

Includes models

HG20F-01  
HG20R-01  
HG20R-02

## HG 20R(Rigid) & HG20F (Flexible) OIL CONTROL GUNS

### INSTRUCTION MANUAL



#### INTRODUCTION

Thank you for purchasing a Macnaught oil dispensing gun complete with either a flexible or rigid extension. The Macnaught oil dispensing guns have been designed for use with engine oil, gear oil, automatic transmission fluid, anti-freeze/anti-boil 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 and greasing needs 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 6900 kPa / 1000 psi / 69 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.

#### OUTLET NOZZLE OPERATION

When fluid flows through the gun the outlet nozzle will automatically open. When the fluid flow stops the outlet nozzle will automatically shut.

#### HANDLE OPERATION

To latch the handle, squeeze the lever, push the button and then release lever.

To release the latch in manual mode simply squeeze and release lever.



#### CAUTION

**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 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 hose from the control gun inlet swivel (10).

B) Unscrew and remove swivel (10) washer and o'ring from the control gun inlet. (Clean or replace the swivel strainer and o'ring if required).



### CAUTION

**The swivel is under spring tension**

C) Remove valve spring (9), seal/valve body assembly (8) and plunger (7).

D) Remove the screw (15), then unclip and remove the trigger guard (16).

## LEVER and VALVE REMOVAL

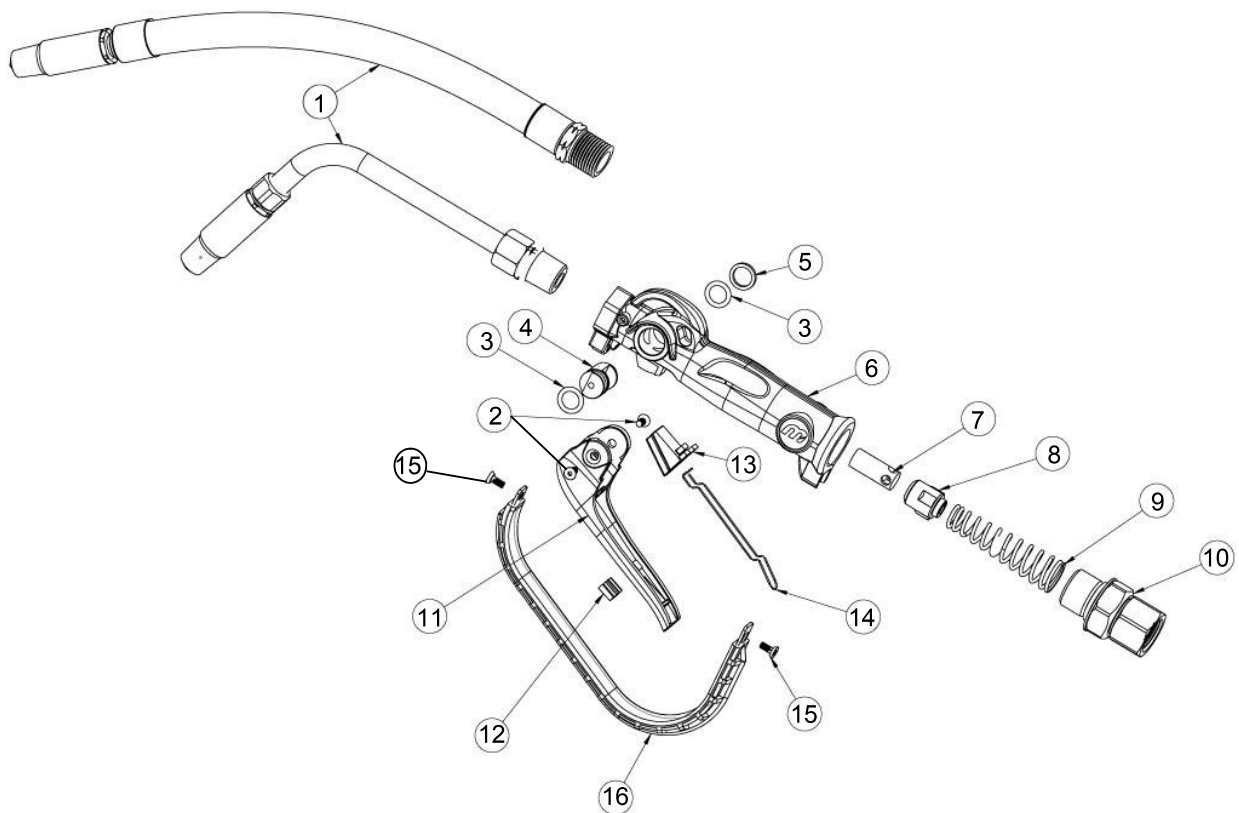
A) Using a 2.5mm allen key, remove the 2 handle screw (2).

B) Remove lever (11), ease downwards.

C) Remove the washer (5), "O"Ring (3), then push the valve cam (4) from the gun body (6), and remove "O"Ring (3).

**Note:** If the plunger has not been removed the cam will not release from the body.

## PARTS DIAGRAM



## CONTROL HANDLE REASSEMBLY

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

**Note:** Lightly lubricate the valve cam before assembly.

B) Place "O"Ring (3) onto valve cam (4).

**Note:** The cut out section in the middle of the valve cam (4) must face the inlet swivel (10).

C) Replace the valve cam (4) into the body (6). Note the orientation shown on the assembly drawing. Fit the second "O"Ring (3) and washer (5).

D) Slide lever assembly (11) into position and replace the two Allen screws (2). (Use Loctite or similar sealant).

E) Replace plunger (7).

**Note:** The end hole in the plunger must face the gun outlet.

F) Replace the seal/valve body assembly (8), and spring (9) and replace into the gun body (6).

**Note:** Install the spring, small end first.

G) Re-fit the trigger guard (16) and replace screw (15)

H) Replace washer, o'ring on to the swivel assembly (10), and screw firmly into place (Use Loctite or similar sealant).

**Note:** After assembly ensure the handle latch is operating correctly.

## SPARE PARTS LIST

		Order for replacement		
Item	No off	Part or Set	Kit Ref	Description
		HG20-1K (Kit A)		Seal Kit
1	1	IM078As		Flexible Extension with Auto Nozzle
1	1	HG510As		Rigid Extension with Auto Nozzle
2	2		A	Screw (M4 x 8 CSK)
3	2		A	O-ring BS111
4	1		A	Camshaft
5	1		A	Washer
6	1	n/a - new gun required		Body Casting
7	1		A	Plunger Cage
8	1		A	Valve Seal
9	1		A	Spring
10	1	HG040As		Swivel Assembly (BSP)
10	1	HG043As		Swivel Assembly (NPT)
11	1	HG022s		Handle (Latching)
12	1		A	Lever Plug
13	1		A	Push Button - Auto
14	1		A	Button Spring
15	2		A	Screw
16	1			Handle guard

## TROUBLE SHOOTING GUIDE

TROUBLE	CAUSE	REMEDY
No fluid passing through the gun	Blocked strainer	Clean or replace strainer
Constant oil leak from the nozzle	Damaged plunger seal	Replace plunger seal ( check for damage )
Intermittent drip from the nozzle	Dirt in the nozzle	Remove the nozzle and blow out any dirt particles, replace if necessary.
Oil leak from camshaft area	Damaged o'rings	Replace damaged o'rings
Low flow rate	Blocked strainer	Replace strainer
Oil leaking from the swivel inlet	Damaged o'ring or swivel	Replace damaged o'ring or swivel

## PRODUCT SPECIFICATIONS:

<b>Flow Range:</b>	1-25 l/min ( 0.26 – 6.6 US gal/min)
<b>Maximum Pressure:</b>	69 BAR / 6900 kPa / 1000 PSI
<b>Swivel Inlet:</b>	1/2" BSPT or 1/2" NPT
<b>Outlet:</b>	1/2" NPT
<b>Weight:</b>	0.8 kg
<b>Wetted Parts:</b>	Aluminium, Mild Steel, Nitrile Rubber
<b>Fluid Compatibility:</b>	Engine Oil, Diesel Oil, Automatic Transmission Fluid, Anti-freeze/Anti-Boil - (Maximum Viscosity SAE140)



Macnaught Pty Limited  
 ABN 66 000 075 785

41-49 Henderson Street  
 Turlella NSW 2206 Sydney Australia  
 Postal Address PO Box 90  
 Arncliffe NSW 2206 Sydney Australia

T: +61 2 9587 0401  
 F: +61 2 9587 7773  
 W: www.macnaught.com.au

**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](http://macnaught.com.au)  
 For a list of Australian Service Centres see [macnaught.com.au](http://macnaught.com.au)**