ETW – Electric Through Wires

Door and Frame Preparation

For grout filled frame, install a Mortar Box (HAGER 430). Failure to do so will void the hinge warranty.
Refer to Fig. 1 for your particular hinge model.

1. Drill a 3/4" diameter access hole in both the frame rabbet and the door edge at the proper location for the wire leads. Mark the door edge and frame rabbet for the location of the security plate on the back of each hinge leaf. Mortise a 1/8" deep recess for a flush fit. (See Fig. 2) After drilling and mortising, deburr the holes to prevent damage to the wire leads.

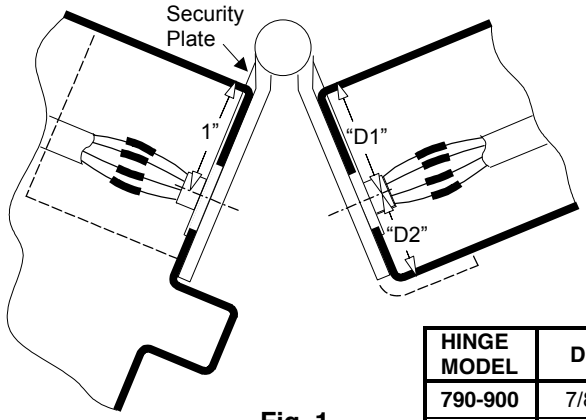


Fig. 1
(4-wire shown)

HINGE MODEL	D1	D2
790-900	7/8"	-
790-915	-	13/16"

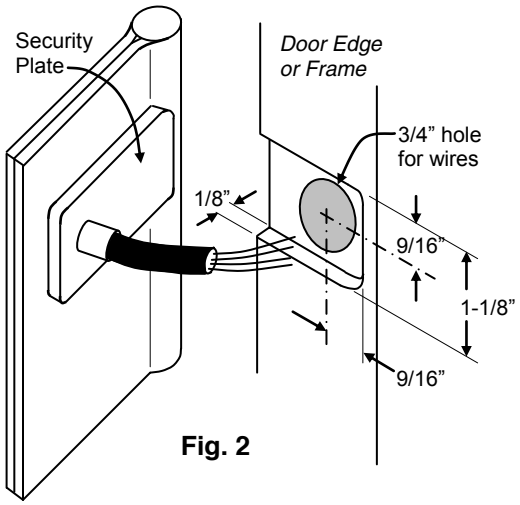


Fig. 2

Installation

Prepare the door and frame for installation using the standard installation instruction sheet furnished with the hinge, but do not attach the hinge at this time.

1. Connect the system wires from the door to the appropriate leads of the hinge door leaf (as described in the system wiring diagram). See Fig. 3. Insulate the bare end of any unused wires.
2. Carefully slide the wires back through the access hole in the door making sure they are placed so they will not be cut or pinched as installation is completed. Attach the hinge to the door per the standard installation instruction sheet supplied with the hinge.
3. Position the door at 90 degrees to the frame. Connect the system wires from the frame to the appropriate leads of the hinge frame leaf. Insulate the bare end of any unused wires.
4. Carefully slide the wires back through the access hole in the frame making sure they are placed so they will not be cut or pinched as installation is completed. Attach the hinge to the frame per the standard installation instruction sheet supplied with the hinge.

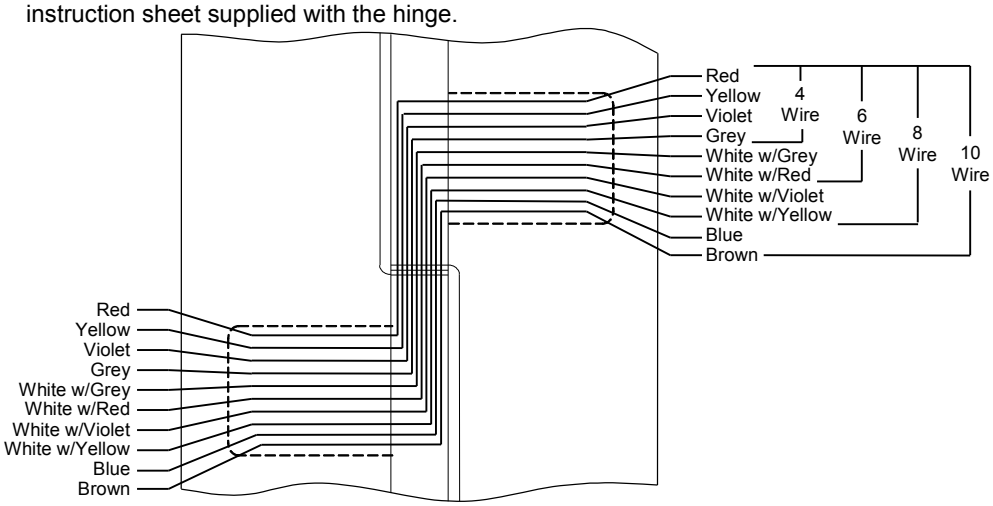


Fig. 3

MAXIMUM ELECTRICAL RATING CONTACT
Volts 30VAC/DC
Amperes 3.5A

E1S – Exposed Switch

Door and Frame Preparation

For grout filled frame, install a Mortar Box (HAGER 430). Failure to do so will void the hinge warranty.
Prepare the door and frame for installation using the standard installation instruction sheet furnished with the hinge, but do not attach the hinge at this time. Refer to Fig. 1 for your particular ROTON Hinge model.

1. Drill a 1/2" (5/8" max.) diameter access hole in both the frame rabbet and the door edge at the proper location for both the switch assembly and the adjustable actuator assembly. After drilling, deburr the holes to prevent damage to the wire leads. *If a shim is utilized in the installation of the hinge, also drill a corresponding 1/2" diameter access hole in the shim.*
2. Locate the wired switch and install it into the threaded hole of the leaf that will be mounted to the frame. Screw the switch into place from the back of the hinge so that the threaded portion is flush with the front face of the leaf (the black plastic plunger will extend 1/8"). Tighten the jam nut against the back of the leaf to secure the switch.
3. Locate the adjustable actuator. Attach it to the leaf that will be mounted to the door. Screw it into place so that the end is flush with the front face of the leaf and tighten the jam nut against the back of the leaf to secure.

Installation

1. Attach the hinge to the door per the standard installation instruction sheet supplied with the hinge.
2. Connect the system wiring to the appropriate leads of the switch. See Fig. 2. Insulate the bare end of any unused wires.
3. Carefully slide wires back through the access hole making sure they are placed so they will not be cut or pinched as installation is completed. Attach the hinge to the frame per the standard installation instruction sheet supplied with the hinge.
4. The position of the actuator should activate the switch properly for most typical square-edge door and frame combinations. Certain factors such as door alignment may slightly affect the switch after installation. Check the circuit to make certain the switch is opening/closing as desired. If necessary, the actuator position can be adjusted to possibly compensate for these factors. Loosen the jam nut and screw the actuator in or out to the desired position, then retighten the jam nut. (The door must be removed to make this adjustment.)

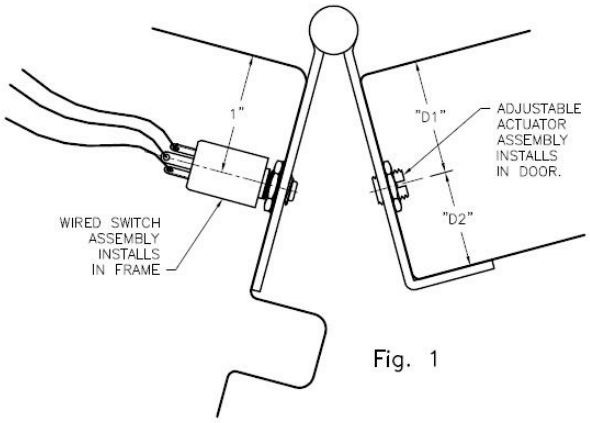


Fig. 1

HINGE MODEL	D1	D2
790-900	7/8"	-
790-915*	-	13/16"

*Not recommended for doors with beveled edge on the hinge side.

CLOSED LOOP SECURE
(Use black and green switch wires.)
Closed Loop Secure hinges are wired so that when the door is closed (secured) the pushbutton switch is closed (passes current). When the door opens, an open circuit is detected as an alarm.

OPEN LOOP SECURE
(Use black and orange switch wires.)
Open Loop Secure hinges are wired so that when the door is closed (secured) the pushbutton switch is open (does not pass current). When the door opens, a closed circuit is detected as an alarm.

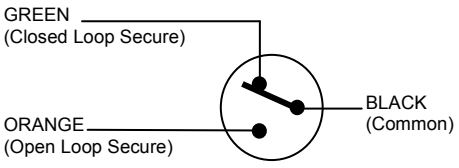


Fig. 2

SWITCH INFORMATION
Voltage Rating: 120VAC/VDC
Current Rating: 250Ma
Power Rating: 30W max.
Switch Function: SPST-NO