

# **1010 INTEGRAL FIELD CULTIVATOR**



## **OPERATORS MANUAL 1010 INTEGRAL FIELD CULTIVATOR**

OMN159504 I4 English

**JOHN DEERE DES MOINES WORKS  
OMN159504 I4**

LITHO IN THE U.S.A.  
ENGLISH



## INTRODUCTION



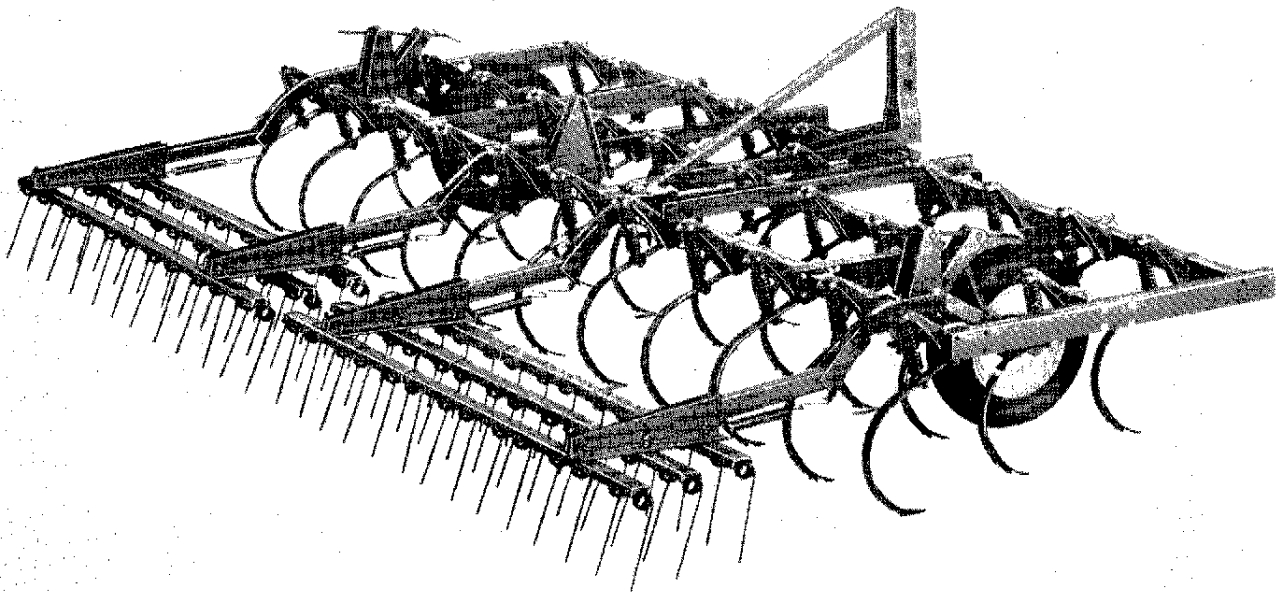
This safety alert symbol indicates important safety messages in this manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.

This publication contains both the US customary units of measurements and the SI Metric equivalents.

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

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

Record your model and serial number in the space provided on page 38.



N34718

1010 Field Cultivator with Harrow Attachment

# 1010 INTEGRAL FIELD CULTIVATOR

## PREDELIVERY CHECK LIST

- ☐ Spring teeth are correctly spaced for width to be cultivated.
- ☐ Shovels or sweeps are correctly assembled.
- ☐ Standard attaching U-bolts tightened to 85 ft-lbs (119 N•m) torque.
- ☐ Cultivator is properly lubricated.
- ☐ Safety reflectors and SMV emblem are installed.
- ☐ Restrictors are installed in remote cylinder ports on Rigid Vertical Fold Field Cultivator.

I have performed the above predelivery service to the best of my ability.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signed

## OWNER REGISTER

Name \_\_\_\_\_

Address \_\_\_\_\_

Post Office \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Implement Serial No. \_\_\_\_\_

Implement Size \_\_\_\_\_

Date Purchased \_\_\_\_\_

## DELIVERY CHECK LIST

- ☐ Advise the customer to lubricate the machine as directed in the operator's manual.
- ☐ Give the operator's manual to the customer and explain all operating adjustments.

- ☐ Tell the customer of safety precautions to observe when using this machine. See page 2.
- ☐ Make sure the customer has the right size and type of hydraulic cylinder to use for the particular model cultivator. See pages 7, 38.
- ☐ If it becomes necessary to transport the cultivator on public roads or highways, advise customer to check with local and state agencies regarding the regulations for transporting over-size equipment and the use of accessory lights and devices for adequate warning to operators of other vehicles on such roads.
- ☐ To the best of my knowledge, this machine has been delivered ready for field use and the customer has been fully informed regarding proper care and operation.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signed

## AFTER-SALE CHECK LIST

- ☐ Check with the customer as to the performance of the cultivator. Make certain the proper operating adjustments for his crop (or soil condition) are understood.
- ☐ If possible, operate the cultivator to see that it is functioning properly.
- ☐ Acquaint the customer with any special attachment which will help to do a better job.
- ☐ Go over entire cultivator for loose or missing bolts.
- ☐ Check for broken or damaged parts.
- ☐ Check with the customer to make sure that recommended periodic lubrication has been performed.
- ☐ Review the operator's manual with the customer and stress the importance of proper lubrication and safety precautions.

\_\_\_\_\_  
Signed

\_\_\_\_\_  
Date



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# Safety



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## Operate Safely

DO NOT operate field cultivator without reading this operator's manual.

DO NOT allow anyone to ride on the field cultivator when it is in operation.

DO NOT operate close to a ditch or creek.

Slow down when turning.

Drive slowly over rough ground.

Always keep the tractor in gear when driving down steep grades with cultivator raised.

Stop the cultivator on level ground when raising and lowering outriggers.

Stay clear of folding sections when raising and lowering.

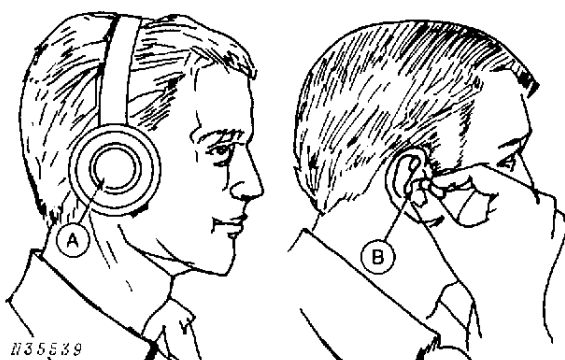
Wear relatively tight and belted clothing to prevent being caught on some part of the machine.

## 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.

A - Earmuffs  
B - Earplugs



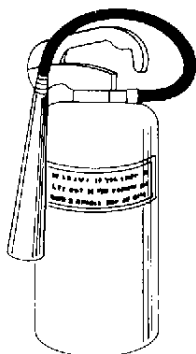
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## Avoid Fires

DO NOT refuel with the tractor engine running.

DO NOT smoke or use a lantern when refueling.



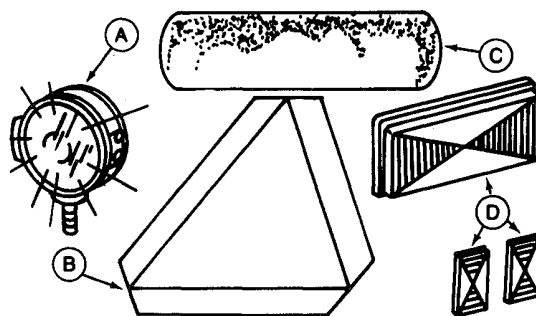
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## Use Safety Lights And Devices

When transporting your machine on a road or highway at night or during the day, use necessary lights (A), SMV emblems (B), reflector tape (C) or reflectors (D), for adequate warning to operators of other vehicles. In this regard, check local governmental regulation. These various safety lights and devices are available from your John Deere dealer.

- A - Lights
- B - SMV Emblem
- C - Reflector Tape
- D - Reflectors



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## Transport Safely

Always install lockup pins (A) on vertical fold outrigger lift models.

Always move depth control cylinder stop forward to lock the cylinder.

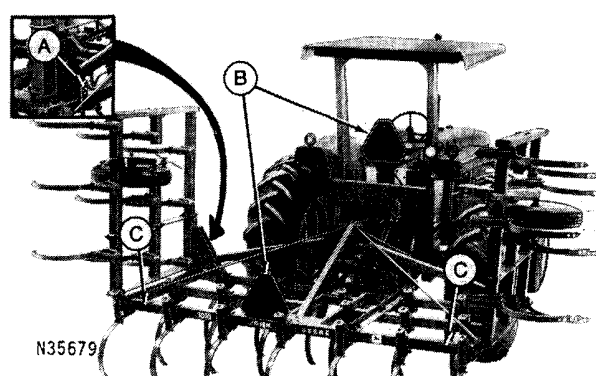
DO NOT fail to latch the tractor brakes together.

Observe overhead wires and KNOW the transport height of your cultivator.

Shift the tractor into a lower gear when transporting down steep slopes or hills.

Keep the SMV emblem (B) and reflectors (C) clean and visible from the rear.

Stop slowly.



N35679

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18-1/2 Ft. (5 539 mm) in Transport Position

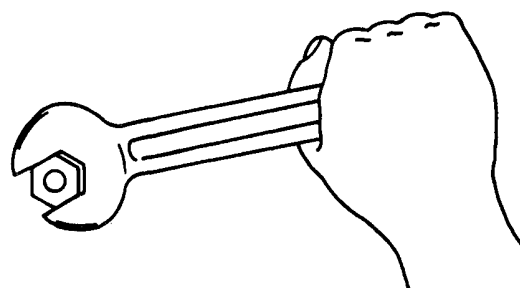
- A - Lockup Pins
- B - SMV Emblem
- C - Red Reflectors

## Practice Safe Maintenance

DO NOT lubricate, adjust, or clean the cultivator while it is in motion.

Always use a safety support when working on, under, or around the cultivator.

Shut off engine and remove key when working on cultivator.



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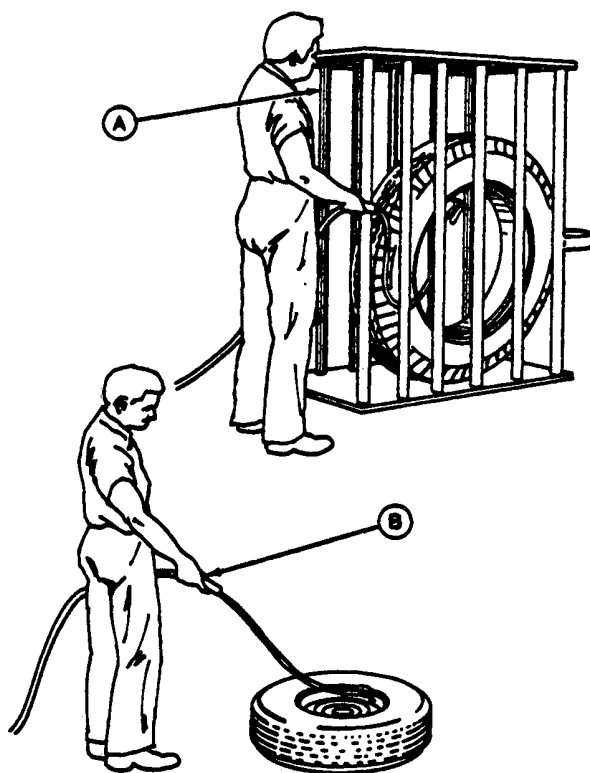
### 3A Safety

#### Service Tires Safely

Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death. Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job. Have it done by your John Deere dealer or a qualified tire repair service.

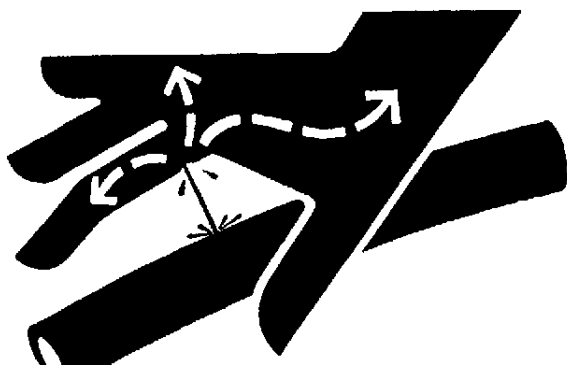
When seating tire beads on rims, never exceed 35 psi (240 kPa) (2.4 bar) or maximum inflation pressures specified by tire manufacturers for mounting tires. Inflation beyond this maximum pressure may break the bead, or even the rim, with dangerous explosive force. If both beads are not seated when the maximum recommended pressure is reached, deflate, reposition tire, relubricate bead, and reinflate.

Detailed agricultural tire mounting instructions, including necessary safety precautions, are contained in John Deere Fundamentals of Service (FOS) Manual 55, Tires and Tracks, available through your John Deere dealer. Such information is also available from the Rubber Manufacturers Association and from tire manufacturers.



- A - Use a safety cage if available.
- B - Do not stand over tire. Use a clip-on chuck and extension hose.

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### Avoid High-Pressure Fluids

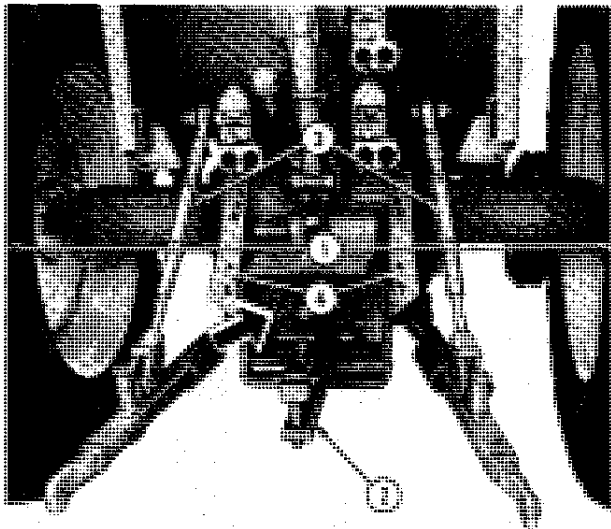
Escaping fluid under pressure can penetrate the skin causing serious injury. Relieve pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Keep hands and body away from pinholes and nozzles which eject fluid under high pressure. Use a piece of cardboard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





# Preparing Tractor



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N34719



**CAUTION:** Make sure PTO guard and master shield are both installed on tractor (bold arrow).

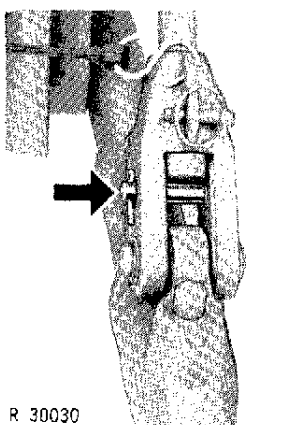
Refer to tractor operator's manual regarding recommended adjustments, tire inflation pressures, use of hydraulic system, PTO and other information pertaining to tractor with implement uses.

Your cultivator is equipped with International Standard Organization (ISO) hydraulic hose fittings. If your tractor does not have ISO hydraulic couplers, see your John Deere dealer for connectors.

1. The tractor must be equipped with a category 2 three point hitch with or without Quik-Coupler or a category 3 hitch with Quik-Coupler.

Set the tractor wheels for the desired row spacing. The wider the spacing, the more stability. See your tractor operator's manual.

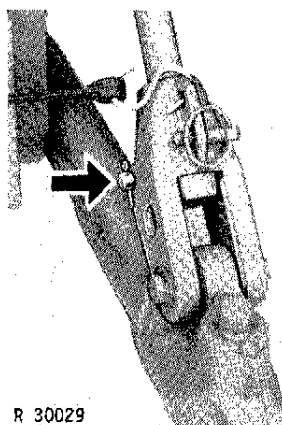
2. Place drawbar in short centered position or remove it.
3. Adjust lift links to minimum length.
4. Position sway blocks in upper wide setting.
5. Set the lift links to lock out lateral float unless stabilizer wheels are used.



R 30030

R30030

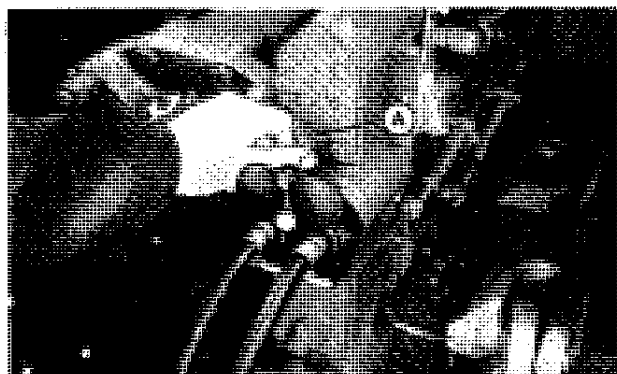
Without Stabilizer Wheels



R 30029

H30029

With Stabilizer Wheels



PW4429

6. Turn metering valves (A) to fast or rabbit position.

7. Move rockshaft selector lever midway between MIN. (or ZERO or D) and MAX.

8. Determine front ballast as follows:

Step I — Find the size of your cultivator in the table at the right and enter its Implement Code on Line 1.

Step II — Enter an Implement Code for each attachment or option used on your cultivator, on Line 2 below.

Step III — Add Implement Code of cultivator and Implement Code(s) for each attachment used to obtain the Total Implement Code.

Step IV — Refer to tractor operator's manual to determine required tractor front ballast.

**IMPORTANT:** 1) If the total implement code exceeds the maximum implement code listed for a particular tractor model, the implement-attachment combination is not recommended for that tractor.

2) The total load on any tractor wheel due to the weight of the implement-attachment combination and tractor equipment, should not exceed the carrying capacity of the tractor tires.

Refer to tractor operator's manual for weight limitations applicable to your tractor and tires.

**NOTE:** Ballast recommendations provide for adequate transport stability at recommended speeds. Additional front ballast may be required for satisfactory field operation due to sudden or extreme forces on the tractor hitch, such as can occur when removing cultivator from the ground and turning at row ends, or during field transport over very rough terrain.

Integral	Size (mm)	Impl. Code
9-1/2'	(2 896) Rigid	60
10-1/2'	(3 200) R	62
11-1/2'	(3 505) R	67
12-1/2'	(3 810) R	72
13-1/2'	(4 115) R	84
14-1/2'	(4 420) R	87
15-1/2'	(4 724) R	103
16-1/2'	(5 029) R	106
17-1/2'	(5 334) R	110
15-1/2'	(4 724) Rigid Vert Fold	105
16-1/2'	(5 029) RVF	108
17-1/2'	(5 334) RVF	111
18-1/2'	(5 639) RVF	140
19-1/2'	(5 944) RVF	142
20-1/2'	(6 248) RVF	145
21-1/2'	(6 553) RVF	145
22-1/2'	(6 858) RVF	146
23-1/2'	(7 163) RVF	151
24-1/2'	(7 468) RVF	157

Attachments or Options	Implement Code
Gauge Wheels (add only when using on 15/1/2, 16-1/2 or 17-1/2 foot [4 724, 5 029, 5 334 mm] Rigid Models)	15
Harrow Attachment	3.14 per foot

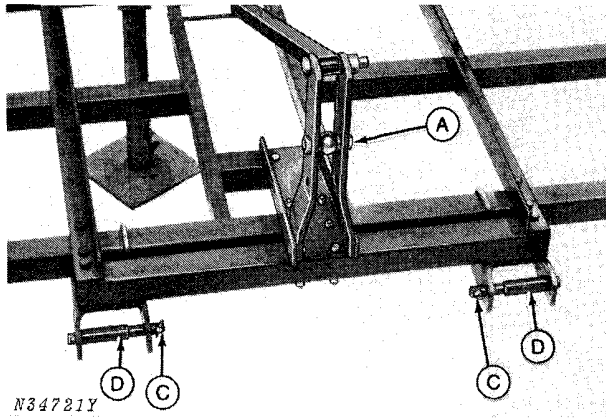
  

Line 1 _____
Line 2 _____
_____
_____
_____
Total Implement Code _____

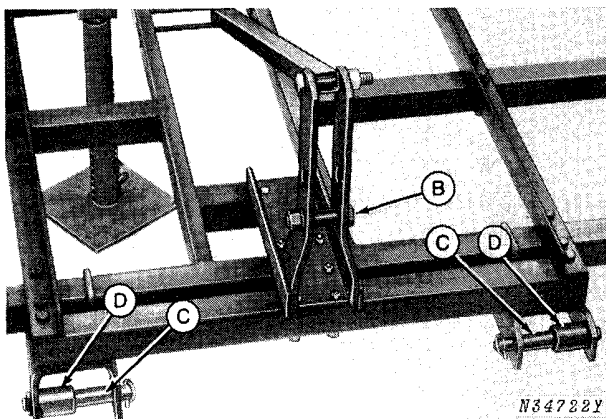


# Preparing the Field Cultivator

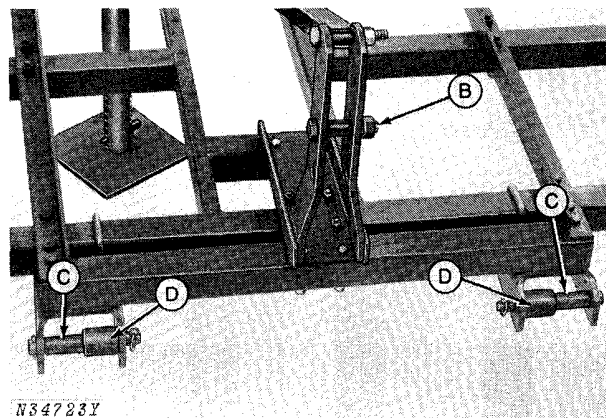
## HITCH PINS AND TIRES



Category 2 Without Quik-Coupler



Category 2 With Quik-Coupler



Category 3 With Quik-Coupler

1. Set the hitch pins and spacers to match the tractor hitch.

Reverse location of sleeves and spacers (C and D) for category 3N.

- A - Mast Ball
- B - Mast Spacer
- C - Sleeve
- D - Spacer

2. Inflate stabilizer wheel tires to 28 psi (194 kPa) (1.94 bar).

## ATTACHING REMOTE CYLINDER ON RIGID VERTICAL FOLD CULTIVATORS

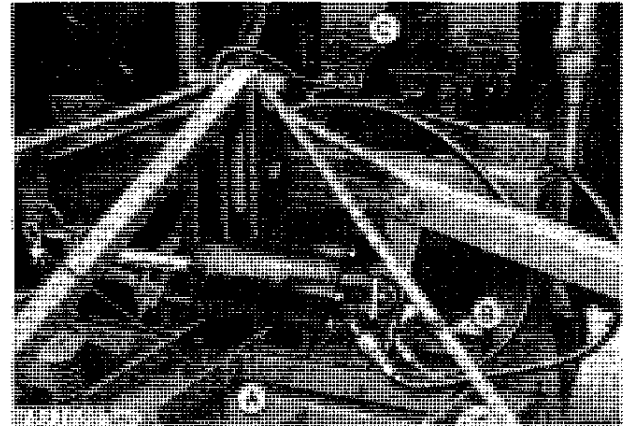
**CAUTION:** Damage to the cylinder and possible personal injury may result if a non-recommended cylinder is used. At initial operation, make sure that neither end of the cylinder interferes with the lift arms in the fully extended or retracted position.

**IMPORTANT:** Use only John Deere remote hydraulic cylinders (black tractor cylinder) or ASAE standard side-ported cylinders.

Assemble hoses and cylinders as follows:

1. Install the two restrictors (B).
2. Attach hoses (C) to restrictors and tighten securely.

**NOTE:** Side-port must point to rear as shown.



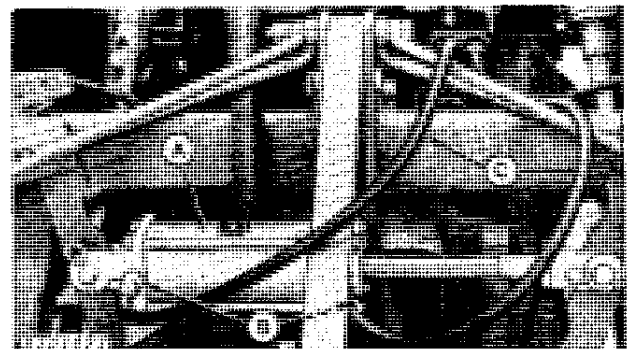
N30166Y

Cylinder With End Ports

Attach cylinders as follows:

1. Attach remote cylinders to the lift arms on field cultivator.
2. Route hoses downward toward the rear as shown.

A - Remote Cylinder  
B - Restrictors  
C - Hoses



N30157Y

Cylinder With Side Ports

## REMOVING TRAPPED AIR FROM REMOTE CYLINDER

**CAUTION:** Escaping hydraulic fluid can be dangerous. See High Pressure Fluids in the Safety section.

Bleed the cylinders as follows:

1. Place cylinder on transport arm of the tractor with hose end up.
2. Plug ends of the hoses into tractor outlet.
3. Start the tractor engine and move the cylinder operating lever back and forth seven or eight times.
4. Check hydraulic oil supply tractor. Refill if necessary.

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