

RAPTOR 3000

Operating and Safety Guide



MANOLE LID LIFTER

A manually operated lid cracking and lifting tool



GENERAL SAFETY

For advice on the safety and suitability of this equipment, contact Westurn Engineering.

There is a serious risk of personal injury if you do not follow all instructions laid down in this guide. The user has a responsibility to **ensure that all necessary risk assessments have been completed** prior to use of this equipment.

This equipment should only be used by an operator who has been deemed competent to do so by his/her employer.

This equipment is designed to be used by an able bodied, competent adult who has read and understood these instructions. Anyone with either a temporary or permanent disability should seek expert advice before using device.

Keep children, animals and bystanders away from the work area. Cordon off a NO GO area using cones and either barriers or tape.

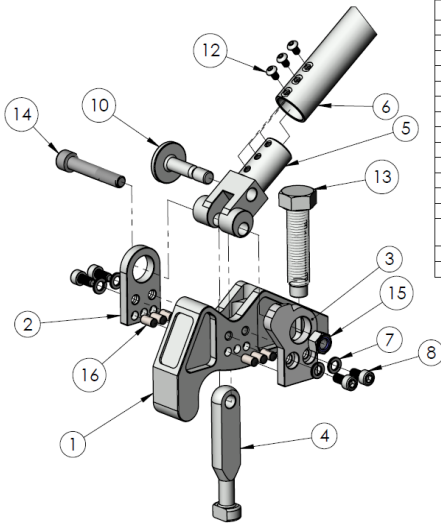
Never use this equipment if you are ill, feeling tired, or under the influence of alcohol or drugs.

Wear practical protective clothing, gloves and footwear. Avoid loose garments and jewellery that could catch in moving parts.

Use this equipment for vertical lifts only and use a level area only.

Make sure you know how to operate this equipment safely and are aware of its limitations before you use device. Make sure that anyone in the immediate work area is warned of what you are doing. Check the condition of the equipment before use. If it shows signs of damage or excessive wear, replace the parts (available from Westurn Engineering).

GETTING STARTED



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	WC-01	BODY	1
2	WC-02	SIDE PLATE	1
3	WC-02	SIDE PLATE	1
4	WC-04	KEY	1
5	WC-03	CAM LEVER	1
6	WC-05	HANDLE	1
7	MET-SPLT-WASH-1	M8 SPRING WASHER	4
8	WC-07	M8 x 16mm SOCKET HEAD	4
9	WC-07-2	M8 x 16mm GRUB SCREW	1
10	WC-06	LOCK PIN	1
11	WC-08		1
12	M6 DOME HEAD	M6x10 DOME SOCKET HEADS	3
13	M20x80 bolt	MODIFIED M20x80 HT BOLT	1
14	WC-11	MODIFIED M12 x 75mm SOCKET HEAD CAP SCREW	1
15	M12 NYLOC	M12 NYLOC NUT	1
16	M8x16 DOWEL	M8x16 DOWEL PIN	6

Remove the Raptor body and handle from the transport box

Using a M4 Allen key, remove the 3 x M6 socket head screws (12) from the Cam lever (5)

Slide the Raptor handle (6) over the cam lever spigot (5) aligning the 3 tapped holes in the cam lever spigot with the 6 mm holes in the handle (6)

Using the 3 x M6 socket head screws that were removed from the cam lever, slide them through the Raptor handle holes and screw them into the cam lever spigot. Tighten all 3 to approximately 20 Nm.

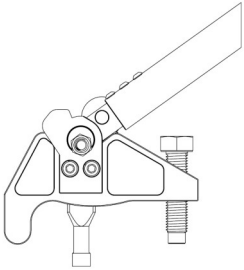
PRODUCT OVERVIEW

IMPORTANT—READ BEFORE USE

The Raptor 3000 is a lid cracking and lifting tool. It has been designed to pry open loose lids that have become stuck and **must be used in pairs**. Once unstuck, the locking pins allow the Raptor 3000 to lift the lid. **Note:** A maximum of 40kg of force is to be applied to the handle at any time, including both when opening and lifting lids. Exceeding this force on the handle will cause the pin holding the device together to shear, to prevent any further injury or damage. This maximum of 40kg force at the handle will equate to at least 8000kg of lifting force. Misuse of the device, such as impacting the device to clear keyways or to exceed lifting capacity will also result in the failure of the shear pin.

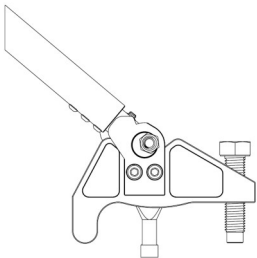
BASIC TECHNIQUE

- Step 1** Carry the Raptor 3000 to the access cover to be lifted
- Step 2** Clean out any debris from the key hole
- Step 3** Screw the Raptor jacking screw up until the parallel section of the bolt is flush with the underside of the Raptor body
- Step 4** Hold the Raptor handle in two hands and lift the Raptor over the key hole and insert the key into the key hole
- Step 5** Rotate the Raptor 90 degrees so that the Raptor jacking bolt locates on the lid and the Raptor heel is on the frame of the pit
- Step 6** Tilt the handle into the forward position and take up any slack by tightening the jacking bolt (finger tight only)



HANDLE IN FORWARD POSITION

- Step 7** Step back and with knees slightly bent, pull the Raptor handle towards you. If the lid does not lift on first attempt, repeat **Step 6**



HANDLE IN LIFT POSITION

- Step 8** With the handles fully back, engage the locking pins
- Step 9** Lift the lid