

9616238  
BUNDLE 2-5524  
LOADER MOUNTING KIT INSTRUCTIONS  
FOR FORD 5610, 6610 & 7610 FWD TRACTORS

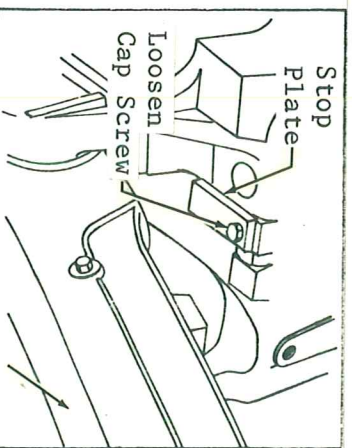
**NOTE:** The installation of this mounting kit may impose restrictions, depending on the model of the front axle, on the usable front axle oscillation and the size of front tires which may be used. If the tractor is equipped with Carraro front axle (Model 709-19 or 709-19S2), which can be distinguished by the Ford oval on the outer hubs, the tractor must be equipped with 13.6-24 or smaller front tires and the adjustment for front axle oscillation must be set to limit axle tilt to 8-1/2° (instructions below). For "ZF" axles, (Model ZFAPL335 or ZFAPL345), which will not have Ford ovals on the outer hubs but are identifiable by the wheel universal joints which are visible from front of tractor when steering straight, the existing axle geometry limits the oscillation sufficiently and front tires as large as 14.9-24 may be used.

The mounting brackets can be installed on the tractor and loader using tools ordinarily available. Shut off the tractor engine and engage tractor brakes during installation.

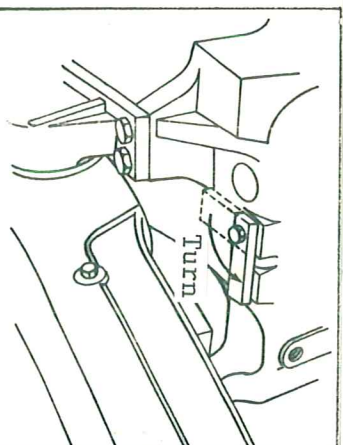
**NOTE:** Unless otherwise specified, leave all attaching hardware loose until loader mounting bracket installation is complete to facilitate assembly and proper alignment of mounting brackets.

Before installing the loader mounting kit, first remove headlights with headlight brackets, front fenders, and front weights with weight brackets if they are present.

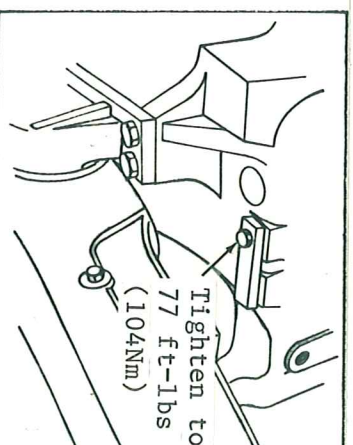
If the tractor is equipped with a Carraro front axle (Ford oval on outer hub), it is necessary to position axle oscillation stop plates to limit axle tilt to 8-1/2°. Check to make sure that the stop plates are in position approximately parallel to the side of the tractor. If they are not, loosen the cap screws which fasten them sufficiently so the plates can swing clear of the locating ribs, then reposition stop plates and tighten cap screws to 77 ft lbs. (104Nm).



Stop Plate Position For 12°  
(Not compatible with  
loader mounting)



Reposition Stop Plate



Stop Plate In Correct  
Position (8-1/2° axle  
oscillation)

## INSTALLING MOUNTING BRACKETS

1. If the tractor has air conditioning lines with quick couplers in the left mid mount area, it will be necessary to remove and relocate the air conditioning lines and their support bracket. Relocate the largest air conditioning line below the bottom tractor hydraulic line. Use three tie straps (18) to secure the air conditioning coupler to the hydraulic lines, underneath the bottom hydraulic coupler. Temporarily restrain the small air conditioning lines above the tractor upper mid mounting pad.

**NOTE:** The air conditioning quick couplers may have to be loosened to achieve correct hose orientation.



**CAUTION:** Avoid contact with leaking coolant and use care to keep coolant from escaping. Although each air conditioning quick coupler has a check valve to prevent leakage when disconnected, they can leak. If air conditioning lines or couplers leak coolant when loosened, reconnect or retighten them and have your dealer pump the coolant from the system before continuing.

2. Fasten front mounting bracket (1) to the tractor front casting using 3/4 x 2 cap screws (9) and lock washers (12) in the front holes, and 3/4 x 2 cap screws (9), lock washers (12) and flat washers (13) in side holes
3. Fasten right mid mounting bracket (3) to right side of tractor transmission casting using 3/4 x 1-1/2 cap screws (10), lock washers (12) and flat washers (13) for holes in upper pad, and 3/4 x 1-1/2 cap screws (10) and lock washers (12) in holes in lower pad. Positioning spacers (6) between tractor front casting and front-most holes of right mid mounting bracket (3), fasten bracket and spacers to tractor using 3/4 x 2-3/4 cap screws (7), lock washers (12) and flat washers (13).

**NOTE:** It may be necessary to trim the cover for the drive shaft for the front wheel assist to provide clearance for right mid mounting bracket (3), and also for left mid mounting bracket (2) and mid crosstie plate (4): see figure 2.

4. Slide mid crosstie plate (4) into channel of right mid mounting bracket (3) from left side of tractor and loosely fasten to right mid mounting bracket (3) using a 3/4 x 2 cap screw (9) and lock nut (15). Loosely fasten one 3/4 x 2-1/2 cap screw (8) with lock washer (12) through mid crosstie plate (4) and right mid mounting bracket (3) into underside of tractor transmission casting.
5. Positioning spacers (6) between left mid mounting bracket (2) and tractor at upper transmission casting pad and at tractor front casting, fasten bracket and spacers to tractor using 3/4 x 2-1/2 cap screws (8), lock washers (12) and flat washers (13) in upper pad, 3/4 x 1-1/2 cap screws (10) and lock washers (12) in lower pad, and 3/4 x 2-3/4 cap screws (7), lock washers (12) and flat washers (13) in front casting. If tractor has repositioned air conditioning lines, fasten air conditioning bracket (17) to outside of mid mounting bracket (2) at front hole in upper pad with coupler support away from tractor and secure the air conditioning coupler to bracket using original equipment lock nut.
6. Fasten left mid mounting bracket (2) to to mid crosstie plate (4) using a 3/4 x 2 cap screw (9) and lock nut (15). Fasten remaining 3/4 x 2-1/2 cap screw (8) and lock washer (12) through mid crosstie plate (4) and left mid mounting bracket (2) into underside of transmission casting.

## INSTALLING MOUNTING BRACKETS (Continued)

7. When all mounting brackets have been installed, tighten all hardware to the torques specified in the table in the SPECIFICATIONS section of the loader operator's manual.

## INSTALLING LOADER TO MOUNTING BRACKETS (FOR LOADER PUMBED TO TRACTOR VALVE)

1. Attach front support bracket (5) to loader side frame channels with 5/8 x 1-3/4 cap screws (11), flat washers (14) and lock nuts (16).

**NOTE:** Use the set of holes in the loader side frame channel which place the front support bracket (5) as far rearward as possible.

2. Remove and save bucket level indicator with attaching hardware from loader. Attach a nylon sling around the loader front bumper and use an overhead hoist to raise the loader off shipping skids.

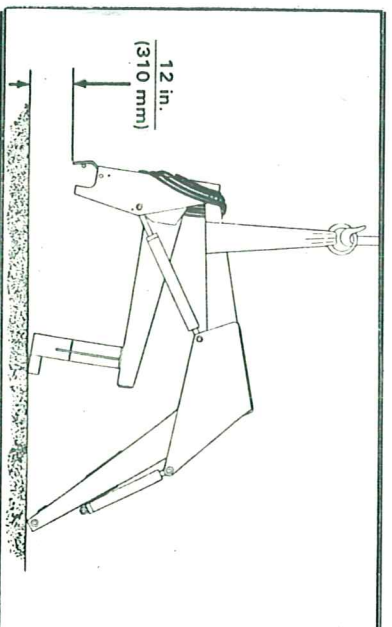


**WARNING:** To avoid injury during installation, do not permit bystanders within 10 feet of loader.

3. Swing hinges open as wide as possible and place 3/4 x 3-1/2 cap screw into hole in each side frame upright to block hinges open.
4. Lower loader to a horizontal position on the ground and disconnect from overhead hoist.
5. Connect the four hoses supplied with the hose kit onto boom oil lines, starting with the bottom oil line tube and working up. Install quick couplers (not supplied with loader) onto free ends of hoses.

**NOTE:** Apply sealant to all tapered threads except when coupled with swivel adapters. When using teflon tape, wrap tape clockwise (as viewed from end) and wrap tape only twice, keeping tape away from the first two threads of tapered end to prevent contamination of hydraulic fluid.

6. Attach nylon slings around both boom arms near side frame uprights. Raise side frame uprights approximately one foot (310 mm) off ground.



7. Start the tractor engine, release tractor brakes and back tractor up to loader. Plug couplers into tractor remote hydraulic couplers.

**INSTALLING LOADER TO MOUNTING BRACKETS (FOR LOADER PLUMBED TO TRACTOR VALVE)**  
(continued)

**NOTE:** When plugging couplers into tractor remote hydraulic couplers, make sure the hoses for the lift cylinders are connected to the two #1 remote couplers (color coded blue on tractors with cab) and hoses for the bucket cylinders are connected to the two #2 remote couplers (color coded green on tractors with cab).

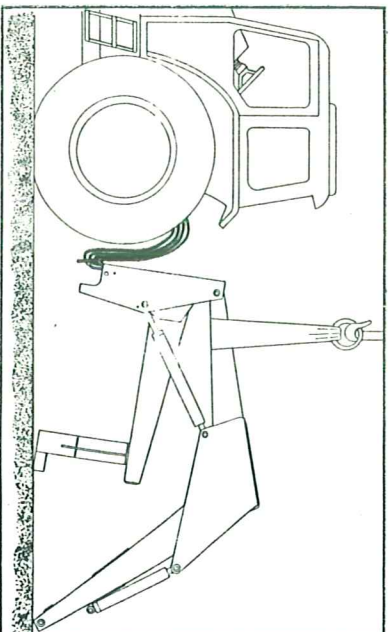


**WARNING:** Escaping hydraulic fluid under pressure can penetrate the skin causing serious injury.

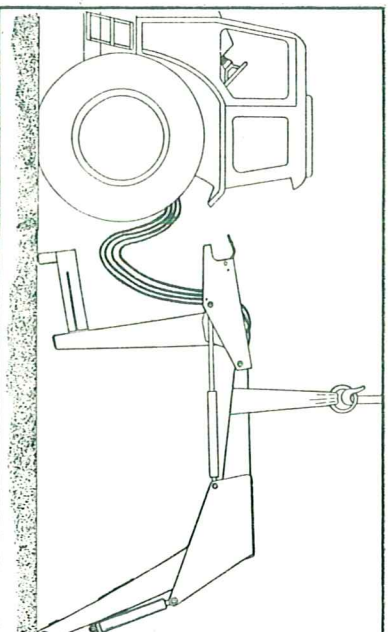
- **DO NOT** use your hand to check for leaks. Use a piece of cardboard or paper to search for leaks.
- Stop engine and relieve pressure before connecting or disconnecting lines.
- Tighten all connections before starting engine or pressurizing lines.

If any fluid is injected into the skin, obtain medical attention immediately or gangrene may result.

**IMPORTANT:** Check tractor remote control valve for proper detent operation before connecting loader quick couplers to tractor hydraulics. See REMOTE CONTROL VALVE DETENT CONVERSION section of loader operator's manual for instructions.

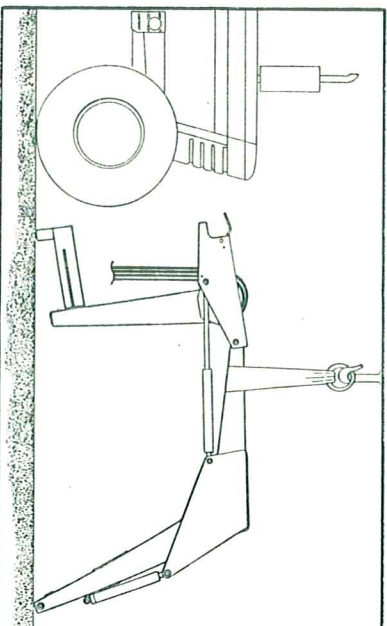


8. Activate valve to extend lift cylinder to full length, then shut off the tractor engine and engage tractor brakes.



**INSTALLING LOADER TO MOUNTING BRACKETS (FOR LOADER PLUMBED TO TRACTOR VALVE)**  
**(continued)**

9. Lower loader to the ground and remove overhead hoist. Move lift and bucket control levers back and forth several times to relieve pressure on the lift and bucket cylinders, then disconnect quick couplers from the tractor remote hydraulic couplers.



10. Start tractor engine, release tractor brakes and turn tractor around. Slowly drive tractor into loader until hoses will reach from loader to tractor. Engage tractor brakes and shut off tractor engine.
11. Connect quick couplers between tractor and loader.
12. Start tractor engine and release tractor brakes. Slowly drive tractor forward while activating lift control lever to retract lift cylinders. Position tractor so hinges hook mid mounting bracket tubes as loader side frame rotates.

**NOTE:** On tractor models equipped with cab, observe clearance between loader side frame upright and fuel tank when mounting loader.

13. Put the tractor in neutral. Retract the lift cylinders bringing side frame channels up so front support bracket tube contacts front mounting bracket channel. Move the tractor ahead so front support bracket tube engages in front mounting bracket channel and loader side frame uprights seat properly on mid mounting bracket tubes (with no gap between upright cut-out and front of tube). Engage tractor brakes and shut off tractor engine.
14. Remove 3/4 x 3-1/2 cap screw from hole in each side frame upright and clamp hinges around mid mounting tubes. Fasten hinges shut with 3/4 x 3-1/2 cap screws, washers and lock nuts.
15. Wrap one end of rubber strap (supplied with hose kit) around the 1/2" hoses and hook back onto itself. Position rubber strap about 44 inches away from boom oil line tubes. Attach other end of rubber strap to loader front support bracket.
16. Loosely attach hoses together with one reusable tie strap. On tractors with cabs, loosely attach hoses to the foot rest platform with remaining reusable tie strap. On tractors with cabs, attach hoses to the tractor step or front cab mounting with remaining reusable tie strap.

**INSTALLING LOADER TO MOUNTING BRACKETS (FOR LOADER PLUMBED TO TRACTOR VALVE)  
(continued)**

17. After all plumbing has been completed, start the tractor engine and slowly cycle the lift and bucket cylinders several times to free the system of air, then retract cylinders and stop engine. Add additional Ford 134 hydraulic oil as specified in your tractor operator's manual, to bring the oil level up to full.

**NOTE:** When cycling the loader, pulling lift control lever up should raise the loader and pushing it down should lower the loader. Pulling bucket control lever up should roll back bucket and pushing it down should dump the bucket. If direction of control lever is reversed, switch quick coupler connections at the tractor remote hydraulic couplers.

18. After mounting the loader, check tire clearances. Adjustment of steering stops may be required. The minimum recommended front tire tread setting is 67.3 inches (1710 mm). Refer to tractor operator's manual for front wheel adjustment.

**INSTALLING LOADER TO MOUNTING BRACKETS (FOR LOADER PLUMBED TO OPTIONAL  
AUXILIARY 1-LEVER VALVE)**

1. Attach front support bracket (5) to loader side frame channels with 5/8 x 1-3/4 cap screws (11), washers (14) and lock nuts (16).

**NOTE:** Use the set of holes in the loader side frame channel which place the front support bracket (5) as far rearward as possible.

2. Remove and save bucket level indicator with attaching hardware from loader. Attach nylon sling around the loader front bumper and use an overhead hoist to raise loader off skids.



**WARNING:** To avoid injury during installation, do not permit bystanders within 10 feet of loader.

3. Swing hinges open as wide as possible and place 3/4 x 3-1/2 cap screw into hole in each side frame upright to block hinges open.
4. Lower loader to a horizontal position on ground and disconnect from overhead hoist.
5. Begin installing auxiliary valve kit on tractor by fastening guide tube to the inside surface of guide flat on right side of mid mounting bracket with 1/2 x 1-1/2 carriage bolt and lock nuts (see instructions placed with valve kit). Slide adjustable mounting bracket inside of guide tube.
6. Install nut and lock washer onto valve handle. Install handle into handle adaptor of valve and lock with nut.

**INSTALLING LOADER TO MOUNTING BRACKETS (FOR LOADER PLUMBED TO OPTIONAL AUXILIARY 1-LEVER VALVE) (continued)**

7. Fasten valve to the valve mounting bracket with 3/8 x 2" cap screws and lock nuts. Slide valve bracket into adjustable bracket and secure with 3/8 x 2-1/2 cap screws and lock nuts. The adjustable mounting bracket and valve bracket should be adjusted so the valve lever is conveniently located for the operator. Secure adjustable bracket within guide tube with 1/2 x 1" square head set screw. Excess tube on adjustable bracket and valve bracket may be cut off.
8. Install 7/8-7/8 x 90° elbow adaptor fittings into the four working ports of valve.
9. Start the tractor engine, release tractor brakes and slowly drive tractor forward into rear of loader. Engage tractor brakes and shut off tractor engine.
10. Install 1/2 x 120" hoses (supplied with valve kit) connecting boom oil lines to elbow adaptor fitting in the four working ports of valve. Install and tighten hose fittings onto boom oil lines, one at a time, starting from the bottom and working up.
11. Install 7/8-1-1/16 elbow adaptor fittings into the inlet and outlet ports of valve.
12. Install 1/2-108" hoses onto elbow adaptor fittings (10) (figure 9) in inlet and outlet ports of valve and install male quick couplers (not supplied with loader) to other end of hoses.
13. Route hoses over the tractor rear axle housing and plug couplers into the tractor remote hydraulic couplers. Secure hoses together with reusable tie straps.



**WARNING:** When plugging couplers into tractor remote couplers, make sure they are connected to the same remote outlet. The line from the inlet port of valve must be pressurized when the tractor valve lever is engaged or damage to the valve could occur.



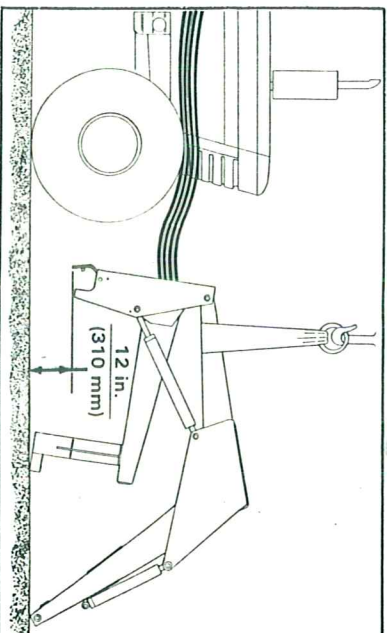
**WARNING:** Escaping hydraulic fluid under pressure can penetrate the skin causing serious injury.

- **DO NOT** use your hand to check for leaks. Use a piece of cardboard or paper to search for leaks.
- Stop engine and relieve pressure before connecting or disconnecting lines.
- Tighten all connections before starting engine or pressurizing lines.

If any fluid is injected into the skin, obtain medical attention immediately or gangrene may result.

**INSTALLING LOADER TO MOUNTING BRACKETS (FOR LOADER PLUMBED TO OPTIONAL AUXILIARY 1-LEVER VALVE) (continued)**

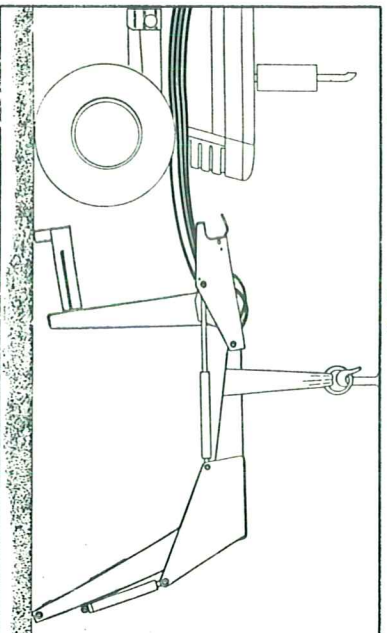
14. Attach nylon slings around both boom arms near side frame uprights. Raise side frame uprights approximately one foot (310 mm) off ground.



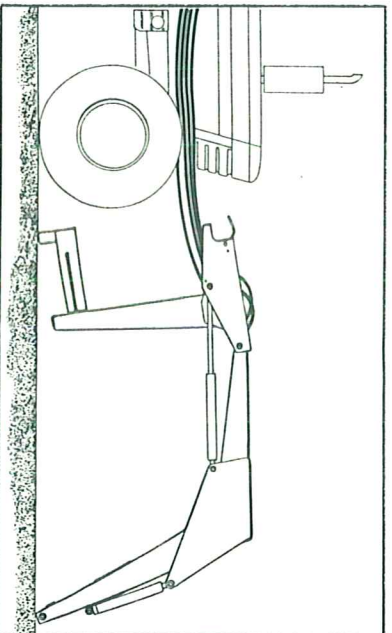
15. Start tractor engine, release tractor brakes and activate valve to extend lift cylinders to full length.

**IMPORTANT:** As lift cylinders extend and side frames rotate, the tractor may need to be moved backward and forward to maintain slack in hydraulic hoses.

Shut off tractor engine and engage tractor brakes.



16. Lower loader to the ground and remove overhead hoist.





**INSTALLING LOADER TO MOUNTING BRACKETS (FOR LOADER PLUMBED TO OPTIONAL AUXILIARY 1-LEVER VALVE)(continued)**

17. Start tractor engine and release tractor brakes. Slowly drive tractor ahead while activating lift control lever to retract lift cylinders. Position tractor so hinges hook mid mounting bracket tubes as loader side frame rotates.

**NOTE:** On tractor models equipped with cab, observe clearance between loader side frame upright and fuel tank when mounting loader.

18. Put the tractor in neutral. Retract the lift cylinders, bringing side frame channels up so front support bracket tube contacts front mounting bracket channel. Move the tractor ahead so front support bracket tube engages in front mounting bracket channel and loader side frame uprights seat properly on mid mounting bracket tubes (with no gap between upright cut-out and front of tube). Engage tractor brakes and shut off tractor engine.

19. Remove 3/4 x 3-1/2 cap screw from hole in each side frame upright and clamp hinges around mid mounting tubes. Fasten hinges shut with 3/4 x 3-1/2 cap screws, washers and lock nuts.

20. Wrap one end of rubber strap around the 1/2" hoses and hook back onto rubber strap. Attach the other end of rubber strap to loader front support bracket.

21. The tractor valve must be engaged and placed in the detent position so there is a continuous oil flow to the auxiliary valve. Tie or wire lever to hold it in the detent position.

22. Apply 1-lever control valve decal on rear side of right loader upright, center 6" from top.

23. After all plumbing has been completed, start the tractor engine and slowly cycle the lift and bucket cylinders several times to free the system of air, then retract cylinders and stop engine. Add additional Ford 134 hydraulic oil as specified in your tractor operator's manual, to bring the oil level up to the full mark.

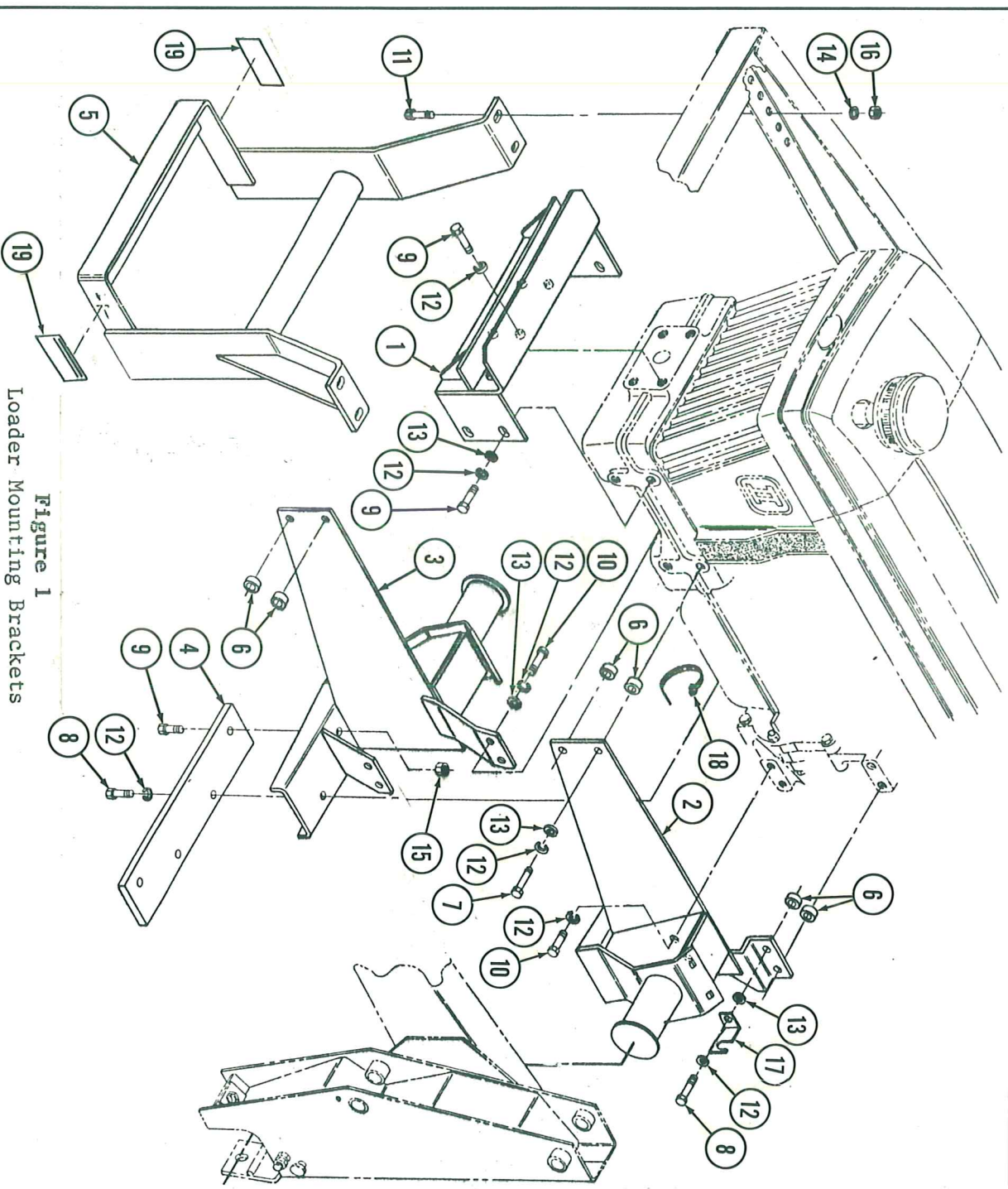
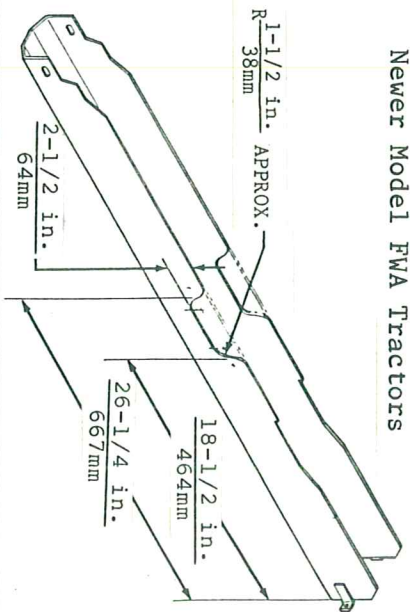
**NOTE:** When cycling the loader, pulling lift control lever up should raise the loader and pushing it down should lower the loader. Pulling bucket control lever up should retract bucket cylinders and pushing it down should extend bucket cylinders. If direction of control lever is reversed, switch hose connections at auxiliary valve working ports. If loader stalls while raising boom and leveling bucket or otherwise fails to operate correctly, consult TROUBLESHOOTING, AUXILIARY 1-LEVER VALVE AND PLUMBING TO LOADER and PLUMBING OPTIONAL SELF-LEVELING VALVE TO LOADER HYDRAULICS sections of loader operator's manual.

24. After mounting the loader, check tire clearances. Adjustment of steering stops may be required. The minimum recommended front tire tread setting is 67.3 inches (1710 mm). Refer to tractor operator's manual for front wheel adjustment.

**PARTS LIST**

Item	Part No.	Description	Qty.
1	38024	BRACKET, Front Mounting	1
2	38012	BRACKET, Mid Mounting, Left	1
3	38011	BRACKET, Mid Mounting, Right	1
4	37212	PLATE, Mid Crossie	1
5	38029	BRACKET, Front Support	1
	39240	DECAL, Warning: Do Not Use For Towing	1
6	35685-5	SPACER, Mid Mounting	6
7	G271774	SCREW, Cap, 3/4-10 x 2-3/4	4
8	G271773	SCREW, Cap, 3/4-10 x 2-1/2	4
9	G271771	SCREW, Cap, 3/4-10 x 2	10
10	G271767	SCREW, Cap, 3/4-10 x 1-1/2	6
11	G271548	SCREW, Cap, 5/8-11 x 1-3/4	4
12	G131046	WASHER, Lock, 3/4	22
13	G131017	WASHER, Flat, 3/4	12
14	G131016	WASHER, Flat, 5/8	4
15	G9414076	NUT, Lock, 3/4-10	2
16	G9414075	NUT, Lock, 5/8-11	4
17	39522	BRACKET, Air Conditioning Quick Coupler	1
18	8137-6	STRAP, Plastic Tie	3
19	39240	Decal, Warning	2

**Figure 2**  
 FWA Drive Shaft Guard  
 Modification For  
 Newer Model FWA Tractors



**Figure 1**  
 Loader Mounting Brackets