

TYPE DEARBORN FARM EQUIPMENT (10-80)





ASSEMBLY and **OPERATING**

Instructions

DEARBORN MOTORS CORPORATION — DETROIT 3, MICHIGAN

DESCRIPTION



Figure 1
The Dearborn Disc Plow

The Dearborn Disc Plow pictured above is a Lift Type implement. Its sturdy construction assures long life and economical operation. The discs, mounted on a heavy high carbon cast steel frame, are equipped with tapered roller bearings to assure smooth operation. The 26 inch discs are made of electrically heat treated high carbon steel to withstand severe shock

and abrasive action. Each disc is equipped with an adjustable scraper.

The Disc Plow is held in alignment by a furrow wheel. The furrow wheel is equipped with a coil spring mounting which permits it to ride over obstructions and to automatically adjust itself for proper height. The furrow wheel is also equipped with tapered roller bearings.

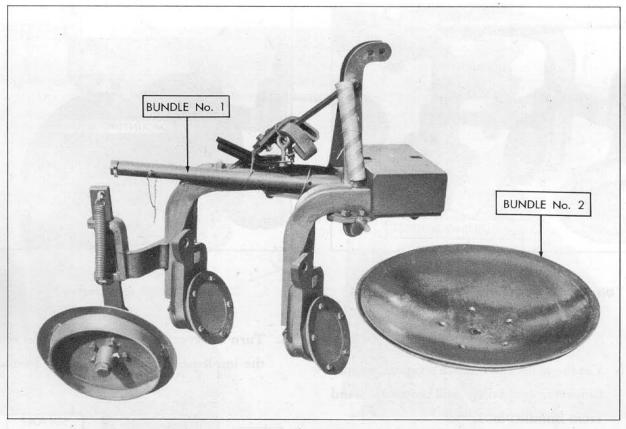


Figure 2
Implement Bundled for Shipment

NOTE: Assembly of the Dearborn Disc Plow is the responsibility of your Dearborn Farm Equipment dealer. This equipment should be delivered completely assembled. The following instructions are provided, in case of need.

BUNDLE INFORMATION

The Dearborn Disc Plow is shipped in two bundles:

Bundle No. 1

Plow frame assembly, front and rear scraper bracket, two scrapers, support stand assembly, two scraper mounting eye bolts, and the instruction manual tube.

Bundle No. 2

Two disc blades.

NOTE: To make certain that the shipment is complete check each item against the above bundle contents information.

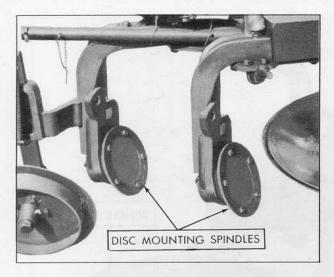


Figure 3

Disc Mounting Spindles with Bolts Reversed

ASSEMBLY PROCEDURE

- Cut the wires and remove scrapers, scraper brackets, eye bolts, and support stand from Bundle No. 1.
- Turn the plow frame assembly over on its side so that the long beam rests on the ground. This will give ground clearance for mounting disc blades.
- 3. Remove the five plow bolts from each disc mounting spindle. See Figure 3.

NOTE: These bolts were placed in the spindles in reverse position to prevent damage in shipping.

- 4. Position a disc (discs are interchangeable) on each mounting spindle and insert the five mounting bolts so that the flat heads fit the contour of the discs as shown in Figure 4.
- Tighten nuts alternately, until disc is securely attached to disc mounting spindle.

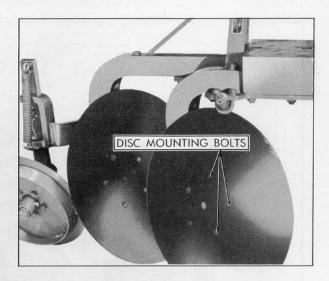


Figure 4
Discs Mounted on Spindles

Turn the complete assembly over so that the implement rests on the short beam.

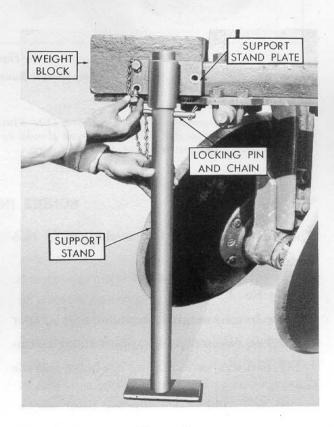


Figure 5
Attaching Support Stand

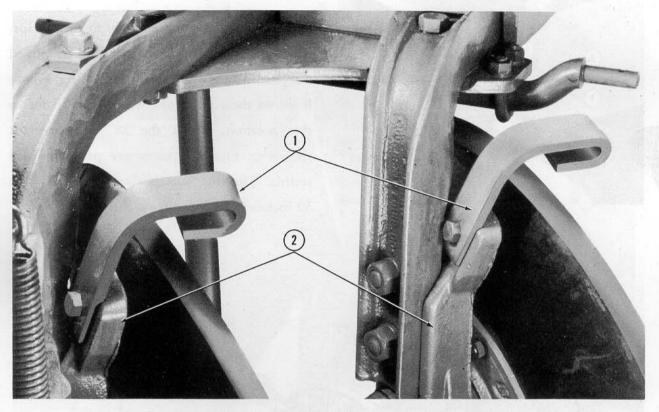


Figure 6
Scraper Mounting Brackets Attached

- 7. Remove cap screws from the weight block and attach the support stand mounting bracket to the left side of the weight block as shown in Figure 5. Secure the support stand chain assembly by inserting cotter pin through the hole drilled in the head of the mounting screw.
- 8. Insert the upright end of the support stand through the sleeve of the mounting bracket and secure stand upright with locking pin as shown in Figure 5. The plow can now be placed in upright position.
- 9. Position and bolt the scraper mounting

- brackets (1) to the disc bearing boxes (2) as shown in Figure 6.
- 10. Attach scrapers to scraper brackets by inserting the eye bolt (1), Figure 7, through the loop end of the scraper mounting bracket (2), and then inserting the scraper stem (3) through the eye bolt as shown in Figure 7.

The scraper should be adjusted so the point is approximately ½ inch from the center of the disc and so there is approximately ⅓ inch clearance between the disc face and scraper blade (4), Figure 7. Secure with washer and nut when scraper is correctly positioned.

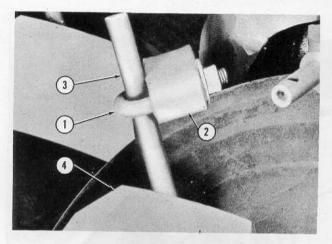


Figure 7
Scraper Attached to Bracket

TRACTOR WHEEL SPACING

Before attaching the disc plow to the tractor, the right front tractor wheel should be moved out four inches from the normal setting. Figure 8 shows the right front wheel moved out to this position. Check the 28" measurement shown in Figure 8 to assure proper wheel setting. The rear wheels should be spaced at 52 inches (as shipped from the factory).



Figure 8
Recommended Front Wheel Setting

ATTACHING AND DETACHING

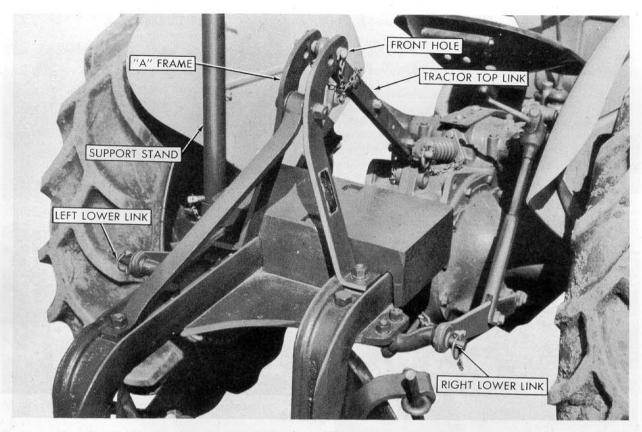


Figure 9
Plow Attached to Tractor

ATTACHING DISC PLOW TO TRACTOR

- Place the assembled Disc Plow on a level floor or ground area where it is accessible to the tractor.
- 2. Back the tractor into position and attach the tractor left lower link and right lower link as shown in Figure 9. Secure with linch pins.
- 3. Attach top tractor connecting link to the front hole of the plow "A" frame and secure with linch pin as shown in Figure 9.

NOTE: The tractor top link should be adjusted to its shortest length.

4. Attach forward end of top link to tractor

- control spring yoke, insert pin and secure with linch pin.
- Raise and lock plow support stand to top position.

DETACHING DISC PLOW FROM TRACTOR

- Lower the support stand and secure with lock pin.
- 2. Level disc plow with tractor leveling crank.
- 3. Disconnect tractor top link from the plow.
- 4. Disconnect lower right link from plow.
- 5. Disconnect lower left link from plow.

CAUTION: Be sure that the disc plow is completely disconnected before attempting to move tractor.



Figure 10
Disc Plow at Work

LUBRICATION

Use standard grease gun to lubricate grease fittings shown in Figure 11: (1) hub of front disc, (2) hub of rear disc, (3) hub of furrow wheel.

- Wipe the fittings clean before lubricating to give a good grease gun fit and to prevent outside dirt from being forced into the bearing.
- Force enough grease into the bearings to carry out the grit and dirt and to seal the bearings from outside dirt and dust.

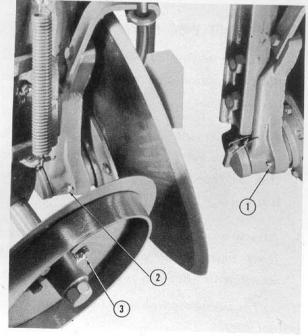


Figure 11 Location of Lubrication Fittings

ADJUSTMENTS

The Dearborn Disc Plow is operated easily and effectively from the tractor seat by means of the Ford Hydraulic Touch Control. Satisfactory operation depends upon a few minor adjustments that can be made quickly and easily in the field.

Leveling the Plow: The plow should be leveled after making the first cut in a new plowing operation to allow for the fact that the tractor and the plow are tilted because the wheels on the right side of the tractor travel in the furrow. This adjustment is made by turning the tractor leveling crank until the plow is level when the right hand tractor wheels are in the furrow. The depth of the furrow determines the amount of leveling adjustment, necessary to keep the plow operating on the level.

Setting the Cross Shaft: Check the distance from the short beam face to the drag link machined shoulder as shown in Figure 12. If this measurement is not 5 inches make the following adjustments:

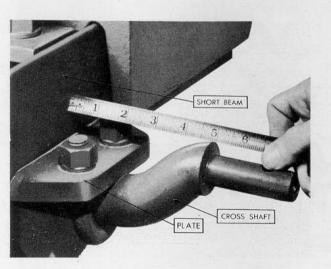


Figure 12 Setting the Cross Shaft

- 1. Loosen the four "U" bolt nuts that hold the cross shaft to the plate.
- 2. Move the cross shaft until the measurement is 5 inches as shown in Figure 12.
- 3. Tighten the "U" bolt nuts securely.

CAUTION: Tighten the nuts on each "U" bolt set alternately a little at a time to assure good contact between the "U" bolt and the cross shaft.

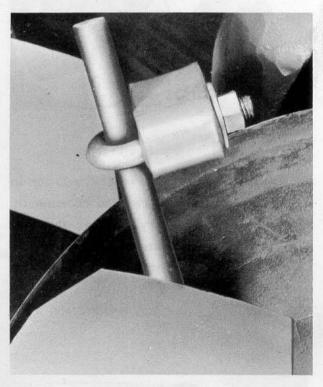


Figure 13 Scraper Adjustment

Scraper Adjustment: The scrapers can be adjusted to suit the particular soil and operating conditions encountered in the field. By loosening the nut shown in Figure 13 the scraper can be raised or lowered to control the turning of the furrow slice as desired. For heavy or wet ground, lower the scraper blades. On dry or trashy ground raising the scrapers will permit better trash clearance.

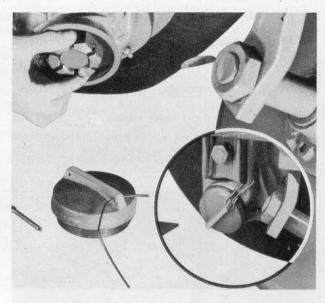


Figure 14
Adjusting Disc Hub Bearing

Bearing Adjustments: The tapered bearings in the disc hub should be checked occasionally and adjusted if necessary. Remove the lock wire, dust cap, and cotter pin, as shown in Figure 14. Turn the castellated nut until reasonably tight, then back it off 1/16 turn Secure nut with cotter pin. Replace and lock-

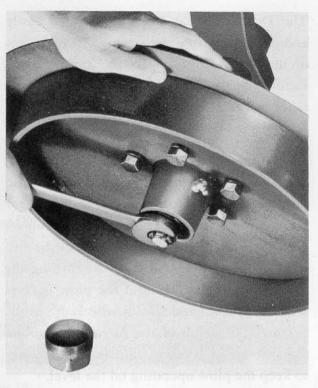


Figure 15
Adjusting Furrow Wheel Bearing

wire the dust cap as shown in Figure 14, insert. Furrow wheel bearing adjustment is made in the same manner. See Figure 15.

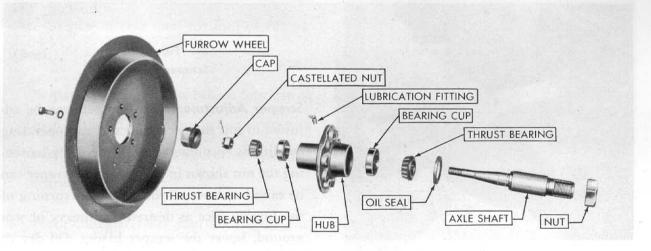


Figure 16
Furrow Wheel Bearing Assembly
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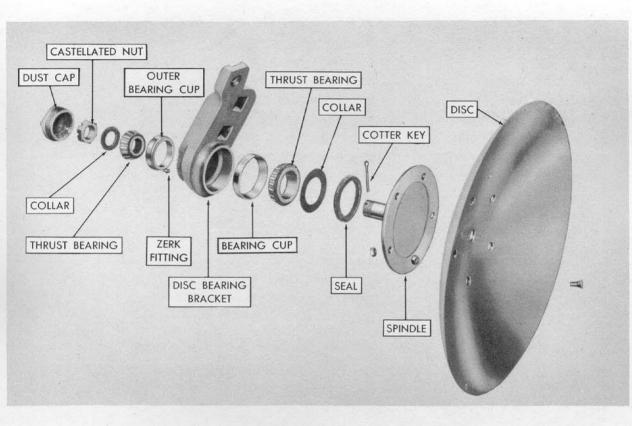


Figure 17
Disc Hub Bearing Assembly



Figure 18
Plow in Transport Position