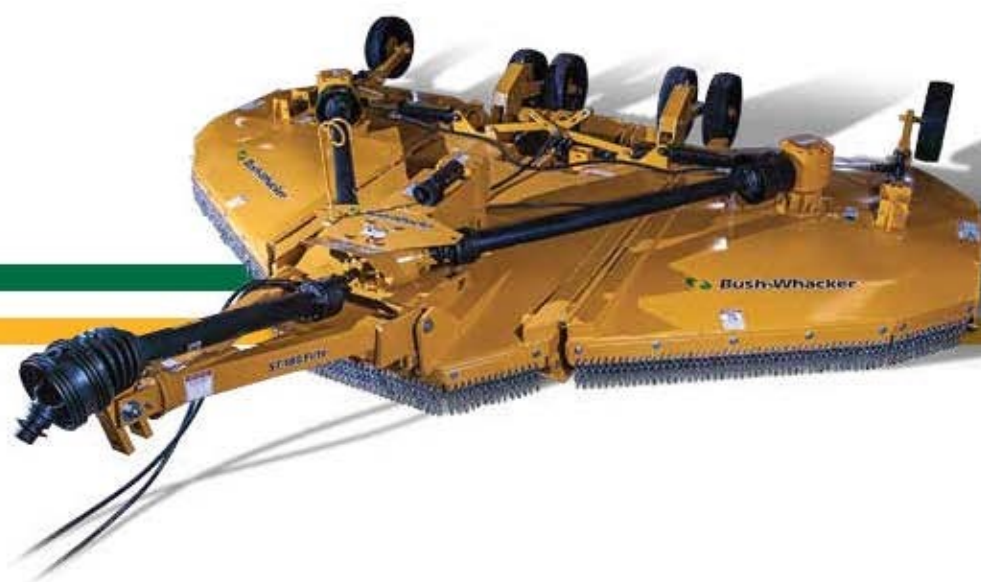




2021
PARTS BOOK
ST-180 ELITE
(540 RPM)

PARTSBOOK

This part of the manual contains part numbers and illustrations based on the latest information available at the time of print.

Hall Manufacturing, Inc. reserves the right to make changes at any time without notice or obligation. Additional copies of the manuals are available from your local Bush-Whacker dealer.

Hall Manufacturing, Inc.
3706 E. Washington Ave., P.O. Box Drawer 5638
North Little Rock, AR 72119
(501)945-7550

**Always use genuine Bush-Whacker replacement parts,
available through the network of authorized dealers.**

Explanation of the terms in the Partsbook

Ref. No.—Refers to the numbered parts in an illustration

Part No.—Refers to the part number of the part. This is what you use when ordering new parts, as well as description and quantity.

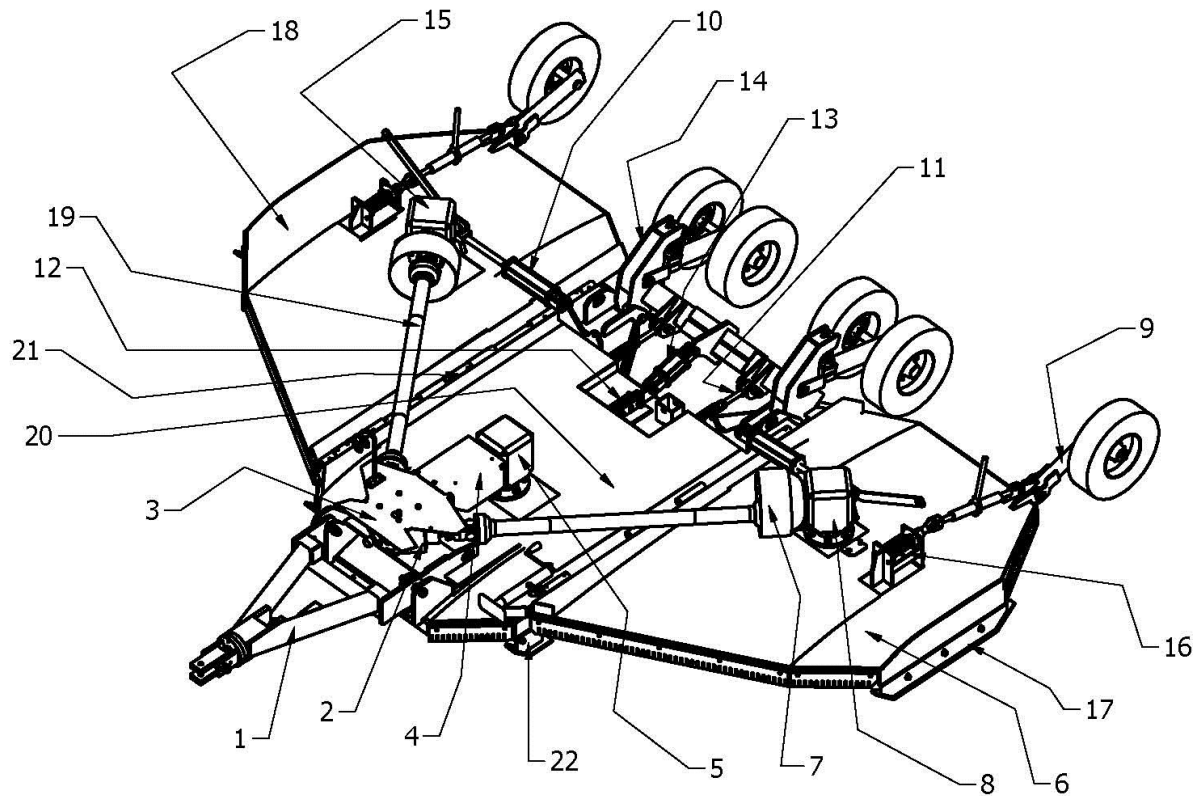
Description—Gives the description of the part

Qty—Quantity listed for each component on the illustration, not the total quantity of that part used on the entire machine.

Remarks—any comments (refers to detail pages of parts, etc.)

Notes

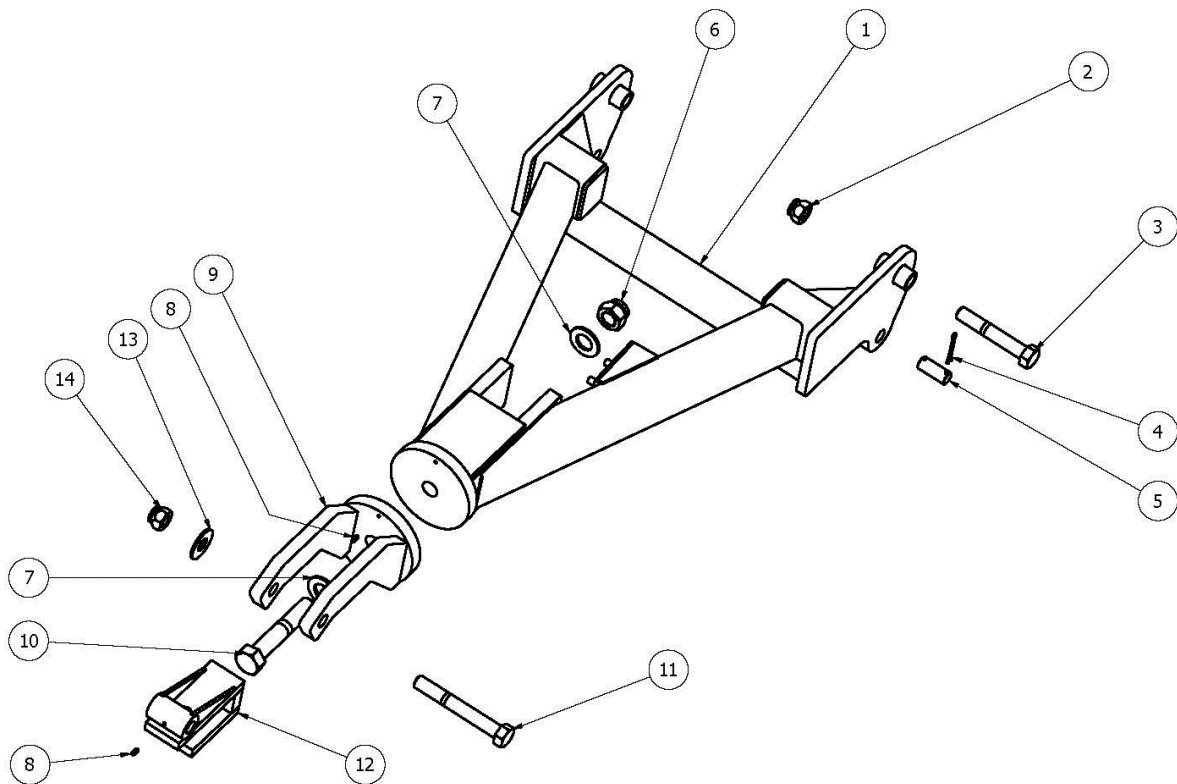
ST-180 Elite Assembly Breakdown



ST-180 Assembly Breakdown

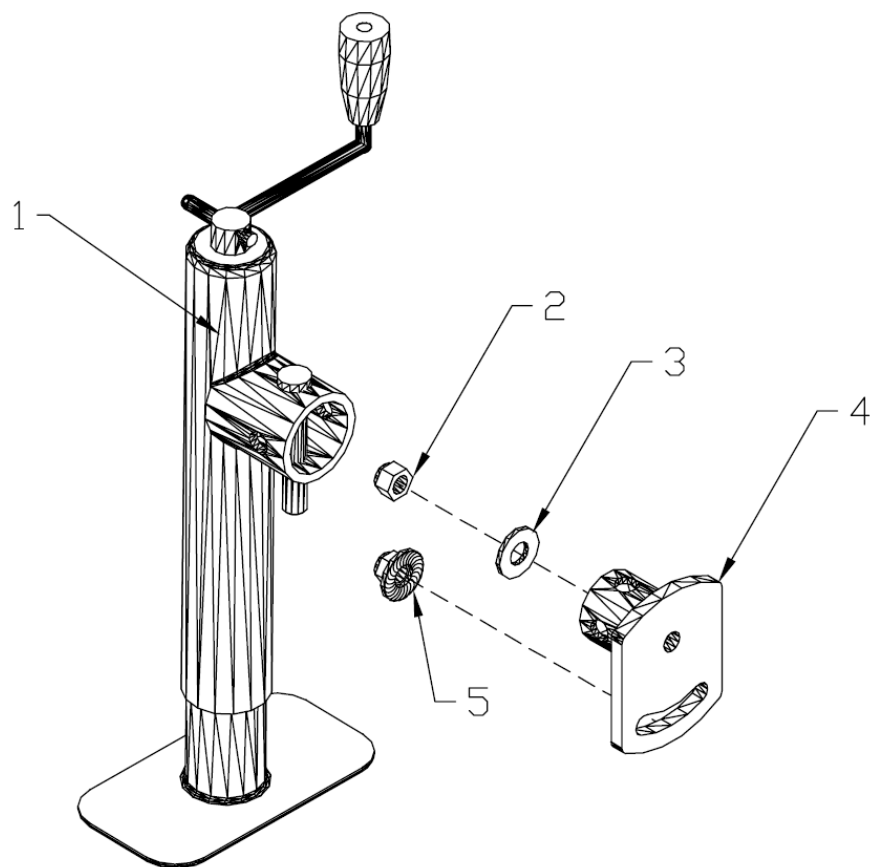
Ref. No.	Description	Page Number
1	Tongue Assembly	6
2	Divider Box	12-13
3	Divider Box Shield Assembly	37
4	Center Gearbox Shield Assembly	38
5	Center Gearbox	16-17
6	Left Wing Deck Assembly (Part #6961)	N/A
7	Wing Gearbox Shield Assembly	36
8	Left Wing Gearbox	16-17
9	Wing Axle Arm Assembly	29
10	Wing Lift Cylinder	30
11	Level Rod Assembly	15
12	Center Lift Cylinder Mounting Point	27
13	Center Lift Cylinder	26
14	Center Pivot Assembly	24
15	Right Wing Gearbox	18-19
16	Wing Shock Absorber Assembly	28
17	Wing Skid Shoe	33
18	Right Wing Assembly (Part #6960)	N/A
19	Wing Drive Shaft	20-21
20	Center Deck Assembly (Part #6990)	N/A
21	Hinge Pins (Part #5104)	N/A
22	Center Skid Shoe	32
Not Shown	Hydraulic Hose Plan	34, 54
Not Shown	Hydraulic Valve	35
Not Shown	Travel Bar Assembly	31
Not Shown	Intermediate Drive Shaft	14
Not Shown	CV Drive Shaft	10-11
Not Shown	Main Drive Shaft	8-9
Not Shown	Center Rotor Bar Assembly	22
Not Shown	Wing Rotor Bar Assembly	23
Not Shown	All Chain Guard Components and Assemblies	39-45
Not Shown	Blade Bolt Access Cover (Part #2965-17)	N/A
Not Shown	Hinge Roll Pin (Part #2556)	N/A
Not Shown	Winch Stand Assembly	42

Tongue with Swivel Clevis



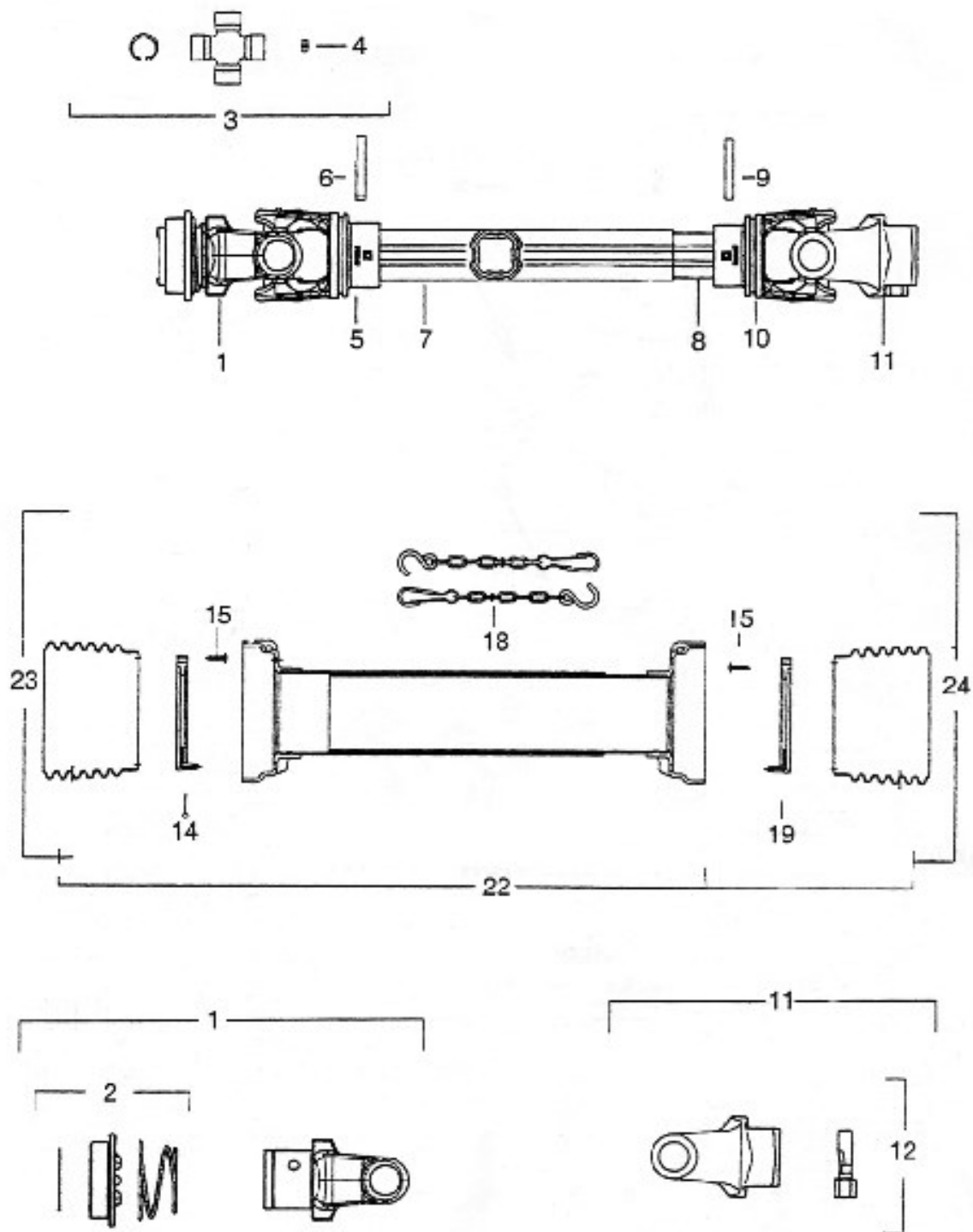
Ref. No.	Part No.	Description	Qty
1	5841	Tongue	1
2	2638	Nut	2
3	5166	Bolt	2
4	2313	Cotter Pin	4
5	2315	Level Rod Pin	2
6	2532	Nut	1
7	3449	Washer	2
8	5033	Grease Zerk	2
9	4866	Swivel	1
10	6073	Bolt	1
11	2626	Bolt	1
12	4865	Clevis	1
13	3259	Washer	1
14	2638	Nut	1

Tongue Jack Mounting Assembly



Ref. No.	Part No.	Description	Qty
1	2969	Jack	1
2	2336	Nut	1
3	2337	Washer	1
4	4089	Plate	1
5	4885	Nut	1

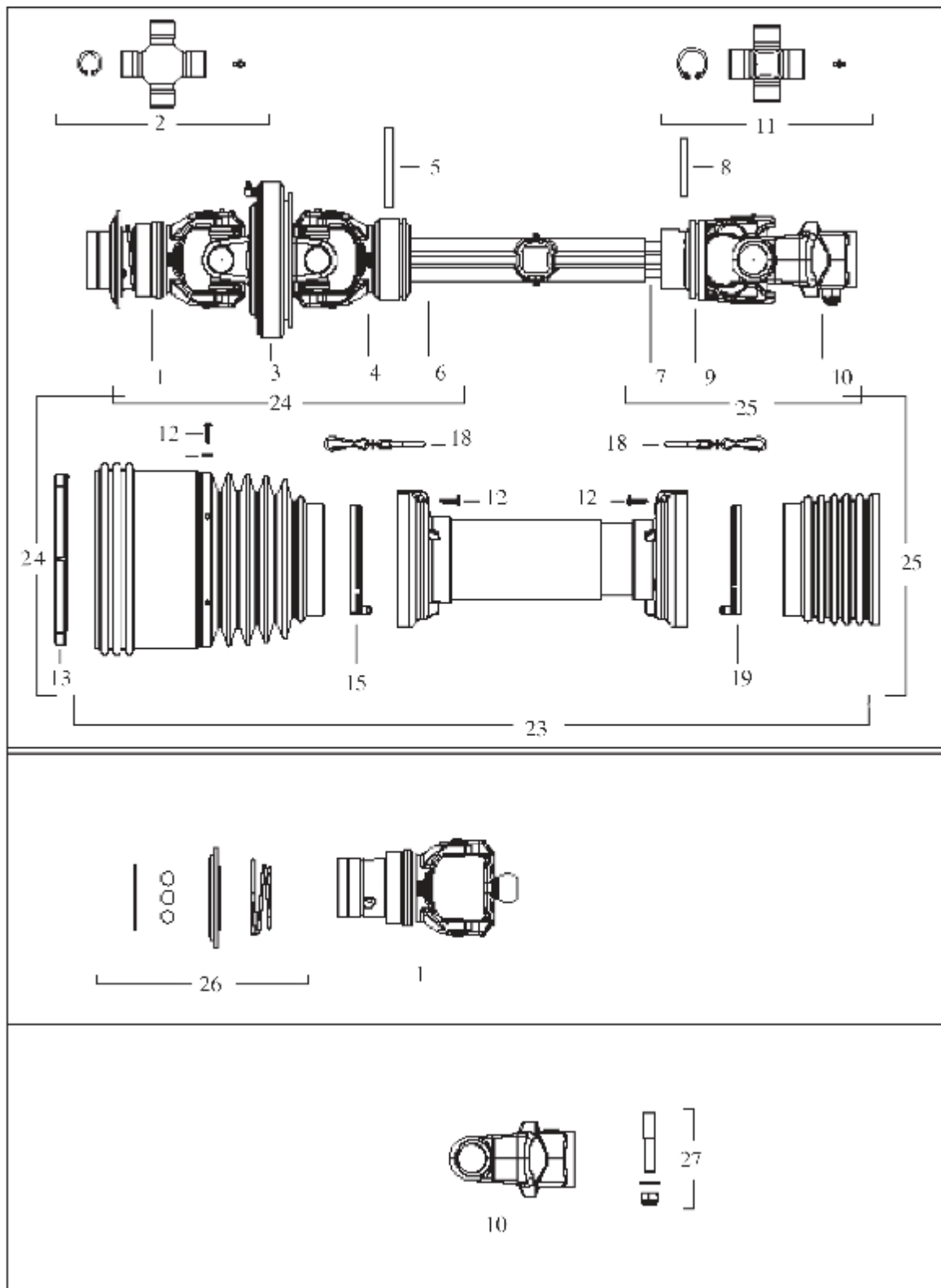
5450 Main Drive Shaft



5450 Main Drive Shaft Parts List

Ref. No.	Part No.	Description	Qty
1	4062	Slide Collar Yoke	1
2	3915	Slide Collar Kit	1
3	3916	Cross Kit	2
4	3917	Grease Fitting	2
5	3918	Outer Tube Yoke	1
6	3129	Outer Roll Pin	1
7	5464	Outer Tube (Steel)	1
8	5465	Inner Tube (Steel)	1
9	5095	Inner Roll Pin	1
10	3923	Inner Tube Yoke	1
11	4945	Quick Disconnect Yoke	1
12	4950	QD Pin Kit	1
14	4904	Outer Shield Ring	1
15	5050	Shield Screw	6
18	5088	Shield Safety Chain	2
19	4909	Inner Shield Ring	1
22	5472	Complete Shield Assembly	1

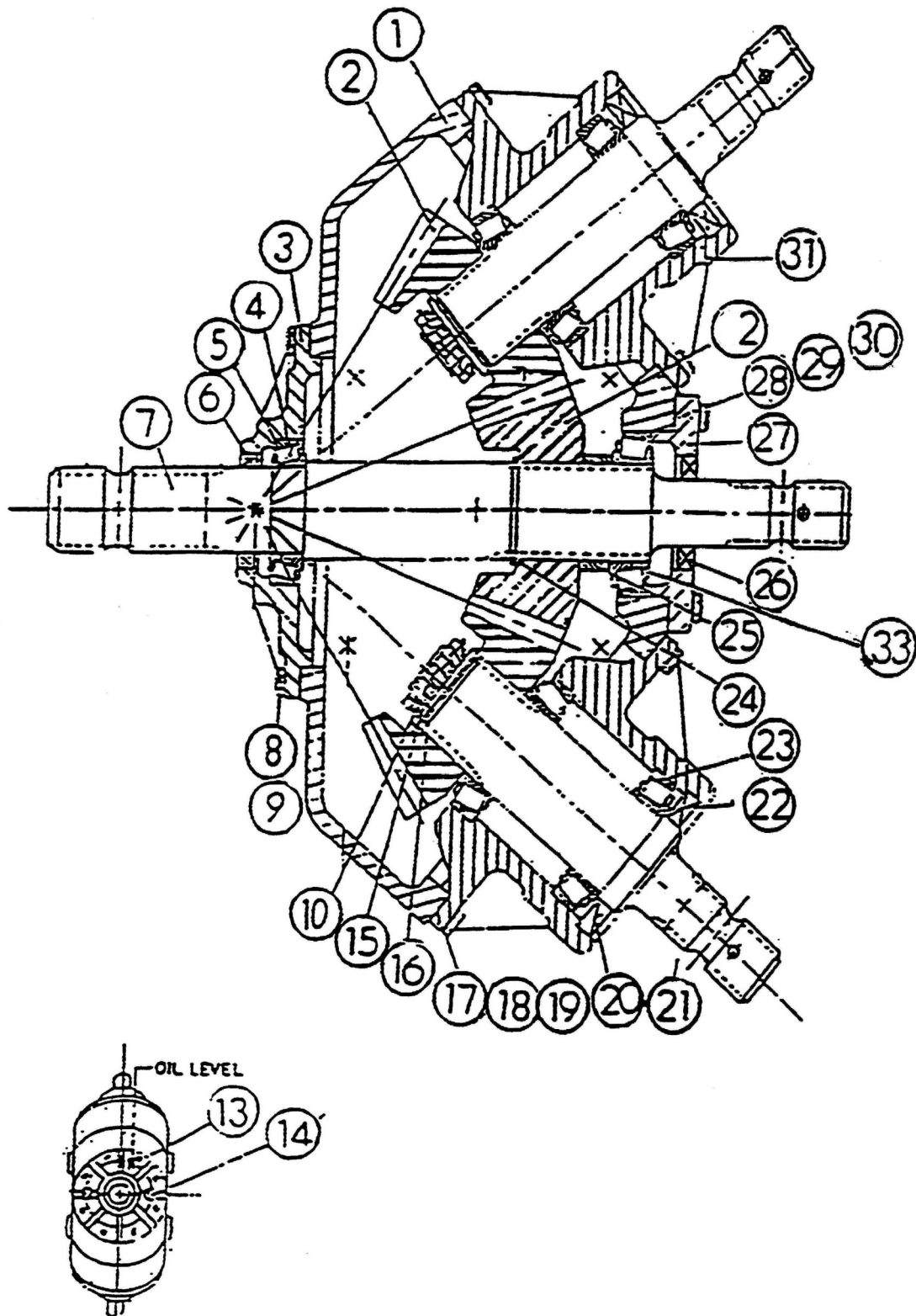
5452 Constant Velocity Drive Shaft



5452 Constant Velocity Drive Shaft Parts List

Ref. No.	Part No.	Description	Qty
1	4917	Slide Collar CV Yoke (1-3/8")	1
2	4918	CV Cross Kit	1
3	4919	CV Body	1
4	4920	Outer Tube Yoke	1
5	4921	Outer Roll Pin	1
6	5479	Outer Tube (Steel)	1
7	5480	Inner Tube (Steel)	1
8	3132	Inner Roll Pin	1
9	3923	Inner Yoke	1
10	4945	Yoke (1-3/4", Z=20)	1
11	3916	Cross Kit	1
12	3928	Shield Screw	12
13	4927	Shield Support	1
15	4904	Shield Flange	1
18	3931	Shield Safety Chain	2
19	3932	Inner Shield Ring	1
23	5487	Complete Shield Assembly	1
26	4934	Ball Collar Kit	1
27	4950	QD Pin Kit	1

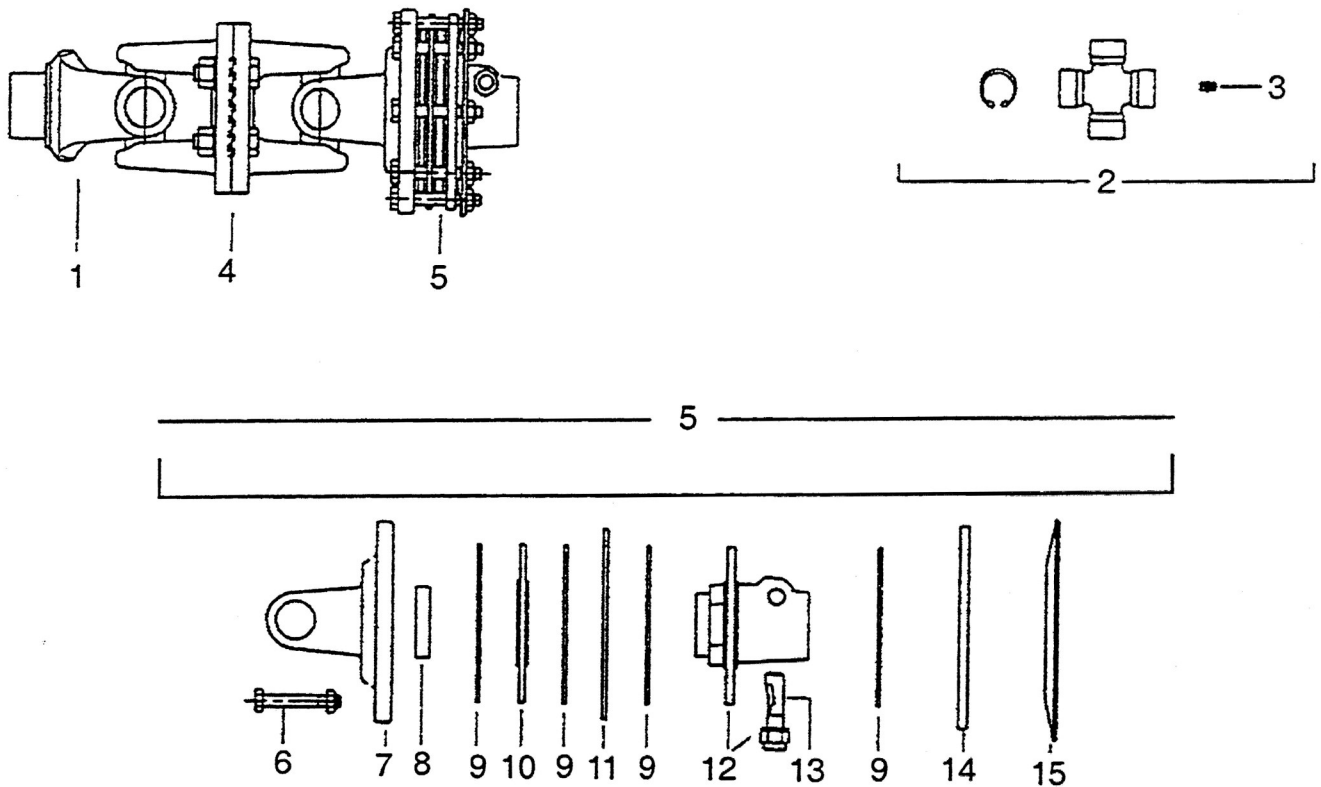
3306 Divider Gear Box **(See Maintenance Section for Required Lubricant)**



3306 Divider Gear Box
(See Maintenance Section for Required Lubricant)

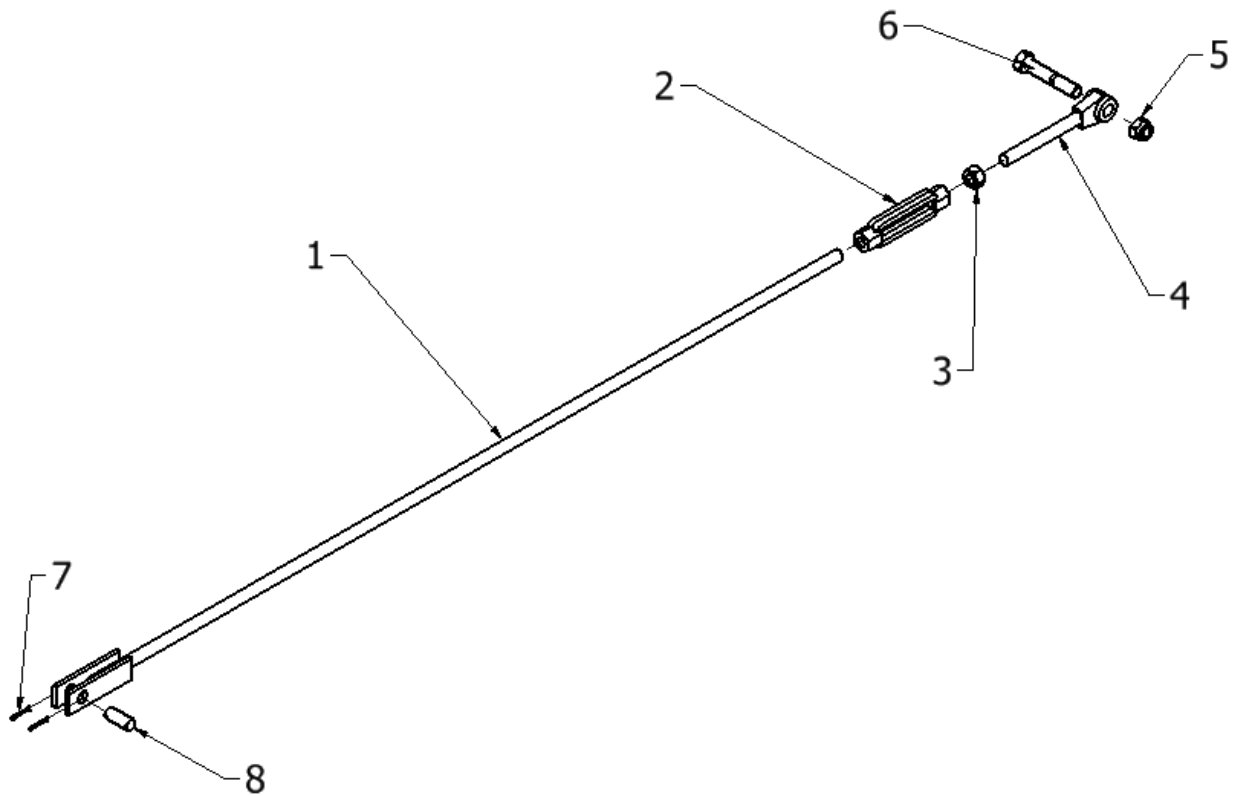
Ref. No.	Part No.	Description	Qty
1	2973	Housing	1
2	3307	Gear	3
3	2726	Cap	1
4	1402	Bearing Cone	1
5	1401	Bearing Race	1
6	2713	Seal	1
7	2975	Input Shaft	1
8	2728	Bolt	28
9	2727	Washer	28
10	2741	Lock Nut	2
13	2742	Oil Plug	1
14	2723	Vent Plug	1
15	2743	Lock Washer	2
16	2744	Washer	2
17	2721	Shim	AR
18	2722	Shim	AR
19	2722	Shim	AR
20	2746	Seal	2
21	2976	Shaft	2
22	BW 0-459	Bearing Cone	5
23	2712	Bearing Race	4
24	2719	Retaining Ring	1
25	2749	Spacer	1
26	2751	Seal	1
27	2752	Cap	1
28	2753	Shim	AR
29	2754	Shim	AR
30	2755	Shim	AR
31	2756	Cap	2
33	3149	Race	1

3956 Intermediate Drive Shaft



Ref. No.	Part No.	Description	Qty
1	4147	Splined Yoke	1
2	3916	Cross Kit	2
3	3958	Grease Fitting	1
4	3959	Flange	1
5	3960	Complete Clutch Assembly	1
6	4098	Bolt with Nut	8
7	3961	Flange Yoke	1
8	3962	Bushing	1
9	3963	Clutch Disk	4
10	3964	Clutch Plate	1
11	3965	Inner Plate	1
12	3966	Splined Hub	1
13	3967	Bolt with Nut	1
14	3968	Outer Plate	1
15	3969	Spring	1

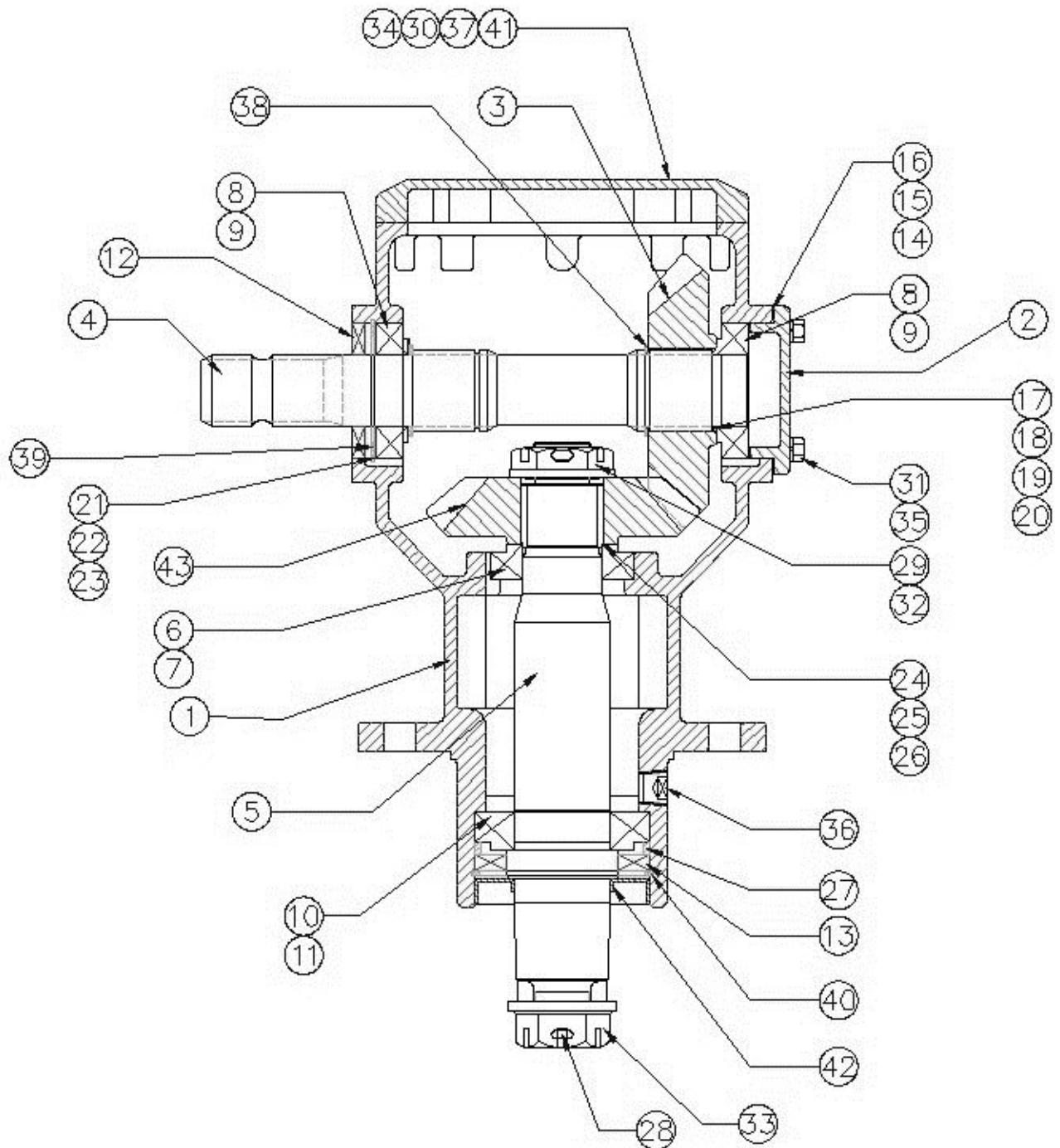
5850 Complete Level Rod Assembly



Ref. No.	Part No.	Description	Qty
1	5107	Front Level Rod	1
2	2321	Turnbuckle	1
3	5381	Nut	1
4	2320	Rear Level Rod	1
5	2638	Nut	1
6	3389	Bolt	1
7	2313	Cotter Pin	2
8	2315	Pin	1

NOTE: P/N 5850 IS MADE FROM ITEMS 1, 2, 3, 4

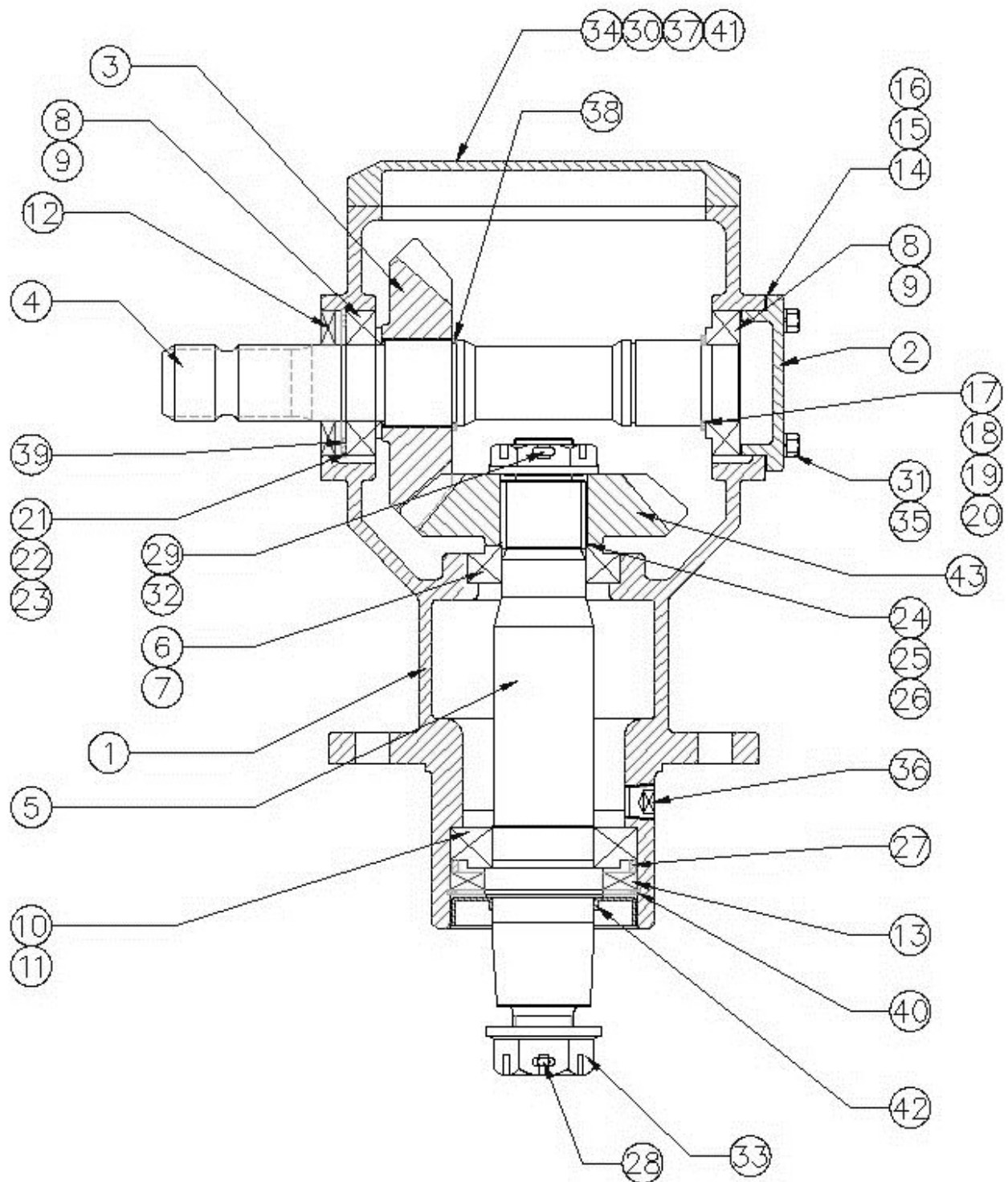
5168 Gear Box Right Wing **(See Maintenance Section for Required Lubrication)**



5168 Gear Box Right Wing (See Maintenance Section for Required Lubrication)

Ref. No.	Part No.	Description	Qty.
1	5210	HOUSING	1
2	5211	SIDE COVER PLATE	1
3	5253	GEAR	1
4	5213	INPUT SHAFT	1
5	5214	OUTPUT SHAFT	1
6	5215	BEARING CUP	1
7	5216	BEARING CONE	1
8	5217	BEARING CUP	2
9	5218	BEARING CONE	2
10	5219	BEARING CUP	1
11	5220	BEARING CONE	1
12	5221	SEAL	1
13	5222	SEAL	1
14	5223	GASKET	1-AR
15	5224	GASKET	1-AR
16	5225	GASKET	AR
17	5226	SHIM	AR
18	5227	SHIM	AR
19	5228	SHIM	1-AR
20	5229	SHIM	1-AR
21	5230	SHIM	1-AR
22	5231	SHIM	1-AR
23	5232	SHIM	1-AR
24	5233	SHIM	1-AR
25	5234	SHIM	1-AR
26	5235	SHIM	1-AR
27	5236	SPACER	1
28	5237	COTTER PIN	1
29	5238	COTTER PIN	1
30	5239	BOLT	8
31	5240	BOLT	4
32	5241	NUT	1
33	5242	NUT	1
34	5243	LOCK WASHER	8
35	5244	LOCK WASHER	4
36	5245	DRAIN PLUG	1
37	2723	FILL PLUG	1
38	2719	RETAINING RING	1
39	5249	RETAINING RING	1
40	5250	RETAINING RING	1
41	5251	INSPECTION COVER	1
42	5252	SEAL PROTECTOR	1
43	5254	GEAR	1
NS	5409	SIGHT GUAGE	1
NS	6152	O-RING	1

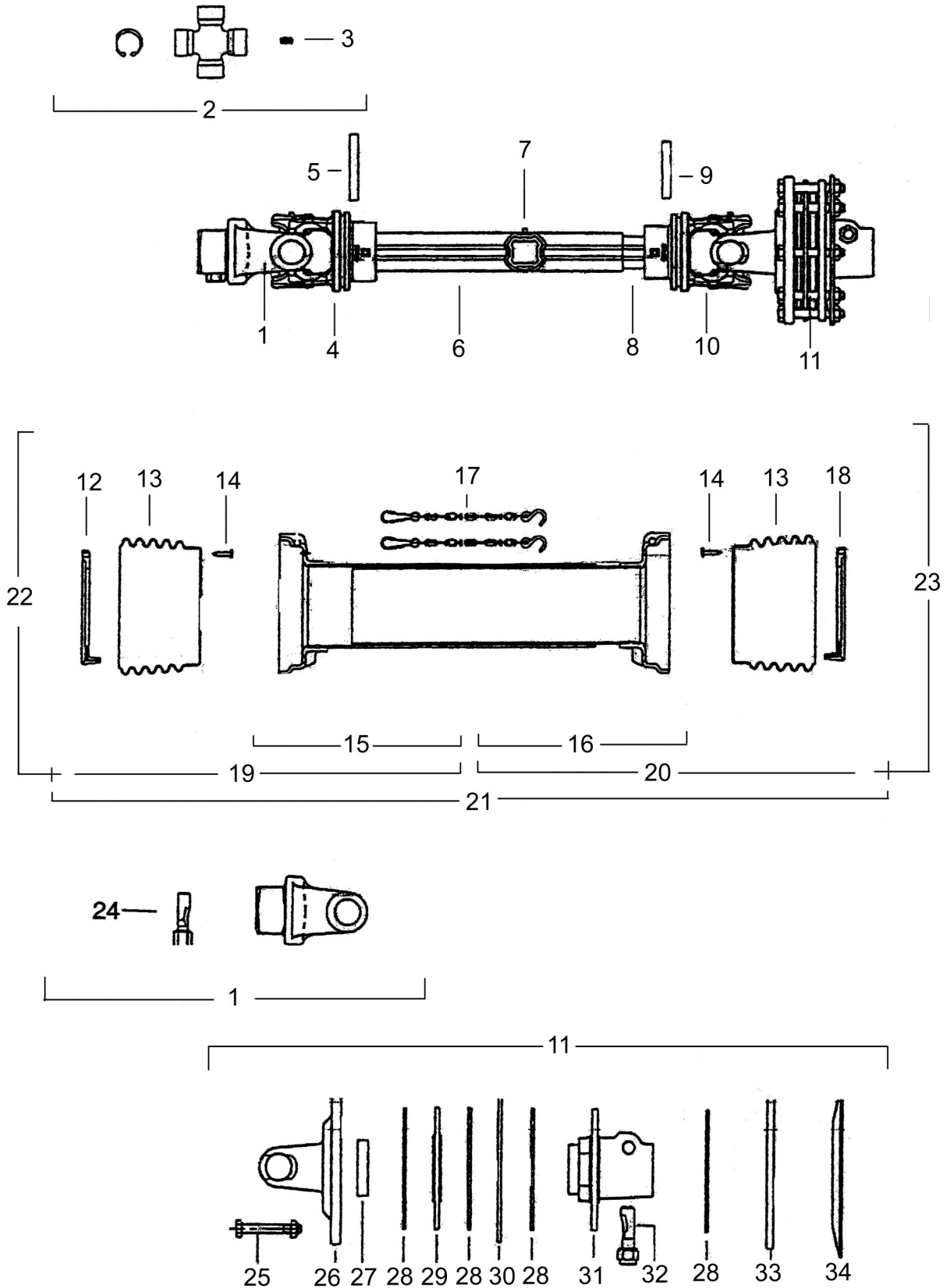
5169 Gear Box - Left Wing and Center
(See Maintenance Section for Required Lubrication)



5169 Gear Box - Left Wing and Center
(See Maintenance Section for Required Lubrication)

Ref. No.	Part No.	Description	Qty.
1	5210	HOUSING	1
2	5211	SIDE COVER PLATE	1
3	5253	GEAR	1
4	5213	INPUT SHAFT	1
5	5214	OUTPUT SHAFT	1
6	5215	BEARING CUP	1
7	5216	BEARING CONE	1
8	5217	BEARING CUP	2
9	5218	BEARING CONE	2
10	5219	BEARING CUP	1
11	5220	BEARING CONE	1
12	5221	SEAL	1
13	5222	SEAL	1
14	5223	GASKET	1-AR
15	5224	GASKET	1-AR
16	5225	GASKET	AR
17	5226	SHIM	AR
18	5227	SHIM	AR
19	5228	SHIM	1-AR
20	5229	SHIM	1-AR
21	5230	SHIM	1-AR
22	5231	SHIM	1-AR
23	5232	SHIM	1-AR
24	5233	SHIM	1-AR
25	5234	SHIM	1-AR
26	5235	SHIM	1-AR
27	5236	SPACER	1
28	5237	COTTER PIN	1
29	5238	COTTER PIN	1
30	5239	BOLT	8
31	5240	BOLT	4
32	5241	NUT	1
33	5242	NUT	1
34	5243	LOCK WASHER	8
35	5244	LOCK WASHER	4
36	5245	DRAIN PLUG	1
37	5246	FILL PLUG	1
38	2719	RETAINING RING	1
39	5249	RETAINING RING	1
40	5250	RETAINING RING	1
41	5251	INSPECTION COVER	1
42	5252	SEAL PROTECTOR	1
43	5254	GEAR	1
NS	5409	SIGHT GUAGE	1
NS	6152	O-RING	1

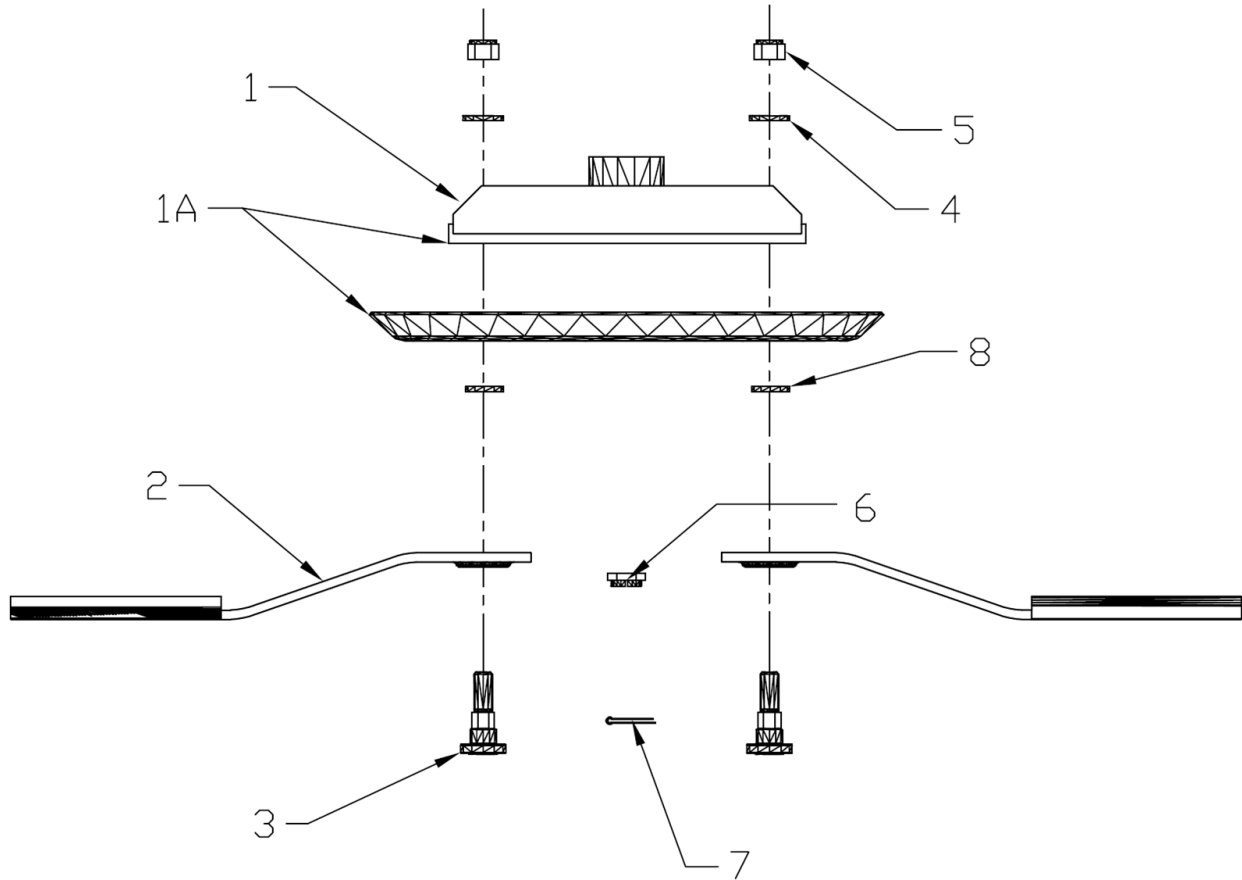
4005 Complete Wing Drive Shaft



4005 Complete Wing Drive Shaft Parts List

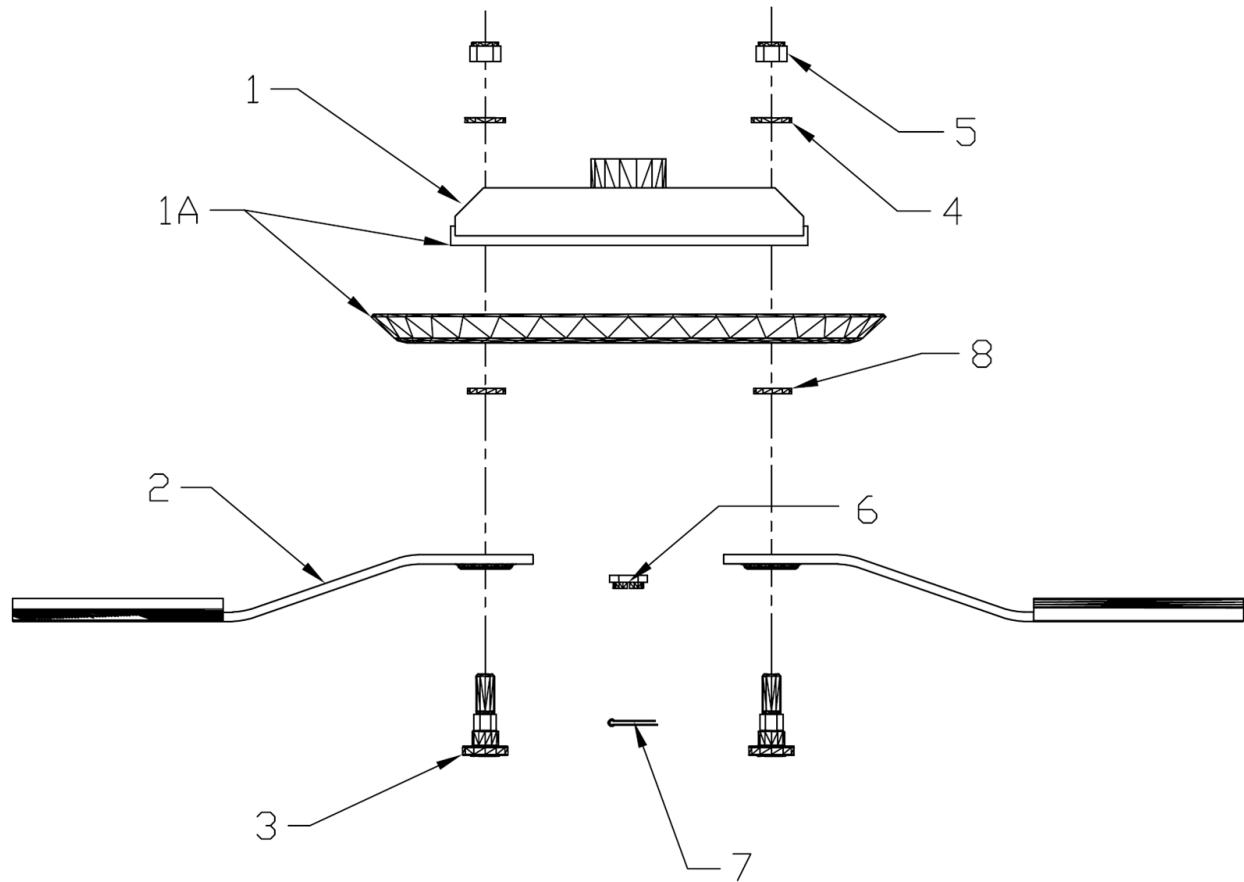
Ref. No.	Part No.	Description	Qty
1	4006	Quick Disconnect Yoke	1
2	3941	Cross Kit	2
3	3917	Grease Fitting	1
4	3942	Outer Tube Yoke	1
5	3919	Outer Roll Pin	1
6	4007	Outer Tube (Steel)	1
7	4008	Grease Fitting	1
8	4009	Inner Tube (Steel)	1
9	3922	Inner Roll Pin	1
10	3945	Inner Tube Yoke	1
11	4010	Complete Clutch Assembly	1
12	3927	Outer Shield Ring	1
13	3947	Shield Bell	2
14	3928	Shield Screw	6
15	4011	Outer Shield Tube	1
16	4095	Inner Shield Tube	1
17	4012	Shield Safety Chain	2
18	3932	Inner Shield Ring	1
19	4013	Outer Shield Complete	1
20	4014	Inner Shield Complete	1
21	4015	Complete Shield Assembly	1
24	5884	QD Pin Kit	1
25	1719	Bolt with Nut	8
26	4018	Flange Yoke	1
27	3962	Bushing	1
28	3963	Clutch Disk	4
29	3964	Clutch Plate	1
30	3965	Inner Plate	1
31	3966	Splined Hub	1
32	3967	Bolt with Nut	1
33	3968	Outer Plate	1
34	3969	Spring	1

Center Rotor Bar Assembly



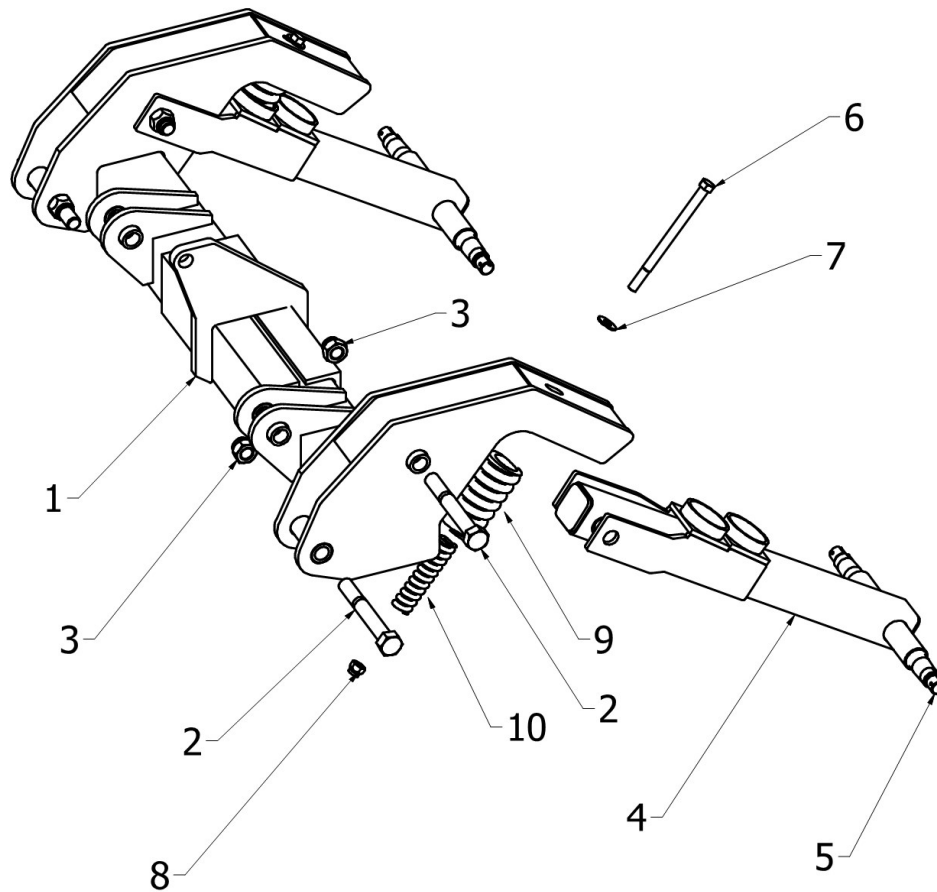
Ref. No.	Part No.	Description	Qty	Remarks
1	5332	Center Blade Bar	1	
1A	5172	Center Blade Bar with Stump Jumper	REF	
2	3093	Updraft Blade, CCW	2	
3	3095	Bolt	2	
4	2106	Washer	2	
5	2105	Nut	2	
6	5242	Output Shaft Nut	1	
7	5237	Cotter Pin	1	
8	3096	Washer	2	Only needed when using Stump Jumper

Wing Rotor Bar Assembly



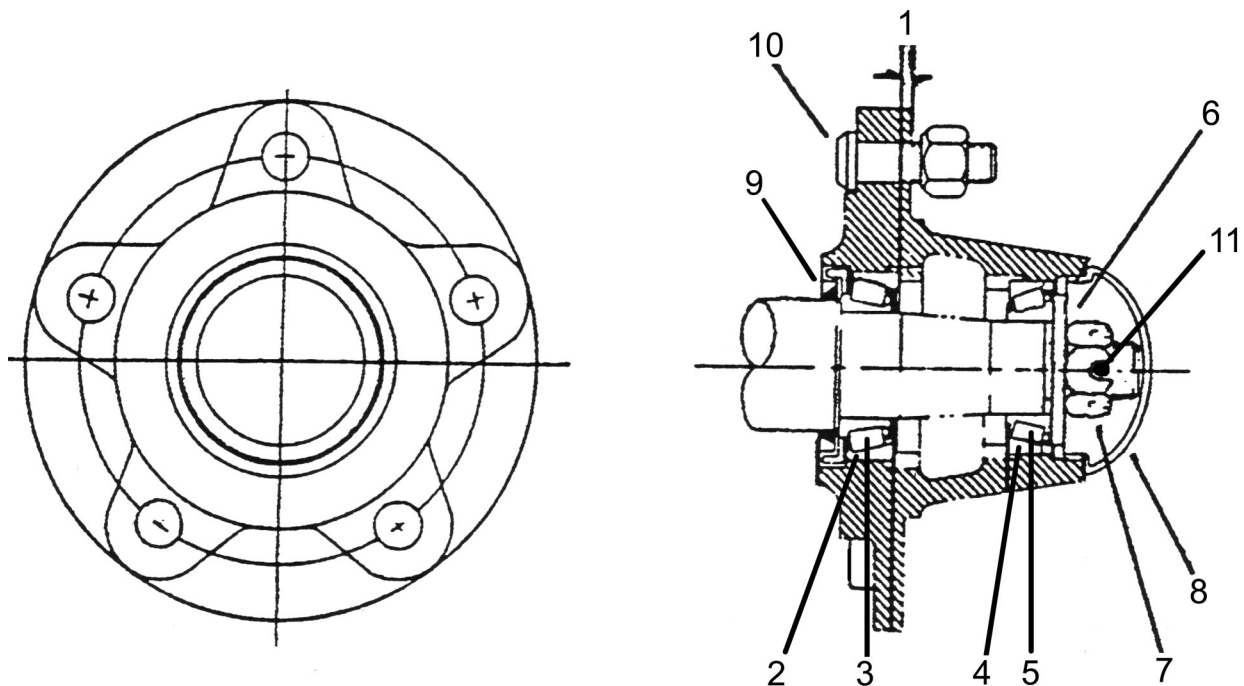
Ref. No.	Part No.	Description	Qty	Remarks
1	5332	Wing Blade Bar	1	
1A	5172	Wing Blade Bar with Stump Jumper	REF	
2	3093	Updraft Blade, CCW	2	Right Wing
Not Shown	3094	Updraft Blade, CW	2	Left Wing
3	3095	Bolt	2	
4	2106	Washer	2	
5	2105	Nut	2	
6	5242	Output Shaft Nut	1	
7	5237	Cotter Pin	1	
8	3096	Washer	2	Only needed when using Stump Jumper

Center Pivot Assembly for Independent Suspension



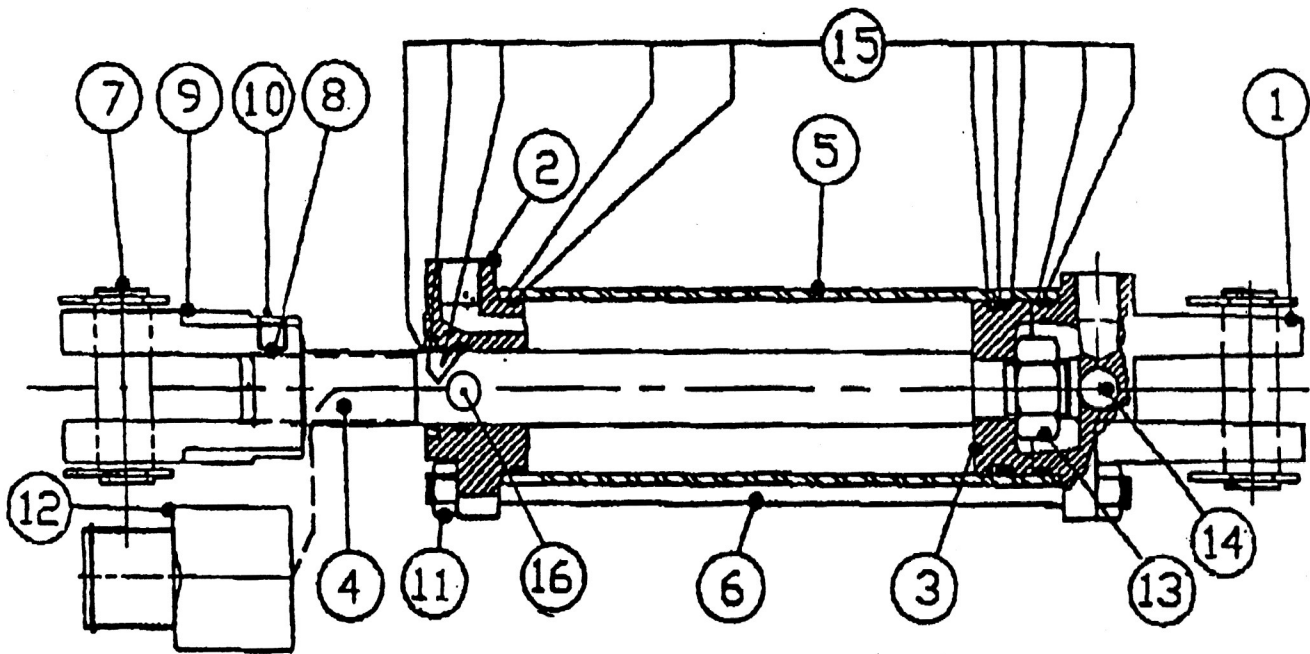
Ref. No.	Part No.	Description	Qty	Remarks
1	7027	Center Pivot		
2	2626	Bolt		
3	2638	Nut		
4	6991	Axle Arm (Dual)		
5	3358	Dual Spindle		Spindle Only
6	3661	Bolt		
7	4097	Washer		
8	3148	Nut		
9	3454	Spring		
10	4143	Spring		

2448 Hub Assembly



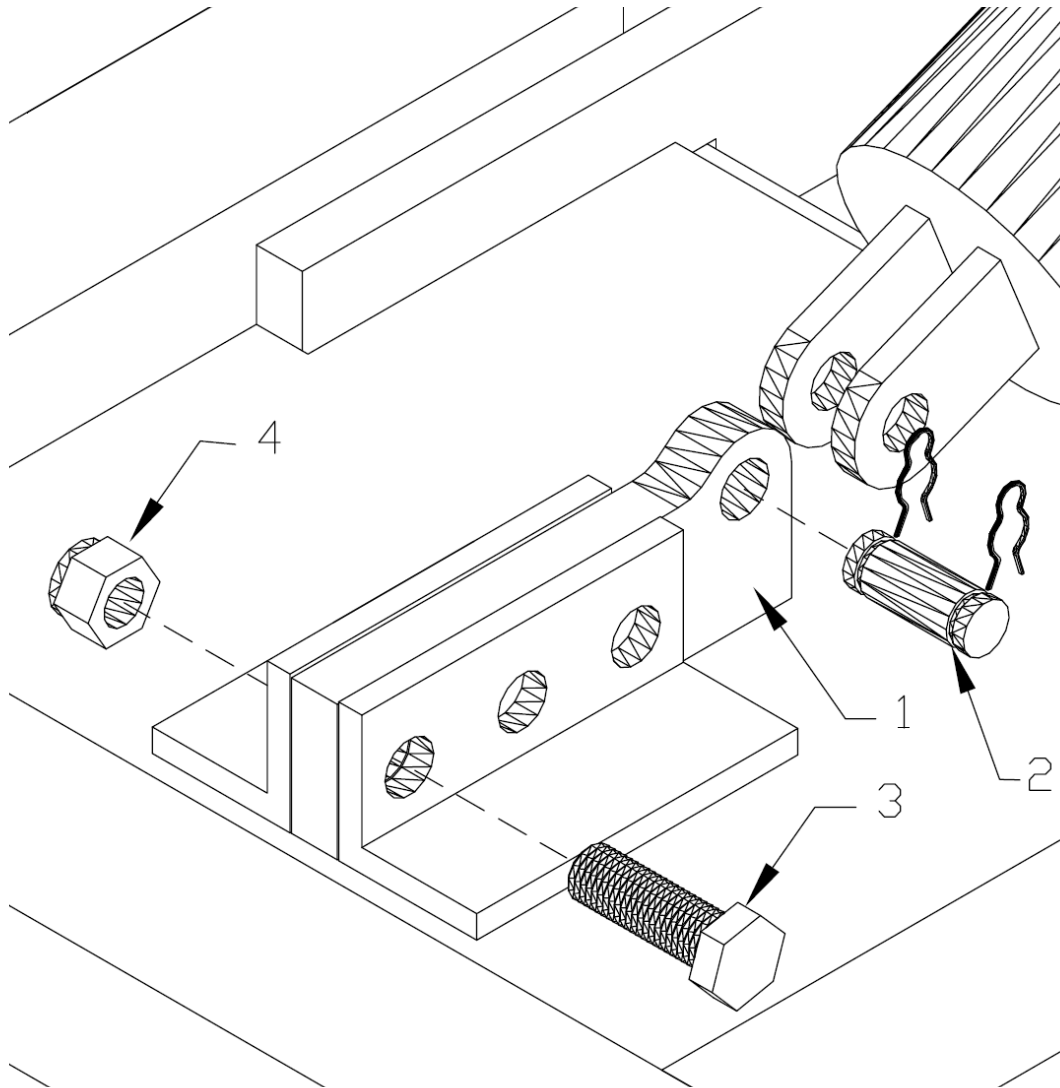
Ref. No.	Part No.	Description	Qty	Remarks
	2448	Complete Hub Assembly	REF	Includes Items 2-5,9,10
1	2449	Hub with Cups and Studs only	1	
2	2450	Inner Race	1	
3	2451	Inner Bearing	1	
4	2452	Outer Race	1	
5	2453	Outer Bearing	1	
6	3359	Spindle Washer	1	
7	3372	Spindle Nut	1	
8	2456	Dust Cap	1	
9	2457	Seal	1	
10	2458	Stud Bolt with Nut	5	
11	3360	Cotter Pin	1	
12	3917	Grease fitting	1	

2649 Lift Cylinder



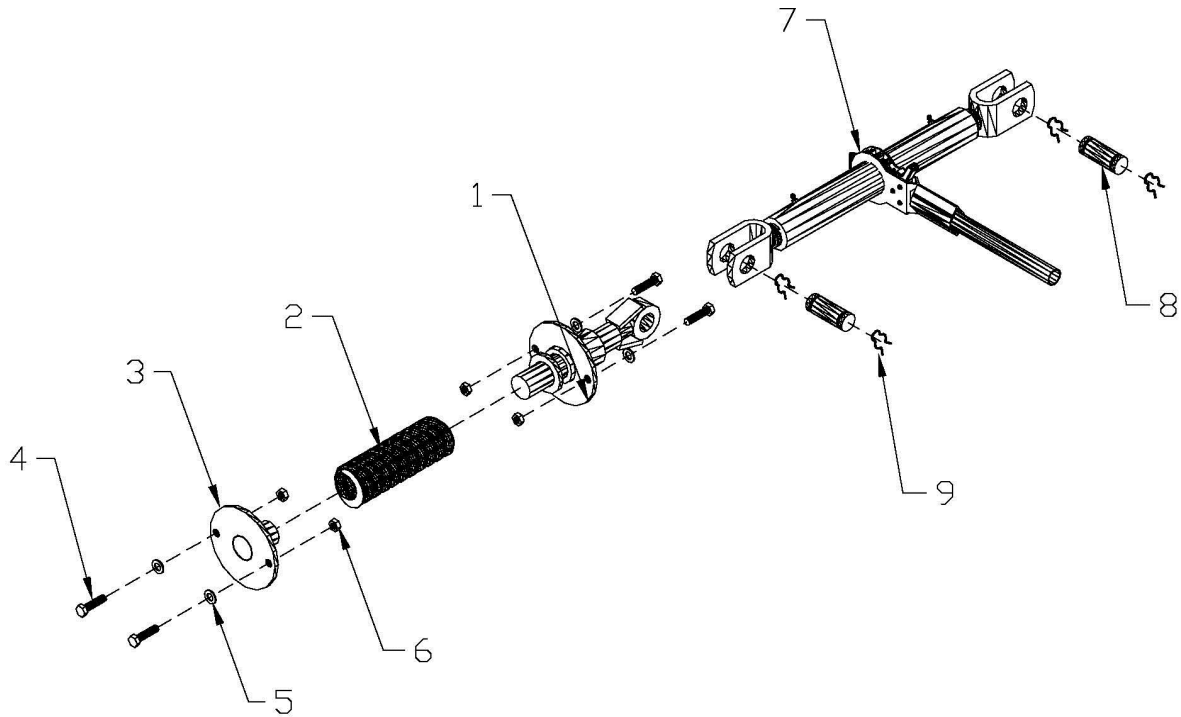
Ref. No.	Part No.	Description	Qty
1	2650	Clevis Cap	1
2	2651	Rod Cap	1
3	2652	Piston	1
4	2653	Rod	1
5	2654	Tube	1
6	2655	Tie Rod	4
7	2330	Pin	2
8	2656	Third Lock	1
9	2657	Rod Clevis	1
10	2658	Set Screw	1
11	2659	Nut	8
12	2374	Stroke Control Kit	1
13	2660	Piston Nut	1
14	2466	Vent Plug	1
15	2661	Seal Kit	1
16	2465	Restrictor	1

Center Lift Cylinder Mounting Point



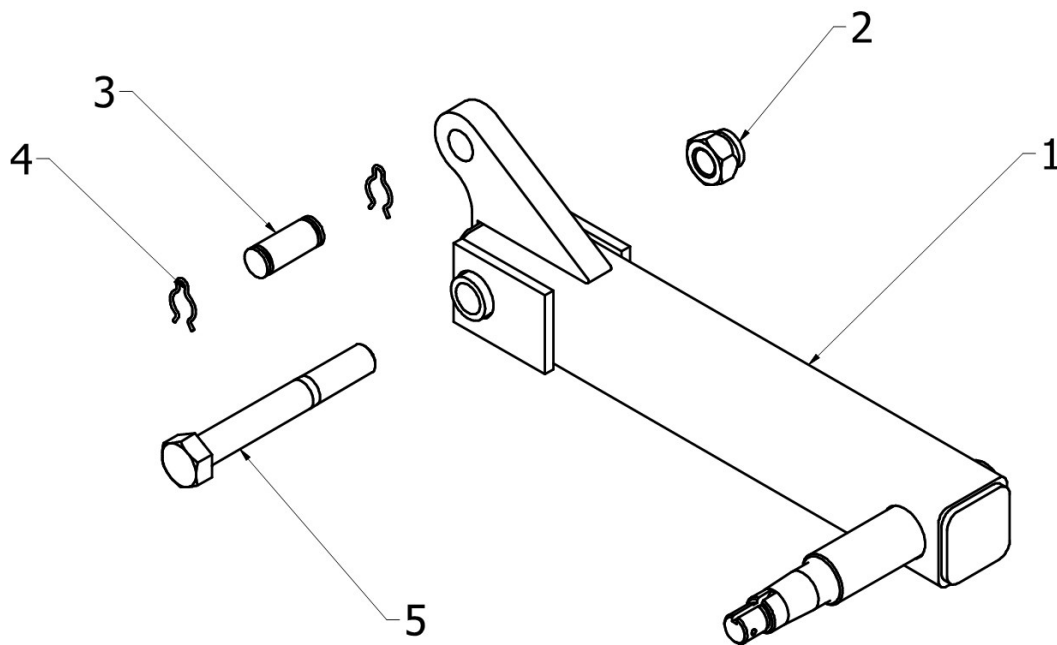
Ref. No.	Part No.	Description	Qty
1	7012	Mounting Block	1
2	2330	Pin with Hair Pins	1
3	5082	Bolt	1
4	2105	Nut	1

Wing Shock Absorber Assembly



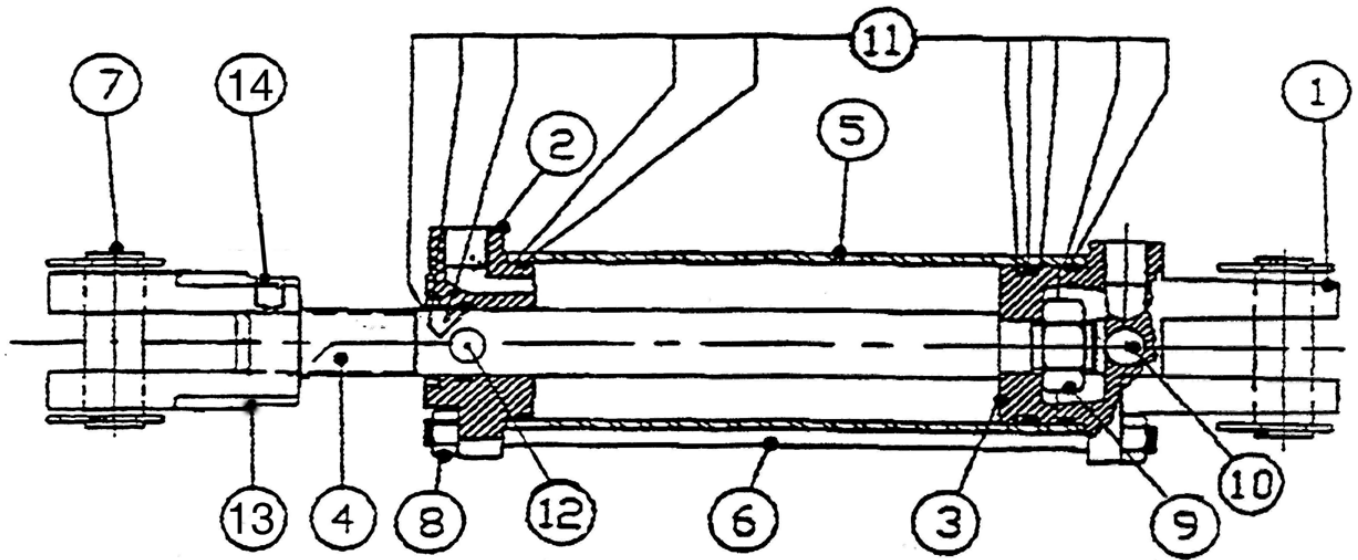
Ref. No.	Part No.	Description	Qty
1	6022	Plunger	1
2	3567	Spring	1
3	6024	Spring Guide	1
4	3758	Bolt	4
5	3248	Washer	4
6	2057	Nut	4
7	3269	Ratchet Jack	1
8	2354	Pin	2
9	3270	Clip Pin	4

Wing Axle Arm Assembly for Independent Suspension



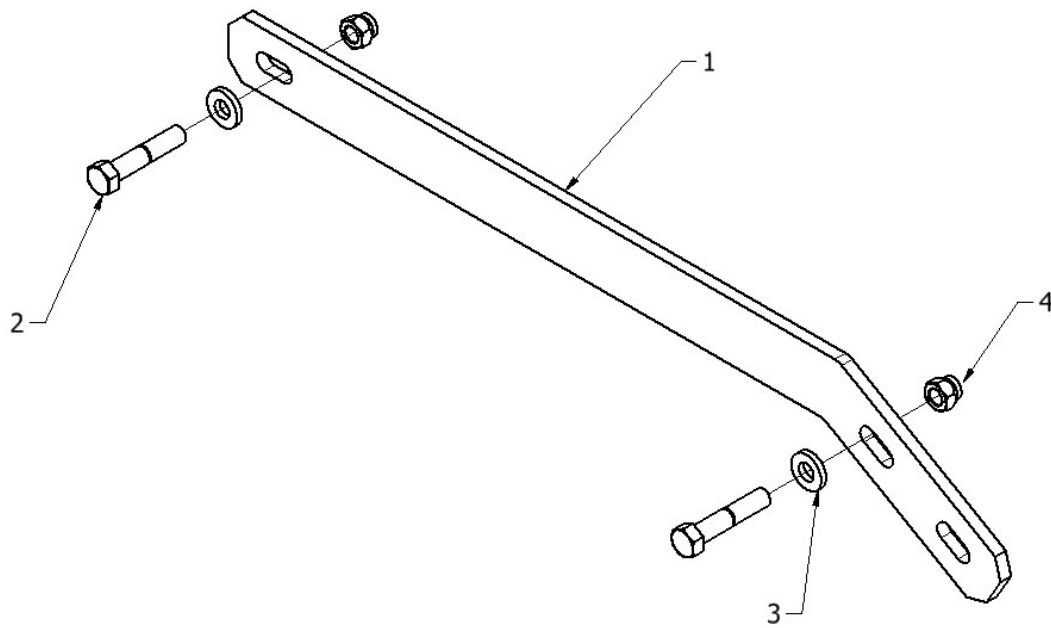
Ref. No.	Part No.	Description	Qty
1	7015	Left Wing Axle Arm	1
Not Shown	7016	Right Wing Axle Arm	1
2	2638	Nut	1
3	2354	Pin	1
4	3270	Hair Pin	1
5	2626	Bolt	1

4879 Wing Lift Cylinder



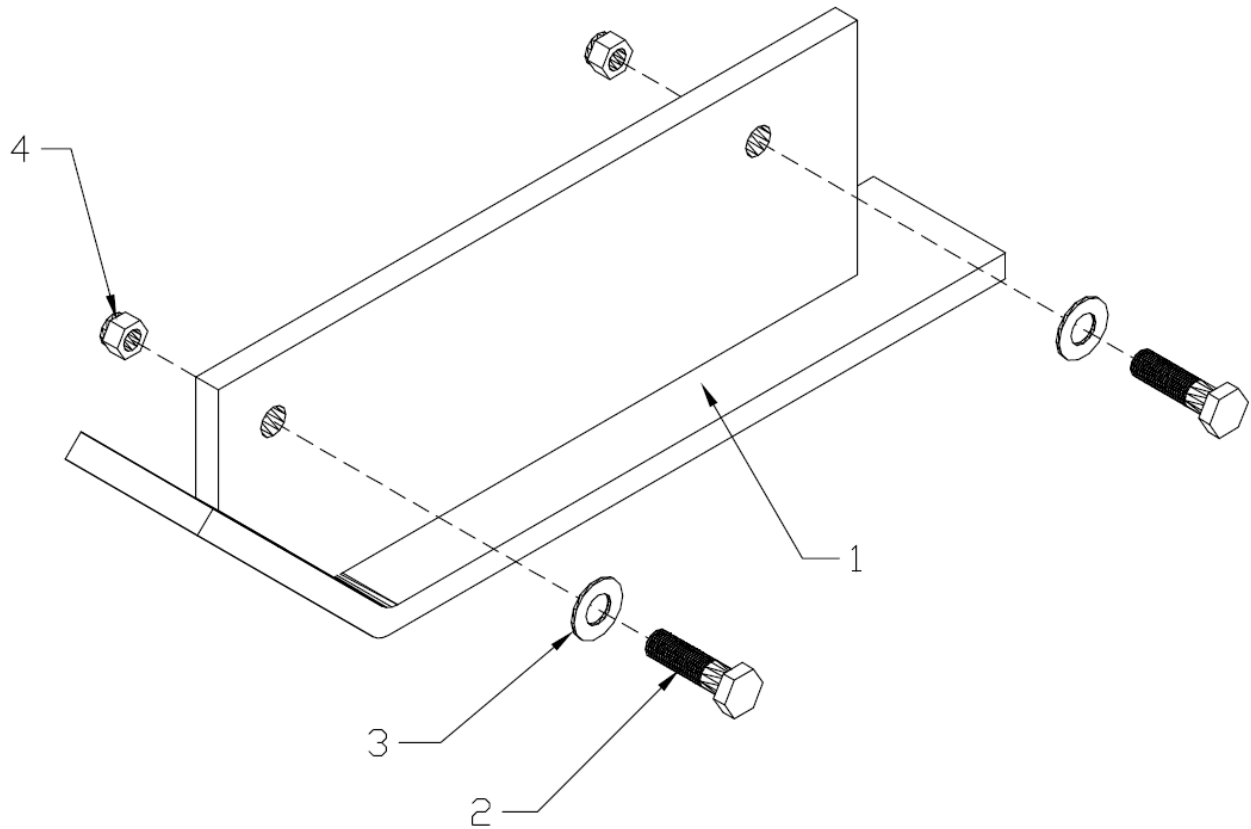
Ref. No.	Part No.	Description	Qty
1	2663	Clevis Cap	1
2	2664	Rod Cap	1
3	2665	Piston	1
4	4880	Rod	1
5	2667	Tube	1
6	2668	Tie Rod	4
7	2330	Pin	2
8	3220	Nut	8
9	2660	Piston Nut	1
10	2466	Vent Plug	1
11	2669	Seal Kit	1
12	2465	Restrictor	1
13	4881	Rod Clevis	1
14	4882	Set Screw	1

Travel Bar Assembly



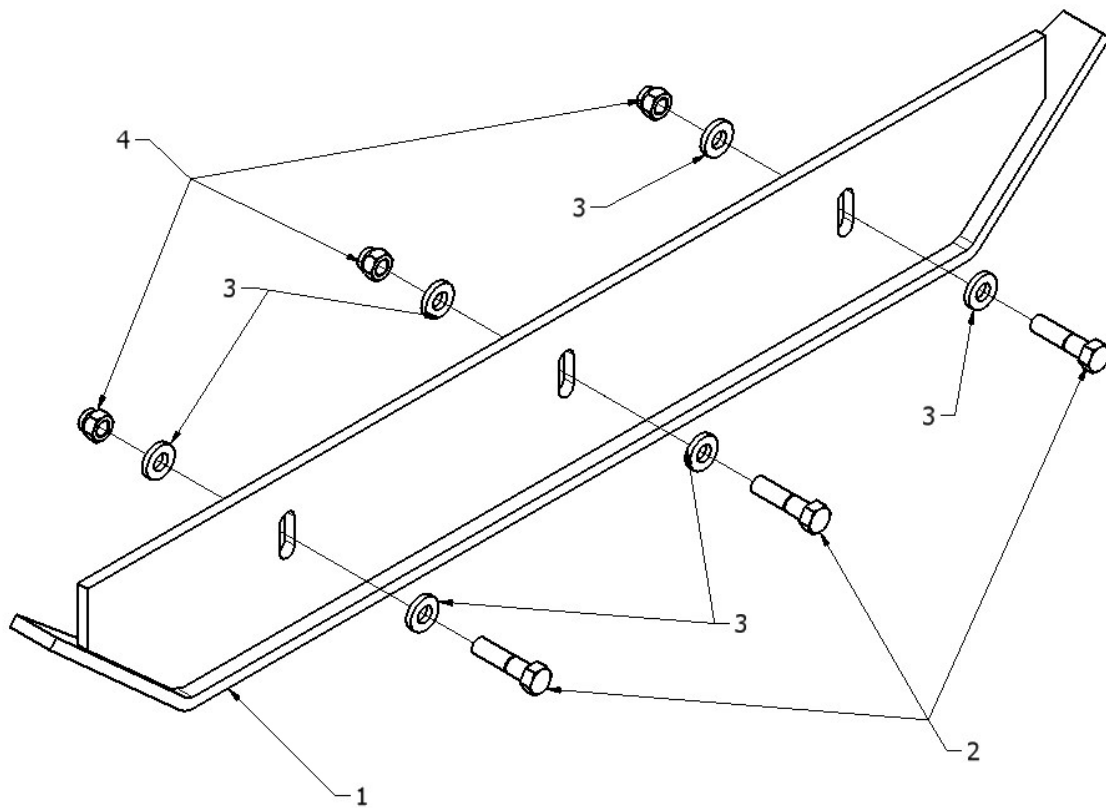
Ref. No.	Part No.	Description	Qty
1	5174	Travel Bar	1
2	3659	Bolt	1
3	3298	Washer	1
4	2336	Nut	1

Center Skid Shoe Assembly



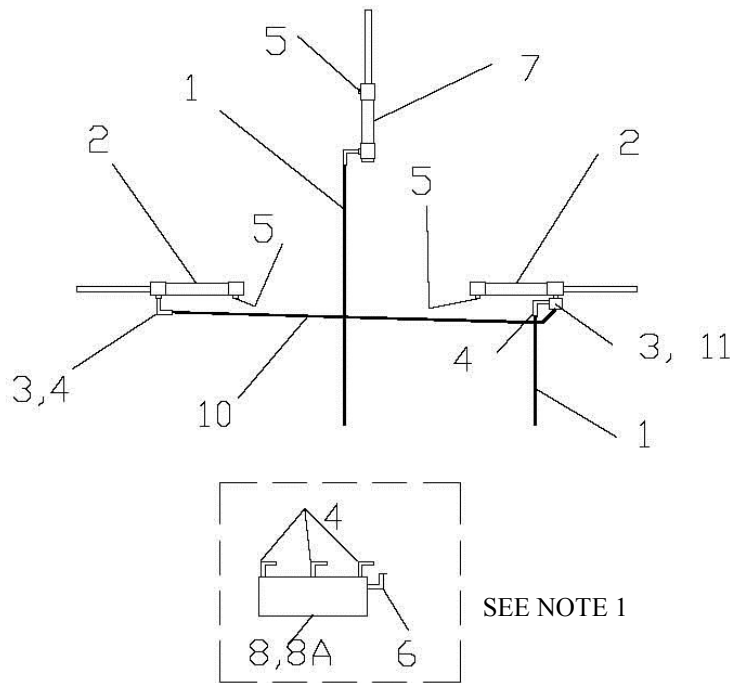
Ref. No.	Part No.	Description	Qty
1	3502	Skid Shoe	1
2	2335	Bolt	2
3	2337	Washer	2
4	2336	Nut	2

Wing Skid Shoe Assembly



Ref. No.	Part No.	Description	Qty
1	5108	Wing Skid Shoe	1
2	2335	Bolt	3
3	2337	Washer	6
4	2336	Nut	3

Hydraulic Hose Plan

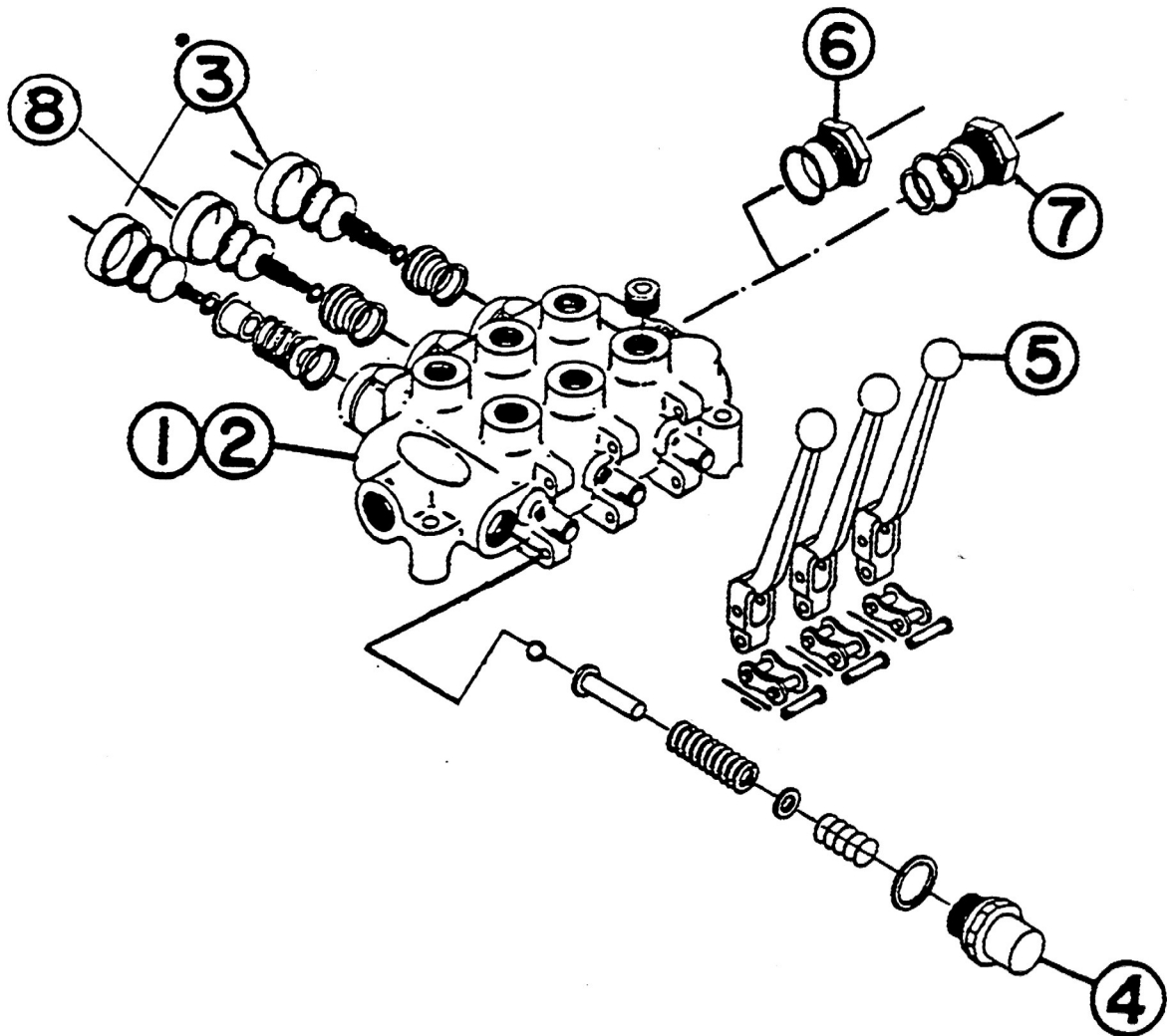


NOTE 1
USE THIS CONFIGURATION
WHEN THEY ARE 3 SEPARATE
REMOTES ON THE FENDER
MOUNTED VALVE.

NOTE 2
THE REPHASING KIT ITEM 9 IS
USED WHEN CHANGING FROM
THE REGULAR HYDRAULIC
SYSTEM (DIAGRAM) TO THE
HYDRAULIC SYSTEM WITH
REPHASING CYLINDERS.

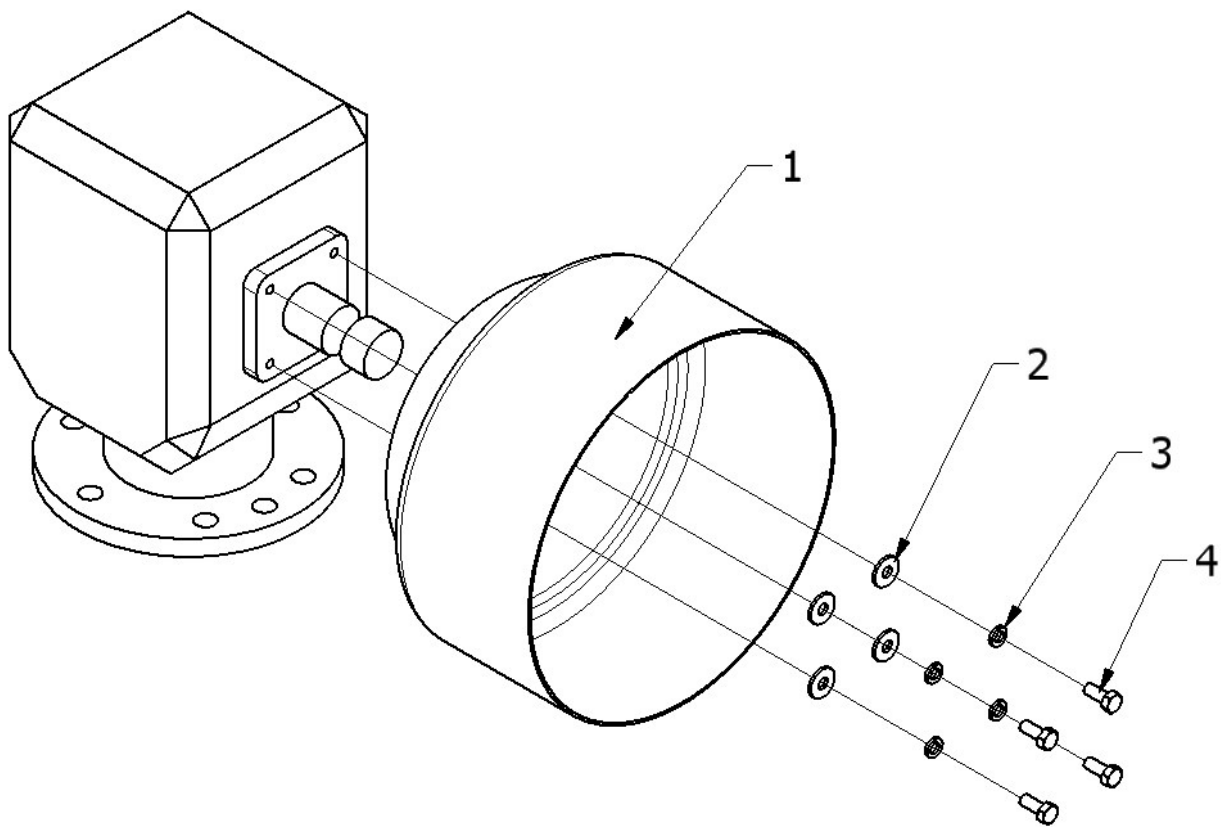
Ref. No.	Part No.	Description	Qty	Remarks
1	2344	Hose	2	
2	4879	Wing Cylinder	2	See details on page 30
3	2465	Restrictor	3	
4	2350	Fitting	3	
5	2466	Vent Plug	3	
6	5006	Fitting	1	See NOTE 1
7	2649	Center Cylinder	1	See details on page 26
8	2518	3-Spool Valve (Open Center)	1	See NOTE 1
8 A	3370	3-Spool Valve (Closed Center)	1	See NOTE 1
9 Not shown	5007	Rephasing Kit	1	
10	4952	#Hose	1	
11	4951	"T" Fitting	1	

3362 Hydraulic Valve



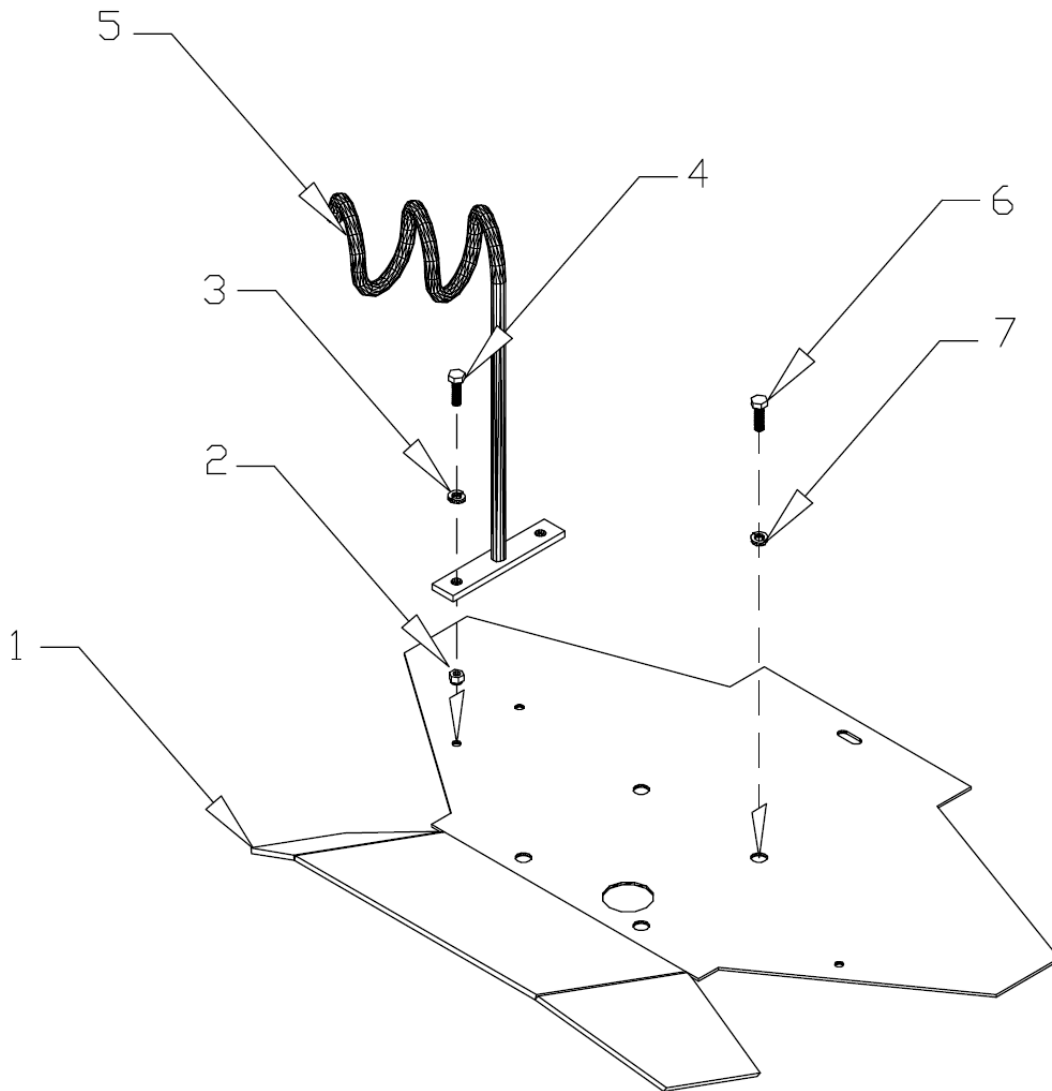
Ref. No.	Part No.	Description	Qty
1	3362	Open Center Valve	1
2	3370	Closed Center Valve	REF
3	3363	Detent Kit	2
4	3364	High Pressure Relief Valve Kit	1
5	3365	Handle Assembly	3
6	3366	Open Center Plug	1
7	3371	Closed Center Plug	REF
8	3367	Spring Repair Kit	1

Wing Gearbox Shield Assembly



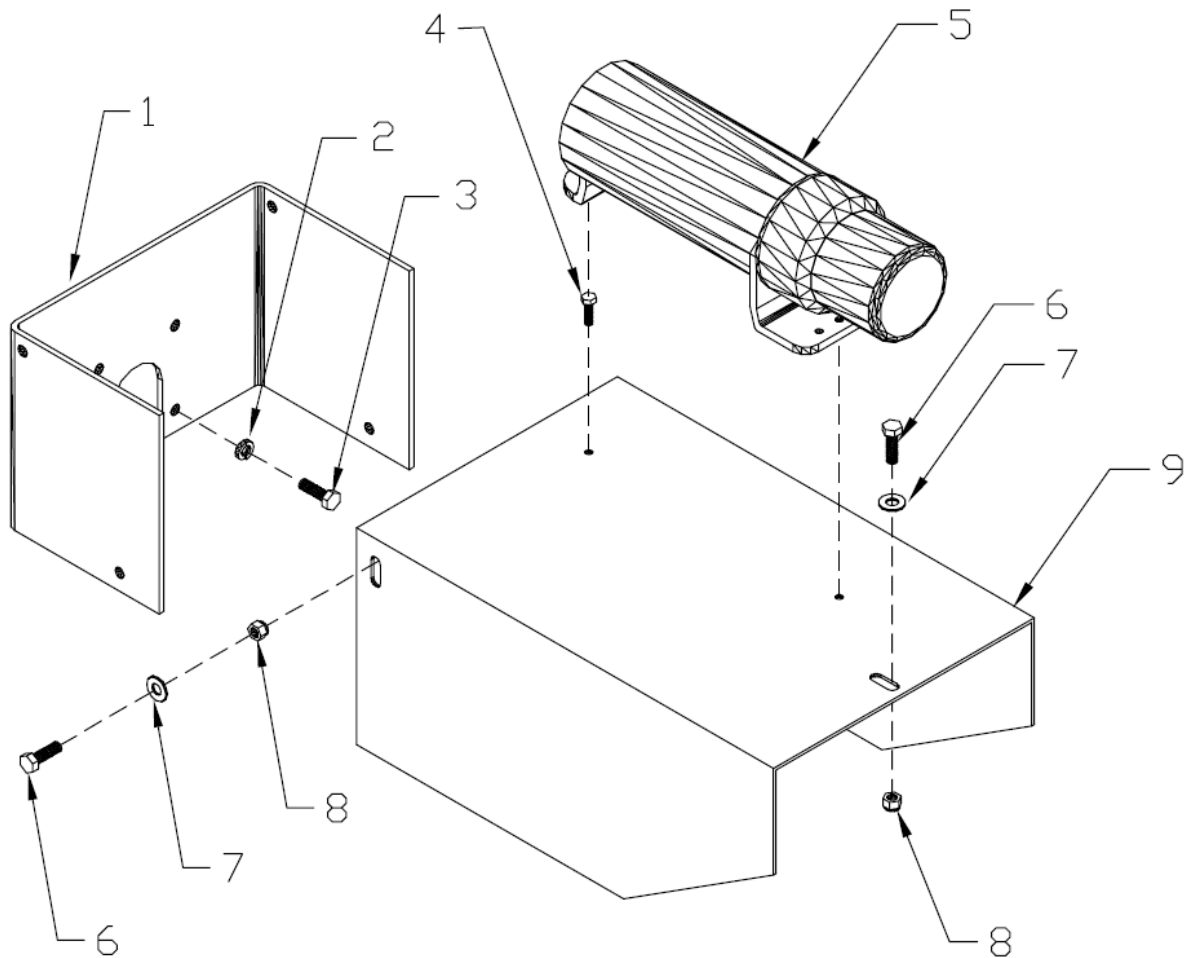
Ref. No.	Part No.	Description	Qty
1	5173	Shield Cover	1
2	5255	Washer	4
3	5244	Washer	4
4	2693	Bolt	4

Divider Gearbox Shield Assembly



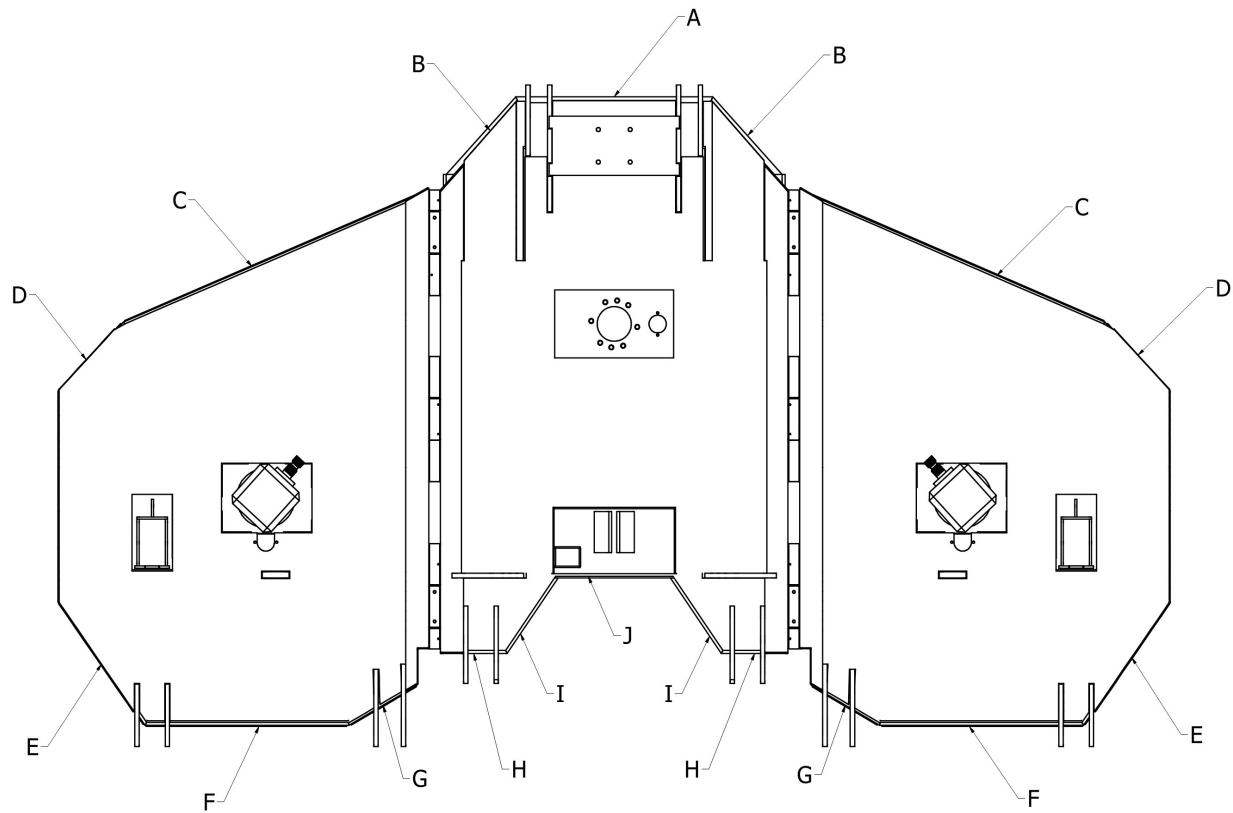
Ref. No.	Part No.	Description	Qty
1	3401	Shield Cover	1
2	2513	Nut	2
3	3415	Washer	2
4	2512	Bolt	2
5	3394	Hose Holder	1
6	2734	Bolt	4
7	2733	Lock Washer	4

Center Gearbox Shield Assembly



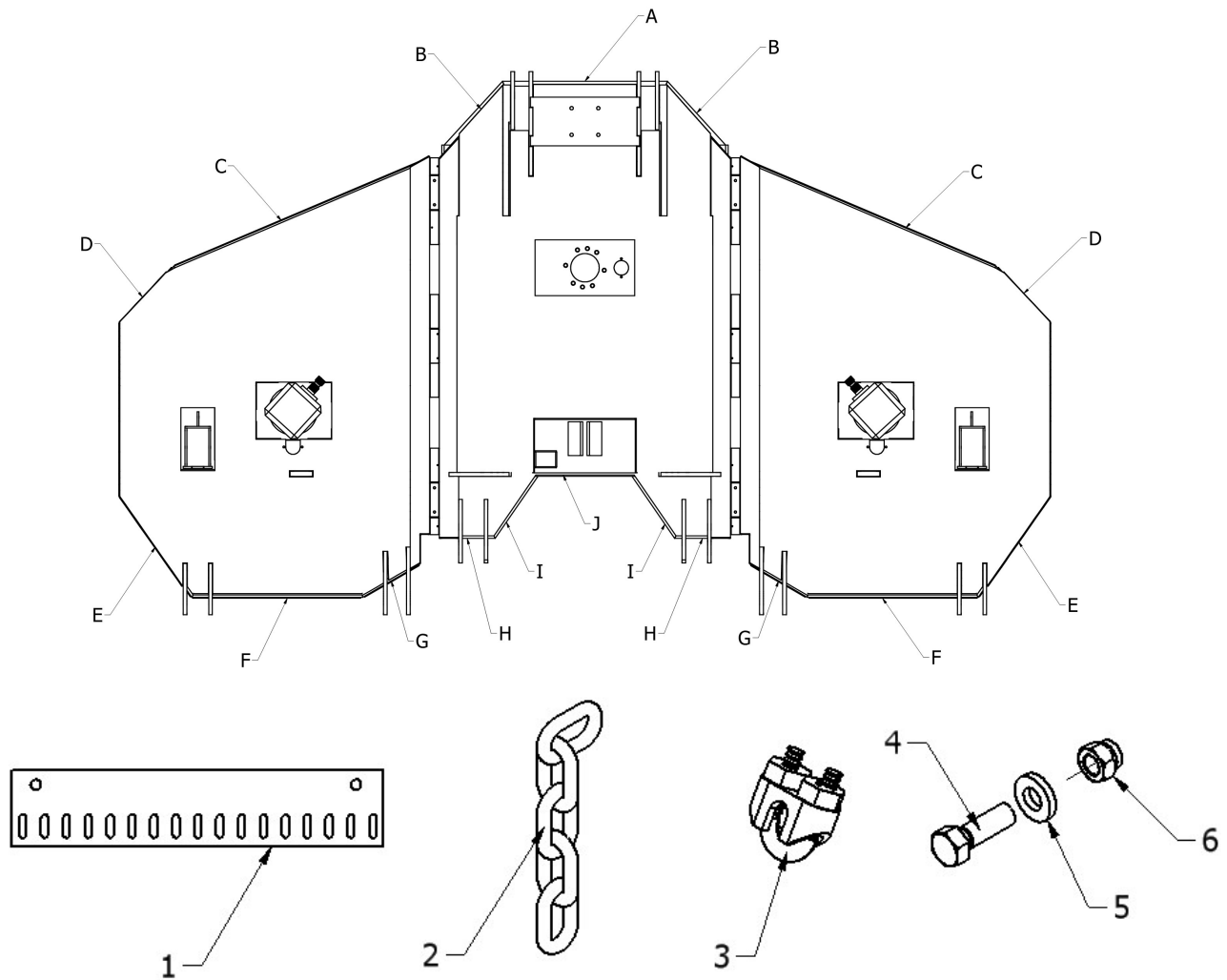
Ref. No.	Part No.	Description	Qty
1	2510	Shield Face Plate	1
2	5244	Lock Washer	4
3	2693	Bolt	4
4	4462	Screw	2
5	4463	Operator's Manual Holder	1
6	2512	Bolt	3
7	3415	Washer	3
8	2513	Nut	3
9	5178	Flip Shield	1

Chain Guard Assembly



REF	SINGLE ROW		DOUBLE ROW	
	LEFT	RIGHT	LEFT	RIGHT
A	5181		5182	
B	5183L	5183R	5184L	5184R
C	7017L	7017R	7022L	7022R
D	7018L	7018R	7023L	7023R
E	7021L	7021R	7026L	7026R
F	7020L	7020R	7025L	7025R
G	7019L	7019R	7024L	7024R
H	5195L	5195R	5196L	5196R
I	5197L	5197R	5198L	5198R
J	5199		5200	

Chain Guard Assembly Components

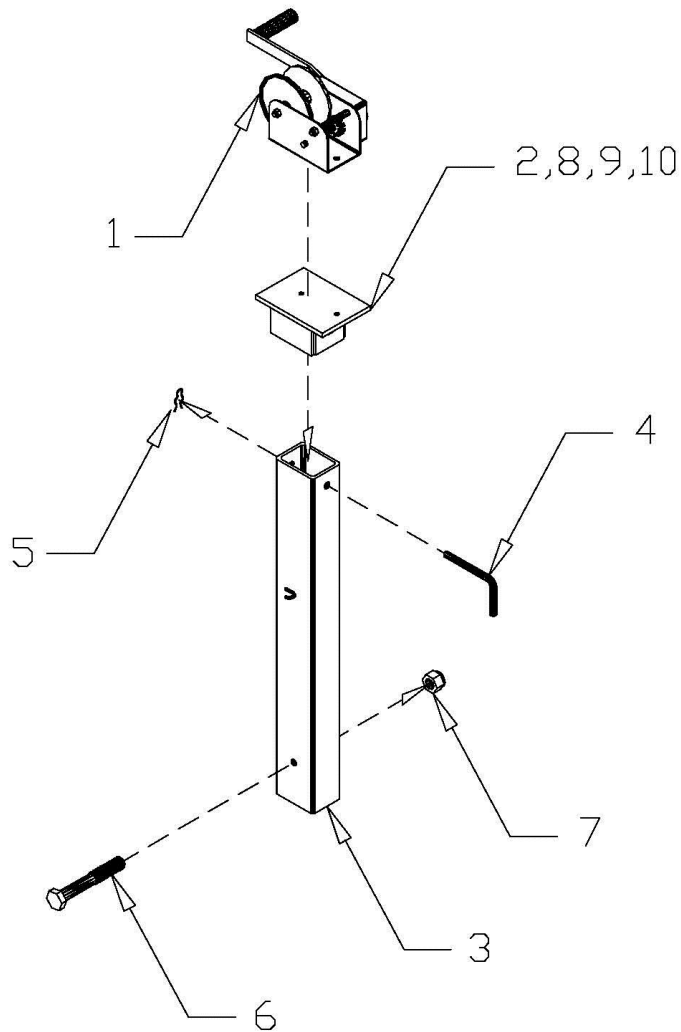


Ref. No.	Part No.	Description
1	-	CHAIN GUARD PLATE
2	3583	CHAIN—SINGLE ROW
Not Shown	3588	CHAIN—DOUBLE ROW
3	3585	CLAMP
4	2335	BOLT
5	2337	WASHER
6	2336	NUT
Not Shown	-	CABLE

Chain Guard Assembly Components

Ref.	PART NUMBERS		QUANTITIES				
	PLATE	CABLE	CHAIN	CLAMP	BOLT	WASHER	NUT
A	5111	5154	29	2	4	4	4
B	5110	5153	14	2	2	2	2
C	6962	5158	47	2	5	5	5
D	6963	5159	13	2	2	2	2
E	6964	5160	20	2	2	2	2
F	6965	5161	29	2	4	4	4
G	6966	5162	11	2	2	2	2
H	5112	5155	9	2	2	2	2
I	5113	5156	13	2	2	2	2
J	5114	5157	15	2	3	3	3

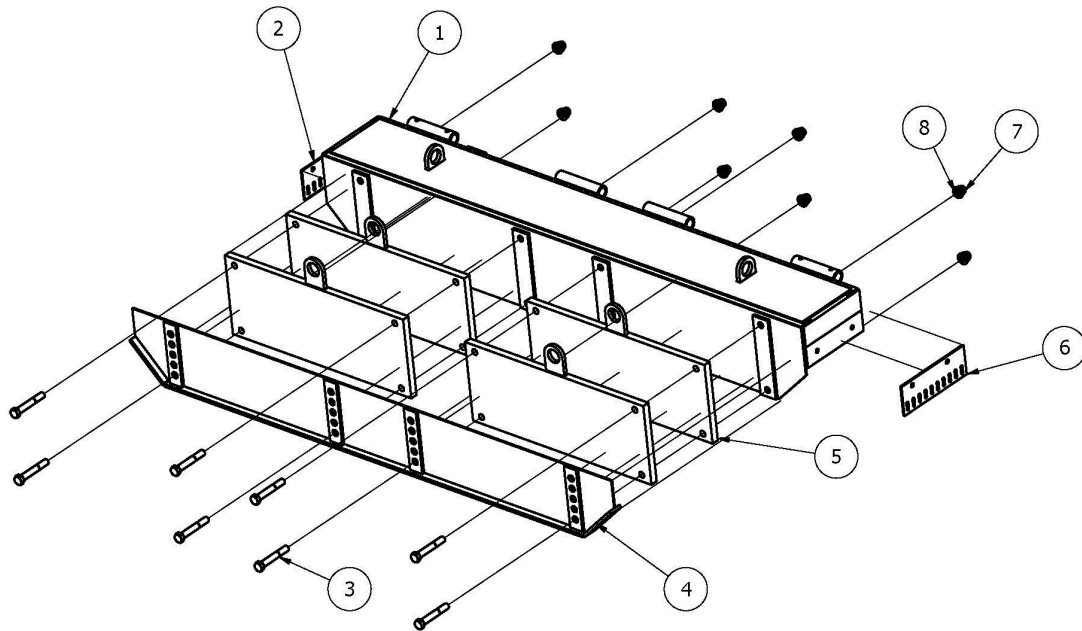
Winch Stand Assembly



Ref. No.	Part No.	Description	Qty
1	2645	Winch Assembly with Cable	1
2	2674	Winch Stand Cap	1
3	3658	Winch Stand	1
4	2648	Pin	1
5	2372	Hair Pin	1
6	2772	Bolt	1
7	2507	Nut	1
8	2512	Bolt	2
9	3415	Washer	2
10	2513	Nut	
Not Shown	2508	Pulley	1

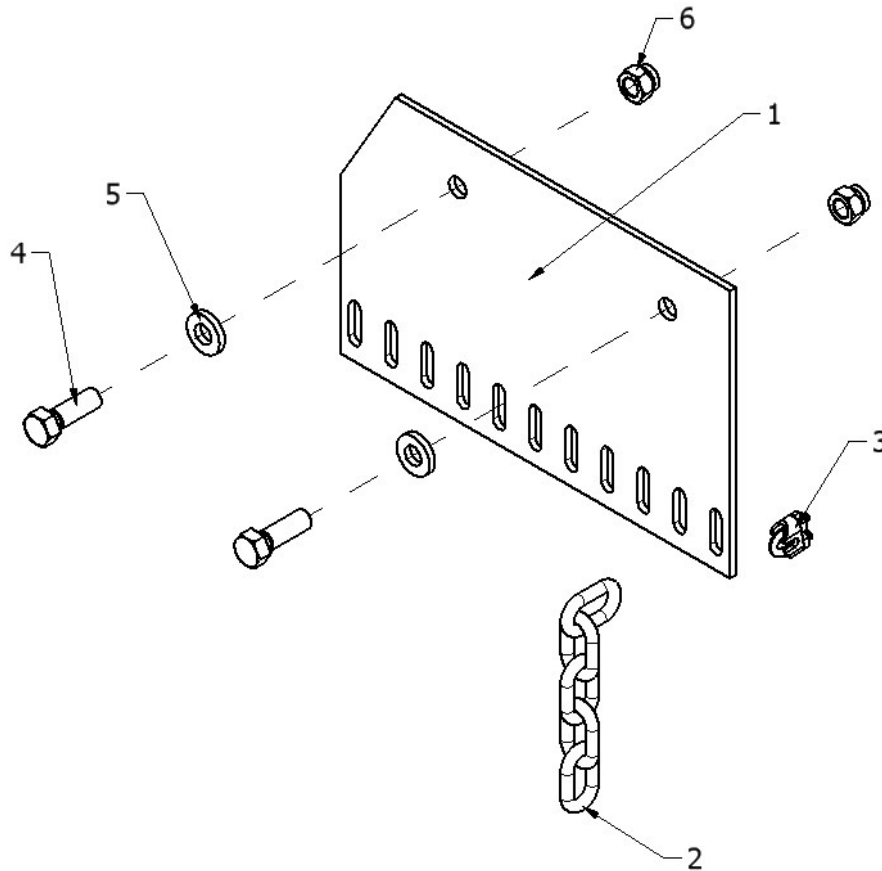
Optional
Equipment
and
Other Items
not Illustrated

ST-120 ELITE Counter Weight Assembly 6093



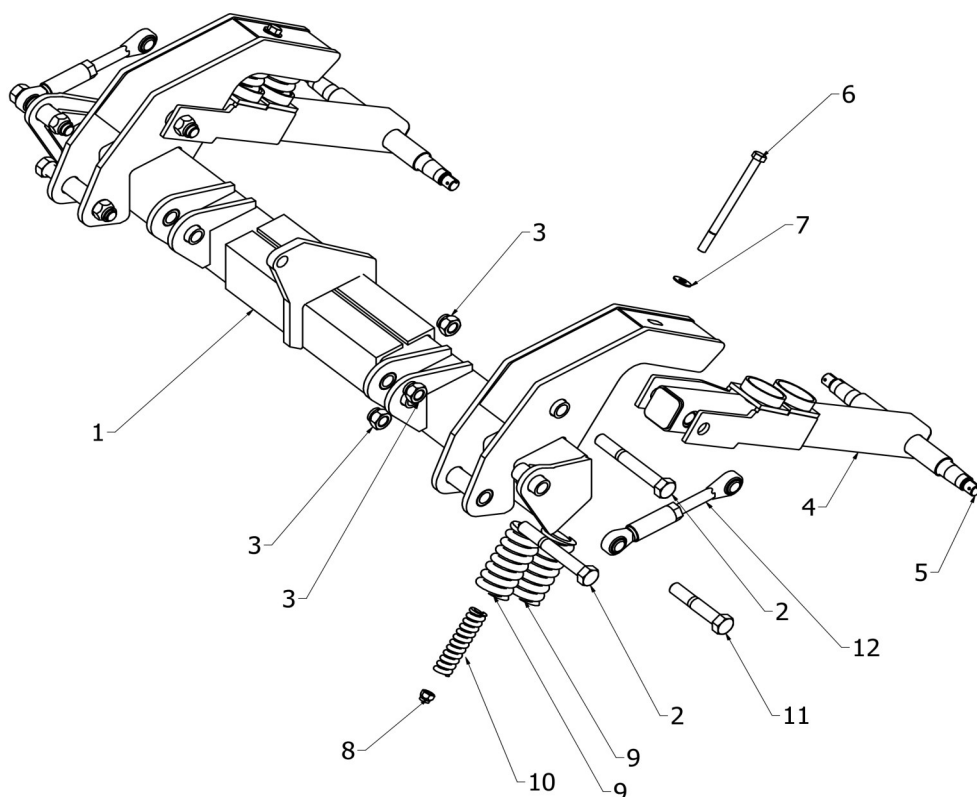
Ref. No.	Part No.	Description	Qty	Remarks
1	5179	Counter Weight Frame	1	
2	5202	Chain Guard Assembly Single Row	1	Assembly details on page 45
2 A	5203	Chain Guard Assembly Double Row	AR	Assembly details on page 45 Not Shown
3	2076	Bolt	8	
4	5180	Skid Shoe	1	
5	3235	1000 LB Weight	6	
5 A	3236	75 LB. Weight	AR	Not Shown
5 B	3237	50 LB. Weight	AR	Not Shown
5 C	3238	25 LF. Weight	AR	Not Shown
6	5204	Chain Guard Assembly Single Row	1	
6 A	5205	Chain Guard Assembly	AR	Assembly details on page 45 Not Shown
7	3285	Washer	8	
8	2077	Nut	8	

Counter Weight Chain Guard Assembly, PN: 5202-5205



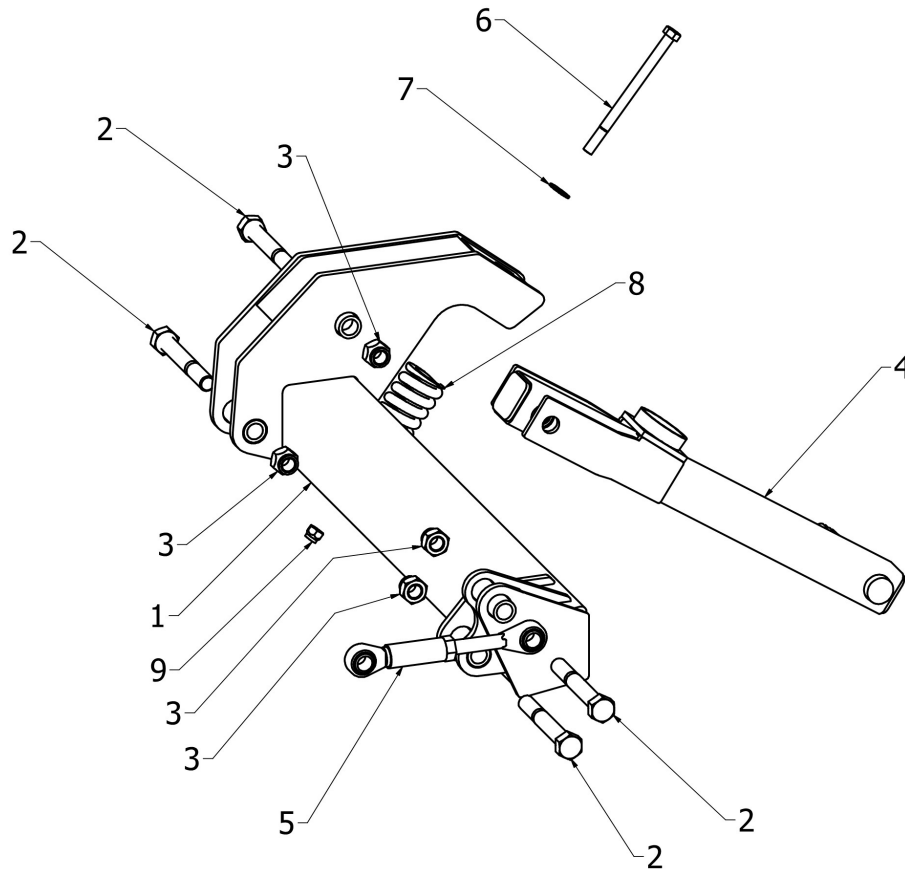
Ref. No.	Part No.	Description	Qty
1	5201	Chain Guard Plate	1
2	3583	Chain Link for Single Curtain	11
2 A Not Shown	3588	Chain Link for Double Curtain	11 AR
3	3585	Clamp	2
4	2335	Bolt	2
5	2337	Washer	2
6	2336	Nut	2
8	5206	Cable	1

Center Pivot for Linked Suspension



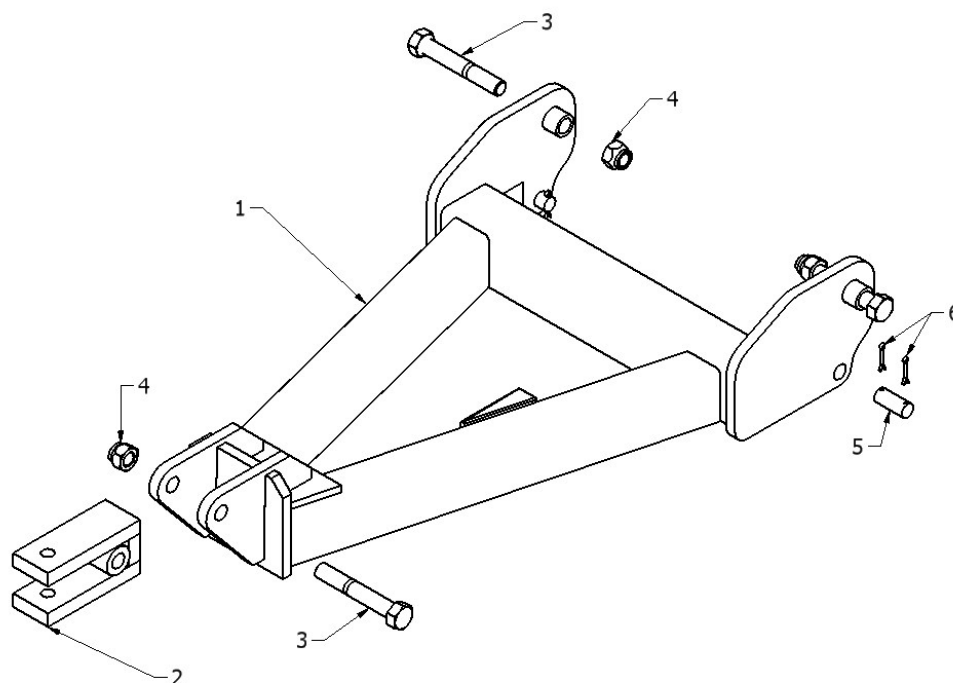
Ref. No.	Part No.	Description	Qty
1	6967	Center Pivot for Linkage Suspension	1
2	2626	Bolt	4
3	2638	Nylock Nut	6
4	6991	Center Axle Arm	2
5	3358	Dual Spindle (Spindle Only)	2
6	3661	Bolt	2
7	4097	Flat Washer	2
8	3148	Nylock Nut	2
9	3454	Outer Spring	4
10	4143	Inner Spring	2
11	3389	Bolt	2
12	6735	Turnbuckle	2

Wing Pivot for Linked Suspension



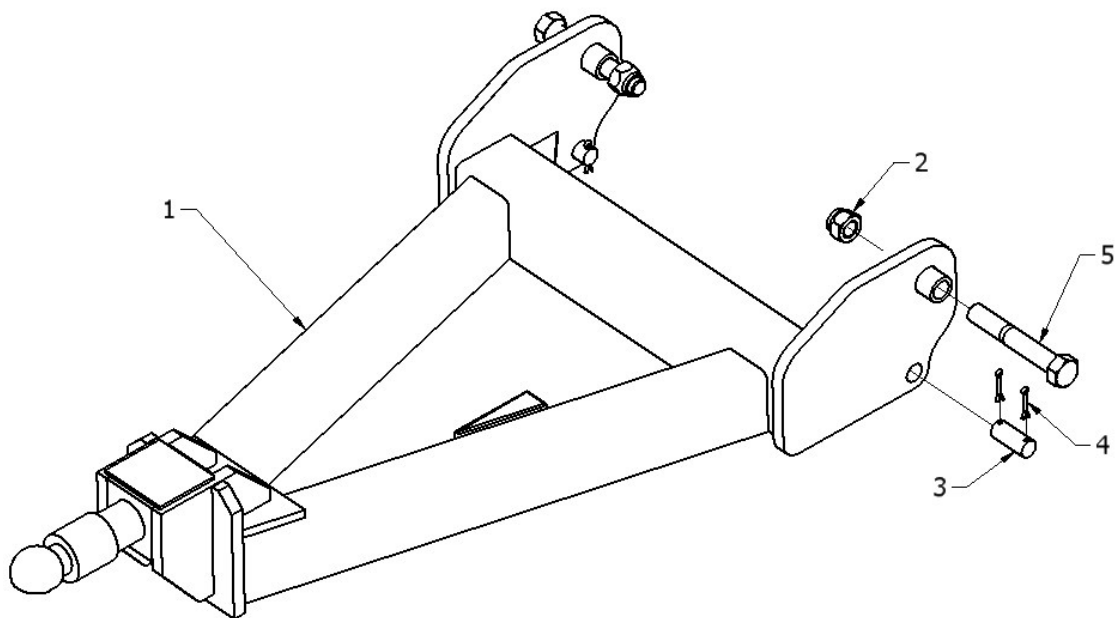
Ref. No.	Part No.	Description	Qty
1	6968	Right Wing Pivot	1
Not Shown	6969	Left Wing Pivot	1
2	2626	Bolt	4
3	2638	Nylock Nut	4
4	6971	Right Wing Axle Arm	1
Not Shown	6970	Left Wing Axle Arm	1
5	6735	Turnbuckle	1
6	3661	Bolt	1
7	4097	Flat Washer	1
8	3454	Outer Spring	1
9	3148	Nylock Nut	1

Tongue with Fixed Clevis



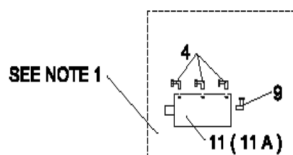
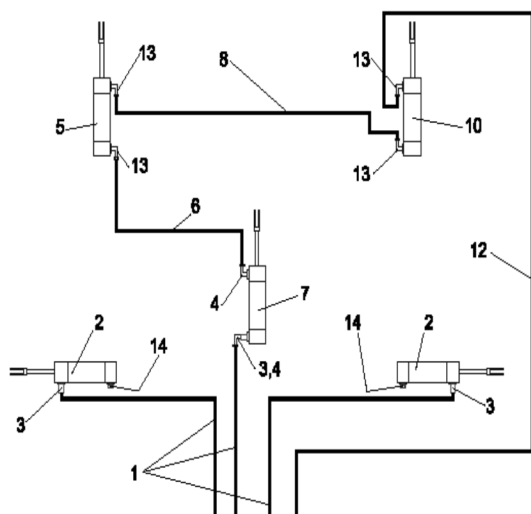
Ref. No.	Part No.	Description	Qty
1	5208	Tongue Only	1
2	2312	Clevis	1
3	2624	Bolt	3
4	2638	Nut	3
5	2315	Level Rod Pin	2
6	2313	Cotter Pin	4

Tongue with Bulldog Hitch



Ref. No.	Part No.	Description	Qty
1	5209	Tongue Only with Bulldog Hitch	1
2	2638	Nut	2
3	2315	Level Rod Pin	2
4	2313	Cotter Pin	4
5	2624	Bolt	2

Hydraulic Hose Plan for Rephasing Cylinder System

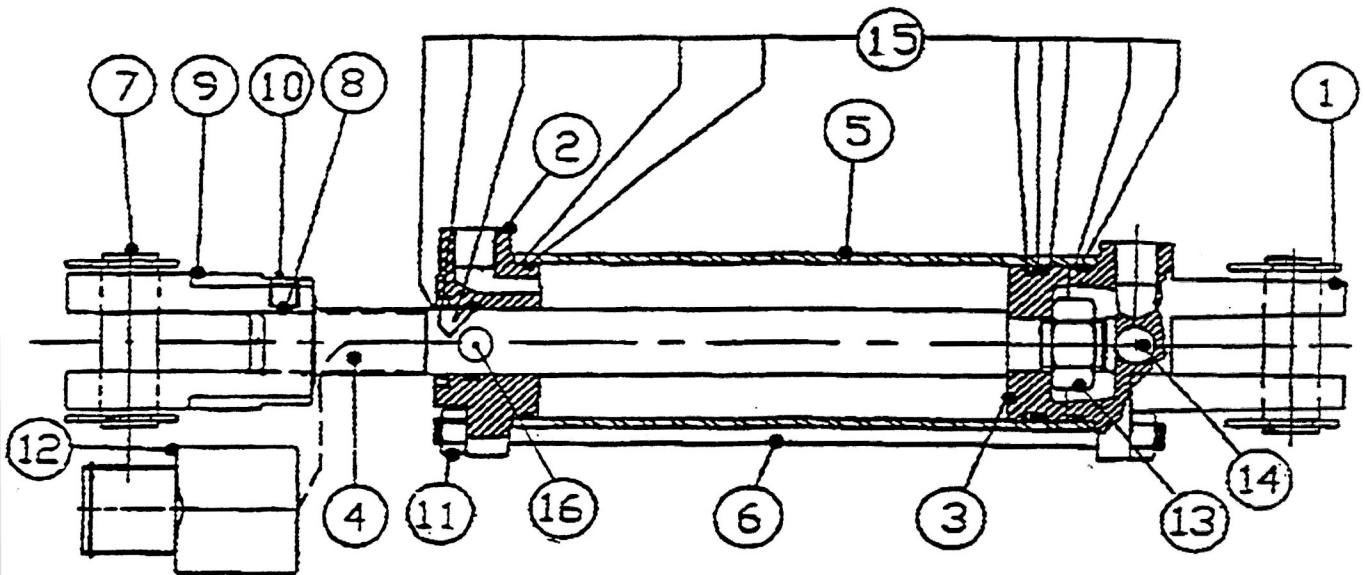


NOTE 1
USE THIS CONFIGURATION
WHEN THEY ARE 3 SEPARATE
REMOTES ON THE FENDER
MOUNTED VALVE.

NOTE 2
THE REPHASING KIT ITEM 15
IS USED WHEN CHANGING
FROM THE REGULAR HY-
DRAULIC SYSTEM (DIA-
GRAM) TO THE HYDRAULIC
SYSTEM WITH REPHASING
CYLINDERS.

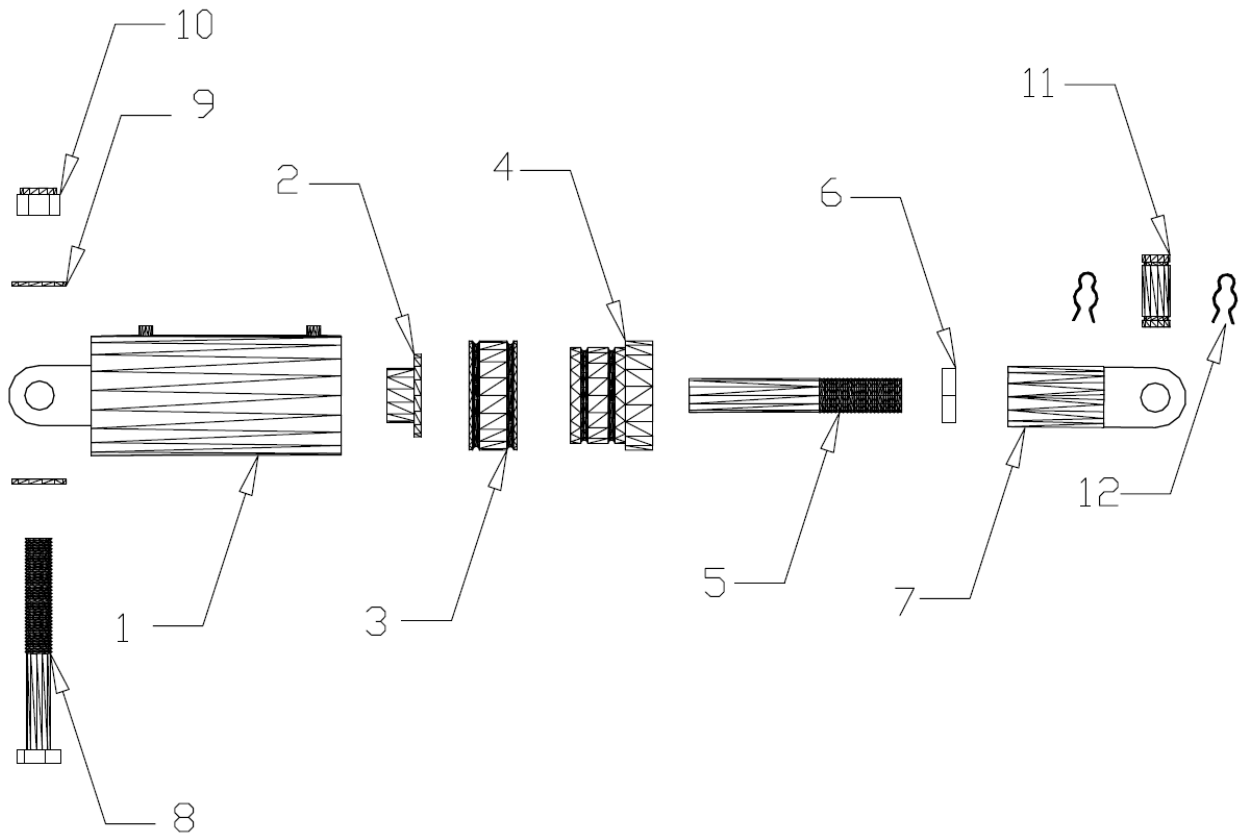
Ref. No.	Part No.	Description	Qty	Remarks
1	2344	Hose	3	
2	4879	Wing Cylinder	2	See details on page 30
3	2465	Restrictor	3	
4	2350	Fitting	2	
5	3673	Right Wing Rephasing Cylinder	1	See detail on page 56
6	3724	Hose	1	
7	2943	Center Rephasing Cylinder	1	See detail on page 49
8	3725	Hose	1	
9	2597	Fitting	1	See NOTE 1
10	3667	Left Wing Rephasing Cylinder	1	See detail on page 57
11	3362	3-Spool Valve (Open Center)	1	See NOTE 1
11 A	3370	3-Spool Valve (Closed Center)	REF	Optional
12	2598	Hose	1	
13	5006	Fitting	4	
14	2466	Vent Plug	2	
15	5007	Rephasing Kit	1	See NOTE 2

2943 Center Lift Cylinder for Rephasing System



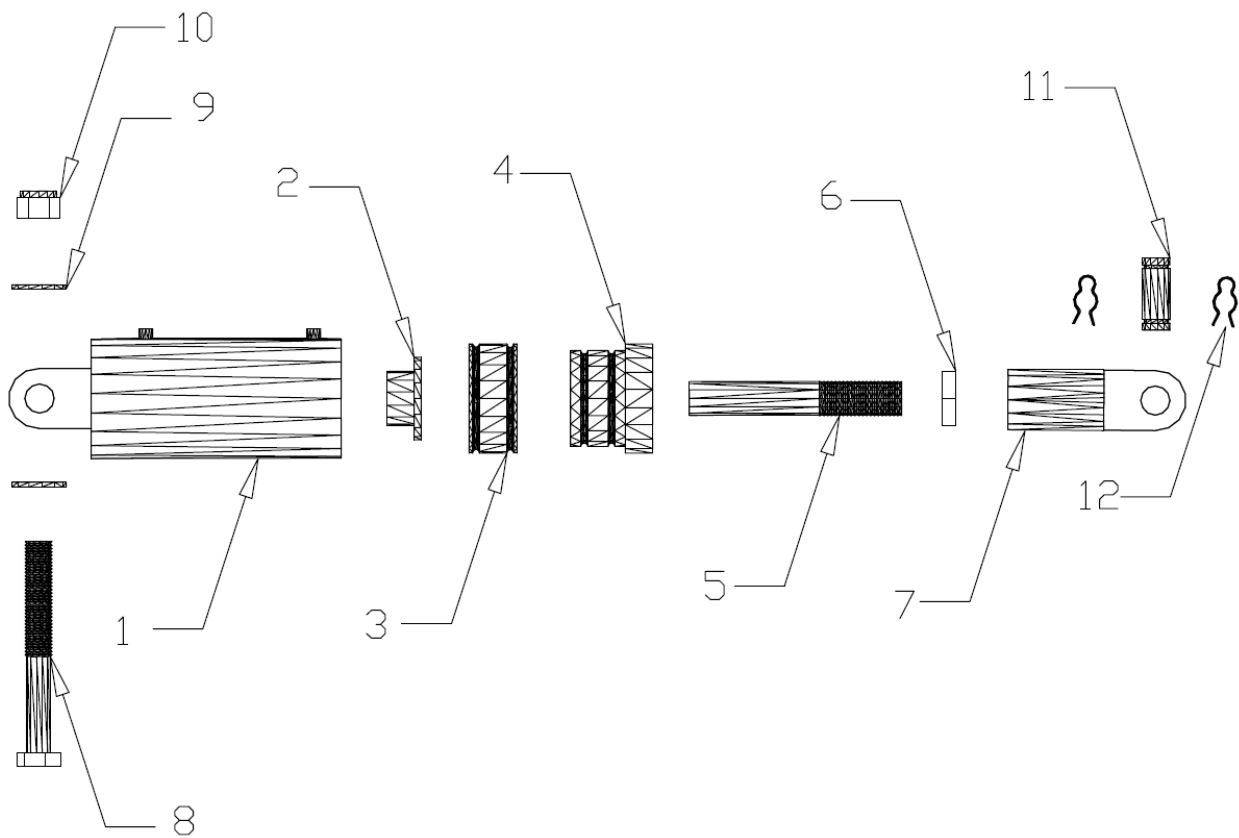
Ref. No.	Part No.	Description	Qty
1	2650	Clevis Cap	1
2	2651	Rod Cap	1
3	2944	Piston	1
4	3219	Rod	1
5	2945	Tube	1
6	2655	Tie Rod	4
7	2330	Pin	2
8	2656	Third Lock	1
9	2657	Rod Clevis	1
10	2658	Set Screw	1
11	2659	Nut	8
12	2374	Stroke Control Kit	1
13	2660	Piston Nut	1
14	2466	Vent Plug	1
15	2946	Seal Kit	1
16	2465	Restrictor	1

3673 Right Wing Rephasing Cylinder



Ref. No.	Part No.	Description	Qty
1	3674	Barrel	1
2	3480	Rod Nut	1
3	3675	Piston	1
4	3676	Gland	1
5	3671	Rod	1
6	3484	Jam Nut	1
7	3672	Clevis	1
8	2627	Bolt	1
9	3449	Washer	1
10	2638	Nut	1
11	2354	Pin	1
12	3270	Clip Pin	2
Not Shown	3857	Seal Kit	1

3667 Left Wing Rephasing Cylinder



Ref. No.	Part No.	Description	Qty
1	3668	Barrel	1
2	3480	Rod Nut	1
3	3669	Piston	1
4	3670	Gland	1
5	3671	Rod	1
6	3484	Jam Nut	1
7	3672	Clevis	1
8	2627	Bolt	1
9	3449	Washer	1
10	2638	Nut	1
11	2354	Pin	1
12	3270	Clip Pin	2
Not Shown	3856	Seal Kit	1

Items not Illustrated

Part No.	Description	Qty
2484	Standard Solid Rubber Tire and Wheel	6
2489	Rim for 2490 Tire	REF
2490	26" Standard Aircraft Type Tire and Wheel	REF
2564	28" Optional Aircraft Type Tire and Wheel	REF
2565	Rim for 2564 Tire	REF
2622	Foam Filled Implement Tires and Wheel	REF
3275	26" Aircraft Tire Only	REF
3276	Tube for 26" Aircraft Tire	REF
3277	28" Aircraft Tire Only	REF

Notes