

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

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

**COMPETENCY CHECKLIST FOR ADVANCED TECHNICAL PLACEMENT  
Automotive Technology**

**AT 114  
Automotive Power Plants  
3 Credit Hours**

To meet the standards for articulated credit, the student will demonstrate competency in tasks listed below. Competency standards will be determined by the high school instructor.

Task	Satisfactory	Unsatisfactory
<b>DEMONSTRATE AN UNDERSTANDING</b>		
<i>The student will be able to:</i>		
Demonstrate an understanding of internal engine components and operation		
<b>DEMONSTRATE PROFICIENCY IN SERVICE</b>		
<i>The student, by using instructor instruction, shop manuals, and appropriate shop safety practices will be able to:</i>		
Clean engines		
Remove and replace motor mounts		
Check valve guides for wear		
Reface valves and seats		
Perform cylinder balance tests		
Perform cylinder compression tests		
Perform cylinder leakage tests		
Determine source(s) of excess noise		
Determine sources(s) of oil/coolant loss		
Determine source(s) of excess noise		
Determine cause(s) of overheating		
Check the engine oil pressure		
Remove and replace core plugs		
Inspect, remove, and replace flywheels and ring gears		
Remove and replace engine assemblies		
Remove and replace oil pans		

Task	Satisfactory	Unsatisfactory
Remove and replace oil pumps		
Clean cylinder blocks, oil passages, and pistons		
Inspect blocks for warpage		
Measure and inspect engine components for proper tolerances		
Remove and replace crankshafts, mains, and rod bearings		
Remove and replace camshafts and bushings		
Remove and replace pistons and rings		
Remove ridges and deglaze cylinder walls		
Bore blocks and finish as needed		
Inspect, refinish, or replace rods as needed		
Remove and replace front and rear oil seals		
Remove and replace intake and exhaust manifolds		
Remove, clean, inspect, and replace cylinder heads; inspect heads for cracks and warpage		
Test and replace hydraulic lifters		
Remove and replace timing chains, belts, and gears		
Test valve springs		
Adjust valve lifters		
Replace rocker arm assemblies		
Change oil and oil filters		

Instructor's Signature \_\_\_\_\_ Date \_\_\_\_\_