

Secoroc Rock Drilling Tools

Secoroc FT Series Pusher Leg

Secoroc FT160 Pusher leg

Operator's instructions / Spare parts list

Foreword

Thank you for selecting the Secoroc pusher leg FT160/170.

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

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

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Scope of application

Secoroc FT series pusher legs are light weight, are easy to handle and to connect and are powered directly from the rock drill. The pusher legs are available in different lengths and with different extensions to achieve the required reach. They also come with a variety of tube diameters for different feed forces to suit various rock drills as well as different rock formations.

The FT160C and the FT170 have extra extensions for higher reach. The FT170 features an extra strong leg which provides additional feed force. The FT160B features a powerful leg, designed for small drifting purposes.

Specification

Product name	Weight (kg)	Length retracted (mm)	Length extended (mm)	Feeding length (mm)	Piston bore (mm)	Suitable rock drill	Article number
FT160A	17	1668	3006	1338	65	7655, 7655D, YT27, YT29A	3312 3006 08
FT160B	16	1428	2526	1098	65	7655, 7655D, YT27, YT29A	3312 3006 09
FT160C	18	1820	3310	1490	65	7655, 7655D, YT27, YT29A	3312 3006 10

Safety instructions

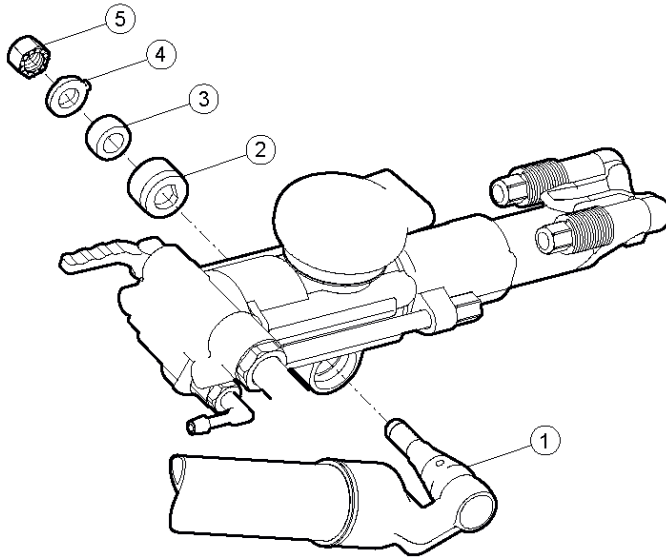
To reduce the risk of serious injury or death to yourself or others, carefully read through this instruction booklet before putting the pusher leg to use. Always follow the instructions given.

- Always wear a safety helmet, goggles and ear protectors during drilling. Any local regulations that exist must also be observed.
- When drilling in certain minerals, there is a risk of spark generation. Before starting work, check that the machine is approved (in accordance with local regulations) for work under such conditions.
- Always take great care when using the machine. The working tool is subjected to heavy loading and can break, with a risk of injury to personnel.
- Check that the hoses used are of the right quality, and that all hose connections are in good condition and properly tightened.
- Before starting work on any of the systems, make sure that the air and water systems are without pressure.
- Make sure that there are no concealed wires or other sources of electricity. Never drill near any electric wires or other sources of electricity.

Operation

Attaching the pusher leg to the rock drill

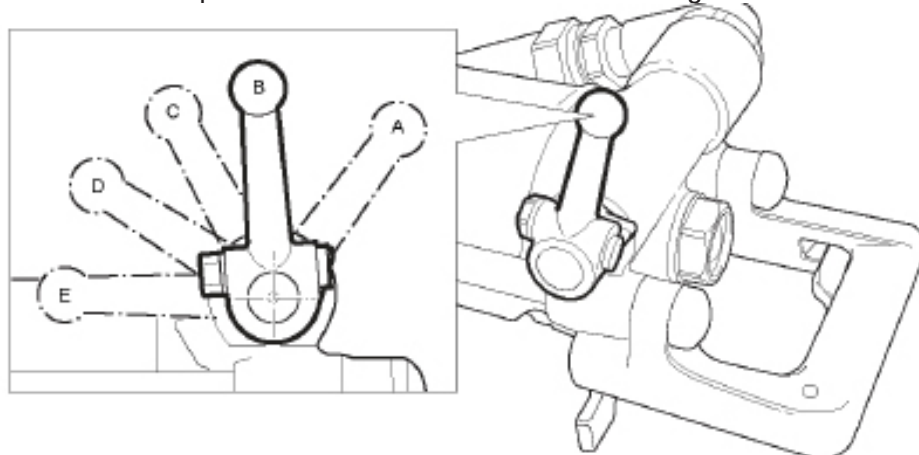
- Mount the pusher leg (1), lock sleeve (2), rubber pad (3), washer (4) and locking nut (5) in the order shown in the picture below.
- Turn the locking nut clockwise with a wrench until you hear a "click".



Controls

Throttle lever

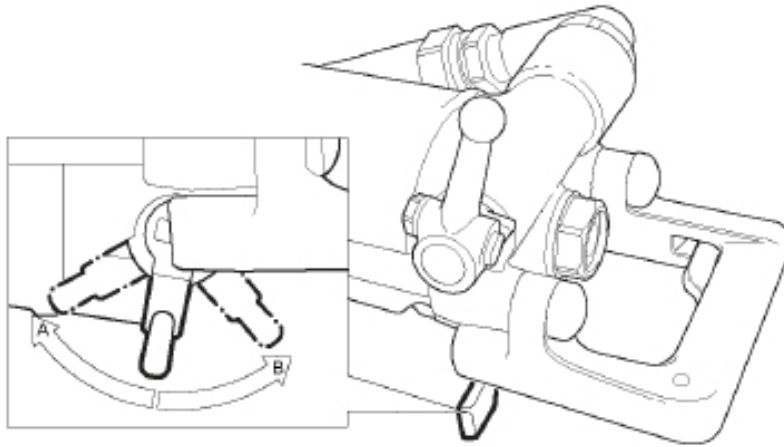
The rock drill is equipped with a throttle lever for regulating both the compressed air to the percussion mechanism and the flushing water.



- A. Extra blowing, water flushing off, impact and rotation off.
- B. Stop position, air and water off
- C. Low throttle, air to pusher leg, water flushing
- D. Medium throttle
- E. Full throttle

Feed control

Adjust the feed force by means of the feed control lever as follows:

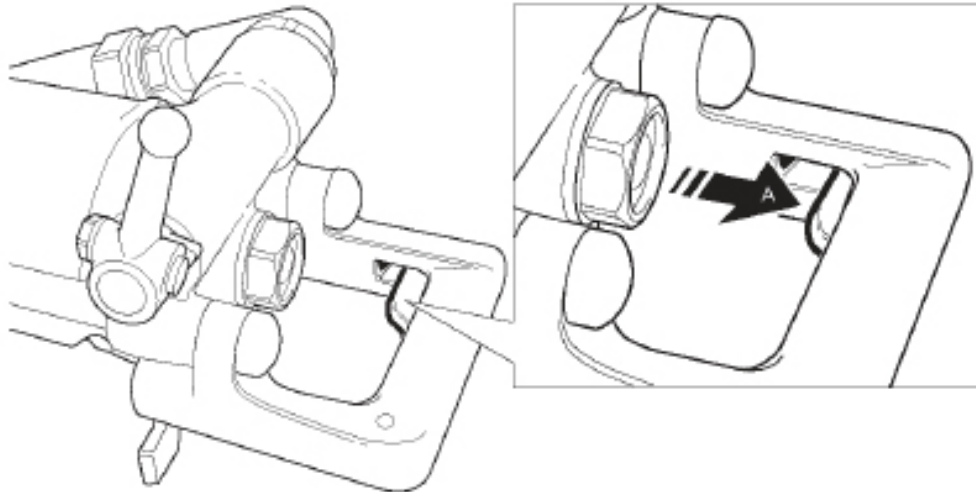


A. Pushing the lever in this direction will increase feed force.

B. Pulling the lever in this direction will decrease feed force

Trigger

When the trigger (A) is pushed in, the feed force stops abruptly and the setting on the feed control lever is overridden. The piston rod in the pusher leg retracts automatically. This function is used for example to adjust the height of the rock drill, when rigging up the pusher leg, or when there is a tendency to jam. When the trigger is released, the feed control setting is activated again.



Drilling

Starting the rock drill

1. Open the main valve for compressed air.
2. Open the cock for the flushing water.
3. Adjust the feed control lever to give a suitable feed force for collaring the hole.
4. Align the rock drill so that the working tool touches the desired collaring point.
5. Move the throttle lever forward a little, which will start water flushing, percussion and rotation.
6. Collar the hole with reduced feed force.
7. Move the throttle lever fully forward once the working tool has gained a secure footing in the rock.
8. Adjust the feed force by means of the control lever so that the maximum penetration rate is obtained.

Stopping the rock drill

Pull the throttle lever backwards, which will stop percussion, rotation and flushing water.

Re-positioning the pusher leg

1. Switch off the rock-drill percussion and flushing by means of the throttle lever.
2. Press the trigger, whereupon the piston rod is pulled back into the pusher-leg cylinder automatically.
3. Re-position the pusher leg.
4. Release the trigger, whereupon the piston rod will move outwards again.
5. Move the throttle lever forward into the working position.

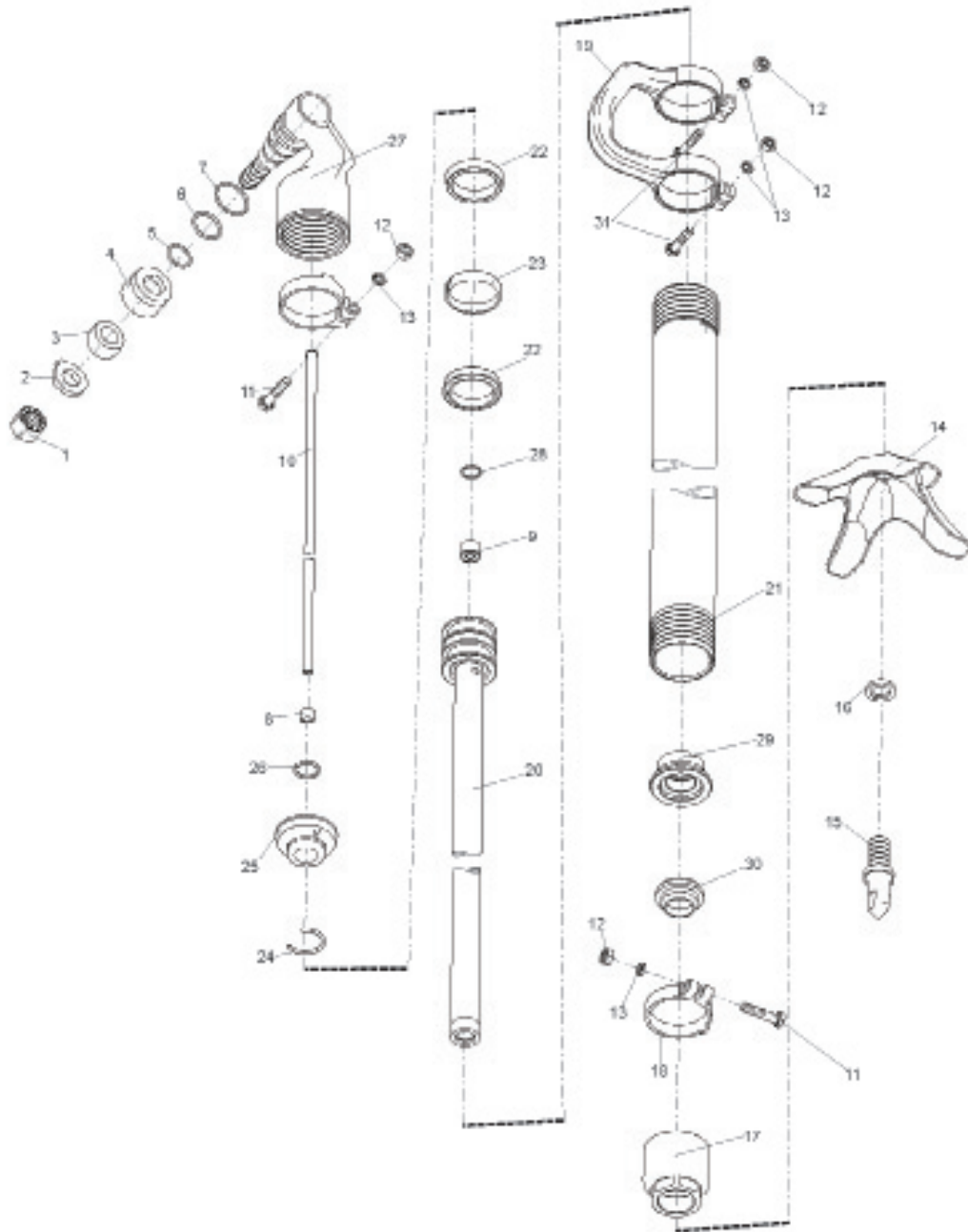
Note! The feed control lever does not need to be touched throughout this operation.

Trouble shooting

Low penetration rate may be caused by insufficient feed force from the pusher leg, check the following points:

- Increase the angle between pusher leg and drilling surface.
- Ring in cross arm wears out; seals between cylinder and back head are worn out. Replace defective seals.
- Loose connection between frame body and outer pipe; lose or defective seal pad at the end of air tube and double YX seals, replace seals.
- Trigger on back head and change over valve are blocked, repair.

Spare parts list and exploded drawing



No.	Description	Quantity			Product no.	Product code
		FT160A	FT160B	FT160C		
1	Lock nut	-	-	-	96000327	9616-1-3312310338
2	Pad	1	1	1	96000328	9616-1-3312310339
3	Rubber pad	1	1	1	96000329	9616-1-3312310340
4	Lock sleeve	1	1	1	96000330	9616-1-3312310341
5	O-ring	1	1	1	96000507	9616-1-3312310677
6	O-ring	1	1	1	96000509	9616-1-3312310680
7	O-ring	1	1	1	96000510	9616-1-3312310681
8	Air pipe rubber pad	1	1	1	96000342	9616-1-3312310353
9	Double Yx-seal ring	1	1	1	96000336	9616-1-3312310347
10	Air pipe	1			96000356	9616-1-3312310386
10	Air pipe		1		96000569	9617-1-3312311115
10	Air pipe			1	96000350	9619-1-3312310361
11	Hex head bolt	2	2	2	96000519	9616-1-3312310698
12	Small nut	3	3	4	96000554	9616-1-3312311016
13	Spring pad	3	3	4	96000534	9605-1-3312310716
14	Foot	1	1	1	96000341	9616-1-3312310352
15	Center	1	1	1	96000340	9616-1-3312310351
16	Spring pad	1	1	1	96000535	9616-1-3312310718
17	Lower tube socket	1	1	1	96000346	9616-1-3312310357
18	Locking ring	2	2	2	96000345	9616-1-3312310356
19	Handle	1	1	1	96000343	9616-1-3312310354
20	Piston bar	1			96000338	9616-1-3312310349
20	Piston bar		1		96000556	9617-1-3312311033
20	Piston bar			1	96000557	9619-1-3312311034
21	Outer pipe	1			96000337	9616-1-3312310348
21	Outer pipe		1		96000347	9617-1-3312310358
21	Outer pipe			1	96000349	9619-1-3312310360
22	Yx-seal ring	2	2	2	96000335	9616-1-3312310346
23	Support ring	1	1	1	96000334	9616-1-3312310345
24	Rubber ring	1	1	1	96000333	9616-1-3312310344
25	Frame pad	1	1	1	96000332	9616-1-3312310343
26	O-ring	1	1	1	96000505	9616-1-3312310675
27	Frame	1	1	1	96000331	9616-1-3312310342
28	Rubber ring	1	1	1	96000533	9616-1-3312310715
29	Guide sleeve	1	1	1	96000339	9616-1-3312310350
30	Dust cap	1	1	1	96000357	9616-1-3312310387
31	Hex head bolt	2	2	2	96000521	9616-1-3312310700



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