ASSEMBLY & OPERATING INSTRUCTIONS

Save This Manual Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures.
Keep this manual and the receipt in a safe and dry place for future reference.

ART. V124-07
ITEM NO. 1090204

KNT-Hjul & Verktyg AB

POWER HAMMER

Diagrams within this manual may not be drawn proportionally.
Due to continuing improvements, actual product may differ slightly from the product described herein.

Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.

SPECIFICATION

Power Input	220V-240V,50Hz,1ph
Inverter	Input:AC220(-15%)-240V(+10%), 1ph,50/60Hz,Output:3ph
Strokes per minute	0-960
Throat Height Capacity	395mm
Throat Depth Capacity	560mm

SAVE THIS MANUAL

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

SAFETY WARNINGS AND PRECAUTIONS

WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage.
Read all instructions before using this tool!

1. **Keep work area clean.** Cluttered areas invite injuries.
2. **Observe work area conditions.** Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted. Do not use electrically powered tools in the presence of flammable gases or liquids.
3. **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords.
4. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **Do not force tool.** It will do the job better and more safely at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool capacity.
6. **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
7. **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
8. **Use eye and ear protection.** Always wear ANSI approved impact safety goggles. Wear a full face shield if you are producing metal filings or wood chips. Wear an ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists.
9. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines. Keep hands and fingers clear of the Roll Dies when operating.

10. **Maintain tools with care.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged, have them repaired by an authorized technician. The handle must be kept clean, dry, and free from oil and grease at all times.
11. **Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or machine work surface before plugging it in.
12. **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
13. **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn on and off properly.
14. **Guard against electric shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges and refrigerator enclosures.
15. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool.
16. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels if taking prescription medicine to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
17. **Maintenance.** For your safety, service and maintenance should be performed regularly by a qualified technician.
18. **Workpiece may be sharp.** After bending or cutting workpieces use caution. Be aware of sharp edges or sharp shreds of metal that may be created. Use heavy duty gloves when handling the workpiece.

WARNING: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

FEATURES

1. Design and form custom hot rod, motorcycle, avlation.
2. Easy for adjusting & assembly.
3. Variable speed foot pedal control.
4. Accepts 16mm tooling.
5. Thumbnail shrinking dies
6. Straight fence
7. Contour fence

UNPACKING

When unpacking, check to make sure that the item is intact and undamaged. If any parts are missing or broken, please contact the seller.

INSTALLATION

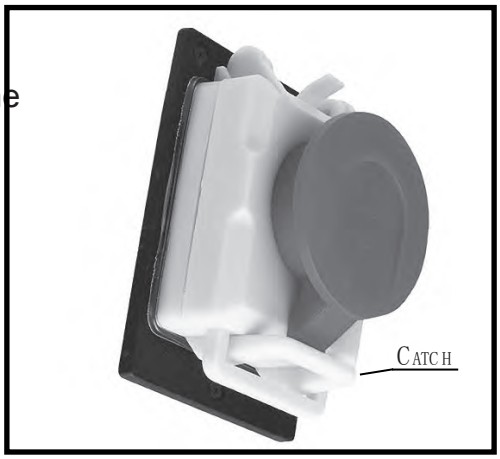
Note: For additional information regarding the parts listed in the following pages, refer to the Parts Diagram.

1. Unpack the Power Hammer components on the floor where the unit will be located and mounted. The floor must be able to support the weight of the Power Hammer and the workpieces.
2. Mount the Power Hamer to the Stand using four Bolts, Washers, and Nuts.

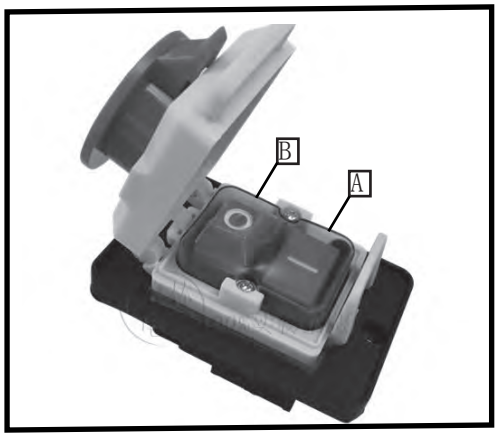
MACHINE START AND STOP

Plug the machine's power cord into the power supply. The machine requires a 240V power source.

ON/OFF SWITCH



The ON/OFF safety switch is located on the front of the machine for quick, easy and safe access. The switch is fitted with a yellow door with a RED button in the centre of it.
To start the machine the yellow door needs to be released by pressing against the catch to open it and reveal the green ON and RED stop buttons.
Push the bottom green button (A) to turn the machine ON. Push the top red button (B) to turn the machine OFF.



In an emergency the red button on the yellow door can be pressed and held with the catch and the machine will stop. With the door closed the machine cannot be started until the catch is released and the buttons exposed.

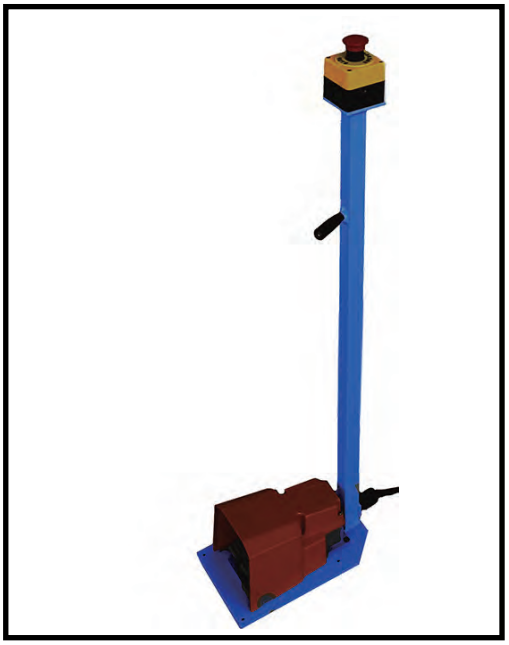
CAUTION: Never walk away from the machine while it is still running. Always lock the switch in the Off position and unplug from the power supply when not in use.

On each initial startup, allow the controller to warm up for 10 -15 seconds before depressing the foot pedal speed control. This allows the VFC time to warm up.
Proceed after this warm up. Depressing the foot speed control pedal before the 10-15 second allow for warm up could trip the VFC.

With the power on, when the foot pedal speed control is depressed the machine begins to run. The farther the foot pedal is depressed the faster the machine runs. Releasing the foot pedal causes the machine to stop.

FOOT PEDAL & EMERGENCY STOP
Controls the starting of the power hammer and speed.

Can be moved to any position for ease of operation. Depress the pedal to start the rotation. Once the pedal is released the mandrels will stop.
On the top of the stand is the emergency stop button. When pressed the machine will stop. Before the machine will restart the emergency button needs to be twisted to release the stop button.



TOOLING

The machine's top tool holder and bottom tool holder are for 16mm square shank tools. The tools are held in place by (2) set screws at 90 degrees in the both the top and bottom tool bolder.
The set screws for the top tools are tightened to hold the tool in place The set screws for the bottom tool are set so the bottom tool can be moved up after each pass for multiple pass work without loosening the set screws. Before locking the top tool in place with the (2) set screws the top tool's shank must be inserted into the tool holder until it's shank bottoms in the tool holder.

TOOLING ADJUSTMENT

The bottom tool holder is adjustable "in-out" and "side to side" relative to the top tool holder.
To adjust the bottom tool holder "in-out", loosen the screw holding the adjuster lock plate in position. Loosen the screw holding the bottom post base and move it in and out as required. Check "side to side" alignment. After final position is obtained first lock the bottom post in position, then slide the adjuster lock plate in position against the bottom post base and lock in position.

Up and down adjustment of the tool holder is usually not changed from the factory setting. Factory furnished dies are cut to a standard length for the factory setting of the up/ down position.

When it is necessary to adjust the bottom tool up or down follow this procedure. Rotate handle G to move tool up or down as needed nylon top lock set screw "F" is adjusted so allow the bottom tool adjuster screw to be turned, but not shake loose during operations.

BEADING DIE SET UP

Tool Alignment. From the operator side of the machine the bead runs L to R, place the dies in the tool holders appropriately. For alignment use a straight edge. For checking the "in-out" alignment, place the straight edge against the diameters on front of the top tool and front of bottom tool. For checking the "side to side" alignment, place the straight edge 90 degrees from front face against the sides of the top tool and bottom. Adjust bottom tool to align with the top tool. The principal adjustment for the bottom die is "in-out" from the operator position. Minor adjustments in the "side to side" direction can be made. The dies should be aligned as close as possible "front to back" to avoid pinching the metal.

STRAIGHT FENCE

Standard straight fence is a gage stop and support for straight edge work piece. It is adjusted “up-down” to support the work piece and “in-out” to top the work piece in relation to the tooling. The vertical adjustment should support the work piece without putting a bow in the work piece.

Vertical adjustment is made by loosening the screws on side of the frame and moving the straight fence to desired position.

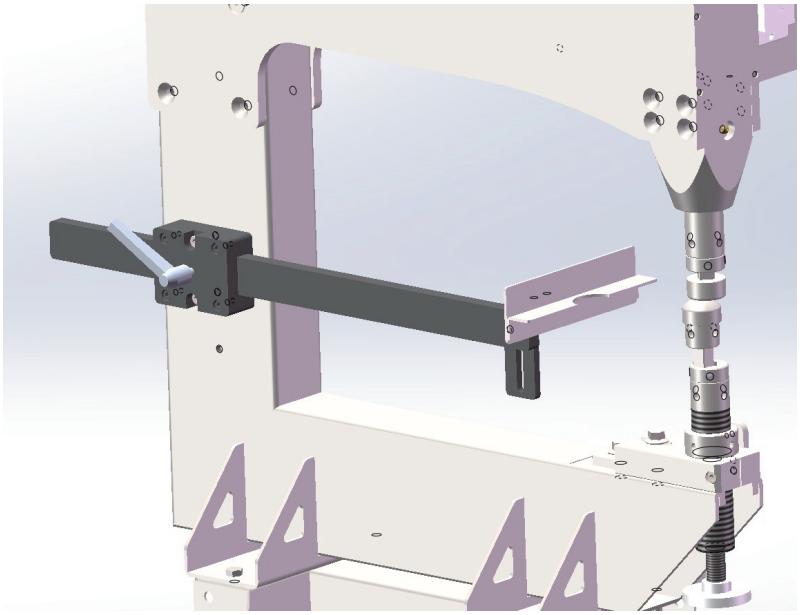
Horizontal adjustment is made by loosening the clamp handles on side of frame and moving straight fence in and out as required.

CONTOUR FENCE

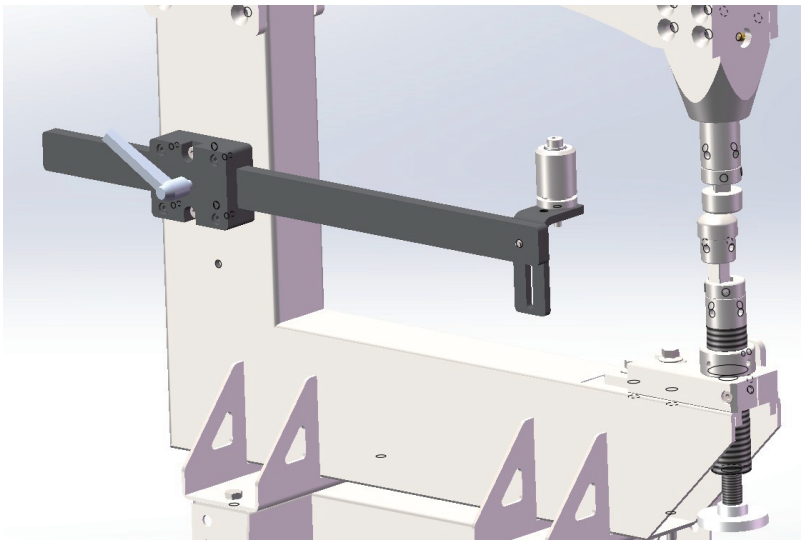
Standard contour fence is a gage stop for parts with a curved edge.

To change from straight fence to contour fence, remove the straight fence back stop from the support rods, and install the contour fence assembly, adjust the contour fence “up-down” so the center of the roller on thecontour fence is on the centerline line o the tools. The “up-down” and “in-out” adjustments of the contour fence same as straight fence.

STRAIGHT FENCE



CONTOUR FENCE



PARTS LIST

Part No.	Description	Qty	Part No.	Description	Qty
1	Main Frame Weldment	1	35-04	16mm Lower Universal Die Holder	1
2	Bottom Post Base	1	35-05	1 pc Steel Lower Die-1"	1
3	Left Plate	1	35-06	1 pc Steel Lower Die-2"	1
4	Right Plate	1	35-07	1 pc Steel Lower Die-3"	1
5	Screw	1	35-08	20mm Upper Round Die Holder	1
6	Bottom Post	1	35-09	20mm Lower Round Die Holder	1
7	Top Post Base	1	35-10	1 pc Steel Upper Die	1
8	Upper Spring Seat	1	36	Bushing	1
9	Lock Plate	1	37	Screw M8X35	5
10	Piston	1	38	Rubber Plate	2
11	Lock Nut	1	39	Pin	1
12	Copper Bushing	1	40	Collar	1
13	Washer 10mm	8	41	1218 Copper Bushing	4
14	Spring Washer 10mm	8	42	Bolt 12X70	4
15	Bolt M10X25	4	43	Adjustable Handle	2
16	Stand	1	44	Oil Cup	3
17	Die Holder Insert	2	45	Washer 8mm	6
18	Spring	4	46	Spring Washer 8mm	6
19	Screw M6X16	4	47	Motor	1
20	Lower Spring Seat	1	48	Motor Base	1
21	Crank Link	2	49	Plate	1
22	Lock Plate	1	50	Screw M6X10	6
23	Crank Shaft	1	51	Spring Washer 6mm	6
24	Bearing UCF206	2	52-01	Stop Support	1
25	Cover	1	52-02	Stop Plate	1
26	Nut M10	12	52-03	Stop Clamp	1
27	Copper Bushing	1	53	Stop Rod	2
28	Screw M5X20	1	54	Fence Bracket	1
29	Cover Plate	1	55	Straight Fence	1
30	202620 Copper Bushing	1	56	Contour Fence Roller	1
31	202615 Copper Bushing	2	57	Bolt M10X65	1
32	Bearing Seat	2	58	Bearing	2
33	Shaft Coupling	1	59	Adjusted Screw	1
34	Screw M10X12	14	60	Spacer	1
35-01	Upper Shrinking Die	1	61	Screw M12X30	8
35-02	Lower Shrinking Die	1	62	Washer 12mm	10
35-03	16mm Upper Universal Die Holder	1	63	Spring Washer 12mm	8

Part No.	Description	Qty	Part No.	Description	Qty
64	Screw M8X20	6	81	Handle	1
65	Screw M8X25	3	82	Varaible Speed Foot Pedal	1
66	Screw M8X10	8	83	Nut M6	1
67	Screw M8X8	8	84	Hand Wheel	1
68	Screw M12X30	1	85	Hinge	2
69	Control Box	1	86	Acrylic plate	3
70	Inverter	1	87	Screw M6X6	4
71	Power Lamp	1	88	Spring	5
72	Potentiometer	1	89	Steel Ball	6
73	Power Switch	1	90	Adjusting block	1
74	Handle	1	91	Nut	1
75	Power Cord	1	92	Collar	1
76	Motor Cable	1	93	Handle	1
77	Foot Pedal Cable	1	94	Screw M12X50	1
78	Emergency Stop	1	95	Hex Key	1 set
79	Emergency Stop Box	1	96	15mm wrench	1
80	Foot Pedal Stand	1	97	wrench	1

PARTS DIAGRAM