

Owner's Manual



Model 2500-4

Engine	_____
Serial #	_____
Specification #	_____
Purchase Date	_____
Dealer	_____

Carlton

J.P. Carlton Company
Div. D.A.F. Inc.
121 John Dodd Road
Spartanburg S.C. 29303
Ph. (864) 578-9335
Fax (864) 578-0210



STUMP GRINDER LIMITED WARRANTY

J.P. Carlton Co. Inc., hereafter referred to as the "Manufacturer" warrants each new Carlton Grinder to be free of defects in workmanship and material for a period of 6 months or 2000 hours, whichever comes first.

This warranty takes effect upon delivery to the original retail purchaser. The manufacturer at its option will replace or repair at a point designated by the manufacturer, any parts which appear to have been defective in material of workmanship. The manufacturer is not responsible for consequential damages.

This warranty will not apply if the grinder is not operated in a manner recommended by the manufacturer. The following examples would void warranty:

1. The grinder has been abused.
2. The machine is involved in or damaged by an accident.
3. Repairs or attempted repairs were made without prior written authorization.
4. Installation of Non-Factory parts.

The owner is responsible for all regular maintenance as explained in the operators manual. Neglect in regular maintenance or failure to replace normal wear items such as teeth, pockets, lubrication oils, filters, belts, bearings, etc. may void warranty.

This warranty is expressly in lieu of any other warranties, expressed or implied, including any implied warranty or merchantability of fitness for a particular purpose and of any non-contractual liabilities including product liabilities based upon negligence or strict liability. J.P. Carlton Co. Inc. will not be liable for consequential damages resulting from breach of warranty.

IT IS NECESSARY TO RETURN THE WARRANTY VALIDATION FORM AND NOTIFY J.P. CARLTON CO. INC. IN WRITING WITHIN TEN (10) DAYS FROM DELIVERY DATE TO VALIDATE THIS WARRANTY.

NOTE: This warranty applies only to new and unused equipment or parts thereof manufactured by J.P. Carlton Co. Inc. ANY MACHINES USED FOR LEASE OR RENTAL - WARRANTY IS LIMITED TO 90 DAYS FROM FIRST DAY OF INITIAL SERVICE.

NOTICE: All power units and associated components are **NOT** warranted by J.P. Carlton Co. Inc. or their dealers. It is the customers responsibility to return machine to the local engine distributor.

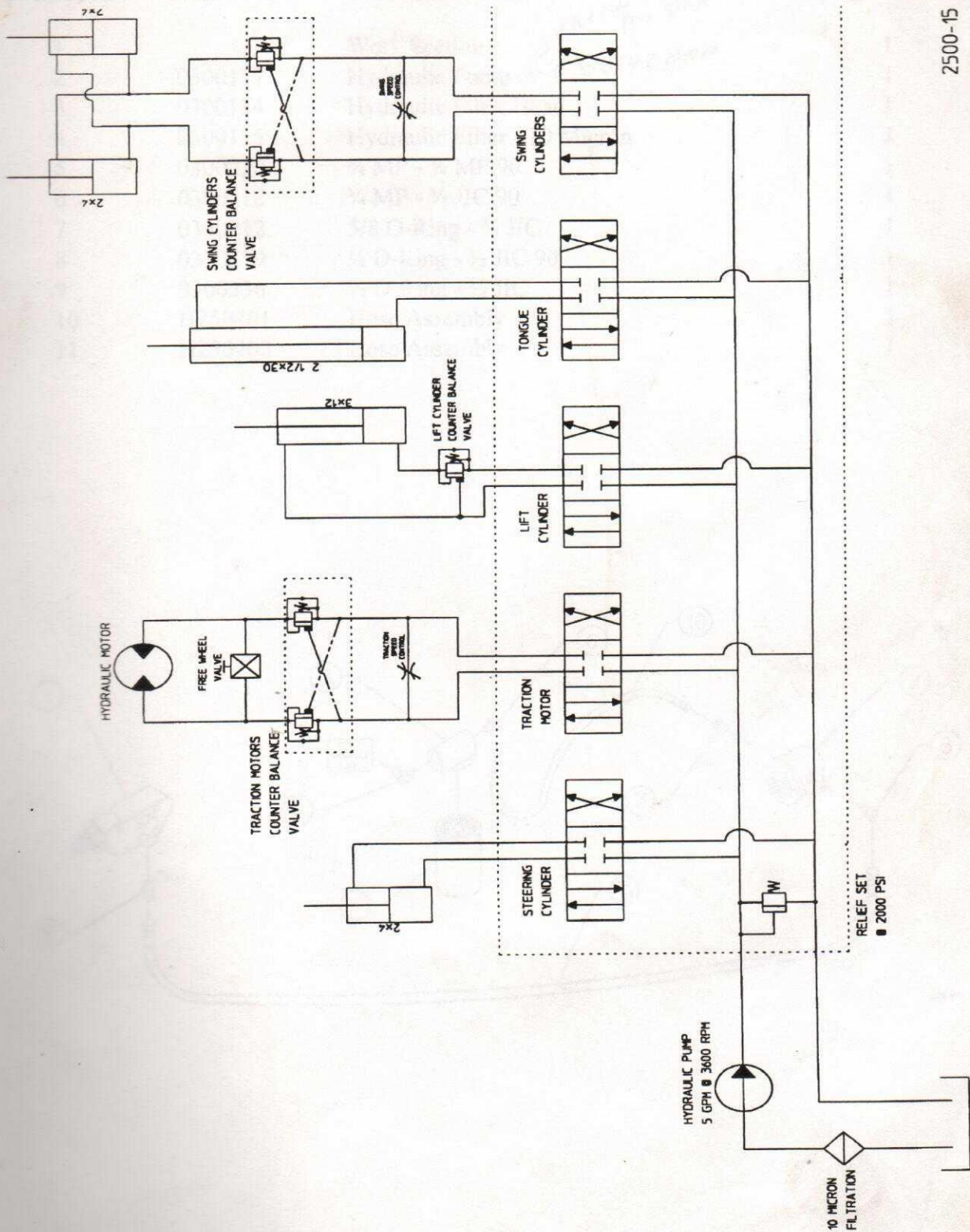
Information phone numbers to find your local engine & parts service centers:

Kohler Engines 1-800-544-2444
Onan Engines 1-800-343-7357
Wisconsin Engines 1-800-932-2858
Deutz Engines 1-800-241-9886
John Deere Engines 1-800-533-4463

In order to process any warranty claims. It is the owners responsibility to report claims promptly to us or our authorized dealer from whom the equipment was purchased. It is necessary to include the following information on any and all request for warranty:

- | | |
|-------------------------------|----------------------------------|
| 1. Dealer from whom purchased | 5. Engine make and serial number |
| 2. Date of delivery | 6. Length of time in use |
| 3. Serial number of unit | 7. Date of failure |
| 4. Model number of unit | 8. Nature of failure |

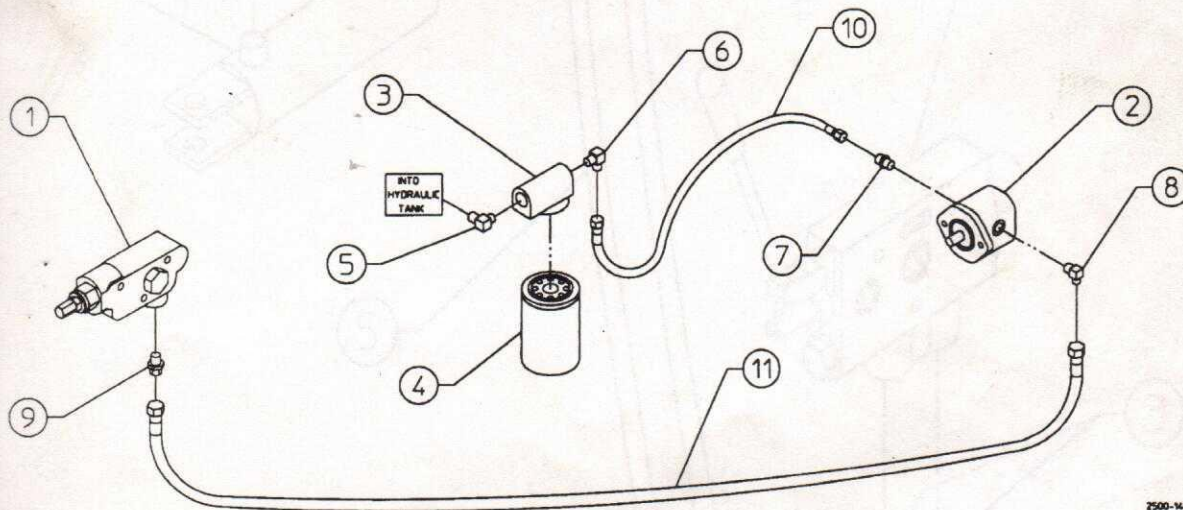
HYDRAULIC SCHEMATIC



HYDRAULIC INLET ASSEMBLY

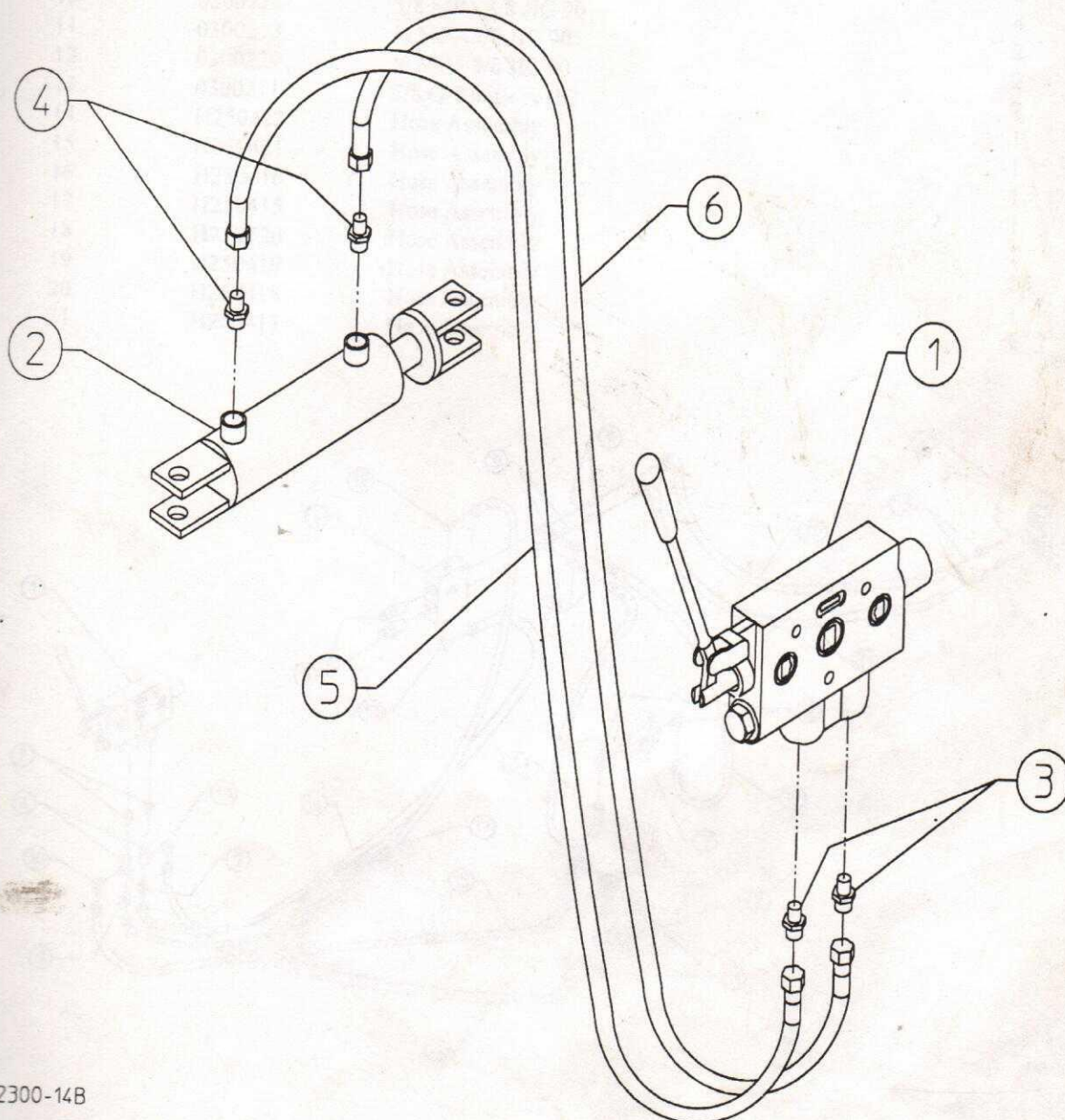
ITEM NO	PART NO	DESCRIPTION	QTY
1		Work Section	1
2	0300117	Hydraulic Pump	1
3	0300134	Hydraulic Filter Head	1
4	0300135	Hydraulic Filter - 10 Micron	1
5	0300220	3/4 MP - 3/4 MP 90	1
6	0300218	3/4 MP - 3/4 JIC 90	1
7	0300212	5/8 O-Ring - 3/4 JIC	1
8	0300219	1/2 O-Ring - 1/2 JIC 90	1
9	0300236	1/2 O-Ring - 1/2 JIC	1
10	H250401	Hose Assembly	1
11	H250402	Hose Assembly	1

*check w/Carlton
BY SNA
- 0300142AAA*



STEERING HYDRAULIC ASSEMBLY

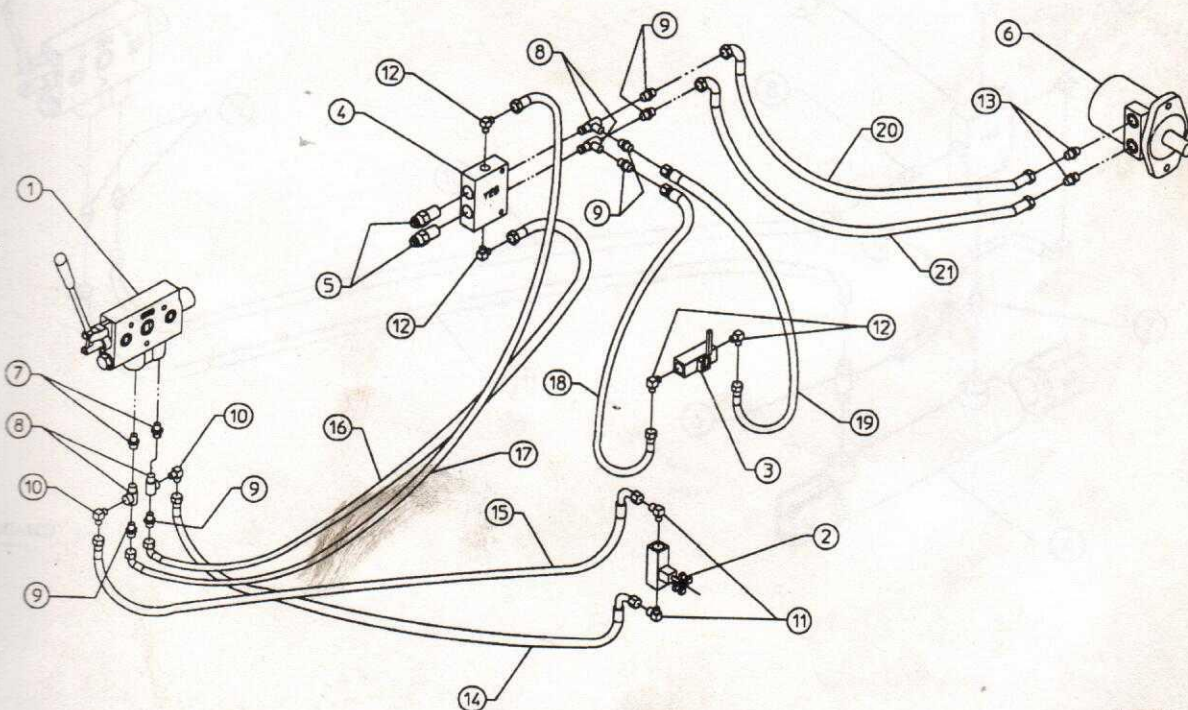
ITEM NO	PART NO	DESCRIPTION	QTY
1		Work Section	1
2	0300105A	Hydraulic Cylinder	1
3	0300257	½ O-Ring - 3/8 JIC	2
4	0300279	½ O-Ring - 3/8 JIC 45	2
5	H250425	Hose Assembly	1
6	H250426	Hose Assembly	2



2300-14B

TRACTION HYDRAULIC ASSEMBLY

ITEM NO	PART NO	DESCRIPTION	QTY
1		Work Section	1
2	0300137	Needle Valve	1
3	0300136	Ball Valve	1
4	0300124	Valve Body - YEB	2
5	0300121	Cartridge Valve - LKN	1
6	0300116	Hydraulic Traction Motor	2
7	0300257	1/2 O-Ring - 3/8 JIC	1
8	0300223	3/8 MP-3/8 FP-3/8 FP Tee	2
9	0300210	3/8 MP - 3/8 JIC	4
10	0300214	3/8 MP - 3/8 JIC 90	6
11	0300213	1/4 MP - 3/8 JIC 90	4
12	0300229	1/2 MP - 3/8 JIC 90	2
13	0300211	5/8 O-Ring - 1/2 JIC	2
14	H250422	Hose Assembly	2
15	H250421	Hose Assembly	1
16	H250416	Hose Assembly	1
17	H250415	Hose Assembly	1
18	H250420	Hose Assembly	1
19	H250419	Hose Assembly	1
20	H250418	Hose Assembly	1
21	H250417	Hose Assembly	1

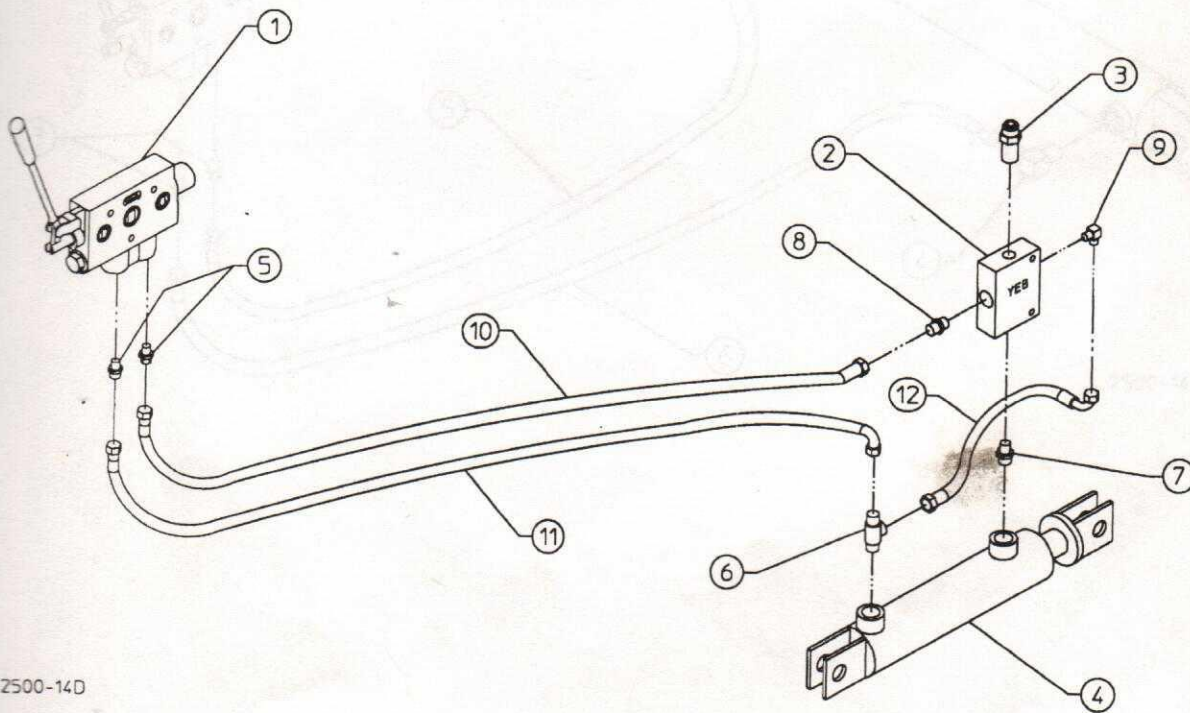


2500-14C

HYDRAULIC ASSEMBLY

LIFT HYDRAULIC ASSEMBLY

ITEM NO	PART NO	DESCRIPTION	QTY
1		Work Section	1
2	0300122	Valve Body - ECB	1
3	0300120	Cartridge Valve - LHN	1
4	0300101	Hydraulic Cylinder - 3" x 12"	1
5	0300257	½ O- Ring - 3/8 JIC	1
6	0300224	½ MP - ½ FP - ½ FP Tee	2
7	0300231	½ MP - 3/8 MP	1
8	0300210	3/8 MP-3/8 JIC	1
9	0300213	1/4 MP - 3/8 JIC 90	1
10	H250412	Hose Assembly	1
11	H250413	Hose Assembly	1
12	H250414	Hose Assembly	1

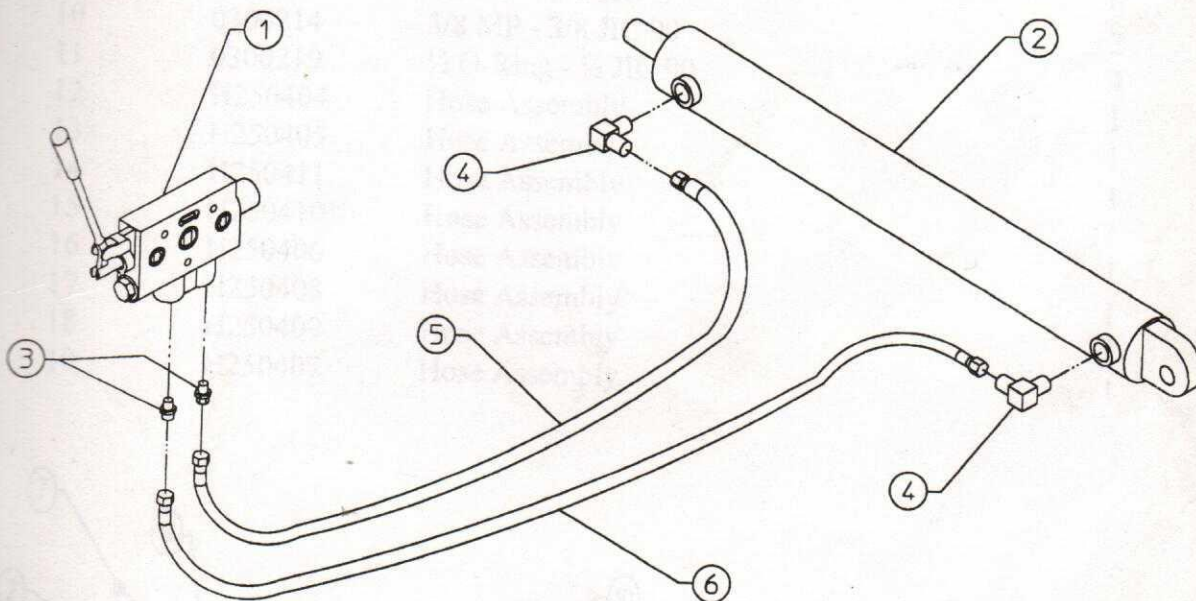


2500-14D

HYDRAULIC ASSEMBLY

TONGUE HYDRAULIC ASSEMBLY

ITEM NO	PART NO	DESCRIPTION	QTY
1		Work Section	1
2	0300108	Hydraulic Cylinder - 2 1/2" x 30"	1
3	0300257	1/2 O-Ring - 3/8 JIC	2
4	0300215	1/2 MP - 3/8 JIC 90	2
5	H250423	Hose Assembly	1
6	H250424	Hose Assembly	1

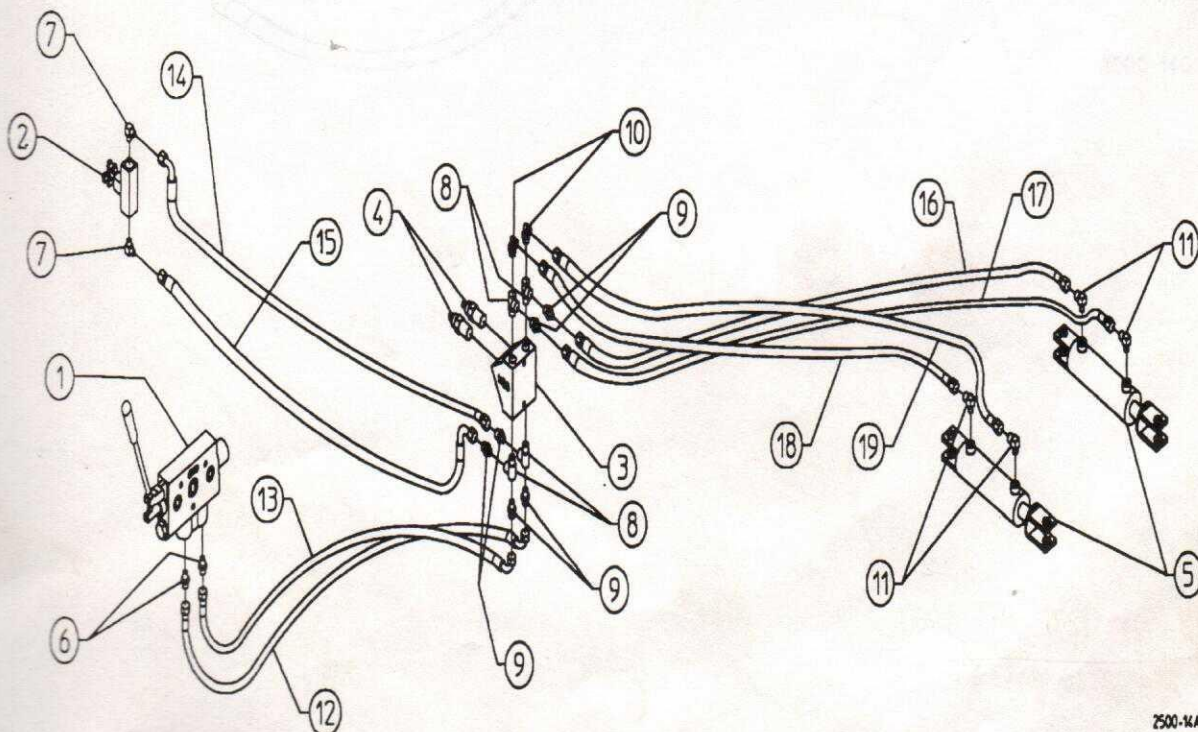


2500-14E

HYDRAULIC ASSEMBLY

SWING HYDRAULIC ASSEMBLY

ITEM NO	PART NO	DESCRIPTION	QTY
1	0300216	Work Section	1
2	0300137	Needle Valve	1
3	0300123	XEB Cartridge Valve Body	1
4	0300120	Cartridge Valve - LHN	2
5	0300105	Hydraulic Cylinder - 2"x4"	2
6	0300257	½ O-Ring - 3/8 JIC	2
7	0300213	¼ MP - 3/8 JIC 90	2
8	0300223	3/8 MP - 3/8 FP - 3/8 FP Tee	4
9	0300210	3/8 MP - 3/8 JIC	6
10	0300214	3/8 MP - 3/8 JIC 90	2
11	0300219	½ O-Ring - ½ JIC 90	4
12	H250404	Hose Assembly	1
13	H250405	Hose Assembly	1
14	H250411	Hose Assembly	1
15	H250410	Hose Assembly	1
16	H250406	Hose Assembly	1
17	H250408	Hose Assembly	1
18	H250409	Hose Assembly	1
19	H250407	Hose Assembly	1

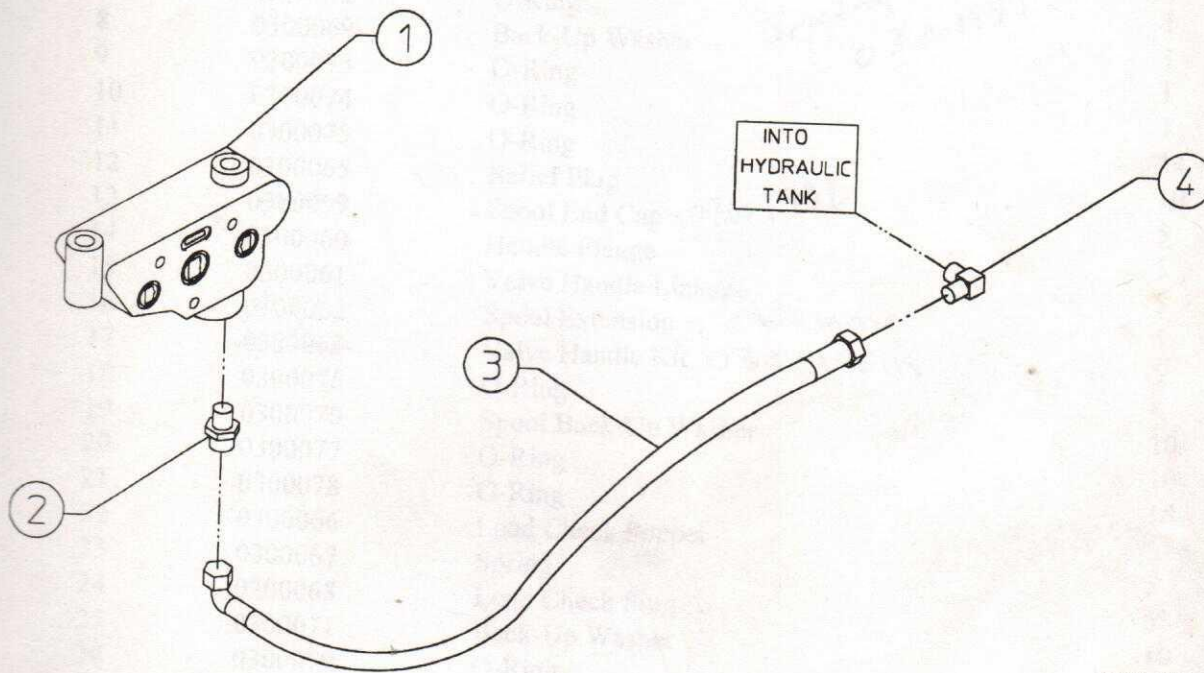


2500-14A

HYDRAULIC ASSEMBLY

HYDRAULIC RETURN ASSEMBLY

ITEM NO	PART NO	DESCRIPTION	QTY
1		Work Section	1
2	0300236	½ O-Ring - ½ JIC	1
3	H250403	Hose Assembly	1
4	0300217	¾ MP - ½ JIC	1



2500-14G

HYDRAULIC ASSEMBLY

CONTROL VALVE ASSEMBLY

ITEM NO	PART NO	DESCRIPTION	QTY
1	0300055	Series Work Section - SVS	4
2	0300056	Work Section - SVH	1
3	0300057	Inlet Section - SVI	1
4	0300058	Outlet Section - SVE	1
5	0300064	Relief Valve	1
6	0300261	Steel Plug, 1/2 SAE	2
7	0300072	O-Ring	1
8	0300069	Back-Up Washer	1
9	0300073	O-Ring	1
10	0300074	O-Ring	1
11	0300075	O-Ring	14
12	0300065	Relief Plug	10
13	~~0300059~~	Spool End Cap - 0300199L	5
14	0300060	Handle Flange	5
15	0300061	Valve Handle Linkage	5
16	0300062	Spool Extension - 0300199N	5
17	~~0300063~~	Valve Handle Kit 0300199K	5
18	0300076	O-Ring	4
19	0300070	Spool Back-Up Washer	10
20	0300077	O-Ring	10
21	0300078	O-Ring	16
22	0300066	Load Check Poppet	5
23	0300067	Spring	5
24	0300068	Load Check Plug	5
25	0300071	Back-Up Washer	10
26	0300079	O-Ring	10

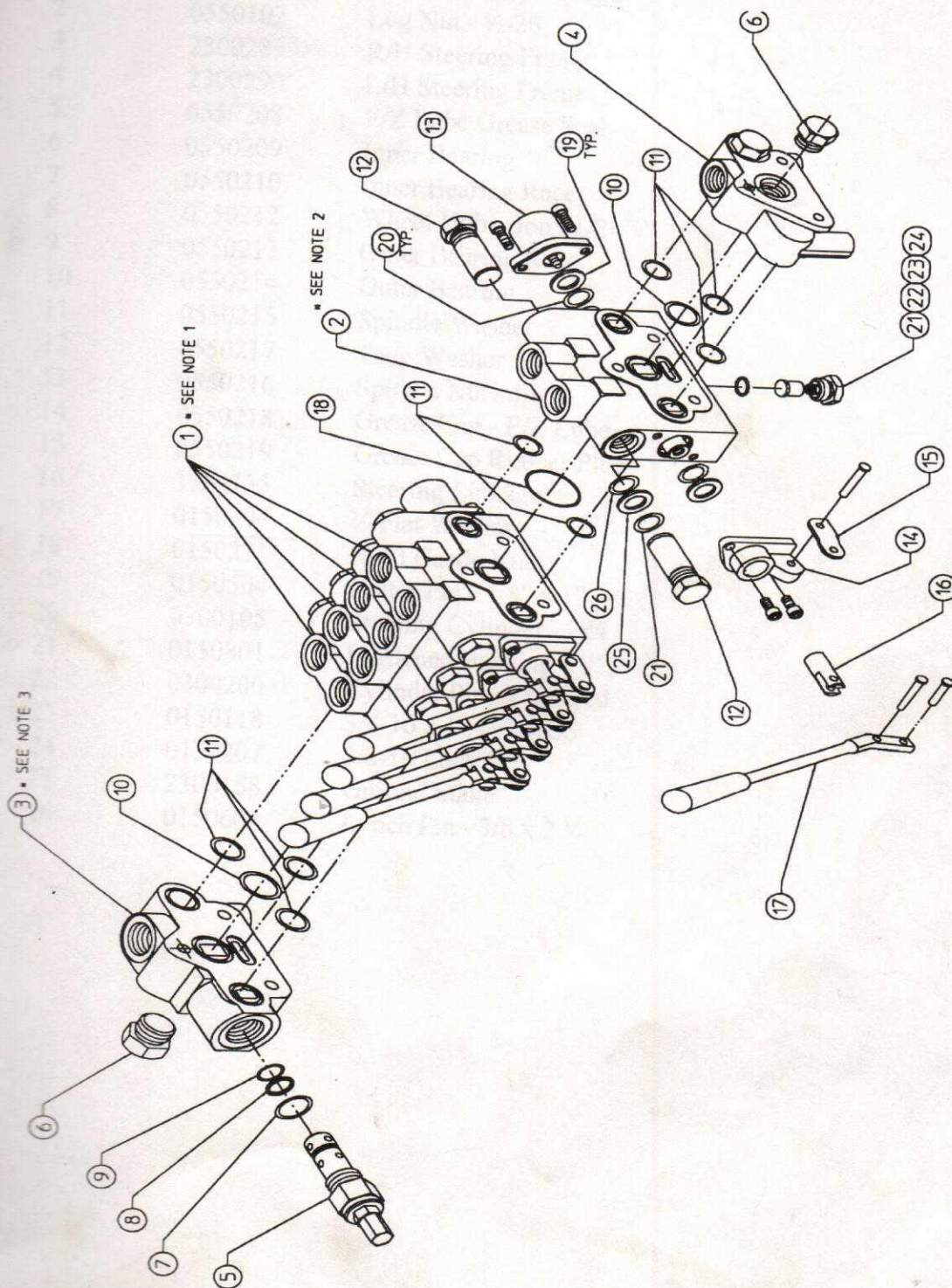
*Spring center kit
0300199J*

NOTES:

1. SVS work section seal kit - P/N 0300080 - Includes items 11,18,20,21,25.
2. SVH work section seal kit - P/N 0300083 - Includes items 10,11,20,21,25.
3. SVI inlet section seal kit - P/N 0300084 - Includes items 10,11.

HYDRAULIC ASSEMBLY

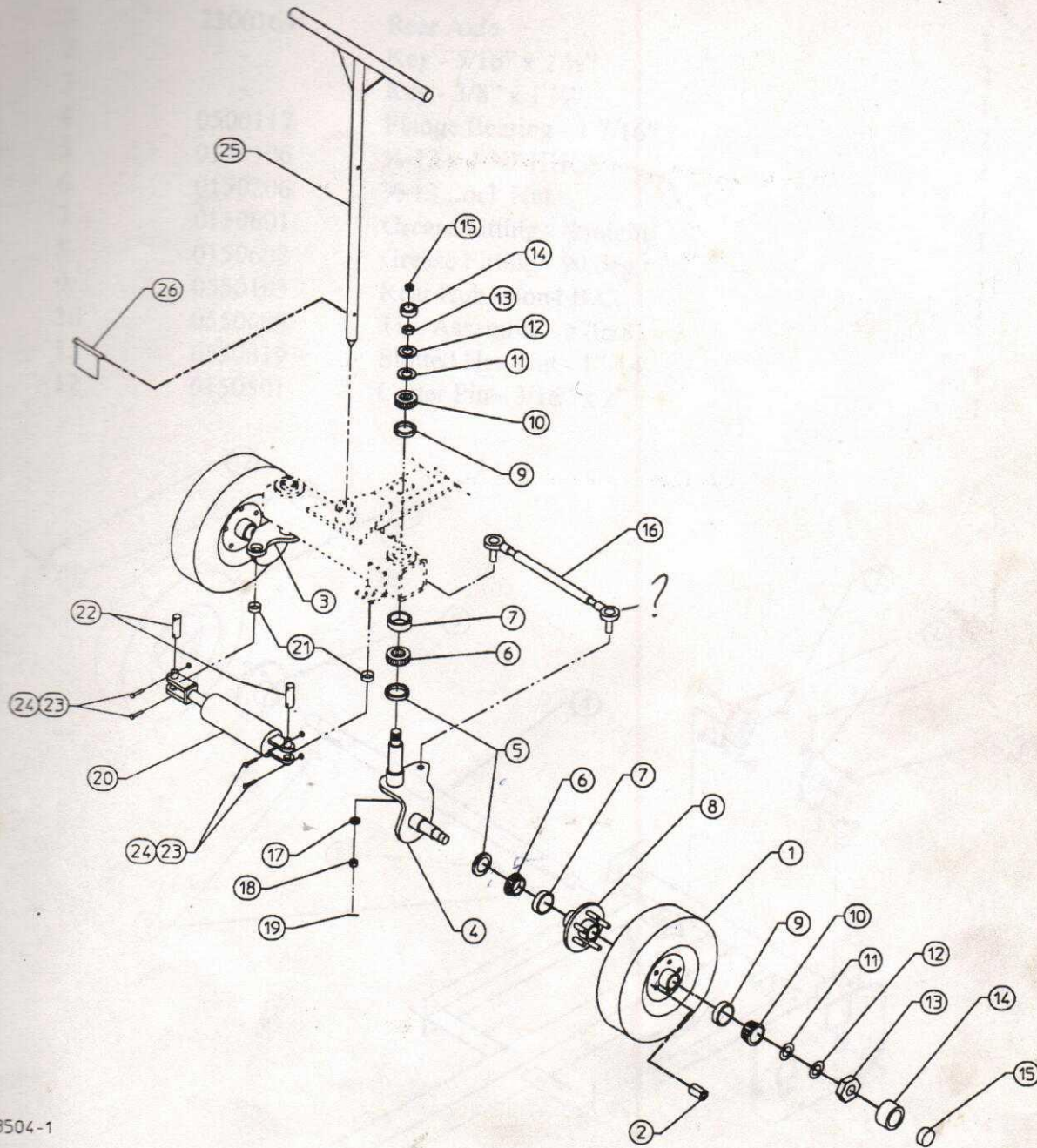
CONTROL VALVE ASSEMBLY



FRONT AXLE ASSEMBLY

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	0550009	Tire Assembly - 570x8	
2	0550102	Lug Nut - 1/2-20	2
3	2300289	R/H Steering Frame	8
4	2300290	L/H Steering Frame	1
5	0550208	E/Z Lube Grease Seal	1
6	0550209	Inner Bearing	4
7	0550210	Inner Bearing Race	4
8	0550212	Wheel Hub - 5on5 1/2	4
9	0550213	Outer Bearing Race	2
10	0550214	Outer Bearing	4
11	0550215	Spindle Washer	4
12	0550217	Tang Washer	4
13	0550216	Spindle Nut - 1"-14	4
14	0550218	Grease Cap - E/Z Lube	4
15	0550219	Grease Cap Rubber Plug	4
16	3504133	Steering Linkage	4
17	0150304	1/2 Flat Washer	1
18	0150231	1/2-13 Castle Nut	2
19	0150504	Cotter Pin - 1/8" x 1"	2
20	0300105	Steering Cylinder - 2x4	2
21	0150801	Hardened Bushing - 1"	1
22	0300200	Cylinder Pin - Captured	2
23	0150118	3/8-16 x 1 1/2" HHCS	2
24	0150207	3/8-16 Lock Nut	4
25	2300158	Ground Stake	4
26	0150604	Lynch Pin - 3/8 x 2 3/4	1
			1

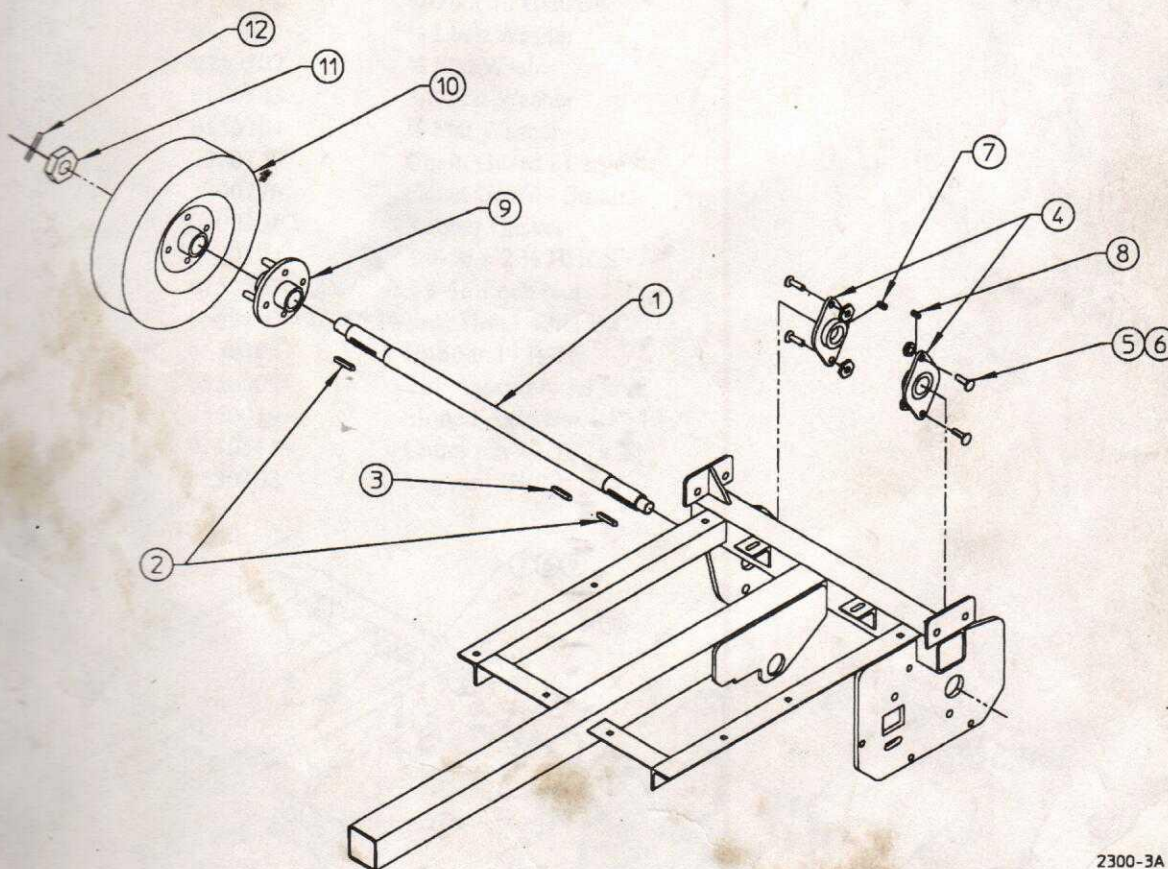
FRONT AXLE ASSEMBLY



3504-1

REAR AXLE ASSEMBLY

ITEM NO	PART NO	DESCRIPTION	QTY
1	2300164	Rear Axle	1
2	-	Key - 5/16" x 2 1/2"	2
3	-	Key - 3/8" x 1 1/2"	1
4	0500117	Flange Bearing - 1 7/16"	2
5	0150106	1/2-13 x 1 3/4" HHCS	4
6	0150206	1/2-13 Lock Nut	4
7	0150601	Grease Fitting - Straight	1
8	0150602	Grease Fitting - 90 deg.	1
9	0550103	Rear Hub - 4on4 B.C.	1
10	0550009	Tire Assembly - 570x8	1
11	0550019	Slotted Hex Nut - 1"-14	1
12	0150501	Cotter Pin - 3/16" x 2"	1

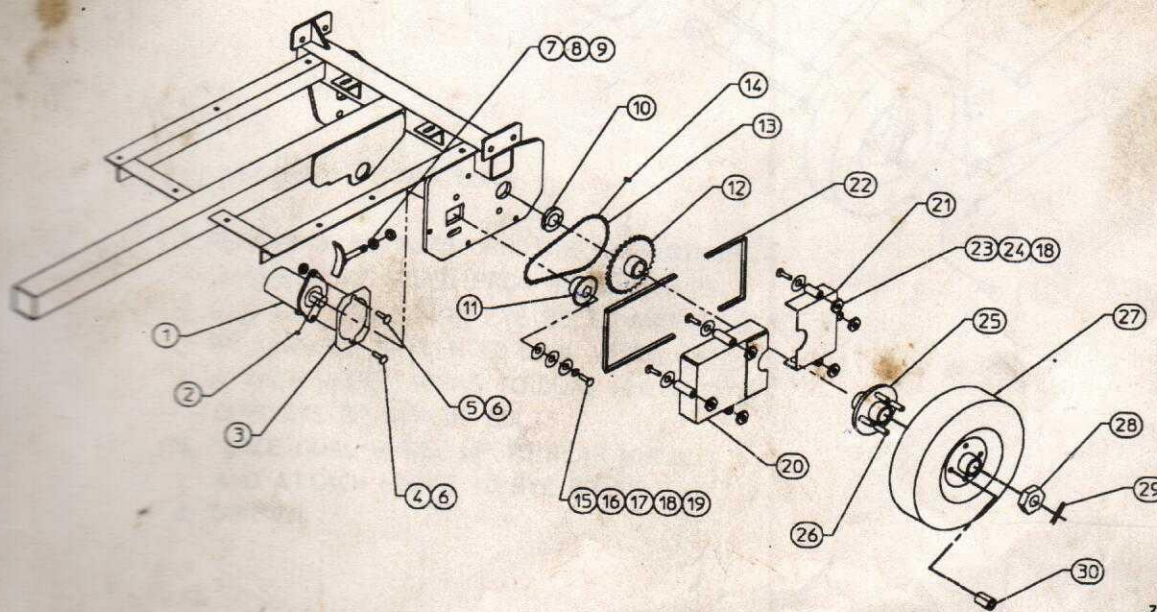


2300-3A

REAR AXLE ASSEMBLY

TRACTION DRIVE ASSEMBLY

ITEM NO	PART NO	DESCRIPTION	QTY
1	0300116	Hydraulic Motor	1
2	0300139	Woodruff Key - Hydraulic Motor	1
3	2300172	Hydraulic Motor Face Plate	1
4	0150107	1/2-13 x 2" HHCS	1
5	0150106	1/2-13 x 1 1/4" HHCS	1
6	0150206	1/2-13 Lock Nut	1
7	2300167	Motor Adjusting Bar	2
8	0150205	1/2-13 Hex Nut	1
9	0150406	1/2 Lock Washer	2
10	0150704	1 7/16" Split Locking Collar	2
11	0250118	Sprocket - Hydraulic Motor - 2 pc. 0250172 & 0250173	1
12	~~2300165~~ 0250116	Sprocket - Axle	1
13	0250130	Roller Chain - #50	1
14	0250131	Master Link - #50	1
15	0150102	1/4-20 x 1" HHCS	1
16	0150402	1/4 Lock Washer	1
17	0150302	1/4 Flat Washer	1
18	0150303	3/8 Flat Washer	1
19	0150304	1/2 Flat Washer	7
20	2300175	Chain Guard - Large	1
21	2300176	Chain Guard - Small	1
22	0400201	Rubber Gasket	1
23	0150104	3/8-16 x 2 1/2 HHCS	1
24	0150207	3/8-16 Lock Nut	6
25	0550103	Rear Hub - 4on4 B.C.	6
26	0550105	Hub Stud - 1/2-20	1
27	0550009	Tire Assembly - 570x8	4
28	0550019	Slotted Axle Nut - 1"-14	1
29	0150501	Cotter pin - 3/16" x 2"	1
30	0550102	Lug nut - 1/2-20	1
			4

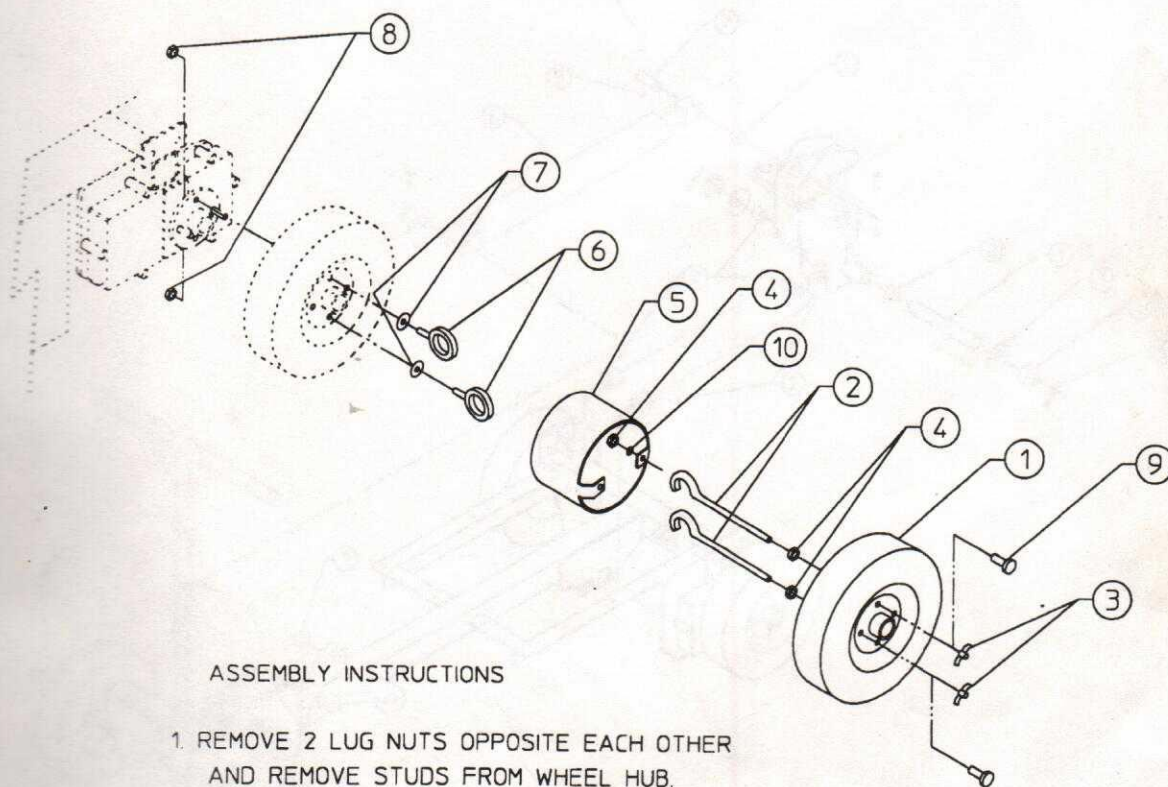


2300-38

REAR AXLE ASSEMBLY

DUAL WHEEL ASSEMBLY

ITEM NO	PART NO	DESCRIPTION	QTY
1	0550101	Tire Assembly	2
2	0150147	Wheel Hooks - 1/2-13	4
3	0150226	Wing Nut - 1/2-13	4
4	0150205	1/2-13 Hex Nut	8
5	2300260	Wheel Spacer	2
6	0150146	Eye Bolts - 9/16-12	4
7	0150314	9/16 Flat Washer	4
8	0150227	9/16-12 Lock Nut	4
9	0150108	1/2-13 x 1 1/4 HCS	2
10	0150406	1/2 Lock Washer	2



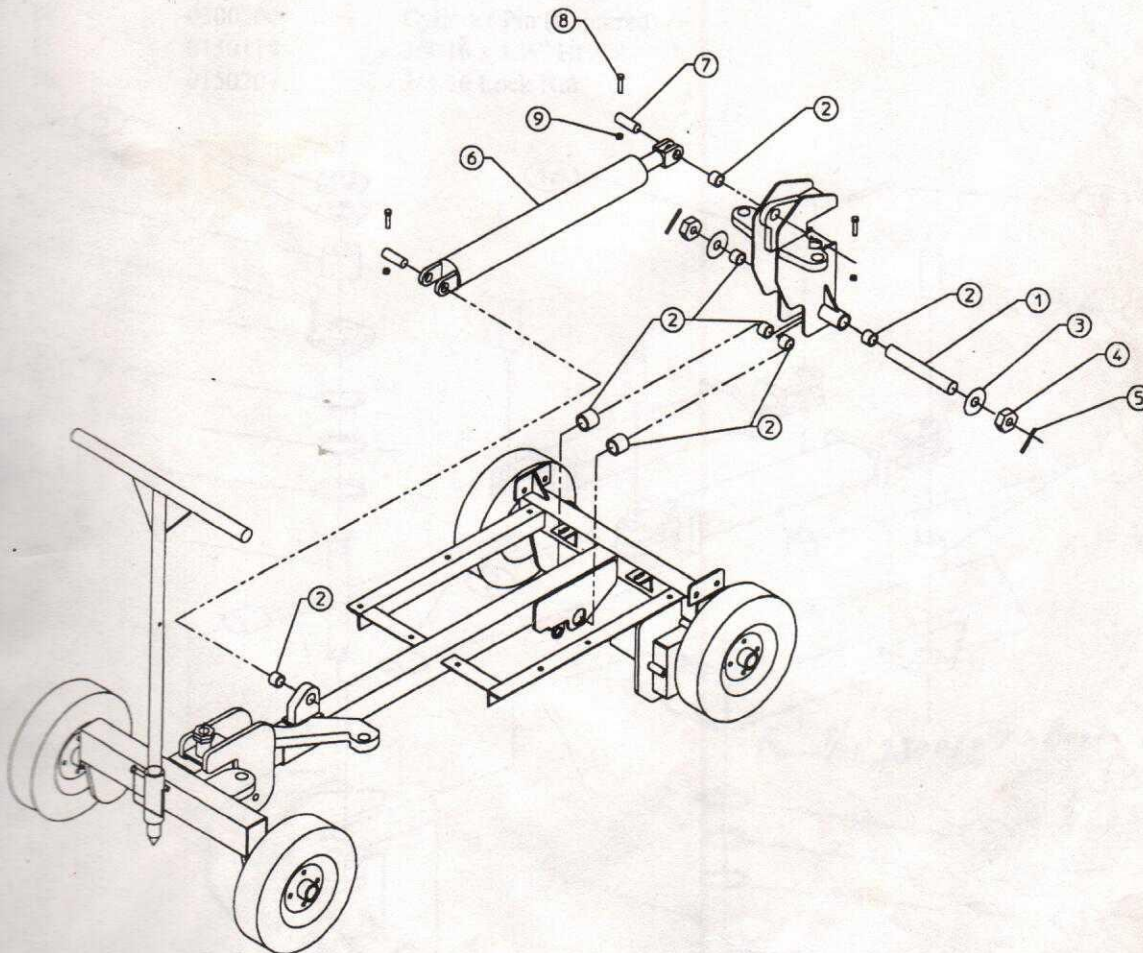
ASSEMBLY INSTRUCTIONS

1. REMOVE 2 LUG NUTS OPPOSITE EACH OTHER AND REMOVE STUDS FROM WHEEL HUB.
2. REPLACE STUDS WITH EYE BOLTS AND NUTS.
3. BOLT WHEEL SPACER TO DUAL WHEEL.
4. ATTACH WHEEL HOOKS TO DUAL WHEEL OPPOSITE OF SPACER BOLTS.
5. PLACE DUAL WHEEL UP TO REAR WHEEL AND ATTACH HOOKS TO EYE BOLTS.
6. TIGHTEN.

PIVOT ASSEMBLY

LOWER PIVOT ASSEMBLY

ITEM NO	PART NO	DESCRIPTION	QTY
1	2300189	Lift Pivot Shaft (Hardened)	1
2	0150801	Hardened Bushing	6
3	0150308	1" Flat Washer	8
4	0150209	1"-14 Hex Castle Nut	2
5	0150501	Cotter Pin - 3/16" x 2"	2
6	0300105	Hydraulic Cylinder - 3"x12"	1
7	0300200	Cylinder Pin - Captured	2
8	0150118	3/8-16 x 1 1/2" HHCS	4
9	0150207	3/8-16 Lock Nut	4

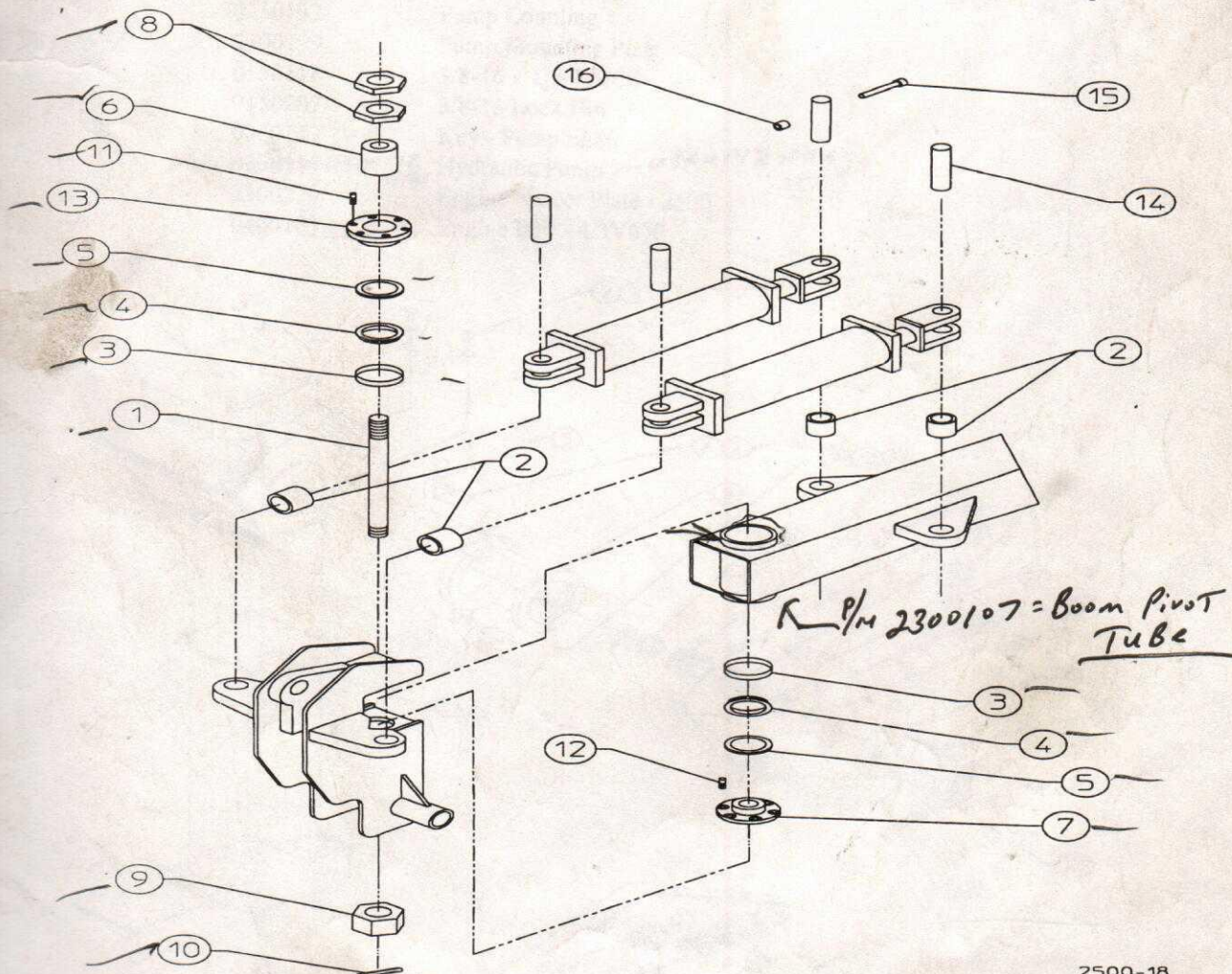


2500-17

PIVOT ASSEMBLY

UPPER PIVOT ASSEMBLY

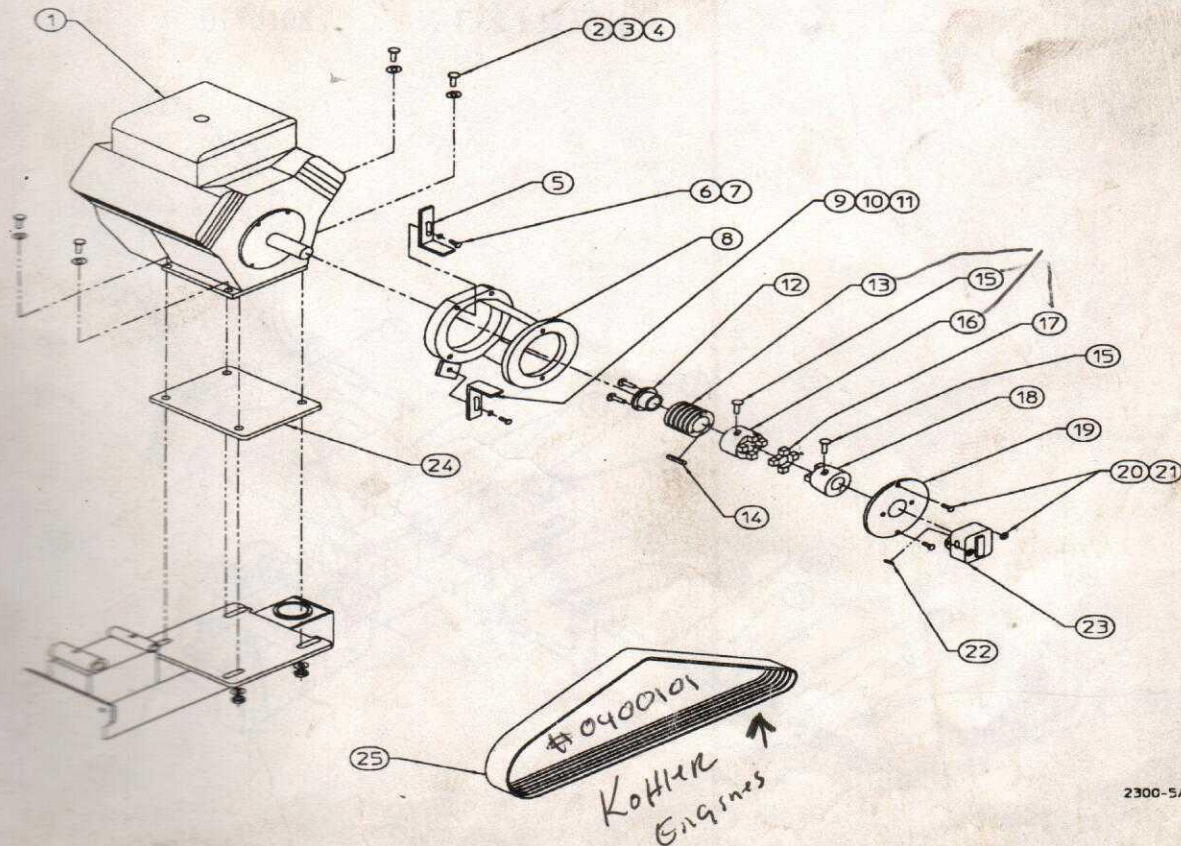
ITEM NO	PART NO	DESCRIPTION	QTY
1	2300159	Swing Pivot Shaft (Hardened)	1
2	0150801	Hardened Bushing	4
3	0500201	Bearing Race	2
4	0500121	Bearing	2
5	0500407	Grease Seal	2
6	2300255	Top Pivot Inner Bushing	1
7	2300256	Bottom Pivot Bushing	1
8	0150208	1"-14 Hex Jam Nut	2
9	0150209	1"-14 Hex Jam Nut	1
10	0150501	Cotter Pin - 3/16" x 2"	1
11	0150123	5/16-18 x 3/4 SHCS	6
12	0150124	5/16-18 x 3/4 FHSCS	6
13	2300257	Top Pivot Bushing	1
14	0300200	Cylinder Pin (Captured)	4
15	0150118	3/8-16 x 1 1/2" HHCS	8
16	0150207	3/8-16 Lock Nut	8



2500-18

ENGINE BELT ASSEMBLY

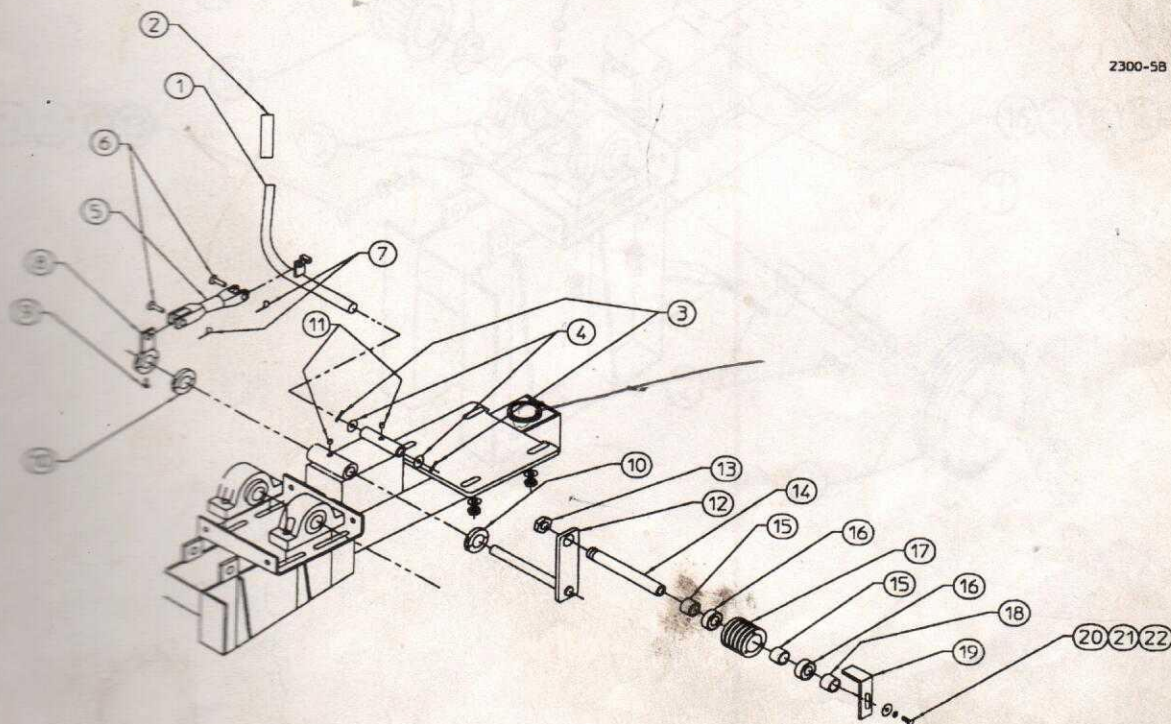
ITEM NO	PART NO	DESCRIPTION	QTY
1	0200101	25 HP Kohler Engine	1
2	0150107	1/2-13 x 2" HHCS	4
3	0150304	1/2 Flat Washer	4
4	0150206	1/2-13 Lock Nut	4
5	2300205	Bee Hive Belt Keeper - Top	1
6	0150112	7/16-14 x 1 3/4" HHCS	4
7	0150405	7/16 Lock Washer	4
8	2300203	Bee Hive	1
9	2300206	Bee Hive Belt Keeper - Bottom	1
10	0150103	3/8-16 x 1" HHCS	1
11	0150404	3/8 Lock Washer	1
12	0250119	Tapered Bushing - SH 1 7/16"	1
13	0250101	Belt Sheave - 4/3V3.0	1
14	-	Key - 3/8" x 5/16" x 1 1/4"	1
15	0150120	5/16-18 x 1" HSHCS	2
-16	0250133	Engine Coupling	1
-17	0250134	Coupling Insert	1
-18	0250132	Pump Coupling	1
19	2300199	Pump Mounting Plate	1
20	0150118	3/8-16 x 1 1/2 HHCS	2
21	0150207	3/8-16 Lock Nut	2
22	0300143	Key - Pump Shaft	1
23	~~0300117~~ 0300142 AAA	Hydraulic Pump - 0300142 AAA	1
24	2300279	Engine Spacer Plate - 2500	1
25	0400101	Engine Belt - 4/3V670	1



BOOM ASSEMBLY

BELT ENGAGEMENT ASSEMBLY

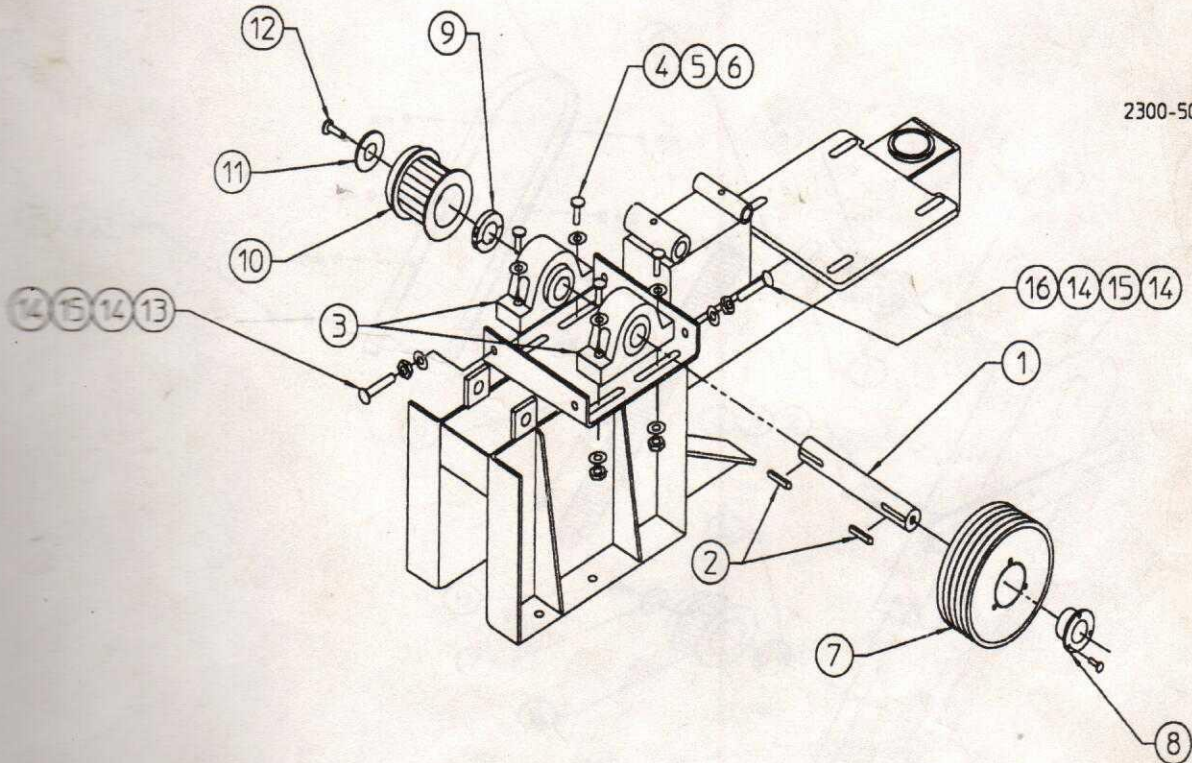
ITEM NO	PART NO	DESCRIPTION	QTY
1	2300214	Belt Engagement Handle	1
2	0400202	Handle Grip	1
3	0150501	Cotter pin - 3/16" x 2"	2
4	0150307	3/4" Flat Washer	2
5	2300240	Linkage Assembly	1
6	0150603	Clevis Pin - 1/2x1 3/8 (.15 Hole)	2
7	0150502	1/8" Bridge Pin - #4 Zn	2
8	2300211	Linkage Collar	1
9	0150122	1/4-20 x 1/2 HSHCS	1
10	0150703	Split Locking Collar - 1"	1
11	0150601	Grease Fitting - Straight	1
12	2300210	Idler Pulley Arm	1
13	0150213	3/4-16 Hex Nut	1
14	0250138	Idler Pulley Shaft	1
15	2300229	Idler Bushing - Long	2
16	0500126	Idler Bearing - 1" <i>- Included on Idler Pulley</i>	2
17	2300215	Idler Pulley	1
18	2300230	Idler Bushing - Short <i>- Included on Idler Pulley</i>	1
19	2300243	Idler Belt Keeper	1
20	0150304	1/2 Flat Washer	1
21	0150406	1/2 Lock Washer	1
22	0150108	1/2-13 x 1 1/4 HHCS	1



2300-58

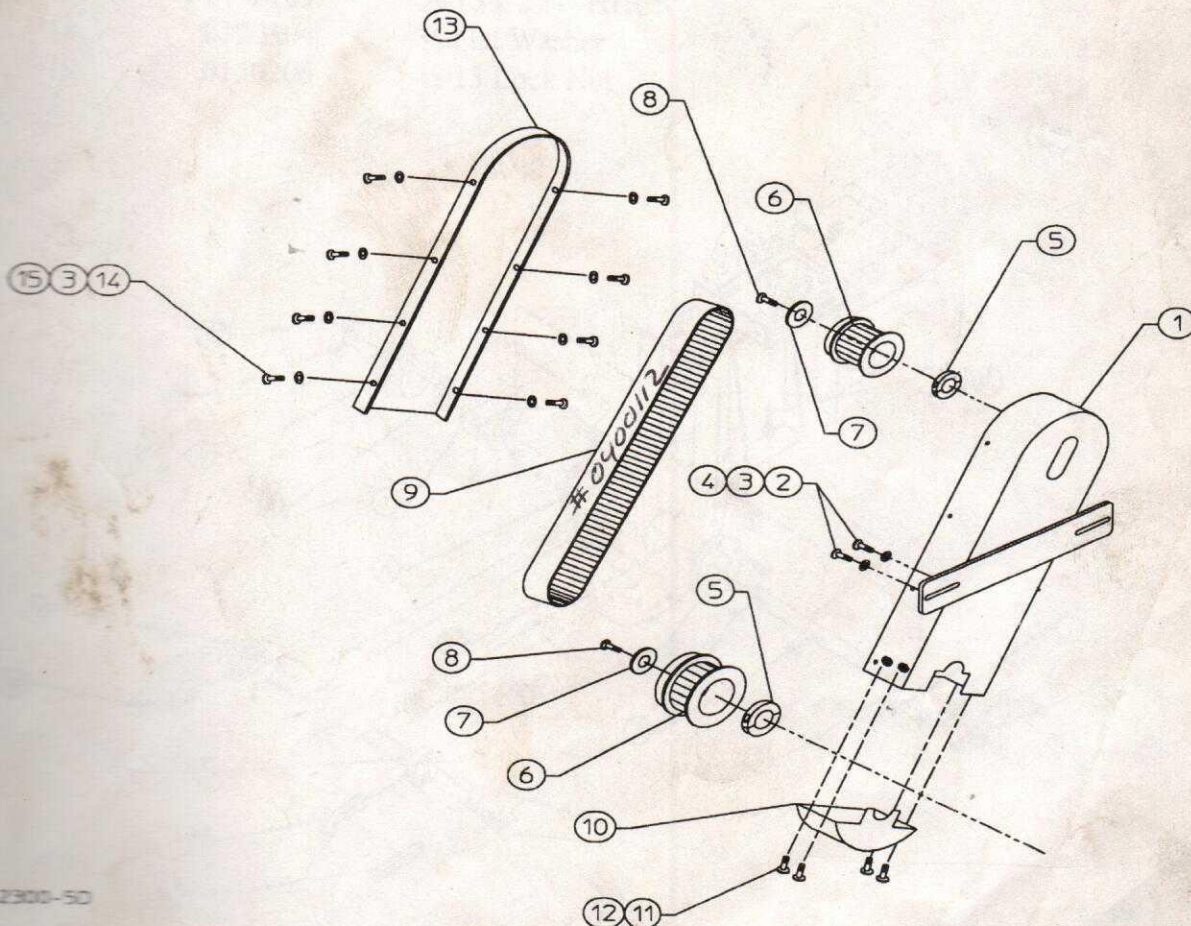
JACK SHAFT ASSEMBLY

ITEM NO	PART NO	DESCRIPTION	QTY
1	2300185	Jack Shaft - 1 7/16"	1
2	-	Key - 3/8" x 1 1/2"	2
3	0500112	Pillow Block Bearing - 1 7/16"	2
4	0150109	1/2-13 x 2 1/4" HHCS	4
5	0150304	1/2 Flat Washer	4
6	0150206	1/2-13 Lock Nut	4
7	0250102	Jack Shaft Sheave - 4/3V8.0	1
8	0250120	Tapered Bushing - SK 1 7/16"	1
9	0150704	Split Locking Collar - 1 7/16"	1
10	0250112	Poly Chain Sprocket - 8M-40S-62	1
11	2300197	Shaft Washer	1
12	0150108	1/2-13 x 1 1/4" HHCS	1
13	0150114	1/2-13 x 3" SQHD	2
14	0150205	1/2-13 Hex Nut	8
15	0150406	1/2 Lock Washer	8
16	0150115	1/2-13 x 4" SQHD	2



POLY CHAIN BELT ASSEMBLY

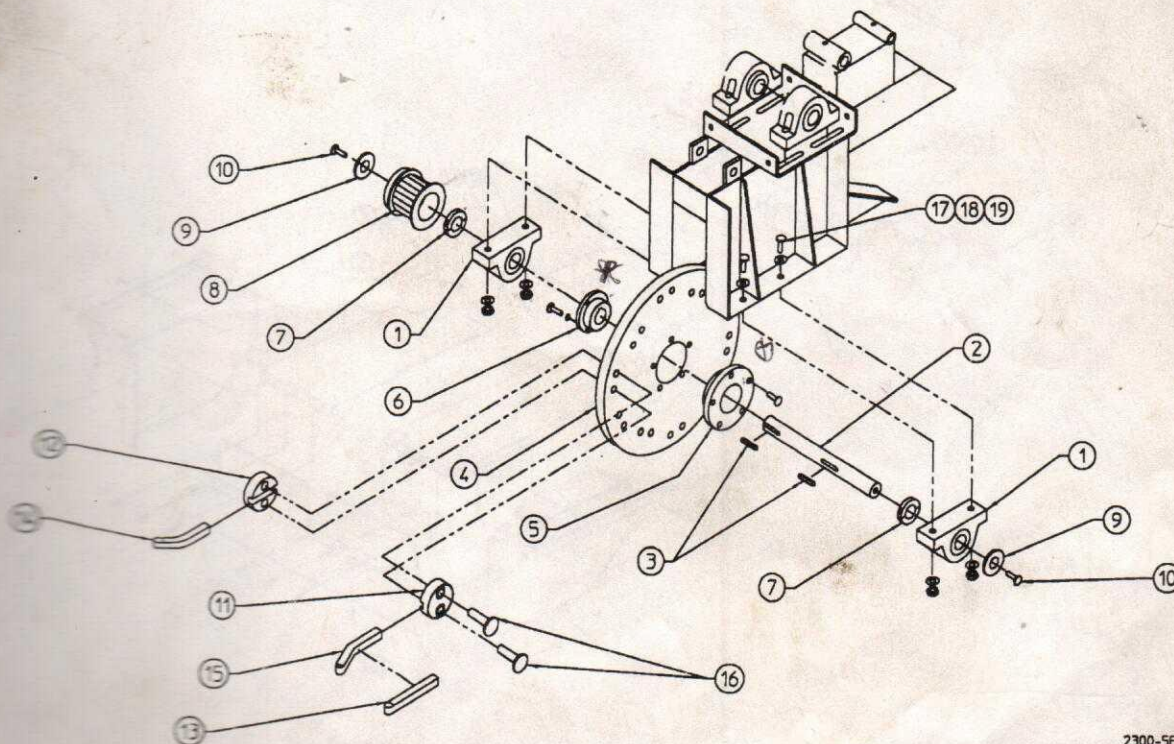
ITEM NO	PART NO	DESCRIPTION	QTY
1	2300249	Poly Chain Belt Guard	1
2	0150117	3/8-16 x 1" Carriage Bolt	4
3	0150303	3/8 Flat Washer	12
4	0150207	3/8-16 Lock Nut	4
5	0150704	Split Lock Collar - 1 7/16"	2
6	0250112	Poly Chain Sprocket - 8M-40S-62	2
7	2300297	Shaft Washer	2
8	0150108	1/2-13 x 1 1/4" HHCS	2
9	0400112	Poly Chain Belt - 8M-1200-62	1
10	2300225	Poly Chain Bottom Guard	1
11	0150116	5/16-18 x 1" HHCS	4
12	0150212	5/16-18 Lock Nut	4
13	2300248	Poly Chain Guard Cover	1
14	0150103	3/8-16 x 1" HHCS	8
15	0150404	3/8 Lock Washer	8



2300-50

CUTTER WHEEL ASSEMBLY

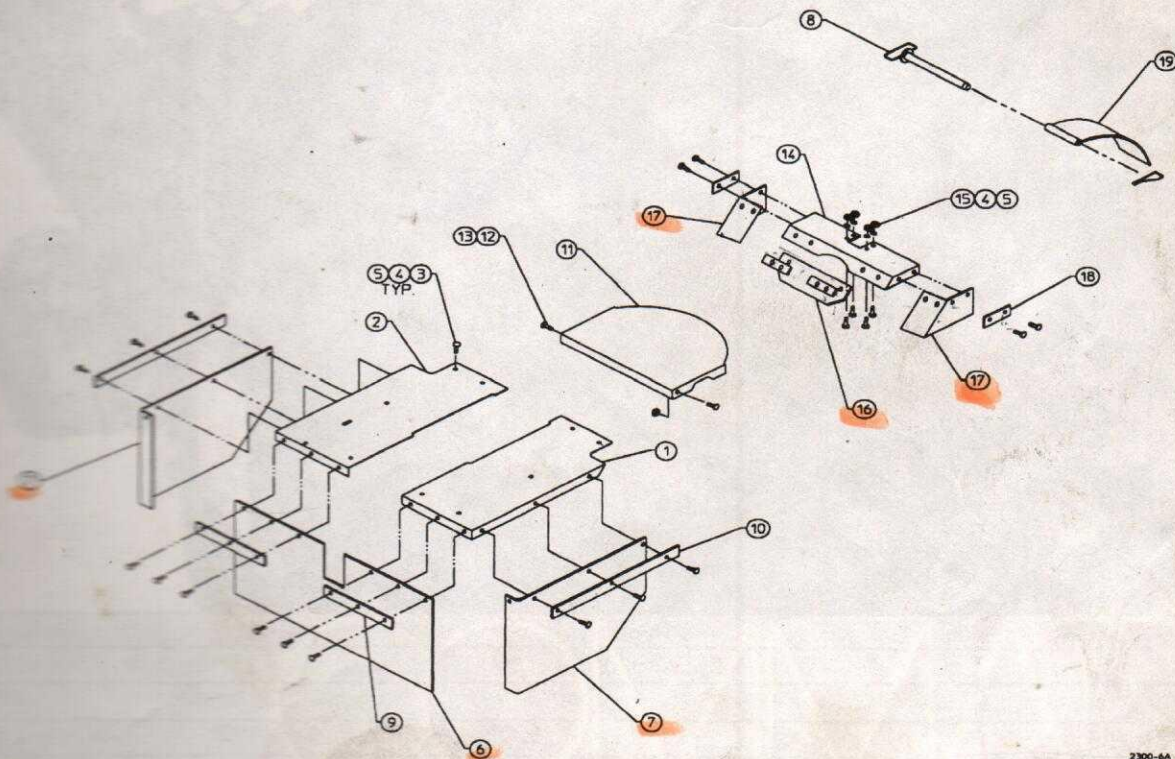
ITEM NO	PART NO	DESCRIPTION	QTY
1	0500112	Pillow Block Bearing - 1 7/16"	2
2	2300184	Cutter Wheel Shaft	1
3	~~2300185~~ <i>A160T01</i>	Key - 3/8" x 1 1/2"	2
4	~~2300185~~	Cutter Wheel - 1" <i>- 2300186</i>	1
5	2300188	Cutter Wheel Hub	1
6	0250120	Tapered Bushing - SK 1 7/16" <i>- 3-6</i>	1
7	0150704	Split Locking Collar - 1 7/16"	2
8	0250112	Poly Chain Sprocket - 8M-40S-62	1
9	2300197	Shaft Washer	2
10	0150108	1/2-13 x 1 1/4" HHCS	2
11	0450106	Round Pocket - C/S	10
12	0450107	Round Pocket - Thd.	10
13	0450101	Tooth - Straight	2
14	0450102	Tooth - Right 45	9
15	0450103	Tooth - Left 45	9
16	0450109	5/8-18 x 2 1/8" Tooth Bolt	20
17	0150109	1/2-13 x 2 1/4" HHCS	4
18	0150304	1/2 Flat Washer	4
19	0150206	1/2-13 Lock Nut	4



2300-5E

CHIP GUARD ASSEMBLY

ITEM NO.	PART NO.	DESCRIPTION	QTY.
1	2300134	Deck Plate - R/H	1
2	2300135	Deck Plate - L/H	1
3	0150119	.375-16 x .750 Carriage Bolt	30
4	0150303	.375 Flat Washer	34
5	0150207	.375-16 Lock Nut	34
6	2300310	Front Chip Guard	1
7	2300311	Side Chip Guard	2
8	0150605	Hitch Pin	1
9	2300218	Chip Guard Front Bracket	2
10	2300217	Chip Guard Side Bracket	2
11	2300193	Pan Guard	1
12	0150108	1/2-13 x 1 1/4 HHCS	2
13	0150206	1/2-13 Lock Nut	2
14	~~2300193~~ 2300221	Pan Guard <i>Chip Guard - 100159</i>	1
15	0150117	3/8-16 x 1" Carriage Bolt	4
16	2300313	Cutter Wheel Chip Guard - Front	1 - oval
17	2300312	Cutter Wheel Chip Guard - Side	2 - square
18	2300234 - 6.49	Chip Guard Bracket	4
19	2300261	Cutter Wheel guard	1



2300-6A