COMMITTED TO THE BUILD
Raingear
HIDDEN WIPER SYSTEM FOR YOUR CLASSIC CAR
ASSEMBLED IN ARIZONA USA RAINGEARWIPERS.COM

Installation Instructions

1962-1967 Nova

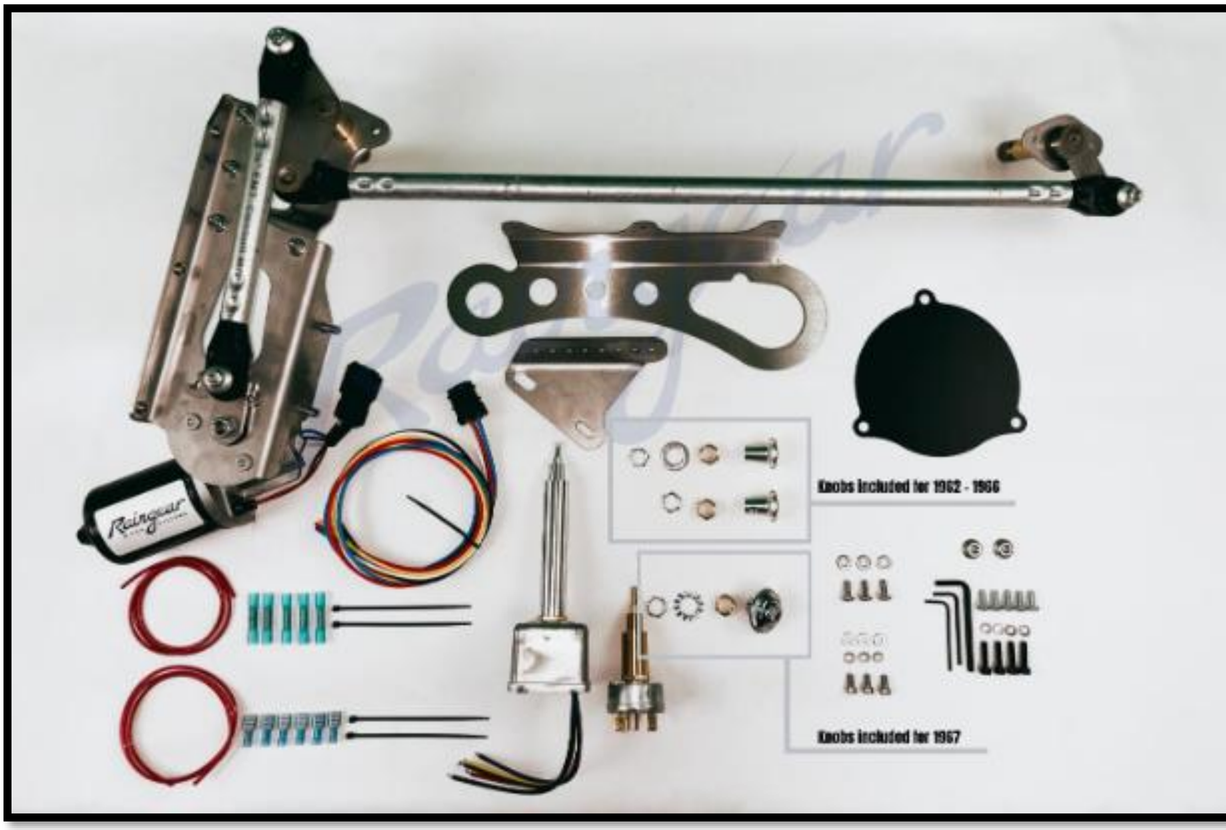

Figure 1

The **Raingear 1962–67 Nova Wiper System** has been engineered for both ease of installation and long-term reliability. Before beginning the installation, please review these instructions thoroughly. This system is designed with precision in mind, and we periodically update our designs—so certain components may differ slightly from the photos shown. If you believe a modification is necessary to fit your particular application, **please contact us at Sales@RaingearWipers.com** before making any changes.

Nomenclature (Fig. 1)

A. Drive Unit
A1. “Park Position” Alignment (see Fig. 10)
A2. Drive Arm Lock Nut (also see Fig. 10)
B. Driver-Side Pivot Shaft Head
C. Motor Brace
C1. Sheet Metal Screws
D. Shield
E. Passenger-Side Pivot Shaft Head
F. Cross Link
G. Intermittent (Delay) + 2-Speed Switch with Extension
H. 2-Speed Switch with Extension — *Shown: 1965–66 Wiper Switch Knob*

Remove the OEM Wiper System

The Raingear wiper system drive unit mounts on the inside of the car, just to the left of the steering column.
Your system arrives fully assembled, including the Shield (D). You will need to remove the shield for installation and reinstall it afterward.
The drive arm is intentionally left loose on the motor shaft to allow the bell crank to be moved out of the way during installation. This will make it easier to install the two Allen-head screws that secure the system in place. You will tighten and secure the drive arm later in the process.
A Cover Plate is included to seal the opening left in the firewall once the original wiper system is removed.
While it fits cars with stock firewalls, it was specifically designed for 1962–67 Novas — including those with modified firewalls.
We collaborated with Vintage Air to ensure full compatibility with their systems. This wiper system is also compatible with all 1962–67 factory heaters and defroster ducts.

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.

You will be working within the most wiring-dense area of the vehicle, so it is highly recommended to remove the instrument panel prior to installation.
Doing so will make it much easier to:

- Access the screws securing the wiper drive unit to the cowl
- Maneuver the cross link across to the passenger side

Installation

Before beginning installation, remove your instrument panel to allow proper access to the mounting points.

1. Remove the original components
    - Detach and remove the entire OEM wiper system, including the wiper switch.
    - Disconnect all associated wiring.
2. Mount the Raingear Drive Unit
    - On the driver side, secure the unit using two Allen-head bolts with lock washers.
    - On the passenger side, also use two Allen-head bolts.
        - However, the inner bolt (closest to the bracket) must not use a lock washer due to limited clearance.
          (See Fig. 2, red circle for reference.)
3. Secure with Thread Locker
    - Apply a small drop of blue Loctite to each bolt during final installation to prevent them from backing out over time.

4. Recommended Tools
    - For the driver side, a 12-inch extension with a 3/32-inch Allen drive socket makes installation easier.
    - For the passenger side, use a standard Allen wrench due to tighter clearance.
    - These are simply tool recommendations based on experience — use the setup that works best for you.

Figure 2

Positioning the Raingear Wiper System

5. Place the Raingear Wiper System on the driver-side floor, with the Passenger-Side Pivot Shaft Head resting against the left side of the dash brace.
(Refer to Figures 3 and 4.)

Figure 3

Figure 4

6. As you raise the Drive Unit (A) from the floor, guide the cross link and passenger-side pivot shaft carefully through the wiring and sheet metal on their way toward the right side of the vehicle.

⚠️ Tip: This step can be a bit tricky — take your time and be patient.
Having an extra set of hands can make positioning easier, but it's not required.

7. Once in place, secure the driver side first, but do not fully tighten the fasteners yet. Keep them slightly loose to allow for proper alignment during final adjustment.

Mounting the Drive Unit

Once the Cross Link is positioned horizontally over the top of the dash brace, you can raise the Drive Unit (A) into place and insert the brass pivot shaft into the opening in the cowl. Next, install the two Allen-head bolts with lock washers to secure the unit.

Figure 5

⚙️ **Note:**
You will need to rotate the bell crank flat in order to access the bolt holes.
This is the reason the drive arm is left loose on the motor shaft during installation.
(See Fig. 5 for reference.)

Securing the Passenger-Side Pivot

1. **Position the Pivot Shaft**
   - Slide the passenger-side pivot shaft through the designated hole in the cowl.
2. **Align the Bracket**
   - Make sure the holes in the pivot shaft bracket align with the corresponding holes on the car.
3. **Install the Fasteners**
   - Insert the two Allen-head bolts to secure the bracket.
   - ⚠️ **Important:** The inner bolt (closest to the car) must not use a lock washer, as it will be too tall to fit properly.
4. **Thread Locker**
   - Apply a small drop of blue Loctite during final installation to ensure the bolts do not loosen over time.

Figure 6

(See Fig. 6 for reference.)

Installing the Drive Unit Brace

The final component to install is the **Drive Unit Brace (C)**.

1. **Tighten the Drive Unit Bolts**
   - At this stage, tighten the two Allen-head bolts that secure the drive unit in place.
2. **Position the Brace**
   - Place the Brace (C) onto the ¼" studs on the drive unit.
   - Secure it using the locking nuts provided with the drive unit.
3. **Align the Brace**

- Press the brace upward against the underside of the cowl, ensuring it rests flush against the sheet metal from front to back.

(See Fig. 7 for reference.)

Figure 7

Securing the Drive Unit Brace

1. **Tighten the Hex Nuts**
   - Ensure the locking nuts on the Drive Unit Brace (C) are fully tightened.
2. **Drill Mounting Holes**
   - Using a 5/32" drill bit, drill through at least three holes in the brace to create matching holes in the cowl for self-tapping screws.
3. **Install Self-Tapping Screws**
   - On the final installation, apply a small drop of blue Loctite to each screw. This will:
     - Prevent the screws from backing out
     - Seal the holes against moisture intrusion

Figure 8

⚠️ **Caution:** Be careful when drilling and installing the screws — overtightening can **break the fasteners**. *(See Fig. 8 for reference.)*

Aligning the Drive Arm

1. **Set to "PARK" Position**
   - Align the **Drive Arm** with the **"PARK" position**.
     (See Fig. 9 for reference.)
2. **Insert Alignment Tool**
   - Use a **Phillips-head screwdriver** (preferred) or any tool **up to ¼" in diameter**.
   - Pass the **shank of the tool** through the **slot in the Drive Arm** and into the **alignment hole in the Drive Unit**.
     (Refer to location A1 in Figures 9 and 10.)
3. **Tighten the Retaining Nut**
   - Using a **13mm wrench or socket**, **tighten the Drive Arm retaining nut** to secure the alignment.

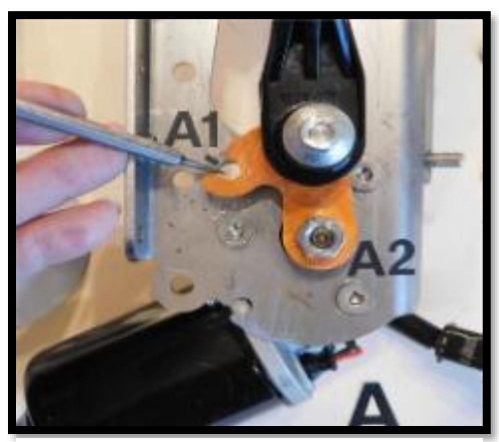

Figure 9

(See location A2 in Fig. 9.)

⚠️ **Tip:** Ensuring proper alignment at this stage is critical for correct wiper operation.

Figure 10

Installing the Shield and Wiring

1. **Attach the Shield**
    - Install the Shield (D) onto the Drive Unit.
    - Secure it using the three 10-32 Allen-head bolts with lock washers that were provided and pre-installed on your drive unit. *(See Fig. 11 for reference.)*
2. **Wiring**
    - The Raingear Wiper System operates on a 12V positive system.
    - Locate a 12V switched power source (one that is off when the ignition is off), such as at the fuse panel, to power the wiper system.
    - Install a 5-amp fuse in the panel to protect the Raingear Wiper System.

Figure 11

⚠️ **Tip:** Using a switched 12V source ensures the wipers only operate when the ignition is on, preventing accidental battery drain.

Switch Installation

1. **Remove the Dash Bracket**
    - To install either switch, you **must remove the dash bracket** first.
    - Choose the method that works best for your vehicle. *(See Fig. 12.)*

Figure 12

2 Speed	**2 Speed with Delay**

https://raingearwipers.com/installation-instructions

2. **Clearance Considerations**
    - Space behind the dash is **very tight**.
    - You may need to **slightly modify the dash brace** to provide sufficient clearance for the switch. *(See Fig. 13.)*

Figure 13

3. **Use Original or Stock Pieces**
    - The small brackets shown in Figures 14 and 15 **do not come with the kit**.
    - Use your **original brackets** or purchase replacements as needed.
    - Example: **2-speed switch for 1967 Nova** with knob shown in Fig. 15.

Figure 14

Figure 15.

4. **Install the Knob**
    - For 1966 models, the **billet knob** is included in the kit.
    - Position the knob as shown in the reference photo.

5. **Test Before Installing Wiper Arms and Blades**

⚠️ **<u>Caution: Do not install wiper arms or blades until you have test-run the system</u>.**
Verify that the **"Park" alignment** at **position A1** is correct.
Installing the arms before confirming proper operation may result in misalignment or damage.

    - After the switch is installed and wired:
        - **Turn the system on and off**
        - **Check the "Park" alignment** at **position A1**.
    - If the alignment is correct, you can install your **wiper arms and blades**.
    - If the alignment is incorrect, **repeat the alignment process** before proceeding.

⚠️ **Tip:** The delay switch is positioned farther back on the dash to avoid interference. Minor adjustments to the dash brace may be necessary to fit your switch properly.

⚠️ **Note:**

The Delay switch is positioned farther back on the dash.

This location avoids interference with the dash brace; moving it closer would require modifying the brace.

(See Fig. 16.)

Figure 16

⚠️ **Note:**

Space is very tight behind the dash. You may need to slightly modify the dash brace to provide adequate clearance.

(See Fig. 17.)

Figure 17

⚠️ **Note:**

The 1966 dash is shown in Fig. 18.

The billet knob is included with the kit and is positioned on the right side of the picture.

Figure 18

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

Raingear