



310/370/430 MANURE SPREADER

PARTS BOOK



Revision #02

310 Starting Serial #315300

370 Starting Serial #316296

430 Starting Serial #319420

HSMFG1012

Part #59682

Manufactured By
H&S MANUFACTURING CO., INC.

P.O. BOX 768 (715) 387-3414 FAX (715) 384-5463
MARSHFIELD, WISCONSIN 54449

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INSTRUCTIONS FOR ORDERING PARTS

All service parts should be ordered through your authorized H&S dealer. They will be able to give you faster service if you will provide them with the following

1. Model & Serial number is located in the front center of the Manure Spreader.
2. All reference to left or right apply to the Manure Spreader as viewed from the rear.
3. Parts should not be ordered from illustration only. Please order by complete part number.
4. If your dealer has to order parts - give shipping instructions:

VIA truck - large pieces (please specify local truck lines)

VIA United Parcel Service (include full address)

H&S MFG. CO. INC.	
MARSHFIELD, WIS.	
MOD. NO.	<input type="text"/>
SER. NO.	<input type="text"/>
DESCR.	<input type="text"/>

PLEASE RECORD NUMBERS FOR YOUR UNIT FOR QUICK REFERENCE

ABOUT IMPROVEMENTS

H&S IS CONTINUALLY STRIVING TO IMPROVE IT'S PRODUCTS

We must therefore, reserve the right to make improvements or changes whenever it becomes practical to do so without incurring any obligation to make changes or additions to the equipment previously sold.

FIGURE 1

BEATER & PAN ASSEMBLY

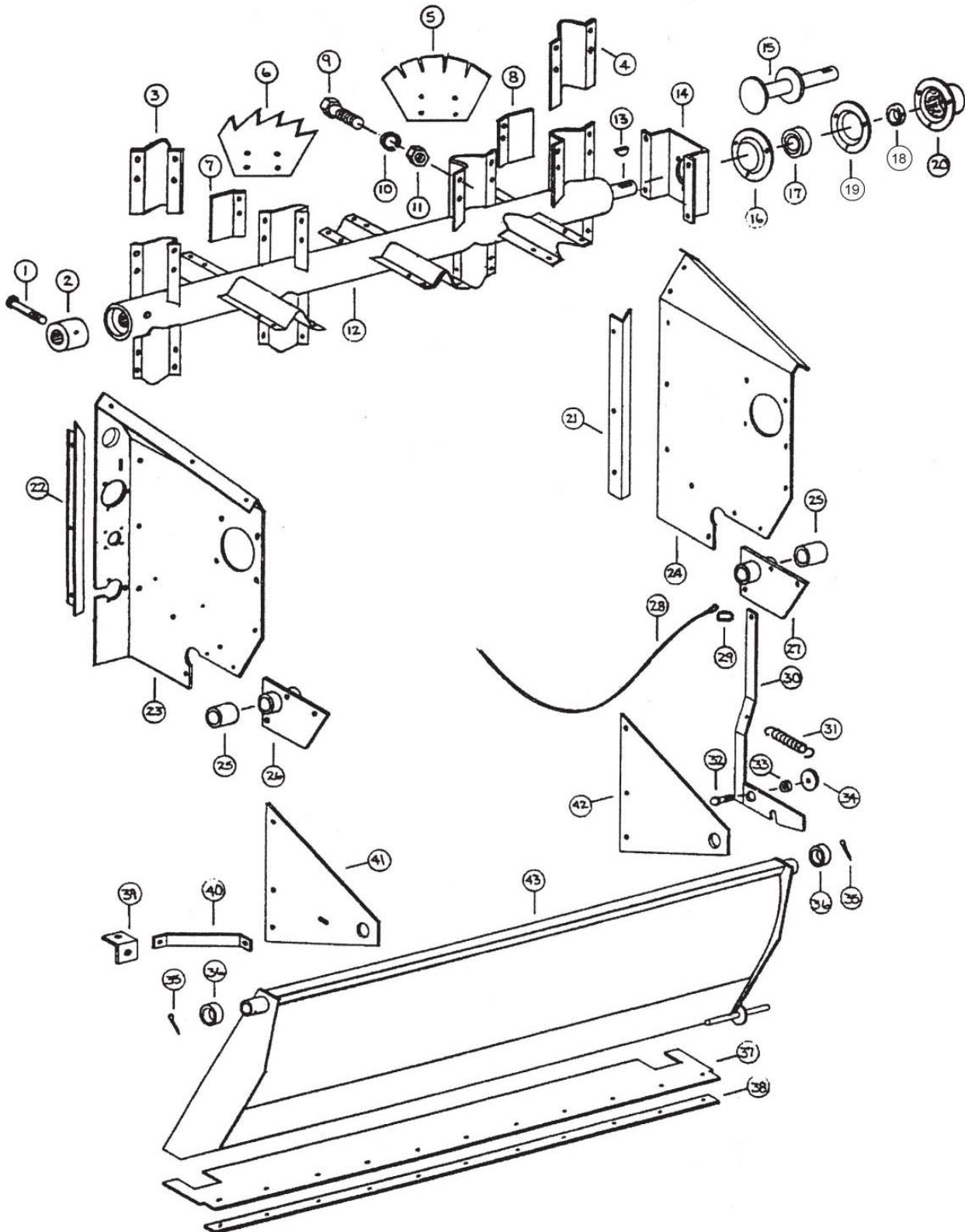


FIGURE 1

BEATER & PAN ASSEMBLY

<u>ITEM</u>	<u>PART #</u>			<u>DESCRIPTION</u>
	<u>310</u>	<u>370</u>	<u>430</u>	
1	YBHH10130	"	"	BOLT, 5/16" X 5" GR. 5
2	23N2	"	"	SPLINED BEATER INSERT
3	23N3	"	"	BEATER BLADE HOLDER LH
4	23N4	"	"	BEATER BLADE HOLDER RH
5	23N276	"	"	BEATER BLADE - HARDENED
6	23N277	"	"	BEATER BLADE - HARDENED
7	23N7	"	"	BEATER BLADE WIPER LH
8	23N8	"	"	BEATER BLADE WIPER RH
9	YBHH16045	"	"	BOLT, 1/2" X 1-1/4" GR. 5
10	YWLO16005	"	"	WASHER, LOCK, 1/2"
11	YNTL16005	"	"	HEX NUT, TOP LOCK, 1/2"-13
12	23N9	"	"	BEATER
13	5B9	"	"	3/8" X 1-1/4" WOODRUFF KEY
14	23N10	"	"	BEATER SHAFT SUPPORT
15	23N11	"	"	BEATER STUB SHAFT
16	F116	"	"	BEARING FLANGE (HEAVY DUTY)
17	12N122	"	"	BEARING W/LOCK COLLAR ASSEMBLY
18	12N122	"	"	BEARING W/LOCK COLLAR ASSEMBLY
19	F114A	"	"	BEARING FLANGE W/ ZERK 450
20	23N12	"	"	BEARING FLANGE GUARD
21	23N13	37N1	37N1	RH SIDE POLY HOLD DOWN
22	23N14	37N2	37N2	LH SIDE POLY HOLD DOWN
23	23N175	37N50	37N50	LH MAIN PANEL
24	23N16	37N4	37N4	RH MAIN PANEL
25	23N17	"	"	DRIVE SHAFT BUSHING
26	37N78	"	"	DRIVE SHAFT BRACKET LH WITH BUSHING
27	23N19	"	"	DRIVE SHAFT BRACKET RH WITH BUSHING
28	31N1	37N5	37N5	PAN TRIP ROPE
29	R31	"	"	CLIP
30	23N21	"	"	PAN TRIP LEVER
31	R27	"	"	SPRING
32	YBCR16010	"	"	CARR. BOLT, 1/2" X 1-1/2" GR. 5
33	23N23	"	"	TRIP LEVER SPACER
34	YWFL16005	"	"	WASHER, FLAT, 1/2" USS
35	YPCT06020	"	"	COTTER PIN, 3/16" X 2"
36	F112	"	"	SPACER
37	23N24	"	"	PAN RUBBER FLAP
38	23N25	"	"	PAN STRAP
39	23N26	"	"	PAN BRACE ANGLE
40	23N27	"	"	PAN SUPPORT BRACE
41	23N28	"	"	LH PAN SUPPORT
42	23N29	"	"	RH PAN SUPPORT
43	23N30	"	"	PAN

NOTE: " MEANS SAME AS PREVIOUS

FIGURE 2

HUB, SPINDLE & BOX PARTS

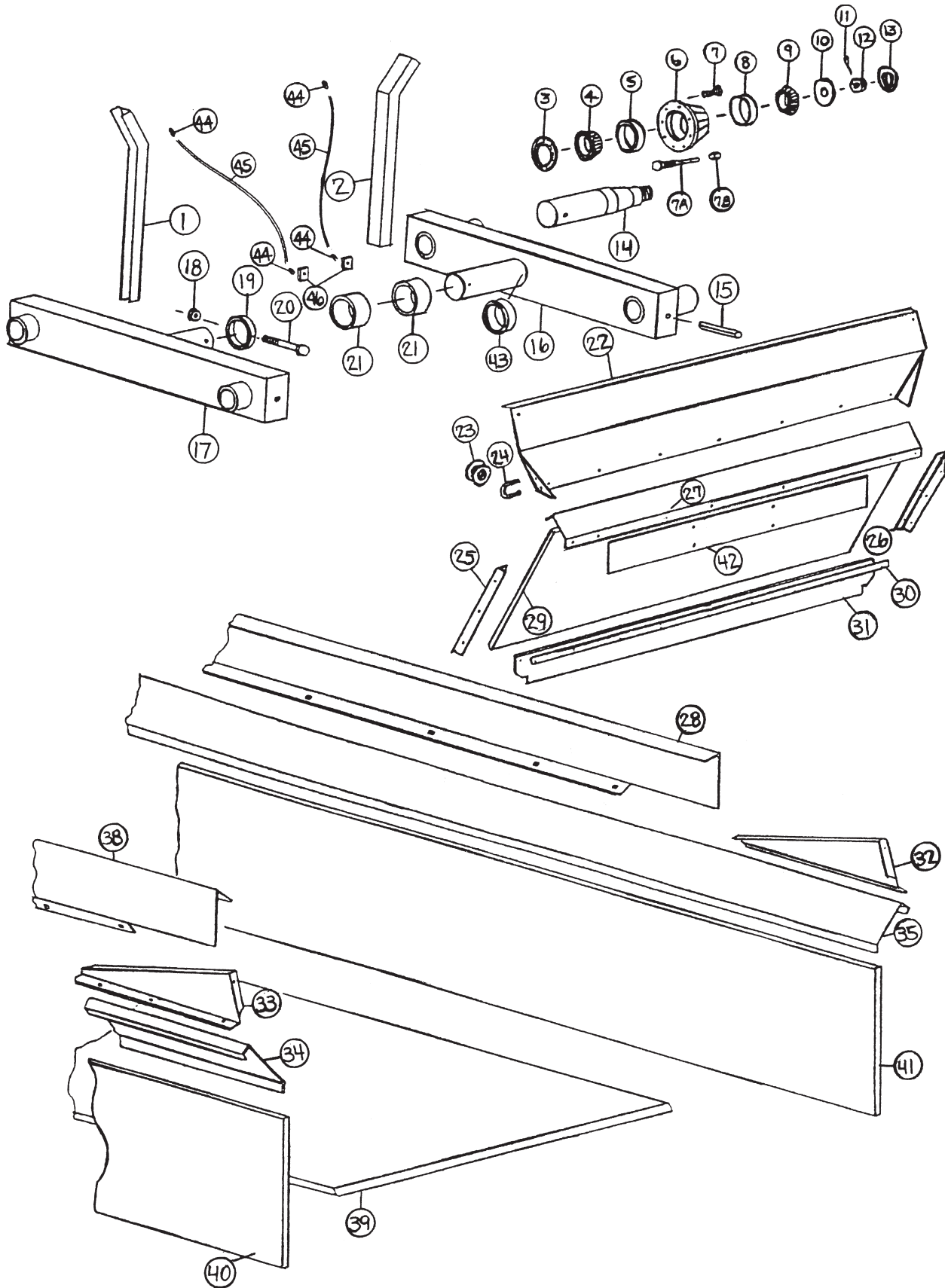


FIGURE 2

HUB, SPINDLE AND BOX PARTS

<u>ITEM</u>	<u>PART #</u>			<u>DESCRIPTION</u>
	<u>310</u>	<u>370</u>	<u>430</u>	
1.	23N31	37N6	37N6	RH SIDE STAKE
2.	23N32	37N7	37N7	LH SIDE STAKE
3.	B8	B90	B90	SEAL
4.	B7	B91	B91	INNER BEARING
5.	B7A	B91A	B91A	INNER RACE
6.	B6	26G4A	26G4A	HUB
7.	B32	-	-	HUB BOLT
7A.	-	YBSD20005	*	STUD BOLT 5/8-18 UNF X 2 1/4
7B.	-	YNWL20005	*	LUG NUT 5/8"
8.	B5A	B94A	B94A	OUTER RACE
9.	B5	B94	B94	OUTER BEARING
10.	YWFL28010	"	"	WASHER, FLAT, SAE 7/8"
11.	B31	"	"	COTTER PIN
12.	B3	"	"	NUT
13.	B2	"	"	HUB CAP
14.	31N2	37N8	16SV203	SPINDLE
Not Shown	31N48	16SV203	16SV203	SPINDLE FOR 16.1 x 14 WHEEL
15.	YPEX16020	"	"	ROLL PIN 1/2" x 4"
16.	31N5	37N10	37N10	TANDEM BEAM LH
17.	31N6	37N11	37N11	TANDEM BEAM RH
18.	YNTL16005	"	"	1/2" LOCK NUT
19.	B60	"	"	RING
20.	YBHH16150	"	"	1/2" x 4 1/2" BOLT GR.5
21.	B58	"	"	BUSHING FOR TANDEM AXLE
22.	23N34	"	"	FRONT FLARE
23.	F33	"	"	ROPE GUIDE
24.	YBPU08005	"	"	U-BOLT
25.	23N35	37N12	37N12	RH GATE ANGLE
26.	23N36	37N13	37N13	LH GATE ANGLE
27.	23N176	"	"	FRONT FLARE SUPPORT
28.	-	-	43N1	SIDE EXTENSION LH
29.	23N270	37N65	37N65	FRONT GATE PLYWOOD/POLY
30.	23N40	"	"	STRAP FOR RUBBER
31.	23N41	"	"	FRONT GATE RUBBER
32.	23N42	"	"	SPLASH GUARD SIDE LH
33.	23N43	"	"	SPLASH GUARD SIDE RH
34.	31N24	37N16	43N3	RH SIDE FLARE
35.	31N25	37N17	43N4	LH SIDE FLARE
38.	-	-	43N2	SIDE EXTENSION RH
39.	31N49	37N81	37N81	POLY FLOOR
40.	31N31	37N67	37N67	RH SIDE PLYWOOD/POLY
41.	31N32	37N68	37N68	LH SIDE PLYWOOD/POLY
42.	-	37N51	37N51	FRONT PANEL
43.	-	B111	B111	OUTER BUSHING FOR TANDEM
44.	S47	"	"	GREASE LINE FITTING
45.	31N43	"	"	GREASE LINE
46.	16V9	"	"	GREASE LINE BRACKET
Not Shown	12V36	"	"	WHEEL 16.1 x 14
Not Shown	23N179A	"	-	WHEEL 22.5 x 8.25

NOTE: " SAME PART # AS PREVIOUS MODEL - PART IS NOT USED ON THIS MODEL
 * SAME PART # AS PREVIOUS MODEL

FIGURE 3

FRONT SHIELD & DRIVE ASSEMBLY

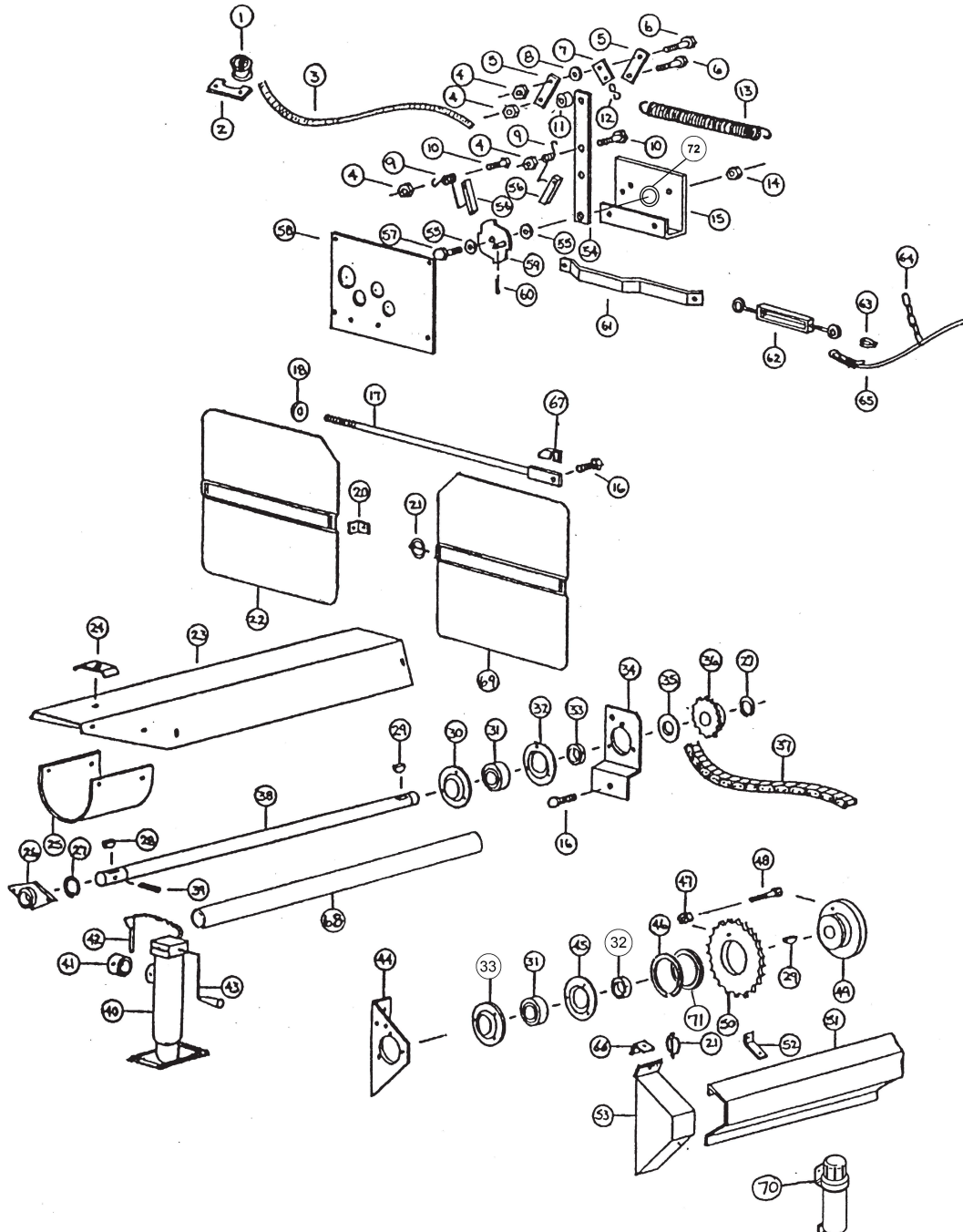


FIGURE 3

FRONT SHIELD & DRIVE ASSEMBLY

	<u>PART #</u>			
<u>ITEM</u>	<u>310</u>	<u>430</u>	<u>370</u>	<u>DESCRIPTION</u>
1	F33	“	“	CABLE GUIDE
2	23N182	“	“	BRACKET
3	23N183	“	“	ROPE - 15'
4	YNTL12005	“	“	HEX NUT, TOP LOCK, 3/8"-16
5	23N184	“	“	BRACKET
6	YBHH12035	“	“	BOLT, 3/8" X 1-1/4" GR. 5
7	23N185	“	“	SPRING BRACKET
8	YWFL12005	“	“	WASHER, FLAT, 3/8" USS
9	23N186	“	“	DOG SPRING
10	YBHH12010	“	“	BOLT, 3/8" X 1" GR. 5
11	D107	“	“	SPACER
12	X79	“	“	S-HOOK
13	23N187	“	“	SPRING
14	YNHX16005	“	“	HEX NUT, 1/2"
15	23N188	“	“	SHIFTER BRACKET
16	YBHH16045	“	“	BOLT, 1/2" X 1-1/4" GR. 5
17	23N63	“	“	TIGHTENER ROD
18	F129	“	“	WASHER
20	F92	“	“	SHIELD BRACKET
21	YPLY08010	“	“	LYNCH PIN, 1/4" X 1-1/2"
22	23N305	“	“	FRONT SHIELD
23	23N66	“	“	SHIELD
24	23N67	“	“	TAILGATE HOSE BRACKET
*	HE42	“	“	HYDRAULIC DRIVE BRACKET
25	F54	“	“	SHIELD
26	12N29	“	“	BEARING
27	F73	“	“	SNAP RING
28	5B10	“	“	1/4" X 1" KEY
29	5B9	“	“	3/8" X 1-1/4" KEY
30	F114A	“	“	FLANGE, 1-1/4" W/45 DEG. ZERK
31	12N122	“	“	BEARING W/LOCK COLLAR ASSEMBLY
32	12N122	“	“	BEARING W/LOCK COLLAR ASSEMBLY
33	F14	“	“	BEARING FLANGE, 1-1/4" #62-MM-3
34	23N68	“	“	FRONT ADJUSTMENT PLATE
35	23N69	“	“	SPACER
36	23N70	“	“	25T SPROCKET
*	37N72	“	“	16T SPROCKET (OPTIONAL 1000 RPM)

NOTE: * MEANS NOT SHOWN

“ MEANS SAME AS PREVIOUS MODEL

FIGURE 3

FRONT SHIELD & DRIVE ASSEMBLY

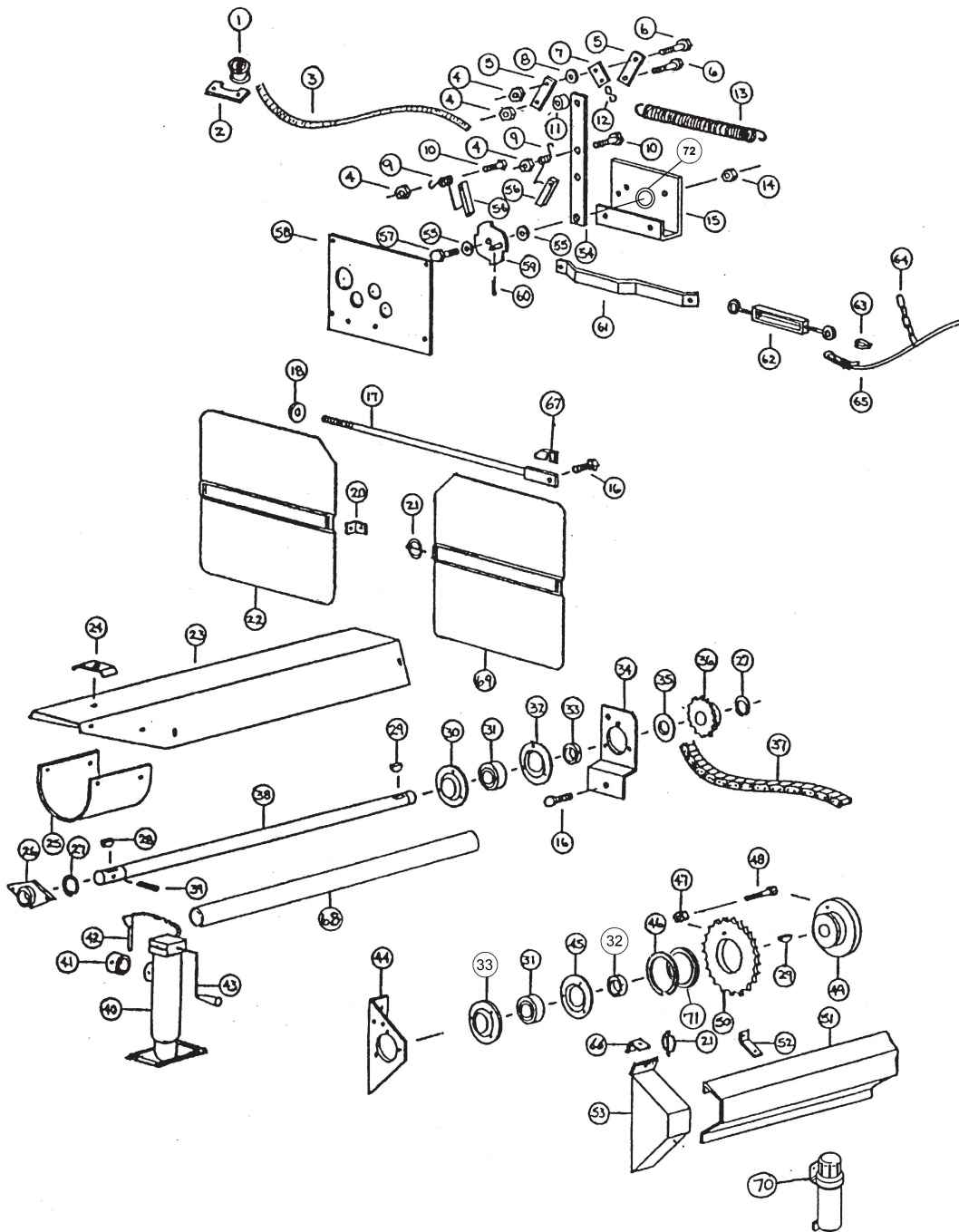


FIGURE 3

FRONT SHIELD & DRIVE ASSEMBLY

	<u>PART #</u>			<u>DESCRIPTION</u>
<u>ITEM</u>	<u>310</u>	<u>370</u>	<u>430</u>	
37	23N71	"	"	#60 ROLLER CHAIN 122 PITCHES
38	23N72	"	"	FRONT SHAFT
39	YPEX10020	"	"	EXPANSION PIN, 5/16" X 2-1/4"
40	27N49	"	"	JACK
*	12N120	"	"	JACK GEAR REPAIR KIT
41	27N51	"	"	JACK MOUNT
42	27N50	"	"	JACK PIN
43	12N119	"	"	HANDLE
*	12N118	"	"	REPLACEMENT BEARING
44	23N74	"	"	BEARING PLATE
45	F114A	"	"	FLANGE
46	23N189	"	"	SNAP RING
47	YNL12005	"	"	HEX NUT, TOP LOCK, 3/8"-16
48	YBHH12025	"	"	BOLT, 3/8" X 1-1/2" GR. 5
49	45N71	"	"	SHEAR HUB
50	C1MS01	"	"	60-A-30 SPROCKET
51	31N17	37N27	37N27	SIDE SHIELD
52	23N79	"	"	BRACKET
53	23N80	"	"	SHIELD
54	23N192	"	"	FRONT SHIFTER ARM
55	YWFL16005	"	"	WASHER, FLAT, 1/2" USS
56	23N193	"	"	DOG
57	YBHH16055	"	"	BOLT, 1/2" X 1-3/4" GR. 5
58	23N195	"	"	SHIFTER PANEL
59	23N196	"	"	SPEED SELECTOR
60	YPCT04005	"	"	COTTER PIN, 1/8" X 1"
61	23N197	"	"	SHIFTER ARM
62	F84	"	"	TURNBUCKLE
63	F44	"	"	CABLE LOOP
64	23N198	37N64	37N64	CABLE CHAIN
65	31N27	37N53	37N53	CABLE
66	23N242	F92	F92	SHIELD BRACKET
67	23N278	"	"	SPACER
68	37N74	"	"	FRONT SHAFT GUARD
69	23N306	"	"	FRONT SHIELD LH
70	S522	"	"	MANUAL HOLDER
71	C112G01	"	"	SHEAR HUB SPACER
72	31N51	"	"	SHIFTER SPACER WASHER

NOTE: * MEANS NOT SHOWN

" MEANS SAME AS PREVIOUS MODEL

FIGURE 4

BACK SHIELDS & DRIVE ASSEMBLY

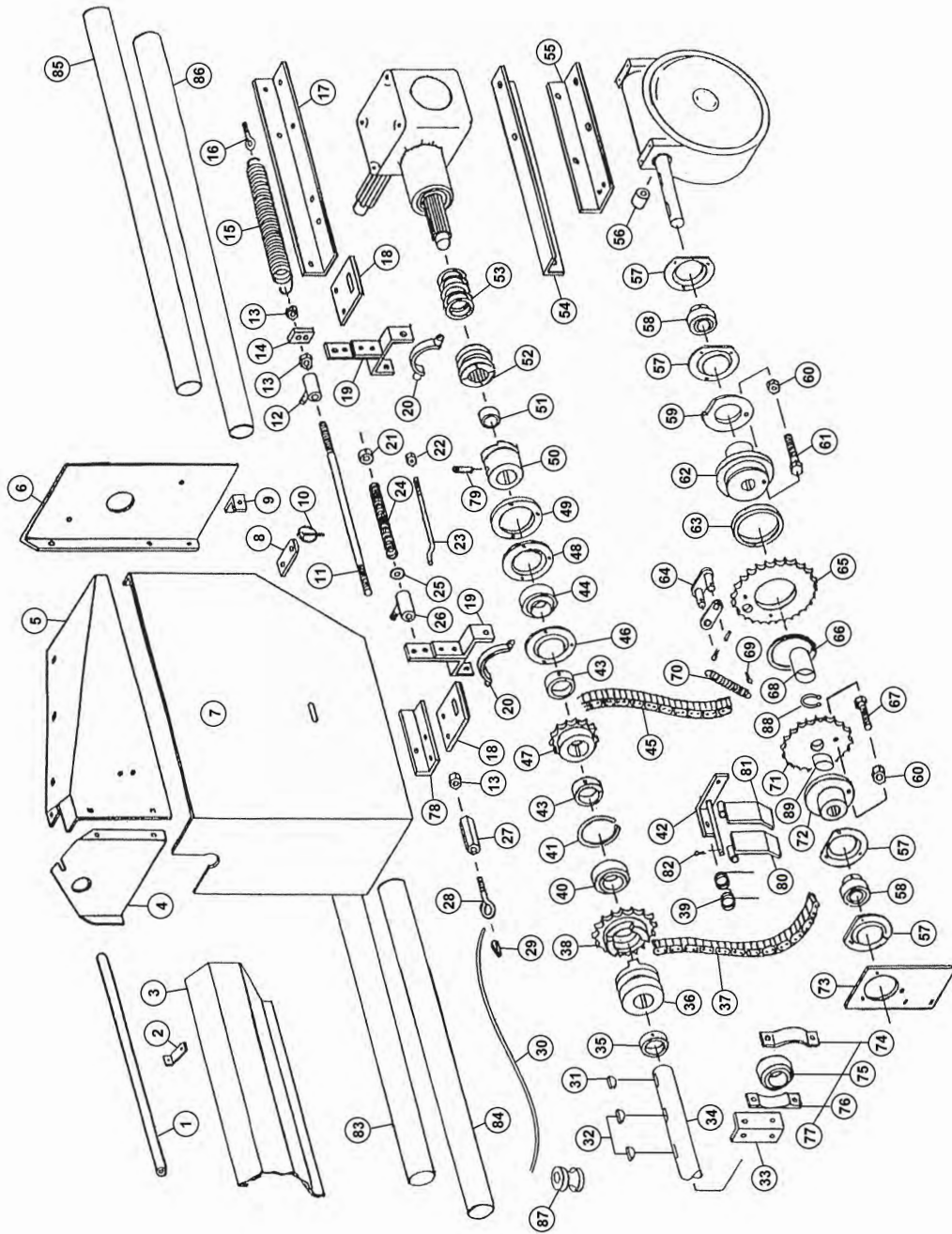


FIGURE 4

BACK SHIELDS & DRIVE ASSEMBLY

<u>ITEM</u>	<u>PART #</u>			<u>DESCRIPTION</u>
	<u>310</u>	<u>370</u>	<u>430</u>	
1	23N200	"	"	CABLE GUARD
2	23N79	"	"	SIDE SHIELD BRACKET
3	31N28	37N54	37N54	SIDE SHIELD
4	23N201	37N55	37N55	SHIELD
5	23N202	37N56	37N56	BACK SHIELD TOP
6	23N203	37N57	37N57	BACK SHIELD
7	23N204	"	"	COVER
8	23N96	"	"	SHIELD BRACKET
9	---	F92	F92	ANGLE
10	S122	"	"	LYNCH PIN, 1/4" X 1-1/2"
11	23N205	"	"	CLUTCH ROD
12	23N206	"	"	SHIFTING ROD BRACKET
13	YNHX12005	"	"	HEX NUT, 3/8"-16
14	23N207	"	"	SPRING BRACKET
15	K103	"	"	SPRING
16	YBTE08005	"	"	TURNUED EYE BOLT, 1/4" X 1" FULL THREAD
17	23N85	"	"	TOP ANGLE
18	23N86	"	"	SHIFTER BRACKET
19	D57	"	"	SHIFTER LEVER
20	23N208	"	"	YOKE W/ ZERK
21	23N209	"	"	COLLAR
22	YNTL08005	"	"	HEX NUT, TOP LOCK, 1/4"-20
23	23N210	"	"	SHIFTING ROD
24	23N211	"	"	SPRING BRACKET
25	YWFL12005	"	"	WASHER, FLAT, 3/8" USS
26	23N206	"	"	ROD BRACKET
27	23N212	"	"	COUPLING NUT
28	YBTE12005	"	"	TURNUED EYE BOLT, 3/8" X 1"
29	F44	"	"	CABLE LOOP
30	31N27	37N53	37N53	CABLE
31	5B9	"	"	3/8" X 1-1/4" WOODRUFF KEY
32	5B10	"	"	1/4" X 1" WOODRUFF KEY
33	23N97	"	"	SIDE BEARING BRACKET
34	31N29	37N58	37N58	SIDE SHAFT
35	F6	"	"	COLLAR
36	23N215	"	"	CLUTCH THROW-OUT
37	23N93	"	"	#50 CHAIN 60 PITCHES
38	23N216	"	"	CLUTCH SPROCKET
*	61138	"	"	INCLUDES (SPROCKET,BEARING,SNAP RING)
39	31N33	"	"	SPRING TIGHTENER
40	BFR525	"	"	BEARING
41	3G19	"	"	SNAP RING
42	31N36	"	"	TIGHTENER BRACKET
43	12N122	"	"	BEARING W/LOCK COLLAR ASSEMBLY
44	12N122	"	"	BEARING W/LOCK COLLAR ASSEMBLY
45	23N93	"	"	#50 CHAIN 60 PITCHES
46	F114A	"	"	FLANGE
47	10R11	"	"	13 TOOTH SPROCKET

NOTE: "(SAME PART # AS PREVIOUS MODEL
 * SAME PART # AS PREVIOUS MODEL - PART IS NOT USED ON THIS MODEL

FIGURE 4

BACK SHIELDS & DRIVE ASSEMBLY

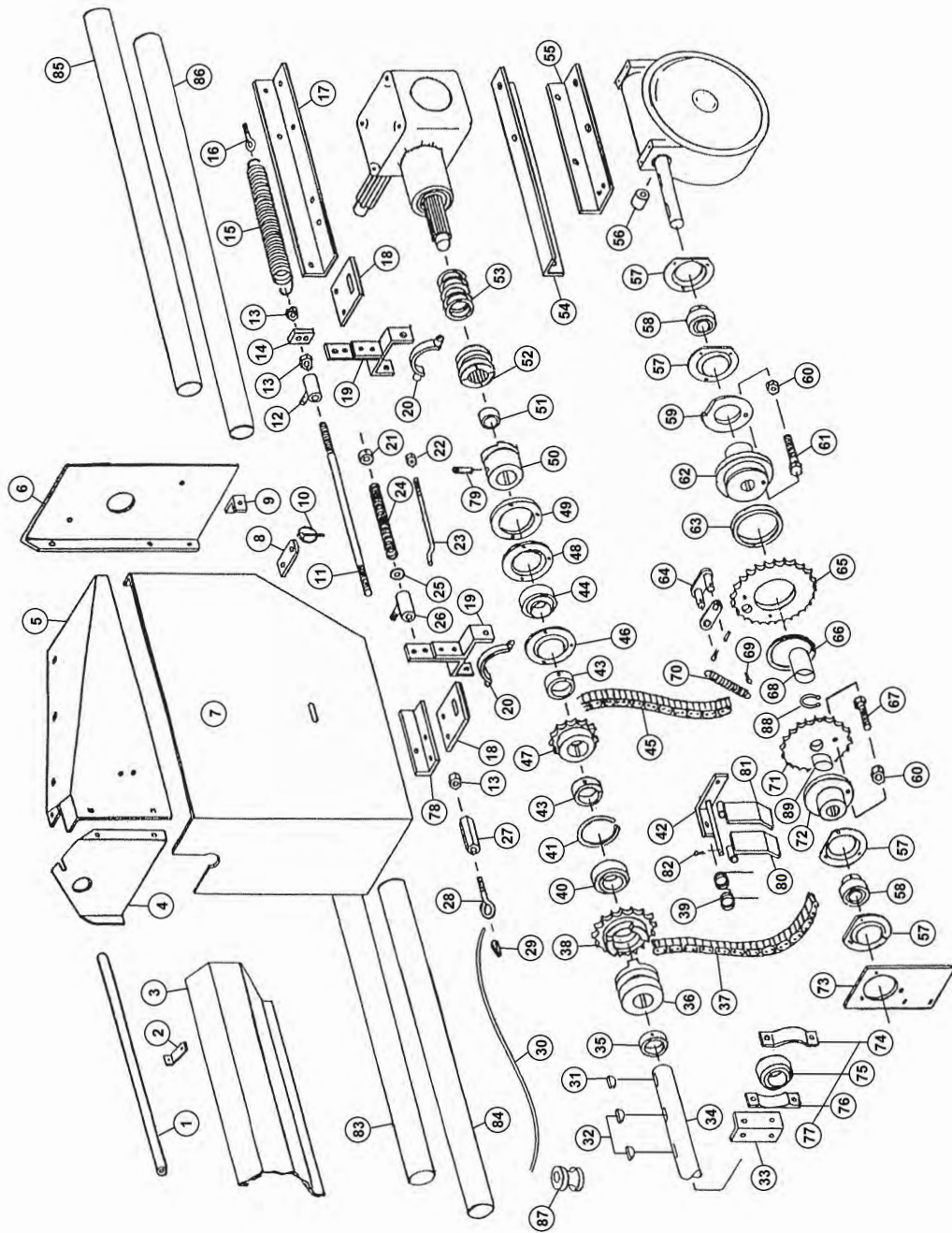


FIGURE 4

BACK SHIELDS & DRIVE ASSEMBLY

<u>ITEM</u>	<u>310</u>	<u>370</u>	<u>430</u>	<u>DESCRIPTION</u>
48	F14	"	"	FLANGE
49	23N174	"	"	FLANGE SPACER
50	23N241	"	"	CLUTCH
51	D68	"	"	BRONZE BUSHING
52	23N90	"	"	CLUTCH
53	23N89	"	"	SPRING
54	23N88	"	"	BOTTOM ANGLE
55	23N95	"	"	WORM BOX HOLDER
56	23N94	"	"	SPACER
57	X85	"	"	FLANGE
58	23N221	"	"	BEARING W/ SETSCREWS
59	23N222	"	"	SHEAR PLATE
60	YNTL08005	"	"	HEX NUT, TOP LOCK, 1/4"-20
61	YBHH08035	"	"	BOLT, 1/4" X 1-1/4" GR. 5
62	23N224	"	"	SHEAR HUB
63	23N225	"	"	BRONZE RING
64	60531	"	"	CONNECTOR LINK W/ PINS
65	23N226	"	"	30T SPROCKET
66	23N227	"	"	SNAP RING
67	YBHH08035	"	"	BOLT, 1/4" X 1-1/4" GR. 5
68	56029	"	"	SPACER
69	YPCT04005	"	"	COTTER PIN, 1/8" X 1"
70	23N229	"	"	DOG SPRING
71	56026	"	"	25T SPROCKET
72	56025	"	"	SHEAR HUB
73	23N230	"	"	BEARING PANEL
74	12N34	"	"	BEARING COVER
75	12N33	"	"	BEARING
76	12N35	"	"	HOLDER
77	12N36	"	"	BEARING
78	23N239	"	"	SHIFTER SUPPORT
79	YSFD12005	"	"	SET SCREW, SOCKET, FULL DOG PT, 3/8"-16 X 3/4"
80	31N34	"	"	LH TIGHTENER BAR
81	31N35	"	"	RH TIGHTENER BAR
82	YPCT04005	"	"	COTTER PIN, 1/8" X 1"
*	X60	"	"	#50 OFFSET
*	X61	"	"	#50 CONN.
*	31N38	"	"	CHAIN TIGHTENER ASSEMBLY
83	31N44	37N76	"	#2 SIDE SHAFT GUARD
84	31N45	37N75	"	#1 SIDE SHAFT GUARD
85	60643	37N76	"	#4 SIDE SHAFT GUARD
86	31N46	37N77	"	#3 SIDE SHAFT GUARD
87	F33	"	"	CABLE GUIDE
88	56024	"	"	EXTERNAL SNAP RING 1-1/2"
89	56027	"	"	BUSHING
*	56036	"	"	SPROCKET BUSHING ASSEMBLY (INCLUDES ITEM #71 & #89)

NOTE: " SAME PART # AS PREVIOUS MODEL - PART IS NOT USED ON THIS MODEL
*** SAME PART # AS PREVIOUS MODEL**

FIGURE 5
HYDRAULIC ENDGATE ASSEMBLY

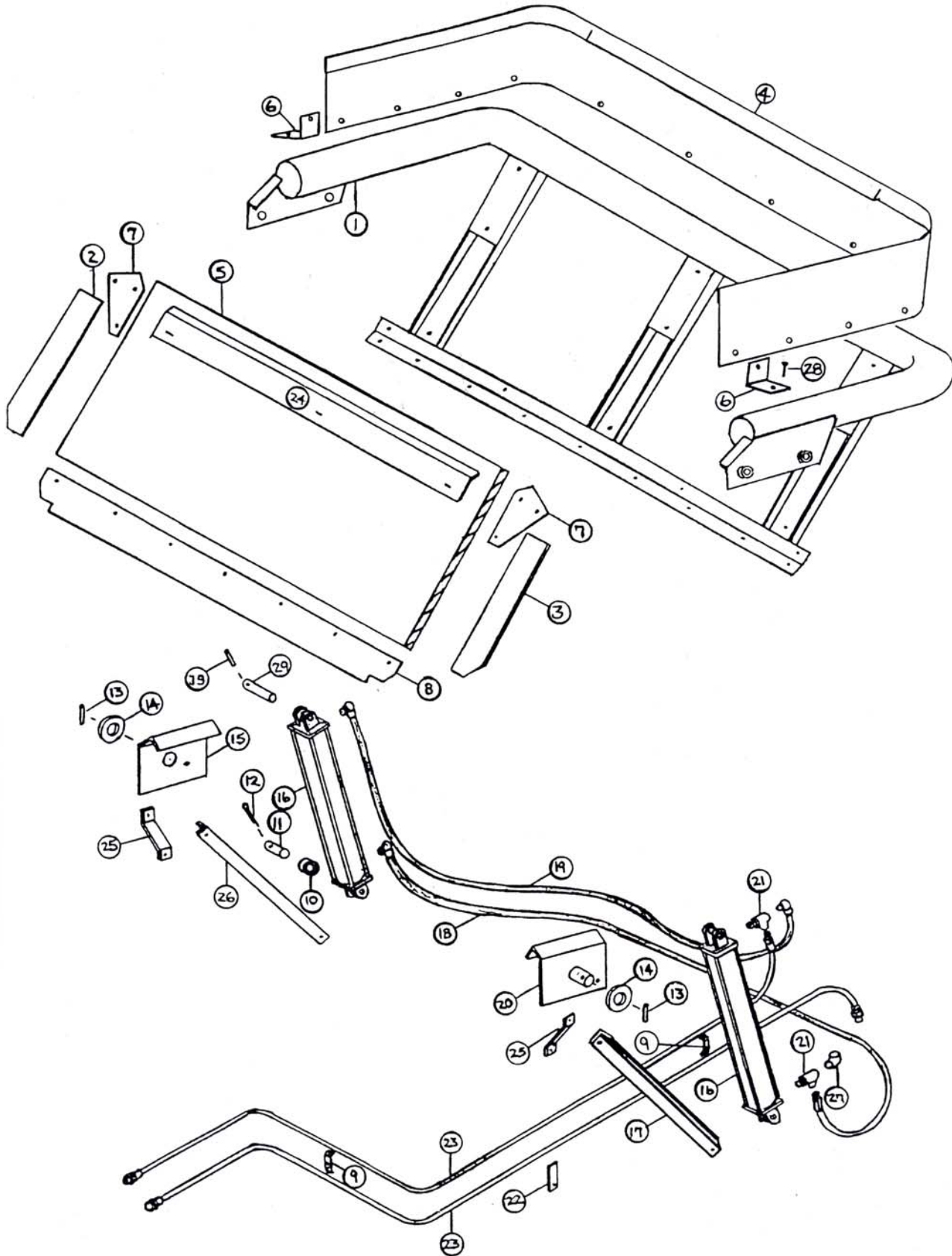


FIGURE 5

HYDRAULIC ENDGATE ASSEMBLY

<u>ITEM</u>	<u>PART #</u>			<u>DESCRIPTION</u>
	<u>310</u>	<u>370</u>	<u>430</u>	
1	23N298	37N79	37N34	TAILGATE FRAME
2	23N99	37N35	37N35	RH SIDE RUBBER
3	23N100	37N36	37N36	LH SIDE RUBBER
4	-----	-----	43N5	BACK EXTENSION
5	31N37A	37N69A	37N69A	TAILGATE PLYWOOD WITH FIBERGLASS
6	-----	-----	43N6	EXTENSION ANGLE
7	23N104	"	"	TAILGATE CORNER
8	23N105	"	"	BOTTOM RUBBER
9	23N67	"	"	HOSE BRACKET
10	K132	"	"	SPACER
11	23N107	"	"	CYLINDER PIN
12	YPCT07005	"	"	COTTER PIN, 7/32" X 2 "
13	YPEX10015	"	"	EXPANSION PIN, 5/16" X 1-3/4"
14	23N109	"	"	WASHER
15	23N299	"	23N110	RH TAILGATE MOUNT
16	23N111A	"	"	HYDRAULIC CYLINDER(310 SERIAL #415402/ 370 SERIAL #416370/ 430 SERIAL #419465 AND PRIOR)
*	56015	"	"	2" X 16" HYDRAULIC CYLINDER(310 SERIAL #415403/ 370 SERIAL #416370/ 430 SERIAL #419465 AND FORWARD)
17	23N231	37N59	37N59	BRACE
18	23N113	37N60	37N60	HOSE (23N113-96" / 37N60-108")
19	23N114	37N61	37N61	HOSE (23N114-138" / 37N61-152")
20	23N300	"	23N115	LH TAILGATE MOUNT
21	23N116	"	"	TEE
22	23N117	"	"	HOSE HOLDER
23	31N50	37N83	37N83	HOSE (31N50-316" / 37N83-152")
24	23N163	"	"	TAILGATE POLY HOLD DOWN
25	23N232	"	"	TAILGATE BRACKET BRACE
26	23N233	37N62	37N62	TAILGATE BRACKET BRACE
27	23N234	"	"	90° STREET ELBOW 3/8"
28	-----	-----	12V3	SELF TAPPING BOLT
29	23N301	"	"	CYLINDER PIN
30	59125	"	"	TAILGATE BOTTOM

**NOTE: " SAME PART # ASPREVIOUS MODEL
 - PART IS NOT USED ON THIS MODEL
 * MEANS NOT SHOWN**

FIGURE 6

APRON CHAIN ASSEMBLY

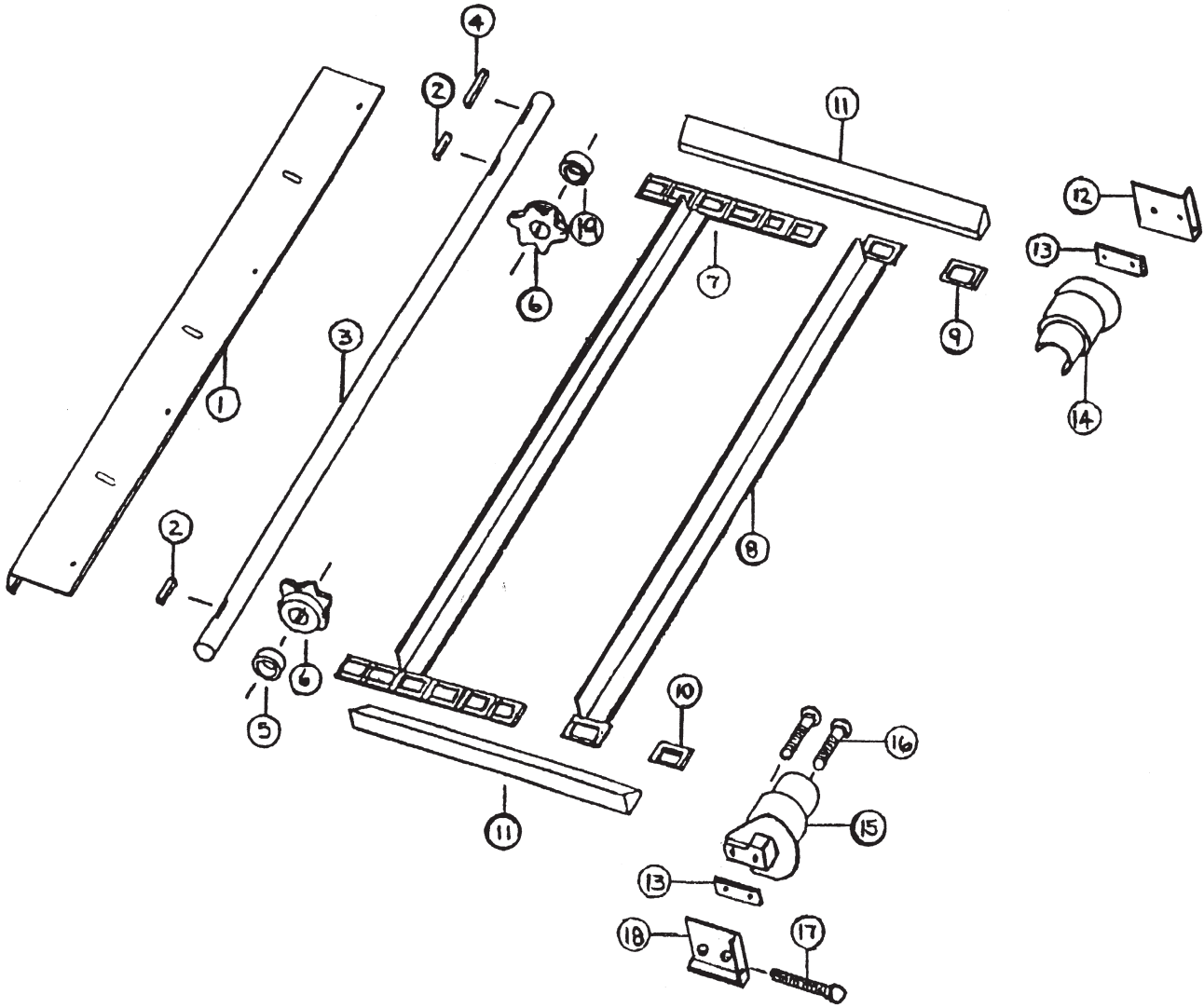


FIGURE 6

APRON CHAIN ASSEMBLY

<u>ITEM</u>	<u>310</u>	<u>370</u>	<u>430</u>	<u>DESCRIPTION</u>
1.	37N82	"	"	DRIVE SHAFT SHIELD
2.	23N303	"	"	3/8" x 1-3/4" SQUARE KEY
3.	27N19	"	"	DRIVE SHAFT
4.	S138	"	"	3/8" x 2-3/8" SQ. KEY W/ROUND ENDS
5.	23N121	"	"	SPACER 5/8"
6.	23N122	"	"	DRIVE SPROCKET 6T
7.	31N21	-	-	APRON CHAIN 26 SLATS, 262 LINKS
	-	37N42	37N42	APRON CHAIN 28 SLATS, 280 LINKS
8.	23N124	"	"	SLAT W/ATTACHMENT LINKS
9.	S55	"	"	T-ROD STANDARD LINK
10.	S55	"	"	T-ROD STANDARD LINK
11.	31N22	37N43	37N43	APRON CHAIN SIDE SPACERS
12.	A30	"	"	CHAIN SLIDE PLATE LH
13.	23N126	"	"	CHAIN SLIDE SPACER
14.	23N127	"	"	T-ROD SLIDE LH
15.	23N128	"	"	T-ROD SLIDE RH
16.	YBCR16045	"	"	1/2" x 4" CARRIAGE BOLT GR.5
17.	YBHH16145	"	"	1/2" x 4-1/2" BOLT GR.5
18.	A29	"	"	CHAIN SLIDE PLATE RH
19.	23N266	"	"	SPACER 5/16"

**NOTE: " SAME PART # AS PREVIOUS MODEL
- PART IS NOT USED ON THIS MODEL**

FIGURE 7
OPTIONAL HYDRAULIC DRIVE ASSEMBLY

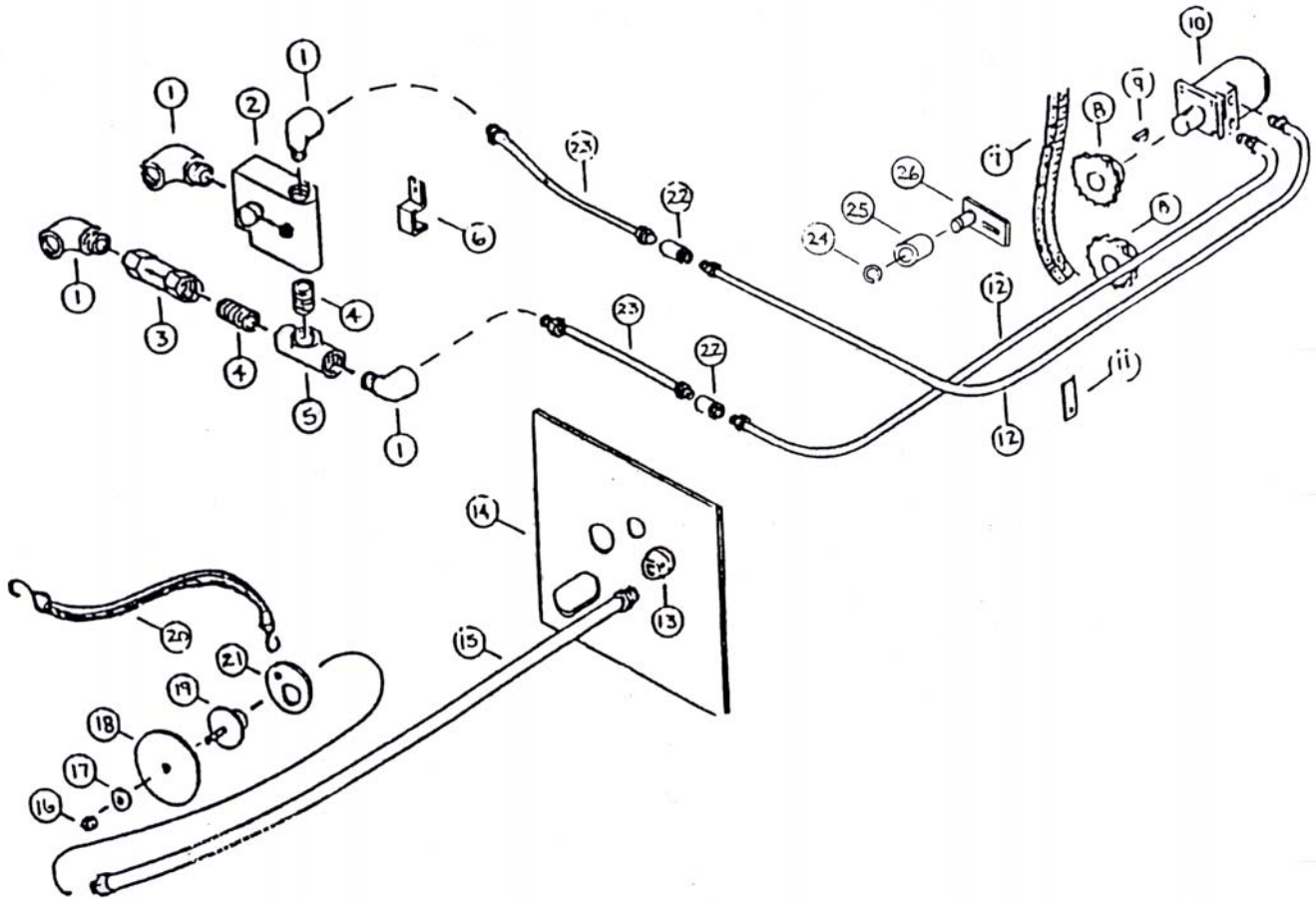


FIGURE 7

OPTIONAL HYDRAULIC DRIVE ASSEMBLY

<u>ITEM</u>	<u>PART #</u>			<u>DESCRIPTION</u>
	<u>310</u>	<u>370</u>	<u>430</u>	
1.	HE58	"	"	90° STREET ELBOW
2.	DF15	"	"	SPEED CONTROL
3.	DF18	"	"	CHECK VALVE
4.	DF7	"	"	NIPPLE
5.	DF8	"	"	TEE
6.	HE14	"	"	HOSE BRACKET
7.	23N131	"	"	#50 ROLLER CHAIN 40 PITCHES
8.	11S19	"	"	20T SPROCKET
9.	5B10	"	"	1/4" x 1" WOODRUFF KEY
10.	DF1	"	"	HYDRAULIC MOTOR
11.	23N117	"	"	HOSE HOLDER
12.	23N132	"	"	HYDRAULIC MOTOR HOSE
13.	DF21	"	"	REDUCER
14.	23N133	"	"	CONTROL PANEL
15.	DF9	"	"	HOSE FOR HANDLE
16.	YNTL12005	"	"	TOP LOCK NUT, 3/8" - 16
17.	DF12	"	"	WASHER
18.	DF11	"	"	HANDLE
19.	DF10	"	"	HANDLE BRACKET
20.	DF14	"	"	STRAP
21.	DF22	"	"	RING FOR STRAP
22.	31N23	"	"	COUPLING
23.	HE12	"	"	HOSE
24.	10R32	"	"	SNAP RING
25.	23N238	"	"	CHAIN TIGHTNER ROLLER
26.	L10R35	"	"	TIGHTNER BRACKET

NOTE: " SAME PART # AS PREVIOUS MODEL

FIGURE 8

WORM GEARBOX ASSEMBLY

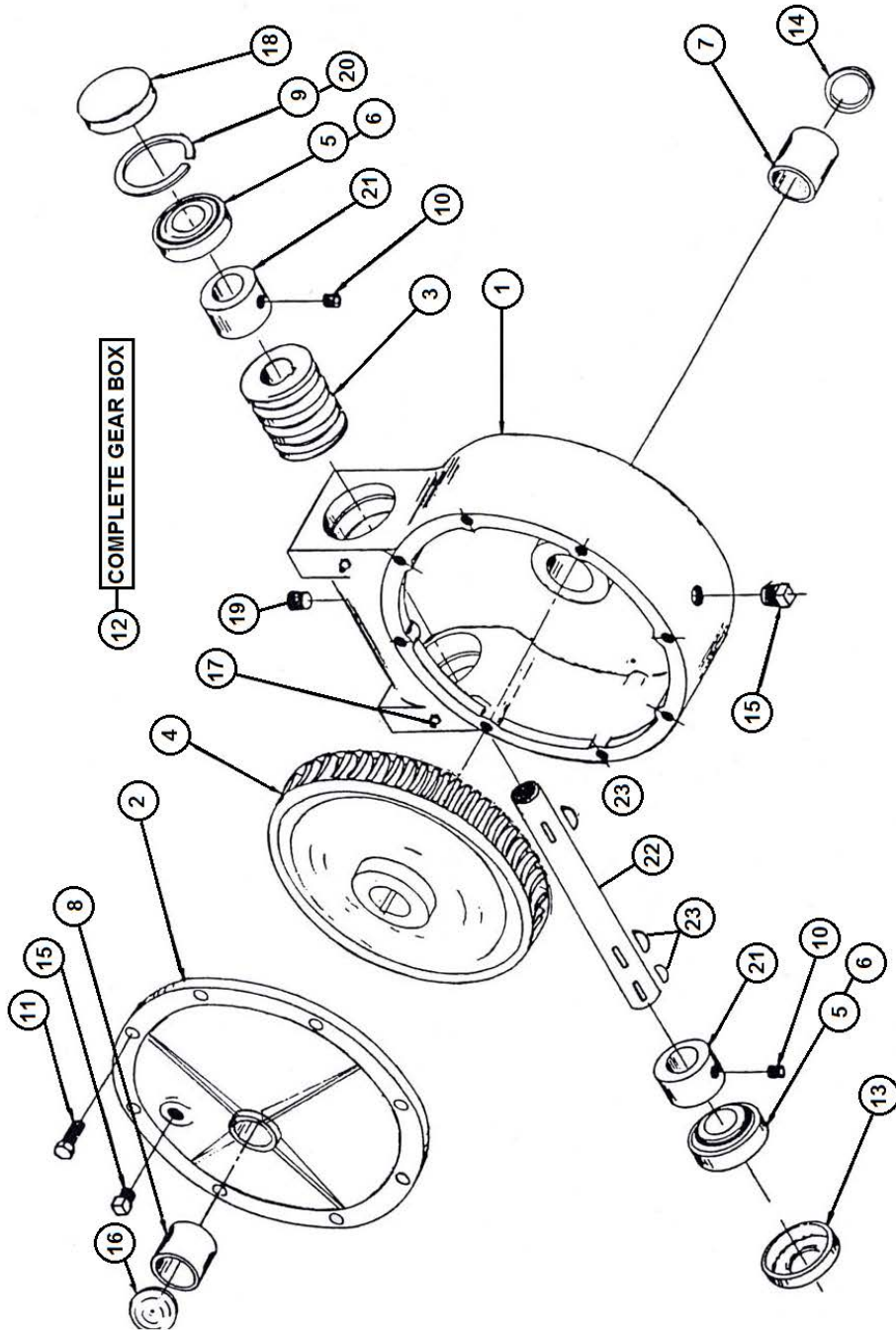


FIGURE 8

WORM GEARBOX ASSEMBLY

<u>ITEM</u>	<u>PART #</u>			<u>DESCRIPTION</u>
	<u>310</u>	<u>370</u>	<u>430</u>	
1.	G114	"	"	HOUSING
2.	G116	"	"	COVER
3.	G76	"	"	WORM
4.	G77	"	"	WORM GEAR
5.	G78	"	"	BEARING #15101
6.	G79	"	"	BEARING CUP #15245 BEARING -
7.	X8	"	"	OIL LITE
8.	X75	"	"	BEARING - OIL 1 1/2 X 1 3/4 X 1 1/4
9.	G82	"	"	SNAP RING
10.	YSKP12025	"	"	SETSCREW 3/8" NC x 3/8" LONG
11.	YSKP12005	"	"	CAPSCREW 3/8" NC x 1" LONG
12.	G122	"	"	WORM GEARBOX COMPLETE
13.	G123	"	"	SEAL
14.	17G133	"	"	SEAL
15.	G65	"	"	PLUG 3/8" NPT
16.	G117	"	"	CAP 1-7/8"
17.	G89	"	"	ZERK 1/4"-28
18.	G90	"	"	CAP
19.	G91	"	"	VENT PLUG 3/8" NPT
20.	G92	"	"	SHIM
21.	G93	"	"	SPACER
22.	23N236	"	"	WORM GEAR SHAFT
23.	5B10	"	"	1/4" x 1" WOODRUFF KEY
*	G88	"	"	GASKET

NOTE: " SAME PART # AS PREVIOUS MODEL

*** MEANS NOT SHOWN**

FIGURE 9

BEVEL GEARBOX

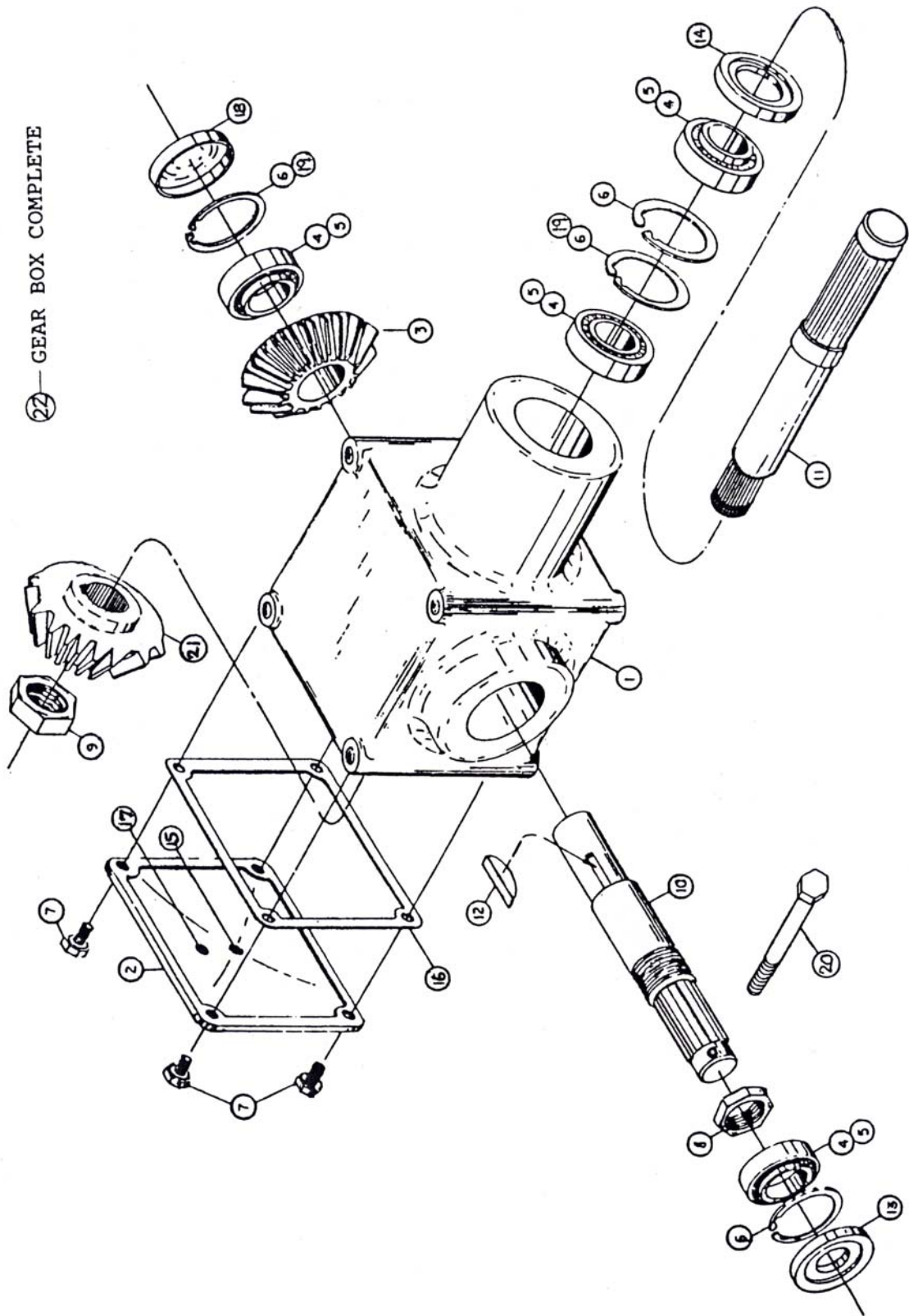


FIGURE 9

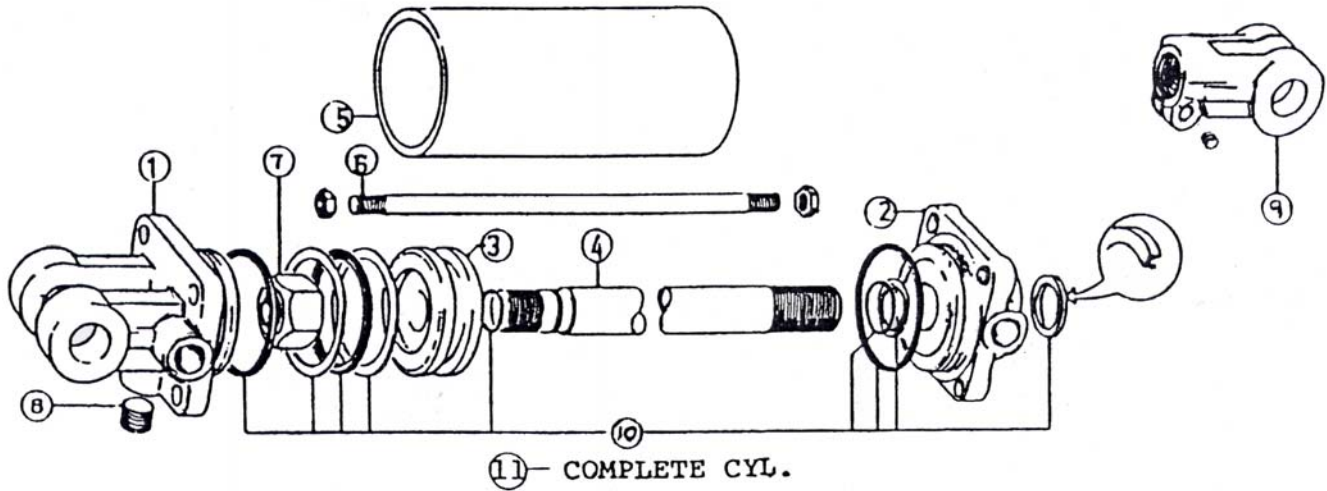
BEVEL GEARBOX

<u>ITEM</u>	<u>310</u>	<u>370</u>	<u>430</u>	<u>DESCRIPTION</u>
1.	G50	"	"	HOUSING
2.	G51	"	"	COVER
3.	23N136	"	"	BEVEL GEARBOX 24T
4.	G53	"	"	BEARING #14137A
5.	G54	"	"	BEARING CUP #14276
6.	G55	"	"	SNAP RING
7.	YBHH10132	"	"	CAPSCREW, 5/16" X 5/8"
8.	G57	"	"	STAKE NUT 1-1/2"
9.	31N39	"	"	STAKE NUT 1-1/8"
10.	23N137	"	"	SHAFT - OUTPUT
11.	31N40	"	"	SHAFT - INPUT DOUBLE SPLINED
12.	G61	"	"	"E" (1210) WOODRUFF KEY (Hard5)
13.	G63	"	"	SEAL - OUTPUT
14.	G64	"	"	SEAL - INPUT
15.	G65	"	"	PLUG 1/8" NPT
16.	G66	"	"	GASKET
17.	G67	"	"	PLUG 1/8" NPT
18.	G68	"	"	CAP
19.	G69	"	"	SHIM
20.	YBHH10130	"	"	5/16" x 5" BOLT GR.5
21.	31N41	"	"	BEVEL GEAR 16T-SPLINED
22.	31N42	"	"	BEVEL GEARBOX COMPLETE

NOTE; " SAME PART # AS PREVIOUS MODEL

FIGURE 10

HYDRAULIC CYLINDER

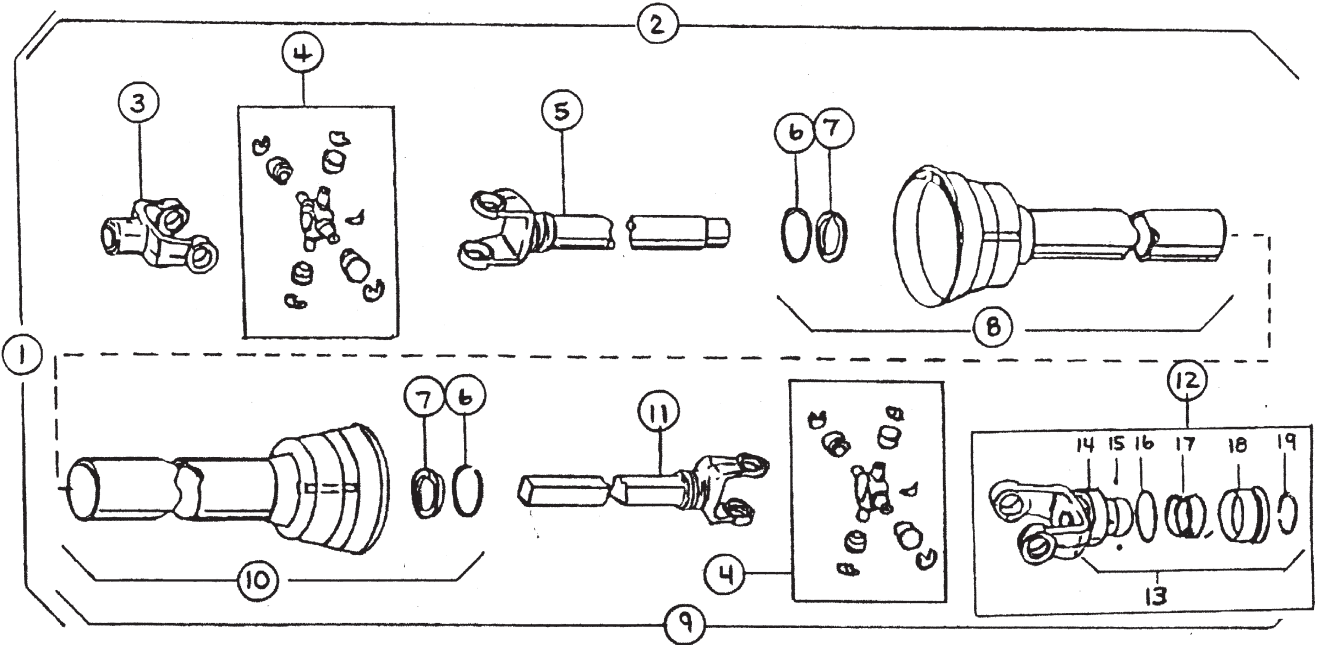


<u>ITEM</u>	<u>310</u>	<u>370</u>	<u>430</u>	<u>DESCRIPTION</u>
1	23N142A	"	"	CLEVIS CAP
2	23N143A	"	"	ROD CAP(310 SERIAL #415402/ 370 SERIAL #416369/ 430 SERIAL #419464 AND PRIOR)
*	56174	"	"	ROD CAP(310 SERIAL #415403/ 370 SERIAL #416370/ 430 SERIAL #419465 AND FORWARD)
3	23N144	"	"	PISTON(310 SERIAL #415402/ 370 SERIAL #416369/ 430 SERIAL #419464 AND PRIOR)
*	56180	"	"	PISTON FOR 2" CYLINDER(310 SERIAL #415403/ 370 SERIAL #416370/ 430 SERIAL #419465 AND FORWARD)
4	23N145A	"	"	ROD CAP
5	23N146	"	"	CYLINDER TUBE
6	23N147	"	"	TIE ROD
7	23N148	"	"	PISTON NUT
8	23N149	"	"	PLUG
9	23N150A	"	"	ROD CLEVIS
10	23N151	"	"	SEAL KIT(310 SERIAL #415402/ 370 SERIAL #416369/ 430 SERIAL #419464 AND PRIOR)
*	56187	"	"	SEAL KIT FOR 2" CYLINDER(310 SERIAL #415403/ 370 SERIAL #416370/ 430 SERIAL #419465 AND FORWARD)
11	23N111A	"	"	HYDRAULIC CYLINDER(310 SERIAL #415402/ 370 SERIAL #416369/ 430 SERIAL #419464 AND PRIOR)
*	56015	"	"	2" X 16" HYDRAULIC CYLINDER(310 SERIAL #415403/ 370 SERIAL #416370/ 430 SERIAL #419465 AND FORWARD)

NOTE " SAME PART # AS PREVIOUS MODEL

FIGURE 11

PTO ASSEMBLY



<u>ITEM</u>	<u>PART #</u>				<u>DESCRIPTION</u>
	<u>310</u>	<u>370</u>	<u>430</u>	<u>1000 RPM</u>	
1.	23N152	"	"	23N313	PTO COMPLETE W/SHIELDS
2.	23N153	"	"	"	MACHINE HALF PTO W/SHIELDS
3.	G1R35	"	"	"	END YOKE MACHINE HALF
4.	14NWKIT	"	"	"	REPAIR KIT
5.	23N155	"	"	"	YOKE AND TUBE
6.	24N26	"	"	"	BEARING RETAINER
7.	4N20	"	"	"	NYLON BEARING
8.	23N156	"	"	"	INNER GUARD INCLUDING ITEM #6 & #7
9.	23N157	"	"	23N314	TRACTOR HALF PTO W/SHIELD
10.	23N158	"	"	23N315	OUTER GUARD INCLUDING ITEM #6 & #7
11.	23N159	"	"	"	YOKE AND SHAFT
12.	23N162	"	"	"	LOCK YOKE ASSEMBLY
*	37N73	"	"	37N73	OPTIONAL 1000 RPM YOKE (1-3/8")
13.	S225	"	"	"	SPRING LOCK REPAIR KIT
14.	S226	"	"	"	COVER
15.	S212	"	"	"	STAINLESS BALL
16.	S227	"	"	"	WASHER
17.	S228	"	"	"	SPRING
18.	S229	"	"	"	COLLAR ASSEMBLY
19.	S215	"	"	"	RETAINING RING
*	S402	"	"	"	PTO SAFETY MANUAL

NOTE: " SAME PART # AS PREVIOUS MODEL
 * MEANS NOT SHOWN

FIGURE 12
OPTIONAL 2ND BEATER

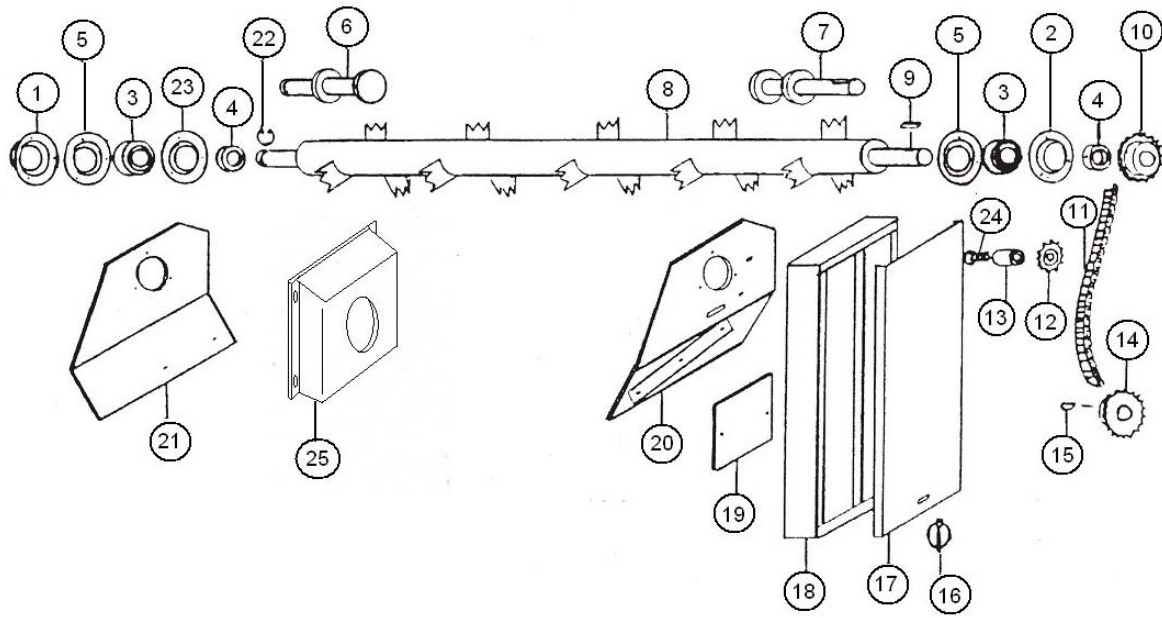


FIGURE 12

OPTIONAL 2ND BEATER

<u>ITEM</u>	<u>PART #</u>			<u>DESCRIPTION</u>
	<u>310</u>	<u>370</u>	<u>430</u>	
1	23N308	"	"	BEARING FLANGE GUARD
2	F114A	"	"	BEARING FLANGE W/ ZERK 450
3	12N122	"	"	BEARING W/ LOCK COLLAR ASSY.
4	12N122	"	"	BEARING W/ LOCK COLLAR ASSY.
5	F14	"	"	BEARING FLANGE, 1-1/4" #62-MM-3
6	23N164	"	"	LH STUB SHAFT
7	23N165	"	"	RH STUB SHAFT
8	23N166	"	"	2ND BEATER
9	G23	"	"	5/16" X 1-3/8" SQUARE KEY
10	D18	"	"	SPROCKET
11	23N167	37N49	37N49	#60 CHAIN
12	12N42	"	"	IDLER SPROCKET
13	23N168	-----	-----	SPACER
14	F13	"	"	SPROCKET
15	5B9	"	"	3/8" X 1-1/4" KEY
16	F56	"	"	CLIP PIN
17	23N169	"	"	COVER
18	23N170	37N48	37N48	SHIELD
19	23N171	37N45	37N45	SHIELD
20	23N172	37N46	37N46	RH PANEL
21	23N173	37N47	37N47	LH PANEL
22	F73			SNAP RING
23	F114A			FLANGE W/ STRAIGHT ZERK
24	YBCR16040	-----	-----	CARR. BOLT, 1/2" X 3-1/2" GR. 5
*	-----	YBCR16030	YBCR16030	CARR. BOLT, 1/2" X 2-1/2" GR. 5
25	57216	"	"	BEATER BEARING PROTECTOR

**NOTE: " SAME PART # AS PREVIOUS MODEL
* MEANS NOT SHOWN**

FIGURE 13

OPTIONAL ELECTRIC CONTROL FOR HYDRAULIC DRIVE

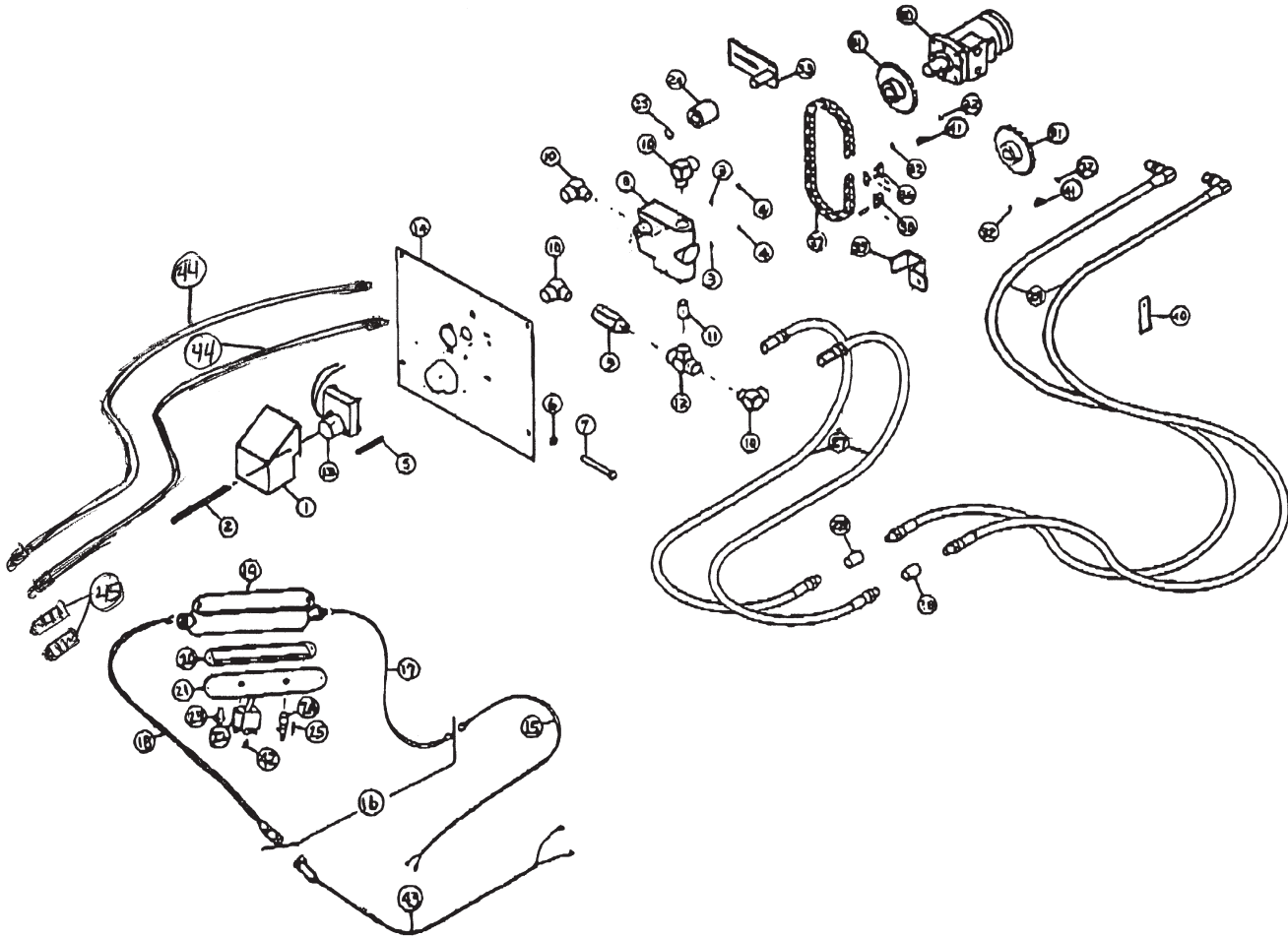


FIGURE 13

OPTIONAL ELECTRIC CONTROL FOR HYDRAULIC DRIVE

<u>ITEM</u>	<u>PART #</u>			<u>DESCRIPTION</u>
	<u>310</u>	<u>370</u>	<u>430</u>	
1.	43H1	"	"	MOTOR SHIELD HOLDER
2.	43H3	"	"	SHIELD BOLT
3.	YWLO08005	"	"	LOCKWASHER, 1/4"
4.	YNTL08005	"	"	TOP LOCK NUT, 1/4"
5.	YBCR08025	"	"	CARR. BOLT, 1/4" X 2 1/2
6.	YNTL12005	"	"	Top Lock Nut, 3/8"
7.	43H5	"	"	FLOW INDICATOR
8.	DF15A	"	"	FLOW CONTROL
9.	DF18	"	"	CHECK VALVE
10.	HE58	"	"	ELBOW
11.	DF4	"	"	NIPPLE
12.	DF8	"	"	TEE
13.	16SV246	"	"	GEAR MOTOR
14.	23N133	"	"	CONTROL PANEL
15.	16SV272	"	"	SPREADER CONTROL CORD
16.	16SV321	"	"	CONTROL END COMPLETE
17.	16SV270	"	"	TRACTOR POWER SUPPLY
18.	16SV271	"	"	CONTROL BOX POWER SUPPLY
19.	16SV316	"	"	CONTROL BOX
20.	16SV317	"	"	CONTROL BOX GASKET
21.	16SV318	"	"	CONTROL BOX COVER
22.	16SV319	"	"	APRON SPEED SWITCH
23.	16SV235	"	"	FLOW CONTROL SWITCH BOOT
24.	16SV231	"	"	FUSE HOLDER
25.	16SV232	"	"	FUSE 5 AMP (AGC-5)
27.	HE12	"	"	HOSE EXTENSION
28.	31N23	"	"	3/8" COUPLING
29.	23N132	"	"	HYDRAULIC MOTOR HOSE
30.	DF1	"	"	HYDRAULIC MOTOR
31.	11S19	"	"	DRIVE SPROCKET
32.	YSKP10010	"	"	SETSCREW(5/16"-18)
33.	L10R35	"	"	TIGHTENER BRACKET
34.	23N238	"	"	TIGHTENER ROLLER
35.	10R32	"	"	SNAP RING
36.	X61	"	"	#50 CHAIN CONNECTOR
37.	23N131	"	"	#50 CHAIN 40 Pitches
38.	X60	"	"	#50 CHAIN OFFSET
39.	HE14	"	"	HOSE BRACKET
40.	23N117	"	"	HOSE HOLDER
41.	5B10	"	"	1/4" x 1" WOODRUFF KEY
42.	YBHH12055	"	"	BOLT, 3/8" X 1 3/4"
43.	16SV269	"	"	TRACTOR POWER SUPPLY CORD
44.	23N309	"	"	HYDRAULIC HOSE
45.	DWM205	"	"	MALE HYDRAULIC TIP

NOTE " SAME PART # AS PREVIOUS MODEL

H&S MFG. CO.

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SEAL OF QUALITY

