

**TEST METHOD D6121
L-37 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 D6121 and the appropriate amendments through the information letter system. The remarks included in this report describe the anomalies associated with this test.

^A Nonlubrited or Lubrited

^B Standard or Canadian

Submitted By:

Testing Laboratory

Signature

Typed Name

Title

Section

TEST METHOD D6121
L-37
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:		
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:
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:

Gear Batch Identification		
Test Hardware:	Pinion Batch:	Ring Batch:
Match Number:	Assembly Date:	
Pattern Contact Length Rating:	Pattern Contact Flank Rating:	

Gear Test Phase – After Completion of Pinion and Ring Gear Drive Side Inspection			
Rater's Initials:			
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			

TEST METHOD D6121**L-37****Form 3****Operational Summary Sheet**

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

Pinion Torque Checks – Full Axle Assembly		
	Break	Turn
Before Test (lbf-in.)		
After Test - hot (lbf-in.)		
After Test - cool (lbf-in.)		

Backlash Measurements							
	Laboratory's Position Measurements						
	1	2	3	4	Minimum	Maximum	Average
Before Test (in.)							
After Test (in.)							
Difference (in.)							
Manufacturer's Measurements							
Manufacturer's Specification				Manufacturer's Measurements			
0.004 – 0.012 (in.)							

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

TEST METHOD D6121
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Form 4

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 °F.

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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 degrees °F.

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Form 4B

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 degrees °F.

TEST METHOD D6121
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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		