# **SPECIFICATIONS**

270 mm
115 mm dia.
95 mm dia.
110 x 87 mm
10 mm dia.
3/8" NPT F
3/8" NPT F
2 kg
750 mL
Donaldson P550318  Turbo Saviour TSSSOF93





















#### Protection for your Turbocharger



# **PRODUCT INFORMATION**



**EMAIL WEB** 

**PHONE** +61 448 889 380 info@turbosaviour.com.au www.turbosaviour.com.au

# **EXTENDING THE LIFE**OF YOUR TURBOCHARGER

Two leading causes of turbocharger failure relate to bearing damage due to oil contamination and exposure to excessive temperatures. 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.

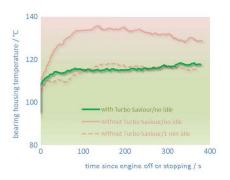
Turbo Saviour is fully self-contained, requiring no external valving or electrics, and is suitable for both petrol and diesel engines.



### **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.

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



To over-come this most engine manufacturers specify "engine idle time" prior to shut down. The dashed curve shows the bearing housing temperature during and after one minute of idling.

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

### **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.

### INSTALLATION

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

