HVAC: Refrigerant Recovery, Recycling, and Handling

Student/intern information:					
Name		Date	Class		
Vehicle used fo	r this activity:				
Year	Make		Model		
Odometer		VIN			

Learning Objective/Task	CDX Tasksheet Number	2013 MLR NATEF Reference Number; Priority Level	2013 AST NATEF Reference Number; Priority Level	2013 MAST NATEF Reference Number; Priority Level
 Identify refrigerant type; select and connect proper gauge set; record temperature and pressure readings. 	C650		7A5; P-1	7A5; P-1
• Leak test A/C system; determine necessary action.	C347		7A6; P-1	7A6; P-1
• Identify and recover A/C system refrigerant.	C836		7E2; P-1	7E2; P-1
• Recycle, label, and store refrigerant.	C657		7E3; P-1	7E3; P-1
Determine recommended oil and oil capacity for system application.	C652		7A8; P-1	7A8; P-1
• Inspect the condition of refrigerant oil removed from the system; determine necessary action.	C651		7A7; P-2	7A7; P-2
• Determine the need for an additional A/C system filter; perform necessary action.	C863		7B5; P-3	7B5; P-3

Time off
Time on

Materials Required

- Refrigerant identifier
- Appropriate air conditioning manifold gauge set including service hoses
- Infrared temp gun or AC thermometer
- Air conditioning service station recovery/recycling equipment as necessary
- · Refrigerant detecting equipment
- · Specified refrigerant oil

Some Safety Issues to Consider

- Refrigerant can cause serious damage if it comes in contact with a person's unprotected skin and eyes.
- When operating, the air conditioning system is normally subject to very high pressure in the system. Extreme caution must be exercised when working on an operating system.
- Extreme caution must be exercised when working around rotating components.

- When running any vehicles in the shop, make sure you use the shop's exhaust ventilation system to discharge all exhaust gas safely outside.
- Comply with personal and environmental safety practices associated with clothing; eye protection; hand tools; power equipment; proper ventilation; and the handling, storage, and disposal of chemicals/materials in accordance with local, state, and federal safety and environmental regulations.

Performance Standard

- **O-No exposure:** No information or practice provided during the program; complete training required
- **1-Exposure only:** General information provided with no practice time; close supervision needed; additional training required
- **2-Limited practice:** Has practiced job during training program; additional training required to develop skill
- **3-Moderately skilled:** Has performed job independently during training program; limited additional training may be required
- **4–Skilled:** Can perform job independently with no additional training