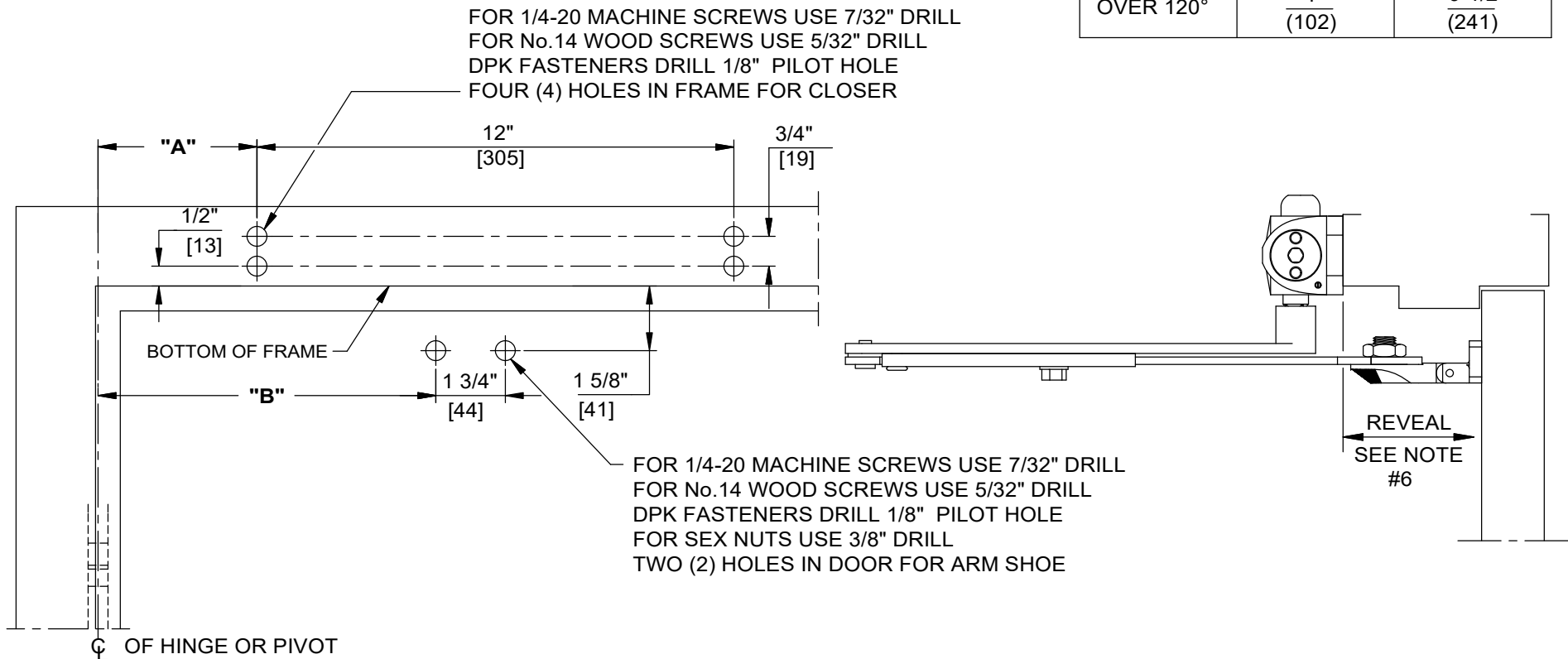


NOTES:

1. DO NOT SCALE DRAWING.
2. DIMENSIONS ARE IN INCHES/(MM).
3. LEFT HAND DOOR SHOWN.
4. CAUTION: SEX NUTS ARE REQUIRED FOR ATTACHMENT OF COMPONENTS TO UNREINFORCED DOORS AND TO WOOD OR PLASTIC FACED COMPOSITE TYPE FIRE DOORS, UNLESS AN ALTERNATIVE METHOD IS IDENTIFIED IN THE INDIVIDUAL DOOR MANUFACTURER'S LISTINGS.
5. MAX. OPENING IS 180°.
6. SEE CATALOG FOR REVEAL INFORMATION.
7. OPTIONAL DPK FASTENERS (DPK86) FOR STEEL DOOR & FRAME ONLY.

ANGLE OF OPENING	DIM. "A" CLOSER	DIM. "B" ARM SHOE
TO 100°	$\frac{8}{(203)}$	$\frac{13-1/2}{(343)}$
100° TO 120°	$\frac{6-1/2}{(165)}$	$\frac{12}{(305)}$
OVER 120°	$\frac{4}{(102)}$	$\frac{9-1/2}{(241)}$

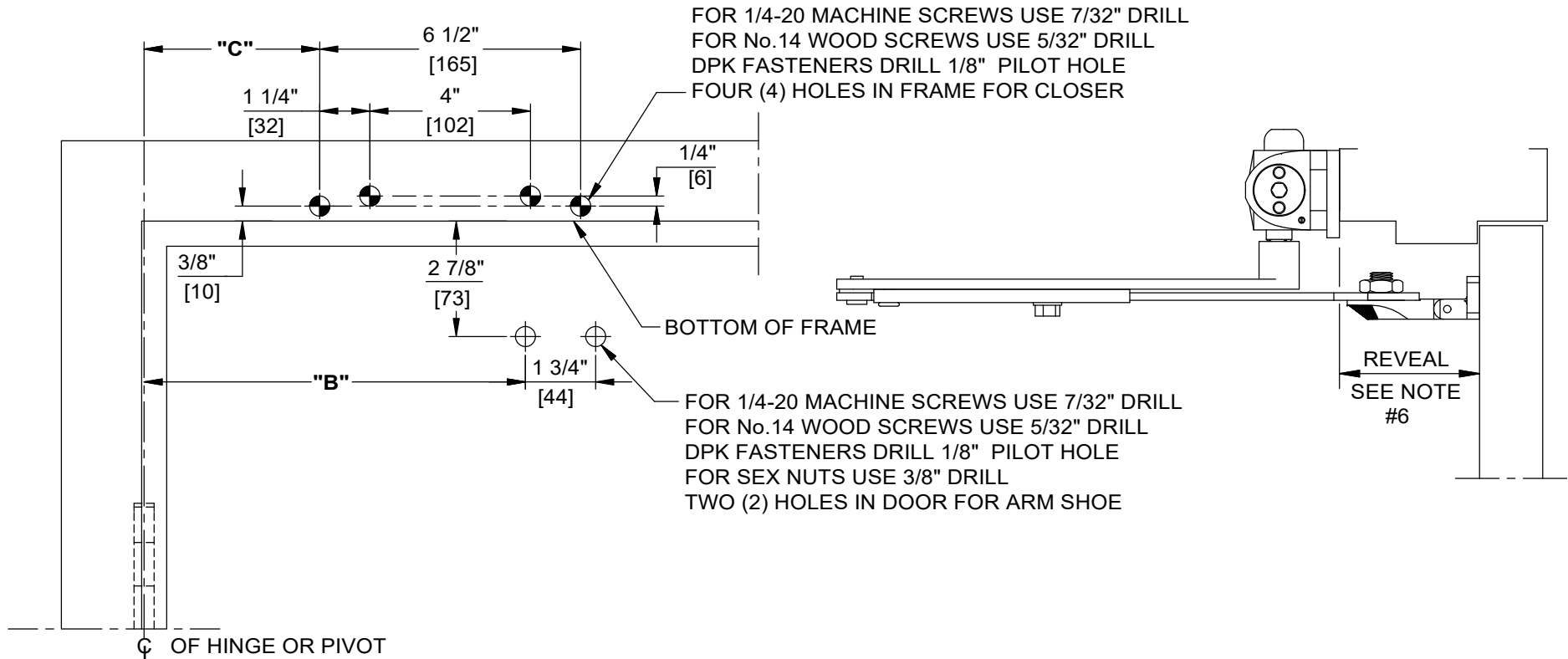


DOOR CLOSER MODELS: 8616 FHJ
 TOP JAMB INSTALLATION (PUSH SIDE MOUNT)

NOTES:

1. DO NOT SCALE DRAWING.
2. DIMENSIONS ARE IN INCHES/(MM).
3. LEFT HAND DOOR SHOWN.
4. CAUTION: SEX NUTS ARE REQUIRED FOR ATTACHMENT OF COMPONENTS TO UNREINFORCED DOORS AND TO WOOD OR PLASTIC FACED COMPOSITE TYPE FIRE DOORS, UNLESS AN ALTERNATIVE METHOD IS IDENTIFIED IN THE INDIVIDUAL DOOR MANUFACTURER'S LISTINGS.
5. MAX. OPENING IS 180°.
6. SEE CATALOG FOR REVEAL INFORMATION.
7. OPTIONAL DPK FASTENERS (DPK86) FOR STEEL DOOR & FRAME ONLY.

ANGLE OF OPENING	DIM. "B" ARM SHOE	DIM. "C" PLATE
0° TO 100°	13-1/2 (343)	8-3/8 (213)
100° TO 120°	12 (305)	6-7/8 (175)
OVER 120°	9-1/2 (241)	4-3/8 (111)

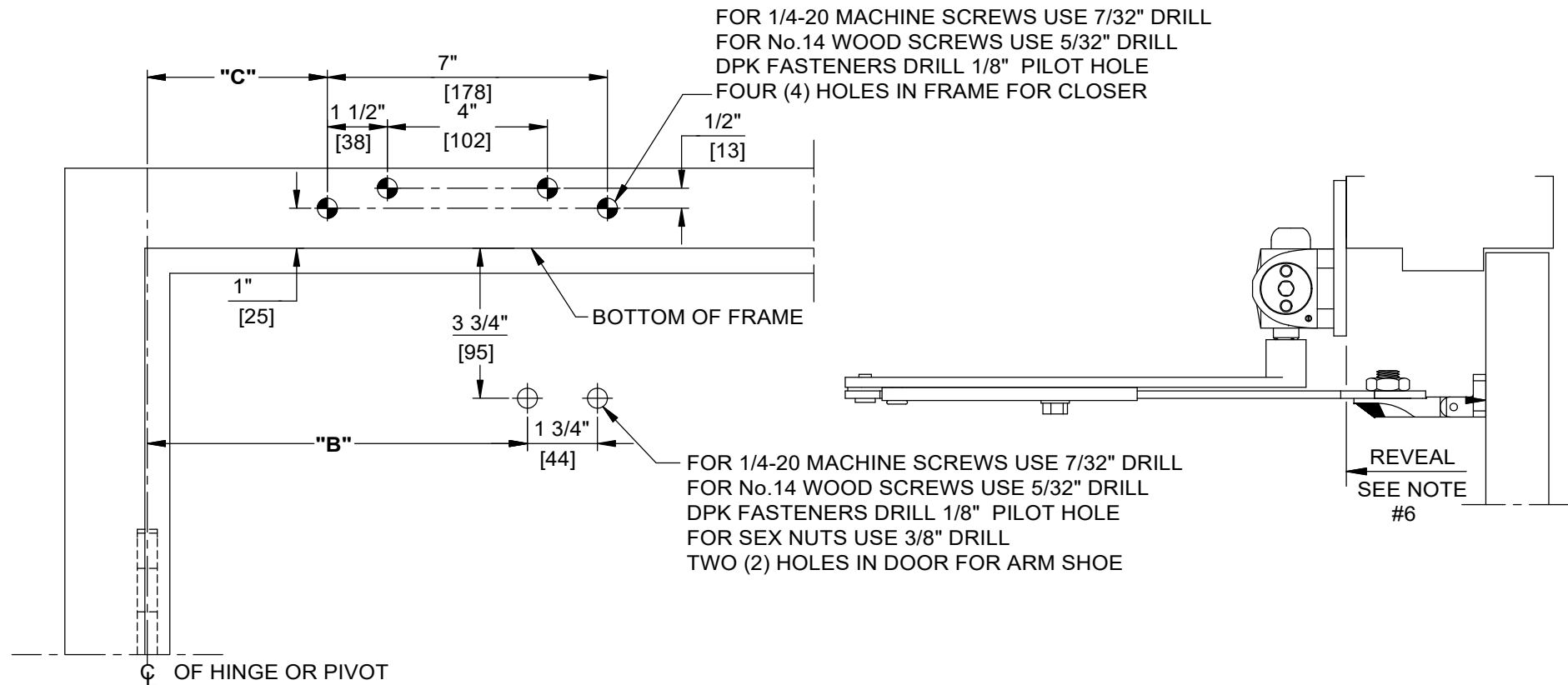


DOOR CLOSER MODELS: 8616 FHJ
 TOP JAMB INSTALLATION (PUSH SIDE MOUNT)
 WITH PLATES BP86, BP86FC

NOTES:

1. DO NOT SCALE DRAWING.
2. DIMENSIONS ARE IN INCHES/(MM).
3. LEFT HAND DOOR SHOWN.
4. CAUTION: SEX NUTS ARE REQUIRED FOR ATTACHMENT OF COMPONENTS TO UNREINFORCED DOORS AND TO WOOD OR PLASTIC FACED COMPOSITE TYPE FIRE DOORS, UNLESS AN ALTERNATIVE METHOD IS IDENTIFIED IN THE INDIVIDUAL DOOR MANUFACTURER'S LISTINGS.
5. MAX. OPENING IS 180°.
6. SEE CATALOG FOR REVEAL INFORMATION.
7. OPTIONAL DPK FASTENERS (DPK86) FOR STEEL DOOR & FRAME ONLY.

ANGLE OF OPENING	DIM. "B" ARM SHOE	DIM. "C" PLATE
TO 100°	$\frac{13-1/2}{(343)}$	$\frac{8-1/2}{(216)}$
100° TO 120°	$\frac{12}{(305)}$	$\frac{7}{(178)}$
OVER 120°	$\frac{9-1/2}{(241)}$	$\frac{4-1/2}{(114)}$



DOOR CLOSER MODELS: 8616 FHJ
 TOP JAMB INSTALLATION (PUSH SIDE MOUNT)
 WITH PLATE DP86