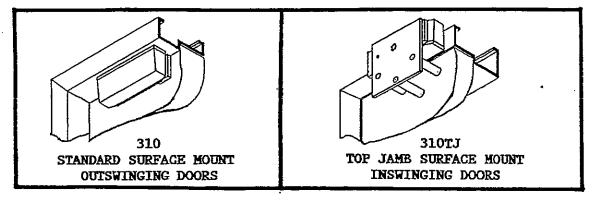
Security Engineering

## GENERAL INFORMATION

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THE 310 SERIES LOCKS ARE HIGH SECURITY, HIGH PERFORMANCE LOCKING DE-VICES WHEN PROPERLY MOUNTED ON A QUALITY DOOR AND FRAME WILL WITHSTAND UP TO 1200 LBS OF DIRECT FORCE. ANY OTHER CONDITIONS (I.E.: WEAK HEADER) MAY REQUIRE REINFORGEMENT.

## PLEASE READ ALL INSTRUCTIONS PRIOR TO INSTALLING THE ELECTROMAGNETIC LOCK

## GENERAL INFORMATION:

- Handle the equipment carefully. Damaging the mating surfaces of the electromagnet or the armature may reduce locking efficiency.
- The electromagnet mounts rigidly to the door frame header. armature mounts to the door and is designed to pivot about it's center compensating for door misalignment.

### CAUTION:

FAILURE TO SEGURE THE ARMATURE TO THE DOOR MAY RESULT IN SERIOUS JURY TO THE DOOR USER. FOR PROPER OPERATION, SAFETY AND SECURITY, NUT/BOLT ASSEMBLY, WASHERS AND SPACERS MUST BE ASSEMBLED IN THE ORDER ILLUSTRATED AND SECURELY TIGHTENED 1/8 TO 1/4 TURN PAST HAND TIGHT.

## MAINTENANCE:

The electromagnet and armature are plated for corrosion resistance and require little maintenance. For maximum performance, occasional cleaning and an application of a protective coating to the electromagnet and the armature is recommended.

> The following service should be done to both the armature and the electromagnet as required:

Clean the functional surfaces of the electromagnet and the armature by applying a light coating of silicon lubricant and wipe with a clean, dry cloth.

## INSTALLATION INSTRUCTIONS

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## MODEL 310

NOTE: Hardware provided is for 1-3/4" door. If door thickness exceeds 1-3/4", an alternate sex nut is required. Order P/N - 399025 for 2" doors - 399026 for 2-1/4" doors

or if additional is required, consult factory.

1.0 Prep door and frame according to the appropriate template drawing on page 6. When using the paper template, follow instructions on the template.

Install armature. Refer to Figures 1, 2, 3 on page 6 and exploded 1.1

views on page 3 for parts identification.

1.2 Install the adjustable mounting plate onto frame, placing screws through the slots and into the holes "A" (see template drawing on page 6) prepped for #10 screws.

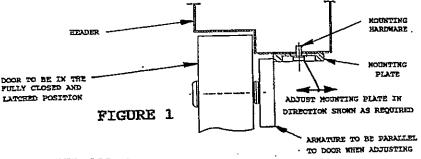
1.3 With the door fully closed and latched, check the alignment of the armature mounting plate with the armature as shown in Figure 1, below. When the magnet mounting plate and the armature are in the correct alignment, firmly tighten the screws. Using the mounting plate as a template, drill the remaining mounting holes "C".

WARNING: INSTALLATION OF THE REMAINING HARDWARE IS NECESSARY TO MAINTAIN

ALIGNMENT.

1.4 Refer to exploded view on page 3 to complete the mechanical installa-

1.5 Go to ALL MODELS, paragraph 3.



## MODEL 390TJ

2.0 Prep door and frame according to the appropriate template drawing on page 6. When using paper template, follow instructions on the template.

2.1 Install the magnet mounting plate (TJ) with two (2) blindnuts and  $1/4-20 \times 1-1/4$  socket head cap screws. Refer to exploded view on page 4 for parts identification. Use locknuts between the mounting plate and frame on steel headers. As the screws are tightened, an initial resistance will be felt as the blind nuts are collapsing. A second, stronger resistance will be felt as the screws are being seated. DO NOT OVERTIGHTEN!

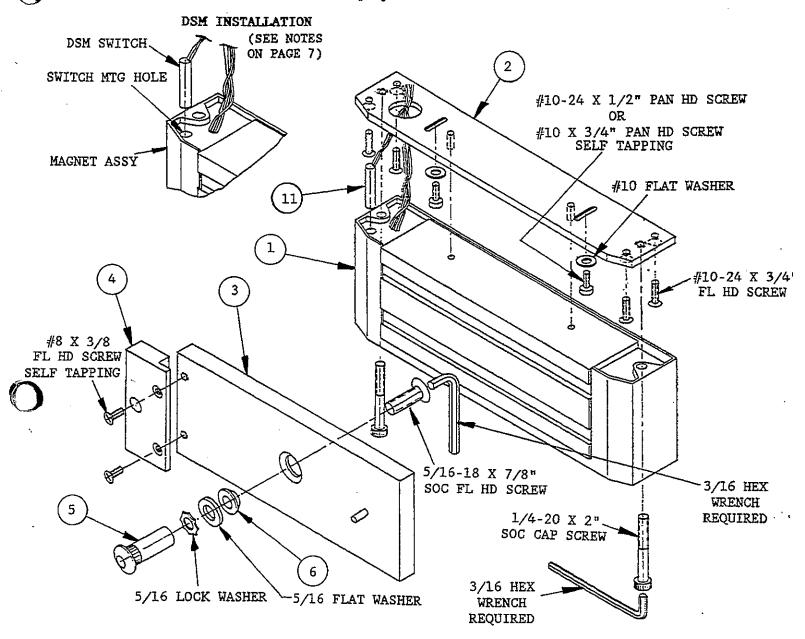
2.2 Refer to exploded view on page 4 to complete the mechanical installation.

## ALL MODELS

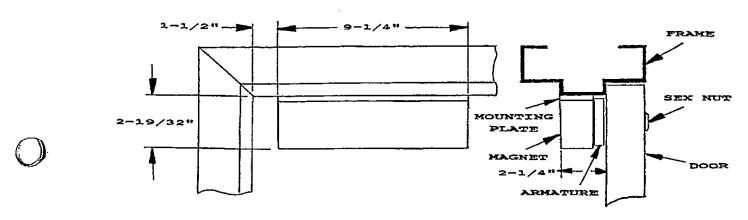
See wiring details on page 8 and other applicable instructions to complete full installation.

EXPLODED VIEW/PARTS IDENTIFICATION





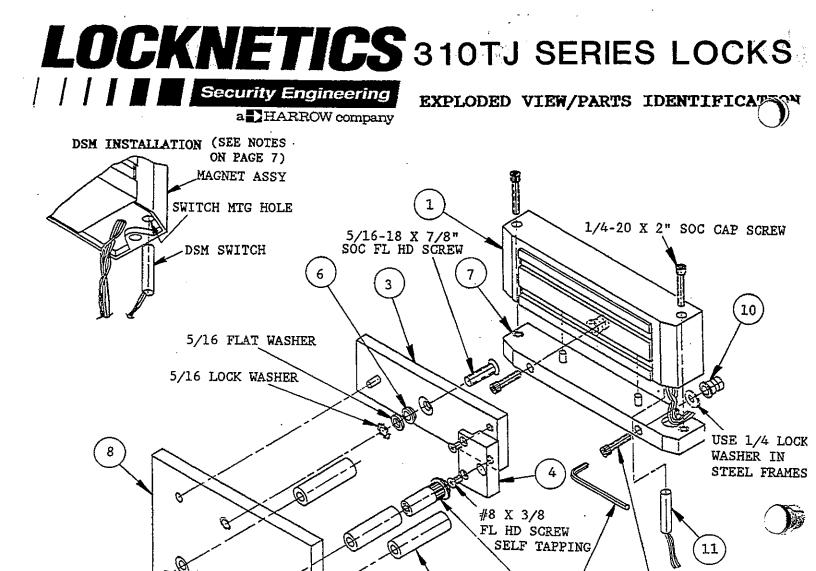
### TYPICAL MOUNTING LOCATION

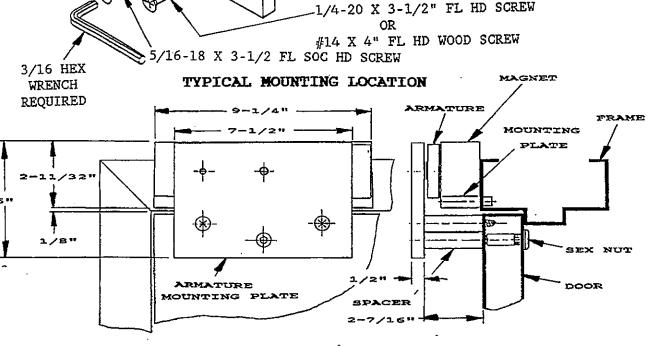


FORM #30001 REV. B

PAGE 3

**LOCKNETICS 1/94** 





1/4-20 X 1-1/4" SOC CAP SCREW

3/16 HEX WRENCH

REOUIRED

NOTE: FOR WOOD FRAMES

SCREWS REQUIRED

THRU BOLTING WITH 1/4"



PARTS LIST

ITEM PART	DADT NO	D. DESCRIPTION	OPTIONS			
	PART NO.		310	310TJ	310 DSM	310TJ DSM
1	310052	MAGNET ASSEMBLY	1	1	1	1
2	310072	MOUNTING PLATE ASSY	1	_	•1	_
3.	310065	ARMATURE ASSEMBLY	1	1	1	1
4	310062	DSM BLOCK ASSEMBLY		_	1	1
5	390498	SEX NUT	1	1	1	1
6	390255	ARMATURE SPACER	1	1	1	1
7	310055	MAGNET MTG PLATE		1		1
8	310059	ARMATURE MTG PLATE	_	1	<del>-</del> ,	1
- 9	310051	SPACER	<b>–</b> .	3		3
10	290011	BLIND NUT	-	2	_	2
11	310064	REED SWITCH-DSM	<del></del>	_	1	1

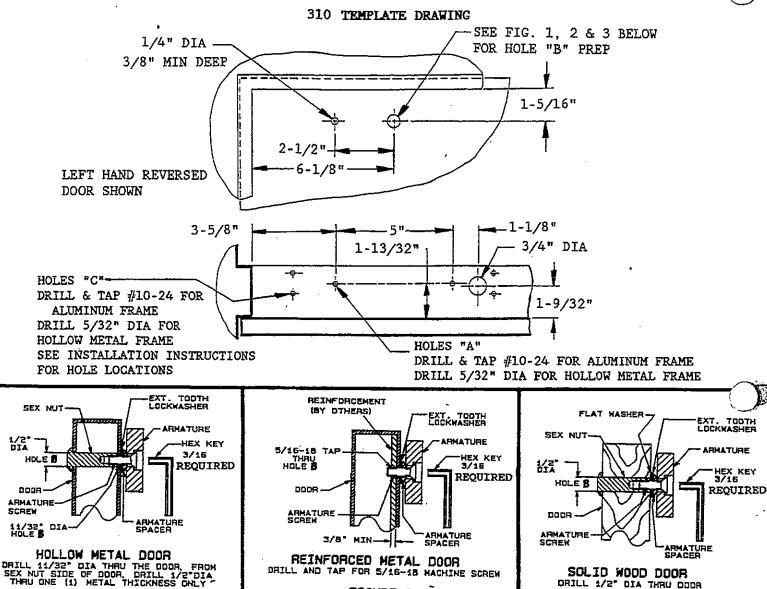


## LOCKNETICS 310 & 310TJ SERIES Security Engineering

LOCKS

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TEMPLATE DRAWING



DRILL AND TAP FOR 5/16-18 MACHINE SCREW

FIGURE 2

## 310TJ TEMPLATE DRAWING 4-3/4"-3/8" DIA TYP 1-1/8" -1" DIA 5/16" LEFT HAND DOOR SHOWN 2-1/2" 5/8" 3/8" 2 - 1/23/4" DRILL & TAP 1/4-20 FOR ALUMINUM AND HOLLOW METAL DOORS SEE FIG. 1, 2 & 3 ABOVE DRILL FOR #14 WOOD SCREWS FOR HOLE "B" PREP FOR WOOD DOORS

FIGURE 1

SOLID WOOD DOOR DRILL 1/2" DIA THRU DODA

FIGURE 3

## Security Engineering a HARROW company

SPECIFICATION AND ELECTRICAL OPTION ALL HODELS

### SPECIFICATIONS:

VOLTAGE: 12V OR 24V FIELD SELECTABLE

CURRENT: .68 AMP @ 12V

.34 AMP @ 24V

RATED HOLDING FORCE: 1200 LBS

## ELECTRICAL OFFICES:

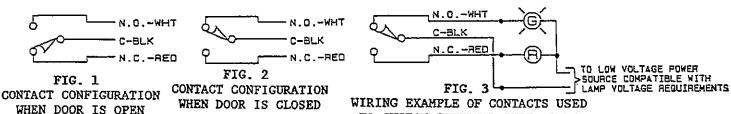
## RECTIFIER (RCP) OPTION:

The RCP option allows operation of a direct current (DC) lock from a low voltage alternating current (AC) supply, such as a 12 or 24 volt transformer. The RCP module converts the AC voltage to DC voltage supplied to the lock. One (1) RCP module should be used for each lock. The RCP module has four (4) leads. The two (2) yellow wires are the low voltage AC input. They are connected to the low voltage side of the transformer. The red lead is the positive (+) DC output. It is connected to the positive (+) lock input. The black lead is the negative (-) DC output. It is connected to the negative (-) lock input.

YEL 12V OR 24V INPUT FROM DC POWER RCP **DUTPUT TO** STEPDOWN YFL BI K TRANSFORMER

## DOOR STATUS MONITOR (DSM) OPTION:

The DSM provides a signal to indicate whether the door is open or closed. The lock mounting instructions shloud be followed closely to ensure reliable performance of this option. The DSM provides a signal via a set of form "C" dry contacts rated 100mA resistive at 24VDC. These contacts are accessed by the red, black and white wires. These contaces are labeled in the door opened condition which are: white-N.O. (normally open), black-C (common) and red-N.C. (normally closed). Closing the door causes the contacts across the black and white wires to close and the black and red wires to open. See figures 1, 2 and 3 below.



TO SWITCH EXTERNAL INDICATORS (NOT INCLUDED). SHOWN DOOR CLOSED, GREEN INDICATOR LIT.

## DOOR STATUS MONITOR (DSM) OPTION INSTALLATION:

- 1. Permanent magnet holder, DSM block item 4 installation is shown in the exploded views on pages 3 and 4.
- 2. To install the DSM magnetic switch, push the switch into the hole shown in DSM Installation view in pages 3 and 4, until it bottoms. Secure switch position with an instant setting type adhesive.



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WIRING DETAILS ALL MODELS

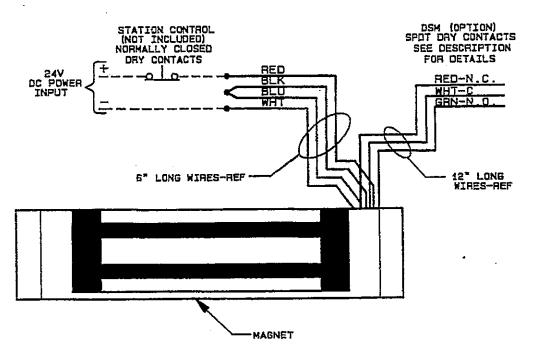


FIG. 1 24V CONFIGURATION WITH DSM OPTION SHOWN

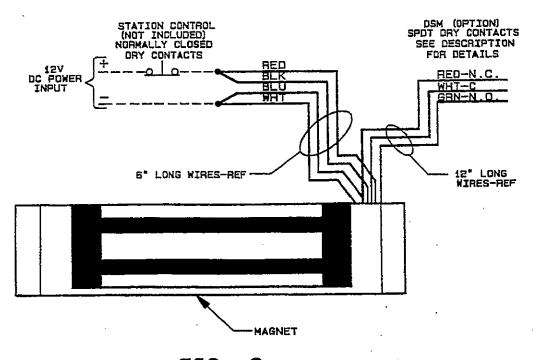


FIG. 2 12V CONFIGURATION WITH DSM OFTION SHOWN

