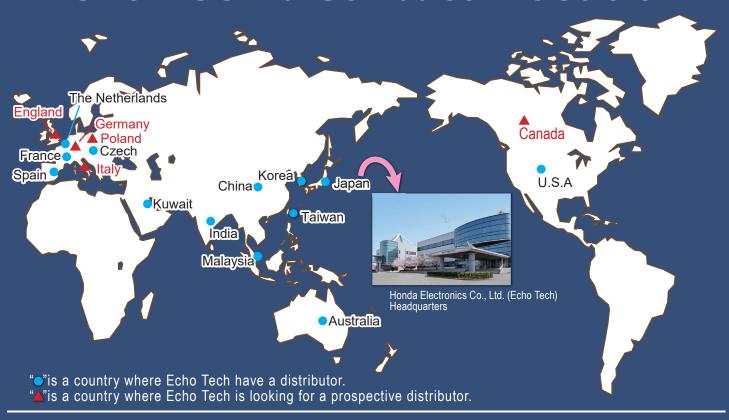
Echo Tech distributor location



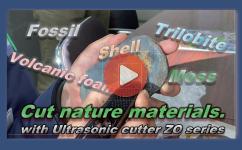
Echo Tech social media accounts



(1)

worldinfo@us-dolphin.co.jp

Ф







► / Echotech oversea channel



Twitter

@Echotechstaff



echotechco.ltd

Facebook

Instagram



Echotech Co.,Ltd.





Tik Tok

Echotech Co..Ltd.

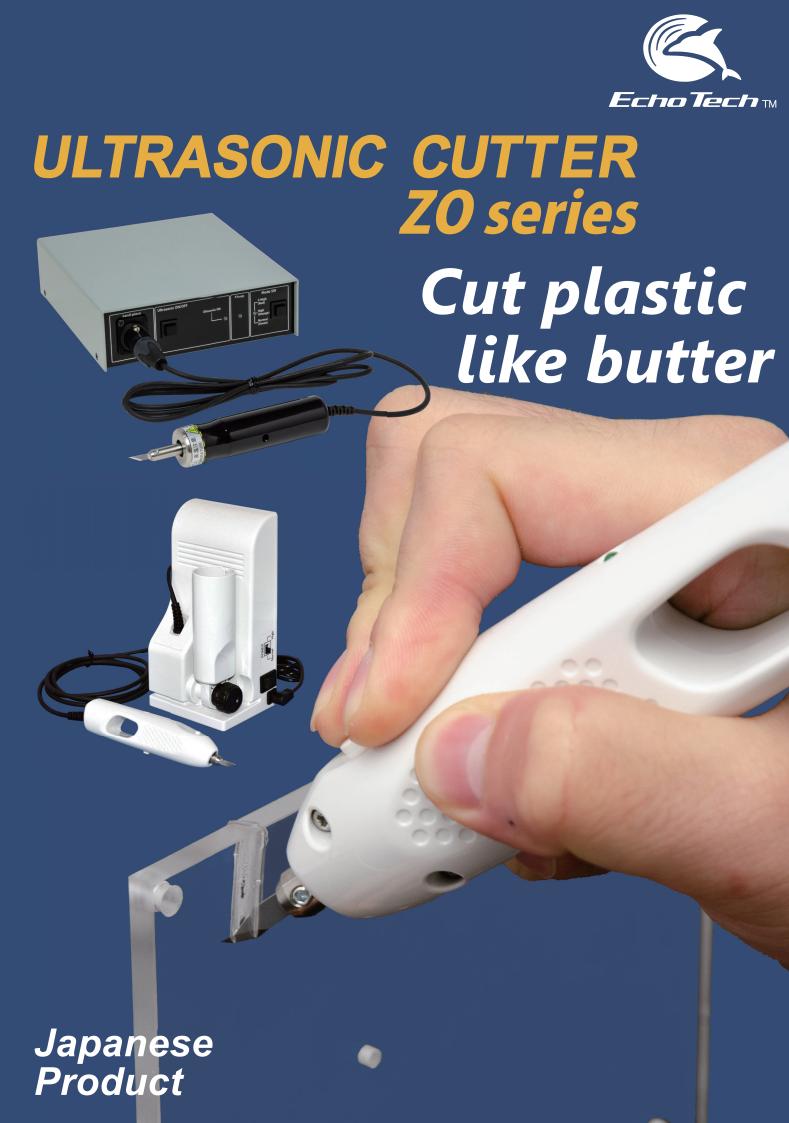
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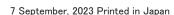


() HONDA ELECTRONICS CO., LTD.

20 Oyamazuka, Oiwa-cho, Toyohashi, Aichi 441-3193 Registered company for ISO9001 and ISO14001







Ultrasonie Gutter 20 series

ULTRASONIC CUTTER BLADE'S HIGH SPEED AND FINE VIBRATION (40 KHZ/40,000 TIMES PER SECOND) DRASTICALLY IMPROVE CUTTING PER-FORMANCE. IT ABLE TO CUT, WELD, POLISH VARIOUS MATERIALS. SINCE 2016, WHICH IS A YEAR THAT WE RELEASED OVERSEAS MODEL, THE MARKET IS EXPANDING AROUND THE WORLD.

Ultrasonic Cutter **ZO-95**



Ultrasonic Cutter Z0-91

-PUSH HAND PIECE SWITCH JUST ONCE AND BLADE WILL START VIBRATION. (NO NEED TO HOLD A HAND PIECE SWITCH. LED LIGHT ON HAND PIECE WILL LIGHT UP WHEN THE UNIT IS OPERATING)

-POWER MODE COULD CONTROL WITH OUTPUT CONVERSION SWITCH.



Example of applicable materials

- Plastic
- ■3D printing
- Carbon
- Cardboard

- Resin
- Leather
- Cloth
- Plaster
- etc.

Specifications

Oscillation frequency	40 kHz
Max. power consumption	MAX. 110 VA
AC adapter	INPUT: 100-240 VAC 50/60 Hz
	OUTPUT: 12 VDC *1
External dimensions	Main unit: 185×169×55
(Unit: mm)	Hand piece: φ28×150
	(include blade)
Power mode	S-High/High/Normal *2
Operating condition	Temperature: 10 to 35℃
	(without condensation)
Weight	Main unit: Approx. 1.2kg
	Hand piece: Approx. 350 g
	(include hand piece cable)
Hand piece cable	1.6 m (straight cable)

Accessories

Protection circuit Temperature sensor has installed inside the hand piece. Detection circuit will activate when the blade anchor screw has loosened or when the unit has overloaded. ZO-95 will be automatically turn OFF when it has used without attaching foot switch (ZH801).

- ·BDC-200P: 40 pcs./case
 - (include unusable blades with hole)
- ·Blade anchor ZH04: 1 pc.
- ·Blade anchor screw HB03: 3 pcs.
- ·Hexagon wrench RR02: 1 pc.
- ·Torque screwdriver 60 cN·m ZH25T2: 1 pc.
- •Foot switch for ultrasonic cutter ZO-95 ZH801: 1 pc.
- ·Blade protector ZH805: 1 pc.

Specifications

Oscillation frequency Max. power consumption

AC adapter

External dimensions (Unit: mm)

Power mode Operating condition

Weight

Protection circuit

40 kHz MAX. 85 VA

INPUT: 100-240 VAC 50/60 Hz OUTPUT: 12 VDC *1 Main unit: 173×89×76

Hand piece: φ32×144 (include blade) High/Normal Temperature: 5 to 35℃

(without condensation) Main unit: Approx. 300 g Hand piece: Approx. 70 g

(include hand piece cable) Temperature sensor has installed inside the hand piece. Detection circuit will activate when the blade anchor screw has

loosened or when the unit has overloaded.

CE

Hand piece cable

Accessories

This product has CE certificate declared by our manufacturer, HONDA Electronics Co., Ltd.

1.6 m (straight cable)

BDC-200P: 40 pcs./case

· Blade anchor ZH04: 1 pc.

(include unusable blades with hole)

· Blade anchor screw HB03: 3 pcs.

· Hexagon wrench RR02: 1 pc.

· Blade protector ZH805: 1 pc

- *1 Since this product has intended selling to CE standard region, the power supply cord has complied to CE standard. In case of using product at any foreign country or region, please prepare and use the power cord which complies to your country or your region's law and safety standard.
- *2 Do not use S-High mode for long time or regularly. It might shorten a life of unit. * Specifications and appearance are subject to change without notice.

Replacement blades

Scan this QR code to get more product information.







Zirconia ceramic blade Zirconia ceramic blade is an insulator, useful for disassembling electronic components.

ZH48



Curving blade (4 mm)

Curving blade

ZH19 2mm Curving blade (2 mm)

ZH20 3mm **Curving blade** (3 mm)

Flat blade alike to graver. There are 2 types of different width blade ZHO5A 1mm Flat blade (1 mm) ZHO6A 2mm Flat blade (2 mm)

Non-blade flat plate. Specialized for processing clay and surface of material.



The blade which has requested to make for welding film sheet. It welds sheets by friction heat of vibration. ZHO7 1mm Flat plate (1 mm)

ZH11

Saw blade

Jagged blade like a saw.

Specialized for carbon processing.



Round shaped blade alike to knife. Specialized for cardboard and cloth processing



Thin blade could be bent easier, but it



ZH16 Thin long blade (5 pcs.)

ZHO8 2mm

Flat plate (2 mm)

Cone shaped blade. Useful for marking work.

> **ZH12** Square pyramid blade

Requested blade to cut gourd. It's also useful for cutting silicone.



ZH01A Sharp edge blade 16°

Useful for making triangular mold by cutting edge of the blade



ZH44 Double-edged triangular blade

Requested blade for cloth processing.



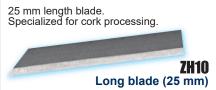
ZH52 Flat round blade

ZH28

Special blade which has been ordered from museum.



Useful for grooving work. **ZH41** Square blade



Grinding stone was made for polishing mold. Even if colored stone part wears, it could keep use black part. Let's clean metal products with grinding stone!

Electrodeposited plates could use for filing, not for cutting. ZH34, ZH35. ZH36 are special products that take 2 months for producing.

Filing plate #325



ZH23 4mm







Electrodeposited square

Electrodeposited round tip filing blade **ZH47**

Round shape filing blade



Only applicable to "Normal power mode" ZO-91 and ZO-95.

ZH24 Grinding stone #800 4mm Color: Blue

ZH26 Grinding stone #120 Color: Green

ZH27 Grinding stone #180 Color: Gold

> Grinding stone #300 Color: Brown

ZH30 Grinding stone #600 Color: Gray **ZH31 Grinding stone #1000** Color: White **ZH32 Grinding stone #1200**

Color: Red

Color: Orange

Grinding stone #400

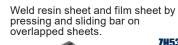
ZH51 Grinding stone #80

Maintenance Option

Get Maintenance set & Optional products to maintain and expand your unit's utility.

Blade anchor for ZO series





ZH14SG Thin blade and goggle set

Thin blade ZH14 (5 pcs.) x 1

Blade anchor ZH15 x 1

Goggle ZH13 x 1

Blade anchor screw HB03 x 1









Blade anchor ZH15 x 1 Blade anchor screw HB03 x 1 Hexagon wrench RR02 x 1

ZH15S

Blade anchor

for thin blade set



ZH16SG Thin long blade and goggle set

Thin long blade ZH16 (5 pcs.) x 1

Blade anchor screw HB03 x 1



ZH04S

7.00

Blade anchor set

Blade anchor ZH04 x 1

Blade anchor screw HB03 x

Hexagon wrench RR02 x 1

Thin blade ZH14 (5 pcs.) x 1 Blade anchor screw HB03 x Blade anchor ZH15 x 1

Torque screwdriver

ZH25T2



Blade anchor ZH15 x 1

eyes from



ZH15

Blade anchor

for Thin blade

Only for ZH14 and ZH16







Replacement Blade Adaption List

ZH13

%"○" is a mark that the blade could use with Normal or High mode, but not S-High mode. "N" is a mark that the blade could use with Normal, but not High mode and S-High mode

						J iligili
			ZO-91	ZO-95		
	HA04	Standard blade	0	0		ZH27
	HA07	Cemented carbide blade	0	0		ZH28
	ZH48	Zirconia ceramic blade	0	0		ZH29
	ZH03	Curving blade (4 mm)	0	0	Grinding	ZH30
	ZH18	Curving blade (1 mm)	0	0	stone	ZH31
	ZH19	Curving blade (2 mm)	0	0		ZH32
	ZH20	Curving blade (3 mm)	0	0		ZH51
	ZH05A	Flat blade 1 mm	0	0		ZH55 ∼ 6
	ZH06A	Flat blade 2 mm	0	0		ZH54
	ZH52	Flat round blade	0	0	Blade anchor	ZH04
	ZH07	Flat plate 1 mm	0	0		HB03
	ZH08	Flat plate 2 mm	0	0		RR02
Blade	ZH44	Double-edged triangular pyramid	0	0		ZH25T2
	ZH45	Circular tip φ0.4 blade	Ν	N	Maintenance	SB01
	ZH11	Saw blade ZH11	0	0	goods	SB02
	ZH12	Square pyramid blade	0	0		ZH04S
	HA09	Long blade for USW series	×	×		
	ZH10	Long blade 25 mm	0	0		
	ZH38	Welding blade 2 mm	0	0		ZH14S
	ZH09	Round tip blade(R 15)	0	0		
	ZH49	Electrodeposited curving filing blade 1 mm	0	0		
	ZH42	Round tip blade	0	0		ZH14S0
	ZH47	Electrodeposited round tip filing blade	0	0	Set of	2111100
	ZH41	Square blade	0	0	blade anchor	
	ZH14	Thin blade 0.15 mm	N	N	and set	ZH15S
	ZH16	Thin long blade	N	N	products	
	ZH23	Filing plate #325 4 mm	○*1	0		ZH16S
	ZH34	Filing plate #325 1 mm	0	0		
	ZH35	Filing plate #325 2 mm	0	0		
	ZH36	Filing plate #325 3 mm	⊝*1	0		
	ZH39	Electrodeposited square pyramid filing plate	0	0		ZH16S0
	ZH01A	Sharp edge blade 16°(Revision)	N	N		
Grinding	ZH24	Grinding stone #800	N	N	*1 The vib	ration m
stone	ZH26	Grinding stone #120	N	N	× i ille vib	iation III

				ZO-91	ZO-9
Grinding stone	ZH27	Grinding stone #18	30	N	N
	ZH28	Grinding stone #30	00	N	Ν
	ZH29	Grinding stone #400		N	Ν
	ZH30	Grinding stone #600		N	Ν
	ZH31	Grinding stone #1000		N	N
	ZH32	Grinding stone #1200		N	Ν
	ZH51	Grinding stone #80		N	Ν
	ZH55 ∼ 63	Grinding stone bar		N	×
Blade anchor	ZH54	Welding bar		0	0
	ZH04	Blade anchor for ZO series			0
	HB03	Blade anchor screv	W	0	0
	RR02	Hexagon wrench		0	0
	ZH25T2	Torque screwdriver 60 cN • m			0
Maintenance	SB01	Abrasive paper x 3 Cleaning bar x 1		0	0
goods	SB02	Abrasive paper x 10		0	0
	ZH04S	Blade anchor set	Blade anchor ZH04 x 1 Blade anchor screw HB03 x 1 Hexagon wrench RR02 x 1	0	0
	ZH14S	Thin blade set	Thin blade ZH14 (5 pcs.) x 1 Blade anchor screw HB03 x 1 Blade anchor ZH15 x 1	N	N
Set of blade	ZH14SG	Thin blade and Goggle set	Thin blade ZH14 (5 pcs.) x 1 Blade anchor screw HB03 x 1 Blade anchor ZH15 x 1 Goggle ZH13 x 1	N	N
anchor and set products	ZH15S	Blade anchor for thin blade set	Blade anchor ZH15 x 1 Blade anchor screw HB03 x 1 Hexagon wrench RR02 x 1	N	Ν
	ZH16S	Thin long blade set	Thin long blade ZH16 (5 pcs.) x 1 Blade anchor screw HB03 x 1 Blade anchor ZH15 x 1	N	N
	ZH16SG	Thin long blade and Goggle set	Thin long blade ZH16 (5 pcs.) x 1 Blade anchor screw HB03 x 1 Blade anchor ZH15 x 1 Goggle ZH13 x 1	N	N

Ultrasonic cutter ZO work with 4 ways of

Depending on the working material, its thickness, or way of processing, there might be differences in unit performance.

Cut

ZO series cuts plastic like butter, and also its range of applicable material is wide. Blade's high-speed, fine vibration cuts even small burrs smoothly and cleanly.





series supports your processing.

Polish

"Grinding stone" and "Filing plate" edge is sanded for polishing metal. It polishes rust gently, reducing damaging on material.





Design

By engraving, melting, making hole or mark on surface of working materials, it able to make object to your original design.





Weld

By pressing and sliding welding blade (or bar) on overlapped vinyl sheet, friction heat melts and weld sheet. Welding bar could also do spot welding on overlapped plastics.







Set abrasive paper to Clean or replace listed

parts. • Blade

- Blade anchor
- · Blade anchor screw Inside the horn
- (Unreplaceable)



X

Replace a blade anchor. If you often replace a blade, the work becomes easier if you get Torque screwdriver set (ZH25T2).

Blade anchor is a consumable product. Please replace when it becomes contaminated or it has broken.



Insert cleaning bar inside the horn and rotate it.



Insert swab inside the horn and clean contamination.

Maintenance set SB01

Cleaning bar and abrasive paper set. If contamination inside horn

has leaved, it might become cause of unit trouble.



Maintenance set SB02

Abrasive paper in Maintenance set could clean inside the horn without damaging. (10 pcs. set)

Progress of Echo Tech

1956



Ultrasonic equipment manufacturer

1999



Sales company of **Honda Electronics** 2001



USW-333 (Discontinued model)

Released Ultrasonic cutter for hobby



2020 **Released ZO-95**



2016 Released ZO-91





Released Mokebu



Attending to international exhibitions!

Japan Expo Paris (France)



Spielwarenmesse (Germany)



Modellbaumesse (Austria)



JIMTOF (Japan)



2023 Wonder Festival (Thailand)



SMC (The Netherlands)







Straight line

BEST ruler is elaborately designed to draw line and for measuring. Hook (A) on BEST ruler stops pen at the zero point and it able to draw a line with accurate length. Because BEST ruler is transparent, it able to draw line with both right and left-hand by reversing ruler.



Point 🕢 Caliper

Because the point (D) corner is right angle, it able to measure a length by hooking corner to material's edge. It could also measure rounded

for more details of setting logo or signature.



Triangle ruler

It able to draw a corner with 30, 45, 90 degrees (B) by following guides on ruler. First, write mark on either degree's point and draw a line without moving ruler. It able to draw a corner with designated angle by drawing line between zero point and mark.



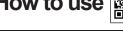
By overlapping point (A)on drawn diagram, it able to measure diagram corner's angle. It also able to draw a corner with various degrees (©).



Point 6 **Compass**

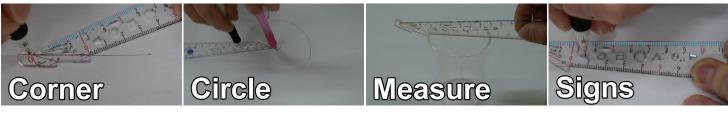
Use two pens to draw a circle. Hook a pen to point (A) and set the other pen in either centimeter's hole. It could draw a circle by turning ruler and drawing, taking point (A) as a





Promotion Promotion video





BEST ruler is a stationery that has function of protractor, compass, triangle and caliper. It is designed by Mr. Nakamura, a chairman of UHOLABO Co., Ltd. BEST ruler is now being started used at workplaces as a support tool of designing and studies.



Contact form: https://echotech.co.jp/en/contact/



Markets of Ultrasonic Cutter 20 series

Hobby

Plastic model, figurine, diorama, RC, etc. For various hobby stuffs, ZO series is useful for fine processing. Not only for cutting parts from runner, it could also able to remodel parts to creator's original design by cutting body. ZO series raises your level of modeling.



Zimmerit coa-

ting on tank model's body.

Cutting car modeľs body.



Art

For creators who use various materials, ZO series is very supportive because of its wide range of application. To express original ideal design, or working on materials which is uneven surface. ZO series raises the working quality and shortens your working time.



Cutting medium lensity fiberboard.

Cutting eggshell.







Manufacturing

ZO series for hobby is low power compared with tools for industrial use, but it could cut lessening damage on materials because it doesn't give large impact. ZO series could also polish metal parts by replacing to grinding stone. To maintain metalic parts, it has popularly used at various workplaces.

Deburring

3D printer resin.



Burned tabletan.

After putting out fire, to specify the origin of fire, ZO series is used for cutting brittle burned materials in Japan. Because those materials might become important evidence at court, there is a demand of tool's performance that gives hardly impact to materials.

Fire station

Cut tabletan



3D printing

ZO series could easily cut support materials and burrs. Compared with other tools, ZO series reduces resistance from working material because of its sharpness. It could shorten user's repeating, fine works on hard materials. ZO series is one of the few tools that able to process on 3D printing.



Cutting 3D printer resin.



Fossil

ZO series could clean a surface of fossil. There are over 50 types of replacement blades including grinding stone, specialized for "polishing". Stone, moss, bone, etc. such natural materials, or which has uneven surface, ZO series flexibly corresponds and able to process easier.



Shaving Fossil

