9940
Cotton Picker

JOHN DEERE

TECHNICAL MANUAL

9940
Cotton Picker

TM1356 (01SEP85) English

TM1356 (01SEP85)

LITHO IN U.S.A.
ENGLISH

9940 COTTON PICKER TECHNICAL MANUAL TM-1356 (SEP-85)

CONTENTS

Publication Number Change

This technical manual was formerly TM-1241. The number was changed when engine information was removed. Some pages still carry the old publication number. For engine information, refer to Engine Component Technical Manual, CTM-1.

N01;;0000 A 270885

CONTENTS—Continued

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

N01;;0000 B 300785

INTRODUCTION

This manual is part of a total service support program.

FOS Manuals—reference

Technical Manuals—machine service

Component Manuals—component service

Fundamentals of Service (FOS) Manuals cover basic theory of operation, fundamentals of troubleshooting, general maintenance, and basic types of failures and their causes. FOS Manuals are for training new personnel and for reference by experienced technicians.

Technical Manuals are concise service guides for specific machines. Technical manuals are on-the-job guides containing only the vital information needed by an experienced service technician.

Component Technical Manuals are concise service guides for specific components. Component technical manuals are written as stand alone manuals covering multiple machine applications.

FEATURES OF THIS TECHNICAL MANUAL

John Deere ILLUSTRUCTION format emphasizing illustrations and concise instructions in easy-to-use modules.

Emphasis on diagnosis, analysis, and testing so you can understand the problem and correct it.

Diagnostic information presented with the most logical and easiest to isolate problems first to help you identify the majority of routine failures quickly.

Step-by-step instructions for teardown and assembly.

Summary listing at the beginning of each group of all applicable specifications, wear tolerances, torque values, essential tools, and materials needed to do the job.

An emphasis throughout on safety—so you do the job right without getting hurt.

This technical manual was planned and written for you—an experienced service technician. Keep it in a permanent binder in the shop where it is handy. Refer to it when you need to know correct service procedures or specifications.

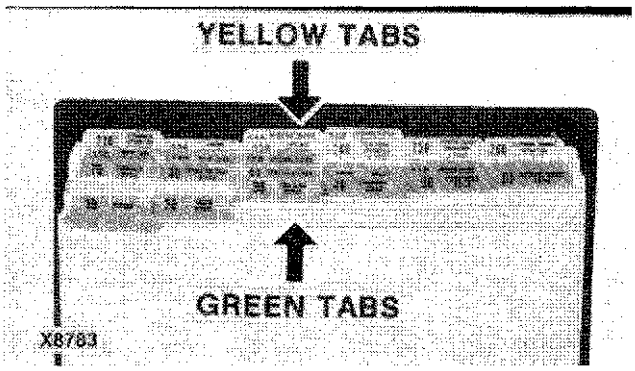
AB6;RW5560 053;INTR03 030785

USING TABS

To fully utilize this technical manual, you must understand how it is organized.

Only two tab colors are used--green and yellow. Each color represents a different type of information.

Spend a minute reading this now and save many minutes of searching later.



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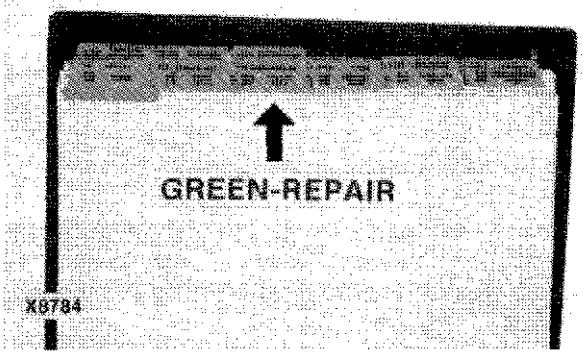
GREEN TAB SECTIONS

The green tab sections are repair sections that tell how to repair the components of the various systems.

Repair of a component includes:

- Removal from machine (when necessary)
- Disassembly
- Inspection
- Replacement of parts
- Assembly
- Adjustment
- Installation on machine (when necessary)

The numbers used for the repair (green tab) sections are part of an overall service publication numbering system. The numbers identify the same sections in the parts catalog, flat rate manual, service information bulletins, and service training courses.



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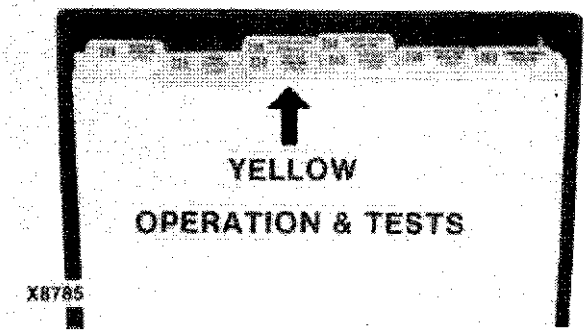
YELLOW TAB SECTIONS

Each yellow tab section contains information on:

- System Operation
- System Tests

System operation explains how the system and its components work.

System tests tell how to test the system and diagnose the problem.



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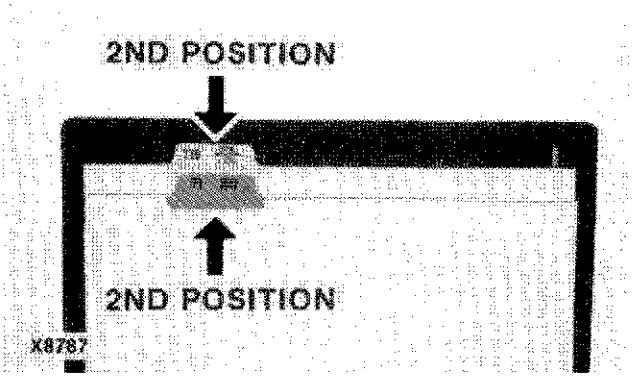
TAB POSITIONS

Each green tab and its corresponding yellow tab have the same tab position. This is to help you quickly locate the related information.

Tab Color	Tab Position	Section No.	Description
Green	2nd	20	Engine Repair
Yellow	2nd	220	Engine Operation and Tests



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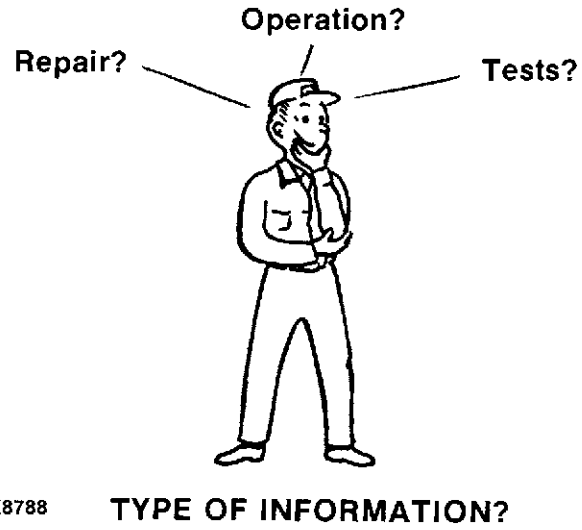
THREE-STEP PROCEDURE

Use the following three-step procedure to locate the desired information.

1. Determine the type of information you need. Is it repair, operation, or tests?

2. Go to the appropriate section tab:
   Green for Repair
   Yellow for Operation or Tests



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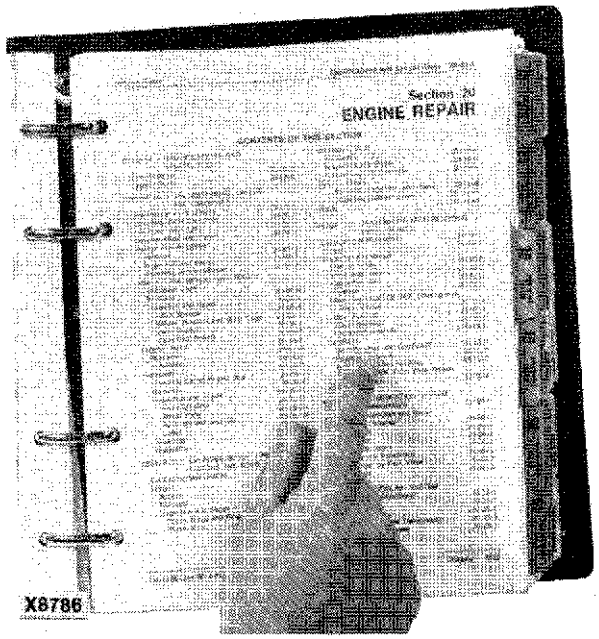
3. Use the table of contents on the first page of the section to locate the information.



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OBSERVE SAFETY RULES

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

Avoid loose clothing that can catch in moving parts and put you out of work.

Wear your safety glasses while on the job.

Avoid working on equipment with the engine running. If it is necessary to make checks with the engine running, ALWAYS USE TWO PEOPLE—with the operator, at the controls, able to see the person doing the checking. Also, put the transmission in neutral, set the brake, and apply safety locks provided. KEEP HANDS AWAY FROM MOVING PARTS.

Keep transmission and brake control units properly adjusted at all times. Before making adjustments, stop engine.

Before removing any housing covers, stop engine. Take all objects from your pockets which could fall into the opened housings. Don't let adjusting wrenches fall into opened housings.

Don't attempt to check belt tension while the engine is running.

Don't adjust the fuel system while the machine is in motion.

Before repairing the electrical system, or performing a major overhaul, make sure the batteries are disconnected.

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AVOID FIRE HAZARDS

Be prepared if an accident or fire should occur. Know where the first aid kit and the fire extinguishers are located—know how to use them.

Don't smoke while refueling or handling highly flammable material.

Shut off the engine when refueling.

Use care in refueling if the engine is hot.

Don't use open pans of gasoline or diesel fuel for cleaning parts. Use good commercial, nonflammable solvents.

Provide adequate ventilation when charging batteries.

Don't check battery charge by placing metal objects across the posts.

Don't allow sparks or open flame near batteries.

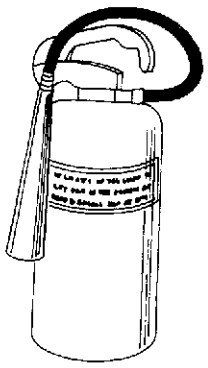
Don't smoke near battery.

Never check fuel, battery electrolyte, or coolant levels with an open flame.

Never use an open flame to look for leaks anywhere on the equipment.

Never use an open flame as light anywhere on or around the equipment.

When preparing engine for storage, remember that inhibitor is volatile and therefore dangerous. Seal and tape openings after adding the inhibitor. Keep container tightly closed when not in use.



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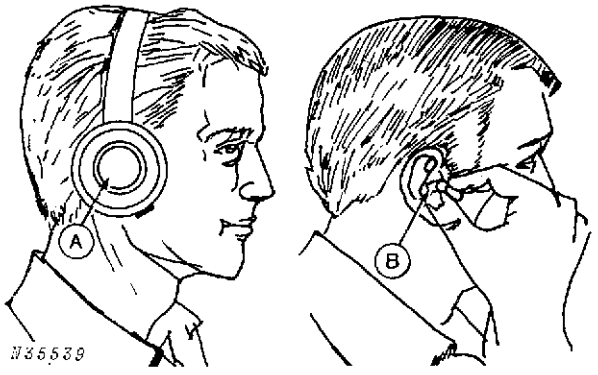
PROTECT AGAINST NOISE

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 noises.



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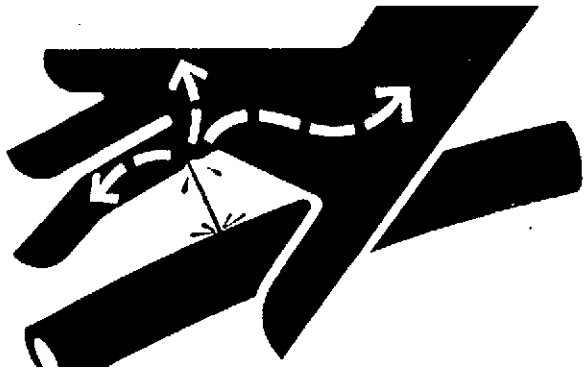
AVOID HIGH PRESSURE-FLUIDS



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. 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 of injury or gangrene may result.

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USE ADEQUATE SERVICE FACILITIES

Keep the service area clean and dry. Wet or oily floors are slippery. Wet spots can be dangerous when working with electrical equipment.

Make sure the service area is adequately vented.

Periodically check the shop exhaust system for leakage. Engine exhaust gas is dangerous.

Be sure all electrical outlets and tools are properly grounded.

Use adequate light for the job at hand.

Service the machine on a level, hard-surfaced area.

Use lifting equipment and safety stands which have adequate strength for the job being performed.

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USE BLOCKS WHEN NEEDED

Block the wheels to keep the cotton picker from moving while it is being serviced.

Whenever the engine is to be removed for service, block the basket securely, so it will not fall.

Whenever working under the picking units, block the picking units so they will not fall.

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Section 10
GENERAL

CONTENTS

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SPECIFICATIONS

ROW WIDTHS	(0.96 to 1.02 m) 38 to 40-inch
PICKING UNITS	
Number of units	4
Number of picking drums	8
Number of picker bars (per unit)	
Front drum	12
Rear drum	12
Number of spindles (per machine)	1920
PICKING UNIT SPEEDS	**rpm**
Picking Unit Drive Shaft	1280
Picking Drum	0-145
Doffer Shaft	0-1755
Spindle	0-4020
GROUND SPEEDS (FULL THROTTLE)	
Picking Speeds	
1st Gear	(0-5.14 km/h) 0-3.2 mph
2nd Gear	(0-6.05 km/h) 0-3.8 mph
Transport Speeds	
3rd Gear	(0-21.56 km/h) 0-13.4 mph
Reverse	(0-11.94 km/h) 0-7 mph
CAPACITIES	
Cotton basket (standard)	(24.2 m^3) 856 cu ft
Cotton basket (with [305 mm]12-in. extension)	(28.4 m^3) 1004 cu ft
with [605 mm]24-in. extension)	(32.3 m^3) 1152 cu ft
Fuel tank	(356 L) 94 gal
Water tank	(870.5 L) 230 gal
Cooling system	(42 L) 44 qt
Thermostat (each)	(82°C) 180°F
Engine crankcase, including filter	(20 L) 21 qt
Hydraulic system, including filter	(26.5 L) 28 qt
Hydraulic Reservoir	(17.4 L) 18.4 qt
Transmission and Final Drive	(31.2 L) 33 qt
Hydrostatic drive	(26.5 L) 28 qt
Hydrostatic Reservoir	(17 L) 18.4 qt

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TIRES

Front drive wheels	18.4 x 38 10 PR (R1, R2)
Rear guide wheels	9.00 x 24 6 PR 1

TIRE INFLATION PRESSURE

Drive wheels	(210 kPa) 30 psi
Guide wheels	(252 kPa) 36 psi

HYDROSTATIC DRIVE

Make	
Motor and Pump (S.N. -736)	Sundstrand
(S.N. 737-)	Eaton
Type of oil filter	Full flow suction
Type of cooler	Air-cooled

WEIGHT

(less basket extensions)	(10,170 kg) 22,600 lb
with [305 mm] 21-in. extension)	(10,442 kg) 23,000 lb
with [610 mm] 24-in. extension)	(10,533 kg) 23,200 lb

FINAL DRIVE

Type	Planetary

ELECTRICAL SYSTEM

Battery voltage	12-volts
Battery terminal grounded	Negative
Alternator (S.N. -736)	72 Amp
(S.N. 737-)	90 Amp
Monitor Light Bulb	OAH94791
Headlight Bulb	Mfg. Type 4460
Tail Light Bulb	Mfg. Type 1157
Warning Light Bulb	Mfg. Type 1156 Front; 1596 Rear
Field Light Bulb (Standard)	Mfg. Type 4411
(Halogen)	Mfg. Type H7610

ENGINE

Manufacturer	John Deere
Model	6466AN-01 Turbocharged, Intercooled
No. of cylinders	6
Bore	(116 mm) 4.56-in.
Stroke	(121 mm) 4.75-in.
Displacement	(7640 cm^3) 466 cu in
Horsepower	(154 kW) 207 hp
Compression ratio	14.9 to 1
Firing order	1-5-3-6-2-4
Tappet clearance	
Intake	(0.46 mm) 0.018-in.
Exhaust	(0.71 mm) 0.028-in.
Fuel injection pump	Bosch
Injection pump timing	TDC
Engine speeds	
Fast idle (no load)	2375-2425 rpm
Rated (under field load)	2200 rpm
Slow idle	800-900 rpm
Muffler	Regular

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OPERATOR'S CAB

Type	SOUND-GARD® (with no ROPS) with heater, windshield wiper, rear view mirror, seat suspension, and posture contour seat
Optional Attachment	PERSONAL-POSTURE™ Seat, Air Conditioner
Dome Light Bulb	12-volt, Type 105 (AR86969)
Console Light Bulb	12-volt, Type 168 (AR48015)
Filter	
Primary	JD-AR61903
Secondary	JD-AH92463

CIRCUIT BREAKERS

Lighting, Ignition and Accessories	Five 20-amp (on engine)
Blower and Dome Light	30-amp (on engine)
Windshield Wiper	6-amp (in switch)

WINDSHIELD WIPER

Blade Length	(508 mm) 20 in.
Arm Length	(508 mm) 20 in.

HEATER CAPACITY ..... (5274 W/hr) 18,000 BTU

AIR CONDITIONER

Make (Compressor)	Delco
Capacity	(6446 W/hr) 22,000 BTU
Refrigerant	Refrigerant R-12
Refrigerant Charge	Approx (2.5 kg) 5-1/2 lb

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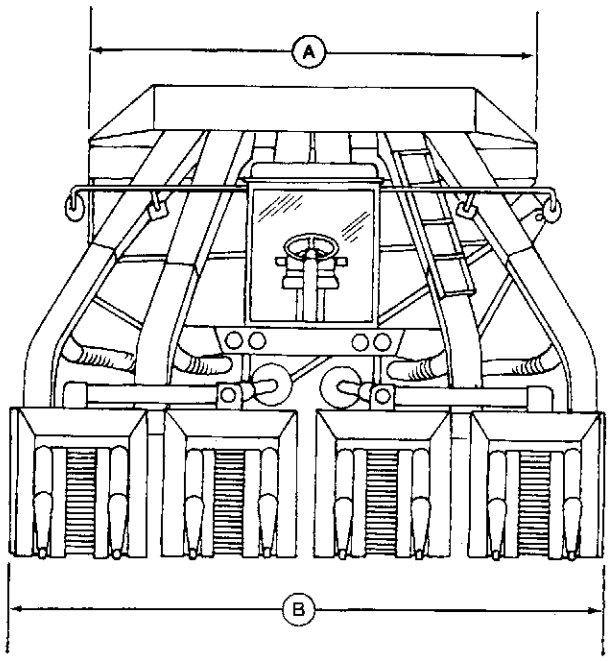
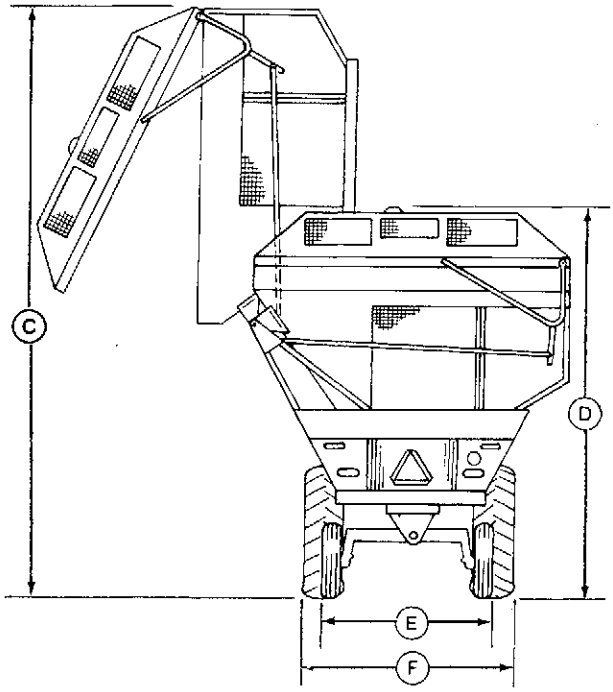
DIMENSIONS





A—(3607 mm) 142"
B—(3861 mm) 152", (0.96 m) 38" rows
(4013 mm) 158", (1.02 m) 40" rows
C—(6.896 mm) 271-1/2" maximum dumping height

D—(4191 mm) 165" (standard)
(4496 mm) 177" (with short extension)
(4801 mm) 189" (with long extension)
E—(2261 mm) 89"
F—(2502 mm) 98-1/2"

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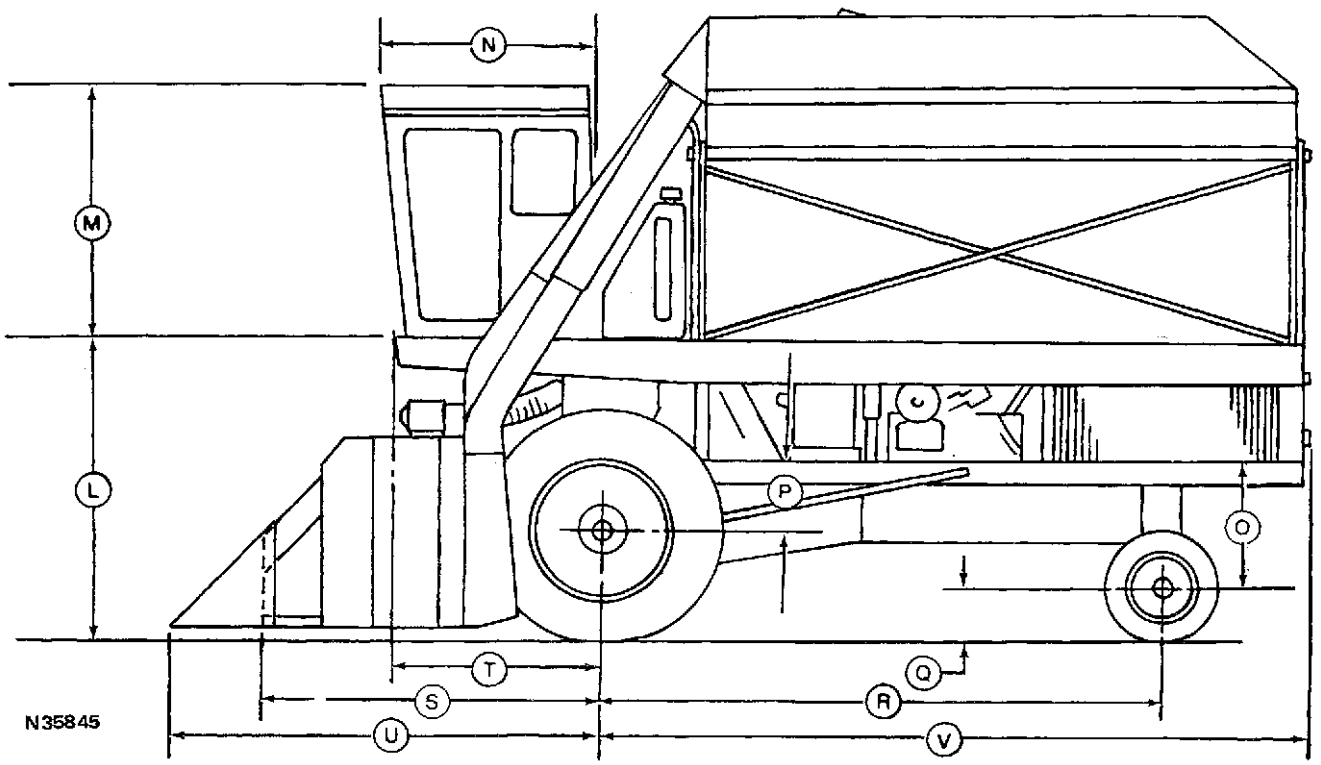

L—(2 096 mm) 82-1/2"
M—(1 638 mm) 64-1/2"
N—(1 740 mm) 68-1/2"
O—(807 mm) 31-3/4"
P—(489 mm) 19-1/4"
Q—(508 mm) 20"
R—(3 321 mm) 130-3/4"
S—(2 540 mm) 100"
T—(1 454 mm) 57-1/4"
U—(3 099 mm) 122"
V—(4 521 mm) 178"

SERIAL NUMBERS

Use serial numbers in all correspondence with the factory on the following items.

The engine serial number is located on the left-hand side of the engine block.

The cotton picker serial number is located at the left-hand top of the housing support.

The hydrostatic motor and pump serial number is located on top of the pump.

The cab serial number is located on the inside left-hand rear corner of the cab.

IMPORTANT: On all machines (S.N. 1501-), the fan control lever has been shipped from the factory in engaged position. DO NOT disengage fan drive until the first basket dump in field.

Fan may be disengaged for adjustments, but engage fan control lever again after adjustments have been made. This provides for proper belt break-in.

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PREPARE FOR UNLOADING

1. Check the cotton picker for shortages or damage. If any are noted, make the proper notations on the freight bill, and immediately notify the carrier.

2. Remove the blocking and fasteners that hold the cotton picker during shipment.

3. Remove wires from height sensing shoes and cab door.

4. Remove banding and shipping board from batteries, and attach positive cables to battery terminals.

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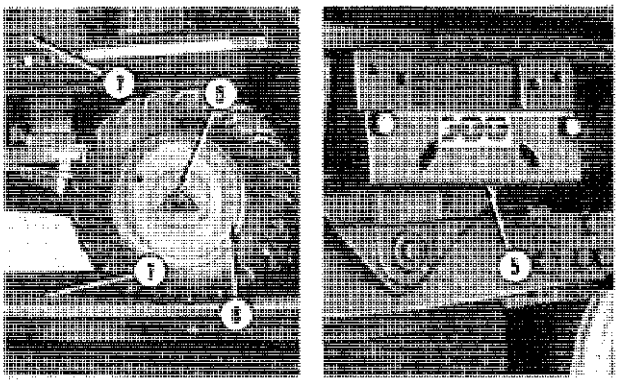
5. Remove and DISCARD the tie-down plates from each drive wheel and rear axle.

CAUTION: Torque ALL drive wheel lug bolts to (325 N·m) 240 ft-lbs and ALL guide wheel lug bolts to (176 N·m) 130 ft-lbs.

6. Check tire inflation pressures and adjust as necessary (See Specifications).



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CHECK DOCK FACILITIES

The cotton picker may be driven off truck or rail car after checking crankcase oil, hydraulic oil, fuel, and coolant levels.

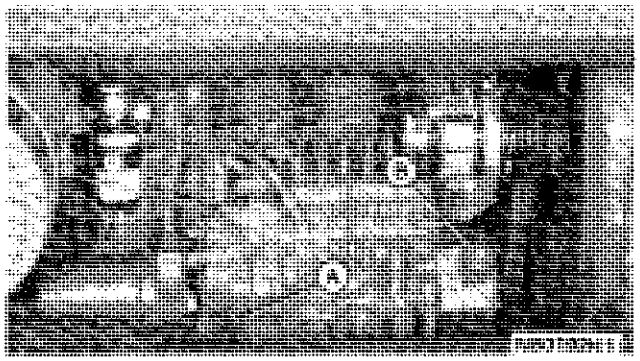
The cotton picker weighs nearly (10 442 kg) 23,000 lbs. Be sure dock and ramp will support this weight.

A68; N01;1005 C 191281

CHECK CRANKCASE OIL LEVEL

1. Check oil level with dipstick (A). The picker is shipped with John Deere TORQ-GARD SUPREME™ oil in the crankcase.

2. If necessry, add oil at (B) until level reaches "full" mark on dipstick. See Group 15 for specifications.



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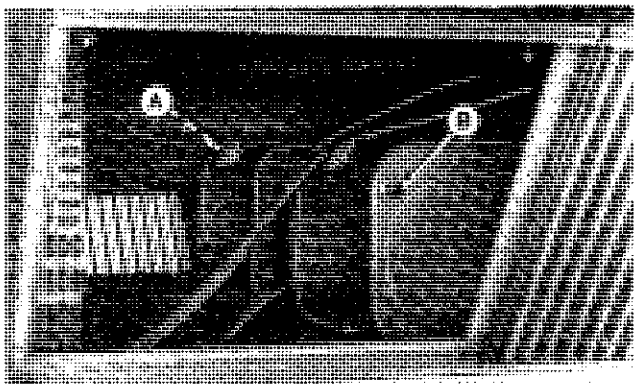
CHECK HYDRAULIC OIL LEVEL

1. Check oil level in sight glass for hydraulic (A) and hydrostatic (B) reservoirs. The picker is shipped with John Deere HY-GARD® oil in the reservoirs.

2. If necessary, add oil until level is visible in sight glass.

IMPORTANT: Keep system closed at all times, except to change oil or filters.



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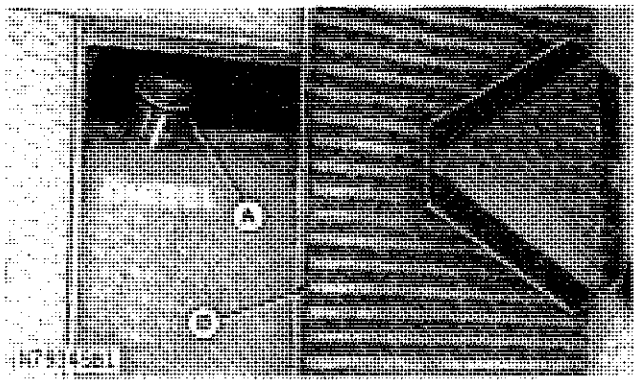
CHECK FUEL LEVEL

1. Check fuel gauge to determine amount of fuel.

2. To fill tank, move screen (B) aside and fill at (A). See Group 15 for fuel specifications.



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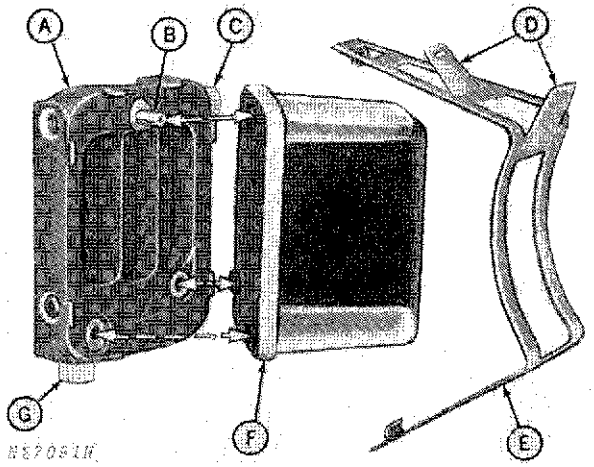
BLEED FUEL SYSTEM

1. If engine will not start, loosen plug (C) and pump primer lever on pump until air bubbles in element (F) disappear.

2. Tighten plug and leave pump lever in down position.

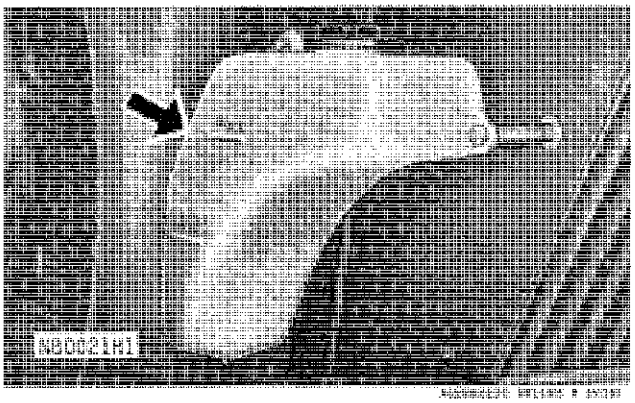


A—Body
B—Pin
C—Plug
D—Tabs
E—Retainer
F—Element
G—Plug

CHECK COOLANT LEVEL

1. Check coolant level. It should be between "FULL" and "ADD" marks on reserve tank. The picker is shipped with a non-evaporating antifreeze mixture in the cooling system.

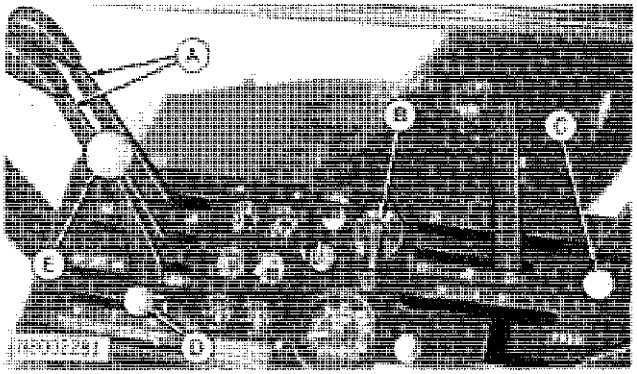
2. If necessary, add coolant mixture as recommended in the Operator's Manual.



START THE ENGINE

CAUTION: Make sure main gearshift lever is in "PARK" position and no one is standing on or near the picker.

1. Push engine stop knob (C) all the way in.
2. Pull unit lift levers (A) rearward and release.
3. Position speed range lever (E) in neutral.
4. Set throttle lever (D) one-third of the way forward.
5. Turn lighting and accessory switches (B) off before attempting to start engine.



A—Unit Lift Levers
B—Light Switch
C—Stop Knob
D—Throttle Lever
E—Speed Range Lever

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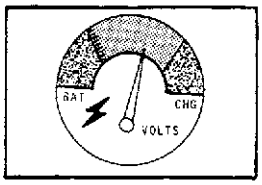
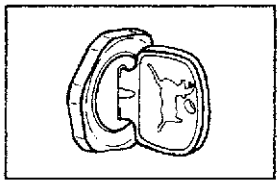
6. Turn key switch to first position and check voltmeter pointer.
7. If pointer does not rise to green band, and starter will not crank engine when key switch is turned to next position, recharge batteries. Refer to Section 40 for charging procedure.

NOTE: With engine running, pointer should rise to right-hand part of green band. If not, refer to Section 40.





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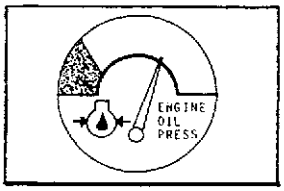
8. **IMPORTANT: If engine has not been run for several weeks, hold engine stop knob out and crank engine until oil pressure gauge pointer moves toward right-hand side of gauge.**

   If engine does not start in approximately thirty seconds, wait at least two minutes before trying again.



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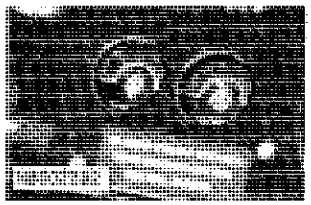
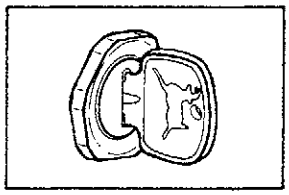
9. Push stop knob down and turn key switch farther clockwise to engage starter. Release key when engine starts. If key is released before engine starts, wait until starter and engine stop turning before trying again.

10. Check indicator lamps while cranking engine. The hydraulic oil temperature and air filter tel-lights should light while key switch is in start position.

NOTE: If temperature is below (4°C) 40°F it may be necessary to use cold weather starting aid.

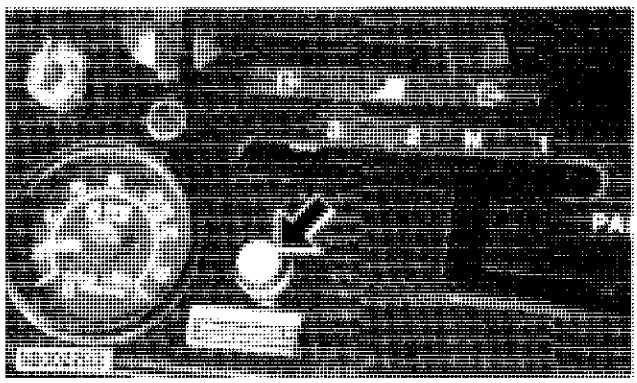




A68;R31932, N80022 B2 N01;1005 L 191281

To inject starting fluid, press yellow button on panel.

IMPORTANT: Turn engine with starter and inject fluid, only while engine is turning. Do not operate engine without starting fluid can in place.

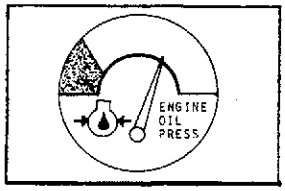


A68;R80022 B3 N01;1005 M 191281

11. Check oil pressure gauge as soon as engine starts. If gauge hand does not rise above warning zone within five seconds, stop engine and determine the cause.

12. Check other instruments with engine running. Voltmeter hand should rise to the right-hand green band to indicte that alternator is charging. Indicator lamps should go out. If any instrument indicates a malfunction, stop the engine and determine the cause.

Always leave key switch on while engine is running, so instruments will function.



A68;R31917 N01;1005 N 191281

UNLOAD PICKER

CAUTION: The cotton picker weighs nearly (10 442 kg) 23,000 lbs. Use adequate ramp and dock facilities. Set rail car or truck brakes and block the wheel. If a ramp is used, back the picker down rather than driving down forward.

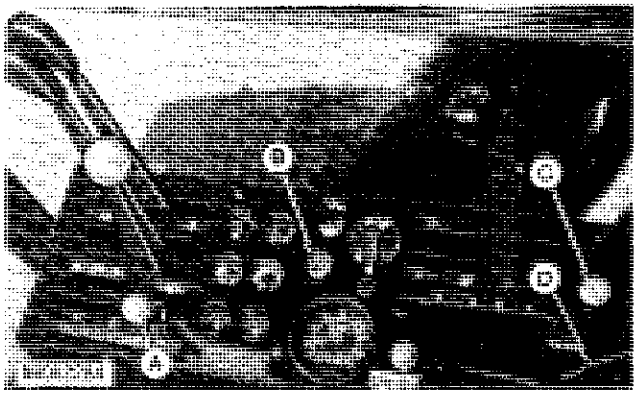
Before driving the cotton picker off rail car or truck, move the picker back and forth to check brake action. Be certain brakes are working before proceeding.

Back the cotton picker onto the ground or dock slowly. Have another person direct the driver from the dock or ground.

To avoid tipping over the cotton picker, do not dump the basket unless all four units are installed.

A68; N01;1005 0 050382

STOP ENGINE



1. Stop picker and place transmission in park (D).

2. Pull hand throttle (A) back to slow idle position. Idle engine three to five minutes.

IMPORTANT: Turbocharger and certain engine parts are cooled by engine oil. Stopping a hot engine suddenly could damage these parts.

3. Pull engine stop knob (C) all the way out. After engine stops, push knob back in.

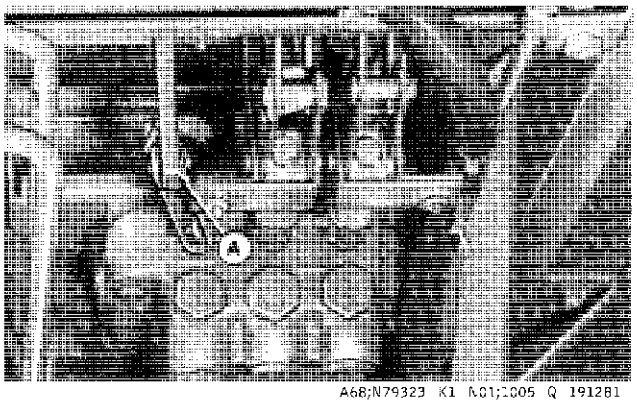
4. Turn switch (B) off and remove key.

5. Before dismounting, be sure units are lowered to the ground and all switches are turned off.

A68;NB0022 B4 N01;1005 P 191281

CONNECT BASKET LIFT LEVER

Connect the straps to the basket lift lever (A) at the main control valve under the platform.



A68;N79323 K1 N01;1005 Q 191281

INSTALL LID LIFT LINKAGE

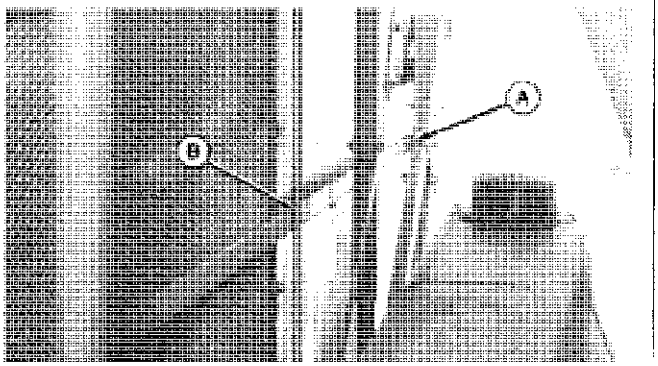
1. Install lid lift link INSIDE inner support frames, on bottom bolt (A).

2. Insert pivot bolts (L. H. side) through plate, then link, with a nut on each side of support, to allow link to pivot freely.

3. Use outer hole in link (R. H. side) for standard lid opening, inner hole for maximum opening.

IMPORTANT: To avoid damage to linkage and basket:

- **a. Pin front and rear linkages in corresponding holes.**
- **b. Be sure pins are in BOTH holes of short link.**
- **c. Install lift link through retainer (B) at front of basket.**

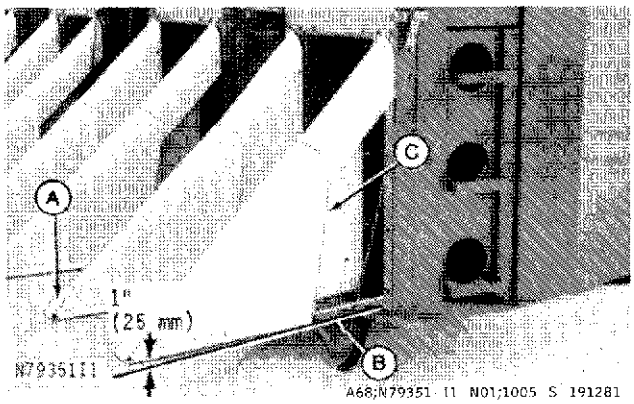


A68;N81243 M1 N01;1005 R 040483

ATTACH STALKLIFTERS

1. Attach the stalklifters to the extensions.

2. Adjust points (A) about (25 mm) 1-in. above bottom of extension (B) by dropping correct number of links on chain (C).

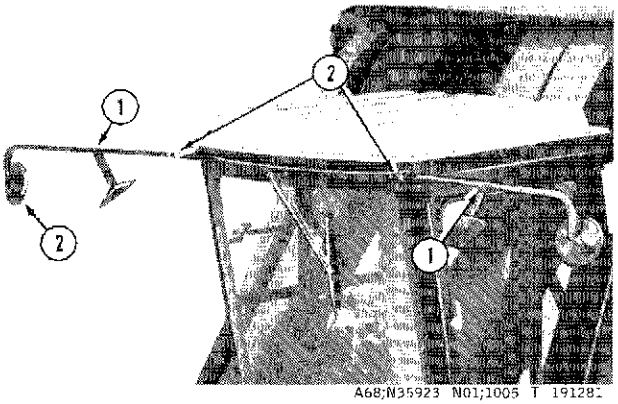


A68;N79351 I1 N01;1005 S 191281

INSTALL REAR-VIEW MIRRORS

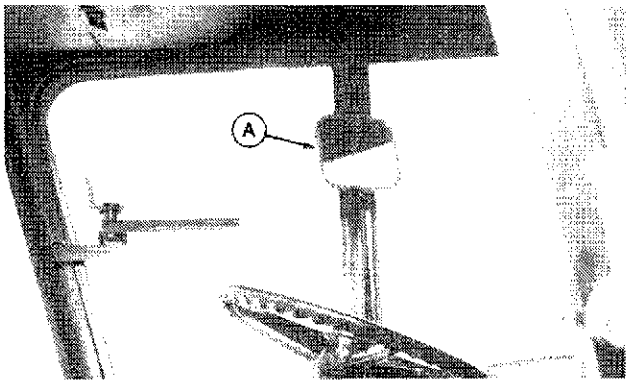
1. Assemble inner mirrors to rear of bar using 5/16 x 1-3/4-in. cap screws.

2. Use direction in mirror bundle to assemble brackets, bar, and outer mirrors.



A68;N35923 N01;1005 T 191281

On machines to be equipped with (610 mm) 24-in. extension, move the inside mirror (A) down to a lower hole so operator can see the top of air ducts.



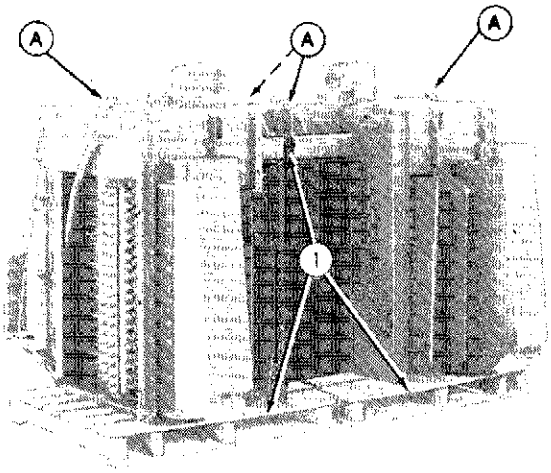
A68;N82252 BB3 N01;;1005 BD 061284

INSTALL OUTER UNITS (Truck Shipments Only)

CAUTION: Use lifting equipment with a capacity in excess of (1800 kg) 4000 lb when removing two outer picking units from truck.

1. Unload units from truck with fork lift. Separate units and discard shipping materials.

NOTE: If overhead hoist is used to move joined units, attach chains at four points (A). To install individual units on picker, attach chains at three points (See Section 120, Group 05).



A68;N80170 E2 N01;1005 U 191281

2. Slide unit (R.H. shown) tie beams together loosely, but do not install tie bolts.

NOTE: The cotton picker is shipped with units set for (0.97 m) 38-in. row spacing. If (1.02 m) 40-in. spacing is desired, refer to the Operator's Manual to set the inner units before proceeding. Install outer unit tie plates in widest position.

3. Install gear case cross shaft assembly and sprockets on inner gear case shafts. Align all grease fitting for ease of lubrication.

4. Install turnbuckles and lock jam nuts.

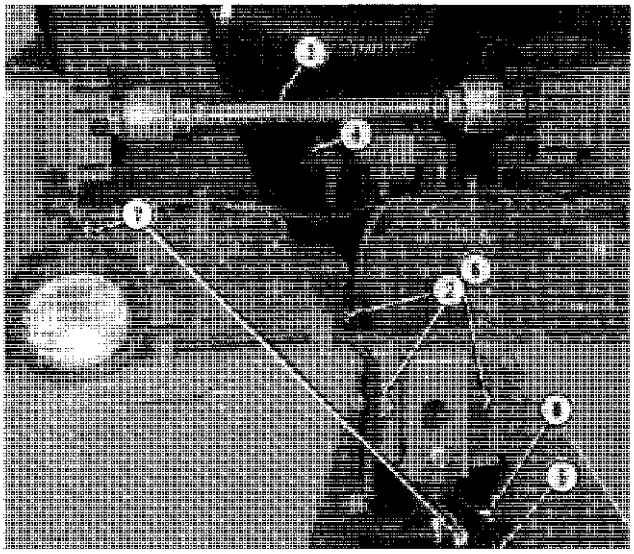
4a. Install 5/16 x 1-1/4-in. spring pin (A) through hex shaft and cap screw.

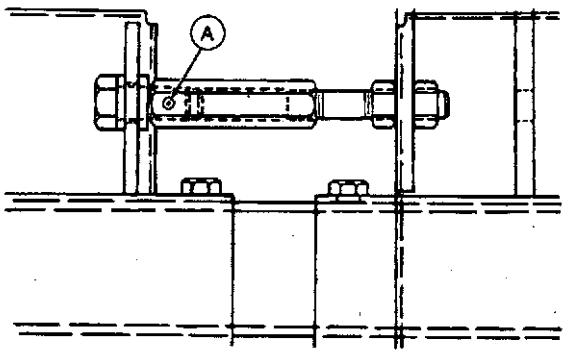
5. Install height sensing cross shaft couplers while moving outer unit in. Align holes. Secure coupler using 1/4 x 1-1/4-in. cap screws and lock nuts.

6. Use a punch or pry bar, and shim as needed, to align holes in tie beams. Secure with 5/8 x 5 in. cap screws (rear) and 5/8 x 3-1/4 in. cap screws (front) and lock nuts.

7. Attach monitor wires and (if equipped) connect wires to field lights.

8. Join moistener tubes (green tube to green tube, clear tube to clear tube).





A66;N80108 J1 N38262 N01;;1005 V 300785

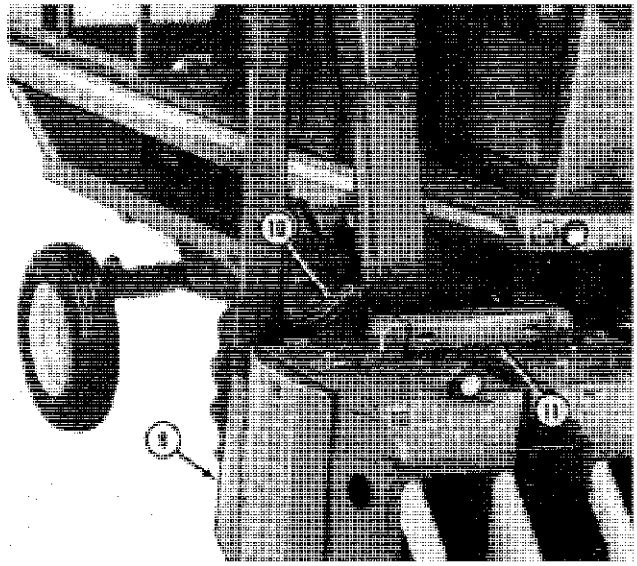
8a. Install bottom suction door hinge using two 3/8 x 3/4-in. flange screws and nuts.

N01;;1005 BF 220585

9. Install suction doors on outer units.

10. Connect suction tubes to ducts.

11. Install cross shaft shields with four 5/16 x 3/4-in. round head bolts.



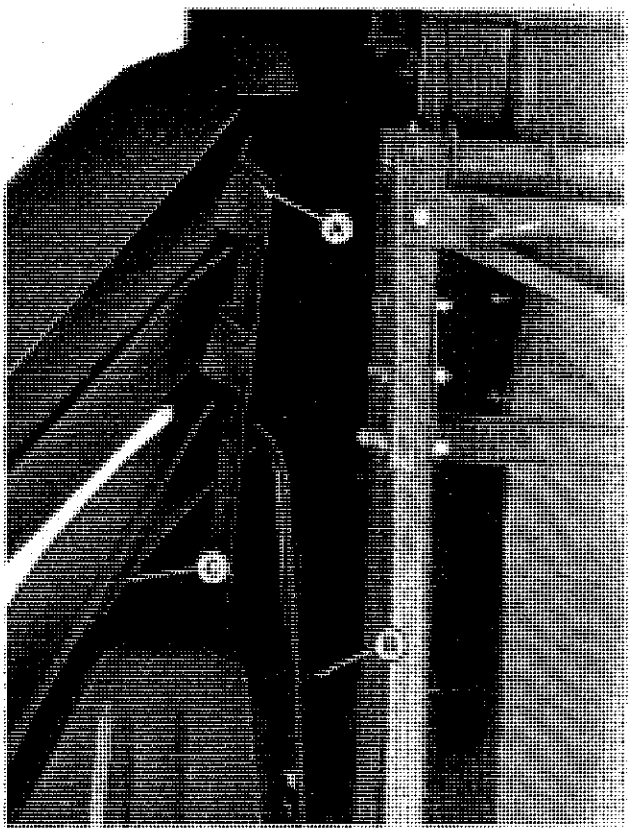
A68;N35926 N01;1005 W 280382

12. Install upper ducts over lower ducts.

12a. Attach upper ducts to bracket (A) using 3/8 x 1-in. Rd. Hd. bolts, 3/8 x 1/4-in. spacers, 13/32 x 1-1/16 x 0.120-in. washers, and flange nuts.

13. Raise ducts and vertical supports and secure with 3/8 x 2-1/4-in. screws. Use top hole in upper support tubes if basket extension is NOT to be installed. If basket extension is installed, see later pages.

IMPORTANT: Install slotted head screw (B), with head towards basket, in vertical inner supports. Install cap screws (C) in braces.



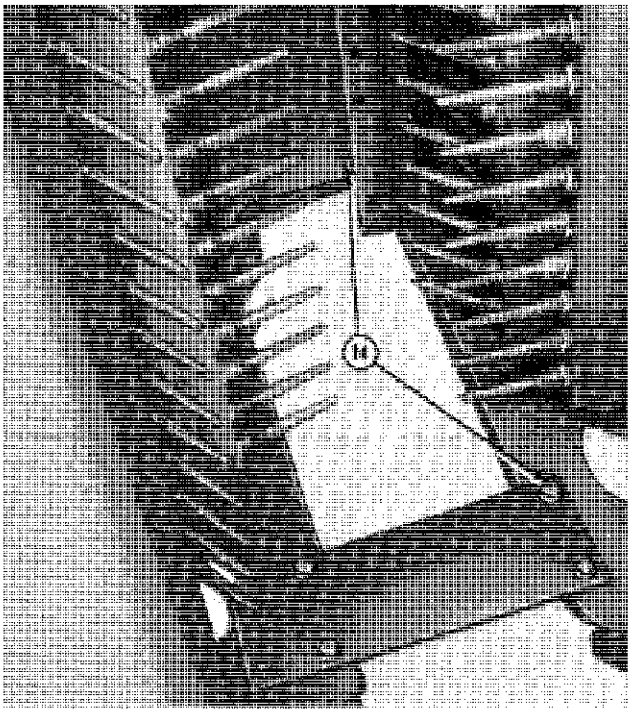
A68;N80108 H2 N01;;1005 X 220585

14. Attach front and rear spacer plates and a double door grates (not shown) to inner units with 3/8 x 3/4-in. flange screws and nuts.

15. Repeat steps 1 - 14 for the L.H. row unit.

16. Attach stalklifters, see previous procedure.

17. (Now shown) Install to grates on left-hand outer an right-hand inner units.



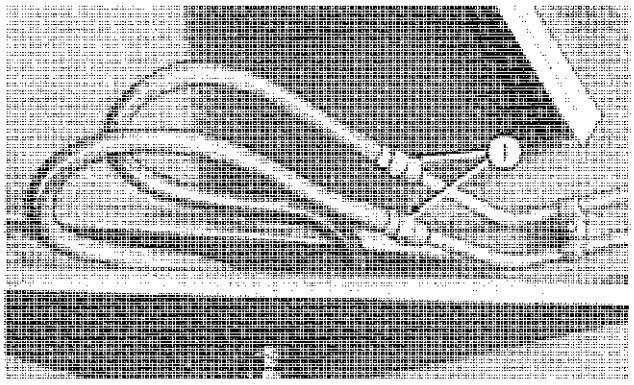
A6A;N35928 N01;1005 Y 280182

REMOVE LID TO INSTALL BASKET EXTENSION

NOTE: If the cotton picker was shipped by rail, remove the basket lid and associated components, as follows:

1. Disconnect compactor hoses at R.H. rear corner of basket. Cap ends of hoses and tubes to keep dirt out. Mark hoses and tubes to assure proper connection later.

2. (Now shown) Remove four bolts from lid center pivot.

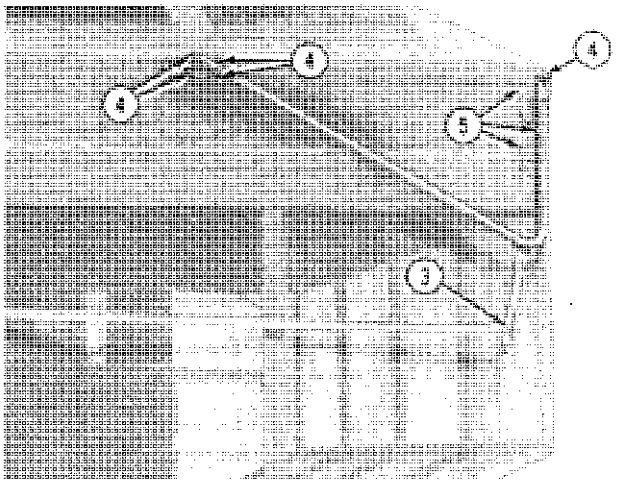


A68;N35929 N01;1005 7 280182

3. Remove pins holding basket horizontal links to vertical links (front and rear of basket).

4. Remove four bolts and cotter pin and remove lift pipes (front and rear of basket).

5. Remove three bolts and remove hinges (front and rear of basket). Reassemble hardware in holes.

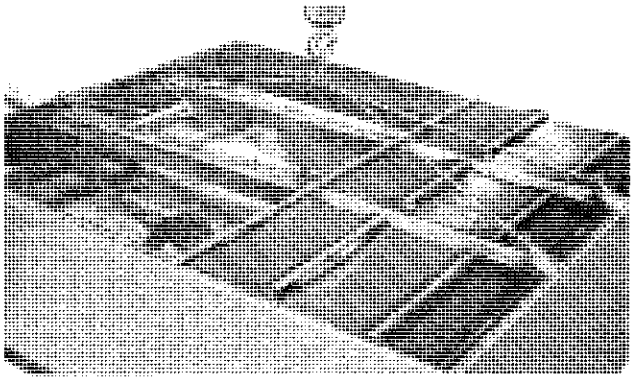


A68;N35930 N01;1005 AA 061284

CAUTION: Use lifting device with at least (340 kg) 750 lb. lift capacity when lifting lid. Attach chains as shown to equalize lifting forces and stabilize the lid.

6. Lift the lid off.

NOTE: For easier access to the basket, remove the rear center expanded metal section from the basket.



A68;N80233 K1 N01;;1005 AB 220884

INSTALL BASKET EXTENSION

NOTE: Use the following procedure to install (305 mm) 12-in. or (610 mm) 24-in. extensions. Alternate procedures are shown where applicable.

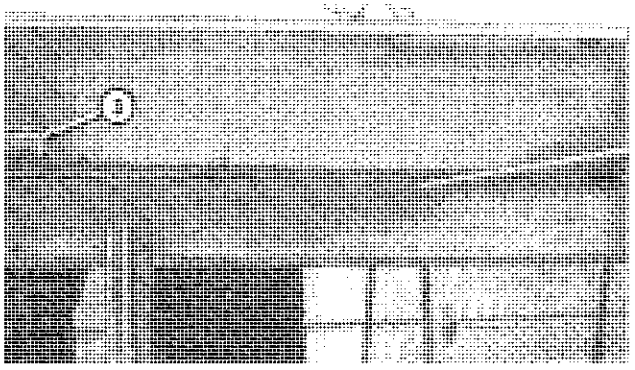
IMPORTANT: Do not tighten basket hardware until front, rear, and R.H. extensions are assembled to basket.

1. Install R.H. extension to basket using 3/8 x 3/4-inch flange screws and nuts.

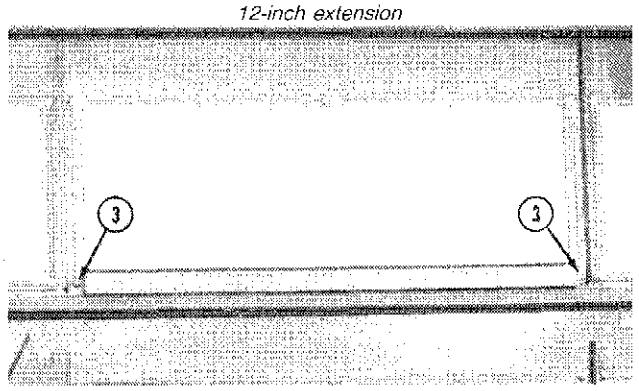
NOTE: Use drift pins in all holes to align corner angles of extension with holes in basket.

2. Lift front and rear extensions into place and bolt to basket and R.H. extension using 3/8 x 3/4-inch flange screws and nuts.

3. Bolt step to front extension with 3/8 x 3/4-inch flange screws and nuts.



12-inch extension

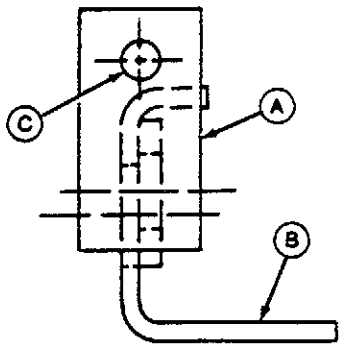


24-inch extension

A68;N79324 A7, N81057 G2 N01;;1005 BA 230884

4. Install front and rear pivot brackets (A) to dump lip channel (B) using 3/8 x 3/4-inch flange screws and nuts.

IMPORTANT: The pivot hole (C) in the front and rear pivot brackets must be to the inside of basket as shown.



A68;N37070 N01;1005 BB 050483

5. Install door ends with 3/8 x 3/4-in. flange screws and nuts.

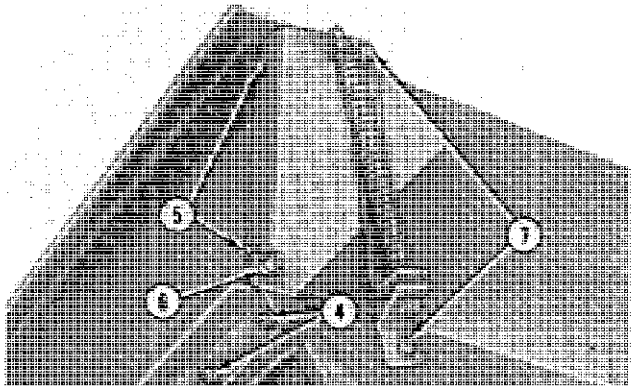
6. Fasten door to pivots with 3/8 x 3/4-in. cap screws. Insert spacers (with [7 mm] 9/32-in. flange width) in door ends from OUTSIDE. Install screws from INSIDE pivot brackets.

NOTE: If bottom of door binds on basket, move dump lip channel down as needed.

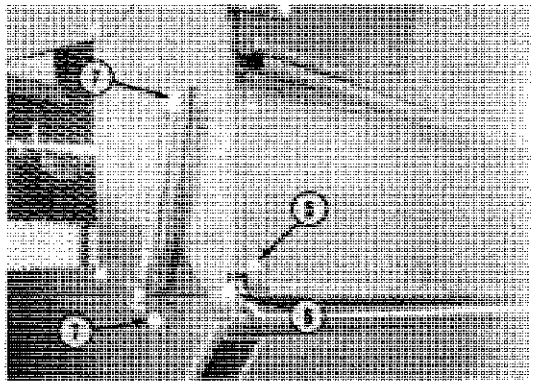
7. Fasten spring and bracket assembly to door and basket end frame with 3/8 x 1-1/4-in. cap screws. Insert spacers (with [10 mm] 3/8-in. flange width) from OUTSIDE of each bracket. Install screws.

NOTE: Check spring lengths. If necessary, adjust stop nut to obtain a length of (248 mm) 9-3/4-in. ADJUST BOTH SPRINGS TO THE SAME LENGTH.

8. Slide door center pivot straps (identified by two holes in flange) through slots in door and between L.H. side of basket and dump lip channel. Use existing hardware to secure.



12-inch extension, rear



24-inch extension, front

A68;N79324 B1 N38349 N01;;1005 AD 020885

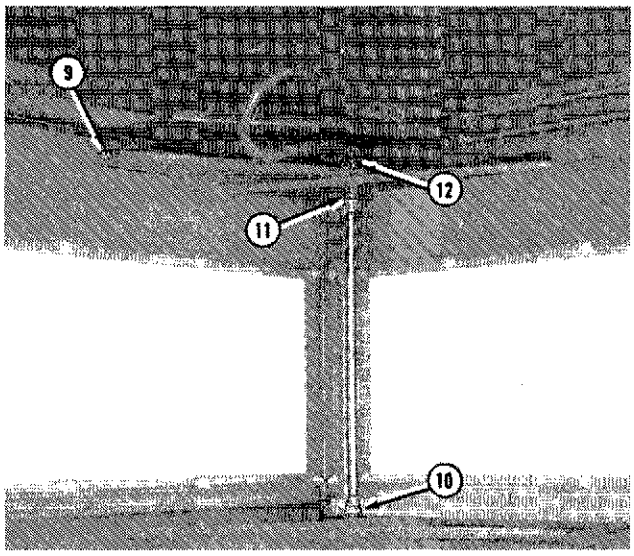
9. Install gussets in front and rear R.H. corners of extension with twelve 3/8 x 3/4-in. flange screws (omit one at front and rear hinge points).

9a. Tighten all hardware, except flange screws and nuts attaching front and rear pivot brackets, installed in Step 4. This hardware to be tightened after lid has been installed.

10. Remove hoses (with elbows) from fittings in lower rear gusset and attach tubes.

11. Install flare fittings in top rear gusset as shown using 0.024-in. thick washers as needed between fittings and gusset to allow tightening tube nuts without stripping threads.

12. Assemble nut and hydraulic hose elbows to fittings.

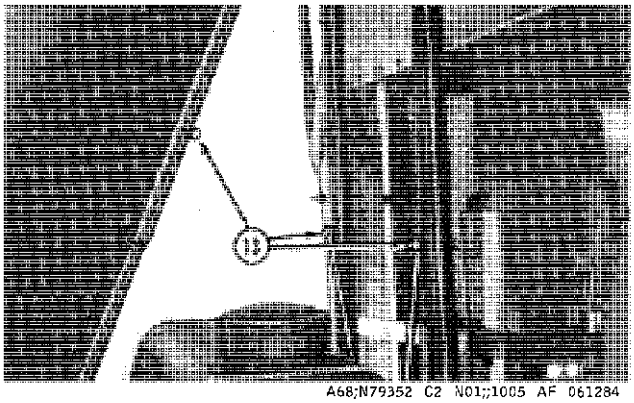


A68;N81057 D1 N01;;1005 AE 270885

13. Raise ducts and support braces to intermediate position (shorter extension), or highest position (longer extension). Use same round head bolts and spacers originally installed in support brackets at top of extension.

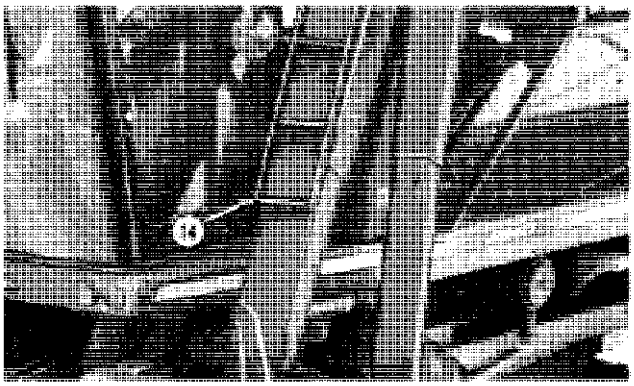
NOTE: In highest position, make sure top hole of inner pipe aligns with hole of outer pipe.

IMPORTANT: Bolt head must be on basket side of support braces with nuts on front.



A68;N79352 C2 N01;;1005 AF 061284

14. Install step extension parts on L.H. inner duct with 5/16 x 1-in. flange screws and nuts.



A68;N80018 A2 N01;;1005 AG 061284

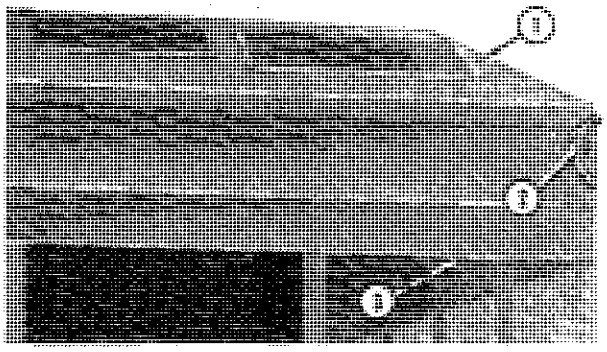
INSTALL LID ON BASKET

NOTE: (305 mm) 12-in. extension illustrated. Use similar procedure for other extension or basket without extension (truck shipments).

1. Lift lid into place on extension.

2. Install front and rear hinges using three 3/8 x 1-1/4-in. "Grade 8"cap screws and flange nuts, installed at factory in hinge bracket.

3. (Not shown) Install center hinge with four 3/8 x 3/4-in. flange screws and nuts.



A68;N79325 A1 N01;;1005 AH 061284

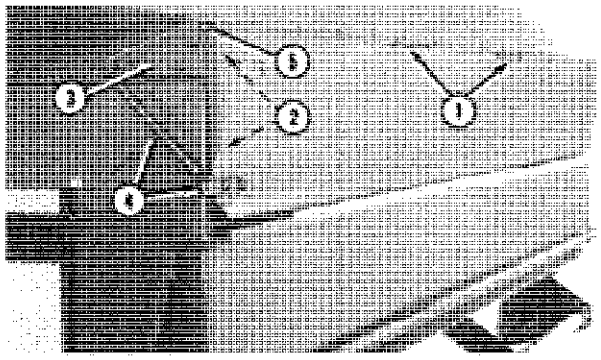
4. Connect hydraulic hoses to tubes at R.H. rear corner of basket. See Remove Lid to Install Basket Extension in this section.

5. Install lift pipes and basket linkage, using same hardware as originally installed. See Remove Lid to Install Basket Extension in this section.

6. (Not Shown) Install basket rear center section, using same hardware as originally installed.

A68; N01;1005 A1 050483

INSTALL UPPER DOOR ON (610 mm) 24-IN. EXTENSION



1. Install upper door with pivots (identified by one hole in flange) on basket lid.

2. Install door ends on INSIDE of upper door using 3/8 x 1-in. round head bolts.

IMPORTANT: To insure proper door action, be sure to place bolt heads on INSIDE with nuts on OUTSIDE of door.

3. Install pivot brackets on lid with 3/8 x 1-in. flange screws.

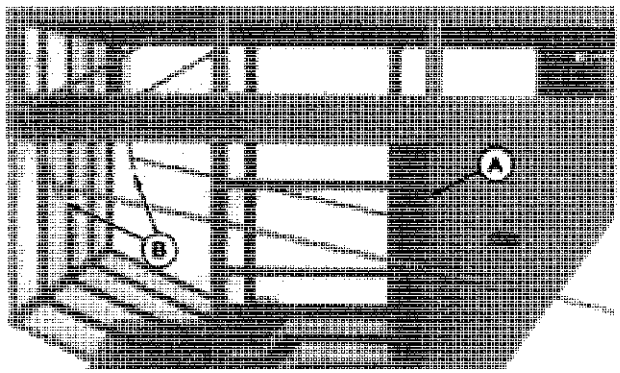
4. Install spring strap on door with 3/8 x 1-in. round head bolts, 0.090 x 12/32 x 1-1/4-in. washers, and nuts.

5. Attach door to pivots, using shoulder bushings and 3/8 x 1-1/4-in. cap screws and nuts.

6. Adjust upper door pivots in attaching slots so there is 5 to 6.5 mm (3/16 to 1/4-in.) gap between upper and lower doors, along entire length of doors.

A68;N81057 E3 N01;;1005 AI1 270885

INSTALL LINKAGE ON (610 mm) 24-IN. EXTENSION



Replace short links (B) with longer links furnished with extension.

IMPORTANT: Be sure lift link is through retainer (A), to avoid damage to linkage and basket.

A68;N81058 C2 N01;;1005 AI3 210585

ADD SOLUTION TO R.H. TIRE ON (610 MM) 24" EXTENSION

CAUTION: To avoid instability, when dumping a basket of high moisture cotton on a picker equipped with the (610 mm) 24-in. extension, add solution to drive tire. Fill R.H. drive tire to 85%, or slightly above wheel rim, with a solution of either water and anti-freeze or water and calcium chloride. There is no need to fill both drive tires, as this only increases the weight and provides no benefit. When possible, dump on level ground.

Inflate tires to recommended air pressure (This Section, Group 00). Use special air-water gauge and test with valve stem at bottom.

A68; N01;1005 AJA 041281

FINAL ASSEMBLY CHECKS

Check and tighten all bolts and screws loosened or installed during assembly. Dump basket and operate augers, then check for leaks and tighten fittings. Check hydraulic reservoir and add fluid as needed. Lubricate hinges and door mechanism with 20W oil.

CAUTION: The height of machine is now approximately (4877 mm) 16 feet maximum; (7010 mm) 23 feet, raised. Advise operator to be careful when working near overhead wires and during transport.

A68; N01;1005 BC 050483