



Power Window Installation Instructions

Major Window Kit Parts

Note gear sleeve retaining rings

Rubber bushings and sleeves

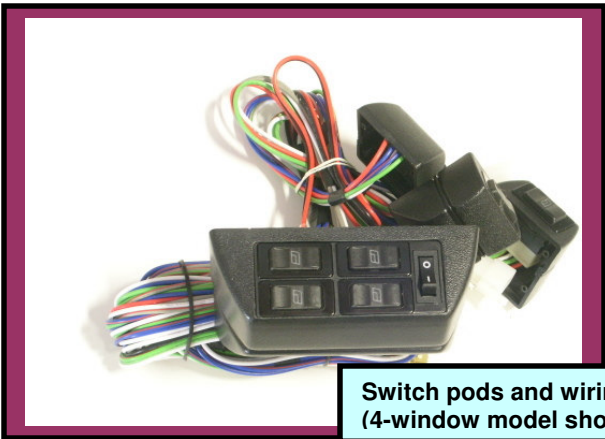
Select the adapter that fits your window crank shaft

Various crank handle shaft adapters

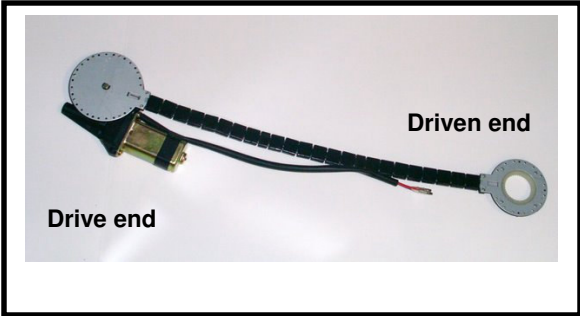
Bracket with rubber bushing and sleeve inserted

Drive mounting brackets and screws

Gear sleeves of different lengths



Switch pods and wiring harness (4-window model shown)



Driven end
Drive end



Shaft covers and cover retainers

Read all the instructions first and plan ahead. Check that all the component parts are at hand.

Additionally, you may need electrical tape, wire ties and wire loom casings.

The tools you will need normally are: #1 & #2 Phillips screw drivers, a slotted screwdriver and a drill.

Nice tools to have are, a door panel removing tool (available at your auto parts store) and a wire tie tool.

Depending on your skills and make of car you are working on, each door will take from 45 minutes to 90 minutes to complete. Add another 45 minutes to an hour to finish up with the wire harness.

Step I – Installing the drive mechanism

A

Remove the door panels.

Determine which is the correct gear sleeve and crank handle shaft adapter you will use.

The correct crank handle shaft adapter is the one that fits perfectly onto the crank handle shaft.

The correct gear sleeve is the one that allows minimum protrusion through the door panel.

B

Locate the drive unit position

Without the sleeve and adapter installed, place the driven end of the drive unit over the window crankshaft.

Position the drive end where you wish to mount it. The motor should be in the door cavity. Keep the curve between the two ends of the drive unit to a minimum. An excessive bind will cause premature failure.

Check for clearances and interference with other door parts. Will you still be able to reinstall the door panel?

Attach the mounting brackets to both ends of the drive unit.

Attach only the drive end to the door.

Note

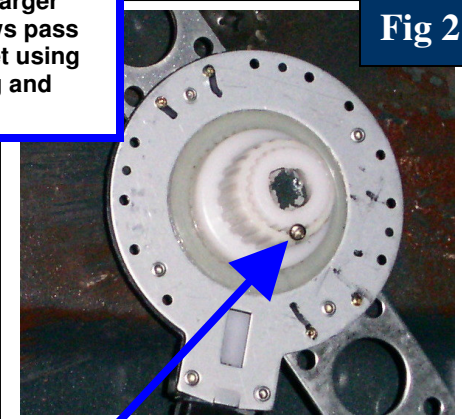
You may need to trim some door metal in order to get proper placement.

Fig 1



The drive unit is mounted to the door by the larger screws. The screws pass through the bracket using the rubber bushing and sleeve.

Fig 2



C

Insert the gear sleeve that you selected in step 1 and use the snap ring to secure it to the gear on the driven end.

Place the driven end over the window crank.

Insert the selected crank handle shaft adapter over the crank handle into the gear sleeve.

Secure with the provided screw as shown in figure 2

Secure the driven end mounting brackets to the door. (Fig 1)

The gear sleeve slides in from the rear and is held in place by the snap ring.

The crank handle shaft adapter is prevented from sliding out of the gear sleeve or off the crank handle shaft by the small screw inserted between the gear sleeve and crank handle adapter.

Now this is the perfect time to test the operation of the drive unit and the existing window regulator.

Using a 12 Volt battery as a source of power, momentarily connect the two leads from the drive unit to the Positive (+) and Negative (-) terminals of the battery. The window should operate – if not, reverse the (+) & (-). Run it fully to the stop. Reverse the leads and run the window fully to the other stop. Repeat this several times and check for smooth operation in both directions.

If window movement is uneven or very slow, check the door's window mechanism for lubrication, binding etc.

Slow operation can result if there is too much of a bend or twist in the drive unit between the motor end and the driven end.

Step 2 – Route and connect the wires

Do not install the connector housings to the wire ends until all wires have been passed into their respective doors

A

Routing the wires is a matter of preference and vehicle design. Behind the dash, under the carpet or under the doorsills could all be valid options. Common sense and a little wiring experience will payoff big here.

The driver's door will have the master switches for all the windows. Power and ground are routed to the master switch panel only.

Each other window lift will have three wires running to it; i.e. passenger door, rear doors or quarter windows. The wires to these switches from the master switch panel have female spade connections that fit into a connector plug housing.

You can go ahead and insert these wires into the plugs.

With both fig x and fig y, you are looking at the back of the plug; insert the wires with the female spade terminals from the back.

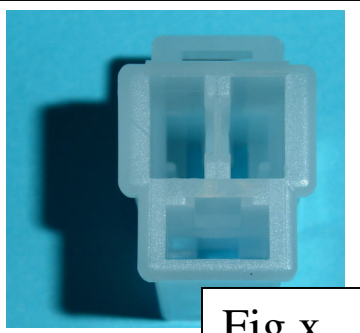


Fig x

When routing the wires, care must be taken to route the wires where there is no chance of chaffing, abrasion or wires being cut by sharp edges.

High temperatures from engine heat or exhaust system Will damage the wiring.

Note

If there are no existing wire holes in the door and in the body, you will need to drill new holes. Use good judgment when locating and drilling. Use grommets in the holes to protect the wires from abrasion.

B

Cavity A – Mated color to wire in cavity B

Cavity B – Same color as Cavity A, but with a red stripe

Cavity C– The third wire (usually White)

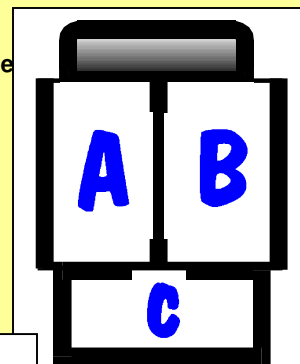


Fig y

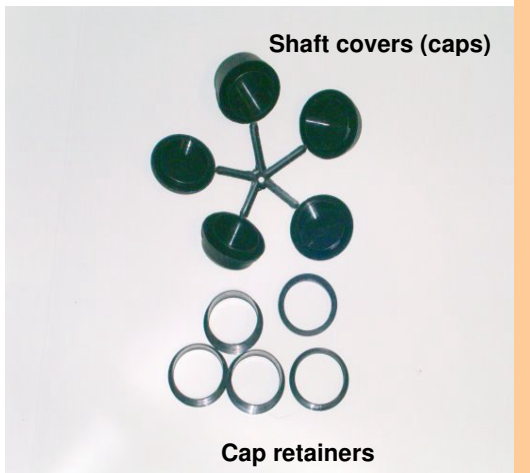
Connect the harness from the switch to the new plug you just made. Connect the wires with the bullet connectors to the wires from the drive unit.

Connect the black wire with the 'U' terminal to a suitable ground on the car's body or frame. The ground connection must be to bare metal.

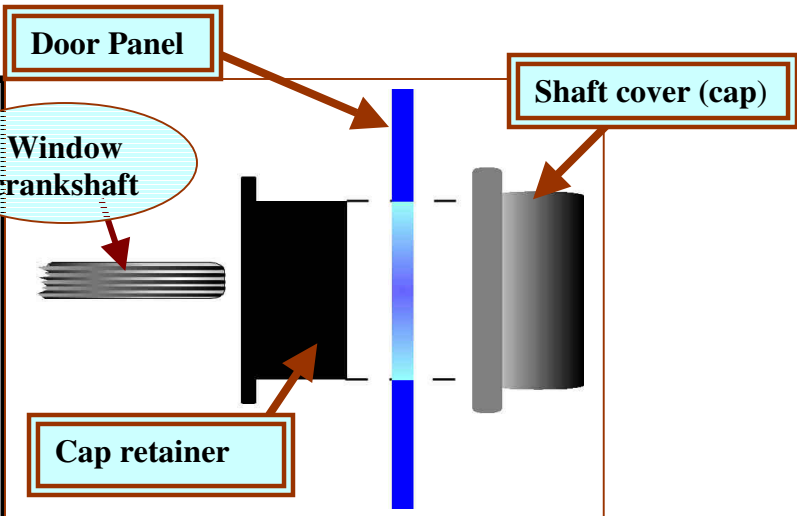
The red, fused lead now needs battery power you should use a switched power source. This provides power to the window lift system only when the ignition key is in the 'run' or 'accessory' positions.

C

Find a suitable location to place the switch pods. Usually over the stub of the window crank shaft.
Use the provided template to locate the location for the switch pod mounting screws.



The cap retainer has grooves or serrations that allow it to lock into position when inserted into the Shaft cover cap.



Replace the door panel and Repeat these steps for each of the other windows.

