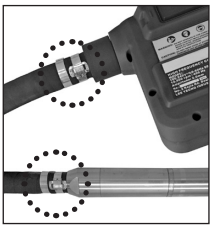
AGP®

Integrated High Frequency Concrete Vibrator

H35 / H35S / H43 / H43S

Instruction Manual

FUNCTIONAL DESCRIPTION



Band clamp type hose
(Optional)

Short Hose Model

Long Hose Model

1. On/Off Switch
2. Integrated high-frequency converter
3. Handle
4. Support Strap
5. Vibrator Head
6. Heat Sink

Model	H35S	H35	H43S	H43
Voltage	100-250 V~50-60 Hz		100-250 V~50-60 Hz	
Vibration Rate	13,500 vpm		12,500 vpm	
Power Input	1000 W		1200 W	
Motor Frequency	400 Hz		400 Hz	
Centrifugal Force	1301 N		2489 N	
Vibrator Head Size	ø 35 mm x 314 mm		ø 43 mm x 300 mm	
Hose Size	ø 30 mm x 0.85 mm	ø 30 mm x 6 m	ø 36 mm x 0.85 m	ø 36 mm x 6 m
Protection	IP X7	IP X7	IP X7	IP X7
Net Weight	4.1 kg (9.0 lb)	7.4 kg (16.3 lb)	5.3 kg (11.6 lb)	9.5 kg (20.9 lb)

GENERAL SAFETY INSTRUCTIONS

WARNING! Read all safety warnings and all instructions. Failure to follow the 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 SAFETY

a. **Keep work area clean and well lit.** Cluttered or 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 tool 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. **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. **b) Use personal protective 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. **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising 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 jewelry. Keep your hair, clothing and gloves away**

from moving parts. Loose clothes, jewelry 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 dust collection 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 and/or the battery pack from the power tool 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 tool's 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, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

5) SERVICE

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.

Symbols used in this manual

V…….....volts
A…….....amperes
Hz…….....hertz
W…….....watt
~……....alternating current
n_o……..no load speed
min^{-1}…….....revolutions or reciprocation per minute


.....warning of general danger


….with electrical earth


.....read these instructions


.....always wear eye protection


.....always wear a dust mask.


.....always wear hearing protection


.....wear safety-approved hard hat


do not dispose of electric tools, accessories and packaging together with household waste material

SPECIFIC SAFETY RULES

DO NOT let comfort or familiarity with the product (gained from repeated use) replace strict adherence to concrete vibrator safety rules. If you use this tool unsafely or incorrectly, you can suffer serious personal injury.

1. **Always keep hands and face away from vibrating head when operating.**
2. **Switch off the tool immediately if you notice abnormal noise or something faulty during operation.**
3. **Inspect the tool carefully for breakage, deformation or cracks if you accidentally drop it or strike it against something.**
4. **Do not set the tool down and switch it on. The vibrating head may whip around out of control and cause an accident.**
5. **Be extra careful when inserting the vibrating head between iron/steel frames or reinforcing rods to not come in contact with them.**
6. **Do not crush or twist the flexible hose.**
7. **Do not touch the heat sink. It gets hot during operation.**
8. **Use a wet cloth or similar method to carefully wipe off any wet concrete left on the tool after use. Extra care should be given to thorough cleaning of the vents, switch area, cover openings, etc.**
9. **Since this tool produces vibration, it is necessary to periodically check for loose screws.**

UNPACKING

Carefully remove the tool and all loose items from the shipping container.
Retain all packing materials until after you have inspected and satisfactorily operated the machine.

CARTON CONTENTS

***** Vibrator unit

INTRODUCTION

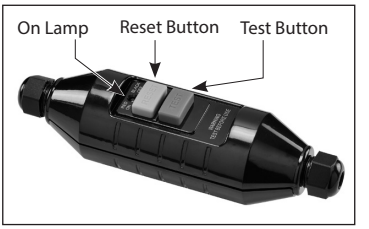
This vibrator unit uses a high frequency motor which is mounted directly in the vibrator head. The power converter which supplies it with the required frequency is located in the switch box. It runs on standard, single phase AC current.

ELECTRICAL CONNECTION

Press the "Reset" button on the PRCD interrupter device to energize the circuit to the machine. Then press unit runs on single phase AC current between 50 and 60 Hz. It can accept any voltage between 100 and 240 V.

WARNING: These machines are equipped with a Portable Residual Current Device (PRCD) also known as a Ground Fault Circuit Interrupter (GFCI). Always use this device whenever using the machine to reduce

the risk of shock hazards. Always position the PRCD as close as possible to the power source. Test and reset the PRCD device before each use. Press the "Test" button to test. Press the "Reset" button to energize the circuit to the machine.



STARTING AND STOPPING TOOL

Press the ON / OFF rocker switch to the "1" position to turn the unit on. Press the switch to the "0" position to turn the unit off.
Always keep the unit unplugged when not in use.

OPERATION

warning and instruction never to use the tool without the RCD provided with the tool warning and instruction always to test the correct operation of the RCD before starting work. Hold the tool straight when inserting/ operating. Use the tool within the effective vibrations range at equidistant intervals.
The effective air bubble removal range is about ten times the diameter of the vibrating head.

Do not use this tool to move concrete within a form. The mortar will just move away and the coarse aggregate will remain, causing segregation.

Always insert and remove the head vertically and remove slowly.
With each insertion, continue vibrating until there are no more bubbles and the surface looks shiny. This normally takes about 10 to 20 seconds.

Effective leveling and removal of air bubbles

Removal of the air bubbles is complete after you have worked the tool throughout each effective range, the concrete stops shrinking, and the mortar has risen evenly to the surface, giving off a light appearance. Gently remove the operating tool to avoid leaving holes.
Never vibrate against rebar. Keep a distance of about 75mm away if possible.

CAUTION: Do not leave the vibrator running in the open air for more than short periods or it will overheat. Its sealed motor unit relies on immersion in the concrete for cooling.
CAUTION: Never force the vibrator head against a solid object with the foot. This will overload the motor and is strictly prohibited.

NOTE: Vibrating too long in a single place causes concrete segregation.
When the coarse aggregate segregates when placing concrete, shovel out thecoarse aggregate and put it where there is plenty of mortar. Then use the tool on it. Don't leave coarse aggregate separated.
When pouring concrete on a slope, always work from the bottom at the beginning. This way the weight of the freshly poured concrete and vibration will lead to effective removal of air bubbles. Conversely, if the working is

done first from above, the mortar will separate and eventually slide to the bottom.

MAINTENANCE

Always be sure that the tool is switched off before attempting to perform inspection or maintenance.

KEEP TOOL CLEAN

IMMEDIATE AFTER USE:

Rinse off all wet concrete from the shaft and vibrator unit before it dries.

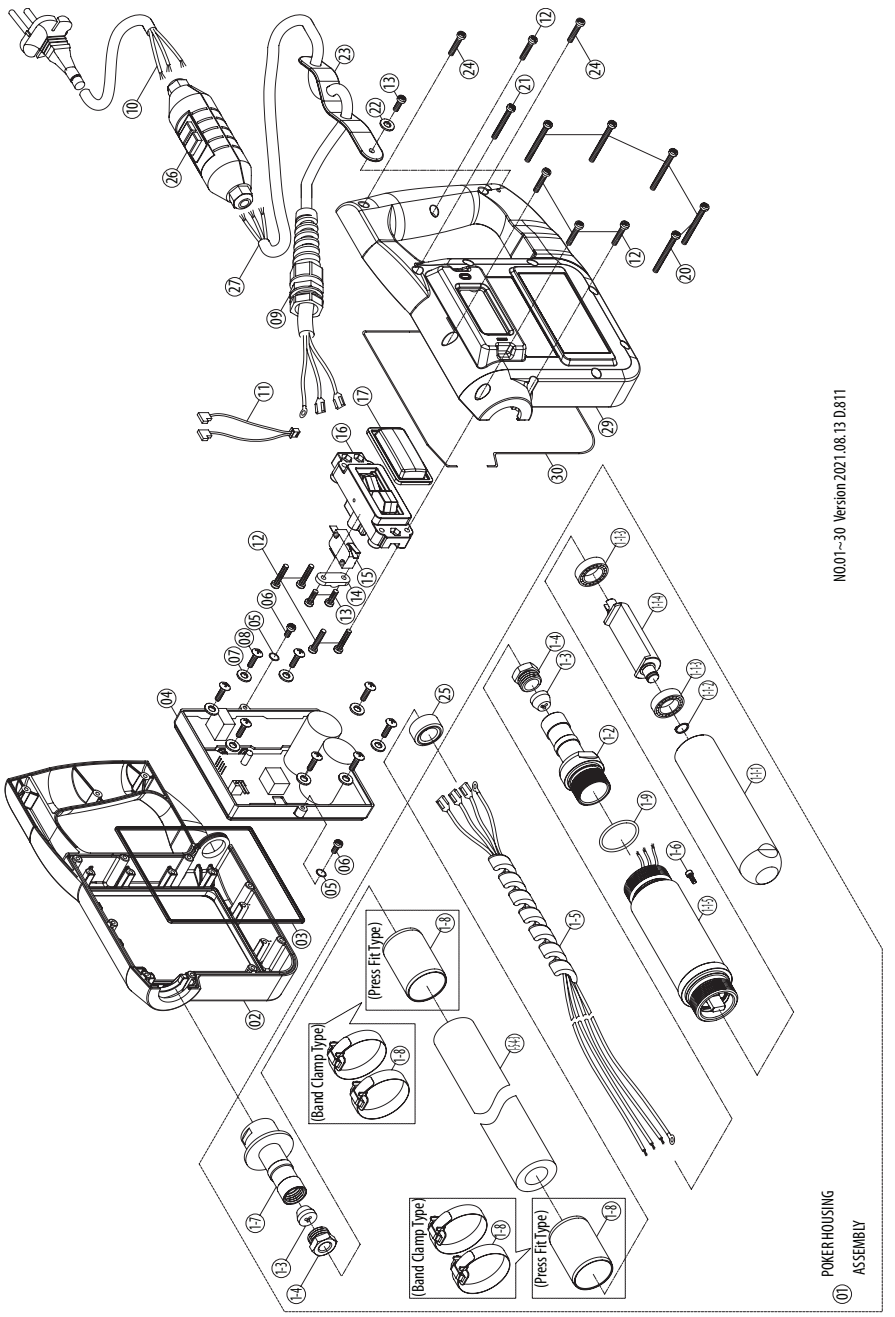
WARNING: Double check to ensure that the machine is unplugged before using water!

All plastic parts should be cleaned with a soft damp cloth. NEVER use solvents to clean plastic parts. They could possibly dissolve or otherwise damage the material.

The supply cord of this power tool cannot be replaced, and the power tool shall be scrapped

WARNING: All repairs must be entrusted to an authorized service center. Incorrectly performed repairs could lead to injury or death.

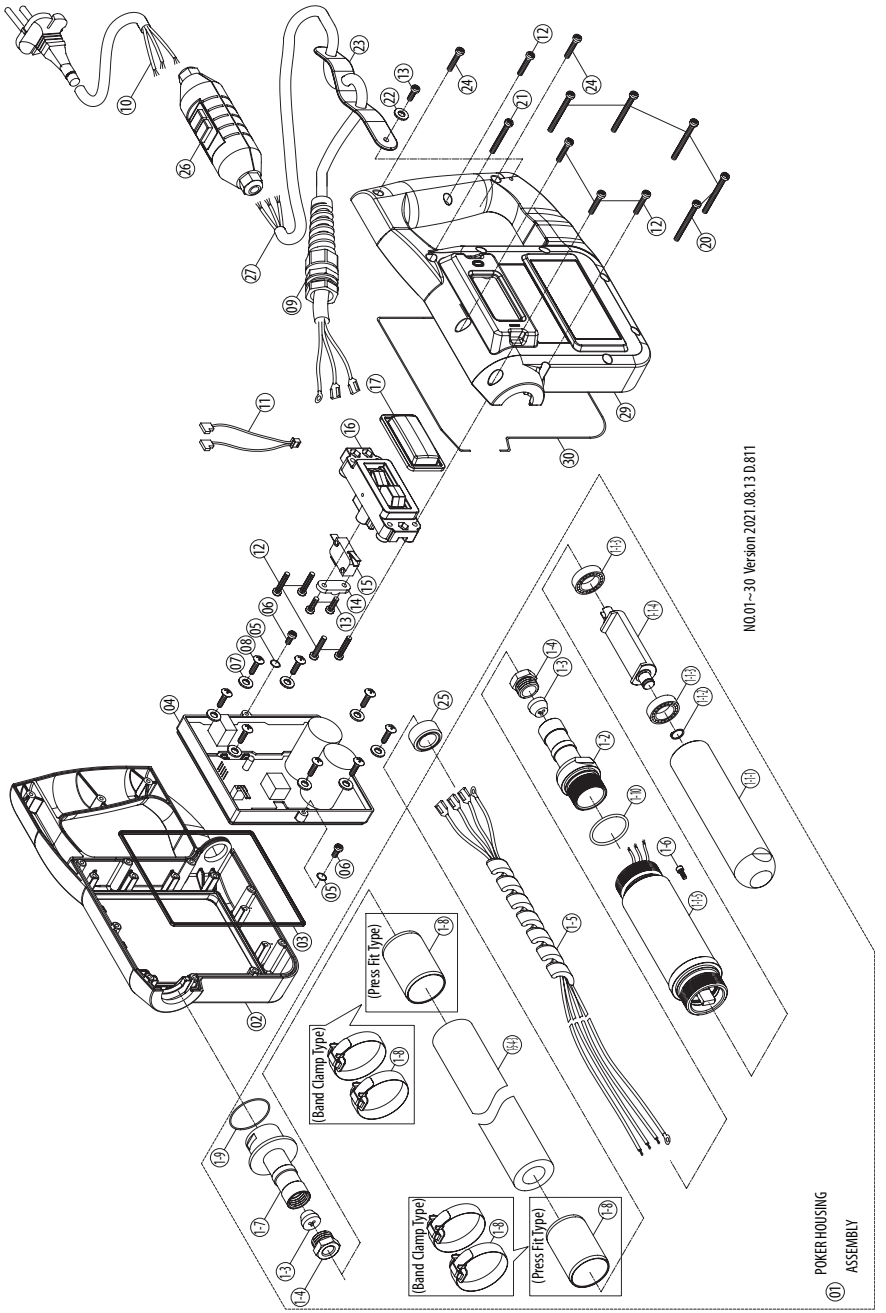
H35S Exploded View



H35S Parts List

NO.	Parts Name	Q'TY	NO.	Parts Name	Q'TY
1	POKER HEAD ASSEMBLY (Ø30x0.6M)	1	7	FLAT WASHER (Ø4xØ12x1)	8
1	POKER HEAD ASSEMBLY (Ø30x0.85M)	1	8	TRUSS HEAD TAPPING SCRREW (M4x12)	8
1-1-1	POKER HOUSING	1	9	CORD ARMOR	1
1-1-2	EXTERNAL CIRCLIP (S-15)	1	10	POWER SUPPLY CABLE (VDE-1.5x3Cx0.3M-H07RNF)	1
1-1-3	BALL BEARING (6000)	2	10	POWER SUPPLY CABLE (UK-1.5x3Cx0.3M-H07RNF)	1
1-1-4	SPINDLE (Ø25-99.5MM)	1	10	POWER SUPPLY CABLE (JP-2.0x3Cx0.3M-JET VCT)	1
1-1-5	MOTOR UNIT	1	11	WIRE LEAD	1
1-2	MOTOR END CASTING	1	12	PANHEAD TAPPING SCREW (M4x20)	8
1-3	CORD ARMOR	2	13	PANHEAD TAPPING SCREW (M4x12)	3
1-4	CLAMPING KNOB	2	14	CABLE CLIP	1
1-5	WIRE LEADS	1	15	LIMIT SWITCH (110V&220V)	1
1-5	WIRE LEADS	1	16	SWITCH BODY	1
1-5-4-3	HOSE(Ø30xØ20x0.6M)	1	17	SWITCH BOOT	1
1-5-4-3	HOSE(Ø30xØ20x0.85M)	1	20	PANHEND TAPPING SCREW (M4x38)	5
1-6	SOCKET CAP SCREW (M3x6xP0.5)	1	21	PANHEAD TAPPING SCREW (M4x30)	1
1-7	HOSE JUNCTION	1	22	FLAT WASHER (Ø4xØ16x1)	1
1-8	HOSE CLAMP	4	23	CABLE SUPPORT STRAP	1
1-8	CV CLAMP (Ø32xØ35x50)	2	24	PANHEAD TAPPING SCREW (M4x25)	2
1-9	O-RING (Ø30x3)	1	25	ANTI-INTERFERENCE TOROID	1
2	HANDLE HALF-RIGHT	1	26	PRCD INTERRUPTER PROTECTION (110V/220V)	1
3	GASKET	1	27	POWER SUPPLY CABLE (NO PLUG-1.5x3Cx14.7M-H07RNF)	1
4	ELECTRONICS UNIT (110V&220V)	1	29	HANDLE HALF-LEFT	1
5	EXTERNAL STAR WASHER (M4)	2	30	MOLDED GASKET (Ø2 x 61cm)	1
6	PANHEAD MACHINE SCREW (M4x8xP0.7)	2			

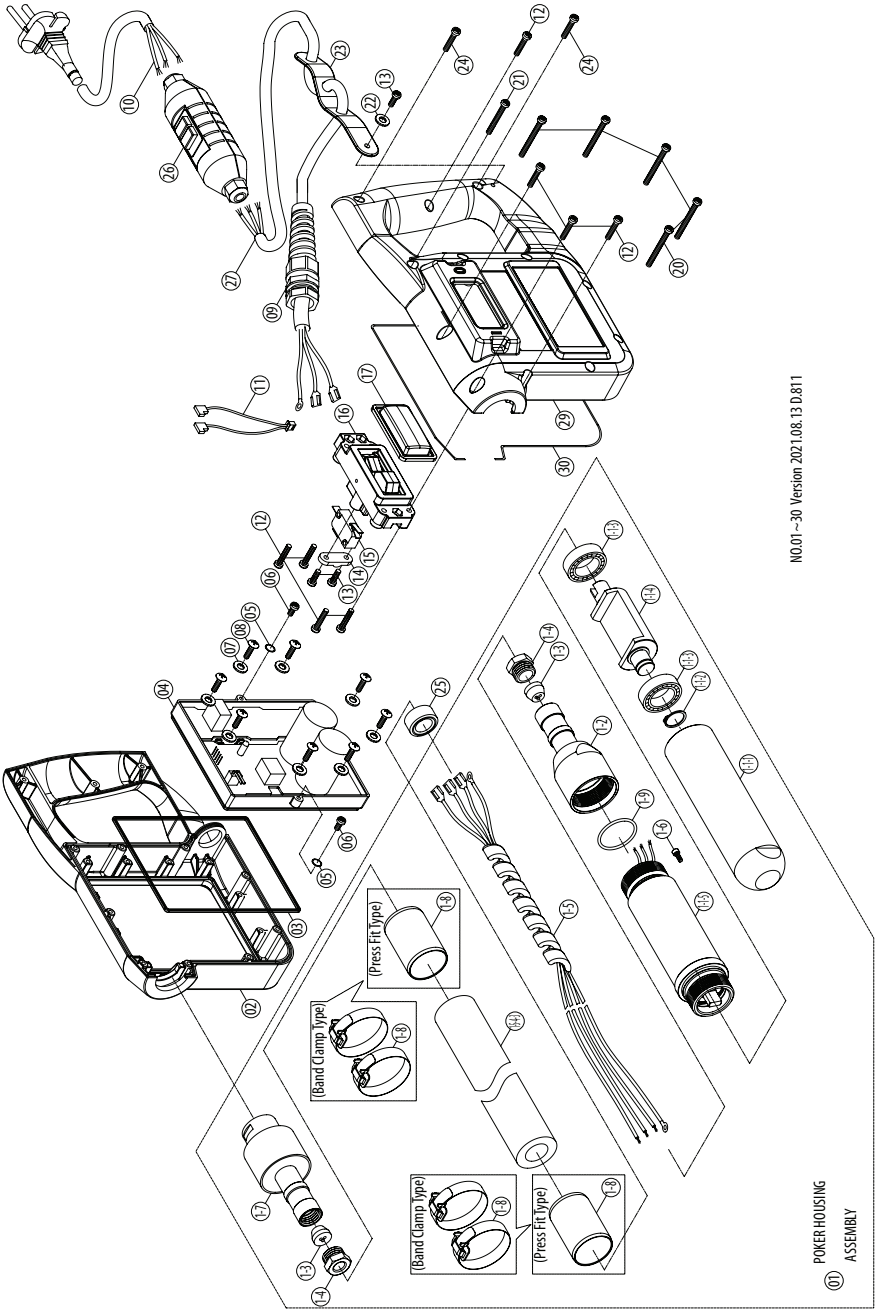
H35 Exploded View



H35 Parts List

NO.	Parts Name	Q'TY	NO.	Parts Name	Q'TY
1	POKER HEAD ASSEMBLY (Ø30x6M)	1	4	ELECTRONICS UNIT (110V&220V)	1
1	POKER HEAD ASSEMBLY (Ø30x5M)	1	5	EXTERNAL STAR WASHER (M4)	2
1	POKER HEAD ASSEMBLY (Ø30x5M)	1	6	PANHEAD MACHINE SCREW (M4x8xP0.7)	2
1	POKER HEAD ASSEMBLY (Ø30x3M)	1	7	FLAT WASHER (Ø4xØ12x1)	8
1-1-1	POKER HOUSING	1	8	TRUSS HEAD TAPPING SCRREW (M4x12)	8
1-1-2	EXTERNAL CIRCLIP (S-15)	1	9	CORD ARMOR	1
1-1-3	BALL BEARING (6000)	2	10	POWER SUPPLY CABLE (VDE-1.5x3Cx0.3M-H07RNF)	1
1-1-4	SPINDLE (Ø25-99.5MM)	1	10	POWER SUPPLY CABLE (UK-1.5x3Cx0.3M-H07RNF)	1
1-1-5	MOTOR UNIT	1	10	POWER SUPPLY CABLE (JP-2.0x3Cx0.3M-JET VCT)	1
1-2	MOTOR END CASTING	1	11	WIRE LEAD	1
1-3	CORD ARMOR	2	12	PANHEAD TAPPING SCREW (M4x20)	8
1-4	CLAMPING KNOB	2	13	PANHEAD TAPPING SCREW (M4x12)	3
1-5	WIRE LEADS	1	14	CABLE CLIP	1
1-5.	WIRE LEADS	1	15	LIMIT SWITCH (110V&220V)	1
1-5	WIRE LEADS	1	16	SWITCH BODY	1
1-5-4-3	HOSE	1	17	SWITCH BOOT	1
1-5-4-3	HOSE	1	20	PANHEND TAPPING SCREW (M4x38)	5
1-5-4-3	HOSE	1	21	PANHEAD TAPPING SCREW (M4x30)	1
1-6	SOCKET CAP SCREW (M3x6xP0.5)	1	22	FLAT WASHER (Ø4xØ16x1)	1
1-7	HOSE JUNCTION	1	23	CABLE SUPPORT STRAP	1
1-8	CV CLAMP (Ø32xØ35x50)	2	24	PANHEAD TAPPING SCREW (M4x25)	2
1-8	HOSE CLAMP	4	25	ANTI-INTERFERENCE TOROID	1
1-9	O-RING (Ø22xØ25x1.5)	1	26	PRCD INTERRUPTER PROTECTION (110V/220V)	1
1-10	O-RING (Ø30x3)	1	27	POWER SUPPLY CABLE (NO PLUG-1.5x3Cx14.7M-H07RNF)	1
2	HANDLE HALF-RIGHT	1	29	HANDLE HALF-LEFT	1
3	GASKET	1	30	MOLDED GASKET (Ø2 x 61cm)	1

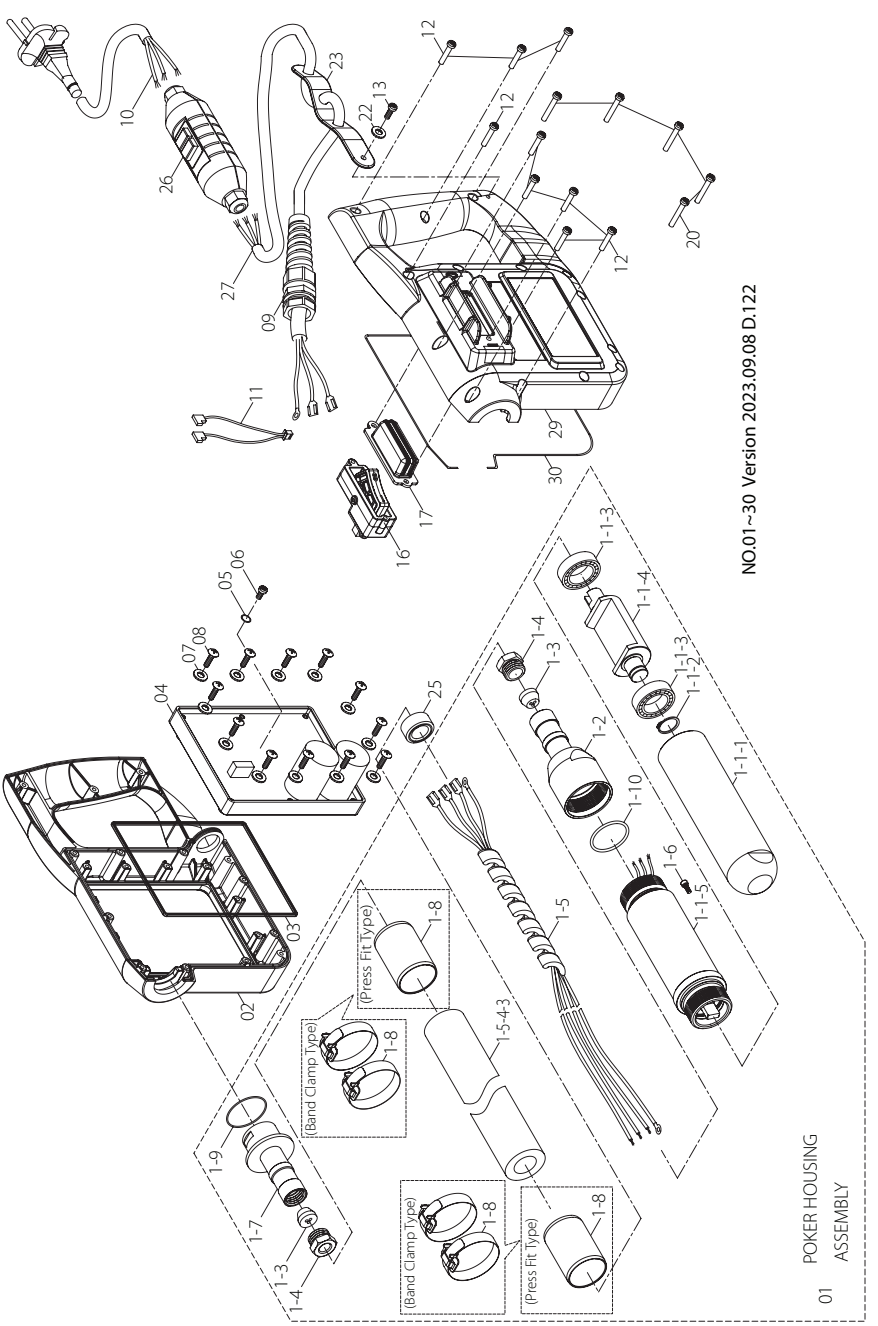
H43S Exploded View



H43S Parts List

NO.	Parts Name	Q'TY	NO.	Parts Name	Q'TY
1	POKER HEAD ASSEMBLY (Ø30x0.85M)	1	4	ELECTRONICS UNIT (110V&220V)	1
1	POKER HEAD ASSEMBLY (Ø36x0.85M)	1	5	EXTERNAL STAR WASHER (M4)	2
1	POKER HEAD ASSEMBLY (Ø36x0.6M)	1	6	PANHEAD MACHINE SCREW (M4x8xP0.7)	2
1	POKER HEAD ASSEMBLY (Ø36x0.85M)	1	7	FLAT WASHER (Ø4xØ12x1)	8
1-1-1	POKER HOUSING	1	8	TRUSS HEAD TAPPING SCRREW (M4x12)	8
1-1-2	EXTERNAL CIRCLIP (S-15)	1	9	CORD ARMOR	1
1-1-3	BALL BEARING (6202)	2	10	POWER SUPPLY CABLE (VDE-1.5x3Cx0.3M-H07RNF)	1
1-1-4	SPINDLE (Ø35-95MM)	1	10	POWER SUPPLY CABLE (UK-1.5x3Cx0.3M-H07RNF)	1
1-1-5	MOTOR UNIT	1	10	POWER SUPPLY CABLE (JP-2.0x3Cx0.3M-JET VCT)	1
1-2	MOTOR END CASTING	1	11	WIRE LEAD	1
1-3	CORD ARMOR	2	12	PANHEAD TAPPING SCREW (M4x20)	8
1-4	CLAMPING KNOB	2	13	PANHEAD TAPPING SCREW (M4x12)	3
1-5	WIRE LEADS	1	14	CABLE CLIP	1
1-5	WIRE LEADS	1	15	LIMIT SWITCH (110V&220V)	1
1-5	WIRE LEADS	1	16	SWITCH BODY	1
1-5-4-3	HOSE(Ø30xØ20x0.85M)	1	17	SWITCH BOOT	1
1-5-4-3	HOSE(Ø36xØ20x0.85M)	1	20	PANHEND TAPPING SCREW (M4x38)	5
1-5-4-3	HOSE(Ø36xØ20x0.6M)	1	21	PANHEAD TAPPING SCREW (M4x30)	1
1-6	SOCKET CAP SCREW (M3x6xP0.5)	1	22	FLAT WASHER (Ø4xØ16x1)	1
1-7	HOSE JUNCTION	1	23	CABLE SUPPORT STRAP	1
1-8	CV CLAMP (Ø32xØ35x50)	2	24	PANHEAD TAPPING SCREW (M4x25)	2
1-8	CV CLAMP (Ø37xØ40x60)	2	25	ANTI-INTERFERENCE TOROID	1
1-8	HOSE CLAMP	4	26	PRCD INTERRUPTER PROTECTION (110V/220V)	1
1-9	O-RING (Ø30x3)	1	27	POWER SUPPLY CABLE (NO PLUG-1.5x3Cx14.7M-H07RNF)	1
2	HANDLE HALF-RIGHT	1	29	HANDLE HALF-LEFT	1
3	GASKET	1	30	MOLDED GASKET (Ø2 x 61cm)	1

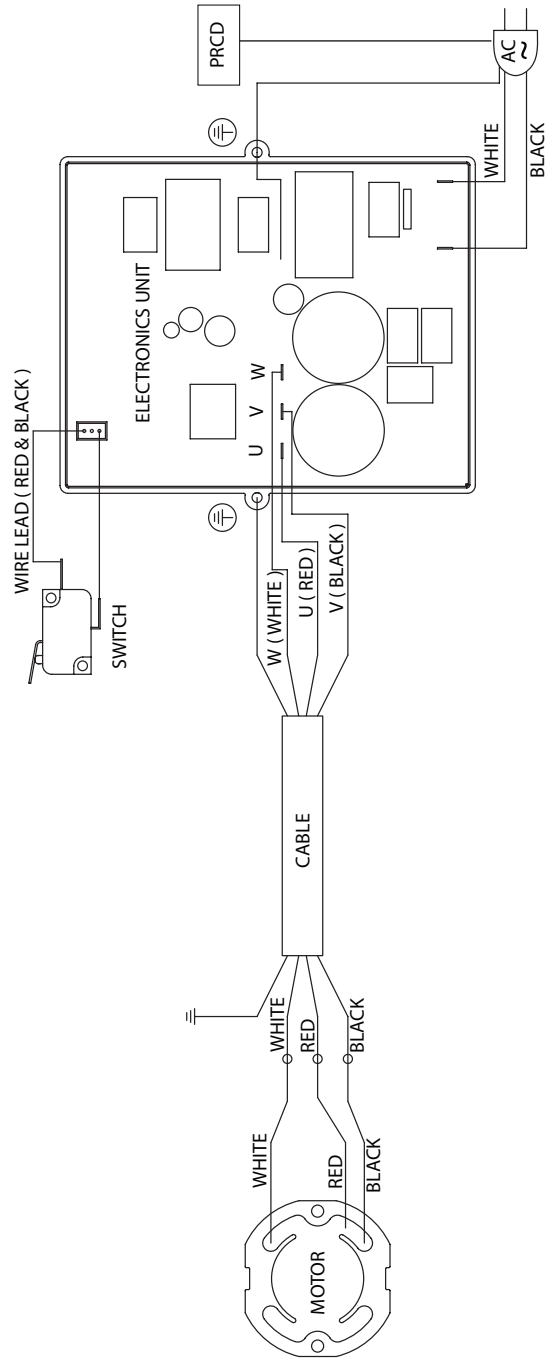
H43 Exploded View



H43 Parts List

NO.	Parts Name	Q'TY	NO.	Parts Name	Q'TY
1	POKER HEAD ASSEMBLY (Ø36x1.2M)	1	1-8	HOSE CLAMP	4
1	POKER HEAD ASSEMBLY (Ø36x5M)	1	1-9	O-RING (Ø22xØ25x1.5)	1
1	POKER HEAD ASSEMBLY (Ø36x6M)	1	1-10	O-RING (Ø30x3)	1
1	POKER HEAD ASSEMBLY (Ø36x6M)	1	2	HANDLE HALF-RIGHT	1
1-1-1	POKER HOUSING	1	3	GASKET	1
1-1-2	EXTERNAL CIRCLIP (S-15)	1	4	ELECTRONICS UNIT (110V&220V)	1
1-1-3	BALL BEARING (6202)	2	5	EXTERNAL STAR WASHER (M4)	1
1-1-4	SPINDLE (Ø35-95MM)	1	6	PANHEAD MACHINE SCREW (M4x8xP0.7)	1
1-1-5	MOTOR UNIT	1	7	FLAT WASHER (Ø4xØ12x1)	12
1-2	MOTOR END CASTING	1	8	TRUSS HEAD TAPPING SCRREW (M4x12)	12
1-3	CORD ARMOR	2	9	CORD ARMOR	1
1-4	CLAMPING KNOB	2	10	POWER SUPPLY CABLE (VDE-1.5x3Cx0.3M-H07RNF)	1
1-5	WIRE LEADS	1	10	POWER SUPPLY CABLE (UK-1.5x3Cx0.3M-H07RNF)	1
1-5	WIRE LEADS	1	10	POWER SUPPLY CABLE (JP-2.0x3Cx0.3M-JET VCT)	1
1-5	WIRE LEADS	1	11	WIRE LEAD	1
1-5	WIRE LEADS	1	12	PANHEAD TAPPING SCREW (M4x20)	9
1-5	WIRE LEADS	1	13	PANHEAD TAPPING SCREW (M4x12)	1
1-5	WIRE LEADS	1	16	REED SWITCH (110V&220V)	1
1-5-4-3	HOSE(Ø30xØ20x3M)	1	17	SWITCH BOOT	1
1-5-4-3	HOSE(Ø30xØ20x6M)	1	20	PANHEAD TAPPING SCREW (M4x25)	5
1-5-4-3	HOSE(Ø36xØ20x3M)	1	22	FLAT WASHER (Ø4xØ16x1)	1
1-5-4-3	HOSE(Ø36xØ20x5M)	1	23	CABLE SUPPORT STRAP	1
1-5-4-3	HOSE(Ø36xØ20x6M)	1	25	ANTI-INTERFERENCE TOROID	1
1-5-4-3	HOSE(Ø36xØ20x1.2M)	1	26	PRCD INTERRUPTER PROTECTION (110V/220V)	1
1-6	SOCKET CAP SCREW (M3x6xP0.5)	1	27	POWER SUPPLY CABLE (NO PLUG-1.5x3Cx14.7M-H07RNF)	1
1-7	HOSE JUNCTION	1	29	HANDLE HALF-LEFT	1
1-8	CV CLAMP (Ø32xØ35x50)	2	30	MOLDED GASKET (Ø2.5 x 58cm)	1
1-8	CV CLAMP (Ø37xØ40x60)	2			

WIRING


PRCD
AC ~
WHITE
BLACK
ELECTRONICS UNIT
U V W
WIRE LEAD (RED & BLACK)
SWITCH
W (WHITE)
U (RED)
V (BLACK)
CABLE
WHITE
RED
BLACK
WHITE
RED
BLACK
MOTOR