

SIFCO®

Ultima 50 Air Compressor

Instructions and Spare Parts Manual



SIFCO
fastening solutions

Auckland
34 Lansford Cres
Avondale 0600
Ph 09 828 2019
Fax 09 828 2017

Tauranga
3/94 Newton Rd
Mt Maunganui 3116
Ph 07 575 0088
Fax 07 575 6546

Christchurch
8 Holt Place
Burnside 8053
Ph 03 358 8135
Fax 03 358 8930

OCT 2016

ULTIMA 50 AIR COMPRESSOR

INSTRUCTIONS AND GUARANTEE

FOREWORD

This manual has been prepared to facilitate the use and servicing of your compressor. If followed carefully, these instructions will ensure efficient operation and low maintenance costs. Sections marked by the word **IMPORTANT** contain special directions which, if not properly carried out, can cause damage to persons and property. Only the use of original spare parts will ensure the efficiency and working life of your compressor.

INITIAL CHECK-LIST

- Make sure compressor is in perfect condition
- Use dip-stick to check oil level in crank case. It should be midway between the minimum and maximum (Fig. 1); use SIFCO BCNZ618 pump oil or any Heavy Duty SAE30 oil

IMPORTANT: Seizing and serious damage can occur if oil level is below minimum

INSTALLATION

Install compressor only in well-ventilated rooms as free as possible of dust and excess moisture.

Do not use the compressor if it is installed on floors with a slope of more than 15 degrees (fig. 9). Always position the compressor at least 50cm from any obstacles that could obstruct the passage of air and hence affect the cooling system.

ELECTRIC POWER

Compressor should be located AS CLOSE AS POSSIBLE to 240 volt 50 cycle mains power – extension power cords should be capable of carrying 15 AMP and should not exceed 4 metres in length.

INITIAL START UP

- Let compressor run for 2 minutes with the air bleed cocks fully open so as to ensure proper lubricant circulation
- Close cocks and make sure that compressor stops when maximum pressure is reached in tank
- Compressor's running is fully automatic; the pressure switch stops the motor when maximum set pressure is reached and restarts it when pressure falls below minimum set point

IMPORTANT: Proper automatic running is signalled by the release (hiss) of air under pressure switch every time the motor stops

IMPORTANT: Never use the wall switch to stop the compressor. To start or stop compressor always use the pressure switch on/off control (Fig 2). This allows the air in the head to be released and facilitates subsequent restarting.

IMPORTANT: Pressure cannot be regulated by the pressure switch

REGULATING WORKING PRESSURE

Compressed air output pressure can be set to desired pressure on filter/regulator. Just turn the knob B clockwise to increase and anti-clockwise to decrease pressure (Fig 3). The compressed air output setting is shown by the pressure gauge of the pressure reducer.

IMPORTANT: If pressure is kept at maximum setting for a prolonged period of time, it can cause the regulator's diaphragm to become worn. After use, reset regulator at zero by turning knob B.

OVERLOAD CUTOUT

Compressor is fitted with a motor-protector, which automatically interrupts the electrical power supply if an overload occurs. In this case, disconnect the power supply and wait a few minutes before resetting the motor-protector manually (fig 8), then restart the compressor. If the motor-protector trips again, disconnect the power supply and contact a SIFCO service centre.

PERIODIC SERVICING: Turn the compressor off and let all the air out of the tank before carrying out any maintenance work.

After the first 50 working hours:

- Change the oil completely
- Tighten head lock screws
- Make sure all screws are tight

Weekly:

- Check oil levels (Fig 1) and top up if necessary
- Drain condensation by opening cock C under tank (Fig 5)

Monthly:

- Remove intake filter F and clean (Fig 4). Change filter element yearly

Every 500 working hours or six months:

- Change compressor oil by removing dipstick and unscrewing screw B (Fig 6) and draining into a container
- Thoroughly clean all external compressor and motor parts. This is necessary to ensure proper cooling and longer working life

Every 2000 working hours or two years:

- Check and clean intake and delivery valves
- Check non-return valve and replace seal if necessary (Fig 7)

TROUBLE SHOOTING**Air Leak**

- Run compressor to maximum pressure
- Turn off power
- Apply soap and water to all screwed-down connections by means of a brush. Any air leaks will be signalled by the appearance of bubbles.

Air Leak from pressure switch with compressor off

- Release all compressed air in tank
- Remove non-return valve cap A (Fig 7)
- Thoroughly clean valve seat and rubber seal B and remount everything

Compressor stops and does not start again:

Check that compressor assembly is not blocked. If it is not a mechanical failure, the fault is in the electric power. If unit is fitted with an overload cut-out, it is enough in many cases just to press the reset button, **once the cause has been determined** (Fig 8). If there is no overload cut-out and the motor does not start, proceed as follows:

- Make sure there is 240 volts at plug
- Make sure that voltage at pressure switch controls is 240 volt
- Check if motor's coil is burnt out

Compressor does not pump air and overheats:

Either the head seal or a valve is broken. With compressor cold, dismantle head and replace the faulty part, being careful to thoroughly clean seal surfaces.

Compressor is very noisy with rhythmic, metallic hitting

The bearing or bushing is burnt out. This occurs when compressor is run without oil or when the oil stops lubricating because it has not been changed on schedule. A skilled service mechanic must be called

IMPORTANT:

- Never unscrew any connection when tank is pressurised. Always make sure it is empty.
- Never remove pressure switch cover with power on
- If compressor is off but power on, it can start again suddenly. Before doing anything, make sure that power is off and all the air released from tank
- Turn power off every evening so that compressor does not start running overnight – at pressure switch and at wall

GUARANTEE

SIFCO will, free of charge, repair or, at its option, replace any part thereof which proves to be commercially defective as to materials or workmanship, provided that compressor is returned freight paid to a SIFCO Service Centre within 90 days of the date of delivery

This guarantee is annulled if the buyer does not observe the terms and conditions of the contract, if the machine has not been installed properly or is submitted to an abnormal workload, more than 8 hours a day

The buyer is also liable for all expenses if a Serviceman is asked to look at unit and can find no fault in the manufacture of the compressor

The guarantee is also voided by tampering, misuse or operation above the maximum pressure

If these provisions are not observed, SIFCO declines all responsibility

SIFCO *fastening solutions*

Auckland - Tauranga - Christchurch

OCT 2016

FIG 1.

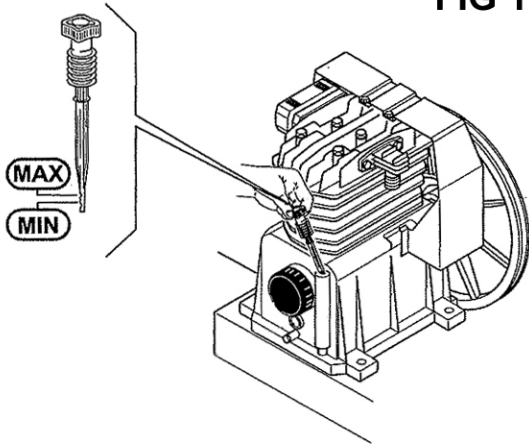


FIG 2.

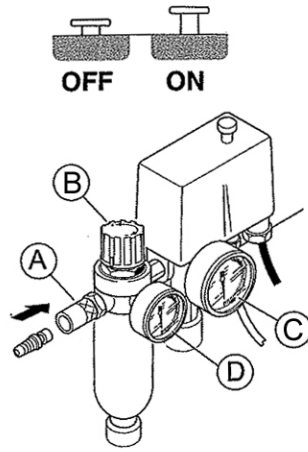


FIG 3.

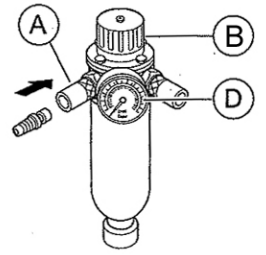


FIG 4.

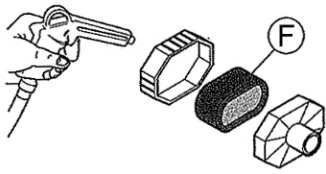


FIG 5.

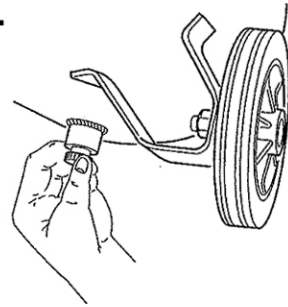


FIG 6.

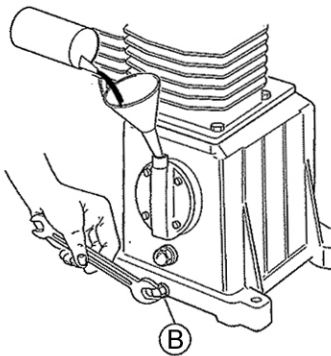


FIG 7.

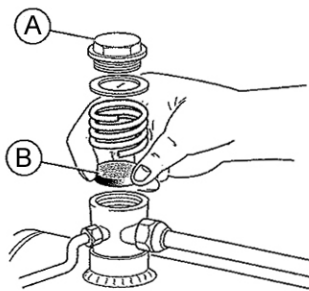


FIG 8.

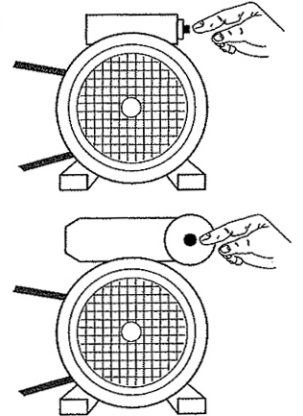


FIG 9.

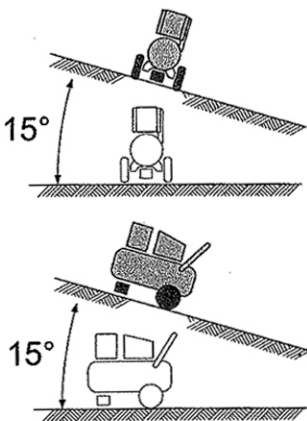
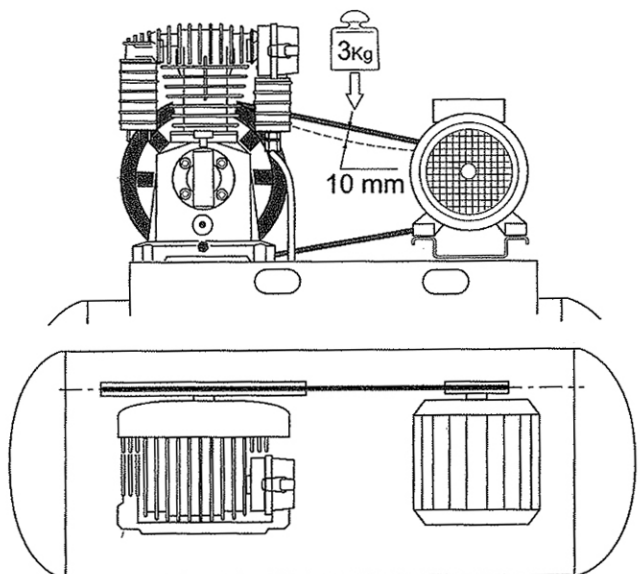
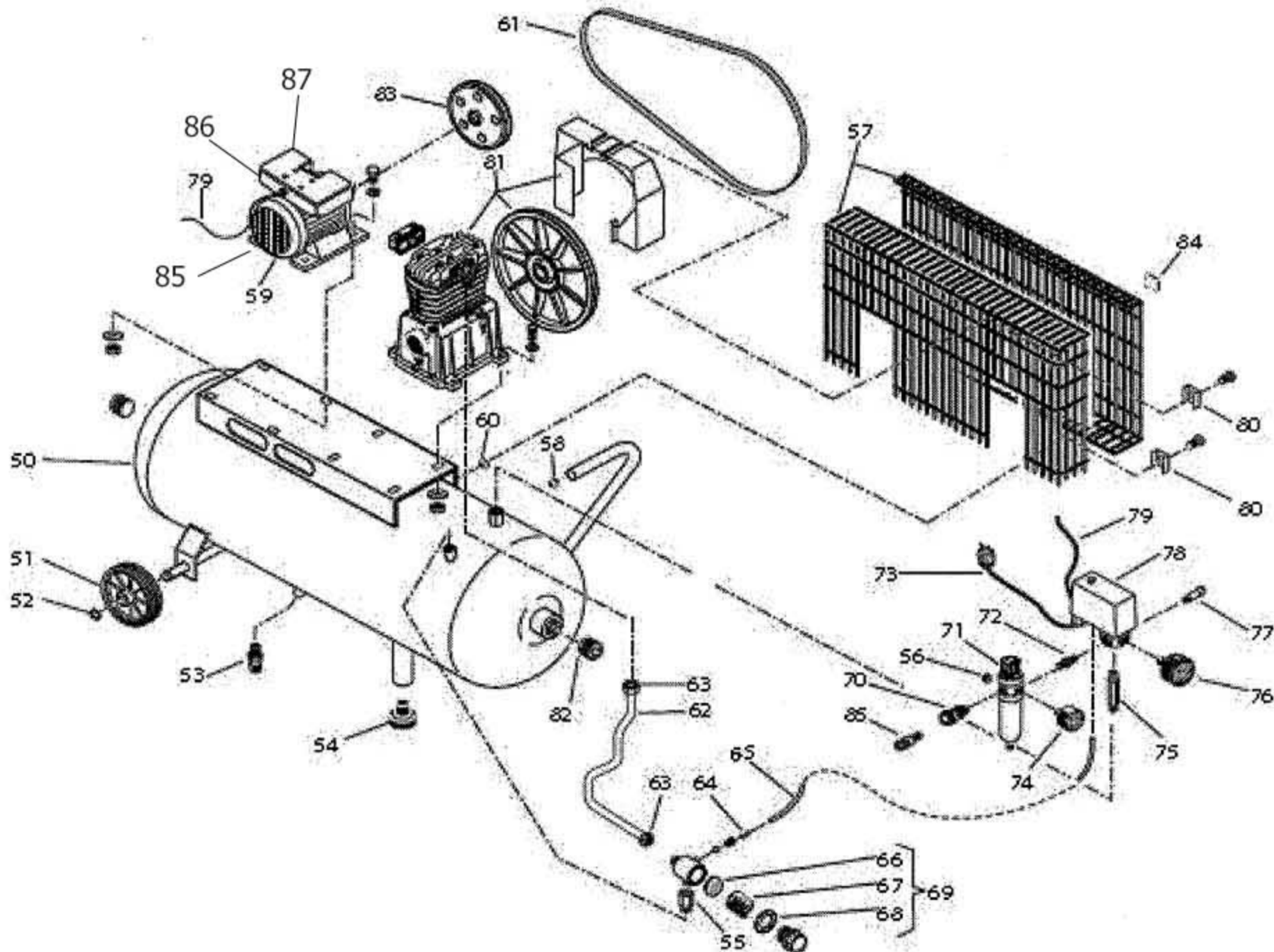


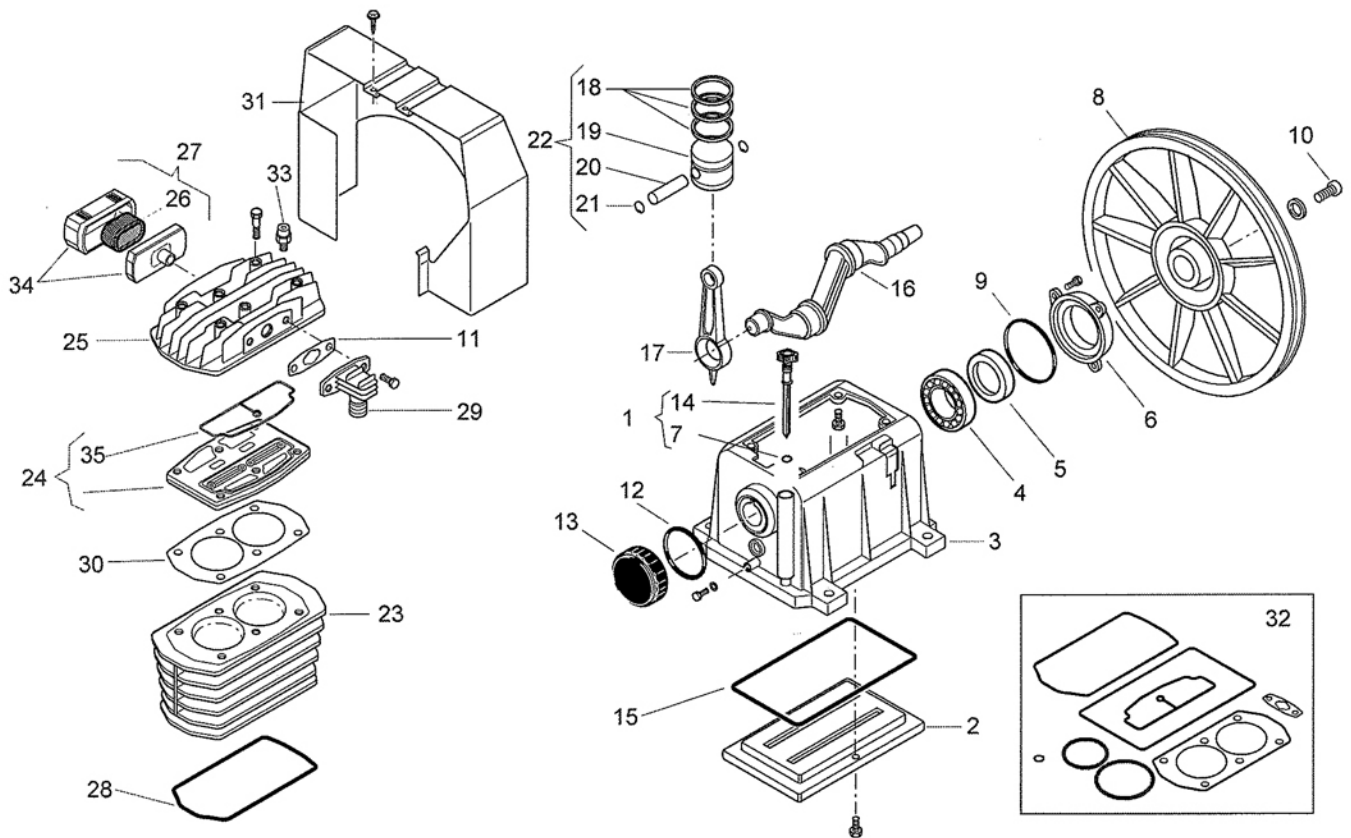
FIG 10.



Type: **Belt driven**Model: **ULTIMA 50**Code: **870THT260517**Date: **NOV 2010**Version: **04**

Ref.	Q.ty	Code	*	Denomination	Ref.	Q.ty	Code	*	Denomination
50	1	170047003V17		TANK	76	1	1481		SMALL GAUGE
51	2	020001001	4	WHEEL	77	1	047206000		SAFETY VALVE
52	2	015024000	12	CIRCLIP	78	1	312028000		PRESSURE SWITCH (SUB WITH 321028000)
53	1	022021000	2	DRAIN VALVE	79	1	139915003		MOTOR CABLE
54	1	020293000	2	CUSHION	80	4	014005007		SQUARE WASHER
55	1	011510002		JOINT	81	1	SP5131690000		PUMP
56	1	011088000		PLUG	82	2	BCNZ901		PLUG
57	1	199688001		BELT GUARD	83	1	140099004		PULLEY
58	1	020024000		STOPPER	84	4	020025000		PLASTIC DOWEL FOR BELT GUARD
59	1	540C001605		MOTOR	85	1	025052000		FAN COWLING
60	3	199763000		SPACER	86	1	026052000		CAPACITOR BOX BASE
61	1	045003000	6	BELT	87	1	02605000		CAPACITOR BOX COVER
62	1	170T10001	2	DELIVERY PIPE	88	1	008433000		OVERLOAD CUTOUT
63	2	199110230		LOCKNUT					
64	1	011304000		COMPASS					
65	1	046001000	2	RILSAN TUBE					
66	1	047102001	8	SEAL					
67	1	047102002		TAPERED SPRING					
68	1	047102003		O-RING					
69	1	347062000	1	CHECK VALVE					
70	1	86523K		QUICK COUPLER					
71	1	F04292600	1	FILTER/REGULATOR					
72	1	10483		DOUBLE MALE NIPPLE					
73	1	117HA0200		POWER CABLE					
74	1	1481	4	SMALL GAUGE					
75	1	199130360		BARREL					

* Suggested parts in percentage

Type: **Belt driven**Model: **MK102**Code: **5131690000**Date: **SEP 2010**Version: **05**

Ref.	Q.ty	Code	*	Denomination
1	1	312036000		DIPSTICK ASSEMBLY
2	1	113149015		LOWER COVER
3	1	113167001		CRANKCASE
4	1	033027000		BEARING
5	1	010053000		OIL SEAL
6	1	113149008		FRONT SUPPORT
7	1	010025000		O RING
8	1	013160010		FLYWHEEL
9	1	010023000		O RING
10	1	014001057		SCREW LEFT
11	1	113169005		RADIATOR GASKET
12	1	010121000		O RING
13	1	113149009		END COVER
14	1	012036000	3	OIL DIPSTICK
15	1	113149013		SEAL
16	1	113167003		CRANKSHAFT
17	2	113150004	4	CONROD
18	2	216024002	8	PISTON RING KIT
19	2	113165013		PISTON
20	2	116025006		PISTON PIN
21	4	015023000		CIRCLIP
22	2	416025017	4	COMPLETE PISTON
23	1	113169003		CYLINDER
24	1	413149080		VALVE HOLDER PLATE
25	1	113149031		HEAD

* Suggested parts in percentage



Ref.	Q.ty	Code	*	Denomination
26	1	017024000	12	FILTERING ELEMENT
27	1	317026000	4	INTAKE FILTER
28	1	113149012		SEAL
29	1	013169004		RADIATOR
30	1	113169006		CYLINDER GASKET
31	1	113150002		SHROUD
32	1	213169001	6	SEAL KIT
33	1	011158000		COLD START VALVE
34	1	017007004		SHELL FOR THE INTAKE
35	1	113149023		SEAL

* Suggested parts in percentage