

# PROTRACTING ACTUATOR, PART NO. 435479, INSTALLATION INSTRUCTIONS

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These instructions are to be used for retrofitting the present CHECKFIRE® actuator, Part No. 24479, which utilizes a squib actuating device. The retrofit will consist of discharging the squib removing the present actuator, and reinstalling the new Protracting Actuator, Part No. 435479. The following steps are used to discharge the squib prior to removing the actuator body from the control module:

1. Remove the LT-10-R cartridge from the manual/automatic actuator, install shipping cap, and set aside in a safe location.

## / CAUTION

Cartridge must be removed before continuing with the following steps or accidental system actuation will take place when squib is actuated.

- 2. Remove control module cover.
- Attach Extender Cable, Part No. 426601, between module cover and backbox.

### / CAUTION

Make certain the cartridge is removed from the actuator. Failure to do so will cause system discharge when squib is actuated.

#### / CAUTION

Do not actuate squib unless it is installed in actuator body. If the squib is actuated outside of actuator body, it will detonate, causing possible personal injury.

### / CAUTION

Do not place hand under actuator body while actuating squib. The moving puncture pin could cause personal injury.

4. Using a short length of insulated wire stripped at both ends, hold one end of the wire to detection Terminal 3 and hold the other end to detection Terminal 4. See Figure 1. Note: When jumping these terminals, the squib will detonate, causing a small popping sound.

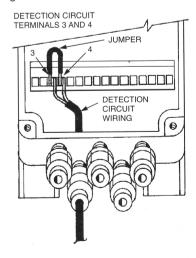


FIGURE 1

- 5. Remove the squib lead connector from the squib, and remove squib body from actuator.
- After verifying that squib has been discharged, remove actuator body from bracket and properly dispose of both actuated squib and actuator body.
- 7. On the terminal strip located in the module, loosen Terminals 7 and 8 (squib lead connector terminals), loosen strain relief at the bottom of the module and remove and properly discard squib lead connector.

Install the Protracting Actuator and Protracting Actuation Device by completing the following steps:

- Remove jam nut from lower threads of actuator and slide actuator through hole in mounting bracket.
- Rotate Manual/Automatic Actuator so that the actuation line outlet is accessible from the front. With the actuation outlet accessible from the front, the terminal housing on the Manual/Automatic Actuator would be on the right side adjacent to the control module.
- 3. Reinstall jam nut but do not tighten at this time. See Figure 2.

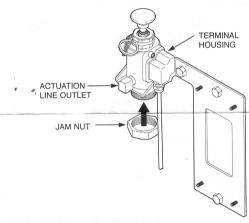
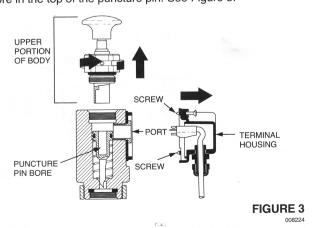


FIGURE 2

- 4. Back out the two (2) screws holding the Terminal Housing and Cable Assembly to the actuator body assembly and remove the terminal housing (the screws are captive screws and should remain secured in the terminal housing cover). This will expose the port in the side of the actuator body assembly and the connector on the inside of the terminal housing. See Figure 3.
- 5. Unscrew the upper portion of the actuator body to expose the bore in the top of the puncture pin. See Figure 3.



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6. Before inserting the Protracting Actuation Device (PAD) into the bore in the top of the pin, route the PAD connector from the inside of the actuator to the outside of the actuator through the port in the actuator body. Then, as the connector is being pulled through the port, insert the PAD into the bore in the top of the actuation pin. See Figure 4.

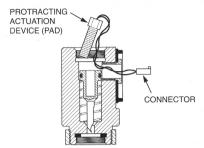


FIGURE 4

- 7. When the PAD is fully seated inside the bore in the actuator pin, carefully pull on the PAD leads that are extending outside the actuator body to take up the remaining slack in the PAD lead wires. Note: Do not pull on the connector.
- 8. Position the upper body so that the slot in the stem base straddles the PAD lead wires. See Figure 5.

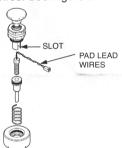
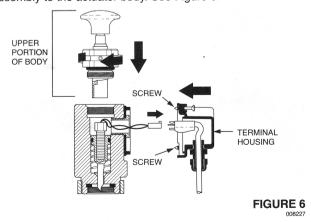


FIGURE 5

Thread the upper actuator body back into the lower body. See Figure 6.

**Note:** Before connecting the PAD to the CHECKFIRE control module, make certain there are no alarms present.

10. Mate the PAD connector that is extending from the port in the actuator body to the connector located on the inside of the Terminal Housing and Cable Assembly, and using the two (2) captive screws, re-attach the Terminal Housing and Cable Assembly to the actuator body. See Figure 6.



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- 11. Rotate the actuator so that the actuation line outlet is facing the front and the Terminal Housing and Cable Assembly is facing to the right (facing the left side of the control module) and tighten the jam nut firmly.
- 12. Route the cable from the actuator, through the strain relief to the terminal strip in the control module.
- Securely fasten the leads to Terminal 7 and Terminal 8 on the control module terminal strip. Note: No polarity is required.
- 14. Disconnect the extender cable and reinstall module cover.
- 15. Install the ring pin, but do not attach the seal at this time.

#### / CAUTION

Make certain cartridge is not installed at this time. The fire suppression system will discharge dry chemical if the cartridge is installed when operating the strike button.

- Push "RESET" button on CHECKFIRE SC-N Control Module to reset system. Note: Depress "RESET" button for at least 3 seconds.
- 17. Pull ring pin and push strike button on manual/automatic actuator several times to ensure smooth movement.
- 18. Install LT-10-R cartridge into manual/automatic actuator by completing the following steps.
  - a. Make certain puncture pin is fully retracted and insert ring pin through actuator body into puncture pin shaft. Note: The tip of the puncture pin of the PAD Actuator, Part No. 435479 only, should be retracted a distance slightly less than 1/8 in. (3.2 mm) above the bottom of the actuator. See Figure 7.
  - b. Attach visual inspection seal, Part No. 197.
  - c. Remove shipping cap and weigh cartridge before installing. Replace if weight is 1/4 ounce (7.1 g) or more below weight stamped on LT-10-R cartridge.
  - d. Screw cartridge into actuator body and hand tighten.

