



# INSTALLATION OF AM36001 REAR HYDRAULIC CONVERSION KIT ON 140 TRACTORS



Instruction M80036

AM36001, M80036

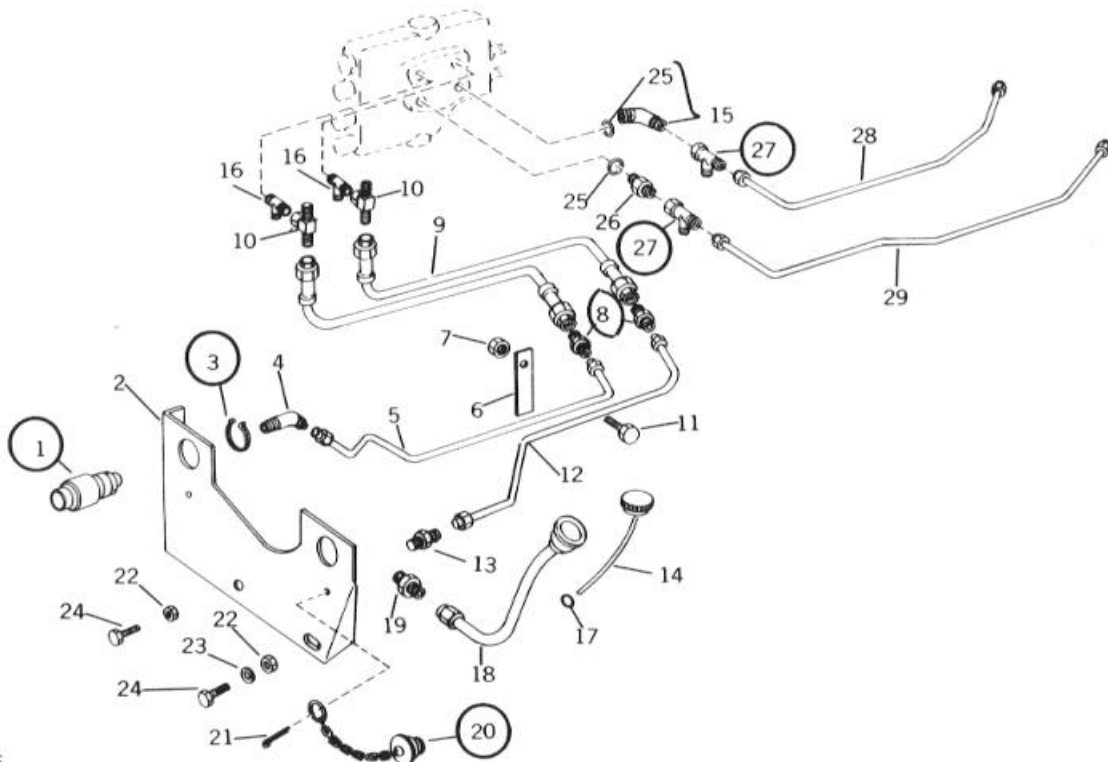
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## PARTS REQUIRED FOR INSTALLATION

When installing a rear hydraulic system on a 140 Tractor, use the AM36001 Kit, plus ten parts from the AM35852 Rear Hydraulic Kit furnished with 3-point hitch.

The parts that are required from the AM35852 ~~Conversion Kit~~ *Rear Hydraulic Kit* are shown below (key numbers circled). These parts consist of (2) female couplers, (2) coupler plugs, (2) snap rings, (2) union connectors, and (2) end swivel tees. The remaining parts of AM35852 Rear Hydraulic Kit are not used with the 140 Tractor and may be discarded after your installation is completed.

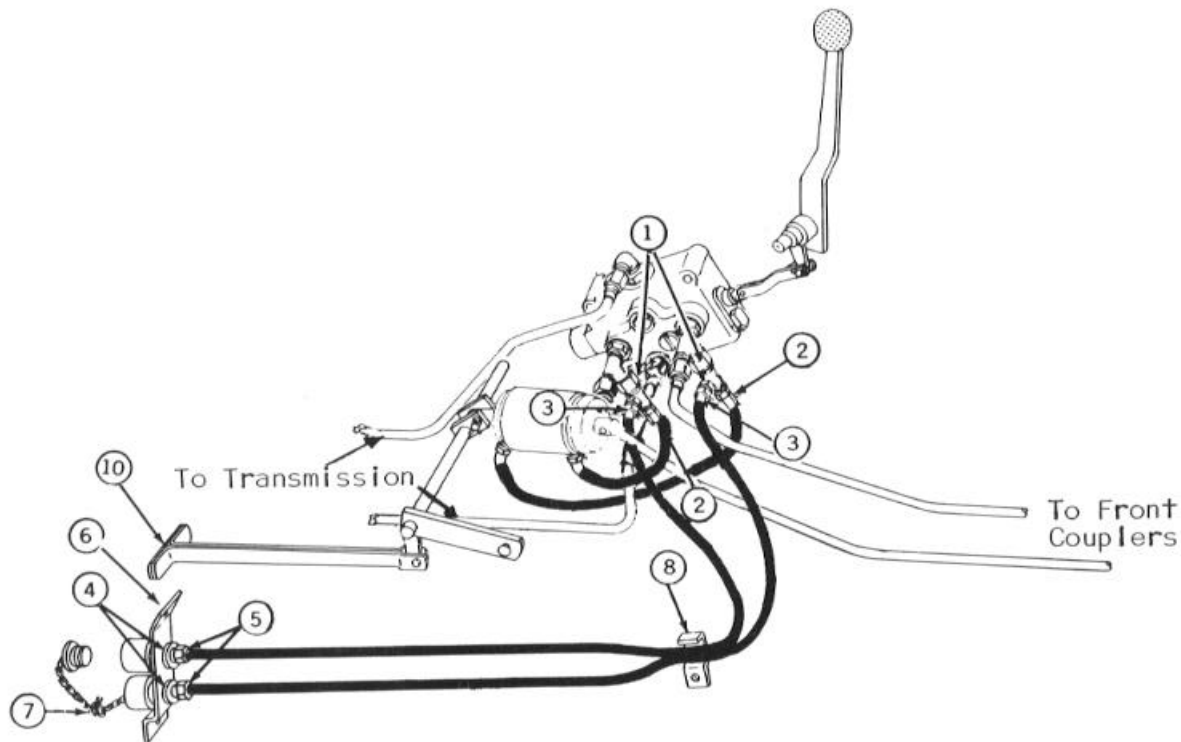


M16306

- 1 - Female Coupler (2 used)
- 3 - Snap Ring (2 used)
- 8 - Union Connectors (2 used)

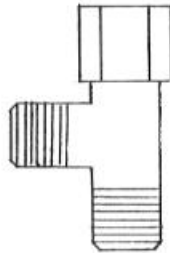
- 20 - Coupler Plugs (2 used)
- 27 - End Swivel Tees (2 used)

ASSEMBLY OF REAR HYDRAULIC SYSTEM  
ON ALL 140 TRACTORS WITH SINGLE CONTROL LEVER (H-1)



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

Install tee fittings with bushing. This is the tee fitting without the O-ring.



2. Connect cylinder oil hoses to bottom end of tee fitting as shown.

3. Connect rear hydraulic hoses to side of tee fitting.

4. Assemble couplers to rear bracket with snap rings.

5. Position oil hoses above lift shaft next to the right frame of tractor.

On tractors above serial number 30,000 route hoses below hydrostatic unit mounting brace and rear fan guard.

Connect hose from rear of valve to the top coupler and hose from front of valve to the lower coupler.

6. Assemble coupler bracket to underside of fender deck with 1/4 x 1/2 self-tapping screws installed from the outside of fender deck.

7. Assemble dust plug chains to deck with 1/8 x 1-inch cotter pin.

8. Install hose clip on front bolt of right-hand lift shaft bearing block to hold hoses against tractor frame. Be sure hoses are clear of all moving parts.

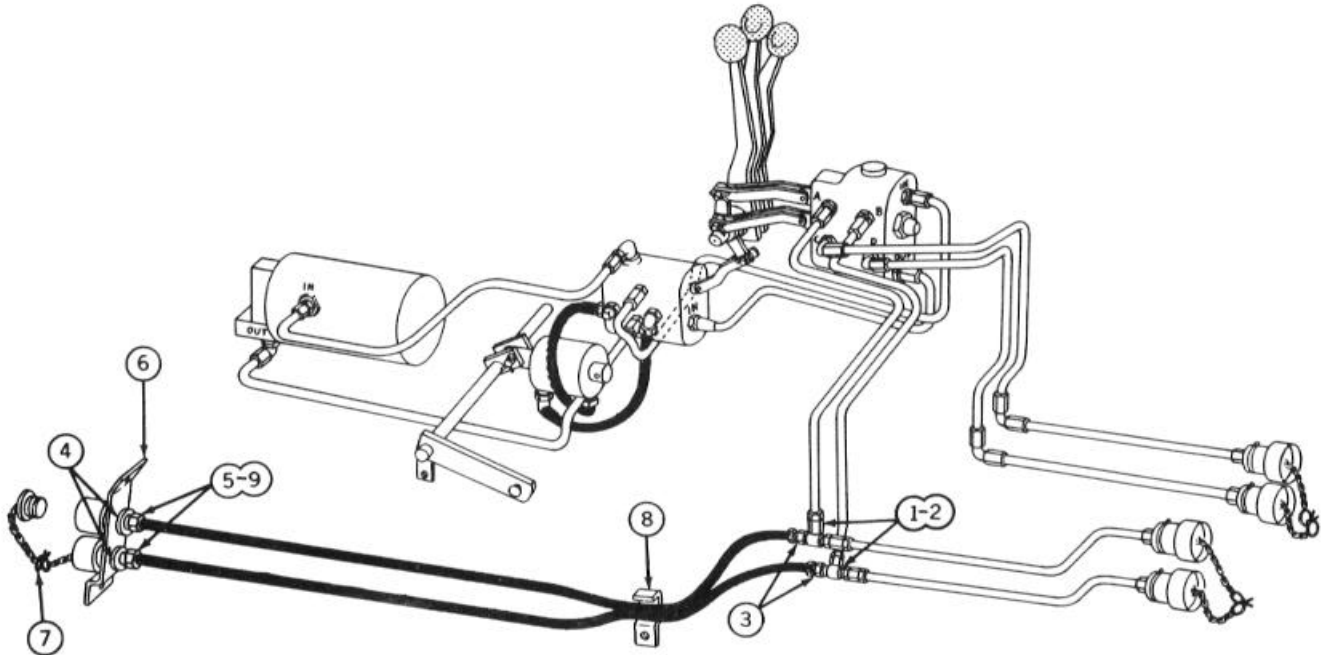
9. Start engine. Bleed air from oil lines by moving the control lever back and forth while unseating ball in each rear coupler. Check oil level in transmission with engine running and hydrostatic control lever in the neutral position. Be sure dipstick oil level is in the safe range.

10. Install cylinder lock-out link so there will be no delay in hydraulic operation of the rear circuit.

*NOTE: Delay is caused by lift cylinder using oil before the rear circuit, if link is not installed.*

ASSEMBLY OF REAR HYDRAULIC SYSTEM  
ON 140 TRACTORS WITH THREE CONTROL LEVERS (H-3)  
BELOW SERIAL NO. 10,001

See Optional Hookup on Next Page.



1. Remove elbows at the rear of the right front oil tubes and discard.

2. Install tee fittings with the bushing to the rear.

3. Connect rear oil hoses to bushings on tee fittings.

4. Assemble couplers to rear bracket with snap ring.

5. Insert hoses above lift shaft. Connect the upper hose to the upper coupler and the lower hose to the lower coupler. Keep hoses clear of transmission fan.

6. Assemble coupler bracket to inside of fender deck with 1/4 x 1/2-inch self-tapping screws.

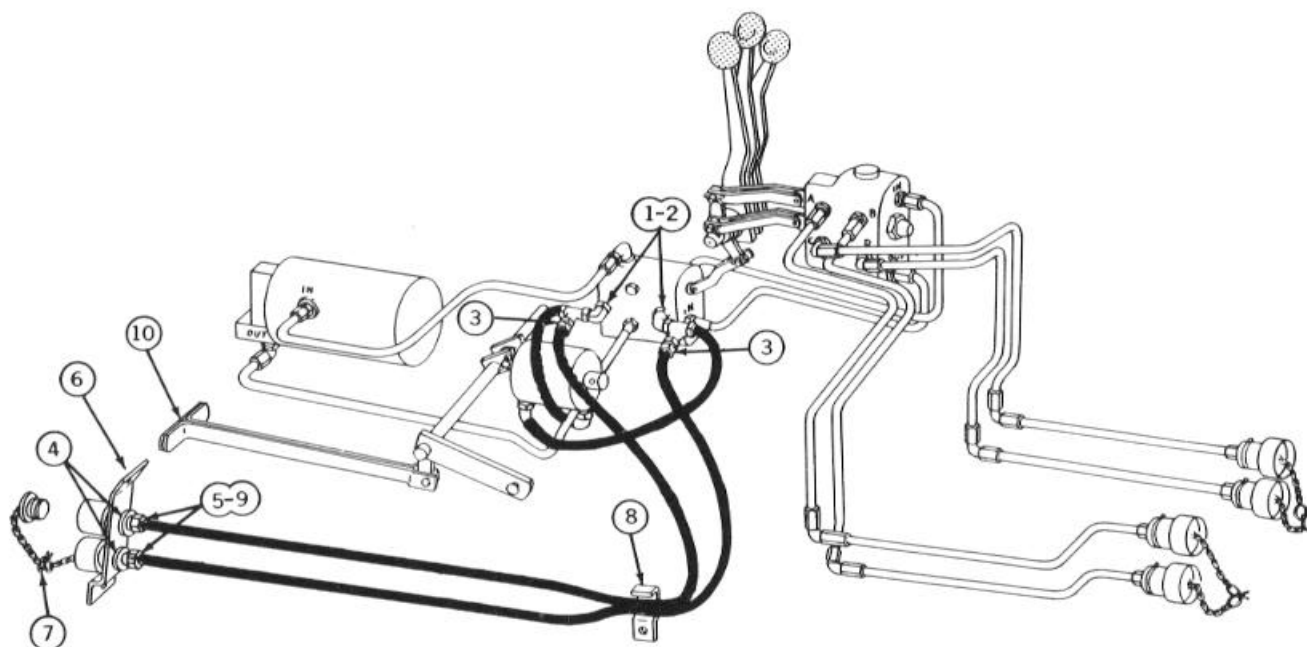
7. Assemble dust plug chains to deck with 1/8 x 1-inch cotter pin.

8. Install hose clip to front bolt of lift shaft bearing block. Be sure hoses are between clip and tractor frame.

9. Start engine. Bleed air from oil lines by moving center 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: When installed as shown above, the center lever operates the rear hydraulic system and right-hand front outlets simultaneously. If a front blade is to be used with the rear hydraulic system, connect tee fittings to the left-hand front outlets. Then the outer lever will operate the rear hydraulic system.*

OPTIONAL ASSEMBLY OF REAR HYDRAULIC SYSTEM  
ON 140 TRACTORS WITH THREE CONTROL LEVERS (H-3)  
BELOW SERIAL NO. 10,001



M 6997

If a customer desires to use the 3-Point Hitch in conjunction with a front-mounted blade, the system shown on page 3 would prove impractical as each time the blade is raised, the hitch would be activated. Using the left-hand outlets for raising the blade would provide independent operation of circuits.

However, if the front blade is to be angled hydraulically, connect rear hydraulic system as follows:

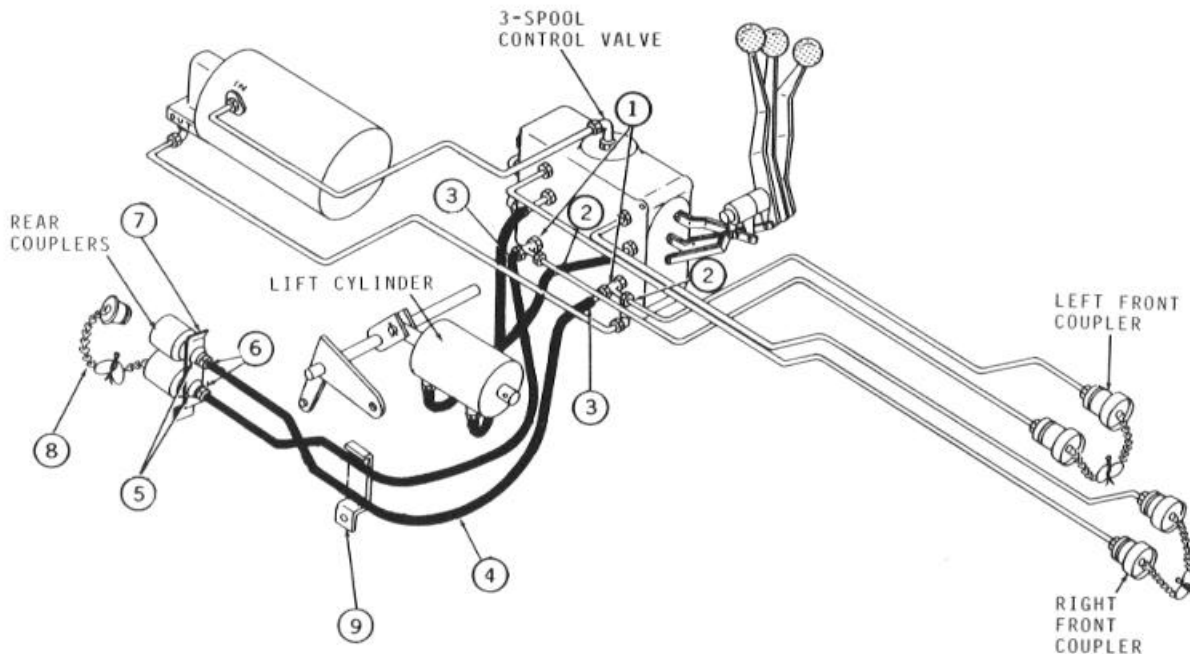
1. Remove hoses from valve to cylinder.
2. Install tee fittings in ports from which hoses were removed.
3. Connect rear oil hoses to tee fittings. Install cylinder hoses as in No. 1 above.
4. Assemble couplers to rear bracket with snap ring.
5. Insert rear hoses above lift shaft. Connect the hose from the rear valve tee to the upper coupler and the hose from the front valve tee to the lower coupler. Keep hoses clear of transmission fan.
6. Assemble coupler bracket to inside of fender deck with 1/4 x 1/2-inch self-tapping screws.
7. Assemble dust plug chains to deck with 1/8 x 1-inch cotter pin.
8. Install hose clip to front bolt of lift shaft bearing block. Be sure hoses are between clip and tractor frame.
9. Start engine. Bleed air from oil lines by moving inner 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.
10. Install cylinder lock-out link so there will be no delay in hydraulic operation of the rear circuit.

*NOTE: Delay is caused by lift cylinder using oil before the rear circuit, if link is not installed.*

*NOTE: When installed in the manner shown above, the inner lever operates the rear hydraulic system.*

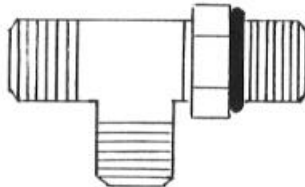
ASSEMBLY OF REAR HYDRAULIC SYSTEM  
ON 140 TRACTORS WITH THREE CONTROL LEVERS (H-3)  
ABOVE SERIAL NO. 10,000

See Optional Hookup on Next Page.



1. Remove two left front hydraulic lines from lower elbows on control valve. Remove elbows from control valve body.

Install tee fittings (with O-ring) into lower ports.



*NOTE: It may be necessary to temporarily remove cylinder hoses and center connectors from control valve prior to installing tee fittings into lower ports.*

*NOTE: If hydraulically angled center blade is to be used with 3-point hitch, connect tees in upper ports instead of lower ports. Attach rear hydraulic lines and right front couplers to upper tees.*

2. Connect lower hydraulic lines to tee fittings.

3. Connect rear hoses to tee fittings.

4. Position hoses above lift shaft next to right frame of tractor. On tractors above serial number 30,000, route hoses below hydrostatic unit mounting brace and rear fan guard.

5. Attach couplers to bracket with snap rings.

6. Connect hose from front tee fitting to upper coupler. Connect hose from rear tee fitting to lower coupler.

7. Remove snap plugs from rear of fender deck. Assemble coupler bracket to underside of fender deck with 1/4 x 1/2 self-tapping screws installed from the outside of fender deck.

8. Assemble dust plug chains to deck with 1/2 x 1-inch cotter pin.

9. Install hose clip on front bolt of right-hand lift shaft bearing block to hold hoses against tractor frame. Be sure hoses are clear of all moving parts.

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: Inner lever operates rockshaft lift cylinder; center lever, the right front couplers, and outer lever, the left front couplers and rear circuit.*

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- When this method is used in hooking up the rear hydraulic system, the inner hydraulic lever operates the hitch, the center operates the right-hand couplers, and the outer lever, the left-hand couplers.