

XINPU

Rotary Hammer

Model: XP-R48VA

HANDLING INSTRUCTIONS



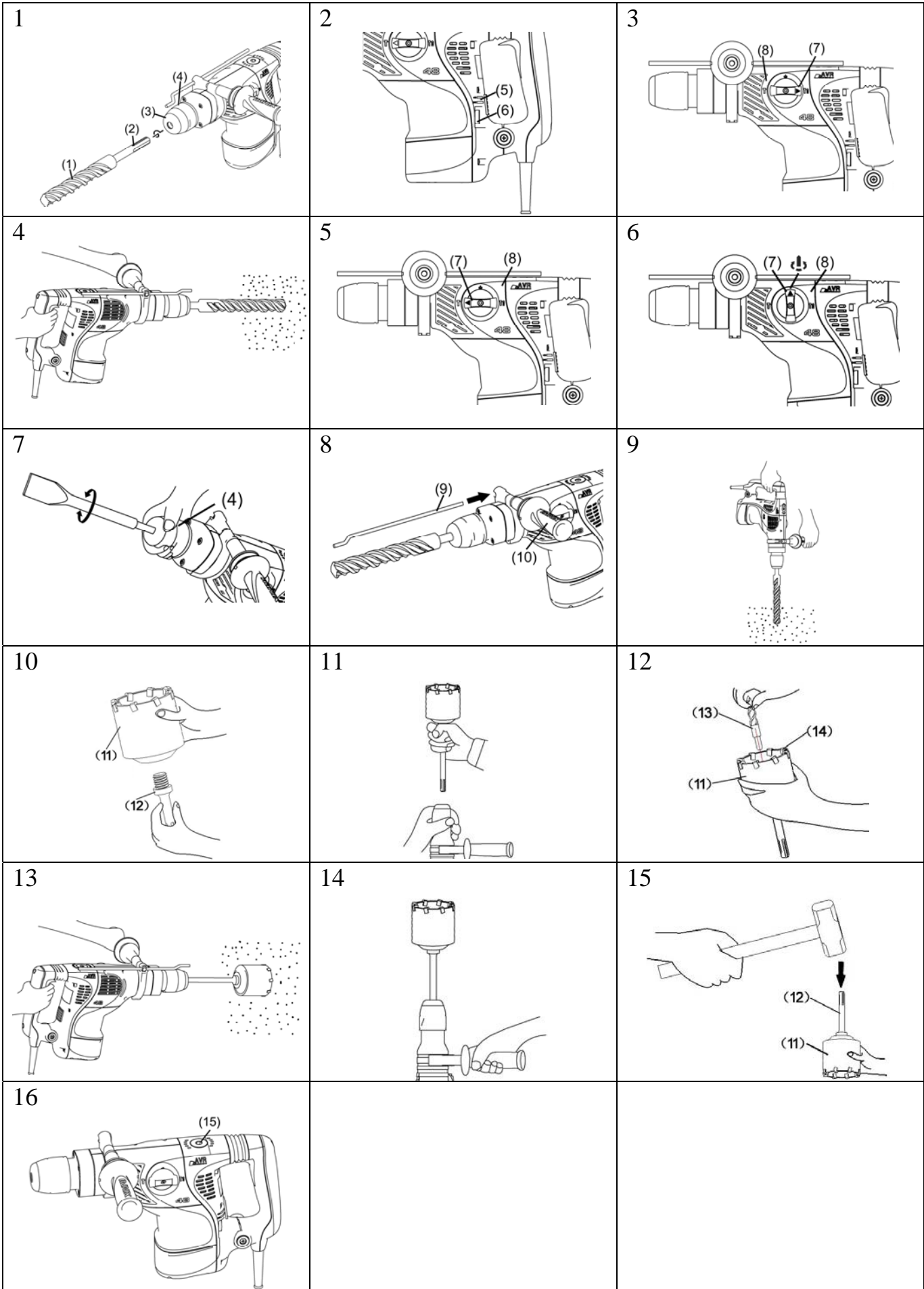
Original Instructions

Before using this XINPU Rotary hammer, please carefully read through these **HANDLING INSTRUCTIONS**. Ensure that you know how the machine works, and how it should be operated. Maintain the machine in accordance with the instructions, and make certain that the machine work correctly, please store this instruction and other enclosed documents with the machine together.



Bj:2013

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(1)	Drill bit
(2)	Part of SDS max shank
(3)	Turn Staff Armor
(4)	Flex Sheath
(5)	Power source Indicator and carbon brushes Indicator
(6)	Speed Adjuster Knob
(7)	Function Knob
(8)	Left Cover
(9)	Orientation Staff Gauge
(10)	Auxiliary handle
(11)	Core bit
(12)	Core bit shank
(13)	Drill bit
(14)	Core bit tip
(15)	Oil Tank Cover

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General Power Tool Safety Warnings

WARNING:

Read all safety warnings and all instructions. *Failure to follow all warnings and instructions may result in electric shock, fire and/or serious injury.*

Save all warnings and instructions for future reference.

The term “power tool” in the warnings refer to your mains operated (corded) power tool or battery operated (cordless) power tool.

1) Work area

a) Keep work area clean and well lit. *Cluttered and dark areas invite accidents.*

b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. *Power tools create sparks which may ignite the dust or fumes.*

- c) **Keep children and bystanders away while operating a power tool.** *Distractions can cause you to lose control.*

2) Electrical safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** *Unmodified plugs and matching outlets will reduce risk of electric shock.*
- b) **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** *There is an increased risk of electric shock if your body is earthed or grounded.*
- c) **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*
- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** *Use of a cord suitable for outdoor use reduces the risk of electric shock.*
- f) **If operating a power tools in a damp location is unavoidable, use a residual current device (RCD) protected supply.** *Use of an RCD reduces the risk of electric shock.*

3) Personal safety

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** *A moment of inattention while operating power tools may result in serious personal injury.*
- b) **Use safety equipment. Always wear eye protection.** *Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*
- c) **Avoid accidental starting. Ensure the switch is in the off position before plugging in.** *Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.*
- d) **Remove any adjusting key or wrench before turning the power tool on.** *A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*
- e) **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*
- f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** *Loose clothes, jewellery or long hair can be caught in moving parts.*
- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of these devices can reduce dust related hazards.*

4) Power tool use and care

- a) **Do not force the power tool. Use the correct power tool for your application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*
- b) **Do not (use the power tool if the switch does not turn it on and off.** *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*
- c) **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*
- d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*
- e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use.** *Many accidents are caused by poorly maintained power tools.*
- f) **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control;*
- g) **Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed.** *Use of the power tool for operations different from intended could result in a hazardous situation.*

5) Service

- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** *This will ensure that the safety of the power tool is maintained.*

Special requirements for rotary hammer

1. **Wear ear protectors with impact drills.** *Exposure to noise can cause hearing loss.*
2. **Use auxiliary handles supplied with the tool.** *Loss of control can cause personal injury.*
3. **Hold Power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord.** *Cutting accessory contacting a “live” wire may make exposed metal parts of the power tool “live” and could give the operator an electric shock.*
4. **Wear a dust mask.** Do not inhale the harmful dusts generated in drilling or chiseling operation. The dust can endanger the health of yourself and bystanders.
5. **Always hold the body handle and side handle of the power tool firmly.** Otherwise the counterforce produced may result in inaccurate and even dangerous operation.
6. **Before beginning work, check the working area (e.g. with a metal detector) to ensure that no concealed electric cables or gas and water pipes are present.** Contact with electric lines can lead to fire and electric shock. Damaging a gas line can lead to explosion. Penetrating a water line causes property damage or may cause an electric shock.
7. In case of damages the replacement of the plug or the supply cord shall always be carried out by the manufacturer of the tool or his service organization
8. Do not touch the bit during or immediately after operation. The bit becomes very hot during operation and could cause serious burns.

9. Do not use the power tool with a damaged cord. Do not touch the damaged cord and pull the plug from the outlet when the cord is damaged while working. Damaged cords increase the risk of an electric shock.

Warning: Reduce the working time to avoid risks related with too much vibration.

2. Safety instructions

In this operator's manual/or machine's labels following symbols are used:



Accordance with essential applicable safety of European directives



Double insulation



Denote risk of personal injury, loss of life or damage to the tool in case of nonobservance of the instruction in this manual.



Indicate electrical shock hazard.



Immediately unplug the plug from the main electricity in the case that the cord gets damage and during maintenance.



Wear ear and eye protection.



Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.



Waste electrical products should not be disposed of with house hold waste, Please recycle where facilities exist. Check with your local Authority or retailer for recycling advice.

SPECIFICATIONS

Model No	XP-R48VA
ID No.	8 8018 010
Voltage	220-240V
Frequency	50Hz
Rated power	1350W
No load speed	250-500 min ⁻¹
Impact rate	1900-3000min ⁻¹
Impact energy	2-14J
Capacity	Drill bit: Φ 48mm Core bit: Φ 120mm
Optimum drilling diameter in concrete	Φ 22- Φ 40mm
Weight (without cord)	7.4kg

*Note type designation on the device, differences might depend on area.

STANDARD ACCESSORIES

- (1) Carbon Brush (7*11*17mm) 1
- (2) Hammer grease 1
- (3) Auxiliary handle1
- (4) Staff Guage.....1

Standard accessories are subject to change without notice.

OPTIONAL ACCESSORIES (sold separately)

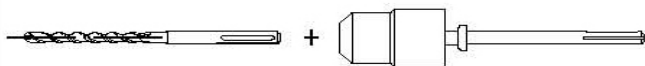
1. Through-hole drilling (Rotation + Hammering)



(1) Drill bit (SDS max shank)

Outer diameter (mm)	Overall length(mm)
8	280
10	280
12	280
14	280
16	400
18	400
20	400
22	400
25	400
28	400
30	400
32	400
35	400
38	400
40	400
45	400
48	400

2. Adapter for SDS-plus shank bit



- (1) Drill bit (SDS-plus shank)
- (2) Adapter for SDS-plus shank bit (SDS max shank)

3. Large dia. hole boring (Rotation + Hammering)



- (1) Drill bit
- (2) Core bit
- (3) Core bit shank(SDS—max shank)

(1) Drill bit

- Applied to core bits 30mm to 120 mm

(2) Core bit

- External dia.30mm,35mm,40mm,45mm,50mm,55mm,60mm,70mm, 75mm, 80mm, 85mm, 90mm, 95mm,100mm,105mm, 110mm, 115mm, 120mm

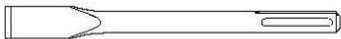
(3) Core bit shank

- Applied to core bits above 30mm.

4. Tine Chisel (Hammering) : 18*400mm(SDS max)



5. Flat Chisel (Hammering) :18*400mm (SDS max)



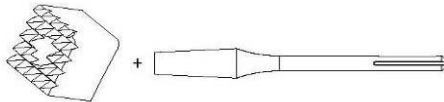
6. Big Flat Chisel (Hammering) :18*400mm (SDS max)



7. Goose Chisel (Hammering) :18*400mm (SDS max)

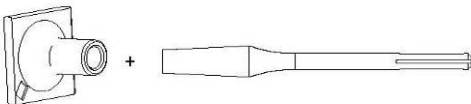


8. Surface Roughing (Hammering)



(1) Bushing Tool (2) Shank

9. Tamping (Hammering)



(1) Rammer (2) Shank (150 x 150 mm)

Optional accessories are subject to change without notice.

APPLICATIONS

- Drilling holes in concrete
- Drilling anchor holes
- Crushing concrete, chipping, digging, and squaring (by applying optional accessories)

OPERATION

1. Power source

Ensure that the power source to be utilized conforms to the power requirements specified on the product nameplate.

2. Power switch

Ensure that the power switch is in the OFF position. If the plug is connected to a power receptacle while the power switch is in the ON position, the power tool will start operating immediately, which could cause a serious accident.

3. Extension cord

When the work area is removed from the power source, use an extension cord of sufficient thickness and rated capacity. The extension cord should be kept as short as practicable.

4. How to install Drill bit

CAUTION:

To prevent accidents, make sure to turn the switch off and disconnect to the plug from the receptacle.

NOTE:

When using tools such as Tine chisel, drill bits, etc., make sure to use the genuine parts designated by our company.

(1) To attach the tool (SDS max shank), insert it into the hole until it contacts the innermost end of the hole as illustrated in **Fig.1**.

If you continue to turn the tool with slight pressure, you can feel a spot where there is a hitch. At that spot, pull the flex sheath to the direction of an arrow mark and insert the tool all the way until it hits the innermost end.

Releasing the flex sheath reverts the flex sheath and secures the tool in place.

(2) Pull the tool to make sure it is locked completely.

(3) To remove the tool, fully pull the flex sheath in the direction of the arrow and pull out the tool.

5. Regulating the number of rotations and hammering (Fig. 2)

This Rotary Hammer is equipped with a built-in electronic control circuit that can adjust and regulate the number of rotations and times of hammering. This Rotary Hammer can be used by adjusting the speed adjuster knob, depending upon the contents of operation, such as boring holes into fragile materials, chipping, centering, etc.

The scale '1' of the speed adjuster knob is designed for a minimum speed with the number of 250 rotations per minute and 1900 times of blow per minute. The scale '6' is designed for a maximum speed with the number of 500 rotations per minute and 3000 times of blow per minute.

CAUTION:

Do not adjust the speed adjuster knob during operation. Doing so can result in injury because the Rotary Hammer must be held by only one hand, disabling the steady control of the Rotary Hammer.

HOW TO USE THE ROTARY HAMMER

CAUTION:

To prevent accidents, make sure to turn the switch off and disconnect the plug from the receptacle when the drill bits and other various parts are installed or removed. The power switch should also be turned off during a work break and after work.

1. Switch operation



Switch on	Press the switch towards ① direction
Switch off	Release the switch towards ② direction

2. When drilling at “rotation + hammering”:

If you switch the function knob during motor rotation, the tool can start to rotate abruptly, resulting in unexpected accidents. Be sure to switch the function knob when the motor is at a complete stop.

(1) Switching to “rotation + hammering”

Turn the function knob clockwise. Align ▲ of the function knob and ■T of the left cover as illustrated in **Fig.3**.

(2) Mount the drill bit.

(3) Pull the trigger switch after applying the drill bit tip to the drilling position **Fig.4**

(4) Pushing the rotary hammer forcibly is not necessary at all. Pushing slightly so that drill dust comes out gradually is sufficient.

CAUTION:

Although this machine is equipped with a safety clutch, if the drill bit becomes bound in concrete or other material, the resultant stoppage of the drill bit could cause the machine body to turn in reaction. Ensure that the main handle and side handle are gripped firmly during operation.

3. When chipping and chiseling at “hammering”:

CAUTION:

○ If the function knob is switched during motor rotation, the tool can start to rotate abruptly, resulting in unexpected accidents. Make sure to switch the function knob when the motor is at a complete stop.

○ If the tine chisel or flat chisel is used at the position of “rotation hammering”, the tool can start to rotate, resulting in unexpected accidents. Make sure that they are used at the position of “hammering”.

(1) Switching to “hammering”

Turn the function knob counterclockwise. Align ▲ of the function knob and T of the left cover as illustrated in **Fig. 5**.

(2) When fixing working positions of flat chisel such as cold chisel, etc.,

(a) Turn the function knob, Align ▲ of the function knob and ⚡ of the left cover as illustrated in **Fig. 6**.

(b) Turn the flex sheath as illustrated in **Fig. 7** and fix the flat chisel to the desired working direction.

(c) Switch the selector lever to “hammering” according to the procedures mentioned in the above item

(1) and secure the position of the tool.

4. Install the Orientation Staff Gauge (Fig. 8)

(1) Loosen the side handle and insert the straight portion of the orientation staff gauge into the handle bolt hole.

(2) Move the orientation staff gauge to the specified position and rotate the grip of the side handle clockwise to fix the orientation staff gauge.

5. Warming up (Fig. 9)

The grease lubrication system in this unit may require warming up in cold regions.

Position the end of the bit so makes contact with the concrete, turn on the switch and perform the warming up operation. Make sure that a hitting sound is produced and then use the unit.

CAUTION:

When the warming up operation is performed, hold the side handle and the main body securely with both hands to maintain a secure grip and be careful not to twist your body by the jammed drill bit.

HOW TO HANDLE A CORE BIT

When a core bit is used, large diameter holes and blind holes can be drilled. In this case, use optional accessories for core bits (such as a drill bit and core bit shank) for more efficient operation.

1. Mounting

CAUTION:

Prior to mounting a core bit, always disconnect the plug from the power supply receptacle.

(1) Mount the core bit on the core bit shank. (**Fig. 10**)

Lubricate the thread of the core bit shank to facilitate disassembly.

- (2) Mount the core bit shank on the main body in the same manner as in mounting the drill bit and the bull point. **(Fig. 11)**
- (3) Fit in the drill bit by aligning its screw portion with the core bit tip. When the position of the concave is shifted by turning the turn drill bit clockwise, the drill bit never slips off even when the drill is used in a downward direction. **(Fig. 12)**

2. Drilling holes

- (1) Connect the plug to the power source.
- (2) By straightly and gently pressing dill bit to the wall or floor surface, the entire surface of the core bit tip attains contact to start the hole drilling job. **(Fig. 13)**
- (3) When the hole depth reaches approximately 5mm, the hole position can be determined. Then remove the dill bit from the core bit and continue the hole drilling job.

CAUTION: When removing the dill bit, always disconnect the plug from the receptacle.

3. How to dismount the core bit

- By holding the rotary hammer (with the core bit inserted) in an upward position, drive the rotary hammer to repeat impact operation two or three times, whereby the screw is loosened and the rotary hammer becomes ready for disassembly. **(Fig. 14)**
- Remove the core bit shank from the rotary hammer, hold the core bit with one hand, and strongly strike the head of the SDS max shank portion of the core bit shank with a manual hammer two or three times, whereby the round head screw is loosened and the rotary hammer is ready for disassembly. **(Fig. 15)**

HOW TO REPLACE GREASE

Low viscosity grease is applied to this rotary hammer so that it can be used for a long period without replacing the grease. Please contact the nearest service center for grease replacement when any grease is leaking from loosened screw.

Further use of the rotary hammer with lock off grease will cause the machine to seize up reduce the service life.

CAUTION:

A special grease is used with this machine, therefore, the normal performance of the machine may be badly affected by use of other grease. Please be sure to let one of our service agents undertake replacement of the grease.

When you have to replacement the grease by yourself, please following the order:

CAUTION:

Before replenishing the grease, turn the power off and pull out the power plug.

- (1) Remove the oil tank cover and wipe off the grease inside. **(Fig. 16)**
- (2) Supply 30g of XINPU Electric Hammer Grease (Standard accessory, contained in tube) to the crank case.
- (3) After replenishing the grease, install the oil tank cover securely.

NOTE:

The XINPU Electric Hammer Grease is of the low viscosity type. If necessary purchase from an XINPU Authorized Service Center.

MAINTENANCE AND INSPECTION

1. Inspecting the tool

Since use of a dull tool will degrade efficiency and cause possible motor malfunction, sharpen or replace the tool as soon as abrasion is noted.

2. Inspecting the mounting screws

Regularly inspect all mounting screws and ensure that they are properly tightened. Should any of the screws be loose, retighten them immediately. Failure to do so could result in serious hazard.

3. Maintenance of the motor

The motor unit winding is the very “heart” of the power tool. Exercise due care to ensure the winding does not become damaged and/or wet with oil or water.

4. Inspecting the carbon brushes

The Motor employs carbon brushes which are consumable parts. When they become worn to or near the “wear limit”, it could result in motor trouble. When an auto-stop carbon brush is equipped, the motor will stop automatically. At that time, replace both carbon brushes with new ones which have the same carbon brush of specification with standard. In addition, always keep carbon brushes clean and ensure that they slide freely within the brush holders.

5. Replacing carbon brushes

When the carbon brushes are worn out, the power tool switches itself off, and also the red indicator light of carbon brush will turn on. The power tool must then be sent to an after-sales service agent.

(Fig. 2)

When you have to replacement the carbon brushes by yourself, please following the order:

- (1) Loosen the four set screws and remove the fan cover.
- (2) Remove the brush caps and carbon brushes.
- (3) After replacing the carbon brushes, tighten the brush caps securely and install the fan cover with securely tightening four set screws.

7.Warranty: For the condition of warranty, please refer to the separately provided warranty card.

8. Environment



Faulty and /or discarded electrical or electronic apparatus have to be collected at the appropriate recycling location.

CAUTION:

Repair, modification and inspection of XINPU Power tools must be carried out by a XINPU Authorized Service Center.

In the operation and maintenance of power tools, the safety regulations and standards prescribed in each country must be observed.

MODIFICATIONS:

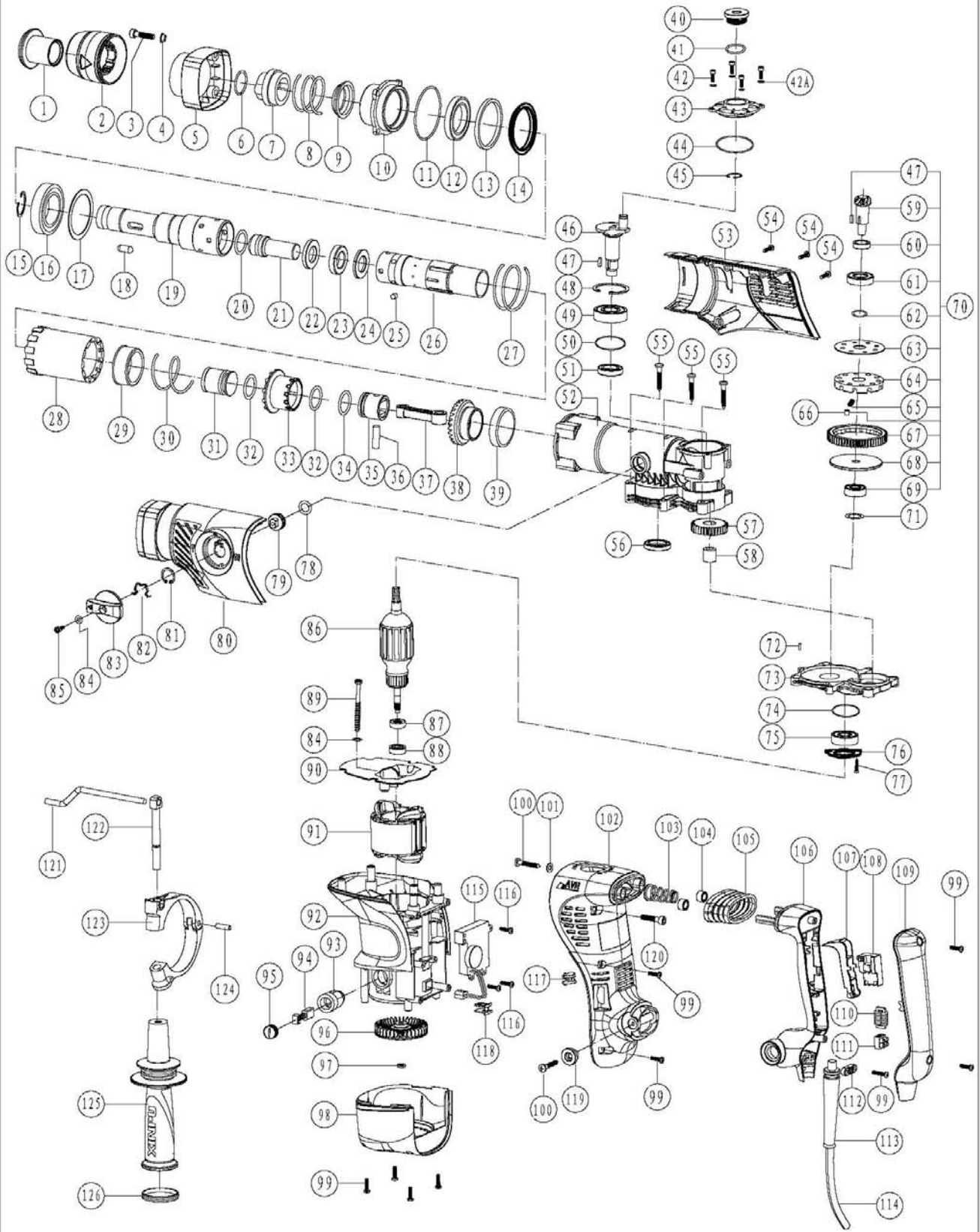
XINPU Power Tools are constantly being improved and modified to incorporate the latest technological advancements.

Accordingly, some parts (i.e. code numbers and/or design) may be changed without prior notice.

NOTE:

Due XINPU’s continuing program of research and development, the specifications herein are subject to change without prior notice.

XP-R48VA Rotary Hammer Part Chart



XP-R48VA Rotary Hammer Parts List

XP-No	Item No.	Part Describe	Quantity	XP-No	Item No.	Part Describe	Quantity
88264142	1	Turn Staff Armor	1	88275013	64	Clutch Seat	1
88264144	2	Flex Sheath	1	88224001	65	Clutch Spring $\Phi 1.2 \times \Phi 4.1 \times 17$	10
88210134	3	Hex .Socket Bolt M6x25(12.9)	4	88224016	66	Clutch Ball Bearing $\Phi 5.5 \times 5.2$	10
88224134	4	Distance Piece M6	4	88275014-1	67	Clutch Gear (58 Tooth)	1
88264146	5	Front shade	1	88275015	68	Clutch Hold Down Plate B	1
88224019	6	Steel Wire Block Ring $\Phi 2 \times \Phi 25.5$	1	88237004	69	Ball Bearing 629 (2RZ C2)	1
88275001	7	Lock Bead Sheath	1	88275018	70	Clutch Compages	1
88224022	8	Lock Bead Sheath Spring $\Phi 2.5 \times \Phi 42.5 \times 74$	1	88224016	71	629 Bearing Washer $\Phi 25 \times \Phi 20 \times 0.5$	1
88224006	9	Spring Seat	1	88221017	72	Pin $\Phi 6 \times 14$	1
88290097	10	Brainpan	1	88290099	73	Inner Cover	1
88264003	11	O-Ring $\Phi 1.5 \times \Phi 60$	1	88264028	74	O-Ring $\Phi 1.5 \times \Phi 31.5$	1
88264004	12	Oil Seal Ring $\Phi 34.5 \times \Phi 53 \times 7$	1	88237006	75	Ball Bearing 6201 DD	1
88264005	13	Spring Washer $\Phi 61 \times \Phi 52.5 \times 4.5$	1	88224017	76	6201 Bearing Hold Down Plate	1
88224007	14	"L" type Washer	1	88210106	77	Embedding Screws M4x8	3
88210091	15	Retaining Ring $\Phi 35$	1	88264026	78	Fluorin O Ring $\Phi 2.5 \times \Phi 15$	1
88237001	16	Ball Bearing 6007 (2RS C3)	1	88275024	79	Dial Staff Sheath	1
88224008	17	Vibration Reducing Washer $\Phi 62 \times \Phi 48.5 \times 1$	1	88264148	80	Left Cover	1
88224009	18	Lock Staff Bead $\Phi 8 \times 19.3$	2	88210094	81	Retaining Ring $\Phi 20$	1
88275002	19	Hammer Staff Sheath	1	88224133	82	shrapnel	1
88264006	20	Fluorin O Ring $\Phi 3 \times \Phi 19$	1	88264149	83	Function Knob	1
88275003	21	Impact Hammer	1	88210090	84	Flat Washer $\Phi 5$	3
88275004	22	Washer A $\Phi 35.7 \times \Phi 19.6 \times 6$	1	88210101	85	Hex .Socket Bolt M6x10	1
88264007	23	Buffering Washer $\Phi 35.5 \times \Phi 19.7 \times 8$	1	88280127	86	Armature 220-240V	1
88275006	24	Washer B $\Phi 35.7 \times \Phi 19.6 \times 3.5$	1	88243033	87	Magnetism Inductorium	1
88224010	25	Cylinder Lock Bead $\Phi 5.8 \times 6$	4	88236001	88	Ball Bearing NMB 608 D	1
88275006	26	Cylinder	1	88210043	89	Tapping Screw ST4.8x65	2
88224023	27	Flower Trough Sheath Spring $\Phi 2.5 \times \Phi 53.5 \times 39$	1	88264150	90	Fan Guide	1
88264008	28	Flower Trough Sheath	1	88280128	91	Stator 220-240V	1
88224011	29	Spring sheath	1	88264151	92	Housing	1
88224024	30	Dial Sheath Spring $\Phi 2.5 \times \Phi 41 \times 58$	1	88244007	93	Brush Holder	2
88275007	31	Impact Piston	1	88244013	94	Carbon Brush	2
88264009	32	Fluorin O Ring $\Phi 3.5 \times \Phi 23$	2	88244006	95	Brush Cap	2
88275008	33	Dial Sheath	1	882890624	96	Fan	1
88264010	34	Fluorin O Ring $\Phi 1.5 \times \Phi 23$	1	88210206	97	M8x1x3.8 Nut	1
88264011	35	Gas Press Piston	1	88264152	98	Fan Cover	1
88223020	36	Piston Pin $\Phi 8 \times 26$	1	88210038	99	Tapping Screw ST4.2x18	12
88264012	37	Connecting Rod Ass'y	1	88210119	100	Machine Screw ST5.5x25	4
88275009	38	Big Cone-shaped Gear	1	88210201	101	Flat Washer $\Phi 5.5 \times \Phi 14 \times 1.6$	2
88275012	39	Oillness Bearing $\Phi 40 \times \Phi 50 \times 13$	1	88264153	102	Main Handle Seat	1
88261055	40	Oil Tank Cover	1	88223057	103	Shock Absorption Spring	1
88263126	41	Rubber Washer $\Phi 31 \times \Phi 25 \times 1.2$	1	88264107	104	Shock Absorption Ferrule	2
88210188	42	Hex .Socket Bolt M4x12(12.9)	4	88264143	105	Shock Absorption Jacket	1
88210111	42A	Flat Washer $\Phi 4$	4	88264154	106	Main Handle	1
88264146	43	Shell cover	1	88264156	107	Switch Trigger	1
88264014	44	O-Ring $\Phi 2 \times \Phi 53.5$	1	88244136	108	Switch	1
88210092	45	Retaining Ring $\Phi 10$	1	88264155	109	Main Handle Cover	1
88275010	46	Crank Shaft	1	88244008	110	Electricity Feels	1
88210098	47	Palt Key 3x3x8	2	88210076	111	Rivet	2
88210093	48	Retaining Ring $\Phi 40$	1	88261010	112	Cord Clip	1
88237002	49	Ball Bearing 6203 (2RS C0)	1	88261051	113	Cord Armor	1
88264015	50	O-Ring $\Phi 2 \times \Phi 39.7$	1	88250000	114	Cord	1
88264017	51	Oil Seal Ring $\Phi 30 \times \Phi 17 \times 7$	1	88244140	115	Speed Adjuster	1
88290098	52	Crank Housing	1	88210200	116	Cross recessed pan head tapping screws	3
88264147	53	Right Cover	1	88264157	117	Indicator	1
88210132	54	Tapping Screw ST4.2x22	3	88264158	118	Limit block	1
88210199	55	Cross recessed pan head tapping screws ST5.5x38	6	88223059	119	Main Handle Platen	2
88264016	56	Oil Seal Ring $\Phi 30 \times \Phi 20 \times 5.5$	1	88210007	120	Hex .Socket Bolt M6x20	2
88275016-1	57	Gear (35 Tooth)	1	88224005	121	Orientation Staff Gauge	1
88234013	58	Needle Bearing BK1010	1	88224004	122	Handle bolt	1
88275011	59	Small Cone-shaped Gear	1	88290100	123	Handle Stay	1
88224020	60	Small Cone-shaped Gear Sheath	1	88210099	124	Spring Column Pin $\Phi 6 \times 18$	1
88237003	61	Ball Bearing 6002 (2RZ C2)	1	88264159	125	Side Handle	1
88224013	62	6002 Bearing Washer $\Phi 22 \times \Phi 15 \times 0.5$	1	88264172	126	Side Handle cover	1
88224014	63	Clutch Hold Down Plate A	1				