

Changing Automobile Oil

DISCLAIMER- Incorrect oil and parts may lead to engine damage or failure. Please refer to the car's maintenance manual for proper materials. Dispose of all hazardous materials at your local recycling center.

INTRODUCTION: Changing oil in a vehicle can be easy and great way to save money. The required materials can be purchased at most automotive stores. Purchasing the materials at automotive stores will be much cheaper than at the dealership.

MATERIALS:

1. Filter element (Refer to maintenance manual)
2. Waste oil container
3. Funnel
4. Rags wiping
5. Lubricating oil (Refer to maintenance manual)

TOOLS:

1. Torque wrench ½ inch drive 0-100 FT LB.
2. Wrench set, socket ½ inch drive 7/16" to 1-1/4" 20PC
3. Wrench set, socket Metric 9-19mm
4. Strap Wrench
5. Goggles
6. Gloves chemical

STEPS:

1. Put on gloves and goggles.
2. Use wiping rags to remove any contaminants from the oil fill cap, drain plug and dipstick.
3. Remove oil fill cap.
4. Place container under the oil pan.
5. Use wrench to loosen lube oil drain plug.
6. Slowly remove the oil drain plug by hand allow oil to drain to waste container.
7. Use rag to clean area around plug.
8. Inspect plug and plug seal for any damage.
9. Reinstall plug after oil has completely drained.
10. Place container under oil filter.
11. Use clean rags to wipe contaminants from around filter.
12. Attempt to remove filter by hand. If filter cannot be removed by hand use a strap wrench. Be careful not to damage the filter housing.

13. Put a light film of oil on the new filter gasket.
14. Install new filter on filter housing. Once contact has been made turn filter an additional $\frac{1}{2}$ to $\frac{3}{4}$ turn.
15. Fill engine with new oil. Fill until new oil level is in the normal mark on the dipstick.
16. Once appropriate level is achieved then reinstall lube oil cap.