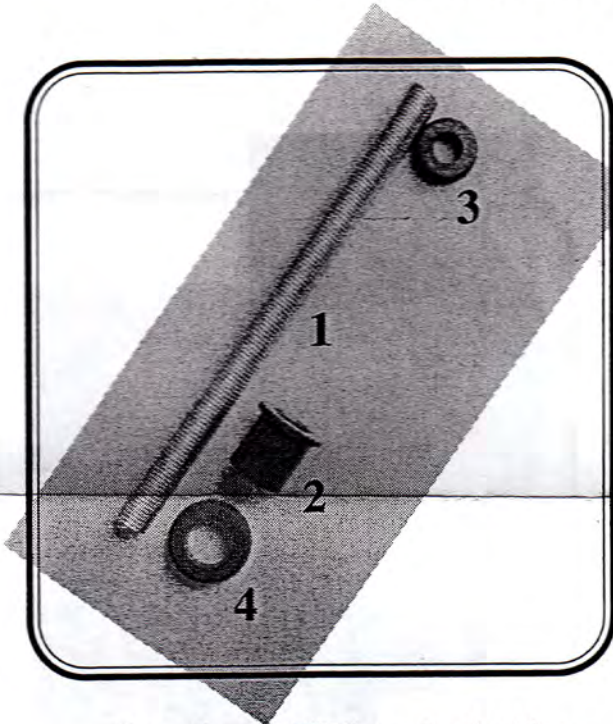




# Specialty Power Windows

## FWC (*Flexible Stainless Steel Wire Conduits*)



FWC's are a simple and elegant way to provide a safe and clean-looking route for wiring into almost any door.

The FWC kit includes:

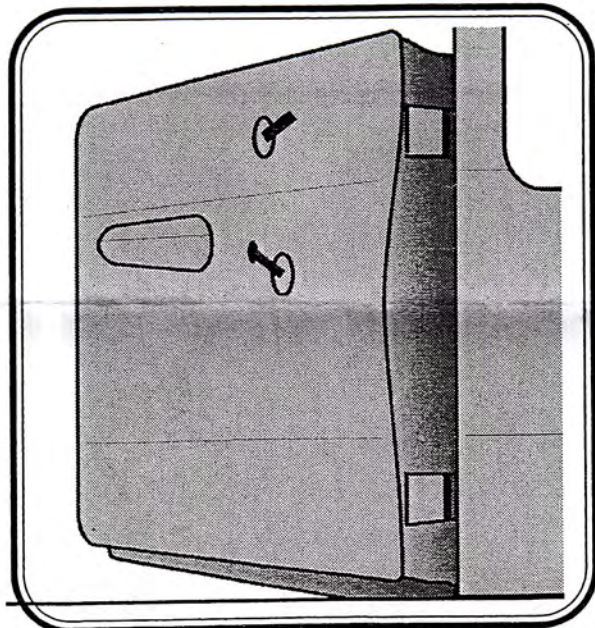
1. Two flexible conduits (springs)
2. Two nylon bushings
3. Two smaller rubber grommets
4. Two larger bushing retainer rubber grommets

The rubber grommets hold the conduits snugly in pillar or door and the bushings allow the conduit to slide smoothly into the door or pillar (depending on application).

Locating the FWC requires looking across the front edge of the door pillars from side to side with the doors open. The portion of the door jamb which is visible from this point of view is where the FWC must be located.

Mark a position where the entire grommet or bushing can be placed in this area, as close to the inside edge of the door and pillar as is practical (consider upholstery, etc.), and where little or no interference with door or pillar reinforcement exists.

Remember that the conduit must slide into either door or pillar, that there must be sufficient room to allow free movement, and that wiring can safely be routed inside the door and pillar. Decide now whether the conduit will slide into the door or the pillar. In most cases, sliding into the door works best.







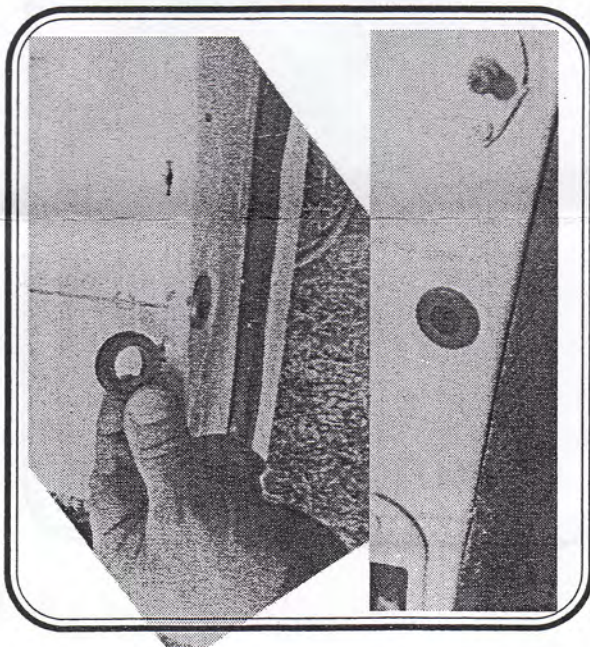
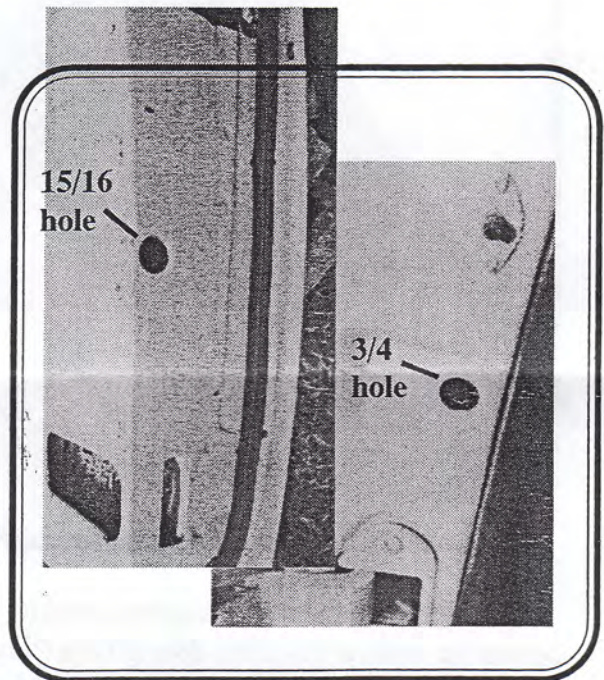
Drill a 1/8 inch hole centered on the FWC location in the pillar. Reach from behind (door closed) and transfer this location to the door jamb.

In some cases a small screw threaded into the 1/8-inch hole may be used to transfer the hole location to the door jamb.

Use a hole saw to cut the proper holes for the nylon bushing and rubber grommet. Use a 3/4-inch hole saw for the rubber grommet. Use a 15/16-inch hole saw for the nylon bushing.

Remember that the bushing end of the FWC slides into the door or pillar as you predetermined.

Use a round file to de-burr the holes.



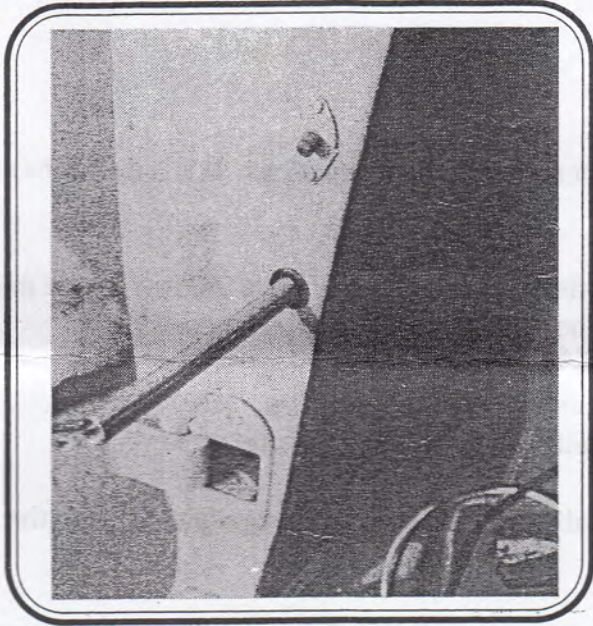
Install the rubber grommet and nylon bushing into the proper holes.

SPW supplies a second larger rubber grommet that slips over the bushing from the backside to retain the bushing and prevent rattles.

You may find in some applications that this grommet will not work and may use an adhesive instead.

When installing the bushing into a wood-framed door, you will need to pin the bushing in place from the side with a sheet metal screw. Be careful not to run the screw through the bushing or to distort it.





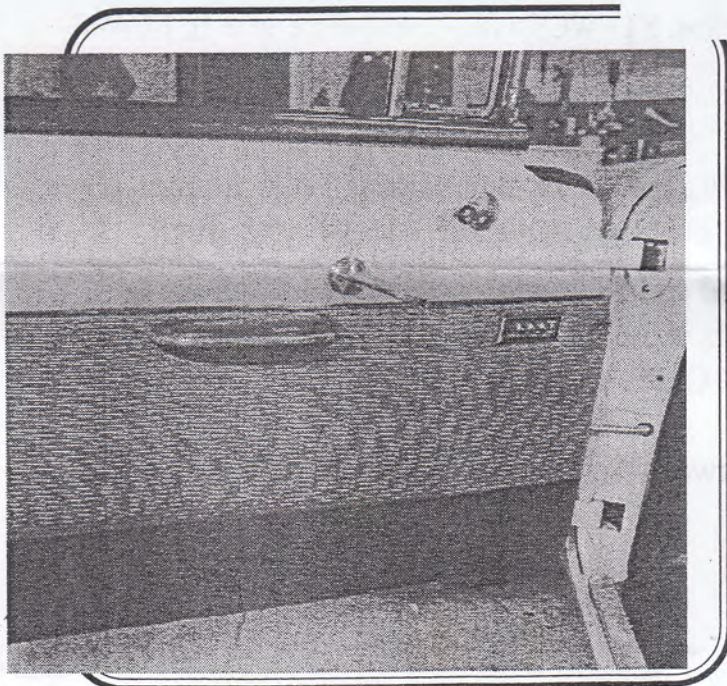
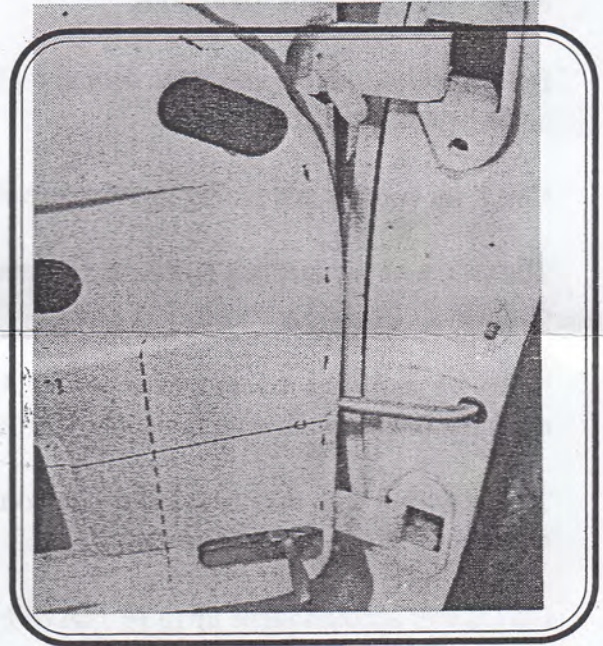
Install the stainless steel flexible conduit into the rubber grommet first. Use a little soapy water to ease installation.

Twist the conduit and use pressure to pass the conduit fully through the grommet.

Bend the conduit until it will slide into the nylon bushing.

The conduit should be fully inserted into the bushing when the door is wide open.

If the conduit is too long to fit fully into the door or pillar through the nylon bushing, push the conduit farther into the rubber grommet.



Slide the wires through the FWC and make sure they are not going to chafe or pinch and use wire ties to keep the wires in place.

The finished installation should not only look good but should operate without kinking or binding.

No lubrication is required.

This photo shows a finished installation in a 1955-57 Chevrolet.



# FWC Installation Hints:

The FWC must be installed in the portion of the door shown in the instructions. If it is not, it may not operate smoothly or could kink and bind.

You must decide whether the conduit will slide into the door or the pillar before drilling. There must be sufficient room inside the door or pillar to allow the conduit to slide completely inside.

Alignment of the holes in both the door and pillar is critical for best operation. Take whatever measures required to get this alignment as perfect as possible.

Our experience shows that in most applications, it will work best to have the conduit slide into the door. There are some exceptions.

Before drilling, check inside the door and pillar to make certain the conduit and wiring can be routed in the location you've identified.

Check for conduit and wiring interference with door both open and closed.

The grommet and bushing holes are different sizes. Make sure you know which is which before drilling.

It may be necessary to remove the door to drill the required holes in some cases. It will save time to mark the hinge location on the door. Use soft padding to protect the door.

Tie the wiring with wire ties to keep it from rattling and protect it from damage from door mechanisms.

FWC's will accommodate up to 10 14AWG wires. XLFWC's will accommodate up to 16 14AWG wires.

If you have any questions regarding the use or installation of this product, please feel free to call our Tech Line at 1-478-994-9248 between 1:30 to 4:30 EST.

It is vitally important that you read and follow the provided instructions to achieve the best results. As is the case in most fabrication and installation projects, it is always best to measure TWICE and cut ONCE.

Thank you for using Specialty Power Windows products!