

XINPU

Rotary Hammer

Model: *XP-R40B*

HANDLING INSTRUCTIONS

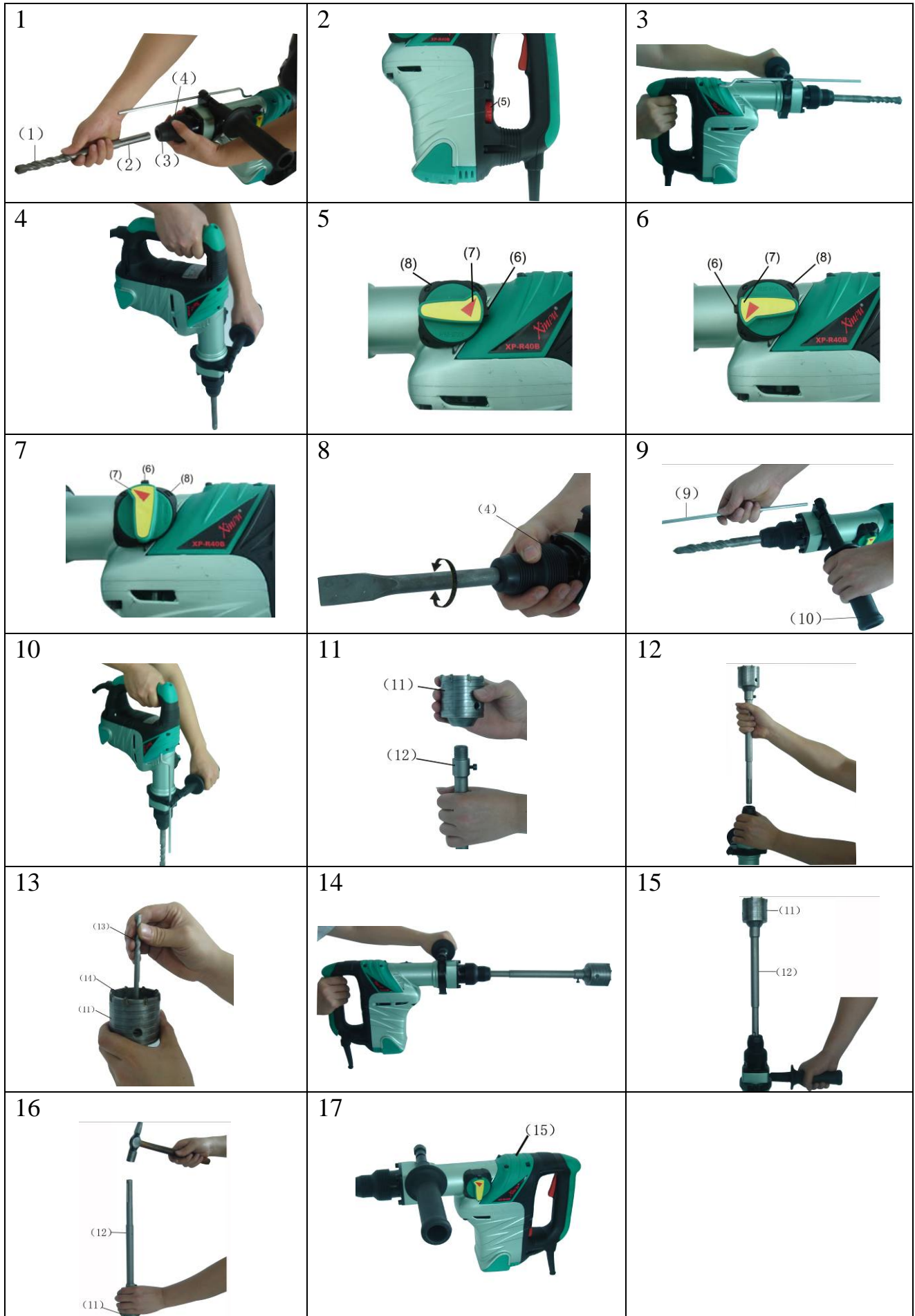


Before using this XINPU demolition hammer, please carefully read through these **HANDLING INSTRUCTIONS**. Ensure that you know how the machine works, and how it should be operated. Maintain the machine in accordance with the instructions, and make certain that the machine work correctly, please store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



Bj:2013

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(1)	Tool
(2)	Part of SDS max shank
(3)	Front cap
(4)	Grip
(5)	Speed Adjuster Knob
(6)	Pushbutton
(7)	Selector lever
(8)	Lever holder
(9)	Stopper
(10)	Side handle
(11)	Core bit
(12)	Core bit shank
(13)	Center pin
(14)	Core bit tip
(15)	Oil Tank Cover

Safety instructions

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



Read the manual carefully



Accordance with essential applicable safety of European directives



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.



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



The guaranteed Noise Value according to Noise Directive

GENERAL SAFETY RULES



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 refers 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.** *Protective 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 hammer

- **Wear ear protectors with impact drills.** *Exposure to noise can cause hearing loss.*
- **Use auxiliary handles supplied with the tool.** *Loss of control can cause personal injury.*

PRECAUTION

Keep children and infirm persons away.

When not in use, tools should be stored out of reach of children and infirm persons.

PRECAUTIONS ON USING ROTARY HAMMER

1. Wear ear protections
Exposure to noise can cause hearing loss.
2. Do not touch the bit during or immediately after operation. The bit becomes very hot during operation and could cause serious burns.
3. Before starting to break, chip or drill into a wall, floor or ceiling, thoroughly confirm that such items as electric cables or conduits are not buried inside.
4. Use auxiliary handles supplied with the tool.
Loss of control can cause personal injury.
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. 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.

SPECIFICATIONS

Machine Type	XP-R40B
Voltage	220-240V
Power input	1200W
Capacity	Drill bit: 40mm Core bit: 60mm
No load speed	250-500 min ⁻¹
Full-load impact rate	1400-2800min ⁻¹
Weight (without cord, side handle)	7.5kg
Impact energy	12J
Bit lock style	18mm SDS max shank lock system
Noise level:	
Hammer & Drill mode LpA	96dB
Hammer & Drill mode LwA	(107+3)dB K=3
Hammer mode only LpA (in accordance with 2000/14/EC)	86.4dB(A)
Hammer mode only, Guaranteed LwA (in accordance with 2000/14/EC)	105dB(A)
Vibration level:	
Hammer drilling into concrete	ah, HD: 12.86m/s ² K=1.5m/s ² (main handle)
	ah, HD: 7.08m/s ² K=1.5m/s ² (auxiliary handle)
Chiseling	ah, HD: 13.43 m/s ² K=1.5m/s ² (main handle)
	ah, HD: 7.37m/s ² K=1.5m/s ² (auxiliary handle)

STANDARD ACCESSORIES

- (1) Case (Molded plastic).....1
 - (2) Side handle1
 - (3) Hexagon Bar Wrench (for 6mm screw).....1
 - (4) Hexagon Bar Wrench (for 5mm screw).....1
 - (5) Hexagon Bar Wrench (for 4mm screw).....1
 - (6) Screwdriver1
 - (7)Carbon Brush (7*11*17mm) 1
 - (8) Hammer grease 1
- Standard accessories are subject to change without notice.
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OPTIONAL ACCESSORIES (sold separately)

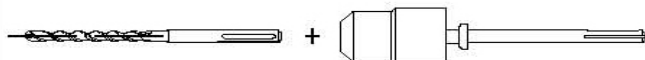
1. Through-hole drilling (Rotation + Hammering)



(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

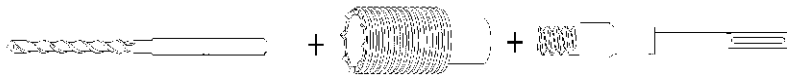
2.Adapter for SDS-plus shank bit



(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

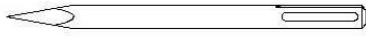
- Applied to drill bit $\varnothing 18*110\text{mm}$
- Applied to core bits 30mm to 60 mm

(2) Core bit

- External dia. 30mm, 35mm, 40mm, 45mm, 50mm, 55mm, 60mm

(3) Core bit shank

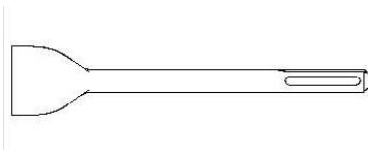
4. Tine Chisel : 18*400mm(SDS max)



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



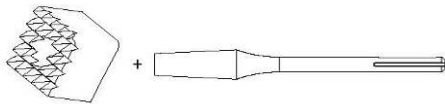
6. Big Flat Chisel :18*400mm (SDS max)



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

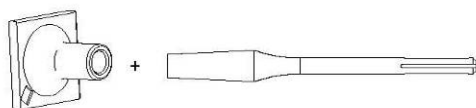


8. Surface Roughing (Hammering)



(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)
-

Assembly

Name of the parts



(1)	Flex Sheath
(2)	Crank Housing
(3)	Function Knob
(4)	Oil Tank Cover
(5)	Switch
(6)	Main handle
(7)	Cord
(8)	Speed Adjuster Knob
(9)	Fan cover
(10)	Housing
(11)	Side Handle

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.



Switch operation

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

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 tool

NOTE:

For tools such as a bull point and a cold chisel, use only XINPU genuine parts.

- (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 grip to the direction of an arrow mark and insert the tool all the way until it hits the innermost end.

Releasing the grip reverts the grip 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 grip 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 dial, depending upon the contents of operation, such as boring holes into fragile materials, chipping, centering, etc.

The scale '1' of the dial is designed for a minimum speed with the number of 250 rotations per minute and 1400 times of blow per minute. The scale '6' is designed for a maximum speed with the number of 500 rotations per minute and 2800 times of blow per minute.

CAUTION:

Do not adjust the dial 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

1. How to drill holes (Fig. 3)

- (1) Pull the switch trigger after applying the drill bit tip to the drilling position.
- (2) It is unnecessary to forcibly press the rotary hammer main body. It is sufficient to slightly press the rotary hammer to an extent that shavings are freely discharged.

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.

2. How to chisel or crush (Fig. 4)

By applying the drill bit tip to the chiseling or crushing position, operate the rotary hammer by utilizing its empty weight.

Forcible pressing or thrusting is unnecessary.

3. When drilling at “rotation + hammering”:

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

- (1) Switching to “rotation + hammering”
 - (a) Push the button, release lock and turn the selector lever clockwise.
 - (b) Align ▲ of the selector lever and ■ T of the lever holder as illustrated in **Fig.5**.
 - (c) Release the button to lock the selector lever.

NOTE:

Turn the selector lever (do not push the button) to check if it is completely locked and make sure that it does not turn.

4. When chipping and chiseling at “hammering”:

CAUTION:

- If the selector lever is switched during motor rotation, the tool can start to rotate abruptly, resulting in unexpected accidents. Make sure to switch the selector lever when the motor is at a complete stop.
 - If the bull point or cold 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”
 - (a) Push the button, release lock and turn the selector lever counterclockwise.
 - (b) Align ▲ of the selector lever and T of the lever holder as illustrated in **Fig. 6**.

(c) Release the button to lock the selector lever.

NOTE:

Turn the selector lever (do not push the button) to check if it is completely locked and make sure that it does not turn.

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

(a) Push the button, release lock and turn the selector lever.

Align ▲ of the selector lever and T of the lever holder as illustrated in Fig. 7.

(b) Release the button to lock the selector lever.

(c) Turn the grip as illustrated in Fig. 8 and fix the tool to the desired working direction.

(d) Switch the selector lever to “hammering” according to the procedures mentioned in the above item (1) and secure the position of the tool.

5. Install the stopper (Fig. 9)

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

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

6. Warming up (Fig. 10)

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.

USING DRILL CHUCK, CHUCK ADAPTER

Note that this machine can be used at “rotation only” if separately sold parts such as drill chuck and chuck adapter are attached. Use it with the selector lever positioned at “rotation +hammering”.

CAUTION:

During operation, be sure to grip the handle and the side handle firmly to prevent your body from swaying.

(1) Switching to “rotation +hammering”

For switching to “rotation + hammering”, follow the same procedures mentioned in [3. When drilling at “rotation +hammering”].

(2) Drilling

(a) Even if you apply more-than-required pressure to the machine body, drilling can never be performed as quickly as you expect. Applying more force or pressure to the machine body than what is needed, on the contrary, damages the drill tip, resulting in the declined working efficiency and shortened life of this machine.

(b) A drill can snap sometimes when drilling is almost finished. It is important to relax your thrusting pressure when drilling is nearing the end.

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 center pin 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. 11) Before that, feed oil the screw portion of core bit shank for easy dismounting .

(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. 12)

(3) Insert the center pin into the guide plate until it reaches the extremity.

- (4) Fit in the guide plate by aligning its concaved portion with the core bit tip. When the position of the concave is shifted by turning the guide plate right or left, the guide plate never slips off even when the drill is used in a downward direction.(Fig. 13)

2. Drilling holes

- (1) Insert the plug into a receptacle.
- (2) A spring is built in the center pin. By straightly and gently pressing it to the wall or floor surface, the entire surface of the core bit tip attains contact to start the hole drilling job.
(Fig. 14)
- (3) When the hole depth reaches approximately 5mm, the hole position can be determined. Then remove the center pin and guide plate from the core bit and continue the hole drilling job.

CAUTION:

When removing the center pin and guide plate, 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. 15)
- 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. 16)

HOW TO REPLACE GREASE

This machine is of full air-tight construction to protect against dust and to prevent lubricant leakage. Therefore, the machine can be used without lubrication for long periods. Replace the grease as described below.

1. Grease replacement period

After purchase, replace grease after every 6 months of usage. Ask for grease replacement at the nearest XINPU Authorized Service Center. Proceed for replacement of grease.

2. Grease replenishment

CAUTION:

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

- (1) Remove the crank cover and wipe off the grease inside. (Fig. 17)
- (2) Supply 30g of XINPU Electric Hammer Grease A (Standard accessory, contained in tube) to the crank case.
- (3) After replenishing the grease, install the crank cover securely.

NOTE:

The XINPU Electric Hammer Grease A 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 Numbers shown in the figure. In addition, always keep carbon brushes clean and ensure that they slide freely within the brush holders.

5. Replacing carbon brushes

Loosen the two set screws and remove the tail cover. Remove the brush caps and carbon brushes. After replacing the carbon brushes, tighten the brush caps securely and install the tail cover with securely tightening two set screws.

6. Service parts list

A: Item No.

B: Code No.

C: No. Used

D: Remarks

CAUTION:

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

This Parts List will be helpful if presented with the tool to the XINPU Authorized Service Center when requesting repair or other maintenance.

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

MODIFICATIONS:

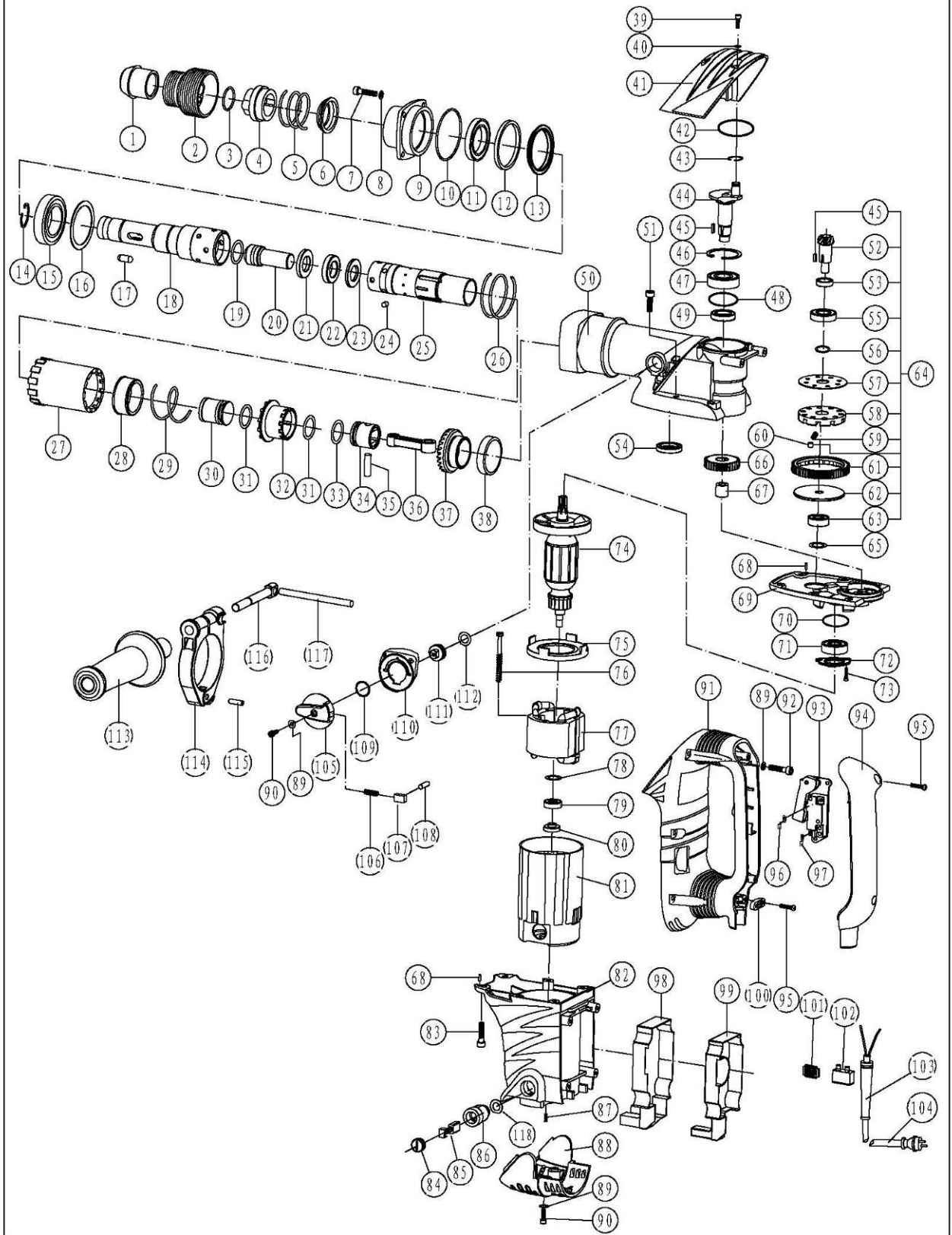
XINPU Power Tools are constantly being improved and modified to incorporate the latest technological advancements.

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-R40B Rotary Hammer Part Chart



XP-R40B Rotary Hammer Parts List

XP-No	Item No.	Part Describe	Quantity	XP-No	Item No.	Part Describe	Quantity
88264001	1	Turn Staff Armor	1	88275015	62	Clutch Hold Down Plate B	1
88264002	2	Flex Sheath	1	88237004	63	Ball Bearing 629 (2RS C2)	1
88224019	3	Steel Wire Block Ring $\phi 2 \times \phi 25.5$	1	88275018	64	Clutch Compages	1
88275001	4	Lock Bead Sheath	1	88224016	65	629 Bearing Washer $\phi 25 \times \phi 20 \times 0.5$	1
88224022	5	Lock Bead Sheath Spring $\phi 2.5 \times \phi 42.5 \times 74$	1	88275016	66	Gear (34 Tooth)	1
88224006	6	Spring Seat	1	88234013	67	Needle Bearing BK1010	1
88210007	7	Hex .Socket Bolt M6x20	4	88221017	68	Pin $\phi 5 \times 14$	2
88210067	8	Flat Washer $\phi 6 \times \phi 10.5$	4	88290045	69	Inner Cover	1
88290043	9	Brainpan	1	88264028	70	O-Ring $\phi 1.5 \times \phi 31.5$	1
88264003	10	O-Ring $\phi 1.5 \times \phi 60$	1	88237005	71	Ball Bearing 6201 (2RS C3)	1
88264004	11	Oil Seal Ring $\phi 34.5 \times \phi 53 \times 7$	1	88224017	72	6201 Bearing Hold Down Plate	1
88264005	12	Spring Washer $\phi 61 \times \phi 62.5 \times 4.5$	1	88210106	73	Embedding Screws M4x8	3
88224007	13	"L" type Washer	1	88280082	74	Armature 220-240V	1
88210091	14	Retaining Ring $\phi 35$	1	88280084	74	Armature 110-120V	1
88237001	15	Ball Bearing 6007 (2RS C2)	1	88280086	74	Armature 100V	1
88224008	16	Vibration Reducing Washer $\phi 62 \times \phi 49.5 \times 1$	1	88264018	75	Fan Guide	1
88224009	17	Lock Staff Bead $\phi 8 \times 19.3$	2	88210100	76	Tapping Screw ST4.8x65	2
88275002	18	Hammer Staff Sheath	1	88280081	77	Stator 220-240V	1
88264006	19	Fluorin O Ring $\phi 3 \times \phi 19$	1	88280083	77	Stator 110-120V	1
88275003	20	Impact Hammer	1	88280085	77	Stator 100V	1
88275004	21	Washer A $\phi 35.7 \times \phi 19.6 \times 6$	1	88224018	78	608 Bearing Washer $\phi 21 \times \phi 8.4 \times 0.3$	1
88264007	22	Buffering Washer $\phi 35.5 \times \phi 19.7 \times 8$	1	88237006	79	Ball Bearing 608 (2RS C3)	1
88275005	23	Washer B $\phi 35.7 \times \phi 19.6 \times 3.5$	1	88244001	80	Magnetism Inductorium	1
88224010	24	Cylinder Lock Bead $\phi 5.9 \times 6$	4	88264019	81	Stator Ass'y	1
88275006	25	Cylinder	1	88290046	82	Housing	1
88224023	26	Flower Trough Sheath Spring $\phi 2.5 \times \phi 53.5 \times 48$	1	88210009	83	Hex .Socket Bolt M6x25	2
88264008	27	Flower Trough Sheath	1	88244006	84	Brush Cap	2
88224011	28	Spring sheath	1	88244009	85	Carbon Brush 7x11x17	2
88224024	29	Dial Sheath Spring $\phi 2.5 \times \phi 41 \times 65$	1	88244007	86	Brush Holder	2
88275007	30	Impact Piston	1	88210089	87	Hex .Socket Seal Lock Screw M5x8	2
88264009	31	Fluorin O Ring $\phi 3.5 \times \phi 23$	2	88264020	88	Fan Cover	1
88275008	32	Dial Sheath	1	88210090	89	Flat Washer $\phi 5 \times \phi 9$	9
88264010	33	Fluorin O Ring $\phi 1.5 \times \phi 23$	1	88210101	90	Hex .Socket Bolt M6x10	3
88264011	34	Gas Press Piston	1	88264021	91	Main Handle	1
88223020	35	Piston Pin $\phi 8 \times 26$	1	88210003	92	Hex .Socket Bolt M6x16	6
88264012	36	Connecting Rod Ass'y	1	88244002	93	Switch	1
88275009	37	Big Cone-shaped Gear	1	88264022	94	Main Handle Cover	1
88275012	38	Oiliness Bearing $\phi 40 \times \phi 50 \times 13.3$	1	88210038	95	Tapping Screw ST4.2x18	4
88210001	39	Hex .Socket Bolt M4x12	4	88210086	96	"Z" type Connection button	2
88210084	40	Flat Washer $\phi 4 \times \phi 8$	4	88210075	97	Connection button	2
88264013	41	Oil Tank Cover	1	88244004	98	Speed Adjuster Cover	1
88264014	42	O-Ring $\phi 2 \times \phi 53.5$	1	88244003	99	Speed Adjuster	1
88210092	43	Retaining Ring $\phi 10$	1	88261010	100	Cord Clip	1
88275010	44	Crank Shaft	1	88244008	101	Electricity Feels	1
88210098	45	Palt Key 3x3x8	2	88210076	102	Rivet	1
88210093	46	Retaining Ring $\phi 40$	1	88261051	103	Cord Armor	1
88237002	47	Ball Bearing 6203 (2RS C0)	1	88250000	104	Cord	1
88264015	48	O-Ring $\phi 2 \times \phi 39.7$	1	88264023	105	Function Knob	1
88264017	49	Oil Seal Ring $\phi 30 \times \phi 17 \times 7$	1	88224002	106	Pushbutton Spring $\phi 0.6 \times \phi 4.4 \times 14$	1
88290044	50	Crank Housing	1	88264024	107	locked Pushbutton	1
88210088	51	Hex .Socket Bolt M6x40	4	88224003	108	Pushbutton lockpin	1
88275011	52	Small Cone-shaped Gear	1	88210094	109	Retaining Ring $\phi 20$	1
88224020	53	Small Cone-shaped Gear Sheath	1	88264025	110	Knob Support	1
88264016	54	Oil Seal Ring $\phi 30 \times \phi 20 \times 5.5$	1	88275017	111	Dial Staff Sheath	1
88237003	55	Ball Bearing 6002 (2RZ C2)	1	88264026	112	Fluorin O Ring $\phi 2.5 \times \phi 15$	1
88224013	56	6002 Bearing Washer $\phi 22 \times \phi 15 \times 0.5$	1	88264027	113	Side Handle	1
88224014	57	Clutch Hold Down Plate A	1	88290047	114	Handle Stay	1
88275013	58	Clutch Seat	1	88210099	115	Spring Column Pin 6x18	1
88224001	59	Clutch Spring $\phi 1.2 \times \phi 4.1 \times 17$	10	88224004	116	Handle bolt	1
88224015	60	Clutch Ball Bearing $\phi 5.5 \times 6.2$	10	88224005	117	Orientation Staff Gauge	1
88275014	61	Clutch Gear	1	88244010	118	Insulate Washer	2