

使用范围:

- I YT28 型气腿式凿岩机最适用于在中硬或坚硬($f=8 \sim 18$)岩石上钻凿水平和倾斜方向炮孔,也可垂直向上钻凿顶板上的锚杆孔,是矿山、铁路、交通、水利建设及国防石方工程中的重要机具;
- I 本机可与 FT160BD 型或 FT160BC 型气腿及有透明壳体的 FY200B 型注油器配套使用,也可装在钻车或钻架上工作。

Introduction:

- I YT28 Air-leg Rock Drill most fit for drilling horizontal and inclined blastholes in medium-hard and hard rock with a hardness of $f=8 \sim 18$. It may also be used with for making roof-bolting holes. The drill is an important instrument in mining, railway, communication and water conservancy projects.
- I May be used together with FT160BC or FT160BD Air-leg and FY200B Line Oiler with transparent casing. The tool can also be mounted on a rig or a wagon.

YT28 型凿岩机技术规格 YT28 Specifications:

机重	Weight	kg	26
长×宽×高	L×W×H	mm	661×247×195
工作气压	Air pressure	MPa	0.63
凿岩机耗气量*	Air consumption*	L/s	≤81
凿岩频率	Impact frequency	Hz	≥37
气管内径	Air hose size	mm	25
水管内径	Water hose size	mm	13
钻孔直径	Bore dia.	mm	Φ34~Φ42
钻孔深度	Drilling depth	m	5
钎尾规格 (六方对边×长度)	Shank size(Hex.×L)	mm	22*108±1

气腿技术规格 Air-leg Specifications

气腿型号	Model		FT160BC	FT160BD
气腿长度	Length	mm	1800	1400
推进行程	Feed length	mm	1365	965
重量	Weight	kg	16.9	14.4

FY200B 型注油器技术规格 FY200B Line Oiler Specifications

贮油量度	Capacity	ml	200
重量	Weight	kg	1.02

结构特点：

- l 操作机构集中、启动灵活、气水联动、使用方便、维修简易；
- l 噪声低、振动小、节能高效、零件寿命长、通用率高、可靠性好。
- l 尤以效率高，吹洗炮孔功能强，转钎力矩大而优于同类产品。

Features:

- l Grouped control mechanism, quick of start up, with “air-on, water-on, air-off, water-off” mechanism, easy operation and maintenance.
- l Low noise, small vibration, energy-saving and efficient, highly interchangeable parts with long service life, reliable performance.
- l Different from similar products particularly in its high efficiency, strong flushing and powerful torque.

使用与维修：

除必须遵循一般凿岩作业的技术安全规程外，还应特别注意：

- l 螺旋母与活塞是左旋螺纹连接，拆装时要注意旋转方向；
- l 凿岩机通气、水前，细致检查钢丝卡环（37）（43）是否完整正确地卡在柄体（29）半圆槽内，并随时注意其磨损情况，磨损或失效后及时更换，以免通气、水时，气管弯头（38）和水管弯头（42）崩出；
- l 机器开动前，要将 FY200B 型注油器注满润滑油，严禁无润滑油作业（推荐选用 GB443-84 所规定的 N46，N22 润滑油）；

- I 机器工作结束，应先关闭水管，再轻运转片刻，吹净机内残余水滴，防止零件锈蚀。
- I 经常使用的机器，应注意定期保养和维护。保持机内清洁，注意更换损坏和失效的零件，消除故障隐患。

Operation & maintenance:

Besides observance of the general safety precautions for rock drilling operations, particular attention should be paid to the following:

- I The rifle nut and the piston are matched with left-hand threads. Cautions should be taken during assembling and disassembling.
- I Before connecting the drill to the air and water supplies, check carefully if the wire clips (37)(43) are entirely and correctly set in the respective semi-circular grooves of the backhead (29). Check frequently the wear on the clips and timely replace the worn-out or broken one or broken one to avoid the shooting out of the swivel or the connector when the air or water is on.
- I Before operation, fill the line oiler with lubrication oil to the required level. The drill should not be run without proper lubrication (recommended lube oil N46 and N22, Chinese National Standard GB443-84).
- I After operation, first turn off the water, lightly run the drill for a few seconds, blow out the residual water drops to prevent the parts from being corroded.
- I If the drill is often used, should maintenance it regularly to ensure the inside parts cleaning. Especially pay attention to change the worn parts and lose efficient parts.

YT28 型凿岩机零配件明细表

Parts List of YT28 Rock Drill

序号 No.	零件号 Part No.	零件名称 Description	单台数量 Qty
1	YT28-1.02	棘轮 Ratchet ring	1
2	YT28-1.03	阀柜 Valve chest	1
3	YT28-1.05	阀盖 Valve cover	1
4	YT28-1.08	螺旋母 Rifle nut	1
5	YT28-1.10	活塞 Piston	1
6	YT28-1.11 ^a	缸体 Cylinder	1
7	YT28-1.12 ^a	导向套 Guide ring	1
8	YT28-1.13	消声罩 Muffler	1
9	YT28-1.14	衬套 Bush	1
10	YT24-1.04	阀 Valve	1
11	YT24-1.06	定位销 Valve plug	1
12	YT24-1.07	棘轮爪 Ratchet Pawl	4
13	YT24-1.09	螺旋棒 Rifle bar	1
14	YT24-1.15	塔形弹簧 Pawl spring	4
15	YT28-2.01 ^b	机头 Fronthead	1
16	YT28-2.02 ^a	转动套 Rotary sleeve	1
17	YT24-2.03*	钎尾套 Chuck sleeve	1
18	YT28-2.12	弹簧垫圈 Spring washer	2
19	YT28-2.05	钎卡弹簧 Steel puller spring	2
20	YT24-2.06	钎卡螺栓 Steel puller bolt	2
21	YT24-2.07 ^a	钎卡 Steel puller	1
22	YT28-2.09	花键母 Dive nut	1
23	GB889 M16-Zn.D	六角锁紧螺母 Locking nut	2
24	YT28-3.02	长螺杆 Through bolt	2
25	YT28-3.03 ^a	操纵阀 Throttle valve	1
26	YT28-3.04	水针 Water tube	1
27	YT28-3.05	气针 Air tube	1
28	YT28-3.07	大密封套 Air seal	1
29	YT28-3.08 ^a	柄体 Backhead	1
30	YT28-3.13	涨圈 Expansion ring	2
31	YT28-3.14	调压阀 Pressure regulating valve	1
32	YT28-3.21	操纵把 Control lever	1
33	YT28-3.27	左把 Left handle	1
34	YT24-3.01	弹性环 Elastic ring	1

35	YT24-3.06	小密封套 Sealing gland	2
36	YT24-3.09	长螺杆螺母 Through bolt nut	2
37	YT24-3.10	钢丝卡环 Wire clip	1
38	YT28-3.11	气管弯头 Air pipe swivel	1
39	YT24-3.12	扳机 Trigger	1
40	YT24-3.15	换向阀 Directional valve	1
41	YT24-3.16	弹簧 Spring	1
42	YT28-3.18	水管弯头 Water pipe connector	1
43	YT24-3.19	钢丝卡环 Wire clip	1
44	YT24-3.22	紧固销 Detent pluger	1
45	YT24-3.23	注水阀体 Water valve body	1
46	YT24-3.24	钢丝卡环 Wire clip	1
47	YT24-3.25 ^a	簧盖 Spring cover	1
48	YT24-3.26	注水阀 Water valve	1
49	YT24-3.28	右把 Right handle	1
50	YT24-3.29	胶把 Rubber grip	1
51	YT24-3.30	密封圈 Seal ring	1
52	YT25-3.06	弹簧 Spring	1
53	YT25-3.09	水针套 Water tube sleeve	1
54	YT25-3.13	胶垫 Rubber pad	1
55	YT25-3.14	气针垫 Air tube washer	1
56	YT25-3.20	弹簧 Spring	1
57	YT25-3.21	定位销 Locating pin	1
58	YT25-3.24	环形密封圈 Seal ring	1
59	YT25-3.35	垫 Washer	1
60	8*1.9 GB1235-76	O形密封圈 O-ring	1
61	22*2.4 GB1235-76	O形密封圈 O-ring	1
62	25*2.4 GB1235-76	O形密封圈 O-ring	1
63	36*3.5 GB1235-76	O形密封圈 O-ring	3
64	d100 ZBJ15 001-87	喉箍 Hose clamp	1
65	GB879 8*24	弹性圆柱销 Pin	1
66	GB93 10	弹簧垫圈 Spring washer	1
67	GB6172 M10-Zn.D	六角薄螺母 Nut	1

注：*钎尾为 25*108 时，可选用 YSP45-02.04/S25

Note: *For shank size 25*108, YSP45-02.04/S25 may be used.

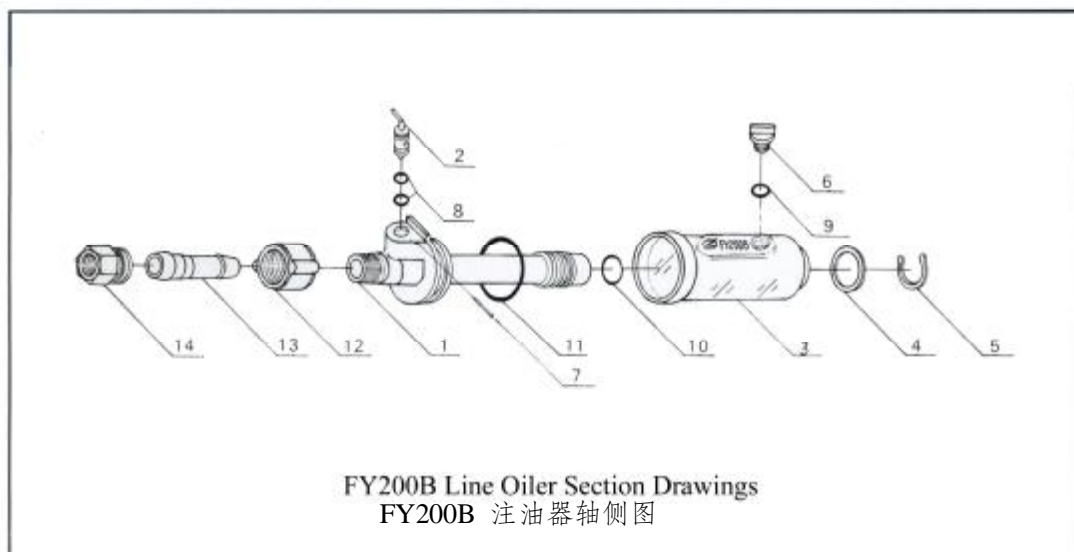
FT160BC/FT160BD 型气腿零件明细表
Parts List of FT160BC/FT160BD Air-leg

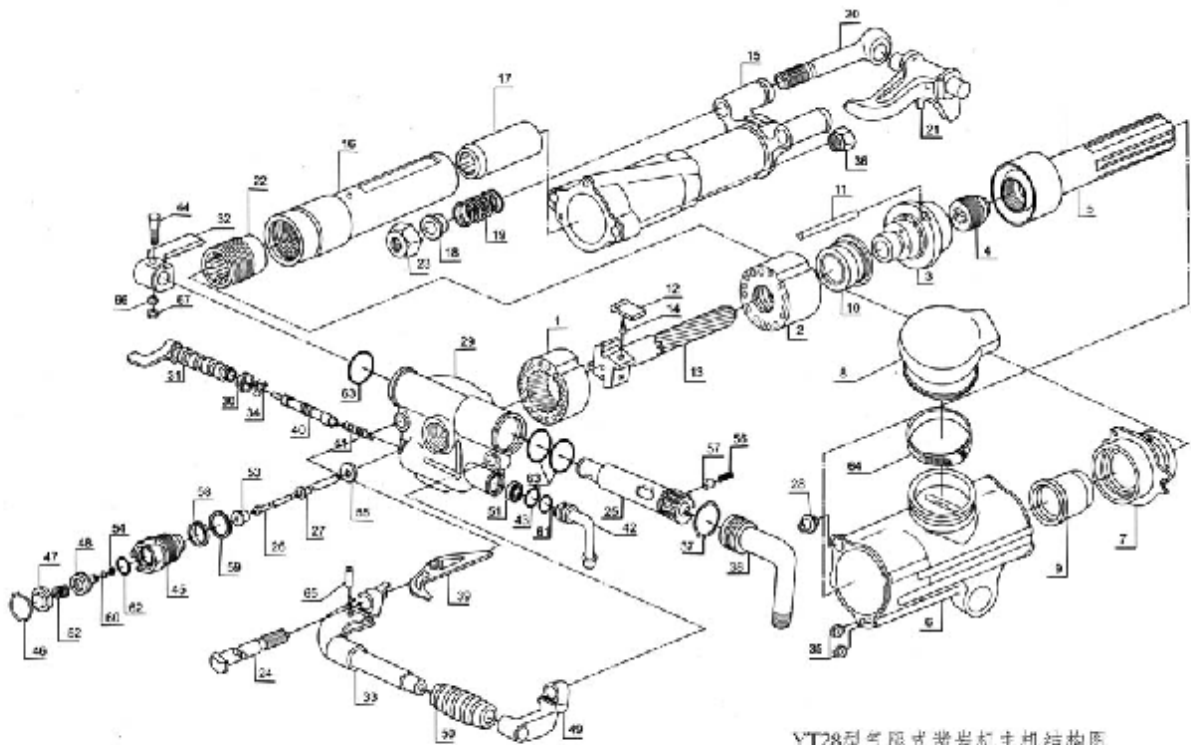
序号 No.	零件号 Part No.	零件名称 Description	单台数量 Qty
1	FT160BC-1 ^{a*} FT160BD-1 ^{a**}	外管 Outer tube	1
2	FT160BC-3* FT160BD-3**	伸缩管焊接件 Telescopic tube	1
3	FT160BC-14* FT160BD-14**	气管 Air pipe	1
4	FT160BC-2	架体垫 Mounting pad	1
5	FT160BC-4	导向套 Guide sleeve	1
6	FT160BC-6	活塞 Piston	1
7	FT160BC-8 ^a	下管座 Lower pipe seat	1
8	FT160BC-11 ^b	架体 Frame body	1
9	FT160BC-12	锁紧圈 Lock ring	2
10	FT160BC-13	横臂 Cross arm	1
11	FT160BC-17	弹性圈 Elastic ring	1
12	FT140B-18 ^b	防尘密封套 Dust cap	1
13	FT160BC-22	气管胶垫 Rubber pad	1
14	FT160BC-23	锁紧螺母 Locking nut	1
15	FT160BC-30	密封套 Sealing sleeve	1
16	FT160BC-21	支承环 Support ring	1
17	FT160BC-24	提把 Lifting handle	1
18	M10*65 GB5782-86	螺栓 Bolt	2
19	FT140B-9	顶叉焊接件 Sprag	1
20	FT140B-10	顶尖 Centre	1
21	FT140B-25	防松套 Retainer	1
22	FT140B-26	弹性胶垫 Rubber pad	1
23	FT140B-27	止退垫 Thrust washer	1
24	FT140B-29	锁紧螺母 Locking nut	1
25	D65 JB/ZQ4264-86	YX 形密封圈 YX Type seal	2
26	26*2.4 GB1235-76	O 形密封圈 O-ring	1
27	28*3.1 GB1235-76	O 形密封圈 O-ring	1
28	32*3.1 GB1235-76	O 形密封圈 O-ring	3
29	GB93 22	弹簧垫圈 Spring washer	2
30	GB93 10	弹簧垫圈 Spring washer	4
31	M10*40 GB5782-86	螺栓 Bolt	2
32	GB6172 M10-Zn.D	六角薄螺母 Nut	4

FY200B 零件明细表
Parts List of FY200B

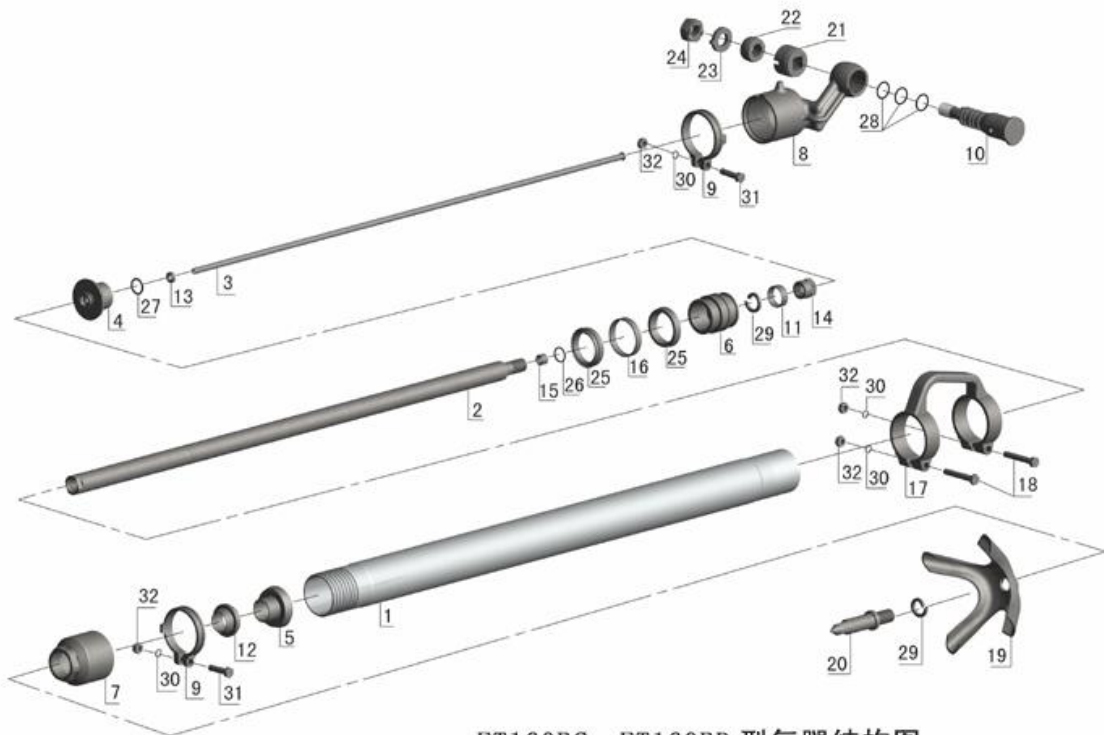
序号 No.	零件号 Part No.	零件名称 Description	单台数量 Qty
1	FY200B-1	注油器体 Oiler body	1
2	FY200B-2	油阀 Needle valve	1
3	FY200B-3	壳体 Casing	1
4	FY200-2	挡圈 Retainer	1
5	FY200-11	弹性挡圈 Elastic retainer	1
6	FY200A-2	油堵 Oil plug	1
7	GB879 3*24	弹性圆柱销 Pin	1
8	14*2.4I GB1235-76	O形密封圈 O-ring	2
9	22*2.4I GB1235-76	O形密封圈 O-ring	1
10	35*3.1I GB1235-76	O形密封圈 O-ring	1
11	Q/LB18-92-52*3	O形密封圈 O-ring	1
12	25Q/LB3-94*	蝶形螺母 Wing nut	1
13	25Q/LB4-92*	锥形气管接头 Air connector	1
14	25Q/LB14-92-A	管接套 Pipe connector	1

注：*供出口配带的件。 Note: * for export.





YT28型气腿式凿岩机主机结构图
Model YT28 Air-leg Rock Drill Section Drawing



FT160BC、FT160BD 型气腿结构图
Model FT160BC、FT160BD Air-leg section Drawing