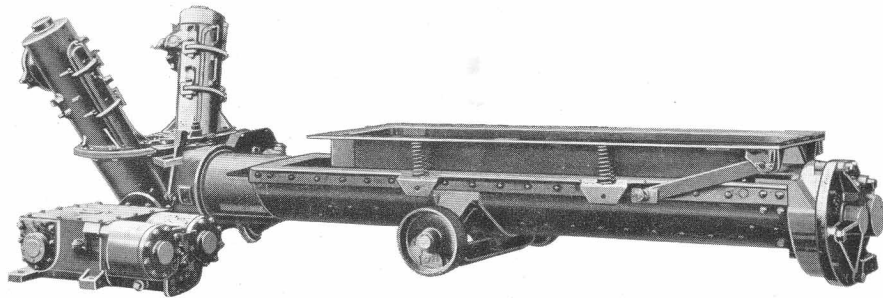


THE  
STANDARD STOKER  
COMPANY, INC.



DUPLEX STOKER

TYPE D-4-A

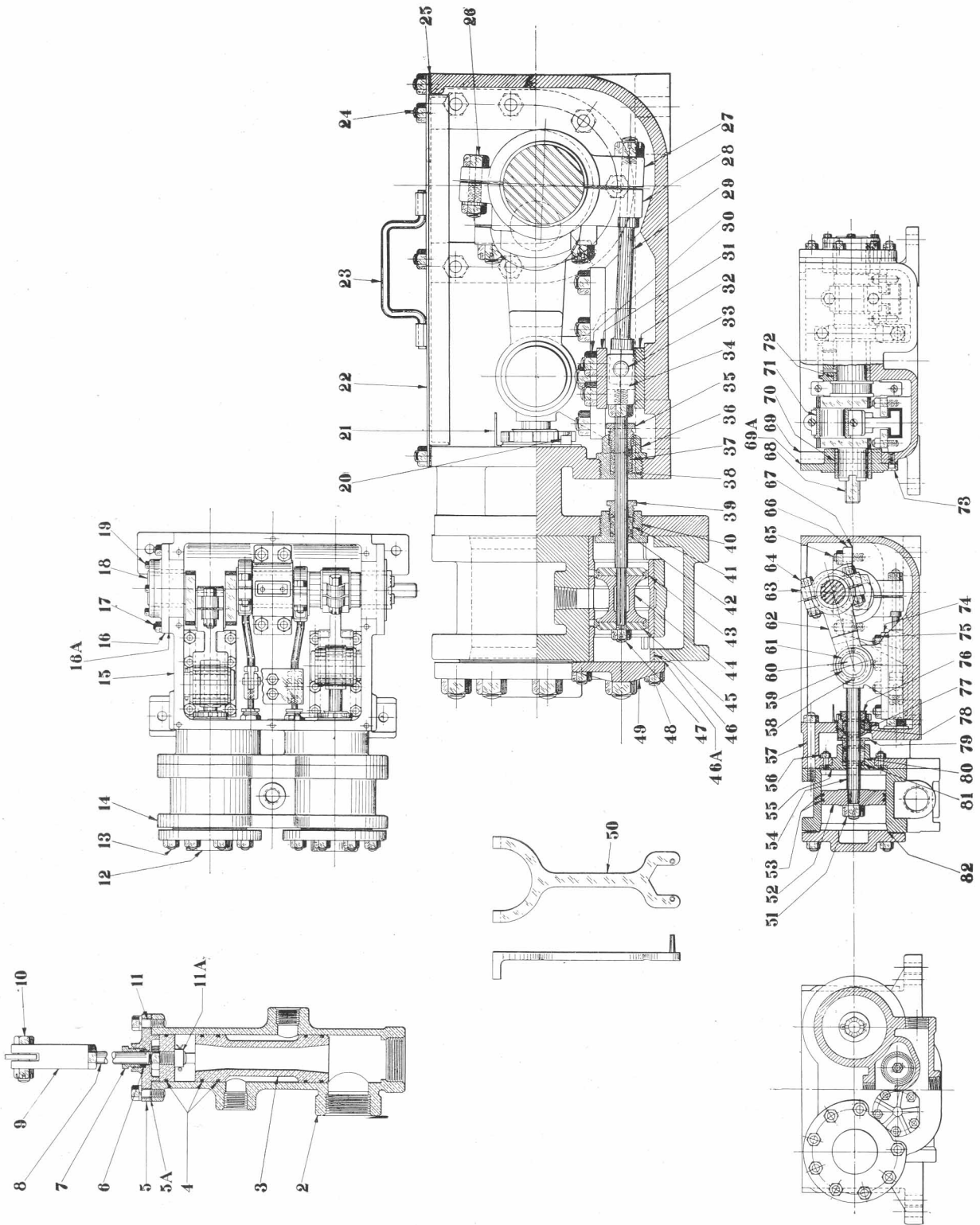
NEW ZEALAND GOVERNMENT RAILWAYS

4-6-2 2-6-4 GARRATT LOCOMOTIVES

Parts Catalog

September, 1930

# D-4-A STOKER ENGINE

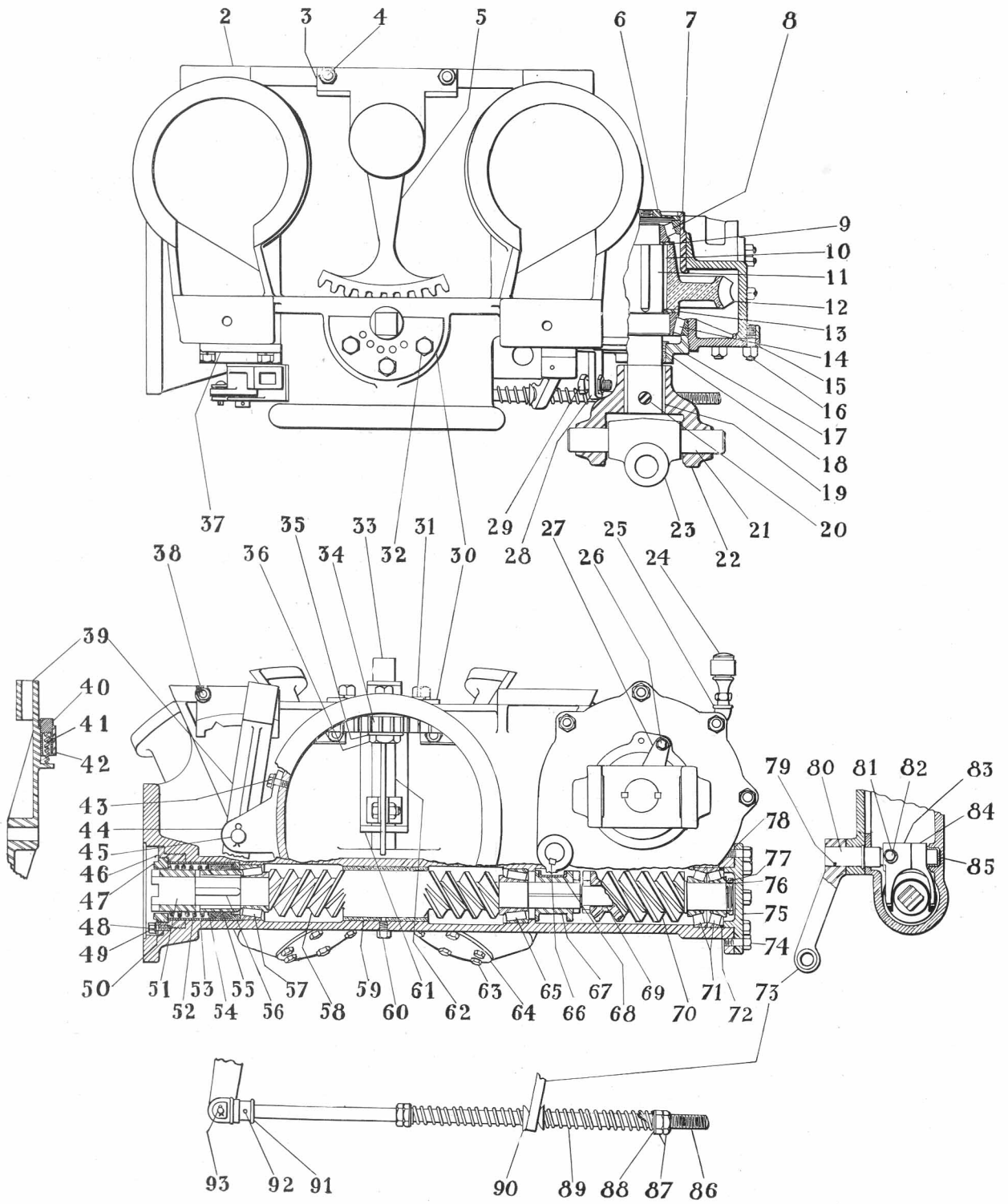


## D-4-A STOKER ENGINE

Part No.	Ref. No.	Net Wt.	Name of Part	Part No.	Ref. No.	Net Wt.	Name of Part
968	2	18 $\frac{3}{4}$	Reverse Valve Body	437	45	$\frac{7}{8}$	Valve End
970	3	7	Reverse Valve	411	46	2 $\frac{7}{8}$	Right Steam Chest Bushing
924	3		Reverse Valve, Complete	412	46	2 $\frac{7}{8}$	Left Steam Chest Bushing
971	4	$\frac{1}{2}$ oz.	Reverse Valve Packing Ring	456	46-A		Steam Chest Gasket
969	5	2 $\frac{1}{2}$	Reverse Valve Body Cover	440	47	2	Valve Stem Nut and Cotter
969-A	5-A		Reverse Valve Body Cover Gasket	10178	48	$\frac{3}{16}$	Stud with Hex. Nut
972-B	6		Valve Stem Packing	451	49	5	Steam Chest Head
974	7	$\frac{1}{4}$	Reverse Valve Cover Packing Gland	454	50	1 $\frac{1}{2}$	Wrench
972	8	1	Reverse Valve Stem	460	51		Piston Rod Nut
973	9	1 $\frac{1}{2}$	Reverse Valve Stem Clevis	403	52	22	Piston
10182	10		Bolt, Nut and Cotter	439	53	2	Piston Ring
10171	11	$\frac{1}{4}$	Tap Bolt	404	54	24	Piston Rod and Crosshead
972-A	11-A		Reverse Valve Stem Nut	415	55	6 $\frac{3}{4}$	Piston Rod Gland "D"
402	12	43	Cylinder Head	10179	56	$\frac{3}{16}$	Stud and Hex. Nut
10172	13	$\frac{5}{8}$	Stud and Hex. Nut	10180	57	1	Stud and Hex. Nut
401	14	137 $\frac{1}{4}$	Cylinder Block	421	58	$\frac{1}{8}$	Wrist Pin Collar Pin
400	15	408	Engine Bed—Style No. 2	420	59	1	Wrist Pin Collar
413	16	23	Outside Main Bearing — Outboard Style No. 2	419	60	9 $\frac{1}{2}$	Wrist Pin
457	16-A		Outside Main Bearing Gasket	430	61	1 $\frac{1}{8}$	Wrist Pin Bushing—Outside
10173	17	$\frac{5}{16}$	Stud with Hex. Nut	429	61	3	Wrist Pin Bushing—Inside
447	18	3 $\frac{1}{4}$	Outside Main Bearing Cap	405	62	12 $\frac{1}{2}$	Connecting Rod
10174	19	$\frac{1}{16}$	Cap Screw	406	63	4 $\frac{1}{2}$	Connecting Rod Cap
444	20	$\frac{3}{16}$	Piston Rod Gland Spring	450	64	1 $\frac{1}{8}$	Connecting Rod Bolts
452	21		Oil Splash Guard	10172	65	$\frac{5}{8}$	Stud with Hex. Nut
408	22	17	Engine Bed Cover	435	66	12	Main Bearing Cap
409	23	$\frac{1}{2}$	Engine Bed Cover Handle	443	67	$\frac{1}{2}$ oz.	Main Bearing Liner
10175	24		Stud and Nut	407	68	66 $\frac{1}{2}$	Crankshaft—Style No. 2
410	25	$\frac{1}{8}$	Engine Bed Cover Felt	413-A	69	23	Outside Main Bearing—Coupling End Style No. 2
10176	26	$\frac{3}{4}$	Hex. Head Cap Screw, Hex Nut & Lock Washer	458	69-A		Outside Main Bearing Gasket—Coupling End
433	27	8	Eccentric Strap—Plain Half	414-A	70	3 $\frac{1}{2}$	Outside Main Bearing Bushing— Coupling End, Style No. 2
434	28	10	Eccentric Strap—Pocket Half	414	70	3 $\frac{1}{2}$	Outside Main Bearing Bushing—Out- board End, Style No. 2
418	29	3 $\frac{1}{2}$	Eccentric Rod with Nut and Cotter	416	71	2 $\frac{3}{4}$	Connecting Rod Brass—Pin Half
10177	30		Hex-Head Bolt and Nut	417	71	2 $\frac{3}{4}$	Connecting Rod Brass—Plain Half
445	31	3	Valve Stem Guide—Top	453	72	5	Inside Main Bearing Brass (2 Pcs.)
446	32	2	Valve Stem Guide—Bottom	10181	73		Cap Screw
459	33		Valve Stem Coupling Pin and Cotter	441	74	12	Guide Bar—Crosshead
442	34	$\frac{9}{16}$	Valve Stem Coupling	10173	75		Stud and Hex. Nut
426	35	3	Valve Stem Gland "F"	424	76	1	Piston Rod Gland "C"
428	36	1 $\frac{1}{2}$	Valve Stem Gland "H"	422	77	7 $\frac{1}{2}$	Piston Rod Gland "A"
449-A	37	$\frac{5}{16}$	$\frac{5}{8}$ " Valve Stem Packing—Oil End	448-A	78	1 $\frac{1}{8}$	Piston Rod Packing—Oil End
432	38	$\frac{1}{2}$ oz.	Valve Stem Junk Ring	423	79	2 $\frac{3}{8}$	Piston Rod Gland "B"
425	39	$\frac{3}{4}$	Valve Stem Gland "E"	448	80	1 $\frac{1}{8}$	Piston Rod Packing—Steam End
427	40	2 $\frac{1}{4}$	Valve Stem Gland "G"	431	81	$\frac{1}{4}$	Piston Rod Junk Ring
449	41	$\frac{5}{16}$	$\frac{5}{8}$ " Valve Stem Packing—Steam End	455	82		Cylinder Head Gasket
432	42	$\frac{1}{2}$ oz.	Valve Stem Junk Ring				
438	43	$\frac{1}{2}$	Valve Packing Ring				
436	44	2	Valve Body				

ORDERS MUST GIVE NAME AND PART NUMBER

# D-4-A TRANSFER HOPPER AND CONVEYOR DRIVE UNIT

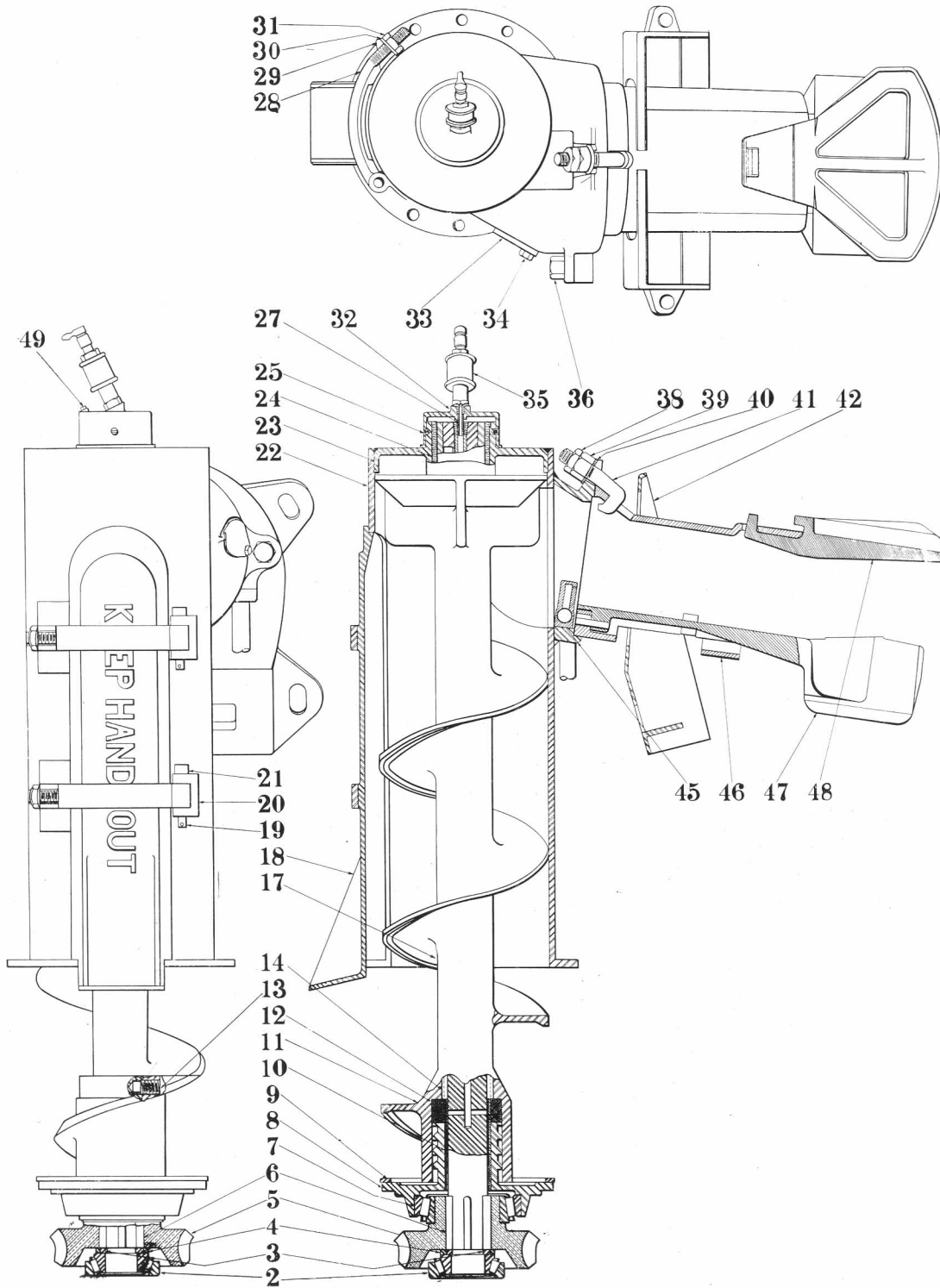


## D-4-A TRANSFER HOPPER AND CONVEYOR DRIVE UNIT

Part No.	Ref. No.	Net Wt.	Name of Part	Part No.	Ref. No.	Net Wt.	Name of Part
12151-1	2	470	Transfer Hopper, Bushed (Includes one of 46, 59, 60 & 85)	12186	46	3	Adjusting Bushing
12152	3	1	Dividing Rib Collar Support	12187	47	1½	Adjusting Collar
10707	4		Cap Screw	10720	48		Lock Washer
12153-1	5		Dividing Rib, Complete	10721	49		Cap Screw
12155	6	2	Sealing Plate	12188	50		Adjuster Stop
12156-3	7	5 <sup>3</sup> / <sub>16</sub>	Bearing Housing, Complete	12189-3	51		Left Coupling
12157	8	3½	Roller Bearing	12193	52	1	Packing Spring
12159	9	½	Washer	12194	53		Adjusting Sleeve
10708	10	<sup>3</sup> / <sub>16</sub>	Key	12195	54	½	Packing Washer
12160-3	11		Conveyor Worm Wheel Shaft	12196	55	<sup>1</sup> / <sub>16</sub>	Felt Packing
12161-2	11		Conveyor Worm Wheel Shaft, Complete (Includes one of 8, 9, 11, 12, 13 & 14 and four of 10)	10722	56	¼	Key
				12197	57	2¾	Roller Bearing
				12198	58		Elevator Drive Shaft, Complete (Includes one of 51, 57, 58, 65 & four of 56)
12162-3	12	35	Conveyor Worm Wheel				
12163	13	½	Washer	12199	59		Center Bearing
12164	14	4 <sup>5</sup> / <sub>16</sub>	Roller Bearing	10723	60		Set Screw
12165-3	15		Conveyor Drive Cover, Complete (Includes one of 15, 17, 18, 26 & 27)	10123	63	<sup>3</sup> / <sub>32</sub>	Stud, Nut & Lock Washer
10062	16		Hex. Hd. Tap Bolt	12201	64	5½	Elevator Bottom Plate
12166	17		Bearing Adjuster, Complete	12197	65	2¾	Roller Bearing
12167	18		Bearing Adjuster Bushing	10725	66	<sup>1</sup> / <sub>16</sub>	Key
10710	19	¼	Key	12205-1	67	3	Shifter Clutch
10096	20	¾	Sq. Hd. Bolt & Hex. Nut	12206	68	<sup>5</sup> / <sub>8</sub>	Shifting Clutch Collar
12240	21	5	Universal Joint Pin	12207	69	<sup>3</sup> / <sub>8</sub>	Conveyor Worm Bushing
12168-2	22	15	Universal Joint Jaw	12208-1	70	9¾	Conveyor Worm Bushed
12237	23	14	Universal Joint Block	12001	71	4½	Roller Bearing
12233	24	¾	Oil Cup	12209	72	1	Thrust Collar—Housing End
10711	25		45° Service Elbow	12210-3	73		Shifter Arm
10062	26		Hex. Head Tap Bolt & Lock Nut	10054	74		Stud, Nut & Lock Washer
12169-2	27		Adjuster Lock	12211	75	6	Housing End Cover
12170-3	28		Shifter Stop	10726	76		Dowel Pin
10712	29		Hex. Head Tap Bolt & Nut	12212	77	¼	Thrust Collar
12171-1	30	3 <sup>7</sup> / <sub>16</sub>	Pinion Shaft Bearing	12213	78		Housing End Cover Shims
10714	31		Lock Washer	10727	79	<sup>1</sup> / <sub>8</sub>	Pin
10715	32		Hex. Head Bolt	12214-1	80	2 <sup>5</sup> / <sub>16</sub>	Shifting Lever Shaft
12172-1	33	2 <sup>11</sup> / <sub>16</sub>	Pinion Shaft	10720	81		Lock Washer
12173	34	1 <sup>13</sup> / <sub>16</sub>	Dividing Rib Pinion	10724	82		Hex. Head Cap Screw
12174	35	<sup>1</sup> / <sub>8</sub>	Pinion Shaft Washer	12215	84	3	Shifting Yoke, Complete
12175	36	<sup>1</sup> / <sub>8</sub>	Pinion Shaft Nut	12216-1	85		Shifting Shaft Bushing
12180-2	37	2	Shifter Quadrant	12217-3	86		Shifting Rod
10717	38	<sup>1</sup> / <sub>8</sub>	Stud with Hex. Nut	10002	87	<sup>3</sup> / <sub>20</sub>	Hex. Nut
12181-3	39		Shifter Lever, Complete	12218	88		Spring Retainer
12241	40		Catch Pin	12219	89	<sup>7</sup> / <sub>8</sub>	Shifting Rod Spring
12182	41	<sup>1</sup> / <sub>32</sub>	Catch Spring	12220	90	¼	Shifting Rod Collar
12183	42		Cover Plate	12235	91	1	Valve Stem Jaw
10719	43		Hex. Head Cap Screw	10007	92		Cotter
12184	44		Yoke	10729	93		Rivet with Cotter
12185	45	1½	Shifting Lever Pin	12239		8	Dividing Rib Wrench

ORDERS MUST GIVE NAME AND PART NUMBER

# D-4-A ELEVATOR UNIT

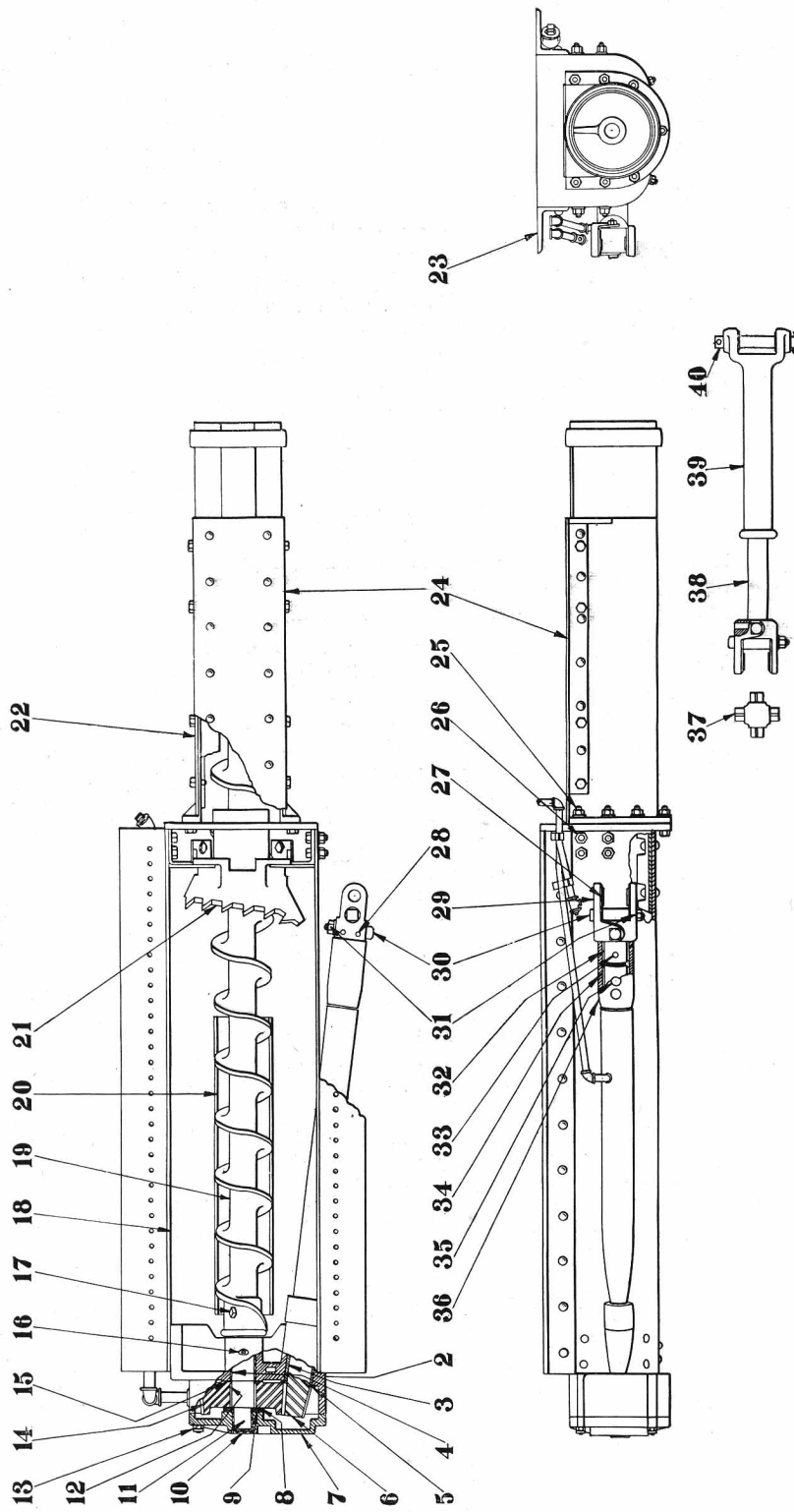


## D-4-A ELEVATOR UNIT

Part No.	Ref. No.	Net Wt.	Name of Part
12001	2	2 $\frac{1}{4}$	Lower Roller Bearing, Complete
12002	3	$\frac{3}{16}$	Split Ring
12003	4	$\frac{3}{16}$	Split Ring Retainer
12004	5	16 $\frac{1}{2}$	Right Elevator Worm Wheel
12005	5	16 $\frac{1}{2}$	Left Elevator Worm Wheel
10147	6	$\frac{1}{8}$	Key
12006	7	4	Upper Roller Bearing, Complete
12007	8	13 $\frac{1}{2}$	Sealing Ring
12008	8	15 $\frac{1}{2}$	Sealing Ring, Complete
12009	9	1 $\frac{3}{8}$	Sealing Ring Retainer, Complete
12010	10	2 $\frac{1}{8}$	Sealing Ring Bushing
12011	11	14 $\frac{7}{8}$	Right Sealing Ring Cap
12012	11	14 $\frac{7}{8}$	Left Sealing Ring Cap
12013	12	$\frac{1}{16}$	Felt Packing
10049	13	$\frac{3}{16}$	Headless Set Screw
10050	14	$\frac{1}{16}$	Key
12014-2	17		Right Elevator Screw, Complete— (Includes one of 11, two of 13, 14 and four of 6)
12015-2	17		Left Elevator Screw, Complete— (Includes one of 11, two of 13, 14 and four of 6)
12016-2	18		Elevator Casing Door
10082	19		Cotter Pin
12023	20	$\frac{7}{8}$	Casing Door Clamp Hinge
12024	21	$\frac{1}{2}$	Hinge Pin
12025-2	22		Right Elevator Casing, Complete with Elbow
12026-2	22		Left Elevator Casing, Complete with Elbow
12027	23	11 $\frac{3}{8}$	Elevator Casing Bearing
12028	24	2 $\frac{3}{4}$	Elevator Casing Bearing Bushing
10701	25		Headless Set Screw
10702	27		Copper Tubing
12029	28	1	Casing Door Clamp Bolt
12030	29	1 $\frac{7}{8}$	Right Clamp Lug
12031	29	1 $\frac{7}{8}$	Left Clamp Lug
10703	30	$\frac{3}{32}$	Washer
10704	31	$\frac{3}{32}$	Special Nut
12032	32	1 $\frac{11}{16}$	Elevator Bearing Cover
12044	33	$\frac{9}{16}$	Right Peep Hole Cover
12045	33	$\frac{9}{16}$	Left Peep Hole Cover
10041	34	$\frac{1}{16}$	Hex. Hd. Shouldered Tap Bolt
12033	35	$\frac{1}{2}$	Oil Cup
10705	36		Hex. Hd. Tap Bolt
10003	38	$\frac{3}{40}$	Hex. Lock Nut
10002	39	$\frac{3}{16}$	Hex. Nut
10042	40	$\frac{1}{8}$	Washer
12046	41	1	Distributor Tube Hook Bolt
12035-2	42		Draft Ring
12036-2	45	3	Left Distributor Jet
12037-2	45	3	Right Distributor Jet
12038-1	46	65	Distributor Tube, Complete
12039-1	46	27	Distributor Tube
12040-1	47	22	Distributor Bottom, Complete
12041-2	48	16	Distributor Top
12047	49	$\frac{1}{32}$	Oil Cup
12042-2			Right Elevator, Complete
12043-2			Left Elevator, Complete
12048			$\frac{1}{2}$ " Choke

ORDERS MUST GIVE NAME AND PART NUMBER

# D-4-A CONVEYOR TROUGH



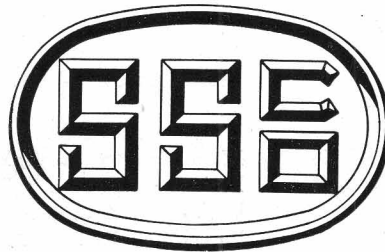


## D-4-A CONVEYOR TROUGH

Part No.	Ref. No.	Net Wt.	Name of Part
12351-3	2		Conveyor End Bearnig, Bushed
12352	3	9	Rigid Drive Shaft Bushing
12353	4	4½	Conveyor Screw Shaft Bushing
12354-2	5		Thrust Washer
12355-3	6	120	Conveyor Rigid Drive Shaft and Pinion
12356-1	7	58	Conveyor End Bearing Cover, Bushed
12357	8	5/8	Brass Thrust Plate
12358	9	1/2	Steel Thrust Plate
12359	10	2	Conveyor End Bearing Cover Bushing
12360-1	11		Conveyor Screw Shaft
10101	12		Key
10740	13		Stud
12361-3	14		Rear Drive Gear
12362	15	1/2	Split Ring
10056	16		2" Pipe Plug
10741	17		Square Head Bolt, Hex. Nut and Lock Nut
12363-4	18		Trough Sheet
12407-2	19		Conveyor Screw
12365-4	20	16	Trough Bottom Angles
12367-2	21		Crusher
12422-1	22		U Trough, Complete
12379-2	23	74	Main Trough Side Angles (Right)
12380-2	23	74	Main Trough Side Angles (Left)
12423-1	24		U Trough Cover, Complete
10747	25		Hex. Head Bolt, Hex. Nut and Lock Nut
10748	26		Hex. Head Bolt, Hex. Nut and Lock Nut
12424	27		Universal Joint Jaw Bushing
12425	28		Universal Joint Pin
12426	29	48	Rear Universal Joint Jaw, Complete
10751	30		Square Head Bolt
10105	31		Hex. Nut
10722	32		Key
10752	33		Dowel Pin
10753	34		Key
10754	35		Ctsk. Head Rivet
12427-1	36		Universal Joint Jaw Collar
12428	37	9	Universal Joint Block
12429-1	38	100	Flexible Drive Shaft
12394	39	65	Universal Joint Jaw
12236	40	6	Universal Joint Pin
12395-4			Tender Unit, Complete

ORDERS MUST GIVE NAME AND PART NUMBER

THE  
STANDARD STOKER  
COMPANY, INC.



REG. U. S. PAT. OFFICE

GENERAL OFFICES  
350 MADISON AVENUE  
NEW YORK, U. S. A.

GENERAL SALES OFFICES  
McCORMICK BUILDING  
CHICAGO, U. S. A.

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