

INSTRUCTION MANUAL

PUMP BTSP75





BETON TROWEL

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ING: BBRUBEBBB

HOW TO USE THIS MANUAL

This manual is written to help you operate and maintain the submersible water pump. It is intended for dealers and submersible water pump operators.

Foreword

The section '**Description of the device**' will allow you to familiarize yourself with the layout and controls of the device.

The section "**Special Safety Rules**" explains how to use the device to ensure your safety and the safety of members of the public in general.

The "Start-up Procedure / Off" section makes it easier for you to start and stop the unit.

The "**Maintenance and Overhaul**" section gives you tips on general maintenance and overhauls of your equipment.

The '**Warranty**' section provides information on warranty coverage and how to make warranty claims.

The section "**Machinery Directives**" lists the standards to which the equipment complies.

Information about the ratings used in this manual.

In this manual, special attention should be paid to the text indicated as follows:



AVERTIR

Ce produit peut présenter des risques. Si les méthodes indiquées ne sont pas rigoureusement respectées, l'appareil ou l'opérateur risque de subir des dommages / blessures.



AVERTISSEMENT

Il peut y avoir un danger mortel pour l'opérateur.

WARNING



AVERTISSEMENT

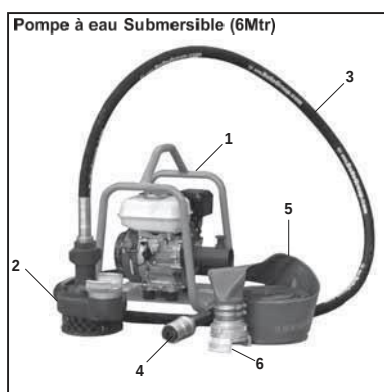
Avant d'utiliser ou d'effectuer toute intervention d'entretien dans cette machine, il est IMPERATIF de LIRE et d'ASSIMILER le contenu de ce manuel.

KNOW how to use the controls of this unit and perform its maintenance safely.
(PS: Make sure you know how to stop the machine before starting it in case you have any problems).

ALWAYS use the elements necessary for your protection when using the machine.

For **ANY QUESTIONS** regarding the safe maintenance and use of this equipment,
REQUEST ADVICE TO YOUR DIRECTION OR CONTACT BETON TROWEL NV: +32 (0) 52 315 350

DESCRIPTION OF THE DEVICE



1. Training Unit
2. Submersible water pump
3. Flexible Shaft
4. Coupling of the Flexible Shaft
5. Discharge pipe
6. Coupling of the Discharge Pipe

TECHNICAL SPECIFICATIONS

Model	Submersible Pump (6M)
Cable length (m)	6
Flow rate (m3/h)	75

SPECIAL SAFETY RULES

For your personal protection and the safety of people in the vicinity, please read and understand the following safety instructions. It is the operator's responsibility to ensure that they have understood how to use this equipment safely. In case of doubt about the correct and safe use, please consult your manager or Beton Trowel NV.

- Mark the work area and keep members of the public and all unauthorized personnel away from the work area.
- Make sure you know how to turn off this unit before turning it on, in case of difficulties.
- Do not leave the pump running unattended.
- Never remove or alter the seals or covers, they are there for your protection. Always check the condition and safety of the covers; if a cover is damaged or missing, **DO NOT USE THE PUMP** until the cover has been replaced or repaired.
- Do not use the Pump in case of illness, fatigue or under the influence of alcohol or drugs.
- The water flow from the discharge pipe may contain stones flowing at high speed. Never point the water jet at other people, as it could cause injury.
- The pump should never be used if the turbine protection is missing. The unprotected turbine can cause serious injury to the user.
- The pump may have been used with contaminated water. Clean the pump before starting the disassembly procedure.
- Make sure the pump is mounted on a bracket. If used at the bottom of a trench, sludge or other residues could be sucked through the strainer.
- Make sure the screen is free of objects such as wire mesh or metal objects that could block the wheel.
- Never pump solvents, fuels and explosive, flammable or corrosive liquids.
- Never fill the fuel tank with fuel while the pump is in operation.

EPI (PERSONAL PROTECTIVE EQUIPMENT).

When using this machine, it is imperative to wear the appropriate PPE (e. g. safety glasses, protective gloves, earmuffs and shoes with steel toe caps).

PRE-COMMISSIONING CHECKS

PRELIMINARY INSPECTION

The preliminary inspection described below must be performed before the start of each work cycle or every four hours of use, whichever comes first. Refer to the Maintenance section for detailed instructions. In the event of a fault, the machine must not be used until the fault has been rectified.

1. Carefully inspect the Pump for possible damage. Check that the components are present and secure.
2. Inspect the flexible shaft for damage.
3. Place the motor unit on a flat surface to check the oil level. Add oil if necessary.

CONNECTION PROCEDURE

Before connecting the pervibrator to the power supply unit, the pervibrator must be extended over its entire length.



AVERTIR

Ne branchez pas le câble sur l'unité moteur quand celle-ci est en marche. Les dégâts en seraient conséquents.

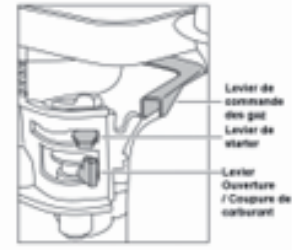
1. Pour fixer le flexible d'entraînement au groupe d'alimentation, soulever la poignée du plongeur situé sur la bride et introduire le connecteur d'extrémité du flexible d'entraînement.
2. Lorsque l'on relâche la poignée, le piston plongeur doit se positionner dans le connecteur d'extrémité.
3. Si le piston plongeur ne se positionne pas correctement, faire tourner le vilebrequin du moteur avec le câble de démarrage ou la poignée et enfoncer l'extrémité.



START-UP AND SHUTDOWN PROCEDURE

Honda & BTP gasoline engine

1. To open the fuel valve, move the Fuel Opening/Shutting lever all the way to the right.
2. If the engine starts cold, put the choke on by moving the choke lever fully to the left. If the engine restarts hot, it is generally not necessary to introduce the choke, but if the engine has cooled to a certain extent, it may be necessary to partially insert the choke.
3. Turn the motor **ON/OFF** knob clockwise to the "I" position.
4. To put the throttle in the idle position, move the throttle lever fully to the right. Do not start the engine at full throttle or the compaction plate may vibrate as soon as the engine starts.
5. Hold the control lever firmly with one hand and grasp the starter lever with the other. Pull the recall starter until you feel resistance from the motor, then let the starter back in place.
6. Be careful not to pull the starter cord completely, pull the starter lever hard.
7. Repeat this operation several times until the engine is running.
8. As soon as the engine is running, gradually move the choke lever to the OFF position to the right.
9. If, after several attempts, the engine still does not run, refer to the Troubleshooting Guide.
10. To turn off the engine, put the throttle in the idle position and turn the engine ON/OFF knob counterclockwise to the "0" position.
11. Turn off the fuel supply.



OPERATION

1. Once the flexible shaft has been connected to the power, the engine to start. While in the idle position, the pump slowly in the water, then gradually until the maximum speed is 2800 rpm.
2. When stopping pumping, the slowness of the back of the engine at idle while the pump speed is still in the water. Then, slowly, put the pump out of the water and turn off the engine.

**AVERTIR**

N'utilisez pas le moteur a une vitesse superieure de 2800 tours par minute. Ce moteur est regle pour 2800 tours par minute, et augmenter la vitesse peut provoquer des degats ou une blessure.

**AVERTIR**

N'utilisez pas la machine pour pomper d'autre liquide que l'eau. N'utilisez pas la machine pour pomper un liquide inflammable. Les risques de feux ou d'explosions existent.

STORAGE

Always store the unit in a place protected from the elements.

TRANSPORTATION

Ensure that the goods will not be subjected to shocks or mistreatment.

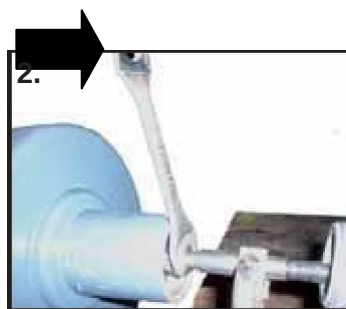
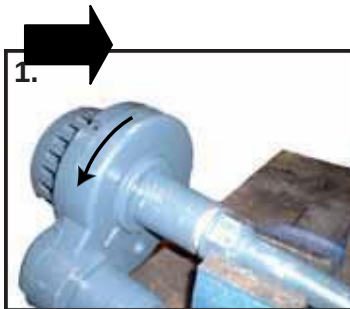
MAINTENANCE AND REVISION

The BT Submersible Water Pump' range of flexible shaft vibrator tubes from Beton Trowel is designed to give many years of trouble-free service. It is recommended to consult an authorized Beton Trowel dealer for all major maintenance and possible repairs. Original Beton Trowel parts must always be used. The use of non-branded parts other than the Beton Trowel brand may void your warranty.

Services

If the transmission cable breaks, follow the following procedure:

- 1) Lock the pump protection tube in a vise, using the flat bars, see **Figure 1**.
 - 2) Remove the complete pump casing by turning counterclockwise as shown in the arrow in **Figure 1**, thus separating the pump casing from the protection tube for easy access to the flexible transmission cable.
 - 3) Use a collet or similar object to lock the flexible transmission cable as shown in **Figure 2**. With a 17 mm wrench, unscrew the end of the cable counter-clockwise (**Figure 2**). The pump can then be separated from both the cable and the sheath.
 - 4) If the transmission cable is broken in the middle, it may also be necessary to remove the coupling opposite the sheath. This will allow the other broken part of the transmission cable to be removed.
To perform this operation, the sheath must be locked as shown in **Figure 3**. once the sheath is locked, the coupling head can be unscrewed.
- Caution** - The coupling has an inverted thread. See **Figure 3**.
- 5) The cable and sheath are reassembled according to the reverse procedure of disassembly.





BETON

Periodic Maintenance	Daily	50 H	200 H	400 H
After use, clean the dirt from the engine, cable and strainer, tighten the bolts to prevent oil leakage.				
The strainer and cable can be disassembled at any time, but try to perform this maintenance as much as possible because dirt and debris can enter the strainer and cause problems.				
Remove the air filter and clean it.				
Remove the spark plug and clean it.				
Check the oil level and add more if necessary. If the engine is new, change it after 8pm.				
Remove the strainer bolts and check internal parts, such as seals and turbine, which may be subject to wear and replace them if necessary.				
Grease the strainer and cable bearings.				

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WARRANTY

Beton Trowel's "BT Submersible Water Pump" is guaranteed to the original purchaser one year (12 months) from the original date of purchase. The Beton Trowel warranty applies to any defects in materials or design or manufacturing defects.

The warranty does not cover the following:

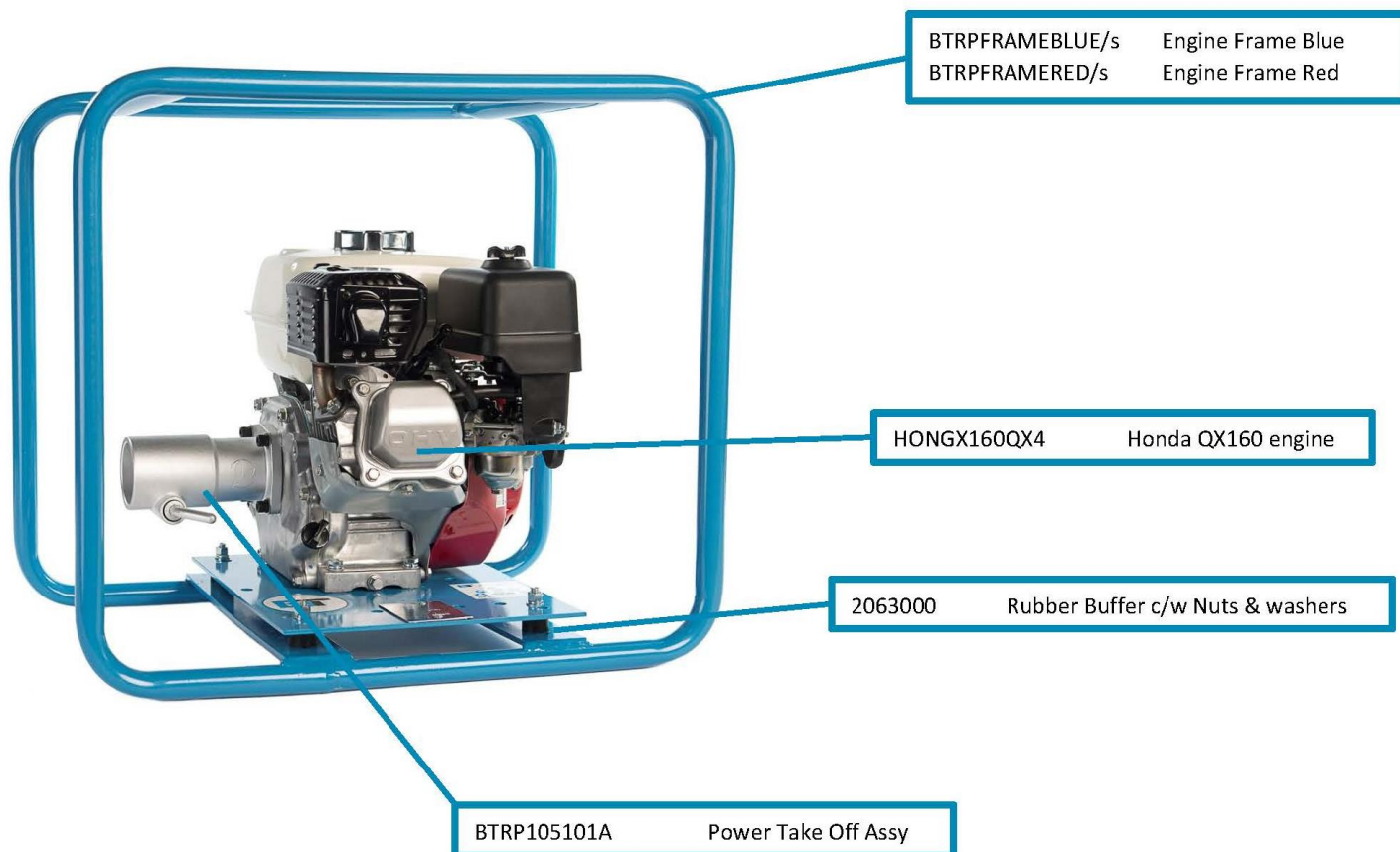
1. Damage caused by misuse, neglect, falling or any other similar damage caused by failure to follow assembly instructions, the use or maintenance operations to be carried out by the user, or resulting from it.
2. Any modifications, additions or repairs made by persons other than Beton Trowel's managers or authorized agents.
3. Transport or shipping costs to return the device to Beton Trowel or its authorized agents, and to return it for repair or evaluation after warranty claim.
4. The cost of materials and/or labour required to replace, repair or renew components due to reasonable wear and tear.

Beton Trowel and/or its authorized agents, directors, employees or insurers are not liable for any consequential or other damages, losses or expenses incurred in connection with the use of the device, or the inability to use the device for any purpose whatsoever.

Warranty claims

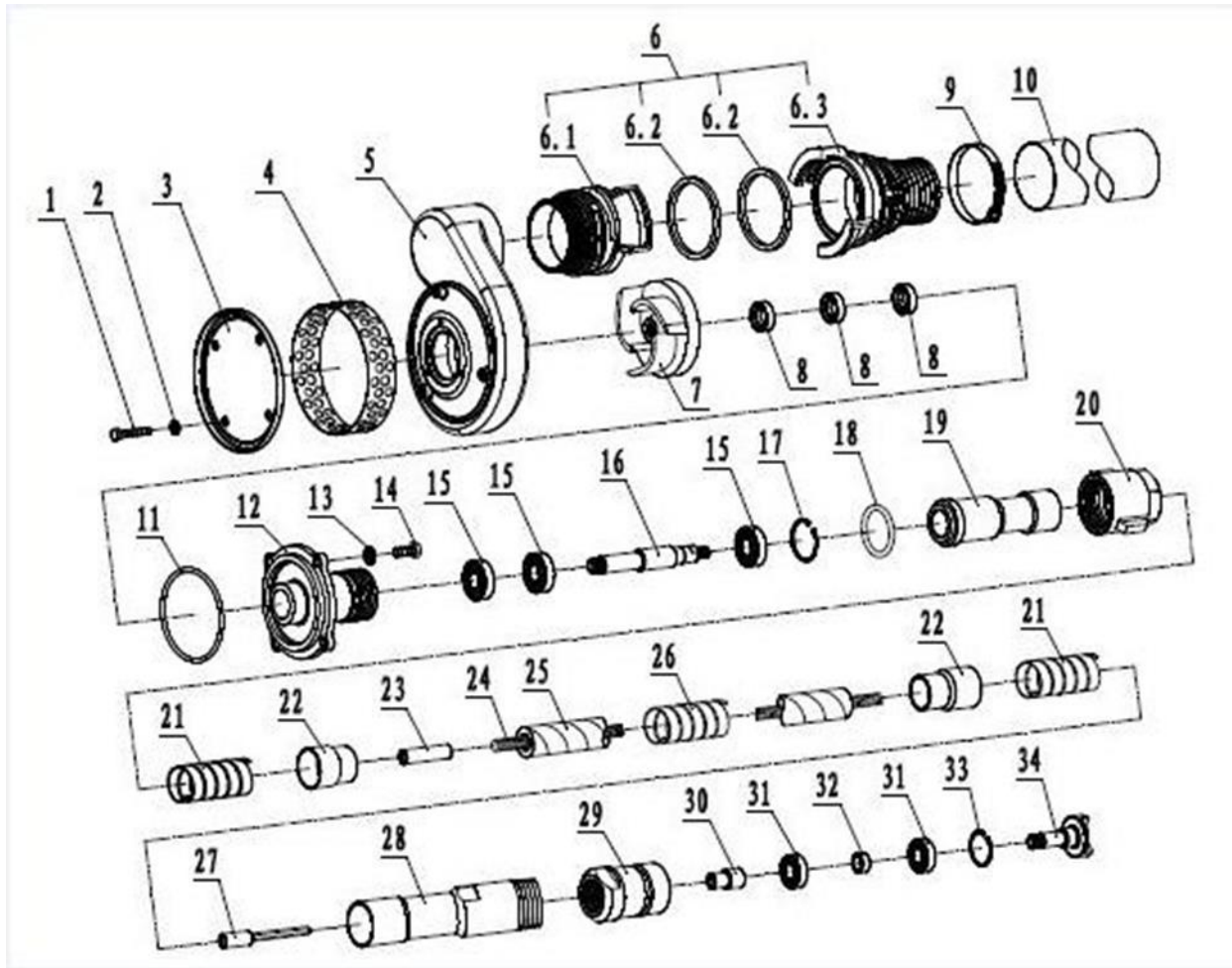
All warranty claims must first be addressed to Beton Trowel by telephone, fax, e-mail or post.

PARTS BTHPU



PARTS BTSP75

Total Pump drawing



NO.	DESCRIPTION	QTY. (pcs)	P/N	WEIGHT (kgs)
1	BOLT M8×45	4	590306	0,02
2	FLAT WASHER 8	4	650303	0,01
3	SUBPLATE	1	200310	0,37
4	FILTER NET	1	200320	0,12
5	CAPSIDE	1	201330	1,77
6	QUICK COUPLER ASSY*	1	201351	1,31
6,1	QUICK COUPLER-A	1		0,59
6,2	O-RING	2		0,01
6,3	QUICK COUPLER-B	1		0,70
7	PUMP IMPELLER	1	200350	1,10
8	OIL SEAL FB20×35×12	3	530529	0,01
9	CLAMP	1	570222	0,03
10	DRINAGE HOSE (10M)	1	570204	5,57
11	O-RING 114×2.7	1	510308	0,01
12	PUMP BODY	1	200360	0,62
13	WASHER	4	650304	0,01
14	BOLT M10×30	4	590325	0,02
15	BEARING 6204-2RS	3	550501	0,10
16	MAIN SHAFT	1	200370	0,39
17	CIRCLE FOR HOLE 47	1	670111	0,01
18	OIL SEAL-RING 50×3.1	1	510102	0,01
19	CONNECTOR	1	200140	1,09
20	NUT	1	200110	0,17
21	HOSE PROTECTOR	2	038170	0,65
22	STOP RING	2	038180	0,05
23	SHAFT ADAPTOR	1	200210	0,05

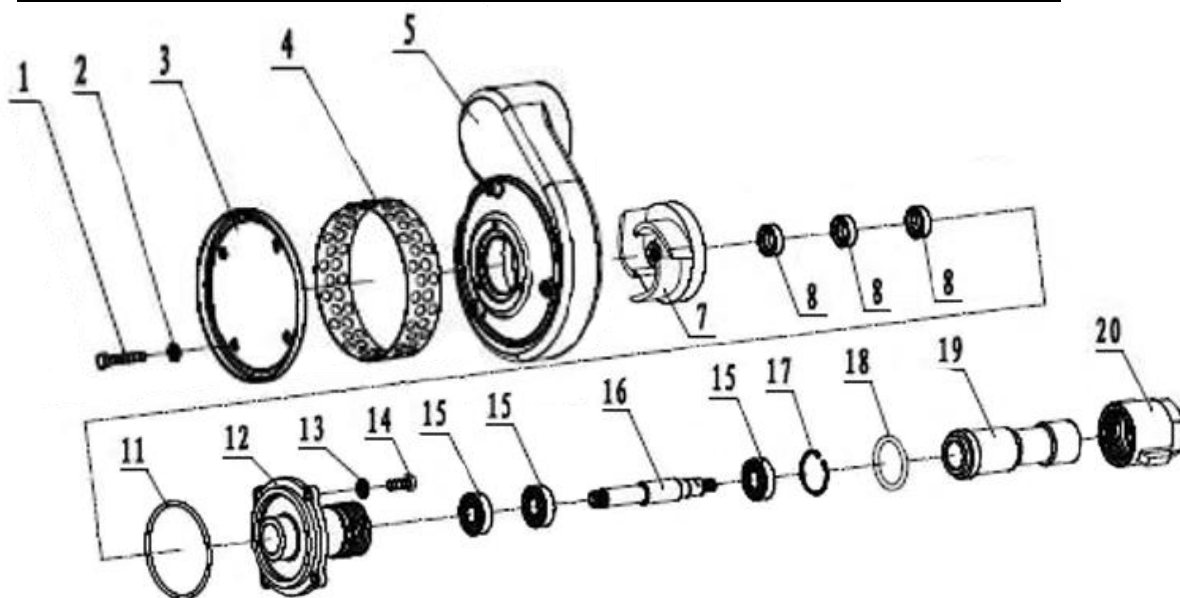
24	FLEXIBLE SHAFT 6M* Contains:	1	810124P	4,53
	23 SHAFT ADAPTOR	1		0,05
	24 FLEXIBLE SHAFT 6M	1		4,53
	27 HEX. PLUG	1		0,07
25	FLEXIBLE HOSE 6M* CONAINST:	1	830124K	11,12
	21 HOSE PROTECTOR	2		0,65
	22 STOP RING	2		0,05
	23 SHAFT ADAPTOR	1		0,05
	24 FLEXIBLE SHAFT 6M	1		4,53
	25 FLEXIBLE HOSE 6M	1		11,12
	26 HOSE PROTECTOR	1		0,62
	27 HEX. PLUG	1		0,07
	28 PIPE COUPLING	1		0,50
26	HOSE PROTECTOR	1	200130	0,62
27	HEX. PLUG	1	049210	0,07
28	PIPE COUPLING	1	038111	0,50
34	HEX PLUG CONECTION* CONTAINS:	1	046350	0,21
	29 COUPLING HEAD	1		1,01
	30 HEX. PLUG CONNECTOR	1		0,07
	31 BEARING 6203	2		0,06
	32 SPACER	1		0,01
	33 CIRCLIP FOR HOLE 40	1		0,01

* Only available as assembly

ASSEMBLIES BTSP75

BTSP75 Pump Head complete - 201300F

NO	DESCRIPTION	QTY. (pcs)	P/N	WEIGHT (kgs)
1	BOLT M8×45	4	590306	0,02
2	FLAT WASHER 8	4	650303	0,01
3	SUBPLATE	1	200310	0,37
4	FILTER NET	1	200320	0,12
5	CAPSIDE	1	201330	1,77
7	PUMP IMPELLER	1	200350	1,10
8	OIL SEAL FB20×35×12	3	530529	0,01
11	O-RING 114×2.7	1	510308	0,01
12	PUMP BODY	1	200360	0,62
13	WASHER	4	650304	0,01
14	BOLT M10×30	4	590325	0,02
15	BEARING 6204-2RS	3	550501	0,10
16	MAIN SHAFT	1	200370	0,39
17	CIRCLE FOR HOLE 47	1	670111	0,01
18	OIL SEAL-RING 50×3.1	1	510102	0,01
19	CONNECTOR	1	200140	1,09
20	NUT	1	200110	0,17

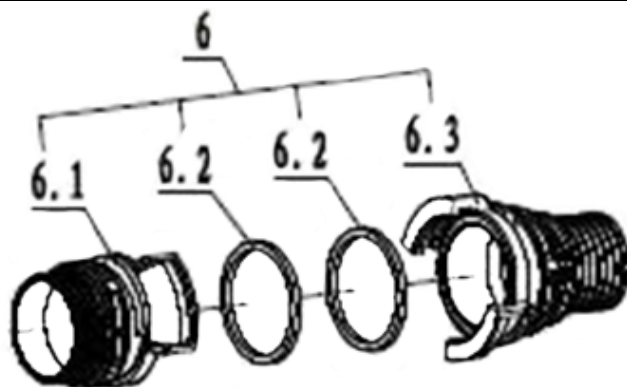


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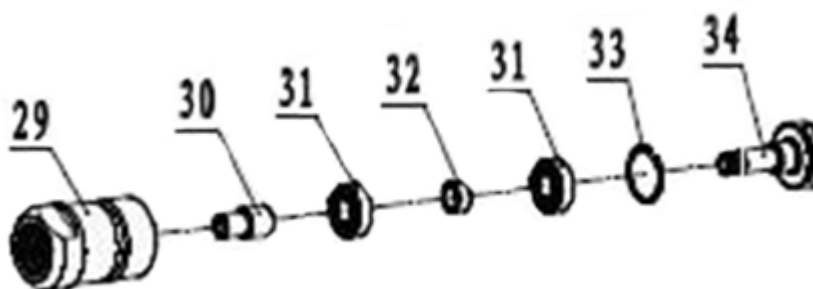
BTSP75 Quick Release Hose Coupling - 201351

NO	DESCRIPTION	QTY. (pcs)	P/N	WEIGHT (kgs)
6,1	QUICK COUPLER-A	1		0,59
6,2	O-RING	2		0,01
6,3	QUICK COUPLER-B	1		0,70



BTSP75 Dynapac Coupling - 46350

NO	DESCRIPTION	QTY. (pcs)	P/N	WEIGHT (kgs)
29	COUPLING HEAD	1		1,01
30	HEX. PLUG CONNECTOR	1		0,07
31	BEARING 6203	2		0,06
32	SPACER	1		0,01
33	CIRCLIP FOR HOLE 40	1		0,01
34	HEX PLUG CONECTION	1		0,21

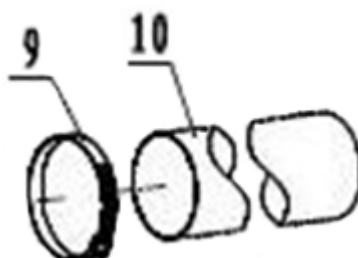


BTSP75 10m Plastic Drainage Hose

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570204 + 570222

NO	DESCRIPTION	QTY. (pcs)	P/N	WEIGHT (kgs)
9	CLAMP	1	570222	0,03
10	DRINAGE HOSE (10M)	1	570204	5,57

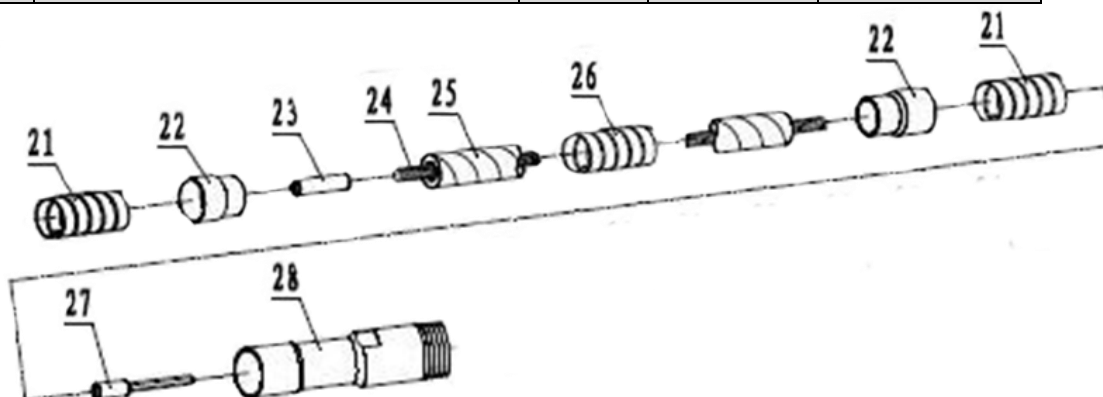


BTSP75 6m Flexible Shaft complete

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830124K

NO	DESCRIPTION	QTY. (pcs)	P/N	WEIGHT (kgs)
21	HOSE PROTECTOR	2		0,65
22	STOP RING	2		0,05
23	SHAFT ADAPTOR	1		0,05
24	FLEXIBLE SHAFT 6M	1		4,53
25	FLEXIBLE HOSE 6M	1		11,12
26	HOSE PROTECTOR	1		0,62
27	HEX. PLUG	1		0,07
28	PIPE COUPLING	1		0,50



BTSP75 Inner core with adaptors - 810124P

NO	DESCRIPTION	QTY. (pcs)	P/N	WEIGHT (kgs)
23	SHAFT ADAPTOR	1		0,05
24	FLEXIBLE SHAFT 6M	1		4,53
27	HEX PLUG	1		0,07

