

SEASTAR
SOLUTIONS®

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SA27276/SA27277

ROD END KIT

INSTRUCTIONS

INSTALLER: THESE INSTRUCTIONS CONTAIN IMPORTANT SAFETY INFORMATION AND MUST BE FORWARDED TO THE BOAT OWNER.

PARTS SUPPLIED IN THIS KIT ARE TO BE USED TO CONNECT A STEERING CONTROL CABLE WITH THREADED STUD (MANUFACTURED PRIOR TO SEPT. 1976 BY SEASTAR SOLUTIONS) TO THE TILLER ARM OF AN OUTBOARD MOTOR.

CAUTION

READ THESE INSTRUCTIONS THOROUGHLY BEFORE PROCEEDING WITH INSTALLATION. CHECK CONTENTS OF THE KIT AGAINST PARTS LIST ON THIS INSTRUCTION SHEET. PARTS SUPPLIED MUST BE USED PER INSTRUCTIONS. THE COMPANY CANNOT ACCEPT RESPONSIBILITY FOR THE INTEGRITY OF INSTALLATIONS IN WHICH SUBSTITUTE PARTS ARE USED.

ASSEMBLY TO MOTOR TILLER ARM

1. Thread the Rod End, Item 1, (Figure 1), fully onto the threaded end of the steering cable telescopic output ram, or link arm, whichever is being used. Then back off approximately 3/4 turn to allow for swivel action.

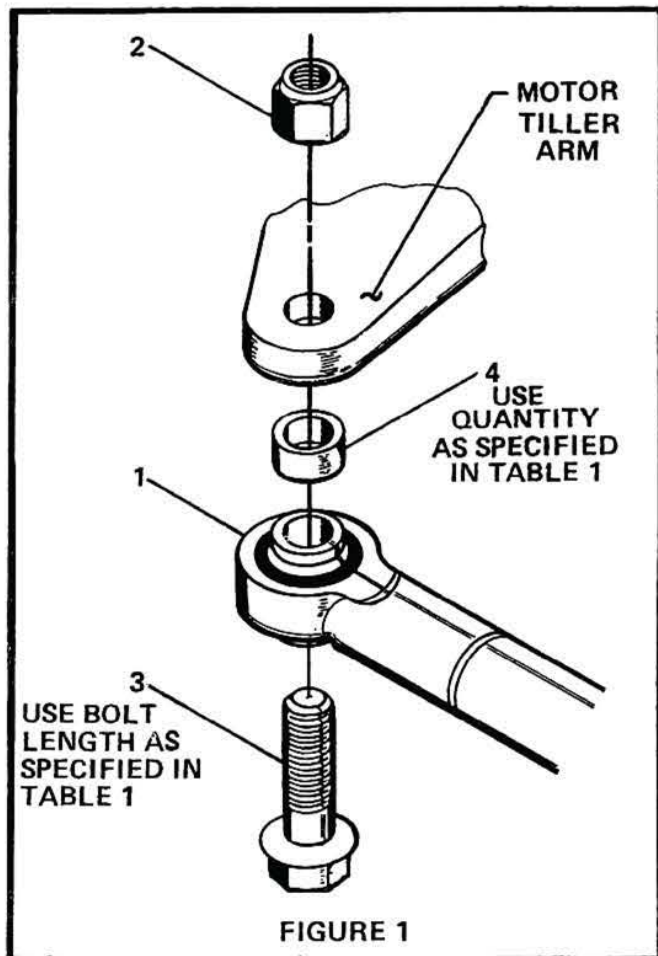


FIGURE 1

2. Install Bolt and attaching hardware per Figure 1 and Table 1. Torque to 200 inch/pounds. DO NOT EXCEED 250 INCH/POUNDS.

NOTE

THREE (3) BOLT LENGTHS (ITEM 3) AND TWO (2) SPACERS (ITEM 4) HAVE BEEN SUPPLIED. SELECT THE CORRECT LENGTH OF BOLT AND QUANTITY OF SPACERS FOR MOTOR AND MOUNT COMBINATION AS SPECIFIED IN TABLE 1.

The installation is now complete.

PARTS LIST

ITEM	DESCRIPTION	QUAN.
1	Rod End Assembly	1
2	Locknut 3/8 - 24	1
3	Bolt/Washer 3/8 - 24	3*
4	Spacer	2*

* SEE TABLE 1 FOR "ATTACHING HARDWARE USED FOR SPECIFIC MOTOR".

WARNING

On some outboard motor installations, the motor cannot be fully tilted, or turned while tilted, without possible damage to the Steering Cable Output Ram or Rod End.

Such damage could result in loss of steering control with subsequent property damage and personal injury.

Check for possible interference indicated in Figures 2 & 3, when the motor is fully tilted up and turned from side to side. If it is determined that such interference exists, examine steering components for possible damage and replace if necessary.

To prevent further interference and possible damage:

1. Avoid placing the motor in the position that causes the interference. Partial or restricted tilt devices are available from your Marine dealer for this purpose.
2. Correction may be possible by repositioning the steering control mounting.

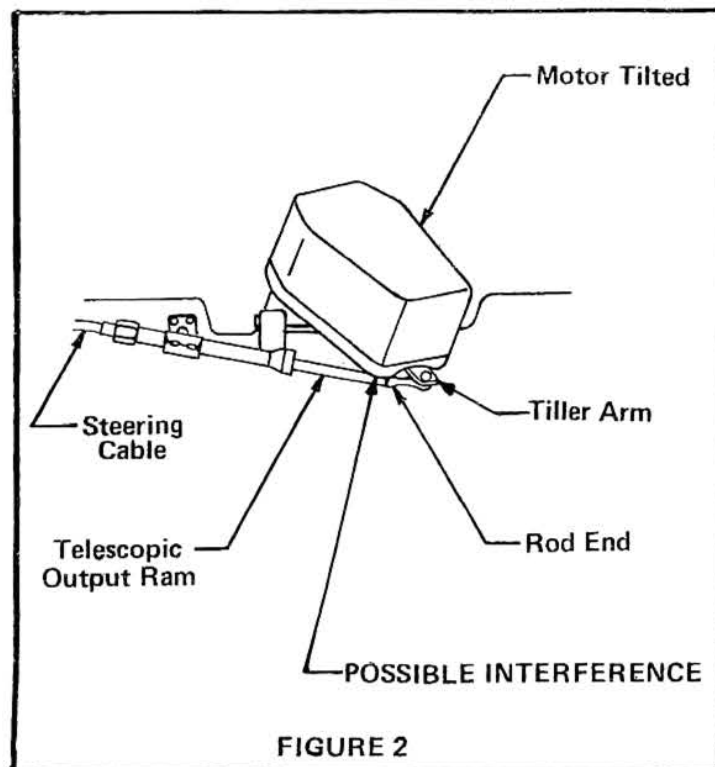


FIGURE 2

3. IF THE CONDITION CANNOT BE CORRECTED OR AVOIDED AND SERVICING OR TRAILERING REQUIRES FULL TILTING OF THE MOTOR, DISCONNECT THE STEERING CONTROL FROM THE MOTOR TILLER ARM. MAKE CERTAIN THAT RE-CONNECTION IS MADE BEFORE LAUNCHING OR OPERATING THE BOAT.

WARNING

THE BOAT SHOULD BE OPERATED WITH CAUTION UNTIL THE STEERING SYSTEM HAS BEEN THOROUGHLY CHECKED OUT UNDER NORMAL OPERATING CONDITIONS TO INSURE THAT THE INSTALLATION IS CORRECT AND COMPLETE.

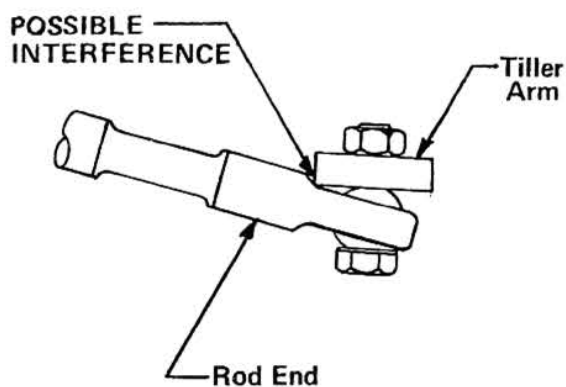


FIGURE 3

MAINTENANCE NOTES

1. AFTER A FEW HOURS OF OPERATION FOLLOWING INSTALLATION OF THIS KIT AND PERIODICALLY THEREAFTER, RE-TORQUE ALL FASTENERS AND CHECK THE STEERING FOR SECURITY AND INTEGRITY.

NOTE: LOOSENING OR SEPARATION OF ONE OR MORE FASTENERS MAY CAUSE FAILURE OF THE STEERING SYSTEM, RESULTING IN PROPERTY DAMAGE AND PERSONAL INJURY.

2. INSPECT FOR CORROSION. ALL METAL PARTS MEET OR EXCEED APPLICABLE SPECIFICATIONS FOR CORROSION RESISTANCE; HOWEVER, WITH EXTENDED OPERATION UNDER EXTREME CONDITIONS, CORROSION MAY OCCUR AND AFFECTED PARTS SHOULD BE REPLACED.

TABLE 1

MOTOR MFR.	HORSEPOWER	MOTOR MOUNT (Tilt Tube)		BOAT MOUNT (Motor well & Transom)	
		Bolt Length (Item 3)	Spacers (Item 4)	Bolt Length (Item 3)	Spacers (Item 4)
MERCURY	40-50 80 & up (EXCLUDING 175)	2"	1	2-1/2"	2
		1-5/8"	0	1-5/8"	0
JOHNSON & EVINRUDE	25-40 50 70 & up	NO TILT TUBE		2"	1
		1-5/8"	0	2"	1
		1-5/8"	0	2-1/2"	2
CHRYSLER	20-25-30 35-45-50 60 75 & up	(With kit SA27279)		2-1/2"	1
		2-1/2"	0	2-1/2"	1
		2-1/2"	1	2-1/2"	1
		2"	0	2"	1
		2-1/2"	1	2-1/2"	2