



1825 VIA BURTON
ANAHEIM CA 92806
714-772-5202 / FAX 714-772-2302
EMAIL: MAIL@MAJORMFG.COM
WEB: WWW.MAJORMFG.COM

**INSTRUCTIONS
FOR
HIT-45
MODULAR CLAMP
FOR ALUMINUM DOOR
AND MORTISE LOCKS
WHEN USING POWER TOOLS
ALWAYS WEAR
EYE AND EAR PROTECTION!!**

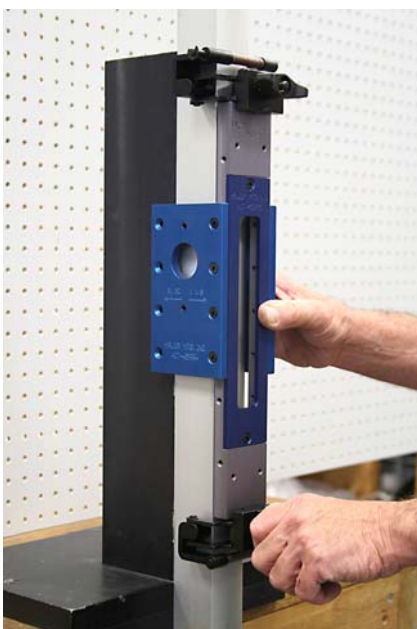


These are the most important tools that you will use in this installation.

**Always use
eye and ear
protection!!**



Select the proper template for the backset that you are installing. The most popular backsets, $31/32$ " and $1-1/8$ " can be installed with a lock indicator or prepped with a lever/paddle arrangement. Lock templates are fastened to the clamp with $10-32 \times 3/4$ " allen flat head screws. The faceplate template is held on with $10-32 \times 1/2$ " allen flat head screws.



Determine the cylinder height of the lock being installed and secure the HIT-45 clamp and templates onto the door as shown.

If you are installing the new lock above an existing lock, be sure to remove the existing lock or any other hardware in the channel. **FAILURE TO REMOVE EXISTING LOCKS OR HARDWARE FROM THE DOOR CHANNEL WILL RESULT IN FILLING THEM WITH ALUMINUM ROUTING CHIPS AND JAMMING THE MECHANISM !**



Your router needs to be equipped with a 3/8" outside diameter template guide mounted in its base. ***Failure to use a template guide will cause the opening being routed to be too large and may damage your HIT-45 templates or the door.***

Install a 1/4" diameter aluminum router bit into the router collet and secure tightly. Adjust the router bit so it will route about 1/4" to 3/8" into the door channel.



Drill a 3/8" or larger starting hole for the router bit in the center of the template hole to be routed. In the picture we are using a step drill bit.



Drill the same starting holes for the lock cylinder.



Here we are drilling the starter hole for the lock indicator. If you are not using an indicator in your installation, do not drill this hole.



We recommend the area to be routed be lubricated with a cutting lube. We use a product called Tapmatic Edge Cream made by the LPS Company. You can find this product at industrial hardware stores or machine shop supplies. This is also a handy product to use for other drilling or tapping chores.



Place the router bit in the starting hole and with firm control of the router follow the HIT-45 template and feed the router slowly in a **CLOCKWISE DIRECTION**. Make sure the base of the router is held flat on the routing template. We advise routing the cylinder sides of the door first and the faceplate last. When completed with the cut, turn the router off **and wait for the bit to come to a complete stop before removing it from the template. Failure to do so may cause damage to the door, your HIT-45 template or injury to yourself.** After making the first pass, brush away the chips and make a second clean up pass.



Use the same procedure and route the opposite side of the door. Don't forget to brush out the chips and make a second clean up pass.



Route the faceplate opening last. When completed, again brush away the chips and make a second pass. We recommend making this cut last because of the unlikely event of a broken router bit, the large faceplate hole will be covered by the router base and the broken bit will most likely be contained in the channel.



Drill the mounting holes for the indicator with a #21 drill bit.



Clean the area of left over cutting lube and chips. Use a machinist scraper or an aluminum cutting file and deburr all of the openings.



Tap the two indicator mounting holes with a 10-32 tap.



Our LMB-08 mounting brackets and LMB-089 tool are being used to mount the lock in the channel. The door can also be drilled and tapped for lock mounting tabs. We do not advise drilling and tapping the rear of the channel like factory doors. They are drilled and tapped prior to the glass being installed, you will be drilling and tapping into a glass channel. ***You run a great risk of breaking the glass in the door!***



LMB-08 brackets in door and lock going in.



Secure lock with the screws supplied with the mounting bracket.



Install the outside cylinder. We recommend the addition of one of our hardened cylinder guards for security.

SEE OUR CATALOG OR WEB SITE FOR A COMPLETE LISTING OF CYLINDER GUARDS AND GUARD PLATES.



Inside thumb turn being installed.



Lock indicator going in, be sure to install per manufacturers directions.



Install the faceplate and the lock is installed.

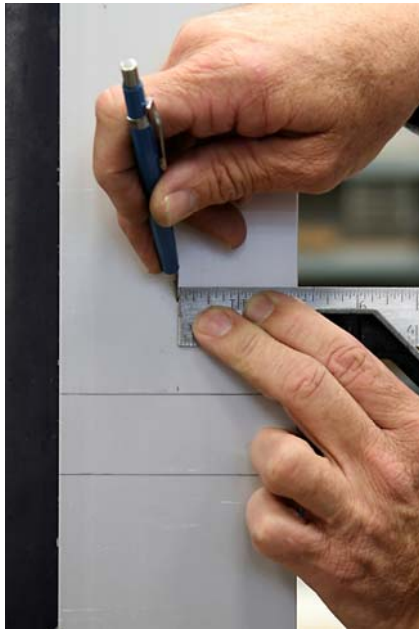
WITH THE LOCK INSTALLED A STRIKE OR STRIKE CUT OUT IS REQUIRED. SEE THE MANY OPTIONS AVAILABLE ON OUR WEBSITE. FOLLOWING IS THE STANDARD CUTOUT USED ON FACTORY INSTALLED JAMBS.



For height alignment, throw the bolt and close the door until it makes contact with the door jamb. Use a pencil and mark the top and bottom of the bolt.



Use a combination square and transfer the lines on the front edge of the door to the side. This will show the location of the bolt when it is in the locked position.



Find the center line of the jamb. This example shows the center line on a 4" wide center hung door. The center line is 2". Use a combination square and draw a vertical line at this point. Note: The center line on an offset hung door will be half the distance from the door stop to the outside edge of the jamb.



Pencil lines showing the center line of the jamb and the height of the bolt when in the locked position have now been established.



We will route the strike opening with our HIT-40AR5 template. Use the alignment marks on the template to align with the pencil lines on the jamb. Attach to jamb with the supplied tek point screws and an electric drill. Make sure the template is square to the jamb prior to running the second screw in.

NOTE: It is a good idea that your drill is equipped with a clutch feature, this will prevent snapping the screw off in the jamb.



Template mounted and ready to go.



Drill a 3/8" or larger starting hole for the router bit in the center of the template hole to be routed. In the picture we are using a step drill bit.



We recommend the area to be routed be lubricated with a cutting lube. We use a product called Tapmatic Edge Cream made by the LPS Company. You can find this product at industrial hardware stores or machine shop supplies. This is also a handy product to use for other drilling or tapping chores.



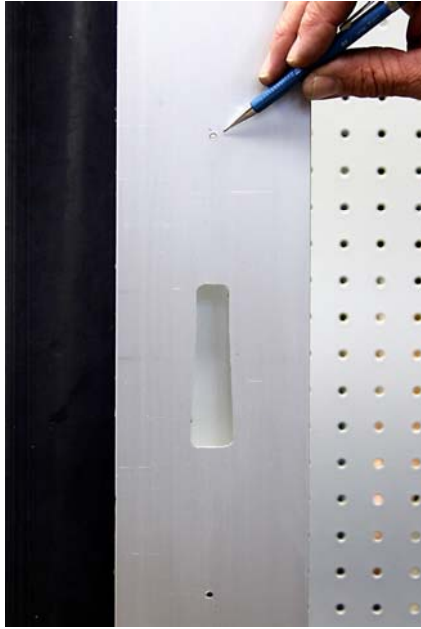
Place the router bit in the center of the starting hole.



Place the router bit in the starting hole and with firm control of the router follow the HIT-40 template and feed the router slowly in a **CLOCKWISE DIRECTION**. Make sure the base of the router is held flat on the routing template. When completed with the cut, turn the router off **and wait for the bit to come to a complete stop before removing it from the template. Failure to do so may cause damage to the door, your HIT-40 template or injury to yourself.** After making the first pass, brush away the chips and make a second clean up pass.



Clean the left over cutting lube and chips from the frame. Use a machinist scraper or an aluminum cutting file and deburr all of the opening.



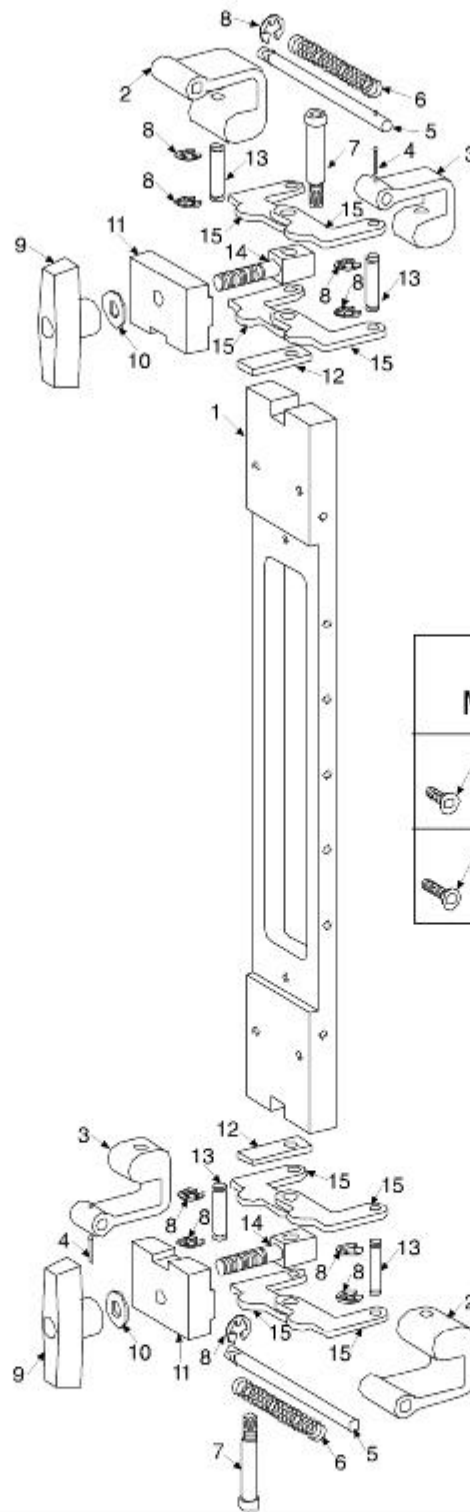
The two small template mounting holes left by the tek screws can be left as is. Or can be drilled out to 1/8" and filled with a steel pop rivet.



Installing a pop rivet.



Finished installation showing mounting holes filled with a pop rivet.



TEMPLATE MOUNTING SCREWS	
	25 4535 Flat Head Screw, 1/2" long
	26 4536 Flat Head Screw, 3/4" long

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	4501	Base	10	4515	Bearing Washer	24	4508	Button Head Screw
2	4528	R.H. Foot Bracket	11	4507	Block	25	4535	Flat Head Screw, 1/2" long
3	4529	L.H. Foot Bracket	12	4523	Support Locator	28	4536	Flat Head Screw, 3/4" long
4	4531	Roll Pin	13	4505	Clamp Pin			
5	4530	Shaft	14	4514	Stud Locator			
6	4532	Compression Spring	15	4506	Clamp			
7	4533	Shoulder Bolt	20	4511	Alignment Plate SC			
8	4504	E-Ring	22	4509	Locator SC			
9	4534	Knob	23	4526	Locator Stud			

