

Exhaust oil mist filter service for Becker U4.20 vacuum pump

A very fine filter is fitted inside the exhaust cavity of the Becker vacuum pump. This has the Becker part number 965413 00000 and is shown as item #34 on the exploded parts drawing provided in the machine instructions. In heavy use, with insufficient oil changes, or with contamination in the incoming air stream this filter may block. Blockage of the filter may show up in the following ways:

- Electric motor overload tripping out (especially on start-up)
- Oil becoming black and replacement oil discolouring rapidly.

Exhaust oil mist filter replacement

Refer to illustrations G and H below or the exploded parts drawing following (with the item numbers below being positions on the exploded drawing).

1. If the pump oil is dirty, first run the pump until hot - ideally about 1 hour. Stop the pump and drain the oil by removing the drain plug (#206). This plug is likely to be tight. To loosen, fit the Allen key securely then give it a sharp anti-clockwise blow with a soft faced hammer.
2. To maximise oil drainage of dirty oil, lock the castors at the pump end of the machine and lift the handle side of the machine
3. Barely loosen the three cap screws (#61 and #63) on the exhaust box cover plate (#60)
4. Give the cover (#60) a sharp sideways tap with a soft faced hammer to break the paint film over the gasket which seals the cover to the exhaust box casting. This will reduce the risk of breaking the gasket when the cover plate is removed. If the gasket is damaged, the replacement part is Becker part # 003000 40300.
5. Completely remove the 3 cap screws (#61 and # 63)
6. Remove the cover plate (#60), taking care not to damage the gasket
7. Unscrew the knob (#93) visible inside the exhaust cavity
8. Remove the cap (#85) and the exhaust oil mist filter (#34)
9. Discard the old filter. (It is not cleanable.)
10. Remove, clean and refit the wire mesh screen visible below the filter (if dirty).
11. Fit a new exhaust oil mist filter and replace the cap (#85) and the knob (#93)
12. Replace the exhaust box cover plate (#60) and fit the 3 cap screws – NOTING THAT THE BOTTOM ONE (#63) HAS THE COPPER SEALING WASHER
13. If the oil has been previously drained, fill the pump with clean oil as follows:

In ambient temperature range

10°C to 30°C (50°F to 86°F)

20°C to 40°C (70°F to 100°F)

Use oil viscosity grade

ISO68 or SAE20

ISO100 or SAE30

The machine should now be ready for use.

Regular oil changes important

Regular oil changes will help prolong the service life of the exhaust oil mist filter. The oil should be changed whenever it is noticeably discoloured, or every 500 hours, whichever is the sooner.

