

Changing the Engine Oil and Filter

1. While engine is still somewhat warm take out drain plug and drain oil
2. Put plug back in
3. Remove old oil filter (be careful as oil will drain from filter)
4. Apply a small amount of engine oil to the rubber seal of the new filter
5. Tighten filter until it touches the mounting surface
6. Tighten filter an additional $\frac{3}{4}$ turn by hand
7. When a new filter is installed, engine oil typically decreases a little. Ensure that oil does not leak through the seal of the filter, then refill oil as needed.

Change oil and filter after first 50 hours and every 100 subsequent hours under normal conditions. If operating under severe conditions change every 70 hours after the first change.



Draining the Fuel Filter

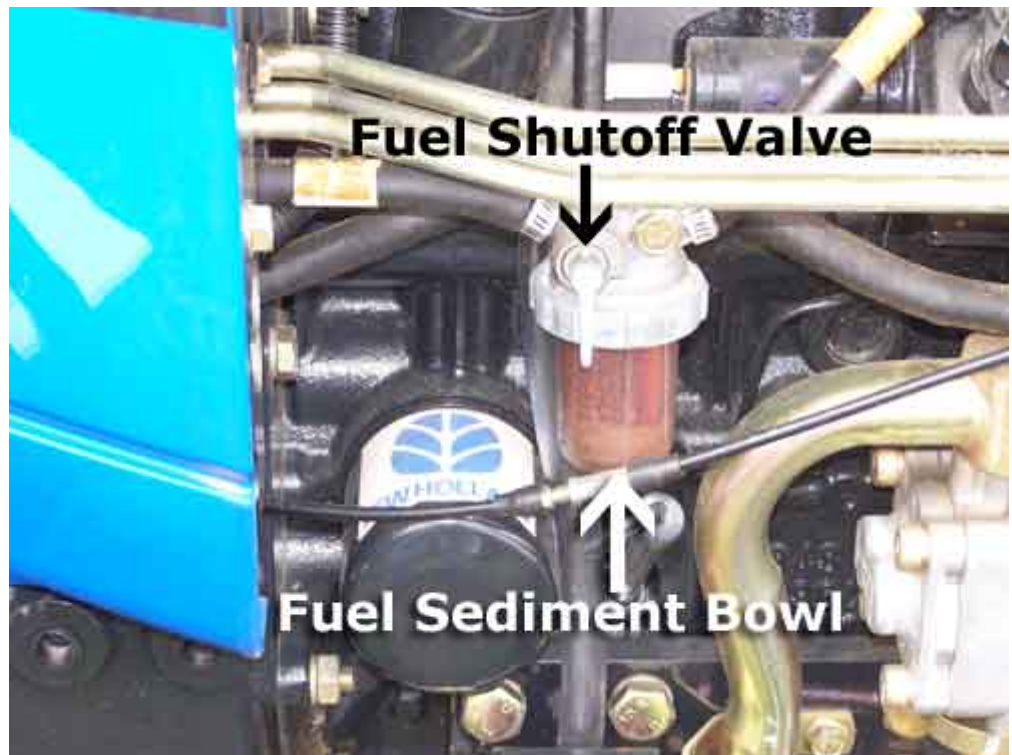
1. Ensure that there is fuel in the tank
2. Close fuel shutoff valve (so that the handle is pointing towards the "C")
3. Take fuel sediment bowl off
4. Open fuel shutoff valve and allow it to flow until only fuel is flowing from the filter base, no water
5. Close shutoff valve
6. Reattach fuel sediment bowl
7. Open fuel shutoff valve
8. Bleed fuel system

Drain fuel filter after every 100 hours of use

Changing the Fuel Filter

1. Close fuel shutoff valve (so that the handle is pointing towards the "C")
2. Take fuel sediment bowl off by rotating the retaining nut
3. Open fuel shutoff valve and allow it to flow until only fuel is flowing from the filter base, no water
4. Install new fuel element
5. Check the two O rings for any damage and replace them as needed
6. Install the spring between the bottom of the fuel filter and the sediment bowl
7. Reattach the sediment bowl
8. Open fuel shutoff valve (so that the handle is pointing towards the "O")
9. Bleed fuel system

Replace fuel filter after the first 50 hours of use, and then after every 200 subsequent hours



Changing the Air Cleaner Elements

Outer Element

1. Remove air cleaner cover by pushing down on it and rotating it counterclockwise
2. Pull outer element out of assembly
3. Clean loose dirt from element
4. Check the end of the canister for dirt
5. Blow compressed air (under 30psi) from the inside of the filter to clean it
6. Check inner diameter seals for damage (if damaged, replace element)
7. Put a light inside the element to check for paper leaks or for the bonding of the paper to the end plate (if leaks are found, replace element)
8. Push primary element back into canister and reinstall
9. Put air cleaner cover into place



Clean outer element after every 100 hours of service

Inner Element

1. Remove air cleaner cover and outer element to expose the inner element
2. Inspect the inner element by placing a light inside the element. If little or no light shines through the element it is partially clogged.
3. Clean dirt from element and canister
4. Check seals for damage (if damaged, replace element)
5. Push element back into canister
6. Push outer element over the top of the inner element and clamp air cleaner cover into place



Change inner element after every 1000 hours or every third outer element change, whichever comes first

Hydraulic Filter

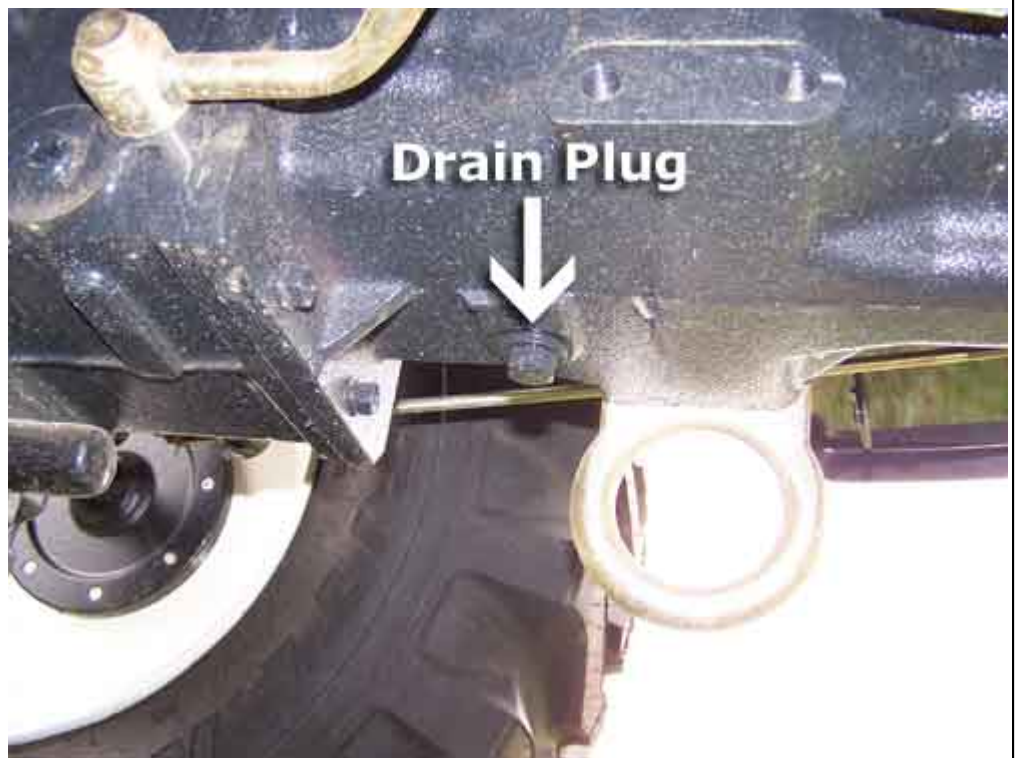
1. Remove old filter
2. Apply a small amount of oil to the rubber seal of the new filter
3. Tighten filter until it touches the mounting surface
4. Tighten filter an additional $\frac{3}{4}$ turn by hand
5. Run engine and check filter for leaks
6. Stop engine
7. Check hydraulic oil level and refill as needed

Replace hydraulic filter after first 50 hours and then after every 300 subsequent hours



Changing the Transmission, Rear Axle, and Hydraulic System Oil

1. Oil drains best when engine is at operating temperature, but not hot
2. Remove transmission and rear axle drain plugs
3. Drain oil and reinstall plugs
4. Take out filler plug and fill with NH 134 hydraulic oil to correct level on dipstick
5. Put dipstick and filler plug back in



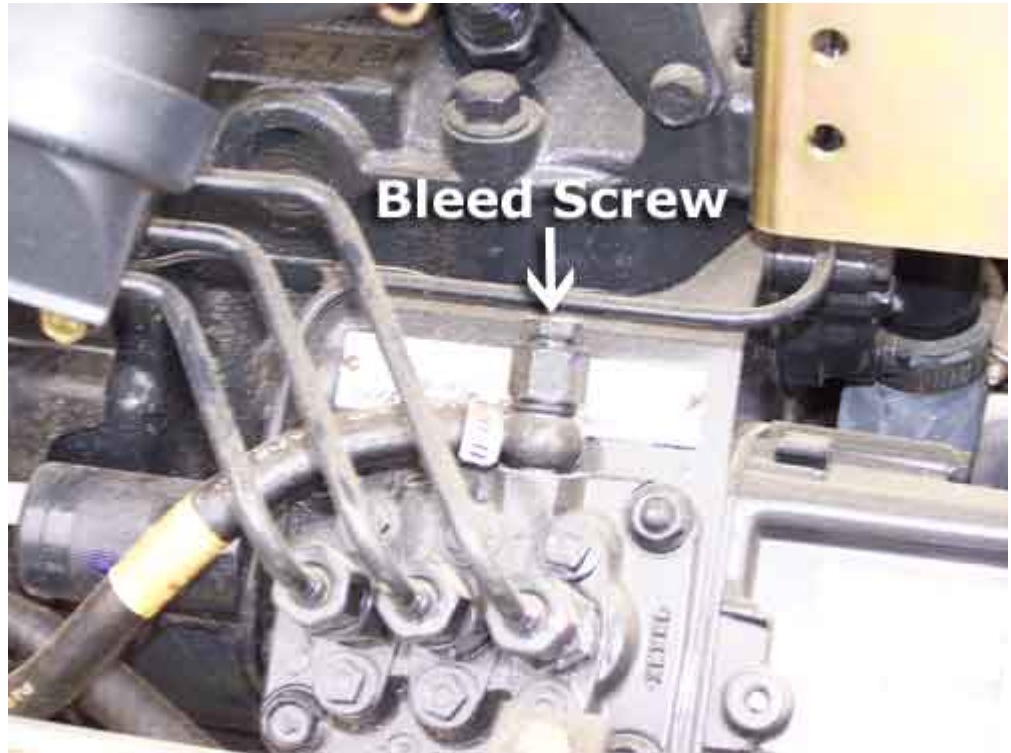
Bleeding the Fuel System

Fuel system needs to be bled for the following reasons:

- System has been drained
- Filter has been replaced
- Tractor has run out of fuel
- Fuel lines have been disconnected
- Injection pump has been replaced

To bleed fuel system:

1. Ensure that there is fuel in the tank
2. Open shutoff valve (so that the handle is pointing towards the "O")
3. Open the bleed screw on the fuel pump
4. Close bleed screw when air-free fuel begins to flow
5. Put throttle in the highest speed position
6. Turn engine over for a few seconds



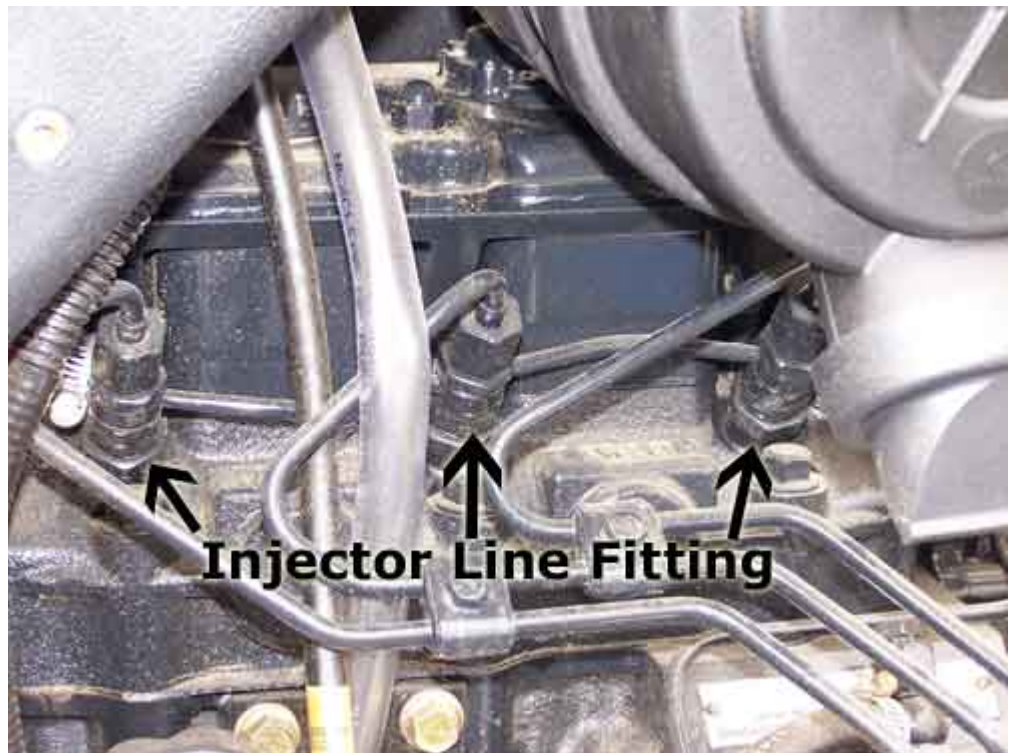
Bleeding the Injector Lines

Injector lines need to be bled for the following reasons:

- Tractor has run out of fuel
- Injectors have been replaced
- Injection pump has been removed

To bleed injector lines:

1. Loosen injector line fittings at the injectors
2. Push hand throttle to highest speed position
3. Crank engine until air-free fuel flows from each connection (do not crank engine continuously for



- more than 30 seconds)
4. Tighten fittings to 18-22 ft-lbs (24-29Nm) of torque

*If air remains in the system,
repeat the above steps*

Changing Clutch Housing Oil

1. Detach clutch assembly
2. Remove check plug
3. Drain oil from check plug opening
4. Fill with NH 134 hydraulic oil through the check plug hole
5. Oil is full when oil level is at the bottom of the opening for the check plug
6. Reinstall check plug and clutch assembly

Oil should be checked after every 50 hours and changed after every 600 hours

Changing the Power Steering Oil

1. Oil drains best when engine is at operating temperature, but not hot
2. Take out drain plug to drain oil
3. Put drain plug back in
4. Turn the filter / reservoir assembly counterclockwise to detach it
5. Apply a small amount of oil to the rubber seal of the new filter
6. Tighten filter until it touches the mounting surface
7. Tighten filter an additional $\frac{3}{4}$ turn by hand
8. Remove filler plug / dipstick and fill the reservoir with NH 134 hydraulic oil
9. Put filler plug / dipstick back in

Power steering oil needs to be changed after every 600 hours of use

Wheel Bolt Torque

Check wheel bolts regularly as follows:

1. Front wheel torque 90 ft pounds
2. Rear wheel torque 125 ft pounds

Lubrication Fittings

Grease the following points after every 50 hours (or more if operating under extremely dirty conditions)

- Steering linkage
- Front axle pivot
- Front wheel spindles (2WD)

- Power steering cylinder
- Pedal shaft – clutch and brake pedals
- 3 – point linkage

New Holland TC-Series Service