

## PARALLEL ARM INSTALLATION - PUSH SIDE - DS (NHO) AND DSHO (HO) APPLICATIONS - 105° MAX

**REV. 2**

**09-06-19**



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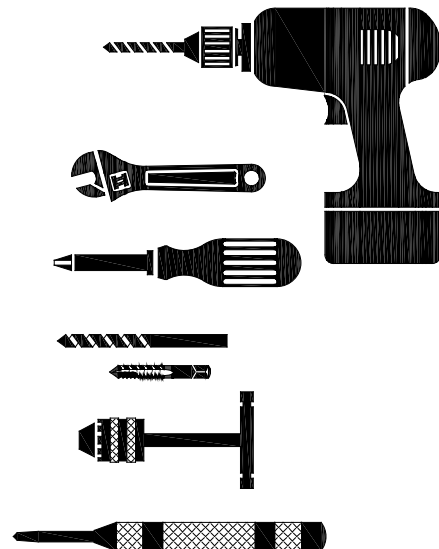
5100 DOOR CLOSER INSTRUCTION SHEET  
PARALLEL ARM INSTALLATION - PUSH SIDE - DS (NHO) AND DSHO (HO) APPLICATIONS - 105° MAX

INSTRUCTION: 519354  
REV. 2 09-06-19

- 1
1. Confirm this sheet is correct for your product and application.
  2. Read the complete instruction sheet before starting installation.
  3. Incorrectly installed or adjusted door closers can cause personal injury or property damage.
  4. To ensure safe operation, closers should be examined and serviced regularly.

- 2
1. See reverse side of this sheet to machine door & frame.
  2. Dimensions based on 4-1/2" x 4-1/2" full mortise butt hinges with 5/8" stop and 1/8" door gap.
  3. Confirm door & frame are properly reinforced.
  4. Sex nuts required for un-reinforced or composite fire doors.
  5. Do not install closer on the exterior (weather) side of building.

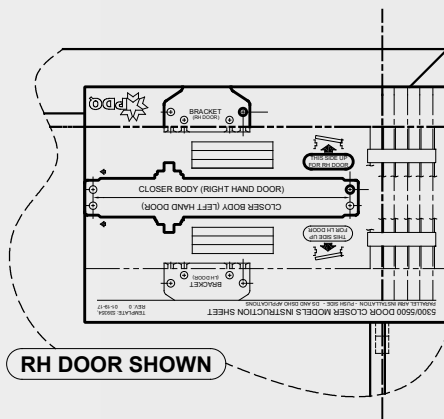
- 3
- TOOLS REQUIRED:
1. Power drill
  2. 10mm box/combo wrench
  3. Phillips screw driver
  4. #7 or 13/64" drill bit and 1/4-20 tap (machine screws)
  5. Tap handle
  6. 5/32" drill bit (wood screws)
  7. 3/8" drill bit (sex nuts)
  8. Center punch



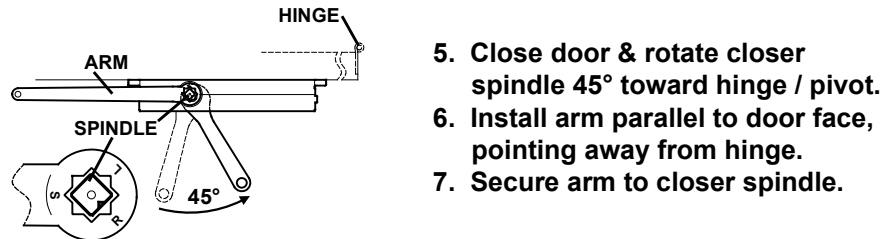
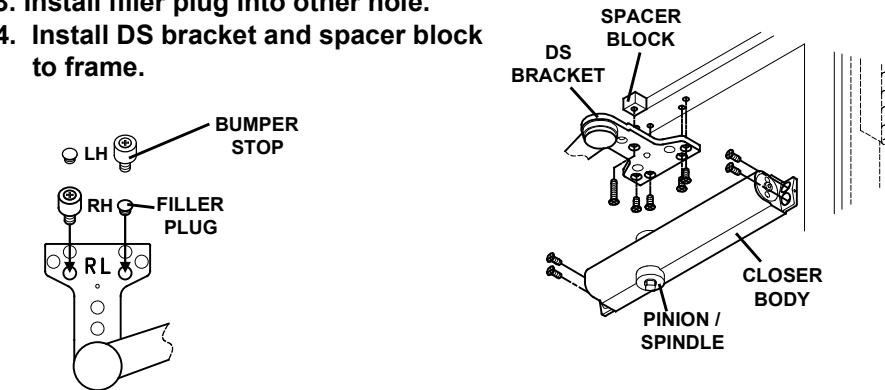
- 4
- PREPARE DOOR AND FRAME:
1. Determine maximum opening angle.
  2. Determine door hand (LH or RH).



3. Align & attach full size template (see reverse side).
4. Mark door & frame with center punch.
5. Remove template before machining door & frame.

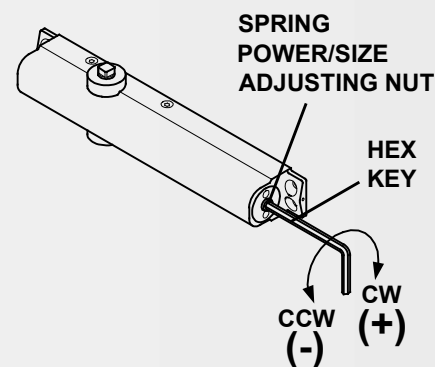


- 5
- INSTALL CLOSER AND ARM:
1. Attach closer body to door. Spring adjustment nut points toward hinges.
  2. Install bumper stop into DS bracket. Bracket is stamped: "L"(left hand) and "R"(right hand).
  3. Install filler plug into other hole.
  4. Install DS bracket and spacer block to frame.



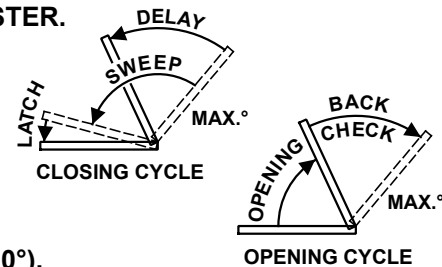
5. Close door & rotate closer spindle 45° toward hinge / pivot.
6. Install arm parallel to door face, pointing away from hinge.
7. Secure arm to closer spindle.

- 6
- ADJUST SPRING POWER:
1. Use 4 mm hex key provided to adjust to size on chart. Clockwise (CW) turns increase spring power (+). Counter-clockwise (CCW) turns decrease spring power (-).

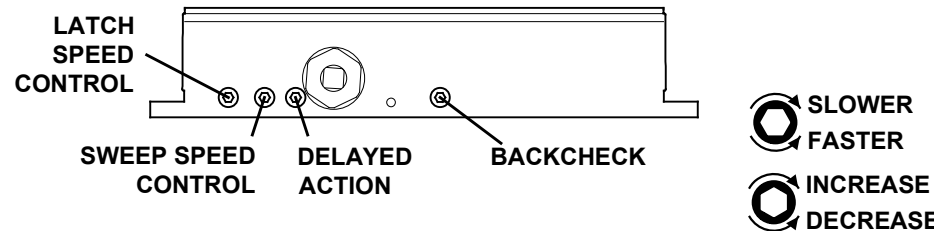


SIZE	DOOR WIDTH		APPROX. 360° TURNS
	INTERIOR	EXTERIOR	
1	28" [711.2]	N/A	-5 (CCW)
2	32" [812.8]	28" [711.2]	-3 (CCW)
3	36" [914.4]	32" [812.8]	0 (PRESET)
4	42" [1066.8]	36" [914.4]	+3 (CW)
5	48" [1219.2]	42" [1066.8]	+6 (CW)
6	54" [1371.6]	48" [1219.2]	+9 (CW)

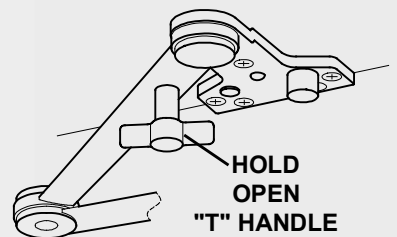
- 7
- CONTROL ADJUSTMENTS:
- Closing time of 3-7 seconds is typical. More time may be needed for ADA/BF access.
- Clockwise (CW) = SLOWER.  
Counter-clockwise (CCW) = FASTER.  
DO NOT REMOVE VALVES



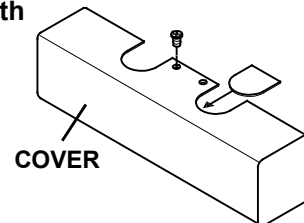
1. Use hex key provided.
2. Adjust SWEEP (closing max.° - 10°).
3. Adjust LATCH (closing 10° - 0°).
4. Adjust BACKCHECK resistance (opening 70° - max.°). DO NOT COMPLETELY CLOSE VALVE
5. Adjust (optional) DELAYED ACTION (closing max.° - 70°); Provides additional hesitation for access (ADA/BF) through door.



- 8
- OPTIONAL HOLD OPEN:
1. DSHO arm has an optional thumb turn "T" handle.
  2. A 1/4 rotation of "T" engages or disengages hold open.
  3. Door can also be manually pulled in and out of hold open without rotating the "T" handle.
  4. Greasing detent ball is recommended to prevent wear.



- 9
- INSTALL 5100 COVER:
1. Align cover with closer spindle. Slide insert into unused cutout.
  2. Slide cover over closer until flush with door face.
  3. Secure with screw provided.



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