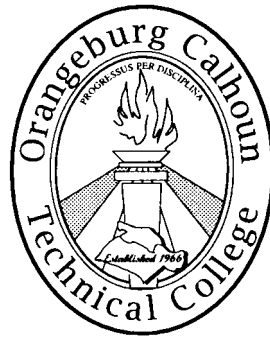


AUTOMOTIVE TECHNOLOGY COMPETENCY PROFILE



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AUTOMOTIVE TECHNOLOGY COMPETENCY PROFILE

An Automotive Technician uses advanced technical skills to diagnose and repair multiple problems in all automotive related areas.

A. DIAGNOSE & REPAIR COOLING SYSTEM	A-1 HAVE WORKING KNOWLEDGE OF COOLING SYSTEM	A-2 IDENTIFY COOLANT	A-3 CHECK LEVEL & CONDITION	A-4 CHECK ANTI-FREEZE TO WATER PERCENTAGE	A-5 CHECK CIRCULATION
	A-6 PRESSURE TEST CHECK	A-7 CHECK FOR LEAKS	A-8 CHECK & ADJUST BELTS & HOSES,	A-9 CHECK SELF ADJUSTING UNITS	A-10 REPAIR OR REPLACE AS NECESSARY PER MANUFACTURER'S GUIDELINES
B. DIAGNOSE & REPAIR BASIC HEATING/AIR CONDITIONING	B-1 POSSESS WORKING KNOWLEDGE OF BASIC HEATING/AIR CONDITIONING FUNDAMENTALS	B-2 POSSESS WORKING KNOWLEDGE OF ELECTRONIC CONTROLS FOR HEATING/AIR CONDITIONING SYSTEM OPERATIONS	B-3 IDENTIFY REFRIGERANT TYPE WITH PROPER EQUIPMENT & PROCEDURES	B-4 CONVERT BASIC RETRO FIT	B-5 CHECK MODE DOORS AND ACTUATORS
	B-6 CHECK CABIN AIR FILTER	B-7 CHECK CONTROL VACUUM SUPPLY	B-8 CHECK BLOWER MOTOR OPERATION (Mechanical & Electrical)	B-9 USE ELECTRONIC EQUIPMENT TO CHECK LEAKS	B-10 USE UV DYE TO CHECK LEAKS
	B-11 CHECK COMPRESSOR FOR CORRECT OPERATION	B-12 CHECK COMPRESSOR MOUNTING	B-13 OPERATE FREON RECYCLER 134-1	B-14 OPERATE FREON RECYCLER R12	B-15 REPAIR OR REPLACE AS NECESSARY PER MANUFACTURER'S GUIDELINES

C. LEARN BASIC THEORY OF ENGINES	C-1 KNOW & UNDERSTAND BLOCK DESIGN AND COMPONENTS	C-2 KNOW & UNDERSTAND VARIOUS CYLINDER HEAD DESIGNS	C-3 KNOW & UNDERSTAND VARIOUS VALVE TRAIN CONFIGURATION s	C-4 KNOW & UNDERSTAND LUBRICATION AND FILTRATION SYSTEMS	
D. DIAGNOSE & REPAIR MECHANICAL ENGINE CONDITION	D-1 HAVE BASIC KNOWLEDGE OF ENGINE MECHANICS	D-2 TAKE PAST REPAIR HISTORY ON VEHICLE	D-3 IDENTIFY PROBLEM AREA	D-4 READ & INTERPRET SPECIFICATIONS IN SERVICE INFORMATION	D-5 USE SPECIAL TOOLS FOR ENGINE DIAGNOSIS
	D-6 REMOVE & REPLACE ENGINE AND/OR SUB-ASSEMBLIES AS NEEDED	D-6 REASSEMBLE ENGINE TO UPDATED MANUFACTURER'S SPECIFICATIONS	D-7 TEST DRIVE & CONFIRM PROPER OPERATION OR REPAIR		
E. DIAGNOSE & REPAIR DRIVE LINE PROBLEMS	E-1 HAVE WORKING KNOWLEDGE OF DRIVE LINE	E-2 ROAD TEST AND VERIFY COMPLAINT	E-3 PERFORM NOISE, HARSHNESS, & VIBRATION ANALYSIS	E-4 TAKE PAST REPAIR HISTORY ON VEHICLE	E-5 VISUALLY INSPECT FOR WORN PARTS
	E-6 IDENTIFY TIRE WEAR PATTERNS & CAUSES	E-7 CORRECT TORQUE STEER WHERE APPLICABLE	E-8 REPAIR OR REPLACE AS NECESSARY PER MANUFACTURER'S GUIDELINES	E-9 ROAD TEST TO CONFIRM PROPER OPERATION OF REPAIR	

F. DIAGNOSE ENGINE DRIVABILITY/ CONDITION	F-1 HAVE WORKING KNOWLEDGE OF POWER TRAIN MANAGEMENT SYSTEMS	F-2 USE & INTERPRET DIAGNOSTIC MACHINE(S) & EQUIPMENT	F-3 TAKE PAST REPAIR HISTORY ON VEHICLE	F-4 ROAD TEST AND VERIFY COMPLAINT	F-5 VISUALLY INSPECT ENGINE COMPARTMENT
	F-6 READ & INTERPRET SERVICE INFORMATION PER MANUFACTURER'S SPECIFICATION	F-7 REQUEST TECHNICAL ASSISTANCE WHEN NECESSARY	F-8 REPAIR AND REPLACE AS NECESSARY PER MANUFACTURER'S GUIDELINES	F-9 ROAD TEST TO CONFIRM PROPER OPERATION OF REPAIR	
G. PERFORM SCHEDULED MAINTENANCE SERVICE(S)	G-1 FOLLOW PROPER PROCEDURES IN APPROPRIATE SERVICE INFORMATION	G-2 PERFORM SAFETY INSPECTION	G-3 RESET SERVICE REMINDERS WHEN NECESSARY	G-4 SELL AND PERFORM NEEDED SERVICES	
H. DIAGNOSE & REPAIR BASIC STEERING & SUSPENSION	H-1 HAVE WORKING KNOWLEDGE OF STEERING & SUSPENSION	G-2 TAKE PAST REPAIR HISTORY ON VEHICLE	G-3 ROAD TEST AND VERIFY COMPLAINT	G-4 VISUALLY INSPECT STEERING & SUSPENSION COMPONENTS	G-5 CHECK TIRE PRESSURE
	H-6 CHECK PHYSICAL CONDITION OF TIRES & WHEELS	H-7 BALANCE TIRES USING COMPUTERIZED EQUIPMENT	G-8 PERFORM 4-WHEEL ALIGNMENT USING COMPUTER EQUIPMENT	H-9 REPAIR AND REPLACE AS NECESSARY PER MANUFACTURER'S GUIDELINES	H-10 ROAD TEST TO CONFIRM PROPER OPERATION OF REPAIR
I. DIAGNOSE & REPAIR FRONT & REAR DIFFERENTIALS	I-1 HAVE WORKING KNOWLEDGE OF FRONT & REAR DIFFERENTIALS	I-2 TAKE PAST REPAIR HISTORY ON VEHICLE	I-3 ROAD TEST AND VERIFY COMPLAINT	I-4 IDENTIFY PROBLEM AREA	1-5 CHECK AND IDENTIFY FLUID LEVELS

I. CON'T. DIAGNOSE & REPAIR FRONT & REAR DIFFERENTIALS	I-6 FOLLOW MANUFACTURERS SPECIFICATIONS	I-7 REPAIR OR REPLACE AS NECESSARY WITH SPECIAL TOOLS PER MANUFACTURER'S GUIDELINES	I-8 ROAD TEST TO CONFIRM PROPER OPERATION OF REPAIR		
J. REPAIR MANUAL TRANSMISSION & CLUTCH ASSEMBLY	J-1 HAVE WORKING KNOWLEDGE OF MANUAL TRANSMISSION & CLUTCH ASSEMBLY	J-2 TAKE PAST REPAIR HISTORY ON VEHICLE	J-3 ROAD TEST AND VERIFY COMPLAINT	J-4 FOLLOW MANUFACTURERS SPECIFICATIONS	J-5 ADJUST CLUTCH AND/OR FLUID LEVEL AS NEEDED
	J-6 REMOVE AND DISASSEMBLE TRANSMISSION	J-7 CLEAN, VISUALLY INSPECT, & IDENTIFY CAUSE & FAULTY PARTS FOR CLUTCH ASSEMBLY & MANUAL TRANSMISSION	J-8 REPAIR AND REPLACE AS NECESSARY PER MANUFACTURER'S GUIDELINES	J-9 ROAD TEST TO CONFIRM PROPER OPERATION OF REPAIR	
K. DIAGNOSE & REPAIR AUTOMATIC TRANSMISSION & TRANSAXLES	K-1 HAVE WORKING KNOWLEDGE OF AUTOMATIC TRANSMISSION & TRANSAXLES	K-2 TAKE PAST REPAIR HISTORY ON VEHICLE	K-3 CHECK FLUID LEVEL & CONDITION	K-4 ROAD TEST & VERIFY COMPLAIN	K-5 PERFORM NECESSARY TESTS PER SERVICE INFORMATION
	K 6 ANALYZE TESTS <i>e.g. Line Pressure Test, Electronic Control System</i>	K-7 REQUEST TECHNICAL ASSISTANCE WHEN NECESSARY	K-8 FLUSH AND CLEAN SYSTEM	K-9 REPAIR AND REPLACE AS NECESSARY PER MANUFACTURER'S GUIDELINES	K-10 ROAD TEST TO CONFIRM PROPER OPERATION OF REPAIR

L. DIAGNOSE & REPAIR BRAKE SYSTEM	L-1 HAVE WORKING KNOWLEDGE OF BRAKE SYSTEM	L-2 TAKE PAST REPAIR HISTORY ON VEHICLE	L-3 CHECK FLUID LEVEL PER MANUFACTURER'S SPECIFICATION	L-4 ROAD TEST & VERIFY COMPLAINT	L-5 CONSULT APPROPRIATE SERVICE INFORMATION
	L-6 EXPLAIN PROS/CONS OF OEM BRAKE PADS vs. USING AFTERMARKET PADS	L-7 OPERATE BRAKE LATHES	L-8 PERFORM BASIC BRAKE REPAIR	L9- CHECK ANTI-LOCK BRAKE SYSTEM'S COMPUTER	L-10 REPAIR AND REPLACE AS NECESSARY PER MANUFACTURER'S GUIDELINES
	L-11 ROAD TEST TO CONFIRM PROPER OPERATION OF REPAIR				
M. APPLY SPECIALIZED ELECTRONICS TRAINING	M-1 HAVE WORKING KNOWLEDGE OF SPECIALIZED ELECTRONICS	M-2 TAKE PAST REPAIR HISTORY ON VEHICLE	M-3 ACQUIRE BASIC ELECTRICAL THEORY	L-4 LEARN BASIC FUNCTIONS OF ONBOARD DIAGNOSTIC SYSTEM	L-5 USE LAB OSCILLOSCOPE & ANALYZER
	M-6 APPLY ADVANCED APPLIED MATH/ALGEBRA SKILLS	M-7 DEMONSTRATE COMPUTER SKILLS	M-8 TEST RESTRAINT SYSTEMS	M-9 CHECK ANTI-LOCK BRAKE SYSTEMS & OPERATIONS	M-10 REPAIR AND REPLACE AS NECESSARY PER MANUFACTURER'S GUIDELINES
	M-11 ROAD TEST TO CONFIRM PROPER OPERATION OF REPAIR				

N. DIAGNOSE & REPAIR EXHAUST SYSTEM	N-1 HAVE WORKING KNOWLEDGE OF EXHAUST SYSTEM	N-2 TAKE PAST REPAIR HISTORY ON VEHICLE	N-3 VISUALLY INSPECT EXHAUST SYSTEM	N-4 LISTEN FOR LEAKS	N-5 CHECK SYSTEM VACUUM AND BACK PRESSURE
	N-6 USE FOUR GAS ANALYZER	N-7 REPAIR AND REPLACE AS NECESSARY PER MANUFACTURER'S GUIDELINES	N-8 ROAD TEST TO CONFIRM PROPER OPERATION OF REPAIR		
O. DIAGNOSE & REPAIR EMISSION SYSTEM WITH SUPERVISION	O-1 HAVE WORKING KNOWLEDGE OF EMISSION SYSTEM	O-2 TAKE PAST REPAIR HISTORY ON VEHICLE	O-3 FOLLOW PROCEDURES IN APPROPRIATE EMISSION CONTROL INFORMATION	O-4 USE AND INTERPRET DIAGNOSTIC EQUIPMENT	O-5 READ/UNDERSTAND & FOLLOW SCHEMATICS, FLOW/ DIAGNOSTIC CHARTS
	O-6 ANALYZE ONBOARD COMPUTERIZED DIAGNOSIS	O-7 DIAGNOSE & REPAIR POWER TRAIN MANAGEMENT SYSTEMS	O-8 DIAGNOSE & REPAIR ELECTRONIC EMISSION COMPONENTS	O-9 ADHERE TO APPLICABLE EMISSION REQUIREMENTS	O-10 REPAIR AND REPLACE AS NECESSARY PER MANUFACTURER'S GUIDELINES
	O-11 ROAD TEST TO CONFIRM PROPER OPERATION OF REPAIR				
P. DIAGNOSE & REPAIR ELECTRICAL SYSTEMS WITH SUPERVISION	P-1 HAVE WORKING KNOWLEDGE OF EMISSION SYSTEM	P-2 TAKE PAST REPAIR HISTORY ON VEHICLE	P-3 IDENTIFY SYSTEM ASSOCIATED WITH COMPLAINT	P-4 VISUALLY INSPECT SYSTEM COMPONENTS	P-5 USE APPROPRIATE TEST EQUIPMENT & SCHEMATICS, FLOW/ DIAGNOSTIC CHARTS

P. CON'T. DIAGNOSE & REPAIR ELECTRICAL SYSTEMS WITH SUPERVISION	P-6 REPAIR AS NECESSARY (WITH SUPERVISION)	P-7 READ, UNDERSTAND, & FOLLOW SCHEMATICS, FLOW/ DIAGNOSTIC CHARTS	P-8 TEST AND VERIFY REPAIR		
Q. FOLLOW ENVIRONMENTAL REGULATIONS	Q-1 USE PROPER REFRIGERANT HANDLING PROCEDURES	Q-2 RECYCLE USED COOLANT OR FOLLOW CORRECT DISPOSAL PROCEDURE AS PER STATE/FEDERAL REGULATIONS	Q-3 PROPERLY DISPOSE OF OIL/OIL FILTERS, TIRES, BATTERIES, & SOLVENTS AS PER STATE/ FEDERAL REGULATIONS	Q-4 FOLLOW PROPER CLEAN-UP & DISPOSAL PROCEDURES AS PER STATE/FEDERAL REGULATIONS	
R. DEVELOP & USE POSITIVE WORKING RELATIONSHIPS	R-1 DEVELOP & USE PROFESSIONAL ETHICS	R-2 DEVELOP & USE SALESMANSHIP AND CUSTOMER SERVICE	R-3 FOSTER POSITIVE RELATIONSHIPS WITH FELLOW EMPLOYEES/ SUPERVISORS	R-4 CONSULT WITH SUPERVISORS WHEN NECESSARY	
S. FOLLOW WRITTEN INSTRUCTIONS	S-1 READ RULES & REGULATIONS	S-2 READ SERVICE INFORMATION	S-3 READ & WRITE REPAIR ORDERS (COMPLAINTS, CAUSE, & CORRECTIONS)	S-4 LOCATE & READ VEHICLE IDENTIFICATION PLATES	S-5 PERFORM ASSIGNED TASKS IN A TIMELY MANNER
T. FOLLOW EMPLOYERS RULES & REGULATIONS	T-1 OBTAIN/MAINTAIN BASIC TOOL SET	T-2 ADHERE TO WORK SCHEDULE	T-3 USE WINDOWS BASED PC PROGRAMS	T-4 PRACTICE GOOD HOUSEKEEPING & GROOMING e.g. Uniforms, etc.	T-5 USE REQUIRED SAFETY EQUIPMENT
	T-6 ADHERE TO DRIVING SAFETY RULES / REGULATIONS	T-7 OBTAIN/MAINTAIN VALID DRIVERS LICENSE	T-8 PARK IN DESIGNATED AREAS		

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