



INSTRUCTIONS FOR INSTALLING AND OPERATING
THE AM35852 REAR HYDRAULIC SYSTEM AND
BM15850 3-POINT HITCH



Instructions M48879

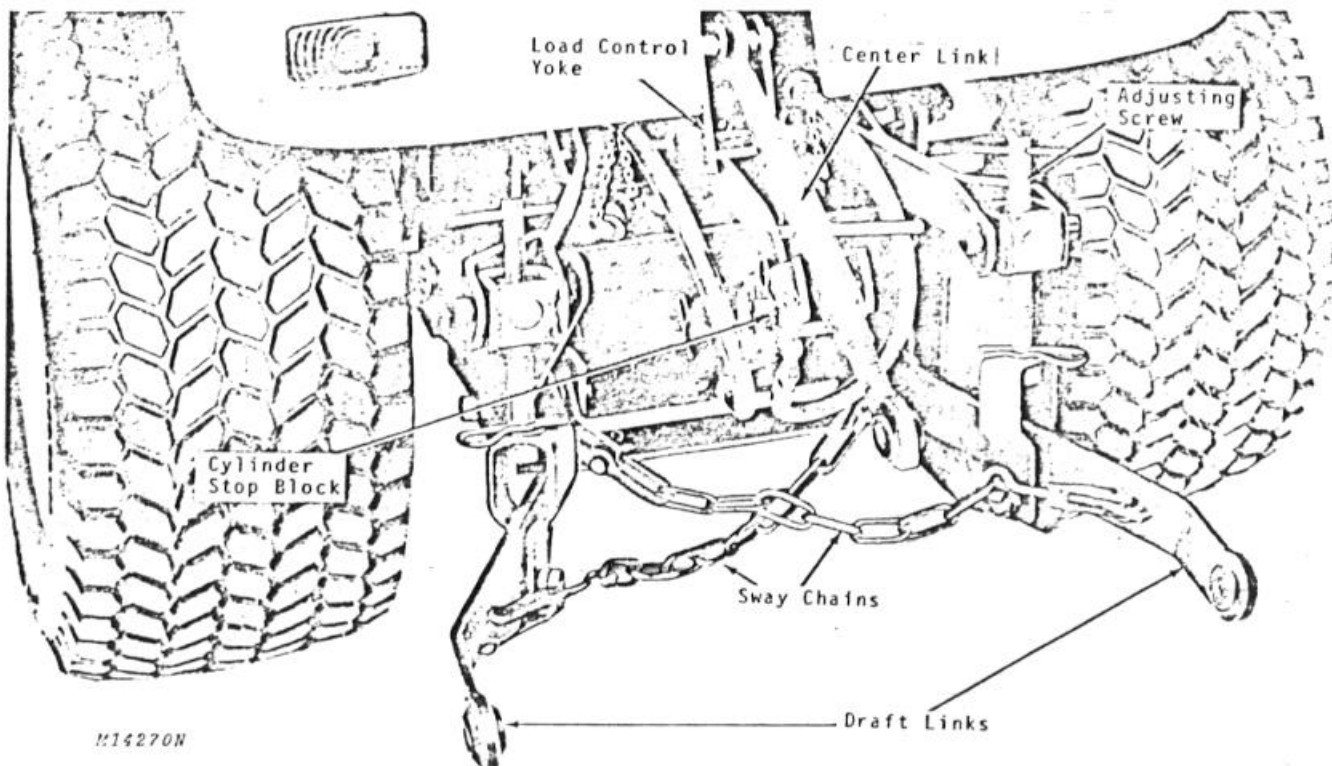
NOTE: These instructions are complete for installing and operating the AM35852 Rear Hydraulic System and the BM15850 3-Point Hitch on a 300 Tractor. To install the AM35852 Rear Hydraulic System on a 140 Tractor, an AM36001 Conversion Kit including installation instructions will also be required.

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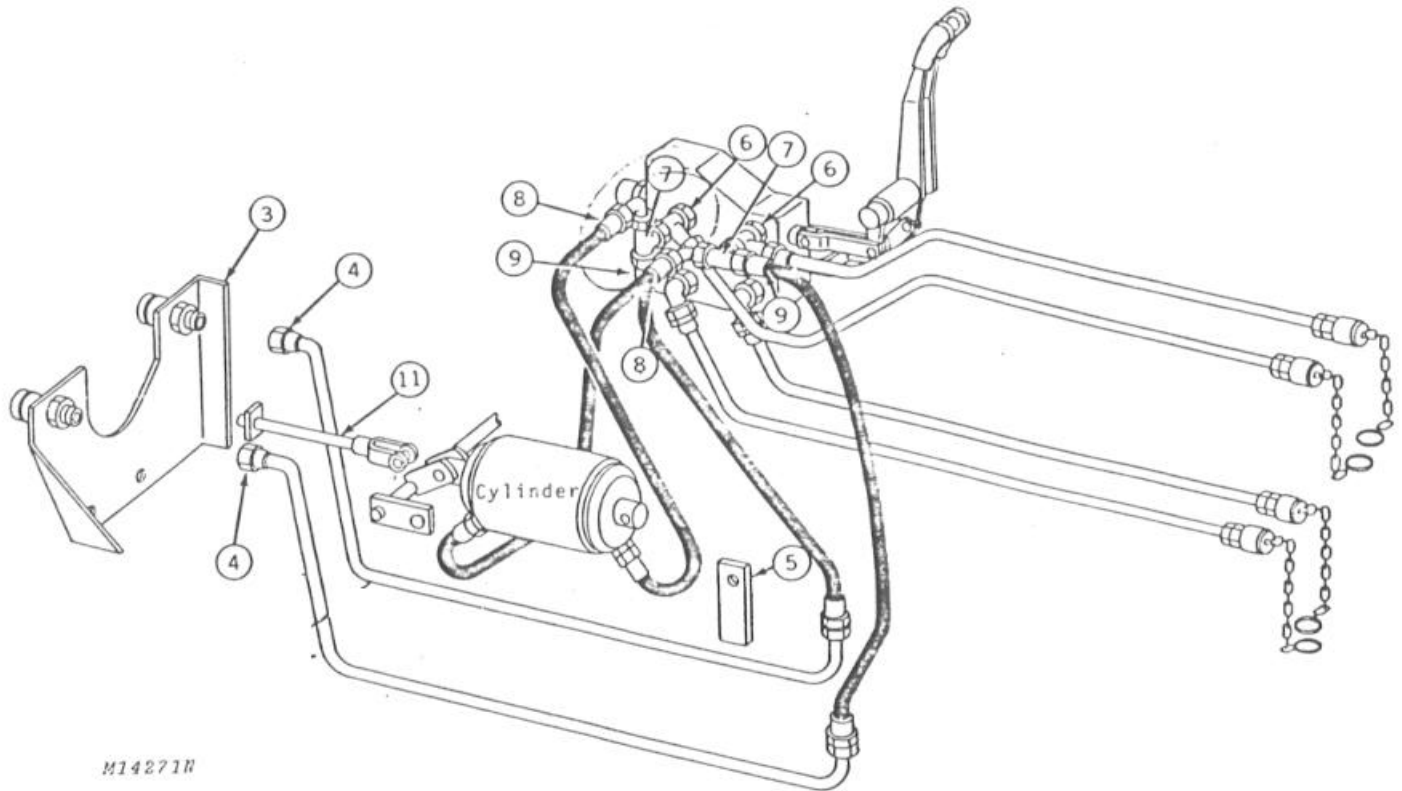
SPECIFICATIONS

Mast Height	12 inches (30.48 cm)	Lift Range	10 inches (25.40 cm)
Hitch Point Spread.....	20 inches (50.80 cm)	Lift Capacity	400 lbs. (181.44 kg) *
Leveling Adjustment Range....	4 inches (10.16 cm)	*With maximum front end ballast.	

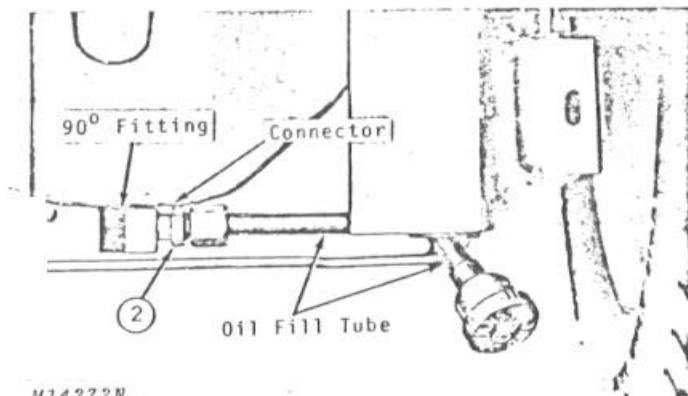


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INSTALLING REAR HYDRAULIC SYSTEM ON 300 TRACTOR
(Rear Hydraulic System Controlled by Outer Control Lever)



M14271R



M14272N

1. Remove fender deck. Close fuel shut-off valve and remove fuel tank. (Not illustrated.)

2. Place tray under transmission and remove the straight tractor hydrostatic oil fill tube from the 90° fitting at the rear axle. Rotate fitting 180° counterclockwise, until hole in fitting points downward.

Install connector into 90° fitting and rotate them 270° clockwise, so that connector points toward right side of tractor. Install new angled oil fill tube onto connector. When correctly installed, the new oil fill tube will extend horizontally from the 90° fitting toward the right side of the tractor;

then, angling upward toward top of frame. Check transmission oil level with dipstick.

3. Attach coupler mounting plate to frame. See photo above.

4. Install rear hydraulic tubes attaching each to its proper connector on the coupler mounting plate.

5. Install tube clamp on front bolt of right hand lift shaft bearing to hold tubes against tractor frame.

6. Disconnect cylinder oil hoses from tee fittings on control valve.

7. Install center swivel tee fittings onto tee fittings presently in control valve.

8. Install cylinder oil hoses to rear end of tee swivels. Attach hose from rear of cylinder to front tee; and hose from front of cylinder to rear tee.

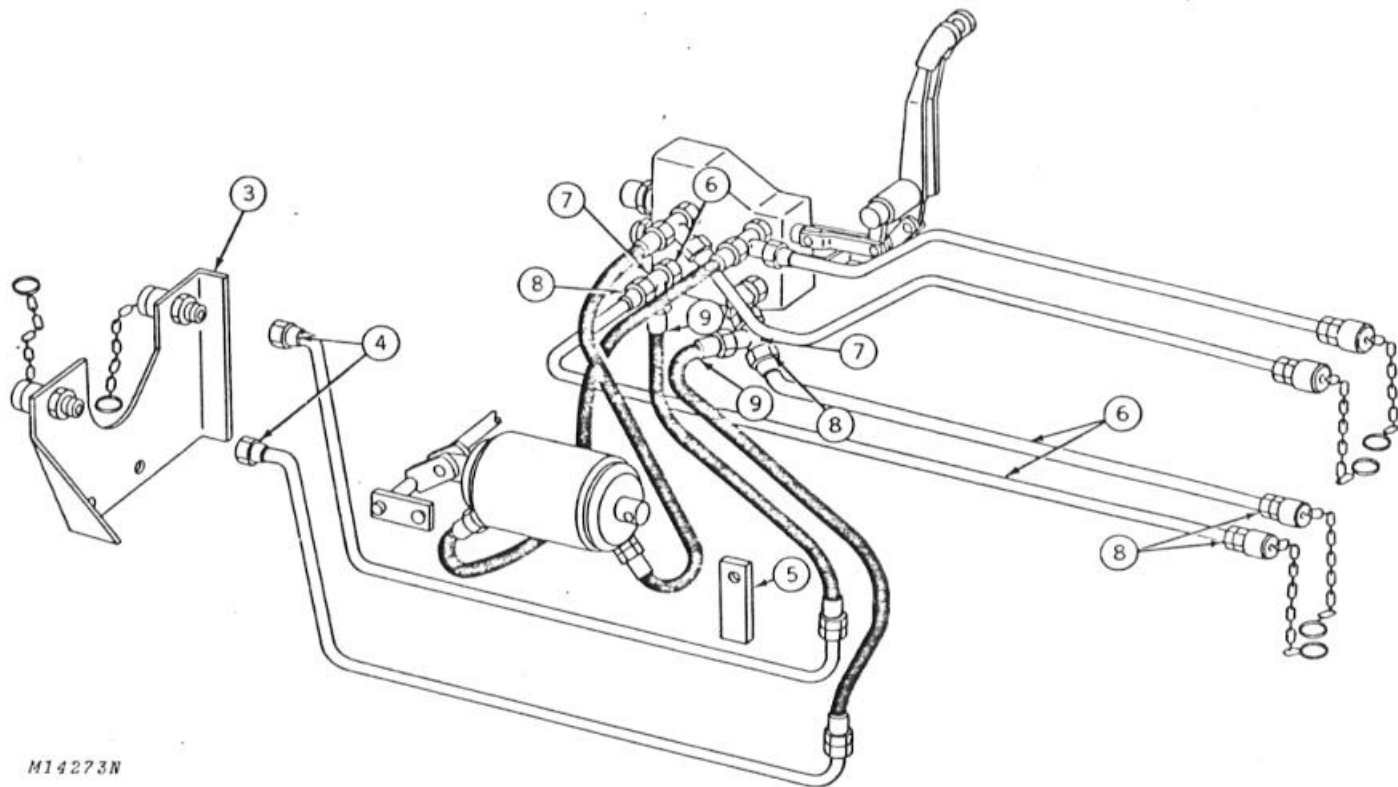
9. Attach hydraulic hoses from rear hydraulic tubes to front end of tee swivels. Attach hose from right-hand rear tube to front tee and hose from left hand rear tube to rear tee.

10. Start engine, Bleed air from oil lines by moving the control lever back and forth while unseating ball in each rear coupler. Check oil level in transmission with engine running and hydrostatic control lever in the neutral position. Be sure dipstick oil level is in the "safe" range.

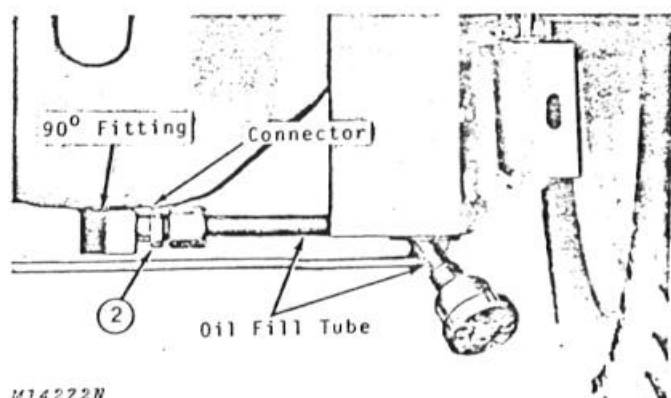
11. Install cylinder lockout link so there will be no delay in hydraulic operation of the rear circuit. See page 6.

NOTE: Inner control lever operates the right front couplers; and the outer control lever operates the left front couplers, rockshaft cylinder and rear circuit.

INSTALLING REAR HYDRAULIC SYSTEM ON 300 TRACTOR (Rear Hydraulic System Controlled by Inner Control Lever)



M14273N



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1. Remove fender deck, close fuel shut-off valve and remove fuel tank. (Not illustrated.)

2. Place tray under transmission and remove the straight tractor hydrostatic oil fill tube from the 90° fitting at

the rear axle. Rotate fitting 180° counterclockwise, until hole in fitting points downward.

Install connector into 90° fitting and rotate them 270° clockwise, so that connector points toward right side of tractor. Install new angled oil fill tube onto connector. When correctly installed, the new oil fill tube will extend horizontally from the 90° fitting toward the right side of the tractor; then, angling upward toward top of frame. Check transmission oil level with dipstick.

3. Attach coupler mounting plate to frame.

4. Install rear hydraulic tubes attaching each to its proper connector on the coupler mounting plate. See large photo above.

INSTALLING REAR HYDRAULIC SYSTEM ON 300 TRACTOR
(Rear Hydraulic System Controlled by Inner Control Lever)
- Continued

5. Install tube clamp on front bolt of right-hand liftshaft bearing block to hold tubes against tractor frame. Be sure tubes are clear of all moving parts.

6. Remove and discard the two right front hydraulic tubes. Remove the rear 45° adjustable elbow. Install a straight fitting in its place.

7. Attach an end swivel tee to both the straight fitting and the remaining 45° adjustable elbow.

8. Install two front hydraulic tubes from rear hydraulic kit attaching front ends to couplers and rear ends to end swivel tees.

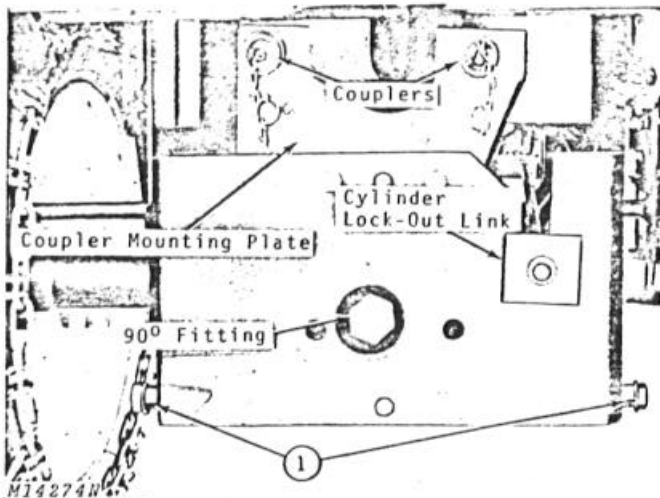
9. Attach hydraulic hoses from rear hydraulic tubes to end swivel tees.

10. Start engine. Bleed air from oil lines by moving the control lever back and forth while unseating ball in each rear coupler. Check oil level in transmission with engine running and hydrostatic control lever in the neutral position. Be sure dipstick oil level is in the "safe" range.

NOTE: Outer lever operates the left front couplers and rockshaft cylinder. The inner lever operates the right front couplers and the rear circuit.

INSTALLING 3-POINT HITCH ON 300 OR 140 TRACTORS

ATTACHING MOUNTING FERRULES



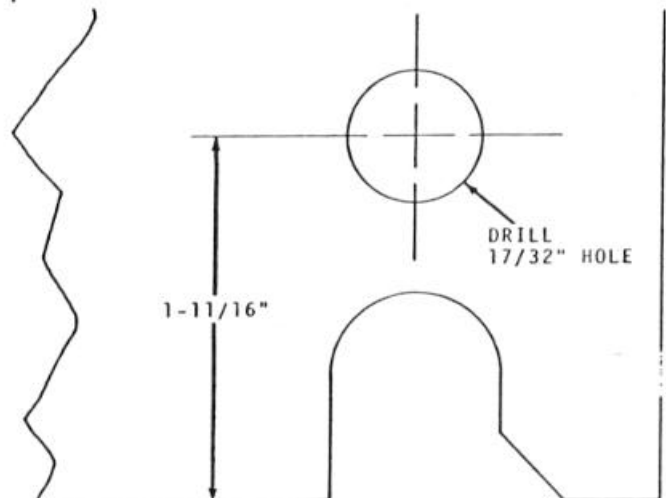
1. Install mounting ferrules in bottom hole on each side of tractor hitch plate with 1/2 x 1-1/2-inch bolts. Use flat washer between bolt head and ferrule. Use lock washer between nut and inside of tractor hitch plate.

If 54C Center Blade is mounted, use 1/2 x 1-1/2-inch bolts furnished with center blade to mount ferrules.

CONVERTING 3-POINT HITCH --- 54C CENTER BLADE

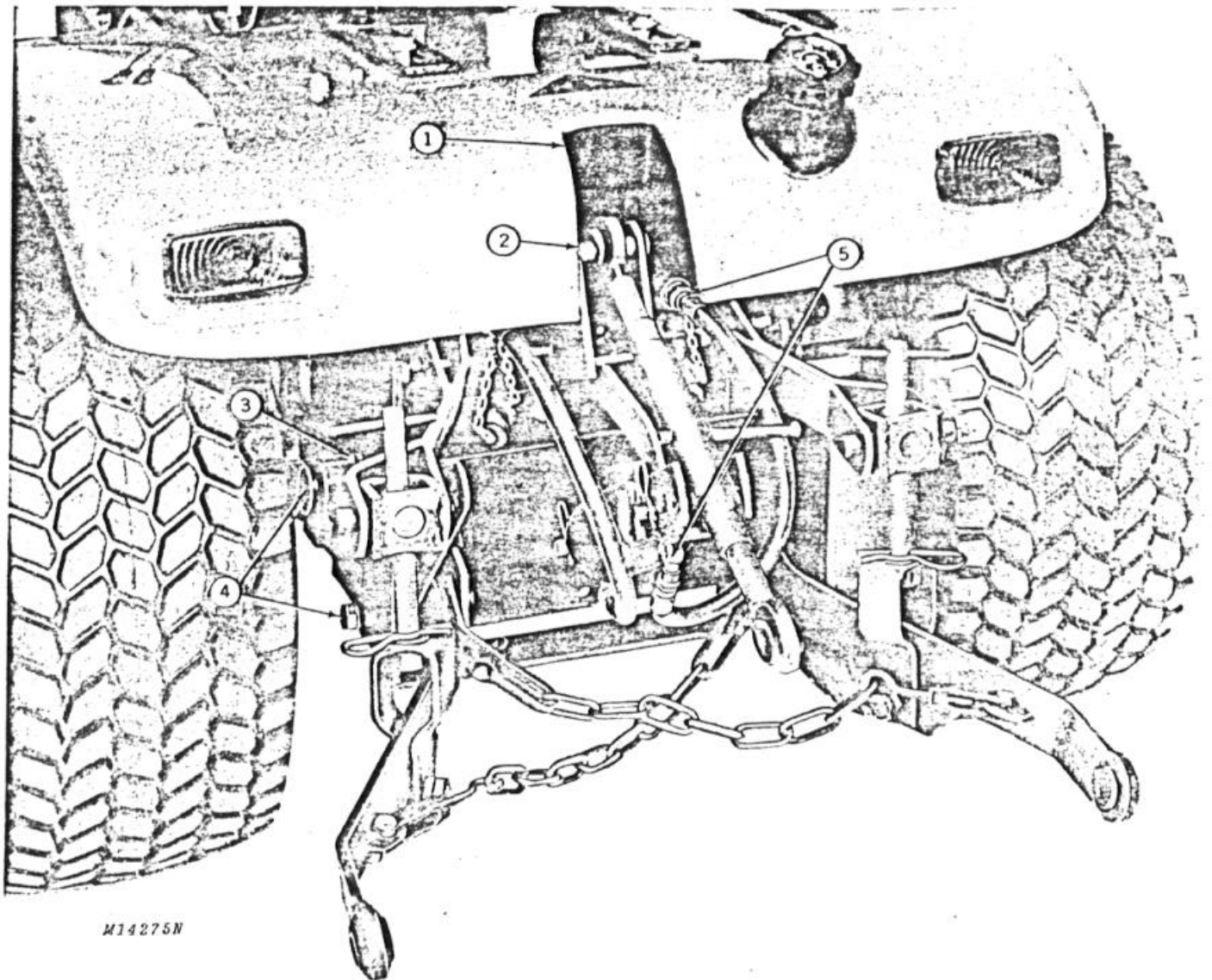
If a 3-point hitch is to be mounted on the tractor with the 54C Center Blade, convert the hitch as follows:

Drill a 17/32-inch hole 1-11/16 inches from bottom of 3-point hitch mounting plate on each side.



Install 3-point hitch on tractor. Use 1/2 x 1-inch bolt furnished with hitch to bolt hitch to tractor hitch plate and blade mounting bracket.

ATTACHING HITCH ON TRACTOR



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1. Remove square cover from fender deck. Store cover for future use.

NOTE: Remove PTO drive shaft extension, if tractor is so equipped. See 33 Rotary Tiller Operator's Manual for removal instructions.

NOTE: If tractor is equipped with 54C Center Blade mounting brackets, remove top bolt from bracket and hitch plate. Drill holes in 3-point hitch as instructed on page 4 before attaching hitch on tractor.

2. Assemble center link to top hole of lift yoke with 5/8 x 2-3/4-inch drilled pin. Secure with large spring locking pin.

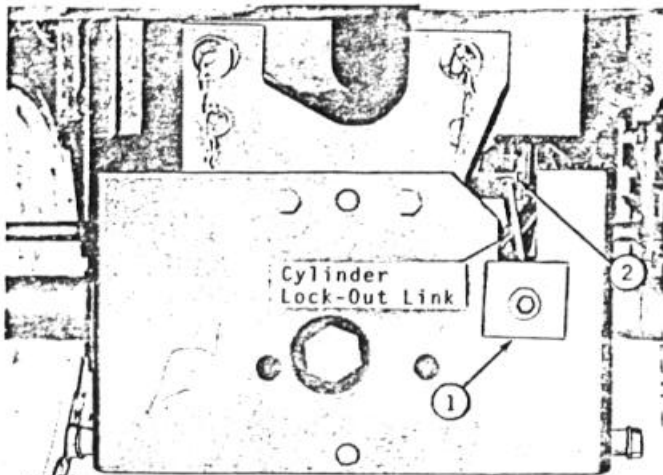
3. Lock spring-loaded pins in extracted position.

4. Position hitch bracket on mounting ferrules and lift hitch against tractor hitch plate. Release spring-loaded pins.

5. On a 300 Tractor (illustrated) attach hose from piston end of cylinder to right hydraulic coupler. Install hose from opposite end of cylinder to left hydraulic coupler.

6. On a 140 Tractor, attach 90° fittings to hose ends. Then attach hose from piston end of cylinder to bottom hydraulic coupler and hose from opposite end of cylinder to top hydraulic coupler. (Not illustrated.)

CYLINDER LOCK-OUT LINK



A cylinder lock-out link is required for tractors with single hydraulic control lever when using front or rear-mounted hydraulically operated equipment.

On the 300 Tractor use the cylinder lockout link when the rear hydraulics are installed as on page 2.

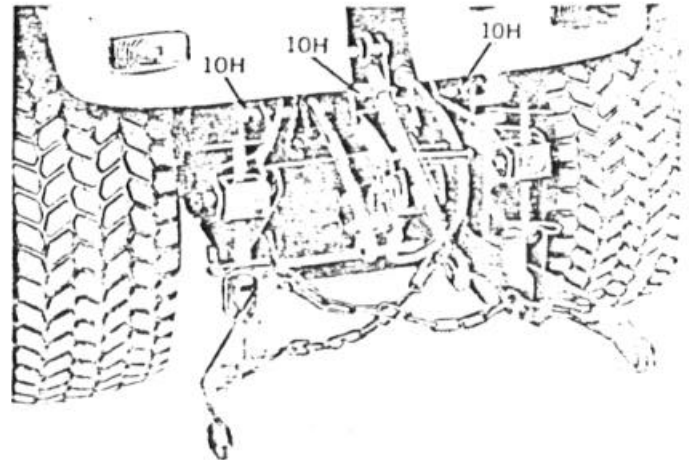
NOTE: This lock-out link is also required for 140 H-3 Tractors if the optional method of assembling the rear hydraulic system is used.

This lock-out link prevents the rockshaft cylinder from operating, giving instantaneous operation of cylinders and equipment.

To install, fully retract rockshaft cylinder. Turn depth control knob on tractor deck to lowest position so that rockshaft arms may be rotated to lowest position. This can be done manually if arms are not completely down.

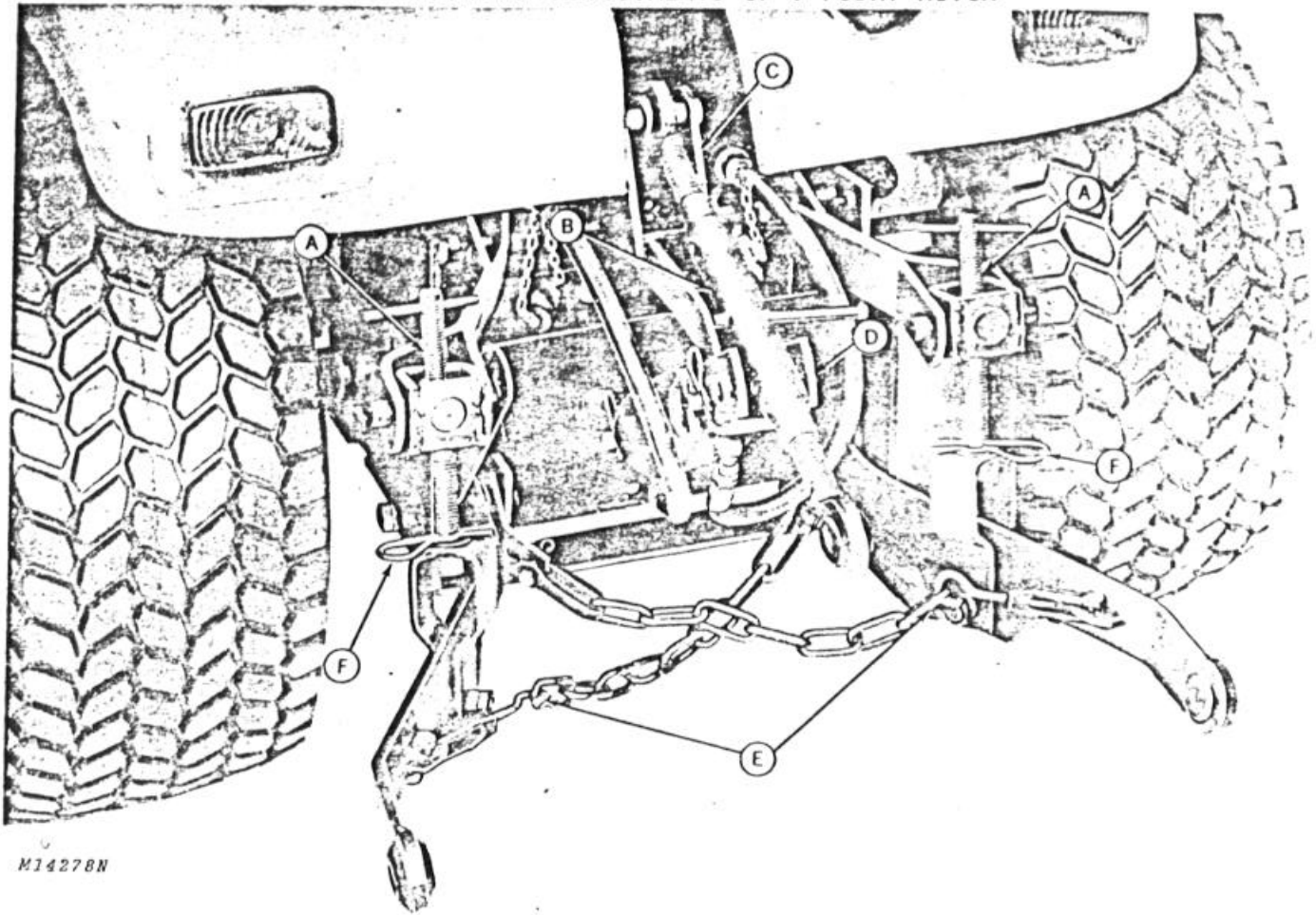
1. Install link in hitch plate slot with ears outside tractor hitch plate.
2. Fasten forward end to rockshaft tiller lift arm with $3/8 \times 1-1/4$ -inch drilled pin and spring locking pin.

LUBRICATION



Using hand grease gun or Pisto-Luber, lubricate lift shaft bearings with SAE (seasonal grade) multi-purpose type grease at time of installation. Bearings should be lubricated every 10 hours of operation. Wipe fittings clean after lubrication.

OPERATION AND ADJUSTMENTS OF 3-POINT HITCH



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Two BM15708 Front Wheel Weights, available as extra equipment, should be used with all rear-mounted equipment.

Several adjustments of the hitch can be made to meet varied soil conditions and tillage requirements.

A. The adjusting screws on the draft links are used to level the implement and also for depth control. Turning adjusting screw clockwise lowers the draft links. Turning adjusting screw counterclockwise raises the draft links.

B. The center link turnbuckle is used for front-to-rear leveling of implements. Adjust so that all ground-engaging parts of the implement, such as a disk or cultivator, are working at a uniform depth. Lengthening the center link lowers the rear of implement. Shortening the center link raises the rear of implement.

C. The load control yoke at the forward connection of the center link has three adjustments that sense the drawbar load

of the implement, providing lesser or greater traction. Use the top hole for plowing and tillage in heavy soils. Use the center or lower hole for cultivating and low draft applications.

D. Depth control is accomplished with the cylinder stop block. This block restricts the hydraulic piston travel thus presetting the working depth of implement being used. The hole closest to the cylinder permits a full piston stroke, while the middle hole restricts stroke by one inch and the top hole by two inches.

E. Sway chains can be adjusted to limit the side-sway of the hitch when a straight-row operation is required, such as planting and row-crop cultivating. After the implement is attached, remove the chain clevis at the rear of the draft links and turn the clevis on the eye-bolt as required to provide a stable hitch. Reinstall chain clevis.

OPERATION AND ADJUSTMENTS OF 3-POINT HITCH - Continued

F. Adjustment for float of each draft link is made by removing the spring locking pin at the bottom of the adjusting screws. These pins should be installed

when using the plow. Float of other implements may be desirable in rough or stony ground conditions.

REMOVAL OF 3-POINT HITCH

1. Disconnect cylinder hoses from hydraulic couplers. Place dust caps over hose ends and dust plugs into couplers.

NOTE: If 54C Center Blade is mounted, remove top bolt in hitch plate. See page 4.

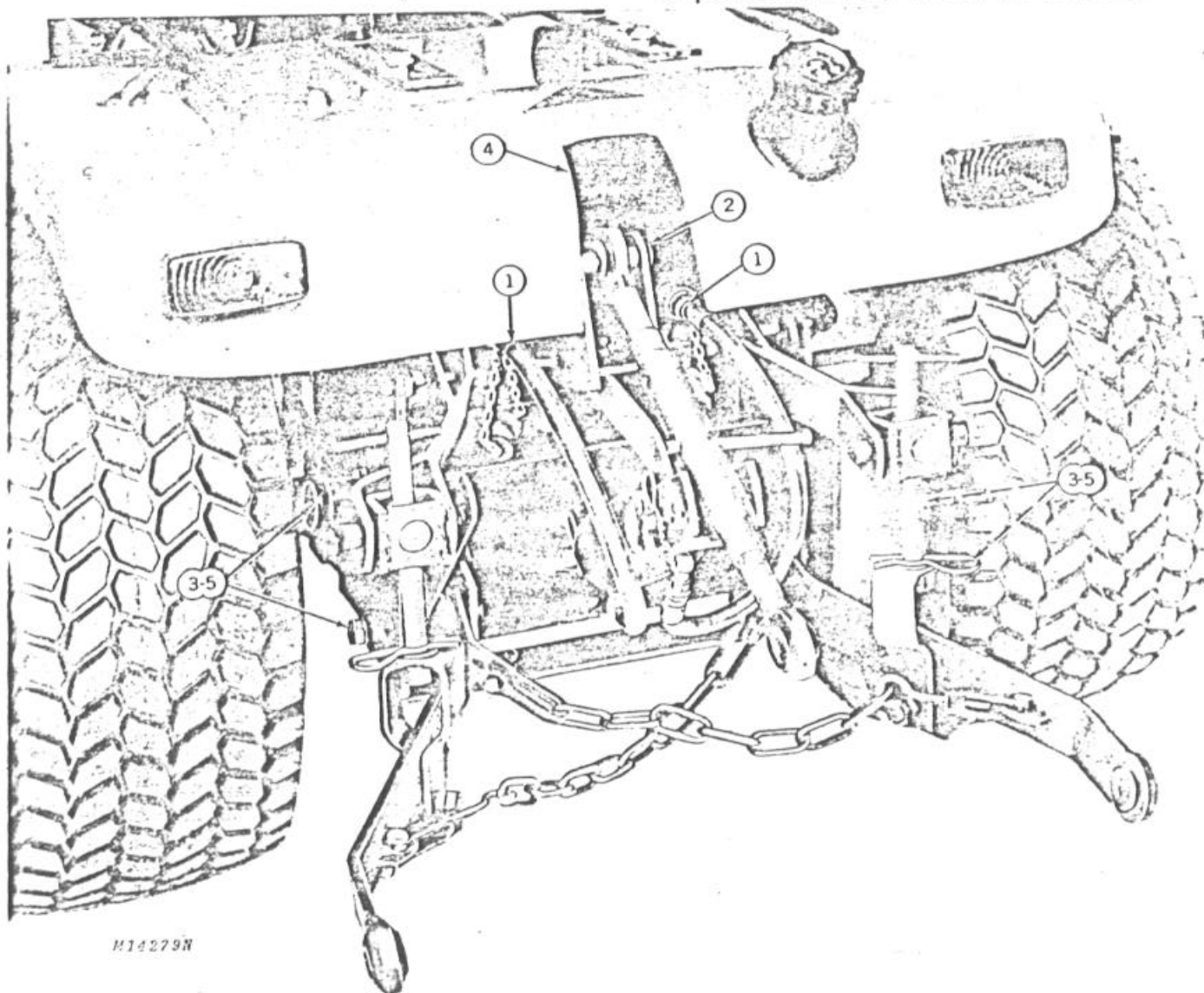
2. Remove center link by removing spring locking pin and drilled pin.

3. Pull spring-loaded pins to extracted position. Allow hitch bracket to pivot downward and lift hitch off mounting ferrules.

NOTE: Mounting ferrules need not be removed from tractor hitch plate.

4. Replace PTO cover in fender deck opening.

5. Replace spring-loaded pins to locked-in position after hitch is removed.



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