



Bio-Diesel Fuel Filter Kit

Groundsmaster® 580-D Traction Unit Models 30582 & 30583

Part No. 112-9130

Form No. 3358-123 Rev A

Installation Instructions

Note: This kit is intended for use on Groundsmaster 580-D Traction Unit Models 30582 & 30583. Also, on machines with serial numbers 260000001 and up, the fuel hoses **do not** need to be replaced.



Danger



Under certain conditions, diesel fuel and fuel vapors are highly flammable and explosive. A fire or explosion from fuel can burn you and others and can cause property damage.

- Use a funnel and fill the fuel tank outdoors, in an open area, when the engine is off and is cold. Wipe up any fuel that spills.
- Never smoke when handling fuel, and stay away from an open flame or where fuel fumes may be ignited by a spark.
- Store fuel in a clean, safety-approved container and keep the cap in place.

Replace the Fuel Filter

1. Park the machine on a level surface, lower the cutting units, stop the engine, engage the parking brake and remove the key from the ignition switch.
2. Loosen the hose clamps securing the fuel hoses to the in-line fuel filter (Fig. 1). Remove the hoses from the filter. Plug the hose ends to prevent any fuel loss. Retain the hose clamps for re-use later.

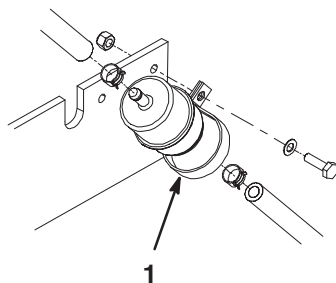


Figure 1

1. Fuel filter

3. Remove the nuts, washers and screws securing the fuel filter R-clamp to the left front engine mount (Fig. 1). Remove and discard the R-clamp and the fuel filter.
4. Using the dimensions shown in figure 2, locate, mark and drill (2) .328 inch diameter holes in the air cleaner mounting bracket which is located below the air cleaner.

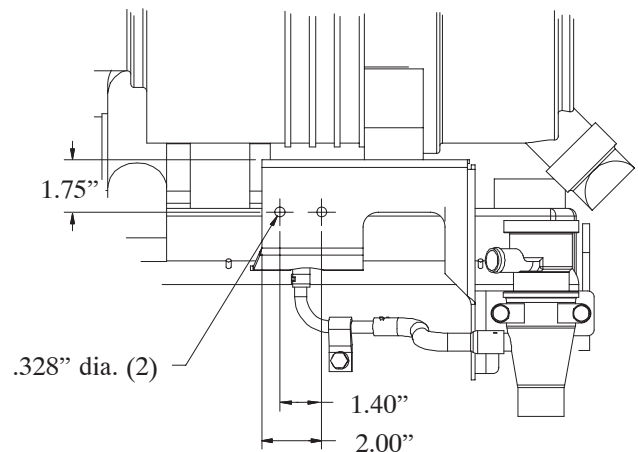


Figure 2

5. Loosely secure the new fuel filter mounting band to the air cleaner mounting bracket with (2) capscrews and flange nuts (Fig. 2). Do not tighten the fasteners at this time.

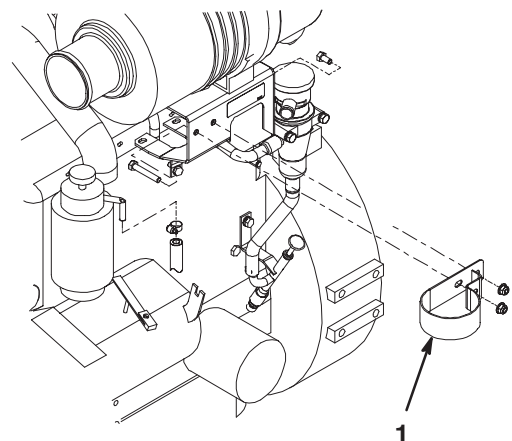


Figure 3

1. Fuel filter mounting band

6. Insert the new fuel filter into the mounting band (Fig. 4). Make sure the filter is all the way down into the band and tighten the capscrews and nuts. Position the filter in the mounting band as shown in figure 4.

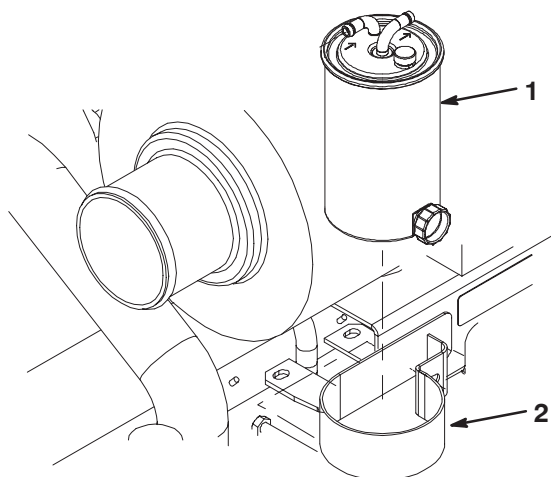


Figure 4

1. Fuel filter

2. Mounting band

Note: Make sure the breather valve, on top of the canister, and the drain plug, on the front of the filter, are closed.

Replace the Fuel Hoses

Note: On machines with serial numbers 260000001 and up, the fuel hoses **do not** need to be replaced.

Note: Before removing the fuel hoses from the machine, note how the hoses are routed and where they are secured to the machine.

1. Loosen the hose clamps and disconnect the fuel hoses from the fuel fittings on the fuel tank and the engine (Fig. 5). Discard the hoses but retain the hose clamps.

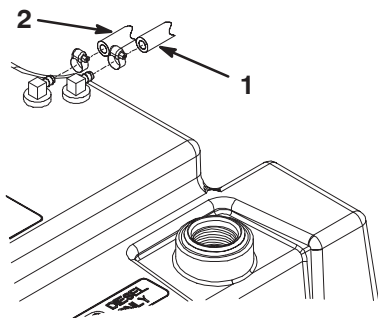


Figure 5

1. Hose to fuel filter

2. Hose from engine

2. Install the new 83 inch long hoses to the fuel tank fittings with the hose clamps removed.

3. Route the inner fuel tank return hose to the engine fitting and secure with one of the hose clamps previously removed (Fig. 5).
4. Route the outer fuel tank supply hose to the new fuel filter and secure it to the inlet fitting with one of the hose clamps previously removed (Fig. 5).

Note: Use the arrows on top of the filter to determine the correct hose installation.

5. Disconnect the hose from the fuel/water separator which was previously connected to the old in line fuel filter.
6. Connect the remaining new hose to the outlet fitting on the new fuel filter and to the fuel water separator with the hose clamps previously removed.
7. Secure the fuel hoses with cable ties.

Note: Fuel hoses must not be routed or clamped with any electrical wires or cables.

Affix Decal

1. Using the dimensions shown in figure 2, locate and affix the fuel filter kit decal to the muffler bracket. Make sure to clean the muffler bracket before affixing the decal.

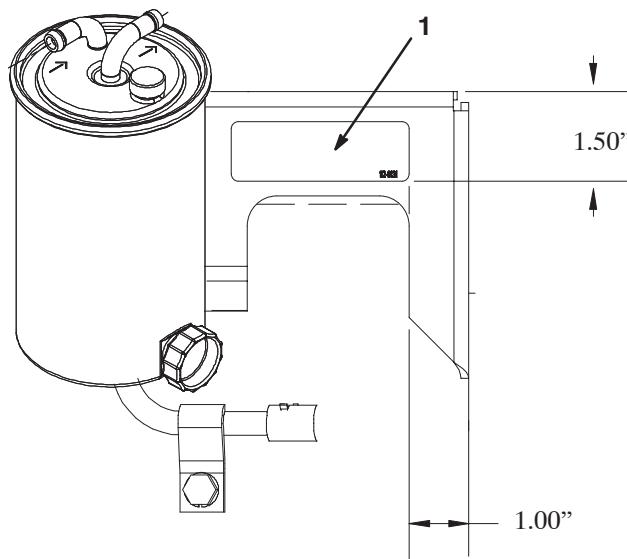


Figure 6

1. Decal

Inspection and Checks

1. Fill fuel tank with fuel. Check fuel lines and tank for leaks.

Draining Water from the Fuel Filter

Any water accumulation should be drained from the fuel filter before each use.

1. Position the machine on a level surface and stop the engine.
2. Place a drain pan under the fuel filter.
3. Open the drain plug on the fuel filter approximately one turn and drain any accumulated water (Fig. 7). Tighten the plug after draining.

Note: Because the accumulated water will be mixed with diesel fuel, drain the fuel filter into a suitable container and dispose of it properly.

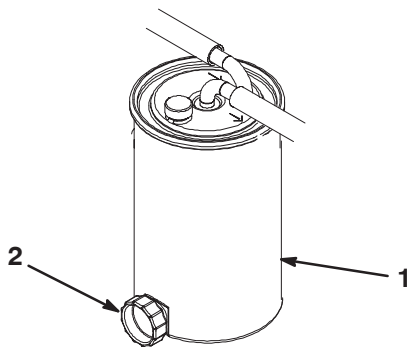


Figure 7

1. Fuel filter 2. Drain plug

Bleeding the Fuel System

1. Position the machine on a level surface. Make sure the fuel tank is at least half full.
2. Open the breather valve, on top of the canister, until fuel leaks out (Fig. 8).

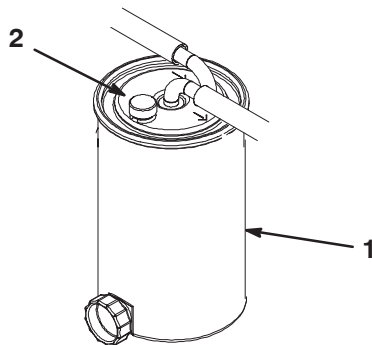


Figure 8

1. Fuel filter 2. Breather valve

3. Close the breather valve.

4. Crank the engine for 5 seconds then pause. Repeat the procedure until the engine starts and runs smoothly.

Fuel Filter

Service Interval/Specification

Replace the filter element after every 800 operating hours.

Servicing the Filter

1. Clean the area where the filter canister mounts (Fig. 9).
2. Place a drain pan under the fuel filter.
3. Open the filter drain plug and breather valve (Fig. 9).
4. Loosen the hose clamps and disconnect the fuel lines from the top of the filter.
5. Loosen the fasteners on the filter mounting band and remove the filter canister. Dispose of properly.

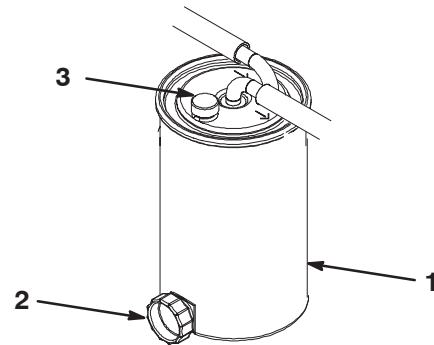


Figure 9

1. Fuel filter /water separator 3. Breather valve
2. Filter drain plug

6. Install the new filter canister and tighten the mounting band carriage bolt.
7. Install the fuel lines and clamps per the inlet and outlet markings on the top of the filter.
8. Make sure the filter drain plug is closed. Open the filter breather valve until fuel leaks out, then close the valve.
9. Start the engine and check for leaks.

