



800 Bu.
GRAIN DRYER
Operators Manual
& Parts Book
SUPPLEMENT



Form S-3084-14
Printed in U.S.A.



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**800 Bu. GRAIN DRYER
OPERATOR'S MANUAL & PARTS BOOK**

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**800 Bu. OPERATING INSTRUCTIONS
SUPPLEMENT TO OPERATOR'S MANUAL AND PARTS BOOK**

GENERAL INFORMATION

This text is intended only as a supplement and contains that information which pertains strictly to the 800 bu. dryer. For complete instructions on dryer operations and safety see the accompanying 500/600 bu. Operator's Manual and Parts Book, Form S-3082-07.

CAUTION: Read and understand both the Operator's Manual and this Supplement before operating this machine.

OPERATION OF DRYER EXTENSION AND TOP AUGER TUBE

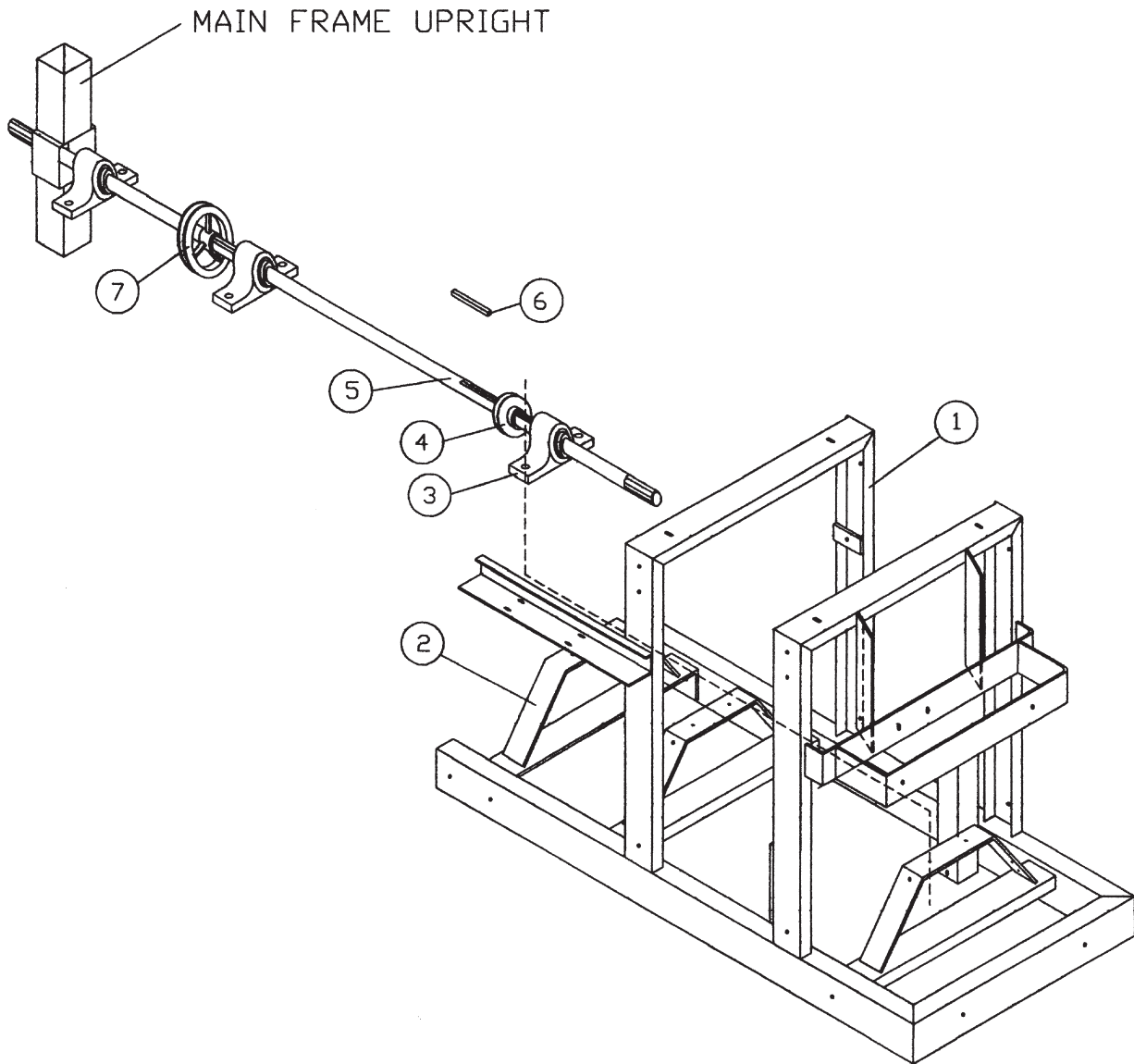
1. Refer to 500/600 bu. manual for proper machine placement, fuel hookup and electrical connections. Make sure jack legs have a solid foundation.
2. Install the top tube and flight with the swivel head, spout and spout handle (Page 16). The assembly can be lifted with the attached hook on the tube (Ref. 9) of the tube and flight assembly. Place the hinges on the tubes together and insert the hinge pin (Ref. 29) and fasten with the spring pin.
3. To raise the tube and flight into position, place the cabler stand (Ref. 16) in the pipe stand base of Ref. 9 with the cable over the roller pulley. Turn the winch handle until the flanges are flush. Through the access door, align the flights and bolt together the angle brackets on the flights. Clamp together with the clamp (Ref. 30) and close the access door. Make sure the spout is in the recirculating position (toward the rear) before filling dryer.
4. To raise the extension sheets, turn the handle of the cable winch (Ref. 6) of the winch roller assembly until the lift pin holes in Ref. 12 of the extension assembly are through the guides and install the safety snap pins (Ref. 13). Lock the winch with the lock pin (Ref. 12 of the roller winch assembly).
5. The operation of the controls is explained in the 500/600 bu. Operators Manual and Parts Book, For S-3082-07.

PREPARE FOR DRYER TRANSPORTATION

1. See operator's manual for complete instructions and rules for transporting the dryer. Check local regulation's governing marking, towing and maximum width and height restrictions.
2. Lower the extension sheets by removing the snap pins (Ref. 13) of the extension assembly and turning the winch handle. Make sure upper ladder slides freely in its track (Ref. 5 of the ladder assembly).
3. To lower the top tube assembly, open the access door and remove the bolt from the angles that tie the flights together. Place the winch cable stand (Ref. 16 of the auger assembly) in the stand pipe and place the cable over the cable pulley (Ref. 17). Unlatch the toggle clamp (Ref. 30) and lower the tube assembly, using the winch (Ref. 13), down on the tube support bracket (Ref. 20) of the extension assembly. Make sure the spout handle (Ref. 12) does not bind as the tube is lowered. Remove the cable stand pipe (Ref. 16) and spout handle (Ref. 12) before towing.
4. With the top tube down, the transport height is 15'6". With the top tube removed the height is 14'0". To remove the top tube assembly, remove the hinge pin (Ref. 29) of the auger assembly. The assembly can be lowered by using the balance point hook welded to the top tube.

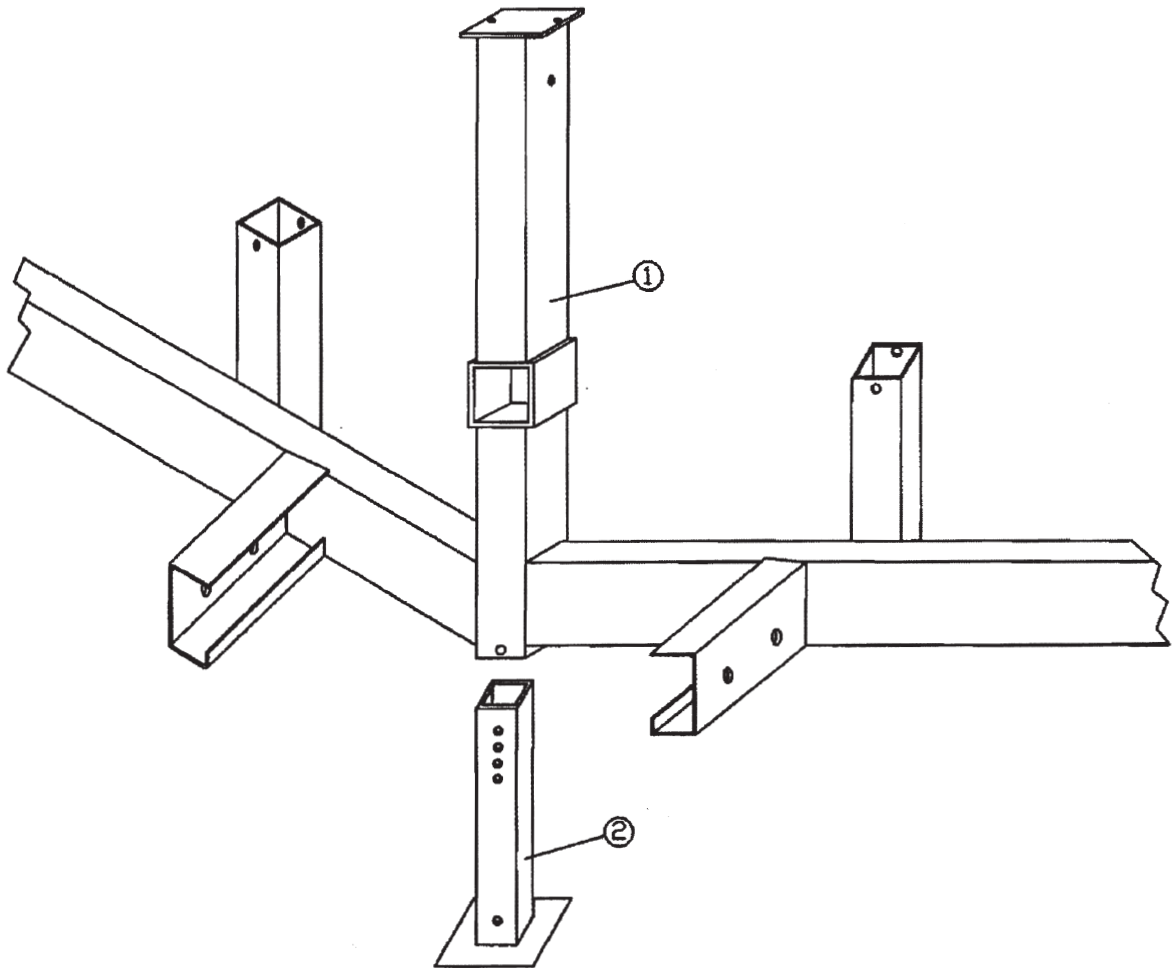
**ASSEMBLY DRAWINGS
AND
PARTS LIST**

800 BU POWER FRAME & SHAFT ASSEMBLY



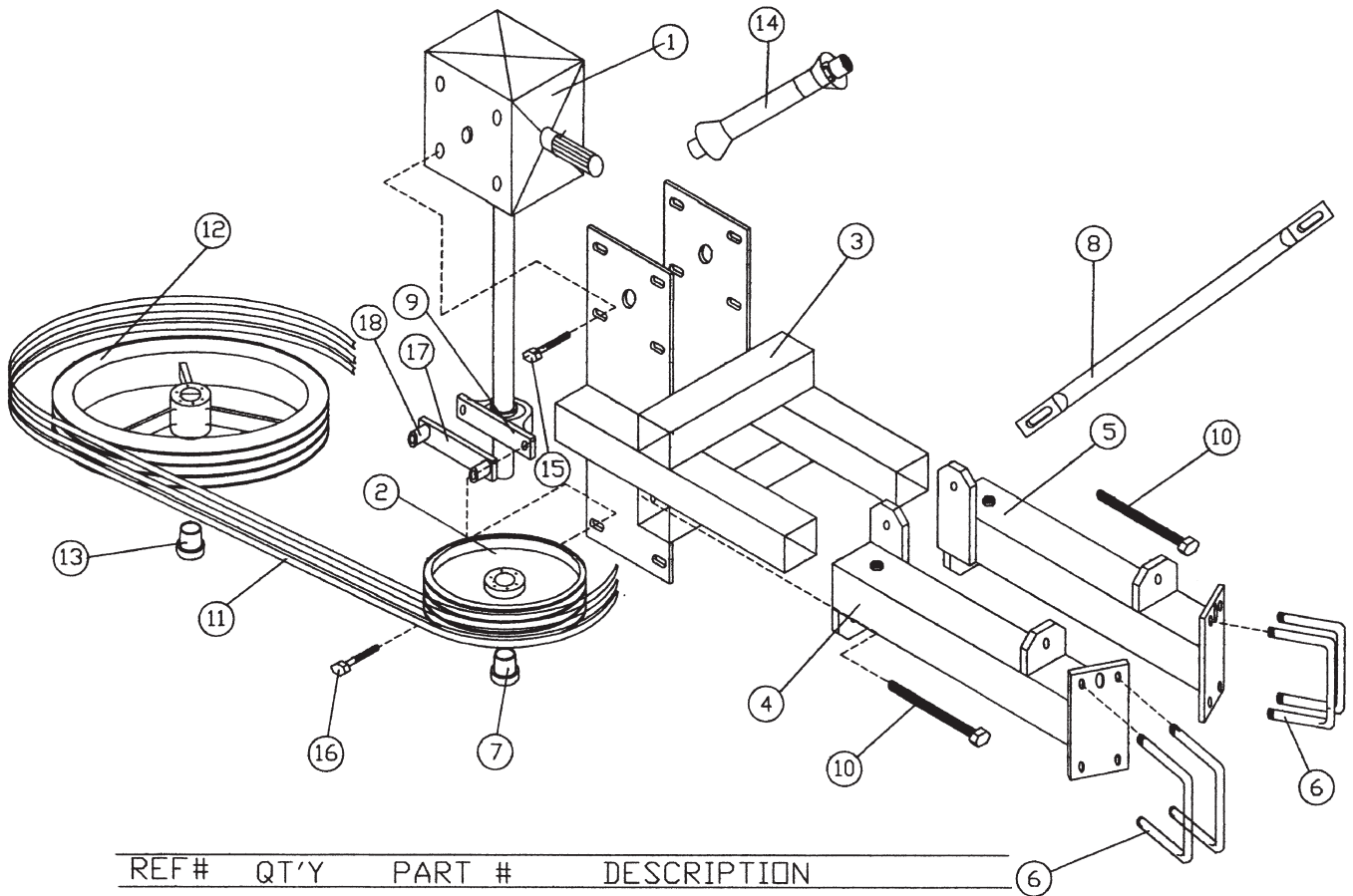
REF #	PART #	QTY	DESCRIPTION
1	D82015	1	POWER FRAME 800
2	D52031	1	MOUNT, 3RD BRG
3	D22097	3	BEARING 1 1/2 PB
4	D22780	1	PULLEY AGIY DR 4"
5	D57117S	1	POWER SHAFT
6	73415	1	KEY 3/8 X 4 1/2
7	76089	1	PULLEY 2B6.6 L/HUB
	76007	1	HUB 1 1/2" SDS

800 BU MAINFRAME FRONT



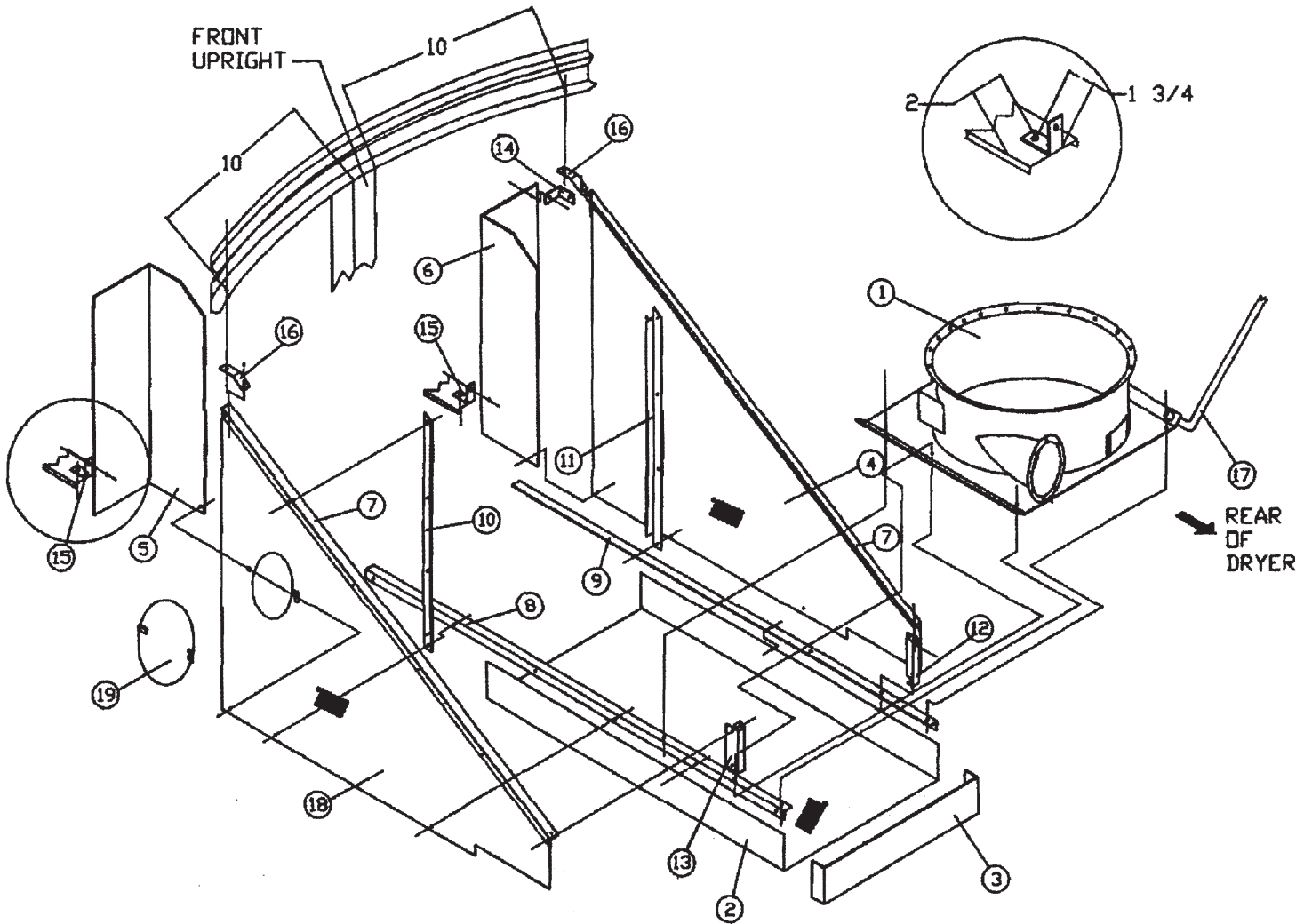
- | | | |
|----|--------|--------------------|
| 1. | D81015 | MAINFRAME 800 BU |
| 2. | D81021 | JACK, FRONT 800 BU |

GEAR BOX MOUNT



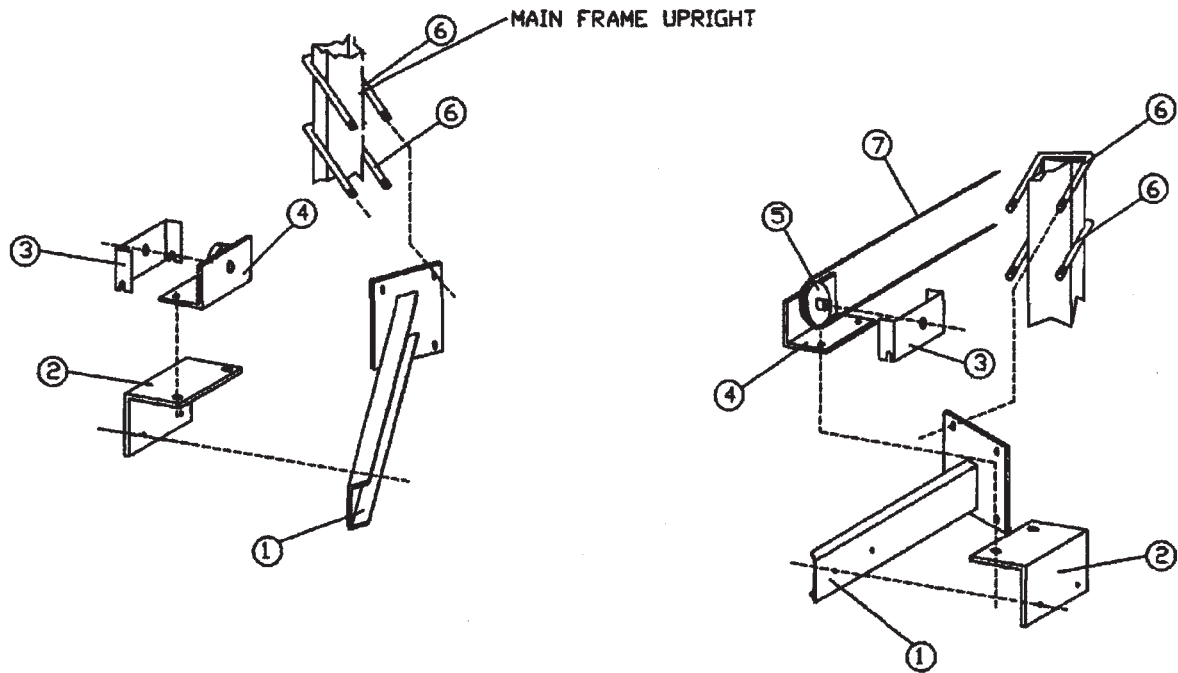
REF#	QTY	PART #	DESCRIPTION
1	1	D80100	GEAR BOX 25HP
2	1	76081	SHEAVE 3B11 PD
3	1	D80135	MOUNT, GEAR BOX
4	1	D50445	MOUNT, RT GEAR BOX
5	1	D50450	MOUNT, LEFT GEAR BOX
6	4	71990	U-BOLT 1/2 x 2 1/2 x 5
7	1	76049	HUB, 1 3/8 SK
8	2	D80130	BRACE, GEAR BOX MT.
9	1	85022	BEARING 1 3/8 PB
10	2	71142	BOLT, 5/8 X 9 1/2 FULL
11	1	D50661	BELT 3RB103
12	1	76001	SHEAVE, 3B18.4
13	1	76002	HUB 2 SK
14	1	D82190	TUMBLER, GEARBOX
15	4	71103	CAPSCREW 1/2 X 1 1/4
16	2	71110	CAPSCREW 1/2 X 3
17	1	D22099	SPACER, 1 3/8 BRG.
18	2	D82270	SPACER, 1 1/2 X 1/2 X 1" LG

SAFETY SHIELDS ASSEMBLY



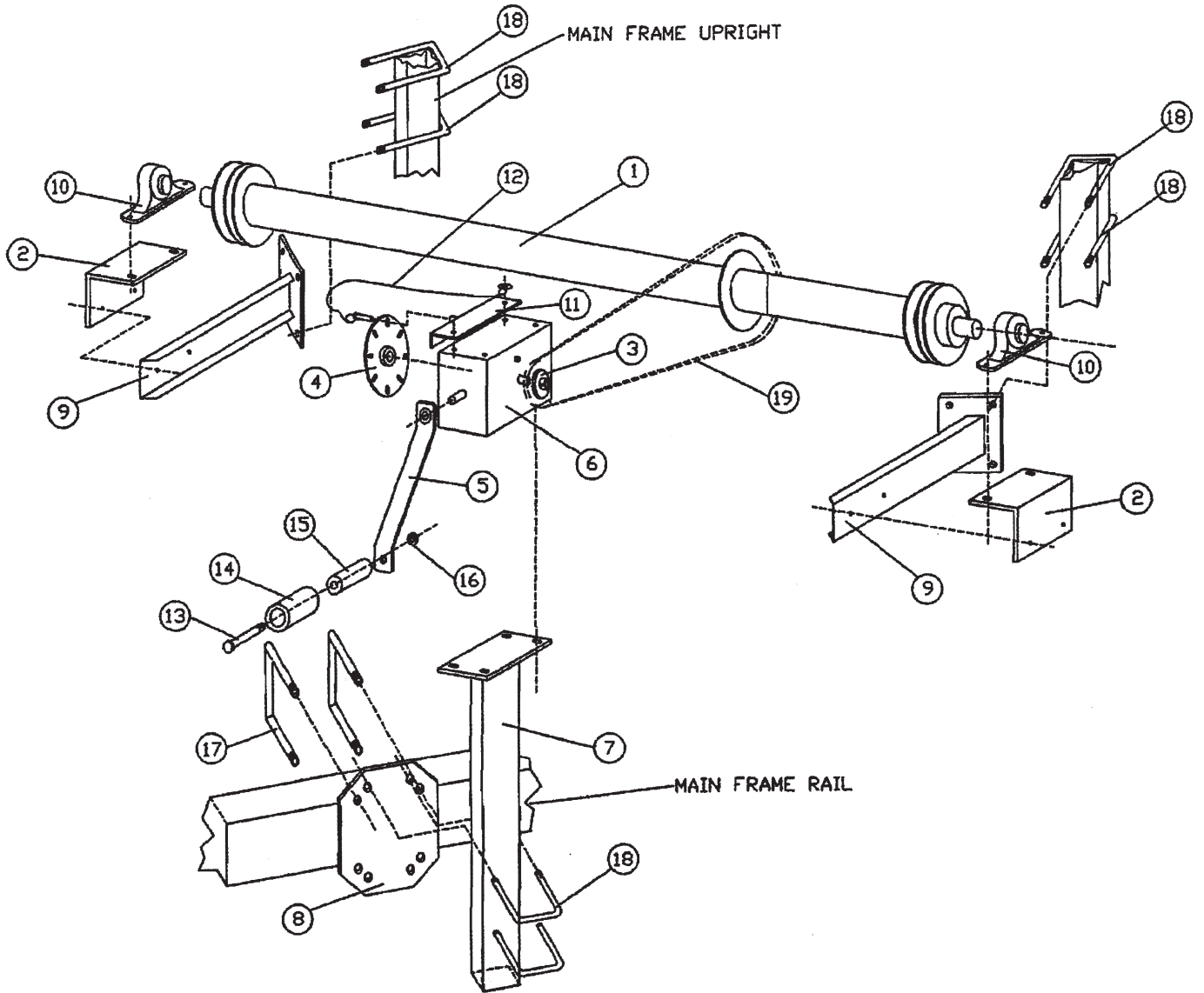
REF#	PART #	QTY	DESCRIPTION
1	D71140	1	WELL WITH BOOT
2	D80200	1	BOTTOM, BELT GUARD
3	D80205	1	BACK, BELT GUARD
4	D80210	1	SIDE, RIGHT BELT GUARD
5	D80215	1	GUARD, LEFT PTO
6	D80220	1	GUARD, RIGHT PTO
7	D80225	2	ANGLE, BELT GUARD LEFT MTG
8	D80230	1	ANGLE, BOTTOM LEFT
9	D80235	1	ANGLE, BOTTOM RIGHT
10	D80240	1	ANGLE, BELT GUARD LEFT
11	D80245	1	ANGLE, BELT GUARD RIGHT
12	D80250	1	ANGLE, RT GUARD MT.
13	D80255	1	ANGLE, LFT GUARD MT. 8'
14	D80260	1	ANGLE, PTO GUARD MT
15	D80265	2	ANGLE, PTO GUARD MT LWR
16	D80270	2	ANGLE, 45 DEG. MTG
17	D71180	4	ROD, WELL TRUSS
18	D80212	1	SHIELD, LEFT W/HOLE
19	D80213	1	DOOR, PTO ACCESS

FRONT CABLE GUIDES



REF#	REQ'D	PART NO.	DESCRIPTION
1	2	D80137	MOUNT, CABLE PULLEY GUIDE
2	2	D80065	ANGLE, CABLE PULLEY MT.
3	2	D80081	SHIELD, CABLE PULLEY
4	2	D80140	ANGLE, PULLEY ANGLE MT.
5	2	77618	PULLEY, 3" CABLE
6	4	71989	U-BOLT, 1/2 X 3 X 3
7	90 FT.	02412	CABLE, 3/16

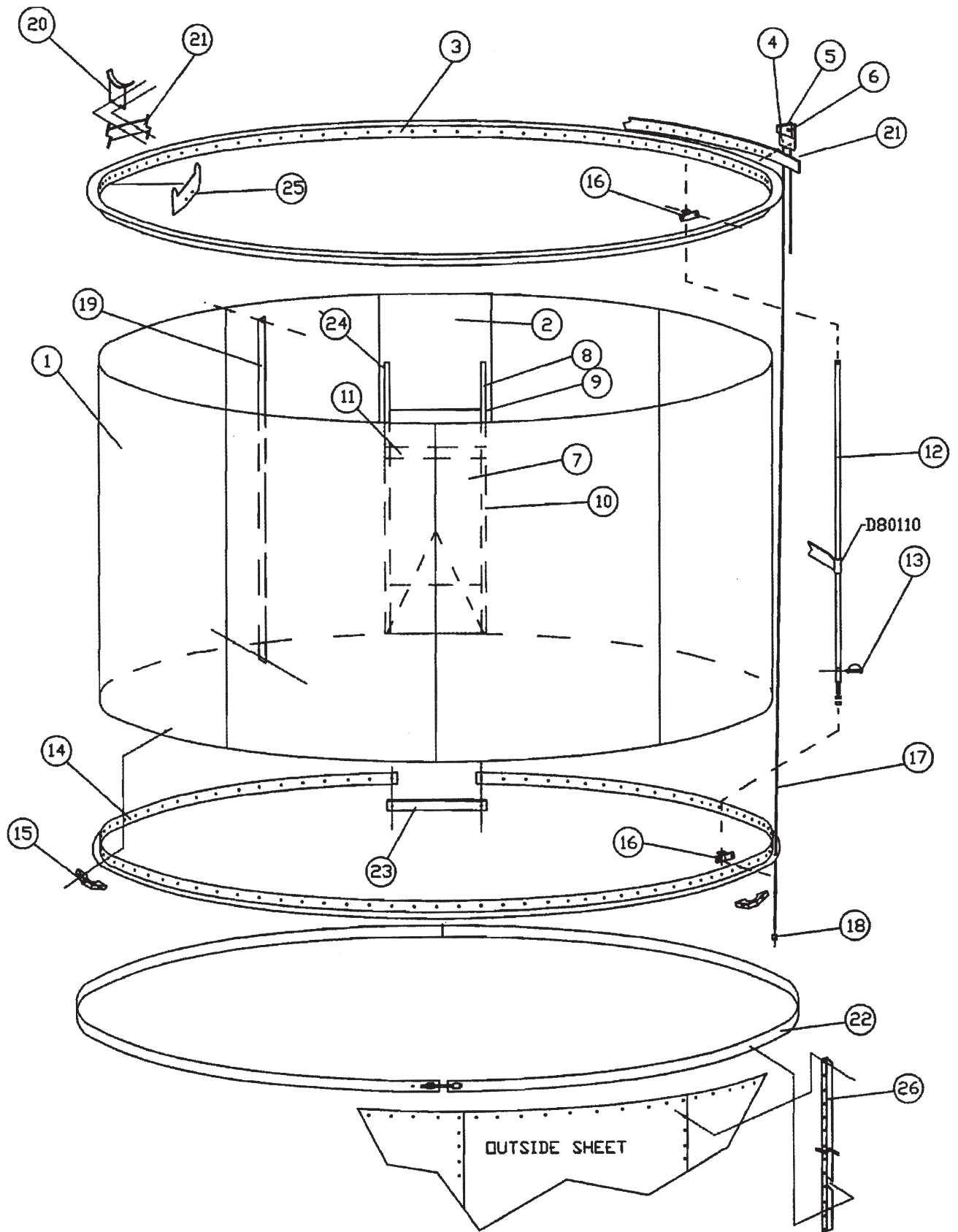
WINCH ROLLER ASSEMBLY



WINCH ROLLER ASSEMBLY

REF#	QTY	PART #	DESCRIPTION
1	1	D80056	CABLE ROLLER WDMT
2	2	D80066	WINCH BEARING MOUNT
3	1	D80052	SPROCKET 4021
4	1	D80021	BRAKE, GEARBOX
5	1	D80051	HANDLE, WINCH
6	1	D80095	GEARBOX
7	1	D80138	MOUNT, GEARBOX
8	1	D80150	PLATE, WINCH MOUNT
9	2	D80137	BRACKET, WINCH BRG. MT.
10	2	D28040	BEARING 1" PB
11	1	D80022	STOP, WINCH BRAKE
12	1	D80148	PIN ASSY BRAKE STOP
13	1	71113	CAPSCREW 1/2 x 4 1/2
14	1	03518	GRIP
15	1	D57155	TUBE 1 x .5 x 3.75
16	1	72379	1/2 NYLOC NUT
17	2	71990	U-BOLT 1/2 x 2 1/2 x 5
18	6	71989	U-BOLT 1/2 x 3 x 3
19	1	80040	CHAIN #40 x 80P W/CONNL

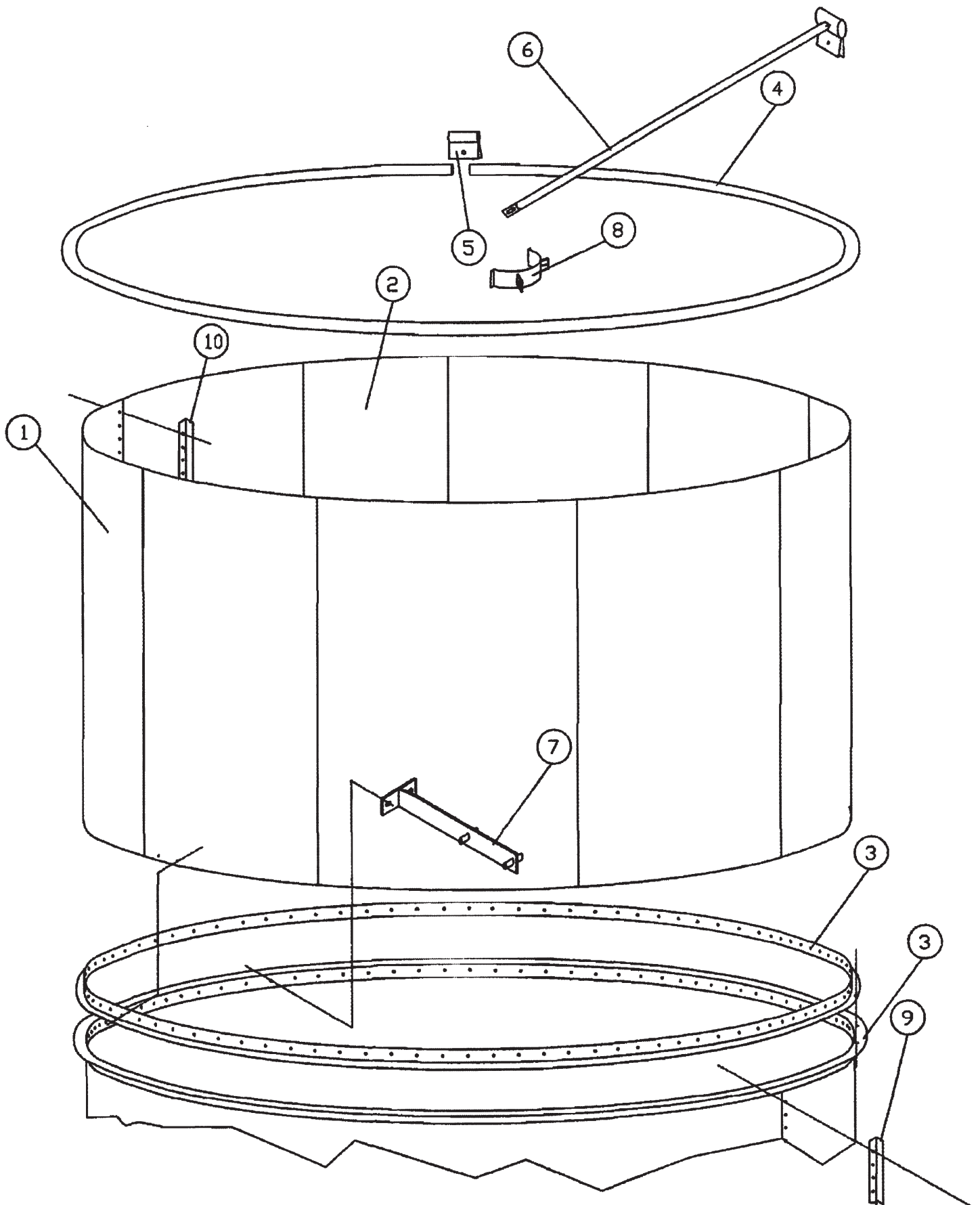
800 BU EXTENSION



800 BU EXTENSION

REF	PART #	QTY	DESCRIPTION
1	D84130	8	SHEET, EXT STD PF
1	D84140	8	SHEET, EXT FINE PF
1	D84230	8	SHEET, EXT FP CTD
1	D84240	8	SHEET, EXT STD PF CTD
2	D80005	1	SHEET, EXT SOLID FRT
3	D80180	1	BAND, UPPER EXT
4	D80139	4	MOUNT, CABLE PULLEY
5	77618	6	PULLEY, 3" CABLE
6	502653	4	PIN, CABLE PULLEY
7	D80001	1	DOOR, EXT SLIDING
8	D80010	1	GUIDE, SLIDING DOOR RT
9	D80011	2	SPACER, SLIDING DOOR
10	D80012	2	SPACER, SLIDING DOOR
11	D80015	1	BRACE, DOOR STOP
12	D80143	4	GUIDE, EXT SUPPORT
13	D80148	4	PIN, SAFETY SNAP
14	D80165	1	BAND, LOWER EXT
15	D80120	13	BLOCK, WEAR NYL
16	D80144	8	BRACKET, EXT GUIDE MT
17	02412	90 FT	CABLE 3/16
18	D84360	4	COLLAR, CABLE LOCK
19	D80155	3	ANGLE, EXT BRACE
20	D80145	1	SUPPORT, TOP TUBE
21	D80125	1	BAND, TOP OUTSIDE
22	D80126	1	BAND, CENTER OUTSIDE
23	D80170	1	SPLICE, LOWER EXT BAND
24	D80009	1	GUIDE SLIDING DOOR LEFT
25	D84090	1	SPOUT SUPPORT 800
26	D80156	9	ANGLE, OUTSIDE BRACE

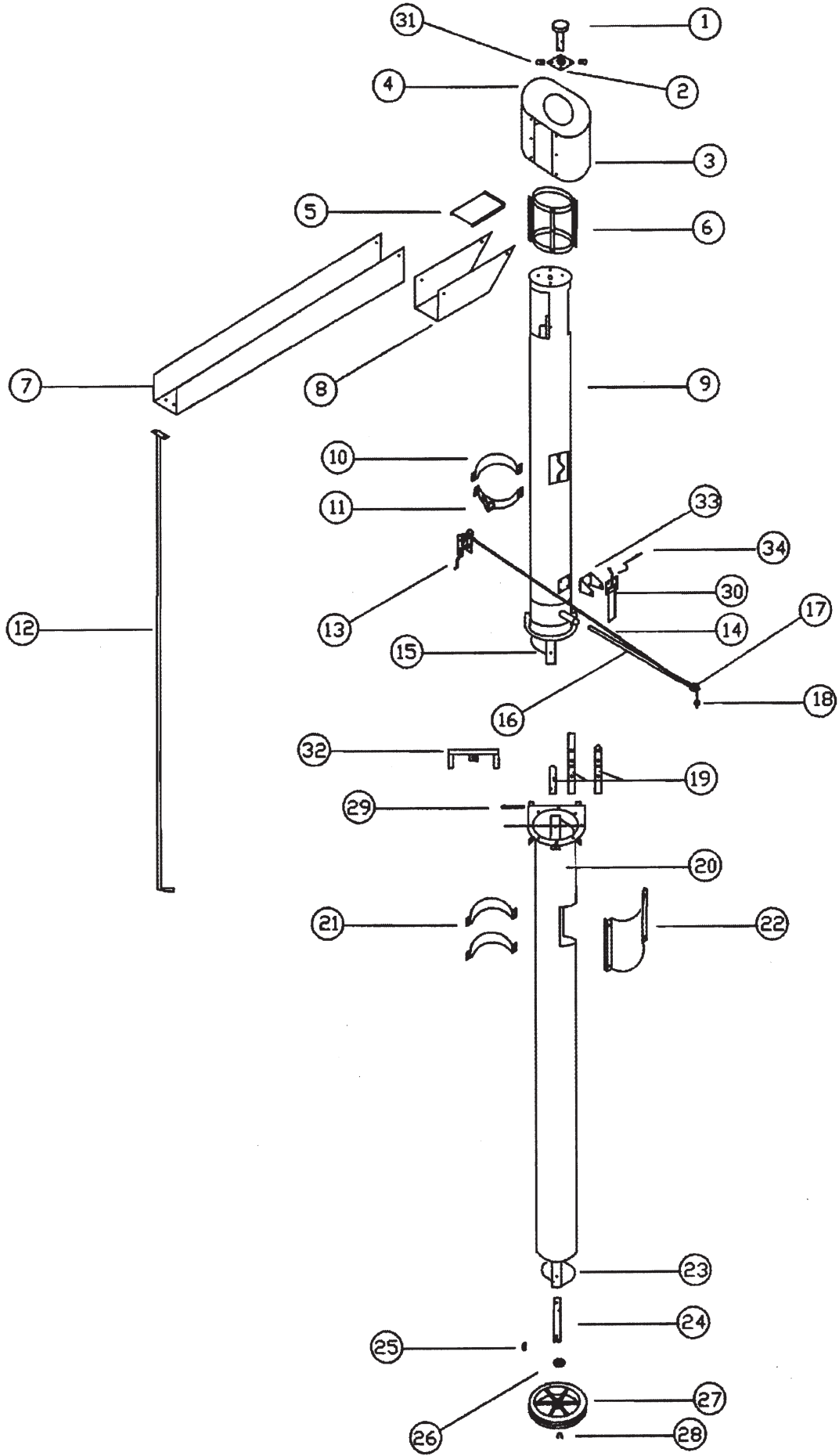
800 BU FIXED EXTENSION



800 BU FIXED EXTENTION

REF #	REQ'D	PART NO.	DESCRIPTION
1	8	D84130	SHEET, FP EXT.
1	8	D84140	SHEET, STD EXT.
1	8	D84230	SHEET, FP CTD EXT.
1	8	D84240	SHEET, STD CTD EXT.
2	1	D84131	SHEET, 34" WIDE FP
2	1	D84141	SHEET, 34" WIDE STD
2	1	D84231	SHEET, 34" WIDE FP CTD
2	1	D84241	SHEET, 34" WIDE STD CTD
3	2	57001328	BAND, OUTSIDE TOP EXT.
4	1	D54040	CAP RING
5	1	D24110	RIM CONNECTOR
6	4	D54072	BRACE CENTER AUGER ELECT.
7	4	D80112	FLOOR SUPPORT
8	2	D26057	CLAMP, BRACE
9	9	D80156	ANGLE, OUTSIDE BRACE
10	4	D80155	ANGLE, EXTENSION BRACE

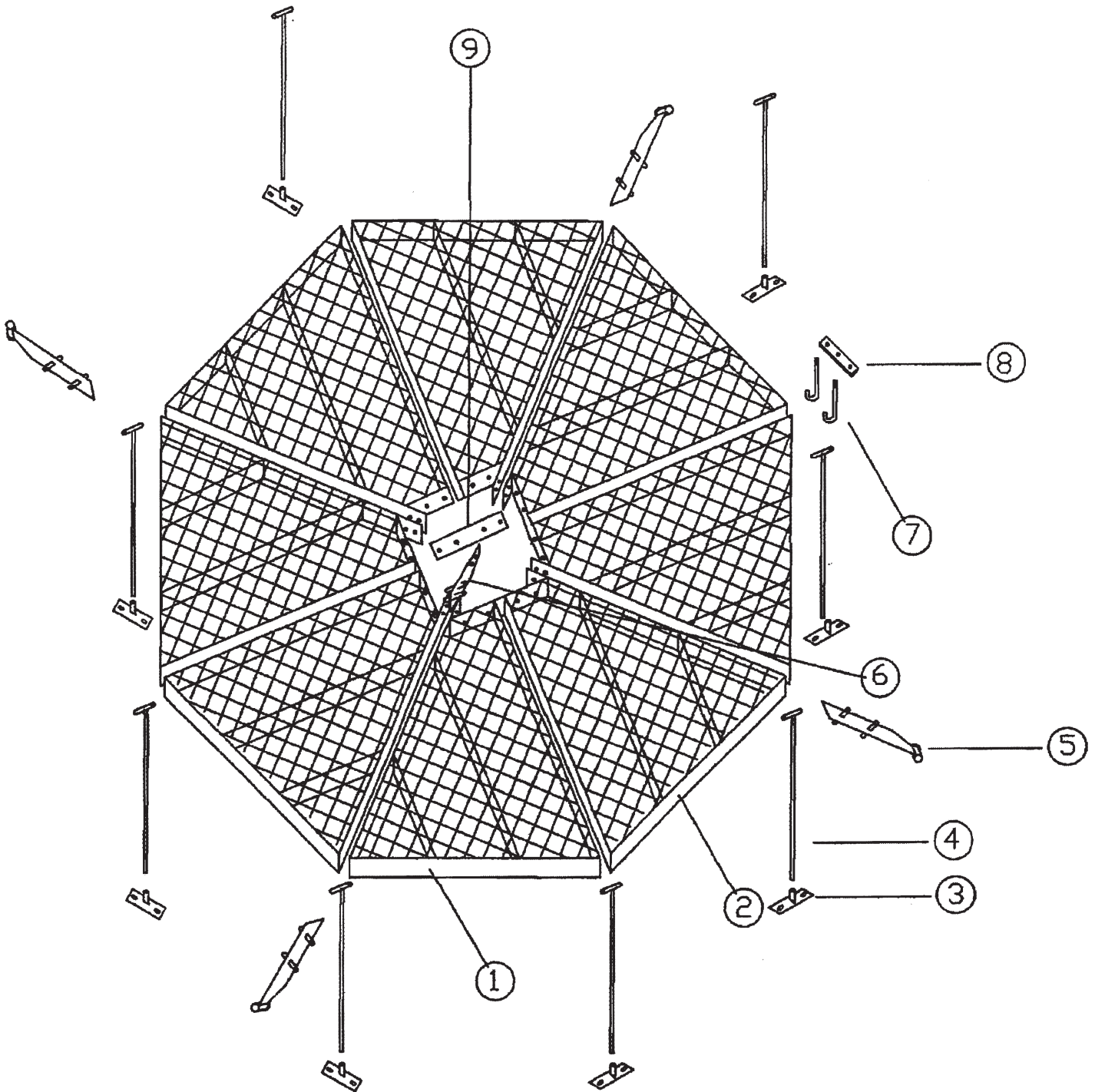
AUGER ASSEMBLY 800 BUSHEL DRYER



AUGER ASSEMBLY 800 BUSHEL DRYER

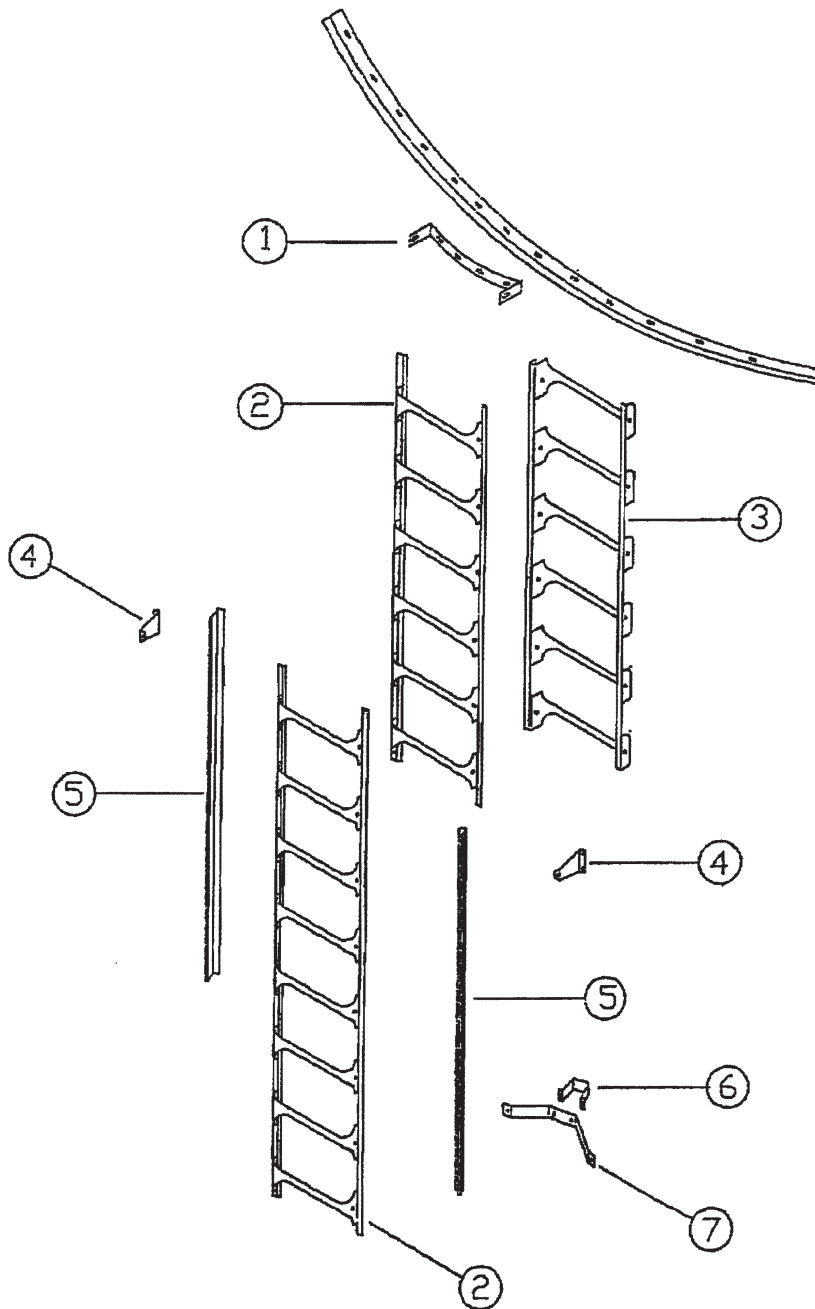
REF #	PART #	QTY	DESCRIPTION
1	D26020	1	Upper Stub Shaft
	D26021	1	Upper Stub Shaft Horizontal Head
2	D21161H	1	2" Flange Bearing
3	D26091	1	Head Baffle, Side
4	D26180	1	Head Baffle, Top
5	D26190	1	Head Baffle, Spout Cover
6	D26013	1	Swivel Head
7	D76070	1	Spout, Top Unloading
8	D26200	1	Spout, Head Baffle
9	D86112	1	Tube, Top Vertical Telescoping
	D86111	1	Tube, Top Vertical Solid Extension
10	500401	1	Half-Band
11	D80141	1	Mount, Top Tube Winch
12	D86081	1	Spout Handle, 800
13	D80098	1	Winch
14	02413	17 FT.	Cable, 1/8" Aircraft
15	D86132	1	Flite, Upper Vertical Notched (Telescoping)
	D86131	1	Flite, Upper Vertical Solid Extension
16	D80136	1	Winch Cable Stand
17	77625	1	2 1/2" Pulley
18	71941	1	Eye Bolt, 1/2" X 1 1/2"
19	D86150	1	Stub Shaft, Connecting Bullet
	D26150	1	Stub Shaft, Solid Extension
20	D86122	1	Tube, Lower Vertical Telescoping
	D86121	1	Tube, Lower Vertical Solid Extension
21	D41030	2	Half-Band, Grain Cleaner Attachment
22	D26220	1	Grain Cleaner Hole Cover
23	D86142	1	Flite, Lower Vertical 151.5"
24	D26101	1	Stub Shaft, Lower
25	73417	1	Key, 1/2" X 1/2" X 1 1/2"
26	72424	1	2" Flat Washer
27	76001	1	Sheave, 3B18.4 L/Hub
	76002	1	Hub, 2" SK
28	69503	1	Snap Ring
29	71134	1	5/8"-11 x 3 1/2" Grade 8 Capscrew
30	77622	1	Clamp, Toggle
31	D80060	1	Bracket, Swivel Head
32	D86171	1	Split Auger Carrier (Use During Assy)
33	502690	1	Bracket, Clamp Lock
34	D80147	1	Pin Assemble, Top Tube Latch

PLATFORM ASSEMBLY 800 BUSHEL DRYER



REF #	PART #	QTY	DESCRIPTION
1.	D80106	4	FLOOR, WLDMNT LT
2.	D80107	4	FLOOR, WLDMNT RT
3.	D80142	8	MOUNT, FLOOR SUPPORT
4.	D80115	8	PLATFORM SUPPORT PIPE
5.	D80110	4	TARGET, PLATFORM SUPPORT
6.	D80086	4	PLATFORM SUPPORT TUBE END
7.	D80026	2	J-BOLT, 1/2 X 6
8.	D80025	1	TUBE WINCH CABLE MTG PLATE
9.	502602	4	PLATFORM SPLICE

LADDER KIT 800 SERIES DRYER

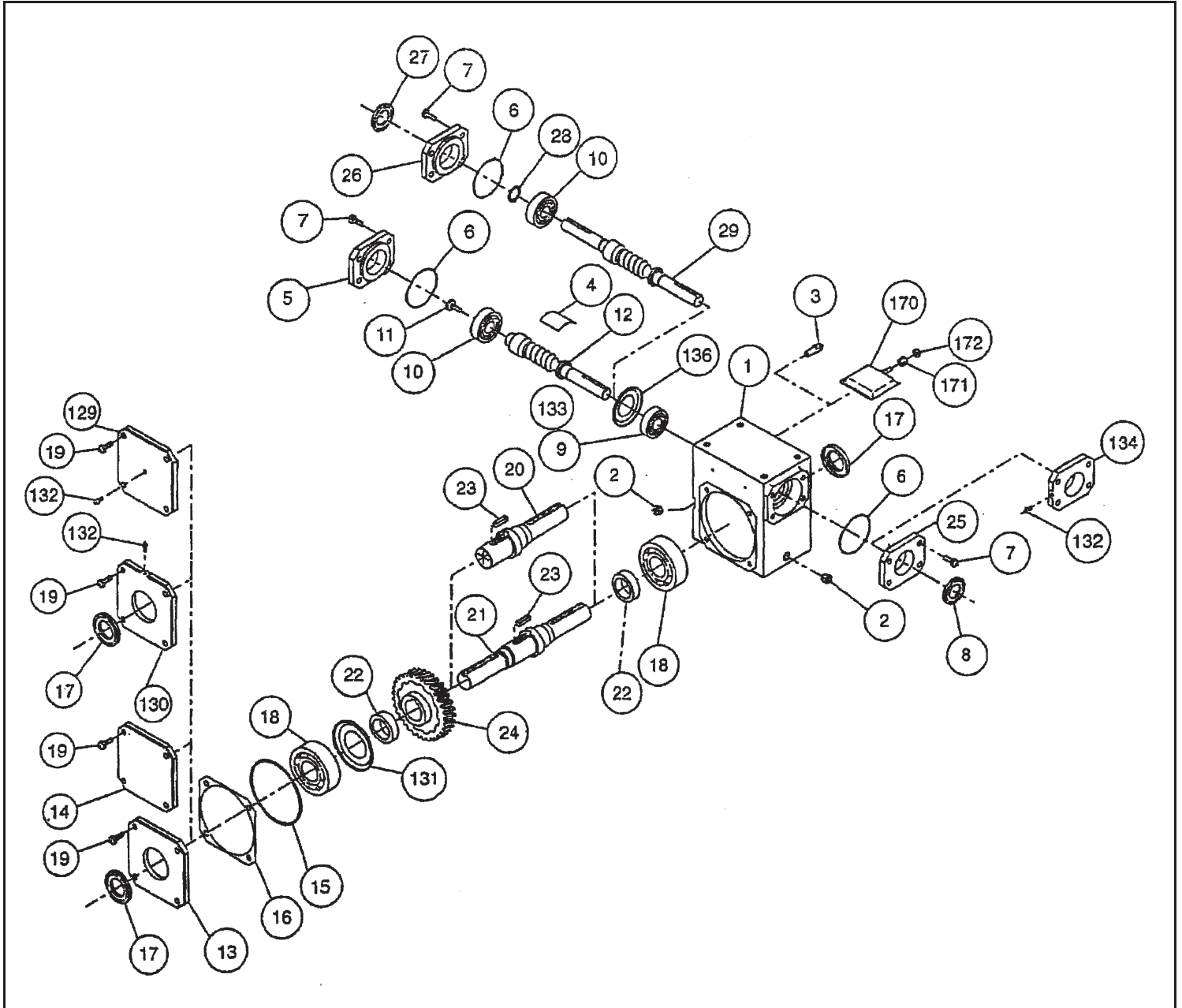


REF #	PART #	QTY	DESCRIPTION
1.	D80031	1	BRACKET, LADDER MTG
2.	D34070	2	LADDER SECTION, LWR
3.	D34080	1	LADDER SECTION, UPR
4.	D24152	8	BRACKET, UPR LADDER
5.	D80035	2	GUIDE, LADDER
6.	D54170	1	CLAMP, LADDER BRKT
7.	D54162	1	BRACKET, LWR LADDER
	A74000	1	BOLT BAG

HYDRAULIC & ELECTRIC UNLOAD HEAD PARTS LIST

REF. NO.	PART NO.	NO. REQ'D.	DESCRIPTION
1	D26311	1	Auger, Horiz. Unload, Vertical
2	D26282	1	Head, Top Auger
3	D21161	1	Bearing, 2" Flanged
4	D26021	1	Stub, Top Auger Horz Hd
5	42-58080	1	Band, 8" X 14 1/2" Connecting
6	D56300	1	Housing, Horiz. Unload Auger Extended
7	D56295	1	Flight, Horiz. Unload Auger Hyd Extended
8	D26270	1	Motor, M202 Hydraulic
9	42-56211	1	Stub, Flight Shaft
10	85000	1	Bearing, 1"
12	D26162	4	Band, Inspection Hole
14	69503	1	Snap Ring
15	D26441	2	Spreader, Grain
16	D26255	1	End Cap
18	D26265	1	Adapter, Spout
19	D26326	1	Spout, Top Unl. Head
21	42-54054	1 Pair	Retainer, Bearing
23	71051	7	Capscrew, 3/8" x 3/4"
24	41-10042	3	Half Band 8"
25	42-58082	1	Band, Rear Motor Support
26	42-58037	1	Stub, Head
27	42-58049	1	Plate, Head
28	42-58081	1	Guard, Belt
33	76052	1	9.4 Sheave
	76069	1	Hub
34	75044	1	Pulley, 2B x 3" x 22 mm – 50 Hz Motor
34	75045	1	Pulley, 2B 3" x 7/8" – 60 Hz Motor
35	D29321	2	Belt, B40
36	42-58052	1	Bearing
37	42-58046	2	Rod, Motor Mounting
38	42-58048	1	Strap, Motor Mount w/Nuts
38	42-58091	1	Strap, Motor Mount
39	42-58083	1	Angle, Rear Motor Support
40	D26314	1	Flight, Vert 800 Bu
41	D26582	1	Housing, Vert 800 Bu
42	D56291	1	Flight, Horiz. Elec Unl Extended
46	42-58050	1	Key, 1/4" X 1/4" X 2

Basic Single Reduction Unit



Single Reduction Parts List

Item # Description

Basic Single Reduction Unit

-
1. Gear Housing
 2. Pipe Plug
 3. Vent Plug
 4. Splash Guard
 5. Input Cover
 6. O-Ring
 7. Hex Head Cap Screw
 8. Input Oil Seal
 9. Input Bearing
 10. Input Bearing
 - *11. Retaining Screw
 12. Input Shaft
 13. Output Cover
 14. Output Cover
 15. O-Ring
 16. Output Cover Gasket (as required)
 17. Output Oil Seal
 18. Output Bearing
 19. Hex Head Cap Screw
 - ***20. Single Output Shaft
 - ***21. Double Output Shaft
 22. Gear Spacer
 23. Gear Key (only used on size 2-5/8" center distance and larger units)
 24. Output Gear (supplied only as output assembly on size 1-1/3" through 2-3/8" center distance units)
 25. Input Cover (only used on size 4-1/4" center distance and larger units)
 26. Input Cover
 27. Input Oil Seal
 - *28. Retaining Ring - Shaft
 29. Double Input Shaft
 170. Internal Pressure Compensation Chamber (optional)
 171. Internal Pressure Compensation Chamber Stem Plug
 172. Internal Pressure Compensation Chamber Stem Nut

**not used on 4-1/4" center distance and larger units*

Quill Motor Flange Unit

-
30. Double Input Shaft
 40. Quill Motor Flange
 41. Input Oil Seal
 42. Hex Head Cap Screw
 43. Retaining Ring - Shaft
 44. Retaining Ring - Housing (only used on size 4-1/4" center distance and larger units)
 45. Quill Input Shaft

Hollow Output Shaft Unit

-
50. Gear Housing
 51. Output Cover
 52. Output Oil Seal
 53. Output Bearing
 54. Gear Spacer
 - ***55. Output Shaft
 56. Setscrew
 57. Gear Key (only used on size 2-5/8" center distance and larger units)

Item # Description

58. Output Gear (supplied only as output assembly on size 1-1/3" through 2-3/8" center distance units)

Mounting Bracket Options

-
70. Horizontal Mounting Foot
 71. Cap Screw
 72. High and Low Riser Bracket
 73. Hex Head Cap Screw
 74. "J" Mount Bracket
 75. Output Flange
 76. Machine Faced Output Cover (only used on size 2-3/8" center distance and larger solid output shaft units)
 77. Hex Head Cap Screw
 78. Torque Bracket
 79. Hex Head Cap Screw

Extended Bearing Unit

-
90. Flange
 91. Output Shaft
 92. Bearing
 93. Output Oil Seal
 94. Hex Head Cap Screw
 95. Pipe Plug
 96. Expansion Plug
 - *97. Flange Cover
 - *98. Gasket
 - *99. Hex Head Cap Screw

**only used on size 5-1/4" center distance and larger units*

Long Motor Flange and Coupling Kit

-
110. "C" Face Motor Flange
 111. Hex Head Cap Screw
 112. Coupling Key - Reducer Shaft
 113. Setscrew - Reducer Shaft
 114. Coupling Gear - Reducer Shaft
 115. Coupling Sleeve
 116. Setscrew - Motor Shaft
 117. Coupling Gear - Motor Shaft
 118. Coupling Key - Motor Shaft

Vertical Shaft Required Parts (Supplied only when mounting position involves a vertical shaft.)

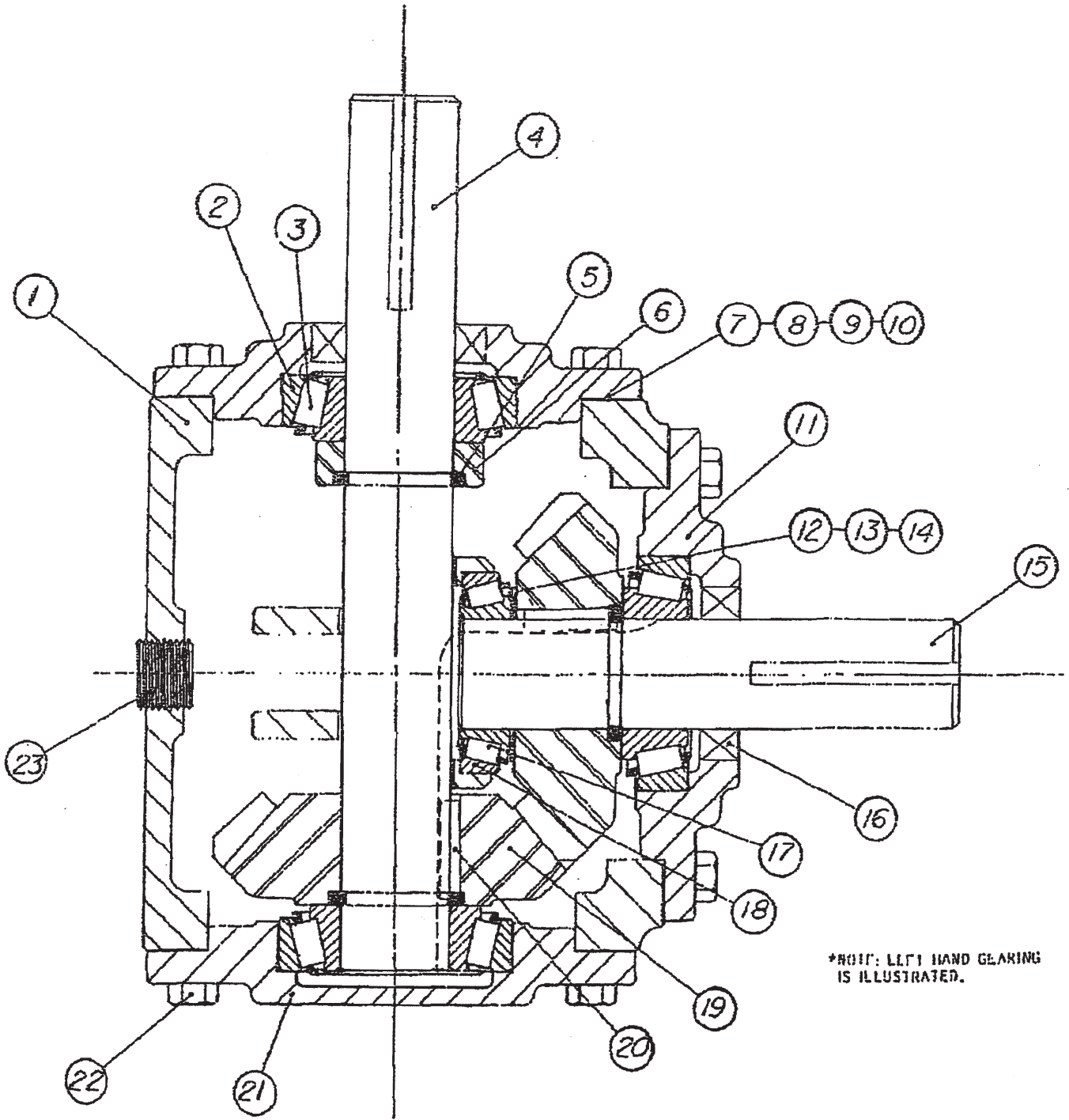
-
- *129. Output Cover
 - *130. Output Cover
 - *131. Output Bearing Grease Retainer
 132. Grease Fitting
 133. Sealed Ball Bearing (only used on size 1-3/4" through 2-5/8" center distance units)
 - **134. Input Cover
 - **136. Input Bearing Grease Retainer

** Only used on size 4-1/4" center distance and larger units.*

*** Only used on size 3" center distance and larger units.*

**** Supplied only as output assembly on size 1-1/3" through 2-3/8" center distance units.*

GEAR BOX, 25 H.P. AUGER DRIVE

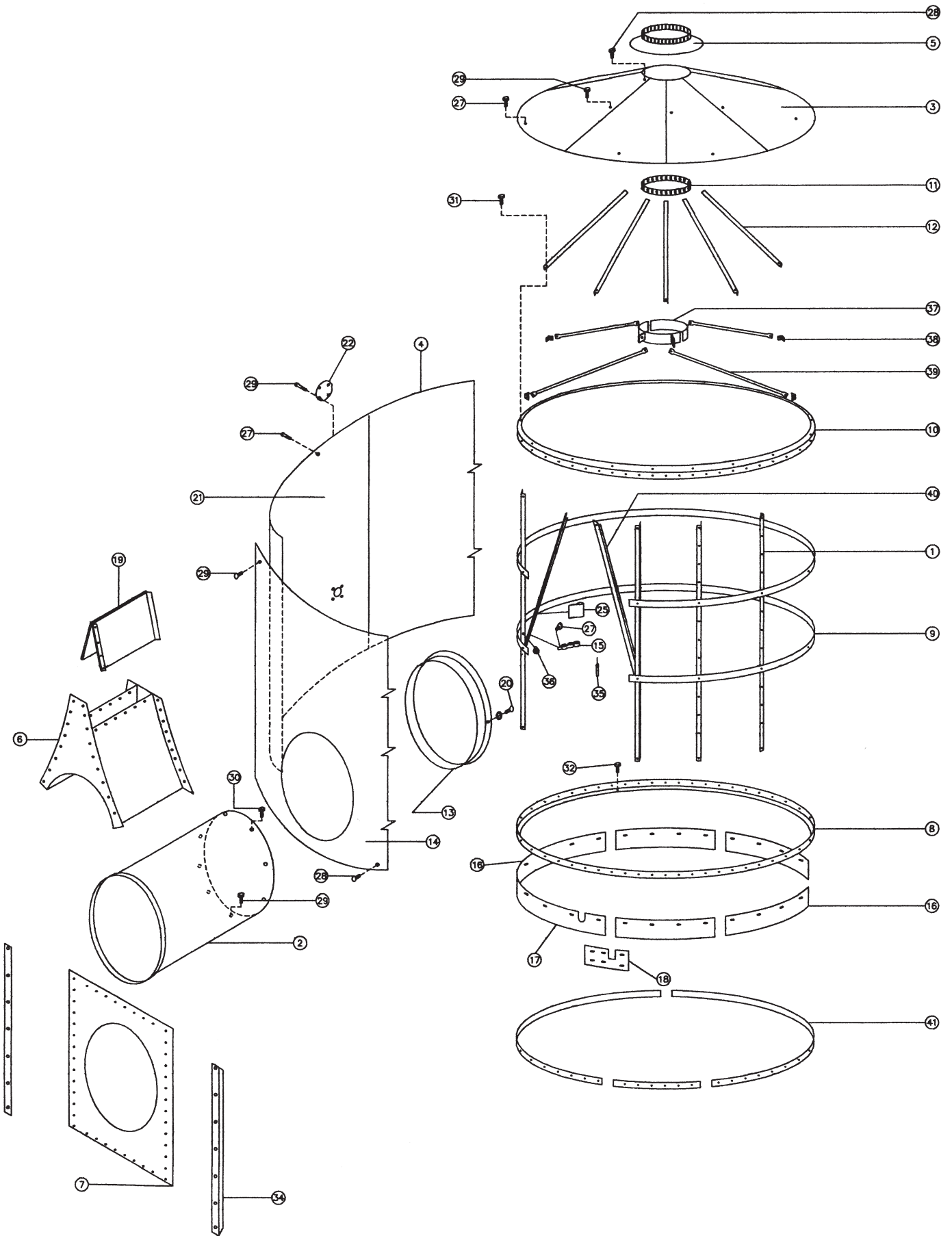


*NOTE: LEFT HAND GEARING IS ILLUSTRATED.

(24) NOT ILLUSTRATED

DET	PART NUMBER	QTY	DESCRIPTION
1	000174	1	HOUSING
2	153585	3	BEARING CUP
3	15393	3	BEARING CONE
4	232645	1	THRU SHAFT
5	620070	3	RETAINING RING
6	450056	1	COLLAR
7	390021	VAR	GASKET (.015)
8	390039	VAR	GASKET (.005)
9	390195	VAR	GASKET (.003)
11	054619	2	THRU CAP
13	370015	VAR	SHIM(.005)
14	370023	VAR	SHIM (.010)
15	224766	1	SHAFT
16	300087	2	SEAL
17	150136	1	BEARING CONE
18	150144	1	BEARING CUP
19	100560	2	GEAR
20	600221	2	TAPERED KEY
21	054593	1	BLANK CAP
22	410167	24	SEMS CAP SCREW
23	410027	2	PIPE PLUG (SOLID)
24	410035	1	PIPE PLUG (VENTED)

PLENUM ASSEMBLY



PLENUM ASSEMBLY

REF. NO.	PART NO.	NO. REQ'D	DESCRIPTION
1	D33011	38	Plenum Frame Angle
2	D53020	1	Connecting Tube
3	D53342	7	Lid Sheet
4	D53041	4	Side Sheet Plenum
5	D63050	1	Cone Cap
6	D53061	1	Saddle
7	D84025	1	Front Enclosure
8	D53080	1	Lower Frame Band
9	D53091	2	Center Band, 1/8" Thick
10	D53100	1	Transition Band
11	D53110	1	Top Ring
12	D63120	35	Lid Frame Angles
13	D53130	1	Connecting Tube Trim Ring
14	D53141	1	Sheet with Connecting Tube Hole, Std Perf
	D53361	1	Sheet with Connecting Tube Hole Fine Perf
	D53150	1	Side Sheet (Narrow Strip)
	D53151	1	Plenum Side Sheet-Narrow
15	D23161	2	Thermometer Support Bracket
16	D53172	5	Skirt
17	D53182	1	Skirt with Slot
18	D53192	6	Splices, Plenum Skirt
19	D53161	1	Extension, Saddle
20	71942	11	No. 14 x 3/4" Self Tapping Screw
21	D53211	1	Side Sheet with Cleaner Hole
22	D24210	1	Plate, Cover
25	D23210	2	Push on Clip
27	71823	85	1/4" - 20 x 1/2" Slotted Hd Machine Screw
28	71825	108	1/4" - 20 x 3/4" Slotted Hd Machine Screw
29	71822	104	1/4" - 20 x 3/8" Slotted Hd Machine Screw
30	71942	14	#14 x 1/2 Self Tapping Screw
31	71001	35	1/4" x 3/4 Capscrew
32	72155	6	5/16" x 3/4" Self Tapping Hex Hd Screw
34	D84026	2	Stiffener, Front Sheet
35	77271	1	Sensor, Temperature Plenum
36	77567	1	Hi Limit, Sensor
	D23230	1	Bracket Sensor
	72958	1	Nut, Brass Sensor
	72522	1	Spacer, Sensor Washer
	72490	35	Spacer, Lid Angle
37	D26057	2	Clamp, Brace (4 on Solid Extension Dryers)
38	D83080	4	Plenum Center Tube Brace Angle
39	D83085	4	Plenum Center Tube Brace
40	D83095	2	Plenum Angle Brace
41	D80157	1	Skirt Reinforcing Band