

	<b>ROFR Section:</b> 300		<b>TFCA Best Practices:</b> 11.03	
	Effective: 3/2010	Revision: 7/2016	Fire Chief: 	

## Apparatus / Equipment Care & Maintenance

### Purpose

- A. To provide and maintain a written record of apparatus and/or equipment that indicates readiness for emergency response or use, the need for corrective actions, the need for repairs and/or a need for change out of equipment or transfer to another apparatus.
- B. To provide for daily, weekly, monthly and other periodic checks, dependent on specific requirements of various apparatus and equipment, that may be used to determine the need for specific repairs, maintenance or other equipment replacement.
- C. To provide the maintenance department with records of fluids being added/needed during daily, weekly, monthly or on other periodic checks that may be used to determine the need for specific repairs or maintenance.
- D. Inspection Records  
Inspection and cleaning confirmation shall be recorded on the department's electronic checkoff records program (currently [www.firecheckoffs.com](http://www.firecheckoffs.com)). Login information is available from the shift officer. Each member on duty is responsible to inspect the apparatus and enter the inspection record in the electronic checkoff records program. (TFCA BP 11.03)

### II. Policy

- A. An "Apparatus Inspection" form shall be filled out according to the daily duties schedule each time a unit is checked. This should be completed during morning apparatus checking and station cleaning time.
- B. It shall be the responsibility of the apparatus operator(s)/driver(s) to check the apparatus and equipment and fill out the proper inspection form area for his/her apparatus.
- C. It shall also be the responsibility of all company firefighters to check or assist in checking all apparatus and equipment as needs to be done and to fill out the proper inspection form.
- D. Station officers shall be responsible for seeing that the inspection forms are filled out correctly for his/her company.

- E. All apparatus and equipment shall be checked in general terms and in specific terms according to the type of apparatus, manufacturer recommendations and specifications and equipment needs.
- F. Check lists shall be forwarded through chain of command to the operations Chief at the end of the month for filing.
- G. Apparatus inspection forms shall be completed at the time when apparatus and equipment is checked. This is usually done at the beginning of each shift day or as soon as possible if responses to calls or other unforeseen activities delay the checking.
- H. All apparatus and equipment shall be checked and logged on the inspection forms on a daily basis.
- I. All compartments and storage areas shall be checked for equipment according to apparatus inventory lists for specific apparatus.
- J. Serious problems or deficiencies shall be reported to the station officer immediately. Station officers shall determine the need for removal of the equipment from service and that a replacement, if available, is placed into service.
- K. No equipment shall be added or removed from inventory without the approval of a Operations Chief or higher. The only exceptions being, that an emergency condition or situation exists and which must be noted by specific comments on the apparatus inspection form.
- L. Any missing or damaged equipment, not serious to safe operations, shall be noted on the apparatus inspection form and on a repair request form.
- M. All apparatus and equipment shall be kept as clean as possible. If dirty - wash it.
- N. All efforts shall be made to maintain apparatus and equipment in safe operational condition.

**III. Apparatus check** - Check overall apparatus for readiness for response to routine and emergency incidents.

- A. Engine oil level/oil leaks** – Check oil level and maintain at full level. Check for unusual leaks especially when drips are found under the apparatus. If oil is added – note how much was added in the appropriate daily box.
- B. Engine coolant/cap seal/leaks** – Check coolant level and maintain at full level (usually at or within 1 inch of bottom of fill neck). Check for leaks especially when unusual drips or puddles are found under the apparatus. If coolant is added – note the amount added in the daily box. Check radiator cap for torn seal and/or leaks.
- C. Hydraulic oil levels** – check oil level in all areas necessary on the apparatus. Maintain levels at or near the bottom of filler neck or screen. Check filler cap for torn seal and/or leaks. Check all hoses and connections (where accessible) for

leaks. This includes all rams, rods and shafts of outriggers and aerial ladder raising, lowering and moving equipment. If oil is added – note the amount added in the daily box.

- D. Fire apparatus pumps/controls** – Check that the pump engages/disengages when valves are shifted into and out of operation. Check that all valves and controls (manual and electrical) work freely and are in the correct position (OPEN or CLOSED) for normal operations. Check that all caps, adapters and fittings are in place. Check for loose, broken or missing knobs and switches.
- E. Drive belts and hoses** – Visually check drive belts and hoses for wear, cracks and/or deterioration.
- F. Seats and seat belts** – check seats for wear, splits and/or exposure of metal or rigid plastic parts that could cause a potential injury. This included recessed areas for SCBA equipment. Check seat belts for wear tears, nicks, cuts, frayed edges or linings. Check seat belt locks and catches for ease of operation and for missing or broken parts.
- G. Steering** – check for freeness of turning (L and R). Check steering wheel adjustments (tilt, telescopic) for freeness of movement and adjust as needed for driver comfort.
- H. Brakes (Stopping and Parking)** – Check for freeness, holding ability, dragging, unusual odors and sounds. Check for air leaks and/or fluid leaks. Check fluid reservoir and maintain at full levels where appropriate.
- I. Mirrors/Radios/Sirens/Horns/Back-up alarms** – Check mirror-mounting brackets for tightness and adjust as needed. Check radios, sirens, horns (electric and/or air) and back-up alarms for proper operation.
- J. Lights/Reflectors** – Check vehicle lighting (headlights, stop lights, turn signals, etc.) and reflectors for proper operation. Check emergency lighting (beacons, strobes, etc.) for proper operation. Check vehicle reflectors to insure that there are no broken or missing items on the vehicle.
- K. Ladders/Ladder locks** – check all ladders for serviceability. Check for loose or broken rungs, plates, beam parts lanyards, etc.
- L. Instrument gauges (Dash/Pump panel)** – check that all gauges are operational and showing/indicating if the apparatus and/or pump are operating properly.
- M. Windshield wipers/Washers** – check wipers and washers for correct operation. Check wipers for cracks, chips and pliability. Check that washer reservoirs are filled with cleaning solution.
- N. Tires/Wheels/Lug nuts** – Check tires for gouges, cuts, tread wear, etc. Check wheels for being bent or damaged and that all lug nuts are in place. Check tire pressures weekly.
- O. Booster tank** – Check for leaks. Check water level in tank – Maintain at full.

- P. Vehicle fuel** – Maintain fuel at reasonable level –  $\frac{3}{4}$  minimum. Apparatus should not be left for oncoming shifts with low fuel. Reasonable exception would be when returning from working fire call that occurred during early morning hours.
- Q. Vehicle body/Doors/Lifts/Latches/Handles/Cranks** – Check vehicle for new damage, scratches, etc. Check doors (cab and compartment) for freeness of operation. Check doors, door lifts, locks, handles and cranks for operation and for loose, damaged or missing parts.
- R. Heater/Defroster/Defogger/Air conditioner** – Check that all these are functional and that all controls are properly operating. Check that all vents and directional vents are in place and working properly.
- S. If immediate service is needed** on any item or an unusual amount of fluid was required – note on repair request and notify the Maintenance Officer and or Operations Chief.

**IV. Equipment checks** – Check all equipment for readiness for use on routine and emergency incidents. This is similar to an inventory check but differs in that the equipment is to be check for availability and for functional use. The apparatus is to contain a sufficient amount of the equipment listed so that any particular incident can be worked safely and efficiently. All equipment shall be maintained in a safe usable condition. All efforts shall be made to keep all equipment as clean as possible. If dirty – wash it.

- A. Binoculars/Map books/Pre-Plan book/Knox keys/Emergency Response Guidebook (ERG)** – Check that these items are available for use.
- B. Radios**– Check that all personnel that will be responding on an apparatus have an operational radio available for use.
- C. SCBA and PASS/Spare SCBA bottles** – Check all SCBA and PASS alarms for functional operation. Use SCBA Check list provided in the Apparatus book for documentation of SCBA checks. Check for hydrostatic dates on cylinders. Change batteries at regular intervals when required by maintenance program. The components and operation of the SCBA and PASS device will be reviewed with all entry-level employees. All employees must be aware of the proper use of SCBA and Pass devices. Maintenance issues must be reported ASAP and a certified technician only can perform repairs **BP 11.03**
- D. Portable extinguishers** – Check charge levels, safety pins and service tags. If a unit is not serviceable replace it with one that is. Check hydrostatic date on cylinders.
- E. Electric power generators ( ENG-1 & ENG-3)** – Check fuel, oil and operation of unit. Run 5 to 10 minutes. Maintain units and fuel cans at near full level.
- F. Power saws/Rescue tools/PPV fans** – Check fuel, oils and operation of units. Check for leaks at couplings and along hoses. Check handles, grips, valve controls and other adjustments. Run 5 to 10 minutes. Maintain units and spare fuel cans at near full levels. Comply with correct fuel/oil mixtures for various units. **Keep Units Clean!!**

- G. Electric cords/Pigtails/Portable lighting** – Check that equipment is in place and available. Check for frayed or damaged cords and illumination of bulbs.
- H. ICS Accountability Board** – Check that the Accountability board is on the apparatus and available for use. Ensure that all personnel place ID tags on the apparatus passport.
- I. Hose tools/Rollers/Appliances/Nozzles/Foam application equipment** – Check that all equipment is in place on the apparatus and available for use. Check that all equipment is functioning properly.
- J. Ropes/Rescue equipment (soft goods)/Forcible entry tools/Axes/Pike poles** – Check that all equipment is in place on the apparatus and available for use. Check that all equipment is properly maintained.
- K. Salvage and Overhaul equipment**  
(Covers/Shovels/Runners/Squeegees/Brooms/etc.) – Check that all equipment is in place on the apparatus and available for use.
- L. Hose loads/Fittings/Appliances** – Check that all equipment is in place and available for use. Check hoses and connections for wear and/or need of replacement.
- M. Tool box(s)/Hand tools/Gas cut off tools** – Check that toolboxes are sufficiently supplied with necessary tools for use.
- N. Liquid spill absorbent** – Check that the container is sufficiently full and available for use. The container shall be maintained at a near full level.
- O. Thermal Imaging Camera** – Check that the unit is maintained and ready for use. Change/charge batteries as needed.
- P. Gas Monitors** – All gas monitors are checked daily and are calibrated per manufacturer's recommendation intervals. BP 11.03
- Q. Drinking water** – Check that water can is clean and filled with drinking water and ice. Ensure that a good quantity of drinking cups is available.

**V. Annual Equipment testing, inspections and Preventative Maintenance**

- A. Pump Testing** - All annual pump testing will be conducted by a Certified Inspections company/personnel to meet or exceed both manufacturer recommendations, NFPA 1911 & 1914.
- B. Aerial Ladder Testing** - All aerial testing will be conducted by a Certified Inspections company/personnel to meet or exceed both manufacturer recommendations, NFPA 1911 & 1914.
- C. Apparatus Preventative Maintenance** – All aerial testing will be conducted by a Certified Inspections company/personnel to meet or exceed both manufacturer recommendations, NFPA 1911.

