

## 1953 -1962 CORVETTE RAINGEAR INSTALLATION INSTRUCTIONS

Designer's Note: The 1953-1962 Corvette Raingear wiper system by Pacific Western Design that you have purchased is complex and will require patient fitting. Complete Instructions and illustrations can also be found on our web site: "Pacificwesterndesign.com"

### GETTING STARTED - SOME RECOMMENDATIONS:

#### **PLEASE TRY OUR WAY FIRST.**

We have found that because Corvettes were virtually hand made there are many subtle differences between each car. This system is designed to accommodate those differences. As you will see, some of the differences are pointed out in the instructions. Because of this we have taken a great deal of effort to make this system adjustable enough to accommodate the differences between the original Corvettes as well as most aftermarket bodies. If, as you are installing it, you think you need to modify the parts supplied, you are probably doing something wrong. Please reread the instructions.

For technical questions etc. please contact us directly! Your dealer does not stock replacement parts and is unlikely to be able to troubleshoot problems.

Another Note: This kit does not contain the outside, chrome escutcheons (trim bezels) which cover the pivot shafts where they pass through the cowl. It also does not include wiper arms and blades and an original switch knob. Pacific Western Design, Inc. Stocks some of these pieces. Please see our price list.

Before proceeding with the installation, please read the instructions and familiarize yourself with the photographs and figures included.

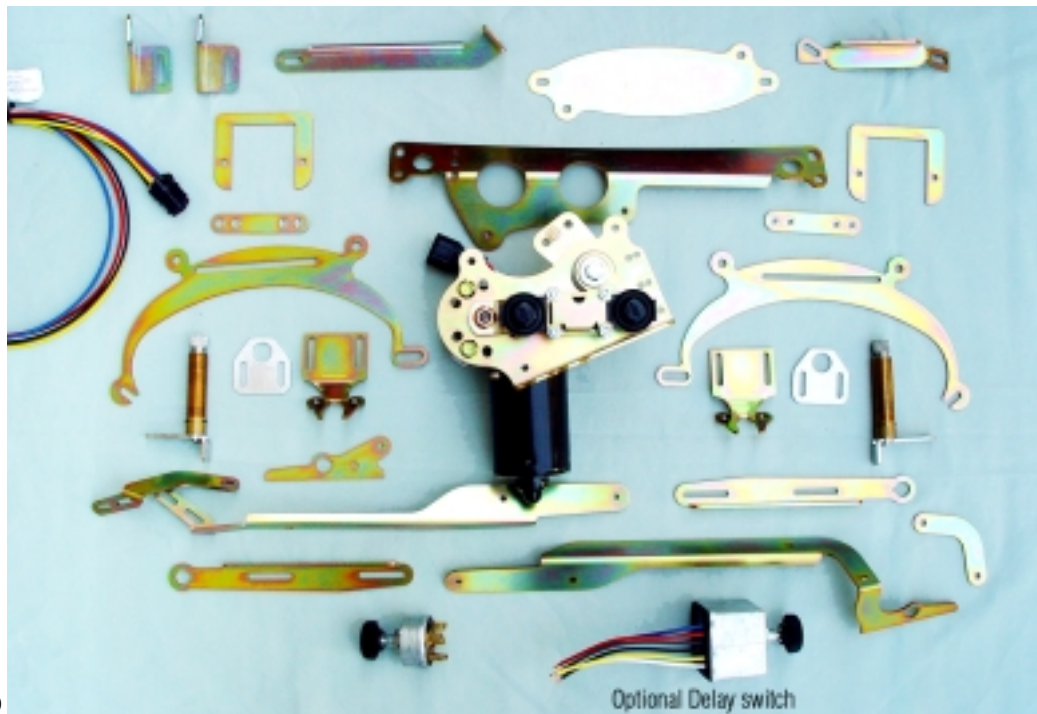


Fig 00

# Instructions

## Removing the stock windshield wiper system.

1. You will be working under the dash in the area of your vehicle that contains the greatest concentration of electrical wiring so first disconnect your battery. Remove and save your stock wiper arms and blades, chrome escutcheons, and stock wiper control knob. Remove the wiper control switch. Be sure to cap any vacuum lines. You will make the installation easier if you remove the instrument cluster, radio and other items that might hinder access to the under dash area.

2. On 1953-55 Corvettes you do not need to remove the stock pivot shaft brackets (Fig 01). On 1956-62 Corvettes you do. Corvette began using a windshield support structure sometime in 1956. It's usually made of aluminum but some are steel. On 1958-62 models with sculpted dashboards, removal of the driver side stock pivot shaft can be particularly difficult. To help, remove the three bolts that attach the windshield support structure at the kick panel. Undo the emergency brake bolts at the dash panel. This will loosen the metal structure and allow removal of the pivot shaft.

3. Remove the radio support (Fig 02). Remove the pivot shaft, spool and cable assembly. It is OK to cut off the screw heads to remove the OEM pivot shafts because the PWD system does not use them. (Fig 03, 04, 05, & 06) Remove the right, or passenger side windshield brace rod. (Fig 07) You'll find the 1/4" passenger side windshield brace rod bolt in the engine compartment. (Fig 08)



(Fig 01) On 53-55 Corvettes you do not need to remove the stock pivot shaft brackets. On 1956-62 Corvettes you do.



(Fig 02) Remove the radio support.



(Fig 03) On 1956-57, remove the spool and cable assembly.



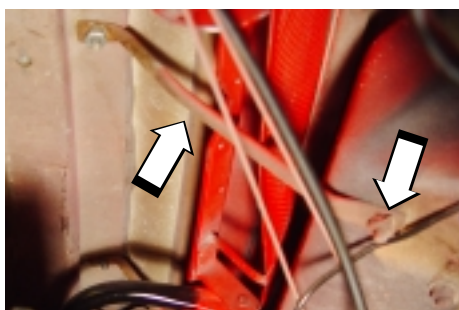
(Fig 04) Later 1958-62 series.



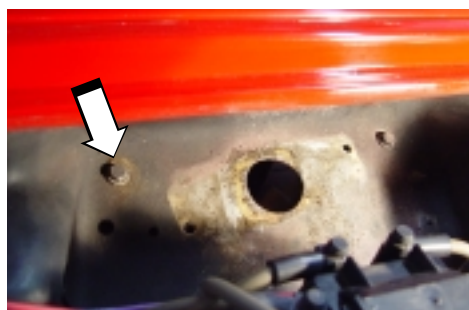
(Fig 05) Remove the pivot shafts.



(Fig 06) The pivot shaft after being removed.



(Fig 07) Remove the right, or passenger side windshield brace rod.



(Fig 08) See the pass side 1/4" bolt in the engine compartment.



## Component Pre-assembly

### 1. Right & left Pivot Shaft and Mounting Assemblies

C-1 Corvettes used two different chrome wiper escutcheons on the outside of the body. The early escutcheons are different from side to side. The later escutcheon is the same for both sides. Assembly procedures change depending on which escutcheons you are using.

1953-57 C-1 Corvettes use the early chrome escutcheons. (Fig 10) The early escutcheons are about 1.06" in overall depth. Note (Fig 11) that early chrome escutcheons are marked "R" or "L" on the backside, deep inside the slots at the 3 and 9 o'clock positions. 1958-62 Corvettes use late 1.20" chrome escutcheons. (Fig 12) Note: 1958-62 chrome escutcheons are identical, both right and left side.

1a. Place the two Pivot Shaft Mount Plates on a table with the tips with slotted holes touching. One is for the right side assembly. The other for the left. (Fig 13)

1b. Using a small tip screwdriver, install 2 rubber bumpers in each part so that the bumpers for each part is on the top side. (Fig 14 & 15). Lubricating the bumpers with a soap solution will help with installation.

1c. Attach the "U" guide to the front of the Pivot Shaft Mounting Plate, between the rubber bumpers. Use two 10-32x 3/8" phillips head screws and washers and the 4 nut backing strip to attach the "U" guide. With the "U" guide positioned on the front of the Pivot Shaft Mount Plate, and the 4 nut backing strip on the back, slide the screws through the ends of the "U" guide and the slots in the Pivot Shaft Mount Plate. Screw them into the outer two threaded holes in the 4 nut backing strip. (Fig 16 & 17)

1d. For cars with a short escutcheon, place a 5/8-24 hex nut onto each brass Pivot Shaft. Run a 5/8-24 hex nut down the barrel as far as it will go.



(Fig 10) The early escutcheons are about 1.06" in overall depth.



(Fig 11) Each early chrome escutcheon is marked "R" or "L" on the backside down inside the slots.



(Fig 12) 1958-62 1.20" chrome escutcheons are identical, both right and left side.



(Fig 13) Place the two Pivot Shaft Mount Plates on a table with the tips with slotted holes touching.



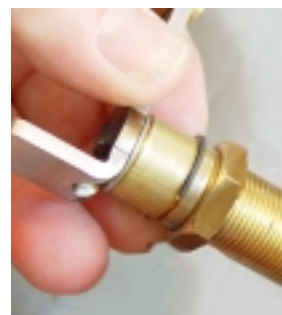
(Fig 14) Using a small tip screwdriver, install 2 rubber bumpers in each part so that the bumpers for each part is on the top side.



(Fig 15) The bumpers have been installed on the top of both brackets.



(Fig 16 & 17) On the opposite side of the pivot shaft Mounting Plate, the 4 nut backing strip is used to attach the "U" Guide to the Mounting Plate.



(Fig 20) If using short escutcheons, place a 5/8-24 hex nut onto each brass Pivot Shaft. Run the nut down the barrel as far as it will go.



(Fig 21) Add the flat aluminum Pivot Shaft Holding Plate down to the first hex nut and install a second 5/8-24 hex nut.

(Fig 20) It may help to hold the brass shaft with pliers or vice grips and use a 3/4" wrench. Skip this procedure for cars using the long escutcheon.

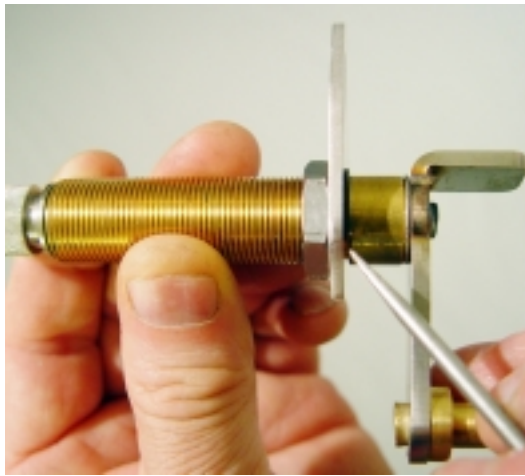
1e. Slip the flat aluminum Pivot Shaft Holding Plate onto the Pivot Shaft. When using **short** escutcheons, slide it down to the 5/8-24 hex nut. (Fig 21) When using **long** escutcheons, slide it down to the Snap ring. (Fig 22) Add a second 5/8-24 hex nut (Fig 21 & 23). Run the second nut all the way down, finger tight.

1f. Back the second 5/8-24 hex nut off at least 3/16". Slip the tips of the open end of the Pivot Shaft Orientation Bracket onto the brass Pivot Shaft between the aluminum Pivot Shaft Holding Plate and second 5/8-24 hex nut. It doesn't go on to the shaft easily. (Fig 30 & 31)

1g. Using two 10-32x3/8" phillips head screws, and washers, attach the aluminum Pivot Shaft Holding Plate to the Pivot Shaft Orientation Bracket. (Fig 32) Orient the screws about mid slot. Tighten the hex nut against the brackets about finger tight. (Fig 33)

1h. Using two 10-32x3/8" phillips head screws and washers, attach the Pivot Shaft Orientation Bracket to the Pivot Shaft Mounting Plate. (Fig 35 & 36)

Do the same for the other side's Pivot Shaft Mounting assembly. Placed side by side, the assemblies should look like Fig 37.



(Fig 22) When using the **long** escutcheons, seat the aluminum Pivot Shaft Holding Plate against the snap ring then install the only hex nut.



(Fig 23) When running the 5/8-24 hex nuts down the barrel of the Pivot Shafts, it may help to hold the brass shaft with pliers or vice grips and use a 3/4" wrench.



(Fig 30) Slip the tips of the open end of the Pivot Shaft Orientation Bracket onto the brass Pivot Shaft.



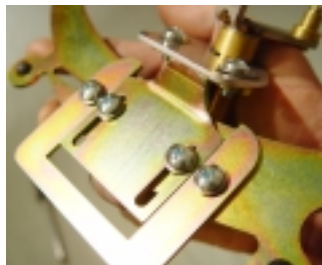
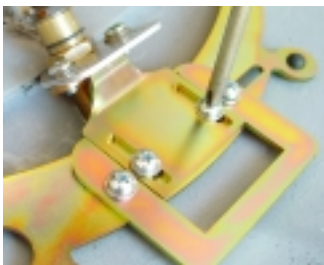
(Fig 31) It doesn't go on the shaft easily. You might find it easier to gently hold the Pivot Shaft with vice grips.



(Fig 32) Using two 10-32x3/8" phillips head screws and flat washers, attach the aluminum Pivot Shaft Holding Plate to the Pivot Shaft Orientation Bracket.



(Fig 33) Run the hex nut down to the Pivot Shaft Orientation Bracket about finger tight.



(Fig 35 & 36) Using the 10-32x3/8" phillips head screws and washers, attach the Pivot Shaft Orientation Bracket to the Pivot Shaft Mounting Plate.

(Fig 37) Placed side by side, the assemblies should look like this.





## 2. Link Assemblies

The passenger side Link Assembly consists of a shorter Link and a longer Link and a Corner Stiffener.

2a. Attach the Corner Stiffener to the longer Link. (Fig 50 & 51). Use two 10-32x3/8" phillips head screws, washers and hex nuts to attach the Corner Stiffener. Tighten the screws.



(Fig 50) Attaching the Corner Stiffener to the passenger side Link.



(Fig 51) The installed Corner Stiffener

2b. Attach the short Link to the other end of the longer Link. Use two 10-32x3/8" phillips head screws, washers and hex nuts, slip the screws through the long slots of the shorter Link at about mid slot. Leave the screws loose or finger tight so the length of the link can be adjusted later. (Fig 52)



(Fig 52) The complete passenger side Link assembly with the longer and shorter links attached.

The driver side Link Assembly is comprised of 4 components; a shorter Link, same as the passenger side and a different longer Link, a Link Tip that attaches to the end of the longer Link, and a link corner Stiffener.

2c. Match the outer end of the longer Link to the Link End Stiffener. (Fig 55) Using a 10-32x 3/8" phillips head screw, washer and hex nut, attach the stiffener to the Link at the hole in the stiffener at the opposite end from the two slotted holes.



(Fig 55) Match the outer end of the longer Link to the Link End Stiffener.



(Fig 56) Sandwich the Link Tip between the Link and the Link End Stiffener.

2d. Sandwich the Link Tip between the Link and the Link End Stiffener. Using two 10-32x1/2" phillips head screws, fasten these three parts together using the slotted holes. Leave the fasteners finger tight for later adjustment. (Fig 56 & 57)



(Fig 57) Attach the 3 together.

2e. In the same way you attached the short Link on the passenger side, install the other short Link to the end of the driver side longer Link assembly. (Fig 58)



(Fig 58) Attach the short Link to the other end of the longer Link assembly.

### 3. Plastic Bushing Installation

Refer to Fig 60, 61 & 62 to see how the Plastic Bushings fit into the keyed holes in the Link Tips.

3a. Orient the tabs on the plastic bushings with the slots in the Link Tip keyed holes. Push the Plastic Bushing into the keyed hole as far as it will go. They are a very tight fit. (Fig 63)

3b. On the opposite side, attach the Plastic Ring over the portion of the bushing extending through the keyed hole. (Fig 64) It's not necessary, but we recommend using a very thin bead of super glue to secure the Plastic Ring to the Plastic Bushing. Be sure to keep the glue out of the keyed hole. (Fig 65) Do the same for the keyed holes in the opposite ends of the Links.



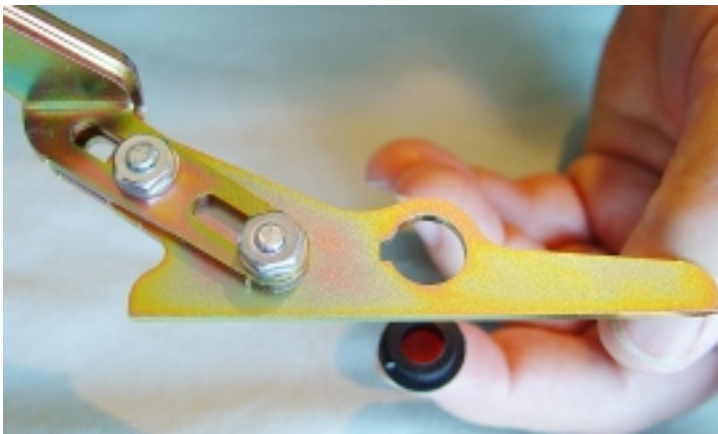
(Fig 60) The Plastic Bushings that fit into the keyed holes in the Link Tips & opposite Link ends.



(Fig 61) The Plastic Bushing tab.



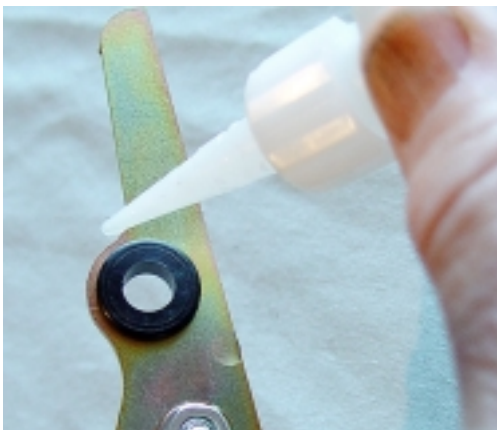
(Fig 62) This shows the keyed hole in the Link Tip.



(Fig 63) Push the Plastic Bushing into the keyed hole as far as it will go.



(Fig 64) The Plastic Bushings that fit into the keyed holes in the Link Tips have a plastic ring that fits on the side that extends through the keyed hole.



(Fig 65) Use a very thin bead of super glue to secure the Plastic Ring to the Plastic Bushing.



# Installation:

## 1. Wiper Motor Mount and Brace Installation

1a. Using two 10-32x3/8 screws, nuts and washers, attach the motor to the motor mount bracket as shown. (Fig 40)



(Fig 40) Using two 10-32x3/8 screws, nuts and washers, attach the motor to the motor mount bracket.

1b. Use a 10mm wrench to remove the motor mounting screw as shown (Fig 41). Attach the Motor Brace. (Fig 42)



(Fig 41) Use a 10mm wrench to remove the motor mounting screw as shown

## 2. Main Drive Unit Installation

2a. Remove four 1/4-20 hex bolts holding the cowl vent hinge brackets to the under side of the cowl. (Fig 43)



(Fig 43) Remove 4 1/4-20 hex bolts holding the cowl vent hinge brackets to the under side of the cowl.

2b. Using the same 1/4" threaded holes as guides, place the Main Drive Unit of the PWD wiper system up against the underside of the cowl, between the cowl vent hinge brackets. Use four 1/4-20x3/8" hex bolts and 1/4" flat washers to hold the cowl vent hinge brackets and Main Drive Unit in place. (Fig 44)



(Fig 42) Attach the Motor Brace.



(Fig 44) Place the Main Drive Unit up against the underside of the cowl, between the cowl vent hinge brackets. Use four 1/4-20x3/8" hex bolts and 1/4" flat washers to hold the Main Drive Unit and cowl vent brackets in place.

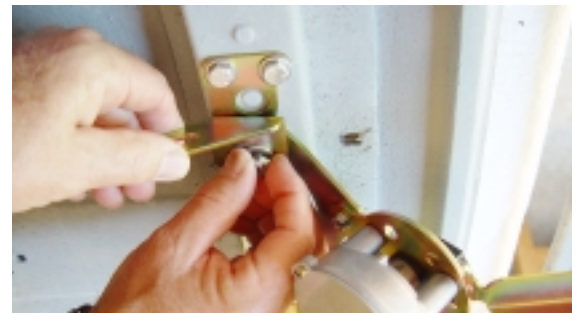
2c. The opposite end of the Motor Brace goes up against the underside of the firewall where the left side of the old (OEM) wiper motor was attached. Attach the Brace using a 10-32x3/4" phillips, washer, and nut. This same fastener holds one side of the new Cover Plate. (Fig 45)



(Fig 45) The opposite end of the Motor Brace goes up against the underside of the firewall where the left side of the old (OEM) wiper motor was attached. Attach the Brace using a 10-32x3/4" phillips, washer, and nut. This same fastener holds one side of the new Cover Plate.

2d. A new Radio Support Tab can be placed on the new Motor Mount Bracket. Use a 1/4-20x5/8" hex bolt and flat washer to attach it. (Fig 46)

(Fig 46) A new Radio Support Tab can be placed on the new Motor Mount Bracket. Use a 1/4-20x5/8" hex bolt and flat washer to attach it.



### 3. Pivot Shaft Installation

Installation and adjustment can be difficult, especially on the 1958-62 models. Just lying on your back, looking upward past the clutch and brake pedals, steering column, windshield support structure, emergency brake and the electrical wiring can be a challenge. Remove as much of the above as practical.

**Begin at the passenger side. It's easier!**

3a. Remove the windshield frame attachment nut from the stud (bolt) beneath the windshield trough, inboard from the pivot shaft hole in the cowl. Also remove the windshield attachment nut from the next outboard stud, on the outboard side of the pivot shaft hole.

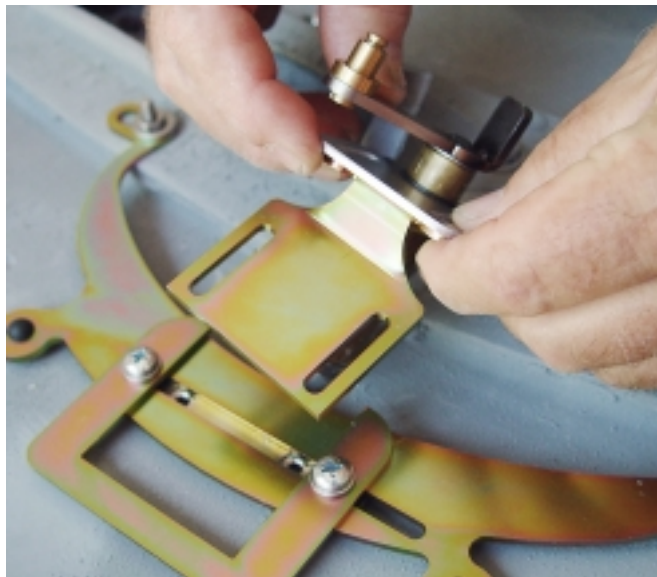
3b. If your Corvette has the metal substructure that extends from side to side, under the windshield you will need to work around it by partially disassembling the pivot shaft and mounting assembly. (Fig 70). Remove the Pivot Shaft Orientation Brackets from the Pivot Shaft Mounting Plates and "U" Guides. (Fig 71). After the Pivot Shaft Orientation Brackets are removed, make sure the "U" Guides are loose enough to slide from side to side in the Pivot Shaft Mounting Plates.

3c. From the forward side of the metal structure, slide the outboard tip (with the open ended slotting) of the Pivot Shaft Mounting Plate over the top of the metal structure and hook it onto the exposed windshield mount stud. (Fig 72)

3d. The inboard slotted hole of the Pivot Shaft Mounting Plate slips over the next inboard windshield retaining stud (bolt), on the other side of the pivot shaft hole in the cowl. Move the Pivot Shaft Mounting Plate inboard, towards the center of the car. Place #12-24 hex nuts and 1/4" flat washers on



(Fig 70) This is the passenger side looking aft. The fiberglass cowl has been removed. This Corvette has the metal substructure that requires separating the Pivot Shaft Orientation Brackets from the Pivot Shaft Mounting Plates and "U" Guides to install the Pivot Shaft Mounting Plates and "U" Guides between the metal substructure and fiberglass cowl.



(Fig 71) If your Corvette has a metal substructure, side to side, under the windshield, you will need to remove the Pivot Shaft Orientation Brackets from the Pivot Shaft Mounting Plates. If it does not, this step is optional.



(Fig 72) This shows an early version of the Pivot Shaft Mounting Plate installed above the metal substructure.



the windshield retaining studs and tighten them. (Fig 75 & 76) Fig 76 shows the desired results without the metal substructure in the way.

3e. Once the Pivot Shaft Mounting Plate with "U" Guide is in place, insert the brass Pivot Shaft, with the Pivot Shaft Orientation Bracket attached, upward through its corresponding wiper shaft hole in the fiberglass cowl. (Fig 74)

3f. Some cars need the excess glue aft of the Pivot Shaft removed so the Pivot Shaft will fit properly. (Fig 73)

3g. Make sure the "U" Guide, attached to the Pivot Shaft Mounting Plate, still slides from side to side. Place the Pivot Shaft Orientation Bracket into the "U" Guide. (Fig 74) Using two 10-32x 3/8" phillips head screws and washers, re-secure the Pivot Shaft Orientation Bracket to the "U" Guide. The Pivot Shaft should be centered within the hole in the cowl. (Fig 77) If not, see the Pivot Shaft Adjustment procedures.

3h. If your car does not have a metal structure, simply install the pivot shaft mounting assembly without disassembling it. Insert the pivot shaft through the pivot shaft hole in the cowl and attach the Pivot Shaft Mounting Plate to the windshield retaining studs as explained above. (Fig 75 & 76)

Repeat the procedure on the Driver's side.

#### 4. Pivot Shaft Adjustment

The primary adjustments are done by changing the Pivot Shaft Orientation Bracket and the aluminum Pivot Shaft Holder Plate positions. Simultaneous adjustment allows movement in all directions.

4a. Center the Pivot Shaft from side to side, within the hole in the cowl (Fig 77) by moving the "U" guide and Pivot Shaft Orientation Bracket from side to side. To do this, loosen the four phillips head screws holding



(Fig 73) Some Corvettes need the excess glue, aft of the pivot shaft, removed so the new pivot shaft will fit properly.



(Fig 74) Insert the Pivot Shaft with the Pivot Shaft Orientation Bracket upward toward the corresponding wiper shaft hole in the fiberglass cowl. This car does not have the metal substructure.



(Fig 75) You can install the pivot shaft mounting assembly as a single unit on cars without the metal sub structure. This photo shows the passenger's side.



(Fig 76) Place #12-24 hex nuts and 1/4" flat washers on the windshield retaining studs and tighten them.



(Fig 77) The Pivot Shaft should be centered within the hole in the cowl.



(Fig 78) A primary adjustment is by loosening the four phillips head screws in the Pivot Shaft Orientation Bracket. The inside two give front to back (in and out) adjustment. The outside two give side to side adjustment.

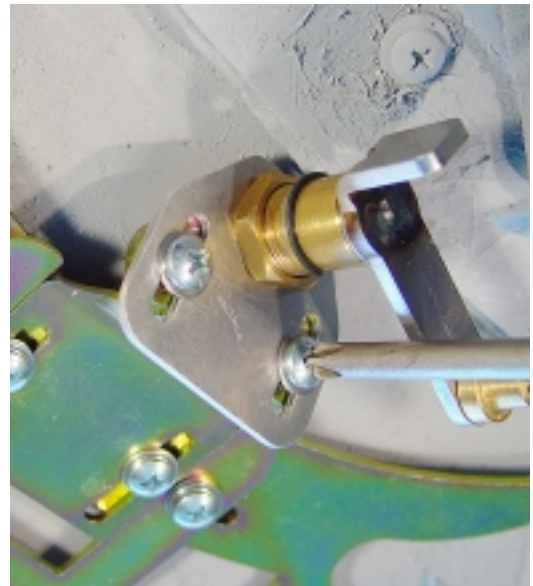
the Pivot Shaft Orientation Bracket and "U" guide to the Pivot Shaft Mounting Plate. (Fig 78) The outside two secure the "U" guide and provide side to side adjustment. Retighten the outside two once the shaft is centered from side to side. The inside two provide up to down centering within the hole in the cowl. It also helps provide in and out adjustment of the Pivot Shaft tip. Center the Pivot Shaft and tighten the inside two screws.

4b. On the outside of the cowl, with the chrome escutcheon placed onto the Pivot Shaft and resting on the body, measure the length of the Pivot Shaft threads showing. 1/8" to 3/16" of the brass threads should be extending through the escutcheon. (Fig 79)



(Fig 79) With the chrome escutcheon placed onto the Pivot Shaft and resting on the body, 1/8" to 3/16" of the brass threads of the Pivot Shaft should be showing.

4c. Adjust the Pivot Shaft tip position by moving the Pivot Shaft Orientation Bracket and the aluminum Pivot Shaft Holding Plate. Re-loosen the inside two screws holding the Pivot Shaft Orientation Bracket to the Pivot Shaft Mounting Plate. (Fig 78) Loosen the two screws and brass hex nut securing the aluminum Pivot Shaft Holding Plate to the Pivot Shaft Orientation Bracket. (Fig 81) Pulling the Pivot Shaft Orientation Bracket aft while pushing the aluminum Pivot Shaft Holding Plate upward will draw the tip of the Pivot Shaft, outside the cowl, inward. Doing the opposite will move the tip of the Pivot Shaft outward.

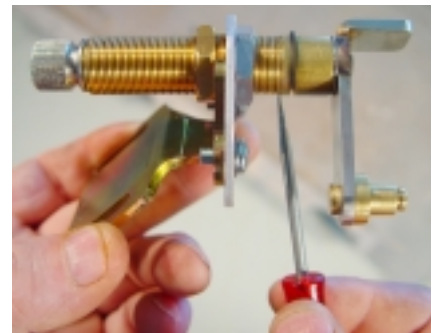


(Fig 81) The other primary, up and down, adjustment is by loosening the two phillips head screws of the aluminum Pivot Shaft Holding Plate so it can be adjusted.

4d. When using the short escutcheons, the tip of the Pivot Shaft can also be moved closer to the cowl by adjusting the 5/8-24 hex nuts that secure the brass Pivot Shaft to the Pivot Shaft Orientation Bracket. To do this you must remove the Pivot Shaft, Pivot Shaft Orientation Bracket and Pivot Shaft Holding Plate. Loosen the 5/8-24 hex nut closest to the tip and rotate it toward the tip by the distance you want to pull the tip closer to the cowl. Slide the Pivot Shaft Orientation Bracket and Pivot Shaft Holding Plate up against that 5/8-24 hex nut. Tighten the other 5/8-24 hex nut up against the Pivot Shaft Holding Plate. (Fig 82 & 83)



(Fig 82) Loosen the 5/8-24 hex nut closest to the tip and rotate it toward the tip by the distance you want to pull the tip closer to the cowl.



(Fig 83) Slide the Pivot Shaft Orientation Bracket and Pivot Shaft Holding Plate up against that 5/8-24 hex nut. Tighten the other 5/8-24 hex nut up against the Pivot Shaft Holding Plate. The pointer shows the distance the tip of the Pivot Shaft will be moved closer to the cowl.

4e. When you are satisfied with the fit of the Pivot Shaft and chrome escutcheon fit on the outside of the car, tighten all interior screws.

4f. To seal the pivot shaft hole in the cowl, place body sealer on the bottom of the escutcheon before final installation.



(Fig 84 & 85) When you are satisfied with the fit of the Pivot Shaft and chrome escutcheon fit on the outside of the car, tighten all interior screws before installing the chrome escutcheon nut with the aluminum Escutcheon Wrench supplied in the kit. Overtightening can damage the fiberglass.

4g. Install the escutcheon and the chrome escutcheon nut and tighten the nut with the aluminum Escutcheon Wrench supplied in the kit. (Fig 84 & 85) Note: The chrome escutcheon nut only holds the escutcheon in place. Overtightening can damage the fiberglass.



## 5. Installing the Cross Links

**Passenger side:** The Passenger Side Cross Link does not have adjustment slots at the outer end, only between the short and long link.

5a. Place the black bushing, in the short link end of the Passenger Side Cross Link, on the upper brass pivot pin on the Drive Unit in the middle of the car. Place the black bushing on the other end of the Passenger Side Cross Link onto the brass pivot pin on the passenger side Pivot Shaft arm. (Lubricating the plastic bushing with oil or grease is not necessary but is recommended to extend its life.)

5b. Place a thin washer and spring clip onto the exposed end of the upper brass pivot pin on the Drive Unit. Using the side of a 1/4 or 5/16 open end wrench or your finger tips, push inward and slide the clip until it snaps in place. Install the washer and spring clip for the brass pivot pin on the passenger side wiper arm Pivot Shaft in the same way. (Fig 92& 93)

5c. To adjust the Passenger Side Cross Link length, loosen the two phillips head screws that attach the long and short link halves of the Passenger Side Cross Link. The slots in the short link allow for adjustment. (Fig 90)

5d. At the Pivot Shaft, there should be between a 1/4" to 3/16" gap between the flat in the Cross Link end and the stop tab on the Pivot Shaft when it is in the parked position. (Fig 91) Extend or retract the Cross Link until the gap is within the 1/4" to 3/16" requirements. Extending the cross link reduces the gap. Tighten the two phillips head screws to fix the Cross Link length.

**Driver side:** Adjustment starts at the outer end of the driver side Cross Link assembly near the driver side wiper arm Pivot Shaft.

5e. Attach the driver side Cross Link assembly to the remaining pivot pins in a like manner as the passenger side. The short link end of the driver side Cross Link assembly is installed on the



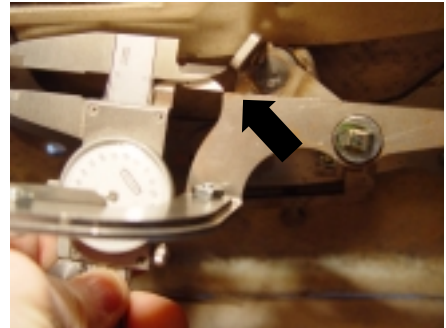
(Fig 92) Place a thin washer and spring clip onto the exposed end of the upper brass pivot pin on the Drive Unit.



(Fig 90) Passenger side Link length adjustment. Loosen the two phillips head screws that attach the long and short Link halves. Slide them apart or together to adjust the length.



(Fig 93) Using the side of a 1/4 or 5/16 open end wrench or your finger tips, push inward and slide the clip until it snaps in place.



(Fig 91) When the Pivot Shaft is in the parked position, there should be between a 1/4" to 3/16" gap between the flat in the Cross Link end and the stop tab on the Pivot Shaft.



(Fig 95) On the driver side loosen the two phillips head screws, extend or retract the Link Tip as needed clear both the defroster duct and the brake pedal/clutch pedal bracket. Retighten the screws.

remaining brass pivot pin on the Drive Unit. The outer end attaches to the driver side wiper arm Pivot Shaft.

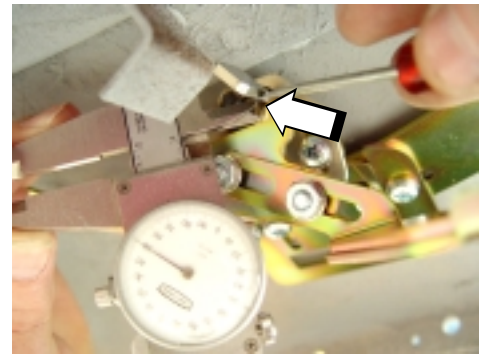
5f. To clear both the defroster duct and the brake pedal/clutch pedal bracket, the tip of the driver side Cross Link can

be extended away from the cowl or drawn closer to the cowl to accommodate clearance. Loosen the two phillips head screws, extend or retract the Link Tip as needed and retighten the screws. (Fig 95)

5g. Adjusting the park position of the Pivot Shaft is done in the same way as the passenger side by extending or retracting the driver side Cross Link in the center, where the short and long links are attached with two phillips head screws. (Fig 96) The gap between the flat in the Cross Link Tip and the stop tab on the Pivot Shaft, when it is in the parked position, should be within the 1/4" to 3/16" requirements. (Fig 97)



(Fig 96) Driver side Link length adjustment.



(Fig 97) Adjusting the parked position of the Pivot Shaft is done in the same way as the Passenger side.

## 6. Installing the Motor Cover Plate and Windshield Brace.

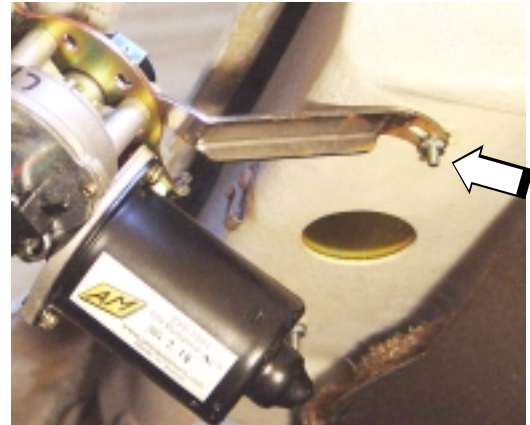
A Cover Plate is supplied to cover the hole left in the firewall for the old wiper motor spool. (Fig 100)



(Fig 100) A Cover Plate is supplied to cover the hole left in the firewall for the old wiper motor spool.

The left hand slotted hole in the Cover Plate attaches at the same hole in the cowl as the new Motor Brace. (Fig 101 & 102)

(Fig 101) The Motor Brace was attached to the cowl so the wiper unit could be installed and adjusted. The Windshield Brace Mounting Bracket will be added at that location.



The Windshield Brace Mounting Bracket also shares the same hole and fastener. Fig 103 illustrates how the Motor Brace, Windshield Brace Mounting Bracket, inside the firewall, and the Cover Plate, outside the firewall, share the same mounting point. Wait to install the Windshield Brace and Windshield Mounting Bracket until after the Wiper unit is installed and adjusted to make the wiper unit installation easier.



(Fig 102) The Cover Plate goes where the old motor was mounted.

6a. Remove the 10-32x3/4 phillips head screw holding the Motor Brace to the firewall. Insert that screw in the left hand slotted hole in the Cover Plate and insert it down through the original hole in the firewall, through the Motor Brace. Then install the Windshield Brace Mounting Bracket on the same bolt. Install the washer and nut on the 10-32x3/4 phillips head screw.

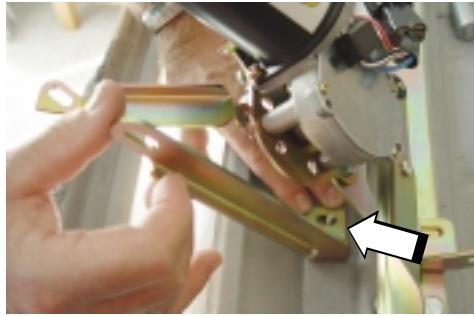


(Fig 103) This photo illustrates how the Motor Brace, Windshield Brace Mounting Bracket and Cover Plate share the same mounting point.

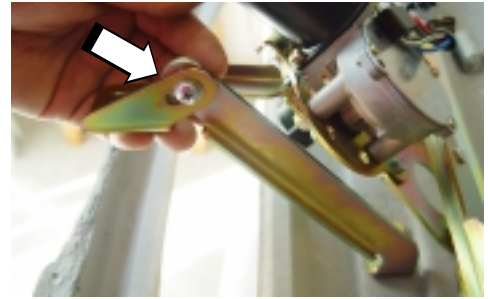


6b. Attach the Windshield Brace on the middle right hand windshield attachment bolts. (Fig 104 & 105) Attach the other end of the to the Windshield Brace to the Windshield Brace Mounting Bracket mounted under the Cover Plate.

6c. Install the remaining 10-32x 3/4 phillips head screws in the Cover Plate.



(Fig 104) Attach the Windshield Brace on the middle right hand windshield attachment bolts.



(Fig 105) Attach the other end of the to the Windshield Brace to the Windshield Brace Mounting Bracket mounted under the Cover Plate.

## 7. Installing the Switch

7a. Make certain the switch is in the off position, all the way counterclockwise.

7b. If your application is using the standard 2-speed switch, install the switch so the flat spot in the shaft is at the bottom, 6 o'clock position. This will align the shaft with the set screw in the bottom of the stock switch knob.



(fig 110) File a flat spot in the shaft at the 6 o'clock position for the switch knob's set screw.



(Fig 111) File enough to allow the set screw to securely clamp the knob to the shaft.

7c. If your application is using the optional 2-speed switch with intermittent delay, install the switch in the dashboard in the manner you like best. File a flat spot in the shaft at the bottom, 6 o'clock position, for the switch knob's set screw. (Fig 110) File enough to allow the set screw to securely clamp the knob to the shaft. (Fig 111)

## 8. Wiring

8a. Please wire the system according to the wiring diagram supplied. **NOTE: with an intermittent switch, you cannot test run this system using power from a battery charger.** Test with a fully charged 12 volt automotive battery.

## 9. Testing & installing wiper arms and blades.

9a. Before installing the wiper arms and blades, test the wiper sweep by wrapping tape around the shaft, leaving about a 6" flap. Turn on the wipers and make sure the sweep is correct and the arms will park in the proper position. When satisfied that the sweep is correct, remove the tape and install the arms and blades.