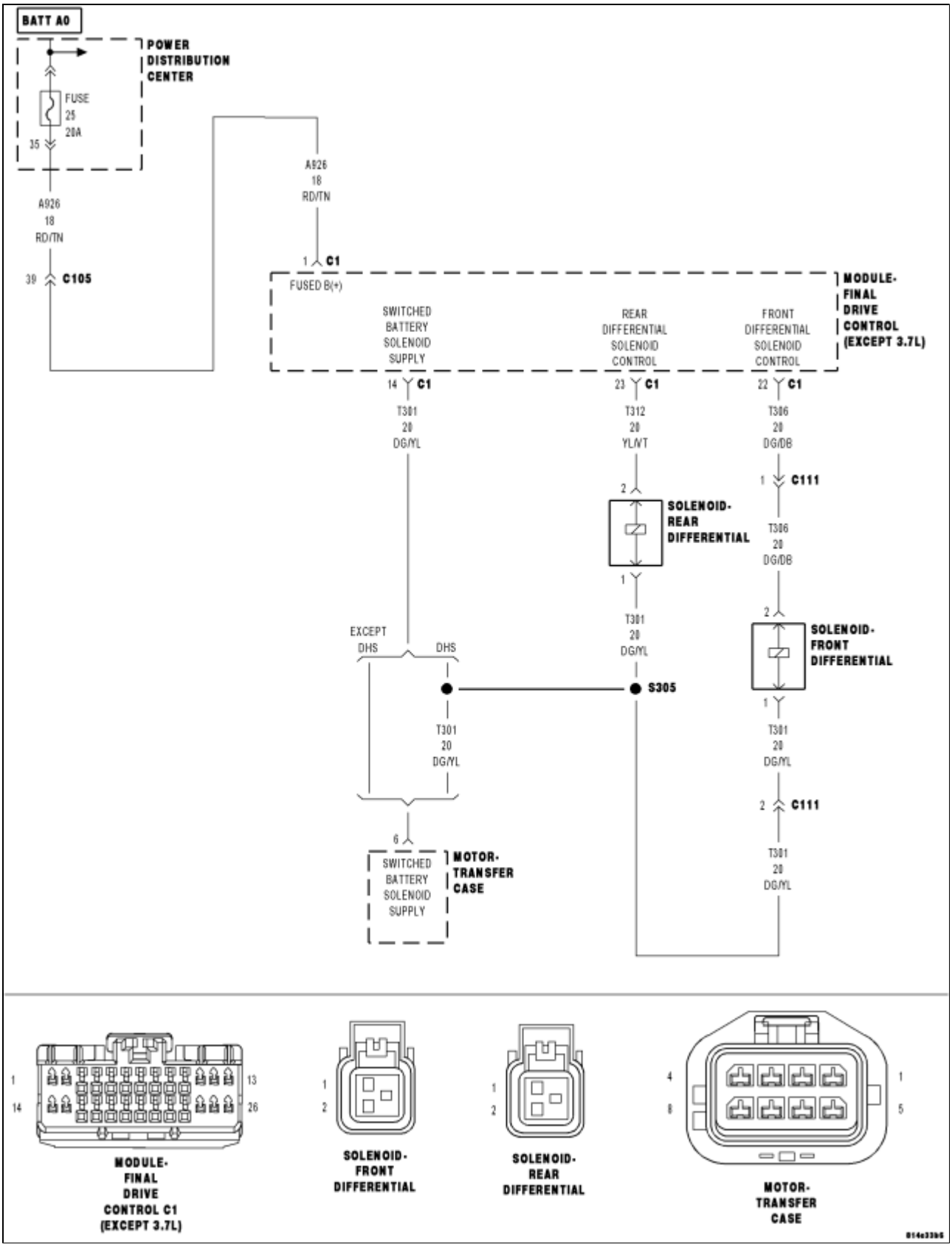
C1421-REAR DIFFERENTIAL CLUTCH PERFORMANCE



For a complete wiring diagram **Refer to Section 8W**.

- **When Monitored:**

  The ignition on. No Solenoid DTCs present.

- **Set Condition:**

  The solenoid duty cycle is greater than 95% and the wheel slippage is greater than 50%.

Possible Causes
WIRING HARNESS INSPECTION
DIFFERENTIAL (MECHANICAL)
REAR DIFFERENTANTIAL SOLENOID

Diagnostic Test

1. ACTIVE DTC

NOTE: You must diagnose any Solenoid circuit (Low or High) DTCs first if set along with this DTC before continuing.

Ignition on, engine not running.
With the scan tool, read DTCs.

Is the DTC active at this time?

Yes

- Go To 2

No

- Go To4

2. WIRING HARNESS INSPECTION

Inspect the wiring harness from both solenoids to the FDCM. Ensure that the harness has routed correctly.
Inspect the FDCM harness connector and Differential Solenoid connectors. Ensure the terminals are clean and no damage is present.

Was the wiring harness and connectors OK?

Yes

- Go To 3

No

- Repair as necessary.
- Perform FDCM VERIFICATION TEST.
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3. INSPECTION DIFFERENTIAL

Ensure the Differential is operating properly. Refer to 3–Differential & Driveline Service Information.
Inspect the Differential for external fluid leaks. Repair as necessary, refer to 3–Differential & Driveline Service Information.

Is the Differential operating properly?

Yes

- Replace the Rear Differential Solenoid.
- Perform FDCM VERIFICATION TEST.

No

- Repair as necessary.
- Perform FDCM VERIFICATION TEST.
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4. INTERMITTENT WIRING AND CONNECTORS

The conditions necessary to set this DTC are not present at this time.
Using the schematics as a guide, inspect the wiring and connectors specific to this circuit.

Wiggle test the wiring harness and connectors while checking for shorted and open circuits.
Using the scan tool, monitor the data related to this circuit while performing the wiggle test. Look for the data to change or for the DTC to reset.

Were there any problems found?

Yes

- Repair as necessary.
- Perform FDCM VERIFICATION TEST.

No

- Test Complete.