

# SANDVIK DTH ROCK DRILLING TOOLS

RH460 HAMMER

**SANDVIK**



For more information on the safe handling of products, please read Sandvik RH460 Operator Manual!

With continued demand from mining companies to ensure safety and increase productivity, Sandvik rock tools are committed to providing the support needed - through safe products and product information.

**GRINDING OF BITS**

Drill bits have cemented carbide buttons. Cemented carbide is made up of tungsten carbide and cobalt. Grinding buttons will produce dusts or fumes with dangerous ingredients that can be inhaled, swallowed or come in contact with the skin or eyes. Do not breathe dust. Wear protective gloves / protective clothing / eye protection. In case of inadequate ventilation wear respiratory protection. In particular, avoid dry grinding.

**LIFTING PROCEDURES**

Use safe and correct lifting practices while working with heavy items. Consider body position, awkwardness of the item and its weight. Are two people required for the lift, is a lifting device necessary?

**THE ALL-NEW RH460 HAMMER**

**PISTON**

The RH460 hammer has a 'solid piston and inner cylinder' concept. With the porting being done externally, the piston is free of any air channels except for the center bore.

The solid piston concept without any cross-holes reduces stress induced failures. This provides for more reliability and long un-interrupted service life.

**V-LOCK SYSTEM**

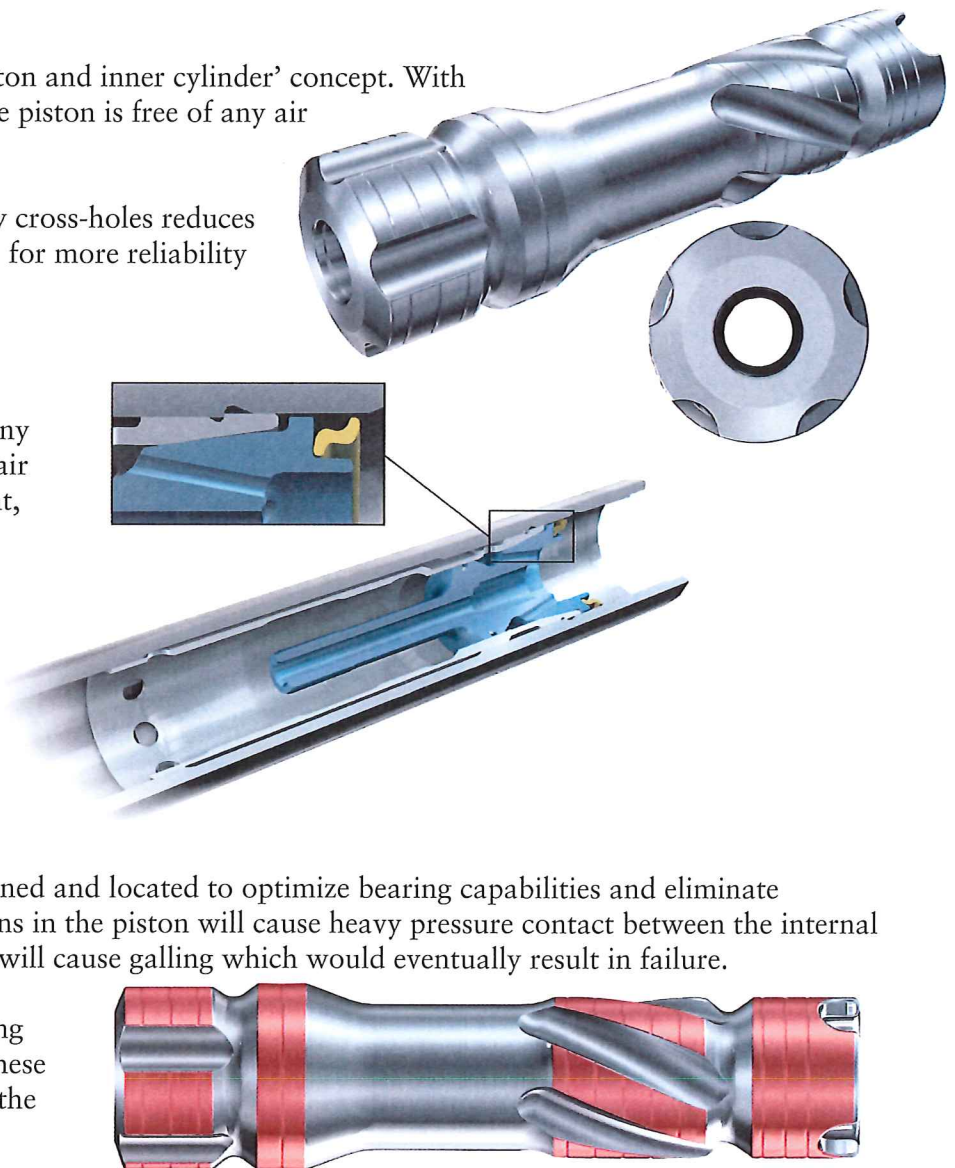
The unique V-lock system prevents any movement of the inner cylinder and air distributor. By ensuring no movement, any failures related to galling is greatly minimized.

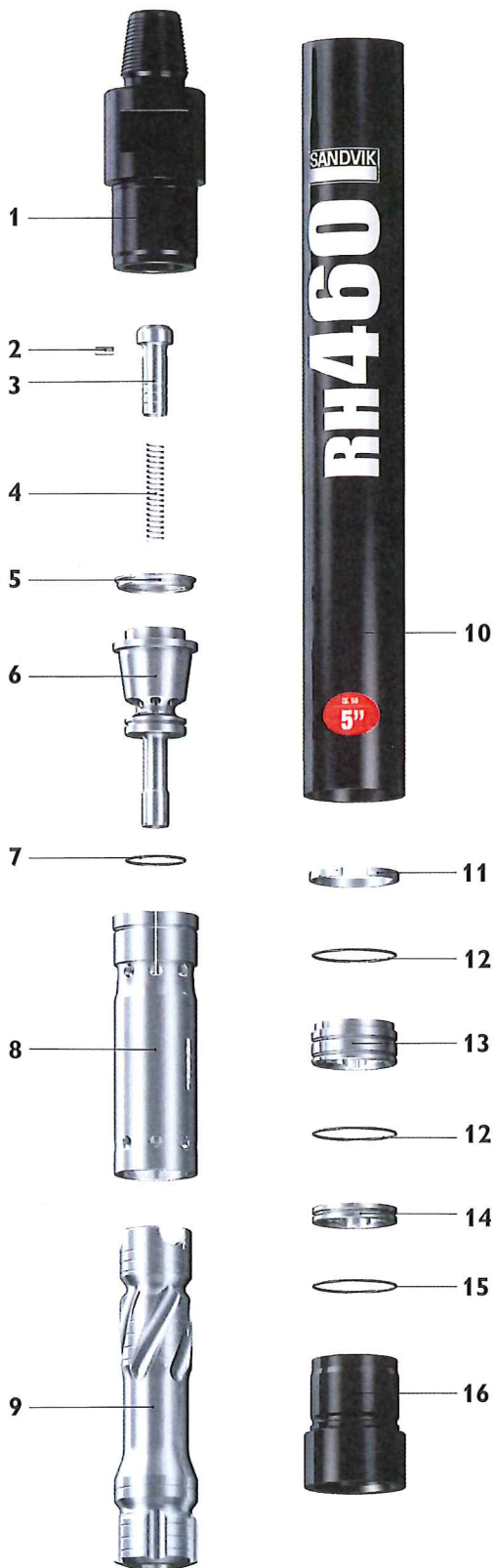
The simple design also ensures ease of assembly and dis-assembly without the need for any special tools.

**PISTON - BEARING AREA**

The piston bearing surfaces are designed and located to optimize bearing capabilities and eliminate bending vibrations. Bending vibrations in the piston will cause heavy pressure contact between the internal parts during the striking mode. This will cause galling which would eventually result in failure.

A lot of R&D has gone in to designing the bearing surfaces, to ensure that these bending vibrations are eliminated in the RH460 piston.





Replacement parts Item description	Weight		Part No.
	kg	lb	
<b>1. Top Sub</b>			
3 1/2" API Reg Pin	14,80	32,63	BG00014995
2. Choke Set, Blank, 3mm, 4.5mm and 6mm	0,01	0,02	BG00015430
3. Check Valve Dart	0,40	0,88	BG00014985
4. Check Valve Spring	0,03	0,07	BG00014972
5. Make Up Ring	0,20	0,44	BG00014994
6. Air Distributor with O-Ring	3,60	7,94	BG00014996
7. O-Ring Air Distributor			In Seal Kit
8. Inner Cylinder	4,20	9,26	BG00025161
9. Piston	14,30	31,53	BG00062889
10. Piston Case with Retainer Ring	22,00	48,5	BG00014999
11. Piston Retainer Ring	0,10	0,22	BG00014998
12. O-Ring Guide Sleeve			In Seal Kit
13. Guide Sleeve with O-Ring	1,00	2,2	BG00014988
14. Bit Retainer Ring with O-Ring	0,40	0,88	BG00014989
15. O-Ring Bit Retainer Ring			In Seal Kit
16. Driver Sub	5,0	11,02	BG00014993

### Optional

Air Screen	0,14	0,31	BG00014867
Air Screen Circlip	0,003	0,01	BG00014862
Driver Sub Hard Faced	5,00	11,02	BG00162923

### Seal Kit

1 Piece of 7, 12 & 15	0,01	0,02	BG00015014
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### Rebuild Kit

1 piece of 1,10,16 & Seal Kit			
3 1/2" API Reg Pin	41,50	91,49	BG00081790

### Complete Hammer

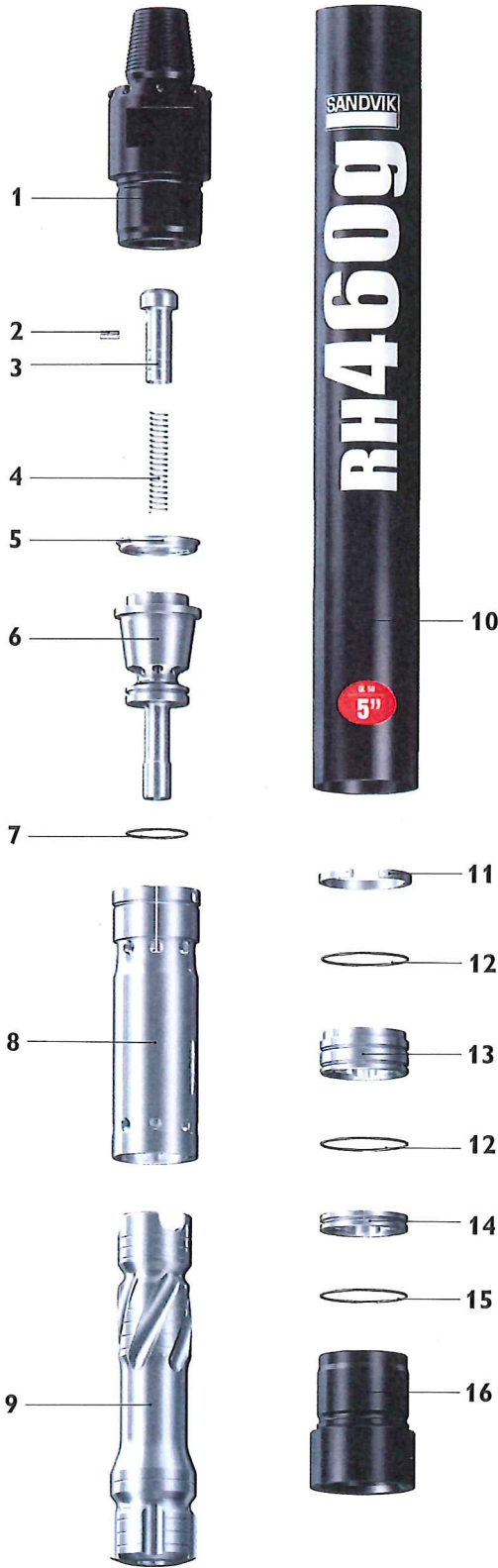
3 1/2" API Reg Pin	66,00	145,5	32-4650-SQA-04S
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### Bit Shank

QL50



Weight		Outside diameter		Hammer length		Hammer length with bit			
kg	lb	mm	inch	mm	inch	Bit closed		Bit extended	
						mm	inch	mm	inch
67	150	120	4,72	1067	42,01	1156	45,51	1185	46,65
Air consumption, cfm				Air consumption, m3/min					
150 psi	250 psi	350 psi		10 bar	18 bar	24 bar			
302	555	778		8,56	15,73	22,03			



Replacement parts Item description	Weight		Part No.
	kg	lb	

<b>1. Top Sub</b>			
3 1/2" API Reg Pin	15,50	34,17	BG00068455
#24 Cubex Pin	13,50	29,76	BG00166404
2 Choke Set, Blank, 3mm, 4.5mm and 6mm	0,01	0,02	BG00015430
3. Check Valve Dart	0,40	0,88	BG00014985
4. Check Valve Spring	0,03	0,07	BG00014972
5. Make Up Ring	0,20	0,44	BG00014994
6. Air Distributor with O-Ring	3,60	7,94	BG00014996
7. O-Ring Air Distributor			In Seal Kit
8. Inner Cylinder	4,20	9,26	BG00025161
9. Piston	14,30	31,53	BG00062889
10. Piston Case with Retainer Ring	30,00	66,14	BG00068439
11. Piston Retainer Ring	0,10	0,22	BG00014998
12. O-Ring Guide Sleeve			In Seal Kit
13. Guide Sleeve with O-Ring	1,00	2,2	BG00014988
14. Bit Retainer Ring with O-Ring	0,40	0,88	BG00014989
15. O-Ring Bit Retainer Ring			In Seal Kit
16. Driver Sub Hard Faced	5,50	12,13	BG00068435

**Optional**

Air Screen	0,14	0,31	BG00014867
Air Screen Circlip	0,003	0,01	BG00014862

**Seal Kit**

1 Piece of 7, 12 & 15	0,01	0,02	BG00015014
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**Rebuild Kit**

1 piece of 1,10,16 & Seal Kit			
3 1/2" API Reg Pin	51,00	112,44	BG00081817
#24 Cubex Pin	49,00	108,03	BG00166783

**Complete Hammer**

3 1/2" API Reg Pin	76,00	167,55	32-4655-GQA-04C
#24 Cubex Pin	74,00	163,14	32-4655-GQA-77C

**Bit Shank**

QL50



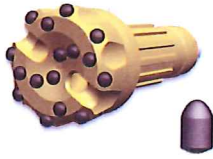
	Weight		Outside diameter		Hammer length		Hammer length with bit			
	kg	lb	mm	inch	mm	inch	Bit closed		Bit extended	
							mm	inch	mm	inch
	75	170	126	4,96	1067	42,01	1156	45,51	1185	46,65
	Air consumption, cfm				Air consumption, m3/min					
	150 psi	250 psi	350 psi		10 bar	18 bar				
	302	555	778		8.56	15.73				

# DRILL BITS / QL 50 SHANKS

	Diameter		Air holes	Gauge buttons	Button dia. mm		Weight		Part No.	Shank
	mm	inch			gauge	front	Kg	lb		

## QL 50

Concave face / Ballistic button

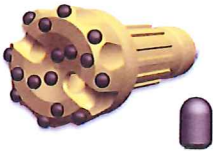


140	5 1/2	2	8	16	14	15,0	33	42-5019140-R48
140	5 1/2	2	8	16	14	15,0	33	42-5019140-R55

QL 50

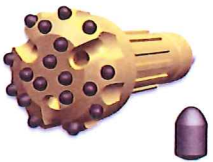


Concave face / Spherical button



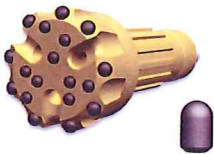
140	5 1/2	2	8	16	14	15	33	42-5019140-S48
140	5 1/2	2	8	16	14	15	33	42-5019140-S65
146	5 3/4	2	8	16	14	16	35	42-5019146-S48
146	5 3/4	2	8	16	14	16	35	42-5019146-S65
152	6	2	8	18	16	17,1	38	42-501D152-S48

Convex face / Ballistic button



140	5 1/2	3	9	16	16	15	33	42-50LC140-R48
140	5 1/2	3	9	16	16	15	33	42-50LC140-R55
146	5 3/4	3	9	16	16	16	35	42-50LC146-R48
146	5 3/4	3	9	16	16	16	35	42-50LC146-R55
152	6	3	9	18	16	17,1	38	42-50LD152-R48

Flat face / Spherical button



140	5 1/2	3	9	16	14	15	33	42-5029140-S48
140	5 1/2	3	9	16	14	15	33	42-5029140-S65
146	5 3/4	3	9	16	14	16	35	42-5029146-S48
146	5 3/4	3	9	16	14	16	35	42-5029146-S65
152	6	3	9	18	16	17,1	38	42-502D152-S48

Foot valve



0,5	1,2	47-50017
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Hammer lifting bails



2-3/8" REG BOX 3600 KG	5,1	11,22	BG00016425
2-7/8" REG BOX 3600 KG	8,0	17,6	BG00016426
3-1/2" REG BOX 3600 KG	14,0	30,8	BG00016427
3-1/2" IF BOX 3600 KG	10,0	22	BG00016428
4-1/2" REG BOX 3600 KG	19,0	41,8	BG00016429