# HG100 HIGH FLOW OIL CONTROL GUN



## INSTRUCTION MANUAL

## Introduction

Thank you for purchasing a Macnaught HG100 dispensing gun complete with flexible extension and non-drip nozzle. The Macnaught oil dispensing gun and meter has been designed for use with engine oil, gear oil, automatic transmission fluid, anti-freeze/antiboil and compatible fluids.

Macnaught also manufacture a complete range of ratio oil pumps and retractable oil hose reels, greasing equipment and accessories, to fulfil all your fluid handling or greasing requirements.

Please read and retain this instruction manual to assist you in the operation and maintenance of this quality product.

## **GENERAL INFORMATION**

This manual assists you in operating and maintaining your new oil control gun. The information contained will help you ensure many years of dependable performance and trouble free operation.

Please take a few moments to read through this manual before installing and operating your new oil control gun. If you experience problems with this product, refer to the trouble shooting sections of this manual. If you require further assistance please contact your local Macnaught distributor or authorised Macnaught service centre.

# IMPORTANT INFORMATION



READ THIS INFORMATION CAREFULLY BEFORE USE.

Your safety is important to us. Please read and follow all safety instructions listed inside.

Some of these instructions alert you to the potential for personal injury. "Cautions" listed throughout this manual advise of potential practices or procedures which may cause damage to your equipment.

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

Do not exceed the maximum working pressure of 10500 kpa / 1500 psi / 105 bar.



# **CAUTION**

Do not hit the oil control gun if it fails to operate. Refer to "trouble shooting guide" or return the unit to your nearest authorised service centre.



Never point the nozzle at yourself or anyone else.

Never exceed the pressure rating of any component. installed in the System.

Before every use check all hoses for signs of wear, leaks or loose fittings. Tighten all fluid connections regularly and replace weak or damaged hoses.

Before attempting any repairs or maintenance of this product firstly disconnect the air supply from the oil pump, then release the oil line pressure by squeezing the lever on your oil control gun.

#### **ASSEMBLY**

Use Teflon tape (or suitable thread sealant) when connecting the oil control gun to an oil hose.

#### MANUAL NOZZLE OPERATION

With the nozzle pointing away from you turn the nozzle tip clock-wise to open.

With the nozzle pointing away from you turn the nozzle tip anti-clockwise to close.

#### HANDLE OPERATION

Ensure the manual nozzle is open before operating the handle.

To latch the handle, squeeze the lever, push the latch button on the rear of the gun and then release lever.

To release the latch in simply squeeze and release lever.

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Before carrying out any maintenance, disconnect the air supply to the pump and release the fluid pressure in the system by pressing the lever on the control gun.

Inspect your metered oil control gun daily for any signs of damage. Replace any damaged parts or components as required.

## CONTROL HANDLE DISASSEMBLY

Use a clean bench to carry out maintenance.

- A) Remove the oil delivery hose from the control gun inlet swivel (14).
- B) Unscrew and remove swivel (14) from the control gun inlet.
- C) Carefully unscrew the valve cap (20), remove the valve spring (19) and valve stem assembly (15,16,17) from the gun body (8).
- D) Remove the Gun Handle (9).

#### **CONTROL HANDLE REASSEMBLY**

A) Clean and inspect all parts for wear or damage.
Replace any suspect, worn or damaged components.

**Note:** Lightly lubricate all o-rings and seals before assembly.

B) If required, carefully place new o-rings (16,17,18) onto valve stem (15).

**Note:** o-ring (16) has a green dot and is different to the 2 o rings (17).

- C) Re-fit the gun handle (9).
- D) Carefully insert the valve stem assembly(15,16.17) into the gun body (8).
- E) Replace the valve spring (19), then replace the valve cap.

**Note:** Ensure the valve spring locates around the nipple on the underside of the valve cap.

F) Replace the swivel assembly (14).

**Note:** After assembly ensure the control gun handle operating correctly.

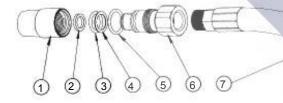
#### MANUAL NOZZLE MAINTENANCE

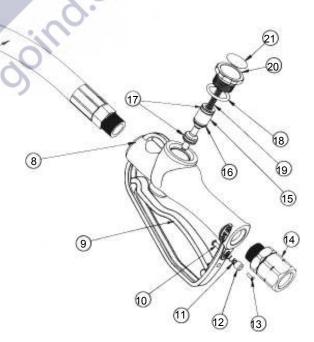
1) Using a spanner and strap wrench, unscrew the nozzle cap (1) from the nozzle body (6).

**Note:** All the nozzle seals must be replaced if the nozzle is disassembled.

- 2) Remove all the old seals from the nozzle body (6).
- 3) Inspect the nozzle cap (1) and nozzle body (6) for damage. Replace if found to be damaged.
- 4) Replace all the nozzle seals (2,3,4,5).
- 5) Lightly lubricate the seals, then reassemble nozzle.

## PARTS DIAGRAM





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# SPARE PARTS LIST

|                        |         | Order            | for replaceme | nt      |                    |        |  |
|------------------------|---------|------------------|---------------|---------|--------------------|--------|--|
| Item                   | No. off | Part / Set       |               | Kit ref | Description        |        |  |
|                        |         |                  |               |         |                    |        |  |
|                        |         | HG100-1K         | (KIT A)       |         | Overhaul Kit       |        |  |
|                        |         |                  |               |         |                    |        |  |
| 1                      | 1       |                  |               |         | Nozzle cap         |        |  |
| 2                      | 1       |                  |               | Α       | Quad Ring          |        |  |
| 3                      | 1       |                  |               | Α       | O'ring (BS212)     |        |  |
| 4                      | 1       | HG42             | 24s           | Α       | Back up washer     |        |  |
| 5                      | 1       |                  |               | Α       | O'ring (BS214)     |        |  |
| 6                      | 1       |                  |               |         | Nozzle body        |        |  |
| 7                      | 1       |                  |               |         | Outlet hose        |        |  |
| 8                      | 1       | n/a - new gun re | equired       |         | Gun body           |        |  |
| 9                      | 1       | HG411s           |               |         | Gun handle         |        |  |
| 10                     | 1       |                  |               | Α       | Latch pin          |        |  |
| 11                     | 1       |                  |               | Α       | Latch spring       |        |  |
| 12                     | 1       |                  |               | Α       | Latch cap          |        |  |
| 13                     | 1       |                  |               | Α       | Latch screw        |        |  |
| 14                     | 1       | HG421s           |               |         | Swivel (BSP)       |        |  |
| 14                     | 1       | HG422s           |               |         | Swivel (NPT)       |        |  |
| 15                     | 2       |                  |               | Α       | O'ring (BS113)     |        |  |
| 16                     | 1       |                  |               | Α       | O'ring (Green Dot) |        |  |
| 17                     | 1       | order HG413s     |               |         | Valve stem         |        |  |
| 18                     | 1       |                  |               | Α       | Valve spring       |        |  |
| 19                     | 1       |                  |               | А       | O'ring (BS122)     |        |  |
| 20                     | 1       | HG413s incl iter | ms 17, 18,21  |         | Valve cap          |        |  |
| 21                     | 1       |                  |               |         | Label              | 20.    |  |
|                        |         |                  |               |         |                    | com au |  |
|                        |         |                  |               |         |                    |        |  |
|                        |         |                  |               |         |                    | ·O,    |  |
|                        |         |                  |               |         |                    |        |  |
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|                        |         |                  |               |         |                    |        |  |
| TROUBLE SHOOTING GUIDE |         |                  |               |         |                    |        |  |
|                        |         |                  |               |         |                    |        |  |
| TROUBLE CAUSE          |         |                  | CAUSE         |         | REMEDY             |        |  |

# TROUBLE SHOOTING GUIDE

| TROUBLE                            | CAUSE                         | REMEDY  |  |
|------------------------------------|-------------------------------|---|--|
| Constant oil leak from the nozzle  | Damaged o'ring (16,17)        | Replace damaged o'ring                                |  |
| Intermittent drip from the nozzle  | Nozzle open or damaged        | 1) Remove the nozzle and blow out any dirt particles. |  |
|                                    |                               | 2) Close nozzle fully or replace the nozzle seals.    |  |
| Oil leak from valve stem area      | Damaged o'rings (16,17 or 18) | Replace damaged o'rings                               |  |
| Oil leaking from the sw ivel inlet | Damaged sw ivel               | Replace sw ivel                                       |  |

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# **SPECIFICATIONS**

| Flow Range:             | Up to 56 ltr / min (15 US GAL)                          |  |  |
|-------------------------|---|--|--|
| Maximum Pressure:       | 105 BAR / 10500 kPa / 1500 PSI                          |  |  |
| Maximum Operating Temp: | 70 deg C (158 deg F)                                    |  |  |
| Weight:                 | 1.8 KG  |  |  |
| Swivel Inlet:           | 3/4" BSPT or 3/4" NPT                                   |  |  |
| Outlet:                 | 3/4" NPT  |  |  |
| Wetted Parts:           | Aluminium, Mild Steel, Nitrile Rubber                   |  |  |
| Fluid Compatibility:    | Transmission Fluid, Anti-freeze / Anti-Boil, Engine oil |  |  |
|                         | Diesel Oil, and Lubricating oils to SAE140              |  |  |



#### Note:

This product should be disposed of according to all applicable local and national government environment regulations and guidelines.



For Warranty Terms and Conditions see macnaught.com.au For a list of Australian Service Centres see macnaught.com.au

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