

BARTELL

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OWNER'S MANUAL AND PARTS BOOK

FORWARD PLATE COMPACTORS

BCF1570



**ORIGINAL
LANGUAGE**

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**ORIGINAL LANGUAGE PARTS MANUAL FOR
FORWARD PLATE COMPACTOR**

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SAFETY PRECAUTIONS

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SAFETY PRECAUTIONS	
	<p> DANGER</p> <p>EXPLOSION HAZARD Never operate the machine in an explosive atmosphere, near combustible materials or where ventilation does not clear exhaust fumes.</p>
	<p> WARNING</p> <p>BURN HAZARD Never come into contact with the engine or muffler when engine is operating or shortly after it is turned off. Serious burns may occur.</p>
	<p> CAUTION</p> <p>MOVING PARTS Before starting the machine ensure that all guards and safety devices are in place and functioning properly.</p>
	<p> CAUTION</p> <p>MACHINE DAMAGE Never operate on hard, unyielding surfaces. Unwarranted damage may result.</p>
	<p> ATTENTION</p> <p>READ OWNERS MANUAL Read and understand operator's manual before using this machine. Failure to follow operating instructions could result in serious injury or death.</p>

OPERATOR'S MANUAL

BCF1570

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QUALITY ASSURANCE / MACHINE BREAK IN BCF1570

The Bartell Vibratory Plate Compactor is the product of extensive engineering development designed to give long life and unmatched performance. The Compactors are shipped completely assembled with the exception of attaching the handle, and only require filling with fuel and a brief check of lubricant levels in preparation for operation. The exciter housing are pre-serviced with oil at factory.

You can help ensure that your Vibratory Plate Compactor will perform at top levels by observing a simple routing on first use. Consider that your new Compactor is like a new car. Just as you would break in a new car to the road or any new machine to the job, you should start gradually and build up to full use. Learn what your machine can do and how it will respond. Refer to the engine manufacturer's manual for run-in times. Full throttle and control may be used after this time period, as allowed by material. This will serve to further break in the machine on your specific application, as well as provide you with additional practice using the machine.

We thank you for the confidence you have placed in us by purchasing a Bartell Vibratory Plate Compactor and wish you many years of satisfied use.

WARRANTY

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Bartell agrees to furnish without charge, F.O.B. our plant, a replacement for any part or portion thereof, comprising the main unit of the Bartell Vibratory Plate Compactor, consisting of the exciter housing assembly, save and except drive belts, and power units, prove upon our examination, to be defective in either material or workmanship within a period of twelve (12) months from date of purchase, provided that notice of such defective part or portion thereof is given to Bartell Ltd. within the twelve month warranty period. No further or other guarantee or warranty expressed or implied in connection with the sale of the Compactor is given and our sole liability consists in replacing defective parts or portions thereof. We shall not be responsible for any special, indirect or consequential damages arising in any manner whatsoever.

This guarantee is for the sole benefit of the original purchaser as end user. Our responsibility under this guarantee ends in the case the original purchaser transfers ownership of the Vibratory Plate Compactor, makes any changes or adds any parts or devices not of our manufacture to the Compactor machine.

SPECIFICATIONS

BCF1570

DIMENSIONS	
OVERALL LENGTH, mm (in.)	1100 (44")
OVERALL WIDTH, mm (in.)	500 (20")
OVERALL HEIGHT, mm (in.)	825 (33")
PLATE SIZE (WxL), mm (in.)	500x525 (20"x21")
WEIGHT	
NET WEIGHT, kg (lb.)	95 (210)
OPERATING WEIGHT, kg (lb.)	100 (221)
PERFORMANCE	
TRAVELING SPEED, m/min (ft/min)	20~25 (66~81)
VIBRATING FREQUENCY, Hz (vpm)	100 (6000)
CENTRIFUGAL FORCE, lb(kN (kgf))	3461 (15(1570))
WATER TANK CAPACITY (L)	15
POWER SOURCE	
MANUFACTURER	Honda/Robin
MODEL	GX160/EX17
MAX. OUTPUT	4.8(3.6)/5.7(4.2)
@ RPM	3600/4000
FUEL TANK CAPACITY (L)	3.3(3.1)/3.8(3.6)
STARTING SYSTEM	Recoil

ROUTINE SERVICE BCF1570

Routine Service Intervals		Each use	After 1.5 months or 50 hrs	Each 3 months or 100 hrs	Each 6 months or 200 hrs	Each 9 months or 300 hrs	Each 12 months or 400 hrs
General Inspection:							
Guards	Check		o	o	o	o	o
	Check		o	o	o	o	o
	Check Operation		o	o	o	o	o
Engine:							
Engine Oil	Check Level	o	o	o	o	o	o
	Change		o		o		o
Oil Cooler	Clean			o	o	o	o
Cooling Fins	Clean		o	o	o	o	o
Air Cleaner	Check - Clean	o	o	o	o	o	o
	Replace						o
Air Intake Line	Check				o		
	Replace						2 yrs
Fuel Filter	Check & Clean			o	o	o	o
	Replace				o		o
Fuel Tank	Clean						500 hrs
Engine Wiring	Check						o
Exciter:							
Exciter Oil	Check Level	o	o	o	o	o	o
	Change	o			o		o
Drive Belt	Check Tightness	o	o	o	o	o	o
	Change				o		o

ROUTINE SERVICE INTERNALS

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Due to the nature and environment of use, plate compactors could be exposed to severe operating conditions. Some general maintenance guidelines will extend the useful life of your machine.

- The initial service for your compactor should be performed after 25 hours of use, at which time your mechanic (or authorized repair shop) should complete all of the recommended checks in the schedule above. The chart on page 6 (six) is handy for keeping a record of the maintenance performed and the parts used for servicing your compactor.
- Regular service according to the schedule above will prolong the life of the plate compactor and prevent expensive repairs.
- Keeping your plate compactor clean and free from debris is the single most important regular maintenance operation, over and above the checks in the service schedule above, that can be performed. After each use your compactor should be cleaned to remove any dust and debris from the undercarriage and surrounding components. Use of a power washer will make clean up quick and easy, especially if a non-stick coating was applied prior to use.
- In the Service Schedule above, items that should be checked, replaced or adjusted are indicated by "o" in the appropriate column. Not all plate compactor models include the same features and options and as such not all service operations may have to be performed. For ease of recording place a checkmark through the "o" when the item is complete. If an item is not required or not completed place an "x" through the "o" in the box.
- All compactors have governed engine speed of 3600 rpm. See engine manufacturer's manual for exact specifications. Care should be used when making any adjustments to the compactor not to change the governed speed. Running the engine at lower rpm's will result in a decrease of compaction force and lower travel speed. It will create excessive "out-of-synch" vibrations resulting in poor compaction, maneuverability, excessive wear to the machine, and discomfort to the operator.
- Failure to have your vibratory plate compactor regularly serviced and properly maintained in accordance with the manufacturer's instructions will lead to premature failure and void the warranty.

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FOREWORD

The Bartell Vibratory Plate Compactor is highly effective for a wide variety of surface, sub-soil, and back-fill materials. Although relatively light in weight and easy to operate, the Vibratory Plate Compactor delivers a tremendous impact to the soil. Pound for pound, the compactors provide a higher impact force. That means more productivity from our ideal combination of speed and deeper compaction.

SAFETY PRECAUTIONS

- Always keep unauthorized, inexperienced, untrained people away from this machine.
- Rotating and moving parts will cause injury if contacted. Make sure guards are in place. Keep hands and feet away from moving parts.
- Fuel the machine only when the engine is stopped, using all necessary safety precautions.
- The engine must always be stopped before attempting any repair or adjustments. Ignition switch should be off. Danger: Never operate the machine in an explosive atmosphere, near combustible materials or where ventilation does not clear exhaust fumes. Repair fuel leaks immediately. Refer to your engine owner's manual for more safety instructions.
- Be careful not to come in contact with the muffler when the engine is hot, serious burns may result!

ASSEMBLY INSTRUCTIONS

Your new Bartell Vibratory Plate Compactor has been shipped to you partially disassembled. Filling the fuel tank and a brief check of lubricant levels in preparation for operation is required. To complete the assembly the following instructions will be helpful.

- A) **HANDLE** – Refer to the particular final assembly diagram in this parts book that corresponds with your compactor model. Attach the one-piece handle with the screws and lock washers supplied.
- B) **EXCITER** – When installing the exciter assembly between the clamps, exciter housing should be located with an equal dimension protruding beyond the outside faces of the exciter clamps. The exciter clamp bolts must be torqued to 50 foot pounds. **DO NOT EXCEED THESE RECOMMENDATIONS.** Refer to the particular final assembly diagram in the parts book that corresponds with your compactor model.

OPERATING PRINCIPLE

An eccentric weight mounted on the exciter shaft contained within the exciter housing is driven at high speed by a clutch and belt drive system. This high speed shaft revolution causes the rapid lifting and downward ramming motion of the machine as well as imparting a forward motion.

The plate compactor is designed to run at an engine speed (engine take off shaft) of 3600 rpm. (normally considered full throttle).

Running the engine at lower rpm's will result in a decrease of compaction force and lower travel speed. It will create excessive "out-of-synch" vibrations resulting in poor compaction, maneuverability, excessive wear to the machine, and discomfort to the operator.

STARTING PROCEDURE:

* WARM CLIMATE

Open fuel valve on gas tank. Set throttle lever to "Fast" idle position, set choke to closed position, start engine. Open choke slightly to prevent flooding. Move to "Open" or "Run" position when engine is warm, increase throttle to maximum operation position (3600 rpm).

STARTING PROCEDURE:

* COLD CLIMATE

Follow same procedure as above but allow longer warm-up period – 3 to 5 minutes. In cold weather, oil is much heavier to move and requires more time to work its way into the moving parts. If maximum power is not attained, allow further warm-up time. Fill fuel tank with clean gasoline, use safety approved gas containers. **DO NOT MIX OIL WITH GASOLINE – USE UNLEADED GAS ONLY.**

STOPPING PROCEDURE

1. Throttle engine down.
2. Depress or turn off stop switch.

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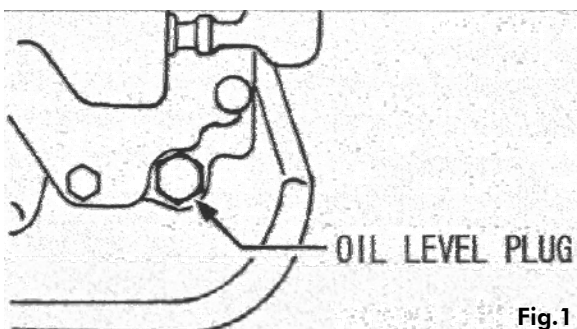
PRIOR TO OPERATION

1. Make sure that all dirt, mud, etc., are thoroughly removed from the unit prior to operation. Special effort should be given to the bottom face of the vibrating plate and those areas adjacent to the cooling air inlet of engine, carburetor, and air cleaner.
2. Check all bolts and screws for tightness and make sure all bolts and screws are securely tightened. Loose bolts and screws may cause damage to the unit.
3. Check the V-belt for tightness. The normal slack should be approximately 10-15mm (1/2") when the belts are forcibly depressed in the middle position between the two sheaves. If there is excess belt play, there could be a decrease in the impact force or erratic vibration, causing machine damage.
4. Check the engine oil level and if the engine oil level is low, it should be refilled. Use the proper motor oil as suggested by the engine manufacturer.
5. Remove the oil plug in the excitor base and check the oil level. Make sure the compactor is level when checking. The oil level should be up to the oil plug. Every month or every 200 hours of operation, replace the oil. (Fig.1)

IMPORTANT:

- When changing the oil, the old oil can be drained by tipping the unit. The oil will drain easily while it is hot.

Season	Temperature	Grade of Exciter Oil
Summer	25C or higher	SAE#30
Spring/Fall	25C~10C	SAE#30, #20
Winter	0C~10C	SAE#10



6. A regular grade gasoline should be used in the engine. When filling the fuel tank, make sure the fuel filter is used.

OPERATION

1. In operation, guide the machine, but let the compactor do the work. Bearing down on the handle is unnecessary and causes shock absorber wear. On level surfaces the compactor moves forward rapidly. On uneven surfaces or inclines, light forward pressure on handle may be required to assist the compactor in moving forward.
2. ALWAYS OPERATE THE MACHINE AT FULL THROTTLE. If excessive vibration is felt through the handle, do not operate until the engine is checked and set at its maximum running speed of 3600 rpm. Insure the drive belt is adjusted properly. Refer to belt tension
3. section.
The handle has a spring loaded locking mechanism to keep it upright in storage. DO NOT OPERATE THE MACHINE WITH THE HANDLE IN THE STORAGE POSITION. To unlock the handle, push it to the left and pull back to operation position.

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MAINTENANCE

Maintaining your compactor will insure long life to the machine and its components.

AIR CLEANER - Keep air filter clean at all times. Wash away dust and debris using a non-oil based cleaning solvent. Let the filter dry before re-installing.

LUBRICATION – Always check engine oil regularly. Use proper engine oil as recommended. See chart below. Fill crankcase to levels as recommended in manufacture's engine manual.

SPARK PLUG – Check and clean spark plugs regularly. A fouled, dirty or carboned spark plug causes hard starting and poor engine performance. Set spark plug gap to recommended clearance. Refer to engine manual.

BELT TENSION – IMPORTANT!

If there is excessive belt play, there will be a decrease in the impact force and erratic vibration, which could cause machine damage. The normal belt play should be 1/2" to 5/8" which is attained by depressing the top section of the belt at the belt guard mounting bracket location. When adjusting the belt make sure that the clutch is in alignment with exciter pulley. Tighten all engine mount bolts, adjust the two engine-stop bolts, and tighten lock nuts.

STORAGE

The following steps should be taken to prepare your plate compactor for extended storage.

1. Close fuel shut off valve.
2. Siphon excess gasoline from tank.
3. Start engine until it stops from lack of fuel. This will use up all the fuel in the carburetor and prevent formation of deposits due to evaporation of fuel. Remove spark plug and pour 2 oz. of SAE 10W-30 motor oil into the cylinder. Slowly crank the engine 2 or 3 times to distribute the oil throughout the cylinder.
4. This will help prevent rust during storage. Replace spark plug.
5. Store the unit in an upright position in a cool, dry, well ventilated area.

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ASSEMBLY DRAWINGS AND PARTS
LIST

PARTS LIST 1

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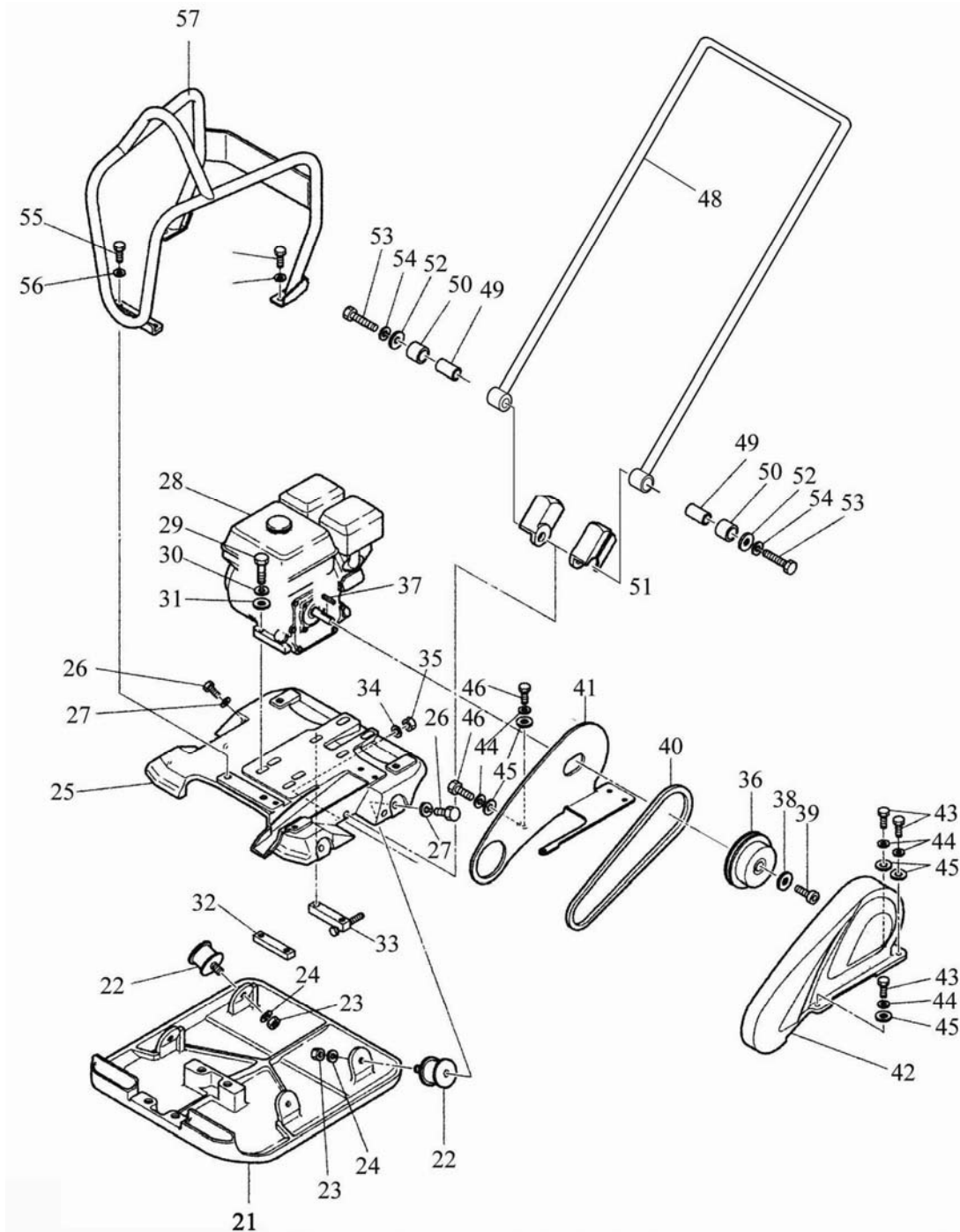
VIBRATOR

ITEM NO.	PART NO.	DESCRIPTION	QTY.	REMARKS
A	CPC-95-A	VIBRATOR ASSEMBLY	1	
1	CPC-95-01A	VIBRATING CASE	1	
2	CPC-95-02A	BOLT M10x20T	1	
3	CPC-95-03A	PACKING	1	
4	CPC-95-04A	BOLT m16x45T	4	
5	CPC-95-05A	SW M16	4	
6	CPC-95-06A	PW M16	4	
7	CPC-95-07A	VIBRATOR	1	
8	CPC-95-08A	BEARING 6211	2	
9	CPC-95-09A	CASE RIGHT COVER	1	
10	CPC-95-010A	CASE LEFT COVER	1	
11	CPC-95-011A	BELT COVER GUARD	1	
12	CPC-95-012A	OIL SEAL 35x48x10	1	
13	CPC-95-013A	O-RING 100 (OD)x3.1	2	
14	CPC-95-014A	BOLT M8x25T	8	
15	CPC-95-015A	WASHER AND SW M8	8	
16	CPC-95-016A	PULLEY	1	
17	CPC-95-017A	KEY 7x7x19	1	
18	CPC-95-018A	WASHER M10x4x40(OD)	1	
19	CPC-95-019A	BOLT M10x25T	1	
20	CPC-95-020A	SW M10	1	

PARTS LIST 2

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BODY



PARTS LIST 2

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BODY

ITEM NO.	PART NO.	DESCRIPTION	QTY.	REMARKS
21	CPC-95-1B	VIBRATING PLATE	1	
22	CPC-95-2B	SHOCK ABSORBER	4	
23	CPC-95-3B	NUT M10	4	
24	CPC-95-4B	SW M10	4	
25	CPC-95-5B	BASE	1	
26	CPC-95-6B	BOLT M10x30T	4	
27	CPC-95-7B	SW M10	4	
28	CPC-95-8B	ENGINE	1	
29	CPC-95-9B	BOLT M8x55T	4	
30	CPC-95-10B	SW M8	4	
31	CPC-95-11B	PW M8	4	
32	CPC-95-12B	ENGINE NUT	1	
33	CPC-95-13B	ENGINE NUT	1	
34	CPC-95-14B	PW M8	1	
35	CPC-95-15B	NYLON NUT M8	1	
36	CPC-95-16B	CLUTCH ASSEMBLY	1	
37	CPC-95-17B	KEY	1	
38	CPC-95-18B	WASHER	1	
39	CPC-95-19B	SOCKET HEAD BOLT	1	
40	CPC-95-20B	V-BELT, AV13x850	1	
41	CPC-95-21B	BASE FOR BELT	1	
42	CPC-95-22B	BELT COVER	1	
43	CPC-95-23B	BOLT M8x35T	3	
44	CPC-95-24B	SW M8	5	
45	CPC-95-25B	PW M8	5	
46	CPC-95-26B	BOLT M8x20T	2	
47	CPC-95-27B	THROTTLE ASSEMBLY	1	
48	CPC-95-28B	HANDLE	1	
49	CPC-95-29B	COLLAR 13-20-44	2	
50	CPC-95-30B	RUBBER 20x32x28.5	2	
51	CPC-95-31B	HANDLE STOPPER	2	
52	CPC-95-32B	WASHER 12.5x35x3	2	
53	CPC-95-33B	BOLT M12x75T	2	
54	CPC-95-34B	SW M12	2	

PARTS LIST 2

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BODY (cont'd)

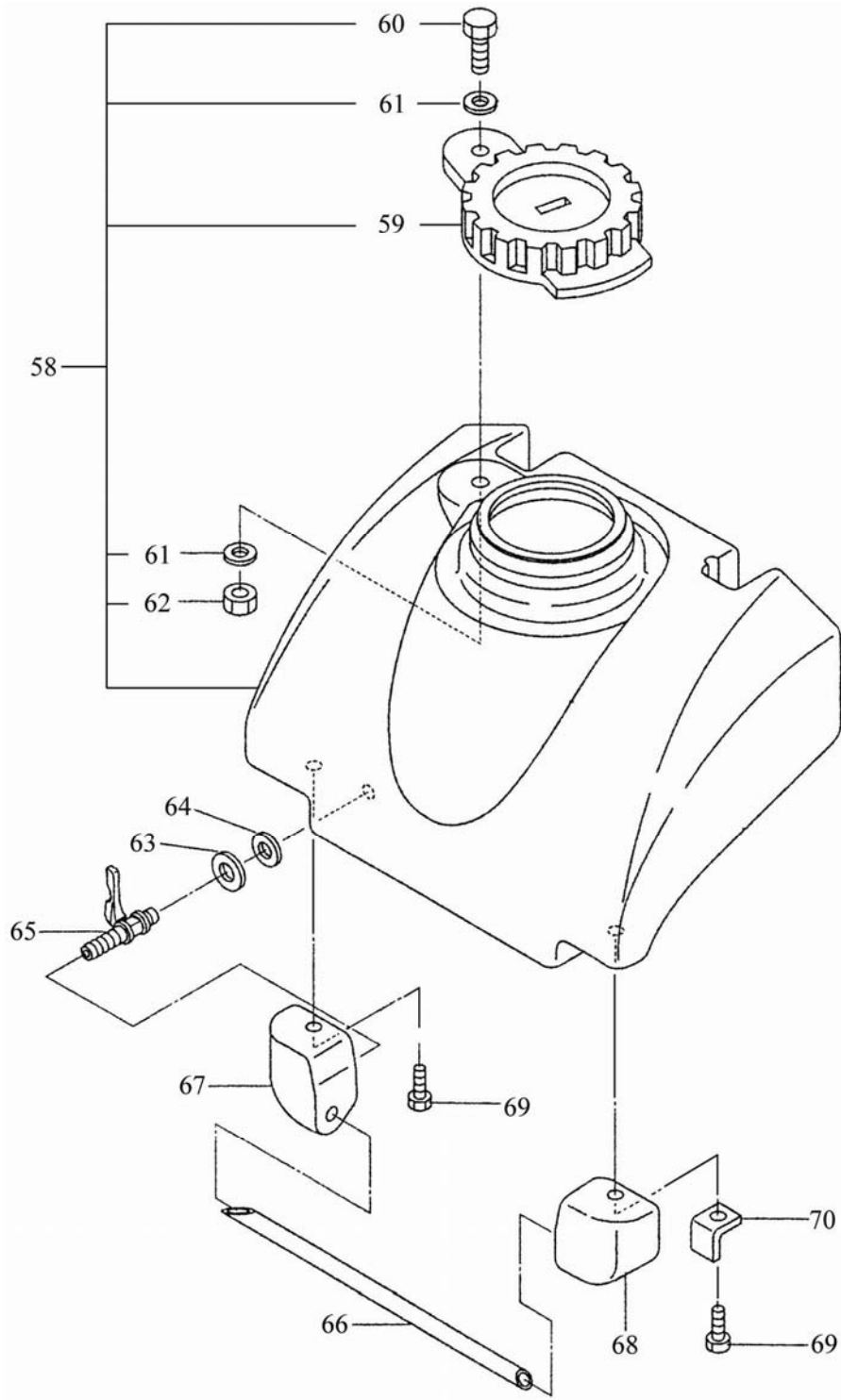
ITEM NO.	PART NO.	DESCRIPTION	QTY.	REMARKS
55	CPC-95-35B	BOLT M10x25T	4	
56	CPC-95-36B	SW M10	4	
57	CPC-95-37B	GUARD HOOK	1	

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PARTS LIST 3

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WATER TANK ASSEMBLY



PARTS LIST 3

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WATER TANK ASSEMBLY

ITEM NO.	PART NO.	DESCRIPTION	QTY.	REMARKS
58	CPC-95-1C	WATER TANK ASSEMBLY	1	
59	CPC-95-1-1C	CAP, WATER TANK	1	
60	CPC-95-1-2C	BOLT M10x30	1	
61	CPC-95-1-3C	WASHER 10.5x21x2	2	
62	CPC-95-1-4C	NYLON NUT M10	1	
63	CPC-95-2C	WASHER 14.1x30x1.6	1	
64	CPC-95-3C	PACKING 13x28x2	1	
65	CPC-95-4C	COCK	1	
66	CPC-95-5C	SPRINKLING PIPY	1	
67	CPC-95-6C	PIPE HOLDER LEFT	1	
68	CPC-95-7C	PIPE HOLDER RIGHT	1	
69	CPC-95-8C	FLANGE BOLT M8x25	2	
70	CPC-95-9C	STAY, PIPE HOLDER	1	

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