501 Positioner Operating Instructions

AUMA Actuators, Inc. USA

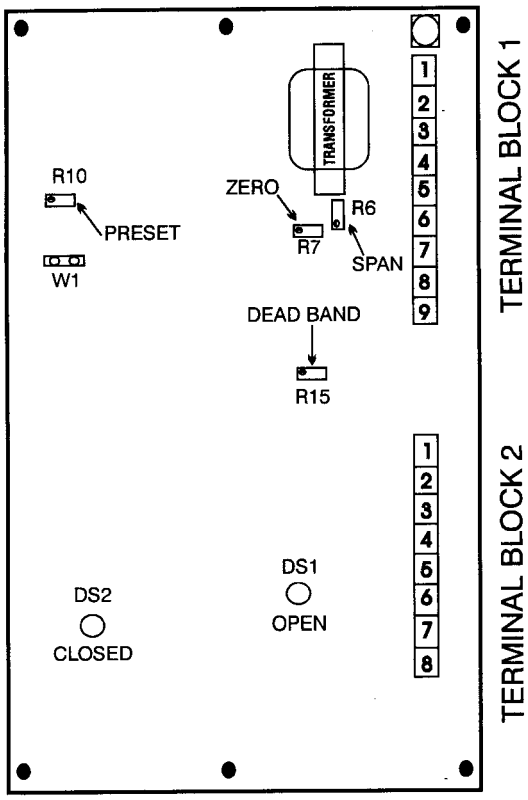
The actuator limit switches and feedback device F1 should be adjusted per the operation instructions manual before proceeding.

NOTE: A voltmeter can be attached to terminal 8 & 9 on TB1 to indicate actuator position when it cannot be observed directly. Minimum voltage will represent closed, maximum voltage will represent open (0-10v DC approximately).

1. Position actuator in an intermediate position. Send the Aumatrol 501 the correct minimum signal (i.e. 4 ma).

NOTE: If the actuator fails to operate in the closed direction, recheck field wiring and limit switch settings. If the actuator does not travel to the full closed position, adjust the zero trim pot. Clockwise adjustment will drive the actuator toward the closed position. If the actuator has gone to the closed position, turn zero adjustment counter-clockwise until the closed drive LED goes out.

AUMA 501.2 ELECTRONIC POSITIONER



2. Send the Aumatrol 501 the correct maximum signal (i.e. 20 ma). The actuator should now go to the full open position. If the actuator does not go to the full open position, adjust span trim pot. Clockwise adjustment will drive the actuator further open. If the actuator has gone to the full open position, adjust span trim pot counter-clockwise until open drive LED goes out.
3. Repeat Steps 1 and 2 until neither potentiometer requires further adjustment.
4. Send the Aumatrol 501 a mid-position signal (50%) the actuator should now drive to the mid-position.
5. The deadband (sensitivity) adjustment controls the amplifier gain. It will increase or decrease the system deadband and also the resolution or ability of the actuator to follow small changes in demand signal. The smaller the deadband (or higher gain), the closer the actuator will follow the demand signal. The larger the deadband (or lower gain), the greater the change in signal will have to be to move the actuator to its desired position. The deadband should be adjusted just large enough so that the actuator does not hunt. Adjusting the deadband trim pot clockwise will decrease the deadband. Counter-clockwise increases the deadband.
6. Preset or loss of signal adjustment. If fail as is operation is desired, jumper W1 should be removed. If a preset position is desired, install the W1 jumper and remove the input signal (demand). Adjusting the preset potentiometer will now allow the preset position to be set. Clockwise adjustment will drive actuator toward open, counter-clockwise will drive actuator closed. When the desired position is achieved, reconnect the input signal. Upon loss of signal, the actuator will return to the preset position.