



**INSTALLATION INSTRUCTIONS
RDO 2902 POWER DOOR OPERATORS
1992 AND LATER FORD VAN, REAR KIT # 01005**

- # Be certain that these supplemental instructions are read and understood completely before installation is attempted. Please refer to the Service/Owner Manual for additional installation instructions.
- # 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 RDO 2902 power door opener is designed to be operated in conjunction with a Ricon lift for best results.

The following pages contain installation instructions for RDO 2902 power door opener. Please follow instructions carefully and do not cut any corners, eliminate any steps, or modify the equipment. Call service department if you need assistance.

II. TOOLS REQUIRED

Drill Bits (9/32", 3/16")
Hole Saw (1")
Screw Drivers (Phillips, Flat)
Side Cutters

Wrenches (7/16", 1/2")
Jig Saw Blades
Hammer
Wire Crimping Tools

Jig Saw
Electric Drill
Wire Strippers
File

III. PREPARATION OF VAN

A. SAFELY PARK VAN ON A FLAT, LEVEL SURFACE AND TURN OFF ENGINE.

B. DISCONNECT BATTERY.

CAUTION

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

C. PREPARE THE DOORS:

1. Remove door panels. Clear doors of any loose material.
2. Remove plastic moisture barriers.
3. Remove door stops and latches **Figures; [1]&[2]**.
 - a. Remove latch at the center of door header **Figure [1]**.
 - b. Remove latch at the center of door way floor **Figure [1]**.
 - c. Remove latch on left doorjamb, above the handle **Figure [1]**.
 - d. Remove both door stops above the top hinge **Figure [2]**.
4. Doors should open and close freely.
5. Remove interior panels from door posts.



FIGURE [1]: REMOVE ALL LATCHES



FIGURE [2]: REMOVE ALL DOOR STOPS

IV. INSTALLATION

A. INSTALL LEFT/RIGHT CLEVIS BRACKETS FIGURE [3]:

1. Bolt the 90° angle bracket to the clevis bracket **Figure [4]**.
2. Position the bottom of the bracket assembly 13.75" above the floor and mark 4 holes. Drill through marked holes using a 3/16" dia drill bit **Figure [3] & [7]**.
3. Install clevis bracket using 1/4" dia. sheet metal screws **Figure [3]**.



FIGURE [3]: CLEVIS & ALUMINUM BRACKET INSTALLED



FIGURE [4]: CLEVIS & ALUMINUM BRACKETS

B. INSTALL POWER DOOR OPERATOR IN RIGHT REAR DOOR:

1. Cut/drill top and bottom brackets per dimensions on **Figure [6]**.
 - ! Drill a 0.125R hole in top bracket per dimensions on **Figure [6]**.
2. Position template (**Temp 3**) onto the door, and mark all lines to be saw cut. Before saw cutting make sure all marks match measurements on **Figure [7]**.
3. Cut into the inside sheet metal per marked lines in step 2.
4. Remove license plate box **Figure [8]**.
5. Bolt the top bracket to top of the door frame using the existing holes on the bracket **Figure [9]**.
6. Bolt the bottom bracket inside the door frame using the existing holes on the bracket **Figure [10]**.
7. Position and mount the door opener to the top & bottom brackets **Figure [11]**.
8. Mount the license plate box. The top left corner screw should be cut to fit.

Note: Use three spacers supplied to fill the gap between the top bracket and the door opener plate.

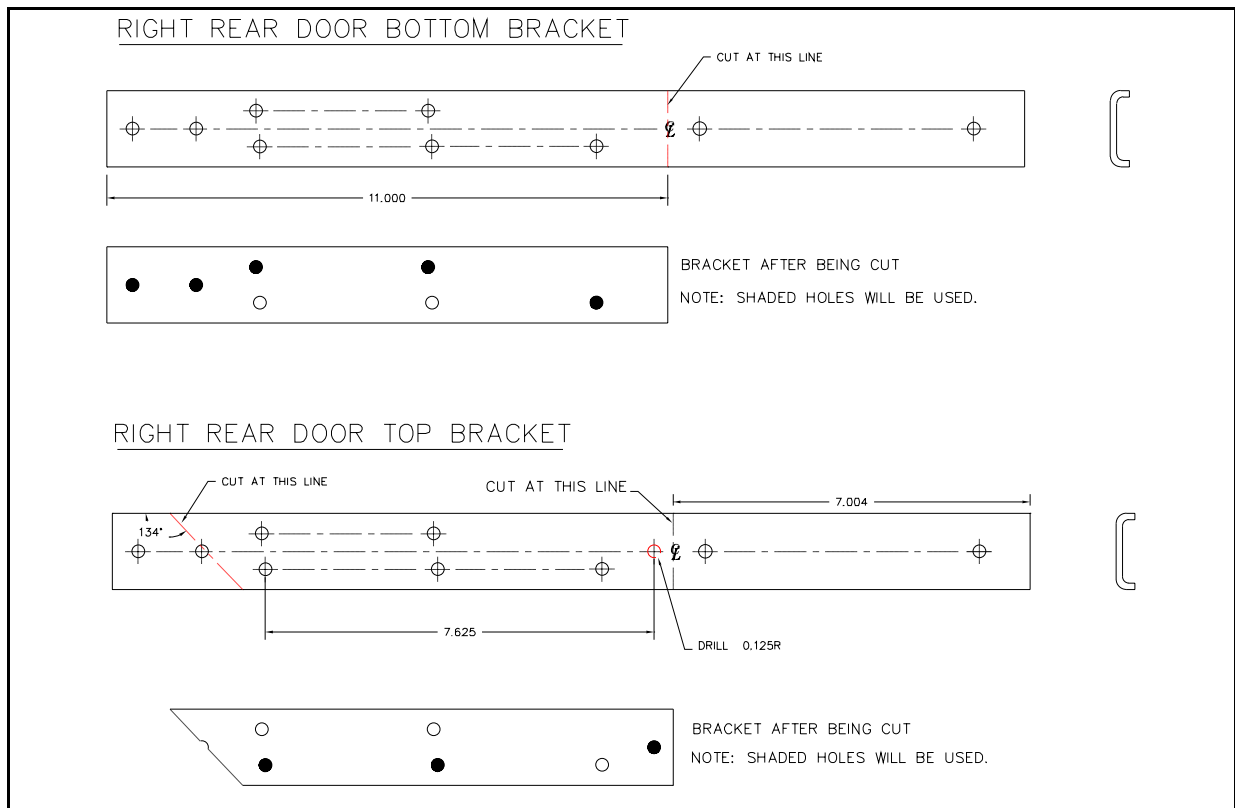


FIGURE [6]: CUT THE BRACKETS PER ABOVE DIMENSIONS AND DRILL AN EXTRA HOLE IN TOP BRACKET

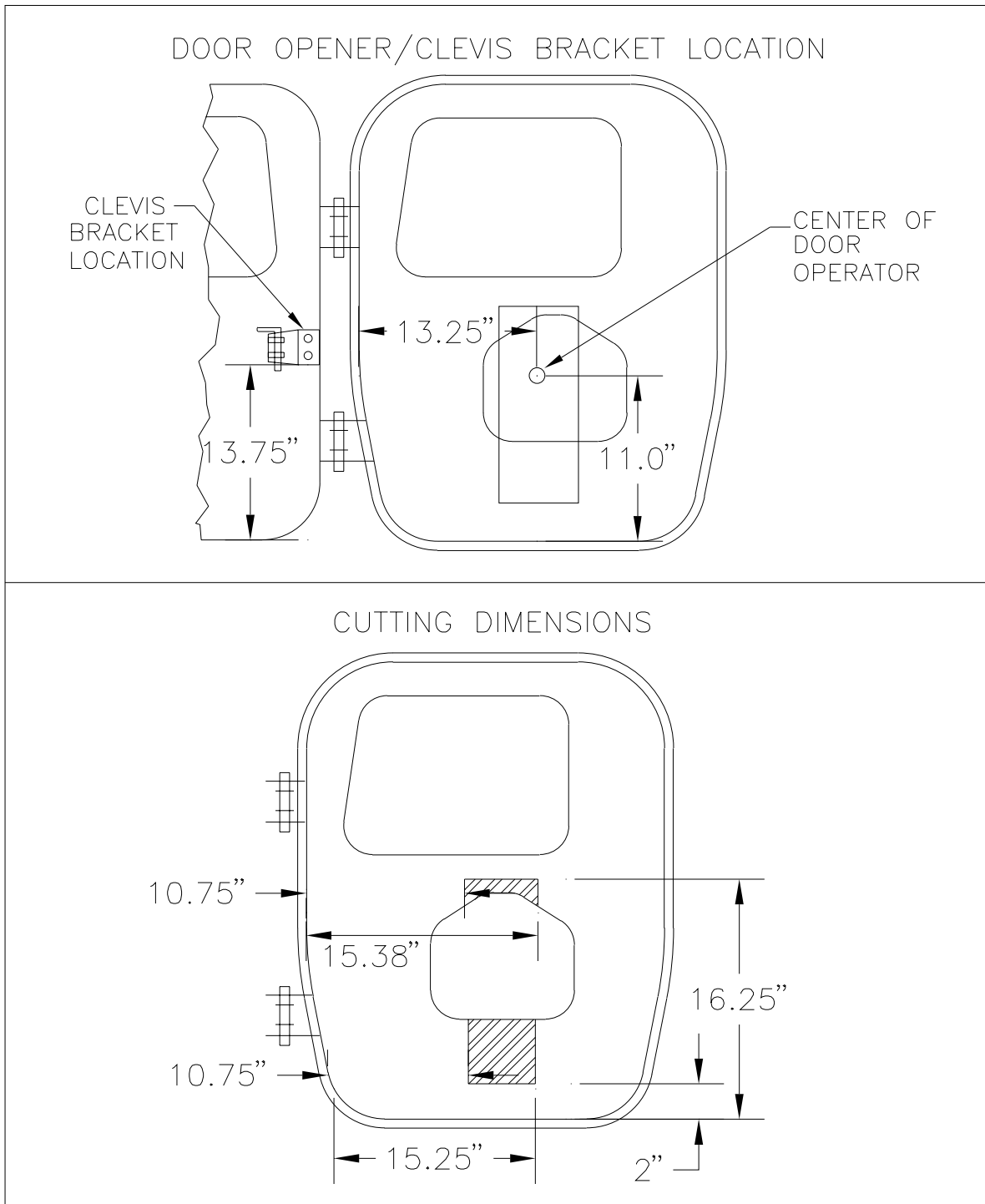


FIGURE [7]: DIMENSIONS FOR CUTTING AND MOUNTING CLEVIS BRACKET IN REAR RIGHT DOOR

NOTE: UTILIZE THE SUPPLIED TEMPLATE (Temp 3) FOR ACCURATE MARKING AND MEASURING.

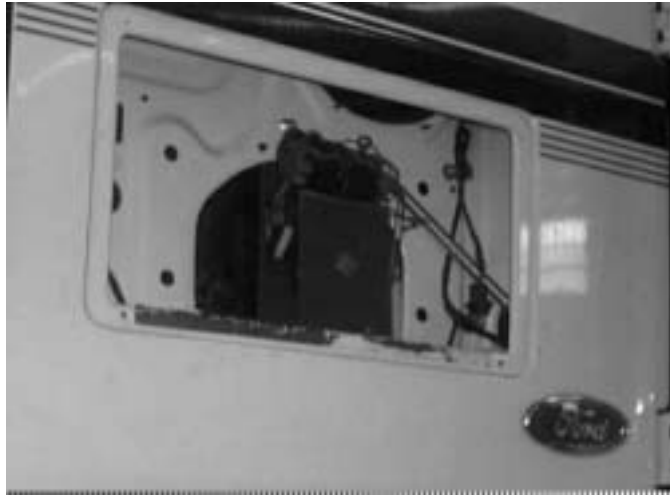
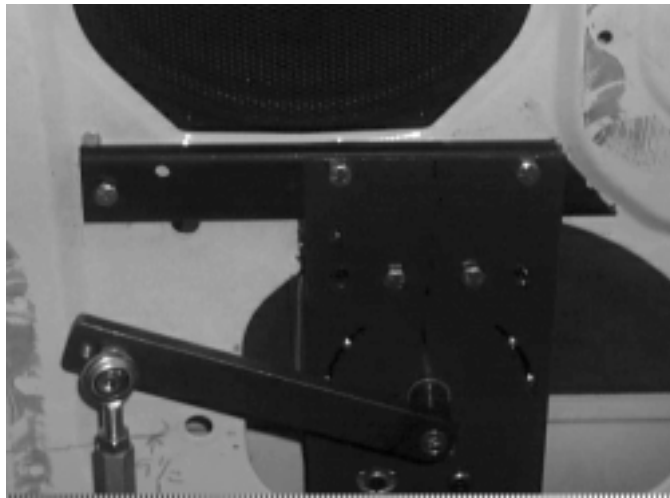
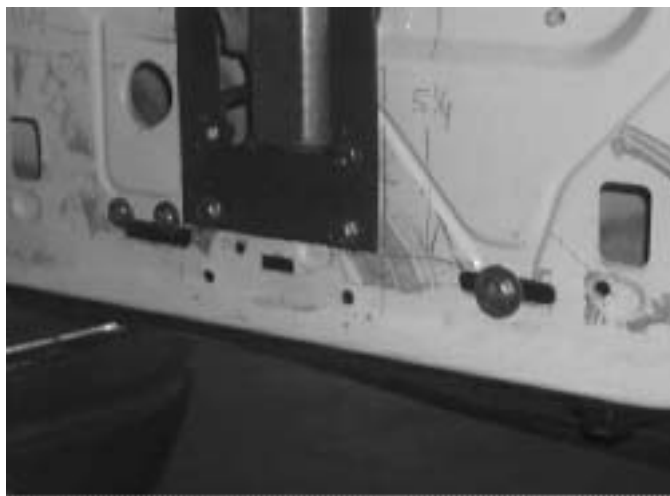


FIGURE [8]: LICENSE PLATE BOX REMOVED



**FIGURE [9]: REAR RIGHT DOOR TOP
BRACKET MOUNTED**



**FIGURE [10]: REAR RIGHT DOOR BOTTOM
BRACKET MOUNTED**

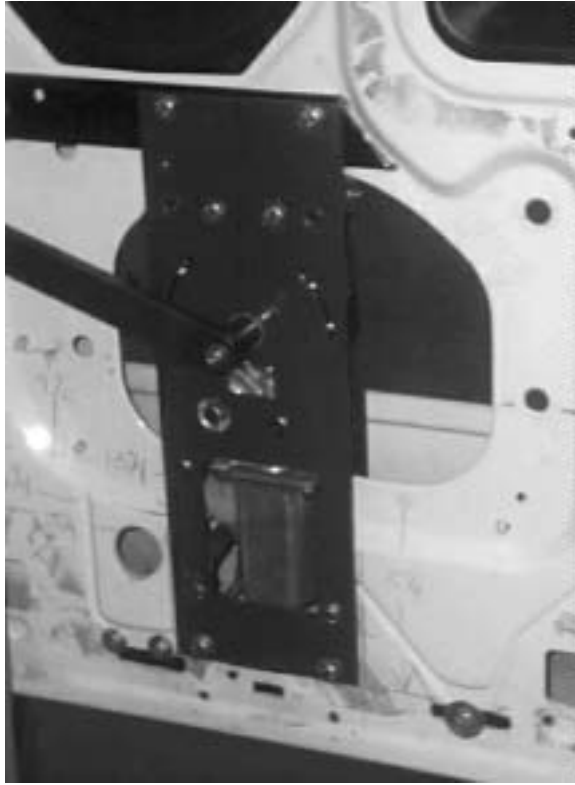


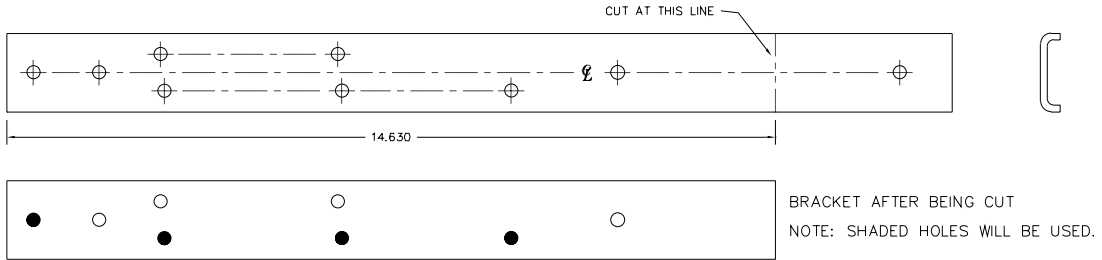
FIGURE [11]: DOOR OPENER MOUNTED ON TOP OF BRACKETS

C. INSTALL POWER DOOR OPERATOR IN LEFT REAR DOOR:

1. Cut top and bottom brackets per **Figure [12]**.
2. Position template (**Temp 4**) onto the door, and mark all lines to be saw cut. Before saw cutting make sure all marks match measurements on **Figure [13]**.
3. Cut into the inside sheet metal per marked lines in step 2.
4. Bolt the top bracket to top of the door frame using existing holes on the bracket **Figure [14]**.
5. Bolt the bottom bracket inside the door frame using the existing holes on the bracket **Figure [15]**.
6. Position and mount the door operator to the top & bottom brackets **Figure [16]**.

NOTE: Use three spacers supplied by Ricon to fill the gap between top bracket and the door opener plate.

LEFT REAR DOOR BOTTOM BRACKET



LEFT REAR DOOR TOP BRACKET

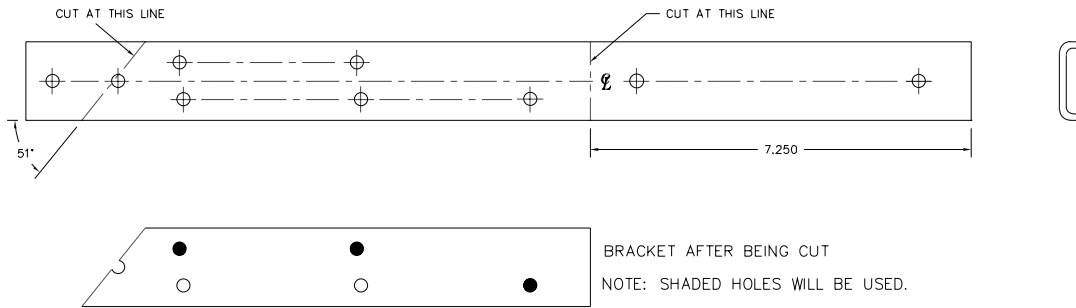


FIGURE [12]: CUT REAR LEFT BRACKETS PER ABOVE DIMENSIONS

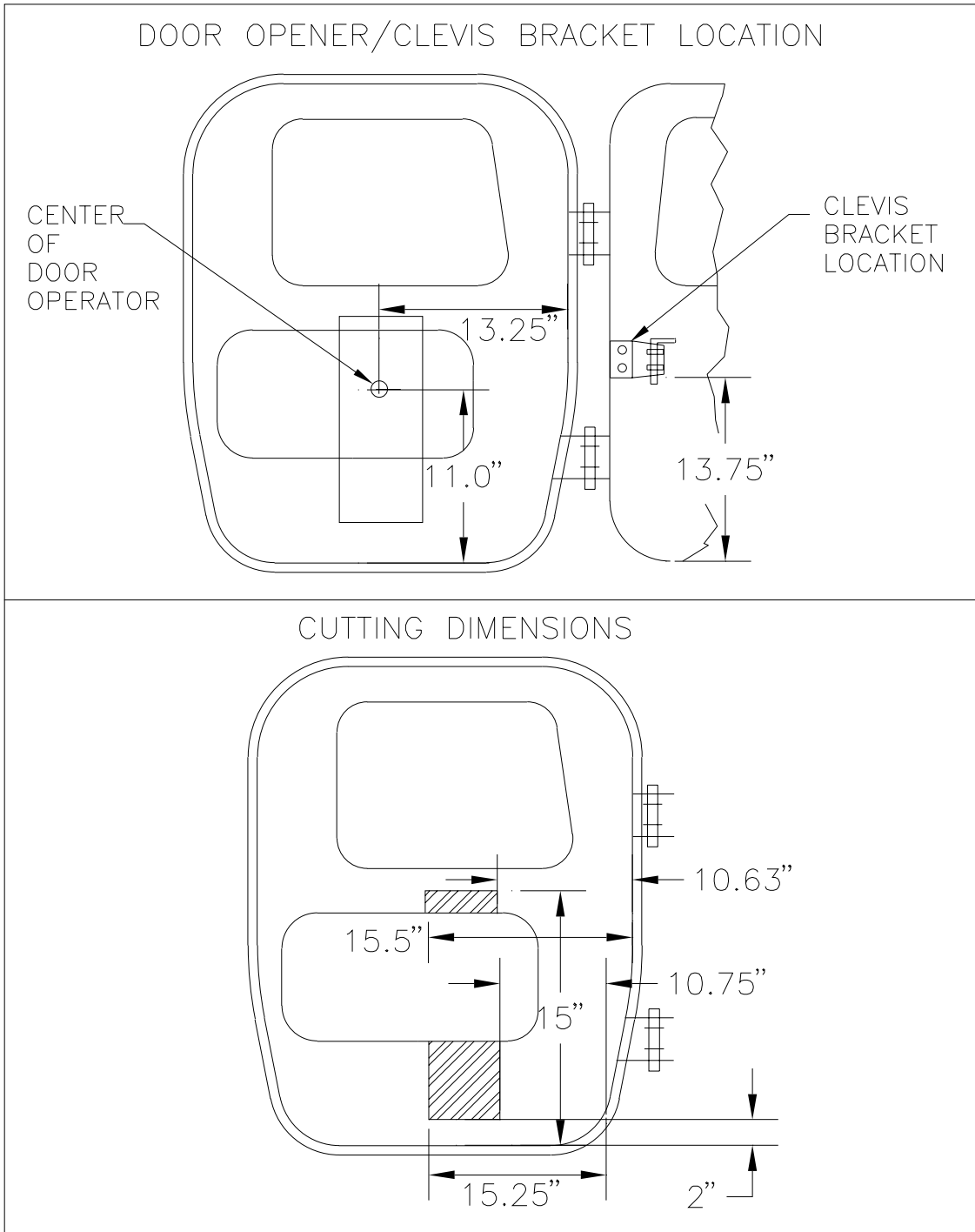


FIGURE [13]: DIMENSIONS FOR CUTTING AND MOUNTING CLEVIS BRACKET IN LEFT REAR DOOR

NOTE: UTILIZE THE SUPPLIED TEMPLATE (Temp 4) FOR ACCURATE MARKING AND CUTTING

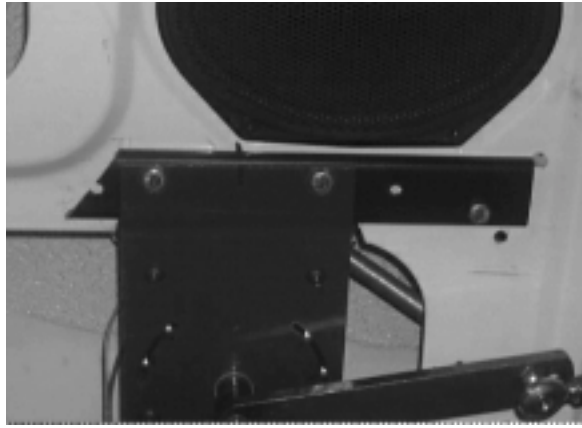


FIGURE [14]: LEFT REAR TOP BRACKET MOUNTED



FIGURE [15]: LEFT REAR BOTTOM BRACKET MOUNTED

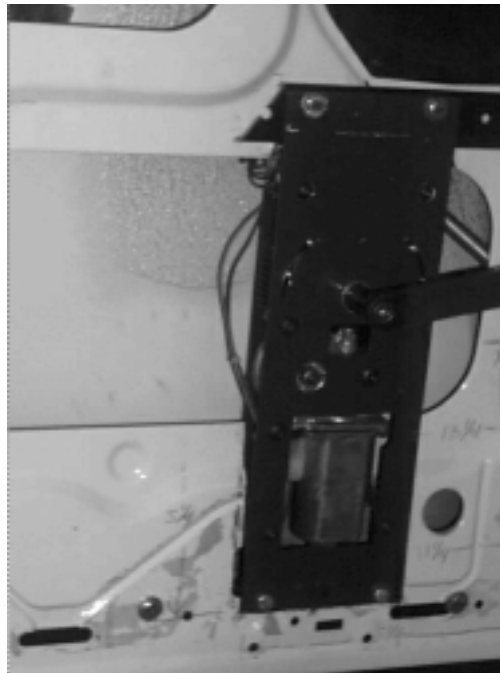


FIGURE [16]: DOOR OPENER MOUNTED IN REAR LEFT DOOR

D. ELECTRICAL HARNESS ROUTING (BOTH SIDES):

1. Drill a 1.0" diameter hole in the door frame 7" above the vehicle floor **Figure [17] & [18]**.
2. Drill a 1.0" diameter hole on the door jamb inline with the hole drilled in step F.1.**FIGURE [17] & [18]**.

▲ CAUTION

MAKE SURE WHEN DRILLING NOT TO TOUCH ANY WIRES OR OBJECT.

3. Deburr the drilled holes.
4. Route the harness through the hole and into the vehicle.
5. Secure the supplied grommets around the spring and insert the grommet into the hole previously made **FIGURE [19]**.
6. Attach the helper spring to end of the spring conduit. This prevents the mechanism from getting caught in the door jamb **FIGURE [20]**.

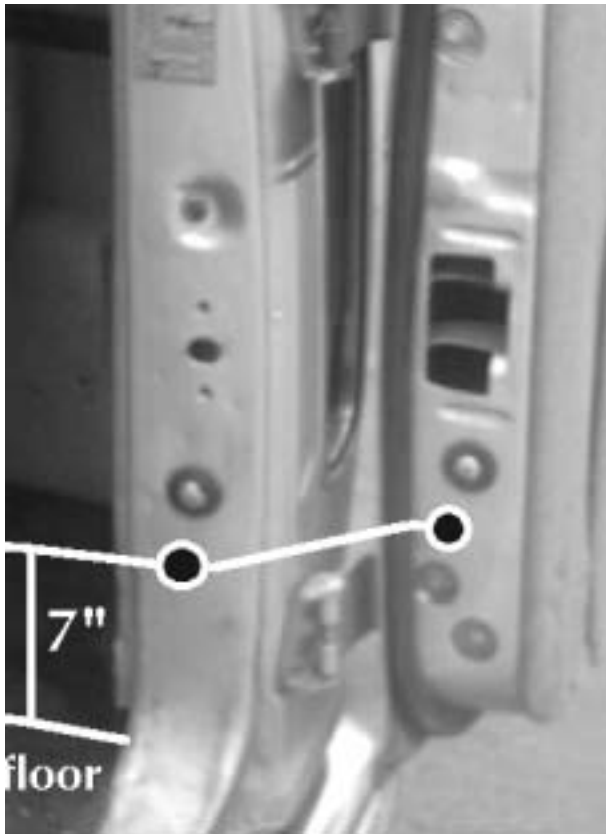


FIGURE [17]: GROMMET LOCATION RIGHT DOOR

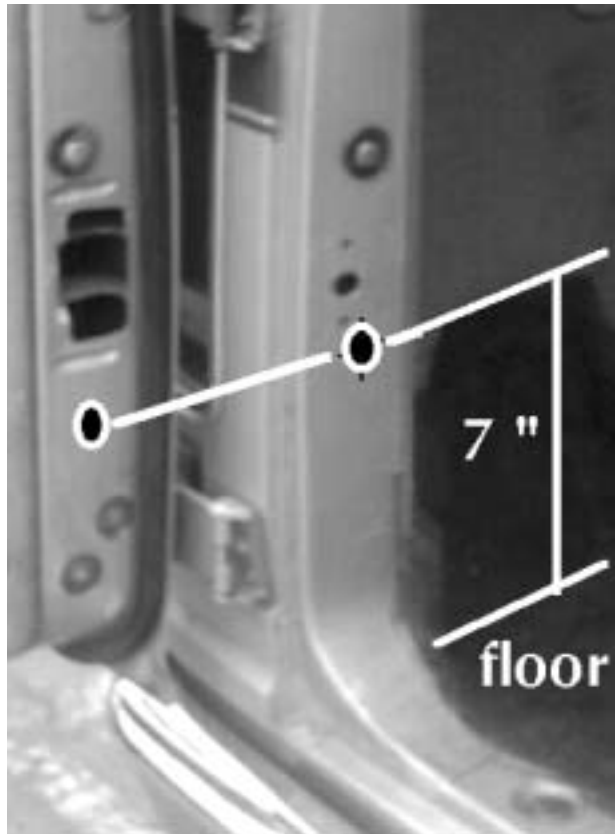


FIGURE [18]: GROMMET LOCATION LEFT DOOR

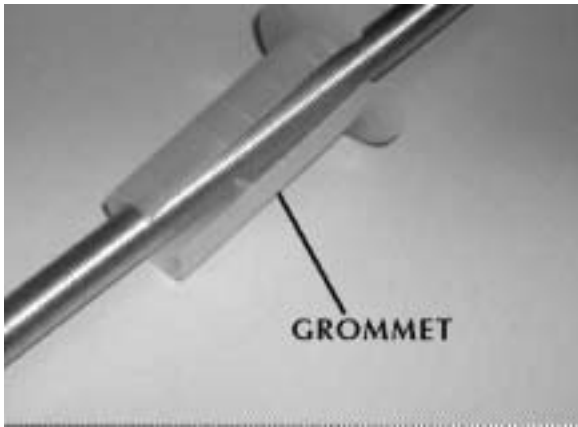


FIGURE [19]: POSITION GROMMET AROUND SPRING

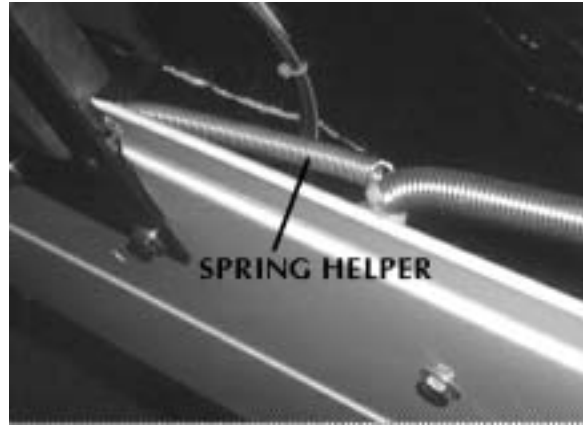


FIGURE [20]: CONNECT HELPER SPRING

E. PLUG INTERCONNECTING CROSS OVER HARNESSES BETWEEN DOOR OPERATORS AND THE LIFT.

F. ADJUSTING THE POWER DOOR OPERATOR SWITCHES:

The door operator is set at factory to operate optimally. To custom adjust door operators refer to the Service/Owner Manual.

G. TEST DOOR OPERATORS FOR PROPER OPERATION.

H. REINSTALL ALL DOOR AND INTERIOR PANELS. USE DOOR FLANGE (P/N :01618) TO COVER THE HOLE AROUND ACTUATOR ARM.

NOTES