



# INSTALLATION INSTRUCTIONS

## 1561S

### HISHEAR® SURFACE MAGNETIC LOCK INTERGRATED ELECTRONICS

READ THESE INSTRUCTIONS AND STUDY THE DIMENSIONS THOROUGHLY BEFORE BEGINNING THE INSTALLATION.

1561S IS MEANT FOR INSTALLATION ON RIGHT-HAND-REVERSE OR LEFT-HAND-REVERSE DOORS ONLY. REFER TO THE DIMENSIONAL REFERENCES FOR CORRECT INSTALLATION.

#### IMPORTANT NOTES:

Although electromagnetic shear locks provide the utmost in aesthetics for fail-safe applications, they are less forgiving than electric bolt locks and direct pull magnetic locks where alignment problems exist. Therefore, great care must be taken during preparation and installation of the frame, door hardware and the shear lock to attain proper alignment and ensure positive lock operation.

Unbalanced air conditioning (stack pressure) can hinder door alignment and must be corrected to help ensure positive locking.

Use only the highest quality door closer.

**Door latching problems must be corrected prior to installation.**

The maximum locking strength of the 1561S HiShear® lock is 2000 lbs.

#### INSTALLATION:

1. Make sure the clearance between the door top and frame header is 1/8". Make adjustments to the door as required before installing magnet lock.
2. Adjust single acting door and door closer to ensure the door settles immediately and is fully closed and at rest against the stop allowing for mutes, smoke seals or weather stripping where applicable.
3. Before determining the frame header centerline, double check that single acting doors are fully closed and at rest. Double acting doors must be fully closed and at rest in the dead center of the frame.
4. **For proper installation, verify that the labels on the L-brackets of Magnet Lock & Armature are facing towards the leading edge of door (lock is set for installation on right-hand-reverse doors by default, see bottom half of pages 3 & 4 to install on left-hand-reverse doors).**
5. Prep the frame header per the dimensions given on page 3 for either a right-hand-reverse or left-hand-reverse door.
6. Mount the Magnet Assembly to the frame header using the provided threaded inserts & mounting bolts.
7. Prep the door per the dimensions given on page 4 for either a right-hand-reverse or left-hand-reverse door. If lock is being installed on a left-hand-reverse door, the Armature needs to be removed from its Housing, rotated 180°, & re-installed in its Housing before the whole Armature Assembly can be mounted to the door (see bottom half of page 4).
8. Mount the Armature Assembly to the door using the provided sex bolts & mounting bolts.

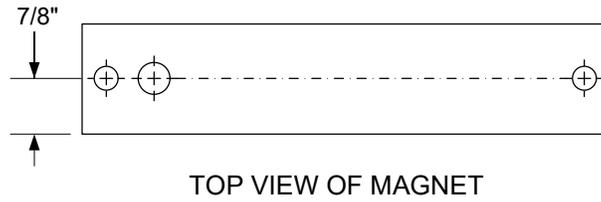
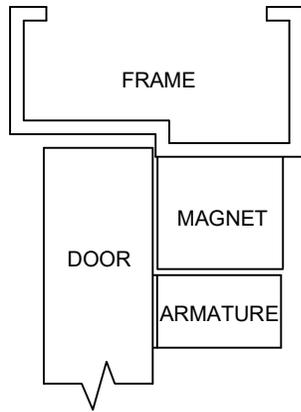


9. An auto relock time delay is provided for all installations to delay relocking 1 to 6 seconds after initial door closure. This will help to ensure that the door is fully closed and at rest to obtain optimum alignment before the lock is energized. Refer to Figure 2 for location of potentiometer.

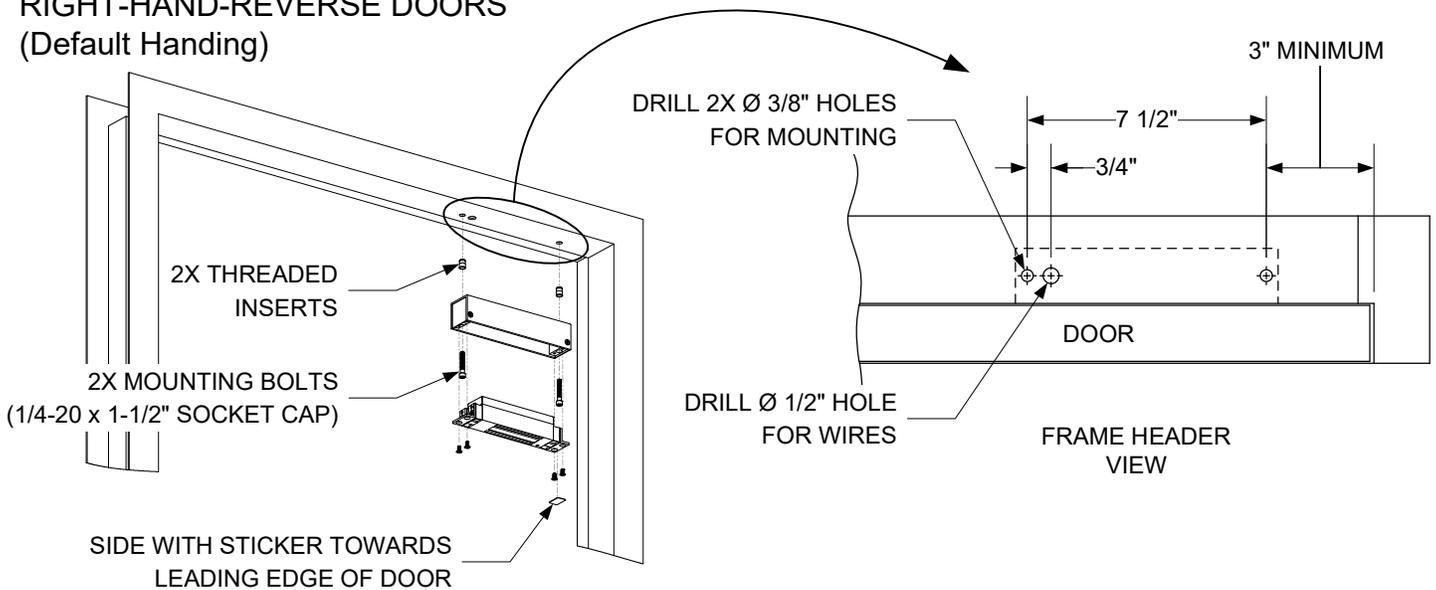
With the power off, make all wire connections to a properly fused power source.

10. The timer adjustment can be made after the lock is installed through the small hole in the face of the magnet. The TDA timer is field adjustable for 1 to 6 seconds and is factory set at approximately 3 seconds. Using a small flat blade screwdriver, turn clockwise to increase time, counter clockwise to decrease time.
11. For proper operation, the armature must be adjusted upward as close as possible and parallel to the lock without interfering with opening and closing of the door. Proper operation cannot be expected with more than 1/8" clearance between the armature and the lock. If you find the clearance to be more than 1/8", adjust the armature screws as needed.
12. With the door closed, turn the lock power on. Check the lateral alignment. The armature shear stops should be centered between each pair of magnet lock shear stops.
13. If the clearance between the shear stops is sufficient, open and close the door a few times to ensure the magnet lock will lock and unlock positively.
14. If positive locking cannot be attained due to misalignment, refer to Fig. 3 on page 5 for suggestions on how to adjust.
15. Repeat step 12 to verify operation after changes have been made.

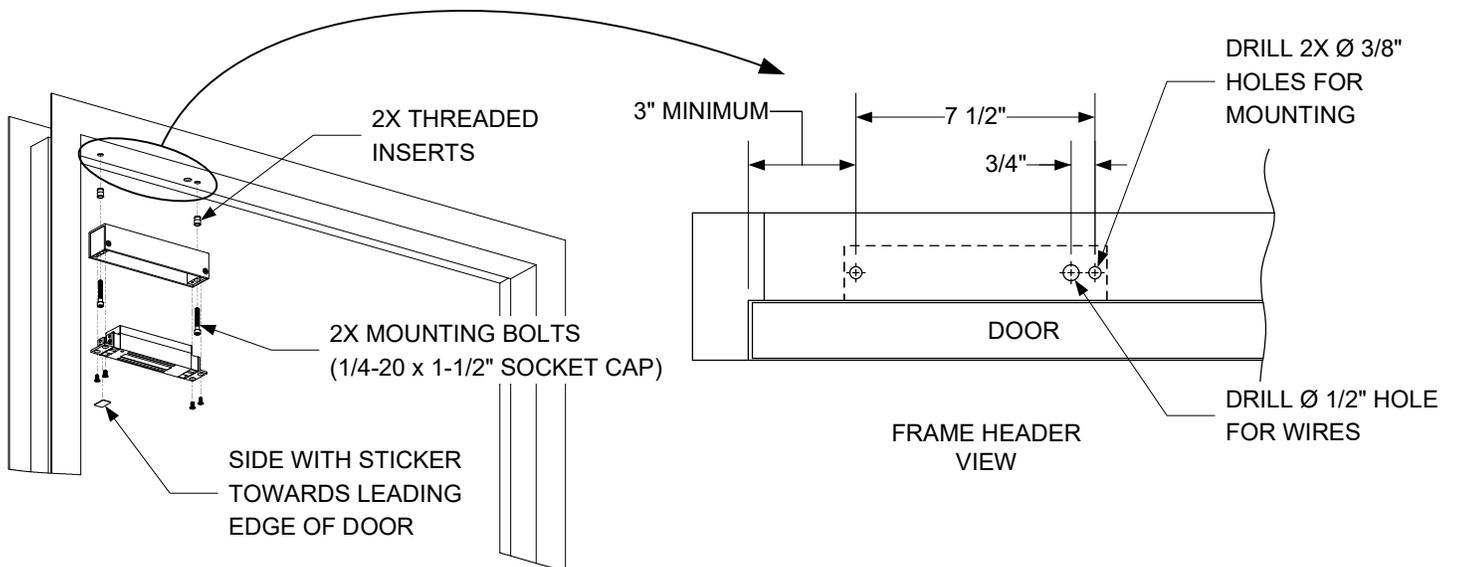
MODEL #	LOCK DIMENSION			ARMATURE DIMENSION			HOLDING FORCE	POWER CONSUPTION	
	L	W	D	L	W	D		12VDC	24VDC
1561S	8"	1-3/4"	1-3/4"	8"	1-3/4"	1"	2000 lbs.	650mA	350mA



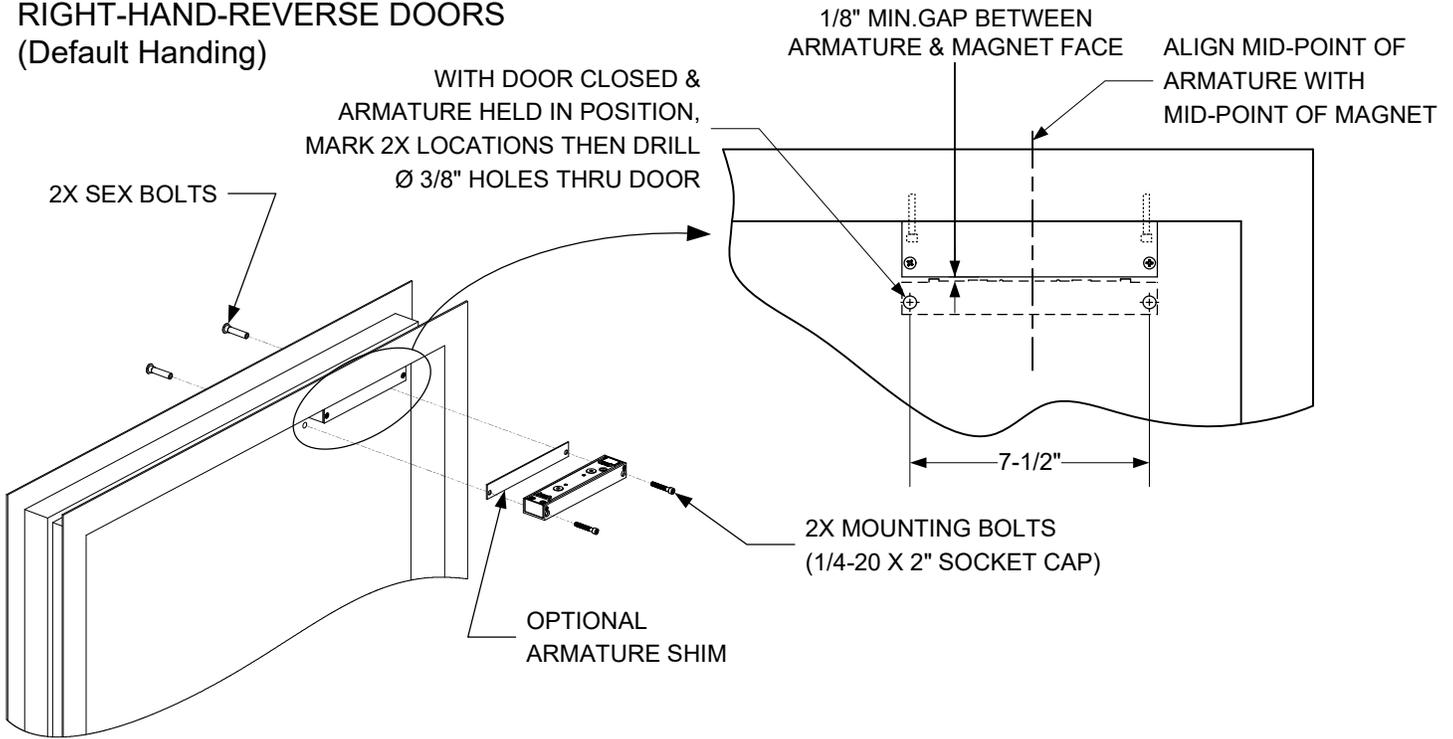
### MAGNET MOUNTING FOR RIGHT-HAND-REVERSE DOORS (Default Handing)



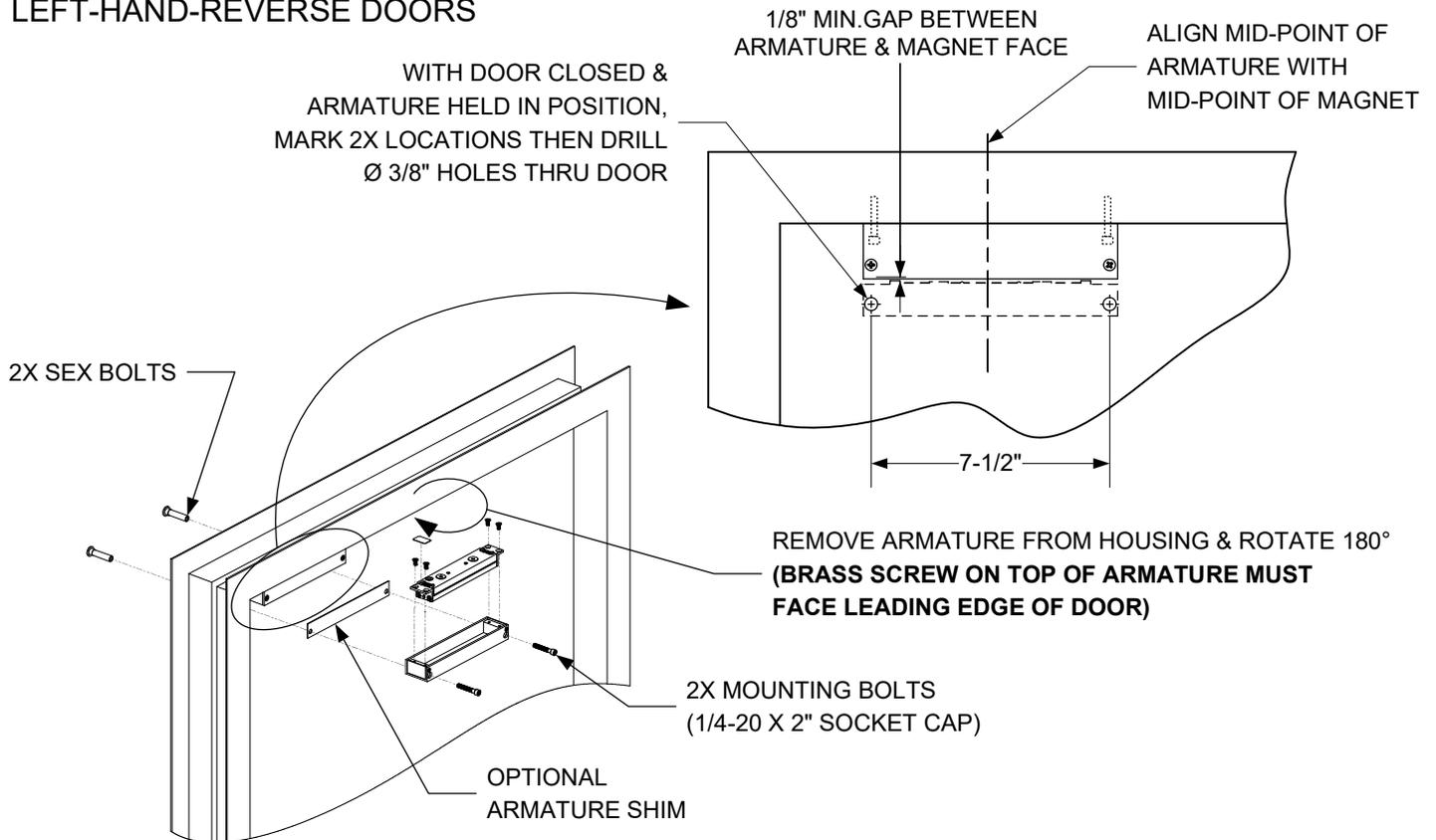
### MAGNET MOUNTING FOR LEFT HAND REVERSE DOORS



### ARMATURE MOUNTING FOR RIGHT-HAND-REVERSE DOORS (Default Handing)

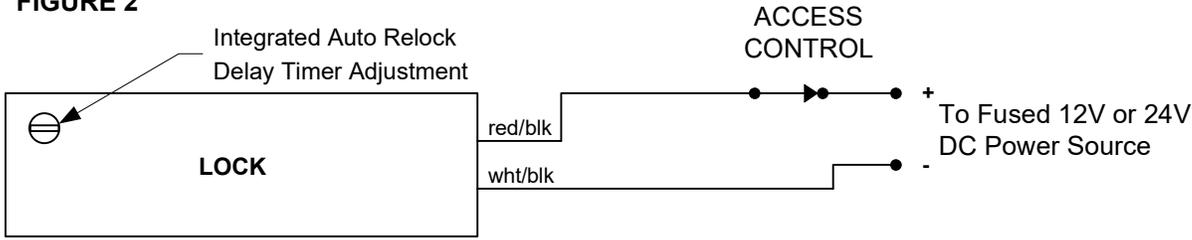


### ARMATURE MOUNTING FOR LEFT-HAND-REVERSE DOORS





**FIGURE 2**



DPS OPTION  
 YEL = N/O  
 GRY = COM  
 ORG = N/C

BAS OPTION  
 WHT = N/O  
 BLK = COM  
 RED = N/C

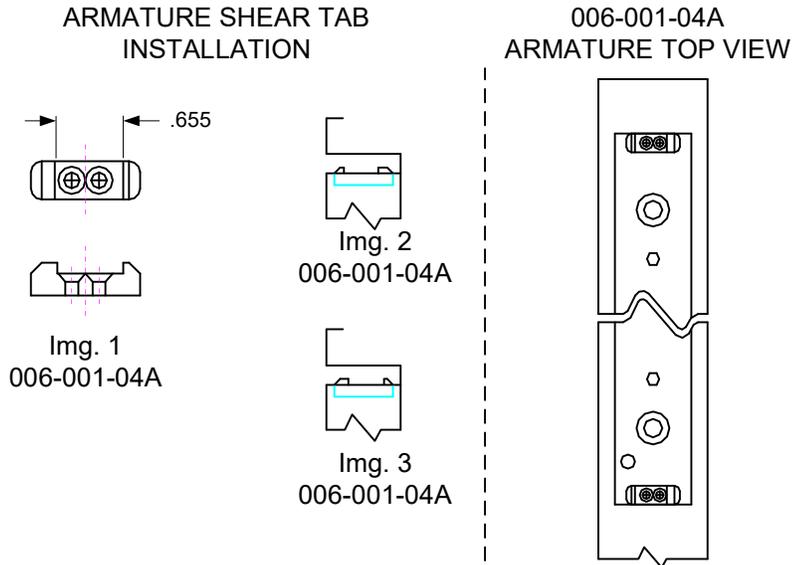
**Model 1561** – With built in Auto Relock Switch & Integrated Auto Relock Delay Timer

**FIGURE 3**

Please note the drawing in Img. 1. It shows the open dimension of the shear tab.

For normal single acting and double acting door alignment see Img. 2.

For slightly warped single acting doors see Img. 3.



**CAUTION:**

The use of armature offset shear stops may correct misalignment but should not be used when proper door latching is inhibited.

**MAINTENANCE INSTRUCTIONS**

The electromagnet and the armature should be handled carefully. Any damage to the surface such as paint, burrs, dirt, or rust may hinder bonding of the surface and reduce holding power.

**IF THE SURFACE PLATING BECOMES DAMAGED**

1. Do not touch lock face with your hands.
2. Use a soft clean dry cloth or abrasive cloth (i.e., Scotch-Brite by 3M) to clean the lock face. Do not use sand paper.
3. A rust inhibitor, such as M1 manufactured by Starret, or LPS3 manufactured by LPS Laboratories (available in most hardware stores) can then be applied to the lock face.
4. Apply a coat of rust inhibitor to the armature face also.