

Architectural Door Accessories

ASSA ABLOY

Markar HG310 Installation Instructions

The global leader in
door opening solutions

PRODUCT MUST BE INSTALLED ACCORDING TO ALL APPLICABLE BUILDING AND LIFE SAFETY CODES

All holes in door and frame must be drilled correctly and fasteners properly installed. Failure to use fasteners supplied by Markar Architectural Products will void UL or WHI fire rated listing.

1. Frame Preparation

A. Place hinge frame leaf on frame face. Position top of hinge $\frac{1}{8}$ " maximum below header. Place hinge firmly against face of frame. Position frame leaf edge $\frac{3}{16}$ " from rabbet as shown in (Fig. 1 & 2).

B. Mark top and bottom two holes with hinge held firmly in place. Remove hinge. A center punch can help center hole so that fasteners will enter straight. Prepare to drill frame.

C. Drill Holes:

Wood Frame: drill holes using a $\frac{5}{32}$ " drill bit.

Hollow Metal Frame: drill holes using a #16 drill bit.
If hollow metal frame is reinforced, thread all holes with 12-24 tap.

D. Install hinge with four screws:

Wood: Attach hinge using #12-8 x $1\frac{1}{2}$ " Flat Head Undercut Particle Board Screws (PBS12150SP10SS).

Hollow Metal: Attach hinge using #12-24 x $1\frac{1}{16}$ " Flat Head Undercut Self Drilling Machine Screws (TKS1267SP10SS).

E. Mark remaining mounting holes, remove hinge and repeat step C.

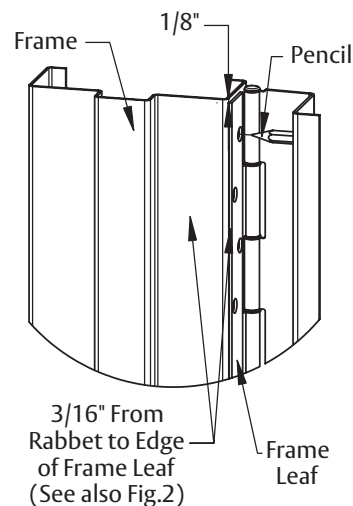


Fig. 1

Do not install hinge to frame at this time.

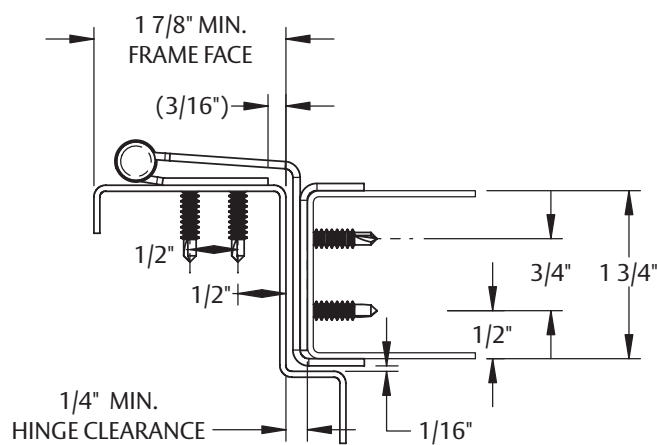
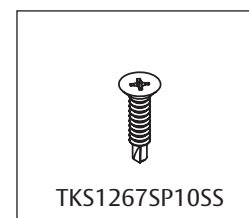


Fig. 2

HINGE PLACEMENT & CLEARANCE TEMPLATE
(NON-ADJUSTABLE APPLICATION SHOWN)



SURFACE SCREW PACK
KMPSS

(2) Per Assembly for 10'
(1) Per Assembly All Others

(PBS12150SP10SS Wood Screws not supplied;
available upon request)

2. Door Preparation

- A. Place hinge door leaf on edge of door. Position top of hinge flush with top of door (Fig 3).
- B. Mark and center punch each hole on door with hinge held firmly in place. Remove hinge from door and prepare to drill door.

C. Drilling Doors:

Non Adjustable Hinge

Wood Doors: drill all holes using a $\frac{5}{32}$ " drill bit.

Hollow Metal Doors: drill all holes using a #16 drill bit.

If hollow metal door is reinforced, thread all holes with 12-24 tap.

Adjustable Hinge (If using Adjust-A-Screw™)

Wood Doors:

1. Drill all holes using a $\frac{5}{32}$ " drill bit then enlarge holes to $\frac{5}{16}$ " with a minimum depth of $1\frac{3}{8}$ ".
2. Insert Adjust-A-Screws into every hole.
3. Place a $\frac{7}{32}$ " Allen wrench in opening of Adjust-A-Screw and turn Adjust-A-Screw into hole while keeping screw properly aligned (Fig 4).
4. Drive all Adjust-A-Screws in until approximately $\frac{1}{8}$ " from edge of door. (*Adjust-A-Screw will self tap*)

Hollow Metal Doors:

1. Drill all holes using a #16 drill bit then enlarge holes with a $\frac{5}{16}$ " drill bit.
2. Thread all holes with 3/8-16 tap.
3. Insert Adjust-A-Screws into every hole.
4. Place a $\frac{7}{32}$ " Allen wrench in opening of Adjust-A-Screw and turn Adjust-A-Screw into hole while keeping screw properly aligned (Fig 4).
5. Drive all Adjust-A-Screws in until approximately $\frac{1}{8}$ " from edge of door.

Note: It is not necessary to tap holes in wood doors since Adjust-A-Screws cut their own threads. Do not be concerned with tight fit. Adjust-A-Screws are designed for a tight friction fit in tapped holes so they will not turn when attachment screw is being tightened. If Adjust-A-Screw turns too freely, apply Loctite™ to threads during installation.

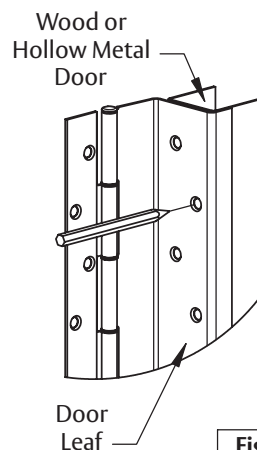


Fig. 3

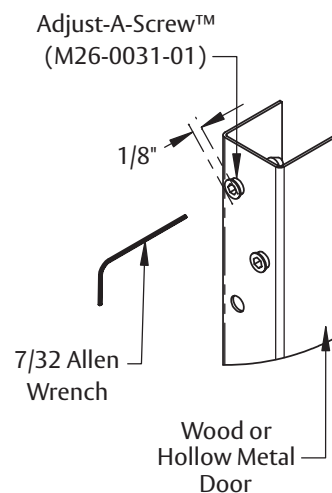


Fig. 4

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M80-0180-0310 Rev G 2/17

3. Hinge Installation

- A. Attaching hinge to door:
Peel backing from two sided tape located on top and bottom of EGA305 hinge guard. Stick guard to edge of door.

Non Adjustable Hinge (Fig 5)

Wood: Attach hinge using #12-8 x 1½" Flat Head Undercut Particle Board Screws (PBS12150SP10SS).

Hollow Metal: Attach hinge using #12-24 x 1¹⁄₁₆" Flat Head Undercut Self Drilling Machine Screws (TKS1267SP10SS).

Adjustable Hinge (Fig 6)

Install top & bottom four screws first, then close door to check alignment. See Special Note below.

Wood & Hollow Metal: Attach hinge using #10-32 x ¾" Flat Head Undercut Machine Screws (MS10075SS).

SPECIAL NOTE: If door is properly aligned, install and tighten remaining screws. If door requires alignment for proper fit, make this adjustment with four screws installed without removing door. Remove one screw and insert Allen wrench through hole into Adjust-A-Screw (Fig 6). Turn Adjust-A-Screw in direction desired for adjustment. One full turn of Allen wrench is equal to ¹⁄₁₆". Reinstall screw. Adjust remaining screws in same manner. Close door to verify door is aligned properly in opening. The balance of Adjust-A-Screw should be adjusted in same manner until all are resting firmly against inside face of hinge. Then install and tighten remaining machine screws. Be sure adjustable angle is pressed firmly against face of door as screws are tightened.

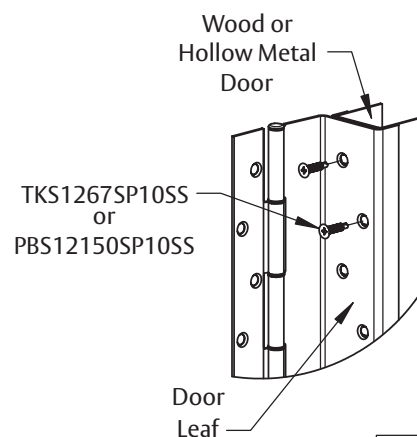


Fig. 5

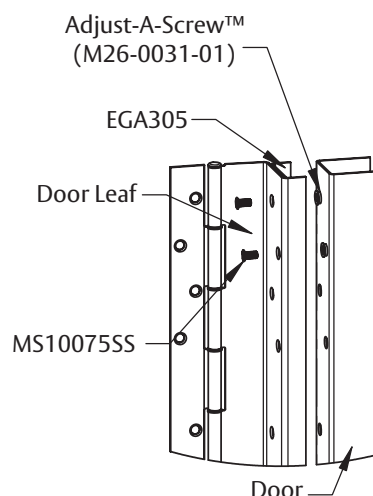


Fig. 6

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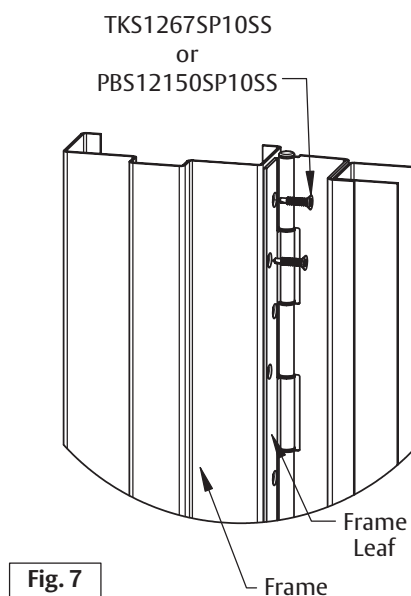
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B. Attaching hinge to frame (Fig 7):

Wood: Attach hinge using #12-8x 1½" Flat Head Undercut Particle Board Screws (PBS12150SP10SS).

Hollow Metal: Attach hinge using #12-24 x 1½" Flat Head Undercut Self Drilling Machine Screws (TKS1267SP10SS).



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