



**INSTALLATION INSTRUCTIONS
RDO2905 POWER DOOR OPERATORS
1994 AND LATER FULL SIZE DODGE VAN, SIDE KIT # 01307**

- # Be certain that these supplemental instructions are read and understood completely before installation is attempted. You should also refer to the Service/Owner Manual for additional installation instructions and safety precautions.
- # Check contents of this kit and notify Ricon immediately of any missing parts. Claims for damages that have occurred during shipping must be made to the shipper.

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I. INTRODUCTION

The RDO2905 Power Door Operator is designed to be used in conjunction with a Ricon lift.

The following pages contain installation instructions for the RDO2905 Power Door Operator. Please follow these instructions carefully and do not cut any corners, eliminate any steps, or modify the equipment. Call our service department if you need assistance.

II. TOOLS REQUIRED

Drill Bits (9/32", 3/16")
Hole Saws (3/4", 1")
Jig Saw Blades
Screw Drivers (Phillips, Flat)

Hammer
Side Cutters
Wire Strippers
Wrenches (7/16", 1/2")

Jig Saw
Electric Drill
Wire Crimping Tools
File

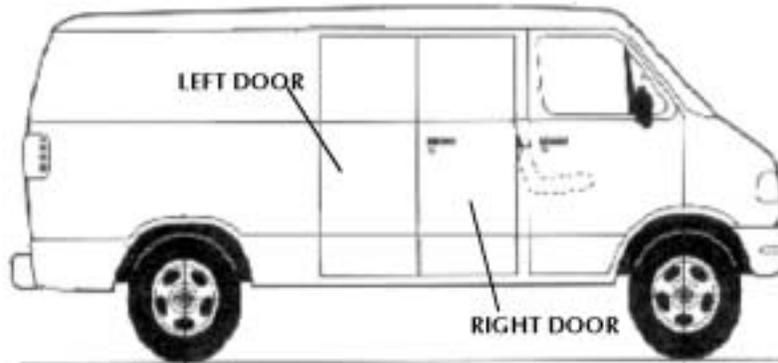


FIGURE [1]: INSTALLATION CONVENTION

III. PREPARATION OF VAN

- A. SAFELY PARK VAN ON A FLAT, LEVEL SURFACE AND TURN OFF ENGINE.
- B. DISCONNECT THE BATTERY.

▲ CAUTION

BATTERIES CONTAIN ACID THAT CAN BURN. WEAR PROTECTIVE CLOTHING AND EYE PROTECTION AT ALL TIMES. IF ACID COMES IN CONTACT WITH SKIN, FLUSH AFFECTED AREAS WITH WATER AND WASH WITH SOAP.

- C. PREPARE THE DOORS:
 1. Remove the door panels. Clear doors of any loose material.
 2. Remove all door stops and latches **Figure [2]**.
 - a. Remove latch at center of door header.
 - b. Remove latch at center of stepwell.
 - c. Remove latch on left doorjamb.
 - d. Remove both door stops.
 3. Doors should open and close freely.
 4. Remove stepwell cover.
 5. Remove interior panels from the doorposts **Figure [3]**.

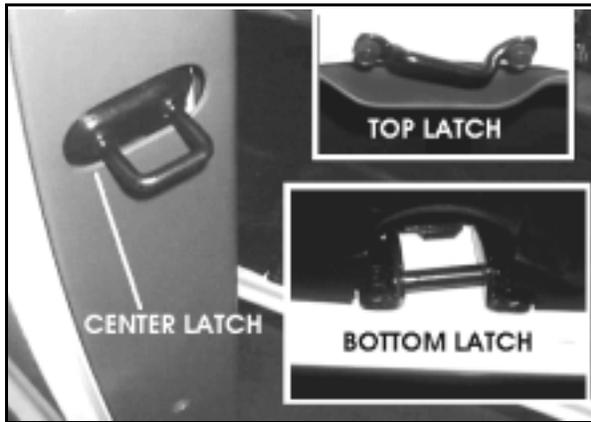
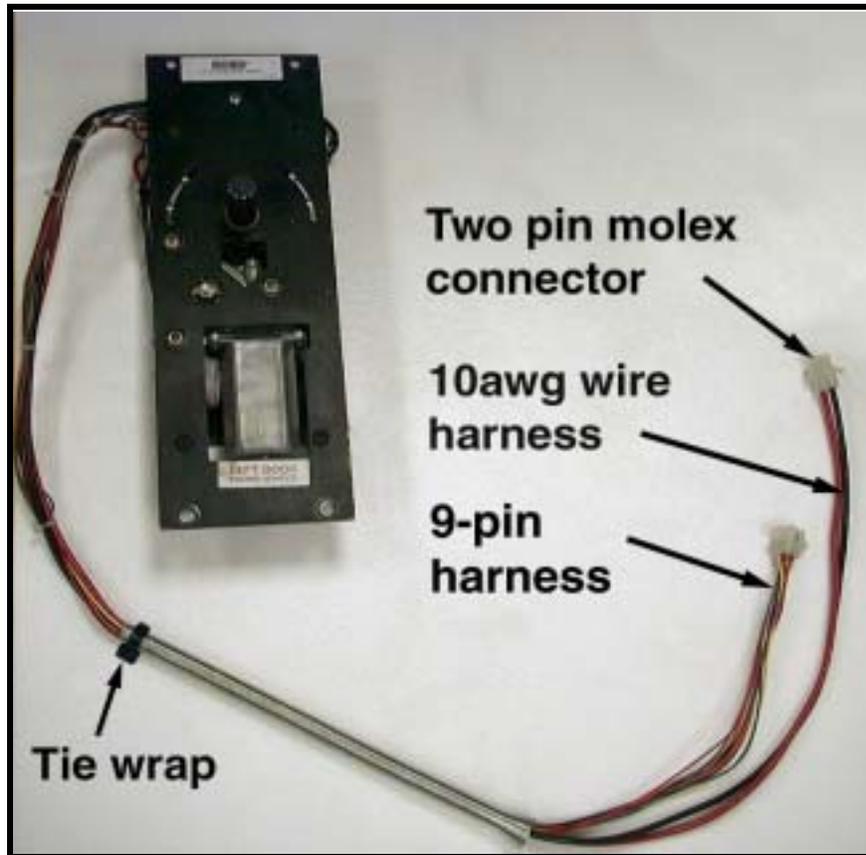


FIGURE [2]: REMOVE ALL LATCHES



FIGURE [3]: REMOVE INTERIOR PANELS

IV. INSTALLATION



DOOR MOTOR ASSEMBLY

- # INSTALL TIE WRAP AT END OF SPRING ON BOTH DOOR MOTOR ASSEMBLIES.
- # NOTE 10AWG TWO WIRE HARNESS.

A. RIGHT SIDE CLEVIS BRACKET **FIGURES [4] & [8]:**

1. Attach angle bracket to the clevis bracket using the supplied hardware **Figure [4]**.

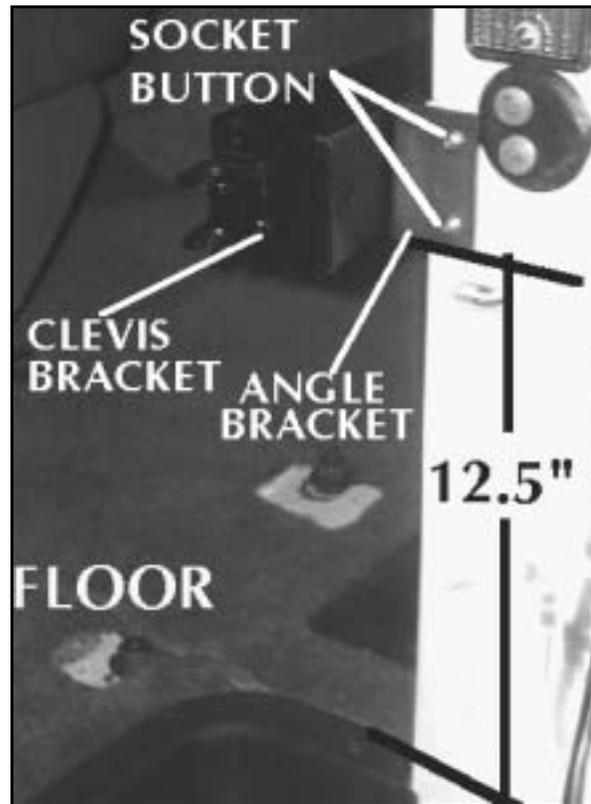


FIGURE [4]: RIGHT CLEVIS BRACKET LOCATION

2. Locate the bottom of the angle/clevis bracket assembly 12.50" above the vehicle floor **Figures [4] & [8]**.
3. Make sure the bracket assembly is level, mark the 2 holes of the angle bracket onto the door jamb, and drill through holes **Figure [4]**.
4. Use two (2) button head screws to fasten the angle bracket to door jamb **Figure [4]**.
5. Align and drill through the hole at the end of the clevis bracket **Figure [5]**.
6. Fasten the front of the clevis bracket using a button head bolt from outside in **Figure [5]**.



FIGURE [5]: BOLT FROM OUTSIDE/IN

B. RIGHT SIDE POWER DOOR OPERATOR:

1. Position, align and tape template to the right door, and mark all lines to be cut **Figure [6]**-sample. Before saw cutting, make sure all marks match measurements as shown in **Figures [7] & [8]**.

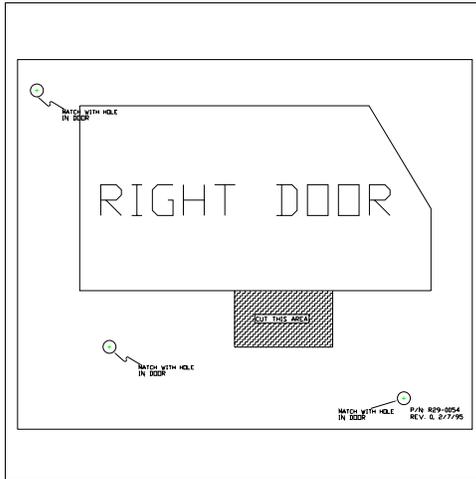


FIGURE [6]: RIGHT DOOR TEMPLATE

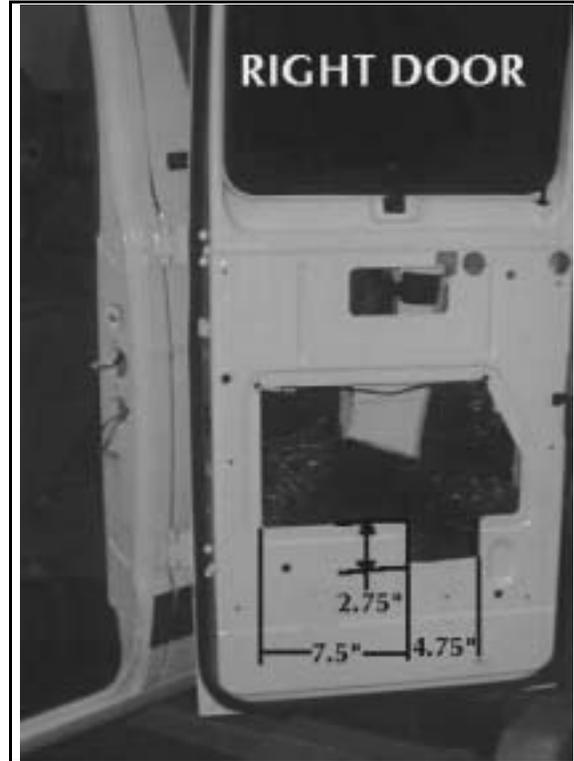


FIGURE [7]: RIGHT DOOR CUT DIMENSIONS

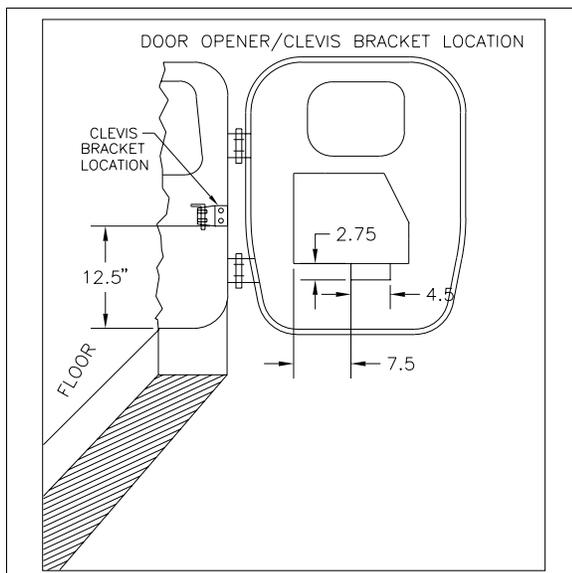


FIGURE [8]: LOCATION OF CLEVIS BRACKET AND CUT PORTION

2. Cut into the inside sheet metal per marked lines in step 1.
3. Position the door operator inside the door frame **Figure [9]**.
4. Mount and bolt the door operator to the top/bottom brackets inside the door frame **Figure [10]**.
5. Attach the actuator arm to the door operator and clevis bracket. Fasten actuator arm to the door operator **Figure [9]**.

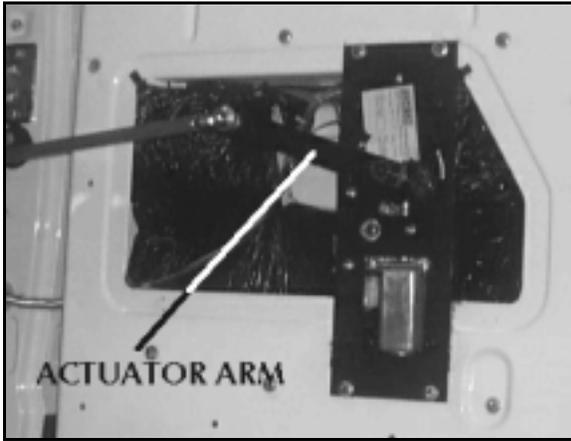


FIGURE [9]: LOCATION OF DOOR OPERATOR

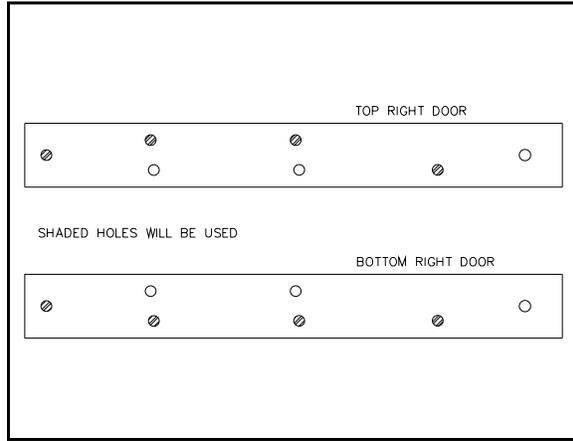


FIGURE [10]: MOUNTING BRACKETS

C. LEFT SIDE CLEVIS BRACKET FIGURES [A] & [E]:

1. Bolt the Angle Bracket to the Clevis Bracket **Figure [A]**.
2. Locate the bottom of the angle/Clevis Bracket Assembly 12.5" above the vehicle floor **Figures [A] & [E]**.
3. Fasten the angle bracket to the door jamb using the three(3) supplied sheet metal screws **Figure [A]**.
4. Insert the supplied spacer between the rear of the clevis bracket and interior of the vehicle, and fasten spacer using supplied bolts **Figure [B]**.



FIGURE [A]: LEFT SIDE CLEVIS LOCATION

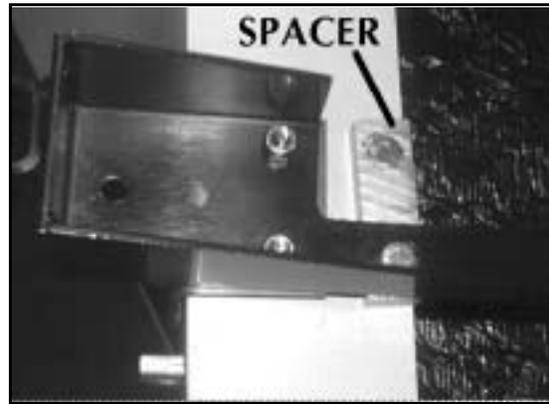


FIGURE [B]: SPACER LOCATION

D. LEFT SIDE POWER DOOR OPERATOR:

1. Position, align and tape template to the left door, and mark all lines to be saw cut **FIGURE [C]**, temp 2. Before saw cutting any material, make sure all marks match measurements as shown in **Figures [D] & [E]**.
2. Cut into the inside sheet metal per lines marked in step 1.
3. Position door operator inside the door frame **Figure [F]**.
4. Mount and bolt the door operator to the top/bottom brackets inside the door frame **Figure [G]**.
5. Attach the actuator arm to the door operator and clevis bracket, and fasten actuator arm to the door operator **Figure [F]**.

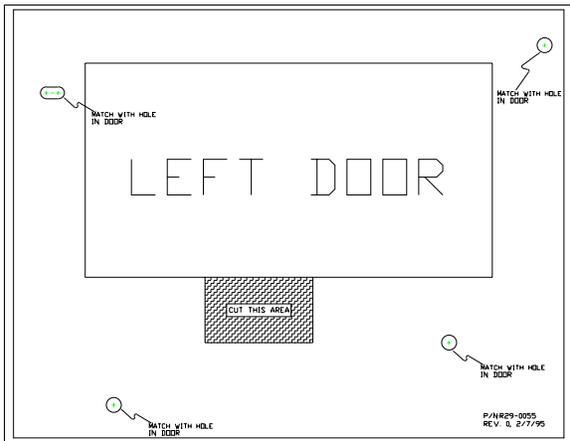


FIGURE [C]: LEFT SIDE TEMPLATE



FIGURE [D]: LEFT DOOR DIMENSIONS

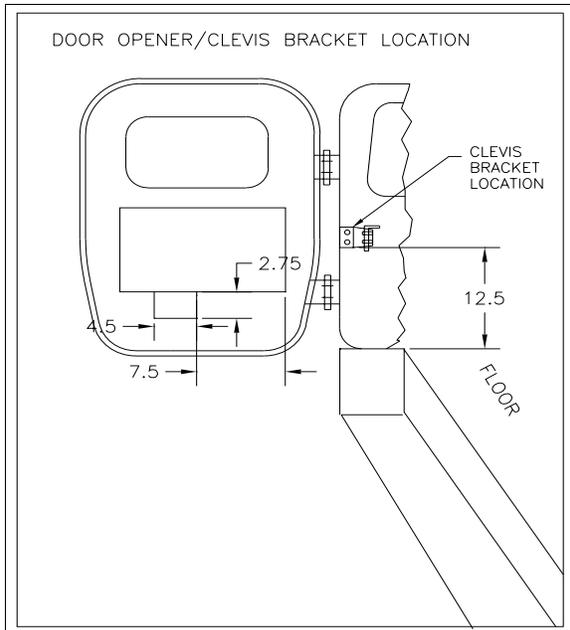


FIGURE [E]: LOCATION OF CLEVIS BRACKET AND CUT PORTION

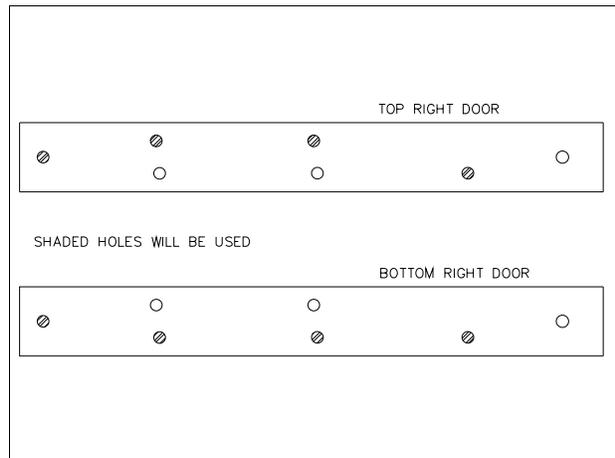


FIGURE [F]: MOUNTING BRACKETS

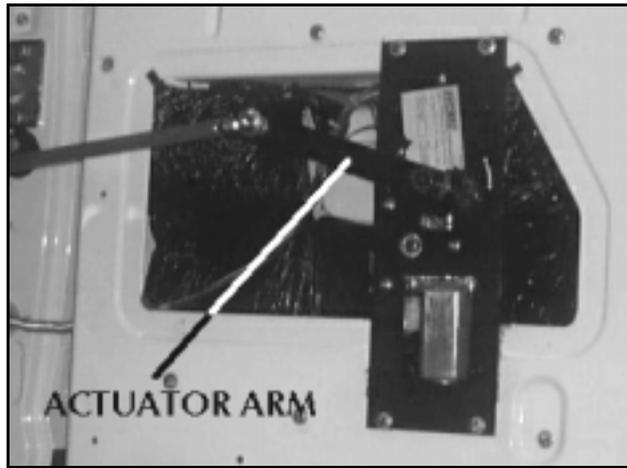


FIGURE [G]: DOOR OPERATOR INSTALLED

E. ELECTRICAL HARNESS ROUTING (BOTH SIDES):

1. Drill a 1.0" diameter hole in the door frame 7" above the vehicle floor **Figures [H] & [I]**.
2. Drill a 1.0" diameter hole on the door jamb in line with the hole drilled in step 1 **Figures [H] & [I]**.
3. Deburr all drilled holes.
4. Route harness through the drilled holes and into the vehicle **Figures [H] & [I]**.
5. Install supplied grommets around the spring and insert grommet into the holes previously made holes. **Figure [J]**.

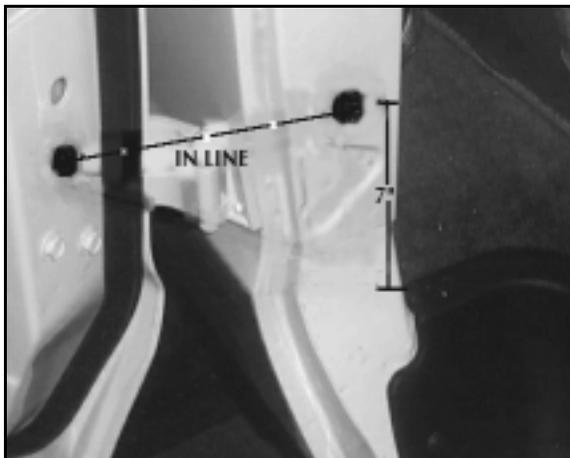


FIGURE [H]: GROMMET LOCATION LEFT DOOR

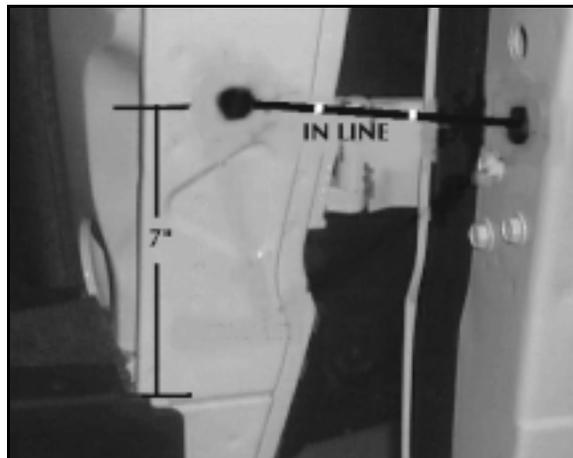


FIGURE [I]: GROMMET LOCATION RIGHT DOOR

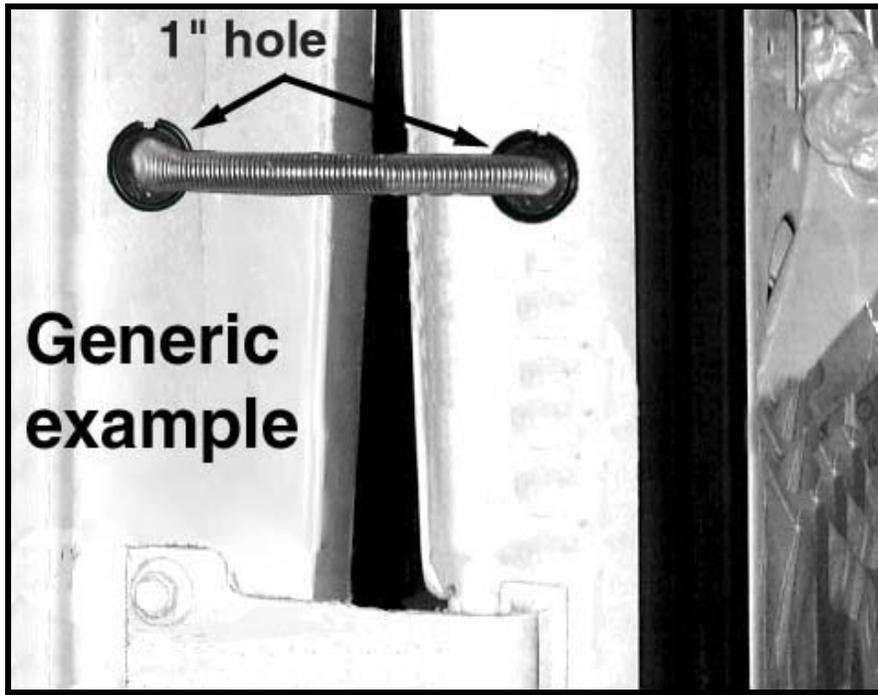


Figure [J]:

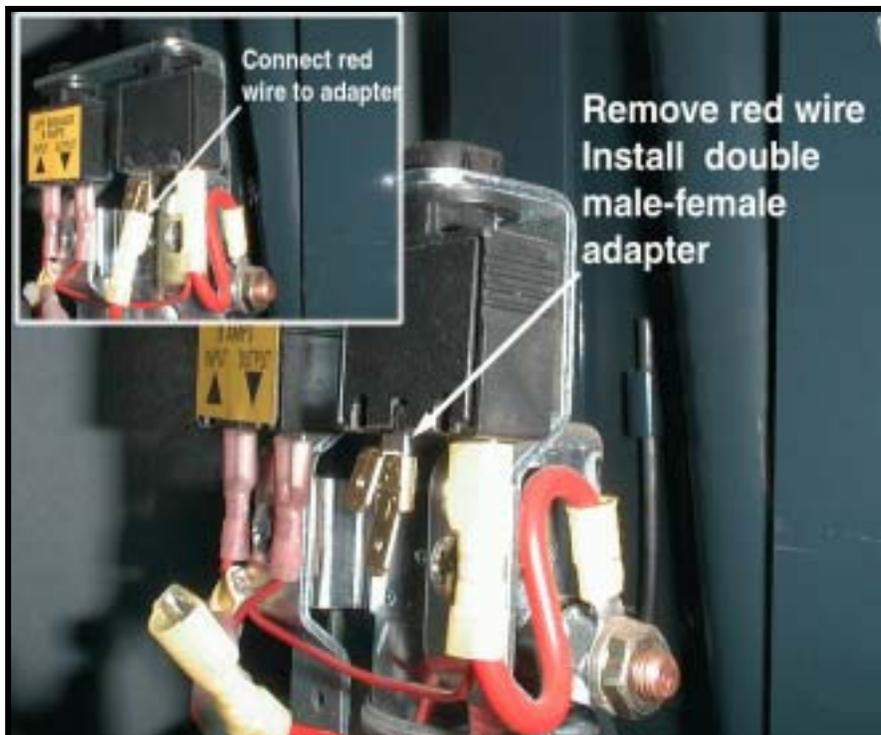


Figure [K] TYPICAL S-SERIES CIRCUIT BREAKER



Figure [L] TYPICAL UNI-LITE CIRCUIT BREAKER

F. 10AWG HARNESS CONNECTION

1. Disconnect wire from 30amp circuit breaker. **FIGURE [K OR L].**
2. Connect terminal adapter (double male-single female) to circuit breaker..
3. Reconnect wire that was removed from breaker and connect 10awg red wire to terminal adapter

G. ELECTRICAL HARNESS ROUTING (BOTH SIDES)

1. Plug interconnecting harness to lift.
2. Connect 9-pin molex connectors at door pillars to interconnecting harness.
3. Connect 10awg harness to molex connector of left door opener.
4. Route 10awg harness to 30amp circuit breaker.
5. Connect red 10awg wire to adapter on circuit breaker.
6. Connect black 10awg wire to suitable ground.
7. **Note that for right side door, 2-pin connector is not used.**

H. ADJUSTMENTS:

1. Refer to the Service/Owner Manual Section 2 Page 6 Part 'C' Final adjustments. Adjust as needed.

I. INSTALLATION VERIFICATION.

1. Verify proper operation of door operators.

J. REWORK THE INTERIOR PANEL:

1. Cut the interior panel to clear all bracket assembly locations, use door flange (P/N: 01618) to cover the hole around the actuator arm.
2. Install stepwell trim.

NOTE: FASTEN BOTH ACTUATOR ARMS BY TIGHTENING THE BUTTON HEAD SCREWS.