Dodge Charger 2006-2012 Workshop Manual

Note: The manual is referenced to year 2005, which is the Dodge Charger LX body. This is applicable for the model years 2006-2012 North America Edition. Please be aware that there may be some slight differences of your actual model due to year by year cosmetic and minor electrical updates by the manufacturer.

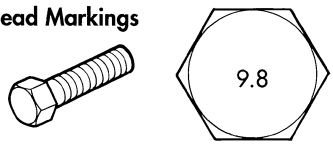
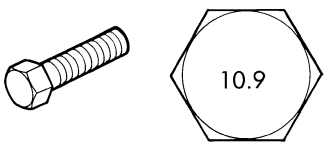
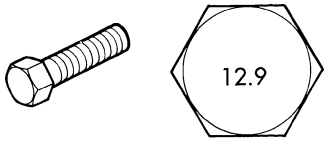
INDEX

FASTENER IDENTIFICATION

DESCRIPTION

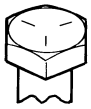
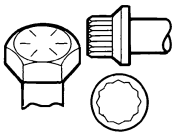
Bolt Markings and Torque - Metric

Commercial Steel Class

	9.8	10.9	12.9
Bolt Head Markings			

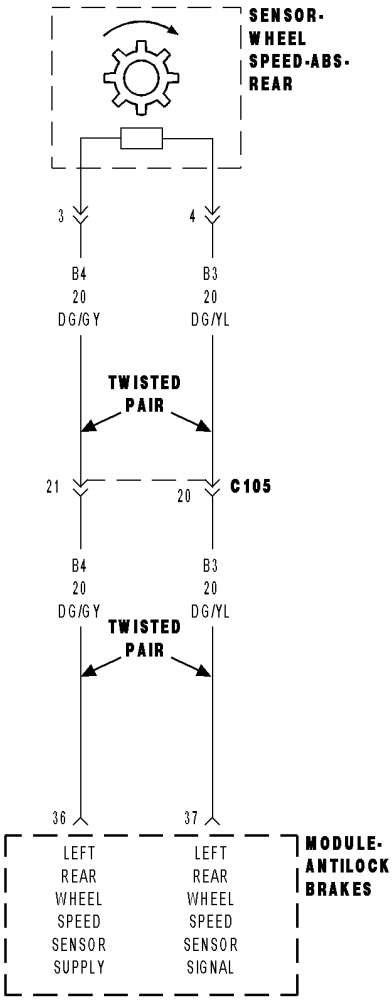
Body Size	Torque				Torque				Torque			
Diam.	Cast Iron		Aluminum		Cast Iron		Aluminum		Cast Iron		Aluminum	
mm	N•m	ft-lb	N•m	ft-lb	N•m	ft-lb	N•m	ft-lb	N•m	ft-lb	N•m	ft-lb
6	9	5	7	4	14	9	11	7	14	9	11	7
7	14	9	11	7	18	14	14	11	23	18	18	14
8	25	18	18	14	32	23	25	18	36	27	28	21
10	40	30	30	25	60	45	45	35	70	50	55	40
12	70	55	55	40	105	75	80	60	125	95	100	75
14	115	85	90	65	160	120	125	95	195	145	150	110
16	180	130	140	100	240	175	190	135	290	210	220	165
18	230	170	180	135	320	240	250	185	400	290	310	230

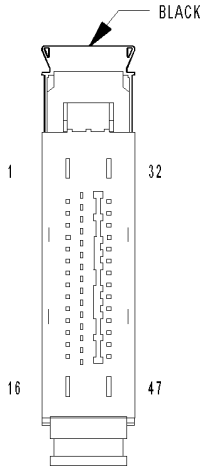
Bolt Markings and Torque Values - U.S. Customary

SAE Grade Number	5	8
Bolt Head Markings These are all SAE Grade 5 (3) line	 	

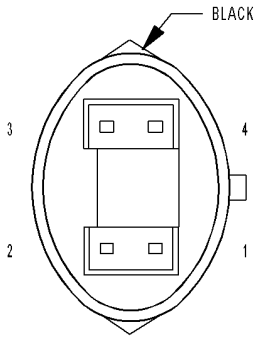
Body Size	Bolt Torque - Grade 5 Bolt				Bolt Torque - Grade 8 Bolt			
	Cast Iron		Aluminum		Cast Iron		Aluminum	
	N•m	ft-lb	N•m	ft-lb	N•m	ft-lb	N•m	ft-lb
1/4 - 20	9	7	8	6	15	11	12	9
- 28	12	9	9	7	18	13	14	10
5/16 - 18	20	15	16	12	30	22	24	18
- 24	23	17	19	14	33	24	25	19
3/8 - 16	40	30	25	20	55	40	40	30
- 24	40	30	35	25	60	45	45	35
7/16 - 14	60	45	45	35	90	65	65	50
- 20	65	50	55	40	95	70	75	55
1/2 - 13	95	70	75	55	130	95	100	75
- 20	100	75	80	60	150	110	120	90
9/16 - 12	135	100	110	80	190	140	150	110
- 18	150	110	115	85	210	155	170	125
5/8 - 11	180	135	150	110	255	190	205	150
- 18	210	155	160	120	290	215	230	170
3/4 - 10	325	240	255	190	460	340	365	270
- 16	365	270	285	210	515	380	410	300
7/8 - 9	490	360	380	280	745	550	600	440
- 14	530	390	420	310	825	610	660	490
1 - 8	720	530	570	420	1100	820	890	660
- 14	800	590	650	480	1200	890	960	710

C102A-LEFT REAR WHEEL SPEED COMPARATIVE PERFORMANCE





MODULE-
ANTILOCK BRAKES



SENSOR-
WHEEL
SPEED-ABS-
REAR

813cf813

C1017-RIGHT FRONT WHEEL SPEED SENSOR CIRCUIT LOW (CONTINUED)

6. CHECK THE (B7) RIGHT FRONT WSS SUPPLY CIRCUIT FOR A SHORT TO VOLTAGE

Turn the ignition off.

Disconnect the Front Control Module harness connector.

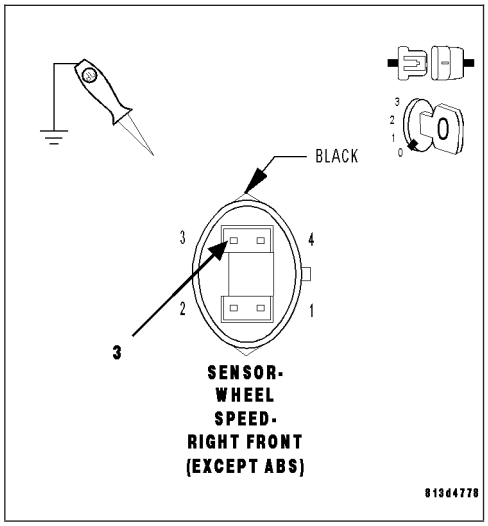
Disconnect the Right Front WSS harness connector.

Using a 12-volt test light connected to ground, check the (B7) Right Front WSS Supply circuit.

Does the test light illuminate brightly?

Yes >> Repair the (B7) Right Front WSS Supply circuit for a short to voltage.
Perform ABS VERIFICATION TEST - VER 1.

No >> Go To 7



7. CHECK THE (B7) RIGHT FRONT WSS SUPPLY CIRCUIT FOR AN OPEN

Turn the ignition off.

Disconnect the Front Control Module harness connector.

Disconnect the Right Front WSS harness connector.

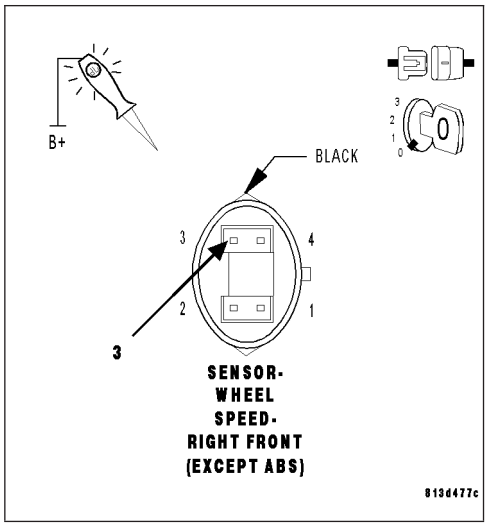
Connect a jumper wire between the (B7) Right Front WSS Supply circuit and ground.

Using a 12-volt test light connected to 12-volts, check the (B7) Right Front WSS Supply circuit.

Does the test light illuminate brightly

Yes >> Replace the Front Control Module in accordance with the Service Information.
Perform ABS VERIFICATION TEST - VER 1.

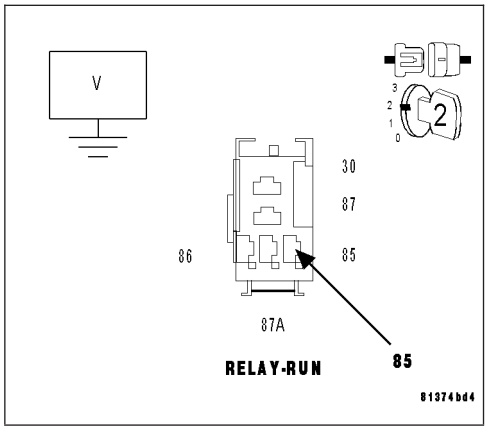
No >> Repair the (B7) Right Front WSS Supply circuit for an open.
Perform ABS VERIFICATION TEST - VER 1.



B2123-IGNITION RUN CONTROL CIRCUIT HIGH (CONTINUED)

3. (F921) RUN RELAY CONTROL CIRCUIT SHORTED TO VOLTAGE

Note: This circuit contains a diode. When checking for a short to voltage you must check both sides of the diode.
Turn the ignition off.
Remove the FCM from the Power Distribution Module.
Remove the run relay from the Rear Power Distribution Module.
Turn the ignition on.
Measure the voltage of the (F921) Run Relay Control circuit at the run relay cavity (85).



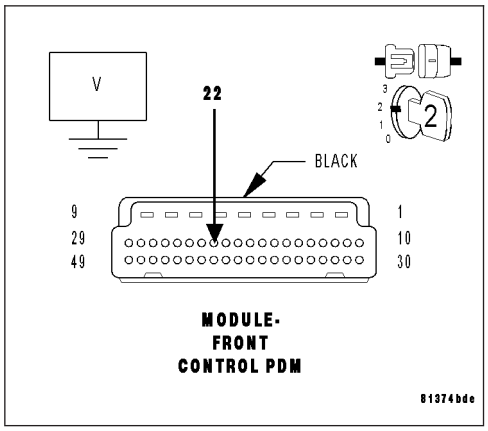
Is the voltage above 10.0 volts?

Yes >> Repair the (F921) Run Relay Control circuit for a short to voltage.
Perform BODY VERIFICATION TEST – VER 1. (Refer to BODY VERIFICATION TEST – VER 1).

No >> Go To 4

4. (F923) RUN RELAY CONTROL CIRCUIT SHORTED TO VOLTAGE

Note: This circuit contains a diode. When checking for a short to voltage you must check both sides of the diode.
Measure the voltage of the (F923) Run Relay Control circuit at the FCM–PDM connector.



Is the voltage above 10.0 volts?

Yes >> Repair the (F923) Run Relay Control circuit for a short to voltage.
Perform BODY VERIFICATION TEST – VER 1. (Refer to BODY VERIFICATION TEST – VER 1).

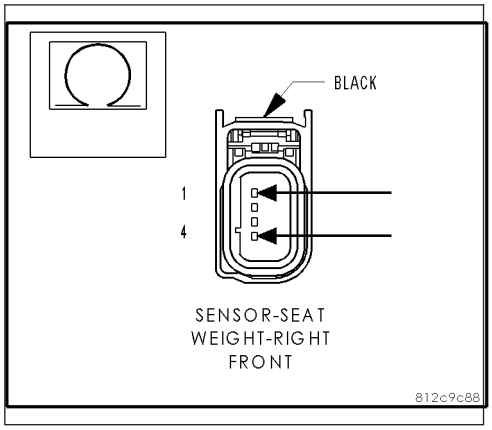
No >> Inspect the wiring and connectors for damage or shorted circuits. If ok, replace and program the Front Control Module in accordance with the service information.
Perform BODY VERIFICATION TEST – VER 1. (Refer to BODY VERIFICATION TEST – VER 1).

B1B7F-PASSENGER SEAT WEIGHT SENSOR 2 - RIGHT FRONT INPUT CIRCUIT HIGH (CONTINUED)

7. CHECK (R718) RT-FT SEAT WEIGHT SENSOR SIGNAL CIRCUIT FOR A SHORT TO (R701) SEAT WEIGHT SENSOR 5 VOLT CIRCUIT

Disconnect the Right-Front Seat Weight Sensor connector.

Measure the resistance between the (R718) RT-FT Seat Weight Sensor Signal circuit and the (R701) Seat Weight Sensor 5 Volt circuit.



Is the resistance below 10K ohms?

Yes >>

Note: Do not attempt to repair the Seat Harness. Replace the Seat Harness if the condition inspecting or testing for is present in the Seat Harness.

Replace the Passenger Seat Harness in accordance with the Service Information.

Perform OCS VERIFICATION TEST - VER 1.

No >> Go To 8

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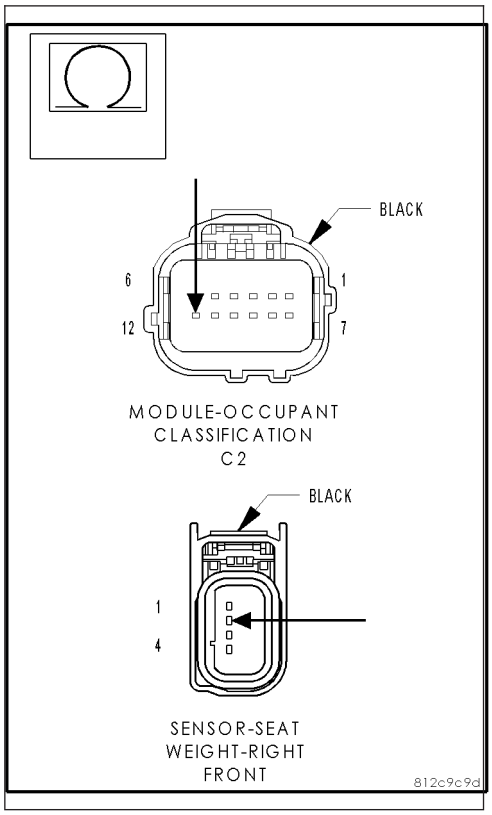
8. CHECK (R728) SEAT WEIGHT SENSOR GROUND CIRCUIT FOR AN OPEN

Measure the resistance of the (R728) Seat Weight Sensor Ground circuit between the OCM C2 connector and the Right-Front Seat Weight Sensor connector.



Is the resistance below 5.0 ohms?

Yes >> Replace the OCM in accordance with the Service Information.

Perform OCS VERIFICATION TEST - VER 1.

No >>

Note: Do not attempt to repair the Seat Harness. Replace the Seat Harness if the condition inspecting or testing for is present in the Seat Harness.

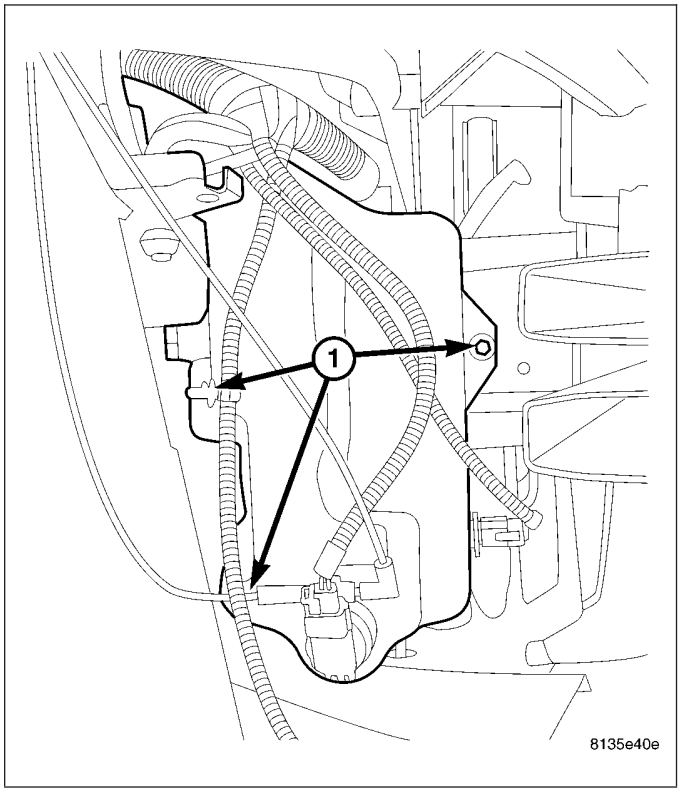
Replace the Passenger Seat Harness in accordance with the Service Information.

Perform OCS VERIFICATION TEST - VER 1.

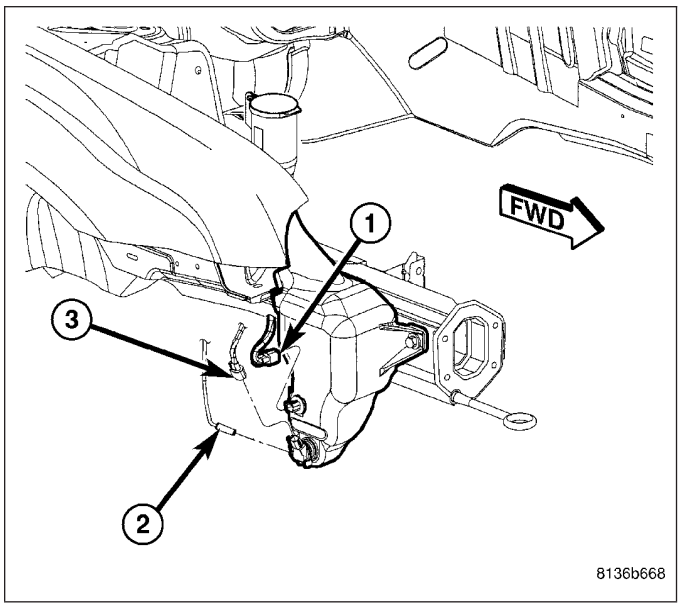
WASHER FLUID LEVEL SWITCH

REMOVAL

1. Disconnect and isolate the battery negative cable.
2. Drain washer fluid from the reservoir and into a suitable clean container. This can be done by disconnecting the windshield washer hose from the front (outboard) washer pump and allowing the washer fluid to drain into a container through a temporary jumper hose connected to the front washer pump.
3. Remove the washer reservoir (Refer to 8 - ELECTRICAL/WIPERS/WASHERS/WASHER RESERVOIR - REMOVAL).

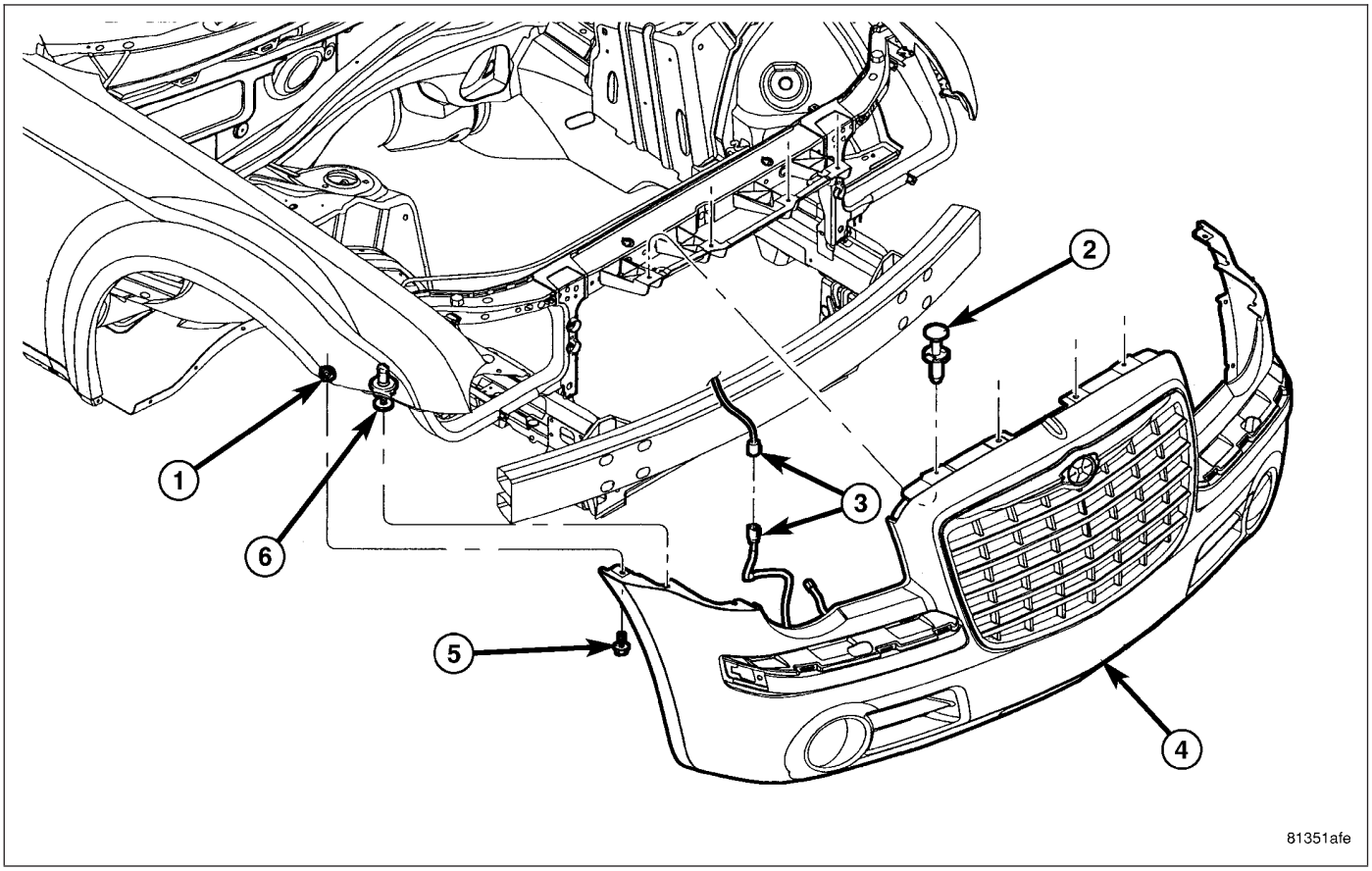


4. Remove the washer fluid level switch by pulling out of reservoir. Inspect the grommet and if installing a new switch, always use a new grommet.

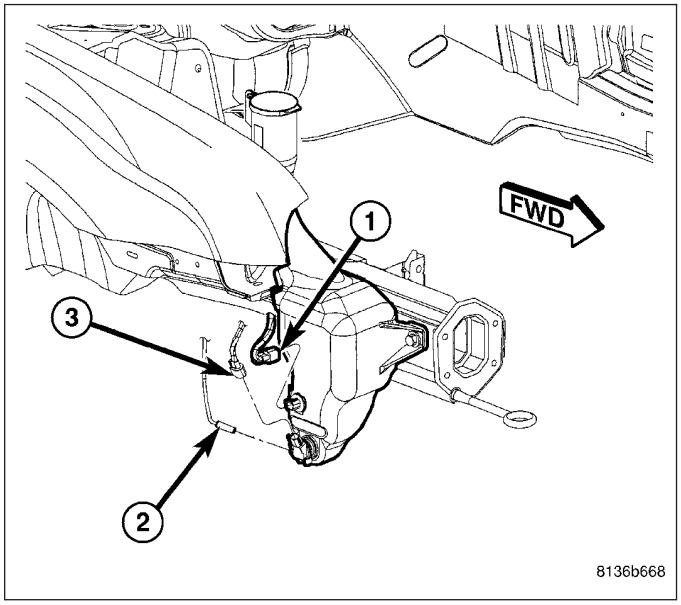


WASHER RESERVOIR

REMOVAL



1. Disconnect and isolate the battery negative cable.
2. Remove the front fascia (4) (Refer to 13 - FRAME & BUMPERS/BUMPERS/FRONT FASCIA - REMOVAL).
3. Disconnect electrical harness connectors (1 and 3) from reservoir.
4. Disconnect hose from reservoir (2) and drain fluid into container.



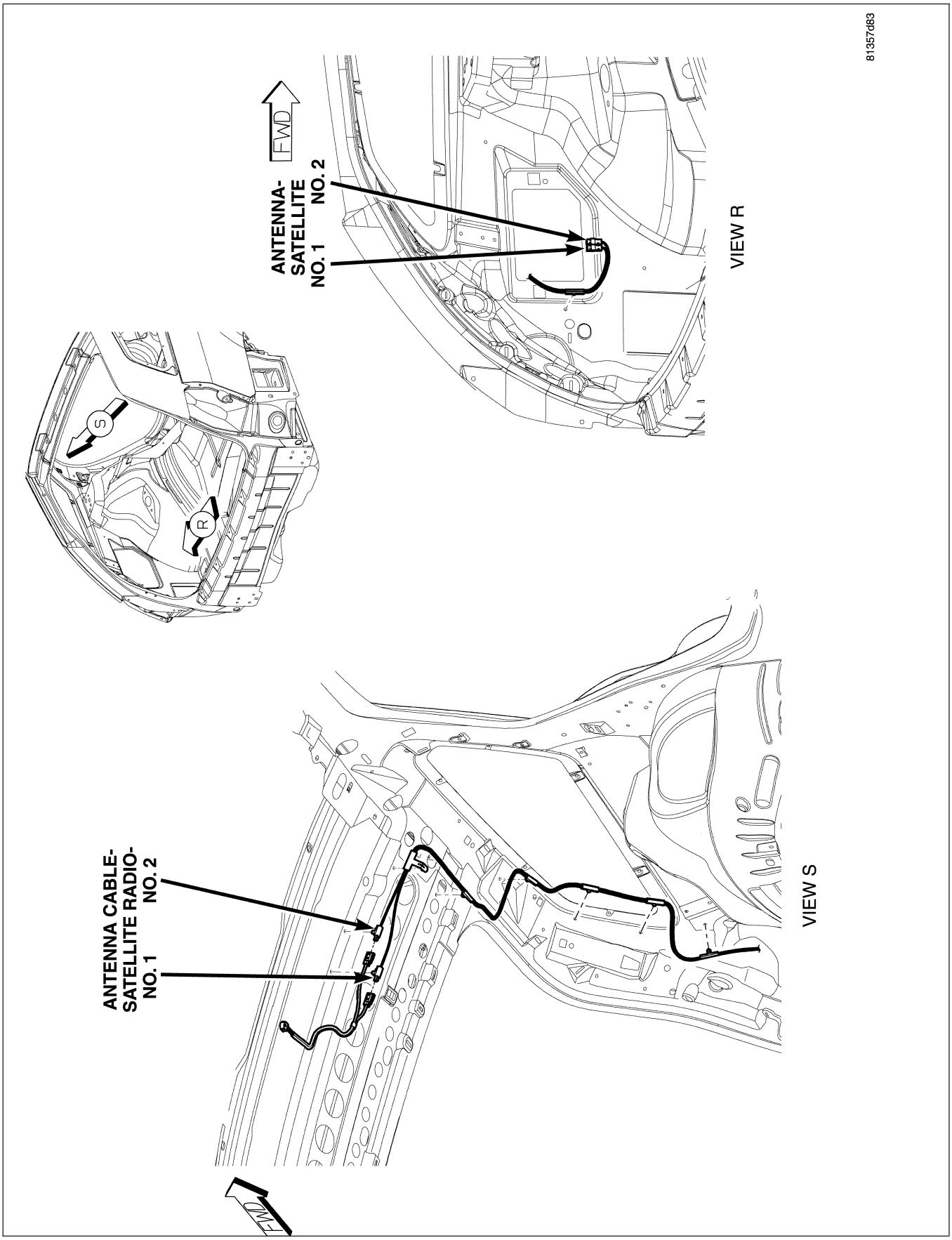


Fig. 54 SATELLITE RADIO ANTENNA CABLES (LX49)

P0330-KNOCK SENSOR 2 CIRCUIT (CONTINUED)

4. (K924) KNOCK SENSOR NO.2 RETURN CIRCUIT OPEN

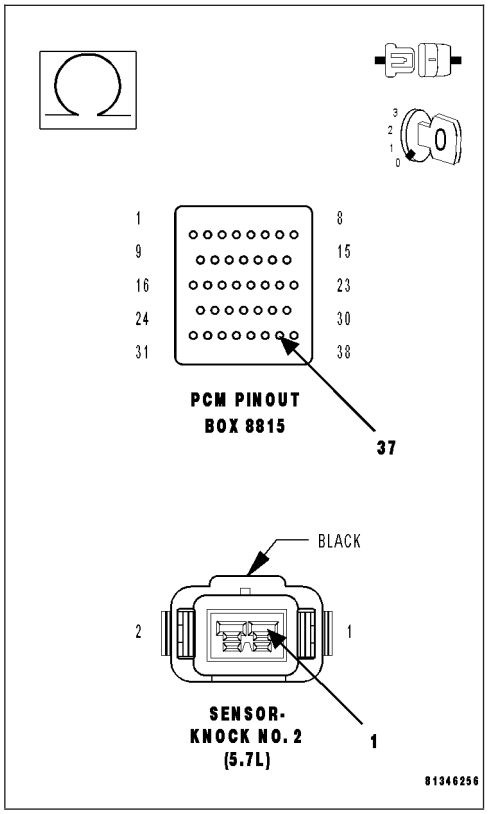
Measure the resistance of the (K924) Knock Sensor No.2 Return circuit from the Knock Sensor harness connector to the appropriate terminal of special tool #8815.

Is the resistance below 5.0 ohms?

Yes >> Go To 5

No >> Repair the open in the (K924) Knock Sensor No.2 Return circuit.

Perform (NGC) POWERTRAIN VERIFICATION TEST VER - 5.(Refer to 8 - ELECTRICAL/ELECTRONIC CONTROL MODULES/POWERTRAIN CONTROL MODULE -DIAGNOSIS AND TESTING)



5. (K242) KNOCK SENSOR NO.2 SIGNAL SHORTED TO THE (K924) KNOCK SENSOR NO.2 RETURN CIRCUIT

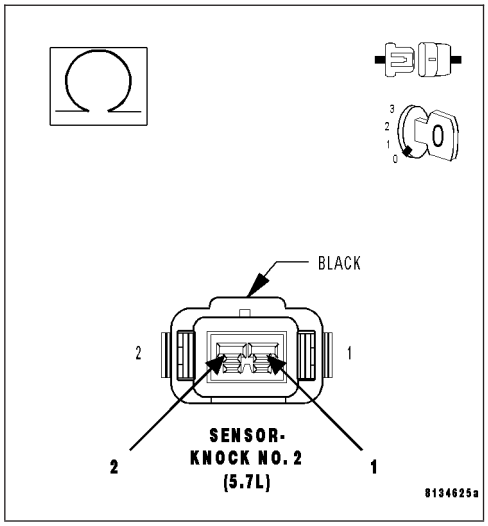
Measure the resistance between the (K242) Knock Sensor No.2 Signal circuit and the (K924) Knock Sensor No.2 Return circuit in the Knock Sensor harness connector.

Is the resistance below 100 ohms?

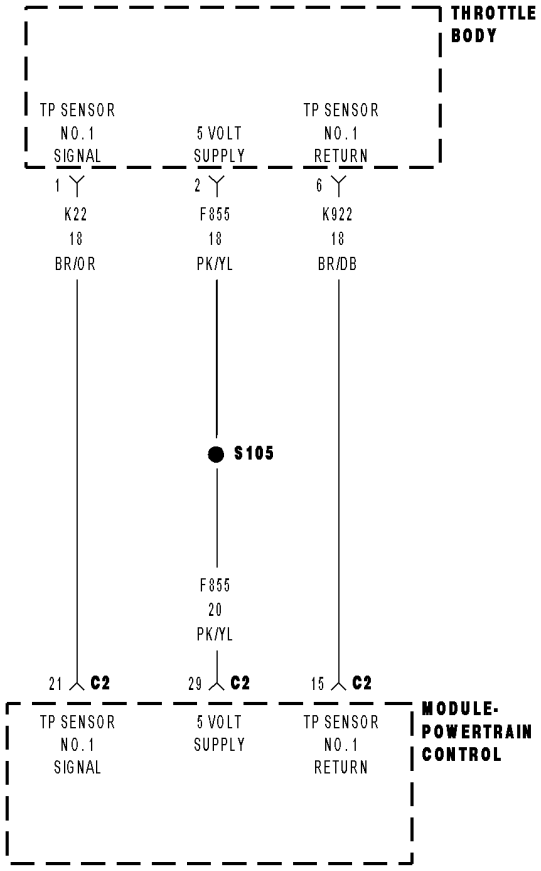
Yes >> Repair the short between the (K242) Knock Sensor No.2 Signal circuit and the (K924) Knock Sensor No.2 Return circuit.

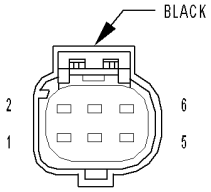
Perform (NGC) POWERTRAIN VERIFICATION TEST VER - 5.(Refer to 8 - ELECTRICAL/ELECTRONIC CONTROL MODULES/POWERTRAIN CONTROL MODULE -DIAGNOSIS AND TESTING)

No >> Go To 6

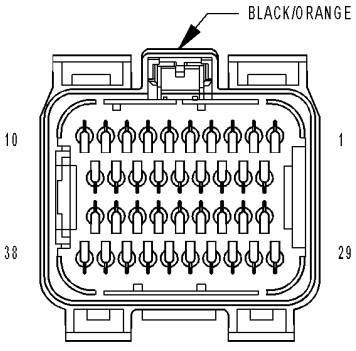


P2135-THROTTLE POSITION SENSOR 1/2 CORRELATION





THROTTLE BODY



MODULE-POWERTRAIN CONTROL C2

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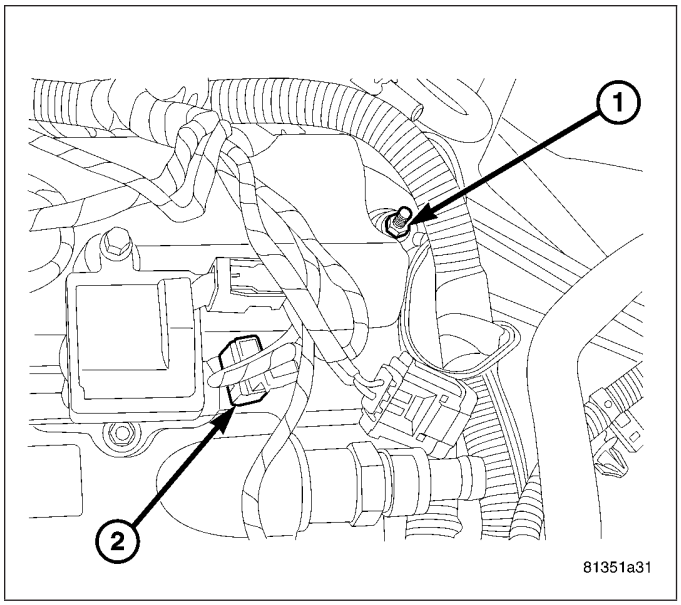
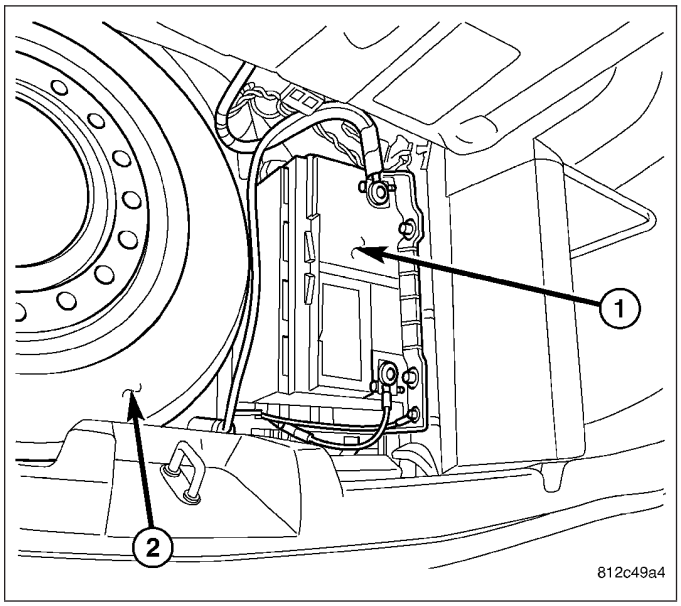
5. Install ignition coil capacitor (2) and fastener.
6. Install ground strap (1) to cylinder head cover stud.
7. Connect all electrical connectors and harness clips.
8. Connect make up air hose.
9. Install upper intake manifold (Refer to 9 - ENGINE/ MANIFOLDS/INTAKE MANIFOLD - INSTALLATION).

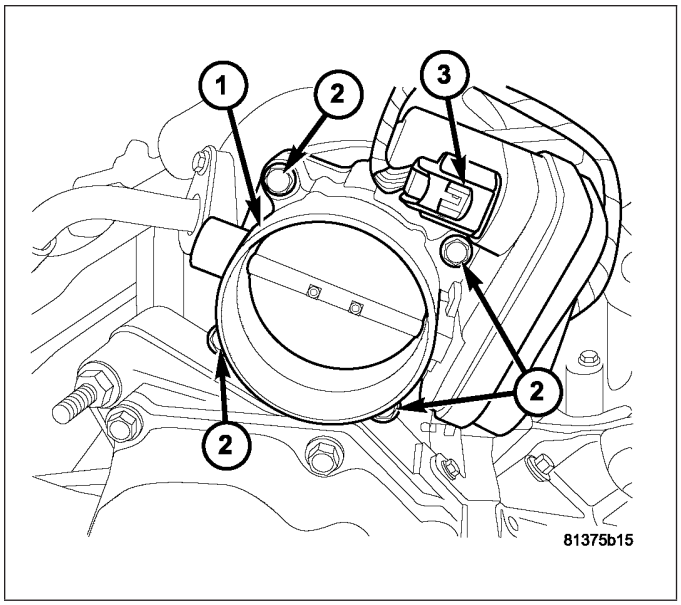


10. Connect negative battery (1) cable.



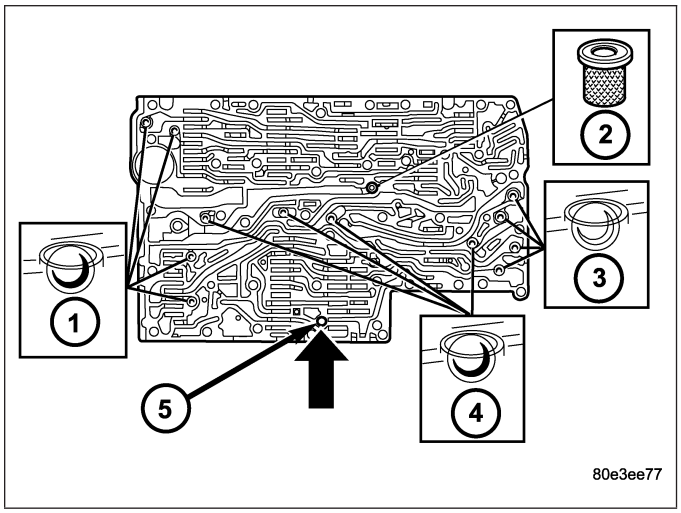
CAUTION: Do not use spray (carb) cleaners on any part of the throttle body. Do not apply silicone lubricants to any part of the throttle body.

3. Install throttle body to intake manifold by positioning throttle body to manifold alignment pins.
4. Install and tighten four mounting bolts (2). Refer to Torque Specifications.
5. Install electrical connector (3).
6. Install rubber air hose to throttle body.
7. A Scan Tool may be used to learn electrical parameters. Go to the Miscellaneous menu, and then select ETC Relearn. If the relearn is not preformed, a Diagnostic Trouble Code (DTC) will be set. If necessary, use a scan tool to erase any Diagnostic Trouble Codes (DTC's) from PCM.

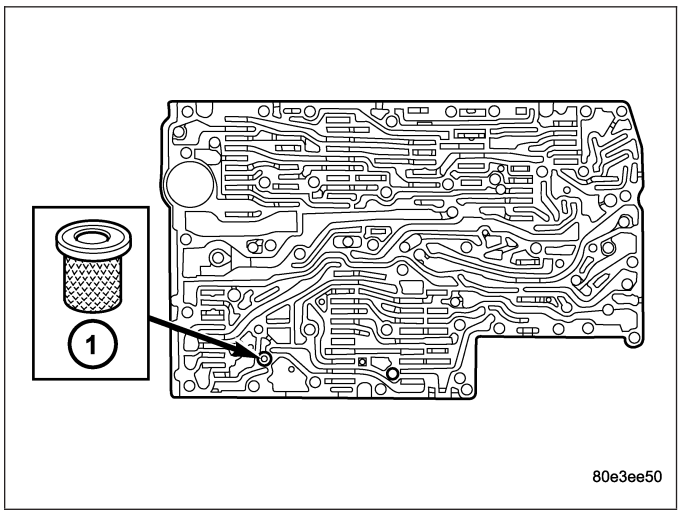


Note: A total of 12 valve balls are located in the valve body, four made from plastic (4) and eight from steel (1, 3).

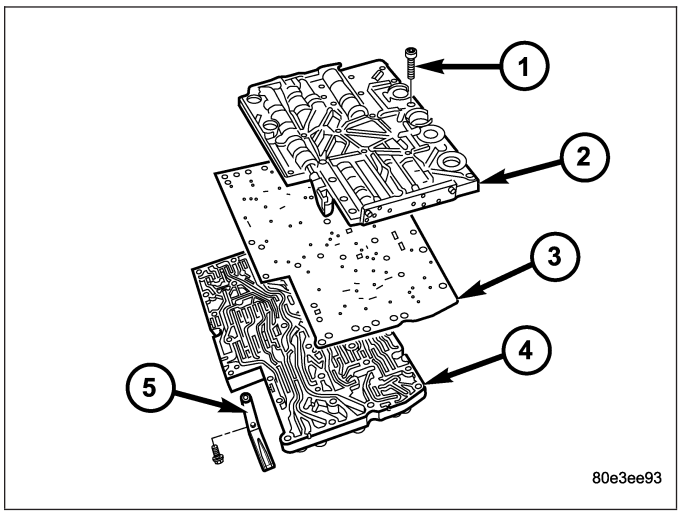
6. Install all check balls (1, 3, 4) and the central strainer (2).



7. Install the strainer (1) in the inlet to torque converter lock-up control solenoid valve.



8. Position the sealing plate (3) onto the valve body (4).
9. Install the valve housing (2) onto the valve body (4) and sealing plate (3).
10. Install the shift plate Torx® bolts (1). Tighten the bolts to 8 N·m (71 in.lbs.).
11. Install leaf spring (5).



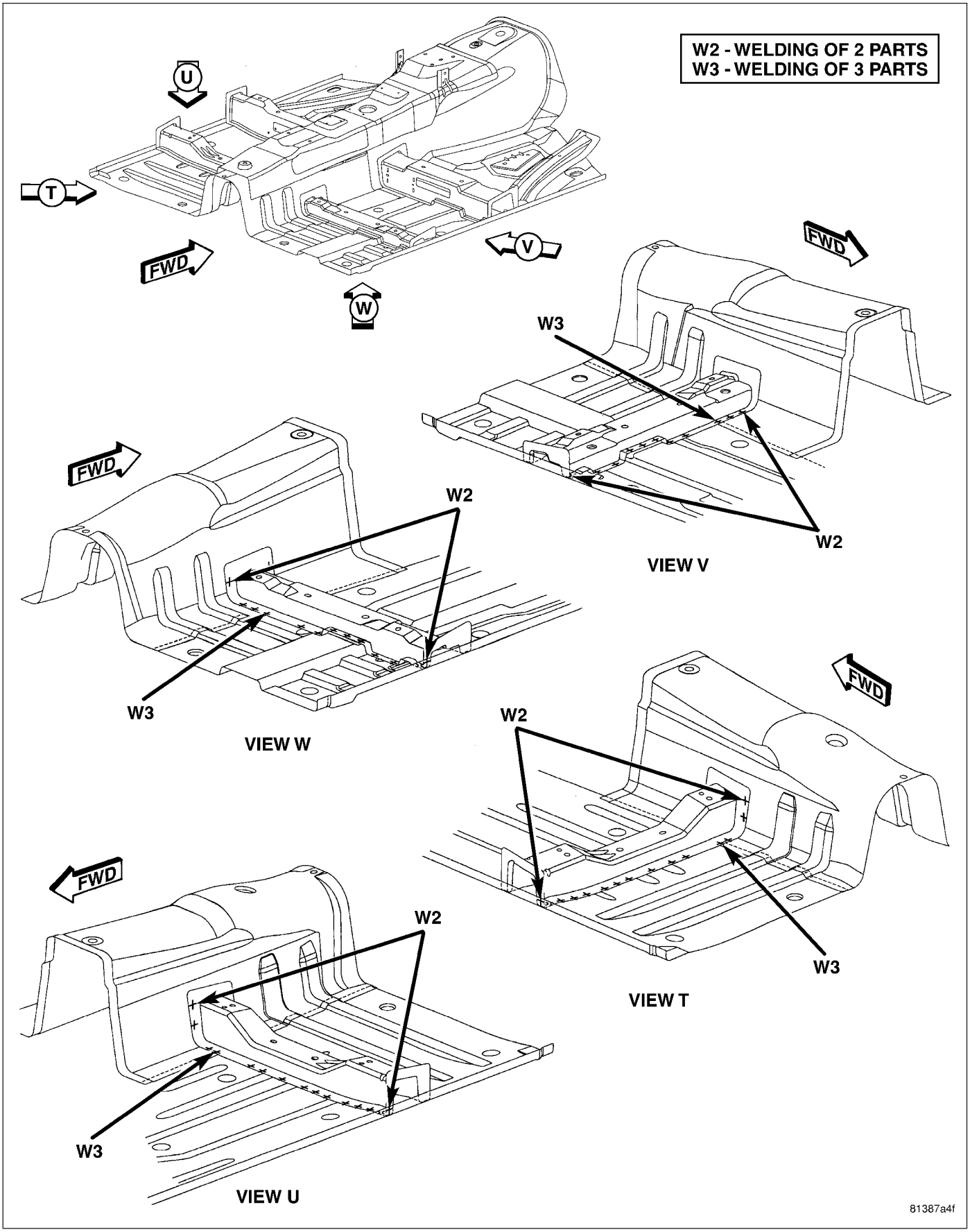


Fig. 145 FRONT FLOOR PAN (3 OF 12)