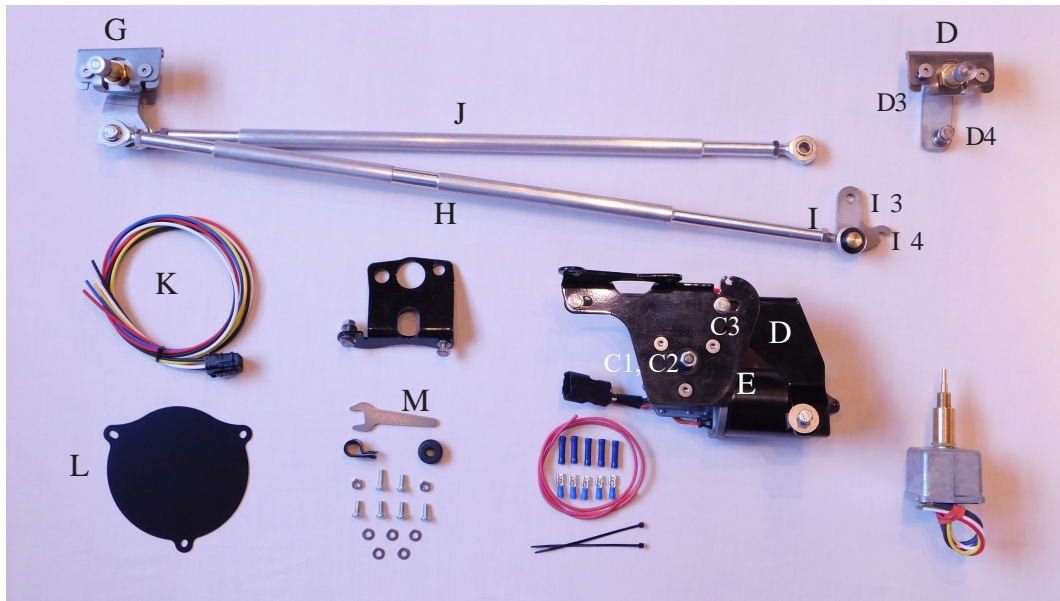


# Windshield Wiper System Installation Instructions

## For 1964-1967 GM A-Body (All including Chevelle, Tempest, Cutlass, Skylark)



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

*This system is designed to fit in your car without modification. For technical questions etc., please call us directly at 541-895-2566. Your dealer does not have spare parts and is unlikely to be able to trouble shoot.*

**Designers note:** Developing this windshield wiper assembly was challenging. Space inside the GM A-body air box is limited and the resulting design is a tight fit. A couple of the fasteners may try your patience.

**Note:** If your car is equipped with a later model GM steering column with a wiper switch, that switch will not work with this system

**Note:** The RAINGEAR A-body windshield wiper system does not reuse any of the original GM parts except the arms and blades. You can also use the stock switch knob in place of the one provided.

**Caution:** You will be working in an area of your vehicle that contains the largest concentration of electrical wires and components. **Please disconnect your battery.**

1. As noted above, all original wires from the wiper switch to the wiper motor are useless to this installation. Therefore, remove the switch, and the entire OEM wiper harness, to the wiper motor and washer pump. If You like, you can re-use the original switch knob in place of the one supplied.
2. Remove the wiper arms and blades. You can reuse them or purchase aftermarket.
3. Remove the cowl vent or fresh air grille from in front of the windshield. The windshield washer hoses and nozzles will come away with the cowl.



*Photo ABO-2: This is the fresh air grille and cowl in front of the windshield opening. Note: in this photo the OEM wiper assembly has already been removed.*

*Photo ABO-1.*

- A. Body Bracket
- B. Left ( driver side ) Pivot Shaft Assembly  
B1 Pivot Shaft Lever  
B2 Pivot Pin
- C. Motor Assembly  
C1 Motor Spindle  
C2 Spindle Nut  
C3 "Park Feature" 1/4" hole
- D. Motor Brace Tab
- E. RH, passenger side, Pivot Shaft Assembly
- F. First Link
- G. Drive Arm  
G1 Tapered Hole  
G2 "Park Feature" slot
- H. Cross Link
- I. Wire Harness
- J. Cover Plate
- K. Spindle nut wrench
- (Not shown: Knob)  
(Delay Switch & wiring pack shown)

4. Remove the OEM wiper motor.
5. Remove the OEM wiper pivot shafts and link assembly.

### Installation:

The Raingear, A-body Windshield Wiper System attaches to the same sheet metal “intercoastal” that held the original pivot shafts. See photo: ABO-2a



Photo ABO-2a: Right and left intercostals.



Photo ABO-3: Place the Body Bracket on top of the Pivot Shaft Assembly.

1. Orient the LH Pivot Shaft Assembly ( B ) with the Body Bracket ( A ). See photo: ABO-3.
2. Insert both under the Left or driver side intercostal. Raise the knurled head (at the tip of the brass pivot shaft) through the large hole. Use two 1/4-20 x 3/4” countersunk screws to join these pieces to the intercostal. Run the bolts in but leave them about a turn from tight. See photo: ABO-4



Photo ABO-4: Install the Body Bracket and Pivot Shaft Assembly under the left, driver side, intercostal.

3. Locate and remove the OEM plastic hole plug ( about 3/4” dia with a dimple in the middle) directly adjacent to the Fender Bolt in the cowl. The hole will be used later as a mounting point for the motor. See photo: ABO-5.

4. Remove and set aside the Spindle Nut (C2) from the Electric Motor output spindle (C1).

**Note:** If you have previously installed a smooth firewall you will want to connect the wire harness (J) to the electric motor at this time.

5. In between the left and right intercostals, Insert the Motor Assembly (C) into the cowl opening. Slide it under the intercoastal, and align the matching holes on the Body Bracket with the Motor Assembly. Refer to photo ABO-1a for the positioning of the Motor Assembly to the Body Bracket. Use a 1/4-28 x 1/2” hex bolt, washer and nut to loosely hold these parts together. Bolt tightening comes later. See photo ABO-6



Photo ABO-5: Remove the OEM hole plug.

**Note:** If you were to place a mirror into the air box you would notice a lot of different body parts spot welded together in this area. Sheet metal flanges and tabs abound here. Occasionally it may seem like something may be blocking the Motor Assembly from sliding into place. Persistence may be needed. Although there may be some cars that might require grinding clearance in the body in this area, we have yet to encounter a car that will not clear the motor assembly.

6. Refer to the nomenclature photo, ABO-1; The frame of the Motor Assembly is made up of two main parts. One holds the electric motor. The other is a Motor Brace. This part is held to the assembly with two 1/4” hex head bolts in slotted holes. Temporarily loosen these bolts so that the Motor Brace can slide freely. Tightening comes later.

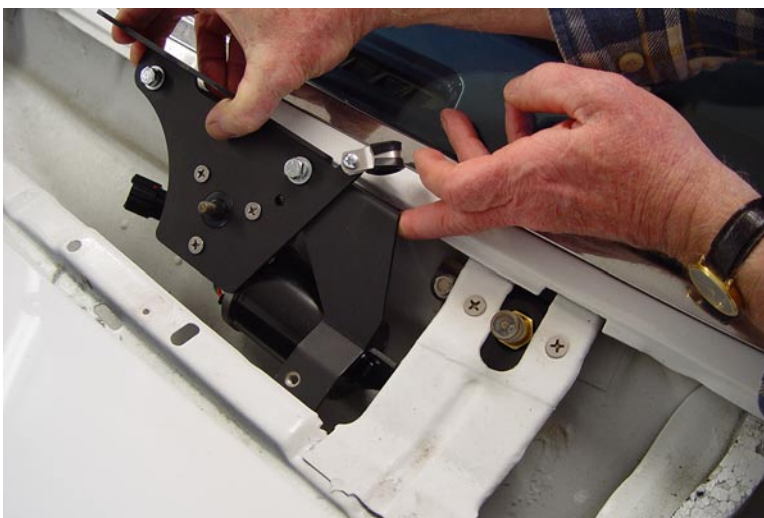


Photo ABO-6: Insert the Motor Assembly into the air box.



7. With one hand on the Motor Assembly, align the threaded hole in the Motor Brace tab (D) with the hole on the body (the one that last held the hole plug) . Use the 1/4-28 x 3/4" hex bolt and larger washer at this position. Run the bolt into the brace so that the tab comes up and touches the body. Do Not Tighten yet. See photo ABO-7.
8. By now you should suspect that the final fastener that joins the Motor Assembly (C) and the Body Bracket (A) is a nasty little cuss hidden under the left intercostal. Use a 1/4-28 x 1/2" bolt and flat washer (A2). Do not tighten quite yet. See photo ABO-8



Photo ABO-7: Motor Brace bolt.

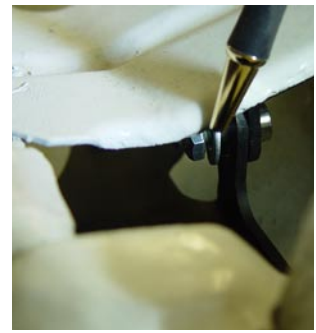


Photo ABO-8: (nasty little cuss) Motor Mount bolt located under the intercostal.

Another note: This bolt is difficult to install. You can access the bolt head with a 7/16ths socket and extension via the vacant wiper motor hole on the firewall, assuming that you don't have a smooth firewall.

9. Now you can tighten the 1/4-20 x 1/2" countersunk bolts, the 1/4-28 x 3/4" motor brace hex bolt and the two 1/4" motor bracket bolts.
10. To insert the passenger side Pivot Shaft and Links Assembly (E, F, H ) into the air box, orient the knurled head at the tip of the brass pivot shaft aft (aft: towards the back of the car) See photo ABO-9. Slide the brass Pivot Shaft under the passenger side intercostal, rotate the knurled head up and through the intercostal. See note below



Photo ABO-9: Orient the Pivot Shaft head aft.

**NOTE:** Before rotating the Pivot Shaft Assembly up and into the right, passenger side, intercostal you need to place the First Link ( F ) (the one with the Drive Arm ( G ) attached) on top of the horizontal, flat surface of the Motor Assembly ( C ). Just place it there for now.

The second link is called the Cross Link ( H ). Without any help from you It will naturally want to lay on the floor of the air box. It will tuck itself under the Motor Assembly and that's OK. We will deal with the Cross Link later.

11. Use two 1/4-20 x 3/4" countersunk bolts to secure the Pivot Shaft to the intercostal. Tighten these bolts. See photo ABO-9a
12. Attaching the Cross Link
  - a. Locate the free end of the Pivot Shaft Lever (B1) (driver side). See photo ABO-10. Swing the lever outboard so it's easy to get to.
  - b. Reach into the airbox and locate the free end of the Cross Link (H).
  - c. Place the loose end of the Cross Link (H) and Heim Joint onto the Pivot Pin (B2) at the tip of the Pivot Shaft Lever (B1). Use a 1/4-28 x 1/2" hex bolt and thin stainless washer to retain the heim joint. Tighten. See photo ABO-10a.
  - d. Locate the free end of the First Link (F). Locate the Drive Arm (G). Swing the open hole (G1) in the Drive arm over and onto the Motor Spindle (C1) DO NOT ADD THE SPINDLE NUT ( C2 ) AT THIS TIME.
  - e. Go back to the Motor Assembly (C) and locate the Drive Arm (G).
  - f. Locate the "U" shaped feature on the Drive Arm. This is the Drive Arm Park Slot (G2)
  - g. Locate the 1/4" hole in the Motor Assembly (C3). These corresponding items make up the "Park Features"
  - h. Rotate the Drive Arm (G) CCW until the Park Features (G2 & C3) align.



Photo ABO-9a: Secure the passenger side Pivot Shaft Head to the Intercostal and tighten these bolts.



Photo ABO-10: Locate the driver side Pivot Shaft Lever under the driver side Intercostal.



Photo ABO-10a: Attach the Cross Link to the driver side Pivot Shaft Lever.



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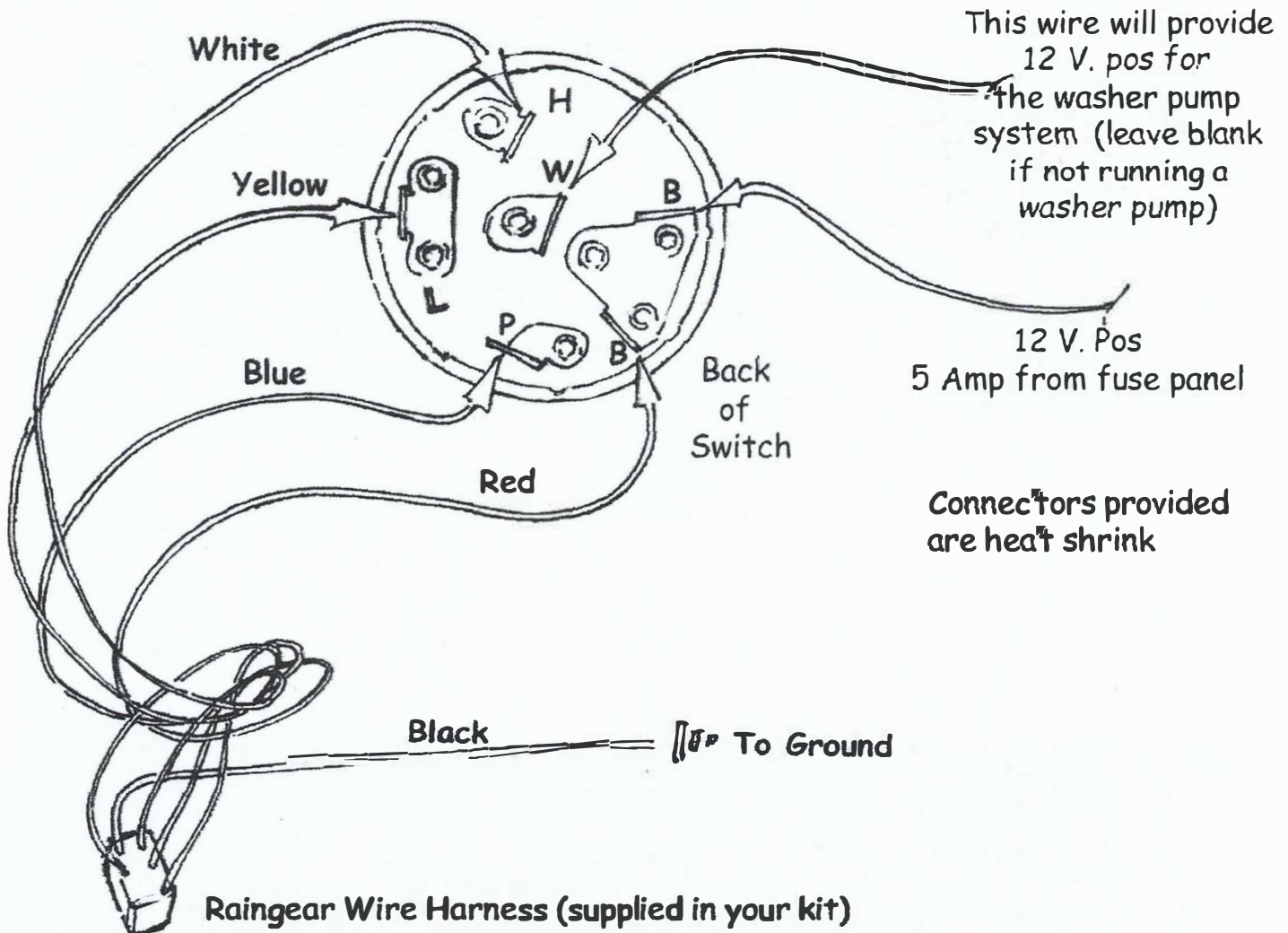
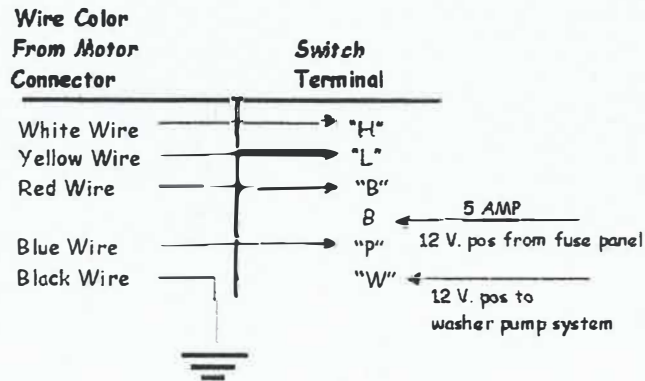
## Wiring Diagram

### 2 Speed Switch

Turn knob to activate wipers.

The detents are definite - you will hear and feel a click between off, low, and high.

If running a washer system, push knob to squirt washers.





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## Wiring Diagram

### 2 Speed/Intermittent Switch

Please Note:

**The Intermittent Switch  
CANNOT be tested  
on a Battery Charger**

Turn knob to operate wipers and adjust speed. The detents are definite - you will hear and feel a click between off, low, - and high.

**If running a washer system, push knob to squirt washers. The wiper blades will cycle twice**

12 Volts, pos  
5 amp fuse  
from fuse panel

Connectors provided are heat shrink

Black wire from Raingear  
wire harness must  
be grounded

**NOTE:** The colors of the wires from the wiper motor and the colors of the wires on the harness do not match. This is correct.

