

10.6.3. Using the spreading tool

NOTICE Risk of component damage.

Stack misalignment due to the incorrect use of the spreading tool can damage the semiconductors.

- ▶ Only use the spreading tool on released stacks.
- ▶ Always support the spreading tool with your hand (arrow in Fig. 10–8).
- ▶ Always insert the spreading tool horizontally into a stack. DO NOT attempt to insert the tool from any other angle.

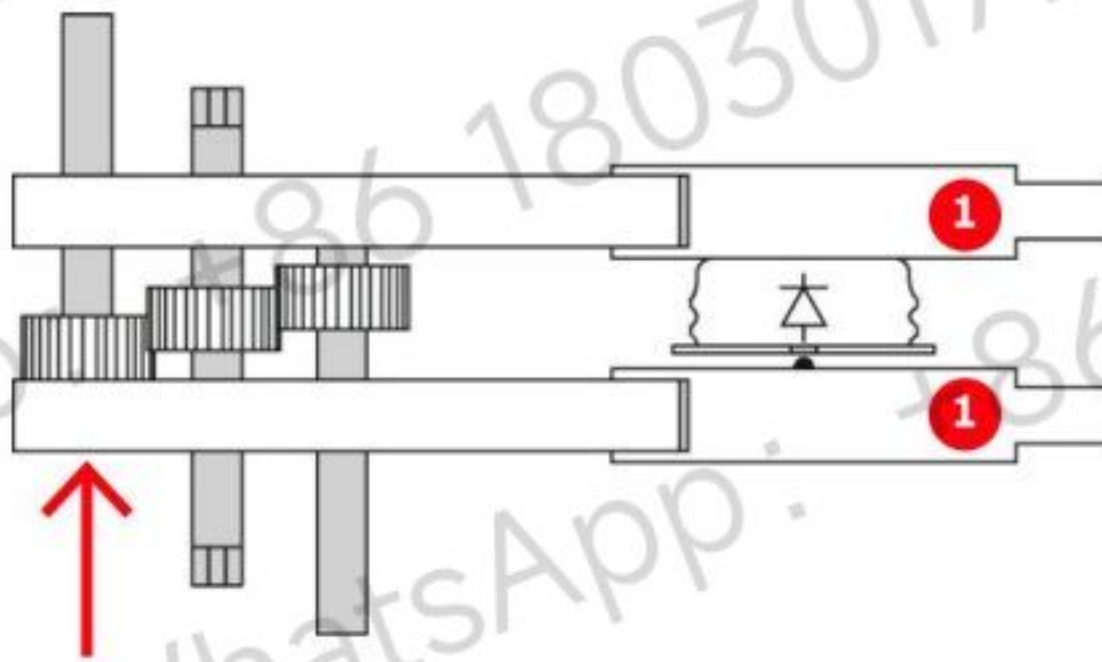


Figure 10–8 Manual support during spreading tool insertion

Procedure:

1. Insert the spreading tool completely into the slots of the coolers (heat sink) above and below the faulty semiconductor as shown in Fig. 10–9.

PRODUCT	DOCUMENT KIND	DOCUMENT ID.	REV.	LANG.	PAGE
PCS6000	Service manual	3BHS600000 E80	F	en	145/272

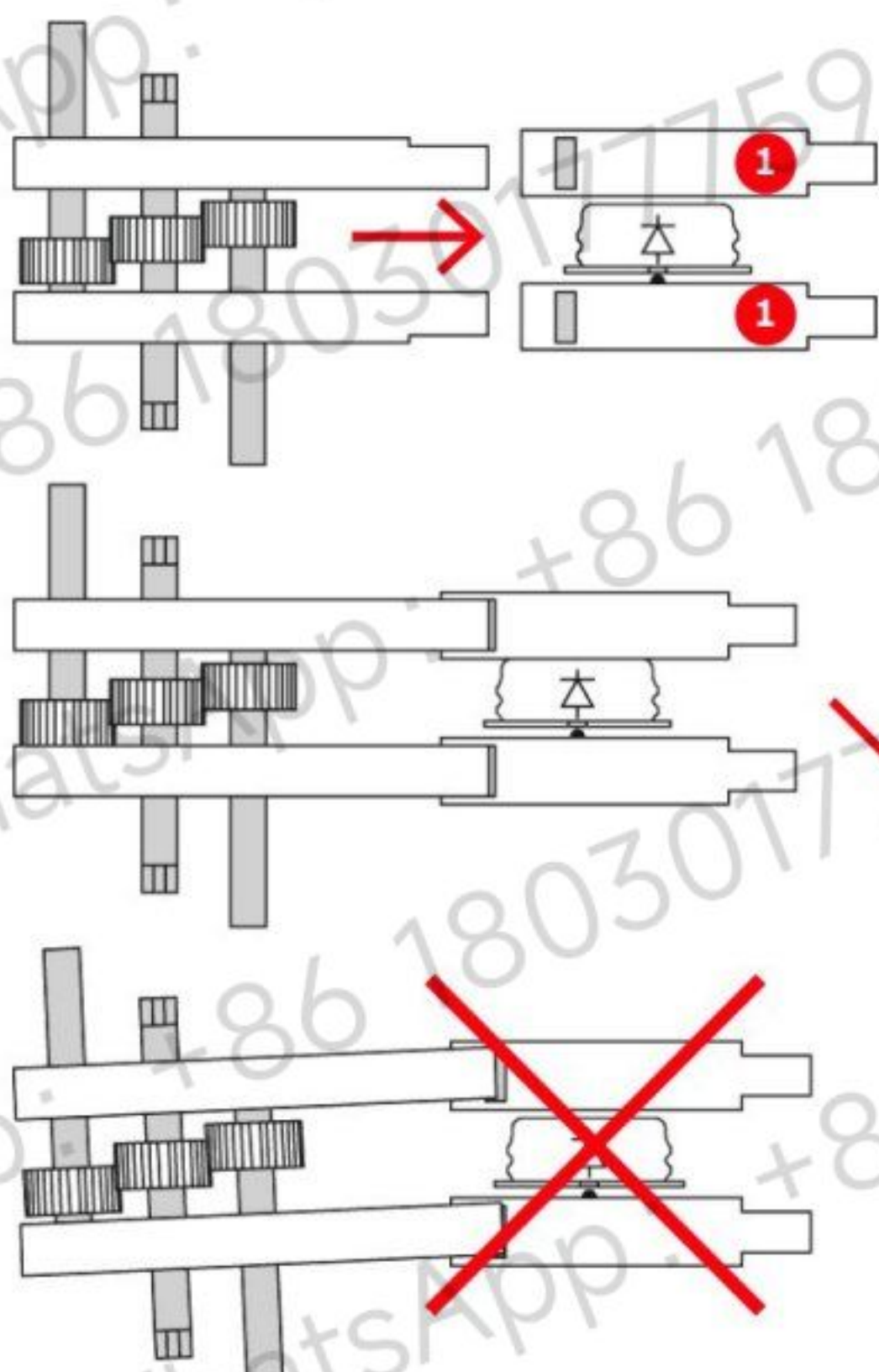


Figure 10-9 Spreading tool insertion

1) Heat sink

2. Expand the spreading tool by turning the middle rod with a 13 mm wrench to lift off the top heat sink so that the semiconductor can be removed (see Fig. 10-10).

NOTICE Excessive lifting might cause damage to the stack! DO NOT separate the two heat sinks more than necessary to remove the semiconductor.

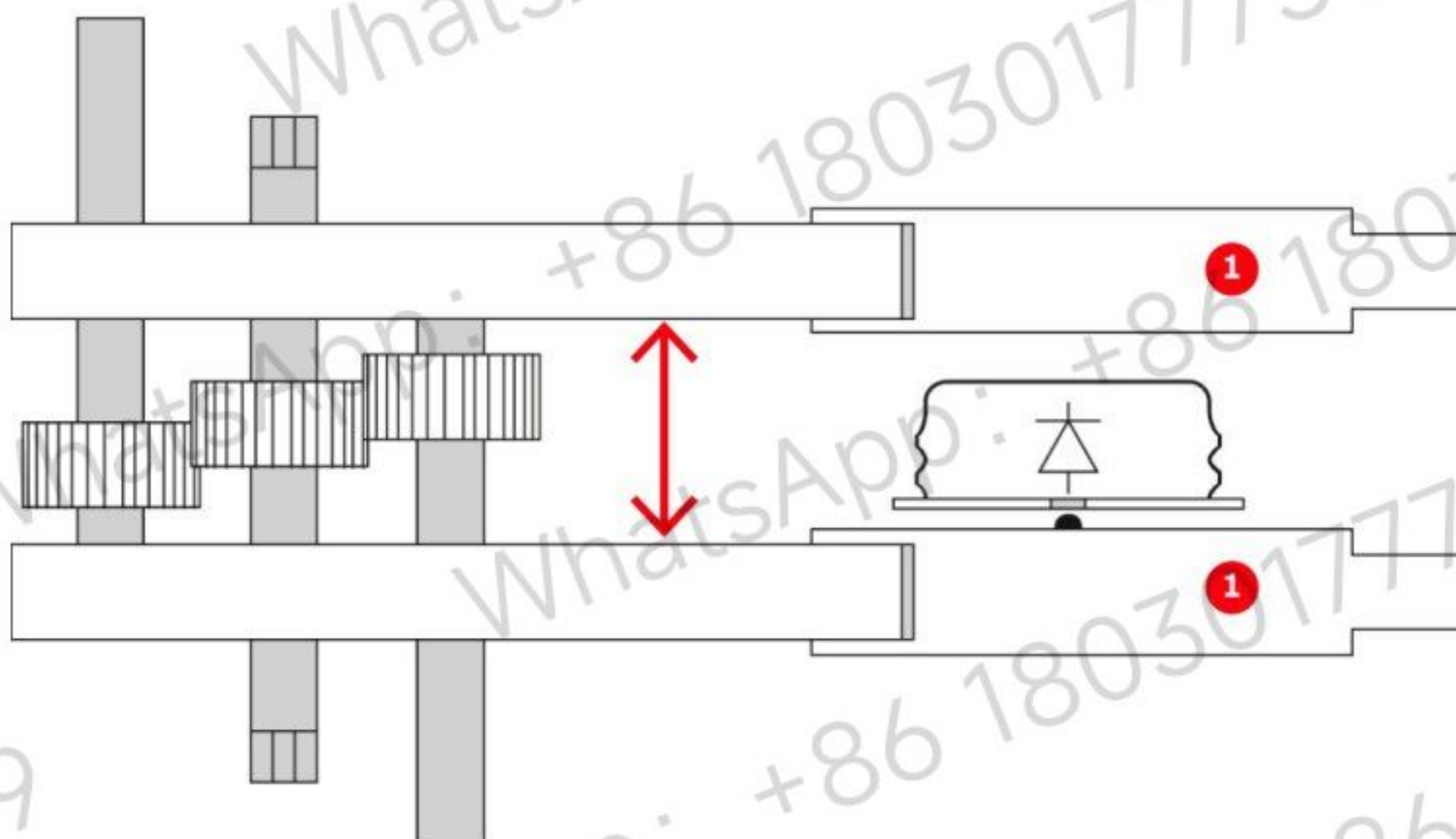


Figure 10-10 Spreading tool expansion

1) Heat sink

- For replacing the neutral point diodes the spreading tool must be applied over three heat sinks (see Fig. 10-11).

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PCS6000	Service manual	3BHS600000 E80	F	en	146/272

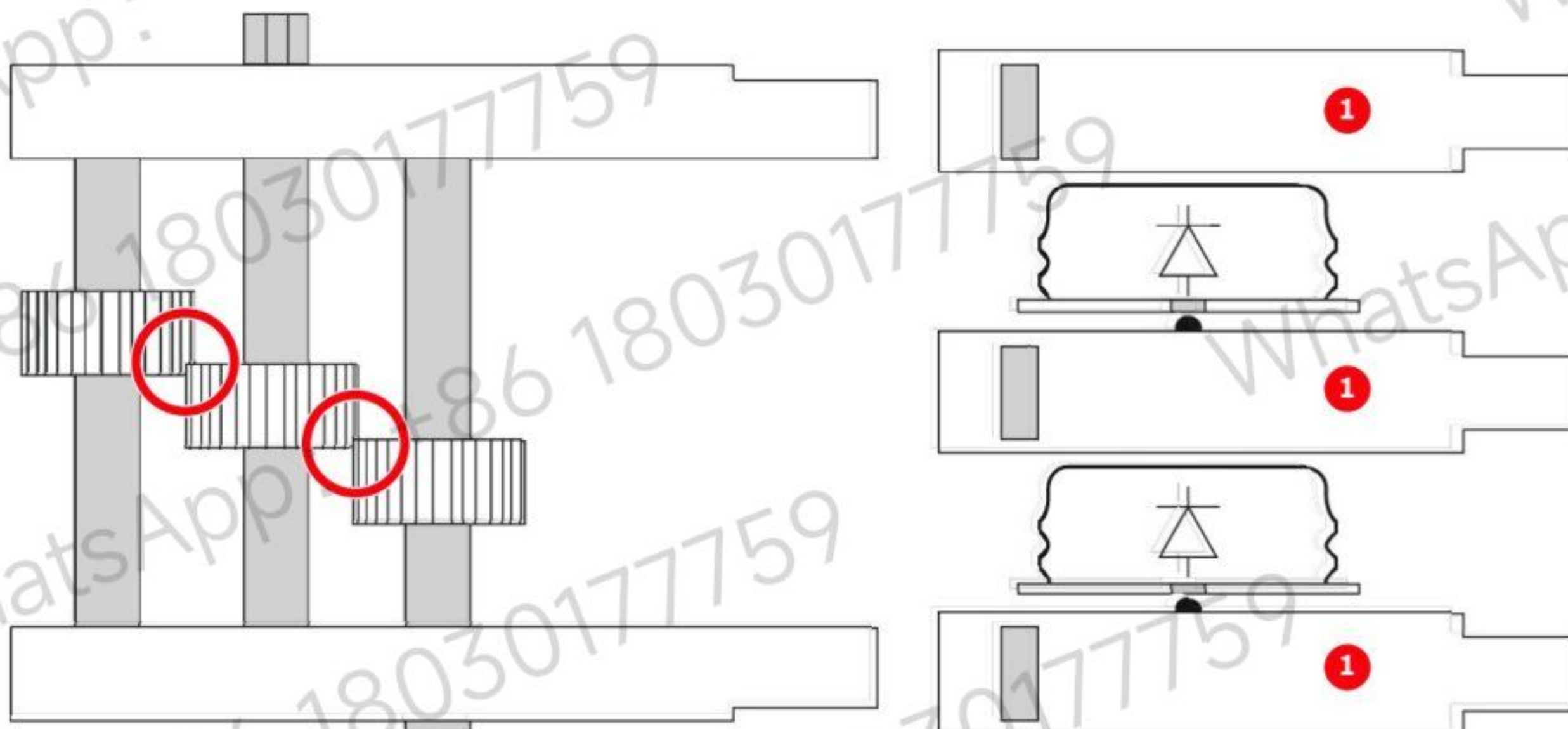


Figure 10-11 Spreading tool applied over three heat sinks

IMPORTANT! The spreading tool must not be spread too far; the gear wheels must grip into each other at least 3 mm.

Fig. 10–12 shows an example of the use of the spreading tool, inserted in the IGCT stack. Turning the wrench clockwise would open the stack.

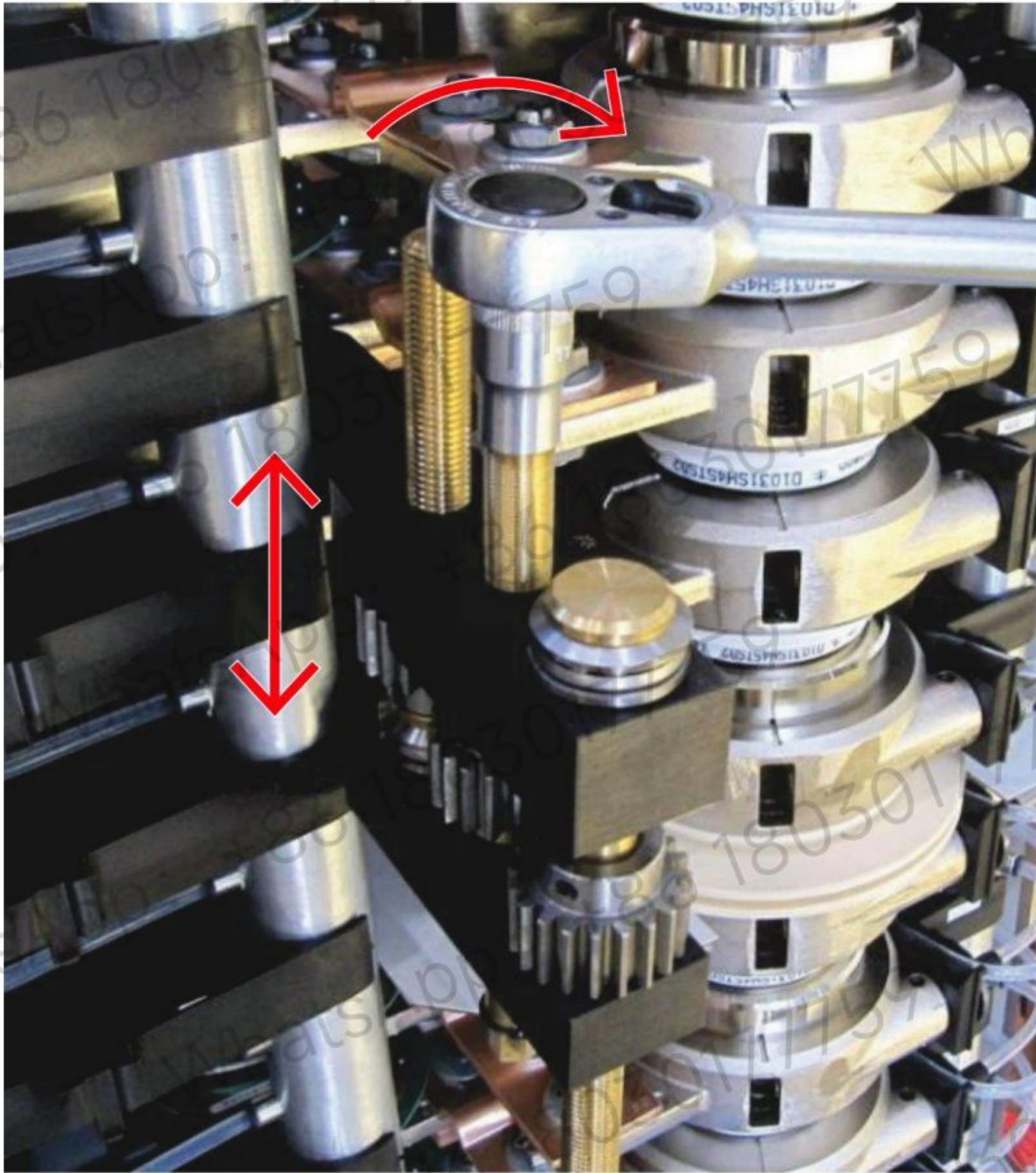


Figure 10–12 Spreading tool use example