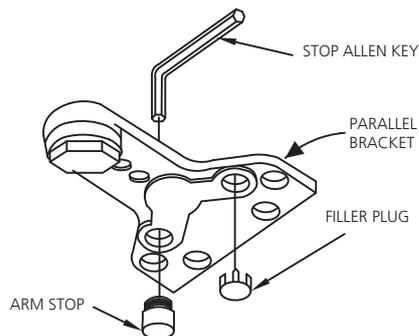
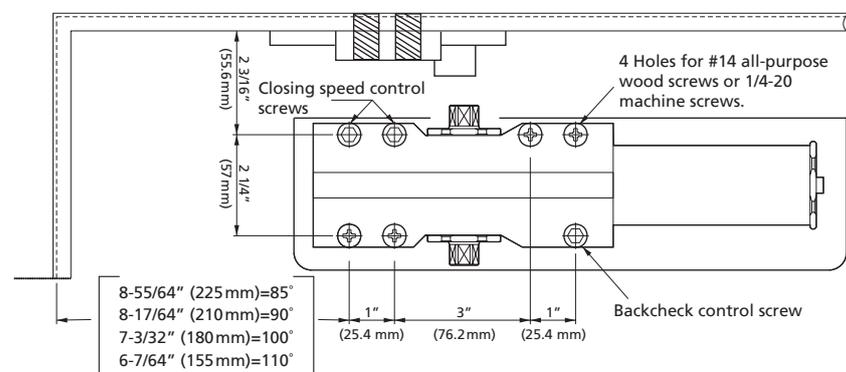
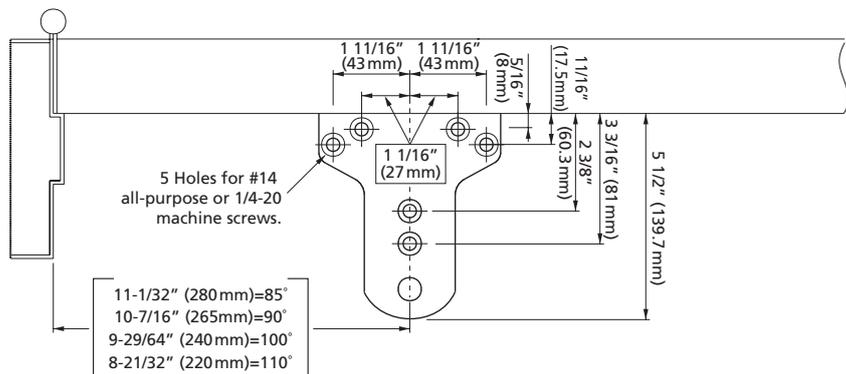


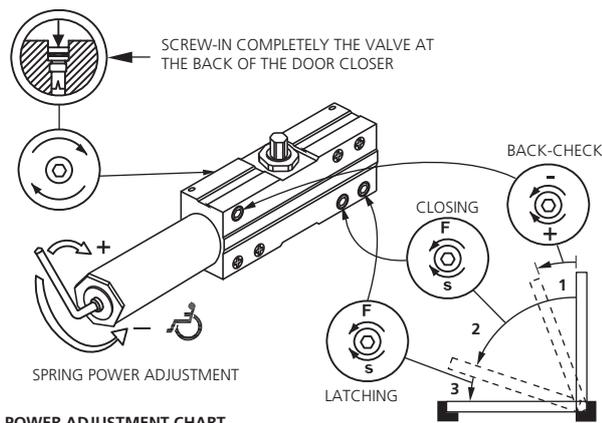
4000CNS & 4000HC SERIES DOOR CLOSER INSTALLATION

HEAVY DUTY ARM WITH STOP OR WITH HOLD-OPEN AND STOP

PARALLEL ARM (PUSH SIDE) MOUNTING LEFT HAND DOOR SHOWN



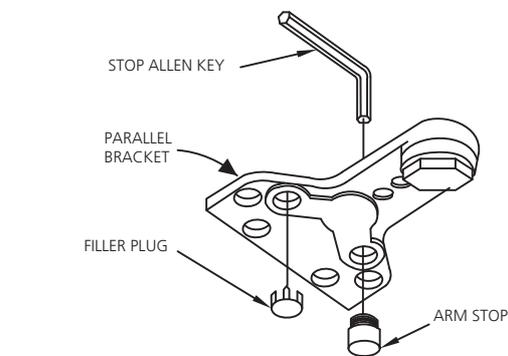
DOOR CLOSER ADJUSTMENT



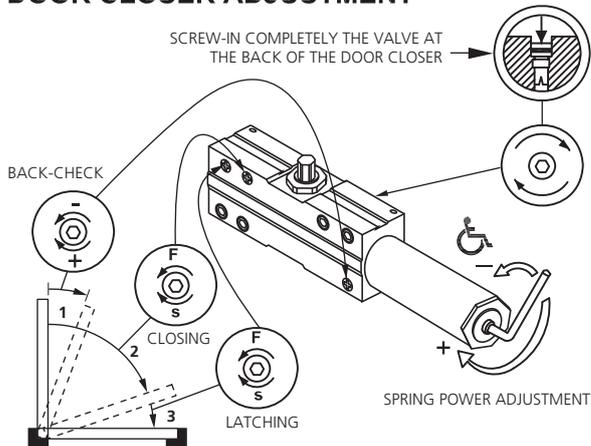
POWER ADJUSTMENT CHART

CLOSER SIZE	1	2	3	4	5	6
CLOCKWISE TURNS	0	4	8	12	16	20

PARALLEL ARM (PUSH SIDE) MOUNTING RIGHT HAND DOOR SHOWN

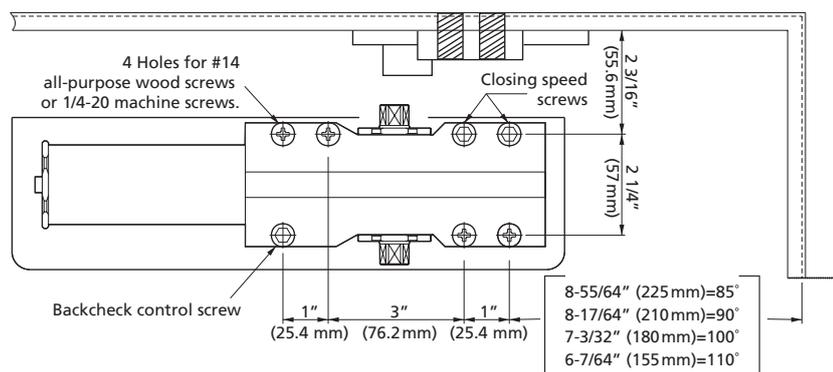
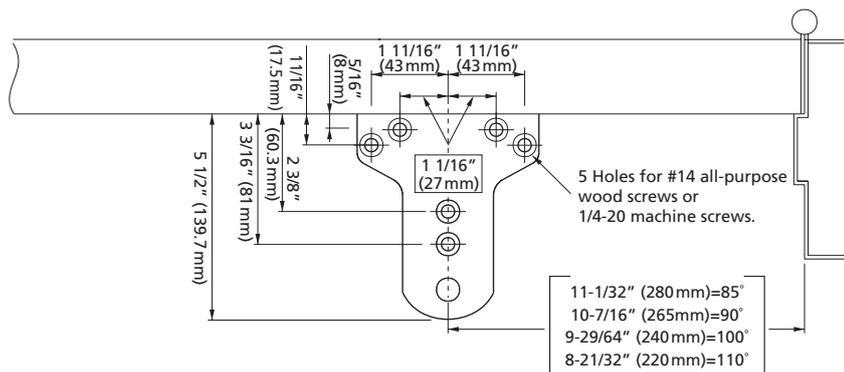


DOOR CLOSER ADJUSTMENT



POWER ADJUSTMENT CHART

CLOSER SIZE	1	2	3	4	5	6
CLOCKWISE TURNS	0	4	8	12	16	20

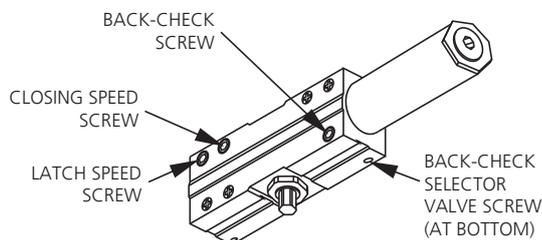
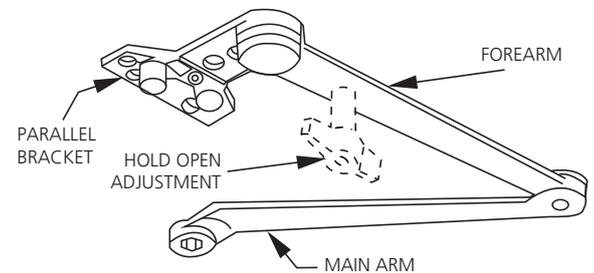
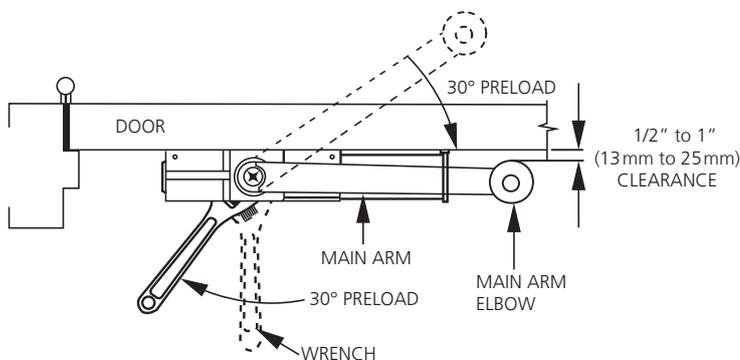


4000CNS & 4000HC SERIES DOOR CLOSER INSTALLATION

HEAVY DUTY ARM WITH STOP OR WITH HOLD-OPEN AND STOP

INSTALLATION INSTRUCTIONS

- Determine door handing (refer to verso) and position door closer with spring tube end located away from the hinges centerline.
- Before installing the door holder ensure that the backcheck is not engaged. Turn backcheck valve-screw counter-clockwise. Also, ensure that the valve under the door closer is completely screwed-in.
- Select the desired door degrees opening from the table (on sheet 1) and use the appropriate position of door closer and parallel arm bracket, with respect to the hinge centreline. Mark the parallel arm bracket mounting holes on the frame door stop face using the actual parallel bracket at the selected location (as illustrated on verso).
- Mark the door closer mounting holes on the door at selected location.
 - For prep doors, drill and tap for ¼-20 UNC and attach door closer to door using provided machine screws.
 - For non-prep doors or wood doors, pre-drill and attach door closer to door using provided #14 wood screws.
 - For hollow metal doors and 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 supplied through bolt sexnuts and machine screws.
- 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.
- Temporarily remove the 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).
- 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" (13 mm to 25 mm). 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 8.
- For prep frames or metal frames, drill and tap for ¼-20 UNC and use provided machine screws. For non-prep frames or wood frames, pre-drill and install provided #14 wood screws.
- To provide additional stiffness to the parallel bracket mounting, install an additional mounting screw on the parallel bracket using spacer block between the door frame jamb ceiling face and the parallel bracket.
- Install the deadstop on the parallel arm bracket and verify that the door opens to the approximate desired opening angle. Install supplied spring plug on the other stop position hole that is not used.
- Door Closer Control Adjustment: (refer also to instructions supplied with door closer)
 - Adjust the closer closing speeds using the closer regulating valves if 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.
 - Adjust spring power if required, depending on door size and weight.
 - Adjust the backcheck to slow down the door before the deadstop. Note that the backcheck is used only to provide damping and prevent the door from opening too fast.
 - For arms with Hold-Open function, engage the spring loaded detent by turning the control handle 90° as shown below.
- 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.



CAUTION

IMPROPER INSTALLATION OR ADJUSTMENT
MAY RESULT IN PERSONAL INJURY
OR EQUIPMENT DAMAGE.
FOLLOW INSTRUCTIONS CAREFULLY