

**GH-BETTIS**

**INSTRUCTIONS FOR**

**INITIALLY SETTING TRAVEL STOP SCREWS**

**ON**

**CB & NCB SERIES SPRING RETURN ACTUATORS**

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## INSTRUCTIONS FOR INITIALLY SETTING TRAVEL STOP SCREWS ON CB & NCB SERIES SPRING RETURN ACTUATORS

### **PURPOSE**

These instructions are to be used when setting travel stops on CB spring return actuators prior to initially mounting on operated devices, i.e., valves and dampers, etc.

### **REFERENCE GH-BETTIS MATERIALS**

CB315/420/525-SR Assembly Drawing Part Number 41006.

CB415/520/725-SR Assembly Drawing Part Number 41007.

### **PROCEDURE**

The actuator must be positioned such that the cylinder is to the right of the housing and the milled flats on the torque shaft are approximately parallel to the cylinder axis (horizontal).

Ensure the actuator is positioned correctly by leveling the cylinder. Using a level on the cylinder, align the actuator to be horizontal. All adjustments must be made with the actuator in this leveled position.

Using a level, adjust the housing stop screw so that the milled flats on the torque shaft facing you are horizontal and level. When the stop screw is properly adjusted, hold the stop screw with the allen wrench and tighten the hex nut against the housing.

After the housing stop screw is properly adjusted, ensure that the hex nut on the cylinder stop screw is approximately even with the bottom of the milled slot in the end of the cylinder stop screw. Using a screw driver (medium size) in the milled slot, screw the stop screw into the cylinder end cap until the hex nut is flush against the end cap.

Apply the actuators rated Nominal Operating Pressure, from actuator nametag, to the housing (1-10) pressure port.

**CAUTION:** Do not exceed air pressure rating on name tag at any time. It may be necessary to relieve air pressure while adjusting the stop screw.

Using a level, adjust the cylinder stop screw so that the milled flats on the opposite side of the torque shaft are horizontal and level.

When the stop screw is properly adjusted, hold the stop screw with a screwdriver and tighten the hex nut against the end cap.

When the above procedure is performed correctly the actuator will have a travel of 90° centered in its travel range. This will permit a maximum of 5° overtravel in both directions.

### **COMPLETION**

The stop screw setting is now complete. Release the air pressure and disconnect the air supply. The actuator is now ready to install.

**CAUTION:** The stop screws must not be rotated counter clockwise more than five full turns. Actuator malfunction may result from improper adjustment of travel stops. Torque shaft may become disconnected from internal mechanism.

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