

OUTBOARD MOTOR LOWER UNIT TOOLS

Listed below are service tools recommended to be used on our products. For detailed instructions, see your Mechanic's Manual. These tools can be purchased through your source of supply. Refer to Master Parts Price List for prices on part numbers shown under Div. 1, Sec. 2.

Item No. Part No. Part Name

1 97846 Test Tank (Fig. 1)

Purpose: To maintain adequate water supply to keep lower unit submerged while running outboard motor. Test tank specifications are as follows:

Width: 16" **Length:** 29" **Height:** 28"

Material: Steel, .0747 or 14 gauge welded construction with primer and finish coats of paint.

Approximate Water Capacity: 33 gallons

Drainage: (1) Removable stand pipe
(2) External drain plug, lower right hand corner

Provision for Filling: Coupling and drain plug in upper left hand corner provides for filling tank from city water supply. The internal stand pipe provides control of water level.

Exhaust: 8" diameter exhaust outlet for attachment to exhaust system to be supplied by purchaser.

Baffling: Two internal baffles to control cavitation and reduce water loss thru exhaust system.

Shipping Weight: 75 lbs. approx.

2 94408 Test Propeller (Fig. 2)

Purpose: 2-blade cut down propeller reduces load and water turbulence while outboard motor is in gear under full throttle. Used on 3 and 4 H.P. range outboard motors.

3 94409 Test Propeller (Fig. 3)

Purpose: 3-blade cut down propeller reduces load and water turbulence while outboard motor is in gear under full throttle. Used on 7 H.P. range F.N.R. outboard motors only.

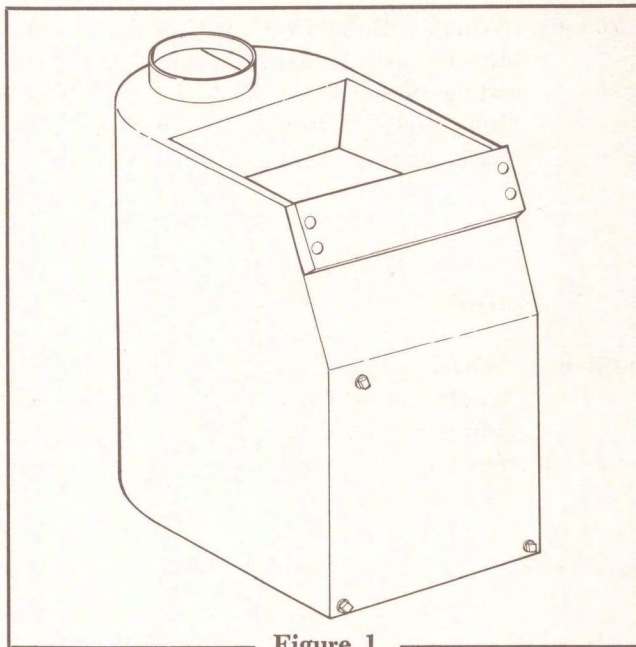


Figure 1

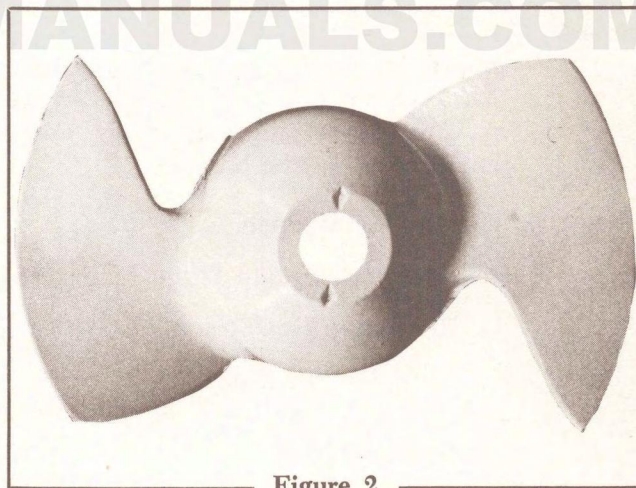


Figure 2

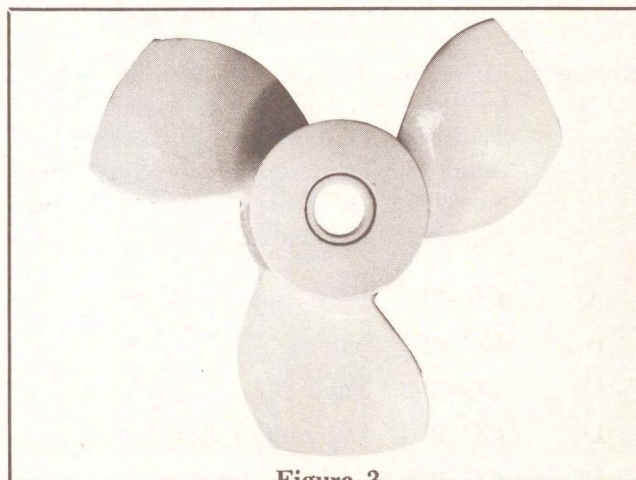


Figure 3

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Item No. Part No. Part Name

4 97974 Test Wheel (Fig. 4)

Purpose: Wheel with beveled edge outside diameter reduces load and water turbulence while outboard motor is in gear under full throttle. Used on 14 and 15 H.P. range outboard motors.

5 97975 Test Wheel (Fig. 5)

Purpose: Wheel without beveled edge outside diameter reduces load and water turbulence while outboard motor is in gear under full throttle. Used on 9 and 10 H.P. range outboard motors.

6 Pipe Tap Tool Assy. (Fig. 6)

Purpose: To remove front oilite flange bushing, propeller shaft, used on F.N.R. gear housing. Tools indicated below as illustrated in figure can be purchased locally. Component tools may be brazed.

- A 1/2" Ratchet Wrench.
- B 4" long x 1/2" Square Drive Extension.
- C 11/16" Square Hex Socket.
- D 3/4" Straight Pipe Tap.

7 Puller Tool Assy. (Fig. 7)

Purpose: To remove front needle bearing, propeller shaft, used on F.N.R. gear housing. Tools indicated below as illustrated in figure can be purchased locally through Snap-On Tool Corp. under their part numbers as indicated.

- A CG-40-1 Press Screw
- B CG-40-2 Nut
- C CG-40-3 Yoke
- D CG-40-4 Expanding Rod
- E CG-40A-10 Collet

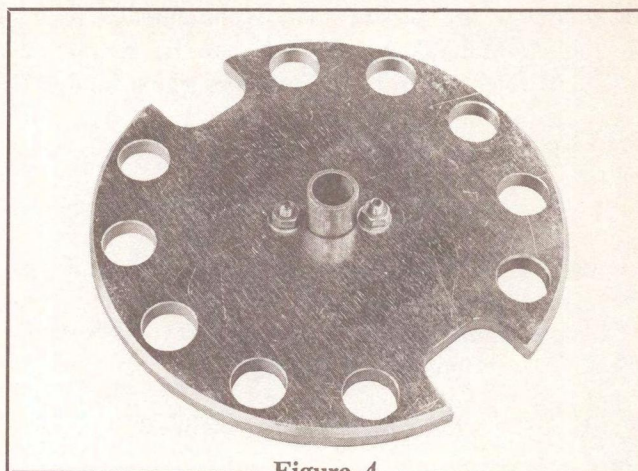


Figure 4

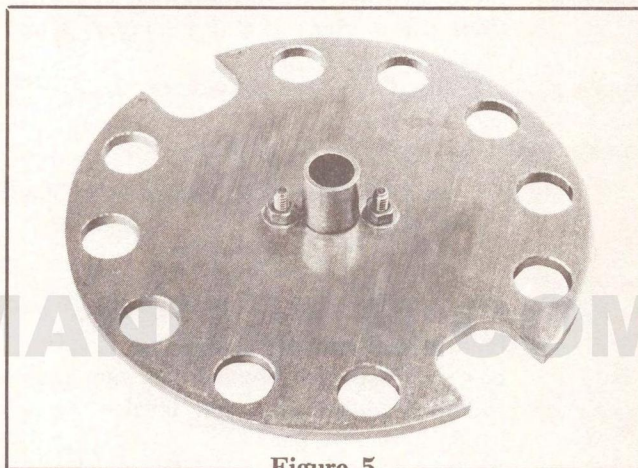


Figure 5

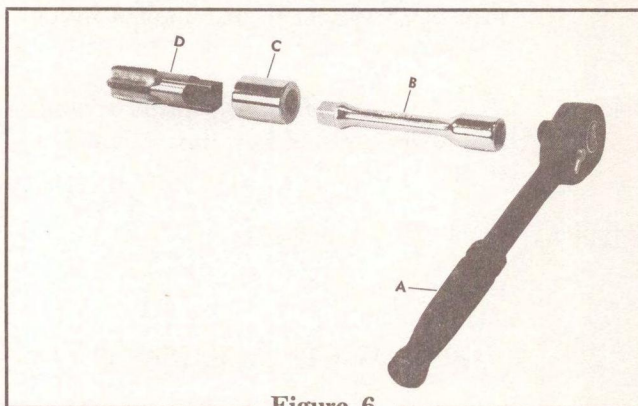


Figure 6

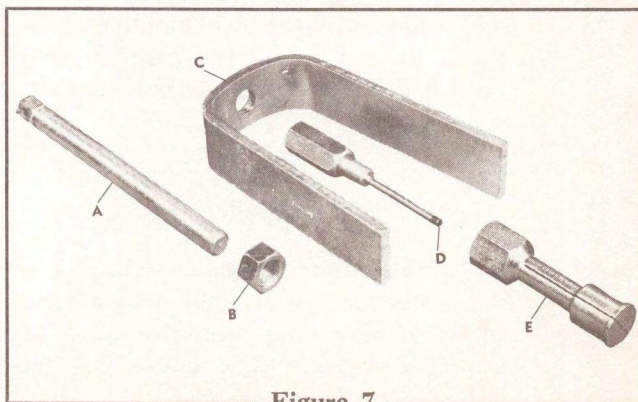


Figure 7

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Item No. Part No. Part Name

8 94427 Pulley Tap Tool (Fig. 8)

Purpose: To remove front oilite flange bushing, propeller shaft, from gear housing, used on outboard motors without F.N.R. A 7/16" Square Hex Socket can be purchased locally for use with this tool.

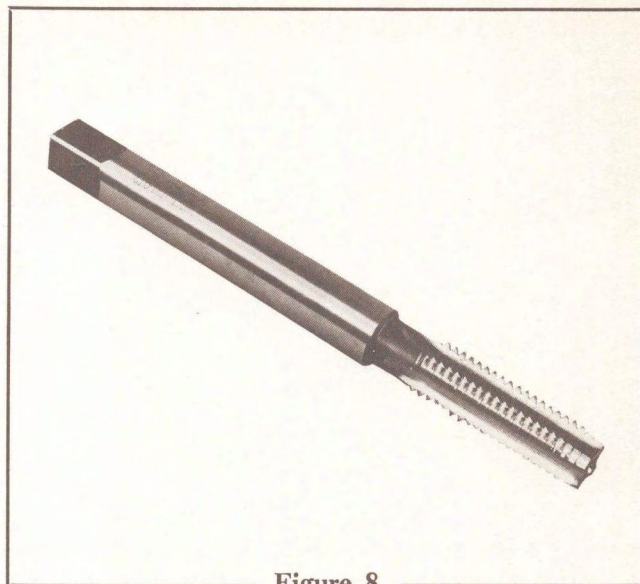


Figure 8

9 190019 Installation Tool Assy. (Fig. 9)

Purpose: May be ordered as an assembly or by separate part numbers as follows:

A 94426 Handle, Head Tool

Purpose: Handle used on both heads as illustrated in figure. Be sure handle is screwed tightly into head before using.

B 94431 Installation Head Tool Without Shoulder

Purpose: To install front oilite sleeve bushing, propeller shaft, used on F.N.R. gear housing.

C 94432 Installation Head Tool with Shoulder

Purpose: To install front needle bearing, propeller shaft, used on F.N.R. gear housing.

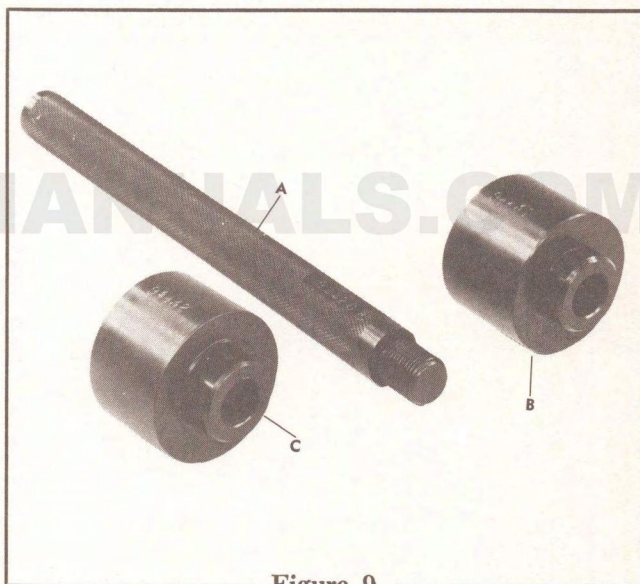


Figure 9

10 94425 Removal and Installation Head Tool (Fig. 10)

Purpose: Remove and install needle bearing, drive shaft, used on F.N.R. gear housing.

Note: "C" washer to be used when installing needle bearing at proper depth.



Figure 10