

ASSEMBLY & INSTALLATION INSTRUCTIONS

TRACTOR PREPARATION



CAUTION: ALWAYS WEAR SAFETY GOGGLES WHEN SERVICING THE TRACTOR/LOADER.

IMPORTANT: Before the loader is installed on the tractor, it is recommended that inner tubes be installed in the front tires on the tractor.

- Before proceeding with B1630 Loader assembly, make sure the proper mount kit is with the tractor. See APPLICATION IN INTRODUCTION.
1. Prior to loader installation, all chassis mounted implements must be removed from the tractor. If the MID PTO TRACTOR is already equipped with a mid-mount mower, only the mower itself should be removed.
 2. Locate the tractor on a firm level surface, with the engine shut off and the brakes locked. The tractor can remain on its own tires for the entire loader installation.
 3. If the tractor is equipped with power steering, disconnect the cylinder and drag link from the tractor. DO NOT DISCONNECT the hoses from the power steering cylinder.

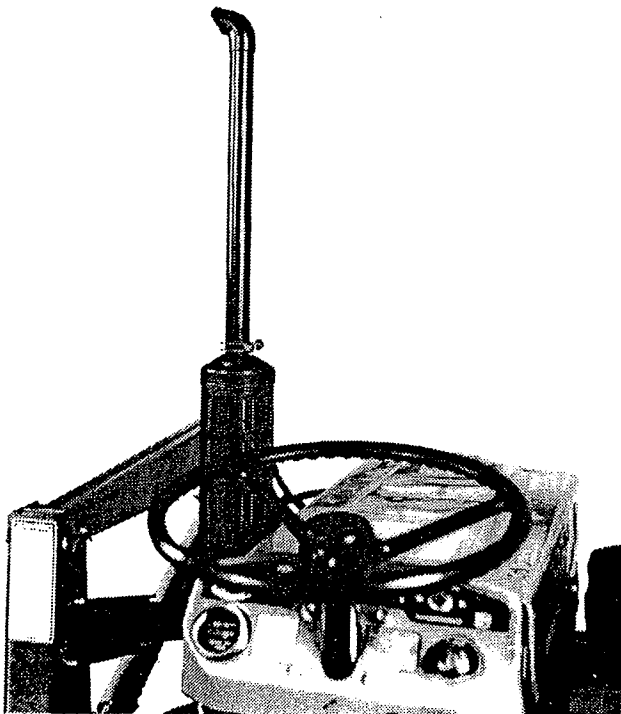


FIGURE TWO

4. Remove the muffler and reposition it vertically. An optional exhaust extension is recommended. Optional extension part numbers are as follows.

100 Series Tractors: 66711-82511

200 Series Tractors: 67800-53410

Point the extension opening toward the left side, away from the tractor.

PRE-ASSEMBLY NOTES



CAUTION: ONLY ALLOW TRAINED PERSONNEL TO OPERATE OR SERVICE THIS EQUIPMENT. KNOW AND UNDERSTAND ALL PRECAUTIONS BEFORE SERVICE OR OPERATION. ALSO READ AND UNDERSTAND ALL PRECAUTIONS FOUND IN THE TRACTOR AND LOADER MANUALS.

1. The Rigid Mount and the Quick Attach Loaders have been specifically designed to mount on "B" Series Kubota Tractors. See APPLICATION, under INTRODUCTION before proceeding with installation.
2. Remove all loader components, hydraulic items, and hardware from their cartons. Make sure all parts are included, according to their packing lists, before beginning assembly.
3. Keep all hydraulic components clean and free of dirt during handling and assembly. Contamination could quickly damage close fitting tractor and loader hydraulic components.

B1630 MOUNTING INSTRUCTIONS

IMPORTANT: See the Reference Drawings for the slight differences in sub-frame components, for the mount kit being installed.

- DO NOT TIGHTEN any fastening hardware until instructions are given.
1. Remove three M12 x 1.75 x 50 bolts from the forward vertical edge of each rear axle case, into the differential case, and discard. Install each rear mounting bracket to the axle case and loosely fasten with new M12 x 1.75 x 60 bolts and lock-washers.

NOTE: If oil seeps out of the axle cases or bolt holes, these bolts may be tightened enough to stop the oil leak. However, torque should not exceed 25 ft. lbs. (35 N•m) for now.

2. GEAR TRACTORS. Install the belly brace to the tractor frame, just forward of the transmission, and loosely fasten with four M10 x 1.25 x 30 bolts and lockwashers, provided.

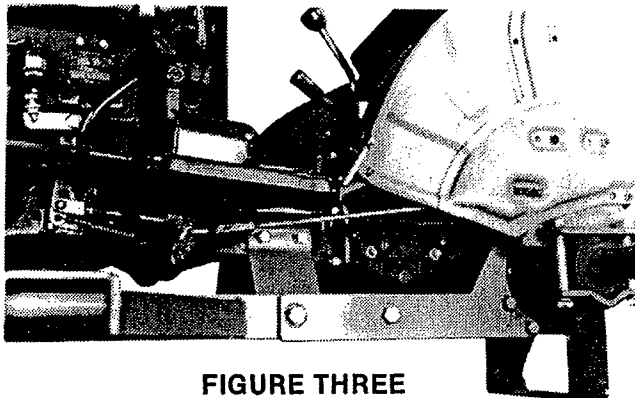


FIGURE THREE

3. HST TRACTORS. Install both support brackets to the HST tunnel sides, just rearward of the foot platform brackets, and loosely fasten with M10 x 1.25 x 30 bolts and lockwashers. See figure #4 for side bracket identification.

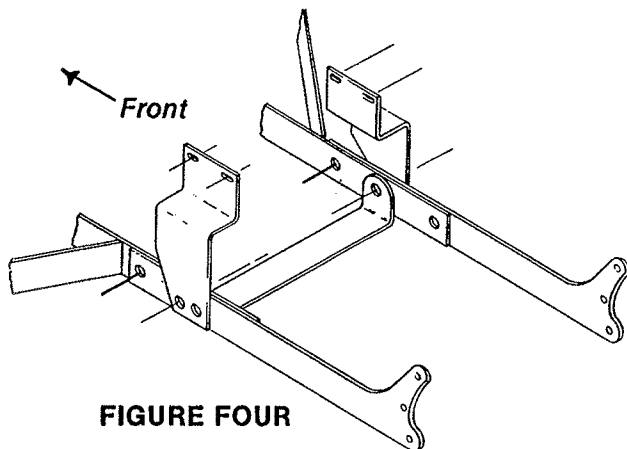


FIGURE FOUR

4. Remove three M10 bolts, as shown in figure #5 or #6, from the lower edge of each engine side rail. Raise the loader sub frame into position, align with the side rail holes, and loosely fasten thru the forward most holes with M10 x 1.25 x 35 bolts and lockwashers.

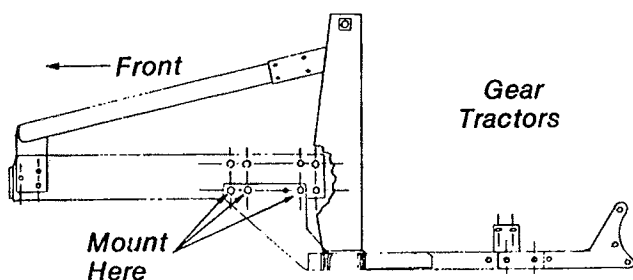


FIGURE FIVE

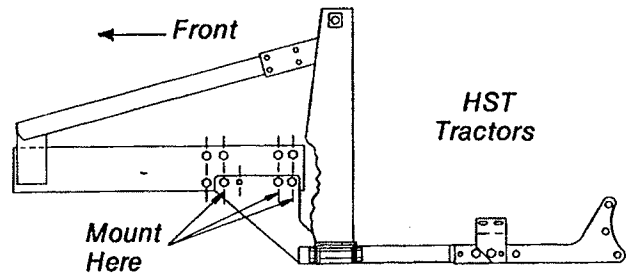


FIGURE SIX

5. Swing the sub frame up at the rear and loosely fasten thru the corresponding holes in the belly brace and rear mount brackets with 5/8-11 x 1-1/2 bolts, lockwashers and nuts.

NOTE: If the tractor is equipped with POWER STEERING, skip step #6.

6. Loosely install the remaining M10 x 1.25 x 35 bolts and lockwashers in all remaining holes thru the front of the sub frame, into the engine side rails.

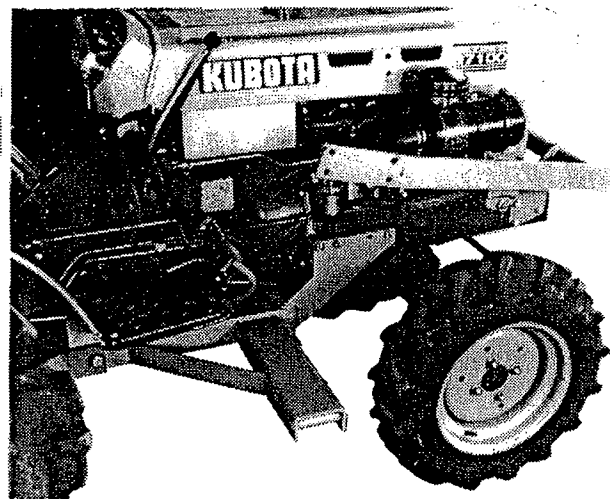


FIGURE SEVEN

7. POWER STEERING EQUIPPED TRACTORS. Loosely install three M10 x 1.25 x 35 bolts and lockwashers thru the right side of the sub frame, into the right engine side rail. Install two or three square spacers, depending on mount kit application, under the steering cylinder mount, and loosely fasten to and thru the left side of the sub frame with four M10 x 1.25 x 40 bolts and lockwashers. Reconnect the power steering cylinder and drag link.

8. Place the front upright support bracket into position on the front tractor frame. The air inlet screen will have to be removed from the 100 Series HST Tractor, for clearance. The upright support must be lowered into place on the tractor to clear the front cross frame edges. Loosely fasten with M12 x 1.25 x 35 bolts and lockwashers.

- Stand both uprights on the sub frame and insert two 5/8-11 x 6 bolts thru each upright base, thru the sub frame, and loosely fasten with 5/8 inch lockwashers and nuts.

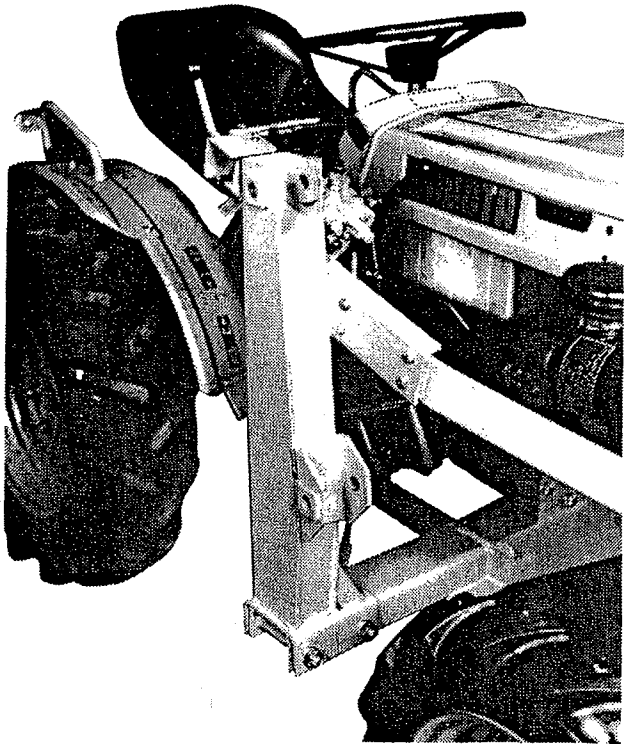


FIGURE EIGHT

- Loosely fasten each upright to the front support with 3/8-16 x 1-1/4 bolts, lockwashers and nuts.

NOTE: All pivot pins on the loader are installed from the outside, with the hairpin clips to the inside of the loader lift frame.

- Lower the loader lift frame assembly into place on the uprights and fasten both sides with a pivot pin and hairpin clip.

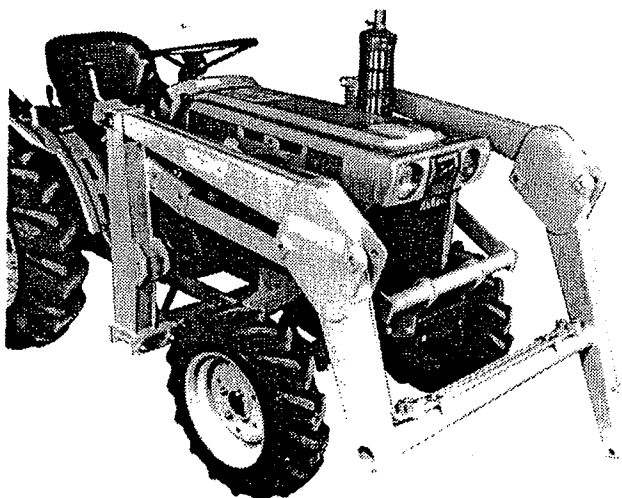


FIGURE NINE

- Torque the M12 x 1.75 x 60 bolts, thru the rear mounting brackets, into the axle case/differential to 57-67 ft. lbs. (78-90 N•m). This torque value **MUST BE FOLLOWED**, or the aluminum differential case threads may be stripped out.
- Tighten all other loose fasteners, working front to rear along the sub frame. Follow the specifications for bolt size found on the Torque Tightening Chart. Tighten the 3/8 inch fasteners, thru the upright, last.

IMPORTANT: For simple identification, the lift cylinders have 1-1/8 inch diameter rods and the bucket cylinders have one inch diameter rods. Make sure the cylinders are used in their correct locations on the loader.

- Install the lift cylinders with the base end, lube fitting **down**, into the kneeplates, and retain with a pivot pin and hairpin clip. Fasten the rod end to the upright bracket, lube fitting **up**, and retain with a pivot pin and hairpin clip.
- Install the base end of each bucket cylinder to the kneeplates with the lube fitting **up**, and retain with a pivot pin and hairpin clip. Install the bucket level indicator tube, short end **up**, on the right bucket cylinder pivot pin, before installing the hairpin clip.

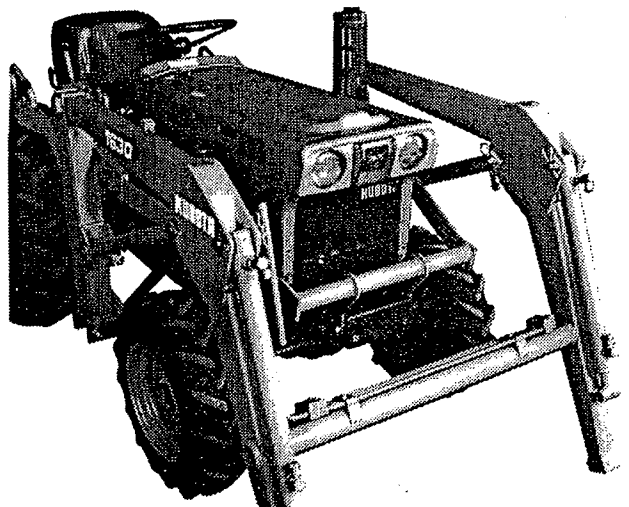


FIGURE TEN

- Install the loader bucket with the remaining pivot pins and hairpin clips. Connect the rod end of the bucket cylinder to the bucket with the lube fitting **up**.
- Slide the bucket level indicator rod thru the bottom of the tube, installed in step #15. Place the lower end of the rod into the bracket on the bucket, and fasten in place with a 1/8 inch cotter pin.

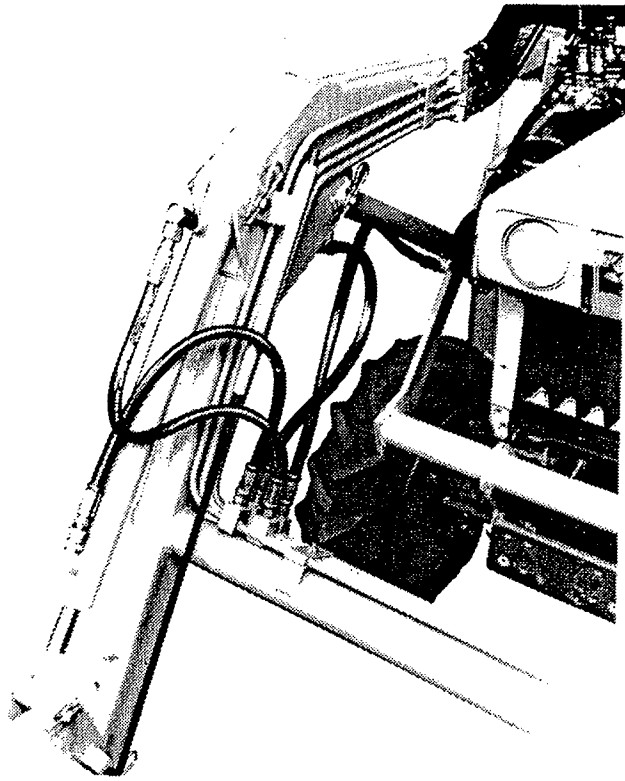


FIGURE ELEVEN

18. The level indicator rod will be long, in relation to the tube, when the bucket is level. Either paint the extended portion, or trim the tube and bracket as shown below.

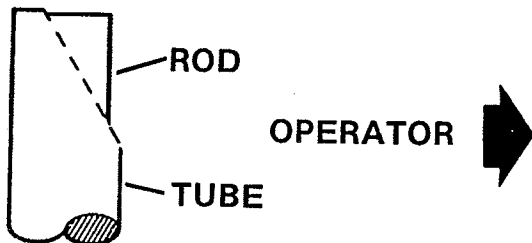


FIGURE TWELVE

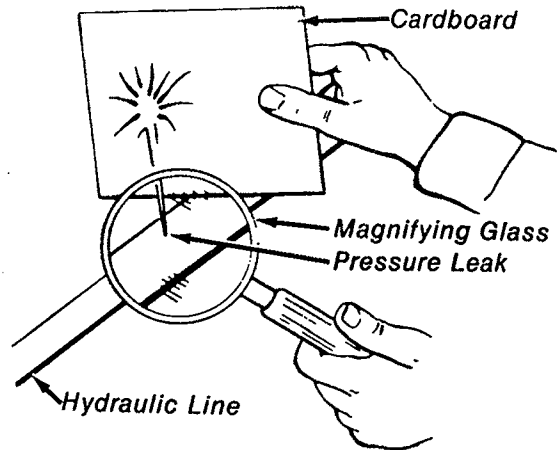
19. If the radiator air inlet screen was removed, it should now be replaced.

B1630 HYDRAULIC CONNECTIONS

IMPORTANT: For correct hydraulic connections, see figures #15 #16. Illustrations and instructions should be closely followed, or control valve or tractor hydraulic pump damage **WILL** result.



WARNING: ESCAPING HYDRAULIC FLUID UNDER PRESSURE CAN HAVE SUFFICIENT FORCE TO PENETRATE THE SKIN, CAUSING SERIOUS PERSONAL INJURY. BEFORE APPLYING PRESSURE TO THE SYSTEM, MAKE SURE ALL CONNECTIONS ARE TIGHTENED AND THAT LINES, PIPES AND HOSES ARE NOT DAMAGED.



FLUID ESCAPING FROM PIN HOLES MAY BE INVISIBLE. DO NOT USE HANDS TO SEARCH FOR SUSPECTED LEAKS. INSTEAD, USE A PIECE OF CARDBOARD AND WEAR PROTECTIVE GOGGLES. IF INJURED BY ESCAPING FLUID, SEE A MEDICAL DOCTOR AT ONCE. SERIOUS INFECTION OR REACTION MAY RESULT IF PROPER MEDICAL TREATMENT IS NOT ADMINISTERED IMMEDIATELY.

NOTE: If the loader is being installed on a 100 Series Tractor, and the oil delivery line does not have a diverter block, replace the line with the new line and block from the mounting kit. Use **new** copper gaskets supplied in the kit.

- KUBOTA recommends the use of a high quality thread sealant, suitable for use with hydraulic oil, on certain pipe thread connections. Do not use thread sealant unless called for.
- Instructions that follow, divide the 100 and 200 Series hydraulic connections. Be sure to follow the correct instructions.

100 SERIES HYDRAULIC CONNECTIONS

1. Remove the cover plate from the diverter block on the oil delivery line. Using new metric hardware, and new o-rings, supplied, replace the cover with the diverter cover supplied with the hydraulic kit.

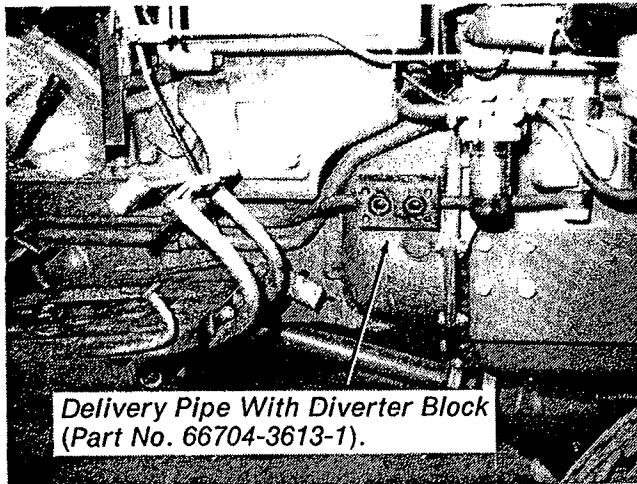


FIGURE THIRTEEN

2. Install the short 90° swivel fitting, with thread sealant, into the rear port of the diverter cover, and tighten so it points straight up.
3. Install the long 90° swivel fitting, with thread sealant, into the front port of the diverter cover, and tighten so it points straight up.
4. Remove the 1/4 inch fastener from the upper outside control valve mount and loosen the lower 1/4 inch fastener. Move the valve, on its mount, sufficiently to allow clearance to install a 90° o-ring fitting in the power beyond ("PB") port in the control valve. Refasten the valve to its mount and tighten the fitting so it points straight down.
5. Install another 90° o-ring fitting in the "IN" port of the control valve and tighten so it points forward.
6. Install one 3/8 x 24 inch hose from the long fitting in the forward port of the diverter cover, to the "IN" port fitting on the control valve, and tighten.
7. Install the other 3/8 x 24 inch hose from the short fitting in the rear port of the diverter cover, to the "PB" fitting on the control valve, and tighten.

NOTE: Continue 100 Series hydraulic connections with step #8 on page #14.

200 SERIES HYDRAULIC CONNECTIONS

1. Remove both plugs from the side ports in the hydraulic selector block, located on the right side of the tractor. Install new fittings and o-rings from the mounting kit into the ports on the selector block.
2. Rotate the selector lever to loader operation, as shown in figure #14, so it points toward the fittings just installed.

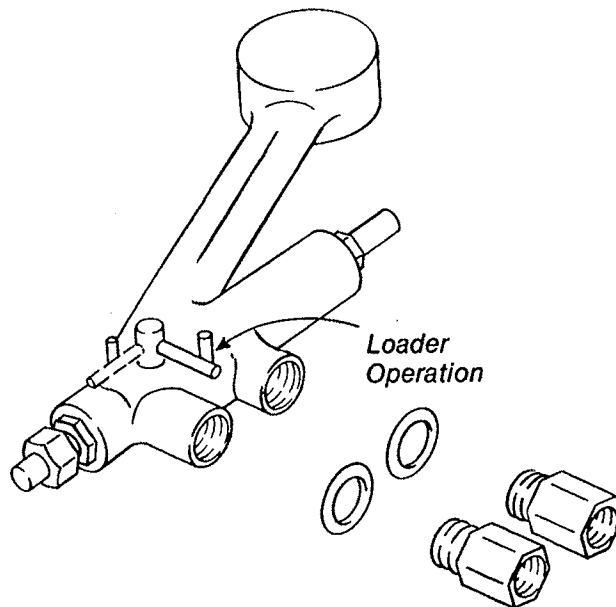


FIGURE FOURTEEN

3. Remove the 1/4 inch fastener from the upper outside control valve mount and loosen the lower 1/4 inch fastener. Move the valve, on its mount, sufficiently to allow clearance to install one 90° o-ring fitting in the power beyond ("PB") port in the control valve. Refasten the valve to its mount and tighten the fitting so it points straight down.
4. Install another 90° o-ring fitting in the "IN" port of the control valve and tighten so it points forward.
5. Install two 3/8 x 24 inch hoses, with thread sealant, into the side port fittings on the tractor selector valve.
6. Install the forward most 24 inch hose on the selector block to the "IN" port fitting on the valve, and the rear 24" hose to the "PB" port fitting on the valve. Tighten both hoses.
7. Double check and make sure all hoses and fittings installed to this point are tight, and the flow selector lever is rotated to loader operation.

NOTE: 200 Series Tractors, equipped with power steering do not require the use of the carryover oil fitting from the mounting kit.

B1630 LOADER HYDRAULIC CONNECTIONS

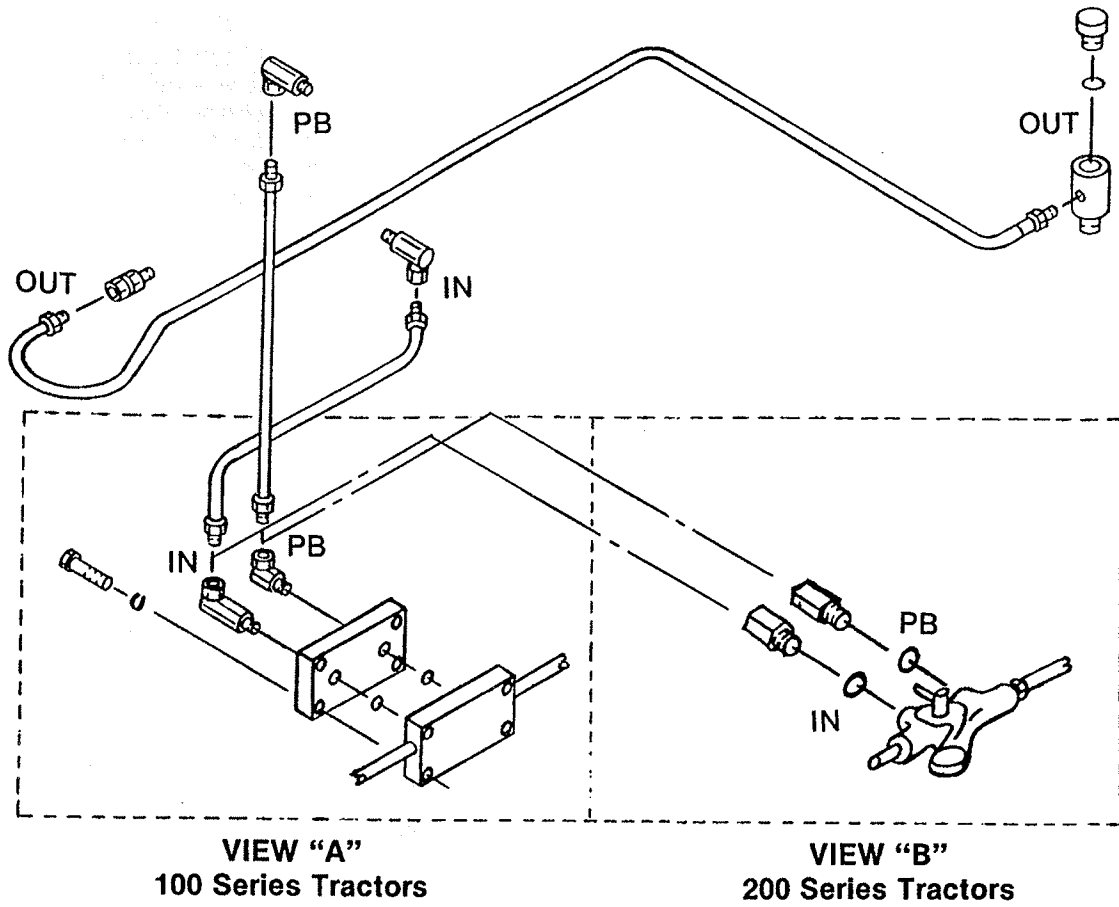


FIGURE FIFTEEN

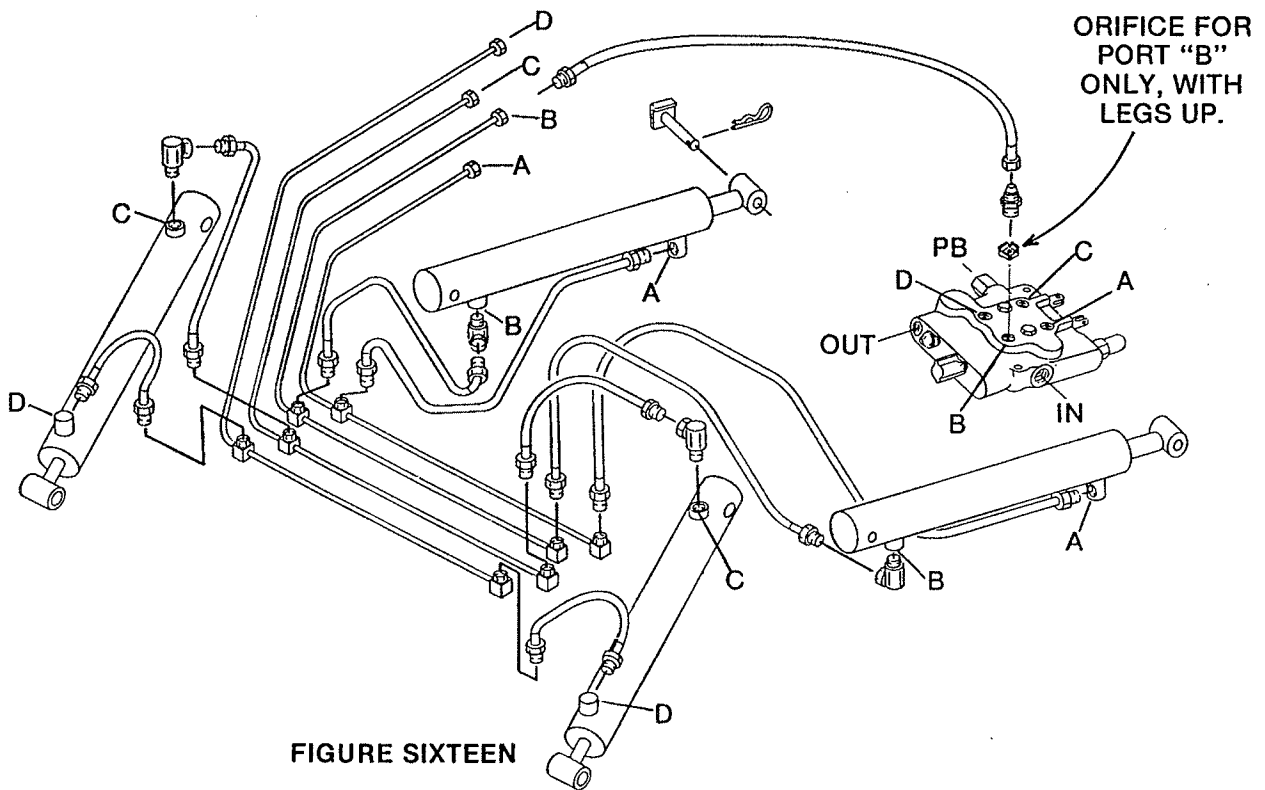


FIGURE SIXTEEN