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Test Monitoring Center

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L-37 Information Letter 13-2
Sequence Number 46
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ASTM consensus has not been obtained on this information letter. An appropriate ASTM ballot will be issued in order to achieve such consensus.

TO: L-37 Surveillance Panel

SUBJECT: V1L528 Hardware Batch Operating Conditions
Comment Text When Pitting/Spalling Exclusion Is Used For V1L528 Hardware

At its December 18-19, 2012 meeting, the L-37 Surveillance Panel approved the use of reduced torque operating conditions when using lubrited V1L528 hardware. Sections 4.4 and 10.2.3.1 of D 6121-12A have been updated.

Information Letter 13-1 described correction factors and exclusions for the V1L528 hardware batch. Annex A11 specifies the comment text required whenever any exclusion is used in parts rating. The exclusion for pitting/spalling was not included in Annex A11. Table A11.1 has now been revised.

These changes are in effect immediately for all tests using lubrited V1L528 hardware.

Date: 2013.03.20 15:28:03 -04'00'

Chris Prengaman
Chairman
L-37 Surveillance Panel

Frank Farber
Director
ASTM Test Monitoring Center

Attachment

cc: ftp://ftp.astmtmc.cmu.edu/docs/gear/l37/procedure_and_ils/il13-2.pdf

Distribution: Email

4.4 Gear Test Phase—Next, run the test unit for 24 h at the operating conditions dictated by the hardware batch and type combination (see 10.2.3.1**)**.

10.2.3.1 Once the axle lubricant temperature reaches 175 +/- 3°F (79.4 °C +/- 1.7 °C), immediately apply dynamometer load to achieve a torque of 1740 +/- 35 lbf-ft (2359 N·m ± 47 N·m)on each wheel. When conducting tests with non-lubrited gear batch V1L500/P4T813 or lubrited gear batch V1L528/ P4T883A, use the 13 % reduced contact stress requirements (see A6.4.1).

TABLE A11.1 Gear Batch Exclusion Comments

Gear Batch	Comment
CIL426/P4L415A Non-lubrited hardware	Excludes any pitting/spalling values from 9.3 to 9.9 in the wear step area 1/16 in. (1.6 mm) of the drive side pinion tooth.
VIL303/P4L514A Non-lubrited hardware	Excludes any pitting/spalling values from 3.0 to 9.9 in the wear step area 1/16 in. (1.6 mm) of the drive side pinion tooth.
VIL686/P4L626A Non-lubrited hardware	References how to report the observations of a thin polished line that is sometimes visible in the root heel of the pinion and on the crown of the ring gear. This condition is normal and not oil-related and is to be noted as “Root and tip line polishing and a function of the gear set manufacturing process.”
V1L528/ P4T883A Lubrited hardware, non-reference oil test	Reported pitting/spalling value excludes distress from the worst pinion tooth.
V1L528/ P4T883A Non-lubrited hardware, non-reference oil test	Reported pitting/spalling value excludes distress from the 3 worst pinion teeth.
All other gear batches	No exclusion applied