

H&S PARTS BOOK

S3131 SPREADER



Revision #04
Starting Ser. #715795

Part #72464
HSMFG0717

**P.O. BOX 768, MARSHFIELD, WI 54449
(715) 387-3414 FAX (715) 384-5463
www.hsmfgco.com**

CONTENTS

Instructions for Ordering Parts - About Improvements	1
Figure 1 - Beater and Pan Assembly.	2-3
Figure 2 - Hub, Spindle and Box Parts.	4-5
Figure 3 - Front Shield and Drive Assembly.	6-9
Figure 4 - Back Shield and Drive Assembly.	10-13
Figure 5 - Hydraulic Endgate.	14-15
Figure 6 - Apron Chain Assembly.	16-17
Figure 7 - Optional Hydraulic Drive Assembly.	18-19
Figure 8 - Worm Gearbox Assembly.	20-21
Figure 9 - Bevel Gearbox.	22-23
Figure 10 - Hydraulic Cylinder.	24
Figure 11 - PTO.	25
Figure 12 - PTO 1000RPM.	26-27
Figure 13 - Optional Second Beater.	28-29
Figure 14 - Optional Electric Control for Hydraulic Drive.	30-31
Figure 15 - Electric Control for Hydraulic Drive.	32-33
Parts Notes	34

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

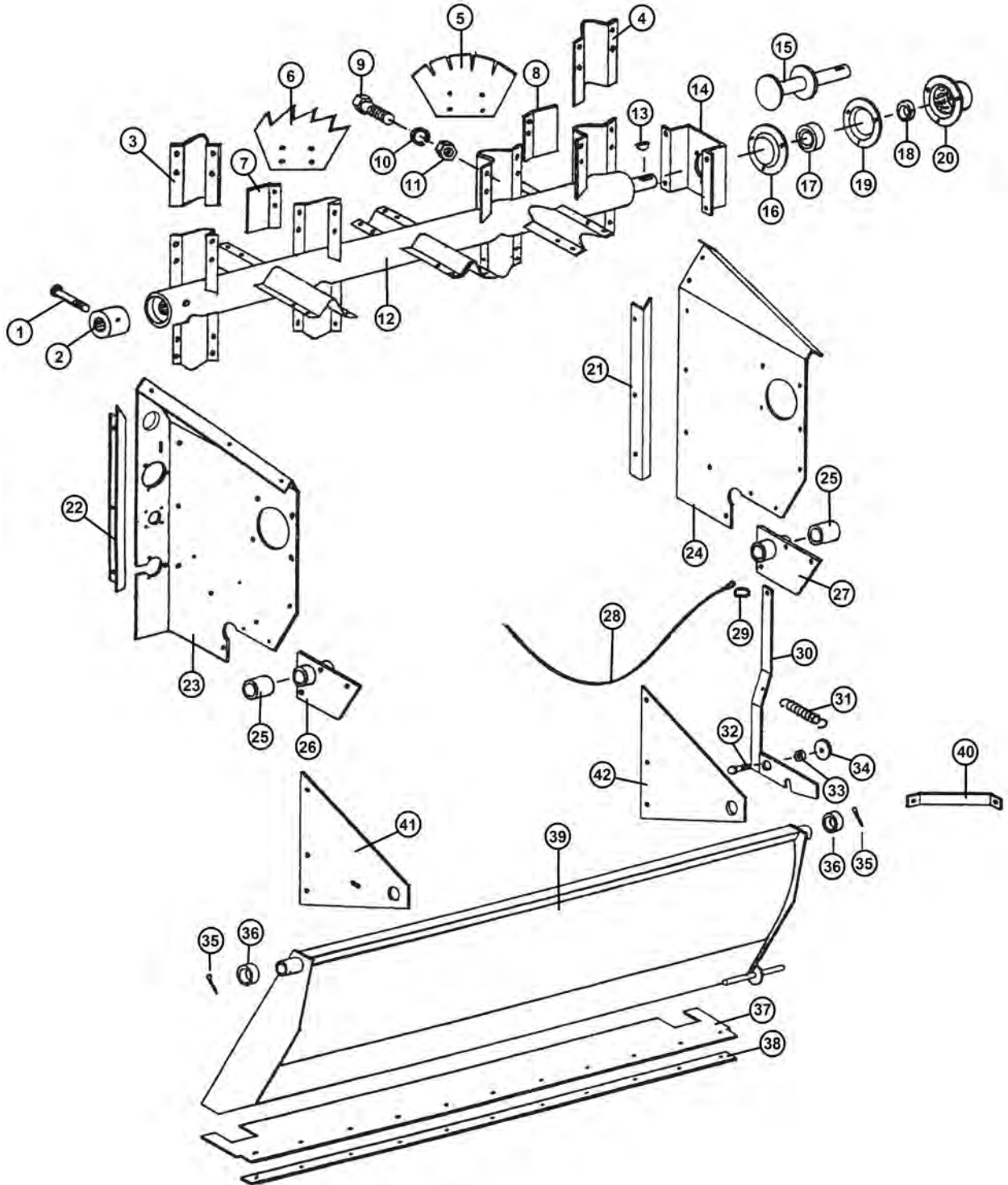


FIGURE 1

BEATER & PAN ASSEMBLY

<u>ITEM</u>	<u>PART #</u>	<u>DESCRIPTION</u>
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	RH SIDE POLY HOLD DOWN
22	23N14	LH SIDE POLY HOLD DOWN
23	23N175	LH MAIN PANEL
24	23N16	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	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	23N30	PAN
40	23N267	PAN BRACE
41	23N28	LH PAN SUPPORT
42	23N29	RH PAN SUPPORT

FIGURE 2

HUB, SPINDLE & BOX PARTS

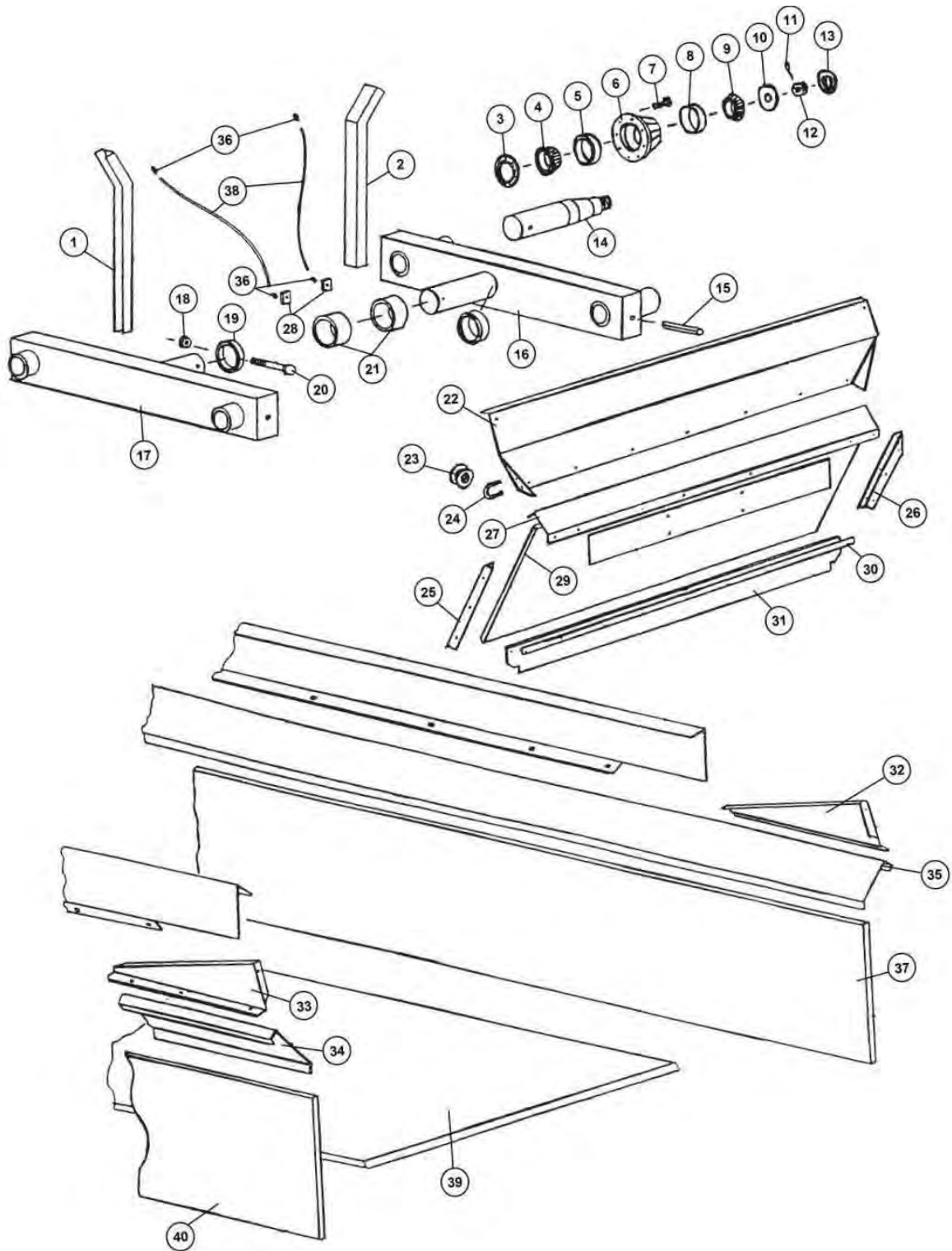


FIGURE 2

HUB, SPINDLE AND BOX PARTS

<u>ITEM</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	23N31	RH SIDE STAKE
2	23N32	LH SIDE STAKE
3	B8	SEAL
4	B7	INNER BEARING
5	B7A	INNER RACE
6	B6	HUB
7	YBWL18005	BOLT,WHEEL,9/16-18X1-1/8,GR5,ZC
8	B5A	OUTER RACE
9	B5	OUTER BEARING
10	YWFL28010	WASHER, FLAT, SAE 7/8
11	B31	COTTER PIN
12	B3	NUT
13	B2	HUB CAP
14	31N2	SPINDLE
*	31N48	SPINDLE FOR 14 X 16.1 WHEEL EXPANSION
15	YPEX16020	PIN, 1/2" X 4"
16	31N5	TANDEM BEAM LH
17	31N6	TANDEM BEAM RH
18	YNTL16005	HEX NUT, TOP LOCK, 1/2"-13
19	B60	RING
20	YBHH16150	BOLT, 1/2" X 4-3/4" GR. 5
21	B58	BUSHING FOR TANDEM AXLE
22	23N34	FRONT FLARE
23	F33	ROPE GUIDE
24	YBPU08005	PIPE U BOLT
25	23N35	RH GATE ANGLE
26	23N36	LH GATE ANGLE
27	23N176	FRONT FLARE SUPPORT
28	16V9	GREASE LINE BRACKET
29	23N270A	FRONT GATE PLYWOOD WITH FIBERGLASS
30	23N40	STRAP FOR RUBBER
31	23N41	FRONT GATE RUBBER
32	23N42	SPLASH GUARD SIDE LH
33	23N43	SPLASH GUARD SIDE RH
34	31N24	RH SIDE FLARE
35	31N25	LH SIDE FLARE
36	S47	GREASE LINE FITTING
37	31N32A	LH SIDE PLYWOOD WITH FIBERGLASS
38	31N43	GREASE LINE
39	31N49	POLY FLOOR
40	31N31A	RH SIDE PLYWOOD WITH FIBERGLASS
*	12V36	WHEEL 14 X 16.1
*	23N54	TIRE 16.5 X 16.1
*	23N179	WHEEL 8 X 22.5 - TUBELESS
*	UR19	TIRE, 295/75R22.5, RECAP, HIGHWAY TREAD

*** MEANS NOT SHOWN**

FIGURE 3

FRONT SHIELD & DRIVE ASSEMBLY

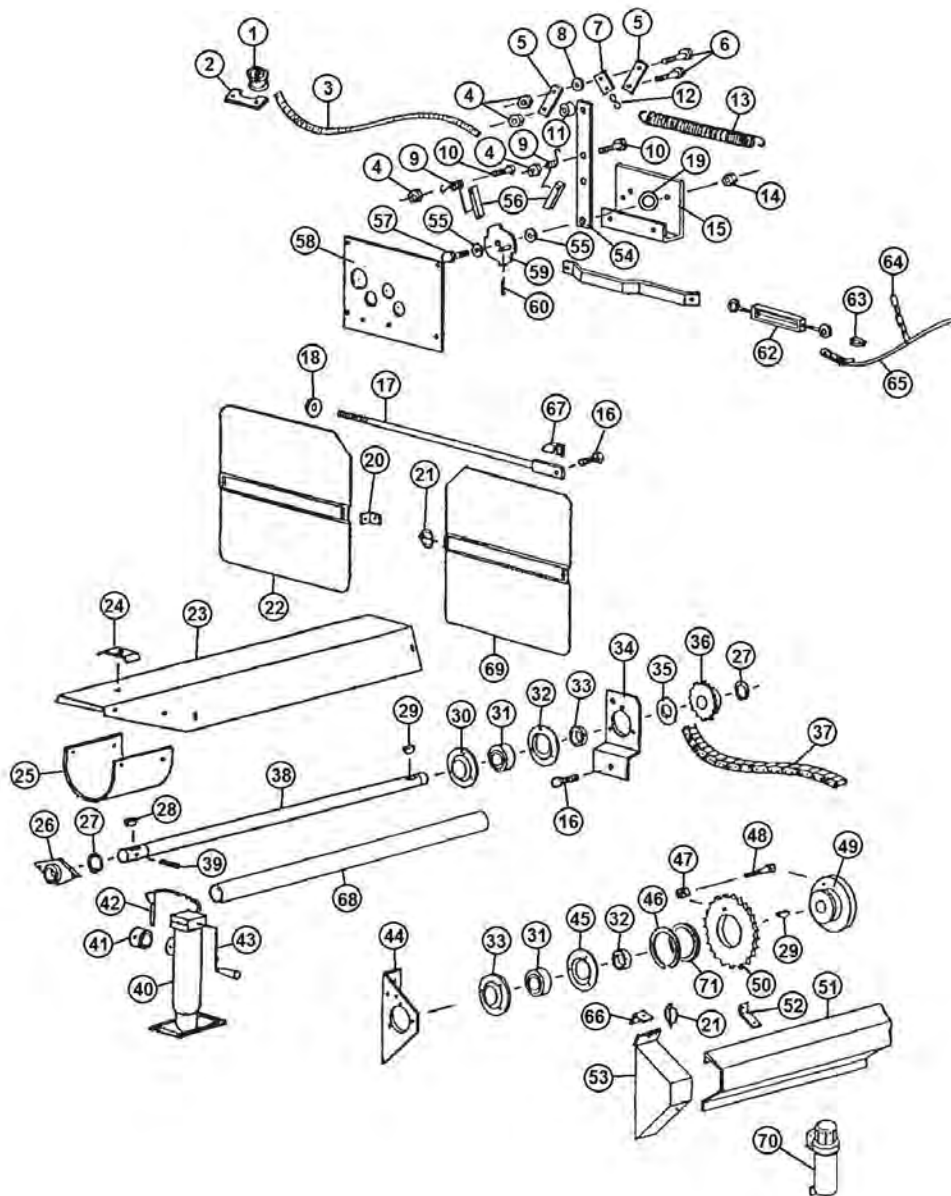


FIGURE 3

FRONT SHIELD & DRIVE ASSEMBLY

<u>ITEM</u>	<u>PART #</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
19	31N51	SHIFTER SPACER 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	T-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	JACK SHAFT BRACKET
35	23N69	FRONT SHAFT SPACER
36	23N70	25T SPROCKET
*	37N72	16T SPROCKET (OPTIONAL 1000 RPM)

*** MEANS NOT SHOWN**

FIGURE 3

FRONT SHIELD & DRIVE ASSEMBLY

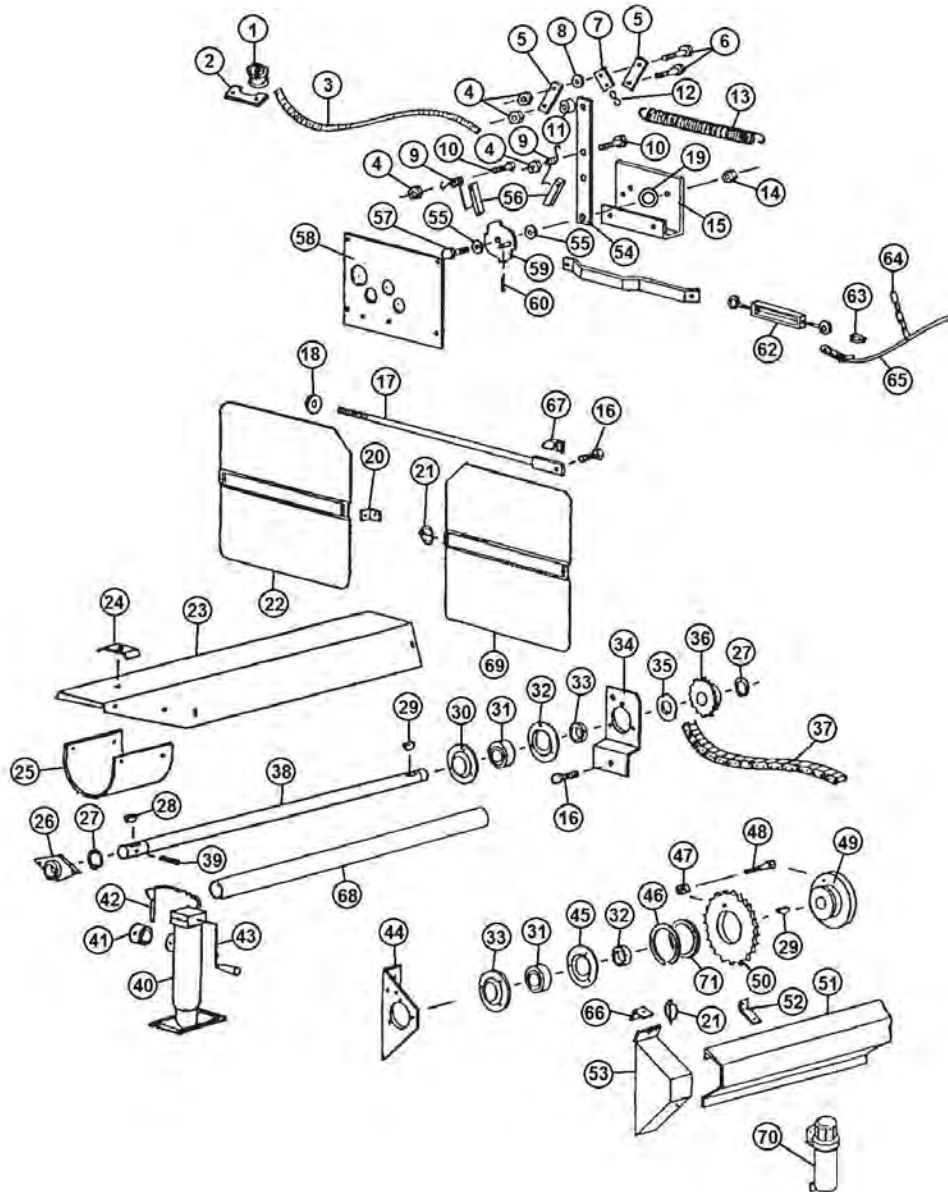


FIGURE 3

FRONT SHIELD & DRIVE ASSEMBLY

<u>ITEM</u>	<u>PART #</u>	<u>DESCRIPTION</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	YNTL12005	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	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	CABLE CHAIN
65	31N27	CABLE
66	23N242	SHIELD BRACKET
67	23N278	SPACER
68	37N74	FRONT SHAFT GUARD
69	23N306	FRONT SHIELD LH
70	S522	MANUAL HOLDER
71	C112G01	SHEAR HUB SPACER

* MEANS NOT SHOWN

FIGURE 4

BACK SHIELDS & DRIVE ASSEMBLY

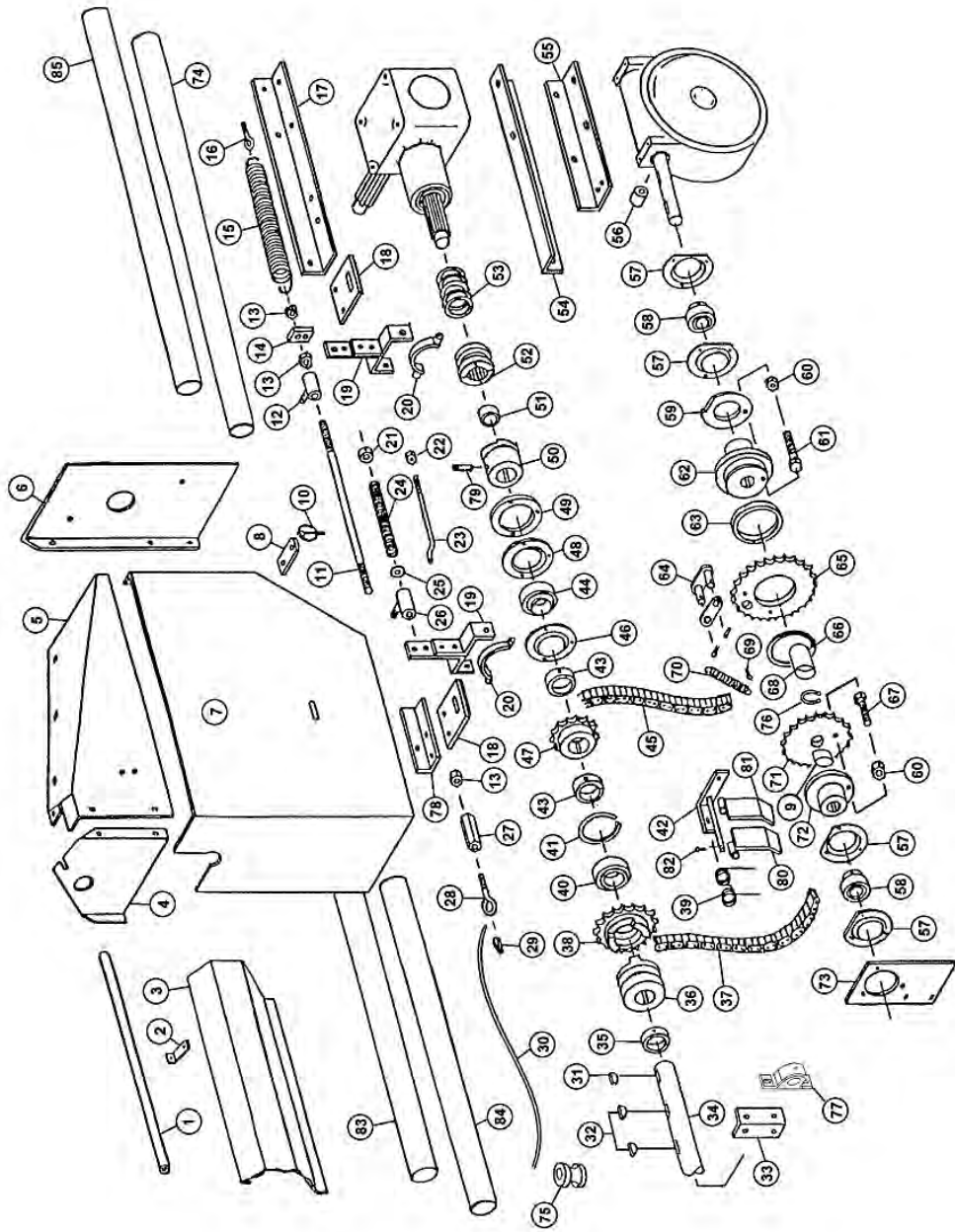


FIGURE 4

BACK SHIELDS & DRIVE ASSEMBLY

<u>ITEM</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	23N200	CABLE GUARD
2	23N79	SIDE SHIELD BRACKET
3	31N28	SIDE SHIELD
4	23N201	SHIELD
5	23N202	BACK SHIELD TOP
6	23N203	BACK SHIELD
7	23N204	COVER
8	23N96	SHIELD BRACKET
9	56027	BUSHING
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	TURNED 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	TURNED EYE BOLT, 3/8" X 1"
29	F44	CABLE LOOP
30	31N27	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	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

* MEANS NOT SHOWN

FIGURE 4

BACK SHIELDS & DRIVE ASSEMBLY

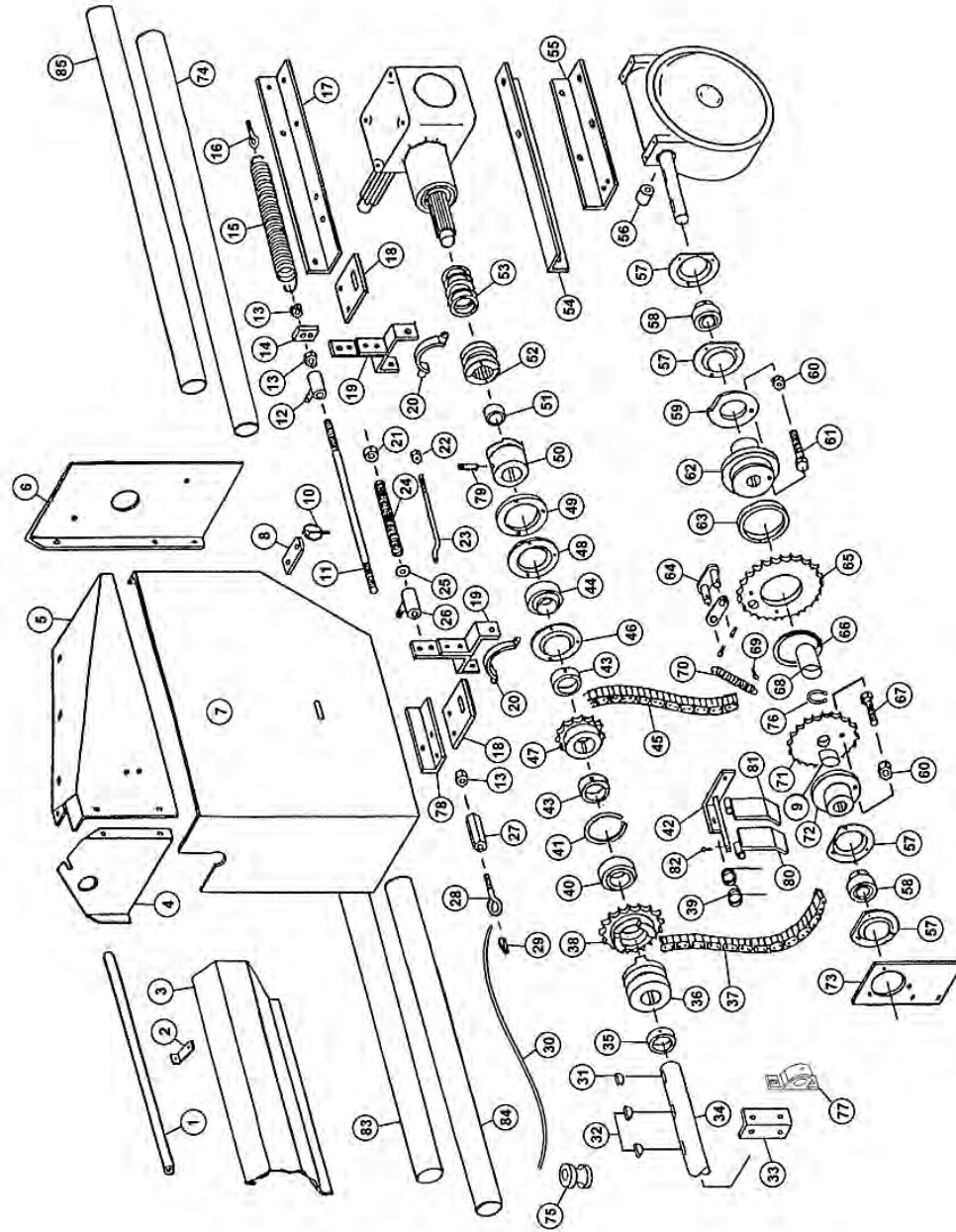


FIGURE 4

BACK SHIELDS & DRIVE ASSEMBLY

<u>ITEM</u>	<u>PART #</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	BUSHING, BRONZE
64	60531	CONNECTOR LINK W/ PINS
65	74381	SPKT, 50, A, 30
*	23N226	SPKT ASSY, 50, A, 30, WITH BSH
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	31N46	#3 SIDE SHAFT GUARD CABLE
75	F33	GUIDE
76	56024	EXTERNAL SNAP RING 1-1/2"
77	12N36	BRG, PILLOW BLOCK 1.25IN
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	#2 SIDE SHAFT GUARD
84	31N45	#1 SIDE SHAFT GUARD
85	60643	#4 SIDE SHAFT GUARD
*	56036	SPROCKET BUSHING ASSEMBLY (INCLUDES ITEM #71 & #9)

*** MEANS NOT SHOWN**

FIGURE 5
HYDRAULIC ENDGATE ASSEMBLY

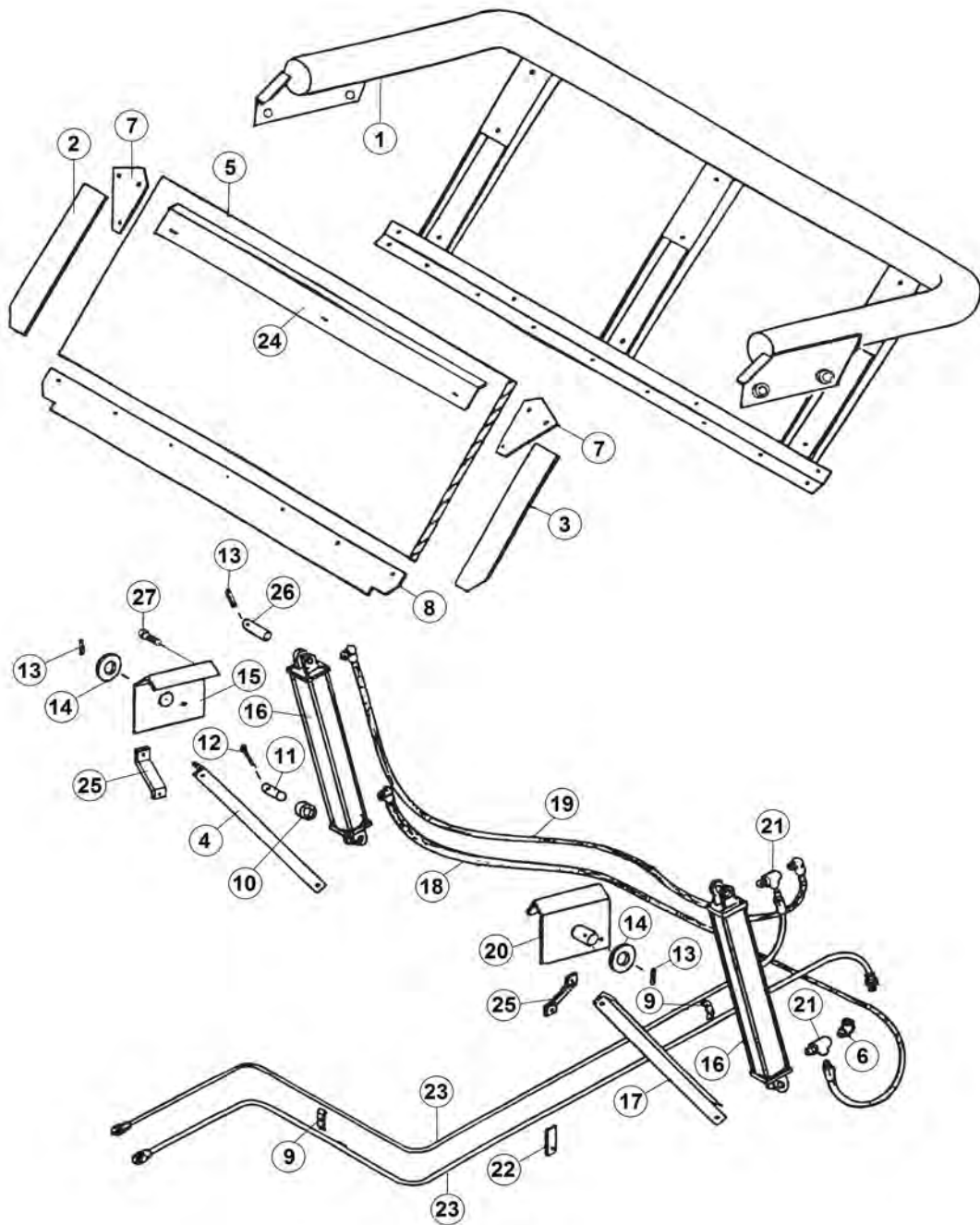


FIGURE 5

HYDRAULIC ENDGATE ASSEMBLY

<u>ITEM</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	23N298	TAILGATE FRAME
2	23N99	RH SIDE RUBBER
3	23N100	LH SIDE RUBBER
4	23N301	CYLINDER
5	31N37A	TAILGATE PLYWOOD W/FIBERGLASS
6	23N234	ELBOW, STREET, 3/8", 90 DEGREE
7	23N104	TAILGATE CORNER
8	23N105	BOTTOM RUBBER
9	23N67	FRONT HOSE BRACKET
10	K132	SPACER 3/8" LONG
11	23N107	CYLINDER PIN
12	YPCT07005	COTTER PIN, 7/32" X 2"
13	YPEX10015	EXPANSION PIN, 5/16" X 1-3/4"
14	23N109	TAILGATE WASHER
15	23N299	RH TAILGATE MOUNT
16	56015	HYD CYL 2" X 16" W/PINS 90DEGREE TO PORTS
17	23N231	LH TAILGATE BRACE
18	23N113	HOSE
19	23N114	HOSE
20	23N300	LH TAILGATE MOUNT
21	23N116	3/8" TEE
22	23N117	HOSE HOLDER
23	31N50	3/8" X 316" HOSE
24	23N163	TAILGATE POLY HOLD DOWN
25	23N232	TAILGATE BRACKET BRACE
26	23N233	TAILGATE BRACKET BRACE
27	YBCR16021	1/2 X 1-3/4" GRADE 5 CARRIAGE BOLT

*** MEANS NOT SHOWN**

FIGURE 6

APRON CHAIN ASSEMBLY

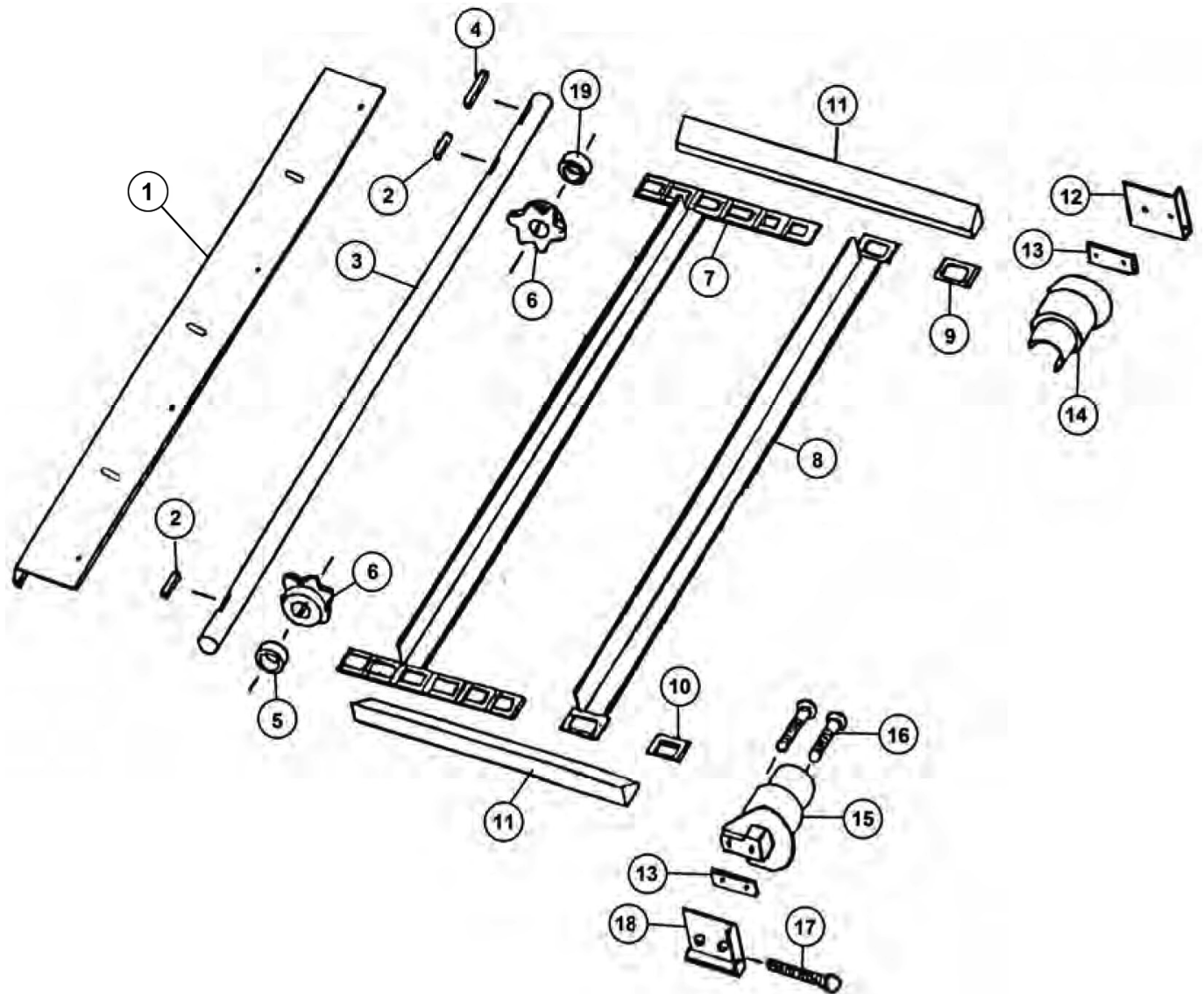


FIGURE 6

APRON CHAIN ASSEMBLY

<u>ITEM</u>	<u>PART #</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" SQUARE KEY W/ ROUND ENDS
5	23N121	SPACER 5/8"
6	23N122	DRIVE SPROCKET 6T
7	31N21	APRON CHAIN 26 SLATS, 262 LINKS
8	23N124	SLAT W/ ATTACHMENT LINKS
9	S55	T-ROD STANDARD LINK
10	S56	T-ROD CONNECTOR LINK
11	31N22	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	CARR. BOLT, 1/2" X 4" GR. 5
17	YBHH16145	BOLT, 1/2" X 4-1/2" GR. 5 FULL THREAD
18	A29	CHAIN SLIDE PLATE RH
19	23N266	SPACER 5/16"

FIGURE 7
OPTIONAL HYDRAULIC DRIVE ASSEMBLY

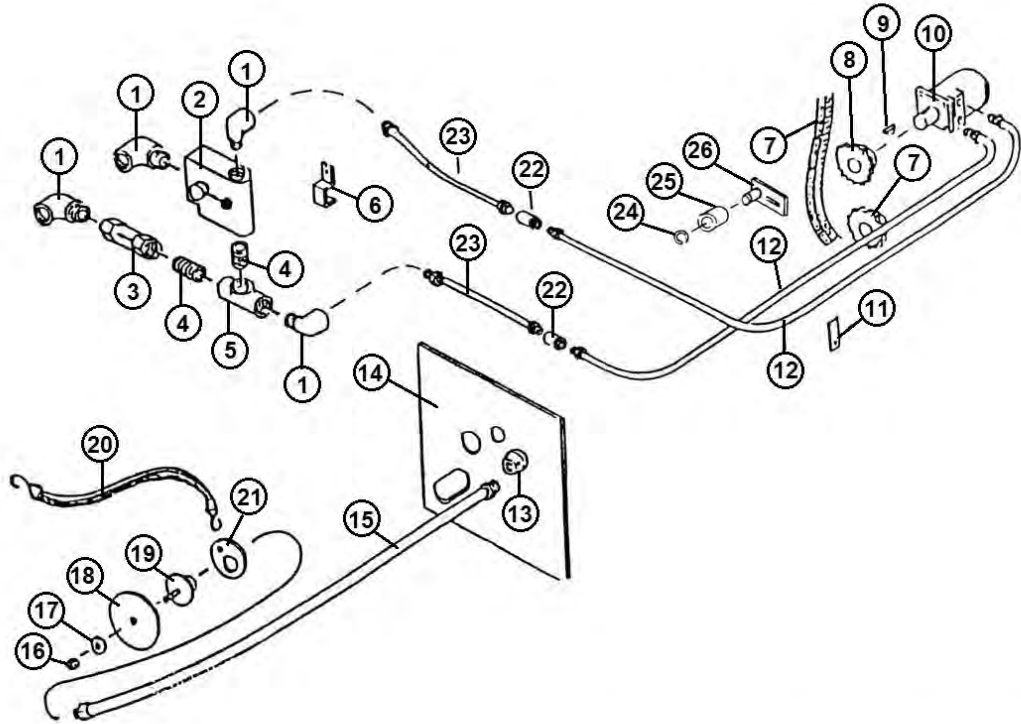


FIGURE 7

OPTIONAL HYDRAULIC DRIVE ASSEMBLY

<u>ITEM</u>	<u>PART #</u>	<u>DESCRIPTION</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 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	HEX NUT, TOP LOCK, 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 TIGHTENER ROLLER
26	L10R35	TIGHTENER BRACKET

FIGURE 8
WORM GEARBOX ASSEMBLY

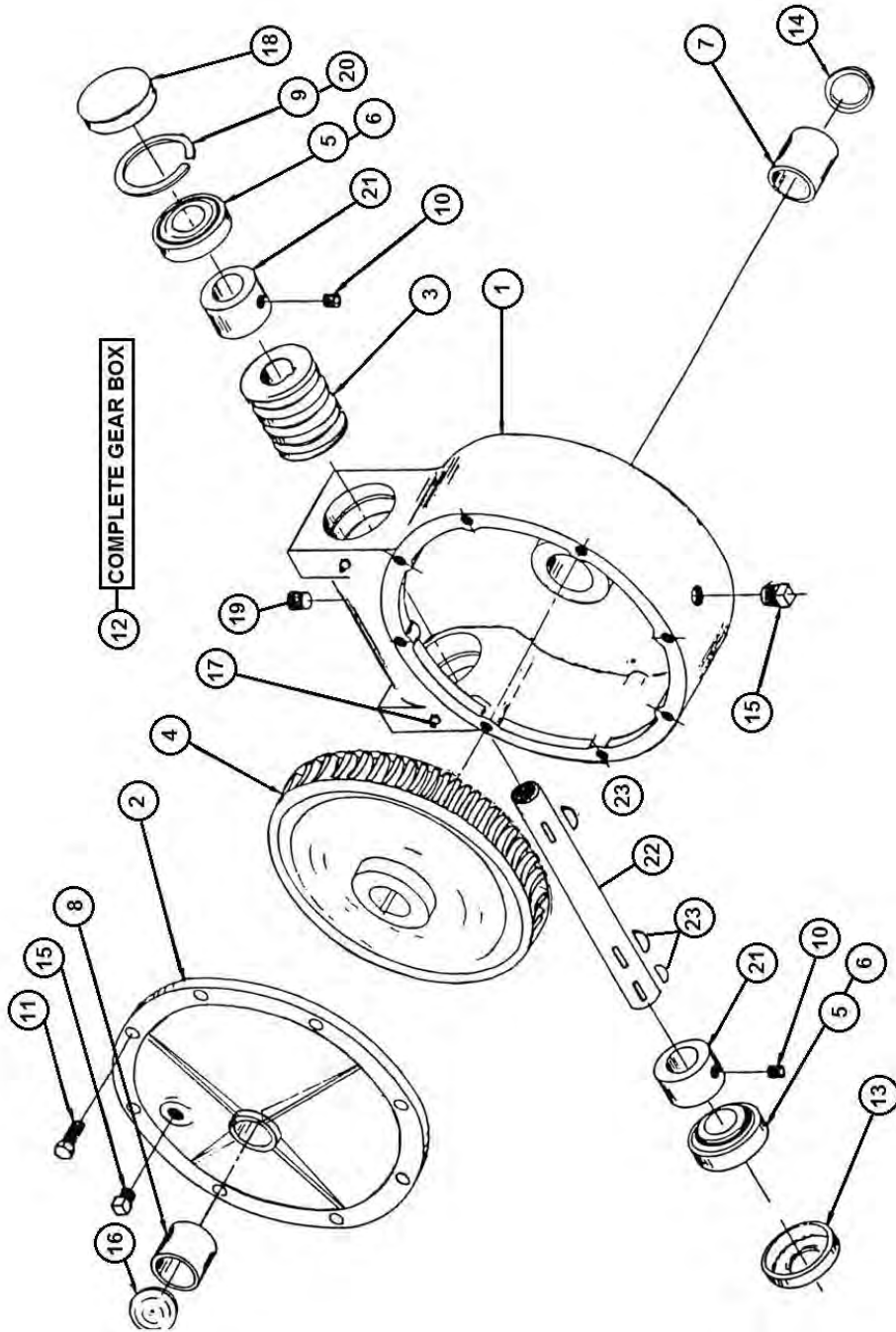


FIGURE 8

WORM GEARBOX ASSEMBLY

<u>ITEM</u>	<u>PART #</u>	<u>DESCRIPTION</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

*** MEANS NOT SHOWN**

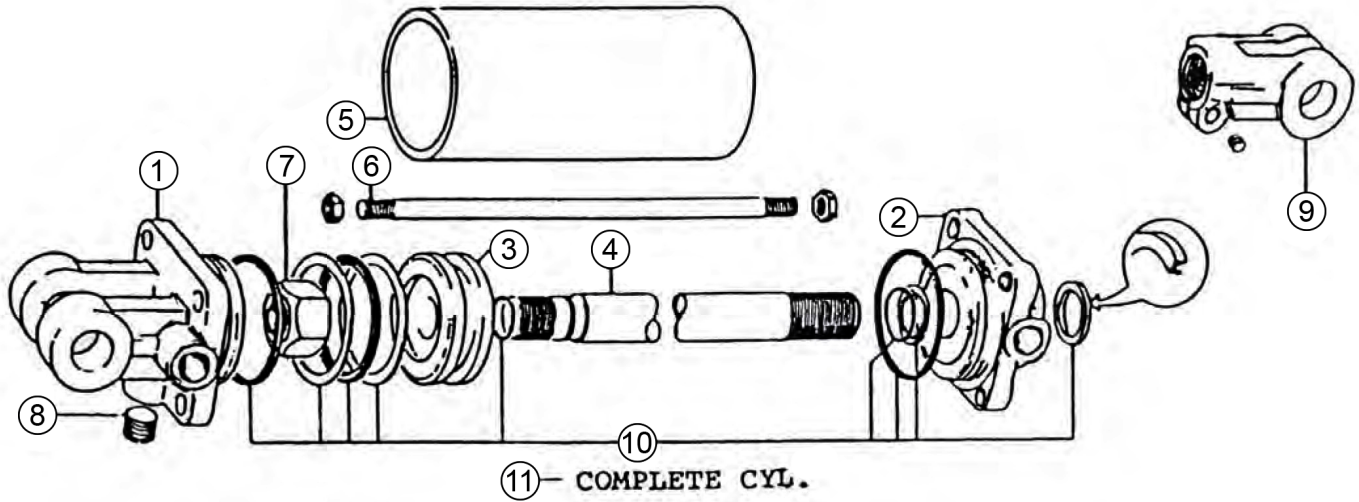
FIGURE 9

BEVEL GEARBOX

<u>ITEM</u>	<u>PART #</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

FIGURE 10

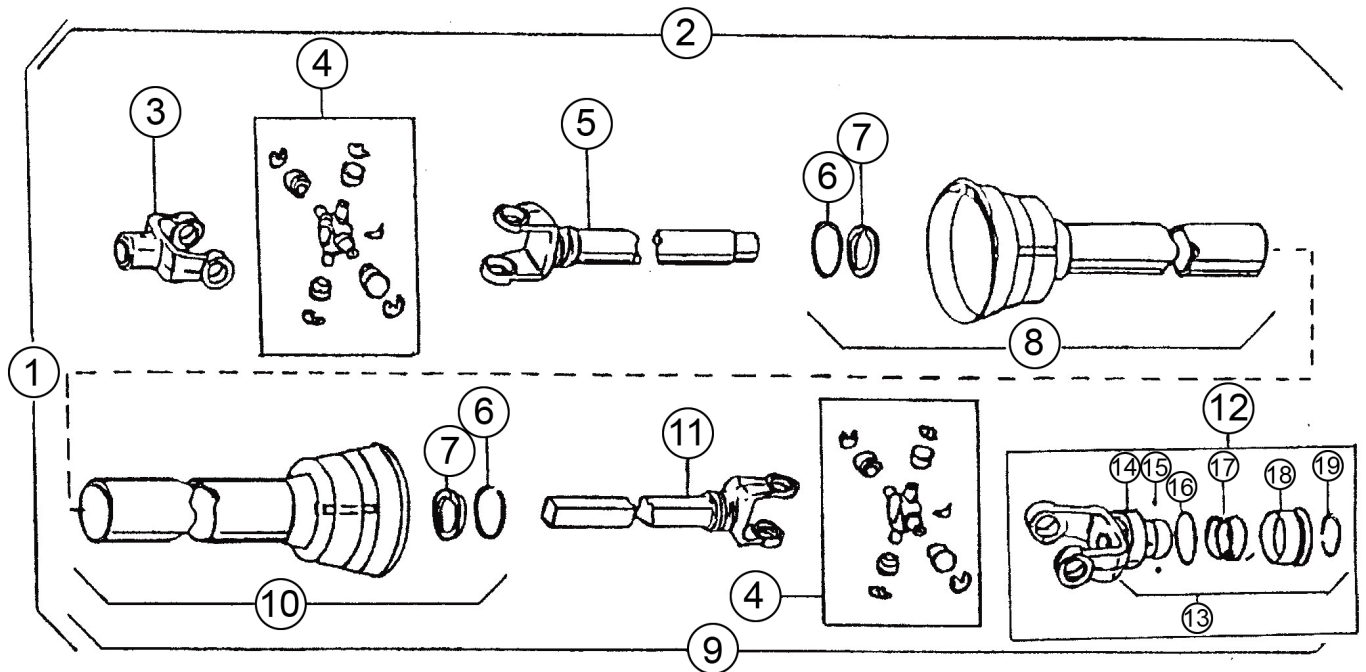
HYDRAULIC CYLINDER



<u>ITEM</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	23N142A	CLEVIS CAP
2	23N143A	ROD CAP
*	56174	ROD CAP
3	23N144	PISTON
*	56180	PISTON FOR 2" CYLINDER
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
*	56187	SEAL KIT FOR 2" CYLINDER
11	23N111A	HYDRAULIC CYLINDER
*	56015	2" X 16" HYDRAULIC CYLINDER

FIGURE 11

PTO ASSEMBLY



<u>ITEM</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	23N152	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	TRACTOR HALF PTO W/SHIELD
10	23N158	OUTER GUARD INCLUDING ITEM #6 & #7
11	23N159	YOKE AND SHAFT
12	23N162	LOCK YOKE ASSEMBLY
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

* MEANS NOT SHOWN

FIGURE 12

PTO ASSEMBLY (1000RPM)

<u>ITEM</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	23N313	14R DRIVE SHAFT PTO /WITH GUARD
2	23N314	PTO TRACTOR HALF W/SHIELD
3	23N153	MACHINE HALF PTO W/SHIELD
4	55864	OUTER GUARD
5	23N156	INNER GUARD
6	37N73	1000 RPM YOKE
7	14NW KIT	14R CROSS & BEARING KIT
8	23N159	YOKE AND SHAFT
9	23N155	YOKE AND TUBE
10	G1R35	YOKE 1-1/4"
11	S225	SPRING-LOK REPAIR KIT
12	55861	GUARD REPAIR KIT
*	S402	ADMA SAFETY MANUAL

*** MEANS NOT SHOWN**

FIGURE 13
OPTIONAL 2ND BEATER

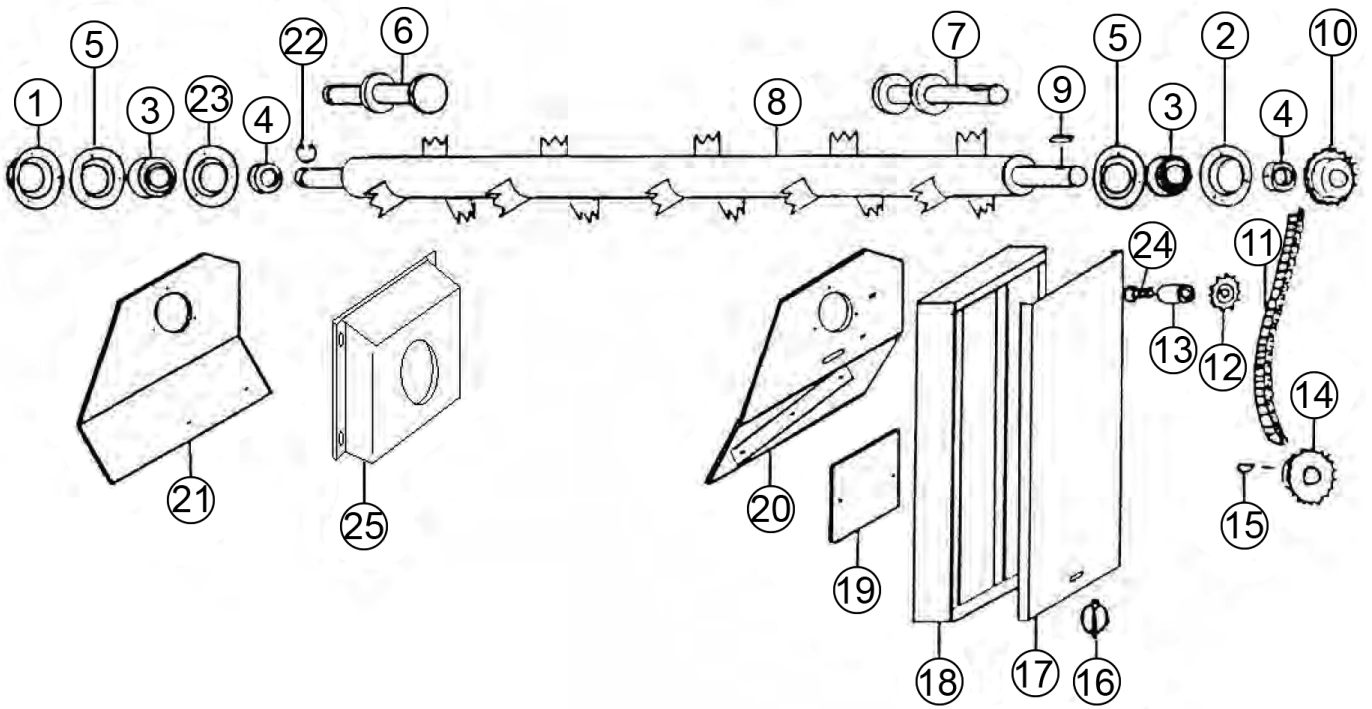


FIGURE 13

OPTIONAL 2ND BEATER

<u>ITEM</u>	<u>PART #</u>	<u>DESCRIPTION</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	#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	SHIELD
19	23N171	SHIELD
20	23N172	RH PANEL
21	23N173	LH PANEL
22	F73	SNAP RING
23	F114A	FLANGE W/ STRAIGHT ZERK
24	YBCR16040	CARR. BOLT, 1/2" X 3-1/2" GR. 5
25	57216	BEATER BEARING PROTECTOR

FIGURE 14
OPTIONAL ELECTRIC CONTROL FOR HYDRAULIC DRIVE

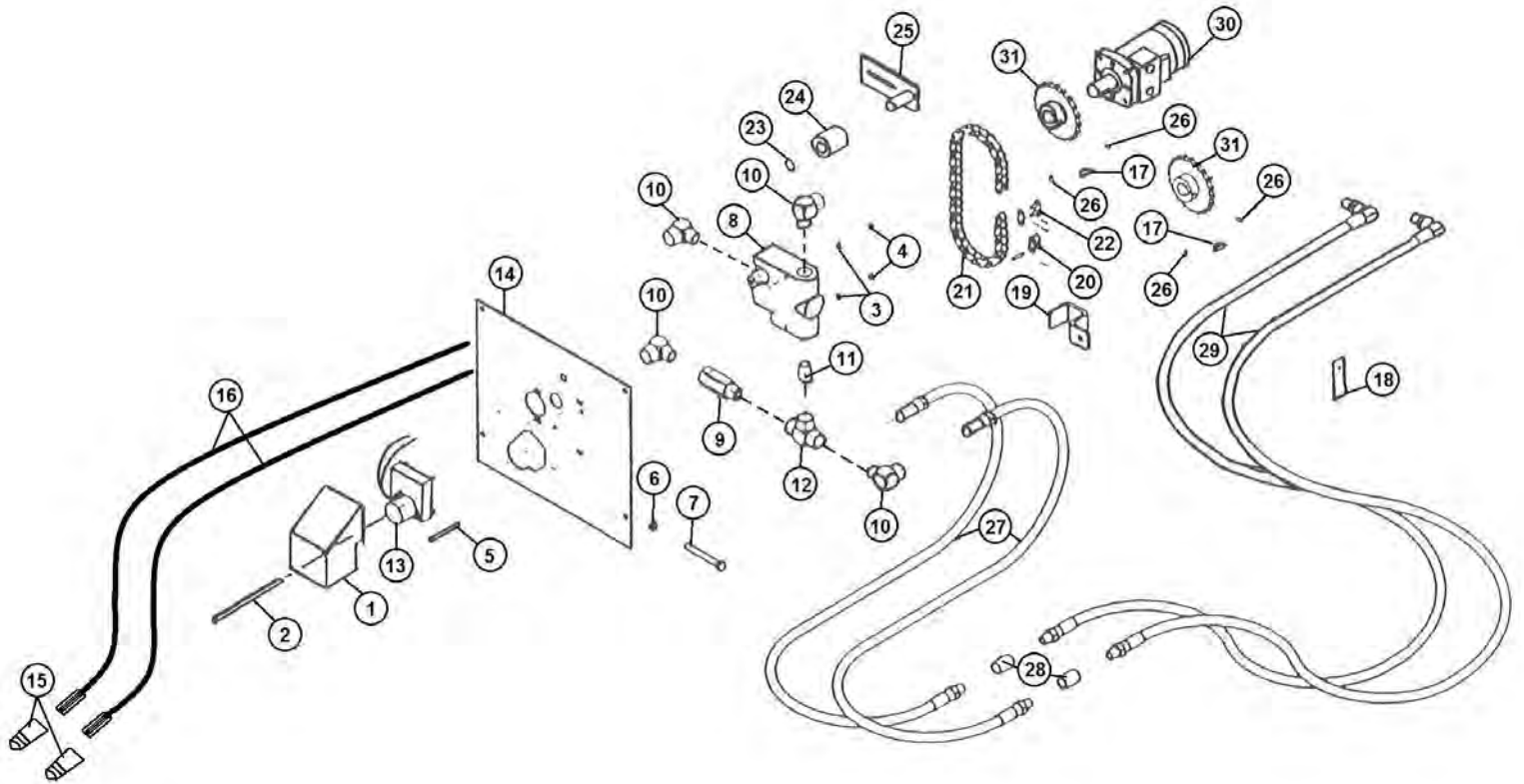


FIGURE 14

OPTIONAL ELECTRIC CONTROL FOR HYDRAULIC DRIVE

<u>ITEM</u>	<u>PART #</u>	<u>DESCRIPTION</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"X2 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.	DWM205	MALE HYDRAULIC TIP
16.	23N309	HYDRAULIC HOSE
17.	5B10	1/4" x 1" WOODRUFF KEY
18.	23N117	HOSE HOLDER
19.	HE14	HOSE BRACKET
20.	X60	#50 CHAIN OFFSET
21.	23N131	#50 CHAIN 40 PITCHES
22.	X61	#50 CHAIN CONNECTOR
23.	10R32	SNAP RING
24.	23N238	ROLLER
25.	L10R35	TIGHTENER BRAKET TIGHTENER
26.	YSKP10010	SETSCREW(5/16"-18)
27.	HE12	HOSE EXTENSION
28.	31N23	3/8" COUPLING
29.	23N132	HYDRAULIC MOTOR HOSE
30.	DF1	HYDRAULIC MOTOR
31.	11S19	DRIVE SPROCKET

FIGURE 15
ELECTRIC CONTROL

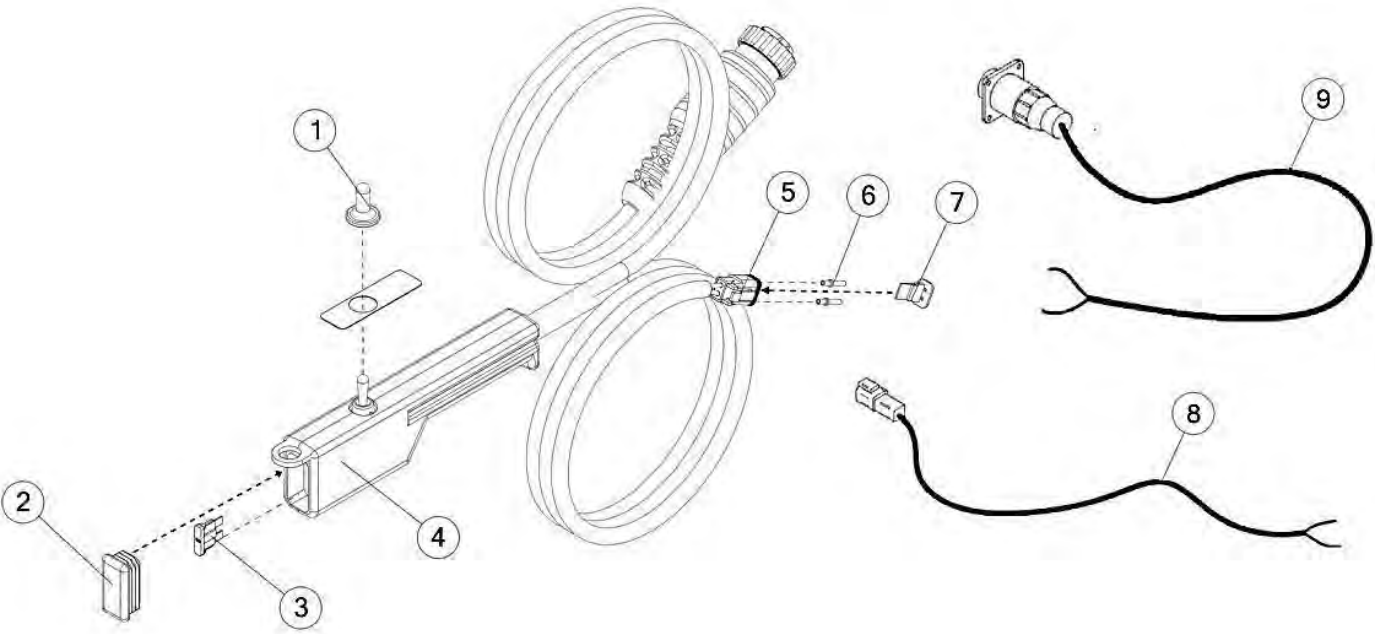


FIGURE 15
ELECTRIC CONTROL

<u>ITEM</u>	<u>QTY</u>	<u>PART #</u>	<u>DESCRIPTION</u>
1	1	16SV235	SWITCH BOOTS
2	1	61564	CAP
3	1	61597	FUSE, BLADE, 5AMP
4	1	63365	HAND CONTROLLER (ON-OFF-ON)
5	1	58790	DEUTSCH 2 PIN PLUG
6	2	56760	DEUTSCH SOCKET, SOLID, 14-16 GA.
7	1	58793	LOCKING WEDGE FOR DT06-2S CONNECTOR
8	1	56N134	SPREADER CONTROL CORD
9	1	16SV269	TRACTOR CONTROL CABLE

H&S MFG. CO.

products approved

for the

FEMA

SEAL OF QUALITY

