



# VORTECH SEALED SUPERCHARGER OIL REFILL INSTRUCTIONS

For any further technical information contact:

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## **Applications**

## This manual applies to three different types of Vortech Sealed Supercharger:

### **CAPA V-3 Sealed**

- As fitted to CAPA's Australian Kits (eg Commodore, Falcon).
- The V-3 was sold from 2010 onwards.
- Oil is an Earthy Red Colour.
- Supercharger has a Dipstick at the top of the Supercharger.
- Supercharger has a Black Header Tank attached.

## **Vortech USA V-3 Sealed**

- As fitted to USA Manufactured Supercharger Kits (Vortech, Stillen, VF Engineering, etc).
- Oil is a Transparent Red Colour.
- Features a Dipstick and Breather at the top of the Supercharger.
- Supercharger has an Oil Drain Line attached.
- NOTE: V-3 Oil is also suitable for Paxton Novi 1200SL Superchargers.

### **CAPA V-2 Sealed**

- As fitted to CAPA's Australian Kits (eg Commodore, Falcon).
- The V-2 Sealed was sold between 2007 and 2010.
- Oil is an Earthy Red Colour.
- Supercharger does not have a dipstick.
- Has Oil Level Bungs on the Pulley Side of the Supercharger.
- Supercharger has a Black Header Tank attached.

## Know your Vortech Supercharger's Oiling Capabilities:

### **Sealed Unit**

Speed Maximum Impeller Speed – 50,000rpm

Applications Basic Kits, Tow Cars, Low Boost Kits, Standard Engines, Everyday Driving

Oil Changes Every 8,000 – 10,000kms

#### Oil Feed & Drain with Air Assist

Speed Maximum Impeller Speed – 58,000rpm

Applications High End Kits, Race Cars, Track Cars, Modified Engines, Hard Driven Street Cars

## Maximum Impeller Speed Calculator for Vortech V-2 and V-3 Superchargers.

Crank Pulley Diameter X 3.6 X Engine RPM = Impeller Speed

Supercharger Pulley Diameter

## **CAPA V-3 Sealed Supercharger Oil Refill Instructions**

Synthetic lubricant for V-3 superchargers. This special oil is required for proper maintenance of the V-3 supercharger. Use of any other oils will void the warranty and may cause component failure.

**Please Note – New Superchargers:** Oil is already installed in the supercharger unit, Take care not to spill oil during installation.

## Fluid Level Checking Procedure

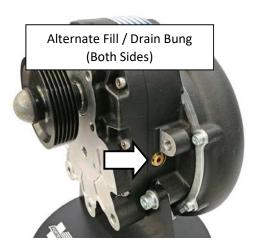
- 1. Fit Supercharger to Vehicle.
- 2. Remove dipstick from supercharger (round brass head)
- 3. Ensure that the .06" copper sealing washer is located on the dipstick base.
- 4. Thread the clean dipstick into the unit until it seats.
- 5. Once the dipstick has seated, remove the dipstick from the unit. Oil should register in the crosshatched area on the dipstick.
- 6. Add oil through the bung on supercharger if extra is needed, leave dipstick out to prevent an air lock inside the unit
- 7. DO NOT OVERFILL!! Drain excess fluid from the unit if it is above the maximum level on the dipstick.
- 8. Check level after first 100kms, top up if necessary.

**NOTE:** Sealed Superchargers uses special oil. Only use oil supplied by CAPA.

**NOTE:** Check supercharger oil every 6 months.

**NOTE:** Replace oil every 12 months or every 10,000km, whatever comes first. Change oil more regularly in high boost or hard driving applications.







## **Vortech USA V-3 Sealed Supercharger Oil Refill Instructions**

Synthetic lubricant for V-3 superchargers. This special lubricant is required for proper maintenance of the V-3 supercharger. Use of any other lubricants or oils will void the warranty and may cause component failure.

## Fluid Level Checking Procedure

- 1. Ensure that the .06" copper sealing washer is located on the dipstick base.
- 2. Thread the clean dipstick into the unit until it seats.
- 3. Once the dipstick has seated, remove the dipstick from the unit. Fluid should register in the crosshatched area on the dipstick.
- 4. DO NOT OVERFILL!! Drain excess fluid from the unit if it is above the maximum level on the dipstick.



#### Fluid Drain Procedure

- 1. Ensure the Oil Drain Line is Free of Any Kinks or Bends.
- 2. Oil Line Fitting can be removed using a 9/16 inch and 1/2 inch wrench.
- 3. Re-fit Oil Line Fitting once oil drain is complete.

#### Fluid Fill Procedure.

- 1. Use Pliers to cut the end off the fill spout provided.
- 2. Remove Dipstick from Supercharger and fill the Supercharger via the Dipstick Hole, lightly squeeze the oil bottle. This procedure takes a few minutes.
- 3. Once supercharger has been filled with 4oz of oil, check fluid level.
- 4. Run the vehicle for 20 minutes and re-check the fluid level. Air can enter the drain line and cause a false level read. Re-adjust and check as necessary. DO NOT OVERFILL!

## **V-3 Maintenance Notes**

- 1. Check the supercharger fluid level using the dipstick at least every 2,500 miles (4,000km)
- 2. Initial supercharger fluid change must be performed at 2,500 miles (4,000km). The supercharger fluid must then be changed at least every 7,500 miles (12,000km).
- 3. Drain the fluid, re-fill the unit only with 4 oz (120ml) of Vortech supplied lubricating fluid.
- 4. Confirm proper oil level using the dipstick. DO NOT OVERFILL!!

## **CAPA V-2 Sealed Supercharger Oil Refill Instructions**

**Please Note – New Superchargers:** Oil is already installed in the supercharger unit, Take care not to spill oil during installation.

1. Fit supercharger unit to bracket on car per instructions.



BUNG A	BUNG B	BUNG C
VZ V8	VE V8	Other
VS Ecotec V6	VT2-VY V8	
FG 6cyl	VE V6	
BA-BF 6cyl	VZ V6	
Landcruiser 4.7L V8	VT-VY Ecotec V6	
	FG V8	
	BA-BF V8 Crank Drive (4V & 3V)	
	BA-BF V8 Engine Belt Drive	
	AU V8	
	EB-EL V8	
	AU 6cyl	
	EF-EL 6cyl	

2. Please to table above to see which bung is relevant to your application. Disregard other bungs as they are not used.

## V-2 Sealed Instructions Continued on Next Page...

#### V-2 Sealed Instructions Continued...

- 3. Fit oil reservoir bottle in designated position as shown in manual.
- 4. Fit oil line to fitting in bottle, taking care not to spill any oil and attach clamp.
- 5. Remove oil level check bung in supercharger lid and add about 50cc of oil to reservoir bottle, this will fill hose with oil.
- 6. Leave to stand for 10 mins to let oil drain through the hose and into unit.
- 7. Check oil level at bung and repeat if necessary, until oil is level with hole.
- 8. Replace bung in supercharger lid.
- 9. Fit lid to oil reservoir bottle.
- 10. Check Oil level at bung every 60 days And Replace every 12 months.

**NOTE:** Sealed Superchargers uses special oil. Only use oil supplied by CAPA.

**NOTE:** Check supercharger oil every 6 months.

**NOTE:** Replace oil every 12 months or every 10,000km, whatever comes first. Change oil more regularly in high boost or hard driving applications.