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Manufactured by  
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## SH 5230/5235 BACK MOUNT RACK NO FEEDBACK HELM INSTRUCTIONS

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

These instructions describe how to install helm assemblies for 'THE BACK MOUNT RACK-NO FEEDBACK HELM' steering system. These helms contain a clutch mechanism to prevent the engine torque from being felt at the steering wheel. This reduces driver fatigue by eliminating constant fighting of the wheel. IT DOES NOT ELIMINATE THE ENGINE TORQUE. This can only be reduced by proper trim and tilt setting by trial and error when running the boat. The instructions for mounting the cable and drive assembly to the helm are given in the Cable Drive and Assembly instructions.

Additional components required to complete the system are:

- SC 134xx Cable (for single cable system)
- SC 135xx Cable (for dual cable system)
- SB 39526 Bezel Kit (Required to mount helm to dash)
- Steering Wheel (max. dia. 16 in.- see Teleflex Catalog)
- Engine Connection Kit (see Teleflex catalog)

Optional components are:

- SB 27448 10 degree Mounting Kit
- SB 27449 20 degree Mounting Kit

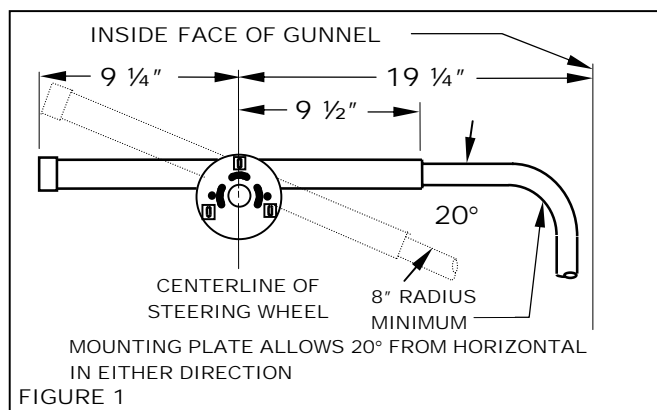
### WARNING

**BEFORE STARTING INSTALLATION READ THESE INSTRUCTIONS AND ENGINE MAKERS 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 MANUFACTURERS OPERATION MANUAL. FAILURE TO DO SO CAN EFFECT 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 AND DRIVE ASSEMBLY CLEAN DURING INSTALLATION. DIRT WILL DAMAGE THE SYSTEM AND CAUSE PREMATURE WEAR.



### WARNING

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

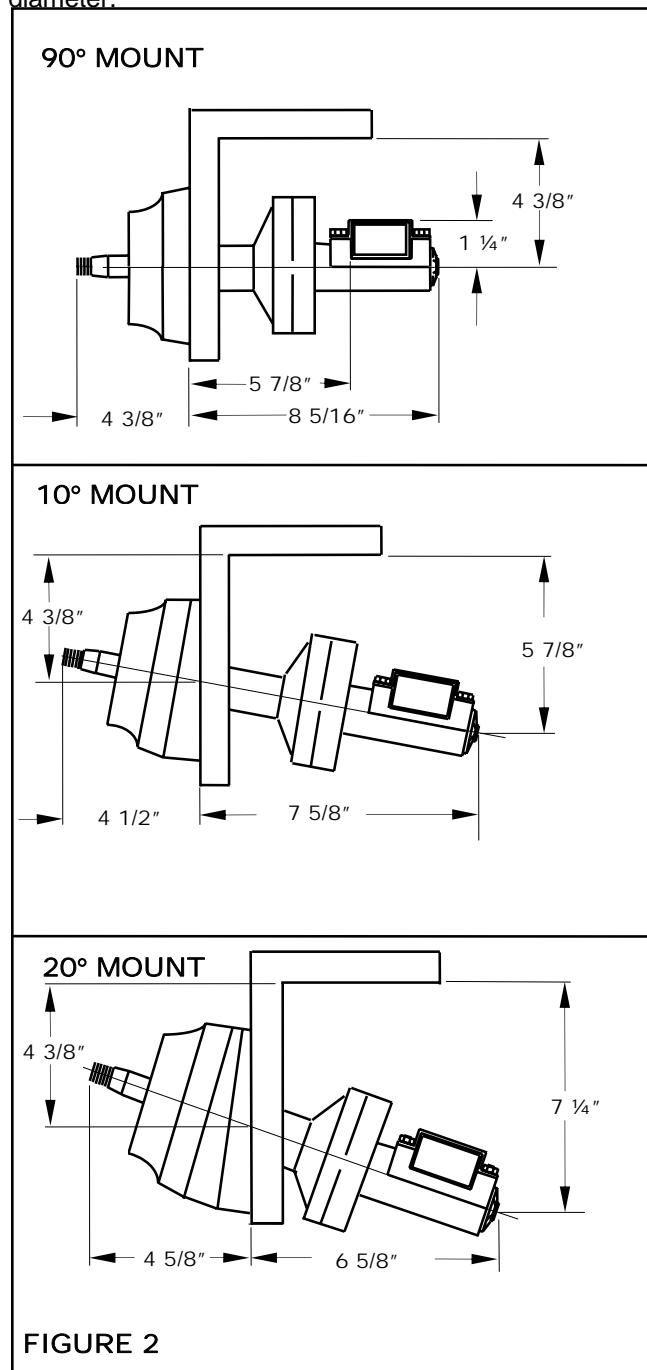
The Helm Assembly can be mounted for either port or starboard cable entry. Steering cables, where possible, should be routed to the starboard side of the boat to balance engine torque.

### PREPARATION FOR INSTALLATION

**Step 1.** Locate the position for the Helm Assembly on the dashboard.

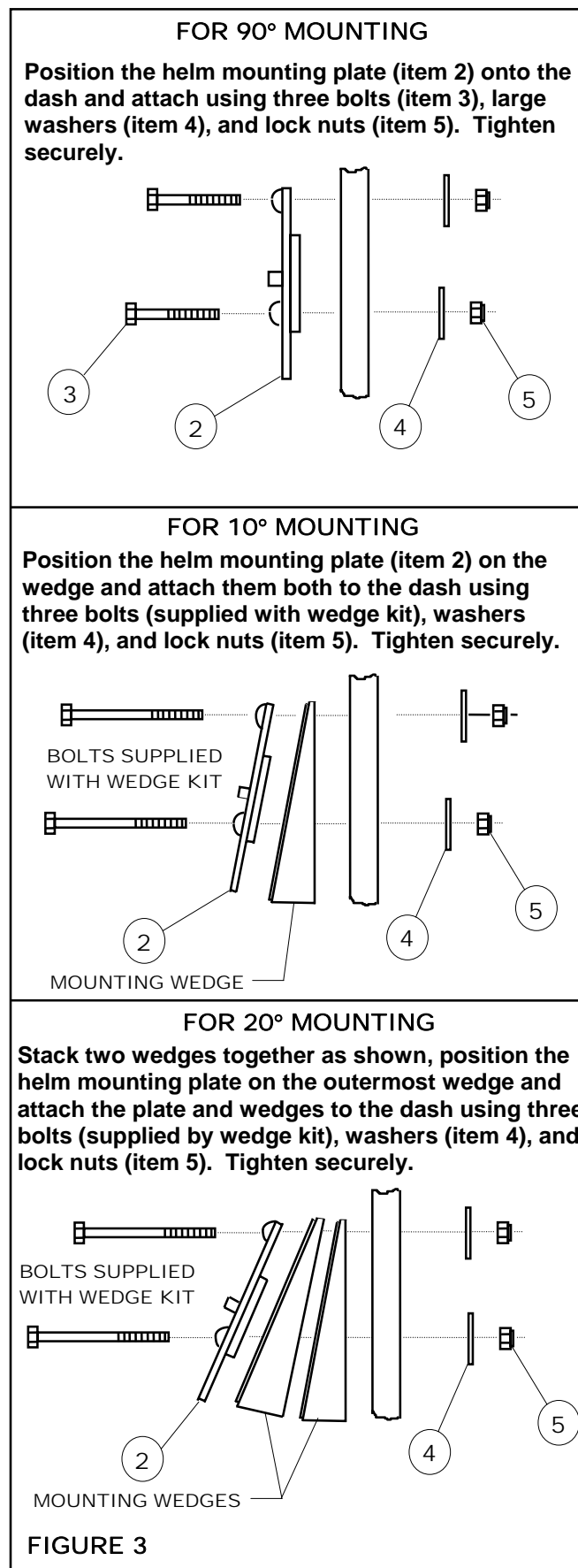
**CAUTION:** ENSURE THAT THE CLEARANCES SHOWN ON FIGURES 1 AND 2 ARE MAINTAINED. ENSURE THAT THE STEERING WHEEL DOES NOT INTERFERE WITH OTHER DASHBOARD EQUIPMENT SUCH AS ENGINE CONTROLS AND INSTRUMENTS.

**Step 2.** Locate template in position selected. **NOTE:** TEMPLATE FOR 20 DEGREE MOUNT DIFFERS FROM TEMPLATE FOR 90 AND 10 DEGREE MOUNTS. ENSURE THAT THE CORRECT ONE IS USED. Drill one hole 2 ¼" diameter and 3 holes 5/16" diameter.



## HELM ASSEMBLY INSTALLATION

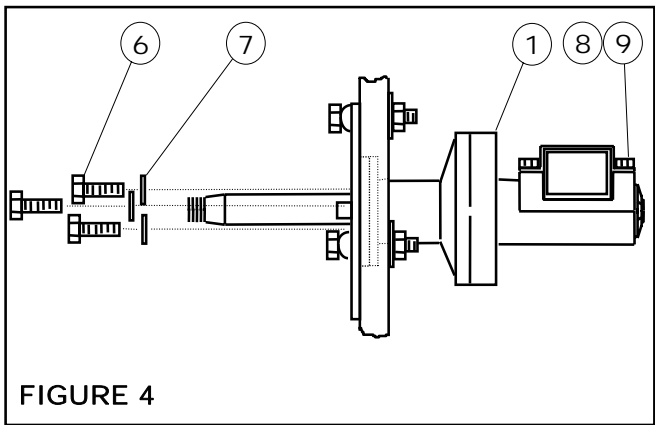
**Step 1.** Attach the helm mounting plate (supplied with the SB 39526 Bezel Kit along with mounting hardware) to the dash as described in figure 3:



**Step 2.** Install rack and cable assembly to helm, following instructions provided with the cable assembly.

**Step 3.** Attach the helm and cable assembly to the helm mounting plate, using three bolts (item 6) and washers (item 7) supplied with the SB 39526 Bezel Kit (see figure 4). If required, the helm and cable assembly can be angled 20° from horizontal in either direction by rotating the helm and cable assembly in the mounting plate slots before tightening (see figure 1). Tighten bolts securely after positioning helm.

**CAUTION:** IF THE RACK IS TO BE ANGLED FROM HORIZONTAL, ADDITIONAL CARE IS NEEDED TO ENSURE THAT IT DOES NOT INTERFERE WITH OTHER EQUIPMENT.



The helm is now ready for the bezel to be mounted. Refer to instruction sheet packed with the bezel.

PARTS LIST		
<i>Note: Items 2-7 supplied with the SB39526 Bezel Kit. Items 8-9 installed following instructions packed with the cable.</i>		
ITEM	PART	QTY
1	Helm Assembly	1
2	Mounting Plate	1
3	¼" x 2 1/8" Long Bolt	3
4	Flat Washer, Large OD	3
5	Lock Nut, ¼"	3
6	¼" x 1" Long Bolt	3
7	Flat Washer, Small OD	3
8	¼" x 1" Long L.P. Bolt	4
9	Flat Washer, ½" OD	4

OPERATION AND MAINTENANCE NOTES

**CAUTION**  
*IT IS POSSIBLE TO OVERTRIM THE ENGINE AND INCREASE THE STEERING TORQUE TO THE POINT THAT THE STEERING WHEEL CANNOT BE TURNED, EVEN THOUGH THE TORQUE IS NOT FELT AT THE WHEEL. THIS MAY GIVE THE IMPRESSION THAT THE STEERING IS "LOCKED". THIS CONDITION CAN OCCUR MORE WHEN JACK PLATES ARE USED TO RAISE THE ENGINE ON THE TRANSOM, AND CAN ONLY BE OVERCOME BY REDUCING THE BOAT SPEED OR ENGINE TRIM OUT POSITION. UNTIL YOU ARE COMPLETELY FAMILIAR WITH THE BOAT AND THE EFFECTS OF POWER TRIM, MAKE ALL ADJUSTMENTS OF TRIM WITH EXTREME CAUTION.*

1. After a few hours of operation and at frequent intervals thereafter, check all fasteners and the complete steering 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 INJURY OR PROPERTY DAMAGE.**

2. Keep all moving parts free from build-up of salt and other foreign material. This will affect their operation and create steering problems. Pay particular attention to the hinge tube of outboard motors. Periodically remove the cable, clean 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 steering cable periodically for cracks or other damage. If any is found the cable **MUST** be replaced.

**DANGER**  
**DO NOT COVER CRACKS WITH TAPE OR OTHER SEALANTS, THIS WILL CREATE A HAZARD IN WHICH THE CABLE CAN FAIL SUDDENLY WITHOUT WARNING.**

**KEEP THESE INSTRUCTIONS WITH YOUR BOAT FOR FUTURE REFERENCE.**

