Fuel Trim Diagnosis

Meets ASE Task: (A8-B-6) P-1 Diagnose emissions or drivability concerns without stored diagnostic trouble codes; determine needed action.

Name	Date	Time on Task				_
Make/Model/Year	VIN	Evaluation:	4	3	2	1

Fuel trim is the computer correction factor that uses the oxygen sensor to determine if more or less fuel needs to be delivered by the fuel injectors. Fuel trim is only available on a scan tool.

- 1. Connect a scan tool and select long-term fuel trim (LTFT) (block learn) and shortterm fuel trim (STFT).
 - 2. Start the engine and operate until normal operating temperature and closed loop status is achieved.
 - **3.** Record the following cell number and LTFT amount:

Idle in Park A/C on

3000 RPM in Park

		Non-			
Connect a scan tool and select long-term	Live Data				
fuel trim (LTFT) (block learn) and short-	4 5	HRTFT1	-2.3	. %	
term fuel trim (STFT).	L L	ONGET 1	-7.0	96	
	4 5	HRTFT2	-3.9	%	
Start the engine and operate until normal	LL	ONGFT2	0	%	
operating temperature and closed loop		02511	95	mV 🚽	
status is achieved.	1275			E	7
Record the following cell number and LTFT amount:			Hold	1 (Back)	
	Cell	LT	FT	STFT	
Idle in Drive (if automatic transmission only)					
Idle in Park A/C off					

Results: Fuel trim should be within plus or minus 10% or within 118-138 if the block/integration is displayed as a binary number.

4. Based on the test results, what is the needed action?