

**TEST METHOD D8165
L-37-1 Load Evaluation**

VERSION

CONDUCTED FOR:

	V = Valid
	I = Invalid
	N = Results cannot be interpreted (Refer to comment section)

	NR = Non-Reference Test Oil
	RO = Reference Oil Result

Test Number			
Test Stand:	Stand Run Number:		
Date Completed:	Time Completed:		
Oil Code:			
Formulation/Stand Code:			
Alternate Codes:			
Test Hardware ^A :	Test Version ^B :		

In my opinion this test been conducted in a valid manner in accordance with Test Method D8165 and the appropriate amendments through the information letter system. The remarks included in this report describe the anomalies associated with this test.

^A MnP Coated or Uncoated

^B Standard or Canadian

Submitted By:

Testing Laboratory

Signature

Typed Name

Title

Section

TEST METHOD D8165
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Form 1
Test Result Summary Sheet

Oil Test			
Lab:	Stand:	Stand Run :	
Start Date:	Date Completed:	EOT Time:	Test Length:
TMC Oil Code:	Laboratory Oil Code:	Viscosity Grade:	
Oil Code:			
Formulation Stand Code:			
Latest Information Letter Test Was Run Under:			
Test Hardware:	Test Version:		
Batch:	Pinion Batch:	Ring Batch:	

Last Reference Oil Calibrating Stand Information - Fill Out For Non-reference Oil Tests Only			
Stand:	Stand Run:	TMC Oil Code:	Date Completed:
Batch:	Pinion Batch:	Ring Batch:	
Test Hardware:	Test Version:		

	Ring Gear Results				
	Wear	Rippling	Ridging	Pitting/Spalling	Scoring
Original Merit Results ^C					
Transformed Results					
Correction Factor					
Corrected Transformed Results					
Severity Adjustment ^A					
Final Transformed Results					
Final Merit Results					

	Pinion Gear Results				
	Wear	Rippling	Ridging	Pitting/Spalling	Scoring
Original Merit Results ^{B,C}					
Transformed Results					
Correction Factor					
Corrected Transformed Results					
Severity Adjustment ^A					
Final Transformed Results					
Final Merit Results					

^A At the present time there are no severity adjustments

^B With any applicable exclusions applied

^C If tooth breakage occurs, leave results blank and report in comment section

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Form 2

Gear Tooth Surface Condition

Lab:	Stand:	Stand Run:
Oil Code:	Test Version:	

Hardware Identification		
Batch:	Pinion Batch:	Ring Batch:
Test Hardware:		
Match Number:		Serial Number:
Assemble Date:		Builder's Initials:
Pattern Contact Length Rating:		Pattern Contact Flank Rating:

Gear Test Phase – After Completion of Pinion and Ring Gear Drive Side Inspection			
Rater's Initials:	Rater Calexp Date:		
Gear Condition	Original Ring Rating	Original Pinion Rating	
Burnish			
Discoloration			
Corrosion			
Deposits			
	Original Ring Rating	Original Pinion Rating	Pinion Rating With Exclusion Applied If Applicable
Wear			
Rippling			
Ridging			
Pitting/Spalling			
Scoring			

	Original Individual Tooth Ratings						
	1	2	3	4	5	6	7
Pitting/Spalling							

TEST METHOD D8165**L-37-1****Form 3****Operational Summary Sheet**

Lab:	Stand :	Stand Run:
Oil Code:	Test Version:	

Pinion Torque Checks – Full Axle Assembly		
	Break	Turn
Before Test (N·m)		
After Test - hot (N·m)		
After Test - cool (N·m)		

Backlash Measurements							
	Laboratory's Position Measurements						
	1	2	3	4	Minimum	Maximum	Average
Before Test (mm)							
After Test (mm)							
Difference (mm)							

General Operating Conditions				
Gear Conditioning Phase:	Start	Finish	Average	Total
1. Time (hh:mm)				
Time (mmmmmm)				
	Maximum	Minimum	Average	
2. Gear-lubricant Temperature (°C)				
3. Dyno Torque 1 (N·m)				
Dyno Torque 2 (N·m)				
4. Dyno Speed 1 (r/min)				
Dyno Speed 2 (r/min)				
Gear Testing Phase:				
1. Time (hh:mm)				
Time (mmmmmm)				
	Maximum	Minimum	Average	
2. Gear-lubricant Temperature (°C)				
3. Dyno Torque 1 (N·m)				
Dyno Torque 2 (N·m)				
4. Dyno Speed 1 (r/min)				
Dyno Speed 2 (r/min)				

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Form 4A
Lost Time and Comments Sheet

Lab:	Stand:	Stand Run:
Oil Code:		
Test Hardware:		Test Version:

Test Lost Time:

Record the time shutdown, time off test conditions, early inspections/termination with reason and minimum oil temperature in °C.

Number of Downtime Occurrences			
Test Hours	Date	Downtime	Reasons
			Total Downtime (hours)

Other Comments
Number of Comment Lines

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Form 4B

Lab:	Stand:	Stand Run:
Oil Code:		
Test Hardware:		Test Version:

Test Lost Time:

Record the time shutdown, time off test conditions, early inspections/termination with reason and minimum oil temperature in °C.

Other Comments	
Number of Comment Lines	

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Form 5
Operational Validity Summary

Lab:	Stand:	Stand Run:
Oil Code:		
Test Hardware:		Test Version:

Controlled Parameter	Gear Conditioning			Gear Testing		
	Allowable % Out	This Test % Out	Actual Time Out min:s	Allowable % Out	This Test % Out	Actual Time Out min:s
Gear Oil Temperature	5			5		
Wheel Speed	5			5		
Wheel Speed 2	5			5		
Dyno Load	5			5		
Dyno Load 2	5			5		

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Form 6

Drive-side Pattern Photo

Lab:	Stand:	Stand Run:
Oil Code:		Test Version: