



**THIS BOOK MUST BE READ,
PRIOR TO OPERATION.**

SAFETY INSTRUCTIONS

**FOR ASSASSIN JETTERS
HIGH PRESSURE WATER JETTERS
&
PRESSURE CLEANERS**

1300 855 145

www.assassinjetters.com.au

Introduction

These instructions should be read in conjunction with the operating instructions supplied with the equipment.

Because pressure cleaners develop extremely high pressures, severe injury may result from directing the jet at the body and from any subsequent skin penetration.



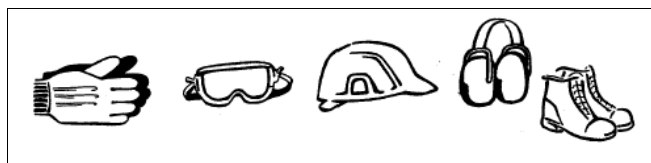
Under OH&S legislation **employers** are required to provide 'safe systems of work', which includes ensuring 'plant', which includes high pressure water jetting equipment, is used safely, for the purpose for which it was designed, and to provide adequate training and supervision. Employers must also conduct a risk assessment before operating high pressure water jetting equipment, i.e. Identify plant hazards, assess risk and implement risk controls.

NOTE: Employers should refer to relevant legislation in their State or Territory and to AS/NZS 4233.1:1999 High pressure water (hydro) jetting systems Part 1: Guidelines for safe operation and maintenance.

General Precautions

Personal Protective Equipment (PPE) recommended includes;

- Safety footwear – rubber preferable
- Hearing protection – ear muffs or plugs
- Gloves – heavy duty
- Safety glasses and/or face shield
- Protective clothing
- Respirator - if potentially exposed to hazardous vapours/mist



Cleaning Agents

If using detergents and alkaline cleaning materials be aware of the potential danger. Many cleaners have a corrosive action upon body tissues, especially the eyes. Even contact with dilute solutions can cause injury.

- When mixing, add the alkaline cleaners to the water gradually. Dumping a large quantity in all at once could result in an explosion
- Read the MSDS
- Prevent contact with your skin and avoid breathing the mist or dust
- Always wear your personal protective equipment, including respirators and eye protection
- Also be sure a wash station is nearby in case of a splash.

Never....

- allow persons to use the equipment unless trained and assessed as competent
- put your hand or fingers in front of the jet
- point the gun at your body or another person
- use the high pressure cleaner when persons or animals are within its action field
- lock the trigger gun "open"

Before use always....

Before commencing any high pressure water jetting operations steps should be taken to ensure that hazards likely to affect the safety of the operator or persons in the vicinity of the water jetter are eliminated or minimised.

- check and follow manufacturer's specifications on maximum pressure and operating instructions



- check that the connections and hoses have the correct pressure rating
- check oil, water, hydraulic fluid and fuel levels in the drive unit and the pump unit
- check condition of guards, shields and safety interlocks
- check filters and strainers.
- Check that emergency stop devices are clearly labeled and working.
- check all throttle cables

- conduct a risk assessment (SWMS or JSA are commonly used), in consultation with the operators, and possibly develop a 'safe operating procedure' if it is a regular job, for the task to be conducted
- lock off gun
- check that the 'fail safe' trigger control is operational
- inspect equipment for damage and check that all connections are secure
- ensure there is no apparent structural damage, eg. corroded or broken wires, bulging, kinking or cuts
- check that the nozzle is clean and not damaged
- erect signs and barriers to prevent unauthorised access to the work area
- clear the work area of material or equipment that may cause a trip, slip or fall, or cause damage to hoses



- elevate or protect hoses from damage from traffic (vehicle or pedestrian), sharp edges, etc
- check that the operator has the physical capacity to use the equipment safely
- decontaminate the work area of hazardous substances, eg. effluent, drain acids, grease
- ensure any equipment, particularly electrical, is isolated and protected from ingress of water or overspray
- agree on signals that will be used to communicate with team members during the operation of the equipment
- put on PPE

Before carrying out adjustment or maintenance always....

- shut off or isolate pump/engine – where there is risk that another person may activate the equipment while adjustment or maintenance is being conducted then the equipment should be physically isolated with a Danger- Do not operate tag and lock (if practicable).



- discharge contents of gun to eliminate pressure
- lock gun in OFF position.

Operating instructions for clearing a blocked drain with a high pressure water jetter

In addition to safety precautions on previous pages;

- Maintain a firm footing
- Hold the lance grip firmly as the high pressure causes a reaction power on the lance
- Always switch off engine and exercise care before inserting or removing the hose from the hose entry point of the pipe

Note: it is recommended to **attach an indicator mark approx 1.5M down** hose from nozzle so when you are pulling hose back under pressure you are aware of the nozzle location and do not pull back to far.

1. Always first ensure area is free from interference by public or bystanders
Put up any required witches hats or barricades to keep bystanders at a safe distance.
2. Double check area for obstructions that may sever or damage hose as a hose blow out can be dangerous or even fatal
3. Prior to starting machine check over hoses for abrasions or cuts that may potentially blow out under pressure
4. Prior to starting machine ensure water is connected and turned on to water tank
Run main hose out to point where you intend to enter into affected drain
5. Plug main hose into Mini reel with quick coupler & double check connection
6. Connect desired jetting nozzle to Mini reel hose & double check connection
7. Insert nozzle and hose into drain to be cleared and push in at least 1M
8. Ensure Mini reel ball valve is off prior to ignition
9. Turn throttle to full, apply choke and turn key.
10. Once started, remove choke and allow to warm for 30 secs prior to loading up pump to full pressure
11. Open ball valve on Mini reel line and it will pull itself in the direction it was inserted until it reaches blockage
12. Continue jetting until you are satisfied blockage is cleared
13. Once blockage is clear shut off Mini reel ball valve and leave hose in line
14. Reduce revs of motor all the way down and turn off
15. Open Mini reel ball valve and release pressure
16. It is now safe to wind up hose and disconnect main (*or mini?*) reel

Note: Cease operations if a malfunction occurs or another person enters the work area and is in the 'line of fire'. If there is a malfunction occurs, isolate the equipment and attach an Out of Service tag, as a minimum, and report it to your Supervisor.

In the event of an incident

If skin is hit by high pressure sprayed water, **contact doctor immediately** because any skin penetration can cause serious illness and permanent damage.

Even if the injury appears insignificant it may give little indication of the extent of the injury beneath the skin and the damage to deeper tissues.

If available, provide the Medical Alert Card to the doctor.

Medical Alert Card

- All operators engaged in water jetting operations should carry a waterproof medical alert card.

This card;

- Outlines the possible nature of injuries and post-accident infections that can be caused by high pressure water jetting;
- Provide details of immediate first-aid treatment until medical treatment can be arranged and

A copy of the card is provided with each Assassin unit and we can provide additional copies on request.

<p style="text-align: center;"><u>ASSASSIN JETTERS</u> Phone: 1300 855 145 Medical alert card. Contact your nearest hospital <u>For emergency specialist advice.</u> THIS PERSON HAS BEEN INVOLVED IN A HIGH PRESSURE WATER JETTING ACCIDENT WITH PRESSURES UP TO 5000PSI. Please take this into account when making your diagnosis. Unusual infections with microaerophilic organisms occurring at lower temperatures have been reported. These may be gram negative pathogens such as are found in sewerage. Bacterial swabs and blood cultures may therefore be helpful. Another particular hazard is Weil's Disease (Leptospirosis) this may cause serious and even fatal illness which presents in the early stages as a flu –like illness with severe headaches, sometimes aseptic meningitis. Early treatment may prevent the onset of the more serious symptoms</p>
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If you have further questions regarding the safe and effective use of you Assassin Jetters equipment, please contact us on 1300 855 145

STANDARD OPERATING PROCEDURES

HIGH PRESSURE CLEANERS


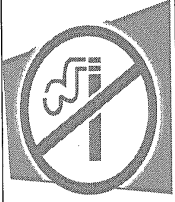


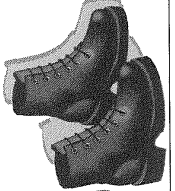


SPECIAL INSTRUCTION:

1. High pressure cleaning should be carried out in an area isolated from other workers, or steps taken to prevent exposure of persons to the cleaning process.
2. Persons should not operate high pressure cleaners unless they have been instructed in the hazards and the means of safe use of the equipment.
3. All persons using high pressure cleaners are to use personal protective equipment appropriate for the task and the equipment used.

Task sequence	Identified hazards in task	Key processes to be followed	Precautions / PPE required
1. Preparation	Electric Shock Skin irritation Burns, risk of fire Foreign matter in eyes	Care must be taken to ensure that electric leads are kept out of water, and preferably above ground. Follow manufacturer's instructions when adding cleaning agents to cleaners. Exercise caution when igniting gas or oil burners on steam cleaners.	Safety switch or RCD must be used. Hand protection must be worn. No smoking in vicinity.
2. Operation	Skin irritation Burns Slips and falls Noise	Water splash will contain cleaning agent and foreign matter from article being cleaned, which may splash back towards operator. Overspray and splash back will result in operator's clothing becoming wet with contaminated water from cleaner. Protect hands from hot water and heat from lance. Keep work areas clean – remove grease and other matter from floors. Larger units and steam cleaners may generate unsafe noise levels.	Wear safety goggles and/or face shield. Wet weather clothing and waterproof footwear required. Wear PVC gloves.
3. Risks to other persons	Splashing	The distance that water will be ejected over depends on the shape and velocity of the water jet. Exclusion of persons other than those actually involved in the cleaning task should be made to prevent injury from water and water-borne particles and cleaning agents.	Wear hearing protection. Prevent unauthorised entry into areas where cleaning is being carried out.

PRECAUTIONS:

1. The following precautions should be observed when carrying out this procedure.
2. Where applicable, suitable safety and warning signs should be displayed in areas where this procedure is carried out.

Preparation	Operation	Risk to other persons
 	   	

Operating Instructions

Petrol Driven Cold Water Pressure Cleaner

Congratulations on the purchase of your new Jetwave product. Before attempting to operate your machines, please read all of the instructions to ensure safe and trouble free service from your Jetwave cleaning machine.

Component Checklist

The following standard accessories should have accompanied your machine:-

- (1) Hose assembly;
- (2) Gun and lance assembly;
- (3) Manufacturers motor and pump assembly specifications;
- (4) Warranty card;
- (5) Detergent line with filter.

Contact your point of purchase immediately if any of the above components are missing.

Pre-Operation Instructions

- (1) Ensure that the machine is unplugged and switched off before proceeding with the following instructions.
- (2) Connect the high pressure hose to the pump outlet.
- (3) Connect water supply to the inlet water fitting on the pump. Ensure that the water supply is sufficient for the operation of the pump, if you are uncertain of the suitability of the water supply then refer to the recommended flow rate which is displayed on the data plate on the pump body.
- (4) Ensure that the water inlet supply filter is not blocked due to the presence of foreign particles in the water supply. Clean the water inlet supply filter regularly to ensure smooth operation.
- (5) Check that the oil level on the pump indicates the correct level.
- (6) Plug the machine into the power outlet, ensure that the water supply is connected and open then turn the machine on.
- (7) Gun Operation
 - (i) **Read the chapter on safety precautions before proceeding to use the machine;**
 - (ii) Point the lance towards the object to be cleaned and depress the trigger on the gun;
 - (iii) If using a twin lance, ensure that the tap handle on the lance is on the 'off' position for optimum pressure. On this high pressure operation the water should only come out of the stainless steel high pressure jet;
 - (iv) To reduce pressure, or, operate on low pressure for detergent, open the low pressure handle on the twin lance. If using a single lance with a Multireg nozzle, pull back the outer cover on the nozzle.
- (8) Chemical Injection Operation
 - (i) Insert the filter end of the clear detergent hose into the container holding the cleaning detergent to be used and affix the opposite end to the chemical injector;
 - (ii) Turn the knob on the chemical injector anticlockwise to adjust the flow of the detergent;
 - (iii) To reduce pressure, or, operate on low pressure for detergent, open the low pressure handle on the twin lance. If using a single lance with a Multireg nozzle, pull back the outer cover on the nozzle.

- (9) To end operation
 - (i) Switch the machine off at the on/off switch;
 - (ii) Switch the power point off and disconnect the plug from the power point;
 - (iii) Turn the inlet water off at the tap;
 - (iv) Pull the trigger on the gun to release any backpressure;
 - (v) Disconnect both the water inlet supply hose and the water outlet high pressure hose.

Important Safety Precautions

- (1) Never direct the spray jet at any person or animal;
- (2) Never place any part of your body over the nozzles;
- (3) Never direct the spray jet towards either the machine itself or any electrical item;
- (4) After use, Pull the trigger on the gun to release any backpressure;
- (5) When not in use, ensure that the machine is switched off and is disconnected from inlet water supply;
- (6) Do not attempt any mechanical repair yourself. Should your machine require either service or repair then please contact your local Jetwave agent;
- (7) Never supply any liquid other than water to the water inlet;
- (8) Never pull on the high pressure hose if it has formed kinks or nooses;
- (9) Never drag the hose over sharp objects;
- (10) Do not attempt to disconnect either the hose or any couplings whilst there is pressure in the hose. Refer to point (4) above.
- (11) Do not operate the machine whilst on a ladder.
- (12) Never allow children to either operate or play with the machine.
- (13) The use of safety glasses is recommended when using the machine to prevent any loose particles disturbed by the high pressure spray coming into contact with your eyes.

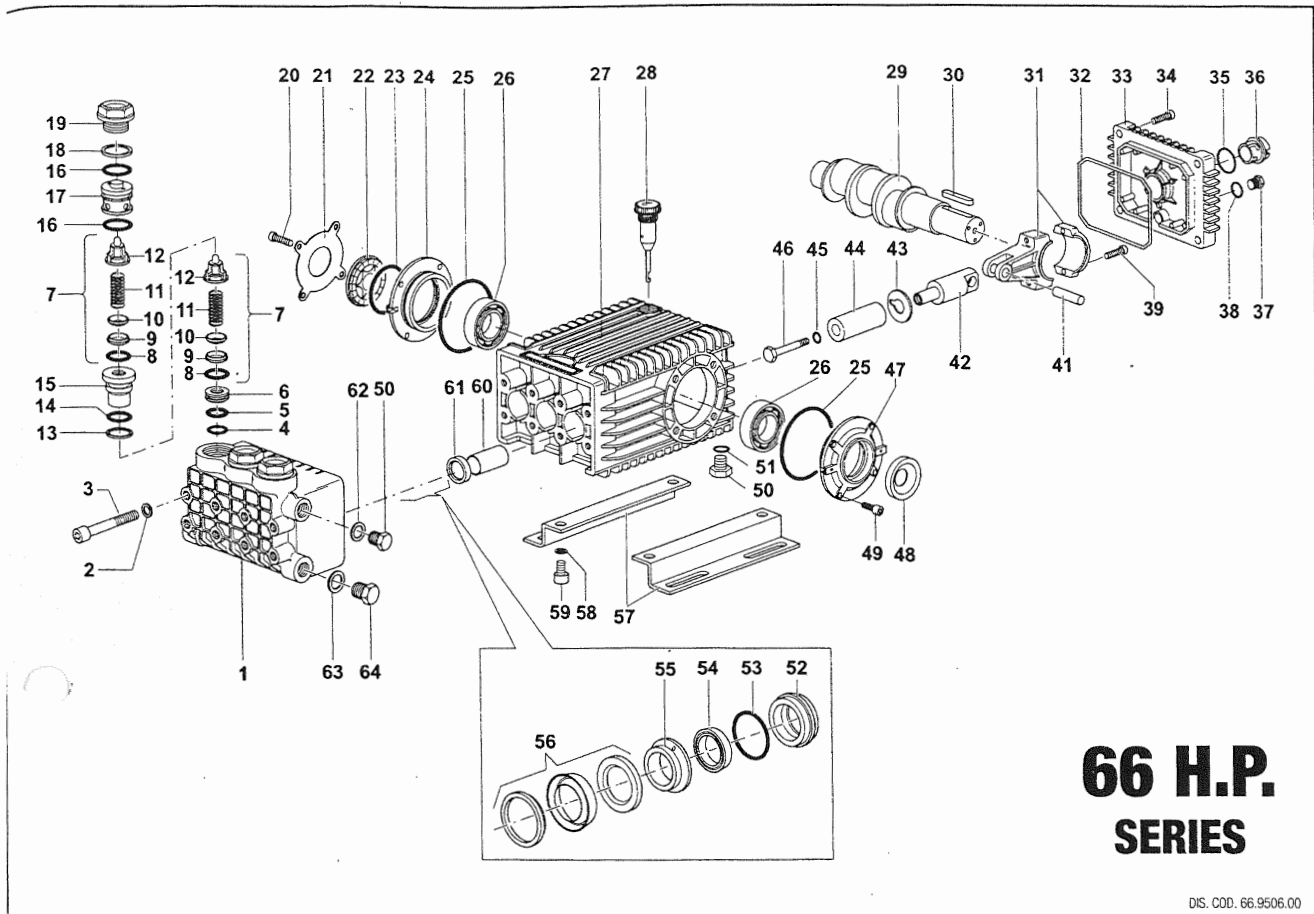
Tips & Hints

- (1) Regularly check the oil level in the pump. The oil level should be maintained at the level indicated on the pump.
- (2) Top up the oil in the pump when required using SAE 20W 50 oil. Never mix different grades of oil.
- (3) Use a good quality 13mm (inside diameter) water supply hose and connect to the water inlet on the pump using a hose clamp. Ensure that this connection is tight to avoid leaks.
- (4) Do not use any water supply hotter than 50°C as this will damage both the valves and seals in the pump.
- (5) Ensure that the tap on the water supply is fully opened before operating the machine.
- (6) After detergent use, flush the machine for a few minutes with clean water.

Trouble Shooting

The following table is provided as a general guide only. Please refer to your local Jetwave agent for service, repairs or specific advice.

Fault	Probable Cause	Possible Remedy
Pump runs normally but pressure does not achieve rated value.	Pump is sucking air.	Check that all hoses and fittings are airtight.
	Valves are worn or dirty.	Check, clean or replace.
	Unloader valve packing worn.	Check and replace.
	Nozzle incorrect or worn.	Check and replace.
	Worn piston packing.	Check and replace.
	Dirty filter.	Check and clean.
Fluctuating pressure.	Valves dirty, worn or stuck.	Check, clean or replace.
	Pump sucking air.	Check that all hoses and fittings are airtight.
	Worn piston packing.	Check and replace.
	Dirty filter.	Check and clean.
Presence of water in oil.	High humidity in air.	Check and change oil twice as often.
	Piston packing or oil seal worn.	Check and replace.
	Water entering through breather.	Excessive water on machine.
Water dripping from pump.	Piston packing worn.	Check and replace.
	Piston guide o'rings worn.	Check and replace.
Dripping oil.	Worn oil seals.	Check and replace.
	Oil coming our of breather.	Pump oil level overfull.
Motor does not start when switched on.	Plug not well connected or unreliable power supply.	Check plug, cable & switch.
	Earth leakage overload.	Check earth leakage.
When switched on the motor hums but does not run.	Mains voltage is insufficient.	Check adequacy of mains power supply.
Motor stops suddenly during operation.	Thermal overload tripped due to overheating.	Check mains voltage for fluctuations.



66 H.P. SERIES

DIS. COD. 66.9506.00

KIT N.	KIT 2	KIT 3	KIT 150	PISTON - PISTONE Ø 16		PISTON - PISTONE Ø 18	
				MODEL - MODELLO: W4015 - W4018 - T4018 W4518 - W5015	MODEL - MODELLO: W3521 - W3523		
Positions Included Posizioni Includere	61	48	8-9-10 11-12 (7)	54-56	52-53-54 55-56	54-56	52-53-54 55-56
N. pcs.	3	2	6	3	1	3	1

STANDARD
VERSION

VERSIONE
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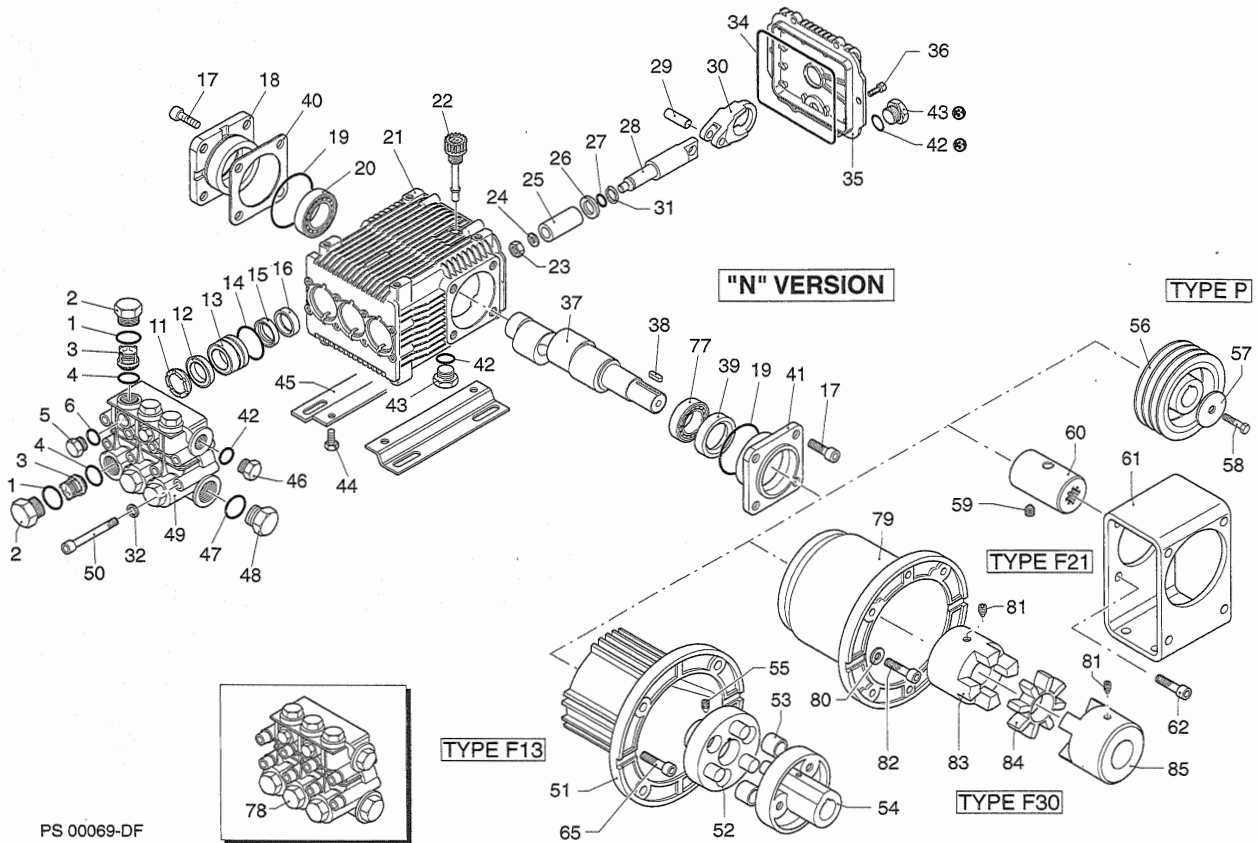
W3521	W4518
W3523	W5015
W4015	T4018
W4018	

POS.	CODE CODICE	DESCRIZIONE DESCRIZIONE	N. PCS.
	66.1210.41	Testata pompa (pistone Ø 16)	1
	66.1211.41	Testata pompa (pistone Ø 18)	1
	66.1240.41	Testata pompa (pistone Ø 16) W4518 - W5015	1
2	96.7104.00	Rosetta Ø 10 Schnorr	8
3	99.3820.00	Vite M 10x120 UNI 5931 Zincata	8
4	90.5118.00	Anello antiestrusione Ø 19,5x22x1,5	3
5	90.3596.00	OR Ø 18,77x1,78	3
6	66.2102.70	Distanziale	KIT 150 3
7	36.7121.01	Gruppo valvola	KIT 150 6
8	90.3841.00	OR Ø 17,13x2,62	KIT 150 6
9	36.2003.66	Sede valvola	KIT 150 6
10	36.2032.66	Valvola	KIT 150 6
11	94.7376.00	Molla Ø 9,4x14,8	KIT 150 6
12	36.2025.51	Guida valvola	6
13	90.5115.00	Anello antiestrusione Ø 18,7x23x1,5	3
14	90.3843.00	OR Ø 17,86x2,62	3
15	66.2101.66	Bussola	3
16	90.3857.00	OR Ø 23,81x2,62	6
17	66.2100.70	Tappo Ø 29	3
18	90.5165.00	Anello antiestrusione Ø 24,7x29x1,5	3
19	66.1301.41	Tappo valvole M 32x1,5x18,5	3
20	99.3069.00	Vite M 8x25 UNI 5931 Zincata	4
21	66.1502.74	Coperchio	1
22	44.2118.01	Distanziale con indicatore	1
23	90.4097.00	OR Ø 55,56x3,53	1
24	66.1501.22	Coperchio laterale carter	1
25	90.3913.00	OR Ø 67,95x2,62	2
26	91.8380.00	Cuscinetto a rulli NJ 2206 EC	2
27	66.0100.22	Carter	1
28	98.2106.00	Tappo carico olio G 3/8	1
29	66.0200.35	Albero W4015 - W3521-T4018 - W5015	1
	66.0204.35	Albero W4018 - W3523 - W4518	1
30	91.4892.00	Linguetta	1
31	66.0300.01	Biella completa	3
32	90.3922.00	OR Ø 133,02x2,62	1
33	66.1600.22	Coperchio posteriore	1

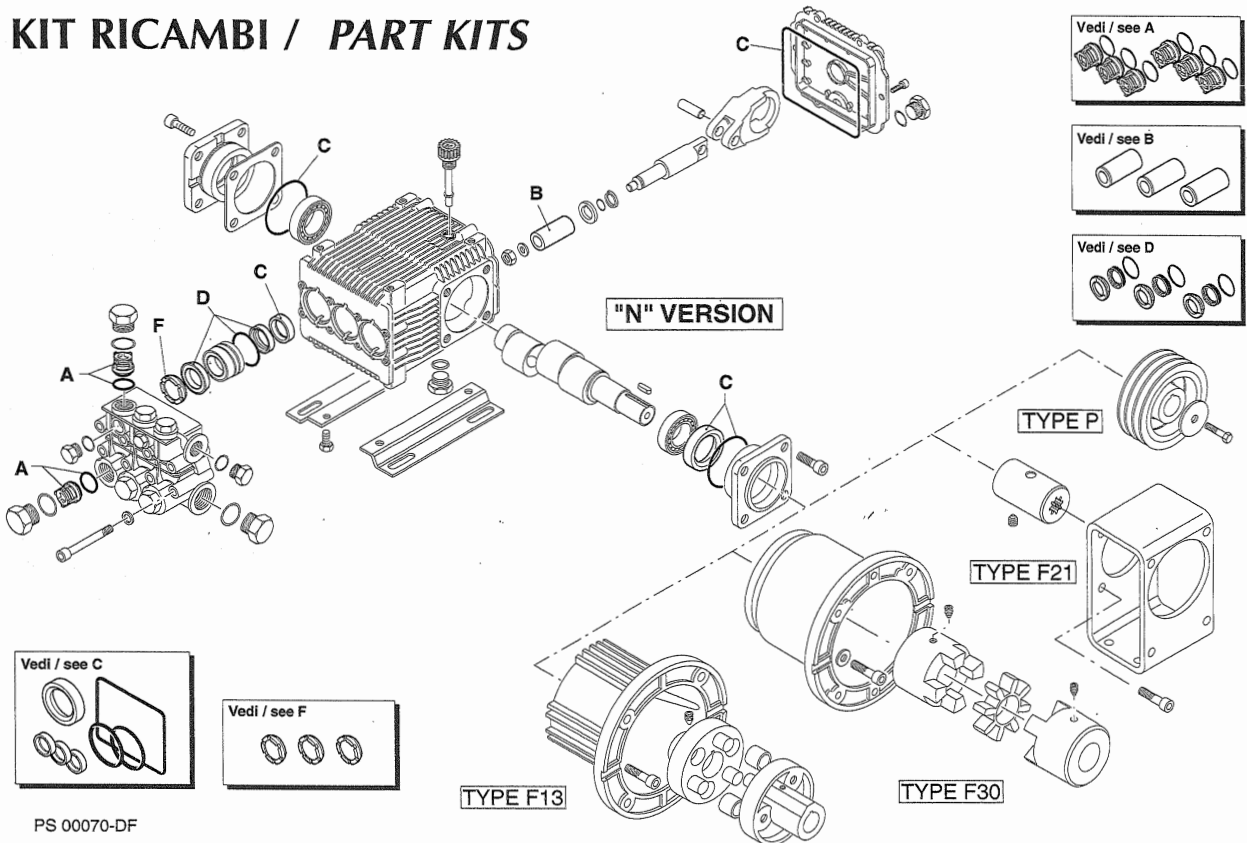
POS.	CODE CODICE	DESCRIZIONE DESCRIZIONE	N. PCS.
34	99.1884.00	Vite M 6x20 UNI 5931 Zincata	4
35	90.4051.00	OR Ø 26,58x3,53	1
36	63.2100.51	Spia livello olio	1
37	98.2041.00	Tappo G 1/4"x9	1
38	90.3585.00	OR Ø 10,82x1,78	1
39	99.3099.00	Vite M8x35 UNI 5931 Zincata	6
41	97.7405.00	Spinotto Ø 14x39	3
42	66.0500.64	Guida pistone	3
43	96.7101.00	Rosetta Ø 10x28x0,5	3
44	66.0402.09	Pistone Ø 16x54	3
	66.0403.09	Pistone Ø 18x54	3
45	90.3584.00	OR Ø 10,82x1,78-90 Sh.	3
46	66.2195.66	Vite fissaggio pistone	3
47	66.1500.22	Coperchio laterale carter	1
48	90.1648.00	Anello radiale Ø 30x55x7	KIT 3 1
49	99.3039.00	Vite M 8x16 UNI 5931 Zincata	4
50	98.2100.00	Tappo G 3/8"x13	1
51	90.3833.00	OR Ø 13,95x2,62	2
	66.0802.70	Anello di fondo Ø 16	KIT 175 3
	66.0803.70	Anello di fondo Ø 18	KIT 176 3
53	90.3616.00	OR Ø 34,65x1,78	KIT 175-176 3
	90.2631.00	Anello di tenuta Ø 16x24x6,5 L.P. seal	KIT 174-175 3
54	90.2652.00	Anello di tenuta Ø 18x26x6,5 L.P. seal	KIT 180-176 3
	66.2162.70	Anello intermedio Ø 16	KIT 175 3
55	66.2163.70	Anello intermedio Ø 18	KIT 176 3
56	90.2634.00	Anello di tenuta Ø 16x26x9,5 H.P. seal	KIT 174-175 3
	90.2655.00	Anello di tenuta Ø 18x28x10 H.P. seal	KIT 180-176 3
57	47.2000.74	Piedino fissaggio pompa	2
58	96.7106.00	Rosetta Ø 10 DIN 7980	4
59	99.3644.00	Vite M 10x18 UNI 5931 Zincata	4
60	90.9126.00	Boccola Ø 22x25x30	3
61	90.1625.00	Anello radiale Ø 22x32x5,5	KIT 2 3
62	96.7380.00	Rosetta Ø 17,5x23x1,5	1
63	96.7514.00	Rosetta Ø 21,5x27x1,5	1
64	98.2176.00	Tappo G 1/2"x10	1

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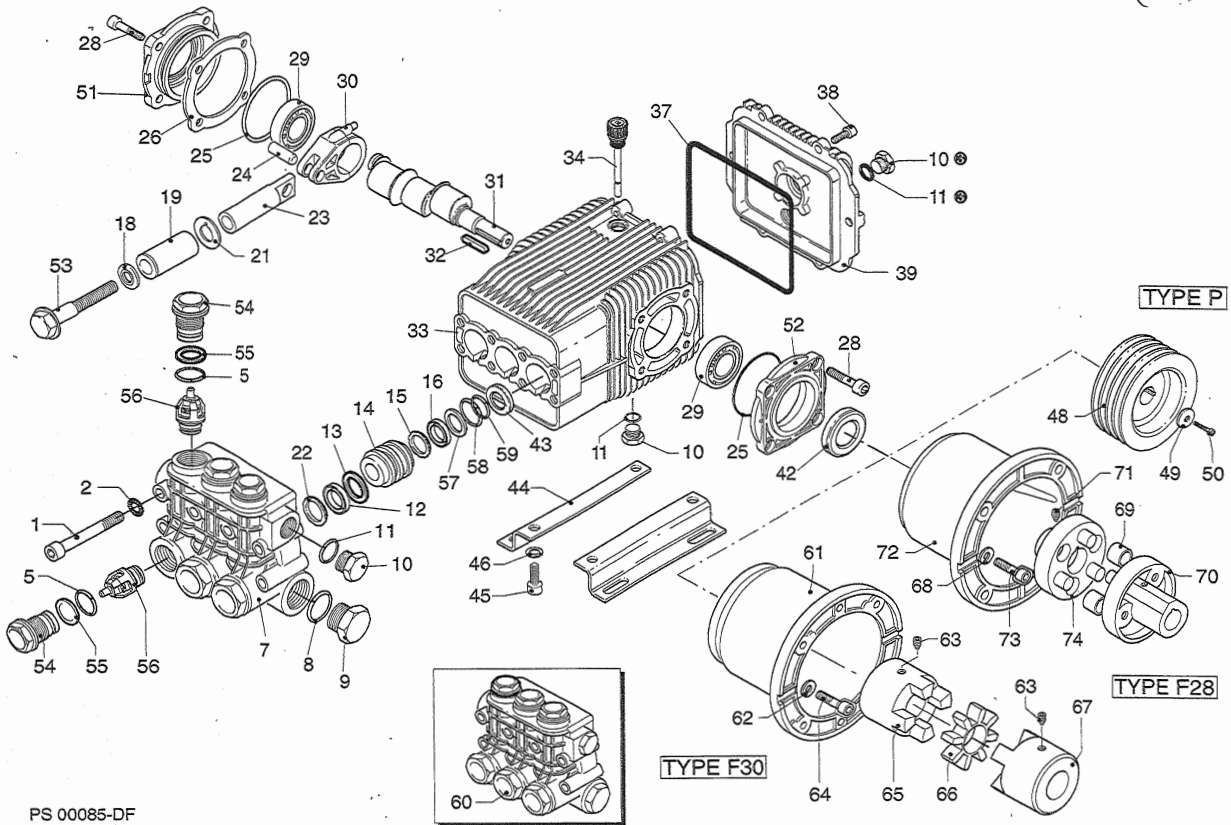
NOISE N 1450 RPM



KIT RICAMBI / PART KITS

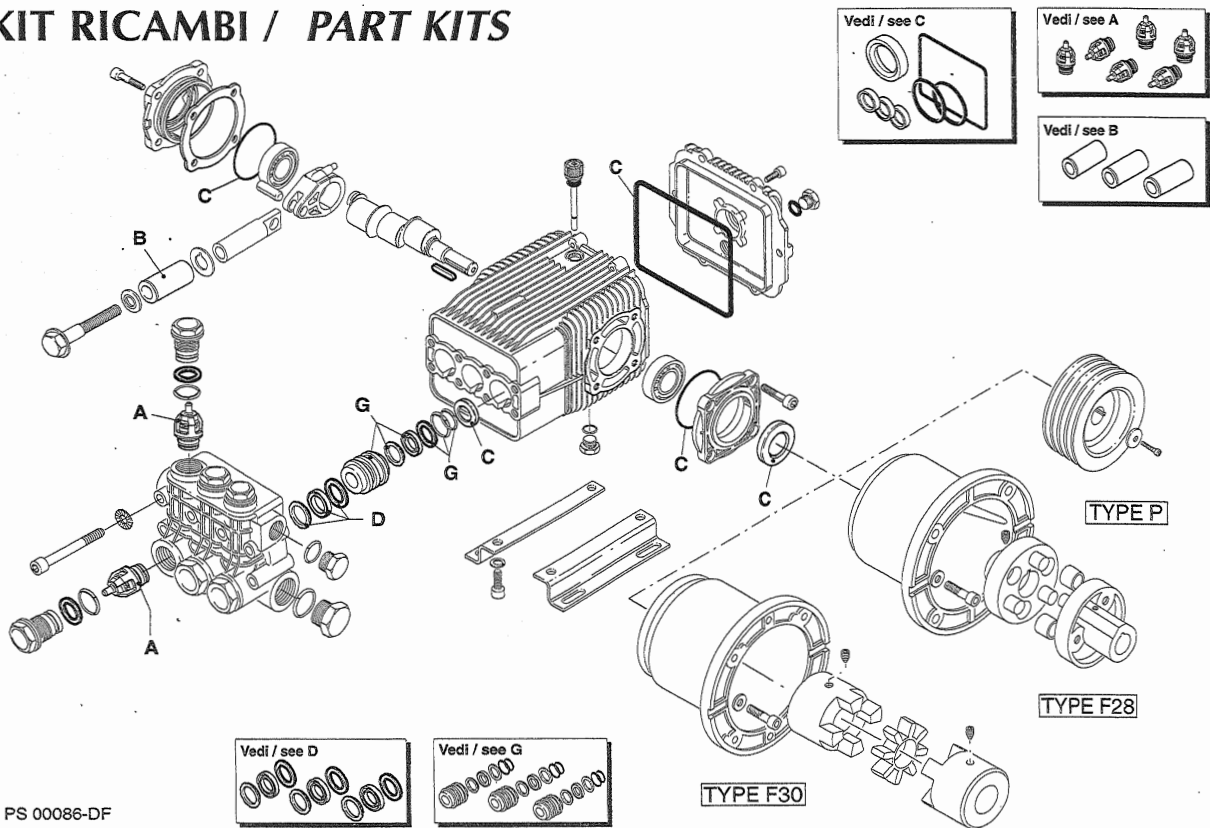


SXW VERSION N 1450 RPM



PS 00085-DF

KIT RICAMBI / PART KITS



PS 00086-DF



Pos.	Cod. Part n°	Denominazione	Description	Q.tà Q.ty	Note Vedi / See	Pos.	Cod. Part n°	Denominazione	Description	Q.tà Q.ty	Note Vedi / See
1	1940260	Vite TCEI M 10x80	Screw	8		50	780060	Vite TCEI M 6x25	Screw	1	
2	650530	Rosetta	Washer	8		51	1949011	Coperchio lat. compl.	Comp. side cover	1	
5	880830	OR ø 15,54x2,62	O-Ring	6		52	1941240	Supporto aperto	Open bearing sup.	1	
7	1940930	Testa pompa	Pump head	1		53	1940920	Vite fiss. pistone	Piston-fixing screw	3	
8	180101	OR ø 17,5x2	O-Ring	1		54	1940940	Tappo valvola	Plug	6	
9	820361	Tappo 1/2" G	Plug	1		55	1941070	Anello antiestr.	Ring	6	
10	1980740	Tappo 3/8" G	Plug	3	③	56	1949051	Valvola completa	Complete valve	6	
11	740290	OR ø 14x1,78	O-Ring	3	⑤	57	1941030	Distanziale	Spacer	3	
12	1941200	Guarnizione	Plug	3		58	820490	OR ø 34,65x1,78	O-Ring	3	
13	1941050	Anello antiestr.	Ring	3		59	1941010	Anello elastico	Snap Ring	3	
14	1940950	Guida pistone	Piston guide	3		60	1949204	Prem.testa	Head pre-assembly	1	
15	1941350	Anello appoggio	Support ring	3		61	1383080	Flangia motori B3/B14	El. motor flange	1	B3/B14
16	1941340	Guarnizione	Gasket	3		62	380241	Rondella Øi 8,5	Washer	1	
18	1340600	Rondella	Washer	3		63	1380180	Grano M 6x10	Grub screw	2	
19	1941020	Pistone	Piston	3		64	540290	Vite TCEI M 8x25	Screw	4	
21	1383190	Disco separatore	Spacer	3		65	1383100	Semigiunto pompa	Pump coupling	1	
22	1941190	Anello appoggio	Support ring	3		66	1940850	Anello elastico	Ring	1	
23	1940960	Pistone di guida	Guiding piston	3		67	1383090	Semigiunto motore	Motor coupling	1	
24	1940060	Spinotto	Con rod pin	3		68	380241	Rondella Øi 8,5	Washer	1	
25	1941380	OR ø 66,34x2,62	O-Ring	2		69	1321670	Boccola	Bushing	6	
26	1941390	Spessore 0,05 mm	0,05 mm shim	1		70	1380340	Semigiunto motore	Motor coupling	1	
	1941400	Spessore 0,10 mm	0,10 mm shim	1		71	1380180	Grano M 6x10	Grub screw	2	
	1941410	Spessore 0,19 mm	0,19 mm shim	1		72	1940890	Flangia motori B3/B14	El. motor flange	1	B3/B14
	1941420	Spessore 0,25 mm	0,25 mm shim	1		73	540290	Vite TCEI M 8x25	Screw	4	
28	850370	Vite TCEI M 8x16	Screw	8		74	1940870	Semigiunto pompa	Pump coupling	1	
29	1140410	Cuscinetto	Bearing	2							
30	1940050	Biella	Conrod	3							
31	1940980	Albero eccentrico	Crank shaft	1	●						
	1940970	Albero eccentrico	Crank shaft	1	○						
32	650250	Linguetta 8x7x40	Key	1							
33	1941330	Corpo pompa	Pump housing	1							
34	1140370	Tappo olio	Plug	1							
37	1940410	OR ø 132x3	O-Ring	1							
38	1200430	Vite TCEI M 6x16	Screw	6							
39	1949010	Coperchio post. compl.	Complete cover	1							
42	820680	Anello tenuta	Seal	1							
43	1940560	Anello tenuta	Seal	3							
44	1940370	Piede pompa	Base	2	Optional						
45	1940380	Vite TCEI M 10x18	Screw	4	Optional						
46	200231	Rosetta	Washer	4	Optional						
48	1940290	Puleggia	Pulley	1	4 B						
49	780230	Rondella	Washer	1							

● Compreso nel cod. 1949010 / Part of part n° 1949010

KIT RICAMBI PART KITS

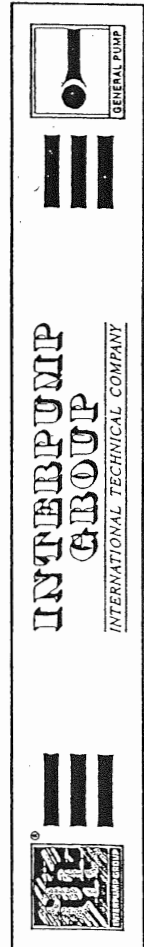
A=KIT 2871 valvole valves		B=KIT 2872 ø 18 pistoni pistons		C=KIT 2873 tenute olio oil seals		D=KIT 2874 ø 18 tenute acqua water seals	
pos.	Q.ty	pos.	Q.ty	pos.	Q.ty	pos.	Q.ty
56	6	19	3	25	2	12	3
				37	1	13	3
				42	1	22	3
				43	3		

G=KIT 2875 ø 18 guida pistoni pistons guide							
pos.	Q.ty	pos.	Q.ty	pos.	Q.ty	pos.	Q.ty
14	3						
15	3						
16	3						
57	3						
58	3						
59	3						

LEGENDA :

● Per / For
SXW 15.35

○ Per / For
SXW 21.35

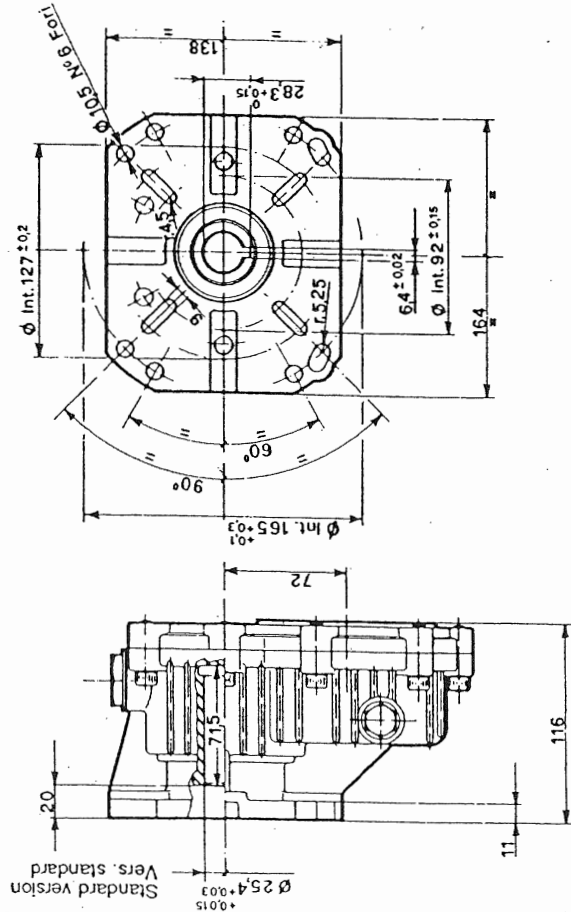


**REDUCTION GEAR FOR
PETROL ENGINE**

RS 151
HP7 - HP10 - HP18

**RIDUTTORE PER
MOTORE A SCOPPIO**

FLANGE FITTING DIMENSIONS - DIMENSIONI D'ATTACCO FLANGIA



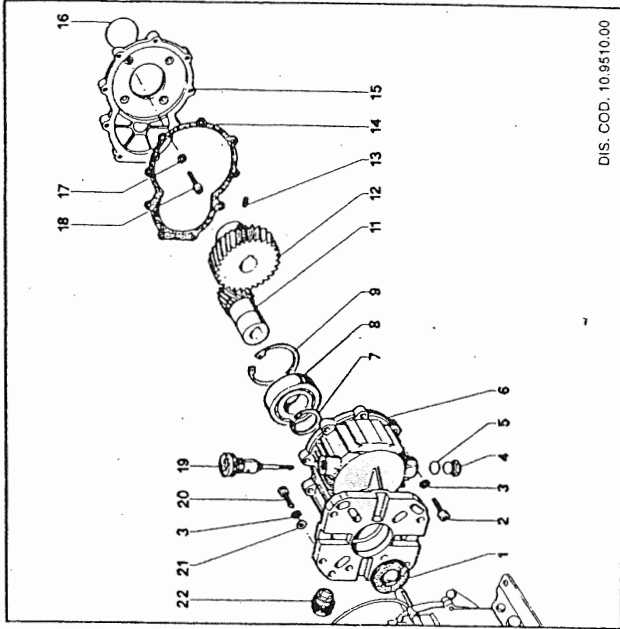
DIS. COD. 10.0245.00

TECHNICAL CHARACTERISTICS - CARATTERISTICHE TECNICHE

PUMP TYPE TIPO POMPA	ABSORBED HP HP ASSORTITI	ENGINE MIN. HP HP MIN. MOTORI	REDUCTION RATIO RAPP.	INPUT R.P.M. GMIN. ENTRATA	MOTORS MOTORI
WS82 - WS92 - WS101 - WS102 WS131 - WS132 - WS133 - WS151 - WS171 SW1513 - SW1515 TS821 - TS1011 - TS1331	4 - 5,6	7			ACME ASPERA MOTORS BRIGGS & STRATTON CO.TIEMME HONDA INTERMOTOR RUGGERINI LOMBARDINI
WS1516 - SW1521 TS921 - TS1021 - TS1311 - TS1321 TS1471 - TS1511 - TS1621 TS1711 - TS2011	5,8 - 8	10	1:2,2	3100	
WS202 TS1521 - TS1991 - TS2021	8,5 - 11,5	18			

P.S. LUBRICATION:
WE RECOMMEND
OIL - SAE 80W90
OIL CAPACITY 1 0,28

P.S. LUBRIFICAZIONE:
SI CONSIGLIA
OLIO - SAE 80W90
CAPACITÀ OLIO 0,28 l



DIS. COD. 10.9510.00

PARTS LIST

POS.	CODE CODICE	DESCRIPTION DESCRIZIONE	N. PCS.
1	90.1680.00	Anello radiante Ø 40x55x7	1
2	99.3084.00	Vite M8x30 UNI 5931	9
3	96.7014.00	Rosetta Ø 8,4 Schnorr	13
4	96.7104.00	Rosetta Ø 10 Schnorr	4
4	98.2100.00	Tappo G 3/8 x 13	1
5	90.3833.00	OR Ø 13,95x2,62	1
6	10.0229.22	Carter riduttore	1
7	90.0725.00	Anello di fermo Ø 40 UNI 7435	1
8	91.8518.00	Cuscinetto a sfera - 6208	1
9	90.0976.00	Anello di fermo Ø 80 UNI 7437	1
11	10.0233.55	Pignone Z.17 Ø 25,4	1
11	10.0312.55	Pignone Z.17 Ø 25	1
12	10.0271.55	Pignone Z.17 Ø 28,6	1
12	10.0234.55	Corona Z. 37	1
13	99.3017.00	Vite M 8x10 UNI 5929	1
14	10.0232.84	Guarnizione	1
15	10.0230.22	Flangia riduttore	1
16	90.3898.00	OR Ø 56,82x2,62	1
17	93.1754.00	Guarnizione Ø 8	4
18	99.3085.00	Vite M 8x30 UNI 5931 - Autoblocc.	4
19	98.2106.00	Tappo carico olio G 3/8	1
20	99.2755.00	Vite 5/16"x1"x24 UNF	4
20	99.3345.00	Vite 3/8"x1"x16 UNC	4
21	96.7020.00	Rosetta Ø 8,4 UNI 1736	4
22	97.5968.00	Spia livello olio G 3/4	1

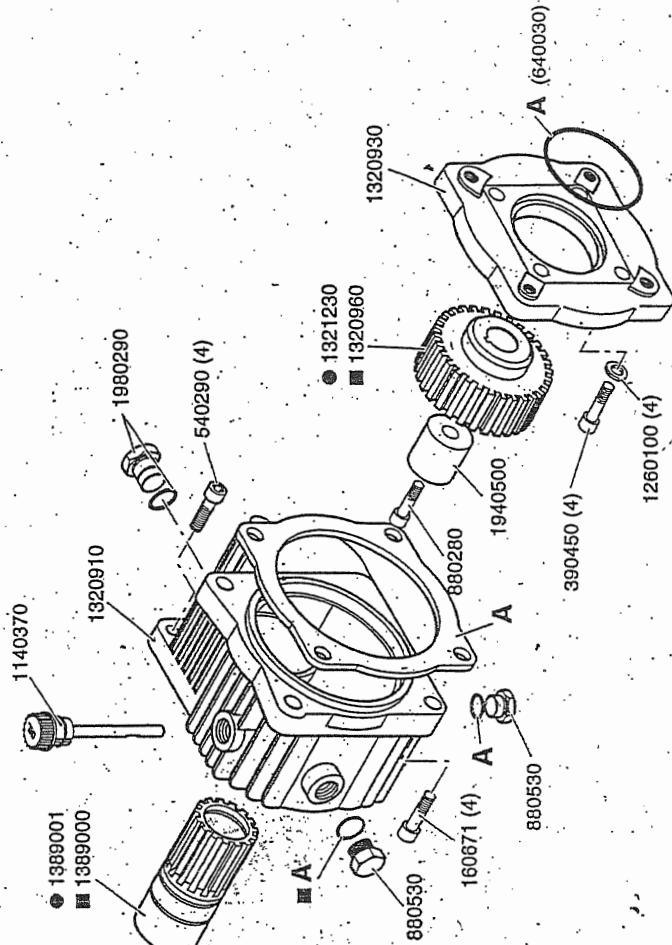
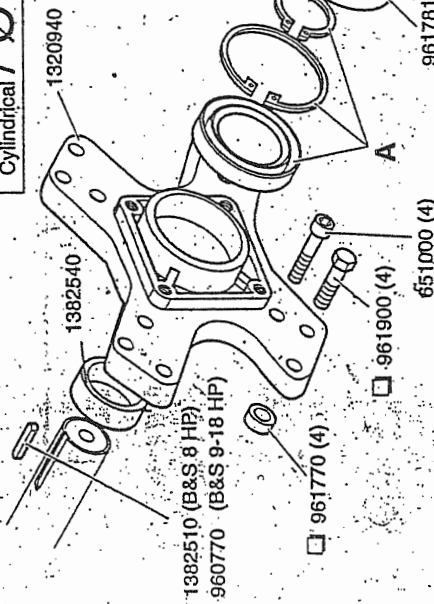
RIDUTTORE 1:2 / GEAR BOX 1:2
 ● **Cod. 1697**
 per / for XW - XWA

RIDUTTORE 1:2,24 / GEAR BOX 1:2,24
 ■ **Cod. 1698**
 per / for XW

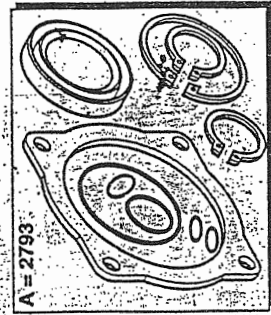
Cilindrico / Ø1"
 Cylindrical

Flangia / SAE J 609a
 Flange

Per motori italiani
 Italian engines only



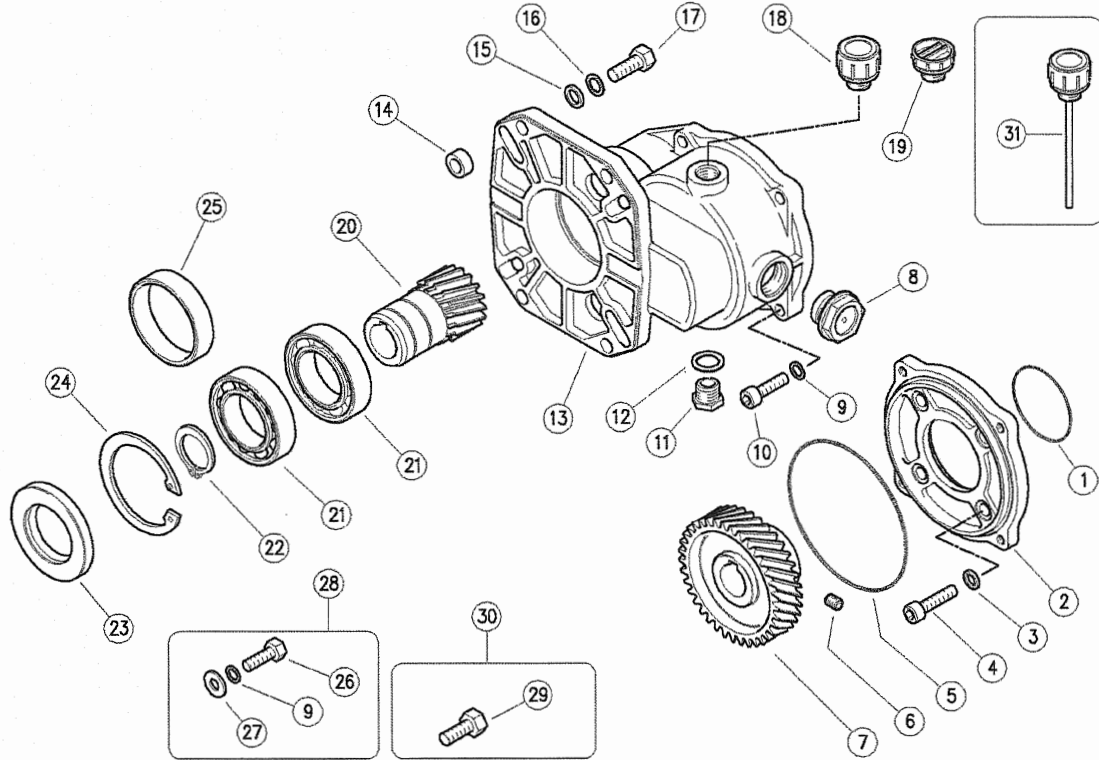
Oil level: 0,26 kg of "BLASIA W 90" is to be used.
 L'huile à utiliser est "BLASIA W 90" 0,26 kg.
 Zur Ölfüllung 0,26 kg "BLASIA W 90" verwenden.
 El aceite que debe utilizarse es "BLASIA W 90" en la cantidad de 0,26 kg.
 L'olio da usare è "BLASIA W 90" nella quantità di 0,26 kg.



AR 1698-KJ

50.0000.00 B18 Gear box 11-18 HP r.2,176:1
 50.0015.00 B18 gear box 1" -Leuco LT-XLT d.25mm
 50.0040.00 B18 Gear box 11-18 HP r.2,176:1

50.0060.00 B24 Gear box 18-24 HP r.2,176:1
 50.0062.00 B24 Gear box 18-24 HP r.2,176:1
 50.0100.00 B10 Gear box 7-10 HP r.2,176:1



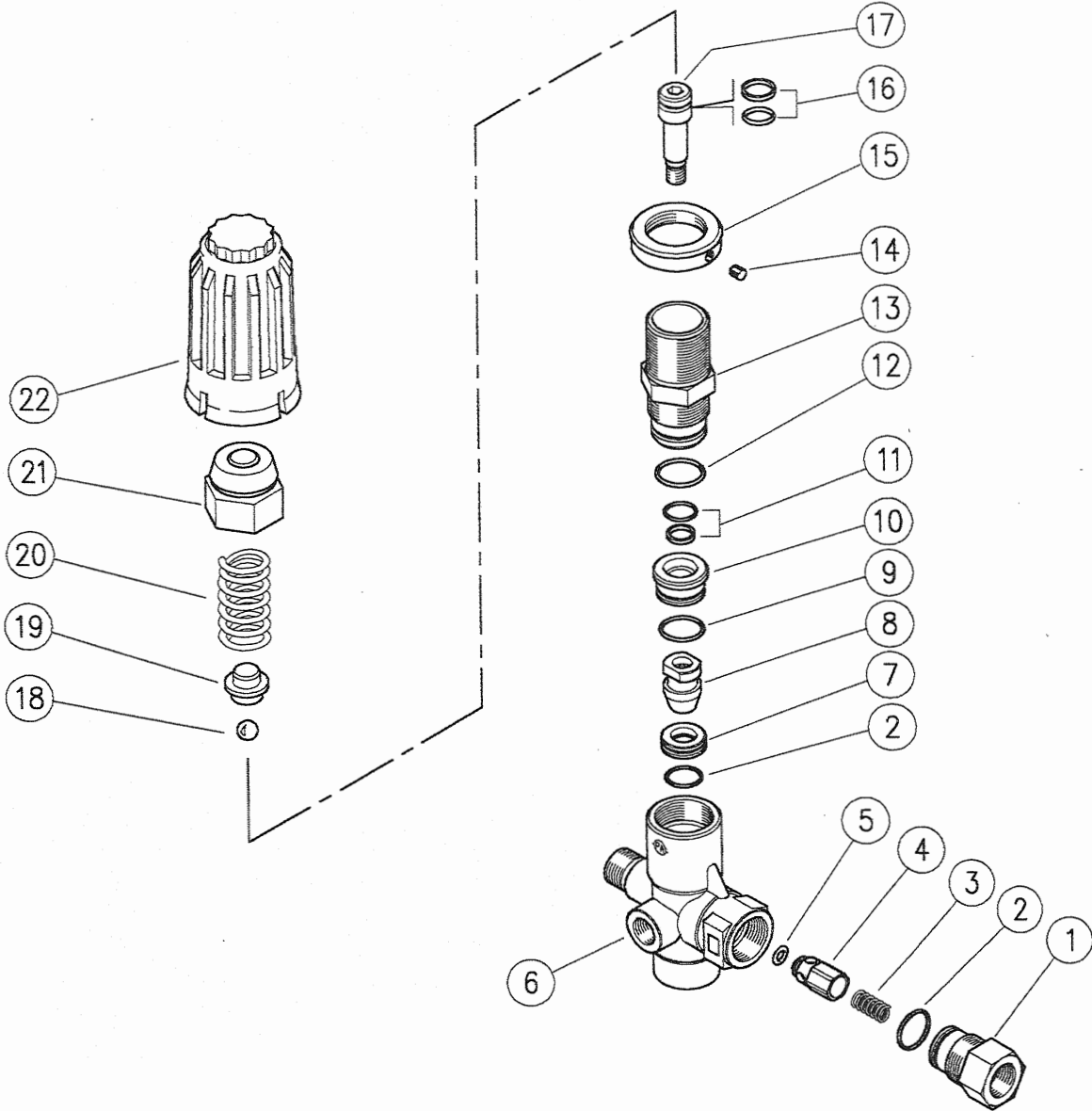
Pos.	P/N	Description	Q.ty	K1	K2	K3	K4	Pos.	P/N	Description	Q.ty	K1	K2	K3	K4
1	10.3210.56	O-ring, 2,62x56,82 mm	1					10	16	14.3653.00 Safet. washer, 10,5x16x1 mm	4				10
1	10.3210.67	O-ring, 2,62 x 67,95 mm (1)	1					10	17	16.2010.00 Screw, DIN933 3/8"UNCx1"1/4 z.pl.	4				4
2	50.0002.44	Gearbox flange, alum.	1					1	18	15.3726.00 Oil plug 3/8" Bsp+seal	1				5
2	50.0016.44	Flange -Leuco LT-XLT (1)	1					1	19	15.3725.00 Plug, 3/8" Bsp plast.	1				5
3	14.4098.00	Sealing washer, d.8 mm	4					5	20	50.0006.21 Pinion, Z.17 d.1" (25,4mm) complete	1				1
4	16.1958.31	Screw, DIN912 M8x30 mm z.pl.	4					4	20	50.0007.21 Pinion, Z.17 d.1"1/8 (28,6mm) complete (2)	1				1
5	10.3211.11	O-ring, 2,62x113,92 mm	1					10	21	11.4440.68 Ball-bearing, 40x68x15 mm (3)	2				2
6	16.2223.00	Set screw, DIN916 M8x10 mm	1					10	21	11.4441.68 Ball-bearing, 40x68x15 mm (4)	2				2
7	50.0003.65	Ring gear, Z.37 d.24mm	1					1	22	10.1040.00 Snap ring, E 40	1				5
7	50.0017.65	Z.37 gear D.25mm (1)	1					1	23	10.2040.72 Seal ring, 40x72x7 mm	1				3
8	15.3734.00	See-through oil plug 3/4" Bsp+seal	1					5	24	10.1072.00 Snap ring, I 72	1				5
9	14.3652.00	Safet. washer, 8,4x13x0,8 mm	8					10	25	50.0101.61 Spacer ring, 60x68x15 mm (5)	1				3
10	16.1958.26	Screw, DIN912 M8x25 mm z.pl.	4					4	26	16.2009.00 Screw, DIN933 5/16"UNFx1" z.pl.	4				4
11	60.0028.31	Plug, brass 3/8 Bsp, hex. 19	1					25	27	14.3572.00 Washer, 8,4x21x1,5 mm	4				10
12	14.4042.00	Washer, 16,7x22x1,5 mm alu.	1					25	28	50.0010.24 Lock-Kit, 127mm, 5/16" screws+washers	1				1
13	50.0001.44	Gearbox case, alum.	1					1	29	16.2035.00 Screw, DIN933 M10x35 mm z.pl. **	4				10
14	50.0008.31	Spacer ring, 10,3x18x6 mm brass	4					4	30	50.0011.24 Lock-Kit, 165mm, M10 screws **	1				1
15	14.3798.00	Washer, 10,5x17x2 mm	4					10	31	15.3728.00 Oil plug +dipstick **	1				3

** On request

(1) 50.0015.00 (2) 50.0040/60.00 (3) 50.0100.00 (1) (4) 50.0060/62.00 (5) 50.0100.00

60.1600.00 VB280 valve, Bsp

60.1700.00 VB350 valve, 3/8 Bsp MF+knob



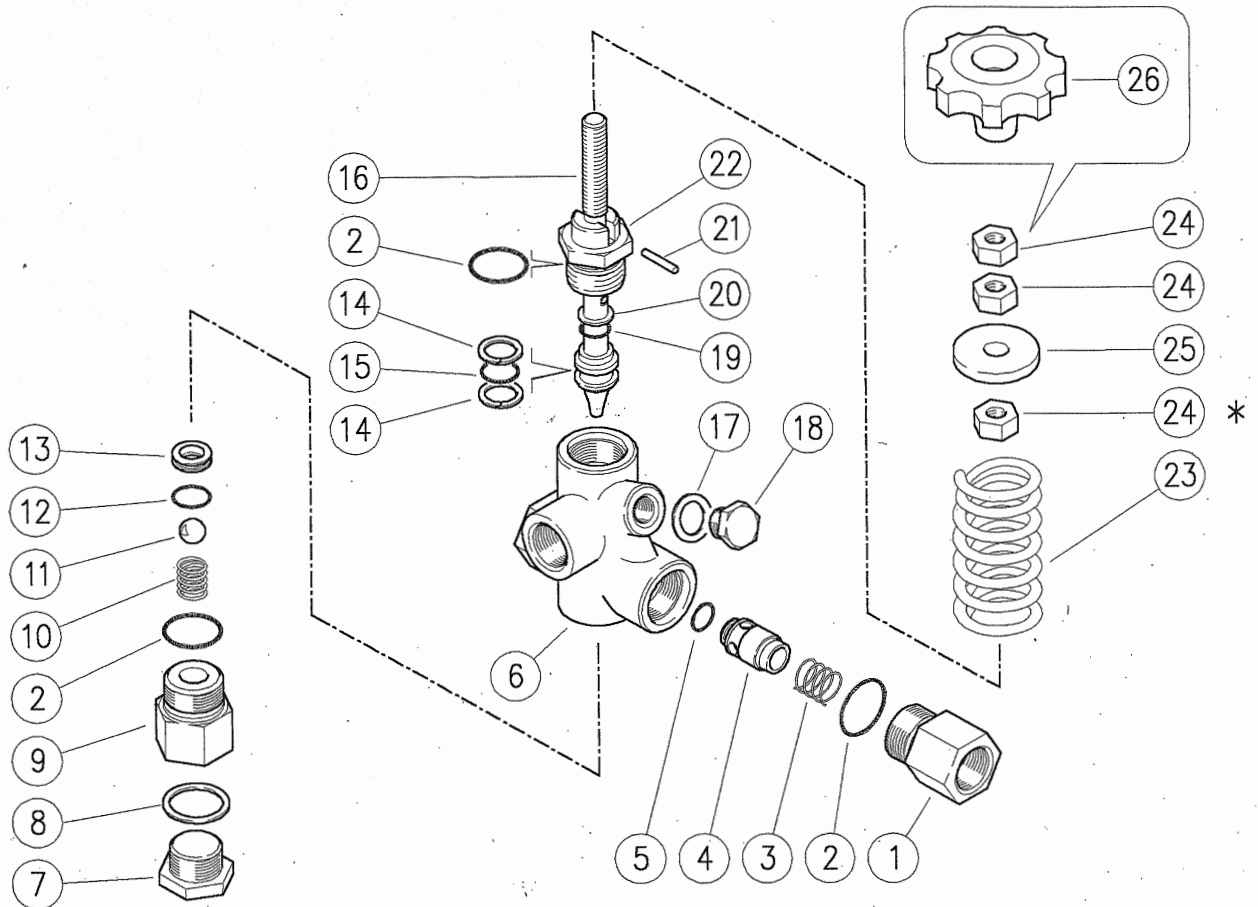
Pos.	P/N	Description	Q.ty	K1	K2	K3
1	60.1811.31	3/8Bsp F nipple	1			3
2	10.3066.01	O ring 1,78 x 15,6 mm	2			25
3	60.0053.51	Spring	1			25
4	60.0052.51	Self check valve	1			3
5	10.3213.08	O ring 3 x 6 mm	1			25
6	60.1725.35	VB280-350 Brass body	1			3
7	60.1809.51	Seat	1			5
8	60.1808.51	M 8 shutter	1			3
9	10.3068.01	O ring 1,78 x 17,17 mm	1			25
10	60.1810.31	Spacer	1			5
11	60.0979.24	VB280-350 val.pist.seal repair set	1			5
12	10.3072.01	O ring 1,78 x 20,35 mm	1			25
13	60.0973.31	Piston housing (60.1600.00)	1			3

Pos.	P/N	Description	Q.ty	K1	K2	K3
13	60.1805.31	Piston housing (60.1700.00)	1			3
14	16.2100.00	M 4 x 4 mm dowel	1			25
15	60.1728.31	Lock nut	1			3
16	60.0978.24	VB280-350 val.pist.seal repair set	1			5
17	60.1806.51	M 8 piston	1			3
18	14.7443.10	Self 11/32" ball	1			25
19	60.1813.31	Spring guide	1			5
20	60.0975.61	4,2 mm spring (60.1600.00)	1			10
21	60.1727.31	Brass cap	1			5
22	60.1726.84	VB280 Black plast.knob (60.1600.00)	1			10
	60.1729.84	VB350.4 red plastic knob (60.1700.00)	1			10

Kit	P/N	Description
K1	60.1615.24	VB280-350.4 spare parts kit pcs.11x1

60.0400.00 VB80/150 valve, Bsp
 60.0400.05 VB80/150 Npt valve
 60.0400.08 VB80/150 Epdm Bsp unload.valve
 60.0400.60 VB80/280 Bsp valve

60.0400.61 VB80/280 valve, Bsp, w/knob
 60.0400.64 VB80/280 Bsp valve,w/ 1/4F port
 60.0400.65 VB80/280 valve, Npt



Pos.	P/N	Description	Q.ty	K1	K2	K3
1	60.0402.31	Outlet fitting	1			5
1	60.0442.31	Brass outlet connec.1/2 Npt (60.0400.05/65)	1			3
2	10.3072.01	O ring 1,78 x 20,35 mm	3			25
2	10.3072.18	O-ring 1,78 x 20,35 mm Epdm (60.0400.08)	3			5
3	60.0409.51	Spring	1			10
4	60.0403.31	Check valve	1			10
5	10.3292.00	O ring 4 x 8 mm	1			25
5	10.3292.10	O ring 4 x 8 mm viton (60.0400.08)	1			10
6	60.0426.35	VB 80 brass body	1			3
6	60.0427.35	Brass body VB80 Npt (60.0400.05/65)	1			3
6	60.0420.35	1/2 Bsp+ 1/4 hole body (60.0400.64)	1			3
7	60.0413.31	1/2 Bsp plug	1			10
7	60.0444.31	1/2Npt brass plug (60.0400.05/65)	1			10
8	14.4290.00	22 x 27 mm washer	1			25
9	60.0405.31	Inlet fitting	1			3
9	60.0443.31	Brass inlet connect. 1/2 Npt (60.0400.05/65)	1			3
10	60.0410.51	Sst 1,6mm spring	1			10
11	14.7461.00	13/32" ball	1			25
12	10.3060.01	O ring 1,78 x 12,42 mm	1			25

Pos.	P/N	Description	Q.ty	K1	K2	K3
12	10.3060.18	O-ring 1,78 x 12,42 mm Epdm (60.0400.08)	1			5
13	60.0408.51	Seal	1			10
14	10.4014.00	Back ring 13,5 x 18 mm	2			25
15	10.3178.00	O ring 2,62 x 13,1 mm	1			25
15	10.3178.18	O ring 2,62 x 13,1 mm Epdm (60.0400.08)	1			5
16	60.0407.51	M 10 piston	1			10
17	14.3912.00	All.1/4" washer (60.0400.64)	1			25
18	28.0013.31	Brass 1/4 Bsp plug (60.0400.64)	1			25
19	10.3174.00	O ring 2,62 x 9,93 mm	1			25
19	10.3174.18	O ring 2,62 x 9,93 mm Epdm (60.0400.08)	1			5
20	10.4015.00	Back ring 10 x 14,5 mm	1			10
21	15.1032.00	Pin 3 x 18 mm	1			25
22	60.0404.31	Piston housing	1			3
23	60.0412.61	Blue spring	1			10
23	60.0411.61	White spring (60.0400.00/05)	1			3
24	11.4629.00	M 10 nut	3			25
25	60.0406.31	Spring guide	1			10
26	12.8310.00	Handle (60.0400.61)	1			5

Kit	P/N	Description
K1	60.0415.24	VB80 valve, repair kit

2010 GENERAL ORDER FORM P1




















NAME _____
ADDRESS _____
SUBURB _____ **PICode** _____
PHONE _____ **M** _____
CIC# _____ **EXP** _____
Name on Card _____ **SEC#** _____
Signature _____ **Date** _____

ADDRESS 2/232 Manns Rd, West Gosford 2250
PHONE 1300 855 145
EMAIL info@assassinjetters.com.au

www.assassinjetters.com.au

GENERAL NOZZLE RANGE

 <p>BANDIT NOZZLE The Bandit nozzle has been computer designed to enter a blockage quickly with maximum thrust. Recommend using a speed cone with this nozzle. 6 rear jets at a tight angle and one front jet.</p> <input type="checkbox"/> BT6R1F \$126+	 <p>PREDATOR PENETRATOR NOZZLE <input type="checkbox"/> P3R1F \$119+ 3 large rear jets and 1 forward jet</p> <p>PREDATOR INVADER NOZZLE <input type="checkbox"/> P6R1F \$123+ Great penetrating thruster 6 rear jets, 1 forward jet</p> <p>PREDATOR THRUSTER NOZZLE <input type="checkbox"/> P6R \$121+ 6 rear thrusting jets only</p> <p>The Predator - 1/4" BSP Good general penetrating nozzle with pointed nose</p>
 <p>BEAVER NOZZLE <input type="checkbox"/> BV6R2F \$132+ The Beaver nozzle has 2 offset forward facing jets that help penetrate at the front of the nozzle and 6 rear jets to quickly thrust the nozzle to the blockage. Has reduced thrust due to 2 front jets.</p>	 <p>NEGOTIATOR PENETRATOR NOZZLE <input type="checkbox"/> N3R1F \$114+ 3 large rear jets and 1 forward jet</p> <p>NEGOTIATOR INVADER NOZZLE <input type="checkbox"/> N6R1F \$118+ Great penetrating thruster 6 rear jets, 1 forward jet</p> <p>NEGOTIATOR THRUSTER NOZZLE <input type="checkbox"/> N6R \$116+ 6 rear thrusting jets only</p> <p>The Negotiator - 1/4" BSP Negotiates itself around light traps and bends</p>
 <p>ROOT RAT NOZZLE <input type="checkbox"/> RR6R1F \$134+ This is a popular nozzle because of its jet configuration. 1 forward, 3 behind the nose at 45 deg and 3 at the rear at 30 deg. It will open a blockage quickly and thoroughly.</p>	 <p>FERRET NOZZLE <input type="checkbox"/> F6R2F \$132+ The Ferret nozzle has 2 offset forward facing jets that help penetrate at the front of the nozzle, 3 rear jets on the side and 3 jets at the back of the nozzle. Has reduced thrust due to 2 front jets.</p>
 <p>SCREWDRIVER NOZZLE <input type="checkbox"/> SD6R1F \$126+ The New Screwdriver nozzle features a blade at the front of the nozzle with an offset jet so you can clear most stubborn blockages just by twisting the hose. Also has 6 rear thrusting jets.</p>	 <p>COMPRESSOR PENETRATOR NOZZLE <input type="checkbox"/> C3R1F \$88+ 3 large rear jets and 1 forward jet</p> <p>COMPRESSOR INVADER NOZZLE <input type="checkbox"/> C6R1F \$92 Great penetrating thruster 6 rear jets, 1 forward jet</p> <p>COMPRESSOR THRUSTER NOZZLE <input type="checkbox"/> C6R \$90+ 6 rear thrusting jets only</p> <p>The Compressor - 1/8" BSP Used for tight access drains, whip hoses and the Bullet adaptor</p>
 <p>GREASE BALL <input type="checkbox"/> GB8 \$120+ The New Grease Ball nozzle is totally spherical with 8 rear thrusting jets only. Designed for extreme thrust and the ability to clean grease off the sidewall of pipes but has proven to be great on root chokes.</p>	 <p>BULLET NOZZLE <input type="checkbox"/> B6R1FC \$166+ This is a great nozzle for penetrating tight blockages because the nozzle is forward of the cone helping it to burrow deep into the choke. 3 Compressor tips available.</p>
<p>CONE & TAIL - 1/4" <input type="checkbox"/> CT8 \$46+ CONE & TAIL - 1/8" <input type="checkbox"/> CT4 \$46+</p>   <p>Buy together and save!</p>	 <p>STAINLESS STEEL QUICK RELEASE <input type="checkbox"/> QR8SS \$64+ 1/4" with Patented double silt proof o'ring</p>
<p>HOSE TAIL - 1/4" <input type="checkbox"/> HT8 \$27+ HOSE TAIL - 1/8" <input type="checkbox"/> HT4 \$27+</p>   <p>Quick release connectors with alan key broach</p>	<p>PVC WEAR CONE - 1/4" <input type="checkbox"/> PC8 \$19+ PVC WEAR CONE - 1/8" <input type="checkbox"/> PC4 \$19+</p>   <p>PVC wear cone - 1/4" and 1/8"</p>


















SALES - ENQUIRIES - 1300 855 145

2010 GENERAL ORDER FORM P2

www.assassinjettters.com.au




ACCESSORIES AND HOSES

	1/8" MALE CONNECTOR Quick release to compressor nozzles (With alan key broach - for 1/8" Nozzles)	<input type="checkbox"/>	HT4M \$27+
	1/8" FEMALE CONNECTOR Quick release to 1/8" male fittings	<input type="checkbox"/>	HT4F \$27+
	1/4" MALE CONNECTOR Quick release to 1/4" nozzles (With alan key broach - for 1/4" Nozzles)	<input type="checkbox"/>	HT8M \$27+
	1/4" FEMALE CONNECTOR Quick release to 1/4" male fittings	<input type="checkbox"/>	HT8F \$27+
	1/4" MALE CONNECTOR - SHORT Quick release to 1/4" female fittings	<input type="checkbox"/>	HT8MS \$27+
	1/4" STUBBIE TAIL Quick release for Root Ranger only (With alan key broach)	<input type="checkbox"/>	HT8MSF \$27+
	3/8" MALE CONNECTOR Quick release to 3/8" nozzles (With alan key broach)	<input type="checkbox"/>	HT12M \$31+
	1/4" X 1/8" COMPRESSOR ADAPTOR Used to join the Compressor nozzle to the end of the 1/4" male hose tail	<input type="checkbox"/>	CA8 \$30+
	1/8" BULLET BLANK Used to join the Compressor nozzle to the quick release adaptor (With alan key broach)	<input type="checkbox"/>	BA4 \$74+
	100/150/350MM SS NOZZLE EXTENSIONS Used to extend the length of the nozzles to prevent them turning around in pipe	<input type="checkbox"/>	CE4 \$180ea+
	1/8" SS WEAR CONE Suit 1/8" male tail behind nozzle protecting the quick release coupler	<input type="checkbox"/>	PC4SS \$29+
	1/4" SS WEAR CONE Suit 1/4" male tail behind nozzle protecting the quick release coupler	<input type="checkbox"/>	PC8SS \$29+
	SONDE ADAPTOR 6 rear jets thrust the Ridgid Sonde down the drain for quick pipe location Sonde Adaptor Complete SAC \$211+	<input type="checkbox"/>	SA \$165+
	RIDGID BATTERY SONDE Ridgid Battery Sonde used with the Sonde Adaptor	<input type="checkbox"/>	RBS \$620+
	THE BLADE CUTTER COMPLETE This SS blade adapts onto the Root Ranger so you can feel if the drain has been cleaned	<input type="checkbox"/>	BCC \$175+
	TIP CLEANER WITH CAPSULE For cleaning all Mustang Nozzles	<input type="checkbox"/>	TC \$19+
	BALL VALVE HANDLE SS Heavy duty cast stainless handle makes any ball valve easier and safer to use	<input type="checkbox"/>	EHCSS \$38+

	MUSTANG NOZZLES BUDGET BOX Save money - Buy a box! 7 Piece Nozzle box	<input type="checkbox"/>	MNBKB \$860+
	MUSTANG NOZZLES DELUXE BOX Save money - Buy a box! 15 Piece Nozzle box	<input type="checkbox"/>	MNBKD \$1490+
	REPLACEMENT PRESSURE GAUGE 10,000PSI Suit all pumps and reels up to 10,000psi Comes with built in spike arrestor	<input type="checkbox"/>	PG \$45+
	1/8" HOSE TAIL SWAGE For repairing 1/8" Synflex, Mustang and Armadillo Water Jetter hose - short	<input type="checkbox"/>	HR4 \$18+
	3/16" HOSE TAIL SHORT SWAGE For repairing 3/16" Synflex, Mustang and Armadillo Water Jetter hose - Short	<input type="checkbox"/>	HR6S \$20+
	1/4" HOSE TAIL SHORT SWAGE For repairing 1/4" Synflex, Mustang and Armadillo Water Jetter hose - short	<input type="checkbox"/>	HR8S \$20+
	1/4" TURBINE EXTENSION This extension prevents the turbine from turning around inside a 6" drain	<input type="checkbox"/>	SSE \$38+
	SMALL HIGH PRESSURE HOSE REEL Fixed bracket - Carries: 40m 3/8" Jet Hose 50m 1/4" Jet Hose 60m 3/16" Jet Hose 40M 1/2" Garden Hose 30M 3/4" Garden Hose	<input type="checkbox"/>	PW-134 \$390+
	LARGE HIGH PRESSURE HOSE REEL Separate bracket - Carries: 40m 3/8" Jet Hose 50m 1/4" Jet Hose 60m 3/16" Jet Hose 40M 1/2" Garden Hose 30M 3/4" Garden Hose OPTIONAL SS SHORTENED BRACKET AVAILABLE - \$158 +	<input type="checkbox"/>	HOSE REEL 4416 \$550+ BRACKET 4416 \$99+

BUILT TO BLAST



Stinger 5000
built to blast

**HOW DO YOU MAKE JETTING HOSE LAST LONGER?
BUY STINGER 5000 JETTING HOSE!**

Sewer and storm water jetting hose. Long lasting hose
specially formulated for jetting PVC & VCP pipe.
Outlasts all others.

60M X3/8"	65M X 1/4"	55M X 3/16"	15MX1/8"
<input type="checkbox"/> ST3/8 \$840+	<input type="checkbox"/> ST1/4 \$780+	<input type="checkbox"/> ST3/16 \$660+	<input type="checkbox"/> ST1/8 \$200+ (including desired tail)


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2010 GENERAL ORDER FORM P3

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ROOT CUTTERS & LARGE NOZZLE RANGE




ROOT RANGER COMPLETE RR8TC
Root cutting turbine with removable front plug and quick connect adaptor \$320+



BANDIT NOZZLE 3/8" BT6R1F10
The Bandit nozzle has been computer designed to enter a blockage quickly with maximum thrust 6 rear jets at a tight angle and one front jet. \$138+




DOUBLE BARREL ROOT RANGER RRDB
Twin Root cutting turbines with quick connect adaptor \$525+



BANDIT NOZZLE 1/2" BT6R1F12
The Bandit nozzle has been computer designed to enter a blockage quickly with maximum thrust 6 rear jets at a tight angle and one front jet. \$168+




ROOT RANGER EXTENSION WGS25
Prevents the Nozzle from turning up inspection caps \$39+



SCREWDRIVER NOZZLE 3/8" SD6R1F10
The New Screwdriver nozzle features a blade at the front of the nozzle with an offset jet so you can clear most stubborn blockages just by twisting the hose. Also has 6 rear thrusting jets. \$140+



REPLACEMENT TURBINE T83055
Suit Root Ranger. Can also be used on the end of hand lances \$149+



SCREWDRIVER NOZZLE 1/2" SD6R1F12
The New Screwdriver nozzle features a blade at the front of the nozzle with an offset jet so you can clear most stubborn blockages just by twisting the hose. Also has 6 rear thrusting jets. \$170+



180 DEGREE PRESSURE BEND SS8TM
With front plug only suit Root Ranger \$171+

WARTHOG ROOT CUTTERS




ROOT RANGER REPAIR KIT RTRK8
Replacement ceramic insert \$108+



WARTHOG WT 3/8" WT 10
Spinning root cutter
4000 PSI
20-48 LPM
Pressure and Flow Dependant \$798+

*Price may vary depending on the SUS



ROOT RANGER FRONT JET M6J
Removable front ceramic jet with flow straightener in body \$36+



SEWER SHAFT CLEANING SET WH 12
\$490+



LARGE ROOT RANGER LRR8TC
1/2" Root cutting turbine \$495+
Adaptor available to quick connect or screw into 1/4" hose. Flow rate from 21 LPM to 90 LPM.

Used to clear tree roots from within sewer shafts and boundary traps. Comes complete with a reversed 45 degree turbine to enable you to clear roots within a 45 degree junction within vertical shaft. Also comes with a 90 degree extension and a straight extension. 1 turbine included.



180 DEGREE PRESSURE BEND LSS8TM
Suit Large Root Ranger \$245+



REPLACEMENT TURBINE LT83055
Suit Large Root Ranger. Can also be used on the end of hand lances \$249+

*Price may vary depending on the SUS

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