

pushed-out or bent pins

damage, pinched, cut or pierced wires

Repair any electrical connector concerns found, Refer to CONNECTOR REPAIR PROCEDURES for schematic and connector information.

Ignition OFF.

Wait one minute then connect RCM C310A and C310B . Make sure the connectors seat and latch correctly.

Connect ABS module C135 and related in-line electrical connectors. Make sure the connectors seat and latch correctly.

Test drive the vehicle above 12 km/h (7 mph) and make at least 1 left turn and 1 right turn.

Is the Advance Trac® warning indicator illuminated?

Yes	CHECK OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW the TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, DIAGNOSE the RCM concern. REFER to: Airbag Supplemental Restraint System (SRS) .
No	The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector. ADDRESS the root cause of any connector or pin issues.

DIAGNOSIS AND TESTING > ANTI-LOCK BRAKE SYSTEM (ABS) AND STABILITY CONTROL > PINPOINT TESTS > PINPOINT TEST H : ABS (ANTI-LOCK BRAKE SYSTEM) PUMP MOTOR FAULTS

Refer to VEHICLE DYNAMIC SYSTEMS for schematic and connector information.

Normal Operation and Fault Conditions

The ABS module uses an internal solid state switch to operate the hydraulic pump motor. The ABS module tests the hydraulic pump motor by activating it for 30 milliseconds. The ABS module monitors the voltage drop across the hydraulic pump motor while the pump motor is being activated. After 30 milliseconds have passed, the ABS module stops applying voltage to the pump motor and monitors the voltage the spinning hydraulic pump motor is generating and the voltage drop across the hydraulic pump motor solid state switch. If the monitored voltages are not within the specifications, the ABS module sets one or more Diagnostic Trouble Codes (DTCs).

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
C0020:11	ABS Pump Motor Control: Circuit Short To Ground	This DTC sets in continuous memory and on-demand if the voltage drop across the solid state switch is too high when the