

Detroit Speed
Selecta-Speed Wiper Kit
1969-70 Mustang
P/N: 121652

A downpour of rain will no longer hinder your ability to clearly see the road. The Detroit Speed Selecta-Speed Wiper Kit provides you with the performance and convenience of a late model wiper system in a package that easily and cleanly mounts in your 1969-70 Mustang.



Item #	Description	Quantity
1	Wiper Motor Assembly	1
2	Wiper Control Module w/ Mounting Plate	1
3	Wiper Harness	1
4	Wiper Switch Assembly	1
5	Wiper Motor Cover	1
6	Wiper Motor Spacer	1
7	Billet Aluminum Wiper Switch Bezel	1
8	Hardware Kit	1
9	Instructions	1

Hardware Kit Checklist			
Item #	Description	Quantity	Check
1	M6-1.0 x 20 Socket Head Cap Screw	3	
2	M6 Washer	2	
3	Threaded Adapter	1	
4	1-1/4" Firewall Grommet	1	

This kit features a seven speed wiper system with five delays, low speed, and high speed. The new pitman arm, included in the kit, connects directly to your existing wiper linkage. A rotary switch is also included, along with a complete wiring harness and new wiper motor cover.

This kit does feature a washer pump option as the wiper switch does have a push button function. The wiring harness/control module is equipped with a power and ground wire to install an inline electric washer pump. Detroit Speed does offer a washer pump kit available as part number 121102.

Installation Instructions:

1. Before beginning, please ensure that the parts included with your kit match the parts list above. Ensure that the factory wiper system is in its "Parked" position. Disconnect the battery power by removing the negative battery lead from the battery.
2. Mark the position of the wiper arms by placing masking tape on the windshield. This will assure the arms are accurately replaced. Remove the wiper arms and the cowl panel from the vehicle to gain access to the stock wiper motor assembly.
3. Disconnect the wiper motor harness in the engine compartment. Remove the ground wire screw from the firewall (Figure 1). The original wiring will not be used with the new Selecta-Speed Wiper Kit. A custom harness is provided to replace the original. **NOTE: If you decide to cut the old wires please pay special attention to properly terminate the wire ends to avoid possible shorting.**

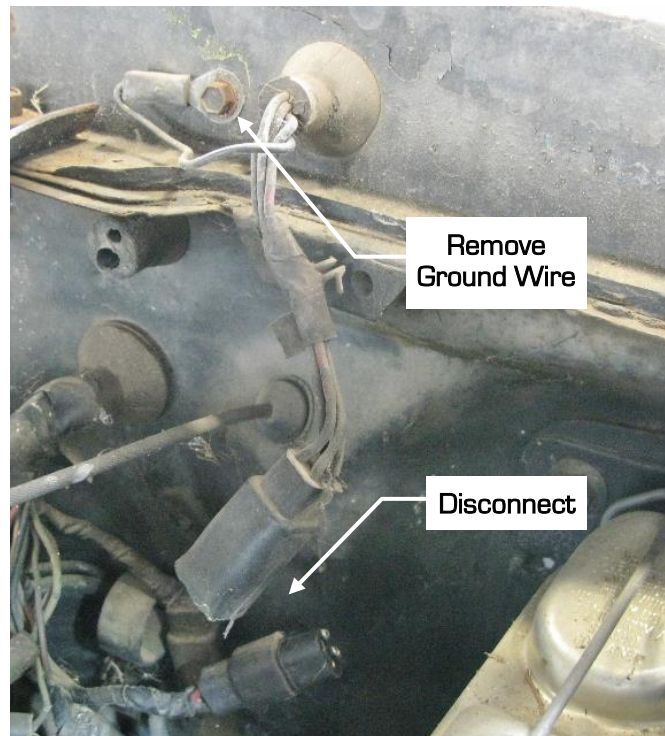


Figure 1 – Disconnect Wiper Motor

4. Disconnect the wiper linkage from the wiper motor in the cowl by removing the retaining clip from the wiper motor pitman arm (Figure 2). Save the retaining clip as it will be used later. Push the wiper linkage off the pitman arm stud. **NOTE:** Make sure the bushing stays with the linkage and not on the pitman arm stud.



Figure 2 - Remove Wiper Linkage

5. Remove the wiper motor/bracket from the vehicle by removing the three bracket screws on the top side of the cowl and one screw at the top of the firewall (Figure 3).

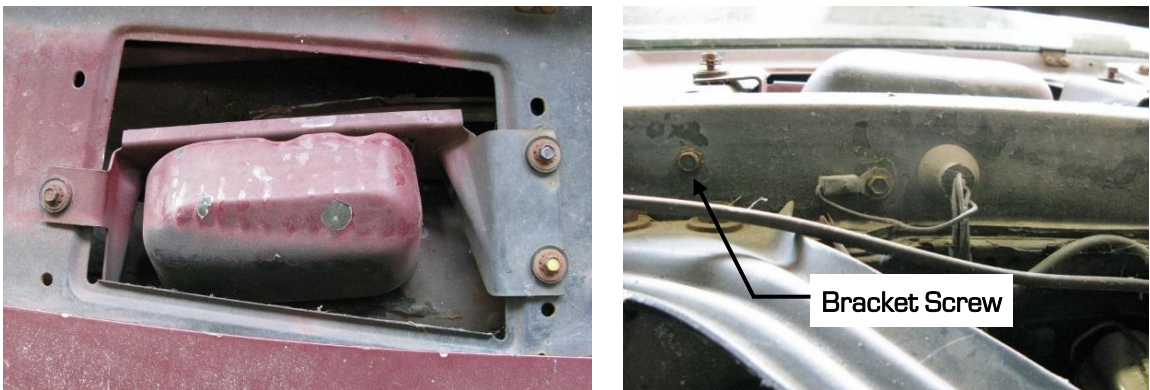


Figure 3 - Remove Wiper Motor/Bracket Assembly

6. Push the grommet and wire harness through the firewall and into the cowl area. Remove the assembly from the vehicle (Figure 4).



Figure 4 - Factory Wiper Motor

7. Remove the 3 screws holding the wiper motor to the wiper motor bracket (Figure 5). Remove the wiper motor and cover from the bracket. The ptiman arm will pass through the hole in the bracket without removing it from the wiper motor.



Figure 5 - Remove the Motor

8. The wiper motor bracket will need to be re-drilled for the new wiper motor bolt pattern. Using the new Detroit Speed wiper motor cover as a template, place it against the wiper motor bracket with the bottom edge of the cover lined up with the bottom edge of the bracket.
9. Use a 15/16" socket to locate the hole in the bracket with the top of the slotted hole in the wiper motor cover. Clamp the cover to the bracket and scribe the three holes in the wiper motor cover to the bracket (Figure 6). **NOTE:** Make sure the cover is as far down and tight against the socket before scribing the holes.



Figure 6 - Clamp Cover to Bracket

10. Depending on if you have an OEM or an aftermarket bracket, you may only need to only drill two holes and slot the 3rd hole (Figure 7).

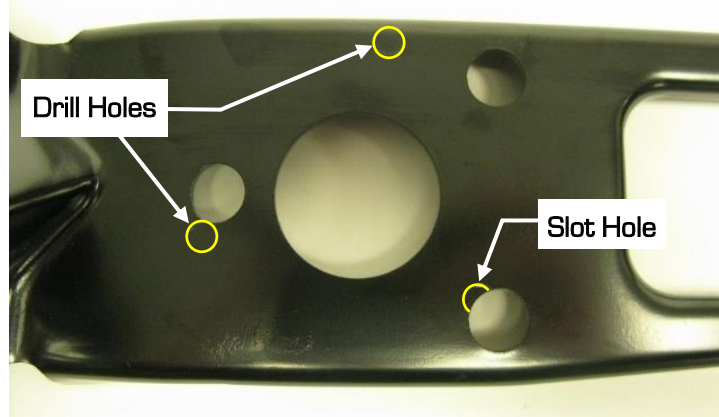


Figure 7 - Scribe Mounting Holes

11. Center punch the holes and drill up to a 9/32" hole starting with a pilot drill. Slot the 3rd hole if required. Place the wiper motor spacer over the pitman arm and onto the wiper motor. Place the wiper motor and spacer into the cover (Figure 8).

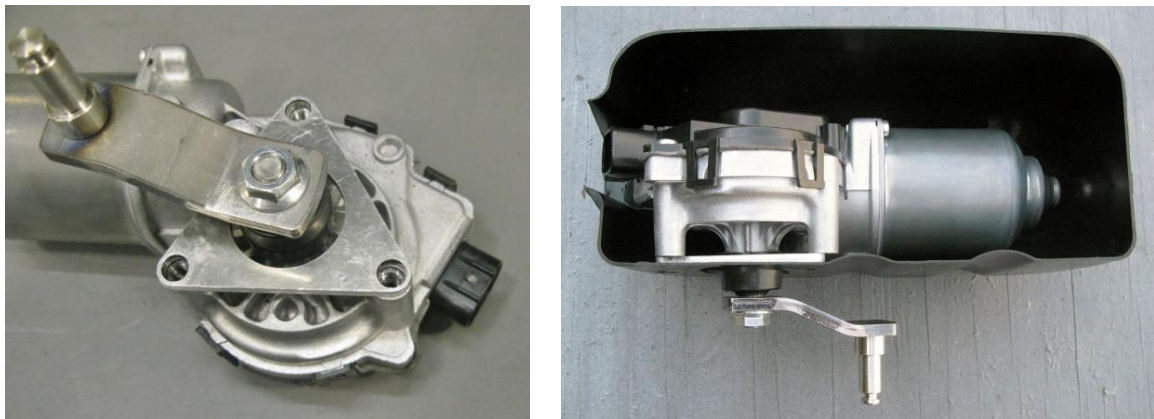


Figure 8 - Wiper Motor, Spacer & Cover

12. Test fit the wiper motor, spacer and cover to the bracket using the provided M6 hardware (Figure 9). Modify the bracket holes as needed until the hardware fits correctly into the wiper motor. **NOTE:** There are only two oversized M6 washers to be used since the other fastener is too close to the flange of the bracket to fit a 3rd washer. Once everything fits correctly, disassemble the wiper motor from the bracket.



Figure 9 - Test Fit Wiper Motor to Bracket

13. Next, place the provided wiring harness underneath the dash. Route the wiper motor connector side of the wiring harness (Figure 10) through the firewall using an existing hole if possible. Otherwise you will need to drill a 1-1/4" hole to allow the wiper motor connector to pass through the firewall.



Figure 10 – Wiper Motor Connector

14. A rubber grommet is already installed on the wire loom for the wiper motor wires. The connector and the grommet will need to pass through the firewall and into the wiper linkage area of the cowl, where the original wiper motor harness passed through (Figure 11).



Figure 11 – Wiper Motor Connection

15. The Detroit Speed Selecta-Speed harness does include a weather pack connector to install an optional electric inline washer pump into your vehicle (Figure 12). Detroit Speed does offer a washer pump kit you can purchase separately as part number 121102.



Figure 12 – Washer Pump Connection

16. If you do not want to use the washer pump feature, you can tie wrap this connector/loom up under the dash. If you would like to use this option, use an existing hole or drill a new hole in your firewall to pass the connector through the firewall. You will need a 1-1/8" diameter hole in order to use the provided 1-1/4" rubber grommet. If you have purchased the Detroit Speed washer pump kit, use the instructions from that kit to complete the washer pump kit installation.
17. Place the spacer back over the pitman arm and onto the wiper motor and then place the motor and spacer into the wiper motor cover as in step 11. Install the wiper motor connector side of the wiring harness into the wiper motor (Figure 13).



Figure 13 – Install Wiper Motor Connector

18. Install the wiper motor assembly back onto the bracket using the provided M6 hardware as in step 12. **NOTE:** There are only two oversized M6 washers to be used since the other fastener is too close to the flange of the bracket to fit a 3rd washer. Route the harness along the side of the bracket (Figure 14).

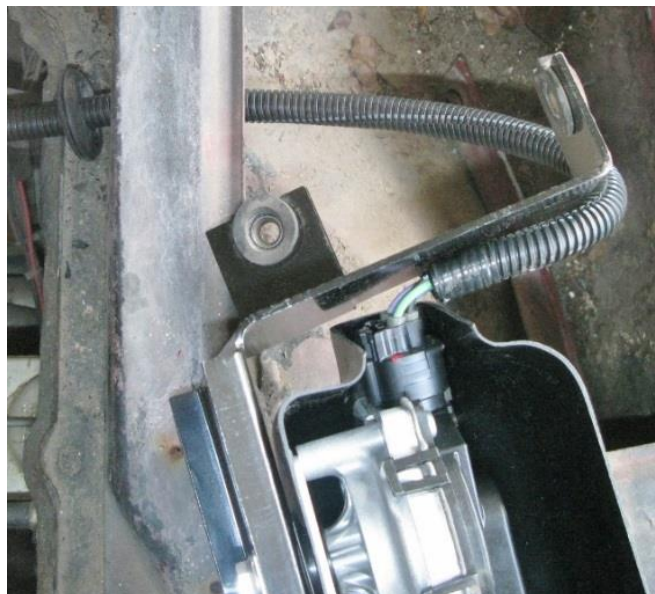


Figure 14 – Install Wiper Motor to Bracket

19. Install the new wiper motor/bracket assembly into the vehicle using the original hardware. Adjust the wire harness length in the cowl area and install the grommet into the firewall (Figure 15 on the next page).

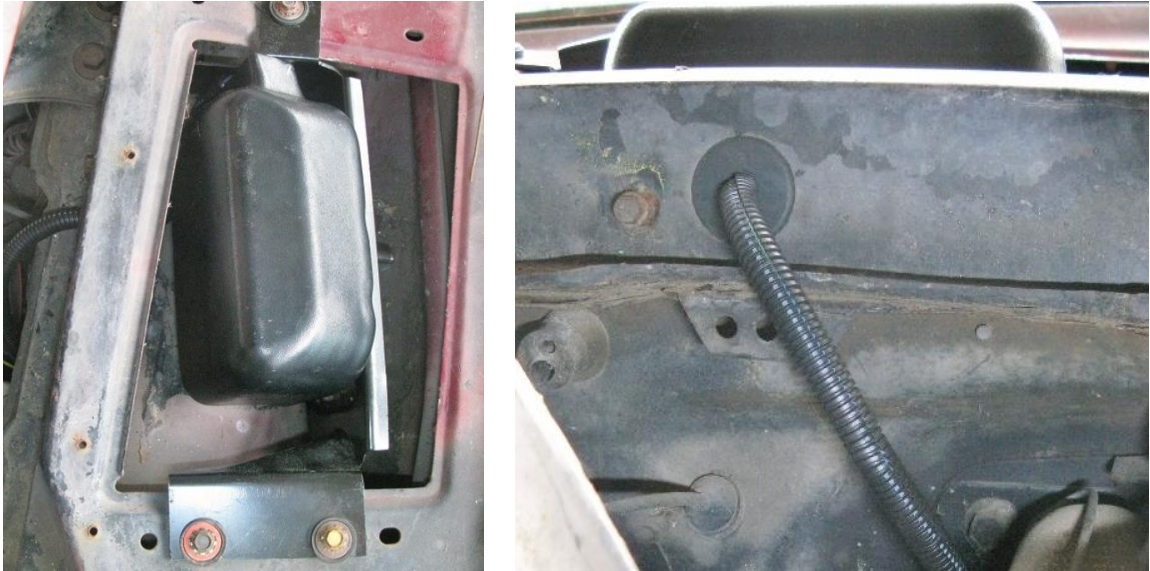


Figure 15 - Install Wiper Motor Assembly

20. Re-attach the wiper linkage to the wiper motor pitman arm and install the original retaining clip (Figure 16). **NOTE: The Selecta-Speed kit is shipped with the pitman arm in the "parked" position.** Do not move the pitman arm by hand to attach the wiper linkage. If the pitman arm is moved from the original "parked" position from Detroit Speed, it may result in the wiper blades stopping in the wrong spot on the windshield.



Figure 16 - Re-attach Wiper Linkage

21. The Selecta-Speed switch will replace the stock switch. Remove the factory wiper switch from the dash. First, remove the wiper knob from the switch using a flat blade screwdriver to release the retaining clip. It can be located by the depression/notch on the knob (Figure 17).



Figure 17 - Remove Wiper Knob

22. Then remove the switch retaining nut by threading it off the wiper switch using a set of pliers (Figure 18).



Figure 18 - Remove Switch Retaining Nut

23. The wiper switch will now pull out from behind the dash and the front and rear wiper switch cover will also be loose (Figure 19). They will be used with the new wiper switch along with the factory wiper knob. Disconnect the factory wiper switch from the harness. Tie up the original wiring under the dash.



Figure 19 - Remove Factory Wiper Switch

24. Next, remove the star washer and hex nut from the wiper switch. Install the threaded adapter onto the new wiper switch (Figure 20). It is recommended to use Loctite or a thread locker so the adapter cannot come loose from the wiper switch.



Figure 20 - Install Threaded Adapter

25. Next, the rear wiper switch cover will need to be modified to use the new wiper switch with the anti-rotation tab. First, drill or grind the "D" shape in the cover to be a round hole so that the new switch with the threaded adapter will pass through (Figure 21).

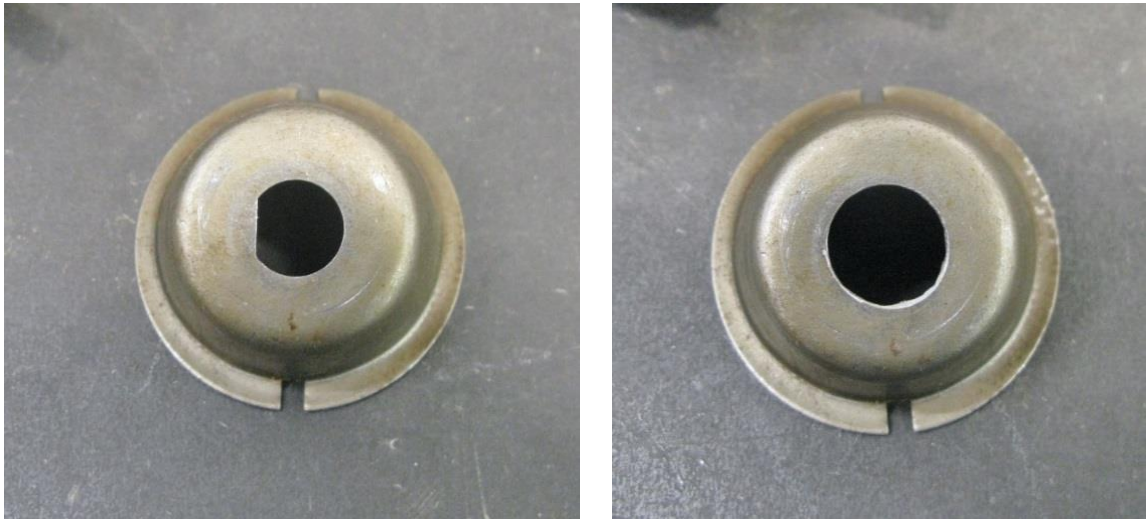


Figure 21 – Modify Switch Bezel

26. Next, mark a location on the back of the cover in the outside corner at the 3 o'clock position (Figure 22). Drill a 1/4" hole at the marked location so that the anti-rotation tab fits through the hole in the cover (Figure 22). You may need to make the hole larger until the cover sits flat against the switch with the anti-rotation tab located in the cover.



Figure 22 – Drill Anti-Rotation Tab Hole

27. Place the rear cover over the wiper switch with the anti-rotation tab locked into the cover. It is recommended to tape the rear cover to the wiper switch for ease of installation into the dash.

28. Install the new wiper switch from behind the dash, position the switch so that the flat on the wiper switch is at 12 o'clock. Place the front switch cover over the switch in place on the dash with the two small holes located at 12 and 6 o'clock.

29. Thread the new DSE wiper bezel onto the threaded adapter on the wiper switch. There are two small holes in the bezel to tighten up the switch with a set of pliers (Figure 23 on the next page).

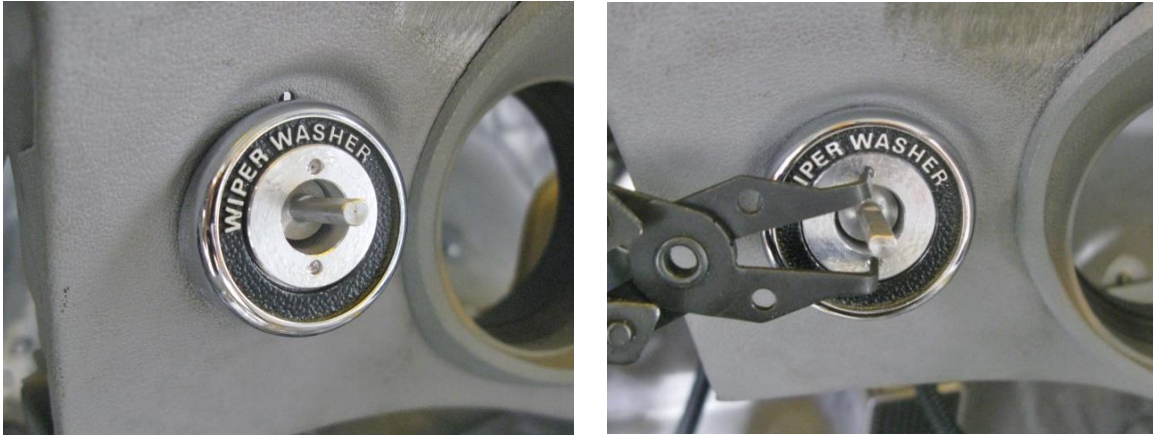


Figure 23 – Wiper Switch Bezel

30. The original wiper knob can now be installed onto the wiper switch. Make sure the “D” shape retaining clip lines up with the flat on the wiper switch and push the knob on the switch until it stops (Figure 26).



Figure 24 – Wiper Knob

31. Next, you will need to install the wiper control module under the dash. It can be mounted anywhere you prefer however there is a recommended location next to the kick panel by the park brake. You can remove the top screw from the dash support and position the module mounting plate under the dash. Re-install the screw through the plate and into the dash (Figure 25).



Figure 25 – Install Control Module

32. With the wiper control module in place, plug in the wiper switch and wiring harness connectors into the control module (Figure 26).



Figure 26– Connect Wiper Switch & Harness to Module

33. Connect the yellow wire under the dash to a 12V ignition or accessory switched source. (Circuit is active when the key is in the run position). This lead is supplied with an inline 30 amp ATO fuse.
34. Connect the black wire with the round eyelet to a ground located under the dash. Make sure a proper ground is obtained by removing any rust or paint from the metal.
35. Connect the negative battery lead and test the wiper system. Upon a successful test, the wiper conversion is now complete. Secure the new wiring harness under the dash and in the engine compartment. Re-install the cowl panel and wiper arms along with any other component that had been removed.

NOTE: In some cases high energy ignition systems have caused interference with the correct operation of the Selecta-Speed Wiper Kit due to spark plug wires routed closely to the wiper motor. If this occurs, re-routing your spark plug wires may be necessary.

If you have any questions before or during the installation of this product, please contact Detroit Speed at tech@detroitsspeed.com or 704.662.3272