

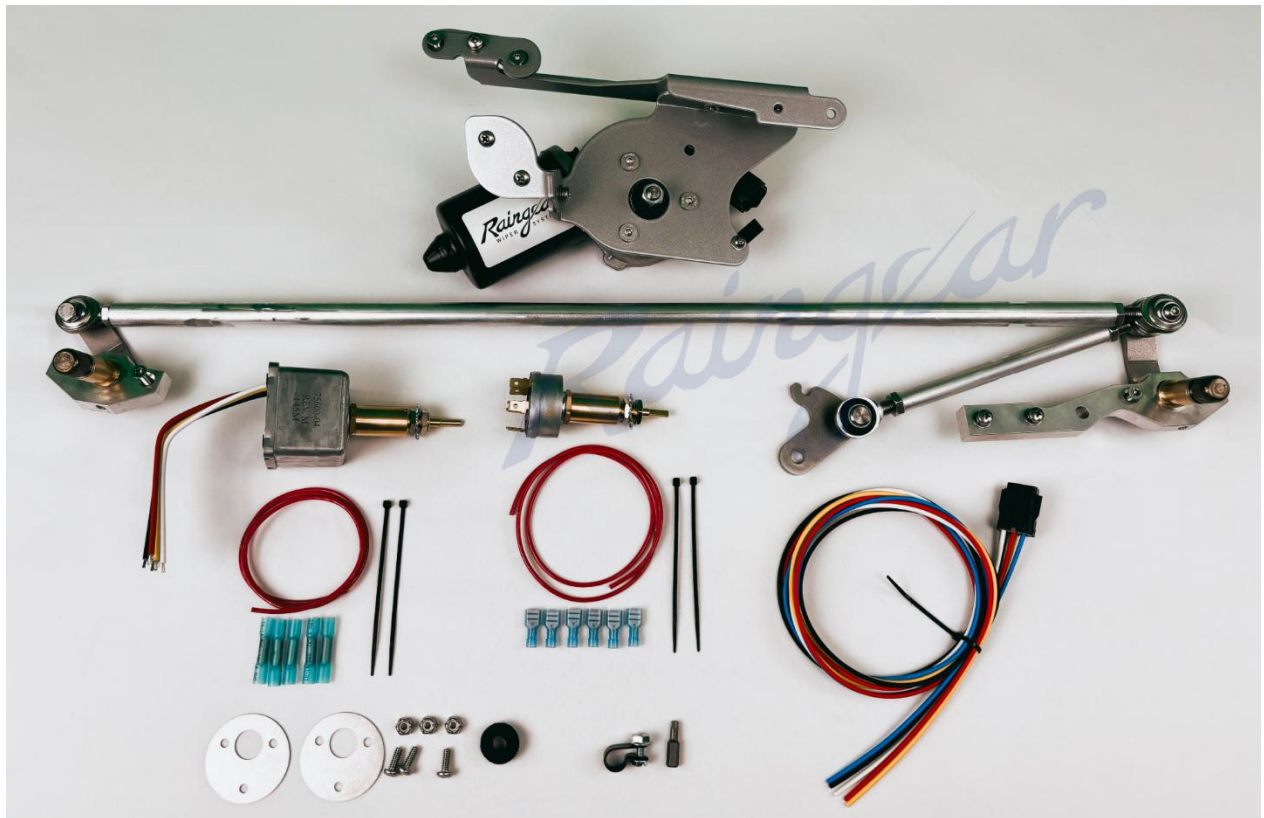
COMMITTED TO THE BUILD

# Raingear

HIDDEN WIPER SYSTEM  
ASSEMBLED IN ARIZONA USA

FOR YOUR CLASSIC CAR  
RAINGEARWIPERS.COM

## Installation Instructions 1967-1972 Chevy Pickup Raingear Windshield Wiper System



The Raingear 1967-1972 Chevy Pickup wiper system is designed for ease of installation as well as reliability

Please review these instructions before beginning installation.

This machine is designed with precision in mind.

We do “tweak” our designs from time to time, so there may be parts that have slight variations from the photos.

If you think you need to alter it to accommodate your installation, please contact us at [Sales@RaingearWipers.com](mailto:Sales@RaingearWipers.com) before proceeding

## Note to the installer

As you follow the instructions, you will be re-using fasteners already installed on the system.

These fasteners are left loose so they are easy to remove.

Please note the location and fastener size/type as you remove these fasteners in order to replace them in the correct location.

You will use your original wiper switch bezel on this installation.

You will use your original wiper switch knob on this installation.

You will need to install a passenger side Defroster duct on the driver side in order to clear the switch wires when installing the system.

Our system installs inside the Airbox.

The photo below shows the assembled system sitting in front of the Airbox.

You will assemble the system in the Airbox



Passenger side

Fig 2

Drivers side

**Please disconnect your battery**

## Remove the OEM Wiper system

On the outside of your truck, remove the Wiper Arms and Blades.

Then remove the Cowl Cover.

You don't need to remove the Washer Squirters.

Reach into the Airbox and remove the OEM wiper Pivot Shafts, Links, and the Drive Arm from the spindle of the Wiper Motor.

Go inside the cab, reach under the dash, and remove the OEM Wiper Motor.

Disconnect the OEM Wiper Motor to Wiper Switch wiring. You will not reuse any of it. Remove the Chrome Dash Panel.

Locate the Wire Harness.

Slip the Connector on the end of the Wire Harness into the receptacle on the Wiper Motor. (See Fig 3)



Fig 3

Find the Phillips Head Screw located at 4 o'clock on the Grommet Disc.

Just forward of that screw, on the floor of the Airbox, drill a 1/8" hole.

Adding the Wire Loop itself will come later, as the last thing you will do inside the Airbox. (See Fig 4)



Fig 4

## Installing the Wire Grommet

This is the location that we have selected for your wiring pass through.

If you want to weld this hole up and choose a different location for a 5/8" pass through hole, feel free to do so.

**NOTE: To perform this task, you will need the assistance of a friend.**

Step 1.

Locate the two 1 7/8" diameter Grommet Discs. One disc will fit inside the cab, under the dash.

One will fit inside the Air Box.

Step 2.

Locate the Rubber Grommet and install it into only one of the Grommet Discs.

This Rubber Grommet gets squeezed between the two discs.

Step 3.

Using the Grommet Disc that now holds the Grommet, insert three 10-32 x 5/8" Phillips head screws through the small holes. (See Fig 5)



Fig 5

Step 4.

Inside the Air Box, locate the old motor mounting hole.

Place the three 10-24 screws into the old wiper motor hole that are in the Grommet Disc.

You will want to run some kind of sealer around the perimeter to prevent water from entering the cab.

Step 5.

The Grommet itself should be placed at the 6 o'clock position. (See Fig 6)



Fig 6

Step 6.

Have a friend reach into the Air Box and hold the Grommet Disc in place.

Step 7.

On the inside of the cab, place the second Grommet Disc onto the three 10-24 screws, use three 10-24 lock nuts to secure the assembly. (See Fig 7)



Fig 7

## Sub Assembly

NOTE: To the left side of the Cowl is what looks like a third pivot shaft location.

You will notice two countersink holes to the right and left of the larger hole.

The left or outside countersink hole may be too small to pass a 3/16" diameter screw through. (See Fig 8)

You may use what you like to open this hole.

For the sake of the paint, we used a small rat tail file to open the hole. (See Fig 9)



Fig 8



Fig 9

## Note about Wiper Switch Location and Defroster Ducts

Wiper Switches are most commonly located at the upper RIGHT corner of the chrome Dash Panel.

For wiper switches located at the upper RIGHT you will first need to install a Passenger side Defroster Duct on the Driver side.

Then you can use a rat tail file to make the hole round. (See Fig 10 and 11)



Fig 10



Fig 11

## Switch Installation pre install

To install a Passenger Side Defroster Duct in the square defroster hole on the Driver Side you need to make a small change to the square, recessed opening on the top of the dash.

Look at the Passenger Side Defroster Duct casting and locate the small key. (See Fig 12)

You will have to use a file to make a keyway in the forward edge of the defroster hole so that the Defroster Duct will settle into the duct recess.

In the middle of the forward flange of the duct recess use a file to make a keyway that is  $\frac{3}{16}$ " wide by  $\frac{1}{8}$ " deep. (See Fig 13 and 14)



Fig 12



Fig 13



Fig 14

With the Defroster Ducts installed and with the hole in the dash sheet metal filed round, and assuming you have connected the wires to your switch, continue to the next step

## Installing the Windshield Wiper Switch

The Brass Switch Extension on the Switch takes an external lock ring, which is included in the kit.

Place the lock ring on the extension.

Reach under the dash and insert the Wiper Switch through the backside hole of your choice

Use the OEM chrome Switch Nut on the front side of the dash sheet metal to secure the switch.

The brass Wiper Switch spindle is "D" shaped.

Place the Wiper Switch Knob on the Switch Spindle and use a 5/64" Allen wrench to secure the Allen screw against the flat on the wiper switch brass spindle.

Be somewhat careful because the threads holding the Allen screw are plastic and can strip easily. See Fig 15, 16 and 17



Fig 15

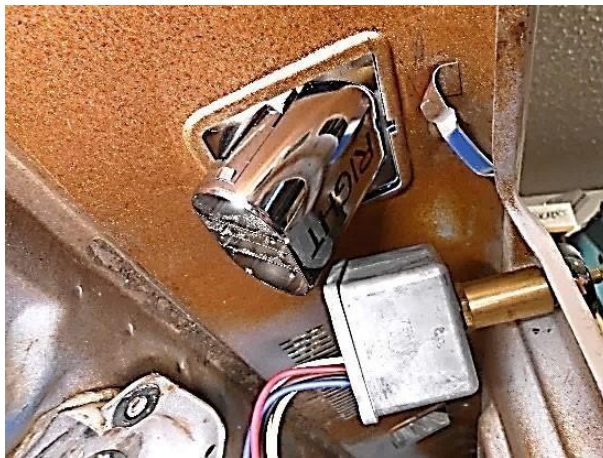


Fig 16



Fig 17

Assuming you already ran the wire harness through the Grommet, route the wires as you please, and, using the wiring diagram, join the individual wires to your switch.

## Installation

Notice the circled tab on the Motor Plate. (See Fig 18)

This tab is an important feature because it holds the brace that secures the motor in the cowl.



Fig 18

Familiarize yourself with the Pivot Shafts and Links Assembly.

The Simple end of the assembly goes on the Left, Driver Side.

The complicated end goes on the Right, Passenger Side

Locate the large opening in the Airbox, circled in cowl Fig 19.

You need to roll three edges for clearance. (See 20, 21, and 22) You need to roll under these lips for bridge clearance, drive arm clearance, and cross link clearance. See Fig 20, 21, and 22.



Fig 19

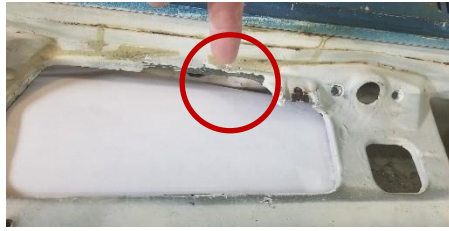


Fig 20



Fig 21



Fig 22

Now, keeping the First Link in line with the Cross Link (not folded in), insert the simple end of the Pivot Shaft/ Links Assembly into the large opening until the whole thing sits on the floor of the Airbox. (See Fig 23 and 24)



Fig 23



Fig 24

Slide the whole Pivot Shaft/ Links Assembly over towards the Driver side to gain clearance so you can set the motor and bridge in place.

In Fig 24 notice the orientation of the aluminum pivot shaft bracket.

It is important that this is aligned as shown.

A good reference is that the hole for the set screw should be at the bottom.

Fig 25 (below) shows three holes.

You will use the bottom two to mount to the Bridge.

The unit is shipped to you in the correct position.

Make sure to put it back that way.



Fig 25

The Bridge is fastened to the Wiper Motor Assembly for shipping.  
Remove the Bridge from the Assembly

In the same opening you just slid the links into, insert the Wiper Motor Assembly into the Airbox. (See 26)



Fig 26

Once the Motor Assembly is inside the Airbox, slide it forward towards the firewall to make room for the following steps.

Locate the part called the Bridge.

Insert this part into the Airbox, forward of the Motor. (See Fig 27)



Fig 27

Locate two 10 -32 studs on the Bridge.

Locate two corresponding holes on the Motor Plate. (See Fig 28)



Fig 28

Join these parts together.

On the outboard studs, thread on the 10 -32 Lock Nuts.

Use a deep socket or a nut driver to snug the nuts down.

**Do not overtighten.**

You don't want to break these off. (See Fig 29)



Fig 29

Now we attach the Pivot Shafts/ Links Assembly to the Cab.

Referring to Fig 30 and 31:

Orient the Pivot Shafts/Links assembly (previously placed into the Airbox) on the floor of the Airbox with the brass Pivot Shafts pointed to the sky.

It doesn't matter where you begin this step. Passenger side or driver side, the procedure is the same for both sides. Be very careful to not cross thread these parts.



Fig 30



Fig 31

Lift the Brass Pivot Shaft upward and through the hole in the Cowl.

Match the countersink holes in the Aluminum Pivot Shaft Head to the two countersink holes on the Cowl sheet metal.

Use two 10/24 x 3/4" Countersink Allen head Machine Screws to join the Head to the Cowl.

DO NOT TIGHTEN yet.

Leave them a bit loose. (See Fig 32)



Fig 32

Once this has been completed, you can move on to Joining the Bridge/Motor Assembly to the truck cowl.

## Installing The Bridge/Motor Assembly to the Truck

Refer to Fig 33, 34, 35, 36, and 37. (Fig 33 is what the finished job looks like) These photos show what the following step describes.



Fig 33



Fig 34



Fig 35



Fig 36



Fig 37

Reach into the Airbox and move the Bridge/Motor Assembly up and onto the top surface of the aluminum Pivot Shaft Head extension.

Two holes in the Bridge will align with the two holes in the Pivot Shaft Head extension. (See Fig 33)

Use two 10-24 x 1/2" Pan Head machine screws and two 3/16" Flat Washers and two lock washers to join these pieces together BUT DON'T TIGHTEN these screws yet. (See Fig 34)

There is a very weird "Phantom" wiper pivot shaft position to the right of the actual Passenger Side Pivot Shaft. This area is where the Bridge is secured to the Cowl. (Circled in Fig 35)

Because, you DID NOT tighten the Phillips Head Screw that holds the Nut Plate to the outboard end of the Bridge, you can now reach inside the Airbox and align the little Nut Plate to the two Countersink holes in the Cowl sheet metal.

Use two 10-24 countersink, Torx head screws to secure this location to the sheet metal Cowl of the truck. (See Fig 36)

Now you can tighten the Phillips Head screw head visible through the bigger, center hole. (See Fig 37)

Now go back and tighten all the loose fasteners on the Driver Side and on the Passenger Side.

Next is the Motor Brace

Use a 10-32 x 1/2" Phillips Head Screw and a 3/16" Flat Washer and a lock washer to attach the Motor Brace to the Motor Plate.

Tighten this screw. (See 38)



Fig 38

With the Motor Brace firmly attached to the Motor Plate, use the open holes on the top of the Motor Brace to drill two, 3/16" diameter holes into the truck's sheet metal. (See Fig 39)



Fig 39

Secure the Motor Brace to the truck's cowl with two 10-24 x 1/2" Phillips Head screws and 2 lock nuts. (See Fig 40)



Fig 40

You will see an empty 1/4" diameter hole on the surface of the Motor Plate. This is the "Park Position" Alignment hole. (See Fig 41)



Fig 41

Remove the Spindle Nut from the Motor Spindle.

Place the open hole on the "Drive Arm" onto the Motor Spindle.

Replace the Spindle Nut, but leave it generously loose.

There is a U-shaped feature on the Drive Arm. Rotate the Drive Arm until the U-shaped feature is over the "Park Position" hole on the Motor Plate.

Use any 1/4" diameter item such as the shaft of a #2 Phillips Screwdriver and insert it through the U-shaped feature on the Drive Arm and the Park Position Hole on the Motor Plate.

Hold it firmly and use a 13mm wrench or ratchet and socket to tighten the Spindle Nut. (See Fig 42)

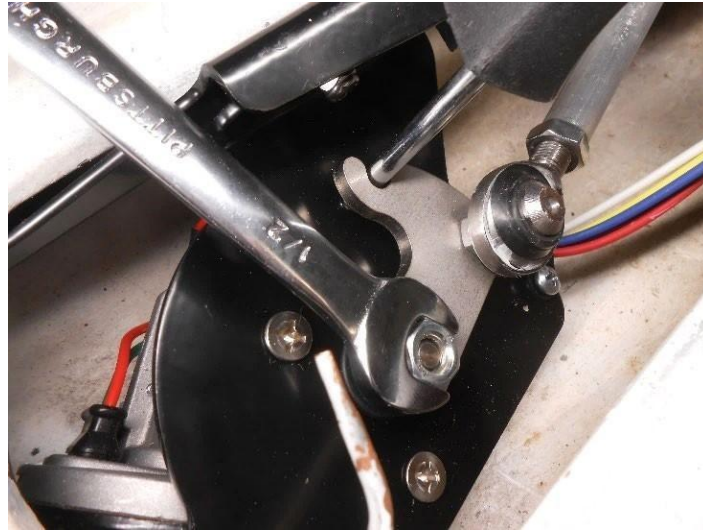


Fig 42

Go to the middle of the cab where the Wire Harness enters the cab.

Secure these wires with a Wire Loop and a 10-32 x 3/4 hex head and locknut, after you drill a 3/16 hole. (See Fig 43)



Fig 43

Now wire up the switch using the attached diagram for your switch type.

Note: The Delay switch has 2 ground wires that need to be grounded; 1 black wire from our wire harness, and 1 black wire from the back of the switch.

**Ground them well. It matters!**

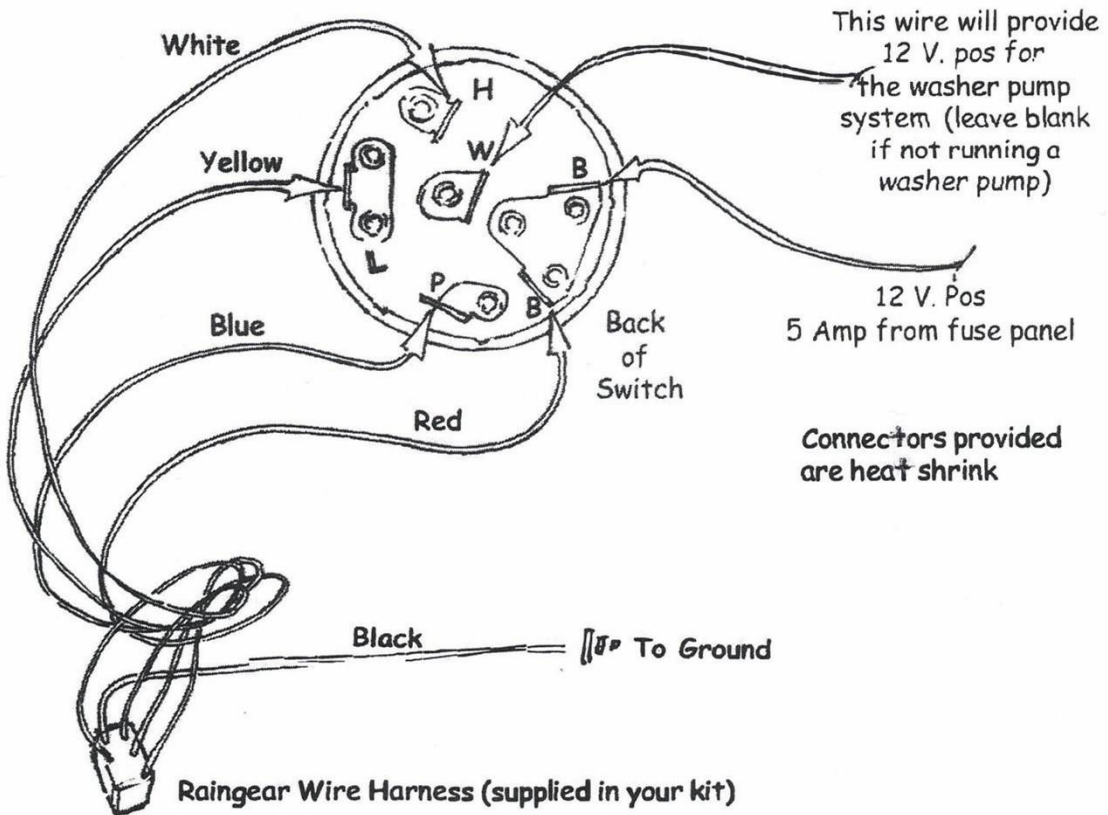
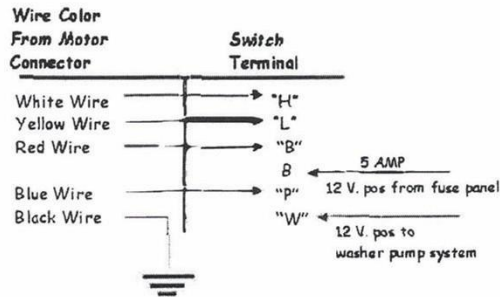
**Please continue to see below**

# RAINGEAR

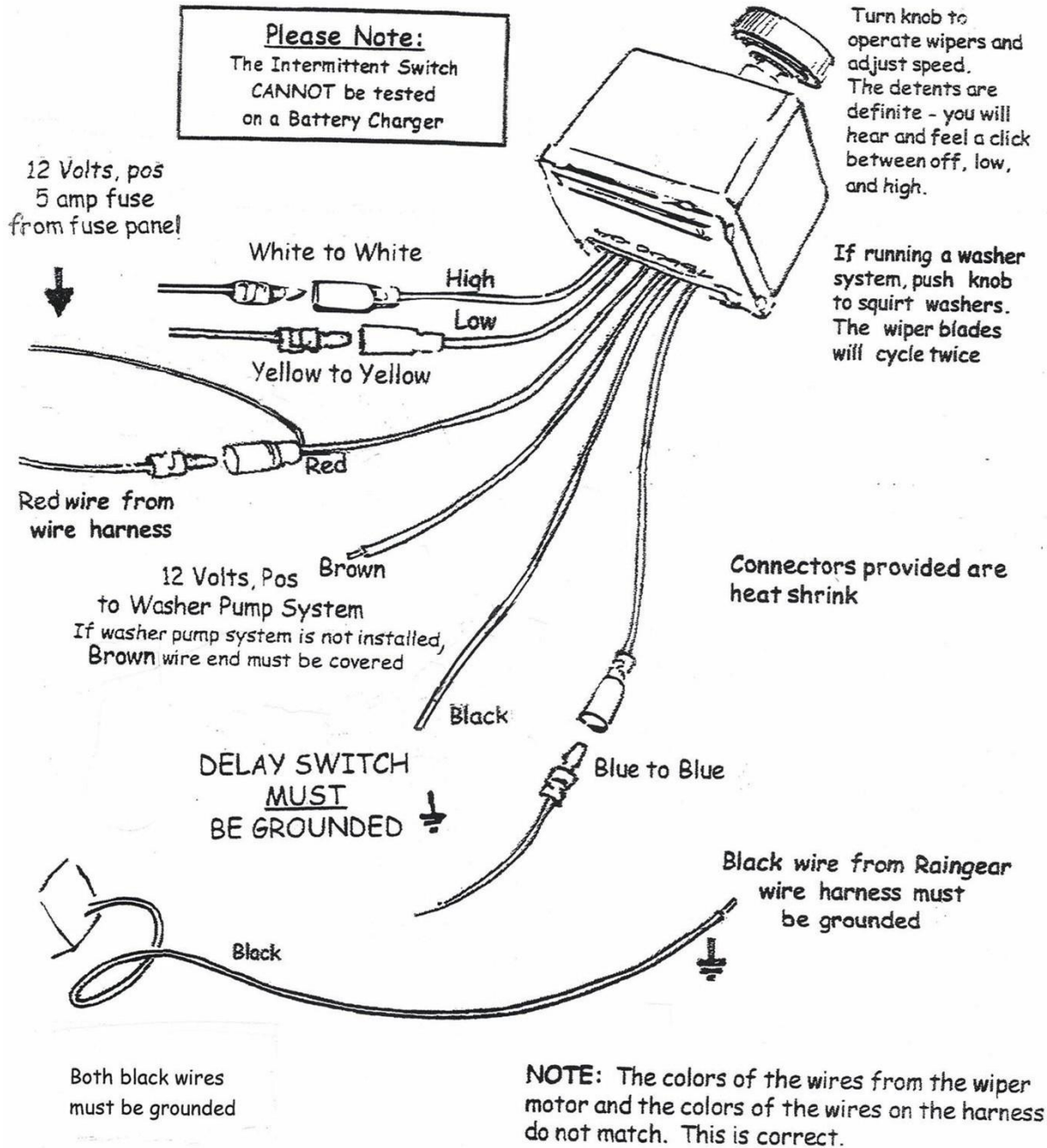
## Wiring Diagram

### 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.



# RAINGEAR Wiring Diagram 2 Speed/Intermittent Switch



**Thank you for choosing Raingear Wiper systems, we look forward to working with you on your next project**

