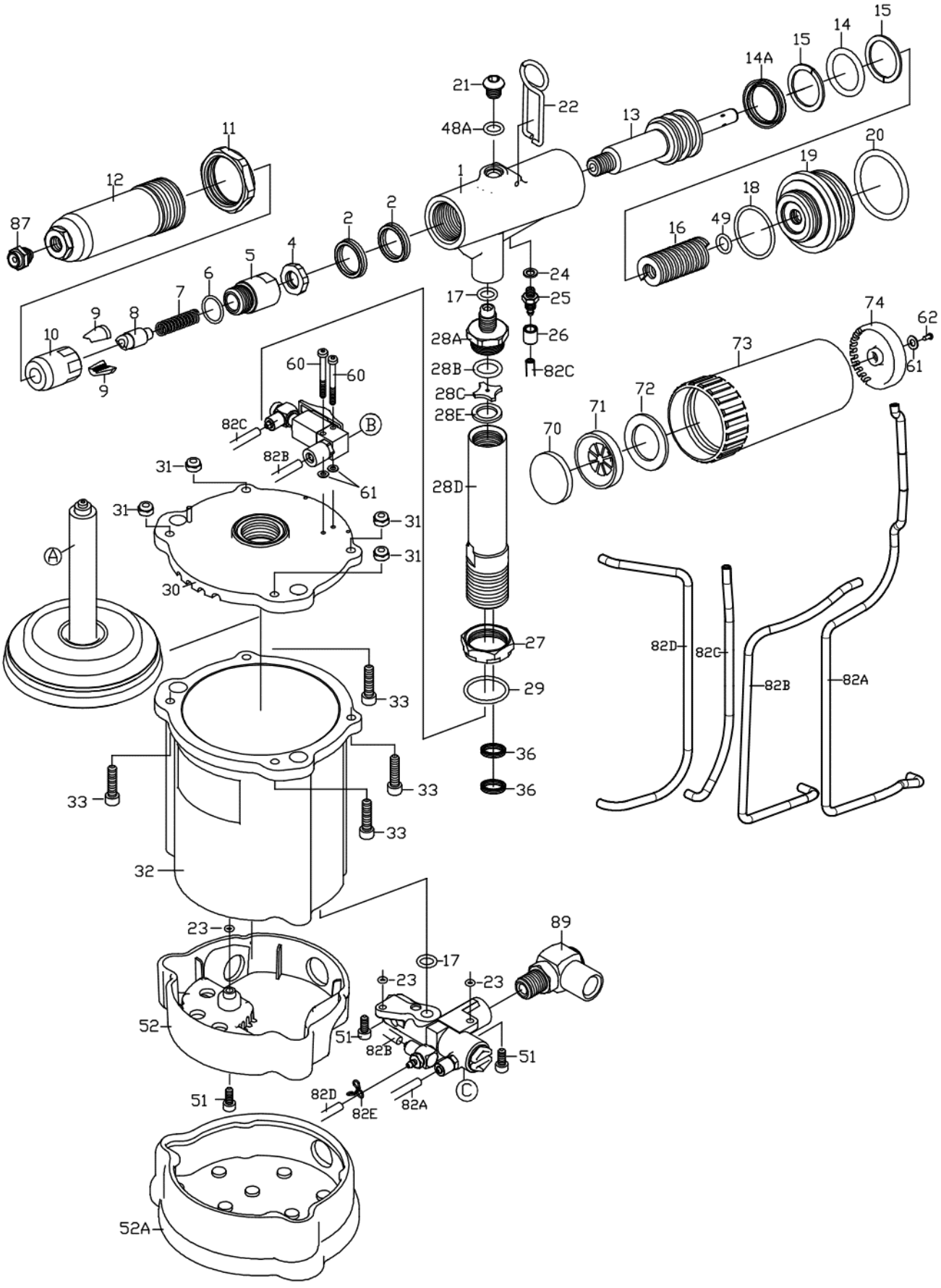
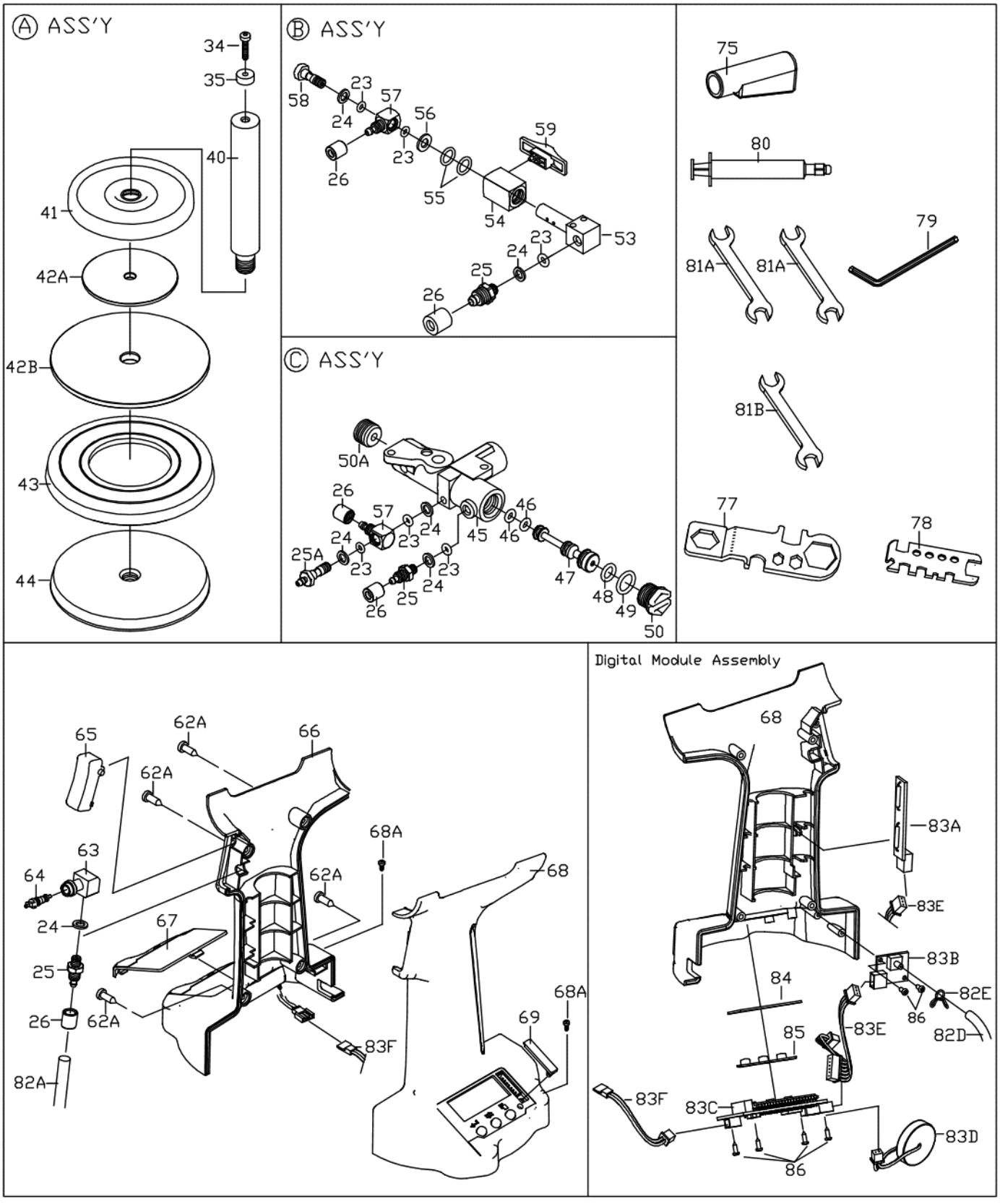
ZT2021D 1/4" (6.4MM) Air Hydraulic Riveter W/DIGITAL MODULE

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66
62A
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63
64
62A
68
24
67
25
26
62A
68A
69
82A
83F
Digital Module Assembly
68
83A
83E
83B
84
82E
86
85
83E
82D
83F
83C
83D
86

ZT2021D 1/4" (6.4MM) Air Hydraulic Riveter W/DIGITAL MODULE

TECHNICAL DATA

Traction Power	lbf(kgf)	:	4400(2000)
Stroke Length	mm	:	21
Net Weight	lbs(kgs)	:	5.6(2.5)
Nosepieces Equipped	inch(mm)	:	3/16(4.8)1/4(6.4),Monobolt 3/16(4.8)1/4(6.4)
Max. Capacity		:	Max. 1/4"(6.4mm) structural rivets in all materials

PARTS LIST

Index	Part #	Description	Index	Part #	Description
1.	202101R	Hydraulic Section	51.	HC00407010	Set Screw (3)
*2.	MS1217	Oil Seal (2)	52.	202402	Base
4.	202306	Nut	52A.	202404	Rubber Boot
5.	202325	Jaw Housing Coupler	53.	922701	Vacuum Valve
6.	OR1417	O-RING	54.	922702	Sleeve
7.	819308	Spring	55.	OR0811	O-RING (2)
8.	214302	Jaw Pusher	56.	PW0510	Washer
*9.	819303	Jaw (2)	57.	612712	Swivel (2)
10.	819324	Jaw Hosing	58.	612713	Socket
11.	819106	Lock Nut	59.	922703	Vacuum Switch
12.	819105	Head	60.	HC00305020	Set Screw (2)
13.	202301	Hydraulic Plunger	61.	PW0306	Washer (3)
*14.	OR2835	O-RING	62.	ST0310	Screw
*14A.	MS2835	Oil Seal	62A.	HC00305006	Set Screw (4)
*15.	BR2835	Back-Up Ring (2)	63.	107602	Valve Body
16.	202309	Return Spring	64.	107601	Bleeding Valve
17.	OR0812	O-RING (2)	65.	107201R	Trigger
18.	OR3034	O-RING	66	202107RVE	Plastic Grip-Right
19.	202102	Rear Gland	67.	202107C	Battery Cap
20.	OR3542	O-RING	68.	202107LVE	Plastic Grip-Left
21.	HR00812508	Set Screw	68A.	HR002504506	Set Screw (2)
22.	258801	Hanger	69.	202E09	Dust Cover
23.	OR0306	O-RING (9)	70.	919904	Silencer
24.	612714	Washer (7)	71.	919903	Muffler Seat
25.	612717	Socket (4)	72.	919905	Silencer
25A	612713A	Socket	73.	919901	Mandrel Collector
26.	612711	Cap (6)	74.	919906	Muffler Cap
27.	520106	Nut	75.	612901	Deflector
28A.	5201082	Hydraulic Tube Connector-B	77.	612904	Multi-Wrench (A)
28B	OR1417	O-RING	78.	918905	Multi-Wrench (B)
28C	8211012	Hydraulic Tube Washer	79.	314755	5mm Hex. Wrench
28D	2021081	Hydraulic Tube Connector-A	80.	922901	Oiler
28E	5201083	Washer	81A.	144905	17x19 Wrench (2)
29.	OR2025	O-RING	81B.	144906	19X21 Wrench
30.	202401RA	Upper Cover	82A	202704A	2.5x4 PU Hose(Black)
31.	NN005080	Nut (4)	82B	202704B	2.5x4 PU Hose(Orange)
32.	202403RZ	Air Cylinder Body	82C	202704C	2.5x4 PU Hose(Orange)
33.	HC00508020	Set Screw (4)	82D	202704D	2.5x4 PU Hose(Black)
34.	TC00508010S	Set Screw	82E	258804	4mmHose Loop (2)
35.	258504	Magnet	83A	202E01	Counter Sensor
*36.	MS1621	Oil Seal (2)	83B	202E02	Pressure Sensor
40.	202501	Plunger Rod	83C	202E03	Digital Display
41.	202505	Bumper Ring	83D	202E04	Lithium Battery
42A.	202504	Front Head Disc A	83E	202E05	Signal Terminal
42B	202503	Front Head Disc B	83F	202E06B	Power Cable - Display Terminal
43.	920505	Packing Ring	84	202E07	Display
44.	202502	Lower Plate	85	202E08	Button
45.	919211	Valve Case	86.	ST0206	Screw (6)
*46.	OR0408AS	O-RING (2)	87.	612706	Nose Piece 3/16" (4.8mm)
47.	919202A	Valve Stem		612708	Nose Piece 1/4" (6.4mm)
*48.	OR0711	O-RING		612746	Monobolt Nosepiece 3/16"(4.8mm)
*48A.	OR0711A	O-RING		612748	Monobolt Nosepiece 1/4"(6.4mm)
*49.	OR1014	O-RING (2)	89.	92L2	Air Inlet Assembly
50.	107409	Inlet Plug	90	2021SK	Service Kit (opt.) (No.02.09.14.14A.15.36.46. 48.48A.49)
50A	922409	Socket Screw			

Maintenance Schedule

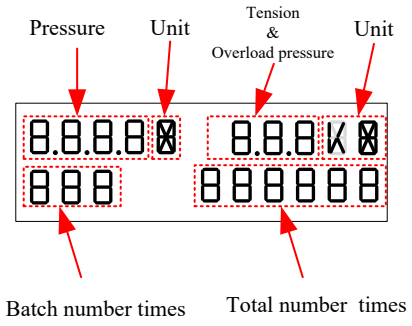
Frequency	Action
Daily after work or every **5,000 cycles**	Lubricate tool through **air inlet**. Clean inside of **Head**
Jaws will not grip rivet stem or **Every 20,000 cycles**	Replace new Jaws
When oil leakage occurs or every **50,000 cycles**	Replace **O-Ring**s and **Back-Up-Ring**s in **Hydraulic Section** and **Hydraulic Tube**.
every **100,000 cycles**	Replace **Packing Ring** in **Air Cylinder**

Troubleshooting

Symptom	Diagnosis	Remedy
Rivet cannot be set by a single pull	1. Low working air pressure 2. Tool requires re-priming 3. Worn **Jaws** or dirt in **Jaws** 4. Broken **Jaws**	1. Check air pressure at the tool. 2. Priming the tool correctly according to the instruction 3. Replace the **Jaws**
The tool can't do suction	The **Suction Switch** didn't open	Turn on the **Suction Switch**.
Jaws will not grip rivet mandrel	1. Worn **Jaws** or build up of dirt on **Jaws** 2. **Jaw Housing** loose 3. Weakened **Jaw Pusher Spring**	1. Clean before replace new **Jaws** 2. Tighten **Jaw Housing**, **Jaw Housing Coupler** and **Nut** 3. Replace new **Jaw Pusher Spring**
Broken **rivet mandrel** can't be released by **Jaws**	1. Dirty **Jaws** and **Jaw Housing** **2.** Weakened **Jaw Pusher Spring** 3. Hydraulic oil over primed.	1. Clean and re-lubricate **2.** Replace **Jaw Pusher Spring** 3. Remove **Plug Screw** and **O-Ring**, let it spill till stop by itself
Broken **rivet mandrel** jammed inside the **Head**	1. Damaged **Jaws** 2. Damaged or dirty **Jaw Pusher**	1. Replace **Jaws** 2. Replace or clean **Jaw Pusher**
The suction force is not strong enough to suck broken mandrel	1. Low air pressure **2.** Air leakage inside **Suction Switch**	1. Check and regulate proper air pressure 2. Check if exhaust air is stuck at rear end of **Collector** 3. Check and replace **O-Ring**s
Digital monitor no display or show "Low"	Low battery power.	Replace new battery
Digital monitor show "Er1".	Inlet pressure is higher than 7.5kg/cm^2.	Adjust the inlet pressure to the pressure below 7.5kg/cm^2.
Digital monitor show "Er2".	1. Oil leaking causes insufficient hydraulic oil 2. Improper assembly of the tool	1. Check the cause of leakage and replace seals if necessary 2. Re-prime hydraulic oil.

Digital Module Operation

1. Digital monitor



2. Button explanation

There are three button on the plastic grip-left.

⧉：**Module button**. The button is used to choose unit or 0~9 number.

⇆：**Shift button**. The button is used to select the mode.

↵：**Enter button**. The button is used to confirm setting.

3. Turn on & turn off the monitor

Turn on：Push⧉ button or the tool is working.

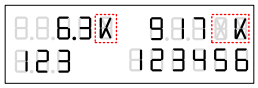
Turn off：No actuating the tool within 30 seconds, the monitor will be shut down automatically

4. Unit Selection

a. Push↵ button 3 seconds. Enter mould function, the monitor begins to flash.

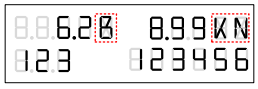
b. Push ⇆ button. Pressure and **pulling force** display begins to flash.

c. Push ⇆ button. Enter **Unit** choose mode, Air Pressure and **pulling force** unit display begins to flash.



d. Push ⧉ button. Change unit.

Push ⧉button again. Change unit.



Push ⧉ button again. Change unit.

e. Push ↵ button. Finish **Unit** setting. The monitor stop flashing.

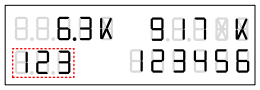
Table 1 below is **Unit** selection of **Air Pressure** and **Pulling Force**.

Table 1. Unit displays

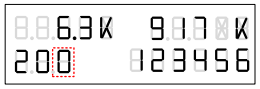
	Air Pressure unit	display	Pulling Force unit	display
ISO	Kg/Cm^2	K	KgF	K
ISO	MPa	M	NF	N
Newton	Bar	B	NF	N
ISS	Psi	P	LbF	B

5. **Setting batch number**
   a. Push ↵ **button** 3 seconds. Enter module function, the monitor begins to flash.

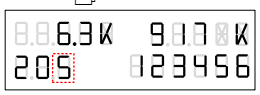
   b. Push ⇆ **button.** The batch number display begins to flash.



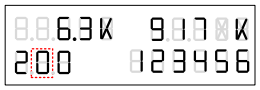
   c. Push ↵ button. Enter batch number times function. The first number display begins to flash.



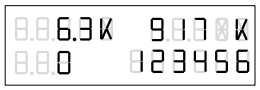
   d. Push 🗍 button. Change number 0~9.



   e. Push ⇆ button. Change numbers'.

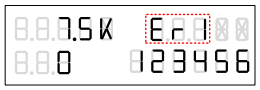


   f. Push ↵ button. Finish batch number setting. The monitor is stop flashing. Batch number display will show "0".

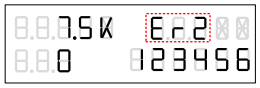


   g. Push ↵ button twice, the batch number display will show "0"

6. **Error massage**：
   a. If working air pressure is over 7.5 kg/ cm^2(107psi), the monitor will display "Er1".



   b. Insufficient hydraulic oil inside Hydraulic Section, the monitor will display "Er2".



   c. If battery is low power, the monitor will display "Low".