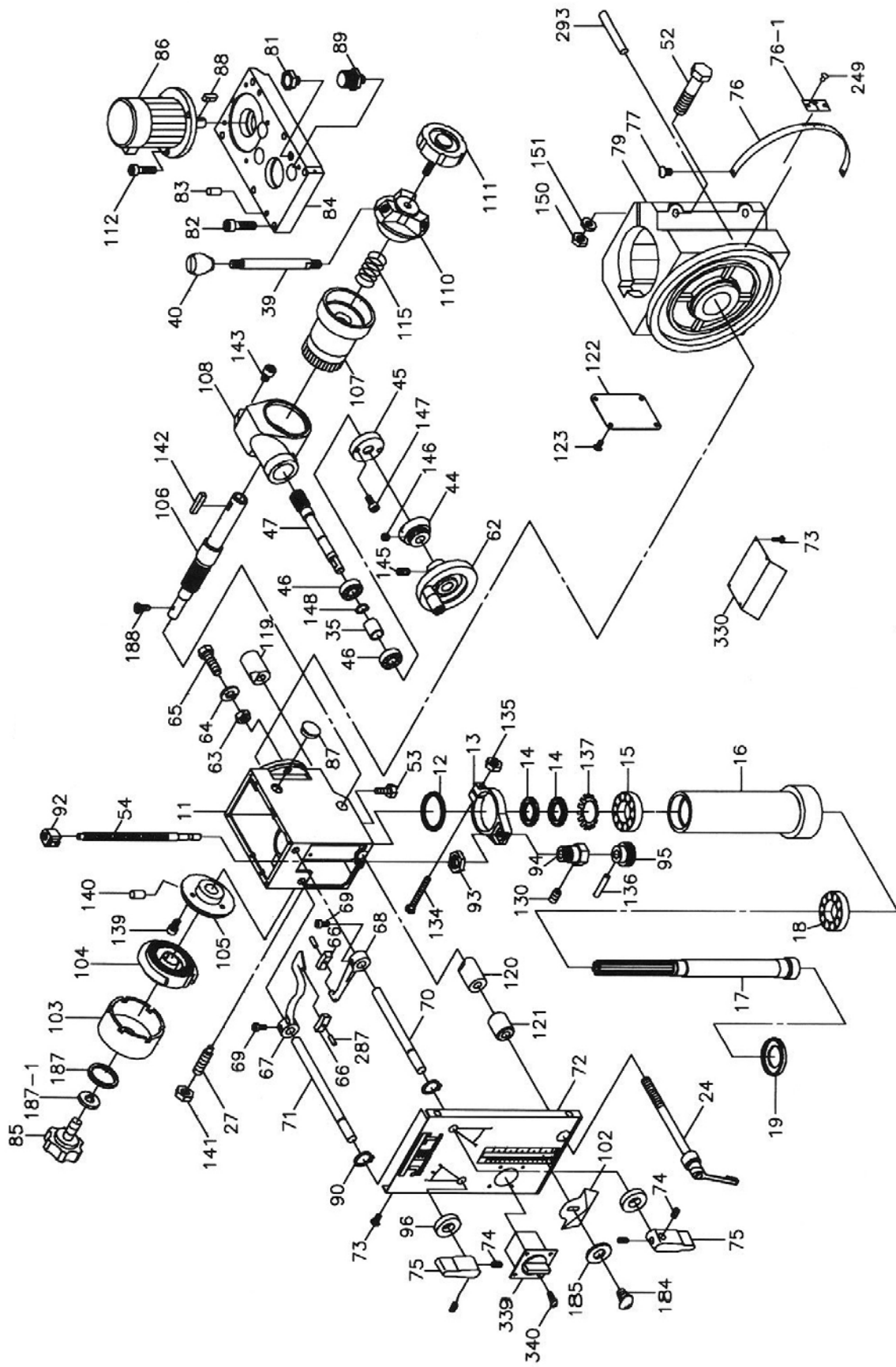


GHD-20/20T Head Assembly

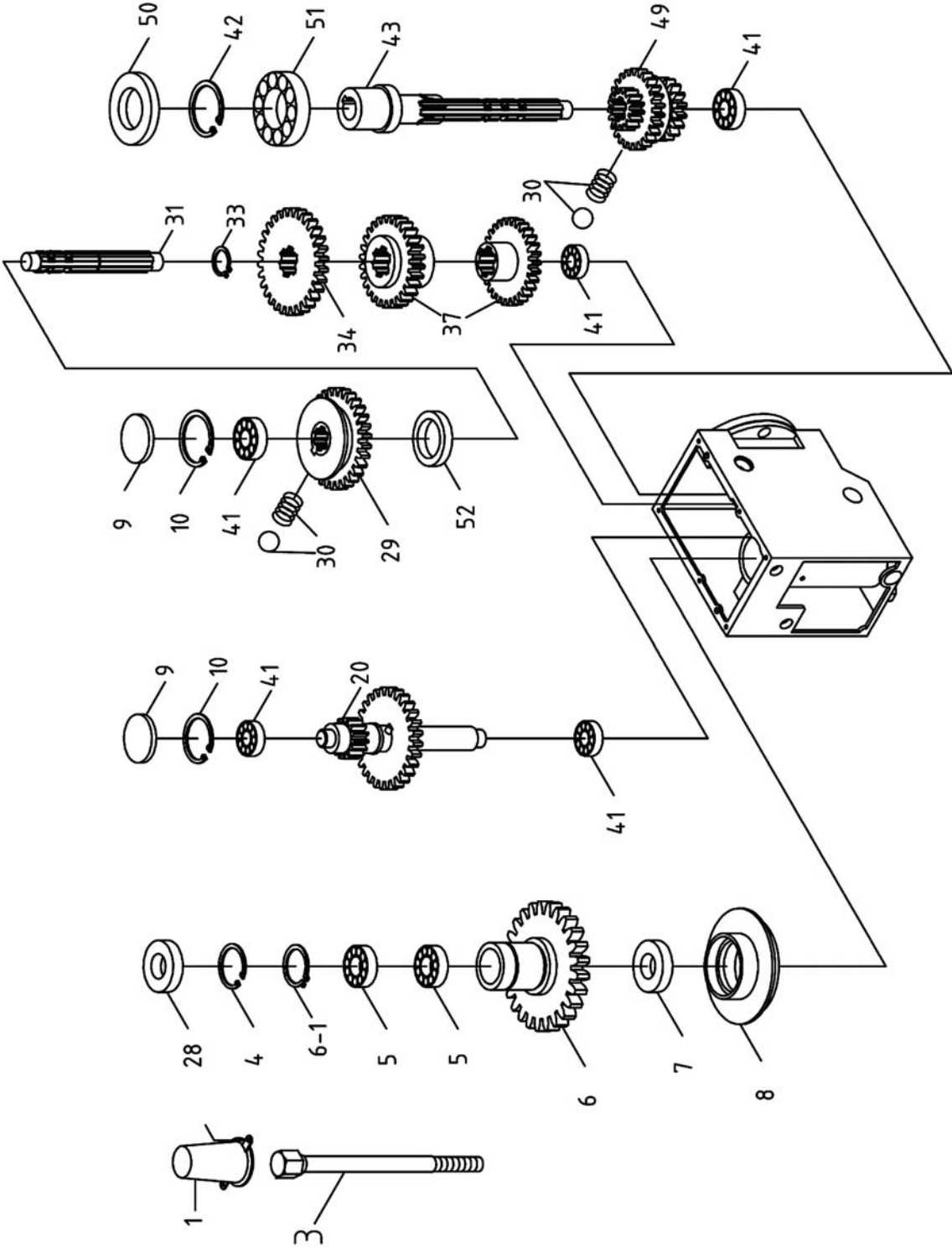


Parts List – GHD-20/20T Head Assembly

Index No.	Part No.	Description	Size	Qty
11	2401011	Head Casting		1
12	6112	Rubber Gasket		1
13	6513	Feed Base		1
14	6114	Lock Nut		2
15	BB-30206	Taper Roller Bearing		1
16	6116	Rack Sleeve	MT3	1
17	6117	Spindle Shaft	MT3	1
18	BB-30207	Taper Roller Bearing		1
19	6119	Bearing Cap		1
24	2421003	Handle Rod		1
27	6127	Screw Key		1
35	6135	Bearing Spacer		1
39	6139	Handle Rod		3
40	290086	Knob		3
44	6144	Micro Adjusting Indicator		1
45	6145	Worm Cover		1
46	BB-6202Z	Ball Bearing		2
47	6147	Worm Shaft		1
52	TS-0071141	Hex Cap Bolt	5/8" x 5-1/2"	2
53	GHD20-53	Oil Plug		1
54	6195	Rod		1
62	6142-2	Head Wheel		1
63	TS-0561071	Hex Nut	5/8"	3
64	TS-0680081	Washer		2
65	TS-0071041	Hex Screw	5/8" x 2-1/4"	3
66	2401066	Gear Lever Bracket		2
67	2401067	Gear Lever (Left)		1
68	2401068	Gear Lever (Right)		1
69	GHD20-69	Screw	1/4" x 1/2"	2
70	2401070	Lever Shaft (Right)		1
71	2401071	Lever Shaft (Left)		1
72	2401072	Name Plate		1
73	GHD20-73	Screw	3/16" x 3/8"	8
74	TS-0267021	Set Screw	1/4" x 1/4"	8
75	2401075	Speed Lever		2
76	GHD20-76	Scale		1
76-1	2401076-1	Pointer		1
77	GHD20-77	Screw		2
79	2412001	Block		1
81	GHD20-81	Oil Plug		1
82	TS-0209061	Hex Socket Cap Screw	3/8" x 3/4"	6
83	GHD20-83	Miter Pin		2
84	2401084	Cover		1
85	6185	Lock Handle		1
86	GHD20-86	Motor	2HP 3PH 230V	1
87	GHD20-87	Oil Sight Glass		1
88	GHD20-88	Key	6 x 6 x 30mm	1
89	GHD20-89	Brass Fitting		1
90	GHD20-90	C-Ring		2
92	6192	Block		1
93	6193	Nut		1
94	6194	Support Base		1
95	6195	Knob Assembly		1
96	GHD20-96	Oil Seal		2
101	61101	Bracket		1
102	61102	Limit Plate		1
103	61103	Spring Cover		1

Index No.	Part No.	Description	Size	Qty
104	61104	Spring		1
105	61105	Spring Base		1
106	61106	Pinion Shaft		1
107	61107	Worm Gear		1
108	61108	Feed Cover		1
110	61110	Spring Base		1
111	6138	Lock Bolt w/ Knob		1
112	TS-0209051	Hex Socket Cap Screw	3/8" x 1"	3
115	61115	Spring		1
119	6126-1	Collar (thread)		1
120	6125-1	Collar		1
121	6125-2	Collar		1
122	61112	Cover		1
123	GHD20-123	Screw		4
130	TS-1501021	Hex Socket Cap Screw	M4 x 8	1
134	TS-005091	Hex Cap Bolt	1/4" x 2"	1
135	TS-0561011	Hex Nut	1/4"	1
136	6195	Spring Pin		1
137	GHD20-137	Star Washer		1
139	GHD20-139	Screw	3/16" x 3/4"	3
140	GHD20-140	Spring Pin		1
141	TS-0561031	Hex Nut	3/8"	1
142	GHD20-142	Key	7 x 7 x 20	1
143	TS-0208021	Hex Socket Cap Screw	5/16" x 1/2"	2
145	TS-0270021	Set Screw	5/16" x 5/16"	1
146	TS-0267021	Set Screw	1/4" x 1/4"	1
147	GHD20-147	Hex Socket Cap Screw	3/16" x 7/16"	2
148	GHD20-148	C-Ring		1
150	TS-0561071	Hex Nut	5/8"	2
151	TS-0680081	Washer	5/8"	2
184	GHD20-184	Screw	5/32" x 1/4"	1
185	GHD20-185	Washer	1/4"	1
187	TS-0680021	Washer	1/4"	1
187-1	TS-0720071	Lock Washer	1/4"	1
188	GHD20-188	Screw	3/16" x 3/8"	1
249	GHD20-249	Rivet		2
287	GHD20-287	Spring Pin		2
330	2401085	Dust Plate		1
339	GHD20-339	Switch		1
340	GHD20-340	Screw		2
341	GHD20-341	Motor Cord		1
342	GHD20-342	Power Cord		1

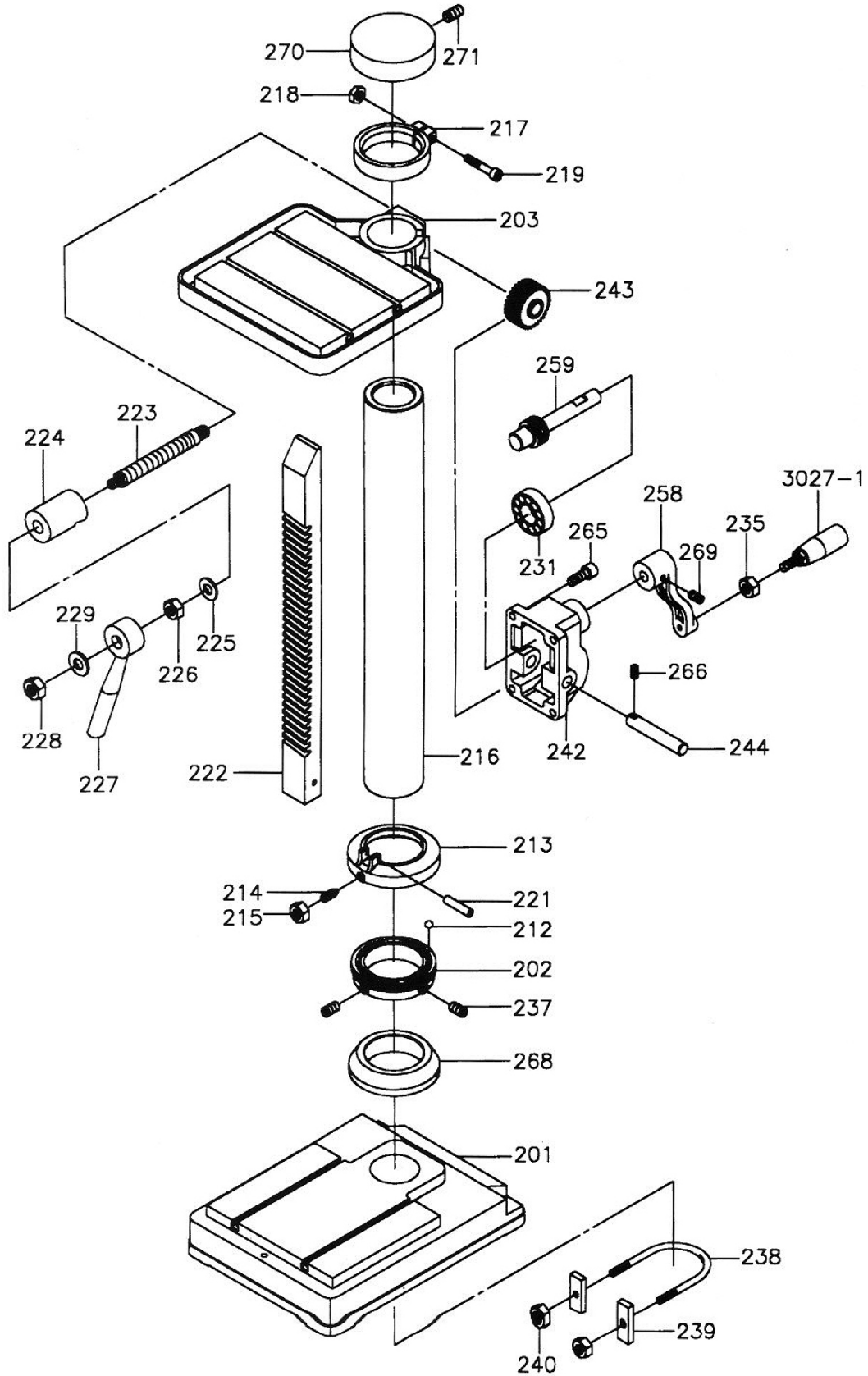
Gear Assembly GHD-20/20T



Parts List – Gear Assembly GHD-20/20T

Index No.	Part No.	Description	Size	Qty
1	2401001-2	Main Shaft Cover		1
2	6101-2	Chuck Arbor Bolt	MT-3	1
4	GHD20-4	Retainer Ring	R68	1
5	BB6008ZZ	Ball Bearing		2
6	2401006	Idle Gear	53T	1
6-1	GHD20-6-1	C-Ring		1
7	GHD20-7	Oil Seal		1
8	2401008	Oil Seal Ring		1
9	GHD20-9	Dust Cover		2
10	GHD20-10	C-Ring		2
20	2401020	Idle Gear		1
	2401020A	Gear Shaft Assembly (s/n 7110881 and higher)	15/41T	1
28	GHD20-28	Oil Seal		1
29	2401029	Idle Gear	35T	1
	2401029N	Idle Gear (s/n 7110881 and higher)	35T	1
30	GHD20-30	Steel Ball w/ Spring	5/16"	3
31	2401031	Pinion Shaft		1
	T2401031BS	Pinion Shaft w/Gear Assembly (s/n 7110881 and higher) (includes #29,#30,#31,#33,#34,#37 and #52)		1
33	GHD20-33	C-Ring	S18	1
34	2401055	Idle Gear	42T	1
	2401055N	Idle Gear (s/n 7110881 and higher)	42T	1
37	2401037	Idle Gear(2piece)	44/28T	1
	2401037N	Idle Gear (2piece) (s/n 7110881 and higher)	44/28T	1
41	BB-6002ZZ	Ball Bearing		5
42	GHD20-42	C-Ring	R62	1
43	2401043	Pinion Shaft		1
	T2401043BS	Pinion Shaft W/Gears Assembly (s/n 7110881 and higher) (includes #30, #43, #49,#50)		1
49	2401049	Idle Gear	15/31/43T	1
	2401049N	Idle Gear (s/n 7110881 and higher)	15/31/43T	1
50	GHD20-50	Oil Seal		1
51	BB-6007ZZ	Ball Bearing		1
52	2401192	Bushing		1

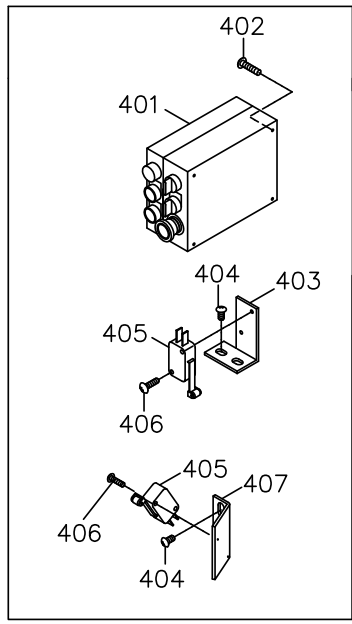
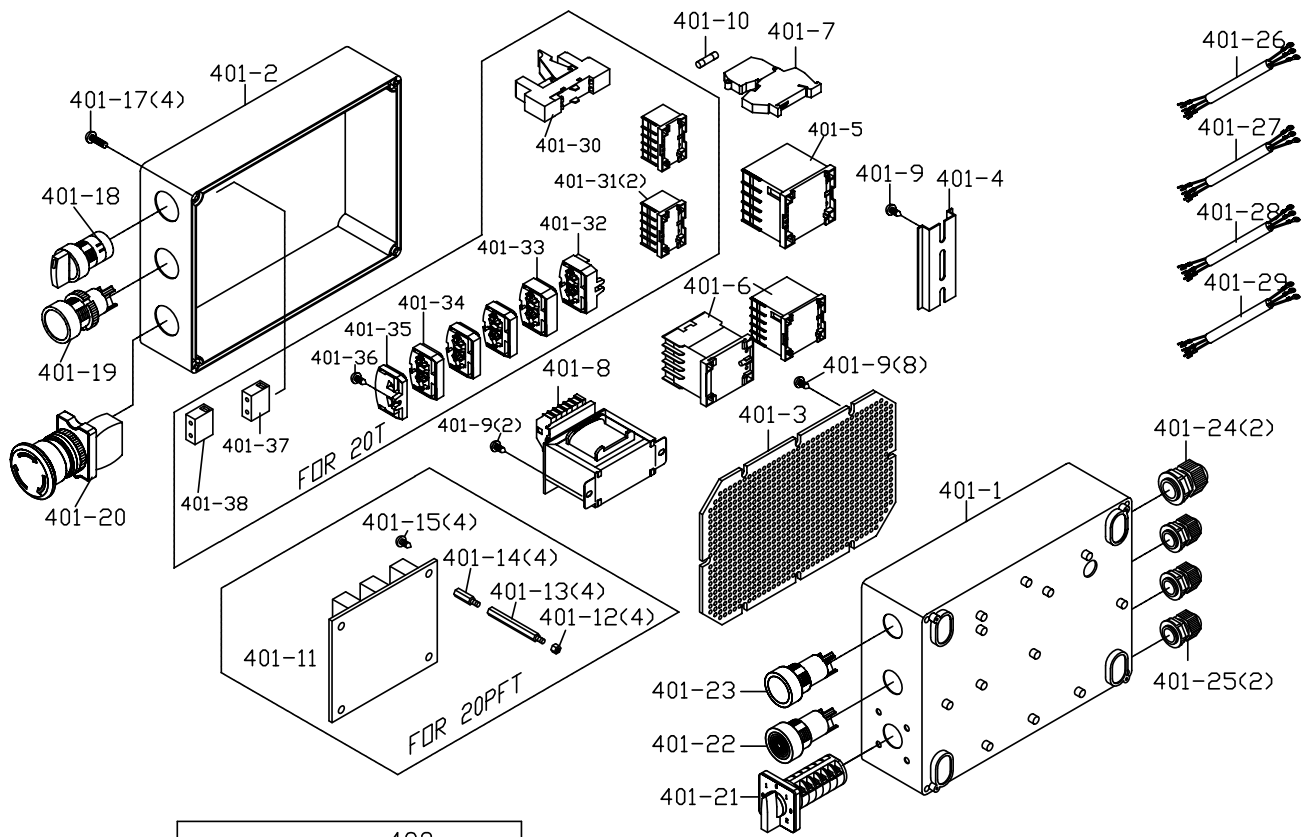
Base, Table and Column Assembly (all models)



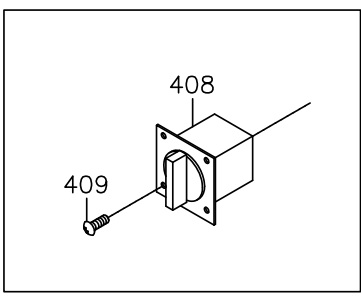
Parts List – Base, Table and Column Assembly (all models)

Index No.	Part No.	Description	Size	Qty
201	62201	Base		1
202	62202	Bearing Cover (lower)		1
203	62203-1	Table		1
212	SB-3/8	Steel Ball	3/8"	40
213	62213	Bearing Cover (upper)		1
214	62214	Screw		2
215	TS-0561021	Hex Nut	5/16"	2
216	62216	Column Base		1
217	66217	Lock Ring		1
218	TS-0561031	Nut	3/8"	1
219	TS-0209101	Hex Socket Cap Screw	3/8" x 2-1/4"	1
221	GHD20-221	Pin		1
222	62222	Rack		1
223	62223	Lock Bolt		1
224	62224-1	Lock Block		1
225	TS-0680081	Washer	5/8"	1
226	TS-0561031	Nut	5/8"	1
227	62227	Lock Handle		1
228	TS-0561031	Nut	3/8"	1
229	TS-0680041	Washer	3/8"	1
231	BB-51103	Thrust Bearing		1
235	TS-0561031	Nut	3/8"	1
237	TS-0267041	Set Screw	1/4" x 3/8"	2
238	62238	U-Bolt		1
239	62239	Block		1
240	TS-0561051	Nut	1/2"	2
242	62242	Bracket		1
243	62243	Worm Gear		1
244	62244	Shaft		1
258	6158	Handle		1
259	62259	Worm Shaft		1
265	TS-0208061	Hex Socket Cap Screw	5/16" x 1"	4
266	TS-0267041	Set Screw	1/4" x 3/8"	1
268	62268	Bracket		1
269	TS-0270021	Set Screw	5/16" x 5/16"	1
270	6611	Column Cap		1
271	GHD20-271	Set Screw		1
3027-1	3027-1	Lever		1

Control Box Assembly (all models)



GHD-20T/20PFT only

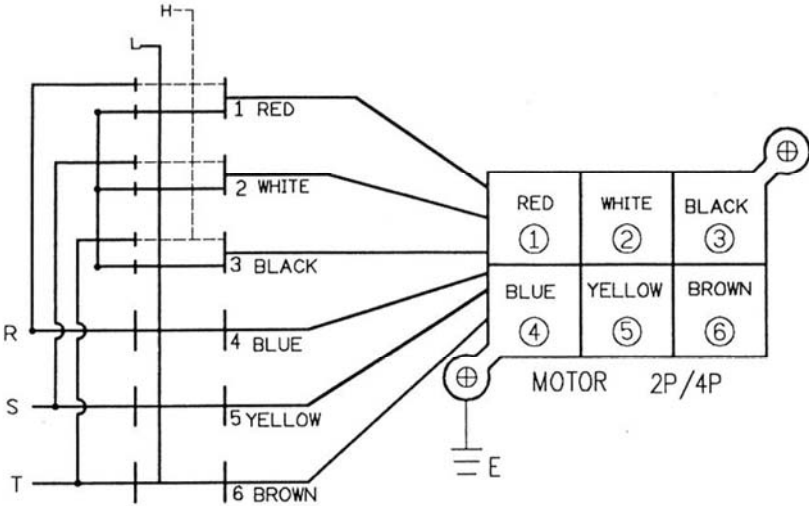


GHD-20/20PF only

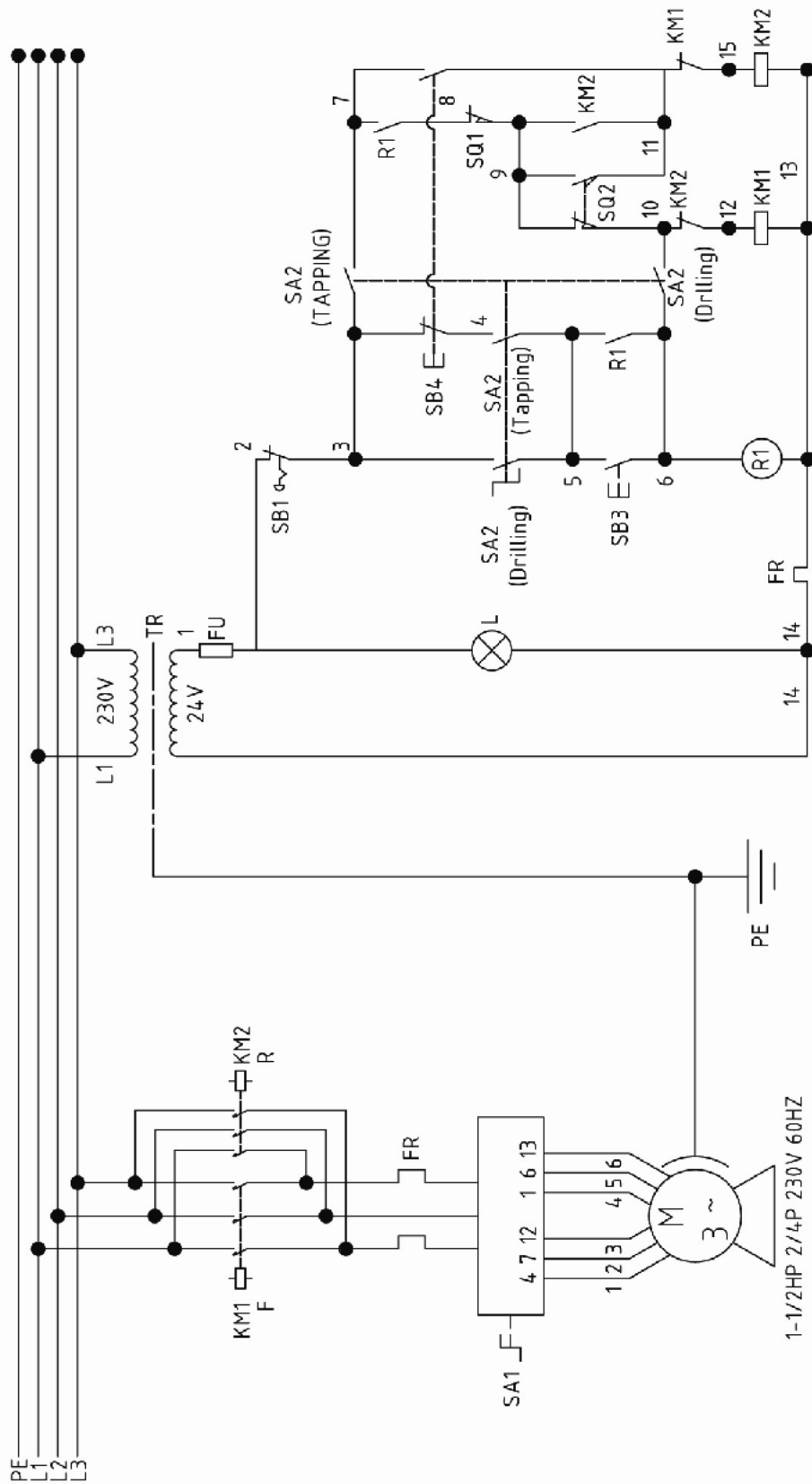
Parts List – Control Box Assembly

Index No.	Part No.	Description	Size	Qty
401	GHD20PFT-401	Control Box		1
	GHD20PFT-CB	Control Box Complete (GHD-20PFT only)		1
	GHD20T-CB	Control Box Complete (#08050908 and higher)		1
401-1	GHD20PFT-401-1	Box Base		1
401-2	GHD20PFT-401-2	Box Cover		1
401-3	GHD20PFT-401-3	Support Plane		1
401-4	GHD20PFT-401-4	Bracket		1
401-5	ET-1123	Magnetic Contactor	LS GMC (D)-6M	2
401-6	ET-2034	Overload		1
401-7	GHD20PFT-401-7	Fuse Bracket		1
401-8	ET-1311	Transformer	20VA, 0.7Kg	1
401-9	GHD20PFT-401-9	Machine Screw	M4x10	12
401-10	ET-1820	Fuse	2A	1
401-11	ET-2504	Support Plate (GHD-20PFT only)		1
401-12	GHD20PFT-401-12	Hex Nut (GHD-20PFT only)	1/8"	4
401-13	GHD20PFT-401-13	Support Rod (GHD-20PFT only)	60mm	4
401-14	GHD20PFT-401-14	Support Rod (GHD-20PFT only)	15mm	4
401-15	GHD20PFT-401-15	Pan Head Screw (GHD-20PFT only)	1/8"x1/4	4
401-17	GHD20PFT-401-17	Pan Head Screw	M4x5	4
401-18	ET-1223	Select Switch	NHD NSS-S	1
401-19	ET-1221	Reverse Switch	NHD NPB-F	1
401-20	ET-1215	Emergency Switch	KEDU HY57B	1
401-21	GN20	High-Low Cam Switch	15A, 600VAC	1
401-22	ET-1414	Power Light	NHD NLD-22	1
401-23	ET-1217	Start Switch	NHD NPB-F	1
401-24	GHD20PFT-401-24	Clamp Plug	PG13.5	2
401-25	GHD20PFT-401-25	Clamp Plug	PG11	2
401-26	GHD20-341	Motor Plug	2.0mm ² x7C	1
401-27	GHD20PFT-401-27	Upper Limit Cord	0.75mm ² x2C	1
401-28	GHD20PFT-401-28	Lower Limit Cord	0.75mm ² x2C	1
401-29	GHD20-342	Power Cord	14AWGx4C	1
401-30	ET-1127	Relay	AC-24V	1
401-31	ET-1229	Auxiliary Contacts	LS, AU-2M	2
401-32	ET-1552	Ground Terminal		1
401-33	ET-1538	Two 2P Terminal		1
401-34	ET-1512	One 1P Terminal		3
401-35	ET-1516	Side Panel		1
401-36	S804	Pan Head Machine Screw	3/16x5/8	2
401-37	ET-1214	Contact Block	CB-10, A contact	2
401-38	ET-1215	Contacts Black	CB-10, B contact	2
402	GHD20PFT-402	Round Head Screw	3/16"x3/8"	4
403	GHD20PFT-403-1	Limit Bracket (top) (GHD-20PFT only)		4
	GHD20T-403-2	Limit Bracket (top) (GHD-20T only)		4
404	GHD20PFT-404	Round Head Screw	3/16"x5/8"	4
405	ET-1610	Limit Block		2
406	GHD20PFT-406	Round Head Screw	M3x15	4
407	GHD20PFT-407-1	Limit Support (GHD-20PFT only)		1
	GHD20T-407-2	Limit Support (GHD-20T only)		4
408	GHD20-339	High-Low Cam Switch		4
409	GHD20-340	Round Head Screw	M4x20	4

Electrical Schematic (GHD-20/20PF only)



Electrical Schematic (GHD-20T)



TR:Transformer
KM1:Contactor(Forward)
KM2:Contactor(Reverse)
FR:Overload
M:Motor

FU:Fuse
SB1:Emergency Stop Switch
SB3:Start Switch
SB4:Reverse Switch
SA2>Select Switch (Drilling/Tapping)

R1:Relay
SQ1:Upper Limit Switch
SQ2:Lower Limit Switch
L:Light
SA1:Lower & Hight Speed Control