

Student Name \_\_\_\_\_

High School or Vocational Center \_\_\_\_\_

### COMPETENCY RECORD FOR ARTICULATION

#### Baker College

Please check below each skill the student has mastered with a minimum of 80 percent accuracy or with an A or B grade.

#### AST102 ENGINE PERFORMANCE I

Task	Satisfactory	Unsatisfactory
Fill in a complete work order including customer information, vehicle information and concerns.		
Analyze and interpret engine performance concerns make repairs.		
Collect vehicle service information, V.I.N. numbers, certification labels and, engine management systems, history and precautions and Technical Service Bulletins (T.S.B.s)		
Inspect for fuel, oil, coolant and other leaks: repair as needed.		
Diagnose engine noise or vibration, exhaust color and odor and sounds: repair as needed.		
Perform engine absolute manifold test and a cylinder balance test, cylinder leakage test and cranking compression test repair as needed.		
Perform engine running compression test: repair as needed.		
Diagnose engine mechanical, electrical, electronic, fuel and ignition concerns with an oscilloscope: repair as needed.		
Adjust valves on engines with mechanical or hydraulic lifters.		
Perform test on the cooling system, engine temperature, pressure test, coolant condition, test radiator and all components of the cooling system: repair as needed.		
Verify correct camshaft timing.		
Retrieve and record stored OBD I and OBD II trouble codes, interpret the scan tool data and clear codes when applicable.		
Remove and replace a timing belt; verify that there is correct camshaft timing.		
Check for module communication (including (Can/Bus systems) errors using a scan tool.		
Inspect and test all computerized engine controls: repair as		

Task	Satisfactory	Unsatisfactory
needed.		
Remove and replace a thermostat and gasket.		
Perform active tests of actuators using scan tool: repair as needed.		
Inspect and test all cooling fans both electrical and mechanical, making sure all ducting and shrouds are in place: repairing as needed.		
Perform oil and filter change.		
Demonstrate common fastener and thread repair, to include broken bolt removal.		
Demonstrate proficiency in using oxy-acetylene torch to heat and cut.		
Inspect the complete exhaust system for integrity, checking exhaust back pressure; repairing as needed.		
Appraise the operation of a turbocharger/supercharger systems; repair as needed.		

Teacher signature \_\_\_\_\_ Date \_\_\_\_\_