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# DK4220 SMARTSTICK INSTALLATION

**NOTICE** 

These instructions are intended to be used in conjunction with the SeaStar Jackplate Installation/Assembly Instructions PID# 469349 provided with your Jackplate.

Please Contact SeaStar Solutions if you require a replacement copy.

**NOTICE** 

Temporarily connecting the relay wiring harness will allow actuation of the Jackplate. This is required to stroke the Jackplate to different positions during the installation. See page 5.

## Requirements

#### **A** WARNING

CRUSH HAZARD. Moving Jackplate parts can crush. Keep all body parts free and clear when actuating the Jackplate.

- **1.** Lay the Jackplate engine side down on a work bench. Stroke the Jackplate to the **full up position** to expose the top Smartstick fastener holes as shown in figure 1.
- 2. Insert the harness end of the Smartstick in front of the port side guide rod and behind the actuator shaft. Slide the Smartstick toward the starboard side until the other end of the Smartstick clears the port side guide rod. Then slide and drop it into the cutout on the port side engine bracket.

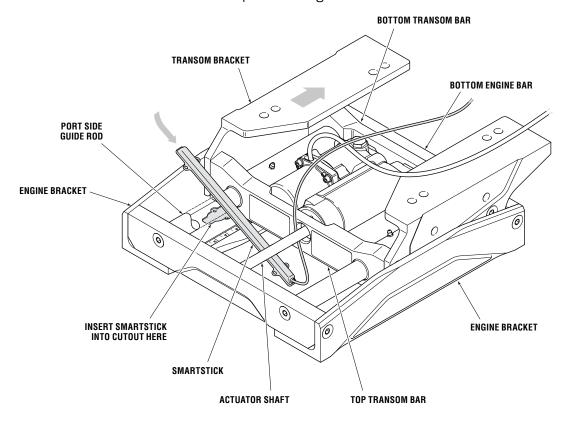


Figure 1. Positioning Smartstick with Jackplate in full up position.



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3. Thread the top two button head screws into the tapped holes in the engine bracket. A 1/8" ball end hex key is required to tighten the inner fastener at an angle as the guide rod is in the way. It is helpful but not required to use needle nose pliers to position the fastener and facilitate starting the thread.

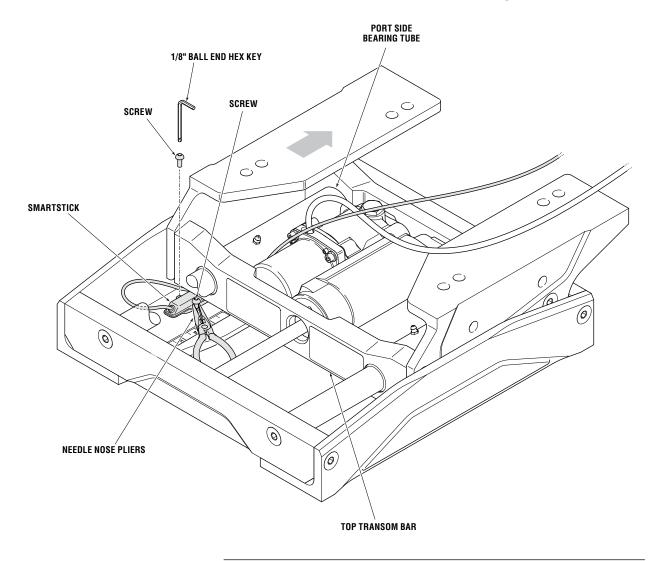


Figure 2. Installing top Smartstick screws.

- **4.** Cut off the existing cable ties bundling the Smartstick harness.
- 5. Route the Smartstick harness to the port side of the Smartstick through the gap between the engine bracket and the top transom bar as shown in figure 2.
- **6.** Route the harness between the actuator motor and the port side bearing tube.



TORQUE TO

## **INSTALLATION INSTRUCTIONS**

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- 7. Install the P-clip on the harness and thread the button head screw into the tapped hole on the engine bracket, arranging the harness in a 2" diameter loop as shown in figure 3 inset. Torque to 10 in-lbs (1.13 Nm).
- **8.** With the plate **at the full up position**, set the harness length such that it runs straight down along the corner of the engine plate as far as possible before looping toward the motor.

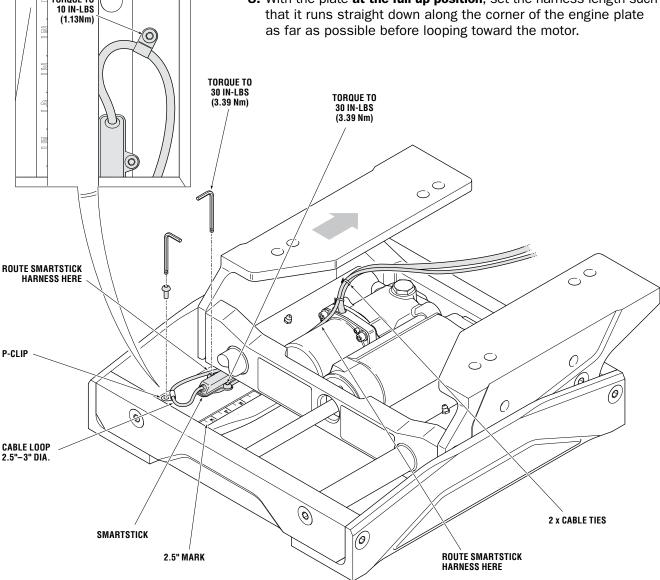


Figure 3. Smartstick Harness Installation.

#### **▲** CAUTION

**Ensure the harness has proper strain** relief and is routed to avoid damage/ pinching/chafing.

- 9. After setting the harness length, bundle the actuator and Smartstick harnesses together with two new cable ties close to the motor.
- 10. Ensure that the harness will not be pinched, caught or stretched during Jackplate movement.



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#### WARNING

**CRUSH HAZARD. Moving Jackplate** parts can crush. Keep all body parts free and clear when actuating the Jackplate.

- **11.** Stroke the Jackplate to the full down position to expose the bottom Smartstick fastener holes.
- **12.** Pass the bottom two cap screws through the holes in the engine bracket and secure with the locknuts. Torque to 30 in-lbs (3.39 Nm). See Inset figure 4.
- **13.** Thread the magnet screw into the hole in the underside of the bottom transom bar as shown in figure 4 inset. Torque to 30 in-lbs (3.39 Nm) with a 1/4" ball end hex key.

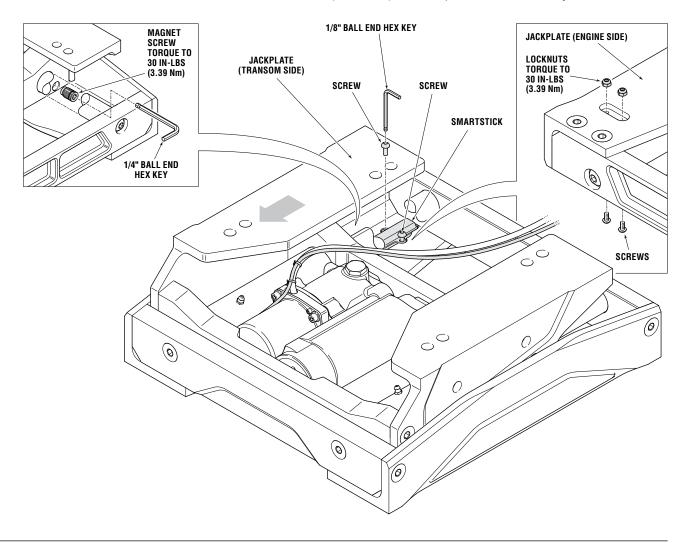


Figure 4. Installing bottom Smartstick fasteners with Jackplate in full down position.

#### **▲** WARNING

**CRUSH HAZARD. Moving Jackplate** parts can crush. Keep all body parts free and clear when actuating the Jackplate.

- **14.** Set the Jackplate to the 2.5" mark in preparation for installation onto the boat.
- 15. After the gauge and Jackplate have been installed on the boat as directed, connect the Smartstick and gauge harnesses as shown in figure 5 to complete the installation.

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### **Main Wiring Diagram**

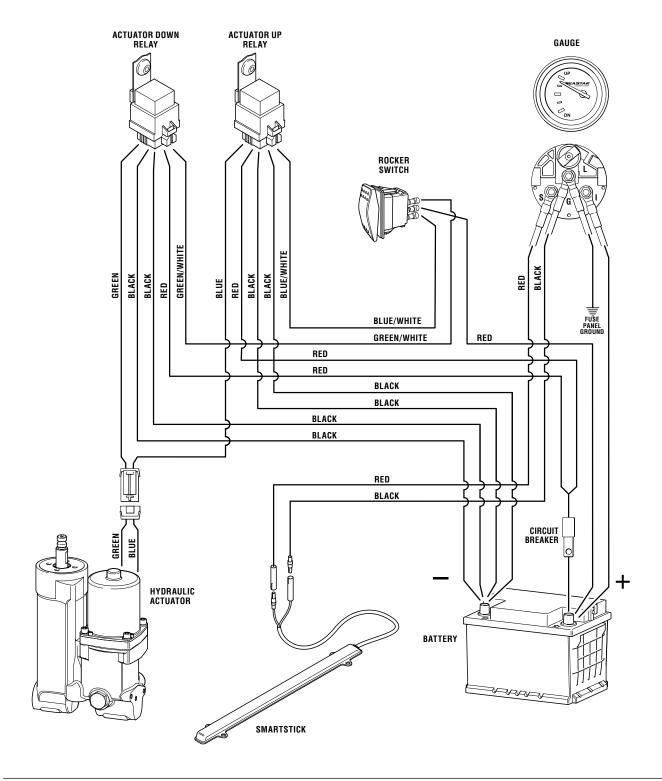


Figure 5. Main Wiring Diagram.