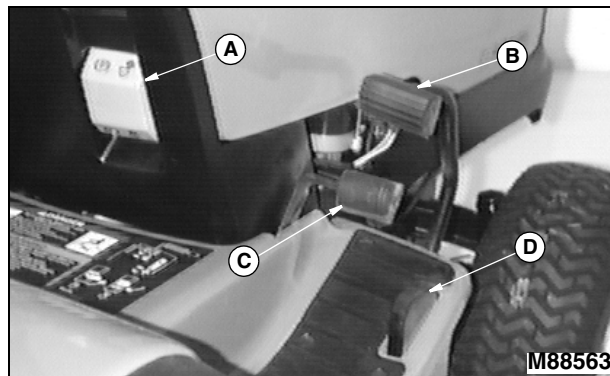
- A - Park Brake Lever
- B - Brake Pedal
- C - Gear Shift Lever
- D - Mower Deck Lift Lever
- E - Clutch Pedal



CONTROLS

Foot and Panel Controls (Automatic Models, 1842HV and 1848HV)

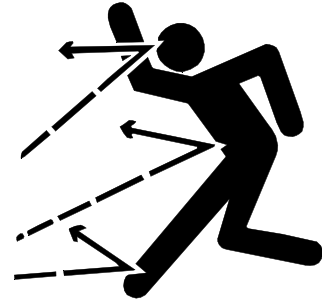
- A - Park Brake Lever
- B - Brake Pedal
- C - Forward Travel Pedal
- D - Reverse Travel Pedal
- E - Mower Deck Lift Lever



OPERATING MACHINE

Operate Safely

- In addition to reading your Operator's Manual, view your John Deere Mowing Safety Video.
- Check brake action before you operate. Adjust or service brakes as necessary.
- Inspect machine before you operate. Be sure hardware is tight. Repair or replace damaged, badly worn, or missing parts. Be sure guards and shields are in good condition and fastened in place. Make any necessary adjustments before you operate.
- Clear work area of objects that might be thrown. Keep people and pets out of the work area. Stop machine if anyone enters the area.
- If you hit an object, stop the machine and inspect it. Make repairs before you operate. Keep machine and attachments properly maintained and in good working order.
- DO NOT leave machine unattended when it is running.
- Only operate during daylight or with good artificial light.
- Be careful of traffic when operating near or crossing roadways.
- Do not wear radio or music headphones while operating the machine. Safe operation requires your full attention.



Park Safely

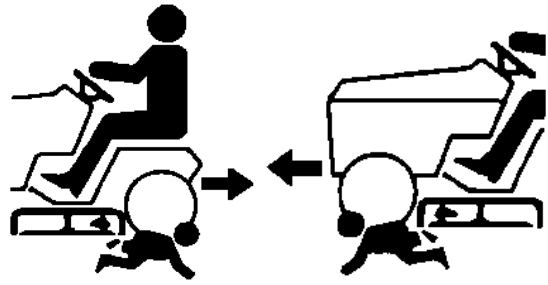
- Stop machine on a level surface, not on a slope.
- Disengage mower blades.
- Lower attachments to the ground.
- Engage park brake.
- STOP engine.
- Remove key.
- Before you leave the operator's seat, wait for engine and all moving parts to STOP.

OPERATING MACHINE

Rotating Blades are Dangerous - Protect Children and Prevent Accidents

PROTECT CHILDREN:

- Never assume that children will remain where you last saw them. Children are attracted to mowing activity, stay alert to the presence of children.
- Keep children in the house when you are operating the machine.
- Turn machine off if a child enters the mowing area.
- Use extra care when you come to blind corners, shrubs, trees, or other objects that may block your vision.
- DO NOT let children or an untrained person operate the machine.
- DO NOT carry or let children ride on machine or any attachment. DO NOT tow children in a cart or trailer.



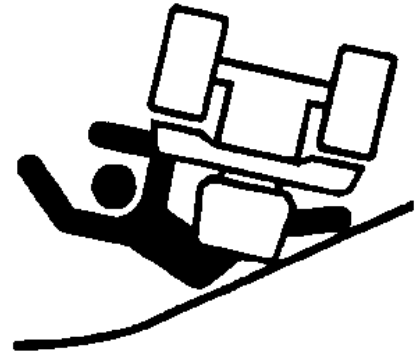
HELP PREVENT SERIOUS OR FATAL ACCIDENTS:

- Be alert at all times, drive forward carefully. People especially children can move quickly into the mowing area before you know it.
- Back carefully. Disengage mower blades and look behind the machine carefully, especially for children, before you back up.
- DO NOT mow in reverse unless it is absolutely necessary.
- Disengage mower blades when you are not mowing.
- DO NOT operate machine if you are under the influence of drugs or alcohol.

OPERATING MACHINE

Avoid Tipping

- DO NOT drive where machine could slip or tip.
- Stay alert for holes and other hidden hazards in the terrain.
- Keep away from drop-offs.
- Slow down before you make a sharp turn or operate on a slope.
- When pulling loads or using heavy equipment, use only approved hitches, limit loads to those you can safely control, and use counterweights or wheel weights when required per this manual or your attachment manual.
- Drive up and down a hill—not across. Be careful when you change direction on a slope.
- DO NOT stop when going up hill or down hill. If machine stops going up hill, DISENGAGE mower blades and back down slowly.
- DO NOT mow wet grass. Reduced traction could cause sliding.
- DO NOT try to stabilize the machine by putting your foot on the ground.



Keep Riders Off

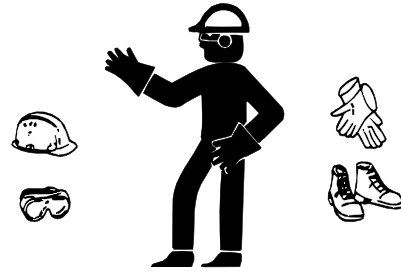
- Only allow the operator on the machine. Keep riders off.
- Riders on the machine or attachment may be struck by foreign objects or thrown off the machine causing serious injury.
- Riders obstruct the operator's view resulting in the machine being operated in an unsafe manner.



OPERATING MACHINE

Wear Appropriate Clothing

- Wear close fitting clothing and safety equipment appropriate for the job.
- Loud noise can cause impairment or loss of hearing, wear a suitable protective device such as earplugs.



Stay Clear of Rotating Drivelines

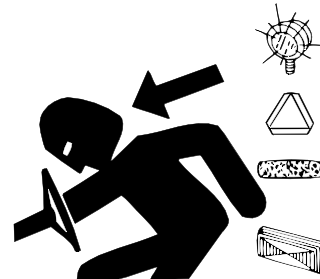
Entanglement in rotating driveline can cause serious injury or death:

- Wear close fitting clothing.
- STOP the engine and be sure PTO driveline is stopped before getting near it.



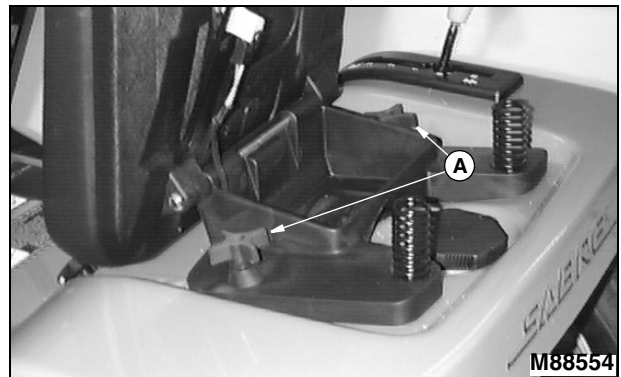
Transport Safely

- Use safety lights and devices. Slow moving machines when driven on public roads are hard to see, especially at night. Avoid personal injury or death resulting from a collision with a vehicle.
- Whenever driving on public roads, use flashing warning lights and turn signals according to local regulations. Extra flashing warning lights may need to be installed.



Adjusting Seat

1. Tip seat forward and loosen two knobs (A) to slide seat assembly forward or rearward to most comfortable OPERATOR position.
2. Tighten knobs after adjustment to keep seat in place.



OPERATING MACHINE

Using the Park Brake

CAUTION: To avoid injury, always **LOCK** park brake before getting off tractor or leaving tractor unattended.

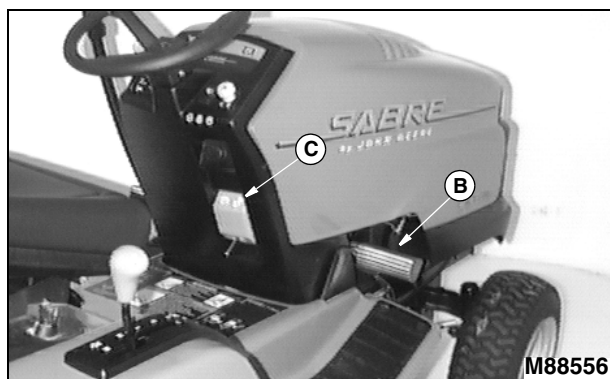
LOCKING PARK BRAKE:

Picture Note: Gear Model Shown

1. Gear Only: Push clutch pedal (A) all the way down.
2. Push brake pedal (B) all the way down.
3. Lift park brake lever (C) up.
4. Release pedal(s) and park brake lever. Pedal(s) should stay down and park brake lever should stay LOCKED in UP position.

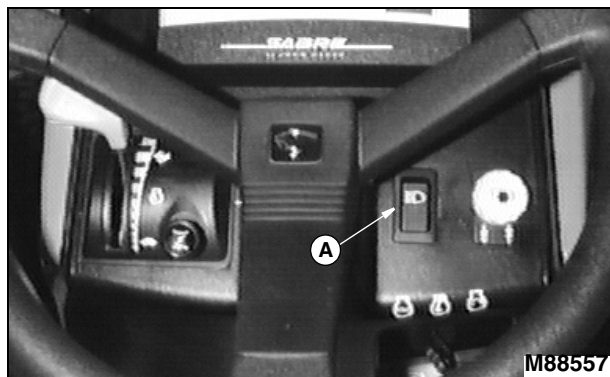
UNLOCKING PARK BRAKE:

1. Push and hold pedal(s) down.
2. Push park brake lever (C) down to UNLOCK park brake.
3. Release pedal(s).



Using Headlights

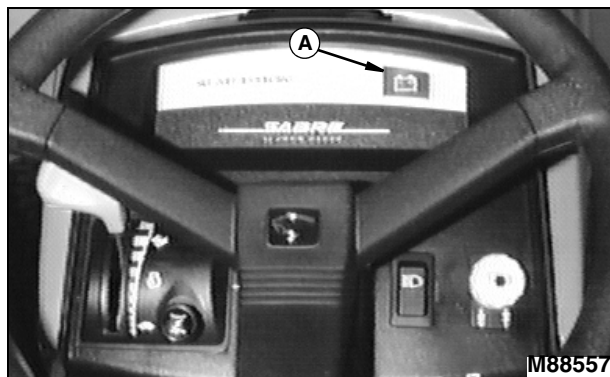
Push top of light switch (A) to turn headlights ON.
Push bottom of light switch to turn headlights OFF.



Check Battery Discharge Light

The Battery Discharge light (A) should go out when throttle lever is moved to the HIGH IDLE/Mowing (🚦) position.

The battery discharge light may remain on for several minutes while the battery is being charged.



OPERATING MACHINE

Starting Engine

CAUTION: Start engine **ONLY** outdoors or in a well ventilated place. Exhaust fumes are dangerous.

IMPORTANT: Do not operate starter more than 20 seconds at a time, or you may damage it. If engine does not start: Wait two minutes before you try again. See Troubleshooting section.

NOTE: Engine will not start unless: PTO switch is **DISENGAGED**, park brake is **LOCKED** or brake pedal pushed down. On **GEAR** model: The transmission shift lever should be in **N (NEUTRAL)** position.

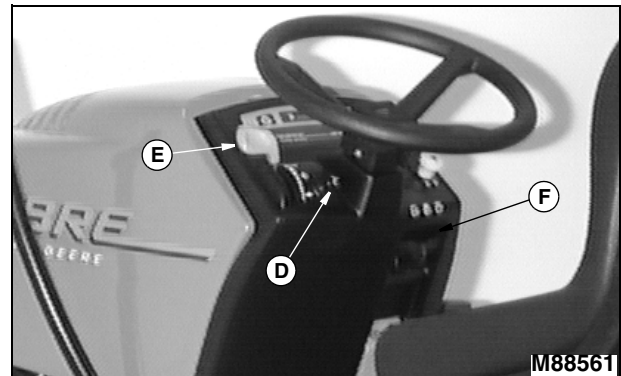
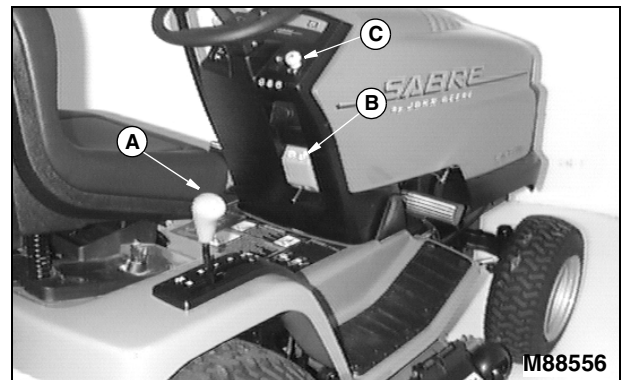
1. On GEAR model: Move transmission shift lever (A) to N (NEUTRAL) position.

Picture Note: Gear Model Shown

2. Lock the park brake (B).
3. Push PTO switch (C) down to DISENGAGE.
4. Pull choke knob (D) out to the ON (🔌) position.
5. Move throttle lever (E) to the HALF-SPEED (🔌) position.

Picture Note: Automatic Model Shown

6. Turn key (F) to START position.
7. When engine starts, release key to RUN position.
8. Check starting conditions:
 - **If engine is COLD:** Gradually return the choke to the OFF position after the engine starts and warms up. (See Cold Weather Starting in this section.)
 - **If engine is WARM:** Return choke to the OFF position as soon as the engine starts.
9. Let engine run for a couple of minutes to warm-up before operating tractor.



OPERATING MACHINE

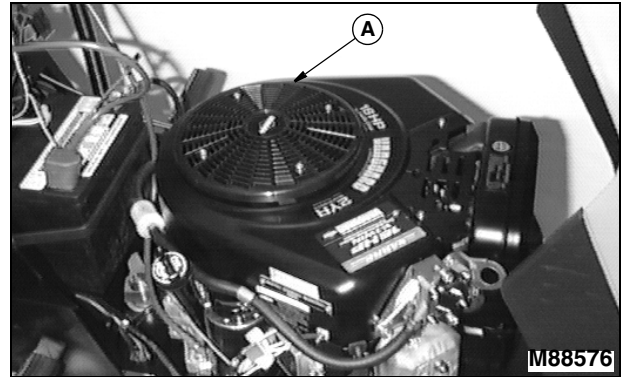
Warming and Idling Engine

WARMING ENGINE:

- Run Engine at half speed for 2–3 minutes.

IDLING ENGINE:

- Engine is air-cooled and needs a large volume of air to keep cool. Keep air intake screen (A) on top of engine clean.
- Avoid unnecessary engine idling.



Stopping Engine

1. Move throttle lever (A) to SLOW (🐢) position. Let engine run at low throttle a few seconds.
2. Turn key (B) to OFF position.
3. Remove key.
4. LOCK the park brake.



Using and Stopping Gear Transmission

CAUTION: TO AVOID INJURY: • Before moving forward or rearward, make sure area is clear of bystanders, especially children.
• Disengage mower or attachment before backing up.

IMPORTANT: You do not have to STOP tractor to shift on the go, but do not shift on the go when tractor is under extreme load. To shift on the go, follow steps below under TRAVEL FORWARD.



TO TRAVEL FORWARD:

1. Push down on clutch pedal (A).
2. Move shift lever (B) to desired forward gear.
3. Release clutch pedal slowly.

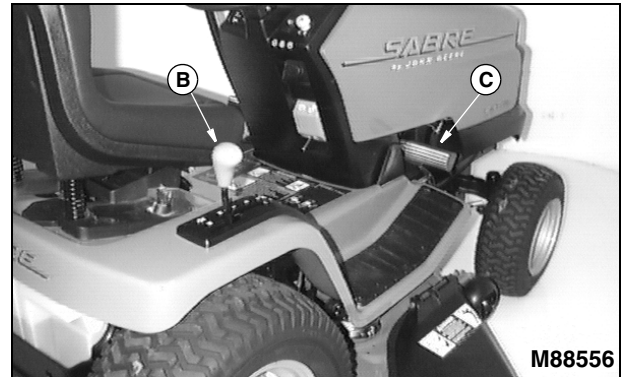


OPERATING MACHINE

TO TRAVEL IN REVERSE:

NOTE: The engine and any operating attachment will stop as the gear shift lever is moved to R (REVERSE) position with attachment engaged.

1. Push clutch pedal and brake (C) all the way down to STOP tractor.
2. Push PTO knob down to the OFF position to disengage attachment.
3. Look behind the vehicle to be sure there are no bystanders nearby.
4. Move shift lever (B) to R (REVERSE) position.
5. Release clutch pedal slowly.



FOR EMERGENCY STOPPING

1. Push down on clutch pedal and brake at the same time.

NOTE: This tractor is equipped with a Brake/Clutch Interlock. Pressing the brake pedal will also depress the clutch pedal for emergency stops.

Using and Stopping Automatic Transmission



CAUTION: TO AVOID INJURY: • Before moving forward or rearward, make sure area is clear of bystanders, especially children.
• Disengage mower or attachment before backing up.

1. UNLOCK park brake. (See Using the Park Brake in this section.)

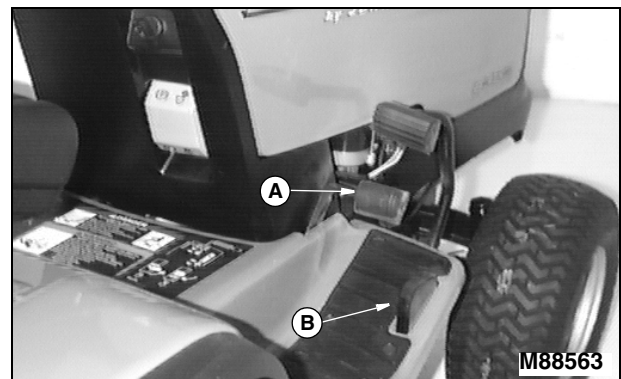
TO TRAVEL FORWARD:

1. Push down pedal (A).

TO TRAVEL IN REVERSE:

NOTE: The engine and any operating attachment will stop as the REVERSE pedal is depressed with attachment engaged.

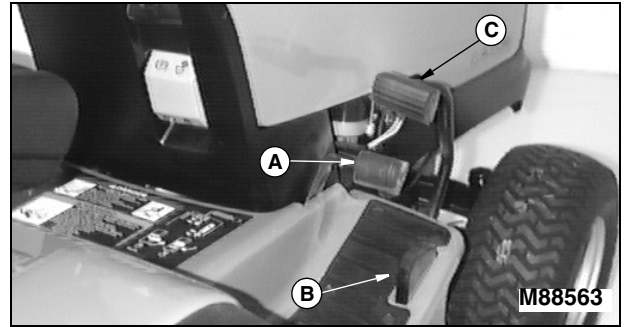
1. Bring the vehicle to a stop.
2. Push PTO knob down to the OFF position to disengage attachment.
3. Look behind the vehicle to be sure there are no bystanders nearby.
4. Push down pedal (B).



OPERATING MACHINE

FOR EMERGENCY STOPPING:

1. Push down on brake pedal (C). Travel pedals (A and B) will return to NEUTRAL position.



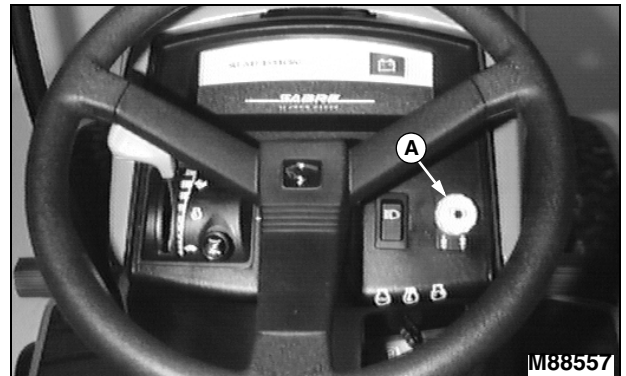
Using Reverse Implement Option



CAUTION: TO AVOID INJURY: Before moving forward or rearward, make sure area is clear of bystanders, especially children.

NOTE: Operating the mower while backing up is strongly discouraged. The Reverse Implement Option should be used **ONLY** when operating another attachment or when the operator deems it necessary to reposition the machine with the mower engaged.

1. Stop the machine FORWARD travel with the attachment still engaged.
2. Look behind the vehicle to be sure there are **no bystanders**.
3. Lift and hold the PTO knob (A) up past the PTO engagement position to activate the reverse implement position while:
 - depressing REVERSE foot pedal slightly (Automatic Transmission)OR
 - moving the gear shift lever to the R (REVERSE) position (Gear Transmission).



NOTE: If the engine and attachment stop while repositioning the machine, return PTO knob to the OFF position and restart the machine. (See Starting The Engine in this section.) Begin again with Step 2.

4. As the machine begins to move backward, release the PTO knob and reposition the machine.
5. Resume FORWARD travel. The attachment should continue operating.
6. Repeat Steps 1 through 5 to reposition the machine again.

OPERATING MACHINE

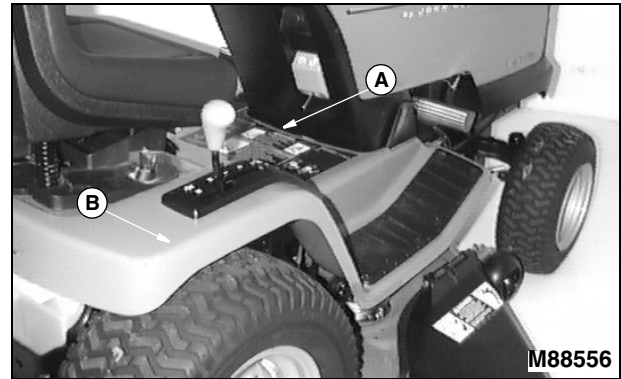
Pushing Machine

IMPORTANT: Avoid transmission damage, DO NOT tow machine.

To move machine when engine is STOPPED:

- Unlock the park brake (A).
- **Picture Note: Gear Model Shown**
- **GEAR MODEL:** Put transmission shift lever (B) in N (Neutral).
- **AUTOMATIC MODEL:** Pull out on free-wheeling lever (C).
- Push machine to desired location.

NOTE: AUTOMATIC MODEL: Push free-wheeling lever (C) IN before operating tractor.



Daily Operating Checklist

- Test safety systems.
- Check tire pressure.
- Check fuel level.
- Check engine oil level.
- Remove grass and debris from machine.

OPERATING MACHINE

Testing Safety Systems



CAUTION: Engine exhaust fumes can cause sickness or death.

If it is necessary to run an engine in an enclosed area, remove the exhaust fumes from the area with an exhaust pipe extension. If you do not have an exhaust pipe extension, open the doors and get outside air into the area.

NOTE: Your Yard Tractor is equipped with a **ELECTRONIC SAFETY INTERLOCK**. Engine will not start unless: • Operator is on seat; • PTO switch is **DISENGAGED**; • Brake pedal is depressed **OR** parking brake is set.

Use the following checkout procedure to check for normal operation of tractor.

If there is a malfunction during one of these procedures, **DO NOT** operate tractor. (See your Sabre Service Center for service.)

Perform these tests in a clear open area. Keep bystanders away .

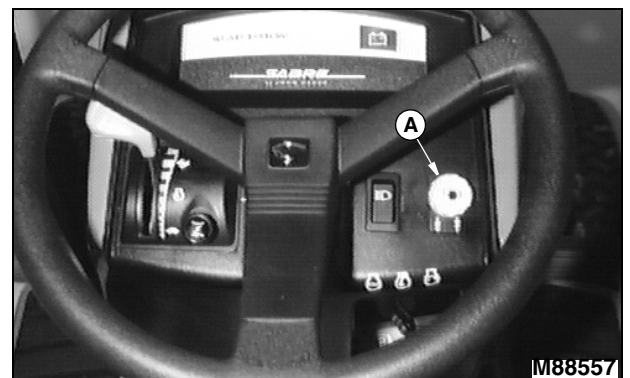
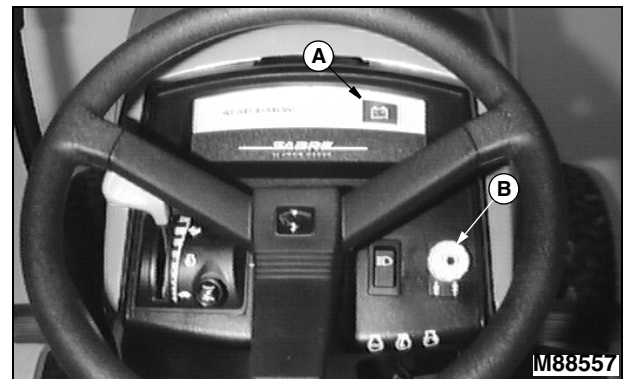
Test 1

Check operation of indicator lights:

- Turn key to RUN position.
- Pull PTO switch (B) up to ENGAGE.
- LOOK: Indicator light (A) must light.
- If indicator does not light, see Replacing Indicator Light Bulb in Service – Electrical section.
- If new indicator bulb does not light or no indicators work, see your Sabre Service Center for service.

Test 2

1. Operator on seat.
2. UNLOCK the park brake.
3. Push PTO switch (A) down to DISENGAGE.
4. Try to start engine.
5. Engine **MUST NOT** start. If engine starts, there is a problem with your safety interlock circuit.



OPERATING MACHINE

Test 3

1. Operator on seat.
2. LOCK the park brake.
3. Pull PTO switch (A) up to ENGAGE.
4. Try to start engine.
5. Engine MUST NOT start. If engine starts, there is a problem with your safety interlock circuit.



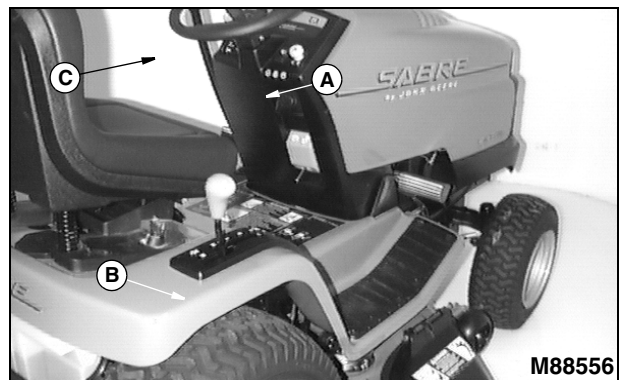
Test 4

1. Operator on seat.
2. Lock the park brake.
3. Push PTO switch (A) down to DISENGAGE.
4. Start engine and move throttle lever (B) to HALF-SPEED (🐢) position.
5. Pull PTO switch (A) up to ENGAGE.
6. Move throttle lever to FAST (🐇) speed position.
7. Raise up off of seat. DO NOT get off tractor.
8. Engine MUST stop. If engine does not stop, there is a problem with your safety interlock circuit.



Test 5

1. Operator on seat.
2. Push brake pedal down.
3. Push PTO switch (A) down to DISENGAGE.
4. Put transmission shift lever (B) in N (NEUTRAL) position.
5. Start engine and move throttle lever (C) to FAST (🐇) speed position.
6. Release brake slowly.
7. Raise up off of seat. DO NOT get off tractor.
8. Engine MUST stop. If engine does not stop, there is a problem with your safety interlock circuit.



OPERATING MACHINE

Test 6

1. Operator on seat.
2. Lock the park brake.
3. Push PTO switch (A) down to DISENGAGE.
4. Start engine and move throttle lever (B) to FAST (🐾) speed position.
5. Raise up off of seat. DO NOT get off tractor.
6. Engine MUST remain running. If engine does stop, there is a problem with your safety interlock circuit.



Test 7

1. Lock the park brake (A).
2. GEAR MODEL: Put transmission shift lever (B) in N (Neutral).
- AUTOMATIC MODEL: Pull out free-wheeling lever (C).
3. Try to push machine manually.
4. Park brake MUST prevent machine from moving. If machine moves, parking brake needs to be adjusted.



OPERATING MACHINE

Test 8



CAUTION: TO AVOID INJURY: Before moving rearward, make sure area is clear of bystanders, especially children.

Test Reverse Implement Option:

1. Start engine.
2. Engage PTO to start attachment.
3. Look behind the vehicle to be sure there are no bystanders.
4. Begin REVERSE travel by depressing REVERSE foot pedal (Automatic transmission) or moving gear shift lever to R (REVERSE) position (Gear transmission).
5. Attachment and engine should stop operation. If attachment or engine continues to operate while tractor travels in REVERSE, do not continue to operate attachment. See your John Deere dealer for service.

Avoid Damage to Plastic and Painted Surfaces

- DO NOT wipe plastic parts unless rinsed first. (See Correct Cleaning Care in Service-Miscellaneous section.)
- Insect repellent spray may damage plastic and painted surfaces. Do not spray insect repellent near machine.
- Be careful not to spill fuel on machine. Fuel may damage surface. Wipe up spilled fuel immediately.

OPERATING MACHINE

Avoid Using Ground Engaging Equipment

IMPORTANT: This tractor is **NOT** intended for use with ground engaging equipment. Use of such equipment could result in damage to transmission components.

This tractor is not intended for use with ground engaging equipment such as a rear tiller, disk, blade or plow.

Using Front Weights



CAUTION: Tractor front wheel weights improve stability in most slope operation. To avoid injury, add front wheel weights for better front-end stability and steering when using a rear mounted attachment or pulling a cart.

NOTE: *Before installing wheel weights on your machine, MAKE SURE that the tire valve stems are facing the inside.*

Install front wheel weights for better stability and steering control when you use equipment such as the rear-mounted grass bagger or dumpcart.

Remove front wheel weights when not required.

Using Rear Wheel Weights

IMPORTANT: When adding weight to rear of tractor, use wheel weights only.
75 lbs. (34 kg) MAX. each wheel.

Use of rear wheel weights is recommended when an attachment, such as snowthrower or blade is used.

OPERATING MACHINE

Using Tire Chains

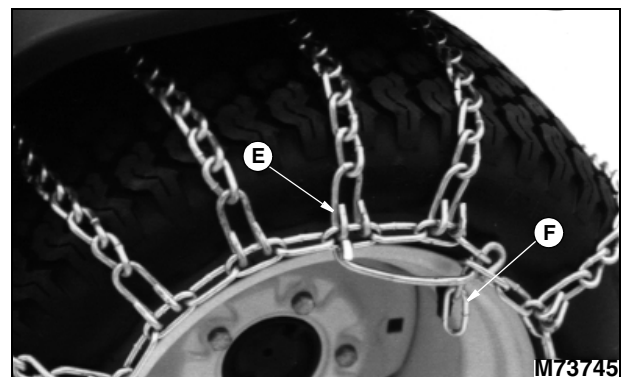
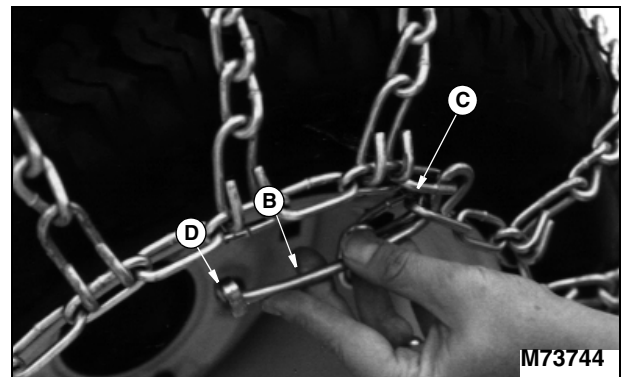
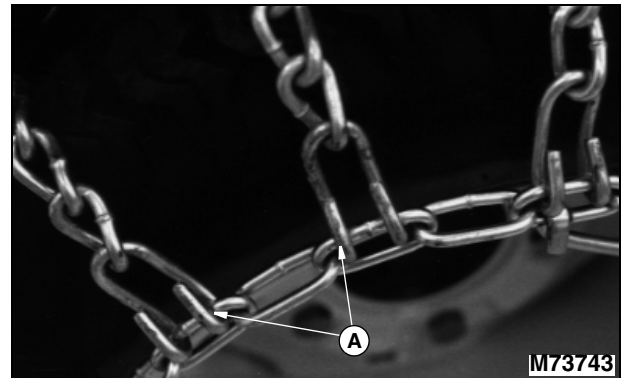
Tire chains are recommended for use with snowthrower and, under certain conditions; the front blade.

Preparing Tractor for Installing Chains on Tires

- Park the tractor on a level surface.
- Lock the park brake.
- STOP the engine.
- Remove the key.

Installing the Chains

1. Remove chains from bag and lay out flat with the cross chain hook ends facing upward. Remove any twists and tangles from cross chain and rim chain.
2. Drive machine onto chains.
3. Drape chain over tire with the lever fastener on outside of tire and cross link hooks (A) facing upward and away from tire.
4. Adjust chain for straightness and an even amount of cross chain links on each side of tire.
5. Place the first cross chain (opposite the end with fastener and inside hook) under tire.
6. Pull the inside rim chain tight and hook the inside hook. Pull the outside rim chain tight and hook the outside lever fastener (B) by running the end through a free link (C). Close the fastener by rotating it back 180 degrees and engaging the hook (D) on the end of the fastener into a rim chain link (E). Make sure the chain is centered on the tire with approximately the same number of free rim links (F) on the inside and outside.

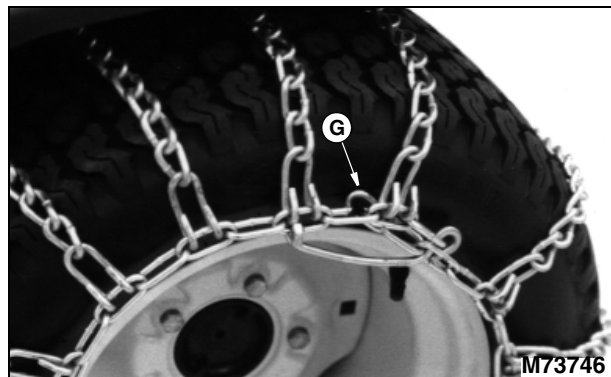


OPERATING MACHINE

7. Tie excess rim chain links (G) back to the rim chain.
8. The chain should be as tight as possible by hand. Unhook the fastener and repeat Step 5 if the chain is loose.
9. Drive forward on chains 30'-40' and recheck for tightness. Adjust as necessary.

IMPORTANT: Periodically check chains for looseness and adjust when necessary.

Maintain proper air pressure in tires.



Transporting

Do not tow machine.

Use a heavy-duty trailer to transport your machine.

Drive forward onto trailer.

Lower mower or any attachment to trailer deck.

LOCK park brake.

Be sure trailer has all the necessary lights and signs required by law.

Fasten machine to trailer with heavy-duty straps, chains, or cables. Both front and rear straps must be directed down and outward from tractor.

OPERATING MOWER

Operate Mower Safely

- In addition to reading your Operator's Manual, view your John Deere Mowing Safety Video.

Check Ground Conditions

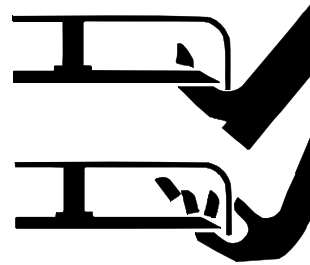
- Clear mowing area of objects that might be thrown. Keep people and pets out of mowing area.
- Study mowing area. Set up safe mowing pattern. Do not mow under conditions where traction or stability is doubtful.
- First, test drive area with PTO switch DISENGAGED and mower lowered. Slow down when you travel over rough ground.



Avoid Injury From Contacting Blades

Before you dismount to unplug or adjust mower:

- DISENGAGE PTO switch to stop mower blades.
- STOP the engine.
- LOCK the park brake.
- Remove key.
- Wait for mower blades to STOP.
- Keep hands, feet and clothing away from mower deck when engine is running.
- DISENGAGE PTO switch to stop mower blades when you are not using mower.



OPERATING MOWER

Using Lift Lever to Raise and Lower Mower

Check out the two different lift lever positions before operation:

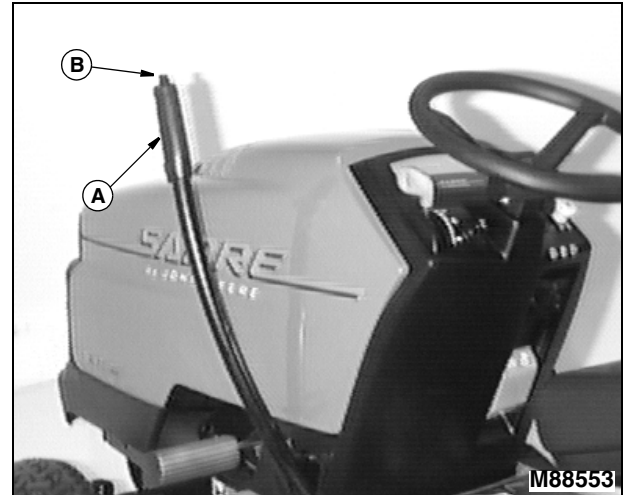
- **TRANSPORT (UPPER) POSITION:** Raises mower for transport.
- **MOWING (LOWER) POSITION:** Maintains cutting height set by mower height control yet allows deck to float over uneven terrain.

To put mower in **MOWING (lower)** position:

- Pull lift lever (A) back slightly.
- Push in button (B).
- Push lever forward until it latches down.

To put mower in **TRANSPORT (upper)** position:

- Push down on lift lever (A) slightly.
- Push in button (B).
- Pull lever back towards you until it latches.



Adjusting Cutting Height

IMPORTANT: Lift lever must be in **TRANSPORT (upper)** position before turning cutting height knob.

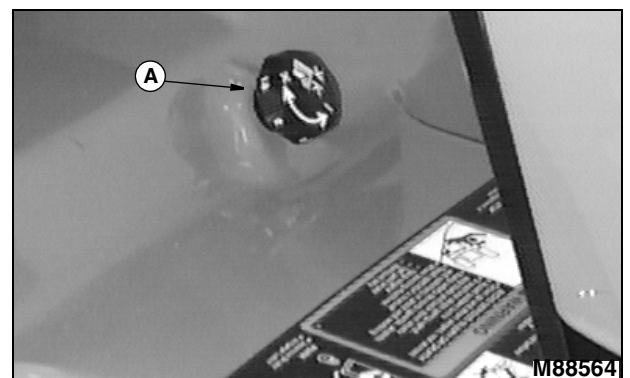
NOTE: *Adjust cutting height after you change cutting height. (See Adjusting Mower Gage Wheels in this section.)*

Cutting height can be adjusted from approximately 25–100 mm (1–4 in).

When lift lever is in **TRANSPORT (upper)** position (lift lever all the way back), cutting height is approximately 100 mm (4 in).

Knob (A) has cutting height identification numbers embossed in it. To change or attain cutting height desired:

- Pull lift lever all the way back to **TRANSPORT (upper)** position.
- Turn cutting height knob (A) to desired cutting height position. Mower will be at this cutting height each time you lower it.



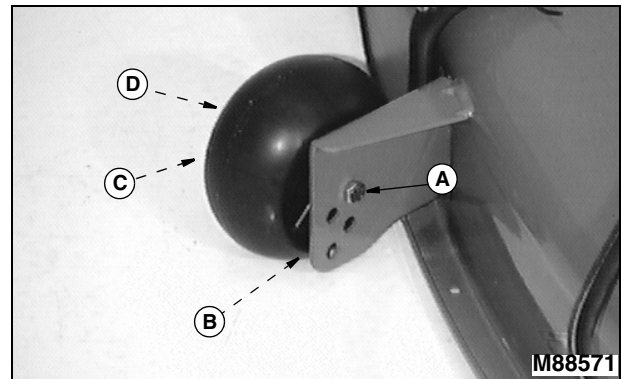
OPERATING MOWER

Adjusting Mower Gage Wheels

CAUTION: To avoid injury, before you adjust gage wheels: **STOP** engine, remove key, and wait for blades to **STOP**.

IMPORTANT: Mower gage wheels must not ride on ground to support mower weight. Adjust gage wheels each time you change cutting height.

1. Check tractor tire pressure. Inflate tires to the correct pressure. (See Checking Tire Pressure in Service - Miscellaneous section.)
2. Raise mower lift lever to TRANSPORT (upper) position and adjust cutting height. (See Adjusting Cutting Height in this section.)
3. Remove bolt (A), bushing (B), washer (C), and nut (D).
4. Move mower gage wheels, one on each side, to one of four holes for desired position.
5. Install bolt and tighten with nut.
6. Move lift lever forward to MOWING (lower) position.
7. Bottom of gage wheels should be approximately 6-13 mm (1/4-1/2 in) from the ground when properly adjusted.



Adjusting Mower Level (Side-to-Side)

CAUTION: To avoid injury, before you adjust mower: **STOP** engine, remove key, and wait for blades to **STOP**.
Be careful, sharp edges on mower blades.
Always wear gloves when handling mower blades.

NOTE: A deck leveling gauge (Part Number TY15272) to aid in deck leveling may be obtained through your local SABRE Service Center at a nominal cost.

1. Park tractor on a hard, level surface.
2. Stop engine and remove key.

OPERATING MOWER

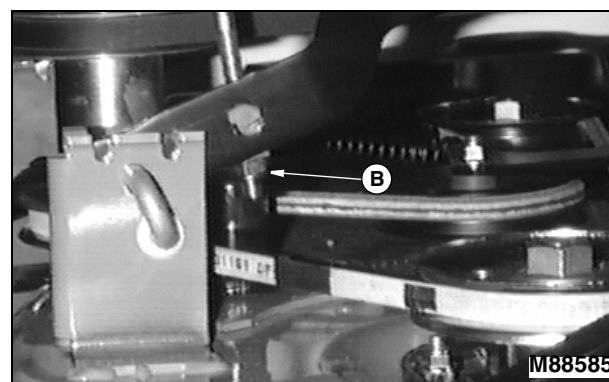
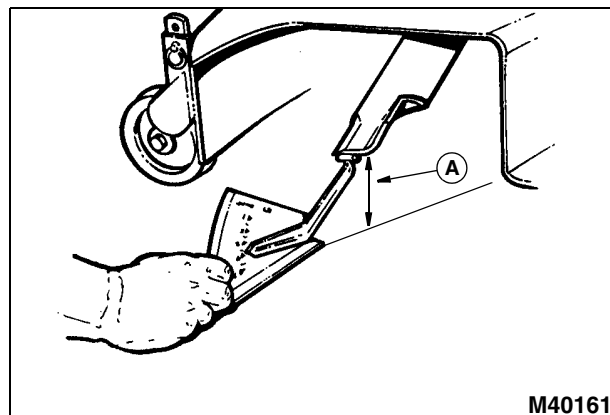
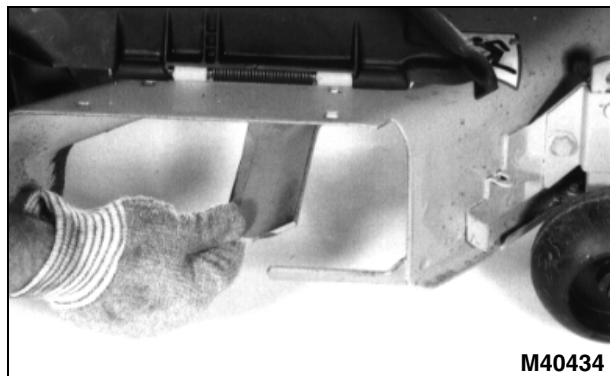
3. CHECK: Tire pressures must be correct. (See Checking Tire Pressure in Service – Miscellaneous section.)
4. Adjust cutting height to 50 mm (2 in). (See Adjusting Cutting Height in this section.)
5. Put mower lift lever in MOWING (lower) position.

NOTE: Mower gage wheels should not contact the ground.

6. Turn left blade parallel to tractor axle. Hold drive belt and turn right blade parallel to axle.
7. Measure from each outside blade tip (A) to the level surface. The difference between measurements must not be more than 3 mm (1/8 in).

NOTE: Adjustable lift links are on both sides of mower. Cutting height can closely match knob setting by using adjustment on both sides. DO NOT adjust deck too high or it will not lock in transport (upper) position.

8. Turn nut (B), (right side shown): Clockwise to RAISE right side of mower and counterclockwise to LOWER right side of mower.
9. Check side-to-side measurements and readjust if necessary.



OPERATING MOWER

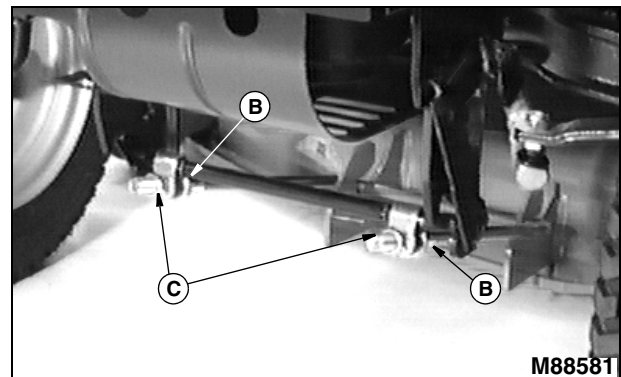
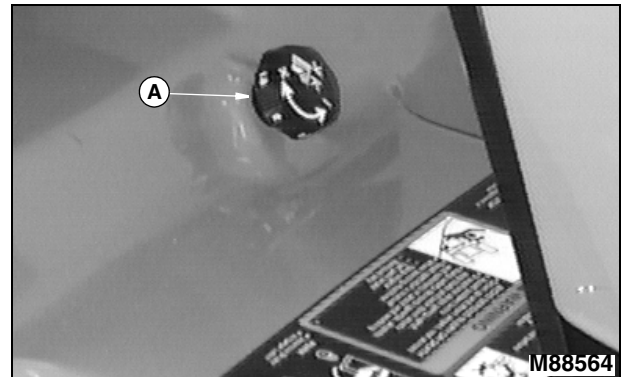
Adjusting Mower Level (Front-to-Rear)

CAUTION: To avoid injury, before you adjust mower: **STOP** engine, remove key, and wait for blades to **STOP**.

Be careful, sharp edges on mower blades. Always wear gloves when handling mower blades.

NOTE: Mower gage wheels should not contact the ground during leveling.

1. Park tractor on a hard, level surface.
2. Stop engine and remove key.
3. CHECK: Tire pressure must be correct. (See Checking Tire Pressure in Service – Miscellaneous section.)
4. Pull lift lever all the way back to TRANSPORT (upper) position.
5. Turn mower depth control knob (A) to adjust cutting height to 50 mm (2 in).
6. Move lift lever forward to MOWING (lower) position.
7. Turn left blade so blade tip points straight forward.
8. Hold drive belt and turn right blade straight forward.
9. Measure from the front of each blade tip to the level surface. The front blade tips must be 6–9 mm (1/4–3/8 in.) lower than rear blade tips or blades will cut grass twice and tips will turn brown.
10. Loosen two rear nuts (B) on front lift rod assembly and turn two front nuts (C) clockwise to RAISE front of mower deck or counterclockwise to LOWER front of mower deck.
11. Tighten rear nuts (B) after adjustment is completed.
12. Check front-to-rear deck measurements and readjust if necessary.



OPERATING MOWER

Engaging Mower

IMPORTANT: Operate mower at HIGH IDLE/
Mowing (📏) position when mowing or after mower
blades are engaged.

Machine may require 2-3 minutes warm-up period
before engaging the mower deck.

1. START engine.
2. Move throttle lever (A) to the FAST (🐘) position.
3. Lower mower to cutting height.
4. Pull PTO switch (B) up to ENGAGE mower.

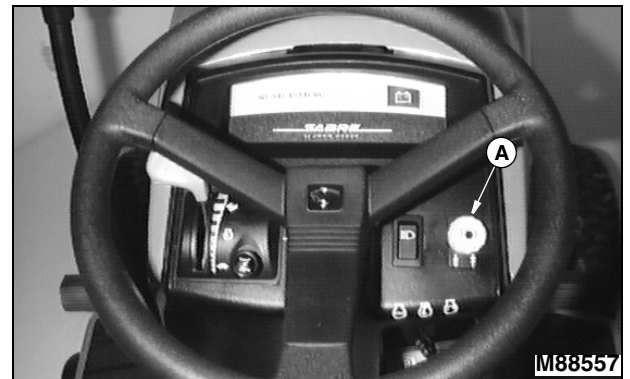
NOTE: Any operating attachment and the engine
will stop as the gear shift lever is moved to the R
(REVERSE) position (Gear transmission) or the
REVERSE foot pedal is depressed (Automatic
transmission) with attachment engaged.

5. Disengage PTO before shifting to REVERSE.



Disengaging Mower

1. Push PTO switch (A) down to DISENGAGE mower.
2. If you hit an object with mower while mowing, STOP mower and engine immediately. Inspect mower for damage.



OPERATING MOWER

Dismounting to Inspect or Unplug Mower or Optional Bagger



CAUTION: To help prevent personal injury, do the following steps before you dismount to inspect or unplug mower or bagger.

1. STOP machine.
2. Push PTO switch down to DISENGAGE mower.
3. Move throttle lever to SLOW (🐢) position.
4. Lower mower to the ground.
5. LOCK park brake.
6. STOP engine.
7. Remove key.
8. Wait for all moving parts to STOP.

REPLACEMENT PARTS

WE RECOMMEND JOHN DEERE quality parts and lubricants, available at your Authorized SABRE Service Center.

PART NUMBERS MAY CHANGE, use part numbers listed below when you order. If a number changes, your dealer will have the latest number.

WHEN YOU ORDER PARTS, your Authorized SABRE Service Center needs your machine serial number and engine serial number. These are the numbers that you have recorded on the inside front cover of this manual.

Parts for Tractor and Mower Deck

ITEM	PART NUMBER
Air Cleaner Elements: Foam Paper	LG272490 LG394018
Battery	AM121593
Fuel Filter	LG493629
Oil Filter	AM125424
Spark Plug	TY6129
Fuse-15 amp	99M7065
Leveling Gauge	TY15272
Mower Deck Belt (42-Inch Mower): Primary (PTO clutch to upper deck sheave) Secondary (lower deck sheave to blade spindles)	M131152 M131151
Mower Deck Belt (48-Inch Mower): Primary (PTO clutch to upper deck sheave) Secondary (lower deck sheave to blade spindles)	M110312 M110313
Blade: • 42-Inch Mower • 48-Inch Mower	M127179 M115495
Steering Wheel Assembly	AM121918
Seat	AM124425
Headlight Bulb (2 required)	AD2062R (#1156)
Fuel Cap	AM115497
Shift Knob	M132841
Ignition Key	M127340

REPLACEMENT PARTS

ITEM	PART NUMBER
Gage Wheel Assembly: Gage Wheels (2 required) Bolts Nuts Bushings Washers	M111489 19M7274 14M7396 M111491 M110698
Throttle Cable	AM124424
Choke Cable	AM125849
Seat Spring	M110439
Front Wheel & Tire Assembly: Wheel Tire Stem	AM124324 M131036 AM130795
Rear Wheel & Tire Assembly: Wheel Tire Stem	AM124326 M131038 AM130795
Muffler	AM125998

(Part numbers are subject to change without notice. Part Numbers may be different outside the U.S.A.)

If you would like a copy of the Parts Catalog for this machine, please use the **Order Form** in the John Deere SERVICE LITERATURE section.

SERVICE MACHINE SAFELY

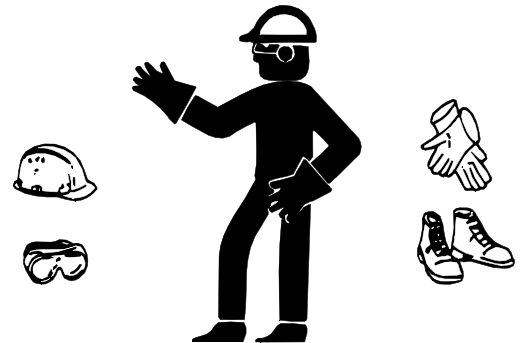
Practice Safe Maintenance

- Understand service procedure before doing work. Keep area clean and dry.
- Never lubricate, service, or adjust machine while it is moving. Keep safety devices in place and in working condition. Keep hardware tight.
- To prevent them from getting caught, keep hands, feet, clothing, jewelry, and long hair away from any moving parts.
- Before servicing machine, disengage all power and stop the engine. Lock park brake and remove the key. Let engine 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.
- Disconnect battery ground cable (-) before making adjustments on electrical systems or welding on machine.
- Unauthorized modifications to the machine may impair its function and safety.



Wear Appropriate Clothing

- Wear close fitting clothing and safety equipment appropriate for the job.
- Loud noise can cause impairment or loss of hearing, wear a suitable protective device such as earplugs.
- Do not wear radio or music headphones while servicing the machine. Safe service requires your full attention.

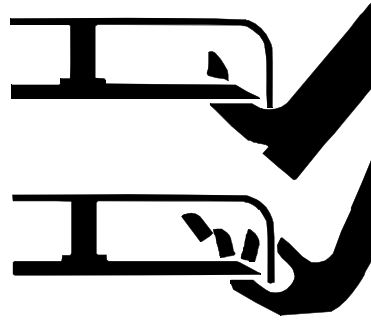


SERVICE MACHINE SAFELY

Avoid Injury From Contacting Blades

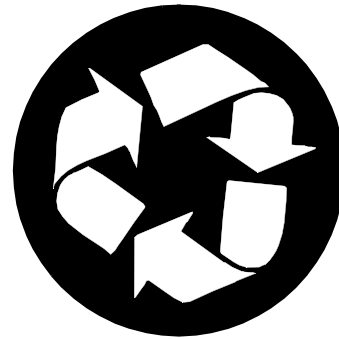
Before you unplug or adjust machine:

- STOP the engine.
- Remove key.
- Wait for blades to STOP.
- Keep hands, feet and clothing away from blades when engine is running.



Handling Waste Product and Chemicals

- Waste products such as used oil, fuel, coolant, brake fluid, and batteries, can harm the environment and people.
- DO NOT use beverage containers for waste fluids - someone may drink from them.
- See your local Recycling Center or John Deere dealer to learn how to recycle or get rid of waste products.
- A Material Safety Data Sheet (MSDS) provides specific details on chemical products: physical and health hazards, safety procedures, and emergency response techniques. See your John Deere dealer for the MSDS on chemical products used with your machine.



SERVICE INTERVAL CHART

Servicing Your Machine

Please use the following timetables to perform routine maintenance on your machine. Service procedures included in this manual but not on this chart are to be performed on an as needed basis.

IMPORTANT: If you operate mower in extreme heat, dust or other severe conditions, service more often than shown below.

After the first 5 hours of operation (break-in period):

- Check/tighten all hardware
- Check wheel bolt torque (also check again at 50 hours for break-in, then every 200 hours)
- Change engine oil (also change oil again at 50 hours for break-in, then every 50 hours)
- Lubricate front steering spindles, wheel bearings and axle pivot

Service to be Performed	Intervals in Hours					
	Before Each Use	Every 25	Every 50	Every 100	Every 200	Yearly
Test safety systems	X					
Check fuel level	X					
Check engine oil level	X					
In severe conditions lubricate all mower spindles	X					
In severe conditions check and clean engine air cleaner	X					
Check tire pressure	X					
Check cutting height	X					
Check/tighten hardware	X					
Change engine oil			X			
Change engine oil filter				X		
Change/clean engine air cleaner pre-cleaner		X				
Change/clean engine air cleaner cartridge				X		
Replace fuel filter						X
Lubricate mower spindles		X				
Clean battery			X			
Lubricate front steering spindles, wheel bearings and axle pivot		X				
Check automatic transmission oil level		X				
Replace spark plugs						X
Clean cooling shrouds and cooling areas				X		

SERVICE INTERVAL CHART

After Each Use

- Clean debris from engine, especially air intake screen.
- Remove belt shields, clean belt area, check belts. Be sure shields are secure.
- Clean under deck. Inspect blades.
- Check for loose, missing, or damaged parts.

SERVICE ENGINE

Engine Warranty Maintenance Statement

Maintenance, repair, or replacement of the emission control devices and systems on this engine, which are being done at the customers expense, may be performed by any nonroad engine repair establishment or individual. Warranty repairs must be performed by an authorized John Deere dealer.

Adjusting Carburetor

NOTE: Carburetor is calibrated by the engine manufacturer and should not require any adjustments.

If engine is operated at altitudes above 1829 m (6,000 ft), some carburetors may require a special high altitude main jet. See your John Deere dealer.

Possible engine surging will occur at high rpm with no load (with transmission in "N" neutral and mower blade engagement lever disengaged). This is a normal condition due to the emission control system.

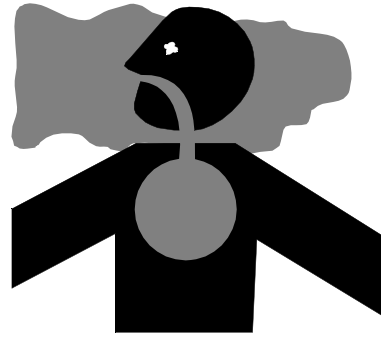
If engine is hard to start or runs rough, check the Troubleshooting section of this manual.

After performing the checks in the troubleshooting section and your engine is still not performing correctly, contact your John Deere dealer.

SERVICE ENGINE

Avoid Fumes

- CAUTION:** Engine exhaust fumes can cause sickness or death:
- If it is necessary to run an engine in an enclosed area, use an exhaust pipe extension to remove the fumes.
 - Always try to work in a well ventilated area.



Engine Oil

- CAUTION:** To prevent injury from accidental starting, always remove wire from spark plugs and disconnect battery at negative terminal before servicing engine.

Use oil viscosity based on the expected air temperature range during the period between oil changes.

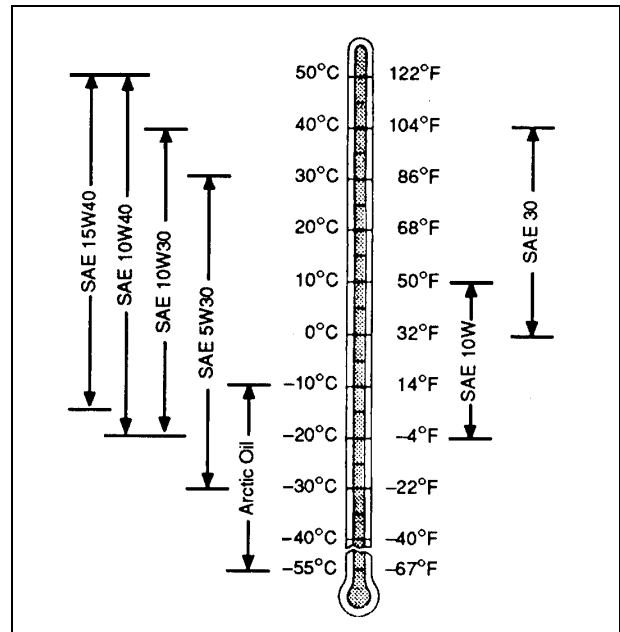
The following John Deere oils are preferred:

- John Deere PLUS-4®

Other oils may be used if they meet one of the following specifications:

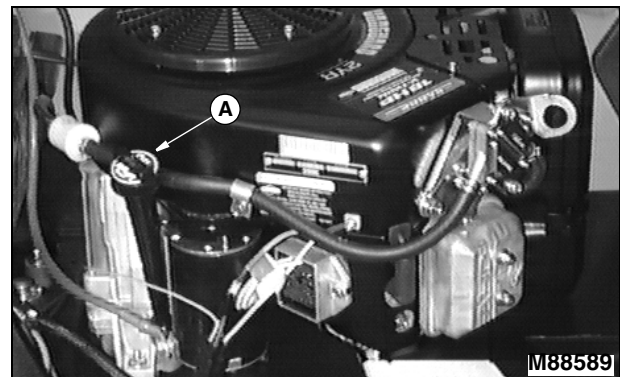
- API Service Classification SG
- API Service Classification SF
- CCMC Specification G4

Oils meeting Military Specification MIL-L-46167B may be used as arctic oils.



Checking Engine Oil

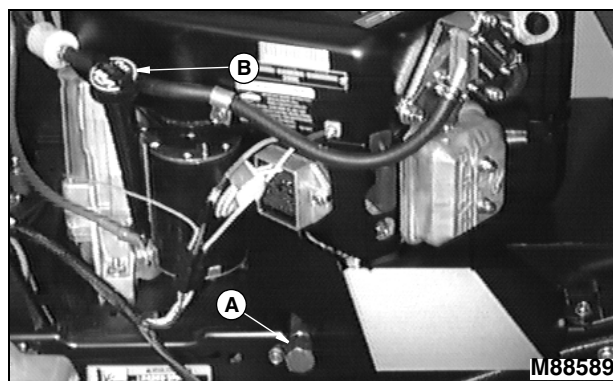
1. Park tractor on a level surface.
2. STOP engine.
3. Lift hood.
4. Remove dipstick (A). Wipe with clean cloth.
5. Install dipstick in tube, tighten dipstick, remove dipstick, and check oil level.
6. Oil must be between ADD and FULL marks.
7. Add oil to FULL mark if necessary. DO NOT overfill.
8. Install and tighten dipstick. Lower hood.



SERVICE ENGINE

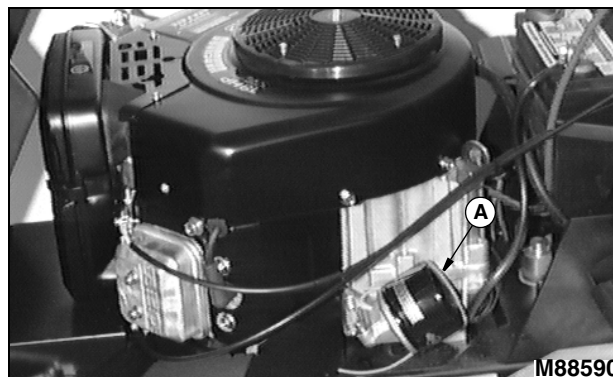
Changing Engine Oil

1. Run engine to warm oil.
2. Park tractor on level surface.
3. STOP engine and remove key.
4. Remove drain plug (A) and drain oil into oil drain pan.
5. Replace drain plug.
6. Remove dipstick (B) and refill with new oil of recommended grade.
7. Install dipstick and then remove to check oil level. Oil level must be between ADD and FULL marks. Do not overfill.
8. Install and tighten dipstick.
9. Start engine and check for oil leaks. Correct any leaks before operating.



Changing Engine Oil Filter

1. STOP engine and remove key.
2. Drain engine oil and replace with fresh oil. (See Changing Engine Oil in this section.)
3. Wipe debris and dirt from around oil filter.
4. Remove old filter (A) and wipe off filter tray with a clean cloth.
5. Lightly oil filter gasket with fresh, clean oil.
6. Install replacement oil filter. Turn oil filter to the right (clockwise) until rubber gasket contacts filter adapter. Tighten filter an additional on-half turn.
7. Start and run engine at idle to check for leaks. Stop engine.
8. Check oil level. (See Checking Engine Oil Level in this section.)
9. Add oil if required. (See Engine Oil in this section.)



SERVICE ENGINE

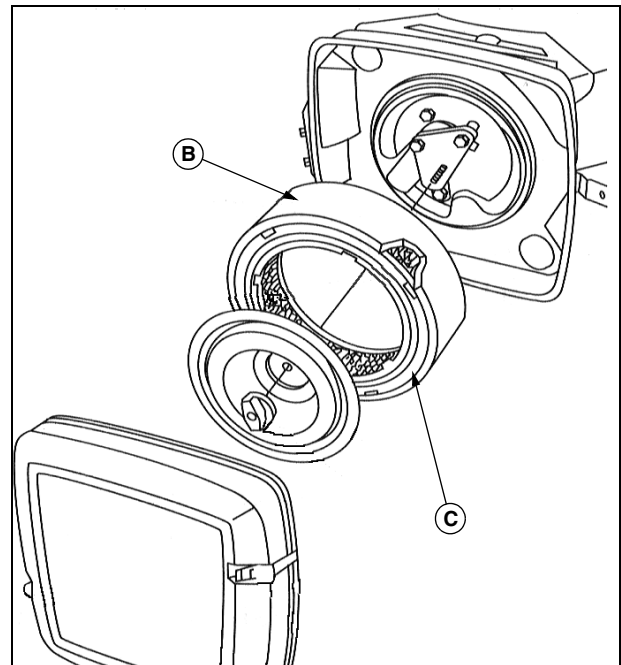
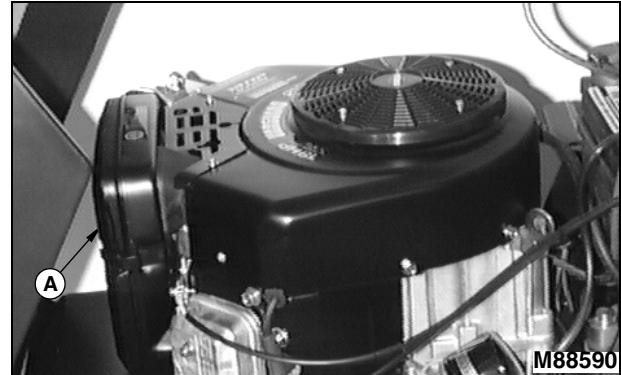
Checking and Cleaning Air Cleaner Elements

NOTE: *It may be necessary to check the air filter more frequently if operating vehicle in dusty conditions.*

1. Lift hood.
2. Clean any dirt and debris from the air cleaner before removing cover.
3. Remove cover (A).
4. Inspect foam precleaner (B) and element (C) without removing.
5. If precleaner (B) is dirty, carefully remove from filter, leaving element (C) in the air cleaner housing.

NOTE: *DO NOT wash paper element.*

6. Wash precleaner (B) in a solution of warm water and liquid detergent.
7. Rinse precleaner thoroughly. Squeeze out excess water in a dry cloth until precleaner is completely dry.
8. Put approximately 30 ml. (1 oz.) of clean engine oil onto precleaner. Squeeze precleaner to distribute oil evenly. Squeeze out excess oil with a clean cloth.



IMPORTANT: A damaged paper element (C) can allow dirt into the carburetor and can cause poor engine performance, engine damage or failure:

- DO NOT attempt to clean paper element by tapping against another object.
- Replace element ONLY if very dirty.
- DO NOT use pressurized air to clean element.
- If element is damaged or the seal is cracked, replace.

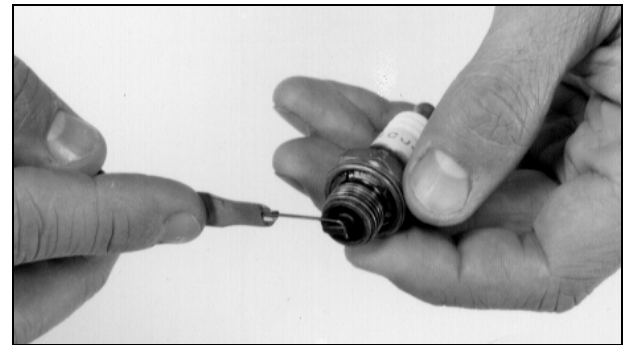
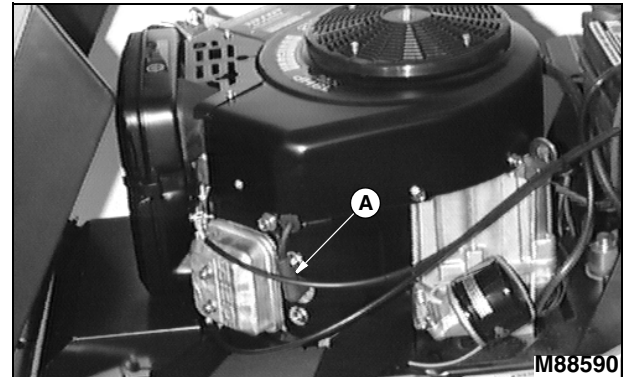
9. Remove and replace filter element (C) ONLY if damaged or very dirty.
10. Carefully remove element (C) from air cleaner housing. Replace with a NEW element.
11. Carefully clean air cleaner housing. Prevent any dirt from falling into carburetor.
12. Install precleaner onto new filter element and install into air cleaner housing.
13. Install cover. Lower hood.

SERVICE ENGINE

Checking Spark Plugs

CAUTION: To avoid injury: Before you remove spark plugs, STOP engine and wait until engine is cool.

1. Stop engine. Remove key. Lift hood.
2. Disconnect spark plug wires (A), one on each side, and remove spark plugs.
3. Clean spark plugs carefully with a wire brush.
4. Check plug gap with a wire feeler gauge.
 - Gap should be 0.76 mm (0.030 in.)
5. To change gap, move the outer electrode.
6. Install and tighten spark plug(s).
 - If you have a torque wrench, tighten plug(s) to: 20 N•m (15 lb-ft).
7. Connect the spark plug wires.
8. Lower hood.



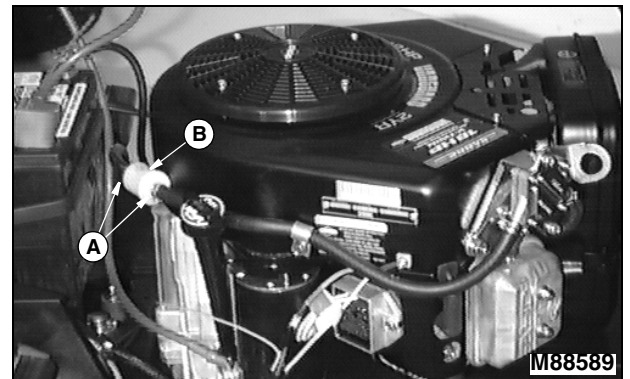
Replacing Fuel Filter

CAUTION: Avoid injury: Keep cigarettes, sparks, and flames away from the fuel system. Make sure engine is cool to the touch.

IMPORTANT: When disconnecting fuel tank hose from filter, be sure to hold hose above fuel tank level so fuel does not run out.

NOTE: Change filter when fuel is low in fuel tank.

1. Park tractor on a level surface.
2. STOP engine. Remove key. Let engine COOL.
3. Lift hood.
4. Using pliers, slide hose clamps (A) away from fuel filter (B).
5. Disconnect hoses from filter.
6. Connect hoses to new filter.
7. Install clamps and check for leaks.
8. Lower hood.



SERVICE TRANSMISSION

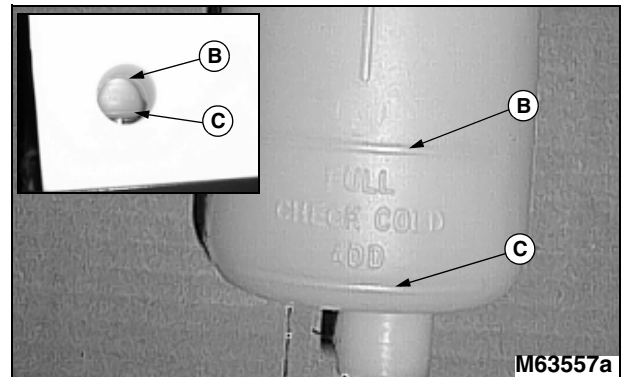
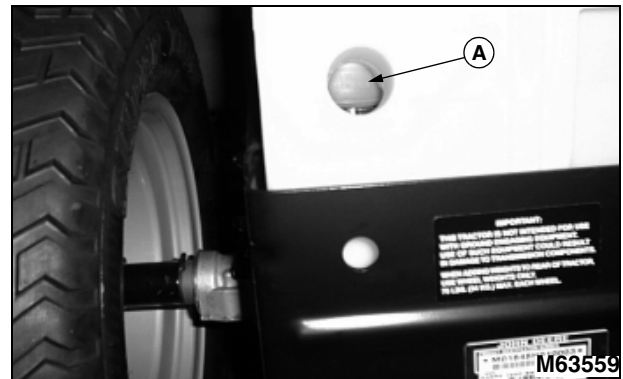
Transmission Oil (Models 1842HV and 1848HV Only)

NOTE: Your **SABRE Yard Tractor** is filled with **5W30** at the factory

Use 5W30 or 10W30 when adding transmission fluid.

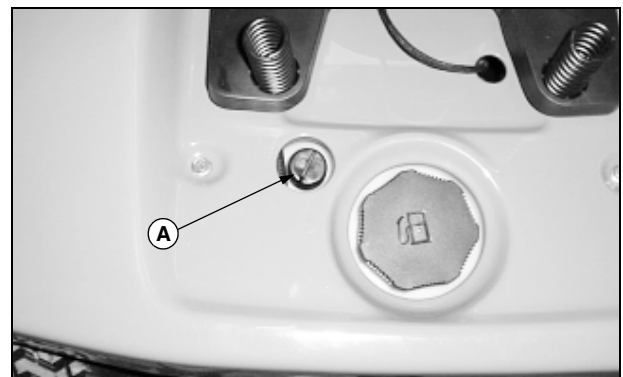
Check Automatic Transmission Fluid Level (Models 1842HV and 1848HV Only)

1. Park machine on level surface.
2. Allow oil in transmission to cool before checking.
3. On the rear of the tractor, there is a sight hole (A) through the left rear side of the fuel tank. The automatic transmission reservoir can be seen through the sight hole.
4. Check FULL (B) and ADD (C) marks on the reservoir bottle which will indicate if fluid needs to be added.
5. Add transmission fluid if necessary. (See Adding Automatic Transmission Fluid below.)



Adding Automatic Transmission Fluid (Models 1842HV and 1848HV Only)

1. Tip seat forward and slide seat suspension all the way forward.
2. Remove cap (A) from automatic transmission reservoir. Cap is located under seat and left of fuel cap.
3. Fill to correct level using 5W30 or 10W30 motor oil. **DO NOT OVERFILL.**



SERVICE MOWER

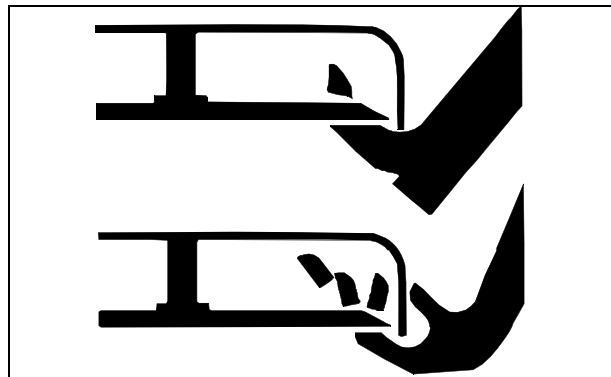
Avoid Injury From Contacting Blades

CAUTION: To avoid injury, before you unplug, adjust or service mower:

- DISENGAGE PTO switch to stop mower blades.
- Wait for mower blades to STOP.
- LOCK the park brake.
- STOP the engine.
- Remove the key.

Clean unit by removing all grass clippings and dirt from mower deck.

Disconnect spark plug wire from spark plug.



Grease

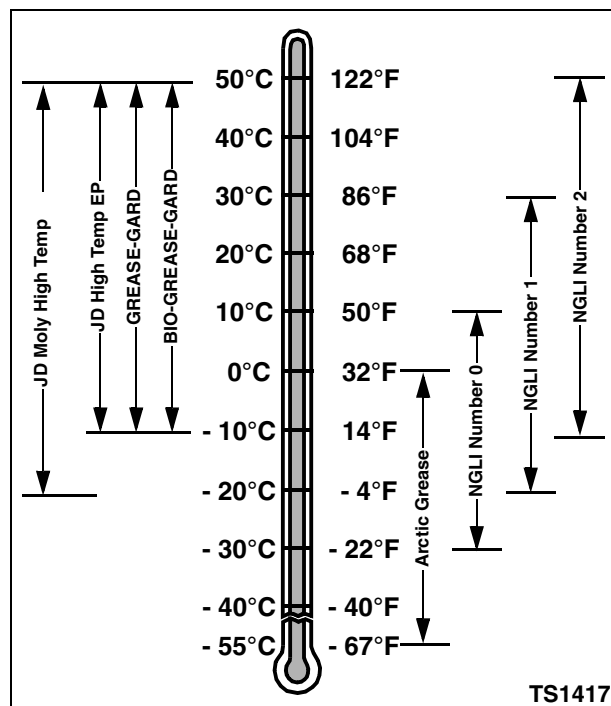
Use grease based on the expected air temperature range during the service interval.

The following greases are preferred:

- John Deere Moly High Temperature EP Grease.
- John Deere High Temperature EP Grease.
- John Deere GREASE-GARD™.

Other greases may be used are:

- SAE Multipurpose EP Grease with 3 to 5 percent molybdenum disulfide.
- SAE Multipurpose EP Grease.
- Greases meeting Military Specification MIL-G-10924C may be used as arctic grease.



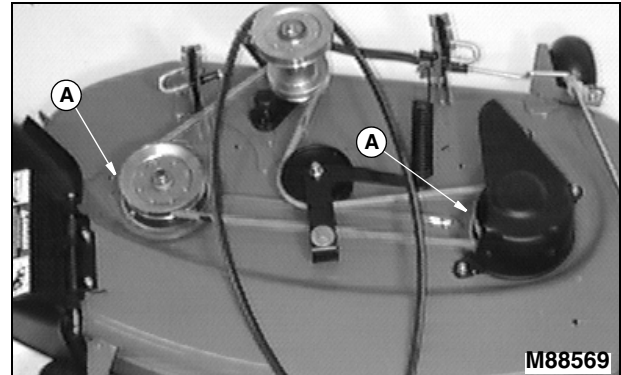
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SERVICE MOWER

Lubricating Mower Spindles

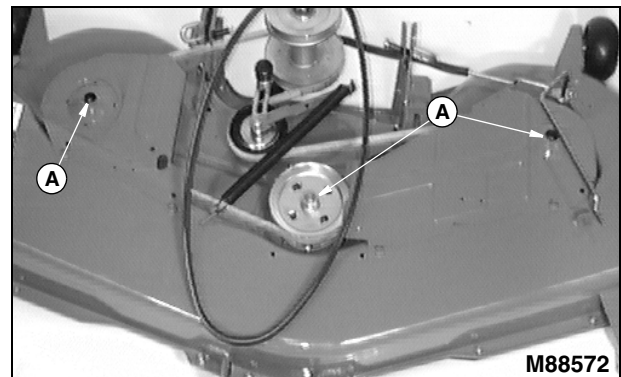
42-Inch Mower Deck

Lubricate both mower spindles grease fittings (A) with Multipurpose EP Grease or an equivalent.



48-Inch Mower Deck

Lubricate three mower spindles grease fittings (A) with Multipurpose EP Grease or an equivalent.



SERVICE MOWER

Replacing Mower (Secondary) Belt

CAUTION: To avoid injury: Before replacing mower drive belt: STOP engine, remove key, wait for all moving parts to STOP, and wear gloves when replacing belt.

1. STOP engine, LOCK park brake, push PTO switch down to DISENGAGE, turn key to the OFF position, and remove key.

2. Remove mower deck. (See Removing Mower in Removing Mower section.)

42-Inch Mower Deck

1. Remove three carriage bolts, washers, and nuts (A) and belt shield if necessary.

2. Disconnect idler spring (B).

3. Remove mower belt (C).

4. Clean upper mower deck and sheaves.

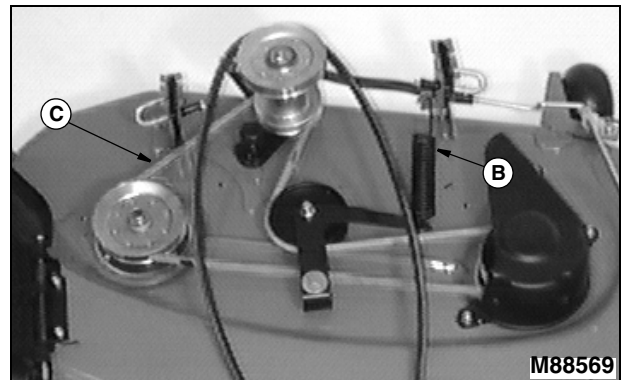
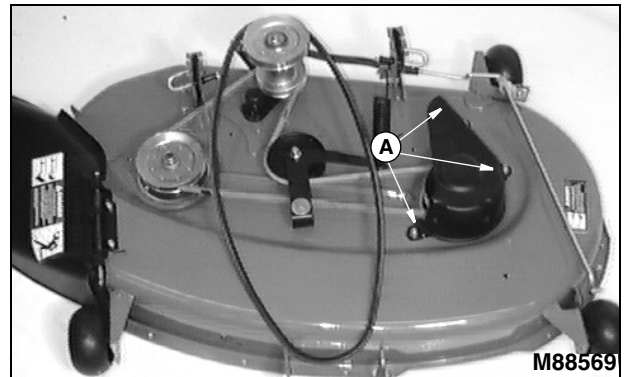
5. Inspect belt for wear or damage; replace as necessary.

6. Install belt (C) on mower deck as shown.

7. Connect idler spring (B).

8. Install belt shield and fasten with three carriage bolts, washers, and nuts.

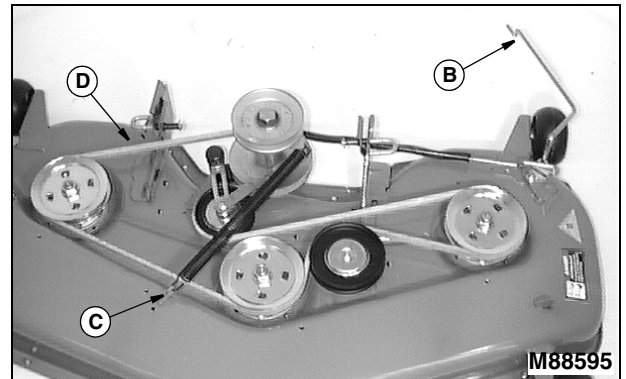
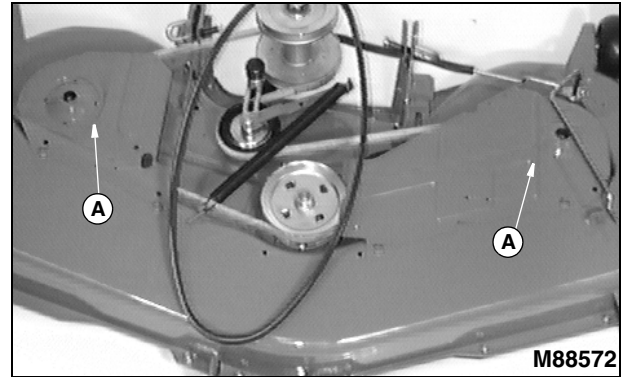
9. Install mower deck. (See Installing Mower in Installing Mower section.)



SERVICE MOWER

48-Inch Mower Deck

1. Remove three cap screws and belt shields (A).
2. Put drive belt tension rod (B) in the released position as shown and disconnect idler spring (C).
3. Remove mower belt (D).
4. Clean upper mower deck and sheaves.
5. Inspect belt for wear or damage; replace as necessary.
6. Install belt (D) on mower deck as shown.
7. Connect idler spring (C).
8. Install two belt shields and fasten with three cap screws.
9. Install mower deck. (See Installing Mower in Installing Mower section.)



SERVICE MOWER

Servicing Mower Blades

42-Inch Mower Deck

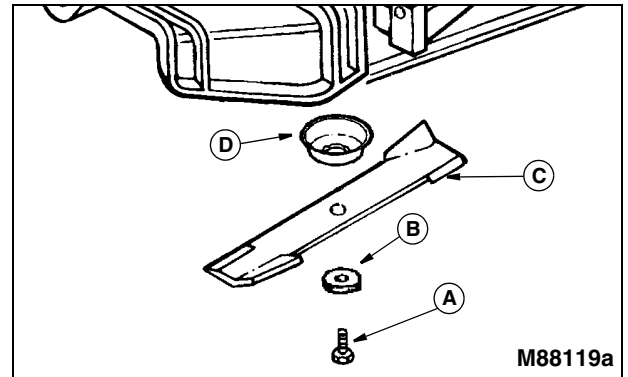
CAUTION: Be careful, sharp edges on mower blades. Always wear gloves when handling mower blades.

REMOVING MOWER BLADES

1. Raise mower deck to gain access to mower blades. If necessary, remove mower deck.
2. Using a wooden block, prevent mower blades from spinning.

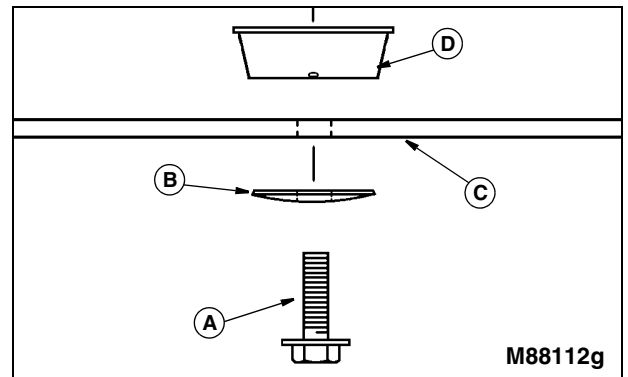
NOTE: Before removing hardware, note the orientation of the cupped blade washer (B) to ensure proper installation.

3. Loosen and remove cap screw (A), cupped blade washer (B), blade (C) and deflector cup (D).
4. Inspect blades; sharpen/balance or replace as necessary.



INSTALLING MOWER BLADES

1. Lightly lubricate cap screw threads with a general purpose grease or oil. This lubrication is to prevent rusting and seizing.
2. Install deflector cup (D) on spindle.
3. Position mower blade (C) with the cutting edge towards the ground onto the mower spindle.
4. Install cupped blade washer (B) with CUPPED SIDE toward the blade.
5. Install and tighten cap screw (A) by hand until mower blade is in full contact (fully seated) with spindle.
6. With mower blade blocked, to prevent spinning, tighten bolt to 67.8 N•m (50 lb-ft).



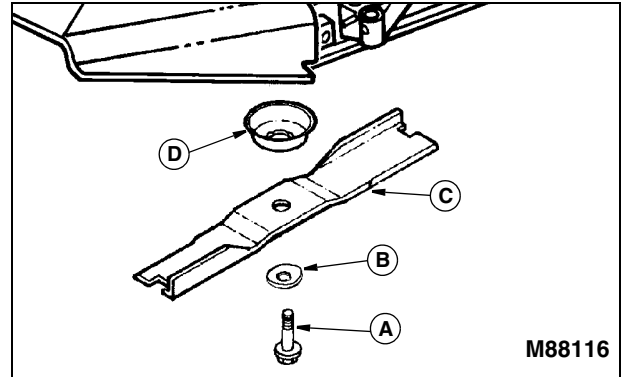
SERVICE MOWER

48-Inch Mower Deck

CAUTION: Be careful, sharp edges on mower blades. Always wear gloves when handling mower blades.

REMOVING MOWER BLADES

1. Raise mower deck to gain access to mower blades. If necessary, remove mower deck.
2. Using a wooden block, prevent mower blades from spinning.
3. Loosen cap screw (A).
4. Remove cap screw (A), round blade washer (B), blade (C) and deflector cup (D).
5. Inspect blades; sharpen/balance or replace as necessary.

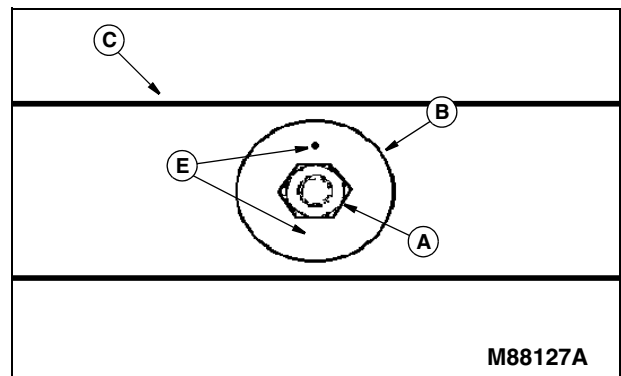
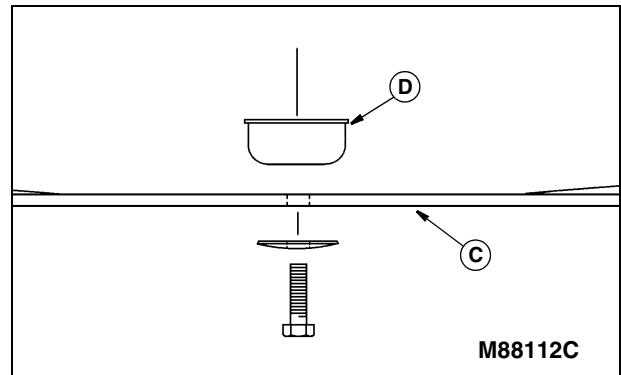


INSTALLING MOWER BLADES

1. Lightly lubricate cap screw threads with a general purpose grease or oil. This lubrication is to prevent rusting and seizing.
2. Install deflector cup (D) on spindle.
3. Position mower blade (C) with the cutting edge towards the ground onto the mower spindle.

IMPORTANT: Some blade washers (B) have 2 index marks (E). When these blade washers are installed, the index marks must be visible. This will indicate that the cup side of the washer is toward the blade (C).

4. Install blade washers (B) and make sure 2 index marks (E) are visible when installed.
5. Install and tighten cap screw (A) by hand until mower blade is in full contact (fully seated) with spindle.
6. With mower blade blocked, to prevent spinning, tighten cap screw (A) to 84 N•m (62 lb-ft).



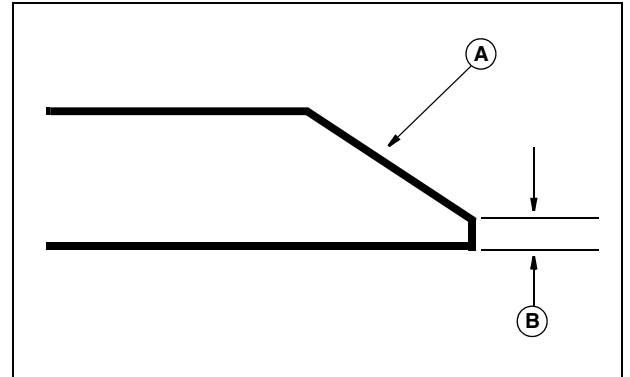
SERVICE MOWER

Sharpening Blades



CAUTION: To avoid injury, wear goggles and gloves when you handle blades.

1. Sharpen blades with grinder, hand file or electric blade sharpener.
2. Keep original bevel (A) when you grind.
3. Blade should have 0.40 mm (1/64 in.) cutting edge (B).

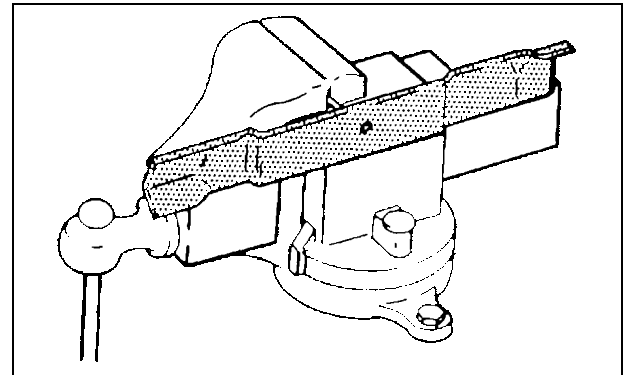


Balancing Blades



CAUTION: To avoid injury, wear goggles and gloves when you handle blades.

1. Clean blade.
2. Put blade on nail in vise or on vertical wall stud. Turn blade to horizontal position.
3. If blade is not balanced, heavy end of blade will drop.
4. Grind bevel of heavy end. Do not change bevel.



SERVICE ELECTRICAL

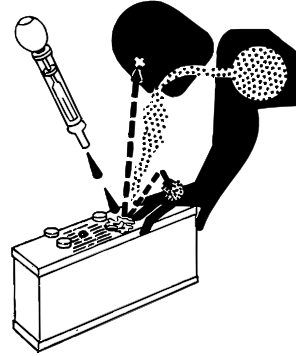
Checking the Battery

CAUTION: Sulfuric acid in battery electrolyte is poisonous. It is strong enough to burn skin, eat holes in clothing, and cause blindness if splashed into eyes. Wear eye protection and avoid spilling or dripping electrolyte.

Flush eyes with water for 15-30 minutes if acid is splashed into eyes.

If acid is swallowed, get medical attention immediately.

DO NOT attempt to open, add fluid or service battery. Any attempt to do so will void warranty and lead to possible injury.

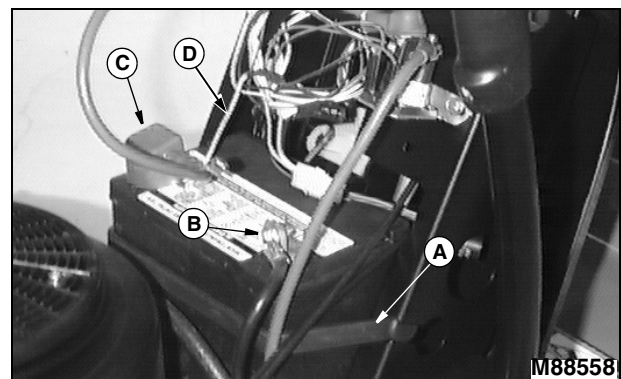


- Keep battery and terminals clean.
- Keep battery bolts tight.
- Keep small vent holes open.
- Recharge, if necessary, at 6–10 amperes for 1 hour. (See Charging the Battery in this section.)

Removing and Installing the Battery

CAUTION: Always remove negative (–) battery cable first, and install it last, to prevent electrical short circuit to chasis.

1. Turn ignition key off and raise seat.
2. Remove rubber hold-down strap (A).
3. Disconnect negative (–) battery cable (B).
4. Remove red cover (C) from positive (+) battery terminal. Remove positive (+) cable and blue harness wire (D) from battery.
5. Remove battery.
6. Install the battery following these steps in reverse order. (See Connect the Battery in the Assembly section.)



SERVICE ELECTRICAL

Clean Battery and Terminals

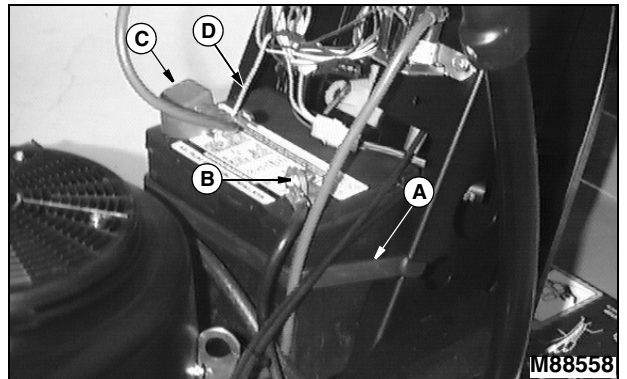


CAUTION: Battery gas can explode, to avoid injury:

- Keep sparks and flames away from batteries. Use a flashlight to check battery electrolyte level.
- Never check battery charge by placing a metal object across the posts. Use a voltmeter or hydrometer.
- Always remove grounded (-) battery clamp first and replace it last.



1. Turn ignition key off and lift hood.
2. Remove rubber hold-down strap (A).
3. Disconnect BLACK (-) battery cable (B) first.
4. Disconnect RED (+) battery cable (C) and blue harness wire (D) and remove battery from mower.
5. Wash battery with solution of four tablespoons of baking soda to one gallon of water. Be careful not to get the soda solution into the cells.
6. Rinse the battery with clean water. Let dry.
7. Clean terminals and battery cable ends with wire brush until bright.
8. Apply petroleum jelly or silicone spray to terminal to prevent corrosion.
9. Reinstall battery. (See Removing and Installing the Battery in this section and Connect the Battery in the Assembly section.)



SERVICE ELECTRICAL

Charging the Battery

⚠ CAUTION: BE VERY CAREFUL: Battery fluid (electrolyte), is a solution of water and sulfuric acid. It is very harmful to eyes, skin, or clothing.

- Wear goggles or an eye shield when you work with a battery.

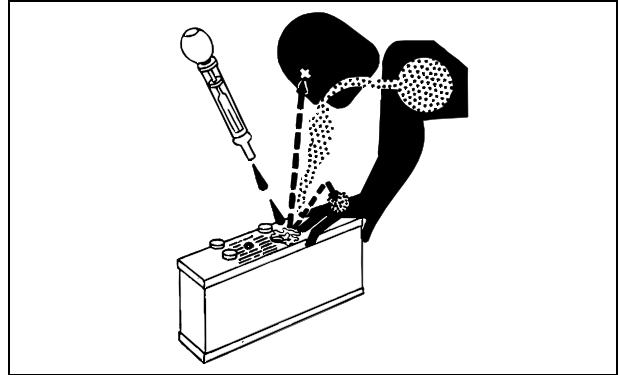
- If the acid contacts your eyes, skin, or clothing, flush the area immediately with water. Get medical help, if necessary.

A battery gives off gas which can explode. An exploding battery will spray sulfuric acid in all directions.

- Keep cigarettes, sparks, and flames away from the battery.

- Charge the battery in an area with good ventilation.

- **DO NOT** charge a frozen battery.



IMPORTANT: This battery comes fully charged. If the mower is not used by the Service Expiration Date indicated on the battery, charge the battery using the following instructions.

Before you charge a battery:

- Wait until the battery has warmed to room temperature. Do not charge a frozen battery.

Turn OFF and unplug the charger before you connect cables to the battery or disconnect cables from the battery.

If the battery becomes warm to touch during charging:

- Reduce the charging rate OR
- Stop charging the battery until it cools.

NOTE: *Your charger may have an AUTOMATIC STOP to prevent charging the battery:*

- When the battery is fully charged OR
- When the battery is not in condition to take a charge.

SERVICE ELECTRICAL

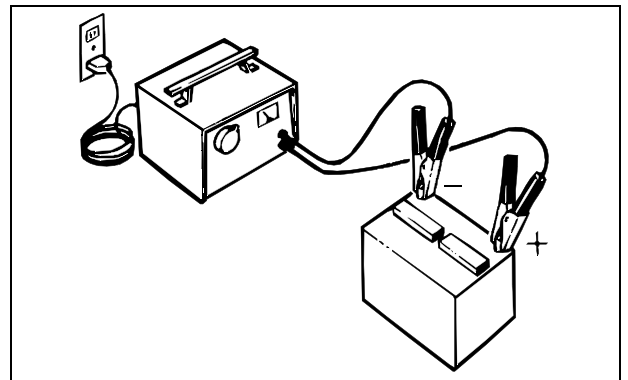


CAUTION: DO NOT attempt to open, add fluid or service battery. Any attempt to do so will void warranty and lead to possible injury.

Battery gas is explosive:

- **DO NOT smoke while you charge battery.**
- **Keep all flames and sparks away.**
- **DO NOT charge frozen battery.**
- **DO NOT connect booster battery negative (-) cable to starting vehicle negative (-) terminal.**

1. Remove battery from mower. (See Removing and Installing Battery in this section.)
2. Connect positive (+) charger cable to positive (+) battery terminal.
3. Connect negative (-) charger cable to negative (-) battery terminal.
4. Plug in charger cord.
5. Charge battery using a 12 Volt battery charger at a rate of 6–10 amperes for a minimum of 1 hour and no more than 2 hours.
6. Unplug charger cord. Remove charger cables.
7. Install battery. (See Removing and Installing Battery in this section.)



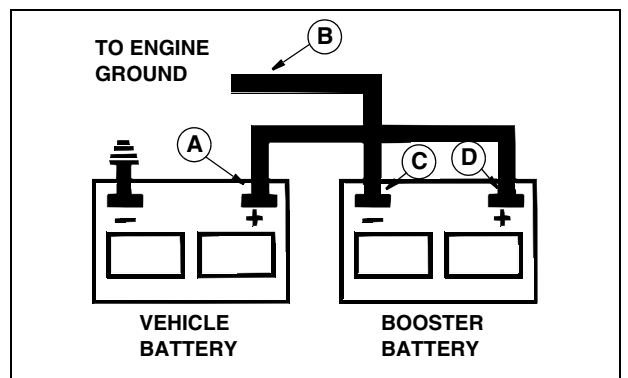
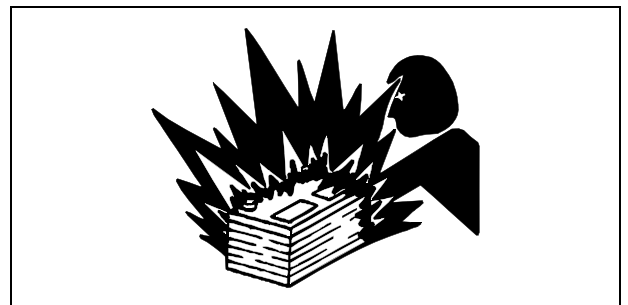
Using Booster Battery



CAUTION: Battery gas is explosive:

- **DO NOT smoke while you charge battery.**
- **Keep all flames and sparks away.**
- **DO NOT charge frozen battery.**
- **DO NOT connect booster battery negative (-) cable to starting vehicle negative (-) terminal.**

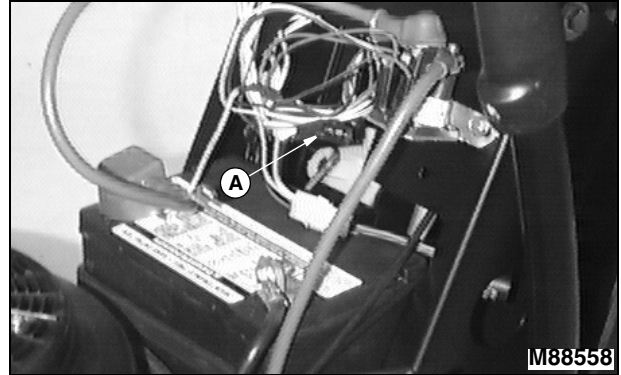
1. Connect positive (+) booster cable to booster battery positive (+) post (D).
2. Connect the other end of positive (+) booster cable to vehicle battery positive (+) post (A).
3. Connect negative (-) booster cable to booster battery negative (-) post (C).
4. Connect the other end of negative (-) booster cable (B) to engine ground away from battery.



SERVICE ELECTRICAL

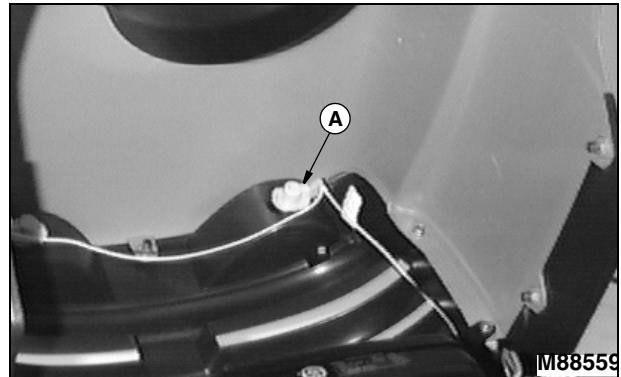
Replacing Fuse

1. Lift hood.
2. Pull defective fuse (A) out of socket.
3. Check metal clip in fuse window and discard fuse if clip is broken.
4. Push new fuse into socket.
5. Lower hood.



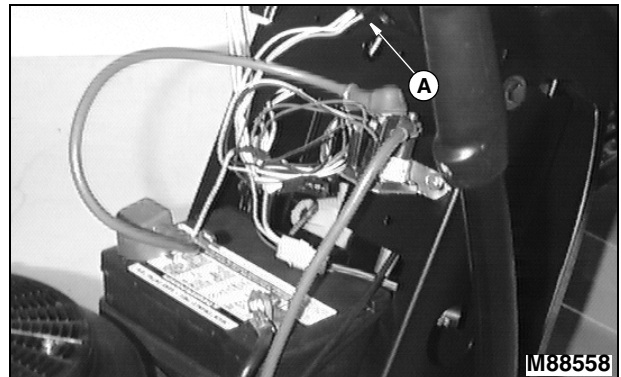
Replacing Headlight Bulb

1. Lift hood.
2. Push in and turn bulb socket (A) 1/4 turn counterclockwise to remove.
3. Replace defective bulb(s) with a new bulb.
4. Insert bulb socket into housing, push in and turn 1/4 turn clockwise to install.
5. Lower hood.



Replacing Battery Discharge Indicator Light Bulb

1. Lift hood.
2. Turn indicator bulb socket (A) to the left to remove it.
3. Pull bulb from socket.
4. Push new bulb into socket and install socket into holder.
5. Lower hood.



SERVICE MISCELLANEOUS

Checking Tire Pressure



CAUTION: Explosive separation of a tire and rim parts can cause serious injury or death:

- Do not attempt to mount a tire without the proper equipment and experience to perform the job.
- Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure. Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure resulting in a tire explosion. Welding can structurally weaken or deform the wheel.
- When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly.
- Check tires for low pressure, cuts, bubbles, damaged rims or missing lug bolts and nuts.



1. Check tires for damage.
2. Check tire pressure with an accurate gauge.
3. Add or remove air, if necessary:

Tire Size	Pressure-kPa (psi)
Front: 16 x 6.5	97 kPa (14 psi)
Rear: 23 x 9.5	83 kPa (12 psi)

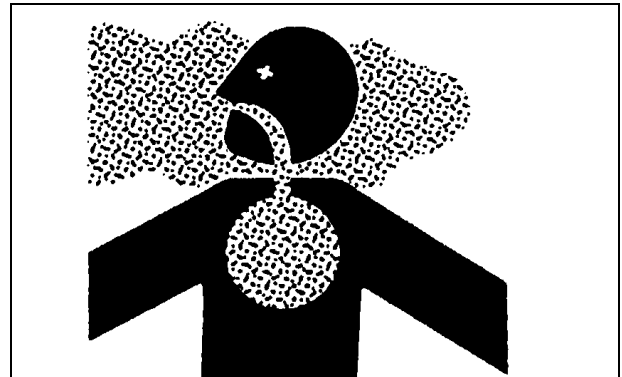
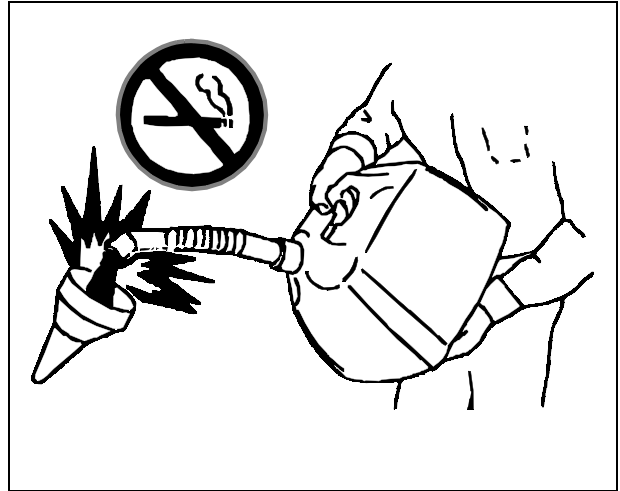
SERVICE MISCELLANEOUS

Fuel



CAUTION: Handle fuel with care, it is highly flammable and can cause serious injury or death:

- DO NOT refuel machine while you smoke, when machine is near an open flame or sparks, or when engine is running. STOP engine.
- Fill fuel tank outdoors.
- Prevent fires: clean oil, grease and dirt from machine. Clean up spilled fuel immediately.
- Do not store machine with fuel in tank in a building where fumes may reach an open flame or spark.
- To prevent fire and explosion caused by static electric discharge, while you fill tank, use a non-metal fuel container. If you use a funnel, MAKE SURE IT IS PLASTIC. Avoid using a funnel which has a metal screen or filter.
- Use only clean approved containers and funnels.
- Store oil and fuel in an area protected from dust, moisture and other contamination.
- DO NOT use METHANOL gasoline. METHANOL is harmful to the environment and to your health.



IMPORTANT: Avoid spilling fuel. Fuel can damage plastic and painted surfaces.

DO NOT mix oil with gasoline. Unleaded gasoline with an octane rating of 87 or higher is recommended.

Using Clean Fuels

Dirt in the fuel system is a major cause of performance problems. Be sure to clean any grass or trash from the top of the tank before removing lid. Use of a PLASTIC funnel with a plastic mesh strainer when filling the tank will prevent most foreign material from entering the tank.

SERVICE MISCELLANEOUS

Octane Rating

Regular grade 87 octane unleaded fuel is recommended for use in your tractor. Higher octane fuels will seldom make your tractor perform better. If your tractor develops a starting or performance problem immediately after use of new fuel, change supplier or fuel brand. If the problem still exists after switching fuel, see your John Deere dealer for service.

Fuel Blends

Fuels are blended to give peak performance during cold weather and warm weather. For cold weather, gasoline is specially blended to provide better starting capabilities. However, avoid prolonged storage of cold-weather blended fuel because it will evaporate more quickly. You may experience longer cranking times in cold weather with “old” fuel. Buy smaller amounts of cold-weather blended fuel in winter.

Fuels used during the summer are not required to provide improved starting properties so they are blended differently. As a result, you may experience hard starting or other performance problems during cold weather if you use fuel remaining from summer uses.

Oxygenated or Reformulated Fuels

Many areas are now required to add “oxygenates” (either alcohol or ether) which blend oxygen into the fuel to help reduce exhaust emissions. If you use oxygenated fuel be sure it is unleaded and meets the minimum octane rating requirement. DO NOT use fuel that contains methanol to avoid producing excess emissions.

Although fuels blended with alcohol or ether allow your engine to run cleaner, they may contribute to fuel system damage and performance problems by causing gum and varnish deposits, especially if fuel is stored for several weeks or more.

Using clean, fresh fuel will help to prevent damage to the fuel system and will help maintain peak engine performance. If engine performance problems occur, use fuel from another supplier before suspecting machine problems. Suppliers blend fuels differently and changing suppliers will generally solve any performance problems.

SERVICE MISCELLANEOUS

Using Fresh Fuel and Stabilizers

The best thing you can do to ensure peak performance of your engine is to use “fresh” fuel. Your tractor’s engine will perform well with most good-quality fresh fuels regardless of additives. Any fuel will begin to deteriorate and evaporate over time and begin to form gum and varnish deposits in the fuel system. Help to avoid this by buying only enough fuel to last approximately 30 days or add fuel stabilizer immediately.

Adding a fuel stabilizer to the fuel system is recommended any time the tractor will not be operated for more than 60 days. Varnish deposits may build up in the carburetor in as little as a few weeks by using stale, oxygenated fuel.

No stabilizer will work with “stale” fuel, any fuel that is more than 30 days old. (See **Preparing Your Engine For Storage** in this section for information on adding stabilizer to the fuel.)

Filling Fuel Tank

IMPORTANT: Dirt and water in fuel are major causes of engine performance problems. Prevent dirt and debris from entering the fuel tank when filling.

Fill the tank at the end of each day’s operation to help keep condensation out of the fuel tank.

Fuel tank capacity:

GEAR MODELS, 1842GV and 1848GV: 13 L (3.5 gal)

AUTOMATIC MODELS, 1842HV and 1848HV: 11 L (3.0 gal)

1. STOP engine. If engine is hot let it cool several minutes before you add fuel.
2. Remove grass clippings and other trash from tank area.
3. Lift seat and remove fuel tank cap (A).
4. Fill tank with fresh fuel only to bottom of filler neck.
5. Install fuel tank cap and lower seat.



SERVICE MISCELLANEOUS

Grease

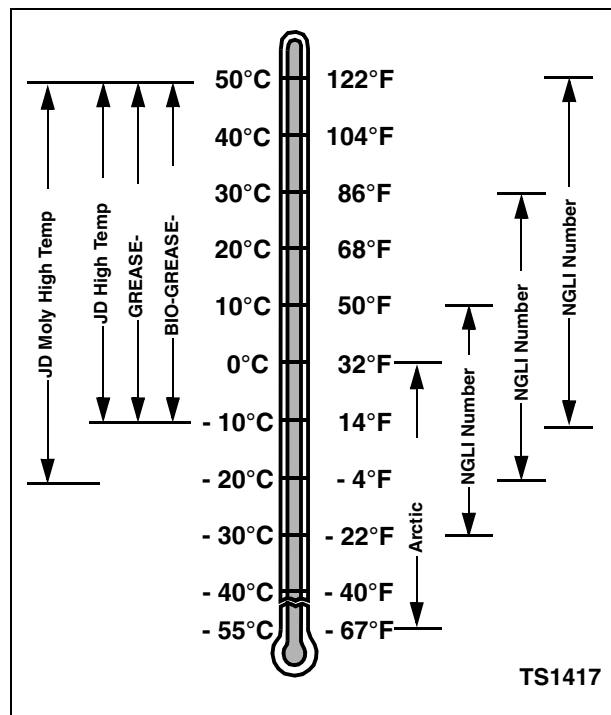
Use grease based on the expected air temperature range during the service interval.

The following greases are preferred:

- John Deere Moly High Temperature EP Grease.
- John Deere High Temperature EP Grease.
- John Deere GREASE-GARD™.

Other greases may be used are:

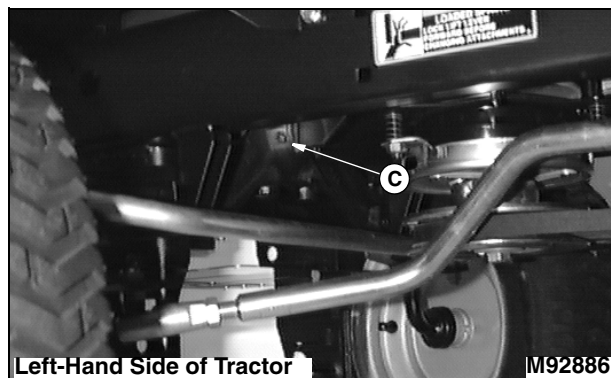
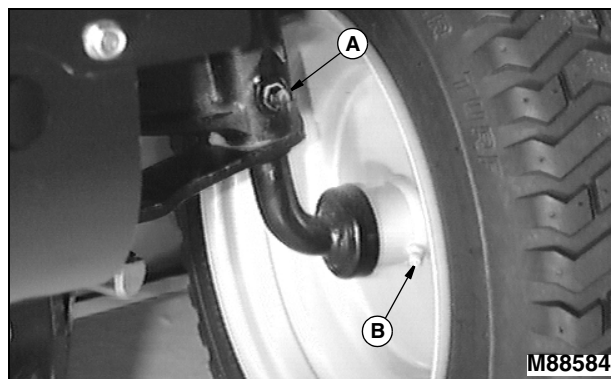
- SAE Multipurpose EP Grease with 3 to 5 percent molybdenum disulfide.
- SAE Multipurpose EP Grease.
- Greases meeting Military Specification MIL-G-10924C may be used as arctic grease.



Lubricating Front Wheel Spindles, Wheel Bearings and Front Axle Pivot

Lubricate front wheel spindles (A), wheel bearings (B), one on each side of tractor, and front axle pivot (C) with one or two shots of multipurpose grease or an equivalent.

Turn wheels to distribute grease to spindles.



SERVICE MISCELLANEOUS

Care for Plastic and Painted Surfaces

PLASTIC SURFACES

The plastic parts on your tractor are made of a blend of polycarbonate and polyester materials. These parts are extremely strong and durable. Unlike painted metal, the plastic parts will never dent or rust. If the plastic parts get scratched, the color will remain the same since the color goes through the entire part.

IMPORTANT: “Dry wiping” or wiping the plastic surface when it is dry will result in minor surface scratches. Always wet the surface before cleaning. Follow correct cleaning and waxing procedures.

Correct Cleaning Care:

NOTE: Follow cleaning procedure every time plastic surfaces are cleaned. DO NOT wipe dry plastic surface with hand or towel.

1. Before washing, rinse hood and entire machine with clean water to remove dirt and dust that may scratch the surface.
2. Wash plastic surface with clean water and a mild liquid automotive washing soap. Use a SOFT, CLEAN cloth (bath towel or automotive mitt) when washing.
3. Dry thoroughly with a SOFT, CLEAN cloth (diaper or bath towel).
4. Wax the surface with a liquid automotive wax. Use products that specifically say “contains no abrasives”.
5. Remove applied wax by hand using a clean, soft cloth.

SERVICE MISCELLANEOUS

Avoid Damage:

- “Dry wiping” or wiping the plastic surface when it is dry is a major source of minor surface scratches.
- DO NOT wipe hood or other plastic parts unless wetted first.
- DO NOT apply wax unless plastic surface has been thoroughly cleaned first.
- DO NOT use abrasive materials, such as polishing compounds, to clean or to wax plastic surface.
- DO NOT wax plastic surfaces without drying first. Hard-to-remove water spots will be left.
- DO NOT use solvents or commercial cleaners.
- DO NOT use power buffers to remove wax.
- DO NOT spray insect repellent near machine. Insect repellent spray may damage plastic or painted surfaces.
- Be careful not to spill fuel on any plastic or painted surfaces. Wipe up fuel immediately.

Repair:

- Your John Deere dealer has the professional materials needed to properly remove surface scratches from any plastic surfaces.
- DO NOT attempt to paint over marks or scratches in plastic parts.
- DO NOT use polishing compounds to attempt to remove scratches.

SERVICE MISCELLANEOUS

PAINTED METAL SURFACES

Correct Cleaning Care:

Follow automotive practices to care for your tractor painted metal surfaces. Use a high-quality automotive wax regularly to maintain the factory look of your tractor's painted surfaces.

Repair:

Minor Scratches (surface scratch):

1. Clean area thoroughly to be repaired.
2. Use automotive polishing compound to remove surface scratches.
 - DO NOT use rubbing compound to avoid removing paint.
3. Apply wax to entire surface.

Deep Scratches (bare metal or primer showing):

1. Clean area to be repaired with rubbing alcohol or mineral spirits.
2. Use paint stick with factory-matched colors available from your John Deere dealer to fill scratches. Follow directions for use and for drying.
 - Apply sparingly to scratch without getting on surrounding painted surface. Fill in scratch to level of surrounding painted area.
 - Allow to dry 48 hours in warm weather and up to 30 days in colder temperatures.
3. Use automotive polishing compound to smooth out surface. Do not use power buffer.
4. Apply wax to surface.

REMOVING MOWER

Removing Mower

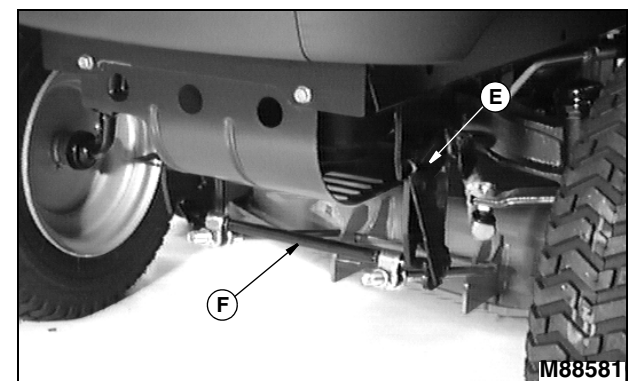
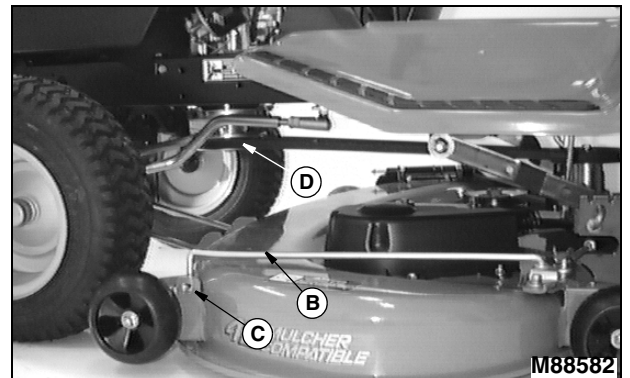
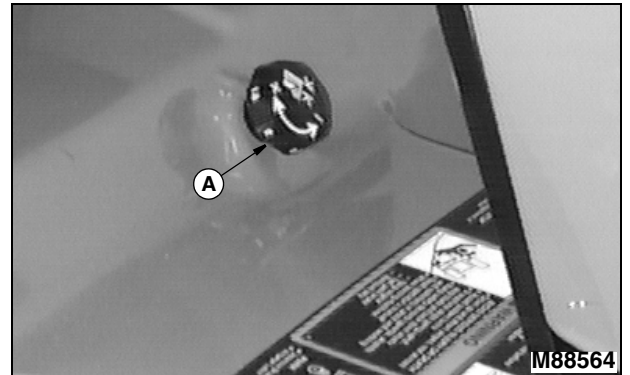
CAUTION: Avoid injury, before removing mower from machine: **STOP** engine. Remove key. Wait for all moving parts to **STOP**.

Avoid injury from loaded spring: **LOCK** lift lever before removing mower.

Avoid injury from spring loaded rod: Make sure you have a tight grip on drive belt tension rod and release slowly.

NOTE: The removal process for the 42-Inch deck and the 48-Inch deck is the same. The 42-Inch deck is illustrated.

1. STOP engine, LOCK park brake, push PTO switch down to DISENGAGE, turn key to the OFF position, and remove key.
2. Raise mower lift lever to TRANSPORT (upper) position.
3. Set cutting height knob (A) to 25 mm (1 in.).
4. Put wood blocks under each side of mower.
5. Lower mower to MOWING (lower) position, bring deck down onto blocks.
6. Release drive belt tension rod (B) from bracket (C).
7. Remove belt from engine drive sheave (D).
8. Pull out and push down on lever (E) to release front lift rod assembly (F) and remove from front of deck.

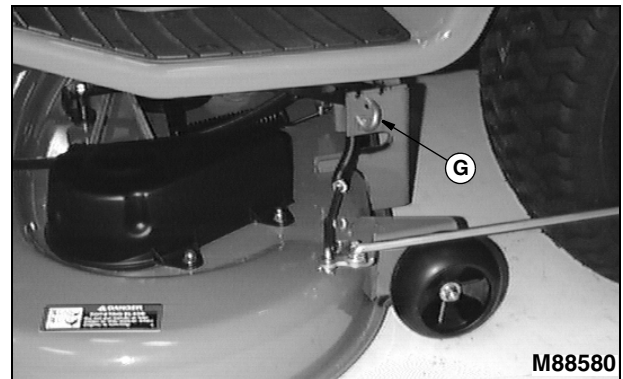


REMOVING MOWER

9. Disconnect draft arms, one on each side, by pulling spring loaded J-pins (G) out.

10. Put mower lift lever in the TRANSPORT (upper) position.

11. Slide mower out from under the tractor.



INSTALLING MOWER

Installing Mower

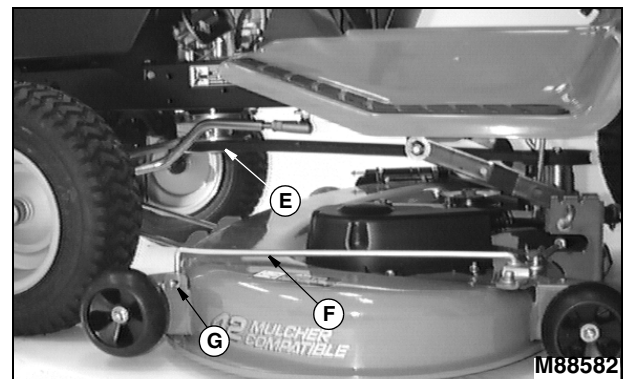
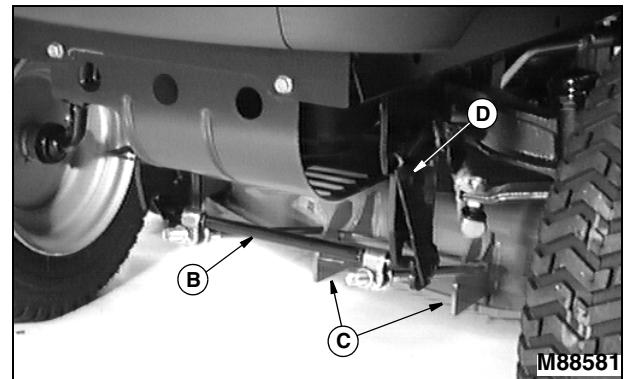
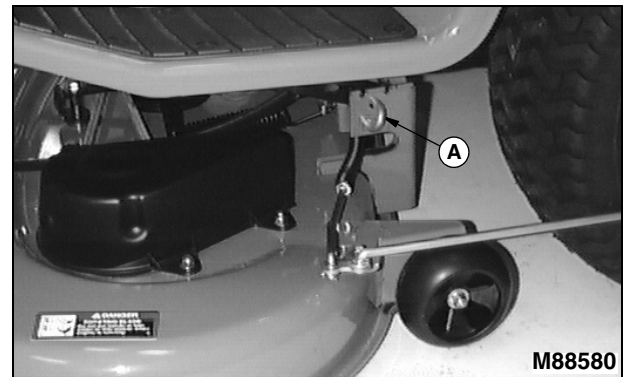
⚠ CAUTION: Avoid injury, before installing mower on machine: **STOP** engine. Remove key. Wait for all moving parts to **STOP**.

Avoid injury from loaded spring: **LOCK** lift lever before installing mower.

Avoid injury from spring loaded rod: Make sure you have a tight grip on drive belt tension rod when installing.

NOTE: The installation process for the 42-Inch deck and the 48-Inch deck is the same. The 42-Inch deck is illustrated.

1. STOP engine, LOCK park brake, push PTO switch down to DISENGAGE, turn key to the OFF position, and remove key.
2. Raise mower lift lever to TRANSPORT (upper) position.
3. Slide mower under the tractor.
4. Put wood blocks under each side of mower.
5. Put mower lift lever in the MOWING (lower) position.
6. Install rear draft arms, one on each side of tractor, to mower lift brackets with spring loaded J-pins (A).
7. Put front lift rod assembly (B) in slotted brackets (C) on mower deck and install the front lift rod assembly to the front of the tractor frame.
8. Push up on lever (D) and lock into tractor frame.
9. Put mower drive belt (E) on engine drive sheave.
10. Push drive belt tension rod (F) into bracket (G).
11. Raise mower lift lever to TRANSPORT (upper) position.
12. Remove wood blocks from both sides of mower.
13. Level mower. (See Leveling Mower in Operating the Mower section.)



TROUBLESHOOTING

Using Troubleshooting Chart

If you are experiencing a problem that is not listed in this chart, see your Authorized SABRE Service Center for service.

When you have checked all the possible causes listed and you are still experiencing the problem, see your Authorized SABRE Service Center.

Engine

IF	CHECK
Engine Will Not Crank	Brake is not pushed down.
	Loose or corroded electrical connections.
	PTO knob is in ON position.
	Fuse is blown.
	Spark plug wire is loose or disconnected.
Engine Runs Unevenly	Cooling fins plugged.
	Loose electrical connections.
	Choke or throttle cable sticking.
	Air cleaner dirty.
	Water in fuel or carburetor float bowl.
	Dirt in carburetor float bowl.
Engine Will Not Idle	Spark plug not gapped correctly.
	Faulty spark plug.
	Choke on or partially on (warm engine).
Engine Is Hard To Start	Fuel filter is gummed or plugged.
	Spark plug is fouled.
	Faulty spark plug or wire.
	Spark plug is not gapped correctly.
	Loose or corroded electrical connections.
	Stale fuel.
	Choke is adjusted or used incorrectly.

TROUBLESHOOTING

IF	CHECK
Engine Misses Under Load	Faulty spark plug.
	Stale fuel.
	Dirt or water in carburetor float bowl.
Engine Vapor Locks	Fuel tank vent plugged.
	Dirt in fuel filter.
	Debris plugging fuel pick-up tube inside fuel tank.
Engine Overheats	Engine air intake screen plugged.
	Cooling fins plugged.
	Engine oil low.
	Engine operated too long at slow idle speed.
Engine Loses Power	Engine overheating.
	Too much oil in engine.
	Dirty air cleaner.
	Faulty spark plug.
Engine Knocks	Low engine speed.
	Stale or low octane fuel.
	Engine overloaded.
	Oil level low.
Engine Backfires	Faulty spark plug.
	Operator raising off seat.
	Shut down procedure for engine not correct.
Engine Stops When REVERSE foot pedal is depressed and Attachment Is Engaged (Models 1842HV and 1848HV)	Normal condition. (See Using Reverse Implement Option in the OPERATING section.)
Engine Stops When gear shift lever is moved to the R (REVERSE) position and Attachment Is Engaged (Models 1842GV and 1848GV)	Normal condition. (See Using Reverse Implement Option in the OPERATING section.)

TROUBLESHOOTING

Tractor

IF	CHECK
Tractor Vibrates Too Much	Attachment drive belts worn or damaged.
	Dirt on drive sheaves.
Tractor Will Not Move With Engine Running	Transmission hydraulic oil level low.
	Parking brake locked.
Tractor Moves With Engine Running And Hydrostatic Control In Neutral	Linkage out of adjustment.

Electrical

IF	CHECK
Starter Does Not Work Or Will Not Turn Engine	Brake pedal not down.
	PTO knob in ON position.
	Battery terminals corroded.
	Battery dead or low charge.
Battery Will Not Charge	Battery cables and terminals dirty.
	Low engine speed or excessive idling.
	Dead cell in battery.

Mower

IF	CHECK
Discharge Chute Plugging	Belt installed incorrectly.
	Grass too wet.
	Grass too long.
	Restricted air flow.
	Check mower front-to-rear level.
	Engine rpm too low.
	Travel speed too fast.

TROUBLESHOOTING

IF	CHECK
Patches Of Grass Uncut	Travel speed too fast.
	Engine rpm too low.
Belt Slipping	Debris in sheaves.
	Worn belt.
Too Much Vibration	Debris on mower deck or in sheaves.
	Damaged drive belt.
	Damaged sheaves or sheaves out of alignment.
	Blades out of balance.
Blades Scalping Grass	Cutting too low.
	Turning speed too fast.
	Ridges in terrain.
	Rough or uneven terrain.
	Low tire pressure.
	Mower gauge wheels not adjusted correctly.
	Bent blade(s).
Uneven Cut	Mower not level.
	Travel speed too fast.
	Blades dull.
	Mower gauge wheels not adjusted correctly.
	Tire pressure.
Requires High Effort To Lift And Latch Lift Handle	Front draft arm on mower is adjusted too short, causing lift system to bind up.
Mower Loads Down Tractor	Engine rpm too low.
	Travel speed too fast.
	Debris wrapped around mower spindles.
	Bagging blades on mower.
Grass Tips Are Jagged And Turn Grayish Brown After Mowing	Dull mower blades.
	Bent blades.
	Front-to-rear blade adjustment not set properly.

TROUBLESHOOTING

IF	CHECK
Mower (or other attachment) Stops When REVERSE foot pedal is depressed and Attachment Is Engaged (Models 1842HV and 1848HV)	Normal condition. (See Using Reverse Implement Option in the OPERATING section.)
Mower (or other attachment) Stops When gear shift lever is moved to the R (REVERSE) position and Attachment Is Engaged (Models 1842GV and 1848GV)	Normal condition. (See Using Reverse Implement Option in the OPERATING section.)

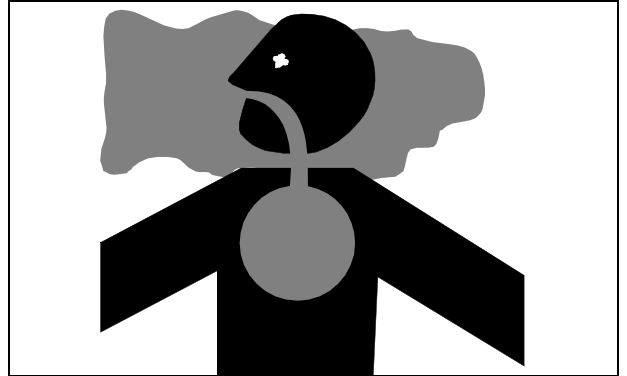
STORING MACHINE

Storing Safely



CAUTION: Engine exhaust fumes can cause sickness or death.

- If it is necessary to run an engine in an enclosed area, use an exhaust pipe extension to remove the fumes.
- Always try to work in a well ventilated area.
- DO NOT store vehicle with fuel in the tank inside a building where fumes may reach an open flame or spark.
- Allow engine to cool before storing in an enclosure.
- Remove the battery and store it in a cool dry place where it will not freeze, and where children cannot reach it.



Preparing Machine for Storage

1. Repair any worn or damaged parts. Replace parts if necessary. Tighten loose hardware.
2. Clean under the deck.
3. Paint scratched or chipped metal surfaces to prevent rust.
4. Wash the machine and apply wax to metal and plastic surfaces. (See SERVICE-MISCELLANEOUS section for care of plastic and metal surfaces.)
5. Run machine for five minutes to dry belts and pulleys.
6. Apply light coat of engine oil to pivot and wear points to prevent rust.
7. Lubricate grease points.
8. Make sure tires are properly inflated.

STORING MACHINE

Preparing Engine For Storage

NOTE: *Properly preparing your tractor engine for storage will make it easier to start the following season. Engine storage procedure should be used if vehicle is not used for longer than 60 days.*

There are two satisfactory methods of preparing the engine for storage: running the engine completely dry of fuel, or filling the fuel tank with a mixture of fresh fuel and fuel stabilizer.

Running engine dry of fuel:

NOTE: *Try to anticipate the last time the tractor will be used for the season so very little fuel is left in the fuel tank.*

1. Park tractor in a well-ventilated area.
2. Engage park brake and disengage PTO.
3. Turn on engine and allow to run until it runs out of fuel.
4. Turn key to OFF position.
5. Continue with Preparing Engine.

Add fuel and stabilizer mixture to tank:

1. Park tractor in a well-ventilated area.

IMPORTANT: Be sure fuel is fresh when adding fuel stabilizer. Fuel stabilizers are ineffective when added to fuels that are more than 30 days old.

2. Mix fresh fuel and fuel stabilizer in separate container. Follow stabilizer instructions for mixing.

NOTE: *Filling the fuel tank reduces the amount of air in the fuel tank and helps reduce deterioration of fuel.*

3. Fill fuel tank with stabilized fuel.
4. Run engine for a few minutes to allow fuel mixture to circulate through carburetor.
5. Continue with Preparing Engine.

STORING MACHINE

Preparing Engine:

1. Change engine oil and filter while engine is warm.
2. Service air filter if necessary.
3. Clean debris from engine air intake screen.
4. Remove spark plugs. Put 30 mL (1 oz.) of clean engine oil in cylinders.
5. Install spark plugs, but DO NOT connect spark plug wires.
6. Crank the engine for approximately five seconds to allow oil to be distributed.
7. Clean the engine and engine compartment.
8. Remove battery.
9. Clean the battery and battery posts.

NOTE: The stored battery should be recharged every 90 days.

10. Charge the battery. (See Charging Battery in the SERVICE - ELECTRICAL section.)
11. Store the battery in a cool, dry place where it will not freeze.
12. Store the vehicle in a dry, protected place. If vehicle is stored outside, put a waterproof cover over it.

Removing Machine From Storage

1. Check tire pressure. (See Checking Tire Pressure in Service - Miscellaneous section.)
2. Fill fuel tank. Check engine oil level.
3. Take machine off of blocks or support stands.
4. Charge battery if necessary. Install battery. (See Removing and Installing the Battery in the SERVICE-ELECTRICAL section.)
5. Check spark plug gap. Install and tighten spark plug to 20 N•m (15 lb-ft).
6. Lubricate all grease points.
7. Check automatic transmission oil level.
8. Run the engine 5 minutes without the mower or any attachments running to allow oil to be distributed throughout engine.
9. Be sure all shields and guards are in place.

SPECIFICATIONS

Engine (Gear Models, 1842GV and 1848GV)

Engine Model Number	Briggs & Stratton-Model No. 350777
Horsepower	13.4 kW (18 hp)
Displacement	570 cc (34.7 cu.in.)
Crankcase Capacity w/o oil filter.	1.42 L (1.5 qt.)
Crankcase Capacity with oil filter	1.54 L (1.63 qt.)
Spark Plug-Gap.	.76 mm (.030 in.)
Cylinders	Two
Stroke/Cycle	Four
Lubrication	Full-Pressure
Oil Filter	Standard Single Element
Air Cleaner.	Dual Stage

Engine (Automatic Models, 1842HV and 1848HV)

Engine Model Number	Briggs & Stratton-Model No. 350777
Horsepower	13.4 kW (18 hp)
Displacement	570 cc (34.7 cu.in.)
Crankcase Capacity w/o oil filter.	1.42 L (1.5 qt.)
Crankcase Capacity with oil filter	1.54 L (1.63 qt.)
Spark Plug-Gap.	.76 mm (.030 in.)
Cylinders	Two
Stroke/Cycle	Four
Lubrication	Full-Pressure
Oil Filter	Standard Single Element
Air Cleaner.	Dual Stage

Fuel System

Fuel	See Fuel in the Service Miscellaneous section
Fuel Filter.	Replaceable
Fuel Tank Capacity	(Gear Models, 1842GV and 1848GV) 13 L (3.5 gal.)
Fuel Tank Capacity	(Automatic Models, 1842HV and 1848HV) 11 L (3.0 gal.)

SPECIFICATIONS

Transaxle (Gear Models, 1842GV and 1848GV)

Model	Peerless Model 820
Drive Train	Gear Transaxle
Speeds	6
Gear Speed Range-Forward	1st: 2.1 km/h (1.3 mph)
.....	2nd: 3.0 km/h (1.9 mph)
.....	3rd: 4.3 km/h (2.7 mph)
.....	4th: 5.3 km/h (3.3 mph)
.....	5th: 7.0 km/h (4.4 mph)
.....	6th: 9.8 km/h (6.1 mph)
Gear Speed - Reverse	4.6 km/h (2.9 mph)

Transaxle (Automatic Models, 1842HV and 1848HV)

Model	Torq Model K-61
Drive Train	Transaxle with foot-controlled variable speed drive
Travel Speed-Forward	0-8.5 km/h (0-5.3 mph)
Travel Speed-Reverse	0-3.5 km/h (0-2.5 mph)

Dimensions

Overall Height	112 cm (44.1 in.)
Overall Length	181.6 cm (71.5 in.)
Vehicle Weight (Gear Model 1842GV)	240 kg (528 lb)
Vehicle Weight (Gear Model 1848GV)	256 kg (565 lb)
Vehicle Weight (Automatic Model 1842HV)	241 kg (530 lb)
Vehicle Weight (Automatic Model 1848HV)	257 kg (567 lb)

Tires

Size-Front	16 X 6.5
Size-Rear	23 X 9.5

SPECIFICATIONS

Mower Deck (42-Inch)

Blades-Rotary	2
Blade Bolt Torque	67 N•m (50 lb-ft)
Cutting Height-Approx.	25–102 mm (1–4 in.)
Blade Length	545.2 mm (21.46 in.)
Cutting Width	1067 mm (42 in.)

Mower Deck (48-Inch)

Blades-Rotary	3
Blade Bolt Torque	84 N•m (62 lb-ft)
Cutting Height-Approx.	25–102 mm (1–4 in.)
Blade Length	423 mm (16.6 in.)
Cutting Width	1219 mm (48 in.)

Recommended Lubricants

Engine Oil	John Deere PLUS-4 ®
Automatic Transmission Oil	5W30 or 10W30
Grease	John Deere MOLY HIGH Temperature ® EP

(Specifications and design subject to change without notice.)

WARRANTY

Product Warranty

The warranties described below are provided by John Deere Company ("John Deere") to the original purchasers of new Sabre Products. Product 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 following warranty information is in addition to the product warranty information you received from your dealer at the time of sale.

All parts of any new Sabre product, except tires and batteries, are warranted for the number of months / days specified below:

SABRE PRODUCTS	WARRANTY TERM
IN RESIDENTIAL (Private Homeowner) APPLICATION	24 Months
IN ANY OTHER APPLICATION	90 Days

Tire Warranty

John Deere warranty applies for tires available through the John Deere parts system. For tires not available through the John Deere parts system, the tire manufacturer's warranty applicable to your machine may not apply outside the U.S. (See your John Deere dealer for specific information.)

Limited Engine Warranty

FEDERAL AND CALIFORNIA EMISSION CONTROL DEFECTS WARRANTY STATEMENT YOUR WARRANTY RIGHTS AND OBLIGATIONS

The United States Environmental Protection Agency (EPA), the California Air Resources Board (CARB) and Deere & Company (John Deere) are pleased to explain the emission control system warranty on your 1995 and later utility or lawn and garden equipment engine. In California new utility and lawn and garden equipment engines must be designed, built and equipped to meet the State's stringent anti-smog standards. In other states, new 1997 and later model year equipment engines must be designed, built and equipped, at the time of sale, to meet the U.S. EPA regulations for small non-road engines. The engine must be free from defects in materials and workmanship which cause it to fail to conform with U.S. EPA standards for the first two years of engine use from the date of sale to the ultimate purchaser. John Deere must warrant the emission control system on your utility or lawn and garden equipment engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your utility or lawn and garden equipment engine.

Your emission control system may include parts such as the carburetor or fuel-injection system, the ignition system, and catalytic converter. Also included may be hoses, belts, connectors and other emission related assemblies.

Where a warrantable condition exists, John Deere will repair your utility or lawn and garden equipment engine at no cost to you including diagnosis, parts and labor.

MANUFACTURER'S WARRANTY COVERAGE:

In California, the 1995 and later utility and lawn and garden equipment engines are warranted for two years. In other states, 1997 and later model year equipment engines are warranted for two years. If any emission related part on your engine is defective, the part will be repaired or replaced by John Deere.

WARRANTY

OWNER'S WARRANTY RESPONSIBILITIES

As the utility or lawn and garden equipment engine owner, you are responsible for the performance of the required maintenance listed in your owner's manual. John Deere recommends that you retain all receipts covering maintenance on your utility or lawn and garden equipment engine, but John Deere cannot deny warranty solely for lack of receipts or for your failure to ensure the performance of all scheduled maintenance.

As the utility or lawn and garden equipment engine owner, you should however be aware that John Deere may deny you warranty coverage if your utility or lawn and garden equipment engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

You are responsible for presenting your utility or lawn and garden equipment engine to an authorized John Deere Commercial and Consumer Equipment Retailer as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days.

If you have any questions regarding your warranty rights and responsibilities, you should contact your John Deere Commercial and Consumer Equipment Retailer, or the John Deere Customer Communications Center, 1-800-537-8233.

JOHN DEERE EMISSION CONTROL SYSTEM WARRANTY COVERAGE

LENGTH OF WARRANTY COVERAGE

John Deere warrants to the initial owner and each subsequent purchaser that the lawn and garden equipment engine is:

- Designed, built and equipped so as to conform with all applicable regulations adopted by the California Air Resources Board (CARB) pursuant to its authority in Chapters 1 and 2, Part 5, Division 26 of the Health and Safety Code for 1995 and later equipment engines, and all applicable regulations of the United States Environmental Protection Agency (EPA) for 1997 and later equipment engines; and
- Free from defects in materials and workmanship which can cause the failure of an emission warranted part for a period of two years after the engine is delivered to the initial retail purchaser. John Deere is liable for damages to other engine components caused by the failure of a warranted part during the warranty period. If any emission related part on your engine is defective, the part will be repaired or replaced by John Deere.

WARRANTED PARTS

Coverage under this warranty extends only to the parts listed below (the emission control system parts) to the extent these parts were present on the engine purchased.

Fuel Metering System:	Fuel Metering System:
	Carburetor and internal parts (or fuel injection system).
	Cold start enrichment system.
	Air/fuel ratio feedback and control system.

WARRANTY

Air Induction System:	Air Cleaner
	Controlled hot air intake system.
	Intake manifold.
Particulate Controls:	Traps, filters, precipitators, and any other device used to capture particulate emissions.
Exhaust Gas Recirculation (EGR) System:	EGR valve body and carburetor spacer if applicable.
	EGR rate feedback and control system.
Ignition System:	Spark plugs.
	Magneto or electronic ignition system.
	Spark advance/retard system.
Air Injection System:	Air pump or pulse valve.
	Valves affecting distribution of flow.
	Distribution manifold.
Catalyst or Thermal Reactor System:	Catalytic converter.
	Thermal reactor.
	Exhaust manifold.
Miscellaneous Items Used in Above Systems	Vacuum, temperature, and time sensitive valves and switches.
	Electronic controls.
	Hoses, belts, connectors, and assemblies.

Since emission related parts may vary slightly from model to model, certain models may not contain all of these parts and certain models may contain functionally equivalent parts.

WARRANTY SERVICE AND CHARGES

Warranty service shall be provided during customary business hours at any authorized John Deere Commercial and Consumer Equipment Retailer located within the United States of America. Repair or replacement of any warranted part will be performed at no charge to the owner, including diagnostic labor which leads to the determination that a warranted part is defective, if the diagnostic work is performed at an authorized John Deere Commercial and Consumer Equipment Retailer. Any parts replaced under this warranty shall become the property of John Deere.

MAINTENANCE WARRANTY COVERAGE

a) Any warranted part which is not scheduled for replacement as required maintenance shall be warranted as to defects for the warranty period. Any such part repaired or replaced under the warranty shall be warranted for the remaining warranty period.

b) Any warranted part which is scheduled only for regular inspection to the effect of "repair or replace as necessary" shall be warranted as to defects for the warranty period. Any such part repaired or replaced under the warranty shall be warranted for the remaining warranty period.

WARRANTY

c) Any warranted part which is scheduled for replacement as required maintenance shall be warranted as to defects only for the period of time up to the first scheduled replacement for that part. Any such part repaired or replaced under the warranty shall be warranted for the remainder of the period prior to the first scheduled replacement point for that part.

d) Normal maintenance, replacement or repair of emission control devices and systems, which are being done at the customers expense, may be performed by any repair establishment or individual; however, warranty repairs must be performed by an authorized John Deere Commercial and Consumer Equipment Retailer.

e) Any replacement part that is equivalent in performance and durability may be used in the performance of any non-warranty maintenance or repairs, and shall not reduce the warranty obligations of John Deere.

CONSEQUENTIAL WARRANTY COVERAGE

Warranty coverage shall extend to the failure of any engine components caused by the failure of any warranted part still under warranty.

LIMITATIONS

This Emission Control System Warranty shall NOT cover any of the following:

a) Repair or replacement required as a result of (i) misuse or neglect, (ii) improper maintenance or unapproved modifications, (iii) repairs improperly performed or replacements improperly installed, (iv) use of replacement parts or accessories not conforming to John Deere specifications which adversely affect performance and/or durability, (v) alterations or modifications not recommended or approved in writing by John Deere.

b) Replacement parts, other services and adjustments necessary for normal maintenance.

c) Transportation to and from the John Deere Commercial and Consumer Equipment Retailer, or service calls made by the Retailer.

LIMITED LIABILITY

a) The liability of John Deere under this Emission Control System Warranty is limited solely to the remedying of defects in materials or workmanship. This warranty does not cover inconvenience or loss of use of the utility or lawn and garden equipment engine or transportation of the engine to or from the John Deere Commercial and Consumer Equipment Retailer. JOHN DEERE SHALL NOT BE LIABLE FOR ANY OTHER EXPENSE, LOSS, OR DAMAGE, WHETHER DIRECT, INCIDENTAL, CONSEQUENTIAL (EXCEPT AS LISTED ABOVE UNDER "COVERAGE") OR EXEMPLARY ARISING IN CONNECTION WITH THE SALE OR USE OF OR INABILITY TO USE THE UTILITY OR LAWN AND GARDEN ENGINE FOR ANY OTHER PURPOSE.

b) NO EXPRESS EMISSION CONTROL SYSTEM WARRANTY IS GIVEN BY JOHN DEERE WITH RESPECT TO THE ENGINE EXCEPT AS SPECIFICALLY SET FORTH IN THIS DOCUMENT. ANY EMISSION CONTROL SYSTEM WARRANTY IMPLIED BY LAW, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, IS EXPRESSLY LIMITED TO THE EMISSION CONTROL SYSTEM WARRANTY TERMS SET FORTH IN THIS DOCUMENT.

c) No dealer is authorized to modify this Federal, California and John Deere Emission Control System Warranty.

WARRANTY

LEGAL RIGHTS

This Warranty gives you specific legal rights. You may also have other rights in the State of California for 1995 and later equipment engines and in other states for 1997 and later equipment engines.

THIS FEDERAL AND CALIFORNIA EMISSION CONTROL SYSTEM WARRANTY IS IN ADDITION TO THE JOHN DEERE LIMITED ENGINE WARRANTY.

Limited Battery Warranty

NOTE: Applicable in North America only.

TO SECURE WARRANTY SERVICE

The purchaser must request warranty service from a John Deere dealer authorized to sell John Deere batteries, and present the battery to the dealer with the top cover plate codes intact.

FREE REPLACEMENT

Any new battery which becomes unserviceable (not merely discharged) due to defects in material or workmanship within 90 days of purchase will be replaced free of charge. Installation costs will be covered by warranty if (1) the unserviceable battery was installed by a John Deere factory or dealer, (2) failure occurs within 90 days of purchase, and (3) the replacement battery is installed by a John Deere dealer.

PRO RATA ADJUSTMENT

Any new battery which becomes unserviceable (not merely discharged) due to defects in material or workmanship more than 90 days after purchase, but before the expiration of the applicable adjustment period, will be replaced upon payment of the battery's current list price less a pro rata credit for unused months of service. The applicable adjustment period is determined from the Warranty Code printed at the top of the battery and chart below. Installation costs are not covered by warranty after 90 days from the date of purchase.

THIS WARRANTY DOES NOT COVER

- A. Breakage of the container, cover, or terminals.
- B. Depreciation or damage caused by lack of reasonable and necessary maintenance or by improper maintenance.
- C. Transportation, mailing, or service call charges for warranty service.

LIMITATION OF IMPLIED WARRANTIES AND PURCHASER'S REMEDIES

To the extent permitted by law, neither John Deere nor any company affiliated with it makes any warranties, representations, or promises as to the quality, performance or freedom from defect of the products covered by this warranty. IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, TO THE EXTENT APPLICABLE, SHALL BE LIMITED IN DURATION TO THE APPLICABLE ADJUSTMENT PERIOD SET FORTH HERE. THE PURCHASER'S ONLY REMEDIES IN CONNECTION WITH THE BREACH OR PERFORMANCE OF ANY WARRANTY ON JOHN DEERE BATTERIES ARE THOSE SET FORTH HERE. IN NO EVENT WILL THE DEALER, JOHN DEERE OR ANY COMPANY AFFILIATED WITH JOHN DEERE BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. (Note: Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages. So these limitations and exclusions may not apply to you.) This warranty gives you specific legal rights, and you may also have some rights which vary from state to state.

WARRANTY

NO DEALER WARRANTY

The selling dealer makes no warranty of its own and the dealer has no authority to make any representation or promise on behalf of John Deere, or to modify the terms or limitations of this warranty in any way.

PRO RATA MONTHS OF ADJUSTMENT

NOTE: *If your battery is not labeled with a warranty code, it is a warranty code "B".*

Warranty Code	Warranty Period
A	40 Months
B	36 Months
C	24 Months

INDEX

A

Air Cleaner Elements, Checking and Cleaning	46
Automatic Transmission, Using and Stopping	20
Axle Pivot, Lubricating	65

B

Battery and Terminals, Cleaning	57
Battery Discharge Indicator Light Bulb, Replacing	60
Battery Discharge Light, Check	17
Battery, Charging the	58
Battery, Checking the	56
Battery, Connect and Check	4
Battery, Removing and Installing	56
Battery, Using Booster	59
Belt, Replacing Mower Drive Belt	51
Blades, Balancing	55
Blades, Servicing Mower (Removing and Installing)	53
Blades, Sharpening	55
Brake, Using the Park	17
Bulbs, Replacing	60

C

Carburetor, Adjusting	43
Certification Label	10
Chains, Using and Installing Tire	28
Cleaning Care, Correct	66
Cleaning Care, Correct for Painted Metal Surfaces	68
Console Controls	11
Controls (GV and HV), Console	11
Controls, Automatic Model 1842HV	12
Controls, Gear Model 1842GV	11
Cutting Height, Adjusting	31

D

Dealer Set-Up	1
---------------------	---

E

Engine for Storage, Preparing	78
Engine Oil	44
Engine Oil, Changing	45
Engine Warranty Maintenance Statement	43
Engine, Starting	18
Engine, Stopping	19
Engine, Warming and Idling	19
Equipment, Avoid Using Ground Engaging	27

INDEX

F

Filter, Changing Engine Oil	45
Filter, Replacing Fuel	47
Fuel	62
Fuel Filter, Replacing	47
Fuel Tank, Filling	64
Fuse, Replacing	60

G

Gear Transmission, Using and Stopping.....	19
Grease	49, 65
Grease-Gard	49, 65

H

Headlight Bulb, Replacing	60
Headlights, Using	17

I

Implement Option, Using Reverse	21
---------------------------------------	----

L

Labels, Safety	8
Lift Lever to Raise and Lower Mower, Using	31
Light, Check Battery Discharge	17
Lubricating Mower Spindles	50
Lubricating Wheel Spindles and Axle Pivot	65

M

Metal Surfaces, Painted	68
Mower Level (Front-to-Rear), Adjusting	34
Mower Level (Side-to-Side), Adjusting	32
Mower Level (Side-to-Side), Adjusting	32
Mower Spindles, Lubricating	50
Mower, Disengaging	35
Mower, Engaging	35
Mower, Installing	71
Mower, Removing	69

O

Oil Filter, Changing Engine.....	45
Oil, Engine	44
Oil, Engine Changing	45
Oil, Engine Checking	44
Oil, Transmission, Type, Checking and Adding	48
Operating Checklist, Daily	22
Operating Mower Safely	30
Operating Safely	13

INDEX

P

Painted Metal Surfaces, Cleaning Care	68
Painted Surfaces Care	66
Part Numbers	37
Plastic and Painted Surfaces, Care for	66
Pushing Machine	22

R

Reverse Implement Option, Using	21
---------------------------------------	----

S

Safety Labels	8
Safety Systems, Testing	23
Safety, Operating	13
Safety, Operating Mower	30
Safety, Service	39
Safety, Service Mower	49
Seat, Adjusting	16
Service Literature Order Form	93
Service Safety	39
Spark Plugs, Checking	47
Specifications	80
Storage, Preparing Engine for	78
Storage, Preparing Machine for	77
Storage, Removing Machine from	79
Storing Safety	77

T

Test 1-7, Safety	23
Tire Chains, Using and Installing	28
Tire Pressure, Checking	61
Transmission Oil, Type, Checking and Adding	48
Transport Safely	16
Transporting	29
Troubleshooting Chart, Using	72

W

Warranty Maintenance Statement, Engine	43
Warranty, Product	83
Weights, Using Front	27
Weights, Using Rear	27
Wheel Spindles, Wheel Bearings and Front Axle Pivot, Lubricating	65
Wheels, Adjusting Mower Gage	32

NOTES

SABRE SERVICE LITERATURE

Order Form

John Deere Distribution Center - Department S/P P.O. Box 186, Moline, IL 61266-0186

To order these publications, call 1-800-522-7448. If you want manuals or catalogs for equipment not shown on this list, provide the model number, serial number, and name of the product when you call. Make checks payable to John Deere.

Name _____

Address _____

City _____

State _____

Zip _____ **Phone:** () _____

Title	Number	Price	Qty	Total
Parts Catalog	PC2655	(Call 1-800-522-7448 for current prices.)		
Operator's Manual	OMM138147			
Technical Manual	TM1740			
Sub-total				
State Sales Tax (Illinois & Iowa only)				
Shipping & Handling				
Total				
Method of Payment ☐ Check/Money Order Enclosed ☐ John Deere Credit Card ☐ MasterCard ☐ Visa ☐ American Express ☐ Discover ☐ Farm Plan				
Credit Card Acct. No. (13 or 16 digits) _____ - _____ - _____ - _____		Expiration Date: _____		Signature: _____

NOTES

QUALITY DOESN'T END WHEN YOU INVEST IN A SABRE BY JOHN DEERE

SABRE by John Deere equipment is more than just a purchase, it's an investment in quality. That quality goes beyond our equipment to your SABRE dealer's parts and service support. This support is needed to keep you a satisfied customer.

That's why John Deere has initiated a process to handle your questions or problems, should they arise. The following three steps will help guide you through the process.



Step 1

Refer to your operator's manual

- A. It has many illustrations and detailed information on the safe and proper operation of your equipment.
- B. It gives troubleshooting procedures, and specification information.
- C. It gives ordering information for parts catalogs, service and technical manuals.
- D. If your questions are not answered in the operator's manual, then go to Step 2.

Step 2

Contact your Authorized SABRE Service Center

- A. Your SABRE Service Center can answer your questions, resolve problems, and fulfill your parts and service needs.
- B. First, discuss your questions or problems with your service center's parts and service staff.
- C. If the parts and service people are unable to resolve your problem, see the service center manager or owner.
- D. If your questions or problems are not resolved by the service center, then go to Step 3.

Step 3

Call the John Deere Customer Communications Center

- A. Your SABRE Service Center is the most efficient source in addressing any concern, but if you are not able to resolve your problem after checking your operator's manual and contacting your service center, call the Customer Communications Center.
- B. For prompt, effective service, please have the following ready before you call:
 - The name of the dealer or service center with whom you've been working.
 - Your equipment model number.
 - Number of hours on machine (if applicable).
 - Your 13-digit serial number which you recorded on the inside front cover of this manual.
 - If the problem is with an attachment, your attachment identification number.
- C. Then call 1-800-537-8233 and our representative will work with your dealer or service center to investigate your concern.

