

# CA69027P ELECTRIC SWITCH (RH) FOR CH4400 SERIES AND 5600P CONTROLS INSTRUCTIONS

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

These instructions describe how to install CA69027P Electric Switch Assembly into SeaStar Solutions CH4400 Series and CH5600P controls. These switches are for use with electric transmissions supplying a maximum of 5 amps current draw to the switching circuit.

#### WARNING

BEFORE STARTING INSTALLATION READ THESE IN-STRUCTIONS 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.

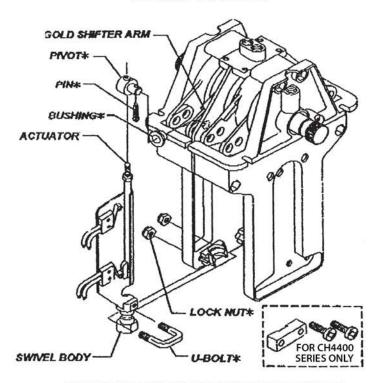
### INSTALLATION PROCEDURE

CA69027P Electric Switch Assemblies mount in the port/forward and starboard/aft positions.

#### CH5600P CONTROLS

- 1. Thread the pivot supplied with the CH5600P control onto the threads of the actuator. Turn the pivot until 1-2 threads extend beyond the top. Do not tighten the jam nut against the pivot at this time.
- 2. Attach the switch assembly to the control. Feed the actuator up between the black and gold shifter arms while placing the grooved swivel body into the retainer of the control. Secure the swivel body with a U-bolt and lock nuts supplied with the control. Insert the bushing supplied with the control into the INSIDE HOLE of the GOLD SHIFT ARM and install the pivot into the bushing. Secure the pivot to the arm with a cotter pin supplied with the control.
- 3. Cycle the shifter to the forward and reverse position detents several times while observing switch function with a continuity meter. Do for both forward and reverse switches. Observe that the switches function in both positions and that the switch rollers are resting on the flat of the actuator cam. If necessary, make adjustments by turning the pivot up or down on the actuator and recheck. Make sure the cotter pin is installed in the pivot and jam the nut against the pivot. Recheck after jamming the nut.

## **CH5600P CONTROL**



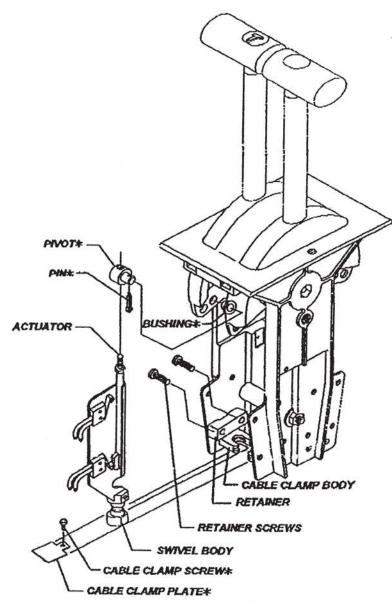
\*THESE ITEMS SUPPLIED WITH THE CH5600P CONTROL.

- 4. Wire switches to the forward and reverse position solenoids of the electric transmission. Take note which switch activated when the shift lever was moved to the forward position and wire this switch to the forward position solenoid. Wire the remaining switch to the reverse postion solenoid. NOTE: SWITCHES ARE NORMALLY OPEN IN THE FREE STATE AND CLOSE THE CIRCUIT WHEN THE ROLLER IS ACTUATED.
- 5. Test the system at dockside before using the boat. With the boat still tied and the engine at idle speed only, move the shift lever to forward gear and back to neutral. Repeat for reverse gear. The boat should go in and out of each gear. If it doesn't, check the wiring, switches and switch roller operation. Do all checks with the engine on. If the boat goes into reverse when the shift lever is moved to the forward position, then reverse the wiring to the switches.

#### **CH4400 SERIES CONTROLS**

- 1. Thread the pivot supplied with the CH4400 Series control onto the threads of the actuator. Turn the pivot until 1-2 threads extend beyond the top. Do not tighten the jam nut against the pivot at this time.
- 2. Attach the retainer to the control. Locate the small bag containing the retainer and (2) retainer screws and use the screws to fasten the retainer to the control as shown in the illustration. Tighten the screws securely.
- 3. Attach the switch assembly to the control. Feed the actuator up between the two arms while placing the grooved swivel body into the cable clamp of the control. Secure the swivel body with a cable clamp plate and screw supplied with the control. Insert the bushing supplied with the control into the INSIDE HOLE of the SHIFT ARM and install the pivot into the bushing. Secure the pivot to the arm with a cotter pin supplied with the control.
- 4. Cycle the shifter to the forward and reverse position detents several times while observing switch function with a continuity meter. Do for both forward and reverse switches. Observe that the switches function in both positions and that the switch rollers are resting on the flat of the actuator cam. If necessary, make adjustments by turning the pivot up or down on the actuator and recheck. Make sure the cotter pin is installed in the pivot and jam the nut against the pivot. Recheck after jamming the nut.
- 5. Wire switches to the forward and reverse position solenoids of the electric transmission. Take note which switch activated when the shift lever was moved to the forward position and wire this switch to the forward position solenoid. Wire the remaining switch to the reverse postion solenoid. NOTE: SWITCHES ARE NORMALLY OPEN IN THE FREE STATE AND CLOSE THE CIRCUIT WHEN THE ROLLER IS ACTUATED.
- 6. Test the system at dockside before using the boat. With the boat still tied and the engine at idle speed only, move the shift lever to forward gear and back to neutral. Repeat for reverse gear. The boat should go in and out of each gear. If it doesn't, check the wiring, switches and switch roller operation. Do all checks with the engine on. If the boat goes into reverse when the shift lever is moved to the forward position, then reverse the wiring to the switches.

## **CH4400 SERIES CONTROL**



\*THESE ITEMS SUPPLIED WITH THE CH4400 SERIES CONTROL.



KEEP THESE INSTRUCTIONS WITH YOUR BOAT FOR FUTURE REFERENCE.