

DOUBLE WINDROW ATTACHMENT



JOHN DEERE

OPERATORS MANUAL DOUBLE WINDROW ATTACHMENT

OME75047 I5 English

**JOHN DEERE OTTUMWA WORKS
OME75047 I5**

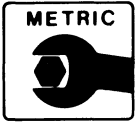
**LITHO IN THE U.S.A.
ENGLISH**



Introduction



CAUTION: This safety alert symbol identifies important safety messages in this manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.



The Double Windrow Attachment is primarily of metric design.

Some specifications cannot be converted, these appear in metric only.

Most Double Windrow Attachment hardware is metric. Specified metric hardware must be used for replacement.

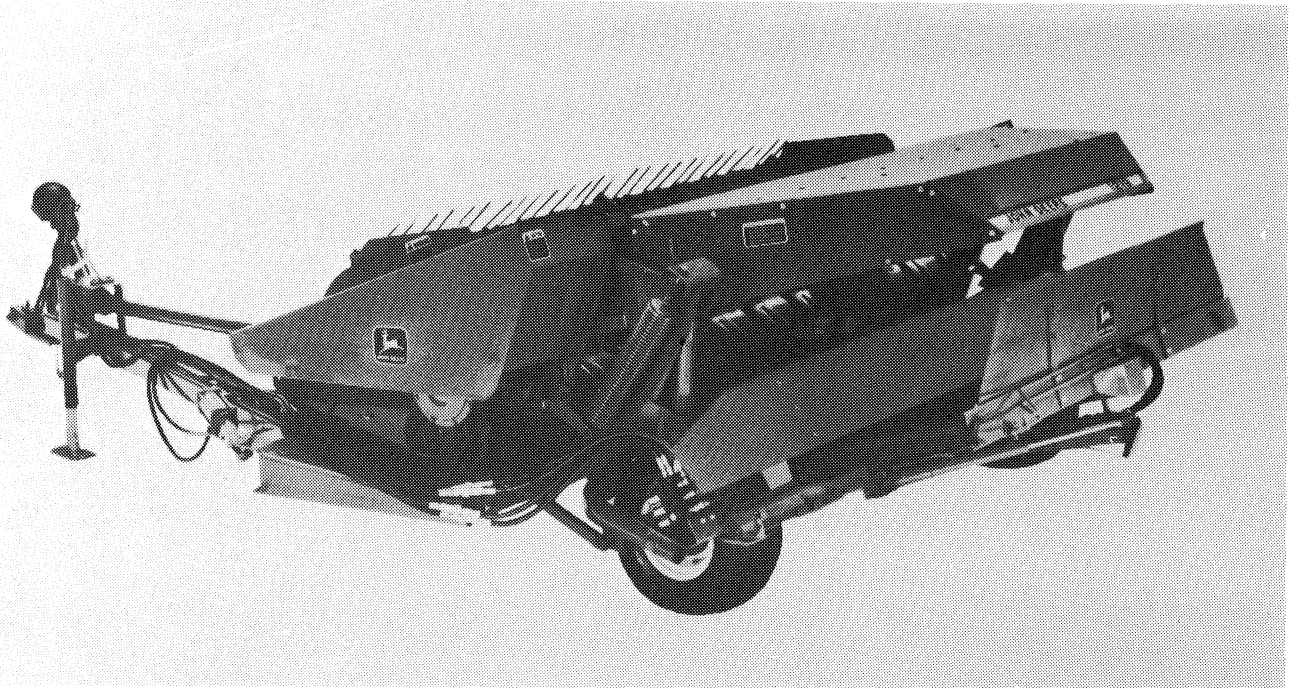


CAUTION: Use only metric tools. Other tools may not fit properly. They may slip and cause injury.

Record the identification number(s) in the space provided following Specifications. Accurately record all of the characters because (should the product be stolen) tracing is sometimes through a computer match of letters and numbers. Also, your dealer needs this information when ordering parts. If you carry your operator's manual on the machine for reference, be sure to also record the identification number(s) on a separate sheet of paper and file it in a secure place not on the machine so you will still have a record in case the machine is stolen.

Your warranty appears on your copy of the purchase order copy which you should have received from your dealer.

"Right-hand" and "left-hand" sides are determined by facing in the direction the mower-conditioner will travel when in use.



John Deere Double Windrow Attachment on a 1219 Mower-Conditioner

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Safety

OBSERVE SAFETY SIGNS AND MESSAGES



CAUTION: This message is used for general reminders of good safety practices or to direct attention to unsafe practices. The message will appear in your operator's manual and/or the sign will appear on the machine with the color combination of yellow and black.

WARNING: This message denotes a specific potential hazard. The sign will be displayed on the machine in areas of potential hazard. The sign will have the color combination of yellow and black.

DANGER: This message denotes the most serious specific potential hazard. The sign will be displayed on the machine in areas of potential hazard. The sign will have the color combination of red and white.



T27999N

AA7;T27999 N E03;;4720C A 130484

OBSERVE "IMPORTANT" MESSAGES

Messages labeled "Important" will appear in your operator's manual and/or on the machine to provide specific instructions for performing adjustments, services, etc. If these instructions are not followed, it could result in damage to the machine.

0A6; E03;;4RRCC I 300484

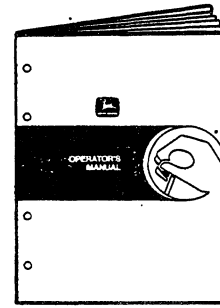
DO NOT MODIFY MACHINE

Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

0A6; E03;;4RRCC J 300484

BEFORE OPERATING

1. Read operator's manual, machine decals, and SAFETY section of this manual.
2. Remove foreign objects from machine.
3. All shields must be in place and secure.
4. Become familiar with all controls affecting machine functions.



0A6;E23482 E03;4RRCC C 300484

PROTECT AGAINST NOISE

Prolonged exposure to loud noise can cause impairment or loss of hearing. Wear a suitable hearing protective device such as earmuffs (A) or earplugs (B) to protect against objectionable or uncomfortable loud noise.

A—Earmuffs
B—Earplugs



0A6;E19364 E03;4RRCC E 300484

AVOID HIGH-PRESSURE FLUIDS

Escaping fluid under pressure can penetrate the skin causing serious injury. Relieve pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Keep hands and body away from pinholes and nozzles which eject fluids under high pressure. Use a piece of cardboard or paper to search for leaks.

If ANY fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this type injury or gangrene may result.

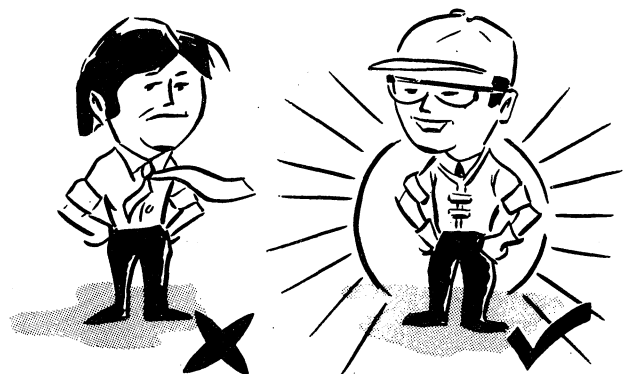


AA7;X9811 E05;DWAC A 100884

OPERATE SAFELY

Keep all shields in place when operating machine. Wear relatively tight and belted clothing to prevent catching on some machine parts. Never clean, lubricate or adjust row-crop when it is running. Stand clear of gatherer chains and oscillating knives. DO NOT hand feed material into row-crop.

Always operate machine at rated speed. Drive slowly over rough ground.

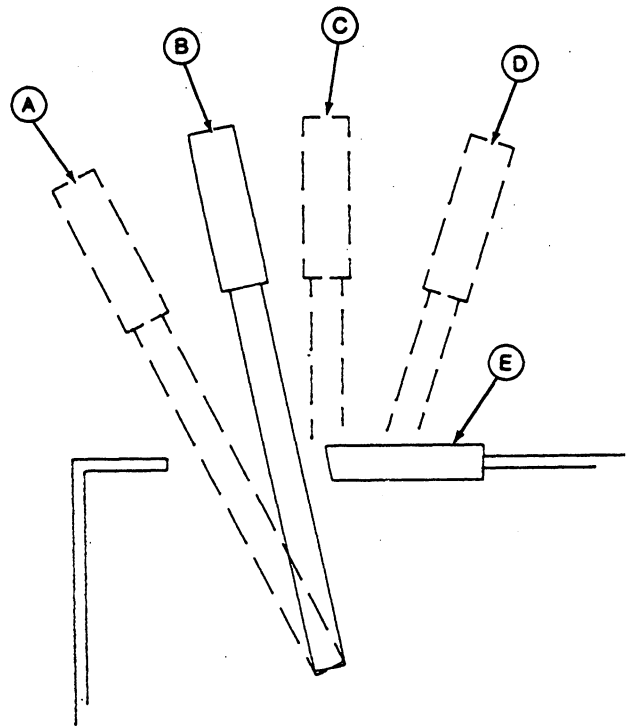


0A6;E19363 E03;4RRCC D 070584

Preparing the Tractor

USE RUBBER STOP IN SELECTOR CONTROL LEVER SLOT

A continuous hydraulic flow is provided by the tractor to the double windrow attachment by engaging the selector control valve lever. The hydraulic flow is shut off by moving the lever forward to the float position. The rubber stop is provided to prevent lever movement from the engaged to the off position.

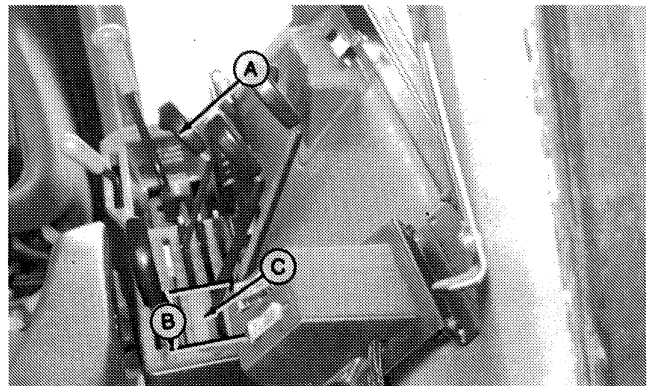


- A—Float Position
- B—Front Engaged Position
- C—Off Position (Not Used)
- D—Rear Engaged Position (Not Used)
- E—Rubber Stop

014;E26623 E05;DWAV A 140685

INSTALL RUBBER STOP IN SELECTIVE CONTROL LEVER

1. Start tractor engine and move lever (A) forward to location just prior to detent.
2. Measure distance (B) from back of lever to end of slot in selective control lever guide.
3. Cut rubber lever stop (C) 1.6 mm (1/16-in.) longer than measured distance from lever to end of slot.
4. Insert stop in slot with “V” groove down. Check operation of lever. Remove additional material, if necessary.



IMPORTANT: Do not use number two selector control lever to operate double windrow attachment as it results in less transmission cooling and lubrication.



CAUTION: Before leaving tractor, push hydraulic lever into float position so canvas will not be activated when tractor is started.

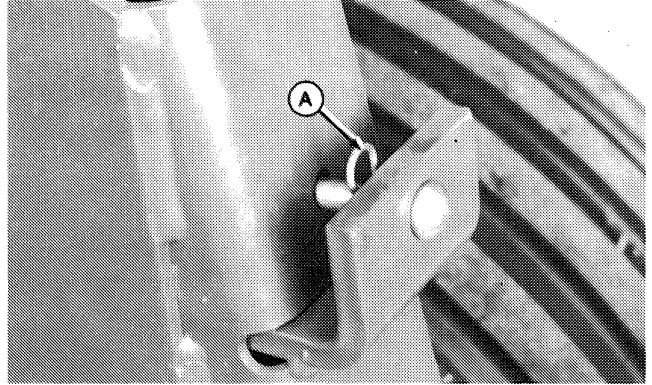
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Attaching and Detaching

INSTALLING DOUBLE WINDROW ATTACHMENT ON MOWER-CONDITIONER

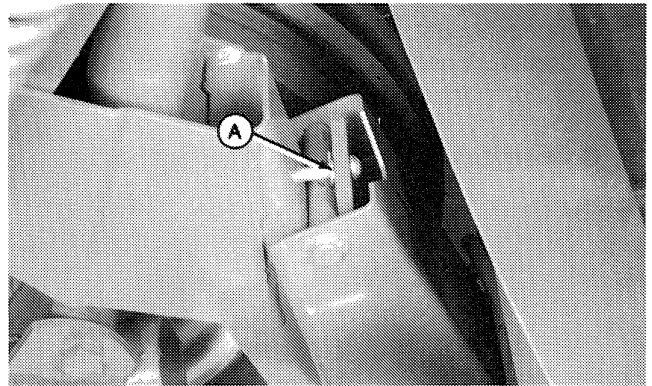
NOTE: When using the attachment on John Deere utility tractors prior to 50 Series, a selective control valve oil return kit should be installed. This kit will improve cooling and transmission lubrication. Order AR71945 from Service Parts.

1. With Double Windrow Attachment sitting on jackstands, back mower-conditioner near attachment.
2. Lower mower-conditioner to ground and shut tractor off.
3. Remove locking pins (A) from attaching brackets.
4. Manually slide the attachment into position. The attaching channel should straddle the mower-conditioner mounting brackets.
5. Start tractor and slowly raise the mower-conditioner. Be sure both sides of attachment are hooked in mounting brackets.
6. Shut tractor off.



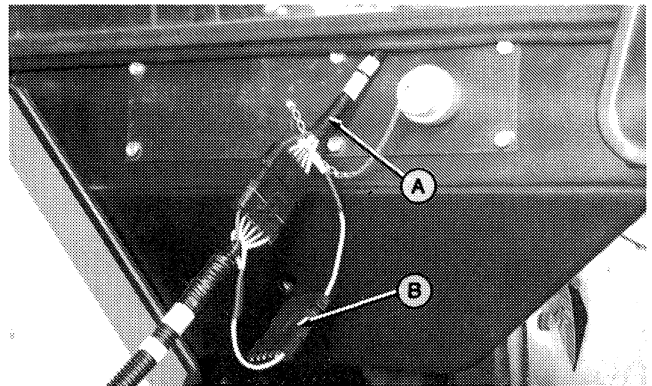
AB4;E24810 E05;;DWAW A 140685

7. Install locking pin (A) in attaching bracket. Repeat on opposite side.
8. Raise the three support stands.



AB4;E24811 E05;;DWAW B 140685

9. Connect wiring harness (A) at tractor and rear of mower-conditioner. Dust covers (B) should be placed on mating harness to prevent dirt buildup and corrosion.

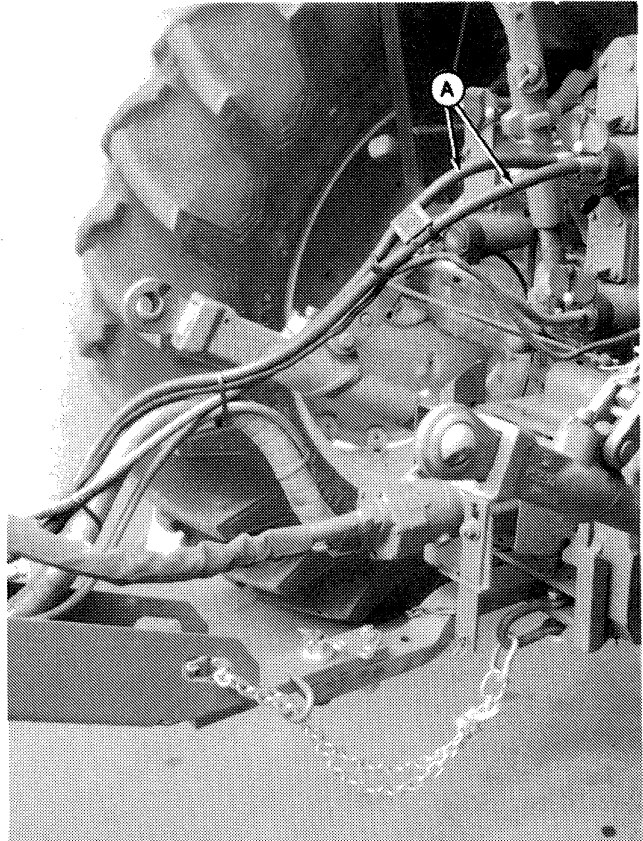


AB4;E24812 E05;;DWAW C 140685

IMPORTANT: Hoses for Double Windrow Attachment should be plugged into #1 selective control valve outlet to improve cooling and transmission lubrication.

10. Connect hoses (A) to tractor.

11. Install rubber stop in selector control lever slot. (See Install Rubber Stop in Selector Control Lever Slot in Preparing the Tractor Section.)

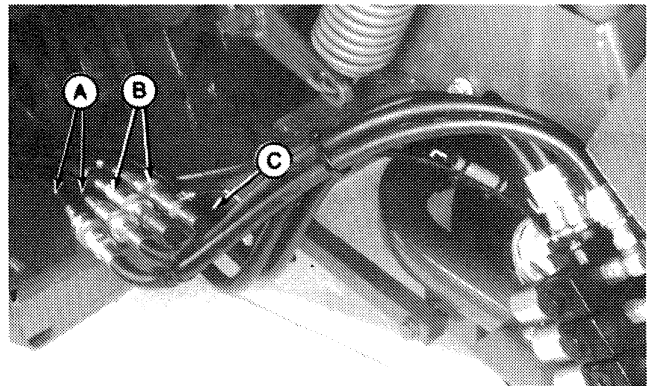


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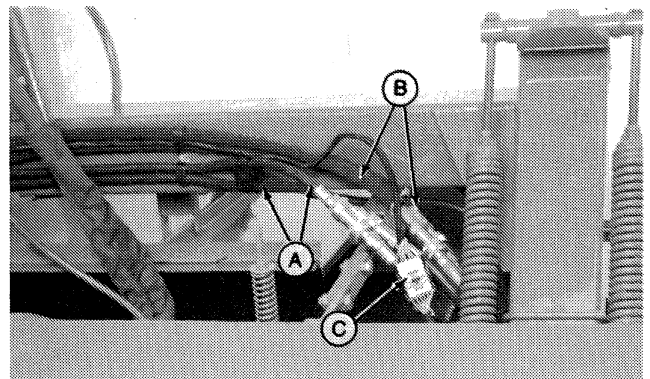
12. Connect hoses between mower-conditioner and attachment. Connect hoses (A) with the identification tag to hoses from electrohydraulic valve with identification tag.

13. Connect remaining hoses (B) and harness (C).

1219 Mower-Conditioner and Attachment



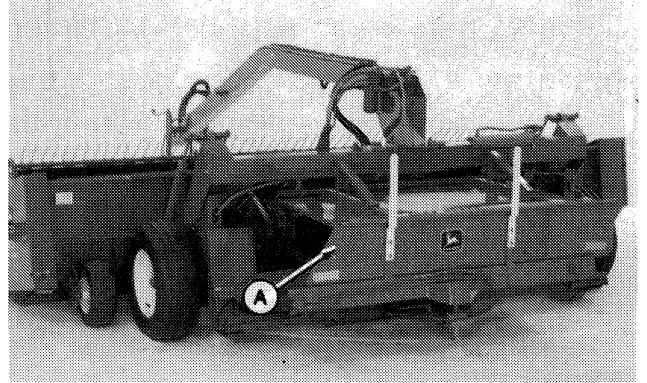
1525 Mower-Conditioner and Attachment



AB4;E26585 E26539 E05;;DWAU G 140685

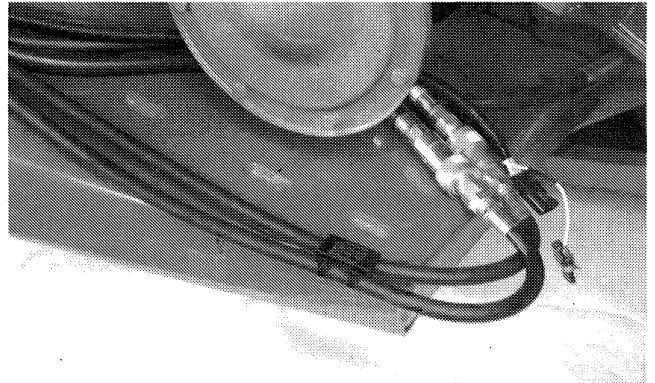
REMOVING DOUBLE WINDROW ATTACHMENT FROM MOWER-CONDITIONER

1. Raise mower-conditioner. Shift attachment table (A) to center of shift range.
2. Remove locking pins from attaching brackets.
3. Remove pins and lower support stands.



AB4;E26541 E05;;DWAWE 140685

4. Unplug wiring harness and hoses between mower-conditioner and attachment. Install dust cap on wiring harness.
5. On 1525 Mower Conditioners and on 1219 Mower-Conditioners with electrohydraulic tongue positioner, plug hoses together as shown to operate tongue positioner with hydraulic lever. (1219 illustrated)
6. On 1219 Mower-Conditioners without electrohydraulic tongue positioner, install dust cap on hose.
7. Plug hoses together on double windrow attachment to help prevent contamination.



AB4;E24814 E05;;DWAWE 140685

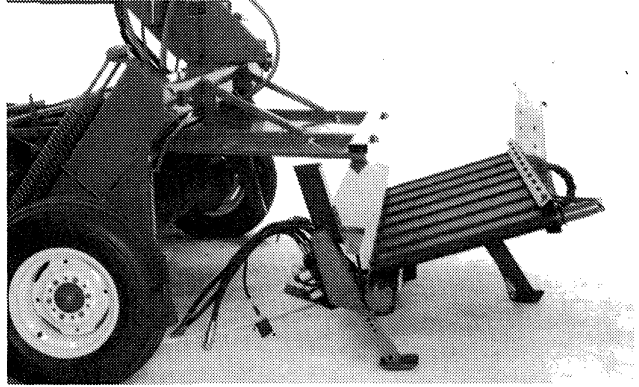
8. Lower mower-conditioner and slowly drive forward.

IMPORTANT: Failure to remove rubber stop could cause overheating of tractor hydraulics or unexpected operation of other hydraulic attachments.

9. Remove rubber stop from hydraulic lever slot and position in neutral.

10. Reinstall locking pins in mower-conditioner attaching brackets.

11. Attach windrow forming shields to mower conditioner.



AB4;E26542 E05;;DWAW H 180785

Operating the Double Windrow Attachment

TRACTOR HYDRAULIC SYSTEM

The attachment uses the tractor hydraulic system to operate the table shift, canvas motor, and the optional tongue positioner. The attachment is compatible only with tractors having closed-center hydraulic systems. When operating in adverse conditions, such as steep hills or high air temperature, it is recommended that the attachment be operated with tractors that have an oil cooler to prevent overheating and possible damage to the tractor hydraulic system.

AA7; E05;;DWAJ H 230884

CANVAS SPEED

The canvas speed of the attachment is controlled by a fixed orifice located inside the electrohydraulic valve.

A speedup kit is available through service parts to increase the canvas speed of the attachment for use in heavy, bulky crops. This orifice results in more heat in the hydraulic system and should only be used with tractors having a hydraulic oil cooler.



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WINDROW PLACEMENT

The Double Windrow Attachment is capable of producing either single or double windrows. As crop conditions change, the attachment can be removed to allow flexibility. Windrow placement is adjustable to accommodate varying pickup widths and drying conditions.

AA7; E05;;DWAJ A 150884

USING THE CONTROLS (1219 MOWER-CONDITIONER)

To engage hydraulic canvas, pull hydraulic lever rearward against rubber stop.

Switch (A) controls table shift and canvas direction. "1st Pass" indicates delivery to the right and "2nd Pass" indicates delivery to the left.

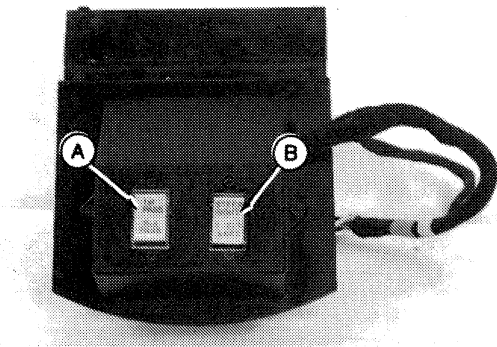
Switch (B) is used for optional mower-conditioner electrohydraulic tongue positioner. "Steer Right" moves the platform to the right and "Steer Left" moves the platform to the left.

To disengage canvas, push hydraulic lever forward into float position.



CAUTION: Before leaving tractor, push hydraulic lever into float position so canvas will not be activated when tractor is started.

IMPORTANT: If canvas stalls, disengage tractor hydraulic lever to prevent damage due to drive roll slipping on canvas. Shut off tractor and remove obstruction before reengaging hydraulic lever.



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USING THE CONTROLS (1525 MOWER-CONDITIONER)

To engage the double windrow attachment, pull selector control valve lever to the rear against rubber stop.

Switch (A) determines method of travel through the field.

Switch (B) controls table shift and canvas direction.

Switch (C) steers platform to the right or the left.

Set travel switch (A) to method of cutting used; around clockwise or back and forth.

Set pass switch (B) to "1st Pass" each time a new double windrow is started.

Set pass switch (B) to "2nd Pass" each time the first pass is completed.

The travel switch (A) and pass switch (B) controls the canvas delivery and table shift as follows:

Travel Around:

1st Pass: Delivery right, shift right

2nd Pass: Delivery left, shift left

Travel Back and Forth:

1st Pass: Delivery left, shift right

2nd Pass: Delivery left, shift left

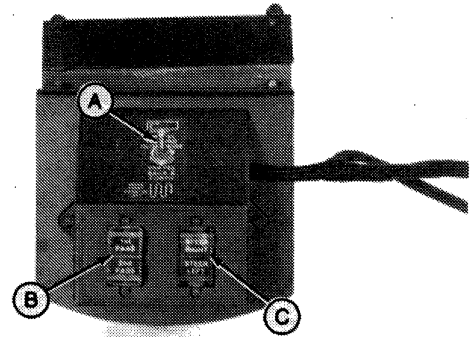
IMPORTANT: If canvas stalls, disengage tractor hydraulic lever to prevent damage due to drive roll slipping on canvas. Shut off tractor and remove obstruction before reengaging hydraulic lever.

To disengage canvas, push hydraulic lever forward into float position.

To raise and lower the platform, use the second selector control valve.



CAUTION: Before leaving tractor, push hydraulic lever into float position so canvas will not be activated when tractor is started.



SINGLE WINDROWS (1219 MOWER-CONDITIONERS)

To produce single windrows all crop is delivered the same direction.

To prevent recutting of a windrow in point rows, deliver all crop to the left by cutting the opening round counterclockwise with delivery to the right. Cut all successive rounds clockwise with delivery to the left. This eliminates the need to double a windrow.

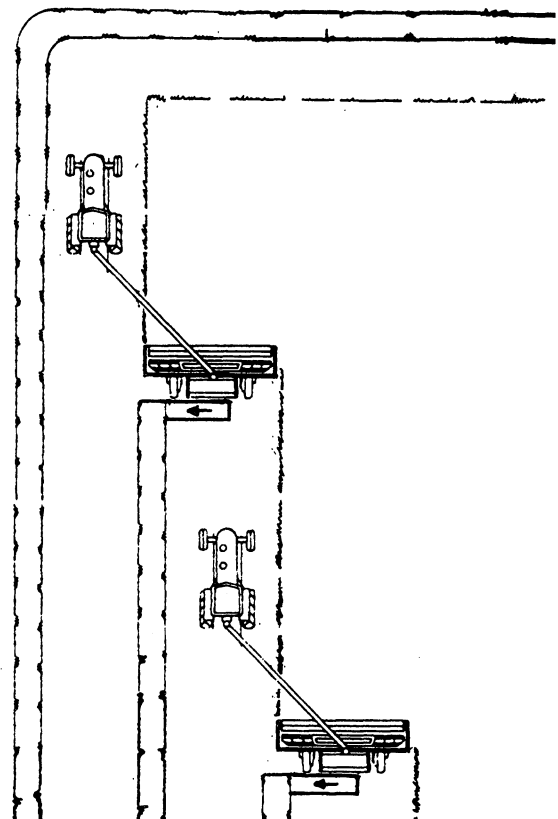
To make single windrows delivering all crop to the right, the opening round may be cut either counterclockwise or clockwise.

E05;;DWAJ B 200685

SINGLE WINDROW (1525 MOWER-CONDITIONER)

NOTE: Travel switch on control console must be in the "Travel Around" position when making single windrows.

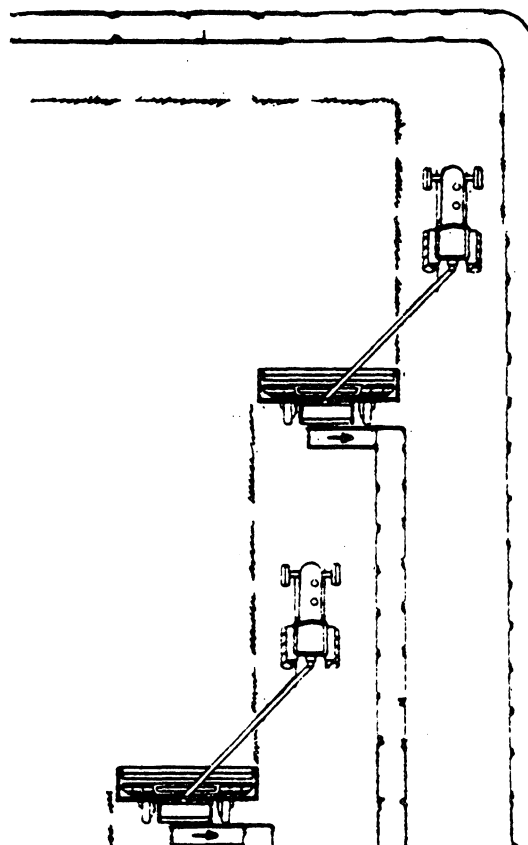
When traveling around the field clockwise, set pass switch to "2nd Pass". Crop delivery and table shift will be to the left.



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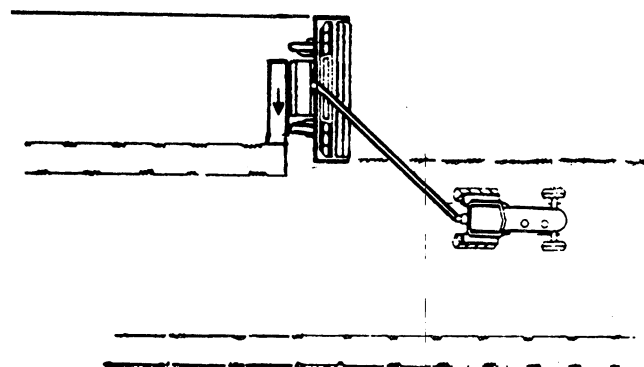
Operating the Double Windrow Attachment

When traveling counterclockwise around the field, set pass switch to "1st Pass". Crop delivery and table shift will be to the right.



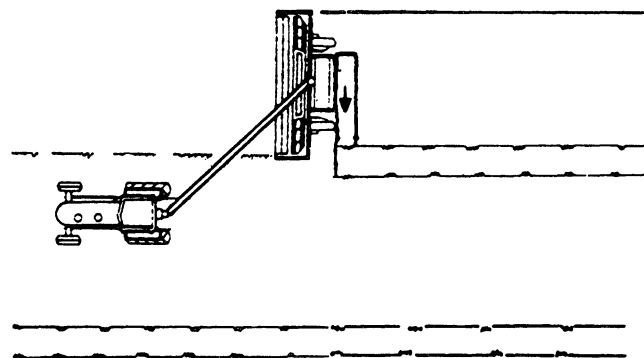
014;E26547 E05;;DWAJ L 140685

When traveling back and forth across the field cutting on the left side of the tractor, set pass switch to "1st Pass". Crop delivery and table shift will be to the right.



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When traveling back and forth across the field cutting on the right side of the tractor, set pass switch to "2nd Pass". Crop delivery and table shift will be to the left.



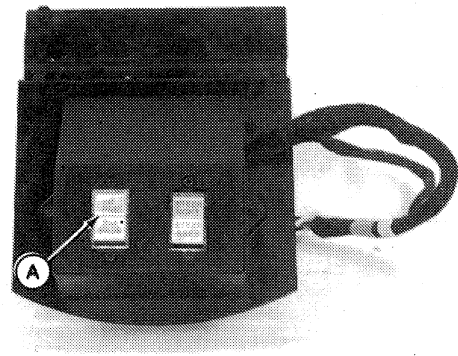
014;E26549 E05;;DWAJ N 140685

DOUBLE WINDROWS (1219 MOWER-CONDITIONER)

To make a double windrow, the first round is made with the table delivery to the right. The second round is made with the table delivery to the left. To change from right to left-hand delivery, move the control console switch (A) from "1st Pass" to "2nd Pass".

For operator convenience the delivery direction should be changed in the same field location once each round.

When cutting square corners, the delivery direction can be changed just before turning the corner. It is not necessary to stop while the table shift and delivery change is being made.

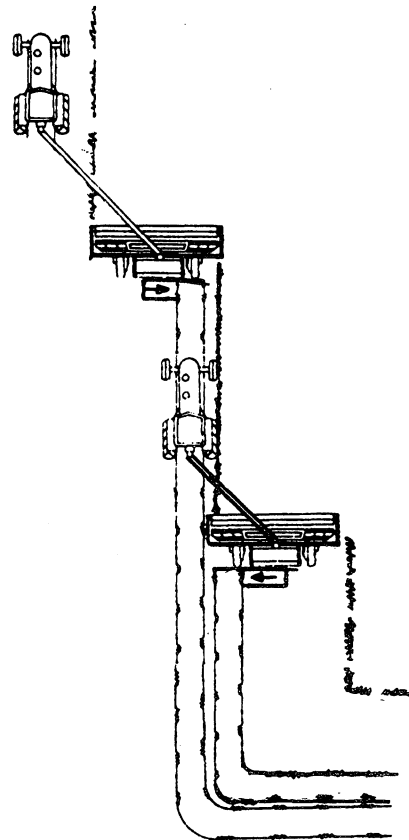


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DOUBLE WINDROWS (1525 MOWER-CONDITIONER)

When traveling around the field, set travel switch on control console to "Travel Around" position.

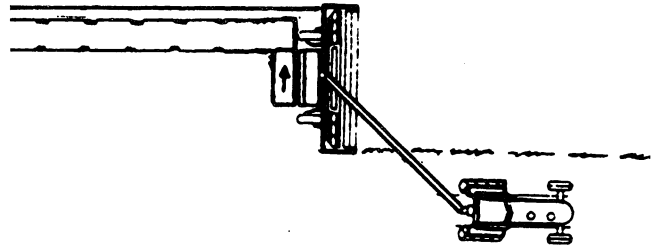
Change delivery direction of windrow, at the same location in the field each round, by actuating the pass switch.



014;E26551 E05;;DWAJ O 140685

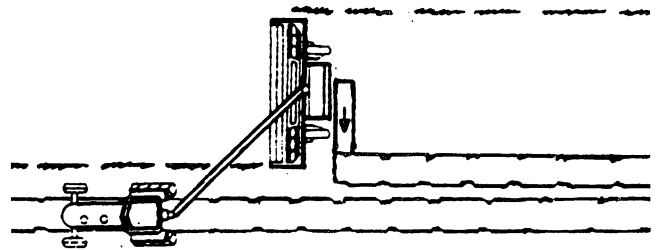
When traveling back and forth across the field, set travel switch on control console to the "Back and Forth" position.

Make the first pass with platform swung to the left. Crop delivery is to the left and table shift will be to the right.



014;E26552 E05;;DWAJ P 140685

Before second pass is made, swing platform to the right and actuate "2nd Pass" switch. Crop delivery and table shift will be to the left.



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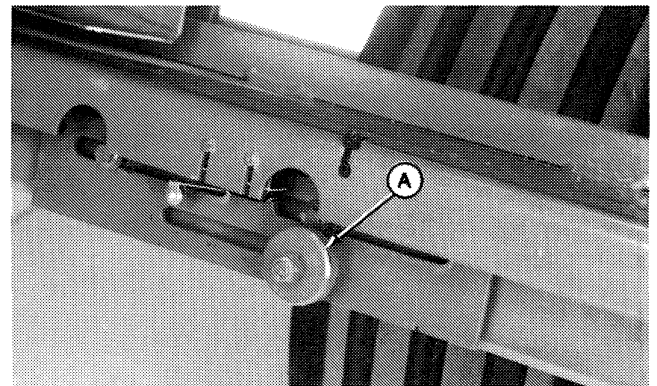
ADJUSTING WINDROW POSITION



CAUTION: Do not move adjusting knobs with canvas running. Table and knobs will move without warning.

The positioning of each windrow can be adjusted by moving the left and right-hand adjusting knob (A).

NOTE: The knob on the left-hand side controls the right-hand stopping point, and the knob on the right-hand side controls the left-hand stopping point.



On the first pass, the windrow should be delivered far enough from the standing crop to allow room for the tractor tire on the second pass. Windrow placement on the second pass also determines overall double windrow width.

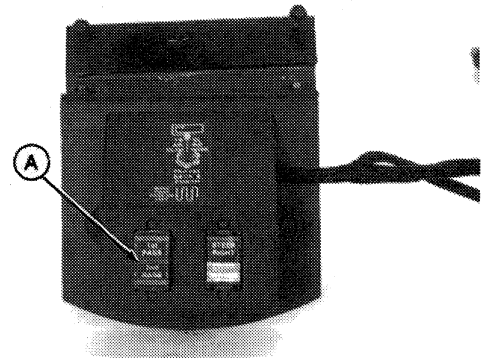
If the windrows are being placed on dry ground, it is recommended that the double windrow width be set as wide as possible for the pickup of the forage harvester or baler that follows. This will maximize drying rate.

014;E26620 E05;;DWAJ D 180785

ADJUSTING WINDROW WIDTH

Adjust width by relocating adjusting knobs which control the stopping point when table is shifted.

1. Engage hydraulics and set the pass switch (A) until desired right delivery location is reached.
2. Move switch back to center position to stop table shift.



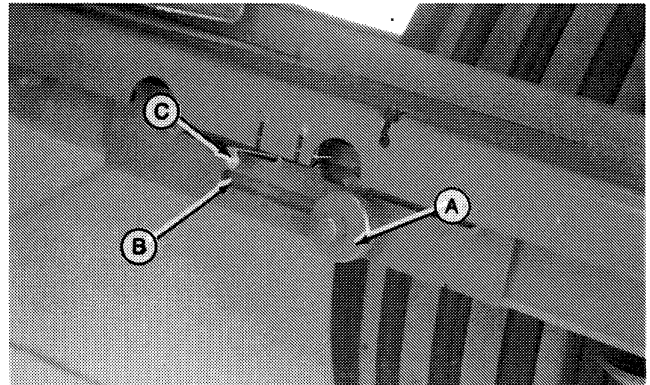
014;E26559 E05;;DWAJ E 140685

3. Disengage hydraulic power and shut off tractor.



CAUTION: Do not move adjusting knobs with canvas running. Table and knobs will move without warning.

4. Loosen right-hand adjusting knob (A) and slide in slot (B) until it contacts the microswitch (C) making an audible click. Tighten knob.
5. Repeat on opposite side.

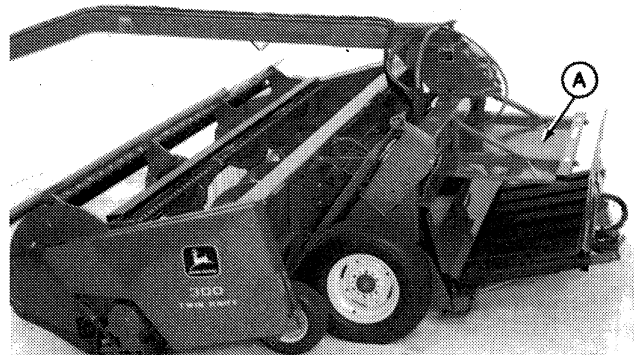


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ADJUSTING WINDROW FORMING SHIELD HEIGHT

In heavy crop, set forming shield (A) to its highest position to prevent clogging.

In a very light crop, set forming shield (A) to its lowest position for a smooth windrow.



014;E26554 E05;;DWAJ R 140685

Attachments

ELECTROHYDRAULIC TONGUE POSITIONER (1219 MOWER-CONDITIONER)

Allows use of double windrow attachment and 1219 Mower-Conditioner, with hydraulic tongue swing cylinder, on tractor with only two selector control valves.

The mower-conditioner can easily be changed from operating position to transporting position with an electric rocker switch located in the cab. This attachment also provides convenient control of mower-conditioner position in side hill operation.

E05;;DWAK A 180785

HEAVY DUTY TIRES AND RIMS (1525 MOWER-CONDITIONER)

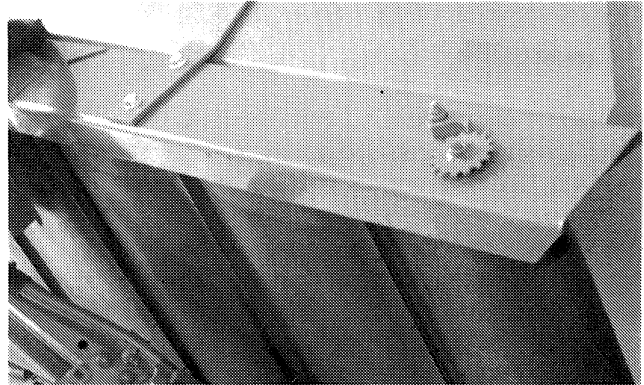
11L - 15, 8 Ply tires and rims are required for the 1525 Mower-Conditioner to withstand the additional weight of the Double Windrow Attachment.

E05;;DWAK B 140685

Lubrication and Maintenance

10-HOUR

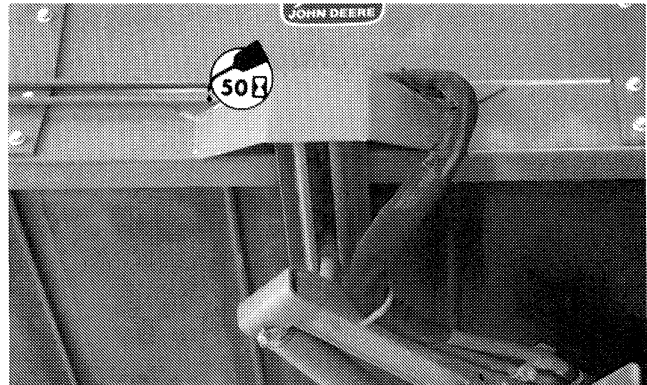
Check canvas tension. Adjust if necessary. (See Adjusting Canvas Tension in Service Section.)



AA9;E24815 E05;;DWAN A 140685

50-HOUR

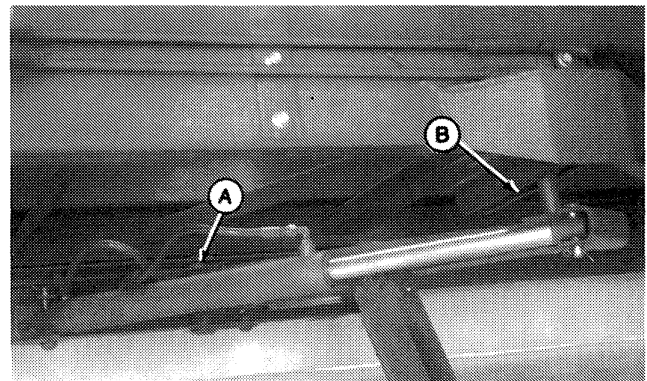
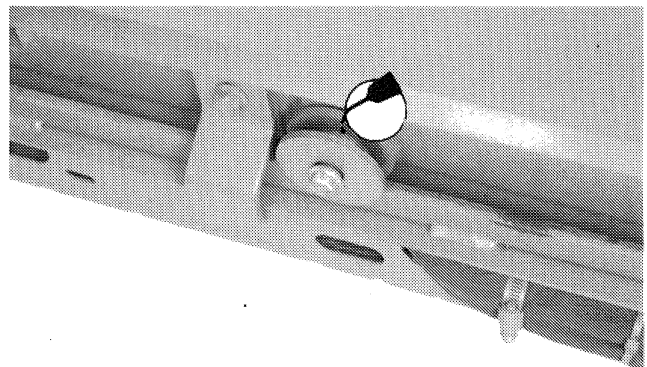
Oil track at rear of table frame.



003;E26555 E05;;DWAN B 140685

END OF SEASON

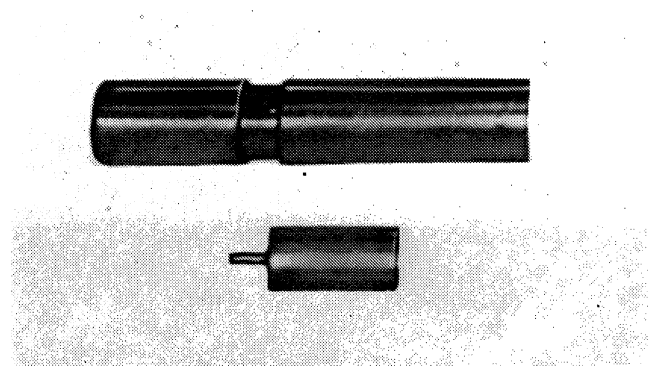
1. Oil bushing in rollers at front of table.
2. Oil bushing (A) in table shift arm.
3. Oil track (B) at rear of table frame.



003;E26556 E24817 E05;;DWAN C 140685

ANNUALLY

Remove housing from end of front canvas drive roller as shown. Pack housing with John Deere EP Moly grease. Replace housing.



AA9;E24818 E05;;DWAN D 140685

Troubleshooting

Problem	Cause	Remedy	Page
All functions operate too slow	Tractor flow rate from coupler too low	Open flow control valve on tractor to rabbit position	See tractor operator's manual
	Hydraulic lever not fully engaged	Check length of rubber stop and correct if necessary	4
Some functions work erratically or not at all	Wire loose or disconnected on solenoid	Check connections	—
	Poor battery or wiring connections on tractor	Check and clean connections	See tractor operator's manual
	Failed solenoid coil	Transfer solenoid coil to malfunctioning location from working location to check for solenoid failure	—
	Buildup of damp material on valve causing short circuit	Clean valve	—
Table shifts, but hydraulic motor will not reverse	Hoses connected to tractor backwards or tractor hydraulic lever locked in wrong direction	Connect hoses so pressure side connects to front top port of electrohydraulic valve when tractor hydraulic lever is engaged	—
	Knob not contacting right-hand microswitch when table completes shift to left	Adjust right-hand microswitch	16
	Loose wires on bottom left-hand solenoid	Check wires	—
	Loose wires on right-hand microswitch	Check wires	—
Mower-Conditioner tongue will not swing (machines equipped with optional electrohydraulic tongue swing) all other functions work	Wires loose on left or right-hand solenoid - third section up from the bottom	Check wires	—
	Wires loose on momentary rocker switch in control console	Check wires	—

E05;DWA0 A 180785

Troubleshooting

Problem	Cause	Remedy	Page
Table shifts full stroke and will not stop when knob contacts microswitch	Microswitches not fully actuated by knobs	Adjust microswitches	16
Table will not shift	Wires loose on left or right-hand solenoid - second section up from the bottom	Check wires	—
	Wires loose on left or right-hand microswitch	Check wires	—
	Wires loose on maintained rocker switch in control console	Check wires	—
	Knobs adjusted so both microswitches are actuated at the same time	Readjust knobs	16
Canvas plugging	Ground speed too fast for crop conditions	Reduce ground speed in heavy or bushy crops	—
	Ground speed too slow for crop conditions	Increasing ground speed may improve crop delivery	—
	Mower-conditioner rpm too slow	Operate PTO at rated speed	—

E05;;DWA0 B 180785

CANVAS ALIGNMENT

Problem	Cause	Remedy	Page
Canvas running high at idler roll	Idler roll spring out of adjustment	Loosen spring at front - tighten rear spring	34
Canvas running low at idler roll	Idler roll spring out of adjustment	Tighten spring at front - loosen rear spring	34
Canvas running low at drive roll	Drive roll out of adjustment	Move hydraulic motor to right	34
Canvas running high at drive roll	Drive roll out of adjustment	Move hydraulic motor to left	34
Canvas will not drive	Drive or idler roll wrapped with material	Loosen canvas and clean rolls	—
	Idler roll tension not engaged	Engage idler roll tension	—
	Slat or connector bar jammed by frame or material	Loosen canvas and clear obstruction	—
	Roll bearing frozen	Replace	*
Hydraulic oil overheats	Operating Double Windrow Attachment on tractor with open-center hydraulic system	Operate only on tractor with closed-center hydraulic system	9
	Operating Double Windrow Attachment with no load for long periods of time while tractor is idling	Increase tractor RPM to increase air flow through tractor cooler. Double Windrow Attachment should be used at rated tractor RPM	—
	Tractor oil cooler plugged	Clean tractor oil cooler	—
	Excessive mud buildup on tractor transmission	Clean tractor transmission case	—
	Double Windrow Attachment hoses coupled to wrong selective control valve	Couple hoses to left-hand selective control valve	—

* See your John Deere dealer.

Troubleshooting

Problem	Cause	Remedy	Page
All electrohydraulic controls fail to operate	Tractor key shut off	Turn key on	—
	Wiring harness not fully plugged in	Check	5
	Tractor hydraulic lever not engaged	Engage against lever stop	4
	Hoses to tractor not plugged in securely	Check hoses	6
	Hoses between mower-conditioner and Double Windrow Attachment not plugged in securely	Check hoses	6
	Control box not plugged into tractor convenience outlet	Check control box	—
	Diode unplugged or damaged	Check and replace if it does not show continuity	—
	Blown in-line fuse on tractor	Replace fuse	See tractor operator's manual

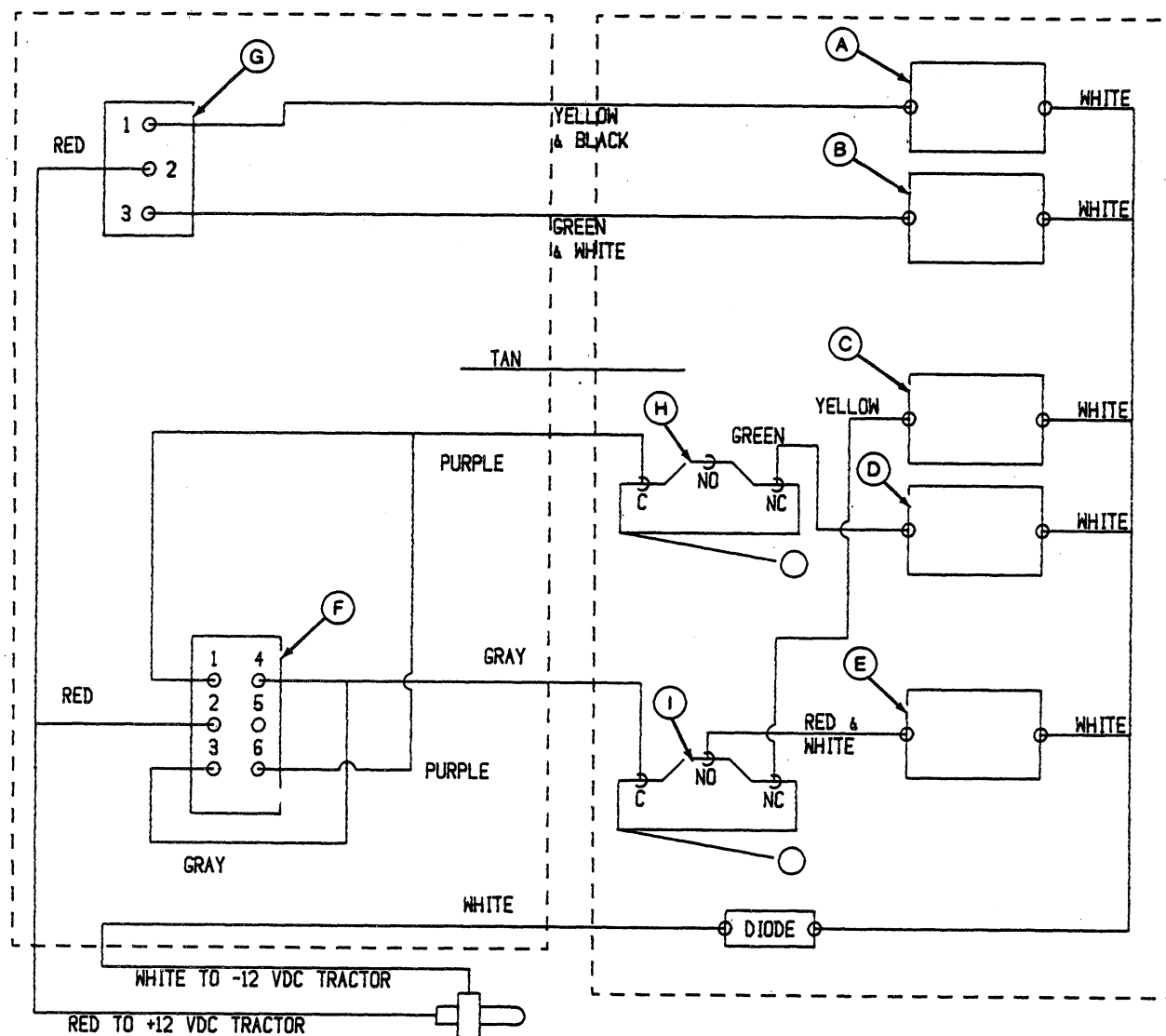
E05;;DWA0 D 180785

Service

1219 MOWER-CONDITIONER AND DOUBLE WINDROW ATTACHMENT WIRING DIAGRAM

CONTROL CONSOLE CIRCUITS

DOUBLE WINDROW ATTACHMENT CIRCUITS



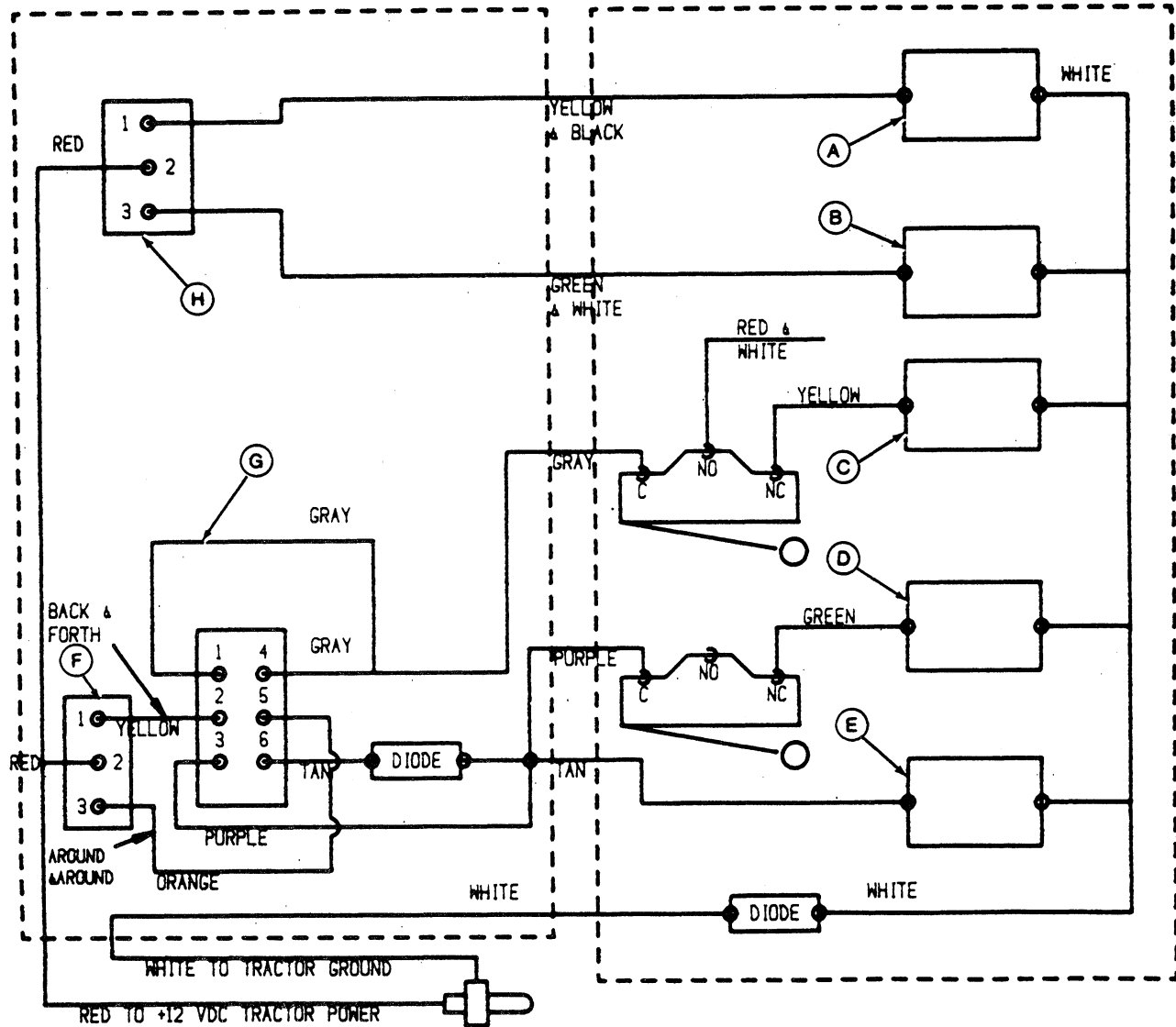
- A—Tongue Swing Valve
Left-Hand Solenoid (Optional)**
**B—Tongue Swing Valve
Right-Hand Solenoid (Optional)**
**C—Table Shift Valve
Left-Hand Solenoid**

- D—Table Shift Valve**
Right-Hand Solenoid
E—Canvas Motor Valve
F—Pass Switch
G—Steering Switch (Optional)
H—Left-Hand Microswitch
I—Right-Hand Microswitch

1525 MOWER-COONITIONER AND DOUBLE WINDROW ATTACHMENT WIRING DIAGRAM

CONTROL CONSOLE CIRCUITS

DOUBLE WINDROW ATTACHMENT CIRCUITS



A—Tongue Swing Valve
Left-Hand Solenoid
B—Tongue Swing Valve
Right-Hand Solenoid
C—Table Shift Valve
Left-Hand Solenoid

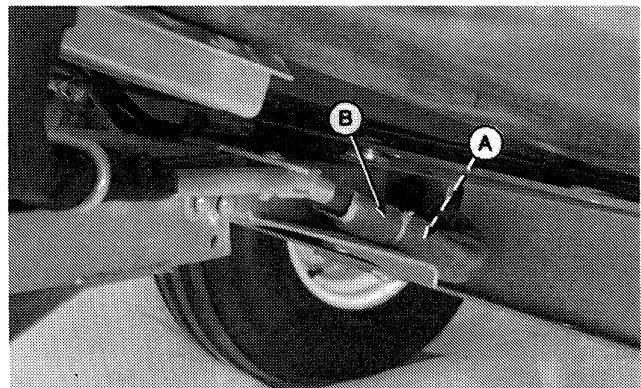
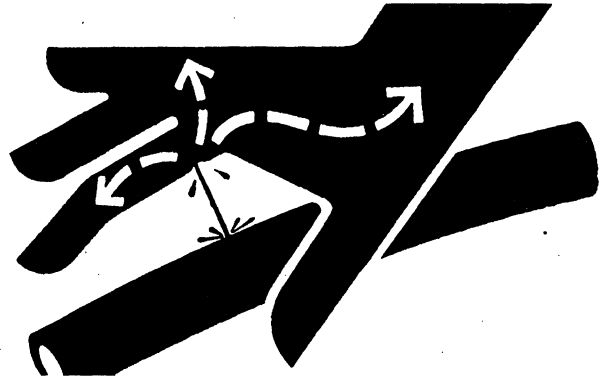
D—Table Shift Valve
Right-Hand Solenoid
E—Canvas Motor Valve
Left-Hand Solenoid
F—Travel Switch
G—Pass Switch
H—Steering Switch (Optional)

REPLACING MOTOR HOSES



CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Relieve pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Keep hands and body away from pinholes and nozzles which eject fluids under high pressure. Use a piece of cardboard or paper to search for leaks. Do not use your hand.

If ANY fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this type injury or gangrene may result.



1. Shift table completely to left, cylinder collapsed.
2. Remove old hoses.
3. Thread new hoses (A) and shield (B) through main frame and grasp shield from back side.

NOTE: Stagger fittings for easier installation of hose into shields.

2GA;X9811 E24819 E05;;DWAP A 180785

4. Pull shield (A) and hoses through main frame and connect hoses to tubing (B) on front of frame and rear of table.

NOTE: Connect hoses with top port of hydraulic motor connected, via tubing, to the right-hand port of electrohydraulic valve.

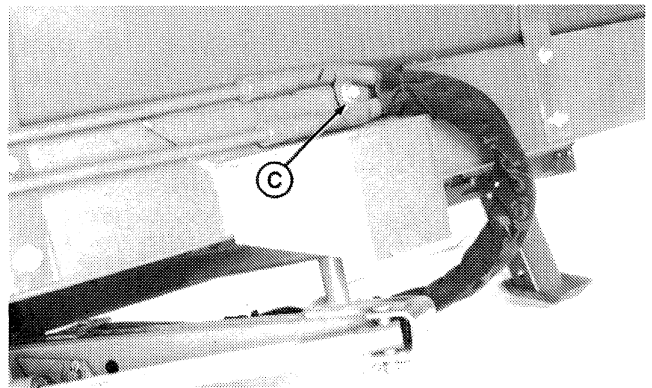
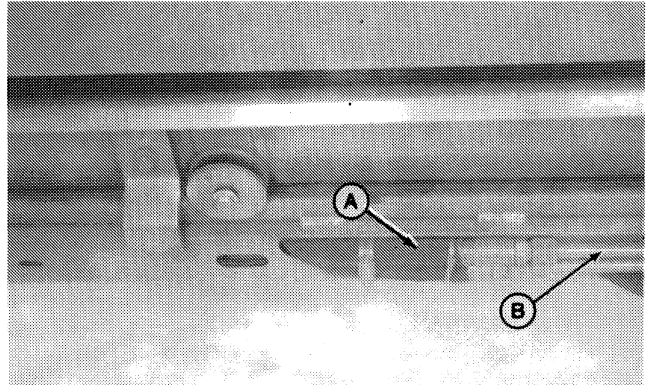
5. Pull hose to rear of hose clamp on table shift arm.
6. Locate slack hose between rear of shift arm and hose clamp (C) on rear of table.

NOTE: Do not flatten hose more than 1.5 mm (0.06 in.) when tightening hose clamps.

7. Extend front hose shield under hose clamp at front edge.
8. Secure hose shields using tie bands on each end of shield.

NOTE: Foam seals inside the hose shield are for painting purposes only.

9. Check for hydraulic leaks.



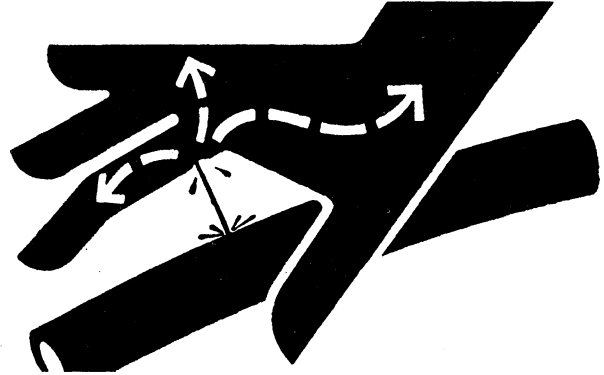
2GA;E24869 E24866 E05;;DWAP B 140685

REPLACING TABLE SHIFT CYLINDER HOSES

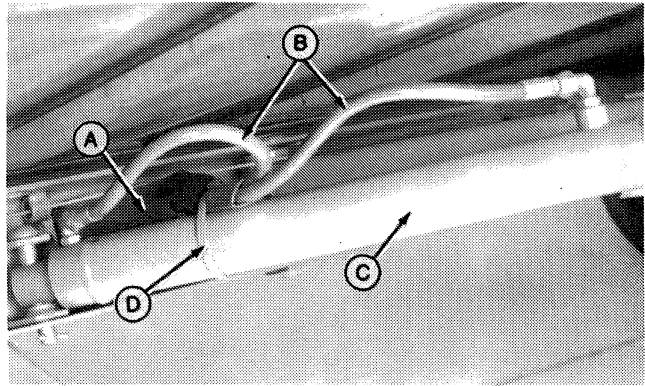


CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Relieve pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Keep hands and body away from pinholes and nozzles which eject fluids under high pressure. Use a piece of cardboard or paper to search for leaks. Do not use your hand.

If ANY fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this type injury or gangrene may result.



1. Remove hoses. Check and replace hose shields, if damaged.
2. Thread hose shield (A) through main frame and grasp shield from back side.
3. Install hoses (B) in shield, with fittings staggered, and pull hoses and shield through the frame.
4. Connect hoses to the cylinder (C).



NOTE: Hose that connects to rod end of table shift cylinder should be connected to the right-hand port of the electrohydraulic valve.

5. Secure hoses and rear of shield to cylinder barrel using tie band (D). Slack hose should be between plastic tie and cylinder fittings when cylinder is completely collapsed.

NOTE: Foam seals inside the hose shield are for painting purposes only.

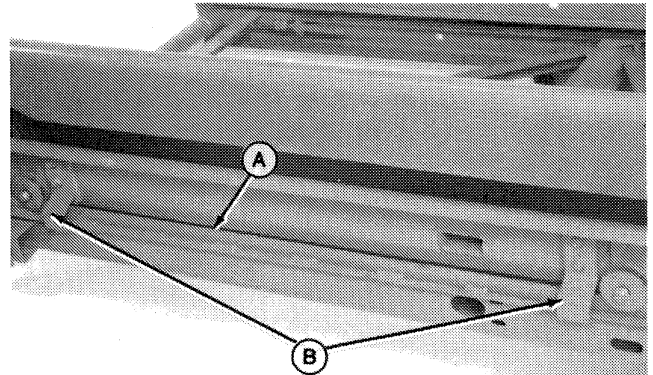
6. Check for hydraulic leaks.
7. Use ties to attach cylinder hoses to hydraulic tubing on front of main frame.

IMPORTANT: Be sure to tie hoses near left-hand side of frame to prevent interference with 1219 Mower-Conditioner tire.

A—Hose Shield
B—Hoses
C—Cylinder
D—Tie Band

ADJUSTING TABLE HOLD-DOWN CLIPS

1. Clean buildup from top of track (A).
2. Adjust hold-down (B) for 4 mm (0.16-in.) clearance.

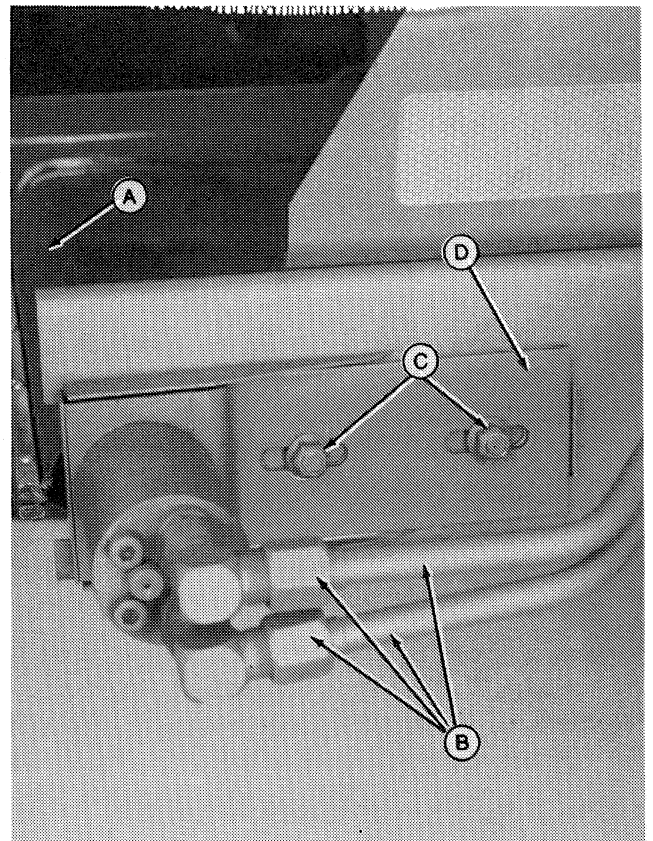


2GA;E24822 E05;;DWAP E 150884

REMOVING DRIVE ROLL

1. Loosen canvas (A).
2. Remove fittings and lines (B) from motor.
3. Remove nuts (C) from motor mounting plate (D).

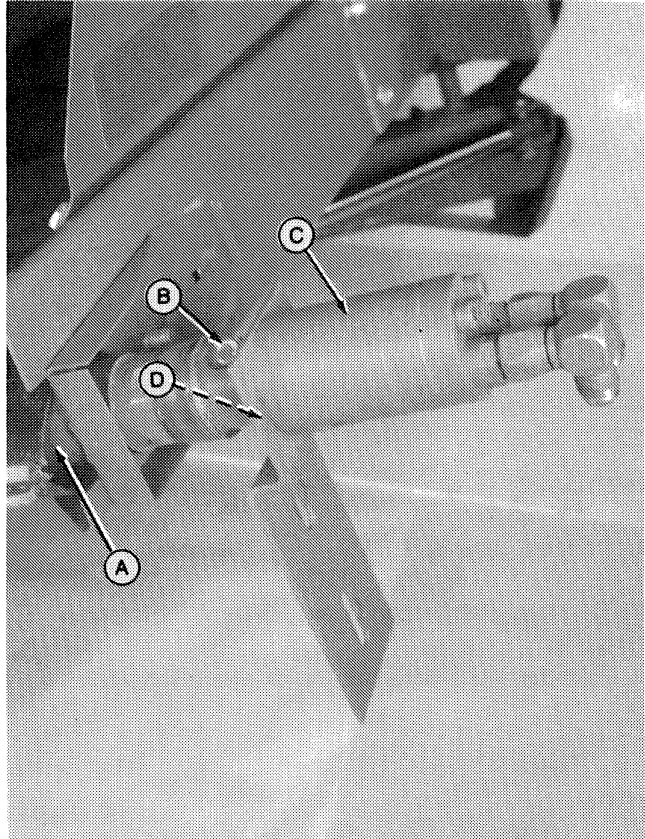
A—Canvas
B—Lines
C—Nuts
D—Motor Mounting Plate



2GA;E24823 E05;;DWAP F 150884

4. Pull motor, motor mounting plate, shield and roll (A) from table frame.
5. Loosen clamp nut (B) on roll.
6. Use large screwdriver to spread clamp hub and remove motor (C) from roll.
7. Remove three screws (D) from motor and mounting plate.
8. Remove bearing housing from front of drive roll.

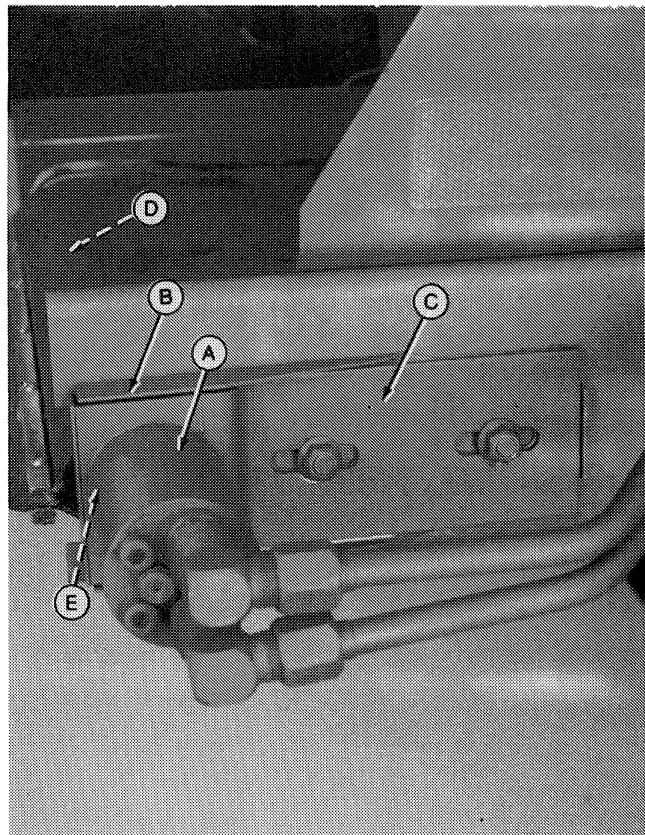
A—Roll
B—Clamp Nut
C—Motor
D—Screws



2GA;E24824 E05;;DWAP G 150884

INSTALLING DRIVE ROLL

1. Attach hydraulic motor (A) to motor mounting bracket (C) using three 1/4 x 1/2-in. fine thread capscrews.
2. Remove clamp bolt from drive roll (D) and spread drive roll hub slightly using large screwdriver in hub slot. Align motor key with drive roll hub and insert motor shaft until hub bottoms against step in motor shaft.
3. Torque clamp bolt (E) to 33 N·m (24 lb-ft).
4. Slide shield (B) onto roll with flange toward hydraulic motor.
5. Install bearing housing in front of drive roll.
6. Install roll into table frame.
7. Attach shield and motor mounting bracket to table frame.
8. Attach fittings and lines to motor.
9. Adjust canvas tracking. (See Adjust Canvas Tracking in this section.)

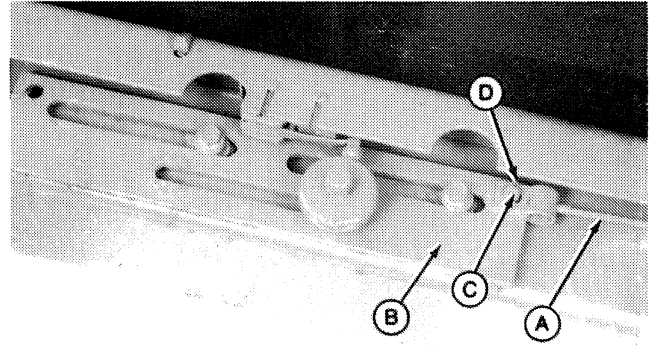


2GA;E24825 E05;;DWAP H 160884

INSTALLING MICROSWITCH ACTUATING CABLE

1. Pin cable (A) to knob mounting strap (B) using pin (C) and cotter pin (D). Adjust both knobs to outside end of slot.

A—Cable
B—Knob Mounting Strap
C—Pin
D—Cotter pin



2GA;E24855 E05;;DWAP I 130984



CAUTION: Be sure everyone is clear of attachment before activating the hydraulic system.

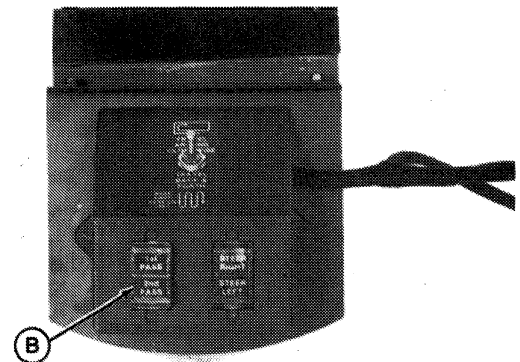
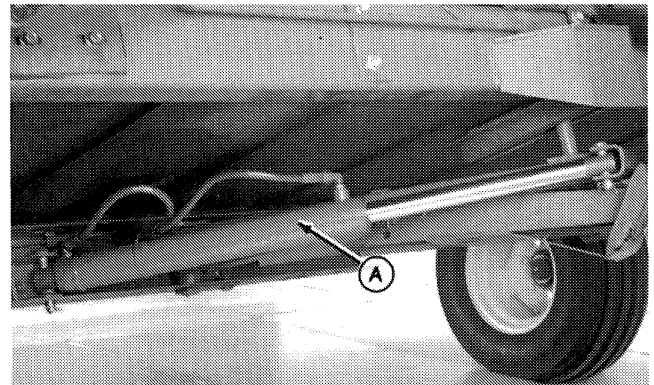
2. Extend table shift cylinder (A) to full stroke by pressing "2nd Pass" switch (B).



CAUTION: Be careful when loosening the fitting to avoid injury from high pressure oil.

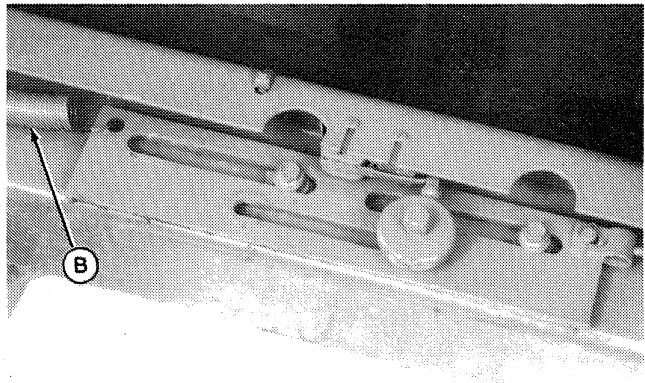
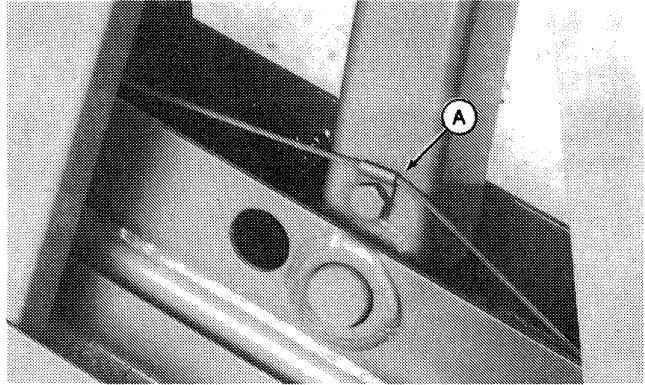
NOTE: If attachment is not connected to a tractor, cylinder may be extended manually after loosening the fitting.

3. Thread cable through left-hand guide.



2GA;E24856 E26622 E05;;DWAP J 140685

4. Pull cable to far right and clamp cable to arm (A). (The plate return spring (B) may be removed for easier adjustment.)

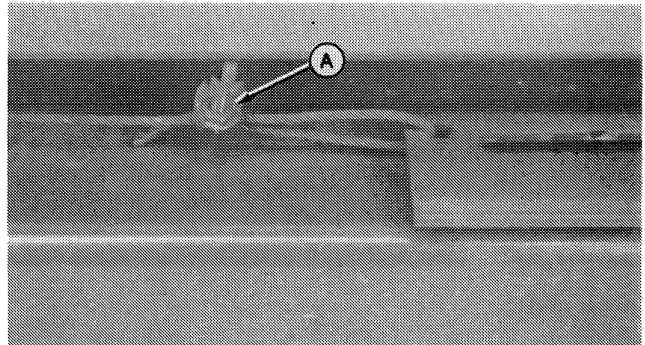


2GA;E24919, E24868 E05;;DWAP K 130984

5. Shift table completely to the left by pressing "1st Pass" switch.

6. Install cable clamp (A) and tighten to hold right-hand plate to far left.

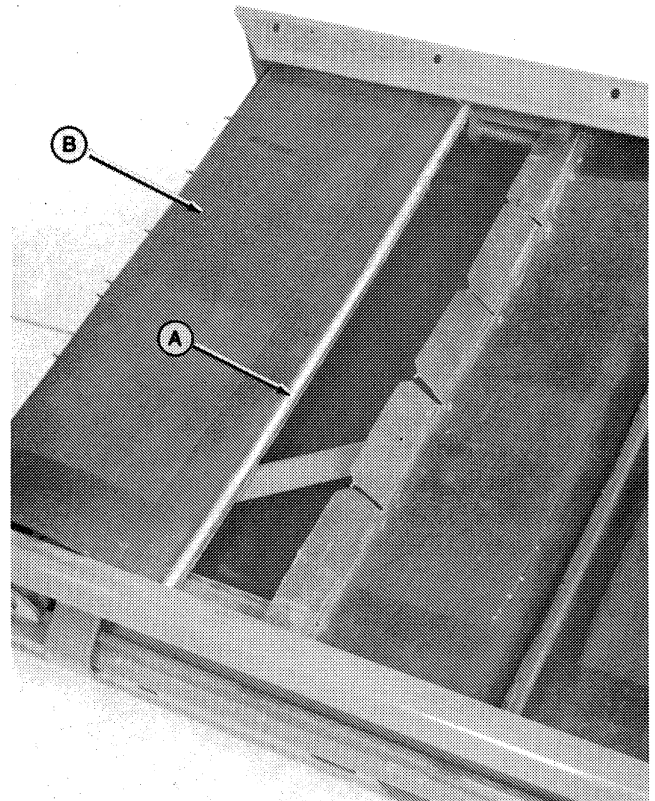
7. If plate return springs were removed, reinstall.



2GA;E24863 E05;;DWAP L 140685

REPLACING CANVAS

1. Remove old canvas and replace with new.
2. Loosen nuts and bottom connector (A). Wrap canvas (B) around rolls.

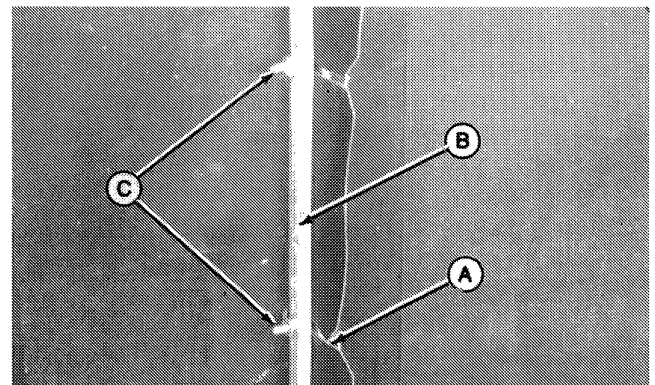


2GA;E24837 E05;;DWAP P 140685

3. Draw canvas to end of slot (A) to assure squareness of the connector bar (B).

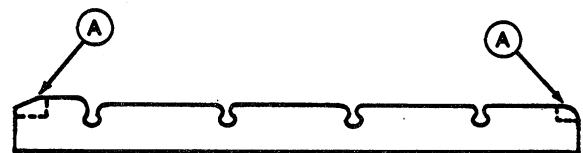
4. Secure ends of canvas using top and bottom connectors, screws, lock washers, and nuts (C).

IMPORTANT: Heads of screws must be on right-hand side of connector.



2GA;E24838 E05;;DWAP Q 140685

5. Trim excess flap (A) from canvas corners.

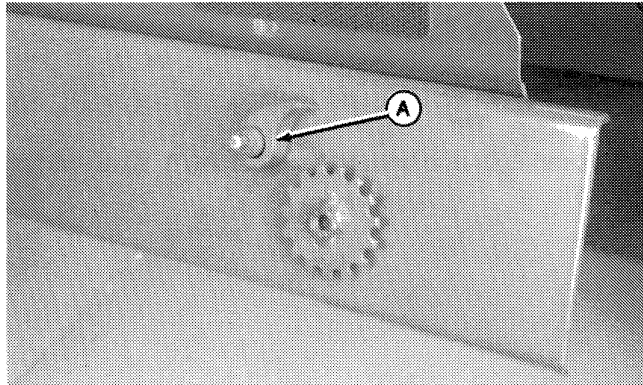


2GA;E24839 E05;;DWAP R 140685

ADJUST CANVAS TRACKING

IMPORTANT: Canvas must run parallel to front of table frame. Allowing canvas to track against the frame will cause excessive wear to the frame and canvas.

1. Release ratchet (A) to loosen canvas tension.

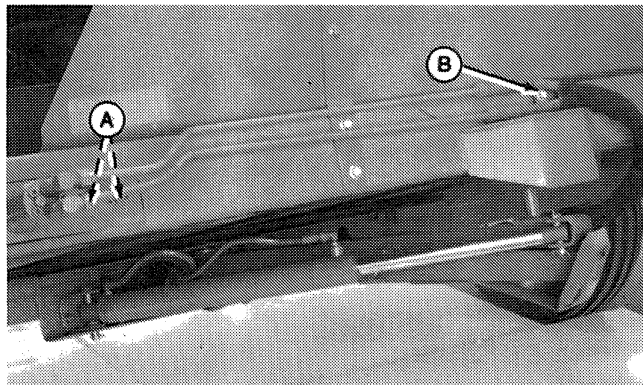


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2. Loosen two motor mount bolts (A) and hose clamp (B) on rear of table frame. Move motor to right if canvas is rubbing front of table frame at drive roll or to left if canvas is rubbing rear of table frame.

NOTE: When tightening motor mount, be sure drive roll is centered vertically in table frame.

3. Tighten motor mount bolts and hose clamp.

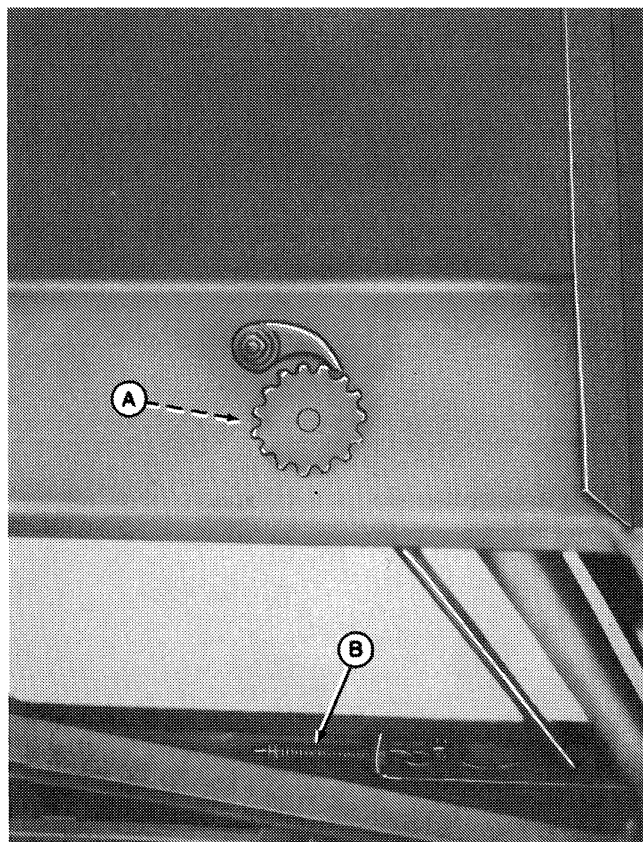


1UA;E24841 E05;;DWAR P 160884

4. Tighten front canvas tension spring (B) and loosen rear canvas tension spring (A) if canvas rubs front of table frame at idler roll. Loosen front canvas tension spring and tighten rear canvas tension spring if canvas rubs rear of table frame at idler roll.

NOTE: Canvas tension springs are accessible by pushing the canvas up in the center and pushing edges down past canvas tension springs.

5. Adjust canvas tension (see Adjust Canvas Tension) and recheck tracking. Repeat steps 1 through 5, if necessary.

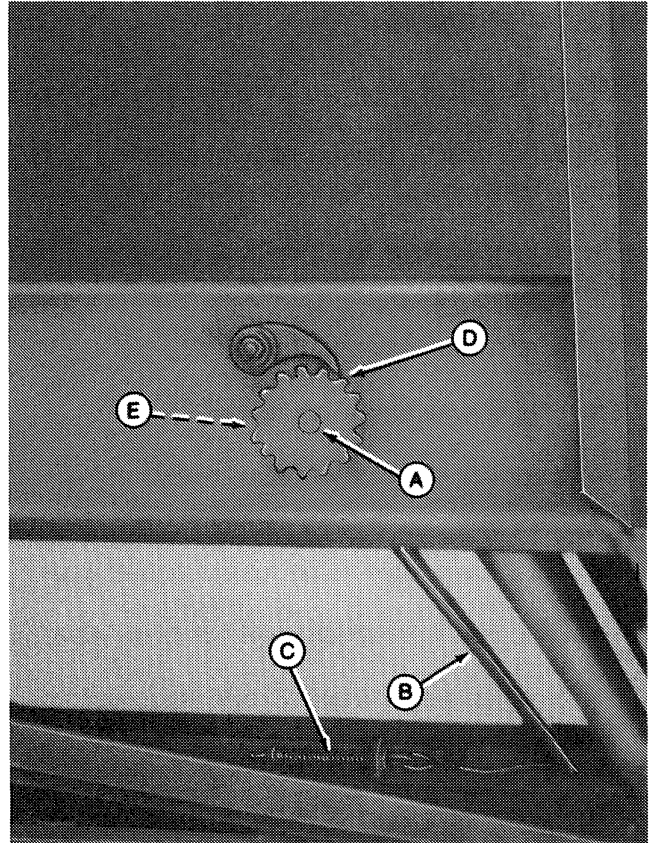


1UA;E24842 E05;;DWAR Q 130984

ADJUST CANVAS TENSION

1. Apply canvas tension by cranking tension rod (A) clockwise. This wraps cable around shaft (B) pulling idler roll supports through an eyebolt, and spring (C).
2. Adjust tension until springs bottom out (springs will be compressed), then loosen to next notch.
3. Lock tension with ratchet and dog mechanism (D).

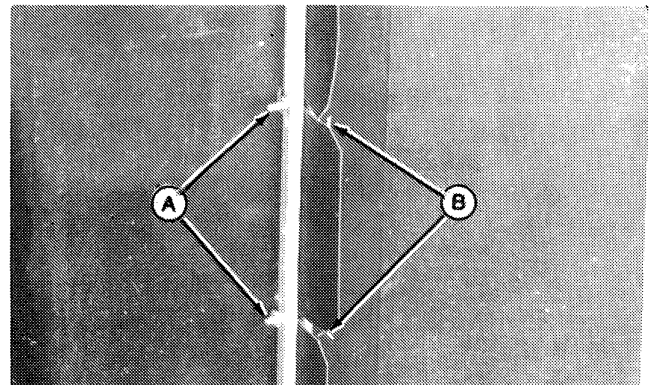
A—Tension Rod
B—Shaft
C—Spring
D—Ratchet and Dog Mechanism
E—Rear Canvas Tension Spring



1UA;E24843 E05;DWAR R 160884

If canvas stretches past idler adjustment capacity, canvas will have to be shortened.

1. Release canvas tension, loosen canvas connector bar screws (A).
2. Cut slots (B) deeper.
3. Pull canvas tight and even.
4. Tighten connector bar and apply canvas tension. Readjust canvas tracking.



1UA;E24844 E05;DWAR S 130984

Storage

END OF SEASON

1. Shelter the double windrow attachment in a dry place.
2. Clean the double windrow attachment thoroughly inside and out. Trash and dirt will draw moisture and cause rust.
3. Thoroughly lubricate the machine according to Lubrication and Maintenance section.
4. Remove tension from canvas.
5. Remove canvas and clean thoroughly.
6. Store canvas in a cool dry place away from sunlight, oil and grease.
7. Inspect canvas table frame for damage or wear.
8. Paint all parts from which paint has been worn.
9. List replacement parts that will be needed and order them early. The dealer can expedite delivery of parts and install them during slack periods, avoiding delays for the next season.

AA7; E05;;DWAQ A 160884

BEGINNING OF SEASON

1. Install canvas and adjust tension. (See Replacing Canvas and Adjust Canvas Tension in Service Section.)
2. Adjust canvas tracking. (See Adjust Canvas Tracking in the Service Section.)

E05;;DWAQ B 140685

Crime Prevention Tips

GOOD ADVICE

Keep your machine damage-free and YOURS!

Follow the advice on these pages to reduce vandalism, discourage theft, and help recover your machine if it is stolen.

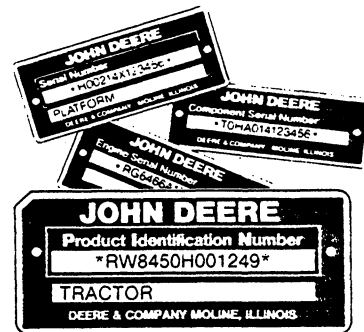
**TAKE A BITE OUT OF
CRIME**
© 1979 The Advertising Council, Inc.



AB6/TS140 053/CRPRV A 181183

RECORD IDENTIFICATION NUMBERS

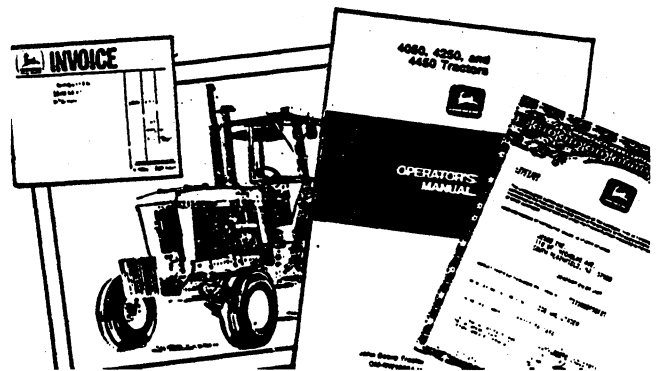
1. Record Product Identification Number (PIN) of unit and identification numbers of engine, component, attachment, etc. EXACTLY as they appear on the plates.
2. Check that the complete and correct numbers appear on all documentation (insurance, financial, warranty, manufacturer's certificate of origin, etc.). Keep all documents in a safe location.
3. If available, participate in an "Owner Applied Numbering Program" and mark your own machines.



AB6/TS161 053/CRPRV B 091283

MAINTAIN DOCUMENTED PROOF OF OWNERSHIP

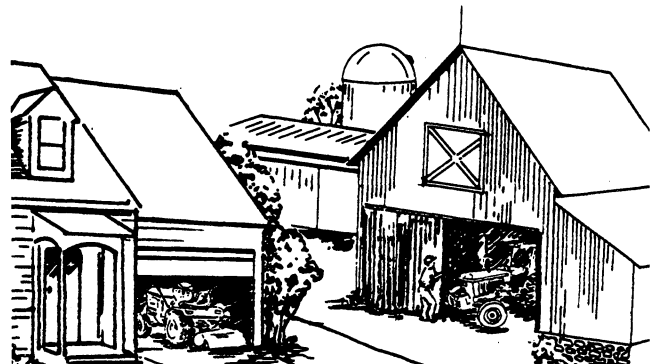
1. Keep in a safe location all documents (invoices, warranty cards, manufacturer's certificate of origin, if available, etc.) that accompanied your machines at the time of purchase.
2. Take color photographs of each machine from several angles.
3. Maintain an up-to-date inventory of all machines. Check regularly to insure no machines have been stolen.



AB6/TS142 053/CRPRV C 181183

PARK INDOORS OUT OF SIGHT

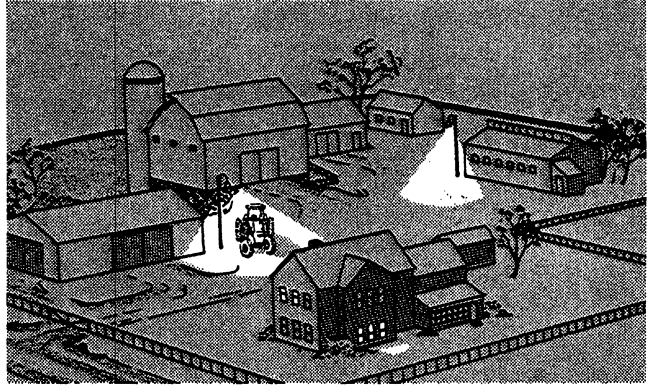
1. Lower all equipment making the machine harder to move.
2. Remove ignition key. If so equipped, lock cab doors, windows and any vandal protection devices. Place hard-to-move equipment in front of exits.
3. If machine is being stored, remove the battery or any essential component in the electrical system.
4. Set wheels in widest position making loading more difficult. Secure all openings to storage buildings.



AB6/TS143 053/CRPRV D 100184

PARKING OUTDOORS

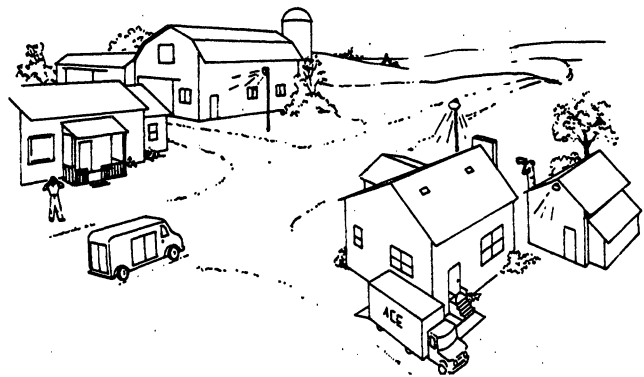
1. Park machine in a fenced, well-lighted, locked area. Lower equipment, remove ignition key and lock cab doors, windows, and any vandal protection devices, if so equipped.
2. Make law enforcement aware of your presence in an area and provide them with a contact person to assist them in dealing with suspicious activity.
3. Solicit assistance from neighbors or merchants who permanently reside near the parking area.



AB6;TS155 053;CRPRV E 091283

REDUCE VANDALISM

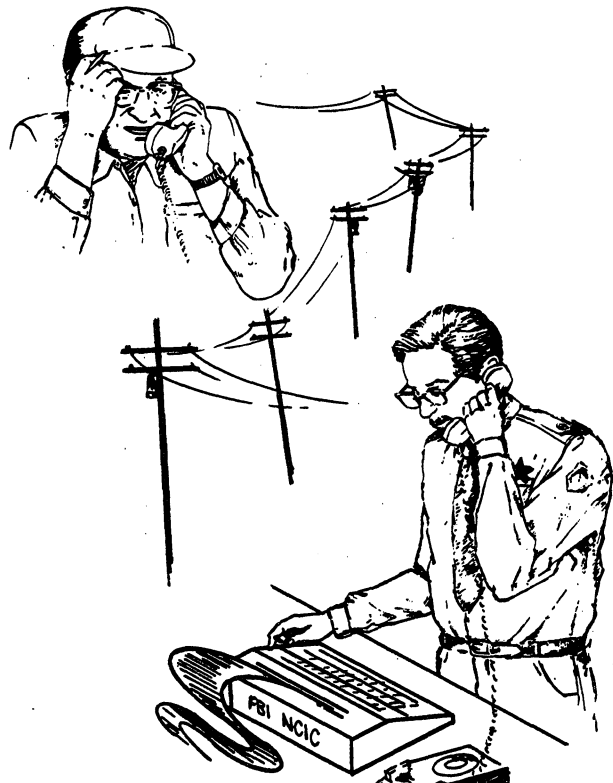
1. Install vandal protection devices especially if parking machine in high-risk areas.
2. Solicit assistance for watching machine from individuals residing in the area.
3. Take written notes and report to law enforcement all suspicious vehicles or persons.
4. Participate in a "Neighborhood Watch Program."



AB6;TS145 053;CRPRV F 100184

REPORT THEFT

1. If a theft occurs, notify the law enforcement agency having jurisdiction and the insurance carrier immediately.
2. Give a full description and a complete identification number(s) to the investigating officer and insurance carrier.
3. If available, provide the investigating officer with photographs of the actual machine, manufacturer's literature and knowledge of any identifiable marks that would assist in identifying the machine.
4. Ask for verification that the stolen machine has been entered into the National Crime Information Center (NCIC) operated by the FBI in Washington D.C.
5. Notify your John Deere dealer of the theft and request that, if possible, a notice be posted that provides the description and identification information.
6. Regularly check the identification plates on all machines and report any removed plates to law enforcement immediately. Promptly contact your dealer and order a duplicate identification plate.



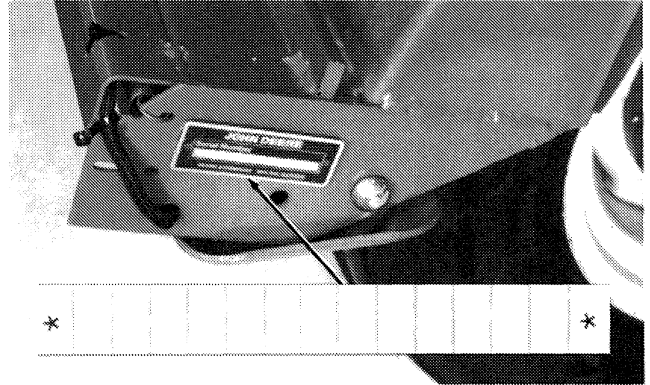
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Specifications

SERIAL NUMBER

When ordering parts, always furnish model and serial number as given on serial number plate.

Record the serial number in the space provided.



014;E26621 E05;;DWAS A 140685

DOUBLE WINDROW ATTACHMENT

Weight 234 kg (515 lb)

Windrow Width Variable, up to 1.5 m (5 ft)

Tractor Hydraulics Closed center only — requires two selective control valves

Minimum Tractor Size 34 kW (45 hp) for 1219 Mower-Conditioner
52 kW (70 hp) for 1525 Mower-Conditioner

Mower-Conditioner 1209 (425001-)
1219 (All Machines)
1424 (All Machines)
1525 (All Machines)

Transport Width Less than 1219 Mower-Conditioner

Speed of Canvas Approximately 29 rpm

Length of Canvas 2025 mm (8 ft) installed on table

Width of Canvas 735 mm (2 ft 5 in.)

Controls Electrohydraulic valve with adjustable limit switches

E05;;DWAS C 140685

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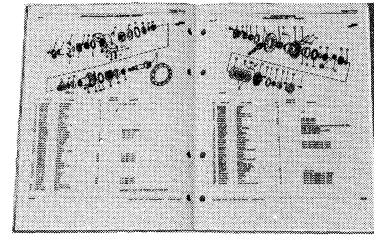
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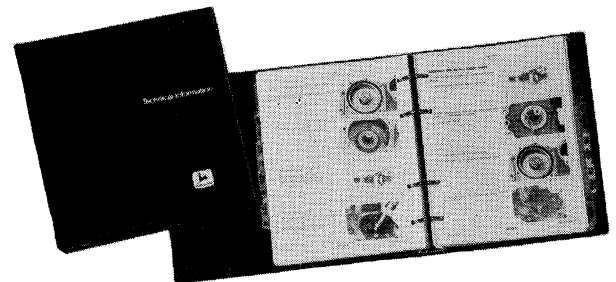
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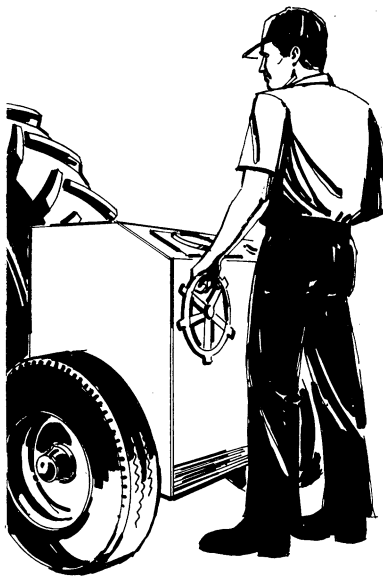
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