Customer Name:	
Vehicle Year, Make & Model:	

SYMPTOMS	×	WHEN DOES IT OC	CUR?	X
☐ Hard starting* ☐ Starts & dies ☐ Rough idle* ☐ Idle speed too high ☐ Idle speed too low ☐ Dies at idle* ☐ Poor fuel mileage ☐ Stalls	□ Loss of power on:   ○ Uphill   ○ High speed   ○ Low speed   □ Smoke from tailpipe:   ○ Bluish   ○ White   ○ Black   □ Quits running & won't restart easily while:	ENGINE TEMPERATURE  Cold During warm up Normal All temperatures Warm restart Hot  OCCURRENCE FREQUENCY	FUEL TANK LEVEL DO  1/4 or less 1/2 3/4 All levels  OTHER FACTORS In the morning Cold weather	JRING
☐ Hesitation* ☐ Bucking* ☐ Backfire ☐ Engine knock* ☐ Dieseling*	<ul> <li>At idle</li> <li>Driving</li> <li>Quits running &amp; restarts easily while:</li> <li>At idle</li> <li>Driving</li> </ul>	☐ Always ☐ Intermittently ☐ Had problem since new ☐ After vehicle accumlated mi.	☐ Hot weather ☐ Wet weather (rain ☐ Damp weather (fo	og) . or less
DRIVING HABITS  Start cold engine & driven and the start cold engine & allowed and the start cold engine and the start col	ve immediately ow warm up period	☐ After previous repair ☐ On acceleration: ☐ Hard ☐ Medium ☐ Light ☐ On deceleration ☐ At constant speeds ☐ In a specific gear:	☐ After driven 10 m more ☐ During braking ☐ During highway operation ☐ During stop/go operation ☐ When specific accordare on:	oeration essories
			☐ Only at a specific mph	speed

## NOISE QUESTIONNAIRE

X

WHAT		

- Whine A high-pitched sound, like an electric motor or drill
- Clunk A metal-to-metal sound, like a hammer striking steel
- Growl A low sound, like an angry dog
- Click A light sound, like a ballpoint pen being clicked
- Rattle A sound like marbles rolling around in a can
- Grind An abrasive sound, like a grinding stone
- ☐ Knock Like a knock on a door
- Hiss Like air escaping from a balloon
- ☐ **Hum** Like a wire humming in the wind
- Squeal A high-pitched sound like fingernails across a chalkboard
- Squeak A sound like rubbing a clean window
- Boom A sound like a drum roll or distant thunder

## **DRIVABILITY TERMINOLOGY**



- \*Dieseling: Engine continues to run after ignition is shut off
- \*Die Out: Engine stalls without accelerator pedal movement
- \*Hard Start: Excessive cranking time
- \*Hesitation: A lack of response to initial throttle opening, occurring from a stand still or accelerating from any speed
- \*Rough Idle: Unsteady or erratic idle
- \*Engine Knock: Engine knock that occurs when accelerating
- \*Surge: Engine speed increase and decrease under constant throttle opening
- \*Bucking: Severe surge

Only at a specific

RPM