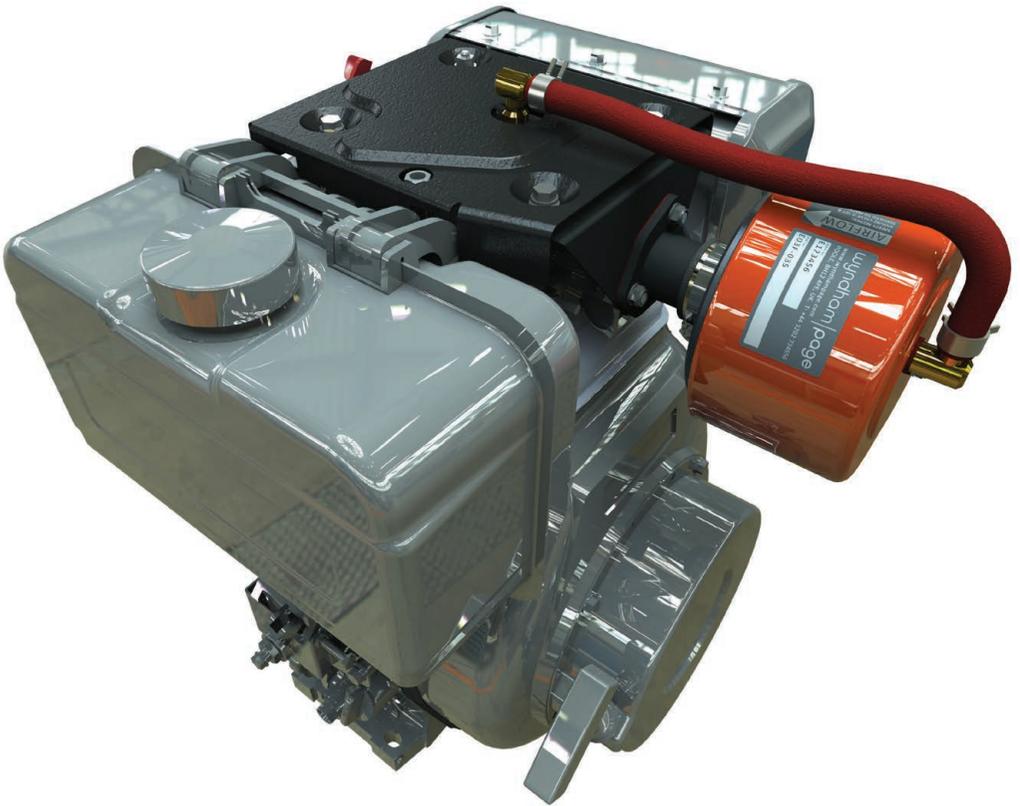


E1187X Breather Kit

For Yanmar L100N Engines

Kit of parts for sealing the existing crankcase breather and venting via the E03F or E03FM air intake valve.



wyndham | page

Application

When installing a diesel engine shutdown valve, such as the Wyndham Page E03F/FM, it is a requirement that any engine crankcase breather arrangement venting directly into the intake ports or into the air intake system downstream of the shutdown valve must be sealed and replaced by an external breather system vented either to atmosphere [if permitted at the site the equipment is to operate] or connected to the intake system upstream of the valve.

The E1187X Breather Kit is designed to seal the internal Yanmar L100N engine crankcase breather and facilitate an external connection into the air filter cover of the Wyndham Page E03F/FM engine shutdown valve.

This kit is not suitable for canopy versions of the L100N engine; please contact Wyndham Page sales for details of alternative kits for this type of engine.

Description

The Kit includes all parts required to convert a Yanmar L100N engine for mounting a Wyndham Page E03F/FM Valve and for replacing the breather arrangement as described above. The E03F/FM valve is not included in the kit and should be ordered separately.

Principle of Operation

The internal crankcase breather arrangement is sealed and re-routed by bonding of a single Elbow fitting into the Rocker Cover. The Rocker Cover must be drilled by the customer prior to fitting the Elbow. The standard Air Filter Cover and Housing are replaced with alternative kit parts to enable mounting of the E03F/FM valve with integrated air filter. The new breather arrangement is then connected to the valve upstream of the air filter via the supplied silicone hose.

Order Coding

E1187X

Breather Kit for Yanmar L100N

E03F038

E03F valve with 38mm outlet to suit Breather Kit

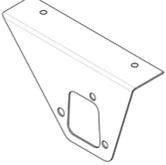
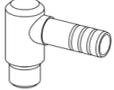
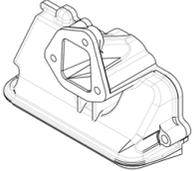
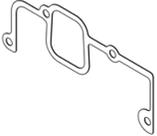
E03FM038 RXX

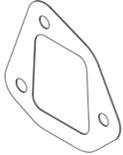
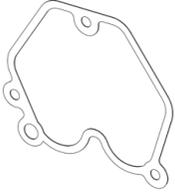
E03FM valve with 38mm outlet to suit Breather Kit

If requested when placing order the E03F/FM Valve Filter Cover will be modified and fitted with the Elbow E1216X at the factory.

Refer to separate E03F-E03FM Handbook for full details on selection and installation of the E03F/FM Valve.

Parts List

Part No	Description	Qty	
E1147	Intake Adaptor Yanmar L100N	1	
E1213	Cover Support Bracket: Yanmar L100	1	
E1212X	Yanmar L100 Elbow Assembly	1	
E1216X	Filter Cover Breather Elbow Assembly	1	
P1114	Fibre Washer M12	1	
P1119	M12 X 1.5 Thin Nut	1	
P1115L050	Silicone Vacuum Hose: 10mm ID X 3mm Wall	0.5M	
P1120	Jubilee Clip - 20mm	2	
P1116	Yanmar L100N Intake Manifold: 114310-12050	1	
P1130	Yanmar Gasket: Air Cleaner - 114310-12210	1	

Part No	Description	Qty	
P1131	Yanmar Gasket: Cleaner - 114699-12210	2	
P1133	Yanmar Gasket: Rocker Cover - 114310-11310	1	
P1117	Yanmar Stud M6 X 90: 114310-45360	1	
P1118	Yanmar Stud M6 X 16: 26226-060142	2	
P1129	Yanmar Nut M6: 114299-12300	2	

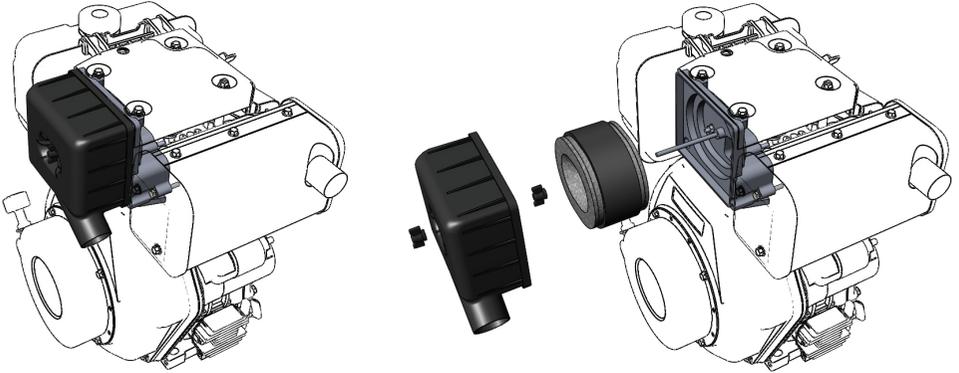
Suggested Tools & Sundries (Not included in kit)

SUGGESTED TOOLS AND SUNDRIES (NOT INCLUDED IN KIT)	
Description	Qty
Adhesive: Loctite 638 Retaining Compound	1
Activator: Loctite SF764	1
9,5mm Drill	1
10mm Drill	1
13mm Drill	1
30mm Sheet Metal Hole Cutter	1
10mm AF Combination Spanners	2
10mm AF Socket	1
10mm AF Long Socket	1
Swivel Drive	1
10cm Extension Drive Bar	1
20cm Extension Drive Bar	1

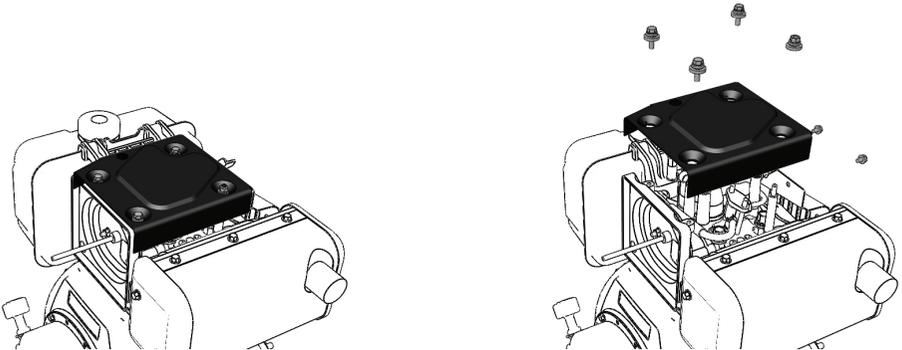
Breather Kit Installation

Notes:

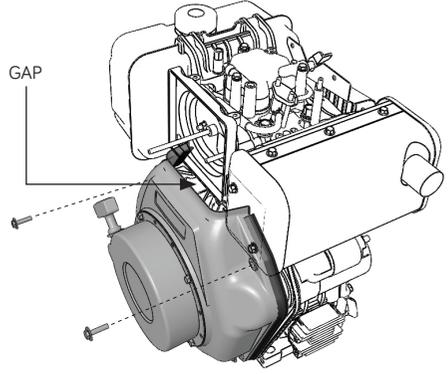
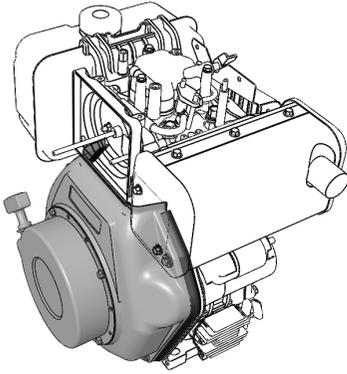
- The appearance of some engine components shown below may vary depending on exact specification of the engine package.
- Retain all parts and fasteners for reuse unless stated.
- All Torque settings as per Yanmar standard torque values table.



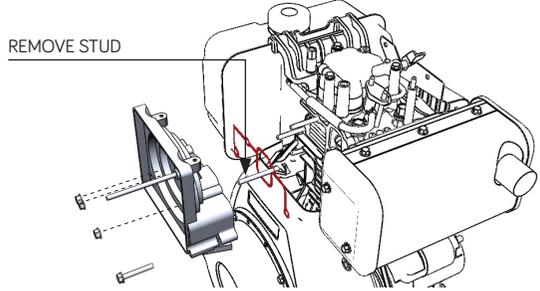
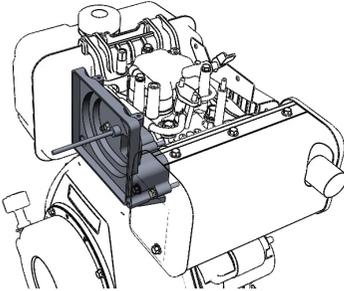
1. Remove M6 plastic wing nut from filter cover, and remove cover (discard parts).
2. Remove M6 filter retaining wing nut, and remove air filter (discard parts).



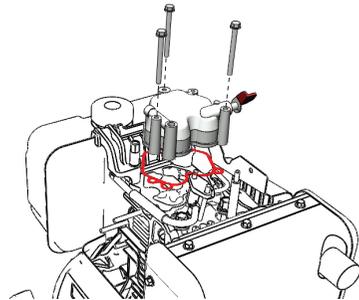
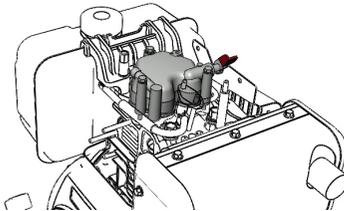
3. Remove 3 off M6 x 20 bolts and 1 x M6 nut from the top of rocker cover hood and 2 off M6 x 8 bolts from the back of rocker cover hood.
4. Remove the Rocker Cover Hood.



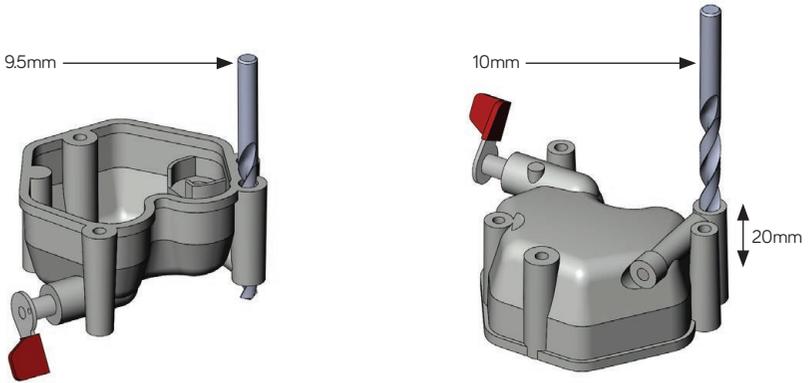
5. Remove 2 off M6 x 25 bolts from top of flywheel cover. Loosen 2 off M6 x 25 bolts at bottom of flywheel cover at least 12 turns (do not remove these 2 bolts). This allows the flywheel cover to pull forward at the top to allow the removal of the filter housing.



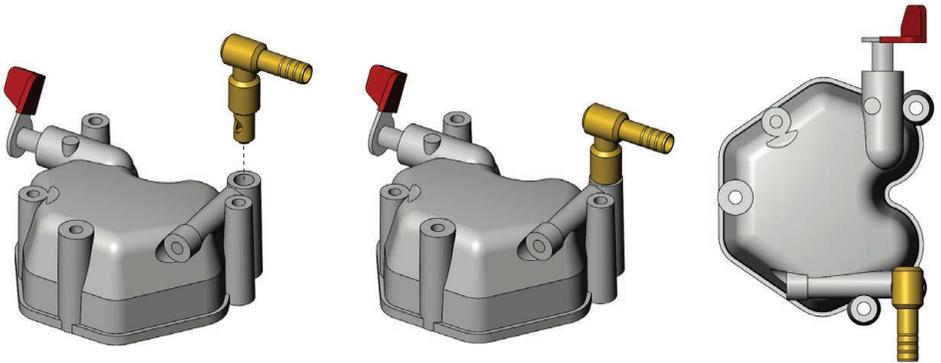
6. Remove 3 off M6 nuts from interior of filter housing, and 1 off M6 x 40 bolt from right hand side of filter housing.
7. Remove the Filter Housing and Gasket (discard parts).
8. Using 2 off M6 nuts locked together, remove the M6 x 50 stud from the right hand side of the square air intake hole.



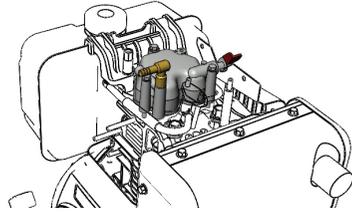
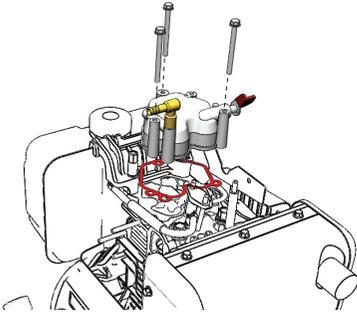
9. Remove 3 off M6 x 65 bolts from top of rocker cover & remove Rocker Cover and Gasket.



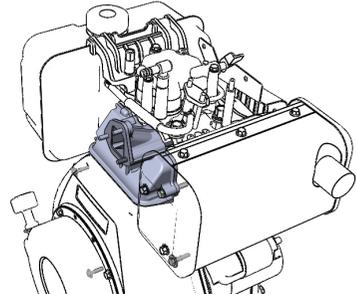
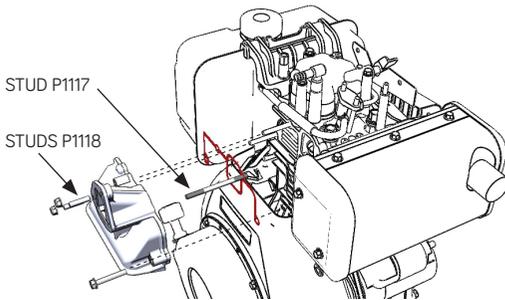
- 10 From the underside of the rocker cover, drill a 9.5mm dia hole through the top of the air vent stack.
- 11 Drill down from the top of the air vent stack, 10mm dia x 20mm deep. CLEAN OUT SWARF.



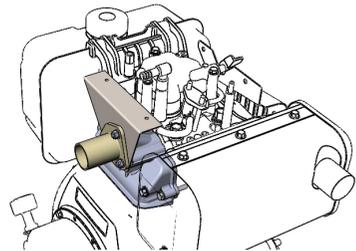
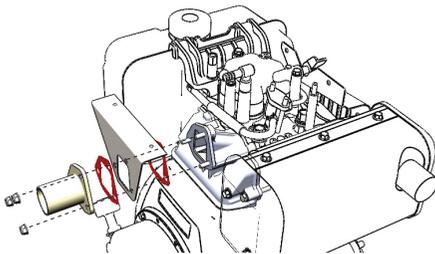
- 12 Bond Elbow E1212X into the air vent stack. The Elbow also plugs the airway to the cylinder head. (Loctite, 638 retaining Compound, SF764 Activator and SF7063 cleaner recommended). Ensure that the side air vent hole in the Elbow aligns with the cross drilling in the rocker cover. This will leave the hose tail pointing directly forwards, towards the air intake filter.



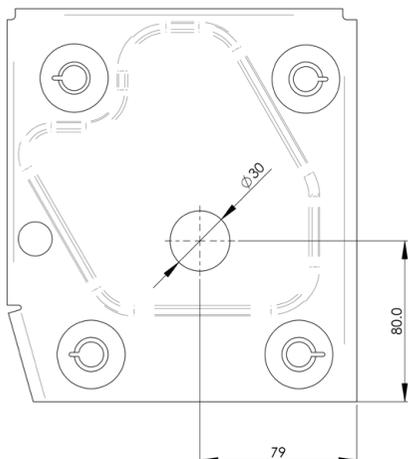
- 13 Refit the Rocker Cover & Gasket P1133.



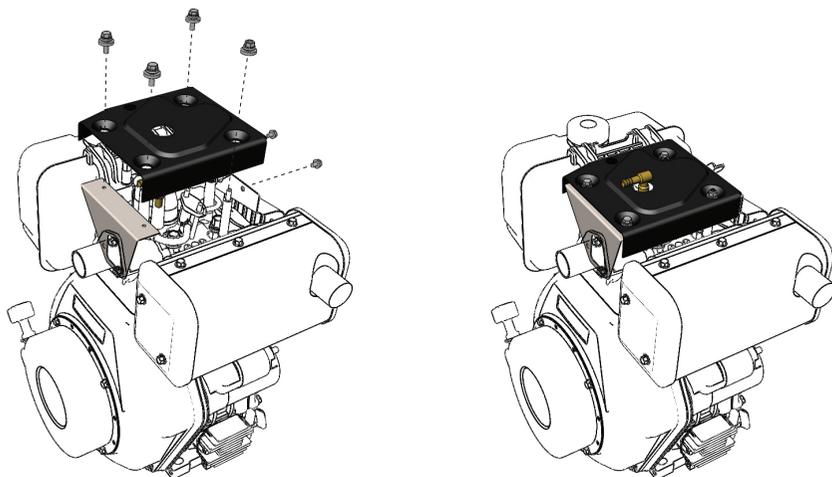
14. Fit a replacement stud P1117 (M6 x 90) to the right hand side of the air intake manifold.
 15. Slide Intake Manifold P1116 and new Gasket P1130 onto the new and existing studs, secure with 2 off M6 nuts on the 2 left hand studs, and 1 off M6 x 40 bolt at the right hand side.
 16. Fit 2 Studs P1118 (M6 x 16) into the top and left hand threaded holes in the Intake Manifold flange.
 17. Refit the Flywheel Cover as reverse of step 5.



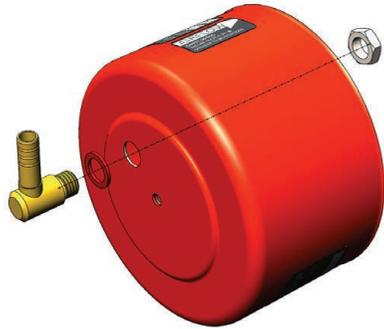
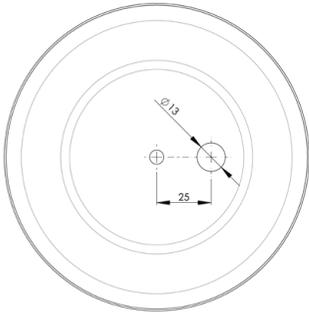
18. Slide a Gasket P1131 & the Hood Support Bracket E1213 over the 3 x Intake Manifold studs.
 19. Slide the a 2nd Gasket P1131 then the Intake Adaptor E1147 over the 3 x Intake Manifold studs and secure using 3 x M6 nuts P1129.



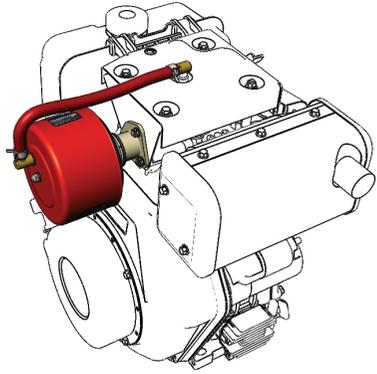
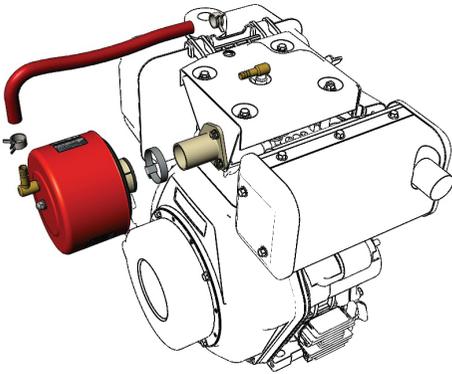
20. Drill hole in the Rocker cover Hood as shown above or make similar square aperture.



21. Manipulate hood over elbow then refit rocker cover hood using retained fasteners in reverse of step three.



22. Remove the filter cover from the E03F/FM valve as per the associated handbook and drill hole as shown above.
23. Fit Elbow E1216 & Fibre Washer P1114 then secure with Nut P1119. Refit Filter cover to Valve.



24. Slide the E03F/FM valve onto the Stub Pipe and clamp using the supplied Jubilee Clip
25. Cut the Breather Hose P1115L050 to suitable length, fit between the elbows and secure using the Jubilee Clips P1120.
26. Set up and test the E03F/FM valve as per instructions in the associated handbook.

wyndham | page

Unit 1c Chalwyn Industrial Estate, Parkstone, Poole,
Dorset BH12 4PE United Kingdom

Tel: +44 (0)1202 734 656

Email: sales@wyndhampage.com

www.wyndhampage.com