







FOREWORD

- First of all, thank you for choosing Beilite Hydraulic Hammer. Manufactured by Beilite Company with strong research and development teams and exquisite process technologies, this product is more powerful and durable. Proper operation and timely maintenance will improve the working efficiency and service life of the product.
- In order to use the hydraulic hammer of the Company safely and correctly, please carefully read the safety indicators and operation specifications in this Manual. Please do not operate this product until you have fully grasped the contents.
- Keep this Manual in the place where you can read and use it at any time.
- The structure of the product may not be changed without the permission of the Company. It is not allowed to operate the product outside the specified range of purpose; otherwise, you will not enjoy the warranty of the Company.
- The Company will not be responsible for any damage caused by improper operation and use of other parts except the original parts of the Company.
- The operator must take personal safety protection measures and confirm the safety of the surrounding environment, people and objects to avoid accidents when using the product for operation.
- For the contents or the descriptions that are not detailed enough in this Manual, please consult the agent or the After-sales Service Department of the Company.

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Permanent quality, fast service

Unswerving efforts, constant innovation



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I. Safety specification

- This Manual describes the correct use and basic safety knowledge of the hydraulic hammer. When you see the important content indication symbol \triangle , you must be alert to possible personal injury or death and confirm the safety matters.
- The safety content in this Manual does not cover all the situations that may cause personal injury, death or product damage and it mainly provides basic safety operation and maintenance knowledge.

🛆 Danger	🛆 Warning	▲ Attention
This symbol indicates that wrong operations may cause death or serious injury to the operator.	This symbol indicates that wrong operations may cause injury to the operator or damage to objects	This symbol indicates that wrong operations may shorten the service life of the equipment

1.1 Basic safety rules

	△ Danger
1.	The accumulator and rear cylinder are filled with high-pressure nitrogen gas and wrong operations will cause major personal injury or death. Please pay attention to the use matters and never carry out violation operations.
2.	If the other gases except nitrogen gas are used for the accumulator or rear cylinder, an explosion may occur, thus causing major personal injury or death. Therefore, it is not allowed to use the other gases except nitrogen gas.
3.	Do not weld or drill the accumulator and rear cylinder and keep them away from fire to prevent cracking or explosion.
4.	When disassembling the accumulator and front, middle and rear cylinders, please discharge the high-pressure nitrogen gas in the accumulator and rear cylinder. Please entrust the discharge operation to the Company or our agent.
5.	Please entrust the repair operations of the accumulator and front, middle and rear cylinders to the Company or our agent.



▲ Warning

- 1. When the hydraulic hammer is just used, do not touch the chisel, because the temperature is high at this time and there is a risk of injury.
- 2. In the period after the hydraulic hammer is used and just stopped, the internal pressure of the hydraulic oil pipe may be still high, and if the oil pipe is released at this time, the high-pressure oil in the pipe may be ejected, so please turn off the main engine and carry out this operation after the oil pressure in the oil pipe is completely released.
- 3. Do not use the standard hydraulic hammer for underwater operations. If underwater operations are needed, please consult the Beilite Company or the designated agent.

\triangle Attention

- 1. When connecting the oil pipe of the hydraulic hammer of the Company, take care to prevent foreign matter from entering to hydraulic oil pipe.
- 2. Make sure that the high and low pressure oil pipes are properly connected to the hydraulic hammer of the Company. The length of the oil pipe at the front end of the pipeline stop valve should be appropriate.
- 3. Intermittently turn on the hydraulic hammer starter to remove the gas in the oil pipe and hydraulic pipeline.

1.2 Basic safety operations

- 1. When operating, repairing and maintaining the hydraulic hammer of the Company, you must strictly observe all the safety rules, precautions and operation methods.
- 2. Only the personnel who have been trained in safety technology and own operation qualifications can operate, repair or maintain the hydraulic hammer.
- 3. When using the hydraulic hammer of the Company, the operators should properly wear safety helmets, safety glasses, safety shoes, masks, gloves and other safety protection articles.
- 4. Please connect the hydraulic hammer with supporting machines in a flat and spacious place. When more than two people carry out operations together, they must strictly abide by the prior agreement and various safety rules, such as sign language, slogan and other communication modes.
- 5. Before the use of the hydraulic hammer of the Company, confirm whether the other relevant personnel around are in a safe place and whether the broken matters may fall or fly into the operation room. In order to protect the safety of the operator, please install protectors around the operation room to prevent the broken matters from hurting the operator or other people around.

II. TECHNICAL PARAMETERS

Beilite product parameters (BLTB40-BLTB140)

Paran	Model neter		BLTB-40	BLTB-45	BLTB-53	BLTB-70	BLTB-75	BLTB-85	BLTB-100	BLTB-125	BLTB-135	BLTB-140
		kg	86	137	180	362	466	666	986	1357	1730	1910
	SILENCED	lb	190	302	397	798	1027	1468	2174	2992	3814	4211
Moight	TOP	kg	90	118	173	296	396	625	942	1535	1893	2134
weight	TOP	lb	198	260	381	653	873	1378	2077	3384	4173	4705
	SIDE	kg	80	105	161	285	390	560	835	1366	1671	1855
	SIDE	lb	176	231	355	628	860	1235	1841	3012	3684	4090
		mm	1115	1279	1446	1652	1862	2140	2310	2609	2729	2786
Length	SILENCED	inch	43.9	50.4	56.9	65.0	73.3	84.3	90.9	102.7	107.4	109.7
	TOP	mm	1150	1294	1436	1598	1787	2109	2284	2634	2764	2824
	TOP	inch	45.3	50.9	56.5	62.9	70.4	83.0	89.9	103.7	108.8	111.2
	SIDE	mm	952	1071	1170	1398	1545	1778	1946	2236	2326	2411
	SIDE	inch	37.5	42.2	46.1	55.0	60.8	70.0	76.6	88.0	91.6	94.9
Markin		l/min	15~30	20~40	20~50	40~70	50~90	60~100	80~110	90~120	100~150	120~180
VVOLKIN	g Oli Flow	gal/min	4~7.9	5.3~10.6	5.3~13.2	10.6~18.5	13.2~23.8	15.9~26.4	21.1~29.1	23.8~31.7	26.4~39.6	31.7~47.6
Cat Drassura		bar	130	140	150	160	180	180	210	210	210	210
SetP	ressure	psi	1885	2031	2176	2321	2611	2611	3046	3046	3046	3046
Working Pressure		bar	90~120	90~120	90~120	110~140	120~150	130~160	150~170	150~170	160~180	160~180
		psi	1305~1740	1305~1740	1305~1740	1595~2031	1740~2176	1885~2321	2176~2466	2176~2466	2321~2611	2321~2611
Impa	act Rate	bpm	800~1400	700~1200	600~1100	500~900	400~800	400~800	350~700	350~650	350~500	350~500
Hose	Diameter	inch	1/2	1/2	1/2	1/2	1/2	3/4	3/4	1	1	1
Chisel	Diameter	mm	40	45	53	70	75	85	100	125	135	140
0111001	Diamotor	inch	1.6	1.8	2.1	2.8	3.0	3.3	3.9	4.9	5.3	5.5
Chise	el Lenath	mm	450	500	580	700	750	850	1000	1100	1200	1250
		inch	17.7	19.7	22.8	27.6	29.5	33.5	39.4	43.3	47.2	49.2
N2 P	Pressure	bar	14~17	14~17	14~17	14~17	14~17	14~17	14~17	14~17	6~8	14~17
(Backhead)		psi	203~247	203~247	203~247	203~247	203~247	203~247	203~247	203~247	87~116	203~247
N2 r	ressure	bar	/	/	/	55~60	55~60	55~60	55~60	55~60	55~60	55~60
(Accu	mulator)	psi	/	/	/	798~870	798~870	798~870	798~870	798~870	798~870	798~870
Noise 85dI	B(A)-Distance	m	2~5	3~6	4~8	5~10	6~12	6~12	7~14	10~18	16~22	16~22
Applicab	le Excavator	t	0.5~1.2	0.8~1.5	1.5~3.5	4.5~6	6~8.5	7~11	10~14	14~18	18~22	20~24

Beilite product parameters (BLTB150-BLTB255)

Parar	Mode neter		BLTB-150	BLTB-155	BLTB-165	BLTB-175	BLTB-190	BLTB-195	BLTB-200	BLTB-210	BLTB-230	BLTB-255
	SILENCED	kg	2295	2610	3149	4575	5300	5420	5580	6525	/	/
		lb	5060	5754	6942	10086	11684	11949	12302	14385	/	/
Woight	TOP	kg	2637	2995	3621	4617	6122	6242	6402	8151	12000	14026
weight	TOP	lb	5814	6603	7983	10179	13497	13761	14114	17970	26455	30922
	SIDE	kg	2448	2741	3301	4287	5240	5360	5520	7230	10255	12000
	SIDE	lb	5397	6043	7277	9451	11552	11817	12170	15939	22608	26455
		mm	3024	3161	3369	3683	3888	4030	4080	4345	/	/
	SILENCED	inch	119.1	124.4	132.6	145.0	153.1	158.7	160.6	171.1	/	/
Longth	TOP	mm	3019	3133	3370	3648	3934	4026	4076	4295	5048	5230
Length		inch	118.9	123.3	132.7	143.6	154.9	158.5	160.5	169.1	198.7	205.9
	SIDE	mm	2609	2704	2865	3073	3307	3432	3482	3810	4240	4530
		inch	102.7	106.5	112.8	121.0	130.2	135.1	137.1	150.0	166.9	178.3
		l/min	130~190	180~240	200~260	220~270	240~280	260~300	280~340	340~450	420~530	430~580
Worki	ng Oil Flow	gal/min	34.3~50.2	47.6~63.4	52.8~68.7	58.1~71.3	63.4~74	68.7~79.3	74~89.8	89.8~118.9	111~140	113.6~153.2
		bar	230	250	250	270	290	290	300	310	310	310
Set	Pressure	psi	3336	3626	3626	3916	4206	4206	4351	4496	4496	4496
\A/a alsia		bar	180~200	200~220	200~220	200~230	230~250	230~250	240~260	250~270	250~270	250~270
Working Pressure		psi	2611~2901	2901~3191	2901~3191	2901~3336	3336~3626	3336~3626	3481~3771	3626~3916	3626~3916	3626~3916
Imp	act Rate	bpm	200~300	200~300	150~300	130~200	100~200	100~200	100~200	90~150	70~120	70~120
Hose	Diameter	inch	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/2	1 1/2	1 1/2
Chies	Diamatan	mm	150	155	165	175	190	195	200	210	230	255
Chise	Dameter	inch	5.9	6.1	6.5	6.9	7.5	7.7	7.9	8.3	9.1	10.0
Chie	al Lanath	mm	1300	1400	1450	1500	1600	1700	1700	1800	2050	2200
Chis	erLength	inch	51.2	55.1	57.1	59.1	63.0	66.9	66.9	70.9	80.7	86.6
N2 I	Pressure	bar	6~8	17~20	18~22	25~28	27~30	27~30	27~30	27~30	27~30	27~30
(Ba	ck head)	psi	87~116	247~290	261~319	363~406	392~435	392~435	392~435	392~435	392~435	392~435
N2 I	⊃ressure	bar	55~60	55~60	55~60	55~60	65~70	65~70	65~70	65~70	65~70	65~70
(Acc	umulator)	psi	798~870	798~870	798~870	798~870	943~1015	943~1015	943~1015	943~1015	943~1015	943~1015
Noise 850	dB(A)-Distance	m	21~30	26~35	35~40	38~45	45~50	48~52	50~55	50~55	60~65	80~85
Applica	ble Excavator	t	24~27	27~33	33~38	40~50	45~55	50~60	50~65	65~100	85~120	100~160

The technical specifications of this product are subject to change without notice



III. Structure and main parts of hydraulic hammer

Structure and Main parts of Hydraulic Hammer Built-in control valve External control valve Through bolt Charging valve Rear cylinder Middle cylinder Reversing valve Accumulator Piston Front cylinder Chisel pin Chisel

- Through bolt It refers to the four main bolts used to closely connect the rear cylinder, middle cylinder and front cylinder.
- Charging valve It is used to fill gas into the rear cylinder.
- Rear cylinder It is mainly used to store nitrogen gas.
- Middle cylinder As the heart of the hydraulic hammer, it includes thereciprocating actions of the hydraulic circulation system and control piston.
- Reversing valve It is used to control the piston to move up and down.
- Accumulator It is used to provide adequate oil reserve and improve the stability of the hydraulic system.
- Piston It is used to convert hydraulic energy into kinetic energy and impact the chisel to play a breaking role.
- Front cylinder It is used to support the main body of the hydraulic breaker.
- Chisel pin It is used to fix the chisel and make orientation.
- Chisel IIt is used to break up objects. The type of this part is optional:
 ① blunt type 2 slot type 3 sharp-pointed type

IV. PRODUCT IDENTIFICATION AND POSITION



Note: This diagram is a structure diagram and it may differ from the actual situation if the models are different.

• In order to help the operator better use and maintain the hyd: a: Ilic hammer, the related signs are attached to the surface of the hydraulic hammer when it leaves the factory.

V. Product identification and position

1. Beilite sign





It refers to the oil injection port. It is recommended to add grease every two hours and grease can be added at any time when it is found that the chisel is dry.

3. Valve adjuster



(Note: Be sure to adjust the pressure when the hydraulic hammer stops)

To regulating the return pressure, you can adjust the hitting power and frequency. If the adjustment is improper, the hydraulic hammer will stop, so it is prohibited to make adjustment randomly.

4. Nitrogen gas charging pressure

N2 GAS CHARGE	
1.7 ~ 2.0 MPA	

It indicates the charging pressure of the rear cylinder and accumulator. Gas should be charged in strict accordance with the indicated scope of pressure.

5. Rear cylinder warning sign



6. Accumulator warning sign



7. Beilite sign

It includes the relevant parameters of the product which must be confirmed when you purchase the product.

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BEILITE MACHINEI	AY CO.,LTD.					
Modelno.:						
Serialno.:						
Weight	kg					
Length	mm					
Required Oil Flow	l/min					
Working Pressure	kg/cm2					
Impate Rate	b.p.m					
Hose Diameter	Zufluss					
Chisel Diameter	mm					
Chisel Length	m2					
Applicable Excavator	mm					
Ton						
WWW.BEILITE.COM						
	D 9001:2015 D 14001:2015 ISAS 18001:2007					

8. Operation precautions

The operator should pay attention to the following items when using the hydraulic hammer

Check before start up:

- •Check whether the main engine is equipped with sufficient hydraulic oil and whether the hydraulic oil is clean. Otherwise, please add or replace hydraulic oil timely.
- Before starting work, please warm up the main engine for 10 minutes to ensure that the temperature of hydraulic oil is suitable.
- Check whether there is oil leakage at the in/out adapters and whether the bolts are loose. Otherwise, tighten the joints or bolts to the specified torque.
- Add grease to the hydraulic hammer timely.
- Attention:
- Do not use this hydraulic hammer for underwater operations. (If underwater operations are needed, please consult the Beilite Company or the designated agent.)

- When disassembling the hydraulic breaker, protect the in/out adapter port and prevent external impurities from polluting hydraulic oil.
- Carry out maintenance and replace the hydraulic oil and filter element timely.
- When loading the hydraulic hammer, please remove the chisel.
- Main inspection points:
- Check whether the stop valve is fully open;
- Check whether the oil pipe shakes abnormally;
- Check whether the hydraulic oil is sufficient and clean;
- Check whether the system pressure is normal;
- Check whether the oil temperature is normal;
- Check whether the filter element is clean;

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5.1 Diagram of hydraulic hammer

In order to enable the hydraulic hammer to work normally, the connecting pipes between the hydraulic hammer and the main engine must be connected in accordance with the method shown in the figure below. Please confirm whether these pipes are installed on the main engine. If not, please contact the Company or the designated agent.



5.2 Hydraulic pipeline of hydraulic hammer

Beilite Hydraulic Hammer can be installed on a variety of different construction machines. In order to enable the machine to run normally with the maximum work efficiency, Beilite advises you to let the company's staff to perform installation if you adopt the products of the Company; if there is no any service personnel of the Company in the region where you are located, it is recommended to entrust the dealer or agent of the Company with the installation work to ensure the safety of the products and operators.

Oil pipeline used alone

For the operation of the hydraulic hammer, a separate hydraulic circuit should be used and it is not allowed to share the pipeline with other hydraulic circuits. Since the hydraulic systems in different types of machines are different, the pressure and flow S of the hydraulic circuit and the wear of hydraulic parts should be checked before installation. It is also recommended to select the original parts when it is necessary to replace parts.



5.3 Preparation before installation

This section describes the safety operation and the correct installation method that can extend the service life of the product. Be sure to strictly observe the contents in this section to prevent accidents.

5.3.1 Requirements for main engine

\triangle Requirements for main engin	\triangle Weight of main engine
Beilite Hydraulic Hammer is specially manufactured for excavator and loader models. Please pay attention to the following requirements when you select to connect the hydraulic hammer equipment.	There will be a risk of overturn if the hydraulic hammer is used for the main engine with the lighter weight than the load or that has a longer big or small arm than the specified arm.
\triangle Installation confirmation	\triangle Performance of main engine
The size of the main engine arm and connecting part should be matched to that of the hydraulic hammer. Check the size of the connecting part, pin hole and distance between pins before connection.	The flow and pressure of the main engine set should be matched to that of the hydraulic hammer, otherwise, the performan ce of the hydraulic hammer will be affected.

Hydraulic contents

- The hydraulic unit of the main engine should be matched to that of the hydraulic hammer. When the hydraulic hammer is installed on the main engine with a smaller value than the specified value or when the highest pressure of the pipeline is lower than the set pressure of the hydraulic hammer, the hitting frequency of the hydraulic hammer may become smaller or the hydraulic hammer fails to start.
- The hydraulic oil flow will decrease as the hydraulic oil temperature increases. For the serious aging hydraulic pump, the hydraulic oil flow will decrease sharply as the oil temperature increases, and the hitting frequency will become smaller or the hydraulic breaker fails to start. Repair or replace the hydraulic pump at this time.
- When the working flow of the main engine is higher than the required flow of the hydraulic hammer, the hitting frequency will become larger, excessive pressure will be applied and the oil temperature will rise sharply, thus damaging the hydraulic hammer. Please contact the main engine manufacturer or the Company for the details of installation requirements.
- The hydraulic pipeline of the hydraulic hammer should be consistent with the data indicated in "2. Table of technical parameters". If the pipeline with the smaller valve than the specified value is used, the hydraulic pressure will increase, and irregular movement will occur as the oil temperature of the pipeline rises.
- In order to prevent heat and irregular work caused by increased back pressure, the size of the oil return pipe should be larger than that of the oil inlet pipe.
- The hydraulic hammer can only be installed on the main engine with sufficient loading capacity. If a quick connector is used, the total weight including that of the quick connector should be confirmed.
- For the installation dimension, please consult the agent or the Company.
- The pipeline connecting the hydraulic hammer should meet the working pressure and flow of the hydraulic hammer.



- When the special hydraulic oil is used instead of normal hydraulic oil, the service life of the seal assemblies of the hydraulic breaker will be reduced. Please be sure to consult the Company in advance.
- The use of the hydraulic hammer will result in higher heat to the hydraulic oil than general main engines, so the oil temperature nd viscosity should be checked before use. Too high or low viscosity of the hydraulic oil will not only enable the hydraulic accessories of the hydraulic hammer and main engine to fail to function normally, but also damage the hydraulic accessories or reduce the service life. Select the hydraulic oil with appropriate viscosity based on the external temperature and the state of main engine before the hydraulic hammer is used.
- During re-installation after the installation or maintenance of the hydraulic hammer, some hydraulic oil will be consumed. Check the hydraulic oil gauge before installation. If the oil is insufficient, add some hydraulic oil before use.
- The main engine with the hydraulic hammer should be equipped with a cooler that is big enough to cool the hydraulic oil. When the cooler is too small or polluted and the cooling power is insufficient, the hydraulic oil temperature will increase, and it may become higher especially in high temperature. When the hydraulic hammer is working, the maximum oil temperature is limited to 80 °C.
- The range of oil temperature can guarantee the adequate breaking performance of the hydraulic hammer. When the oil temperature rises above 90T in the using process, damage will be caused to all hydraulic accessories, including seal assemblies; therefore, check or upgrade the cooler to ensure that the oil temperature will not exceed the maximum. For details, please consult the main engine manufacturer or the Company.

5.3.2 Hydraulic oil discharge and pipeline cleaning

Purpose

The damage between the hydraulic hammer cylinder and the piston is mainly caused by the foreign matter in the hydraulic oil. It is essential for the long-term trouble-free use of the hydraulic hammer to keep the hydraulic oil clean. In particular, in order to remove the pollutants from the hydraulic oil when installing the pipeline, the hydraulic oil must be discharged and circulated.

- Hydraulic oil discharge method
- (01) Prepare a clean oil drum with a volume of more than 20 liters.
- (02) Enable the small arm of the main engine to contact the ground.
- (03) Turn on the work switch of the hydraulic hammer 3-5 times when the stop valves of the oil inlet pipe and oil return pipe are in the closed state.
- (04) Open the stop valves of the oil inlet pipe and oil return pipe and drain the hydraulic oil in the pipeline into the prepared empty drum. (Note! Do not turn on the work switch when the hydraulic oil is discharged).
- (05) Repeat Steps (3)-(4) more than 3 times.



- (1) Oil return port
- Pipeline cleaning
- (01) After the hydraulic oil is drained, connect the oil inlet (2) and oil return port (1) of the stop valve directly by using an oil pipe without passing through the hydraulic hammer.
- (02) Adjust the engine speed to the maximum, keep a stop of 5 seconds in 10 seconds after the work switch of the hydraulic breaker is turned on, and repeat this operation for more than 5 minutes. (Hydraulic oil circulation)
- (03) In order to clean the pipeline more effectively, beat the hydraulic breaker pipelines on the large and small arms evenly with a rubber hammer during the circulation of hydraulic oil, so that the foreign matter in the pipelines falls.
- (05) After the hydraulic oil circulation is completed, replace the hydraulic oil and hydraulic oil filter element of the main engine.

5.4 Installation and disassembly steps

▲ Attention

- ▶ When various fixing pins are disassembled by using a hammer, metal chips may fly out due to the knocking, and major injury accidents may be caused especially when metal chips enter into eyes. Therefore, be sure to wear safety protection articles, such as safety helmets, safety glasses, safety boots, masks and gloves during disassembly.
- Please disassemble the hydraulic hammer in a flat, spacious and clean place. When more than two people carry out operations together, they should agree on and strictly observe contact modes, such as sign language.
- Do not put your hands into the shaft holes when installing the connecting shaft, because the small arm and hydraulic breaker may move, and thus causing injury.
- Before disassembling the oil pipe, first confirm the temperature of the equipment and oil circuit, and then release the pressure of the hydraulic system to avoid injury.
- ► Installation and disassembly should be carried out on clean, smooth and hard ground to prevent foreign matter from flowing into the hydraulic system; otherwise, fatal damage may be caused to the hydraulic hammer and main engine.

5.4.1 Installation of connecting base

- For top type and box type hydraulic hammers, the connecting base should be connected with the hydraulic breaker housing first before connecting to the main engine.
- 1. Place the hydraulic hammer on a wooden block or base plate with the pipe joint of the hydraulic hammer up.
- 2. Fasten the connecting base and hydraulic hammer housing with bolts, spring washers and nuts. For the box type hydraulic breaker, put a damping block in the hydraulic hammer housing before the connecting base is fastened.



5.4.2 Connection between hydraulic hammer and main engine

Connection of small arm of main engine

- 1. Place the hydraulic hammer on a smooth and hard ground with the chisel of the hydraulic hammer facing the main engine.
- 2. Place the two shaft sleeves inside the pin shaft holes respectively.
- 3. Operate the main engine and align the pin shaft holes on the small arm of the main engine to the pin shaft holes on the hydraulic hammer housing.
- 4. After it is confirmed that the pin shaft holes are aligned, insert the connecting shaft, install the check ring on the connecting shaft and then lock it with bolts and nuts.



Connection of connecting rod of main engine

- 5. Raise the hydraulic hammer to an appropriate height.
- 6. Place the two shaft sleeves inside the pin shaft holes respectively.
- 7. Make them pass through the bucket cylinder until the pin shaft holes of the connecting rod are aligned with the pin shaft holes of the hydraulic hammer housing.
- 8. After it is confirmed that the pin shaft holes are aligned, insert the connecting shaft, install the check ring on the connecting shaft, and lock it with bolts and nuts.
- 9. Check whether there is clamping stagnation, looseness or mechanical defects during operation.



Connection of hydraulic oil pipe

Before the hydraulic pipeline is connected, make inspection according to the following items:

- ► To avoid the damage to the hydraulic hammer, keep the hydraulic system of the main engine clean. Check the oil pollution, replace the hydraulic oil or further filter the hydraulic oil if necessary, and replace the filter element according to the maintenance rules of main engine.
- ▶ When the hydraulic hammer pipeline is used for the first time, remove the pollution in the hydraulic circuit through circulating filtration (do not connect it to the hydraulic hammer). See Section 5.3.2 Hydraulic oil discharge and pipeline cleaning.
- Check the set pressure of the hydraulic hammer overflow valve. The pressure should be at least 30-40 bars higher than the measured working pressure of the hydraulic hammer. See Section 5.5 Setting of overflow valve pressure.
- Completely release the pressure in the hydraulic system before installation or maintenance.
- ▶ The sealing surface, oil pipes and joint connecting threads should not be damaged or polluted by sand or other similar impurities.
- 10. Confirm that the stop valve is closed.
- 11. Remove the in/out adapter cover on the hydraulic hammer body and connect the oil inlet and outlet pipes. The oil inlet is IN and the oil outlet is OUT.
- 12. Connect the oil pipe to the oil inlet and outlet of the stop valve, be careful not to connect the oil inlet and outlet reversely, ensure that the pipeline is smooth and do not distort the pipeline.
- 13. After the oil pipe is connected properly, open the stop valve. When the stop valve is opened, the hydraulic hammer will suddenly move. Please keep a safe distance from the chisel.
- 14. Operate the hydraulic hammer slowly and check the oil pipe for oil leakage and deformation.



5.4.3 DISASSEMBLY OF HYDRAULIC HAMMER

Place the hydraulic hammer on a clean and smooth surface, stop the main engine and release the hydraulic system pressure.

- 1. Completely close the stop valve.
- 2. Remove the hydraulic oil pipe (IN, OUT) from the stop valve.
- 3. In order to prevent dirt from entering the stop valve and oil pipe, plug the stop valve interface and the both ends of oil pipe with plugs.
- 4. Confirm that there is no oil leakage in the stop valve and oil pipe.
- 5. Remove the connecting shaft from the small arm and connecting rod.
- 6. Remove the small arm from the hydraulic hammer so as to move the hydraulic hammer or install other accessories on the main engine.

5.4.4 INSTALLATION AND DISASSEMBLY OF CHISEL

- Please use the real Beilite chisel. If other brands are used, serious damage may be caused to the hydraulic hammer, and in this case, our company will refuse the warranty.
- Please select the appropriate lifting equipment according to the weight of chisel to prevent it from falling off.
- The chisel should be installed according to the method described. Otherwise, the chisel may fall off, which may cause safety accidents.
- After the hydraulic hammer works for a period of time, the chisel, especially the rod tip will be overheated for a long time. Never touch it. Otherwise, severe scald may be caused.

INSTALLATION OF CHISEL

- 1. Observe the both ends of the lock pin, and knock the lock pin out from the side with small diameter to the side with large diameter by using a punch pin.
- 2. Take the chisel pin out of the front cylinder.
- 3. Remove all the dirt adsorbed on the surface of the inserted part of the chisel and apply grease to the chisel and hydraulic breaker chisel bush.
- 4. Insert the tail of the chisel into the front cylinder, and align the pin hole plane on the chisel with the pin hole plane on the front cylinder by rotation.
- 5. Insert the chisel pin.
- 6. Insert the lock pin into the pin hole of the front cylinder and confirm that the lock pin is fully inserted.
- 7. Check whether the rubber ring (or rubber plug) inserted in the pin hole is damaged; if it is damaged, replace it timely.
- 8. Operate the main engine so that the hydraulic hammer is erected vertically. The hydraulic hammer chisel can move up and down freely after a certain pressure is applied.



Note: This diagram is a structure diagram and it may differ from the actual situation if the models are different.

DISASSEMBLY OF CHISEL

- 1. Observe the both ends of the lock pin, and knock the lock pin out from the side with small diameter to the side with large diameter by using a mandril.
- 2. Take the two chisel pin out of the front cylinder.
- 3. Take out the chisels.
- 4. Check the wear degree of the contact surface between the chisel pin and chisel and the thrust bush of the front cylinder. If the wear limit is exceeded, replace them with new products.

5.5 SETTING OF OVERFLOW VALVE PRESSURE

- When a new product is to be delivered, re-install the pipeline or replace the overflow valve product and readjust the overflow pressure, including the overflow pressure of pipeline (it is not the overflow pressure of the main engine).
- The overflow valve is usually located on the hydraulic hammer pipeline of the big arm. If you cannot find the overflow valve, please consult the main engine manufacturer or our local agent.
- When the overflow setting pressure is too low, the hitting frequency of the hydraulic hammer will become small or the hydraulic hammer may be unable to start; on the contrary, if the overflow setting pressure is too high, the oil pipe, steel pipe, pump, valve and other surrounding parts will be damaged.

Please set the overflow pressure according to the following method;

- 1. Close the stop valves of the oil inlet and return pipelines of the hydraulic hammer pipeline.
- 2. Connect the oil inlet and return pipes with the oil inlet and oil return port of the pressure measuring equipment respectively.
- 3. Open the stop valve, start the, main engine hydraulic hammer mode and adjust the overflow valve knob until the specified pressure of each model is reached (the setting overflow static pressure is the maximum working pressure of the hydraulic breaker plus 30-40bar).
- 4. If the main engine instrument panel has the hydraulic system pressure display function, it is unnecessary to carry out test by using the pressure measuring equipment.



5.6 ADJUSTING METHOD OF VALVE ADJUSTER

- The BLTB125 and above hydraulic hammers are equipped with valve
- The valve adjuster can control the oil return pressure of the hydraulic hammer to enable the working pressure of the hydraulic hammer to increase or decrease. When the oil supply of the hydraulic hammer is too small or too large, it can be adjusted by using the valve adjuster.



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Close the valve adjuster (rotate clockwise):

- The working pressure increases;
- The hitting power increases;
- The hitting frequency decreases.

Open the valve adjuster (rotate anticlockwise):

- The working pressure decreases;
- The hitting power decreases;
- The hitting frequency increases.

When the valve adjuster is closed and the working pressure is increased to the setting overflow pressure, the hitting frequency will be significantly reduced. Sometimes the hydraulic hammer will stop automatically and it is prohibited to adjust the valve at will. Before the delivery, the valve adjuster has been initially adjusted by the manufacturer. Please make re-adjustment according to the actual working conditions. The method is shown below: (The hydraulic hammer should be stopped)

- 1. Place the hydraulic hammer on a clean and smooth ground and stop the main engine.
- 2. Loosen the nut until the regulating valve is able to rotate.
- 3. Rotate the regulating valve element clockwise or anticlockwise as needed.
- 4. When tightening the nut, to prevent the regulating valve element from rotating together, fix it with an L-shaped wrench.
- 5. The adjusting method of the valve adjuster when leaving the factory is as follows: close it completely and then release it for 2.5-3 turns.

5.7 ANTI-BLANK-FIRE ADJUSTMENT METHOD

- When the hydraulic hammer is idle, the piston transmits the impact force to the chisel, the chisel transfers the impact force to the chisel pin, and the c hisel pin will be easily broken due to strong impact force. In addition, when the chisel is subjected to impact, the impact force will also be dispersed to the cross pin, so that the edge of the inner hole of the cross pin is cracked and the lower cylinder is broken finally. If the hydraulic hammer is always idle, the front cylinder block, chisel, chisel pin, bolt and other parts may be broken, oil leakage in soft and hard pipes and other faults will occur, Anti-blank-fire Valve and the service life of the hydraulic hammer will be greatly reduced.
- The BLTB140F/175L hydraulic hammer is equipped with the anti-idle function. When the hydraulic hammer is idle, this function can automatically enable the hydraulic hammer to stop work. When the chisel touches the object to be broken, the piston will be lifted by the chisel and the hydraulic hammer will restore its normal hitting operation. The anti-idle function can also be turned off according to the working conditions to simplify the controllability.
- In case of hard rock breaking, heavy concrete structure breaking and other operations, you can turn on the anti-idle function.
- In case of soft rock and soil breaking, house demolition, secondary breaking of ore and other operations, you can turn off the anti-idle function.

- BEILITE
- ▶ The operation method to turn on/off the anti-blank-fire function is shown below:
- 1. Place the hydraulic hammer on a smooth and hard ground.
- 2. Release the pressure in the hydraulic system.
- 3. Close the stop valve.
- 4. Remove the anti-blank-fire valve element plug.
- 5. Take out the anti-blank-fire valve element.
- 6. Check the anti-blank-fire valve element; if the threaded end is placed outward, it indicated that the anti-blank-fire function is on; if the threaded end is placed inward, it indicated that the anti-blank-fire function is off.
- 7. Insert the anti-blank-fire valve element again.
- 8. Install the plug and tighten it. Check whether the O ring of the plug is damaged; if it is damaged, replace it with a new product.
- 9. Turn on the anti-blank-fire function when the equipment leaves the factory.

5.8 ADJUSTMENT METHOD OF HITTING FREQUENCY



The BLTB135G/150G hydraulic hammer is equipped with the function of controlling the number of hitting times per minute by rotating the regulating valve element. The hitting frequency can be adjusted according to the working condition, that is, the type of the object to be broken, to improve the work efficiency.

- BEILITE
- ► Close the regulating valve element (rotate clockwise)
- The piston has a long-stroke impact.
- The hitting power increases.
- The hitting frequency decreases.
- It is applicable to the breaking of large and hard rock, breaking of high-hardness cement with many reinforced constructions and other work conditions.
- Open the regulating valve element (rotate anticlockwise):
- The piston has a short-stroke impact.
- The hitting power decreases.
- The hitting frequency increases.
- It is applicable to the breaking of small-hardness rock, cement and brick walls with less rebars and other breakable objects.
- ► The adjustment method is shown below:
- 1. Loosen the nut until the regulating valve is able to rotate.
- 2. When low-frequency hitting is required, rotate the regulating valve element clockwise to the bottom; when high-frequency hitting is required, rotate the regulating valve element for 1-1.5 turns anticlockwise.
- 3. Tighten the nut. To prevent the regulating valve element from rotating together, fix it with an L-shaped wrench.

5.9 INSPECTION AFTER INSTALLATION

After the hydraulic hammer is installed, installation inspection must be carried out;

• Working pressure of hydraulic hammer:

When the hydraulic hammer works, check the pressure at the oil inlet pipe with a pressure gauge; if the main engine instrument panel has the pressure display function, you can check the pressure directly on the instrument panel.

- The pressure of the pre-installed gas in the rear cylinder and accumulator must be measured under static conditions and the hydraulic hammer should not work at this time.
- Check whether the hitting frequency of the hydraulic hammer meets the requirements.
- Check whether the connecting oil pipe of the hydraulic hammer shakes abnormally and whether there is oil leakage at the joint part.

VI. Method of Application

▲ Warning

- Before using the hydraulic hammer, please confirm that the special pipe for hydraulic hammer has been installed on the main engine.
- ▶ If the main engine is equipped with the "hydraulic hammer mode", please use this mode.
- ► If the main engine is equipped with the special pipe for hydraulic shear, it must be replaced with the special pipe for hydraulic hammer to prevent excessive flow.
- ► The hydraulic hammer is used with the supporting main engine. Before using the hydraulic hammer, please set the main engine speed correctly in accordance with the operation and maintenance manual of main engine.

6.1 OPERATION PRECAUTIONS

• Check the replacement cycles of thrust bush and chisel bush. (See P.41 P.42)



Long time deflection of piston and abrasion of chisel bush &thrust bush will caused the piston scratched and hit part broken.



▶ The wear of inner diameter of chisel and thrust bushes may cause the breakage of the chisel.



- ▶ Minimize the number of idling times as far as possible.
- Idling will accelerate the breakage and wear of the hydraulic hammer and main engine connecting fittings.
- Frequent idling will cause the following problems.







▶ The wear of the chisel pin will cause the cracks of the front cylinder. (See P.40)

▶ When grease is added, place the hydraulic hammer vertically and press the chisel at the top of the thrust bush.





If the grease oil flows into the hydraulic hammer cylinder, the entire hydraulic system will be damaged and the hydraulic oil will become black.





Do not carry out continuous hitting operation for more than 1 minute

- When the hydraulic hammer hits the same fixed point continuously for more than 1 minute and fails to break the object, change the hitting point and try again. If the hydraulic hammer hits the same fixed point continuously for more than 1 minute, the excessive loss of the chisel may be caused.
- When the target object is a large or hard stone, start the breaking operation from the edge.



• Do not shake the chisel when in use

If the chisel is shaken during the breaking operation, the chisel, front cylinder, thrust bush, chisel bush, main body and other parts may be damaged.



Do not push the object to be broken by using the hydraulic breaker

Do not use the hydraulic breaker as a tool to push materials during operation; otherwise, the side plate bolt, housing and chisel may be damaged, and even the main engine failure may be caused.



Do not use the hydraulic breaker as a tool to lift materials

Lifting heavy objects with the hydraulic breaker or chisel is a kind of dangerous operation and it may cause damage to the hydraulic breaker and main engine.



Do not operate the hydraulic breaker when the cylinder of the main engine is fully extended or fully retracted.

If the hitting operation is carried out when the cylinder of the main engine is fully extended or fully retracted, the shock will be returned to the oil cylinder and other parts, thus damaging the main engine seriously.



Please stop operation immediately when it is found that the oil pipe is loose

When the high-pressure or low-pressure oil pipe of the hydraulic breaker is loose, stop operation immediately, perform inspection and repair timely, and check whether there is any oil leakage in other places.



6.2 CORRECT OPERATION ESSENTIALS

Please warm up the main engine before operation

Before the hydraulic breaker operates, please warm up the main engine for 10 minutes in advance. The proper warming will help the smooth operation of the breaking operation especially in winter. Please select an appropriate engine speed when you operate the hydraulic breaker

Carry out the breaking operation at an appropriate engine speed. When the engine speed is improperly increased above the speed required for operation, the strength of hitting power cannot be increased; on the contrary, the temperature of hydraulic oil will rise rapidly, the lubrication and work ability will be reduced and the piston and reversing valve may be damaged.



Correct load

When the load is insufficient, the hitting power cannot be fully exerted, and the hitting power of the hydraulic breaker will make the hydraulic breaker body and housing as well as the operation arm of the main engine shake, thus resulting in damage to the above parts.





When the load is too large, the front of the main engine will be lifted up, and the main engine may lean forward suddenly due to the stone breaking, so that the hydraulic breaker body or housing will hit the stone, thus causing damage.



The above situation should be avoided as much as possible, because improper shock will be returned to the main engine. Therefore, it should be confirmed that each operation is correct load during breaking operation, which can effectively reduce the failure rate and prolong the service life.



Select an appropriate origin of force

- When the hydraulic breaker operates, make sure that the direction of the origin of force of the chisel is perpendicular to the surface of the object to be broken and maintain this status as much as possible. If it is inclined to the surface of the object to be broken, the chisel may slide off from the surface, thus damaging the chisel and affecting the piston and other parts.
- During the breaking operation, please select the appropriate hitting point and confirm that the chisel is stable before hitting.



6.3 APPROPRIATE STORAGE METHOD

To ensure the proper use of the hydraulic breaker, please observe the following contents. Improper storage may reduce the - service life of the hydraulic breaker or cause serious faults!

TEMPORARY STORAGE

- Place the main engine smoothly and close the stop valve.
- Place the hydraulic breaker vertically, fix the chisel against the ground and keep the piston inside the cylinder to avoid pollution.

LONG-TERM STORAGE (MORE THAN 1 MONTH)

There are two main reasons for the damage to the hydraulic breaker caused by long-term storage:

1. Rust damage

The lower part of the piston is often exposed to air, and the moisture, oxygen and dust in the air may damage the piston. Corrosion is the main cause for the oil leakage and serious fault of the hydraulic breaker.damage

2. Deformation of seal assembly

If the hydraulic breaker is stored for a long time, the weight of piston will squeeze the seal assembly, thus deforming the seal assembly. If the seal assembly is deformed or damaged, the cylinder will directly contact the piston (direct metal contact fault) and the piston and cylinder will be damaged simultaneously.







- Close the stop valve of the hydraulic breaker pipeline.
- Remove the hydraulic breaker connecting hose and block the interface with a plug to prevent the entry of foreign matter.
- Take out the chisel from the hydraulic breaker.
- Place the hydraulic breaker on a clean and flat ground horizontally, put sleepers at the front and rear ends to enable the rear end of the hydraulic breaker to be slightly higher than the front end, and ensure that the surrounding environment is dry and ventilated.
- Completely release the nitrogen gas in the rear cylinder.
- Insert a round stick from the front cylinder hole of the hydraulic breaker and enable the stick to contact with the piston. Gently knock the stick with a hammer to push the piston into the cylinder (when knocking the stick, open the gas charging value of t he rear cylinder with a tool).
- The bottoms of the piston, chisel and bushing must be protected with grease and anti-rust oil.
- Cover the entire hammer with a waterproof cloth.



INSPECTION AFTER LONG-TERM STORAGE

• The hydraulic breaker must be checked before it is reused after long-term storage. The internal parts of the hydraulic breaker, such as seal assembly, piston and cylinder may be damaged; if they are damaged, replace them in a timely manner. If you use the hydraulic breaker that has been stored for a long time without any inspection, the faults incurred will not be covered by the warranty of the Company.

VII. Maintenance

	∆Warning
	The hydraulic components must be kept absolutely clean, and dirt is the biggest cause for hydraulic system failure.
	The hydraulic breaker components should be kept in a clean place. Clean the components with diesel before use and do not use water or acid to clean them.
	The sealing components, such as O ring and sealing gasket should be cleaned with diesel before installation. For the hydraulic components that are tightly installed, grease should be applied to their sliding surfaces.
	The gas in the rear cylinder and accumulator should be completely released before maintenance or repair.
•	Use correct maintenance tools. The hydraulic breaker should not be changed or refitted without authorization. The resulting fault or the decrease in the service life of the hydraulic breaker will not be covered by the warranty of the Company.

7.1 MAINTENANCE CYCLE

In order to keep the hydraulic breaker in the best condition, periodic maintenance must be carried out as follows:

Cycle	Inspection items	
Every 2 hours	 Check the grease in the chisel,thrust bush and chisel bush. (BLTB40-85:20ml/2h,BLTB100-155:40ml/2h, BLTB165-200:60ml/2h,BLTB210-255:100ml/2h) Check the hydraulic oil pipe for oil leakage. Check the hitting effect. 	 When the grease is insufficient, add grease timely and correctly. When the hydraulic oil pipe is loose or damaged, tighten or replace it. If the hitting is abnormal, contact the agent for maintenance and repair.
Every 10 hours or 1 day	 Remove the chisel pin and chisel and check the burrs caused by wear. Check whether the gap between the chisel, thrust bush and chisel bush is too large and whether there is sufficient grease. Check the loss of the chisel. Check whether the side plate bolts, through bolts, accumulator bolts and in/out adapters are loose or damaged. 	 Remove burrs if any. When the grease is insufficient, add grease; when the gap is too large, replace the thrust bush and chisel bush. Replace the chisel when there is too much loss. If these parts are loose, tighten them diagonally; if they are damaged, please replace them timely.
Every 50 hours or 1 week	 Check the nitrogen chamber pressure. Check the wear of the tail of chisel, the thrust bush, the chisel bush and the head of piston. Check the hydraulic pipeline for oil leakage. Check whether the side plate bolts and through bolts need to be tightened or replaced. 	 When the nitrogen pressure is abnormal, please release or add nitrogen gas. In case of excessive wear, please contact the agent for repair and replacement. If there is oil leakage or excessive wear, please tighten or replace it timely. If they are loose, please tighten them timely; if there is any crack or damage, please replace them timely.

Every 100 hours or 1 month	 Carry out major inspections by the agent. Check the connection of the hydraulic oil pipeline. 	1. In case of oil leakage or excessive wear, please tighten or replace it timely.
Every 540 hours or 3 months	 Carry out major inspections by the agent. Check the connection of the hydraulic pipeline used and the oil return filter element. Check the side plate bolts and through bolts for cracks. Replace all seals. Check the hydraulic system. 	 Please handle the fault risks timely if any. In case of oil leakage or excessive wear, please tighten or replace them timely. In case of looseness or crack, please tighten or replace them timely. Replace them by the agent. If there is a fault, maintain the hydraulic system by the main engine service provider.

7.2 Daily inspection

Before operation, please make sure to check the key points listed in the table below:

Inspection parts	Inspection results		Maintenance methods
 Through bolt Side plate bolt Accumulator connecting bolt Reversing valve seat bolt 	Looseness, fall-off and loss of bolts and nut		Re-tighten the bolts symmetrically
 Hydraulic oil pipe Hydraulic pipeline of hydraulic breaker 	Looseness and oil leakage of hydraulic oil pipe and hydraulic pipeline	100	Tighten the loose parts and replace the seriously damaged parts
 Rear cylinder Front cylinder and chisel 	Abnormal oil leakage		Please contact the local dealer or maintenance unit
Chisel	Abnormal wear and breakage		Replace the excessively worn chisels timely and update or repair the damaged or broken chisels immediately

7.3 Inspection emphasis

The fastening bolts on the hydraulic hammer are subjected to particularly high loads and vibrations. Within the first 50 hours, the fastening bolts on the must be checked every day, and then they can be checked every week thereafter. When tightening the bolts, be careful not to exceed the specified torque.

Model	Position	Unit	BLTB-	BLTB- 135G								
Pre-tightening torque of through bolt	А	N •m	400	500	600	800	800	1300	1840	2700	3000	2700
Pre-tightening torque of accumulator seat bolt	В	N •m	/	/	/	100	100	100	500	500	940	940
Pre-tightening torque of accumulator cover bolt	С	N •m	Ι	/	/	100	100	100	200	200	480	540
Pre-tightening torque of side plate bolt	D	N •m	200	270	450	800	1150	1150	1800	3000	4600	4600

Model	Position	Einheit	BLTB-	BLTB-	BLTB-							
Dra tightaning tangua	A	N •m	4000	4800	3500	4800	4800	5200	6000	7500	7500	14000
of through bolt			1000	1000		1000	1000			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	11000
Pre-tightening torque of accumulator seat bolt	В	N •m	940	940	1500	940	940	1500	940	940	940	4500
Pre-tightening torque of accumulator cover bolt	С	N •m	480	350	540	350	350	540	540	540	540	1285
Pre-tightening torque of side plate bolt	D	N •m	4600	5600	5600	5600	5600	6700	6700	8000	8000	10000



7.4 Replacement of chisel

• The service life of the chisel depends on the method of use. The chisel can withstand the vertical working load sufficiently, but its ability to withstand the horizontal load is weak. In particular, some ways that may damage the chisel or enable the chisel to lose work ability, such as lifting operation and inclined and unfocused hitting, will shorten the service life of the chisel.



The hitting power focuses on a certain point (origin) of the chisel by 90 degrees.



Unebener grauer Bereich

For the above typical breakage caused by overbending, the Company rejects the warranty claim For the fracture caused by the use of the chisel as a crowbar in the above picture, the Company rejects the warranty claim.

- When the gap between the chisel and chisel bush is too large, the piston will not be able to hit the chisel accurately, thus causing damage to the cylinder and piston. Please replace the chisel timely and replace the thrust bush and chisel bush simultaneously.
- If you do not use the real chisel of the Company, the working efficiency of the hydraulic hammer will not be guaranteed.

BEILITE

The chisel needs to be replaced when it wears to a certain extent.

The spe	cific size is as follows:	Unit: mm	
No.	Model	Initial size A	Replacement size B
1	BLTB 40	300	180
2	BLTB 45	325	200
3	BLTB 53	345	200
4	BLTB 70	410	200
5	BLTB 75	420	200
6	BLTB 85	515	250
7	BLTB 100	560	250
8	BLTB 125	645	300
9	BLTB 135	730	300
10	BLTB 135G	760	300
11	BLTB 140	710	300
12	BLTB 150	845	350
13	BLTB 150G	805	350
14	BLTB 155	780	350
15	BLTB 165	785	350
16	BLTB 175	790	350
17	BLTB 185	880	400
18	BLTB 190	900	400
19	BLTB 195	900	400
20	BLTB 210	1125	450



The replacement size B indicated above is the size remaining when the chisel is pressed into the innermost end of the main engine.

7.5 Replacement of chisel pin

If the chisel pin wears with a length of more than 1.5mm on one side, reverse the chisel pin and use the other side. After the chisel pin wears to a certain extent, it should be replaced immediately, as shown in the table below:

				Unit: mm
No.	Model	Initial size A	Replacement size B	Pin shape
1	BLTB-40	φ22	φ19	-
2	BLTB-45	φ24	φ21	
3	BLTB-53	φ24	φ21	Rund
4	BLTB-70	φ35	φ32	
5	BLTB-75	φ35	φ32	
6	BLTB-85	54	50	
7	BLTB-100	60	56	
8	BLTB-125	76	71	
9	BLTB-135	81	76	
10	BLTB-135G	80	75	
11	BLTB-140	89	83	
12	BLTB-150	94	88	
13	BLTB-150G	90	84	Flach
14	BLTB-155	97	91	
15	BLTB-165	97	91	
16	BLTB-175L	120	114	
17	BLTB-185G	110	104	
18	BLTB-190G	120	114	
19	BLTB-195	120	114	
20	BLTB-210L	140	134	





Round chisel pin





Flat chisel pin

7.6 Replacement of chisel bush

If the chisel bush wears seriously, the service life of the piston and chisel will be shortened, and even the piston and chisel may be broken. Therefore, when the chisel bush wears to a certain extent, please replace it timely, as hown in the table below:

				Unit: mm
No.	Model	Measurement position B	Initial size A	Replacement size A
1	BLTB 40	10	φ40	φ43
2	BLTB 45	10	φ45	φ48
3	BLTB 53	10	φ53	φ56
4	BLTB 70	12	φ70	φ74
5	BLTB 75	12	φ75	φ80
6	BLTB 85	12	φ85	φ90
7	BLTB 100	15	φ100	φ105
8	BLTB 125	15	φ125	φ131
9	BLTB 135	15	φ135	φ141
10	BLTB 135G	15	φ135	φ141
11	BLTB 140	18	φ140	φ147
12	BLTB 150	18	φ150	φ157
13	BLTB 150G	18	φ150	φ157
14	BLTB 155	18	φ155	φ162
15	BLTB 165	18	φ165	φ173
16	BLTB 175L	20	φ175	φ183
17	BLTB 185G	20	φ185	φ193
18	BLTB 190G	20	φ190	φ200
19	BLTB 195	20	φ195	φ205
20	BLTB 210L	20	210	CD 220
	1	1		

7.7 REPLACEMENT OF THRUST BUSH

WIf the thrust bush wears seriously, the service life of the piston and chisel will be also shortened, and in case of serious wear, the piston and chisel may be broken.



For the replacement of worn round bushing, refer to the data in the small table. If any of the sizes A and C in the table exceeds the allowable range, the thrust bush needs to be replaced.

Unit: mm

No.	Model	Measurement position B	Initial size A	Replacement size A	Initial size C	Replacement size C
1	BLTB 40	10	φ40	φ42	8	6
2	BLTB 45	10	φ45	φ47	10	8
3	BLTB 53	10	φ53	φ55	8	6
4	BLTB 70	12	φ70	φ73	8	6
5	BLTB 75	12	φ75	φ78	14	12
6	BLTB 85	12	φ85	φ88	22	20
7	BLTB 100	15	φ100	φ104	17	14
8	BLTB 125	15	φ125	φ129	31	28
9	BLTB 135	15	φ135	φ139	27	24
10	BLTB 135G	15	φ135	φ139	27	24
11	BLTB 140	18	φ140	φ145	38	35
12	BLTB 150	18	φ150	φ155	36	33
13	BLTB 150G	18	φ150	φ155	35	32
14	BLTB 155	18	φ155	φ160	32	29
15	BLTB 165	18	φ165	φ171	37	34
16	BLTB 175L	20	φ175	φ181	32	29
17	BLTB 185G	20	φ185	φ191	33	30
18	BLTB 190G	20	φ190	φ197	38	35
19	BLTB 195	20	φ195	φ202	38	35
20	BLTB210L	20	φ210	φ217	35	32

7.8 NITROGEN GAS SUPPLEMENT





Nitrogen gas inspection and gas filling methods for rear cylinder:

- 1) Remove the rear cylinder gas charging valve plug.
- 2) After it is confirmed that the nut and exhaust valve of the gas filling device are tightened and the handle is to bounce off upward, screw the gas filling device on the gas charging valve.
- 3) Press the handle of the gas filling device, measure the nitrogen gas pressure and make adjustment.
 - → If the nitrogen gas pressure is within the standard range, enable the handle of the gas filling device to bounce off upward, open the exhaust valve to release the residual gas, then remove the gas filling device from the gas charging valve and tighten the gas charging valve plug.
 - → If the nitrogen gas pressure is higher than the standard range, slowly open the exhaust valve of the gas filling device, release the pressure to the standard range, tighten the exhaust valve, enable the handle of the gas filling device to bounce off upward, open the exhaust valve to release the residual gas, then remove the gas filling device from the gas charging valve and tighten the gas charging valve plug.
 - → If the nitrogen gas pressure is lower than the standard range, enable the handle of the gas filling device to bounce off upward, open the exhaust valve to release the residual gas and remove the nut of the gas filling device. Connect the gas filling hose with the gas filling device and nitrogen gas bottle and press the handle of the gas filling device; slowly open the valve of the nitrogen gas bottle, fill the bottle with nitrogen gas and then close the valve after a while; open the valve to charge gas and then close it again; repeat the steps and check the pressure of the nitrogen gas gauge at any time until the pressure reaches the standard range. Close the valve of the nitrogen bottle, enable the handle of the gas filling device to bounce off upward, open the exhaust valve to release the residual gas, then remove the gas filling device from the gas charging valve and tighten the gas charging valve plug.

Nitrogen gas inspection and gas filling methods for accumulator:

- 1) Remove the gas charging adjuster nut on the accumulator, tighten the gas charging adjuster, and remove the gas charging valve nut on the accumulator.
- 2) After it is confirmed that the nut and exhaust valve of the gas filling device are tightened and the handle is to bounce off upward, screw the gas filling device on the accumulator.
- 3) Slowly loosen the gas charging adjuster, measure the nitrogen gas pressure and make adjustment.
 - \rightarrow a. If the nitrogen gas pressure is within the standard range, tighten the gas charging adjuster, open the exhaust valve to release the residual gas, then remove the gas filling device from the accumulator and tighten the gas charging valve plug and gas charging adjuster nut.
 - → b. If the nitrogen gas pressure is higher than the standard range, slowly open the exhaust valve of the gas filling device, release the pressure to the standard range, tighten the exhaust valve, tighten the gas charging adjuster, open the exhaust valve to release the residual gas, then remove the gas filling device from the accumulator and tighten the gas charging valve plug and gas charging adjuster nut.
 - → c. If the nitrogen gas pressure is lower than the standard range, tighten the gas charging adjuster, open the exhaust valve to release the residual gas and remove the nut of the gas filling device. Connect the gas filling pipe with the gas filling device and nitrogen gas bottle and loosen the gas charging adjuster; slowly open the valve of the nitrogen gas bottle, fill the bottle with nitrogen gas and then close the valve after a while; open the valve to charge gas and then close it again; repeat the steps and check the pressure of the nitrogen gas gauge at any time until the pressure reaches the standard range. Close the valve of the nitrogen bottle, tighten the gas charging adjuster, open the exhaust valve to release the residual gas, then remove the gas filling device from the accumulator and tighten the gas charging valve plug and gas charging adjuster nut.

7.9 Hydraulic oil

▲ Attention						
Operating temperature and viscosity of hydraulic oil						
▶ Please operate the hydraulic hammer when the operating temperature of hydraulic oil is 20 to 80 °C.						
► Do not use the mixture of hydraulic oil and other oils						
▶ Please do not add other oils or hydraulic oils with different components in the hydraulic oil or use the mixture.						
Periodic replacement of hydraulic oil						
► The hydraulic oil needs to be checked periodically. When the hydraulic oil needs to be replaced, all the hydraulic oil in the oil tank and hydraulic circuit should be replaced.						
▶ When the temperature of hydraulic oil exceeds the range of operating temperature, the abnormal operation or fatal						
fault of the hydraulic hammer may be caused.						
▶ When replacing the hydraulic oil, the hydraulic oil filter should be washed or replaced simultaneously.						

Selection of hydraulic oil/The selection of hydraulic oil determines the efficiency and service life of the hydraulic hammer. Please contact the agent in the following cases.

- 1. When the hydraulic hammer must be used under special weather conditions (for example, in extremely cold or hot regions).
- 2. When the recommended hydraulic oil is not available and needs to be replaced by other hydraulic oils.
- 3. When the oil recommended by the main engine manufacturer is different from the oil recommended by the hydraulic breaker manufacturer.

Hydraulic oil and grease (recommended by Beilite)							
Manufacturer	Summer oil	Winter oil	Grease				
Your Choice of Energy	Beilite 68 #	Beilite 46 #	Beilite 2# Beilite 3#				
Shell	Shell TellusT68	Shell Tellus T46	Alvania Grease2				
Esso	Nuto H68	Nuto H46	Beacon 02				
Mobil	Mobil DTE 16	Mobil DTE 15	Mobil Grease Special				
Gulf	Harmony 68	Harmony 46	Golf Grown EP2				
Caltex	Lando CZ68	Lando GZ46					
Fuchs			Hammerpasta				

Operating temperature of hydraulic oil:

- 1. The hydraulic oil recommended by the Company is used at a temperature of 20 to 80 °C. Please use the hydraulic oil within this range. If the temperature of hydraulic oil rises above 80 °C, fatal damage may be caused to the hydraulic breaker. Therefore, please check the hydraulic oil cooler to keep the hydraulic oil within a reasonable temperature range in the operation process.
- 2. After the hydraulic hammer works for a long time, the temperature of hydraulic oil will rise above the operating temperature range. Therefore, stop work for a while, and then continue the operation after the temperature decreases.
- 3. The temperature is low in winter, so the hydraulic hammer should be sufficiently preheated first and then the operation can be started after the temperature of the main engine rises. If sufficient hydraulic oil cannot be supplied to the hydraulic hammer at a low temperature, fatal damage may be caused to the hydraulic hammer.

Oil pollution:

If the polluted hydraulic oil is used, the hydraulic hammer and main engine will fail, so special attention should be paid to the hydraulic oil quality. When the hydraulic oil is polluted or deteriorated, please replace it immediately without delay. When replacing the hydraulic oil, please clean the pipeline, oil tank and other parts thoroughly, and replace them if necessary.

- 1. Replacement of filter element: The filter element should be replaced 250 hours after first use, and then it can be replaced every 600 hours.
- 2. Replacement of hydraulic oil: The hydraulic oil should be replaced 600 hours after first use, and then it can be replaced every 1500 hours.

VIII. FAULT AND SOLUTION

Fault	Cause	Solution
The hydraulic hammer fails to hit	The high and low pressure connecting pipes are installed reversely	Exchange the connecting pipes
	The stop valve is closed or it is not fully opened	Open the stop valve
	The nitrogen gas pressure of the rear cylinder is too high	Adjust the nitrogen gas pressure of the rear cylinder to the specified value
	The hydraulic oil level is too low	Add hydraulic oil
	The overflow valve pressure is too low	Adjust the overflow valve pressure to the specified value
	The piston or control valve gets stuck	Consult the agent
	The circuit of the main engine fails	Maintain the circuit of the main engine
	The oil return quantity of the main engine is too low	Check the oil return quantity and engine speed
The hitting frequency is too small	The middle cylinder or piston wears	Consult the agent (replace the cylinder or piston)
	The oil supply of the main engine is too low	Check the main engine (engine, hydraulic pump and hydraulic system)
	The back pressure of the öil return pipeline of the hydraulic hammer is too high (the oil return pipeline shakes seriously)	Check the filter element and cooler and clean or replace the oil return pipeline with larger caliber
	The hydraulic oil temperature is too high	Clean or replace the cooler and replace the hydraulic oil with high viscosity
	The overflow valve pressure is too low	Adjust the overflow valve pressure to the specified value
	The hydraulic oil level is too low	Add hydraulic oil
	The frequency regulating valve or regulating valve of the hydraulic breaker is adjusted improperly	Consult the agent
	The piston or control valve is damaged	Consult the agent

The hitting frequency is too large	The hydraulic system of the main engine is unstable	Consult the agent (maintain or replace the accumulator)	
	The thrust bush wears (the installation position of the chisel is too high)	Consult the agent (replace the thrust bush)	
	The piston or control valve is damaged	Consult the agent	
The hitting frequency is unstable	The hydraulic system of the main engine is unstable	Consult the main engine agent	
	The control valve of the hydraulic hammer is damaged	Consult the agent	
Oil leakage	The middle cylinder seal is aged or has a quality problem	Consult the agent (replace the seal)	

IX. Automatic lubrication device

∧Warning

- When automatic lubrication is adopted, an automatic lubrication device should be installed on the hydraulic breaker.
- ▶ Do not use liquid grease, and please select the grease recommended by the Company.
- ▶ The accessories required for automatic lubrication are optional and need to be purchased separately.

Installation method of automatic lubrication device:

When it is necessary to install an automatic lubrication device, please consult Beilite Company or the agent designated by Beilite.

- 1. Clean the mounting hole of the automatic lubrication device ① of the shell and clear the foreign matter at the grease hole of the middle cylinder.
- 2. Align the four mounting holes of the automatic lubrication device ① with the holes on the shell respectively, place the bolt pads ⑥ into the mounting holes of the automatic lubrication device, then put the shield ⑤ and tighten it with the nord lock ring. ④, spring washer ⑤ and bolt ③.
- 3. Remove the grease nipple on the middle cylinder with a tool.
- 4. Install the joint \overline{O} (thread specification: G1/4") at the grease hole on the middle cylinder.
- 5. Connect the G1/4" grease pipe (2) to the joints of the lubrication device and the grease hole of the middle cylinder respectively.
- 6. The grease in the automatic lubrication pipeline inside the hydraulic hammer will be hardened and blocked due to foreign matter or temperature changes. If the grease cannot be added smoothly, disassemble the hydraulic hammer, remove the foreign matter and grease deposited in the internal pipeline and then clean the pipeline.





Automatic lubrication device
 Grease pipe
 Bolt
 Nord lock ring
 Shield
 Bolt pad
 Joint

Composition of automatic lubrication device (BLTB85 and above)

Part na	me	Automatic lubrication device	Grease pipe	Inner shex. ocket bolt	Nord lock ring	Shield	Bolt pad	Joint
Quanti	ty	1	1	4	4	1	4	1
	BLTB85	S2U-300	G1/4"*520	M10*120	10	210*127*85	ф18*ф12*35	G1/4"
	BLTB100	S2U-300	G1/4"*520	M10*120	10	210*127*85	φ 18* φ 12*35	G1/4"
	BLTB125	S2U-300	G1/4"*520	M10*120	10	210*127*85	φ 18* φ 12*35	G1/4"
Corresp on ding	BLTB135	11U-370	G1/4"*520	M12*130	12	310*147*95	ф20*ф13*30	G1/4"
model	BLTB140	11U-370	G1/4"*520	M12*130	12	310*147*95	ф 20* ф 13*30	G1/4"
	BLTB150	11U-370	G1/4"*520	M12*130	12	310*147*95	ф 20* ф 13*30	G1/4"
	BLTB155	11U-500	G1/4"*520	M12*130	12	310*147*95	φ20*φ13*30	G1′
	BLTB165	11U-500	G1/4"*520	M12*130	12	310*147*95	φ20*φ13*30	Gì,
	BLTB175	11U-500	G1/4"*520	M12*130	12	310*147*95	ф 20* ф 13*30	G1/4"



If the contents or illustrations in this manual are not detailed enough, please contact the company's representative or customer service terms.

-Taizhou Beilite Machinery Co., Ltd.

Thank you for choosing "BLTB" hydraulic breaker!

. To reduce the breaker broken rate and prolong breaker usage life, please carefully read & understand the entire contents of "Operating manual & parts list".

1. Full understanding of the importance of the hammer cylinder

Hammer cylinder is the core component of the hydraulic hammer. Interior part --piston, driven by the up and down movement of the hydraulic oil, to hit chisel, in order to achieve breaking operations. The cylinder is a precision hydraulic products, clearance between the piston and the cylinder chamber surface between the very small, like hair. Improper maintenance will cause the surface of the piston and inner cylinder body occurring in the phenomenon of strain. In this case, hammer internal leakage increases, hammer blow frequency instability, strike force decline ect. failures, and even serious leads to scrapped cylinder. If so, it will not only reduce the hammer efficiency, reduce your income, but also give you a great deal of Economic losses (the value of cylinder is more than 60% of the total value of the hammer, the replacement of the cylinder is a great cost).

2. Try best to protect the cylinder of hydraulic breaker.

♦When the gap between the chisel and bushing is larger than specified value (refer to bushing wear table), please be sure to replace inside & outside bushing in time.

When hammer is working, frequent friction between the chisel and inside & outside bushing, the gap between them is growing. If the gap is too large, will cause a lot of adverse consequences:

A. Rod subjected to bending stress, resulting in abnormal Rod fracture.

B. A lot of dust will get to the part that piston hit chisel, and then into the cylinder body inside, lead to hydraulic oil metamorphism, black, and cause the scratch on the surface of the piston and the internal cylinder.C. Chisel is in the tilt situation while hammer is working, not the surface contact between the piston and

chisel, lead to damage of piston hitting parts and the end surface of chisel.

D. Under chisel is in the tilt situation, after piston hit chisel, the chisel give the counter-acting force to piston, this force will be deviated from the piston's center axis, and it not only pass along the centerline of the piston, but also can produce horizontal component, makes the piston movement Shaking, leads to friction between piston surface and inner cylinder, and scratch on the surface of the piston and the cylinder, even severe irreparable.

♦ Use a hammer within 1000 hours per, please be sure to replace the seals in time (especially in the main oil seal).

Seals in hammer are mostly rubber products. With the use of time, the seals will be inevitably varying degrees of wear & aging, seals' sealing performance will gradually decline, the support ability to piston is also weakening (piston movement of the shaking). Therefore, if do not timely replacement seals, leads to oil spills, and issues such as friction between the surface of piston and the internal cylinder, resulting in scratch phenomenon.

♦ Use a hammer 250 hours per (50 hours for the first time use), please be sure to timely replace filter element on piping system back to oil filter.

With the use of time, the filter impurities deposition inside will be more and more, cartridge filter performance will drop dramatically, the number of impurities in hydraulic system will increase. This will not only result in faults such as hammer with oil leakage, scratch on the surface of the piston and the internal cylinder, but also damage the excavator's hydraulic system. Therefore, must keep the hydraulic oil clean, timely replace the oil return filter.

In addition, use a hammer 1500 hours per (600 hours for the first time use), please be sure to timely replace the hydraulic oil.

User signature confirmation:_____

Thank you for choosing " **BLTB** " hydraulic breaker!

To reduce the breaker broken rate and prolong breaker usage life, please carefully read & understand the entire contents of "Operating manual & parts list" from Beilite Machinery Co., Ltd., In addition, there are special important matters need your high attention:

1. Quality Assurance

Warranty period starts from the date written on "After-sales Service Report" when accepting the hydraulic breaker. This report is the main base for you to enjoy after-sales service. Write it carefully and submit it to our company after finishing to accept the hydraulic breaker, or you maybe can not enjoy the after-sales service.

2. Warranty Standard of hydraulic breaker that chisel diameter from 40 mm to 155 mm.

Spare parts	Warranty period under right using situation	No warranty in following situations
Cylinder	12 months or up to 2160 working hours (whichever come first)	 The damage is caused by contaminated oil or delay to change the seal kits. Cylinder scratch after 2 months, except the scratch due to broken piston in warranty period. Inner & outer bushing overwear, delay to change, long-time train off, seal kit without changed regularly.
Piston, Main Control Valve	12 months or up to 2160 working hours (whichever come first)	 Piston scratch due to contaminated oil or delay to change the seal kits. The damage is caused by non using the original chisel bushing or excessive wear bushing without changed regularly. Piston scratch after 2 months.
Front Head	6 months or up to 1080 working hours (whichever come first)	 The damage is caused by continuous empty impact or delay to change the chisel pin. The damage is caused by non using the original chisel pin. The damage is caused by outside force.
Back Head	12 months or up to 2160 working hours (whichever come first)	1.The damage is caused by outside force
Accumulator Assembly (Except Diaphragm)	12 months or up to 2160 working hours (whichever come first)	1.The accumulator is damaged from bolt looseness.
Front Sleeve and Back Sleeve	3 months or up to 540 working hours (whichever come first)	1. The damage is caused by wear frequently or misoperation.
Chisel Pin	3 months or up to 540 working hours (whichever come first)	1. The damage is caused by continuous empty impact.
Through Bolt and Side Bolt	3 months or up to 540 working hours (whichever come first)	 The damage is caused by not proper fastening (refer to instructions). The damage is caused by outside force (refer to instructions).
Seal Kit	3 months or up to 540 working hours (whichever come first)	1. The damage is out of warranty range.
Bracket	3 months or up to 540 working hours, (whichever come firs)	 The damage is caused by horizontal operation, side plate screw loose. The damage is caused by privately strengthening. Weld failure(customer need to repair it by himself).
Pin and pin sleeve	3 months or up to 540 working hours (whichever come first)	1.The damage is caused by outside force.
Hydraulic Hoses	1 months or up to 180 working hours (whichever come first)	 The damage is caused by outside force. The damage is caused by excessive adjustment of the relief valve pressure
Chisel	Refer to the chisel manual	
Note	 The warranty period of other spare pa Our company do not undertake direct 	arts is 3 months or up to 540 working hours (whichever come first). t or indirect losses caused by hydraulic breaker .

Thank you for choosing "BLTB" hydraulic breaker!

To reduce the breaker broken rate and prolong breaker usage life, please carefully read & understand the entire contents of "Operating manual & parts list" from Beilite Machinery Co., Ltd., In addition, there are special important matters need your high attention:

1. Quality Assurance

Warranty period starts from the date written on "After-sales Service Report" when accepting the hydraulic breaker. This report is the main base for you to enjoy after-sales service. Write it carefully and submit it to our company after finishing to accept the hydraulic breaker, or you maybe can not enjoy the after-sales service.

2. Warranty Standard of hydraulic breaker that chisel diameter from 165 mm to 210 mm.

Spare parts	Warranty period under right using situation	No warranty in following situations				
Cylinder	6 months or up to 1080 working hours (whichever come first)	 The damage is caused by contaminated oil or delay to change the seal kits. Cylinder scratch after 2 months, except the scratch due to broken piston in warranty period. Inner & outer bushing overwear, delay to change, long-time train off, seal kit without changed regularly. 				
Piston, Main Control Valve	6 months or up to 1080 working hours (whichever come first)	 Piston scratch due to contaminated oil or delay to change the seal kits. The damage is caused by non using the original chisel bushing or excessive wear bushing without changed regularly. Piston scratch after 2 months. 				
Front Head	6 months or up to 1080 working hours (whichever come first)	 The damage is caused by continuous empty impact or delay to change the chisel pin. The damage is caused by non using the original chisel pin. The damage is caused by outside force. 				
Back Head	6 months or up to 1080 working hours (whichever come first)	1.The damage is caused by outside force.				
Accumulator Assembly (Except Diaphragm)	6 months or up to 1080 working hours (whichever come first)	1.The accumulator is damaged from bolt looseness.				
Front Sleeve and Back Sleeve	3 months or up to 540 working hours (whichever come first)	1.The damage is caused by wear frequently or misoperation.				
Chisel Pin	3 months or up to 540 working hours (whichever come first)	1.The damage is caused by continuous empty impact.				
Through Bolt and Side Bolt	3 months or up to 540 working hours (whichever come first)	 The damage is caused by not proper fastening (refer to instructions). The damage is caused by outside force (refer to instructions). 				
Seal Kit	3 months or up to 540 working hours (whichever come first)	1. The damage is out of warranty range.				
Bracket	3 months or up to 540 working hours, (whichever come firs)	 1.The damage is caused by horizontal operation, side plate screw loose. 2.The damage is caused by privately strengthening. 3.Weld failure(customer need to repair it by himself). 				
Pin and pin sleeve	3 months or up to 540 working hours (whichever come first)	1.The damage is caused by outside force.				
Hydraulic Hoses	1 months or up to 108 working hours (whichever come first)	1.The damage is caused by outside force.2.The damage is caused by excessive adjustment of the relief valve pressure				
Chisel	Refer to the chisel manual					
Note	 The warranty period of other spare parts is 3 months or up to 540 working hours (whichever come first). Our company do not undertake direct or indirect losses caused by hydraulic breaker. 					

						Hammer model:			
						Serial	number:		
END USER									
Name:									
Adresse:									
Contact person:									
Telephone:									
DEALER:				SUP	PLIER:				
Company:				Comp	any:				
Postal code/city:				Postal	code/city:				
Delivery date:/	2	200 .		Delive	ery date:	/		_200	
Country:				Coun	try:				
HYDRAULIC INSTALLATIO	N								
Installed by:				Comp	any:				
Excavator make:				Mode	l: _				
Build:				Total	weight:				
Serial number: Working hours on clock:									
Measured max. oil displacement to	attachmen	t		_				l/min	
Measured max. excavator system p	pressure to a	ittac	chment					bar	
Measured setting of reliefvalve pre	ssure for att	tach	iment					bar	
Measured working pressure of han	nmer at max	x. ei	ngine rp	m				bar	
Measured max. oil displacemnet to	attachmen	t at	working	g pressure				l/min	
Measured back pressure in return	line from ha	amn	ner					bar	
Measured max. oil temperature at	continues o	per	ation					°C	
Hydraulic oil make, type, quality:				_					
Hammer valve for hammer:	ja	/	no	Setting:			l/min		
Oilcooler installed:	ja	/	no						
Returnline over filter:	ja	/	no						
Quick release coupling at stick:	ja	/	no						
Rotation function:	ja	/	no	Setting:		l/min	bar		
Installation approved no:				/	200	Ву:			
Warranty starts:				/	200	Finished:		_/200	
Next scheduled service:				/	200	at:		Working hours	
Customer excepts installation	on:			/	200			-	

A signed copy of this commissioning card has to be send or e mailed directly after the commissioning of the hammer to Beilite Europe. Claim can only be handled when the commissioning card is available. Whenever the hammer or attachment is switched to a different excavator, you will have to commission this new excavator and provide Beilite Europe with a new commission card after measuring and administrating the required information.

JUDGMENT AND TREATMENT OF OIL LEAKAGE IN HAMMER CYLINDER



3.Little oil leakage in cylinder, keep observing for some time, then decide to make treatment or not



4.Slight oil leakage in cylinder, need repairing within few days



5.Oil leakage showed as photo, must be repaired 6.Serious oil leakage, must be repaired at onceRemark: Strictly distinguish the differences between grease oil residue, grease oil of poor quality and grease oil leakage, otherwise will misunderstand the operator.

Pls grease hydraulic breaker with pure hydraulic oil grease

BEILITE

HAMMER DAILY INSPECTON



BEILITE BEILITE

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—Tai Zhou Beilite Machinery Co., Ltd.