

Operating & Maintenance Manual



Pressurized filters are utilized to remove contaminant from hydraulic systems.

Long working life of the hydraulic components and correct use of the hydraulic systems can be assured only when maintenance is performed correctly and at regular intervals.

Pressurized filters can be equipped with bypass valves, reverse flow valves, and check valves.

If the filters are not equipped with a bypass valve, only high strength filter cartridges should be used (Δp 210 bar) to avoid the risk of collapse due to the presence of contaminants retained during the filtration process.

- “H” series cartridges when bypass valves are not installed.
- “S” series cartridges when reverse flow valves and duplex filters are installed.

When bypass valves are present and during flushing operations, we recommend the use of cartridges with low mechanical strength (Δp 20 bar).

- “N” series cartridges when reverse flow valves are not installed.
- “R” series cartridges when reverse flow valves and duplex filters are installed.

In order to prevent the filter elements from collapsing due to excessive hydraulic pressure it is essential to use differential indicators that serve to inform the user of the need to change the cartridge.

Effective contamination control can be assured only by the correct use of clogging indicators.

CHANGING THE FILTER ELEMENT ON FHD 021 - 051 - 326 - 333 FILTERS

1

Depressurise the system and clean the filter.

2

Before turning the valve from housing B to housing A, open the * balancing valve (item C) by turning it counterclockwise.

Bleed the air through the plug (item A1), the screw must be turned through a maximum of one revolution.

After bleeding the air re-tighten the vent plug and close the balancing valve (item C) by turning it clockwise.

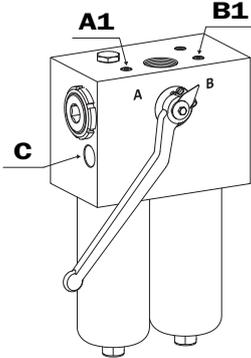


Fig. 1

3

Turn handle to divert the oil flow from housing B to housing A (Fig. 2). Unscrew the air vent plug (item B1) and open the oil drain connection (item B2) collecting the fluid in a suitable container. When the operation is finished check the condition of the seals and if OK re-assemble on the plug (item B2) tightening it fully down and re-tighten the the air vent connection (item B1).

Unscrew housing (B) using the appropriate tools and extract the filter element (Fig. 3).

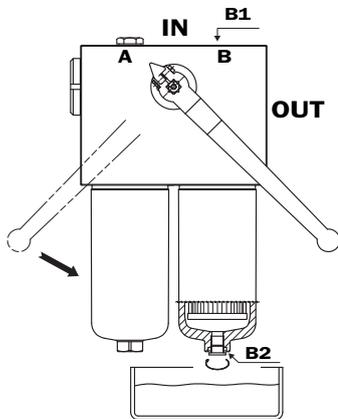


Fig. 2

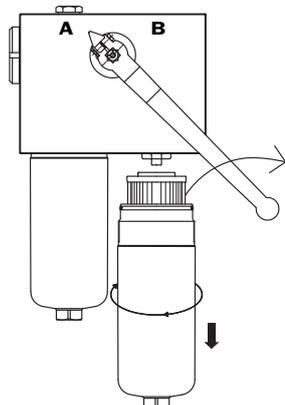


Fig. 3

4

Collect the spent oil and cartridge in a suitable container and dispose of them in compliance with statutory legislation.

!!! WARNING !!!

5

To avoid damaging the components check the thread of the housing and the seals thoroughly; check also the thread of the head. Check the condition of the seals when changins the seals lubricate the new seals with operating fluid prior to installation (Fig. 4).

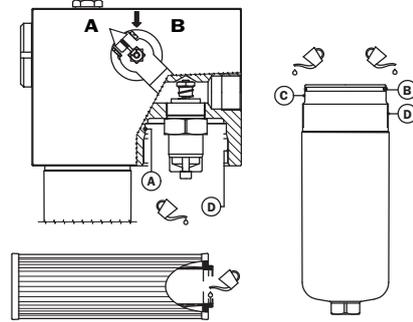


Fig. 4

6

Lubricate the filter element seal with the operating fluid prior to installation (Fig. 4).

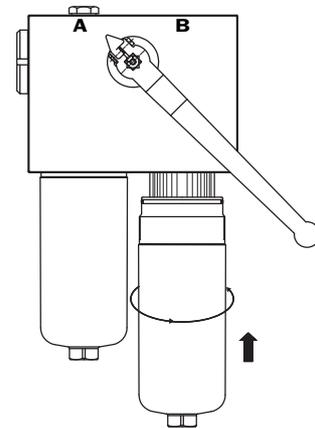


Fig. 5

7

Screw the housing onto the head using the correct tool.

WARNING:

Screw the housing fully home on the housing
“ **DO NOT OVER - TIGHTEN** ”

Open the balancing valve* (item C) by turning it counterclockwise.

Bleed the air through the plug (item B1), the screw must be turned through a maximum of one revolution.

After bleeding the air re-tighten the vent plug and close the balancing valve* (item C) by turning it clockwise.

Check for the absence of leaks.

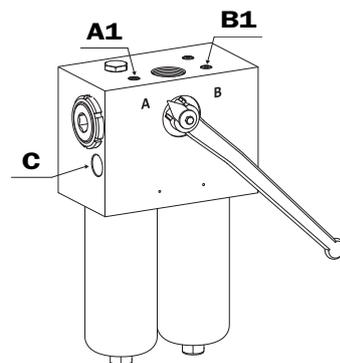


Fig. 6

8

Repeat the check when the machine has reached its operating temperature.

* The balancing valve is not present in version FHD 021.

CHANGING THE FILTER ELEMENT ON FHD 333 FILTERS HOUSING

Length 4

1

Depressurise the system and clean the filter.

2

Before turning the valve from housing B to housing A, open the balancing valve (item C) by turning it counterclockwise.

Bleed the air through the plug (item A1), the screw must be turned through a maximum of one revolution. After bleeding the air re-tighten the vent plug and close the balancing valve (item C) by turning it clockwise.

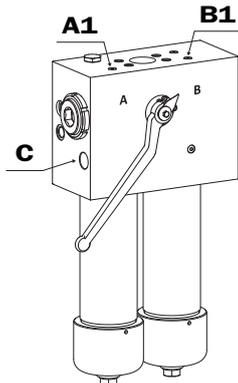


Fig. 1

3

Turn handle to divert the oil flow from housing B to housing A. Unscrew the air vent plug (item B1) and open the oil drain connection (item B2) collecting the fluid in a suitable container. When the operation is finished check the condition of the seals and if OK re-assemble on the plug (item B2) tightening it fully down and close their vent connection (item B1).

Unscrew the cover (version P01) using the appropriate tools and extract the filter element (Fig. 3).

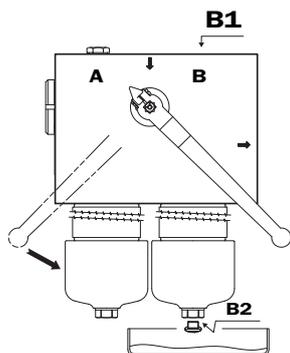


Fig. 2

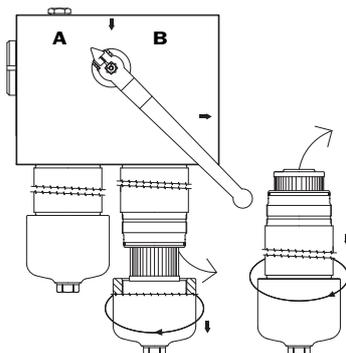


Fig. 3

4

Collect the spent oil and cartridge in a suitable container and dispose of them in compliance with statutory legislation.

!!! WARNING !!!

5

To avoid damaging the components check the cover threads (version P01) or the housing threads (version P02) and the seals thoroughly; check also the housing threads (version P01) or the head threads (version P02).

Check the condition of the seals when changing the seals lubricate the new seals with operating fluid prior to installation (see fig. 4).

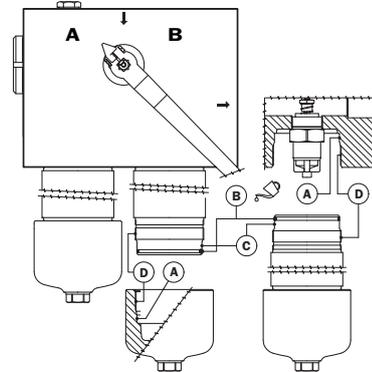


Fig. 4

6

Lubricate the filter element seal with the operating fluid prior to installation (Fig. 5).

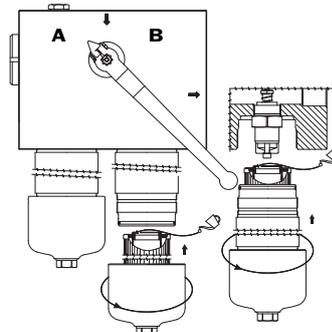


Fig. 5

7

Screw the cover onto the housing (version P01), or the housing onto the head (version P02) using the correct tool.

WARNING:

Screw down the cover / housing fully home into the housing

“ DO NOT OVER - TIGHTEN ”

Open the balancing valve* (item C) by turning it counterclockwise. Bleed the air by means of plug (item B1), the screw must be turned through a maximum of one revolution.

After bleeding the air refit the vent plug and close the balancing valve* (item C) by turning it clockwise. Check for the absence of leaks.

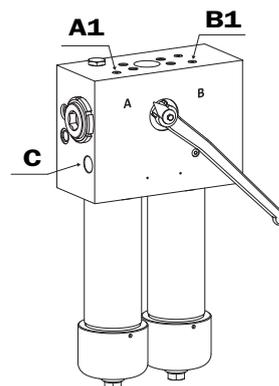


Fig. 6

8

Repeat the check when the machine has reached its operating temperature.