

Secoroc Rock Drilling Tools

Secoroc Pneumatic Breaker

Secoroc B70/B90 Pneumatic Breaker

Operator's instructions / Spare parts list

Foreword

Thank you for selecting the Secoroc B70/B90 pneumatic breaker.

These instructions were developed to help you get the best performance and productivity from the use of your new breaker.

Please refer to them also for the correct maintenance of the breaker.

Table of Contents

Scope of application	4
Operation	5
1. Machine operation and maintenance	5
2. Operation	5
3. Air hose and air pressure	5
4. Lubrication oil	5
5. Chisels	6
6. Replacement of parts	6
7. Maintenance	6
8. Notes for dismantling/reassembling	6
Troubleshooting	7
Spare parts list and exploded drawing	8

Scope of application

B70 and B90 breakers are simple in design and easy to operate. They are designed for vertical demolition of concrete, asphalt, frozen soil and other hard materials in road construction and other demolition and construction work. No other use is permitted. The tools are not intended for rig-mounting.

For use in noise sensitive areas, there is an efficient muffler available as an option.

Specification

		B90	B70
Dimensions	mm	745x496x162	725x496x162
Weight without muffler	kg	34	29
Cylinder diameter	mm	58	52
Working pressure	Bar	4–6	4–6
Max working pressure	Bar	6	6
Impact energy (6 bar)	J	110	72
Impact energy (5 bar)	J	90	58
Impact frequency (6 bar)	Hz	18	18
Impact frequency (5 bar)	Hz	17	17
Air consumption (6 bar)	l/s	43	30
Air consumption (5 bar)	l/s	37	24
Air hose inner diameter	mm	19	19

Operation

1. Machine operation and maintenance

- Clean the parts from rust-protecting oil before starting the breaker for the first time. All surfaces should be lubricated before reassembly. The tool should then be test run.
- Blow away any dirt adhering to couplings and air lines before connecting an air hose to the breaker.
- Warning! Make sure that each threaded connector is tightened before operation, in order to avoid injury to people caused by loose air hoses or parts.
- Operation without lubrication oil is not allowed. Fill the lubricator at the start of every shift. The oil chamber should be filled with the machine lying down. It should be filled to the bottom thread for the oil plug (roughly 40 ml).
- Check regularly, clean inside and change damaged parts.
- For any lengthy period of non-use, please clean and lubricate the machine for storage.
- The machine must not be modified.

2. Operation

- The chisel should be correctly inserted into the breaker. The chisel should be of good quality and have the correct shank dimensions.
- Keep a good balance and keep your feet away from the chisel.
- The breaker must be pressed against the work object and sufficient feed force should be applied to ensure that vibrations are at a minimum.
- Always follow local laws and safety rules.

3. Air hose and air pressure

- The inner diameter of the air hose should be no less than 19 mm and the ideal length is less than 30 m. If the hose length is between 30 m and 100 m, a hose with a minimum diameter of 25 mm should be used.
- Working pressure should be 4–6 bar measured at the machine. Higher pressure (more than 6 bar) may damage the parts and be a risk, whereas, if the pressure is lower than 4 bar, the efficiency will be relatively low.

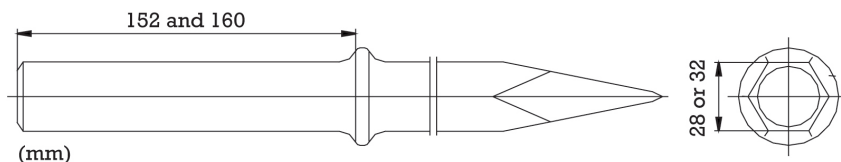
4. Lubrication oil

The choice of the correct oil viscosity varies with working temperature. Use oil with high viscosity at high temperature, use low viscosity oil at low temperature.

Temperature	Name	Viscosity
15 – 50 °C	Mineral oil or synthetic oil	ISO VG 46-68
-20 – 15 °C	Mineral oil or synthetic oil	ISO VG 22-32

5. Chisels

The chisels should be of good quality and have a shank of the right size and shape (including the collar).



A schematic sketch of a suitable chisel.

6. Replacement of parts

Always immediately replace worn or damaged parts. Use genuine parts only; otherwise the correct functioning of the machine cannot be safeguarded.

7. Maintenance

Check the tightening of the side bolts once a week.

The nuts for the side bolts should be tightened to a torque of 160 N/m. After turning to the correct torque, continue turning in the same direction until your first opportunity to lock the nut with the spring pin.

Check the breaker for wear every 3 months.

Make sure the breaker is overhauled every 150 impact hours or twice a year. A complete overhaul is required when (without a chisel in the machine) the piston can be heard to strike against metal.

8. Notes for dismantling/reassembling

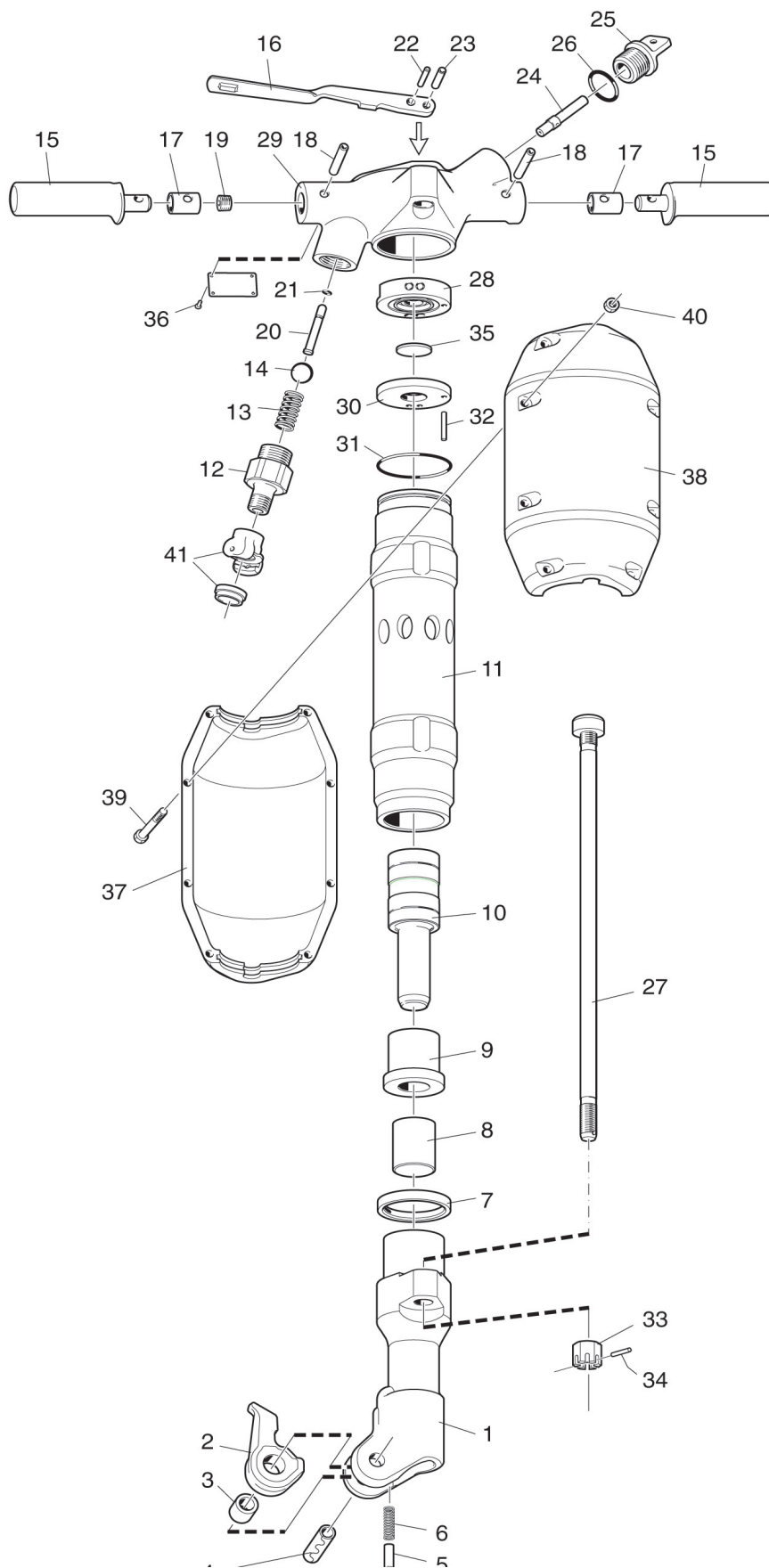
All work for dismantling or reassembling should be done in accordance with the product drawing. Special care should be taken with the air valve, avoiding dirt from the work to get into the machine. The valve must be moving freely after reassembly. Tighten the side bolts by alternately increasing the torque on the two bolts until the correct tightening torque is reached. The tightening torque of the side bolts/nuts should be 160 Nm. After turning to the correct torque, continue turning in the same direction until your first opportunity to lock the nut with the spring pin.

Troubleshooting

If the pneumatic breaker does not start, has low power or an uneven performance, check the following points:

- Check that the chisel used has the correct shank dimension.
- Check that the pneumatic breaker is getting the correct amount of lubrication.
- Note, that too much lubricant may cause starting problems, low power or uneven performance.
- Check that the compressed air system supplies the machine with sufficient air pressure to get full power.
- Check that the dimension and length of the air hose are in accordance to the recommendations.
- If there is a risk of freezing, check that the machine's exhaust ports are not blocked.
- If the machine function is still not satisfactory after this procedure, contact an authorized service workshop.

Spare parts list and exploded drawing



No.	NAME	QTY	PART NUMBER	Product no.	Product code
1	Front head	1	3312 3112 37	96000578	965L-1-3312311237
1	Front head	1	3312 3112 38	96000579	965L-1-3312311238
2	Tool retainer	1	3312 3112 39	96000580	965L-1-3312311239
3	Bushing	1	3312 3112 40	96000581	965L-1-3312311240
4	Spring pin	1	3312 3112 88	96000617	966T-1-3312311288
5	Plunger	1	3312 3112 41	96000582	965L-1-3312311241
6	Spring	1	3312 3112 42	96000583	965L-1-3312311242
7	Ring	1	3312 3112 43	96000584	965L-1-3312311243
8	Tappet	1	3312 3112 44	96000585	965L-1-3312311244
9	Intermediate part	1	3312 3112 45	96000586	965L-1-3312311245
9	Intermediate part	1	3312 3112 73	96000849	965J-1-3312311273
10	Piston	1	3312 3112 46	96000587	965L-1-3312311246
10	Piston	1	3312 3112 74	96000850	965J-1-3312311274
11	Cylinder	1	3312 3112 47	96000588	965L-1-3312311247
11	Cylinder	1	3312 3112 75	96000608	965J-1-3312311275
12	Nipple	1	3312 3112 48	96000589	965L-1-3312311248
13	Spring	1	3312 3112 49	96000590	965L-1-3312311249
14	Ball	1	3312 3112 50	96000591	965L-1-3312311250
15	Handle	2	3312 3112 51	96000592	965L-1-3312311251
16	Trigger	1	3312 3112 53	96000593	965L-1-3312311253
17	Sleeve	2	3312 3112 54	96000594	965L-1-3312311254
18	Spring pin	2	3312 3112 86	96000615	966T-1-3312311286
19	Plug	1	3312 3112 82	96000611	965L-0-3312311282
20	Valve stem	1	3312 3112 55	96000595	965L-1-3312311255
21	O-ring	1	3312 3112 83	96000612	965L-0-3312311283
22	Spring pin	1	3312 3112 85	96000614	966T-1-3312311285
23	Spring pin	1	3312 3104 08	96000364	966M-1- 3312310408
24	Oiler filter	1	3312 3112 56	96000596	965L-1-3312311256
25	Oil plug	1	3312 3112 59	96000597	965L-1-3312311259
26	O-ring	1	3312 3107 40	96000550	965L-0-3312310740
27	Side bolt	2	3312 3122 60	96000598	965L-1-3312311260
27	Side bolt	2	3312 3112 76	96000609	965J-1-3312311276
28	Valve housing (B70)	1	3312 3112 63	96000599	965L-1-3312311263
28	Valve housing (B90)	1	3312 3119 52	96000854	965L-1-3312311952
29	Back head	1	3312 3112 64	96000600	965L-1-3312311264
30	Valve cover (B70)	1	3312 3112 65	96000601	965L-1-3312311265
30	Valve cover (B90)	1	3312 3119 53	96000855	965L-1-3312311953
31	O-ring	1	3312 3112 84	96000613	965L-0-3312311284
32	Pin	1	3312 3112 89	96000618	965L-0-3312311289
33	Nut	2	3312 3112 66	96000602	965L-1-3312311266
34	Spring pin	2	3312 3112 87	96000616	966T-1-3312311287
35	Valve	1	3312 3112 67	96000603	965L-1-3312311267
36	Rivet	4	3312 3112 90	96000619	965L-0-3312311290
37	Muffler, front	1	3312 3112 69	96000605	965L-1-3312311269
38	Muffler, back	1	3312 3112 70	96000606	965L-1-3312311270
39	Bolt	8	3312 3112 91	96000620	965L-0-3312311291
40	Nut	8	3312 3112 92	96000621	965L-0-3312311292



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