

Electrical Systems

WINDSHIELD WIPER/WASHER DIAGNOSIS

Washer Always On

Washer Always On				
Step	Action	Yes	No	
1	1. Turn the ignition switch to the RUN position.	Go to Step 3	Go to Step 2	
	2. Disconnect the wiper/washer switch connector from the windshield wiper pulse control module.			
	Does the washer pump continue to operate?			
2	Replace the multifunction switch.	System OK	_	
	Is the repair complete?			
3	1. Turn the ignition switch to the OFF position.	Go to Step 4	Go to Step 5	
	2. Disconnect the wiper/washer wire harness from the windshield wiper pulse control module.			
	3. Turn the ignition switch to the RUN position.			
	Does the washer pump stop operating?			
4	Replace the pulse wiper control module.	System OK	_	
	Is the repair complete?			
5	Repair the short to ground in CKT 94 (PNK) between the pulse wiper control module connector, cavity	System OK	_	
	B and the wiper/washer body builder provision connector.			
	Is the repair complete?			



Electrical Systems

Washers Inoperative

Washer Pump Inoperative				
Step	Action	Yes	No	
1	Verify the condition.	System OK	Go to Step 2	
	Does the washer pump operate?			
2	Check to see if the windshield wipers will operate. Do the windshield wipers operate?	Go to Step 3	Go to Windshield Wipers Inoperative	
3	Check the WIPER fuse in the IP extension fuse block.	Go to Step 4	Go to Step 5	
	Is the fuse open?			
4	Repair the short to ground condition in circuit 143 (YEL) and replace the fuse.	Go to Step 1	_	
	Is the repair complete?			
5	 Check for available voltage at the washer pump. Turn the ignition switch to the ON position. Connect a DMM between terminal A of the Body Builder supplied washer pump and chassis ground. Have a helper turn the washer pump switch to the ON position. 	Go to Step 7	Go to Step 6	
	Is voltage available to the washer pump?			
6	Repair the open condition in circuit 94 (PNK).	Go to Step 1	_	
	Is the repair complete?			

TOC

SECTION 8

PAGE 66

Electrical Systems

Wash	Washer Pump Inoperative				
Step	Action	Yes	No		
7	Check for output voltage from the Pulse Wiper Control Module.	Go to Step 9	Go to Step 8		
	Turn the ignition switch to the ON position.				
	2. Connect a DMM between terminal J of the Pulse Wiper Control Module and chassis ground.				
	3. Have a helper turn the washer pump switch to the ON position.				
	Is there output voltage from the Pulse Wiper Control Module?				
8	Replace the Pulse Wiper Control Module.	Go to Step 1	_		
	Is the repair complete?				
9	Check for available voltage to the Pulse Wiper Control Module.	Go to Step 11	Go to Step 10		
	1. Turn the ignition switch to the ON position.				
	2. Connect a DMM between terminal J of the Pulse Wiper Control Module and chassis ground.				
	Is power available to the Pulse Wiper Control Module?				
10	Repair the open circuit in circuit 143 (YEL).	Go to Step 1	_		
	Is the repair complete?				
11	Replace the body builder supplied washer pump.	System OK	<u> </u>		
	Is the repair complete?				



Electrical Systems

Wipers Inoperative – All Modes

Wipe	rs Inoperative – All Modes			
Step	Action	Value(s)	Yes	No
1	 Turn the ignition switch to the RUN position. With a test light, probe the pulse wiper control module connector, C234 from cavity F to ground. 	_	Go to Step 3	Go to Step 2
	Does the test light illuminate?			
2	Repair the open in CKT 143 (YEL) between the instrument panel fuse block, cavity E4 of the multifunction switch pigtail and the wiper pulse control module connector, cavity F.	_	System OK	_
	Is the repair complete?	100 11	<u> </u>	
3	 Backprobe the windshield wiper pulse control module with a DMM from cavity K to B+. Measure the voltage. 	10.0 volts	Go to Step 5	Go to Step 4
	Is the voltage more than the specified value?			
4	Repair the open in CKT 250 (BLK) between the windshield wiper pulse control module, cavity D and ground terminal 12.	_	System OK	_
	Is the repair complete?			
5	Backprobe the multifunction switch pigtail with a DMM from cavity D to B+. Measure the voltage.	10.0 volts	Go to Step 7	Go to Step 6
	Is the voltage more than the specified value?			
6	Replace the windshield wiper pulse control module.	_	System OK	_
	Is the repair complete?			
7	Replace the multifunction switch.	_	System OK	_
	Is the repair complete?			



Electrical Systems

Wipers Delay Mode Inoperative

Wipers Delay Mode Inoperative				
Step	Action	Value(s)	Yes	No
1	1. Turn the ignition switch to the ACCY or RUN position.	30 K-ohm to 430 K-	Go to Step 3	Go to Step 2
	2. Turn the wiper/washer switch to the PULSE position.	ohm		
	3. Move the wiper/washer delay rheostat to the maximum delay position.	Offiliti		
	4. Probe the wiper/washer switch pigtail connector with a DMM from cavity E4 to cavity E5.			
	5. Measure the resistance.			
	Is resistance outside the specified range?			
2	Replace the multifunction switch.	_	System OK	_
	Is the repair complete?			
3	1. Probe the multifunction switch pigtail connector with a DMM from cavity E3 to cavity E5.	5 ohms	Go to Step 4	Go to Step 5
	2. Measure the resistance.			
	Is the resistance greater than the specified value?			
4	Replace the multifunction switch.	_	System OK	_
	Is the repair complete?			
5	Replace the windshield wiper pulse control module.	_	System OK	_
	Is the repair complete?			



Electrical Systems

Wipers High Mode Inoperative

Wipe	Wipers High Mode Inoperative			
Step	Action	Value(s)	Yes	No
1	1. Turn the ignition switch to the ACCY or RUN position.	4.0 volts	Go to Step 3	Go to Step 2
	2. Turn the wiper/washer switch to the HIGH position.			
	3. Backprobe the wiper/washer switch pigtail with a DMM from cavity E3 to ground.			
	Is the voltage greater than the specified value?			
2	Replace the multifunction switch.	_	System OK	_
	Is the repair complete?			
3	1. Backprobe the windshield wiper pulse control module with a DMM from cavity F to ground.	10.0 volts	Go to Step 4	Go to Step 5
	2. Measure the voltage.			
	Is the voltage greater than the specified value?			
4	Replace the windshield wiper pulse control module.	_	System OK	_
	Is the repair complete.			
5	Repair the open in CKT 92 (PPL) between the multifunction switch, cavity E3 and the wiper/washer provision connector, C207.	_	System OK	_
	Is the repair complete?			



Electrical Systems

Wipers Low or Mist Modes Inoperative

Wipe	Wipers Low or Mist Modes Inoperative			
Step	Action	Value(s)	Yes	No
1	1. Turn the ignition switch to the ACCY or RUN position.	680 k-ohm	Go to Step 3	Go to Step 2
	2. Turn the multifunction switch to the LOW position.			
	3. Backprobe the multifunction switch pigtail connector with a DMM from cavity E4 to E5.			
	4. Measure the resistance.			
	Is the resistance approximately the specified value?			
2	Replace the multifunction switch.	_	System OK	_
	Is the repair complete?			
3	Turn and hold the multifunction switch in the MIST position.	680 k-ohm	Go to Step 5	Go to Step 4
	Backprobe the multifunction switch pigtail connector with a DMM from cavity E4 to E5.	000 11 011111		
	3. Measure the voltage.			
	· · · · · · · · · · · · · · · · · · ·			
	Is the voltage greater than the specified value?			
4	Replace the multifunction switch.	_	System OK	_
	Is the repair complete?		0-4-04-7	0- 4- 04 0
5	1. Turn the multifunction switch to the LOW position.	_	Go to Step 7	Go to Step 6
	2. Backprobe the multifunction switch pigtail connector with a test light from cavity E5 to ground.			
	3. Measure the voltage.			
	Does the lamp illuminate?			
6	Repair the open in CKT 112 (GRA).	_	System OK	_
	Is the repair complete?			
7	Turn and hold the multifunction switch in the MIST position.	_	Go to Step 9	Go to Step 8
	2. Backprobe the multifunction switch pigtail connector with a test light from cavity E5 to ground.			
	Does the lamp illuminate?			
	Does the lamp mammate:			

TOC

SECTION 8

PAGE **71**

Electrical Systems

Step	Action	Value(s)	Yes	No
8	Replace the multifunction switch.		System OK	_
	Is the repair complete?			
9	 Use a DMM to backprobe the wiper/washer provision connector C 207, from cavity A to B+. Measure the voltage. 	10.0 volts	Go to Step 11	Go to Step 10
	Is the voltage greater than the specified value?			
10	Repair the open in CKT 91 (GRY) between the windshield wiper pulse control module connector, cavity E and the wiper/washer provision connector C207, cavity A.	_	System OK	_
	Is the repair complete?			
11	 Use a DMM to backprobe the wiper/washer provision connector C207, from cavity D to B+. Measure the voltage. 	10.0 volts	Go to Step 13	Go to Step 12
	Is the voltage greater than the specified value?			
12	Repair the open in CKT 97 (LT BLU) between the windshield wiper pulse control module connector, cavity F and the wiper/washer provision connector C207, cavity D.	_	System OK	_
	Is the repair complete?			
13	Repair the windshield wiper motor or the wiring beyond the wiper/washer provision connector.	_	System OK	
	Is the repair complete?			