



Figure 1
Dearborn Standard Loader, Model 19-21

The Dearborn Standard Loader, Model 19-21, is shipped knocked-down in four bundles: The main frame with the bucket trip rod wired to it; the loader lift arm assembly; a carton of small parts and the bucket (Model 19-31) or manure fork (Model 19-32). The bucket or fork are optional and are sold at additional cost. A crane attachment (Model 19-33) is also available for this loader.

This loader is operated by the Ford Tractor Hydraulic mechanism.

ASSEMBLY PROCEDURE

1. Remove the tractor fenders and bolt a loader rear mounting bracket (1), Figure 2, in place as shown on each rear axle housing. Use the original tractor fender bolts (2).
2. Install the tractor-to-loader hydraulic pipeline as follows.
 - a. Bolt the pipe support bracket (9), Fig-

ure 3, to the tractor with the cap screw (8) from the tractor.

- b. Remove the tractor right-hand running board and free the rear end of the exhaust muffler (11) and pull it away from the tractor as shown.
- c. Remove the plug (cap screw) from the outlet (13) in the base of the tractor hydraulic pump and install the adaptor fitting (15). Remove the gasket from the cap screw and fit in place on the adaptor. Coat the threads with plumber's compound, turn the adaptor into the opening as far as it will go and secure it with the lock nut (14), provided.
- d. Insert the $\frac{3}{8}$ x 18 $\frac{1}{2}$ inch pipe (10) through the hole in the support bracket (9) and turn the pipe into the adaptor. Be sure to coat the threads with plumber's compound. Do this to all threaded joints. These joints must be leakproof.

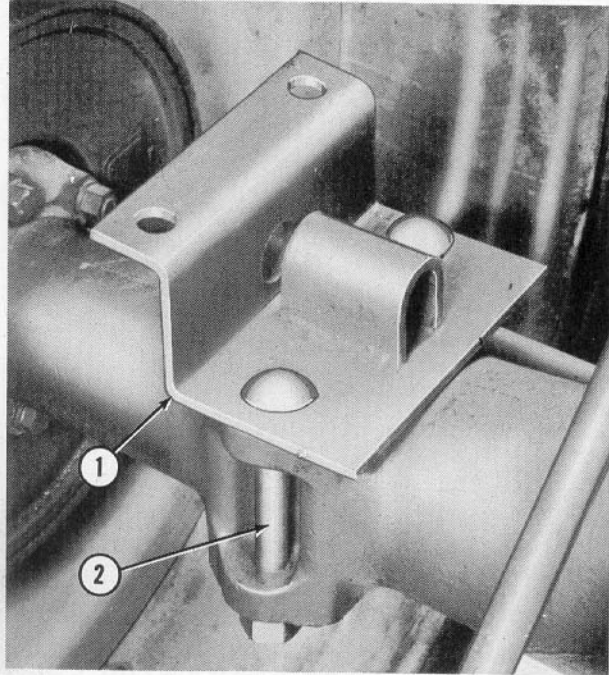


Figure 2

Loader Rear Mounting Bracket (Left) Attached

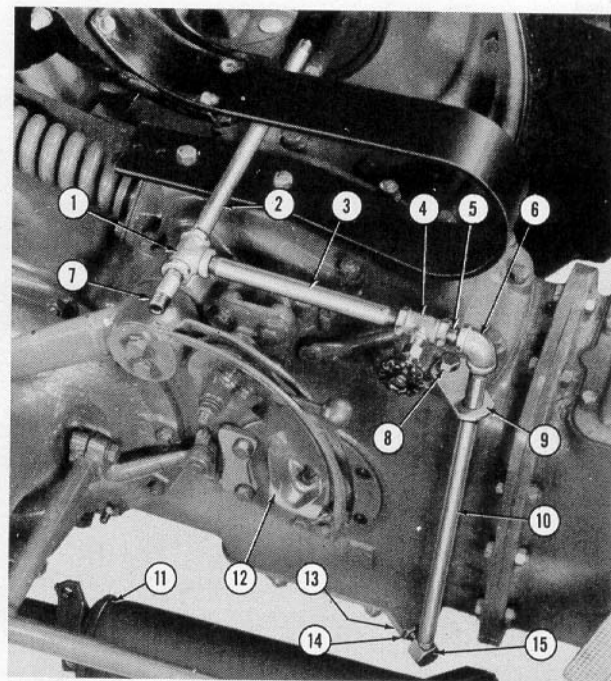


Figure 3

Tractor-to-Loader Hydraulic Pipe Lines Installed

- e. Turn the close nipple (5) into the 90° ell (6) and turn the ell onto the pipe (10). Coat the threads with plumber's compound.
 - f. Turn the valve (4) onto the close nipple (5).
 - g. Then complete the assembly as shown by turning the $\frac{3}{8}$ x $7\frac{3}{4}$ inch pipe (3) into the valve (4), the tee (1) onto the pipe (3) and the $\frac{3}{8}$ x 2 inch nipple (7) and $\frac{3}{8}$ x 12 inch pipe (2), into the tee.
 - h. On all tractors with a serial number below 248,790, install the new safety valve (8N-638) in the tractor hydraulic pump. To do this, remove the inspection plate (12), Figure 3, from the tractor and work through this opening.
3. Remove the tractor front axle support pin (8), Figure 4, and install the loader front suspension plate (3) as shown in Figure 4. Be sure the wide spacer and the washers are in place on the pin of the suspension plate as they were on the axle support pin. See (9) and (10) insert, Figure 4. To make

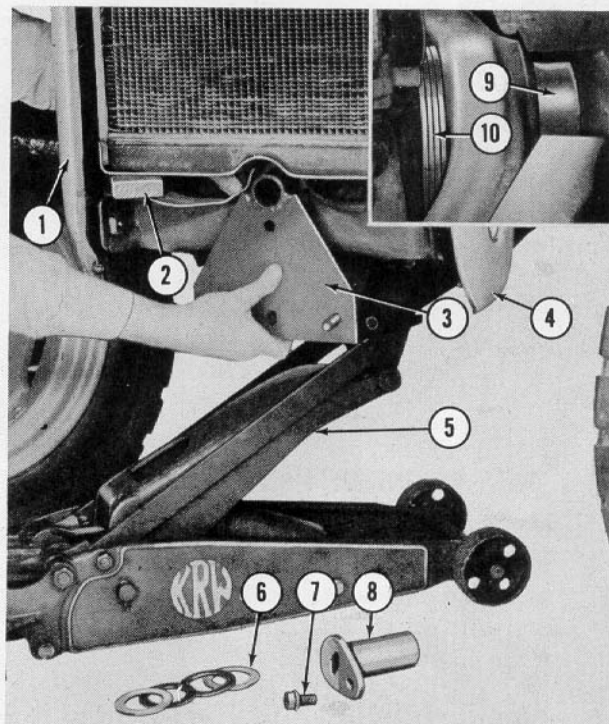


Figure 4

Installing Loader Front Suspension Plate

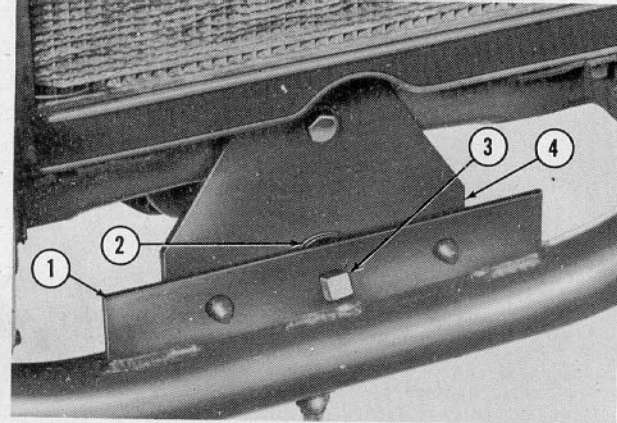


Figure 5

Front End of Main Frame Attached

this installation, place a jack (5) under the engine and raise it just enough to start lifting the wheels. Then remove the tractor radiator grill and free the hood side panels (1) and (4) and the radiator from the tractor front axle support assembly. Raise the radiator and support it with a $\frac{3}{4}$ inch thick wooden block (2), as shown, to provide room for positioning the spacer and washers. Secure the plate with the cap screw (7) used to hold the original pin in place. Reattach the base of the radiator to the front axle support assembly, but leave the hood side panels unattached at this time.

4. Mount the loader main frame on the tractor by hanging the front end of the frame on the loader suspension plate (4) as shown in Figure 5, and securing the rear end (2), Figure 6, to the mounting brackets (1) with the pivot pin (4). Secure the pivot pin with the cap screw and lock washer (3), as shown. Fit the spacer washers (2), Figure 5, in place between the front suspension plate (4), Figure 5, and the loader front mounting bracket (1), as shown. Secure the front end of the loader to the suspension plate with the bolt, lock washer and nut (3), Figure 5.
5. Install the tractor radiator grill and secure the two hood side panels.
6. Position the loader lift arm assembly (4), Figure 7, and insert the pivot bar (3), as shown. Fasten the pivot bar in place with

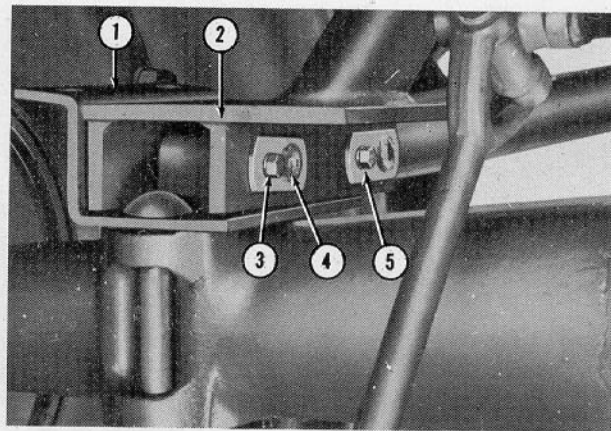


Figure 6

Rear End of Frame and Cylinder Attached

the bolt (2) on each end. Be sure the spacer (1) is in place on each end of the pivot bar.

7. Attach the front end of a hydraulic cylinder (9), Figure 7, to each side of the loader lift arm assembly with the short pin (10). Secure the pin with the cap screw and lock washer (8). Attach the rear end of each cylinder to the rear end of the loader with a pin and cap screw as shown at (5), Figure 6. Be sure the

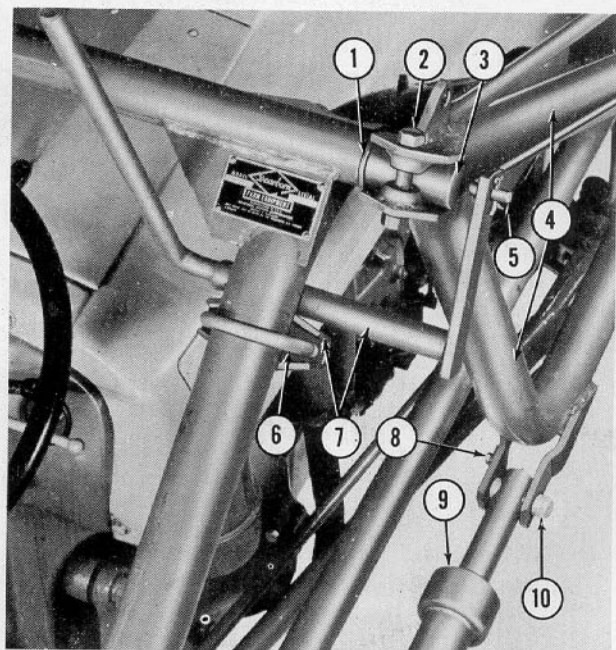


Figure 7

Lift Arms, Cylinder and Trip Lever Assembly Attached

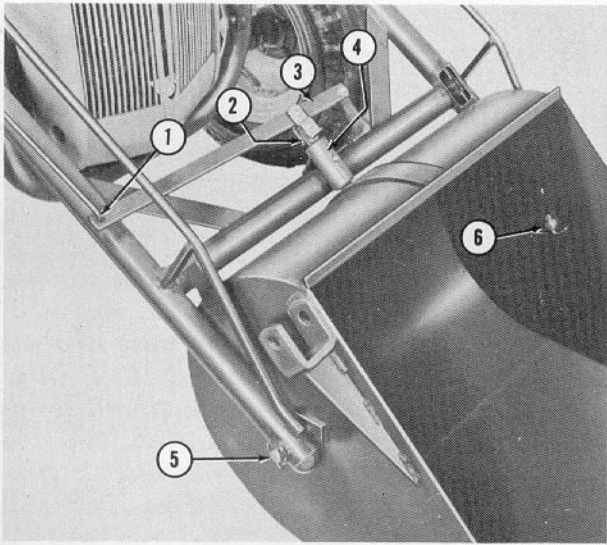


Figure 8

Bucket and Trip Linkage Attached

hose outlet in the rear end of the cylinder faces up.

8. Attach the bucket trip lever assembly (7), Figure 7, to the main frame with the "U" bolt (6) as shown. The U-bolt should be about 3 inches below the nameplate. Then attach the bucket trip rod to the arm of the

trip lever with a cotter pin as shown at (5), Figure 7.

9. Assemble and attach the bucket latch bar (3) and linkage as shown in Figure 8. Insert the spring and the bucket latch pin (2) in the sleeve (4) and connect the linkage as shown. Secure the trip rod to the latch bar with a cotter pin as shown at (1).
10. Attach the bucket (or manure fork) to the lift arms with the large pins (5) and (6) and the cotter pins as shown in Figure 8.
11. Attach the two hydraulic hoses (1) and (2), Figure 9, to the two cylinders and the hydraulic line as shown. Coat the threads with plumber's compound.
12. Bolt the tractor fenders in place on the loader rear mounting brackets with two $\frac{5}{8} \times 1\frac{1}{2}$ inch square head bolts, lock washers and nuts provided.
13. Add two quarts of oil to the tractor transmission oil reservoir. Normally 5 quarts of oil (Ford specification—M4864-A for winter, M4864-B for summer) is required for the tractor transmission. The two additional quarts are necessary to operate the loader hydraulic cylinders.

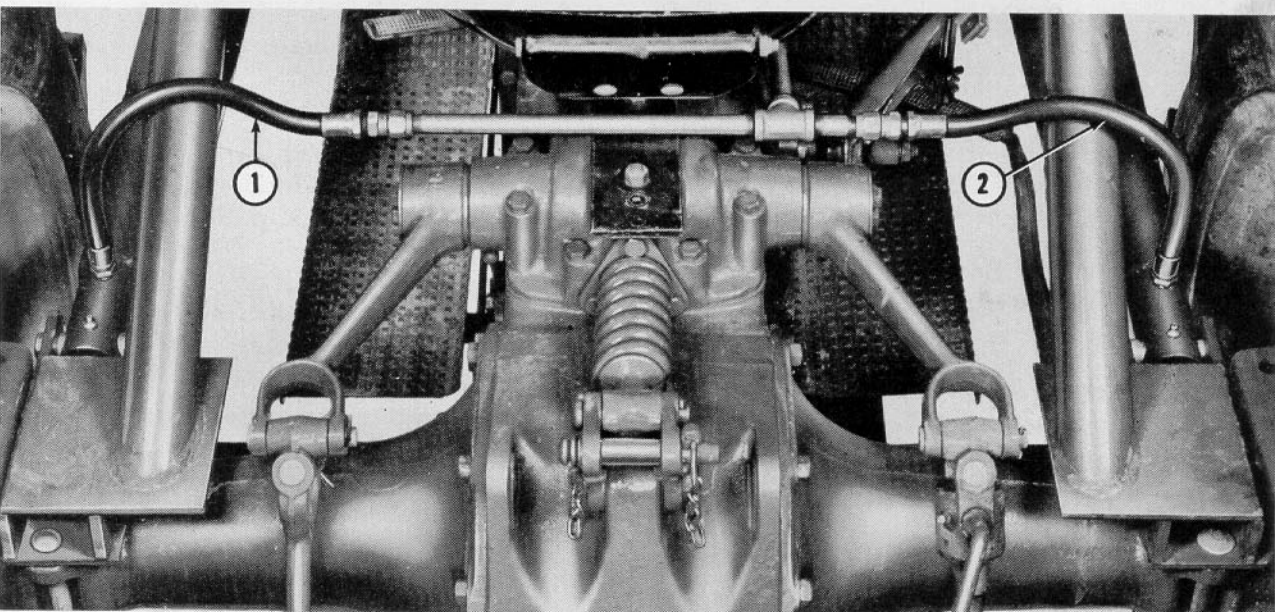


Figure 9

Hydraulic Hose Attached

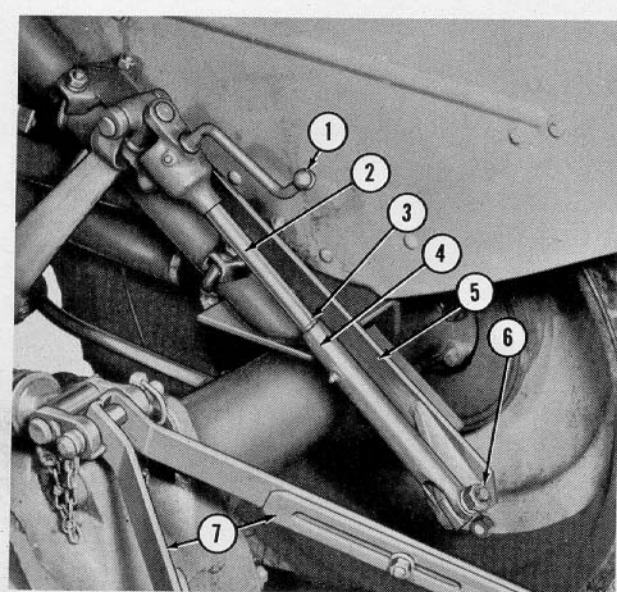


Figure 10

Leveling Arm Support Bracket Attached

14. Attach the leveling arm support bracket (5), Figure 10, to the main frame with the two U-bolts as shown. Be sure the bracket is as far on the main frame as it will go.
15. Attach the stay braces (7) and drawbar in the usual manner.
16. Remove the right-hand and left-hand hydraulic lift rods from the lower lift links and bolt the right-hand rod to the support bracket as shown at (6), with the $\frac{5}{8}$ x $2\frac{1}{4}$ inch machine bolt, lock washer and nut provided. Leave the left-hand lift rod free and reattach the anchor chains to the lift links.
17. Adjust the position of the tractor lift arms to obtain proper loader operation as follows:

NOTE: This adjustment is very important. It provides the means for obtaining proper loader operation.

- a. Turn the leveling crank (1), Figure 10, until the top of the hydraulic lift rod rod fork (4) is even with locating ring on the lift rod (2) as shown at (3).
- b. Push the Hydraulic Touch Control lever to the bottom of the quadrant, start the tractor engine, engage the P.T.O. and open the hand shut-off valve in the tractor-to-loader hydraulic line.

c. Pull Touch Control lever to the top of the quadrant and note the action of the loader lift arms.

If they do not raise, push the touch control lever to the bottom of the quadrant, turn the leveling crank counter-clockwise one full turn, and then try to raise the lift arms again. Repeat this process until the lift arms raise to their maximum height.

If the loader arms do raise to their maximum height but do not lower when the Touch Control lever is moved downward on the quadrant, then pull the Touch Control lever back to its top position and turn the leveling crank one full turn clockwise, and try to lower the arms again. It may require two or more turns to get the lift arms to lower properly. If so, be sure the Touch Control lever is at the top of the quadrant before turning the leveling crank.

LUBRICATION

There are six grease gun fittings to be lubricated on this loader: One on each end of the hydraulic cylinders, one on the bucket latch pin sleeve, and one on the cross member at the top of the main frame. Lubricate thoroughly when the loader is new and every eight hours of operation thereafter.

OPERATION

The bucket is raised and lowered by means of the Ford Tractor Hydraulic Touch Control lever. To trip the bucket, pull back on the trip lever handle, see Figure 7. When the bucket is lowered to loading position, the bucket latch pin will automatically reset itself.

TRANSPORTING

When transporting the loader with the bucket (or manure fork) loaded or empty, the lift arms should be raised to a height where the bucket (or fork) is just above the level of the tractor hood.

ADJUSTMENTS

Keep the cap (9), Figure 7, on each cylinder tightened hand tight.

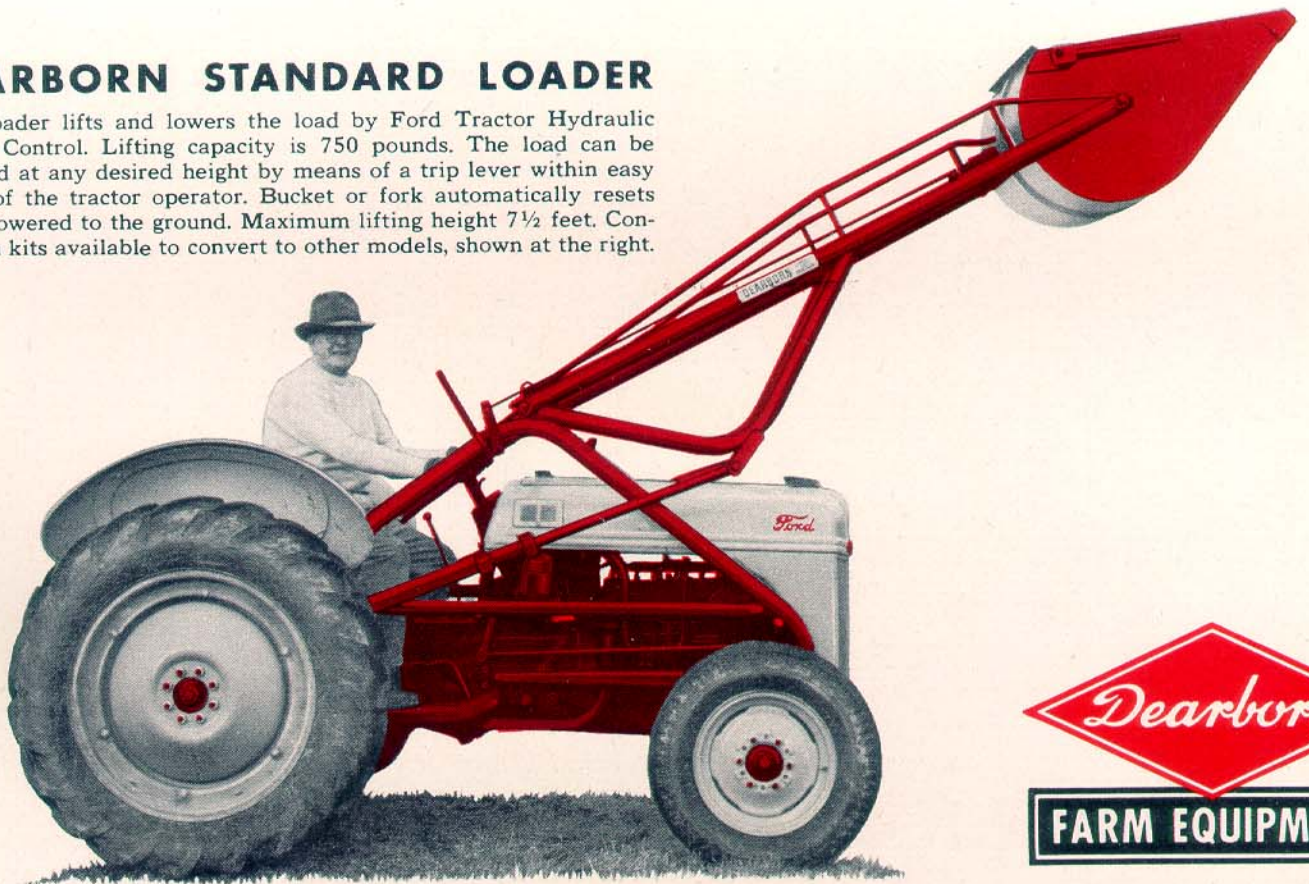
Maintain the position of the lift arms as explained in assembly Step No. 17.

These 3 Models

GIVE FORD TR

DEARBORN STANDARD LOADER

This loader lifts and lowers the load by Ford Tractor Hydraulic Touch Control. Lifting capacity is 750 pounds. The load can be dumped at any desired height by means of a trip lever within easy reach of the tractor operator. Bucket or fork automatically resets when lowered to the ground. Maximum lifting height 7½ feet. Conversion kits available to convert to other models, shown at the right.



THE BEST LOADER IDEA IN YEARS!

ALL 3 MODELS USE SAME BASIC FRAME, CONVERSION KITS CONVERT STANDARD MODEL TO EITHER OF TWO HEAVY-DUTY MODELS

■ All three of the loaders you see above look remarkably alike . . . at first glance. That's because the basic frame parts, lift arms and ram cylinders are identical . . . making possible the low price you pay for any of these outstanding loaders no matter which model you select!

Furthermore, if you start out with the standard model and later decide you would like to convert it to either of the heavy-duty models, you can do it by getting a conversion kit. Likewise, you can convert the heavy-duty model to the *hydraulically controlled bucket* heavy-duty model. In any case you can get whatever model is best suited to your farm.

The basic differences in these models are pictured and described on these pages. All loaders use the same bucket, manure fork and crane as shown and described on following pages.

Think what one of these loaders could mean on your farm in loading manure; handling sand, gravel, cinders, dirt, cement, coal. Think what a Dearborn Loader could mean in handling corn and grain either loose or in bags! At butchering time you can eliminate heavy lifting! Old posts can be pulled with your fingertips! Heavy machinery, boxes, bales, rolled fence can be picked up, moved and set down where you want with almost no effort on your part.

STANDARD

Model No. 19-21

MAIN FRAME—Constructed of one continuous length 2-inch steel tubing. Horizontal struts are 1½-inch steel tubing welded to front and rear legs of main frame.

LIFT ARMS—Constructed of 2-inch steel tubing reinforced with bridge type truss. Cross member at front end of lift arms is 2-inch double extra heavy tubing. A solid steel shaft on main frame is pivot for lift arms.

HYDRAULIC PUMP—Uses the Ford Tractor's built-in Hydraulic pump.

RAM CYLINDER—1½-inch diameter x 27-inch stroke.

HYDRAULIC CONTROL—Lifts, lowers by Ford Tractor Hydraulic Control.

BUCKET CONTROL—Mechanical lever conveniently located for operator. Bucket resets automatically after load is dumped.

MAXIMUM LIFT HEIGHT—Bucket or Fork 8 feet. Crane 14 feet.

MAXIMUM DUMP HEIGHT—7½ feet.

MAXIMUM LIFTING LOAD—750 pounds.

SHIPPING WEIGHT—Approximately 600 pounds.