

Includes models

S20H-01

S20HA-01

S60H-01

S60HA-01

SPRING LOADED OIL PUMPS

(20 LITRE and 60 LITRE MODELS)

INSTRUCTION MANUAL



Introduction

Thank you for purchasing a Macnaught Spring loaded Oil Pump. Your spring loaded oil pump has been designed to dispense oil under spring pressure after the oil gun trigger has been pressed.

The materials of construction used in the manufacture of this pump include, Aluminium, Carbon Steel, Zinc, Polypropylene, Nitrile Rubber, Stainless Steel and PVC.

GENERAL INFORMATION

This manual assists you in operating and maintaining your new spring loaded oil pump. 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, operating or carrying out any maintenance on your spring loaded oil pump. This instruction manual is applicable to models S20H, S20HA, S60H and S60HA. Models S20HA and S60HA are fitted with an ATF filter. If you experience problems with the product, refer to the procedures contained within this instruction manual.

If you require further assistance please contact your local Macnaught distributor or local Macnaught service centre.

OPERATION



CAUTION

This pump is packed with the spring loaded handle in the energised position. To remove the locking wire, push down firmly on the handle and carefully remove the locking wire then release the handle slowly.

- 1) Screw the pump into the oil drum.
- 2) Push the handle down several times while holding the trigger on the control gun. This will prime the oil through the pump. Once the pump is primed release the gun trigger, the pump handle will stay down when the hose is full of oil.
- 3) To dispense oil, pull the trigger on the control gun. Oil should flow through the gun.

MAINTENANCE

Please refer to the Disassembly and reassembly procedures included in this instruction manual when carrying out any maintenance on your spring loaded oil pump.



DISASSEMBLY



CAUTION

Caution must be taken when removing the foot-valve from the pump tube, or removing the pump tube from the pump body. The large main spring is under tension.

- 1) Unscrew the handle (8) from the piston rod (9).
- 2) Unscrew the foot-valve (7) from the pump tube (4), remove the spring (15) and the piston rod (9). Take care not to damage the seal.
- 3) Unscrew and remove the pump tube (4) from the pump body (2).
- 4) Hold the piston nut (10) with a spanner, using multigrips on the smallest diameter, unscrew the lower piston (14).
- 5) Remove the lower piston (14), piston seal (13), upper piston (12), shake proof washer (11) and the piston rod (9).
- 6) Remove the spacer tube (16), (fitted to the S60 pump models only)

REASSEMBLY

Before assembly check the pump body o'ring (1) and piston seal (13) for damage. Replace if worn or damaged.

1) Screw the piston nut (10) onto the piston rod (9), followed by the shake proof washer (11), upper piston (12), piston rod seal (13) and lower piston (14). Tighten the piston nut to lock the piston assembly.

Note: The piston seal must be assembled with the seal lip facing up.

2) Fit the spacer tube (16). The swaged end should rest on the piston nut (10).

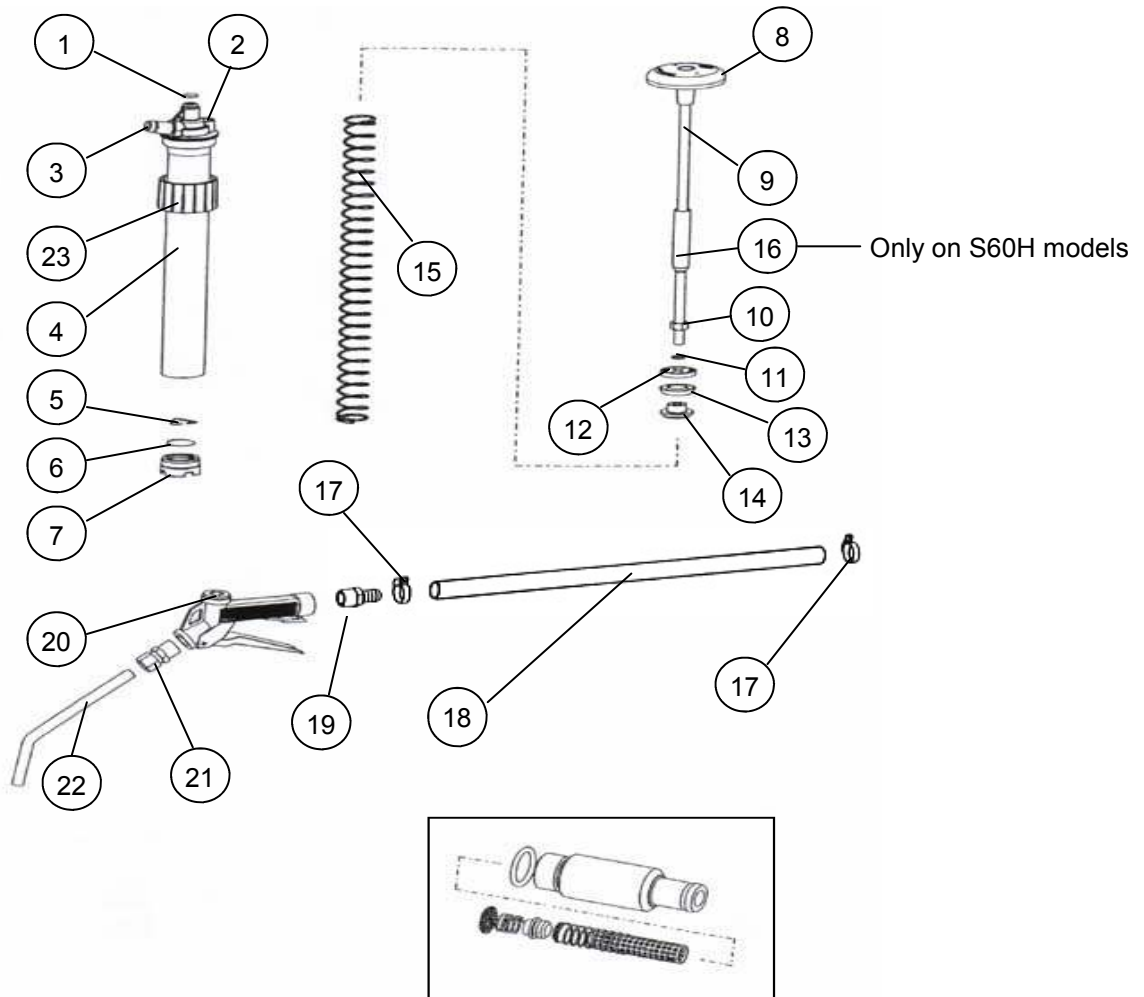
3) If required, replace the pump body o'ring (1), insert the piston rod assembly (9-14) upwards into the pump body (2).

4) Add thread sealant (Loctite 567 or similar) to the pump body (2) then fit the pump tube (4) over the piston seal (13), with the short thread end leading (take care not to damage the piston seal). Screw the pump tube (4) firmly to the pump body.

5) Insert the main spring (15) into the open end of the pump tube (4).

6) Check the foot valve assembly (5, 6, 7) for damage, replace if necessary. Place the foot valve assembly on the end of the spring (15), press down to compress the spring and screw the foot valve assembly firmly into the pump tube (4). Tighten the pump assembly and test.

PARTS DIAGRAM



For ATF filter assembly order part number SA045

PARTS LISTS

S20H / S20HA PARTS LIST

		Order for replacement			
Item	No. off	Part or Set	Kit ref	Description	
		SA20-1K (Kit A)			
				Seal Kit	
1	1			A	O'ring (BS111)
2	1		n/a (new pump req'd)		Pump body
3	1				Pump body outlet tube
4	1		n/a (new pump req'd)		Pump tube
5	1			A	Valve retainer plate
6	1			A	Valve plate
7	1			A	Foot valve
8	1			A	Handle (blue)
9	1		n/a		Piston rod
10	1			A	Piston nut
11	1			A	Shakeproof washer
12	1				Upper piston
13	1			A	Piston seal
14	1				Lower piston
15	1				Main spring
16					n/a
17	2		SA026s incl N367		Hose clamp
18	1				
19	1				Hose tail
20	1		SA11B-1K		Control gun
21	1				
22	1				Delivery tube
23	1	SA012s		Bung adapter (Blue)	

S60H / S60HA PARTS LIST

		Order for replacement			
Item	No. off	Part or set	Kit ref	Description	
		SA60-1K (Kit A)			
					Seal kit
1	1			A	O'ring (BS111)
2	1		n/a (new pump req'd)		Pump body
3	1				Pump outlet tube
4	1		n/a (new pump req'd)		Pump tube
5	1			A	Valve plate retainer
6	1			A	Valve plate
7	1			A	Foot valve
8	1			A	Handle (blue)
9	1		n/a		Piston rod
10	1			A	Piston nut
11	1			A	Shakeproof washer
12	1				Upper piston
13	1			A	Piston seal
14	1				Lower piston
15	1				Main spring
16	1				Spacer tube
17	2		SA026s incl N367s		Hose clamp
18	1				
19	1				Hose tail
20	1		SA11B-1K		Control gun
21	1				
22	1				Delivery tube
23				n/a	

S20H-01P

Same parts as S60H-01 but with the SA12s adapter and TB12s bung adapter

Note: For ATF filter assembly on both S20H and S60H pumps order part number SA045

TROUBLE SHOOTING GUIDE

Trouble	Cause	Remedy
Pump will not deliver oil	Dirty or damaged footvalve assembly (5,6,7)	Clean footvalve (replace if damaged)
	Footvalve plate sticking	Lift plate on footvalve to check for correct operation
	Piston seal (13) is damaged	Replace piston seal (13)
Oil leaks out of the top of pump body	Damaged o'ring (1)	Replace o'ring (1)
Pump handle rises slowly when not in use	Piston seal (13) is damaged	Replace piston seal (13)
	Pump body o'ring (1) is damaged	Replace o'ring (1)
	Control gun assembly (20,21,22) is leaking	Replace Control gun assembly (20,21,22)
Oil delivery is slow	Oil viscosity is too high	Maximum recommended viscosity is SAE30

ATF Filter Models only

Trouble	Cause	Remedy
Pump handle stays down but does not deliver oil	Blocked filter mesh	Clean filter mesh
Oil delivery is slow	Oil viscosity is too high	Maximum recommended viscosity is SAE30



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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**