

# FORD

## **722 LOADER ATTACHING KITS**

**ASSEMBLY INSTRUCTIONS**

- **8N**
- **NAA**
- **DEXTA**

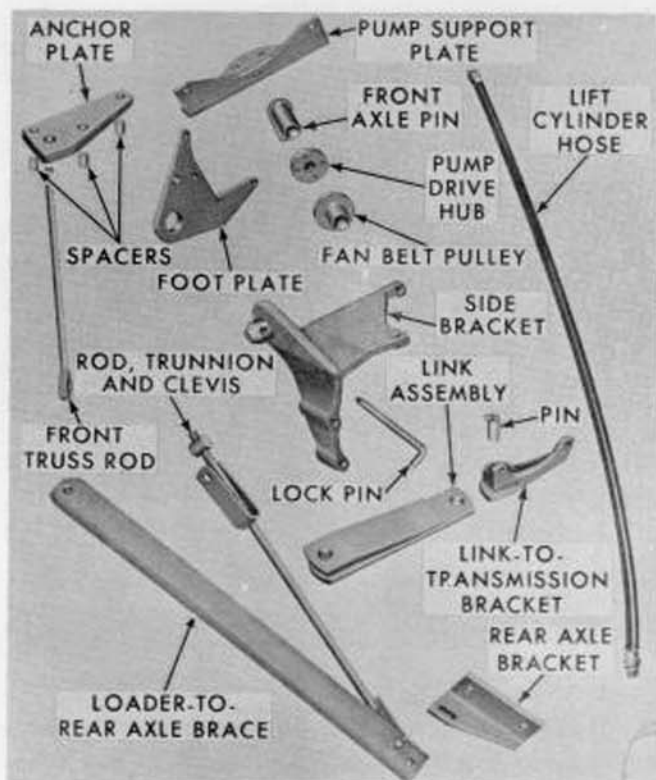
FORD TRACTOR DIVISION  
TRACTOR AND IMPLEMENT OPERATIONS (U.S.)  
FORD MOTOR COMPANY  
BIRMINGHAM, MICHIGAN

# FOREWORD

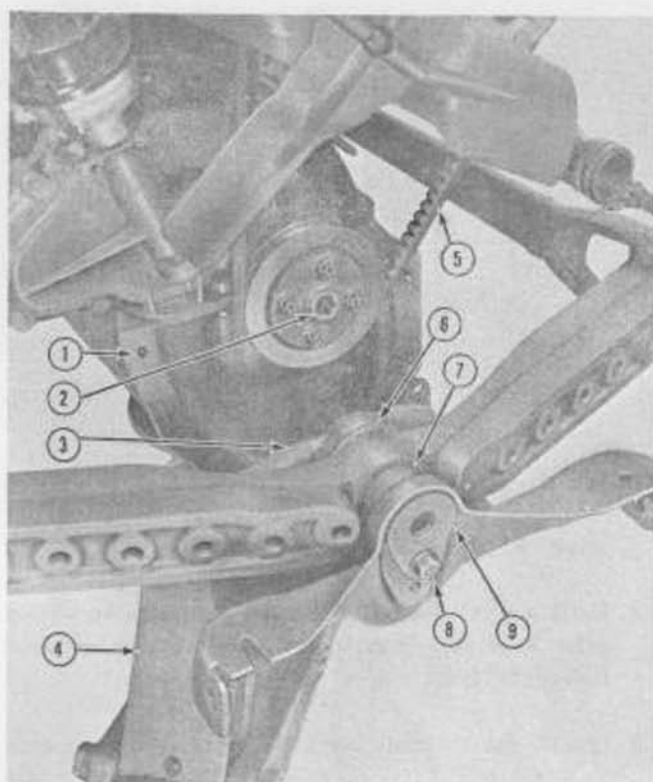
This manual contains assembly instructions and other dealer information on the Ford 722 Heavy Duty Loader Attaching Kits for Dexta, NAA, and 8N Tractors. It is recommended that the instructions for each component be read entirely before starting actual assembly. This manual was not provided for use by the owner, but rather as a dealer folder which may be discarded when the components are properly assembled and installed. These instructions will be provided with each Dexta, NAA, or 8N Kit shipped.

It is the responsibility of the Ford Tractor and Implement Dealer to deliver the Ford 722 Loader assembled as outlined in this manual and 722 Loader Manual SE 8655. He should also acquaint the owner with the safety precautions to be observed.

SERVICE DEPARTMENT  
TRACTOR AND IMPLEMENT OPERATIONS (U.S.)  
FORD TRACTOR DIVISION  
FORD MOTOR COMPANY



**Figure 1**  
19-330 8N Kit



**Figure 2**  
Center Axle Pin

## GENERAL INFORMATION

This manual contains instructions for installing the Series 722 Loader Attaching Kits on the following tractors.

Description	Use Kit No.
Ford 8N Tractors	19-330
Ford NAA Tractors	19-328
Fordson Dexta Tractors	19-331

The assembly and installation of the basic loader (Model 19-277 or 19-278) is covered in the 722 Loader Operating and Assembly Manual, SE 8655. The manual also includes instructions for installing the 19-327 Loader Attaching Kit on Series 601, 801, 2000, 4000 and L.C.G. Tractors.

## 19-330 KIT (8N) INSTALLATION

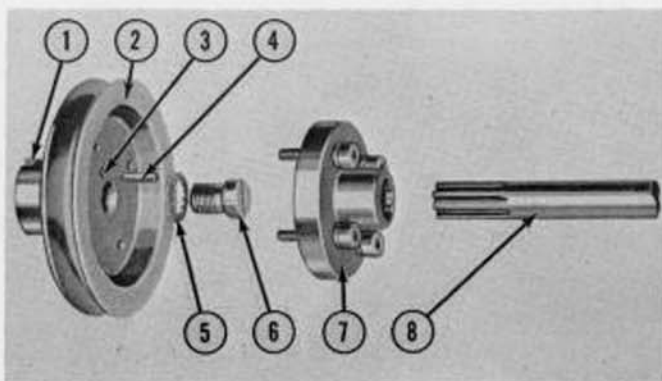
The loader attaching kit for the 8N tractor is shipped in two bundles. Bundle No. 290132 contains the items shown in Figure 1. Bundle No. 290137, not

shown, contains the attaching bolts, nuts, etc.

After checking and identifying the parts, begin the installation as follows:

1. Remove the entire hood and fuel tank assembly; then remove the radiator.
2. Place a jack (4), Figure 2, under the engine crankcase and place wood blocks behind the rear tires. Raise the jack until it touches the crankcase.
3. Remove six bolts located at (1), Figure 2, which hold the front support on the engine crankcase.
4. Jack up the engine assembly until the crankshaft pulley is clear to work on. If the front axle assembly raises with the engine push it down so that the wheels rest on the floor.
5. Remove the fan belt (5), Figure 2. Unscrew the crankshaft ratchet bolt (turn counterclockwise) and remove the fan belt pulley.

**NOTE:** On early model tractors, remove the distributor cap for clearance to remove the pulley.



**Figure 3**  
**Pump Drive Hub**

6. Install the new pulley on the crankshaft. Make sure that the pulley key slot fits over the crankshaft Woodruff key.
7. Drill a 1/4" hole 7/8" deep through the pulley pilot hole (3), Figure 3. Clean out the hole and insert the 1/4" x 3/4" straight pin (4).

8. Install the internal tooth lock washer (5), Figure 3, and the 5/8" - 18 x 7/8" slotted head screw (6). Bolt the pump drive hub (7) on the pulley with four 1/4" - 28 x 1" socket head cap screws and lock washers.

9. Install the fan belt and adjust it for proper tension with the generator position.

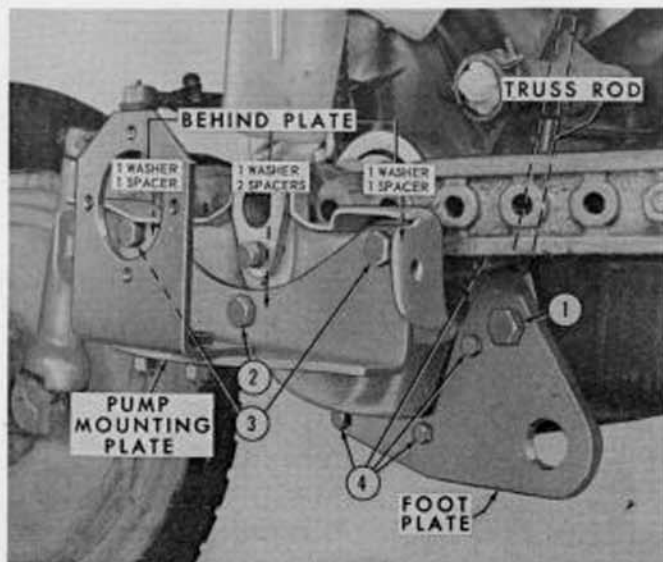
10. Remove the bolt (8), Figure 2; then, hold the front support and remove the axle pin (9).

11. Install the new axle pin, making sure that the washer (6), and spacer (7), Figure 2, are in position as shown. Install the bolt and lock washer (8), to hold the pin.

12. Lower the jack to align the front support holes with the engine crankcase. Position the loader foot plate, Figure 4, on the left side of the tractor front support. Install four new 7/16" - 20 x 1-3/4" bolts and lock nuts as shown at (4); also, install two of the original bolts, lock washers, and nuts on the right side.

**NOTE:** Inspect the condition of the tractor front support. If it is badly bent or damaged, it is recommended that a new one be installed.

13. Position the pump mounting plate, Figure 4, on the tractor front support. Position one flat washer and two 1/4" x 1-1/4" x 1-1/4" spacers behind



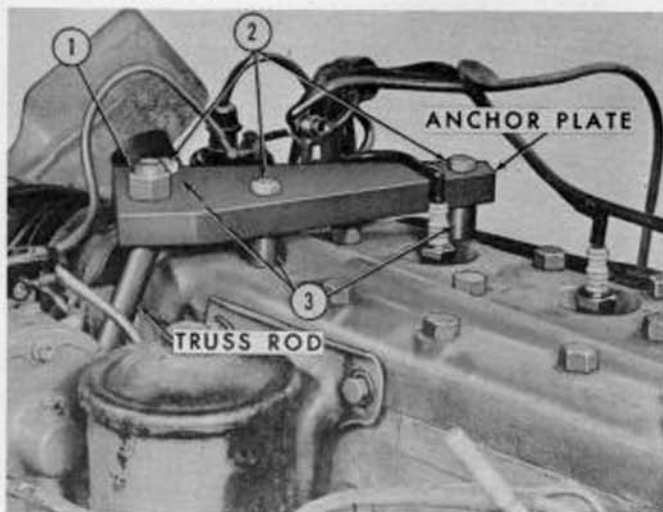
**Figure 4**  
**Loader Front Plate**

the pump plate at (2); then install the 5/8" - 18 x 1-3/4" bolt and lock washer (2).

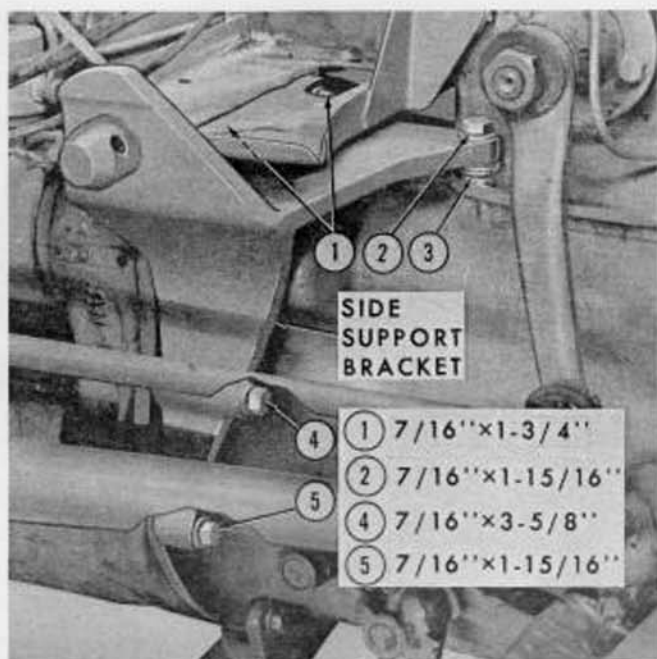
**NOTE:** An early model 8N tractor may not have the bolt hole shown at (2), Figure 4. In this case, locate a position on the front support 3-1/4" directly below the center of the front axle pin. Then, drill a 21/32" hole through the front support at this position.

14. Make sure that the plate is level, then use it as a template and drill two 41/64" holes at (3), Figure 4.

15. Install two 5/8" - 11 x 1-1/2" bolts and lock nuts at (3), Figure 4. Insert one flat washer and one spacer on each bolt between the plate and front support.



**Figure 5**  
**Anchor Plate**



**Figure 6**  
*Side Support Bracket*

16. Remove three engine head bolts from the location shown at (2), Figure 5. Bolt the anchor plate, Figure 5, to the engine with three 7/16" - 14 x 4-1/16" bolts (2), and spacers (3). **Uniformly** tighten the bolts to 70 ft. lbs. torque.

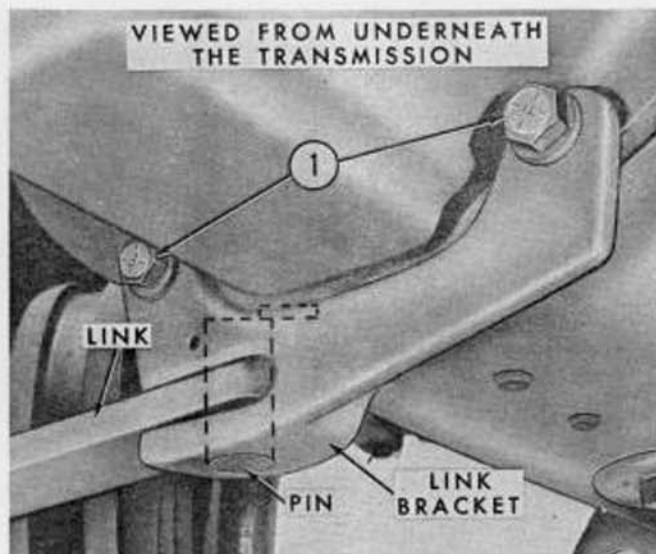
17. Bolt the truss rod, Figures 4 and 5, between the foot plate and the anchor plate. Use a lock nut and a 3/4" - 16 x 2" bolt (1), Figure 4, at the bottom; then, install the 5/8" - 11 lock nut (1), Figure 5, at the top.

18. Remove the battery. Then, remove four transmission-to-engine bolts as shown at (1), (4), and (5), Figure 6. Also remove the steering gear box bolt (2).

19. Bolt the side support bracket, Figure 6, on the tractor with five 7/16" - 14 bolts. Install the proper bolt lengths as shown in the illustration. Use a flat washer under each bolt head and two additional washers under the bracket as shown at (3).

20. Install the battery and the hood assembly. Install the hood-to-front support bolts, but do not install the grille at this time.

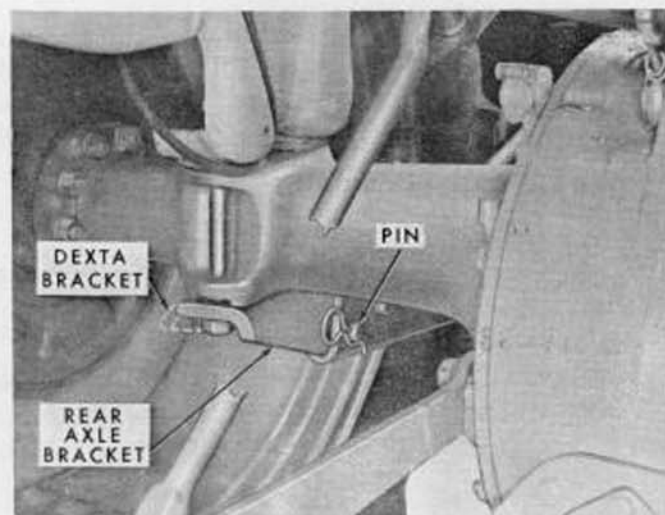
21. Remove two bottom transmission-to-engine bolts at (1), Figure 7. Pin the link to the link bracket and bolt the bracket on the transmission with two



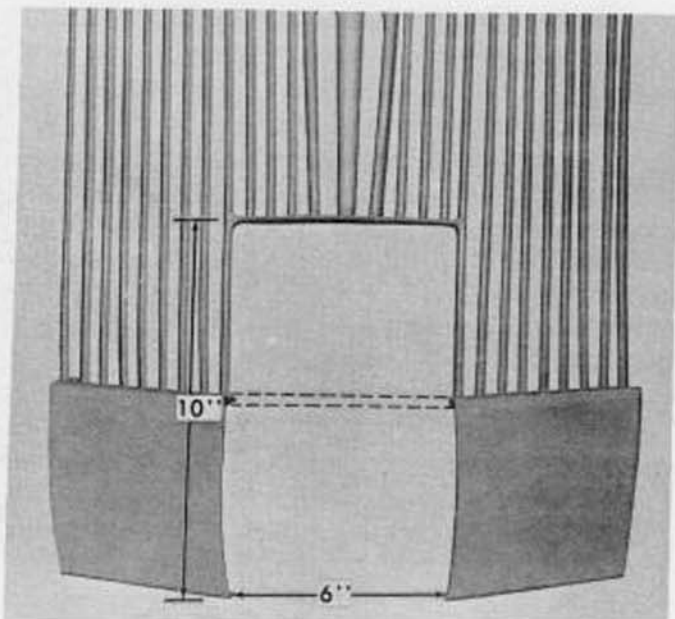
**Figure 7**  
*Link Bracket*

7/16" - 14 x 1-15/16" bolts and flat washers (1). Torque the bolts to 40-60 ft. lbs.

22. Bolt the rear axle bracket under the left rear axle with the fender bolts, as shown in Figure 8.



**Figure 8**  
*Rear Axle Bracket*



*Figure 9*  
**8N Grille Modification**

23. Since the pump will occupy space at the base of the grille, the grille must be modified as follows:

- a. Cut out a 6" x 10" section of the grille as shown in Figure 9.
- b. Cut off the top of the metal section removed in step 1. See the dotted lines, Figure 9, for reference. Weld this piece across the end of the rods as shown.

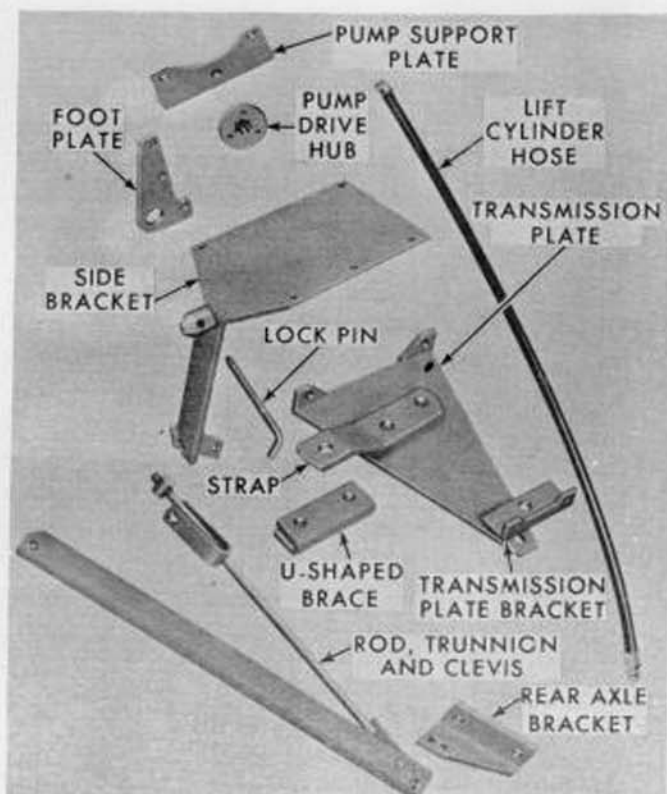
24. Install the modified grille. Save the loader-to-rear axle brace and rod for use during loader assembly.

25. Remove the tractor left headlamp and space the front tires to 52" in preparation for the loader. See the Series 722 Loader Operating and Assembly Manual, SE 8655, for instructions on installing the loader.

## 19-331 KIT (DEXTA) INSTALLATION

The Dexta Attaching Kit is shipped in two bundles. Bundle No. 290135 contains the items shown in Figure 10. Bundle No. 290138, not shown, contains the attaching hardware.

After checking the bundle contents, install the kit as follows:

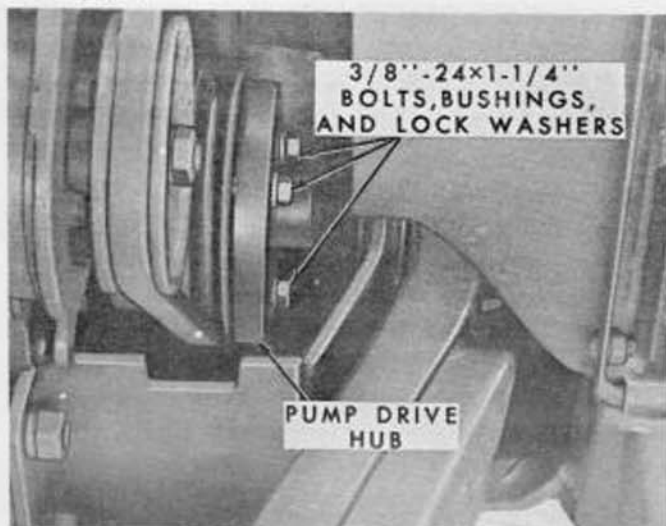


*Figure 10*  
**19-331 Dexta Kit**

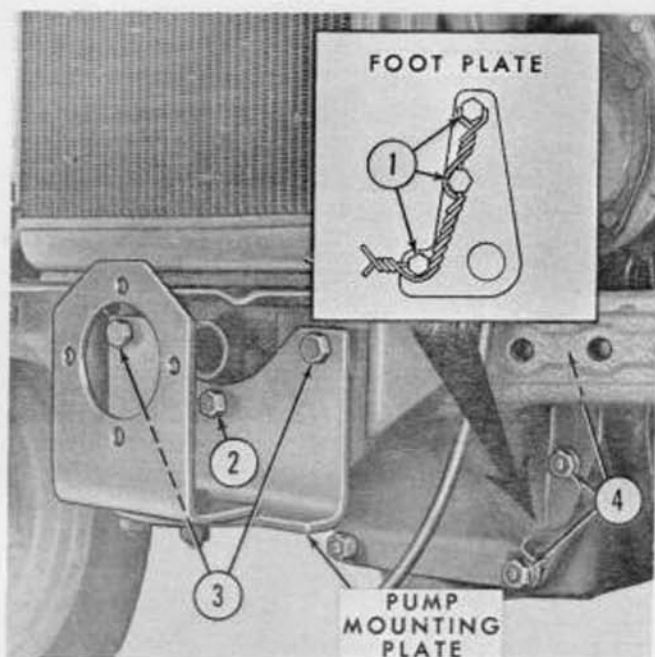
1. Remove the tractor front sheet metal section shown in Figure 15. Then, bolt the pump drive hub on the engine crankshaft pulley as shown in Figure 11.



**CAUTION:** Secure the tractor fuel shut-off knob in the "out" position before working at the front of the engine.



*Figure 11*  
**Pump Drive Hub**



**Figure 12**  
*Pump Plate and Foot Plate*

2. Bolt the pump mounting plate on the front of the tractor with one  $1/2'' - 20 \times 1-1/2''$  bolt and lock washer (2), Figure 12. Level the plate, and using it as a template, drill two  $41/64''$  holes at (3).

3. Insert two  $5/8'' - 11 \times 1-1/2''$  bolts (3), Figure 12, through the drilled holes and secure them with  $5/8''$  lock nuts.

4. Note the location for the foot plate as shown in the Insert, Figure 12, and remove the three nuts and studs as shown at (4).

5. Bolt the foot plate in position with three  $9/16'' - 12 \times 1-1/2''$  drilled head bolts (1), Figure 12.

**IMPORTANT:** Safety wire the bolt heads with  $5/64''$  diameter wire following the pattern shown in the Insert.

6. Remove the battery and disconnect the rear end of the tractor left drag link and radius rod.

7. Remove the battery tray and position the top plate of the side support bracket over the holes for the battery tray bolts, see Figure 13.

8. Loosely bolt the support bracket at (3), Figure 13, with one  $5/8'' - 11 \times 1-3/4''$  bolt and lock nut.

9. Bolt the battery tray on top of the support bracket plate with five new  $7/16'' - 14 \times 1-1/4''$  bolts at (1), Figure 13. Remember to install the battery ground cable and wire (2) under the new bolt heads.

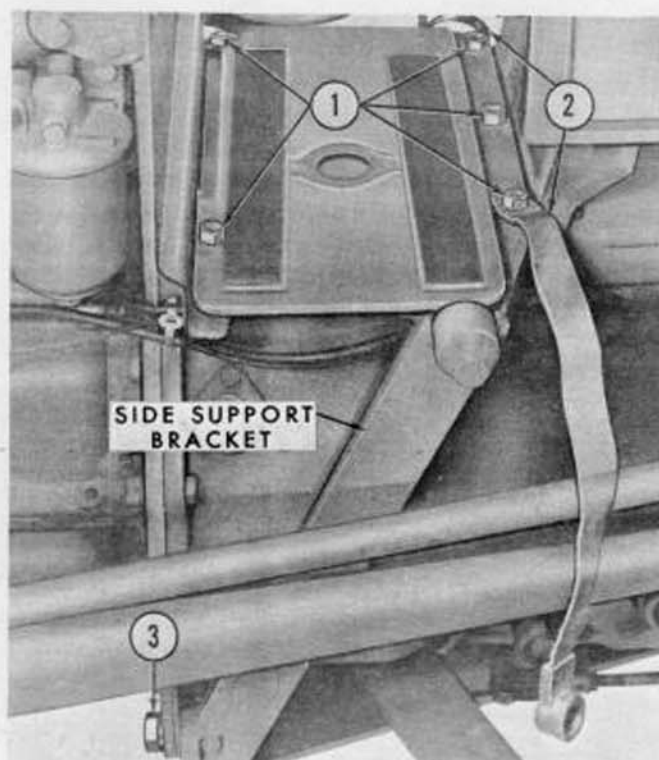
10. Loosely bolt the transmission plate bracket (6), Figure 14, on the transmission plate (1) with one  $5/8'' - 11 \times 1-1/2''$  bolt (5), washer, and lock nut. Also, bolt the strap (4) on the plate with two  $5/8'' - 11 \times 1-1/2''$  bolts (3) and lock nuts. Note that the offset end of the strap is up.

11. Remove two transmission-to-center housing bolts, located as shown at (7), Figure 14. Bolt the transmission plate assembly underneath the tractor with:

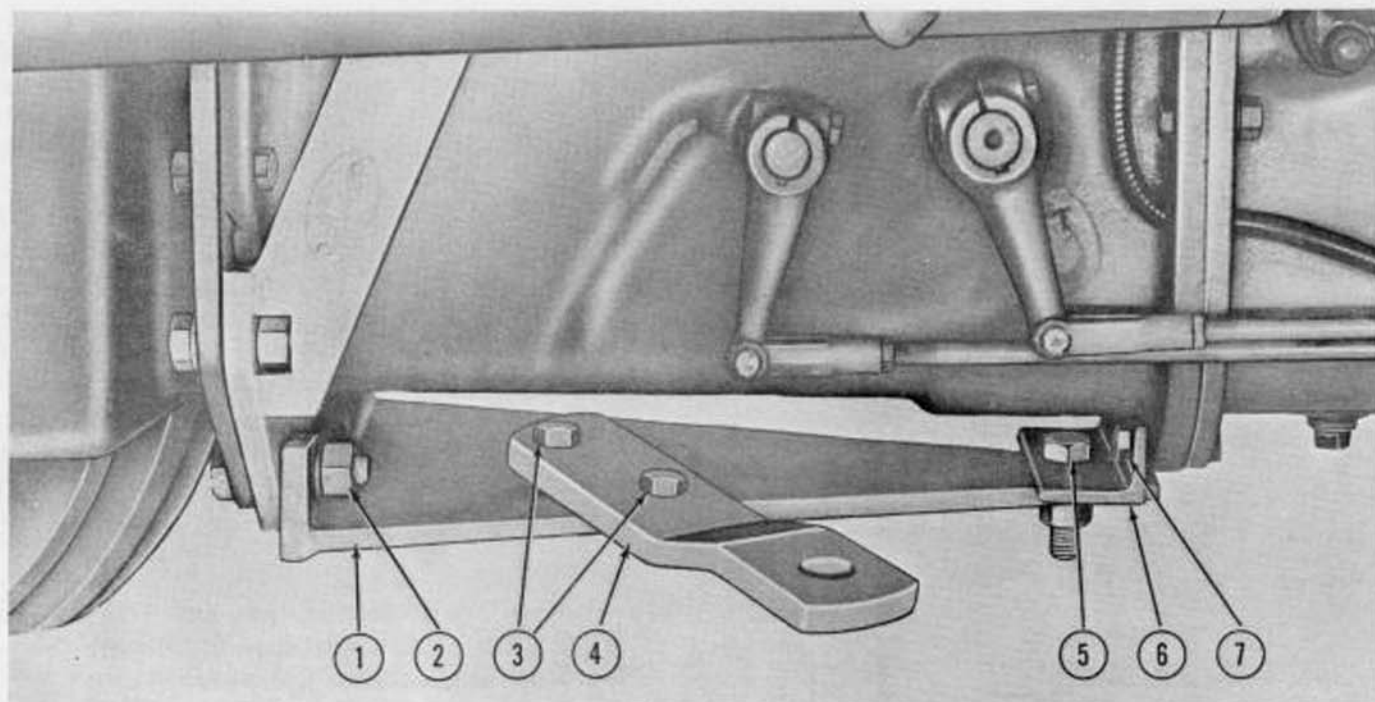
a. At (7), Figure 13, use two  $7/16'' - 14 \times 1-15/16''$  bolts and secure them with the nuts and washers previously removed.

b. At (2) on the left front side, use one  $5/8'' - 11 \times 2-1/4''$  bolt and lock nut.

c. On the right front side (not shown) use one  $5/8'' - 11 \times 1-3/4''$  bolt and lock nut.



**Figure 13**  
*Side Support Bracket*



*Figure 14*  
**Transmission Plate**

12. Tighten all the bolts, including bolt (5), that were left loose. Bolt the radius rod and drag link to the tractor.
13. Install the rear axle bracket under the left fender bolts as shown in Figure 8.
14. Remove the tractor left headlamp, if it is side mounted, and then cut out a section of the grille as follows:
  - a. Measure a 10" span at the bottom center of the grille, Figure 15.
  - b. Draw a curved line from each end of the 10" mark to the top of the crank hole in the grille. Cut out this section of metal as shown.
15. Install the grille. Save the loader-to-rear axle brace and rod for use during loader assembly.
16. Space the tractor front tires to 52" in preparation for the loader. See Service Publication, SE 8655, for the procedure of installing the loader.

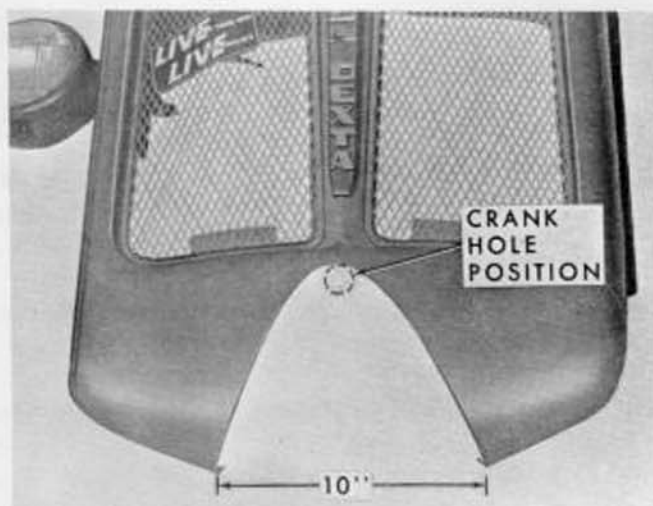
## 19-328 KIT (NAA) INSTALLATION

The NAA Attaching Kit is shipped in two bundles.

Bundle No. 290130 contains the items shown in Figure 16. Bundle No. 290135, not shown, contains the attaching hardware.

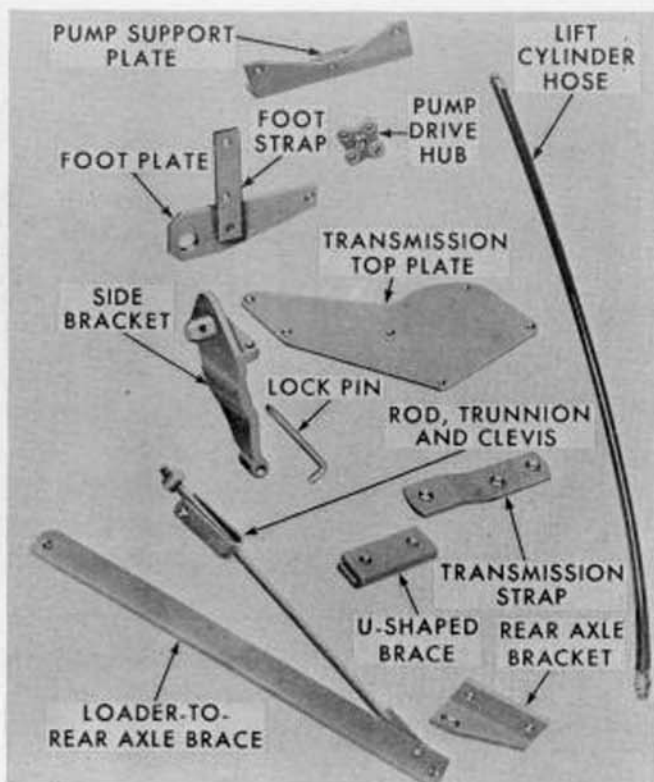
After checking the bundle contents, install the kit as follows:

1. Remove the two left-hand front axle support nuts, used to secure the support to the engine block, and position the foot strap as shown in Figure 17. Secure the strap with two rear wheel-type nuts and torque them to 130 ft. lbs. The rounded



*Figure 15*  
**Dexta Grille Modification**



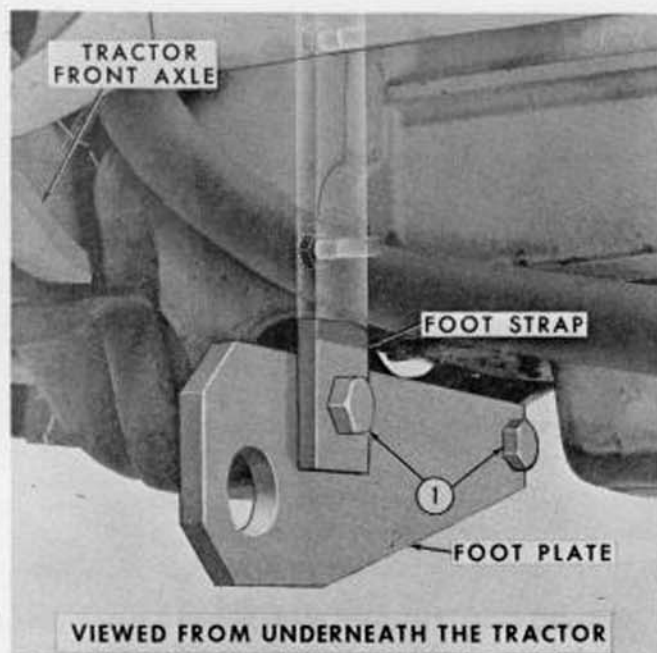


**Figure 16**  
19-328 NAA Kit

end of the nuts must seat in the countersunk areas of the plate for enough thread engagement.

**NOTE:** It may be desirable to temporarily remove the fan belt to facilitate installing the nuts.

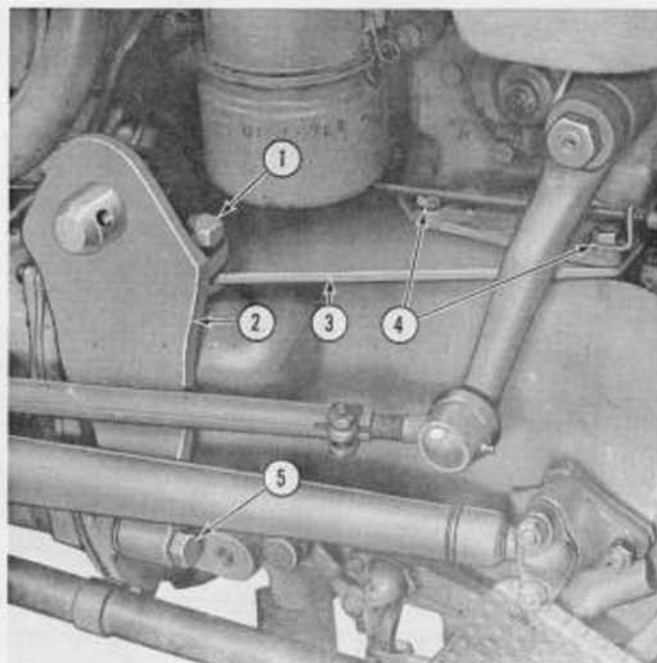
2. Bolt the foot plate to the strap and to the tractor front axle support with two  $3/4'' - 10 \times 2-1/4''$  bolts, lock washers, and nuts as shown at (1), Figure 17. Torque the nuts to 200 ft. lbs.
3. Remove the four bolts which secure the steering gear housing to the top of the transmission.
4. Position a rope under the center area of the steering wheel and lift the steering gear housing approximately 1" above the transmission.
5. Slide the transmission top plate (3), Figure 18, under the steering gear housing and align the holes with those in the transmission case.
6. Lower the steering gear box and install the four  $7/16'' - 14 \times 1-3/8''$  bolts as shown at (4), Figure 18. Torque the bolts to 40-60 ft. lbs.
7. Remove the large transmission-to-engine bolt from the left side of the tractor. The location of



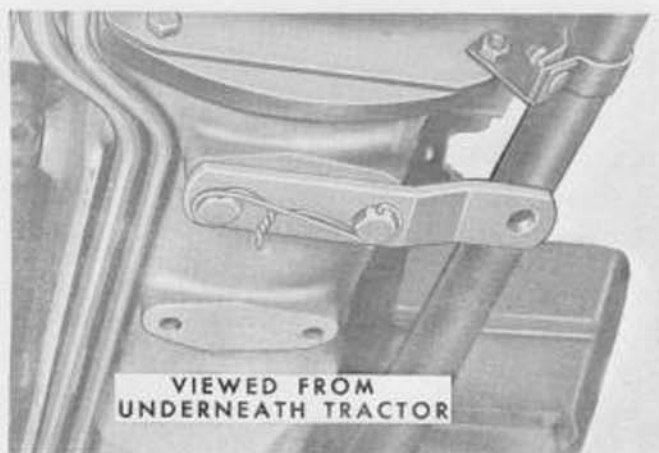
**Figure 17**  
Foot Plate

this bolt is shown at (5), Figure 18.

8. Loosely bolt the mounting support bracket (2), Figure 18, on the transmission top plate with two  $5/8'' - 11 \times 1-1/2''$  bolts and lock nuts as shown at (1). Bolt the bottom of the support bracket to the engine with one  $5/8'' - 11 \times 5''$  bolt and lock nut (5). Torque the three support bolts to 100-120 ft. lbs.



**Figure 18**  
NAA Side Bracket



**Figure 19**  
*Transmission Strap*

9. Bolt the transmission strap underneath the tractor with two 5/8" - 11 x 1-1/2" drilled bolts as shown in Figure 19. Note that the offset end of the strap is up. Wire the bolts together as shown.

10. Remove the radiator grille from the tractor. Bolt the pump support plate on the front of the tractor with one 5/8" - 18 x 1-1/2" bolt (2), Figure 20, lock washer, and spacer (1). The spacer goes behind the plate.

11. Use the plate as a template and drill two 41/64" holes as shown at (3), Figure 20. Make sure that the plate is level before drilling the holes. Install two 5/8" - 18 x 1-1/4" bolts, lock washers, and nuts (3).

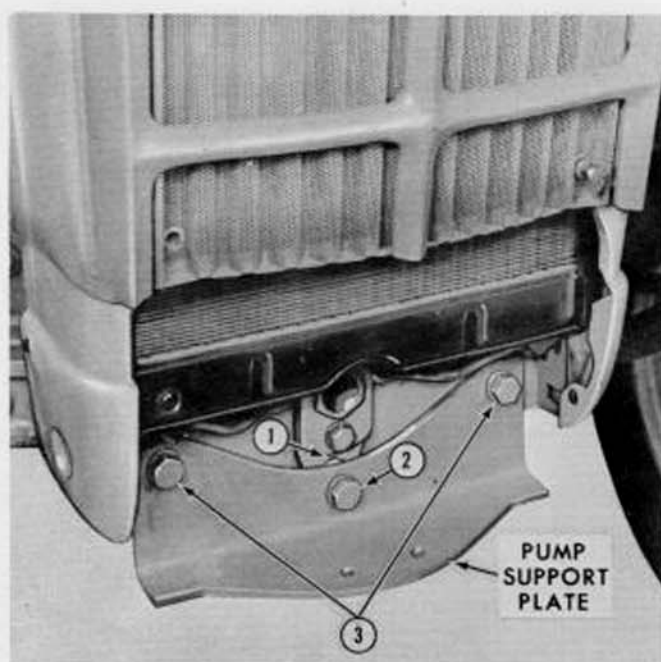
12. To install the pump drive hub, remove the four bolts (1) and (2), Figure 21, from the engine pulley. Also remove the hex head bolt from the end of the crankshaft. Use a socket wrench, socket, and long extension to remove the bolt.

13. Install the special 5/8" slotted head screw and washer shown in the Insert, Figure 21, in place of the crankshaft bolt which was removed.

14. Bolt the pump drive hub on the engine pulley with four 7/16" - 14 x 1-1/4" bolts and lock washers. See (1) and (2), Figure 21.

15. Since the pump will occupy space at the base of the grille, the grille must be modified as follows:

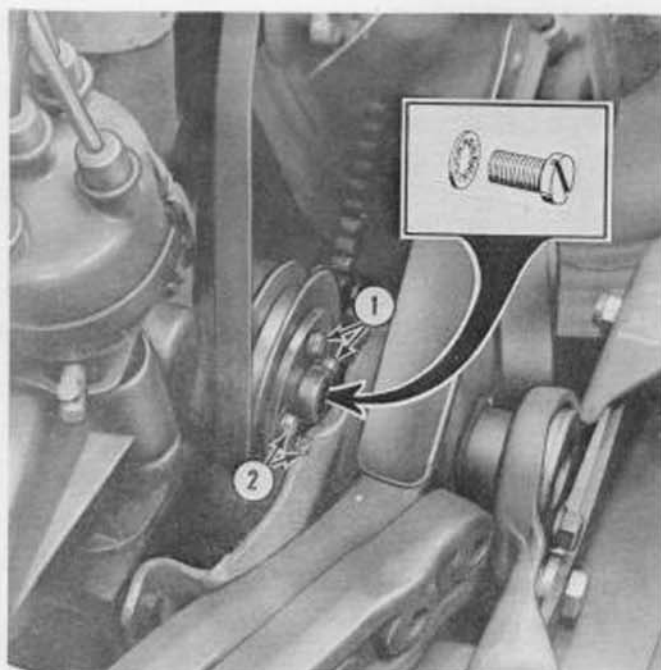
a. Find the center line of the grille and mark it as shown at (1), Figure 22.



**Figure 20**  
*Pump Plate Installation*

b. Make two cuts four inches on each side of the center line with a sabre saw. Extend the cuts 9 inches, then cut straight across and remove the metal leaving an open area as shown.

c. File off the sharp edges of the opening and install the grille.

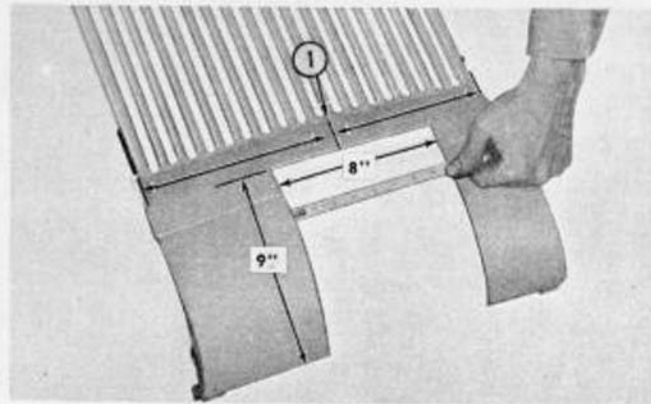


**Figure 21**  
*Pump Drive Hub*

# ASSEMBLY

16. Bolt the rear axle bracket underneath the left axle with the fender bolts, as shown in Figure 8. Save the loader-to-rear axle brace and rod for use during the loader assembly.

17. Remove the tractor left headlamp and space the front tires to 52" in preparation for installing the loader. Refer to the Series 722 Loader Operating and Assembly Manual, SE 8655, for the procedure on installing the loader.



*Figure 22  
Grille Modification*



A PRODUCT OF



MOTOR COMPANY

*Prepared by*

**TRACTOR AND IMPLEMENT OPERATIONS (U.S.)**

**FORD TRACTOR DIVISION      FORD MOTOR COMPANY**

**BIRMINGHAM, MICHIGAN**

*"Ford Motor Company, whose policy is one of continuous improvement, reserves the right to make changes in design and specifications at any time without notice and without obligation to modify units previously built."*

SE 8687 6627

PRINTED IN U.S.A.