COMMITTED TO THE BUILD

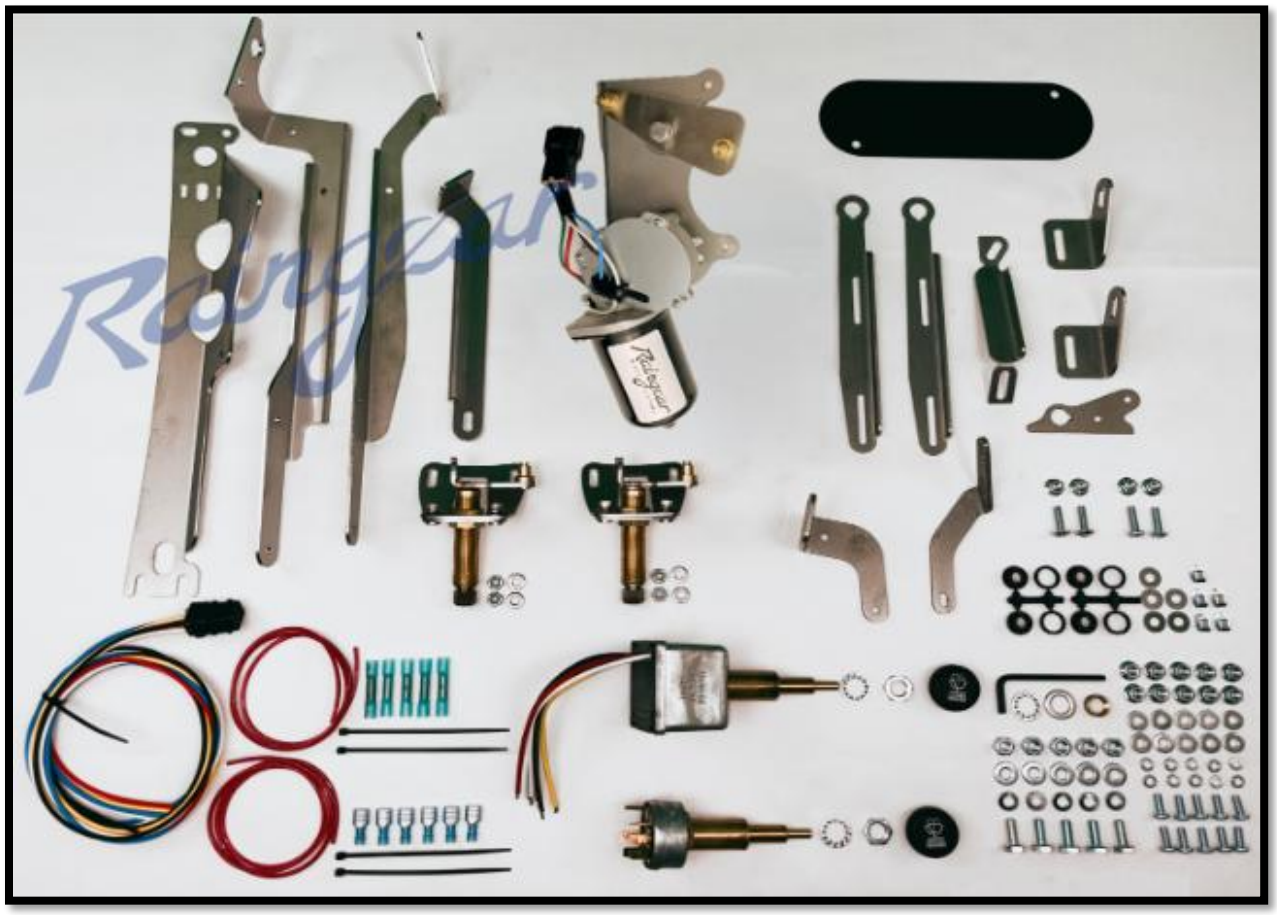
Raingear

HIDDEN WIPER SYSTEM FOR YOUR CLASSIC CAR

ASSEMBLED IN ARIZONA USA RAINGEARWIPERS.COM

**Installation Instructions**

# 1958-1962 Corvette



**Designer's Note:** The 1958–1962 Corvette Raingear Wiper System you've purchased is a precision-engineered, complex installation that will require patience and careful fitting.

The drive unit you've received is configured to fit with Vintage Air systems. It may not match the photos shown in this guide exactly, but the installation process remains the same. The photo illustrates all kit components, including both the standard 2-speed switch and the optional 2-speed delay switch. The drive unit is shown as shipped—set up to fit with Vintage Air and most other applications

## Getting Started – Recommendations

### Please follow our installation method first.

Because Corvettes of this era were virtually **hand-built**, there are often **subtle differences** between individual cars. You may notice variations between your vehicle and the photos in these instructions—that's perfectly normal. Proceed with the installation; this system is **designed to accommodate** those differences.

Throughout the guide, we've noted some of these variances and provided solutions where needed. We've also gone to great lengths to make this system **adjustable**, ensuring it fits both **original Corvettes and aftermarket bodies.**

If, during installation, you feel that **any modification** to the supplied parts might be necessary, please **contact us first** at **Sales@RaingearWipers.com** before proceeding.

For **technical questions** or **installation support**, reach out to us directly.

Please note that **dealers do not stock replacement parts** and may not be able to provide troubleshooting assistance.

**Additional Notes**

This kit **does not include:**

- The **chrome escutcheons (trim bezels)** that cover the pivot shafts where they pass through the cowl.
- **Wiper arms, blades,** or the **original switch knob.**

Your **original components** will work with this system.

> ⚠ **Important:** You will be working in an area of the vehicle that contains a high concentration of electrical wiring.
>
> **Disconnect the battery before beginning installation.**

## Removing the Stock Windshield Wiper System

1. **Prepare the workspace**
   You will be working under the dash, where the **greatest concentration of electrical wiring** is located. **Disconnect the battery** before beginning.

Next, remove and **save** the following stock components:

- Wiper arms and blades
- Chrome escutcheons
- Wiper control knob

Remove the **wiper control switch** and **cap any vacuum lines**.

*Tip:* Installation will be easier if you temporarily remove the **instrument cluster, radio, and any other items** that might restrict access to the under-dash area.

2. **Loosen the windshield support structure**
   Corvettes began using a windshield support structure around **1956**, typically made of aluminum (some are steel).

On **1958–1962 models with sculpted dashboards**, removal of the **driver-side pivot shaft** can be difficult. To assist:

- 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**, making pivot shaft removal easier.

3. **Remove remaining components**
   - Remove the **radio support** (if your car has one). *(See Fig. 1)*
   - Remove the **pivot shaft, spool, and cable assembly**. *(See Fig. 2)*
   - Remove the **right (passenger-side) windshield brace rod**. *(See Fig. 3)*

Note: The 1/4” passenger-side windshield brace rod bolt is located in the **engine compartment**. *(See Fig. 4)* Its position may vary slightly by about 1/8".

4. You will **reuse the two mounting holes** from the passenger-side brace rod later to mount our **windshield support**.

## Figure References:

**Fig. 1:** Remove the radio support (if equipped).

**Fig. 2:** Remove the spool and cable assembly.

**Fig. 3:** Remove the passenger-side windshield brace rod.

**Fig. 4:** Location of the 1/4” passenger-side bolt in the engine compartment (top-left bolt in the picture).

## Link Assemblies

### Passenger-Side Link Assembly

The **passenger-side link assembly** consists of:

- One **longer link**
- One **shorter link**
- One **corner stiffener**

1. **Attach the Corner Stiffener**
    - Attach the **corner stiffener** to the **longer link**. *(See Fig. 5 & 6)*
    - Use **three 10-32 x 1/2” Phillips head screws** and **three flange nuts** to secure the stiffener.
    - **Tighten the screws**.

**Fig. 5:**
Attaching the corner stiffener to the passenger-side link.

**Fig. 6:** Installed corner stiffener.

2. **Attach the Shorter Link**

   - Attach the **shorter link** to the other end of the **longer link**.
   - Use **two 10-32 x 1/2" Phillips head screws** and flange nuts.
   - Insert the screws through the **long slots of the shorter link**, roughly at **mid-slot**.
   - Leave the screws **finger tight** to allow later adjustment. *(See Fig. 7)*

**Fig. 7:** Complete passenger-side link assembly with longer and shorter links attached.

## Driver-Side Link Assembly

The **driver-side link assembly** consists of four components:

- One **shorter link** (same as passenger side)
- One **longer link** (different from passenger side)
- One **link tip** (attaches to the end of the longer link)
- One **corner stiffener**

3. **Attach the Link End Stiffener**

   - Align the **outer end of the longer link** with the **link end stiffener**. *(See Fig. 8)*
   - Secure with **10-32 x 3/4" Phillips head screws** and flange nuts at the hole opposite the **two slotted holes**.

**Fig. 8:**
Outer end of longer link matched to the link end stiffener.

4. **Attach the Link Tip**

    - Sandwich the **link tip** between the **longer link** and the **link end stiffener**.
    - Use **two 10-32 x 3/4" Phillips head screws** and flange nuts through the **slotted holes**.
    - Leave screws **finger tight** for later adjustment. *(See Fig. 9 & 10)*

5. **Attach the Shorter Link**

    - Attach the **shorter link** to the other end of the **driver-side longer link assembly**, similar to the passenger-side installation. *(See Fig. 11)*

| | | |
|---|---|---|
| **Fig. 9:** Link tip sandwiched between the longer link and link end stiffener.  | **Fig. 10:** Fastening all three parts together.  | **Fig. 11:** Shorter link attached to the other end of the longer link assembly.  |

## Plastic Bushing Installation

Refer to **Fig. 12, 13 & 14** to see how the **plastic bushings** fit into the **keyed holes** in the link tips.

| | | |
|---|---|---|
| **Fig. 12:** Plastic bushings that fit into the keyed holes in the link tips and opposite link ends.  | **Fig. 13:** Detail of the plastic bushing tab.  | **Fig. 14:** Keyed hole in the link tip. Note: the link tip and passenger-side link arm supplied are **revised and shorter** than those pictured here.  |

## Installation Steps

1. **Insert the Plastic Bushing**
    - 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**.
    - The fit is **very tight**, which is normal. *(See Fig. 15)*

2. **Attach the Plastic Ring**

   - On the **opposite side**, place the **plastic ring** over the portion of the bushing extending through the keyed hole. *(See Fig. 16)*
   - Optional: Apply a **very thin bead of super glue** to secure the plastic ring to the bushing.
     - **Important:** Keep glue out of the keyed hole to ensure proper link movement. *(See Fig. 17)*
   - Repeat this process for the **keyed holes at the opposite ends** of the links.

**Fig. 15:** Plastic bushing pushed fully into the keyed hole.

**Fig. 16:** Plastic ring fitted over the bushing extending through the keyed hole.

**Fig. 17:** Optional thin bead of super glue securing the plastic ring to the bushing.

## Installation

**Note:** On your drive unit, the **motor is pointing to the right**. This configuration is to fit with **Vintage Air**, but the installation process remains the same.

**Fig. 18:** Motor attached to the motor mount bracket using 10-32 x 1/2" screws, nuts, and washers.

### 1. Wiper Motor Mount and Brace Installation

#### 1a. Attach Motor to Motor Mount Bracket

- Using **two 10-32 x 1/2" Phillips head screws**, nuts, and washers, attach the **motor** to the **motor mount bracket**. *(See Fig. 18)*

#### 1b. Attach Motor Brace

- Use a **10mm wrench** to remove the motor mounting screw. *(See Fig. 19)*
- Attach the **Motor Brace** as shown. *(See Fig. 20)*

**Fig. 19:** Remove motor mounting screw with a 10mm wrench.

**Fig. 20:** Motor brace installed.

## 2. Main Drive Unit Installation

2a. **Prepare the Cowl**

- Remove the **four 1/4-20 hex bolts** holding the cowl vent hinge brackets to the underside of the cowl. *(See Fig. 21)*

2b. **Install Main Drive Unit**

- Using the same **1/4" threaded holes as guides**, position the **Main Drive Unit** between the **cowl vent hinge brackets**.
- Secure with **four 1/4-20 x 5/8" hex bolts** and **1/4" flat washers**. *(See Fig. 22)*

2c. **Attach Motor Brace to Firewall**

- Position the **opposite end of the motor brace** against the underside of the firewall, where the **OEM wiper motor** was mounted.
- Secure with a **10-32 x 3/4" Phillips head screw, washer, and nut**.
- This fastener also holds **one side of the new cover plate**. *(See Fig. 23)*

2d. **Install Radio Support Tab (Optional)**

- Attach a **new radio support tab** to the motor mount bracket using a **1/4-20 x 5/8" hex bolt** and **flat washer**.

| | | |
|---|---|---|
| **Fig. 21:** Removing cowl vent hinge bracket bolts. | **Fig. 22:** Main Drive Unit positioned between cowl vent hinge brackets. *Note: motor orientation may differ; yours points to the right.* | **Fig. 23:** Motor brace attached to firewall; note possible need to drill a new hole for alignment. |
|  |  |  |

## 3. Pivot Shaft Installation

**Tip:** Installation can be challenging due to limited access. Begin at the **passenger side** for easier alignment.

3a. **Prepare Pivot Shaft**

- Ensure **Allen head screws** are loose so the two sheet metal pieces **move freely**.

3b. **Position Pivot Shaft**

- Locate the **10-24 studs** used by the original pivot shaft brackets. *(See Fig. 24)*
- Insert the **tip of the brass pivot shaft** through the wiper hole in the body.
- Align the **slotted holes** with the studs. *(See Fig. 25)*
- Secure with **two 3/16" flat washers** and **two 10-24 lock nuts**. *(See Fig. 26)*

**Fig. 24:** Original pivot shaft bracket studs.

**Fig. 25:** Align slotted holes onto studs.

**Fig. 26:** Pivot shaft bracket secured to body.

3c. **Tighten Allen Screws**

- The brass pivot shaft should self-orient in the wiper hole.
- Tighten the **Allen head screws**. *(See Fig. 27)*

3d. **Install Exterior Components**

- Place a **fiber gasket** over the brass pivot shaft.
- Install the **passenger-side chrome escutcheon** and **chrome escutcheon nut**. *(See Fig. 28)*
- Apply **sealant** on the gasket if desired, then tighten with the **aluminum escutcheon nut wrench**. *(See Fig. 29)*

**Fig. 27:**

**Fig. 28:**

**Fig. 29:**

**Notes:**

- Overtightening can **damage fiberglass**.
- Escutcheon wrench kits are available at **RaingearWipers.com**.

## 4. Pivot Shaft Adjustment

4a. Remove the **Pivot Shaft Assembly**.
4b. Loosen the **two brass hex nuts** securing the pivot shaft to the bracket using **3/4" open-end wrenches**.
4c. Adjust the pivot shaft as needed and reinstall. *(See Fig. 30)*

**Fig. 30:** Adjust pivot shaft length to correct the amount of exposed brass.

## 5. Installing the Cross Links

### Passenger Side:

5a. Position the **black bushing** in the **short link end** of the passenger-side cross link on the **upper brass pivot pin** of the drive unit. Place the other end on the **passenger-side pivot shaft**.

- Lubricate the **plastic bushing with grease** to extend life.

5b. Apply a **dab of thick axle grease** on the brass pin and exposed side of the plastic bushing.

- Place a **thin flat washer** onto the exposed brass pivot pin. *(See Fig. 31)*
- Install the **spring clip** using needle-nose pliers. *(See Fig. 32)*
- Repeat on the passenger side.

5c. Adjust the **link length**: loosen the **two Phillips screws** connecting the long and short link halves. *(See Fig. 33)*
5d. Ensure a **1/4" to 3/16" gap** between the flat of the cross link end and the pivot shaft stop tab in the **parked position**. *(See Fig. 34)*

**Fig. 31:**

**Fig. 32:**

**Fig. 33:**

**Fig. 34:**

### Driver Side:

5e. Attach the **driver-side cross link** to the remaining pivot pins similarly.
5f. Adjust the **link tip** to clear the defroster duct and pedal brackets. Loosen the **Phillips screws**, extend or retract the link, and retighten. *(See Fig. 35)*
5g. Adjust the **park position** using the **short and long link adjustment screws**, maintaining a 1/4" to 3/16" gap. *(See Fig. 36 & 37)*

**Fig. 35:**

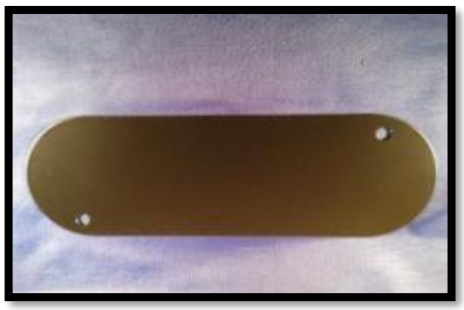
**Fig. 36:**

**Fig. 37:**

**Cover Plate Installation:**

- Attach the supplied **cover plate** over the old wiper motor hole. *(See Fig. 38 & 39)*

**Fig. 38:**



*A Cover Plate is supplied to cover the hole left in the firewall from the old wiper motor. 1958-62 plate shown.*

**Fig. 39:**

*The Cover Plate goes where the old motor was mounted. (1953-57 Cover Plate shown.)*

**Windshield Brace Installation:**

- Attach the brace to the **middle right-hand windshield bolts** and the **bracket under the cover plate** using **1/4-20 bolt, nut, flat washer, and lock washer**. *(See Fig. 40 & 41)*
- Install remaining **10-32 x 3/4" Phillips screws** in the cover plate.

**Fig. 40:**

**Fig. 41:**

## 6. Installing the Switch

6a. Ensure the **switch is in the OFF position** (fully counterclockwise).
6b. **Standard 2-speed switch:**

- Align the **flat spot** on the shaft at the **6 o'clock position** for proper set screw alignment.

6c. **Optional 2-speed intermittent switch:**

- Install in the preferred orientation.
- File a **flat spot at 6 o'clock** for the switch knob set screw. *(See Fig. 42 & 43)*

**Fig. 42:**

**Fig. 43:**

## 7. Wiring

- Wire the system according to the **supplied diagram**.
- **Important:** Do not test with a battery charger when using an intermittent switch. Use a **fully charged 12V automotive battery**.

2 Speed

2 Speed with Delay

*https://raingearwipers.com/installation-instructions*

## 8. Testing & Installing Wiper Arms and Blades

8a. Test the **wiper sweep** before installing arms and blades:

- Wrap tape around the shaft with a **6" flap**.
- Turn on the wipers to verify sweep and park position.
- Once satisfied, remove the tape and install the arms and blades.

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