# **BD545 R.C. HAMMER**



5" R.C. Hammers	Item Description W	/eight (Kg)	Part Number		
	A Crossover sub Assy PIN Metzke 4.5" to Ren PIN to BOX CROSSOVER SUB ASSEMBLY				
•	1 Top Sub-Remet 4.5"	7.79	BD545-TSUB-R4.5		
	2 Adaptor Tube Remet 4.5"	1.06	BD545-ASCREEN-R4.5		
	3 O ring Adaptor Tube Remet 4.5" x 6	0.02	BD545-SK-ASCREENR4.5		
(B)	4 Circlip A	0.02	BD545-CIRCLIP-4.5		
9——	Parts List				
$\mathcal{I}$	5 Sample Tube	4.61	BD545-STUBE-M4.5		
(C)	6 O ring (Sample Tube) x 4	0.02	BD545-SK-STUBE		
₩ BD545	7 Circlip B	0.02	BD545-CIRCLIP-4		
<b>5</b>	8 Air Screen	0.04	BD545-AIRSCREEN		
51	Distributor	0.48	BD545-DIST		
<u>5</u>	O ring (Distributor) x 2	0.02	BD545-SK-DIST		
R.C.	1 Check Valve/Plunger	0.53	BD545-CVALVE		
	Y ring (Check Valve)	0.02	BD545-SK-CVALVE		
<b>1</b>	Spring	0.12	BD545-SPRING		
	O Ring(inner Cylinder)	0.02	BD545-SK-ICYL		
	15 Inner Cylinder/Top Barrel	10.2	BD545-ICYL-M4.5		
	16 Piston	15.1	BD545-PISTON		
HAMMER	Texternal Cylinder/Barrel/Piston Case	17.2	BD545-ECYL		
23-	18 Bearing Bush	2.95	BD545-BUSH		
	O ring (Bearing Bush) x 4	0.05	BD545-SK-BUSH		
24	Bush Retaining Ring	0.02	BD545-PRING		
	② Bit Ring	0.26	BD545-SRING		
<b>1 25</b> — <b>1 1</b>	② O ring (Bit Ring)	0.02	BD545-SK-SRING		
	3 Shroud	1.6	BD545-SHROUD-127/125		
	② Drive Sub	3.41	BD545-DSUB		
	⊕ Drill Bit	12.6	BD545-133DC		
	Seal Kit (Item 2+4(3)+7+11+13+15+20+23	0.3	BD545-SK		

### **Technical Data**

Length(Less bit)	Weigth(Less bit)	External Diameter	Bit Shank	Hole Range	Connection Thread				
1261mm	65.0kg	Ф117.5	BD545	Ф123-Ф140	4" -4 .5" Remet 4 " - 4 .5" Metzke				
	Impact rate			Air Consumption					
Box Size Impact rate at 2.4Mpa		Recommended	rotation speed	200-500(PSI)					
1260x150x180mm	35HZ	25-40	)r/min	300-1200(CFM)					

# RECOMMENDED SAFETY PROCEDURES

The mining industry continues to demand even higher levels of safety and productivity. In order to meet these requirements, we work continuously to develop even safer products, and to produce comprehensive manuals enabling for safer and effective use of our products.



#### IT'S ALL ABOUT EVERYONE'S HEALTH

Helping you to ensure a safer workplace and healthier workforce is of the utmost importance to us. The well-being of any person coming into contact with our equipment is paramount. Therefore, we strive to identify and assess potential risk factors that could threaten the health of you and your employees.

All of the products in this catalogue are designed to meet safety requirements.

#### DRESS RIGHT FROM HEAD TO TOE

You must wear appropriate personal protective equipment (PPE) at all times. This is what we strongly recommend, to help avoid injury:

- Safety helmet
- Hearing protection
- Safety glasses
- Protective high visibility clothing
- Respiratory protection
- Safety boots
- Any site-specific PPE as required

#### BE AWARE OF ALL SAFETY PROCEDURES

We ask that you start by obeying all instructions given. Never work under an unsupported roof or close to potential pinch point locations. Beware of the potential hazards of a loose roof and ribs, and scale down roof and ribs prior to bolting. It is important to bolt early in the mining process – as soon as is safely and practically possible.

Safe work procedures should incorporate inspection before the machine operates, and also through regular monitoring based upon mining conditions, safety and hazard management systems. Workers should be provided with safety information, instruction and training on transportation, installation, operational care and disposal of drilling tools.

#### MAKE A RISK ANALYSIS BEFORE YOU START

Pay attention to safety when planning all of your work. Before you start, always take your time to go through all operations. Identify any potential risks and take appropriate measures to avoid them. If necessary, seek expert advice on how to help minimize risks. Finally, make sure that you have the right resources to perform all tasks in the safest manner possible.

Please check www.safeworkaustralia.gov.au for more information.



## 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 type breakouts are recommended. (See diagram). When holding bits for breakout, use a secure plate or pot to grab the bit head, but never on the gauge row buttons.

This information is included with every Hammer purchase.

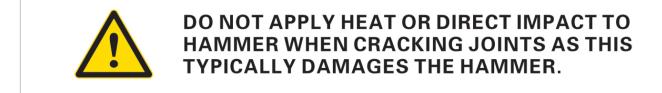




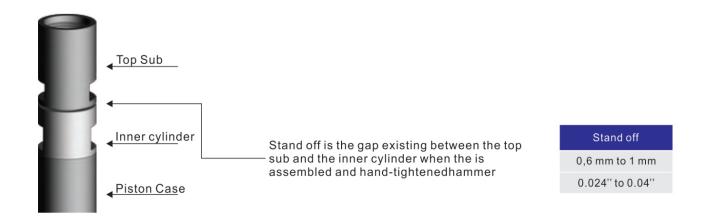
Figure 1: Gripping Locations For BD DRILL Reverse Circulation Hammer

## Lubrication

Correct lubrication is critical to the performance and longevity of the hammer.

#### Recommends:

- Oil Grade: SAE 320 Hammer Oil for most operating conditions
- Rate: 2 liter/hour minimum via an 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





# **SPECIFICATIONS**

Hammer	BD531	RC3.5	E	3D004		BD542			BD543		BD545		BD040				BD52		BD54		A67
Top sub thread	R3"	R3"	R3.5"	R4"	M4"	R3.5"	R4"	M4"	R4"	M4"	M4.5	R4.5	M4"	R4"	M4.5"	R4.5"	M4.5"	R4.5"	M4.5"	R4.5	M4.5"
Package case size	(L)1100 (W)110 (H)120	(L)1230 (W)120 (H)150		L)1300 W)150 (H)180			(	L)1230 W)140 (H)170			(W)	, ,			(L)1300 (W)150 (H)180			(L)1300 (W)160 (H)190		(L)1300 (W)160 (H)190	
Recommende d bit size, mm	86-100	100-110	1	11-12	5	113-133					123	-140		127	-140		133	-143	136-146		136-146
Bit shank	RE531	RC3.5		RE004			RE542		RE	543	RE	545	RE040				PR52		PR54		BD67
External diameter, mm (mm)	81	94		107		109.5			1	16	11	7.5	121				120.5		130		132
Length excl. thread, mm (Less bit)	1069	1184		1252		1191					1261 1210					1227		1294		1200	
Hammer weight, kg (Less bit)	29	44		52			57	57		63		65		47.5	69.4	69.4	68.5		84.5		81.8
Piston weight, kg	4.8	8.3		10.5		11.6			11.6		13.5		13.6			14.3		16.8		17	
Wrench flat, mm	No Wrench Flat			(L)90 (W)5 0		(L)95 (W)45	(L)95 (W)45		(L)95 (W)4 5		(L)102 (W)50	(L)102 (W)50	(L)94 (W)50	(L)94 (W)50	(L)94 (W)50	(L)94 (W)50	(L)94 (W)50	(L)94 (W)50	(L)100 (W)50	(L)100 (W)50	

Drilling conditions and project specifications may require larger air package to be used

## AIR CONSUMPTION/OPERATING PRESSURE

