

Fuji USER MANUAL

— DRILLS —

MODELS : FRD-20R-21, -21S, -22, -22S



FRD-20R-21, -21S, -22, -22S

SPECIFICATIONS

Model	Capacity (Guidance)				Stall Torque			Free Speed	Socket	Feed Length		Overall Length		Mass		Max. Air Consumption		Air Inlet Thread Size	Air Hose Size	
	Drilling		Reaming-Tapping																	
	mm	in	mm	in	N·m	kgf·m	ft·lb	min ⁻¹	M.T.#	mm	in	mm	in	kg	lb	Nm³/min	Nlt³/min	in	mm	in
FRD-20R-21	19	3/4	16	5/8	63.7	6.5	47.0	600	2	67	2 5/8	282	11 7/64	7.0	15.4	1.5	53.0	PT or NPT 1/2	12.7	1/2
FRD-20R-21S	19	3/4	16	5/8	63.7	6.5	47.0	600	2	67	2 5/8	282	11 7/64	7.0	15.4	1.5	53.0	PT or NPT 1/2	12.7	1/2
FRD-20R-22	19	3/4	16	5/8	63.7	6.5	47.0	600	3	67	2 5/8	307	12 3/32	7.0	15.4	1.5	53.0	PT or NPT 1/2	12.7	1/2
FRD-20R-22S	19	3/4	16	5/8	63.7	6.5	47.0	600	3	67	2 5/8	307	12 3/32	7.0	15.4	1.5	53.0	PT or NPT 1/2	12.7	1/2

The models with "S" at the end of model names are Self Return Rolling Throttle types.

The performance figures are at 0.63MPa (6.3bar).

⚠ Refer to "The Instructions and Warning for Safety Use" enclosed in each tool box.

Fuji Industrial Technique Co.,Ltd.

2-1-14, Kamiji, Higashinari-ku, Osaka, 537-0003 Japan

Tel : 81-6-6972-2335

Fax : 81-6-6972-2380

PARTS LIST

Index No.	Parts No.		Parts Name	Qt.
	Roll Handle	Self Return Roll Handle		
CP No.	D -095004-03	D -095004-04	Throttle Valve Stem C.P	
106	M-040106-00	○	Throttle Valve Handle	1
110	M-040110-00	○	Throttle Valve	1
113	M-040113-00	○	Throttle Valve Rod	1
115	M-040115-00	○	Throttle Valve Sheet	1
120	M-040120-00	○	Throttle Valve Cover <PT>	1
120	M-040120-01	○	Throttle Valve Cover <NPT>	1
124	G -005124-00	—	Knock Spring	1
125	M-040125-00	○	Throttle Valve Stem	1
126	D -095126-00	○	Throttle Valve Stem Nut	1
127	M-040127-00	○	Throttle Valve Handle Band	1
128	M-040128-00	○	Reverse Valve Rod	1
135	D -026135-00	○	Reverse Valve Lever	1
174	D -026174-00	○	Small Screw	1
175	M-040175-00	○	Small Screw 	1
177	M-040177-00	○	Throttle Handle Step	1
187	—	M-040187-00	Throttle Valve Handle Spring	1
197	D -097197-00	—	Handle Bushing	1
(B01)	SP-28	—	Spring Pin	1
698	D -026698-00	○	Guide Roller	1
B02	SP-38	○	Spring Pin	1
B03	NR-45	○	Needle Roller	1
B04	NR-35FR	—	Needle Roller	1
C01	O-11	○	"O" Ring	2
C02	O-S20	○	"O" Ring	2

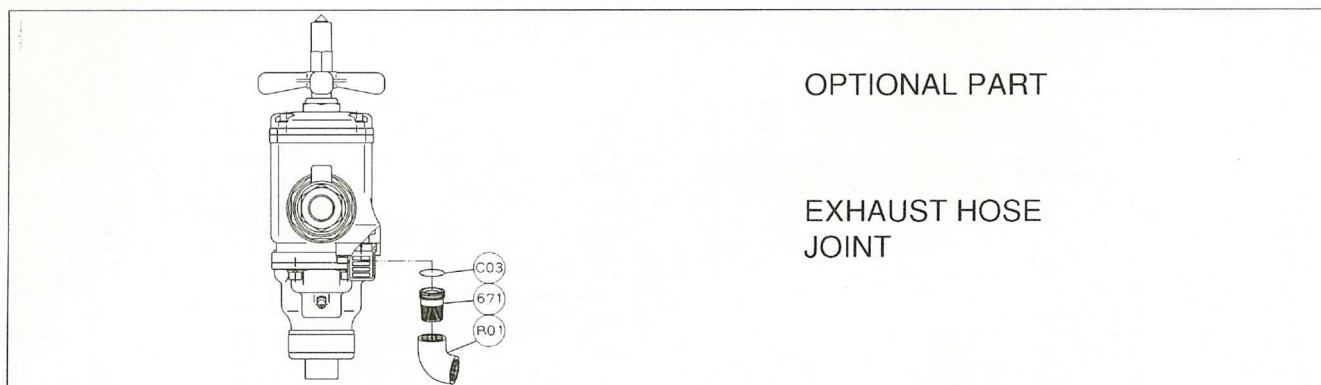
All of the above parts can be commonly used on the models.

Index No.	Parts No.		Parts Name	Qt.
	FRD-20R-21,-21S	FRD-20R-22,-22S		
CP No.	D -095006-54	○	Housing C.P	
133	D -008133-02	○	Reverse Valve Sheet	1
176	D -008176-00	○	Reverse Valve Sheet Packing	1
201	D -095201-04	○	Housing	1
B05	SP-38	○	Spring Pin	1
101	D -095101-00	○	Housing Cover	1
131	D -008131-01	○	Reverse Valve	1
134	D -008134-01	○	Reverse Valve Spring	1
207	D -026207-00	○	Rotor	1
208	D -026208-00	○	Rotor Blade	5
209	D -026209-00	○	Cylinder	1
(B06)	SP-310	○	Spring Pin	1
(B07)	SP-320	○	Spring Pin	1
210	D -026210-00	○	Cylinder Upper Plate	1
211	D -008211-00	○	Cylinder Lower Plate	1
250	D -097250-00	○	Exhaust Cover	1
257	D -008257-00	○	Washer	1
258	D -008258-00	○	Washer 	1
259	D -008259-00	—	Inner Race	1
401	D -026401-00	○	No.1 Pinion	1
402	D -008402-00	○	No.1 Gear	1
403	D -008403-00	○	No.2 Pinion	1
404	D -008404-00	○	No.2 Gear	1
430	D -008430-A	D -034430-00	No.1 Gear Case	1
435	D -034435-00	○	Thrust Washer	1
436	D -008436-00	○	Bearing Holder	1
450	D -008450-00	○	Feed Screw Center	1
451	D -008451-00	○	Center Holder	1
453	D -008453-00	○	Feed Screw Handle	1
454	D -008454-00	○	Feed Screw	1
455	D -008455-00	○	Feed Sleeve	1
456	D -008456-00	○	Feed Sleeve Nut	1
457	D -008457-00	D -034457-00	Extractor	1
458	D -008458-00	D -034458-00	MT. Socket	1
459	D -008459-00	D -034459-00	Socket Arbor	1
461	D -008461-A	D -034461-00	Socket Nut	1
604	T -004604-00	○	Dead Handle	1
605	D -008605-00	○	Dead Handle Joint	1
621	D -095621-00	○	Packing <A>	1

	FRD-20R-21,-21S	FRD-20R-22,-22S		
622	D-008622-00	○	Packing 	1
639	D-095639-00	○	Exhaust Cover Holder	1
722	D-008722-00	D-034722-00	Leather Packing	1
A01	BB-6202	○	Ball Bearing	1
A02	BB-6203	○	Ball Bearing	1
A03	BB-627	○	Ball Bearing	2
A04	BB-7203	○	Ball Bearing	1
A05	NB-SC2016	○	Needle Bearing	1
B08	NR-412FR	○	Needle Roller	1
B09	SP-38	○	Spring Pin	1
C03	O-S22	○	"O" Ring	1
D01	CS-622	○	Cap Screw	4
D02	CS-520	○	Cap Screw	2
D03	CS-622	○	Cap Screw	4
D04	CS-616	○	Cap Screw	2
E01	SW-6	○	Spring Washer	4
E02	SW-5	○	Spring Washer	2
E03	SW-6	○	Spring Washer	6
H01	K-3311	○	Key	1
H02	K-338.5	○	Key	1
H03	K-3.53.511	○	Key	1
H04	K-4511.5	K-4412	Key	1
N01	GN-6	○	Grease Nipple	1
Z01	NP-3005	○	Name Plate	1
Z02	NPN-0×3.2	○	Screw Rivet	2

OPTIONAL PART LIST : EXHAUST HOSE JOINT

Index No.	Parts No.	Parts Name	Qt.
671	D-097671-00	Exhaust Cover Joint	1
R01	JE-1/2	Elbow Joint	1



- ☐ CP No. denotes the assembled parts comprising of more than 1 pc. of parts.
The related parts are shown in the thick frame.
- ☐ Mark ○ in the part No. column shows that same part shown in the left column is used.
- ☐ # 197 and 209 are supplied together with parts shown in ().
- ☐ Specify parts number and quantity in ordering.

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