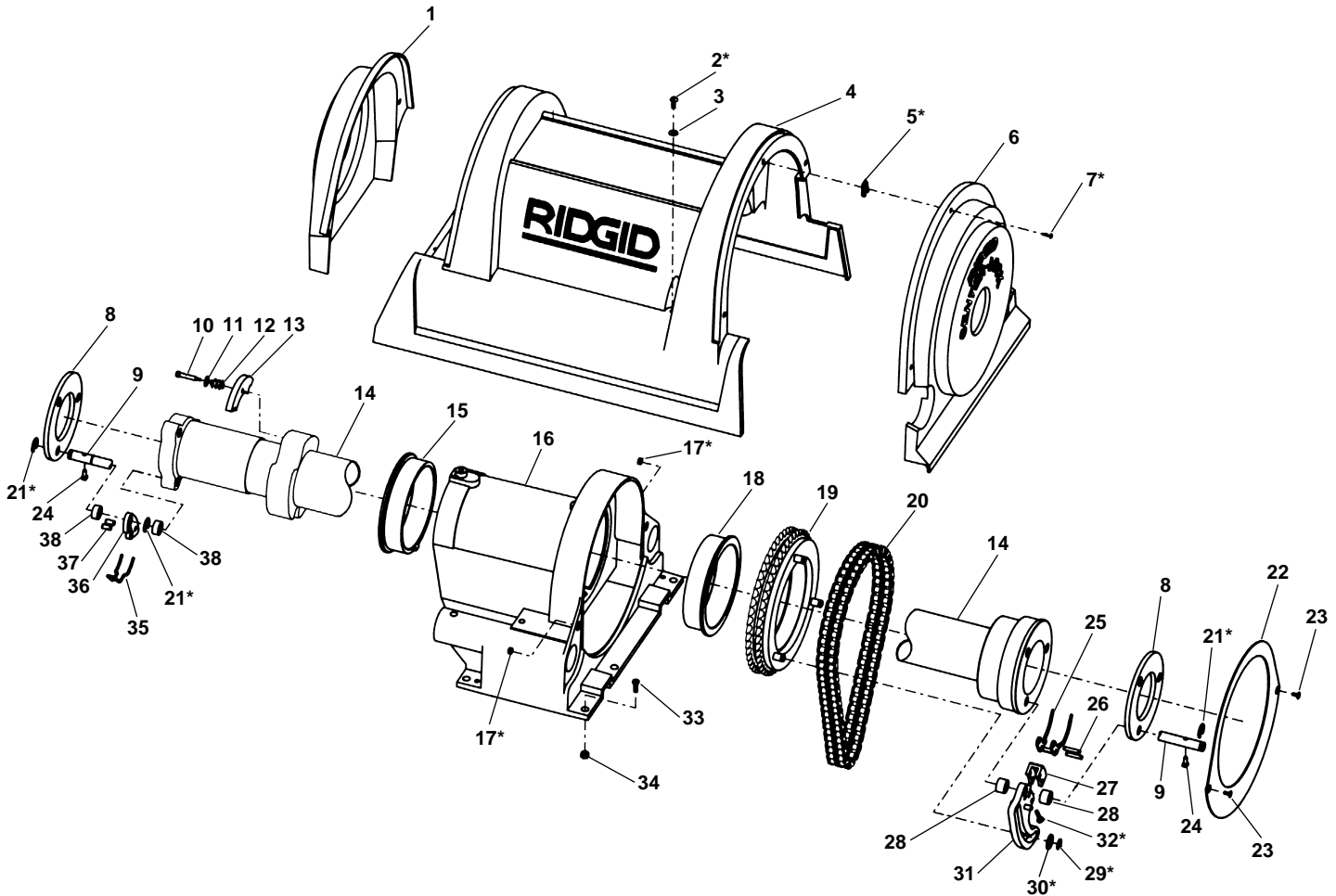


Spindle Assembly

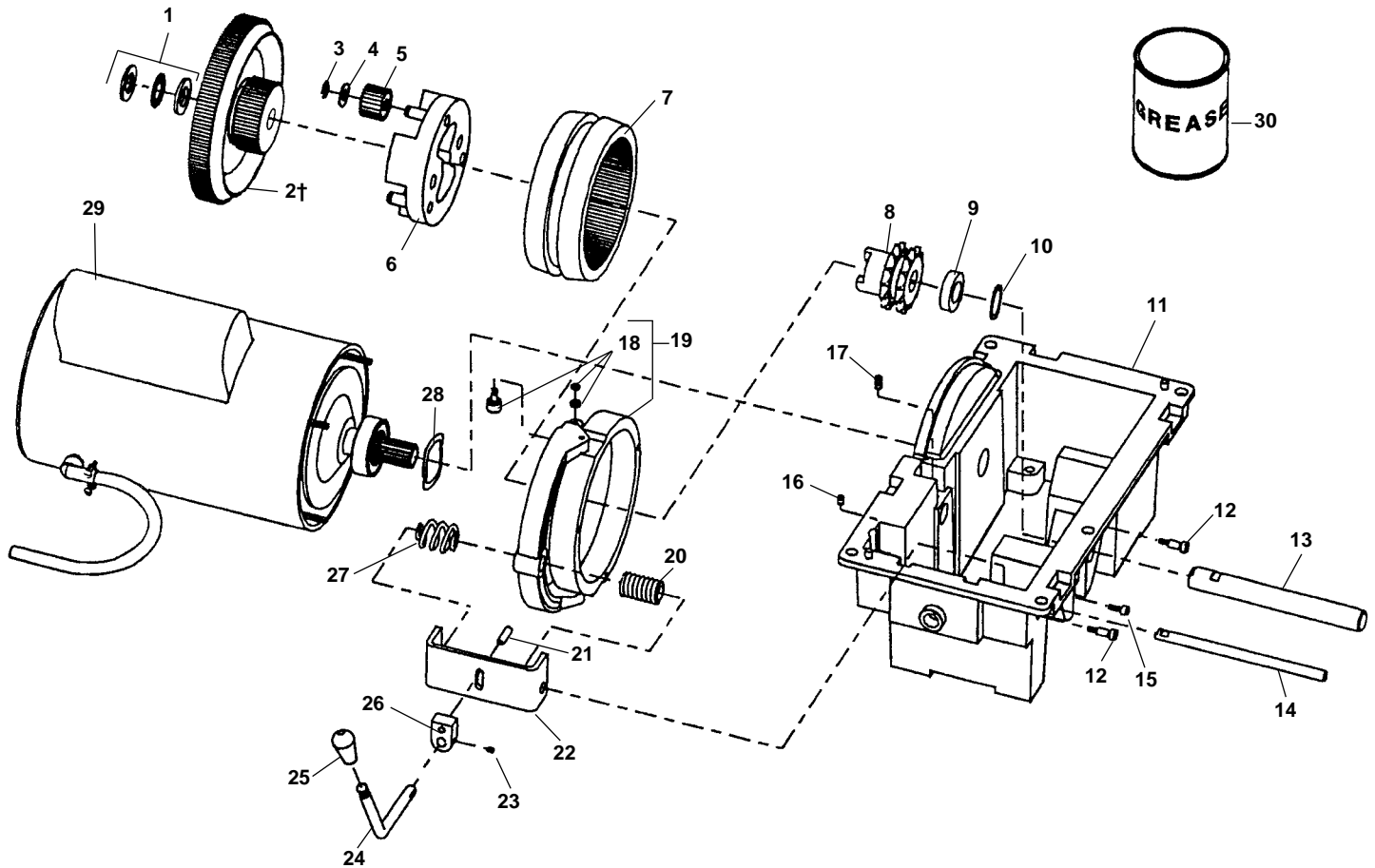


**NOTE: Order parts by Catalog Number only.
DO NOT order by Reference Number.**

Ref. No.	Catalog No.	Description	Ref. No.	Catalog No.	Description
1	34652	Rear Cover	21*	26937	Retaining Ring (9)
2*	43352	Screw (3)	22	34757	Splash Guard
3*	43357	Washer (3)	23*	46785	Screw 10-32 x 3/8" (2)
4	34657	Top Cover w/Clips (Includes 4, 5, 7)	24	34762	Pivot Rod Pin (6)
5*	43362	"J" Clip (6)	25	34772	Front Pick-up Springs (3)
6	34662	Front Cover	26	34777	Roll Pin (6)
7*	43367	Screw (6)	27	34782	Jaw Insert (3) (Includes Ref.# 25, 26)
8	47497	Pivot Rod Support (2)	28	34787	Front Jaw Spacer (6)
9	34767	Pivot Rod (3)	29*	34245	Retaining Ring (3)
10	39567	Shoulder Screw 1/4" - 20 x 1 1/2" (3)	30*	34792	Washer (3)
11	54290	Flat Washer (3)	31	40847	Front Jaw (Includes Ref.# 25, 26, 27, 32)
12	35362	Spring (3)	32*	44557	Jaw Insert Screw (3)
13	34702	Brake Shoe (3)	33	45470	Bolt 3/8" - 16 x 1" (5)
14	44552	Spindle Tube	34	44225	Nut 3/8" - 16 (5)
15	34712	Rear Bearing	35	34807	Rear Pick-up Spring (3)
16	34717	Spindle Housing	36	41347	Rear Jaw Set (Includes Ref.# 35, 37)
17*	34722	Nut #10 (2)	37	34817	Pick-up Spring Pin (6)
18	34727	Front Bearing	38	34802	Rear Jaw Spacer (6)
19	34732	Drive Sprocket w/Pins	—	46727	Hardware package (Includes items marked with *)
20	34742	Drive Chain w/Master Link Master Link			

†See Service Notes

Transmission and Motor – Induction



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

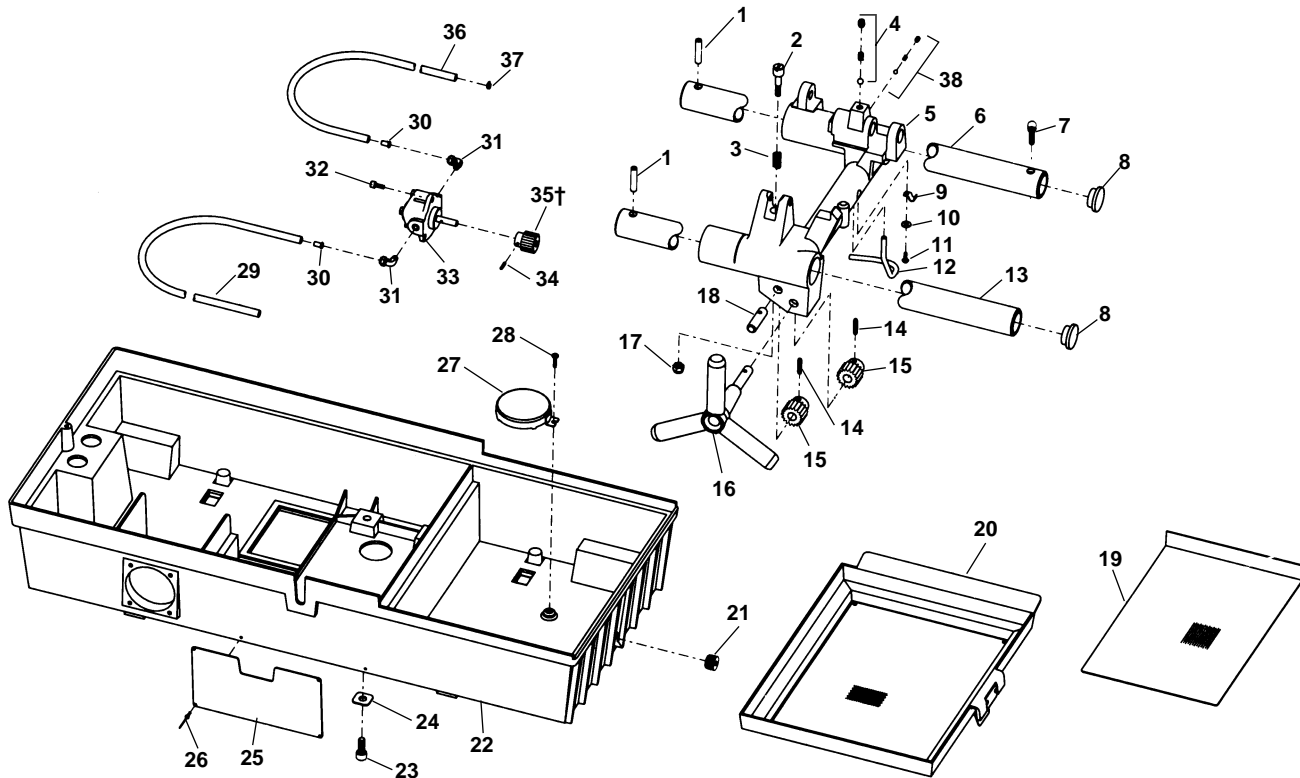
Ref. No.	Catalog No.	Description	Ref. No.	Catalog No.	Description	Ref. No.	Catalog No.	Description
1	41425	Thrust Bearing w/Washer	12	34877	Shoulder Screw 1/4" - 20 x 1/2" (2)	23	34917	Set Screw 10 - 32 x 1/4"
2†	44532	Input Gear 50 Hz	13	34882	Transmission Shaft	24	34927	Shifter Lever
	44537	Input Gear 60 Hz	14	34887	Shifter Shaft	25	34932	Knob
3	34245	Retaining Ring (3)	15	40260	Screw 10 - 24 x 1/2"	26	34922	Pivot Block
4	34792	Washer (3)	16	34897	Set Screw 10 - 32 x 1/4"	27	35362	Barrel Spring
5	34837	Planet Gear (3)	17	34892	Set Screw 1/4" - 20 x 1/2"	28	34942	Wave Washer
6	56822	Planet Gear Spider w/Pins	18	44547	5/8" Cam Roller (2)	29	34947	Motor 120V 60 Hz
7	44527	Internal Ring Gear	19	44542	Stationary Cup Assembly		34952	Motor 240V 60 Hz
8	34862	Output Sprocket	20	34907	Large Spring		34962	Motor 220/240V 50 Hz
9	34867	Thrust Spacer	21	44640	Dowel Pin	30	26707	Transmission Grease 1 lb. (2)
10	68037	Wave Washer	22	34912	Yoke Slide			
11	34872	Transmission Housing						

†Service Note: 60 Hz Input Gear #44537 also used on 40 RPM Denmark and UK Machines.

1822-I Motor Parts

Description	120V 60Hz	240V 60Hz	220/240V 50Hz	110V 50Hz
Dual Contact Start Switch	46772	46772	46772	46772
Start Capacitor	46782	46787	46792	46782
Run Capacitor	46802	46807	46807	46802
Motor Bolts	46812	46812	46812	46812

Carriage and Oil System - Induction



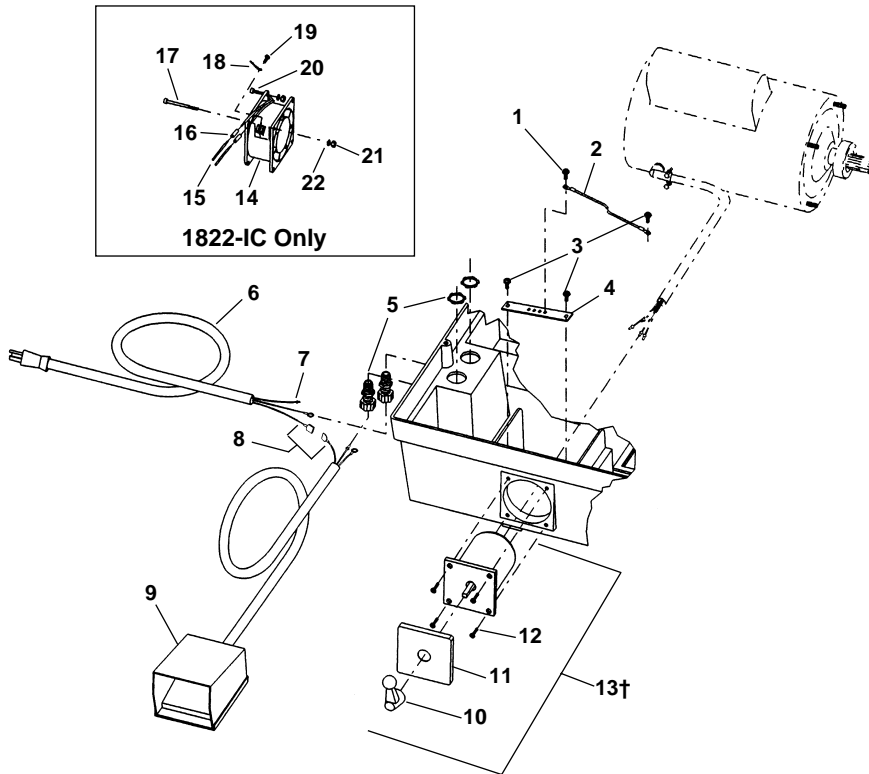
**NOTE: Order parts by Catalog Number only.
DO NOT order by Reference Number.**

Ref. No.	Catalog No.	Description	Ref. No.	Catalog No.	Description
1	34375	Rail Pin (2)	22	59747	Base
2	35042	Stop Bolt		59752	Base (1822-IC)
3	35047	Stop Bolt Spring	23	46755	Bolt 3/8" -16 x 7/8" (4)
4	46810	Detente Assembly	24	35107	Square Washer (4)
5	35147	Carriage (Includes 2, 3, 4, 5, 38)	25	36612	Warning Plate 60Hz
6	35057	Rear Rail		35267	Warning Plate 50Hz
7	34425	Screw 5/16" -18 x 3/8"		35312	Warning Plate (40 RPM)
8	35162	Rail Plug (2)	26	35222	Pop Rivet (2)
9	35062	Oil Line Clamp	27	58467	Oil Screen Assembly
10	45365	Washer #10	28	26797	Oil Screen Screw 10-32 x 5/16"
11	79965	Screw 10-32 x 1/2	29	35112	Oil Intake Line 30"
12	35067	Oil Tube	30	35117	Oil Line Insert (2)
13	35167	Front Rail	31	35122	90 Degree Fitting (2)
14	34342	Roll Pin 3/16" x 15/16" (2)	32	32145	Bolt 1/4" - 20 x 1/2" (3)
15	35177	Carriage Pinion (2)	33	39162	Oil Pump
16	35182	Handwheel	34	39820	Pin
17	75110	Stop Nut 5/16" -18	35†	35132	26 T Pump Gear - 50 Hz
18	35187	Pinion Idler Shaft		35197	24 T Pump Gear - 60 Hz
19	35192	Lower Screen	36	35137	Oil Supply Line 40"
20	35097	Draw Tray Assembly	37	35142	Hose Clamp
21	48337	Drain Plug	38	35307	Oil Pressure Relief

†Service Note: 24 Tooth (60Hz) Pump Gear used on 40 RPM Denmark and UK Machines

See 1822 Service Notes

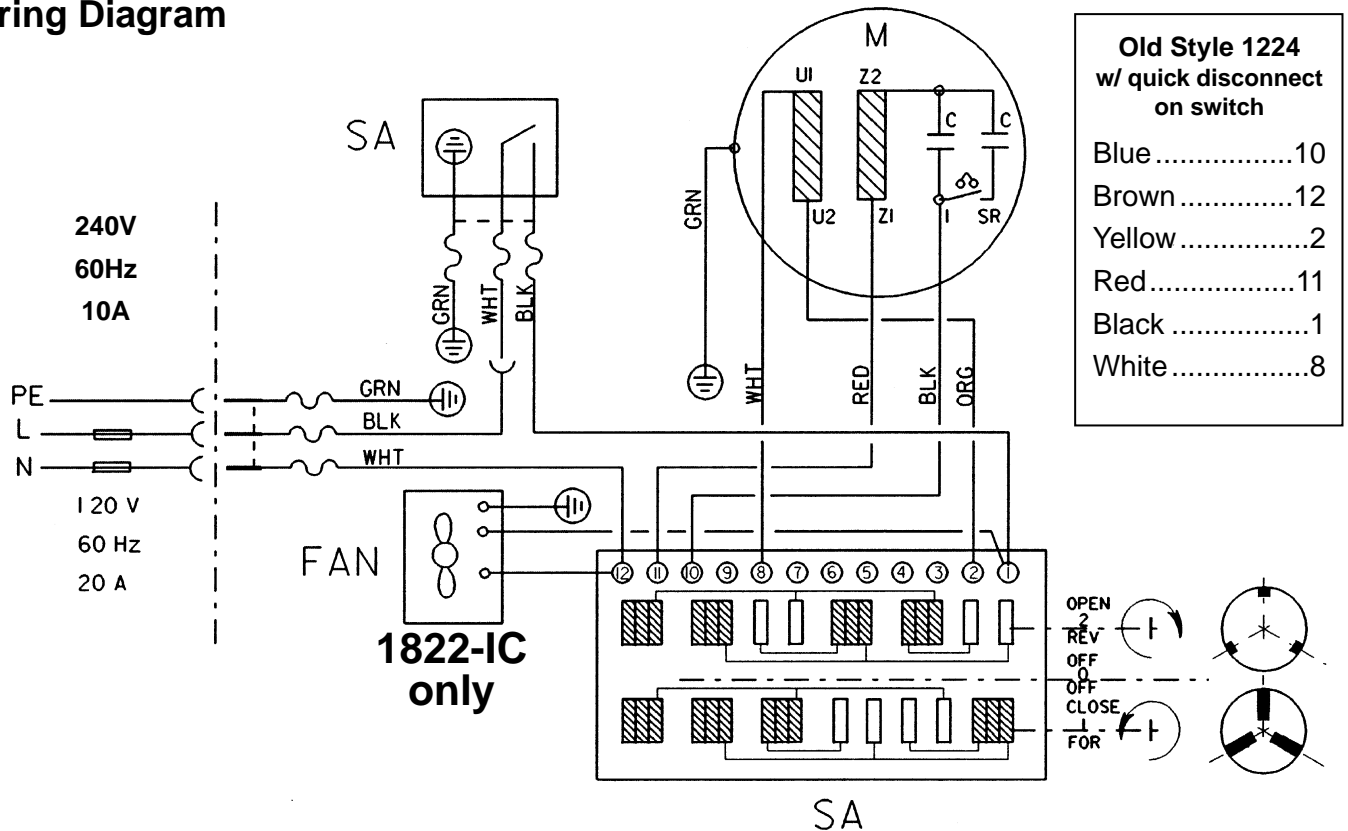
60 Hz Electrical Components



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

Ref. No.	Catalog No.	Description
1	34715	Screw 10-32 x 3/8" (3)
2	33607	Ground Wire
3	45420	Screw 10-24 (4)
4	59732	Ground Strap
5	68885	Strain Relief (2)
6	46740	Power Cord 120V
	46410	Power Cord 240V
7	36222	Wire Terminal
8	56407	Quick Disconnect Set
9	36642	B-294 Foot Switch
10	59707	Switch Knob
11	59737	Switch Plate
12	59727	Screw 8-32 x 3/4" Fl. Head (4)
13†	59757	Switch Assembly
14	35232	Fan Assembly
15	35242	Fan Wire (2)
16	35237	Wire Connector (2)
17	35247	Screw 10-32 x 2 1/4" (2)
18	35227	Fan Ground Wire
19	45525	Screw
20	35302	Screw 8-32 x 1/2"
21	85945	Ext. Tooth Washer #8 (4)
22	76190	Hex Nut - #8 (4)

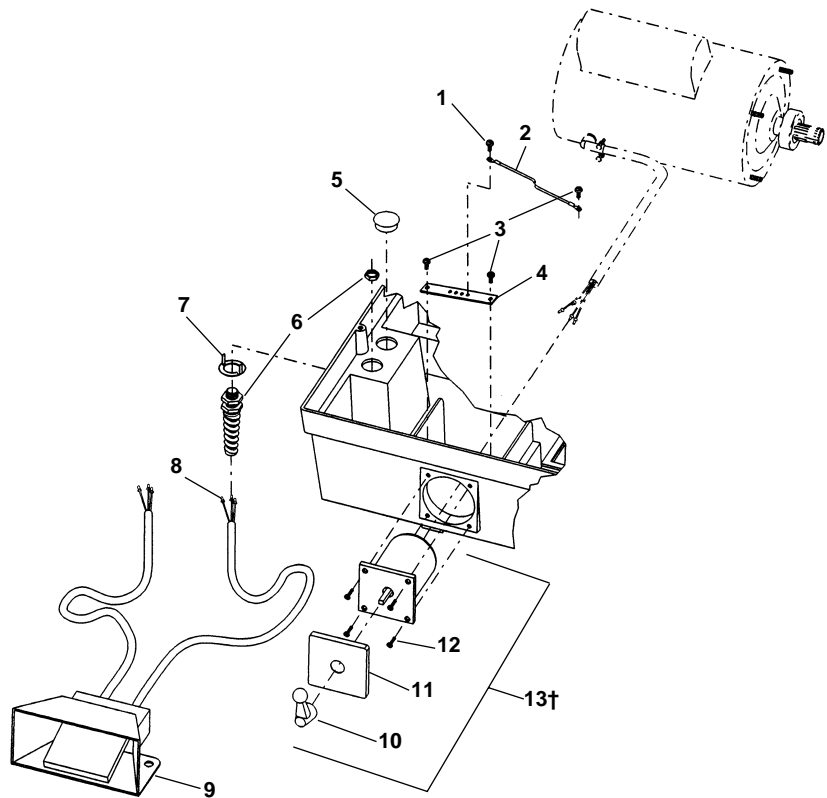
1224 & 1822-I Replacement Switch Wiring Diagram



50 Hz Electrical Components

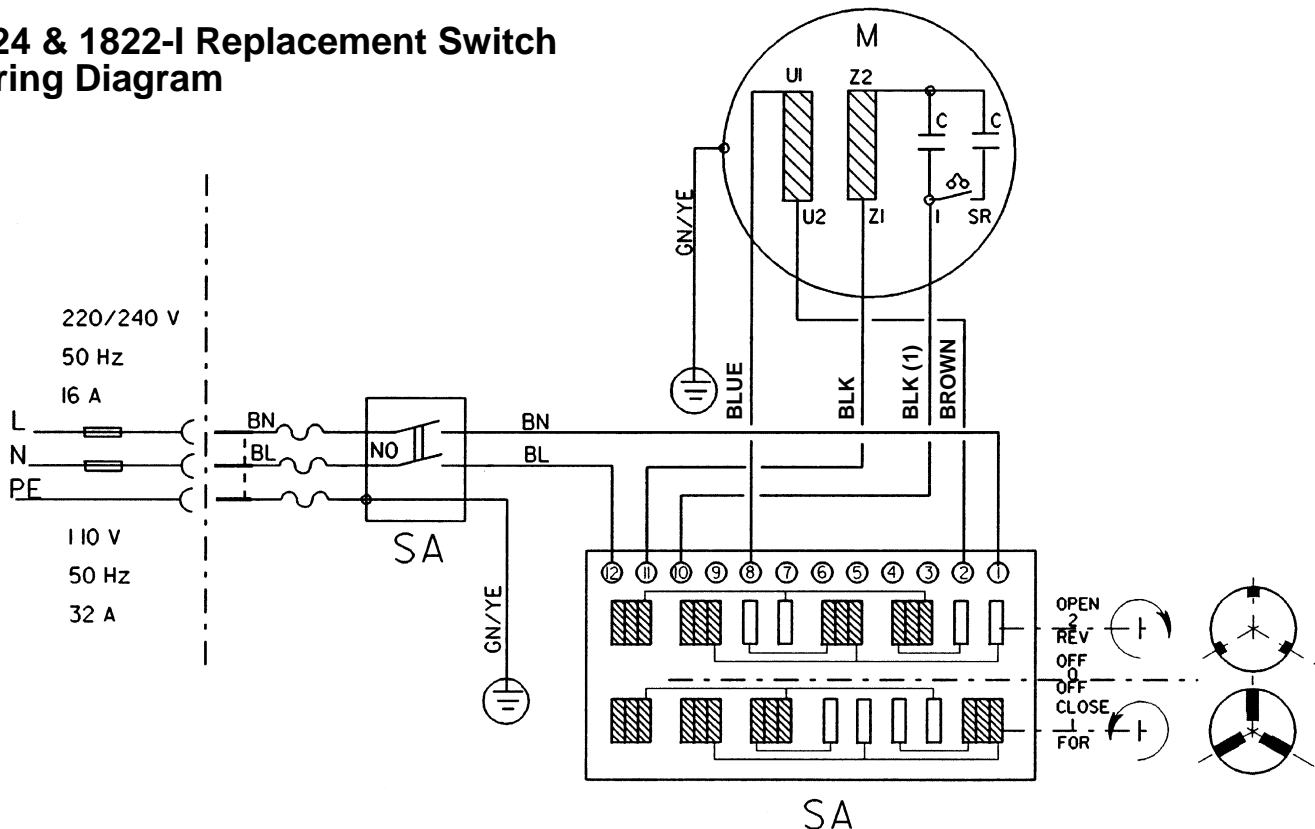
NOTE: Order parts by Catalog Number only.
DO NOT order by Reference Number.

Ref. No.	Catalog No.	Description
1	34715	Screw 10-32 x 3/8" (3)
2	33607	Ground Wire
3	45420	Screw 10-24 (4)
4	59732	Ground Strap
5	36252	Hole Plug
6	27187	Strain Relief
7	36247	Hole Adapter
8	44887	Wire Terminal (2)
9	36652	B-296 Foot Switch (220/240V)
	40017	B-298 Foot Switch (110V f/U.K.)
	40022	B-299 Foot Switch (240V f/Australia)
10	59707	Switch Knob
11	59717	Switch Plate (220/240V)
	59737	Switch Plate (110V)
12	45280	Screw 8-32 x 3/4" Fl. Head (4)
13†	59757	Switch Assembly



† Ref. No. 13 – When replacing early style switches, which have a black body, order Switch Kit, Catalog No. 59762. Kit includes 59757 Switch Assembly and 59742 Switch Adapter Plate

1224 & 1822-I Replacement Switch Wiring Diagram

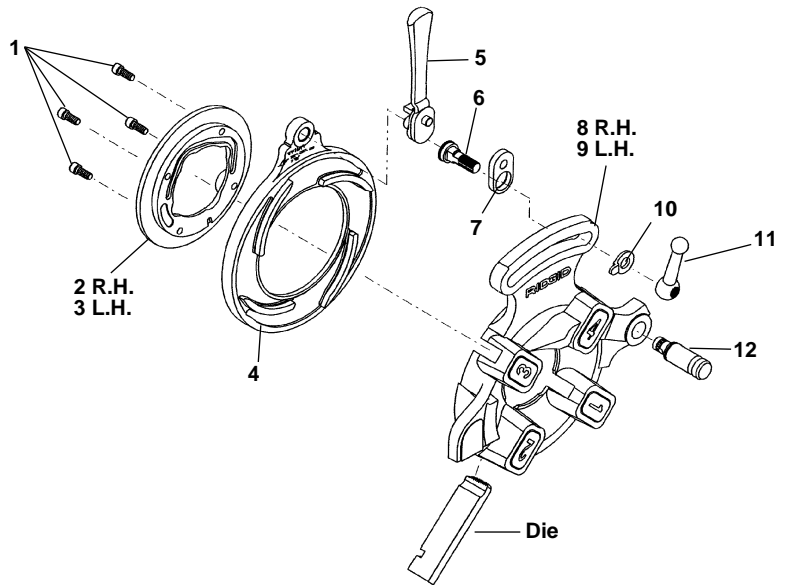


**Quick-Opening
Through-Head-Oiling Die Heads**

**811A NPT
811A BSPT
842
531B
532B**

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

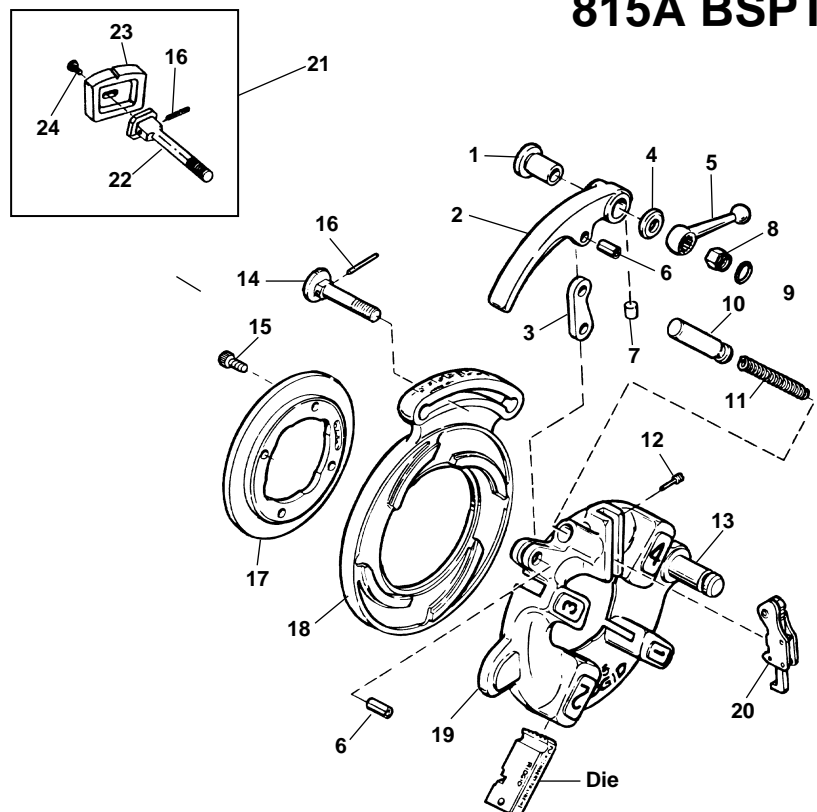
Ref. No.	Catalog No.	Description
—	97065	811A NPT Quick Opening (Through-Head-Oiling) Die Head (NPT RH)
	97070	842 Quick Opening (Through-Head-Oiling) Die Head (NPT LH)
	23282	811A BSPT Quick Opening (Through-Head-Oiling) Die Head (BSPT RH)
	97045	531B Quick Opening Through-Head-Oiling) Die Head (1/4" - 1 Bolt RH/LH)
	97050	532B Quick Opening (Through-Head-Oiling) Die Head (1/4" - 2 Bolt RH/LH)
1	32205	Screw
2	97020	Retaining Ring RH (811A)
	46620	Retaining Ring RH/LH (531)
	46625	Retaining Ring RH/LH (532)
3	23292	Retaining Ring LH (842)
4	43360	Cam Plate (811A, 842)
	43405	Cam Plate (531)
	43410	Cam Plate (532)
5	46520	Throwout Lever (811A, 842)
	46555	Throwout Lever (531, 532)
6	39860	Lock Screw (811A, 842)
	39955	Lock Screw (531, 532)
7	39950	Link
8	40922	Head w/Post RH (811A)
	97025	Head w/Post RH (851)
	97055	Head w/Post LH/RH (531)
	97060	Head w/Post LH/RH (532)
9	23287	Head w/Post LH (842)
10	39460	Lever Washer
11	39970	Clamp Lever
12	59832	Post



**Self-Opening
Through-Head-Oiling Die Heads**

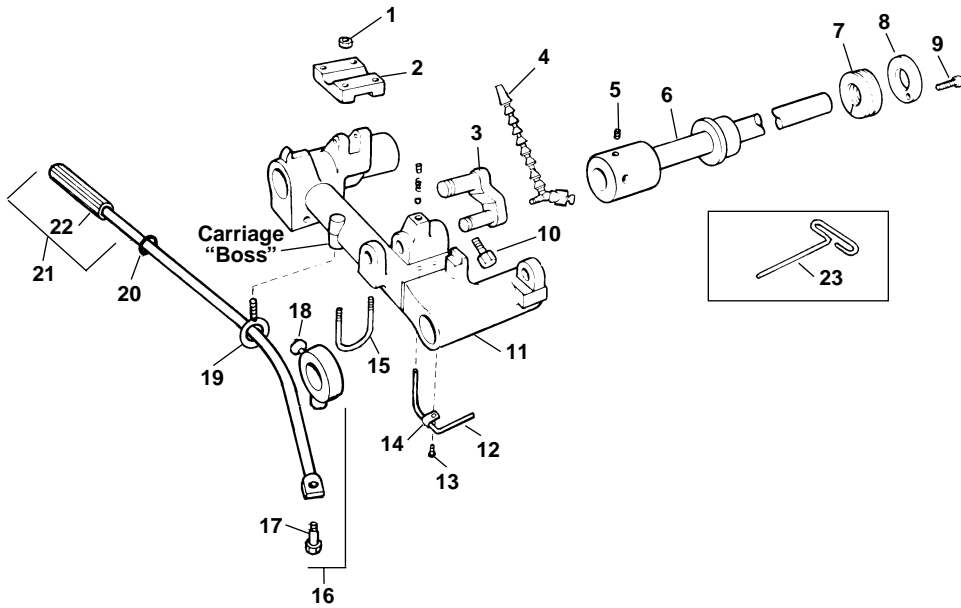
**815A NPT
815A BSPT**

Ref. No.	Catalog No.	Description
—	97075	815A Self-Opening (Through-Head-Oiling) Die Head (NPT)
	97080	815A Self-Opening (Through-Head-Oiling) Die Head (BSPT)
1	44240	Bushing
2	43830	Throw-Out Lever
3	44265	Throw-Out Link
4	44245	Washer
5	44260	Clamp Lever
6	44270	Roll Pin (2)
7	45055	Insert
8	44250	Nut
9	44255	Retaining Ring
10	44275	Throw-Out Plunger
11	48997	Spring
12	44290	Trigger Screw
13	59832	Post
14	44235	Lock Screw
15	32205	Screw (4)
16	45050	Pin
17	97020	Retaining Ring
18	40942	Cam Plate (815A NPT)
	97040	Cam Plate (815A BSPT)
19	40932	Head w/Post
20	44285	Trigger Assembly
	32982	Adj. Trigger Assembly (Europe)
	45327	Trigger Assy. (Europe)
21	45332	Gauge Plate Assembly
22	46722	Adj. Lock Screw
23	46717	Gauge Plate
24	47147	Screw



See 1822 Service Notes

No. 241 Carriage Mount Kit Parts

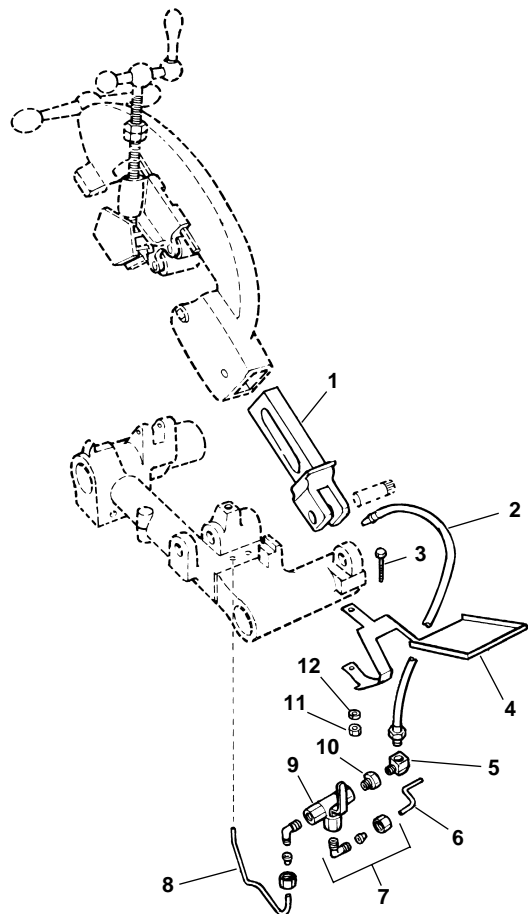


NOTE: Order parts by Catalog Number only. DO NOT order by Reference Number.

Ref. No.	Catalog No.	Description
—	35877	241 Carriage Mount Kit
1	96730	Hex Nut, 5/16" - 18
2	36177	Saddle
3	36182	Connecting Link
4	35277	Coolant Nozzle
5	39775	Set Screw, 5/16" - 11
6	36187	Drive Bar
7	36192	Spring
8	36197	End Cap
9	27357	Cap Screw, 1/4" - 20 x 3/4"
10	35202	Sq. Hd. Set Screw, 1/2" - 13
11	35052	Carriage
12	35067	Oil Supply Line
13	79965	Screw, 10-32 x 1/2"
14	35062	Oil Line Clamp
15	35207	U-Bolt
16	35282	Collar Assembly
17	46210	Shoulder Bolt
18	46220	Thumb Screw
19	35082	Eye Bolt
20	35092	O-Ring
21	43400	Lever Arm Assembly
22	46235	Hand Grip
23	35212	Hex Wrench
24	46810	Detente Assembly

No. 822 Blade Cutter Adapter Kit Parts
307 Oil Spout Assembly

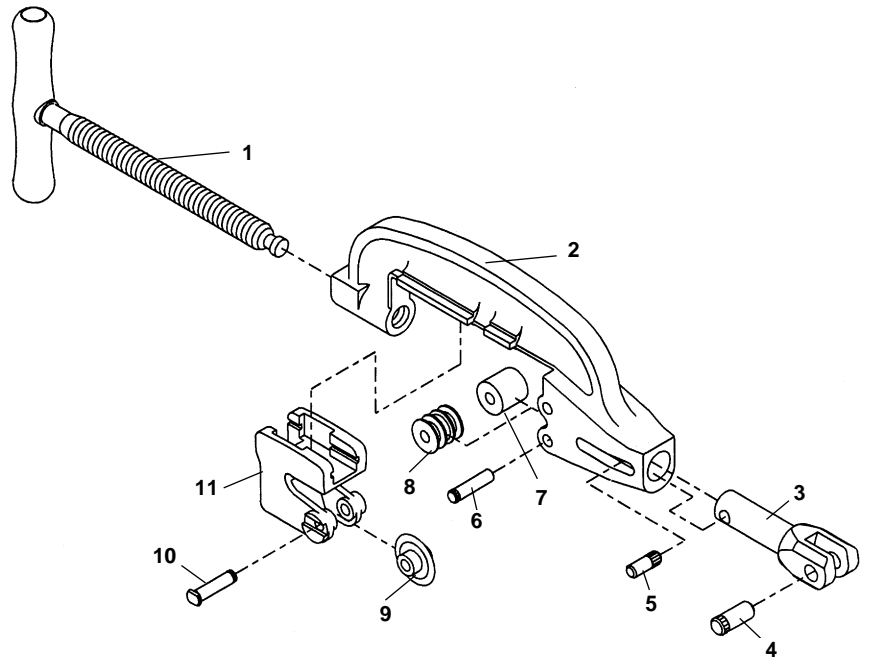
Ref. No.	Catalog No.	Description
—	35872	822 Adapter Kit
—	36602	307 Manifold Kit
1	36137	Cutter Arm (822 Kit Only) (1)
2	39845	Coolant Nozzle (1)
3	44510	Cap Screw 1/4" - 20 x 2" (1)
4	36142	Drip Guard (1)
5	36147	90° Street Elbow (1)
6	36152	Oil Line (3.3 in.) (1)
7	36157	90° Comp. Fitting (2)
8	36162	Oil Line (7.4 in.) (1)
9	36167	3-Way Valve (1)
10	36172	Reducer Bushing (1)
11	83890	Hex Nut, 1/4" - 20 (1)
12	27097	Flat Washer, 1/4" (1)



No. 364 Cutter

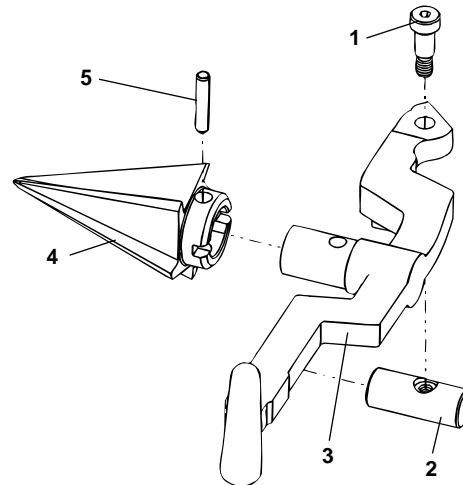
NOTE: Order parts by Catalog Number only.
DO NOT order by Reference Number.

Ref. No.	Catalog No.	Description
—	34617	364 Cutter Complete
1	36287	Feed Screw Handle
2	36292	Cutter Frame
3	45505	Support Arm
4	45520	Hinge Pin
5	35317	Retaining Pin
6	46662	Roll Pin (2)
7	46960	Roll (Steel) (2)
8	43682	Roll Pl. Coated Pipe (2)
9	44185	Cutter Wheel E-1032
10	34780	Wheel Pin
11	36282	Wheel Housing



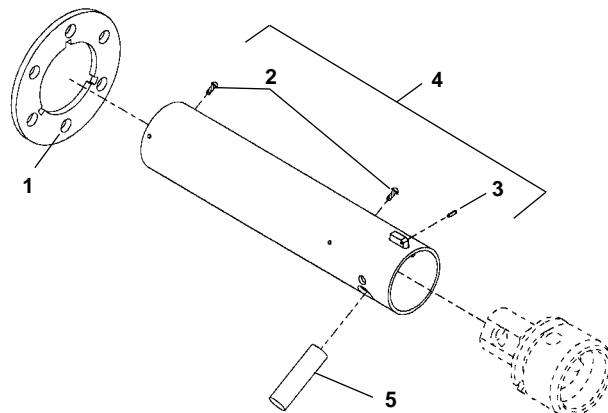
No. 344 Reamer

Ref. No.	Catalog No.	Description
—	34612	344 Reamer Complete
1	36262	Shoulder Screw
2	36267	Pivot Pin
3	36272	Reamer Arm
4	36277	Reamer Core (R.H.)
	46660	Reamer Core (L.H. & R.H.)
5	35355	Split Roll Pin

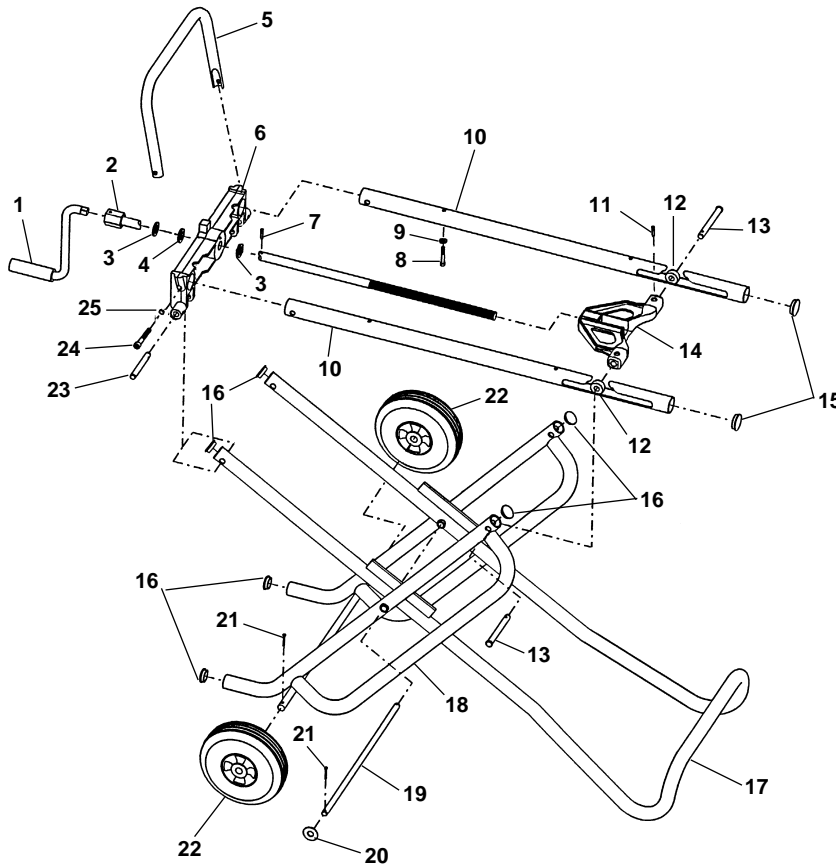


No. 839 Nipple Chuck

Ref. No.	Catalog No.	Description
—	35867	No. 839 Adapter Kit
1	47497	Pivot Rod Support
2	54307	Drive Screw (6)
3	47502	Roll Pin
4	47507	Tube Assembly
5	47512	Pin, 3/4" x 2 3/4"

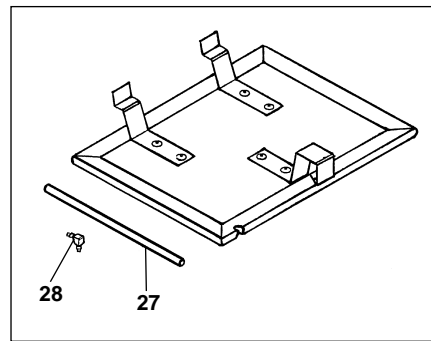


1406 Folding Wheel Stand



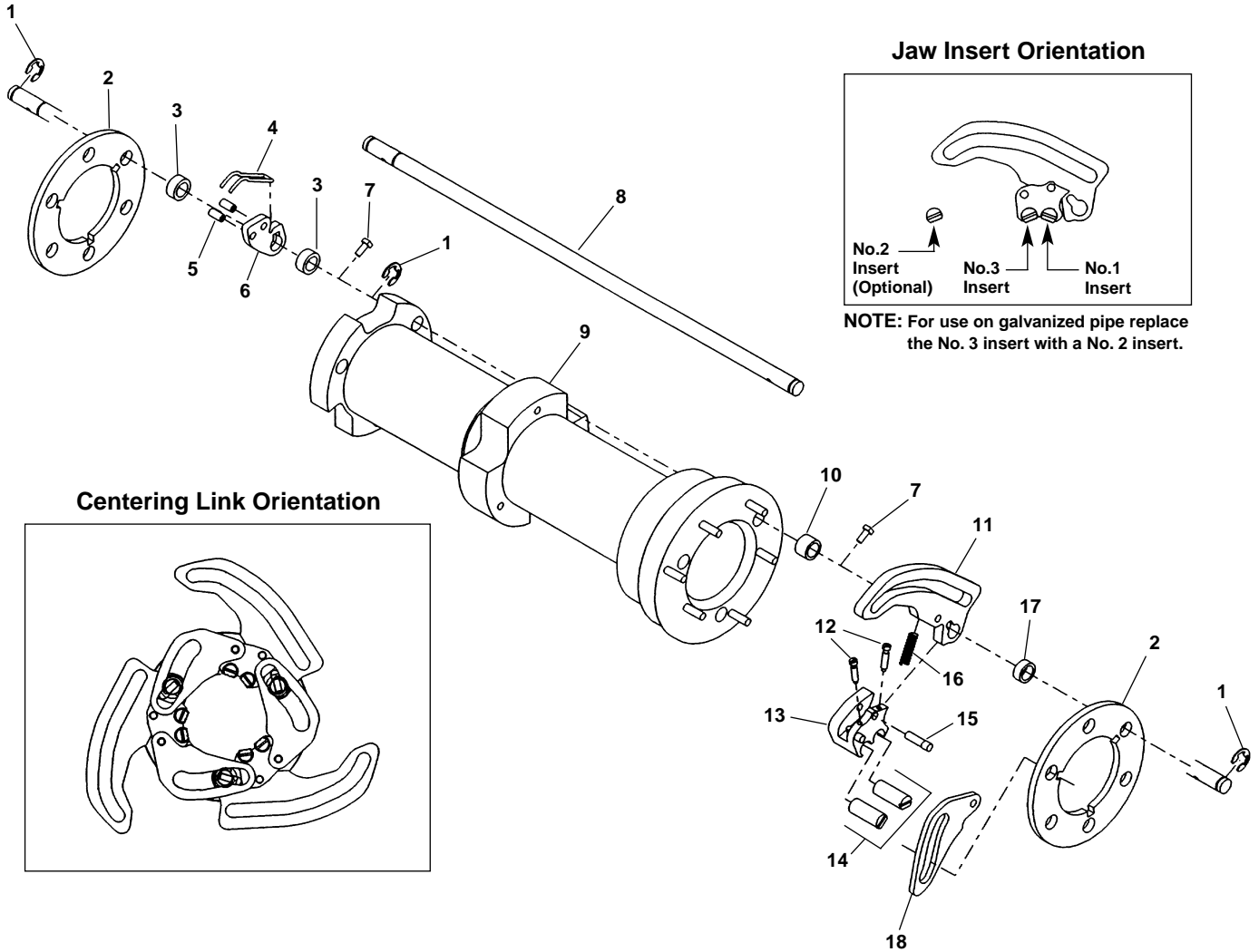
**NOTE: Order parts by Catalog Number only.
DO NOT order by Reference Number.**

Ref. No.	Catalog No.	Description
—	20105	1406 Folding Wheel Stand
1	51777	Crank Handle
2	51782	Screw Shaft
3	54312	Flat Washer (2)
4	36347	Nylon Bearing
5	36352	Rear Handle
6	45337	Brace
7	54300	Roll Pin 1/4" x 1 1/2"
8	46775	Screw 1/4" - 20 x 1 3/4" (4)
9	26947	Flat Washer 1/4" (4)
10	36367	Mounting Rail (2)
11	83325	Roll Pin 3/16" x 1 3/8" (2)
12	36377	Roller (2)
13	36382	Yoke Pin (2)
14	51787	Traverse Yoke
15	36312	Mounting Rail Cap (2)
16	36417	Pivot Assembly Cap (4)
17	51792	Leg Handle
18	51797	Pivot Assembly
19	36412	Pivot Shaft
20	83420	Flat Washer 1/2" (2)
21	47030	Cotter Pin 1/8 x 1" (4)
22	93325	Wheel (2)
23	45342	Groove Pin (2)
24	80045	Hex Bolt 3/8" - 16 x 3 1/4" (2)
25	41582	Washer-Int. Tooth (2)
26	35882	1460 Oil Pan Cover
27	36447	Tubing
28	36442	Elbow Fitting



26

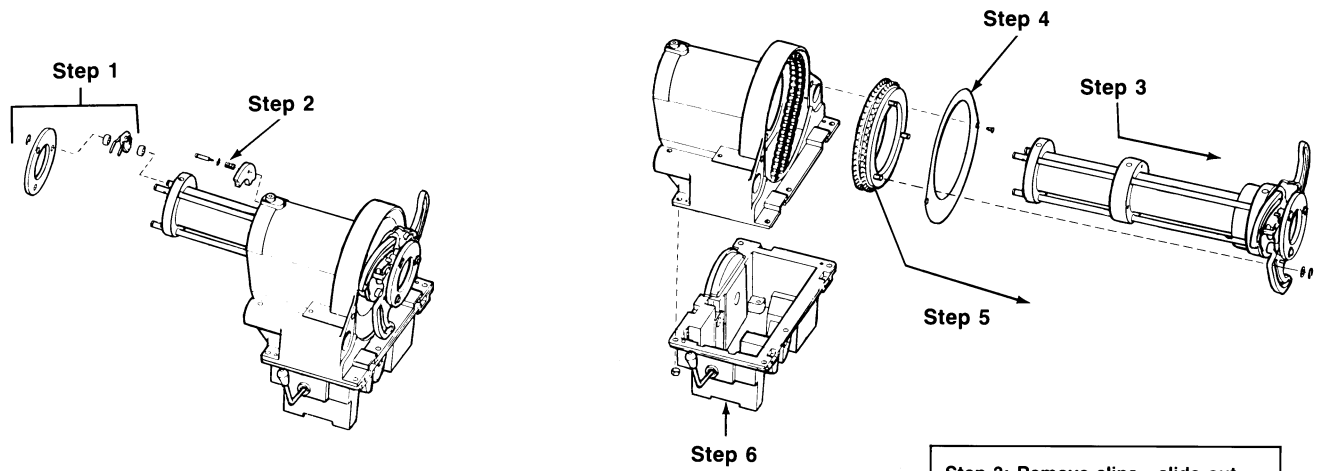
Spindle Assembly For Plastic Coated Pipe



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

Ref. No.	Catalog No.	Description	Ref. No.	Catalog No.	Description
—	50107	Plastic Coated Pipe Spindle Assembly	10	34787	Large Front Spacer
1	26937	Retaining Clip (9)	11	52977	Jaw (3) (Includes Ref. No.12-16)
2	47497	Pivot Rod Support (2)	12	46642	Jaw Insert Screw (6)
3	34802	Rear Spacer (6)	13	52982	Insert Holder (3)
4	43407	Rear Pick-up Spring (3)	14	43377	Jaw Insert Set (Includes 3 each No.1 & 3 Inserts)
5	34817	Rear Pick-up Spring Pin (6)	15	46647	Jaw Insert Set (No. 2 - Optional f/Galv. Pipe)
6	43412	Rear Jaw (3) (Includes Ref. No. 4 & 5)	16	43402	Insert Holder Pin (3)
7	34762	Pivot Rod Pin (6)	17	52987	Insert Holder Spring (3)
8	34767	Pivot Rod (3)	18	43392	Small Front Spacer (3)
9	61127	Spindle Tube f/P.C.P.		43387	Centering Link (3)

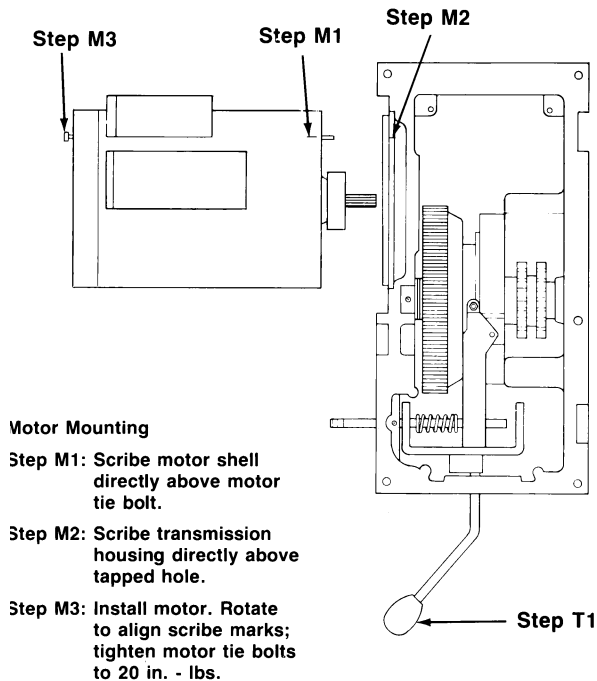
Power Assembly/Drive Assembly Separation Procedure



Step 1: Remove Rear Centering Device.
Step 2: Remove Brake Shoes (3).

Step 3: Remove clips - slide out Spindle Assembly.
Step 4/5: Remove Splash Guard and Sprocket.
Step 6: Separate housings.

Motor Mounting and Transmission Shifter Assembly (Induction Only)



Motor Mounting
Step M1: Scribe motor shell directly above motor tie bolt.
Step M2: Scribe transmission housing directly above tapped hole.
Step M3: Install motor. Rotate to align scribe marks; tighten motor tie bolts to 20 in. - lbs.

Transmission Shifter Assembly
Step T1: Rotate shift lever to left and install small (short) spring over shifting shaft.
Step T2: Rotate shift lever to right and install large (long) spring.
Step T3: (Not shown) Rotate shift lever to center (upright) position and finish installing shaft.
Step T4: Tighten set screw.
Note: Install "flat" on shafts UP.

