

COMMITTED TO THE BEST

RAINGEAR

HIDDEN WIPER SYSTEM

FOR YOUR CLASSIC CAR

ASSEMBLED IN ARIZONA USA

RAINGEARWIPERS.COM

1970-1981 Camaro/Firebird/Trans Am

The image displays a comprehensive kit for a manual transmission shifter. The central component is a black metal shifter assembly with a silver motor and a 'Rainier Gear' label. Surrounding it are three selector plate options, each with a different shape and mounting holes. Two solenoid options are shown, one with a black top and one with a silver top. A 'Pantograph Option' is also included. The kit also contains two wiring harnesses with multi-colored wires, a set of pins and springs, and various hardware like screws and a hex key. The components are arranged on a white background with a large 'Rainier Gear' watermark.

Figure 1: Displays the components included in your purchased kit. The contents may vary depending on your vehicle's year, model, and switch option, as shown in the labeled boxes.



Disconnect the battery before beginning installation.

Removal of Factory Wiper System

1. Access the Airbox:

Open the hood to access the plastic grille located just forward of the windshield. This grille covers the “**Airbox**”, a term that will be referenced frequently throughout these instructions.

2. Remove the Grille: Carefully remove the plastic grille.

3. Disconnect the Drive Arm:

Using a 1/2" wrench, remove the nut securing the Drive Arm to the stock wiper motor. Gently pry the Drive Arm from the Motor Spindle.

4. Remove the OEM Wiper Assembly:

Each OEM Pivot Shaft is attached to the cowl with three fasteners. Remove these fasteners and lift the entire wiper assembly from the vehicle.

5. Remove the Wiper Motor and Adapter Plate:

Unplug the wire harness from the wiper motor. Remove the wiper motor from the firewall, then remove the motor adapter plate.

Drill Wire Location

Before beginning the installation of your Raingear GEN II Wiper System, locate and drill a 5/8" hole from inside the car into the floor of the airbox.

Start by removing the plastic cover beneath the steering column. This will provide access for drilling and later allow easy access to the dash panel when installing the wiper switch.

Figure 2:

To the right of the steering column, look straight up and locate the sheet metal bracket with a row of small holes



Figure 3:

To the right of the steering column, look straight up and locate the sheet metal bracket with a row of small holes.



Figure 4:

Step 1: Go outside the car and look into the airbox. You will see the hole on the floor of the box.

Step 2: Clean off any sharp burrs around the hole.

Step 3: Install the rubber grommet provided in the kit.

Step 4: Locate the wire bundle and carefully thread the loose ends from inside the airbox, through the rubber grommet, and into the car's interior.



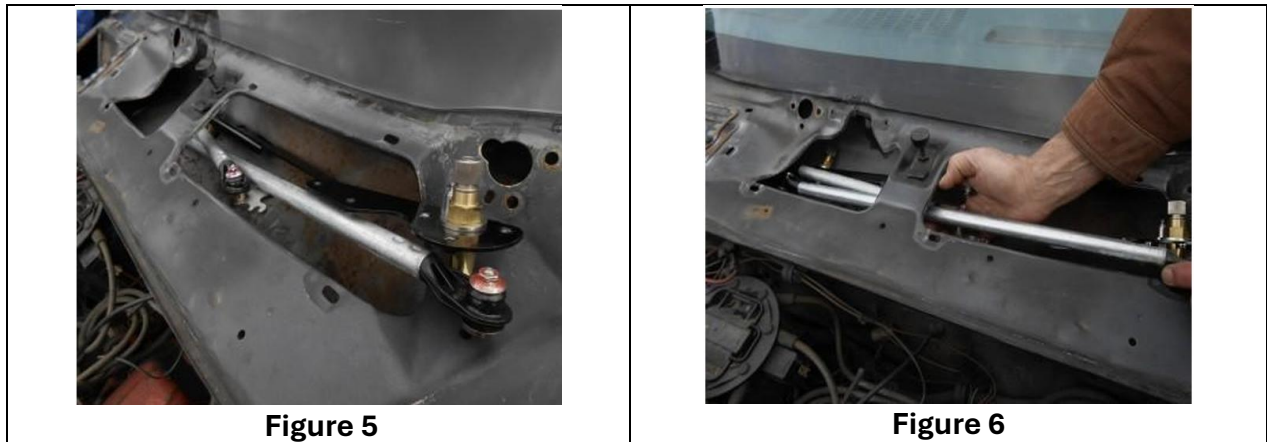
You are now ready to install the Wiper System

The Machinery

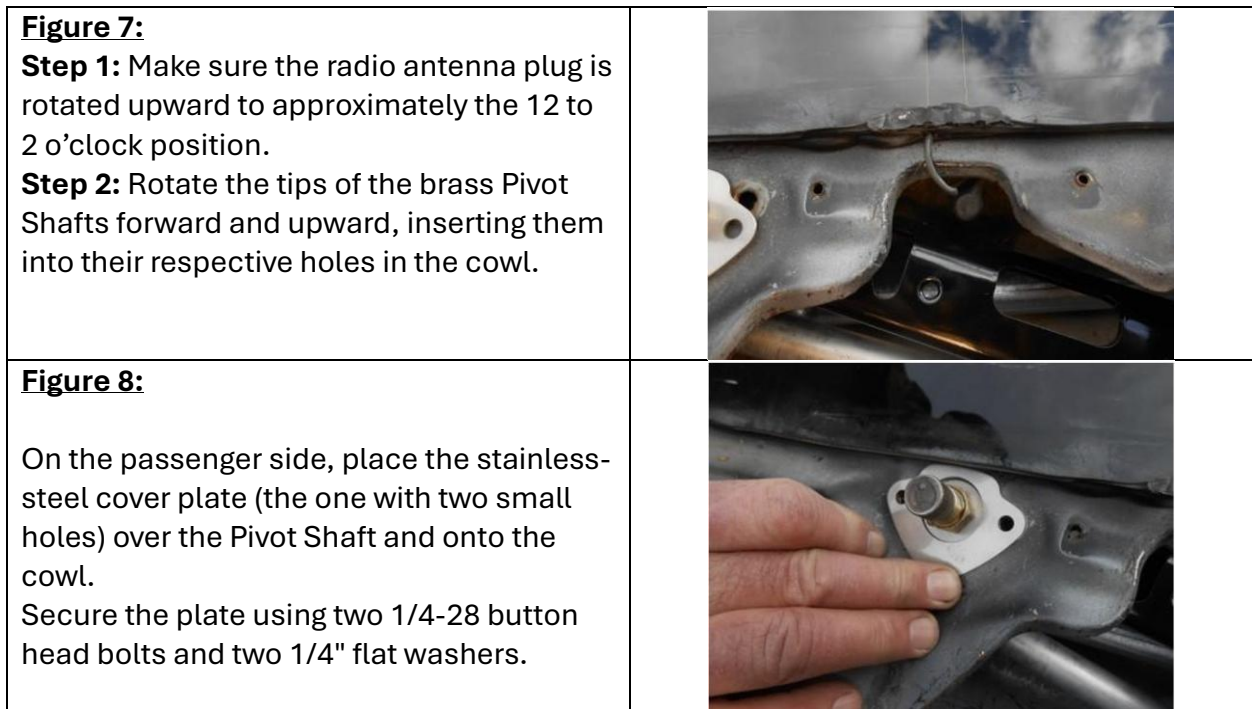
Step 1: Orient the **Pivot Shafts and Link Assembly** as it will fit into the airbox.

Note: The **passenger side Pivot Shaft** goes to the **right**, and the **driver side Pivot Shaft** goes to the **left**.

Step 2: Using the **far-left, large hole** in the top of the airbox, carefully insert the **Pivot Shaft and Link Assembly** into the airbox.



***Point the tips of the brass Pivot Shafts toward the back of the car.
(Refer to Figure 1 on page 1, see Figures 5 and 6.)***



Important: Do not fully tighten the bolts at this time.

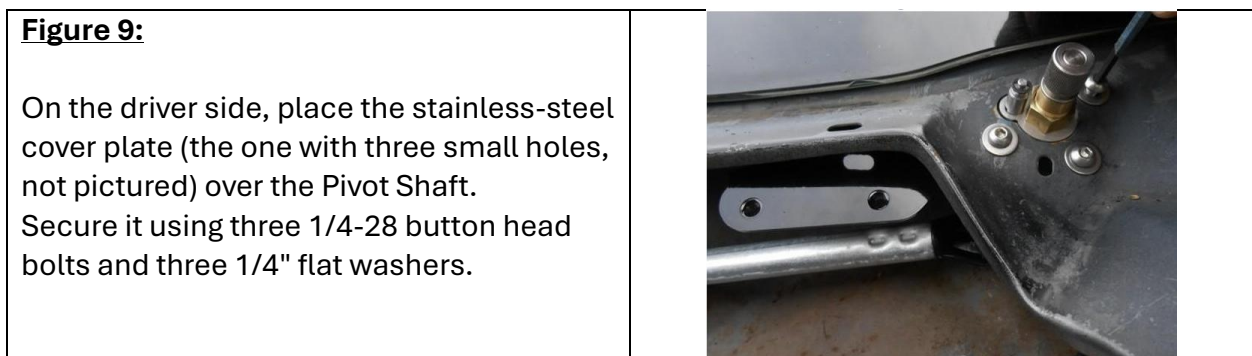


Figure 10:

Before inserting the wiper motor into the airbox, connect the wire harness to the plug on the electric motor.

Make sure to orient the wires from the motor as shown in Fig. 10.



Insert the wiper motor and bracket through the far-left opening into the airbox.
Attach the motor bracket to the left Pivot Shaft head first. (See Fig. 11 and 12.)
Secure using two 1/4-28 button head bolts and two 1/4" flat washers.



Figure 11



Figure 12

Figure 13:

Next, attach the motor bridge to the driver side Pivot Shaft head using two 1/4-28 button head bolts and two 1/4" flat washers



After all button head bolts are installed tighten all fasteners.

The Drive Arm

Figure 14:

To attach the drive arm to the motor:

1. Remove the loose 13mm nut from the motor spindle.
2. Place the tapered hole of the drive arm onto the vacant spindle.



Figure 15:

Replace the nut but **DO NOT TIGHTEN.**



IMPORTANT NOTE (Figures 15 & 16):

The hardware shown in these figures is incorrect.
The revised nut is not shown in the original photos.
A photo of the correct nut has been added for your reference.



Figure 16:

Locate the empty 1/4" diameter hole on the motor mount face.

This hole is used to align the **“PARK”** position of the wiper system when it is in the off position.

Note: The wiper motor included in this kit is shipped in the “PARK” position.



Figure 17:

Rotate the drive arm “park slot” over the hole in the motor bracket and insert a 1/4" round object through the slot and into the hole.

Use a 13mm open-end wrench to tighten the motor spindle nut.

(A Phillips screwdriver, 1/4" bolt, or any object of similar size can be used.)



If you have the Pantograph Arm feature

If your pantograph arm has the slide clip installed, use it to secure the arm.
If not, use the supplied small E-clip. (See Fig. 18.)

Note: Skip this step if your kit does not include the pantograph feature.



Figure 18

1979-1981 Switch

Remove the OEM windshield wiper switch.

Use the OEM switch screws to attach the adapter plate to the dash panel.

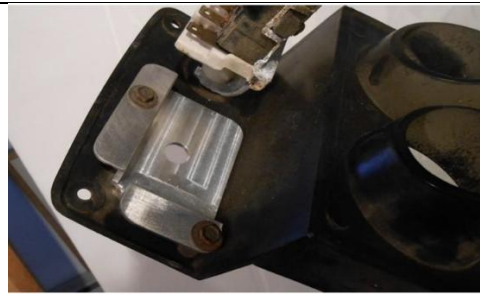


Figure 19

Cover Plate



Figure 20

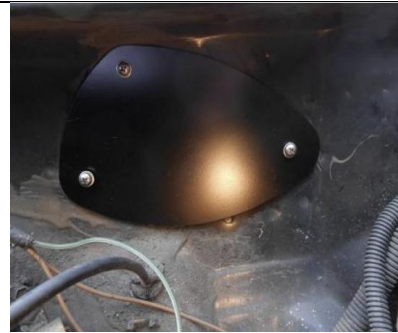


Figure 21

Secure the cover plate to the outside of the firewall using three 10-24 stainless steel screws and three 3/16" flat washers. (See Fig. 20 and 21.)

Thank you for choosing Raingear Wiper Systems. We look forward to assisting you with your next project!

Raingear