

## USER GUIDE AND INSTALLATION MANUAL

## ELECTRIC WINDOW CRANK SWITCH

EWS1 EWS2 EWS3 EWS4 EWSS

## INSTALLATION

The electronic window crank switch (EWS) are designed to work in all vehicles. Autoloc's EWS thin design will allow you the most flexibility when installing it on your door. On some early domestic vehicle it is necessary to shorten the shaft of the EWS, and to drill a small retaining pin hole to match your window crank.

1. Remove your door panel and all installation on your door to gain access to your metal door skin.
2. Select a location on your door to mount the EWS. The EWS may be mounted at any angle or position. NOTE: Make sure when you mount the unit to the door you have adequate clearance from all moving parts.

3. Once a suitable location is found drill three holes on the door to match up with the three mounting holes on the EWS.

4. Place the EWS behind the door metal and through the original the three holes you drilled on your door.

5. Secure the EWS to the door by installing three screws into the EWSS through the holes drilled in the door.

6. Temporarily secure the EWS to the door, and reinstall your door panel and trim rings.

7. If you have a square shaft EWS unit, you might need to shorten the length of the EWS shaft. To do this simply:

- A. Measure the EWS shaft where the crank fits properly, and mark.
- B. Remove the EWS from the door and

cut to the mark length.

C. Insert the crank onto the EWS shaft and mark the position of the retaining hole.

D. Remove the crank and drill the retaining hole on the EWS shaft where marked.

**NOTE:** In some cases you will need to file down the edges of the shaft for a proper fit.

## WIRING POLARITY

Power windows systems are wired up two ways, reverse polarity (most popular), and direct polarity.

**Reverse Polarity:** In most cases reverse polarity systems will have two wires on the motor that activate the window up when one wire gets 12 volts, and the other wire gets grounded. The window will go down when the polarity is reversed. Typically the window switch will 5 to 6 wires. If you have a reverse polarity window system follow diagram A.

**Direct Polarity:** In a direct polarity window system, the motor is grounded directly to the car thru the metal motor case and will also have

two wires going to the motor. However direct polarity systems will activate your window up when 12 volts is given to one wire and down

when you give 12 volts to the other wire. Typically the window switch will have 3 wires. If you have a direct polarity window system follow diagram B.

**Note:** AutoLoc's #EWSK will allow you to use the drivers EWS unit to control the drivers and passengers power windows.

## TROUBLESHOOTING

**Q.Nothing Works?**

A. Check the fuse for power. Make sure you have a good chassis ground. Check your wiring. Check battery level.

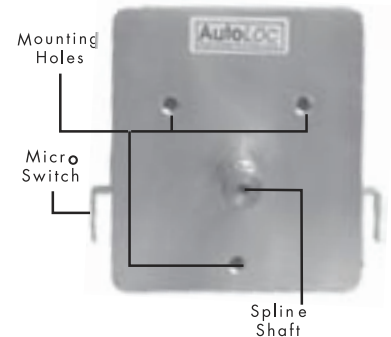
**Q. I notice the EWS**

**can only work w/motor under 10 amps. What do I do if my motor draws more power?**

A. You will need to wire your window system with RA1000, external relays.

**Q The EWS is missing the hole in the middle of the shaft to hold crank on.**

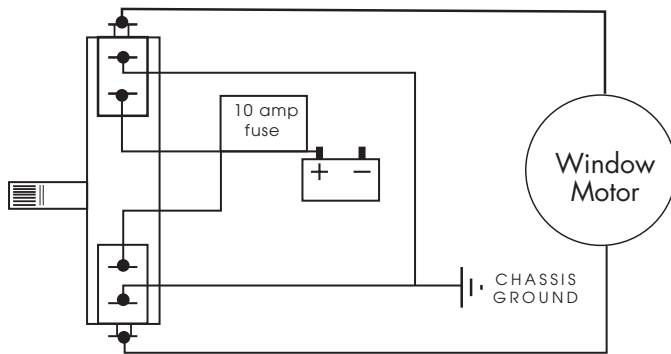
A. You need to drill a hole in the EWS shaft and tap it to meet the thread specs of your screw.



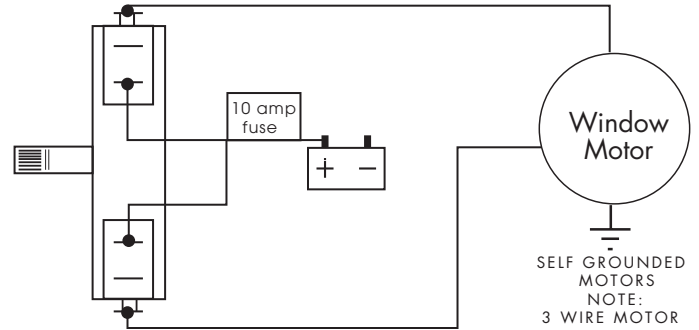
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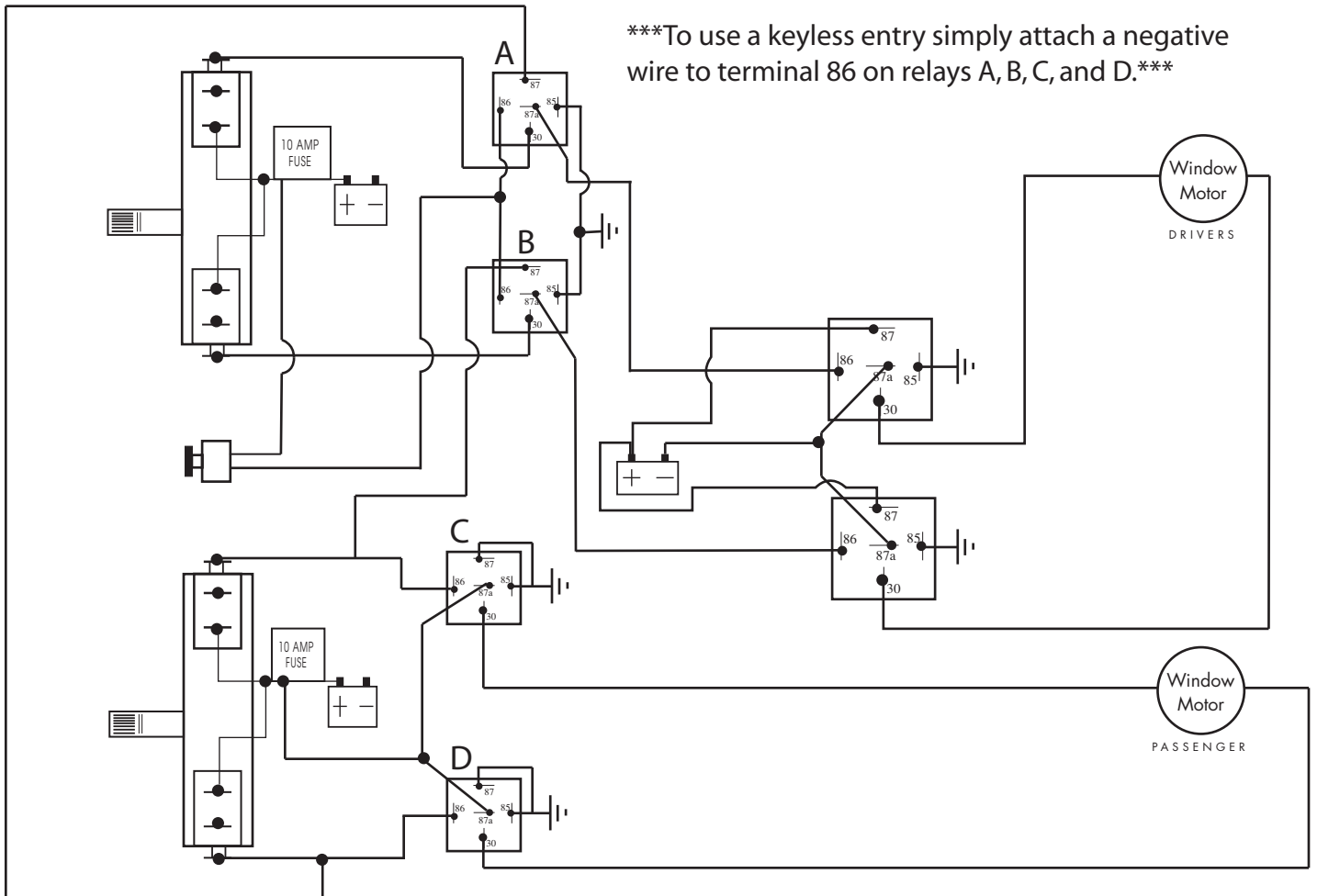
**A SINGLE WINDOW OPERATION REVERSE POLARITY**



**B SINGLE WINDOW OPERATION DIRECT POLARITY**



**C DUAL WINDOW OPERATION WITH BUTTON**



# USER GUIDE AND INSTALLATION MANUAL ELECTRIC WINDOW CRANK SWITCH

EWS1 EWS2 EWS3 EWS4 EWSS

FOR WINDOWS WITH A DRAW OVER 10 AMPS

