

POST HOLE DIGGER

SERIES 903



MOTOR COMPANY

ASSEMBLY AND OPERATING INSTRUCTIONS

GENERAL

The Series 903 Ford Post Hole Digger is designed for use with Ford and Fordson Tractors. It mounts on the tractor lowerlinks and the hydraulic lift rocker as shown in Figure 2. The digger is operated from the tractor seat and is driven by the tractor P.T.O. at the 540 rpm speed only.

Maximum digging depth of all Ford Augers is approximately 42 inches, making it ideal for digging fence post holes and for use in construction work to dig holes for pilings or footings.

Augers are sold separately, and are available in a wide variety of sizes (diameter) as detailed on page 4. All augers are 42 inches long and are provided with either a plain or serrated cutting edge.

This manual contains information pertaining to the assembly, lubrication, and operation of the Series 903 Post Hole Digger. Read it carefully before attempting to assemble or operate the digger.

SHIPPING INFORMATION

The Ford Post Hole Digger is shipped in one Bundle, No. 22-63. Before assembling the unit, check the parts against Figure 1 and the following list to make certain that all parts are present.

Item No.	Figure No.	Description
1	1	Universal Drive Shaft
2	1	Frame
3	1	A & O Manual
4	1	Gear Housing
5	1	Centering Lever & Control Handle
6	1	Pin
7	1	Lifting Link

ASSEMBLY PROCEDURE

1. Secure the lifting link (12), Figure 2, to the frame with the long pin (6), Figure 1, and cotter pins. Make certain that the control handle attaching ears are slanting forward.

NOTE: The forward set of holes (A), Figure 2, in the frame is used for row crop tractors, while the rear set of holes (B), is used for general purpose tractors.

2. Disconnect the gear box from the frame by removing the long pin (2), Figure 2. Attach the centering lever (3), to the top of the gear box with the two bolts provided on the gear box. Realign the gear box with the frame and install the pin (2), as shown in Figure 2.
3. Secure the control handle (1), Figure 2, between and lifting link ears (5), with the drilled pin and cotter pin provided.

ATTACHING PROCEDURE

Ford and Fordson Dexta Tractors

1. Attach the lifting link pins (10), Figure 2, to the tractor lower links and secure with linch pins.
2. Attach the frame ball socket assembly (9), Figure 2, to the tractor rocker assembly with the pin and linch pin provided on the tractor. The lower hole in the rocker will give the most ground clearance.
3. Fit the auger (7), Figure 2, on the drive spindle and secure with the 7/16" x 4" hex head shear bolt (6), lock washer, and nut provided.
4. Extend the universal drive shaft (11), Figure 2, and coat it with grease, then slide it back in the drive tube.
5. Disengage the tractor P.T.O. and remove the P.T.O. cap. Turn the P.T.O. shaft manually until the hole is aligned with the spring loaded joint on the universal drive shaft and slide the drive shaft over the P.T.O. shaft until the pin is locked.

NOTE: The universal drive shaft on the Ford Post Hole Digger is designed for use on tractors having a P.T.O. drive shaft of 1-3/8" diameter. Tractors having a P.T.O. drive shaft of 1-1/8" diameter must be adapted for use by installing a P.T.O. Coupling Adapter, Part No. 231082. Secure the coupling with a 5/16" x 2-1/4" bolt.

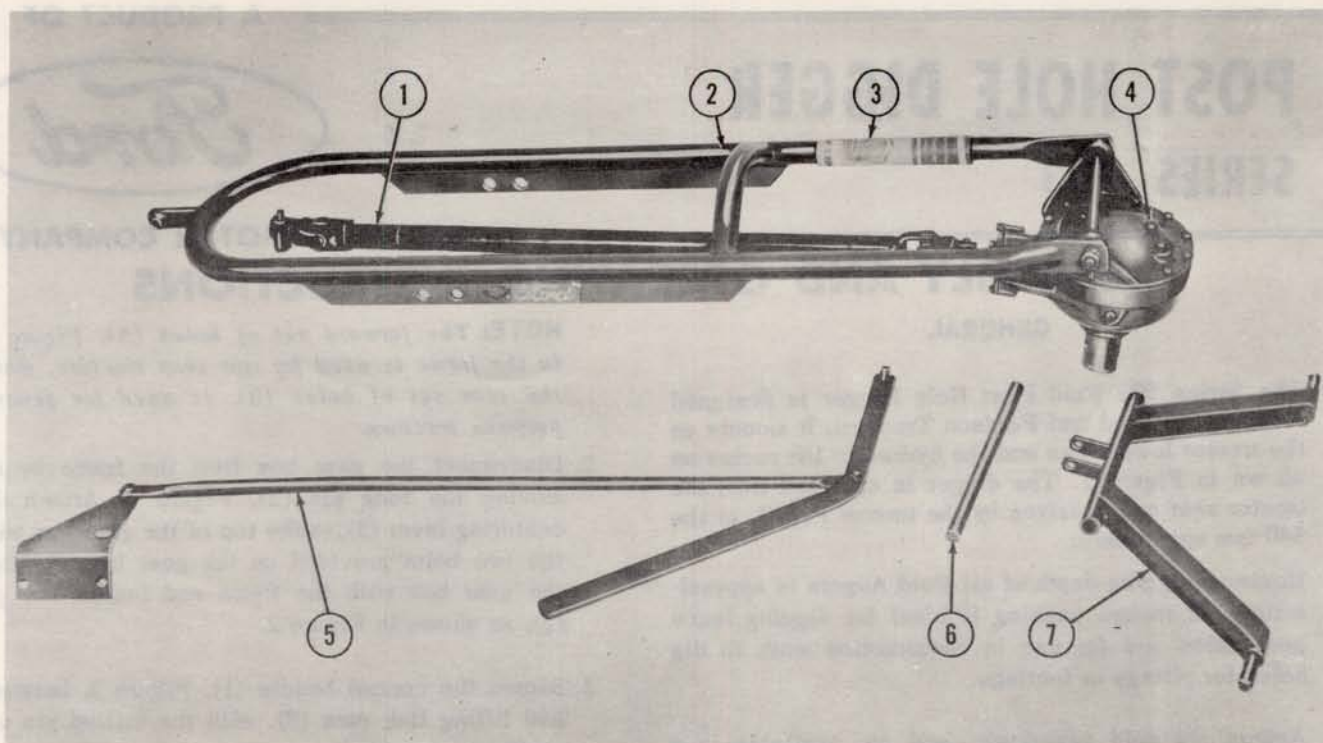


Figure 1
Post Hole Digger Shipment Breakdown

**Fordson Super Major, Fordson Power Major,
and Fordson Major Diesel Tractors**

The following parts are necessary to adapt the Ford Post Hole Digger to these tractors. The parts are standard and may be ordered separately from your Ford Tractor and Implement Dealer.

Qty.	Part Number	Description
4	44746-S8	Washer
2	221799	Spacer, Lower Link Pin
2	NCA-22218-A	Spacer, Upper Link Pin
1	100918	Pin, Drilled
1	111856	Pin, Self-Locking

NOTE: Assemble the Ford Post Hole Digger in the same manner as outlined for Ford Tractors, with the lift link in the rear holes (B), of the frame support (13), Figure 2.

1. Adjust the tractor hydraulic lift leveling rods to a length of 24 inches to obtain auger tip ground clearance of approximately 10 inches.
2. On F.M.D. and F.P.M. Tractors, set the tractor leveling rods in telescoping position by repositioning the leveling rod sleeve pin EIADKN-995250.
3. Place the leveling rod clevises in the forward hole in the tractor lower link assemblies.
4. Lengthen the check chain linkage to permit closing the tractor lower links to a minimum of 26-7/8".

NOTE: Remove the Buffer Bar, EIADKN-995309, on Fordson Tractors equipped with an automatic clutch release prior to post hole digger installation.

5. Position one spacer, Part No. 221799, in each of the ball sockets of the tractor lower links, then insert the post hole digger lifting link pins through the spacers and secure with linch pins.
6. Position an NCA-22218-A Spacer in each side of the tractor upper link support bracket, then attach the frame ball socket assembly to the clevis. Insert the pin, Part No. 100918, through the spacers and the front link and secure with the self-locking internal hair pin, Part No. 111856.

To complete the installation procedure, follow steps 3, 4, and 5, under **Ford Tractors**.

LUBRICATION

There are three lubrication fittings on the Ford Post Hole Digger. One fitting is provided on each universal shaft joint and one on the shaft tube. Lubricate these fittings with a good grade of grease after assembly and every eight hours of operation thereafter, or more often if required.

The gear box is shipped less oil and should be filled with 2 quarts of SAE 90 EP oil. To fill the gear box, remove filler plug (4), Figure 2, pour 2 quarts of

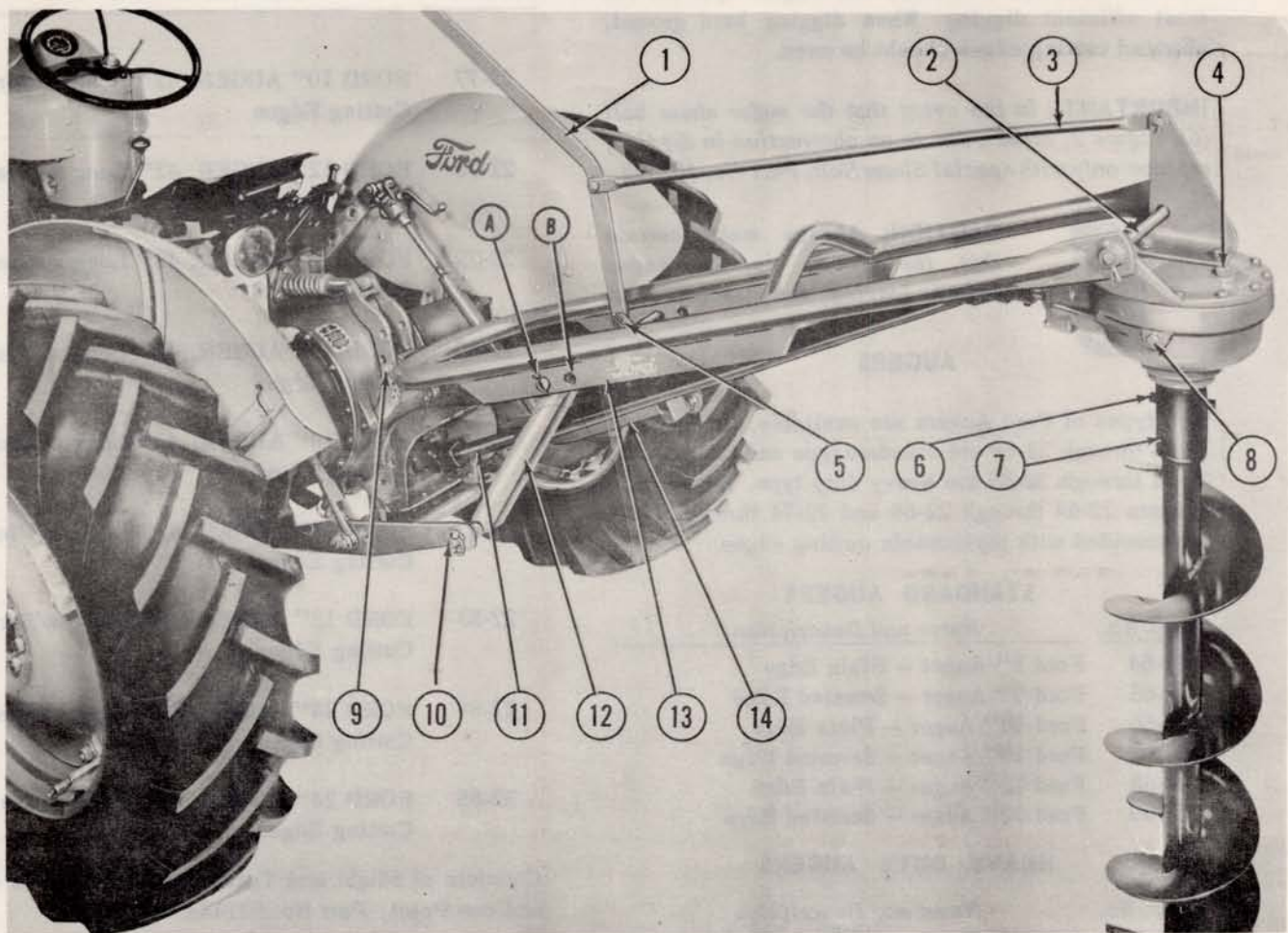


Figure 2
Post Hole Digger Assembled on Tractor

SAE 90 EP oil into box. Install the filler plug. Remove plug (8), to check the lubricant level occasionally and keep the gear box two-thirds full.

OPERATION

The Ford Post Hole Digger is easily operated from the tractor seat by means of the tractor hydraulic system and the manual centering lever.

Drive the tractor into position with the auger directly over the center of the hole location and set the engine P.T.O. speed according to ground conditions.



CAUTION: The 1000 rpm range on Select-O-Speed equipped tractors should never be used to drive the Post Hole Digger.

Make certain the hydraulic system is in Implement Position Control. Engage the P.T.O. and lower the digger until the auger point and cutting edges engage the ground. In order to drill a clean hole, drill in a

foot or so then raise the auger until it is almost out of the hole. Then, drill deeper and repeat this process until the desired hole depth is reached.

The Ford Post Hole Digger operates equally well on either hillside or level land. The auger unit is suspended so that it is free to swing toward or away from the tractor. The centering lever, which is easily reached from the tractor seat, centers the auger for vertical drilling. The adjustment provided by the tractor lower link leveling crank compensates for the tractor tilt.

When operating on level ground or ground of uniform slope, drill the first hole to the desired depth and then set the stop on the hydraulic lift control quadrant so the lever will be moved downward the same distance in drilling each successive hole. On uneven ground or slopes it will be necessary to vary the hydraulic quadrant setting to maintain consistent hole depth.

The condition and type of soil and the experience of

the operator will determine the engine rpm for the most efficient digging. When digging hard ground, serrated cutting edges should be used.

IMPORTANT: In the event that the auger shear bolt (6), Figure 2, breaks due to an obstruction in digging, replace only with special Shear Bolt, Part No. 107328.



CAUTION: Always make certain that the P.T.O. is disengaged before leaving the tractor seat.

AUGERS

Two types of Ford Augers are available, Components 22-64 through 22-69 are standard type and Components 22-72 through 22-85 are heavy duty type. Auger Components 22-64 through 22-69 and 22-74 through 22-85 are provided with replaceable cutting edges.

STANDARD AUGERS

Comp. No.	Name and Description
22-64	Ford 9" Auger - Plain Edge
22-65	Ford 9" Auger - Serrated Edge
22-66	Ford 10" Auger - Plain Edge
22-67	Ford 10" Auger - Serrated Edge
22-68	Ford 12" Auger - Plain Edge
22-69	Ford 12" Auger - Serrated Edge

HEAVY DUTY AUGERS

Comp. No.	Name and Description
22-72	FORD 4" AUGER, 42" Long w/Welded Plain Cutting Edge Consists of Flight and Tube, plus: Auger Point, Part No. 107862
22-73	FORD 6" AUGER, 42" Long w/Welded Plain Cutting Edge
22-74	FORD 9" AUGER, 42" Long w/Plain Cutting Edges
22-75	FORD 9" AUGER, 42" Long w/Serrated Cutting Edges
22-76	FORD 10" AUGER, 42" Long w/Plain Cutting Edges

Comp. No.	Name and Description
22-77	FORD 10" AUGER, 42" Long w/Serrated Cutting Edges
22-78	FORD 12" AUGER, 42" Long w/Plain Cutting Edges
22-79	FORD 12" AUGER, 42" Long w/Serrated Cutting Edges
22-80	FORD 14" AUGER, 42" Long w/Plain Cutting Edges
22-81	FORD 14" AUGER, 42" Long w/Serrated Cutting Edges
22-82	FORD 18" AUGER, 42" Long w/Plain Cutting Edges
22-83	FORD 18" AUGER, 42" Long w/Serrated Cutting Edges
22-84	FORD 24" AUGER, 42" Long w/Plain Cutting Edges
22-85	FORD 24" AUGER, 42" Long w/Serrate Cutting Edges

Consists of Flight and Tube plus either of two edges and one Point, Part No. 221443.

A Fish Tail Auger Point, Part No. 150036, may be purchased as extra equipment for use in conditions where penetration is difficult. A Stabilizer Link Kit may be used with the Series 903 Post Hole Digger to prevent the auger from swaying to one side when operating on an incline. The part numbers for the various kits are as follows:

Part No.	Description	Model Application
231253	Stabilizer Link Kit	Category I All Purpose
231076	Stabilizer Link Kit	Category II Row Crop

"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."

Prepared by

TRACTOR AND IMPLEMENT OPERATIONS (U.S.)

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