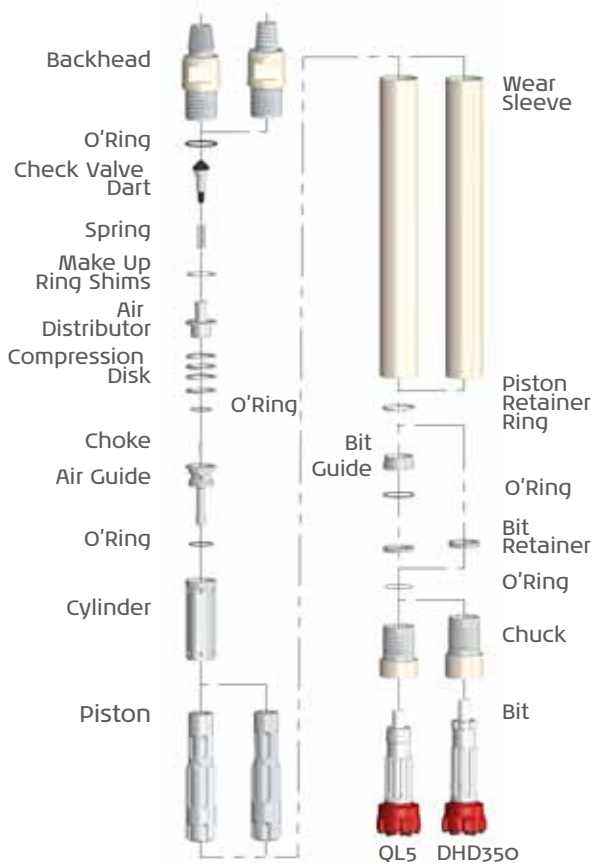


PUMA M5.2 MAINTENANCE SHEET

QL5, DHD 350

EXPLODED VIEW



DISASSEMBLY

WARNING!

- Use hammer disassembly bench.
- Do not apply heat to any component
- Use wrenches in good condition
- Do not apply wrench over Inserts on bit body
- Apply clamps on recommended areas

DISASSEMBLY SEQUENCE

- 1 Disassemble the hammer on the bit side
- 2 Extract the chuck, Bit retainer, and Bit
- 3 Rotate and loosen the hammer at the Backhead side
- 4 Take out the backhead and remove its O'ring
- 5 Remove the check Valve, Spring, Air distributor and Disc springs
- 6 Remove the cylinder and air guide
- 7 Remove the piston.
- 8 Rotate the wear sleeve
- 9 Remove the stop ring



A Bit Side		B Back Head Side		C Clamp Location	
inch	mm	inch	mm	inch	mm
6.5	164	11.8	300	2.0 - 3.9	50-100

ASSEMBLY



Disc springs Position

WARNING!

- 1 All components must be in good conditions for use
- 2 Follow assembly sequence as per drawing
- 3 Lubricate each component, before installation
- 4 Secure spring discs position
- 5 Check gap between Wear Sleeve and Backhead ("s") If gap space "s" is less than 3.4 mm, use a make up ring shim
- 6 Apply recommended pretorque

T=Force x Arm

Distance "s"		PRE-TORQUE	
inch	mm	ft-lb _t	kg _t -m
0.14 - 0.18	3,5 - 4,5	2,850 - 3,150	395 - 437



LUBRICATION

OIL GRADE SELECTION (cst)

Work Pressure (bars)	TEMPERATURE		ISO GRADE	
	Environment Air	Discharge Air	Dry Drilling	with water
6.9 - 10.3	-20°C to 30°C	< 100°C	50 to 100	100 to 150
	Over 30°C	< 100°C	100 to 150	150 to 220
10.3 - 24.1	-20°F to 30°C	> 100°C	150 to 220	220 to 320
	Over 30°C	> 100°C	220 to 320	320

OIL CONSUMPTION (gal/h)

Drilling	WORK PRESSURE (barg)				
	10.3	13.8	17.2	20.7	24.1
Dry	1.0	1.3	1.7	2.1	2.5
With Water	1.5	2.0	2.6	3.2	3.8

MAINTENANCE

STANDARD MAINTENANCE PROGRAM

OPERATION CONDITIONS	INSPECT EVERY:
· Stable, non abrasive ground	200 (operating hours)
· No water injection	
· Stable and abrasive ground	100 (operating hours)
· With or without water injection	
· Unstable and abrasive ground	50 (operating hours)
· With or without water injection	

COMPONENT INSPECTION AND REPAIR.

All components must be washed thoroughly with appropriate solvent, eliminating all accumulated dirt. Use sand paper to smooth steel surfaces and friction marks, leaving all contact, sliding and threaded surfaces in good smooth condition



DIMENSIONS LIMITS in (mm)

COMPONENT	DIMENSION		QL-5	DHD-350
1 Backhead	∅ External	a	4.17" (106,00)	
2 Air Guide	∅ Flute	b	1.160" (29,47)	
3 Cylinder	∅ Internal	c	3.011" (76,47)	
	Shoulder width	c2	0.394" (10,00)	
4 Wear Sleeve	∅ External	d	4.17" (106,00)	
	∅ Rotate (*)	d	4.331" (110,00)	
	∅ Internal	e	3.618" (91,90)	
	∅ Ext. tail	g	2.996" (76,1)	
5 Piston	∅ Int. body	h	1.539" (39,09)	1.406" (35,71)
	∅ Int. tail	i	1.179" (29,95)	
	∅ Ext. body	f	3.606" (91,58)	
	∅ Ext. tail	g	2.996" (76,1)	
6 Chuck	∅ External	j	4.17" (106,00)	
	External Length	k	1.77" (45,00)	2.56" (65,00)
	Spline width	l	0.12" (3,00)	0.16" (4,00)
	∅ Internal	m	3.024" (76,81)	-----



(*) This dimension is the allowable lower limiting diameter in which the wear sleeve can be reversed prolonging the operational life-time of the part

Check : 05/2018

PHONE: (56-2) 2431 2211; (56-2) 2431-2000 / www.drillco.com

DRILLCO