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INSTALLATION INSTRUCTIONS

AND OWNERS MANUAL

Part # IS-7407, Rev 3, 11/2014

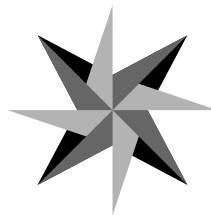
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Big-T™ Helm SH5000



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*Before you do it your way,
please try it our way.*

BIG-T™ HELM

SH5000

NOTICE

Installer: these instructions contain important safety information and must be forwarded to the boat owner.

These instructions describe how to install a steering cable assembly into a SH5000 BIG-T™ HELM for a mechanical rotary steering system.

In addition to this kit the following components are required for a complete steering system:

- SSC61xx Cable (where xx is length in feet)
- SB27265 Bezel Kit (required to mount helm to dash)
- Engine Connection Kit (refer to SeaStar Solutions catalog)
- Steering Wheel (refer to SeaStar Solutions catalog; Maximum wheel diameter 20", Maximum wheel dish 6")

DANGER

If steering cable is stiff in operation, it is unsafe to use and must be replaced immediately.

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, injury, or death.

WARNING

DO NOT substitute parts from other manufacturers, they may cause a safety hazard for which SeaStar Solutions cannot accept responsibility. Use only SeaStar Solutions steering cables with this helm.

WARNING

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 which may cause property damage, injury, or death.

WARNING

DO NOT attach any electrical ground wires to the helm. This would result in an electrolytic reaction to the steering system that may result in system failure or greatly reduced service life.

WARNING

Helms must not be disassembled for any reason. Failure to reassemble correctly may lead to total failure of the system, which could result in property damage, injury, or death.

NOTICE

When replacing an existing steering system it is recommended that you stay with the style (rotary or rack) the boat manufacturer installed. Never change your steering from a dual cable to a single cable system, as this could cause an unsafe boating condition.

NOTICE

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. This notice does not include the engine output ram end of the cable.

Preparation for Installation

Before the steering cable can be installed, the helm, the bezel, and steering wheel must be fully installed as shown in the bezel kit instructions.

Cable Routing

The steering cables, if possible, should be routed to the starboard side of the boat in order to balance engine torque. When routing the steering cable, select a path with the minimum number of bends, making the bends as large as possible. **DO NOT MAKE BENDS OF LESS THAN 8 INCHES RADIUS.** Sharp or frequent bends will result in hard steering and premature cable wear. When it is necessary to pass through a bulkhead, a 1½" diameter hole is required. Cable should be clamped or tied for support at regular intervals.

⚠ CAUTION

Cable must not be bundled together with electrical wiring. Cables must not rest on sharp edges which can cause chafing.

Steering Cable Installation

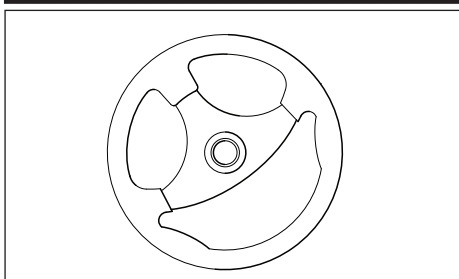


Figure 1.

Before the steering cable is installed the steering wheel should be positioned as shown in Figure 1, so that it is in the correct orientation when installation is completed.

Refer to QC helm converter instructions (IS-SA27620) packaged with SSC61xx cable.

QC helm converter should be installed to lower helm spigot for standard steering applications.

NOTICE

If boat is equipped with 1979 or 1980 Model ONLY, OMC sterndrive engine with power assist steering, the cable must be fed into the opposite entry spigot of the helm. 1981 Models will be tagged by the manufacturer stating that this reversing procedure is no longer required. Rotate wheel starboard for starboard mount, port for port mount to draw cable end into entry spigot. Continue turning wheel until end fitting of Cable conduit is flush with the entry spigot.

Connection to Engine

For engine-mounted steering systems, slide the output ram through the engine support tube. Thread the cable coupler nut fully onto the support tube.

For a boat-mounted steering system, attach the cable to the boat and engine in accordance with the instructions furnished with the connection kit.

⚠ CAUTION

The output ram end of the steering cable should be lubricated with a good Waterproof Marine Grease before being inserted into the support tube.

⚠ CAUTION

Ensure that the cable output end is not bent when installing into the engine. If necessary remove the engine from the boat.

NOTICE

The coupler nut has a locking ring in the threads. Make sure the nut is drawn up fully and its internal plastic locking ring is engaged. If you do not tighten this nut fully there will be excessive play in the steering system. Connect the cable output ram to the engine tiller arm as shown in the instructions packed with the connection kit.

Operation & Maintenance Notes

⚠ CAUTION

It is possible to over trim 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 property damage, injury, or death.

2. Keep all moving parts free from build-up of salt and other foreign material. This will affect their operation and create steering problems. Periodically remove the cable, clean support tube and telescopic end of cable thoroughly and lubricate with a **waterproof marine grease**.

3. Periodically inspect for corrosion. Any parts affected by corrosion must be replaced. When replacing hardware, self-locking hardware as originally supplied must be used.

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

⚠ DANGER

If steering cable is stiff in operation, it is unsafe to use and must be replaced immediately.

⚠ DANGER

DO NOT cover cracks with tape or other sealants, this will create a hazard in which the cable can fail suddenly without warning, resulting in property damage, injury, or death.

NOTICE

Boat builder and boat dealer, please supply these Installation Instructions and Owner's Manual with the delivery of boat. Boat owner keep these instructions with your boat for future reference. Boat owner consult with your boat builder, boat dealer, or SeaStar Solutions if you have any questions regarding these instructions.



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