



# SSC124XX CABLE & DRIVE ASSEMBLY THE RACK SYSTEM INSTRUCTIONS

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

These instructions describe how to install cable and drive assemblies to 'The Rack' system helms.

### 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 SEASTAR SOLUTIONS 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.**

Before beginning installation, the helm, bezel and steering wheel should be fully installed as described in the instructions packed with those components.

NOTE: CABLE AND DRIVE 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

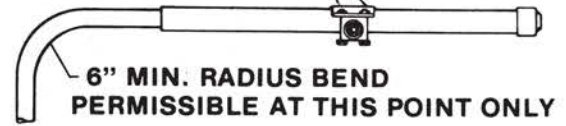
**CABLE AND DRIVE ASSEMBLIES MUST NOT BE DISASSEMBLED FOR ANY REASON. REASSEMBLY MAY LEAD TO TOTAL FAILURE OF THE SYSTEM, WHICH COULD RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE.**

### CABLE ROUTING

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 as few bends as possible and as gradual as possible. **A MINIMUM BEND RADIUS OF 8" MUST BE MAINTAINED.** WHERE CONDITIONS DICTATE, ONE BEND IN THE CABLES IMMEDIATELY AT THE HELM CAN BE 6" RADIUS. Sharp or frequent bends will result in hard steering and premature cable wear. When it is necessary to pass through a bulkhead, a 1-1/2" Dia. hole is required. Cable should be clamped or tied for support at regular intervals.

**CAUTION: CABLE MUST NOT BE BUNDLED TOGETHER WITH ELECTRICAL WIRING. CABLE MUST NOT REST ON SHARP EDGES WHICH CAN CAUSE CHAFING.**

### BOLTS, NUTS & WASHERS FROM HELM KIT



VIEWED FROM BACK

Figure 1

### INSTALLING CABLE AND DRIVE ASSEMBLY

Single Cable Systems, See Figure 1.

**STEP 1.** Place cable and drive assembly on top of helm unit taking care that the pinion gear of helm unit meshes with gear teeth on rack. Turn steering wheel to accomplish this. Fasten cable and drive assembly to rack using 4 bolts 1/4" x 2-1/8" long, and 4 lock-nuts supplied with helm. Tighten all 4 bolts equally. Turn steering wheel to check freedom movement.

Two Cable Systems, See Figure 2.

**STEP 1.** Push output ends of both cables in until fully closed. Install one cable and drive assembly onto helm, nearest dashboard, with Bolts (1) and Nuts (2), passing through Connector Plate (3) and holes marked (A). **DO NOT TIGHTEN BOLTS FULLY AT THIS TIME.**

**STEP 2.** Install second cable and drive assembly onto helm with Bolts (1), and Nuts (2), through holes (B). **DO NOT TIGHTEN BOLTS FULLY AT THIS TIME.**

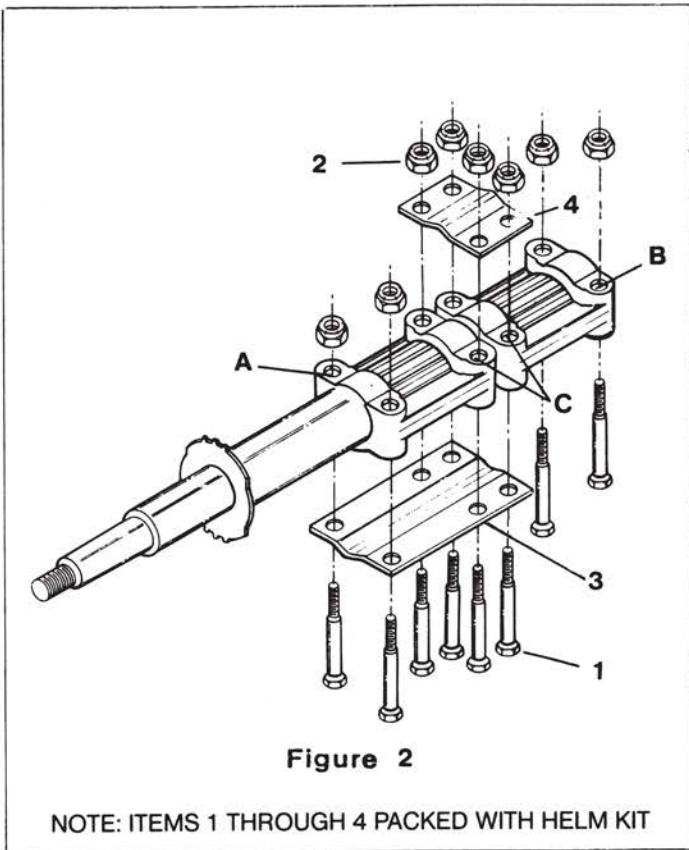
**STEP 3.** Place small Connector Plate (4) over cable and drive assemblies, and install Bolts (1), and Nuts (2), through both connector plates and holes (C). Fully tighten all 8 Nuts (2) at this time.

Turn steering wheel to check freedom of movement.

Cable and drive assemblies should now be supported at regular intervals.

Connect output end of cable and drive assemblies to engine or tiller with the correct connection kit for the engine. Follow instructions packed with connection kit.

**CAUTION: WHEN CONNECTING TO THE HINGE PIN TUBE ON OUTBOARD MOTORS, SOME TRANSOMS DO NOT ALLOW SUFFICIENT ROOM TO SLIDE CABLE AND DRIVE OUTPUT END INTO THE HINGE TUBE. TAKE CARE NOT TO BEND THE OUTPUT END WHEN INSTALLING, IF NECESSARY REMOVE ENGINE FROM THE BOAT TO INSTALL CABLE.**



**MAINTENANCE NOTES**

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.

