

# **Electric Windshield Wiper Motor Kit**

#### Please read entire instruction sheet before you get started. Based on how you proceed some steps may be out of sequential order.

### Changing degree of the passenger wiper motor (66-68 Bronco only)

All wiper motors are set at 110 degrees on the degree wheel. If you are installing this kit on a 66-68 Ford Bronco windshield frame you must change the degree setting to 80 degrees on the passenger side wiper motor (only the passenger side needs to be set to the 80 degree setting)

- 1. Remove the four (4) screws from the back plate of the wiper motor.
- 2. Remove the U-clip from the actuator arm.
- 3. Remove the actuator arm from the degree wheel.
- 4. Remove the two phillips screws holding the degree wheel.
- 5. Move the degree wheel and place the arm in the 80 degree position.
- 6. Re-install phillips screws, actuator arm, u-clip and cover.

### Mounting the wiper motors to the windshield frame.

1. Remove the old wiper assembly from the Bronco.

2. For 66-68 Ford Bronco, remove the old vacuum hoses from the windshield fram. For 69-77, remove the wiper motor wiring from the windshield frame. To do this, the windshield frame must be lowered forward. You will need to remove the windshield frame retaining knobs and disconnect the hard top from the windshield frame to do so.

3. Position wiper motors so that the round portion of the motor housing is towards the passenger side.

4. Insert the wiper shaft into windshield frame, on 66-68 frames you may need to file or drill out the hole for the wiper motor shafts to fit through the windshield frame. Attach the nut and washer. Tighten the nut to 30-50 in. lbs.

5. Use the supplied self tapping screws to secure the motor mounting tab to the windshield frame.

### Wiring the wiper switch and motors. (Reference Figure 2)

Note 14-16 gauge wire is recommended. A 5 amp fuse needs to be placed between the battery and the wiper switch. Our wiper switch is equipped with a push knob for the windshield washers. For the 66-68 you must connect the old washer pump button wire to the W (washer) port on the new switch. If you have a 69-77 Bronco you must connect the green wire from the old wiper switch to the W (washer) port on the new switch.

### Getting the wiring through the frame.

Patience grasshopper. Fishing the wires through the windshield frame is a pain to say the least but it can be done. You might be able to use the old wiring or vacuum tube to help pull the new wiring through.





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# **Figure 2: Wiper Motor Switch Wiring**

These motors come with one of two potential wiring styles. One includes three orange wires numbered 1-3. For this style, run a ground off the mounting bracket of the motor. The other has color coded wiring. There is a white ground wire included on this version.





Ground - White Wire (Models with Color Coded Wiring Only)

Ground - Orange Wire, No Number, Attached to Mount Bracket (Models with Orange Wiring Only)

### **Motor to Switch Wiring Guide**

This synchronizing switch is provided with a pre-wired plug with color-coded wiring. The wiring on the plug does not match the wiring colors on the motor.

Our motors come with one of two wiring styles. Option 1 comes with orange wires that are numbered for identification. Option 2 comes with color coded wiring. Please follow the below table for wiring the switch to the motors.

Action	Motor (Option 1)	Motor (Option 2)	Switch Wire
SLOW	Orange Wire #1	Green Stripe	Yellow
FAST	Orange Wire #2	Blue Stripe	White
PARK	Orange Wire #3	Red Stripe	Green
GROUND	Orange Wire, No # Attached to Mount Bracket	White	Blue

**Positive Supply (+) Terminal on the Switch:** Run a wire to a 5 Amp Fuse and then to the Positive (+) Battery Terminal.

**Negative Ground (-) Terminal on the Switch:** Run a grounding wire directly to the Negative (-) Battery Terminal.





# **Wiper Switch Control for Two Wiper Motors**

This wiper control provides easy installation, with options for high and low continuous speeds. It allows individual activation or deactivation of each wiper and ensures synchronization in the selected mode. Additionally, it offers three intermittent speeds, perfect self-parking through dynamic braking, a wiper/washer program, and visual indications for ON, continuous, and intermittent modes.

Technical Specifications		
Power Supply	10 to 30V DC - This wiper control is available to operate under a power supply of 12V or 24V DC. Check the power supply of the unit supplied before connecting it to the electrical system.	
Internal Fuse	4 amp PTC for each motor	
Stand-by Current	Less than 20mA	
Motor Output Current	Single or Double Speed - 4 amp max.	
Working Temperature	14 to 122° F	
Storage Temperature	-4 to 158° F	
Inputs	2 parking signals, open in park position	
Outputs	2 slow speed, 2 high speed,1 wash/pump solenoid, positive pole	

### **Intelligent Wiper Switch Functions**

Brief explanation of buttons & LED's:

- 1. Main ON/OFF Switch *Turns main power to the system on and off*
- 2. Increase Speed / Decrease Time Between Strokes Decreases the frequency of wiping in the intermittent mode
- 3. Decrease Speed / Increase Time Between Strokes Increases the frequency of wiping in the intermittent mode

### Installation

Location and installation of touch pad

The touch pad is to be fitted at a location that is within reach of the driver, allowing ease of operation. Make sure that sufficient room is available for the cables and teh connectors. The required mounting hole for the touch pad is  $1.44" \times 0.83"$ . There should be at least 4" space available under the front of the touch pad for the connection cable and plug.

**INSERT CONNECTOR (linked to the wiper motors) BEFORE CONNECTING THE POWER SUPPLY.** 



