WIPAIRE

WIPLINE FLOATS | MODIFICATIONS | AIRCRAFT SALES
AVIONICS | INTERIORS | MAINTENANCE | PAINT



PARTS MANUAL
FOR
WIPLINE MODEL 2350 FLOATS
ON
CESSNA 172 & 175 SERIES

Revision Y

Wipaire | Fire Boss | Lake & Air
1700 Henry Ave – Fleming Field (KSGS), South St. Paul, MN 55075
651.451.1205 info@wipaire.com wipaire.com

THIS PAGE INTENTIONALLY LEFT BLANK

LOG OF REVISIONS

Revision	Pages Affected	Description	Date
A-T	All	For previous revision changes, reference Parts Manual for 2350 Floats on Cessna 172 & 175 Series, Revision T, part number 1002168.	3/1/2024
U	123, 126, 128, 130	Updated 0-332-209-211 to Relay, 24V, 5 Prong and 0332-209-137 to Relay, 12V, 5 Prong. Corrected bulb part numbers in gear control indicator assemblies.	9/23/2024
V	10-13, 17-18, 26-27, 43, 45, 49, 92-97	Removed 21A03115-001 from Hull Assembly Overview Amphibian and Seaplane sections. Changed Spreader Bar Support Panel Assembly 21A01000-260 to 23A01000-302. Updated images and parts in Bulkheads 21A01000-261, 21A01000-263, 21A01000-264, and 21A01000-265. Removed Paddle Bracket 3A01158-093, Paddle Stop 1002113, Paddle Clip 3A01503-001, and Paddle 0238-0035 from side skins. Added Canoe Paddle section image and parts list. Updated image and renumbered parts list, removed 21A03032-006, 21A03214-003, 21A03154-008, 21A03115-001, and AN6-42A, changed MS21044N6 quantity 18 to 14 in Struts, Wires, Steps, & Spreader Bars section. Updated Fwd Spreader Bar Support Panel Assembly 23A01000-302 image and parts list. Updated Aft Spreader Bar Support Panel Assembly 21A01000-259 image and parts list. Removed Fwd Spreader Bar Panel Assembly 21A01000-260 as it is not used on 2350 Floats. Updated Spreader Bar Tube Mounting image and parts list.	4/17/2025
W	21	Updated image of 21A01000-252 Bulkhead 6 AFT.	9/25/2025
Y	43, 45, 53-54, 56-57, 63, 65-68, 71, 78-79, 86, 88, 112, 115, 127	Added Gusset, Stiffener, Bottom 21A01005-270 to Bottom & Side Skins & Stiffeners Overview sections. Changed Gear Indicator Cover 21A01002-137 and 21A01002-138 to 1009202, changed Placard 10A3-6338-1 to 1009122 and changed Placard 10A3-6338-2 to 1009123, changed 2600-3 quantity from 4 to 2, added Stud 1126000-4 in Top Deck - Amphibian section. Changed Cross Tie, Top Deck, Baggage 21A01326-004 to 1013020, changed Cross Tie, Top Deck 30S01326-035 to 1013025 in Top Deck sections. Changed Screw #8 X 5/8 to SS TATP 8 X 5/8 in Top Deck sections. Added After Body Gusset Assemblies 1013018 for Right Float and 1013019 for Left Float in Seaplane Hull Extrusions section. Renamed Section 6. Updated image and parts list in Pumpout Cup and Tube section. Updated parts in Water Rudder Installation section. Added Float Hand Pump section. Updated image and parts list in Nose Gear Retraction Assembly. Updated image and added 21A04547-004 Lower Shock Strut Bushing to Main Gear Retraction Installation section. Changed Assembly, Relay, Time Delay Release from 1005042 and 1005043 to 1012411.	11/9/2026

View most current version of parts manual at www.wipaire.com.

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

FLOAT PART SALES DEPARTMENT OPERATIONS 6
INTRODUCTION 7
SECTION 1 HULL BULKHEAD ASSEMBLIES....9
SECTION 2 WHEEL WELL ASSEMBLIES 35
SECTION 3 SKINS, STIFFENERS, & PADDLE 41
SECTION 4 TOP DECK ASSEMBLY....51
SECTION 5 EXTRUSIONS....59
SECTION 6 PUMPOUT CUP AND TUBES & FLOAT HAND PUMP....65
SECTION 7 WATER RUDDER AND STEERING & RETRACT SYSTEM 69
SECTION 8 LANDING GEAR....77
SECTION 9 STRUTS, WIRES, STEPS, & SPREADER BARS 93
SECTION 10 HYDRAULIC SYSTEM 103
SECTION 11 ELECTRICAL....123

FLOAT PART SALES DEPARTMENT OPERATIONS

Parts Sales:

Wipaire, Inc.

1700 Henry Avenue – Fleming Field

South St. Paul, MN 55075

Telephone: (651) 306-0459

Fax: (651)-306-0666

Website: www.wipaire.com

Email: customerservice@wipaire.com

Parts Ordering

Purchase orders should include:

1. Purchase order number
2. Name of person placing order
3. Invoicing information:
    a. Customer name - company or individual
    b. Address
    c. Phone and fax number
4. Shipping information:
    a. Address (if different from invoice address)
    b. Method of shipment/preferred carrier
5. Aircraft model, float model, and serial numbers
6. Wipaire part number; name; type, e.g. left or right; quantity
7. Payment method: VISA, MasterCard, C.O.D. (Collect on Delivery) (U.S. customers only), pre-payment by check or wire transfer, open account (see Credit Policy)

Note: Any information not found in this manual for strut package parts and other installation items refer to the installation drawing package provided with the STC at the time of float installation. Additional drawing copies are available for purchase through the Wipaire Customer Service Department.

INTRODUCTION

All references in this manual to LEFT and RIGHT are from the perspective of the pilot's seat with the floats fully installed and ready for floatplane operation.

The following is a list of abbreviations that may appear in the description nomenclature fields of this manual:

AB	Afterbody	Inbd.	Inboard
Amphib.	Amphibious	Lg.	Large
AR	As Required	Lt.	Left
Assy.	Assembly	Lwr.	Lower
Brkt.	Bracket	Opt.	Optional
Btm.	Bottom	Otbd.	Outboard
Bulk.	Bulkhead	Reinf.	Reinforcement
Ctr.	Center	Rr.	Rear
Cyl.	Cylinder	Rt.	Right
Ft.	Front	Sm.	Small
Ftg.	Fitting	SN	Serial Number
Fus.	Fuselage	Spr.	Spreader
Fwd	Forward	Upr.	Upper
Horiz.	Horizontal	Vert.	Vertical
Hyd.	Hydraulic	W.W.	Wheel Well

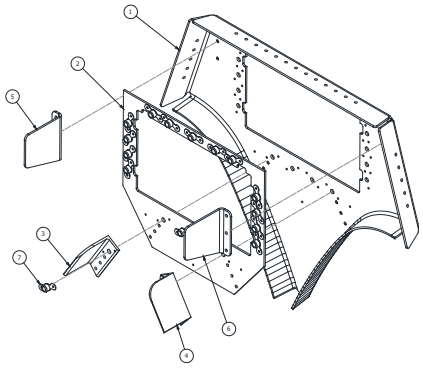
USING THIS PARTS MANUAL

COVERAGE

Parts information is provided in this manual for the hulls and all "deck down" parts. For information on strut package parts and other aircraft installation items, refer to the installation drawing package provided with the STC at the time of float installation. Additional drawing copies are available for purchase through Wipaire Customer Service Department.

Name of main part in the section. Example: This part is showing the components made up in Bulkhead #1.

BULKHEAD #1



Main part image. If the image has numbers associated with it, then those numbers are item numbers shown in the table below.

Items with a (-) instead of a number represent the main part as an assembly. Other parts represent the parts included in the assembly.

ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	1008815	ASSEMBLY BULKHEAD #1, 10000
1	1	1008797	PANEL, BULKHEAD #1
2	1	13A01156-085	DOUBLER #1 BULKHEAD
3	1	13A01357-049	CLEAT, SISTER KEEL ATTACH #1 BULKHEAD
4	1	13A01357-050	CLEAT, SISTER KEEL ATTACH #1 BULKHEAD
5	1	6A01156-054	ANGLE – TOP RAIL
6	1	6A01156-055	ANGLE – TOP RAIL
7	17	MS21047L4	NUT PLATE, SELF LOCKING

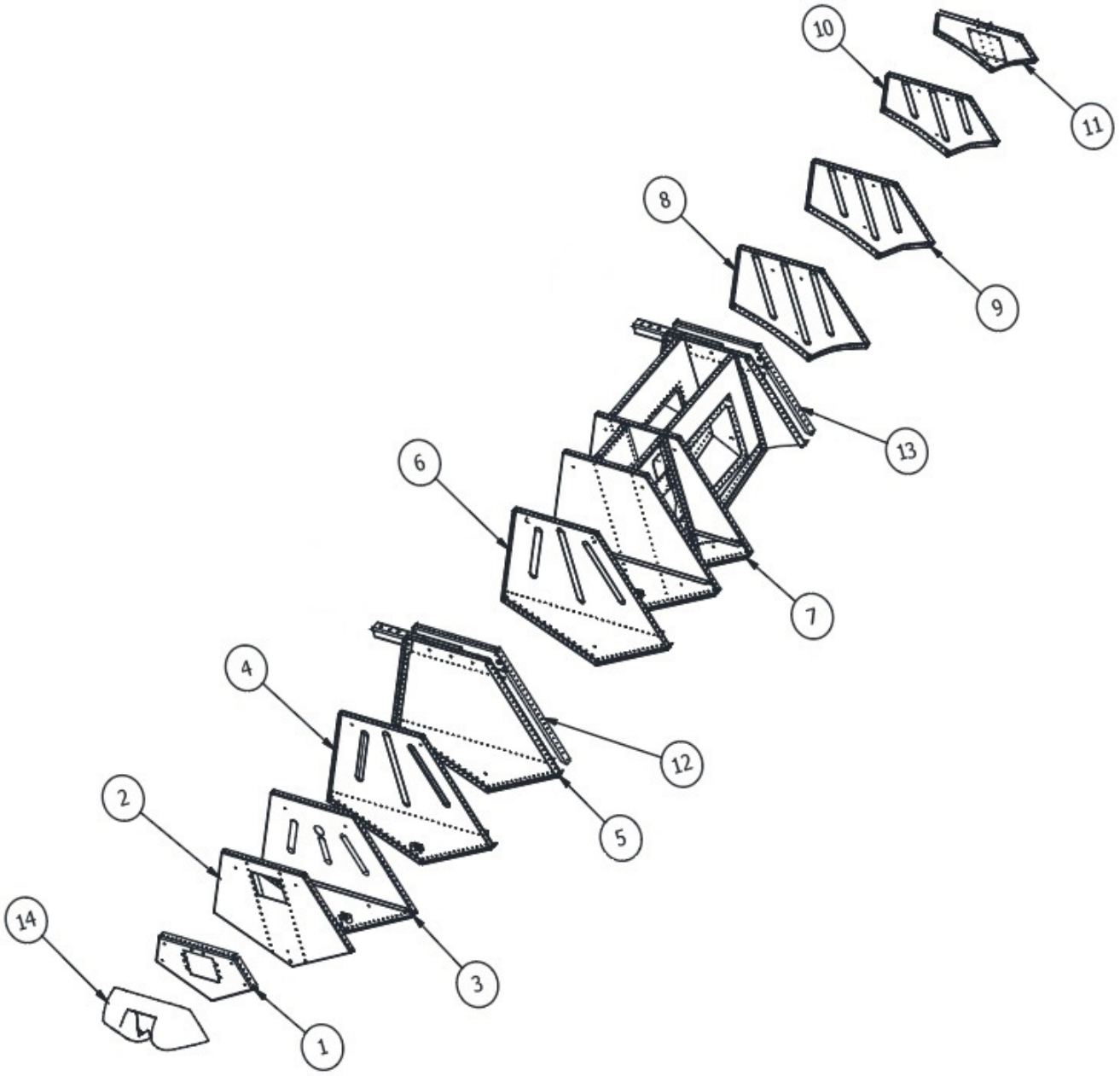
To order an individual part, order the part number associated with item number.

SECTION 1
HULL BULKHEAD ASSEMBLIES

CONTENTS

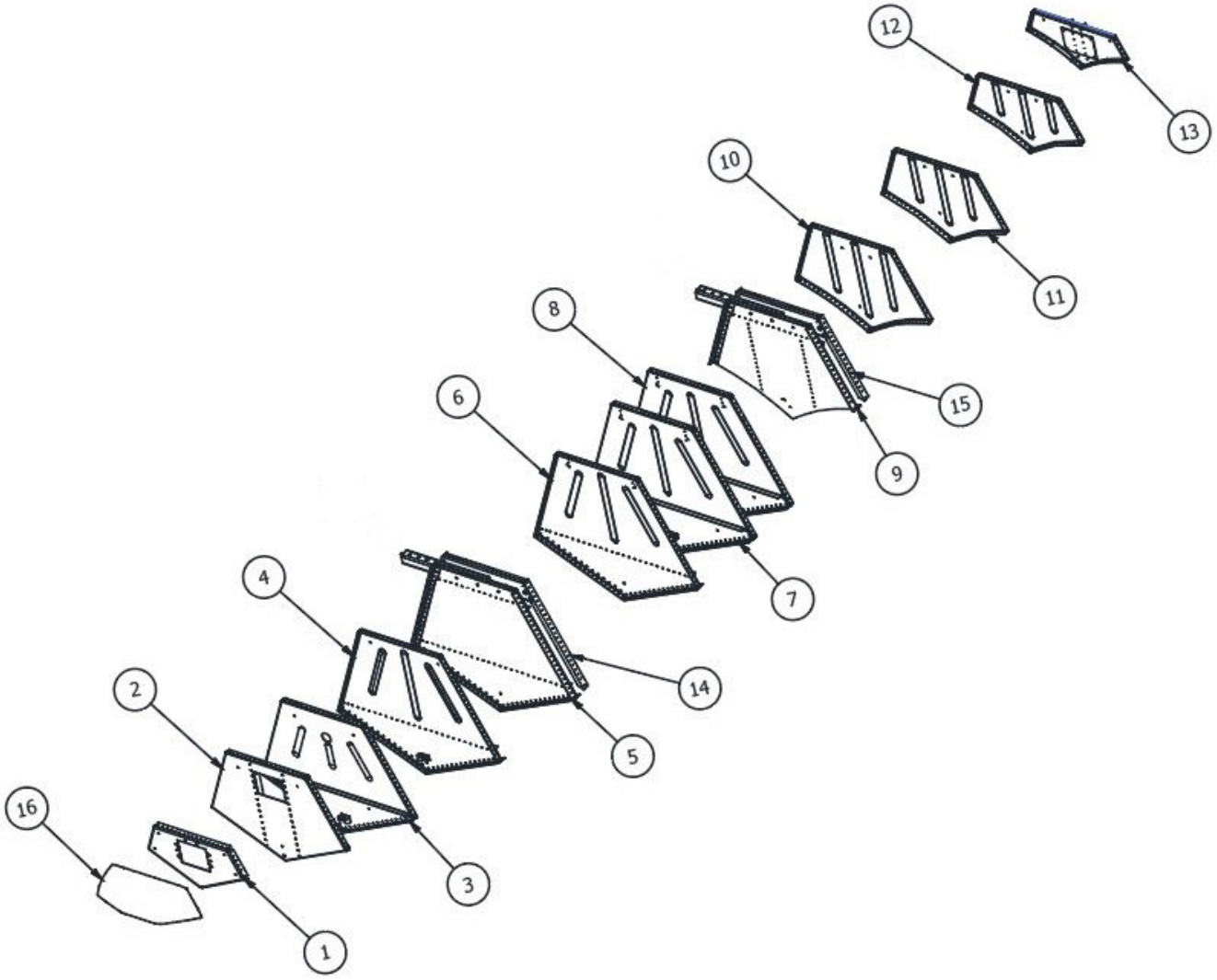
HULL ASSEMBLY OVERVIEW - AMPHIBIAN....10
HULL ASSEMBLY OVERVIEW - SEAPLANE....12
NOSE BUMPER AMPHIBIAN ONLY....14
NOSE BUMPER SEAPLANE ONLY....15
BULKHEAD #1....16
BULKHEAD #3....17
BULKHEAD #4....18
BULKHEAD #5....19
BULKHEAD #6 FWD....20
BULKHEAD #6 AFT....21
BULKHEAD #6 FWD SEAPLANE ONLY....22
BULKHEAD #6 AFT SEAPLANE ONLY....23
BULKHEAD #7 LEFT FLOAT AMPHIBIAN ONLY....24
BULKHEAD #7 RIGHT FLOAT AMPHIBIAN ONLY....25
BULKHEAD #8 LEFT FLOAT AMPHIBIAN ONLY....26
BULKHEAD #8 RIGHT FLOAT AMPHIBIAN ONLY....27
BULKHEAD #10 AMPHIBIAN ONLY....28
BULKHEAD #10 SEAPLANE ONLY....29
BULKHEAD #11....30
BULKHEAD #12....31
BULKHEAD #13....32
BULKHEAD #15....33

HULL ASSEMBLY OVERVIEW - AMPHIBIAN



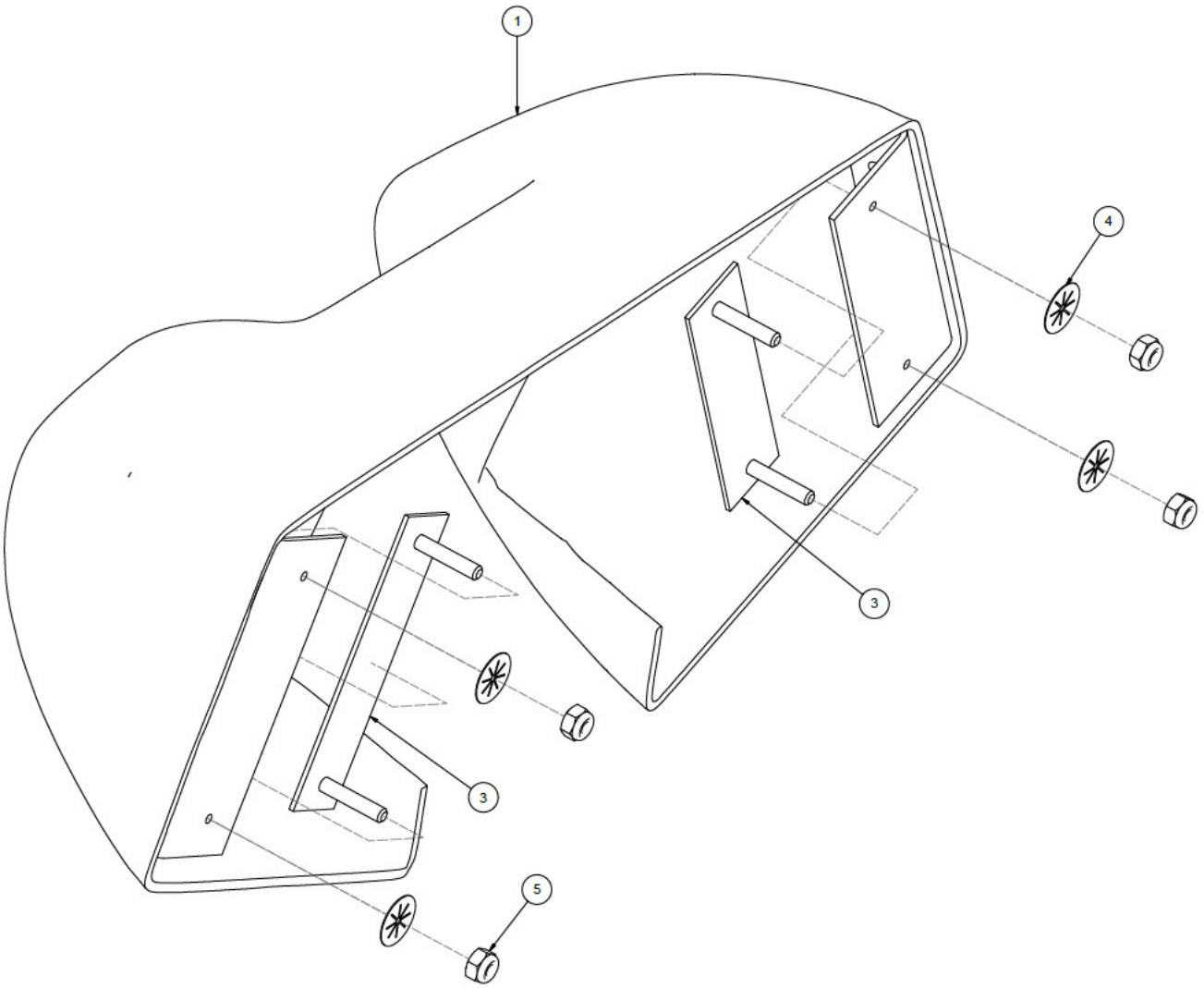
ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	21A01163-067	BULKHEAD #1
2	1	21A01000-265	ASSEMBLY, BULKHEAD #3
3	1	21A01000-261	ASSEMBLY, 2350 BULKHEAD #4
4	1	23A01000-296	ASSEMBLY, BULKHEAD STN #5
5	1	23A01000-297	BULKHEAD STN #6 ASSY
6	1	21A01000-252	ASSEMBLY, 2350 BULKHEAD #6
7 LT	1	21A01000-293	WHEEL WELL BUILD UP ASSY. LT.
7 RT	1	21A01000-294	WHEEL WELL BUILD UP ASSY RT.
8	1	21A01000-395	BULKHEAD STN. #11 ASSY
9	1	21A01000-396	ASSY, BULKHEAD #12
10	1	21A01000-397	ASSEMBLY, BULKHEAD #13
11	1	23A01000-298	BULKHEAD #15 ASSY
12	1	23A01000-302	ASSEMBLY, SPREADER BAR SUPPORT PANEL, FWD, 2350
13	1	21A01000-259	SPREADER BAR PANEL AFT ASSY
14	1	21A01000-295	NOSE BUMPER AMPHIBIAN

HULL ASSEMBLY OVERVIEW - SEAPLANE



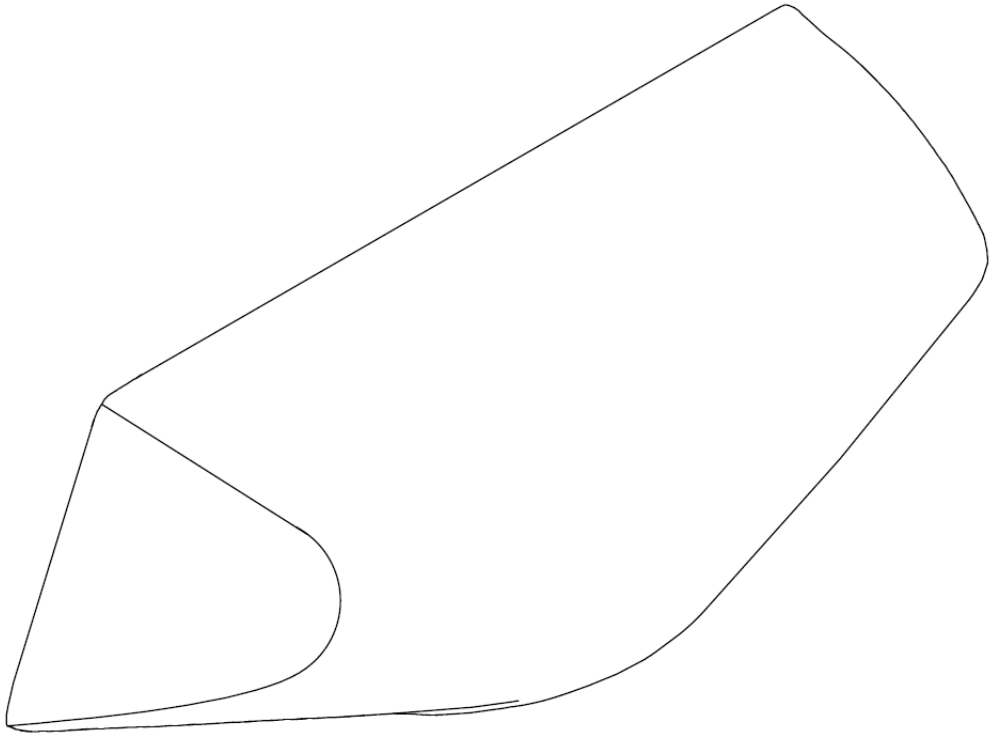
ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	21A01163-067	BULKHEAD #1
2	1	21A01000-265	ASSEMBLY, BULKHEAD #3
3	1	21A01000-261	ASSEMBLY, 2350 BULKHEAD #4
4	1	23A01000-296	ASSEMBLY, BULKHEAD STN #5
5	1	23A01000-297	BULKHEAD STN #6 ASSY
6	1	21A01000-252	ASSEMBLY, 2350 BULKHEAD #6
7	1	21S01000-308	ASSEMBLY, 2350 BULKHEAD #6
8	1	21S01000-309	ASSEMBLY, 2350 BULKHEAD #6
9	1	21S01000-322	ASSEMBLY, BULKHEAD 10, 2350 COMP
10	1	21A01000-395	BULKHEAD STN. #11 ASSY
11	1	21A01000-396	ASSY, BULKHEAD #12
12	1	21A01000-397	ASSEMBLY, BULKHEAD #13
13	1	23A01000-298	BULKHEAD #15 ASSY
14	1	23A01000-302	ASSY, SPREADER BAR PANEL, FWD
15	1	21A01000-259	ASSY, SPREADER BAR PANEL, AFT
16	1	21S01738-001	NOSE BUMPER - SEAPLANE

NOSE BUMPER AMPHIBIAN ONLY



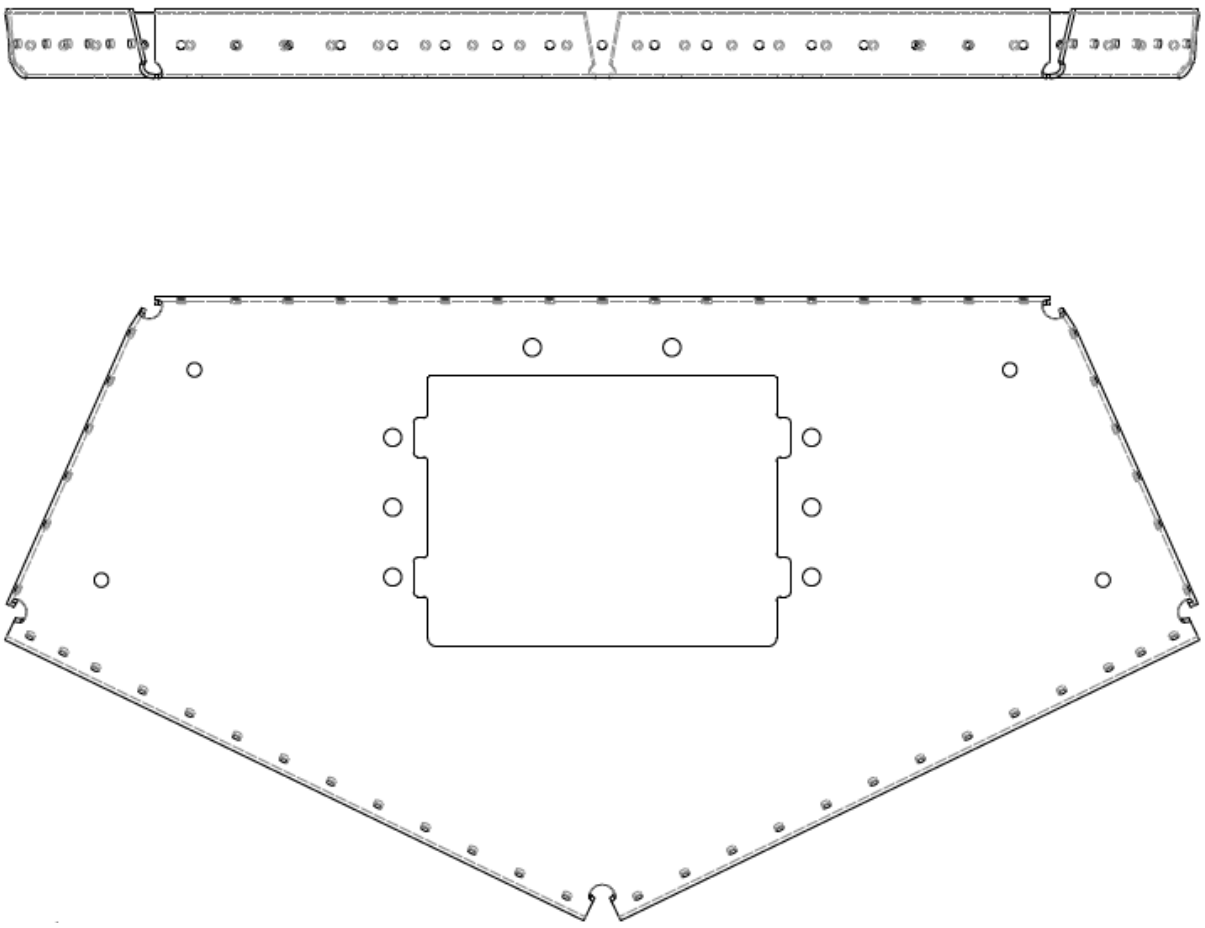
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21A01000-295	NOSE BUMPER - AMPHIBIAN
1	1	21A01000-295-1	NOSE BUMPER
2	2	21A01000-295-2	ANGLE, MOUNT, NOSE BUMPER
3	2	21A01000-295-3	PLATE, SCREW MOUNT, NOSE BUMPER
4	4	4HFW3	PUSH NUT WASHER
5	4	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
6	4	MS51958-67	SCREW, BUTTON HEAD

NOSE BUMPER SEAPLANE ONLY



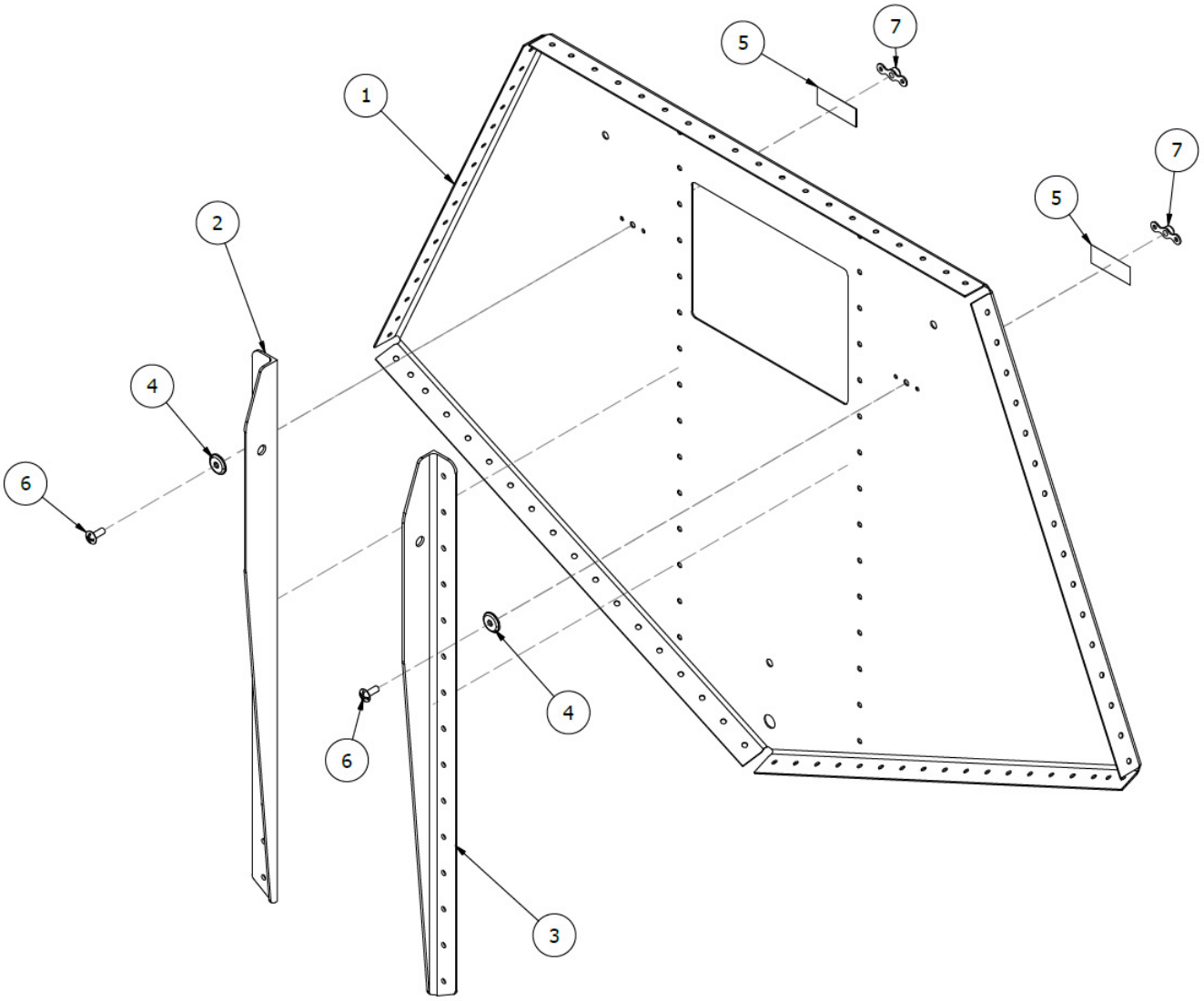
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21S01738-001	NOSE BUMPER - 2100 SEAPLANE

BULKHEAD #1



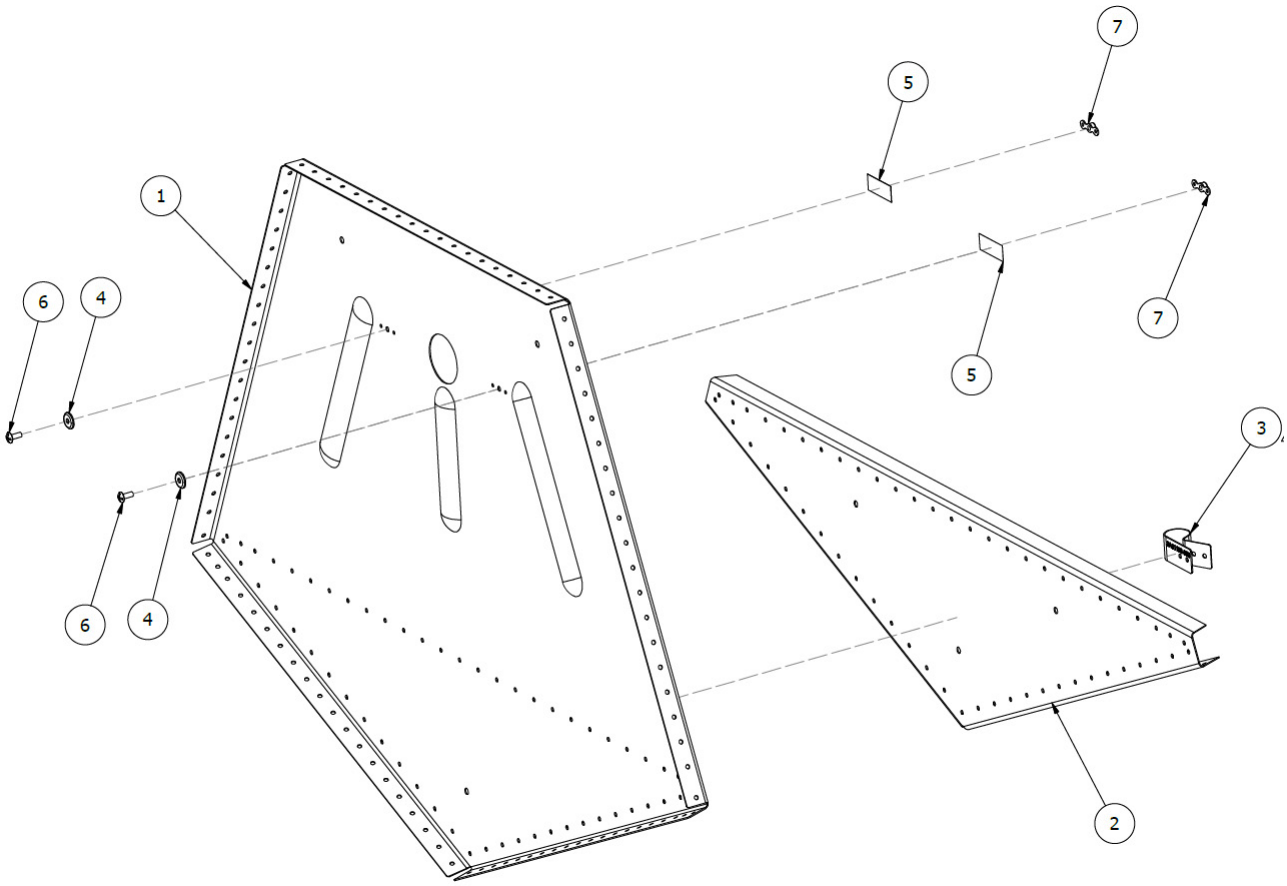
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21A01163-067	BULKHEAD #1

BULKHEAD #3



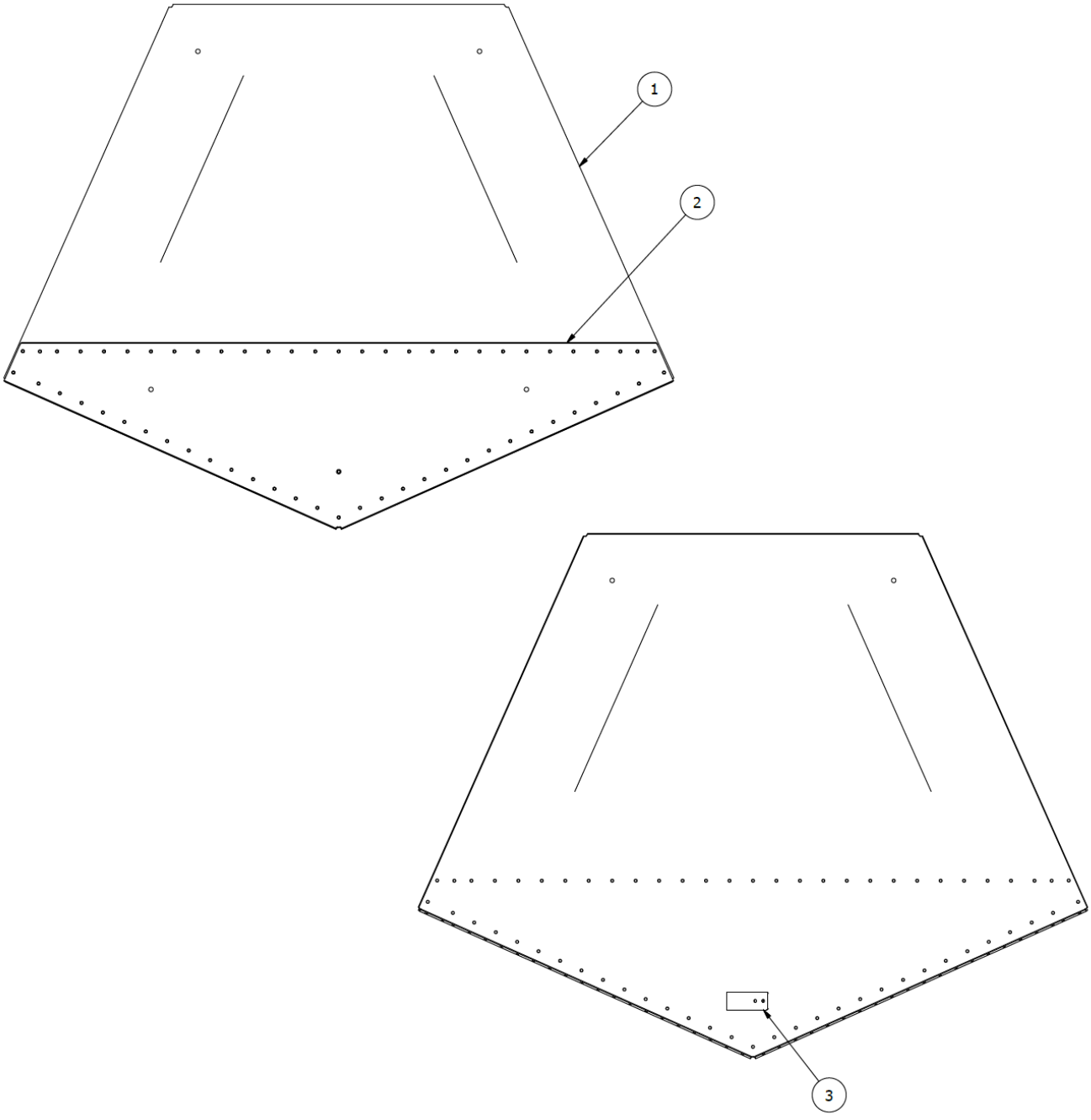
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21A01000-265	ASSEMBLY, BULKHEAD #3
1	1	21A01158-184	PANEL, BULKHEAD 3
2	1	21A01326-005	ANGLE, SUPPORT, BULKHEAD 3
3	1	21A01326-006	ANGLE, SUPPORT, BULKHEAD 3
4	2	94154A100	WASHER, STAINLESS STEEL W/PVC PLASTIC, SEALING
5	2.5 IN	9903-13-36	TAPE, TINNERMAN, 1/2"X.005"
6	2	AN526-632R6	SCREW, MACHINE, TRUSS HEAD
7	2	MS21047L06	NUT PLATE, FIXED, STEEL, PLAIN, 6-32

BULKHEAD #4



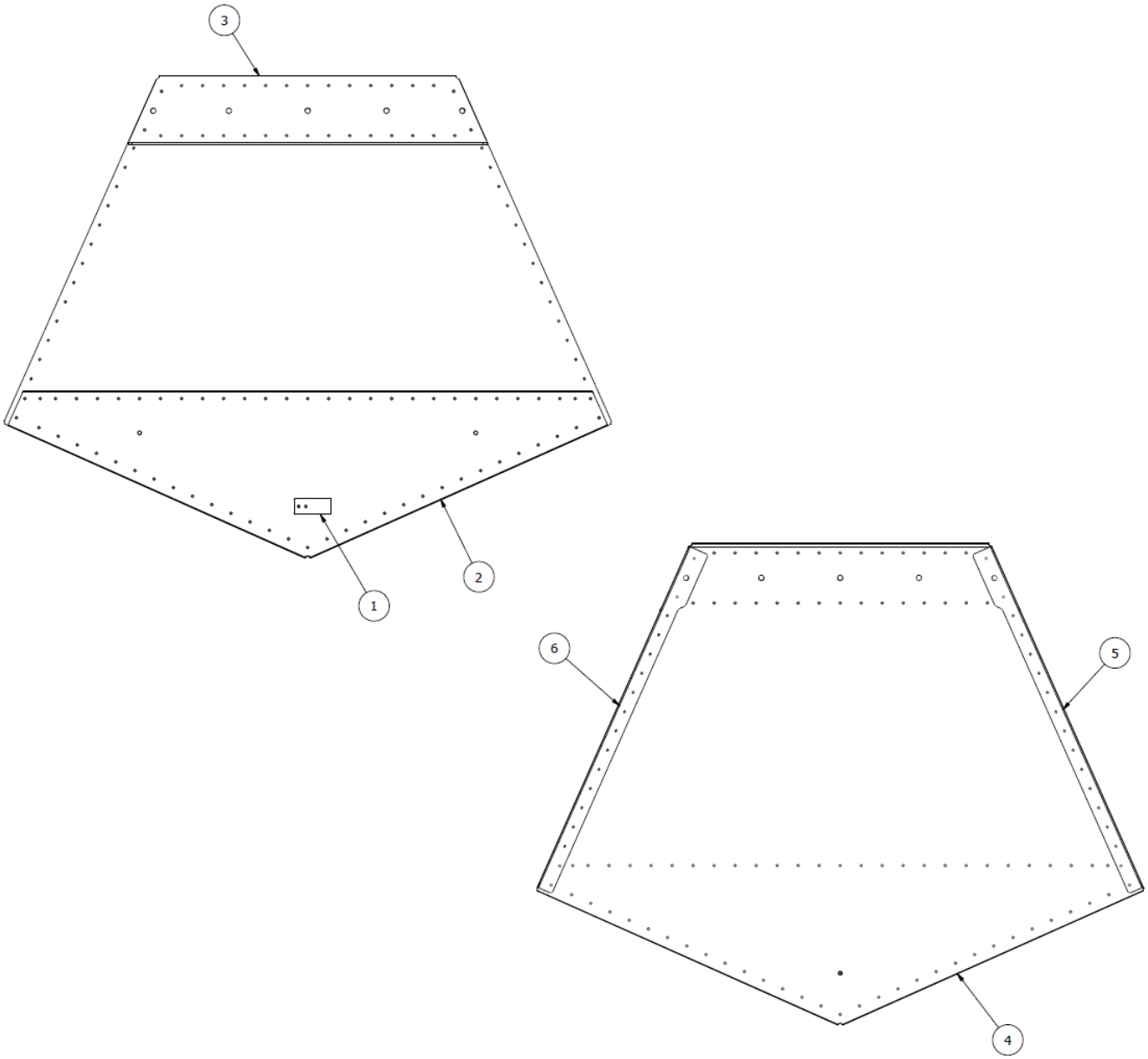
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21A01000-261	ASSEMBLY, BULKHEAD #4
1	1	21A01158-174	PANEL, BULKHEAD 4
2	1	21A01158-175	SUPPORT BULKHEAD 4
3	1	3A01158-003	CLAMP, PUMP OUT TUBE
4	2	94154A100	WASHER, STAINLESS STEEL W/PVC PLASTIC, SEALING
5	2.5 IN	9903-13-36	TAPE, TINNERMAN, 1/2"X.005"
6	2	AN526-632R6	SCREW, MACHINE, TRUSS HEAD
7	2	MS21047L06	NUT PLATE, FIXED, STEEL, PLAIN, 6-32

BULKHEAD #5



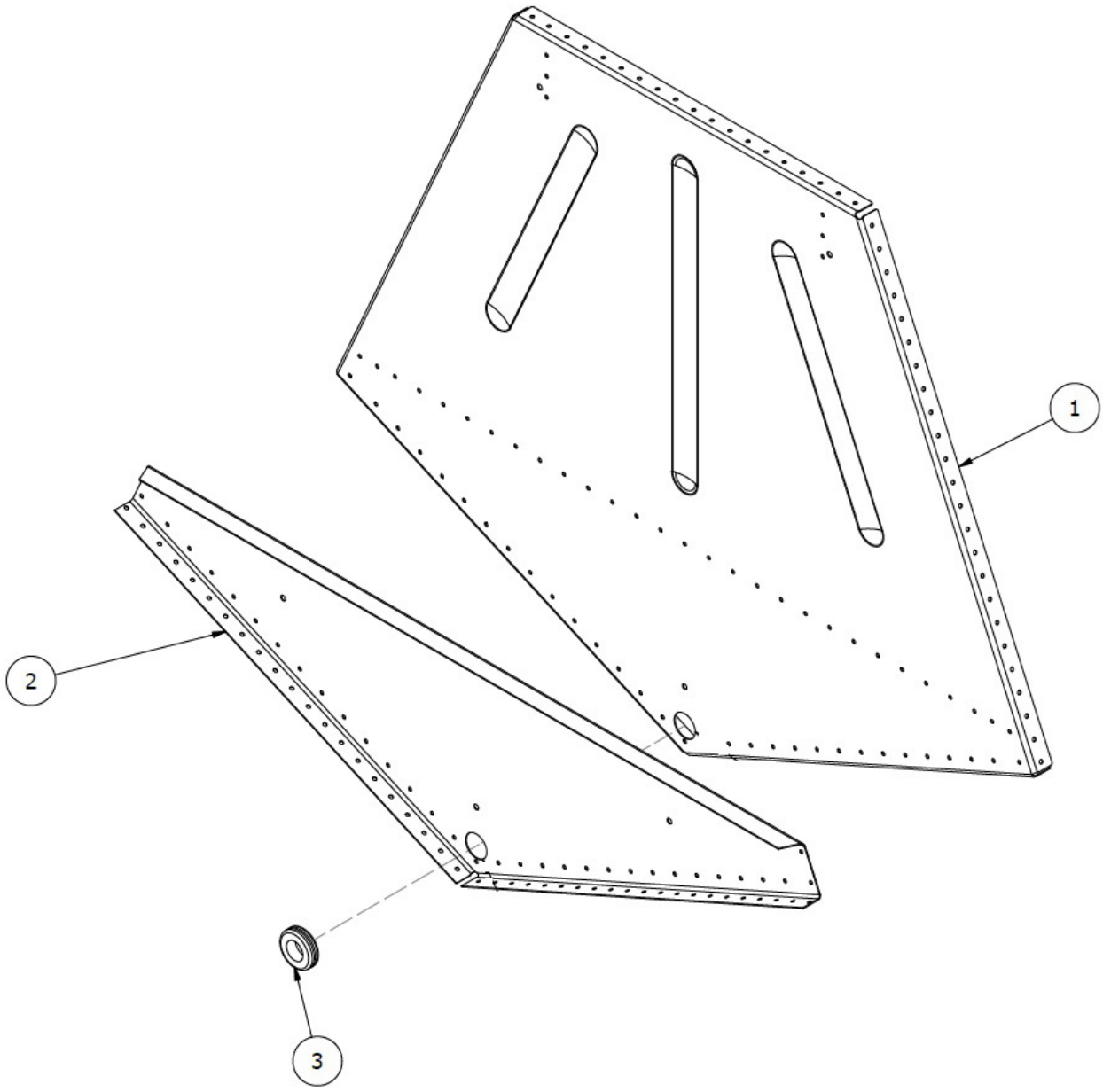
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	23A01000-296	ASSEMBLY, BULKHEAD STN #5
1	1	23A01158-196	BULKHEAD #5 - FORMED
2	2	21A01158-177	SUPPORT, BULKHEAD #6
3	3	3A01158-003	CLAMP, PUMP OUT TUBE

BULKHEAD #6 FWD



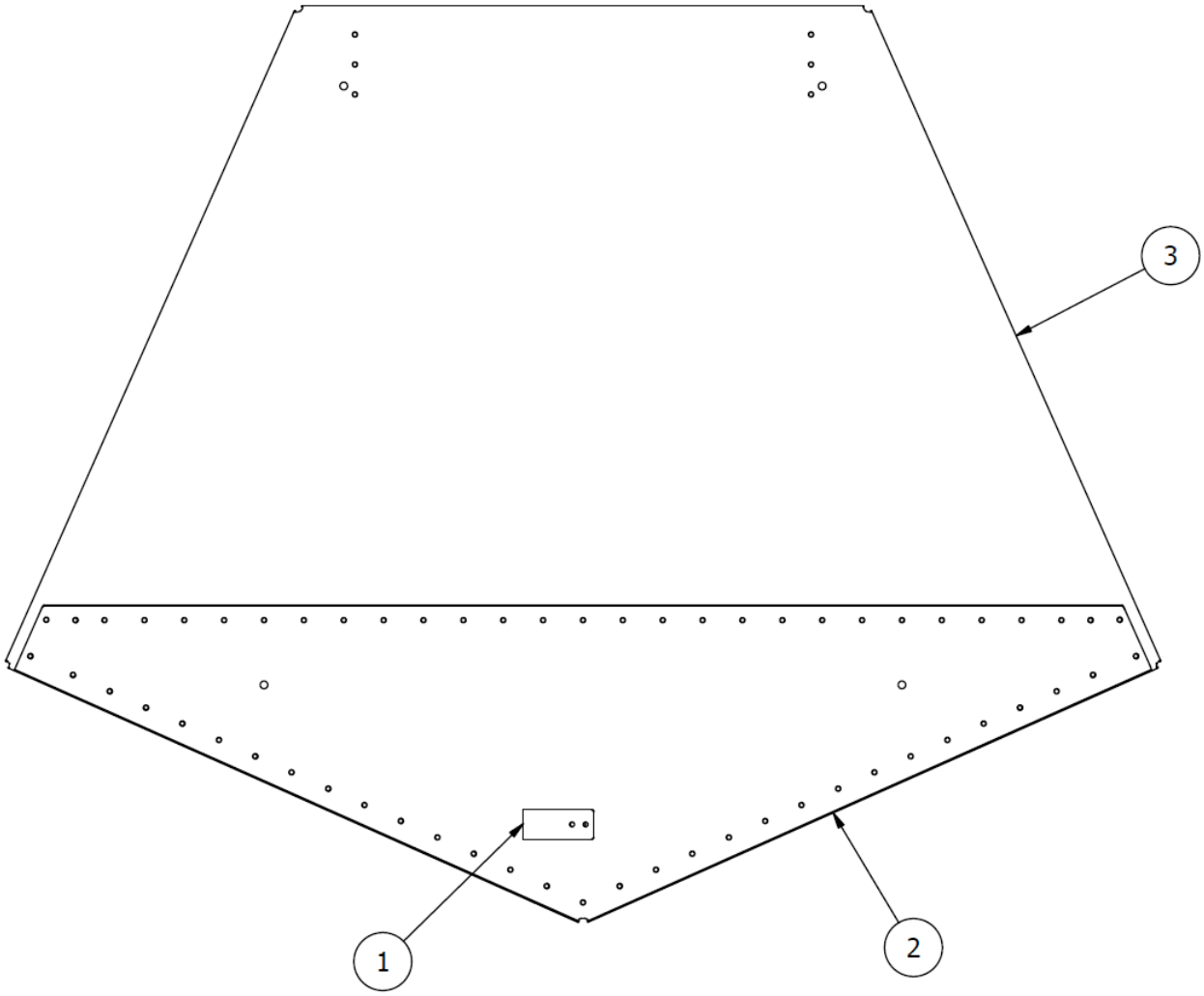
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	23A01000-297	BULKHEAD STN #6 ASSY
1	1	3A01158-003	CLAMP, PUMP OUT TUBE
2	1	21A01158-177	SUPPORT, BULKHEAD # 6
3	1	21A01163-066	SPREADER BAR PANEL
4	1	23A01158-197	BULKHEAD #6 - 2350
5	1	23A01326-016	ANGLE, BULKHEAD STN #5
6	1	23A01326-017	ANGLE, BULKHEAD STN #5

BULKHEAD #6 AFT



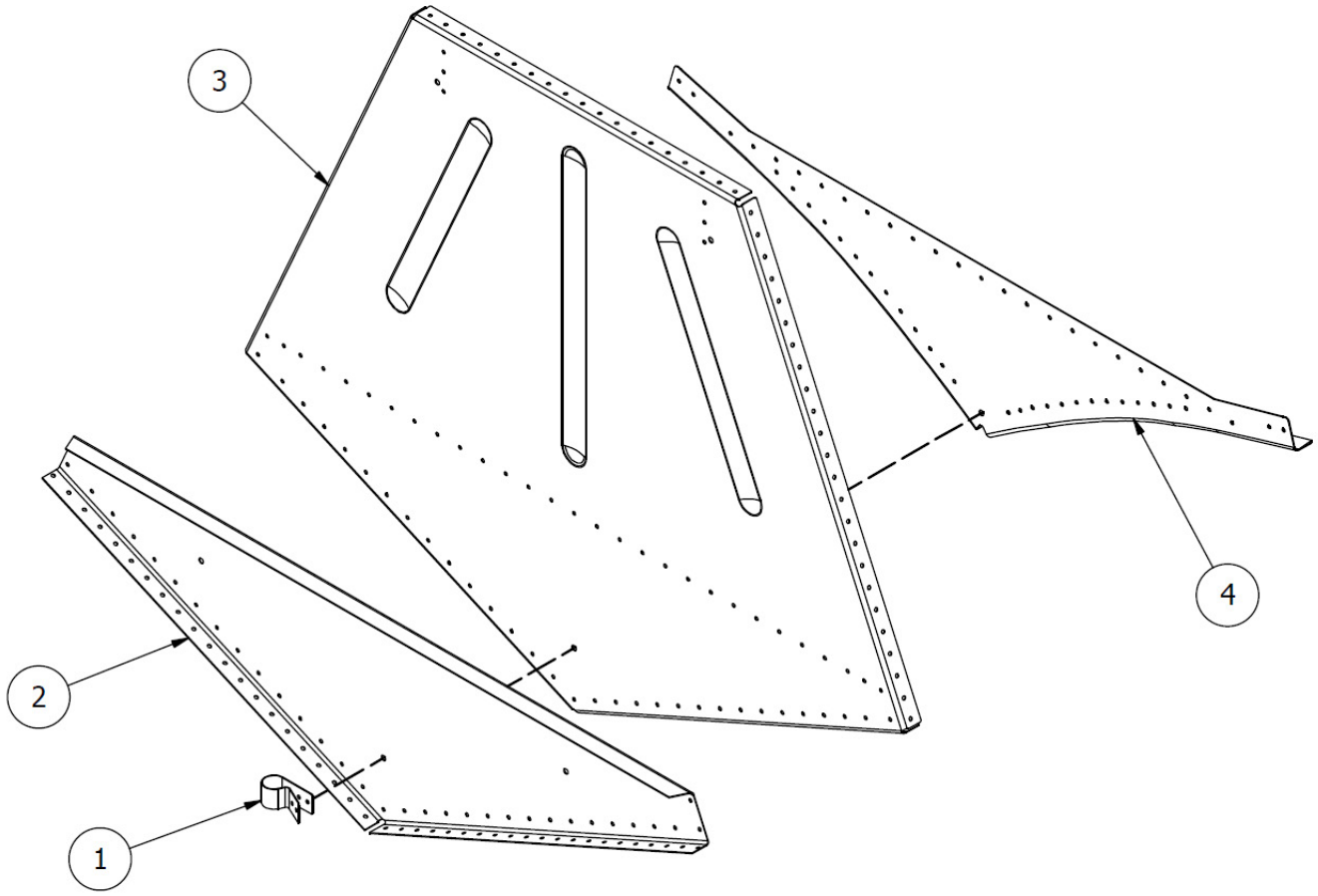
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21A01000-252	ASSEMBLY, 2350 BULKHEAD #6
1	1	21A01158-189	BULKHEAD #6
2	1	21A01158-177	SUPPORT, BULKHEAD # 6
3	1	MS35489-19	GROMMET, RUBBER

BULKHEAD #6 FWD SEAPLANE ONLY



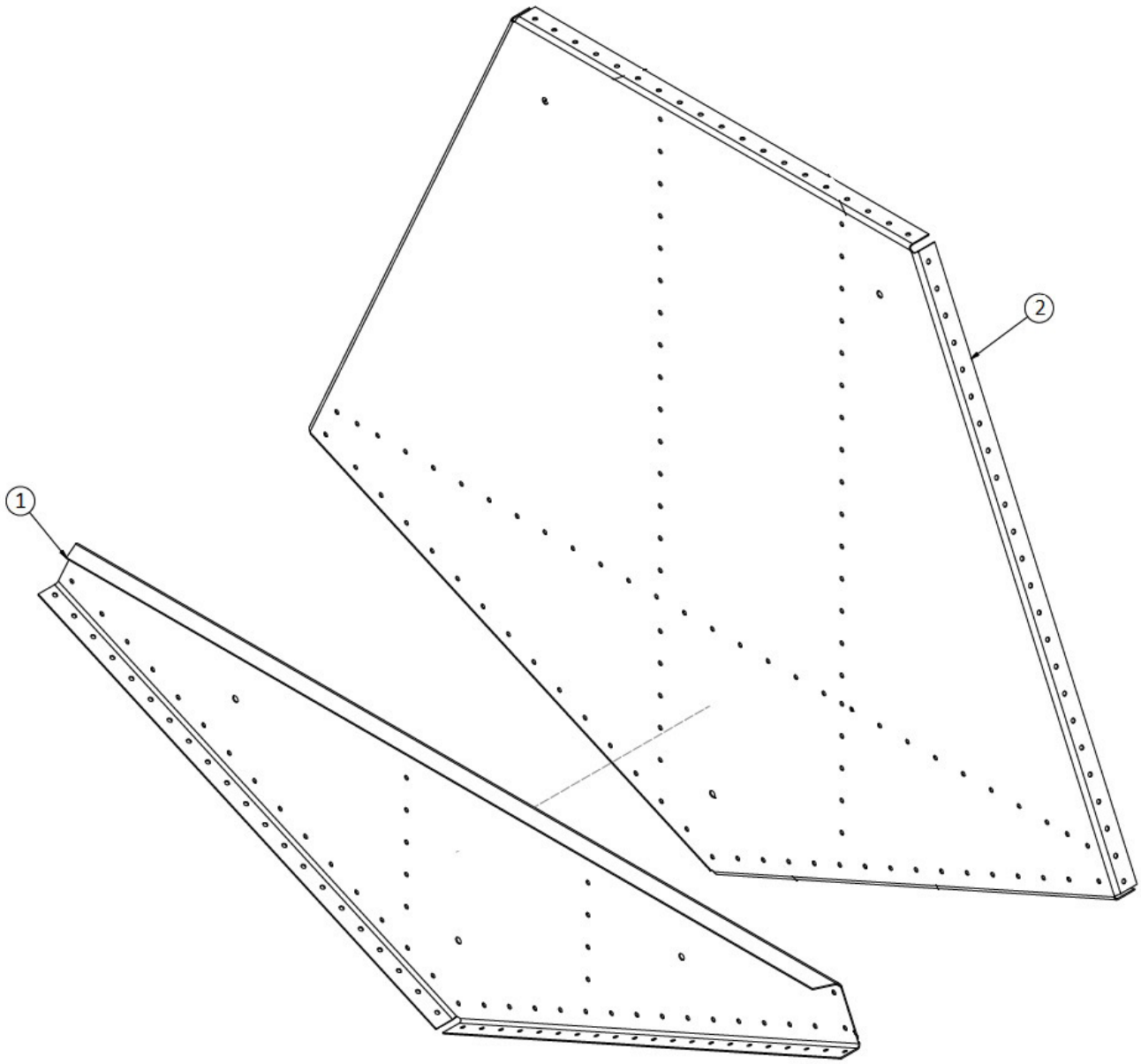
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21S01000-308	ASSEMBLY, 2350 BULKHEAD #6 SEAPLANE
1	1	3A01158-003	CLAMP, PUMP OUT TUBE
2	1	21A01158-177	SUPPORT, BULKHEAD #6
3	1	21A01158-189	BULKHEAD #6

BULKHEAD #6 AFT SEAPLANE ONLY



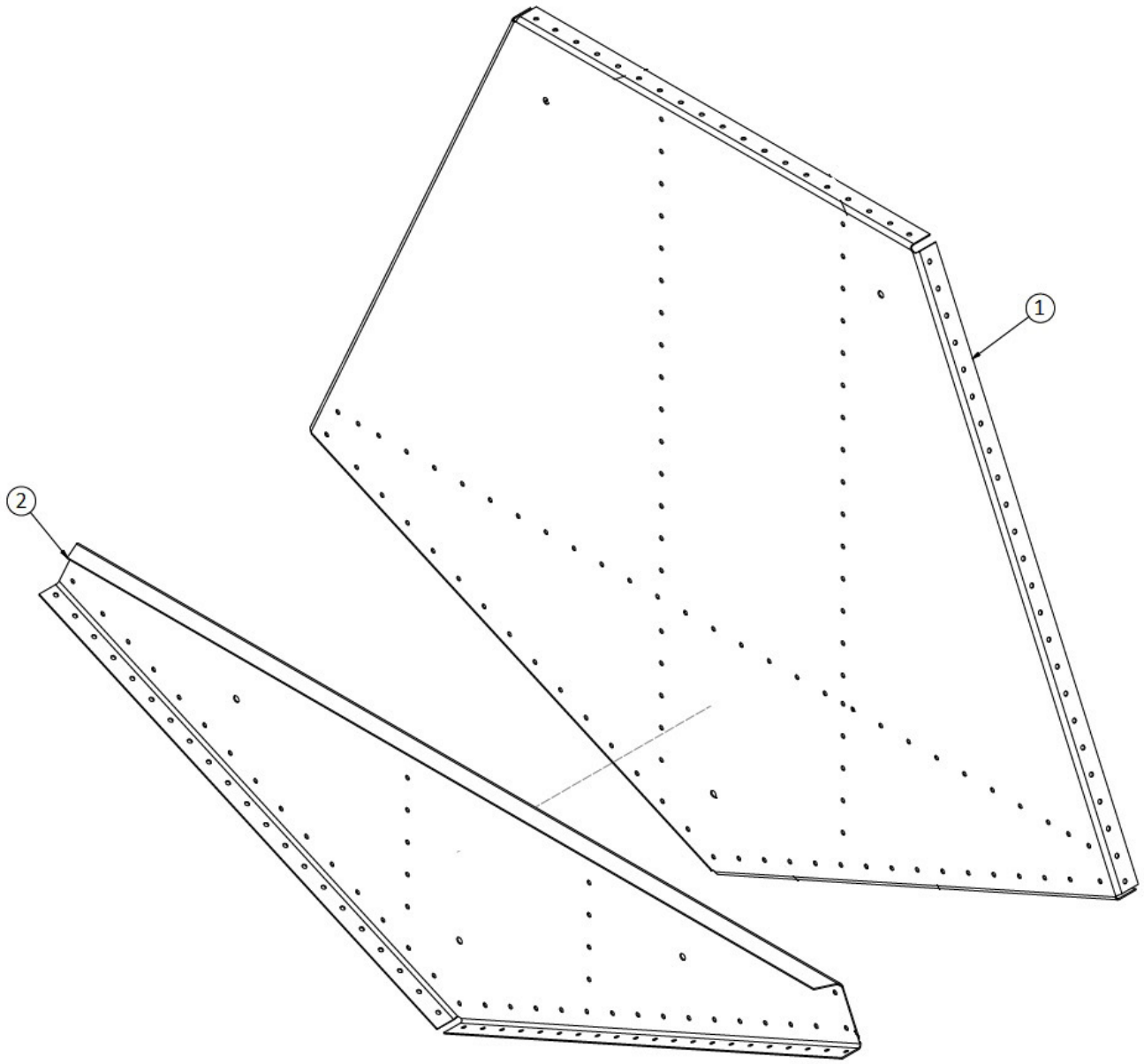
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21S01000-309	ASSEMBLY, 2350 BULKHEAD #6 SEAPLANE
1	1	3A01158-003	CLAMP, PUMP OUT TUBE
2	1	21A01158-177	SUPPORT, BULKHEAD #6
3	1	21A01158-189	BULKHEAD #6
4	1	21S01158-203	ANGLE, BULKHEAD #8 AFT

BULKHEAD #7 LEFT FLOAT AMPHIBIAN ONLY



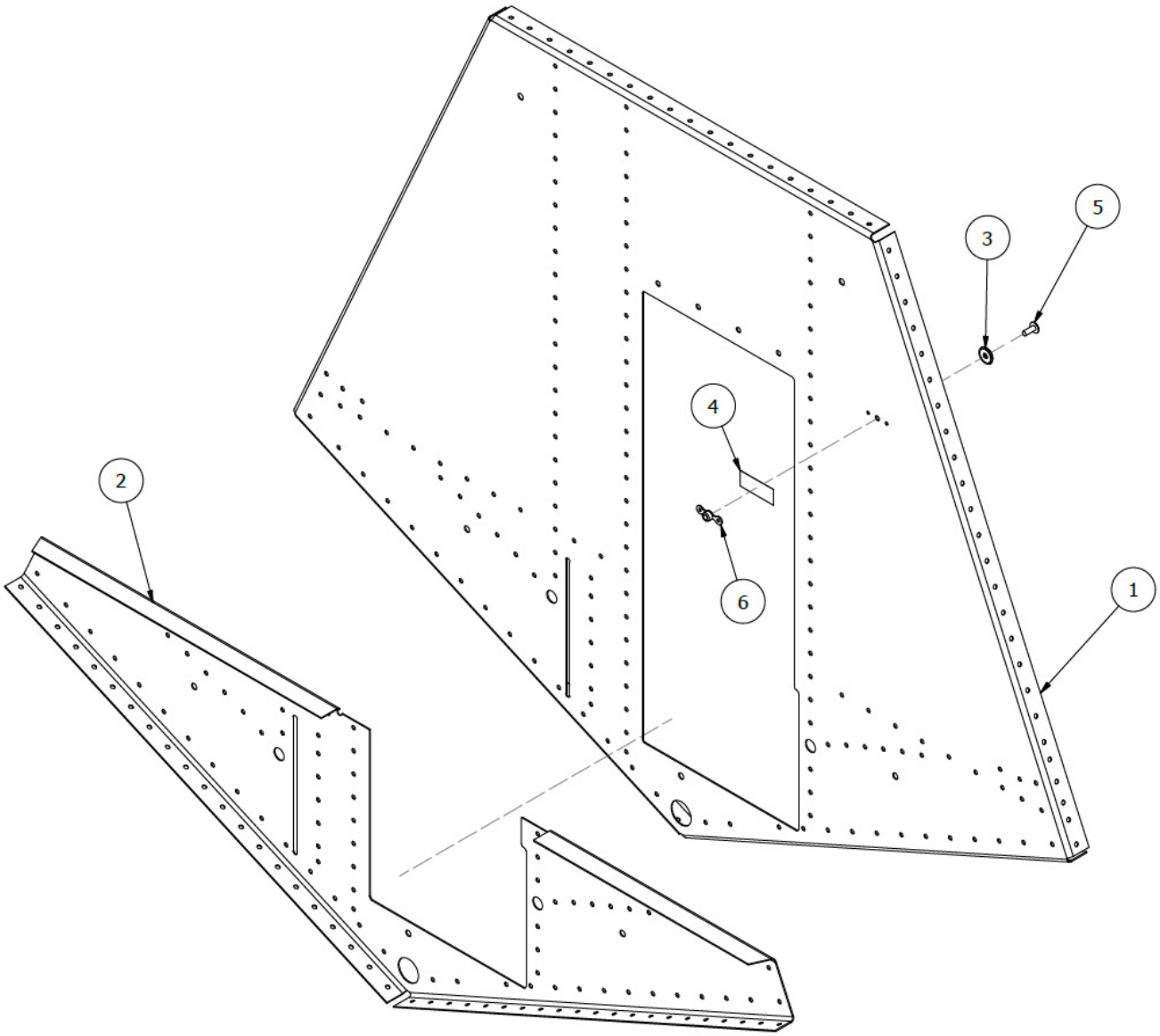
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21A01000-267	ASSEMBLY, BULKHEAD #7, LH
1	1	21A01158-187	SUPPORT, BLKHD 7, RH, 2350
2	1	21A01158-181	BULKHEAD #7 - LH

BULKHEAD #7 RIGHT FLOAT AMPHIBIAN ONLY



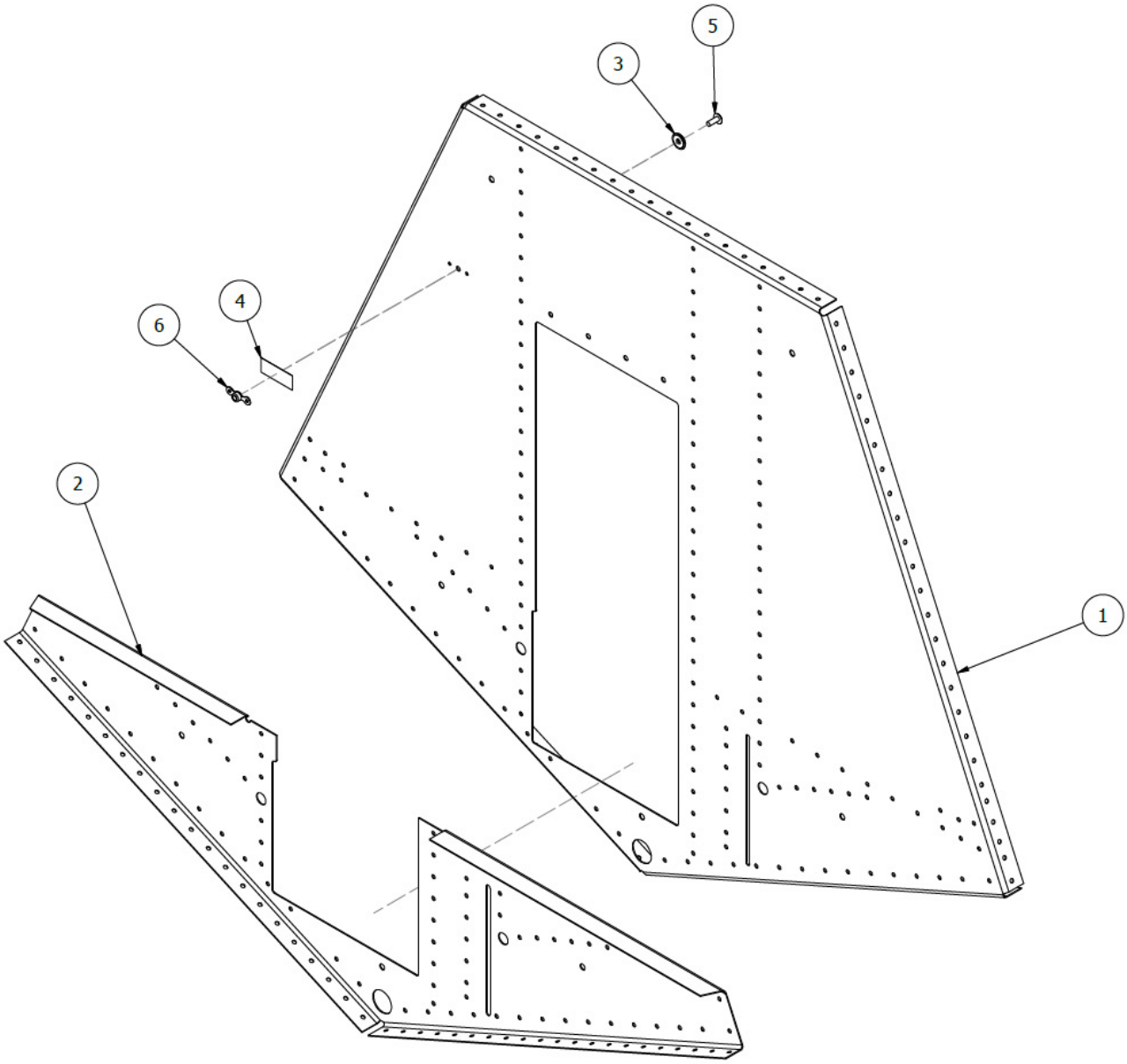
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21A01000-266	ASSEMBLY, BULKHEAD #7, RH
1	1	21A01158-182	BULKHEAD #7 - RH
2	1	21A01158-188	SUPPORT, BLKHD 7, LH, 2350

BULKHEAD #8 LEFT FLOAT AMPHIBIAN ONLY



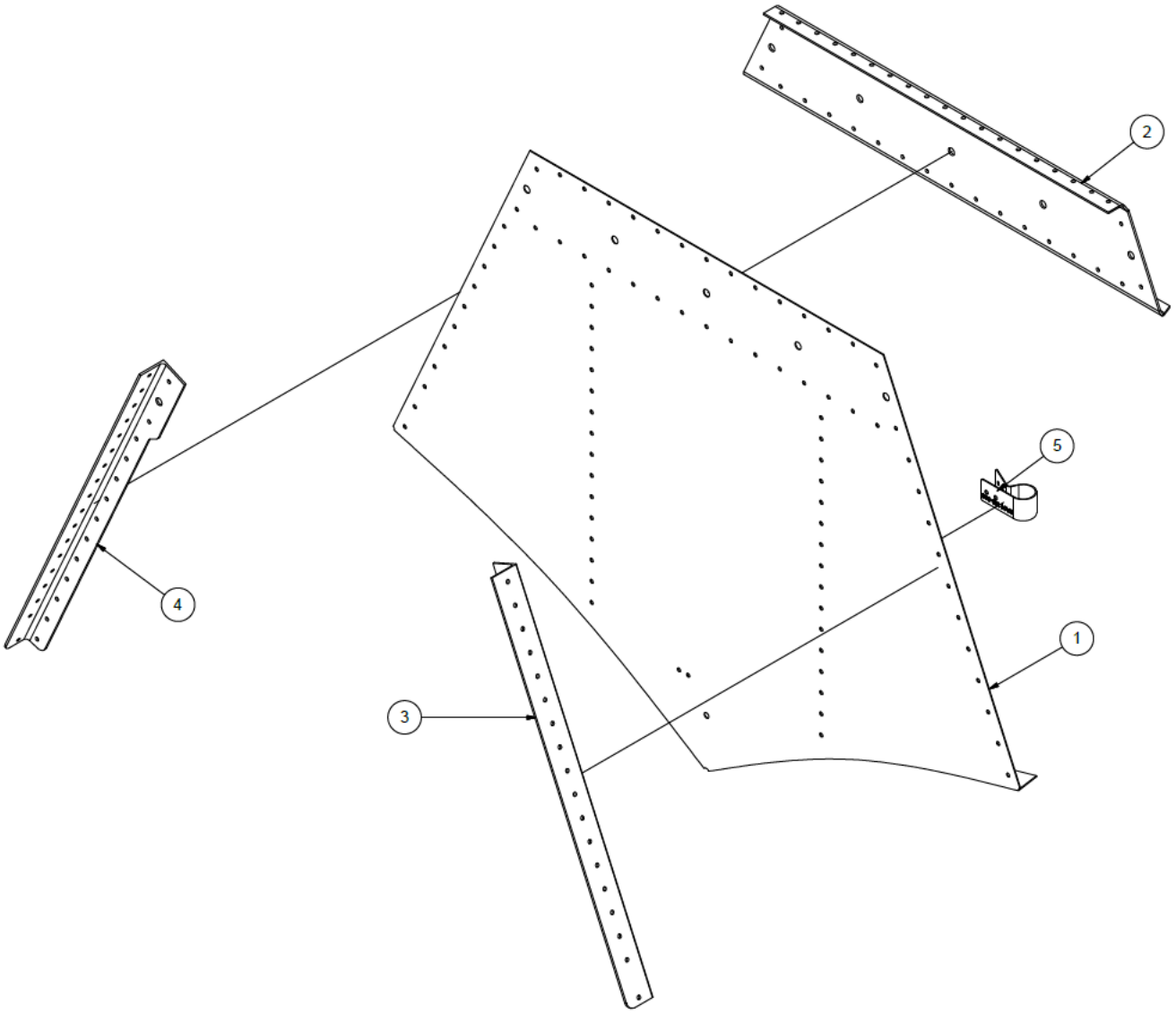
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21A01000-263	ASSY, BULKHEAD #8, LH
1	1	21A01158-191	PANEL, BULKHEAD 8, LH
2	1	21A01158-193	SUPPORT - LH - BULKHEAD #8
3	1	94154A100	WASHER, STAINLESS STEEL W/PVC PLASTIC, SEALING
4	1.25 IN	9903-13-36	TAPE, TINNERMAN, 1/2"X.005"
5	1	AN526-632R6	SCREW, MACHINE, TRUSS HEAD
6	1	MS21047L06	NUT PLATE, FIXED, STEEL, PLAIN, 6-32

BULKHEAD #8 RIGHT FLOAT AMPHIBIAN ONLY



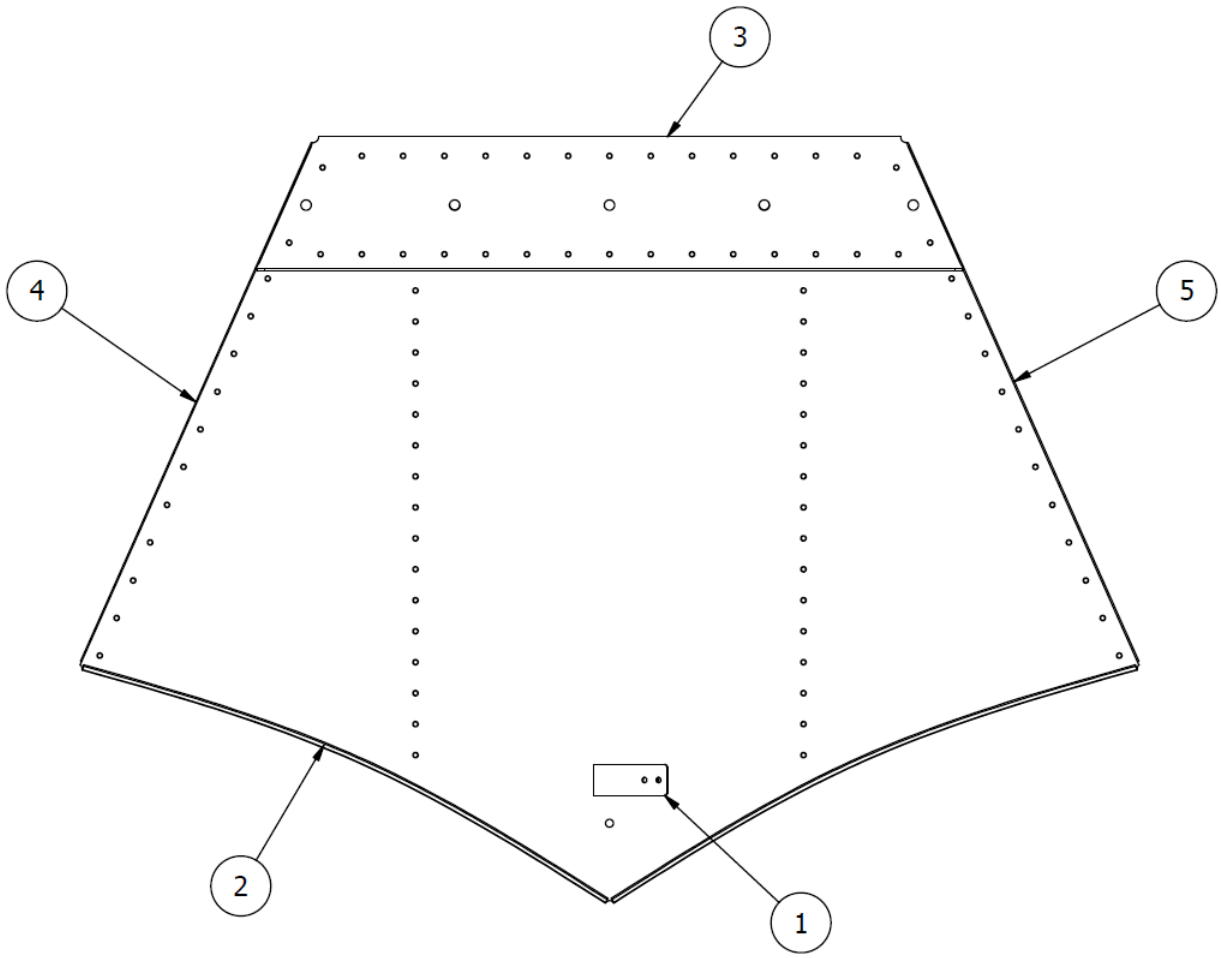
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21A01000-264	ASSY, BULKHEAD #8, RH
1	1	21A01158-190	PANEL, BULKHEAD 8, RH
2	1	21A01158-192	SUPPORT - RH - BULKHEAD #8
3	1	94154A100	WASHER, STAINLESS STEEL W/PVC PLASTIC, SEALING
4	1.25 IN	9903-13-36	TAPE, TINNERMAN, 1/2"X.005"
5	1	AN526-632R6	SCREW, MACHINE, TRUSS HEAD
6	1	MS21047L06	NUT PLATE, FIXED, STEEL, PLAIN, 6-32

BULKHEAD #10 AMPHIBIAN ONLY



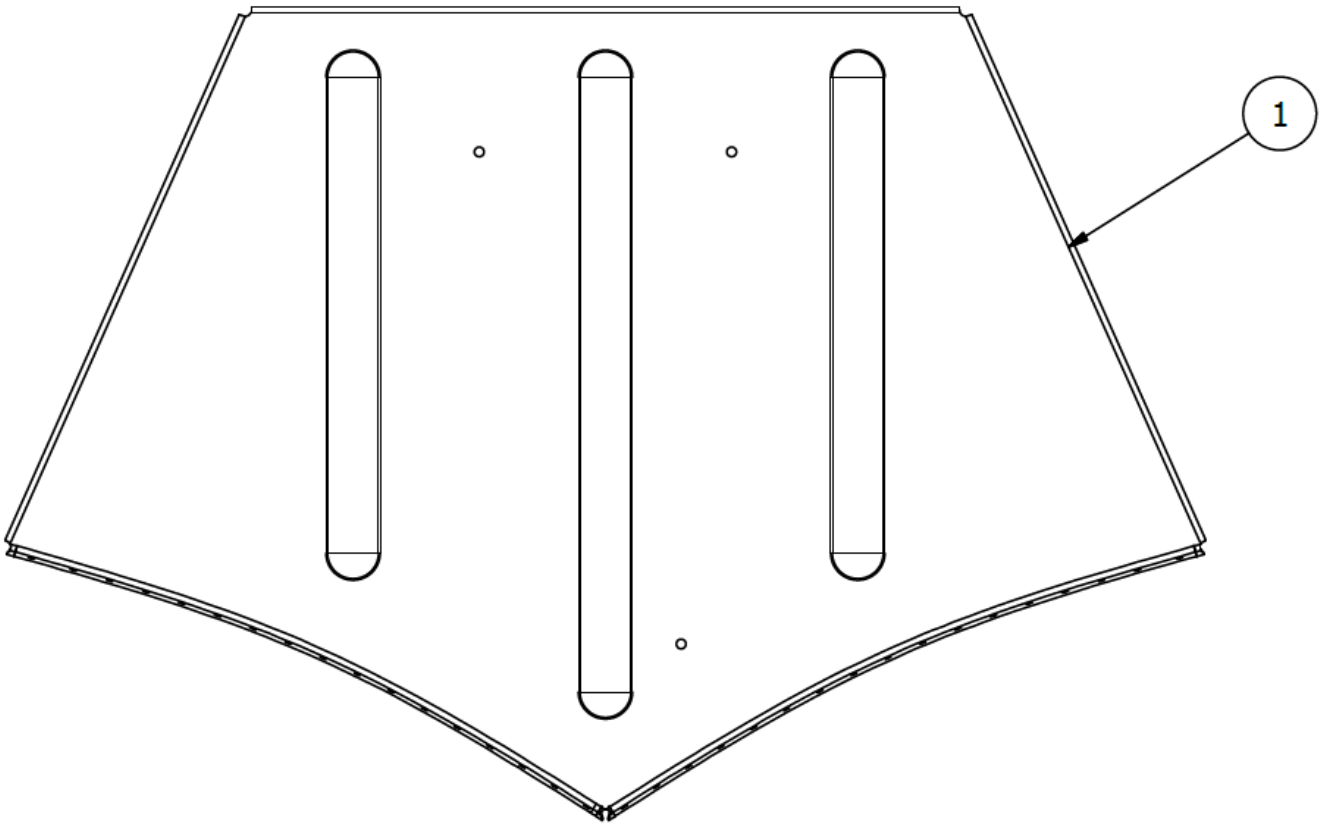
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21A01000-262	ASSY, BLKHD 10, 2350 COMP
1	1	21A01158-169	BULKHEAD #10 - FORMED
2	1	21A01163-066	SPREADER BAR PANEL
3	1	21A01326-011	ANGLE, SIDE BAR, BULKHEAD #10, LF
4	1	21A01326-012	ANGLE, SIDE BAR, BULKHEAD #10, RT
5	1	3A01158-003	CLAMP, PUMP OUT TUBE

BULKHEAD #10 SEAPLANE ONLY



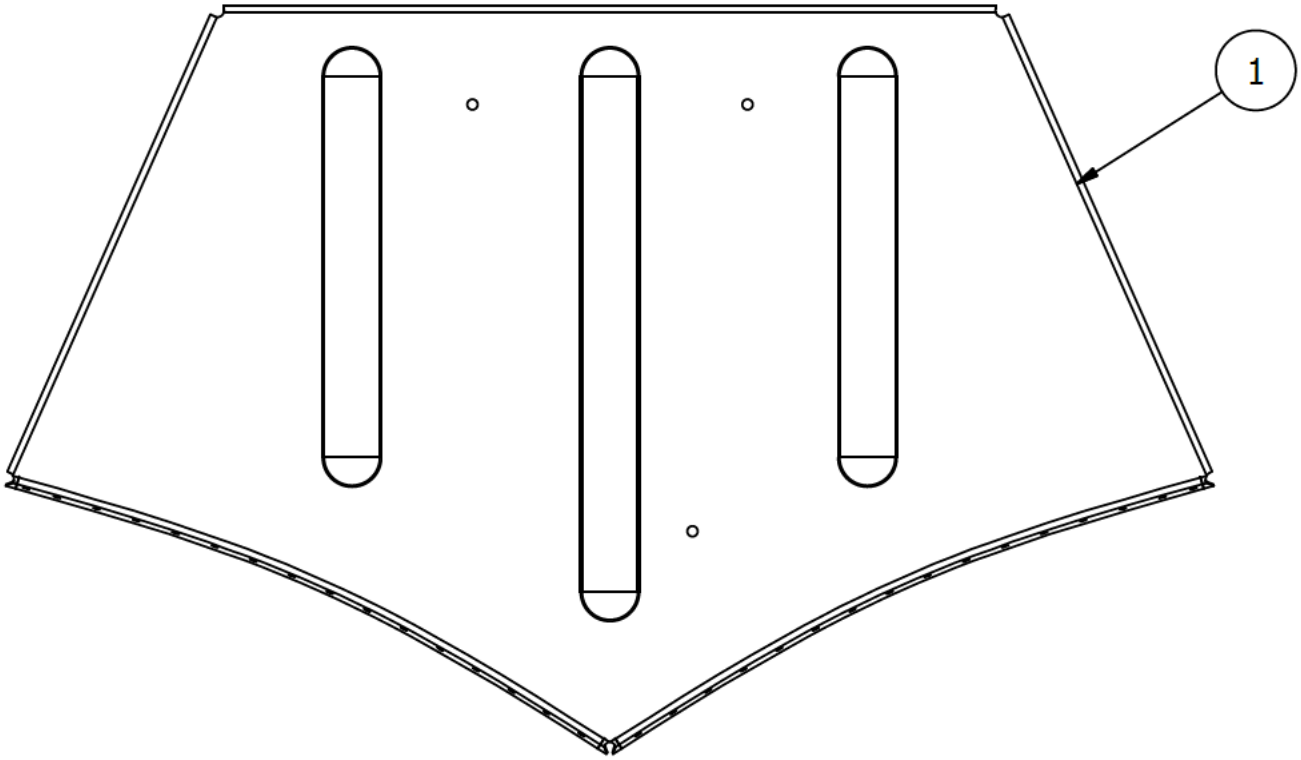
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21S01000-322	ASSEMBLY, BULKHEAD 10, 2350 COMP
1	1	3A01158-003	CLAMP, PUMP OUT TUBE
2	1	21A01158-169	BULKHEAD #10 - FORMED
3	1	21A01163-066	SPREADER BAR PANEL
4	1	21A01326-011	ANGLE, SIDE BAR, BULKHEAD #10, LF
5	1	21A01326-012	ANGLE, SIDE BAR, BULKHEAD #10, RT

BULKHEAD #11



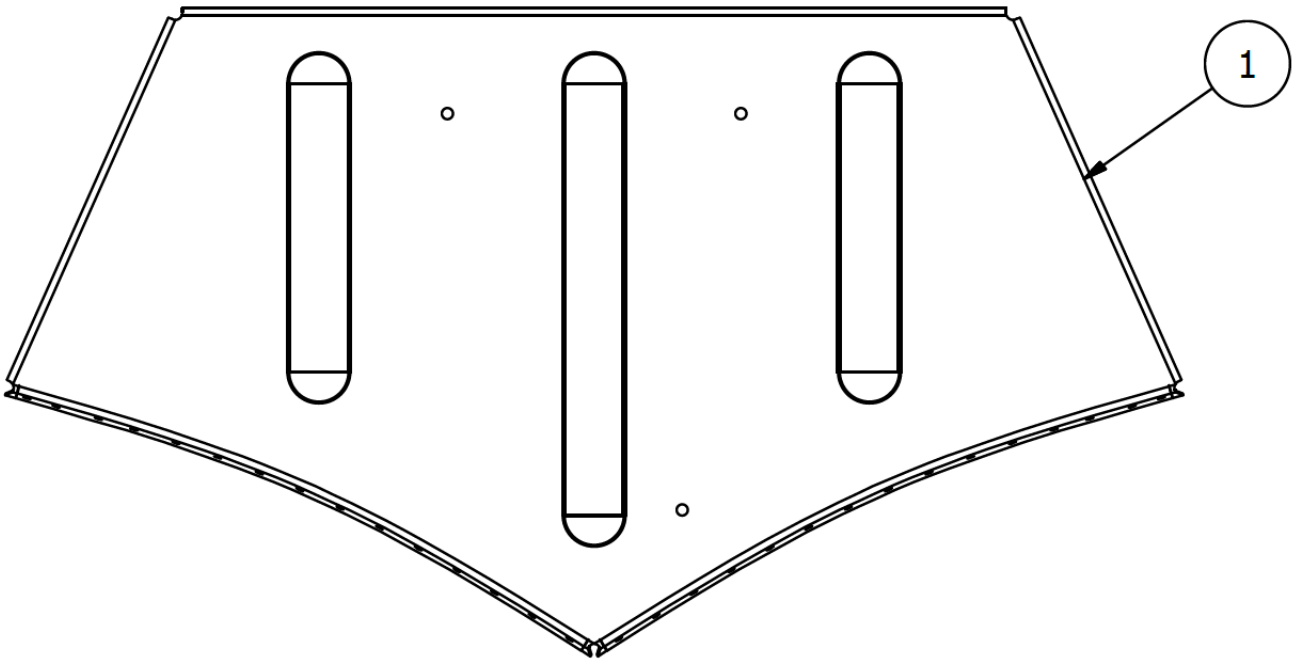
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21A01000-395	BULKHEAD STN. #11 ASSY
1	1	21A01158-168	BULKHEAD #11 - FORMED

BULKHEAD #12



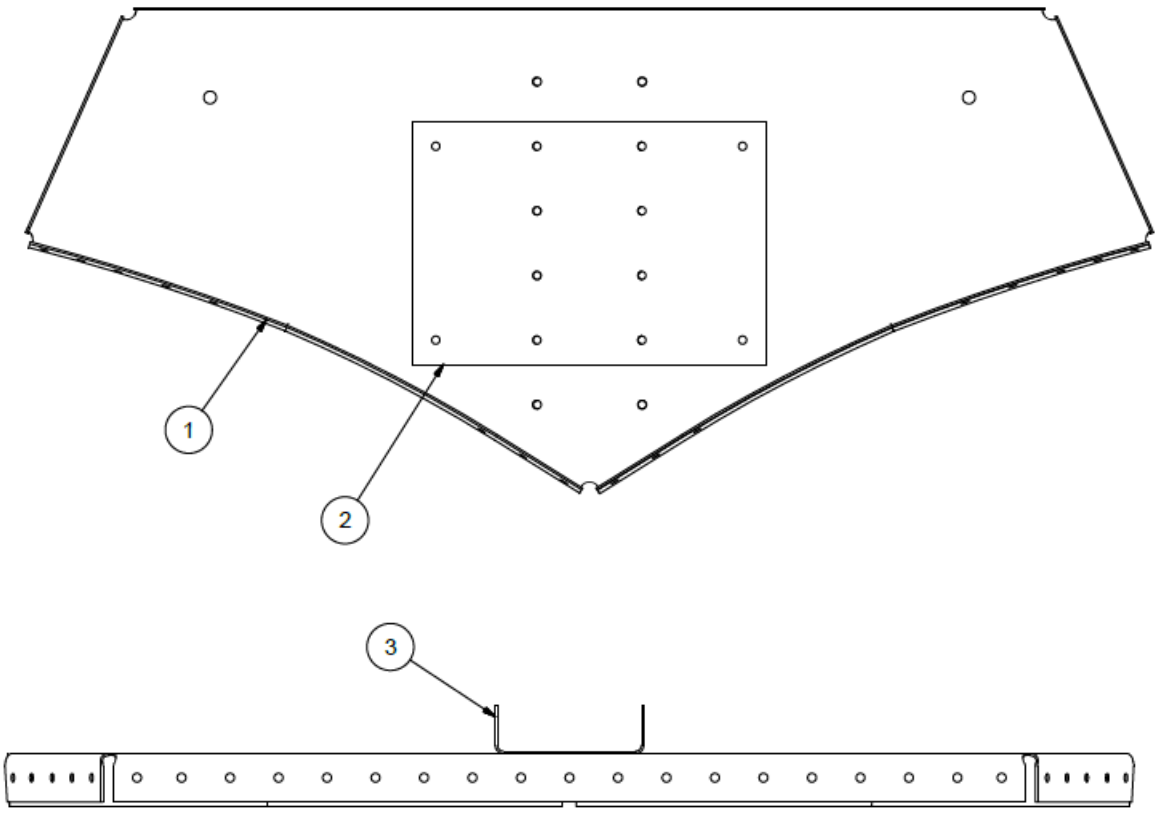
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21A01000-396	ASSY, BULKHEAD #12
1	1	21A01158-167	BULKHEAD #12 - FORMED

BULKHEAD #13



ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21A01000-397	ASSEMBLY, BULKHEAD #13
1	1	21A01158-166	BULKHEAD #13 - FORMED

BULKHEAD #15



ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	23A01000-298	BULKHEAD #15 ASSY
1	1	23A01158-198	BULKHEAD #15
2	1	21A08156-130	PLATE - WATER RUDDER STOP
3	1	1009187	CHANNEL - BULKHEAD #15

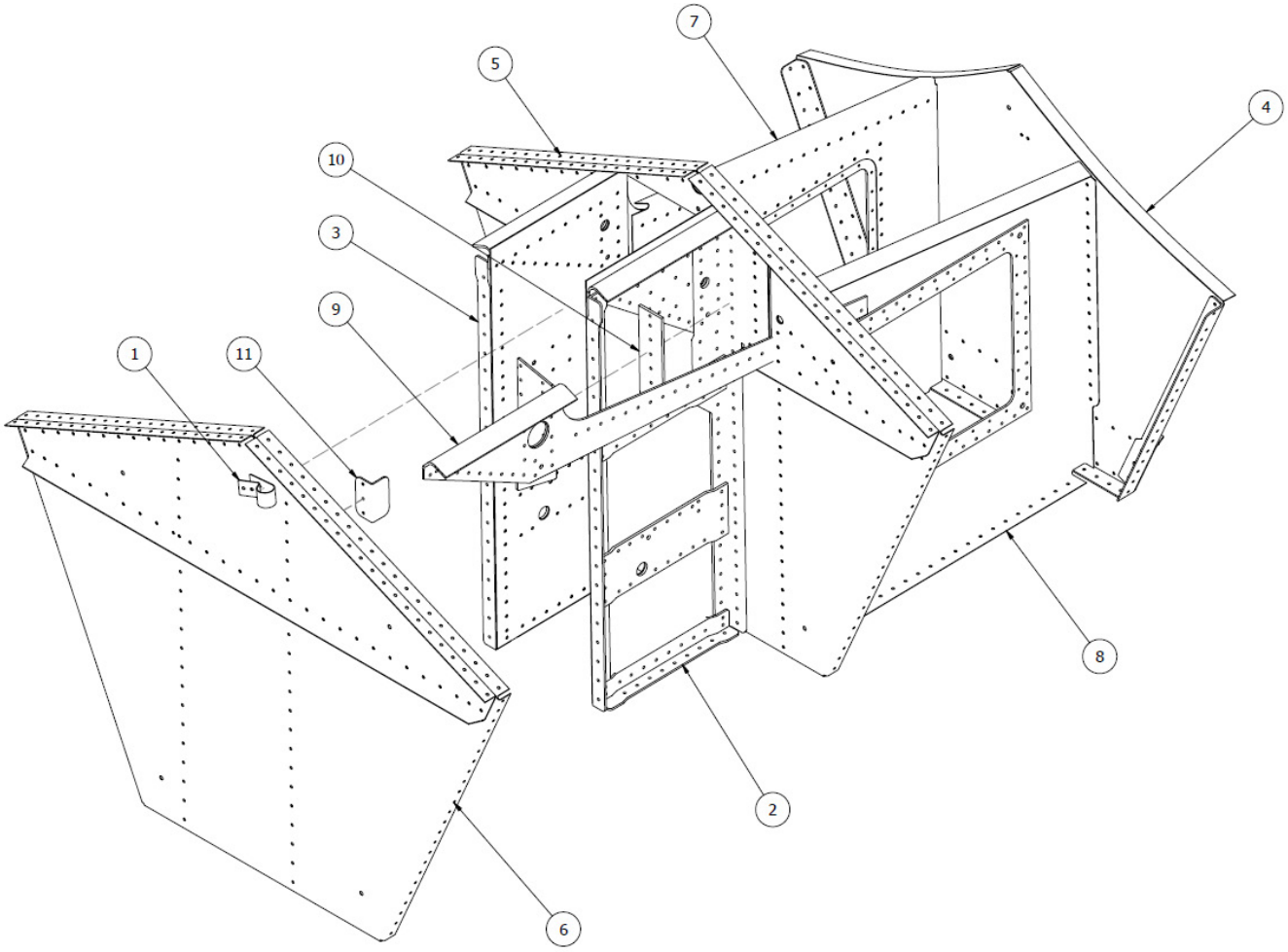
THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 2
WHEEL WELL ASSEMBLIES

CONTENTS

WHEEL WELL BUILD UP ASSEMBLY LEFT FLOAT.....36
WHEEL WELL BUILD UP ASSEMBLY RIGHT FLOAT.....38

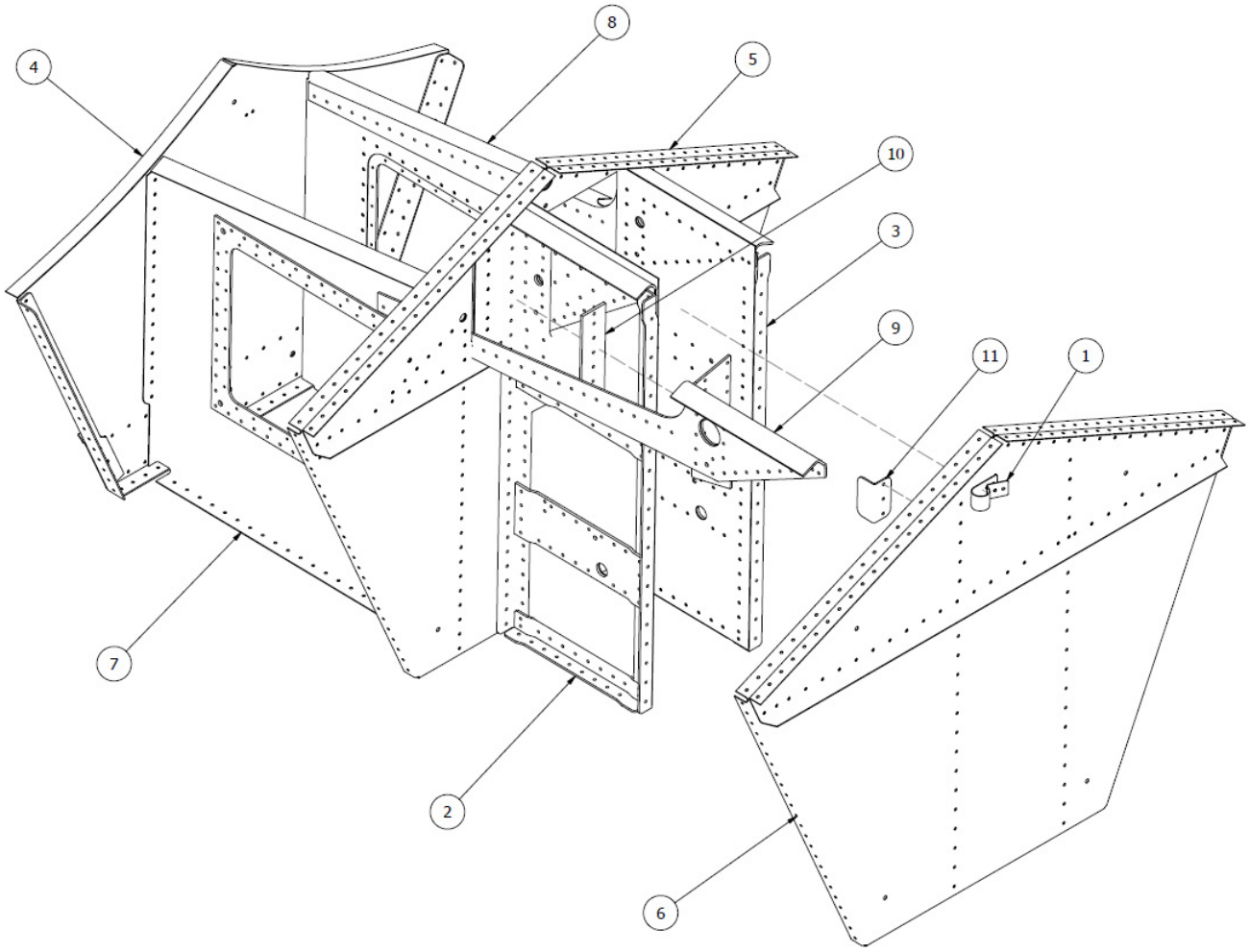
WHEEL WELL BUILD UP ASSEMBLY LEFT FLOAT



ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21A01000-293	WHEEL WELL BUILD UP ASSY. LT.
1	1	3A01158-003	CLAMP, PUMP OUT TUBE
2	1	21A01000-255	ASSEMBLY, WHEEL WELL LONG, LH
	1	21A01359-196	ANGLE - WHEEL WELL
	1	21A01359-198	ANGLE, WHEEL WELL, LONG, 2350 COMP
	1	21A01017-007	CARRY THRU STRAP - SHORT - LH
	1	21A01160-022	PLATE - SUPPORT WHEEL WELL WIDE - RH
	1	21A01160-020	PLATE - SUPPORT - WHEELWELL - RH
	1	21A01357-058	ANGLE, WIDE WHEEL WELL, LONG, RT, 2350
	1	21A01002-135	PANEL - WHEEL WELL LONG
3	1	21A01000-257	ASSY, WHEEL WELL. SHORT, LT, 2350
	1	1003343	DOUBLER, PROXIMITY SWITCH
	1	21A01002-133	PANEL, WHEEL WELL SHORT
	1	21A01017-005	CARRY THRU STRAP - LONG - SMALL HOLE - LH

ITEM	QTY	PART NO.	PART DESCRIPTION
	1	21A01160-021	PLATE - SUPPORT WHEEL WELL- LH
	1	21A01160-023	PLATE - SUPPORT - WHEEL WELL WIDE - LH
	1	21A01357-056	ANGLE, WIDE WHEEL WELL SHORT, RIGHT
	1	21A01359-195	ANGLE - WHEEL WELL
	1	21A01359-200	ANGLE, LONG WHEEL WELL SHORT
4	1	21A01000-262	ASSY, BLKHD 10, 2350 COMP
5	1	21A01000-263	ASSY, BULKHEAD #8, LH
6	1	21A01000-267	ASSEMBLY, BULKHEAD #7, LH
7	1	21A01000-289	ASSY, SIDE PANEL, WHEEL WELL, LT. 2350
	1	21A01158-185	PANEL - LH - WHEEL WELL
	1	13A01156-124	SUPPORT, INSPECTION COVER, WHEEL WELL, LARGE
8	1	21A01000-290	ASSY, SIDE PANEL, WHEEL WELL, RT. 2350
	1	21A01158-186	PANEL - RH - WHEEL WELL
	1	13A01156-124	SUPPORT, INSPECTION COVER, WHEEL WELL, LARGE
9	1	21A01000-291	ASSY, CARRY THRU STRAP, LT, 2350
	1	21A01017-002	CARRY THRU STRAP - LONG - LARGE HOLE - RH
	1	21A01156-132	ANGLE, CARRY THRU, RIGHT
10	1	21A01156-125	SPACER, CARRY THRU STRAP, 2350
11	1	21A01326-015	ANGLE, CARRY THRU

WHEEL WELL BUILD UP ASSEMBLY RIGHT FLOAT



ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21A01000-294	WHEEL WELL BUILD UP ASSY. RT.
1	1	3A01158-003	CLAMP, PUMP OUT TUBE
2	1	21A01000-254	ASSEMBLY, WHEEL WELL LONG, RH
	1	21A01002-135	PANEL - WHEEL WELL LONG
	1	21A01017-006	CARRY THRU STRAP - SHORT - RH
	1	21A01359-197	ANGLE, LONG WHEEL WELL, LONG
	1	21A01359-195	ANGLE - WHEEL WELL
	1	21A01160-023	PLATE - SUPPORT - WHEEL WELL WIDE - LH
	1	21A01160-021	PLATE - SUPPORT WHEEL WELL- LH
	1	21A01357-059	ANGLE, WIDE WHEEL WELL LONG, LT, 2350
3	1	21A01000-256	ASSY, WHEEL WELL PANEL, SHORT, RH
	1	1003343	DOUBLER, PROXIMITY SWITCH
	1	21A01002-133	PANEL, WHEEL WELL SHORT

ITEM	QTY	PART NO.	PART DESCRIPTION
	1	21A01017-004	CARRY THRU STRAP - LONG - SMALL HOLE - RH
	1	21A01160-020	PLATE - SUPPORT - WHEEL WELL - RH
	1	21A01160-022	PLATE - SUPPORT WHEEL WELL WIDE - RH
	1	21A01357-057	ANGLE, WIDE WHEEL WELL SHORT, LEFT
	1	21A01359-196	ANGLE - WHEEL WELL
	1	21A01359-199	ANGLE, LONG WHEEL WELL SHORT
4	1	21A01000-262	ASSY, BLKHD 10, 2350 COMP
5	1	21A01000-264	ASSY, BULKHEAD #8, RH
6	1	21A01000-266	ASSEMBLY, BULKHEAD #7, RH
7	1	21A01000-289	ASSY, SIDE PANEL, WHEEL WELL, LT. 2350
	1	21A01158-185	PANEL - LH - WHEEL WELL
	1	13A01156-124	SUPPORT, INSPECTION COVER, WHEEL WELL, LARGE
8	1	21A01000-290	ASSY, SIDE PANEL, WHEEL WELL, RT. 2350
	1	21A01158-186	PANEL - RH - WHEEL WELL
	1	13A01156-124	SUPPORT, INSPECTION COVER, WHEEL WELL, LARGE
9	1	21A01000-292	ASSY, CARRY THRU STRAP, RT, 2350
	1	21A01017-003	CARRY THRU STRAP - LONG - LARGE HOLE - LH
	1	21A01156-131	ANGLE, CARRY THRU, LEFT
10	1	21A01156-125	SPACER, CARRY THRU STRAP, 2350
11	1	21A01326-015	ANGLE, CARRY THRU

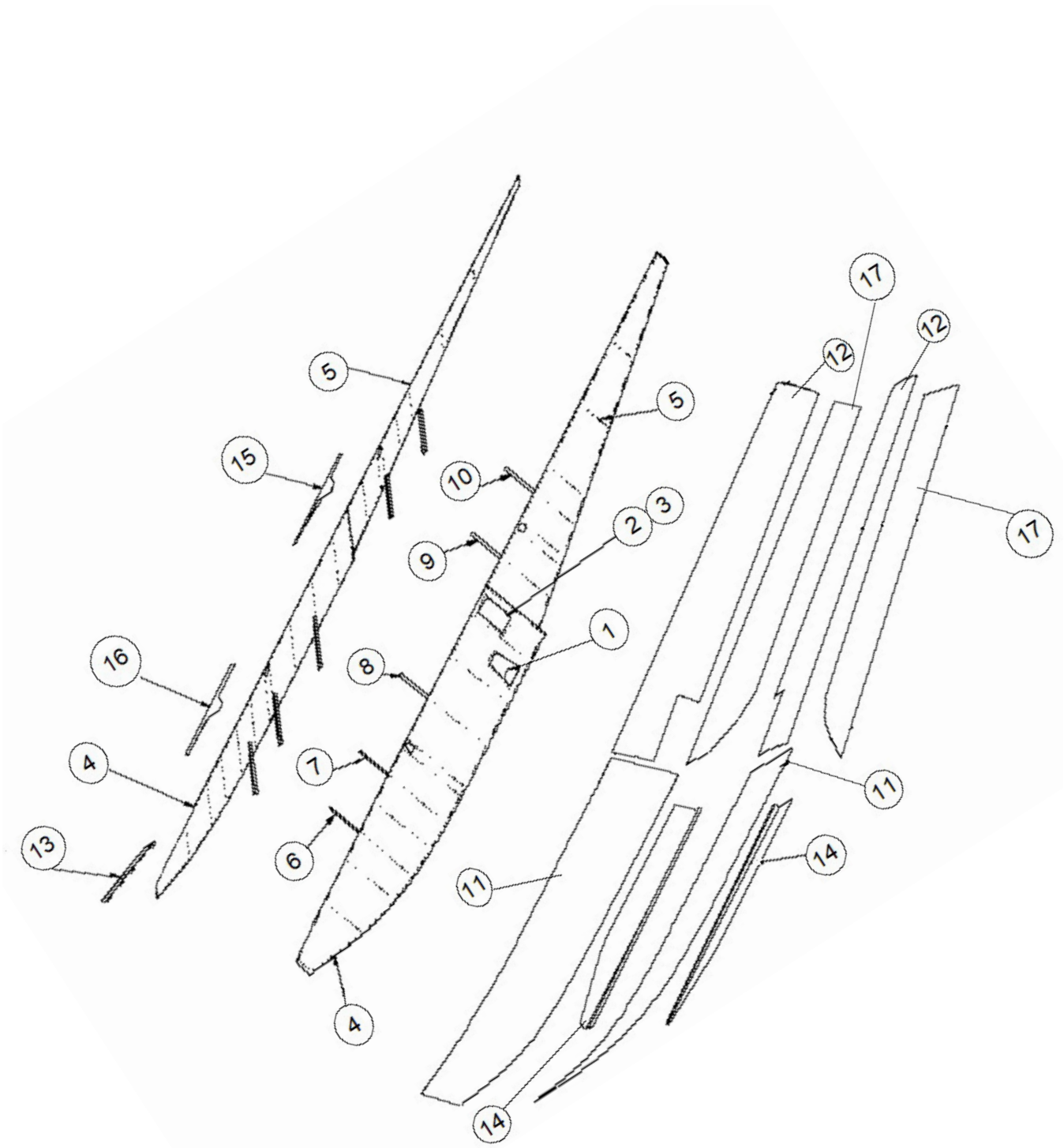
THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 3
SKINS, STIFFENERS, & PADDLE

CONTENTS

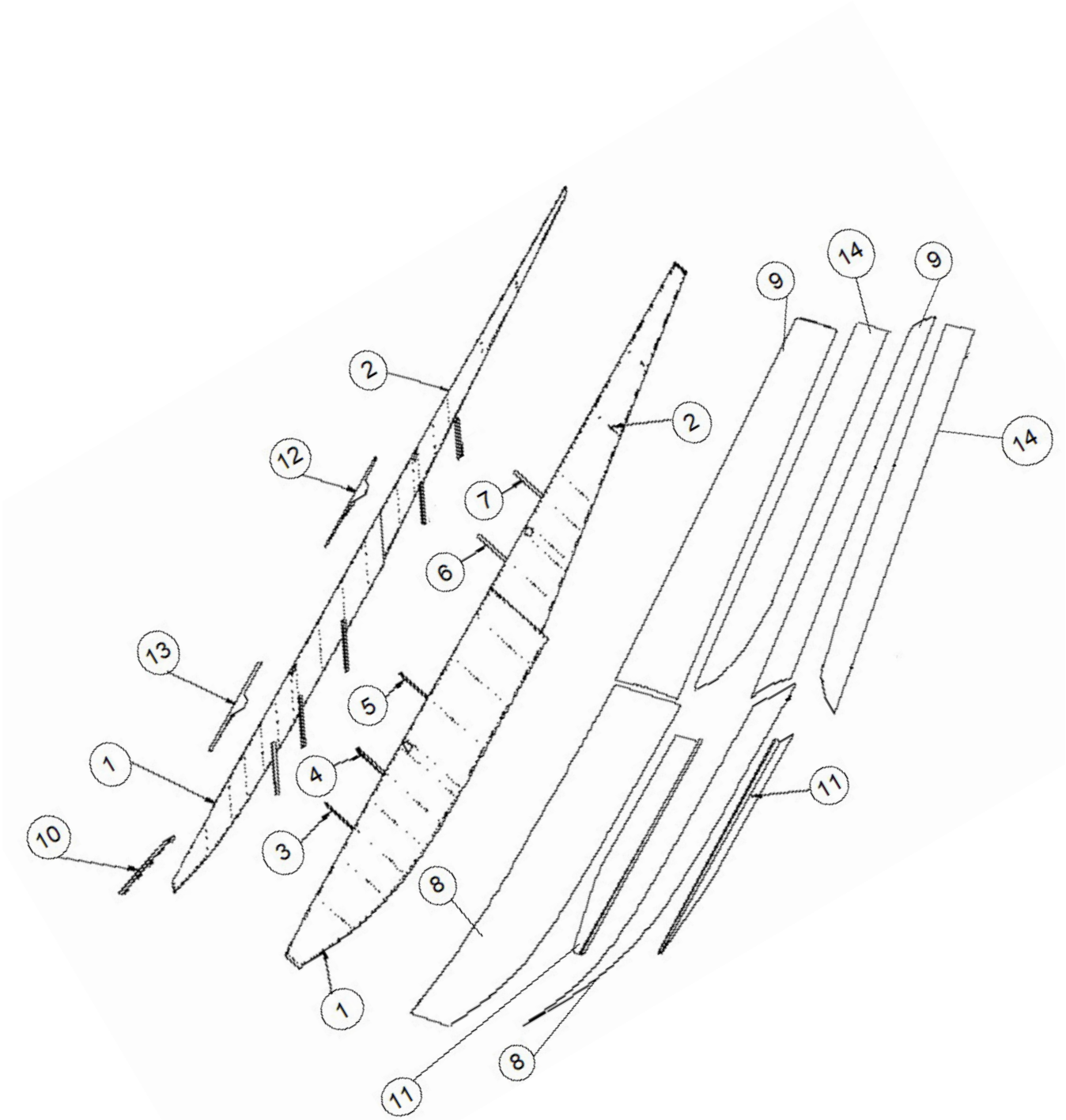
BOTTOM & SIDE SKINS & STIFFENERS OVERVIEW - AMPHIBIAN 42
BOTTOM & SIDE SKINS & STIFFENERS OVERVIEW - SEAPLANE 44
BOTTOM SKIN ASSEMBLIES.....46
BOTTOM SKIN WITH STIFFENERS LEFT.....47
BOTTOM SKIN WITH STIFFENERS RIGHT 48
CANOE PADDLE 49

BOTTOM & SIDE SKINS & STIFFENERS OVERVIEW - AMPHIBIAN



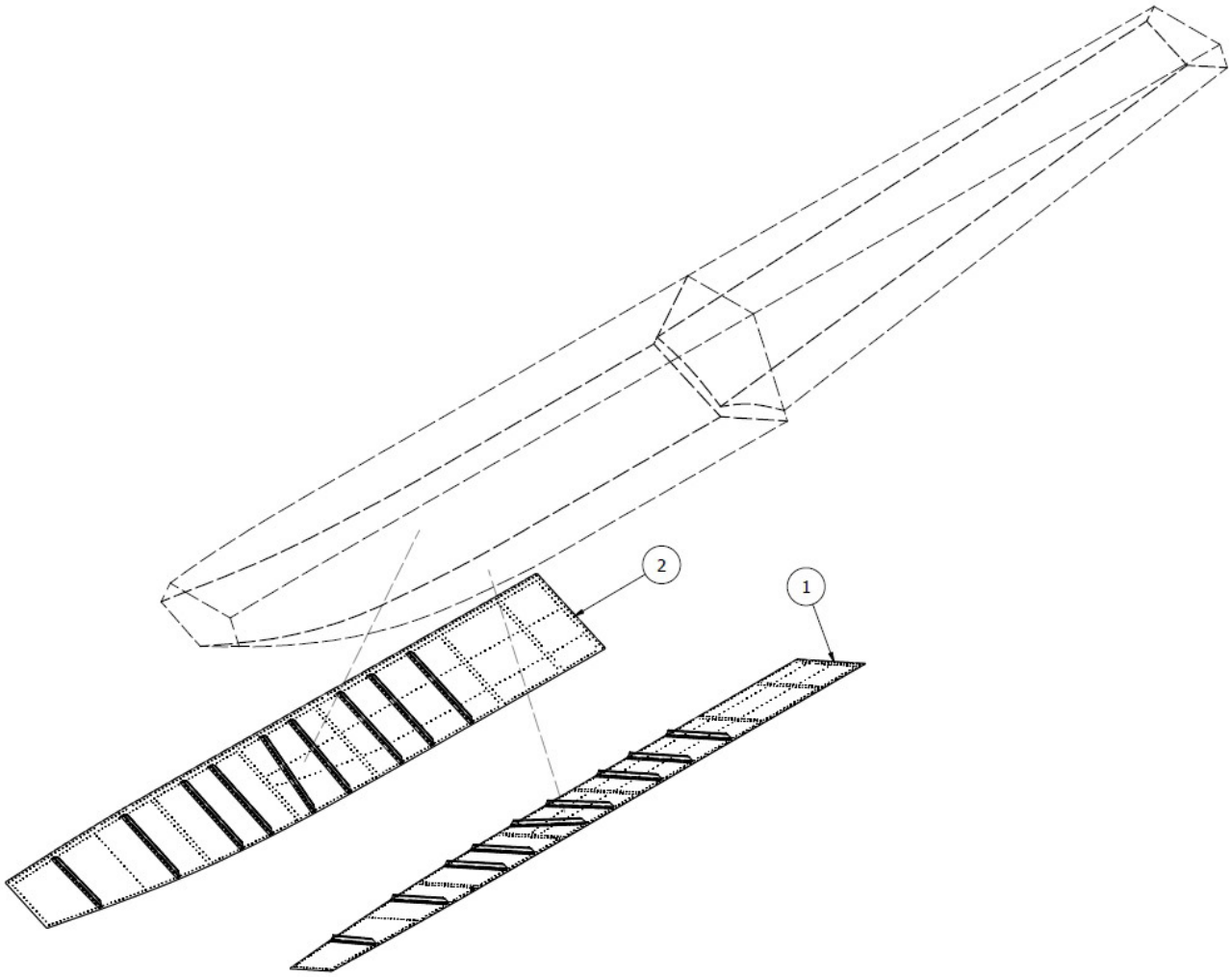
ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	3A01000-005	STEP – BOARDING
2	2	21A01156-126	REINFORCEMENT – COVER
3	2	21A01000-427	COVER, SIDE ACCESS ASS'Y
	2	21A01004-101	COVER – INSP.
	56	AN526-632R6	SCREW – ATTACH
	2	21A01567-012	GASKET
4	1	23A01004-109	SIDE SKIN – STEP TO BOW L. OUTBR'D
	1	23A01004-108	SIDE SKIN – STEP TO BOW R. OUTBR'D
	1	23A01004-111	SIDE SKIN – STEP TO BOW L. INBR'D
	1	23A01004-110	SIDE SKIN – STEP TO BOW R. INBR'D
5	1	23A01004-113	SIDE SKIN – STEP TO STERN L. OUTBR'D
	1	23A01004-112	SIDE SKIN – STEP TO STERN R. OUTBR'D
	1	23A01004-115	SIDE SKIN – STEP TO STERN L. INBR'D
	1	23A01004-114	SIDE SKIN – STEP TO STERN R. INBR'D
6	2	23A01340-114	STIFFENER – SIDE SKIN
7	2	23A01340-115	STIFFENER – SIDE SKIN
8	2	23A01340-116	STIFFENER – SIDE SKIN
9	2	23A01340-117	STIFFENER – SIDE SKIN
10	2	23A01340-118	STIFFENER – SIDE SKIN
11	1	1011500	ASSEMBLY, SKIN, BOTTOM, FWD, LEFT, 2350 (SEE DETAIL)
		1011501	ASSEMBLY, SKIN, BOTTOM, FWD, RIGHT, 2350 (SEE DETAIL)
12	1	23A01004-121	BOTTOM SKIN AFTERBODY L.
	1	23A01004-120	BOTTOM SKIN AFTERBODY R.
13	1	21A01000-274	ASS'Y SPRAY RAIL L.
	1	21A01000-275	ASS'Y SPRAY RAIL R.
14	1	21A01000-429	BOOSTER – SISTER KEEL L.
	1	21A01000-428	BOOSTER – SISTER KEEL R.
15	1	21A01162-033	DOUBLER – GUNWALL AFT L.
16	1	21A01162-031	DOUBLER – GUNWALL FWD L.
	1	21A01162-032	DOUBLER – GUNWALL FWD R.
	1	21A01162-034	DOUBLER – GUNWALL AFT R.
17	1	1009446	SCALLOP, FORMED WITH FOAM, RIGHT 2350 S/N 23177 OR LATER
	1	1009539	SCALLOP, FORMED WITH FOAM, LEFT 2350 S/N 23177 OR LATER
18	3	21A01005-270	GUSSET, STIFFENER, BOTTOM (NOT PICTURED)

BOTTOM & SIDE SKINS & STIFFENERS OVERVIEW - SEAPLANE



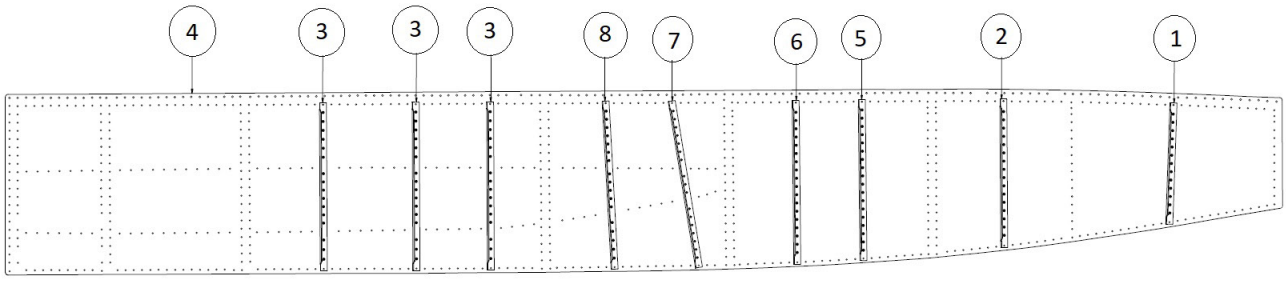
ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	23S01004-123	SIDE SKIN – STEP TO BOW L. OUTBR'D
	1	23S01004-122	SIDE SKIN – STEP TO BOW R. OUTBR'D
	1	23S01004-125	SIDE SKIN – STEP TO BOW L. INBR'D
	1	23S01004-124	SIDE SKIN – STEP TO BOW R. INBR'D
2	1	23A01004-113	SIDE SKIN – STEP TO STERN L. OUTBR'D
	1	23A01004-112	SIDE SKIN – STEP TO STERN R. OUTBR'D
	1	23A01004-115	SIDE SKIN – STEP TO STERN L. INBR'D
	1	23A01004-114	SIDE SKIN – STEP TO STERN R. INBR'D
3	2	23A01340-114	STIFFENER – SIDE SKIN
4	2	23A01340-115	STIFFENER – SIDE SKIN
5	2	23A01340-116	STIFFENER – SIDE SKIN
6	2	23A01340-117	STIFFENER – SIDE SKIN
7	2	23A01340-118	STIFFENER – SIDE SKIN
8	1	1011500	ASSEMBLY, SKIN, BOTTOM, FWD, LEFT, 2350 (SEE DETAIL)
		1011501	ASSEMBLY, SKIN, BOTTOM, FWD, RIGHT, 2350 (SEE DETAIL)
9	1	23S01004-133	BOTTOM SKIN AFTERBODY L.
	1	23S01004-132	BOTTOM SKIN AFTERBODY R.
10	1	21A01000-275	ASS'Y SPRAY RAIL L.
	1	21A01000-274	ASS'Y SPRAY RAIL R.
11	1	21A01000-429	BOOSTER – SISTER KEEL L.
	1	21A01000-428	BOOSTER – SISTER KEEL R.
12	1	21A01162-033	DOUBLER – GUNWALL AFT L.
	1	21A01162-034	DOUBLER – GUNWALL AFT R.
13	1	21A01162-031	DOUBLER – GUNWALL FWD L.
	1	21A01162-032	DOUBLER – GUNWALL FWD R.
14	1	1009539	SCALLOP, FORMED WITH FOAM, LEFT, 2350
	1	1009446	SCALLOP, FORMED WITH FOAM, RIGHT, 2350
15	3	21A01005-270	GUSSET, STIFFENER, BOTTOM (NOT PICTURED)

BOTTOM SKIN ASSEMBLIES



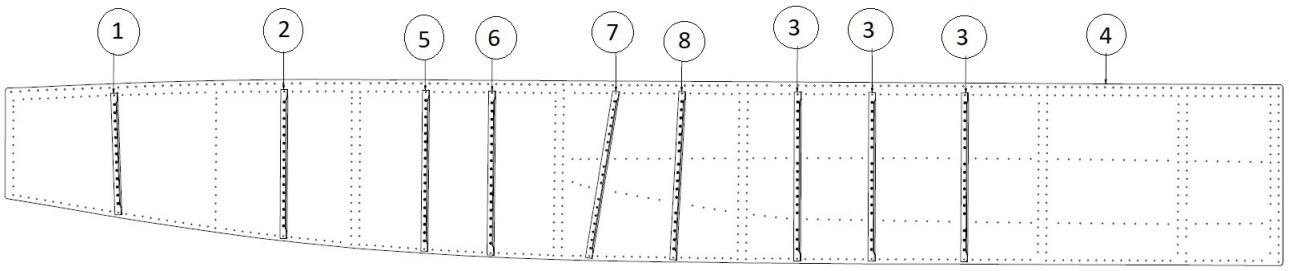
ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	1011500	ASSEMBLY, SKIN, BOTTOM, FWD, LEFT, 2350 (SEE DETAIL)
2	1	1011501	ASSEMBLY, SKIN, BOTTOM, FWD, RIGHT, 2350 (SEE DETAIL)

BOTTOM SKIN WITH STIFFENERS LEFT



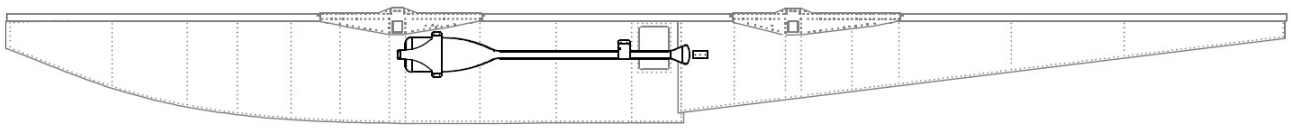
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	1011500	ASSEMBLY, SKIN, BOTTOM, FWD, LEFT, 2350
1	1	1011412	STIFFENER, BOTTOM SKIN, FWD
2	1	1011413	STIFFENER, BOTTOM SKIN, FWD
3	3	1011420	STIFFENER, BOTTOM SKIN, FWD
4	1	1011422	SKIN, BOTTOM, LH, FWD, 2350
5	1	1011424	STIFFENER, BOTTOM SKIN, FWD
6	1	1011425	STIFFENER, BOTTOM SKIN, FWD
7	1	1011426	STIFFENER, BOTTOM SKIN, FWD
8	1	1011428	STIFFENER, BOTTOM SKIN, FWD

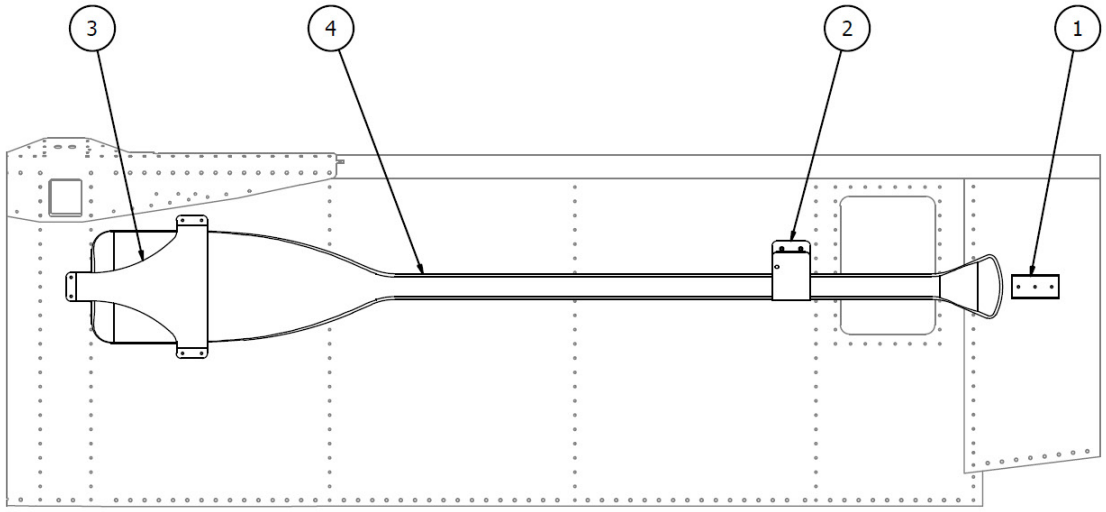
BOTTOM SKIN WITH STIFFENERS RIGHT



ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	1011501	ASSEMBLY, SKIN, BOTTOM, FWD, RIGHT, 2350
1	1	1011412	STIFFENER, BOTTOM SKIN, FWD
2	1	1011413	STIFFENER, BOTTOM SKIN, FWD
3	3	1011421	STIFFENER, BOTTOM SKIN, FWD
4	1	1011423	SKIN, BOTTOM, RH, FWD, 2350
5	1	1011424	STIFFENER, BOTTOM SKIN, FWD
6	1	1011425	STIFFENER, BOTTOM SKIN, FWD
7	1	1011426	STIFFENER, BOTTOM SKIN, FWD
8	1	1011429	STIFFENER, BOTTOM SKIN, FWD

CANOE PADDLE





ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	1005676	BRACKET, CANOE PADDLE STOP
2	1	1005677	CLIP, MOUNTING, CANOE PADDLE
3	1	1005678	BRACKET, CANOE PADDLE
4	1	1012326	CANOE PADDLE, 4.0 FT

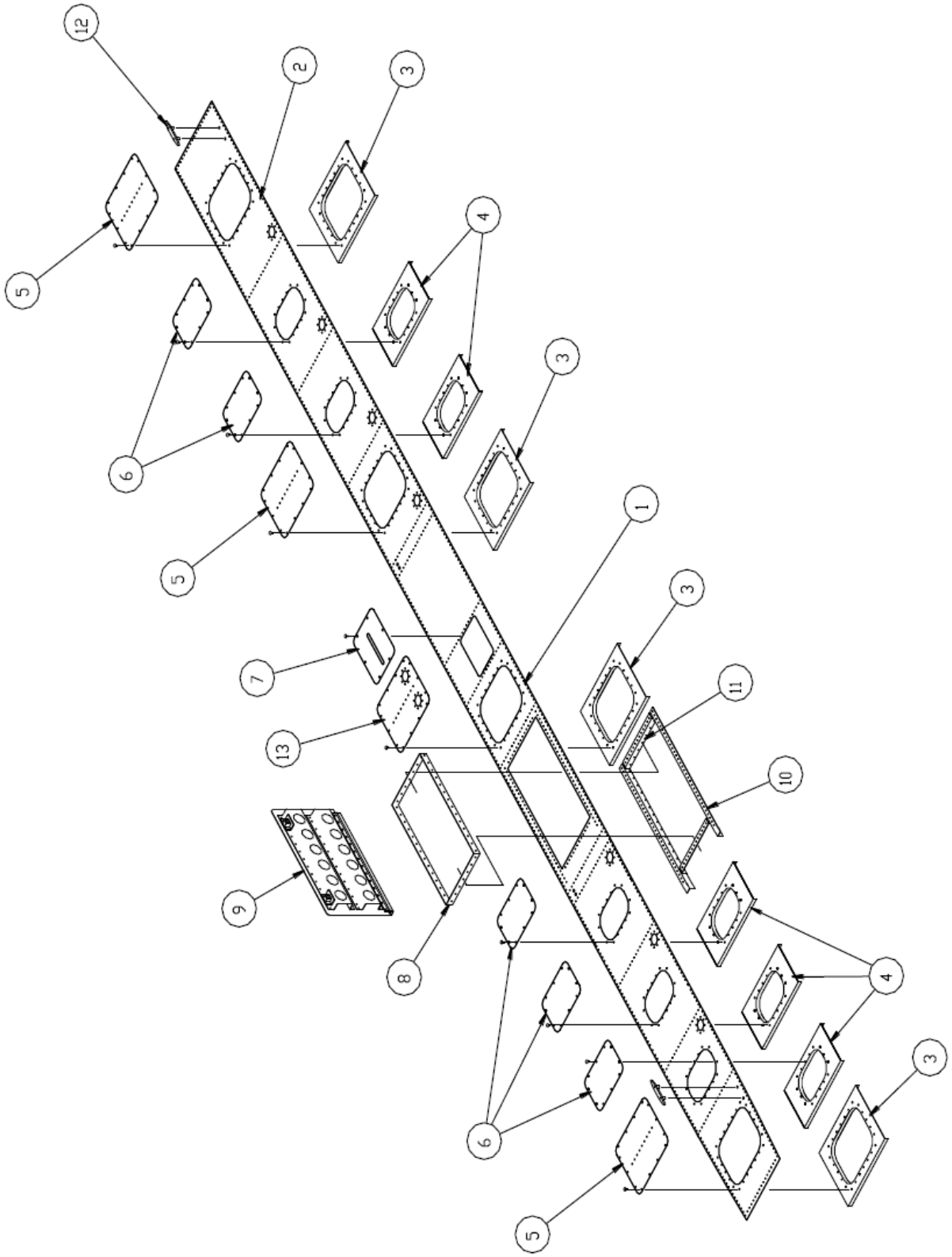
THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 4
TOP DECK ASSEMBLY

CONTENTS

TOP DECK - AMPHIBIAN 52
TOP DECK - SEAPLANE 55

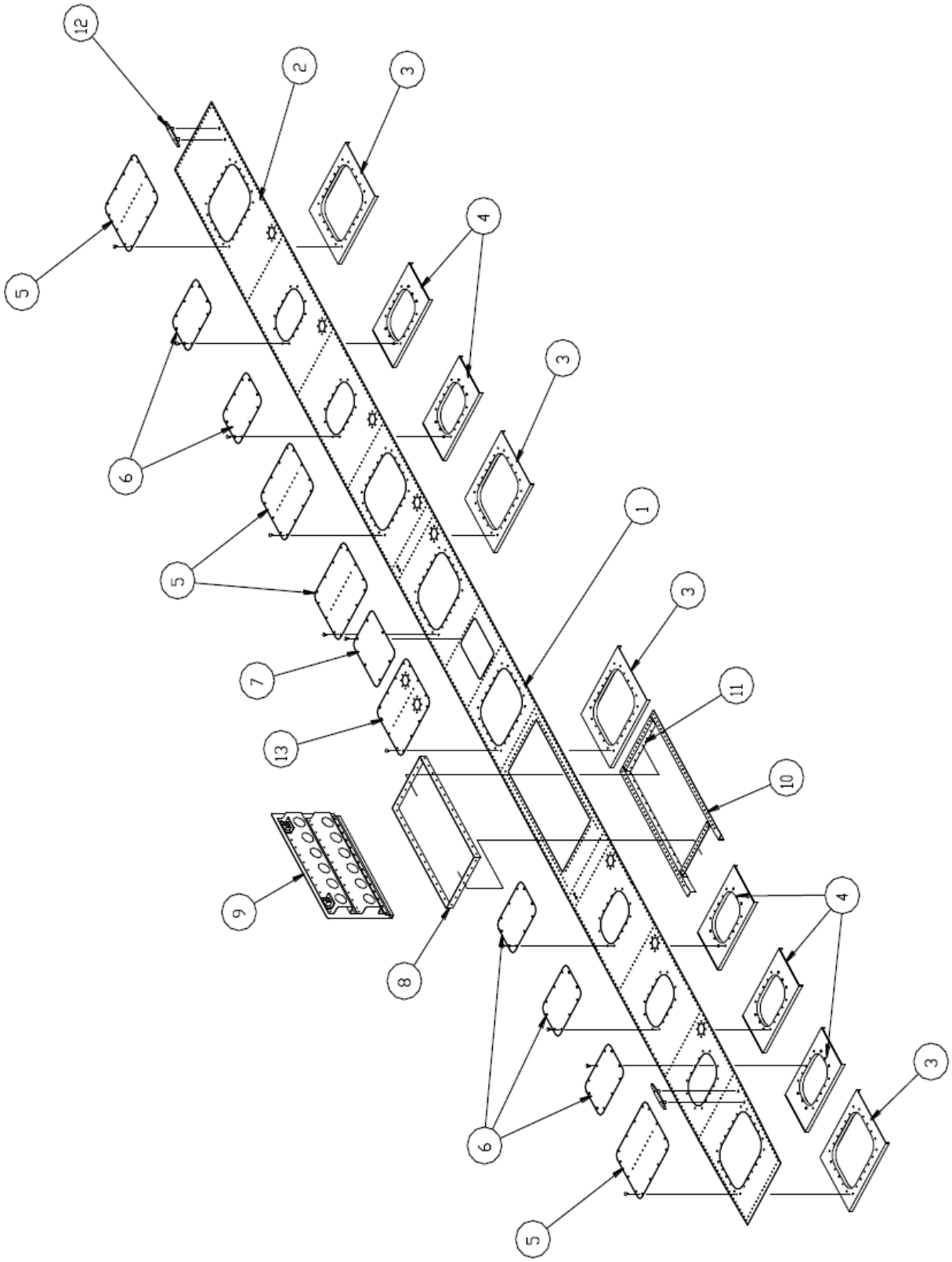
TOP DECK - AMPHIBIAN



ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	23A01004-117	SKIN – FWD SECTION L.
	1	23A01004-116	SKIN – FWD SECTION R.
2	1	23A01004-119	SKIN – AFT SECTION L.
	1	23A01004-118	SKIN – AFT SECTION R.
3	4	21A01002-130	SUPPORT – INSP. COVER – LARGE
	A/R	1002481	NUT – TINNERMAN & INSULATOR
4	5	21A01002-131	SUPPORT – INSP. COVER – SMALL
	A/R	1002481	NUT – TINNERMAN & INSULATOR
5	4/3	21A01000-258	INSP. COVER – LARGE – W/ ANGLE & GASKETS
	A/R	SS TATP 8 X 5/8	SCREW – ATTACH
	4/3	1001437	SEAL – GASKET ONLY
	4/3	21A01567-001	SEAL – GASKET ONLY
6	5	21A01000-284	INSP. COVER – SMALL & GASKETS
	A/R	SS TATP 8 X 5/8	SCREW – ATTACH
	5	1001728	SEAL – GASKET ONLY
	5	21A01567-002	SEAL – GASKET ONLY
7	1	1009202	COVER, GEAR INDICATOR
	1	1009122	PLACARD, GEAR INDICATOR, RH
	1	1009123	PLACARD, GEAR INDICATOR, LH
	2	2600-3	SCREW – CAM - LOK
	2	1126000-4	STUD, PROTRUDING HEAD
	2	1126000-5	AIR LOC / CAMLOC STUD, PROTRUDING HEAD
	6	212-12	RECEPTACLE – CAM – LOK
8	1	21A01150-131	JAMB – BAGGAGE DOOR
	1	1002067	JAMB – HINGE SIDE
9	1	21A01000-268	ASSY – BAGGAGE DOOR
	1	21A01162-035	COVER - SKIN
	1	21A01741-004	HINGE
	1	1002186	HINGE PIN
	2	21A01010-012	STIFFENER - DOOR
	2	21A01004-106	STIFFENER ENDS
	2	3A01206-001	RETAINER - LOCK
	2	3A01273-004	LOCK PIN
	2	3A01702-004	CATCH – LATCH
	2	3A01525-003	LOCK SPRING
	2	1002663	RING – OPENING
	1	1001438	SEAL – GASKET (NOT SHOWN) BAGGAGE HUTCH
	12	01692-0410	POP RIVET
	2	10/32 X ½ SS	BOLT
10	1	21A01326-003	TOP RAIL – BAGGAGE OPENING L.
	1	21A01326-002	TOP RAIL – BAGGAGE OPENING R.

ITEM	QTY	PART NO.	PART DESCRIPTION
11	2	1013020	CROSS TIE, TOPDECK, BAGGAGE
12	2	21A01203-001	CLEAT – TIE DOWN
	4	21A01280-004	BUSHING
	4	AN525-10R24	SCREW – ATTACH
13	1	21A01000-273	INSP. COVER – LARGE – W/ ANGLE (2 CUPS) & GASKETS
	A/R	SS TATP 8 X 5/8	SCREW – ATTACH
	1	1001437	SEAL – GASKET ONLY

TOP DECK - SEAPLANE



ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	23S01004-139	SKIN – FWD SECTION L.
	1	23S01004-138	SKIN – FWD SECTION R.
2	1	23S01004-141	SKIN – AFT SECTION L.
	1	23S01004-140	SKIN – AFT SECTION R.
3	5	21A01002-130	SUPPORT – INSP. COVER - LARGE
	A/R	1002481	NUT – TINNERMAN & INSULATOR
4	5	21A01002-131	SUPPORT – INSP. COVER – SMALL
	A/R	1002481	NUT – TINNERMAN & INSULATOR
5	5	21A01000-258	INSP. COVER – LARGE – W/ ANGLE & GASKETS
	A/R	SS TATP 8 X 5/8	SCREW – ATTACH
	5	1001437	SEAL – GASKET ONLY
	5	21A01567-001	SEAL – GASKET
6	5	21A01000-284	INSP. COVER – SMALL & GASKETS
	A/R	SS TATP 8 X 5/8	SCREW – ATTACH
	5	1001728	SEAL – GASKET ONLY
	5	21A01567-002	SEAL – GASKET
7	1	21S01000-399	COVER W/ GASKET
	1	21S01567-013	SEAL – GASKET
	A/R	SS TATP 8 X 5/8	SCREW – ATTACH
	A/R	1002481	NUT – TINNERMAN & INSULATOR
	2	1013025	CROSS TIE, TOPDECK
8	1	21A01150-131	JAMB – BAGGAGE DOOR
	1	1002067	JAMB – BAGGAGE DOOR, HINGE SIDE
9	1	21A01000-268	ASSY – BAGGAGE DOOR
	1	21A01162-035	COVER – SKIN
	1	21A01741-004	HINGE
	2	21A01010-012	STIFFENER – DOOR
	1	1002186	HINGE PIN
	2	21A01004-106	STIFFENER ENDS
	2	3A01206-004	RETAINER – LOCK
	2	3A01273-004	LOCK PIN
	2	3A01702-001	CATCH – LATCH
	2	3A01525-003	LOCK SPRING
	2	1002663	RING – OPENING
	1	1001438	SEAL – GASKET (NOT SHOWN)
	12	01692-0410	POP RIVET
	2	10/32 X ½ SS	BOLT
10	1	21A01326-003	TOP RAIL – BAGGAGE OPENING L.
	1	21A01326-002	TOP RAIL – BAGGAGE OPENING R.
11	1	1013020	CROSS TIE, TOPDECK, BAGGAGE
12	2	21A01203-001	CLEAT – TIE DOWN

ITEM	QTY	PART NO.	PART DESCRIPTION
	4	21A01280-004	BUSHING
	4	AN525-10R24	SCREW – ATTACH
13	1	21A01000-273	INSP. COVER – LARGE – W/ ANGLE (2 CUPS) & GASKETS
	A/R	SS TATP 8 X 5/8	SCREW – ATTACH
	1	1001437	SEAL – GASKET ONLY

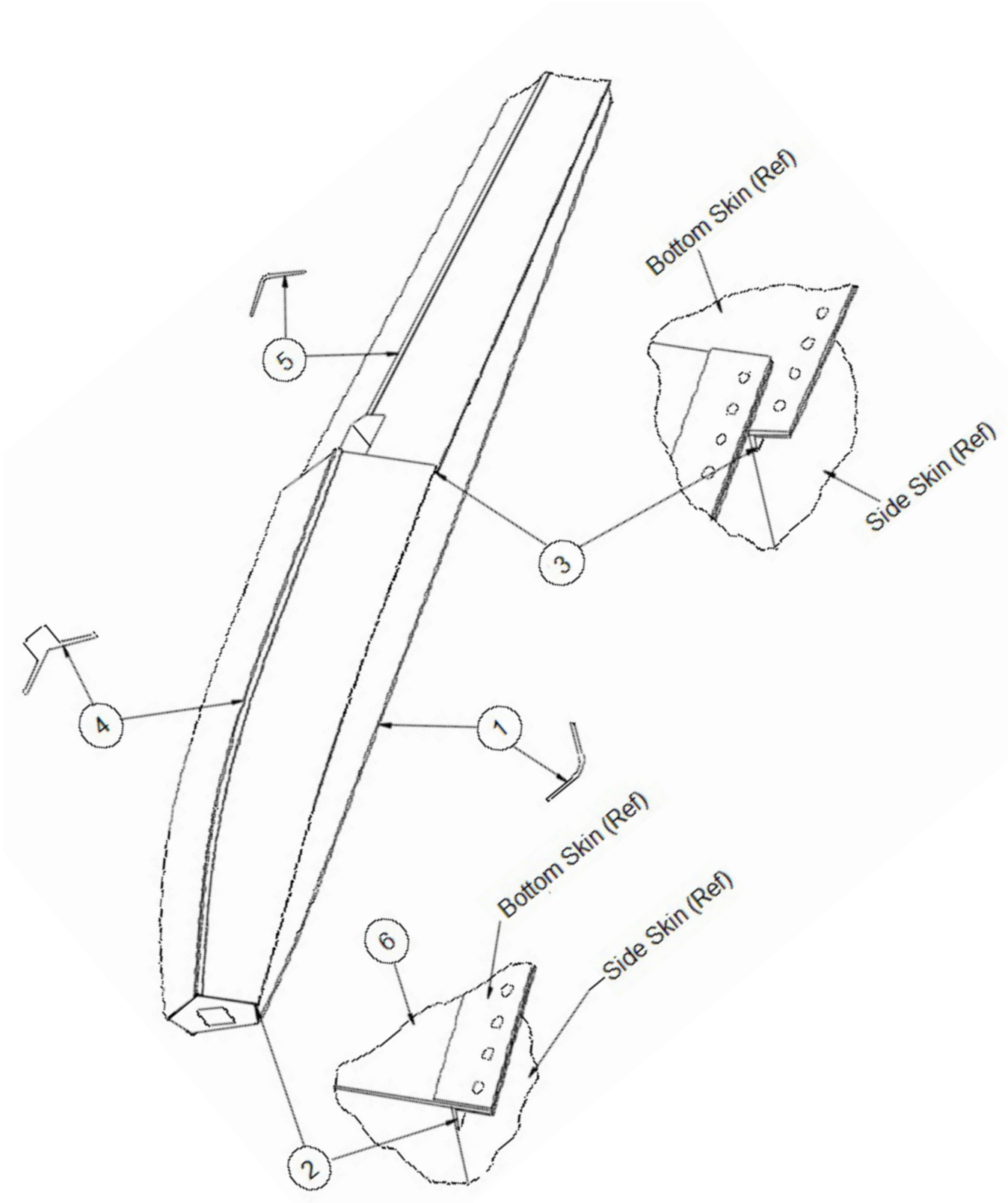
THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 5
EXTRUSIONS

CONTENTS

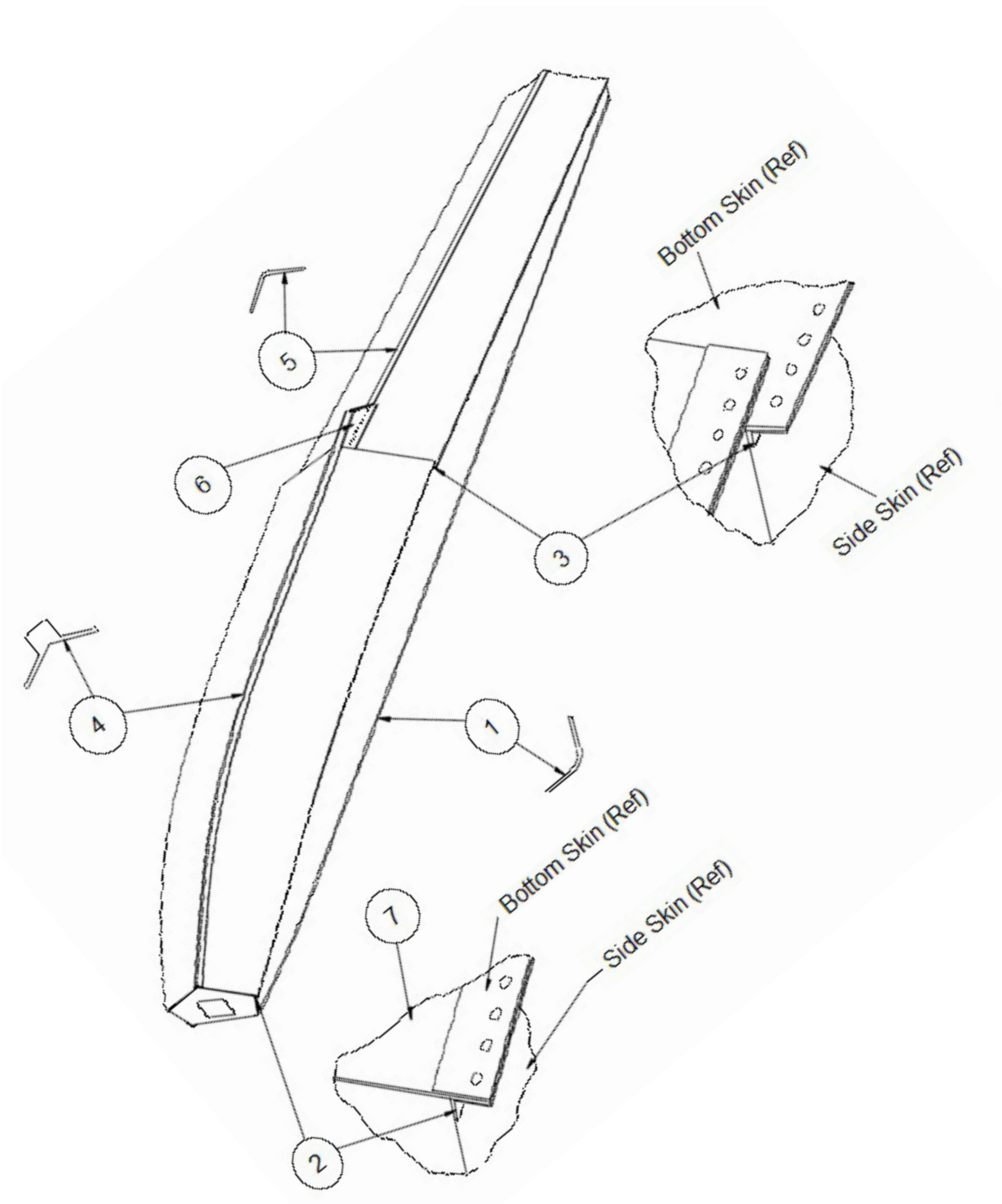
HULL EXTRUSIONS - AMPHIBIAN 60
HULL EXTRUSIONS - SEAPLANE 62

HULL EXTRUSIONS - AMPHIBIAN



ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	23A01324-003	GUNWALL – L.
	1	23A01324-004	GUNWALL – R.
2	1	23A01340-013	CHINE - FWD L.
	1	23A01340-012	CHINE – FWD R.
3	1	23A01340-011	CHINE – AFTERBODY L.
	1	23A01340-010	CHINE – AFTERBODY R.
4	1	23A01321-002	KEEL - MAIN
5	1	23A01008-170	KEEL - AFTERBODY
6	1	23A01005-295	STRAP – CHINE L.
	1	23A01005-296	STRAP – CHINE R.

HULL EXTRUSIONS - SEAPLANE



ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	23A01324-003	GUNWALL – L.
	1	23A01324-004	GUNWALL – R.
2	1	23A01340-013	CHINE - FWD L.
	1	23A01340-012	CHINE – FWD R.
3	1	23A01340-011	CHINE – AFTERBODY L.
	1	23A01340-010	CHINE – AFTERBODY R.
4	1	23S01321-003	KEEL - MAIN
5	1	23S01008-173	KEEL - AFTERBODY
6	1	1013018	ASSEMBLY, GUSSET, AFTERBODY, RF
	1	1013019	ASSEMBLY, GUSSET, AFTERBODY, LF
	1	21S01163-037	ANGLE SUPPORT – AFTERBODY L.
	1	21S01163-038	ANGLE SUPPORT – AFTERBODY R.
7	1	23A01005-295	STRAP - CHINE L.
	1	23A01005-296	STRAP – CHINE R.

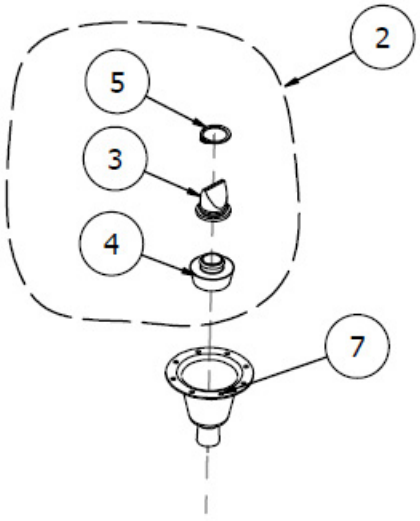
THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 6
PUMPOUT CUP AND TUBES & FLOAT HAND PUMP

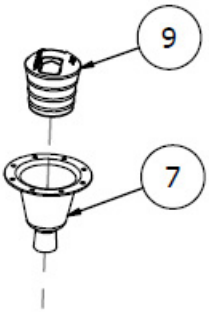
CONTENTS

PUMPOUT CUP AND TUBE 66
FLOAT HAND PUMP 68

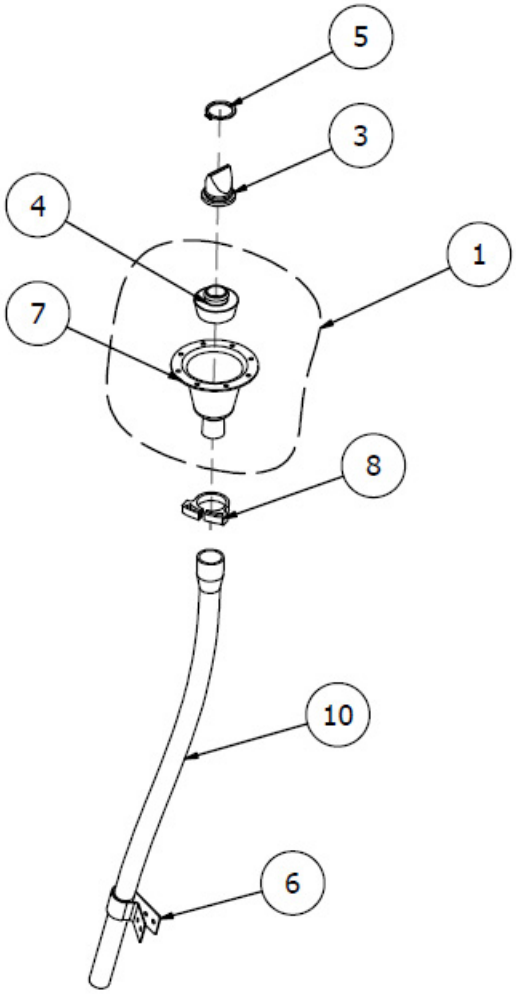
PUMPOUT CUP AND TUBE



DUCKBILL VALVE
RETROFIT



STOPPER



CUP ASSEMBLY
& TUBE

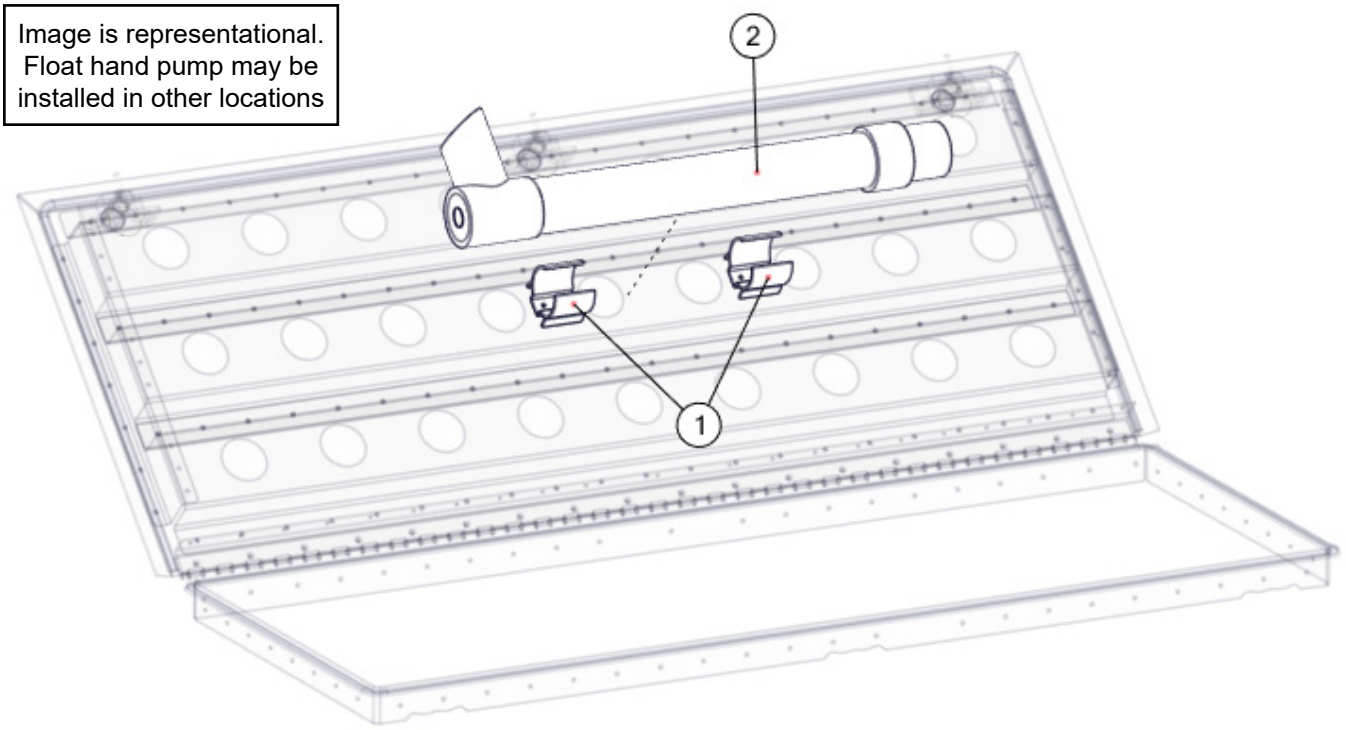
ITEM	QTY	PART NO.	PART DESCRIPTION	NOTE
1	1	1011004	ASSEMBLY, CUP, PUMPOUT, DUCKBILL	
2	1	1011075	KIT, PUMPOUT PLUG, DUCKBILL	1
3	1	1011870	VALVE, DUCKBILL	
4	1	1011808	RETAINER, VALVE, DUCKBILL, PUMPOUT PLUG	
5	1	91590A129	RETAINING RING, EXTERNAL, 13/16 OD, STAINLESS	
6	1	3A01158-003	CLAMP, PUMPOUT TUBE	
7	1	4A01749-001	CUP, PUMPOUT	
8	1	57134	CLAMP	
9	1	2111	STOPPER, PUMPOUT, LAKE AND AIR	2
10	A/R	RM618	TUBE, 5/8 OD, 1/2 ID	3
	10.5 IN	RM618	PUMPOUT TUBE	
	12.5 IN	RM618	PUMPOUT TUBE	
	15 IN	RM618	PUMPOUT TUBE	
	17.5 IN	RM618	PUMPOUT TUBE	
	23 IN	RM618	PUMPOUT TUBE	
	21.5 IN	RM618	PUMPOUT TUBE	
	18.5 IN	RM618	PUMPOUT TUBE	

NOTES:

1. Parts kit that requires RTV adhesive, see service letter 240 for instructions.
2. Not compatible with 1011004.
3. Length in feet as required, see tube table for individual lengths.

FLOAT HAND PUMP

Image is representational. Float hand pump may be installed in other locations



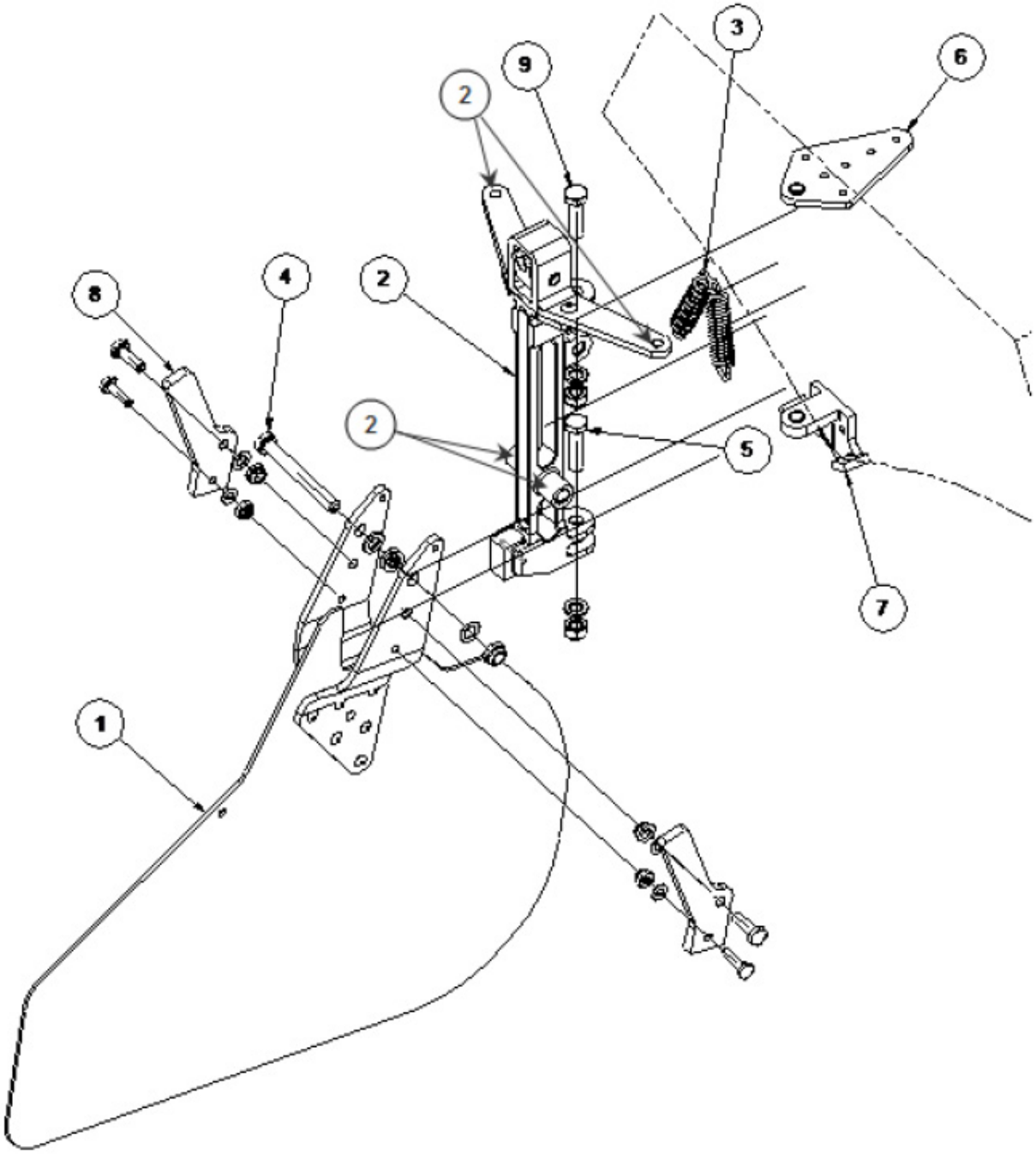
ITEM	QTY	PART NO.	PART DESCRIPTION
1	2	CM-2	CLIP, PLASTIC, PUMPOUT (SCREWS INCLUDED, MAY BE RIVETED IN)
2	1	F15PX	PUMP, HAND, FLOAT, 15"
2 (ALT)	1	F24PX	PUMP, HAND, FLOAT, 24"
2 (ALT)	1	F36PX	PUMP, HAND, FLOAT, 36"

SECTION 7
WATER RUDDER AND STEERING & RETRACT SYSTEM

CONTENTS

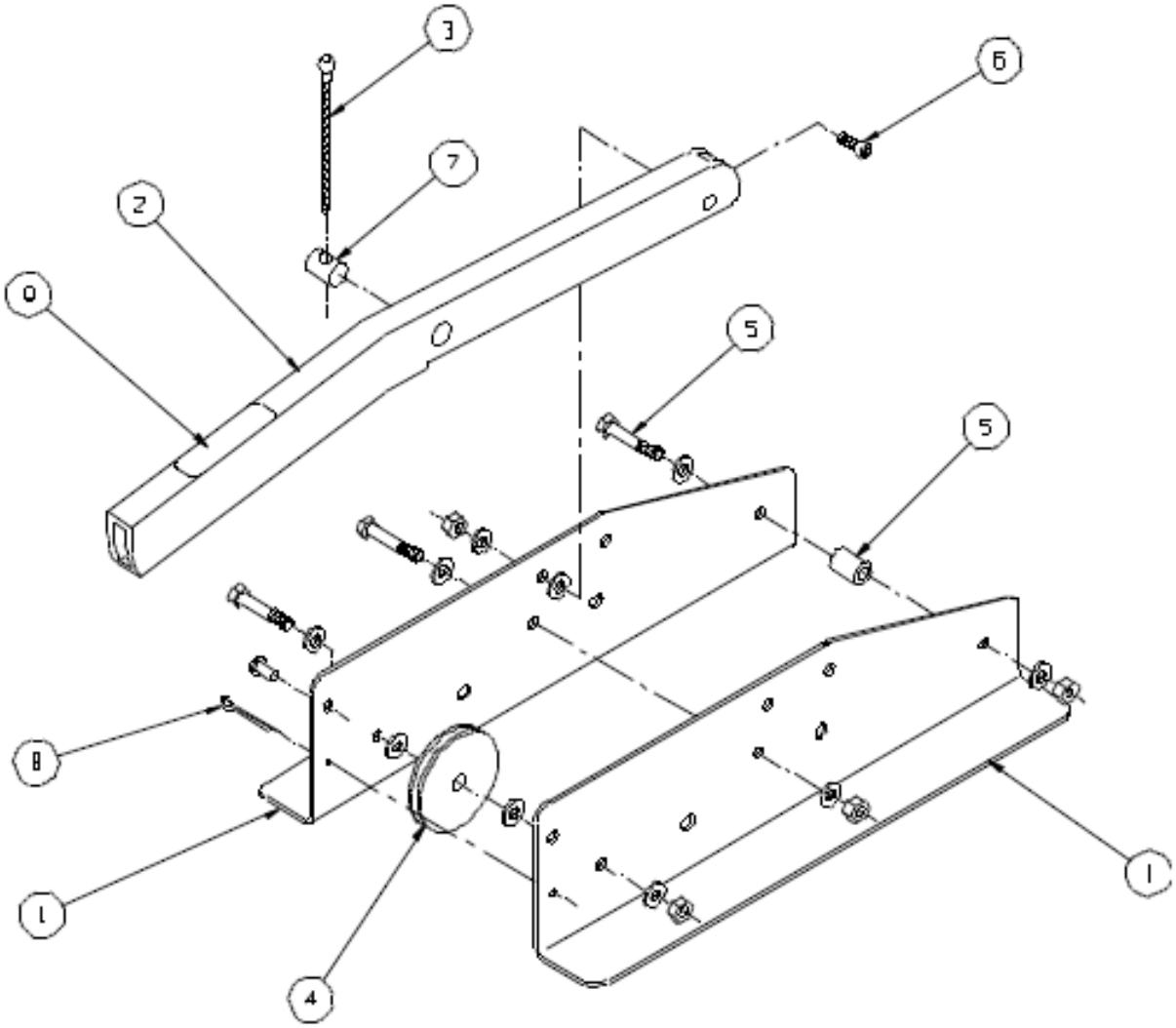
WATER RUDDER INSTALLATION....70
RETRACT HANDLE ASSEMBLY....72
STEERING AND RETRACT SYSTEM....74

WATER RUDDER INSTALLATION



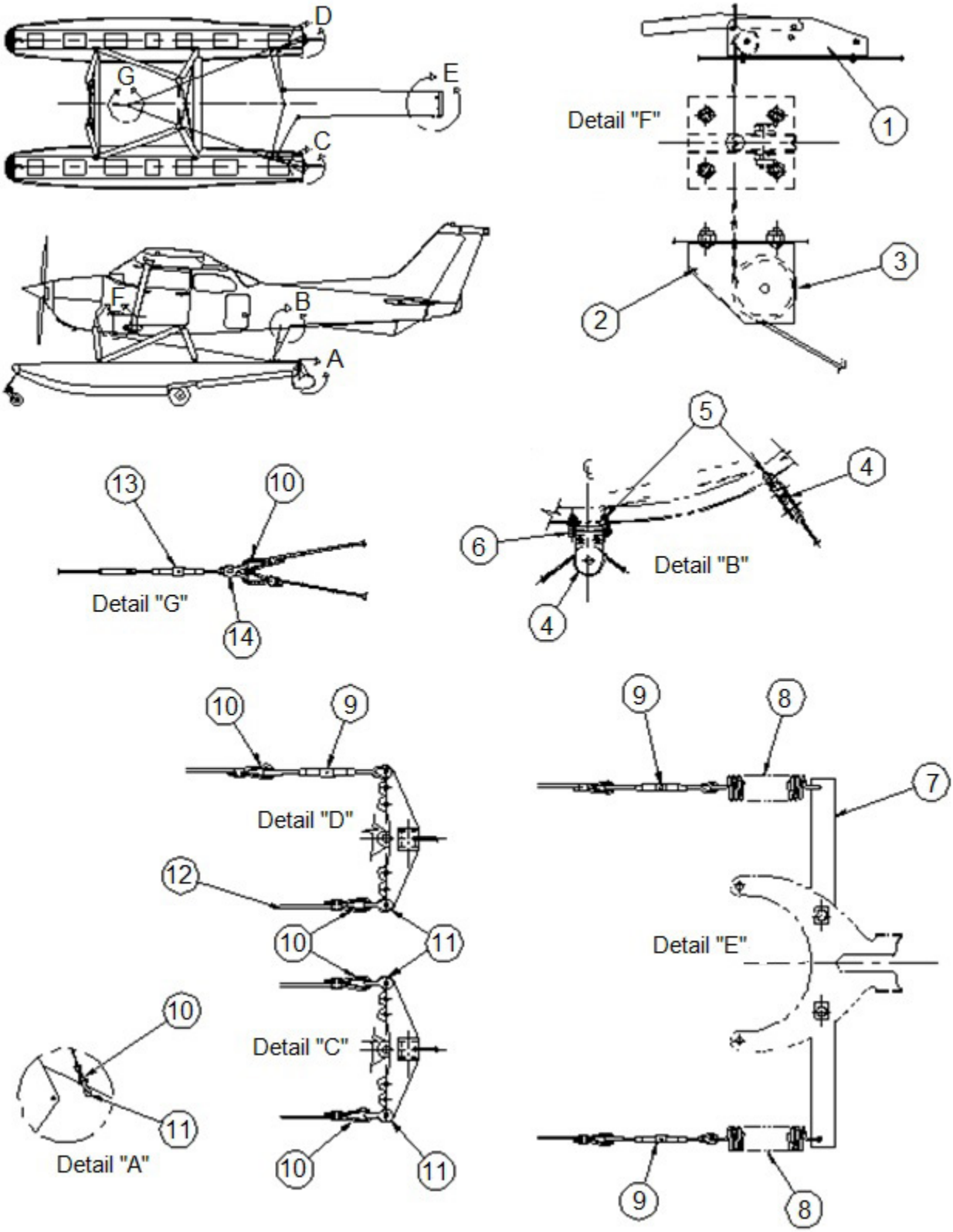
ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	21A08000-123	ASS'Y., BLADE
	1	1002649	WATER RUDDER BLADE 2350
	1	21A08019-001	ARM, L.
	1	21A08019-002	ARM, R.
2	1	1003859	ASSY, WATER RUDDER POST, W/BELLCRANK, 2350
	1	1003855	ASSY, WATER RUDDER POST, 2350
	1	1003271	WATER RUDDER POST, 2350
	4	05DU06	BUSHING, SELF LUBRICATING, .313 ID X .375 LONG
	1	1003853	BELLCRANK, WATER RUDDER POST ASSEMBLY
	1	1003274	BELLCRANK, WATER RUDDER POST
	2	03DU04	SELF LUBRICATING BUSHINGS
	1	21A08648-002	BUMPER, DOWN STOP
	1	1001457	ROLL PIN
	1	21A8602-009	GUIDE, RETRACT
	1	5/16 X 1 ½ INCHES	PIN ATTACH
3	2	21A08525-006	SPRING
4	1	AN5-25A	BOLT, 5/16-24, 2.1875 GRIP, UNDRILLED, STEEL
	3	NAS1149D0516J	WASHER, 0.328 ID, 0.016 THK, ALUMINUM
	1	NAS 1149D0563J	WASHER, 0.328 ID, 0.063 THK, ALUMINUM
	1	MS21083N5	NUT, LOCKING, LOW HEIGHT, 5/16-24 UNF
5	1	AN5-11A	BOLT, 5/16-24, 0.6875 GRIP, UNDRILLED, STEEL
	A/R	NAS1149D0563J	WASHER, 0.328 ID, 0.063 THK, ALUMINUM
	1	MS21044N5	NUT, LOCKING, REGULAR HEIGHT, 5/16-24 UNF
6	1	21A01000-299	ASS'Y., TOP BEARING
	1	21A01019-003	BRACKET, TOP RUDDER BEARING
	1	21A01705-003	BUSHING, TOP RUDDER PLATE
7	1	21A08000-157	ASS'Y., LOWER BEARING
	1	21A08318-002	BRACKET - WATER RUDDER, LOWER PIVOT
	1	05DU06	BUSHING, SELF LUBRICATING, .313 ID X .375 LONG
8	2	23A08234-003	STOP, WATER RUDDER, UP
	2	AN4-6A	BOLT, 1/4-28, 0.3125 GRIP, UNDRILLED, STEEL
	2	NAS1149D0416J	WASHER, 0.265 ID, 0.016 THK, ALUMINUM
	2	MS21083N4	NUT, LOCKING, LOW HEIGHT, 1/4-28 UNF
	2	AN3-6A	BOLT, 10-32, 0.375 GRIP, UNDRILLED, STEEL
	2	NAS1149D0316J	WASHER, 0.203 ID, 0.016 THK, ALUMINUM
	2	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
9	1	AN5-12A	BOLT SIZE 5/16-24, LNGTH +/- 1/64 - 1-11/32, GRIP LNGTH 13/16
	A/R	NAS1149D0563J	WASHER, 0.328 ID, 0.063 THK, ALUMINUM
	1	MS21044N5	NUT, LOCKING, REGULAR HEIGHT, 5/16-24 UNF

RETRACT HANDLE ASSEMBLY



ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	21A08000-128	ASS'Y – RETRACT HANDLE
	1	3A08003-015	BRACKET SIDE L.
	1	3A08003-016	BRACKET SIDE R.
2	1	3A08414-001	HANDLE
3	1	21A08000-137	CABLE ASS'Y
4	1	MS20219-2	PULLEY
	1	AN4-10A	BOLT, 1/4-28, 0.5625 GRIP, UNDRILLED, STEEL
	2	NAS1149F0463P	WASHER, 0.265 ID, 0.063 THK, STEEL
	1	NAS679A4W	KAYNAR NUT
5	2	AN3-10A	BOLT, 10-32, 0.625 GRIP, UNDRILLED, STEEL
	2	3A08613-001	PLASTIC TUBE
	8	NAS1149F0316P	WASHER, I.D. 13/64", O.D. 7/16"
	4	NAS679A3W	KAYNAR NUT
6	2	3A08702-006	PIN PIVOT
	2	NAS1149F0432P	WASHER, 0.265 ID, 0.032 THK, STEEL
	2	NAS679A3W	KAYNAR NUT
7	1	4A08506-002	SWIVEL
8	1	MS24665-285	PIN – COTTER
9	1	3A3-1115-2	PLACARD – DOWN
	1	3A3-1115-3	PLACARD – UP
	1	3A3-1115-1	PLACARD – WATER RUDDER CONTROL

STEERING AND RETRACT SYSTEM



ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	21A08000-128	ASS'Y – RETRACT HANDLE (SEE DETAIL)
	4	AN526-1032R8	SCREW - ATTACH
	4	NAS1149D0363J	WASHER, 0.203 ID, 0.063 THK, ALUMINUM
	4	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
2	1	3A08151-046	PULLEY BRACKET
	4	AN526-1032R8	SCREW – ATTACH
	4	NAS1149D0316J	WASHER, 0.203 ID, 0.016 THK, ALUMINUM
	4	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
3	1	MS20219-2	PULLEY
	1	AN4-7A	BOLT, 1/4-28, 0.4375 GRIP, UNDRILLED, STEEL
	2	NAS1149D0463J	WASHER, 0.265 ID, 0.063 THK, ALUMINUM
	1	MS21044N4	NUT
4	3	21A08000-125	ASS'Y – PULLEY BRACKET
	1	21A08008-150	BRACKET
	1	21A08230-002	SPACER - BLOCK
	1	MS20219-2	PULLEY
	1	AN4-7A	BOLT, 1/4-28, 0.4375 GRIP, UNDRILLED, STEEL
	1	NAS1149D0416J	WASHER, 0.265 ID, 0.016 THK, ALUMINUM
	1	MS21083N4	NUT, LOCKING, LOW HEIGHT, 1/4-28 UNF
	1	NAS1149D0463J	WASHER, 0.265 ID, 0.063 THK, ALUMINUM
5	6	AN42B4A	EYE BOLT
	6	NAS1149D0363J	WASHER, 0.203 ID, 0.063 THK, ALUMINUM
	6	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
6	3	AN3-17A	BOLT
	3	NAS1149D0363J	WASHER, 0.203 ID, 0.063 THK, ALUMINUM
	3	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
7	1	21A08359-201	EXTENSION – RUDDER HORN
	2	AN3-6A	BOLT – ATTACH
	2	NAS1149D0363J	WASHER, 0.203 ID, 0.063 THK, ALUMINUM
	2	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
8	2	21A08525-005	SPRING
9	3	MS21251B3S	TURNBUCKLE – BARREL
	3	MS21252-3RS	FORK – TERMINAL
	3	MS20392-2-1	PIN ATTACH
	3	MS24665-132	PIN – COTTER
	3	NAS1149D0316J	WASHER, 0.203 ID, 0.016 THK, ALUMINUM
10	10	AN100-3	THIMBLE – CABLE
	10	18-2-G	NICOPRESS – CLAMP
11	5	MS20115-3	SHACKLE
	5	MS20392-2-11	PIN – ATTACH
	5	MS24665-132	PIN – COTTER

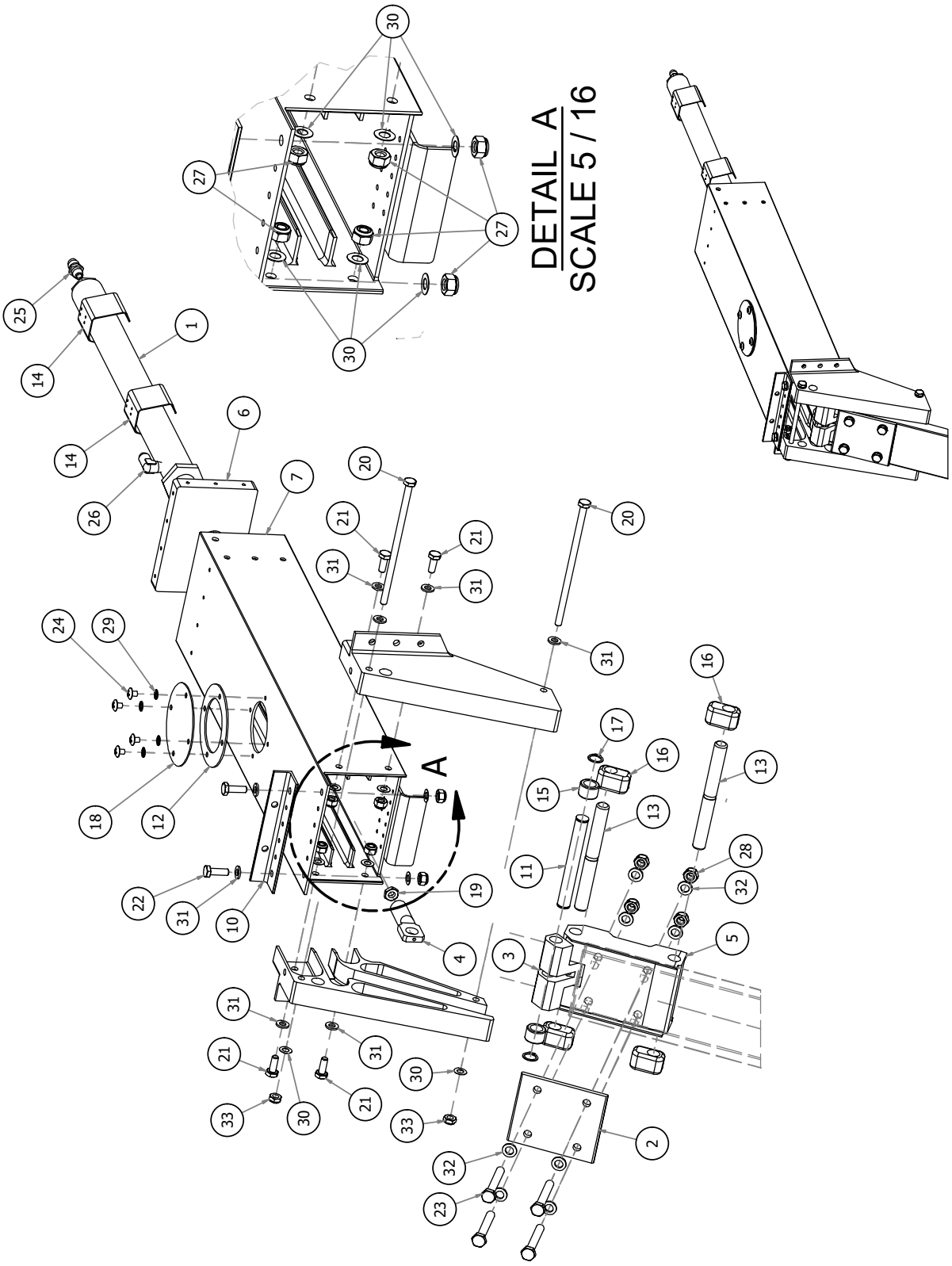
ITEM	QTY	PART NO.	PART DESCRIPTION
12	A/R	3/32 7X 7 S.S.	CABLE (REQUEST LENGTH)
13	1	MS21251B3S	BARREL
	1	MS21252-3RS	FORK
14	2	MS20115-3	SHACKLE
	1	MS20392-2-19	PIN – CLEVIS

SECTION 8
LANDING GEAR

CONTENTS

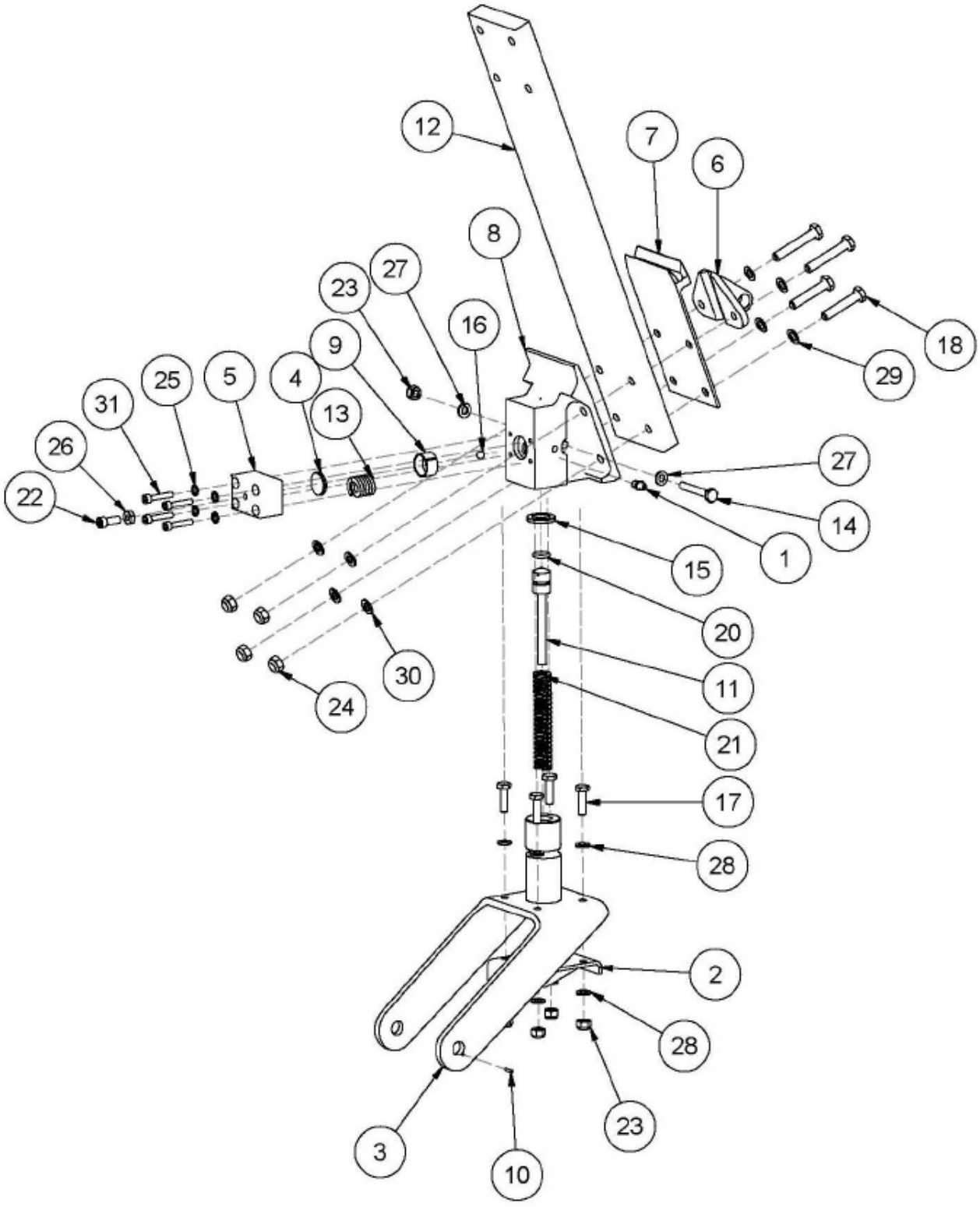
NOSE GEAR RETRACTION ASSEMBLY....78
NOSE GEAR LOWER ASSEMBLY....80
NOSE WHEEL ASSEMBLY (GROVE ONLY)....82
NOSE WHEEL ASSEMBLY (PARKER ONLY)....84
MAIN GEAR RETRACTION INSTALLATION....86
MAIN GEAR WHEEL (GROVE / WIPAIRE ASSEMBLY)....89
MAIN GEAR WHEEL (CLEVELAND / PARKER ASSEMBLY)....91

NOSE GEAR RETRACTION ASSEMBLY



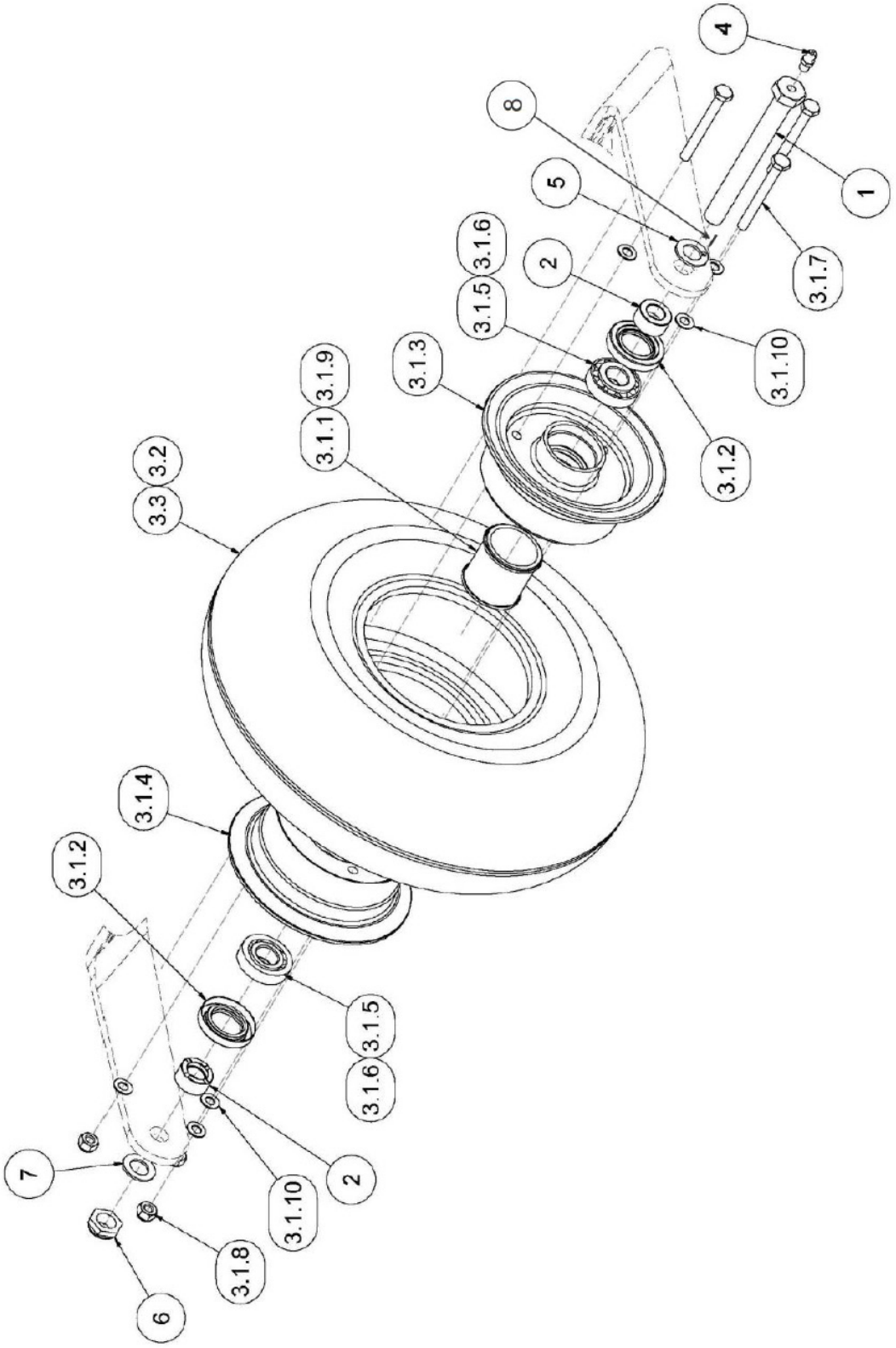
ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	1002571	CYLINDER, NOSE GEAR, 2100/2350
2	1	21A06166-001	PLATE - BEARING, NOSE SPRING
3	1	21A07032-005	LINK - TROLLEY, NOSE GEAR
4	1	21A07094-002	END - ROD, CYLINDER, NOSE GEAR
5	1	21A07187-009	TROLLEY - NOSE GEAR
6	1	21A07237-002	END CAP, NOSE BOX
7	1	21A07323-001	BOX, NOSE GEAR
8	1	21A07349-003	END, NOSE BOX, TRACK
9	1	21A07349-004	END, NOSE BOX, TRACK
10	1	21A07359-194	EXTRUSION, ANGLE
11	1	21A07509-007	AXLE, TROLLEY LINK
12	1	30A07567-011	GASKET, COVER, NOSE BOX, 2100 AND 3000
13	2	34A07509-008	AXLE, TROLLEY
14	2	3A07005-178	CLIP, SWITCH, NOSE & MAIN
15	2	3A07530-001	BEARING - TROLLEY, NOSE GEAR
16	4	3A07604-001	BLOCK, SLIDE, TROLLEY, NOSE GEAR
17	2	5100-46-H	SNAP RING
18	1	8A01008-080	COVER, BULKHEAD HYD CYL. HOLE
19	1	AN316-5R	NUT JAM, HEXAGON, 5/16-24 THREAD, RIGHT
20	2	AN4-53A	BOLT, 1/4-28, 4.9375197 GRIP, UNDRILLED, STEEL
21	4	AN4-5A	BOLT, 1/4-28, 0.1875 GRIP, UNDRILLED, STEEL
22	2	AN4-6A	BOLT, 1/4-28, 0.3125 GRIP, UNDRILLED, STEEL
23	4	AN5-21A	BOLT, 5/16-24, 1.6875 GRIP, UNDRILLED, STEEL
24	4	AN526-1032R4	SCREW, MACHINE, TRUSS HEAD
25	1	AN816-4D	NIPPLE, FLARED TUBE AND PIPE THREAD
26	1	MS20822-4D	ELBOW
27	6	MS21044N4	NUT, LOCKING, REGULAR HEIGHT, 1/4-28 UNF
28	4	MS21044N5	NUT, LOCKING, REGULAR HEIGHT, 5/16-24 UNF
29	4	MS35333-39	STAR WASHER
30	8	NAS1149D0416J	WASHER, 0.265 ID, 0.016 THK, ALUMINUM
31	8	NAS1149D0463J	WASHER, 0.265 ID, 0.063 THK, ALUMINUM
32	8	NAS1149F0563P	WASHER, 0.328 ID, 0.063 THK, STEEL
33	2	NAS679-A4W	KAYNAR NUT

NOSE GEAR LOWER ASSEMBLY



ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	1095K41	COMMON GREASEZERK
2	1	21A06000-020	WELDMENT, PIVOT SHAFT, FORK, NOSE GEAR
3	1	21A06020-001	FORK, NOSE GEAR
4	1	21A06160-053	PRESSURE PLATE
5	1	21A06194-005	BLOCK - SPRING
6	1	21A06213-006	TOW HOOK NOSE GEAR
7	1	21A06237-001	BEARING PLATE, LOWER, NOSE GEAR
8	1	21A06318-005	BLOCK - PIVOT, NOSE GEAR
9	1	21A06475-006	FRICTION CUP
10	1	21A06476-003	PIN, ANTIROTATION
11	1	21A06605-002	PLUNGER- NOSE WHEEL
12	1	23A06654-002	SPRING NOSE GEAR
13	1	21A06705-005	PRESSURE SPRING
14	1	30A06702-016	BOLT - MODIFIED, PIVOT BLOCK
15	1	3A06602-001	THRUST WASHER
16	1	9528K15	1/4" CHROME BALL BEARING
17	4	AN4-7A	BOLT, 1/4-28, 0.4375 GRIP, UNDRILLED, STEEL
18	2	AN5-15A	BOLT, 5/16-24, 1.1875 GRIP, UNDRILLED, STEEL
19	2	AN5-17A	BOLT, 5/16-24, 1.4375 GRIP, UNDRILLED, STEEL
20	1	MS28775-111	"O" RING, HYDRAULIC
21	1	M62-350	SPRING
22	1	MS16997-60	SOCKET HEAD CAP SCREW
23	5	MS21044N4	NUT, LOCKING, REGULAR HEIGHT, 1/4-28 UNF
24	4	MS21044N5	NUT, LOCKING, REGULAR HEIGHT, 5/16-24 UNF
25	4	MS35333-39	STAR WASHER
26	1	MS35649-2252	NUT, HEXAGON, COARSE THREAD, STEEL, 1/4-20 THREAD
27	2	NAS1149D0463J	WASHER, 0.265 ID, 0.063 THK, ALUMINUM
28	8	NAS1149F0463P	WASHER, 0.265 ID, 0.063 THK, STEEL
29	4	NAS1149F0532P	WASHER, 0.328 ID, 0.032 THK, STEEL
30	4	NAS1149F0563P	WASHER, 0.328 ID, 0.063 THK, STEEL
31	4	NAS1352-316P	SOCKET HEAD CAP SCREW

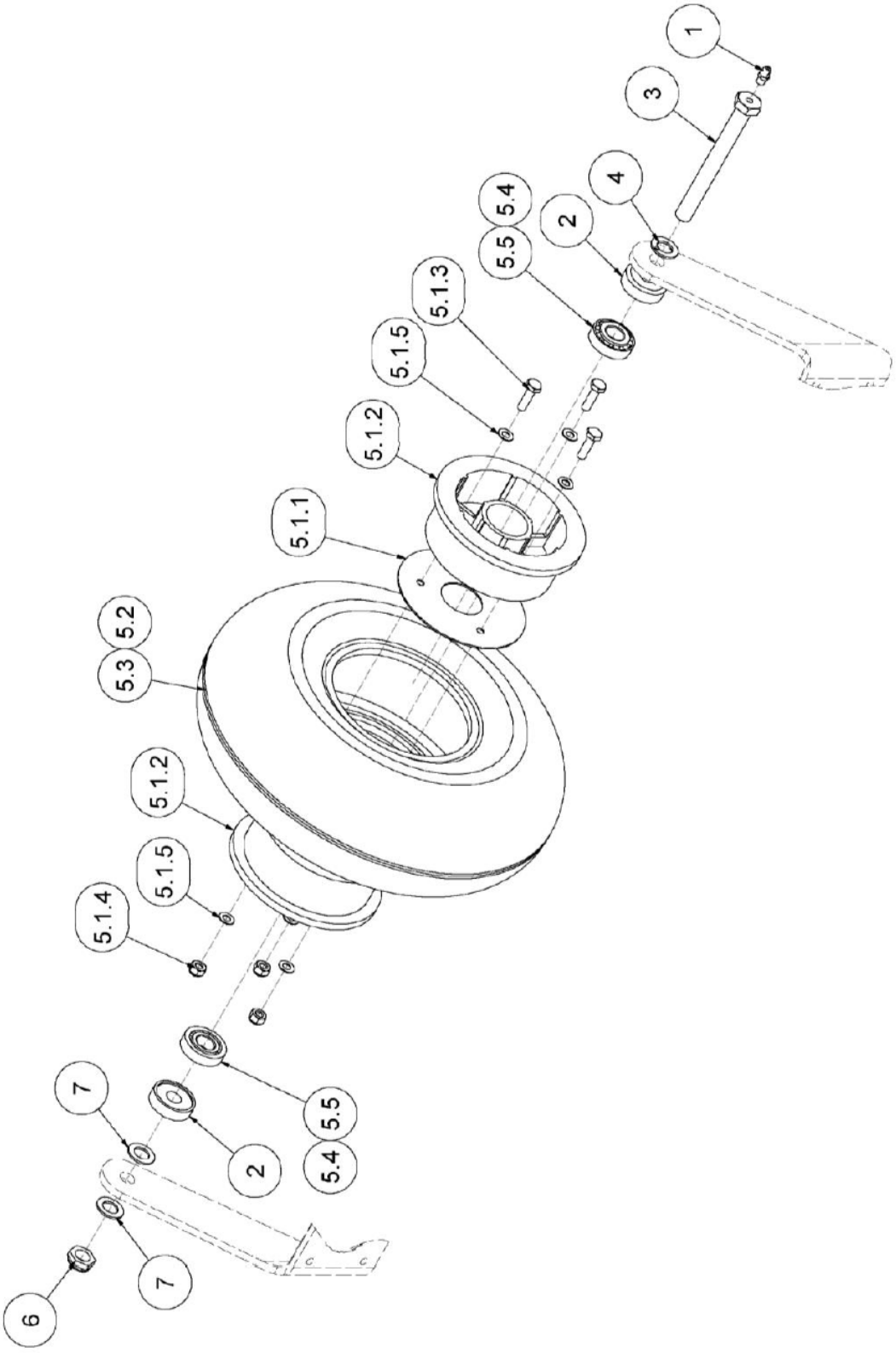
NOSE WHEEL ASSEMBLY (GROVE ONLY)



ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	1005927	BOLT, AXLE, NOSE GEAR
2	2	1005929	SPACER
3	1	1005931	ASSEMBLY, NOSE WHEEL
3.1	1	49-12AF-001	ASSEMBLY, WHEEL, GROVE
3.1.1	1	010-019	GREASE RETAINER
3.1.2	2	471570	SEAL, TIMKEN (EQUIVALENT TO GROVE OEM P/N 010-026)
3.1.3	1	015-020A	WHEEL HALF INNER
3.1.4	1	016-020AF	WHEEL HALF OUTER
3.1.5	2	A4050	BEARING CORE
3.1.6	2	A4138	BEARING CONE
3.1.7	3	AN4-23A	BOLT
3.1.8	3	MS21044N-4	NUT
3.1.9	2	MS28775-029	O-RING
3.1.10	6	NAS1149F0416	WASHER
3.2	1	XA1AA*	INNER TUBE, 2.80 X 4
3.3	1	AD1A2*	TIRE, 2.50 / 2.80 - 4
4	1	1095K41	COMMON GREASE ZERK
5	1	3A06702-003	MODIFIED WASHER
6	1	MS21083N8	NUT
7	1	NAS1149D0863J	WASHER
8	1	21A06476-003	PIN ANTI ROTATE AXEL

* Any alternate tire (tube type) which is TSO-approved, matches the listed tire's dimensions, and meets its speed/load/ply ratings may be used. Equivalent tubes may also be used.

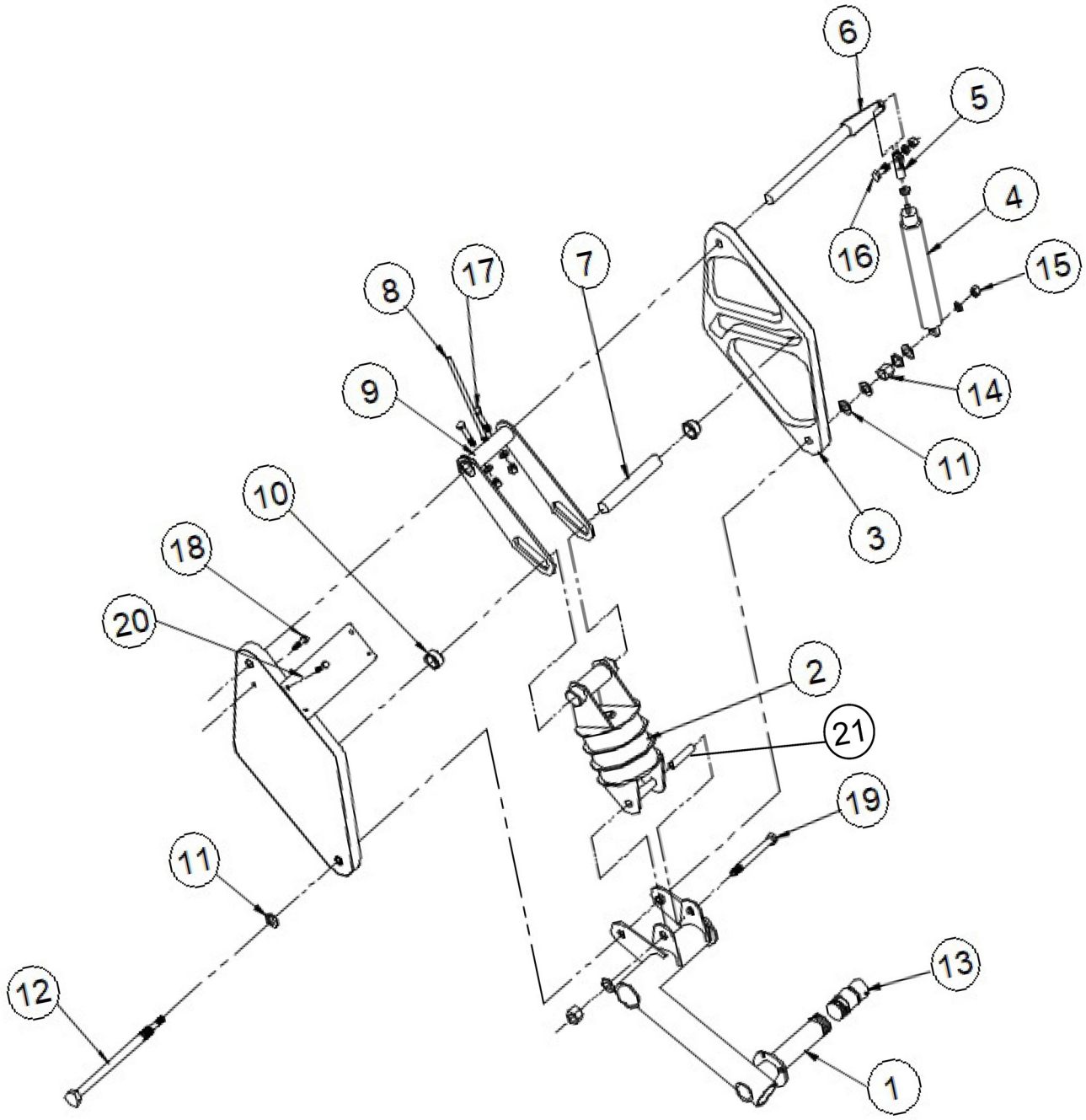
NOSE WHEEL ASSEMBLY (PARKER ONLY)



ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	1095K41	COMMON GREASEZERK
2	2	3A06259-001	SPACER
3	1	3A06702-002	MODIFIED BOLT
4	1	3A06702-003	MODIFIED WASHER
5	1	21A06000-021	NOSE WHEEL ASSEMBLY
5.1	1	D-30380	PARKER WHEEL ASSEMBLY
5.1.1	1	068-30373	GASKET
5.1.2	2	161-30382	WHEEL HALF
5.1.3	3	AN4-7A	BOLT, 1/4-28, 0.4375 GRIP, UNDRILLED, STEEL
5.1.4	3	MS21044N4	NUT
5.1.5	6	NAS1149F0432P	WASHER
5.2	1	XA1AA*	INNER TUBE, 2.80 X 4
5.3	1	AD1A2*	TIRE, 2.50 / 2.80 - 4
5.4	2	A4050	BEARING CORE
5.5	2	A4138	BEARING CONE
6	1	MS21083N8	NUT
7	2	NAS1149D0863J	WASHER

* Any alternate tire (tube type) which is TSO-approved, matches the listed tire's dimensions, and meets its speed/load/ply ratings may be used. Equivalent tubes may also be used.

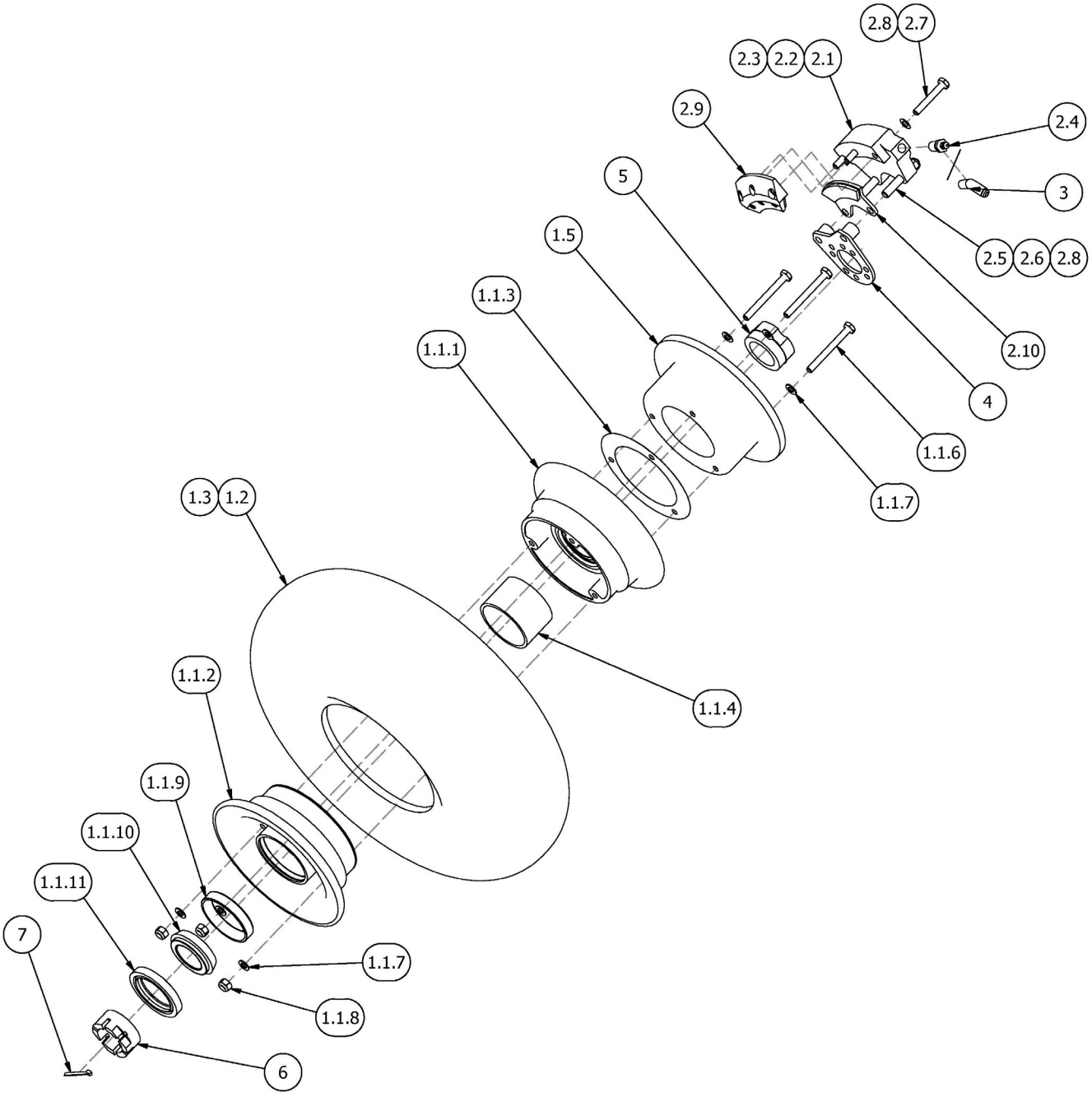
MAIN GEAR RETRACTION INSTALLATION



ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	21A04000-077	ASS'Y – DRAG LINK L.
	1	21A04000-076	ASS'Y – DRAG LINK R.
	2	08FDU12	BEARING
2	1	23A04000-113	ASS'Y SHOCK STRUT
	1	21A04000-075	ASS'Y – LOWER END
	1	21A04585-002	SLEEVE
	2	1095K41	ZERK – GREASE
	1	21A04000-074	ASS'Y – UPPER END
	1	1002088	DUAL BUSHING ASSEMBLY
	1	1001101	BUSHING ASSEMBLY
	1	21A04503-004	RETAINING PIN
	1	MS24665-151	COTTER PIN
	2	NAS1149F0416J	WASHER
	2	NAS1149F0463J	WASHER
3	1	21A05114-005	TRACK – MAIN GEAR L.
	1	21A05114-006	TRACK – MAIN GEAR R.
	1	10DU12	BEARING - UPPER
	1	08DU12	BEARING – LOWER
4	1	1002574	CYLINDER
	2	MS20822-4D	FITTING - ELBOW
5	1	21A05705-002	ROD END
	1	AN316-5	JAMB NUT
	1	21A05260-005	SPACER
	1	MS20002C6	CHAMFERED WASHER (CHAMFERED EDGE GOES AGAINST CYLINDER)
6	1	21A05000-017	ARM – RETRACT L.
	1	21A05000-016	ARM – RETRACT R.
7	1	21A04454-006	AXLE – SHOCK STRUT
8	1	21A05000-022	INDICTATOR ASS'Y
9	1	21A05000-018	GEAR ACTUATOR
10	2	21A05520-003	ROLLER – TRACK
11	2	93783A033	WASHER – SEALING
12	1	21A05000-019	BOLT – ASSEMBLY
13	1	21A04263-007	RETAINER - GREASE
	2	MS28775-210	"O" RING
	1	1095K41	ZERK – GREASE
14	1	MS21044N8	NUT
	2	NAS1149F0863P	WASHER
15	1	MS21083N5	NUT, LOCKING, LOW HEIGHT, 5/16-24 UNF
	A/R	NAS1149F0563P	WASHER
16	1	AN5-11A	BOLT, 5/16-24, 0.6875 GRIP, UNDRILLED, STEEL

ITEM	QTY	PART NO.	PART DESCRIPTION
	2	NAS1149F0563P	WASHER
	1	MS21044N5	NUT, LOCKING, REGULAR HEIGHT, 5/16-24 UNF
17	2	AN4-13A	BOLT
	4	NAS1149D0416J	WASHER, 0.265 ID, 0.016 THK, ALUMINUM
	2	MS21044N4	NUT
18	8	AN3-6A	BOLT – TRACK ATTACH
	8	NAS1149D0316J	WASHER, 0.203 ID, 0.016 THK, ALUMINUM
	8	NAS1149D0363J	WASHER, 0.203 ID, 0.063 THK, ALUMINUM
	8	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
19	1	AN8-33A	BOLT
	1	NAS1149F0832P	WASHER
	1	NAS1149F0863P	WASHER
	1	MS21044N8	NUT
20	1	21A05003-079	PLATE - SEPARATING
	4	AN3-5A	BOLT
	8	NAS1149D0316J	WASHER, 0.203 ID, 0.016 THK, ALUMINUM
	4	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
21	1	21A04547-004	BUSHING - LOWER SHOCK STRUT

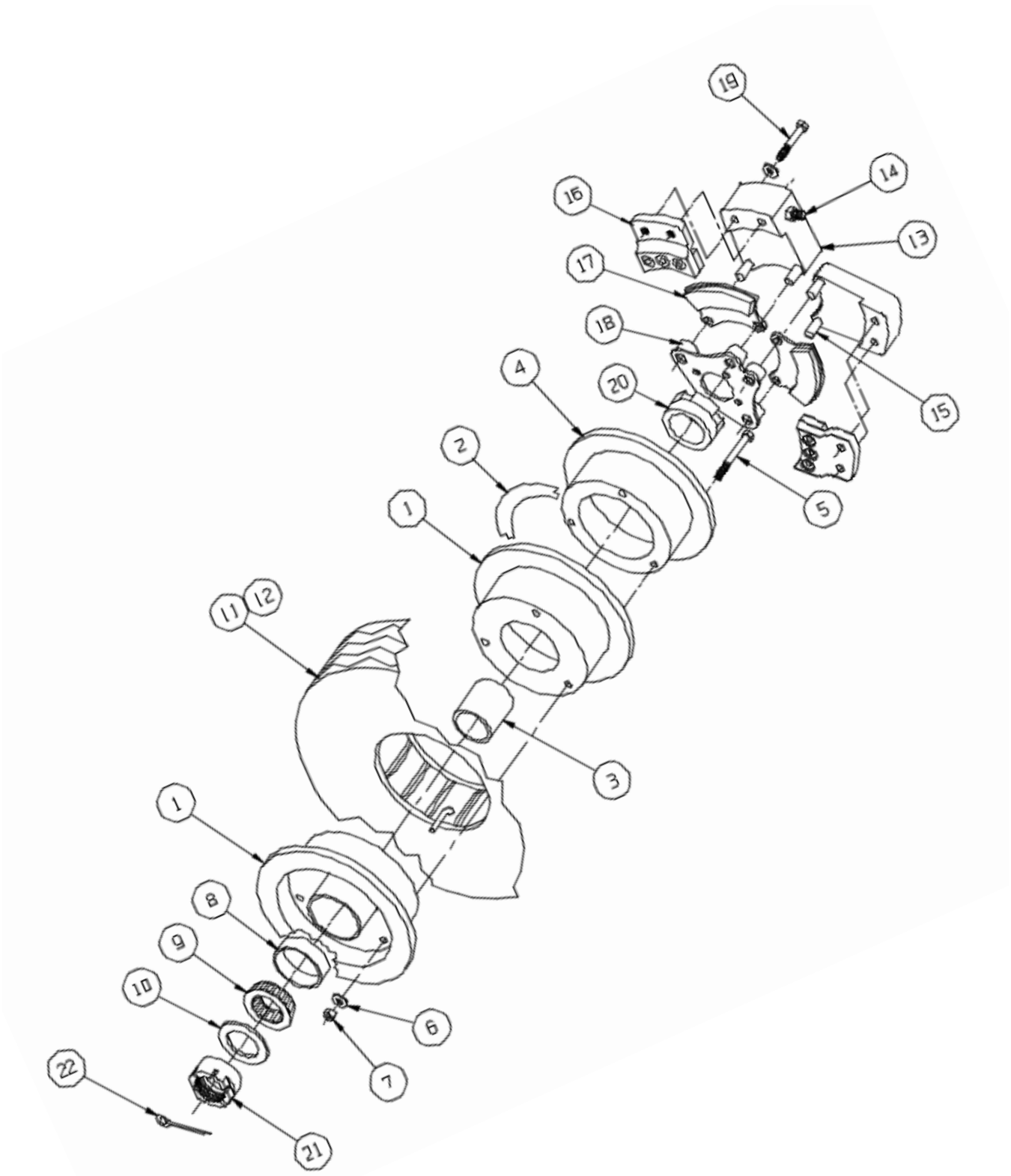
MAIN GEAR WHEEL (GROVE / WIPAIRE ASSEMBLY)



ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	1002144	ASSY, MAIN WHEEL, GROVE, 2350 (INCLUDES TIRE AND TUBE)
1.1	1	1002145	ASSY, RIM AND BEARINGS, GROVE, 2350
1.1.1	1	015-002	WHEEL HALF, INNER (REF)
1.1.2	1	016-002	WHEEL HALF, OUTER (REF)
1.1.3	1	3A04620-001	GASKET - TEFLON
1.1.4	1	010-009	GREASE RETAINER
1.1.5	1	018-002	BRAKE DISC (NOMINAL THICKNESS 0.313", MINIMUM 0.288")
1.1.6	3	AN4-23A	BOLT, 1/4-28, 1.9375 GRIP, UNDRILLED, STEEL
1.1.7	6	NAS1149F0432P	WASHER, 0.265 ID, 0.032 THK, STEEL
1.1.8	3	MS21044N4	NUT, LOCKING, REGULAR HEIGHT, 1/4-28 UNF
1.1.9	2	08231	BEARING CUP, NON-CHROME
	2	08231CP	BEARING CUP (CHROME, REF)
1.1.10	2	08125	BEARING CONE, NON-CHROME
	2	08125CP	BEARING CONE (CHROME, REF)
1.1.11	2	473237	SEAL - INSIDE/OUTSIDE *DRILL #50 HOLE IN SIDE OF SEAL TO BE USED IN OUTBOARD SIDE OF WHEEL
1.2	1	AA1D4*	TIRE –TYPE III 5.00 X 5, 6 PLY
1.3	1	XA1AC*	TUBE 5.00 X 5
2	1	32-3	BRAKE ASSEMBLY
2.1	1	023-007	CALIPER BODY (REF)
2.2	2	017-003	PISTON (REF)
2.3	2	MS28775-217	O-RING, HYDRAULIC
2.4	1	220-0063	BLEEDER ASSEMBLY
2.5	2	013-001	TORQUE PIN (REF)
2.6	2	MS21044N4	NUT, LOCKING, REGULAR HEIGHT, 1/4-28 UNF
2.7	3	AN4H-15A	BOLT
2.8	5	NAS1149F0416P	WASHER, 0.265 ID, 0.016 THK, STEEL
2.9	1	10-3	ASS'Y – BACK PLATE (REF)
2.9.1	1	RA66-111	LINING (PAD)
2.9.2	3	066-001	RIVET (REF)
	3	105-00200 (ALT)	RIVET (ALTERNATE PN)
2.10	1	11-2	ASS'Y – PRESSURE PLATE
2.10.1	1	RA66-111	LINING (PAD)
2.10.2	3	066-001	RIVET (REF)
	3	105-00200 (ALT)	RIVET (ALTERNATE PN)
3	1	MS20823-3D	FITTING 45˚ BRAKE LINE
4	1	020-001	BRAKE TORQUE PLATE
5	1	3A04093-001	SPACER
6	1	3A04268-003	NUT – AXLE
7	1	MS24665-351	COTTER PIN

* Any alternate tire (tube type) which is TSO-approved, matches the listed tire's dimensions, and meets its speed/load/ply ratings may be used. Equivalent tubes may also be used.

MAIN GEAR WHEEL (CLEVELAND / PARKER ASSEMBLY)



ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	3A04000-002	ASS'Y – WHEEL (W/ TUBE & TIRE)
	1	3A04000-060	ASS'Y
2	1	3A04620-001	GASKET - TEFLON
3	1	3A04616-001	GREASE RETAINER
4	1	164-01700	BRAKE DISC
5	3	AN4-22A	BOLT
6	3	NAS1149F0432P	WASHER
7	3	MS21044N4	NUT
8	2	8231	BEARING CUP
	2	8231CP	BEARING CUP, CHROME (OPT.)
9	2	8125	BEARING CONE
	2	8125CP	BEARING CONE, CHROME (OPT.)
10	2	473237	SEAL - INSIDE/OUTSIDE
11	1	AA1D4*	TIRE –TYPE III
	1	XA1AC*	TUBE
12	2	3A04000-052	ASS'Y – BRAKE AND TORQUE PLATE
13	2	030-00903	ASS'Y – CALIPER
	2	062-00300	PISTON
	2	AN6227-23	"O" RING
	2	MS20823-3D	FITTING - 45 DEGREES (BRAKE LINE)
14	2	081-30619	SEAT – BLEEDER
	2	79-3	SCREW – BLEEDER
	2	183-1	CAP – BLEEDER
15	4	069-00400	ANCHOR BOLT
	4	NAS1149F0463P	WASHER, 0.265 ID, 0.063 THK, STEEL
	4	MS21044N4	NUT
16	2	074-02700	ASS'Y – BACK PLATE
	2	064-00500	PLATE – BACK
	2	066-10600	LINING
	6	105-2	RIVET
17	2	073-04800	ASS'Y – PRESSURE PLATE
	2	063-00500	PLATE - PRESSURE
	2	066-10600	LINING
	6	105-2	RIVET
18	1	23A04000-109	BRAKE TORQUE PLATE - LEFT
	1	23A04000-110	BRAKE TORQUE PLATE – RIGHT
19	4	AN4H15A	BOLT
	4	NAS1149F0432P	WASHER
20	1	3A04093-001	SPACER
21	1	3A04268-003	NUT – AXLE
22	1	MS24665-351	COTTER PIN

* Any alternate tire (tube type) which is TSO-approved, matches the listed tire's dimensions, and meets its speed/load/ply ratings may be used. Equivalent tubes may also be used.

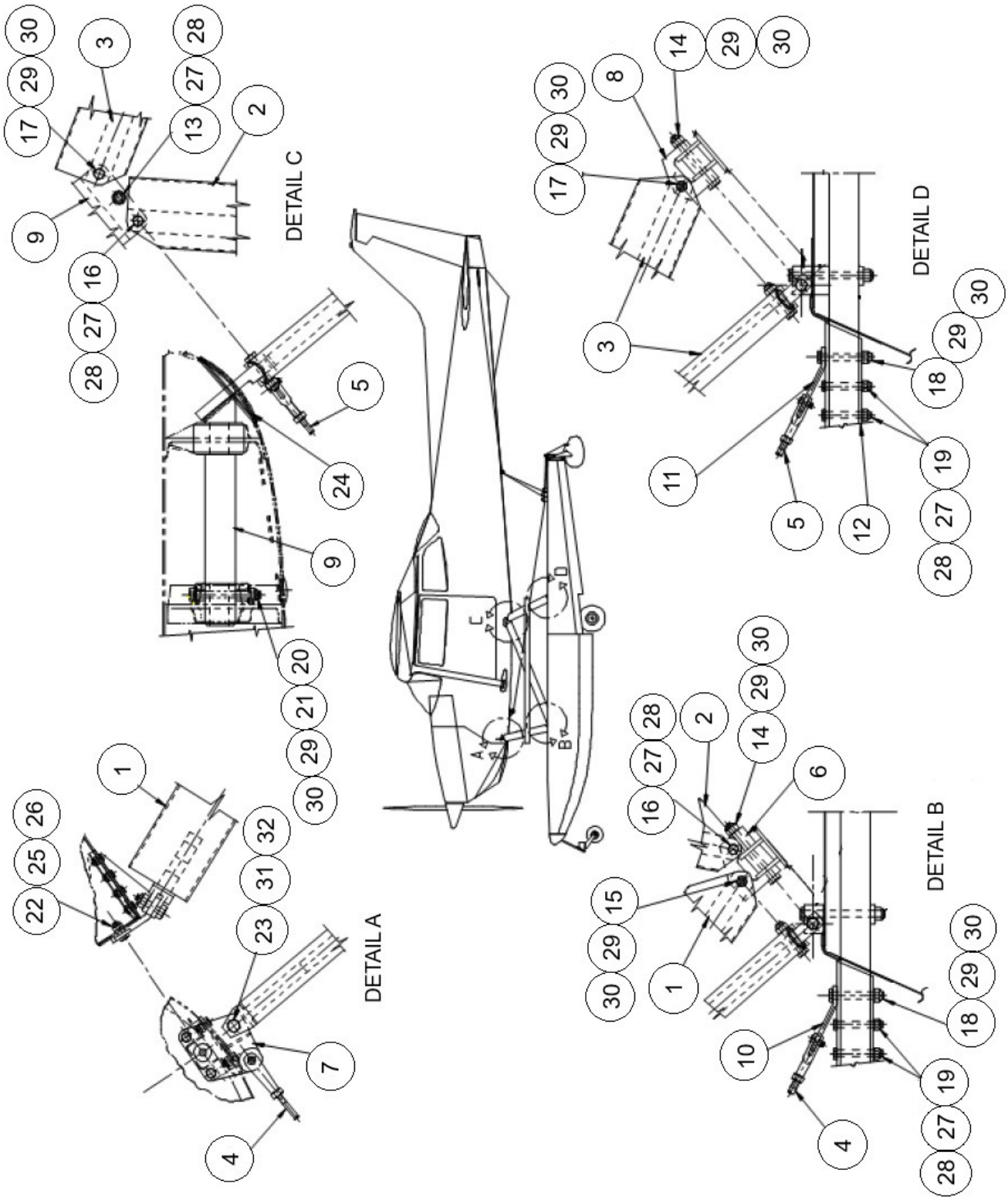
SECTION 9

STRUTS, WIRES, STEPS, & SPREADER BARS

CONTENTS

STRUTS, WIRES, STEPS & SPREADER BARS 94
FWD SPREADER BAR SUPPORT PANEL ASSEMBLY 97
AFT SPREADER BAR SUPPORT PANEL ASSEMBLY.....98
SPREADER BAR TUBE MOUNTING 99
VENTRAL FIN & FUSELAGE STEPS INSTALLATION 100

STRUTS, WIRES, STEPS & SPREADER BARS

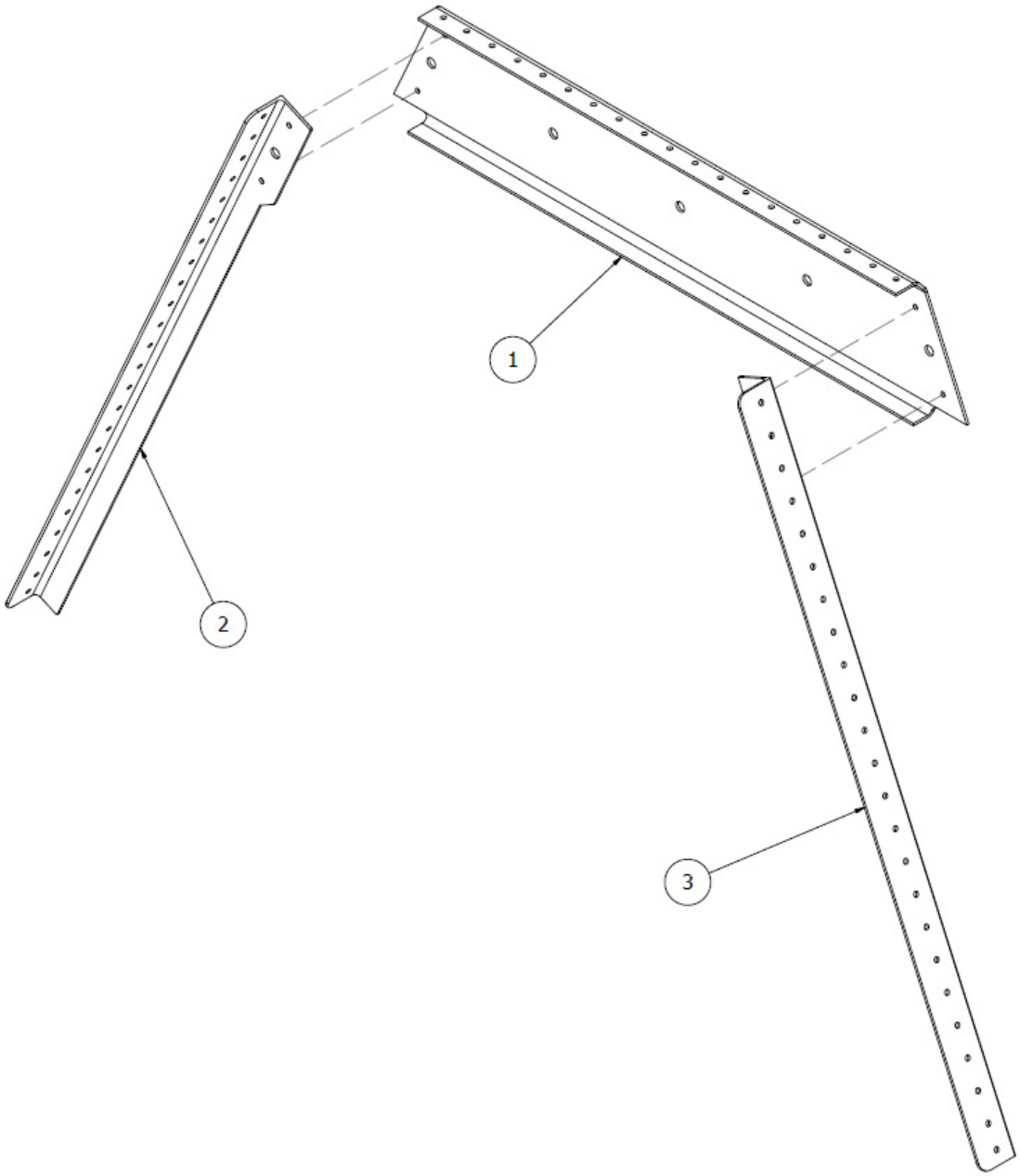


ITEM	QTY	PART NO.	PART DESCRIPTION
1	2	23A02000-174	ASS'Y – FRONT STRUT
	1	23A02053-010	FITTING - UPPER
	4	AN5-16A	BOLT – FITTING ATTACH
	8	NAS1149F0563P	WASHER
	4	MS21044N5	NUT, LOCKING, REGULAR HEIGHT, 5/16-24 UNF
	1	21A02334-020	STRUT – BLANK WITH BUSHINGS
	4	NAS1149F0532P	WASHER, 0.328 ID, 0.032 THK, STEEL
2	2	23A02000-230	ASS'Y - STRUT – CENTER WITH BUSHINGS
3	2	21A02000-161	ASS'Y – STRUT – REAR WITH BUSHINGS
4	2	1002111	ASS'Y – DRAG WIRE – FWD
	2	SP4ZF6	CLEVIS - PIN
	2	SP90C5	PIN – COTTER
	1	AN665-46LS *	TERMINAL CLEVIS "L"
	1	AN665-46RS *	TERMINAL CLEVIS "R"
	1	AN316C5L	CHECK NUT "L"
	1	AN316C5R	CHECK NUT "R"
5	2	21A02000-137	ASS'Y – DRAG WIRE – AFT
	2	SP4ZF6	PIN - CLEVIS
	2	SP90C5	PIN – COTTER
	1	AN665-46LS *	TERMINAL CLEVIS "L"
	1	AN665-46RS *	TERMINAL CLEVIS "R"
	1	AN316C5L	CHECK NUT "L"
	1	AN316C5R	CHECK NUT "R"
6	2	21A02062-009	FITTING – LOWER FRONT STRUT
7	1	21A02000-141	ASS'Y - FITTING – UPPER FRONT STRUT L.
	1	21A02000-142	ASS'Y – FITTING – UPPER FRONT STRUT R.
8	2	21A02062-010	FITTING – LOWER AFT STRUT
9	1	23A02000-219	ASS'Y – MAIN FUSELAGE FITTING L.
	1	23A02000-222	ASS'Y – MAIN FUSELAGE FITTING R.
10	2	21A02462-005	WIRE PULL LOWER FWD
11	2	21A02519-007	WIRE PULL LOWER AFT
12	2	21A03356-047	SPREADER BAR
13	2	AN45-12A	EYEBOLT
14	2	AN6-31A	BOLT, SHOULDER, GEAR ACTUATOR, 1450
15	2	AN6-17A	BOLT, 3/8-24, 1.3125 GRIP, UNDRILLED, STEEL
16	4	AN5-16A	BOLT
17	4	AN6-17A	BOLT, 3/8-24, 1.3125 GRIP, UNDRILLED, STEEL
18	4	AN6-26A	BOLT SIZE 3/8-24, LENGTH 1/64 - 2-53/64, GRIP LENGTH 2-3/16
19	8	AN5-24A	BOLT, 5/16-24 THREAD, 2-1/16" GRIP, 2-19/32" LENGTH
20	2	AN6-35A	BOLT, 3/8-24 THREAD, 3-1/16" GRIP, 3-45/64 LENGTH
21	4	21A02095-003	BUSHING

ITEM	QTY	PART NO.	PART DESCRIPTION
22	10	AN4-6A	BOLT, 1/4-28, 0.3125 GRIP, UNDRILLED, STEEL
23	2	AN7-13A	BOLT, 7/16-20, 0.8125 GRIP, UNDRILLED, STEEL
24	2	21A02010-018	COVER – GEAR OPENING
25	A/R	NAS1149D0463J	WASHER, 0.265 ID, 0.063 THK, ALUMINUM
26	10	MS21044N4	NUT, LOCKING, REGULAR HEIGHT, 1/4-28 UNF
27	A/R	NAS1149D0563J	WASHER, 0.328 ID, 0.063 THK, ALUMINUM
28	6	MS21044N5	NUT, LOCKING, REGULAR HEIGHT, 5/16-24 UNF
29	A/R	NAS1149D0663J	WASHER, 0.39 ID, 0.063 THK, ALUMINUM
30	14	MS21044N6	NUT, LOCKING, REGULAR HEIGHT, 3/8-24 UNF
31	A/R	NAS1149D0763J	WASHER, 0.453 ID, 0.063 THK, ALUMINUM
32	2	MS210365-720A	NUT

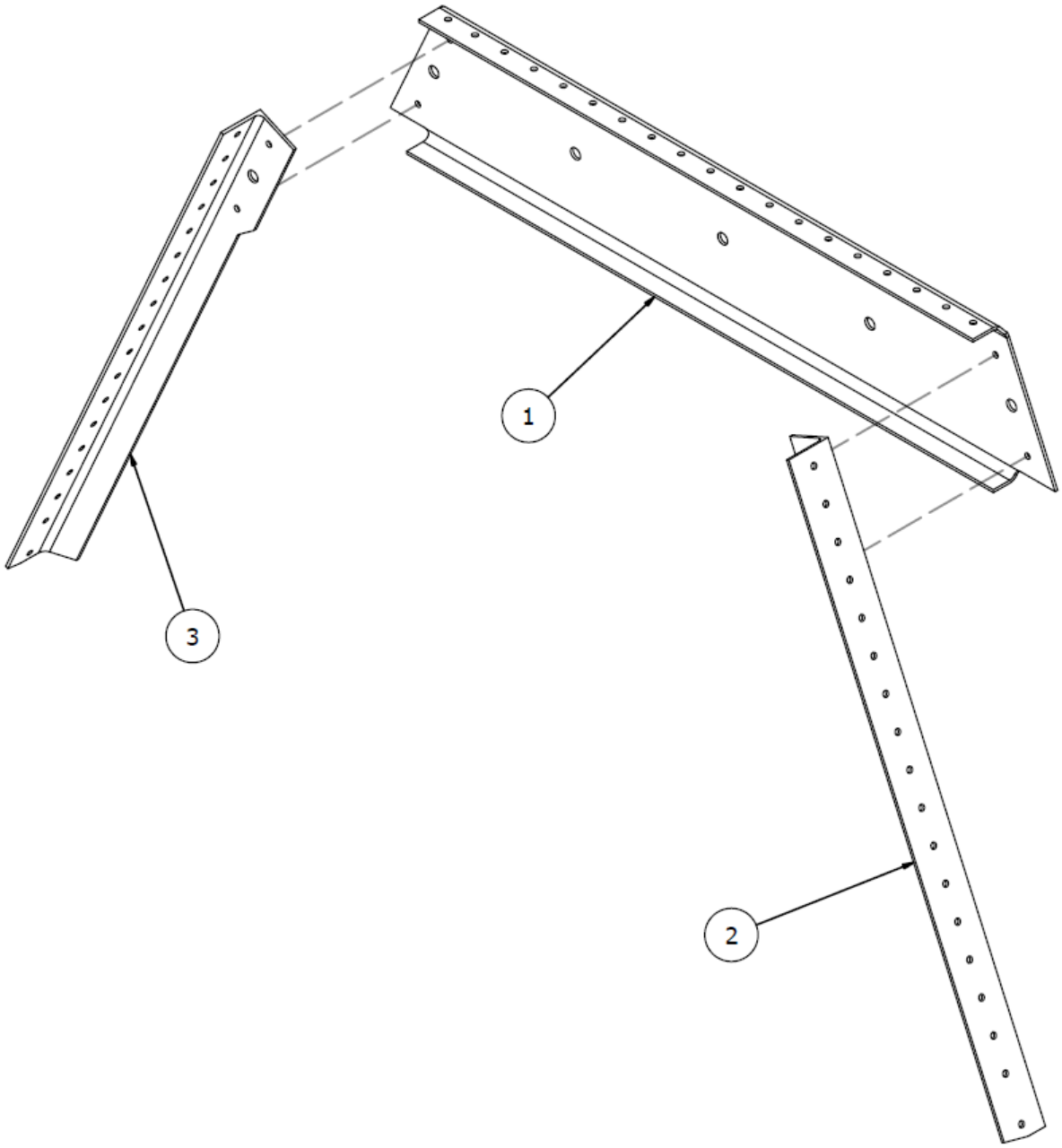
* DENOTES STAINLESS STEEL

FWD SPREADER BAR SUPPORT PANEL ASSEMBLY



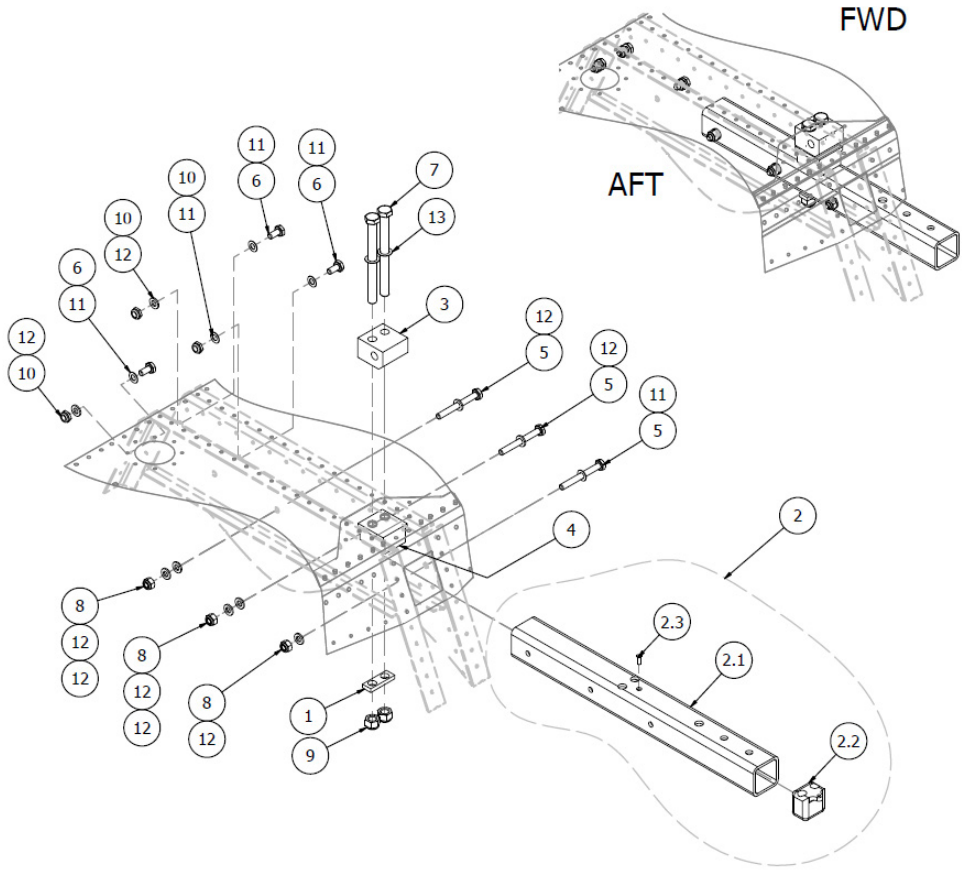
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	23A01000-302	ASSEMBLY, SPREADER BAR SUPPORT PANEL, FWD, 2350
1	1	21A01163-065	PANEL, SUPPORT, SPREADER BAR
2	1	23A01326-018	ANGLE, SPREADER BAR SUPPORT PANEL, LH
3	1	23A01326-019	ANGLE, SPREADER BAR SUPPORT PANEL, RH

AFT SPREADER BAR SUPPORT PANEL ASSEMBLY



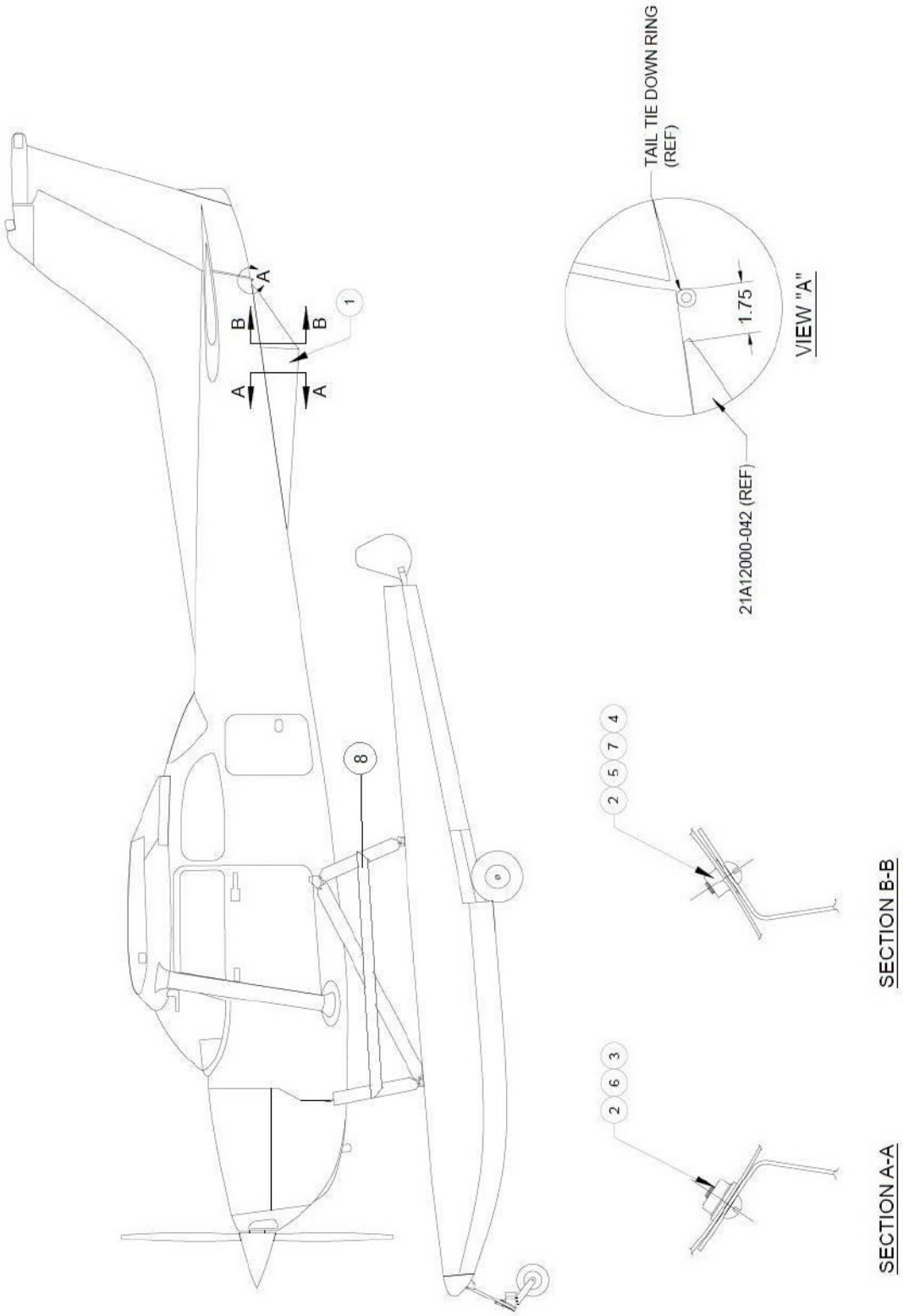
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21A01000-259	ASSEMBLY, SPREADER BAR SUPPORT PANEL, AFT
1	1	21A01163-065	PANEL, SUPPORT, SPREADER BAR
2	1	21A01326-009	ANGLE, SPREADER BAR SUPPORT PANEL, RH
3	1	21A01326-010	ANGLE, SPREADER BAR SUPPORT PANEL, LH

SPREADER BAR TUBE MOUNTING



ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	1002009	CLAMP BLOCK, SPREADER BAR
2	1	1012630	ASSEMBLY, TUBE, SPREADER BAR, MOUNTING
2.1	1	21A03115-001	TUBE, SPREADER BAR, MOUNTING
2.2	1	1002012	INSERT, TUBE REINFORCEMENT, SPREADER BAR
2.3	1	CR3212-4-5	RIVET, CHERRY MAX, COUNTERSUNK, 1/8 DIA , 5/16 GRIP
3	1	21A03032-006	FITTING, DECK, STRUT
4	1	21A03214-003	SPACER
5	3	AN4-22A	BOLT, 1/4-28, 1.8125 GRIP, UNDRILLED, STEEL
6	3	AN4-4A	BOLT, 1/4-28, 0.0625 GRIP, UNDRILLED, STEEL
7	2	AN6-41A	BOLT, 3/8-24, 3.5625 GRIP, UNDRILLED, STEEL
8	3	MS21044N4	NUT, LOCKING, REGULAR HEIGHT, 1/4-28 UNF
9	2	MS21044N6	NUT, LOCKING, REGULAR HEIGHT, 3/8-24 UNF
10	3	MS21083N4	NUT, LOCKING, LOW HEIGHT, 1/4-28 UNF
11	5	NAS1149D0416J	WASHER, 0.265 ID, 0.016 THK, ALUMINUM
12	9	NAS1149D0463J	WASHER, 0.265 ID, 0.063 THK, ALUMINUM
13	2	NAS1149F0616P	WASHER, 0.39 ID, 0.016 THK, STEEL

VENTRAL FIN & FUSELAGE STEPS INSTALLATION



ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	21A12000-042	VENTRAL FIN (172)
2	24	AN526-832R8	SCREW, MACHINE, TRUSS HEAD
3	14	MS21047L08	NUTPLATE
4	10	MS27130A13	RIVNUT
5	10	MS35333-38	STAR WASHER
6	14	NAS1149F0363P	WASHER, 0.203 ID, 0.063 THK, STEEL
7	10	NAS1149FN832P	WASHER, 0.174 ID, 0.032 THK, STEEL
8	2	21A02369-035	STEP – L. & R.
	4	AN3-20A	BOLT, 10-32, 1.625 GRIP, UNDRILLED, STEEL
	2	AN3-24A	BOLT, 10-32 THREAD, 2-1/8" GRIP, 2-17/32" LENGTH
	12	NAS1149D0363J	WASHER, 0.203 ID, 0.063 THK, ALUMINUM
	6	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
	6	BFP	HOLE PLUG
	4	6A02273-006	SPACER – FRONT STRUT

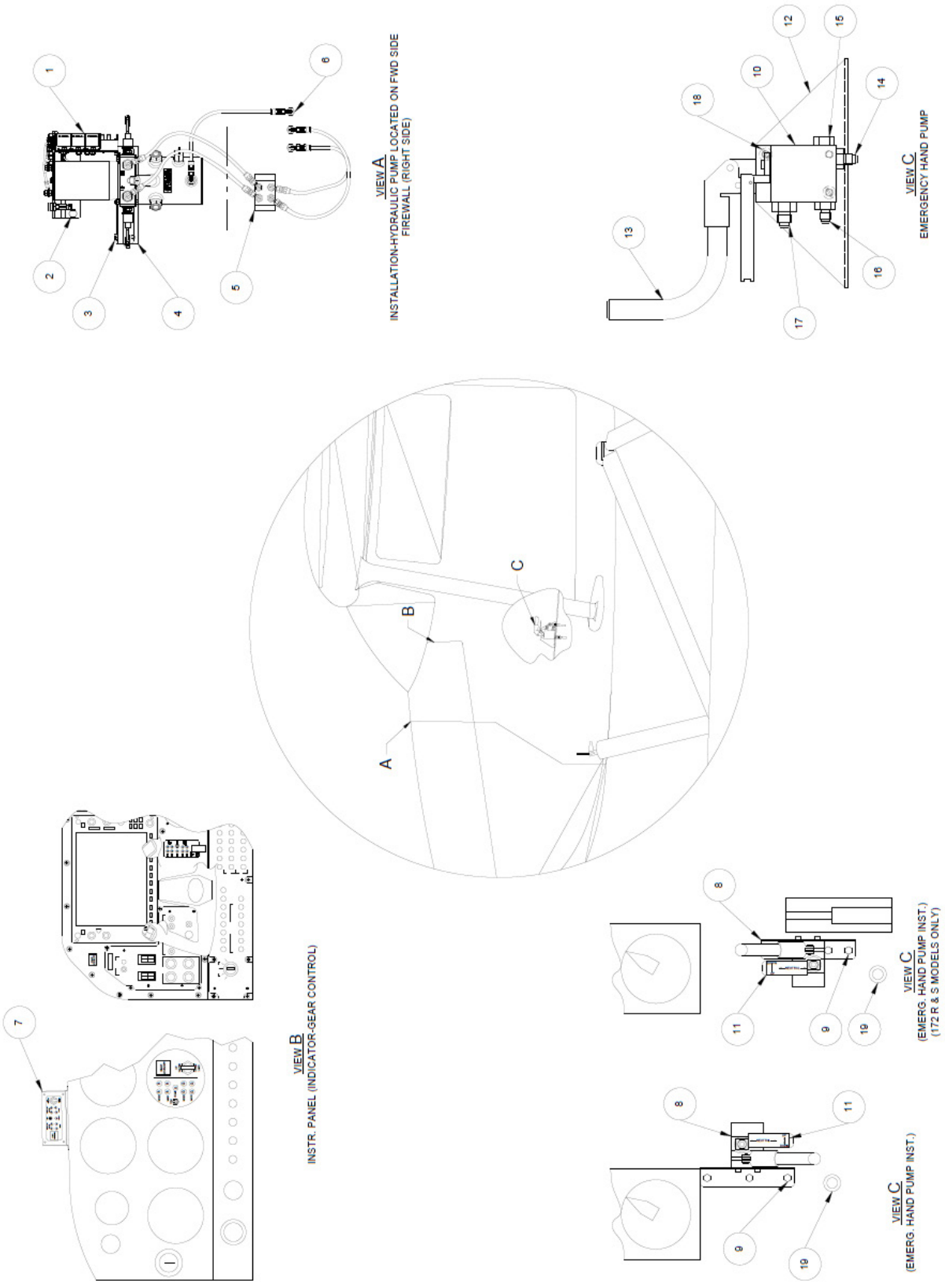
THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 10
HYDRAULIC SYSTEM

CONTENTS

HYDRAULIC SYSTEM INSTALLATION POST SERVICE LETTER 228 104
HYDRAULIC SYSTEM INSTALLATION PRE SERVICE LETTER 228 107
HYDRAULIC PUMP ASSEMBLY POST SERVICE LETTER 228 110
HYDRAULIC PUMP ASSEMBLY PRE SERVICE LETTER 228 114
HYDRAULIC PUMP OVERVIEW POST SERVICE LETTER 228 117
HYDRAULIC PUMP OVERVIEW PRE SERVICE LETTER 228 119
HYDRAULIC SCHEMATIC 121

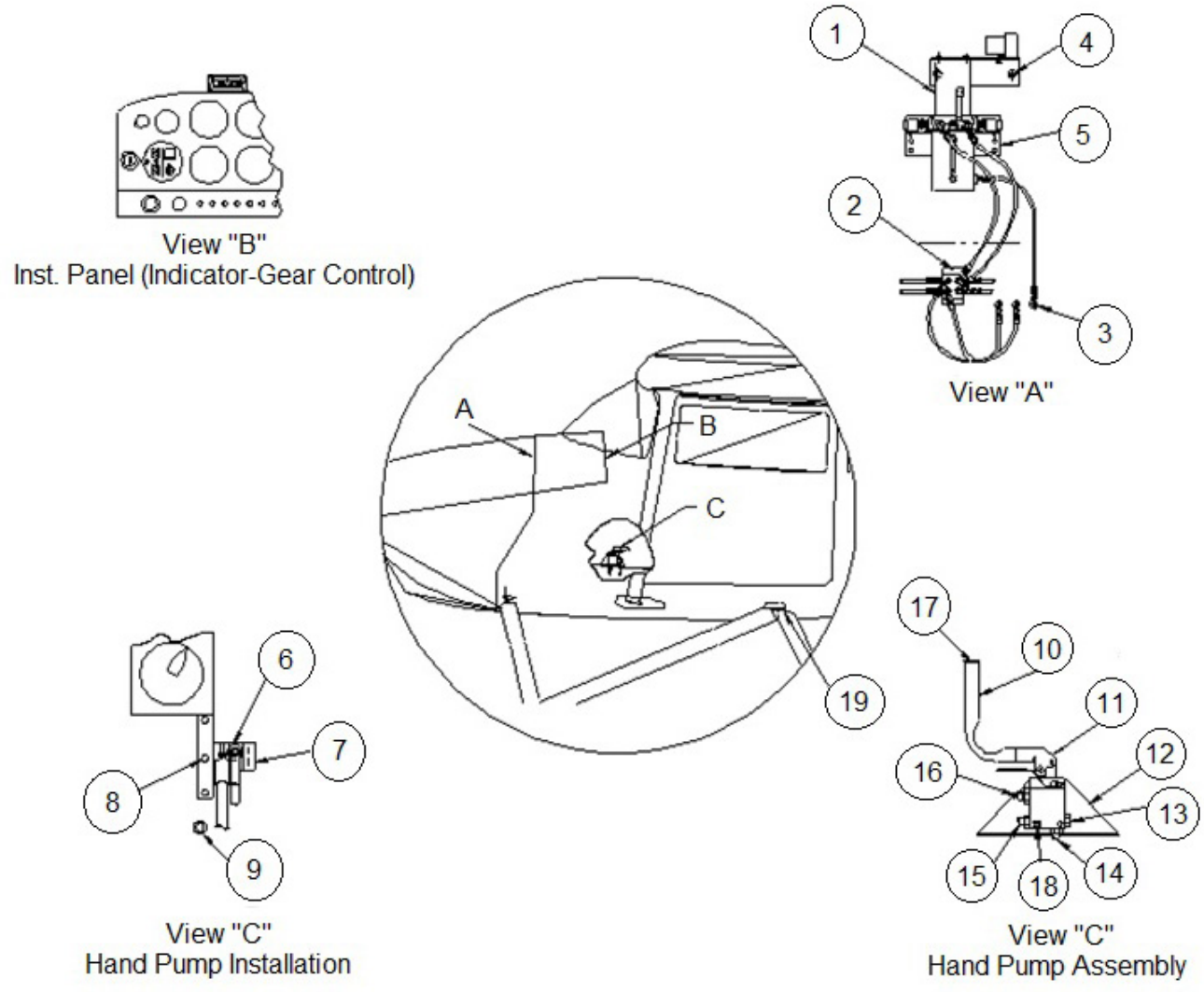
HYDRAULIC SYSTEM INSTALLATION POST SERVICE LETTER 228



ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	1011849	ASSEMBLY, HYDRAULIC POWER PACK, 12V
	1	1011850	ASSEMBLY, HYDRAULIC POWER PACK, 24V
	1	1011851	SPACER, INSTALLATION, HYDRAULIC POWER PACK
2	2	AN3-3A	(TOP BRACKET) BOLT, 10-32, 0.063 GRIP, UNDRILLED, STEEL
	4	NAS1149F0332P	WASHER, 0.203 ID, 0.032 THK, STEEL
	2	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
3	2	AN4-6A	(BOTTOM BRACKET) BOLT, 1/4-28, 0.313 GRIP, STEEL
	4	NAS1149F0432P	WASHER, 0.265 ID, 0.032 THK, STEEL
	2	MS21044N4	NUT, LOCKING, REGULAR HEIGHT, 1/4-28 UNF
4	1	21A09348-020	ANGLE, LOWER PUMP ATTACH
	4	AN3-4A	BOLT, 10-32, 0.125 GRIP, UNDRILLED, STEEL
	4	NAS1149F0363P	WASHER, 0.203 ID, 0.063 THK, STEEL
	4	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
5	1	21A09000-240	ASSEMBLY, MANIFOLD
	1	6A09046-001	MANIFOLD
	2	AN3-5A	BOLT, 10-32, 0.25 GRIP, UNDRILLED, STEEL
	4	AN816-4D	FITTING, NIPPLE, FLARED TUBE AND PIPE THREAD
	4	AN816-4-4D	FITTING, NIPPLE, FLARED TUBE AND PIPE THREAD
	2	NAS1149F0363P	WASHER, 0.203 ID, 0.063 THK, STEEL
	2	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
6	3	AN832-4D	UNION, BULKHEAD, FLARED TUBE
	3	NAS1149F0763P	WASHER, 0.453 ID, 0.063 THK, STEEL
	3	AN924-4D	NUT, TUBE, 7/16-20 THREAD
7	1	21A11158-194	COVER, SQUARE GEAR CONTROL HEAD
	4	MS35214-42	GEAR CONTROL HEAD MOUNTING SCREW, 8-32, 0.50 LENGTH
8	1	21A09000-194	ASSEMBLY, EMERGENCY HAND PUMP
9	3	AN3-4A	(MOUNTING HARDWARE) BOLT, 10-32, 0.125 GRIP, STEEL
	3	NAS1149F0332P	WASHER, 0.203 ID, 0.032 THK, STEEL
	3	AN970-3	WASHER, 0.203 ID, 0.875 OD, .063 THK, STEEL
	3	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
10	1	642873	HAND PUMP (ONLY)
11	1	12A3-7379-1	PLACARD, EMERGENCY HAND PUMP
12	1	21A09156-129	BRACKET, PUMP ATTACH
13	1	21A09396-001	HANDLE
	1	9283K13	CAP PLUG
14	1	21A09746-001	UNION
	1	MS28775-012	O-RING, HYDRAULIC PACKING, 0.364 ID
15	1	AN814-4D	PLUG, 7/16-20 THREAD
	1	MS28775-012	O-RING, HYDRAULIC PACKING, 0.364 ID
16	1	AN815-4D	UNION
	1	MS28775-012	O-RING, HYDRAULIC PACKING, 0.364 ID

ITEM	QTY	PART NO.	PART DESCRIPTION
17	1	AN919-6D	UNION
	1	MS28775-014	O-RING, HYDRAULIC PACKING, 0.489 ID
18	2	MS16997-77	SOCKET HEAD CAP SCREW, 5/16-18 THREAD
	2	MS35333-41	LOCK WASHER, INTERNAL TOOTH
	2	NAS1149F0563P	WASHER, 0.328 ID, 0.063 THK, STEEL
19	1	MS35489-49	GROMMET
20	2	21A04000-080	ASSEMBLY, BRAKE LINE (NOT SHOWN)
	2	63-190600-3	FITTING, AERO QUIP HOSE #3

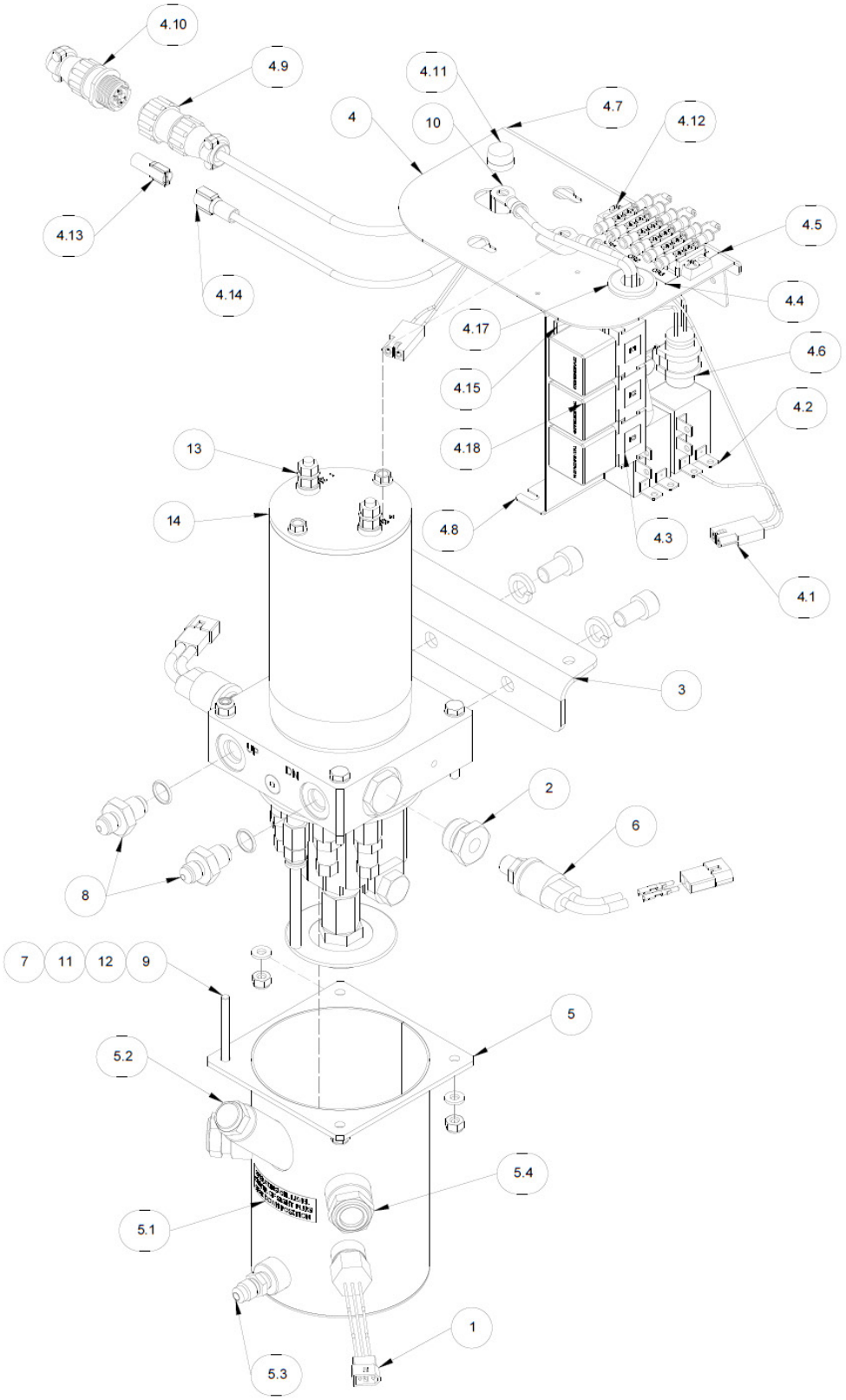
HYDRAULIC SYSTEM INSTALLATION PRE SERVICE LETTER 228

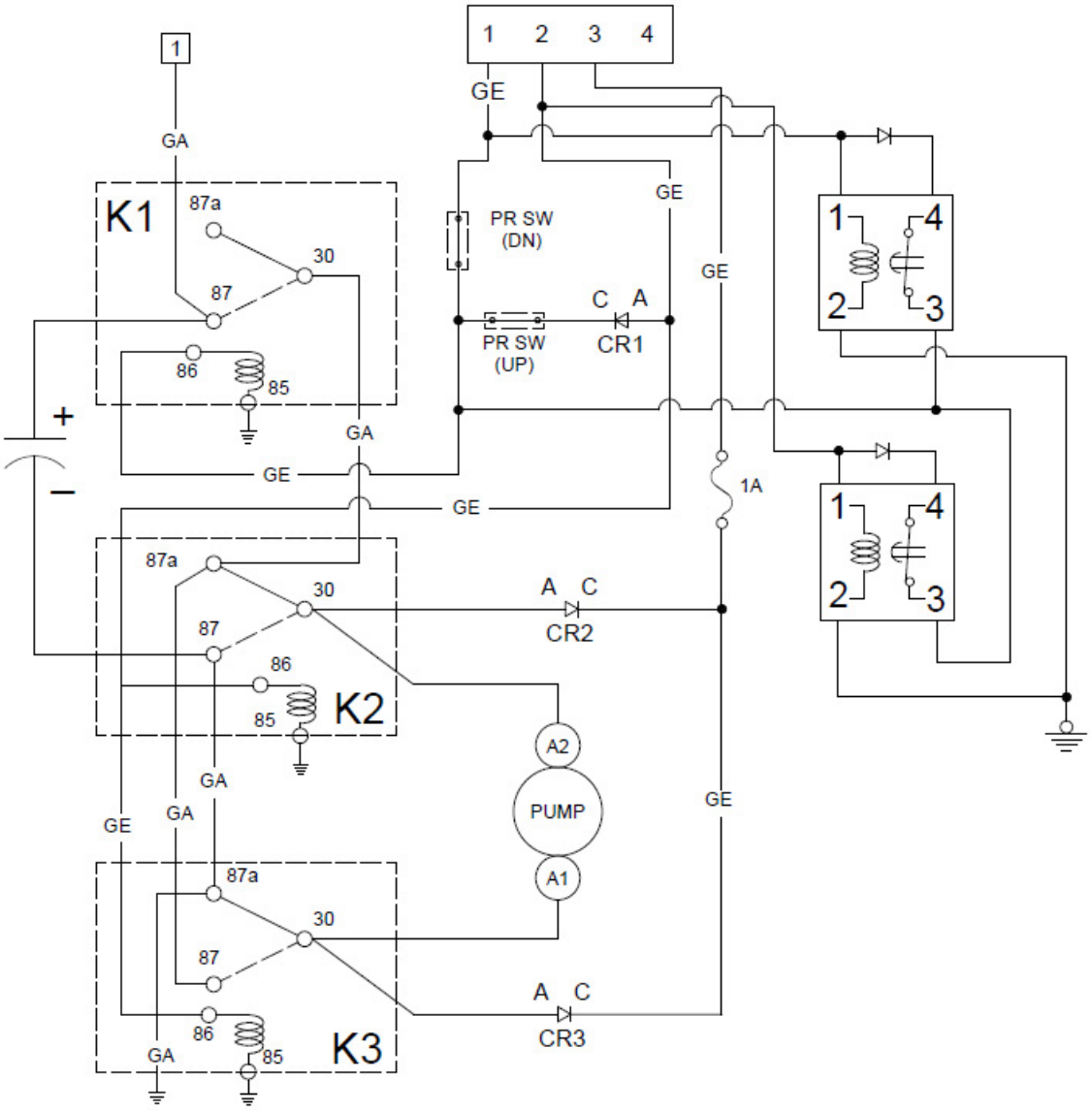


ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	21A09000-239	ASS'Y - PUMP 12V
	1	21A09000-283	ASS'Y – PUMP 24V
2	1	21A09000-240	ASS'Y – MANIFOLD
	1	6A09046-001	MANIFOLD
	4	AN816-4-4D	NIPPLE – FITTING
	2	AN3-5A	BOLT - ATTACH
	2	NAS1149F0363P	WASHER
	2	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
	4	AN816-4D	NIPPLE FITTING
3	3	AN832-4D	UNION - FIREWALL
	3	NAS1149F0763P	WASHER
	3	AN924-4D	NUT
4	2	AN3-4A	BOLT - TOP BRACKET ATTACH
	4	NAS1149D0363J	WASHER, 0.203 ID, 0.063 THK, ALUMINUM
5	1	21A09348-020	ANGLE – LOWER PUMP ATTACH
	4	AN3-4A	BOLT
	4	NAS1149D0363J	WASHER, 0.203 ID, 0.063 THK, ALUMINUM
	4	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
6	1	21A09000-194	ASS'Y – HAND PUMP
7	1	21A12000-052	ASS'Y – SELECTOR HANDLE
	1	12A3-7379-1	PLACARD
8	3	AN3-4A	BOLT – ATTACH
	3	AN970-3	WASHER
	3	NAS1149D0363J	WASHER, 0.203 ID, 0.063 THK, ALUMINUM
	3	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
9	1	MS35489-49	GROMMET
10	1	21A09396-001	HANDLE - PUMP
11	1	642873	HAND PUMP (ONLY)
12	1	21A09156-129	BRACKET – PUMP ATTACH
13	1	AN814-4D	PLUG
	1	MS28775-012	"O" RING
14	1	21A09746-001	UNION
	1	MS28775-012	"O" RING
15	1	AN815-4D	UNION
	1	MS28775-012	"O" RING
16	1	AN919-6D	UNION
	1	MS28775-014	"O" RING
17	1	9283K13	CAP PLUG
18	2	5/16-18 UNC-28 X .63	CAP SCREW – ATTACH
	2	MS35333-40	LOCK WASHER

ITEM	QTY	PART NO.	PART DESCRIPTION
	2	NAS1149F0563P	WASHER
19	2	21A04000-080	ASS'Y – BRAKE LINE (NOT SHOWN)
	2	63-190600-3	FITTING

HYDRAULIC PUMP ASSEMBLY POST SERVICE LETTER 228





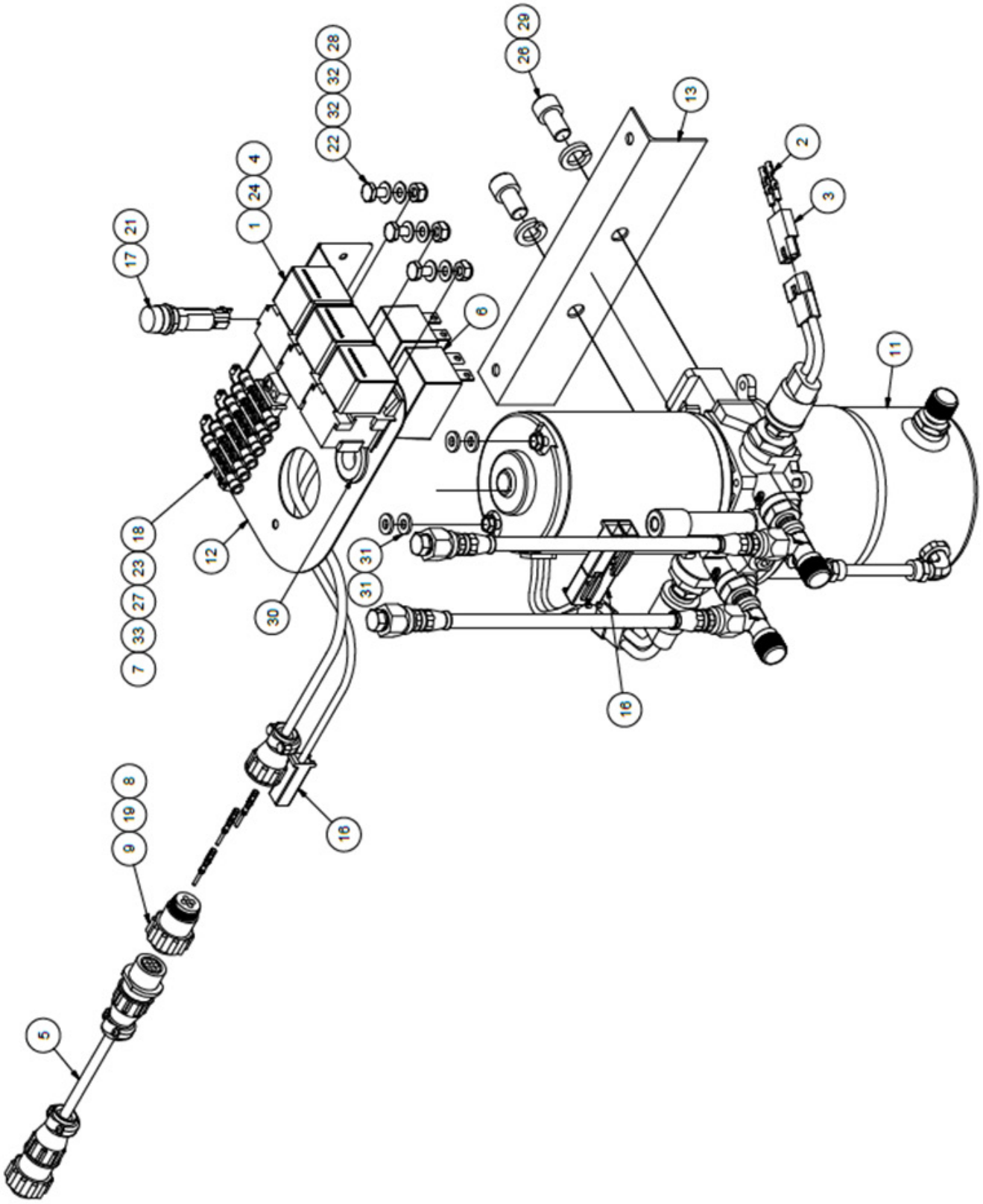
POWER PACK SCHEMATIC
(RELAYS SHOWN IN RELAXED CONDITION)

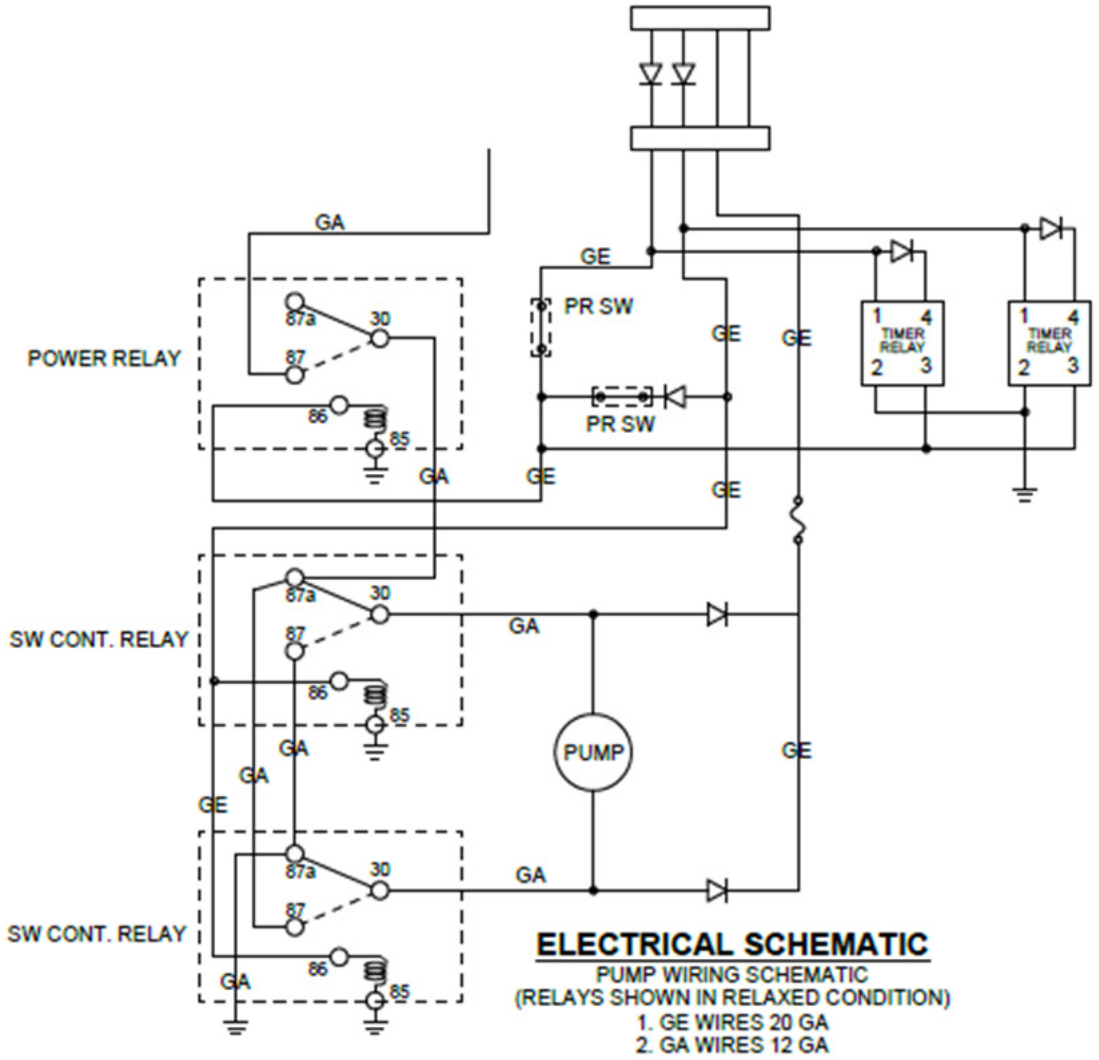
1. GE WIRES 20 GA
2. GA WIRES 12 GA

ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	1011849	ASSEMBLY, HYDRAULIC POWER PACK, 12V
-	1	1011850	ASSEMBLY, HYDRAULIC POWER PACK, 24V
1	1	1009428	ASSEMBLY, SENSOR, FLUID LEVEL
	1	93786A200	PRESSURE SEALING WSHER, M12
2	2	1011062	ASSEMBLY, PLUG, PRESSURE SWITCH PORT
3	1	1011842	ANGLE, MOUNTING HYDRAULIC PUMP
	2	MS16997-96	SOCKET HEAD CAP SCREW, 3/8-16 THREAD
	2	MS35338-46	WASHER, SPLIT
4	1	1011845	ASSEMBLY, SUPPORT PLATE, HYDRAULIC POWER PACK, 12V
	1	1011846	ASSEMBLY, SUPPORT PLATE, HYDRAULIC POWER PACK, 24V
4.1	2	03-09-1022	CONNECTOR PLUG, MALE, 2 CONN.
	4	02-09-1104	PIN, CRIMP FEMALE, 1/8" DIA
4.2	1	1012411	ASSEMBLY, RELAY, TIME DELAY RELEASE, 6-48 VDC
4.3	1	1009143-01	PLACARD, K1 INDICATOR
	1	1009143-02	PLACARD, K2 INDICATOR
	1	1009143-03	PLACARD, K3 INDICATOR
4.4	1	1009144-01	PLACARD, CR INDICATOR
4.5	1	1009144-02	PLACARD, AC INDICATOR
4.6	1	1011798	ASSEMBLY, CAPACITOR
	1	MS21919WDG10	CLAMP, LOOP, CUSHIONED, 5/8" TUBE OD
	1	AN3-3A	BOLT, 10-32, 0.063 GRIP, UNDRILLED, STEEL
	1	NAS1149F0332P	WASHER, 0.203 ID, 0.032 THK, STEEL
	1	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
4.7	1	1011843	TOP PLATE, HYDRAULIC PUMP
4.8	1	1011844	ELECTRONIC SIDE PLATE
4.9	1	206429-1	PLUG, MALE, CPC SIZE 1, 4 PIN
	3	66103-4	PIN, CRIMP SOCKET, 24-20 AWG
	1	206062-3	CLAMP, CABLE, CPC SIZE 11
4.10	1	206430-2	PLUG, FEMALE, CPC SIZE 1, 4 PIN
	3	66105-4	CRIMP SOCKET, FEMALE
	1	206062-3	CLAMP, CABLE, CPC SIZE 11
4.11	1	3453LF2A	FUSE HOLDER
	1	AGC-1	FUSE, 250V, 1 AMP
4.12	1	6-140	TERMINAL BLOCK, 6 CONNECTOR
	2	AN526C632R8	SCREW, MACHINE, TRUSS HEAD, 6-32 THREAD
	2	MS21044N06	NUT LOCKING, REGULAR HEIGHT, 6-32 UNC
	12	MS25036-102	RING TERMINAL, #6 STUD, 16-22 AWG, RED
	3	1N4004	DIODE
4.13	1	73F-250-32-NL	CONNECTOR, FEMALE, 10-12 AWG, FULLY INSULATED
4.14	1	73M-250-32-NL	CONNECTOR, MALE, 10-12 AWG, FULLY INSULATED
4.15	3	BR05-FW	SOCKET, 5 PRING, PLASTIC

ITEM	QTY	PART NO.	PART DESCRIPTION
	14	1-901-355-917	TERMINAL
	3	AN3-3A	BOLT, 10-32, 0.063 GRIP, UNDRILLED, STEEL
	6	NAS1149F0332P	WASHER, 0.203 ID, 0.032 THK, STEEL
	3	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNC
4.16	1	MS35489-9	GROMMET, RUBBER (NOT SHOWN)
4.17	1	MS35489-14	GROMMET, RUBBER
4.18	3	V23234-A0001-X032	RELAY, PRONG, 12V
	3	0-332-209-211	RELAY, 5 PRONG, 24V
5	1	1011847	ASSEMBLY, HYDRAULIC RESERVOIR
5.1	1	1011848	PLACARD, OIL LEVEL
5.2	1	1EJT7	BREATHER VENT
5.3	1	AN816-4D	NIPPLE, FLARED TUBE AND PIPE THREAD
5.4	2	LSP151-04-01	LIQUID LEVEL SIGHT PLUG
6	1	20PS001EB 700W50OW	PRESSURE SWITCH
	2	03-09-2022	CONNECTOR, PLUG, FEMALE
	4	02-09-2118	PIN, CRIMP MALE, 1/8" DIA.
7	4	AN3-16A	BOLT, 10-32, 1.375 GRIP, UNDRILLED, STEEL
8	2	AN919-3D	FITTING, REDUCER
	2	MS28775-013	O-RING, HYDRAULIC
9	4	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
10	2	MS25036-157	RING TERMINAL, 1/4 STUD, 10-12 AWG, YELLOW
11	2	NAS1149F0332P	WASHER, 0.203 ID., 0.032 THK, STEEL
12	5	NAS1149F0363P	WASHER, 0.203 ID, 0.063 THK, STEEL
13	2	NAS1149F0432P	WASHER, 0.265 ID, 0.032 THK, STEEL
14	1	YBZS-C0.63W1T100K/ UVZOT2	HYDRAULIC PUMP, 12VDC
	1	YBZS-C0.63W2T100K/ UVZOT2	HYDRAULIC PUMP, 24VDC

HYDRAULIC PUMP ASSEMBLY PRE SERVICE LETTER 228

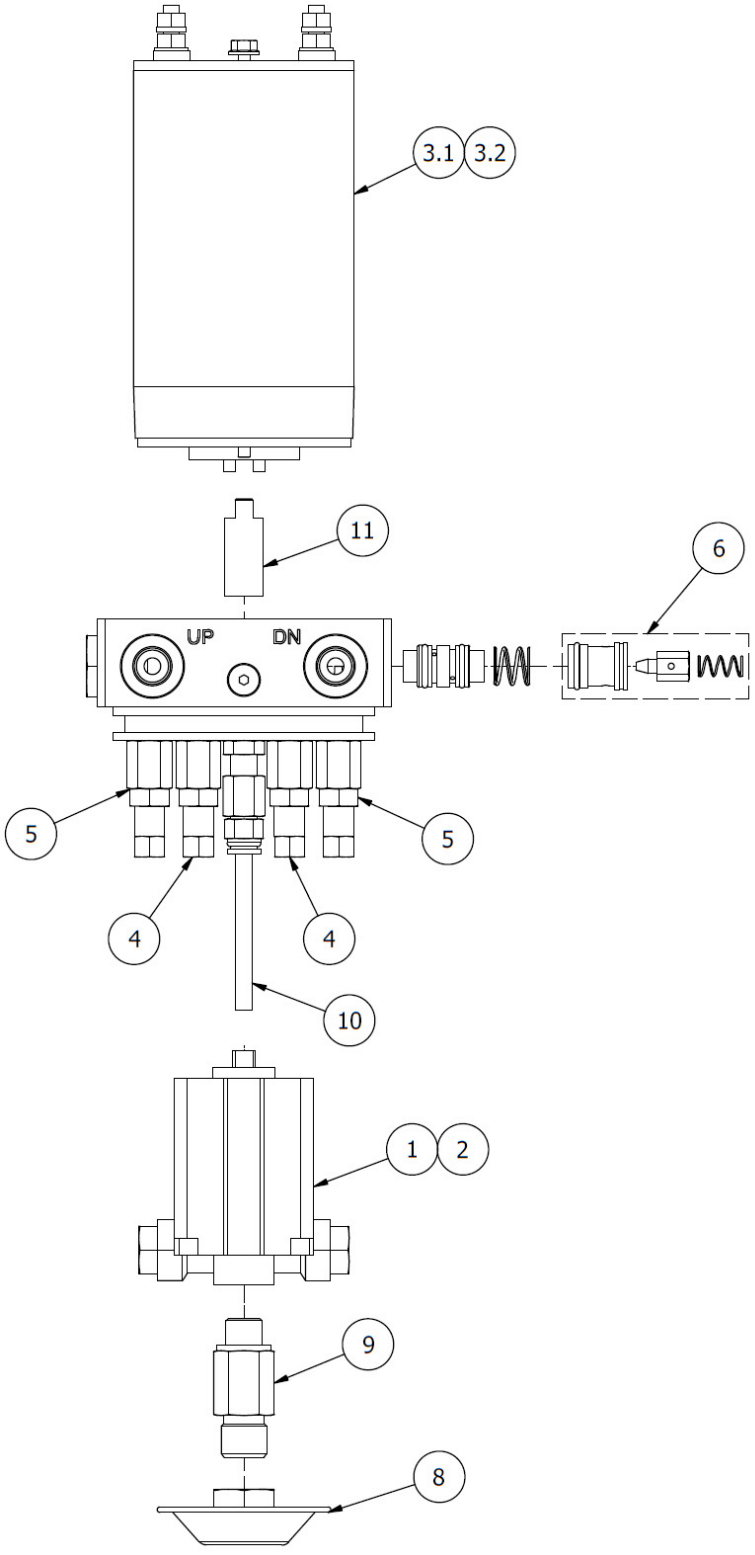




ITEM	QTY	PART NO.	PART DESCRIPTION
1	3	0-332-209-137	RELAY, 12V, 5 PRONG
	3	0-332-209-211	RELAY. 24V, 5 PRONG
2	4	02-09-1104	PIN, CRIMP FEMALE, 1/8" DIA
3	2	03-09-1022	CONNECTOR PLUG, MALE, 2 CONN.
4	14	1-901-355-917	TERMINAL
5	1	1004949	CABLE, DIODE ADAPTOR
6	1	1012411	ASSEMBLY, RELAY, TIME DELAY RELEASE, 6-48 VDC
7	3	1N4004	DIODE, 2-1/2”
8	2	206062-3	CLAMP, CABLE, CPC SIZE 11
9	1	206429-1	PLUG, MALE, CPC SIZE 1, 4 PIN
10	1	206430-2	CPC FREE HANG, 4 PIN, FEMALE
11	1	21A09000-215	ASSEMBLY, HYDRAULIC PUMP, 12V
	1	21A09000-282	ASSEMBLY, HYDRAULIC PUMP, 24V
12	1	21A09005-264	SUPPORT, HYD. PUMP ATTCH

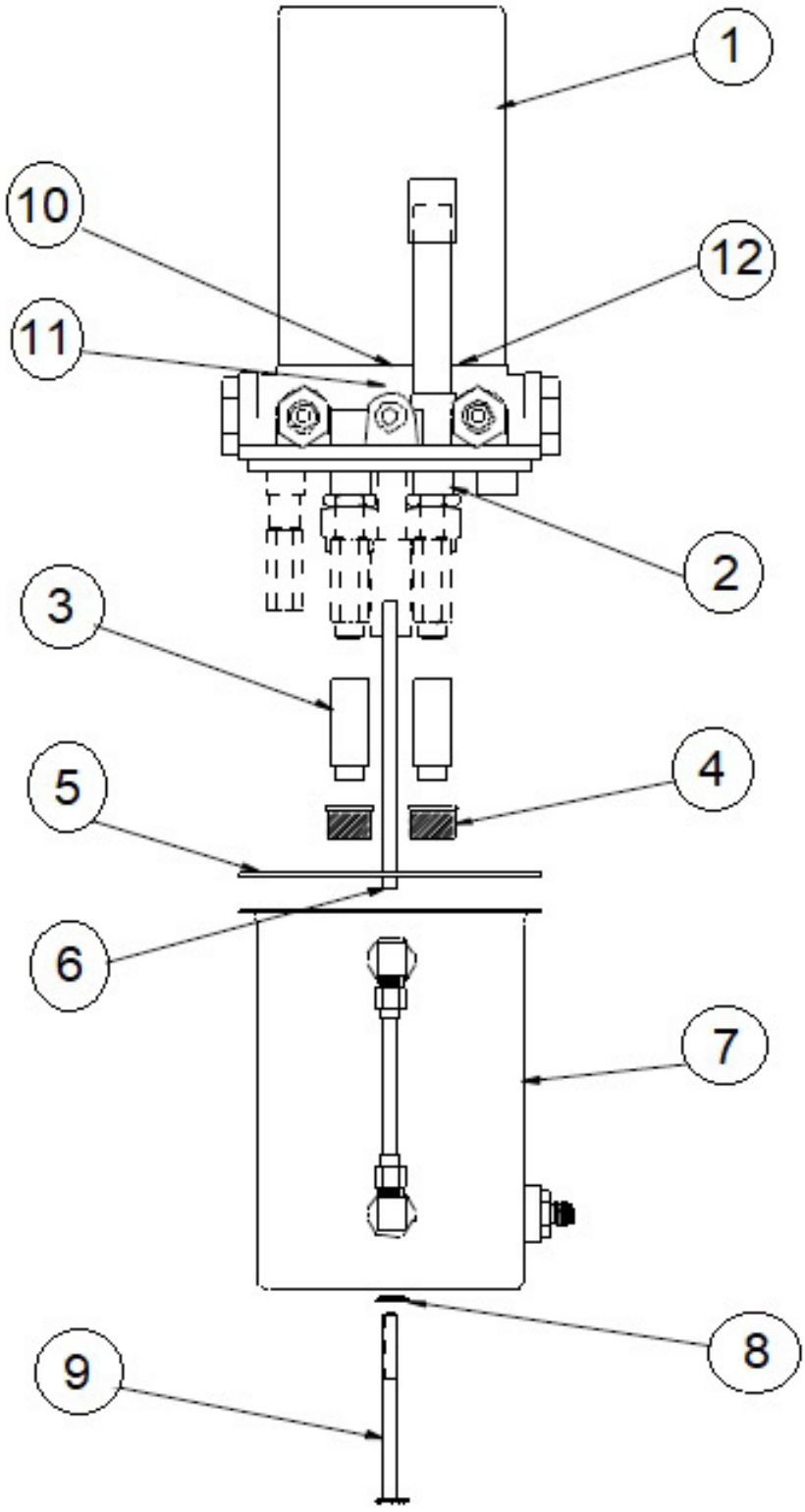
ITEM	QTY	PART NO.	PART DESCRIPTION
13	1	21A09352-030	ANGLE, MOUNTING, HYD. PUMP
14	6 FT	22759-16-12-9	WIRE, 12 AWG, WHITE
15	10.1 FT	22759-16-20-9	WIRE, 20 AWG, WHITE
16	1	73F-250-32-NL	CONNECTOR, FEMALE, 10-12 AWG
	1	73M-250-32-NL	CONNECTOR, MALE, 10-12 AWG
17	1	3453LF2A	FUSE HOLDER
18	1	6-140	TERMINAL BLOCK, 6 CONNECTOR
19	3	66103-4	PIN, CRIMP SOCKET, 24-20G
20	3	66105-4	CRIMP SOCKET, FEMALE
21	1	AGC-1	FUSE, 250V, (S2565-1)
22	3	AN3-3A	BOLT
23	2	AN526-632R8	SCREW, MACHINE, TRUSS HEAD
24	3	BR05FW	SOCKET, 5 PRONG, PLASTIC
25	1.5 FT	HS105-3/16-0	HEAT SHRINK, TUBING, BLACK
26	2	MS16997-96	SOCKET HEAD CAP SCREW
27	2	MS21044N06	NUT
28	3	MS21044N3	NUT, LOCKING, REGULAR HEIGHT, 10-32 UNF
29	2	MS35338-46	WASHER, SPLIT
30	1	MS35489-14	GROMMET, RUBBER
31	4	NAS1149D0363J	WASHER, 0.203 ID, 0.063 THK, ALUMINUM
32	6	NAS1149F0332P	WASHER

HYDRAULIC PUMP OVERVIEW POST SERVICE LETTER 228



ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	202-0003	BI-DIRECTIONAL PUMP, 0.64 ML/R
2	1	299-0008	SEAL KIT, BI-DIRECTIONAL GEAR PUMP
3.1	1	610-0010	DC MOTOR, 12V, .8KW
3.2	1	610-0017	DC MOTOR, 24V, .8KW
4	2	631-0005	PRESSURE RELIEF VALVE
5	2	631-0006	THERMAL RELIEF VALVE
6	2	632-0004	ASSEMBLY, PILOT OPERATED CHECK VALVE
7	1	637-0024	SHUTTLE VALVE
8	1	682-0019	FILTER, PICKUP TUBE, HYDRAULIC PUMP
9	1	682-0055	SUCTION HEX TUBE
10	1	682-0056	RETURN TUBE
11	1	683-0011	COUPLING, MOTOR TO PUMP
12	2	685-0012	SPRING, SHUTTLE VALVE
13	11	687-0001	SEAL KIT, RESERVIOR O-RING, PILOT OPERATED RELIEF VALVE O-RING, THERMAL AND PRESSURE RELIEF VALVE O-RING (NOT SHOWN)

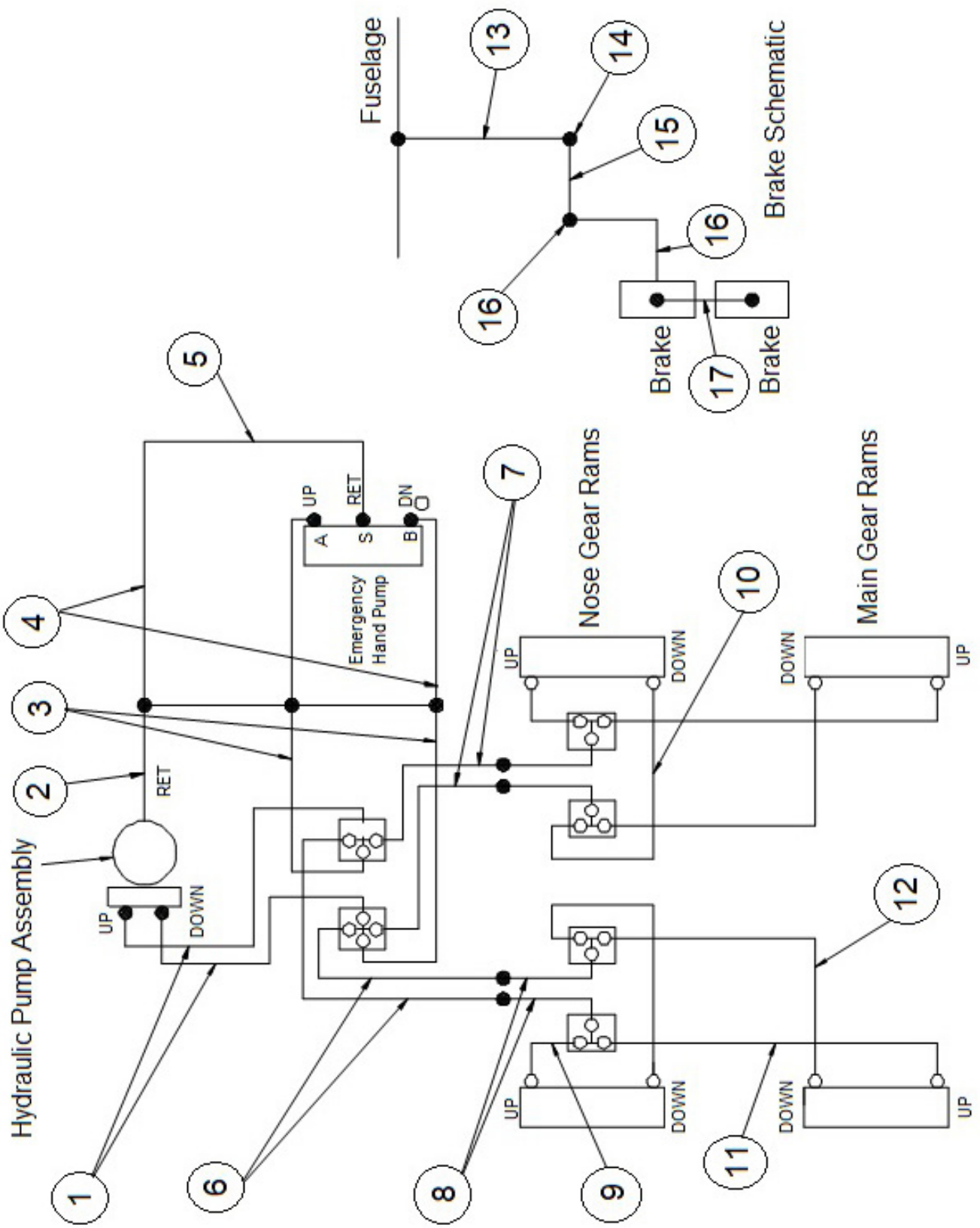
HYDRAULIC PUMP OVERVIEW PRE SERVICE LETTER 228



ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	21A09000-215	HYDRAULIC PUMP ASS'Y (12V)
	1	21A09000-282	HYDRAULIC PUMP ASS'Y (24V)
	1	640661	MOTOR (12V)
	1	641131	MOTOR (24V)
2	1	634873	BASIC PUMP
3	2	362136	TUBE EXTENSIONS
4	2	410521*	FILTER
5	1	410578*	SEAL RESERVIOR
6	1	365047	RETURN TUBE
7	1	775260	RESERVIOR – GAUGE ASS'Y
8	1	415067	SEAL THREAD
9	1	409715*	SCREW – RESERVIOR ATTACH
10	1	361183*	COUPLING – MOTOR TO PUMP
11	1	410512	SEAL – PUMP SHAFT
12	1	405673	"O" RING MOTOR TO BASE

*Reference Wipaire drawing 1011065 for alternate part numbers.

HYDRAULIC SCHEMATIC



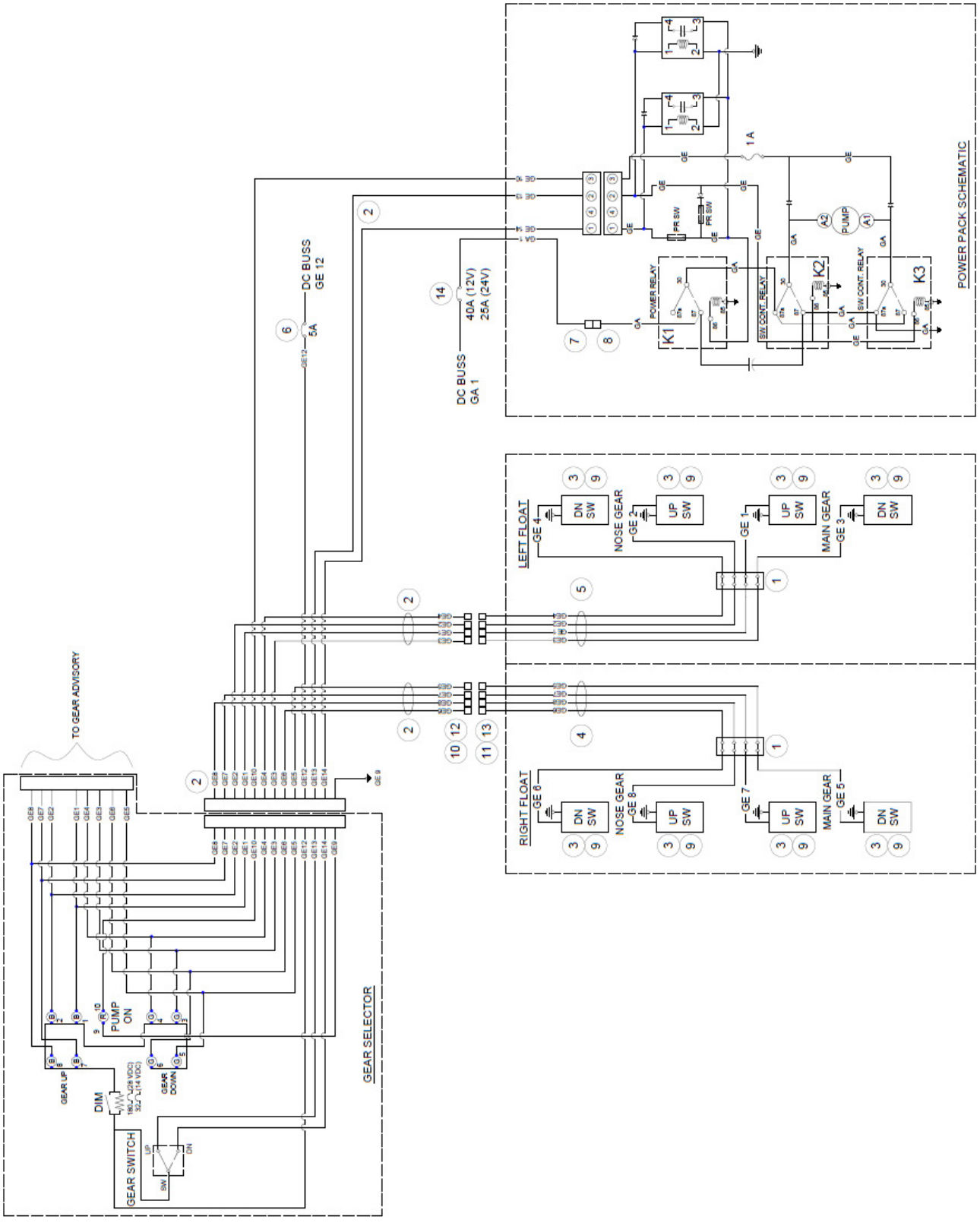
ITEM	QTY	PART NO.	PART DESCRIPTION
1	2	21A09000-197	ASSY, HOSE, MAIN PUMP TO MANIFOLD, 18"
2	1	21A09000-201	ASSY, HOSE, LWR RES FITTING TO FW, 18"
3	2	21A09000-200	ASSY, HOSE, FIREWALL TO MANIFOLD, 8"
4	2	21A09000-202	ASSY, HOSE, FIREWALL TO HAND PUMP, 60"
5	1	21A09000-203	ASSY, HOSE, FIREWALL TO HAND PUMP 40"
6	2	21A09000-198	ASSY, HOSE, LH FLOAT TO MANIFOLD 74"
7	2	21A09000-199	ASSY, HOSE RH FLOAT TO MANIFOLD 62"
8	4	21A09000-222	ASSEMBLY, HOSE – TEE TO TOP UP – DN
9	2	23A09000-235	HYD. LINE ASSY.
10	2	23A09000-236	HYD. LINE ASSY.
11	2	23A09000-237	HYD. LINE ASSY.
12	2	23A09000-238	HYD. LINE ASSY.
13	2	21A04000-080	TOP DECK FLOAT TO FUS., BRAKE
	2	63-190600-3	FITTING – ENDS
14	2	AN833-3D	FITTING – ELBOW
	4	NAS1149D0663J	WASHER
	2	AN924-3D	JAM NUT
15	2	21A04000-079	ALUM BRAKE LINE
16	2	21A04000-078	HYD. LINE ASSY. WHEEL WELL BRAKE LINE
17	2	23A04000-118	BRAKE LINE ASS'Y

SECTION 11
ELECTRICAL

CONTENTS

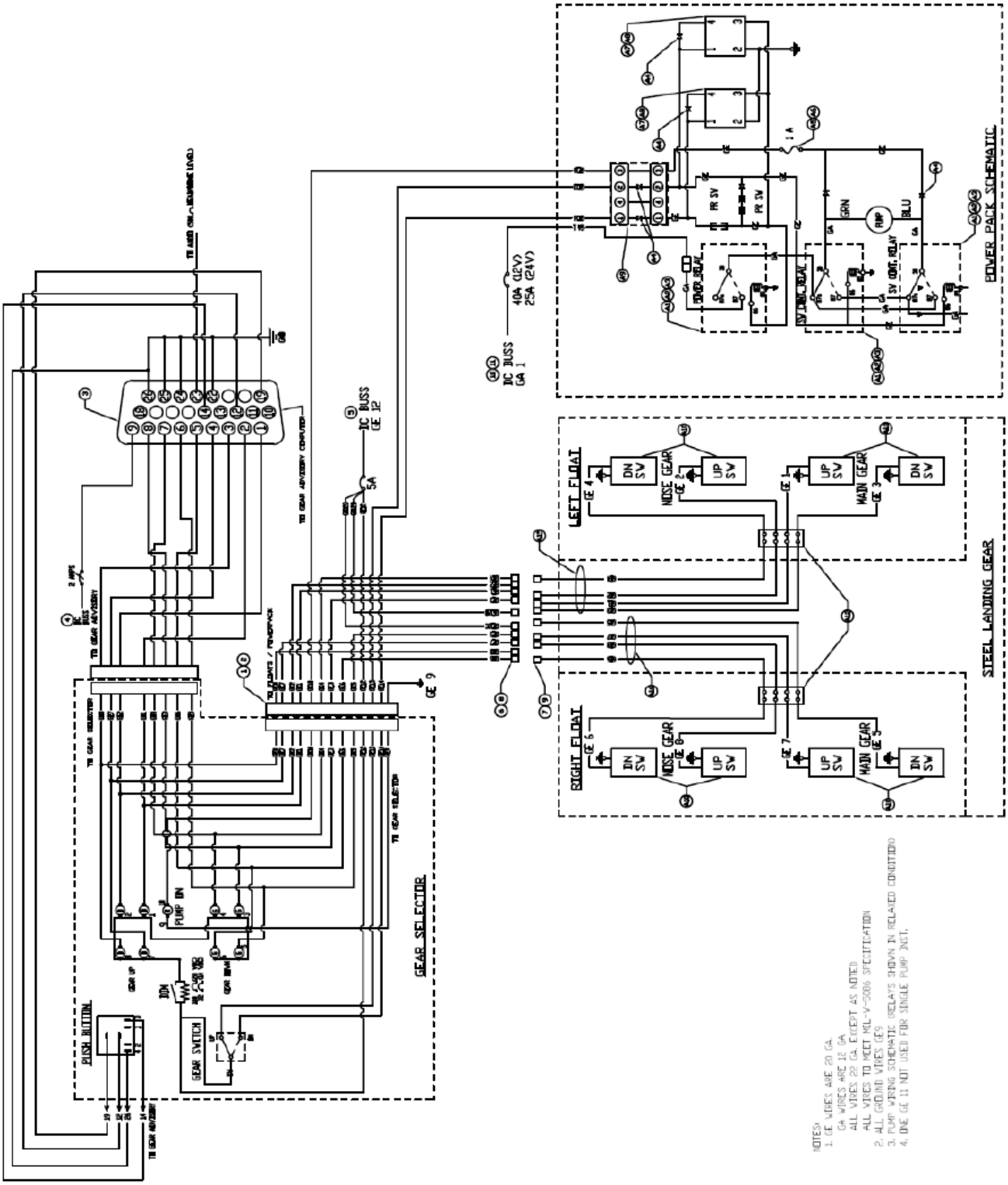
ELECTRICAL SCHEMATIC POST SERVICE LETTER 228 124
ELECTRICAL SCHEMATIC PRE SERVICE LETTER 228 126
GEAR CONTROL (ROUND) 128
GEAR CONTROL (RECTANGLE) 131
GEAR CONTROL (G1000 ONLY) 133

ELECTRICAL SCHEMATIC POST SERVICE LETTER 228



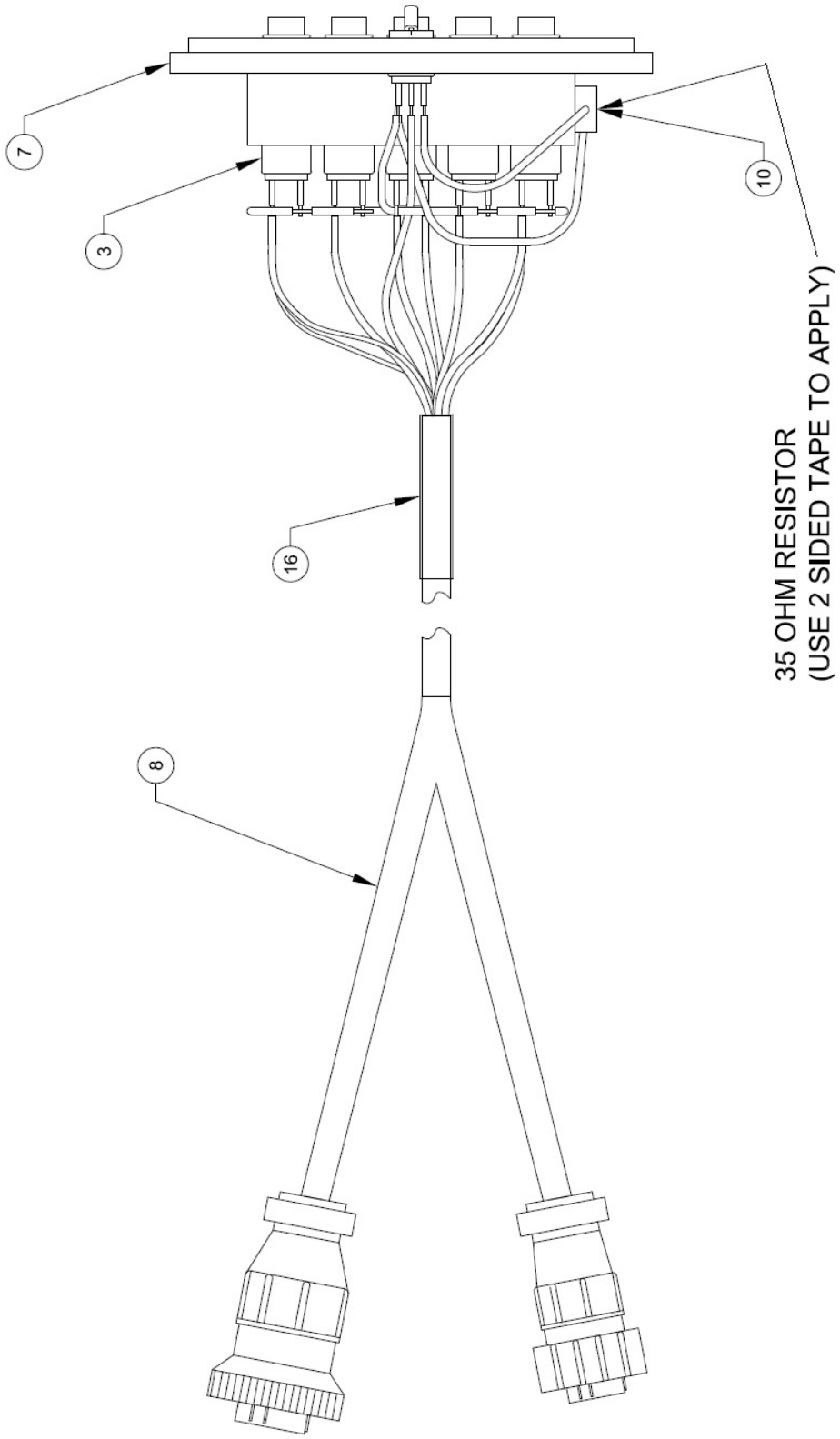
ITEM	QTY	PART NO.	PART DESCRIPTION
1	4	1005724	GEAR POSITION SWITCH, PROXIMITY, 3 WIRE
2	4	1006668	ELECTRIC WATER RUDDER RETRACT SOLENOID
3	2	4-140	TERMINAL BLOCK, 4 POSITION
4	1	4A11000-012	WIRE HARNESS, GEAR SELECTOR, FLOATS, HYD. PUMP
5	8	5801	GEAR POSITION SWITCH, PROXIMITY, MAGNETIC
6	2	6-140	TERMINAL BLOCK, 6 POSITION
7	1	6A10000-004	WIRE HARNESS, LEFT FLOAT
8	1	6A10000-005	WIRE HARNESS, RIGHT FLOAT
9	1	7277-2-5	CIRCUIT BREAKER, 5 AMP
10	1	73F-250-32-NL	CONNECTOR, FEMALE, 12-10 AWG
11	1	73M-250-32-NL	CONNECTOR, MALE, 12-10 AWG
12	8	21A09005-262	CLIP, GEAR POSITION SWITCH HOLDER
13	1	MS24523-21	TOGGLE SWITCH, ELECTRIC WATER RUDDER RETRACT
14	8	S1635-1	PIN
15	8	S1636-1	SOCKET
16	8	S1637-1	HOUSING
17	8	S1637-2	HOUSING
18	1	W23-X1A1G-25	CIRCUIT BREAKER, 25 AMP, 24VDC
19	1	W23-X1A1G-40	CIRCUIT BREAKER, 40 AMP, 12VDC

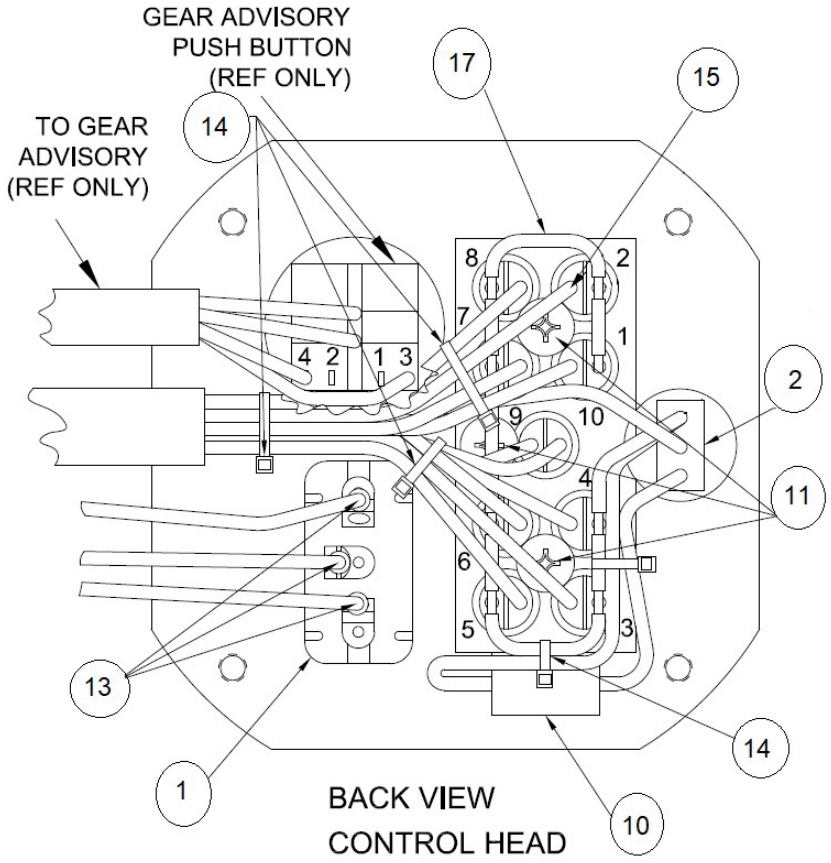
ELECTRICAL SCHEMATIC PRE SERVICE LETTER 228

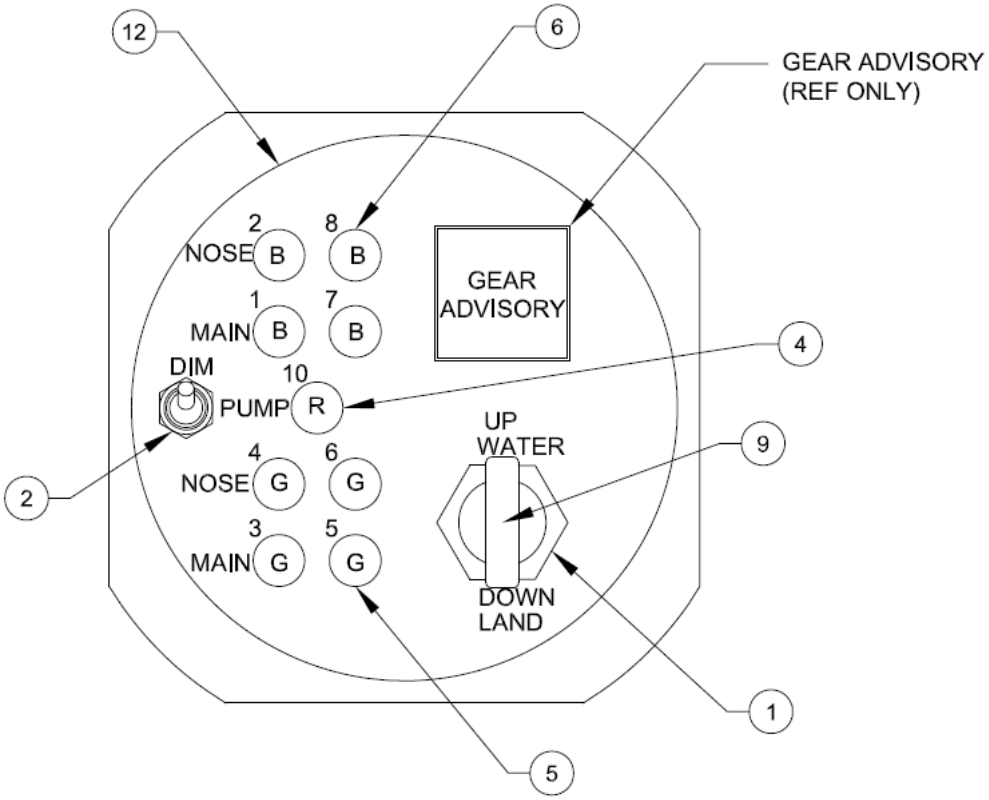


ITEM	QTY	PART NO.	PART DESCRIPTION
1	1	4A11000-011	ASSY, WIRING HARNESS, GEAR SELECTOR
3	1	4A11000-014	ASSY, WIRING HARNESS, GEAR ADVISORY
4	1	7277-2-2	BREAKER, CIRCUIT, KLIXON, 2AMP
5	1	7277-2-5	BREAKER, CIRCUIT, KLIXON, 5AMP
6	8	S1635-1SF	PIN
7	8	S1636-1	SOCKET
8	8	S1637-1	HOUSING
9	8	S1637-2	HOUSING
10	1	W-23- X1A1G-25	BREAKER, CIRCUIT, 25AMP
11	1	W-23-X1A1G-40	BREAKER, CIRCUIT, 40AMP
A1	3	0-332-209-211	RELAY, 24V, 5 PRONG
A2	3	0-332-209-137	RELAY, 12V, 5 PRONG
A3	3	BR05FW'	RELAY SOCKET
A4	7	1N4004	DIODE
A5	1	AGC-1	FUSE 1 AMP
A6	1	3453LF2A	FUSE HOLDER
A7	2	1012411	ASSEMBLY, RELAY, TIME DELAY RELEASE, 6-48 VDC
A9	1	1004949	DIODE CABLE ADAPTOR
A10	8	5801	SWITCH, 2 WIRE
A12	2	4-140	ELECTRICAL TERMINAL, 4 CONNECT
A15	1	6A10000-004	HARNESS W'IRE, FLOATS LT
A16	1	6A10000-005	HARNESS W'IRE, FLOATS, RT

GEAR CONTROL (ROUND)

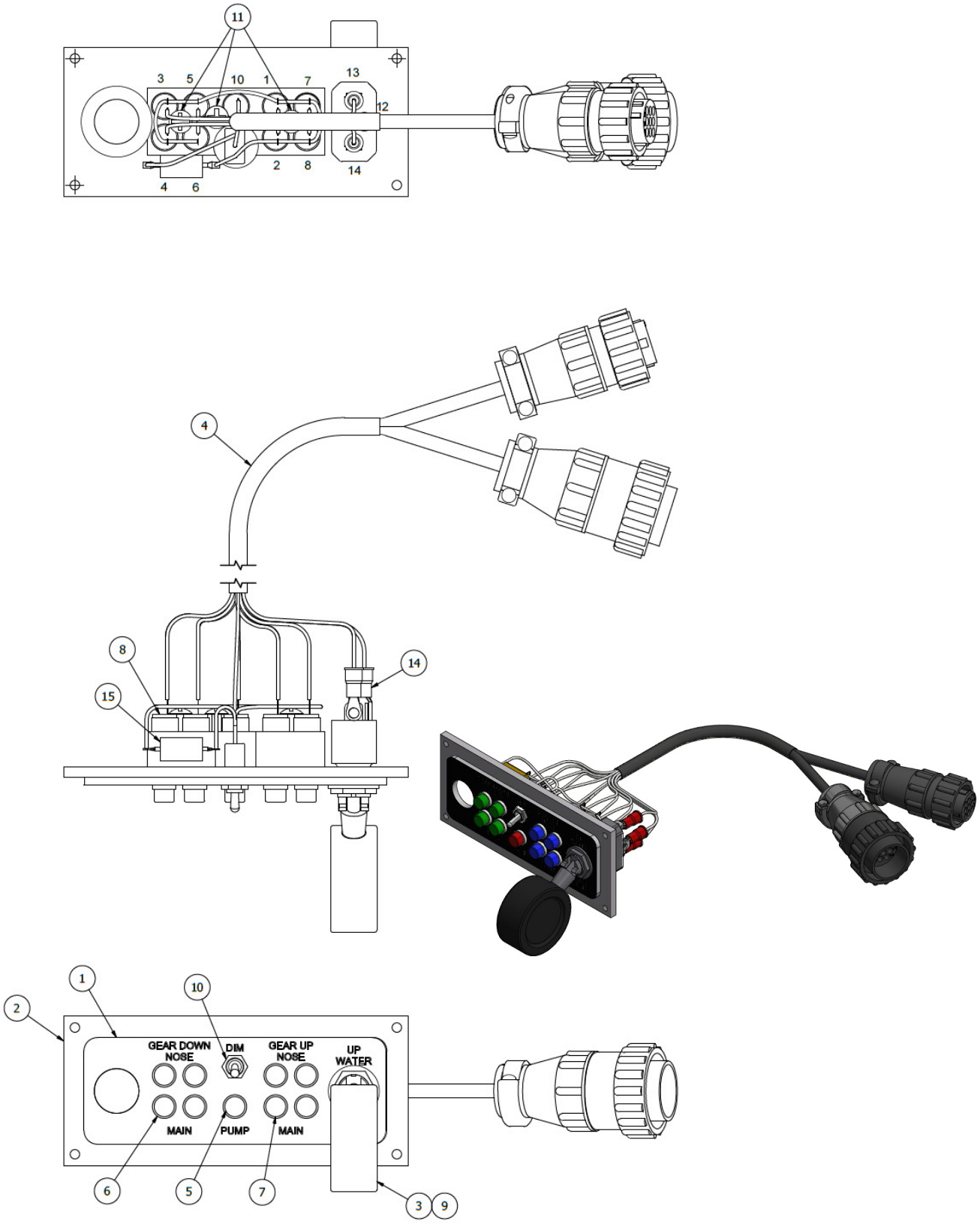



GEAR ADVISORY
PUSH BUTTON
(REF ONLY)
TO GEAR
ADVISORY
(REF ONLY)
14
17
15
8
2
7
1
4 2
1 3
2
9
10
4
11
6
5
3
13
1
14
10
BACK VIEW
CONTROL HEAD


12
6
GEAR ADVISORY
(REF ONLY)
2
NOSE
B
8
B
GEAR
ADVISORY
1
MAIN
B
7
B
4
DIM
10
PUMP
R
UP
WATER
9
2
4
NOSE
G
6
G
3
MAIN
G
5
G
DOWN
LAND
1
5

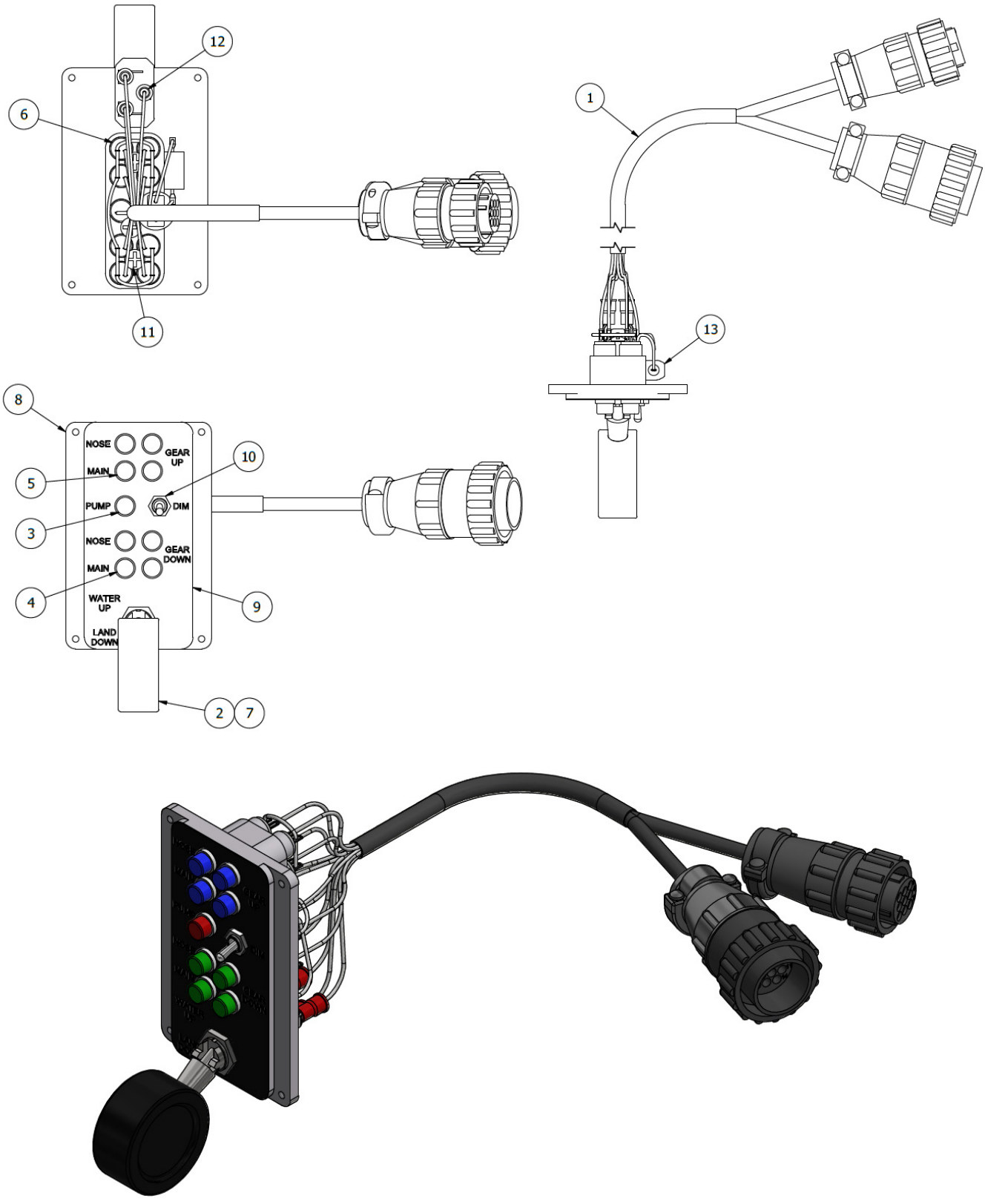
ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21A11000-009	GEAR SELECTOR ASSY. ROUND (12V)
-	1	21A11000-019	GEAR SELECTOR ASSY. ROUND (24V)
1	1	8857K44	SWITCH
2	1	A101SYCB	TOGGLE SWITCH, SPDT, ON-ON
3	9	515-0012	SOCKET
4	1	507-3914-1431-600F	INDICATOR LAMP, 14V, RED
	1	507-3918-1431-600F	INDICATOR LAMP, 28V, RED
5	4	507-3914-1432-600F	INICATOR LAMP, 14V, GREEN
	4	507-3918-1432-600F	INICATOR LAMP, 28V, GREEN
6	4	507-3914-1434-600F	INDICATOR LAMP, 14V, BLUE
	4	507-3918-1434-600F	INDICATOR LAMP, 28V, BLUE
7	1	21A11179-001	BLOCK, GEAR CONTROL
8	1	4A11000-008	HARNESS ASSEMBLY, GEAR SELECTOR
9	1	21A11259-003	GEAR SWITCH KNOB
10	1	RH-5-35	RESISTOR, 14V, DALE RH5 5W
	1	RH-5-180	RESISTOR, 28V, DALE RH5 5W
11	3	AN526-632R8	SCREW, TRUSS HEAD, 6-32
12	1	10B3-6202	PLACARD, ROUND 2100 GEAR SELECTOR
13	3	R-3	RING CONNECTOR, #6, 20 AWG, RED
14	5	PLT1M-M	CABLE TIE
15	16 IN	HIXR-3/16	SHRINK WRAP, 3/16, WHITE
16	3 IN	HS105-1/2-0	HEAT SHRINK TUBING
17	6 IN	22759-16-20-9	WIRE, 20 AWG, WHITE

GEAR CONTROL (RECTANGLE)



ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	21A11000-010	ASSEMBLY, INDICATOR, GEAR CONTROL, SQUARE, 12V
-	1	21A11000-018	GEAR SELECTOR ASSY. RECTANGLE (24V)
1	1	10B3-6277	PLACARD, GEAR CONTROL SQUARE
2	1	21A11179-002	BLOCK GEAR CONTROL SQUARE
3	1	21A11259-003	GEAR SWITCH KNOB
4	1	4A11000-008	WIRING HARNESS ASSY. SELECTOR
	3 IN	HS105-1/2-0	HEAT SHRINK TUBING
5	1	507-3914-1431-600F	LAMP LIGHT, RED 14V
		507-3918-1431-600F	INDICATOR LAMP, 28V, RED
6	4	507-3914-1432-600F	LAMP LIGHT, GREEN 14V
		507-3918-1432-600F	INICATOR LAMP, 28V, GREEN
7	4	507-3914-1434-600F	LAMP LIGHT, BLUE, 14V
		507-3918-1434-600F	INDICATOR LAMP, 28V, BLUE
8	9	515-0012	SOCKET
9	1	8857K44	SWITCH
10	1	A101SYCB	TOGGLE SWITCH
11	3	AN526-632R8	SCREW, TRUSS HEAD MACHINE, 6-32 THREAD, 1/2" LENGTH
12	12"	HS105-3/32-0	HEAT SHRINK, TUBING - BLACK
13	3	PLT1M-M	CABLE TIE, NYLON, WHITE, 4" (SMALL)
14	3	R-3	TERMINAL, RING #6 STUD, 16-22 AWG, RED
15	1	RH-5-35	RESISTOR, 14V, DALE RH5 5W
	1	RH-5-180	RESISTOR, 28V, DALE RH5 5W
16	6 IN	22759-16-20-9	WIRE, 20AWG, WHITE (NOT SHOWN)
17	16 IN	HIXR-3/16	SHRINK WRAP, 3/16, WHITE (NOT SHOWN)

GEAR CONTROL (G1000 ONLY)



ITEM	QTY	PART NO.	PART DESCRIPTION
-	1	1001431	ASSEMBLY, INDICATOR, GEAR CONTROL, G1000
1	1	4A11000-008	ASSEMBLY, WIRE HARNESS
2	1	21A11259-003	GEAR SWITCH KNOB
3	1	507-3918-1431-600F	INDICATOR LAMP, 28V, RED
4	4	507-3918-1432-600F	INDICATOR LAMP, 28V, GRN
5	4	507-3918-1434-600F	INDICATOR LAMP, 28V, BLU
6	9	515-0012	SOCKET, GEAR SELECTOR LIGHTS
7	1	8857K44	SWITCH, GEAR SELECTOR, 2100/7000
8	1	1001172	BLOCK, GEAR CONTROL, GLASS PANEL
9	1	1001173	PLACARD, GEAR CONTROL, GLASS PANEL
10	1	A101SYCB	TOGGLE SWITCH, SPDT, ON ON
11	3	AN526-632R6	SCREW, MACHINE, TRUSS HEAD
12	3	MS25036-102	RING TERMINAL, #6 STUD, 16-22 AWG, RED
13	1	RH005180R0FE02	RESISTOR, 28V