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# OES89 OIL EVACUATION UNIT and OD80 OIL DRAINER

## INSTRUCTION MANUAL

### INTRODUCTION

Thank you for purchasing a Macnaught OES89 Oil Evacuation System or OD80 Oil Drainer.

The Macnaught Oil evacuation system and Oil drainer are suitable for use with engine oil, automatic transmission fluid and anti-freeze/anti-boil or compatible fluids.

Macnaught also manufacture a complete range of retractable hose reels, oil dispensing nozzles, fuel pumps, positive displacement flowmeters, greasing equipment and a complete range of accessories.

### GENERAL INFORMATION

The information contained will help ensure many years of dependable performance and trouble free operation.

Please take a few moments to read through this instruction manual before installing or operating your new OES89 Oil Evacuation System or OD80 Oil Drainer. If you require further assistance please contact your nearest Macnaught Distributor or Authorised Macnaught Service centre.



**READ THIS INFORMATION CAREFULLY BEFORE USE.**

Please retain this instruction manual for future reference.

Your safety is important to us. Please read, understand and follow all instructions listed below. Some of these instructions alert you to the potential for personal injury. "Cautions" throughout the manual advise of potential practices or procedures which may cause damage to your equipment.

Make sure all operators have access to adequate instructions about safe operating and maintenance procedures.

Do not exceed the maximum recommended air inlet pressure of 690 kPa / 100 psi / 6.9 bar.

Do not exceed the maximum oil temperature of 80C.

Use suitable thread sealant (eg. Teflon tape) on all screwed fittings, but do not over tighten to avoid damage.

Most accidents occur because of component rupture. Never exceed the pressure rating of any component installed in the system.



OD80

OES89



### WARNING

Before attempting any repairs or maintenance of this product, disconnect the air supply to release the air pressure.

Do not extract caustic or flammable products.

Do not expose the reservoir to any source of heat.

When extracting hot oils, keep hands and face protected. Only use this device for the purpose for which it has been designed.

Do not modify any component of this equipment. Only use original spare parts.

### MAINTENANCE



### IMPORTANT

Check the safety relief valve on the holding tank weekly for correct operation. The Safety valve should open at 7 psi.

If the valve is found to be faulty. The valve must be replaced.

## DESCRIPTION

The OES89 is an oil suction based system which also includes a gravity drain. The system allows the extraction of waste oil.

The OD80 is a gravity drain system only. This drainer allows the oil to be drained through a funnel into the holding tank.

## GRAVITY DRAIN USE on models

- 1) Open the ball valve located under the gravity drain.
- 2) Close the discharge ball valve located at the bottom of the holding tank.
- 3) Close the ball valve located under the viewing glass (**OES89 only**)
- 4) Position the gravity bowl under the sump plug. Remove sump plug and drain the waste oil into the funnel.
- 5) To remove oil from the holding tanks on the OES89 or OD80 refer to "Empty Holding Tank" instructions

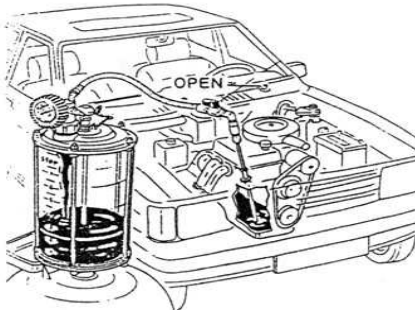
## OES89 OIL EVACUATION OPERATION

### Oil Evacuation using the suction probes

**NOTE: The oil should always be removed when the oil temperature is between 70 to 80 deg C.**

**Only fill the holding tank to 2/3 of its capacity capacity.**

- 1) With the engine still warm, remove the dipstick from the motor and insert the largest possible probe as far down as it will go. (see fig 1).



( fig 1)

- 2) Connect the suction hose to the probe.
- 3) Close the ball valve located under the gravity bowl
- 4) Close the ball valve located under the viewing glass.
- 5) Close the discharge ball valve located at the bottom of the holding tank.
- 6) Connect the air supply to the air inlet on top of the viewing glass.
- 7) Open the ball valve on the suction hose, keeping the probe dipped in the oil. The oil will be sucked from the sump into the graduated viewing glass where the oil can be inspected (see fig 1)



## CAUTION

**Do not over fill the viewing chamber**

**To drain the oil from the viewing tank down into the holding tank.**

- 8) Disconnect the air supply.
- 9) Open the ball valve located under the viewing glass.
- 10) After all the oil has drained from the viewing tank into the holding tank, shut the ball valve under the viewing glass.
- 11) The device is now ready for use on the next vehicle.



## CAUTION

**Do not adjust the pressure relief valve on the air inlet valve on the holding tank. Make sure the two ball valves described in the "Empty Holding tank" procedure are closed.**

## EMPTY HOLDING TANK

The pressure relief valve is designed to open if the pressure in the holding tank exceeds 7psi. If the relief valve does not open, the valve is damaged and should be replaced.

- 1) Remove the air supply from the air inlet on the top of the viewing tank. (OES89 only)
- 2) Close the ball valve located just below the gravity drain
- 3) Ensure that the ball valve located below the viewing glass (OES89 only) and the discharge ball valve on the bottom of the holding tank are both closed.
- 4) Place the drain hose into a bulk waste oil tank.
- 5) Using a tyre air pressure gauge. Connect it to the air inlet on the holding tank and pressurise the tank to 7 psi. If the air pressure exceeds 7 psi the relief valve will open and will not close until the pressure reaches 7 psi or lower.



## WARNING

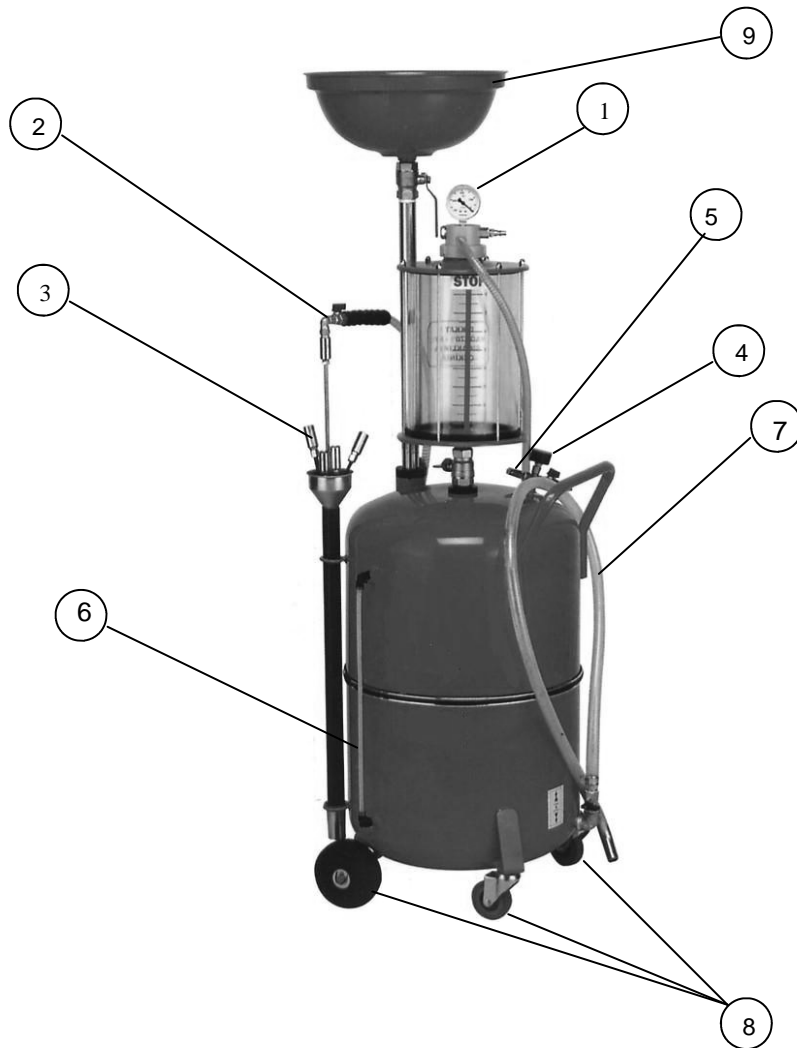
**Do not adjust the safety relief valve on the holding tank. The relief valve is factory set to 7psi.**

- 6) Open the ball valve located on the bottom of the holding tank.

**Note: Ensure that you only open the discharge ball valve on the bottom of the holding tank.**

Note: The air will now push the waste oil out of the holding tank into the bulk waste oil tank. If you run out of air pressure repeat step 5.

- 7) After the oil transfer has been completed, release the air pressure in the holding tank and shut the holding tank ball valve.



ITEM NO	PART/SET No	DESCRIPTION
1	OS260s	VACUUM GAUGE
2	OS262s	SUCTION HOSE SET
3	OS265s	SUCTION PROBE SET
4	OS266s	PRESSURE GAUGE
5	OS267s	PRESSURE RELIEF VALVE
6	OS268s	SIGHT LEVEL AND HOSE SET
7	OS269s	OUTLET HOSE AND TUBE SET
8	OS270s	WHEEL SET
9	OS271s	FUNNEL SET

## TROUBLE SHOOTING GUIDE

TROUBLE	CAUSE	REMEDY
1) No oil suction.	a) Damaged Venturi	a) Replace Venturi
	b) Damaged Suction probe 'O' Ring	b) Replace damaged Suction Probe 'O' Ring
2) Oil leaking from the viewing tank seals.	a) Damaged Viewing Tank Seals	a) Replace damaged Viewing Tank Seals
3) Air constantly leaking from Relief Valve on the Holding Tank.	a) Air pressure is above 7psi	a) Reduce the air pressure below 7 psi
	b) Damaged Pressure Relief Valve	b) Replace the damaged Pressure Relief Valve.

**Note:**

For replacement parts please contact your closest Macnaught distributor or Macnaught.

## SPECIFICATIONS

Tank Capacity:	80 Litre
Working Capacity:	80 Litre
Viewing Tank Capacity:	9 Litre
Max Suction Rate:	1.6 ltr/min
Min Oil Temperature:	60 Deg C
Max Oil Temperature	80 Deg C

**Note:** The oil suction rate will vary depending on oil viscosity, oil temperature and air operating pressure.



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### macnaught warranty

- Macnaught Pty Ltd ("Macnaught") warrants that all products manufactured by Macnaught and/or supplied by Macnaught under the "Macnaught" brand, excluding M-Series positive displacement meters ("Meters") and components subject to wear, will be free from any defects caused by faulty materials or workmanship ("Warranty") for a period of 5 years from the date of purchase of the product.
- For products (excluding Meters) which carry the "Macnaught design" endorsement, an additional Warranty period of 5 years applies to all mechanical components (excluding electronic and electrical components), giving a total Warranty period of 10 years.
- For Meters, the Warranty period is 12 months from the date of purchase of the product.
- For components contained in all products which are usually subject to wear from normal operation of the products (such as o-rings, seals, springs, hoses and batteries), the Warranty period is 12 months from the date of purchase of the relevant product.
- For products and components which are not manufactured by Macnaught and are supplied by Macnaught under a brand name other than "Macnaught", the Warranty period is the longer of 12 months from the date of purchase of the relevant product and the period of the manufacturer's warranty.
- The warranties contained in clauses 1, 2, 3, 4 and 5 above are conditional on the purchaser, during the relevant Warranty period:
  - delivering to Macnaught a detailed notice setting out full details of any defect in any product and details of the date and place of purchase (together with copies of purchase receipts and/or other supporting documents), and
  - at the purchaser's own cost, returning the defective product to the nearest authorised Macnaught service centre.
- Subject to compliance by the purchaser with clause 6, Macnaught shall, at its option, repair or replace any product or component found defective by its inspection by reason of faulty materials or workmanship of Macnaught.
- This Warranty does not cover the failure of products, parts or components which, in the sole judgment of the Macnaught, arises other than from faulty materials or workmanship of Macnaught, including misuse, abrasion, corrosion, negligence, accident, substitution of non-Macnaught parts, unauthorised modification, improper use, storage or handling, faulty installation or tampering by the purchaser or any third party.
- If Macnaught's inspection discloses no defect in material or workmanship, repair or replacement and return (at Macnaught's sole option) will be made at customary charges, which will be advised to the purchaser.
- Macnaught's liability and the purchaser's rights under this Warranty shall be limited to the repair or replacement of defective products or components and particular, shall not extend to any direct, special, indirect or consequential damage or losses of any other warranties.