

304 Machine Base

Base Assembly

405 Machine Base

## PARTS LIST

3/77

The Base Assemblies for Model Nos. 304 and 405 are fundamentally similar. However, the Model No. 405 base weldment has been elongated by the addition of an extension to its left-hand side (Plate No. 1, Item No. 6).  
 The machine body left-hand side attaching hardware differs (Model No. 405, Item Nos. 1 & 2, and Model No. 304, Item Nos. 25 thru 27) but the right-hand side attaching hardware (Item Nos. 40 thru 42) is identical for both models.

No.	Qty.	Part No.	Part Name	No.	Qty.	Part No.	Part Name
1	2	05457	Nut - 405 Machine only	39	1	40859	Spindle Motor for Model No. 304-74006D (220/230V-50/60Hz - 1 Phase)
2	2	305-00092	Stud - 405 Machine only		1	40837	Spindle Motor for Model No. 304-74007D (200V-60Hz - 3 Phase)
3	4	15142	Leveling Screw		1	40837	Spindle Motor for Model No. 304-74008D (220/230V-50/60Hz - 3 Phase)
4	4	05199	Nut		1	40964	Spindle Motor for Model No. 304-74009D (575V-60Hz - 3 Phase)
5	4	304-00201	Leveling Pad		1	40837	Spindle Motor for Model No. 304-74010D (440/460V-50/60Hz - 3 Phase)
6	1	305-07399	Base Weldment - 405 Machine (Note: Cut-a-way view, depicting base left-hand side extension)		<b>304 Machine</b>		
7	4	05577	Washer (See Item No. 19)		<b>405 Machine</b>		
8	2	08378	Screw	1	40859	Spindle Motor for Model No. 405-74006D (220/230V-50/60Hz - 1 Phase)	
9	3	19910	Screw	1	40837	Spindle Motor for Model No. 405-74007D (200V-60Hz - 3 Phase)	
10	2	28802	Pin	1	40837	Spindle Motor for Model No. 405-74008D (220/230V-50/60Hz - 3 Phase)	
11	2	304-00498	Sprocket (See Item No. 54)	1	40964	Spindle Motor for Model No. 405-74009D (575V-60Hz - 3 Phase)	
12	2	09046	Nut (See Item No. 24)	1	40837	Spindle Motor for Model No. 405-74010D (440/460V-50/60Hz - 3 Phase)	
13	2	07626	Set Screw (See Item No. 21)	40	2	08328	Screw
14	2	111-00322A	Plug (See Item No. 22)	41	2	17474	Lock Washer
15	2	444-00197	Collar (See Item No. 23)	42	2	05268	Washer
16	2	05364	Washer (See Item No. 18)	42	6	304-00553	Pad (See Item No. 51)
17	1	304-07550	Base Weldment - 304 Machine (Note: Cut-a-way view for illustrative purposes only)	44	4	05150	Screw
18		05364	Washer (See Item No. 16)	45	4	05889	Lock Washer
19		05577	Washer (See Item No. 7)	46	4	05208	Nut
20	2	06616	Nut	47	1	304-00549	Motor Plate w/Qty. (4) Part No. 05314 Screws welded
21		07626	Set Screw (See Item No. 13)	48	4	05489	Washer
22		111-00322A	Plug (See Item No. 14)	49	4	05207	Nut
23		444-00197	Collar (See Item No. 15)	50	1	41104	Vari-Drive Pulley w/Coupling
24		09046	Nut (See Item No. 12)	51		304-00553	Pad (See Item No. 43)
25	2	05268	Washer - 304 Machine only	52	1	304-00483	Support
26	2	17474	Lock Washer - 304 Machine only	53	1	304-00524	Pulley Adjusting Screw
27	2	09021	Screw - 304 Machine only	54		304-00498	Sprocket (See Item No. 11)
28	1	304-00482	Shaft (Note: Item Nos. 28, 32, 33, & 34 are furnished as an assembled unit)	55	1	40831	Chain
29	1	304-00493	Plate Name	56	1	40538	Link Master
30	1	304-07495	Support	57	1	305-07503	Guard Control
31	1	08566	Screw	58	1	304-07420	Pulley Guard
32	1	304-00481	Indicator (See Item No. 28)	59	4	19910	Screw
33	1	41042	Handwheel (See Item No. 28)				
34	1	05465	Set Screw (See Item No. 28)				
35	1	304-00494	Scale				
36	4	05353	Pin				
37	1	204-00038	Model and Serial Number Plate				
38	1	41232	Van Norman Plate				

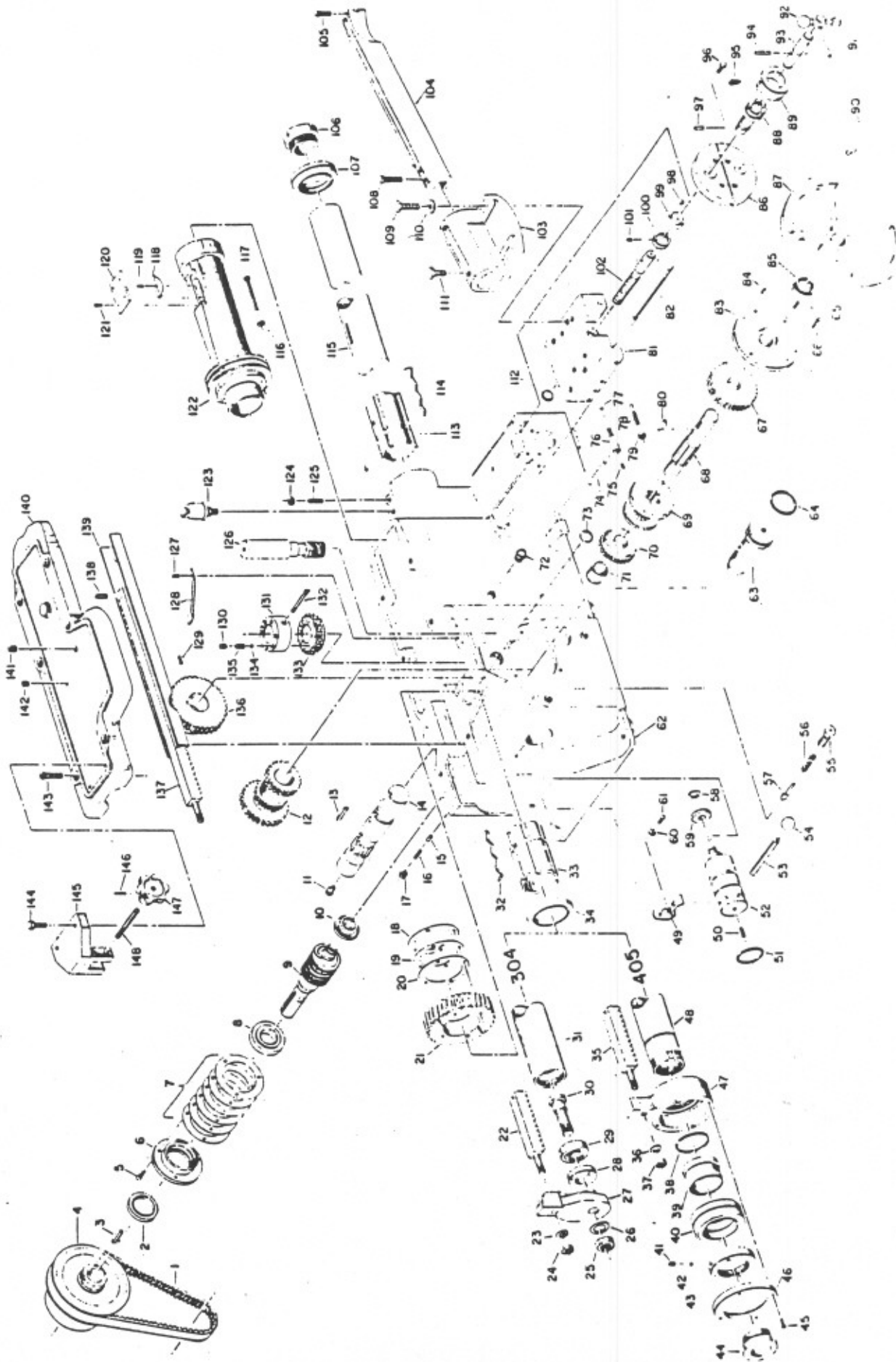
# PARTS LIST

## Body and Spindle Assembly Turning Attachment Assembly

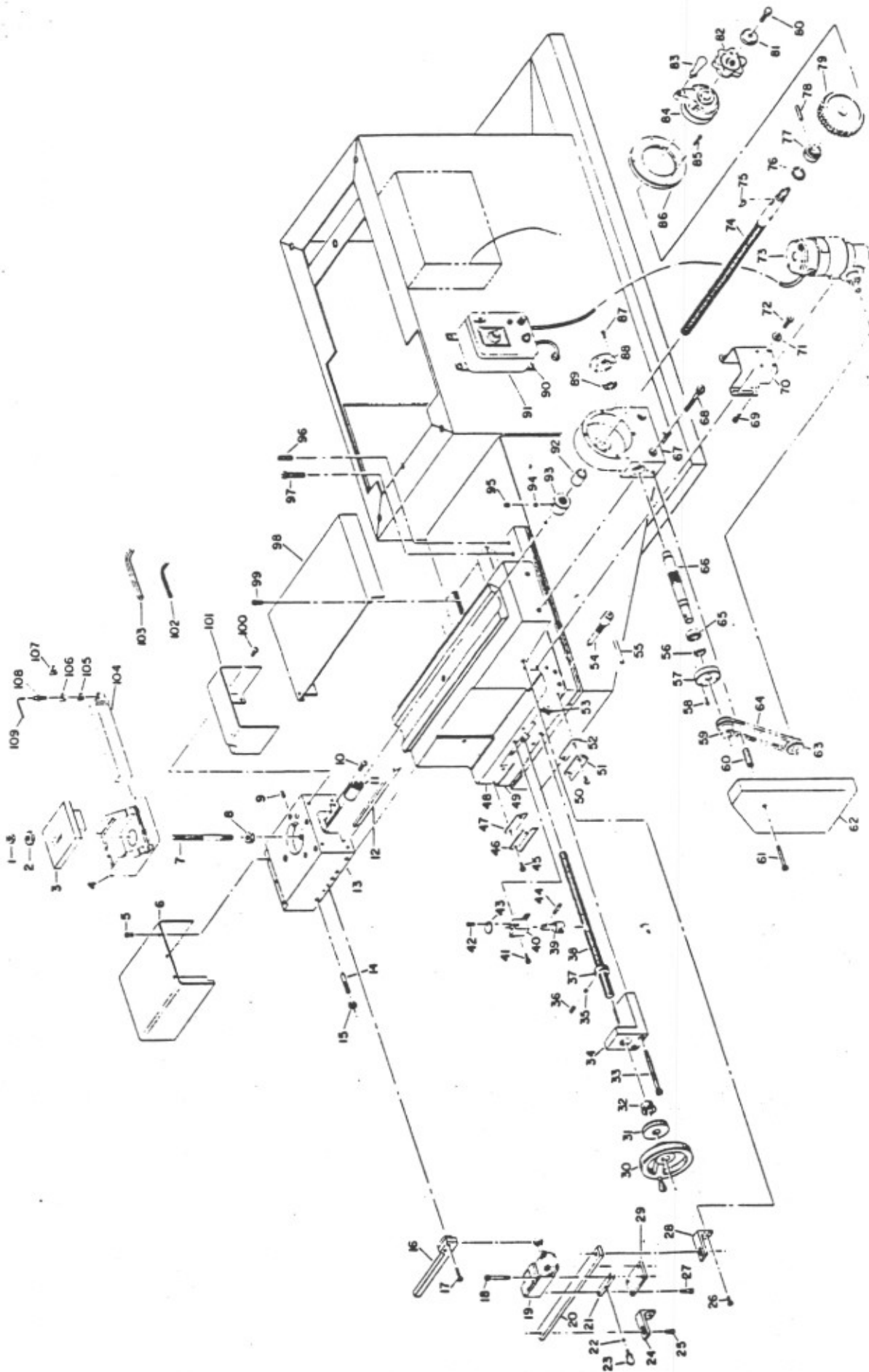
The Body & Spindle Assemblies for Model Nos. 304 and 405 are basically identical. The Spindles and Yoke Assemblies differ (Model No. 304, Plate No. 2, Item Nos. 22 thru 31, and Model No. 405, Item Nos. 35 thru 48) and Model No. 405 is shipped with No. 304-07148 Spindle Rack Clamp Assembly (Item Nos. 144 thru 148).

The Turning Attachment Assembly (Item Nos. 74 thru 79, 81, 82, 86, 88, 89, 91 thru 105, & 108 thru 112) is compatible with each model.

No.	Qty.	Part No.	Part Name	No.	Qty.	Part No.	Part Name
1	1	41108	Belt	75	1	09204	Set Screw
2	1	40628	Seal	76	1	304-00337	Binder
3	1	304-00279	Key	77	1	16741	Plug
4	1	41105	Variable-Speed Pulley (4) Springs	78	3	448-00007	Screw
5	3	05340	Screw	79	3	05208	Nut
6	1	304-00411	Flange	80	1	17087	Key
7	1	305-00048	Shim	81	1	304-00040	Slide
8	1	26677	Bearing (Rear)	82	1	304-00069	Gib
9	1	304-00432	Worm	83	1	304-00028	Bearing
10	1	13617	Bearing (Front)	84	2	Q-00646	Pin
11	1	05757	Oiler	85	1	15428	Seal
12	1	304-00030	Gear	86	1	304-00333	Bracket
13	1	11705	Key	87	1	304-00324	Handwheel with Part No. 7098 Set Screw (Note: Item Nos. 87 & 90 are furnished as an assembled unit)
14	1	304-00017	Pinion				
15	2	16747	Pin				
16	4	09373	Screw (See Item No. 125)	88	1	304-00042	Sleeve (See Plate No. 4, Item No. 84)
17	4	05208	Nut	89	1	304-00048	Dial
18	2	20919	Shim (.020)	90	1	06610	Handle (See Item No. 87)
19	2	20918	Shim (.007)	91	1	11558	Pin
20	2	20917	Shim (.005)	92	1	304-00045	Handle
21	1	305-00008	Worm Wheel	93	1	304-00046	Shaft
22		304-00339	Rack - 304 Machine (Cut-a-way view to illustrate assembly with Part No. 304-00338 yoke. See Item No. 137)	94	1	20964	Pin
				95	1	26-01098	Set Screw
23	1	19751	Washer (See Item No. 36)	96	4	07283	Screw
24	1	07709	Nut (See Item No. 37)	97	1	09424	Pin (See Plate No. 4, Item No. 85)
25	1	09896	Nut	98	1	15422	Key
26	1	05383	Washer	99	1	304-00043	Collar
27	1	304-00338	Yoke	100	1	304-00044	Nut
28	1	304-00008	Nut	101	1	07626	Set Screw
29	1	15617	Bearing	102	1	304-00041	Feed Screw
30	1	304-00009	Stud	103	1	304-00039	Clamp
31		304-00150	Spindle (Cut-a-way view for illustrative purposes only. See Item No. 115)	104	1	304-00383	Tool Bar
				105	2	05162	Set Screw
32	2	304-00012	Spring (See Item No. 114)	106	1	304-00154	Collar
33	2	304-00011	Bearing (See Item No. 113)	107	1	19784	Seal (Front)
34	1	11662	Seal (Rear)	108	2	06425	Set Screw
35		304-00218	Rack - 405 Machine (Cut-a-way view to illustrate assembly with Part No. 304-00027 yoke. See Item No. 137)	109	2	05270	Screw
				110	2	18444	Washer
36		19751	Washer (See Item No. 23)	111	2	15107	Binder
37		07709	Nut (See Item No. 24)	112	1	07164	Plug
38	1	305-00082	Retainer	113		304-00011	Bearing (See Item No. 33)
39	1	304-00230	Sleeve	114		304-00012	Spring (See Item No. 32)
40	2	10349	Bearing	115	1	304-00150	Spindle (304 Machine) - See Item No. 31
41	1	08115	Screw			304-00226	Spindle (405 Machine) - See Item No. 48
42	1	111-00681	Plug	116	4	05889	Lock Washer
43	1	304-00229	Locknut	117	4	09651	Screw
44	1	304-00154	Nut (405 Machine only)	118	1	304-00010	Key
45	4	11747	Screw	119	1	11816	Screw
46	1	304-00228	Cap	120	1	304-00035	Cover
47	1	304-00227	Yoke	121	4	07326	Screw
48		304-00226	Spindle (Cut-a-way view for illustrative purposes only. See Item No. 115)	122	1	304-00005	Sleeve
				123	1	19585	Oiler
49	1	304-00105	Indicator	124		05208	Nut (See Item No. 17)
50	1	05629	Set Screw	125		18314	Screw (See Item No. 16)
51	1	20915	"O" Ring	126	1	304-00032	Shaft
52	1	304-00023	Eccentric	127	1	08494	Screw
53	1	304-00027	Handle	128	1	304-00155	Scraper
54	1	14779	Knob	129	1	05490	Set Screw
55	1	304-00026	Housing	130	6	40522	Set Screw
56	1	17194	Spring	131	1	304-00406	Clutch
57	1	304-00025	Detent	132	1	08491	Screw
58	1	19978	Retaining Ring	133	1	304-00404	Gear
59	1	304-00024	Roller	134	6	08303	Ball
60	1	18100	Washer	135	6	15697	Spring
61	1	05262	Screw	136	1	304-00018	Gear
62	1	304-00416	Body	137	1	304-00339	Rack - 304 Machine (See Item No. 22)
63	1	304-00031	Stud			304-00218	Rack - 405 Machine (See Item No. 35)
64	1	21142	"O" Ring	138	1	09911	Pin
65	1	15220	Set Screw	139	1	304-07015	Channel, with Qty. (1) Part No. 5006 Attaching Screw
66	3	10298	Screw	140	1	304-00417	Cover
67	1	304-00022	Gear (Front)	141	2	08194	Plug
68	1	304-00020	Shaft	142	1	05757	Oiler
69	1	304-00019	Spool	143	6	09937	Screw
70	1	304-00021	Gear	144	2	05179	Screw (405 Machine)
71	1	304-00052	Bushing	145	1	305-00044	Clamp (405 Machine)
72	1	29354	Gauge	146	1	11558	Pin (405 Machine)
73	1	07166	Plug	147	1	305-00045	Knob (405 Machine)
74	1	73-00200	Handle	148	1	27172	Stud (405 Machine)



Body, Spring and Drum Turning Assembly



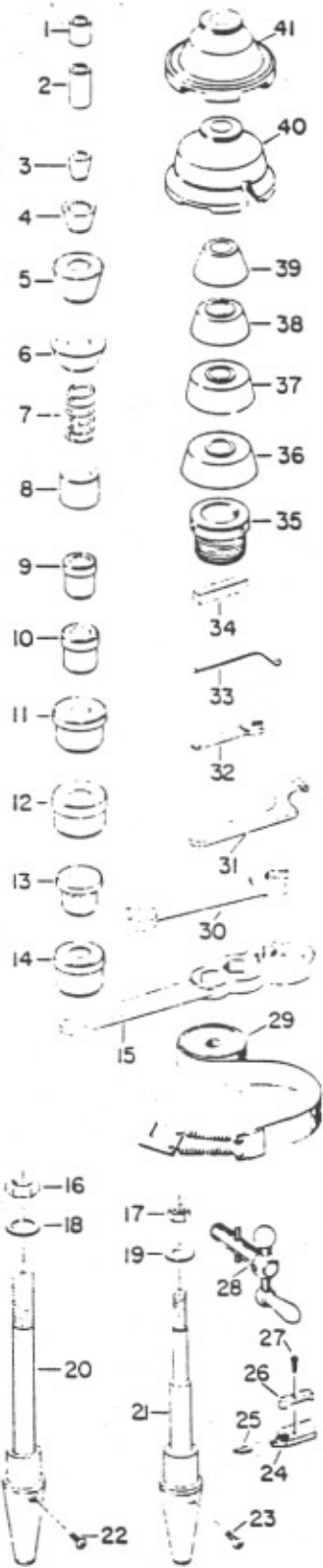
405 Flywheel Turning Assembly

# PARTS LIST

## Flywheel & Turning Assembly

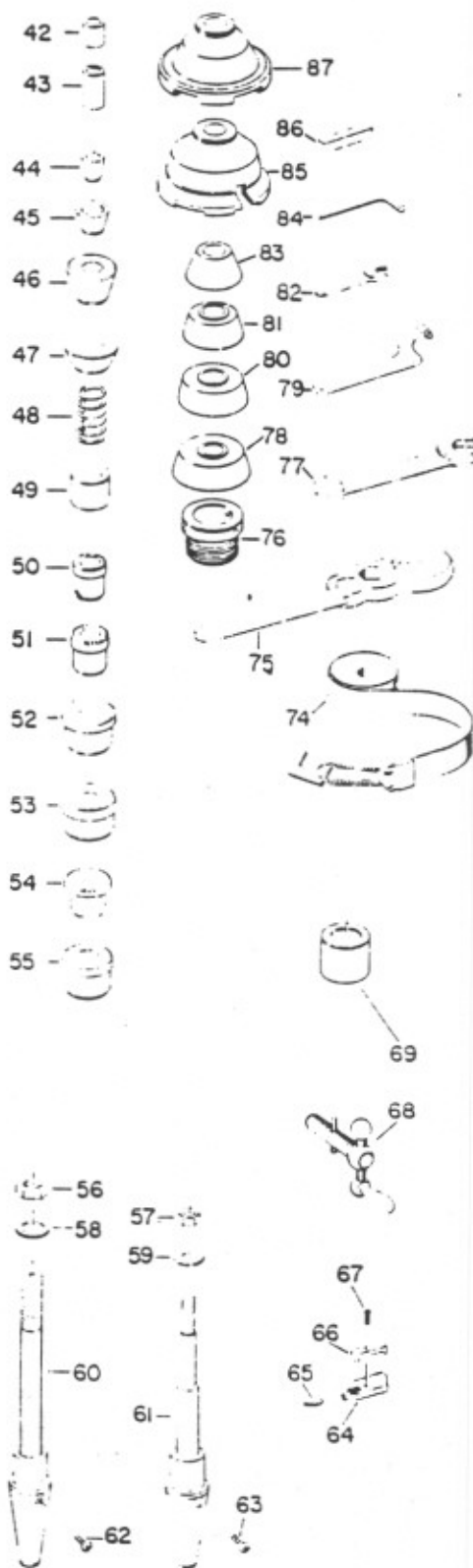
405 Machine

No.	Qty.	Part No.	Part Name	No.	Qty.	Part No.	Part Name
1	1	20380	Nut	56	1	11680	Seal
2	1	22-01012	Washer	57	1	304-00219	Cap, L. H.
3	1	305-00052	Clamp	58	3	07284	Screw
4	1	204-00031	Tool Holder	59	2	25761	Pulley (See Item No. 63)
5	3	19343	Screw	60	1	305-00377	Spacer
6	1	304-00327	Guard	61	1	10492	Screw
7	1	304-00290	Stud	62	1	305-07356	Guard
8	1	05457	Nut	63		25761	Pulley (See Item No. 59)
9	1	18314	Set Screw	64	1	21217	Belt
10	1	27098	Screw	65	2	24250	Bearing (See Item No. 89)
11	1	305-00358	Feed Nut	66	1	304-00215	Worm Shaft
12	1	305-00039	Gib	67	1	305-00353	Worm Housing
13	1	305-00357	Turning Slide	68	2	09021	Screw
14	4	448-00007	Screw	69	4	07326	Screw
15	4	05208	Nut	70	1	305-00355	Base
16	1	305-00359	Switch Dog	71	4	05577	Washer
17	2	08708	Screw	72	4	10431	Screw
18	2	11348	Screw	73	1	40566	Motor
19	1	23358	Switch	74	1	305-00354	Feed Screw
20	1	305-00352	Track	75	1	05134	Key
21	2	305-00030	Rail	76	1	40845	Thrust Bearing
22	1	111-00322½	Plug	77	1	304-00211	Collar
23	1	16905	Thumb Screw	78	1	09821	Pin
24	2	305-00029	Bracket (See Item No. 28)	79	1	304-00214	Worm Wheel
25	2	08955	Screw	80	1	05340	Screw
26	2	10431	Screw	81	1	85E-00145	Stop
27	2	09691	Screw	82	1	204-00159	Binder
28		305-00029	Bracket (See Item No. 24)	83	1	08447	Handle
29	1	305-00031	Plate	84	1	304-00295	Handwheel
30	1	28954	Handwheel	85	4	19892	Screw
31	1	305-00343	Dial	86	1	304-00217	Cover
32	1	40562	Bushing	87	3	19892	Screw
33	2	15611	Screw	88	1	304-00220	Cap, R. H.
34	1	305-00341	Support	89		24250	Bearing (See Item No. 65)
35	1	23-00108	Plug	90	4	19099	Screw
36	1	06775	Set Screw	91	1	40567	Control
37	1	305-00361	Collar (Note: Shown assembled to Part No. 305-00342 Feed Screw)	92	1	25801	Bushing
38	1	305-00342	Feed Screw	93	1	305-00035	Collar
39	1	305-00349	Half Nut	94	2	111-00386	Plug
40	1	305-07350	Bracket	95	2	09204	Set Screw
41	2	08480	Screw	96	2	JB-00553	Pin
42	1	07326	Screw	97	6	06905	Screw
43	1	305-00351	Lid	98	1	304-00292	Guard
44	1	19934	Pin	99	3	19099	Screw
45	4	05085	Screw (See Item No. 50)	100	4	19910	Screw
46	1	305-00346	L. H. Wiper	101	1	305-00038	Cover
47	1	305-00345	L. H. Felt	102	1	05317	Allen Wrench ⅜" Hex
48	1	305-00344	Slide	103	1	06813	Allen Wrench ⅜" Flats
49	1	305-00340	Slide Base	104	1	40888	Tool Holder
50		05085	Screw (See Item No. 45)	105	1		Tool Bit Base (Part of Tool Holder, Item No. 104)
51	1	305-00348	R. H. Wiper	106	1	27266	Carbide Insert .015R
52	1	305-00347	R. H. Felt	107	1	27267	Carbide Insert .031R
53	1	304-00203	Gib (Note: Shown in place with Part No. 305-00344 Slide)	108	1		Cam (Part of Tool Holder, Item No. 104)
54	2	304-00205	Binder	109	1		Allen Wrench ⅜" Hex (Part of Tool Holder, Item No. 104)
55	2	10197	Pin				



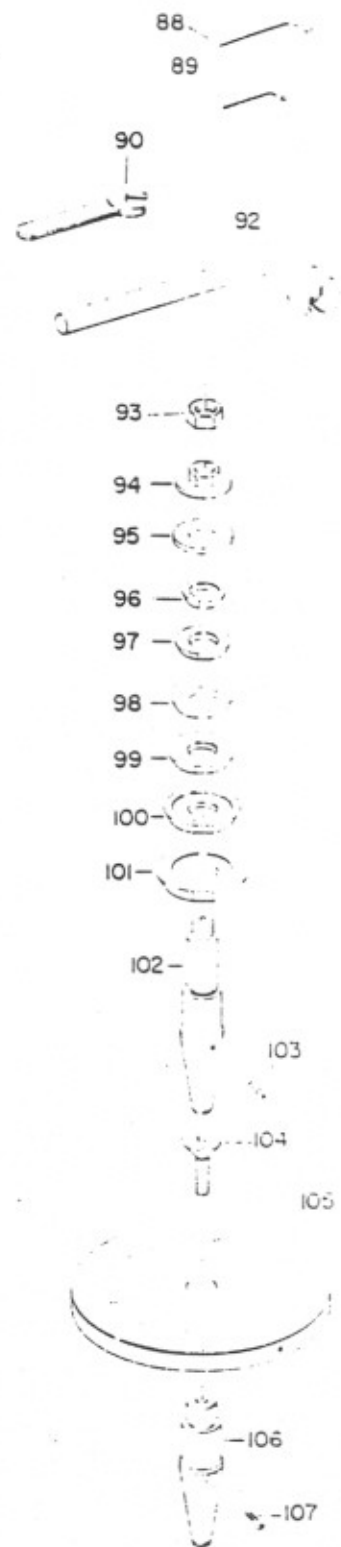
304-07435

304



305-07369 and 305-07371

405



Standard Equipment

3/77

# PARTS LIST

## Standard Equipment

### 304 Machine - 304-07435

No.	Qty.	Part No.	Part Name	No.	Qty.	Part No.	Part Name
1	1	BD-00091	Bushing 1" O.D. x 1 1/16" I.D. x 1 1/4" long	55	1	300-00081	Ball Bearing Adaptor for 909060-70 N.D. Bearing
2	1	BD-00080	Spacer 1" O.D. x 1 1/16" x I.D. x 2" long	56	1	08519	1" Arbor Nut
3	1	BD-00061	Cone 1 1/4" O.D. (for Ford V-8)	57	1	08521	1 1/16" Arbor Nut
4	2	BD-00060	Cone 1 1/4" O.D.	58	1	05488	1" Arbor Washer
5	1	BD-00059	Cone 2 1/2" O.D.	59	1	14162	1 1/16" Arbor Washer
6	1	BD-00058	Cone 2 1/4" O.D.	60	1	304-00152	1" Arbor
7	1	BD-00075	Clamp Bell Spring	61	1	304-00151	1 1/16" Arbor
8	1	BD-00066	Bushing 2" O.D. x 1" I.D. x 1 1/2" long	62	1	24354	1" Arbor Screw
9	1	300-00001	Ball Bearing Adaptor for 909001-21 N.D. Bearing	63	1	24354	1 1/16" Arbor Screw
10	1	300-00002	Ball Bearing Adaptor for 909003-23-25 N.D. Bearing	64	1	304-07171	Tool Kit (Note: Includes Part No. 304-07134 L.H. Tool Holder Assembly, which assembly contains Part No. 304-00134 Tool Holder Base, Item Nos. 26 & 27, and Part No. 304-00138 Contents List Tag)
11	1	300-00006	Ball Bearing Adaptor for 909002-24-32-42-52 N.D. Bearing	65	2	24209	Tool Bit
12	1	300-00005	Ball Bearing Adaptor for 909007-24-42 N.D. Bearing	66	1	304-00135	Clamp Bar
13	1	300-00082	Ball Bearing Adaptor for 909040-67 N.D. Bearing	67	1	07498	Screw
14	1	300-00081	Ball Bearing Adaptor for 909060-70 N.D. Bearing	68	1	304-00046	Handle Assembly
15	1	BD-00515	Wrench for 1 1/16", 1", & 2" Arbor Nuts	69	1	BD-00358	Handle
16	1	08519	1" Arbor Nut	70	1	BD-00358	Clamp Screw
17	1	08521	1 1/16" Arbor Nut	71	1	BD-07355	Wheel Dresser Unit (Note: Includes Part No. BD-00355 Frame and Item Nos. 69, 70, 72, & 73)
18	1	05488	1" Arbor Washer	72	1	05629	Set Screw
19	1	14162	1 1/16" Arbor Washer	73	1	05668	Wheel Dresser Diamond
20	1	304-00152	1" Arbor	74	1	11486	Drum Silencer Band
21	1	304-00151	1 1/16" Arbor	75	1	BD-00515	Wrench for 1 1/16", 1" & 2" Arbor Nuts
22	1	24354	1" Arbor Screw	76	1	304-00154	Collar
23	1	24354	1 1/16" Arbor Screw	77	1	19327	Double End Wrench, 1 1/16" & 1/2"
24	1	304-07171	Tool Kit (Note: Includes Part No. 304-07134 L.H. Tool Holder Assembly, which assembly contains Part No. 304-00134 Tool Holder Base, Item Nos. 26 & 27, and Part No. 304-00138 Contents List Tag)	78	1	300-00106	Cone Adaptor 4" O.D.
25	2	24209	Tool Bit	79	1	25110	Spanner Wrench
26	1	304-00135	Clamp Bar	80	1	300-00105	Cone Adaptor 3 1/2" O.D.
27	1	07498	Screw	81	1	300-00104	Cone Adaptor 3" O.D.
28	1	304-00046	Handle Assembly	82	1	06423	Open End Wrench 1/2"
29	1	11486	Drum Silencer Band	83	1	300-00103	Cone Adaptor 2 1/2" O.D.
30	1	07710	Open End Wrench 1 1/16"	84	1	05771	Hex Wrench 1/16"
31	1	25110	Spanner Wrench	85	1	300-00108	Clamp Bell
32	1	06423	Open End Wrench 1/2"	86	1	07318	Honing Stick
33	1	05771	Hex Wrench 1/16"	87	1	300-00107	Clamp Bell
34	1	07318	Honing Stick				
35	1	304-00154	Collar				
36	1	300-00106	Cone Adaptor 4" O.D.				
37	1	300-00105	Cone Adaptor 3 1/2" O.D.				
38	1	300-00104	Cone Adaptor 3" O.D.				
39	1	300-00103	Cone Adaptor 2 1/2" O.D.				
40	1	300-00108	Clamp Bell				
41	1	300-00107	Clamp Bell				

### 405 Machine - 305-07368

42	1	BD-00091	Bushing 1" O.D. x 1 1/16" I.D. x 1 1/4" long				
43	1	BD-00080	Spacer 1" O.D. x 1 1/16" I.D. x 2" long				
44	1	BD-00061	Cone 1 1/4" O.D. (for Ford V-8)				
45	2	BD-00060	Cone 1 1/4" O.D.				
46	1	BD-00059	Cone 2 1/2" O.D.				
47	1	BD-00058	Cone 2 1/4" O.D.				
48	1	BD-00075	Clamp Bell Spring				
49	1	BD-00066	Bushing 2" O.D. x 1" I.D. x 1 1/2" long				
50	1	300-00001	Ball Bearing Adaptor for 909001-21 N.D. Bearing				
51	1	300-00002	Ball Bearing Adaptor for 909003-23-25 N.D. Bearing				
52	1	300-00006	Ball Bearing Adaptor for 909002-24-32-42-52 N.D. Bearing				
53	1	300-00005	Ball Bearing Adaptor for 909007-24-42 N.D. Bearing				
54	1	300-00082	Ball Bearing Adaptor for 909040-67 N.D. Bearing				
				88	1	06813	Allen Wrench
				89	1	05317	Allen Wrench
				90	1	18395	Set Screw
				91	1	570-00207	Diamond Holder w/Part No. 25415 Alnico Magnet
				92	1	05688	Diamond (3/8" Dia. x 3" long - 1/4 - 1/2 K)
				93	1	19539	Offset Socket Wrench 1 1/2" opening
				94	1	304-00261	Arbor Nut
				95	2	304-00262	Arbor "C" Washer 1/4" thick
				96	1	304-00312	Flywheel Adaptor 1 1/2" to 2" diameter
				97	1	304-00313	Flywheel Adaptor 2" to 2 1/2" diameter
				98	1	304-00314	Flywheel Adaptor 2 1/2" to 3" diameter
				99	1	304-00315	Flywheel Adaptor 3" to 3 1/2" diameter
				100	1	304-00316	Flywheel Adaptor 3 1/2" to 4" diameter
				101	1	304-00317	Flywheel Adaptor 4" to 4 1/2" diameter
				102	1	304-00260	Arbor with 1 1/2" diameter shank
				103	1	24354	Arbor Screw
				104	1	304-00320	Arbor
				105	1	304-00182	Arbor Flywheel Disc
				106	1	304-00319	Arbor Shank
				107	1	24354	Arbor Shank Screw

### 405 Machine - 305-07371



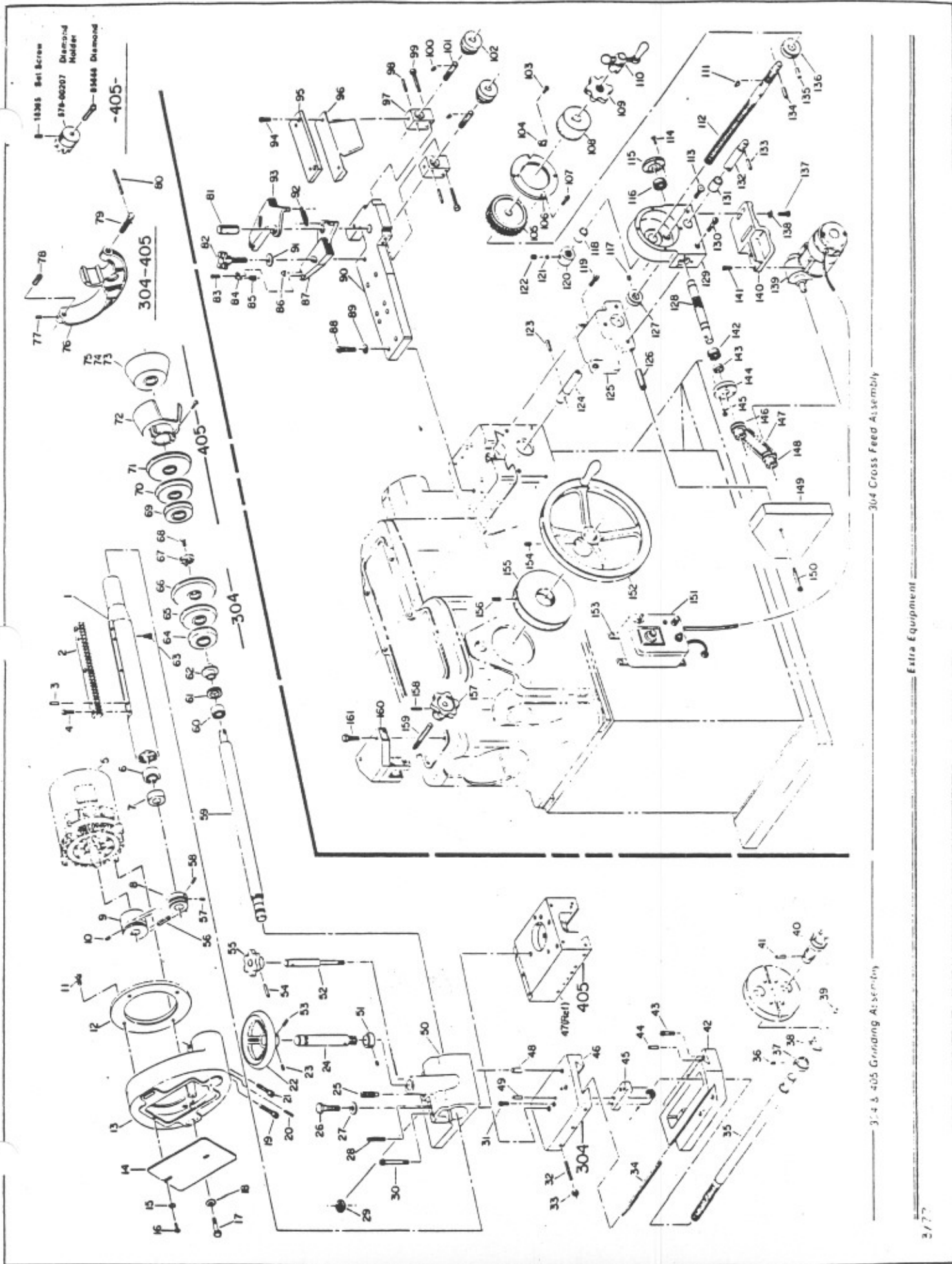
# PARTS LIST

## Extra Equipment

### 304 & 405 Grinding Assembly

No.	Qty.	Part No.	Part Name	No.	Qty.	Part No.	Part Name
				73	1	27263	Cup Grinding Wheel 5" Dia. - 405 Machine
				74	S.O.	27262	Cup Grinding Wheel 5" Dia. - 405 Machine (Used when softer wheel is required for excessive hardness in Flywheels)
				75	S.O.	27264	Cup Grinding Wheel 5" Dia. - 405 Machine (Used when harder wheel is required for the softer type Flywheels)
1	1	304-00081	Grinding Attachment Quill				
2	1	304-00088	Rack				
3	2	29791	Dowel				
4	3	10341	Screw				
<b>304 Machine</b>							
5	1	41196	Motor for Model No. 304-73791A (115V-60Hz - 1 Phase)	76	1	8D-00355	Wheel Dresser Frame
	1	41236	Motor for Model No. 304-73792A (110V-60Hz - 1 Phase)	77	1	05629	Set Screw
	1	41196	Motor for Model No. 304-73793A (230V-60Hz - 1 Phase)	78	1	05668	Diamond
	1	41197	Motor for Model No. 304-73794A (200V-60Hz - 3 Phase)	79	1	8D-00358	Clamp Screw
	1	41235	Motor for Model No. 304-73795A (220V-50Hz - 1 Phase)	80	1	8D-00358	Handle
	1	41198	Motor for Model No. 304-73800A (230/460V-60Hz - 3 Phase) (220/440V-50Hz - 3 Phase)				
	1	41199	Motor for Model No. 304-73801A (575V-60Hz - 3 Phase)				
<b>405 Machine</b>							
	1	41198	Motor for Model No. 304-73796A (230V-60Hz - 1 Phase)	81	1	25812	Pin
	1	41197	Motor for Model No. 304-73797A (200V-60Hz - 3 Phase)	82	2	40753	Knob
	1	41198	Motor for Model No. 304-73798A (230/460V-60Hz - 3 Phase)	83	2	30084	Screw
	1	41199	Motor for Model No. 304-73799A (575V-60Hz - 3 Phase)	84	2	29279	Clamp
	1	41236	Motor for Model No. 304-73710A (220V-50Hz - 3 Phase)	85	2	25810	Spring
	1	41196	Motor for Model No. 304-73802A (115V-60Hz - 1 Phase)	86	2	29687	Insert
	1	41236	Motor for Model No. 304-73803A (110V-50Hz - 1 Phase)	87	1	204-00262	L. H. Tool Holder
				88	2	05178	Screw
				89	2	05268	Washer
				90	1	304-00440	Mounting Plate
				91	2	40754	Washer
				92	1	40535	Spring
				93	1	204-00261	R. H. Tool Holder
				94	2	08792	Screw
				95	1	205-00066	Plate
				96	1	204-00320	Guard
				97	2	204-00312	Block
				98	2	19925	Pin
				99	4	10307	Screw
				100	2	08057	Key
				101	2	204-00270	Feed Screw
				102	2	204-00269	Dial
				103	1	20065	Screw
				104	1	204-00143	Pointer
				105	1	304-00250	Worm Gear
				106	1	304-00246	Cover
				107	4	19892	Screw
				108	1	304-00247	Spacer
				109	1	204-00159	Drive Nut
				110	1	304-00045	Screw Crank
				1	1	304-00249	Plug
				1	1	11558	Pin
				111	1	10049	Key
				112	1	304-00248	Power Feed Screw
				113	1	25905	Screw
				114	3	19892	Screw
				115	1	304-00220	Cap
				116	2	24250	Bearing (See Item No. 142)
				117	1	05739	Screw
				118	1	25801	Bushing
				119	2	08158	Screw
				120	1	304-00252	Take Up Collar
				121	1	111-00322 1/2	Plug
				122	1	05379	Screw
				123	2	20964	Rod Pin (See Item No. 133)
				124	1	304-00255	Extension Rod (Note: Cut-a-way view for illustrative purposes. See other segment, Item No. 132)
				125	1	304-00253	Gear Housing Mount
				126	1	304-00304	Spacer
				127	1	304-00254	Collar
				128	1	304-00215	Power Feed Worm
				129	1	304-00245	Worm Gear Housing
				130	2	08581	Screw
				131	1	18520	Bushing
				132	1	304-00255	Extension Rod (Note: Cut-a-way view for illustrative purposes. See other segment, Item No. 124)
				133	1	20964	Rod Pin (See Item No. 123)
				134	1	20964	Crank Pin
				135	1	09883	Pin
				136	1	304-00251	Stop Collar
				137	3	05508	Screw
				138	3	05489	Washer
				139	1	40566	Motor (and Reducer Gear)
				140	1	304-00370	Mount
				141	4	09316	Screw
				142	2	24250	Bearing (See Item No. 118)
				143	1	11680	Seal
				144	1	304-00219	Cap
				145	3	07284	Screw
				146	2	25761	Worm Shaft Pulley (See Item No. 148)
				147	1	25717	Drive Belt
				148	1	25761	Pulley (See Item No. 148)
				149	1	304-00303	Pulley & Belt Guard
				150	1	09742	Screw
				151	1	40567	Motor Speed Control
				152	1	304-00324	Handwheel
				153	4	05021	Screw
				154	1	14541	Set Screw
				155	1	304-00334	Graduated Collar (405 Machine)
				156	1	15220	Screw (405 Machine)
				157	1	305-00045	Knob (405 Machine)
				158	1	11558	Pin (405 Machine)
				159	1	27172	Stud (405 Machine)
				160	1	305-00044	Spindle Rack Clamp (405 Machine)
				161	2	05179	Screw (405 Machine)

### 304 Cross Feed Assembly 304-73701A

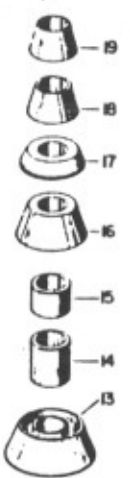


304 Cross Feed Assembly

Extra Equipment

304 405 Grinding Assembly

304-07071 Tool Bar Extension Unit for Small Diameter Brake Drums

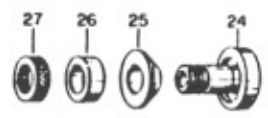


304-07070 2" Truck Equipment without Mandrel, Nut and Washer

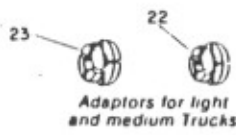


304-07315 Disc Rotor Adaptor Kit

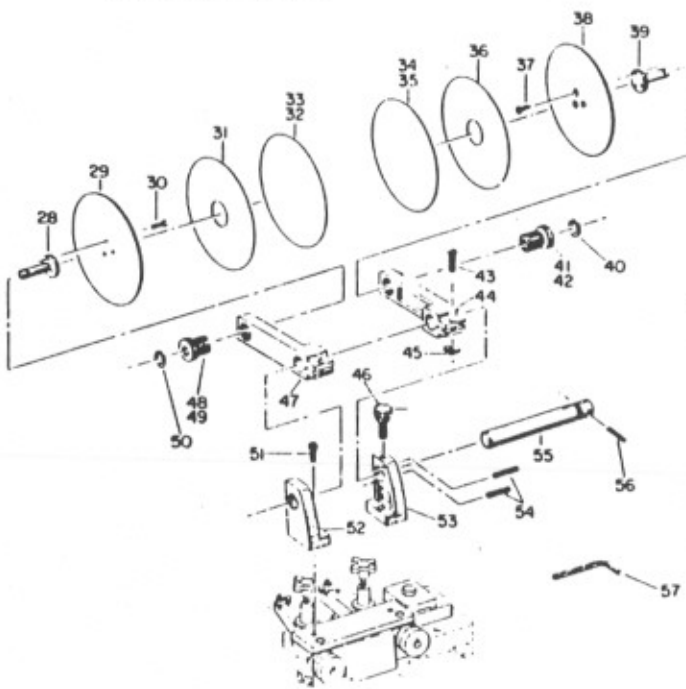
304-07070H 2" Truck Equipment with Mandrel, Nut and Washer



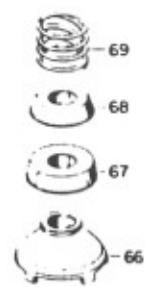
304-07177 Adaptor Kit for Popular Hubless Discs



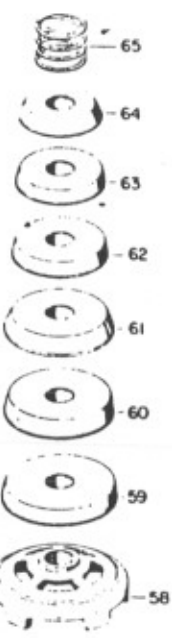
Adaptors for light and medium Trucks



204-72290 Non-Directional Disc Rotor Polisher



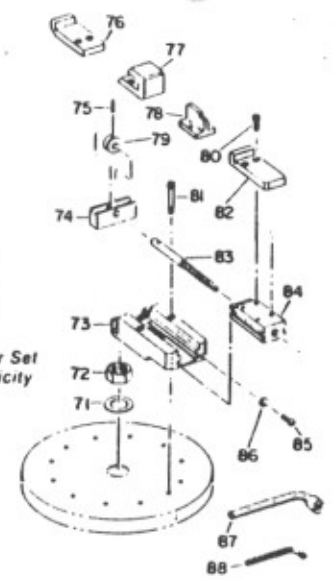
300-07083 Adaptor Kit Hub Bore Range: 3 1/4" to 5" Dia



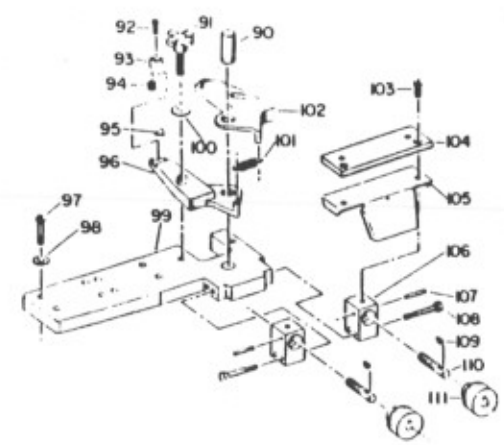
300-07084 Adaptor Kit Hub Bore Range 4 1/2" to 8 1/4" Dia



26003 Dial Indicator Set to Check Concentricity



305-70004 Clutch Plate Chuck Mounting

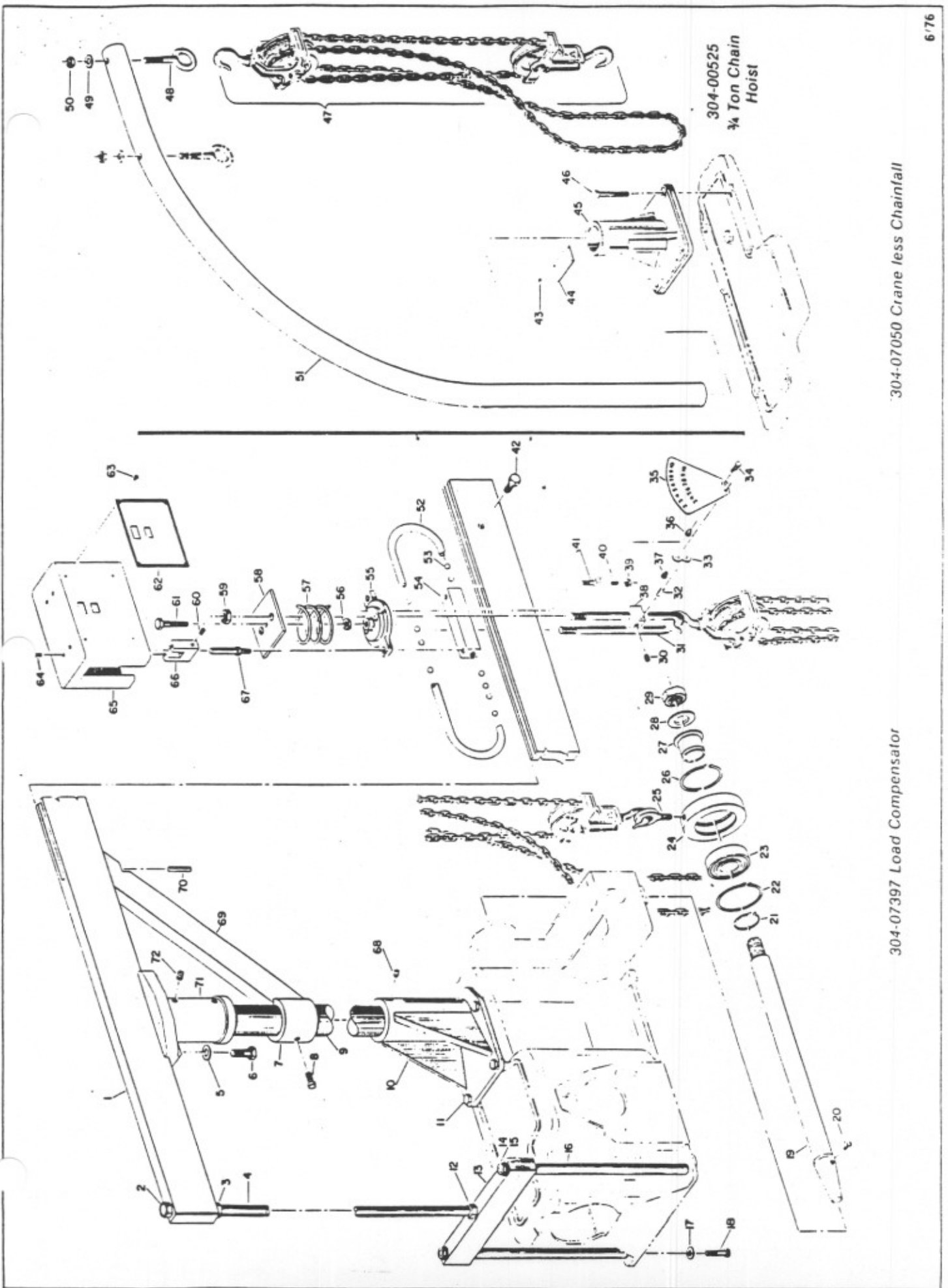


304-07440 Disc Brake Tool Holder

Extra Equipment

## PARTS LIST

<i>304-07315 Disc Rotor Adaptor Kit</i>				<i>300-07084 Adaptor Kit</i>			
No.	Qty.	Part No.	Plate Name	No.	Qty.	Part No.	Plate Name
1	1	415-00173	Arbor Adaptor	58	2	300-00084	Large Clamp Bell 8 $\frac{1}{2}$ " I.D.
2	1	415-00174	Arbor Adaptor	59	1	300-00083	Centering Cone 7 $\frac{7}{32}$ " Dia. x 8 $\frac{11}{64}$ " Dia. x 1 $\frac{1}{2}$ "
3	1	204-00210	Collar	60	1	300-00082	Centering Cone 7 $\frac{1}{32}$ " Dia. x 7 $\frac{41}{64}$ " Dia. x 1 $\frac{1}{2}$ "
4	1	204-00208	Collar	61	1	300-00081	Centering Cone 8 $\frac{1}{2}$ " Dia. x 7 $\frac{7}{16}$ " Dia. x 1 $\frac{1}{2}$ "
5	1	415-00178	Nut	62	1	300-00090	Centering Cone 5 $\frac{21}{32}$ " Dia. x 6 $\frac{9}{16}$ " Dia. x 1 $\frac{1}{2}$ "
6	1	415-00186	Spacer	63	1	300-00089	Centering Cone 5 $\frac{7}{16}$ " Dia. x 6 $\frac{1}{32}$ " Dia. x 1 $\frac{1}{2}$ "
7	1	415-00185	Cone	64	1	300-00088	Centering Cone 4 $\frac{1}{2}$ " Dia. x 5 $\frac{1}{2}$ " Dia. x 1 $\frac{1}{2}$ "
8	1	415-00177	Locator	65	1	300-00085	Centering Cone Spring
<i>304-07070H 2" Truck Equipment</i>				<i>300-07083 Adaptor Kit</i>			
9	1	24354	2" Arbor Screw	66	2	300-00083	Small Clamp Bell 5 $\frac{1}{2}$ " I.D.
10	1	304-00153	2" Arbor	67	1	300-00087	Centering Cone 4 $\frac{23}{64}$ " x 5" Dia. x 1 $\frac{1}{2}$ "
11	1	404-00174	2" Arbor Washer	68	1	300-00086	Centering Cone 3 $\frac{21}{64}$ " Dia. x 4 $\frac{27}{64}$ " Dia. x 1 $\frac{1}{2}$ "
12	1	08520	2" Arbor Nut	69	1	300-00085	Cone Centering Spring
<i>304-07070 2" Truck Equipment</i>				<i>26003 Dial Indicator Set</i>			
13	2	BD-00053	Cone 2" I.D. x 8" Dia. x 4 $\frac{1}{2}$ " Dia.	70	1	26003	Dial Indicator Set (to check concentricity)
14	1	BD-00078	Spacer 2" I.D. x 3" long	<i>305-70004 Clutch Plate Chuck Mounting</i>			
15	1	BD-00093	Spacer 2" I.D. x 2" long	71	1	05488	2" Arbor Washer
16	2	BD-00054	Cone 2" I.D. x 4 $\frac{1}{2}$ " Dia. x 3 $\frac{1}{2}$ " Dia.	72	1	15055	2" Arbor Nut
17	2	BD-00055	Cone 2" I.D. x 4 $\frac{1}{2}$ " Dia. x 3 $\frac{1}{2}$ " Dia.	73	4	304-00187	Clamp Jaw Housing
18	1	BD-00056	Cone 2" I.D. x 3 $\frac{1}{2}$ " Dia. x 2 $\frac{1}{2}$ " Dia.	74	4	304-00185	Retainer
19	1	BD-00057	Cone 2" I.D. x 3 $\frac{1}{2}$ " Dia. x 2 $\frac{1}{32}$ " Dia.	75	4	09924	Pin
<i>304-07071 Tool Bar Extension</i>				76	4	570-00183	Work Jaw (for very large flat plates)
20	1	304-00148	Extension Piece [with Qty. (2) Part No. 05256 Screws]	77	4	570-00182	Work Jaw (for Borg & Beck)
21	1	21972	Tool Bit	78	4	570-00181	Work Jaw (for Pin-type clutch plates)
<i>Adaptors for light &amp; medium Trucks</i>				79	4	304-00184	Bearing
22		415-00187	Adaptor for F350 Truck Rotor and IHC	80	8	07366	Screw
23		415-00188	Adaptor	81	8	08481	Screw
<i>304-07177 Adaptor Kit</i>				82	4	570-00180	Work Jaw (for flat plates)
24	1	415-00177	Locator	83	4	304-00183	Movable Clamp Jaw Screw
25	1	415-00185	Cone	84	4	570-00184	Movable Clamp Jaw
26	1	415-00186	Spacer	85	4	19089	Stop Screw
27	1	415-00178	Nut	86	4	05577	Washer
<i>204-72290 Non-Directional Disc Rotor Polisher</i>				87	1	25389	"L" Handle Wrench (for Clamp Screw)
28	2	415-00088	Spindle (See Item No. 38)	88	1	305-00004	Arbor & Chuck Spacer
29	2	415-00087	Disc Mount (See Item No. 38)	<i>304-07440 Disc Brake Tool Holder</i>			
30	6	05006	Screw (See Item No. 37)	90	1	25812	Pin
31	2	415-00128	Disc Mount Pad (See Item No. 36)	91	2	40753	Knob
32	2	29203	Sanding Disc, 80 Grit (Shipped with Unit) See Item No. 34	92	2	30084	Screw
33		29204	Sanding Disc, 80 Grit (Special Order Item) See Item No. 35	93	2	29279	Clamp
34		29203	Sanding Disc, 80 Grit (Shipped with Unit) See Item No. 32	94	2	25810	Spring
35		29204	Sanding Disc, 80 Grit (Special Order Item) See Item No. 33	95	2	29687	Insert
36		415-00128	Disc Mount Pad (See Item No. 31)	96	1	204-00262	L. H. Tool Holder
37		05006	Screw (See Item No. 30)	97	2	05178	Screw
38		415-00087	Disc Mount (See Item No. 29)	98	2	05268	Washer
39		415-00088	Spindle (See Item No. 28)	99	1	304-00440	Mounting Plate
40	2	29201	Retaining Ring (See Item No. 50)	100	2	40754	Washer
41	2	415-00089	Adjusting Nut (See Item No. 48)	101	1	40535	Spring
42	2	20717	Bushing (Shown assembled) See Item No. 49	102	1	204-00261	R. H. Tool Holder
43	2	08324	Screw	103	2	08792	Screw
44	1	415-00091	Support, R. H.	104	1	205-00066	Plate
45	2	29148	Nut	105	1	204-00320	Guard
46	1	29021	Knob	106	2	204-00312	Block
47	1	415-00082	Support, L. H.	107	2	19925	Pin
48		415-00089	Adjusting Nut (See Item No. 41)	108	4	10307	Screw
49		20717	Bushing (Shown assembled) See Item No. 42	109	2	08057	Key
50		29201	Retaining Ring (See Item No. 40)	110	2	204-00270	Feed Screw
51	2	08158	Screw	111	2	204-00269	Dial
52	1	415-00094	Support Rod Base, L. H.				
53	1	415-00093	Support Rod Base, R. H.				
54	3	19368	Stop Pin (See Item No. 56)				
55	1	415-00090	Support Rod				
56		19368	Stop Pin (See Item No. 54)				
57	1	05771	Wrench, $\frac{1}{16}$ "				



304-07050 Crane less Chainfall

304-07397 Load Compensator

304-00525  
1/4 Ton Chain  
Hoist

## PARTS LIST

## Deflection Compensator — Crane &amp; Hoist

## 304-07397 Load Compensator

No.	Qty.	Part No.	Part Name
1	1	304-00388	Boom (grooved on top)
2	3	05380	Rear Mast Adjusting Nut (See Item Nos. 3 and 12)
3		05380	Rear Mast Adjusting Nut (See Item No. 2)
4	1	304-00396	Rear Mast
5	2	05354	Washer
6	2	12180	Screw
7	1	404-00135	Boom Support Bracket Bushing
8	1	15106	Clamp Screw
9	1	404-00092	Front Mast
10	1	304-00383	Lower Bracket (with Qty. (1) Part No. 304-00401 Tube)
11	4	05394	Screw
12		05380	Rear Mast Adjusting Nut (See Item No. 2)
13	1	304-00394	Anchor Bar
14	2	5354	Washer (See Item No. 17)
15	2	06857	Nut
16	2	304-00385	Tension Bar
17		5354	Washer (See Item No. 14) Optional Item
18	2	09021	Screw
19	1	304-00392	2" Arbor
20	1	24354	Cross Screw
21	1	19659	Retaining Ring
22	2	19658	Retaining Ring (See Item No. 26)
23	1	19661	Bearing
24	1	404-00120	Arbor Lift Ring Housing
25	1	08009	Eye Bolt
26		19658	Retaining Ring (See Item No. 22)
27	1	404-00097	Bushing
28	1	404-00174	Washer
29	1	08520	Nut
30	1	08449	Set Screw
31	1	404-00117	Shackle
32	1	10219	Rocker Pin
33	1	232-00372	Link
34	1	404-00176	Pivot Shaft
35	1	404-00137	Dial (Indicates load)
36	1	404-00151	Pivot Bushing
37	1	404-00153	Link Pivot Bushing
38	1	404-00115	Adjusting Lug
39	1	05207	Check Nut
40	1	13536	Set Screw
41	1	404-00175	Pivot Post
42	1	10439	Stop Screw

## 304-07050 Crane

No.	Qty.	Part No.	Part Name
43	4	05353	Pin
44	1	24429	Plate
45	1	304-00049	Bracket
46	4	05394	Screw

## 304-00525 ¼ Ton Chain Hoist

47	1	304-00525	Hoist
----	---	-----------	-------

## 304-07050 Crane (continued)

48	1	BD-00486	Eye Bolt
49	1	05364	Washer
50	1	05204	Nut
51	1	304-00050	Mast

## 304-07397 Load Compensator (continued)

52	1	404-00108	Return Tube
53		19824	Ball (¾" Dia.) * Qty. 44 or 45
54	1	404-00107	Ball Track
55	1	404-00109	Seal
56	1	05457	Check Nut
57	1	404-00111	Load Spring
58	1	404-00110	Pressure Plate
59	2	06857	Nut
60	2	09372	Set Screw
61	1	05176	Preload Screw
62	1	404-00140	Instruction Plate
63	4	05353	Pin
64	4	05349	Screw
65	1	404-00118	Hood
66	2	404-00113	Return Tube Guide Saddle
67	2	404-00112	Return Tube Guide Post
68	4	15235	Set Screw
69	1	404-00134	Support Bracket Bar
70	1	33N-00748	Dowel
71	1	404-00105	Upper Bracket
72	4	15235	Set Screw