

Vehicle Maintenance Points

This section contains information on the mechanical checkout points of the ambulances currently in service with Boston EMS. Vehicle checkouts should be performed in accordance with the following department SOP:

Fleet Status

Checking Oil

First, make sure the vehicle is parked on level ground and the engine is cold, so you don't burn yourself on a hot engine part. With the engine off, open the vehicle's hood and find the dipstick. Pull the dipstick out from the engine and wipe any oil off from its end. Then insert the dipstick back into its tube and push it all the way back in.

Pull it back out, and this time look at both sides of the dipstick to see where the oil is on the end. Every dipstick has some way of indicating the proper oil level, whether it be two pinholes, the letters L and H (low and high), the words MIN and MAX, or simply an area of crosshatching. If the top of the oil "streak" is between the two marks or within the crosshatched area, the level is fine.

But if the oil is below the minimum mark, you need to add oil as described below.

Also, check the oil's color. If it's brown or black, that's fine. But if it has a light, milky appearance, this could mean coolant is leaking into the engine. Look closely for any metal particles, too, as this could mean there is internal engine damage. If you see either of these conditions, include this information on your vehicle checkout report.

If everything's okay, wipe off the dipstick again and insert it back into its tube, making sure it's fully seated. Close the hood and you're done.

Adding Oil

To add oil, remove the oil filler cap, usually located on top of the engine. Since over-filling with oil is bad for the engine, you should add oil a little at a time. Using a funnel helps avoid spills. Wait a minute or so and check the dipstick again. If the level is still below or near the minimum mark, add more oil. Screw the oil filler cap back on securely, and you're done.

Checking Transmission Fluid

The proper method of checking transmission fluid will require both you and your partner. With the vehicle parked on a flat surface, the parking brake should be applied while one member applies pressure to the driving brake. The vehicle should be placed in drive for about one minute, then moved to neutral. Once in neutral, the other member will remove the transmission fluid dipstick out from the engine and wipe any fluid off from its end. Then insert the dipstick back into its tube and push it all the way back in.

Pull it back out, and this time look at both sides of the dipstick to see where the fluid level is on the end. Every dipstick has some way of indicating the proper oil level, whether it be two pinholes, the letters L and H (low and high), the words MIN and MAX, or simply an area of crosshatching. If the top of the fluid “streak” is between the two marks or within the crosshatched area, the level is fine.

But if the fluid is below the minimum mark, you need to add oil as described below.

Also, check the fluid’s color. If it’s medium to dark red, that’s fine. But if it has a black or almost black appearance, this could mean the fluid is nearing the end of its useful life cycle. Look closely for any metal particles, too, as this could mean there is internal damage to the transmission. If you see either of these conditions, include this information on your vehicle checkout report.

Adding Transmission Fluid

To add transmission fluid, you will need a long funnel. Using a funnel helps avoid spills. The funnel should be inserted into the same tube that the transmission fluid dipstick was removed from. Add a small amount of fluid and wait a minute or so and check the dipstick again. If the level is still below or near the minimum mark, add more fluid. Screw the oil filler cap back on securely, and you’re done.

Checking Brake Fluid

Locate the brake master cylinder reservoir. It is usually mounted on or near the firewall at the rear of the engine compartment, almost directly in front of where the brake pedal is mounted on the other side of the firewall. The reservoir is made of a translucent material which makes it unnecessary to remove the cap to check the fluid level. There will be a clearly marked “Full” line on the reservoir. If the level is low, add fluid until the level is at the “Full” line.

Ford F-450 Super Duty Chassis

