

Engine Air Filter

Changing the Outer Air Filter Element

⚠ CAUTION

The outer element must be renewed immediately if the warning light on the instrument panel illuminates.

2-3-3-1

Note: Do not attempt to wash or clean the elements - they must only be renewed.

Note: Do not run the engine with the dust valve **F** removed.

Note: Change the outer element more frequently if operating in dusty conditions. A new inner element must be fitted at least every other time the outer element is

changed. As a reminder, mark the inner element with a pen each time the outer element is changed.

- 1 Stop the engine.
- 2 Press clips **A** and lift off cover **B**. Remove outer element **C**. Take care not to tap or knock the element.
- 3 Clean the inside of cover **B** and canister **D**.
- 4 Insert a new element into the canister, check seal **E** is fully seated. Fit cover **B** with dust valve **F** at the bottom. Push the cover firmly into position and make sure it is secured by clips **A**.
- 5 Make sure that the wire is connected to the Air Filter Blocked switch.
- 6 Check all hoses for condition and tightness.

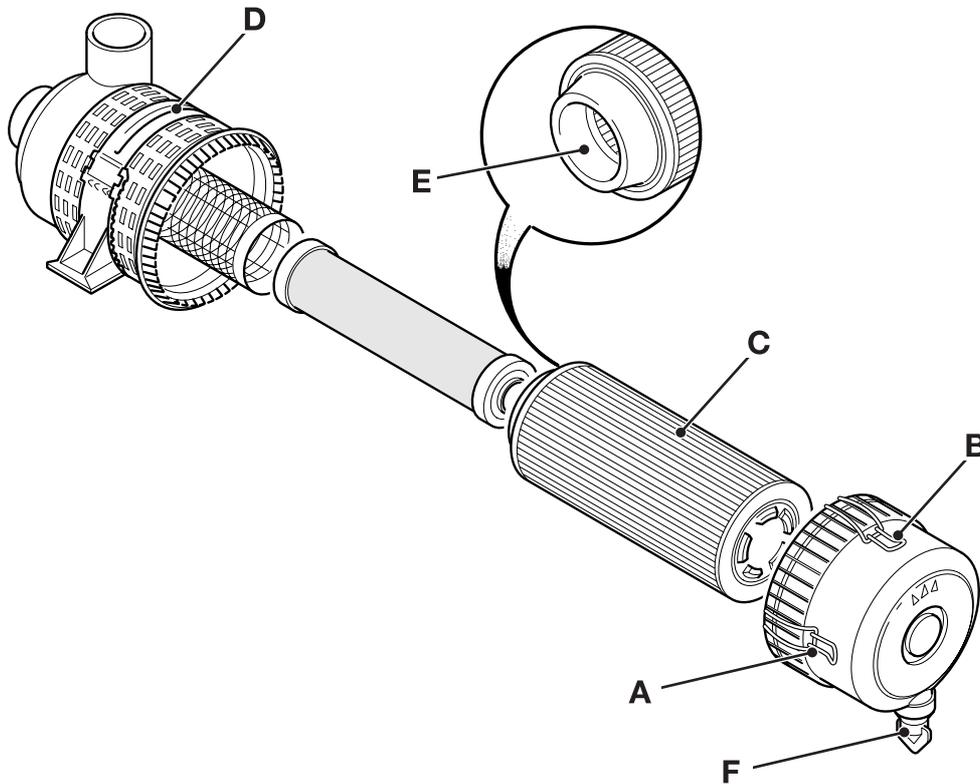


Fig 46.

Changing the Inner Air Filter Element

Note: Do not attempt to wash or clean the elements - they must only be renewed.

Note: Do not run the engine with the dust valve **F** removed.

Note: Change the outer element more frequently if operating in dusty conditions. A new inner element must be fitted at least every other time the outer element is changed. As a reminder, mark the inner element with a pen each time the outer element is changed.

- 1 Stop the engine.
- 2 Press clips **A** and lift off cover **B**. Remove outer element **C**.
- 3 Lift up pulls **J** and remove inner element **G**.
- 4 Clean the inside of cover **B** and canister **D**.
- 5 Carefully insert the new inner element **G** into the canister. Make sure it seats correctly. Check seal **H** is fully seated.
- 6 Insert a new outer element **C** into the canister, check seal **E** is fully seated. Fit cover **B** with dust valve **F** at the bottom. Push the cover firmly into position and make sure it is secured by clips **A**.
- 7 Make sure that the wire is connected to the Air Filter Blocked switch.
- 8 Check all hoses for condition and tightness.

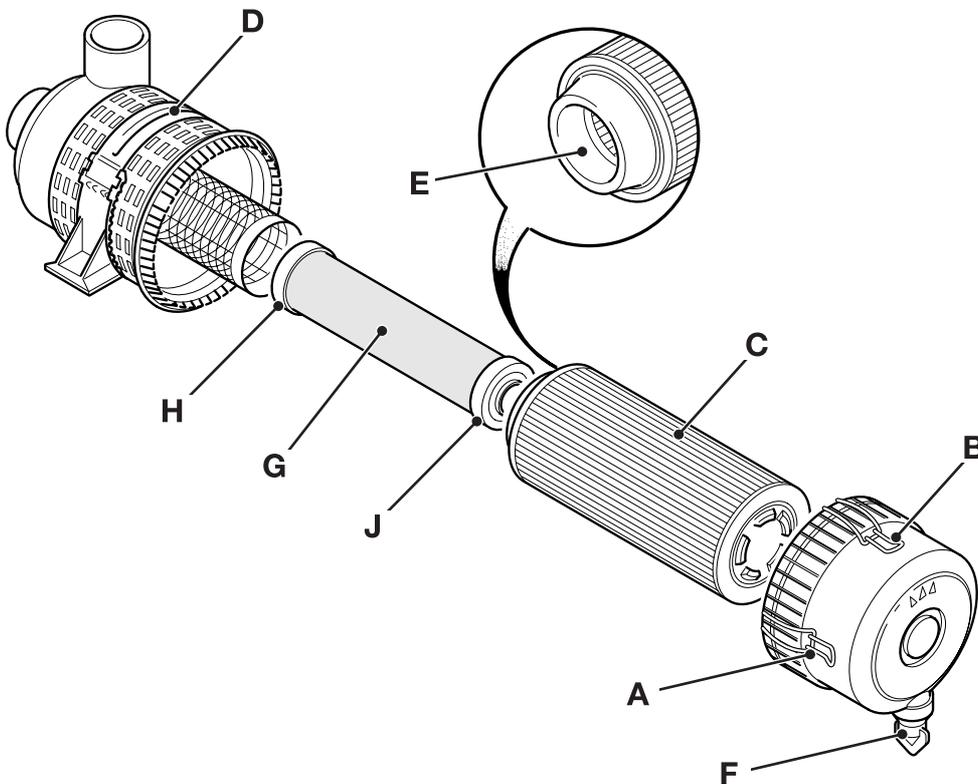


Fig 47.

Fuel System

Introduction

WARNING

Fuel

Fuel is flammable; keep naked flames away from the fuel system. Stop the engine immediately if a fuel leak is suspected. Do not smoke while refuelling or working on the fuel system. Do not refuel with the engine running. Completely wipe off any spilt fuel which could cause a fire. There could be a fire and injury if you do not follow these precautions.

INT-3-2-2_3

WARNING

Fine jets of fluid at high pressure can penetrate the skin. Keep face and hands well clear of pressurised fluid and wear protective glasses. If fluid penetrates your skin, get medical help immediately.

0177

CAUTION

Do not allow dirt to enter the system. Before disconnecting any part of the system, thoroughly clean around the connection. When a component has been disconnected, always fit protective caps and plugs to prevent dirt ingress.

Failure to follow these instructions will lead to dirt entering the system. Dirt in the system will seriously damage the systems components and could be expensive to repair.

INT-3-3-12

CAUTION

Running the engine with air in the system could damage the fuel injection pump. After maintenance, the system must be bled to remove any air.

2-3-3-11

Draining Fuel Tank Impurities

- 1 Stop the engine and remove the key.
- 2 Remove screws and take off the cover plate from below the fuel tank.
- 3 Position a suitable container under the drain.

Note: The machine is fitted with a self sealing drain plug X.

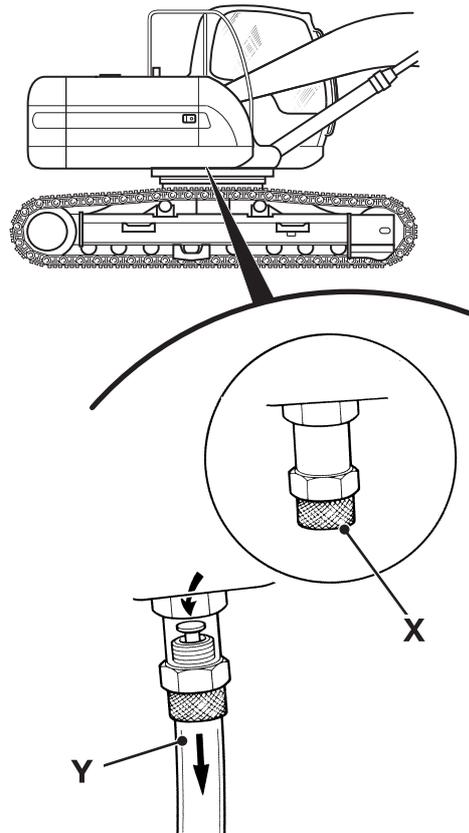


Fig 48.

- 4 Remove the self sealing drain plug outer threaded cover.
- 5 Fit the self sealing drain kit threaded union with attached pipe Y. Drain water and deposits until clean diesel oil flows.

- 6 Remove the self seal drain kit, clean and refit the outer cover. Do not over tighten the cover.

Note: The JZ140 is fitted with a round access hatch to enable the inside of the tank to be cleaned.

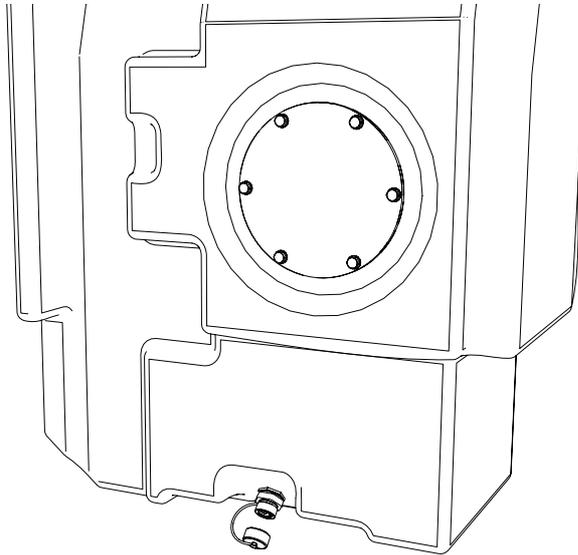


Fig 49. JZ140 illustrated

- 7 Remove the 6 x bolts securing the access hatch.

Note: Always replace the O-ring before re-fitting the hatch.

Draining the Primary Filter/Sedimenter

The filter/sedimenter should be drained at least every 50 hours, but more often if necessary.

- 1 Park the machine on firm and level ground. Stop the engine and remove the key.
- 2 Locate filter/sedimenter **A** → [Fig 50.](#) ([□ 3-65](#)).

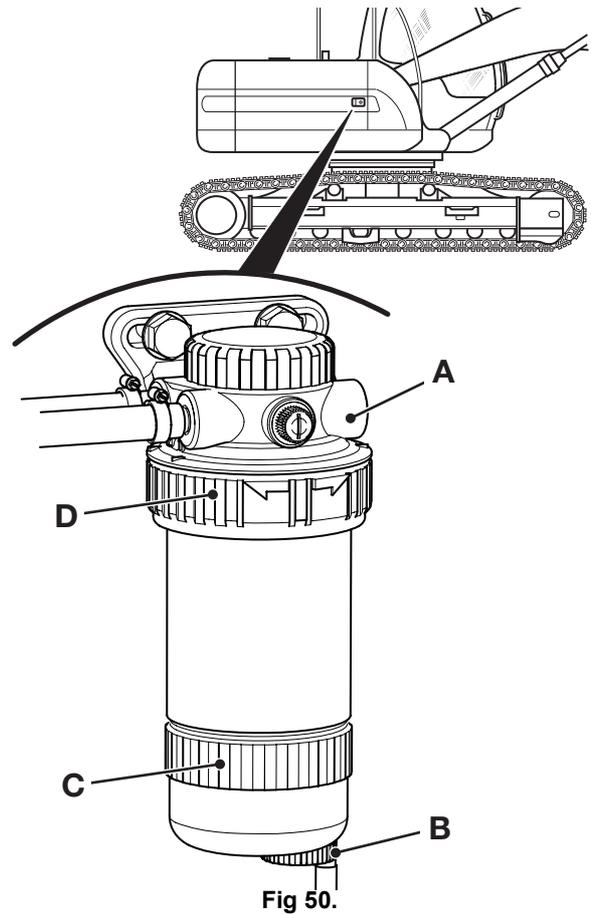


Fig 50.

- 3 Drain off the water by opening tap **B**. When the water is drained off turn off tap **B**, make sure it is turned off and secure.
- 4 If there is sediment in the bowl, after draining, support the bowl and release the locking ring **C**.
- 5 Wash the bowl in clean fuel.
- 6 Refit the bowl, secure in position with locking ring **C**.