EVERET

EE-3828

EVERFT

ALL FOR AUTO

ITEM NO:EE-3828 USER MANUAL



KEEP THE MANUAL NEAR THE MACHINE ALL TIME AND MAKE SURE ALL USERS HAVE READ THIS.

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The manufacturer keeps the rights to improve the contents in this manual.



Warning

• This manual is a necessary part of the product. Please read carefully.

• Keep the manual for later use when maintaining the machine.

• This machine can only be used for the designated purposes. Never use it for any other purpose.

• The manufacturer is not responsible for the damage incurred by improper use or use other than the intended purpose.

Precaution

• The equipment can only be operated by qualified personnel with special training. Modification to any components or parts, or use the machine for other purpose without either obtaining the agreement from the producer, or observing the requirement of the instructions may lead to direct or indirect damage to the equipment.

★ The equipment should be installed on the stable ground, not wooden pallet, otherwise not accurate.

• Keep the back panel 0.6M away from the wall for good ventilation. Enough room should be left on both sides for convenient operation.

• Do not put the equipment a place with high temperature or moisture, or near the heating system, water tap, air-humidifier or chimney.

- Avoid lots of dust, ammonia, alcohol, thinner or spraying binder.
- People who are no operating the machines should be kept away when it is used.

• Use appropriate equipment and tools, protective and safety equipment, including eyeglasses, earplugs and working boots.

- Pay special attention to the marks on the machine.
- Do not touch or approach the moving parts by hand during operating.
- Do not remove the safety device or keep it from working properly.

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1. General

1.1. Technical data:

- Max wheel weight: 65kg
- Power: 0.2kw;
- Power supply: 220v;230v;240v;110v;50hz;60hz
- Balancing accuracy: ±1g
- 9 balancing modes: DYN, ALU1, ALU2, ALU3, ALU3, ALU5, ALUS1, ALUS2, ST
- Balancing speed: 200r/min
- Cycle time: 8s
- Rim diameter: 10 "~24 " (256mm~610mm)
- Sound pressure level during work cycle: <70db

1.2. Features:

- Distance and diameter value input automatically
- Laser helped 9 o'clock position indication under ALU-S mode
- Statistic and dynamic balancing, ALU-programs for alloy rims or special shaped
- Self diagnoses, easy to find the problem
- Apply to steel and aluminum alloy rim

1.3. Working environment:

- Temperature: 5~50°C
- Height: ≤4000m

2. Machine assembly

2.1. Unpack

Unpack the carton, check if missing any spare parts.

No.	Item	Qty
1	Width gauge	1
	Conic No.1	1
2	Conic No.2	1
2	Conic No.3	1
	Conic No.4	1
3	Quick release nut	1
4	Thread hub	1
5	Bowl for quick nut	1
6	Pad for bowl	1
7	Balancing hammer	1
8	100g weight	1
9	Allen wrench	1



2.2. Install

• The equipment should be installed on the stable ground, not wooden pallet, otherwise not accurate.

• Keep the back panel 0.6M away from the wall for good ventilation. Enough room should be left on both sides for convenient operation.



2.3. Fix balancer to floor with screws on the bottom.

2.4. Install adaptor

The wheel balancer is supplied complete with cone type adaptor for fastening wheel with central bore. (see below picture)



2.5. Install wheel

Clean wheel, take off counterweights, check pressure of wheel. Choose the way of installation according to the type of wheel.



Main shaft-wheel-

Cro for

Main shaft-suitable cone(big head towards inside) —wheel—quick handle nut

suitable cone(small head towards inside)—quick handle nut —wheel—quick handle nut Attention: May add a wheel, and hold the wheel to help install the thread hub. When installing or taking off wheel, do not let wheel move on the shaft, to avoid scratching shaft.

No.	Item	Standard/Optio nal
А	Switch	s
В	Cover with tool tray	s
С	Gauge head	s
D	Main shaft	s
Е	Pedal breaker	S
F	Safe guard	S
G	Screen	S
Н	Key board	S
J	Width Gauge	S
К	LASER	S

3. Controls and components



Screen (G)



- 1. Inside amount of unbalance
- 2. Outside amount of unbalance
- 3. Balancing mode
- 4. Operating unit
- 5. Inside unbalance position indicator
- 6. Outside unbalance position indicator
- 7. Illustrated unbalance position
- 8. Function buttons to choose
- 9. Automatic lock

Eight balancing modes

inside	Icon	outside	Balancin g mode	Operation	Add weights
12 o'clock	DYN	12 o'clock	Default	1.Turn on machine 2.Input a,b,d value 3.Start spin, after spin stop	Clip on weights on both sides of rim edge
9 o'clock		9 o'clock	ALU1	 Turn on machine Input a,b,d value Press ALU button, indicator lit up Start spin, after spin stop 	Add adhesive weights on the rim shoulder both sides
12 o'clock	ALU-2	9 o'clock	ALU2	 Turn on machine Input a,b,d value Press ALU button, indicator lit up 	Clip on weight on inside rim edge, add adhesive weight on outside rim shoulder

				4. Start spin, after spin stop	
9 o'clock	ALU-3	12 o'clock	ALU3	 Turn on machine Input a,b,d value Press ALU button, indicator lit up Start spin, after spin stop 	Add adhesive weights on the rim shoulder both sides
12 o'clock	ALU-4	12 o'clock	ALU4	 Turn on machine Input a,b,d value Press ALU button, indicator lit up Start spin, after spin stop 	Clip on weight on inside rim edge, add adhesive weight on outside rim shoulder
9 o'clock	ALU-5	12 o'clock	ALU5	 Turn on machine Input a,b,d value Press ALU button, indicator lit up Start spin, after spin stop 	Add adhesive weight on inside rim shoulder, clip on weight on outside rim edge
12 o'clock	STA	12 o'clock	Static mode	 Turn on machine Input a,b,d value Press F button Start spin, after spin stop 	Add adhesive weight
9 o'clock	ALU-S	9 o'clock	ALUS-1	 Turn on machine Input al,aE,d value Start spin, after spin stop 	Add adhesive weights on the two positions gauge head touch
12 o'clock	ALU-S	9 o'clock	ALUS-2	 Turn on machine Input aI,aE,d value Start spin, after spin stop 	Add adhesive weights on the two positions gauge head touch

Key board

Icon	Function	Icon	Function

	Input rim data		Selection of "ALU" modes
	Data add key	6	Stop/Cancel/ brake
- 3	Data reduction key		Start
(+) 4	Unbalance display pitch and threshold	ç ç	Setting

Key combination function

Icon	Function	Icon	Function
	Inch / mm conversion	o fter the second seco	Weight self calibration

Special functions (e.g. assembly)

Icon	Function	Icon	Function
6	Automatic brake switch / can be used to load and unload tires		Looking for imbalances

4. Indication and use of wheel balancer

4.1. DYN (Standard/Default) mode

4.1.1. Clean wheel, take off counterweights, check pressure of wheel. Choose the way of installation according to the type of wheel.



Main shaft-wheel-

suitable cone(small head towards inside)-quick handle nut



Main shaft-suitable cone(big head towards inside) —wheel—quick handle nut

Attention: May add a wheel, and hold the wheel to help install the thread hub. When installing or taking off wheel, do not let wheel move on the shaft, to avoid scratching shaft.

4.1.2. Turn on machine

4.1.3. Input a b d value

Turn on machine, choose right way to install wheel according to the type of wheel. Set "a" "b" "d" values:

• Set "a" value: move the gauge to measuring position as illustrated as Fig.1, hold the gauge still in





4.1.4. Put down the guard to perform a measuring spin.

4.1.5.In a few seconds the wheel is brought to operating speed and begin measuring unbalance, the unbalance values

remain on instruments 1 and 2 when the wheel stopped. (Press may check the real unbalance value under threshold.)

4.1.6. The left LED lit up full, clip weight on 12 o'clock position (Fig.3)

4.1.7.Press for the unbalance position on outside, when the wheel stopped, the right LED lit up full, clip weight on 12 o'clock position (Fig.4)



4.1.8. After finishing clipping the counterweights, put down the guard to perform balancing spin again, if comes out 00 00, means balancing succeed. (Fig.5)



Fig. 5

4.2. ALU-1 mode (ALU-1, ALU2, ALU 3, ALU 4, ALU5, same operation, only the position to add weights different)

4.2.1. Set "a" "d" "b" values

- 4.2.2. Press until ALU1 indicator lit up

4.2.3. Put down the guard to perform a measuring spin.

4.2.4. In a few seconds the wheel is brought to operating speed and begin measuring unbalance, the unbalance values

remain on instruments 1 and 2 when the wheel stopped. (Press may check the real unbalance value under threshold.)

4.2.5. The left LED will lit up full and the laser will indicate the correct angular position where to mount the counterweights, 9 o'clock position outside, as Fig.6, add the counterweight.



Fig. 6

4.2.6. Press do find the unbalance position on outside, when the wheel stopped, the displays with right LED's lit up full and the laser will indicate the correct angular position where to mount the counterweights, 9 o'clock position inside, as Fig.7, add the counterweight.



Fig. 7

4.2.7. After finishing mounting the counterweights, put down the guard to perform balancing spin again, if comes out 00 00, means balancing succeed. (Fig.8)



Fig. 8

4.3. ALU-S mode

This mode is used for special rim, if ALU1/ALU2 can not be used, you should choose ALUS mode.

Input aI, aE, d value

• Set "al": pull gauge out let the gauge head touch the position for 4 seconds(as figure below), may press and



• Set "aE": pull gauge out let the gauge head touch the position for 4 seconds(as figure below), may press



• Set "dl": read from rim, usually no need to operate, when input al, dI will input automatically,or may press



• Set "dE": read from rim, usually no need to operate, when input aE, dE will input automatically, may press



Touch pisition for inout al



Touch pisition for inout aE





Put down the guard to perform a measuring spin.

4.3.1. 9o'clock position to add weight

Laser indication operation

When the wheel stopped, the left LED lit up full, add weight on 90'clock position follow the laser indication (Fig.10)



Fig. 10

Press or to find the unbalance position on outside, when the wheel stopped, the right LED lit up full, add weight on 9 o'clock position follow the laser indication (Fig.11)



Fig. 11

After finishing mounting the counterweights, put down the guard to perform balancing spin again, if comes out 00, means balancing succeed. (Fig.12)



Fig. 12

4.4. ALUS split function

Note: Only ALU-S mode can use this function. And Operator must be experienced.







5. Machine Setting and Self-calibration



5.1Self diagnosis





Order	Function	Function normal		
1	Position pick up board	POS changes in 0-127		
2	Pressure sensor	Use hand to press main shaft, 4X-4X 6X-6X changes		
3	Pressure sensor	Use hand to press main shaft, 4X-4X 6X-6X changes		
4	Width potentiometer	left window data is 327-340, turn ruler to another direction, data changes		
5	Diameter potentiometer	left window data is 327-340, turn ruler to another direction, data changes		
6	Distance potentiometer	Left window data is 327-340, when pull gauge out, the data changes		
7	Laser Indicator	There is a digital angle change. See if the indication is turning?		
PS:When enter self diagnosis,Press twice to access the manual and video functions,then will come 5.1.2 as follows				

5.1.2 User manual and video functions



5.2 Machine setting press keys to enter. select Select Press keys to enter. enter



Order	Display	Function	Function normal
1	gr 🖉 oz 🎄	Unit of weight	for modification, for the next item
2	5 _æ 10 _æ 15 _æ	Unbalance display threshold	for modification, for the next item
3	ی چر کی گر	Rim type	for modification, for the next item

5.2.1. Motorcycle adaptor install

 \star Use the motorcycle adapter for wheel balancer we provide \star



order	Display	Function	Display wheel type after turn on balancer
1	**** **	Car wheel	
2	7 6 4.	Motorcycle wheel	7 8 8

★ "Display wheel type after turn on balancer" means after turn on machine, it comes signal to tell you it is a car mode or motorcycle mode.

5.3 Rim distance gauge calibration



5.4 Radar Calibration of width gauge (No tyres need to be installed)



5.4.1 Width compensation for Radar

Tire installation required note (known tire width)



18



5.5.Calibration of diameter gauge(Install a tire)

5.6 Calibration of laser





5.7. Self-calibration of weight

5.7.1 Self-calibration of wheel balancer

5.7.2 Turn on balancer, install a medium size wheel (14"-18")which can use clip-on weight, set "a b d" value, then

Do the self-calibration whenever you think the balancer is not accurate. The 100g weight must be accurate.







6. Errors

Various abnormal conditions can arise during machined operation by the microprocessor, if comes the errors, must stop operation, find the reason and the solution according, if the error persists, consult the supplier.

No.	Errors	Reasons	Solution
1	RR:	 No spin Shaft spin 	 If no spin, check or change power board If spin, check or change position pick up board and computer board Adjust position pick up board support
2		 No wheel or wheel not locked tightly Position pick up board problem 	1.Lock tightly 2.Check or change position pick up board
3	RR.	 No enough pressure in wheel Wheel distortion 	 Add proper pressure in wheel Check wheel
4	Contraction of the second seco	 Position pick up board problem Computer board problem 	1.Check or change position pick up board 2.Check or change computer board

5		 Micro switch problem Computer board problem 	1.Check or change Micro switch 2.Check or change computer board
6	Sector Contractions of the sector of the sec	 Power board problem Computer board problem 	1.Check or change power board 2.Check or change computer board
7	Program lost	 Program lost Computer board problem 	 Self calibration Check or change computer board
8	RR: Ant total undarge prover 2. Ant total undarge prover anti-	 No add 100g weight during self calibration Computer board problem Power board problem 	 Add 100g weight Check or change computer board Check or change power board
9		emergency stop	return
10		Data protection	 Contact vendor unlock Update data

7. OPT function

Note: When unbalance value is too much, choose OPT, and operator must be experienced.

Install wheel, input a b d value



6	Press and Rotate wheel until two indicators lit up (one on both sides, the dark spot in the right side picture), mark the position D with chalk on rim	reference>	
7	Press with the help of tire changer, change the rim and rubber to make C and D match	reference>	
8	Put down safe guard and press	comes>	If unbalance is less than before, OPT succeed

8.Spare parts list and exploded drawings

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PART NO.	2064814	2064939	2064962	2064941	2064944	3005142	6000341	6000127	6000309	2064942	2065534	6000417	6000148	6000294	6000233	2010701	6000289	6000134	2037401	6000143	6000230	6000207	4003001	6000171	2034501	6000138	6000120	2034301	4000801	4001901	4002201	2065781	6000271	2043601	20001JE
DESCRIPTION	Body	Foot lever	Brake pedal	Brake ring	Brake lever	Brake pads	Hex nut GB41 /M4	Hex nut GB41 /M8	Hex nut GB41 /M6	Connecting	Connecting rod	Bolt GB2673 M6X12	Hex nut GB889 /M8	Bolt GB70 /M6X25	Hex nut GB41 /M6	Tension spring	Bolt GBT70 M10X60	Flat washer GB95/Ф10	Flat washer GB95 /Ф38x10x3	Hex nut GB889 M10	Bolt GB80 M6X12	Bolt GB70/M6X35	Motor MY6324	Belt 380J5	Fixed seat	Flat washer¢6	Bolt GB70/M6X30	Holder	Power Switch	Plug	Cable glands	Power box	Bolt GB818 M5X16	Small side plate	11
I TEM NO	1	2	3	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	30



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	PART NO.	6000201	6000134	6000176	4001701	6000197	2052501	2037401	6000184	2032901	6000267	2042801	3005013	6000336	6000159	2067389	2034001	5000401
	DESCRIPTION	Screw M10X160	Flat washerGB95/Ф10	Horizontal screw M10X160	Pressure sensor	Spring washer GB93/Φ10	Spring washer GB93Ф30x10x3	Spring washer GB93 Ф 38x10x3	Screw GB5783 M10X25	Complete axle	Bolt GB818/M4X10	Tower spring	Plastic lid	Hex nut GB41 M10	Copper backing	Retaining ring	Support	Position pick-up board
	ITEM NO	-	2	е	4	5	9	7	8	6	10	11	12	13	14	15	16	17

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PART NO. Q'TY	2064812 1	2064398 1	2067562 1	2046301 1	5001388 1	2067563 1	2067439 1	4004471 1	2066172 1	2065780 1	2067437 1	6000375 1	6000124 1	6000160 2	6000230 2	6000114 1	6000271 2	2034401 1 4	18 9 9
DESCRIPTION PART NO. Q'TY	Shaft 2064812 1	Plastic sleeve 2064398 1	Distance sensor board 2067562 1	Aluminum ruler 2046301 1	Footage number 5001388 1	Distance pick-up board 2067563 1	Distance pick-up board 2067439 1	Potentiometer RV24/202 4004471 1	Ruler head 2066172 1	Return support 2065780 1	Distance sensor board 2067437 1	Bolt M3X12 6000375 1	Hex nut GB41 M3 6000124 1	Bolt GB845 ST4. 2X16 6000160 2	Bolt GB80 M6X12 6000230 2	Bolt GB70 M6X20 6000114 1	Bolt GB 818 M5*16 6000271 2	Tension spring 2034401 1 $\frac{4}{2}$	Provide a state of the state of

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	DESCRIPTION	Power box	Support	Support	Hex nut GB41 M3	Hex nut GB41 M4	Bolt GB819 M3X15	Electric power board	Driving module	BoltGB818 M4X12	BoltGB818 M3X5	Bolt GB70 M6X16	Hex nut GB41 M6	Computer bard	VGA display card	Display card power supply	Support	
	ITEM NO		2	3	4	5	9	7	8	6	10	11	12	13	14	15	16	



). Q'TY	1	1	-	4	5	2	1	4	
	PART NC	2066527	2066520	5001445	6000134	6000138	6000114	6000184	6000267	
	DESCRIPTION	Display bracket	Display mounting plate	Display	flat washer Φ10	flat washer Φ6	Bolt M6X20	Bolt M10X25	Bolt M4X8	
(C)	ITEM NO	1	2	3	4	5	6	7	8	
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DESCRIPTION	Radar housing	Radar ranging m	Radar control	shell	3olt GBT818	Radar cont	

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The signal line	Bolt GB80 M4X8	Hex nut GB41 M4	Bolt GB818 M4X10	Control Zero	Cross Laser Head	Laser Fixed Bracket	(28BYJ-48) motor	Laser Control Board	Protective shell	DESCRIPTION	
4004482	6000267	6000341	6000267	3005393	5001433	3005392	5001432	5001431	3005391	PART NO.	
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