

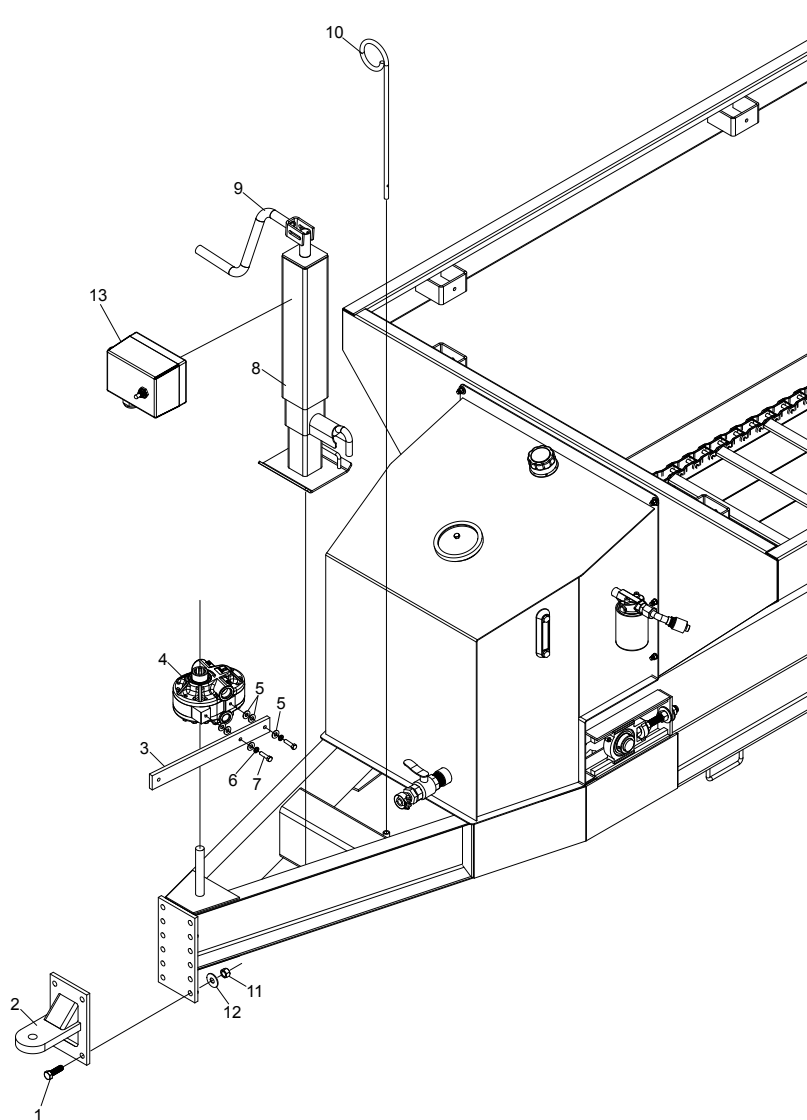


V12 Orchard Spreader

Illustrated Parts Breakdown

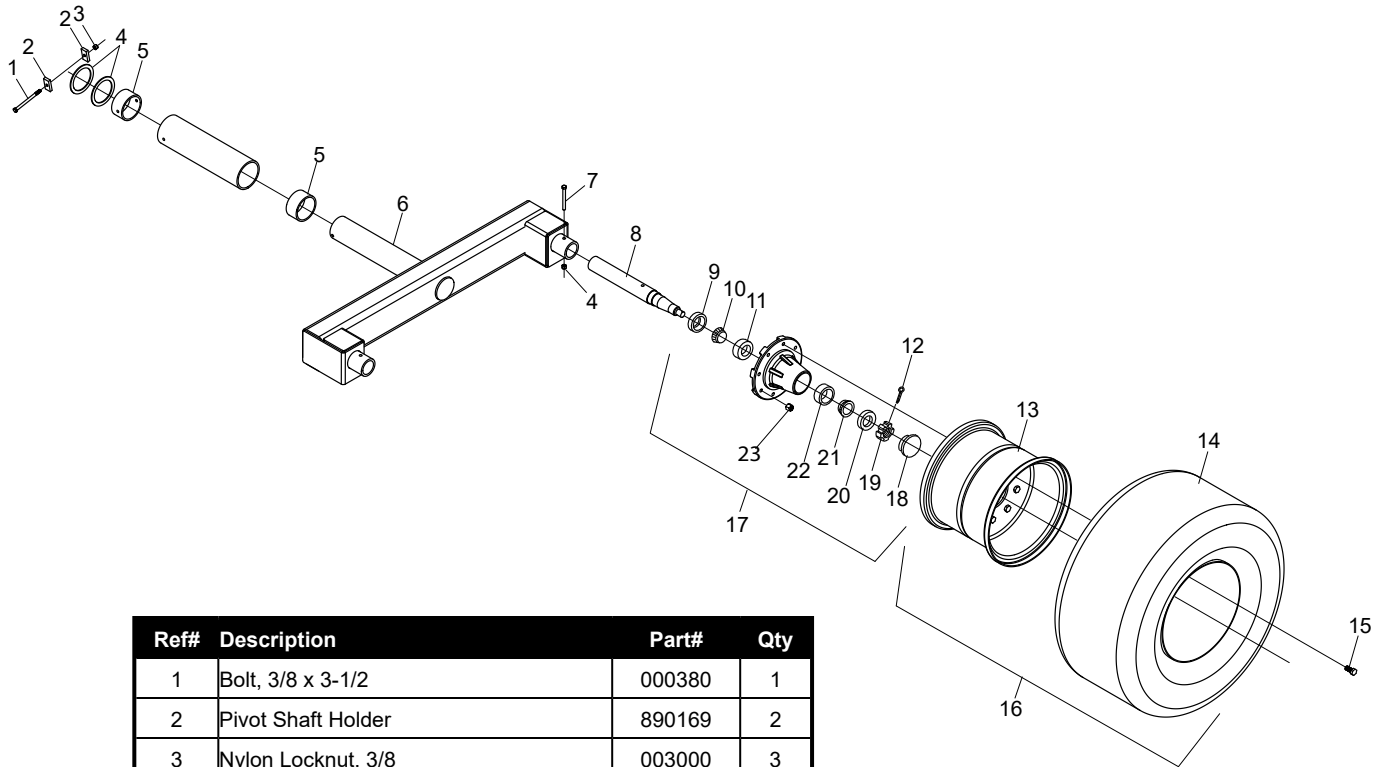
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Front End Assembly



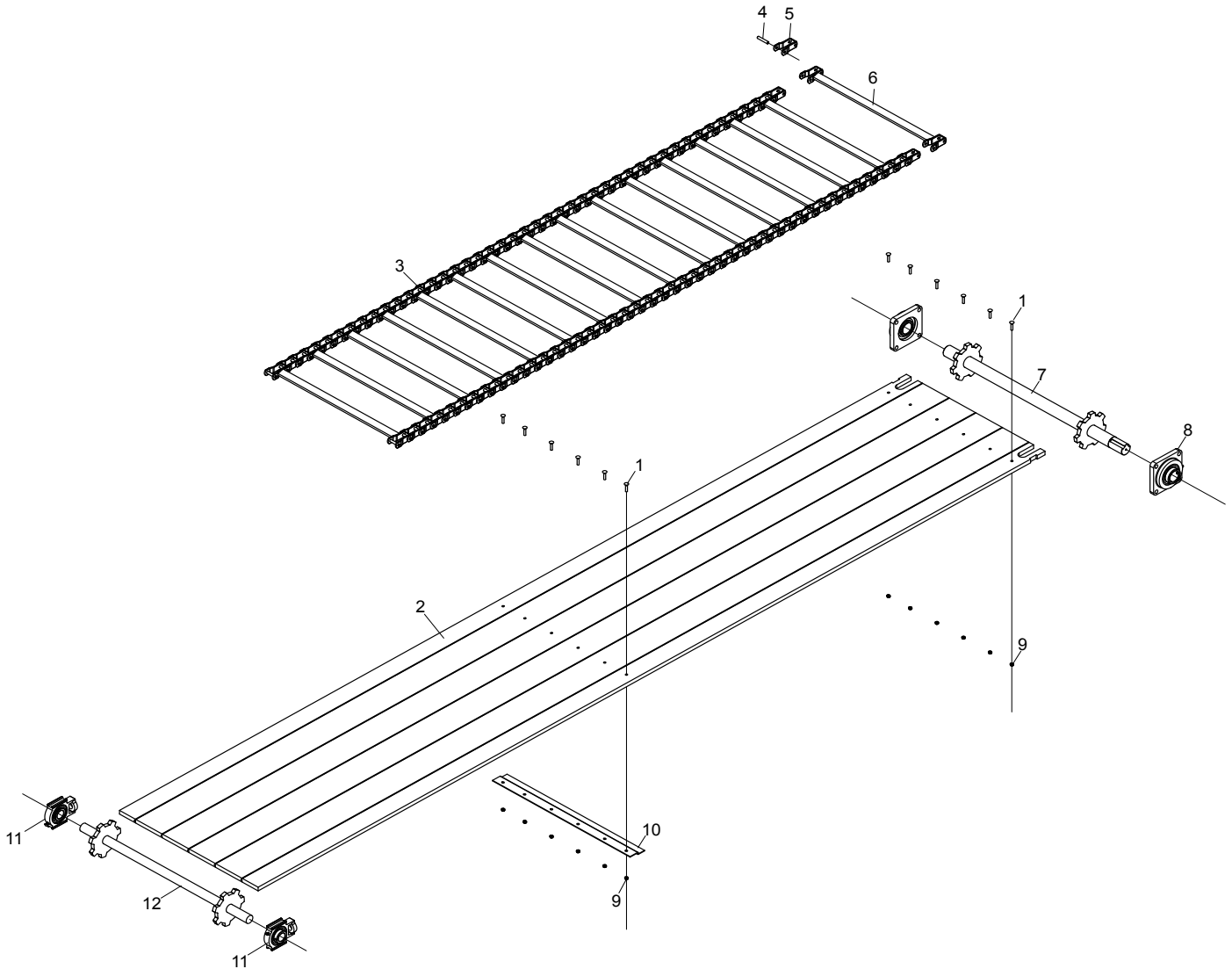
Ref#	Description	Part#	Qty
1	Bolt, 5/8 x 2	000615	4
2	Hitch Weldment	890446	1
3	Pump Holder	801052	1
4	PTO Pump	890178	1
5	Flatwasher, 3/8	001035	6
6	Lock Washer, 3/8	000820	2
7	Bolt, 3/8 x 1-1/2	000280	2
8	Complete Jack	100155	1
9	Jack Handle Only	100448	1
10	Hydraulic Hose Holder	800556	1
11	Lock Nut, 5/8	000972	4
12	Flatwasher, 5/8	001075	4
13	Switchbox	890194	1

Axle Assembly



Ref#	Description	Part#	Qty
1	Bolt, 3/8 x 3-1/2	000380	1
2	Pivot Shaft Holder	890169	2
3	Nylon Locknut, 3/8	003000	3
4	Pivot Washer	830015	2
5	Bronze Bushing	800632	2
6	Walking Beam Weldment, Left	890141	1
	Walking Beam Weldment, Right	890143	1
7	Bolt, 3/8 x 5	000350	2
8	Spindle	890144	2
9	Grease Seal	300500	2
10	Inner Bearing	300553	2
11	Inner Race	300551	2
12	Cotter Pin, 5/32 x 1-3/4	300282	2
13	Wheel	830235	2
14	18L x 16.1 Tire	800513	2
15	Lug Bolt, 9/16	300556	16
16	Tire & Wheel Assembly	890145	2
17	Hub (Complete w/ Bearings)	300549	2
18	Hub Cap	300555	2
19	Spindle Nut	300281	2
20	Spindle Washer	300283	2
21	Outer Bearing	300554	2
22	Outer Race	300552	2
22	Lug Nut, - 1288 Hub (5/8" Fine)	300278	8

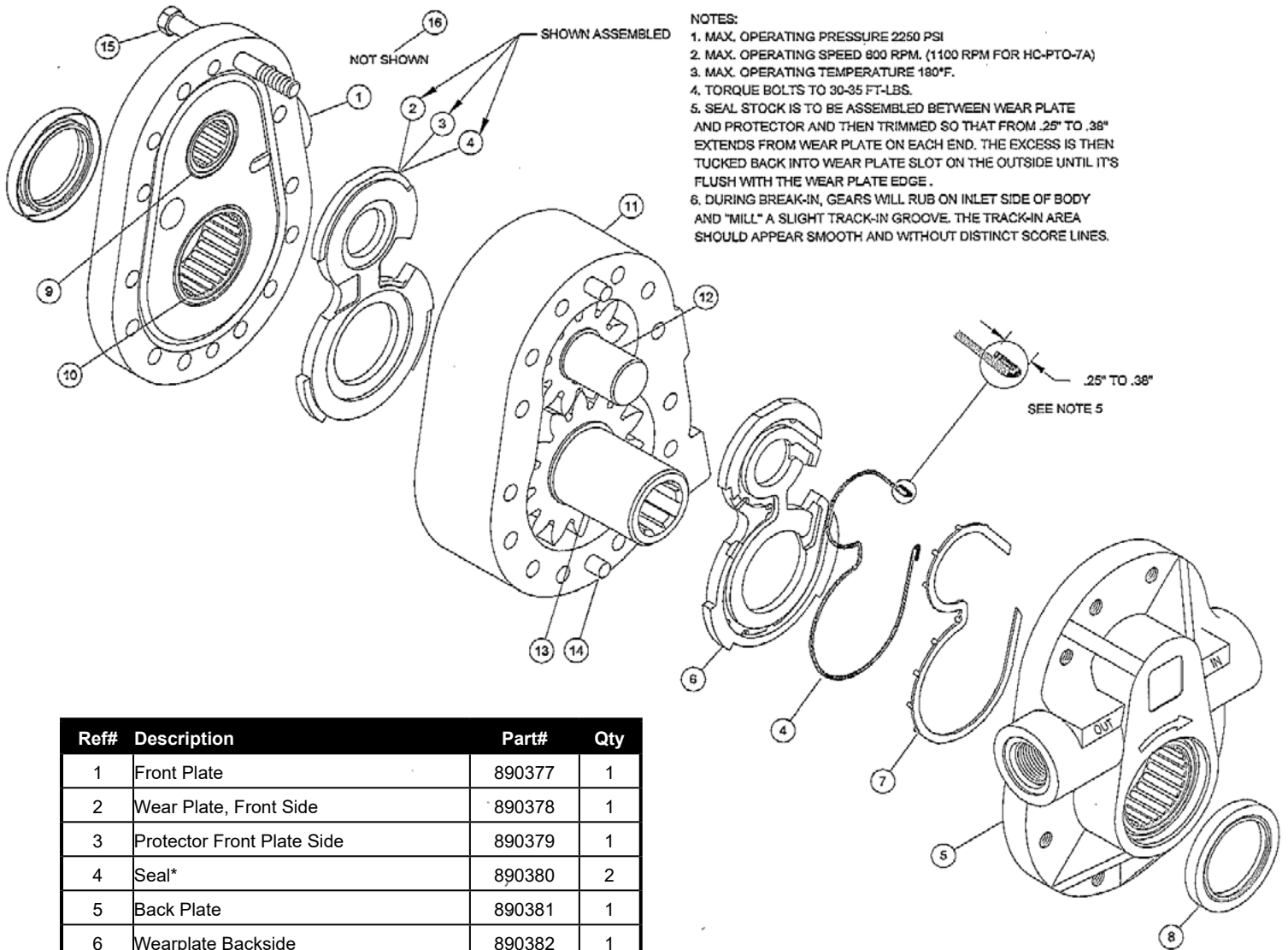
Floor & Apron



Ref#	Description	Part#	Qty
1	Carriage Bolt, 5/16 x 1-1/2	000126	18
2	Floor Board **	890198	6
3	Web Chain w/ Slats (10' Section)	830555-WD	3.3
4	Connector Pin	830328	N/A
5	Connector Link w/ Pin	830326	N/A
6	Slat Assembly	890375	N/A
7	Rear Drive Shaft Weldment	830528	1
8	Flange Bearing	801100	2
9	Nut, 5/16	000910	18
10	Floor Hold Plate	830557	3
11	Take-up Bearing	801099	2
12	Front Drive Shaft Weldment	830675	1

** Left & Right floor boards must be cut to correct width

Pump Assembly



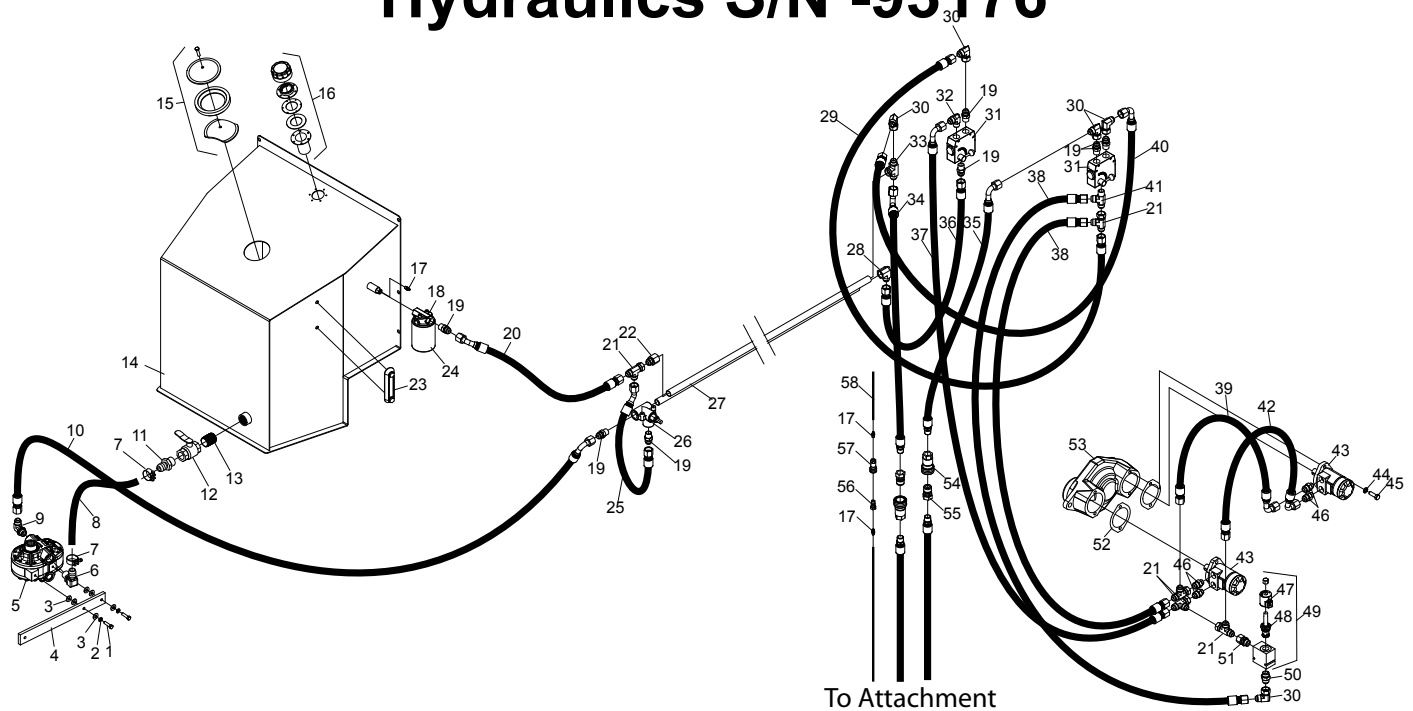
NOTES:

1. MAX. OPERATING PRESSURE 2250 PSI
2. MAX. OPERATING SPEED 800 RPM. (1100 RPM FOR HC-PTO-7A)
3. MAX. OPERATING TEMPERATURE 180°F.
4. TORQUE BOLTS TO 30-35 FT-LBS.
5. SEAL STOCK IS TO BE ASSEMBLED BETWEEN WEAR PLATE AND PROTECTOR AND THEN TRIMMED SO THAT FROM .25\" TO .38\" EXTENDS FROM WEAR PLATE ON EACH END. THE EXCESS IS THEN TUCKED BACK INTO WEAR PLATE SLOT ON THE OUTSIDE UNTIL IT'S FLUSH WITH THE WEAR PLATE EDGE.
6. DURING BREAK-IN, GEARS WILL RUB ON INLET SIDE OF BODY AND "MILL" A SLIGHT TRACK-IN GROOVE. THE TRACK-IN AREA SHOULD APPEAR SMOOTH AND WITHOUT DISTINCT SCORE LINES.

Ref#	Description	Part#	Qty
1	Front Plate	890377	1
2	Wear Plate, Front Side	890378	1
3	Protector Front Plate Side	890379	1
4	Seal*	890380	2
5	Back Plate	890381	1
6	Wearplate Backside	890382	1
7	Protector Back Plate Side*	890383	1
8	Shaft Seal*	890384	2
9	Idler Shaft Bearing	890385	2
10	Drive Shaft Bearing	890386	2
11	Body HC-PTO-2A	890387	1
12	Gear Assembly	890388	1
13	Drive Gear Assembly	890389	1
14	Dowel Pin	890390	2
15	Cap Screw	890391	12
16	Seal Kit	890392	1

Note: All items with * are included in Seal Kit.

Hydraulics S/N -93176

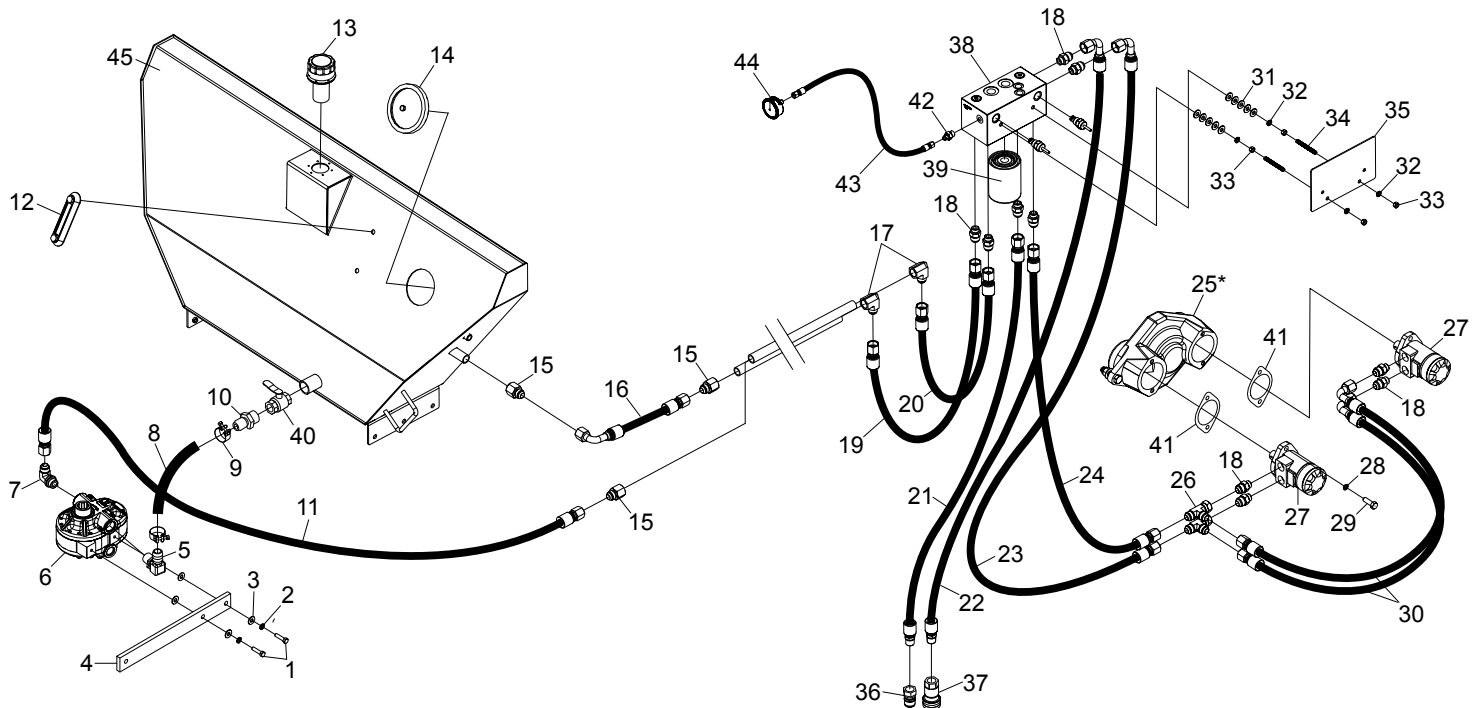


*Note: Double Drive Gearbox (ID 53) was changed at serial number 94982. Old gearbox (801098) is no longer available and will be substituted with new gearbox (801418).

Ref#	Description	Part#	Qty
1	Bolt, 3/8 x 1-1/2	000280	2
2	3/8 Lock Washer	000820	2
3	3/8 USS Flat Washer	001035	6
4	Pump Holder	801052	1
5	PTO Pump	890178	1
6	Elbow Fitting	290080	1
7	Hose Clamp	290169	2
8	66" Supply Hose	890350	1
9	Elbow Fitting	290022	1
10	148" Hose	890351	1
11	Straight Fitting	290187	1
12	Valve	830355	1
13	Pipe Nipple	290081	1
14	Hydraulic Reservoir	890132	1
15	Access Door	290044	1
16	Breather Cap	290142	1
17	Straight Fitting	290036	3
18	Filter Head	290131	1
19	Straight Fitting	290120	7
20	37" Hose	890361	1
21	"T" Fitting	290034	5
22	Straight Fitting	290019	3
23	Sight Guage	290054	1
24	Oil Filter (10 Micron)	290135	1
25	22" Hose	890360	1
26	Relief Valve	890191	1
27	Hydraulic Line	890154	2
28	Elbow Fitting	290093	1
29	39" Hose	890354	1

Ref#	Description	Part#	Qty
30	Elbow Fitting	290150	5
31	Flow Control Valve	890192	2
32	Elbow Fitting	290147	1
33	"T" Fitting	290129	1
34	24" Hose	890358	1
35	14" Hose	890355	1
36	31" Hose	890352	1
37	36" Hose	890353	1
38	31" Hose	890357	2
39	23" Hose	830333	1
40	58" Hose	890359	1
41	"T" Fitting	290078	1
42	24" Hose	890356	1
43	Drive Motor	830171	2
44	Lockwasher, 1/2	000840	4
45	Bolt, 1/2 x 1-1/2	000435	4
46	Straight Fitting	290001	4
47	Solenoid Valve Coil	830325	1
48	Solenoid Valve	830320	1
49	Complete Valve Assm.	890197	1
50	Straight Fitting	290065	1
51	Straight Fitting	290079	1
52	Gasket	830251	2
53	Double Drive Gearbox	801418	1
54	Female Coupler	290041	2
55	Male Coupler	290040	2
56	1/4" Male Coupler	290197	1
57	1/4" Female Coupler	290196	1
58	1/4" Hose (sold per inch)	890365	A/R

Hydraulics S/N 93176+

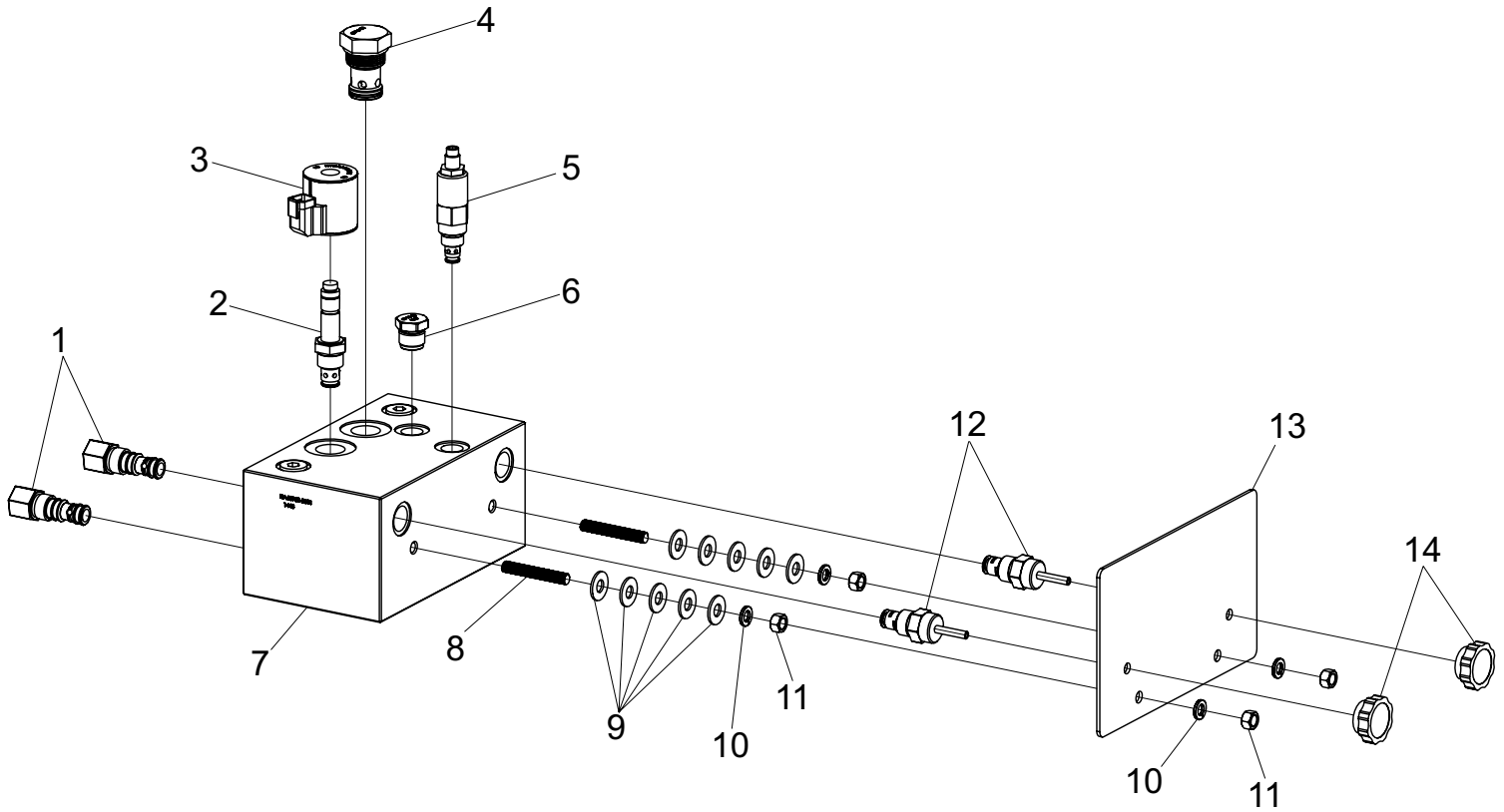


*Note: Double Drive Gearbox (ID 25) was changed at serial number 94982. Old gearbox (801098) is no longer available and will be substituted with new gearbox (801418).

Ref#	Description	Part#
1	3/8" x 1-1/2" Hex Head Bolt	000280
2	3/8" Split Lock Washer	000820
3	3/8" Flat Washer	001035
4	Pump Holder	801052
5	90 Degree Elbow (20HB x 16MB)	290080
6	PTO Pump	890178
7	90 Degree Elbow (12MJ x 12MB)	290022
8	72" Suction Hose	830689
9	1-1/2" SV Hose Clamp	290169
10	Straight Fitting (20HB x 20MP)	290187
11	111" Hose Assembly (12FJX x 12FJX)	830688
12	Hydraulic Tank Sight Gauge	290054
13	4" Tank Filler Breather Cap	290142
14	6" Tank Door	290044
15	Straight Fitting (12MJ x 12FP)	290019
16	27" Hose Assembly	830336
17	90 Degree Elbow (12MJ x 12FP)	290093
18	Straight Fitting (12MJ x 10MB)	290001
19	22" Hose Assembly (12FJX - 12FJX)	830681
20	25" Hose Assembly (12FJX - 12FJX)	830682
21	12" Hose Assembly (12FJX x 12MP)	830683
22	19" Hose Assembly (12FJX90S x 12MP)	830684

Ref#	Description	Part#
23	24" Hose Assembly (12FJX90S - 12FJX)	830686
24	21" Hose Assembly (12FJX - 12FJX)	830685
25	6:1 Double Drive Gearbox S/N 94982+	801418
26	T-Fitting (12MJ x 12FJX x 12MJ)	290034
27	Drive Motor	830171
28	1/2" Lock Washer	000840
29	1/2" x 1-1/2" Hex Head Bolt	000435
30	23" Hose Assembly (12FJX90 x 12FJX)	890333
31	3/8" Flat Washer	001035
32	3/8" Lock Washer	000820
33	3/8" Hex Nut	000915
34	3/8" x 3-1/4" Threaded Rod	902245
35	Manifold Face Plate	890451
36	3/4" Male Ag Coupling	290040
37	3/4" Female Ag Coupling	290041
38	Manifold	890940
39	Oil Filter	890962
40	Ball Valve	830355
41	2 Bolt Flange Gasket	830251
42	Straight Fitting, - #4 MJ x #6 MB	700908
43	12" Hose Assembly (4FJX x 4FJX)	830812
44	SPG Pressure Gauge	290293
45	Oil Tank	890410

Manifold Components S/N 93176+

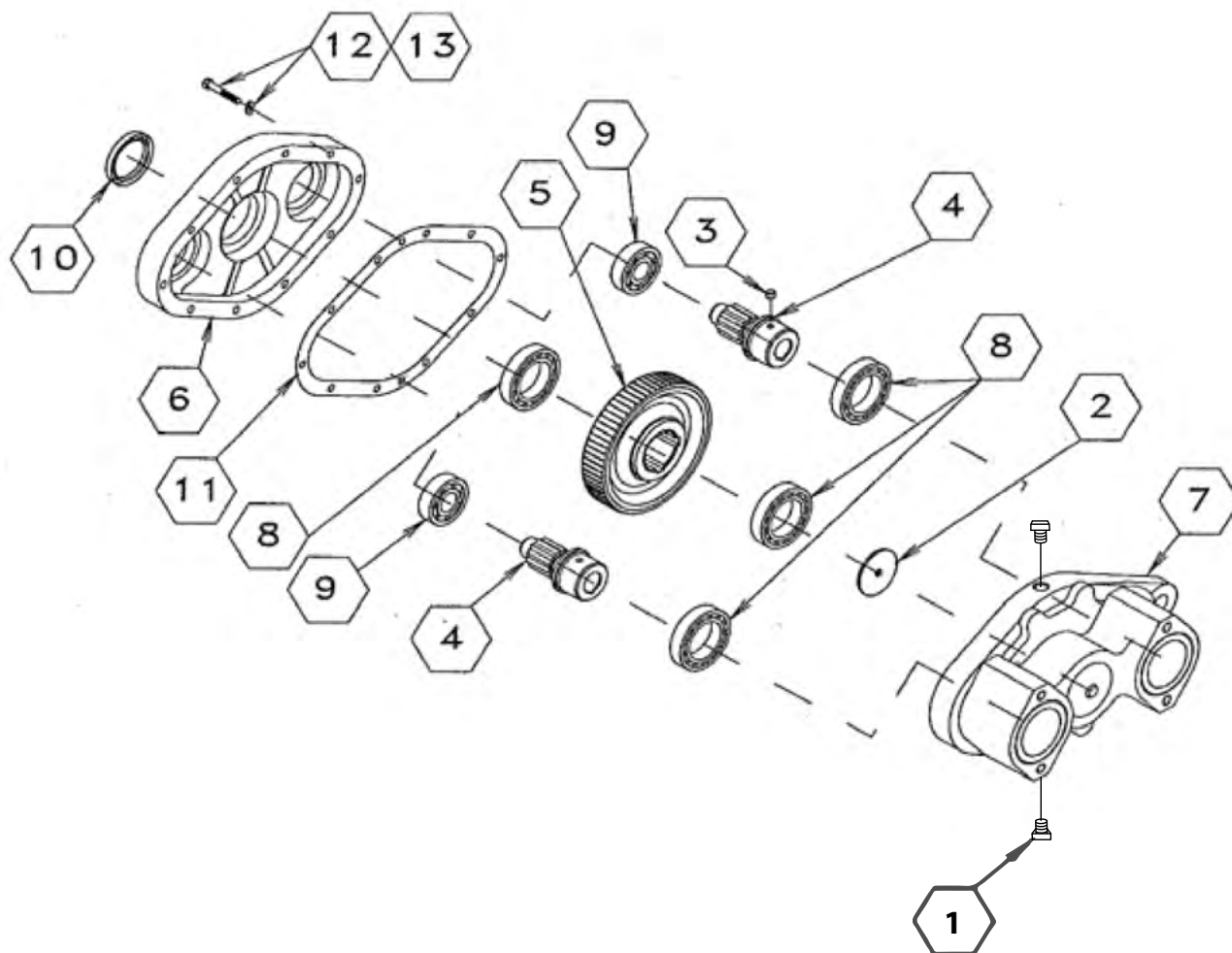


Ref#	Description	Part#
1	EP10-S35 40 Directional Valve	806140
2	SV16-21 2 Way N/O Poppet Valve	830320
3	Solenoid Valve Coil (4303712)	830325
4	CV16-20-0-N-15 Check Valve	830801
5	Relief Valve	830535
6	CV10-20-0-N-02 Check Valve	830802
7	Hydraulic Manifold with all valves included	890940

Ref#	Description	Part#
8	3/8" x 2-1/2" Threaded Rod	890951
9	3/8" Flat Washer	001035
10	3/8" Lock Washer	000820
11	3/8" Hex Nut	000915
12	MR10-20A Flow Control Valve	806136
13	Manifold Face Plate	890451
14	Control Knob	806143

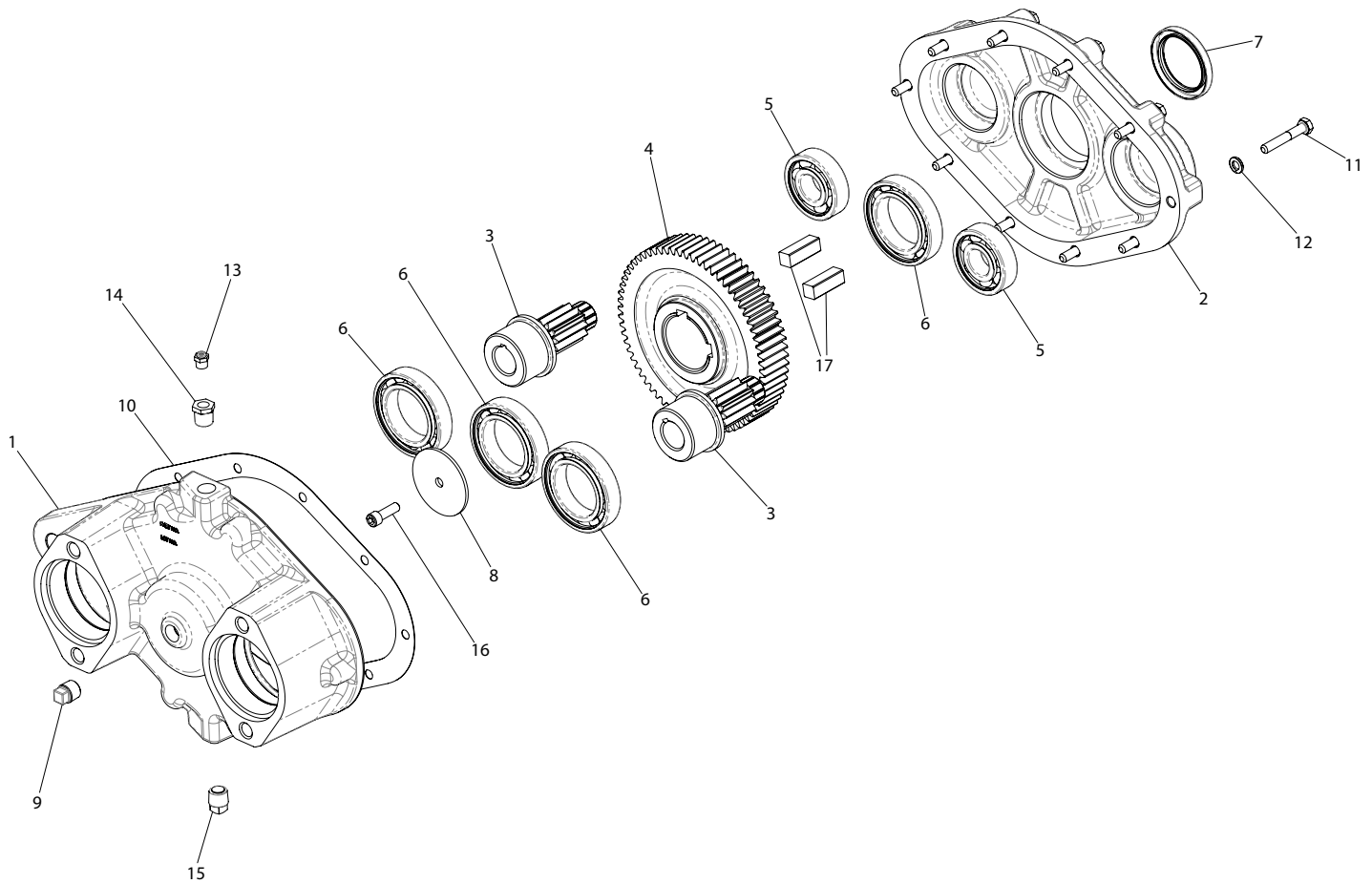
Gearbox Components S/N -94982

*Limited Parts Available. Can substitute complete gearbox with Part # 801418



Ref#	Description	Part#
1	Plugs and Keys	830700
2	Washer	830701
3	Plug-Delrin	830702
4	Gear-Pinion	830703
5	Gear-Driven	830704
6	Housing-Inboard	830705
7	Housing-Outboard	830706
8	Bearing	830707
9	Bearing	830708
10	Oil Seal	800136
11	Gasket	830709
12	Lock Washer	000810
13	Capscrew	000122

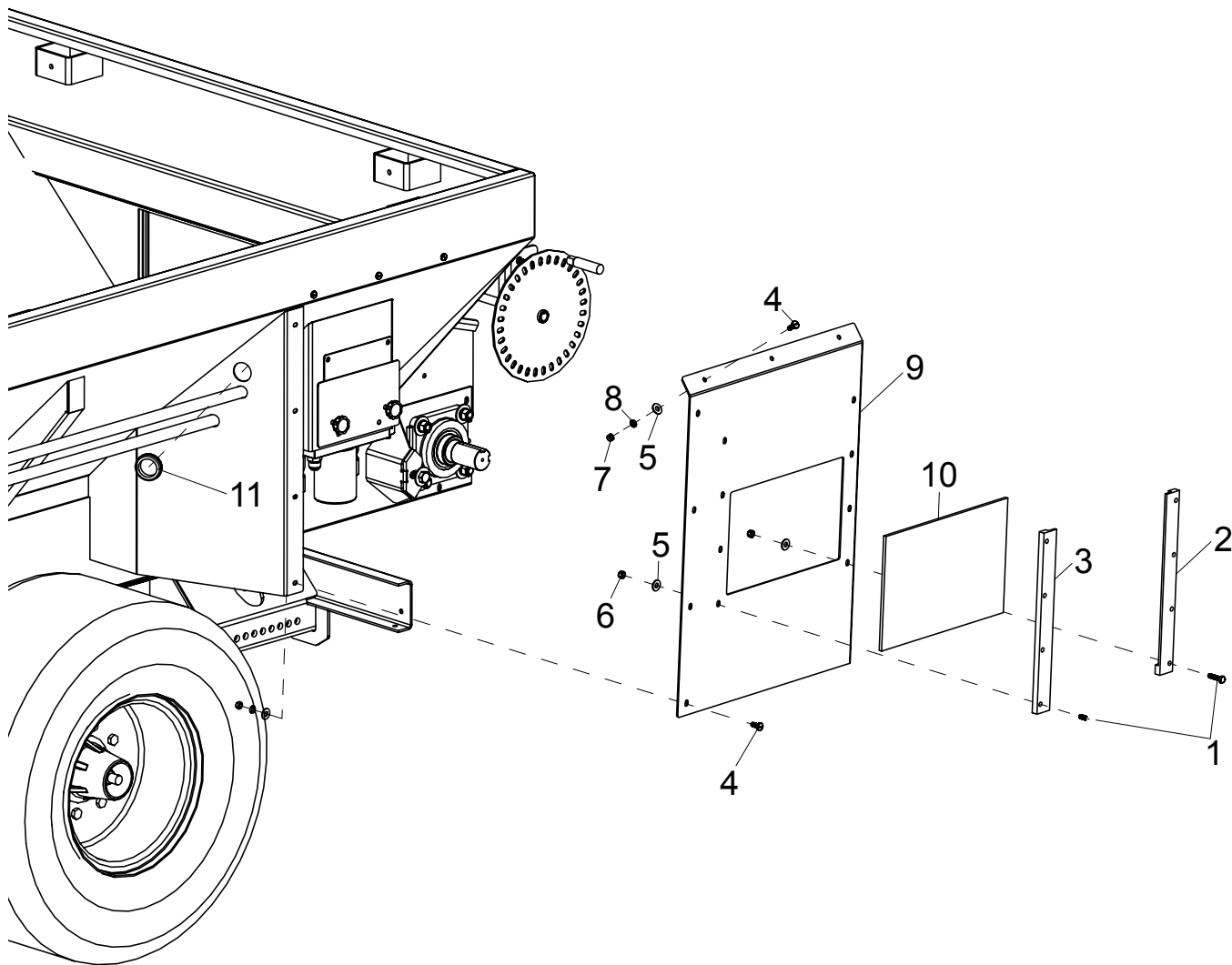
Gearbox Components S/N 94982+



Ref#	Description	Part#
1	Outer Housing	801435
2	Inner Housing	801436
3	11 Tooth Spur Gear	801422
4	67 Tooth Spur Gear	801423
5	6305 C3 Ball Bearing	801424
6	6010 C3 Ball Bearing	801425
7	1.969-2.627-.312	801437
8	2.50 x .34 x .120 Washer	801427
9	3/8" NPT Square Head Plug w/ 3M	801428

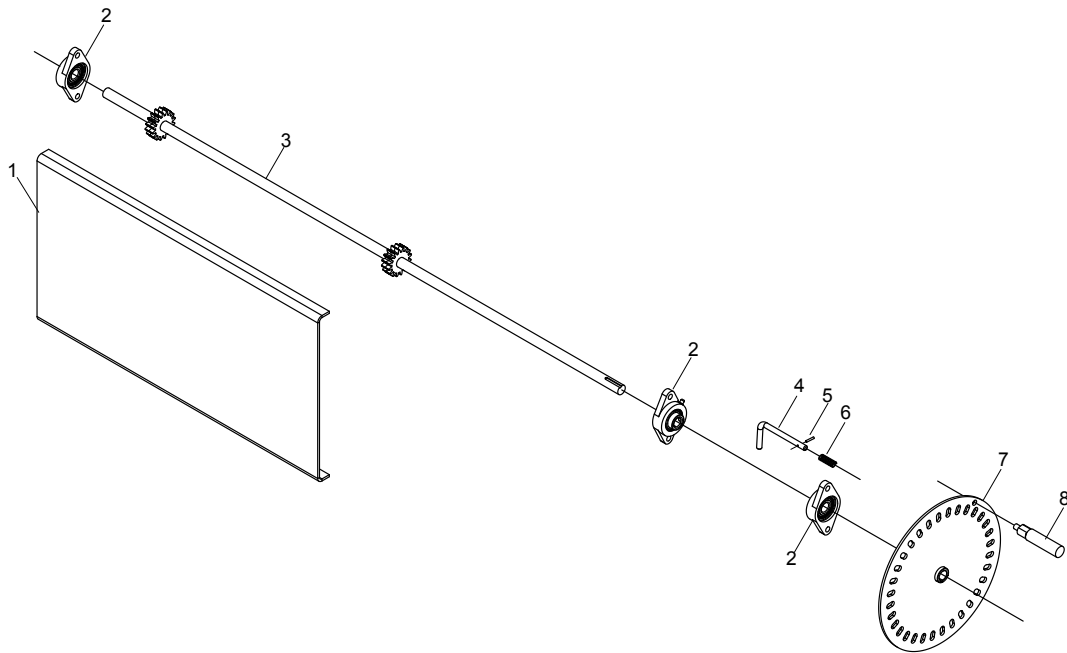
Ref#	Description	Part#
10	IP39 Gasket	801438
11	5/16" x 2" Hex Head Bolt, Gr. 8	000122
12	5/16" Lock Washer	000810
13	1/8" NPT Vent Plug, 5 PSI	801430
14	3/8" NPT x 1/8" NPT Bushing	801431
15	3/8" NPT MAG Square Head Plug	801432
16	5/16" x 1" Gr. 8 Bolt	401434
17	1/2" x 1/2" x 1-1/2" Key	801439
18	Complete Gearbox	801418

Manifold Cover S/N 93176+



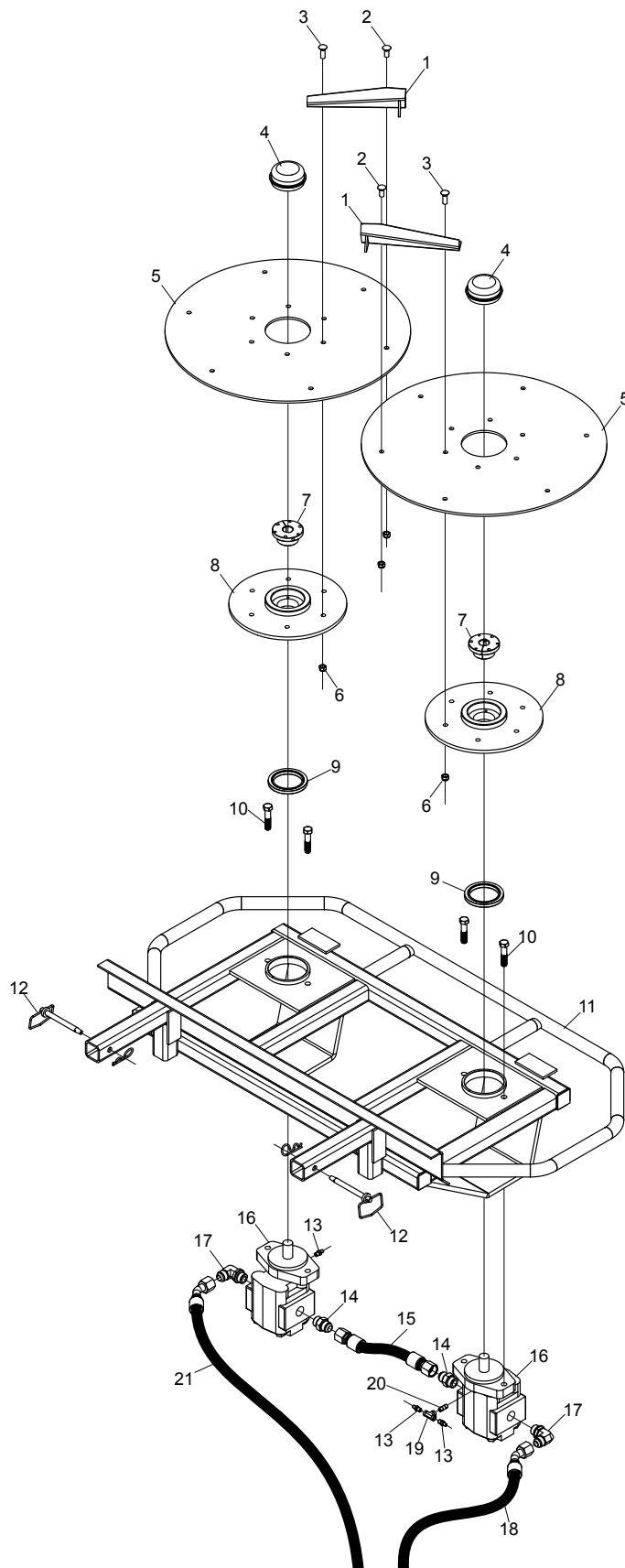
Ref#	Description	Part#
1	5/16" x 1-1/4" Hex Head Bolt	000230
2	Manifold Window Slide, Right	890456
3	Manifold Window Slide, Left	890455
4	5/16" x 3/4" Hex Head Bolt	000210
5	5/16" USS Flat Washer	001030
6	5/16" Nylon Lock Nut	002999
7	5/16" Hex Nut	000910
8	5/16" Lock Washer	000810
9	Manifold Cover Plate	890454
10	Flow Control Cover	890200
11	Grommet, 1-1/2" ID	403796

Rear Gate



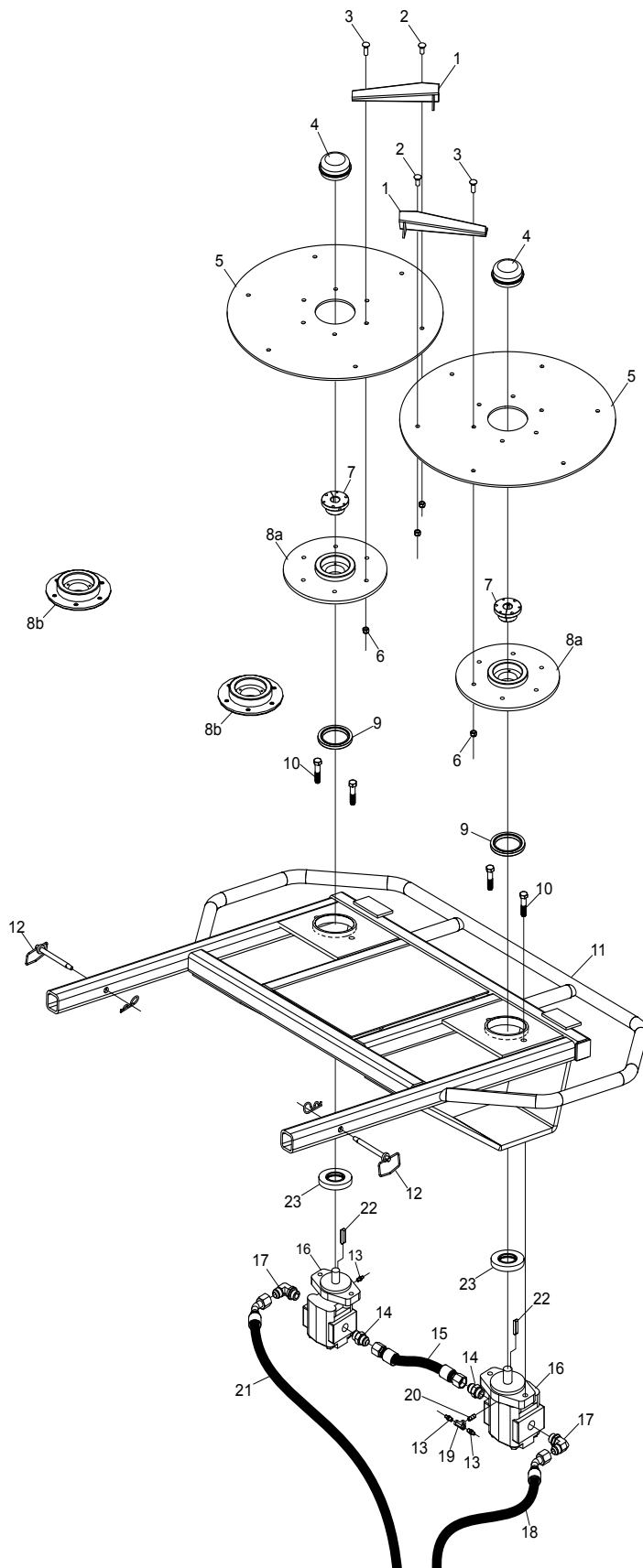
Ref#	Description	Part#	Qty
1	Endgate Weldment	890120	1
2	Flange Bearing	806108	3
3	Endgate Shaft	890150	1
4	Latch Pin	806052	1
5	Roll Pin, 1/8 x 3/4	000561	1
6	Endgate Latch Spring	806166	1
7	Endgate Wheel	806131	1
8	Swivel Handle	890193	1

Spinner Assembly S/N -91553



Ref#	Description	Part#	Qty
1a	Spinner Paddle, Right	830265	6
1b	Spinner Paddle, Left	830267	6
2	Carriage Bolt, 7/16 x 1	000356	12
3	Carriage Bolt, 7/16 x 1-1/2	000359	12
4	Dust Cap	830314	2
5	Spinner Disc	830309	2
6	Locknut, 7/16	000385	24
7	Tapered Bushing	505420	2
8	Spinner Hub	830313	2
9	Seal	830317	2
10	1/2" x 2-1/2" Hex Head Bolt	000460	4
11	Spinner Frame	890147	1
12	Hitch Pin	100292	1
13	1/4 Straight Fitting	290036	3
14	Straight Fitting	290065	2
15	15" Hose	890363	1
16	Hydraulic Motor	830318	2
	Seal Kit for Motor	830345	N/A
	Replacement 1" Key Shaft	830391	N/A
17	Elbow Fitting	290022	2
18	32" Hose	890362	1
19	"T" Fitting	290033	1
20	Pipe Nipple	290039	1
21	56" Hose	890364	1

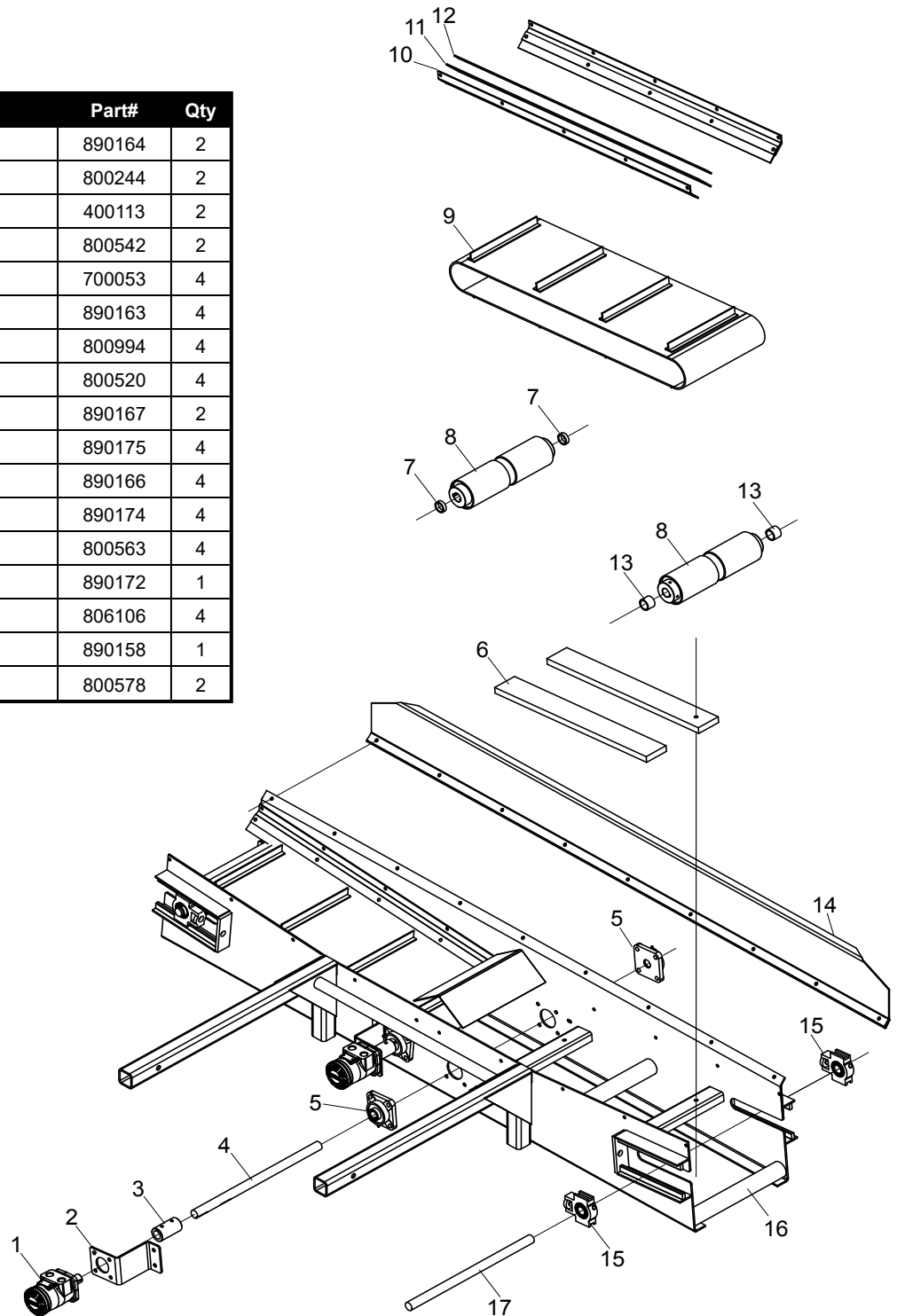
Spinner Assembly S/N 91553+



Ref#	Description	Part#	Qty
1a	Spinner Paddle, Right	830265	6
1b	Spinner Paddle, Left	830267	6
2	Carriage Bolt, 7/16 x 1	000356	12
3	Carriage Bolt, 7/16 x 1-1/2	000359	12
4	Dust Cap	830314	2
5	Spinner Disc	830309	2
6	Locknut, 7/16	000385	24
7	Tapered Bushing	505420	2
8a	Spinner Hub	830313	2
8b	Spinner Hub S/N 93756+	830629	2
9	Seal	830317	2
10	1/2" x 2-1/2" Hex Head Bolt	000460	4
11	Spinner Frame	890266	1
12	Hitch Pin	100292	1
13	1/4 Straight Fitting	290036	3
14	Straight Fitting	290065	2
15	15" Hose	890363	1
16	Hydraulic Motor	830318	2
	Seal Kit for Motor	830345	N/A
	Replacement 1" Key Shaft	830391	N/A
17	Elbow Fitting	290022	2
18	32" Hose	890362	1
19	"T" Fitting	290033	1
20	Pipe Nipple	290039	1
21	56" Hose	890364	1
22	1/4" x 3/8" x 1-1/4" Key	830390	2
23	Outer Seal	830389	2

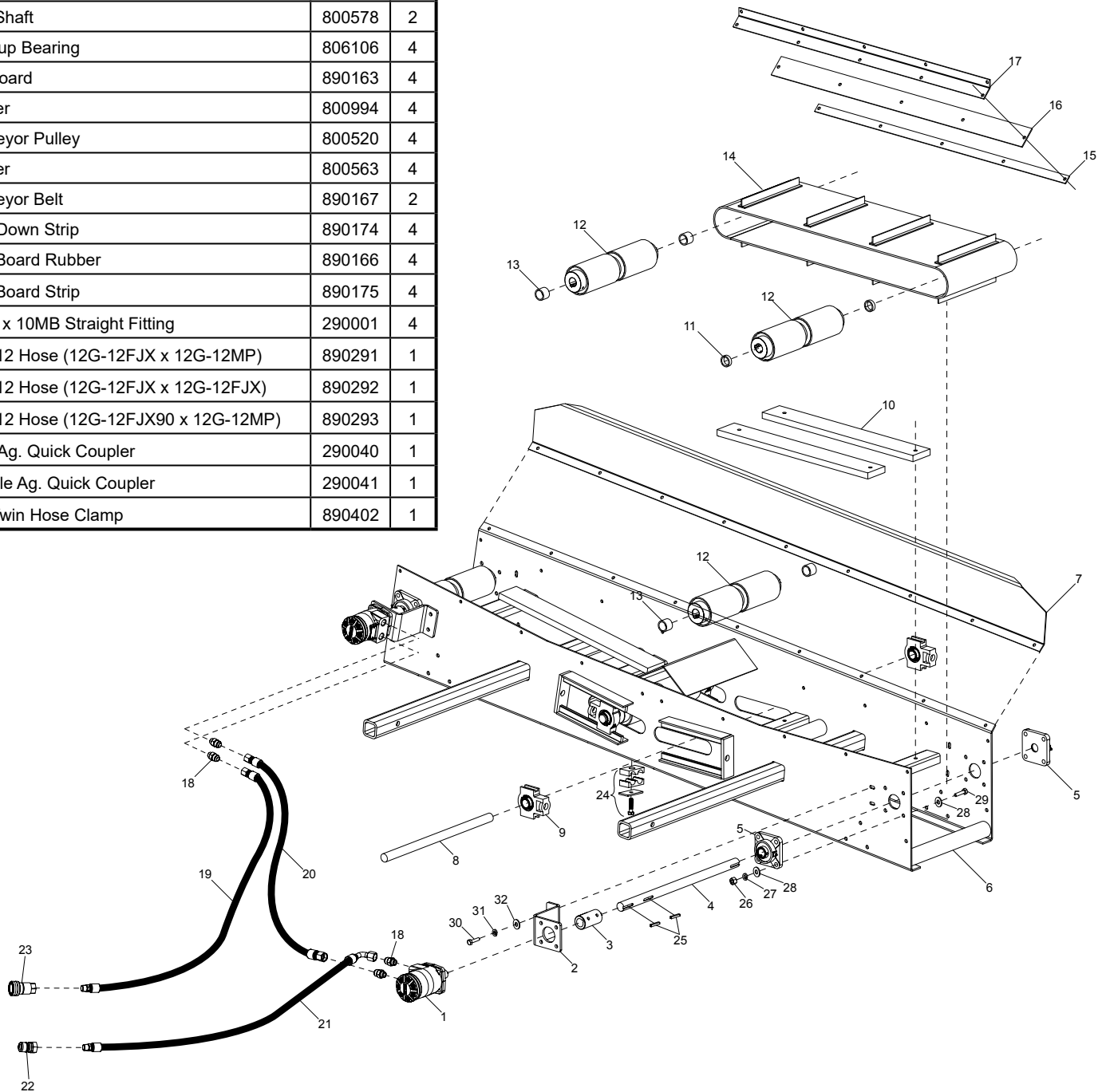
Dual Conveyor Assembly S/N -91553

Ref#	Description	Part#	Qty
1	Hydraulic Motor	890164	2
2	Motor Bracket	800244	2
3	Coupler	400113	2
4	Drive Shaft	800542	2
5	Flange Bearing	700053	4
6	Apron Belt Support	890163	4
7	Spacer	800994	4
8	Conveyer Pulley	800520	4
9	Cleated Belt	890167	2
10	Skirtboard Strip	890175	4
11	Skirtboard Rubber	890166	4
12	Hold Down Strip	890174	4
13	Spacer	800563	4
14	Side Extension	890172	1
15	Take-up Bearing	806106	4
16	Conveyer Frame Weldment	890158	1
17	Idler Shaft	800578	2

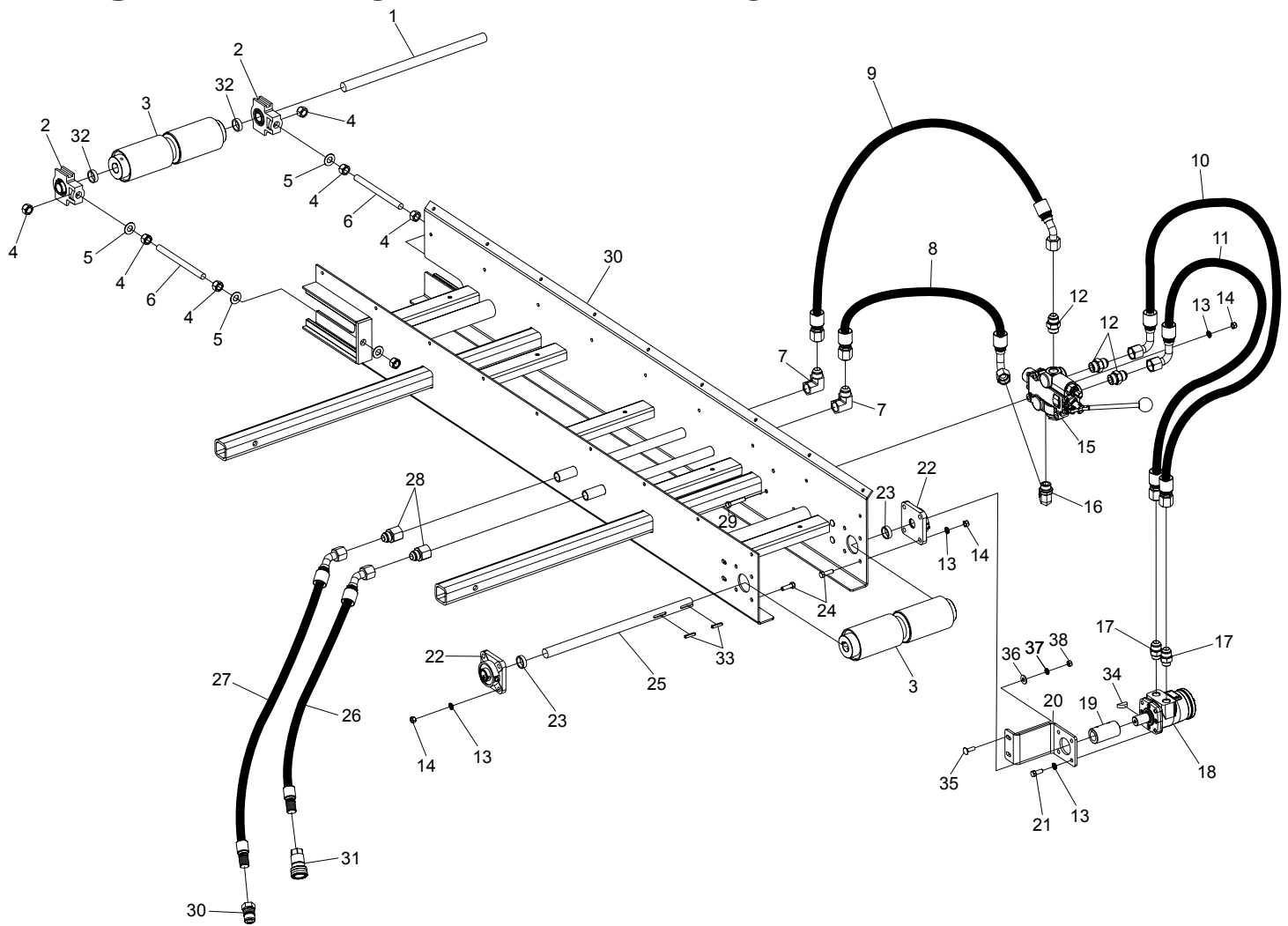


Dual Conveyor Assembly S/N 91553+

Ref#	Description	Part#	Qty
1	Hydraulic Motor	890164	2
2	Motor Bracket	800244	2
3	Coupler	400113	2
4	Drive Shaft	890277	2
5	Flange Bearing	700053	4
6	Conveyer Frame Weldment	890158	1
7	Side Extension	890172	1
8	Idler Shaft	800578	2
9	Take-up Bearing	806106	4
10	Polyboard	890163	4
11	Spacer	800994	4
12	Conveyor Pulley	800520	4
13	Spacer	800563	4
14	Conveyor Belt	890167	2
15	Hold Down Strip	890174	4
16	Skirt Board Rubber	890166	4
17	Skirt Board Strip	890175	4
18	12MJ x 10MB Straight Fitting	290001	4
19	84" #12 Hose (12G-12FJX x 12G-12MP)	890291	1
20	72" #12 Hose (12G-12FJX x 12G-12FJX)	890292	1
21	20" #12 Hose (12G-12FJX90 x 12G-12MP)	890293	1
22	Male Ag. Quick Coupler	290040	1
23	Female Ag. Quick Coupler	290041	1
24	3/4" Twin Hose Clamp	890402	1



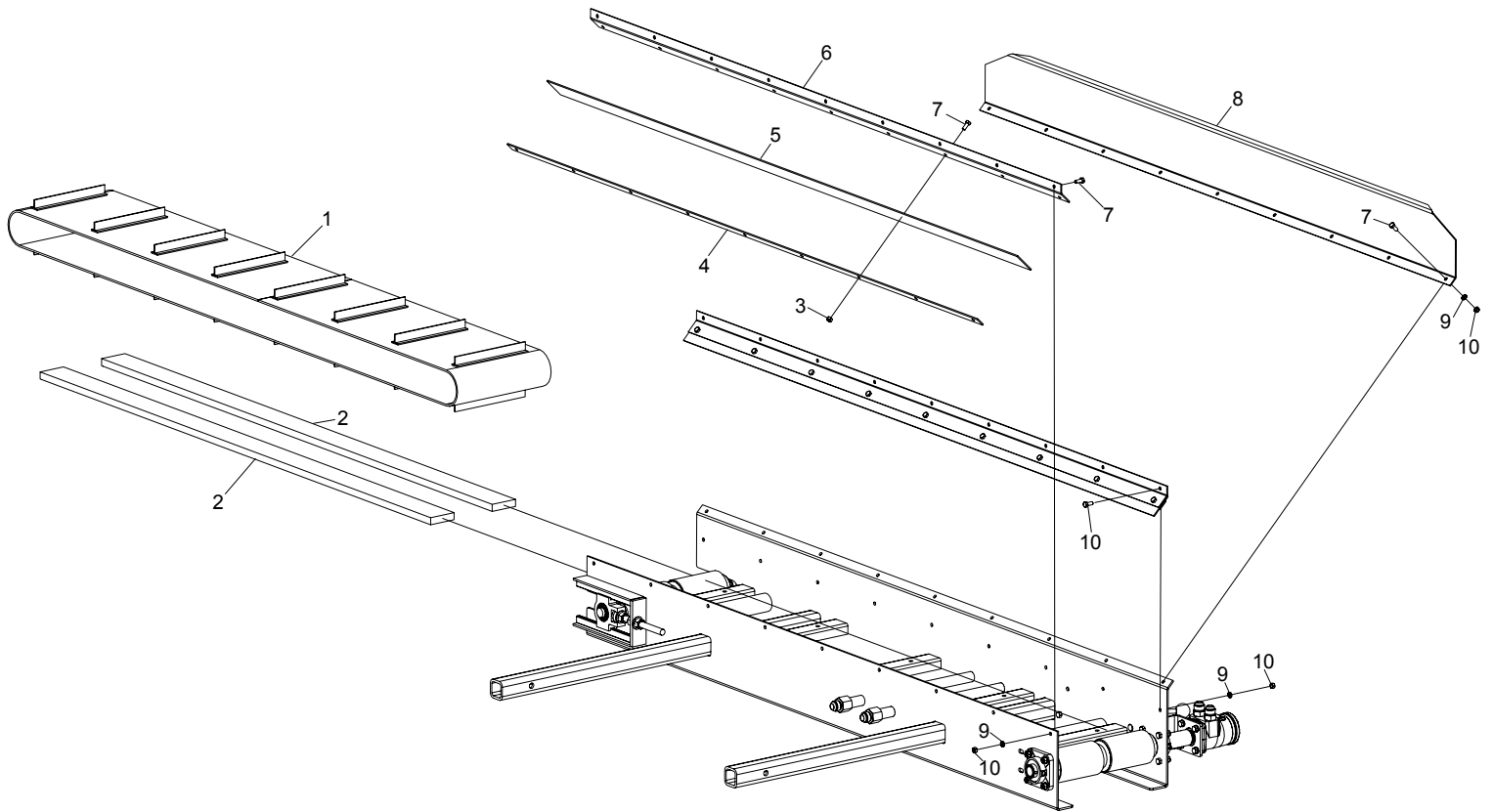
Single Conveyor Option - Hydraulics and Drive



Ref#	Description	Part#	Qty
1	1" x 18.5" Idler Shaft	800578	1
2	1" Take Up Bearing	830666	2
3	Cross Conveyor Pulley	800520	2
4	5/8" Hex Nut	000970	8
5	5/8" Flat Washer	001076	6
6	5/8-11 All Thread x 7.875	806139	2
7	90° Fitting (12 MJ x 12 FP)	290093	2
8	27" Hose (12FJX90 x 12FJX)	890948	1
9	29" Hose (12FJX45 x 12FJX)	890947	1
10	29" Hose (12FJX x 12FJX90S)	890945	1
11	21" Hose (12FJX x 12FJX90S)	890946	1
12	Straight Fitting (12 MJ x 12 MB)	290065	3
13	3/8" Lock Washer	000820	15
14	3/8" Hex Nut	000915	11
15	Motor Spool Valve	890403	1
16	90° Elbow (12 MJ x 12 MB)	290022	1
17	Straight Fitting (12 MJ x 10 MB)	290001	2
18	Hydraulic Motor (101-1011)	890164	1
19	Drive Shaft Couple	400113	1

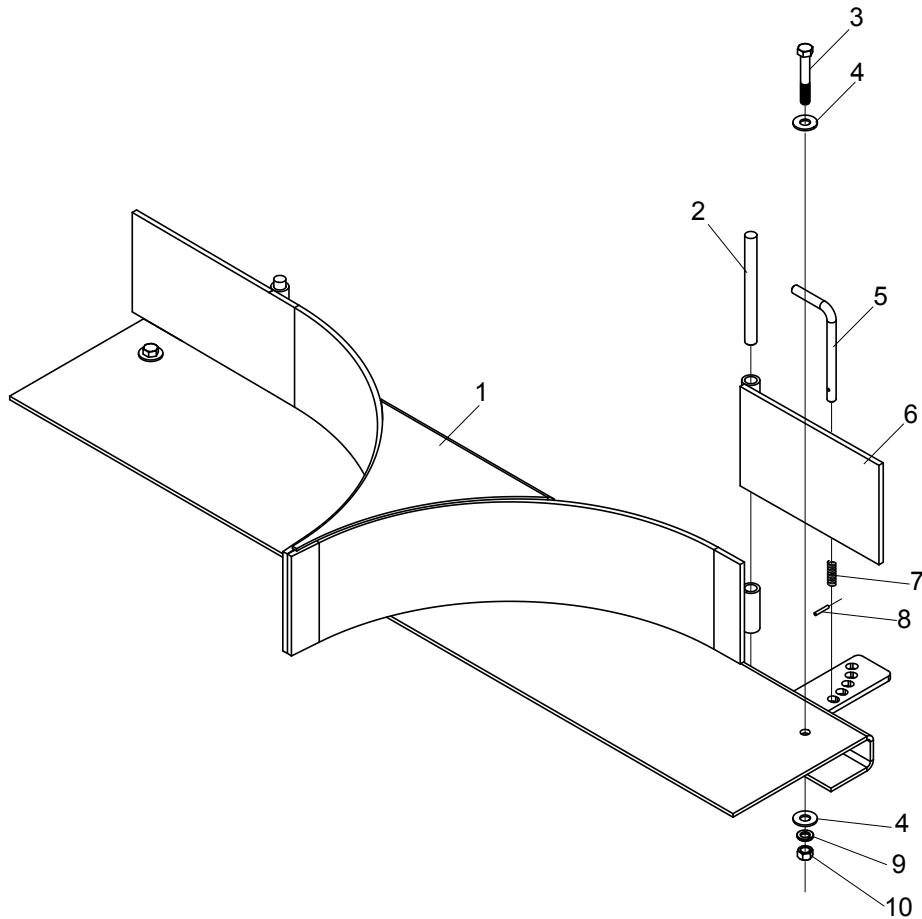
Ref#	Description	Part#	Qty
20	Motor Bracket	800244	1
21	3/8" x 1" Hex Head Bolt	000270	4
22	1" 4-Bolt Flange (UCF 205-16)	700053	2
23	.375" Conveyor Pulley Spacer	800994	2
24	3/8" x 1-1/4" Hex Head Bolt	000275	8
25	1" x 18.813 Drive Shaft	800542	1
26	26" Hose (12FJX45 x 12MP)	890944	1
27	41" Hose (12FJX45 x 12MP)	890943	1
28	Straight Fitting (12 MJ x 12 FP)	290019	2
29	3/8" x 2" Hex Head Bolt	000286	3
30	3/4" Male Ag Quick Coupler	290040	1
31	3/4" Female Ag Quick Coupler	290041	1
32	1" Conveyor Pulley Spacer	800563	2
33	1/4" x 1-1/2" Key	902017	2
34	1/2" x 1" Half Moon Key	900863	1
35	5/16" x 1" Carriage Bolt	000124	2
36	5/16" USS Flat Washer	001030	2
37	5/16" Split Lock Washer	000810	2
38	5/16" Hex Nut	000910	2

Single Conveyor Option - Flooring and Rubber



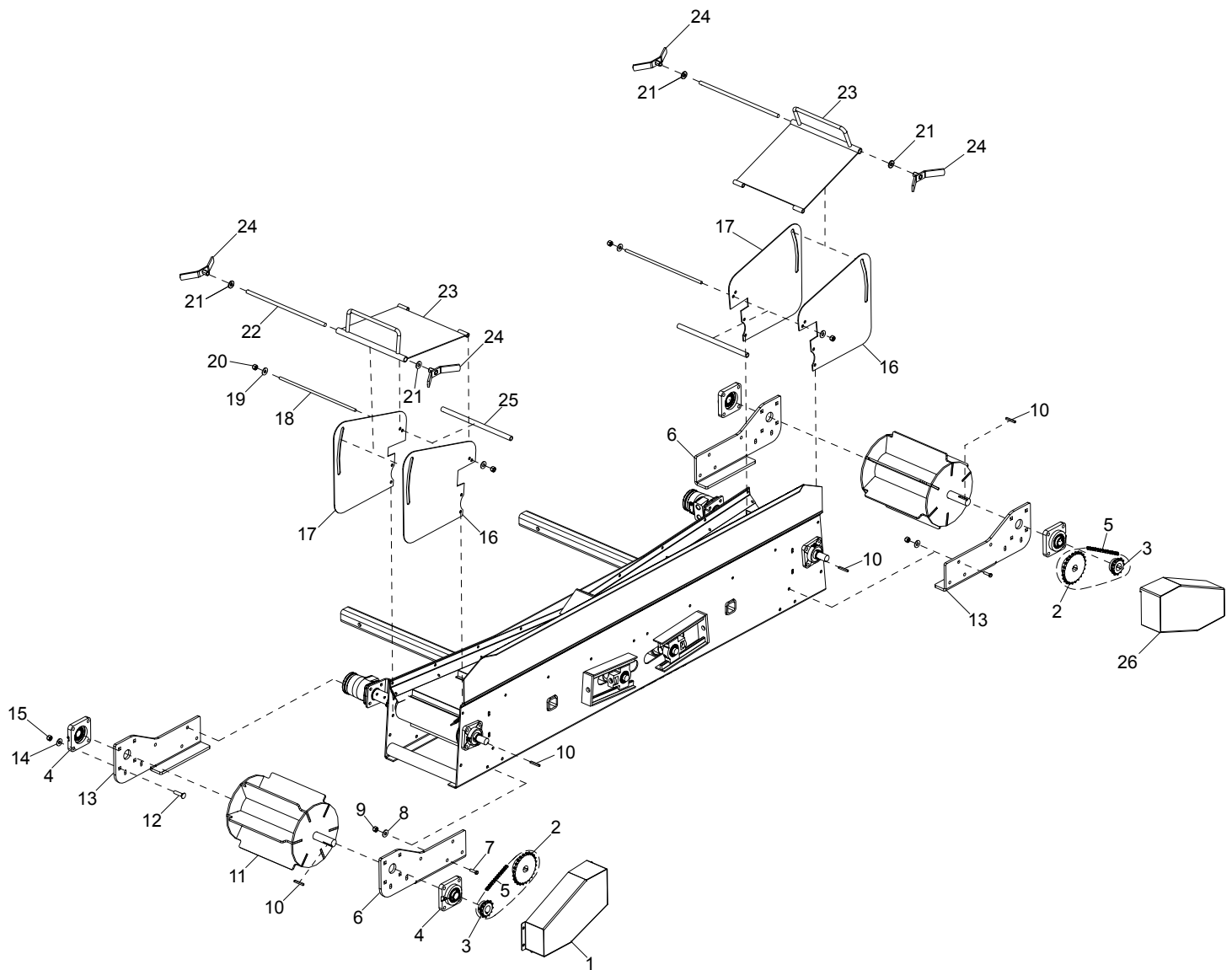
Ref#	Description	Part#	Qty
1	12" x 154" COS Belt (1" Cleats Every 10")	890400	1
2	.75" x 3" x 65" Polyboard	890401	2
3	5/16"-18 Nylon Lock Nut	002999	18
4	1" x 78.25" Hold Down Strip	890399	2
5	.125" x 2.5" x 78.25" Skirtboard Rubber	890398	2
6	2.5" x 78.25" Skirtboard Strip	890396	2
7	5/16" x 3/4" Hex Head Bolt	010005	45
8	Cross Conveyor Extension Side	890172	1
9	5/16" Split Lock Washer	000810	27
10	5/16" Hex Nut	000910	27

Deflector Option



Ref#	Description	Part#	Qty
1	Deflector Frame	890179	1
2	Hinge Pin	801063	2
3	Bolt, 3/8 x 2-1/2	000300	3
4	Flat Washer, 3/8	001035	6
5	Latch Pin	806052	2
6	Flow Deflector, Left	890181	1
	Flow Deflector, Right	890180	1
7	Spring	806166	2
8	Roll Pin	000561	2
9	Lockwasher, 3/8	000820	3
10	Nut, 3/8	000915	3

Flicker Option

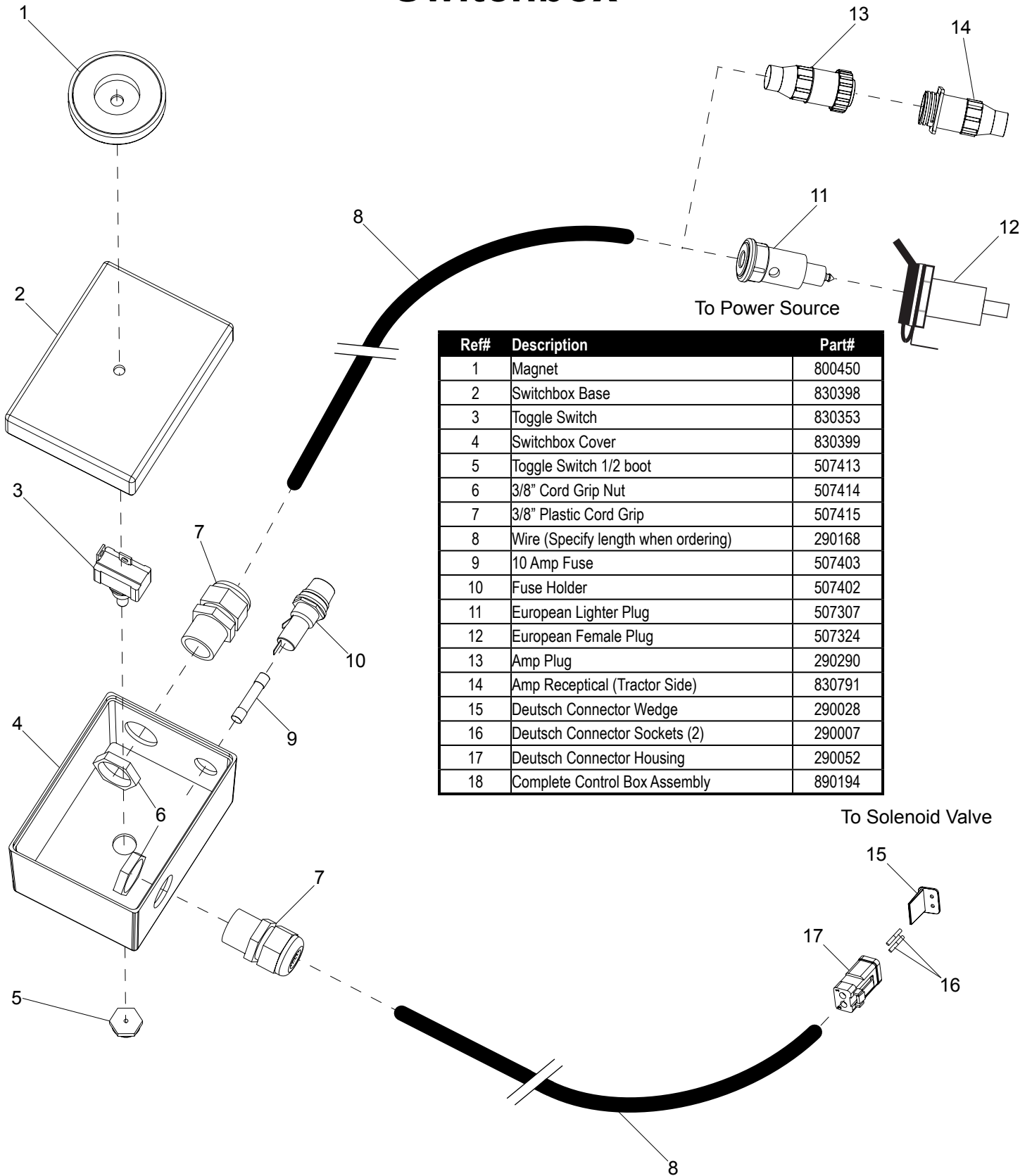


Note: See page 11 for part information on dual conveyor option.

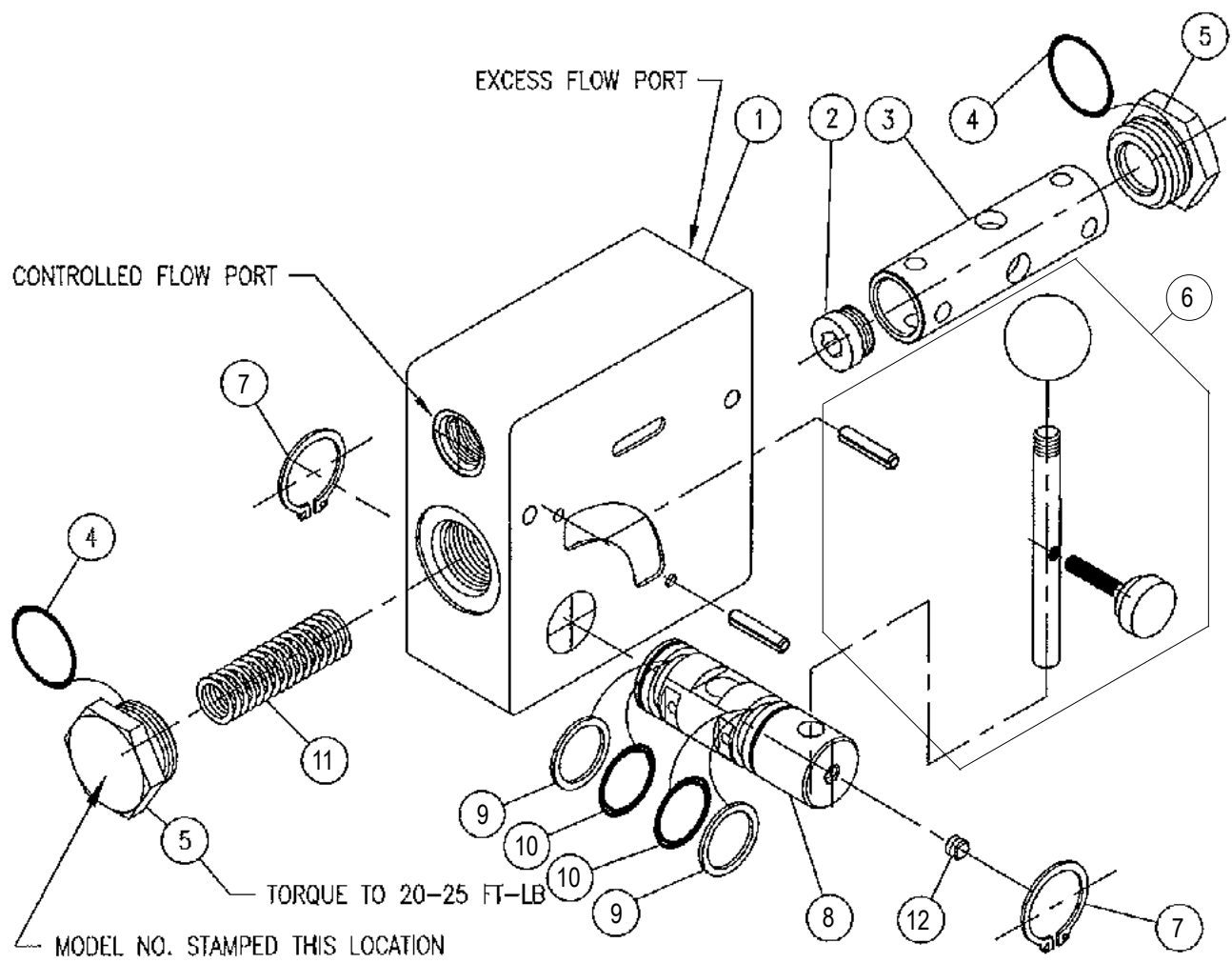
Ref#	Description	Part#	Qty
1	Left Chain Shield Weldment	890281	1
2	Large Sprocket	830666	2
3	Small Sprocket	830665	2
4	4 Bolt 1-1/8" Flange Bearing	400104	4
5	ANSI #50 Chain	890290	2
6	Flicker Mounting Bracket	890259	2
8	3/8" Lock Washer	000820	12
9	3/8" Hex Nut	000915	12
10	1/4" x 1-1/2" Key	700161	2
11	Flicker Weldment	890254	2
12	7/16" x 1-3/4" Carriage Bolt	000363	16
13	Flicker Mounting Bracket	890257	2
14	7/16 Lock Washer	000830	16

Ref#	Description	Part#	Qty
15	7/16" Hex Nut	000935	16
16	Rear Flicker Side Panel	890265	2
17	Front Flicker Side Panel	890274	2
18	3/8" Threaded Rod	890288	2
19	3/8" Flat Washer	001035	4
20	3/8" Lock Nut	003000	4
21	1/2" Flat Washer	001055	4
22	1/2" Threaded Rod	890287	2
23	Flicker Deflector Weldment	890268	2
24	Tightener Handle	890272	2
25	Flicker Spacer Pipe	890270	2
26	Right Chain Shield Weldment	890283	1

Switchbox



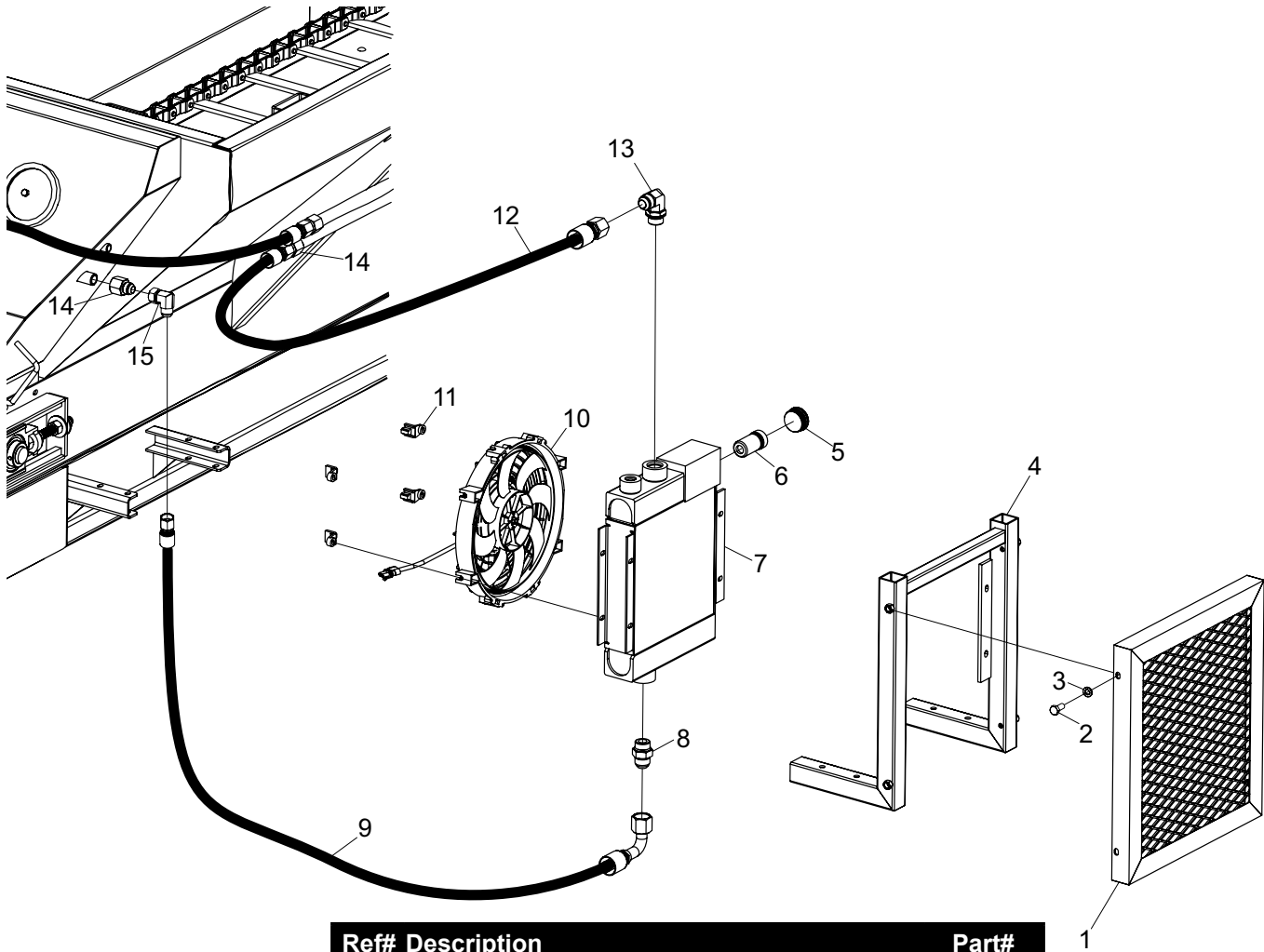
Flow Control Valve



Ref#	Description	Part#
6	Flow Control Handle Kit	890453

All other Items not sold seperately

Oil Cooler Option



Ref#	Description	Part#
1	Cooler Grill Weldment	801166
2	5/16-18 x 3/4 Truss Head Bolt, Zinc	000210
3	5/16 Lock Washer, Zinc	000810
4	Cooler Frame Weldment	801160
5	#20 Plug	890459
6	Oil Cooler Check Valve	890462
7	Oil Cooler Core	890463
8	Straight Fitting, #12 MJ x #12 MB	290065
9	45-1/2" Hose Assembly (12FJX90S - 12FJX)	891211
10	Oil Cooler Fan W/Shroud	890460
11	Oil Cooler Fan Mounting Bracket	890461
12	27" Hose Assembly (12FJX - 12FJX)	890357
13	90 Degree Fitting, #12 MJ x #12 MB	290022
14	Straight Fitting,- #12 MJ x #12 FP	290019
15	90 Degree Elbow,- #12 MJ x #12 FJX	290150
16	Complete Oil Cooler	890209