

California Regulations on Air Conditioning Equipment & Service Requirements

Background: California has regulations on virtually everything, including what to look for when you are fixing the AC in a car. The AC regulations have been around since 2003 with relative low compliance. Last year, California Bureau of Automotive Repair (BAR) issued six-figure fines and ordered temporary suspensions of BAR license for failure to comply with California regulations, indicating that this is serious business. The awareness in the California dealer community on this issue is lacking so we have taken this step to inform dealers of this regulation and possible compliance steps.

AC Servicing Requirements for California Shops

The statute requires that any CA automotive repair dealer that advertises or performs, directly or through a sublet contractor, automotive air conditioning work and uses the words:

- service
- inspection
- diagnosis
- top off
- performance check

or any expression or term of like meaning on any form of advertising, written estimate, or invoice shall include and perform all of the following procedures as part of that air conditioning work:

- (1) Exposed hoses, tubing and connections are examined for damage or leaks;
- (2) The compressor and clutch, when accessible, are examined for damage, missing bolts, missing hardware, broken housing and leaks;
- (3) The compressor is rotated to determine if it is seized or locked up;
- (4) Service ports are examined for missing caps, damaged threads and conformance with labeling;
- (5) The condenser coil is examined for damage, restrictions or leaks;
- (6) The expansion device, if accessible, is examined for physical damage or leaks;
- (7) The accumulator receiver dryer and in-line filter have been checked for damage, missing or loose hardware or leaks;
- (8) The drive belt system has been checked for damaged or missing pulleys or tensioners and for proper belt routing, tension, alignment, excessive wear or cracking;
- (9) The fan clutch has been examined for leakage, bearing wear and proper operation;
- (10) The cooling fan has been checked for bent or missing blades;
- (11) Accessible electrical connections have been examined for loose, burnt, broken or corroded parts;
- (12) The refrigerant in use has been identified and checked for contamination;
- (13) The system has been checked for leakage at a minimum of 50-PSI system pressure;
- (14) The compressor clutch, blower motor and air control doors have been checked for proper operation;
- (15) High and low side system operating pressures, as applicable, have been measured and recorded on the final invoice; and,
- (16) The center air distribution outlet temperature has been measured and recorded on the final invoice.

Exemption: Whenever the automotive air conditioning work being advertised or performed does not involve opening the refrigerant portion of the air conditioning system, refrigerant evacuation, or full or partial refrigerant recharge, the procedures specified above need be performed only to the extent required by accepted trade standards.

Discussion: Each technician may inspect the vehicle AC system differently. So long as items 1-14 are complied with and items 15-16 are recorded on final invoice, the dealership is in good standing. The key is to make sure the technician is educated and remembers to do the detailed inspection under the statute. The only way to ensure that the technician completely inspects and records their findings is to require a written copy. A sample checklist is attached (link).

Note 1: Certain hybrids have air conditioning systems that may not have components similar to the ones listed in the link above. Modification to the inspection checklist may then be undertaken as necessary.

Compliance with the statute also helps the dealership with additional items as follows:

- It helps provide uniform guidance to techs as to what to look for while repairing servicing AC
- It helps the service advisor sell the repair needed on the AC based upon the detailed findings of the technician
- It helps in customer satisfaction when the customer sees the nature and extent of work done as part of service/ inspection/diagnosis of the AC system.

Other States: Other states may use this checklist to ensure that work is done diligently, which may become a selling tool for AC equipment that is faulty or is not operating satisfactorily. The customer can see value in the inspection they just paid for.

Equipment Requirements for CA Automotive Air Conditioning Repair Dealers

The California statute requires that all automotive repair dealers engaged in the service or repair of automotive air conditioning systems in vehicles covered by the Act shall be subject to the following minimum requirements. An automotive repair dealer that is performing service or repair to a motor vehicle's air conditioning system, which involves evacuation or full or partial recharge of the air conditioning system, shall have all repair, measuring, testing and refrigerant recovery equipment and current reference manuals necessary to service or repair the system, including but not limited to:

- (a) Refrigerant identification equipment that meets or exceeds current Society of Automotive Engineers (S.A.E.) standard J1771 (Rev. Nov. 1998) which is hereby incorporated by reference.
- (b) Refrigerant leak detection equipment that meets or exceeds current Society of Automotive Engineers (S.A.E.) standard J1627 (Rev. Aug 1995) which is hereby incorporated by reference.
- (c) Refrigerant recovery equipment that meets or exceeds current Society of Automotive Engineers (S.A.E.) standards J1732 (Rev. Nov. 1998), J1770 (Issued Oct. 1995), J1990 (Rev. Feb. 1999), J2209 (Rev. Feb. 1999) and J2210 (Rev. Feb. 1999) which are hereby incorporated by reference.
- (d) Low and high pressure gauges for the purpose of measuring pressure in a mobile air conditioning system. As a minimum, the low pressure gauge shall be capable of measuring from zero to thirty inches of vacuum Hg, and zero to 250 pounds of pressure per square inch (psi). As a minimum, the high pressure gauge shall be capable of measuring from zero to 500 pounds of pressure per square inch (psi).
- (e) A functioning vacuum pump that is designed for the evacuation of mobile air conditioning systems.
- (f) A thermometer capable of testing air conditioning system efficiency. As a minimum, the thermometer shall be capable of measuring air temperatures from 20 to 100 degrees Fahrenheit.

Note 2: Underline added by the author of the newsletter to the cited California statute.

Authority Cited: Sections 9882 and 9884.19. *Business and Professions Code Reference: Sections 9884.7(a)(7), 9884.8 and 9884.9, Business and Professions Code. 16 California Code of Regulations Sections 3351.6 & 3366*

DISCLAIMER: *The contents of this newsletter are merely for informational purposes only and not to be considered as legal advice. Employers must consult their lawyer for legal matters and safety consultants for matters related to safety. The article was authored by Sam Celly of Celly Services, Inc. who has been helping automobile dealers comply with EPA & OSHA regulations since 1987. Sam received his BE (1984) and MS (1986) in Chemical Engineering followed by a J.D. from Southwestern University School of Law (1997). Our newsletters can be accessed at www.epaoshablog.com. Your comments/questions are always welcome. Please send them to sam@cellyservices.com.*