

Antique & Classic Car Club of Canada

Vehicle Inspection Standards

Submitted by Al Neufeld of ACCCC

Understanding Your Safety Inspection

Safety Representative _____

Mailing Address: _____

For More Information Call: _____

Vehicle inspection is the first line of defense in assuring a motor vehicle is in a safe operating condition.

To ensure that all critical components have been examined, an inspection needs to be made in a systematic manner listing all inspection items, keeping a written report listing all defects and deficiencies. By keeping a current copy of all vehicle condition reports in the vehicle, any mechanic, new driver, interested parties or government agency, can at a glance ascertain the known mechanical condition of the vehicle described. A copy of the yearly mandatory safety inspection requirement, of all Antique and Classic Car Club members' cars will be kept on file by the safety representative for future reference.

Vehicle Inspection Standard Procedure (Describing A Systematic Safety Inspection)

1. At a glance as you approach your car, you are checking the vehicle for broken glass, low or flat tires, weak or sagging springs, damage from foreign objects, leaks under the vehicle, vandalism, position of vehicle in relation to surrounding objects.
2. Unlock Driver's door. Enter vehicle, set driver's seat position (left foot should be flat on the floor under the clutch pedal or brake pedal for automatic vehicles). Driver's side window must roll down for hand signaling.
3. Check wheel lash (free play). Depending on size of steering wheel, this should be approximately 3-4 inches in either direction. (See Service Manual)
4. Apply brake pedal. A firm pedal should be felt with floor clearance of approximately three (3) inches. Firmly apply emergency brake. Emergency brake lever should be in the mid travel position.
5. Place automatic transmissions in park, standard transmissions in neutral. Adjust rear view mirrors.
6. If seat belts are installed, adjust for proper fit and check for proper operation.
7. Pull hood release, give horn a blow and check driver's door safety latch as you exit the car, taking the keys with you.
8. Open trunk and check safety equipment. Mandatory item is a fully charged A-B-C fire extinguisher. Recommended safety equipment:
 - Reflective triangular flare kit
 - A first aid kit and a warm clean blanket
 - Booster cables
 - Spare Tire
 - Jack and Wheel wrench
 - A flashlight

Vehicle Inspection Standard Procedure (Con't)

Recommended safety equipment (cont'd)

- A rope
 - Spare fluids
 - Names of members with cell phones.
 - Names of members with CPR and First Aid Training.
9. Circling vehicle – check remaining door safety latches, seat belts (if installed) and body integrity. Check that fuel cap is in place.
 10. Open the hood and check the following:
 - Hood latch safety catch , hood hinges
 - Radiator fluid level, leaks
 - Engine oil level, leaks
 - Windshield washer fluid level, leaks, cracked hoses
 - Master cylinder level, leaks at base of cylinder at lines and fittings.
 - Vacuum Booster (Leaks, secure & corrosion)
 - Check for leaks in gas lines, fuel pump, carburetor, filters and hoses.
 - Check water pump, drive belts, radiator and heater hoses
 - Check battery fluid level and terminal connections.
 - Power steering pump and belts, fluid level
 11. Re-enter driver's seat. Start engine. Immediately check oil pressure, amp meter for discharging and fuel level.
 12. Turn on headlights (high beam). Check high beam indicator. Turn on left signal. Check indicator. Check instrument lighting. Turn on heater and defroster. Check blower operation. Check windshield wiper operation. Check dome light operation. Leave car and walk around, check left front signal, headlights on high beam, marker lights, tail lights and license plate light, left rear signal, license plate validation sticker and ACCCC Safety Decal attached.
 13. Re-enter car. Turn on right signal. Change to low beam headlights, check gauges, oil amps, and water. Kick off automatic choke. Check engine idle. Also check accelerator pedal that it is not sticking and returns to idle.
 14. Circle the vehicle – check the low beam headlights, right signal (front and rear). Check all tires for proper air pressure, valve stem caps in place, sidewall damage, proper tread remaining (mixing bias ply and radial tires is not safe). Check all wheel spokes. Recheck engine compartment for leaks and unusual noises. Check electrical wiring and connections. Close the hood.
 15. Check windshield, windshield wiper blades and arms for proper spring tension.
 16. Re-enter vehicle. With the help of someone, check back up lights, brake lights and parking lights.(This can be done on your own with vehicle backed up to a wall or garage door)
 17. Know the condition of your brake shoes, drums (ask your mechanic to give you this information if you do not know.) A brake inspection can be acquired free of charge at many local brake shops.
 18. Test hydraulic brakes by rolling car at approximately five (5) miles per hour and applying brake pedal. Apply emergency brakes. With light throttle, try to pull away. Brakes should hold firmly.
 19. Valid ownership and insurance certificate to be with vehicle at all times.
 20. Clutch pedal free play and clutch slippage can be checked after hydraulic brake test.(approx. 1" free play)
 21. Automatic transmission safety start switch (place car in any gear and try to start). Ignition should be dead.

Vehicle Inspection Standard Procedure (cont'd)

This systematic inspection can be carried out by the car owner or driver, prior to vehicle operation in an Antique and Classic Car Club activity. Also the yearly inspection can be simplified if these inspections are observed.

Routine inspections that were not covered above and would be inspected in the annual safety inspection are listed below:

- Front Wheel Flex Lines (Brakes) – cracks, twisted or frayed
- Steel brake lines (corrosion, leakage, crushing)
- Wheel cylinders (leakage, not seized, secure)
- Rear axle seals (leakage)
- Wheel bearings (looseness, lubrication)
- King pins (excessive play)
- Tie Rod Ends (excessive play)
- Ball Joints (excessive play)
- Front End Alignment (Tire wear)
- Spring and Shackle Bushings
- Springs (front and rear)
- Rear Axle Mounting
- Frame (mounting, corrosion/rust damage)
- Idler Arm (excessive play)
- Cracks in drums and rotors
- Exhaust pipe (leaks and mounting)
- Exhaust manifold (leaks, mounting and cracks)
- Muffler (leaks, secure)
- Tail Pipe (leaks, secure)
- Gas Tank and holding straps (leaks and secure)
- Corrosion under body (no holes entering car interior)
- Emergency brake cables
- Shock absorbers (leaks, broken parts)
- Steering box (leaks, secure, binding)
- Front and Rear Bumpers (secure)
- Trailer towing equipment (secure)
- Tire rating
- Power Steering Rack
- Air Bags
- Struts
- Wheel Lug Nuts, proper torque all in place
- Seat mounting secure
- Seat belt mounting
- Auxiliary safety equipment (center stop light, rear view mirrors, sun visor, tinted glass, fog lights, auto head light dimmer)
- Continental Kit