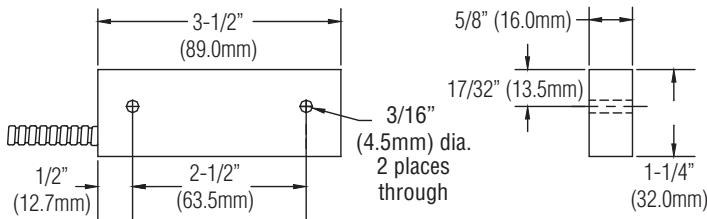




### Switch and Magnet Dimensions



### Principal Of Operation

Each switch case contains one reed switch of different magnetic sensitivity to the others. This is the magnetic tamper. When the door is closed and the magnet is in the balanced position, two reed switches close and the magnetic tamper reed switch stays open. If an external magnet is placed next to the switch in an effort to bypass the magnetic contact, the magnetic tamper will close causing an alarm.

### Specifications

#### Electrical

Circuit: SPDT with Magnetic Tamper  
 Voltage: 100VDC Max.  
 Current: 50ma. Max.  
 Wattage: 10 Max.

#### Mechanical

Gap on steel: 0 to 1/2" (12.7mm)  
 Housing: Solid Aluminum  
 Construction

Wire Color Code - Based On Loop Type When Magnet Is Present				
		Common	Closed	Open
Loop	Switch 1	Green	Red	White
	Switch 2 Magnetic Tamper	Black/White	Brown/White	Blue/White

### Test Switch

1. Hook meter to tamper loop, black/white and blue/white wires.
2. Use large external magnet and place next to switch. Tamper loop will close.
3. Hook meter to other loops.
4. Open door and these loops will change state.

### Mounting

Mount the switch case on door frame in the desired position. Mount the magnet case on door 1/4" (6.3mm) from switch with the magnet offset from the switch armored cable, See Figure A. The magnet case should be aligned with the switch so that there is no overlap in any direction. The switch and magnet may also be positioned in an L configuration, See figure A. The switch and magnet cases should be well fixed in place and there should not be any movement within the door or door frame. The gap between switch and magnet cases must be no more than 1/2" (12.7mm).

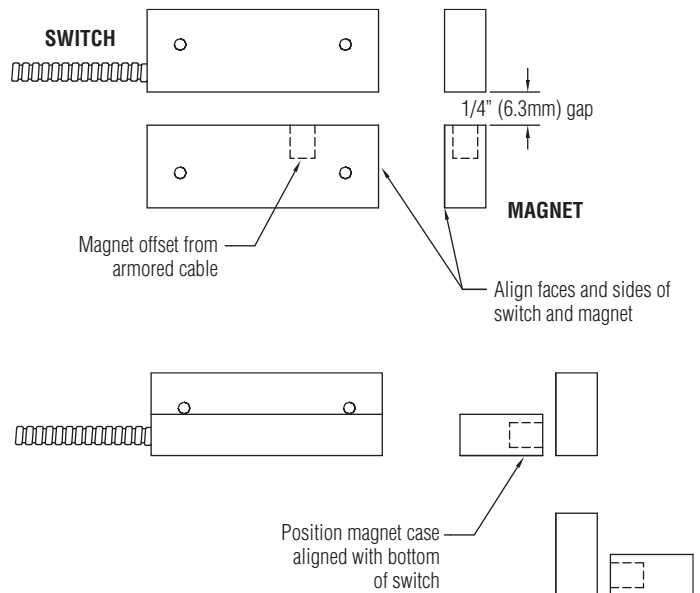


FIGURE A

# 9530 Installation Instructions (Continued)

## Alarm Panel Wiring

There are two recommended wiring configurations, both involving the addition of resistors. One configuration uses a single zone input to monitor for alarm and tamper, see Figure B. The other configuration uses two zone inputs, one zone for monitoring alarm and door status, the other zone for monitoring tamper, see Figure C. The Figure B configuration is recommended if your alarm panel can be programmed to distinguish the difference between an open circuit for alarm and a short circuit for tamper. If this is not possible, then the Figure C configuration is recommended. 4. Open door and these switch loops will open.

## Testing With Resistors

### One Resistor

See Figure B - Make all loop test readings with door closed and a 1k Ohm resistor installed. Auxiliary switch loops may be used to trigger other devices.

1. With the door open the Supervised Alarm Loop will read open (Infinite Ohms)
2. With the door closed and the switch balanced the Supervised Alarm Loop will read 1k Ohm
3. With the door closed and in a tamper condition the Supervise Alarm Loop will read 0.0 Ohms

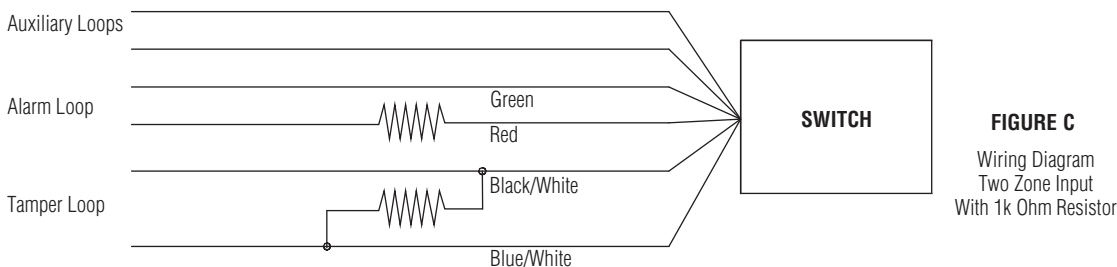


**FIGURE B**  
Wiring Diagram  
Single Zone Input  
With 1k Ohm Resistor

### Two Resistors

See Figure C - Make all loop test readings with door closed and two (2) 1k Ohm resistors installed. Auxiliary switch loops may be used to trigger other devices.

1. With the door open the Alarm Loop will read open (Infinite Ohms) and the Tamper Loop will read 1k Ohm
2. With the door closed and the switch balanced the Alarm Loop will read 1k Ohm and the Tamper Loop will read 1k Ohm
3. With the door closed and in a tamper condition the Alarm Loop will read 1k Ohm and the Tamper Loop will read 0.0 Ohms



**FIGURE C**  
Wiring Diagram  
Two Zone Input  
With 1k Ohm Resistor