ASSEMBLY and OPERATING Instructions

DEARBORN MOTORS CORPORATION – DETROIT 3, MICHIGAN
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Description</td>
<td>2</td>
</tr>
<tr>
<td>Assembly</td>
<td>3</td>
</tr>
<tr>
<td>Attaching</td>
<td>4-5</td>
</tr>
<tr>
<td>Detaching</td>
<td>6</td>
</tr>
<tr>
<td>Safety Precautions</td>
<td>6</td>
</tr>
<tr>
<td>Operating</td>
<td>7-8</td>
</tr>
<tr>
<td>Maintenance</td>
<td>8</td>
</tr>
<tr>
<td>Lubrication</td>
<td>9</td>
</tr>
</tbody>
</table>

Dearborn Motors Corporation reserves the right to make changes in design, materials, and/or specifications, without notice and without liability therefor.

Copyright, 1947 — Dearborn Motors Corporation — Detroit 3, Michigan
The Danuser Post Hole Digger is one item of the basic line of Dearborn Farm Equipment designed for use with the Ford Tractor. Each item of this equipment has been built to aid you in the performance of specific agricultural operations.

This implement drills holes straight and clean to a maximum depth of 40 inches. Its specific use around the farm, the ranch, or the vineyard, includes drilling holes for steel or wood fence posts, for pilings to support light buildings, and holes for planting seedlings. It is easily operated and does the job quickly.

This manual, which contains information about the assembly, preparation for use, operation and care of the Digger, is provided to help you get maximum use and satisfaction from this piece of Dearborn equipment. Read the instructions carefully and keep this manual available for ready reference.

Your Ford Tractor dealer will instruct you in the operation of this equipment. He will show you how to easily and quickly attach the Digger to your Ford Tractor, how to control the hole depth, and how to secure the auger when traveling on the open road or across fields.

Your Ford Tractor dealer will be glad to answer any questions that may arise regarding the operation of the Digger. He is interested in your getting the most out of your investment.

For your service and satisfaction, your Ford Tractor dealer carries a complete stock of genuine Ford Tractor and Dearborn Equipment Repair Parts. These parts are precision manufactured and inspected, thus assuring high quality and accurate fit. Insist on genuine Ford Tractor and Dearborn Equipment Repair Parts.
The Danuser Digger, pictured above, like all Dearborn equipment is built to high quality standards and specifications. It is designed for one-man operation and takes full advantage of the Ford Tractor hydraulic system. All parts are steel fabricated. Tubular arms and welded construction provide maximum strength with minimum weight. The Digger is equipped with Timken Bearings.

The auger has double flights thus assuring efficient elevation of dirt and quick digging. Augers are available in the following sizes: 4", 6", 9", 10", 12", 14" and 18". The 9" diameter auger is standard. The smaller augers are used for digging holes for steel posts which are to be set in concrete. The larger diameter augers are used primarily for digging holes for seedlings. All augers except the two smaller diameters are equipped with removable cutting edges. The auger is attached to the auger shaft by a shear bolt which will release before the tractor or Digger is damaged.

A telescopic shaft connects the drive gears of the auger unit with the tractor power take-off. This feature permits the auger to swing freely toward or away from the tractor and, in conjunction with the Leveling Crank, assures a perpendicular drilling position regardless of tractor tilt.
The Danuser Digger is shipped in two bundles. Bundle No. 1 is made up of the auger unit with the tubular lift arms inserted in the telescopic lift arms and wired at the outer end. The yoke and the telescopic end of the drive shaft are also a part of this bundle.

Bundle No. 2 is a box containing the front link, two rear links, one universal joint male assembly, a right- and left-hand stabilizer bracket and a bag containing small parts. See figure 2.

**Step 1:** Cut and remove all wires on bundle No. 1.

**Step 2:** Remove parts from box (bundle No. 2).

**Step 3:** Attach rear links to telescopic lift arms of auger unit with clevis pins. Secure pins with cotter keys. Be sure to attach rear links so that the holes in the forward ends are in alignment and will permit attachment to the yoke.

**Step 4:** Attach one end of front link to lower hole in yoke hinge with clevis pin. Secure pin with cotter key. The Digger is now ready for attachment to the tractor.
Step 1: Attach stabilizer brackets to rear axle housing with furnished bolts. Flange faces inward with wide portion of bracket flange forward. Use nuts from fender bolts and tighten finger tight. Do not tighten with wrench until Digger is entirely mounted.

Step 2: Attach flanged fulcrum bolts to stabilizer brackets.

Step 3: Attach lift arms to stabilizer brackets. Be sure reinforcement ribs are turned upward and the "bend" in each arm is inward. Secure with linch pins.

Step 4: Attach yoke and lift arms to lower tractor hydraulic lift links and secure with linch pins.

Step 5: Attach front Digger link to tractor control spring yoke.

Step 6: Lay assembled auger and drive unit on ground behind tractor with point of auger toward center of tractor.

Step 7: Coat engaging ends of tubular lift arms with grease to facilitate attachment.

Step 8: Back tractor up to assembled auger unit and put end of tubular lift arms in open ends of telescopic arms on auger unit.

Step 9: Back tractor up slowly until Digger lift arms attached to tractor are fully engaged with lift arms attached to auger unit.

Step 10: Raise unit to transport position with Ford Tractor Hydraulic Touch Control Lever.
Step 11: Attach the right and left rear Digger links to upper end of yoke hinge.

Step 12: Coat outer portion of square shaft of universal joint (male) assembly with a good grade of lubricating grease and insert in telescopic auger unit shaft.

Step 13: Remove tractor power take-off cap and attach spline end of universal joint to tractor power take-off. Secure with bolt provided.

Warning: This should always be the last attachment made in mounting Digger on tractor.

Step 14: Tighten nuts on bolts holding stabilizer brackets to rear axle housing.

Step 15: Lubricate all zerk fittings. These fittings are on the auger unit and universal joints.
**Step 1:** Raise digger to transport position and shut off tractor engine.

**Step 2:** Remove power shaft from tractor power take-off and pull shaft free from digger. Replace attaching bolt in spline end of universal joint. Replace tractor power take-off cap.

**Step 3:** Lower auger with Ford Tractor Hydraulic Touch Control Lever until point rests firmly on ground or floor.

**Step 4:** Back tractor up slowly and at the same time lower auger with Ford Hydraulic Touch Control Lever until auger unit rests on ground or floor.

**Step 5:** Push Ford Hydraulic Touch Control Lever to lowest position and shut off tractor engine.

**Step 6:** Disconnect right and left rear Digger links from yoke.

**Step 7:** Pull lift arms out of telescopic arms on auger unit by rolling or driving tractor forward.

**Step 8:** Disconnect yoke and left and right lower tractor links from lift arms.

**Step 9:** Disconnect front Digger link from tractor control spring yoke.

**Step 10:** Disconnect tubular lift arms from stabilizer brackets.

**Step 11:** Remove stabilizer brackets from tractor rear axle housing. (Brackets may be left on tractor if desired.)

**Step 12:** Secure fenders with regular fender bolts.

**Caution:** Be sure Digger is completely disconnected before attempting to move tractor.

---

**SAFETY PRECAUTIONS**

Most farm implement accidents can be avoided by following these safety precautions:

1. Do not permit anyone but the operator to ride the tractor at any time.

2. Always lower implement to ground with the Ford Hydraulic Touch Control when leaving tractor. This will prevent injury should anyone tamper with the controls.

3. Never leave tractor while it is in motion.

4. Never attempt to make adjustments on tractor or implement when tractor is in motion.

5. Always shut off engine when leaving tractor.
OPERATING THE DIGGER

The Danuser Digger is operated simply and easily from the seat of the tractor by means of the Ford Hydraulic Touch Control Lever.

DRILLING HOLES

Under normal operating conditions the Digger will drill between 500 and 600 holes in a day. To drill a hole, drive tractor into position so auger point hangs in perpendicular position over center of hole location; engage tractor power take-off; and lower the revolving auger by pushing the Ford Hydraulic Touch Control Lever forward slowly until auger point and cutting edges engage ground. Increase engine R.P.M. and continue to lower auger into ground.

In most soil conditions it will be necessary to raise the auger two or three times to clean the dirt from the hole. It will be found helpful to occasionally bring the Ford Hydraulic Touch Control Lever back to neutral position. This stops the auger's downward travel, holds it there and lets the auger turn in the hole for a few revolutions to clear itself.

In rocky terrain and in areas where roots are prevalent, the Digger is protected by a shear pin (use only standard soft machine bolt) and by a built-in safety valve on the tractor.
When auger reaches desired depth, lift it out of the hole to transport position with Ford Hydraulic Touch Control Lever. Disengage tractor power take-off and drive tractor to location of next hole. Engine R.P.M. for efficient digging will be determined by condition and type of soil, and experience of operator.

NOTE: If bobbing is noticeable at top of lift or if unit falls out of control on downward travel, this may be caused by the master control spring being loosely adjusted. Failure to lift properly may be caused by weak spring or scored ball in safety valve. This should be checked and replaced if defective. Consult your Ford Tractor instruction book or dealer if hydraulic system needs adjustment.

TRANSPORTING
Transport clearance of auger in operating position is 8 inches.
The telescopic arms and power shaft plus ball joint mounting prevent damage when passing over stumps or rocks with auger in operating position. However, to insure safe traveling, when on the open road or crossing fields, swing auger forward and secure with heavy rope above maximum clearance of tractor.

CUTTING EDGES
All augers except the 4" and 6" are equipped with removable cutting edges. Keep cutting edges reasonably sharp to insure maximum digger efficiency. Grind cutting edges on upper surface only. Serrated edges are available on 9", 10", 12" and 18" augers.

MAINTENANCE
1. Clean auger after each day's operation.
2. Keep cutting edges reasonably sharp. Grind on upper surface only.
3. Store Digger in clean, dry place on wood or cement floor, if possible.
4. Use touch-up paint as necessary to maintain appearance of implement and prevent rust.
5. Replace worn parts promptly, using genuine Dearborn Farm Equipment Repair Parts.
LUBRICATION

All Timken bearings are protected with grease seals to keep out dust and dirt. Keep the auger unit gear box two-thirds full with a good grade of tractor differential lubricant.

The six zerk fittings as shown in the above Figure should be lubricated with a good grade of gear grease before the Digger is used for the first time and thereafter following every 15 to 20 hours of operation.

Lubricate the male portion of the drive shaft with a good grade of machine or engine oil through the two oil holes located near the forward end of the telescopic portion of the drive shaft.
DEARBORN MOTORS CORPORATION

EQUIPMENT WARRANTY

Dearborn Motors Corporation warrants all parts (other than tires) of equipment bearing the trade mark "Dearborn Equipment" to the original purchaser thereof at retail, for a period of six (6) months from the date of delivery thereof to the original purchaser at retail, to be free from defects in workmanship and material under normal use and service. The obligation of Dearborn Motors Corporation under this warranty shall be limited to shipment, without charge to the original purchaser at retail, of the part or parts of such Dearborn Equipment intended to replace the part or parts acknowledged by Dearborn Motors Corporation to be defective in workmanship or material. This warranty is in lieu of all other warranties, expressed or implied, and of all obligations or liabilities on the part of Dearborn Motors Corporation, and it neither assumes nor authorizes any person to assume for it, any other obligation or liability in connection with workmanship or material of equipment bearing the trade mark "Dearborn Equipment" or any part thereof. This warranty shall not apply to any Dearborn Equipment, or any part thereof, which has been damaged in any accident, or by fire, flood, or Act of God, or abused or misused, or which has been altered elsewhere than at the place of manufacture, or in which the original purchaser thereof at retail, has used or allowed to be used, parts not made or supplied by Dearborn Motors Corporation. Dearborn Motors Corporation reserves the right at any time to make changes in the design, materials and/or specifications of equipment bearing the trade mark "Dearborn Equipment" and/or accessories therefor, without thereby becoming liable to make similar changes in equipment bearing the trade mark "Dearborn Equipment" and/or accessories therefor, previously manufactured.

DEARBORN MOTORS CORPORATION
DETOUR 3, MICHIGAN