



USER MANUAL

# Relief valve cracking tool

The relief valve cracking tool has been designed to release the relief valve from the change adaptor without accidentally moving the check adaptor and causing a leak, requiring removal of product for reparation. that requires product removal to repair.

Although these tools were specifically designed for use on difficult to access underground tanks, usage on above ground tanks is also recommended.

1. Always check the valve and isolation device identities carefully.



2. Place the split collets on the change adaptor.  
As some of the collets have been designed to fit more than one type of change adaptor they may be a looser fit on some adaptors, this might require two attempts as the slack fit takes up some of the travel.



3. Hold in place with a rubber band fitted below the drive pins if necessary. This frees up your hands to place the top part of the tool.



4. Screw the actuating nut back to the end of the thread and spread the arms of the tool as far as possible before fitting it over the valve to ensure maximum travel.



5. Align the drive pins with the slots and slide over the flats of the relief valve. There are 12 flats inside the tool to allow for the best possible positioning. As it slides on, it will displace the rubber band if fitted.



6. Wind the actuating nut towards the arm ensuring that the pivot is correctly seated in its recess. Take up the slack by turning the nut by hand.



7. Continue winding until the arms meet, use of a ratchet spanner is recommended (18mm)

Considerable resistance may be felt before the valve begins to turn as it may have been over tightened when previously fitted or the bonded seal may have expanded due to rust.

If the valve has not become hand tight by the time the arms meet, remove the tool and repeat actions 4 - 7.



8. Finally, remove the tool completely and unscrew the valve.

To ensure total safety use a Safe-Swap tool (available from MAKEEN Gas Equipment) to prevent accidental valve ejection.

#### Maintenance

Lightly grease or oil the thread of the actuating rod before use.

Occasionally lubricate the ball bearings by placing a few drops of oil into the gap between the two halves of the upper part of the tool.



Find more information about your local MAKEEN Gas Equipment contact on [makeengasequipment.com/get-in-touch](http://makeengasequipment.com/get-in-touch)  
Or scan the QR-code.



## MAKEEN Gas Equipment Headquarters

Alsvej 21  
8940 Randers SV  
Denmark  
Tel +45 8644 8734

[mge@makeenenergy.com](mailto:mge@makeenenergy.com)  
[www.makeengasequipment.com](http://www.makeengasequipment.com)  
[www.makeenenergy.com](http://www.makeenenergy.com)

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For easy selection, each cracking tool is marked with part number and suitable relief valve.

Always make sure to follow the manufacturer's instructions and your own company procedures when changing relief valves on service vessels. Use of the cracking tool can be incorporated into those instructions.

**To ensure complete safety throughout the valve exchange, we strongly recommend that you follow up with the SafeSwap (made by MAKEEN Gas Equipment) to safeguard against accidental valve ejections.**

