



## MONTGOMERY COUNTY FIRE AND RESCUE SERVICE DRIVER/OPERATOR TRAINING PROGRAM

# Practical Application Guide Sheet

### Pre-trip Inspection – Class “A” Apparatus

**Driver Performance Competency:** The driver candidate will explain the purpose of and perform a pre-trip inspection on the vehicle used for training. The Pre-Trip Inspection will be completed using guidelines below:

1. **Vehicle Overview:** Start at the front of the vehicle looking for fluid leaks, and hanging wires. Are all body components intact, not missing, or broken. Look down right side of body and then left side looking for leaning which indicates weak or broken suspension.
2. **Engine Compartment:** Raise engine hood/cab making sure that hood springs, safety cables and cab lift piston safety locks are intact and not broken.
  - a. **Oil** – Oil level will be above the add mark. Check oil for foam and fuel. If oil is below the add mark add two quarts of oil. Indicate type and amount.
  - b. **Coolant** – Check coolant by checking sight glass on reservoir. If no coolant is present add the proper mixture provided by the mechanic shop.
  - c. **Power Steering Fluid** – Check power steering reservoir for proper level. Make sure fluid is above the low or add mark. Some reservoir’s have a cold full mark and a hot full mark.
  - d. **Transmission Fluid** – The Transmission dipstick should have a cold full mark, a cold add mark, a hot full mark and a hot add mark. The Driver Operator should know what type of fluid is in the transmission and its associated color. Does it smell burnt? Does it appear foamy? Check the transmission with the engine running and when the transmission has reached normal operating temperature. Place in neutral and check according to the dipstick marks according to the temperature of the fluid. This will give you the proper fluid level.
  - e. **Alternator** - Check for loose or broken electrical connections. Is alternator securely mounted?
  - f. **Fan** – All blades present and not bent or broken?
  - g. **Radiator** – Is the radiator securely mounted? Is the radiator leaking?

- h. **Water pump and air Compressor** – You must know if the water pump and air compressor is gear or belt driven. Are both units securely mounted? Are there missing parts? Are they leaking?
  - i. **Power Steering pump** – Is the power steering pump gear or belt driven? Are all hoses securely mounted to the pump? Are there any fluid leaks?
  - j. **Hoses** – Check all hoses for cracking, cuts and bulges.
  - k. **Belts** – Check all belts for cuts, cracks, and frays. Belts will have no more  $\frac{3}{4}$  inch deflection.
  - l. **Wiring** – Check all wires for fraying, broken connections, and broken wires.
  - m. **Batteries** – Check batteries for leaks and corrosion. No loose or broken electrical connections. Batteries will be securely mounted.
  - n. **Steering system** - Check steering shaft to steering box. Check the output shaft on the steering box. Pitman arm to drag link with castle nut and locking pin installed. Drag link to steering arm with castle nut and locking pin installed. Check for leaks at hoses and the steering box. No loose or broken steering components. No welds on steering system.
3. **Suspension System** – Check spring mount making sure it is secure to the frame. There will be no missing or loose parts. Check for missing, misaligned, or broken springs. Make sure U-bolts are not broken or missing. Make sure locking nuts are securely fastened on bottom. Air Suspension will be checked making sure both air bags are inflated.
4. **Brake System** – You must know what type of brakes is on the vehicle. Are they disc brakes or drum brakes. Are they air brakes or hydraulic brakes? Do they have dust covers on? Drum brakes the drum will not be cracked, or broken, or missing. Heat cracks are numerous and common but can not be any longer than half the width of the drum. Brake shoes will be free from oil and grease and have at least  $\frac{1}{4}$  inch of lining on the brake shoes. Disc brakes will have the rotor intact and not be broken, cracked, or missing. There will be at least  $\frac{1}{8}$  inch pad and they will be free from oil and grease. Heat cracks are common but will not run across more than half the width of the rotor. They will not be open or more than  $\frac{1}{8}$ " deep.
5. **Tires** – Tires will not be mismatched, re-grooved, or recapped on the steering axle. Tires will be free from cuts that expose the cord of the tire. Tires will be free from bulges which may indicate cord/tire separation. Tires will be inflated to proper pressure. Steering axle tires will have at least  $\frac{4}{32}$  inch of tread in the major grooves. All other axles will have at least  $\frac{2}{32}$  inch of tread in the major grooves. Dual tires will have sufficient air pressure to prevent tire from making contact with its mate.
6. **Wheels** – Wheels will not be bent as to expose the bead of the tire. Wheels will not be cracked or broken, or have any welded repair. All wheels studs and lugs will be present and

tight. Air valve will be of metal with metal cap. Oil hubcap will have proper oil level. Oil will not be muddy in color.

7. **Drive Line** – Drive line will be intact and have no missing parts. All bolts will be in the U-joints and carrier bearing. Drive shaft will not make contact with exhaust system or any part of the under carriage.

8. **Windshield** – Windshield will not be cracked or broken. Wiper blades will make proper contact with windshield. Wiper blades will not be missing or torn.

9. **Body** – All mirrors will be securely mounted to the body with no missing, or broken parts. Mirrors will not be missing, cracked or broken. All compartment doors will latch securely.

### **In Cab Inspection**

10. **Seat** – The seats will be securely mounted to the floor with no missing parts. Seat will adjust forwards and backwards. Seat will adjust up and down. The seatbelt will function properly and will have no missing parts. Seatbelt strap will not be torn or cut. Locking mechanism will securely latch.

11. **Windshield** – Windshield will be free from chips and cracks that obstruct the view of the driver. Dash will be free of debris that obstructs the performance of the defroster.

12. **Battery Switch** – Battery switch will be free from debris, preventing accidental shut off.

13. **Gauges** – With ignition on and motor running all gauges will operate in their normal operating range. Gauges should be illuminated from the back.

14. **Steering Wheel** – Steering wheel will not be broken. Steering wheel will have no more than 10 degree of play. Horn will function.

15. **Lights** – All lights will function properly and be of proper color. Turn signals will function properly. Headlights, high and low beam will be in working order.

16. **Reverse Alarm** – When unit is in reverse the reverse alarm will sound. Disabling switch on the console will function.

17. **In Cab General** – Cab will be kept clean as to prevent items from rolling on the floor or falling off of the dashboard. The unit will be equipped with at least one wheel chock.

18. **Safety Equipment**- present on vehicle. Minimum 5lb extinguisher, traffic flares or triangles.