

Screwdriver with Hammer Head Model (with Shock-less Stand)

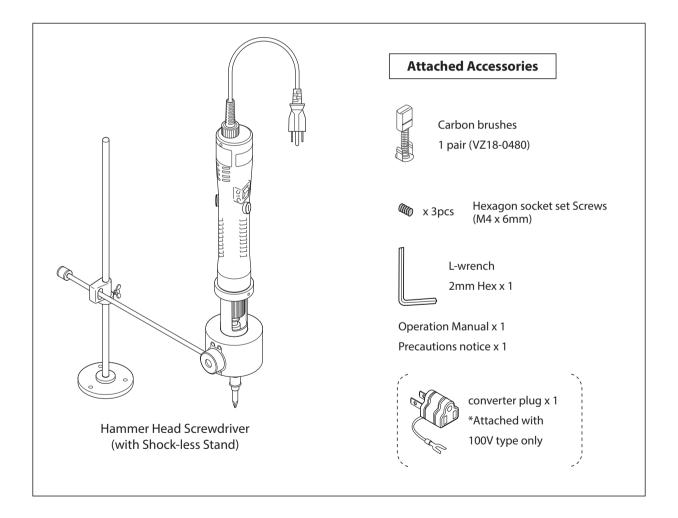
## VZH-1820 / VZH-1820PS VZH-3012 / VZH-3012PS

### **Operation Manual**

2021.03 ET-A073 21A

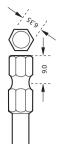
Thank you for purchasing HIOS VZH series screwdriver. Please read this operation manual thoroughly before use to ensure proper operation. Store this manual in a safe place for future reference.

Please confirm following accessories attached with this product before using.



#### <Pre><Precautions>

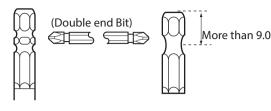
- Do not connect this tool to the power outlet when attach or remove the bit.
   During the tool is not in use, please slide FOR/REV switch to **OFF(Neutral position)** to avoid unintentional starting.
- 2. Hold the shock-less stand with bolt firmly on the work benches.
- Please prepare the bit which type is according as following standard.
   NOTE: Do not attach improper type of bit avoid screwdriver to be broken down.



#### **Proper Bit type**

- 6.35mm hexagon shape
- The length from the end of bit to center of the ditch is 9mm

#### **Improper Bit type**



(Bit with double ditches)

- Avoid any location that is wet, moist or oily.
   Never use the screwdriver in the place where there is a lot of dust, debris, oil or corrosive gas.
   Otherwise an electric shock or damage might be caused in the place with high humidity in particular.
- 5. Please use the screwdriver carefully due to avoid drop off.
- 6. Before changing rotation way from Forward to Reverse, please make motor to be stopped by sliding FOR/REV switch to OFF (Neutral position).
- 7. Please note the following about carbon brushes.
  - (1) The range of use is up to the position of the groove on the brush surface. (A) When it wears to the specified position, replace it with a new one.
  - (2) When replacing the carbon brush, replace the two places with new ones at the same time.  $(\mathbf{\Theta})$
  - When replacing, set the brush surface in the direction that matches the internally rotating commuter surface.
  - Be careful not to overtighten the carbon brush cap.
  - (3) In order to prevent the insulation from being deteriorated due to the wear powder of the carbon brush, be sure to send the screwdriver for maintenance and inspection 1 million times or after 1 year of use.
  - (4) Please use genuine HIOS products.

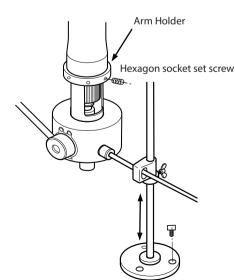
Do not use carbon brushes of different dimensions or made by other companies. It may cause a malfunction. Please note that we are not responsible for any accidents or malfunctions caused by using parts other than those specified.

#### <Usage Procedure>

- 1. The way of driver grip can be adjustable after take off 3pcs of hexagon socket set screws from the arm holder.
  - After adjusting of the grip position or the way of slide arm, please fix it again with hexagon socket set screws.
- 2. Please hold the stand base at 3points by bolts.
  - Make sure it to be hold firmly to withstand large shock.
- 3. Set up the height of the slide arm.

Put the prop through the shock-less holder and tighten the wing bolt at the demanding height of the slide arm to hold.

\*NOTE: Each set screws are sometimes loosen due to tightening shock. Please check them periodically.



4. Insert the bit to the screwdriver.

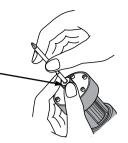
Push down the joint shaft collar at the end of the driver upwards and insert the bit.

Check the bit not to come loose after that.

\*NOTE:

Please make sure whether the bit size# is proper for the screws to avoid damaging the screw recess.

Insert a bit during pushing down the joint shaft coller.



#### 5. Torque Adjustment

Adjust the torque adjusting nut(T/A nut) to the appropriate Level by following to "the Approx. Guidance of Output Torque" on this book.

The scale on the guidance is assuming same scale on the torque adjusting nut of the screwdriver.

\*NOTE:

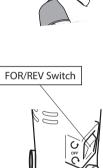
Please make sure the exact output torque value by using Torque meter\* due to the value on the guidance is

just for your reference.

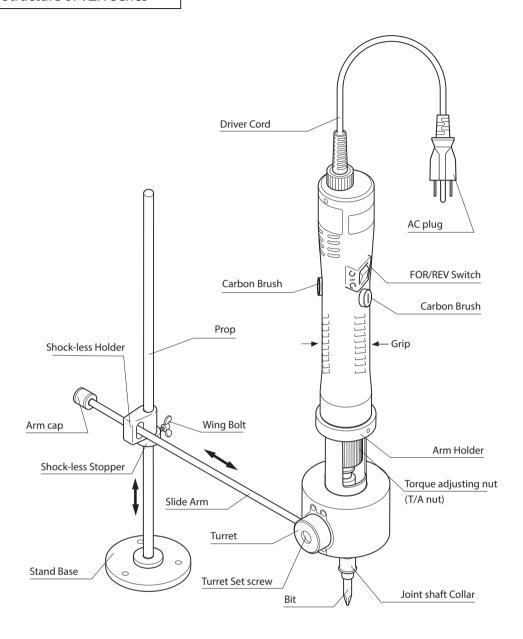
- 6. Connect AC plug to the power outlet.
- 7. Please confirm the rotation way as slide the FOR/REV switch to "FOR" or "REV" side. As for the driver with PUSH to start will be worked when the screw is pressed by bit inserted on the screwdriver.
- 8. Please tighten the screw for a trial before using indeed.
  Please make sure the exact output torque value by using Torque meter\* and adjust T/A nut until achieve the target torque.
- 9. If in case of loosening the tightened screw, please slide the FOR/REV switch to "REV". The tightened screw can be loosened by the driver with several times impact.

\*We recommend using HIOS Torque Meter for torque checking or setting output torque of a screwdriver.

- Measuring slack torque of tightened screws or torque increase ··· HDP series
- Making torque setting on an electric screwdriver, checking output torque of tools ··· HP series



### Structure of VZH Series



Length of Slide Arm (mm) () is the active range of sliding		530 (475)
Height of Prop (mm)		570
Stand Base (mm)	Height	8
	Internal dia. of hole	6
	Interval length of holes	52 a triangle (L) on a side

### Specification of VZH driver

Model		VZH-1820	VZH-3012
		VZH-1820PS	VZH-3012PS
Power Input / Power consumption (W)		AC 100V±5%	AC 100V±5%
		Approx. 40W	Approx. 40W
		AC 120V±5%	AC 120V±5%
		Approx. 60W	Approx. 60W
Output Torque Range	N·m	3.0 - 7.0	4.0 -10.0
	(kgf·cm)	(30-70)	(40-100)
Unloaded Rotation Speed (r.p.m±10%)		470	270
Screw Size (mm)		5.0 – 6.0	5.0 - 6.0
Dimension(mm) Grip dia. / Total Length		Ф39 / 345mm	
Weight (kg)		1.8 kg	
		(Including "driver cord" and "slide arm")	
Bit Type		1/4 HEX	
AC Cord Length (m)		3m	

# Approx. Guidance of Output Torque

