

1989-1994 Toyota Pickup Oil Change (2.4L I4)

Change the oil in your '89-'94 Toyota Pickup, with the 2.4L I4 engine, to improve engine performance and longevity.

Written By: Phillip Takahashi



INTRODUCTION

Change the oil in your '89-'94 Toyota Pickup, with the 2.4L I4 engine, to improve engine performance and longevity.

It is typically recommended that you change your vehicle's oil every 3,000 miles for extreme running conditions. However, this number can vary depending on your operating conditions, age of your vehicle, number of miles on your engine and your driving habits. Use of synthetic oils can help reduce engine wear and are advisable for older engines or if your typical driving involves extended periods of stop and go traffic.



TOOLS:

- 14 mm Box End Wrench (1)
- Funnel (1)
- Oil Drain Pan (1)
- Oil Filter Wrench (1)

Optional. An end type wrench is recommended.



PARTS:

Engine Oil - Quart (1)

(4.5), 10W-40

Consult your owner's manual if you think your operating conditions call for a different oil viscosity.

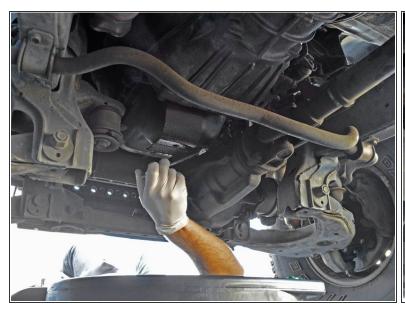
Oil Filter (1)

Consult your owner's manual or an online data base to determine what filters are appropriate.

Step 1 — Draining the Oil



- Begin by locating the 14 mm hex oil drain plug. The drain plug is on the driver's side of the truck, facing the differential case.
- Place the oil drain pan under the oil drain plug.
 - (i) Be sure to position the drain pan so that it will catch the oil when it is streaming out of the pan.





- Always wear protective gloves and eyewear when working with motor oil. Be careful if your car has been running recently as the engine, transmission and exhaust may be very hot. Keep rags or towels nearby to wipe up any spills.
- Use a 14 mm box end wrench to loosen the oil drain plug by turning it counter-clockwise until you can turn it by hand.
 - A socket wrench is not advisable due to space constraints.
- Finish removing the oil drain plug by hand to allow the oil to drain.
 - (i) Watch the draining oil for shiny specks. The shiny specks may be metal flakes and could mean that there is a serious problem with your engine internals.







- While the oil drains, remove the old drain plug gasket and clean the drain plug.
- Place a new gasket on the oil drain plug.
 - (i) Be sure that the new gasket is against the back of the drain plug to ensure that it will not get caught in the threads.







- Once the draining oil has slowed to a drip, clean the area around the drain plug hole with a clean towel or rag and replace the oil drain plug.
- Screw in the oil drain plug by hand, turning it clockwise as far as possible. Finish tightening the drain plug by using a 14 mm socket or box end wrench.
 - Only tighten the drain plug until it is snug. Over-tightening the oil drain plug can strip the threads or crack the oil pan.
- Wipe off any oil that may have dripped onto the differential case with a clean rag or towel.

Step 5 — Replacing the Oil Filter







- Locate the two mud flaps in the front passenger side wheel well.
- Lift the mud flaps to reveal the location of the oil filter.
- Alternatively, for pickups that do not have wheel well flaps, remove four 10mm bolts securing an access plate.
- Reposition the oil drain pan so that it will catch any oil that will spill when you remove the oil filter.







- Lift one or both mud flaps and use your hand to remove the oil filter by turning it counter-clockwise.
 - (i) If the filter is too tight to turn by hand, use an oil filter wrench. A wrench that fits over the top of the oil filter is ideal as there is very little space on the sides of the oil filter.
- Remove the oil filter with the threads facing up to prevent spilling oil, then place it in the oil pan
 with the threads facing down.





- Put on a clean glove and dip your finger in a new bottle of oil.
- Spread clean oil around the entire gasket of the new oil filter.
 - (i) Wipe off any excess oil from your hands/fingers when you are done as the oil may make handling the filter or tools difficult.





- Place the threaded end of the oil filter onto the engine's oil filter threads, being careful to not get dirt or debris on the filter's gasket.
- Turn the filter clockwise by hand until it is snug. Tightening the filter should require a moderate amount of your strength, but not all of it.
 - If the filter is difficult to turn at the beginning of its threads, **stop**! You may be cross threading the oil filter. Re-align the oil filter and try again.
 - Do not over-tighten your oil filter by using a wrench. Doing so may cause the oil filter seal to leak and will make removing the oil filter very difficult in the future.
- Remove the oil drain pan from under the truck.

Step 9 — Refilling the Oil







- Locate the hood release lever. It is below the driver's console, on the left.
- Pull the lever until you hear the hood click.
- Go to the front of the truck and locate the hood release latch. It is under the hood and slightly towards the driver's side of the truck.
- Lift up on the hood release latch with one hand and lift the hood open with the other.
- Place the end of the hood prop rod into the hole on the driver's side of the hood marked by an arrow.



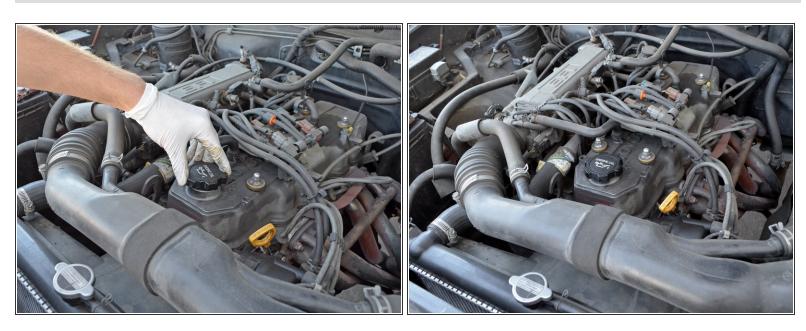




- Locate the oil filler cap. It is on the valve cover, along the cover's center line and towards the front.
- Twist the cap counter-clockwise and remove it.
- Place a funnel in the oil filler hole.



- Pour 4.5 quarts of 10W-40 oil into the engine. Use one hand to stabilize the funnel to help prevent spills.
- (i) Consult your owner's manual if you think your operating conditions call for a different oil viscosity.



- Remove the funnel and place the oil filler cap over the oil filler hole.
- Twist the cap clockwise until it is snug.

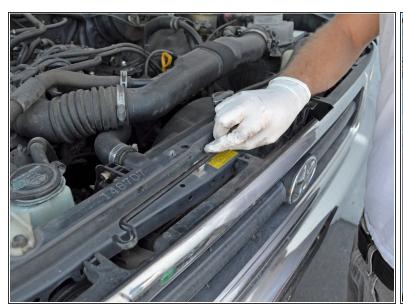






- Locate the oil dipstick. It has a yellow handle and is just to the right of the oil filler cap.
- Pull out the oil dipstick, wipe it off, place it all the way back into its hole and remove it again.
- Check the oil level on the end of the dipstick. It should be between the two holes or slightly above the top one.
 - (i) This is not your actual oil level, but a pre-check to make sure the engine will not run dry when you first start it. The oil level will drop slightly after the first run when oil fills the new oil filter.
- Add oil if the oil level is below the bottom hole of the dipstick. Place the oil dipstick all the way back in its hole.

Step 14 — Wrapping Up





- Support the hood with one hand and use your other hand to place the hood prop rod back into its holder.
 - Make sure the hood prop rod is secured in its holder to prevent damage.
- Gently lower the hood until it clicks into the secondary latch.
- Press firmly on the edge of the hood until you hear the primary latch engage.





- Start the truck and look for leaks under the truck. If there are leaks, shut the truck off and determine if the drain plug or filter need to be tightened, or if a part has been damaged.
- After running the engine for a few minutes, let it cool down for at least an hour and re-check the oil level. If the oil level is more than a 1/2" above the top hole of the dipstick you will need to drain oil. If the oil level is below the bottom hole of the dipstick you will need to add oil.
- Allow 12-24 hours for all the oil to drain out of your old oil filter.
- Take your old oil and filter to a recycling facility. Most auto parts stores and repair shops accept these at no charge. In addition, some cities and/or counties have a service where they will collect used oil and filters from your home. For more information, see the American Petroleum Institute's web page on used motor oil collection and recycling.