Installation Instructions

5400 SERIES DOOR CLOSER INSTALLATION WITH **5400-CSA** RIGID ARM WITH DEAD-STOP, AND HOLD-OPEN OR NO HOLD-OPEN FUNCTION

CAUTION:

- A. Refer to the door closer installation and adjustment instructions supplied with door closer and use these instructions for the door closer installation with a rigid cushion and dead-stop arm (with Hold-Open of No Hold-Open function).
- B. Left Hand door installation is shown. For Right Hand installation, use the same dimensions in opposite direction and rotate door closer 180° so that the speed control valves are located away from the hinges centerline.
- C. Hold-Open arm cannot be used on fire labeled doors.
- 1. Before installing the door closer ensure that the backcheck is not engaged. Turn backcheck valve screw counter-clockwise, so that the door closer shaft rotates fully from 0° to maximum.
- 2. Select door opening of 90° or 105° and consult table for door closer and parallel arm bracket positioning
- 3. Mark-up the parallel arm bracket mounting holes on the door frame top jamb bottom surface, using the actual parallel bracket and at the shown location.
- 4. Mark the door closer mounting holes location on the door at location as shown using the dimensions for a 90° or 105° door openning. Ensure that the speed regulating valves are located away from the hinges side. Prepare the mounting holes on the door as per door closer installation instructions. Attach the door on the door using the appropriate mounting hardware.
- 5. For wood fire rated doors use through bolts with machine screws. For hollow metal door drill and tap for ¼-20 UNC and use provided machine screws. For non-labeled composite material doors and wood doors, pre-drill and install provided #14 wood screws.
- 6. Using a wrench on the closer bottom shaft, turn the shaft towards the hinge about 12° (as illustrated for pre-loading), and place main arm on the closer top shaft. Insert the main arm screw into the top shaft and tighten.
- 7. Temporary remove the dead-stop from the parallel bracket and disengage the Hold-Open function with the Hold-Open control handle (if arm with Hold-O function is used).
- 8. Rotate the closer shaft, so that the main arm is parallel the door surface. Verify that the parallel arm bracket holes line-up with the marked-up holes. Once the position of the holes has been verified, move out parallel arm with bracket and proceed with preparing the mounting holes as instructed (use appropriate wood screws or machine screws).
- 9. To provide additional stiffness to the parallel bracket mounting, install an additional mounting screw on the parallel bracket using a spacer block (if provided), between the door frame jamb ceiling face and the parallel bracket.
- 10. Install dead-stop on the parallel arm bracket and verify that the door opens about 90° (or 105°) from been closed, till the arm contacts the dead-stop. Install supplied spring plug on the other not-used stop position hole.
- 11. Door Closer Control Adjustment:
 - a. Adjust the back check to slow down the door before the dead-stop. Note that the backcheck is used only to provide damping and prevent the door from opening too fast and coming into hard contact with any mechanical stop or wall behind it.
 - b. Adjust the door closer spring force if required to ensure the door is closing.
 - c. Adjust the closing speeds (sweep and latch) using the closer regulating valves as per door closer instructions.
 - d. Caution: Do not turn any of the speed control and backcheck adjusting valves more than two (2) turns counter-clockwise from the factory preset position.
 - 3. For arms with Hold-Open function, engage the spring loaded detent by turning the control handle 90°.
- 12. Install covers (if provided) and attach using supplied mounting screws. Knock out the cover cutout at the top shaft location of the cover. If cover is not supplied install the supplied shaft pinion cover at the closer bottom shaft.

