

RC121 – BD040 R.C. HAMMER

Compatibility: RE545, RE040, PR40, AD650, RC45, MR120



Black Diamond Drilling offers a complete range of reverse circulation hammers along with fully integrated R.C. Bits and Shrouds that have been designed to provide a world-class sampling system. Precision engineering enables our R.C. Hammers to excel in maintaining an efficient and smooth flow of drill cuttings to the surface, ensuring cleaner, more accurate samples. This leads to more reliable data for exploration and better overall hole quality.

SPECIFICATIONS

Item	Diameter Ø	
	mm	inch
Hammer	121	4 3/4
Bit	126 – 146	4 – 5 3/4"
Suits medium to hard ground conditions		



RC121 – BD040 R.C. HAMMER

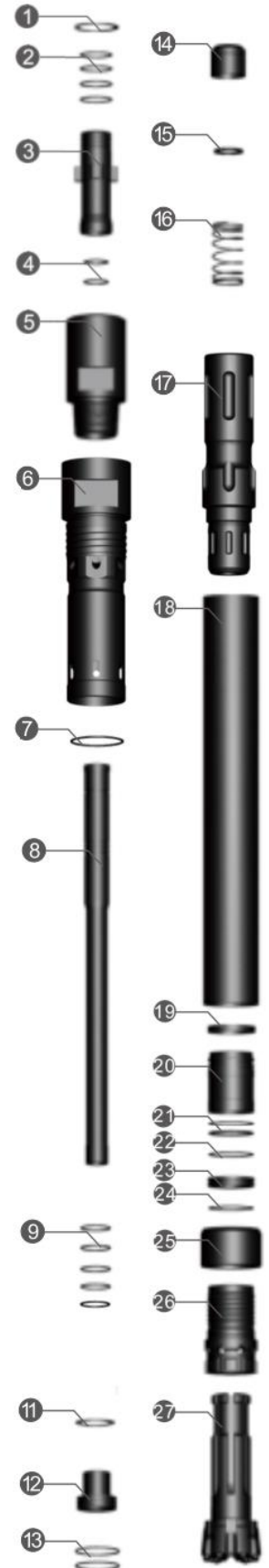
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Top Sub Assembly

Product Code	Description	Amt	Compatibility
A	Top Sub Assembly Remet 4"		
1	BD67/RC121-CIRCLIP	1	-
2	SKOPM45	4	-
3	ATUBE-PM45BR45	1	-
4	SK-BR45	2	-
5	ADAPT-SUB-PM45BR45-121	1	-

Hammer Assembly

Product Code	Description	Amt	Compatibility
6	RC121-ICYL-M4.5	1	-
7	RC121-SK-ICYL	1	-
8	RC121-STUBE-H	1	-
9	BD67/RC121-SK-STUBE	5	-
10	BD67/RC121-CIRCLIP-1	1	-
11	BD67/RC121-AIRSCREEN-1	1	-
12	BD67/RC121-DIST-1	1	-
13	BD67/RC121-SK-DIST	2	-
14	BD67/RC121-CVALVE-MHK	1	-
15	BD67/545/547/RC121-SK-YRING	1	-
16	BD67/545/547/RC121/S-PRING	1	-
17	BD52/RC121-PISTON	1	-
18	RC121-ECYL-DK	1	-
19	RC121-SRING-BUSH	1	-
20	RC121-BUSH	1	-
21	BD040/RC121-SK-BUSH	2	-
22	BD040/RC121-SRING-HD	1	-
23	RC121-BD040-SK-SRING	1	-
24	RC121-RRING	1	-
25	BD040-136/133.5-DB	1	-
26	RC121/BD040-DSUB	1	-
27	BD040-136DC-TV	1	-



Bit Selection Table

Bit Product Code	Diameter		Compatibility
	Metric	Imperial	
BD040-124DC-TPD	124mm	4 7/8"	-
BD040-127DC-TPD	127mm	5"	63-040-502DC
BD040-133DC-TPD	133mm	5 1/4"	63-040-504DC
BD040-140DC-TPD	140mm	5 7/16"	63-040-508DC



Shroud Selection Table

Shroud Product Code	Diameter		Compatibility
	Metric	Imperial	
BD040-SHROUD-124/121.5-DB	124mm	4 7/8"	40-040-413
BD040-SHROUD-127/124.5-DB	127mm	5"	40-040-415
BD040-SHROUD-133/130.5-DB	133mm	5 1/4"	40-040-503
BD040-SHROUD-140/137.5-DB	140mm	5 1/2"	40-040-507
BD040-SHROUD-152/149.5-DB	152mm	6"	-



General Specifications

Description	Metric	Imperial
Piston Case OD	121mm	4 3/4"
Hammer length	1039mm	4' 5 5/8"
Hammer Weight	71 kg	156lb 8 3/8oz
Bit Size Range	126 - 146mm	4 - 5 3/4"
Drill Rod Diameter	114mm	4 1/2"
Spanner Flat Width – Inner Cylinder	51mm	2"
Spanner Flat Width – Top Sub	51mm	2"

Air Consumption

Pressure		Consumption	
psi	bar	cfm	m ³ /min
400	27.6	850	24.0
450	31.1	925	25.1
500	34.5	1000	28.3
550	38.0	1050	29.8
600	41.4	1125	32.0

REVERSE CIRCULATION SERVICE GUIDE

When breaking a hammer down, avoid placing breakout tools in the mid-section of the cylinder (barrel). Recommended breakout points are 130mm from each end of cylinder. Wrap around chain breakouts are recommended (see diagram). When holding bits for breakout, use a secure plate or opt to grab the bit head, but never on the gauge row buttons.

This information is included with every Hammer purchase.



DO NOT APPLY HEAT OR DIRECT IMPACT TO HAMMER WHEN CRACKING JOINTS AS THIS TYPICALLY DAMAGES THE HAMMER.



Figure 1: Gripping Locations for BD DRILL Reverse Circulation Hammer

Lubrication: Correct lubrication is critical to performance and longevity.

Recommended:

- Oil Grade: SAE 320 Hammer Oil for most operating conditions
- Rate: 2 litre/hour minimum via automatic feeder
- Double the rate when injecting fluids such as water, foam & polymers
- Clean and relubricate the hammer each day after use to prevent corrosion and premature failure

