

WIRE ROPE CUTTERS

TYPE WC38 & WCO38

LOW PRESURE

**INSTRUCTIONS, OPERATION &
MAINTENANCE MANUAL**

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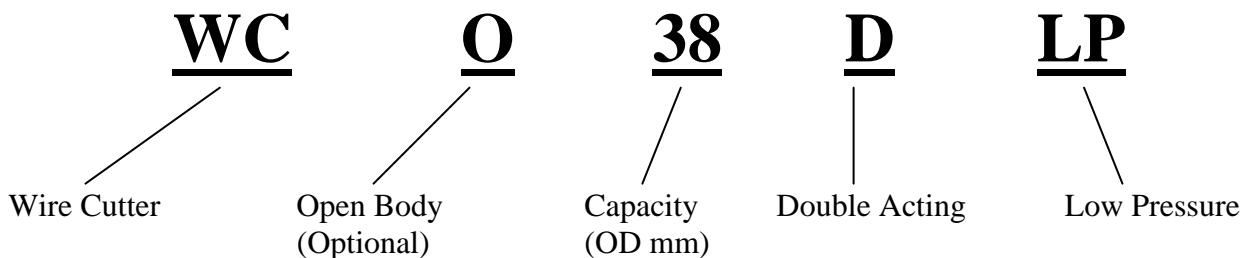
TYPE WC38 & WCO38 LOW PRESSURE

THESE INSTRUCTIONS COVER THE FOLLOWING TOOL VARIANTS

WC38D LP - Double Acting Hydraulic Return Closed Body Cutters (Models 22, 38, 54 & 75)

WCO38D LP - Double Acting Hydraulic Return Open Body Cutters (Models 22, 38 & 54)

Tool Specification Code



THINK SAFETY

Before using the tool to cut, review the safety aspects of the operation.

- Ensure* :
- That the hose couplings are properly made and safe.
 - That the tool is in good condition.
 - That the rated pressure of the tool cannot be exceeded.
 - That the wire rope to be cut is not under tension and that it is properly within the tool.
 - That any severed ends cannot fly off and injure the operator or others, if in any doubt always arrange shields.

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OPERATING & MAINTENANCE INSTRUCTIONS

Hydraulic Supply Requirements:

The tool must be connected to a double acting hydraulic power source, which can be either a manual or powered pump. **IT IS IMPORTANT** that the pressure source incorporates a pressure relief or limiting valve so that the applied pressure cannot exceed the rating of the tool. A relief valve must also be incorporated in the return line.

The maximum working pressure is **220 Bar** (3190 PSI).

A good quality ISO22 grade hydraulic oil, e.g. Shell Tellus 22, is suitable.

Connections:

OPERATING PORT

Fitted with Male Q/D
Or No 6 JIC Male

RETURN PORT

Fitted with Male Q/D
Or No 6 JIC Male

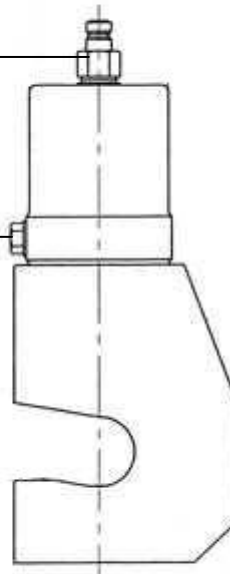


FIG. 1

Operations:

Operating the pressure source will cause the ram to extend, thus moving the blade to the anvil. It is safe to operate the cutter to full travel and full pressure even without having wire in place to cut.

To perform a cut, the wire rope should be placed between the blade and anvil. In the case of closed body cutters, type WC, the end of the wire rope should be fed through the tool or the anvil removed, the tool placed over the wire rope and the anvil replaced. Ensure the anvil is fully home and that the retaining spring is engaged.

For open body cutters, type WCO, the wire rope should be placed as far into the access slot as possible. Note that unless this is done some strands of wire may escape being cut.

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Cutting Capacity:

The cutter is designed to cut wire rope upto the diameter indicated by the tool size. These capacities are for wire rope only. The cutters will not cut solid sections to these diameters. The cutting blade is designed for use on wire rope having an ultimate tensile strength of 1770 N/mm². Attempts to cut wire rope of greater tensile strength may damage the blade or reduce its operating life.

General Maintenance:

Since the cutters are manufactured with care from high quality materials, little maintenance is necessary, other than to keep the tool clean and free from debris.

Replaceable parts in normal service are the blade and anvil, please refer to table 1 for part numbers. The life of the anvil may be extended by rotating it slightly to present new cutting surfaces to the wire and blade.

Seal kits are also available, please refer to table 1 for part numbers.

Table 1:

ITEM	CUTTER TYPE	
	WCO38D LP	WC38D LP
BLADE PART NO.	705032	705012
ANVIL PART NO.	WC6403	WC6388
SEAL KIT PART NO.	995121	

Blade Renewal: (Numbers in brackets refer to Table 2 and Figures 2 & 3)

To change the blade the following procedure should be adopted.

Extend the ram until the blade retaining pin (12) can be seen under the access hole in the body. Drift out the retaining pin and remove the blade (6).

When fitting a new blade, ensure the retaining pin is below the surface of the ram (4) on both sides. The part number for the retaining pins is shown in table 2.

Cutter Disassembly: (Numbers in brackets refer to Table 2 and Figures 2 & 3)

Remove the blade as previously described, then disconnect the operating hose and unscrew the Q/D coupling (18). Unscrew the cylinder cap (3) from the main cylinder (2) then push out the piston (4) upward through the main cylinder. Unscrew the body (1) from the main cylinder (2). All seals are now accessible.

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Cutter Re-Assembly: (Numbers in brackets refer to Table 2 & Figures 2 & 3)

Make sure all parts are clean and smear all seals with grease before assembly. Fit the 2 off couplings (17), to cylinder (2). Add liquid gasket to the threads of the body (1) (see Fig 2), screw onto the cylinder (2) and tighten. Slide the piston (4) into the Cylinder (2). Rotate the slot in the end of the piston until it lines up with the keyways in the body and temporarily insert the blade (6) to maintain angular location. Hold in the retracted position. Add liquid gasket (see Fig 2) to the threads of the cylinder cap (3), screw into the cylinder (2) and tighten. Connect hose and then pump out piston until the hole for the retaining pin is visible through the body. Fit the retaining pin (12) then test the cutter ready for use.

Table 2:

ITEM	DESCRIPTION	QTY	PART NUMBER	
			WCO38	WC38
1	Main Body	1	710243	710239
2	Cylinder	1	728046	
3	Cylinder Cap	1	728047	
4	Piston	1	764097	
5	Anvil	1	WC6403	WC6388
6	Blade	1	705032	705012
7	Wiper Seal	1	025563	
8	Ram Seal	1	025793	
9	Main Ram Seal	1	025799	
10	O-Ring	1	025825	
11	Back-Up Ring	1	025827	
12	Retaining Pin	1	030522	
13	Spring	1	N/A	788064
14	Screw	1	N/A	035052
15	Washer	1	N/A	080959
16	Bonded Washer	2	32-07-0804	
17	Adapter	2	726356	
18	Coupling	2	791123	
19	Set Screw	2	043406	
20	Anvil Screw	1	035066	N/A

WIRE ROPE CUTTERS - TYPE WC38 LP

Part No's refer to Table 2

Diagram shows a Cross-Section of a Double Acting Closed Body Cutter

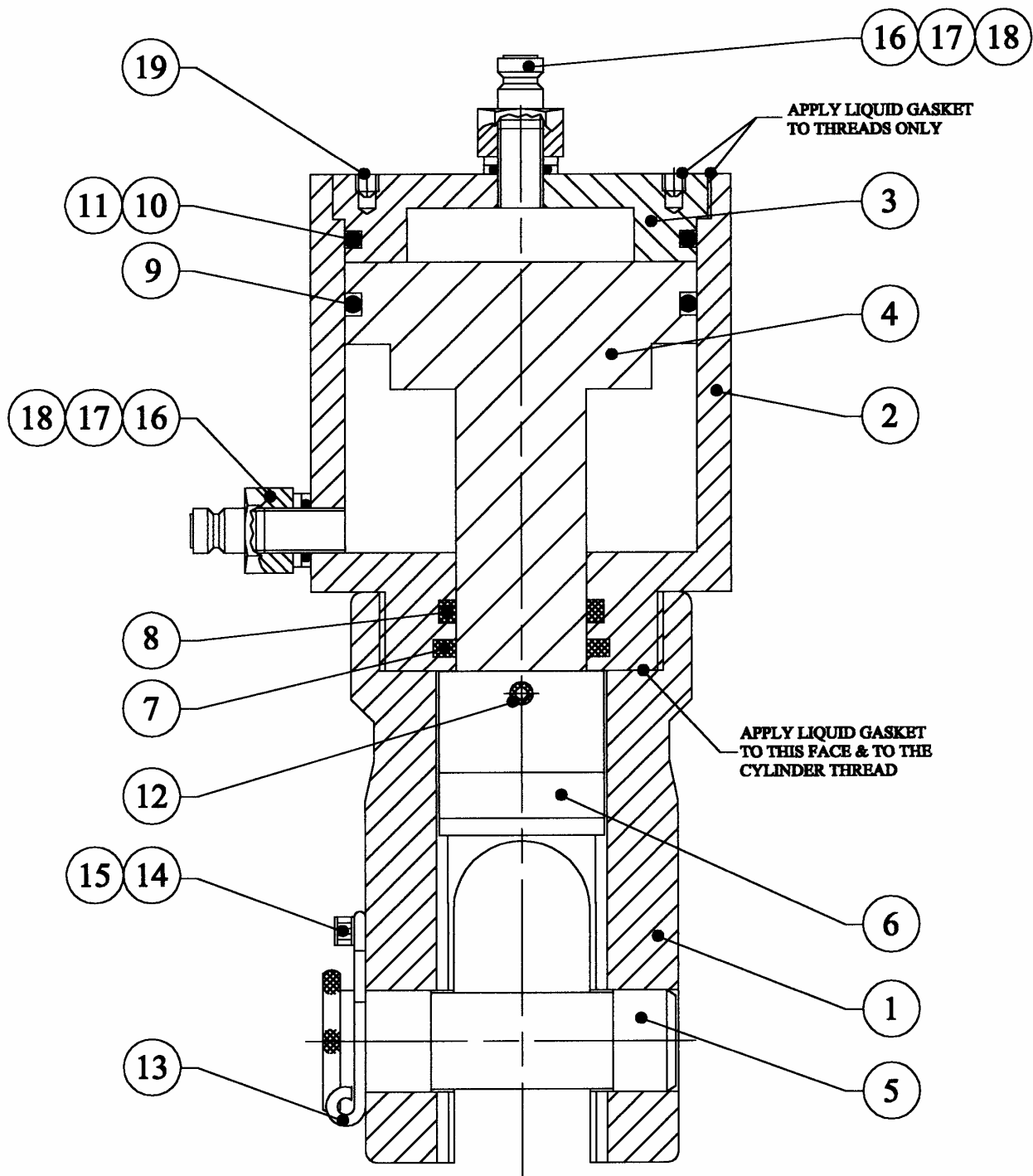


FIG. 2

WIRE ROPE CUTTERS - TYPE WCO38 LP

Part No's refer to Table 2

Diagram shows a Cross-Section of a Double Acting Open Body Cutter

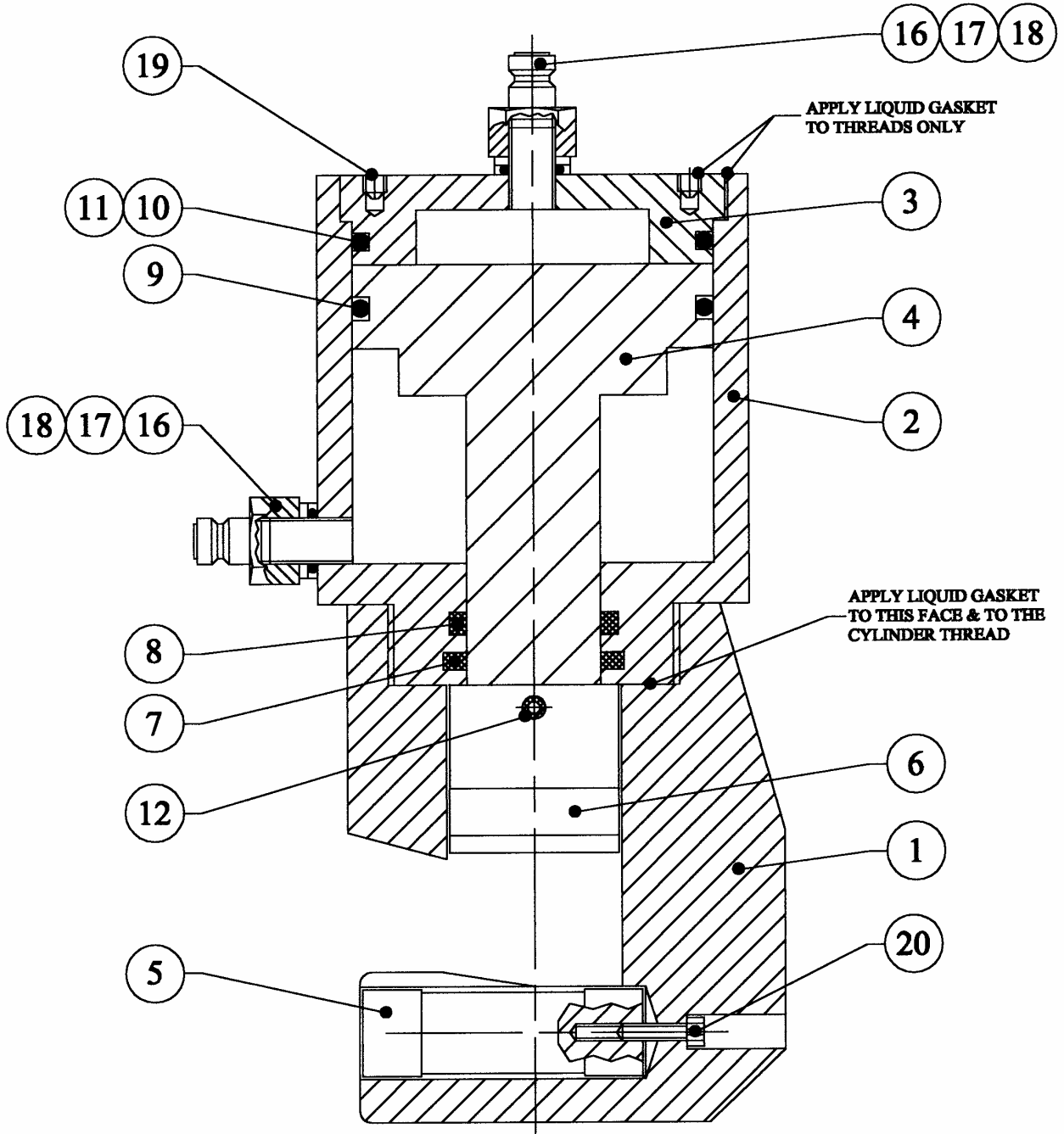


FIG. 3