SH 915XX Series
Performance Tilt System
"The Rack' Helm
SH91528 Single, SH91529 Dual
INSTRUCTIONS

Marine Products

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

The following instructions describe how to install **"THE RACK"** system HELMS for **PERFORMANCE TILT** steering systems.
In addition to this kit the following components are required for a complete **PERFORMANCE TILT** system.

- PERFORMANCE TILT MECHANISM.
- RACK & CABLE ASSEMBLY SC124xx x length required (Two required for Twin Helms)

STEERING WHEEL (max. dia. 16 ins.), see catalog

- ENGINE CONNECTION KIT, see catalog.

(Engine makers kits are recommended for two cable systems.)

WARNING

- BEFORE STARTING INSTALLATION READ THESE INSTRUCTIONS AND ENGINE MAKER'S INSTRUCTIONS THOROUGHLY. FAILURE TO FOLLOW EITHER OF THESE INSTRUCTIONS OR INCORRECT ASSEMBLY CAN RESULT IN LOSS OF CONTROL AND CAUSE PROPERTY DAMAGE OR INJURY.
- DO NOT SUBSTITUTE PARTS FROM OTHER MANUFACTURERS. THEY MAY CAUSE A SAFETY HAZARD FOR WHICH TELEFLEX INC., USA CANNOT ACCEPT RESPONSIBILITY.
- TO AVOID EXCESSIVE STEERING LOADS, AND TO GET THE BEST STEERING PERFORMANCE, THE OUTBOARD MOTOR OR OUTDRIVE TRIM TABS AND TILT POSITION MUST BE ADJUSTED AS INSTRUCTED IN THE MOTOR MANUFACTURER'S OPERATION MANUAL. FAILURE TO DO SO CAN AFFECT THE PERFORMANCE OF THE BOAT AND ITS SAFE OPERATION.

NOTE: Helms and cable assemblies are supplied lubricated ready for installation, do not add any lubricant to either assembly. Use of other lubricants can cause damage to the steering cable, resulting in the cable seizing or premature wear. Keep the cable clean during installation Dirt will damage the system and cause premature wear.

WARNING

HELMS MUST NOT BE DISASSEMBLED FOR ANY REASON. INCORRECT RE-ASSEMBLY MAY LEAD TO TOTAL FAILURE OF THE SYSTEM WHICH COULD RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE.

PREPARATION FOR INSTALLATION

Locate the position for the steering wheel on the console or dashboard. The steering cable may enter the helm from either port or starboard. The dimensions shown in figures 1 & 2 must be maintained for proper clearances.

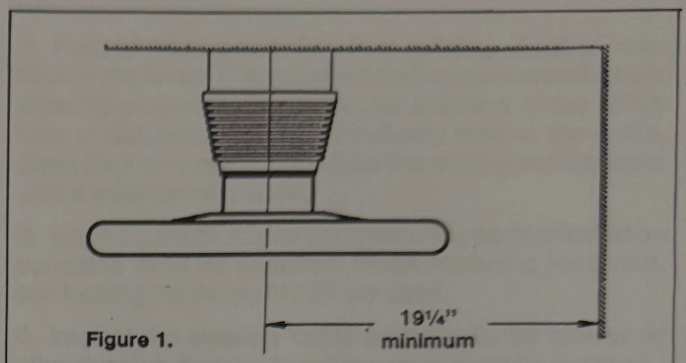


Figure 1.

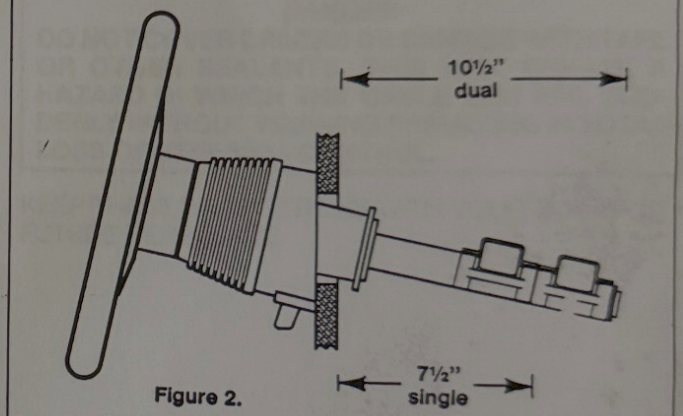


Figure 2.

Position the template figure 3, on the console or dashboard, at the location previously marked, and drill three holes 5/16 inches dia, and one hole 2-7/8 inches diameter.

HELM MOUNTING BRACKET INSTALLATION.

Secure the helm mounting plate (item 2) in position using hex. bolts (item 5), large flat washers (item 3) and locknuts (item 6). Tighten securely, see figure 4.

HELM INSTALLATION

Insert helm and shaft through hole in mounting bracket, (see figure 4), orienting helm so open gear teeth are uppermost. Secure in place using two hex bolts (item 7) flat washers (item 4) and locknuts (item 6). Tighten securely.

At this time refer to the instructions packed with the tilt mechanism hardware kit and install the tilt mechanism and the steering wheel.

The installation is now ready for the steering cable to be installed. Follow the instructions packed with the steering cable.

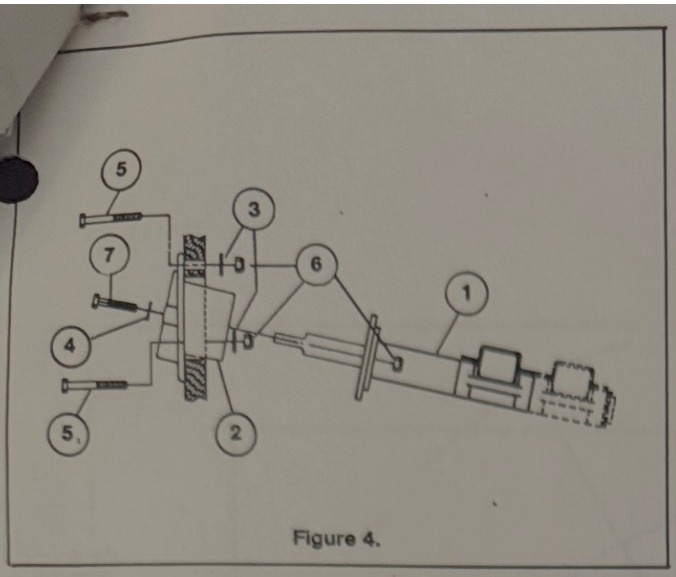


Figure 4.

PARTS LIST			
Item	Description	Single	Dual
1	Helm	1	1
2	Helm mounting plate	1	1
3	Large washer	3	3
4	Flat washer 1/4	2	2
5	Hex. bolt ¼ x 2⅛	7	11
6	Locknut	9	13
7	Hex bolt ¼ x 2¾	2	2
8	Top connector	—	1
9	Bottom connector	—	1

NOTE: Items 5 & 6 are also used to mount cable assemblies to the helm assembly. Items 8 & 9 are used on dual helms only. Refer to the instructions packed with cable assemblies for their use.

MAINTENANCE NOTES.

1. After a few hours of operation and at frequent intervals thereafter check all fasteners and the complete system for security and integrity.

DANGER

LOOSENING OR LOSS OF ONE OR MORE FASTENERS MAY CAUSE FAILURE OF THE STEERING SYSTEM, RESULTING IN LOSS OF STEERING CONTROL AND COULD CAUSE PERSONAL OR PROPERTY DAMAGE.

2. Keep all moving parts free from build-up of salt or other foreign materials. This will affect their operation and create steering problems. Pay particular attention to the hinge tube of outboard motors. Periodically remove the cable, clean the inside of the hinge tube thoroughly and lubricate with a waterproof grease.

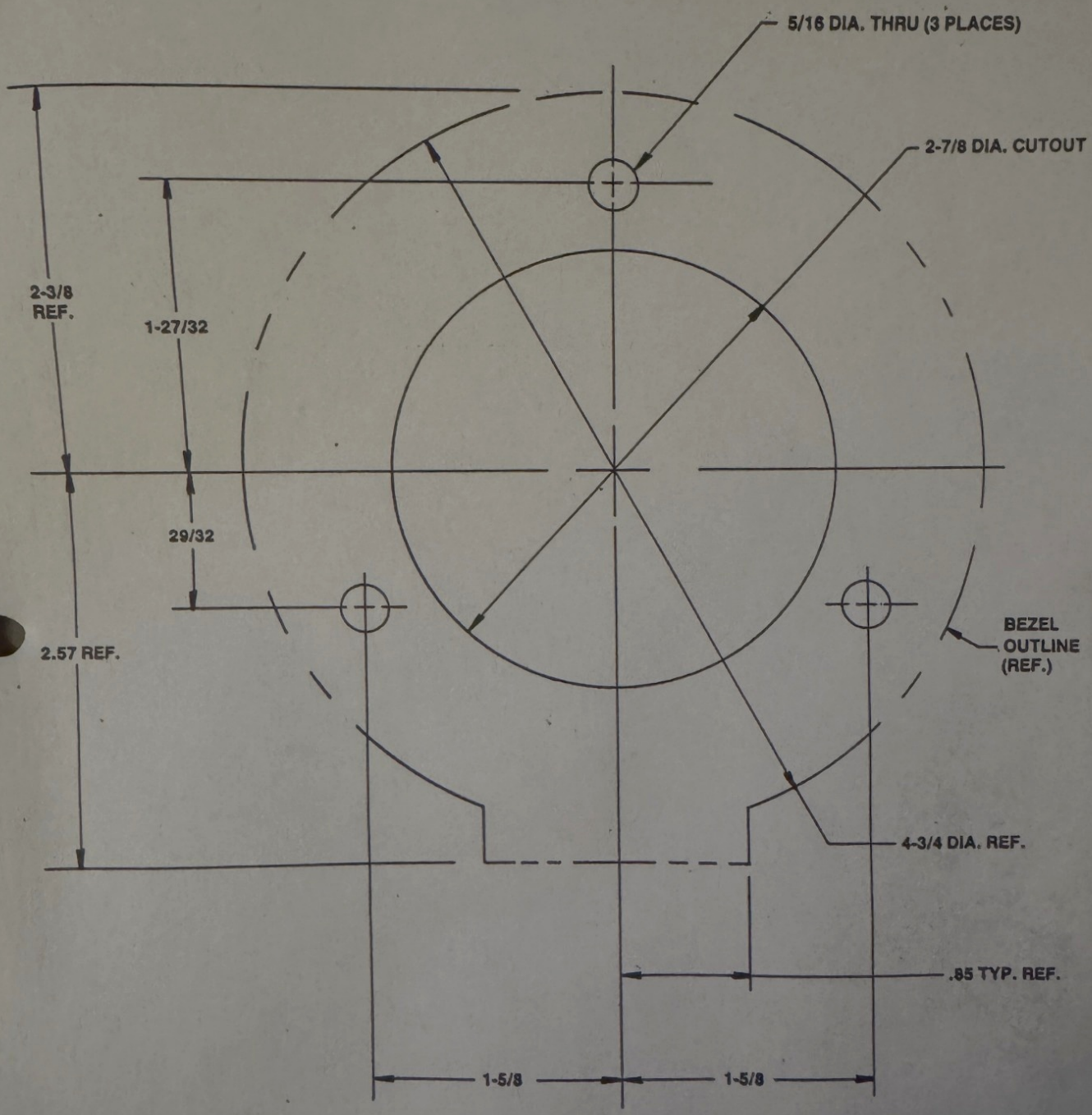
3. Inspect periodically for corrosion. Any parts affected by corrosion must be replaced. When replacing hardware, self locking hardware MUST be used.

4. Inspect the steering cable periodically for cracks or other damage. If any is found the cable must be replaced.

DANGER

DO NOT COVER CRACKS OR DAMAGE WITH TAPE OR OTHER SEALANTS. THIS WILL CREATE A HAZARD IN WHICH THE CABLE CAN FAIL SUDDENLY WITHOUT WARNING RESULTING IN TOTAL LOSS OF STEERING CONTROL.

KEEP THESE INSTRUCTIONS WITH YOUR BOAT FOR FUTURE REFERENCE



TEMPLATE

Figure 3.