

## TX1103036A-UN: Fan Drive Motor

## LEGEND:

3.

- 1 Pressure Line (fan drive pump to fan drive motor)
- 133 Fan Drive Motor

Y5005 - Variable Speed Fan Solenoid

Disconnect pressure line (1) coming from fan drive pump and connect JT05984 Flowmeter in-line using hose containing -10 ORFS female ends.

- 4. Connect one of the following test equipment to display hydraulic oil temperature and actual engine speed.
  - Monitor application. See Service Menu for instruction to actuate the service menu on monitor in cab. (Group 9015-16.)

Select the following items to display:

- Hydraulic Oil Temperature
- Actual Engine Speed
- Service ADVISOR<sup>™</sup> application. See Service ADVISOR<sup>™</sup> Connection Procedure for instruction. (Group 9015-20.)

Select the following items to display:

- Hydraulic Oil Temperature
- Actual Engine Speed
- MPDr application. See MPDr Connection Procedure for instruction. (Group 9015-20.)

Select the following items to display:

- Hydraulic Oil Temperature
- Actual Engine Speed
- 5. Warm hydraulic oil to specification. See Hydraulic Oil Warm-Up Procedure . (Group 9025-25.)

Item Measurement Specification Hydraulic Oil Temperature 45—55°C 110—130°F

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NOTE:

When the variable speed fan solenoid is disconnected, all hydraulic oil is forced through

fan drive motor (133) with the exception of a small portion is sent over circuit relief to tank. This non adjustable circuit relief valve is built into the variable speed fan solenoid.

Disconnect variable speed fan solenoid (Y5005). See Engine Interface Harness (W5) Component Location . (Group 9015-10.) Be aware that the hydraulic oil temperature will cool rapidly due to high fan speed, so it is important to have this test done quickly and with proper hydraulic oil temperatures.

7. Run engine at specification.

ltem	Measurement	Specification
Engine	Speed	Fast Idle
Work Mode Switch	Position	Bucket Mode
Power Mode Button	Position	PWR (power) Mode
Auto-Idle Switch	Position	OFF

8. Record fan drive pump flow and compare to specification.

ltem	<b>Measurement</b>	Specification
New, Typical	Flow Rate	47 L/min 12.4 gpm
Used, Minimum	Flow Rate	40 L/min 10.6 gpm
Fan Drive Circuit	Pressure	24.8—25.2 MPa 24 800—25 200 kPa 248—252 bar 3600—3650 psi

9. If fan drive circuit testing pressure is not to specification, change variable speed fan solenoid which contains a built in relief valve.

If pump flow is below minimum specification, replace cooling fan drive pump. See Fan Drive Pump Remove and Install—If Equipped . (Group 3360.)

If pump flow is within specification and overheating persists, perform the following:

- Check hydraulic lines to and from fan drive motor.
- Check variable speed fan solenoid. See Electrical Component Specifications . (Group 9015-20.)
- Replace fan drive motor. See Fan Drive Motor Remove and Install—If Equipped . (Group 3360.)
- 10. Connect variable speed fan solenoid. See Engine Interface Harness (W5) Component Location . (Group 9015-10.)
- 11. Install cooling package guard.

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