

## 2025 ASE Correlation Chart

### Heating, Ventilation, and Air Conditioning (HVAC) (A7)

**MLR-** Maintenance & Light Repair

**AST-** Auto Service Technology (Includes MLR)

**MAST-** Master Auto Service Technology (Includes MLR and AST)

	Task	Priority	MLR	AST	MAST	Text Page #	Task Page #
<b>A. General</b>							
1.	Research vehicle service information, including refrigerant/oil/fluid type, vehicle service history, service precautions, technical service bulletins, and recalls including vehicles equipped with advanced driver assistance systems (ADAS).	P-1	✓	✓	✓	2-8; 52-62	
2.	Identify heating, ventilation, and air conditioning (HVAC) components and configurations.	P-1	✓	✓	✓	22-31	
3.	Retrieve and record DTCs, OBD monitor status, and freeze frame data; clear codes and data when directed.	P-1	✓	✓	✓	177-179	
4.	Perform A/C system performance test; interpret results; determine needed action.	P-1	✓ (P-2)	✓	✓	206-209	
5.	Identify abnormal operating noises in the A/C system; determine needed action.	P-2	✓ (P-3)	✓	✓	202-203	
6.	Leak test A/C system; determine needed action.	P-1	✓ (Visual only)	✓	✓	209-210	
7.	Identify and interpret heating and air conditioning concerns; determine needed action.	P-1	✓	✓	✓	202-203	

Automotive Heating and Air Conditioning-9th

8.	Place a vehicle in service mode as needed before servicing and diagnosing the HVAC system.	P-1	✓ (research only)	✓	✓	206	
9.	Identify refrigerant type; test for sealant; select and connect proper gauge set/test equipment; record temperature and pressure readings.	P-1		✓	✓	215-217	
10.	Inspect condition/quantity of refrigerant oil removed from A/C system; determine needed action.	P-2		✓	✓	218-219	
11.	Determine recommended oil and oil capacity for system application and component(s) replacement.	P-1		✓	✓	61-62; 224	
<b>B. Refrigeration System Components</b>							
1.	Inspect, remove, and/or replace A/C compressor drive belts, pulleys, tensioners; determine needed action.	P-1	✓	✓	✓	46-48; 202	
2.	Inspect for proper A/C condenser airflow; determine needed action.	P-1	✓ (P-2)	✓	✓	204-205	
3.	Inspect evaporator housing condensation drain; determine needed action.	P-1	✓	✓	✓	236	
4.	Inspect, test, and/or service A/C compressor clutch components and/or assembly; determine needed action.	P-2		✓	✓	39-41	
5.	Remove, inspect, reinstall, and/or replace A/C compressor and mountings; determine recommended oil type and quantity	P-1		✓	✓	48-49	
6.	Remove and inspect A/C system mufflers, hoses, lines, fittings, O-rings, seals, and service valves; determine needed action.	P-2		✓	✓	75-78	

Automotive Heating and Air Conditioning-9th

7.	Remove, inspect, and replace receiver/drier or accumulator/drier; determine recommended oil type and quantity.	P-2		✓	✓	81-84	
8.	Remove, inspect, and install expansion valve or orifice (expansion) tube.	P-1		✓	✓	83-84	
9.	Diagnose A/C system conditions that cause the protection devices (pressure, thermal, and/or control module) to interrupt system operation; determine needed action.	P-1		✓	✓	42-43	
10.	Determine procedure to remove and reinstall evaporator; determine required oil type and quantity.	P-2		✓	✓	222-223; 246-248	
11.	Remove, inspect, reinstall, and/or replace condenser; determine required oil type and quantity.	P-2		✓	✓	222-224	
<b>C. Heating, Ventilation, and Engine Cooling Systems</b>							
1.	Inspect engine cooling and heater systems hoses and pipes; determine needed action.	P-1	✓	✓	✓	112-130	
2.	Inspect and test heater control valve(s); determine needed action.	P-2		✓	✓	122-123	
3.	Diagnose temperature control problems in the HVAC system related to the engine cooling system, including electric heating; determine needed action.	P-2		✓	✓	112-115; 195-199	
4.	Determine procedure to remove, inspect, reinstall, and/or replace heater core; properly refill system.	P-2		✓	✓	138-140	
<b>D. Operating Systems and Related Controls</b>							
1.	Inspect HVAC system ducts, doors, hoses, cabin filters, and outlets; determine needed action.	P-1	✓	✓	✓	87-97	
2.	Identify the source of HVAC system odors.	P-2	✓	✓	✓	240-242	

Automotive Heating and Air Conditioning-9th

3.	Inspect and test HVAC system blower motors, resistors, switches, relays, wiring, and protection devices; determine needed action.	P-1		✓	✓	97-98	
4.	Diagnose A/C compressor control systems; determine needed action.	P-1		✓	✓	42-43	
5.	Diagnose malfunctions in the vacuum, mechanical, and/or electrical components, and controls of the HVAC system; determine needed action.	P-2		✓	✓	91-97	
6.	Inspect, test, remove and/or replace HVAC system control panel; determine needed action.	P-2		✓	✓	93-94	
7.	Check operation of automatic HVAC control systems; determine needed action.	P-2		✓	✓	167-179	
<b>E. Refrigerant Recovery, Recycling, and Handling</b>							
1.	Demonstrate knowledge of the requirement to recover, recycle, and handle refrigerants using proper equipment and procedures	P-1	✓	✓	✓	214-229	
2.	Use and maintain refrigerant handling equipment according to equipment manufacturer's standards.	P-1		✓	✓	52-62	
3.	Identify A/C system refrigerant; test for sealants; recover, evacuate, and charge A/C system; add refrigerant oil as required.	P-1		✓	✓	215-229	
4.	Recycle, label, and store refrigerant.	P-1		✓	✓	52-60	