## HOZ/JN

#### INSTRUCTION MANUAL

# K-83 CHASSIS PUNCH SET

Thank you for purchasing the HOZAN K-83 CHASSIS PUNCH SET. With proper care and handling, this fine instrument will provide years of trouble-free operation. Please read this entire instruction manual carefully before attempting to place this instrument in service. Please keep this instruction manual available for reference.

#### **Specifications**

	Sheet of aluminum : Less than 1.8 mm thick
	Sheet of iron : Less than 0.8 mm thick
Punch size	16·18·21·25·30 mm φ
Accessory	Reamer

A guide hole of  $10 \text{ mm } \phi$  is necessary to begin the work.

#### Warning and caution symbols

These symbols are used throughout the instruction manual to alert the user to potential safety hazards as follows:

**Warning** ... Notice when incorrect handling could cause the user's death or serious injury.

Caution ... Notice when incorrect handling could cause injury to the user or material damage.

Even if the instructions do not have \_\_\_\_\_Caution mark, there are some possibilities for a serious situation. Follow the instructions.

#### **Precautions**

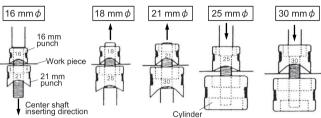
#### **∴**Caution

- 1. Work carefully when using the punch and cylinder to avoid being hurt.
- 2. Always punch complete circles. Punch a circle 5 mm or more apart from the sheet edge. Otherwise, these could damage the punch.
- 3. Dump debris each time.
- 4. Do not tighten the punch excessively after punching is completed. Do not punch hard sheets or thick sheets beyond the rating. This could damage the punch.

#### Operation

- Make a hole of about 3 mm diameter on the center of the point to be punched using a hand drill, and extend it to 10 mm diameter by the reamer provided turning clockwise.
- Select the punch and the cylinder.

The 16, 18 and 21 mm punches do not have exclusive cylinders. Use the back of the 21 mm, e.g., as the cylinder for the 16 mm punch.



- Oil the threads of the center shaft and the inner threads of the cylinder.
- Orient the work piece between the punch and the cylinder, and insert the center shaft into them. The center shaft should be inserted in the direction indicated by arrows in the illustrations above.
- Turn the center shaft clockwise while holding the cylinder so that the tip of the punch contacts the work piece. Check if the punching position is proper, then turn the center shaft clockwise further to complete the work.

### **Daily care**

Lubricate after use with an oiled cloth to prevent rusting.

#### HOZAN TOOL INDUSTRIAL CO.LTD.

1-2-12 Saiwaicho, Naniwa-ku, Osaka 556-0021, Japan https://www.hozan.co.jp/E/ E-mail:th@hozan.co.jp