

EXTENDING THE LIFE OF YOUR TURBOCHARGER

The two leading causes of turbocharger failure-

1. Oil Contamination causes bearing damage.
2. Exposure to excessive temperatures - HEAT SOAK.

This damage occurs because the flow of oil to the bearings has been affected. Maintaining the bearing lubrication system is therefore critical to the performance and continued longevity of a turbocharger.

The **Turbo Saviour** tackles both of these causes of failure by providing oil flow after the engine shuts down and ensuring that the turbocharger always receives clean oil.

It is especially effective in applications that involve frequent start ups and shut downs.

EXPLANATION: The **Turbo Saviour** has a cast alloy centre section incorporating a mounting flange, built in check valve and a provision for the spin on filter. The accumulator section is a purpose spun alloy canister housing a nitrile rubber bladder that continues to deliver a flow of oil to the turbo for a short time after engine shut down.

Turbo Saviour is fully self-contained, requiring no external valving or electrics and is suitable for both petrol and diesel engines.

OIL CONTAMINATION

To avoid blockages of the narrow oil galleries and damage to the bearings, the Turbo Saviour provides filtration of all the oil flowing to the turbocharger. This is done using a standard spin-on filter cartridge.

To make sure the filter remains fully charged with oil, the Turbo Saviour system includes a check-valve to prevent oil-flow delays to the turbocharger at start-up.

HEAT SOAK

Under load, the exhaust gases driving the turbine can reach temperatures in excess of 800°C. The turbine and its housing heats up and transfers some of this heat to the bearings. While the engine is running a continuous flow of oil dissipates this heat and keeps the bearings cool. When the engine is shut-down the oil flow stops, and the bearings begin to heat up.

To over-come this most engine manufacturers specify "engine idle time" prior to shut down.

AVAILABLE FROM

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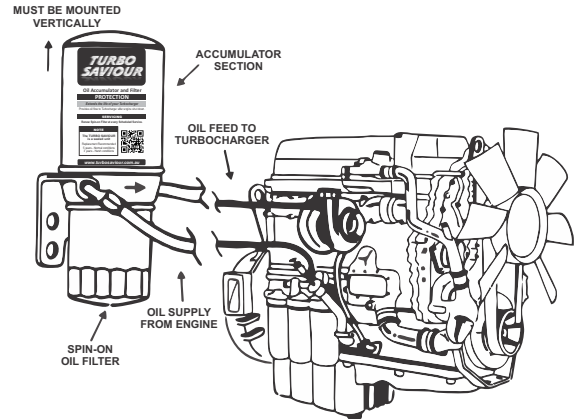


SCAN
for web site



EASY INSTALLATION

The Turbo Saviour is quick and easy to install by a qualified mechanic.



SPECIFICATIONS

| | |
|------------------------------------|---|
| Overall Height | 270mm |
| Accumulator | 115mm dia. |
| Filter | 95mm dia. |
| Mounting Flange | 110 x 87mm |
| Bolt Holes (4 off) | 10mm dia. |
| Oil Inlet | 3/8" NPT F |
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| dry Weight | 2kg |
| Oil Capacity (Charged @ 60 PSI) | 750ml. |
| Oil Filter (Recommended) | Donaldson P550318 Turbo Saviour TSSSO93 |

The dashed curve shows the bearing housing temperature during and after one minute of idling.

The red curve in the figure below shows this rise in bearing (centre) housing temperature after the engine is shut off.

In contrast, the green curve shows that using a Turbo Saviour prevents the bearings from overheating even after a "hot" shutdown.

