

Truck Maintenance and Servicing Checklist

CHECKLIST NUMBER 1

CHECKING FUEL TANK, FUEL LEVEL AND CHANGING FUEL FILTERS Fuel Tanks

1. Open drain cocks on bottom of tanks and drain off any water present
2. Tighten all fuel tank mountings and brackets
3. Check seal in fuel tank cap and check breather hole

Fuel Level

1. Park vehicle on level ground
2. Open fuel tank cap
3. Visually check fuel level
4. Make sure level corresponds with gauge reading in cab

Changing Filters

Strainer Replacement

1. Turn fuel filter element counter clockwise until it is free of base
2. Discard filter element
3. Clean seal surface on filter base
4. Wipe up fuel that was spilled during filter removal
5. Coat seal of new filter with clean diesel fuel or engine oil
6. Thread filter onto base until seal contacts base
7. Tighten filter on additional 1/2 turn
8. Start engine and check for leaks

Filter Replacement

1. Turn off fuel supply from fuel tanks
2. Place a suitable container under filter
3. Open drain cock in filter housing base and drain
4. Remove filter body with elements
5. Discard filter element
6. Clean housing and close drain cock
7. Install new filter in housing
8. Fill housing with clean fuel
9. Install filter housing (containing new filter element) with a new gasket (lubricate with fuel or engine oil) and tighten
10. Open fuel line shut off valve
11. Start engine
12. Check for leaks

CHECKLIST NUMBER 2

Oil Level

1. Park vehicle on level ground, shut engine off (allow a few minutes for oil to drain down before checking).
2. Locate dipstick.
3. Pull stick out, wipe clean and replace
4. Pull out again, check oil level
5. Level should be maintained between the full and add marks (Do not overfill or operate vehicle when oil level is below the add mark).

Changing Filter

1. Remove drain plug from bottom of filter housing, drain oil.
2. Remove filter housing container filter element (consult manufacturer's owner guides for specific instructions on removal of filter elements).
3. Discard filter.
4. Clean housing and cover.
5. Replace with new filter emergent, secure housing.
6. Replace drain plug.
7. Start engine, check for leaks.
8. Shut engine down, wait 10 minutes.
9. Check oil level (add sufficient oil to bring it to proper level on dip stick)

CHECKLIST NUMBER 3

CHECKING COOLANT LEVEL AND CHANGING COOLANT FILTERS

Coolant Level

Preparation

1. Shut engine off (never check when running).
2. Wait until engine has cooled.
3. Even then use extreme care when removing radiator cap.
4. Protect hands (gloves, thick cloth).

Removing radiator cap

1. Turn cap slowly to the first stop.
2. Step back while pressure is released from cooling system.
3. When all pressure has been released, press down on the cap and remove it.

Checking coolant level

1. Visually check level of coolant, add if necessary (consult operator's manual for specific instruction for your particular vehicle)
2. Some vehicles have sight glasses or see through overflow containers for checking coolant level.

Changing Coolant Filters

Preparation

1. Shut engine off.
2. Wait until engine has cooled.
3. Do not handle hot filter with bare hands (gloves, thick cloth).

Removing filter

1. Turn filter element counter clockwise and remove.
2. Replace with new filter element and new cover gasket.
3. Start engine, check for leaks.

CHECKLIST NUMBER 4

CHECKING BATTERY FLUID LEVEL

Precautions

1. Caution: batteries contain acid which will cause severe burns if contacted with skin.
2. Batteries give off explosive gases--no smoking.
3. Protect eyes with goggles or glasses.

Checking Fluid Level

1. Open battery caps, check fluid level (not necessary with maintenance free batteries).
2. Fill if needed--bring level to bottom of split ring in cell filler well (Add distilled water if possible, never use acid)

PROCEDURE FOR CHECKING POWER STEERING FLUID

Preparation

With engine running at normal operating temperature, turn steering wheel back and forth several times to stabilize fluid level.

Checking Fluid Level

1. Stop engine.
2. Remove dipstick.
3. Fluid should register between bottom of dipstick and full mark.
4. Add if necessary, bring level to full mark, do not overfill. (Consult manufacturer's specification in owner's manual for correct type of fluid)

CHECKLIST NUMBER 5

CHANGING AIR FILTER ELEMENT

CHANGING AIR FILTER ELEMENTS--DRY AIR CLEANERS

On air cleaners with a restrictions indicator, change or clean element when indicator shows red.

On vehicles equipped with an air filter restriction gauge, replace element when gauge reads 25" for Cummins and Caterpillar engines and 20" for Detroit Diesel engines.

Steps

1. Remove end covering from housing.
2. Remove filter element (do not handle with greasy hands).
3. Inspect end cover and gasket surfaces for dents or possible air leaks.
4. Check outlet tube (should be clean and undamaged).
5. Check filter element for holes and tears (replace if damaged).
6. If filter is undamaged, it may be cleaned by using compressed air (always blow air in opposite direction of normal air cleaner flow).
7. Wipe out any dirt in the filter housing.
8. Install filter element.
9. Replace end cover and secure

NOTE: Always handle filter element carefully to prevent dirt from shaking loose onto clean side of system.

CHECKLIST NUMBER 6

CHANGING HEAD LAMP

A supply of smaller lights as well as sealed beam head lamps, fuses and wire should be carried with the vehicle.

Steps

1. Park vehicle, shut off and secure.
2. Remove trim ring from burned out light.
3. Unfasten mounting screws.
4. Disconnect light from socket and remove.
5. Remove any dirt or bugs from socket area.
6. Replace with new head lamp (plug it in).
7. Test lamp to see if it's working property
8. Fasten mounting screws.
9. Replace trim ring.
10. Make sure new light is clean.

NOTE: Do not touch head lamp adjusting screws!

CHARGING FUSES AND RESETTING CIRCUIT BREAKERS

Fuses

Always use right size and amp fuse (new fuse should have the same amp rating as the fuse it replaces).

Steps

1. Check the fuse and clip holder for cleanliness and burrs.
2. If dirty, touch up the contact points with a coarse cloth.
3. Gently but firmly snap new fuse into clip holder (make sure there is a good connection between fuse ends and clip holders)

Circuit Breakers

1. Remove circuit breaker cover panel.
2. Flip the circuit breaker switch back in the opposite direction to reset.
3. Replace panel.

CHECKLIST NUMBER

DRAINING MOISTURE FROM AIR RESERVOIRS

1. Place vehicle on level ground.
2. Chock wheels.
3. Open drain cocks by twisting valve on bottom of tank.
4. Allow all air pressure to escape (0 psi) --this will permit moisture to drain.
5. Close valve.

DRAINING MOISTURE FROM FUEL SYSTEM

1. Locate filter with water separator.
2. Remove drain plug at bottom of filter.
3. Allow water to drain.
4. Replace drain plug.

ADJUSTING BRAKES

Drum Brakes (S-cam)

Preparation

1. Chock wheels.
2. Clean adjusting area.
3. Press down on lock collar.
4. Turn adjusting screw until shoes make contact with the drum.
5. Visually check to see that contact was made

The adjusting screw is being turned the wrong way if:

- The screw turns more than two full turns
- The push rod starts to pull out of the chamber

Adjustment

1. Back screw off 1/2 turn.
2. Measure push rod travel

With air pressure

- Have someone apply pressure (100 psi)
- Push rod should travel between 1 and 1-1/2 inches

With a pry bar

- If alone pull out push rod with a pry bar
- Pushrod should travel between 1/2 and 3/4 inches

Disc Brakes (Power Screw)

Preparation

1. Chock wheels.
2. Clean adjusting area
3. Turn adjusting nut until brake linings contact disk
4. Check visually to see that contact was made

Adjustment

1. After linings contact disk, back screw off one complete turn.
2. Road test (this type adjustment will provide a slightly increased stroke and will necessitate more frequent adjustments)

CHECKING TIRE AIR PRESSURE

1. Remove valve stem cap.
2. Place air gauge over valve stem opening.
3. Read inflation pressure (inflate if necessary).
4. Replace cap.
5. Check operators manual or read correct inflation pressure for tire on its side wall.
6. Replace cap

NOTE: Never check incorrect air pressure when tires are cold, hot readings are incorrect.

CHANGING A WHEEL/TIRE ASSEMBLY

Secure Vehicle

1. Park vehicle on level ground.
2. Chock other wheels fully against vehicle movement.
3. Set parking brakes and place transmission in lowest forward gear.

Inspect Tire

1. Check for over inflation.
2. Compare appearance of tire with that of other tires.
3. Check side and lock rings.
4. On duals, also check seating of inner tire.
5. If inflation or seating does not appear normal, avoid attempting tire change, obtain expert help.

Place Jack

1. Refer to owner's manual to determine proper placement of jack for removing the tire to be changed.
2. Place hardwood plank or block under base of jack regardless of surface.

Remove Wheel Assembly/Tire

1. Loosen stud nuts.
2. Observe direction of rotation

Examine thread

On some wheels, direction indicated on end of stud

- R means to right "Clockwise"
- L means to left "Counter-clockwise"

3. Stand to one side of tire. Portions of wheel assembly may fly outward and cause injury when stud bolts are loosened.
4. Turn stud nuts by hand until they are flush with the end of the stud.

5. Loosen clamp (on cast-type wheels)

6. Tap with hammer

Don't remove stud nuts until clamp is free

Cramp could fly off studs

7. Remove air lines from any wheels with a tire pressure sensing device, cap the line and actuator.

8. Raise vehicle.

Jack up vehicle to allow tire to clear the surface

Stand clear of vehicle while raising jack

Vehicle could slip off jack and cause severe injury if arms, legs, or head are under the vehicle

9. Remove the wheel assembly

Remove stud nuts

Pull off wheel assembly

10. Remove inside wheel of a dual wheel assembly following the same procedure

Replace Wheels

1. Replace inside duals first

2. Mount wheel

Place wheel on hub

Install rim clamp (cast-type wheel)

Install stud nuts

Tighten nuts properly

3. Follow prescribed pattern

Consult owner's manual for proper pattern

If manual not available, use the following tightening sequence:

4. If wheel is free to rotate, move the nut to be tightened to the top position.

5. Use proper tightening procedure

Tighten with lug wrench

6. Use torque wrench for final tightening

Follow torque specifications in owner's manual

Don't over tighten

Can damage rim

Can strip treads on stud

Don't under tighten

Nuts can work loose

Wheel could come off

7. If tires equipped with pressure sensing device

Remove caps

Connect airline to actuator

8. Lower vehicle

Lower jack until tire supports the weight of the vehicle

Remove the jack

9. Store equipment in proper place

Jack and support plank

Store damaged tire (where spare came from)

Remove wheel chock and Recheck Torque

1. Stop after driving a few miles and tighten nuts as necessary using torque wrench

Rotation of wheel almost always loosens wheel

Nuts can fall off unless tightened

2. Repeat process after 100 miles