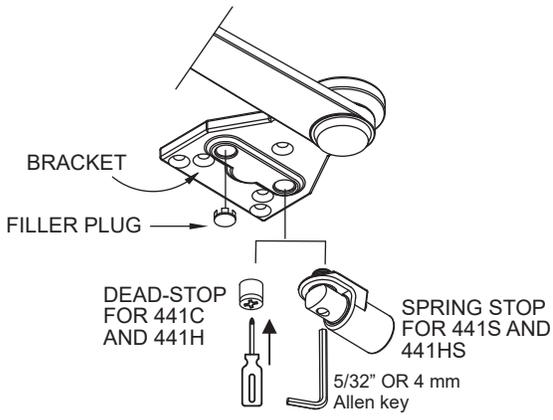


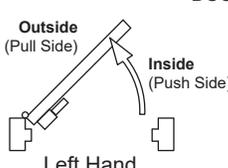
DOREX® 441C/441H/441HS/441S Series

For Heavy Duty Arm w/ STOP (441C), w/ STOP and Hold Open (441H), w/ Spring Stop (441S), Hold Open w/ Spring Stop (441HS)

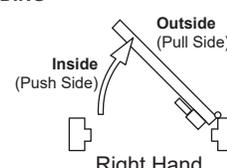


INTERCHANGEABLE DOOR HANDING

DOOR HANDING



Left Hand



Right Hand

GENERAL NOTES

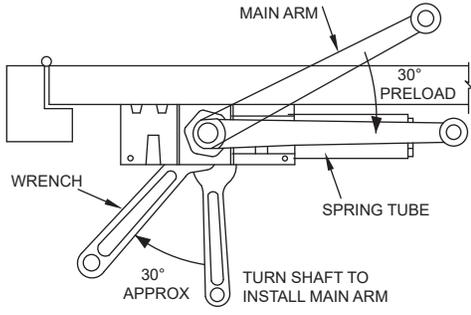
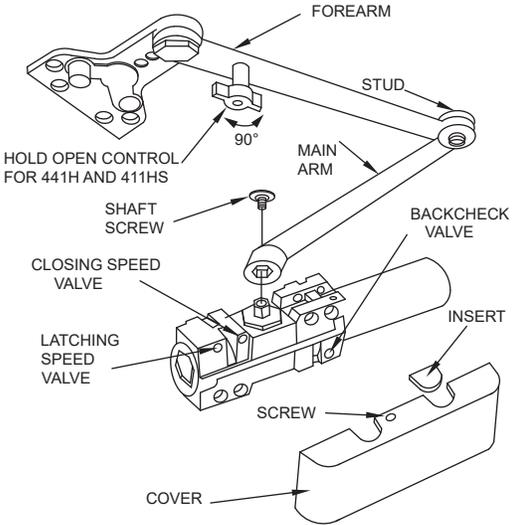
1. Door must be hung on ball bearing or anti-friction hinges.
2. Door and frame must be properly reinforced at the door closer and arm mounting areas.
3. For non-labelled wood doors pre-drill and use wood screws.
4. For steel reinforced hollow metal doors, drill and tap for the appropriate machine screws.
5. For non-reinforced hollow metal doors and labeled wood doors, drill and use sex-nut bolts.
6. For steel frames drill and tap for the appropriate machine screws.
7. For optional drop plates installation see separate installation instructions.
8. Door closer should not be installed on an exterior side of a door or door frame surface.
9. Hold open arms should NOT be installed on fire doors.
10. For additional door closer installation information refer to installation instructions supplied with door closer.

INSTALLATION SEQUENCE

LEFT HAND DOOR SHOWN - RIGHT HAND DOOR IS OPPOSITE

⚠ CAUTION

IMPROPER INSTALLATION OR REGULATION
MAY RESULT IN PERSONAL INJURY OR
PROPERTY DAMAGE. FOLLOW ALL
INSTRUCTIONS CAREFULLY.

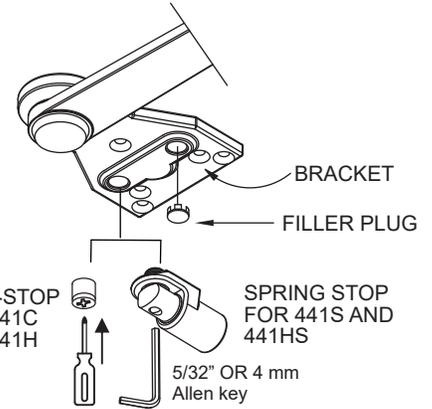
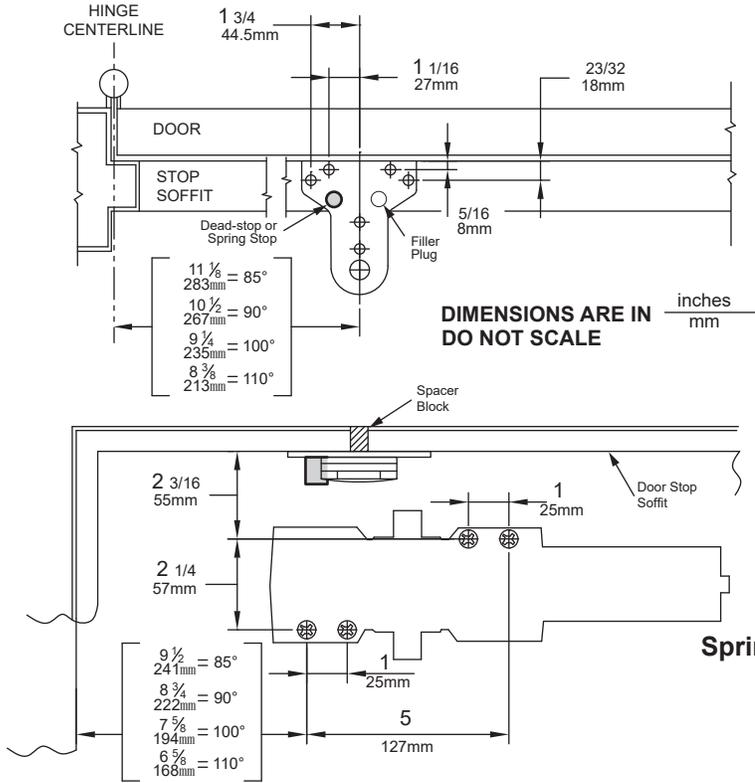



1. Determine door handing (refer above) and position door closer with spring tube end located away from the hinges centerline.
2. Before installing the door holder ensure that the backcheck is not engaged. Turn backcheck valve-screw counter-clockwise. Also, ensure that the valve at the back of the door closer is completely screwed-in.
3. Select the desired degree of opening as indicated on page 2 and use the appropriate position of door closer and parallel arm bracket with respect to the hinge centerline. Mark the parallel arm bracket mounting holes on the frame door stop soffit using the actual parallel bracket at the selected location (as illustrated on page 2).
4. Mark the door closer mounting holes on the door at selected location.
 - a. For prepped (reinforced) hollow metal doors, drill and tap for 1/4-20 UNC and attach door closer to door using provided machine screws.
 - b. For non-prepped hollow metal fire rated doors: drill 3/8" (9.5 mm) holes on exterior door surface and 5/16" (8 mm) hole on door interior surface and attach door closer to door using through bolt sexnuts and machine screws. (Not supplied)
5. For non-rated wood doors pre-drill 3/16" (4.8 mm) and use wood screws. For fire rated wood doors drill 3/8" (9.5 mm) holes through door and attach door closer to door using through bolt sexnuts and machine screws. (Not supplied)
6. Using a wrench on the door closer bottom shaft (refer to illustration below), turn the shaft towards the hinge about 30° (for pre-loading) and place main arm on the closer's top shaft. Insert the main arm screw into the top shaft and tighten.
7. Temporarily remove the arm stop from the parallel bracket and disengage the Hold-Open function with the Hold-Open control handle (if arm with Hold-Open function is used).
8. Rotate the arm on the closer shaft so that the main arm is approximately parallel to the door and ensuring that the arm elbow clears the door surface by about 1/2" to 1" (13mm to 25mm). Verify that the parallel arm bracket holes line-up with the marked-up holes. Once the position of the holes has been verified, remove the arm with bracket and proceed in preparing the mounting holes as instructed in note 9.
9. For prepped frames or metal frames, drill and tap for 1/4-20 UNC and use provided machine screws. For non-prepped frames or wood frames, pre-drill and install provided #14 wood screws.
10. To provide additional stiffness to the parallel bracket mounting, install an additional mounting screw on the parallel bracket using the spacer block between the door frame jamb ceiling face and the parallel bracket.
11. Install the arm solid stop or the spring stop on the parallel arm bracket and verify that the door opens to the approximate desired opening angle. Install supplied filler plug on the unused stop position hole.
12. Door Closer Control Adjustment:
 - a. Adjust the closer closing speeds using the closer regulating valves as required. Turn valves clockwise for a slower closing speed and counter-clockwise for a faster closing speed. A normal closing time from 90° open position to door stop positions is 5-7 seconds, evenly divided between door closing moving speed and latch speed.
 - b. Adjust spring power if required, depending on door size and weight.
 - c. Adjust the backcheck 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. Does not replace door stop.
 - d. For arms with Hold-Open function, engage the spring loaded detente by turning the control handle 90° as shown.
13. To install the door closer cover, first place insert in the appropriate cutout, place shaft insert over the lower shaft, then install cover and secure with supplied mounting screws.

DOREX® 441C/441H/441HS/441S Series

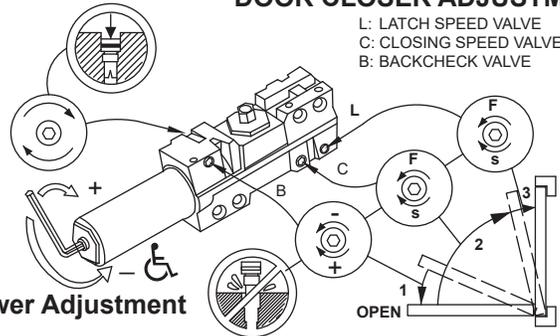
For Heavy Duty Arm w/ STOP (441C), w/ STOP and Hold Open (441H), w/ Spring Stop (441S), Hold Open w/ Spring Stop(441HS)

PARALLEL ARM (PUSH SIDE) MOUNTING LEFT HAND DOOR SHOWN



DOOR CLOSER ADJUSTMENT

L: LATCH SPEED VALVE
C: CLOSING SPEED VALVE
B: BACKCHECK VALVE



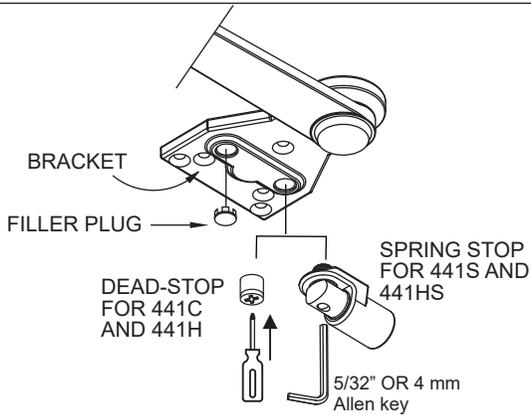
Spring Power Adjustment

Power Adjustment Chart

CLOSER SIZE	1	2	3	4	5	6
FULL TURNS	-6 CCW	-3 CCW	0	4 CW	8 CW	14 CW

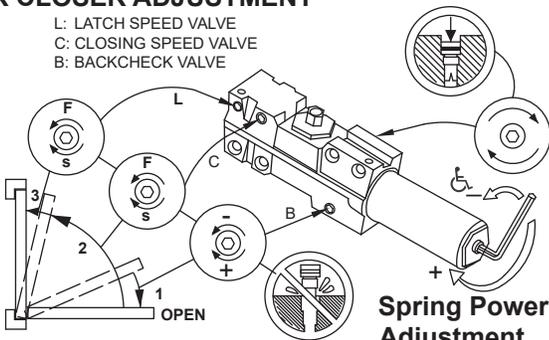
CCW: Counter Clock Wise CW: Clock Wise

PARALLEL ARM (PUSH SIDE) MOUNTING RIGHT HAND DOOR SHOWN



DOOR CLOSER ADJUSTMENT

L: LATCH SPEED VALVE
C: CLOSING SPEED VALVE
B: BACKCHECK VALVE



Power Adjustment Chart

CLOSER SIZE	1	2	3	4	5	6
CLOCKWISE TURNS	-6 CCW	-3 CCW	0	4 CW	8 CW	14 CW

CCW: Counter Clock Wise CW: Clock Wise

