## **MODEL 171**

## MOUNTING INSTRUCTIONS FOR ASTERIX SERIES ELECTRO-MAGNETIC LOCKS

IMPORTANT! READ THOROUGHLY BEFORE ATTEMPTING INSTALLATION.

DO NOT DAMAGE OR MARK MAGNETIC LOCK OR ARMATURE FACE-MAY REDUCE HOLDING EFFICIENCY.

See Figure 1 elevation profiles to determine mounting application requirements for each individual application.

NOTE: A 2-1/2" (64 MM) REVEAL IS REQUIRED TO ASSURE RIGID MOUNTING OF THE 171 SERIES MAGNETIC LOCK ASSEMBLY.

STEP 1. Mark door(s) according to armature template and dimensions on reverse side.

**STEP 2.** Drill and prep holes in door per armature template on reverse side.

STEP 3. Gently tap (2) 3/16" (5 mm) diameter spring pins into rear side of armature(s).

NOTE: IF MAGNETIC LOCK ASSEMBLY IS EQUIPPED WITH BDA (BUILT-IN DELAY ACTUATOR) OPTION STOP HERE AND REFER TO INSTRUCTION SHEET MAGOPT-2 FOR INSTRUCTIONS, THEN PROCEED TO STEP 5.

STEP 4. Insert one (1) spring washer over 5/16"-18
"special" shoulder screw, insert screw through armature(s).
Add three (3) conical spring washers and one (1) flat
washer over shoulder screw(s). See Figure 2 = details for
each type of installation. All parts must be assembled
properly before installing armature to door. Install complete
armature assembly on door per Figure 2 details.

STEP 5. Tighten shoulder screw(s) securely with allen wrench. (Do not overtighten.)

NOTE: ALL ARMATURES ARE NORMALLY EQUIPPED WITH A PERMANENT MAGNET ON ONE END. BE CERTAIN TO INSTALL ARMATURE SO MAGNET LINES UP WITH MAGNETIC SWITCH INSIDE HOUSING OF MAGNETIC LOCK ASSEMBLY. SEE FIGURE "3".

**STEP 6.** Mark frame per magnetic lock template and dimensions on reverse side.

**STEP 7.** Remove housing cover of Magnetic Lock Assembly.

STEP 8. Drill and prep frame per "D" of Magnetic lock template, attach Magnetic Lock Assembly to frame using either (2) #14 sheet metal screws or (2) 1/4"-20 machine screws and toothed lock washers, tighten only enough to hold unit in place. (If filler plate is used assure that screws

go thru both filler plate and frame.

STEP 9. Drill 7/8" (22 mm) diameter hole thru filler plate and frame per template for wiring harness.

STEP 10. Make all electrical connections per applicable wiring diagrams enclosed. Use wire nuts, crimp connectors or solder to assure good connections.

STEP 11. Energize Magnetic Lock Assembly; Adjust assembly so door is snug against door stop, tighten (2) preliminary screws securely.

FOR BDA (Built-in Delay Actuator) OPTION: see instruction sheet MAGOPT-2.

A. Verify that when door is closed plunger and push button are in the closed position. If proper continuity cannot be obtained, an stop washer may be required to move shoulder screw further into push button switch.

B. Energize the system with the door in the closed position. Apply pressure to door, having retracted latch bolt (if used). Verify compression of belleville washers and electrical state of push switch indicates door open mode. If electrical output of switch dictates door closed condition, the shoulder screw is adjusted to far into switch, not allowing switch to return to normal position. Stop washer may have to be removed to obtain proper operation.

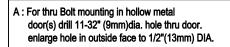
C. After all adjustments have been made, verify that switch indicates both door closed and attempted exit.

For MBS (Magnetic Bond Sensor) additional wiring details see instruction sheet MAGOPT-1.

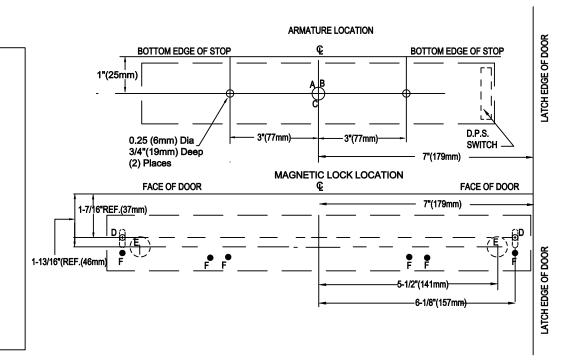
STEP 12. De-energize system. Using mounting plate as template, drill-#21 drill and tap for 10-32 screws (minimum (2) places). (See Magnetic Lock Template) Install screws and tighten securely. Re-energize system, recheck alignment of Magnetic Lock Assembly to Armature by opening and closing door(s).

STEP 13. Install Magnetic Lock housing cover.

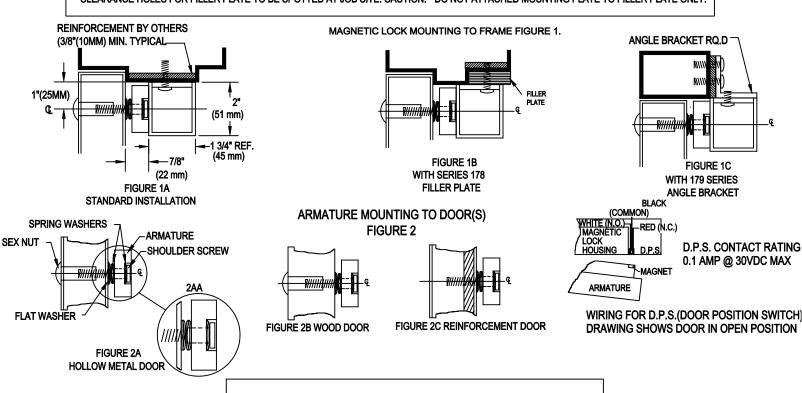


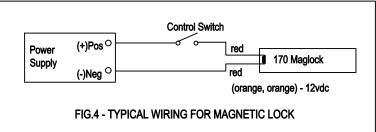


- B: For Thru bolt mounting in solid core wood door(s), drill 11-32"(9mm)DIA hole thru door(s) enlarge hole in outside face to 1/2"(13mm) DIA. 1"(25mm) deep.
- C: for REINFORCED DOOR (Minimum 3/8"(10mm) thickness . Drill and tapthru reinforcement for 5/16-18 screw.
- D: Drill for no:14 sheet metal screws or drill and tap for 1-4"-20 machine screws.
- E: Drill 7/8"(22mm) DIA hole thru filler (if used)and frame in either of locations marked (E) for wiring harness
- F: Using actual Magnetic Lock as template, drill and tap per STEPS 12 of installation instructions.



NOTE: FOR MACHINE SCREW MOUNTING, REINFORCEMENT AND STRUCTURING ARE REQUIRED TO WITHSTAND A 1200 LB(544 KG) LOAD.
CLEARANCE HOLES FOR FILLER PLATE TO BE SPOTTED AT JOB SITE. CAUTION: " DO NOT ATTACHED MOUNTING PLATE TO FILLER PLATE ONLY.





**ELECTRICAL SPECS:** 

CURRENT DRAW: 0.50 AMPS @ 12 VDC 0.25 AMPS @ 24 VDC

WIRE COLOR CODE: ORANGE/ORANGE (12VDC)

(NON-POLARIZED) RED/RED (24VDC)
HOLDING FORCE: 1200 LBS. (544 KG)

NOTE:Use with Underwriter Laboratories Listed (UL/ULC) Compatible Power Supply.

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