

Mechanical System Tests

STALL TEST

The object of this test is to check the overall performance of the transmission and engine by measuring the stall speeds in the D and R ranges.

NOTICE:

- Perform the test at normal operating fluid temperature (50 - 80 °C or 122 - 176 °F).
- Do not continuously run this test longer than 5 seconds.

MEASURE STALL SPEED

- Warm up the transmission fluid.
- Chock the front and rear wheels.
- Connect a tachometer to the engine.
- Fully apply the parking brake.
- Step down strongly on the brake pedal with your left foot.
- Start the engine.
- Shift into the D range. Step all the way down on the accelerator pedal with your right foot. Quickly read the stall speed at this time.

Stall speed: 3F Engine 1,850 ± 150 rpm

1H Engine 1,900 ± 150 rpm

- Perform the same test in R range.

EVALUATION

- If the stall speed is the same for both ranges but lower than specified value:
 - Engine output may be insufficient
 - Stator one-way clutch is not operating properly

HINT: If more than 600 rpm below the specified value, the torque converter could be faulty.

- If the stall speed in D range is higher than specified:
 - Line pressure too low
 - Front clutch slipping
 - No.2 one-way clutch not operating properly
 - O/D one-way clutch not operating properly
- If the stall speed in R range is higher than specified:
 - Line pressure too low
 - Rear clutch slipping
 - First and reverse brake slipping
 - O/D one-way clutch not operating properly
- If the stall speed in both R and D ranges are higher than specified:
 - Line pressure too low
 - Improper fluid level
 - O/D one-way clutch not operating properly

