DIAGNOSIS AND TESTING

C0077- LOW TIRE PRESSURE

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

A low pressure condition will exist when the tire pressure falls below or is equal to the low pressure threshold value as specified for the vehicle.

Possible Causes
INTERMITTENT PERFORMANCE DTC
INCORRECT TIRE PRESSURE
TIRE PRESSURE SENSOR
WCM (SKREEM)

Diagnostic Test

1) DTC STATUS IS ACTIVE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

NOTE: If the following conditions are present:

- Low Tire Pressure DTC (Stored)

- Tire Pressure Sensor Internal DTC (Active)

- Spare Tire is not equipped with a Tire Pressure Sensor

- Spare Tire is currently on the vehicle

Repair the tire and place it back on the vehicle.

Test drive the vehicle.

If the DTC(s) reset continue with the diagnostic procedure.

Turn the ignition on.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Is the DTC status Active at this time?

Yes

Go to 2).

No

Go to 4).

2) LOW TIRE PRESSURE

NOTE: The DTC can be caused by many different factors and might not be a sensor/transmitter or a WCM (SKREEM) fault. Interference from other elements will over power the sensor/transmitter RF frequency making erratic operation to the TPM system. Check the vehicle for aftermarket accessories that could compromise the RF frequency signal before diagnosing the TPM system.

Correct all tire pressure to the recommended specifications and wait 2 minutes.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to 3).

No

Test Complete.

3) TIRE PRESSURE SENSOR

NOTE: Before continuing, ensure the tire is free from any leaks or damage that would cause a low tire pressure condition. If a problem is found, repair as necessary and retest.

Turn the ignition off.

Replace the Tire Pressure Sensor in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

No

Test Complete.

4) INTERMITTENT TIRE PRESSURE SENSOR DTC

The conditions necessary to set this DTC are not present at this time.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Repair as necessary.

No

Test complete.

C1501-TIRE PRESSURE SENSOR 1 INTERNAL

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

Theory of Operation

The tire pressure sensor actively monitors the air pressure and air temperature inside the tire, the sensor internal battery status, and the radial acceleration of the wheel. Each sensor has a unique ID code. The sensor transmits the data at regular intervals via an encoded signal to a receiver circuit located in the Wireless Control Module (SKREEM).

When Monitored:

With vehicle speed greater than 15 m.p.h. (24 km/h).

Set Condition:

The WCM (SKREEM) will monitor the signals from the four active road tire sensors. A loss of signal error is detected when eight consecutive blocks of data are not received or cannot be accurately decoded. An internal sensor hardware error condition will be set when an error in the accelerometer, pressure sensor, or temperature sensor is detected.

Possible Causes
INTERMITTENT TIRE PRESSURE SENSOR INTERNAL DTC
TIRE PRESSURE SENSOR
WIRELESS CONTROL MODULE (SKREEM)

Diagnostic Test

1) DTC STATUS IS ACTIVE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

NOTE: If the following conditions are present:

- Low Tire Pressure DTC (Stored)

- Tire Pressure Sensor Internal DTC (Active)

- Spare Tire is not equipped with a Tire Pressure Sensor

- Spare Tire is currently on the vehicle

Repair the tire and place it back on the vehicle.

Test drive the vehicle.

If the DTC(s) reset continue with the diagnostic procedure.

Turn the ignition on.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Is the DTC status Active at this time?

Yes

Go to step 2).

No

Go to step 4).

2) TIRE PRESSURE SENSOR

NOTE: When working with vehicles equipped with the base tire pressure monitoring system the correct tire that set the fault must be identified. Following the below procedure will help in identifying the correct tire.

1. Set all tire pressures to the recommended specifications and recheck for fault/alert.

2. Turn the ignition on.

3. Starting with the left front wheel, deflate the tire to 20 PSI and wait 2 minutes. The fault will set once the pressure has reached 20 PSI within the 2 minute time frame.

4. If the TPM fault was detected and not associated to this Sensor/Transmitter, repeat the process until the faulty Sensor/Transmitter has been identified.

Once a fault/alert has set, it will establish the location of the tire pressure sensors/transmitter. Repeat steps until the applicable Tire Pressure Sensor/Transmitter has been located.

Turn the ignition off.

Replace the Tire Pressure Sensor in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 3).

No

Test Complete.

3) WIRELESS CONTROL MODULE (SKREEM)

View repair.

Repair

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

4) INTERMITTENT TIRE PRESSURE SENSOR DTC

The conditions necessary to set this DTC are not present at this time.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Return to the beginning of this test and perform the diagnostic procedure as necessary.

No

Test complete.

C1502-TIRE PRESSURE SENSOR 2 INTERNAL

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

Theory of Operation

The tire pressure sensor actively monitors the air pressure and air temperature inside the tire, the sensor internal battery status, and the radial acceleration of the wheel. Each sensor has a unique ID code. The sensor transmits the data at regular intervals via an encoded signal to a receiver circuit located in the Wireless Control Module (SKREEM).

When Monitored:

With vehicle speed greater than 15 m.p.h. (24 km/h).

Set Condition:

The WCM (SKREEM) will monitor the signals from the four active road tire sensors. A loss of signal error is detected when eight consecutive blocks of data are not received or cannot be accurately decoded. An internal sensor hardware error condition will be set when an error in the accelerometer, pressure sensor, or temperature sensor is detected.

Possible Causes
INTERMITTENT TIRE PRESSURE SENSOR INTERNAL DTC
TIRE PRESSURE SENSOR
WIRELESS CONTROL MODULE (SKREEM)

Diagnostic Test

1) DTC STATUS IS ACTIVE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

NOTE: If the following conditions are present:

- Low Tire Pressure DTC (Stored)

- Tire Pressure Sensor Internal DTC (Active)

- Spare Tire is not equipped with a Tire Pressure Sensor

- Spare Tire is currently on the vehicle

Repair the tire and place it back on the vehicle.

Test drive the vehicle.

If the DTC(s) reset continue with the diagnostic procedure.

Turn the ignition on.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Is the DTC status Active at this time?

Yes

Go to step 2).

No

Go to step 4).

2) TIRE PRESSURE SENSOR

NOTE: When working with vehicles equipped with the base tire pressure monitoring system the correct tire that set the fault must be identified. Following the below procedure will help in identifying the correct tire.

1. Set all tire pressures to the recommended specifications and recheck for fault/alert.

2. Turn the ignition on.

3. Starting with the left front wheel, deflate the tire to 20 PSI and wait 2 minutes. The fault will set once the pressure has reached 20 PSI within the 2 minute time frame.

4. If the TPM fault was detected and not associated to this Sensor/Transmitter, repeat the process until the faulty Sensor/Transmitter has been identified.

Once a fault/alert has set, it will establish the location of the tire pressure sensors/transmitter. Repeat steps until the applicable Tire Pressure Sensor/Transmitter has been located.

Turn the ignition off.

Replace the Tire Pressure Sensor in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 3).

No

Test Complete.

3) WIRELESS CONTROL MODULE (SKREEM)

View repair.

Repair

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

4) INTERMITTENT TIRE PRESSURE SENSOR DTC

The conditions necessary to set this DTC are not present at this time.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Return to the beginning of this test and perform the diagnostic procedure as necessary.

No

Test complete.

C1503-TIRE PRESSURE SENSOR 3 INTERNAL

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

Theory of Operation

The tire pressure sensor actively monitors the air pressure and air temperature inside the tire, the sensor internal battery status, and the radial acceleration of the wheel. Each sensor has a unique ID code. The sensor transmits the data at regular intervals via an encoded signal to a receiver circuit located in the Wireless Control Module (SKREEM).

When Monitored:

With vehicle speed greater than 15 m.p.h. (24 km/h).

Set Condition:

The WCM (SKREEM) will monitor the signals from the four active road tire sensors. A loss of signal error is detected when eight consecutive blocks of data are not received or cannot be accurately decoded. An internal sensor hardware error condition will be set when an error in the accelerometer, pressure sensor, or temperature sensor is detected.

Possible Causes
INTERMITTENT TIRE PRESSURE SENSOR INTERNAL DTC
TIRE PRESSURE SENSOR
WIRELESS CONTROL MODULE (SKREEM)

Diagnostic Test

1) DTC STATUS IS ACTIVE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

NOTE: If the following conditions are present:

- Low Tire Pressure DTC (Stored)

- Tire Pressure Sensor Internal DTC (Active)

- Spare Tire is not equipped with a Tire Pressure Sensor

- Spare Tire is currently on the vehicle

Repair the tire and place it back on the vehicle.

Test drive the vehicle.

If the DTC(s) reset continue with the diagnostic procedure.

Turn the ignition on.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Is the DTC status Active at this time?

Yes

Go to step 2).

No

Go to step 4).

2) TIRE PRESSURE SENSOR

NOTE: When working with vehicles equipped with the base tire pressure monitoring system the correct tire that set the fault must be identified. Following the below procedure will help in identifying the correct tire.

1. Set all tire pressures to the recommended specifications and recheck for fault/alert.

2. Turn the ignition on.

3. Starting with the left front wheel, deflate the tire to 20 PSI and wait 2 minutes. The fault will set once the pressure has reached 20 PSI within the 2 minute time frame.

4. If the TPM fault was detected and not associated to this Sensor/Transmitter, repeat the process until the faulty Sensor/Transmitter has been identified.

Once a fault/alert has set, it will establish the location of the tire pressure sensors/transmitter. Repeat steps until the applicable Tire Pressure Sensor/Transmitter has been located.

Turn the ignition off.

Replace the Tire Pressure Sensor in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 3).

No

Test Complete.

3) WIRELESS CONTROL MODULE (SKREEM)

View repair.

Repair

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

4) INTERMITTENT TIRE PRESSURE SENSOR DTC

The conditions necessary to set this DTC are not present at this time.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Return to the beginning of this test and perform the diagnostic procedure as necessary.

No

Test complete.

C1504-TIRE PRESSURE SENSOR 4 INTERNAL

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

Theory of Operation

The tire pressure sensor actively monitors the air pressure and air temperature inside the tire, the sensor internal battery status, and the radial acceleration of the wheel. Each sensor has a unique ID code. The sensor transmits the data at regular intervals via an encoded signal to a receiver circuit located in the Wireless Control Module (SKREEM).

When Monitored:

With vehicle speed greater than 15 m.p.h. (24 km/h).

Set Condition:

The WCM (SKREEM) will monitor the signals from the four active road tire sensors. A loss of signal error is detected when eight consecutive blocks of data are not received or cannot be accurately decoded. An internal sensor hardware error condition will be set when an error in the accelerometer, pressure sensor, or temperature sensor is detected.

Possible Causes
INTERMITTENT TIRE PRESSURE SENSOR INTERNAL DTC
TIRE PRESSURE SENSOR
WIRELESS CONTROL MODULE (SKREEM)

Diagnostic Test

1) DTC STATUS IS ACTIVE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

NOTE: If the following conditions are present:

- Low Tire Pressure DTC (Stored)

- Tire Pressure Sensor Internal DTC (Active)

- Spare Tire is not equipped with a Tire Pressure Sensor

- Spare Tire is currently on the vehicle

Repair the tire and place it back on the vehicle.

Test drive the vehicle.

If the DTC(s) reset continue with the diagnostic procedure.

Turn the ignition on.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Is the DTC status Active at this time?

Yes

Go to step 2).

No

Go to step 4).

2) TIRE PRESSURE SENSOR

NOTE: When working with vehicles equipped with the base tire pressure monitoring system the correct tire that set the fault must be identified. Following the below procedure will help in identifying the correct tire.

1. Set all tire pressures to the recommended specifications and recheck for fault/alert.

2. Turn the ignition on.

3. Starting with the left front wheel, deflate the tire to 20 PSI and wait 2 minutes. The fault will set once the pressure has reached 20 PSI within the 2 minute time frame.

4. If the TPM fault was detected and not associated to this Sensor/Transmitter, repeat the process until the faulty Sensor/Transmitter has been identified.

Once a fault/alert has set, it will establish the location of the tire pressure sensors/transmitter. Repeat steps until the applicable Tire Pressure Sensor/Transmitter has been located.

Turn the ignition off.

Replace the Tire Pressure Sensor in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 3).

No

Test Complete.

3) WIRELESS CONTROL MODULE (SKREEM)

View repair.

Repair

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

4) INTERMITTENT TIRE PRESSURE SENSOR DTC

The conditions necessary to set this DTC are not present at this time.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Return to the beginning of this test and perform the diagnostic procedure as necessary.

No

Test complete.

C1505-TIRE PRESSURE SENSOR 5 INTERNAL

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

Theory of Operation

The tire pressure sensor actively monitors the air pressure and air temperature inside the tire, the sensor internal battery status, and the radial acceleration of the wheel. Each sensor has a unique ID code. The sensor transmits the data at regular intervals via an encoded signal to a receiver circuit located in the Wireless Control Module (SKREEM).

When Monitored:

With vehicle speed greater than 15 m.p.h. (24 km/h).

Set Condition:

The WCM (SKREEM) will monitor the signals from the four active road tire sensors. A loss of signal

error is detected when eight consecutive blocks of data are not received or cannot be accurately decoded. An internal sensor hardware error condition will be set when an error in the accelerometer, pressure sensor, or temperature sensor is detected.

Possible Causes
INTERMITTENT TIRE PRESSURE SENSOR INTERNAL DTC TIRE PRESSURE SENSOR WIRELESS CONTROL MODULE (SKREEM)

Diagnostic Test

1) DTC STATUS IS ACTIVE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

NOTE: If the following conditions are present:

- Low Tire Pressure DTC (Stored)

- Tire Pressure Sensor Internal DTC (Active)

- Spare Tire is not equipped with a Tire Pressure Sensor

- Spare Tire is currently on the vehicle

Repair the tire and place it back on the vehicle.

Test drive the vehicle.

If the DTC(s) reset continue with the diagnostic procedure.

Turn the ignition on.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Is the DTC status Active at this time?

Yes

Go to step 2).

No

Go to step 4).

2) TIRE PRESSURE SENSOR

NOTE: When working with vehicles equipped with the base tire pressure monitoring system the correct tire that set the fault must be identified. Following the below procedure will help in identifying the correct tire.

1. Set all tire pressures to the recommended specifications and recheck for fault/alert.

2. Turn the ignition on.

3. Starting with the left front wheel, deflate the tire to 20 PSI and wait 2 minutes. The fault will set once the pressure has reached 20 PSI within the 2 minute time frame.

4. If the TPM fault was detected and not associated to this Sensor/Transmitter, repeat the process until the faulty Sensor/Transmitter has been identified.

Once a fault/alert has set, it will establish the location of the tire pressure sensors/transmitter. Repeat steps until the applicable Tire Pressure Sensor/Transmitter has been located.

Turn the ignition off.

Replace the Tire Pressure Sensor in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 3).

No

Test Complete.

3) WIRELESS CONTROL MODULE (SKREEM)

View repair.

Repair

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

4) INTERMITTENT TIRE PRESSURE SENSOR DTC

The conditions necessary to set this DTC are not present at this time.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Return to the beginning of this test and perform the diagnostic procedure as necessary.

No

Test complete.

C1506-LEFT FRONT TIRE PRESSURE TRIGGER MODULE PERFORMANCE

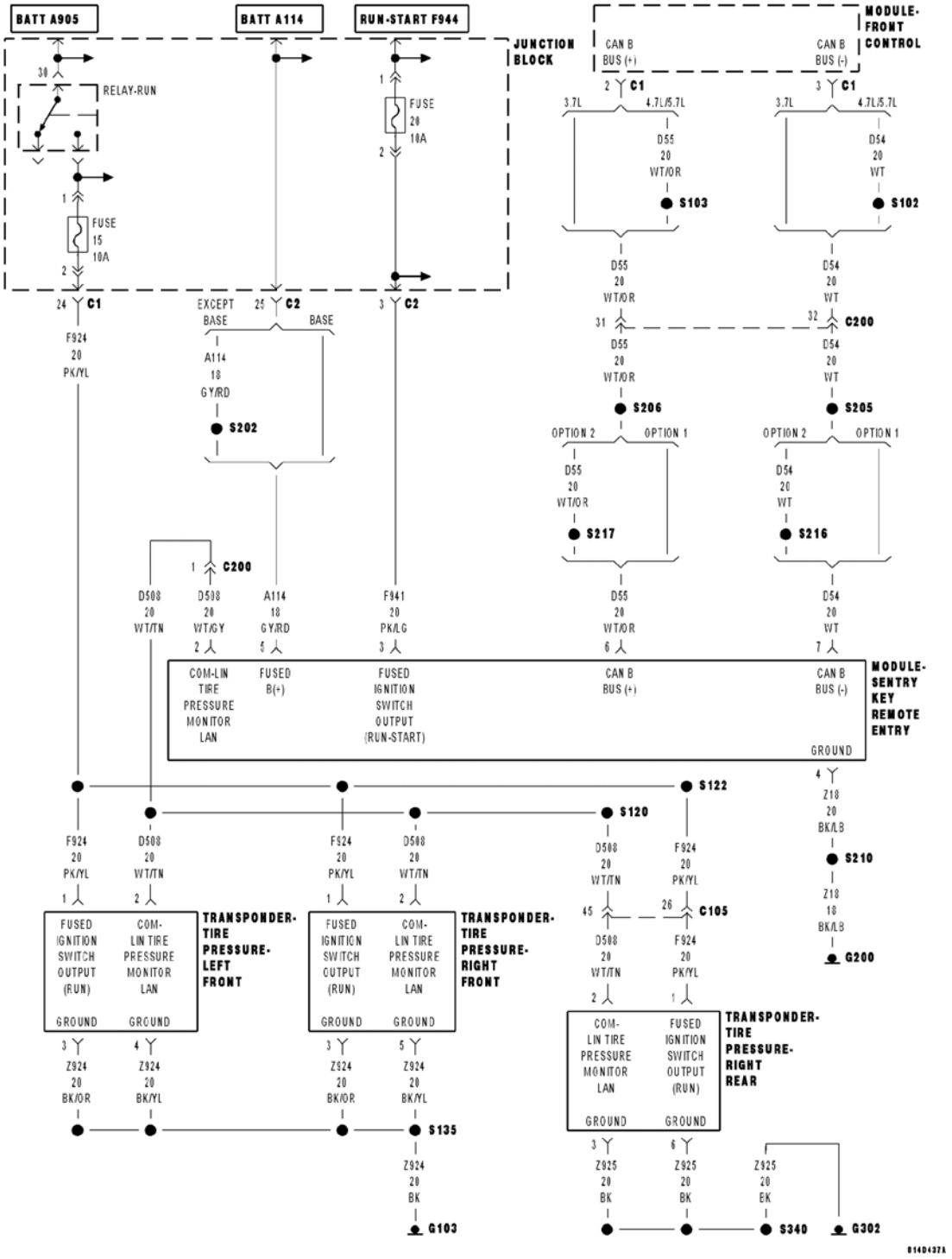

Fig. 1: Tire Pressure Sensor Circuit Schematic
Courtesy of DAIMLERCHRYSLER CORP.

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

Theory of Operation

The Tire Pressure Trigger Module is used to automatically learn the location of each wheel sensor on the

vehicle. The module is controlled and activated in sequence by the Wireless Control Module (SKREEM) over a LIN bus. When activated, the module will generate a 125 KHz signal of sufficient field strength to trigger the tire pressure sensor and force a RF transmission from the sensor.

When Monitored:

Continuously.

Set Condition:

The WCM (SKREEM) will monitor the messages from each Tire Pressure Trigger Module over the LIN bus. If any of the messages are not received, or are received other than as expected, a DTC will set. When the condition is corrected, or is no longer detected, as acknowledged via a LIN bus message, the WCM will reset the appropriate trigger module fault status.

Possible Causes
INTERMITTENT TIRE PRESSURE TRIGGER MODULE PERFORMANCE DTC
(D508) COM - LIN TIRE PRESSURE MONITOR LAN CIRCUIT SHORT TO VOLTAGE
(D508) COM - LIN TIRE PRESSURE MONITOR LAN CIRCUIT SHORT TO GROUND
(D508) COM - LIN TIRE PRESSURE MONITOR LAN CIRCUIT OPEN OR HIGH RESISTANCE
(F924) FUSED IGNITION SWITCH OUTPUT (RUN) CIRCUIT OPEN OR HIGH RESISTANCE
(Z924) GROUND CIRCUIT(S) OPEN OR HIGH RESISTANCE
TIRE PRESSURE TRIGGER MODULE
WIRELESS CONTROL MODULE (SKREEM)

Diagnostic Test

1) DTC STATUS IS ACTIVE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

Turn the ignition on.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Is the DTC status Active at this time?

Yes

Go to step 2).

No

Go to step 9).

2) (F924) FUSED IGNITION SWITCH OUTPUT (RUN) CIRCUIT OPEN OR HIGH RESISTANCE

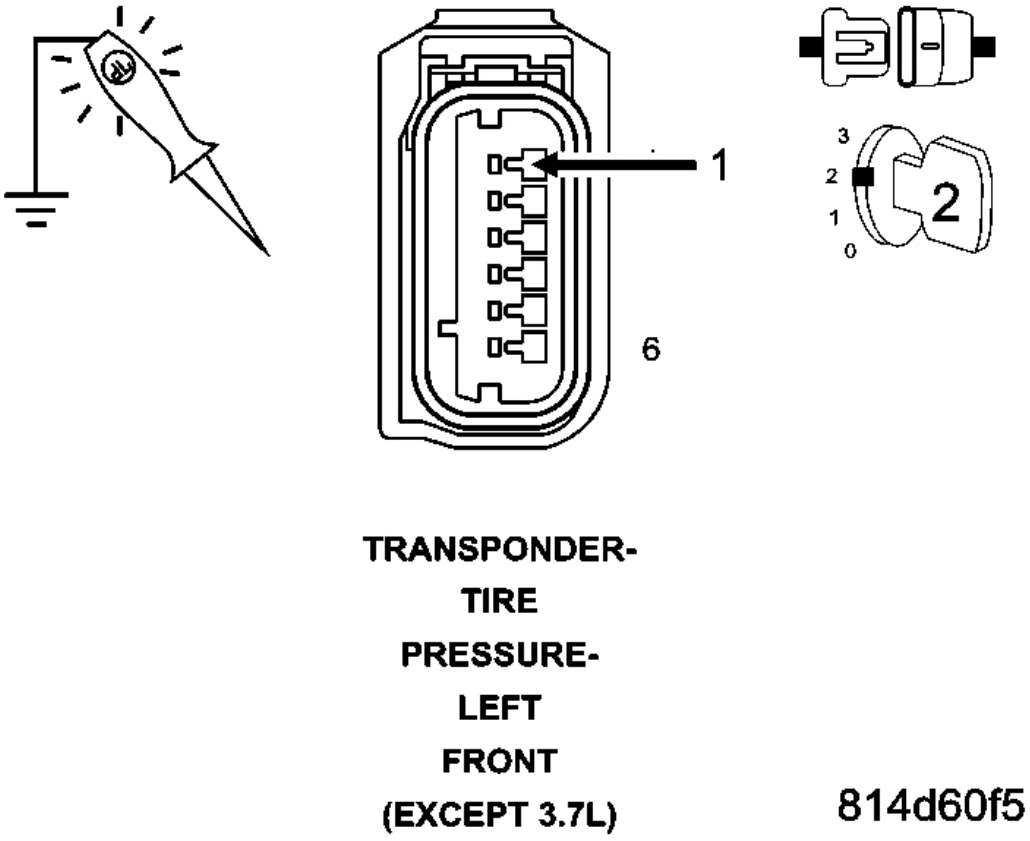

Fig. 2: Checking Fused Ignition Switch Output (RUN) Circuit Open Or High Resistance
Courtesy of DAIMLERCHRYSLER CORP.

Turn the ignition off.

Disconnect the Tire Pressure Transponder harness connector.

Disconnect the Sentry Key Remote Entry Module harness connector.

Turn the ignition on.

Using a 12-volt test light connect to ground, check the (F924) Fused Ignition Switch Output (Run) circuit.

NOTE: The test light should be illuminated and bright. Compare the brightness to that of a direct connection to the battery.

Is the test light illuminated and bright?

Yes

Go to step 3).

No

Repair the (F924) Fused Ignition Switch Output (Run) circuit for an open circuit or high resistance.

Perform **SKREEM/SKIM VERIFICATION** .

3) (Z924) GROUND CIRCUIT(S) OPEN OR HIGH RESISTANCE

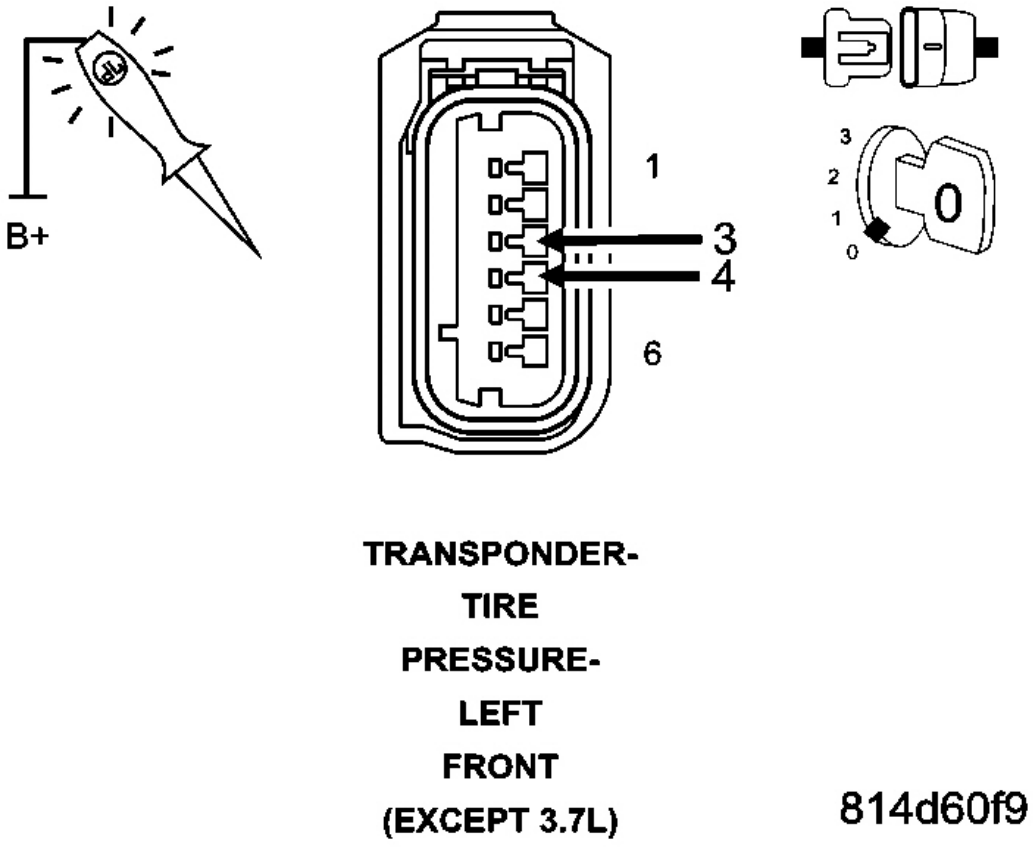

Fig. 3: Checking Ground Circuit(S) Open Or High Resistance
Courtesy of DAIMLERCHRYSLER CORP.

Using a 12-volt test light connect to battery voltage, probe each of the (Z924) Ground circuit(s).

NOTE: The test light should be illuminated and bright. Compare the brightness to that of a direct connection to the battery.

Does the test light illuminate brightly?

Yes

Go to step 4).

No

Repair the (Z924) Ground circuit(s) for an open circuit or high resistance.
Perform **SKREEM/SKIM VERIFICATION** .

4) (D508) COM - LIN TIRE PRESSURE MONITOR LAN CIRCUIT SHORT TO VOLTAGE

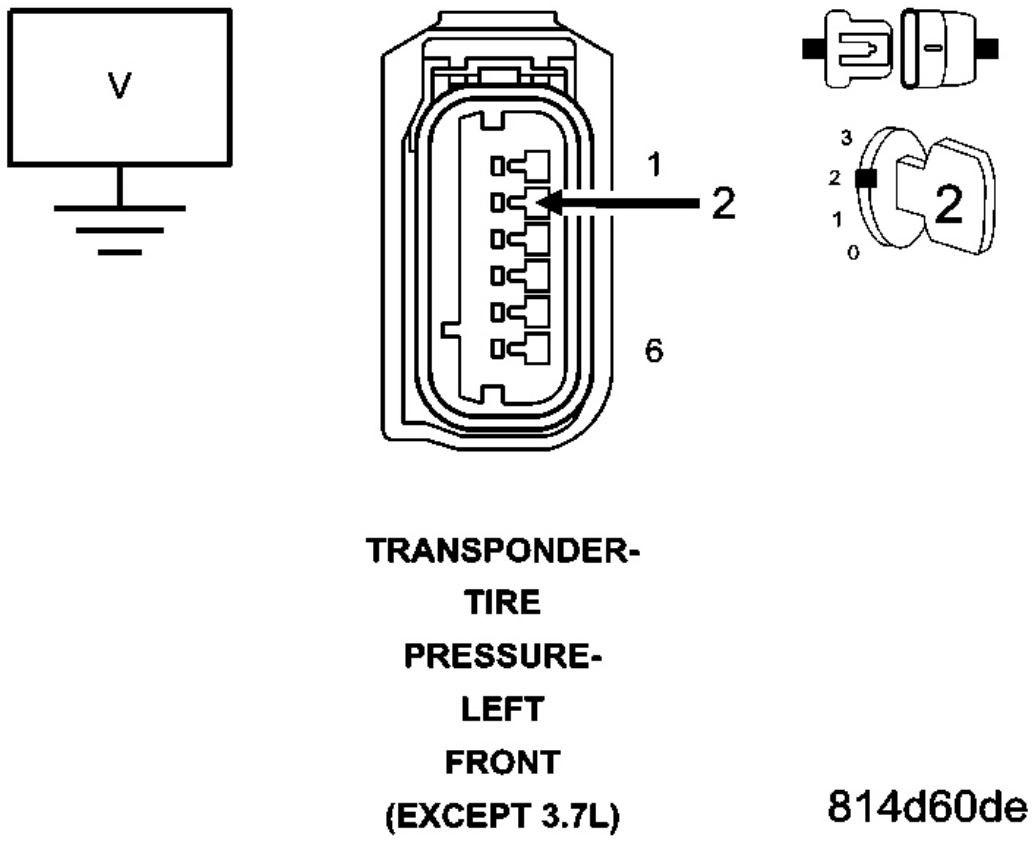

Fig. 4: Checking COM - LIN Tire Pressure Monitor LAN Circuit
Courtesy of DAIMLERCHRYSLER CORP.

Turn the ignition on.

Measure the voltage of the (D508) COM - LIN Tire Pressure Monitor LAN circuit.

Is there any voltage present?

Yes

Repair the (D508) COM - LIN Tire Pressure Monitor LAN circuit for a short to voltage.

No

Go to step 5).
Perform **SKREEM/SKIM VERIFICATION** .

5) (D508) COM - LIN TIRE PRESSURE MONITOR LAN CIRCUIT SHORT TO GROUND

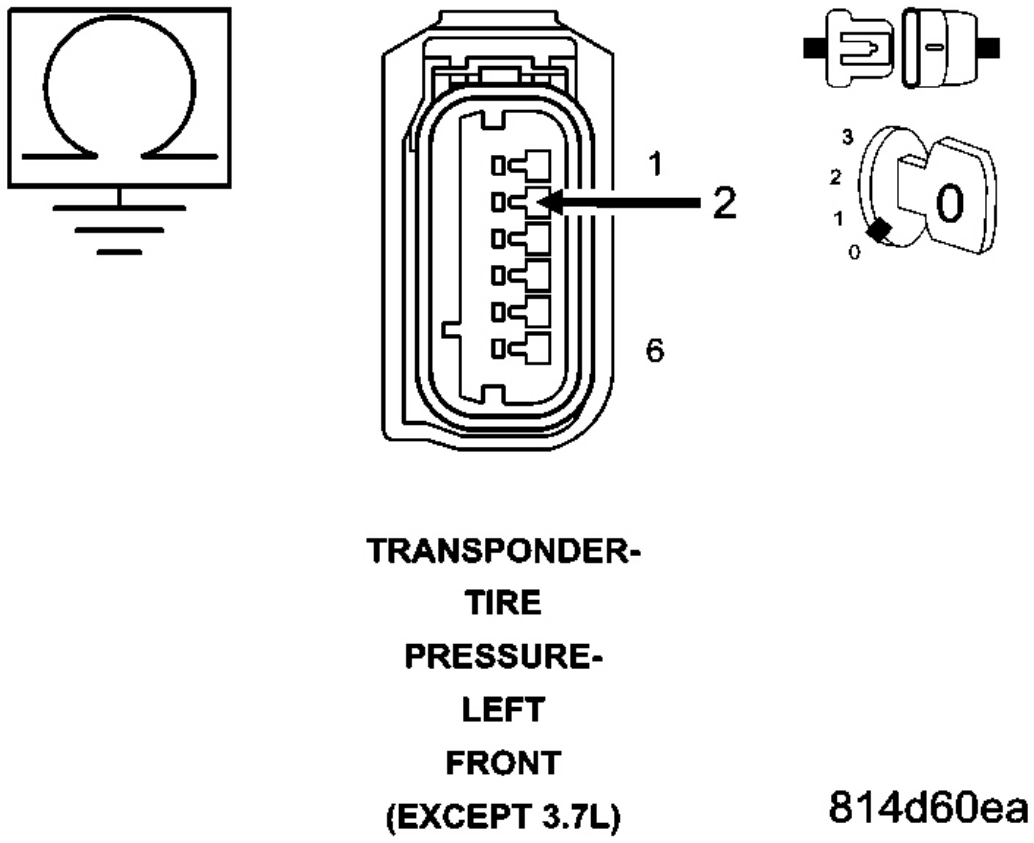

Fig. 5: Checking COM - LIN Tire Pressure Monitor LAN Circuit
Courtesy of DAIMLERCHRYSLER CORP.

Turn the ignition off.

Measure the resistance between ground and the (D508) COM - LIN Tire Pressure Monitor LAN circuit.

Is the resistance below 5.0 ohms?

Yes

Repair the (D508) COM - LIN Tire Pressure Monitor LAN circuit for a short to ground.
Perform **SKREEM/SKIM VERIFICATION** .

No

Go to step 6).

6) (D508) COM - LIN TIRE PRESSURE MONITOR LAN CIRCUIT OPEN OR HIGH RESISTANCE

Use a jumper wire with one end connected to ground and the other to the (D508) COM - LIN Tire Pressure Monitor LAN circuit in the Front Left Pressure Tire Transponder harness connector.

Using a 12-Volt test light connected to battery voltage, probe the (D508) COM - LIN Tire Pressure Monitor LAN circuit in the SKREEM harness connector.

NOTE: The test light should be illuminated and bright. Compared the brightness to that of a direct connection to the battery.

Does the test light illuminate bright?

Yes

Go to step 7).

No

Repair the (D508) COM - LIN Tire Pressure Monitor LAN circuit for an open circuit or high resistance.

Perform **SKREEM/SKIM VERIFICATION** .

7) TIRE PRESSURE TRIGGER MODULE

Turn the ignition off.

Replace the appropriate Tire Pressure Trigger Module in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 8).

No

Test Complete.

Perform **SKREEM/SKIM VERIFICATION** .

8) WIRELESS CONTROL MODULE (SKREEM)

View repair.

Repair

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information. Perform **SKREEM/SKIM VERIFICATION** .

9) INTERMITTENT TIRE PRESSURE TRIGGER MODULE DTC

The conditions necessary to set this DTC are not present at this time.

Using the wiring schematic as a guide, inspect the wiring and connectors relative to this circuit.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Return to the first step of this test and perform the diagnostic procedure.

No

Test complete.

C1507-RIGHT FRONT TIRE PRESSURE TRIGGER MODULE PERFORMANCE

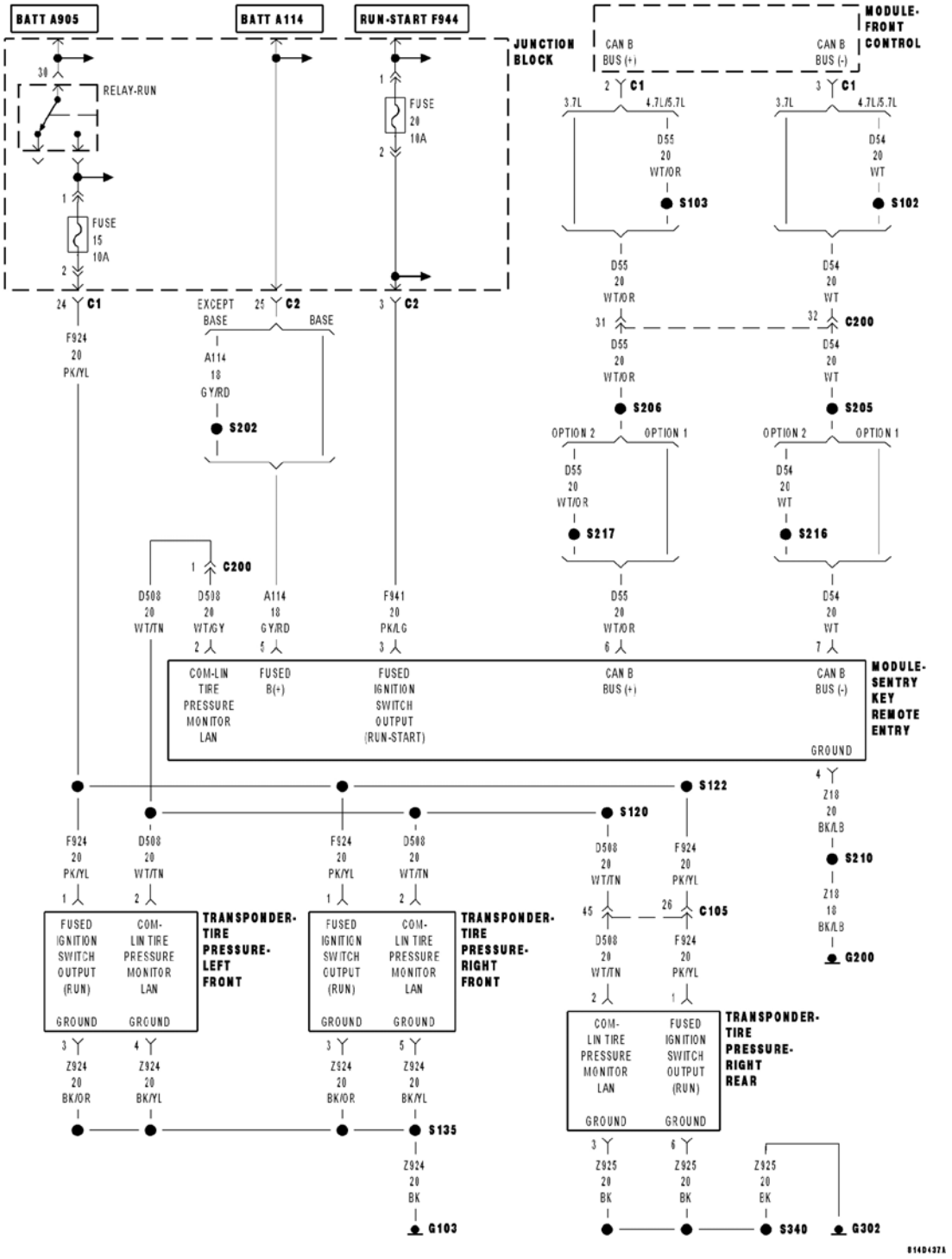

Fig. 6: Tire Pressure Sensor Circuit Schematic
Courtesy of DAIMLERCHRYSLER CORP.

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

Theory of Operation

The Tire Pressure Trigger Module is used to automatically learn the location of each wheel sensor on the

vehicle. The module is controlled and activated in sequence by the Wireless Control Module (SKREEM) over a LIN bus. When activated, the module will generate a 125 KHz signal of sufficient field strength to trigger the tire pressure sensor and force a RF transmission from the sensor.

When Monitored:

Continuously.

Set Condition:

The WCM (SKREEM) will monitor the messages from each Tire Pressure Trigger Module over the LIN bus. If any of the messages are not received, or are received other than as expected, a DTC will set. When the condition is corrected, or is no longer detected, as acknowledged via a LIN bus message, the WCM will reset the appropriate trigger module fault status.

Possible Causes
INTERMITTENT TIRE PRESSURE TRIGGER MODULE PERFORMANCE DTC
(D508) COM - LIN TIRE PRESSURE MONITOR LAN CIRCUIT SHORT TO VOLTAGE
(D508) COM - LIN TIRE PRESSURE MONITOR LAN CIRCUIT SHORT TO GROUND
(D508) COM - LIN TIRE PRESSURE MONITOR LAN CIRCUIT OPEN OR HIGH RESISTANCE
(F924) FUSED IGNITION SWITCH OUTPUT (RUN) CIRCUIT OPEN OR HIGH RESISTANCE
(Z924) GROUND CIRCUIT(S) OPEN OR HIGH RESISTANCE
TIRE PRESSURE TRIGGER MODULE
WIRELESS CONTROL MODULE (SKREEM)

Diagnostic Test

1) DTC STATUS IS ACTIVE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

Turn the ignition on.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Is the DTC status Active at this time?

Yes

Go to step 2).

No

Go to step 9).

2) (F924) FUSED IGNITION SWITCH OUTPUT (RUN) CIRCUIT OPEN OR HIGH RESISTANCE

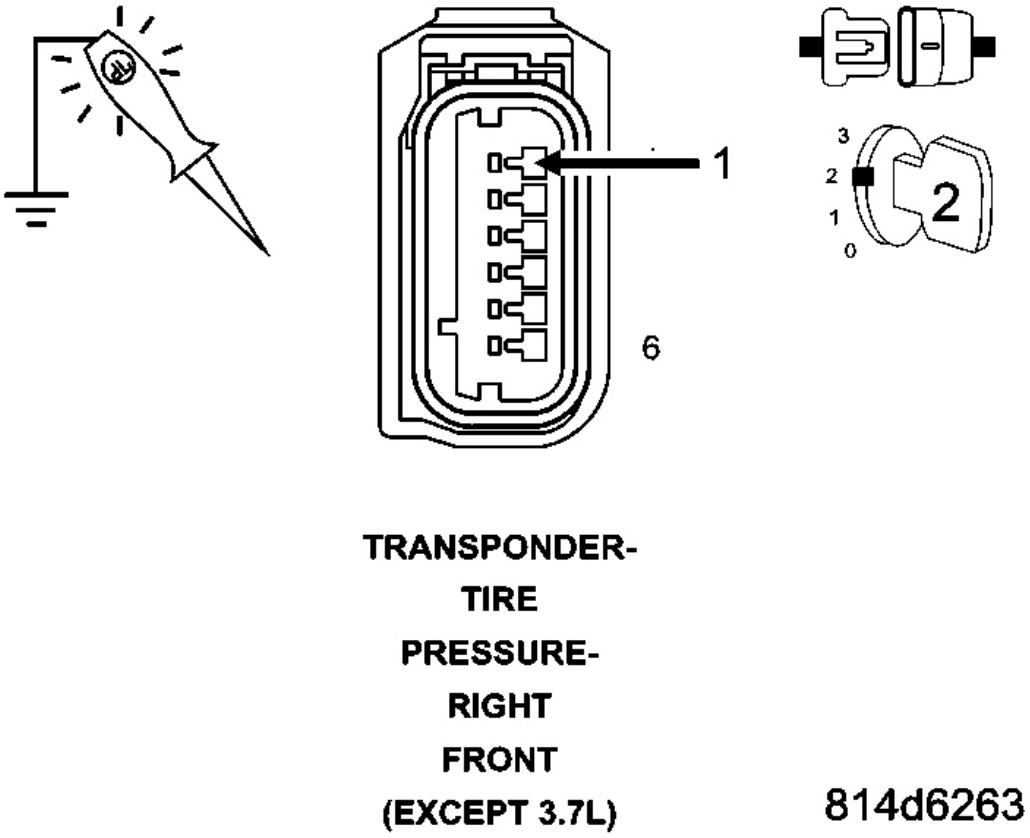

Fig. 7: Checking Fused Ignition Switch Output (RUN) Circuit Open Or High Resistance
Courtesy of DAIMLERCHRYSLER CORP.

Turn the ignition on.

Using a 12-volt test light connect to ground, check the (F924) Fused Ignition Switch Output (Run) circuit.

NOTE: The test light should be illuminated and bright. Compare the brightness to that of a direct connection to the battery.

Is the test light illuminated and bright?

Yes

Go to step 3).

No

Repair the (F924) Fused Ignition Switch Output (Run) circuit for an open circuit or high resistance.

Perform **SKREEM/SKIM VERIFICATION** .

3) (Z924) GROUND CIRCUIT(S) OPEN OR HIGH RESISTANCE

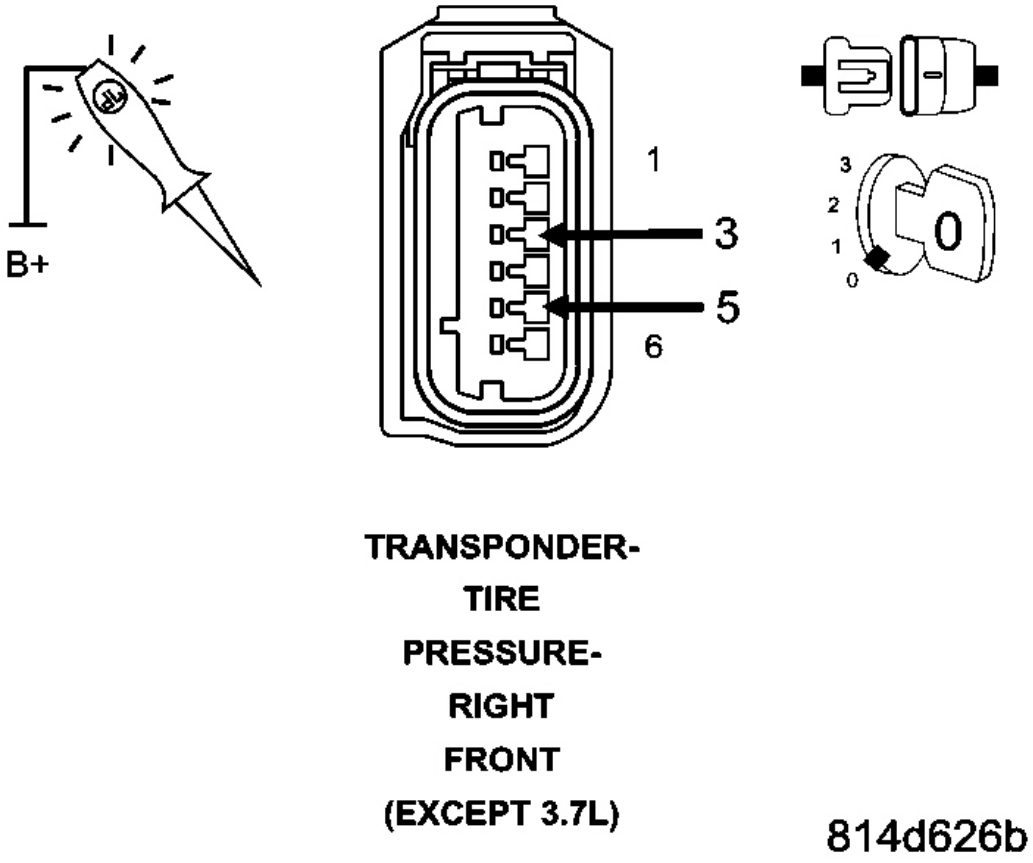

Fig. 8: Checking Ground Circuit(S) Open Or High Resistance
Courtesy of DAIMLERCHRYSLER CORP.

Using a 12-volt test light connect to 12 volts, check each of the (Z924) Ground circuit(s).

NOTE: The test light should be illuminated and bright. Compare the brightness to that of a direct connection to the battery.

Is the test light illuminated and bright?

Yes

Go to step 4).

No

Repair the (Z924) Ground circuit(s) for an open circuit or high resistance.

Perform **SKREEM/SKIM VERIFICATION** .

4) (D508) COM - LIN TIRE PRESSURE MONITOR LAN CIRCUIT SHORT TO VOLTAGE

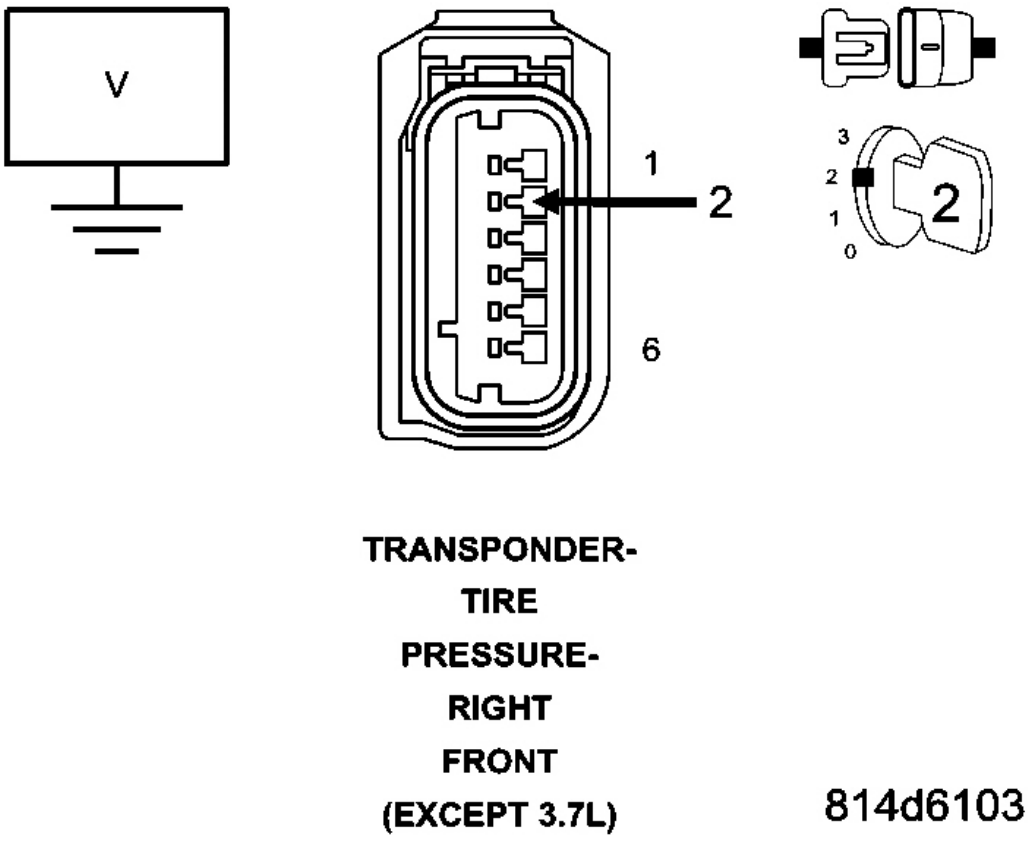

Fig. 9: Checking COM - LIN Tire Pressure Monitor LAN Circuit
Courtesy of DAIMLERCHRYSLER CORP.

Turn the ignition off.

Disconnect the Tire Pressure Transponder harness connector.

Disconnect the Sentry Key Remote Entry Module harness connector.

Turn the ignition on.

Measure the voltage of the (D508) COM - LIN Tire Pressure Monitor LAN circuit.

Is there any voltage present?

Yes

Repair the (D508) COM - LIN Tire Pressure Monitor LAN circuit for a short to voltage.

No

Go to step 5).
Perform **SKREEM/SKIM VERIFICATION** .

5) (D508) COM - LIN TIRE PRESSURE MONITOR LAN CIRCUIT SHORT TO GROUND

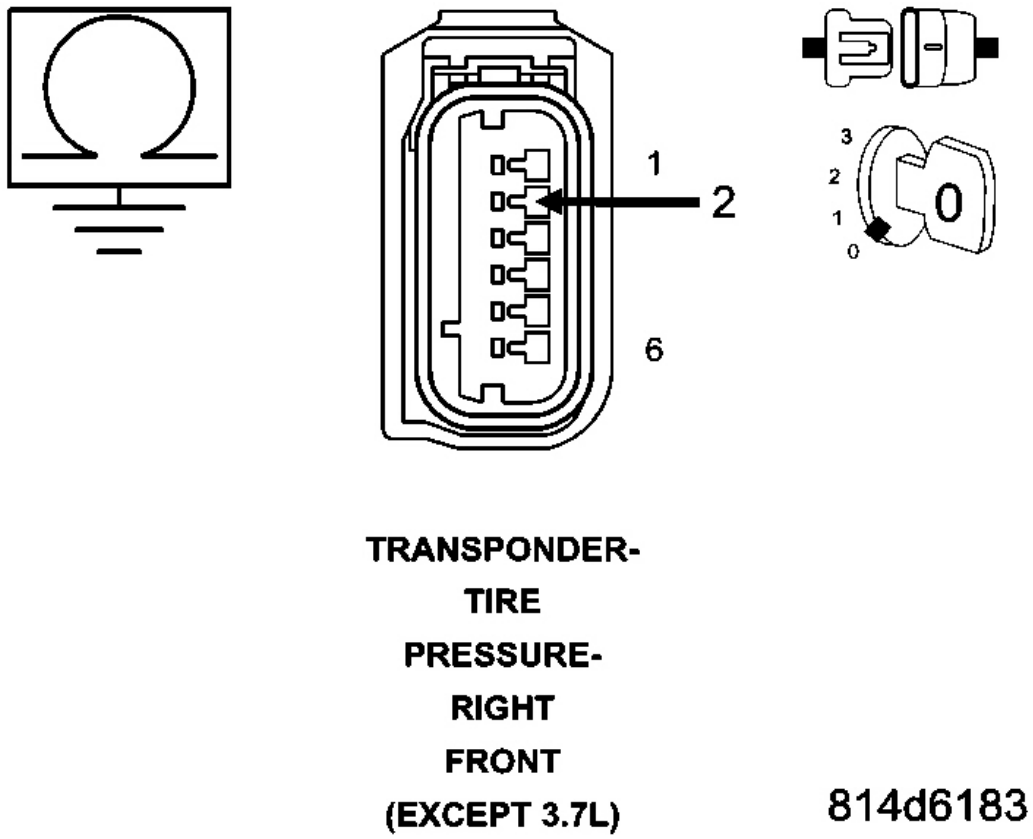

Fig. 10: Checking COM - LIN Tire Pressure Monitor LAN Circuit
Courtesy of DAIMLERCHRYSLER CORP.

Turn the ignition off.

Measure the resistance between ground and the (D508) COM - LIN Tire Pressure Monitor LAN circuit.

Is the resistance below 5.0 ohms?

Yes

Repair the (D508) COM - LIN Tire Pressure Monitor LAN circuit for a short to ground.
Perform **SKREEM/SKIM VERIFICATION** .

No

Go to step 6).

6) (D508) COM - LIN TIRE PRESSURE MONITOR LAN CIRCUIT OPEN OR HIGH RESISTANCE

Use a jumper wire with one end connected to ground and the other to the (D508) COM - LIN Tire Pressure Monitor LAN circuit in the Front Left Pressure Tire Transponder harness connector.

Using a 12-Volt test light connected to battery voltage, probe the (D508) COM - LIN Tire Pressure Monitor LAN circuit in the SKREEM harness connector.

NOTE: The test light should be illuminated and bright. Compared the brightness to that of a direct connection to the battery.

Does the test light illuminate bright?

Yes

Go to step 7).

No

Repair the (D508) COM - LIN Tire Pressure Monitor LAN circuit for an open circuit or high resistance.

Perform **SKREEM/SKIM VERIFICATION** .

7) TIRE PRESSURE TRIGGER MODULE

Turn the ignition off.

Replace the appropriate Tire Pressure Trigger Module in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 8).

No

Test Complete.

Perform **SKREEM/SKIM VERIFICATION** .

8) WIRELESS CONTROL MODULE (SKREEM)

View repair.

Repair

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information. Perform **SKREEM/SKIM VERIFICATION** .

9) INTERMITTENT TIRE PRESSURE TRIGGER MODULE DTC

The conditions necessary to set this DTC are not present at this time.

Using the wiring schematic as a guide, inspect the wiring and connectors relative to this circuit.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Return to the first step of this test and perform the diagnostic procedure.

No

Test complete.

C1509-RIGHT REAR TIRE PRESSURE TRIGGER MODULE PERFORMANCE

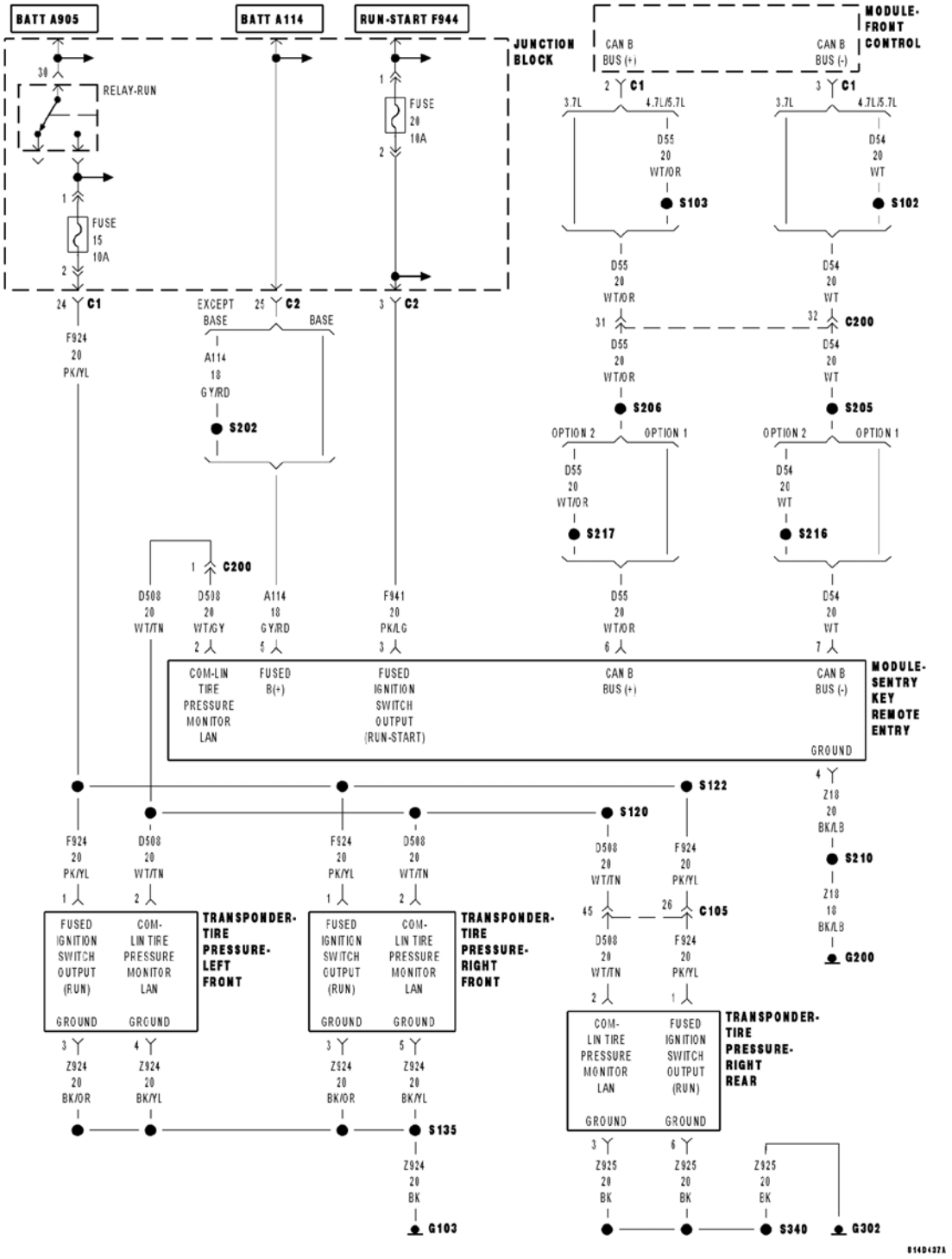

Fig. 11: Tire Pressure Sensor Circuit Schematic
Courtesy of DAIMLERCHRYSLER CORP.

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

Theory of Operation

The Tire Pressure Trigger Module is used to automatically learn the location of each wheel sensor on the

vehicle. The module is controlled and activated in sequence by the Wireless Control Module (SKREEM) over a LIN bus. When activated, the module will generate a 125 KHz signal of sufficient field strength to trigger the tire pressure sensor and force a RF transmission from the sensor.

When Monitored:

Continuously.

Set Condition:

The WCM (SKREEM) will monitor the messages from each Tire Pressure Trigger Module over the LIN bus. If any of the messages are not received, or are received other than as expected, a DTC will set. When the condition is corrected, or is no longer detected, as acknowledged via a LIN bus message, the WCM will reset the appropriate trigger module fault status.

Possible Causes
INTERMITTENT TIRE PRESSURE TRIGGER MODULE PERFORMANCE DTC
(D508) COM - LIN TIRE PRESSURE MONITOR LAN CIRCUIT SHORT TO VOLTAGE
(D508) COM - LIN TIRE PRESSURE MONITOR LAN CIRCUIT SHORT TO GROUND
(D508) COM - LIN TIRE PRESSURE MONITOR LAN CIRCUIT OPEN OR HIGH RESISTANCE
(F924) FUSED IGNITION SWITCH OUTPUT (RUN) CIRCUIT OPEN OR HIGH RESISTANCE
(Z924) GROUND CIRCUIT(S) OPEN OR HIGH RESISTANCE
TIRE PRESSURE TRIGGER MODULE
WIRELESS CONTROL MODULE (SKREEM)

Diagnostic Test

1) DTC STATUS IS ACTIVE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

Turn the ignition on.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Is the DTC status Active at this time?

Yes

Go to step 2).

No

Go to step 9).

2) (F924) FUSED IGNITION SWITCH OUTPUT (RUN) CIRCUIT OPEN OR HIGH RESISTANCE

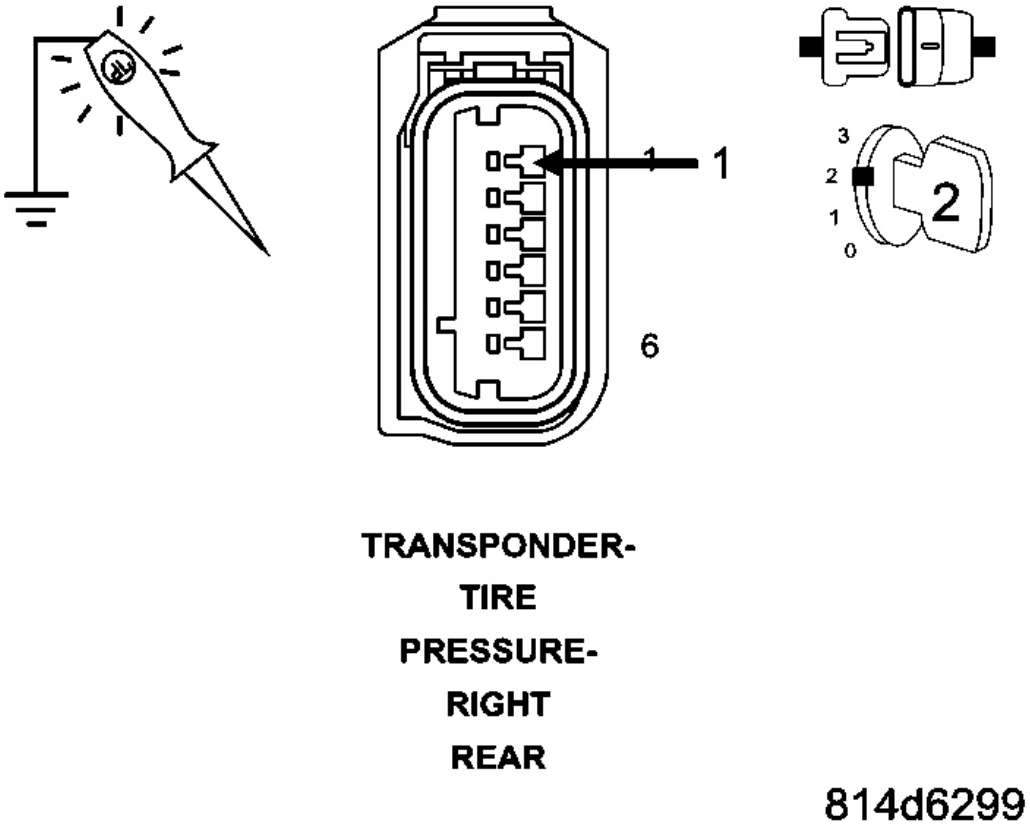

Fig. 12: Checking Fused Ignition Switch Output (RUN) Circuit Open Or High Resistance
Courtesy of DAIMLERCHRYSLER CORP.

Turn the ignition on.

Using a 12-volt test light connect to ground, check the (F924) Fused Ignition Switch Output (Run) circuit.

NOTE: The test light should be illuminated and bright. Compare the brightness to that of a direct connection to the battery.

Is the test light illuminated and bright?

Yes

Go to step 3).

No

Repair the (F924) Fused Ignition Switch Output (Run) circuit for an open circuit or high resistance.

Perform **SKREEM/SKIM VERIFICATION** .

3) (Z924) GROUND CIRCUIT(S) OPEN OR HIGH RESISTANCE

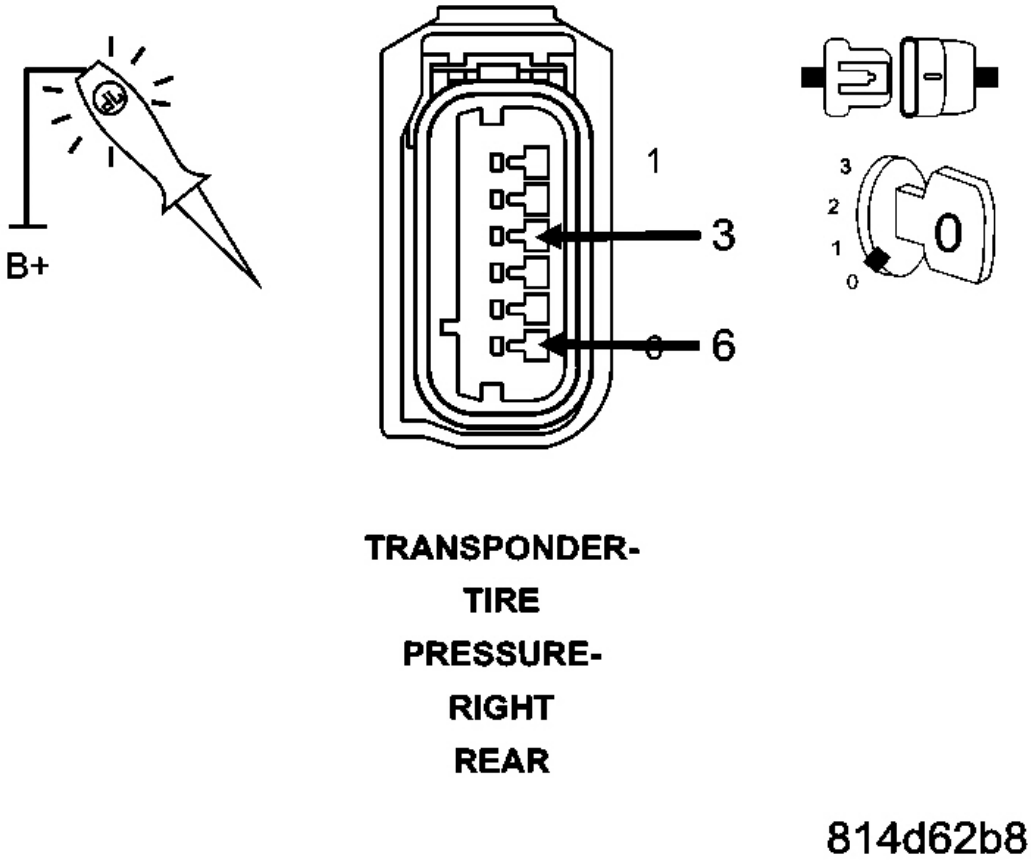

Fig. 13: Checking Ground Circuit(S) Open Or High Resistance
Courtesy of DAIMLERCHRYSLER CORP.

Using a 12-volt test light connect to 12 volts, check each of the (Z924) Ground circuit(s).

NOTE: The test light should be illuminated and bright. Compare the brightness to that of a direct connection to the battery.

Is the test light illuminated and bright?

Yes

Go to step 4).

No

Repair the (Z924) Ground circuit(s) for an open circuit or high resistance.

Perform **SKREEM/SKIM VERIFICATION** .

4) (D508) COM - LIN TIRE PRESSURE MONITOR LAN CIRCUIT SHORT TO VOLTAGE

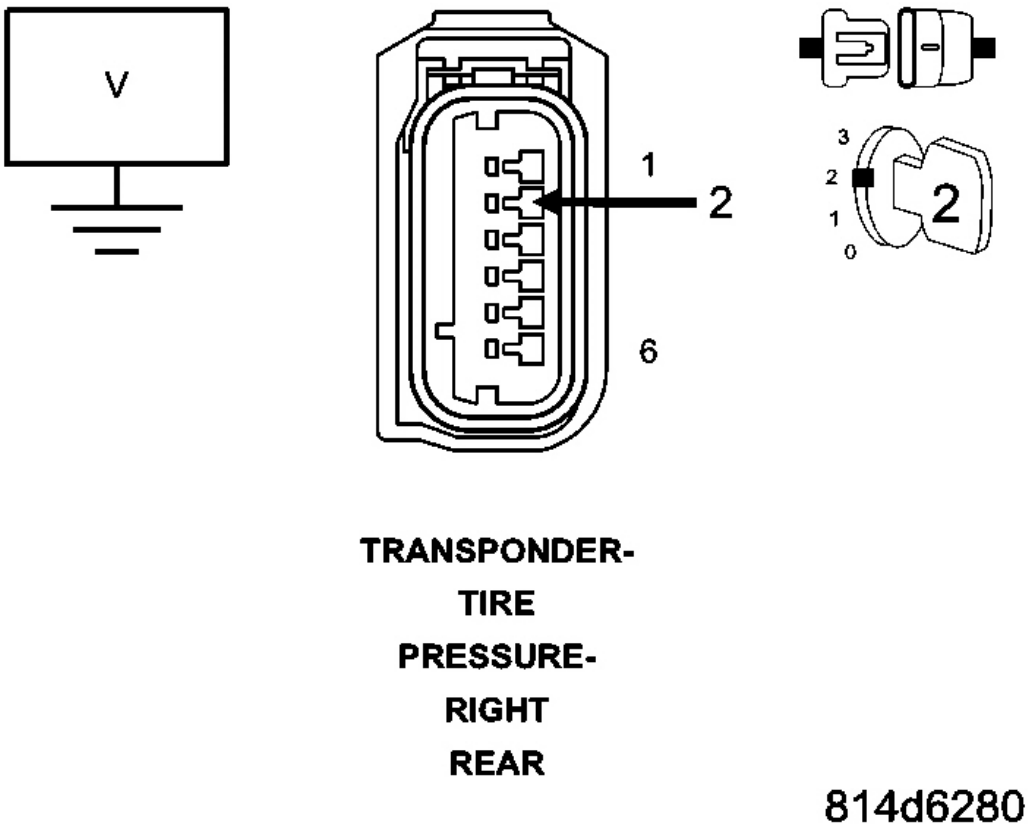

Fig. 14: Checking COM - LIN Tire Pressure Monitor LAN Circuit
Courtesy of DAIMLERCHRYSLER CORP.

Turn the ignition off.

Disconnect the Tire Pressure Transponder harness connector.

Disconnect the Sentry Key Remote Entry Module harness connector.

Turn the ignition on.

Measure the voltage of the (D508) COM - LIN Tire Pressure Monitor LAN circuit.

Is there any voltage present?

Yes

Repair the (D508) COM - LIN Tire Pressure Monitor LAN circuit for a short to voltage.

No

Go to step 5).
Perform **SKREEM/SKIM VERIFICATION** .

5) (D508) COM - LIN TIRE PRESSURE MONITOR LAN CIRCUIT SHORT TO GROUND

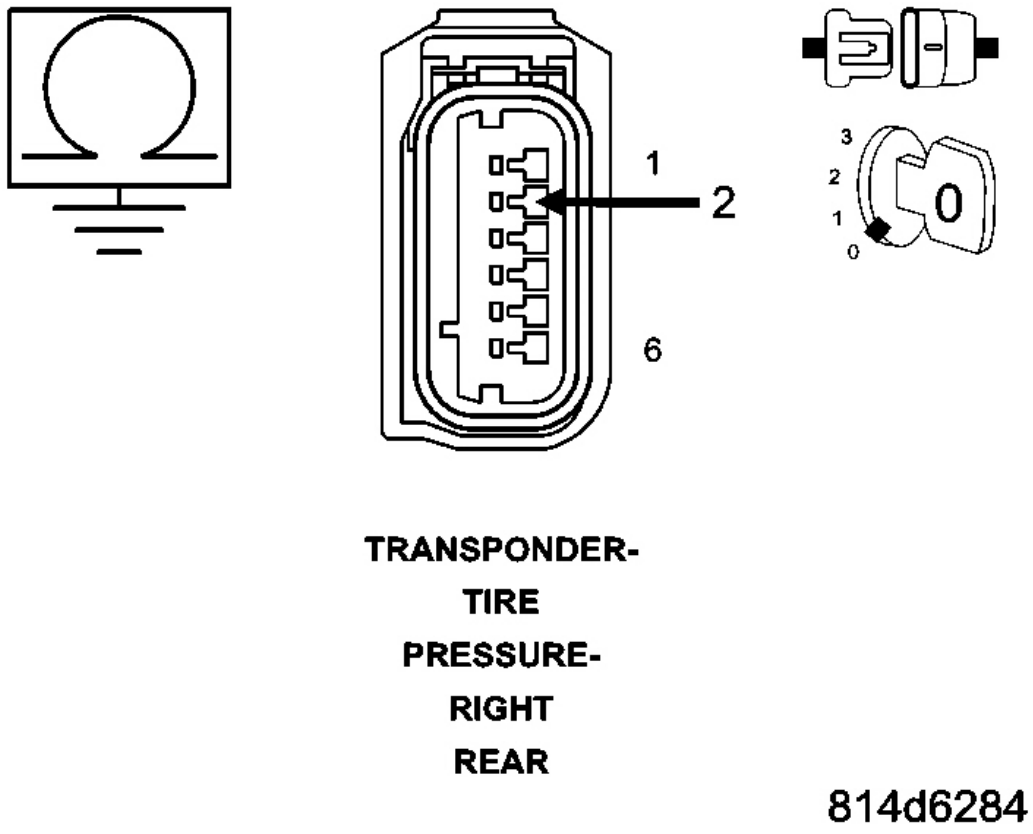

Fig. 15: Checking COM - LIN Tire Pressure Monitor LAN Circuit
Courtesy of DAIMLERCHRYSLER CORP.

Turn the ignition off.

Measure the resistance between ground and the (D508) COM - LIN Tire Pressure Monitor LAN circuit.

Is the resistance below 5.0 ohms?

Yes

Repair the (D508) COM - LIN Tire Pressure Monitor LAN circuit for a short to ground.
Perform **SKREEM/SKIM VERIFICATION** .

No

Go to step 6).

6) (D508) COM - LIN TIRE PRESSURE MONITOR LAN CIRCUIT OPEN OR HIGH RESISTANCE

Use a jumper wire with one end connected to ground and the other to the (D508) COM - LIN Tire Pressure Monitor LAN circuit in the Front Left Pressure Tire Transponder harness connector.

Using a 12-Volt test light connected to battery voltage, probe the (D508) COM - LIN Tire Pressure Monitor LAN circuit in the SKREEM harness connector.

NOTE: The test light should be illuminated and bright. Compared the brightness to that of a direct connection to the battery.

Does the test light illuminate bright?

Yes

Go to step 7).

No

Repair the (D508) COM - LIN Tire Pressure Monitor LAN circuit for an open circuit or high resistance.

Perform **SKREEM/SKIM VERIFICATION** .

7) TIRE PRESSURE TRIGGER MODULE

Turn the ignition off.

Replace the appropriate Tire Pressure Trigger Module in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 8).

No

Test Complete.

Perform **SKREEM/SKIM VERIFICATION** .

8) WIRELESS CONTROL MODULE (SKREEM)

View repair.

Repair

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information. Perform **SKREEM/SKIM VERIFICATION** .

9) INTERMITTENT TIRE PRESSURE TRIGGER MODULE DTC

The conditions necessary to set this DTC are not present at this time.

Using the wiring schematic as a guide, inspect the wiring and connectors relative to this circuit.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Return to the first step of this test and perform the diagnostic procedure.

No

Test complete.

C150A-LEFT FRONT TIRE PRESSURE TRIGGER MODULE VOLTAGE HIGH

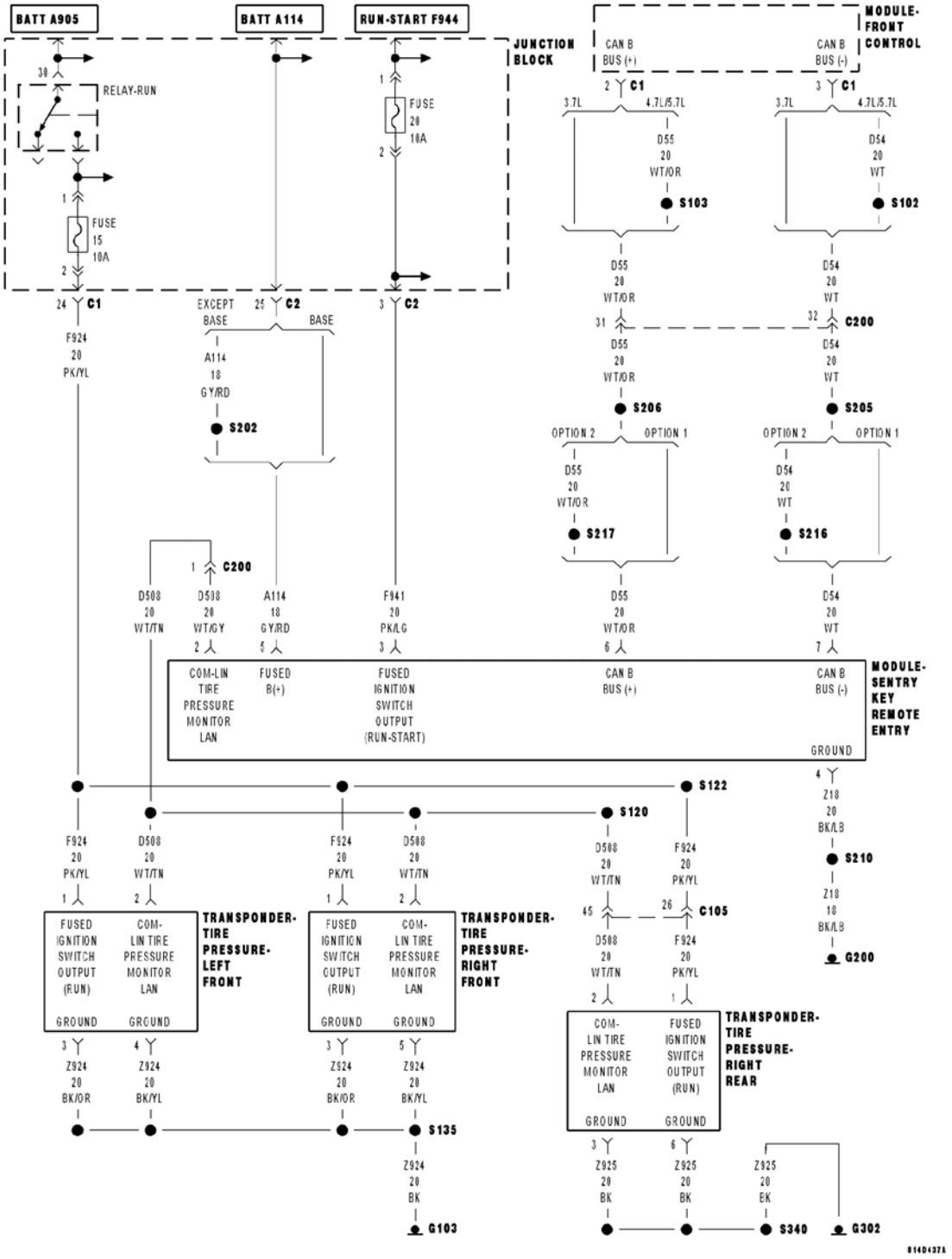

Fig. 16: Tire Pressure Sensor Circuit Schematic
Courtesy of DAIMLERCHRYSLER CORP.

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

Theory of Operation

The Tire Pressure Trigger Module is used to automatically learn the location of each wheel sensor on the

vehicle. The module is controlled and activated in sequence by the Wireless Control Module (SKREEM) over a LIN bus. When activated, the module will generate a 125 KHz signal of sufficient field strength to trigger the tire pressure sensor and force a RF transmission from the sensor.

When Monitored:

Continuously.

Set Condition:

The WCM receives a message from the Tire Pressure Trigger Module indicating that an over voltage condition has been detected.

Possible Causes
INTERMITTENT TIRE PRESSURE TRIGGER MODULE PERFORMANCE DTC
(F924) FUSED IGNITION SWITCH OUTPUT (RUN) CIRCUIT OPEN OR HIGH RESISTANCE
(Z924) GROUND CIRCUIT(S) OPEN OR HIGH RESISTANCE
TIRE PRESSURE TRIGGER MODULE
WIRELESS CONTROL MODULE (SKREEM)

Diagnostic Test

1) DTC STATUS IS ACTIVE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

Turn the ignition on.

NOTE: If a system or battery voltage high DTC is set in the Wireless Control Module (SKREEM) or in the PCM, repair the voltage DTC before continuing with this test.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Is the DTC status Active at this time?

Yes

Go to step 2).

No

Go to step 6).

2) (F924) FUSED IGNITION SWITCH OUTPUT (RUN) CIRCUIT OPEN OR HIGH RESISTANCE

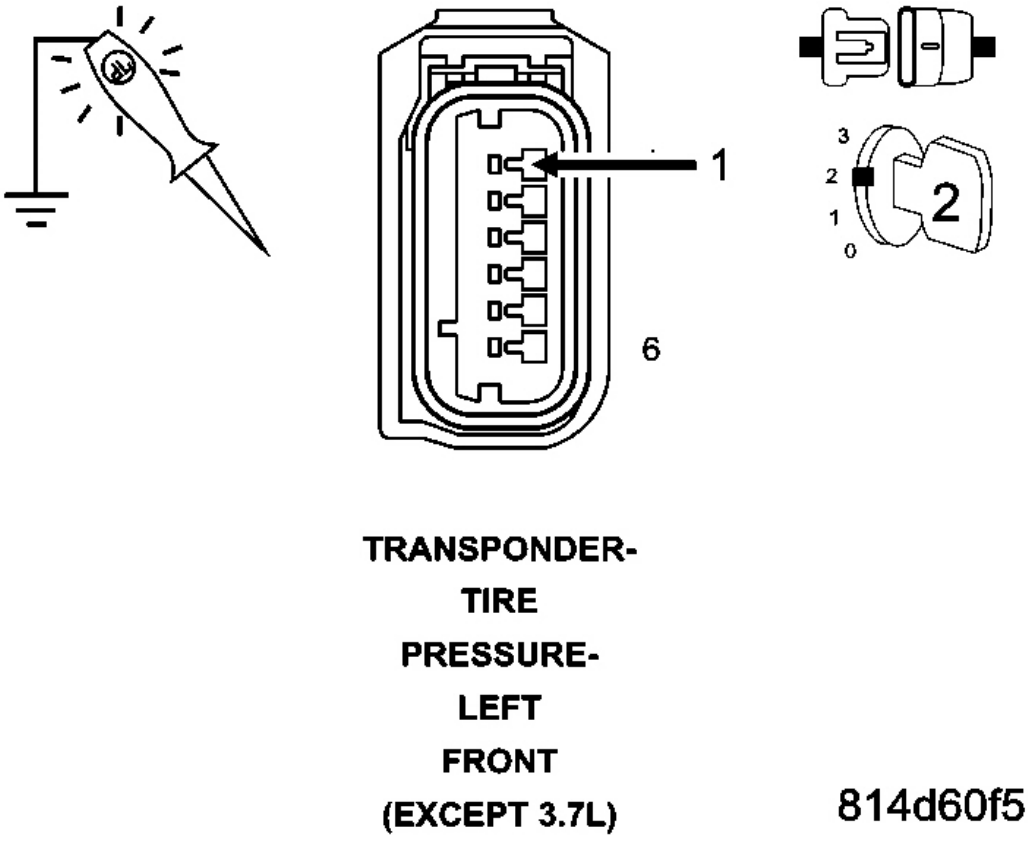

Fig. 17: Checking Fused Ignition Switch Output (RUN) Circuit Open Or High Resistance
Courtesy of DAIMLERCHRYSLER CORP.

Turn the ignition on.

Using a 12-volt test light connect to ground, check the (F924) Fused Ignition Switch Output (Run) circuit.

NOTE: The test light should be illuminated and bright. Compare the brightness to that of a direct connection to the battery.

Is the test light illuminated and bright?

Yes

Go to step 3).

No

Repair the (F924) Fused Ignition Switch Output (Run) circuit for an open circuit or high resistance.

3) (Z924) GROUND CIRCUIT(S) OPEN OR HIGH RESISTANCE

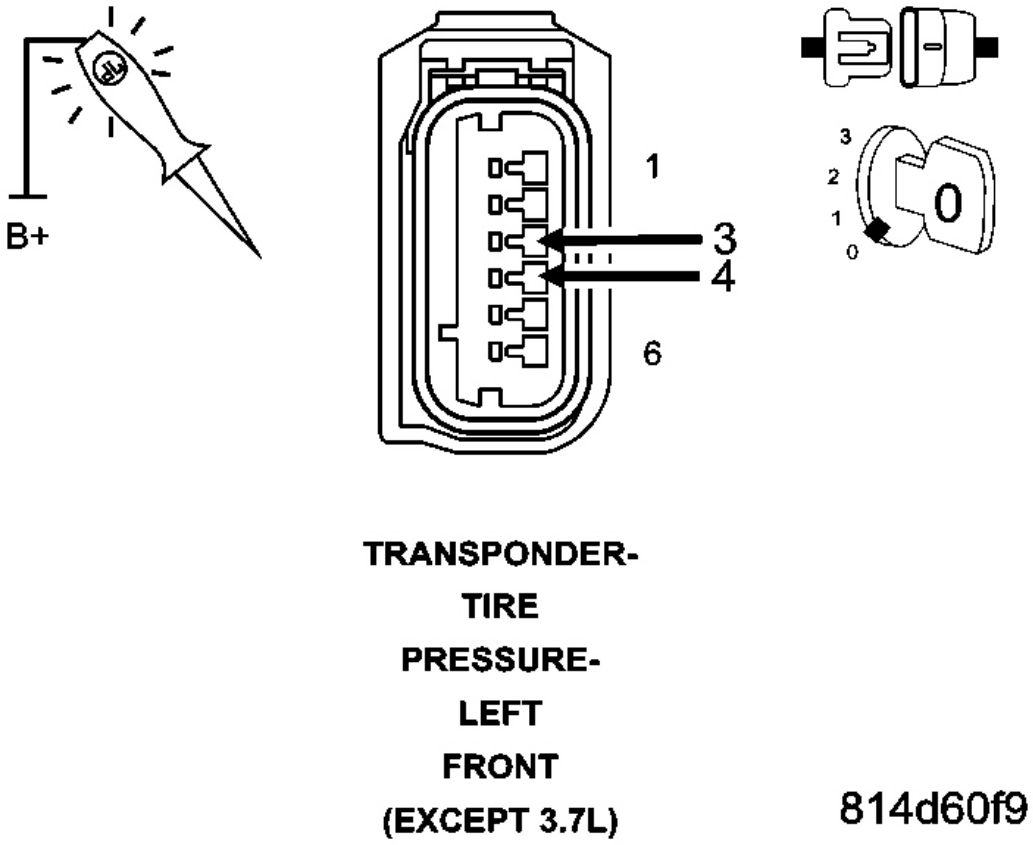

Fig. 18: Checking Ground Circuit(S) Open Or High Resistance
Courtesy of DAIMLERCHRYSLER CORP.

Using a 12-volt test light connect to 12 volts, check each of the (Z924) Ground circuit(s).

NOTE: The test light should be illuminated and bright. Compare the brightness to that of a direct connection to the battery.

Is the test light illuminated and bright?

Yes

Go to step 4).

No

Repair the (Z924) Ground circuit(s) for an open circuit or high resistance.

4) TIRE PRESSURE TRIGGER MODULE

Turn the ignition off.

Replace the appropriate Tire Pressure Trigger Module in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 5).

No

Test Complete.

5) WIRELESS CONTROL MODULE (SKREEM)

View repair.

Repair

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

6) INTERMITTENT TIRE PRESSURE TRIGGER MODULE DTC

The conditions necessary to set this DTC are not present at this time.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Return to the first step of this test and perform the diagnostic procedure.

No

Test complete.

C150B-RIGHT FRONT TIRE PRESSURE TRIGGER MODULE VOLTAGE HIGH

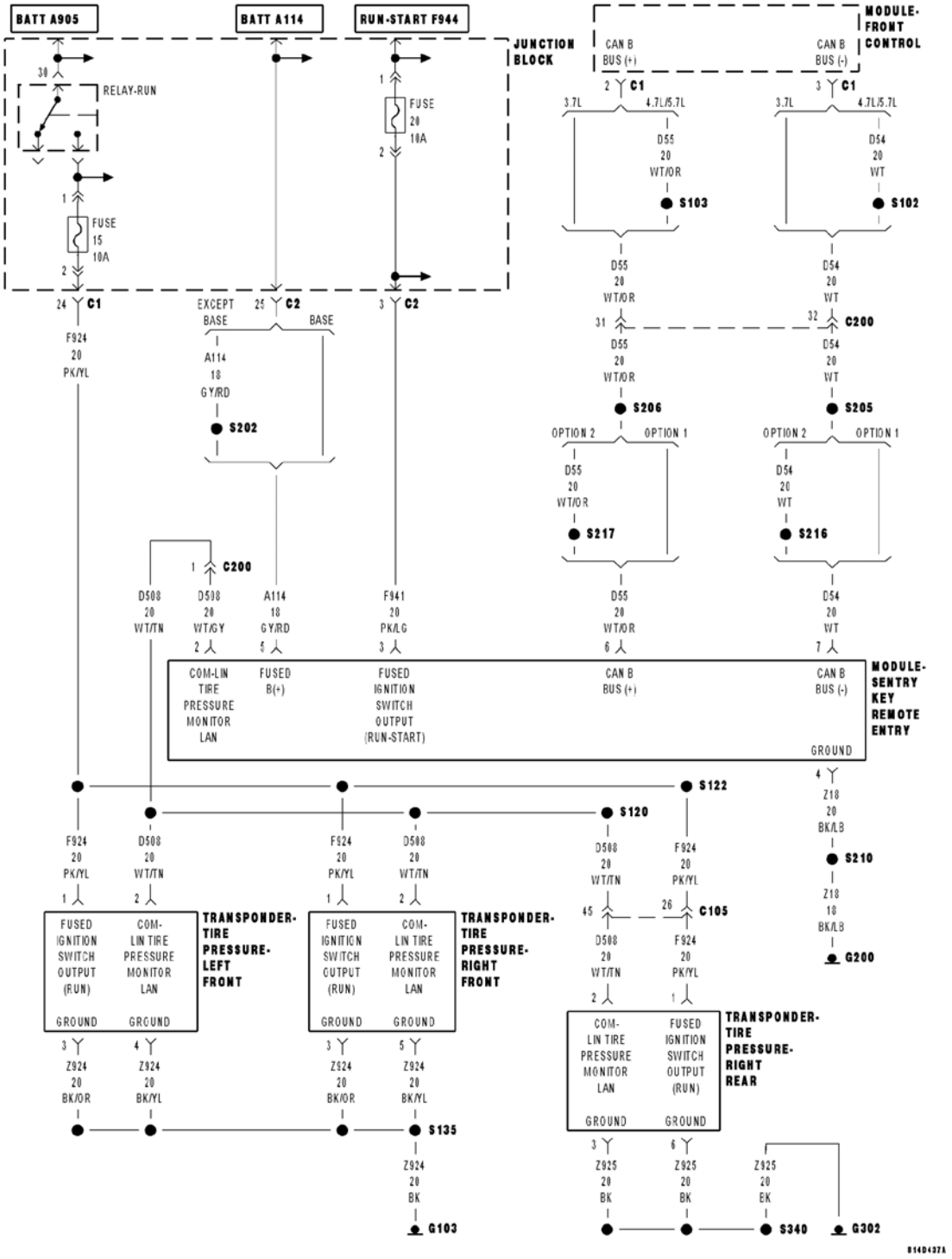

Fig. 19: Tire Pressure Sensor Circuit Schematic
Courtesy of DAIMLERCHRYSLER CORP.

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

Theory of Operation

The Tire Pressure Trigger Module is used to automatically learn the location of each wheel sensor on the

vehicle. The module is controlled and activated in sequence by the Wireless Control Module (SKREEM) over a LIN bus. When activated, the module will generate a 125 KHz signal of sufficient field strength to trigger the tire pressure sensor and force a RF transmission from the sensor.

When Monitored:

Continuously.

Set Condition:

The WCM receives a message from the Tire Pressure Trigger Module indicating that an over voltage condition has been detected.

Possible Causes
INTERMITTENT TIRE PRESSURE TRIGGER MODULE PERFORMANCE DTC
(F924) FUSED IGNITION SWITCH OUTPUT (RUN) CIRCUIT OPEN OR HIGH RESISTANCE
(Z924) GROUND CIRCUIT(S) OPEN OR HIGH RESISTANCE
TIRE PRESSURE TRIGGER MODULE
WIRELESS CONTROL MODULE (SKREEM)

Diagnostic Test

1) DTC STATUS IS ACTIVE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

Turn the ignition on.

NOTE: If a system or battery voltage high DTC is set in the Wireless Control Module (SKREEM) or in the PCM, repair the voltage DTC before continuing with this test.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Is the DTC status Active at this time?

Yes

Go to step 2).

No

Go to step 6).

2) (F924) FUSED IGNITION SWITCH OUTPUT (RUN) CIRCUIT OPEN OR HIGH RESISTANCE

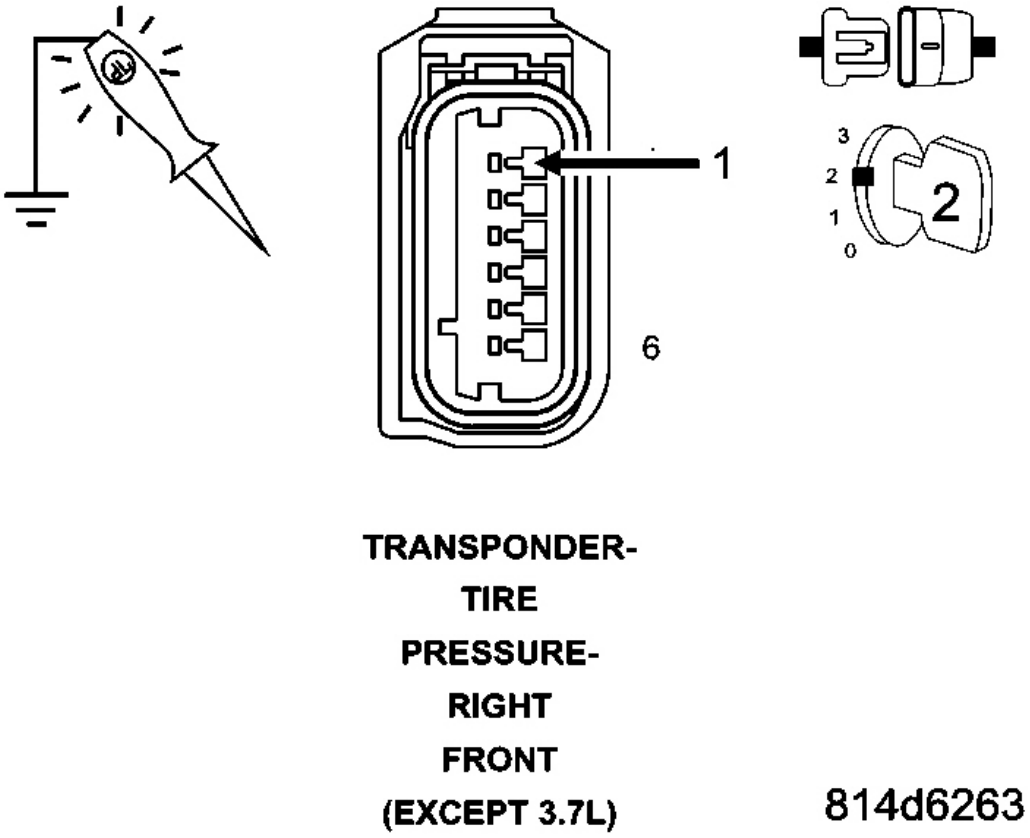

Fig. 20: Checking Fused Ignition Switch Output (RUN) Circuit Open Or High Resistance
Courtesy of DAIMLERCHRYSLER CORP.

Turn the ignition on.

Using a 12-volt test light connect to ground, check the (F924) Fused Ignition Switch Output (Run) circuit.

NOTE: The test light should be illuminated and bright. Compare the brightness to that of a direct connection to the battery.

Is the test light illuminated and bright?

Yes

Go to step 3).

No

Repair the (F924) Fused Ignition Switch Output (Run) circuit for an open circuit or high resistance.

3) (Z924) GROUND CIRCUIT(S) OPEN OR HIGH RESISTANCE

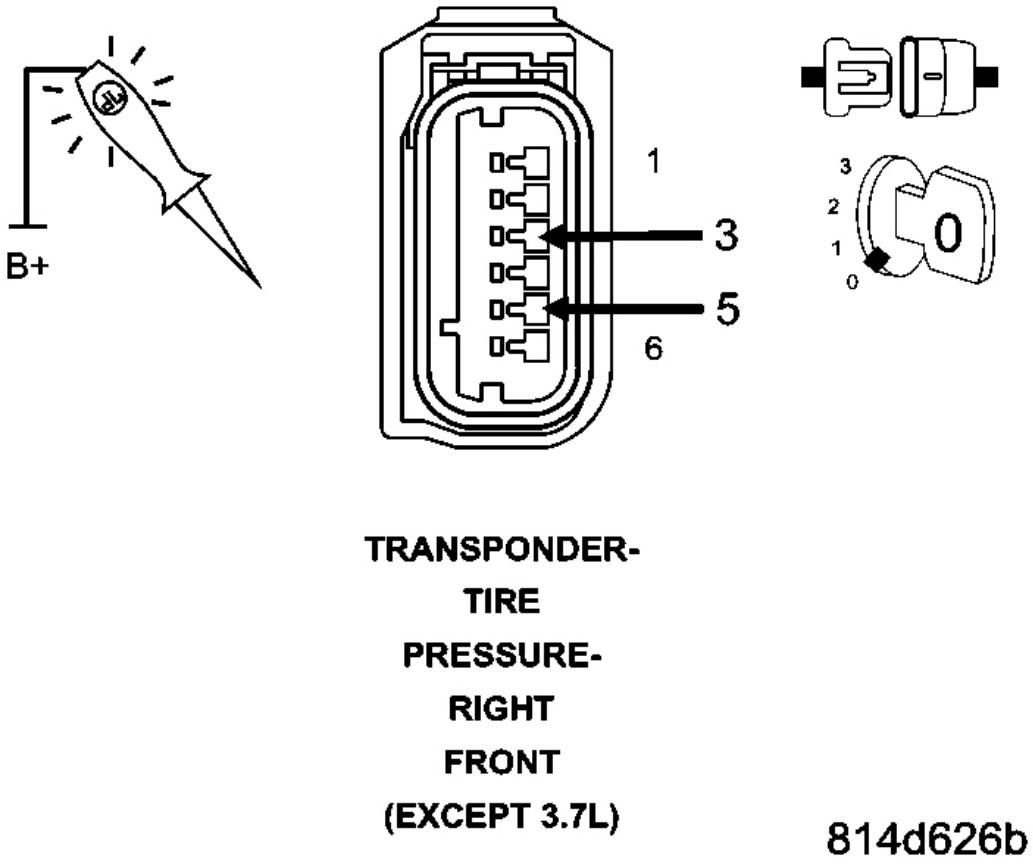

Fig. 21: Checking Ground Circuit(S) Open Or High Resistance
Courtesy of DAIMLERCHRYSLER CORP.

Using a 12-volt test light connect to 12 volts, check each of the (Z924) Ground circuit(s).

NOTE: The test light should be illuminated and bright. Compare the brightness to that of a direct connection to the battery.

Is the test light illuminated and bright?

Yes

Go to step 4).

No

Repair the (Z924) Ground circuit(s) for an open circuit or high resistance.

4) TIRE PRESSURE TRIGGER MODULE

Turn the ignition off.

Replace the appropriate Tire Pressure Trigger Module in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 5).

No

Test Complete.

5) WIRELESS CONTROL MODULE (SKREEM)

View repair.

Repair

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

6) INTERMITTENT TIRE PRESSURE TRIGGER MODULE DTC

The conditions necessary to set this DTC are not present at this time.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Return to the first step of this test and perform the diagnostic procedure.

No

Test complete.

C150C-RIGHT REAR TIRE PRESSURE TRIGGER MODULE VOLTAGE HIGH

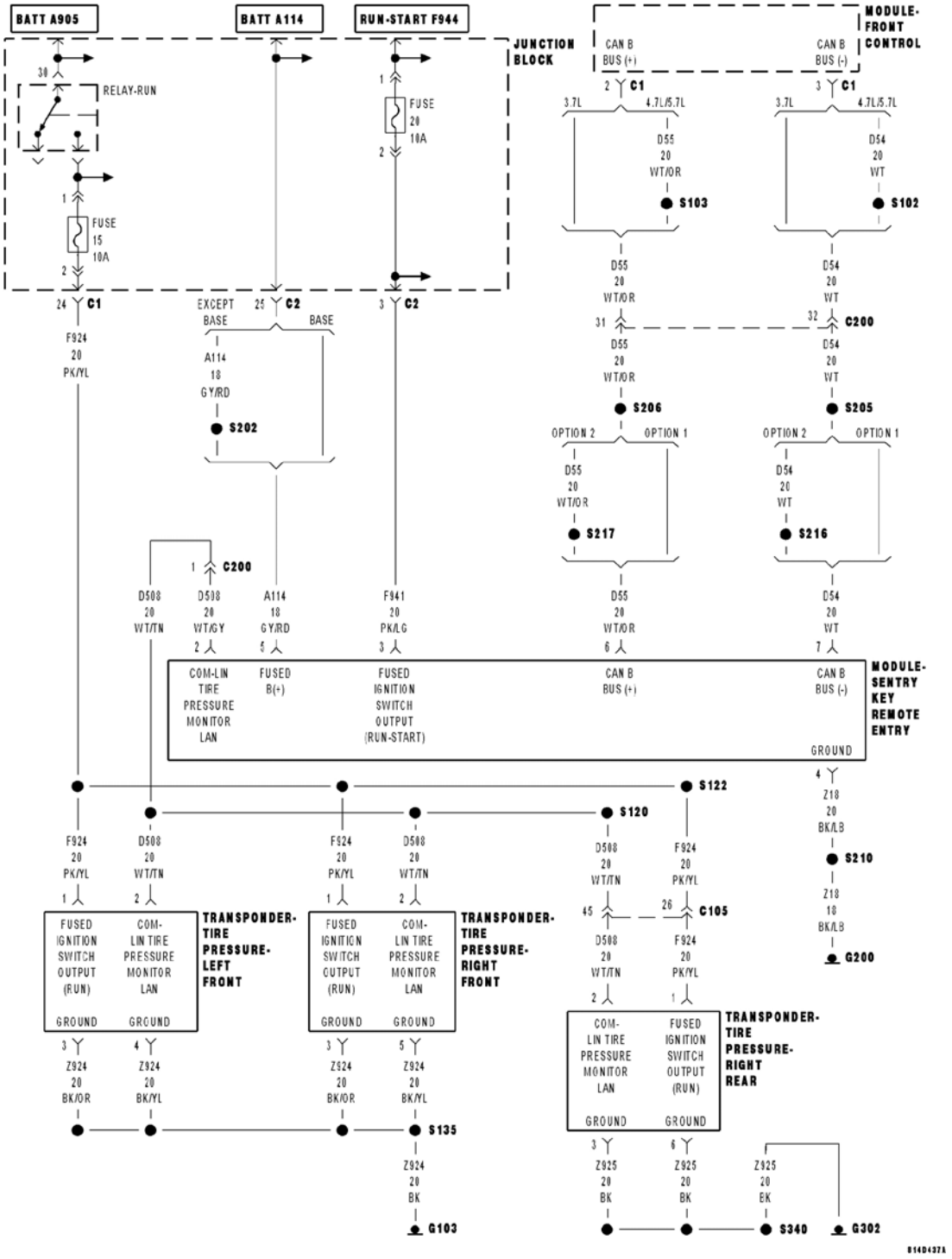

Fig. 22: Tire Pressure Sensor Circuit Schematic
Courtesy of DAIMLERCHRYSLER CORP.

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

Theory of Operation

The Tire Pressure Trigger Module is used to automatically learn the location of each wheel sensor on the

vehicle. The module is controlled and activated in sequence by the Wireless Control Module (SKREEM) over a LIN bus. When activated, the module will generate a 125 KHz signal of sufficient field strength to trigger the tire pressure sensor and force a RF transmission from the sensor.

When Monitored:

Continuously.

Set Condition:

The WCM receives a message from the Tire Pressure Trigger Module indicating that an over voltage condition has been detected.

Possible Causes
INTERMITTENT TIRE PRESSURE TRIGGER MODULE PERFORMANCE DTC
(F924) FUSED IGNITION SWITCH OUTPUT (RUN) CIRCUIT OPEN OR HIGH RESISTANCE
(Z925) GROUND CIRCUIT(S) OPEN OR HIGH RESISTANCE
TIRE PRESSURE TRIGGER MODULE
WIRELESS CONTROL MODULE (SKREEM)

Diagnostic Test

1) DTC STATUS IS ACTIVE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

Turn the ignition on.

NOTE: If a system or battery voltage high DTC is set in the Wireless Control Module (SKREEM) or in the PCM, repair the voltage DTC before continuing with this test.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Is the DTC status Active at this time?

Yes

Go to step 2).

No

Go to step 6).

2) (F924) FUSED IGNITION SWITCH OUTPUT (RUN) CIRCUIT OPEN OR HIGH RESISTANCE

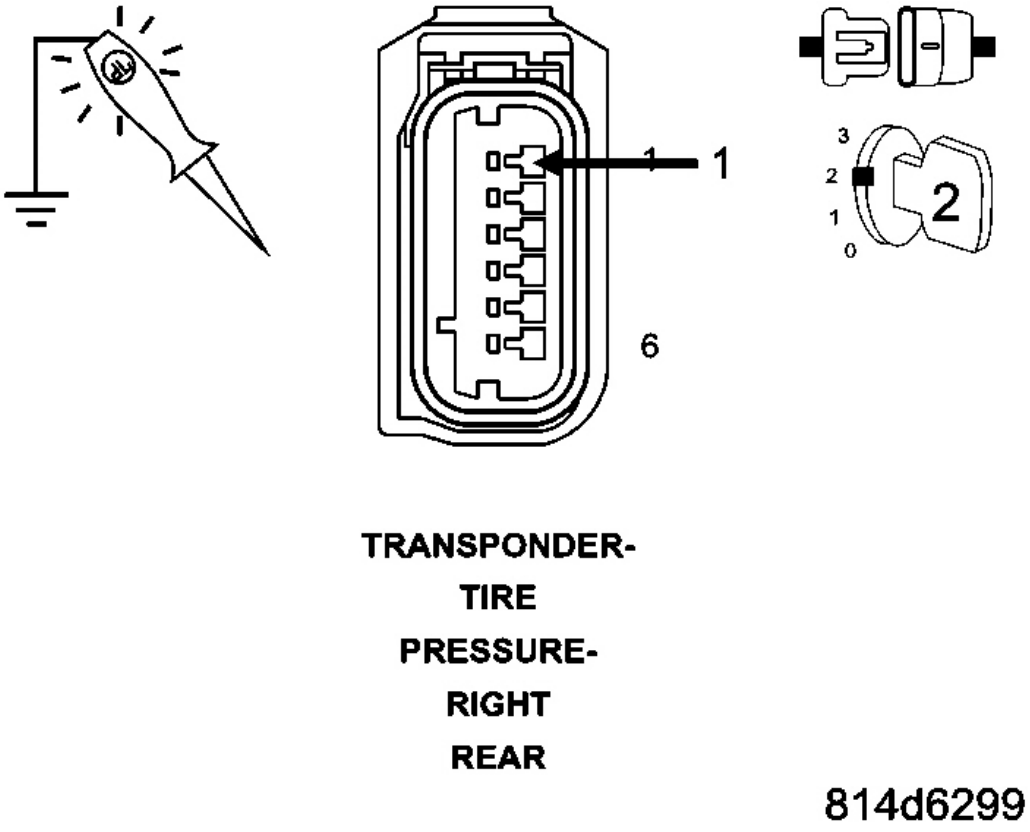

Fig. 23: Checking Fused Ignition Switch Output (RUN) Circuit Open Or High Resistance
Courtesy of DAIMLERCHRYSLER CORP.

Turn the ignition on.

Using a 12-volt test light connect to ground, check the (F924) Fused Ignition Switch Output (Run) circuit.

NOTE: The test light should be illuminated and bright. Compare the brightness to that of a direct connection to the battery.

Is the test light illuminated and bright?

Yes

Go to step 3).

No

Repair the (F924) Fused Ignition Switch Output (Run) circuit for an open circuit or high resistance.

3) (Z925) GROUND CIRCUIT(S) OPEN OR HIGH RESISTANCE

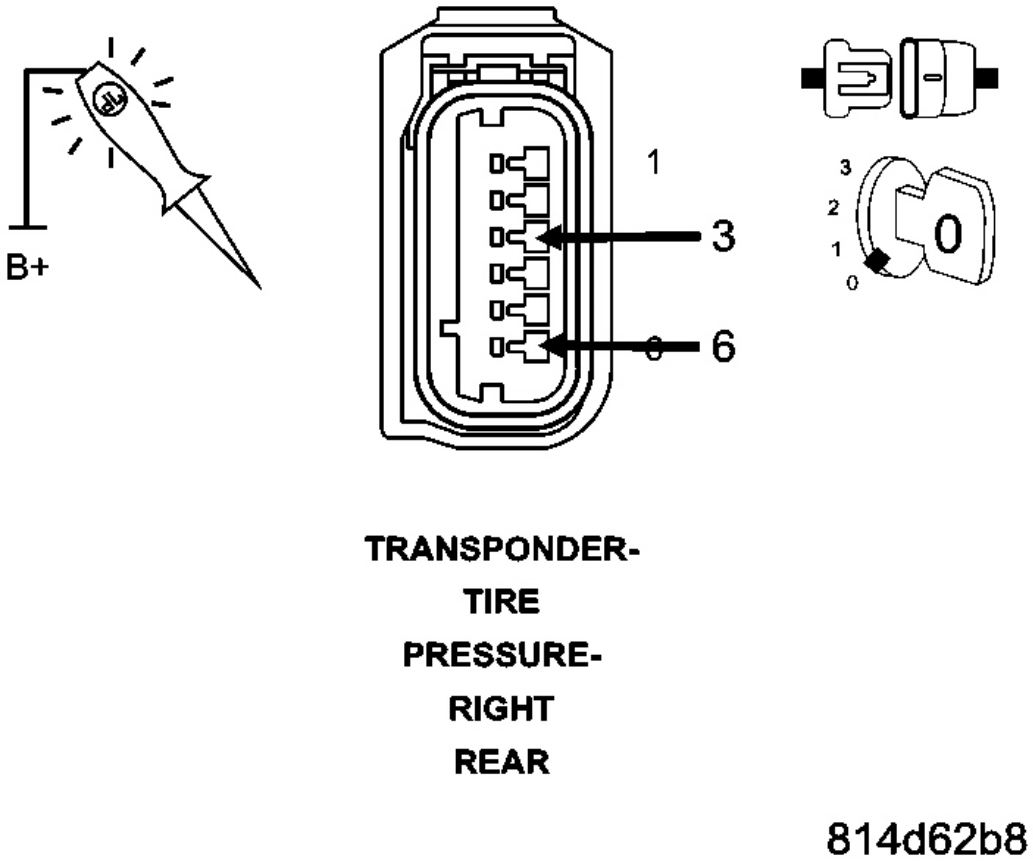

Fig. 24: Checking Ground Circuit(S) Open Or High Resistance
Courtesy of DAIMLERCHRYSLER CORP.

Using a 12-volt test light connect to 12 volts, check each of the (Z925) Ground circuit(s).

NOTE: The test light should be illuminated and bright. Compare the brightness to that of a direct connection to the battery.

Is the test light illuminated and bright?

Yes

Go to step 4).

No

Repair the (Z925) Ground circuit(s) for an open circuit or high resistance.

4) TIRE PRESSURE TRIGGER MODULE

Turn the ignition off.

Replace the appropriate Tire Pressure Trigger Module in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 5).

No

Test Complete.

5) WIRELESS CONTROL MODULE (SKREEM)

View repair.

Repair

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

6) INTERMITTENT TIRE PRESSURE TRIGGER MODULE DTC

The conditions necessary to set this DTC are not present at this time.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Return to the first step of this test and perform the diagnostic procedure.

No

Test complete.

TIRE SENSOR 1 LOW PRESSURE ALERT

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

The fault is set when there is a low tire pressure condition or sensor pressure measurement failure from the sensor/transmitter.

Possible Causes
INTERMITTENT PERFORMANCE DTC
INCORRECT TIRE PRESSURE
TIRE PRESSURE SENSOR
WCM (SKREEM)

Diagnostic Test

1) TIRE SENSOR LOCATION PROCEDURE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

NOTE: If the TPM indicator is illuminated, check for a low tire pressure condition. If the TPM indicator is flashing, check for DTCs.

NOTE: The following test is to locate the Tire Pressure Sensor/Transmitter. If the tires have been rotated, the Tire Pressure Sensor/Transmitter are no longer in sequence from the factory. Faults are linked to the sensor/transmitter IDs. You MUST locate the correct Tire Pressure Sensor/Transmitter that set the fault before continuing.

Set all tire pressures to the recommended specifications and recheck for fault/alert.

Turn the ignition on.

Starting with the left front wheel, deflate the tire to 20 PSI and wait 2 minutes. The fault will set once the pressure has reached 20 PSI within the 2 minute time frame.

If the TPMS fault was detected and not associated to this Sensor/Transmitter, repeat the process until the faulty Sensor/Transmitter has been identified.

NOTE: Once a fault/alert has set, it will establish the location of the tire pressure sensors/transmitter. Repeat steps until the applicable Tire Pressure Sensor/Transmitter has been located.

Once the correct sensor/transmitter has been located continue.

Continue

Go to step 2).

2) LOW TIRE PRESSURE

NOTE: The DTC can be caused by many different factors and might not be a sensor/transmitter or a WCM (SKREEM) fault. Interference from other elements will over power the sensor/transmitter RF frequency making erratic operation to the TPM system. Check the vehicle for aftermarket accessories that could compromise the RF frequency signal before diagnosing the TPM system.

Correct all tire pressure to the recommended specifications and wait 2 minutes.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 3).

No

Go to step 4).

3) TIRE PRESSURE SENSOR

Turn the ignition off.

Replace the Tire Pressure Sensor in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

No

Test Complete.

4) TIRE PRESSURE CORRECTION/INTERMITTENT

NOTE: If the tire pressure was out of specification and by adjusting the pressure corrected the DTC, the test is complete. If the tire pressure was within specification and were unable to reset the DTC an intermittent condition is present and the below steps may aid in identifying the failure.

The conditions necessary to set this DTC are not present at this time.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Repair as necessary.

No

Test complete.

TIRE SENSOR 1 TRANSMIT FAILURE

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

The fault is set when the WCM (SKREEM) does not receive eight consecutive RF transmissions from the sensor/transmitter

Possible Causes
INTERMITTENT PERFORMANCE DTC
INCORRECT TIRE PRESSURE
TIRE PRESSURE SENSOR
WCM (SKREEM)

Diagnostic Test

1) TIRE SENSOR LOCATION PROCEDURE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

NOTE: If the TPM indicator is illuminated, check for a low tire pressure condition. If the TPM indicator is flashing, check for DTCs.

NOTE: The following test is to locate the Tire Pressure Sensor/Transmitter. If the tires have been rotated, the Tire Pressure Sensor/Transmitter are no longer in sequence from the factory. Faults are linked to the sensor/transmitter IDs. You MUST locate the correct Tire Pressure Sensor/Transmitter that set the fault before continuing.

Set all tire pressures to the recommended specifications and recheck for fault/alert.

Turn the ignition on.

Starting with the left front wheel, deflate the tire to 20 PSI and wait 2 minutes. The fault will set once the pressure has reached 20 PSI within the 2 minute time frame.

If the TPMS fault was detected and not associated to this Sensor/Transmitter, repeat the process until the faulty Sensor/Transmitter has been identified.

NOTE: Once a fault/alert has set, it will establish the location of the tire pressure sensors/transmitter. Repeat steps until the applicable Tire Pressure Sensor/Transmitter has been located.

Once the correct sensor/transmitter has been located continue.

Continue

Go to step 2).

2) LOW TIRE PRESSURE

NOTE: The DTC can be caused by many different factors and might not be a sensor/transmitter or a WCM (SKREEM) fault. Interference from other elements will over power the sensor/transmitter RF frequency making erratic operation to the TPM system. Check the vehicle for aftermarket accessories that could compromise the RF frequency signal before diagnosing the TPM system.

Correct all tire pressure to the recommended specifications and wait 2 minutes.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 3).

No

Go to step 4).

3) TIRE PRESSURE SENSOR

Turn the ignition off.

Replace the Tire Pressure Sensor in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

No

Test Complete.

4) TIRE PRESSURE CORRECTION/INTERMITTENT

NOTE: If the tire pressure was out of specification and by adjusting the pressure corrected the DTC, the test is complete. If the tire pressure was within specification and were unable to reset the DTC an intermittent condition is present and the below steps may aid in identifying the failure.

The conditions necessary to set this DTC are not present at this time.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Repair as necessary.

No

Test complete.

TIRE SENSOR 2 LOW PRESSURE ALERT

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

The fault is set when there is a low tire pressure condition or sensor pressure measurement failure from the sensor/transmitter.

Possible Causes
INTERMITTENT PERFORMANCE DTC
INCORRECT TIRE PRESSURE
TIRE PRESSURE SENSOR
WCM (SKREEM)

Diagnostic Test

1) TIRE SENSOR LOCATION PROCEDURE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

NOTE: If the TPM indicator is illuminated, check for a low tire pressure condition. If the TPM indicator is flashing, check for DTCs.

NOTE: The following test is to locate the Tire Pressure Sensor/Transmitter. If the tires have been rotated, the Tire Pressure Sensor/Transmitter are no longer in sequence from the factory. Faults are linked to the sensor/transmitter IDs. You MUST locate the correct Tire Pressure Sensor/Transmitter that set the fault before continuing.

Set all tire pressures to the recommended specifications and recheck for fault/alert.

Turn the ignition on.

Starting with the left front wheel, deflate the tire to 20 PSI and wait 2 minutes. The fault will set once the pressure has reached 20 PSI within the 2 minute time frame.

If the TPMS fault was detected and not associated to this Sensor/Transmitter, repeat the process until the faulty Sensor/Transmitter has been identified.

NOTE: Once a fault/alert has set, it will establish the location of the tire pressure sensors/transmitter. Repeat steps until the applicable Tire Pressure Sensor/Transmitter has been located.

Once the correct sensor/transmitter has been located continue.

Continue

Go to step 2).

2) LOW TIRE PRESSURE

NOTE: The DTC can be caused by many different factors and might not be a sensor/transmitter or a WCM (SKREEM) fault. Interference from other elements will over power the sensor/transmitter RF frequency making erratic operation to the TPM system. Check the vehicle for aftermarket accessories that could compromise the RF frequency signal before diagnosing the TPM system.

Correct all tire pressure to the recommended specifications and wait 2 minutes.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 3).

No

Go to step 4).

3) TIRE PRESSURE SENSOR

Turn the ignition off.

Replace the Tire Pressure Sensor in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

No

Test Complete.

4) TIRE PRESSURE CORRECTION/INTERMITTENT

NOTE: If the tire pressure was out of specification and by adjusting the pressure corrected the DTC, the test is complete. If the tire pressure was within specification and were unable to reset the DTC an intermittent condition is present and the below steps may aid in identifying the failure.

The conditions necessary to set this DTC are not present at this time.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Repair as necessary.

No

Test complete.

TIRE SENSOR 2 TRANSMIT FAILURE

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

The fault is set when the WCM (SKREEM) does not receive eight consecutive RF transmissions from the sensor/transmitter

Possible Causes
INTERMITTENT PERFORMANCE DTC
INCORRECT TIRE PRESSURE
TIRE PRESSURE SENSOR
WCM (SKREEM)

Diagnostic Test

1) TIRE SENSOR LOCATION PROCEDURE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

NOTE: If the TPM indicator is illuminated, check for a low tire pressure condition. If the TPM indicator is flashing, check for DTCs.

NOTE: The following test is to locate the Tire Pressure Sensor/Transmitter. If the tires have been rotated, the Tire Pressure Sensor/Transmitter are no longer in sequence from the factory. Faults are linked to the sensor/transmitter IDs. You MUST locate the correct Tire Pressure Sensor/Transmitter that set the fault before continuing.

Set all tire pressures to the recommended specifications and recheck for fault/alert.

Turn the ignition on.

Starting with the left front wheel, deflate the tire to 20 PSI and wait 2 minutes. The fault will set once the pressure has reached 20 PSI within the 2 minute time frame.

If the TPMS fault was detected and not associated to this Sensor/Transmitter, repeat the process until the faulty Sensor/Transmitter has been identified.

NOTE: Once a fault/alert has set, it will establish the location of the tire pressure sensors/transmitter. Repeat steps until the applicable Tire Pressure Sensor/Transmitter has been located.

Once the correct sensor/transmitter has been located continue.

Continue

Go to step 2).

2) LOW TIRE PRESSURE

NOTE: The DTC can be caused by many different factors and might not be a sensor/transmitter or a WCM (SKREEM) fault. Interference from other elements will over power the sensor/transmitter RF frequency making erratic operation to the TPM system. Check the vehicle for aftermarket accessories that could compromise the RF frequency signal before diagnosing the TPM system.

Correct all tire pressure to the recommended specifications and wait 2 minutes.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 3).

No

Go to step 4).

3) TIRE PRESSURE SENSOR

Turn the ignition off.

Replace the Tire Pressure Sensor in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

No

Test Complete.

4) TIRE PRESSURE CORRECTION/INTERMITTENT

NOTE: If the tire pressure was out of specification and by adjusting the pressure corrected the DTC, the test is complete. If the tire pressure was within specification and were unable to reset the DTC an intermittent condition is present and the below steps may aid in identifying the failure.

The conditions necessary to set this DTC are not present at this time.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Repair as necessary.

No

Test complete.

TIRE SENSOR 3 LOW PRESSURE ALERT

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

The fault is set when there is a low tire pressure condition or sensor pressure measurement failure from the sensor/transmitter.

Possible Causes
INTERMITTENT PERFORMANCE DTC
INCORRECT TIRE PRESSURE
TIRE PRESSURE SENSOR
WCM (SKREEM)

Diagnostic Test

1) TIRE SENSOR LOCATION PROCEDURE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

NOTE: If the TPM indicator is illuminated, check for a low tire pressure condition. If the TPM indicator is flashing, check for DTCs.

NOTE: The following test is to locate the Tire Pressure Sensor/Transmitter. If the tires have been rotated, the Tire Pressure Sensor/Transmitter are no longer in sequence from the factory. Faults are linked to the sensor/transmitter IDs. You MUST locate the correct Tire Pressure Sensor/Transmitter that set the fault before continuing.

Set all tire pressures to the recommended specifications and recheck for fault/alert.

Turn the ignition on.

Starting with the left front wheel, deflate the tire to 20 PSI and wait 2 minutes. The fault will set once the pressure has reached 20 PSI within the 2 minute time frame.

If the TPMS fault was detected and not associated to this Sensor/Transmitter, repeat the process until the faulty Sensor/Transmitter has been identified.

NOTE: Once a fault/alert has set, it will establish the location of the tire pressure sensors/transmitter. Repeat steps until the applicable Tire Pressure Sensor/Transmitter has been located.

Once the correct sensor/transmitter has been located continue.

Continue

Go to step 2).

2) LOW TIRE PRESSURE

NOTE: The DTC can be caused by many different factors and might not be a sensor/transmitter or a WCM (SKREEM) fault. Interference from other elements will over power the sensor/transmitter RF frequency making erratic operation to the TPM system. Check the vehicle for aftermarket accessories that could compromise the RF frequency signal before diagnosing the TPM system.

Correct all tire pressure to the recommended specifications and wait 2 minutes.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 3).

No

Go to step 4).

3) TIRE PRESSURE SENSOR

Turn the ignition off.

Replace the Tire Pressure Sensor in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

No

Test Complete.

4) TIRE PRESSURE CORRECTION/INTERMITTENT

NOTE: If the tire pressure was out of specification and by adjusting the pressure corrected the DTC, the test is complete. If the tire pressure was within specification and were unable to reset the DTC an intermittent condition is present and the below steps may aid in identifying the failure.

The conditions necessary to set this DTC are not present at this time.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Repair as necessary.

No

Test complete.

TIRE SENSOR 3 TRANSMIT FAILURE

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

The fault is set when the WCM (SKREEM) does not receive eight consecutive RF transmissions from the sensor/transmitter

Possible Causes
INTERMITTENT PERFORMANCE DTC
INCORRECT TIRE PRESSURE
TIRE PRESSURE SENSOR
WCM (SKREEM)

Diagnostic Test

1) TIRE SENSOR LOCATION PROCEDURE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

NOTE: If the TPM indicator is illuminated, check for a low tire pressure condition. If the TPM indicator is flashing, check for DTCs.

NOTE: The following test is to locate the Tire Pressure Sensor/Transmitter. If the tires have been rotated, the Tire Pressure Sensor/Transmitter are no longer in sequence from the factory. Faults are linked to the sensor/transmitter IDs. You MUST locate the correct Tire Pressure Sensor/Transmitter that set the fault before continuing.

Set all tire pressures to the recommended specifications and recheck for fault/alert.

Turn the ignition on.

Starting with the left front wheel, deflate the tire to 20 PSI and wait 2 minutes. The fault will set once the pressure has reached 20 PSI within the 2 minute time frame.

If the TPMS fault was detected and not associated to this Sensor/Transmitter, repeat the process until the faulty Sensor/Transmitter has been identified.

NOTE: Once a fault/alert has set, it will establish the location of the tire pressure sensors/transmitter. Repeat steps until the applicable Tire Pressure Sensor/Transmitter has been located.

Once the correct sensor/transmitter has been located continue.

Continue

Go to step 2).

2) LOW TIRE PRESSURE

NOTE: The DTC can be caused by many different factors and might not be a sensor/transmitter or a WCM (SKREEM) fault. Interference from other elements will over power the sensor/transmitter RF frequency making erratic operation to the TPM system. Check the vehicle for aftermarket accessories that could compromise the RF frequency signal before diagnosing the TPM system.

Correct all tire pressure to the recommended specifications and wait 2 minutes.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 3).

No

Go to step 4).

3) TIRE PRESSURE SENSOR

Turn the ignition off.

Replace the Tire Pressure Sensor in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

No

Test Complete.

4) TIRE PRESSURE CORRECTION/INTERMITTENT

NOTE: If the tire pressure was out of specification and by adjusting the pressure corrected the DTC, the test is complete. If the tire pressure was within specification and were unable to reset the DTC an intermittent condition is present and the below steps may aid in identifying the failure.

The conditions necessary to set this DTC are not present at this time.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Repair as necessary.

No

Test complete.

TIRE SENSOR 4 LOW PRESSURE ALERT

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

The fault is set when there is a low tire pressure condition or sensor pressure measurement failure from the sensor/transmitter.

Possible Causes
INTERMITTENT PERFORMANCE DTC
INCORRECT TIRE PRESSURE
TIRE PRESSURE SENSOR
WCM (SKREEM)

Diagnostic Test

1) TIRE SENSOR LOCATION PROCEDURE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

NOTE: If the TPM indicator is illuminated, check for a low tire pressure condition. If the TPM indicator is flashing, check for DTCs.

NOTE: The following test is to locate the Tire Pressure Sensor/Transmitter. If the tires have been rotated, the Tire Pressure Sensor/Transmitter are no longer in sequence from the factory. Faults are linked to the sensor/transmitter IDs. You MUST locate the correct Tire Pressure Sensor/Transmitter that set the fault before continuing.

Set all tire pressures to the recommended specifications and recheck for fault/alert.

Turn the ignition on.

Starting with the left front wheel, deflate the tire to 20 PSI and wait 2 minutes. The fault will set once the pressure has reached 20 PSI within the 2 minute time frame.

If the TPMS fault was detected and not associated to this Sensor/Transmitter, repeat the process until the faulty Sensor/Transmitter has been identified.

NOTE: Once a fault/alert has set, it will establish the location of the tire pressure sensors/transmitter. Repeat steps until the applicable Tire Pressure Sensor/Transmitter has been located.

Once the correct sensor/transmitter has been located continue.

Continue

Go to step 2).

2) LOW TIRE PRESSURE

NOTE: The DTC can be caused by many different factors and might not be a sensor/transmitter or a WCM (SKREEM) fault. Interference from other elements will over power the sensor/transmitter RF frequency making erratic operation to the TPM system. Check the vehicle for aftermarket accessories that could compromise the RF frequency signal before diagnosing the TPM system.

Correct all tire pressure to the recommended specifications and wait 2 minutes.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 3).

No

Go to step 4).

3) TIRE PRESSURE SENSOR

Turn the ignition off.

Replace the Tire Pressure Sensor in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

No

Test Complete.

4) TIRE PRESSURE CORRECTION/INTERMITTENT

NOTE: If the tire pressure was out of specification and by adjusting the pressure corrected the DTC, the test is complete. If the tire pressure

was within specification and were unable to reset the DTC an intermittent condition is present and the below steps may aid in identifying the failure.

The conditions necessary to set this DTC are not present at this time.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Repair as necessary.

No

Test complete.

TIRE SENSOR 4 TRANSMIT FAILURE

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

Continuously.

Set Condition:

The fault is set when the WCM (SKREEM) does not receive eight consecutive RF transmissions from the sensor/transmitter

Possible Causes
INTERMITTENT PERFORMANCE DTC
INCORRECT TIRE PRESSURE
TIRE PRESSURE SENSOR
WCM (SKREEM)

Diagnostic Test

1) TIRE SENSOR LOCATION PROCEDURE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM

diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

NOTE: If the TPM indicator is illuminated, check for a low tire pressure condition. If the TPM indicator is flashing, check for DTCs.

NOTE: The following test is to locate the Tire Pressure Sensor/Transmitter. If the tires have been rotated, the Tire Pressure Sensor/Transmitter are no longer in sequence from the factory. Faults are linked to the sensor/transmitter IDs. You MUST locate the correct Tire Pressure Sensor/Transmitter that set the fault before continuing.

Set all tire pressures to the recommended specifications and recheck for fault/alert.

Turn the ignition on.

Starting with the left front wheel, deflate the tire to 20 PSI and wait 2 minutes. The fault will set once the pressure has reached 20 PSI within the 2 minute time frame.

If the TPMS fault was detected and not associated to this Sensor/Transmitter, repeat the process until the faulty Sensor/Transmitter has been identified.

NOTE: Once a fault/alert has set, it will establish the location of the tire pressure sensors/transmitter. Repeat steps until the applicable Tire Pressure Sensor/Transmitter has been located.

Once the correct sensor/transmitter has been located continue.

Continue

Go to step 2).

2) LOW TIRE PRESSURE

NOTE: The DTC can be caused by many different factors and might not be a sensor/transmitter or a WCM (SKREEM) fault. Interference from other elements will over power the sensor/transmitter RF frequency making erratic operation to the TPM system. Check the vehicle for aftermarket accessories that could compromise the RF frequency signal before diagnosing the TPM system.

Correct all tire pressure to the recommended specifications and wait 2 minutes.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Go to step 3).

No

Go to step 4).

3) TIRE PRESSURE SENSOR

Turn the ignition off.

Replace the Tire Pressure Sensor in accordance with the Service Information.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

No

Test Complete.

4) TIRE PRESSURE CORRECTION/INTERMITTENT

NOTE: If the tire pressure was out of specification and by adjusting the pressure corrected the DTC, the test is complete. If the tire pressure was within specification and were unable to reset the DTC an intermittent condition is present and the below steps may aid in identifying the failure.

The conditions necessary to set this DTC are not present at this time.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Repair as necessary.

No

Test complete.

PRNDL MESSAGE MISSING

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

With the ignition on.

Set Condition:

This DTC will set if the PRNDL message is not received for more than 5 seconds.

Possible Causes
INTERMITTENT PRNDL MESSAGE MISSING DTC
PCM DTCS PRESENT
CLUSTER DTCS PRESENT
WIRELESS CONTROL MODULE (SKREEM)

Diagnostic Test

1) DTC STATUS IS ACTIVE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

Turn the ignition on.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Is the DTC status Active at this time?

Yes

Go to step 2).

No

Go to step 5).

2) DTCS PRESENT IN PCM

Cycle the ignition off and on.

With the scan tool, select View DTCs in the Powertrain Control Module (PCM).

Are there any DTCs present on the PCM?

Yes

Refer to the appropriate diagnostic procedure for the PCM DTC.

No

Go to step 3).

3) DTCS PRESENT IN THE CLUSTER

Cycle the ignition off and on.

With the scan tool, select View DTCs in the Instrument Cluster (CCN).

Are there any DTCs present on the Cluster?

Yes

Refer to the appropriate diagnostic procedure for the Cluster DTC.

No

Go to step 4).

4) WIRELESS CONTROL MODULE (SKREEM)

Inspect the wiring and connectors relative to this circuit.

Monitor the scan tool data relative to this circuit while performing a wiggle test on the wiring and connectors. Look for the DTC to reset or for the data to change other than as expected.

Refer to any Technical Service Bulletins that may apply to this condition.

If no problems are found view repair.

Repair

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

5) INTERMITTENT PRNDL MESSAGE MISSING DTC

The conditions necessary to set this DTC are not present at this time.

Inspect the wiring and connectors relative to this circuit.

Monitor the scan tool data relative to this circuit while performing a wiggle test on the wiring and

connectors. Look for the DTC to reset or for the data to change other than as expected.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Return to the beginning of this test and perform the diagnostic procedure as necessary.

No

Test complete.

VEHICLE SPEED MESSAGE MISSING

For a complete wiring diagram, refer to **SYSTEM WIRING DIAGRAMS** article.

When Monitored:

With the ignition on.

Set Condition:

This DTC will set if the Vehicle Speed message is not received for more than 5 seconds.

Possible Causes
INTERMITTENT VEHICLE SPEED MESSAGE MISSING DTC
PCM DTCS PRESENT
CLUSTER DTCS PRESENT
WIRELESS CONTROL MODULE (SKREEM)

Diagnostic Test

1) DTC STATUS IS ACTIVE

NOTE: If the incorrect Placard Values were programmed into the WCM/SKREEM, a DTC could be set. Before continuing with any TPM diagnostic test, using the scan tool, check that the correct Placard Values have been programmed in to the module.

Turn the ignition on.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Is the DTC status Active at this time?

Yes

Go to step 2).

No

Go to step 5).

2) DTCS PRESENT IN PCM

Cycle the ignition off and on.

With the scan tool, select View DTCs in the Powertrain Control Module (PCM).

Are there any DTCs present on the PCM?

Yes

Refer to the appropriate diagnostic procedure for the PCM DTC.

No

Go to step 3).

3) DTCS PRESENT IN THE CLUSTER

Cycle the ignition off and on.

With the scan tool, select View DTCs in the Instrument Cluster (CCN).

Are there any DTCs present on the Cluster?

Yes

Refer to the appropriate diagnostic procedure for the Cluster DTC.

No

Go to step 4).

4) WIRELESS CONTROL MODULE (SKREEM)

Inspect the wiring and connectors relative to this circuit.

Monitor the scan tool data relative to this circuit while performing a wiggle test on the wiring and connectors. Look for the DTC to reset or for the data to change other than as expected.

Refer to any Technical Service Bulletins that may apply to this condition.

If no problems are found view repair.

Repair

Replace the Wireless Control Module (SKREEM) in accordance with the Service Information.

5) INTERMITTENT VEHICLE SPEED MESSAGE MISSING DTC

The conditions necessary to set this DTC are not present at this time.

Inspect the wiring and connectors relative to this circuit.

Monitor the scan tool data relative to this circuit while performing a wiggle test on the wiring and connectors. Look for the DTC to reset or for the data to change other than as expected.

Refer to any Technical Service Bulletins that may apply to this condition.

With the scan tool, clear DTCs in the Wireless Control Module (SKREEM).

Test Drive the vehicle for a minimum of 10 minutes with vehicle speed greater than 15 m.p.h.

With the scan tool, select View DTCs in the Wireless Control Module (SKREEM).

Does the DTC reset or is the status Active for this DTC?

Yes

Return to the beginning of this test and perform the diagnostic procedure as necessary.

No

Test complete.