



**PRODUCT TECHNICAL BULLETIN 35834C:
EXHAUST PARTICULATE FILTER SEALS
& NEW COUGAR FILTER**
(SINGLE AND DUAL CANISTERS)

Date: 18-06-2023
Issue: C
Prepared for: Industry
Prepared by: Bill Davidson

12-14 Martin Drive
Tomago 2322
02 4028 0400

REVISION:C



1-5

35834



Background:

The original communication 35834 was initially issued to clarify the correct installation of sealing method for the originally type tested filter with no external seals.

This updated communication seeks to clarify the different versions of filter sealing for the original type tested filter and the new Cougar filter available for this arrangement. Where an incorrect sealing arrangement is installed, exhaust gas may be able to bypass the exhaust filter and exit via the particulate filter lid or exhaust pipe, reducing the filter efficiency and effectiveness.

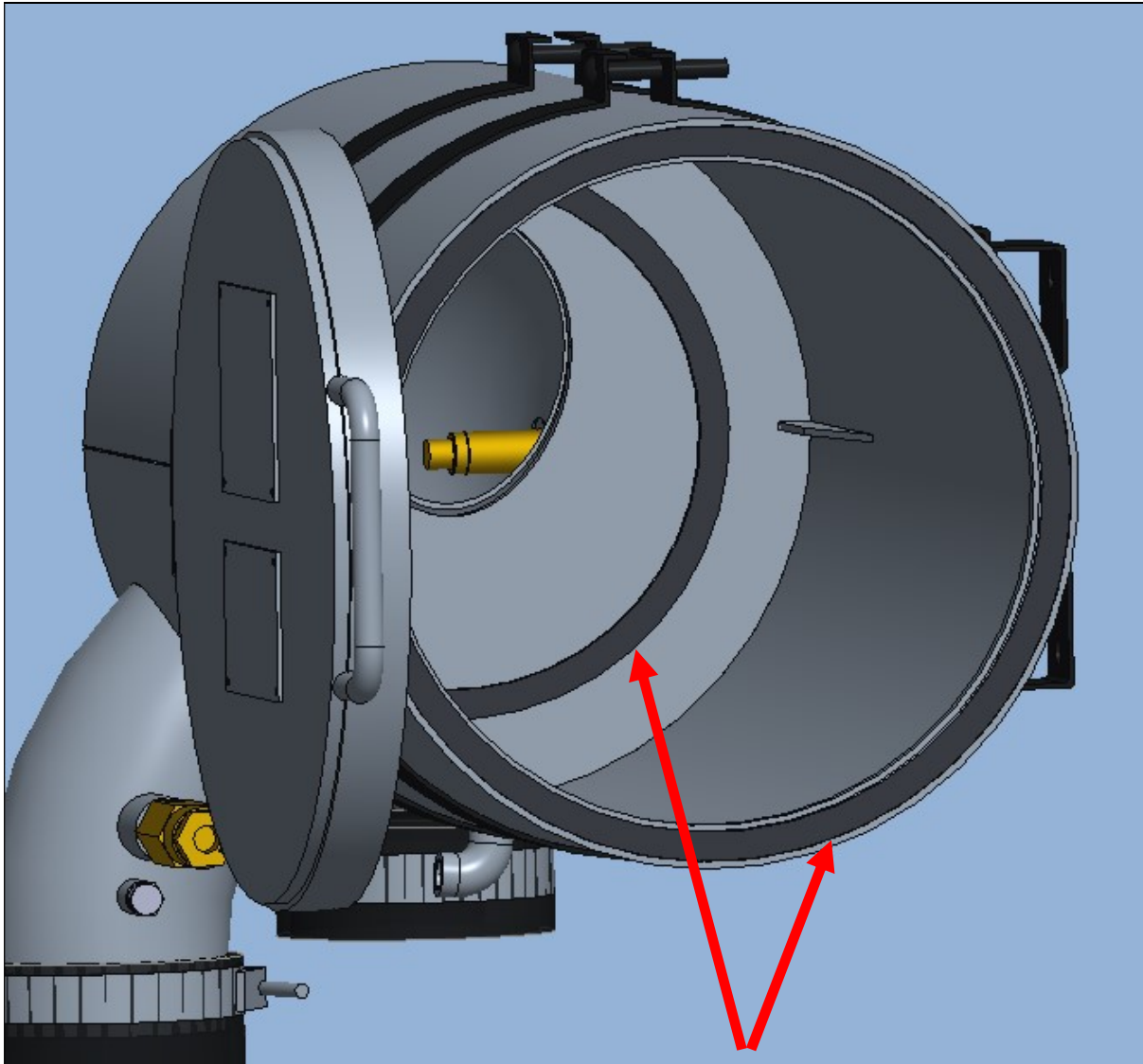


Figure 1: Single filter housing depicting seal locations as used on Minecruisers and PETs

Communication:

Upon review of information regarding the sealing arrangement, it is apparent that clarification of information is required to enable consistent correct installation of the various filters and sealing arrangements, including the new Cougar Filter 7-181038-711.

New Cougar Long Life Filter:

The New Cougar filter is now registered for use on Grader/Predator and MineCruiser Engine packages MDR 114056 DES, boasting the below benefits;

- Filter balances pleat count against longevity to provide an optimised solution when compared against original and aftermarket filters
- Offers 5.6 times improvement in life when compared against cheaper alternative (test safe report TR36995)
- Integral seal on end of canister
- Savings potential of a factor of four+.
- Small improvement in diesel particulate signature over original type tested filter
- Small reduction in efficiency over cheaper filter, offset by large reduction in required filter changes.
- Note: recommended changeout back pressure is 10 kilopascals.
- Reputable global filter supplier

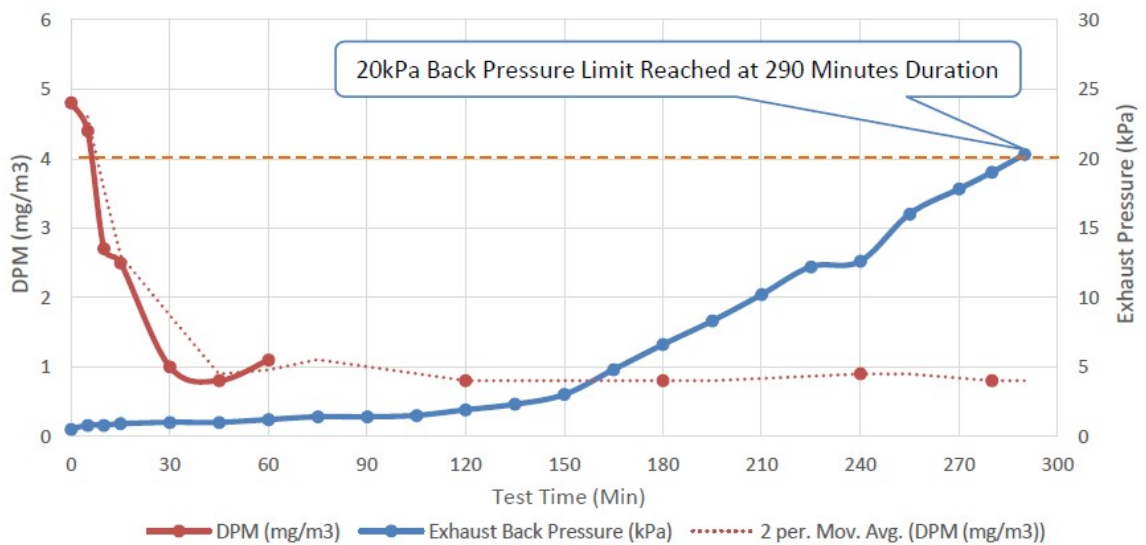


Figure 2: Cougar Long Life Filter duration test

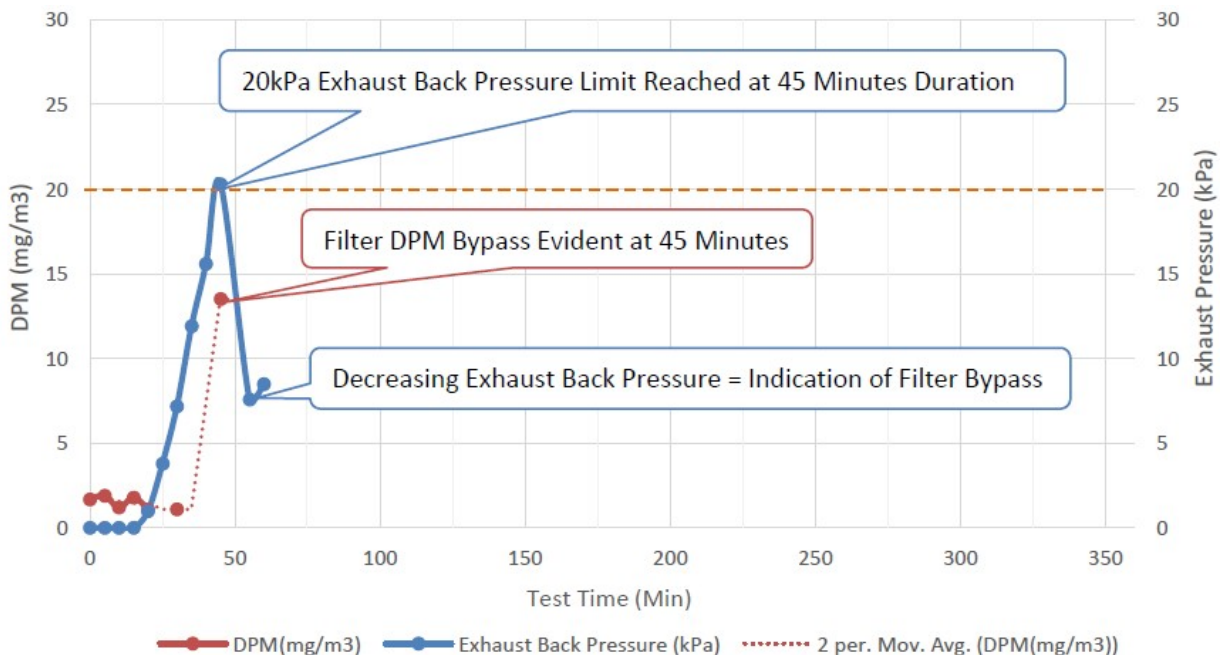


Figure 3: Cheaper alternative filter – Fit for Purpose Test

The original installation for the single filter housing has no seals on the filter and relies on 'foam sealing tape' to be installed on both of the indicated location on the particulate filter canister below.

Later filter designs, including Cougars new long-life filter 7-181038-711, have a seal installed on the open end of the filter.

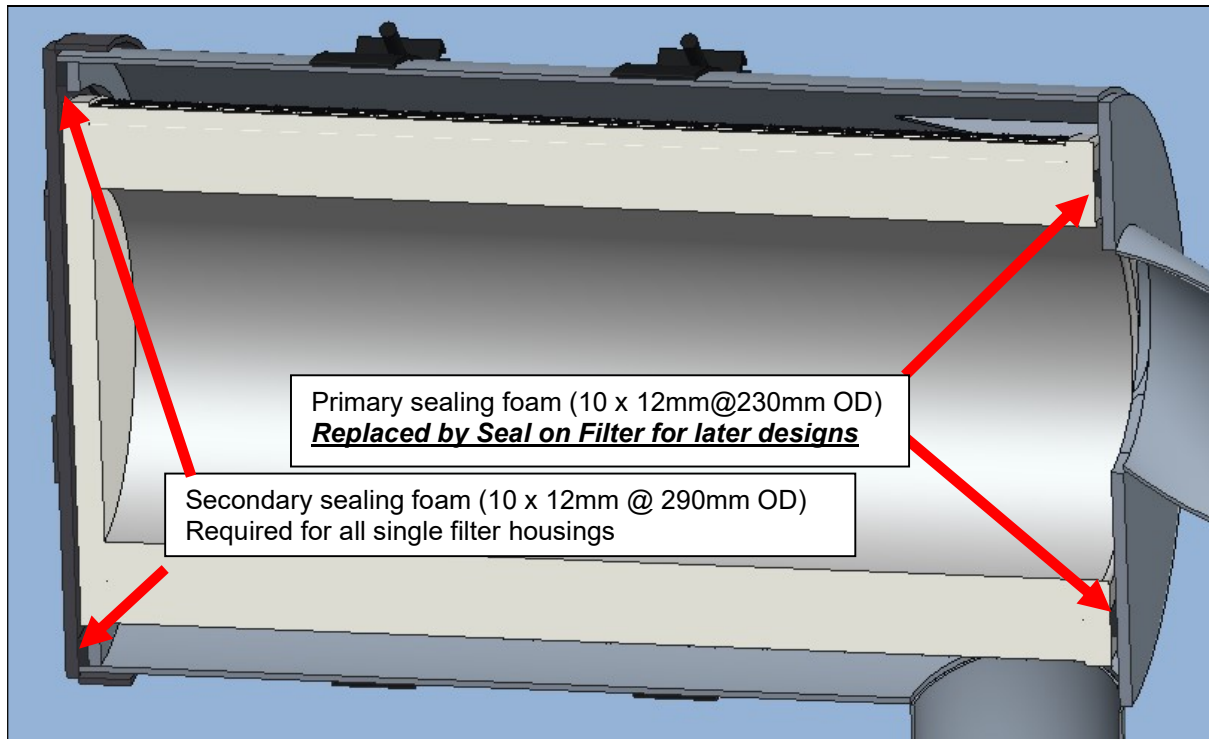


Figure 4: Sectional view of single filter arrangement depicting seal locations

When the new Cougar filter is used in the single filter housing, the Primary Sealing foam must be removed from the canister (not the filter).

The new cougar filter has the added benefit that the seal is renewed, each time the filter is replaced. The usual precautions, of gloves, appropriate dust mask should be observed when removing the foam tape/replacing filters.

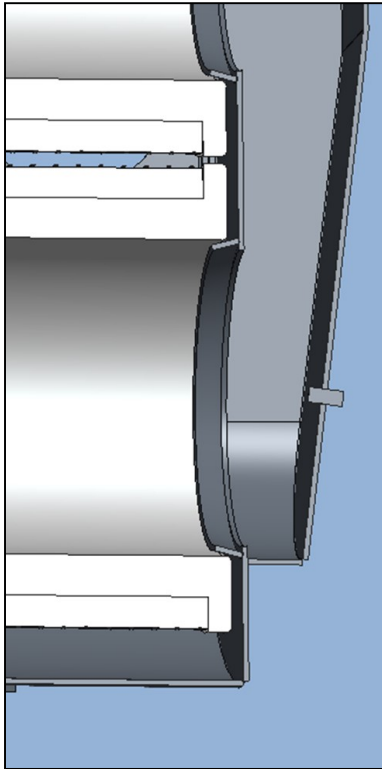


Figure 5a: No Seals

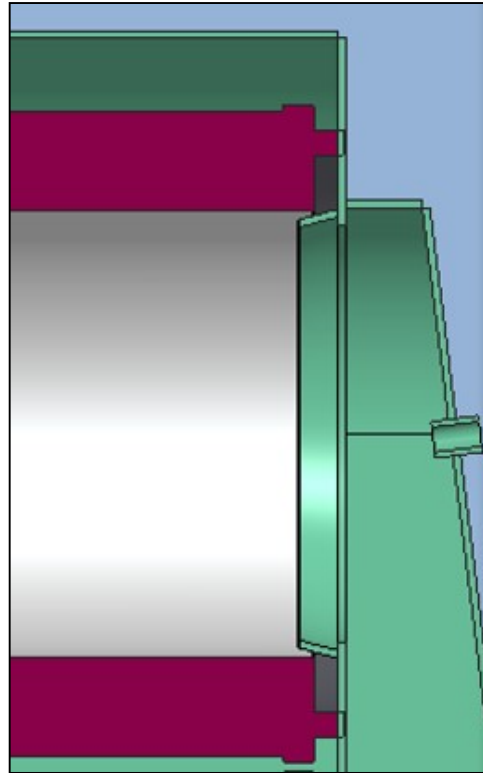


Figure 5b: Additional Seal on open end

Dual Filter arrangement depicting original filter canister with no seals (Figure 5a) and new Cougar Filter with a Seal on the open end of the filter (Figure 5b)

The new Cougar long life filter may be used in a dual filter housing without modification as per figure 3b above.

Recommendations

Where filters are used, filter sealing assemblies should be inspected to ensure seals are present and correctly installed during filter installation as per the information contained in this bulletin.

The New Cougar Filter is available for purchase via part number 7-181038-711.
Foam sealing tape is available for purchase via part number P/N MC42009.

Orders may be placed by emailing orders@cougarme.com.au

Owners and end users are reminded that where non OEM filters are installed, filters must be approved for use with the specific engine package they are being used.

Please distribute this bulletin to all relevant personnel

Cougar Mining Equipment Contacts in respect to this bulletin:

Technical Services Manager
Operations Manager NSW
Operations Manager QLD
Product Support Manager (QLD)
Spare Parts Co-ordinator (QLD)

Bill Davidson 0409 562 385
Garrad Latham 0407 272 296
Herb Cranston 0411 742 079
Cameron Pike 0428 628 944
Sean Spencer 0466 346 354
Sean.spencer@cougarme.com.au

Spare Parts Manager

Greg Davies 0422 025 295
greg.davies@cougarme.com.au