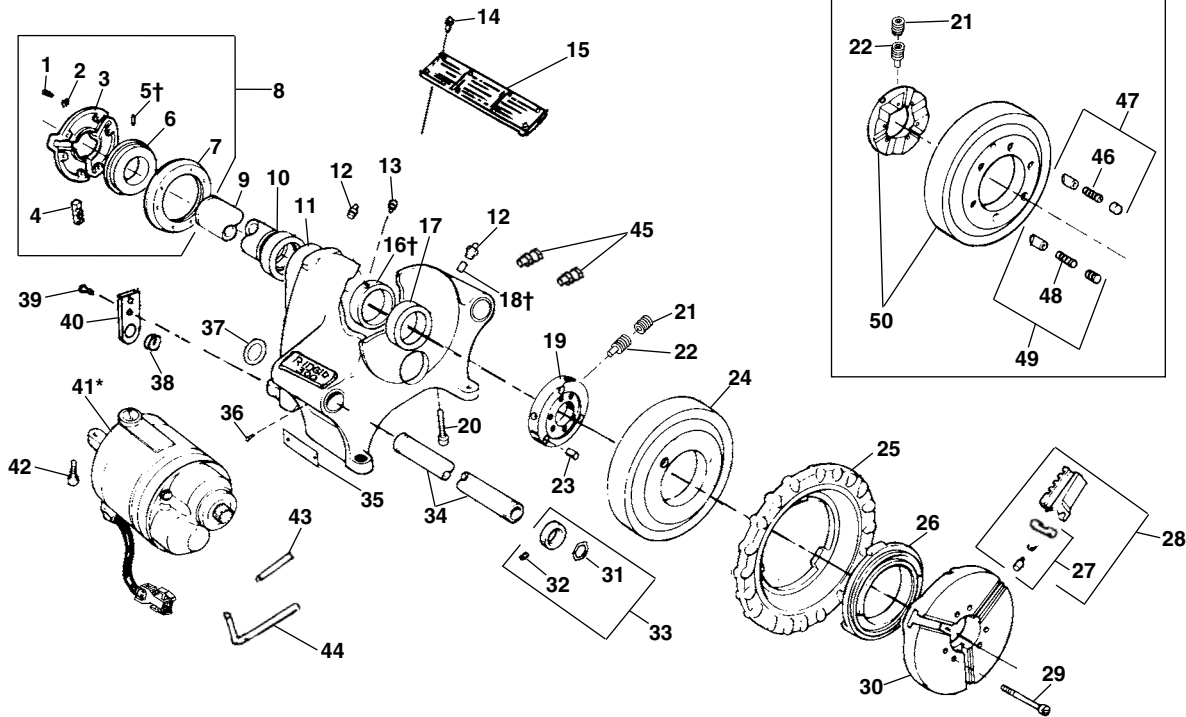


Main Components



**NOTE: Order parts by Catalog Number only.
DO NOT order by Reference Number.**

For Information on Cutters, Die Heads and Reamers SEE INDEX

Ref. No.	Catalog No.	Description	Ref. No.	Catalog No.	Description
1	46790	Screw, 12 - 24 x 3/4" (6)	27	44715	Jaw Insert Set
2	40270	Lock Washer (6)	28	97365	Jaw Insert Set F/Coated Pipe
3	43735	Centering Head	29	44090	Chuck Jaw Set
	19346	Centering Head (Europe)	29	45295	Screw 5/16" - 18 x 2 3/4" (6)
4	46500	Rear Jaw (3)	30	43525	Cap
5†	45260	Step Pin (3)	31	44720	Snap Ring (2)
6	44095	Scroll	32	46050	Set Screw 1/4" - 18 x 1/4" (2)
7	43740	Back Plate	33	44725	Ring Assembly (2)
	19356	Back Plate (Europe)	34	44425	Support Bar (Incl. Ref. No. 37)
8	44165	Rear Centering Assembly	35	90392	FOR/OFF/REV Label
9	44100	Drive Shaft	36	45280	Screw #8 - 32 x 5/8" (2)
10	45335	Rear Bearing-Bronze	37	44525	Spring Ring (2)
11	42845	300 Body Assembly (Incl. Ref. No. 10, 11, 12, 13, 14, 15, 17, 18, 38, 39, 40)	38	46735	Cord Grommet
	19056	300A Body Assy. - Europe (Incl. Ref. No. 10, 11, 12, 13, 14, 15, 17, 18, 38, 39, 40, 43, 44, 45)	39	44735	Screw 1/4" - 20 x 5/8" (2)
	96805	300A Body Assy. (Incl. Ref. No. 10, 11, 12, 13, 14, 15, 17, 18, 38, 39, 40, 43, 44, 45)	40	45825	Strain Relief Plate
12	46860	Grease Fitting	41*	87740	3177 Motor 115V (300)
13	33785	Set Screw 5/16" - 24 x 1/4" (2)		87780	3277 Motor 230V (300)
14	85920	Pop Rivet (10)		96910	3181 Motor 115V (300A)
15	88690	Warning Plate		96975	3281 Motor 230V (300A)
16†	45345	Thrust Ring		61202	3177-CE Motor 115V (300CE)
17	45270	Front Bearing-Bronze		61207	3277-CE Motor 230V (300CE)
18†	45310	Split Roll Pin		61192	3181-CE Motor 115V (300A CE)
19	30027	Drive Ring, Type II		61197	3281-CE Motor 230V (300A CE)
20	46035	Screw 5/16" - 18 x 1 3/4"	42	46745	Screw 3/8" - 16 x 1 1/4" (2)
21	45300	Set Screw 5/16" - 24 x 1/4" (2)	43	96850	Tubing (300A)
22	45265	Set Screw 5/16" - 24 x 1/2" (3)	44	96855	Tubing (300A)
23	30022	Drive Pin, Type II (3)	45	96860	Bulkhead Union (2) (300A)
24	30017	Ring Gear, Type II	46	44310	Drive Spring (3)
25	89150	Hand Wheel	47	91552	Drive Wedge Kit
26	43540	Scroll	48	45285	Pressure Spring (3)
			49	91557	Plunger Kit
			50	91562	Conversion Kit (Includes Ref. Nos. 19-24)

* Refer to Motor Model No. for Component Parts

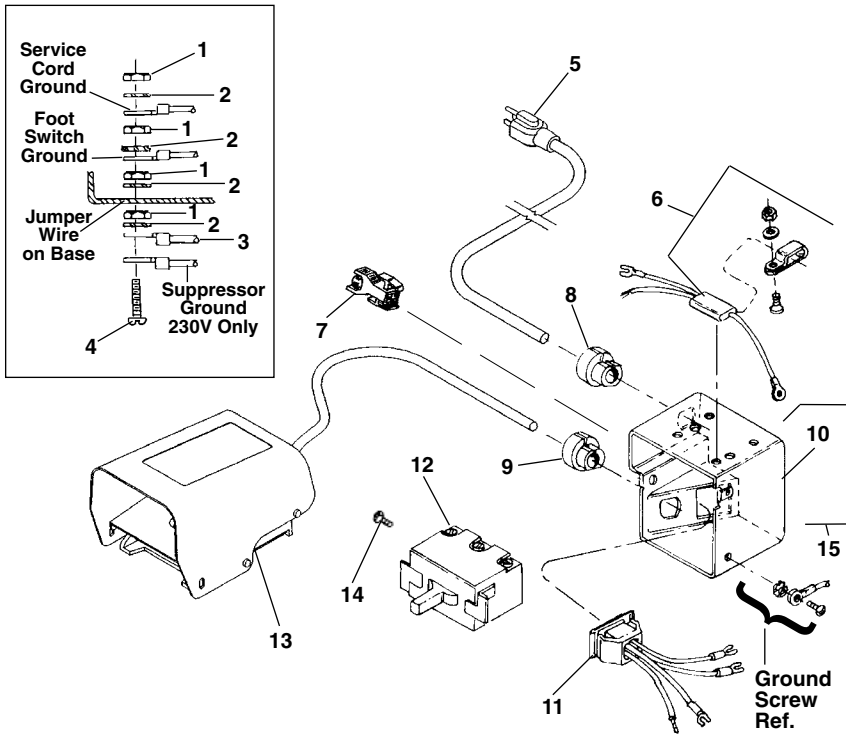
Service Notes:

†Ref. 5 Stop Pins are easily removed by pushing from inside to outside.

†Ref. 18 Before removing front bearing sleeve (Ref. No. 17), dowel pin and grease fitting must be pushed out from inside.

†Ref. 16 Position thrust ring so that offset screw holes are closer to chuck.

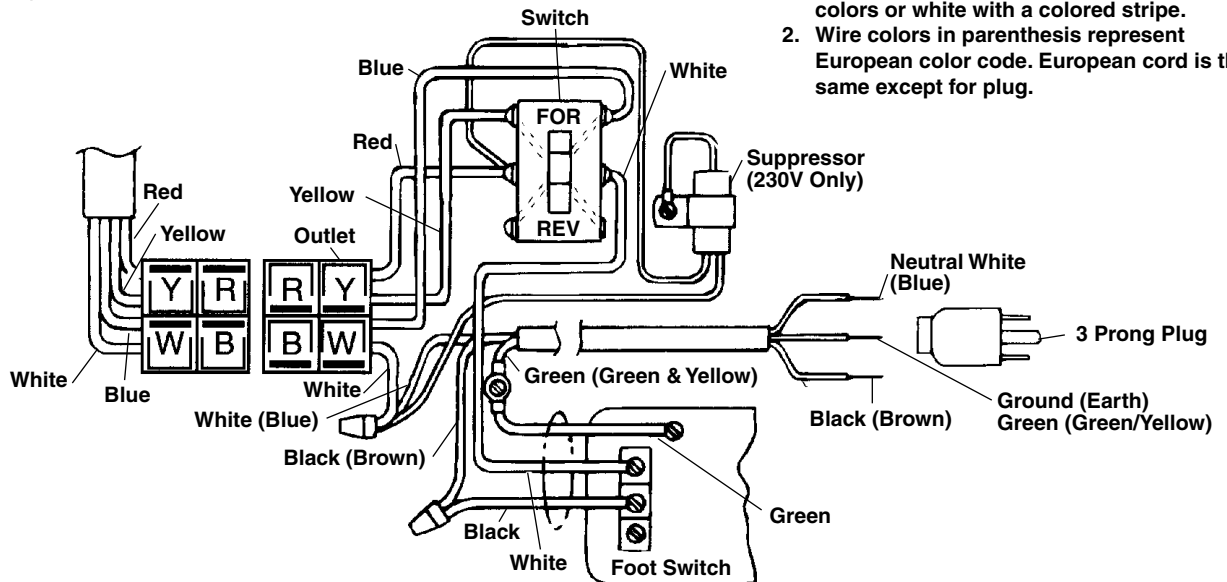
Electrical Components



NOTE: Order parts by Catalog Number only. DO NOT order by Reference Number.

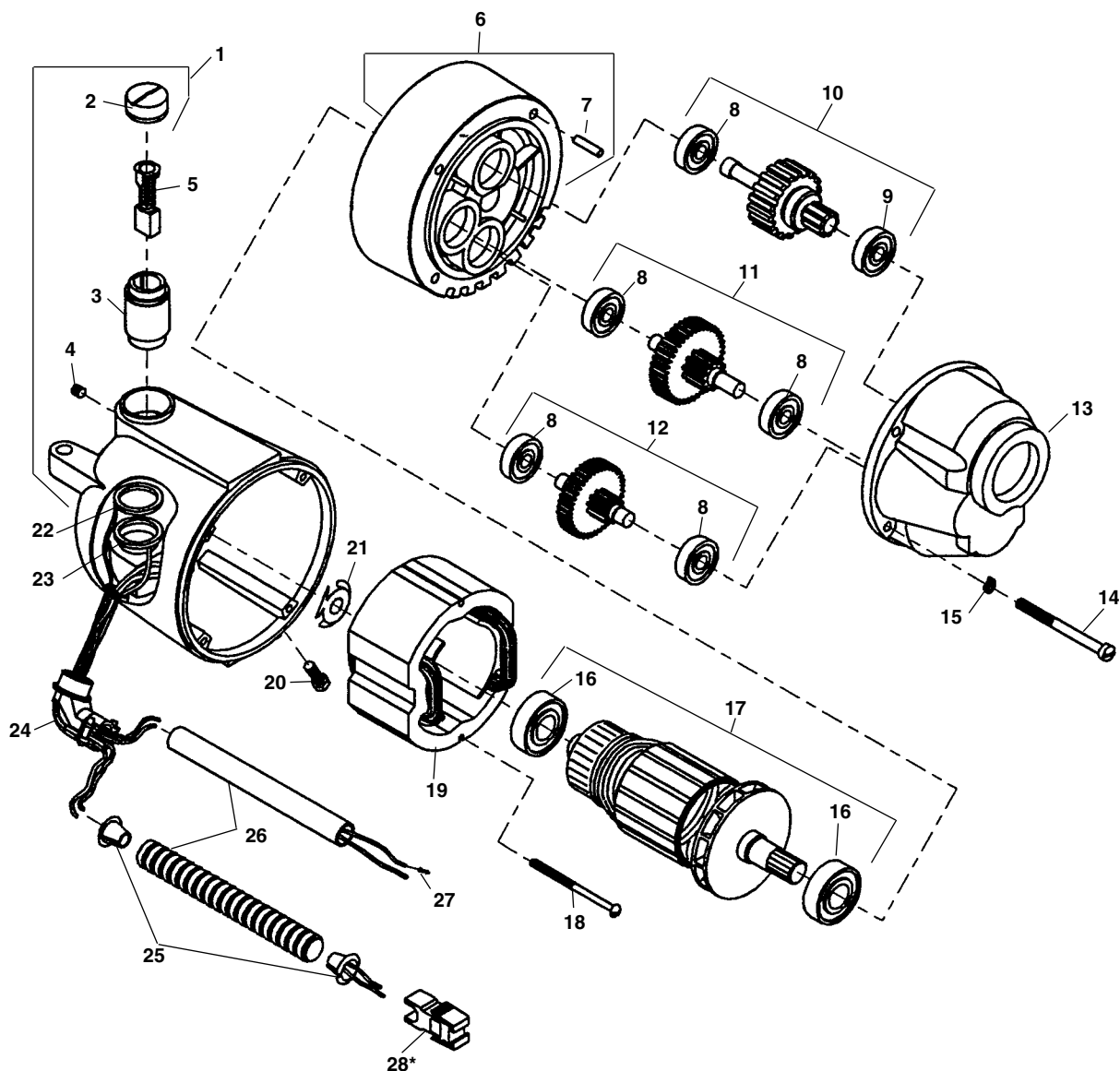
Ref. No.	Catalog No.	Description
1	44695	Hex Nut #10 - 24 (4)
2	46985	Ext. Tooth Washer #10 (4)
3	85925	Jumper Wire
4	92455	Screw #10 - 24 x 3/4"
5	46740	Power Cord w/Plug (115V)
	46410	Power Cord w/Plug (230V)
	75045	Power Cordless Plug (230V Europe/S. Africa)
6	46320	Suppressor Kit (230V Europe)
	99170	Suppressor (230V S. Africa)
7	50552	Plug
8	46735	Cord Grommet
	46730	Cord Grommet (230V Europe/S. Africa)
9	46735	Cord Grommet
10	50612	Switch Box
11	50617	Outlet Jumper Assembly
12	44505	Switch
13	36642	B-294 Foot Switch
14	44180	Screw
15	91187	Switch Box Kit (Includes Ref. Nos. 7-11)

Wiring Diagram (115/230V)



1. Brush and Armature Leads may be solid colors or white with a colored stripe.
2. Wire colors in parenthesis represent European color code. European cord is the same except for plug.

3177
3277
3177-CE
3277-CE

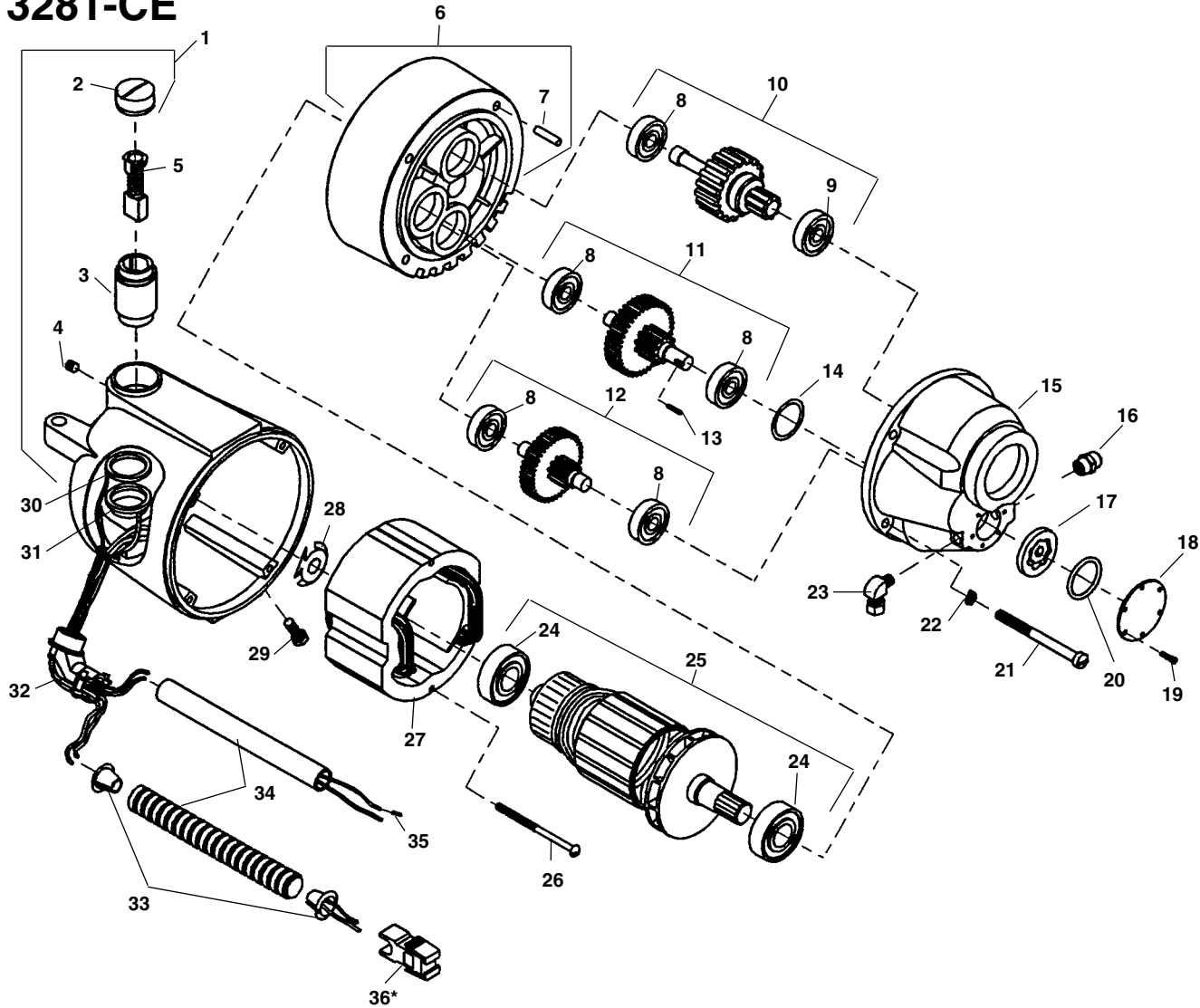


**NOTE: Order parts by Catalog Number only.
 DO NOT order by Reference Number.**

Ref. No.	Catalog No.	Description	Ref. No.	Catalog No.	Description	Ref. No.	Catalog No.	Description
†	87740	3177 Motor 115V	10	45370	Drive Gear	20	83500	Locking Screw
†	87780	3277 Motor 230V	11	44985	1st Gear Assembly	21	44580	Loading Spring
†	61202	3177-CE Motor 115V	12	45005	2nd Gear Assembly	22	86680	White Upper Lead
†	61207	3277-CE Motor 230V	13	42875	Gear Housing	23	86685	Red Lower lead
1	43160	Housing Assembly		19066	Gear Housing (Europe)	24	46900	Connector 90 Degree
2	44545	Brush Cap Set	14	45075	Screw (4)	25	46890	E-918 Insulator (2)
3	45025	Brush Holder Set	15	45150	Lock Washer	26	47407	Flexible Conduit
4	39770	Set Screw (2)	16	44565	Armature Bearing (2)		46880	Plastic Tube (CE Only)
5	44540	Brush Assembly Set	17	44010	Armature (115V)	27	88402	Wire Terminal (4) (CE Only)
6	43165	Fan Housing Assembly		44030	Armature (230V)	28*	50552	Plug (Included in Switch Box Assy. 91187)
7	45165	Dowel Pin	18	44555	Mounting Screw (2)			
8	45060	Gear Bearings (5)	19	44015	Field (115V)			
9	45315	Front Bearing		44035	Field (230V)			

† Refer to Speed Change Chart for Optional Speeds on Page 8

3181
3281
3181-CE
3281-CE



**NOTE: Order parts by Catalog Number only.
 DO NOT order by Reference Number.**

Ref. No.	Catalog No.	Description	Ref. No.	Catalog No.	Description	Ref. No.	Catalog No.	Description
†	96810	3181 Motor 115V	12	45005	2nd Gear Assembly	26	44555	Mounting Screw (2)
†	96975	3281 Motor 230V	13	96885	Pin	27	44015	Field (115V)
†	61192	3181-CE Motor 115V	14	96880	Oil Seal		44035	Field (230V)
†	61197	3281-CE Motor 230V	15	96830	Gear Housing	28	44580	Loading Spring
1	43160	Housing Assembly	16	46830	Male Connector	29	83500	Locking Screw (2)
2	44545	Brush Cap Set	17	96870	Gerotor Set	30	86680	White Upper Lead
3	45025	Brush Holder Set	18	96840	Cover Plate	31	86685	Red Lower lead
4	39770	Set Screw (2)	19	96890	Screw (6)	32	46900	Connector 90
5	44540	Brush Assembly Set	20	96875	O Ring	33	46890	E-918 Insulator (2)
6	43165	Fan Housing Assembly	21	45075	Screw (4)	34	47407	Flexible Conduit
7	45165	Dowel Pin	22	45150	Lock Washer		46880	Plastic Tube (CE Only)
8	45060	Gear Bearings (5)	23	96910	Male Elbow	35	88402	Wire Terminal (4) (CE Only)
9	45315	Front Bearing	24	44565	Armature Bearing (2)	36*	50552	Plug (Included in Switch Box Assy. 91187)
10	45370	Drive Gear	25	44010	Armature (115V)			
11	97000	1st Gear Assembly		44030	Armature (230V)			

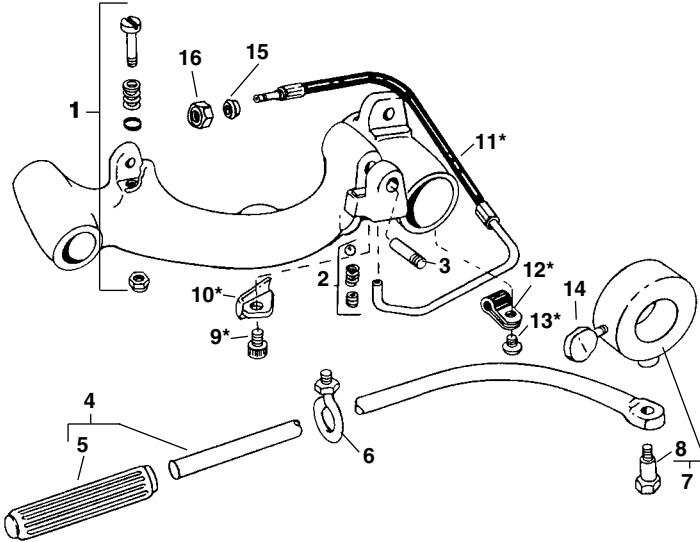
† Refer to Speed Change Chart for Optional Speeds on Page 8

311
311A
341
360

No. 311 Carriage w/Lever (200, 300 Power Drive)

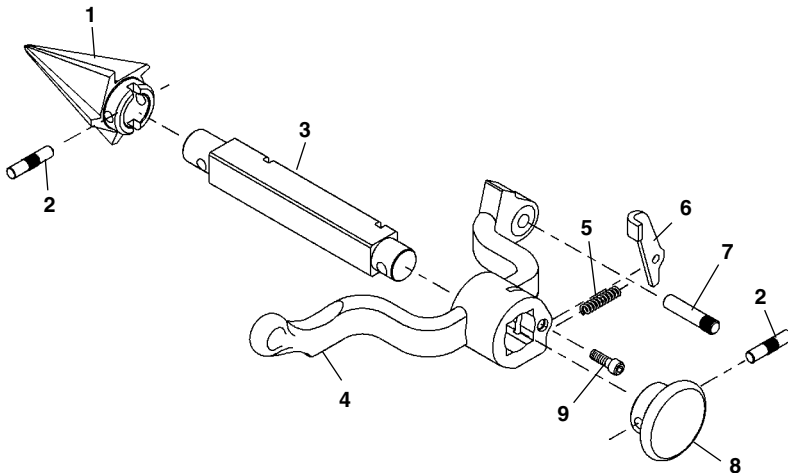
No. 311A Carriage w/Lever (300A, 304 Retrofit)

**NOTE: Order parts by Catalog Number only.
DO NOT order by Reference Number.**



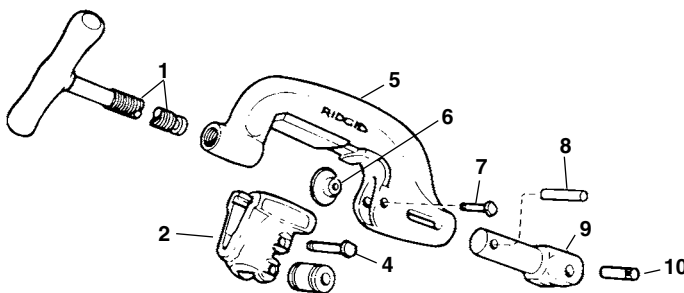
Ref. No.	Catalog No.	Description
—	68815	311 Carriage w/Lever
—	96945	311A Carriage w/Lever
—	42385	312 Lever Kit (incl. Ref. No. 4, 6, 7, 14)
1	45515	Stop Bolt Assembly
2	46810	Detente Assembly
3	47065	Reamer Hinge Pin
4	43400	Lever Arm Assembly
5	46235	Handgrip
6	46205	Eye Bolt Assembly
7	46215	Collar Assembly
8	46210	Shoulder Bolt
9	96900	Screw
10	96970	Oil Line Cover
11	96965	Hose Assembly
	19336	Hose Assembly (Europe)
12	96895	Clamp
13	96915	Screw
14	46220	Thumbscrew
15	19966	Ferrule
16	19956	Nut

No. 341 Reamer



Ref. No.	Catalog No.	Description
—	42365	341 Reamer Complete
1	36277	Cone (R.H.)
	46660	Cone (L.H. & R.H.)
2	47155	F-693 Pin
3	43790	D-387 Reamer Bar
4	43230	C-144 Reamer Arm
5	44700	E-1664 Latch Spring
6	46665	E-865 Reamer Latch
7	47065	F-412 Hinge Pin
8	46585	E-762 Reamer Knob
9	46515	E-650 Screw 1/4" - 20 x 3/4"

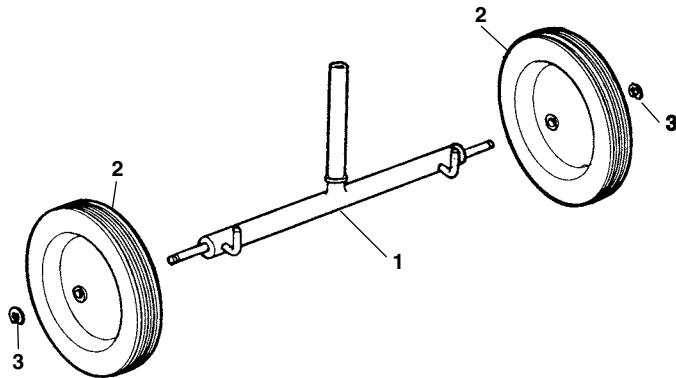
No. 360 Cutter



Ref. No.	Catalog No.	Description
—	42370	360 Cutter Complete
1	43625	D-1024-X Screw Handle
2	33400	C-878-X Roll Housing Assembly
3	34305	E-1751 Roll (2)
4	34310	E-1752 Roll Pin (2)
5	43595	C-877 Cutter Frame
6	33100	F-514 Cutter Wheel Thin
	33105	F-3 Cutter Wheel H.D.
	44185	E-1032 Cutter Wheel Std.
7	34780	F-9 Wheel Pin
8	45435	E-3549 Retaining Pin
9	45505	E-3759 Support Arm
10	45520	E-3819 Pin

No. 32 Transporter

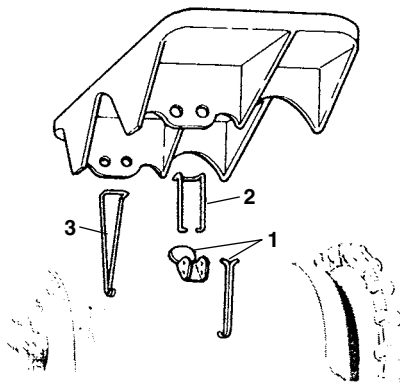
**32
1452
1206**



NOTE: Order parts by Catalog Number only. DO NOT order by Reference Number.

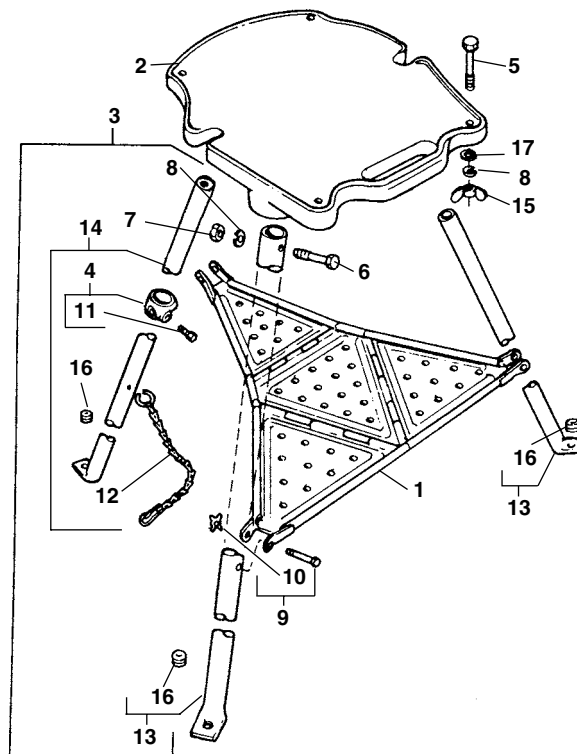
Ref. No.	Catalog No.	Description
—	42575	No. 32 Transporter
1	42590	Axle & Support Tube Assembly
2	42585	Wheel (2)
3	42580	Retaining Ring (2)

No. 1452 Clip-On Tool Tray



Ref. No.	Catalog No.	Description
—	42380	No. 1452 Tool Tray
1	45535	Hook & Lever Assembly
2	45540	Top Hook
3	45545	Side Hook

No. 1206 Stand



Ref. No.	Catalog No.	Description
—	42360	1206 Stand Complete
—	83540	1206 Stand Export
1	43475	B-547 Tool Tray
2	42870	B-1058 Base
3	42990	B-1983-X Tray & Leg Assembly
4	41235	D-488-X Tray Support
5	46670	E-867 Bolt 3/8" - 16 x 2" (4)
6	46675	E-868 Bolt 3/8" - 16 x 2 3/4" (3)
7	44225	E-1094 Nut 3/8" - 16 (3)
8	40930	E-1095 Lock Washer 3/8" (7)
9	41265	E-1375-X Pin w/Washer (1 7/8" Long)
10	89720	E-10396-X Pin w/Washer (1 5/8" Long)
11	41270	E-1377 X-Washer (6)
12	41245	E-1380 Set Screw 3/8" - 16 x 1"
13	40945	E-1444-X Chain Assembly
14	45325	E-1336-X Front Leg (2)
15	45330	E-3237-X Rear Leg
16	45385	E-3328 Wing Nut 3/8" - 16 (4)
17	40940	F-532 Grommet (3)
17	44230	E-1096 Washer 3/8" (4)