

## **ENGINE PERFORMANCE DIAGNOSIS**

**Meets NATEF Task:** (A8-A-1) Identify and interpret engine performance concern; determine necessary action. (P-1)

Name	Date Time on Task
Make/Model/Year	VIN Evaluation: 4 3 2 1
(PLEASE	CIRCLE ALL THAT APPLY IN ALL CATEGORIES)
Describe Problem:	
When Did the	• Just Started • Last Week • Last Month
<b>Problem First Occur?</b>	• Other
List Previous Repairs in the Last 6 Months:	
Starting Problems	• Will Not Crank • Cranks, But Will Not Start • Starts, But Takes A Long Time
Engine Quits or Stalls	<ul> <li>Right After Starting</li> <li>When Put Into Gear</li> <li>During Steady Speed Driving</li> <li>Right After Vehicle Comes To A Stop</li> <li>While Idling</li> <li>During Acceleration</li> <li>When Parking</li> </ul>
Poor Idling Conditions	• Is Too Slow At All Times • Is Too Fast • Intermittently Too Fast or Too Slow • Is Rough or Uneven • Fluctuates Up and Down
Poor Running Conditions	• Runs Rough • Lacks Power • Bucks and Jerks • Poor Fuel Economy • Hesitates or Stumbles On Acceleration • Backfires • Misfires or Cuts Out • Engine Knocks, Pings, Rattles • Surges • Dieseling or Run-On
Auto. Transmission Problems	<ul> <li>Improper Shifting (early/late)</li> <li>Changes Gear Incorrectly</li> <li>Vehicle Does Not Move When In Gear</li> <li>Jerks or Bucks</li> </ul>
<b>Usually Occurs</b>	Morning
<b>Engine Temperature</b>	• Cold • Warm • Hot
Driving Conditions During Occurrence	<ul> <li>Short-Less Than 2 Miles</li> <li>2-10 Miles</li> <li>Long-More Than 10 Miles</li> <li>Stop and Go</li> <li>While Turning</li> <li>While Braking</li> <li>At Gear Engagement</li> <li>With A/C Operating</li> <li>With Headlights On</li> <li>During Acceleration</li> <li>During Deceleration</li> <li>Mostly Downhill</li> <li>Mostly Uphill</li> <li>Mostly Level</li> <li>Mostly curvy</li> <li>Rough Road</li> </ul>
Driving Habits	• Mostly City Driving • Highway • Park Vehicle Inside • Park Vehicle Outside <b>Drive Per Day:</b> • Less Than 10 Miles • 10-50 • More Than 50
Gasoline Used	Fuel Octane: • 87 • 89 • 91 • More Than 91  Brand:
Temperature When Problem Occurs	• 32-55° F • Below Freezing (32° F) • Above 55° F
Check Engine Light/ Dash Warning Light	• Light on Sometimes • Light on Always • Light Never On
Smells	• "Hot" • Gasoline • Oil Burning • Electrical
Noises	• Rattle • Knock • Squeak • Other