



Installation Instructions

Unitrol®

Parallel Arm Door Controls UNI-7500 (DA) (H) Series UNI-7700 (DA) (H) Series

ASSA ABLOY

Use these instructions for installing all models of these series on 1-3/4" (45mm) doors hung on 4-1/2" (114mm) wide hinges or 3/4" (19mm) offset pivots.

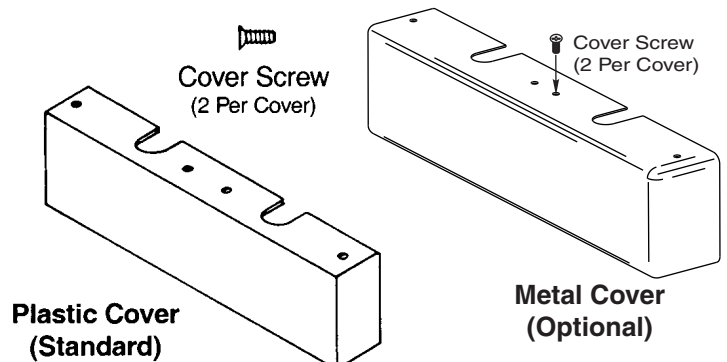
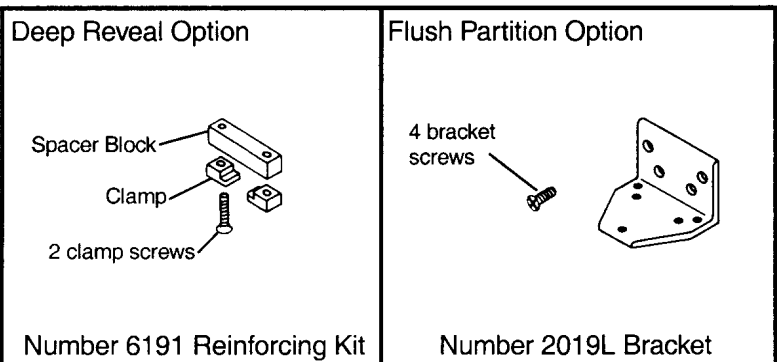
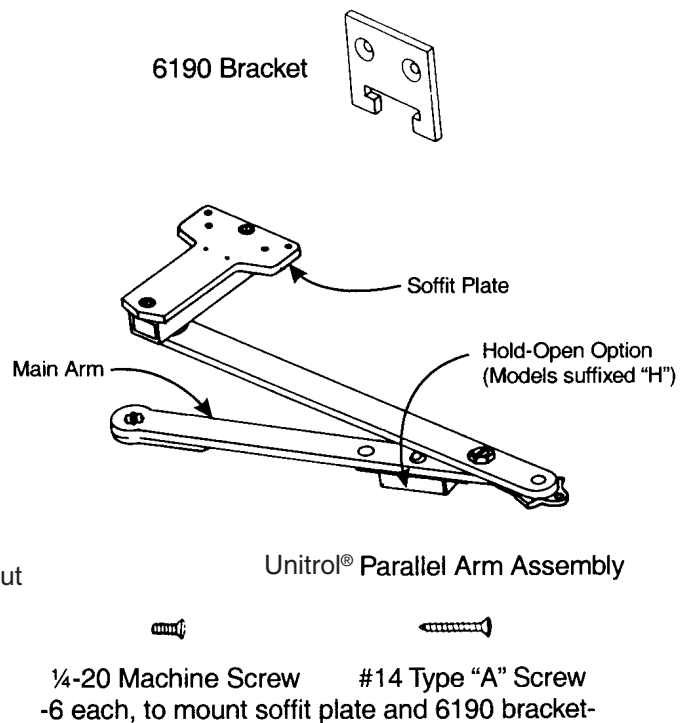
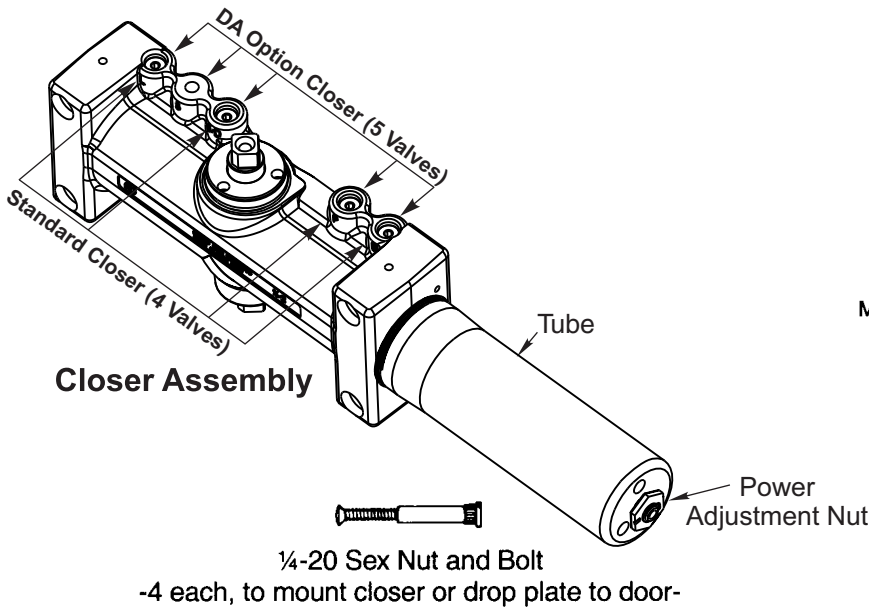
DOOR WIDTH determines the location of the closer. Use ONLY the template chart corresponding to your door width.

Use ONLY the dimensions given in each template chart for the door total OPENING angle or the HOLD-OPEN angle desired.

Unitrol® parallel arms are supplied in one of three lengths, according to door width specified on order. To verify that the ARM you have is CORRECT FOR THE DOOR WIDTH, check the number stamped on the arm against the chart below.

| DOOR WIDTH | Non-Holder Arm | Hold-Open Arm |
|-----------------------|----------------|---------------|
| 28"-32" 0.70-0.80M | 6100-11 | 6100-1 |
| 33"-41" 0.85-1.00M | 6100-13 | 6100-3 |
| 42"-48" 1.05-1.20M | 6100-14 | 6100-4 |

Components



Frame Template for 1-7/8 to 4-5/8 Reveals Door Template Typical for All Installations

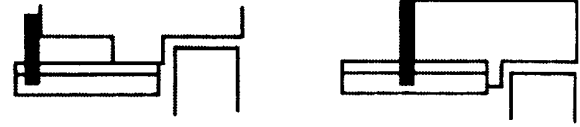
Template Information



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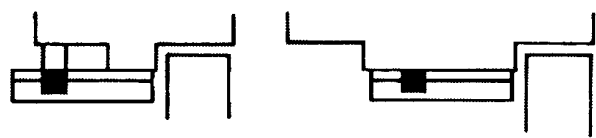
- Door template is typical for all installations.
- Frame template must be selected according to reveal.

- 1-7/8 to 4-5/8 Frame Reveals (Uses 6190 Bracket).



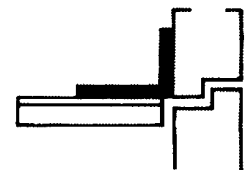
Frame Template: Page 2

- Frame Reveals Over 4-5/8 (Uses 6190 Clamp Kit).



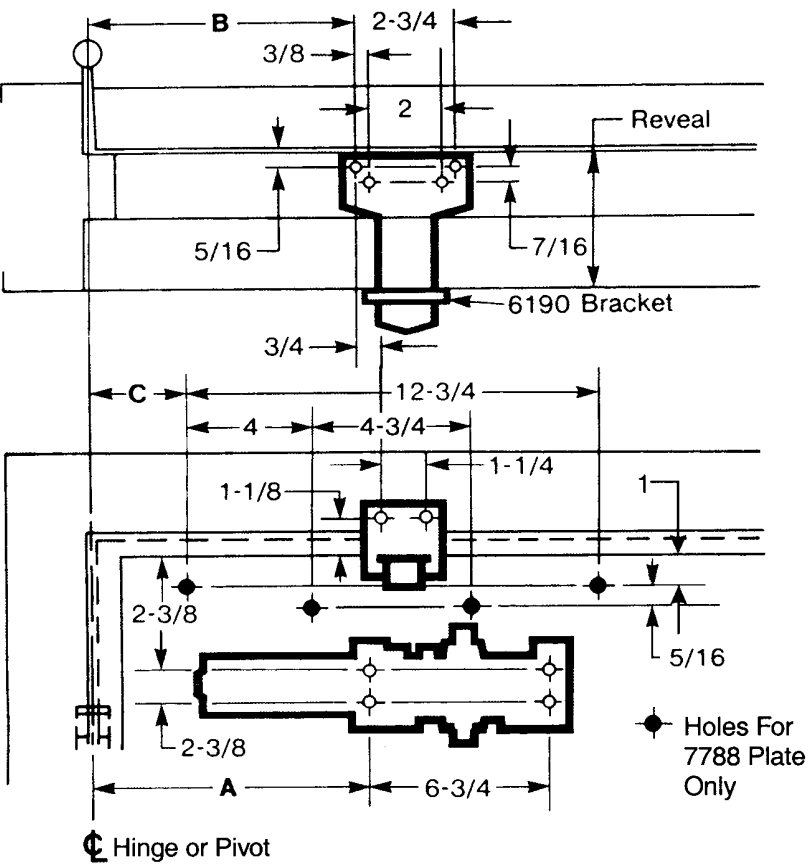
Frame Template: Page 3

- Flush Partitions (Uses 2019L Bracket).



Frame Template: Page 3

- Dimension charts on this page are typical for all templates.
- Do not scale drawing.
- Left hand door shown.
- Dimensions are in inches.
- Metric conversion chart below.
- Fastener specifications on Page 3.



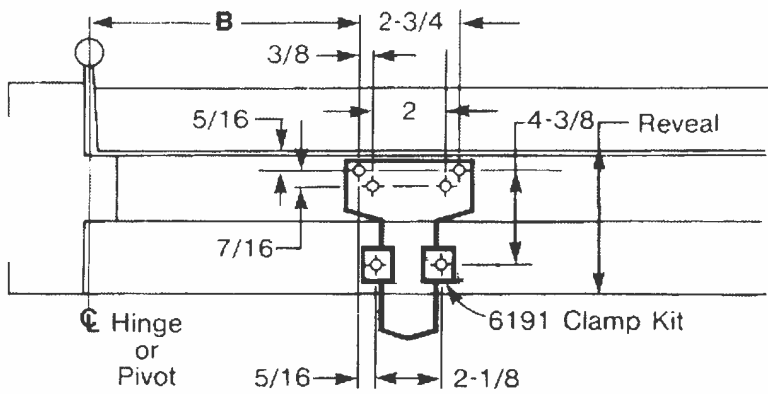
| DIMENSIONS FOR DOORS 28" TO 32" WIDE | | | | |
|--------------------------------------|------|-------------|-------------|-------------|
| Opening | | Dimension A | Dimension B | Dimension C |
| Hold-Open | Stop | | | |
| 85° | 90° | 10-1/4 | 10-1/2 | 4-1/2 |
| 90° | 95° | 9-5/8 | 9-7/8 | 3-7/8 |
| 95° | 100° | 9-1/8 | 9-3/8 | 3-3/8 |
| 100° | 105° | 8-3/4 | 9 | 3 |
| 105° | 110° | 8-3/8 | 8-5/8 | 2-5/8 |
| 110° | 115° | 8 | 8-1/4 | 2-1/4 |

| DIMENSIONS FOR DOORS 33" TO 41" WIDE | | | | |
|--------------------------------------|------|-------------|-------------|-------------|
| Opening | | Dimension A | Dimension B | Dimension C |
| Hold-Open | Stop | | | |
| 85° | 90° | 12-3/4 | 12-7/8 | 7 |
| 90° | 95° | 12 | 12-1/8 | 6-1/4 |
| 95° | 100° | 11-1/2 | 11-5/8 | 5-3/4 |
| 100° | 105° | 10-7/8 | 11 | 5-1/8 |
| 105° | 110° | 10-1/2 | 10-5/8 | 4-3/4 |
| 110° | 115° | 10 | 10-1/8 | 4-1/4 |

| DIMENSIONS FOR DOORS 42" TO 48" WIDE | | | | |
|--------------------------------------|------|-------------|-------------|-------------|
| Opening | | Dimension A | Dimension B | Dimension C |
| Hold-Open | Stop | | | |
| 85° | 90° | 14-7/8 | 15-1/8 | 9-1/8 |
| 90° | 95° | 14 | 14-1/4 | 8-1/4 |
| 95° | 100° | 13-3/8 | 13-5/8 | 7-5/8 |
| 100° | 105° | 12-3/4 | 13 | 7 |
| 105° | 110° | 12-1/4 | 12-1/2 | 6-1/2 |
| 110° | 115° | 11-7/8 | 12-1/8 | 6-1/8 |

| inches | mm | inches | mm | inches | mm | inches | mm |
|--------|------|--------|-------|--------|-----|--------|-------|
| 5/16 | 8.0 | 2-3/4 | 69.9 | 8-3/8 | 213 | 11-7/8 | 302 |
| 3/8 | 9.5 | 3 | 76 | 8-5/8 | 219 | 12 | 305 |
| 7/16 | 11.1 | 3-3/8 | 86 | 8-3/4 | 222 | 12-1/8 | 308 |
| 1/2 | 12.7 | 3-7/8 | 98.5 | 9 | 229 | 12-1/4 | 311 |
| 3/4 | 19.1 | 4 | 101.6 | 9-1/8 | 232 | 12-1/2 | 318 |
| 1 | 25 | 4-1/4 | 108 | 9-3/8 | 238 | 12-3/4 | 323.9 |
| 1-1/8 | 29 | 4-3/8 | 111 | 9-5/8 | 244 | 12-7/8 | 327 |
| 1-1/4 | 31.8 | 4-1/2 | 114 | 9-7/8 | 251 | 13 | 330 |
| 1-1/2 | 38.1 | 4-3/4 | 120.7 | 10 | 254 | 13-3/8 | 340 |
| 1-3/4 | 44 | 5-1/8 | 130 | 10-1/8 | 257 | 13-5/8 | 346 |
| 1-7/8 | 48 | 5-3/4 | 146 | 10-1/4 | 260 | 14 | 356 |
| 2 | 50.8 | 6-1/4 | 159 | 10-1/2 | 267 | 14-1/4 | 362 |
| 2-1/8 | 54 | 6-3/4 | 171.5 | 10-5/8 | 270 | 14-7/8 | 378 |
| 2-1/4 | 57 | 7 | 177.8 | 10-7/8 | 276 | 15-1/8 | 384 |
| 2-3/8 | 60.5 | 8 | 203 | 11-1/2 | 292 | | |
| 2-5/8 | 67 | 8-1/4 | 210 | 11-5/8 | 295 | | |

Frame Template for Reveals Over 4-5/8 Door Template on Page 2

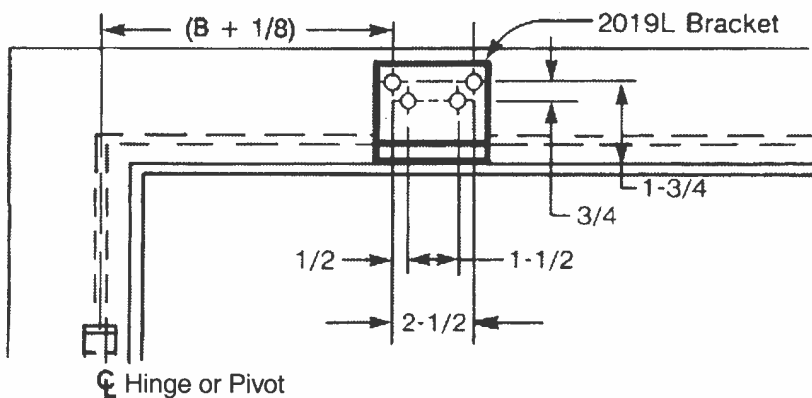


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Installation Sequence

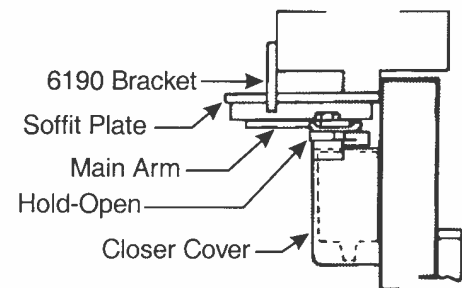
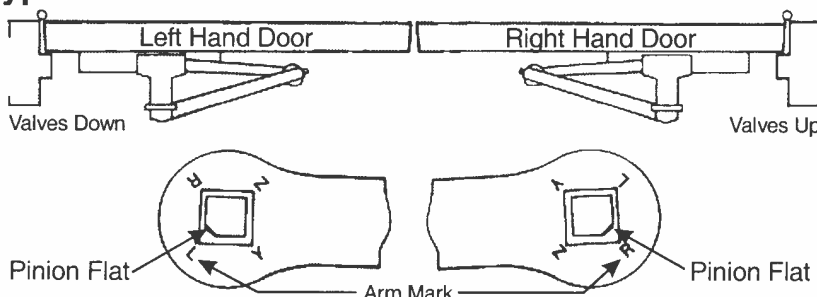
- **Read Front Page.**
Installation ground rules and components identification are on this page.
- **Match hardware to opening.**
Follow "Template Information" on Page 2.
- **Mark mounting holes location.**
Use dimensions for hold-open or door stop angle desired. Mark position of 4 holes on door for closer (or drop plate) and 6 holes on frame for soffit plate (or 4 for 2019L angle bracket).
- **Prepare holes for fasteners.**
See chart below.
- **Mount closer to door.**
Drop plate first, if used. Place spring tube end toward the hinge edge of the door; closer with valves up for right hand door, with valves down for left hand door.
- **Mount arm to frame.**
Fasten soffit plate (or angle bracket if flush partition) to frame. Mount 6190 bracket or 6191 clamps to hold soffit plate flat.
- **Install arm on pinion top.**
Close valve "S". Rotate pinion over 45° to align main arm letter "R" (right hand) or "L" (left hand) with pinion flat. Fasten with arm screw. See "Typical Installation" figure below.
- **Adjust closer.**
See "Unit Adjustment" on page 4.
- **Install cover.**
See front page.

Frame Template for Flush Partitions Door Template on Page 2



| Fastener | Frame | Door | Drill |
|--------------------------------|-------|------------------|--|
| 1/4-20 machine screw | metal | none | #7 (.201 dia.) or 5.10mm. drill...1/4-20 tap |
| #14 type "A" sheet metal screw | wood | none | 3/16" (4.30mm.) |
| SNB | none | hollow-metal | 9/32" (7.00mm.) thru... 3/8" (9.50mm.) door face opposite to closer |
| | | aluminum or wood | 3/8" (9.50mm.) thru |

Typical Installation



Unit Adjustment

Power Adjustment

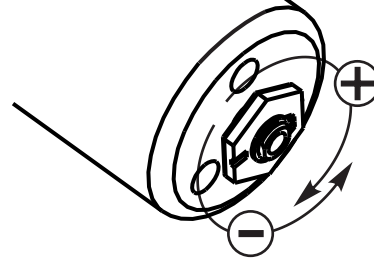
Spring Power is controlled by the power adjustment nut at the end of the closer. An 11/16" wrench is required. All closers are supplied at lowest power point. Clockwise turns of the power adjustment nut may increase closer power up to 50% over the nominal power value. Basic power of multi size closers is first set as shown on the "Power Setting" chart.

- **All Valves** adjustable by 1/8" (3.18mm) hex key (supplied).
- **Backcheck** cushioning controlled by valve marked "BC". (Never close BC valve completely.) Valve "P" (normally fully closed), is open to move backcheck start to a greater door opening angle.
- **Delayed Action** option permits door to creep from fully open to about 70°. Creeping time controlled by valve marked "D".
- **Hold-Open** option is found at the arm elbow. To select hold-open "on" or hold-open "off" and to adjust the hold-open force...use screwdriver as illustrated.

Closing Power Control

For 7500 Series Only

Set closer to desired size. For recommended sizes, refer to the Power Adjustment Chart below.



Install closer per instructions with the proper pre-load applied to the arm then adjust spring power. The power adjustment will not work properly if the closer spring is not pre-loaded. To increase power, use 11/16" wrench to turn power adjustment nut clockwise. To decrease power, turn nut counter clockwise.



DO NOT use a power drill or driver to turn adjustment nut. This will damage closer and void warranty.

Valve Controls

Backcheck Intensity "BC"
Delay Time "DA"

Decrease Increase

Closing Speeds
"S" and "L"

Valve Adjustments

Power Setting - Multi size Closers

| Door Size Inches (M) | Turns from Zero | |
|----------------------------|-----------------|---------------|
| | Series UNI-7500 | |
| | Interior Door | Exterior Door |
| 28-32 (0.70-0.80) | 1 | 3 |
| 33-41 (0.85-1.00) | 6 | 8 |
| 42-48 (1.05-1.20) | 9 | 12 |

Hold-Open Controls

Hold-Open "On" **Hold-Open Force**

Turn 90° To "Off"

Press and Turn

To Decrease Force To Increase Force



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