Electronic Joystick Control Adjustment Instructions

Flow Control:

Single coil or solenoid, for single direction. The coil has two connections; one is wired to the P.C. Board (A) terminal and the other is wired to (-), or the negative side of the supply voltage. Switches to control directional valves may be provided on the controller.

Adjustment Procedures:

Adjustments are made by turning a trimpot adjustment screw. The trimpots are 15 turn, end to end devices. It may be necessary to turn the adjustment screw several turns (5 or more) to observe a change in output.

CLOCKWISE (CW) ADJUSTMENT OF THE TRIMPOT INCREASES THE OUTPUT. COUNTER-CLOCKWISE (CCW) ADJUSTMENT OF THE TRIMPOT DECREASES THE OUTPUT.

Adjustments affect output current and voltage to the coil. The minimum and maximum output current is preset at the factory. However, for optimum performance, they must be adjusted while the equipment is operating.

Although the following adjustments affect the current/voltage or percentage of duty cycle, the best way to adjust the function is to observe the response or speed of the function. The following adjustments affect function response, or speed. There may be some interaction between adjustments. It may be necessary to repeat the adjustment in order to achieve the desired response.

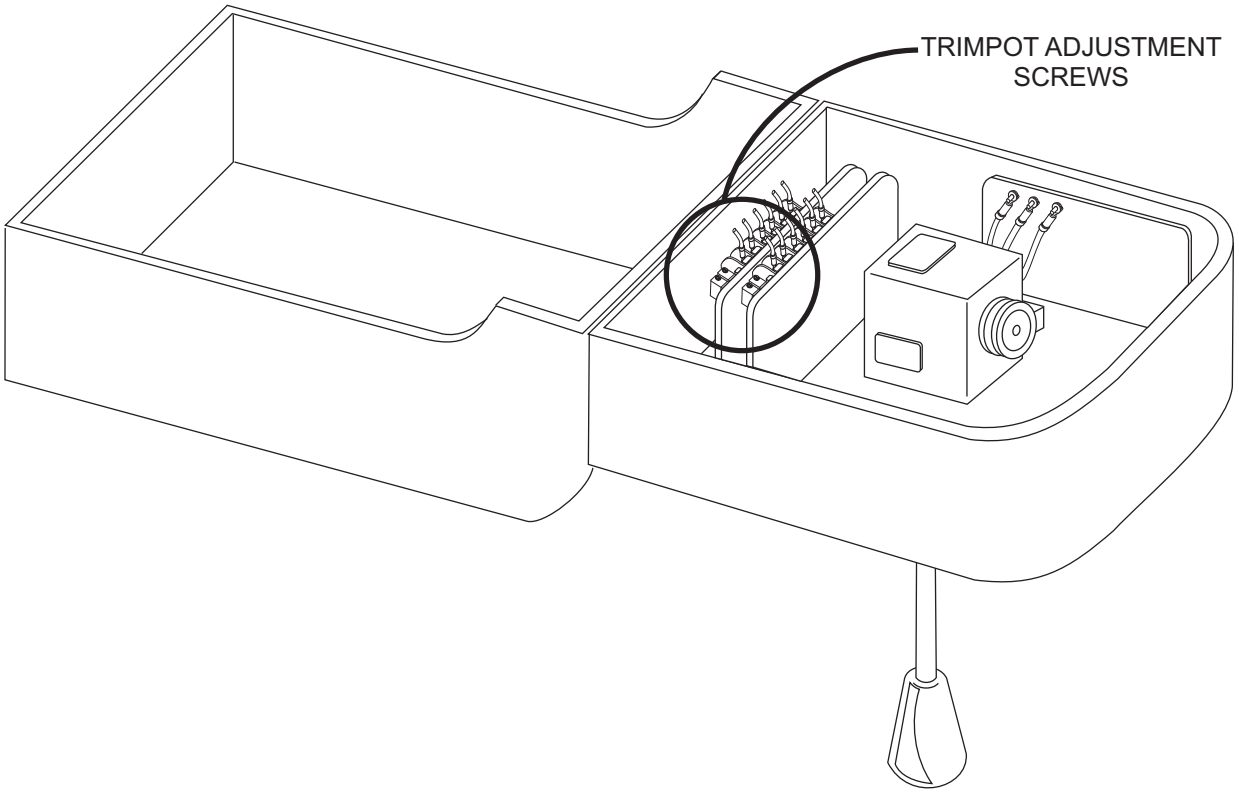

Figure 1-1 Electronic Joystick Control

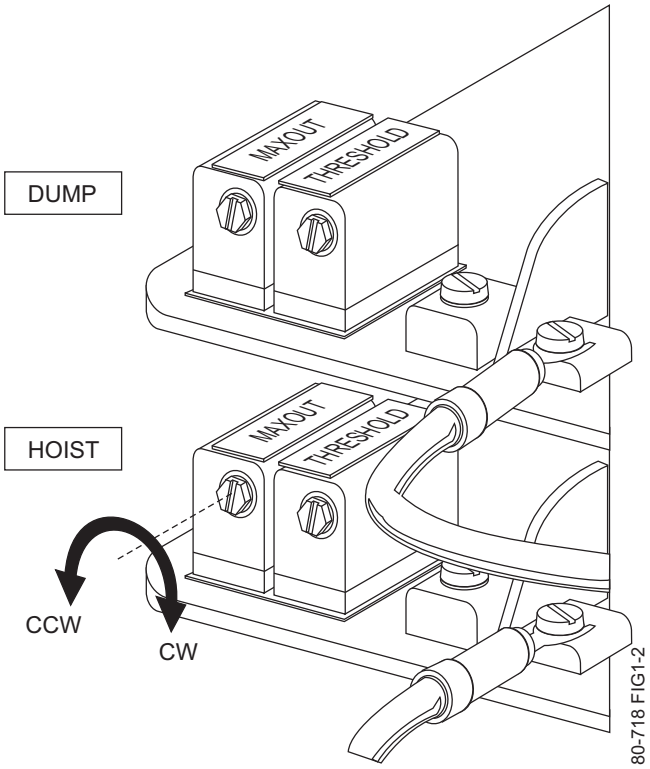

Figure 1-2 Trimpot Adjustment Screws

"Threshold" Adjustment:

Adjusts the initial current flow, function response, or speed when the handle is first moved from the off position. Deflect the handle slowly to the position where the controller first turns on. Adjust the threshold trimpot screw for startup or creep speed. If the speed is too fast, turn the trimpot screw "CCW"; if the speed is too slow, turn the trimpot screw "CW". **This adjustment should be done first.**

"Maxout" Adjustment:

Adjusts the full stroke current, maximum function response, or speed when the handle is deflected to its full travel. Fully deflect the handle, and adjust the maxout trimpot for maximum desired function response or speed. To obtain proportional resolution, it is important that the function starts to slow down as soon as the handle is moved back from the fully deflected position.

The ideal adjustment occurs when the function just begins to move when the handle is deflected, and the output increases until it reaches its maximum desired response or speed at the end of handle travel.

Optional Adjustment Method:

The adjustments can also be set using a multimeter. Identify the correct board for the function you are making the adjustment. Disconnect the "A" (or "B") wire and place the ammeter "+" on "A" (or "B") and the "-" on the other removed wire. Move the joystick in the "A" (or "B") direction to have the required response. Min. 0.35 A - Max. 0.45 A. (0.35 A being the slowest response and 0.45 A the fastest response)