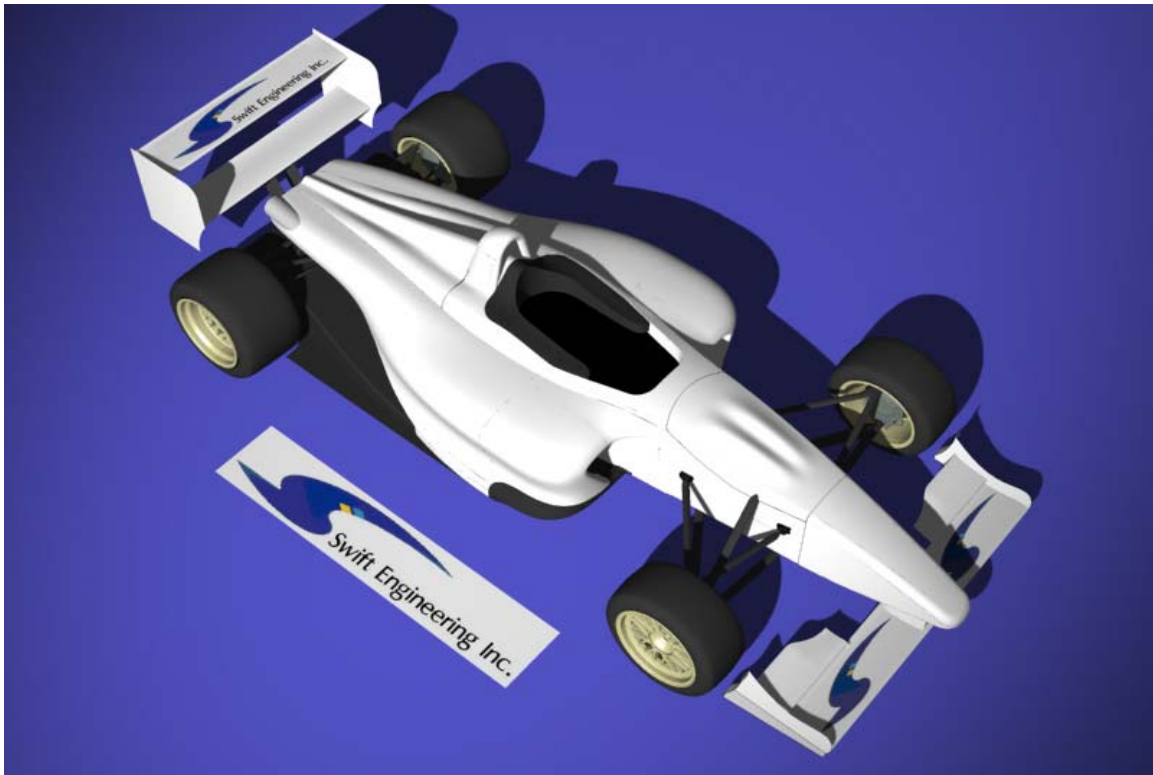




Parts Manual



Swift 016.a Champ Car Atlantic

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WARNING

THE SWIFT PRODUCTS WHICH ARE THE SUBJECT OF THIS SWIFT 016.a PARTS MANUAL ARE INTENDED TO BE USED IN ULTRA-HAZARDOUS ACTIVITIES AND ARE SUBJECT TO THE FOLLOWING WARNING:

(a) SWIFT PRODUCTS ARE INTENDED FOR USE IN OR AS HIGH SPEED AND HIGH PERFORMANCE RACING VEHICLES. THE RACING OF HIGH SPEED AND HIGH PERFORMANCE VEHICLES IS AN ULTRA-HAZARDOUS ACTIVITY AND INVOLVES A SUBSTANTIAL POSSIBILITY OF SERIOUS PHYSICAL INJURY OR DEATH. SWIFT PRODUCTS WILL NOT WITHSTAND ALL FORESEEABLE IMPACTS DURING THEIR NORMAL INTENDED USE IN OR AS A RACING VEHICLE WITHOUT THE SUBSTANTIAL POSSIBILITY OF SERIOUS PHYSICAL INJURY OR DEATH TO THE DRIVER OR DAMAGE TO SWIFT PRODUCTS WHICH MAY AFFECT SUCH SWIFT PRODUCTS' PERFORMANCE AND SAFE USE.

(b) SWIFT PRODUCTS SHOULD ONLY BE DRIVEN OR USED (1) BY A DRIVER WITH THE REQUISITE TRAINING, SKILL AND EXPERIENCE NECESSARY FOR THE RACING OF HIGH SPEED AND HIGH PERFORMANCE VEHICLES; (2) ON SPECIALLY DESIGNED RACING TRACKS AND UNDER THE SUPERVISION OF SANCTIONED RACING ORGANIZATIONS OR OTHERWISE UNDER PROPER AND REASONABLE OPERATING CONDITIONS; AND (3) WITH PROPER MAINTENANCE AND REPAIRS TO PARTS SUBJECT TO WEAR AND TEAR, FATIGUE, OR DISINTEGRATION, AND/OR DAMAGE DUE TO COLLISION OR IMPROPER USE.

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SWIFT STANDARD PART NUMBERING SYSTEM

XXXXX - XXXX A part number consists of 9 digits hyphenated as shown

The first 3 digits indicate the model

The last 2 digits before the hyphen indicate a specific system

The last digit before the hyphen can indicate a specific area of the car

The first 3 digits after the hyphen indicate a specific part number

The last digit can indicate a variant

XXXX**0** - XXXX Indicates a part used universally

XXXX**1** - XXXX Indicates a part used at the front

XXXX**2** - XXXX Indicates a part used at the rear

XXXXX - XXXX - **X** Numbers with an extra digit indicate a sub-component

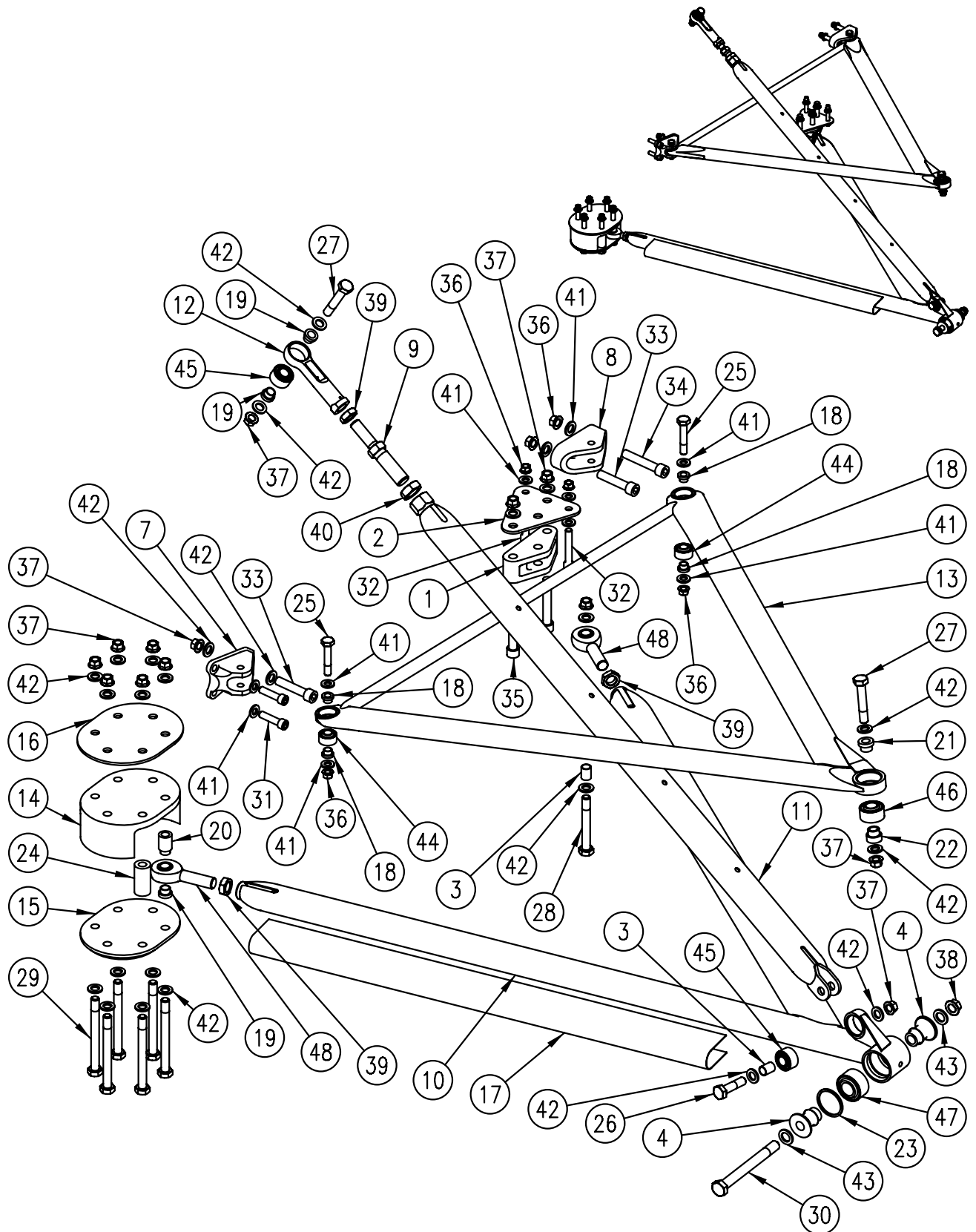
XXXX - **X** Single digit suffixes indicate assemblies or kits

01610-XXXX	Chassis Panels and Components
01611-XXXX	Body Panels and Components
01612-XXXX	Front Wing
01613-XXXX	Rear Wing
01614-XXXX	Underwing and Components
01620-XXXX	Non-Generic Multi Use
01621-XXXX	Front Suspension
01622-XXXX	Rear Suspension
01630-XXXX	Engine Installation Components and Accessories
01631-XXXX	Drivetrain Components
01632-XXXX	Adapter Housing / Bellhousing and Components
01633-XXXX	Gearbox and Components
01634-XXXX	Exhaust System Components
01640-XXXX	Pedal Components
01641-XXXX	Steering Components
01642-XXXX	Brake Components
01643-XXXX	Clutch Components
01644-XXXX	Throttle Components
01645-XXXX	Shift Linkage Components
01646-XXXX	Anti-Roll Bar Control Components

01650-XXXX	Starter Components
01651-XXXX	Fuel System Components
01652-XXXX	Oil System Components
01653-XXXX	Cooling System Components
01654-XXXX	Air Intake System Components
01660-XXXX	Battery and Electrical Components
01661-XXXX	Instruments
01662-XXXX	Safety Components
01663-XXXX	Inspection and Setup Components
200-XXXX	Bushings, Bearing, Clips, Inserts
200-0001 thru 200-0299	Top Hat Bushing and Sleeves
200-0300 thru 200-0599	Bearings
200-0600 thru 200-0899	Seals
200-0900 thru 200-1199	Retaining Rings and Clips
200-1200 thru 200-01699	Components, Bushings, and Sleeves
200-1500 thru 200-1799	Inserts and Bobbins
200-1800 thru 200-1899	Mounts and Standoffs
700 Series	Fasteners
774 Series	Camloc Fasteners
790 Series	Washers
800 Series	Plumbing
809 Series	O-Rings
810 Series	Fittings
820 Series	Spherical Bearings
825 Series	Rod Ends
826 Series	Rod Ends, Non-Lined
840 Series	Hose Clamps
853 Series	Electrical Terminals
853-6000	Mil-Spec Connectors
861 Series	Cap Plugs
900 Series	Swift Apparel

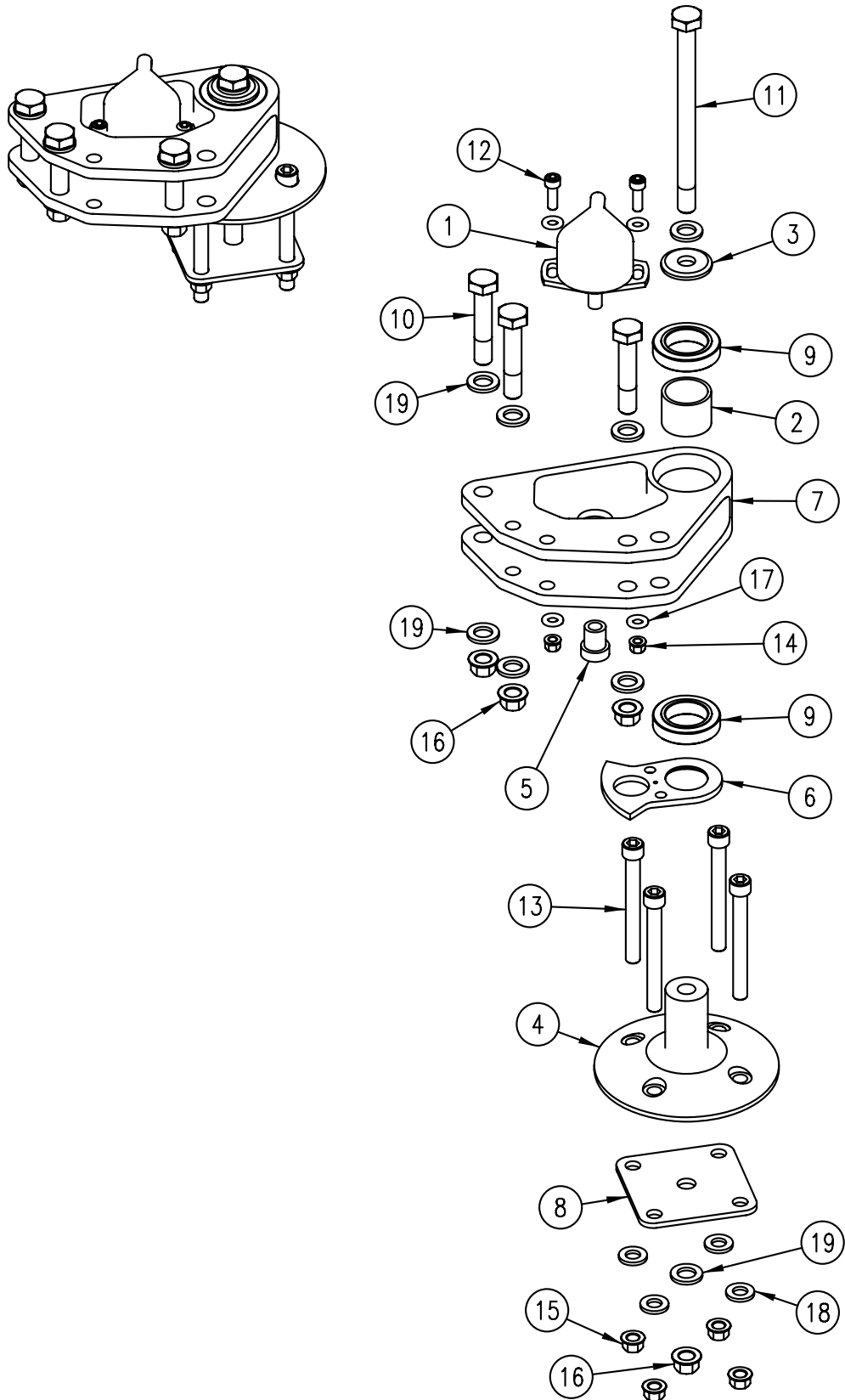
FRONT SUSPENSION ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	0810-4060	FLWB Aft Bracket	2
2	0810-4065-2	Doubler, FLWB Aft Bracket	2
3	0820-0300	Sleeve, Spherical Bearing	4
4	0821-0234	Spacer, FLWB Outbd	4
5	0862-0200	Rope, WEAD Front Short (not shown)	2
6	0862-0201	Rope, WEAD Front Long (not shown)	2
7	01610-3120	FUWB Forward Mount Bracket	2
8	01610-3122	FUWB Aft Mount Bracket	2
9	01620-0185	Pushrod Adjuster	2
9	01620-0186	Pushrod Adjuster, Long (Optional)	2
10	01621-0150L,R	Front Lower Wishbone	1L,1R
11	01621-0180	Front Pushrod	2
12	01621-0187	Pushrod Top	2
12	01621-0187-1	Pushrod Top, Ungauged (Optional)	2
13	01621-0191	Front Upper Wishbone	2
14	01621-4230	FLWB Fwd Mount	1
15	01621-4232	FLWB Fwd Mount Plate	1
16	01621-4234	FLWB Fwd Mount Doubler	1
17	01662-0210-2	WEAD Cover Front	2
18	200-040-050-094-A	Top Hat Spacer 0.094 Thick	8
19	200-050-060-124-A	Top Hat Spacer 0.124 Thick	6
20	200-050-060-625-A	Top Hat Spacer 0.625 Thick	2
21	200-050-070-140-A	Top Hat Spacer 0.140 Thick	2
22	200-050-070-235-A	Top Hat Spacer 0.235 Thick	2
23	200-0927	Retaining Ring	2
24	204-050-10-1250-D	Plain Spacer	2
25	701-4-13A	Bolt 1/4-28 x 1.41 long	4
26	701-5-11A	Bolt 5/16-24 x 1.22 long	2
27	701-5-15A	Bolt 5/16-24 x 1.72 long	4
28	701-5-22A	Bolt 5/16-24 x 2.34 long	2
29	701-5-31A	Bolt 5/16-24 x 3.22 long	6
30	701-6-34A	Bolt 3/8-24 x 3.58 long	2
31	704-04-08	SHCS 1/4-28 x 1.00 long	4
32	704-04-12	SHCS 1/4-28 x 1.50 long	4
33	704-05-12	SHCS 5/16-24 x 1.50 long	4
34	704-05-14	SHCS 5/16-24 x 1.75 long	2
35	704-05-16	SHCS 5/16-24 x 2.00 long	4
36	716-1291-04	Jet Nut 1/4-28	8
37	716-1291-05	Jet Nut 5/16-24	24
38	716-1291-06	Jet Nut 3/8-24	2
39	716-316-07	Jam Nut 7/16-20	6
40	716-316-09L	Pushrod Jam Nut	2
41	717-960-04	Washer 1/4	20
42	717-960-05	Washer 5/16	40
43	717-960-06	Washer 3/8	4
44	820-PWB-5TG	Spherical Bearing 5/16	4
45	820-PWB-6TG	Spherical Bearing 3/8	4
46	820-PWB-7TG	Spherical Bearing 7/16	2
47	820-PWB-9TG	Spherical Bearing 9/16	2
48	825-RXAM-6T	Rod End 3/8 x 7/16-20 RH	4

FRONT SUSPENSION ASSEMBLY



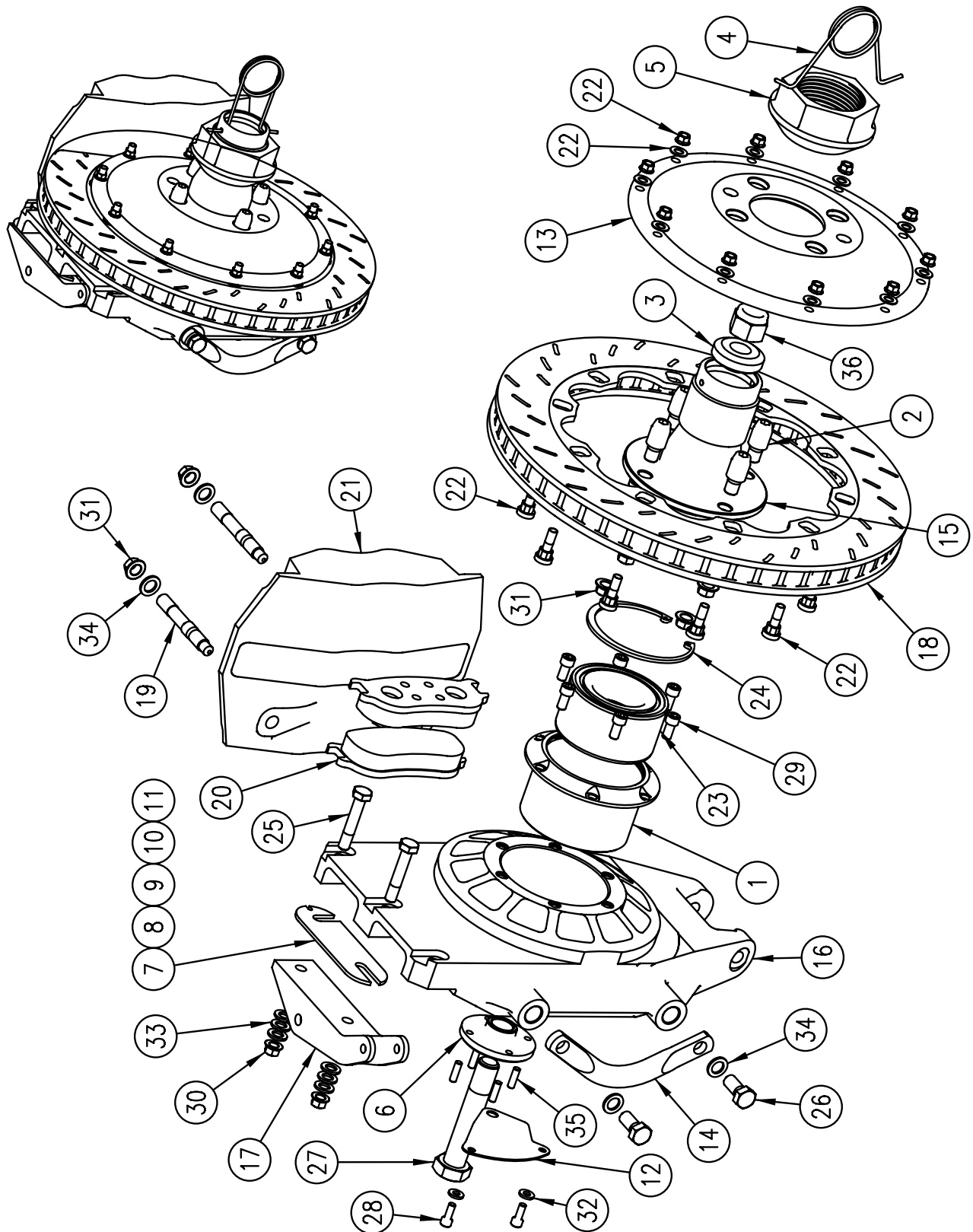
FRONT ROCKER ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	Supplied by Pi	Rotary Potentiometer (not supplied)	2
2	0820-0032	Crush Sleeve, Rocker	2
3	0820-0033	Cap, Rocker	2
4	0820-0050	Pivot Pin, Rocker	2
5	01620-0300	Gear, Rocker Potentiometer (not supplied)	2
6	01620-0301	Quadrant Gear, Rocker Potentiometer	2
7	01621-0030	Front Rocker	2
8	01621-0052	Plate, Rocker Post Backup	2
9	200-0354	Bearing	4
10	701-5-14A	Bolt 5/16-24 x 1.59 long	6
11	701-5-37A	Bolt 5/16-24 x 3.97 long	2
12	704-008-04	SHCS #8-32 x 0.50 long (not supplied)	4
13	704-04-18	SHCS 1/4-28 x 2.25 long	8
14	716-1291-008	Jet Nut #8-32 (not supplied)	4
15	716-1291-04	Jet Nut 1/4-28	8
16	716-1291-05	Jet Nut 5/16-24	8
17	717-960-008	Washer #8 (not supplied)	8
18	717-960-04	Washer 1/4	8
19	717-960-05	Washer 5/16	16

FRONT ROCKER ASSEMBLY



FRONT UPRIGHT ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	0820-0009	Bearing Sleeve	2
2	0820-0018	Drive Pin	8
3	0820-1008	Hub Washer	2
4	0820-1009	Spring, Wheel Nut Retaining	2
5	0820-1029L/R	Wheel Nut LH Blue / RH Red	1L,1R
6	0821-1027	Bearing Retainer	2
7	0821-0080-1	Front Camber Shim 0.050 Gold	2
8	0821-0080-2	Front Camber Shim 0.100 Red	2
9	0821-0080-3	Front Camber Shim 0.190 Blue	2
10	0821-0080-4	Front Camber Shim 0.375 Black	2
11	0821-0080-5	Front Camber Shim 0.025 Silver	2
12	0860-0240	Wheel Speed Sensor Mount	2
13	1442-0090	Hat, Brake Rotor	2
14	1462-0210	Upright Bracket, WEAD	2
15	01620-1007L,R	Wheel Hub Front LH (RH Thread) / RH (LH Thread)	1L,1R
16	01621-0010	Upright Front	2
17	01641-0070	Steering Arm	2
18	01642-0100L,R	Brake Rotor L/R	1L,1R
19	01642-0010	Caliper Stud	4
20	01642-0200	Brake Pad Set 01 Compound	1
20	01642-0201	Brake Pad Set 05 Compound (Alternate)	1
21	01642-0300LF/RF	Brake Caliper LF/RF	1L,1R
22	01642-1	Rotor Mounting Hardware Kit	2
23	200-0344	Wheel Bearing	2
24	200-0929	Snap Ring	2
25	701-5-15A	Bolt 5/16-24 x 1.72 long	4
26	701-6-06A	Bolt 3/8-24 x 1.83 long	4
27	701-10-32A	Bolt 5/8-18 x 3.39 long	2
28	704-03-04	SHCS #10-32 x 0.50 long	4
29	704-04-04	SHCS 1/4-28 x 0.50 long	12
30	716-1291-05	Jet Nut 5/16-24	4
31	716-1291-06	Jet Nut 3/8-24	12
32	717-960-03	Washer #10	4
33	717-960-05	Washer 5/16	6
34	717-960-06	Washer 3/8	8
35	746-0316-05	Dowel Pin (Wheel Speed Sensor)	8
36	752-10	Nut 5/8-18	2
37	01642-100-02	Caliper Seal Kit (not shown)	2
38	01642-103-19	Caliper Piston Kit (not shown)	2
39	01642-104-01	Caliper Bleeder Kit (not shown)	1
40	01642-104-02	Caliper Bleeder Adapter (not shown)	4
41	01642-106-02	Caliper Anti-Knockback Spring Kit (not shown)	2
42	01642-225-01	Caliper Crossover Tube (not shown)	2

FRONT UPRIGHT ASSEMBLY



FRONT ANTI-ROLL BAR ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	01621-0080	FARB Blade, Soft	1
2	01621-0081	FARB Blade, Stiff	1
3	01621-0100	FARB T-Bar 0.40 Dia	1
4	01621-0101	FARB T-Bar 0.55 Dia	1
5	01621-0102	FARB T-Bar 0.70 Dia	1
6	01621-0103	FARB T-Bar 0.85 Dia	1
7	01621-0270	FARB Drop Link	2
8	01621-1010	FARB Mounting Block	2
9	01646-0010	FARB Adjuster Cable	1
10	01646-0110	Cable Housing Stop FARB	2
11	01646-0120	FARB Cable Stop 0.55 Dia Bar	2
12	01646-0121	FARB Cable Stop 0.40 Dia bar	2
13	01646-0122	FARB Cable Stop 0.70 Dia bar	2
14	01646-0123	FARB Cable Stop 0.85 Dia bar	2
15	01646-0310	Adjuster Arm, FARB	1
16	01646-0360	Locating Sleeve, ARB Cable	1
17	200-040-050-094-A	Top Hat Spacer 0.094 thick	4
18	200-040-050-156-A	Top Hat Spacer 0.156 thick	4
19	200-0982	Snap Ring	4
20	701-4-11A	Bolt 1/4-28 x 1.16 long	2
21	701-4-14A	Bolt 1/4-28 x 1.53 long	2
22	703-008-03	SHCS #8-32 x 0.38 long	1
23	703-008-08	SHCS #8-32 x 1.00 long	1
24	704-03-05	SHCS #10-32 x 0.63 long	2
25	704-04-06	SHCS 1/4-28 x 0.75 long	2
26	704-04-08	SHCS 1/4-28 x 1.00 long	2
27	716-1291-008	Jet Nut #8-32	1
28	716-1291-03	Jet Nut #10-32	2
29	716-1291-04	Jet Nut 1/4-28	8
30	716-316-05	Jam Nut 5/16-24	2
31	716-316-05L	Jam Nut 5/16-24 LH	2
32	717-960-04	Washer 1/4	4
33	747-416-1	R Clip	1
34	748-393-13	Clevis Pin	1
35	820-PWB-6TG	Spherical Bearing 3/8	2
36	825-RAM-5T	Rod End 5/16 x 5/16-24	2
37	825-RAB-5T	Rod End 5/16 x 5/16-24 LH	2

This diagram is an exploded view of a mechanical assembly, likely a robotic arm or a similar device. It shows the following components and their assembly sequence:

- Base and Support Structure:** Includes a central vertical support (1), a base plate (2), and various mounting brackets (3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37).
- Actuator and Drive Mechanism:** Features a motor or actuator unit (1) connected to a drive shaft (2) and a gear or pulley system (3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37).
- End Effector and Gripper:** Consists of a gripper mechanism (3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37) and a gripper arm (3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37).
- Fasteners and Connectors:** Includes various screws (32), bolts (21), washers (36), and other small components (29, 30, 31, 33, 34, 35, 36, 37) used to assemble the structure.

The diagram uses numbered callouts (1 through 37) to identify each part, and arrows indicate the assembly direction and sequence.

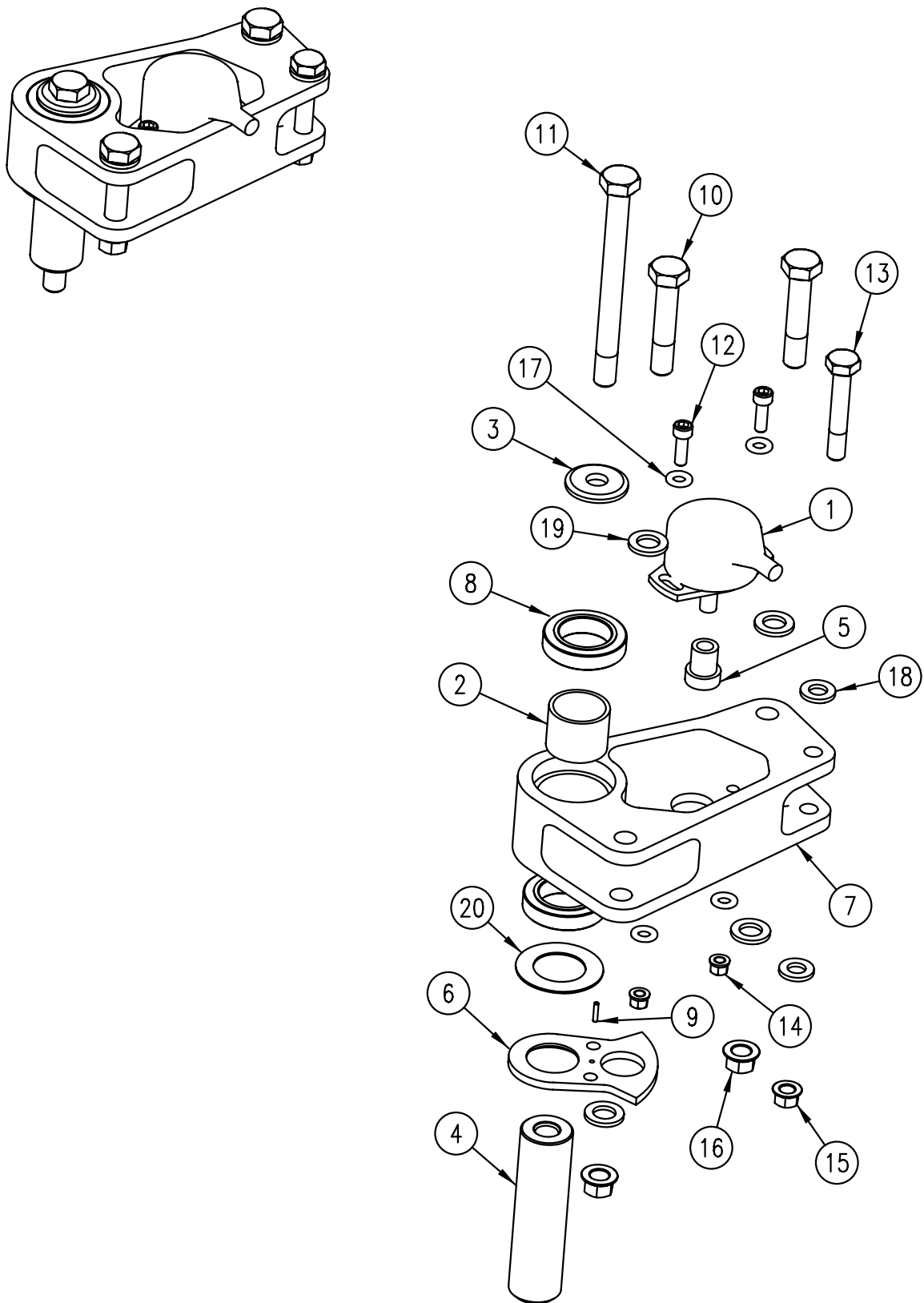
REAR SUSPENSION ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	0820-0300	Sleeve, Spherical Bearing	4
2	0822-0120	Spacer, RLWB Outboard Bearing	4
3	0822-0160	Rear Toe Link	2
4	0822-0380	Mount Block, Rear Lower Wishbone Fwd	2
5	0822-0400	Mounting Block, Rear Lower Wishbone Aft	2
6	0862-0202	Rope, WEAD Rear Short (not shown)	2
7	0862-0203	Rope, WEAD Rear Long (not shown)	2
8	01620-0185	Pushrod Adjuster	2
8	01620-0186	Pushrod Adjuster, Long (Optional)	2
9	716-316-09L	Pushrod Jam Nut	2
10	01621-0187	Pushrod Top	2
10	01621-0187-1	Pushrod Top, Ungauged (Optional)	2
11	01622-0150L,R	Rear Lower Wishbone L/R	1L,1R
12	01622-0180	Rear Pushrod	2
13	01622-0181	Clevis, Pushrod Rear	2
14	01622-0191	Rear Upper Wishbone	2
15	01622-0351	Shear Plate, RUWB Inboard Mount	4
16	01622-0352	Shear Plate, Large Oval RUWB Inboard Mount	4
17	01622-0401	Spacer, RLWB Aft Mount	2
18	01662-0210-1	WEAD Cover, Rear	2
19	200-050-060-062-A	Top Hat Spacer 0.062 thick	6
20	200-050-060-124-A	Top Hat Spacer 0.124 thick	8
21	200-050-060-158-A	Top Hat Spacer 0.158 thick	4
22	200-050-060-470-A	Top Hat Spacer 0.470 thick	2
23	200-050-070-093-A	Top Hat Spacer 0.093 thick	8
24	200-0927	Spiral Retaining Ring	2
25	204-05-09-400-D	Plain Spacer 0.400 thick	4
26	204-05-20-125-D	Plain Spacer 0.125 thick	4
27	701-5-11A	Bolt 5/16-24 x 1.22 long	4
28	701-5-13A	Bolt 5/16-24 x 1.47 long	8
29	701-5-14A	Bolt 5/16-24 x 1.59 long (701-5-15A in LH Item 16)	10
30	701-5-15A	Bolt 5/16-24 x 1.72 long	8
31	701-5-17A	Bolt 5/16-24 x 1.97 long	2
32	701-5-25A	Bolt 5/16-24 x 2.72 long	2
33	701-6-35A	Bolt 3/8-24 x 3.70 long	2
34	704-05-16	SHCS 5/16-24 x 2.00 long	6
35	706-05-16	BHCS 5/16-24 x 2.00 long	2
36	716-1291-05	Jet Nut 5/16-24	26
37	716-1291-06	Jet Nut 3/8-24	2
38	716-316-06	Jam Nut 3/8-24	4
39	716-316-06L	Jam Nut 3/8-24 LH	2
40	716-316-07	Jam Nut 7/16-20	6
41	717-960-05	Washer 5/16	64
42	717-960-06	Washer 3/8	4
43	742-14-28	Set Screw 7/16-20 x 1.75 long	2
44	820-PWB-6TG	Spherical Bearing 3/8	4
45	820-PWB-7TG	Spherical Bearing 7/16	4
46	820-PWB-9TG	Spherical Bearing 9/16	2
47	825-RAM-6T	Rod End 3/8 x 3/8-24	4
48	825-RAB-6T	Rod End 3/8 x 3/8-24 LH	2
49	825-RXAM-6T	Rod End 3/8 x 7/16-20	4

This diagram is an exploded view of a mechanical assembly, likely a scissor lift or a similar hydraulic lifting mechanism. It shows the main structural components and their associated fasteners, arranged in their relative positions as they would be assembled. The components are identified by circular callout numbers:

- 1**: Hydraulic cylinder
- 2**: Piston rod
- 3**: Main scissor arm
- 4**: Hydraulic cylinder mounting bracket
- 5**: Piston rod mounting bracket
- 6**: Hydraulic cylinder mounting bracket
- 7**: Piston rod mounting bracket
- 8**: Hydraulic cylinder mounting bracket
- 9**: Piston rod mounting bracket
- 10**: Hydraulic cylinder mounting bracket
- 11**: Piston rod mounting bracket
- 12**: Hydraulic cylinder mounting bracket
- 13**: Piston rod mounting bracket
- 14**: Hydraulic cylinder mounting bracket
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- 36**: Hydraulic cylinder mounting bracket
- 37**: Piston rod mounting bracket
- 38**: Hydraulic cylinder mounting bracket
- 39**: Piston rod mounting bracket
- 40**: Hydraulic cylinder mounting bracket
- 41**: Piston rod mounting bracket
- 42**: Hydraulic cylinder mounting bracket
- 43**: Piston rod mounting bracket
- 44**: Hydraulic cylinder mounting bracket
- 45**: Piston rod mounting bracket
- 46**: Hydraulic cylinder mounting bracket
- 47**: Piston rod mounting bracket
- 48**: Hydraulic cylinder mounting bracket
- 49**: Piston rod mounting bracket

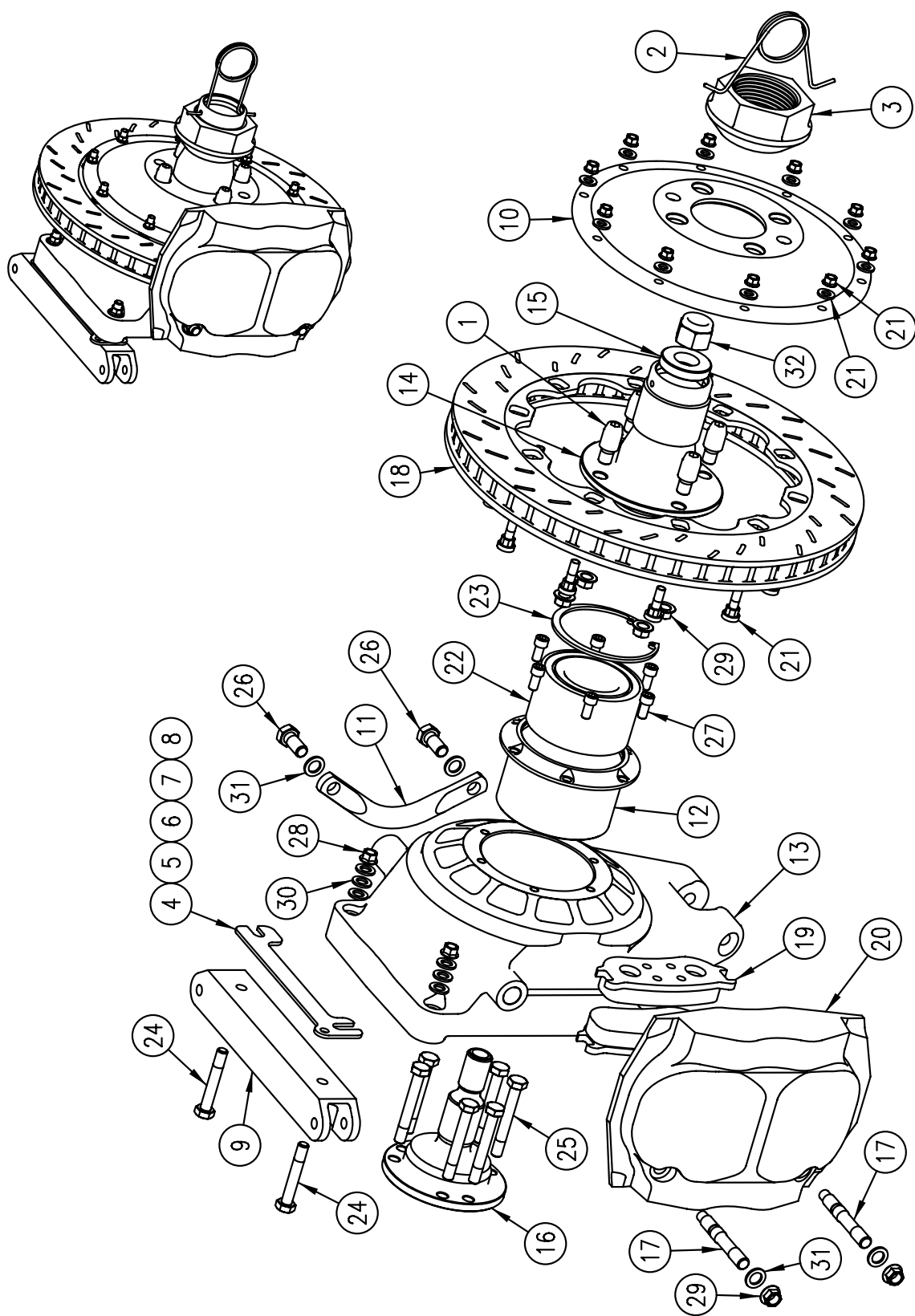
REAR ROCKER ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	Supplied by Pi	Rotary Potentiometer (not supplied)	2
2	0820-0032	Crush Sleeve, Rocker	2
3	0820-0033	Cap, Rocker	2
4	01622-0600	Pivot Pin, Rocker	2
5	01620-0300	Gear, Rocker Potentiometer (not supplied)	2
6	01620-0301	Quadrant Gear, Rocker Potentiometer	2
7	01622-0030	Rear Rocker	2
8	200-0345	Bearing	4
9	746-0116-05	Dowel Pin 1/16 x 0.31 long	2
10	701-5-14A	Bolt 5/16-24 x 1.59 long	4
11	701-5-32A	Bolt 5/16-24 x 3.34 long	2
12	704-008-04	SHCS #8-32 x 0.50 long (not supplied)	4
13	701-4-14A	Bolt 1/4-28 x 1.53 long	2
14	716-1291-008	Jet Nut #8-32 (not supplied)	4
15	716-1291-04	Jet Nut 1/4-28	2
16	716-1291-05	Jet Nut 5/16-24	4
17	717-960-008	Washer #8 (not supplied)	8
18	717-960-04	Washer 1/4	4
19	717-960-05	Washer 5/16	8
20	797-0755-045	Thrust Washer	2

REAR ROCKER ASSEMBLY



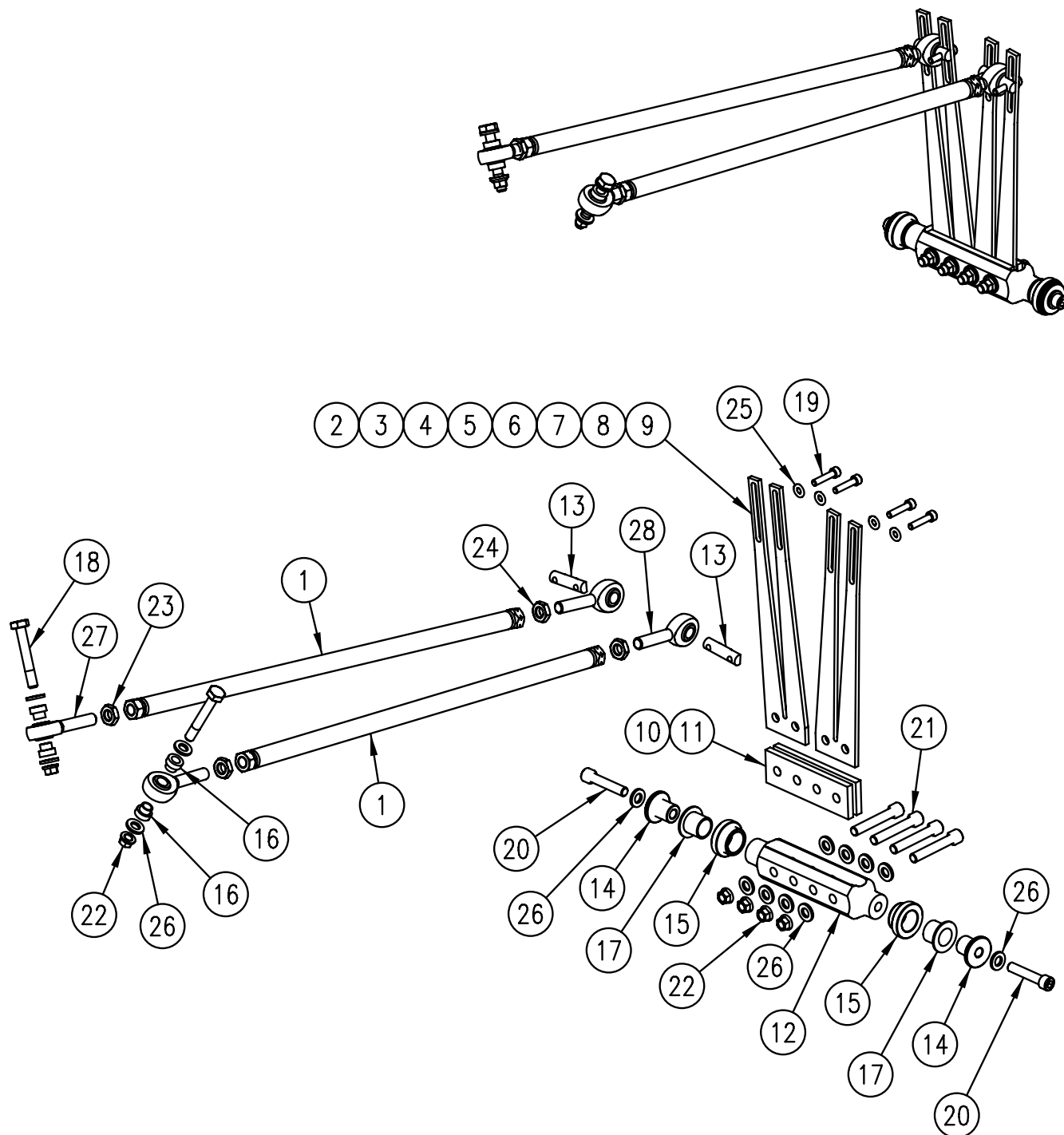
REAR UPRIGHT ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	0820-0018	Drive Pin	8
2	0820-1009	Spring, Wheel Nut Retaining	2
3	0820-1029L,R	Wheel Nut LH Blue / RH Red	1L,1R
4	0822-0080-1	Rear Camber Shim 0.050 Gold	2
5	0822-0080-2	Rear Camber Shim 0.100 Red	2
6	0822-0080-3	Rear Camber Shim 0.190 Blue	2
7	0822-0080-4	Rear Camber Shim 0.375 Black	2
8	0822-0080-5	Rear Camber Shim 0.025 Silver	2
9	0822-0200	Rear Top Link Mount, Upright	2
10	1442-0090	Hat, Brake Rotor	2
11	1462-0210	Upright Bracket, WEAD	2
12	01622-0009	Sleeve, Rear Wheel Bearing	2
13	01622-0010	Rear Upright	2
14	01622-1007L,R	Hub LR (RH Thread) / RR (LH Thread)	1L,1R
15	01622-1008	Hub Washer, Rear	2
16	01631-1012	Drive Flange	2
17	01642-0010	Caliper Mounting Stud	4
18	01642-0100L,R	Brake Rotor LH/RH	1L,1R
19	01642-0200	Brake Pad Set 01 Compound	1
19	01642-0201	Brake Pad Set 05 Compound (Alternate)	1
20	01642-0300LR,RR	Brake Caliper LR/RR	1L,1R
21	01642-1	Rotor Mounting Hardware Kit	2
22	200-0394	Wheel Bearing	2
23	200-0929	Snap Ring	2
24	701-5-17A	Bolt 5/16-24 x 1.97 long	4
25	701-5-22A	Bolt 5/16-24 x 2.34 long	12
26	701-6-06A	Bolt 3/8-24 x 0.83 long	4
27	704-04-04	SHCS 1/4-28 x 0.50 long	12
28	716-1291-05	Jet Nut 5/16-24	4
29	716-1291-06	Jet Nut 3/8-24	12
30	717-960-05	Washer 5/16	12
31	717-960-06	Washer 3/8	8
32	752-10	Nut 5/8-18	2
33	01642-100-02	Caliper Seal Kit (not shown)	2
34	01642-103-19	Caliper Piston Kit (not shown)	2
35	01642-104-01	Caliper Bleeder Kit (not shown)	1
36	01642-104-02	Caliper Bleeder Adapter (not shown)	4
37	01642-106-02	Caliper Anti-Knockback Spring Kit (not shown)	2
38	01642-225-01	Caliper Crossover Tube (not shown)	2

REAR UPRIGHT ASSEMBLY



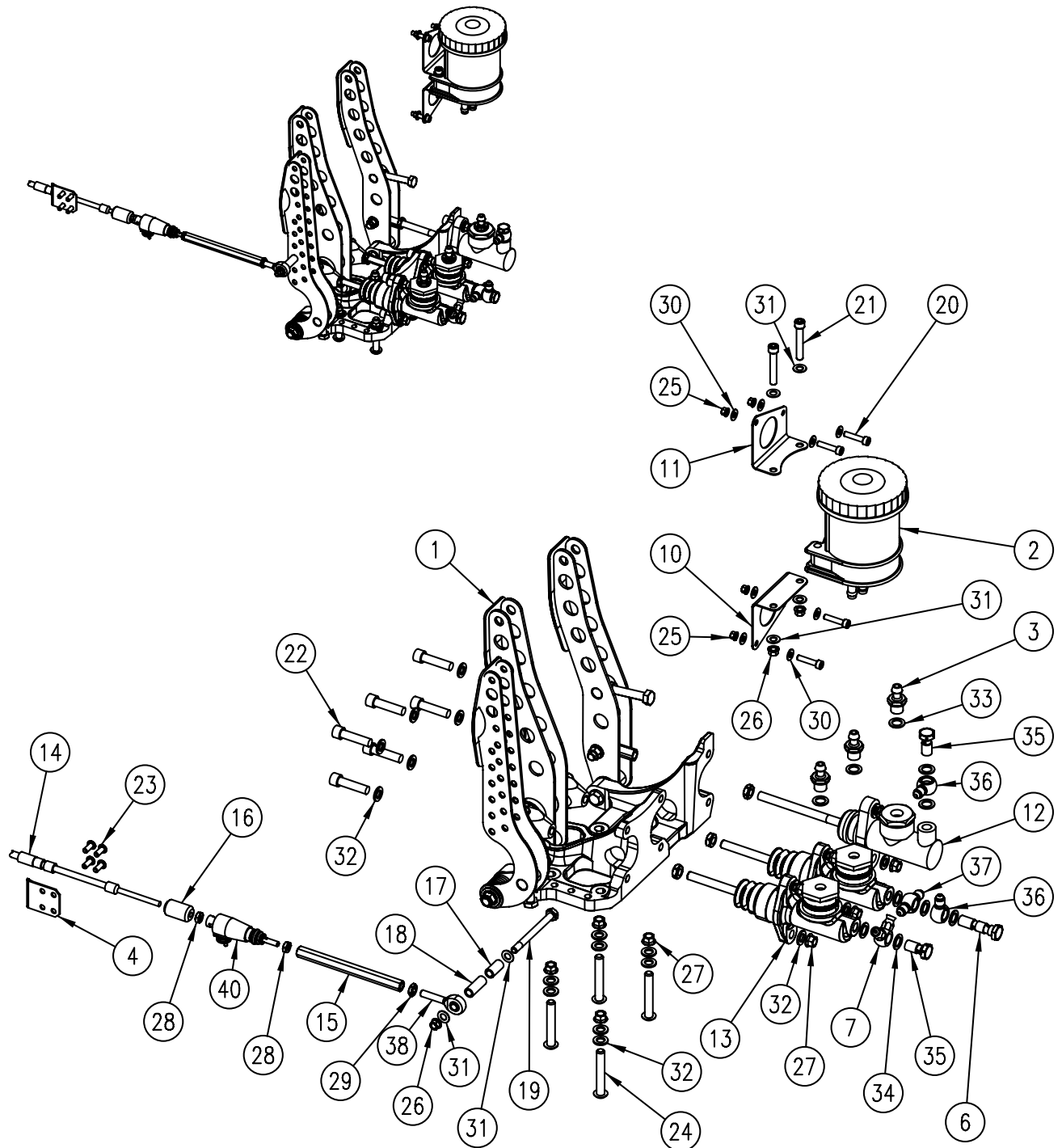
REAR ANTI-ROLL BAR ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	0822-0270	Rear Anti-Roll Bar Drop Link	2
2	01622-0080	Rear Anti-Roll Blade 0.100 thick	2
3	01622-0081	Rear Anti-Roll Blade 0.125 thick	2
4	01622-0082	Rear Anti-Roll Blade 0.158 thick	2
5	01622-0083	Rear Anti-Roll Blade 0.200 thick	2
6	01622-0084	Rear Anti-Roll Blade 0.253 thick	2
7	01622-0085	Rear Anti-Roll Blade 0.312 thick	2
8	01622-0086	Rear Anti-Roll Blade 0.400 thick	2
9	01622-0087	Rear Anti-Roll Blade 0.500 thick	2
10	01622-0090	Spacer, RARB Blade 0.053 thick	2
11	01622-0091	Spacer, RARB Blade 0.047 thick	2
12	01622-0100	Pivot Block, RARB	1
13	01622-0102	Clevis Pin, RARB	2
14	01622-0104	Pivot Sleeve, Long RARB	2
15	01622-0105	Pylon Sleeve	2
16	200-040-050-156-A	Top Hat Spacer 0.156 thick	4
17	200-0515	Flanged Bushing	2
18	701-4-15A	Bolt 1/4-28 x 1.66 long	2
19	703-008-06	SHCS #8-32 x 0.75 long	4
20	703-04-10	SHCS 1/4-20 x 1.25 long	2
21	704-04-12	SHCS 1/4-28 x 1.50 long	4
22	716-1291-04	Jet Nut 1/4-28	6
23	716-316-05	Jam Nut 5/16-24	2
24	716-316-05L	Jam Nut 5/16-24 LH	2
25	717-960-008	Washer #8	4
26	717-960-04	Washer 1/4	14
27	825-RAM-5T	Rod End 5/16 x 5/16-24	2
28	825-RAB-5T	Rod End 5/16 x 5/16-24 LH	2

REAR ANTI-ROLL BAR ASSEMBLY



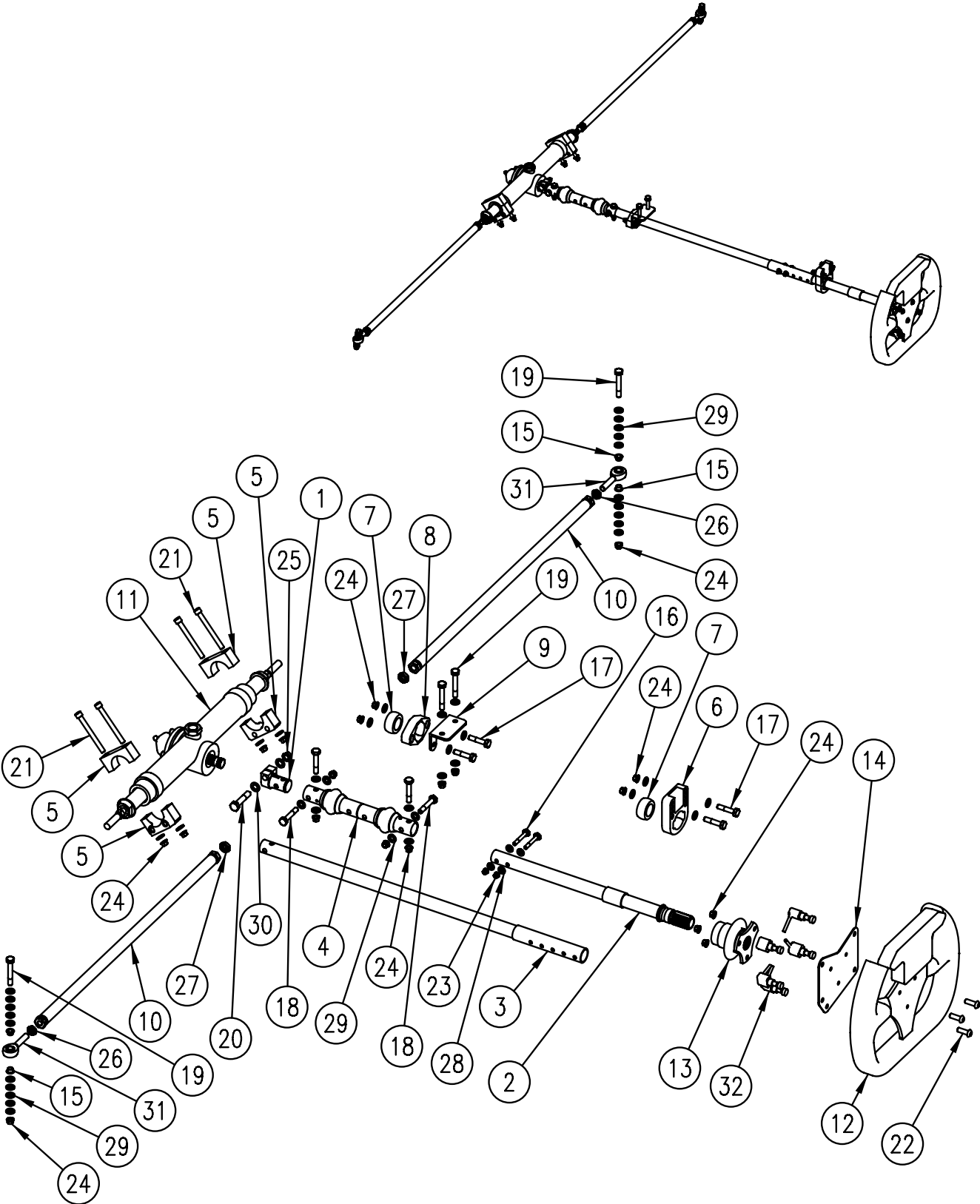
PEDAL AND MASTER CYLINDER ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	01640-72-680	Pedal Assembly	1
2	0842-5130	Brake Fluid Reservoir	1
3	0842-CP4623-2	Inlet Adapter, Master Cylinder	3
4	0844-0040	Throttle Cable Bracket	1
5	0855-0400	Hose, Brake Reservoir to M/C (not shown)	3
6	01642-2 Kit	Banjo Bolt, Double	1
7	01642-2 Kit	Banjo Fitting Double AN-2	1
8	01642-72-501	Brake Bias Cable (not shown)	1
9	01642-72-826	Knob, Brake Bias Cable (not shown)	1
10	01642-5110	Mount, Reservoir Lower	1
11	01642-5111	Mount, Reservoir Upper	1
12	01643-1000	Clutch Master Cylinder 0.625" Bore	1
13	01640-76-625	Brake Master Cylinder 0.625" Bore (Optional)	1
13	01640-76-700	Brake Master Cylinder 0.700" Bore	1
13	01640-76-750	Brake Master Cylinder 0.750" Bore	1
13	01640-76-812	Brake Master Cylinder 0.812" Bore (Optional)	1
14	01644-0010	Throttle Cable	1
15	01644-0030	Throttle Cable Spacer 2.40 long (Optional)	1
15	01644-0032	Throttle Cable Spacer 3.50 long (Optional)	1
15	01644-0034	Throttle Cable Spacer 4.60 long	1
15	01644-0036	Throttle Cable Spacer 5.70 long (Optional)	1
15	01644-0038	Throttle Cable Spacer 6.80 long (Optional)	1
16	01644-0043	Spacer, Throttle Spring Stop	1
17	204-04-06-750-A	Plain Spacer 0.75 long	1
18	204-04-06-1000-E	Plain Spacer 1.00 long	1
19	701-4-26A	Bolt 1/4-28 x 2.78 long	1
20	704-03-07	SHCS 10-32 x 0.88 long	4
21	704-04-12	SHCS 1/4-28 x 1.50 long	2
22	704-05-10	SHCS 5/16-24 x 1.25 long	6
23	706-03-04	BHCS 10-32 x 0.50 long	4
24	706-05-16	BHCS 5/16-24 x 2.00 long	4
25	716-1291-03	Jet Nut 10-32	4
26	716-1291-04	Jet Nut 1/4-28	3
27	716-1291-05	Jet Nut 5/16-24	10
28	716-316-03	Jam Nut 10-32	2
29	716-316-04	Jam Nut 1/4-28	1
30	717-960-03	Washer #10	8
31	717-960-04	Washer 1/4	6
32	717-960-05	Washer 5/16	20
33	810-44515-03A	Crush Washer	3
34	810-44516-03C	Crush Washer 10mm Copper	7
35	811-775-03	Banjo Bolt AN-3	2
36	812-776-03C	Banjo Adapter AN-3	2
37	812-779-03C	Banjo Adapter Double AN-3	1
38	825-RAM-4	Rod End 1/4 x 1/4-28	1
39	840-003	Hose Clamp 003 (not shown)	6
40	Supplied by Cosworth	Full Throttle Cutoff Switch	1
41	01640-72-261	Balance Bar Assy Ø7/16 Teflon Coated (not shown, optional)	1
42	01640-76-0511-20	0.020 Shim 0.700 Master Cylinder (not shown, optional)	AR
43	01640-76-0511-40	0.040 Shim 0.700 Master Cylinder (not shown, optional)	AR
44	01640-76-0511-60	0.060 Shim 0.700 Master Cylinder (not shown, optional)	AR
45	01640-76-0512-20	0.020 Shim 0.750 Master Cylinder (not shown, optional)	AR
46	01640-76-0512-40	0.040 Shim 0.750 Master Cylinder (not shown, optional)	AR
47	01640-76-0512-60	0.060 Shim 0.750 Master Cylinder (not shown, optional)	AR
48	01640-76-625RK	Rebuild Kit, 0.625" Brake Master Cylinder (not shown)	1
49	01640-76-700RK	Rebuild Kit, 0.700" Brake Master Cylinder (not shown)	1
50	01640-76-750RK	Rebuild Kit, 0.750" Brake Master Cylinder (not shown)	1
51	01640-76-812RK	Rebuild Kit, 0.812" Brake Master Cylinder (not shown)	1

PEDAL AND MASTER CYLINDER ASSEMBLY



STEERING SYSTEM ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	01641-1210-2	Splined Coupling, Steering Rack	1
2	01641-1212	Steering Column Aft Section	1
2	01641-1212-1	Steering Column Aft Section, Non Wired (Optional)	1
3	01641-1220	Steering Column Mid Section	1
4	01641-1230	Steering Joint Weldment	1
5	01641-1400	Steering Rack Mount block (Matched Pair)	2
6	01641-1600	Support, Steering Column Aft	1
7	01641-1610	Bearing, Steering Column	2
8	01641-1620	Steering Column Forward Mount	1
9	01641-1630	Support, Steering Column Forward Mount	1
10	01641-1700	Track Rod, Front	2
11	01641-2020	Steering Rack Assembly	1
12	01641-500	Steering Wheel	1
13	01641-QRE1-5-41	Quick Release Coupling	1
14	01661-0020	Steering Wheel Button Plate	1
15	200-040-050-047-X	Top Hat Spacer -4-5 047thk	4
16	701-3-12A	Bolt 10-32 x 1.28 long	2
17	701-4-11A	Bolt 1/4-28 x 1.16 long	4
18	701-4-13A	Bolt 1/4-28 x 1.41 long	4
19	701-4-15A	Bolt 1/4-28 x 1.66 long	4
20	701-5-13A	Bolt 5/16-24 x 1.47 long	1
21	704-04-20	SHCS - 1/4-28UNF X 2.50	4
22	706-04-06	BHCS - 1/4-28UNF x 0.75	3
23	716-1291-03	Nut - Jet - NAS1291-3 - #10-32UNF	2
24	716-1291-04	Nut - Jet - NAS1291-4 - 1/4-28UNF	19
25	716-1291-05	Nut - Jet - NAS1291-5 - 5/16-24UNF	1
26	716-316-05	Nut - Jam - AN316-5 - 5/16-24UNF	2
27	716-316-06	Nut - Jam - AN316-6 - 3/8-24UNF	2
28	717-960-03	Washer - AN960 - #10	4
29	717-960-04	Washer - AN960 - 1/4	44
30	717-960-05	Washer - AN960 - 5/16	2
31	825-RAM-5T	Rod End	2
32	Supplied by Pi	Steering Wheel Push Button	5

STEERING SYSTEM ASSEMBLY

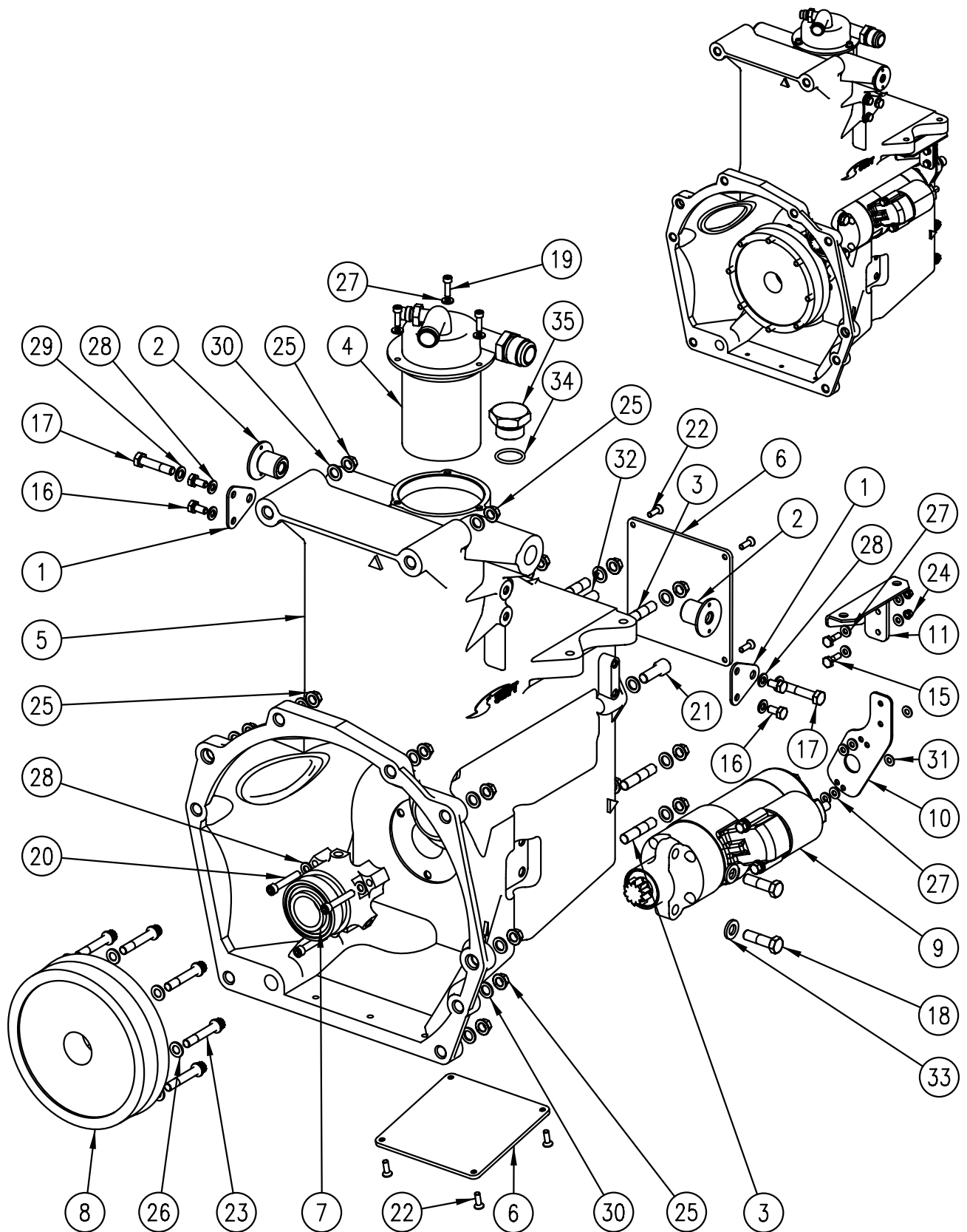


STEERING RACK ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	01641-1001	Eccentric Pinion Housing	1
2	01641-1002	Back Stop Screw	1
3	01641-1003	Eccentric Pinion Back Plate	1
4	01641-1004	Back Stop Shoe	1
5	01641-1005	Back Stop Lock Nut	1
6	01641-1210-2	Splined Coupling, Steering Column	1
7	01641-1009 Kit	Shim	2
8	01641-1008-9	Pinion, 9 Tooth	1
9	01641-1009 Kit	Socket, Ball End	2
10	01641-1009 Kit	Shoe, Ball End	2
11	01641-1011	Ball End 3/8-24	2
12	01641-1012	Ball Bearing	2
13	01641-1013	Linear Bush	2
14	01641-1014	Rack Housing	1
15	01641-1015	Rack Bar	1
16	01641-1016	SHCS M4x0.7 x 8mm long (not supplied)	1
17	01641-1017	Belleville Washer, Back Stop	5
18	01641-1018	Belleville Washer, Pinion	1
19	01641-1019	SHCS 1/4-20 x 0.38 long	4
20	01641-1020	Washer M4 (not supplied)	2
21	Supplied by Pi	Steering Potentiometer (not supplied)	1
22	01641-2100	Rack Stop	2

This exploded view diagram illustrates the assembly of a mechanical component, likely a pump or valve. The main shaft (1) is the central element, with various parts numbered 1 through 22. The assembly includes a large circular flange (12) with a central hub (8) and a smaller flange (18). A series of seals and O-rings (13, 15, 17, 19) are shown in their relative positions. A small rectangular component (6) is attached to the side of the shaft. The diagram uses standard engineering conventions to show the fit and alignment of the parts.

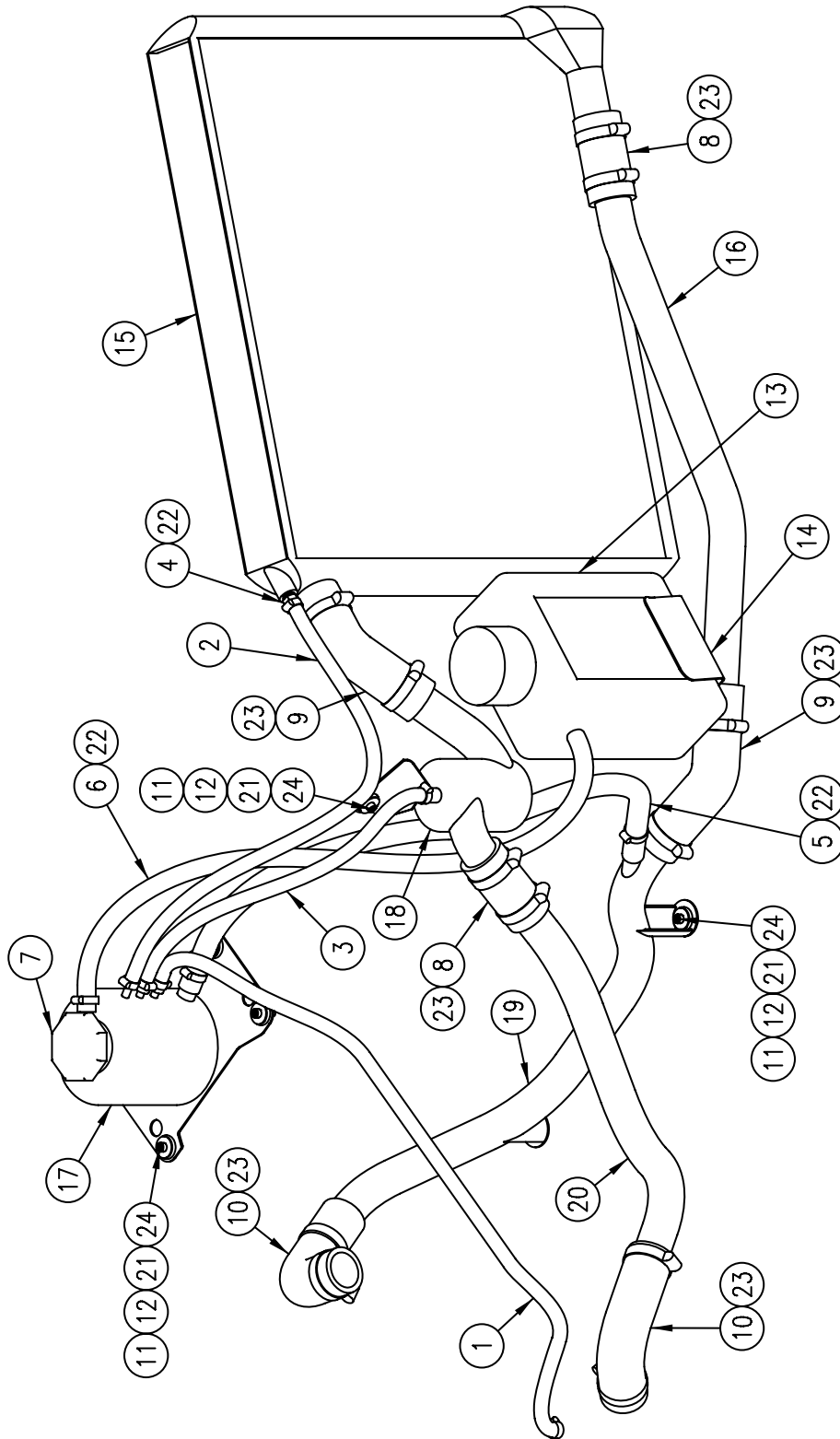
BELLHOUSING AND CLUTCH ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	0822-0700	Rear Damper Mount	2
2	0832-1060	Top Hat, Trunnion	2
3	0832-2000	Stud, Adapter Housing	9
4	01632-0020	Oil Tower	1
5	01632-1000	Bellhousing	1
6	01632-1040	Cover, Bellhousing Port	2
7	01643-61-3031	Throwout Bearing	1
8	01643-6552HSG-S	Clutch Assembly	1
9	01650-0010	Starter Motor	1
10	01650-0101	Motor End Plate, Starter Motor Brace	1
11	01650-0102	Anchor Bracket, Starter Motor Brace	1
12	01650-54-3687	Nose, Starter (not shown)	1
13	01650-59-22R	Solenoid, Starter (not shown)	1
14	01650-59-023	Brush Plate, Starter (not shown)	1
15	701-3-05A	Bolt 10-32 x 0.66 long	2
16	701-4-04A	Bolt 1/4-28 x 0.53 long	4
17	701-5-13A	Bolt 5/16-24 x 1.47 long	2
18	701-6-12A	Bolt 3/8-24 x 1.33 long	2
19	704-03-05	SHCS 10-32 x 0.63 long	3
20	704-04-12	SHCS 1/4-28 x 1.50 long	3
21	704-06-08	SHCS 3/8-24 x 1.00 long	1
22	708-03-05	FHCS 10-32 x 0.63 long	8
23	713-21250-0520	Bolt, 12 Point 5/16-24 x 1.82 long	8
24	716-1291-03	Jet Nut 10-32	2
25	716-1291-06	Jet Nut 3/8-24	20
26	717-20002C5	Washer 5/16 Chamfered	8
27	717-960-03	Washer #10	11
28	717-960-04	Washer 1/4	7
29	717-960-05	Washer 5/16	2
30	717-960-06	Washer 3/8	21
31	717-961-03	Washer #10 Thin	2
32	746-10MM-20MM	Dowel Pin Ø10mm x 20mm long	2
33	795-06-0750-100	Washer	2
34	809-BUNA-119	O-Ring	1
35	816-814-12D	Port Plug	1
36	01643-62-008	Bearing, Throwout Bearing (not shown)	1
37	01643-62-905	Seal Kit, Throwout Bearing (not shown)	1
38	01650-54SD-040	Bolt, Starter Motor, Long (used with Item 10, not shown)	2
39	01650-59-032M	Gear Housing, Starter (not shown)	1

BELLHOUSING AND CLUTCH ASSEMBLY



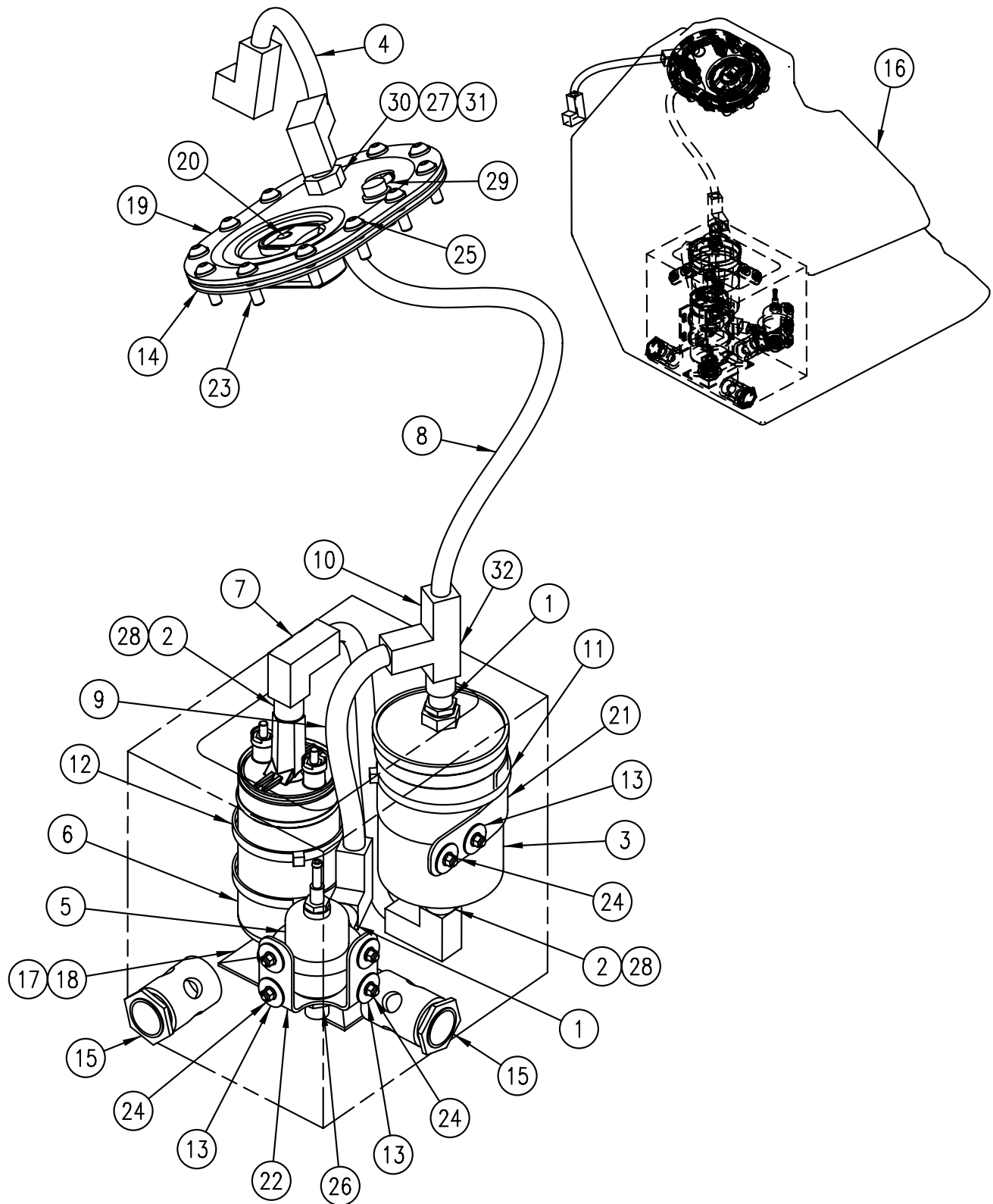
WATER SYSTEM ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	Included in 01653-1	Bleed Hose, Engine Out to Header Tank	1
2	Included in 01653-1	Bleed Hose, Radiator to Header Tank	1
3	Included in 01653-1	Bleed Hose, Swirl Pot to Header Tank	1
4	Included in 01653-1	Fitting 1/4 Hose Barb	1
5	Included in 01653-1	Hose, Header Tank to Crossover Tube	1
6	01655-0300	Hose, Pressure Cap to Overflow Tank	1
7	01653-1000	Radiator Cap	1
8	Included in 01653-1	Hose Coupling Straight	2
9	Included in 01653-1	Hose Coupling 45°	2
10	Included in 01653-1	Hose Coupling 90°	2
11	01653-0050	Standoff	8
12	795-03-0750	Washer	8
13	0852-0500	Overflow Tank	1
14	01652-0020	Bracket, Overflow Tank	1
15	01653-0010	Radiator	1
16	01653-0140	Water Tube, Radiator Out	1
17	01653-0150	Header Tank	1
18	01653-0170	Swirl Pot	1
19	01653-0180	Water Tube, Return Crossover	1
20	01653-0200	Water Tube, Engine Out	1
21	704-03-06	SHCS #10-32 x 0.75 long	8
22	840-003	Hose Clamp	9
23	840-020	Hose Clamp	12
24	861-MS35489-9	Grommet, Rubber	8

WATER SYSTEM ASSEMBLY



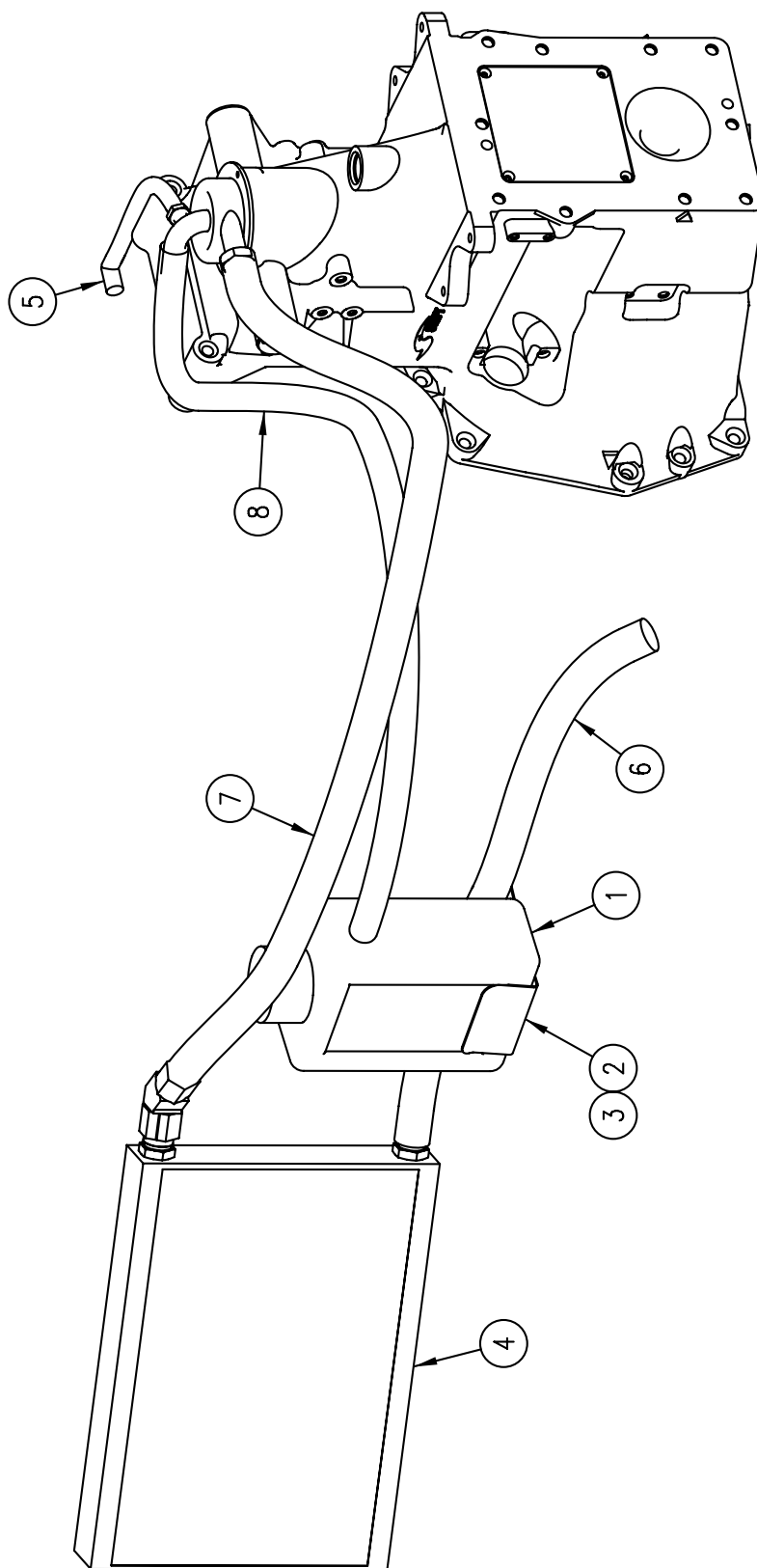
FUEL SYSTEM ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	Supplied by Cosworth	Adapter, Cosworth PR7493	2
2	816-316-06-M12D	Adapter	2
3	Supplied by Cosworth	Fuel Filter Bosch 0 450 905 203	1
4	Included in 01655-1	Fuel Hose Assembly, Access Cover to Engine	1
5	Supplied by Cosworth	Fuel Pressure Regulator Bosch B 280 500 737/3	1
6	Supplied by Cosworth	Fuel Pump Bosch 0 580 254 046	1
7	Included in 01655-1	Hose Assembly, Fuel Pump to Filter	1
8	Included in 01655-1	Hose Assembly, Tee to Access Cover	1
9	Included in 01655-1	Hose Assembly, Tee to Pressure Regulator	1
10	816-894-08-06D	Reducer	1
11	855-14	Tie Wrap, Fuel Filter	1
12	855-11	Tie Wrap, Fuel Pump	2
13	795-03-0750	Washer	8
14	0851-0500	Gasket, Fuel Cell	2
15	0851-CV100	Collector Check Valve	3
16	01651-0010	Fuel Cell	1
17	01651-0020	Fitting, Fuel Pump Inlet	1
18	01651-0100	Pickup Filter	1
19	Included in 01651-0120	Fuel Cell Access Cover	1
20	Included in 01651-0120	Fuel Cell Cap	1
21	01651-4020	Mount, Fuel Filter	1
22	01651-4030	Mount, Fuel Pressure Regulator	1
23	706-04-07	BHCS 1/4-28 x 0.88 long	12
24	716-1291-03	Jet Nut #10-32	8
25	717-960-04	Washer 1/4	12
26	765-14150	Nut M14 x 1.50	1
27	810-CW901-06A	Crush Washer -6 Aluminum	1
28	810-CW901-M12A	Crush Washer 12mm	2
29	816-527-04	Vent Check Valve	1
30	816-832-06D	Straight Bulkhead Fitting AN-6	1
31	816-924-06D	Bulkhead Nut AN-6	1
32	816-CPL-826-08D	Tee Fitting	1
33	01655-0100	Hose, Fuel Tank Air Inlet	1

FUEL SYSTEM ASSEMBLY



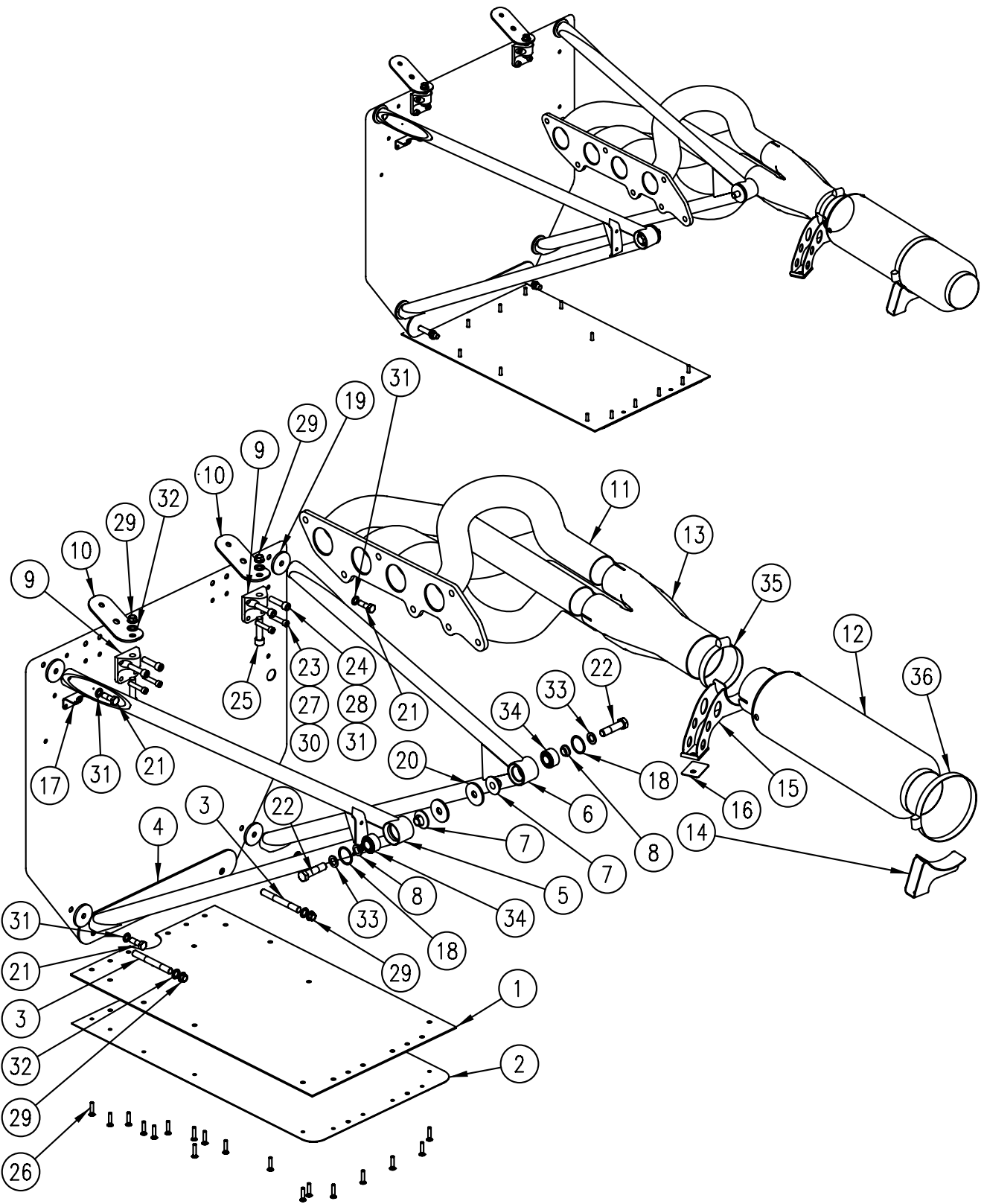
OIL LINE SYSTEM ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	0852-0500	Overflow Tank	1
2	01652-0020	Bracket, Overflow Tank	1
3	01652-0030	Support, Oil Overflow Tank Bracket	1
4	01652-0100	Oil Cooler	1
5	Included in 01652-1	Hose, Cam Cover to Swirl Pot	1
6	Included in 01652-1	Hose, Engine to Oil Cooler	1
7	Included in 01652-1	Hose, Oil Cooler to Swirl Pot	1
8	01655-0200	Hose, Swirl Pot to Overflow Tank	1

OIL LINE SYSTEM ASSEMBLY



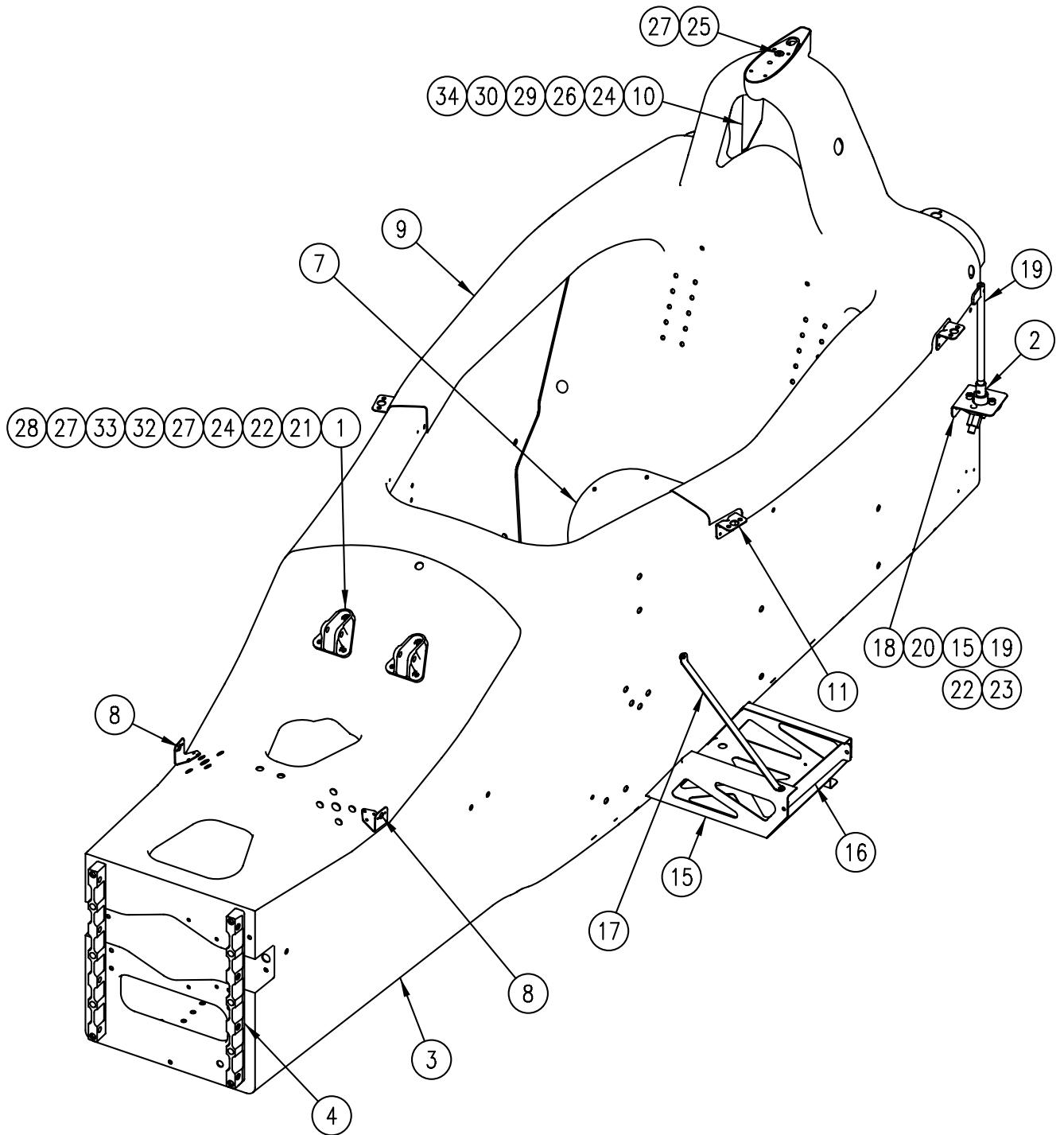
ENGINE INSTALLATION ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	01610-6011	Aft Skid	1
2	01610-6013	Skid, Auxiliary Aft	1
3	01630-0031	Stud, Lower Engine	2
4	01630-0040	Shim, Lower Engine Mount	1
5	01630-0081L	Trunnion LH	1
6	01630-0081R	Trunnion RH	1
7	01630-0082	Spacer, Standoff, Trunnion	2
8	01630-0083	Washer, Top Hat Trunnion	2
9	01630-0300	Mount, Engine Plate Lower	2
10	01630-0400	Mount, Engine Plate Upper	2
11	01634-0025	Exhaust Header	1
12	01634-0026	Muffler	1
13	01634-0040	Exhaust Collector	1
14	01634-0080	Mount, Muffler	1
15	01634-0082	Auxiliary Exhaust Bracket	1
16	01634-0083	Shim, Auxiliary Exhaust Bracket	AR
17	01660-0120	Mount, Engine Loom Connector	1
18	200-0927	Retaining Ring	2
19	204-05-24-120-A	Spacer, Trunnion 0.120 Thick	2
19	204-05-24-130-A	Spacer, Trunnion 0.130 Thick	2
19	204-05-24-140-A	Spacer, Trunnion 0.140 Thick	2
19	204-05-24-150-A	Spacer, Trunnion 0.150 Thick	2
19	204-05-24-160-A	Spacer, Trunnion 0.160 Thick	2
19	204-05-24-170-A	Spacer, Trunnion 0.170 Thick	2
19	204-05-24-180-A	Spacer, Trunnion 0.180 Thick	2
20	204-07-24-050-A	Spacer, Trunnion Lateral 0.050 Thick	AR
20	204-07-24-075-A	Spacer, Trunnion Lateral 0.075 Thick	AR
20	204-07-24-125-A	Spacer, Trunnion Lateral 0.125 Thick	AR
20	204-07-24-250-A	Spacer, Trunnion Lateral 0.250 Thick	AR
21	701-5-07A	Bolt 5/16-24 x 0.97 long	4
22	701-7-15A	Bolt 7/16-20 x 1.72 long	2
23	704-04-10	SHCS 1/4-28 x 1.25 long	4
24	704-05-10	SHCS 5/16-24 x 1.25 long	4
25	704-06-12	SHCS 3/8-24 x 1.50 long	2
26	1102-03-08	NAS1102 FHCS 100° 10-32 x 0.50 long	18
27	716-1291-04	Jet Nut 1/4-28	4
28	716-1291-05	Jet Nut 5/16-24	4
29	716-1291-06	Jet Nut 3/8-24	4
30	717-960-04	Washer 1/4	4
31	717-960-05	Washer 5/16	8
32	717-960-06	Washer 3/8	4
33	717-960-07	Washer 7/16	2
34	820-PWB-9T	Spherical Bearing	2
35	840-044	Hose Clamp 044	1
36	840-064	Hose Clamp 064	1

ENGINE INSTALLATION ASSEMBLY



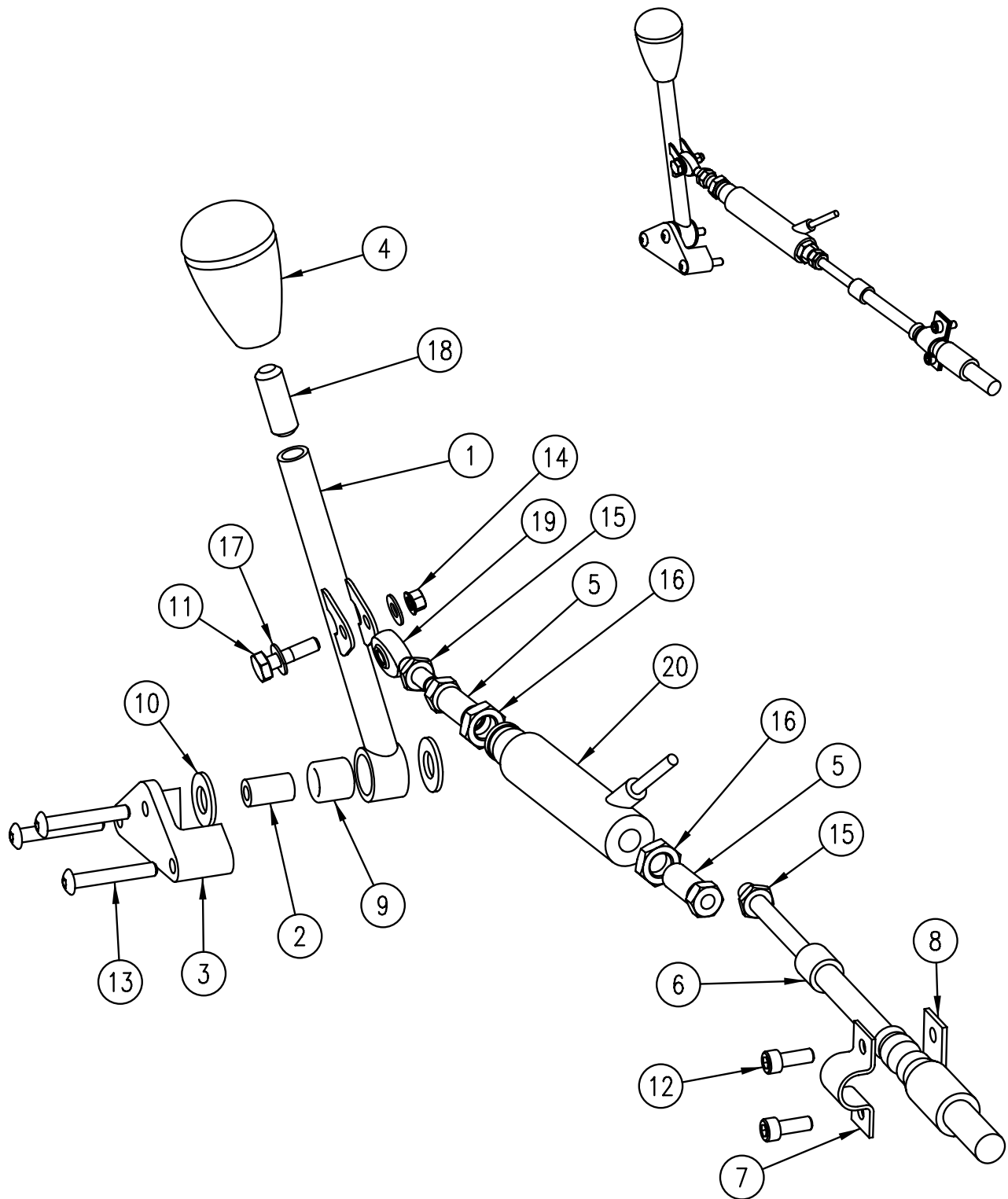
CHASSIS ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	0810-4100	Front Damper Mount	2
2	0861-87181	Master Switch, Bosch	1
3	01610-1010	Monocoque	1
4	01610-1020	Nose Mount Bracket	2
5	01610-3001-100	Bobbin, 10-32 up to 0.95 thick (not shown)	AR
6	01610-3001-120	Bobbin, 10-32 up to 1.15 thick (not shown)	AR
7	01610-4030	Seat Back Cover Plate	1
8	01610-4240	Mount Bracket, Shock Cover	2
9	01611-0070	Roll Hoop Fairing	1
10	01611-0080	Roll Hoop	1
11	01611-0150	Body Mounting Bracket	4
12	01611-0180L	Roll Hoop Backup Bracket LH (not shown)	1
13	01611-0180R	Roll Hoop Backup Bracket RH (not shown)	1
14	01630-0040	Shim, Lower Engine Mount (not shown)	1
15	01660-0160	Battery Box	1
16	01660-0170	Hold Down Bracket, Battery	1
17	01660-0180	Stay Brace, Battery Box	1
18	01660-5000	Master Switch Bracket, Bosch	1
19	01660-5021	Master Switch Key, Bosch	1
20	704-03-04	SHCS 1/4-28 x 0.50 long	2
21	704-04-05	SHCS 1/4-28 x 0.63 long	2
22	704-04-14	SHCS 1/4-28 x 1.75 long	4
23	704-05-12	SHCS 5/16-24 x 1.50 long	2
24	704-06-12	SHCS 3/8-24 x 1.50 (Roll Hoop AFT)	2
25	708-04-16	FHCS 1/4-28 x 2.00 long	1
26	713-21250-06-14	Bolt MS21250 x 1.52 long (Roll Hoop FWD)	2
27	716-1291-04	Jet Nut 1/4-28	7
28	716-1291-05	Jet Nut 5/16-24	2
29	716-1291-06	Jet Nut 3/8-24 (Roll Hoop)	2
30	717-20002C6	Washer, Chamfered (Roll Hoop FWD)	2
31	717-960-03	Washer #10	2
32	717-960-04	Washer 1/4	6
33	717-960-05	Washer 5/16	2
34	717-960-06	Washer 3/8 (Roll Hoop)	2
35	795-0416SS	Washer 1/4	4
36	795-0516-SS	Washer 5/16	2
37	01611-0085	Spherical washer set (cup and ball) roll hoop fwd leg	2
38	01611-0086-005	Shim Washer, roll hoop aft leg, 0.005" thick	A/R
39	01611-0086-010	Shim Washer, roll hoop aft leg, 0.010" thick	A/R
40	01611-0086-020	Shim Washer, roll hoop aft leg, 0.020" thick	A/R
41	01611-0086-040	Shim Washer, roll hoop aft leg, 0.040" thick	A/R

CHASSIS ASSEMBLY



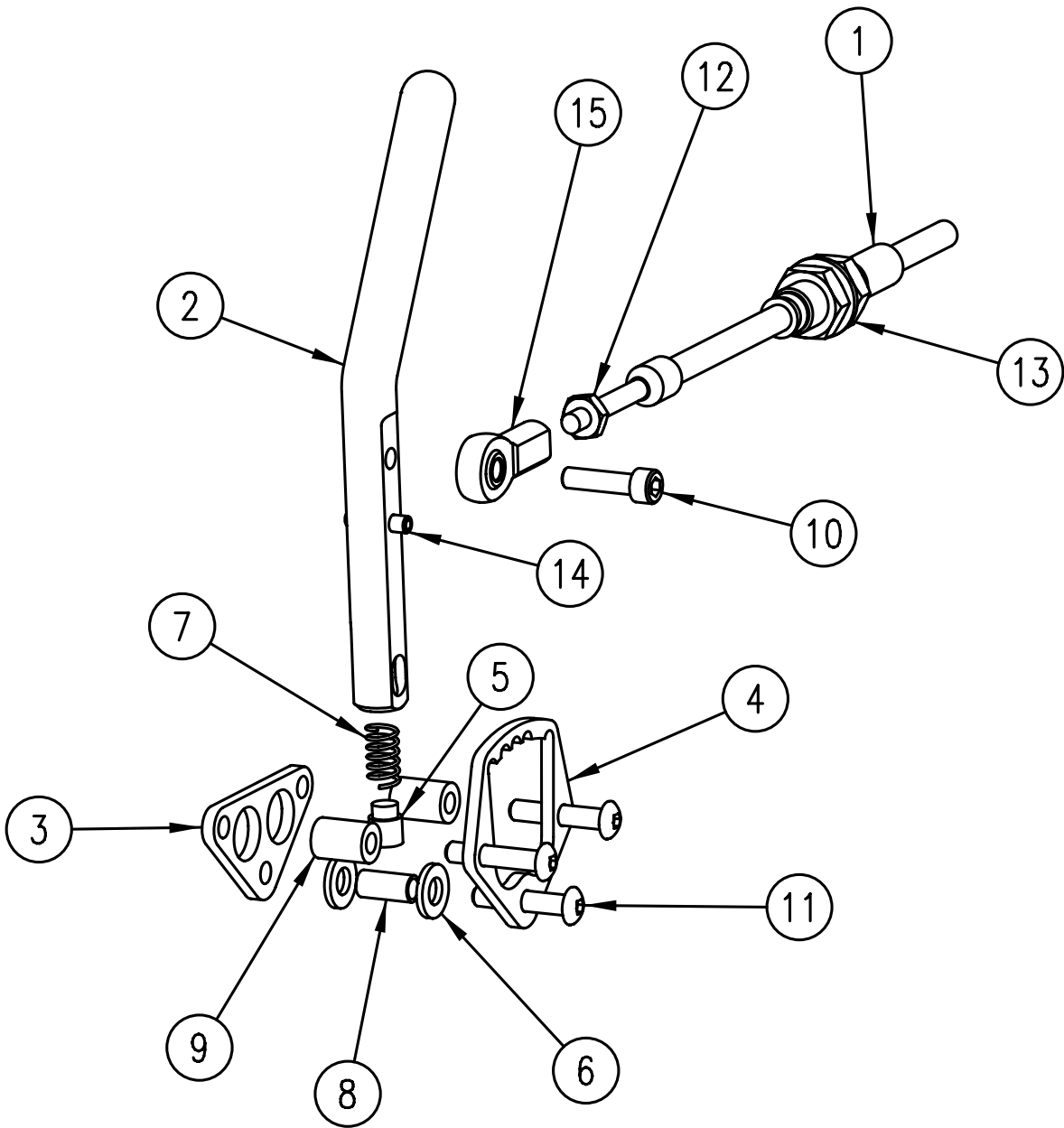
SHIFT LEVER ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	01645-0020	Gear Lever	1
2	01645-0030	Pivot Sleeve, Gear Lever	1
3	01645-0040	Mount, Gear Lever	1
4	01645-0050	Shift Knob	1
5	01645-1000	Reducer Bushing, SWOL Switch	2
6	01645-1130	Shift Cable	1
7	01645-1131	Cable Housing Stop	1
8	01645-1132	Cable Housing Stop Spacer	1
9	200-0303	Needle Bearing	1
10	200-0512	Thrust Washer	2
11	701-3-06A	Bolt #10-32 x 0.78 long	1
12	704-03-04	SHCS #10-32 x 0.50 long	2
13	706-03-10	BHCS #10-32 x 1.25 long	3
14	716-1291-03	Jet Nut #10-32	1
15	716-316-04	Jam Nut 1/4-28	2
16	716-316-06	Jam Nut 3/8-24	2
17	717-960-03	Washer #10	2
18	741-06-08CFT	Stud 3/8-16 x 1.0	1
19	825-REMX-3	Rod End #10 x 1/4-28	1
20	Supplied by Cosworth	SWOL Switch	1

SHIFT LEVER ASSEMBLY



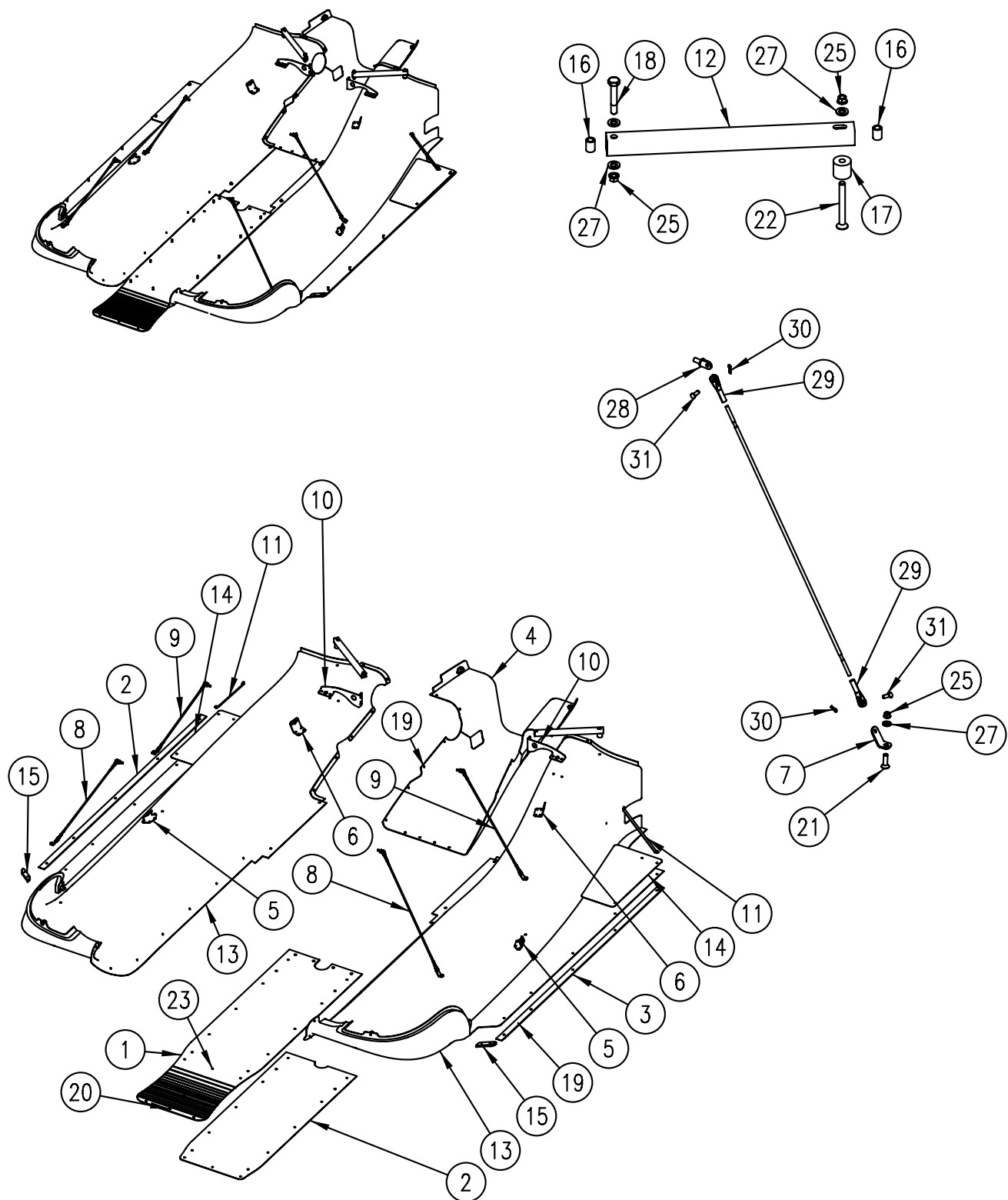
ANTI-ROLL BAR ADJUSTER ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	01646-0010	FARB Adjuster Cable	1
2	01646-0710	Lever, FARB Adjuster	1
3	01646-0720	Base Plate, FARB Adjuster	1
4	01646-0730	Detent Plate, FARB Adjuster	1
5	01646-0470	Plunger	1
6	200-0513	Thrust Washer	2
7	200-0815	Spring	1
8	204-03-04-530-F	Pivot Sleeve	1
9	204-03-06-535-D	Spacer Sleeve	2
10	703-03-06	SHCS #10-24 x 0.75 long	1
11	706-03-08S	BHCS #10-32 x 1.00 long	3
12	716-316-03	Jam Nut #10-32	1
13	717-960-07	Washer 7/16	1
14	764-05-06S	Roll Pin	1
15	825-MW-3	Rod End #10 x 10-32 Female	1

ANTI-ROLL BAR ADJUSTER ASSEMBLY



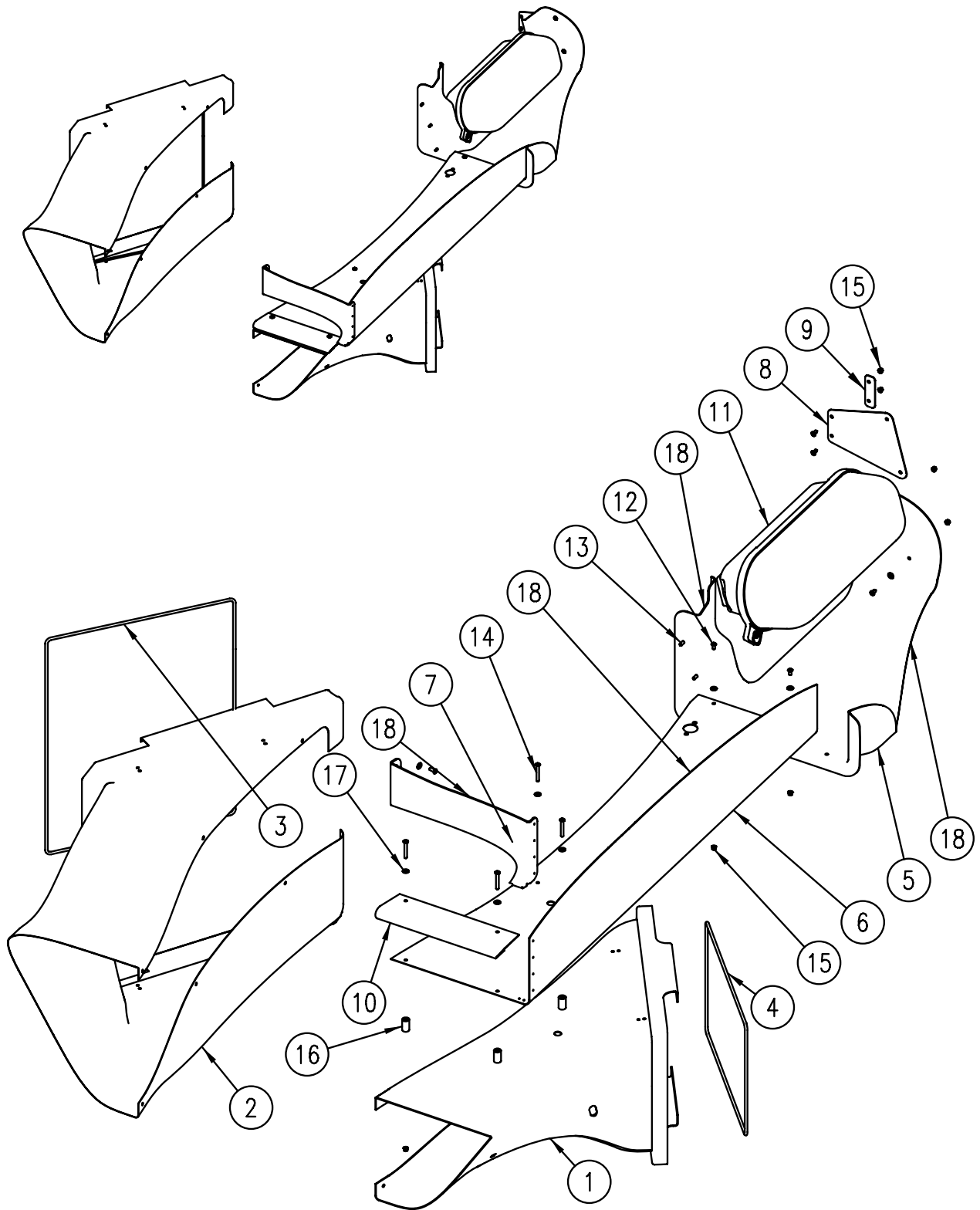
UNDERWING ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	01610-6010	Forward Skid	1
2	01610-6012	Auxiliary Skid, Forward	1
3	01611-0015	Tunnel Skid	2
4	01611-0016	Gearbox Fairing	1
5	01611-0160	Bracket, Fore Body Mounting	2
6	01611-0170	Bracket, Aft Body Mounting	2
7	01611-4040	Tunnel Stay Mount	4
8	01611-4042	Tunnel Stay Fwd	2
9	01611-4043	Tunnel Stay Aft	2
10	01611-4061L,R	Tunnel Mount Bracket L/R	1L,1R
11	01611-4070	Underwing Support, Foot Flange	2
12	01611-4130	Aft stay	2
13	01614-0010L,R	Tunnel L/R	1L,1R
14	01614-4502	Tunnel Shelf Guard	2
15	01614-4503	Leading Edge Guard, Tunnel	2
16	204-04-06-510-E	Plain Spacer 0.510 thick	4
17	204-04-12-710-A	Plain Spacer 0.710 thick	2
18	701-4-14A	Bolt 1/4-28 x 1.53 long	2
19	706-03-04	BHCS #10-32 x 0.50 long	12
20	708-03-06	FHCS #10-32 x 0.75 long	18
21	708-04-07	FHCS 1/4-28 x 0.88 long	4
22	708-04-18	FHCS 1/4-28 x 2.25 long	2
23	1102-03-12	NAS1102 FHCS 100° 10-32 x 0.75 long	11
24	716-1291-03	Jet Nut #10-32	34
25	716-1291-04	Jet Nut 1/4-28	8
26	717-960-03	Washer #10	46
27	717-960-04	Washer 1/4	10
28	732-438-04A	Eye Bolt	4
29	733-665-21	Threaded Clevis Tie Rod	8
30	747-416-1	R Clip	8
31	748-393-11	Clevis Pin	8

UNDERWING ASSEMBLY



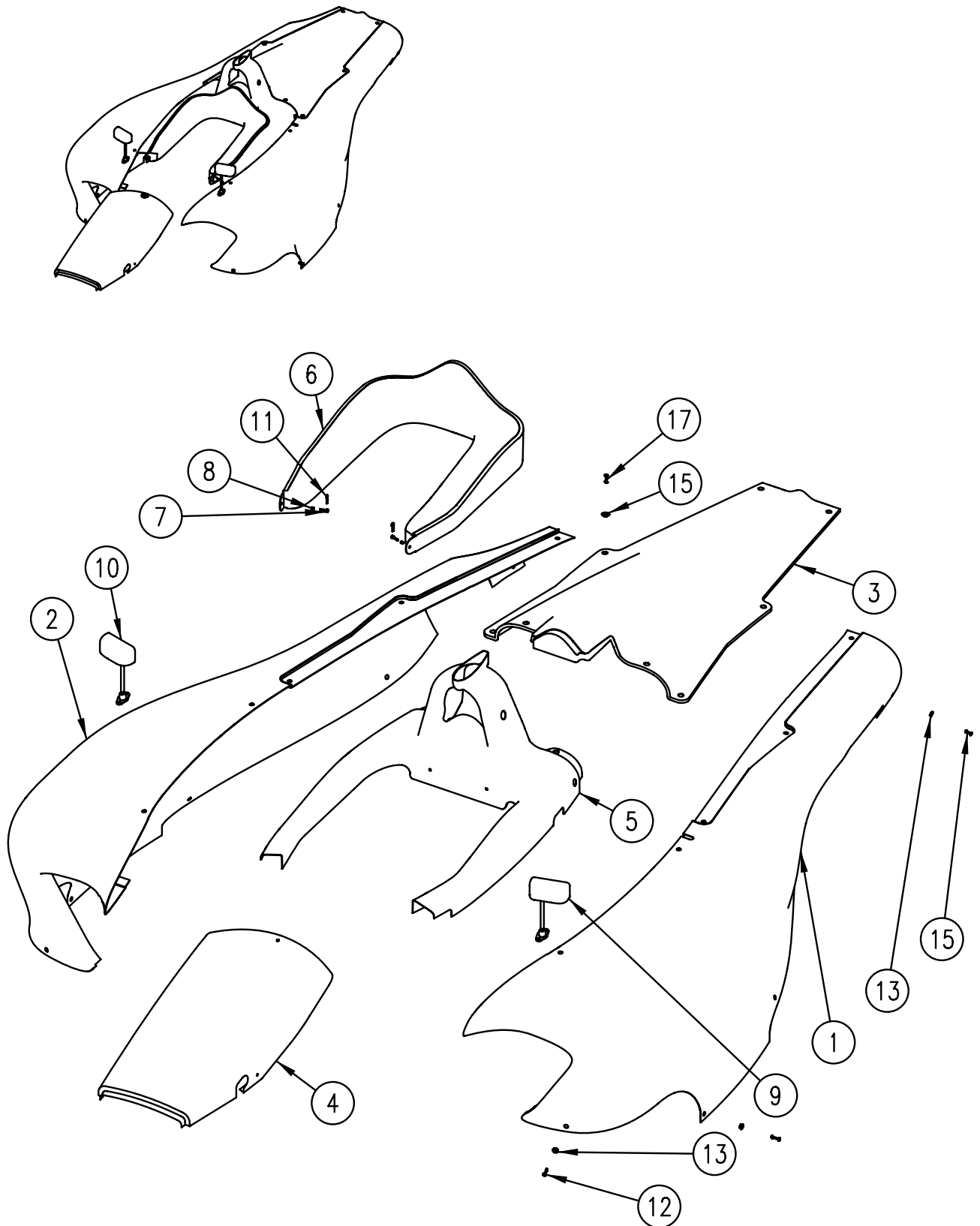
INLET DUCT ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	01611-0090	Inlet Duct LH Oil Cooler	1
2	01611-0110	Inlet Duct RH Radiator	1
3	01653-0500	Radiator Cooler Screen	1
4	01652-0500	Oil Cooler Screen	1
5	01654-0100	Airbox	1
6	01654-0090	Airbox Inlet Duct	1
7	01654-0080	Airbox Inlet Duct Forward Plate	1
8	01654-0051	Airbox Aft Bracket Plate	1
9	01654-0052	Clamp Plate, Airbox Aft Bracket	1
10	01654-0070	Airbox Duct Leading Edge	1
11	Supplied by Cosworth	Air Filter	1
12	706-03-03	BHCS #10-32 x 0.38 long	6
13	706-03-04	BHCS #10-32 x 0.50 long	5
14	706-03-11	BHCS #10-32 x 1.38 long	4
15	716-1291-03	Jet Nut #10-32	10
16	204-03-08-887-D	Plain Spacer 0.887 thick	4
17	717-960-03	Washer #10	13
18	MCRB-0063-0563	Rubber Channel	7.8 ft

INLET DUCT ASSEMBLY



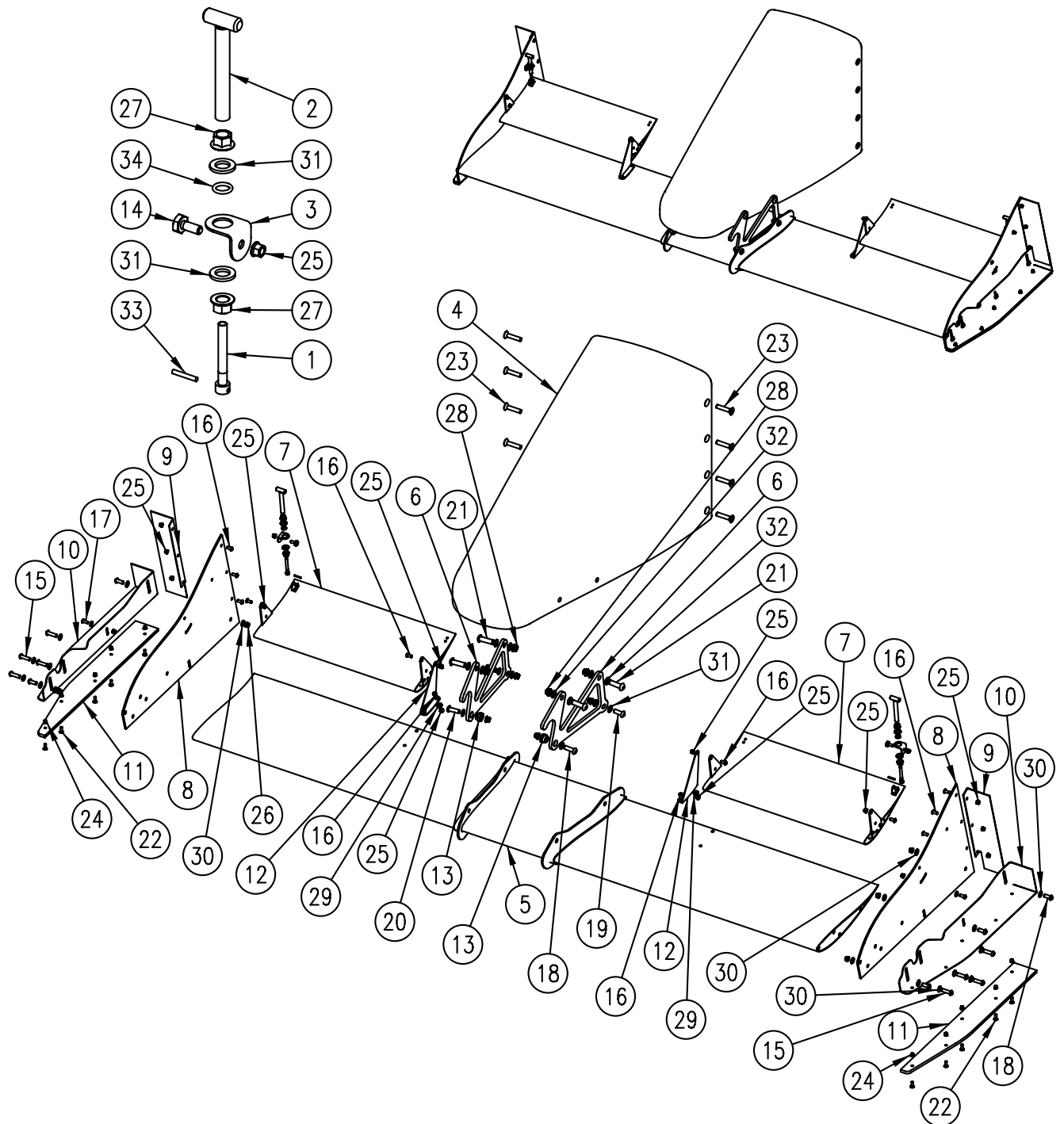
BODYWORK ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	01611-0010L	Side Pod LH	1
2	01611-0010R	Side Pod RH	1
3	01611-0020	Engine Cover	1
4	01611-0060	Shock Cover	1
5	01611-0070	Roll Hoop Fairing	1
6	01610-7000	Helmet Collar Assembly	1
7	01610-7050	Pin, Helmet Collar Retaining	2
8	01610-7051	Sleeve, Helmet Collar Retaining	2
9	01611-0230L	Mirror Assembly LH	1
10	01611-0230R	Mirror Assembly RH	1
11	749-01	R Clip	2
12	768-617	Camloc Stud	2
13	786-302	Camloc Grommet	14
14	768-616	Camloc Stud	10
15	768-605	Camloc Stud	2
16	786-301	Camloc Grommet	8
17	768-613	Camloc Stud	8

BODYWORK ASSEMBLY



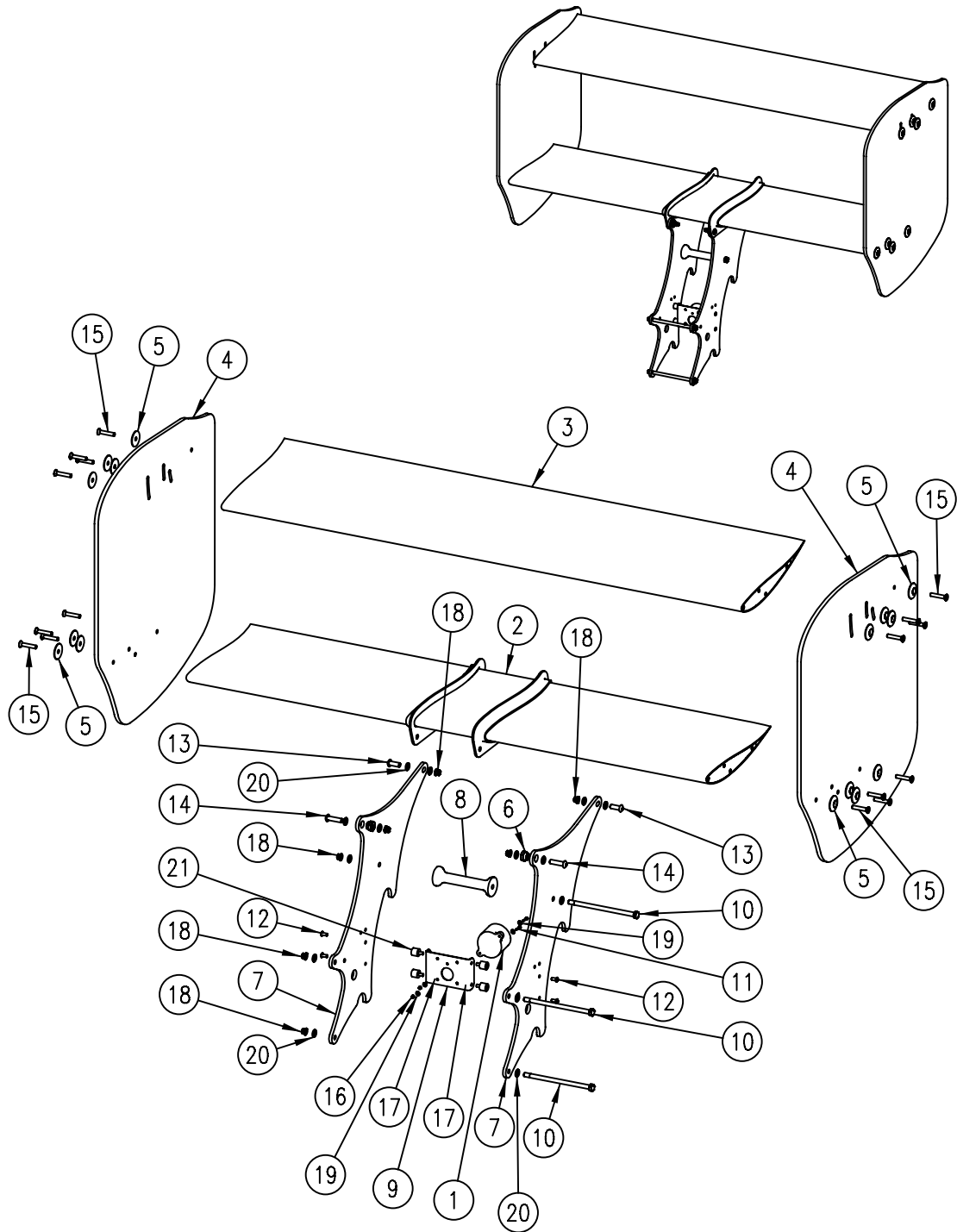
FRONT WING ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	1412-5010	Link, Front Flap Adjuster	2
2	1412-5020	Front Flap Adjuster	2
3	1412-5030	End Plate Mount, Front Flap Adjuster	2
4	01611-0040	Nose Cone	1
5	01612-0010	Front Wing	1
6	01612-0030	Mount Plate, Front Wing, Adjustable	2
7	01612-1020L, R	Flap LH / RH	1L,1R
8	01612-1031	Front Wing Endplate	2
9	01612-1032L, R	Gurney, Front Wing Endplate LH / RH	1L,1R
10	01612-1040L, R	Rub Strip, Front Wing LH / RH	1L,1R
11	01612-1041L, R	Jabrock Rub Strip, Front Wing Rub Strip LH / RH	1L,1R
12	01612-2040L,R	Flap Mount Inboard L/R	1L,1R
13	01613-4001	Eccentric, Wing Angle Adjuster	2
14	701-3-03A	Bolt 10-32 x 0.47 long	2
15	705-04-07	BHCS 1/4-20 x 0.88 long	8
16	706-03-03.5	BHCS 10-32 x 0.44	14
17	706-03-04	BHCS 10-32 x 0.50 long	2
18	706-04-05	BHCS 1/4-28 x 0.63 long	6
19	706-05-07	BHCS 5/16-24 x 0.88 long	2
20	706-05-08	BHCS 5/16-24 x 1.00 long	2
21	706-06-10	BHCS 3/8-24 x 1.25 long	4
22	708-008-04	FHCS 8-32 x 0.50	10
23	708-05-12	FHCS 5/16-24 x 1.50 long	8
24	708-1291-008	Jet Nut 8-32	10
25	716-1291-03	Jet Nut 10-32	16
26	716-1291-04	Jet Nut 1/4-28	6
27	716-1291-05	Jet Nut 5/16-24	8
28	716-1291-06	Jet Nut 3/8-24	4
29	717-960-03	Washer #10	4
30	717-960-04	Washer 1/4	20
31	717-960-05	Washer 5/16	10
32	717-960-06	Washer 3/8	8
33	764-03-05C	Roll Pin 3/32 x 5/8 long	2
34	809-TEFLON-011	O-Ring	2

FRONT WING ASSEMBLY



REAR WING ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	1462-0141	Rain Light	1
2	01613-0010	Lower Element, Rear Wing	1
3	01613-0013	Upper Element, Rear Wing	1
4	01613-1060	Rear Wing Endplate	2
5	Included in 01613-2	Washer, Rear Wing Endplate	16
6	01613-4001	Eccentric, Wing Angle Adjuster	2
7	01613-5000	Rear Wing Pylon	2
8	01613-5011	Brace, Rear Wing Pylon	1
9	01662-0140	Mount, Rain Light	1
10	701-5-55A	Bolt 5/16-24 x 5.72 long	3
11	703-004-04	SHCS #4-40 x 0.50 long	2
12	706-03-03.5	BHCS #10-32 x 0.44 long	4
13	706-05-07	BHCS 5/16-24 x 0.88 long	2
14	706-05-10	BHCS 5/16-24 x 1.25	2
15	Included in 01613-2	FHCS 1/4-20 x 1.38 long	16
16	716-1291-004	Jet Nut #4-40	2
17	716-1291-03	Jet Nut #10-32	4
18	716-1291-05	Jet Nut 5/16-24	7
19	717-960-004	Washer #004	4
20	717-960-05	Washer 5/16	14
21	200-1818	Lord Mount	4

REAR WING ASSEMBLY



HALFSHAFT ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	0833-4120	Bumper, Halfshaft Inboard	2
2	1431-0020	Halfshaft, Road Course	2
3	1431-0100	Tripod Joint	4
4	1431-1030	Shim, Tripod Boot	4
5	1431-1040	Tripod Housing	4
6	1431-1050	Joint Boot, Modified	4
7	01631-1012	Drive Flange, Outboard	2
8	01631-1020	Bumper, Halfshaft Outboard	2
9	01631-1050	Sleeve, Spring Guide, Gearbox Output Shaft	2
10	200-0808	Spring	2
11	200-0949	Snap Ring	4
12	701-5-22A	Bolt 5/16-24 X 2.34 long	12
13	701-5-23A	Bolt 5/16-24 X 2.47 long	12
14	716-1291-05	Jet Nut 5/16-24	24
15	809-BUNA-033	O-ring	2

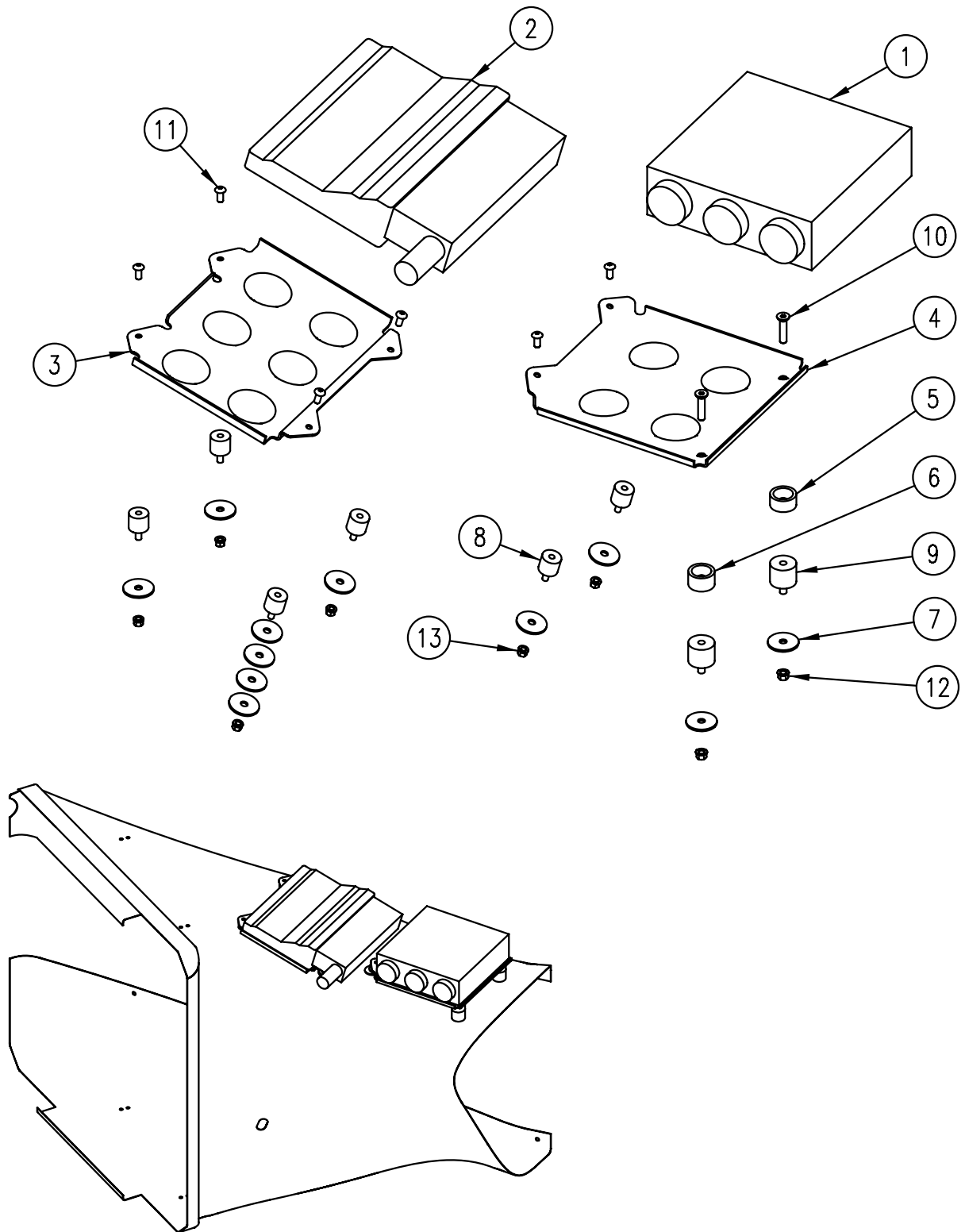
This exploded view diagram illustrates the assembly of a steering knuckle. The central component is the steering knuckle (2), which is shown in its assembled state at the top left. The exploded view below shows the following components and their assembly sequence:

- 1**: Upper ball joint assembly, including the upper ball joint (1) and upper ball joint cap (9).
- 3**: Upper ball joint cap (9).
- 4**: Upper ball joint cap (9).
- 5**: Upper ball joint cap (9).
- 6**: Upper ball joint cap (9).
- 7**: Lower ball joint assembly, including the lower ball joint (7) and lower ball joint cap (12).
- 8**: Lower ball joint cap (12).
- 10**: Lower ball joint cap (12).
- 11**: Lower ball joint cap (12).
- 12**: Lower ball joint cap (12).
- 13**: Lower ball joint cap (12).
- 14**: Lower ball joint cap (12).
- 15**: Lower ball joint cap (12).

The diagram shows the steering knuckle (2) being assembled with the upper ball joint (1) and lower ball joint (7) components. The exploded view shows the upper ball joint (1) and lower ball joint (7) being assembled onto the steering knuckle (2). The exploded view also shows the upper ball joint cap (9) and lower ball joint cap (12) being assembled onto the upper ball joint (1) and lower ball joint (7) respectively. The exploded view shows the upper ball joint cap (9) and lower ball joint cap (12) being assembled onto the upper ball joint (1) and lower ball joint (7) respectively. The exploded view shows the upper ball joint cap (9) and lower ball joint cap (12) being assembled onto the upper ball joint (1) and lower ball joint (7) respectively.

ELECTRONICS TRAYS			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	Supplied by Pi	MCU Box	1
2	Supplied by Cosworth	ECU Box	1
3	01660-0200	Mounting tray-ECU	1
4	01660-0210	Elite tray	1
5	01660-0211-1	Spacer-elite DAQ tray inboard	1
6	01660-0211-2	Spacer-elite DAQ tray outboard	1
7	792-03	Washer - AN960 - #10 - Large	12
8	200-1808	Rubber Mount-8-32	6
9	200-1812	Rubber Mount - 10-32UNF	2
10	708-03-07	FHCS - #10-32UNF X .875	2
11	706-008-03	BHCS - #8-32UNC X .38	6
12	716-1291-03	Nut - Jet - NAS1291-3 - #10-32UNF	2
13	716-1291-008	Nut - Jet - MS21042 - #8-32UNC	6

ELECTRONICS TRAYS



SAFETY HARNESS ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	0862-0020	Safety Harness	1
2	0862-0030	Mount, Lap Belt	2
3	0862-0070	Reducer Bushing, Seat Belt Crotch Strap	2
4	01662-1	Seat Belt Hardware Kit	1

FIRE EXTINGUISHER ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	01610-2000	Fire Bottle Cover	1
2	01662-0010	Fire Extinguisher System	1
3	01662-0110	Mount, Fire Extinguisher	1

BALLAST ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	01663-3000	Ballast Plate Kit	1

SWITCH PANEL MOUNT ASSEMBLY			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	0861-0010-1	Sleeve	4
2	0861-24523-22	Switch, On/Off	3
3	0861-24523-30	Switch, Momentary	1
4	01661-0010	Switch Panel	1
5	706-03-04	BHCS 10-32 x 0.50 long	4
6	793-010	Washer #10	4
7	861-MS35489-93	Grommet	4

SWIFT 016.a FASTENER TORQUE SPECIFICATION TABLE

All torque values listed are for dry AN, MS, or Swift manufactured fasteners.

For nuts on studs, use the torque value for the material that the stud is in.

For conventional nut-bolt combinations, use the 'in steel' torque value.

Refer to the Cosworth YDX Manual for engine fastener torque specifications.

Refer to the Swift SG4 Gearbox Manual for gearbox fastener torque specifications.

Wheel Nuts	500 to 550 ft*lb
Outboard Drive Flange Nuts	250 ft*lb

THREAD SIZE	TORQUE SPECIFICATION [ft*lb]	
	IN ALUMINUM	IN STEEL
8-32	1.6	2.1
10-32	2.6	3.5
1/4-28	6.4	8.5
5/16-24	13	17
3/8-24	23	30
7/16-20	36	48
1/2-20	56	74
9/16-18	80	106
5/8-18	111	148