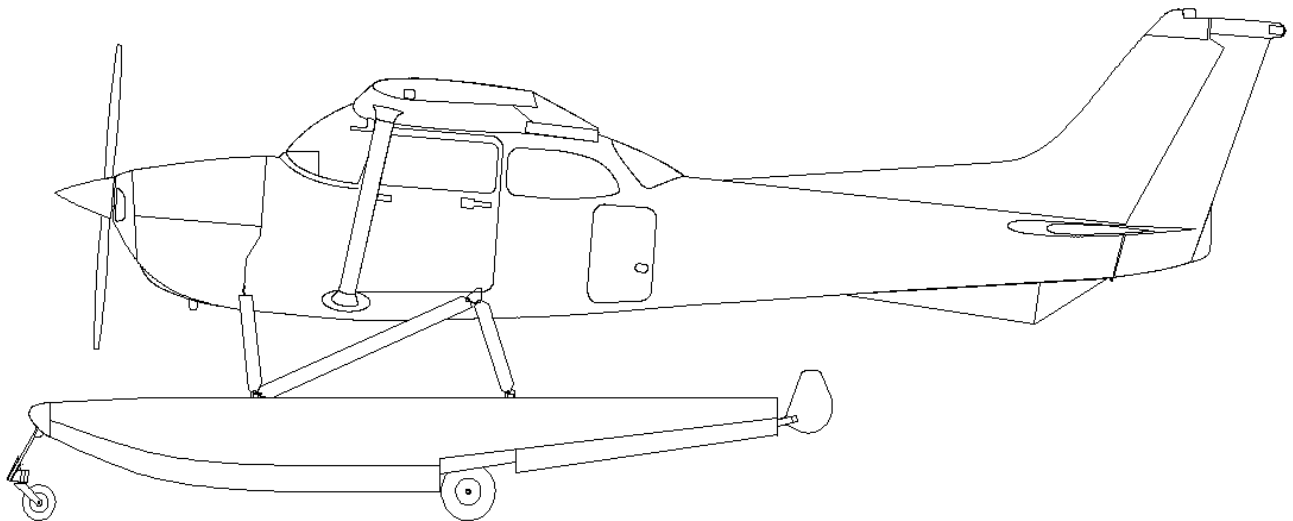


WIPLINE FLOATS

MODEL 2100

PARTS MANUAL

CESSNA 172



WIPAIRE, INC.

1700 HENRY AVE

SOUTH ST. PAUL

MINNESOTA 55075

U.S.A.

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New Customer Information

Customer Name	
Billing Address	
Shipping Address	
Phone Number	Fax Number
Purchasing Contact	Phone Number
E-Mail	Fax Number
Accounts Payable Contact	Phone Number
E-Mail	Fax Number
Type(s) of Aircraft Owned or Maintained	
Model(s) of Floats and Skis Owned or Maintained	
FedEx and/or UPS account number (if applicable)	

Please return to Wipaire Customer Service:

Fax 651-306-0666

Phone 651-306-0459

CustomerService@wipaire.com

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Warranty Claim Form

Aircraft Owner Name: _____

Address: _____

City, State, Zip: _____

Phone: _____ Fax: _____

E-Mail Address: _____

Aircraft Information

Aircraft Model Number: _____ Aircraft Registration ID: _____

Aircraft Serial Number: _____

Please circle the category that most describes the aircraft's primary type of operations:

Commercial Operator Training/Rental Private Use Business Use

Float / Ski Information

Float / Ski Model: _____ Float / Ski Serial Numbers: _____

Total Hours on Floats / Skis to Date: _____ Approximate Hours per Year of Use: _____

Date Floats / Skis Went Into Service (New): _____

Claim Information

Date of Claim: _____

Faulty Part and Number: _____ Company Performing Maintenance: _____

Work Order Number: _____ Contact Person: _____

Phone: _____ Fax: _____ E-Mail Address: _____

Wipaire Representative and any RMA or Claim Numbers: _____

Please include a brief description of the conditions at the time of failure or damage, if applicable, and any additional remarks:

Please fax or mail back to us. If you prefer, you can e-mail the form to CustomerService@wipaire.com

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Wipline Model 2100 Parts Manual

Log of Revisions

Revision	Pages Effected	Description	Date
A	55-59	ADDED NEW BRAKE ASSEMBLY & SHIFTED TABLE OF CONTENTS	12/12/05
B	44, 52	MAIN AND NOSE GEAR CYLINDER RETRACT P/N CHANGE.	3/20/06
C	20-26	Changed P/Ns for float deck covers.	8/3/06
D	51 ALL 62 63	Changed P/Ns for Main Gear Bushings Added part number and revision to all pages Ref 4- Drag Wire 1002111 was 21A02000-136 Ref 10 Wire Pull 21A02462-005 was 21A02519-008	10/31/06
E	44, 51	Hydraulic Cylinder part number change.	7/21/07
F	Multiple pages updated	Many pages changed with updated part numbers for parts. New figure added for water rudder.	9/1/10

You may also look at the latest parts manual at www.wipaire.com.

FLOAT PART SALES DEPT. OPERATIONS

Hours: 7 AM - 6 PM, Monday through Friday

Central U.S. Time

Phone: 651-306-0459

Fax: 651-306-0666

CustomerService@wipaire.com

www.wipaire.com

SHIPPING SCHEDULE:

Orders received before noon (central time) will be shipped the same day.

In stock orders ship the same day if received by 3 pm central US time. Orders after this time may be assessed an AOG fee for special priority handling.

As we are primarily a manufacturer, our stocks can be rapidly depleted by production requirements. Therefore, prices and availability are subject to change at any time. It is our intent to provide courteous and prompt service of your needs. Please let us know of any problems or concerns so that changes in these procedures can be a benefit for all.

A. PARTS ORDERING

Purchase orders should include:

- 1) P.O. 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, COD (U.S. customers only),
Pre-payment by check or wire transfer, open account (see E.)

B. *DAMAGED GOODS*

Inspect all parts upon receipt. Damages to parts in transit must be filed as a claim against the carrier.

C. RETURNED PARTS

Written explanation of reason for return must accompany parts, including invoice number of original shipment. Shipping charges on returned parts must be prepaid or the shipment will be refused.

D. ORDER SHORTAGES

Check shipment against delivery slip immediately. All claims for any shortages should be made within three (3) days after order receipt.

E. CREDIT POLICY

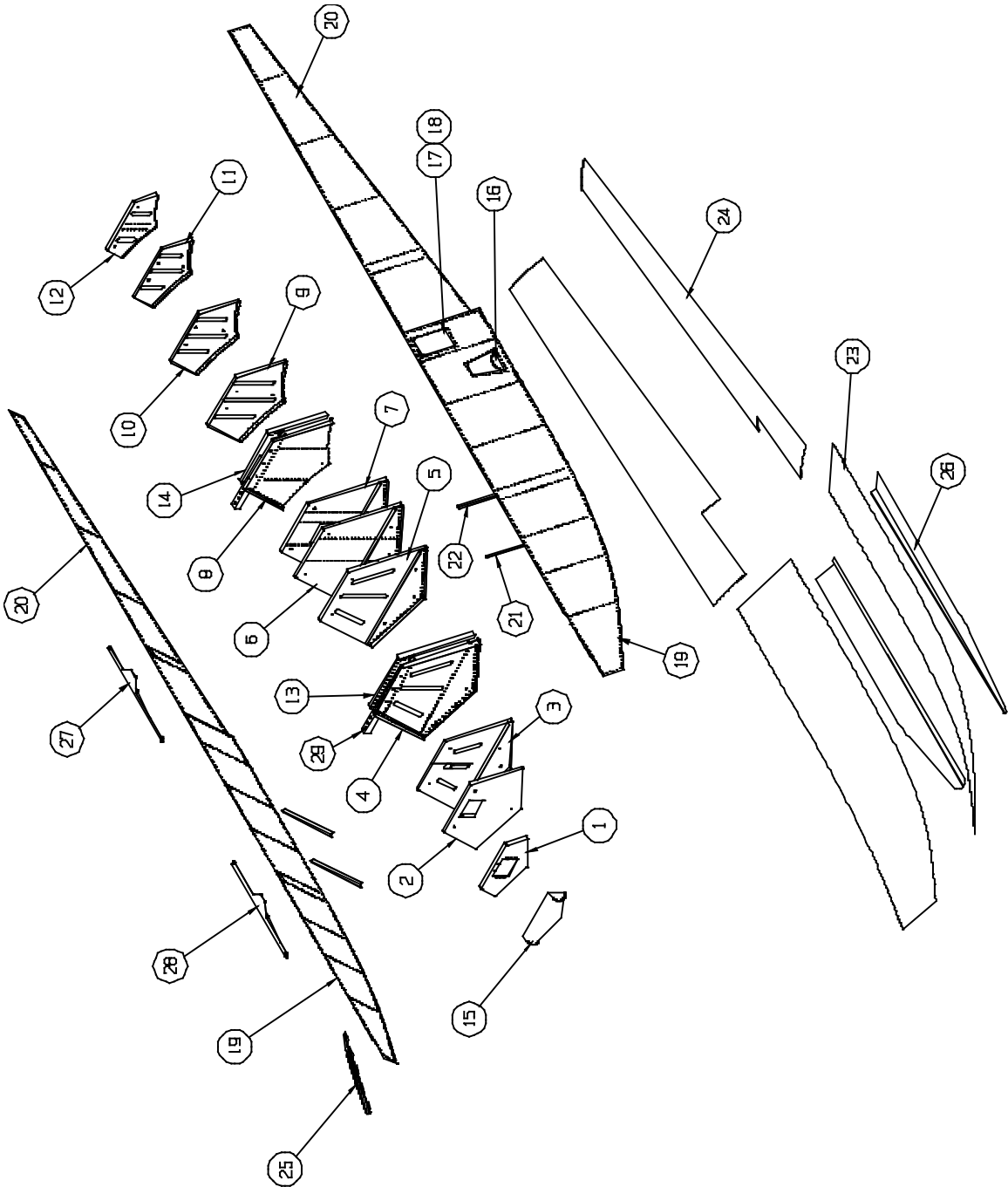
Parts will be shipped on open account, net 30 days, to Wipaire-approved credit customers only. A balance due over 60 days will result in no shipments. Wipaire, Inc reserves the right to send any order C.O.D.

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

WIPLINE MODEL 2100 FLOAT PARTS MANUAL



HULL ASSEMBLY – AMPHIBIAN
FIGURE 1

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

HULL ASSEMBLY - AMPHIBIAN, FIGURE 1

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	1		BULKHEAD #1	21A01163-067
2	1		ASSY BULKHEAD #3	21A01000-265
	1		BULKHEAD	21A01158-184
	1		ANGLE – NOSE BOX ATTACH	21A01326-006
	1		ANGLE – NOSE BOX ATTACH	21A01326-005
3	1		ASSY BULKHEAD #4	21A01000-261
	1		BULKHEAD – MAIN	21A01158-174
	1		SUPPORT – BULKHEAD LOWER	21A01158-175
	1		CLAMP, PUMP OUT TUBE	3A01158-003
4	1		ASSY BULKHEAD #5	21A01000-253
	1		BULKHEAD - MAIN	21A01158-178
	1		ANGLE – SIDE L.	21A01326-007
	1		ANGLE – SIDE R.	21A01326-008
	1		PANEL – SPR. BAR	21A01163-066
	1		SUPPORT – BULKHEAD #6	21A01158-177
	1		CLAMP, PUMP OUT TUBE	3A01158-003
5	1		ASSY BULKHEAD #6	21A01000-252
	1		BULKHEAD – MAIN	21A01158-189
	1		SUPPORT – BULKHEAD LOWER	21A01158-177
	1		GROMMET	MS35489-19
6	1		ASSY BULKHEAD #7 L.	21A01000-267
	1		BULKHEAD - MAIN	21A01158-181
	1		SUPPORT – BULKHEAD LOWER	21A01158-187
	1		ASSY BULKHEAD #7 R	21A01000-266
	1		BULKHEAD - MAIN	21A01158-182
	1		SUPPORT – BULKHEAD LOWER	21A01158-188
7	1		ASSY BULKHEAD #8 L.	21A01000-263
	1		BULKHEAD - MAIN	21A01158-191
	1		SUPPORT – BULKHEAD LOWER	21A01158-193

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

HULL ASSEMBLY - AMPHIBIAN, FIGURE 1

<u>REF NO.</u>	<u>NO. REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
	1	ANGLE – A.B. SKIN ATTACH L.	21A01158-179
	1	ANGLE – A.B. SKIN ATTACH R.	21A01158-180
	1	ASSY BULKHEAD #8 R	21A01000-264
	1	BULKHEAD - MAIN	21A01158-190
	1	SUPPORT – BULKHEAD LOWER	21A01158-192
	1	ANGLE – A.B. SKIN ATTACH L.	21A01158-179
	1	ANGLE – A.B. SKIN ATTACH R.	21A01158-180
8	1	ASSY. – BULKHEAD #10	21A01000-262
	1	BULKHEAD - MAIN	21A01158-169
	1	ANGLE SIDE L.	21A01326-011
	1	ANGLE SIDE R.	21A01326-012
	1	PANEL – SPR. BAR	21A01163-066
9	1	BULKHEAD #11	21A01000-395
10	1	BULKHEAD #12	21A01000-396
11	1	BULKHEAD #13	21A01000-397
12	1	ASSY. BULKHEAD #14	21A01000-250
	1	BULKHEAD - MAIN	21A01158-164
	1	CHANNEL – REIN.	21A01158-165
	1	PLATE – WATER RUDDER STOP	21A08156-130
13	1	ASSY. SPR. BAR PANEL FWD	21A01000-260
	1	PANEL – SPR. BAR	21A01163-065
	1	ANGLE – SIDE L.	21A01326-013
	1	ANGLE – SIDE R.	21A01326-014
	1	BOLT	AN4-5A
	1	WASHER	NAS1149F0463P
	1	NUT	MS21044N4
14	1	ASSY. SPR. BAR PANEL AFT	21A01000-259
	1	PANEL – SPR. BAR	21A01163-065
	1	ANGLE – SIDE L.	21A01326-009

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

HULL ASSEMBLY - AMPHIBIAN, FIGURE 1

<u>REF NO.</u>	<u>NO. REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
	1	ANGLE – SIDE R.	21A01326-010
	1	BOLT	AN4-5A
	1	WASHER	NAS1149F0463P
	1	NUT	MS21044N4
15	1	NOSE BUMPER	21A01000-295
16	1	STEP – BOARDING	3A01000-005
17	2	REINFORCEMENT – COVER	21A01156-126
18	2	CONVER – INSP. ASSY.	21A01000-427
	2	COVER – INSP.	21A01004-101
	2	GASKET	21A01567-012
	56	SCREW – ATTACH	AN526-632R6
19	1	SIDE SKIN – STEP TO BOW L. OUTBR'D	21A01004-093
	1	SIDE SKIN – STEP TO BOW R. OUTBR'D	21A01004-094
	1	SIDE SKIN – STEP TO BOW L. INBR'D	21A01004-095
	1	SIDE SKIN – STEP TO BOW R. INBR'D	21A01004-096
	1	BRACKET (PADDLE)	1002114
	1	STOP (RIGHT)	1002113
	1	CLIP	3A01503-001
	1	PADDLE 4 FT.	0238-0035
20	1	SIDE SKIN – STEP TO STERN L. OUTBR'D	21A01004-097
	1	SIDE SKIN – STEP TO STERN R. OUTBR'D	21A01004-098
	1	SIDE SKIN – STEP TO STERN L. INBR'D	21A01004-099
	1	SIDE SKIN – STEP TO STERN R. INBR'D	21A01004-100
		<u>NOTE:</u> DIFFERENCE BETWEEN R. AND L. IS FINISH	
21	2	STIFFENER – SIDE SKIN	21A01340-105
22	2	STIFFENER – SIDE SKIN	21A01340-104
23	1	ASSY. BOTTOM SKIN FWD L.	21A01000-307
	1	SKIN ALONE	21A01005-265

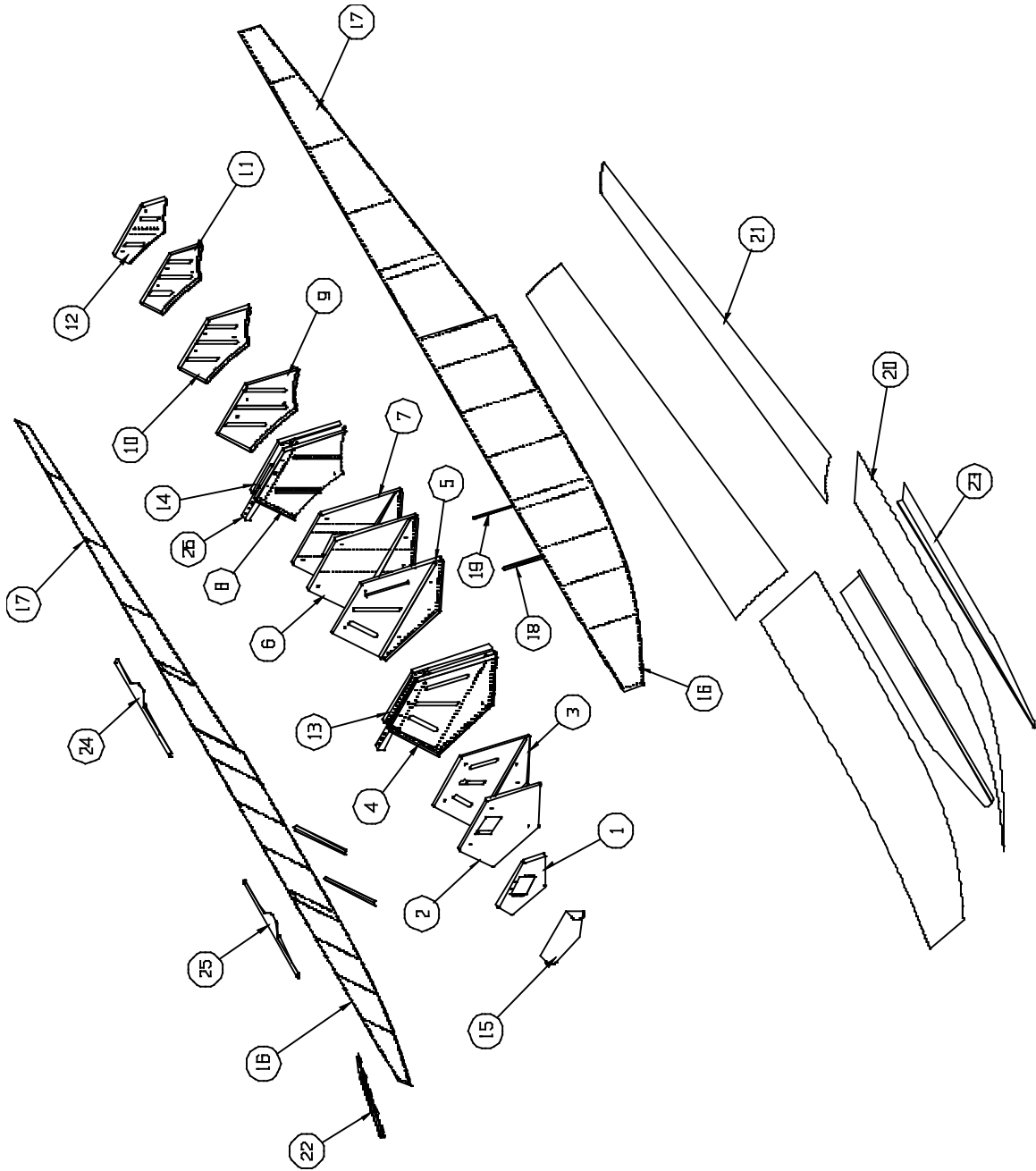
WIPLINE MODEL 2100 FLOAT PARTS MANUAL

HULL ASSEMBLY - AMPHIBIAN, FIGURE 1

<u>REF NO.</u>	<u>NO. REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
	1	ASSY. BOTTOM SKIN FWD R.	21A01000-306
	1	SKIN ALONE (ASSY. INCLUDES BONDED STIFFENERS)	21A01005-265
	2	STIFFENER	21A01322-001
	2	STIFFENER	21A01322-002
	2	STIFFENER	21A01322-003
	2	STIFFENER	21A01322-004
	2	STIFFENER	21A01322-005
	6	STIFFENER	21A01322-006
24	1	BOTTOM SKIN AFTERBODY L.	21A01004-103
	1	BOTTOM SKIN AFTERBODY R.	21A01004-104
25	1	ASSY. SPRAY RAIL L.	21A01000-275
	1	ASSY. SPRAY RAIL R.	21A01000-274
26	1	BOOSTER – SISTER KEEL L.	21A01000-429
	1	BOOSTER – SISTER KEEL R.	21A01000-428
27	1	DOUBLER – GUNWALL AFT L.	21A01162-033
	1	DOUBLER – GUNWALL AFT R.	21A01162-034
28	1	DOUBLER – GUNWALL FWD L.	21A01162-031
	1	DOUBLER – GUNWALL FWD R.	21A01162-032
29	2	TUBE – SPR. BAR MOUNTING	21A03115-001
	6	BOLT	AN4-22A
	12	WASHER	NAS1149D0416J
	12	WASHER	NAS1149D0463J
	6	NUT	MS21044N4

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WIPLINE MODEL 2100 FLOAT PARTS MANUAL



HULL ASSEMBLY – SEAPLANE
FIGURE 2

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

HULL ASSEMBLY - SEAPLANE, FIGURE 2

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	1		BULKHEAD #1	21A01163-067
	1		COVER ASS'Y	21501000-366
	1		COVER – NOSE GEAR OPENING	21S01150-134
			A/R PLATE NUT	MS21059L3
2	1		ASSY BULKHEAD #3	21A01000-265
	1		BULKHEAD	21A01158-184
	1		ANGLE – NOSE BOX ATTACH	21A01326-006
	1		ANGLE – NOSE BOX ATTACH	21A01326-005
3	1		ASSY BULKHEAD #4	21A01000-261
	1		BULKHEAD – MAIN	21A01158-174
	1		SUPPORT – BULKHEAD LOWER	21A01158-175
	1		CLAMP, PUMP OUT TUBE	3A01158-003
4	1		ASSY BULKHEAD #5	21A01000-253
	1		BULKHEAD - MAIN	21A01158-178
	1		ANGLE – SIDE L.	21A01326-007
	1		ANGLE – SIDE R.	21A01326-008
	1		PANEL – SPR. BAR	21A01163-066
	1		SUPPORT – BULKHEAD LOWER	21A01158-177
	1		CLAMP, PUMP OUT TUBE	3A01158-003
5	1		ASSY BULKHEAD #6	21A01000-252
	1		BULKHEAD – MAIN	21A01158-189
	1		SUPPORT – BULKHEAD LOWER	21A01158-177
	1		GROMMET	MS35489-19
6	1		ASSY BULKHEAD #7	21S01000-308
	1		BULKHEAD - MAIN	21A01158-189
	1		SUPPORT – BULKHEAD LOWER	21A01158-177
	1		CLAMP, PUMP OUT TUBE	3A01158-003
7	1		ASSY BULKHEAD #8	21S01000-309
	1		BULKHEAD – MAIN	21A01158-189

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

HULL ASSEMBLY - SEAPLANE, FIGURE 2

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
	1		SUPPORT – BULKHEAD LOWER	21A01158-177
	2		ANGLE – A.B. SKIN ATTACH	21A01158-203
	1		CLAMP, PUMP OUT TUBE	3A01158-003
8	1		ASSY. – BULKHEAD #10	21S01000-322
	1		BULKHEAD - MAIN	21A01158-169
	1		ANGLE SIDE L.	21A01326-011
	1		ANGLE SIDE R.	21A01326-012
	1		PANEL – SPR. BAR	21A01163-066
	2		ANGLE – VERTICAL	21S01340-129
	1		CLAMP, PUMP OUT TUBE	3A01158-003
9	1		BULKHEAD #11	21A01000-395
10	1		BULKHEAD #12	21A01000-396
11	1		BULKHEAD #13	21A01000-397
12	1		ASSY. BULKHEAD #14	21A01000-250
	1		BULKHEAD - MAIN	21A01158-164
	1		CHANNEL – REIN.	21A01158-165
	1		PLATE – WATER RUDDER STOP	21A08156-130
13	1		ASSY. SPR. BAR PANEL FWD	21A01000-260
	1		PANEL – SPR. BAR	21A01163-065
	1		ANGLE – SIDE L.	21A01326-013
	1		ANGLE – SIDE R.	21A01326-014
	1		BOLT	AN4-5A
	1		WASHER	NAS1149F0463P
	1		NUT	MS21044N4
14	1		ASSY. SPR. BAR PANEL AFT	21A01000-259
	1		PANEL – SPR. BAR	21A01163-065
	1		ANGLE – SIDE L.	21A01326-009
	1		ANGLE – SIDE R.	21A01326-010

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

HULL ASSEMBLY - SEAPLANE, FIGURE 2

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
	1		BOLT	AN4-5A
	1		WASHER	NAS1149F0463P
	1		NUT	MS21044N4
15	1		NOSE BUMPER	21S01738-001
16	1		SIDE SKIN – STEP TO BOW L. OUTBR'D	21S01004-123
	1		SIDE SKIN – STEP TO BOW R. OUTBR'D	21S01004-122
	1		SIDE SKIN – STEP TO BOW L. INBR'D	21S01004-125
	1		SIDE SKIN – STEP TO BOW R. INBR'D	21S01004-124
	1		BRACKET (PADDLE)	1002114
	1		STOP (LEFT)	3A01156-057
	1		STOP (RIGHT)	1002113
	1		CLIP	3A01503-001
	1		PADDLE	4 FT
17	1		SIDE SKIN – STEP TO STERN L. OUTBR'D	21A01004-097
	1		SIDE SKIN – STEP TO STERN R. OUTBR'D	21A01004-098
	1		SIDE SKIN – STEP TO STERN L. INBR'D	21A01004-099
	1		SIDE SKIN – STEP TO STERN R. INBR'D	21A01004-100
			<u>NOTE:</u> DIFFERENCE BETWEEN R. AND L. IS FINISH	
18	2		STIFFENER – SIDE SKIN	21A01340-105
19	2		STIFFENER – SIDE SKIN	21A01340-104
20	1		ASSY. BOTTOM SKIN FWD L.	21A01000-307
	1		SKIN ONLY	21A01005-265
	1		ASSY. BOTTOM SKIN FWD R.	21A01000-306
	1		SKIN ONLY	21A01005-265
			(ASSY. INCLUDES BONDED STIFFENERS)	
	2		STIFFENER	21A01322-001
	2		STIFFENER	21A01322-002
	2		STIFFENER	21A01322-003
	2		STIFFENER	21A01322-004

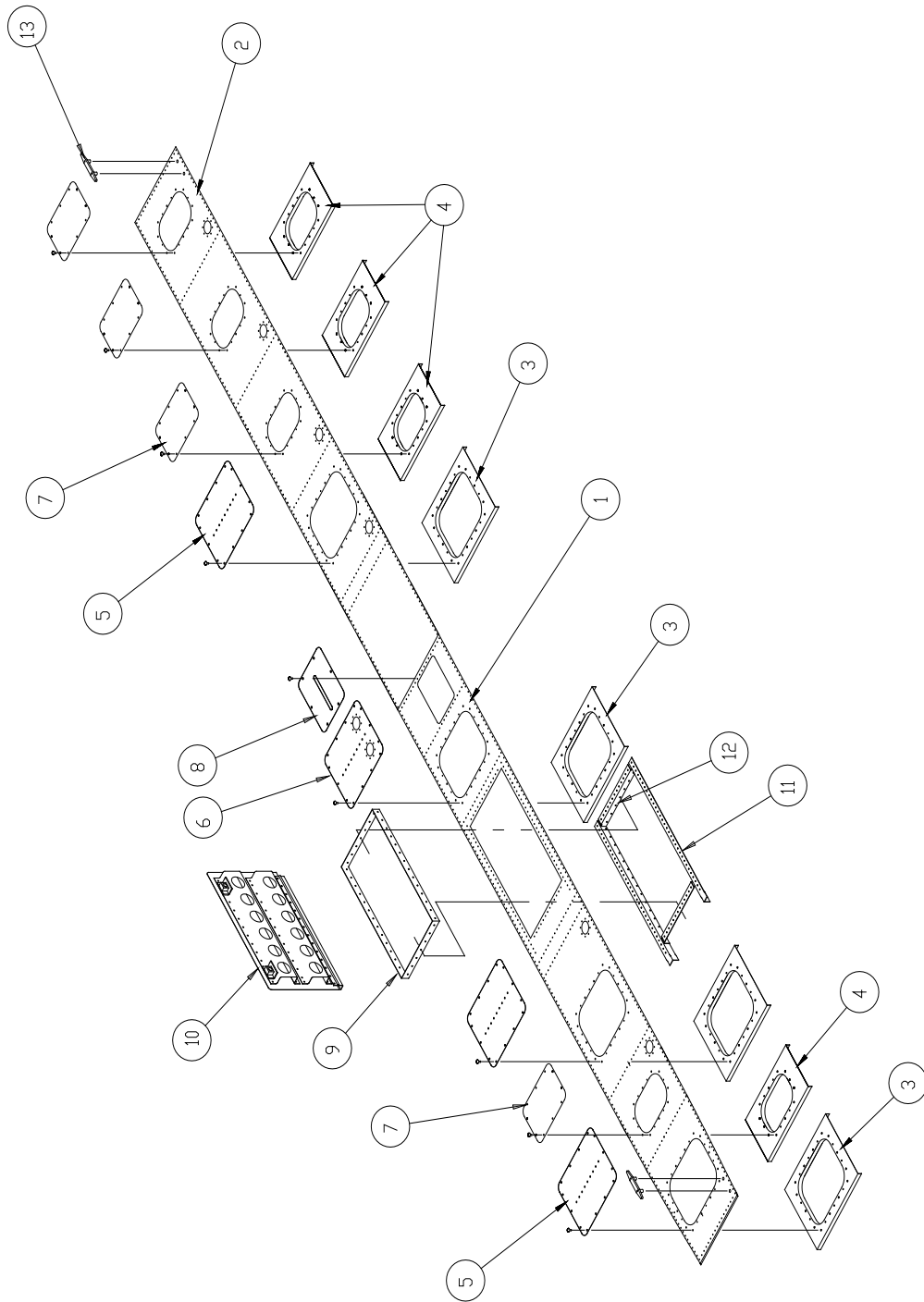
WIPLINE MODEL 2100 FLOAT PARTS MANUAL

HULL ASSEMBLY - SEAPLANE, FIGURE 2

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
	2		STIFFENER	21A01322-005
	6		STIFFENER	21A01322-006
21	1		BOTTOM SKIN AFTERBODY L.	21S01004-131
	1		BOTTOM SKIN AFTERBODY R.	21S01004-130
22	1		ASSY. SPRAY RAIL L.	21A01000-275
	1		ASSY. SPRAY RAIL R.	21A01000-274
23	1		BOOSTER – SISTER KEEL L.	21A01000-429
	1		BOOSTER – SISTER KEEL R.	21A01000-428
24	1		DOUBLER – GUNWALL AFT L.	21A01162-033
	1		DOUBLER – GUNWALL AFT R.	21A01162-034
25	1		DOUBLER – GUNWALL FWD L.	21A01162-031
	1		DOUBLER – GUNWALL FWD R.	21A01162-032
26	2		TUBE – SPR. BAR MOUNTING	21A03115-001
	6		BOLT	AN4-22A
	12		WASHER	NAS1149D0416J
	12		WASHER	NAS1149D0463J
	6		NUT	MS21044N4

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WIPLINE MODEL 2100 FLOAT PARTS MANUAL



TOP SKIN – HULL – AMPHIBIAN
FIGURE 3

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

TOP SKIN - HULL – AMPHIBIAN, FIGURE 3

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	1		SKIN – FWD SECTION L.	21A01004-089
	1		SKIN – FWD SECTION R.	21A01004-090
2	1		SKIN – AFT SECTION L.	21A01004-091
	1		SKIN – AFT SECTION R.	21A01004-092
3	4		SUPPORT – INSP. COVER - LARGE	21A01002-130
			A/R NUT – TINNERMAN WITH TAPE	9A3-671
			A/R TAPE – INSULATOR	1002481
4	4		SUPPORT – INSP. COVER – SMALL	21A01002-131
			A/R NUT – TINNERMAN WITH TAPE	9A3-671
			A/R TAPE – INSULATOR	1002481
5	3		INSP. COVER ASSY– LARGE – W/ ANGLE & GASKET	21A01000-258
			A/R SCREW – ATTACH	#8 X 5/8
	3		SEAL – GASKET ONLY	1001437
6			INSP. COVER ASSY – LARGE – W/ ANGLE (2 CUPS) &	
	1		GASKET	21A01000-273
			A/R SCREW – ATTACH	#8 X 5/8
	1		SEAL – GASKET ONLY	1001437
7	4		INSP. COVER ASSY - SMALL	21A01000-284
			A/R SCREW – ATTACH	#8 X 5/8
	4		SEAL – GASKET ONLY	1001728
8	1		COVER – GEAR INDICATOR L.	21A01002-137
	1		COVER – GEAR INDICATOR R.	21A01002-138
	1		PLACARD – DOWN - LAND	10A3-6338-1
	1		PLACARD – UP - WATER	10A3-6338-2
	4		SCREW – CAM - LOK	2600-3
	2		SCREW – CAM – LOK	1126000-5
6		RECEPTACLE – CAM – LOK	212-12	
9	1		JAMB – BAGGAGE DOOR	21A01150-131

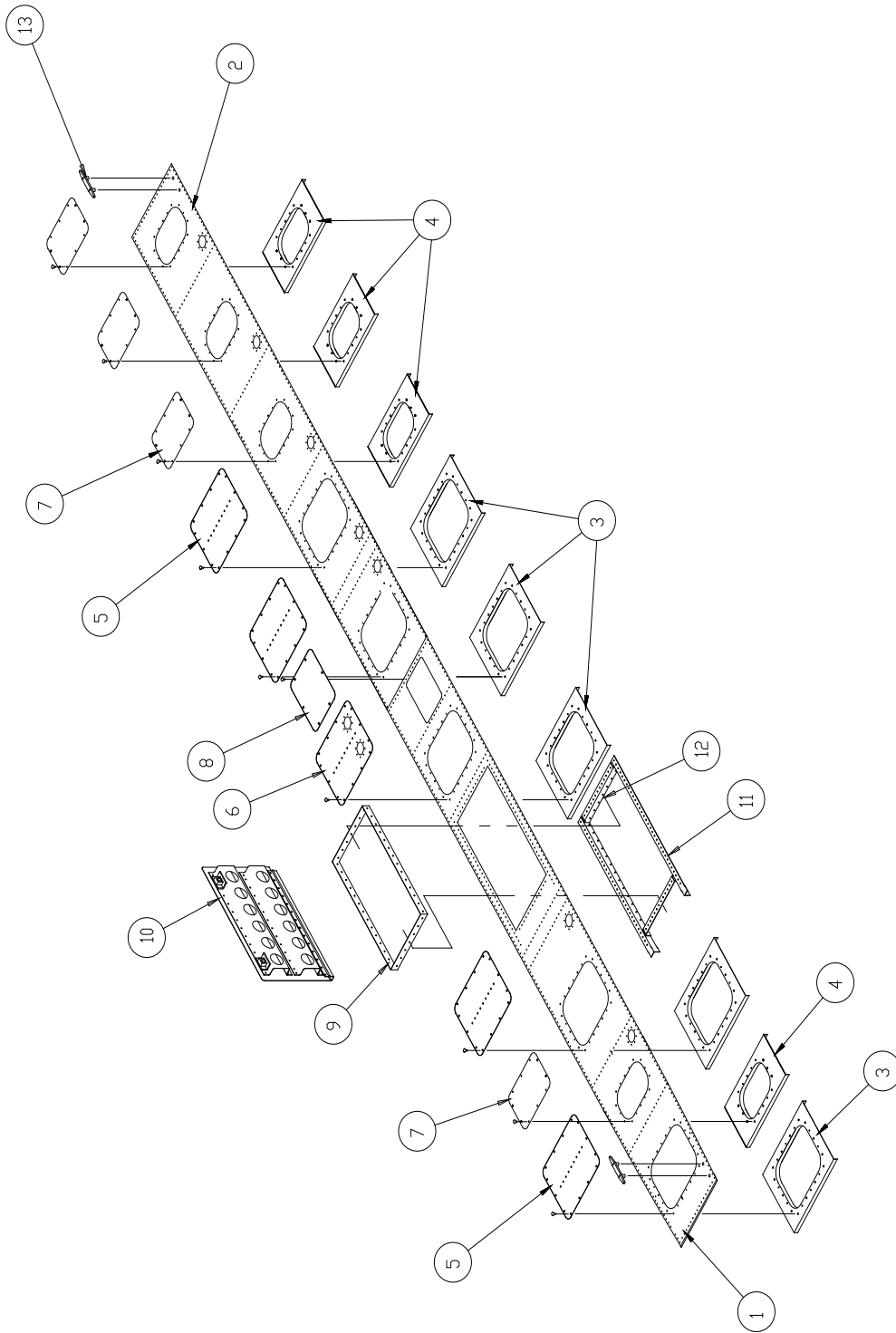
WIPLINE MODEL 2100 FLOAT PARTS MANUAL

TOP SKIN - HULL – AMPHIBIAN, FIGURE 3

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
	1		BAGGAGE JAMB, HINGE SIDE	1002067
10	1		ASSY – BAGGAGE DOOR	21A01000-268
	1		COVER - SKIN	21A01162-035
	1		HINGE	21A01740-008
	1		HINGE	21A01741-004
	2		STIFFENER - DOOR	21A01010-012
	2		STIFFENER ENDS	21A01004-106
	2		RETAINER - LOCK	3A01206-001
	2		LOCK PIN	3A01273-004
	2		CATCH – LATCH	3A01702-004
	2		LOCK SPRING	3A01525-003
	2		RING – OPENING	1002663
	1		SEAL – GASKET (NOT SHOWN)	1001438
	1		HINGE PIN	1002186
12			RIVET POP	01692-0410
	2		BOLT	10/32 x ½ SS
11	1		TOP RAIL – BAGGAGE OPENING L.	21A01326-003
	1		TOP RAIL – BAGGAGE OPENING R.	21A01326-002
12	2		JAMB – BAGGAGE DOOR	21A01326-004
13	2		CLEAT – TIE DOWN	21A01203-001
	4		BUSHING	21A01280-004
	4		SCREW – ATTACH	AN525-10R24
	4		NUT	MS21044N3
	4		WASHER	NAS1149D0363J

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WIPLINE MODEL 2100 FLOAT PARTS MANUAL



TOP SKIN – HULL – SEAPLANE
FIGURE 4

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

TOP SKIN - HULL – SEAPLANE, FIGURE 4

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	1		SKIN – FWD SECTION L.	21S01004-135
	1		SKIN – FWD SECTION R.	21S01004-134
2	1		SKIN – AFT SECTION L.	21S01004-137
	1		SKIN – AFT SECTION R.	21S01004-136
3	4		SUPPORT – INSP. COVER - LARGE	21A01002-130
			A/R NUT – TINNERMAN WITH TAPE	1002481
			A/R NUT – TINNERMAN	9A3-671
			A/R TAPE – INSULATOR	9903-10-36
4	5		SUPPORT – INSP. COVER – SMALL	21A01002-131
			A/R NUT – TINNERMAN WITH TAPE	1002481
			A/R NUT – TINNERMAN	9A3-671
			A/R TAPE – INSULATOR	9903-10-36
5	4		INSP. COVER ASSY – LARGE – W/ ANGLE & GASKET	21A01000-258
			A/R SCREW – ATTACH	#8 X 5/8
	4		SEAL – GASKET ONLY	1001437
6	1		INSP. COVER ASSY – LARGE – ANGLE (2 CUPS) & GASKET	2A01000-273
			A/R SCREW – ATTACH	#8 X 5/8
	1		SEAL – GASKET ONLY	1001437
7	4		INSP. COVER ASSY- SMALL & GASKET	21A01000-284
			A/R SCREW – ATTACH	#8 X 5/8
	4		SEAL – GASKET	1001728
8	1		COVER ASSY & GASKET	21S01000-399
	1		SEAL – GASKET ONLY	21S01567-013
			A/R SCREW – ATTACH	#8 X 5/8
			A/R NUT – TINNERMAN	1002481
	2		STIFFENER – ANGLE	30S01326-035
9	1		JAMB – BAGGAGE DOOR	21A01150-131

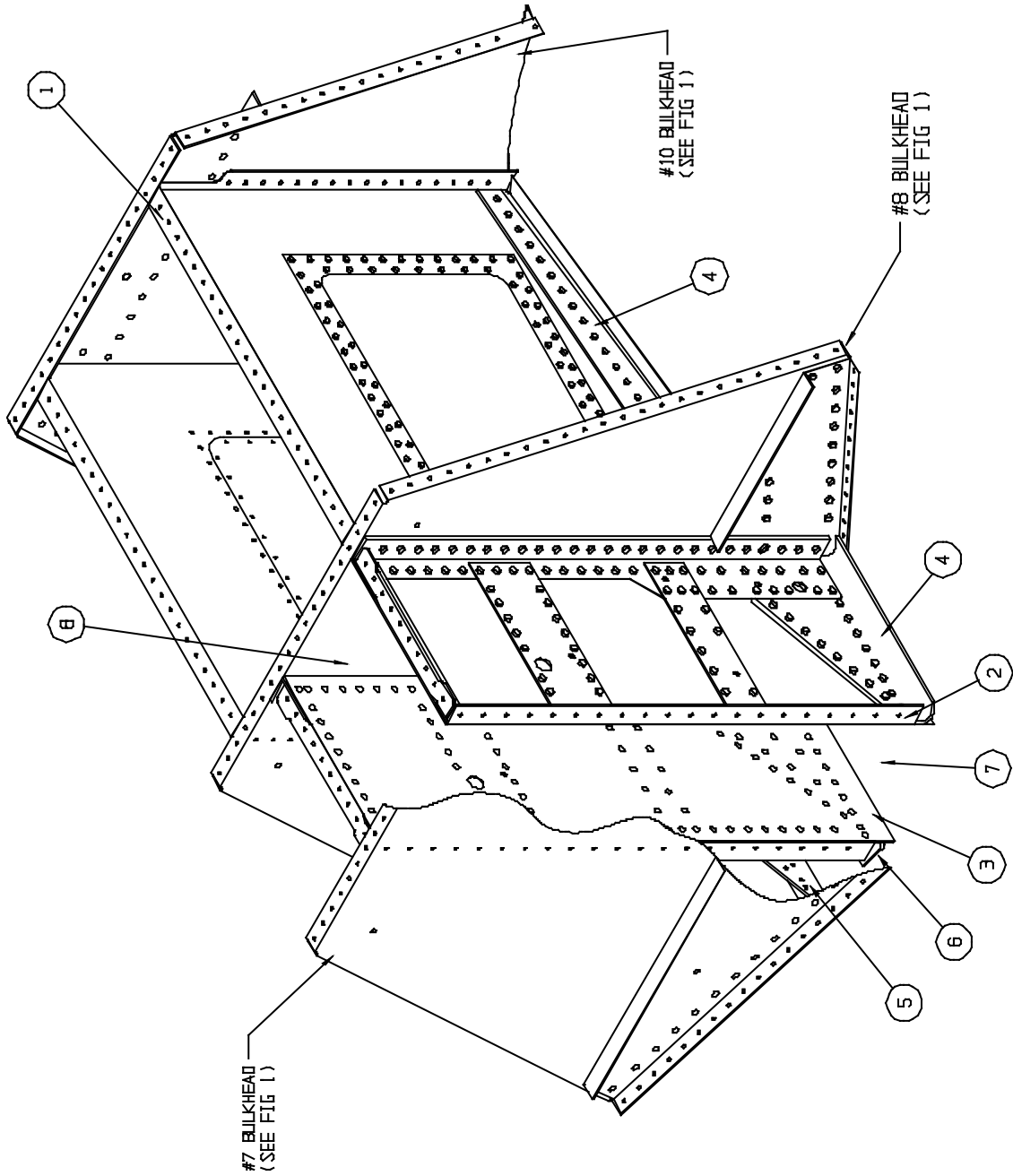
WIPLINE MODEL 2100 FLOAT PARTS MANUAL

TOP SKIN - HULL – SEAPLANE, FIGURE 4

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
	1		JAMB – HINGE SIDE	1002067
10	1		ASSY – BAGGAGE DOOR	21A01000-268
	1		COVER - SKIN	21A01162-035
	1		HINGE	21A01741-004
	2		STIFFENER - DOOR	21A01010-012
	2		STIFFENER ENDS	21A01004-106
	2		RETAINER - LOCK	3A01206-001
	2		LOCK PIN	3A01273-004
	2		CATCH – LATCH	3A01702-004
	2		LOCK SPRING	3A01525-003
	2		RING – OPENING	9-0177A221
	1		SEAL – GASKET (NOT SHOWN)	101438
	1		HINGE PIN	1002186
	12		POP RIVET	01692-0410
	2		BOLT	10/32 x ½ SS
11	1		TOP RAIL – BAGGAGE OPENING L.	21A01326-003
	1		TOP RAIL – BAGGAGE OPENING R.	21A01326-002
12	2		JAMB – BAGGAGE DOOR	21A01326-004
13	2		CLEAT – TIE DOWN	21A01203-001
	4		BUSHING	21A01280-004
	4		SCREW – ATTACH	AN525-10R24
	4		NUT	MS21044N3
	4		WASHER	NAS1149D0363J

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WIPLINE MODEL 2100 FLOAT PARTS MANUAL



WHEELWELL ASSEMBLY – AMPHIBIAN
FIGURE 5

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

WHEELWELL ASSEMBLY – AMPHIBIAN, FIGURE 5

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>	
1	1		ASSY. – WHEELWELL HALF L.	21A01000-289	
	1		PANEL – FORMED L.	21A01158-185	
	1		RING – COVER REINFORCEMENT	13A01156-124	
	1		COVER	21A01158-163	
	28		SCREW	AN526-632R6	
	2	1		ASSY. – WHEELWELL HALF R.	21A01000-290
		1		PANEL – FORMED R.	21A01158-186
		1		RING – COVER REINFORCEMENT	13A01156-124
		1		COVER	21A01158-163
		28		SCREW	AN526-632R6
2	1		ASSY. – WHEELWELL PANEL – OUTBR'D L.	21A01000-257	
	1		ASSY. - WHEELWELL PANEL – OUTBR'D R.	21A01000-256	
3	1		ASSY. – WHEELWELL PANEL – INBR'D L.	21A01000-255	
	1		ASSY. - WHEELWELL PANEL – INBR'D R.	21A01000-254	
4	1		CARRY-THRU STRAP OUTBR'D L.	21A01017-005	
	1		CARRY-THRU STRAP OUTBR'D R.	21A01017-004	
5	1		CARRY-THRU STRAP INBR'D L.	21A01017-003	
	1		CARRY-THRU STRAP INBR'D R.	21A01017-002	
6	1		CARRY-THRU STRAP INBR'D L.	21A01017-007	
	1		CARRY-THRU STRAP INBR'D R.	21A01017-006	
	1		ANGLE – ATTACH AFT L.	21A01156-131	
	1		ANGLE – ATTACH AFT R.	21A01156-132	
	1		SHIM	21A01156-125	
	2		ANGLE – ATTACH FWD	21A01326-015	
7	1		SAND GUARD ASSY. (NOT SHOWN)	21A01000-398	
	1		SAND GUARD (NOT SHOWN)	21A01150-136	
	4		SCREW	AN526-1032R8	
	4		NUT PLATE	MS21078-3	

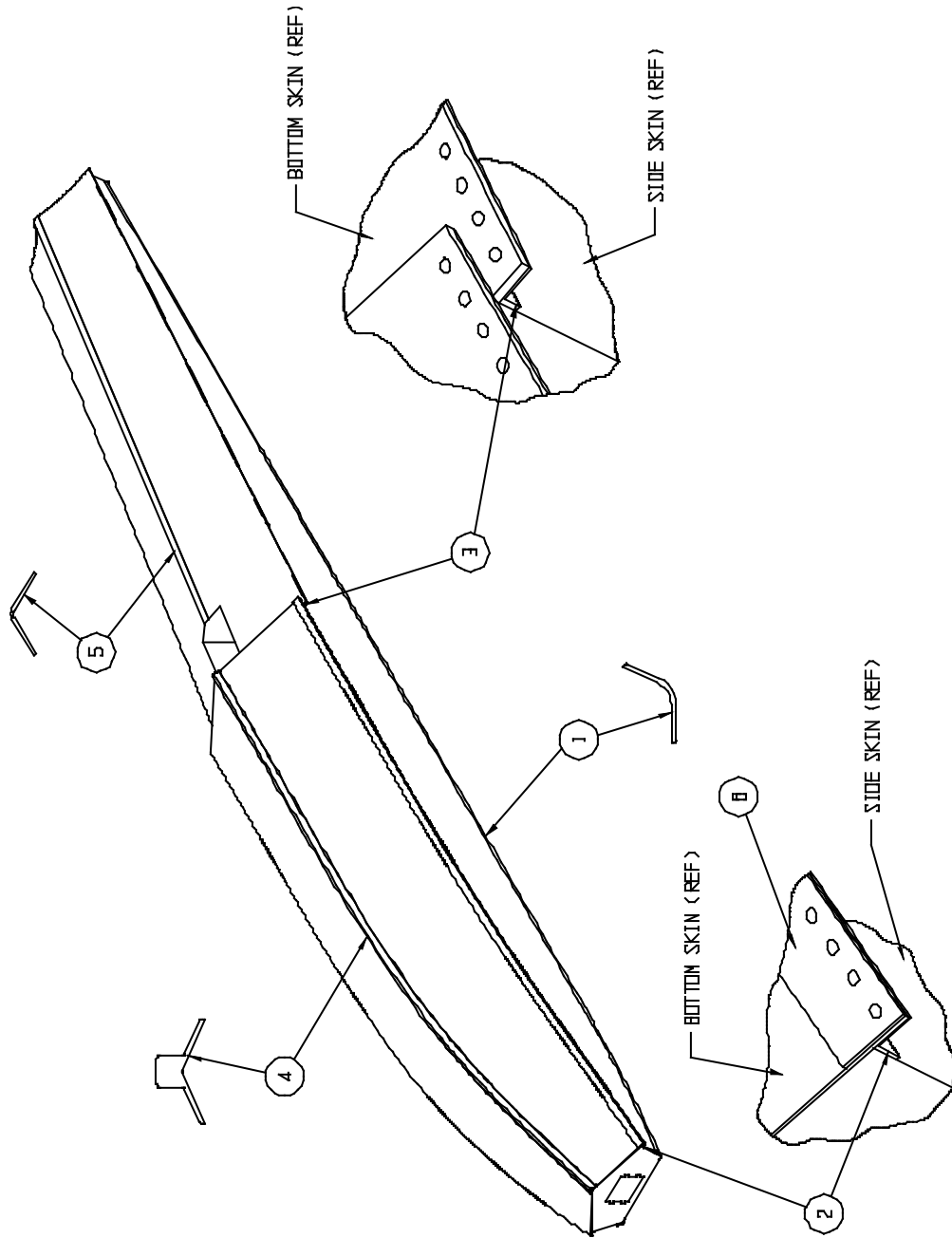
WIPLINE MODEL 2100 FLOAT PARTS MANUAL

WHEELWELL ASSEMBLY – AMPHIBIAN, FIGURE 5

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
8	1		MUD FLAP (NOT SHOWN)	21A01569-001
	1		REINFORCEMENT	21A01150-135

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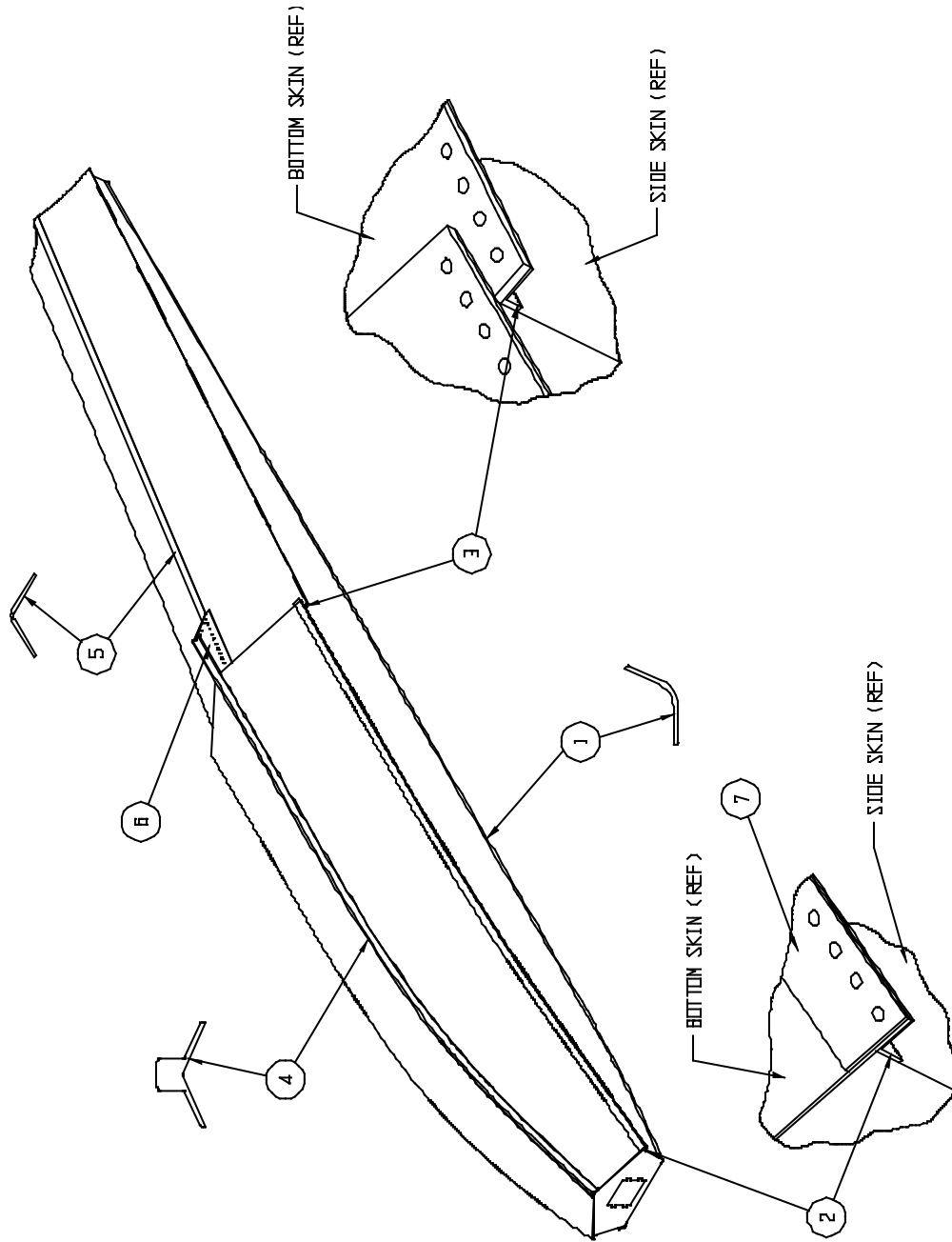
EXTRUSIONS – HULL – ASSEMBLY
FIGURE 6

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

EXTRUSIONS - HULL – AMPHIBIAN, FIGURE 6

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	1		GUNWALL – L.	21A01324-001
	1		GUNWALL – R.	21A01324-002
2	1		CHINE - FWD L.	21A01340-109
	1		CHINE – FWD R.	21A01340-108
3	1		CHINE – AFTERBODY L.	21A01340-107
	1		CHINE – AFTERBODY R.	21A01340-106
4	1		KEEL - MAIN	21A01321-001
5	1		KEEL - AFTERBODY	21A01008-142

WIPLINE MODEL 2100 FLOAT PARTS MANUAL



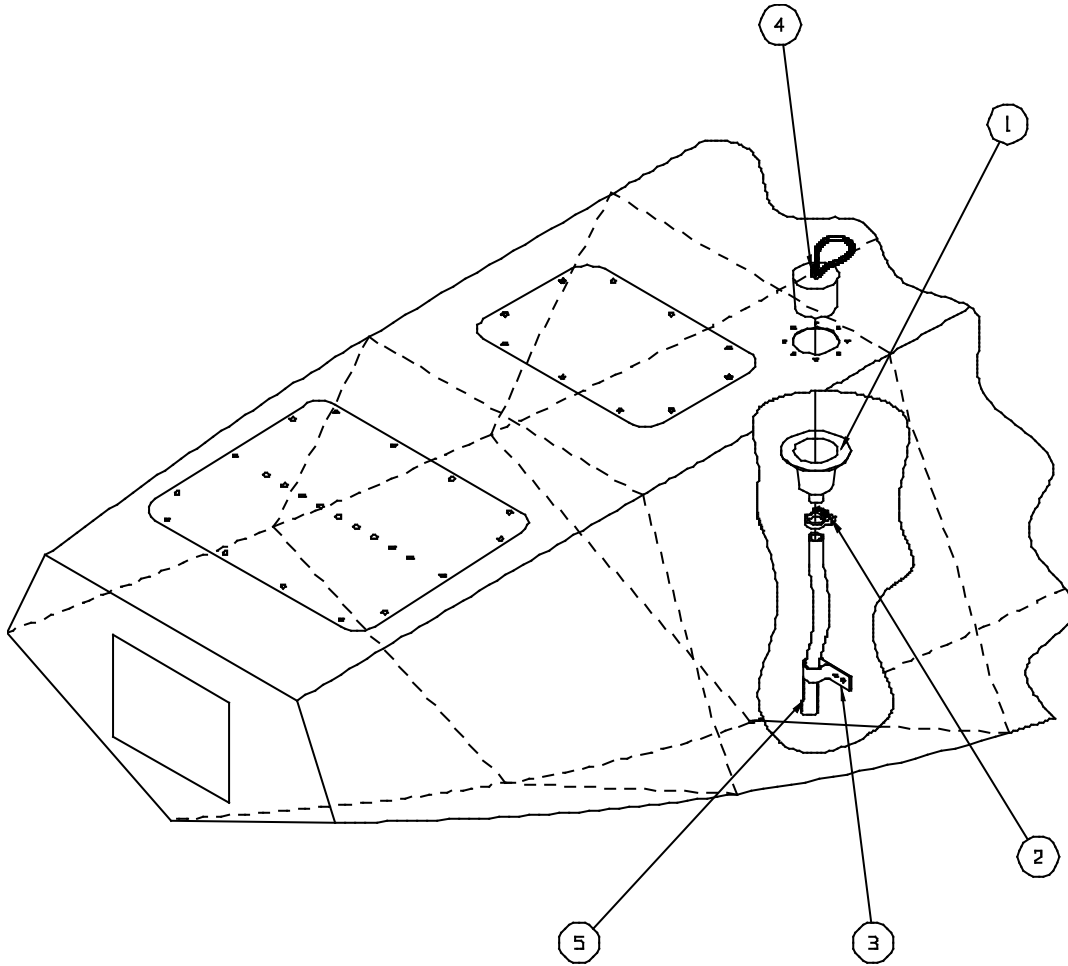
EXTRUSIONS – HULL – SEAPLANE
FIGURE 7

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

EXTRUSIONS - HULL - SEAPLANE, FIGURE 7

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	1		GUNWALL – L.	21A01324-001
	1		GUNWALL – R.	21A01324-002
2	1		CHINE - FWD L.	21A01340-109
	1		CHINE – FWD R.	21A01340-108
3	1		CHINE – AFTERBODY L.	21A01340-107
	1		CHINE – AFTERBODY R.	21A01340-106
4	1		KEEL - MAIN	21S01321-004
5	1		KEEL - AFTERBODY	21S01008-172
6	1		AFTERBODY GUSSET ASSY.	21S01000-400
	1		ANGLE SUPPORT – AFTERBODY L.	21S01163-037
	1		ANGLE SUPPORT – AFTERBODY R.	21S01163-038

WIPLINE MODEL 2100 FLOAT PARTS MANUAL



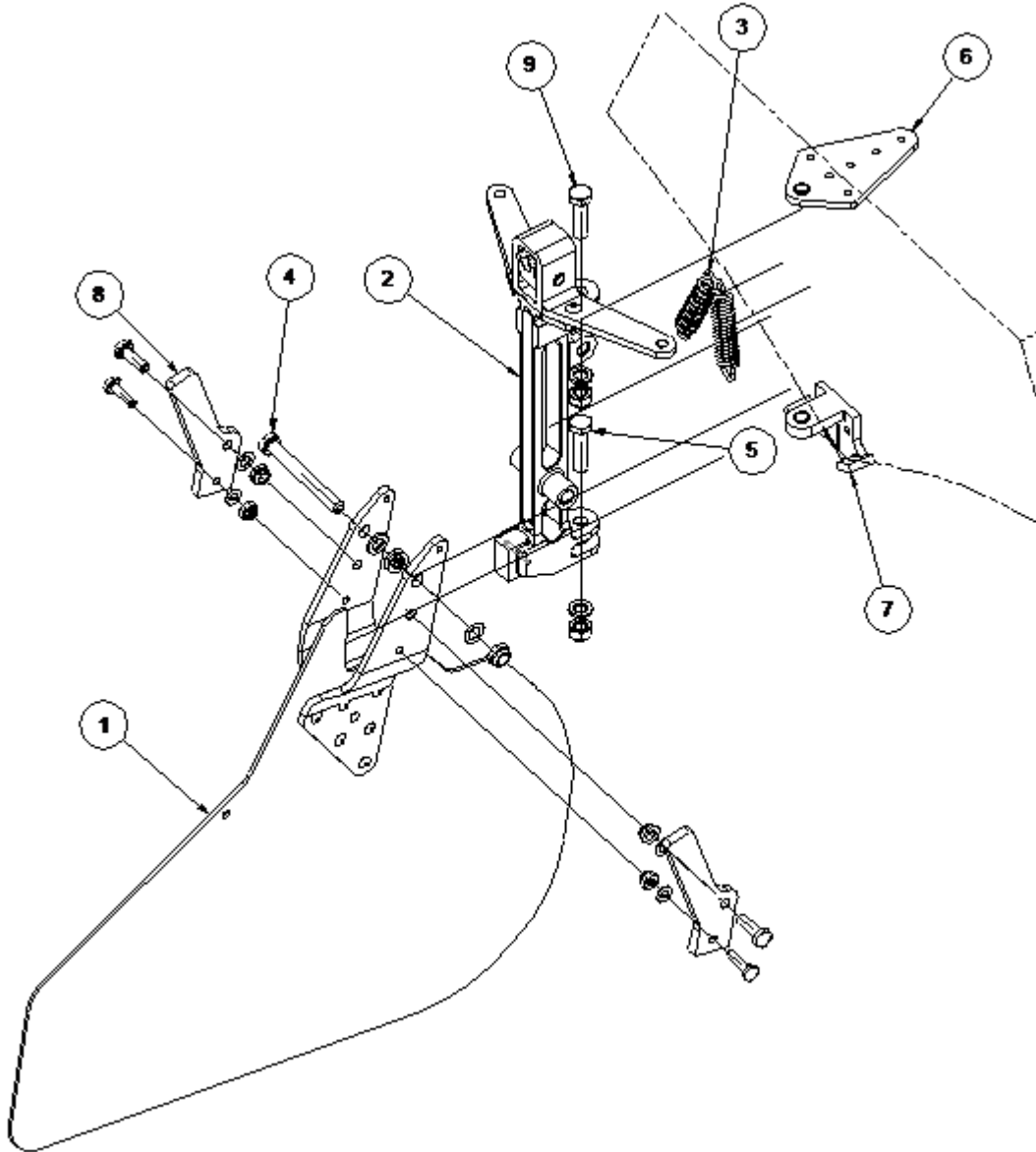
PUMPER TUBE INSTALLATION
FIGURE 8

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

PUMPOUT TUBE INSTALLATION, FIGURE 8

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	1		CUP – PUMPOUT ALUM. A/R RIVETS	4A01749-001 MS20470AD4-4
2	1		CLAMP – UPPER END	57134
3	1		CLAMP – LOWER END	3A01158-003
4	1		STOPPER – PUMPER TUBE	2111
5	1		PUMPOUT TUBE 10.5 IN.	21A01618-062
	1		PUMPOUT TUBE 12.5 IN.	21A01648-061
	1		PUMPOUT TUBE 15.0 IN.	21A01648-060
	1		PUMPOUT TUBE 17.5 IN.	21A01618-059
	1		PUMPOUT TUBE 23.0 IN.	21A01648-058
	1		PUMPOUT TUBE 21.5 IN.	21A01648-056
	1		PUMPOUT TUBE 18.5 IN.	21A01648-055

WIPLINE MODEL 2100 FLOAT PARTS MANUAL



INSTALLATION WATER RUDDER
FIGURE 9

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

INSTALLATION WATER RUDDER, FIGURE 9

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	1		ASSY. - BLADE	21A08000-123
	1		BLADE	1002649
	1		ARM L.	21A08019-001
	1		ARM R.	21A08019-002
2	1		WATER RUDDER POST WITH BELLCRANK ASSEMBLY	1003858
	1		WATER RUDDER POST ASSEMBLY	1003854
	1		BELLCRANK, WATER RUDDER POST ASSEMBLY	1003853
	1		BUMBER, DOWN STOP	21A08648-002
	1		ROLL PIN	1001457
	1		GUIDE, RETRACT	21A8602-009
	1		PIN ATTACH	5/16 x 1 ½ inches
3	2		SPRING	21A08525-006
4	1		BOLT - ATTACH	AN5-25A
	3		WASHER	NAS1149D0516J
	1		WASHER	NAS 1149D0563J
	1		NUT	MS21083N5
5	1		BOLT, ATTACH	AN5-11A
	1		WASHER	NAS1149D0563J
	1		NUT	MS21044N5
6	1		ASSEMBLY – TOP BEARING	21A01000-299
	1		PLATE	21A01019-003
	1		BEARING	21A01705-003
7	1		ASSEMBLY – LOWER BEARING	21A08000-157
	1		BRACKET	21A08318-002
	1		BEARING	05DU06
8	2		STOP	21A08154-009
	2		BOLT – ATTACH LOWER	AN4-6A
	2		WASHER	NAS1149D0416J

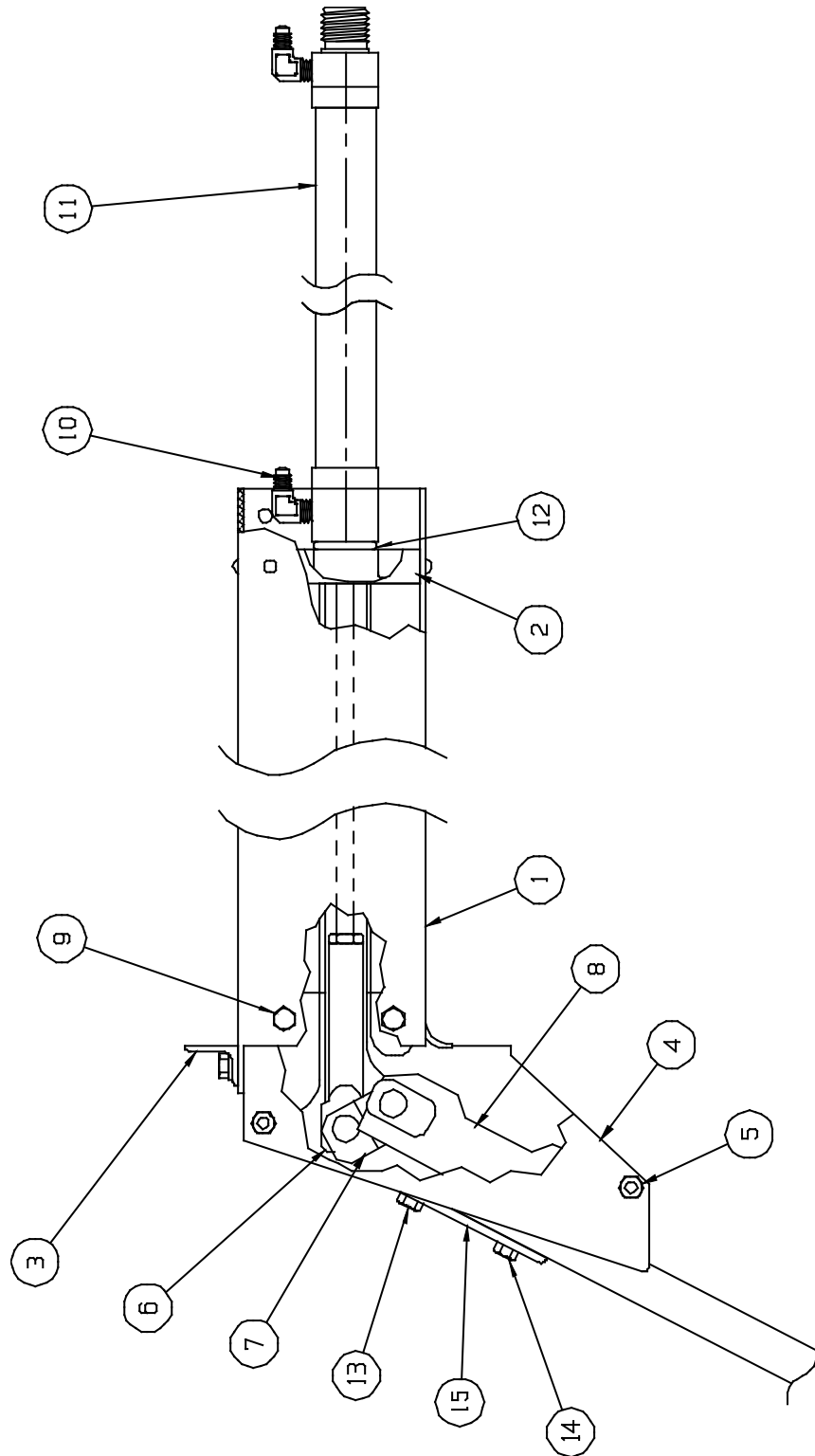
WIPLINE MODEL 2100 FLOAT PARTS MANUAL

INSTALLATION WATER RUDDER, FIGURE 9

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
	2		NUT	MS21083N4
	2		BOLT – ATTACH LOWER	AN3-6A
	2		WASHER	NAS1149D0316J
	2		NUT	MS21044N3
9	1		BOLT, ATTACH	AN5-12A
	1		WASHER	NAS1149D0563J
	1		NUT	MS21044N5

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WIPLINE MODEL 2100 FLOAT PARTS MANUAL



ASSEMBLY – NOSE GEAR RETRACTION
FIGURE 10

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

ASSEMBLY – NOSE GEAR RETRACTION, FIGURE 10

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	1		ASSY. – NOSE BOX	21A07000-015
	1		NOSE – BOX	21A07323-001
	1		COVER – ACCESS	8A01008-080
	1		GASKET	30A07567-011
	4		SCREW	AN526-1032R4
2	1		END – CAP - AFT	21A07237-002
3	1		ANGLE	21A07359-194
	2		BOLT	AN4-6A
	2		WASHER	NAS1149D0463J
	2		WASHER	NAS1149D0416J
	2		NUT	MS21044N4
4	1		TRACK – NOSE END L.	21A07349-003
	1		TRACK – NOSE END R.	21A07349-004
5	2		BOLT	AN4-53A
	4		WASHER	NAS1149D0416J
	2		NUT	NAS5679-A4W
6	1		ROD END - RAM	21A07094-002
	1		NUT - JAMB	AN316-5R
7	1		LINK – DOWN LOCK	21A07032-005
	1		AXLE – SHAFT	21A07509-007
	2		ROLLER	3A07530-001
	2		SNAP RING	5100-46-H
8	1		TROLLEY – SPRING ATTACH	21A07187-009
	2		AXLES - SHAFT	34A07509-008
	4		BLOCK - SLIDE	3A07604-001
9	4		BOLT	AN4-5A
	4		WASHER	NAS1149D0463J

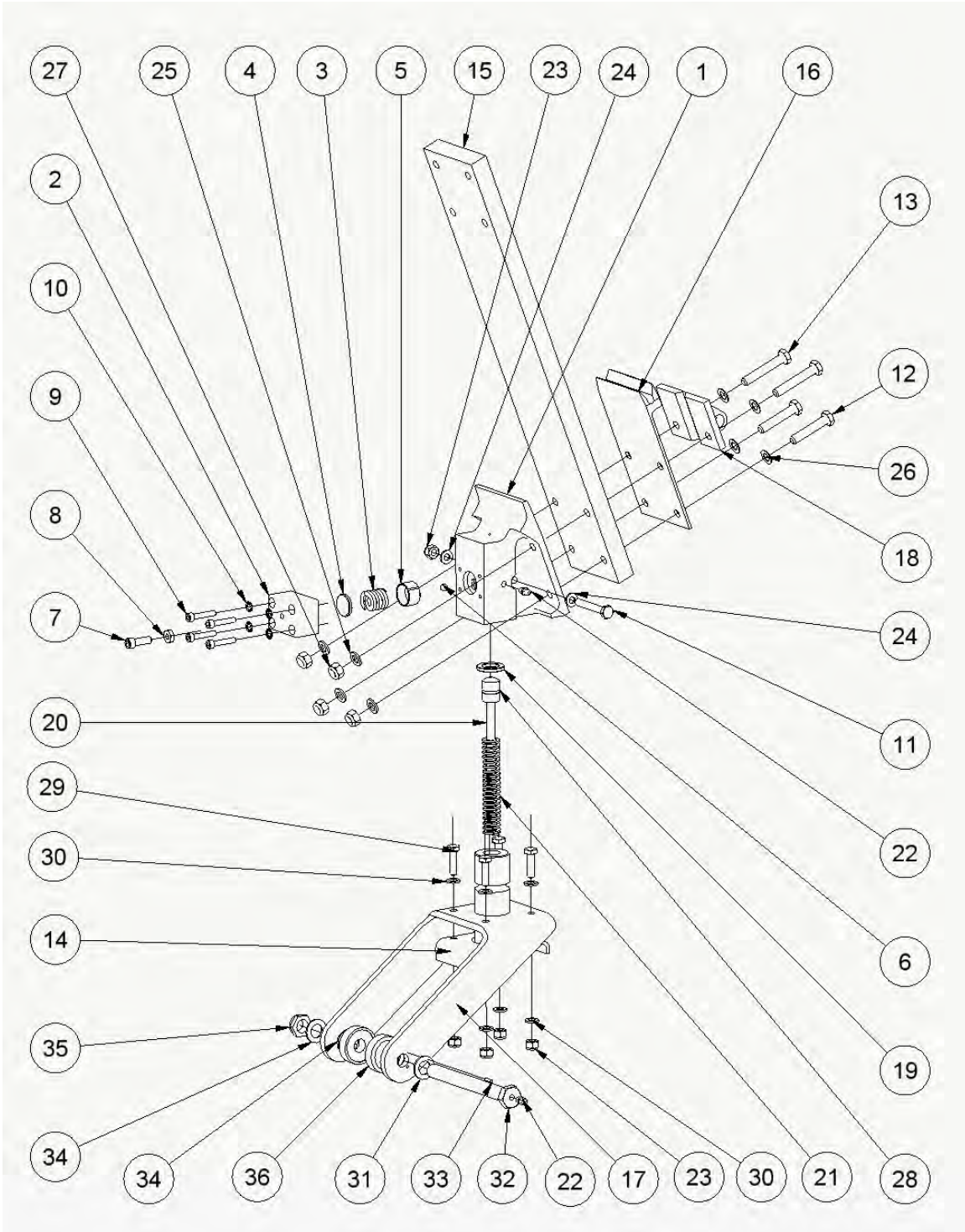
WIPLINE MODEL 2100 FLOAT PARTS MANUAL

ASSEMBLY – NOSE GEAR RETRACTION, FIGURE 10

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
	8		WASHER	NAS1149D0416J
	2		NUT	NAS5679-A4W
10	1		ELBOW	MS20822-4D
11	1		HYDRAULIC CYLINDER	1002571
12	A/R		WASHER	NAS1149D1416J
13	2		BOLT	AN5-20A
			A/R WASHER	NAS1149F0563P
	2		NUT	MS21044N5
14	2		BOLT	AN5-21A
			A/R WASHER	NAS1149F0563P
	2		NUT	MS21044N5
15	1		PLATE – BEARING UPPER	21A06166-001

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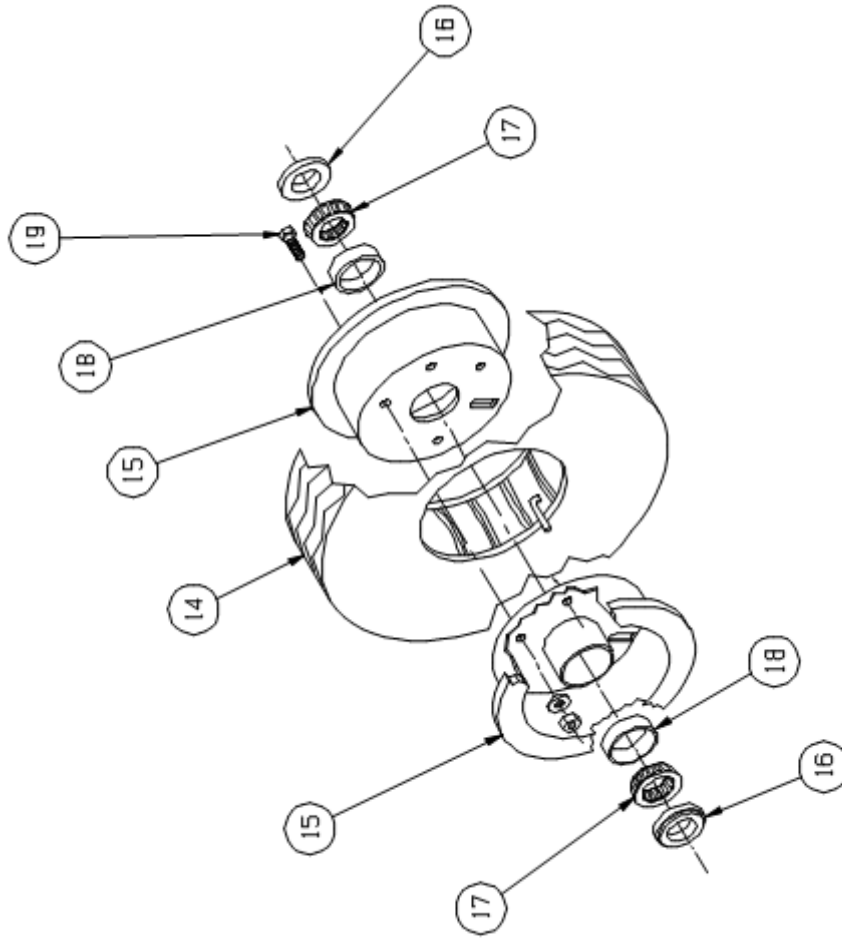
ASSEMBLY – NOSE GEAR – LOWER
FIGURE 11

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

ASSEMBLY – NOSE GEAR LOWER, FIGURE 11

<u>REF NO.</u>	<u>NO.</u>	<u>PART DESCRIPTION</u>	<u>PART NO</u>
1	1	PIVOT BLOCK - NOSE GEAR	21A06318-005
2	1	SPRING BLOCK	21A06194-005
3	1	PRESSURE SPRING	21A06705-005
4	1	PRESSURE PLATE	21A06160-053
5	1	FRICTION CUP	21A06475-006
6	1	1/4" CHROME BALL BEARING	9528K15
7	1	1/4-20 SOCKET HEAD CAP SCREW	MS16997-60
8	1	1/4-20 NUT	MS35649-2252
9	4	10-24 SOCKET HEAD CAP SCREW	NAS1352-3-18P
10	4	WASHER STAR	MS35333-39
11	1	MODIFIED BOLT	30A06702-016
12	2	BOLT	AN5-14A
13	2	BOLT	AN5-16A
14	1	ASS"Y - PIVOT SHAFT	21A06000-020
15	1	SPRING NOSE GEAR (2100)	21A06653-001
16	1	BEARING PLATE, LOWER, NOSE SPRING	21A06237-001
17	1	FORK, NOSE GEAR	21A06020-001
18	1	TOW HOOK NOSE GEAR	21A06213-006
19	1	THRUST WASHER	3A06602-001
20	1	NOSE WHEEL PLUNGER	21A06605-002
21	1	SPRING	M62-350
22	2	COMMON GREASEZERK	1095K41
23	5	Nut	MS21044N4
24	2	WASHER	NAS1149D0463J
25	4	WASHER	NAS1149F0563P
26	4	WASHER	NAS1149F0532P
27	4	Nut	MS21044N5
28	1	O-RING	MS28775-111
29	4	Bolt	AN4-7A
30	8	WASHER	NAS1149F0463P
31	1	MODIFIED WASHER	3A06702-003
32	1	BOLT - NOSE WHEEL AXLE	3A06702-002
33	1	PIN, ANTIROTATION	21A06476-003
34	3	WASHER	NAS1149D0863J
35	1	NUT	MS21083N8
36	2	SPACER - NOSE WHEEL - SMALL FLOAT	3A06259-001

WIPLINE MODEL 2100 FLOAT PARTS MANUAL



ASSEMBLY – NOSE WHEEL
FIGURE 12

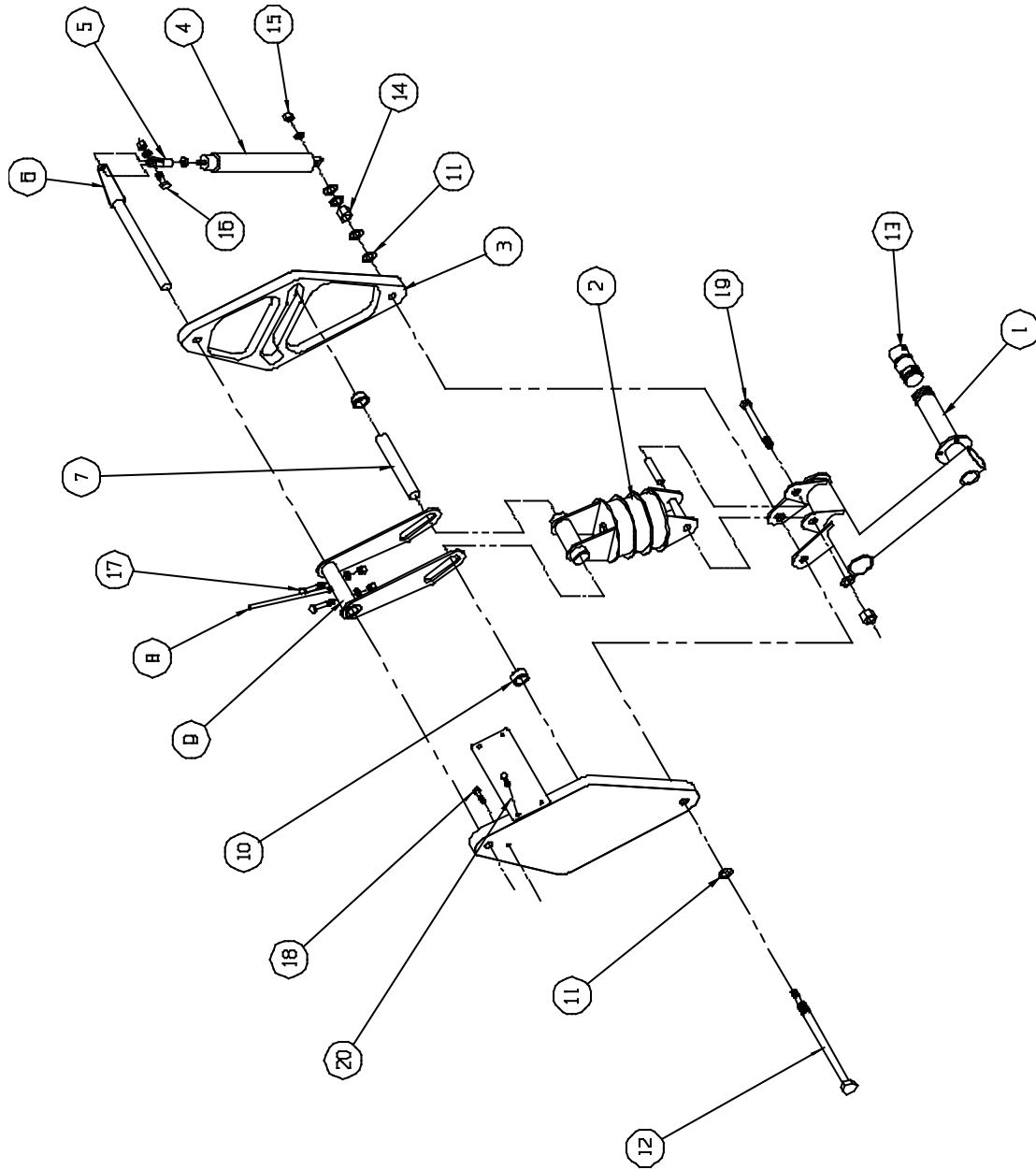
WIPLINE MODEL 2100 FLOAT PARTS MANUAL

ASSEMBLY – NOSE WHEEL, FIGURE 12

<u>REF NO.</u>	<u>NO</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
14	1		TIRE 2.80 X 4, 4 PLY	XA1AA
	1		TUBE 2.80 X 4	AD1A2
15	1		WHEEL ASSEMBLY	D-30380
	1		GASKET	068-30373
16	2		SPACER	3A06259-001
17	2		BEARING CONE	4050
			BEARING CONE, CHROME (OPT.)	4050CP
18	2		BEARING CUP	4138
			BEARING CUP, CHROME (OPT.)	4138CP
19	3		BOLT – WHEEL HALF	AN4-7A
	6		WASHER	NAS1149F0432P
	3		NUT	MS21044N4

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WIPLINE MODEL 2100 FLOAT PARTS MANUAL



INSTALLATION – MAIN GEAR RETRACTION
FIGURE 13

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

INSTALLATION – MAIN GEAR RETRACTION, FIGURE 13

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	1		ASSY. – DRAG LINK L.	21A04000-077
	1		ASSY. – DRAG LINK R.	21A04000-076
	2		BEARING	08FDU12
2	1		ASSY. SHOCK STRUT	21A04000-073
	1		ASSY. - UPPER END	21A04000-074
	1		ASSY. – LOWER END	21A04000-075
	2		ZERK – GREASE	1095K41
	2		WASHER	NAS1149D0416J
	2		WASHER	NAS1149D0463J
	1		DUAL BUSHING ASSEMBLY	1002087
	1		BUSHING ASSEMBLY	1001101
	1		RETAINING PIN	21A04503-004
	1		COTTER PIN	MS24665-151
	1		SLEEVES	21A04585-002
3	1		TRACK – MAIN GEAR L.	21A05114-005
	1		TRACK – MAIN GEAR R.	21A05114-006
	1		BEARING - UPPER	10DU12
	1		BEARING – LOWER	08DU12
4	1		CYLINDER	1002574
	2		FITTING - ELBOW	MS20822-4D
5	1		ROD END	21A05705-002
	1		JAMB NUT	AN316-5
	1		SPACER	21A05260-005
	1		CHAMFERED WASHER (CHAMFERED EDGE GOES AGAINST CYLINGER)	MS20002C6
6	1		ARM – RETRACT L.	21A05000-017
	1		ARM – RETRACT R.	21A05000-016
7	1		AXLE – SHOCK STRUT	21A04454-006

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

INSTALLATION – MAIN GEAR RETRACTION, FIGURE 13

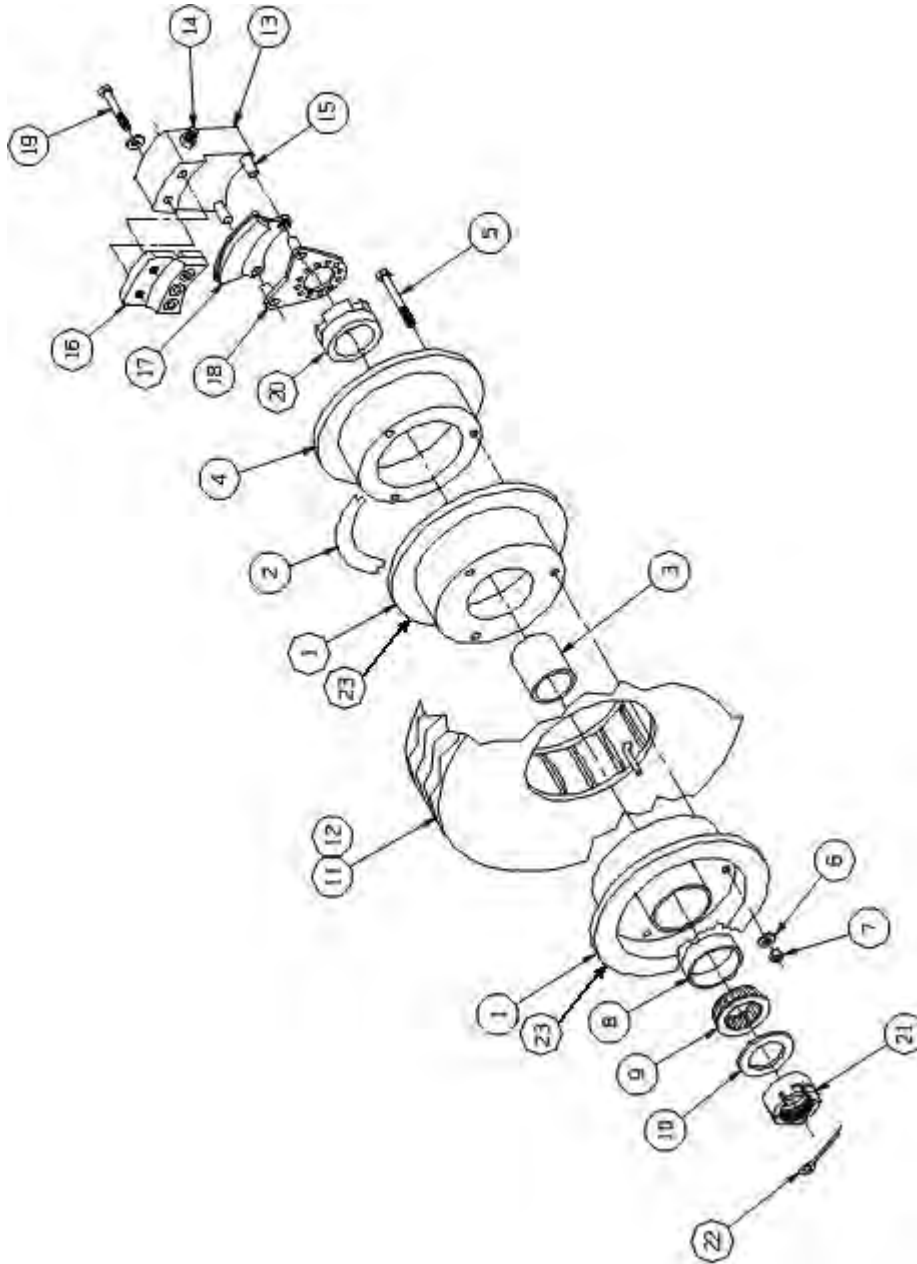
<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
8	1		INDICTATOR ASSY.	21A05000-022
9	1		GEAR ACTUATOR	21A05000-018
10	2		ROLLER – TRACK	21A05520-003
11	2		WASHER – SEALING	93783A033
12	1		BOLT – ASSEMBLY	21A05000-019
13	1		RETAINER - GREASE	21A04263-007
	2		“O” RING	Ms28775-210
	1		ZERK – GREASE	1095K41
14	1		NUT	MS21044N8
	2		WASHER	NAS1149F0863P
15	1		NUT	MS21083N5
			A/R WASHER	NAS1149F0563P
16	1		BOLT	AN5-11A
	2		WASHER	NAS1149F0563P
	1		NUT	MS21044N5
17	2		BOLT	AN4-13A
	4		WASHER	NAS1149D0416J
	2		NUT	MS21044N4
18	8		BOLT – TRACK ATTACH	AN3-6A
	8		WASHER	NAS1149D0316J
	8		WASHER	NAS1149D0363J
	8		NUT	MS21044N3
19	1		BOLT	AN8-33A
	1		WASHER	NAS1149F0832P

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

INSTALLATION – MAIN GEAR RETRACTION, FIGURE 13

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
	1		WASHER	NAS1149F0863P
	1		NUT	MS21044N8
20	1		PLATE - SEPARATING	21A05003-079
	4		BOLT	AN3-5A
	8		WASHER	NAS1149D0316J
	4		NUT	MS21044N3

ASSEMBLY – MAIN GEAR WHEEL – GROVE*WIPAIRE, FIGURE 14A



ASSEMBLY – MAIN GEAR WHEEL – 14A
FIGURE 14A – GROVE * WIPAIRE

WIPLINE 2100 FLOAT PARTS MANUAL

ASSEMBLY – MAIN GEAR WHEEL – GROVE*WIPAIRE, FIGURE 14A

1	1	ASSY. – WHEEL AND BRAKE (COMPLETE) INCLUDES ALL ITEMS BELOW EXCEPT TIRE & TUBE	21A04000-125
2	1	GASKET - TEFLON	3A04620-001
3	1	GREASE RETAINER	010-009
4	1	BRAKE DISC	018-001
5	3	BOLT	AN4-23A
6	3	WASHER	NAS1149F0432P
7	3	NUT	MS21044N4
8	2	BEARING RACE (CHROME) NON-CHROME	0823120027 08231
9	2	BEARING CUP (CHROME) NON-CHROME	0812520027 08125
10	2	SEAL - INSIDE/OUTSIDE	473237
11	1	TIRE –TYPE III 500 x 5, 6 PLY	AA1D4
12	1	TUBE 500 X 5	XA1AC
13	1	BRAKE ASSEMBLY	32-1
	2	PISTON	017-003
	2	O-RING	MS28775-217
14	1	BLEEDER ASSEMBLY	220-0063
	1	FITTING 45° BRAKE LINE	MS20823-3D
15	2	TORQUE PIN	013-001
	2	NUT	MS21044N4
16	1	ASSY. – BACK PLATE	10-3
	1	PAD	66-111

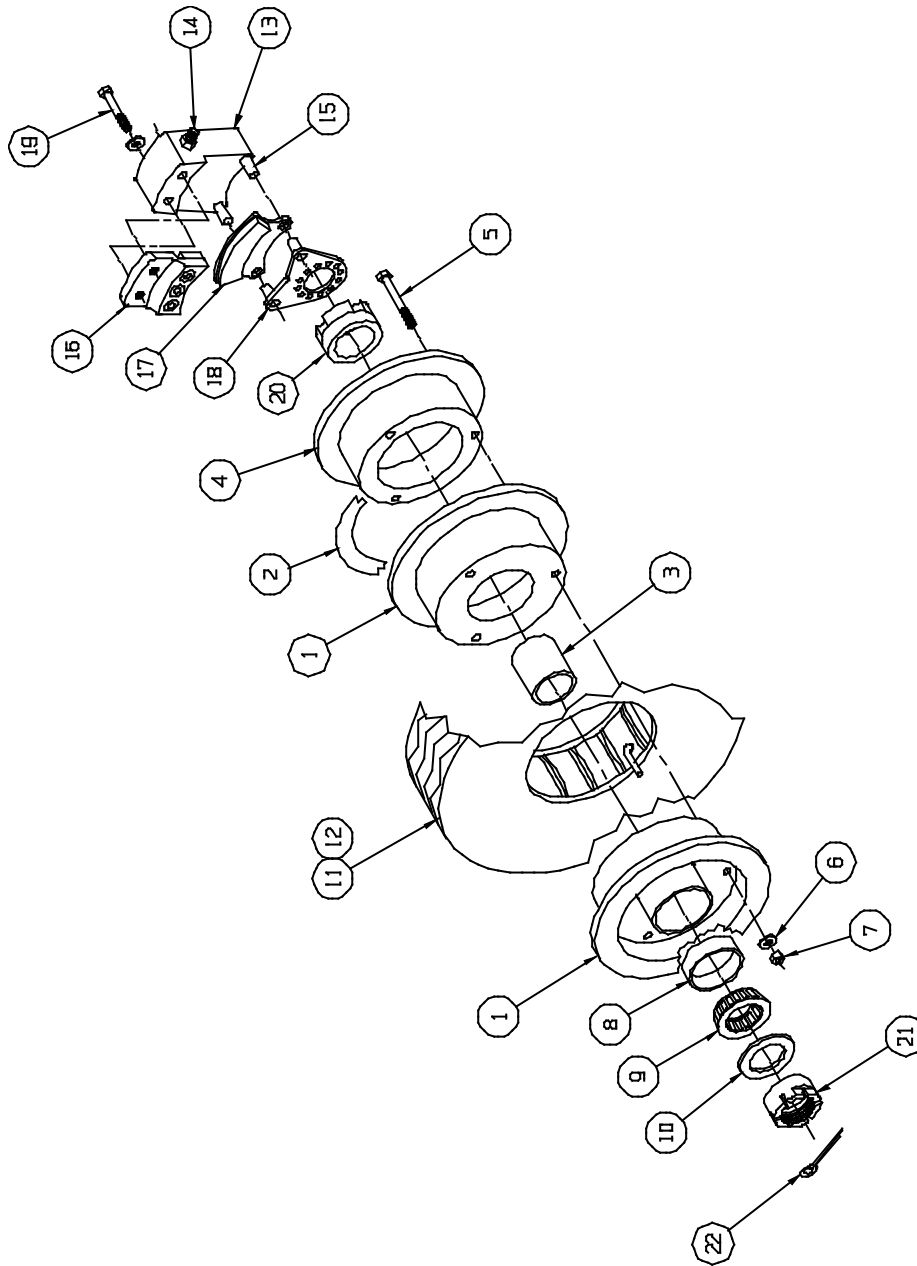
WIPLINE 2100 FLOAT PARTS MANUAL

ASSEMBLY – MAIN GEAR WHEEL – GROVE*WIPAIRE, FIGURE 14A

	3 RIVET	105-2
17	1 ASSY. – PRESSURE PLATE	11-2
	1 LINING	66-111
	3 RIVET	105-2
18	1 BRAKE TORQUE PLATE	020-001
19	3 BOLT	AN4H-15A
	3 WASHER	NAS1149F0432P
20	1 SPACER	3A04093-001
21	1 NUT – AXLE	3A04268-003
22	1 COTTER PIN	MS24665-351
23	1 WHEEL HALF-INNER	015-002
	1 WHEEL HALF-OUTER	016-002
	(HALVES NOT SOLD SEPERATELY)	

WIPLINE 2100 FLOAT PARTS MANUAL

ASSEMBLY – MAIN GEAR WHEEL – CLEVELAND * PARKER, FIGURE 14



WIPLINE MODEL 2100 FLOAT PARTS MANUAL

ASSEMBLY – MAIN GEAR WHEEL, CLEVELAND*PARKER, FIGURE 14

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	1		ASSY. – WHEEL (W/ TUBE & TIRE)	3A04000-002
	1		ASSY. - WHEEL	3A04000-060
2	1		GASKET - TEFLON	3A04620-001
3	1		GREASE RETAINER	3A04616-001
4	1		BRAKE DISC	164-01700
5	3		BOLT	AN4-22A
6	3		WASHER	NAS1149F0432P
7	3		NUT	MS21044N4
8	2		BEARING CUP	8231
			BEARING CUP, CHROME (OPT.)	8231CP
9	2		BEARING CONE	8125
			BEARING CONE, CHROME (OPT.)	8125CP
10	2		SEAL - INSIDE/OUTSIDE	473237
11	1		TIRE –TYPE III	500 X 5, 6 PLY
12	1		TUBE	500 X 5
	1		ASSY. – BRAKE AND TORQUE PLATE	075-00800
13	1		ASSY. – CALIPER (RIGHT)	21A04000-096
	1		ASSY. – CALIPER (LEFT)	21A04000-097
	1		PISTON	062-00300
	1		“O” RING	AN6227-23
	1		FITTING - 45 DEGREES (BRAKE LINE)	MS20823-3D
14	1		SEAT – BLEEDER	081-30619

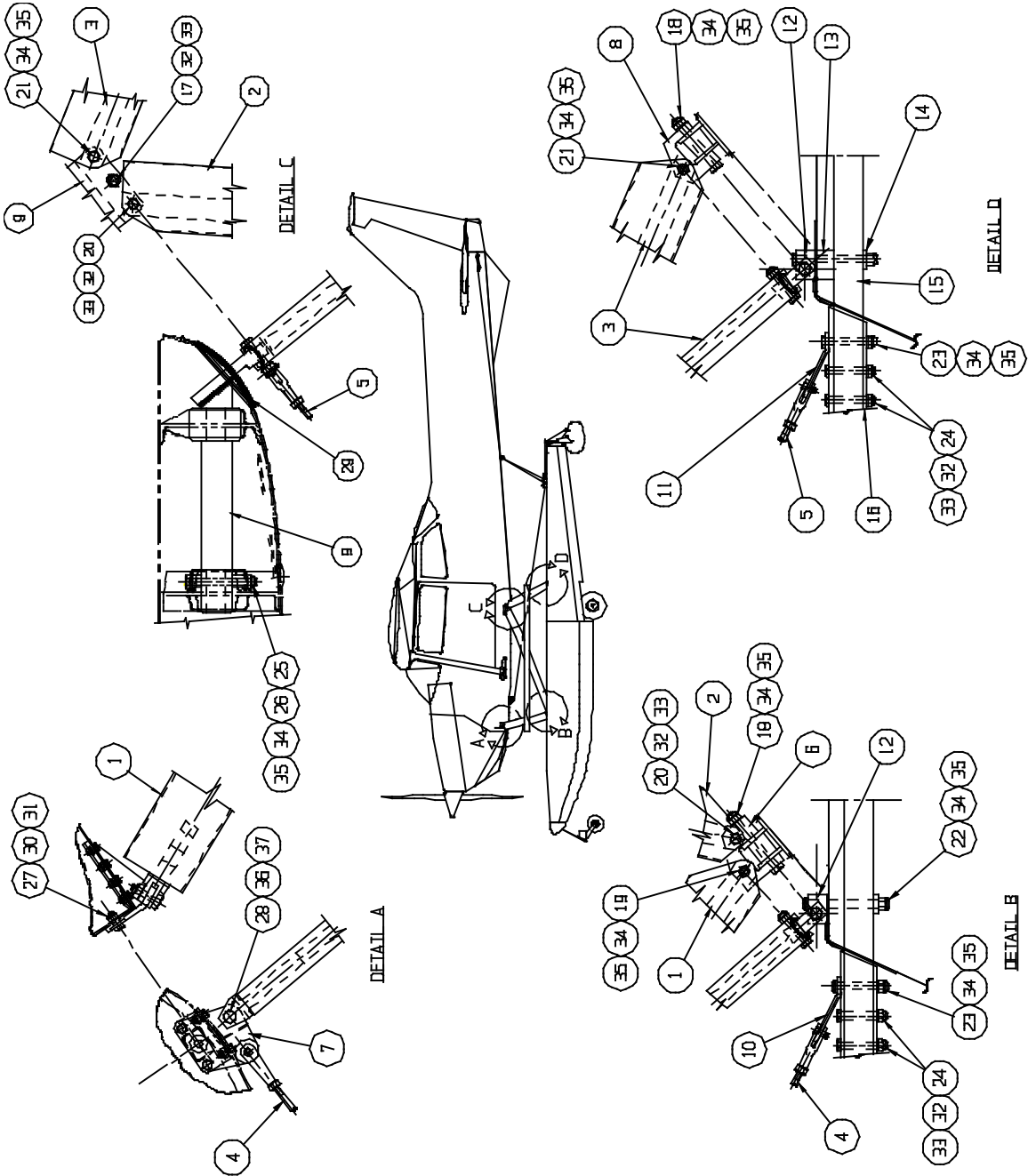
WIPLINE MODEL 2100 FLOAT PARTS MANUAL

ASSEMBLY – MAIN GEAR WHEEL, CLEVELAND*PARKER, FIGURE 14

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
	1		SCREW – BLEEDER	79-3
	1		CAP – BLEEDER	183-1
15	2		ANCHOR BOLT	069-00400
	2		WASHER	NAS1149F0463P
	2		NUT	MS21044N4
16	1		ASSY. – BACK PLATE	074-02700
	1		PLATE – BACK	064-00500
	1		LINING	066-10600
	3		RIVET	105-2
17	1		ASSY. – PRESSURE PLATE	073-04800
	1		PLATE - PRESSURE	063-00500
	1		LINING	066-10600
	3		RIVET	105-2
18	1		BRAKE TORQUE PLATE - LEFT	3A04711-001
	1		BRAKE TORQUE PLATE – RIGHT	3A04711-002
19	1		BOLT	AN4H15A
	1		WASHER	NAS1149F0432P
20	1		SPACER	3A04093-001
21	1		NUT – AXLE	3A04268-003
22	1		COTTER PIN	MS24665-351

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WIPLINE MODEL 2100 FLOAT PARTS MANUAL



INSTALLATION – STRUTS, WIRES AND SPREADER BARS CESSNA 172
 FIGURE 15

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

INSTALLATION – STRUTS, WIRES, & SPREADER BARS, FIGURE 15 CESSNA
172

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	2		ASSY. – FRONT STRUT	21A02000-145
	1		STRUT	21A02334-020
	1		FITTING - UPPER	21A02053-008
	4		BOLT – FITTING ATTACH	AN5-14A
	8		WASHER	AN960-516
	4		NUT	AN365-524
2	2		ASSY. - STRUT – CENTER	2A02000-228
3	2		ASSY. – STRUT – REAR	21A02000-161
4	2		ASSY. – DRAG WIRE – FWD	1002111
	1		WIRE	AN704AC-4925
	1		CLEVIS L.	AN665-34LS *
	1		CLEVIS R.	AN665-34RS *
	1		NUT CHECK L.	AN316-C4L
	1		NUT CHECK R.	AN316-C4R
	2		PIN – CLEVIS	MS20392-4C15
	2		PIN – COTTER	MS24665-151
5	2		ASSY. – DRAG WIRE – AFT	21A02000-137
	1		WIRE	AN704AC-5225
	1		CLEVIS L.	AN665-46LS *
	1		CLEVIS R.	AN665-46RS *
	1		NUT CHECK L.	AN316-C5L
	1		NUT CHECK R.	AN316-C5R
	2		PIN – CLEVIS	MS20392-4C17
	2		PIN – COTTER	MS24665-152
6	2		FITTING – LOWER FRONT STRUT	21A02062-009
7	1		ASSY. - FITTING – UPPER FRONT STRUT L.	21A02000-141
	1		ASSY. – FITTING – UPPER FRONT STRUT R.	21A02000-142

* * “S” DENOTES STAINLESS STEEL

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

INSTALLATION – STRUTS, WIRES, & SPREADER BARS, FIGURE 15 CESSNA
172

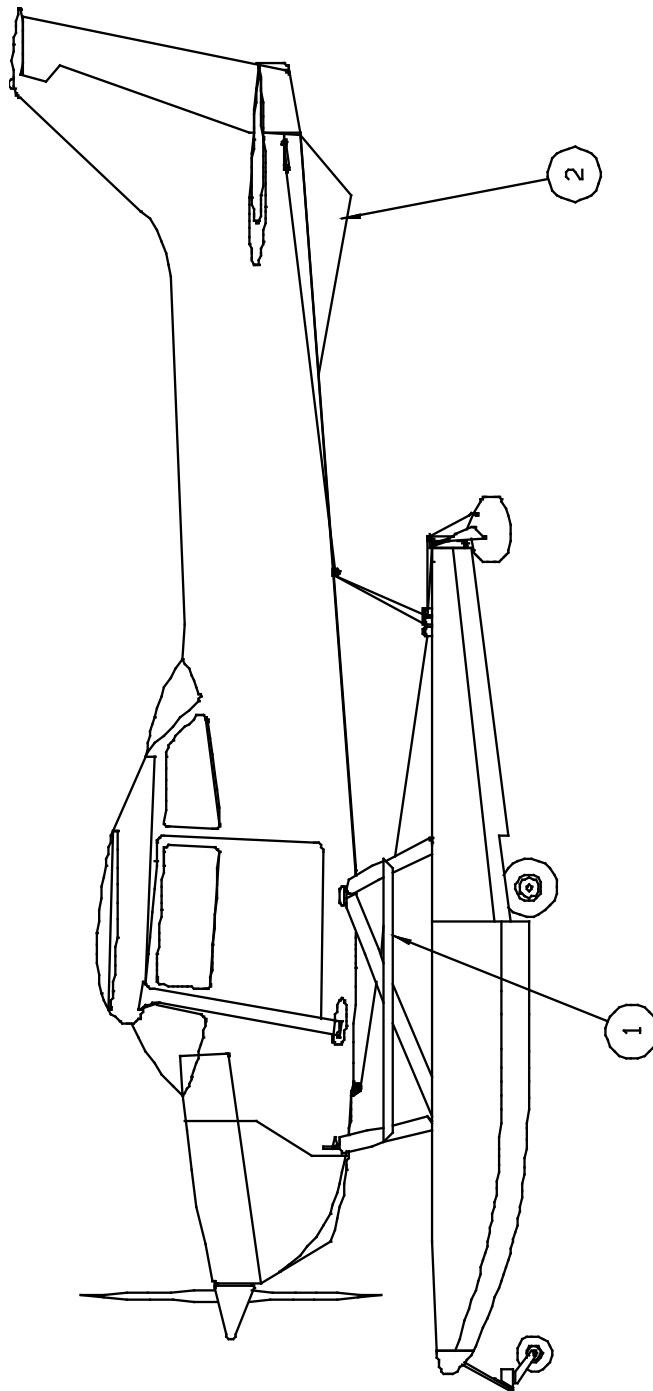
<u>REF NO.</u>	<u>NO.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
8	2	FITTING – LOWER AFT STRUT	21A02062-010
9	1	ASSY. – MAIN FUSELAGE FITTING L.	21A02000-177
	1	BUSHING - INBOARD	21A02095-004
	1	BUSHING - OUTBOARD	21A02083-001
	1	ROLL PIN	MS16562-75
	1	ASSY. – MAIN FUSELAGE FITTING R.	21A02000-178
	1	BUSHING - INBOARD	21A02095-004
	1	BUSHING - OUTBOARD	21A02083-001
	1	ROLL PIN	MS16562-75
10	2	WIRE PULL LOWER FWD	21A02462-005
11	2	WIRE PULL LOWER AFT	21A02519-007
12	4	BLOCK – DECK FITTING	21A03032-006
13	4	SPACER	21A03214-003
14	4	CAP	21A03154-007
15	4	TUBE – SPREADER BAR MOUNT	21A03115-001
16	2	SPREADER BAR	21A03356-047
17	2	EYEBOLT	AN45-11A
18	4	BOLT	AN6-31A
19	2	BOLT	AN6-15A
20	2	BOLT	AN5-14A

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

INSTALLATION – STRUTS, WIRES, & SPREADER BARS, FIGURE 15 CESSNA
172

<u>REF NO.</u>	<u>NO. REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
21	4	BOLT	AN6-17A
22	4	BOLT	AN6-42A
23	4	BOLT	AN6-26A
24	8	BOLT	AN5-24A
25	2	BOLT	AN6-35A
26	4	BUSHING	21A02095-003
27	10	BOLT	AN4-6A
28	2	BOLT	AN7-13A
29	2	COVER – GEAR OPENING	21A02010-018
30	20	WASHER	NAS1149D0463J
31	10	NUT	MS21044N4
32	28	WASHER	NAS1149F0563P
33	14	NUT	MS21044N5
34	40	WASHER	NAS1149D0663J
35	20	NUT	MS21044N6
36	2	WASHER	NAS114D0763J
37	2	NUT	MS21044N7

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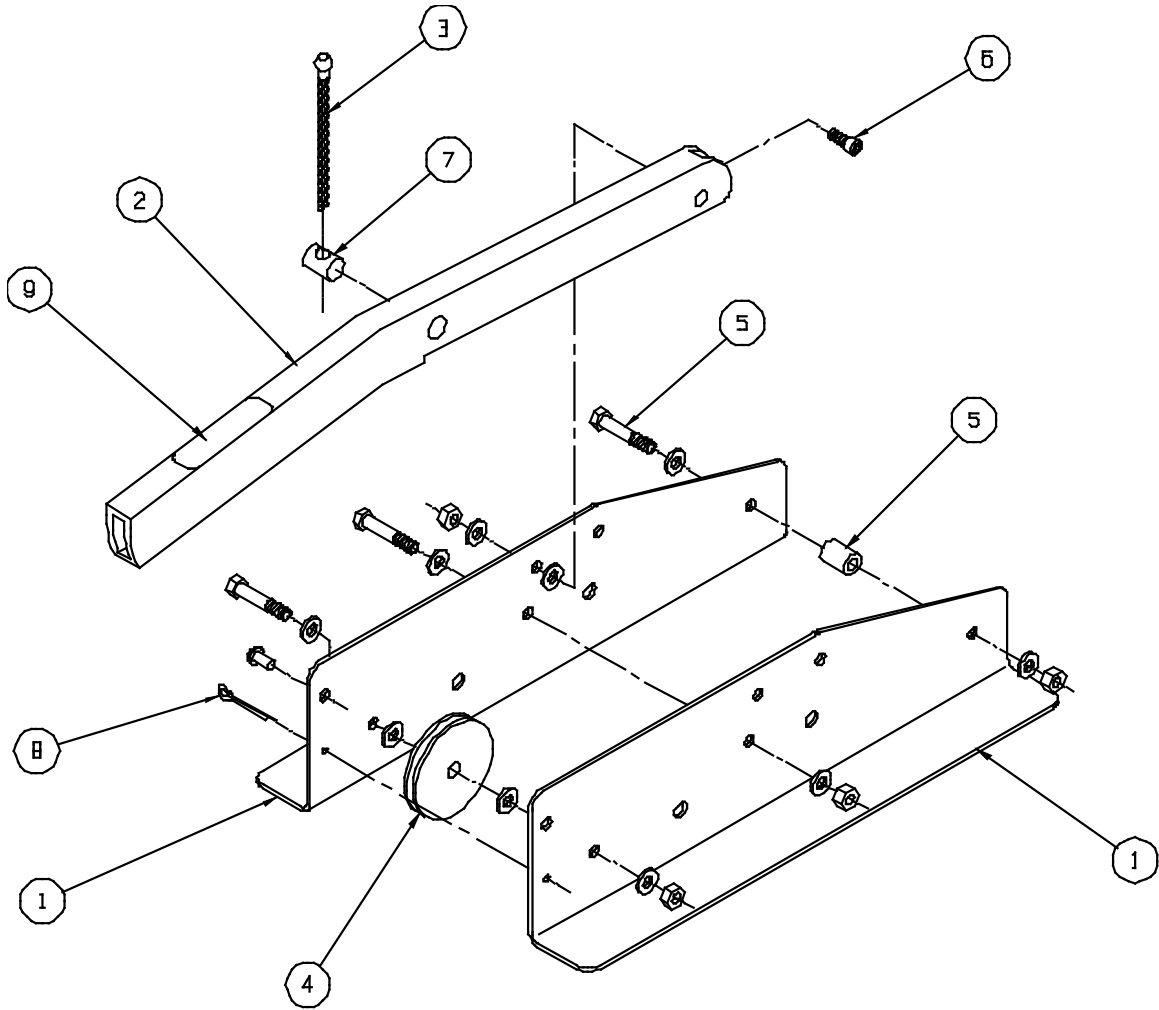
INSTALLATION – FUSELAGE STEPS CESSNA 172
FIGURE 16

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

INSTALLATION – FUSELAGE STEPS, FIGURE 16 CESSNA 172

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	2		STEP – L. & R.	21A02369-035
	4		BOLT – ATTACH	AN3-20A
	2		BOLT – ATTACH	AN3-23A
	12		WASHER	NAS1149D0363J
	6		NUT	MS21044N3
	6		HOLE PLUG	BPF
	4		SPACER – FRONT STRUT	6A02273-006
2	1		ASSY. – VENTRAL FIN	21A12000-042
	10		RIVNUTS	B8-75
	14		PLATENUT	MS21078-08
	24		SCREW – ATTACH	AN526-1032R8
	24		WASHER	NAS1149D0363J
	10		WASHER – LOCK	MS35333-39

WIPLINE MODEL 2100 FLOAT PARTS MANUAL



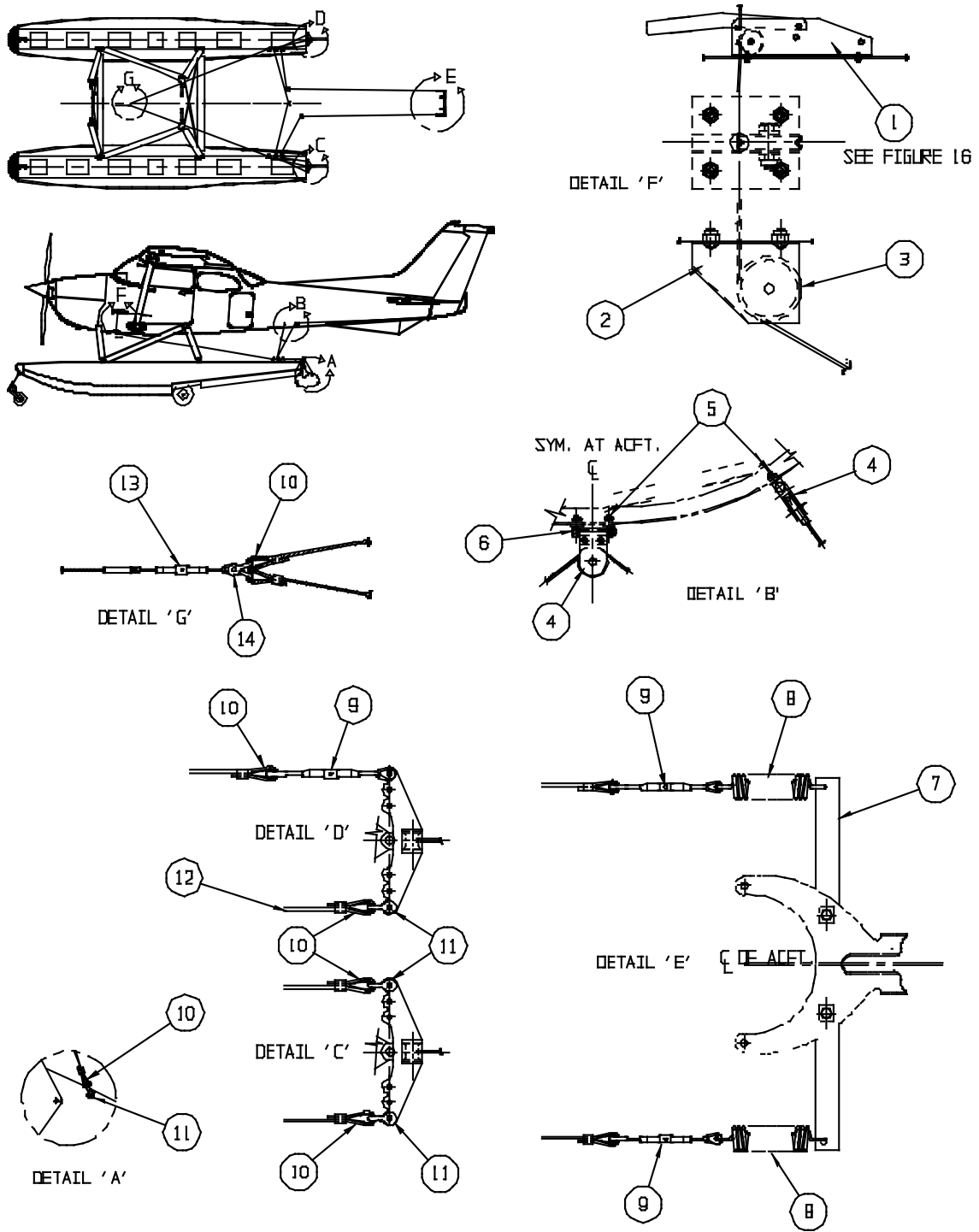
ASSEMBLY – RETRACT HANDLE CESSNA 172
FIGURE 17

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

ASSEMBLY – RETRACT HANDLE, FIGURE 17 CESSNA 172

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	1		ASSY. – RETRACT HANDLE	21A08000-128
	1		BRACKET SIDE L.	3A08003-015
	1		BRACKET SIDE R.	3A08003-016
2	1		HANDLE	3A08414-001
3	1		CABLE ASSY.	21A08000-137
4	1		PULLEY	MS20219-2
	1		BOLT – ATTACH	AN4-10A
	2		WASHER	NAS1149D0463J
	1		NUT	H10-4
5	2		BOLT	AN3-10A
	2		BUSHING – PLASTIC	3A08613-001
	4		WASHER	NAS1149D0316J
	2		NUT	H10-3
6	2		PIN PIVOT	3A08702-006
	2		WASHER	NAS1149D0316J
	2		NUT	H10-3
7	1		SWIVEL	4A08506-002
8	1		PIN – COTTER	MS24665-285
9	1		PLACARD – DOWN	3A3-1115-2
	1		PLACARD – UP	3A3-1115-3
	1		PLACARD – WATER RUDDER CONTROL	3A3-1115-1

WIPLINE MODEL 2100 FLOAT PARTS MANUAL



INSTALLATION – STEERING AND RETRACT SYSTEM CESSNA 172
FIGURE 18

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

INSTALLATION – STEERING AND RETRACT SYSTEM, FIGURE 18 CESSNA 172

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	1		ASSY. – RETRACT HANDLE SEE FIGURE 16	21A08000-128
	4		SCREW - ATTACH	AN526-1032R8
	4		WASHER	NAS1149D0363J
	4		NUT	MS21044N3
2	1		PULLEY BRACKET	3A08151-046
	4		SCREW – ATTACH	AN526-1032R8
	4		WASHER	NAS1149D0316J
	4		NUT	MS21044N3
3	1		PULLEY	MS20219-2
	1		BOLT	AN4-7A
	2		WASHER	NAS1149D0463J
	1		NUT	MS21044N4
4	3		ASSY. – PULLEY BRACKET	21A08000-125
	1		BRACKET	21A08008-150
	1		SPACER - BLOCK	21A08230-002
	1		PULLEY	MS20219-2
	1		BOLT	AN4-7A
	1		WASHER	NAS1149D0363J
	1		NUT	MS21044N3
5	6		EYE BOLT	AN42B4A
	6		WASHER	NAS1149D0363J
	6		NUT	MS21044N3
6	3		BOLT	AN3-17A
	3		WASHER	NAS1149D0363J
	3		NUT	MS21044N3
7	1		EXTENSION – RUDDER HORN	21A08359-201
	2		BOLT – ATTACH	AN3-6A
	2		WASHER	NAS1149D0363J

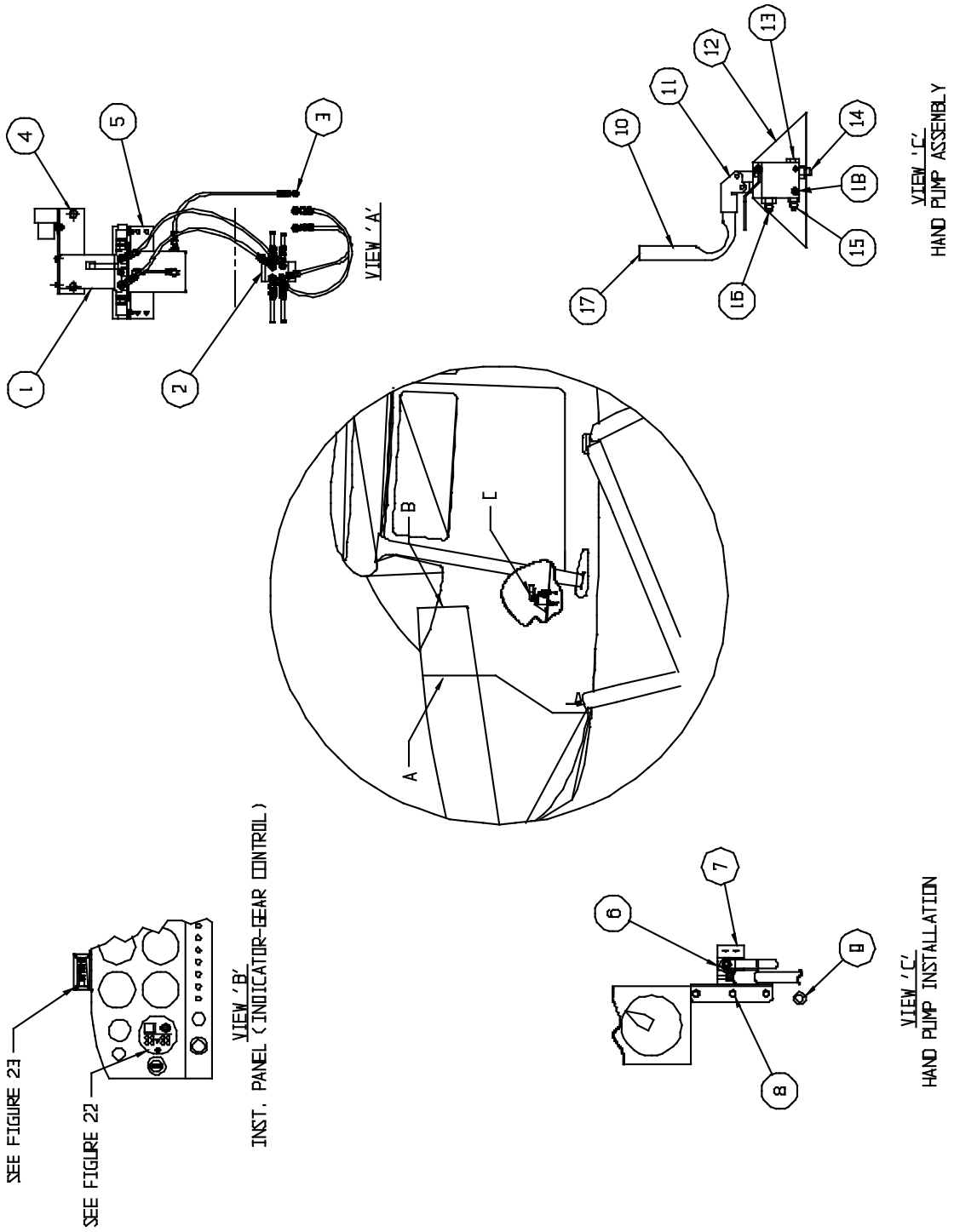
WIPLINE MODEL 2100 FLOAT PARTS MANUAL

INSTALLATION – STEERING AND RETRACT SYSTEM, FIGURE 18 CESSNA 172

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
	2		NUT	MS21044N3
8	2		SPRING	21A08525-005
9	3		TURNBUCKLE – BARREL	MS21251B3S
	3		FORK – TERMINAL	MS21252-3RS
	3		PIN ATTACH	MS20392-2-1
	3		PIN – COTTER	MS24665-132
	3		WASHER	NAS1149D0316J
10	10		THIMBLE – CABLE	AN100-3
	10		NICOPRESS – CLAMP	18-2-G
11	5		SHACKLE	MS20115-3
	5		PIN – ATTACH	MS20392-2-11
	5		PIN – COTTER	MS24665-132
12	A/R CABLE (REQUEST LENGTH)			3/32 7X 7 S.S.
13	1		BARREL	MS21251B3S
	1		FORK	MS21252-3RS
14	2		SHACKLE	MS20115-3
	1		PIN – CLEVIS	MS20392-2-19

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WIPLINE MODEL 2100 FLOAT PARTS MANUAL



INSTALLATION – HYDRAULIC SYSTEM CESSNA 172
FIGURE 19

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

INSTALLATION – HYDRAULIC SYSTEM, FIGURE 19 CESSNA 172

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	1		ASSY. - HAND PUMP 12V	21A09000-239
	1		ASSY. – HAND PUMP 24V SEE FIGURE XX (BREAK DOWN)	21A09000-283
2	1		ASSY. – MANIFOLD	21A09000-240
	1		MANIFOLD	6A09046-001
	4		NIPPLE – FITTING	AN816-4-4D
	2		BOLT - ATTACH	AN3-5A
	2		WASHER	NAS1149F0363P
	2		NUT	MS21044N3
	4		NIPPLE – FITTING	AN815-4D
3	3		UNION - FIREWALL	AN832-4D
	3		WASHER	NAS1149F0763P
	3		NUT	AN924-4D
4	2		BOLT - TOP BRACKET ATTACH	AN3-4A
	4		WASHER	NAS1149D0363J
5	1		ANGLE – LOWER PUMP ATTACH	21A09348-020
	4		BOLT	AN3-4A
	4		WASHER	NAS1149D0363J
	4		NUT	MS21044N3
6	1		ASSY. – HAND PUMP	21A09000-194
8	3		BOLT – ATTACH	AN3-4A
	3		WASHER	AN970-3
	3		WASHER	NAS1149D0363J
	3		NUT	MS21044N3
9	1		GROMMET	MS35489-49
10	1		HANDLE	21A09396-001

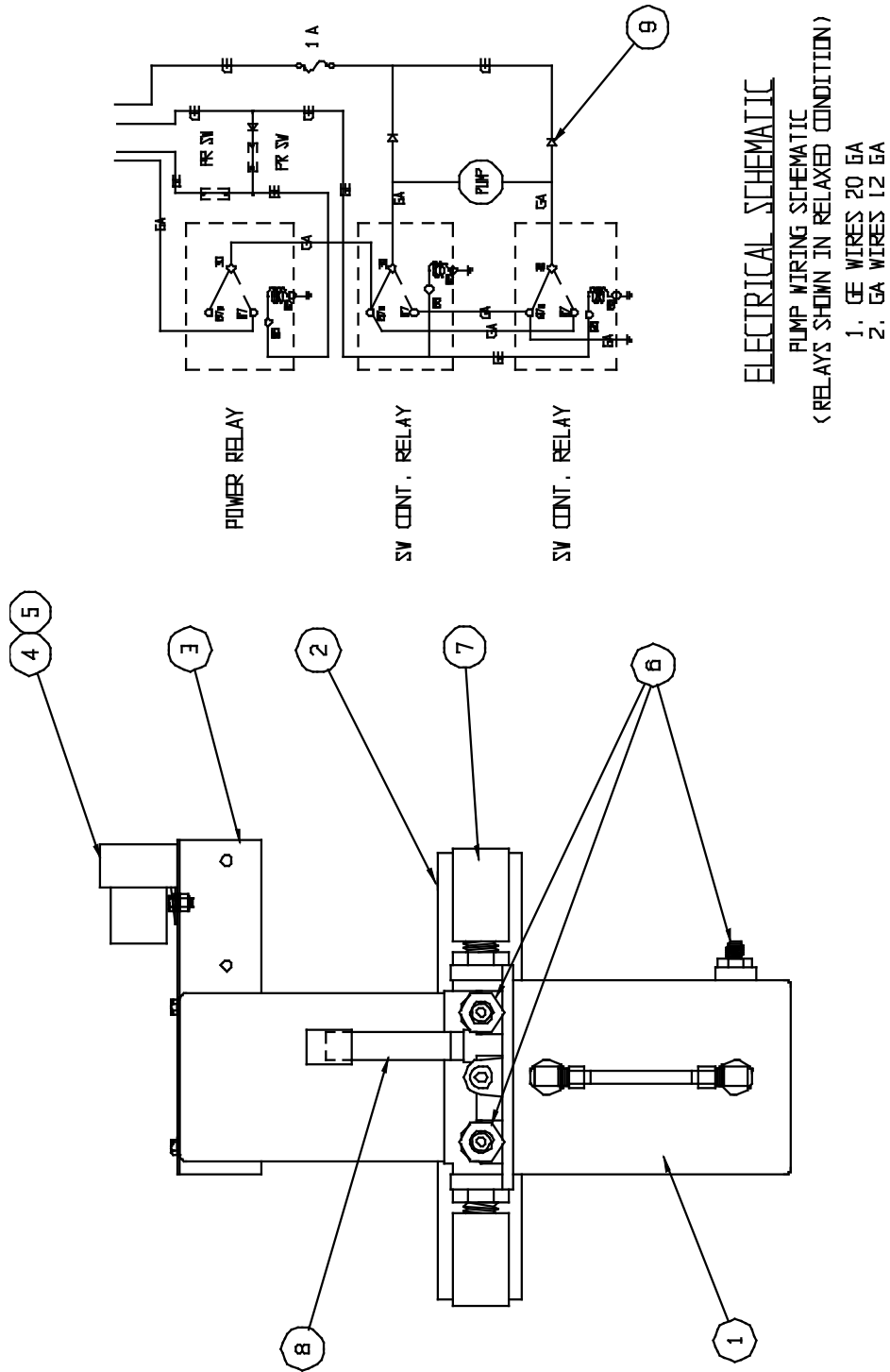
WIPLINE MODEL 2100 FLOAT PARTS MANUAL

INSTALLATION – HYDRAULIC SYSTEM, FIGURE 19 CESSNA 172

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
11	1		HAND PUMP (ONLY)	642873
12	1		BRACKET – PUMP ATTACH	21A09156-129
13	1		PLUG	AN814-4D
	1		“O” RING	MS28775-012
14	1		UNION	21A09746-001
	1		“O” RING	MS28775-012
15	1		UNION	AN815-4D
	1		“O” RING	MS28775-012
16	1		UNION	AN919-6D
	1		“O” RING	MS28775-014
17	1		CAP PLUG	9283K13
18	2		CAP SCREW – ATTACH	5/16-18 UNC-28 X .63
	2		LOCK WASHER	MS35333-40
	2		WASHER	NAS1149F0563P
19	2		ASSY. – BRAKE LINE (NOT SHOWN)	21A04000-080
	2		FITTING	63-190600-3

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WIPLINE MODEL 2100 FLOAT PARTS MANUAL



ELECTRICAL SCHEMATIC
 PUMP WIRING SCHEMATIC
 (RELAYS SHOWN IN RELAXED CONDITION)
 1. GE WIRES 20 GA
 2. GA WIRES 12 GA

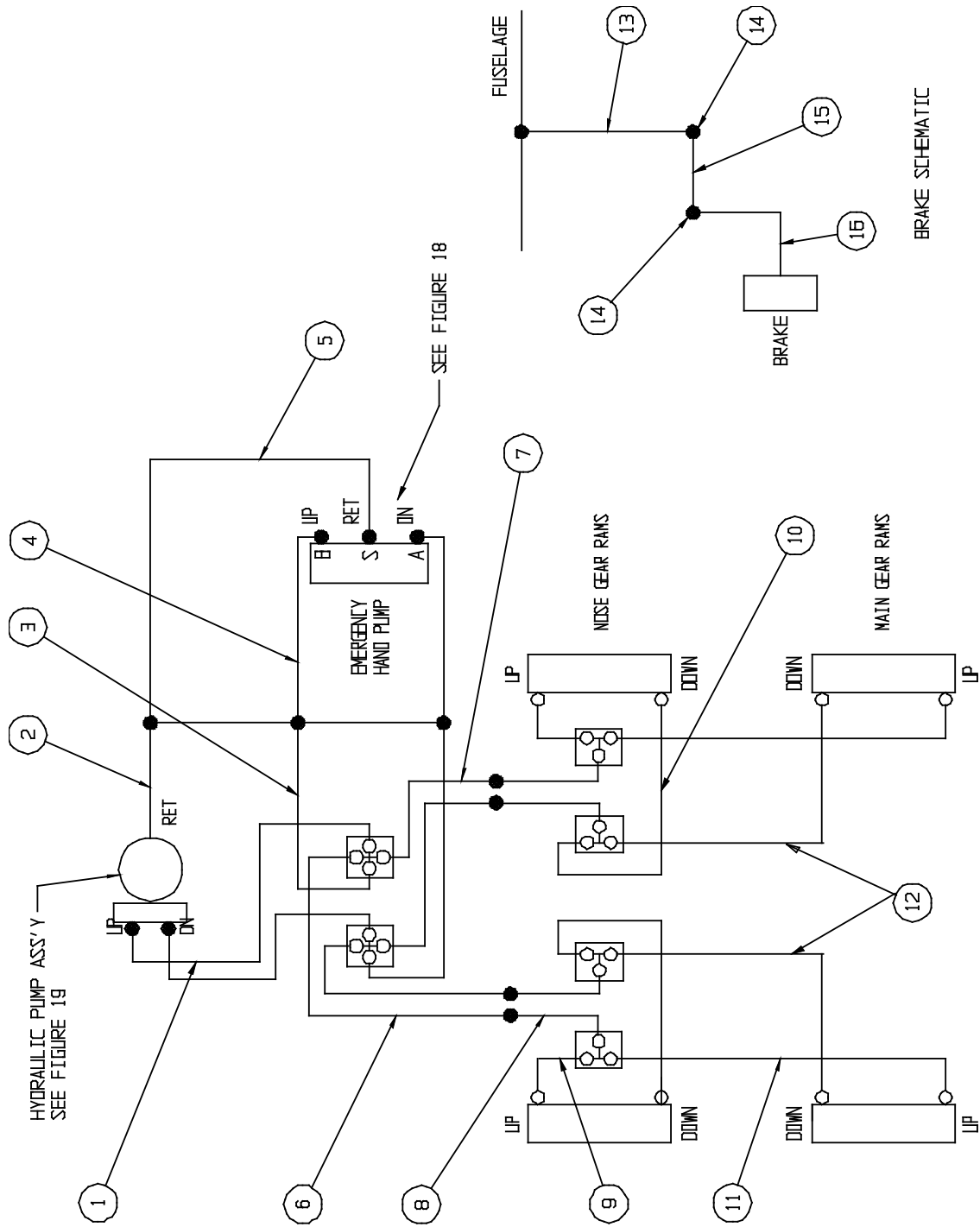
ASSEMBLY – HYDRAULIC PUMP CESSNA 172
 FIGURE 20

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

ASSEMBLY – HYDRAULIC PUMP, FIGURE 20 CESSNA 172

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	1		HYDRAULIC PUMP 12V	21A09000-215
	1		HYDRAULIC PUMP 24V	21A09000-282
2	1		ANGLE – LOWER PUMP	21A09352-030
	2		CAP SCREW – ATTACH	MS16997-96
	2		LOCK WASHER	3/8”
3	1		SUPPORT – TOP PUMP	21A09005-264
4	3		RELAY – 24V	0-332-209-211
	3		RELAY – 12V	0-332-209-137
5	3		SOCKET – RELAY	BR05-FW
	15		TERMINAL	1-901-355-917
	1		BOLT - ATTACH	AN3-4A
	2		BOLT – ATTACH	AN3-3A
	6		WASHER	NAS1149F0332P
	3		NUT	MS21044N3
6	3		FITTING	AN815-4D
	3		“O” RING	MS28775-011
7	2		PRESSURE - SWITCH	20PS001EB700W500W
8	1		STAND PIPE	21A09274-006
	1		“O” RING	MS28775-012
	1		FILTER	6A09706-001
9	3		DIODE	IN4004

WIPLINE MODEL 2100 FLOAT PARTS MANUAL



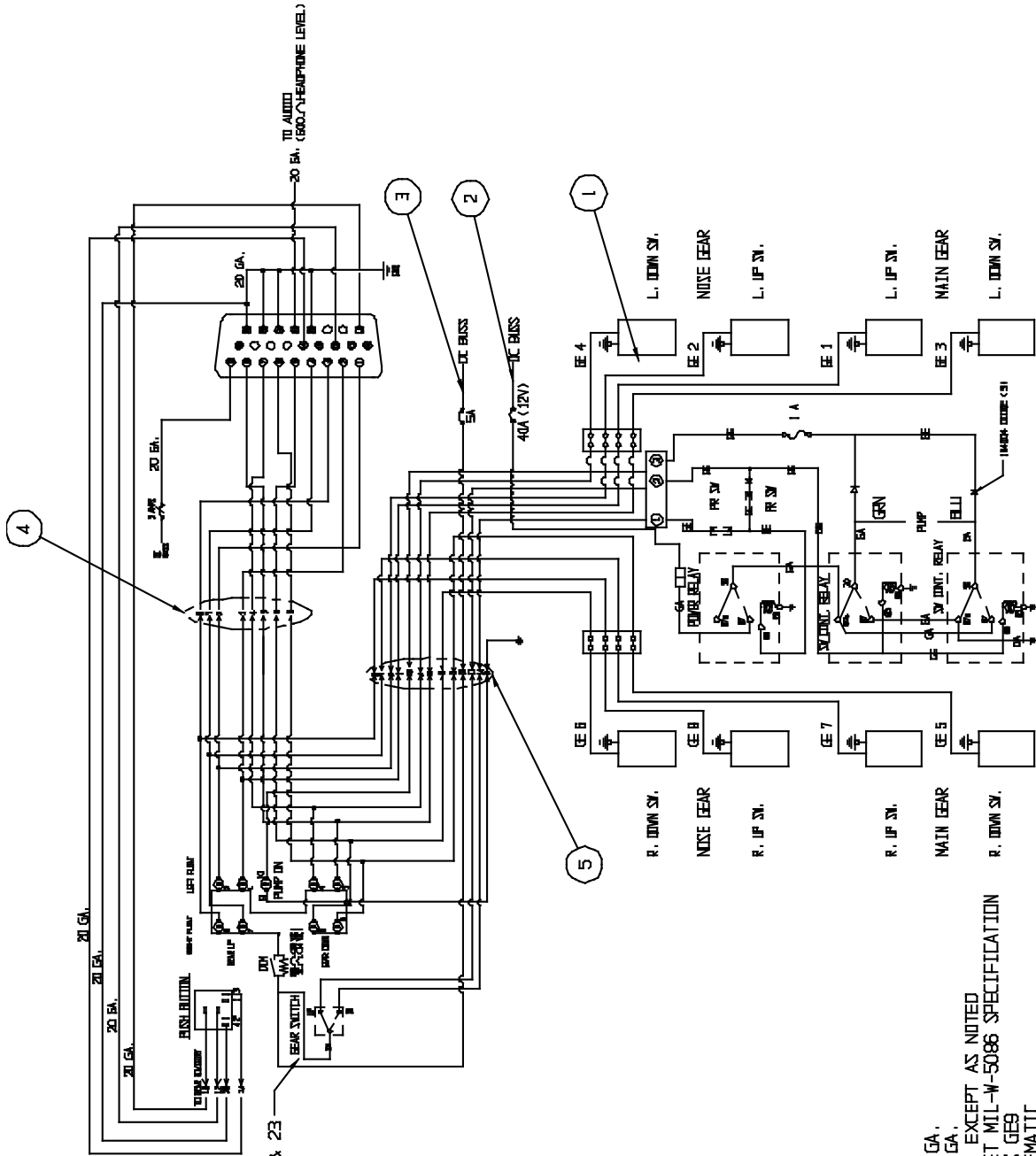
HYDRAULIC SCHEMATIC
FIGURE 21

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

HYDRAULIC SCHEMATIC, FIGURE 21

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	2		ASSY. – HYDRAULIC HOSE	21A09000-197
2	1		ASSY. – HYDRAULIC HOSE	21A09000-201
3	2		ASSY. – HYDRAULIC HOSE	21A09000-200
4	2		ASSY. – HYDRAULIC HOSE	21A09000-202
5	1		ASSY. – HYDRAULIC HOSE	21A09000-203
6	2		ASSY. – HYDRAULIC HOSE	21A09000-198
7	2		ASSY. – HYDRAULIC HOSE	21A09000-199
8	4		ASSY. – HYDRAULIC HOSE	21A09000-222
9	2		ASSY. – HYDRAULIC HOSE	21A09000-218
10	2		ASSY. – HYDRAULIC HOSE	21A09000-219
11	2		ASSY. – HYDRAULIC HOSE	21A09000-220
12	2		ASSY. – HYDRAULIC HOSE	21A09000-221
13	2		ASSY. – HYDRAULIC HOSE	21A04000-080
	2		FITTING – ENDS	63-190600-3
14	2		FITTING – ELBOW	AN833-3D
	4		WASHER	NAS1149D0663J
	2		NUT	AN924-3D
15	2		LINE ASSY. – HARD	21A04000-079
16	2		LINE ASSY. – FLEX	21A04000-078

WIPLINE MODEL 2100 FLOAT PARTS MANUAL



SEE FIGURE 22 & 23

- NOTES:
1. GE WIRES ARE 20 GA., GA WIRES ARE 12 GA.
 - ALL WIRES 22 GA. EXCEPT AS NOTED
 - ALL WIRES TO MEET MIL-W-5086 SPECIFICATION
 2. ALL GROUND WIRES G09
 3. PUMP WIRING SCHEMATIC (RELAYS SHOWN IN RELAXED CONDITION)

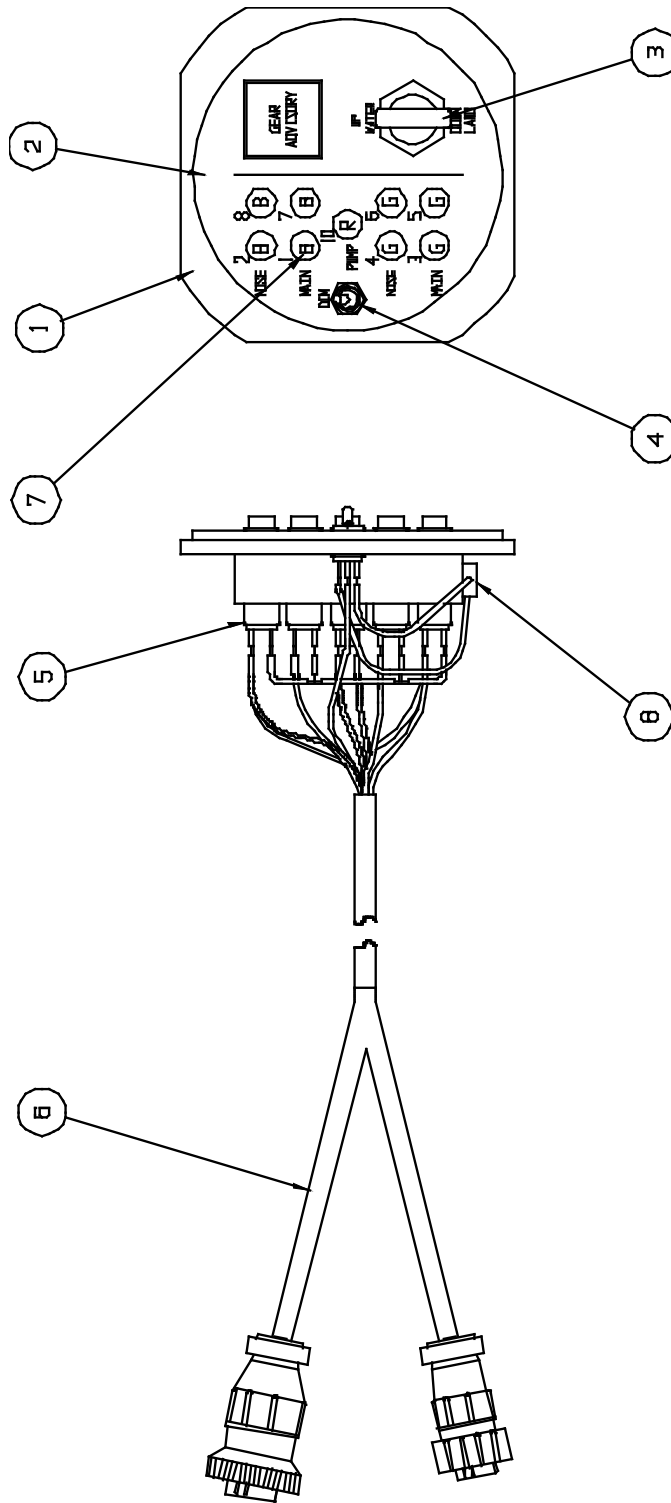
ELECTRICAL SCHEMATIC
FIGURE 22

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

ELECTRICAL SCHEMATIC, FIGURE 22

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	8		SWITCH – PROXIMITY - MAGNETIC	5801
	8		CLIP – SWITCH HOLDER	21A09005-262
2	1		CIRCUIT BREAKER	40 AMP
3	1		CIRCUIT BREAKER	5 AMP
4	1		WIRE HARNESS	4A11000-014
5	1		WIRE HARNESS	4A11000-012

WIPLINE MODEL 2100 FLOAT PARTS MANUAL



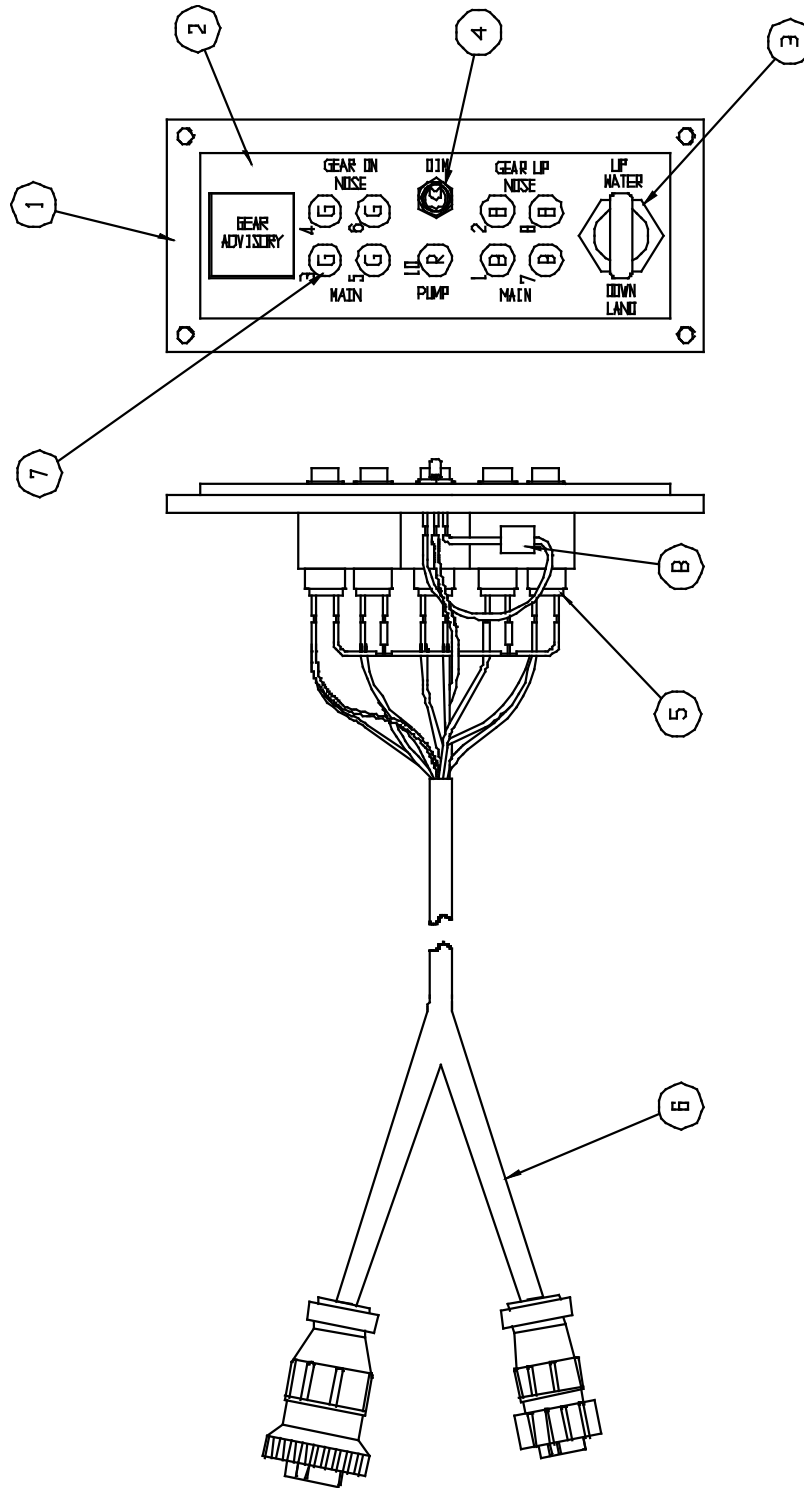
GEAR CONTROL (ROUND)
FIGURE 23

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

GEAR CONTROL (ROUND), FIGURE 23

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	1		BLOCK – INDICATOR (ROUND)	21A11179-001
2	1		PLACARD – FACE	10B3-6202
3	1		SWITCH – ASSEMBLY	8857K44
	1		KNOB – GEAR CONTROL	21A11259-003
4	1		SWITCH – DIMMER	A101SYCB
5	9		SOCKETS	515-0012
	3		SCREW – ATTACH	AN526-632-R8
6	1		ASSY. – WIRE HARNESS	4A11000-008
7	1		LIGHT – RED (12V)	5073914-1431-600
	4		LIGHT – BLUE (12V)	5073914-1434-600
	4		LIGHT – GREEN (12V)	5073914-1432-600
8	1		RESISTOR (12V)	RH-5-35

WIPLINE MODEL 2100 FLOAT PARTS MANUAL



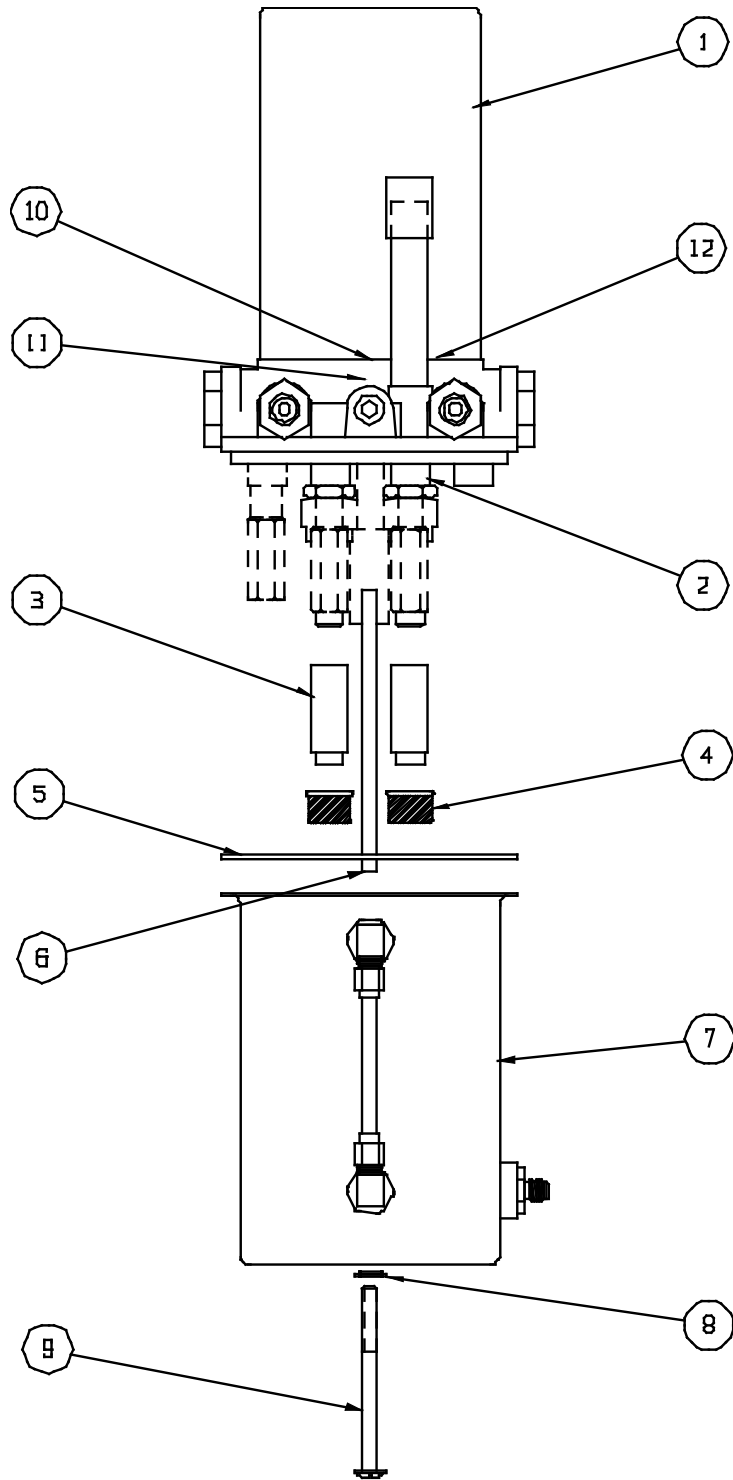
GEAR CONTROL (RECTANGLE)
FIGURE 24

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

GEAR CONTROL (RECTANGLE), FIGURE 24

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	1		BLOCK – INDICATOR (RECTANGLE)	21A11179-002
2	1		PLACARD – FACE	10B3-6277
3	1		SWITCH – ASSEMBLY	8857K44
	1		KNOB – GEAR CONTROL	21A11259-003
4	1		SWITCH – DIMMER	A101SYCB
5	9		SOCKETS	515-0012
	3		SCREW – ATTACH	AN526-632-8
6	1		ASSY. – WIRE HARNESS	4A11000-008
7	1		LIGHT – RED (12V)	5073914-1431-600
	4		LIGHT – BLUE (12V)	5073914-1434-600
	4		LIGHT – GREEN (12V)	5073914-1432-600
8	1		RESISTOR (12V)	35 OHM RH-5-35

WIPLINE MODEL 2100 FLOAT PARTS MANUAL



HYDRAULIC PUMP
FIGURE 25

WIPLINE MODEL 2100 FLOAT PARTS MANUAL

HYDRAULIC PUMP, FIGURE 25

<u>REF NO.</u>	<u>NO.</u>	<u>REQ.</u>	<u>PART DESCRIPTION</u>	<u>PART NO.</u>
1	1		HYDRAULIC PUMP ASSY. (12V)	21A09000-215
			HYDRAULIC PUMP ASSY. (24V)	21A09000-282
			MOTOR (12V)	410497
			MOTOR (24V)	411165
2	1		BASIC PUMP	634873
3	2		TUBE EXTENSIONS	362136
4	2		FILTER	410521
5	1		SEAL RESERVIOR	410578
6	1		RETURN TUBE	365047
7	1		RESERVIOR – GAUGE ASSY.	775260
8	1		SEAL THREAD	359071
9	1		SCREW – RESERVIOR ATTACH	409715
10	1		COUPLING – MOTOR TO PUMP	361183
11	1		SEAL – PUMP SHAFT	410512
12	1		“O” RING MOTOR TO BASE	405673

WPLINE MODEL 2100 FLOAT PARTS MANUAL

WEIGHT AND BALANCE 2100 AMPHIBIAN			
ITEM	WEIGHT	ARM	MOMENT
FLOAT INSTALLATION (NOT INCLUDING BELOW ITEMS)	379.00	33.75	12792
VENTRAL FIN	2.00	210.00	420
BOARDING STEP RIGHT	2.00	55.00	165
BOARDING STEP LEFT	2.00	55.00	165
CANOE PADDLE	2.00	27.00	54
WEIGHT AND BALANCE 2100 SEAPLANE			
ITEM	WEIGHT	ARM	MOMENT
FLOAT INSTALLATION (NOT INCLUDING BELOW ITEMS)	249.0	38.0	9462
VENTRAL FIN	2.00	210.0	420
BOARDING STEP RIGHT	2.00	55.0	165
BOARDING STEP LEFT	2.00	55.0	165
CANOE PADDLE	2.00	27.0	54
REMOVE FUSELAGE ITEMS			
	WEIGHT	ARM	MOMENT
1. MAIN GEAR	101.0	58.0	5858
2. NOSE GEAR	36.0	-6.8	-244

Flap Extended Speed Range	Stall To V _g	33 nph CAS 100 nph CAS
Normal Operating Speed Range	Stall To V _{lo}	50 nph CAS 145 nph CAS
Cautionary Speed Range	V _{lo} To V _g	145 nph CAS 180 nph CAS
Never Exceed Speed	V _e	180 nph CAS
Maneuvering Speed	V _a	110 nph CAS

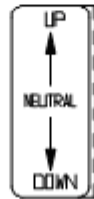
P/N 10A3-6281 PLACARD
(172M)

Flap Extended Speed Range	Stall To V _e	43 kts IAS 85 kts IAS
Normal Operating Speed Range	Stall To V _{lo}	45 kts IAS 127 kts IAS
Cautionary Speed Range	V _{lo} To V _g	127 kts IAS 340 kts IAS
Never Exceed Speed	V _e	340 kts IAS
Maneuvering Speed	V _a	98 kts IAS

P/N 10A3-6206 PLACARD
(172N & 172P)

EMERGENCY HANDPUMP
PULL GEAR MOTOR CIRCUIT BREAKER
SELECT DESIRED GEAR POSITION
PUMP GEAR TO DESIRED POSITION

P/N 10B3-62B3-1 PLACARD



P/N 10B2-6338-2 PLACARD

SEAPLANE OPERATIONS LIMITATIONS
The ratings and placards installed in this seaplane contain operating limitations which must be complied with when operating this seaplane in the Normal Category. Other operating limitations which must be complied with when operating this seaplane in this category are contained in the Pilot's Operating Handbook and the Approved Airplane Flight Manual Supplement.
No aerobatic maneuvers including spins, approved.
Flight into terrain during conditions prohibited.
This seaplane is certified for the following flight operations as of date of original airworthiness certificate:
DAY-NIGHT-VFR-IFR

P/N 10A3-6284 PLACARD

WATER RUDDER CONTROL



P/N 3A3-1115-1, -2, -3 PLACARDS

WATER RUDDER UP FOR ALL FLIGHT OPERATIONS

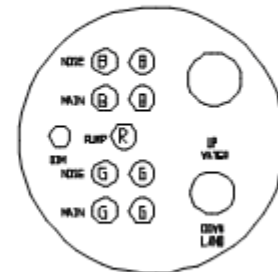
P/N 8B3-2243-2 PLACARD

REFER TO WPLINE AFM SUPPLEMENT FOR OPERATION WITH WPLINE FLOATS INSTALLED

P/N 10A3-6279 PLACARD

DO NOT LAND ON WATER UNLESS GEAR IS FULLY RETRACTED

P/N 6B3-2243-3 PLACARD



P/N 10B3-6202 PLACARD
ALTERNATE 10B3-6277

PLACARDS AND MISCELLANEOUS DATA CESSNA 172
FIGURE 26