

1. Removal

At every change of coalescer elements, we recommend that the separator element(s) are removed from a filter/water separator and tested. The green coating of the screen shall not be touched with the bare hands. Use clean gloves or a sheet of plastic between your hands and the screen.

2. Inspection

Inspection of the green coating for soiling and for nicks, cuts and other flaws. If the element appears clean and undamaged, testing shall be done as described detailed on item 3. If the element is dirty, it shall be cleaned as described on item 5. Minor damages of the screen (holes, cuts or abrasion of coating) may be repaired as described on item 6. If this is not possible, the element shall be replaced.

3. Testing

Hold the element as shown in figures 1a-c and slowly pour clean tap water on the coated screen from a height of approx. 1" (2,5 cm). Do not spray the water. Avoid making gushes or jets of water. Do not pour the water from more than 2" (5 cm) above the element. Ensure that the water can run freely over the surface of the element. Rotate the element so that water can flow over the entire screen surface and every portion of the screen comes in contact with the water. Hold the upper side of the Teflon® coated screen in horizontal position to ensure that the water does not cascade on to the folded-over edges of the end caps where the screen is held. If the water were to penetrate at this point, this would give a false test result.

We recommend testing the separator element according to JIG 1, A5.2.4: "[...] The separator(s) needs to be completely wet with aviation fuel to perform a valid test [...]."



Fig. 1a: correct

Fig 1b: correct

Fig. 1c: correct



Fig. 2a: wrong

Fig. 2b: wrong

Fig. 2c: wrong

4. Evaluation

If the screen is not soiled or damaged and the coating is in perfect condition, the water will break up into beads, rolling off the surface (fig. 3a) without seeping into the pores of the screen and the inside of the element. The element has passed the water repellance test and can be re-installed as detailed under item 7. If the screen is dirty, the water will not form beads (fig. 3b). It will adhere to the screen and seep into the pores. The element has not passed the water repellance test and must be cleaned and dried as detailed under item 5.

If water penetration is due not to soiling but to mechanical damage such as holes, cuts or areas where the coating is scraped away, please see item 6. If, after repeated cleaning the element continues to fail the water repellance test or if the screen is so badly damaged that it cannot be repaired as detailed under item 6, the element must be replaced.

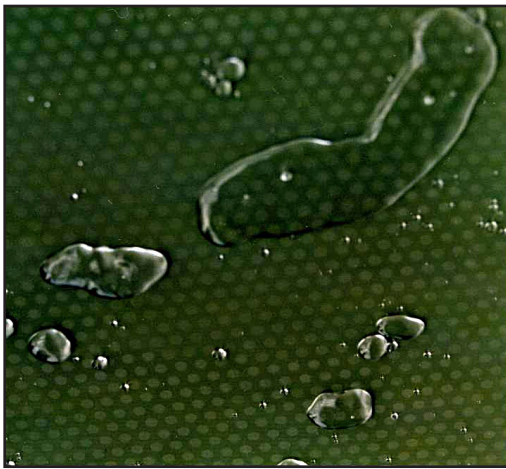


Fig. 3a: correct



Fig. 3b: wrong

5. Cleaning

Separator should be cleaned only with hot water at between 50 and 90°C without detergent or soap. Pour the water on the green coating at moderate speed without forming a jet. Do not use a steam cleaner (contains chemical detergent). If the screen is heavily soiled you can also use a very soft brush (but not a metal brush). The element shall not be touched with the bare hands. After testing it should be examined for proper function as detailed under item 4.

6. Repairing

Holes, cuts or other damage to the screen can be repaired provided that they are not larger than 3 mm. We recommend to repair the damaged point with our Separator Repair Kit. After repairing the element, test and evaluate as detailed under item 3 and 4.

7. Re-installation

When re-installing the element, put on a clean pair of gloves or hold the element with a plastic sheet.