

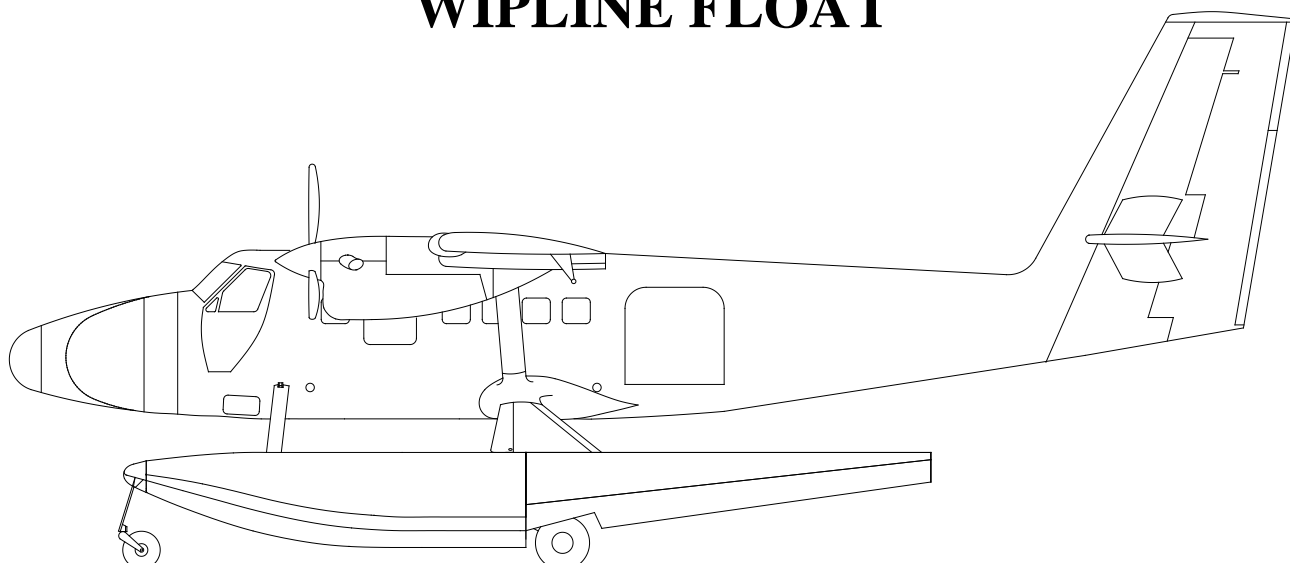


## **PARTS MANUAL**

**For**

**MODEL 13000**

**WIPLINE FLOAT**



**Wipaire, Inc.**

**1700 Henry Ave. - Fleming Field**

**South St. Paul, MN 55075**

**U.S.A.**

**Phone: (651) 451-1205**

**Fax: (651) 451-1786**

**Website: [www.wipaire.com](http://www.wipaire.com)**

**Item No. 1001021**

**Revision H**

**03/31/2016**

**This page blank**



**New Customer Information**

|   |              |
|---|--------------|
| <b>Customer Name</b>                            |              |
| <b>Billing Address</b>                          |              |
| <b>Shipping Address</b>                         |              |
| Phone Number                                    | Fax Number   |
| <b>Purchasing Contact</b>                       | Phone Number |
| E-Mail  | Fax Number   |
| <b>Accounts Payable Contact</b>                 | 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

**This page blank**

**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**

## WIPLINE MODEL 13000 FLOAT PARTS MANUAL

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   | 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    |

THIS PAGE BLANK

**TABLE OF CONTENTS**

**SECTION**

**FLOAT PART SALES DEPT. OPERATIONS ..... 5**

**HULL ASSEMBLY AMPHIB FLOATS, BULKHEADS & BOTTOM SKINS ..... 11**

**HULL ASSEMBLY STRAIGHT FLOATS, BULKHEADS & BOTTOM SKINS..... 20**

**HULL ASSEMBLY AMPHIB FLOATS, TOP SKIN..... 29**

**HULL WHEEL WELL AREA..... 33**

**EXTRUSIONS HULL, AMPHIB..... 36**

**EXTRUSIONS HULL, STRAIGHT FLOAT ..... 38**

**PUMPER TUBE INSTALLATION..... 40**

**INSTALLATION STRUTS, FRONT ..... 42**

**INSTALLATION STRUTS, REAR..... 45**

**OUTSIDE STEP INSTALLATION.....51**

**MAIN GEAR WHEEL ASSEMBLY..... 57**

**MAIN GEAR AXLE ASSEMBLY..... 59**

**OLEO SHOCK STRUT ASSEMBLY (T-SEALS INSTALLED)..... 62**

**OLEO SHOCK STRUT ASSEMBLY(O-RINGS INSTALLED) ..... 65**

**MAIN GEAR RETRACTION (T-SEALS INSTALLED) ..... 67**

**MAIN GEAR RETRACTION (O-RINGS INSTALLED)..... 71**

**NOSE GEAR LOWER END ASSEMBLY ..... 75**

**ASSEMBLY NOSE GEAR RETRACTION (T-SEALS INSTALLED) ..... 79**

**ASSEMBLY NOSE GEAR RETRACTION (O-RINGS INSTALLED) ..... 83**

**HYDRAULIC SCHEMATIC ..... 87**

**INSTALLATION HYDRAULIC PUMP..... 89**

**HYDRAULIC PUMP ASSEMBLY ..... 92**

**INSTALLATION HYDRAULIC HAND PUMP ..... 95**

**INSTALLATION BRAKE LINES..... 97**

**ELECTRICAL SCHEMATIC ..... 98**

**GEAR CONTROL ASSEMBLY..... 100**

**INSTALLATION MISC. FUSELAGE ITEMS..... 103**



### LOG OF REVISIONS

| Revision | Pages Effected            | Description   | Date     |
|----------|---------------------------|---|----------|
| A        | 62                        | Parker wheel nuts P/N changed from MS21044-N5 to <b>MS21042-5</b> . This is a steel low profile nut to allow for greater bolt thread extension after torquing.  | 8/30/07  |
| B        | 55-57                     | Some O-rings on the Main gear Oleo were replaced with T-seals. That drawing was also changed for greater clarity.   | 10/5/07  |
| C        | 57-60, 65-68              | Nose gear retraction and Main gear retraction have been revised to reflect O-rings being replaced by T-seals.   | 1/1/08   |
| D        | 56,59,61,65,72<br>76      | Pages removed for T-seal change in Rev.C returned to aid customers who choose not to update. Main Oleo, Main and Nose retraction can be sealed with either the updated T-seal system or original O-ring system. Call Wipaire Customer service if you are not sure which system is installed | 10/31/08 |
| E        | 45-50                     | Added new figure 11 for 3 options of left cargo door steps  | 10/05/09 |
| F        | 51-58                     | New Figure 11 and parts list.   | 9/10/10  |
| G        | 16, 30, 47, 61,<br>79, 80 | ADDED MS16997-99, 13A01427-021 / 022, 13A01427-019 / -020, 13A01163-014, -013, -016, -015, 40-426, 13836, 13889, AN5-35A, 067-14700, UPDATED HARDWARE, CORRECTED P/N FOR SPLASH GAURD & BARREL NUT  | 07/17/12 |
| H        | 1, 3, 104, 83-<br>103, 80 | Updated Logo, Removed Warranty Claim Form, Corrected Figure Numbering, Added Nose Box Assy. P/N   | 3/31/16  |
|          |                           |   |          |
|          |                           |   |          |
|          |                           |   |          |
|          |                           |   |          |
|          |                           |   |          |
|          |                           |   |          |
|          |                           |   |          |
|          |                           |   |          |

**THIS PAGE BLANK**

# HULL ASSEMBLY AMPHIB FLOATS, BULKHEADS & BOTTOM SKINS

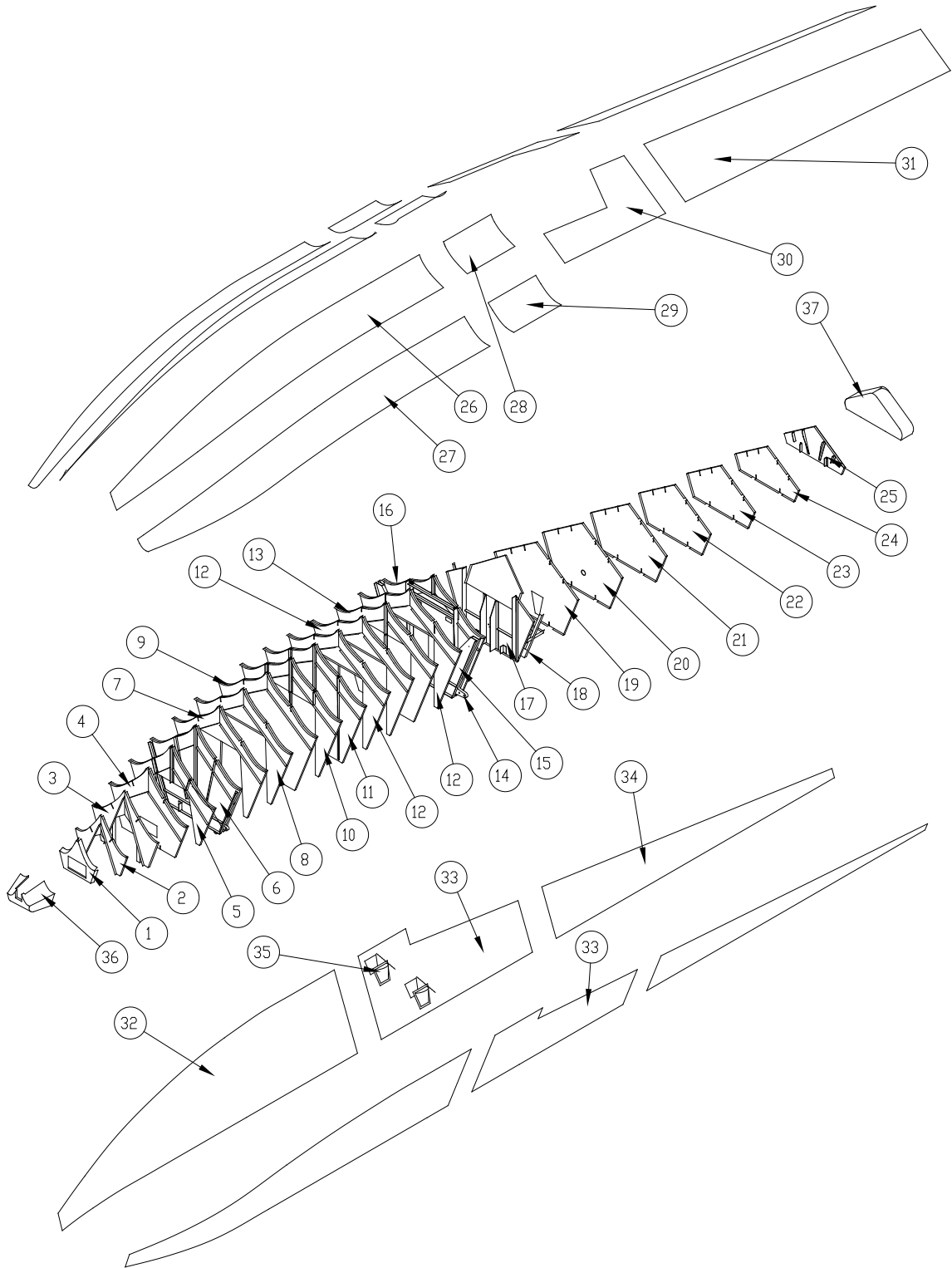


FIGURE 1

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

HULL ASSEMBLY AMPHIB FLOATS, BULKHEADS & BOTTOM SKINS - FIGURE 1

| ITEM | QTY | PART DESCRIPTION            | PART NO.         |
|------|-----|-----------------------------|------------------|
| 1    | 1   | ASSY BULKHEAD #1            | 13A01000-185     |
|      | 1   | BULKHEAD BLANK              | 13A01156-084     |
|      | 1   | DOUBLER                     | 13A01156-085     |
|      | 1   | KEEL ANGLE L.               | 13A01357-049     |
|      | 1   | KEEL ANGLE R.               | 13A01357-050     |
|      | A/R | NUT PLATES                  | MS21047-24       |
|      | 1   | ANGLE-TOP RAIL L.           | 6A01156-055      |
|      | 1   | ANGLE-TOP RAIL R.           | 6A01156-054      |
|      | 2   | 1                           | ASSY BULKHEAD #2 |
| 1    |     | SIDE PANEL L.               | 13A01150-045     |
| 1    |     | SIDE PANEL R.               | 13A01150-044     |
| 1    |     | FLUTE BOTTOM L.             | 13A01150-003     |
| 1    |     | FLUTE BOTTOM R.             | 13A01150-002     |
| 1    |     | "T" SECTION KEEL ATTACH     | 13A01381-002     |
| 2    |     | ANGLE SISTER KEEL ATTACH    | 13A01359-127     |
| 3    |     | 1                           | ASSY BULKHEAD #3 |
|      | 1   | SIDE PANEL L.               | 13A01150-047     |
|      | 1   | SIDE PANEL R.               | 13A01150-046     |
|      | 1   | FLUTE BOTTOM L.             | 13A01150-005     |
|      | 1   | FLUTE BOTTOM R.             | 13A01150-004     |
|      | 1   | "T" SECTION KEEL ATTACH     | 13A01381-003     |
|      | 2   | ANGLE SISTER KEEL ATTACH    | 13A01359-128     |
|      | 1   | ANGLE-VERT. STIFFENER L.    | 13A01382-005     |
|      | 1   | ANGLE-VERT. STIFFENER R.    | 13A01382-004     |
| 4    | 1   | ASSY BULKHEAD #4            | 13A01000-188     |
|      | 1   | FLUTE FWD L.                | 13A01150-007     |
|      | 1   | FLUTE FWD R.                | 13A01150-006     |
|      | 1   | FLUTE AFT L.                | 13A01150-009     |
|      | 1   | FLUTE AFT R.                | 13A01150-008     |
|      | 1   | PANEL-MAIN BULKHEAD         | 13A01150-048     |
|      | 1   | "T" SECTION KEEL ATTACH     | 13A01381-001     |
|      | 1   | ANGLE SISTER KEEL ATTACH L. | 13A01359-125     |
|      | 1   | ANGLE SISTER KEEL ATTACH R. | 13A01359-126     |
|      | 1   | ANGLE-NOSE BOX ATTACH L.    | 13A01382-001     |
|      | 1   | ANGLE-NOSE BOX ATTACH R.    | 13A01382-002     |
|      | 2   | ANGLE-TOP RAIL ATTACH       | 13A01359-124     |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

HULL ASSEMBLY AMPHIB FLOATS, BULKHEADS & BOTTOM SKINS - FIGURE 1

| ITEM | QTY | PART DESCRIPTION            | PART NO.               |
|------|-----|-----------------------------|------------------------|
| 5    | 1   | ASSY BULKHEAD #5            | 13A01000-189           |
|      | 1   | SIDE PANEL L.               | 13A01150-049           |
|      | 1   | SIDE PANEL R.               | 13A01150-050           |
|      | 1   | FLUTE FWD R.                | 13A01150-010           |
|      | 1   | FLUTE FWD L.                | 13A01150-011           |
|      | 1   | FLUTE AFT R.                | 13A01150-012           |
|      | 1   | FLUTE AFT L.                | 13A01150-013           |
|      | 1   | PANEL-CENTER                | 13A01150-051           |
|      | 1   | "T" SECTION-KEEL ATTACH     | 13A01381-004           |
|      | 2   | ANGLE-SISTER KEEL ATTACH    | 13A01359-129           |
| 6    | 1   | ASSY BULKHEAD #6 R.         | 13A01000-190           |
|      | 1   | ASSY BULKHEAD #6 L.         | 13A01000-243           |
|      | 1   | BODY BULKHEAD               | 13A01150-052           |
|      | 1   | FLUTE FWD R.                | 13A01150-014           |
|      | 1   | FLUTE FWD L.                | 13A01150-015           |
|      | 1   | FLUTE AFT R.                | 13A01150-016           |
|      | 1   | FLUTE AFT L.                | 13A01150-017           |
|      | 1   | PANEL-UPPER-STRUT FITT. L.  | 13A01160-003           |
|      | 1   | PANEL-UPPER STRUT FITT. R.  | 13A01160-004           |
|      | 1   | ARM-SIDE SKIN ATTACH L.     | 13A01427-009           |
|      | 1   | ARM-SIDE SKIN ATTACH R.     | 13A01427-010           |
|      | 1   | ARM-PANEL #6 BULKHEAD       | 13A01427-021           |
|      | 1   | ARM-PANEL #6 BULKHEAD       | 13A01427-022           |
|      | 2   | ANGLE-TOP RAIL ATTACH       | 13A01382-003           |
|      | 1   | ANGLE-SISTER KEEL ATTACH L. | 13A01359-165           |
|      | 1   | ANGLE-SISTER KEEL ATTACH R. | 13A01359-164           |
|      | 1   | "T" SECTION LOWER           | 13A01381-013           |
|      | 1   | "T" SECTION UPPER           | 13A01381-014           |
|      | 1   | ANGLE PANEL ATTACH UPPER    | 13A01359-163           |
|      | 6A  | 1                           | ASSY SPR. BAR PANEL L. |
| 1    |     | ASSY SPR. BAR PANEL R.      | 13A01000-216           |
| 1    |     | PANEL L.                    | 13A01160-003           |
| 1    |     | PANEL R.                    | 13A01160-004           |
| 1    |     | ANGLE VERTICAL L.           | 13A01427-007           |
| 1    |     | ANGLE VERTICAL R.           | 13A01427-008           |
| 1    |     | ARM-SPREADER BAR INBD. LT.  | 13A01427-019           |
| 1    |     | ARM-SPREADER BAR INBD. RT.  | 13A01427-020           |
| 2    |     | ANGLE-TOP RAIL ATTACH       | 13A01382-003           |

## WIPLINE MODEL 13000 FLOAT PARTS MANUAL

## HULL ASSEMBLY AMPHIB FLOATS, BULKHEADS &amp; BOTTOM SKINS - FIGURE 1

| ITEM | QTY | PART DESCRIPTION             | PART NO.     |
|------|-----|------------------------------|--------------|
| 7    | 1   | ASSY BULKHEAD #7             | 13A01000-191 |
|      | 1   | SIDE PANEL L.                | 13A01150-053 |
|      | 1   | SIDE PANEL R.                | 13A01150-054 |
|      | 1   | PANEL CENTER                 | 13A01150-055 |
|      | 1   | FLUTE-FWD R.                 | 13A01150-018 |
|      | 1   | FLUTE-FWD L.                 | 13A01150-019 |
|      | 1   | FLUTE-AFT R.                 | 13A01150-020 |
|      | 1   | FLUTE-AFT L.                 | 13A01150-021 |
|      | 1   | "T" SECTION KEEL ATTACH      | 13A01381-008 |
|      | 2   | ANGLE-SISTER KEEL ATTACH     | 13A01359-130 |
| 8    | 1   | ASSY #8 BULKHEAD             | 13A01000-192 |
|      | 1   | SIDE PANEL R.                | 13A01150-056 |
|      | 1   | SIDE PANEL L.                | 13A01150-057 |
|      | 1   | PANEL-CENTER                 | 13A01150-058 |
|      | 1   | FLUTE-FWD R.                 | 13A01150-022 |
|      | 1   | FLUTE-FWD L.                 | 13A01150-023 |
|      | 1   | FLUTE-AFT R.                 | 13A01150-024 |
|      | 1   | FLUTE-AFT L.                 | 13A01150-025 |
|      | 1   | "T" SECTION KEEL ATTACH      | 13A01381-006 |
|      | 2   | ANGLE-SISTER KEEL ATTACH     | 13A01359-131 |
| 9    | 1   | ASSY #9 BULKHEAD             | 13A01000-193 |
|      | 1   | PANEL-MAIN BULKHEAD          | 13A01150-059 |
|      | 1   | FLUTE-FWD R.                 | 13A01150-026 |
|      | 1   | FLUTE-FWD L.                 | 13A01150-027 |
|      | 1   | FLUTE-AFT R.                 | 13A01150-028 |
|      | 1   | FLUTE-AFT L.                 | 13A01150-029 |
|      | 1   | ANGLE-SISTER KEEL ATTACH R.  | 13A01359-152 |
|      | 1   | ANGLE-SISTER KEEL ATTACH L.  | 13A01359-153 |
|      | 2   | ANGLE-TOP RAIL ATTACH        | 13A01359-124 |
|      | 1   | "T" SECTION-MAIN KEEL ATTACH | 13A01381-012 |
| 10   | 1   | ASSY #10 BULKHEAD            | 13A01000-194 |
|      | 1   | SIDE PANEL R.                | 13A01150-060 |
|      | 1   | SIDE PANEL L.                | 13A01150-061 |
|      | 1   | PANEL CENTER                 | 13A01150-062 |
|      | 2   | FLUTE-FWD R.                 | 13A01150-030 |
|      | 2   | FLUTE-FWD L.                 | 13A01150-031 |
|      | 1   | "T" SECTION-MAIN KEEL ATTACH | 13A01381-008 |
|      | 2   | ANGLE-SISTER KEEL ATTACH     | 13A01359-133 |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

HULL ASSEMBLY AMPHIB FLOATS, BULKHEADS & BOTTOM SKINS - FIGURE 1

| ITEM | QTY | PART DESCRIPTION             | PART NO.                |
|------|-----|------------------------------|-------------------------|
| 11   | 1   | ASSY #11 BULKHEAD            | 13A01000-195            |
|      | 1   | PANEL-MAIN BULKHEAD          | 13A01150-063            |
|      | 2   | FLUTE R.                     | 13A01150-034            |
|      | 2   | FLUTE L.                     | 13A01150-035            |
|      | 1   | "T" SECTION-MAIN KEEL ATTACH | 13A01381-012            |
|      | 1   | ANGLE-SISTER KEEL L.         | 13A01359-151            |
|      | 1   | ANGLE-SISTER KEEL R.         | 13A01359-168            |
|      | 2   | ANGLE-TOP RAIL ATTACH        | 13A01359-124            |
|      | 12  | 2                            | ASSY #12, #13, BULKHEAD |
| 1    |     | ASSY #15 BULKHEAD            | 13A01000-198            |
| 1    |     | SIDE PANEL R.                | 13A01150-064            |
| 1    |     | SIDE PANEL L.                | 13A01150-065            |
| 1    |     | PANEL CENTER                 | 13A01150-066            |
| 2    |     | FLUTE-BOTTOM R.              | 13A01150-034            |
| 2    |     | FLUTE-BOTTOM L.              | 13A01150-035            |
| 1    |     | "T" SECTION-KEEL ATTACH      | 13A01381-008            |
| 2    |     | ANGLE-SISTER KEEL ATTACH     | 13A01359-133            |
| 13   | 1   | ASSY #14 BULKHEAD            | 13A01000-197            |
|      | 1   | PANEL-MAIN BULKHEAD          | 13A01150-071            |
|      | 2   | FLUTE-BOTTOM R.              | 13A01150-034            |
|      | 2   | FLUTE-BOTTOM L.              | 13A01150-035            |
|      | 2   | ANGLE-DOOR HORZ.             | 13A01359-134            |
|      | 1   | ANGLE-SISTER KEEL ATTACH R.  | 13A01359-142            |
|      | 1   | ANGLE-SISTER KEEL ATTACH L.  | 13A01359-141            |
|      | 1   | "T" SECTION KEEL ATTACH      | 13A01381-011            |
|      | 1   | "T" SECTION-UPPER            | 13A01381-009            |
|      | 2   | ANGLE-TOP RAIL ATTACH        | 13A01359-124            |
|      | 1   | ASSY COVER                   | 13A01000-208            |
|      | 1   | COVER                        | 13A01162-007            |
|      | 1   | "T" SECTION                  | 13A01381-010            |
|      | 40  | SCREW-COVER ATTACH           | AN526-832R6             |
| 14   | 1   | FITTING-MAIN STRUT           | 13A01161-002            |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

HULL ASSEMBLY AMPHIB FLOATS, BULKHEADS & BOTTOM SKINS - FIGURE 1

| ITEM | QTY | PART DESCRIPTION            | PART NO.          |
|------|-----|-----------------------------|-------------------|
| 15   | 1   | ASSY MAIN STRUT PANEL       | 13A01000-222      |
|      | 1   | PANEL-INBOARD L.            | 13A01160-001      |
|      | 1   | PANEL-INBOARD R.            | 13A01160-002      |
|      | 1   | PANEL-OUTBOARD L.           | 13A01160-009      |
|      | 1   | PANEL-OUTBOARD R.           | 13A01160-008      |
|      | 1   | PANEL TOP R.                | 13A01160-006      |
|      | 1   | PANEL TOP L.                | 13A01160-007      |
|      | 1   | FITTING (ITEM 14)           | 13A01161-002      |
|      | 4   | ANGLE-TOP RAIL ATTACH       | 13A01382-003      |
|      | 12  | BOLT                        | AN5-15A           |
|      | 26  | BOLT                        | AN5-20A           |
|      | 76  | WASHER                      | NAS1149F0563P     |
|      | 38  | NUT                         | MS21044N5         |
|      | 16  | 1                           | ASSY BULKHEAD #16 |
| 1    |     | PANEL MAIN BULKHEAD         | 13A01150-075      |
| 2    |     | FLUTE-BOTTOM L.             | 13A01150-035      |
| 2    |     | FLUTE-BOTTOM R.             | 13A01150-034      |
| 1    |     | ANGLE-HORZ. LOWER TUNNEL    | 13A01359-170      |
| 1    |     | ANGLE-HORZ. UPPER TUNNEL    | 13A01359-169      |
| 1    |     | ANGLE-VERT. TRUNION L.      | 13A01428-001      |
| 1    |     | ANGLE-VERT. TRUNION R.      | 13A01428-002      |
| 2    |     | ANGLE-HORZ. TRUNION         | 13A01427-016      |
| 1    |     | "T" SECTION KEEL ATTACH     | 13A01381-005      |
| 2    |     | ANGLE-TOP RAIL ATTACH       | 13A01382-003      |
| 1    |     | ANGLE-SISTER KEEL ATTACH L. | 13A01357-051      |
| 1    |     | ANGLE-SISTER KEEL ATTACH R. | 13A01357-052      |
| 17   | 1   | ASSY BULKHEAD #17           | 13A01000-200      |
|      | 1   | PANEL MAIN BULKHEAD         | 13A01163-009      |
|      | 1   | PANEL BULKHEAD LOWER        | 13A01163-010      |
|      | 1   | ANGLE-SLIDE TUBE ATTACH L.  | 13A01426-007      |
|      | 1   | ANGLE-SLIDE TUBE ATTACH R.  | 13A01426-006      |
|      | 1   | ANGLE-CARRY THRU ATTACH L.  | 13A01357-047      |
|      | 1   | ANGLE-CARRY THRU ATTACH R.  | 13A01357-046      |
|      | 1   | ANGLE-HORZ.                 | 13A01357-045      |
|      | 2   | ANGLE-TOP RAIL ATTACH       | 13A01382-003      |



WIPLINE MODEL 13000 FLOAT PARTS MANUAL

HULL ASSEMBLY AMPHIB FLOATS, BULKHEADS & BOTTOM SKINS - FIGURE 1

| ITEM | QTY   | PART DESCRIPTION          | PART NO.     |
|------|-------|---------------------------|--------------|
| 18   | 1     | ASSY PANEL DRAG STRUT     | 13A01000-212 |
|      | 1     | PANEL-MAIN                | 13A01160-005 |
|      | 1     | ANGLE-VERTICAL L.         | 13A01427-017 |
|      | 1     | ANGLE VERTICAL R.         | 13A01427-018 |
|      | 2     | ANGLE-TOP RAIL ATTACH     | 13A01382-003 |
| 19   | 1     | ASSY BULKHEAD #18         | 13A01000-201 |
|      | 1     | PANEL MAIN BULKHEAD       | 13A01150-067 |
|      | 1     | ANGLE-SISTER KEEL LONG L. | 13A01359-135 |
|      | 1     | ANGLE-SISTER KEEL LONG R. | 13A01359-136 |
|      | 4     | ANGLE-SHORT               | 13A01359-124 |
|      | 1     | DOUBLER-ACCESS HOLE       | 13A01160-012 |
|      | 1     | ANGLE-ACCESS HOLE         | 13A01359-166 |
|      | 1     | COVER-ACCESS              | 13A01150-091 |
| A/R  | SCREW | AN526-632R6               |              |
| 20   | 1     | ASSY BULKHEAD #19         | 13A01000-202 |
|      | 1     | PANEL MAIN                | 13A01150-068 |
|      | 1     | ANGLE SISTER KEEL LONG L. | 13A01359-037 |
|      | 1     | ANGLE SISTER KEEL LONG R. | 13A01359-138 |
|      | 4     | ANGLE-SHORT               | 13A01359-124 |
| 21   | 1     | ASSY BULKHEAD #20         | 13A01000-203 |
|      | 1     | PANEL MAIN                | 13A01150-069 |
|      | 1     | ANGLE SISTER KEEL LONG L. | 13A01359-139 |
|      | 1     | ANGLE SISTER KEEL LONG R. | 13A01359-140 |
|      | 4     | ANGLE-SHORT               | 13A01359-124 |
| 22   | 1     | ASSY BULKHEAD #21         | 13A01000-204 |
|      | 1     | PANEL MAIN                | 13A01150-070 |
|      | 1     | ANGLE SISTER KEEL LONG L. | 13A01359-143 |
|      | 1     | ANGLE SISTER KEEL LONG R. | 13A01359-144 |
|      | 4     | ANGLE-SHORT               | 13A01359-124 |
| 23   | 1     | ASSY BULKHEAD #22         | 13A01000-205 |
|      | 1     | PANEL MAIN                | 13A01150-072 |
|      | 1     | ANGLE SISTER KEEL LONG L. | 13A01359-145 |
|      | 1     | ANGLE SISTER KEEL LONG R. | 13A01359-146 |
|      | 4     | ANGLE-SHORT               | 13A01359-124 |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

HULL ASSEMBLY AMPHIB FLOATS, BULKHEADS & BOTTOM SKINS - FIGURE 1

| ITEM | QTY | PART DESCRIPTION            | PART NO.     |
|------|-----|-----------------------------|--------------|
| 24   | 1   | ASSY BULKHEAD #23           | 13A01000-206 |
|      | 1   | PANEL MAIN                  | 13A01150-073 |
|      | 1   | ANGLE SISTER KEEL ATTACH L. | 13A01359-147 |
|      | 1   | ANGLE-SISTER KEEL ATTACH R. | 13A01359-148 |
|      | 4   | ANGLE-SHORT                 | 13A01359-124 |
| 25   | 1   | ASSY BULKHEAD #24           | 13A01000-207 |
|      | 1   | PANEL MAIN                  | 13A01150-074 |
|      | 1   | ANGLE SISTER KEEL ATTACH L. | 13A01359-149 |
|      | 1   | ANGLE SISTER KEEL ATTACH R. | 13A01359-150 |
|      | 4   | ANGLE-SHORT                 | 13A01359-124 |
| 26   | 1   | SKIN-BOTTOM LOWER FWD L.    | 13A01163-043 |
|      | 1   | SKIN-BOTTOM LOWER FWD R.    | 13A01163-044 |
| 27   | 1   | SKIN-BOTTOM UPPER FWD L.    | 13A01153-013 |
|      | 1   | SKIN-BOTTOMUPPER FWD R.     | 13A01153-014 |
| 28   | 1   | SKIN-BOTTOM LOWER AFT       | 13A01163-017 |
| 29   | 1   | SKIN-BOTTOM UPPER AFT       | 13A01162-009 |
| 30   | 1   | SKIN-DOUBLER AFTERBODY L.   | 13A01162-015 |
|      | 1   | SKIN-DOUBLER AFTERBODY R.   | 13A01162-024 |
| 31   | 1   | SKIN AFTERBODY L.           | 13A01158-143 |
|      | 1   | SKIN AFTERBODY R.           | 13A01158-144 |
| 32   | 1   | SKIN-SIDE FWD INBRD L.      | 13A01150-037 |
|      | 1   | SKIN-SIDE FWD INBRD R.      | 13A01150-036 |
|      | 1   | SKIN-SIDE FWD OUTBRD L.     | 13A01150-039 |
|      | 1   | SKIN-SIDE FWD OUTBRD R.     | 13A01150-038 |
| 33   | 1   | SKIN-SIDE CENTER INBRD R.   | 13A01150-036 |
|      | 1   | SKIN-SIDE CENTER INBRD L.   | 13A01150-037 |
|      | 1   | SKIN-SIDE CENTER OUTBRD R.  | 13A01150-038 |
|      | 1   | SKIN-SIDE CENTER OUTBRD L.  | 13A01150-039 |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

HULL ASSEMBLY AMPHIB FLOATS, BULKHEADS & BOTTOM SKINS - FIGURE 1

| ITEM | QTY | PART DESCRIPTION     | PART NO.     |
|------|-----|----------------------|--------------|
| 34   | 1   | SKIN-SIDE AFT R.     | 13A01150-040 |
|      | 1   | SKIN-SIDE AFT L.     | 13A01150-123 |
| 35   | 2   | STEP-BOARDING        | 3A01000-005  |
| 36   | 1   | BUMPER NOSE-AMPHIB   | 13A01733-001 |
|      | 1   | BUMPER NOSE-SEAPLANE | 13S01735-001 |
| 37   | 1   | BUMPER-AFT-FLOAT     | 13A01734-001 |

**HULL ASSEMBLY STRAIGHT FLOATS, BULKHEADS & BOTTOM SKINS  
(S/N 13067 & UP)**

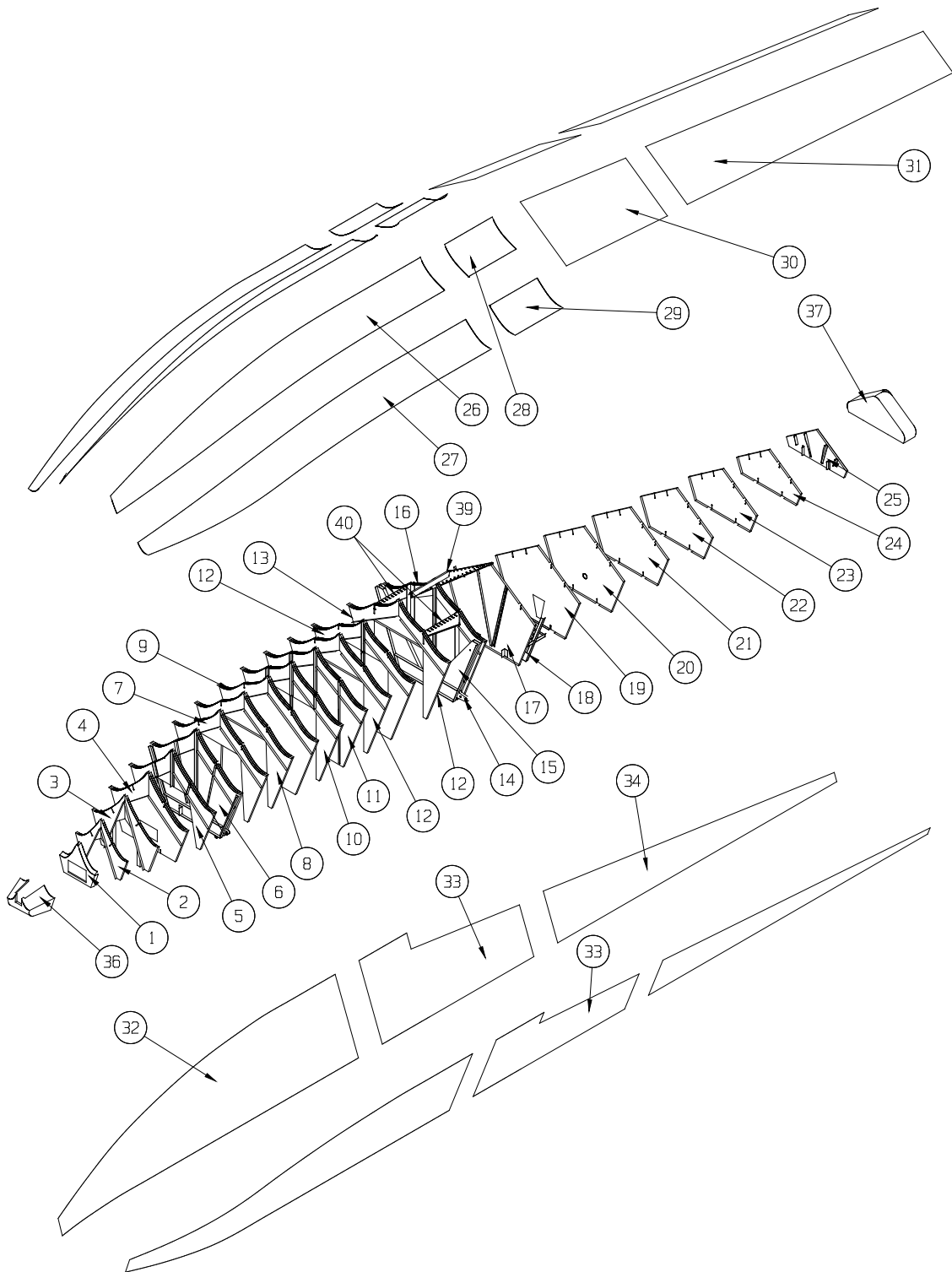


FIGURE 2

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

HULL ASSEMBLY STRAIGHT FLOATS, BULKHEADS & BOTTOM SKINS - FIGURE 2

| ITEM | QTY | PART DESCRIPTION            | PART NO.         |
|------|-----|-----------------------------|------------------|
| 1    | 1   | ASSY BULKHEAD #1            | 13A01000-185     |
|      | 1   | BULKHEAD BLANK              | 13A01156-084     |
|      | 1   | DOUBLER                     | 13A01156-085     |
|      | 1   | KEEL ANGLE L.               | 13A01357-049     |
|      | 1   | KEEL ANGLE R.               | 13A01357-050     |
|      | A/R | NUT PLATES                  | MS21047-24       |
|      | 1   | ANGLE-TOP RAIL L.           | 6A01156-055      |
|      | 1   | ANGLE-TOP RAIL R.           | 6A01156-054      |
|      | 2   | 1                           | ASSY BULKHEAD #2 |
| 1    |     | SIDE PANEL L.               | 13A01150-045     |
| 1    |     | SIDE PANEL R.               | 13A01150-044     |
| 1    |     | FLUTE BOTTOM L.             | 13A01150-003     |
| 1    |     | FLUTE BOTTOM R.             | 13A01150-002     |
| 1    |     | "T" SECTION KEEL ATTACH     | 13A01381-002     |
| 2    |     | ANGLE SISTER KEEL ATTACH    | 13A01359-127     |
| 3    |     | 1                           | ASSY BULKHEAD #3 |
|      | 1   | SIDE PANEL L.               | 13A01150-047     |
|      | 1   | SIDE PANEL R.               | 13A01150-046     |
|      | 1   | FLUTE BOTTOM L.             | 13A01150-005     |
|      | 1   | FLUTE BOTTOM R.             | 13A01150-004     |
|      | 1   | "T" SECTION KEEL ATTACH     | 13A01381-003     |
|      | 2   | ANGLE SISTER KEEL ATTACH    | 13A01359-128     |
|      | 1   | ANGLE-VERT. STIFFENER L.    | 13A01382-005     |
|      | 1   | ANGLE-VERT. STIFFENER R.    | 13A01382-004     |
| 4    | 1   | ASSY BULKHEAD #4            | 13A01000-188     |
|      | 1   | FLUTE FWD L.                | 13A01150-007     |
|      | 1   | FLUTE FWD R.                | 13A01150-006     |
|      | 1   | FLUTE AFT L.                | 13A01150-009     |
|      | 1   | FLUTE AFT R.                | 13A01150-008     |
|      | 1   | PANEL-MAIN BULKHEAD         | 13A01150-048     |
|      | 1   | "T" SECTION KEEL ATTACH     | 13A01381-001     |
|      | 1   | ANGLE SISTER KEEL ATTACH L. | 13A01359-125     |
|      | 1   | ANGLE SISTER KEEL ATTACH R. | 13A01359-126     |
|      | 1   | ANGLE-NOSE BOX ATTACH L.    | 13A01382-001     |
|      | 1   | ANGLE-NOSE BOX ATTACH R.    | 13A01382-002     |
|      | 2   | ANGLE-TOP RAIL ATTACH       | 13A01359-124     |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

HULL ASSEMBLY STRAIGHT FLOATS, BULKHEADS & BOTTOM SKINS - FIGURE 2

| ITEM | QTY                      | PART DESCRIPTION            | PART NO.     |
|------|--------------------------|-----------------------------|--------------|
| 5    | 1                        | ASSY BULKHEAD #5            | 13A01000-189 |
|      | 1                        | SIDE PANEL L.               | 13A01150-049 |
|      | 1                        | SIDE PANEL R.               | 13A01150-050 |
|      | 1                        | FLUTE FWD R.                | 13A01150-010 |
|      | 1                        | FLUTE FWD L.                | 13A01150-011 |
|      | 1                        | FLUTE AFT R.                | 13A01150-012 |
|      | 1                        | FLUTE AFT L.                | 13A01150-013 |
|      | 1                        | PANEL-CENTER                | 13A01150-051 |
|      | 1                        | "T" SECTION-KEEL ATTACH     | 13A01381-004 |
|      | 2                        | ANGLE-SISTER KEEL ATTACH    | 13A01359-129 |
| 6    | 1                        | ASSY BULKHEAD #6 R.         | 13A01000-190 |
|      | 1                        | ASSY BULKHEAD #6 L.         | 13A01000-243 |
|      | 1                        | BODY BULKHEAD               | 13A01150-052 |
|      | 1                        | FLUTE FWD R.                | 13A01150-014 |
|      | 1                        | FLUTE FWD L.                | 13A01150-015 |
|      | 1                        | FLUTE AFT R.                | 13A01150-016 |
|      | 1                        | FLUTE AFT L.                | 13A01150-017 |
|      | 1                        | PANEL-UPPER-STRUT FITT. L.  | 13A01160-003 |
|      | 1                        | PANEL-UPPER STRUT FITT. R.  | 13A01160-004 |
|      | 1                        | ARM-SIDE SKIN ATTACH L.     | 13A01427-009 |
|      | 1                        | ARM-SIDE SKIN ATTACH R.     | 13A01427-010 |
|      | 2                        | ANGLE-TOP RAIL ATTACH       | 13A01382-003 |
|      | 1                        | ANGLE-SISTER KEEL ATTACH L. | 13A01359-165 |
|      | 1                        | ANGLE-SISTER KEEL ATTACH R. | 13A01359-164 |
|      | 1                        | "T" SECTION LOWER           | 13A01381-013 |
|      | 1                        | "T" SECTION UPPER           | 13A01381-014 |
| 1    | ANGLE PANEL ATTACH UPPER | 13A01359-163                |              |
| 6A   | 1                        | ASSY SPR. BAR PANEL L.      | 13A01000-217 |
|      | 1                        | ASSY SPR. BAR PANEL R.      | 13A01000-216 |
|      | 1                        | PANEL L.                    | 13A01160-003 |
|      | 1                        | PANEL R.                    | 13A01160-004 |
|      | 1                        | ANGLE VERTICAL L.           | 13A01427-007 |
|      | 1                        | ANGLE VERTICAL R.           | 13A01427-008 |
| 2    | ANGLE-TOP RAIL ATTACH    | 13A01382-003                |              |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

HULL ASSEMBLY STRAIGHT FLOATS, BULKHEADS & BOTTOM SKINS - FIGURE 2

| ITEM | QTY | PART DESCRIPTION             | PART NO.     |
|------|-----|------------------------------|--------------|
| 7    | 1   | ASSY BULKHEAD #7             | 13A01000-191 |
|      | 1   | SIDE PANEL L.                | 13A01150-053 |
|      | 1   | SIDE PANEL R.                | 13A01150-054 |
|      | 1   | PANEL CENTER                 | 13A01150-055 |
|      | 1   | FLUTE-FWD R.                 | 13A01150-018 |
|      | 1   | FLUTE-FWD L.                 | 13A01150-019 |
|      | 1   | FLUTE-AFT R.                 | 13A01150-020 |
|      | 1   | FLUTE-AFT L.                 | 13A01150-021 |
|      | 1   | "T" SECTION KEEL ATTACH      | 13A01381-008 |
|      | 2   | ANGLE-SISTER KEEL ATTACH     | 13A01359-130 |
| 8    | 1   | ASSY #8 BULKHEAD             | 13A01000-192 |
|      | 1   | SIDE PANEL R.                | 13A01150-056 |
|      | 1   | SIDE PANEL L.                | 13A01150-057 |
|      | 1   | PANEL-CENTER                 | 13A01150-058 |
|      | 1   | FLUTE-FWD R.                 | 13A01150-022 |
|      | 1   | FLUTE-FWD L.                 | 13A01150-023 |
|      | 1   | FLUTE-AFT R.                 | 13A01150-024 |
|      | 1   | FLUTE-AFT L.                 | 13A01150-025 |
|      | 1   | "T" SECTION KEEL ATTACH      | 13A01381-006 |
|      | 2   | ANGLE-SISTER KEEL ATTACH     | 13A01359-131 |
| 9    | 1   | ASSY #9 BULKHEAD             | 13A01000-193 |
|      | 1   | PANEL-MAIN BULKHEAD          | 13A01150-059 |
|      | 1   | FLUTE-FWD R.                 | 13A01150-026 |
|      | 1   | FLUTE-FWD L.                 | 13A01150-027 |
|      | 1   | FLUTE-AFT R.                 | 13A01150-028 |
|      | 1   | FLUTE-AFT L.                 | 13A01150-029 |
|      | 1   | ANGLE-SISTER KEEL ATTACH R.  | 13A01359-152 |
|      | 1   | ANGLE-SISTER KEEL ATTACH L.  | 13A01359-153 |
|      | 2   | ANGLE-TOP RAIL ATTACH        | 13A01359-124 |
|      | 1   | "T" SECTION-MAIN KEEL ATTACH | 13A01381-012 |
| 10   | 1   | ASSY #10 BULKHEAD            | 13A01000-194 |
|      | 1   | SIDE PANEL R.                | 13A01150-060 |
|      | 1   | SIDE PANEL L.                | 13A01150-061 |
|      | 1   | PANEL CENTER                 | 13A01150-062 |
|      | 2   | FLUTE-FWD R.                 | 13A01150-030 |
|      | 2   | FLUTE-FWD L.                 | 13A01150-031 |
|      | 1   | "T" SECTION-MAIN KEEL ATTACH | 13A01381-008 |
|      | 2   | ANGLE-SISTER KEEL ATTACH     | 13A01359-133 |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

HULL ASSEMBLY STRAIGHT FLOATS, BULKHEADS & BOTTOM SKINS - FIGURE 2

| ITEM | QTY | PART DESCRIPTION             | PART NO.                    |
|------|-----|------------------------------|-----------------------------|
| 11   | 1   | ASSY #11 BULKHEAD            | 13A01000-195                |
|      | 1   | PANEL-MAIN BULKHEAD          | 13A01150-063                |
|      | 2   | FLUTE R.                     | 13A01150-034                |
|      | 2   | FLUTE L.                     | 13A01150-035                |
|      | 1   | "T" SECTION-MAIN KEEL ATTACH | 13A01381-012                |
|      | 1   | ANGLE-SISTER KEEL L.         | 13A01359-151                |
|      | 1   | ANGLE-SISTER KEEL R.         | 13A01359-168                |
|      | 2   | ANGLE-TOP RAIL ATTACH        | 13A01359-124                |
|      | 12  | 3                            | ASSY #12, #13, #15 BULKHEAD |
| 1    |     | SIDE PANEL R.                | 13A01150-064                |
| 1    |     | SIDE PANEL L.                | 13A01150-065                |
| 1    |     | PANEL CENTER                 | 13A01150-066                |
| 2    |     | FLUTE-BOTTOM R.              | 13A01150-034                |
| 2    |     | FLUTE-BOTTOM L.              | 13A01150-035                |
| 1    |     | "T" SECTION-KEEL ATTACH      | 13A01381-008                |
| 2    |     | ANGLE-SISTER KEEL ATTACH     | 13A01359-133                |
| 13   | 1   | ASSY #14 BULKHEAD            | 13A01000-197                |
|      | 1   | PANEL-MAIN BULKHEAD          | 13A01150-071                |
|      | 2   | FLUTE-BOTTOM R.              | 13A01150-034                |
|      | 2   | FLUTE-BOTTOM L.              | 13A01150-035                |
|      | 2   | ANGLE-DOOR HORZ.             | 13A01359-134                |
|      | 1   | ANGLE-SISTER KEEL ATTACH R.  | 13A01359-142                |
|      | 1   | ANGLE-SISTER KEEL ATTACH L.  | 13A01359-141                |
|      | 1   | "T" SECTION KEEL ATTACH      | 13A01381-011                |
|      | 1   | "T" SECTION-UPPER            | 13A01381-009                |
|      | 2   | ANGLE-TOP RAIL ATTACH        | 13A01359-124                |
|      | 1   | ASSY COVER                   | 13A01000-208                |
|      | 1   | COVER                        | 13A01162-007                |
|      | 1   | "T" SECTION                  | 13A01381-010                |
|      | 40  | SCREW-COVER ATTACH           | AN526-832R6                 |
|      | 14  | 1                            | FITTING-MAIN STRUT          |



WIPLINE MODEL 13000 FLOAT PARTS MANUAL

HULL ASSEMBLY STRAIGHT FLOATS, BULKHEADS & BOTTOM SKINS - FIGURE 2

| ITEM | QTY | PART DESCRIPTION                        | PART NO.          |
|------|-----|---|-------------------|
| 15   | 1   | ASSY MAIN STRUT PANEL                   | 13A01000-222      |
|      | 1   | PANEL-INBOARD L.                        | 13A01160-001      |
|      | 1   | PANEL-INBOARD R.                        | 13A01160-002      |
|      | 1   | PANEL-OUTBOARD L.                       | 13A01160-009      |
|      | 1   | PANEL-OUTBOARD R.                       | 13A01160-008      |
|      | 1   | PANEL TOP R.                            | 13A01160-006      |
|      | 1   | PANEL TOP L.                            | 13A01160-007      |
|      | 1   | FITTING (ITEM 14)                       | 13A01161-002      |
|      | 4   | ANGLE-TOP RAIL ATTACH                   | 13A01382-003      |
|      | 12  | BOLT                                    | AN5-15A           |
|      | 26  | BOLT                                    | AN5-20A           |
|      | 76  | WASHER                                  | NAS1149F0563P     |
|      | 38  | NUT                                     | MS21044N5         |
|      | 16  | 1                                       | ASSY BULKHEAD #16 |
| 1    |     | PANEL MAIN BULKHEAD                     | 13S01150-210      |
| 2    |     | FLUTE-BOTTOM L.                         | 13A01150-035      |
| 2    |     | FLUTE-BOTTOM R.                         | 13A01150-034      |
| 1    |     | ANGLE-STIFFENER – VERTICAL-LEFT         | 13A01359-151      |
| 1    |     | ANGLE-STIFFENER – VERTICAL-RIGHT        | 13A01359-168      |
| 1    |     | ANGLE-.LONG, STRAIGHT CENTER STIFFENER  | 13S01359-259      |
| 1    |     | ANGLE-LONG STRAIGHT CENTER STIFFENER    | 13S01359-260      |
| 1    |     | ANGLE-AFT BOTTOM ANGLE - RIGHT          | 13S01163-143      |
| 1    |     | ANGLE- AFT BOTTOM ANGLE – LEFT          | 13S01163-144      |
| 1    |     | ANGLE-AFT SHORT STIFFENER – RIGHT       | 13S01359-253      |
| 1    |     | ANGLE-AFT SHORT STIFFENER – LEFT        | 13S01359-254      |
| 1    |     | ANGLE-AFT INNER DOG LEG STIFFENER-RIGHT | 13S01359-255      |
| 1    |     | ANGLE-AFT INNER DOG LEF STIFFENER- LEFT | 13S01359-256      |
| 2    |     | COVERS                                  | 13S01150-214      |
| 17   |     | 1                                       | ASSY BULKHEAD #17 |
|      | 1   | BULKHEAD BODY                           | 13S01150-209      |
|      | 2   | SISTER KEEL ANGLE                       | 13A01359-124      |
|      | 1   | ANGLE, VERTICAL                         | 13S01359-257      |
|      | 1   | ANGLE VERTICAL                          | 13S01359-258      |
|      | 2   | TOP RAIL ATTACH ANGLE                   | 13A01382-003      |
| 18   | 1   | ASSY PANEL DRAG STRUT                   | 13A01000-212      |
|      | 1   | PANEL-MAIN                              | 13A01160-005      |
|      | 1   | ANGLE-VERTICAL L.                       | 13A01427-017      |
|      | 1   | ANGLE VERTICAL R.                       | 13A01427-018      |
|      | 2   | ANGLE-TOP RAIL ATTACH                   | 13A01382-003      |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

HULL ASSEMBLY STRAIGHT FLOATS, BULKHEADS & BOTTOM SKINS - FIGURE 2

| ITEM | QTY | PART DESCRIPTION            | PART NO.     |
|------|-----|-----------------------------|--------------|
| 19   | 1   | ASSY BULKHEAD #18           | 13A01000-201 |
|      | 1   | PANEL MAIN BULKHEAD         | 13A01150-067 |
|      | 1   | ANGLE-SISTER KEEL LONG L.   | 13A01359-135 |
|      | 1   | ANGLE-SISTER KEEL LONG R.   | 13A01359-136 |
|      | 4   | ANGLE-SHORT                 | 13A01359-124 |
|      | 1   | DOUBLER-ACCESS HOLE         | 13A01160-012 |
|      | 1   | ANGLE-ACCESS HOLE           | 13A01359-166 |
|      | 1   | COVER-ACCESS                | 13A01150-091 |
|      | A/R | SCREW                       | AN526-632R6  |
| 20   | 1   | ASSY BULKHEAD #19           | 13A01000-202 |
|      | 1   | PANEL MAIN                  | 13A01150-068 |
|      | 1   | ANGLE SISTER KEEL LONG L.   | 13A01359-037 |
|      | 1   | ANGLE SISTER KEEL LONG R.   | 13A01359-138 |
|      | 4   | ANGLE-SHORT                 | 13A01359-124 |
| 21   | 1   | ASSY BULKHEAD #20           | 13A01000-203 |
|      | 1   | PANEL MAIN                  | 13A01150-069 |
|      | 1   | ANGLE SISTER KEEL LONG L.   | 13A01359-139 |
|      | 1   | ANGLE SISTER KEEL LONG R.   | 13A01359-140 |
|      | 4   | ANGLE-SHORT                 | 13A01359-124 |
| 22   | 1   | ASSY BULKHEAD #21           | 13A01000-204 |
|      | 1   | PANEL MAIN                  | 13A01150-070 |
|      | 1   | ANGLE SISTER KEEL LONG L.   | 13A01359-143 |
|      | 1   | ANGLE SISTER KEEL LONG R.   | 13A01359-144 |
|      | 4   | ANGLE-SHORT                 | 13A01359-124 |
| 23   | 1   | ASSY BULKHEAD #22           | 13A01000-205 |
|      | 1   | PANEL MAIN                  | 13A01150-072 |
|      | 1   | ANGLE SISTER KEEL LONG L.   | 13A01359-145 |
|      | 1   | ANGLE SISTER KEEL LONG R.   | 13A01359-146 |
|      | 4   | ANGLE-SHORT                 | 13A01359-124 |
| 24   | 1   | ASSY BULKHEAD #23           | 13A01000-206 |
|      | 1   | PANEL MAIN                  | 13A01150-073 |
|      | 1   | ANGLE SISTER KEEL ATTACH L. | 13A01359-147 |
|      | 1   | ANGLE-SISTER KEEL ATTACH R. | 13A01359-148 |
|      | 4   | ANGLE-SHORT                 | 13A01359-124 |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

HULL ASSEMBLY STRAIGHT FLOATS, BULKHEADS & BOTTOM SKINS - FIGURE 2

| ITEM | QTY | PART DESCRIPTION            | PART NO.     |
|------|-----|-----------------------------|--------------|
| 25   | 1   | ASSY BULKHEAD #24           | 13A01000-207 |
|      | 1   | PANEL MAIN                  | 13A01150-074 |
|      | 1   | ANGLE SISTER KEEL ATTACH L. | 13A01359-149 |
|      | 1   | ANGLE SISTER KEEL ATTACH R. | 13A01359-150 |
|      | 4   | ANGLE-SHORT                 | 13A01359-124 |
| 26   | 1   | SKIN-BOTTOM LOWER FWD L.    | 13A01163-043 |
|      | 1   | SKIN-BOTTOM LOWER FWD R.    | 13A01163-044 |
| 27   | 1   | SKIN-BOTTOM UPPER FWD L.    | 13A01153-013 |
|      | 1   | SKIN-BOTTOMUPPER FWD R.     | 13A01153-014 |
| 28   | 1   | SKIN-BOTTOM LOWER AFT       | 13A01163-017 |
| 29   | 1   | SKIN-BOTTOM UPPER AFT       | 13A01162-009 |
| 30   | 1   | SKIN-DOUBLER AFTERBODY L.   | 13S01162-093 |
|      | 1   | SKIN-DOUBLER AFTERBODY R.   | 13S01162-092 |
| 31   | 1   | SKIN AFTERBODY L.           | 13A01158-143 |
|      | 1   | SKIN AFTERBODY R.           | 13A01158-144 |
| 32   | 1   | SKIN-SIDE FWD INBRD L.      | 13A01150-037 |
|      | 1   | SKIN-SIDE FWD INBRD R.      | 13A01150-036 |
|      | 1   | SKIN-SIDE FWD OUTBRD L.     | 13A01150-039 |
|      | 1   | SKIN-SIDE FWD OUTBRD R.     | 13A01150-038 |
| 33   | 1   | SKIN-SIDE CENTER INBRD R.   | 13A01163-014 |
|      | 1   | SKIN-SIDE CENTER INBRD L.   | 13A01163-013 |
|      | 1   | SKIN-SIDE CENTER OUTBRD R.  | 13A01163-016 |
|      | 1   | SKIN-SIDE CENTER OUTBRD L.  | 13A01163-015 |
| 34   | 1   | SKIN-SIDE AFT R.            | 13A01150-040 |
|      | 1   | SKIN-SIDE AFT L.            | 13A01150-123 |
| 35   | 2   | STEP-BOARDING               | 3A01000-005  |
| 36   | 1   | BUMPER NOSE-AMPHIB          | 13A01733-001 |
|      | 1   | BUMPER NOSE-SEAPLANE        | 13S01735-001 |
| 37   | 1   | BUMPER-AFT-FLOAT            | 13A01734-001 |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

HULL ASSEMBLY STRAIGHT FLOATS, BULKHEADS & BOTTOM SKINS - FIGURE 2

| ITEM | QTY | PART DESCRIPTION                 | PART NO.     |
|------|-----|----------------------------------|--------------|
| 38   | 1   | DOUBLER ZINC ANODE (PER SET QTY) | 13S01150-211 |
|      | 1   | DOUBLER ZINC ANODE (PER SET QTY) | 13S01150-212 |
| 39   | 1   | SAPCER – KEEL                    | 13S01154-080 |
|      | 1   | GUSSET – KEEL – INBOARD          | 13S01156-187 |
|      | 1   | GUSSET – KEEL – OUTBOARD         | 13S01156-188 |
|      | 2   | WASHER - ZINC ANODE              | 13S01150-213 |
| 40   | 2   | SPACER – SISTER KEEL             | 13S01156-189 |
|      | 1   | GUSSET – SISTER KEEL - INBOARD   | 13S01162-094 |
|      | 1   | GUSSET – SISTER KEEL - OUTBOARD  | 13S01162-095 |

**HULL ASSEMBLY AMPHIB FLOATS, TOP SKIN**

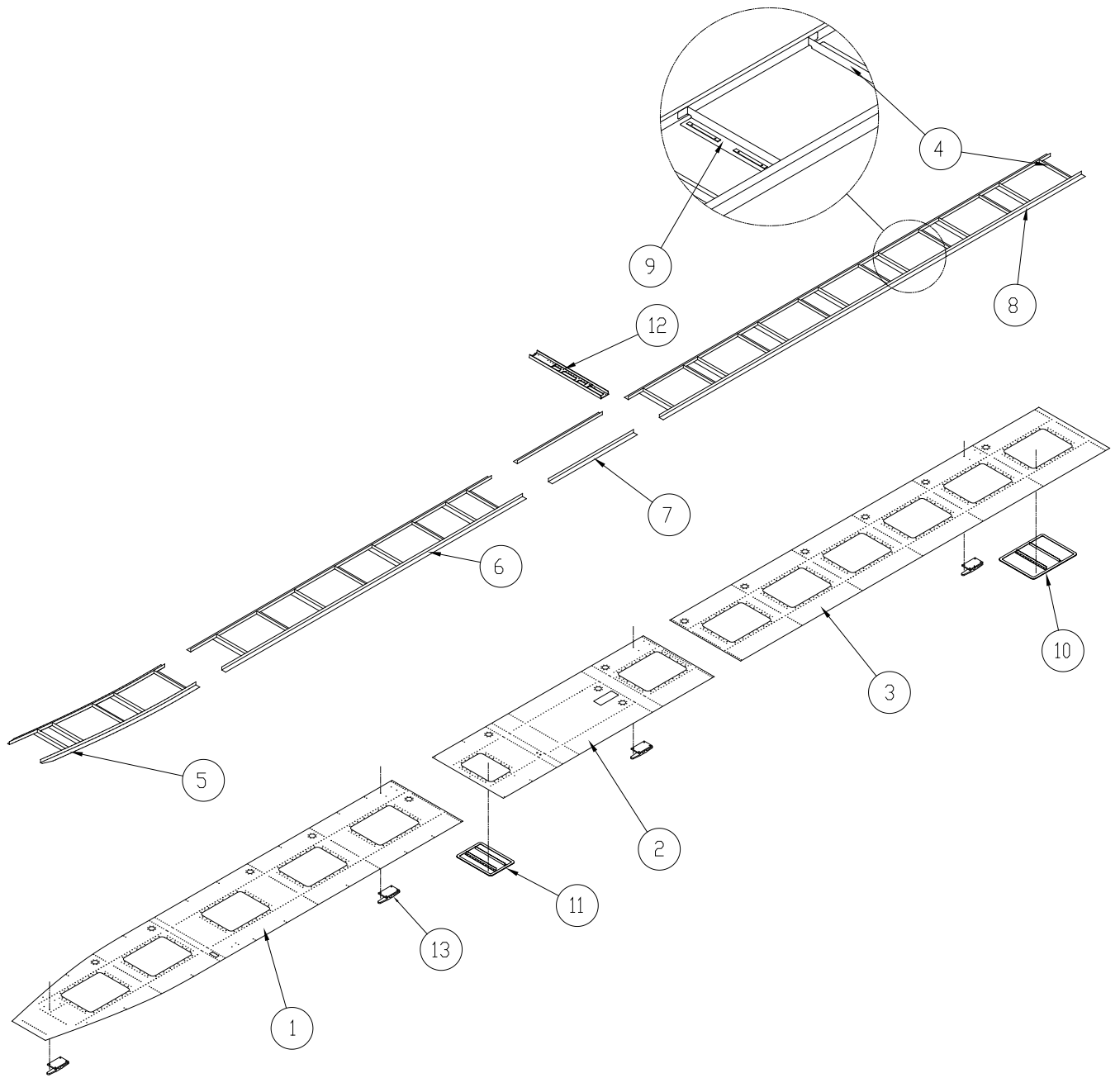


FIGURE 3

## WIPLINE MODEL 13000 FLOAT PARTS MANUAL

## HULL ASSEMBLY AMPHIB FLOAT TOP SKIN - FIGURE 3

| ITEM | QTY | PART DESCRIPTION                           | PART NO.     |
|------|-----|--|--------------|
|      | 1   | ASSY TOP SKIN COMPLETE L.                  | 13A01000-231 |
|      | 1   | ASSY TOP SKIN COMPLETE R.                  | 13A01000-246 |
| 1    | 1   | SKIN-TOP-FWD L.                            | 13A01150-041 |
|      | 2   | SKIN-TOP-FWD R.                            | 13A01150-042 |
| 2    | 1   | SKIN-TOP-CENTER L.                         | 13A01163-011 |
|      | 1   | SKIN-TOP-CENTER R.                         | 13A01163-012 |
| 3    | 1   | SKIN-TOP-AFT L.                            | 13A01150-043 |
|      | 1   | SKIN-TOP-AFT R.                            | 13A01150-122 |
| 4    | 26  | ANGLE-CROSS TIE                            | 13A01382-006 |
| 5    | 1   | ANGLE TOP FWD R.                           | 13A01382-014 |
|      | 1   | ANGLE TOP FWD L.                           | 13A01382-015 |
| 6    | 1   | ANGLE-TOP CENTER R.                        | 13A01382-008 |
|      | 1   | ANGLE-TOP CENTER L.                        | 13A01382-009 |
| 7    | 1   | ANGLE-TOP CENTER R.                        | 13A01382-010 |
|      | 1   | ANGLE-TOP CENTER L.                        | 13A01382-011 |
| 8    | 1   | ANGLE-TOP AFT R.                           | 13A01382-012 |
|      | 1   | ANGLE-TOP AFT L.                           | 13A01382-013 |
| 9    | 180 | TINNERMAN NUT PLATE with<br>TAPE-INSULATOR | 1002481      |
| 10   | 12  | ASSY-INSP. COVER LARGE                     | 13A01000-211 |
|      | 12  | COVER GASKETS                              | 13A01567-010 |
| 11   | 1   | ASSY-INSP. COVER SMALL                     | 13A01000-210 |
|      | 1   | COVER GASKET                               | 13A01567-009 |
| 12   | 1   | CHANNEL-DRAG STRUT                         | 13A01374-001 |
| 13   | A/R | BOLLARD-TIE DOWN                           | 13A01233-001 |

**HULL ASSEMBLY STRAIGHT FLOAT, TOP SKIN  
(S/N 13067 & UP)**

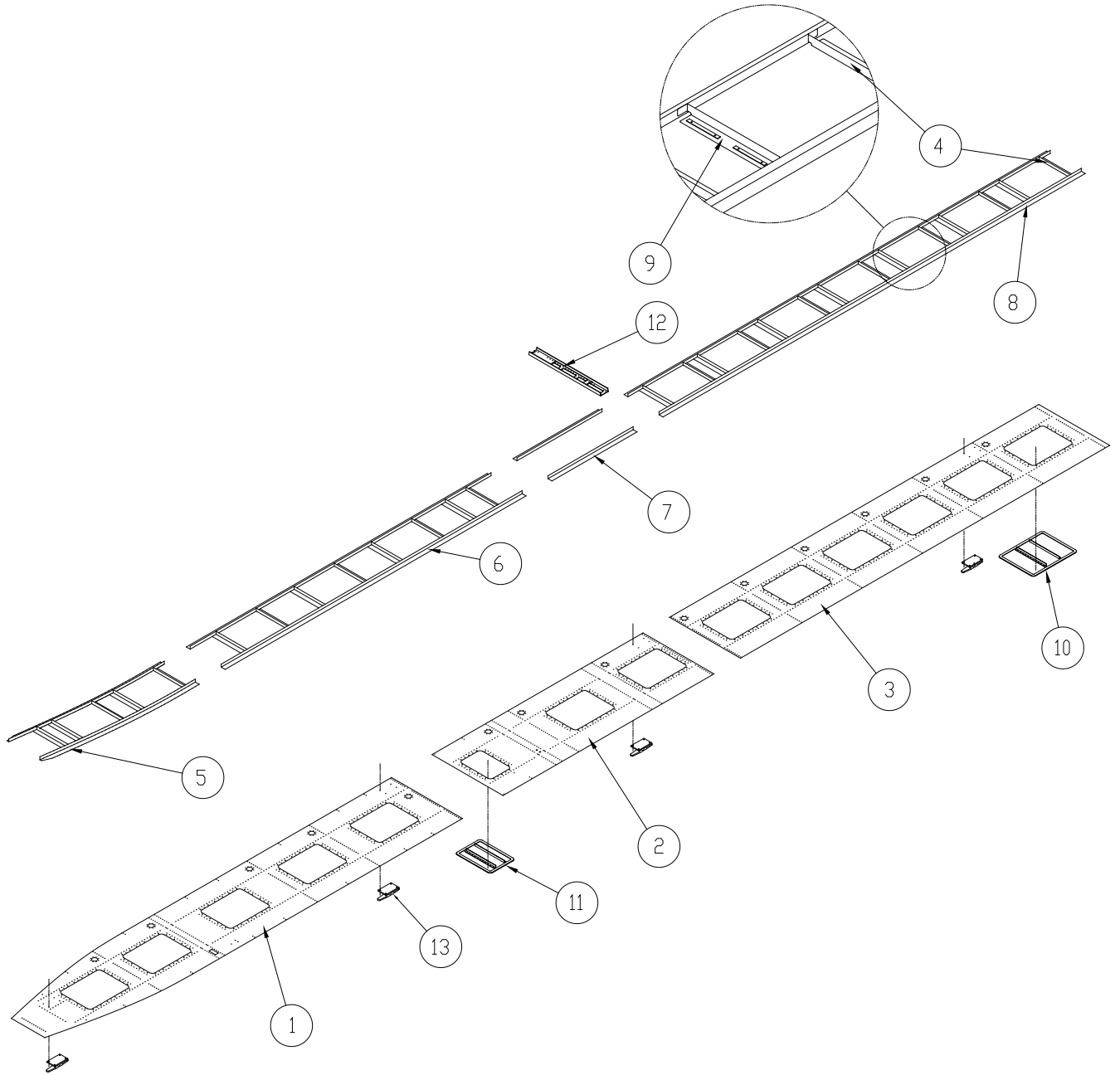


FIGURE 4

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

HULL ASSEMBLY STRAIGHT FLOAT, TOP SKIN - FIGURE 4

| ITEM | QTY | PART DESCRIPTION                           | PART NO.     |
|------|-----|--|--------------|
|      | 1   | ASSY TOP SKIN COMPLETE L.                  | 13S01000-066 |
|      | 1   | ASSY TOP SKIN COMPLETE R.                  | 13S01000-067 |
| 1    | 1   | SKIN-TOP-FWD L.                            | 13A01150-041 |
|      | 2   | SKIN-TOP-FWD R.                            | 13A01150-042 |
| 2    | 1   | SKIN-TOP-CENTER L.                         | 13S01163-141 |
|      | 1   | SKIN-TOP-CENTER R.                         | 13S01163-142 |
| 3    | 1   | SKIN-TOP-AFT L.                            | 13A01150-043 |
|      | 1   | SKIN-TOP-AFT R.                            | 13A01150-122 |
| 4    | 26  | ANGLE-CROSS TIE                            | 13A01382-006 |
| 5    | 1   | ANGLE TOP FWD R.                           | 13A01382-014 |
|      | 1   | ANGLE TOP FWD L.                           | 13A01382-015 |
| 6    | 1   | ANGLE-TOP CENTER R.                        | 13A01382-008 |
|      | 1   | ANGLE-TOP CENTER L.                        | 13A01382-009 |
| 7    | 1   | ANGLE-TOP CENTER R.                        | 13A01382-010 |
|      | 1   | ANGLE-TOP CENTER L.                        | 13A01382-011 |
| 8    | 1   | ANGLE-TOP AFT R.                           | 13A01382-012 |
|      | 1   | ANGLE-TOP AFT L.                           | 13A01382-013 |
| 9    |     | TINNERMAN NUT PLATE with<br>TAPE-INSULATOR | 1002481      |
| 10   | 13  | ASSY-INSP. COVER LARGE                     | 13A01000-211 |
|      | 13  | COVER GASKET                               | 13A01567-010 |
| 11   | 1   | ASSY-INSP. COVER SMALL                     | 13A01000-210 |
|      | 1   | COVER GASKET                               | 13A01567-009 |
| 12   | 1   | CHANNEL-DRAG STRUT                         | 13A01374-001 |
| 13   | A/R | BOLLARD-TIE DOWN                           | 13A01233-001 |



**HULL WHEEL WELL AREA**

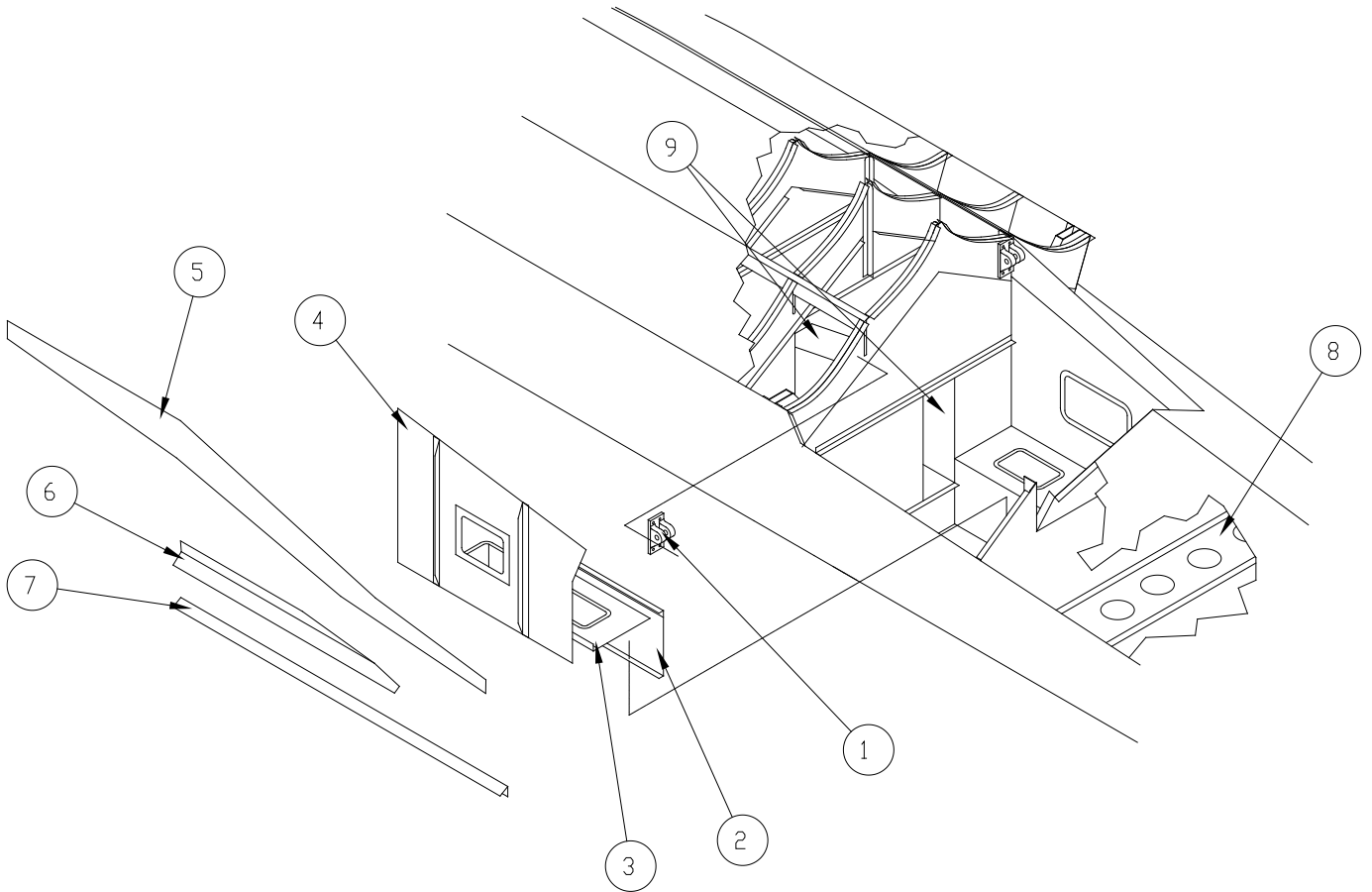


FIGURE 5

## WIPLINE MODEL 13000 FLOAT PARTS MANUAL

## HULL WHEEL WELL AREA - FIGURE 5

| ITEM | QTY | PART DESCRIPTION            | PART NO.     |
|------|-----|-----------------------------|--------------|
| 1    | 1   | TRUNION, L.                 | 13A04030-003 |
|      | 1   | TRUNION, R.                 | 13A04030-002 |
| 2    | 1   | PANEL-UPPER-VERT. L.        | 13A01000-237 |
|      | 1   | PANEL-BLANK                 | 13A01150-099 |
|      | 1   | ANGLE                       | 13A01359-171 |
|      | 1   | PANEL-UPPER VERT. R.        | 13A01000-238 |
|      | 1   | PANEL-BLANK                 | 13A01150-100 |
|      | 1   | ANGLE                       | 13A01359-172 |
| 3    | 1   | PANEL-HORZ. L.              | 13A01000-225 |
|      | 1   | PANEL-BLANK                 | 13A01150-101 |
|      | 2   | REINFORCEMENT-ACCESS HOLE   | 6A01156-014  |
|      | 2   | COVER                       | 6A01158-151  |
|      | 1   | PANEL-HORZ. R.              | 13A01000-224 |
|      | 1   | PANEL-BLANK                 | 13A01150-102 |
|      | 2   | REINFORCEMENT-ACCESS HOLE   | 6A01156-014  |
|      | 2   | COVER                       | 6A01158-151  |
| 4    | 1   | PANEL-LOWER VERT. L.        | 13A01000-227 |
|      | 1   | PANEL-BLANK                 | 13A01150-103 |
|      | 1   | REINFORCEMENT-ACCESS HOLE   | 13A01156-124 |
|      | 1   | COVER                       | 13A01150-130 |
|      | 1   | ANGLE-FWD                   | 13A01359-187 |
|      | 1   | ANGLE-AFT                   | 13A01359-188 |
|      | 1   | PANEL-LOWER VERT. R.        | 13A01000-226 |
|      | 1   | PANEL-BLANK                 | 13A01150-104 |
|      | 1   | REINFORCEMENT-ACCESS HOLE   | 13A01156-124 |
|      | 1   | COVER                       | 13A01150-130 |
|      | 1   | ANGLE-FWD                   | 13A01359-187 |
|      | 1   | ANGLE-AFT                   | 13A01359-188 |
| 5    | 2   | CARRY THRU STRAP            | 13A01001-035 |
| 6    | 1   | ANGLE-CARRY THRU-OUTSIDE L. | 13A01162-013 |
|      | 1   | ANGLE-CARRY THRU-OUTSIDE R. | 13A01162-014 |
| 7    | 2   | ANGLE-CARRY THRU-INSIDE     | 13A01008-128 |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

HULL WHEEL WELL AREA - FIGURE 5

| ITEM | QTY | PART DESCRIPTION       | PART NO.     |
|------|-----|------------------------|--------------|
| 8    | 1   | PANEL-BULKHEAD SUPPORT | 13A01000-245 |
|      | 1   | PANEL-BLANK            | 13A01160-010 |
|      | 1   | ANGLE-LONG             | 13A01359-180 |
|      | 1   | ANGLE-SHORT            | 13A01359-181 |
| 9    | 1   | ASSY-TUNNEL COMPLETE   | 13A01000-213 |
|      | 1   | BODY-TUNNEL            | 13A01158-145 |
|      | 1   | FITTING END-MACHINED   | 13A01210-003 |
|      | 1   | TOP-FWD                | 13A01150-094 |
|      | 1   | TOP-REAR               | 13A01158-146 |
|      | 2   | ANGLE-SIDES            | 13A01340-088 |

**EXTRUSIONS HULL, AMPHIB**

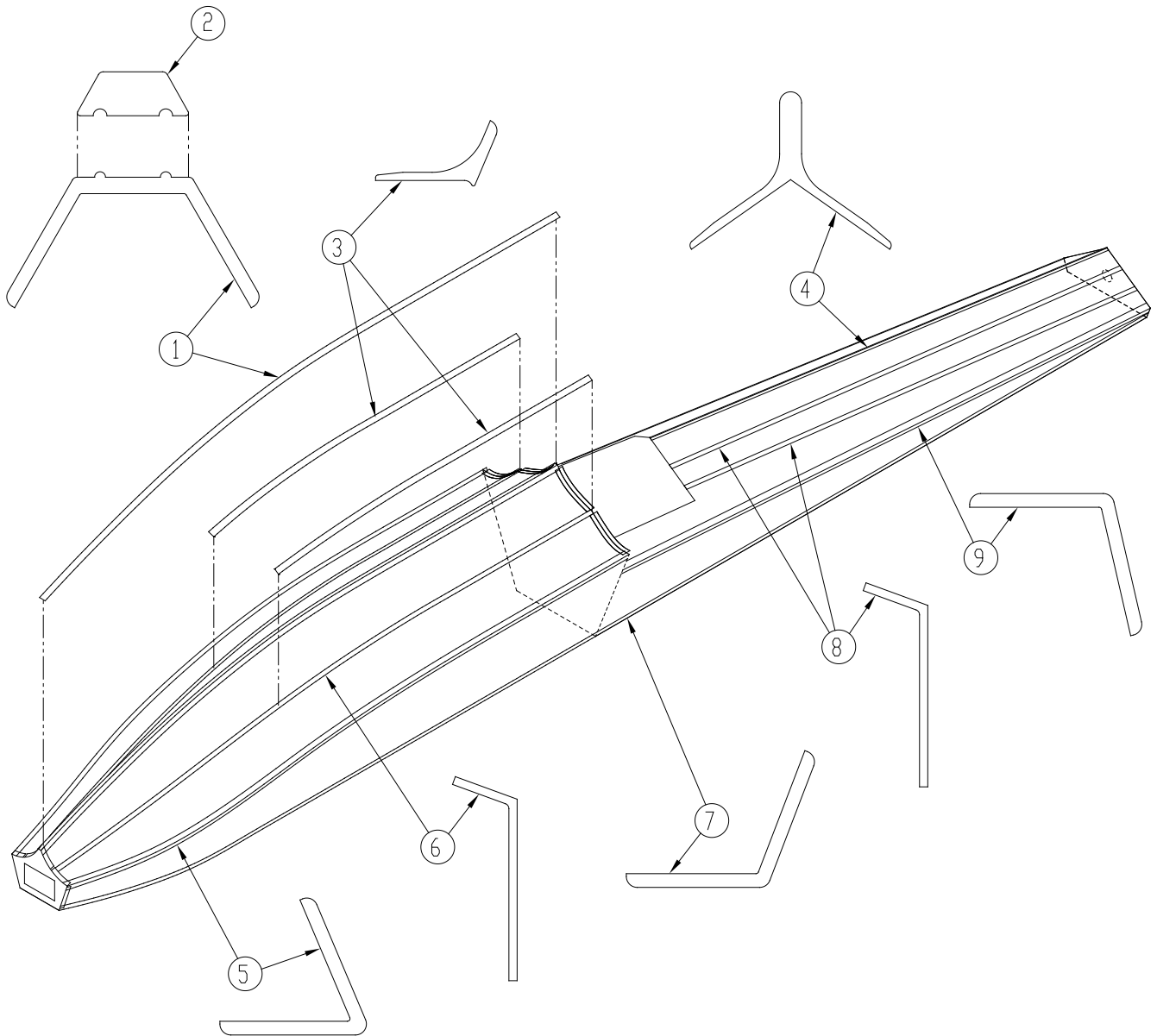


FIGURE 6

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

EXTRUSIONS HULL, AMPHIB - FIGURE 6

| ITEM | QTY | PART DESCRIPTION                  | PART NO.     |
|------|-----|-----------------------------------|--------------|
| 1    | 1   | KEEL-MAIN                         | 13A01387-001 |
| 2    | 1   | WEAR STRIP MAIN KEEL              | 13A01388-001 |
| 3    | 1   | SISTER KEEL R.                    | 8A01342-006  |
|      | 1   | SISTER KEEL L.                    | 8A01342-005  |
| 4    | 1   | KEEL-AFTERBODY                    | 13A01328-001 |
| 5    | 1   | CHINE-FORWARD-L.                  | 13A01385-001 |
|      | 1   | CHINE-FORWARD R.                  | 13A01385-002 |
| 6    | 1   | SISTER KEEL-FWD INSIDE L.         | 13A01383-005 |
|      | 1   | SISTER KEEL-FWD INSIDE R.         | 13A01383-006 |
| 7    | 1   | GUNWALL L.                        | 13A01384-001 |
|      | 1   | GUNWALL R.                        | 13A01384-002 |
| 8    | 1   | SISTER KEEL-AFTERBODY INBOARD R.  | 13A01383-002 |
|      |     | SISTER KEEL-AFTERBODY INBOARD L.  | 13A01383-001 |
|      |     | SISTER KEEL-AFTERBODY OUTBOARD R. | 13A01383-004 |
|      |     | SISTER KEEL-AFTERBODY OUTBOARD L. | 13A01383-003 |
| 9    | 1   | CHINE-AFTERBODY L.                | 13A01386-001 |
|      | 1   | CHINE-AFTERBODY R.                | 13A01386-002 |

NOTE: ANY PORTION OF ABOVE EXTRUSIONS MAY BE PURCHASED IN SECTIONS SHORTER THAN FULL LENGTH. (PLEASE NOTE AREA REQUIRED).

**EXTRUSIONS HULL, STRAIGHT FLOAT  
(S/N 13067 & UP)**

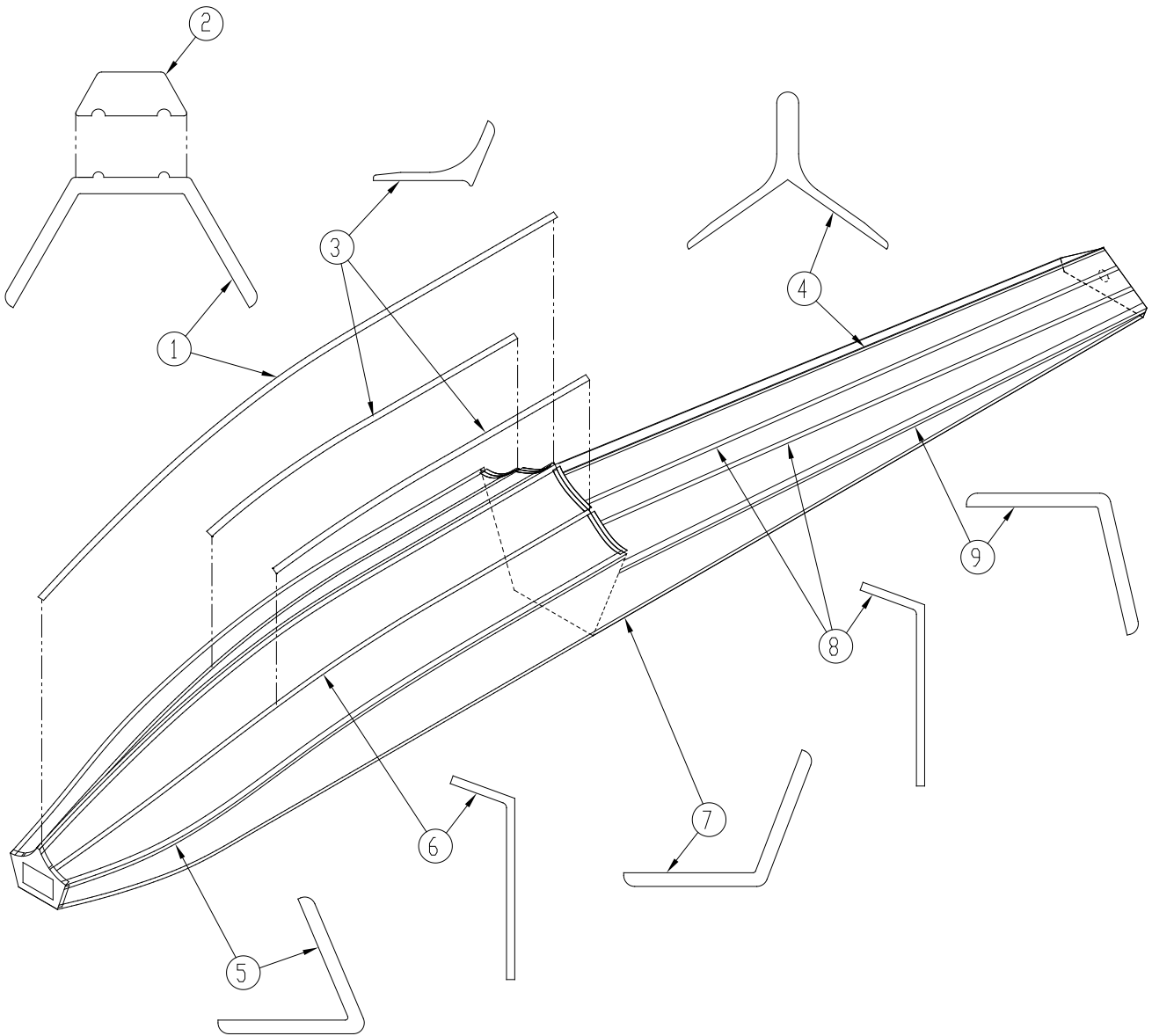


FIGURE 7

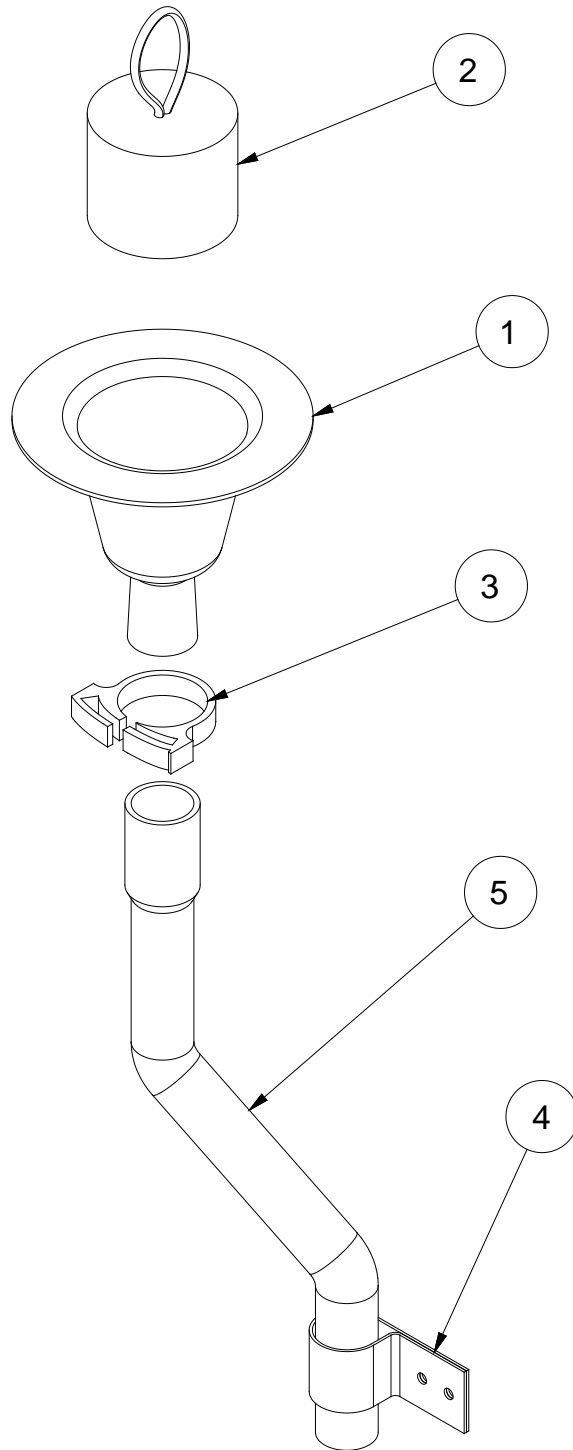
WIPLINE MODEL 13000 FLOAT PARTS MANUAL

EXTRUSIONS HULL, STRAIGHT FLOAT (S/N 13067 & UP) - FIGURE 7

| ITEM | QTY | PART DESCRIPTION               | PART NO.     |
|------|-----|--------------------------------|--------------|
| 1    | 1   | KEEL-MAIN                      | 13S01387-004 |
| 2    | 1   | WEAR STRIP MAIN KEEL           | 13A01388-001 |
| 3    | 1   | SISTER KEEL R.                 | 8A01342-006  |
|      | 1   | SISTER KEEL L.                 | 8A01342-005  |
| 4    | 1   | KEEL-AFTERBODY                 | 13S01328-004 |
| 5    | 1   | CHINE-FORWARD-L.               | 13A01385-001 |
|      | 1   | CHINE-FORWARD R.               | 13A01385-002 |
| 6    | 1   | SISTER KEEL-FWD INSIDE L.      | 13A01383-005 |
|      | 1   | SISTER KEEL-FWD INSIDE R.      | 13A01383-006 |
| 7    | 1   | GUNWALL L.                     | 13A01384-001 |
|      | 1   | GUNWALL R.                     | 13A01384-002 |
| 8    | 2   | SISTER KEEL-AFTERBODY INBOARD  | 13S01383-051 |
|      | 2   | SISTER KEEL-AFTERBODY OUTBOARD | 13S01383-052 |
| 9    | 1   | CHINE-AFTERBODY L.             | 13A01386-001 |
|      | 1   | CHINE-AFTERBODY R.             | 13A01386-002 |

NOTE: ANY PORTION OF ABOVE EXTRUSIONS MAY BE PURCHASED IN SECTIONS SHORTER THAN FULL LENGTH. (PLEASE NOTE AREA REQUIRED).

**PUMPER TUBE INSTALLATION**



**FIGURE 8**

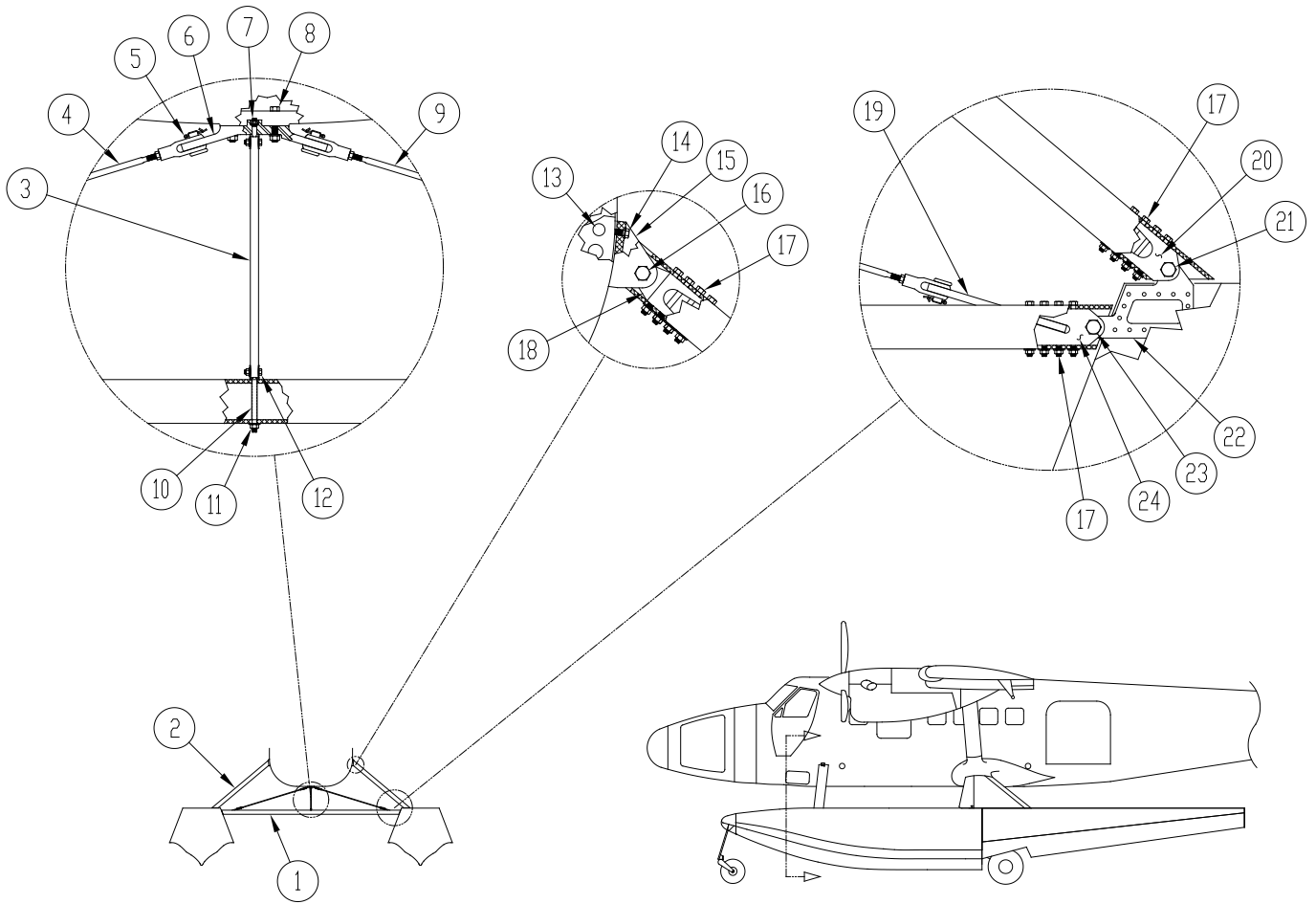


WIPLINE MODEL 13000 FLOAT PARTS MANUAL

PUMPER TUBE INSTALLATION-FIGURE 8

| ITEM | QTY       | PART DESCRIPTION                            | PART NO.                 |
|------|-----------|---|--------------------------|
| 1    | 14<br>A/R | CUP-ALULMINUM (LAKE & AIR)<br>RIVETS (SOFT) | 4A01749-001<br>AN470A4-5 |
| 2    | 1         | STOPPER-PUMPER TUBE                         | 2111                     |
| 3    | 2         | CLAMP-UPPER END                             | SNP16-10                 |
| 4    | 1         | CLAMP-LOWER END                             | 3A01158-003              |
| 5    | 1         | PUMPOUT TUBE (40.75")                       | 13A01618-042             |
|      | 1         | PUMPOUT TUBE (49")                          | 13A01618-043             |
|      | 1         | PUMPOUT TUBE (44")                          | 13A01618-044             |
|      | 1         | PUMPOUT TUBE (43")                          | 13A01618-045             |
|      | 1         | PUMPOUT TUBE (46")                          | 13A01618-046             |
|      | 1         | PUMPOUT TUBE (49")                          | 13A01618-047             |
|      | 1         | PUMPOUT TUBE (38.5")                        | 13A01618-048             |
|      | 1         | PUMPOUT TUBE (34")                          | 13A01618-049             |
|      | 1         | PUMPOUT TUBE (30")                          | 13A01618-050             |
|      | 1         | PUMPOUT TUBE (28")                          | 13A01618-051             |
|      | 1         | PUMPOUT TUBE (24.5")                        | 13A01618-052             |
|      | 1         | PUMPOUT TUBE (23.5")                        | 13A01618-053             |
|      | 1         | PUMPOUT TUBE (19.5")                        | 13A01618-054             |

**INSTALLATION STRUTS, FRONT**



**FIGURE 9**

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

INSTALLATION STRUTS, FRONT - FIGURE 9

| ITEM | QTY | PART DESCRIPTION                                   | PART NO.      |
|------|-----|--|---------------|
| 1    | 1   | SPREADER BAR FRONT                                 | 13A03335-004  |
| 2    | 2   | STRUT FRONT RIGHT                                  | 13A02335-002  |
|      | 1   | STRUT FRONT LEFT                                   | 13A02335-003  |
| 3    | 1   | STRUT-BRACE FT. SPR. BAR                           | 13A03473-001  |
| 4    | 1   | FRONT DRAG WIRE                                    | 13A02000-079  |
|      | 1   | CLEVIS "L"   | AN665-247LS * |
|      | 1   | CLEVIS "R"   | AN665-247RS * |
|      | 1   | CHECK NUT "L"                                      | AN316C10L     |
|      | 1   | CHECK NUT "R"                                      | AN316C10R     |
|      | 2   | PIN - CLEVIS                                       | MS20392-9C33  |
|      | 2   | PIN - COTTER                                       | MS24665-444   |
| 5    | 4   | PIN  | MS20392-9C33  |
|      | 4   | PIN COTTER   | MS24665-353   |
| 6    | 1   | FITTING FUSELAGE DRAG WIRE                         | 13A02469-001  |
|      | 1   | SHIM IN BELLY SKIN (not shown) pre-A/C sn 231 only | 13A02078-002  |
| 7    | 1   | EYEBOLT  | AN44-10A      |
|      | 1   | NUT  | LH3849-054    |
| 8    | 2   | BOLT-ATTACH  | AN6-21A       |
|      | 2   | WASHER   | NAS1149F0663P |
|      | 2   | NUT  | MS21044N6     |
| 9    | 1   | FRONT DRAG WIRE                                    | 13A02000-079  |
|      | 1   | CLEVIS "L"   | AN665-247LS * |
|      | 1   | CLEVIS "R"   | AN665-247RS * |
|      | 1   | CHECK NUT "L"                                      | AN316C10L     |
|      | 1   | CHECK NUT "R"                                      | AN316C10R     |
|      | 2   | PIN - CLEVIS                                       | MS20392-9C33  |
|      | 2   | PIN - COTTER                                       | MS24665-444   |
| 10   | 1   | BUSHING  | 13A03280-003  |
| 11   | 1   | EYEBOLT  | AN44-34A      |
|      | 1   | WASHER   | NAS1149F0563P |
|      | 1   | NUT  | MS21044N5     |

\* "S" DENOTES STAINLESS STEEL

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

INSTALLATION STRUTS, FRONT - FIGURE 9

| ITEM | QTY | PART DESCRIPTION        | PART NO.      |
|------|-----|-------------------------|---------------|
| 12   | 2   | BOLT                    | AN4-7A        |
|      | 2   | WASHER                  | NAS1149F0463P |
|      | 2   | NUT                     | MS21044N4     |
| 13   | 2   | BARREL NUT              | 13A02458-002  |
|      | 2   | RETAINER                | 2552-064RET   |
| 14   | 4   | BOLT                    | AN6-20A       |
|      | 4   | WASHER                  | NAS1149F0663P |
| 15   | 1   | FITTING-FT. STRUT R.    | 13A02029-002  |
|      | 1   | FITTING-FT. STRUT L.    | 13A02029-001  |
| 16   | 2   | BOLT                    | AN10-25A      |
|      | 4   | WASHER                  | NAS1149F1063P |
|      | 2   | NUT                     | MS21044N10    |
| 17   | 16  | BOLT                    | AN5-33A       |
|      | 32  | WASHER                  | NAS1149F0532P |
|      | 16  | NUT                     | MS21044N5     |
| 18   | 1   | FITTING FT. STRUT L.    | 13A02056-006  |
|      | 1   | FITTING FT. STRUT R.    | 13A02056-012  |
| 19   | 2   | FITTING DRAG WIRE       | 13A02540-002  |
| 20   | 2   | FITTING FT. STRUT LOWER | 13A02030-006  |
| 21   | 2   | BOLT                    | AN10-30A      |
|      | 4   | WASHER                  | NAS1149F1063P |
|      | 2   | NUT                     | MS21044N10    |
| 22   | 2   | FITTING-FLOAT           | 13A01082-001  |
| 23   | 2   | BOLT                    | AN10-30A      |
|      | 4   | WASHER                  | NAS1149F1063P |
|      | 2   | NUT                     | MS21044N10    |
| 24   | 2   | FITTING FT. STRUT       | 13A03030-005  |

\* "S" DENOTES STAINLESS STEEL

**INSTALLATION STRUTS, REAR**

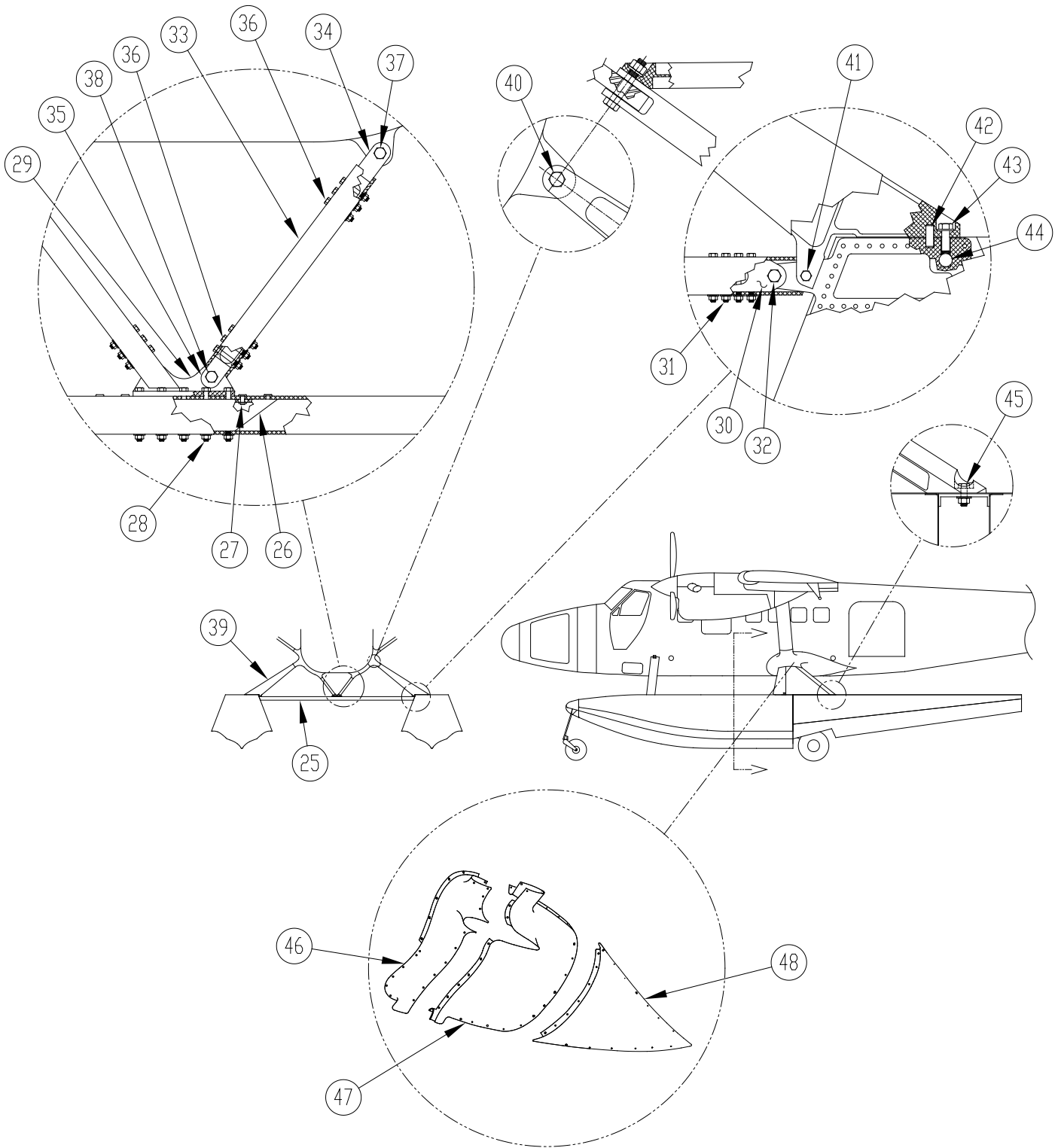


FIGURE 10

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

INSTALLATION STRUTS, REAR - FIGURE 10

| ITEM | QTY | PART DESCRIPTION  | PART NO.      |
|------|-----|---|---------------|
| 25   | 1   | ASSY. REAR SPREADER BAR<br>(INCLUDES ITEMS 26,27,28,29,30,31) | 13A03000-020  |
|      | 1   | SPREADER BAR (NO FITTINGS)                                    | 13A03335-005  |
| 26   | 1   | INSERT - REAR SPREADER BAR                                    | 13A03390-003  |
| 27   | 8   | HUCK BOLTS  | MS90354U10-08 |
| 28   | 10  | BOLT  | AN6-37A       |
|      | 10  | WASHER  | NAS1149F0663P |
|      | 10  | NUT   | MS21044N6     |
| 29   | 1   | FITTING - ASSY.   | 13A03000-022  |
|      | 1   | FITTING   | 13A03030-001  |
|      | 2   | BUSHING   | 13A02454-003  |
| 30   | 2   | FITTING SPREADER BAR ATTACH                                   | 13A03030-004  |
| 31   | 8   | BOLT  | AN6-34A       |
|      | 16  | WASHER  | NAS1149F0663P |
|      | 8   | NUT   | MS21044N6     |
| 32   | 2   | BOLT  | AN10-31A      |
|      | 4   | WASHER  | NAS1149F1063P |
|      | 2   | NUT   | MS21044N10    |
| 33   | 1   | ASSY STRUT - JURY R..   | 13A02000-132  |
|      | 1   | ASSY STRUT - JURY L.  | 13A02000-133  |
|      | 1   | STRUT (BLANK)   | 13A02356-035  |
| 34   | 2   | ASSY UPPER FITTING  | 13A02000-024  |
|      | 1   | FITTING   | 13A02056-009  |
|      | 2   | BUSHING   | 13A02454-002  |
| 35   | 2   | ASSY LOWER FITTING  | 13A02000-023  |
|      | 1   | FITTING   | 13A02059-004  |
|      | 2   | BUSHING   | 13A02454-002  |

## WIPLINE MODEL 13000 FLOAT PARTS MANUAL

## INSTALLATION STRUTS, REAR - FIGURE 10

| ITEM | QTY                      | PART DESCRIPTION         | PART NO.      |
|------|--------------------------|--------------------------|---------------|
| 36   | 12                       | BOLT                     | AN5-23A       |
|      | 12                       | WASHER                   | NAS1149F0563P |
|      | 12                       | WASHER                   | NAS1149F0532P |
|      | 12                       | NUT                      | MS21044N5     |
| 37   | 2                        | BUSHING - AIRCRAFT       | 13A02512-003  |
|      | 2                        | BOLT                     | NAS6209-40    |
|      | 2                        | WASHER                   | NAS1149F0932P |
|      | 2                        | NUT                      | MS21083N9     |
| 38   | 2                        | BOLT                     | NAS6209-26    |
|      | 2                        | WASHER                   | NAS1149F0932P |
|      | 2                        | NUT                      | MS21083N9     |
| 39   | 2                        | MAIN STRUT ASSY R.       | 13A02000-084  |
|      | 1                        | MAIN STRUT ASSY L.       | 13A02000-095  |
|      | 1                        | MAIN STRUT - MACH        | 13A02105-001  |
|      | 1                        | DRAG STRUT - MACH L.     | 13A02073-003  |
|      | 1                        | DRAG STRUT - MACH R.     | 13A02073-002  |
|      | 1                        | SKIN LEADING EDGE L.     | 13A02163-027  |
|      | 1                        | SKIN LEADING EDGE R.     | 13A02163-022  |
|      | 1                        | TOP SKIN L.              | 13A02150-111  |
|      | 1                        | TOP SKIN R.              | 13A02150-106  |
|      | 1                        | BOTTOM SKIN L.           | 13A02150-105  |
|      | 1                        | BOTTOM SKIN R.           | 13A02150-112  |
|      | 1                        | STIFFENER TOP SKIN LOWER | 13A02150-090  |
|      | 1                        | SKIN TRAILING EDGE L.    | 13A02150-107  |
|      | 1                        | SKIN TRAILING EDGE R.    | 13A02150-110  |
|      | 1                        | NOSE RIB UPPER           | 13A02150-089  |
|      | 2                        | GROMMET                  | MS35489-11    |
|      | 1                        | NOSE RIB LOWER           | 13A02150-088  |
|      | 1                        | ASSY CENTER RIB UPPER #1 | 13A02000-083  |
|      | 1                        | ASSY CENTER RIB #2       | 13A02000-082  |
|      | 1                        | ASSY CENTER RIB #3       | 13A02000-081  |
| 1    | ASSY CENTER RIB LOWER #4 | 13A02000-080             |               |
| 1    | BRAKE LINE ASSY          | 13A04000-069             |               |
| 40   | 2                        | BUSHING - FUSELAGE       | 13A02474-001  |
|      | 2                        | BOLT                     | AN12-36A      |
|      | 2                        | WASHER                   | NAS1149F1232P |
|      | 2                        | NUT                      | MS21044N12    |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

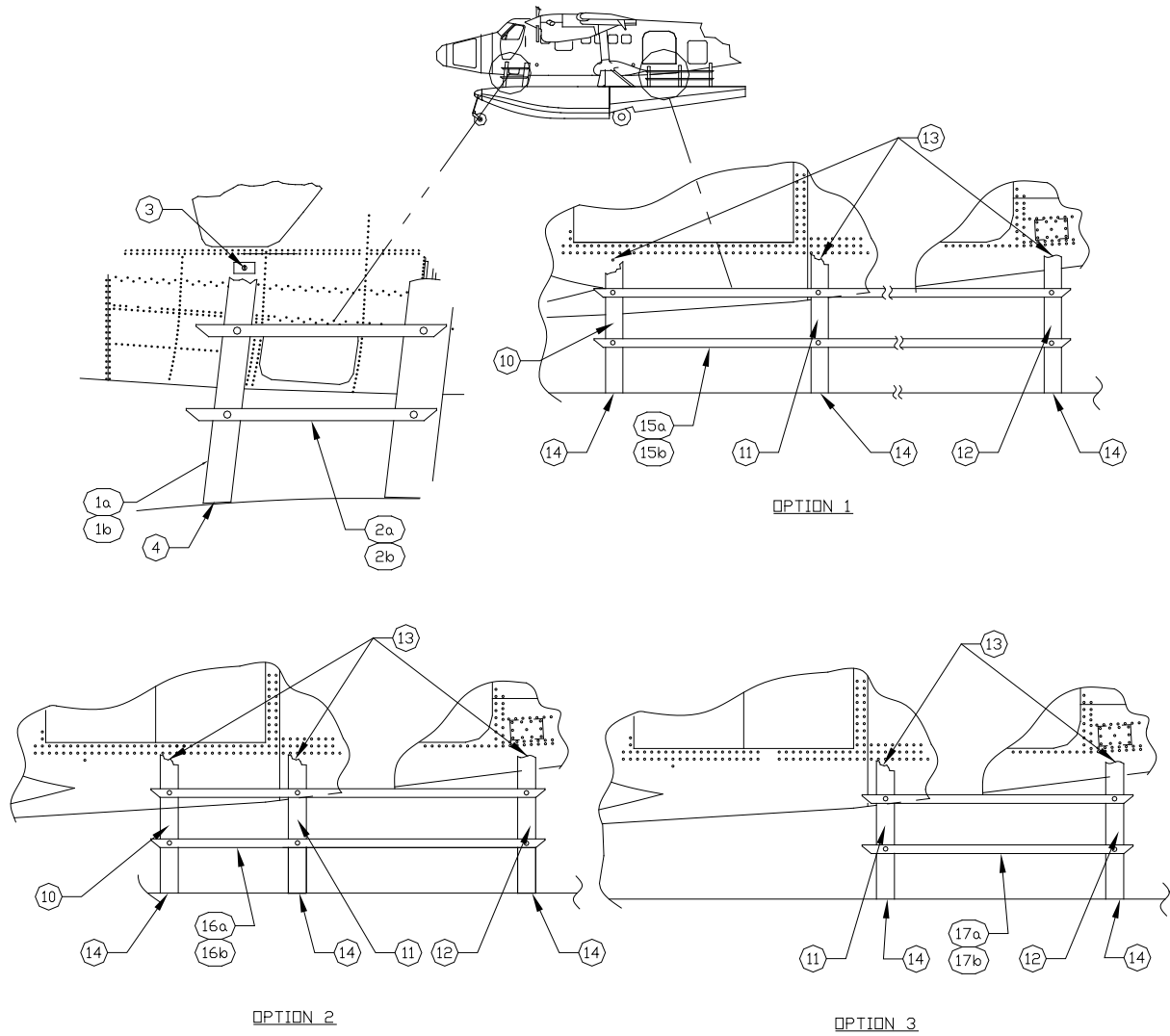
INSTALLATION STRUTS, REAR - FIGURE 10

| ITEM | QTY                     | PART DESCRIPTION                                    | PART NO.      |
|------|-------------------------|---|---------------|
| 41   | 2                       | BOLT  | AN8-32A       |
|      | 2                       | WASHER  | NAS1149F0716P |
|      | 2                       | NUT   | MS21044N8     |
| 42   | 2                       | PIN   | 13A02518-003  |
| 43   | 2                       | BOLT  | AN10-25A      |
|      | 2                       | WASHER  | NAS1149F1063P |
| 44   |                         | BARREL NUT  | 13A02458-005  |
| 45   | 2                       | BOLT  | AN8-15A       |
|      | 4                       | WASHER  | NAS1149F0716P |
|      | 2                       | NUT   | MS21044N8     |
|      | 2                       | SPACER - SUPPORT (UNDER NUT)                        | 13A02070-004  |
| 46   | 1                       | STRUT FAIRING FWD L.                                | 13A12599-011  |
|      | 1                       | STRUT FAIRING FWD R.                                | 13A12599-012  |
| 47   | 1                       | STRUT FAIRING ASSY CENTER L. (INCLUDES ITEMS BELOW) | 13A12000-113  |
|      | 1                       | STRUT FAIRING CENTER L.                             | 13A12599-009  |
|      | 1                       | NUT PLATE STRIP FERRING                             | 13A12004-085  |
|      | 1                       | NUT PLATE STRIP FERRING                             | 13A12004-086  |
|      | 1                       | NUT PLATE STRIP FERRING                             | 13A12004-087  |
|      | 1                       | NUT PLATE STRIP FERRING                             | 13A12004-088  |
|      | 1                       | STRUT FAIRING ASSY CENTER R. (INCLUDES ITEMS BELOW) | 13A12000-114  |
|      | 1                       | STRUT FAIRING CENTER R.                             | 13A12599-010  |
|      | 1                       | NUT PLATE STRIP FERRING                             | 13A12004-085  |
|      | 1                       | NUT PLATE STRIP FERRING                             | 13A12004-086  |
|      | 1                       | NUT PLATE STRIP FERRING                             | 13A12004-087  |
| 1    | NUT PLATE STRIP FERRING | 13A12004-088  |               |
| 48   | 1                       | STRUT FAIRING AFT L.                                | 13A12599-007  |
|      | 1                       | STRUT FAIRING AFT R.                                | 13A12599-008  |



WIPLINE MODEL 13000 FLOAT PARTS MANUAL

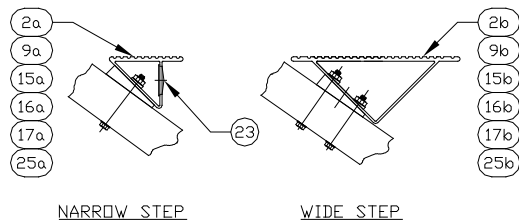
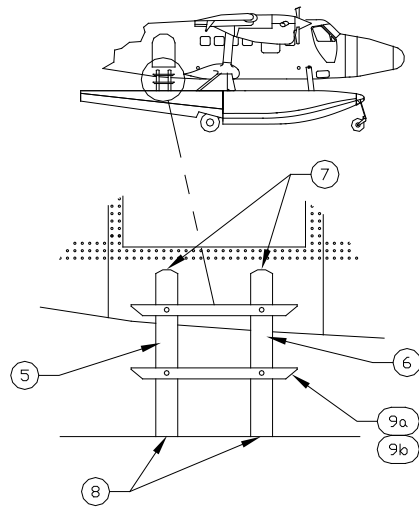
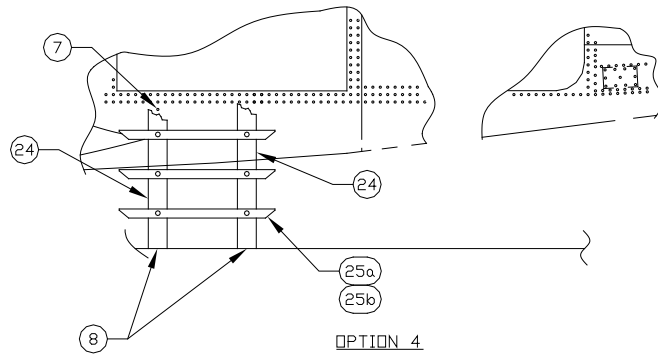
FUSELAGE STEPS INSTALLATION - FIGURE 11



FUSELAGE STEPS INSTALLATION - FIGURE 11

# WIPLINE MODEL 13000 FLOAT PARTS MANUAL

## FUSELAGE STEPS INSTALLATION - FIGURE 11



WIPLINE MODEL 13000 FLOAT PARTS MANUAL

FUSELAGE STEPS INSTALLATION - FIGURE 11

| ITEM | QTY | PART DESCRIPTION         | PART NO.                      |              |
|------|-----|--------------------------|-------------------------------|--------------|
| 1a   | 1   | ASSY STRUT STEP-PILOT    | 13A02000-130                  |              |
|      | 1   | FITTING-SLIDE-LOWER      | 8A02053-005                   |              |
|      | 1   | FITTING-UPPER            | 8A02053-006                   |              |
|      | 4   | SCREW                    | MS24694S145                   |              |
|      | 1   | ASSY STRUT STEP-PILOT    | 13A02000-094                  |              |
|      | 1   | STRUT-BLANK              | 13A02334-012                  |              |
|      | 1   | FITTING-SLIDE-LOWER      | 8A02053-005                   |              |
|      | 1   | FITTING-UPPER            | 8A02053-006                   |              |
|      | 4   | SCREW                    | MS24694S145                   |              |
|      | 1b  | 1                        | ASSY STRUT STEP-COPILOT       | 13A02000-131 |
| 1    |     | FITTING-SLIDE-LOWER      | 8A02053-005                   |              |
| 1    |     | FITTING-UPPER            | 8A02053-006                   |              |
| 4    |     | SCREW                    | MS24694S145                   |              |
| 1    |     | ASSY STRUT STEP CO-PILOT | 13A02000-101                  |              |
| 1    |     | STRUT-BLANK              | 13A02334-012                  |              |
| 1    |     | FITTING-SLIDE-LOWER      | 8A02053-005                   |              |
| 1    |     | FITTING-UPPER            | 8A02053-006                   |              |
| 4    |     | SCREW                    | MS24694S145                   |              |
| 2a   |     | 2                        | NARROW STEP, PILOT            | 13A02369-011 |
|      | 2   | BOLT                     | AN3-21A                       |              |
|      | 2   | BOLT                     | AN3-35A                       |              |
|      | 8   | WASHER                   | NAS1149F0363P                 |              |
|      | 4   | NUT                      | M221044N3                     |              |
|      | 4   | WEDGE                    | 1002753                       |              |
|      | 2   | NARROW STEP, CO-PILOT    | 13A02369-012                  |              |
|      | 2   | BOLT                     | AN3-21A                       |              |
|      | 2   | BOLT                     | AN3-35A                       |              |
|      | 8   | WASHER                   | NAS1149F0363P                 |              |
|      | 4   | NUT                      | M221044N3                     |              |
|      | 4   | WEDGE                    | 1002753                       |              |
|      | 2b  | 2                        | WIDE STEP, PILOT <sup>1</sup> | 1001112      |
|      |     | 2                        | BOLT                          | AN3-21A      |
| 2    |     | BOLT                     | AN3-23A                       |              |
| 2    |     | BOLT                     | AN3-35A                       |              |

<sup>1</sup> WIDE STEPS REPLACE NARROW STEPS

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

FUSELAGE STEPS INSTALLATION - FIGURE 11

| ITEM | QTY | PART DESCRIPTION              | PART NO.      |
|------|-----|-------------------------------|---------------|
|      | 2   | BOLT                          | AN3-36A       |
|      | 8   | WASHER                        | NAS1149F0363P |
|      | 4   | NUT                           | M221044N3     |
|      | 4   | WEDGE                         | 1002753       |
|      | 2   | WIDE STEP,CO-PILOT *          | 1001111       |
|      | 2   | BOLT                          | AN3-21A       |
|      | 2   | BOLT                          | AN3-23A       |
|      | 2   | BOLT                          | AN3-35A       |
|      | 2   | BOLT                          | AN3-36A       |
|      | 8   | WASHER                        | NAS1149F0363P |
|      | 4   | NUT                           | M221044N3     |
|      | 4   | WEDGE                         | 1002753       |
| 3    | 2   | EYEBOLT-UPPER ATTACH          | AN44-5A       |
|      | 2   | WASHER                        | NAS1149F0563P |
|      | 2   | NUT                           | MS21044N5     |
|      | 2   | DOUBLER                       | 13A02163-037  |
|      | 2   | WASHER                        | NAS1149F0432P |
|      | 2   | BOLT                          | AN4-13A       |
| 4    | 2   | NUT                           | MS21044N4     |
|      | 2   | EYEBOLT-LOWER ATTACH          | AN44-5A       |
|      | 2   | WASHER                        | NAS1149F0532P |
|      | 2   | NUT                           | MS21044N5     |
|      | 2   | SLIDE-FITTING                 | 8A02273-007   |
|      | 2   | BOLT SLIDE ATTACH             | AN4-12A       |
|      | 8   | WASHER                        | NAS1149F0463P |
|      | 9   | NUT                           | MS21044N4     |
| 5    | 1   | ASSY STEP STRUT R. CARGO AFT  | 13A02000-098  |
|      | 1   | FITTING-SLIDE-LOWER           | 8A02053-005   |
|      | 1   | FITTING-UPPER                 | 8A02053-006   |
|      | 4   | SCREW                         | MS24694S145   |
| 6    | 1   | ASSY STEP STRUT R. CARGO FWD. | 13A02000-096  |
|      | 1   | FITTING-SLIDE-LOWER           | 8A02053-005   |
|      | 1   | FITTING-UPPER                 | 8A02053-006   |
|      | 4   | SCREW                         | MS24694S145   |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

FUSELAGE STEPS INSTALLATION - FIGURE 11

| ITEM | QTY | PART DESCRIPTION                   | PART NO.      |
|------|-----|------------------------------------|---------------|
| 7    | 2   | EYEBOLT-UPPER ATTACH TO FUSELAGE   | AN43-5A       |
|      | 2   | WASHER                             | NAS1149F0563P |
|      | 2   | BOLT UPPER ATTACH TO EYEBOLT       | AN3-13A       |
|      | 2   | WASHER                             | NAS1149F0363P |
|      | 2   | NUT                                | MS21044N3     |
| 8    | 2   | EYEBOLT-LOWER ATTACH               | AN44-5A       |
|      | 2   | WASHER                             | NAS1149F0532P |
|      | 2   | NUT                                | MS21044N5     |
|      | 2   | SLIDE-FITTING                      | 8A02273-007   |
|      | 2   | BOLT-SLIDE ATTACH TO EYEBOLT       | AN4-12A       |
|      | 2   | WASHER                             | NAS1149F0463P |
|      | 2   | NUT                                | MS21044N4     |
| 9a   | 2   | NARROW STEP,RIGHT CARGO            | 13A02369-014  |
|      | 4   | BOLT, STEP TO STEP STRUT           | AN3-21A       |
|      | 8   | WASHER                             | NAS1149F0363P |
|      | 4   | NUT                                | MS21044N3     |
|      | 4   | WEDGE                              | 1002751       |
| 9b   | 2   | WIDE STEP,RIGHT CARGO <sup>→</sup> | 10001113      |
|      | 4   | BOLT                               | AN3-21A       |
|      | 4   | BOLT                               | AN3-23A       |
|      | 16  | WASHER                             | NAS1149F0363P |
|      | 8   | NUT                                | MS21044N3     |
|      | 4   | WEDGE                              | 1002751       |
| 10   | 1   | ASSY STEP STRUT FWD                | 13A02000-097  |
|      | 1   | FITTING-SLIDE-LOWER                | 8A02053-005   |
|      | 1   | FITTING-UPPER                      | 8A02053-006   |
|      | 4   | SCREW                              | MS24694S145   |
| 11   | 1   | ASSY STEP STRUT, MID               | 13A02000-099  |
|      | 1   | FITTING-SLIDE-LOWER                | 8A02053-005   |
|      | 1   | FITTING UPPER                      | 8A02053-006   |
|      | 4   | SCREW                              | MS24694S145   |

<sup>→</sup> WIDE STEPS REPLACE NARROW STEPS

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

FUSELAGE STEPS INSTALLATION - FIGURE 11

| ITEM | QTY | PART DESCRIPTION           | PART NO.  |
|------|-----|----------------------------|---|
| 12   | 1   | ASSY STEP STRUT AFT        | 13A02000-127                                      |
|      | 1   | FITTING-SLIDE-LOWER        | 8A02053-005                                       |
|      | 1   | FITTING-UPPER              | 8A02053-006                                       |
|      | 4   | SCREW                      | MS24694S145                                       |
| 13   | 3   | EYEBOLT                    | AN43-5A   |
|      | 3   | WASHER                     | AN970-4   |
|      | 3   | NUT                        | MS21044N4   |
|      | 1   | DOUBLER-FUSELAGE-AFT STRUT | 13A02163-037                                      |
|      | 3   | BOLT                       | AN4-13A   |
|      | 3   | WASHER                     | NAS1149F0363P                                     |
|      | 3   | NUT                        | MS21044N3   |
| 14   | 3   | EYEBOLT                    | AN44-5A   |
|      | 3   | WASHER                     | NAS1149F0532P                                     |
|      | 3   | NUT                        | MS21044N5   |
|      | 3   | SLIDE-FITTING              | 8A02273-007                                       |
|      | 3   | BOLT                       | AN4-12A   |
|      | 3   | WASHER                     | NAS1149F0463P                                     |
|      | 3   | NUT                        | MS21044N4   |
|      | 15a | 2                          | NARROW STEP, CARGO DOOR LEFT, OPTION 1            |
| 6    |     | BOLT                       | AN3-21A   |
| 12   |     | WASHER                     | NAS1149F0363P                                     |
| 6    |     | NUT                        | MS21044N3   |
| 6    |     | WEDGE                      | 1002751   |
| 15b  |     | 2                          | WIDE STEP, CARGO DOOR LEFT, OPTION 1 <sup>→</sup> |
|      | 6   | BOLT                       | AN3-21A   |
|      | 6   | WASHER                     | AN3-23A   |
|      | 24  | WASHER                     | NAS1149F0363P                                     |
|      | 6   | NUT                        | MS21044N3   |
|      | 6   | WEDGE                      | 1002751   |
|      | 16a | 2                          | NARROW STEP, CARGO DOOR LEFT, OPTION 2            |
| 6    |     | BOLT                       | AN3-21A   |
| 12   |     | WASHER                     | NAS1149F0363P                                     |
| 6    |     | NUT                        | MS21044N3   |

<sup>→</sup> WIDE STEPS REPLACE NARROW STEPS

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

FUSELAGE STEPS INSTALLATION - FIGURE 11

| ITEM | QTY | PART DESCRIPTION                           | PART NO.      |
|------|-----|--|---------------|
|      | 6   | WEDGE                                      | 1002751       |
| 16b  | 2   | WIDE STEP, CARGO DOOR LEFT, OPTION 2 *     | 1003394       |
|      | 6   | BOLT                                       | AN3-21A       |
|      | 6   | BOLT                                       | AN3-23A       |
|      | 24  | WASHER                                     | NAS1149F0363P |
|      | 12  | NUT  | MS21044N3     |
|      | 6   | WEDGE                                      | 1002751       |
| 17a  | 2   | NARROW STEP, CARGO DOOR LEFT, OPTION 3     | 1003415       |
|      | 6   | BOLT                                       | AN3-21A       |
|      | 12  | WASHER                                     | NAS1149F0363P |
|      | 6   | NUT  | MS21044N3     |
|      | 6   | WEDGE                                      | 1002751       |
| 17b  | 2   | WIDE STEP, CARGO DOOR LEFT, OPTION 3 -1    | 1001444       |
|      | 4   | BOLT                                       | AN3-21A       |
|      | 4   | BOLT                                       | AN3-23A       |
|      | 16  | WASHER                                     | NAS1149F0363P |
|      | 8   | NUT  | MS21044N3     |
|      | 4   | WEDGE                                      | 1002751       |
| 23   | 18  | HOLE PLUG 1", WHITE (ONLY FOR NORMAL STEP) | BPF           |
| 24   | 2   | ASSY STEP STRUT AFT CARGO DOOR LT          | 13A02000-097  |
|      | 1   | FITTING-SLIDE-LOWER                        | 8A02053-005   |
|      | 1   | FITTING-UPPER                              | 8A02053-006   |
|      | 4   | SCREW                                      | MS24694S145   |
| 25a  | 2   | NARROW STEP, CARGO DOOR LEFT, OPTION 4     | 1004847       |
|      | 6   | BOLT                                       | AN3-21A       |
|      | 12  | WASHER                                     | NAS1149F0363P |
|      | 6   | NUT  | MS21044N3     |
|      | 6   | WEDGE                                      | 1002751       |

-1- WIDE STEPS REPLACE NARROW STEPS

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

FUSELAGE STEPS INSTALLATION - FIGURE 11

|     |    |   |               |
|-----|----|---|---------------|
| 25b | 2  | WIDE STEP, CARGO DOOR LEFT, OPTION 4 <sup>➦</sup> | 1004848       |
|     | 6  | BOLT  | AN3-21A       |
|     | 6  | BOLT  | AN3-23A       |
|     | 24 | WASHER  | NAS1149F0363P |
|     | 12 | NUT   | MS21044N3     |
|     | 6  | WEDGE   | 1002751       |

---

<sup>➦</sup> WIDE STEPS REPLACE NARROW STEPS



**MAIN GEAR WHEEL ASSEMBLY**

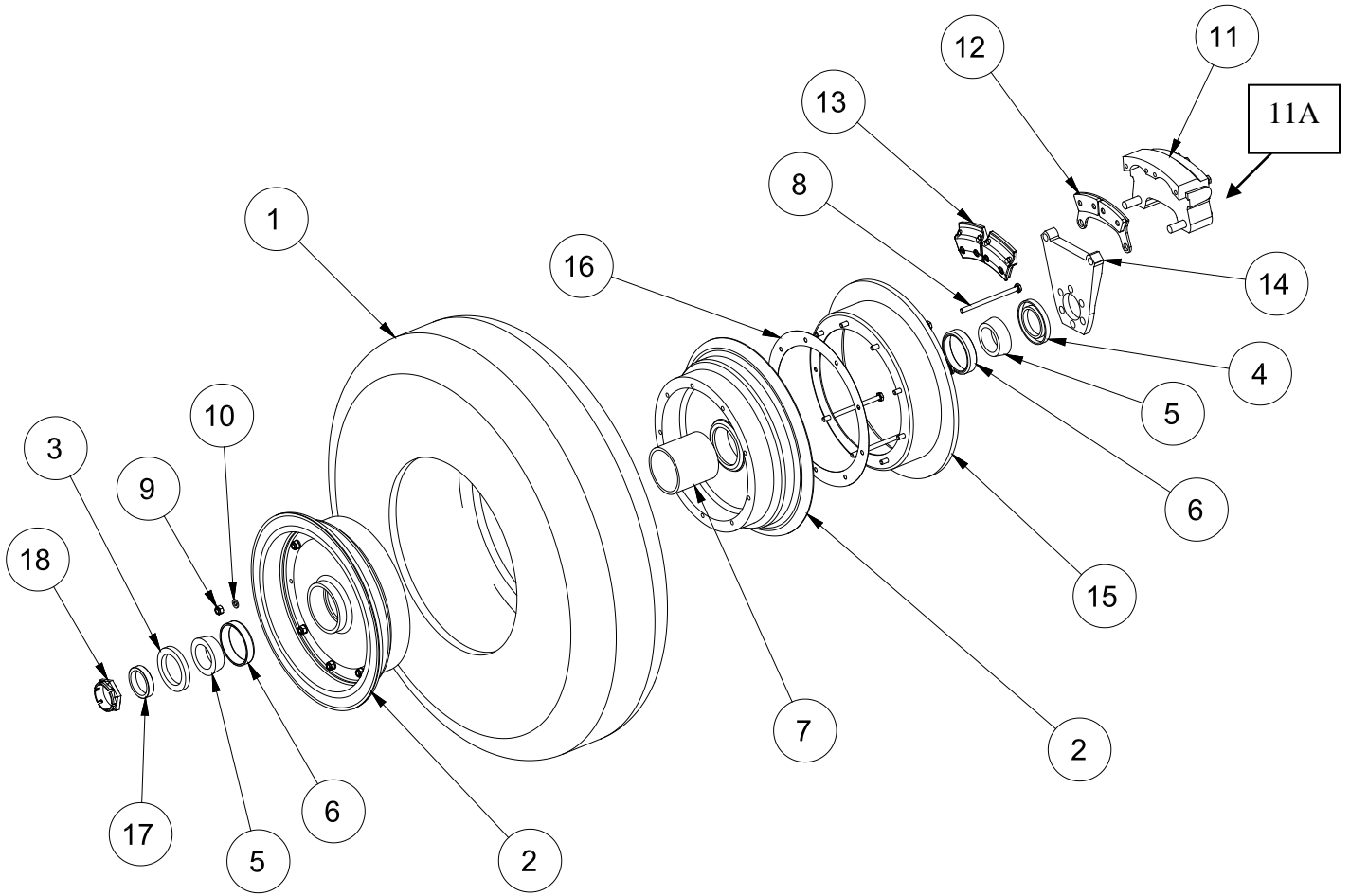


FIGURE 12

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

MAIN GEAR WHEEL ASSEMBLY - FIGURE 12

| ITEM | QTY | PART DESCRIPTION                            | PART NO.      |
|------|-----|---|---------------|
|      |     | ASSY WHEEL & TIRE (INCLUDES 1 THRU 7, & 16) | 13A04000-055  |
| 1    | 1   | TIRE  | AA1N6         |
|      |     | TUBE  | XA1AM         |
| 2    | 1   | WHEEL ASSY (INCLUDES 3 THRU 7 & 16)         | 13A04000-127  |
| 3    | 1   | SEAL OUTSIDE                                | 1001994       |
| 4    | 1   | SEAL INSIDE                                 | 1001996       |
| 5    | 2   | BEARING-CONE                                | LM29749       |
| 6    | 2   | BEARING-CUP                                 | LM29710       |
| 7    | 1   | GREASE RETAINER                             | 067-06300     |
| 8    | 9   | BOLT  | AN4-40A       |
| 9    | 9   | NUT   | MS21044N4     |
| 10   | 15  | WASHER                                      | NAS1149F0463P |
| 11   | 1   | BRAKE ASSEMBLY RT.                          | 13A04000-191  |
|      | 1   | BRAKE ASSEMBLY LT.                          | 13A04000-192  |
| 12   | 1   | LINING ASSY OUTSIDE                         | 073-01500     |
|      | 2   | LINING                                      | 066-10800     |
|      | 4   | RIVETS                                      | 105-00200     |
| 13   | 2   | LINING ASSY INSIDE                          | 074-01300     |
|      | 1   | LINING                                      | 066-10800     |
|      | 2   | RIVETS                                      | 105-00200     |
|      | 1   | BLEEDER NUT (NOT SHOWN)                     | 081-00200     |
|      | 1   | BLEEDER (NOT SHOWN)                         | 079-00300     |
| 14   | 1   | TORQUE PLATE                                | 075-04200     |
|      | 6   | BOLT not pictured                           | MS16997-99    |
| 15   | 1   | BRAKE DISC                                  | 164-03006     |
| 16   | 1   | SPACER, TEFLON                              | 13A04620-002  |
| 17   | 1   | SPACER, MAIN WHEEL AXLE                     | 6A04093-002   |
| 18   | 1   | NUT   | MS21025-24    |

**MAIN GEAR AXLE ASSEMBLY**

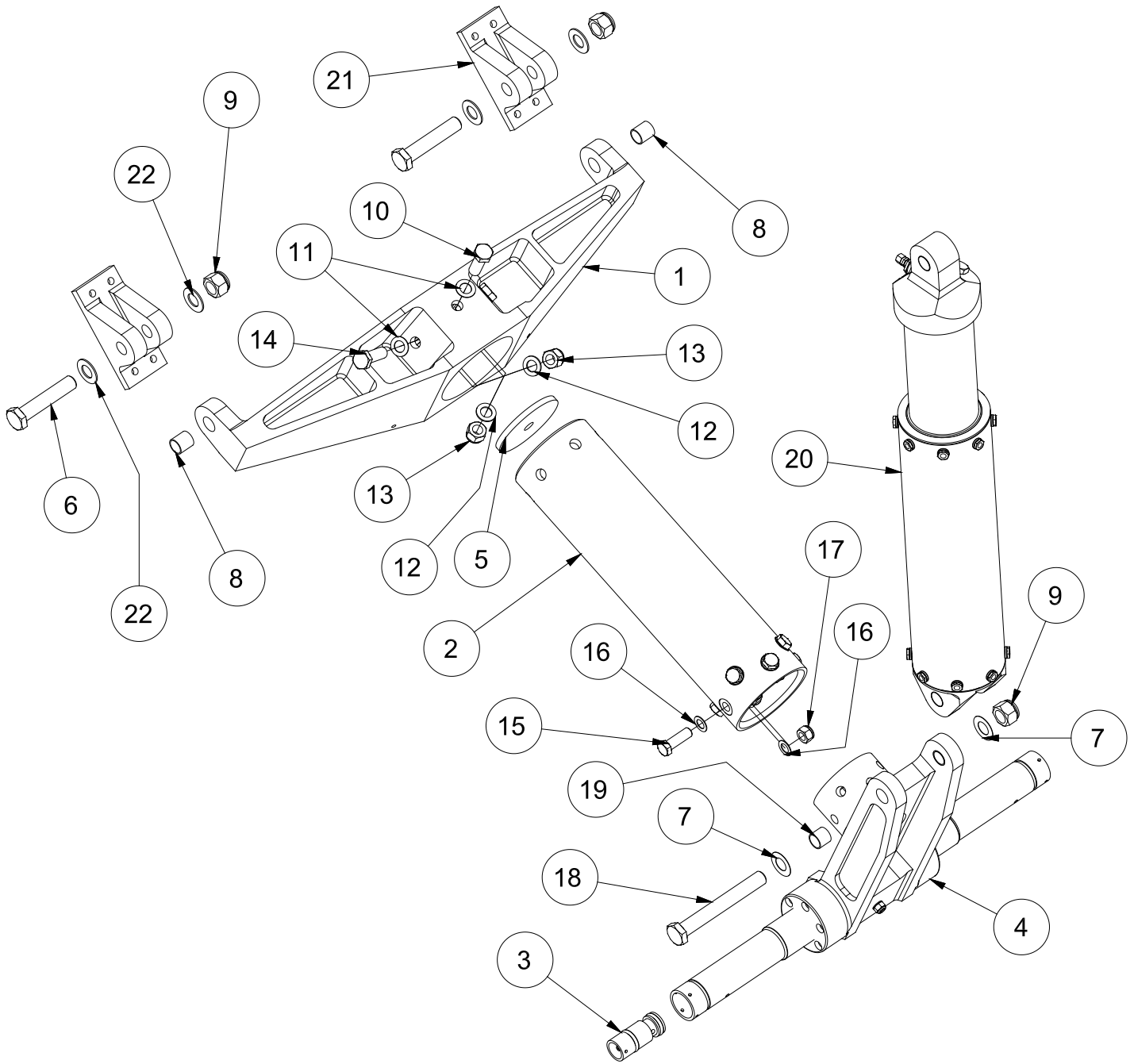


FIGURE 13

## WIPLINE MODEL 13000 FLOAT PARTS MANUAL

## MAIN GEAR AXLE ASSEMBLY - FIGURE 13

| ITEM | QTY | PART DESCRIPTION  | PART NO.      |
|------|-----|---|---------------|
|      | 1   | ASSY AXLE (INCLUDES 1,2,4,5,10,12 THRU 17)                | 13A04000-057  |
| 1    | 1   | FITTING - DRAG BRACE                                      | 13A04081-001  |
| 2    | 1   | TUBE – MAIN GEAR  | 13A04289-001  |
| 3    | 2   | ASSY - GREASE INSERT                                      | 6A04000-064   |
|      | 1   | INSERT  | 6A04263-004   |
|      | 2   | O-RING  | AN6227-16     |
|      | 1   | COMMON GREASEZERK   | 1095K41       |
| 4    | 1   | ASS"Y AXLE - DRAG LINK                                    | 13A04000-058  |
| 5    | 1   | PLUG - TUBE UPPER END                                     | 13A04231-003  |
| 6    | 2   | BOLT  | AN10-30A      |
| 7    | 2   | WASHER  | NAS1149D1032J |
| 8    | 2   | BUSHING - BEARING   | 10DU12        |
|      | 2   | BUSHING (use only if front zerk on drag brace is present) | 1003069       |
| 9    | 3   | NUT   | MS21044N10    |
| 10   | 2   | BOLT  | AN8-13A       |
| 11   | 6   | WASHER  | NAS1149F0863P |
| 12   | 6   | WASHER  | NAS1149D0863J |
| 13   | 6   | NUT   | MS21044N8     |
| 14   | 4   | BOLT  | AN8-14A       |
| 15   | 8   | BOLT  | AN7-13A       |
| 16   | 16  | WASHER  | NAS1149D0763J |
| 17   | 8   | NUT   | MS20365-720A  |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

MAIN GEAR AXLE ASSEMBLY - FIGURE 13

| ITEM | QTY | PART DESCRIPTION   | PART NO.      |
|------|-----|--|---------------|
| 18   | 1   | BOLT   | AN10-46A      |
| 19   | 2   | BUSHING - BEARING  | 10DU10        |
|      | 2   | BUSHING – BEARING (if manufactured 7/05 or later)  | 1001886       |
| 20   | 1   | ASSY - OLEO SHOCK STRUT (SEE FIGURE 14)  | 13A04000-059  |
| 21   | 1   | TRUNNION R.  | 13A04030-002  |
|      | 1   | TRUNNION L.  | 13A04030-003  |
|      | 2   | BUSHING – (if manufactured 4/08 or later, no bushing<br>Used if manufactured before this date) | 1003069       |
| 22   | 4   | WASHER   | NAS1149D1063J |

**OLEO SHOCK STRUT ASSEMBLY (T-SEALS INSTALLED)**

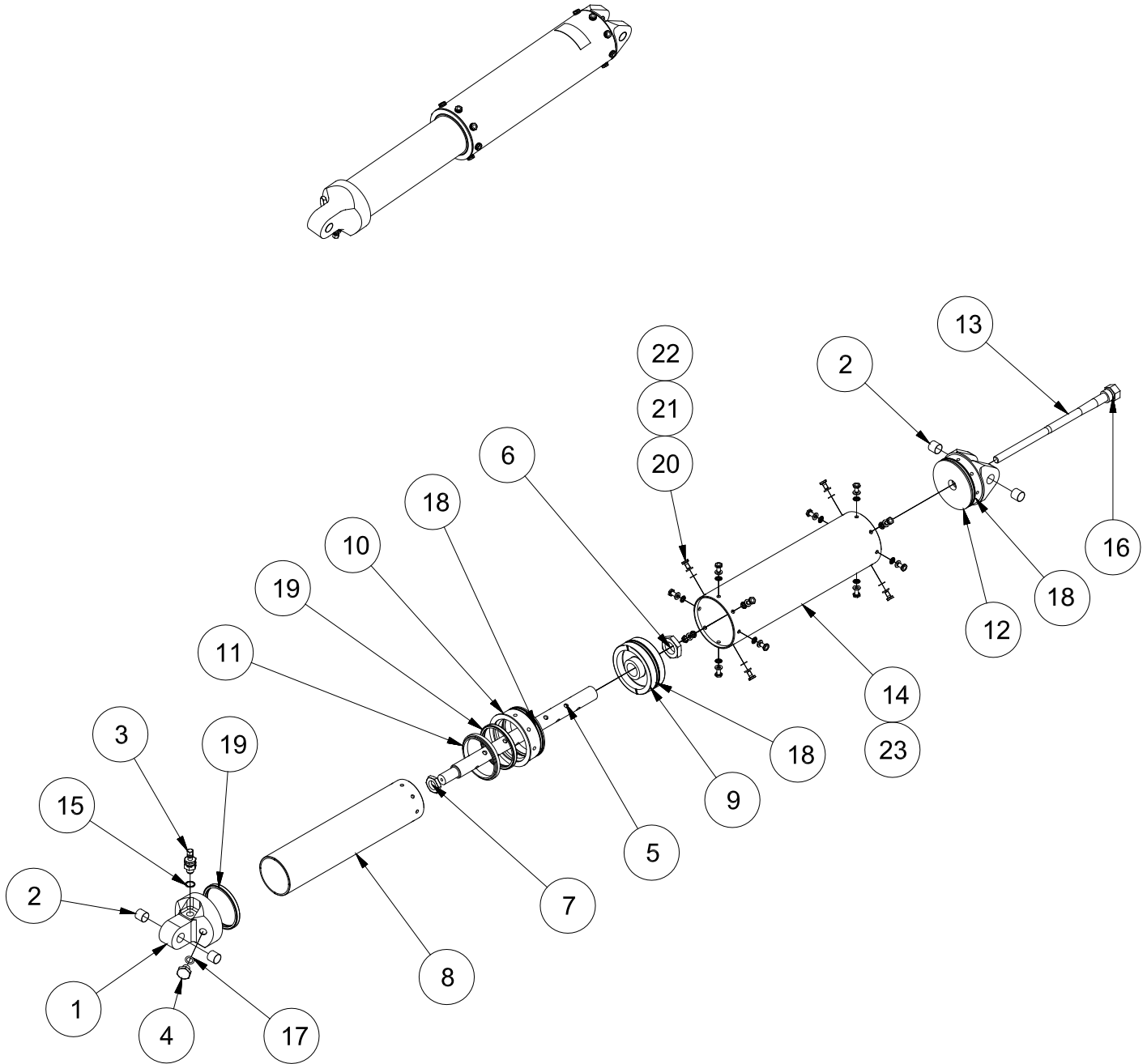


FIGURE 14

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

OLEO SHOCK STRUT ASSEMBLY – FIGURE 14

| ITEM | QTY | PART DESCRIPTION  | PART NO.     |
|------|-----|---|--------------|
| -    | 1   | SHOCK STRUT ASSY (COMPLETE)                                       | 13A04000-059 |
| -    | 1   | OLEO STRUT RE-BUILD KIT<br>(includes items 11, 15, 16, 17, 18,19) | KT13A04-001  |
| 1    | 1   | CAP - UPPER END   | 13A04098-003 |
| 2    | 4   | BUSHING - BEARING   | 10DU10       |
| 3    | 1   | VALVE   | MS28889-2    |
| 4    | 1   | PLUG  | 6A04271-003  |
| 5    | 1   | METERING TUBE   | 1001031      |
| 6    | 1   | CHECK NUT   | 6A04276-001  |
| 7    | 1   | CHECK NUT   | 6A04275-001  |
| 8    | 1   | INNER CYLINDER  | 13A04498-002 |
| 9    | 1   | PISTON  | 13A04098-005 |
| 10   | 1   | GLAND   | 13A04297-002 |
| 11   | 1   | WIPER   | 8881910      |
| 12   | 1   | CAP, LOWER END  | 13A04098-004 |
| 13   | 1   | METERING PIN  | 13A04261-006 |
| 14   | 1   | OUTER CYLINDER  | 13A04119-001 |
| 15   | 1   | O-RING  | MS28775-015  |
| 16   | 1   | O-RING  | MS28775-116  |
| 17   | 1   | O-RING  | MS28775-111  |
| 18   | 3   | T-SEAL,   | 1001930      |
| 19   | 2   | T-SEAL,   | 1001929      |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

OLEO SHOCK STRUT ASSEMBLY – FIGURE 14

| ITEM | QTY | PART DESCRIPTION | PART NO.      |
|------|-----|------------------|---------------|
| 20   | 16  | BOLT             | NAS6204-2     |
| 21   | 16  | WASHER           | MS35333-40    |
| 22   | 16  | WASHER           | NAS1149D0463J |
| 23   | 1   | PLACARD          | 7A3-4089      |



**OLEO SHOCK STRUT ASSEMBLY(O-RINGS INSTALLED)**

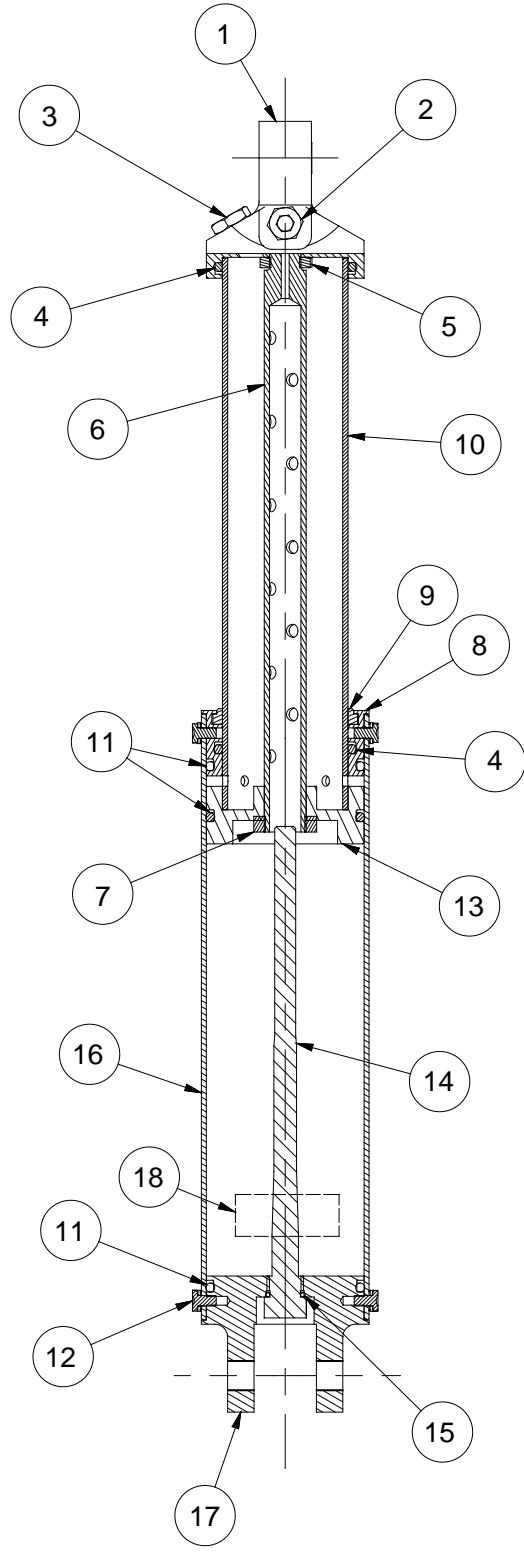


FIGURE 14

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

OLEO SHOCK STRUT ASSEMBLY – FIGURE 16

| ITEM | QTY | PART DESCRIPTION            | PART NO.      |
|------|-----|-----------------------------|---------------|
|      | 1   | ASSY SHOCK STRUT (COMPLETE) | 13A04000-059  |
| 1    | 1   | CAP UPPER END               | 13A04098-003  |
|      | 1   | BUSHING-BEARING             | 10DU10        |
| 2    | 1   | VALVE, SHRADER              | MS28889-2     |
|      | 1   | “O” RING                    | MS28775-015   |
| 3    | 1   | CAP-FILLER                  | 6A04271-003   |
|      | 1   | "O" RING                    | MS28775-111   |
| 4    | 2   | "O" RING                    | MS28775-337   |
| 5    | 1   | NUT-UPPER                   | 6A04275-001   |
| 6    | 1   | METERING TUBE               | 1001031       |
| 7    | 1   | NUT-LOWER                   | 6A04276-001   |
| 8    | 1   | GLAND                       | 13A04297-002  |
| 9    | 1   | WIPER                       | 888 1910      |
| 10   | 1   | INNER CYLINDER, SHOCK STRUT | 13A04498-002  |
| 11   | 3   | "O" RING                    | MS28775-340   |
| 12   | 16  | BOLT                        | NAS6204-2     |
|      | 16  | WASHER                      | NAS1149D0463J |
|      | 16  | WASHER                      | MS35333-40    |
| 13   | 1   | PISTON                      | 13A04098-005  |
| 14   | 1   | METERING PIN                | 13A04261-006  |
| 15   | 1   | "O" RING                    | MS28775-116   |
| 16   | 1   | OUTER CYLINDER, SHOCK STRUT | 13A04119-001  |
| 17   | 1   | CAP-LOWER END               | 13A04098-004  |
|      | 2   | BUSHING-BEARING             | 10DU10        |
| 18   | 1   | PLACARD                     | 7A3-4089      |

**MAIN GEAR RETRACTION (T-SEALS INSTALLED)**

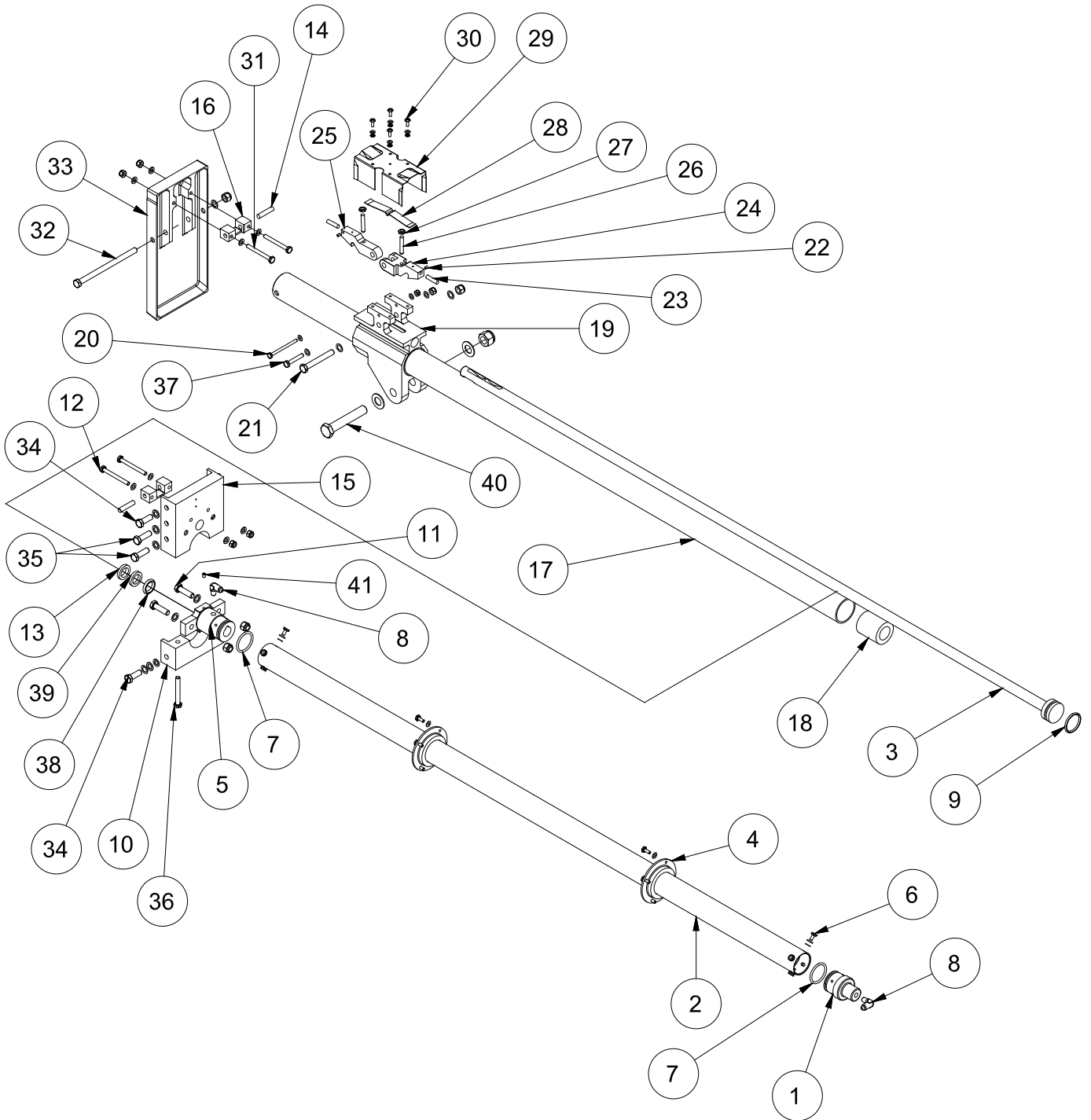


FIGURE 15

## WIPLINE MODEL 13000 FLOAT PARTS MANUAL

## MAIN GEAR RETRACTION - FIGURE 16

| ITEM | QTY | PART DESCRIPTION              | PART NO.      |
|------|-----|-------------------------------|---------------|
| 1    | 1   | CYLINDER - END CAP            | 1002011       |
| 2    | 1   | CYLINDER - OUTSIDE            | 1002010       |
| 3    | 1   | ASS"Y - RAM                   | 1002224       |
| 4    | 2   | RING - CYLINDER SUPPORT       | 6A05181-001   |
|      | 2   | "O" RING                      | MS28775-327   |
|      | 8   | BOLT - ATTACH                 | AN3-4A        |
|      | 8   | WASHER                        | NAS1149F0363P |
|      | 8   | NUT                           | MS21044N3     |
| 5    | 1   | FLANGE - CYLINDER END         | 1002008       |
| 6    | 8   | BOLT                          | NAS6203-2     |
|      | 8   | WASHER                        | NAS1149D0363J |
|      | 8   | NUT                           | MS35333-39    |
| 7    | 2   | T SEAL                        | 1002229       |
| 8    | 2   | ELBOW                         | MS20822-4D    |
| 9    | 1   | T SEAL                        | 1002229       |
| 10   | 1   | CAP - SLIDE TUBE              | 13A05073-004  |
| 11   | 2   | BOLT - FLANGE CYL. END ATTACH | AN6-12A       |
|      | 4   | WASHER                        | NAS1149F0663P |
|      | 2   | NUT                           | MS21044N6     |
| 12   | 2   | BOLT                          | AN4-24A       |
|      | 4   | WASHER                        | NAS1149F0463P |
|      | 2   | NUT                           | MS21044N4     |
| 13   | 1   | WIPER - NYLON                 | 8880410       |
| 14   | 2   | LOCK - PIN                    | 6A05702-008   |
| 15   | 1   | FITTING - SLIDE TUBE          | 13A05064-002  |
| 16   | 2   | LOCK - FITTING                | 6A05193-001   |

## WIPLINE MODEL 13000 FLOAT PARTS MANUAL

## MAIN GEAR RETRACTION - FIGURE 16

| ITEM | QTY | PART DESCRIPTION     | PART NO.      |
|------|-----|----------------------|---------------|
| 17   | 1   | SLIDE TUBE           | 13A05120-001  |
| 18   | 1   | INSERT (AFT END)     | 13A05099-001  |
| 19   | 1   | CARRIAGE             | 1002239       |
|      | 2   | BEARING - BUSHING    | 32DU16        |
| 20   | 1   | BOLT - SPRING ATTACH | AN3-25A       |
|      | 2   | WASHER               | NAS1149F0363P |
|      | 1   | NUT                  | MS21044N3     |
| 21   | 1   | BOLT - LOCK ATTACH   | AN6-26A       |
|      | 2   | WASHER               | NAS1149D0663J |
|      | 1   | NUT                  | MS21044N6     |
| 22   | 2   | SET SCREW - MAGNET   | 1032NF X 3/16 |
| 23   | 2   | MAGNET               | 3A05701-001   |
| 24   | 1   | LOCK - AFT           | 6A05042-001   |
| 25   | 1   | LOCK - FORWARD       | 6A05041-001   |
| 26   | 2   | SCREW - SET          | 6A05087-001   |
| 27   | 2   | JAMB NUT             | AN316-4R      |
| 28   | 1   | SPRING - LOCK        | 6A05533-001   |
| 29   | 1   | COVER - CARRIAGE     | 6A05158-019   |
| 30   | 4   | SCREW - COVER ATTACH | AN526-832R8   |
|      | 4   | WASHER               | NAS1149FN816P |
|      | 4   | WASHER               | MS35333-38    |
| 31   | 2   | BOLT - LOCK ATTACH   | AN4-24A       |
|      | 4   | WASHER               | NAS1149F0463P |
|      | 2   | NUT                  | MS21044N4     |

## WIPLINE MODEL 13000 FLOAT PARTS MANUAL

## MAIN GEAR RETRACTION - FIGURE 16

| ITEM | QTY | PART DESCRIPTION             | PART NO.      |
|------|-----|------------------------------|---------------|
| 32   | 1   | BOLT - FWD SLIDE TUBE ATTACH | AN6-56A       |
|      | 1   | WASHER                       | NAS1149F0663P |
|      | 1   | NUT                          | MS21044N6     |
| 33   | 1   | FITTING FWD TUNNEL           | 13A01210-003  |
| 34   | 4   | BOLT - FITTING & CAP ATTACH  | AN6-10A       |
|      | 4   | WASHER                       | MS1149D0663J  |
|      | 4   | NUT                          | MS21044N6     |
| 35   | 4   | BOLT - FITTING ATTACH        | AN6-11A       |
|      | 4   | WASHER                       | MS1149D0663J  |
|      | 4   | NUT                          | MS21044N5     |
| 36   | 2   | BOLT - CAP ATTACH            | AN5H22A       |
|      | 2   | WASHER                       | NAS1149F0563P |
|      | 2   | NUT                          | MS21044N5     |
| 37   | 1   | BOLT - RAM KEEPER            | AN4-14A       |
|      | 2   | WASHER                       | NAS1149D0463J |
|      | 1   | NUT                          | MS21044N4     |
| 38   | 2   | T SEAL                       | 1002231       |
| 39   | 1   | WIPER - FELT                 | 6A05580-004   |
| 40   | 1   | BOLT - SHOCK STRUT ATTACH    | AN10-34A      |
|      | 2   | WASHER                       | NAS1149D1032J |
|      | 1   | NUT                          | MS21044N10    |
| 41   | 1   | VALVE - OILER                | 1214K1        |

**MAIN GEAR RETRACTION (O-RINGS INSTALLED)**

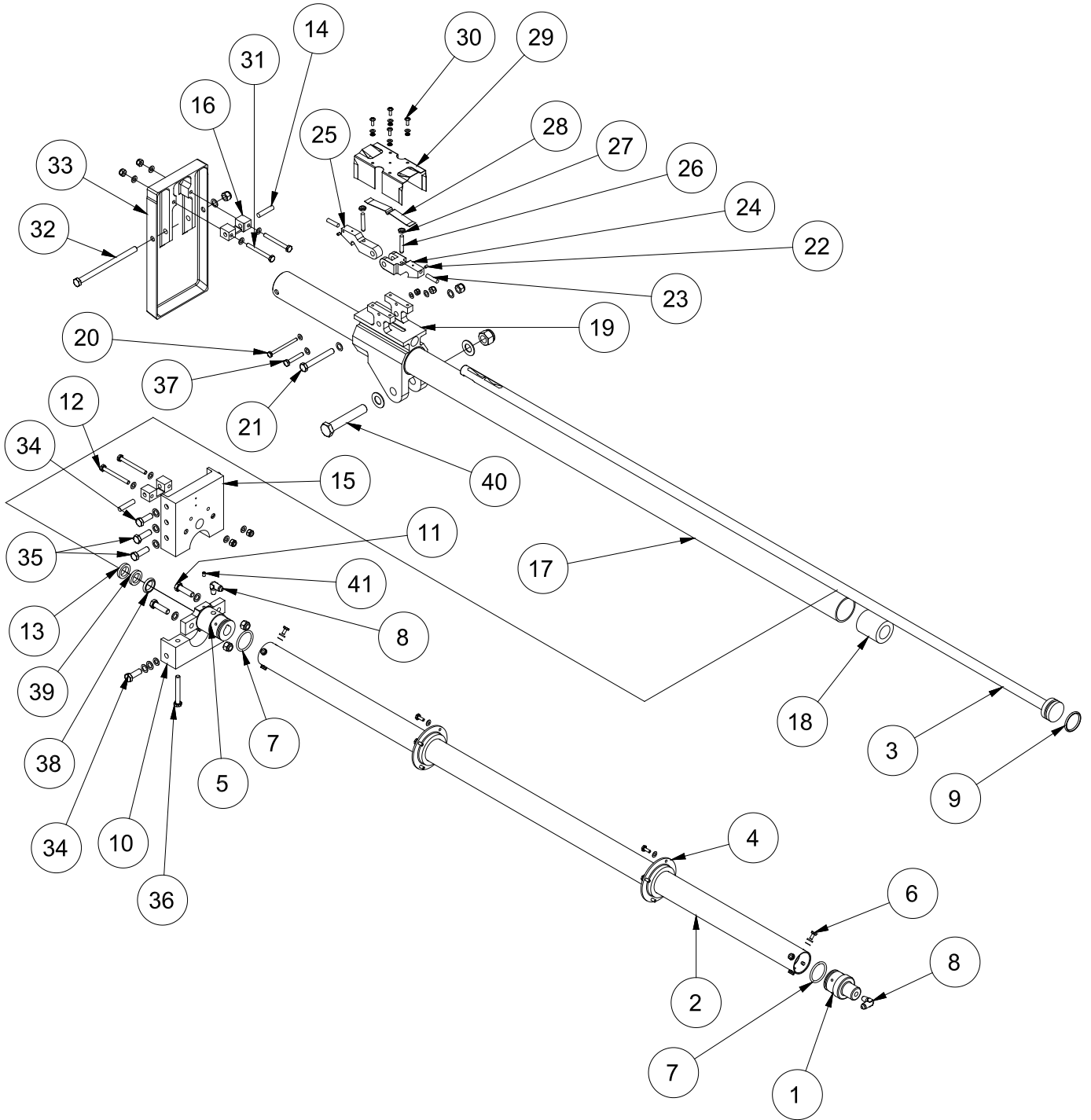


FIGURE 15

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

| ITEM | QTY | PART DESCRIPTION              | PART NO.      |
|------|-----|-------------------------------|---------------|
| 1    | 1   | CYLINDER - END CAP            | 6A05268-001   |
| 2    | 1   | CYLINDER - OUTSIDE            | 13A05116-005  |
| 3    | 1   | ASS"Y - RAM                   | 13A05000-012  |
| 4    | 2   | RING - CYLINDER SUPPORT       | 6A05181-001   |
|      | 2   | "O" RING                      | MS28775-327   |
|      | 8   | BOLT - ATTACH                 | AN3-4A        |
|      | 8   | WASHER                        | NAS1149F0363P |
|      | 8   | NUT                           | MS21044N3     |
| 5    | 1   | FLANGE - CYLINDER END         | 6A05199-001   |
| 6    | 8   | BOLT                          | NAS6203-2     |
|      | 8   | WASHER                        | NAS1149D0363J |
|      | 8   | NUT                           | MS35333-39    |
| 7    | 2   | "O" RING                      | MS28775-220   |
| 8    | 2   | ELBOW                         | MS20822-4D    |
| 9    | 1   | "O" RING                      | MS28775-219   |
| 10   | 1   | CAP - SLIDE TUBE              | 13A05073-004  |
| 11   | 2   | BOLT - FLANGE CYL. END ATTACH | AN6-12A       |
|      | 4   | WASHER                        | NAS1149F0663P |
|      | 2   | NUT                           | MS21044N6     |
| 12   | 2   | BOLT                          | AN4-24A       |
|      | 4   | WASHER                        | NAS1149F0463P |
|      | 2   | NUT                           | MS21044N4     |
| 13   | 1   | WIPER - NYLON                 | 8880410       |
| 14   | 2   | LOCK - PIN                    | 6A05702-008   |
| 15   | 1   | FITTING - SLIDE TUBE          | 13A05064-002  |
| 16   | 2   | LOCK - FITTING                | 6A05193-001   |



WIPLINE MODEL 13000 FLOAT PARTS MANUAL

| ITEM | QTY | PART DESCRIPTION             | PART NO.      |
|------|-----|------------------------------|---------------|
| 17   | 1   | SLIDE TUBE                   | 13A05120-001  |
| 18   | 1   | INSERT (AFT END)             | 13A05099-001  |
| 19   | 1   | CARRIAGE                     | 13A05316-001  |
|      | 2   | BEARING - BUSHING            | 32DU16        |
| 20   | 1   | BOLT - SPRING ATTACH         | AN3-25A       |
|      | 2   | WASHER                       | NAS1149F0363P |
|      | 1   | NUT                          | MS21044N3     |
| 21   | 1   | BOLT - LOCK ATTACH           | AN6-26A       |
|      | 2   | WASHER                       | NAS1149D0663J |
|      | 1   | NUT                          | MS21044N6     |
| 22   | 2   | SET SCREW - MAGNET           | 1032NF X 3/16 |
| 23   | 2   | MAGNET                       | 3A05701-001   |
| 24   | 1   | LOCK - AFT                   | 6A05042-001   |
| 25   | 1   | LOCK - FORWARD               | 6A05041-001   |
| 26   | 2   | SCREW - SET                  | 6A05087-001   |
| 27   | 2   | JAMB NUT                     | AN316-4R      |
| 28   | 1   | SPRING - LOCK                | 6A05533-001   |
| 29   | 1   | COVER - CARRIAGE             | 6A05158-019   |
| 30   | 4   | SCREW - COVER ATTACH         | AN526-832R8   |
|      | 4   | WASHER                       | NAS1149FN816P |
|      | 4   | WASHER                       | MS35333-38    |
| 31   | 2   | BOLT - LOCK ATTACH           | AN4-24A       |
|      | 4   | WASHER                       | NAS1149F0463P |
|      | 2   | NUT                          | MS21044N4     |
| 32   | 1   | BOLT - FWD SLIDE TUBE ATTACH | AN6-56A       |
|      | 1   | WASHER                       | NAS1149F0663P |
|      | 1   | NUT                          | MS21044N6     |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

| ITEM | QTY | PART DESCRIPTION            | PART NO.      |
|------|-----|-----------------------------|---------------|
| 33   | 1   | FITTING FWD TUNNEL          | 13A01210-003  |
| 34   | 4   | BOLT - FITTING & CAP ATTACH | AN6-10A       |
|      | 4   | WASHER                      | MS1149D0663J  |
|      | 4   | NUT                         | MS21044N6     |
| 35   | 4   | BOLT - FITTING ATTACH       | AN6-11A       |
|      | 4   | WASHER                      | MS1149D0663J  |
|      | 4   | NUT                         | MS21044N5     |
| 36   | 2   | BOLT - CAP ATTACH           | AN5H22A       |
|      | 2   | WASHER                      | NAS1149F0563P |
|      | 2   | NUT                         | MS21044N5     |
| 37   | 1   | BOLT - RAM KEEPER           | AN4-14A       |
|      | 2   | WASHER                      | NAS1149D0463J |
|      | 1   | NUT                         | MS21044N4     |
| 38   | 1   | "O" RING                    | MS28775-314   |
| 39   | 1   | WIPER - FELT                | 6A05580-002   |
| 40   | 1   | BOLT - SHOCK STRUT ATTACH   | AN10-34A      |
|      | 2   | WASHER                      | NAS1149D1032J |
|      | 1   | NUT                         | MS21044N10    |
| 41   | 1   | VALVE - OILER               | 1214K1        |

**NOSE GEAR LOWER END ASSEMBLY**

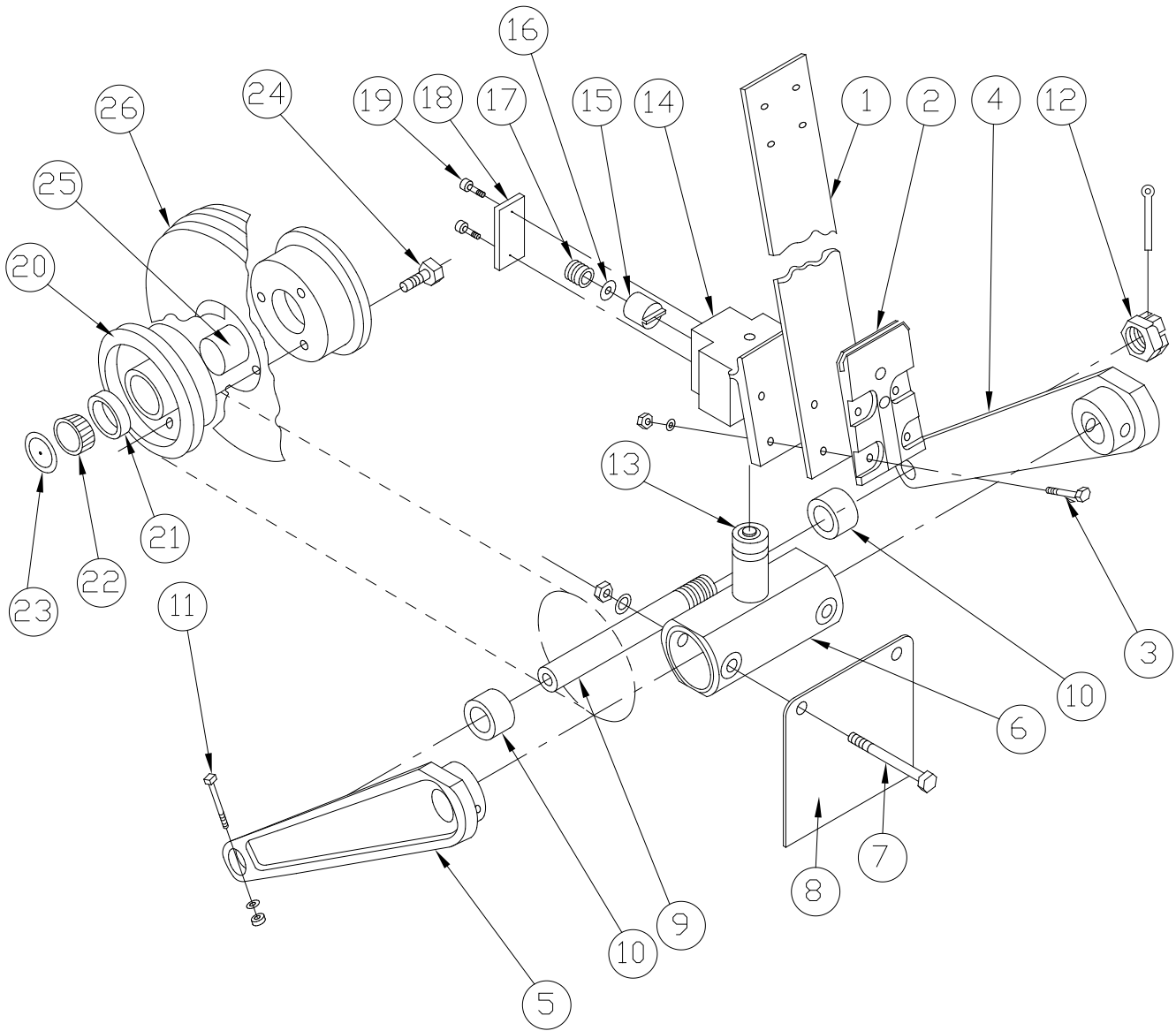


FIGURE 16

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

NOSE GEAR LOWER END ASSEMBLY - FIGURE 18

| ITEM | QTY | PART DESCRIPTION   | PART NO.      |
|------|-----|--------------------|---------------|
| 1    | 1   | SPRING-NOSE        | 13A06633-001  |
| 2    | 1   | PLATE-UP STOP      | 13A07232-001  |
| 3    | 4   | BOLT-PLATE ATTACH  | AN7-24A       |
|      | 8   | WASHER             | NAS1149F0716P |
|      | 4   | NUT                | MS21044N7     |
| 4    | 1   | LEG-NOSE FORK L.   | 13A06199-007  |
| 5    | 1   | LEG-NOSE FORK R.   | 13A06199-008  |
| 6    | 1   | YOKE-ASSY          | 13A06000-017  |
| 7    | 2   | BOLT               | AN7-45A       |
|      | 4   | WASHER             | NAS1149F0763P |
|      | 4   | WASHER             | NAS1149F0716P |
|      | 2   | NUT                | MS21044N7     |
| 8    | 1   | SPLASH GUARD       | 13A06156-108  |
| 9    | 1   | AXLE               | 13A06097-001  |
|      | 1   | ZERK-GREASE        | 1095K41       |
| 10   | 2   | SPACER-AXLE        | 13A06251-002  |
|      | 2   | ROLL PIN 1/8 x 3/4 | 215-125-0750  |
| 11   | 2   | BOLT               | AN4-27A       |
|      | 2   | WASHER             | NAS1149F0463P |
|      | 2   | NUT                | MS21044N4     |
| 12   | 1   | NUT-AXLE           | MS21025-24    |
|      | 1   | COTTERPIN          | MS24665-351   |
| 13   | 1   | WASHER-NYLON       | 8A06600-001   |
| 14   | 1   | PIVOT BLOCK        | 13A06314-001  |
|      | 1   | ZERK-GREASE        | 1095K41       |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

NOSE GEAR LOWER END ASSEMBLY - FIGURE 18

| ITEM   | QTY | PART DESCRIPTION            | PART NO.      |
|--|-----|-----------------------------|---------------|
| 15   | 1   | RETAINER-CENTERING          | 6A06512-002   |
| 16   | 1   | WASHER (TENSION)            | NAS1149F0716P |
| 17   | 1   | SPRING                      | 3A06525-002   |
| 18   | 1   | CAP                         | 3A06037-001   |
| 19   | 2   | SCREW-CAP ATTACH            | MS16997-60    |
|  | 2   | LOCK WASHER                 | MS35333-40    |
|  | 2   | WASHER                      | NAS1149F0563P |
| 20   | 1   | ASSY WHEEL (W/ TIRE & TUBE) | 13A06000-015  |
|  | 1   | ASS'Y WHEEL (21 THRU 25)    | 40-426        |
| 21   | 2   | CUP-BEARING                 | LM29710       |
| 22   | 2   | CONE BEARING                | LM29749       |
| 23   | 2   | SEAL-OUTSIDE-INSIDE         | 472439        |
| 24   | 6   | BOLT-WHEEL HALF             | AN5-37A       |
|  | 6   | WASHER                      | NAS1149F0532P |
|  | 6   | NUT                         | MS21042-5     |
| 25   | 1   | RETAINER-GREASE             | 6A04616-002   |
| 26   | 1   | TIRE                        | AA1E6         |
|  | 1   | TUBE                        | XA1AD         |
| <p>Parker Wheel has changed their wheel design. If the McCauley Die Cast Wheel is installed on the float, use P/N's above. If the new designed Parker Wheel is installed Use the following Part Numbers.</p> |     |                             |               |
| 20   | 1   | ASSY WHEEL                  | 40-426        |
| 21   | 2   | CUP-BEARING                 | 13836         |
| 22   | 2   | CONE BEARING                | 13889         |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

NOSE GEAR LOWER END ASSEMBLY - FIGURE 18

| ITEM | QTY | PART DESCRIPTION      | PART NO.  |
|------|-----|-----------------------|-----------|
| 24   | 3   | BOLT - WHEEL HALF     | AN5-35A   |
| 25   | 1   | RETAINER - GREASE     | 067-14700 |
| 27   | 2   | SNAP RING (not shown) | 155-14300 |

**ASSEMBLY NOSE GEAR RETRACTION (T-SEALS INSTALLED)**

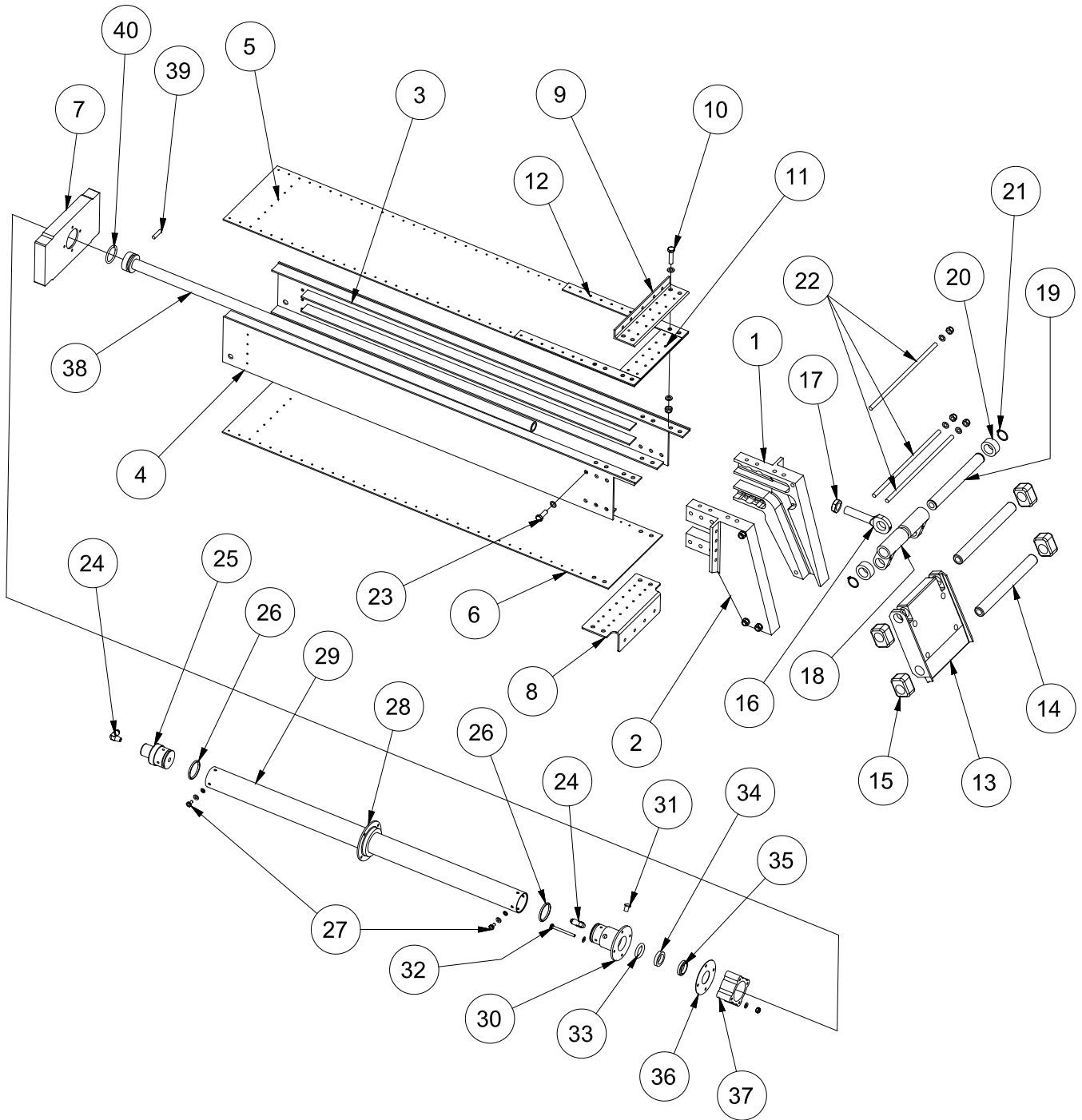


FIGURE 17

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

ASSEMBLY NOSE GEAR RETRACTION - FIGURE 19

| ITEM | QTY | PART DESCRIPTION                   | PART NO.                     |
|------|-----|------------------------------------|------------------------------|
| 1    | 1   | NOSE BOX ASSY,<br>TRACK - FRONT L. | 13A07000-009<br>13A07104-001 |
| 2    | 1   | TRACK - FRONT R.                   | 13A07104-002                 |
| 3    | 1   | TRACK - SIDE L.                    | 13A07373-001                 |
| 4    | 1   | TRACK - SIDE R.                    | 13A07373-002                 |
| 5    | 1   | COVER - NOSE BOX - TOP             | 13A07156-082                 |
|      | 4   | BOLT                               | AN5-6A                       |
|      | 8   | WASHER                             | NAS1149F0563P                |
|      | 4   | NUT                                | MS21044N5                    |
| 6    | 1   | COVER - NOSE BOX - BOTTOM          | 13A07156-083                 |
| 7    | 1   | END CAP - NOSE BOX                 | 13A07201-003                 |
| 8    | 1   | ANGLE - NOSE BOX - BOTTOM          | 13A07160-011                 |
|      | 4   | BOLT                               | AN5-6A                       |
|      | 8   | WASHER                             | NAS1149F0563P                |
|      | 4   | NUT                                | MS21044N5                    |
| 9    | 1   | ANGLE - NOSE BOX - TOP             | 13A07357-048                 |
| 10   | 4   | BOLT                               | AN5-12A                      |
|      | 8   | WASHER                             | NAS1149F0563P                |
|      | 4   | NUT                                | MS21044N5                    |
| 11   | 1   | SPACERS - NOSE BOX                 | 13A07156-086                 |
| 12   | 2   | SPACERS - NOSE BOX                 | 13A07156-087                 |
| 13   | 1   | TROLLEY - NOSE GEAR                | 13A07080-001                 |
| 14   | 2   | AXLE - NOSE GEAR TROLLEY           | 13A07475-001                 |
| 15   | 4   | BLOCK - SLIDE                      | 13A07603-004                 |
| 16   | 1   | ROD END                            | 13A07257-003                 |



## WIPLINE MODEL 13000 FLOAT PARTS MANUAL

## ASSEMBLY NOSE GEAR RETRACTION - FIGURE 19

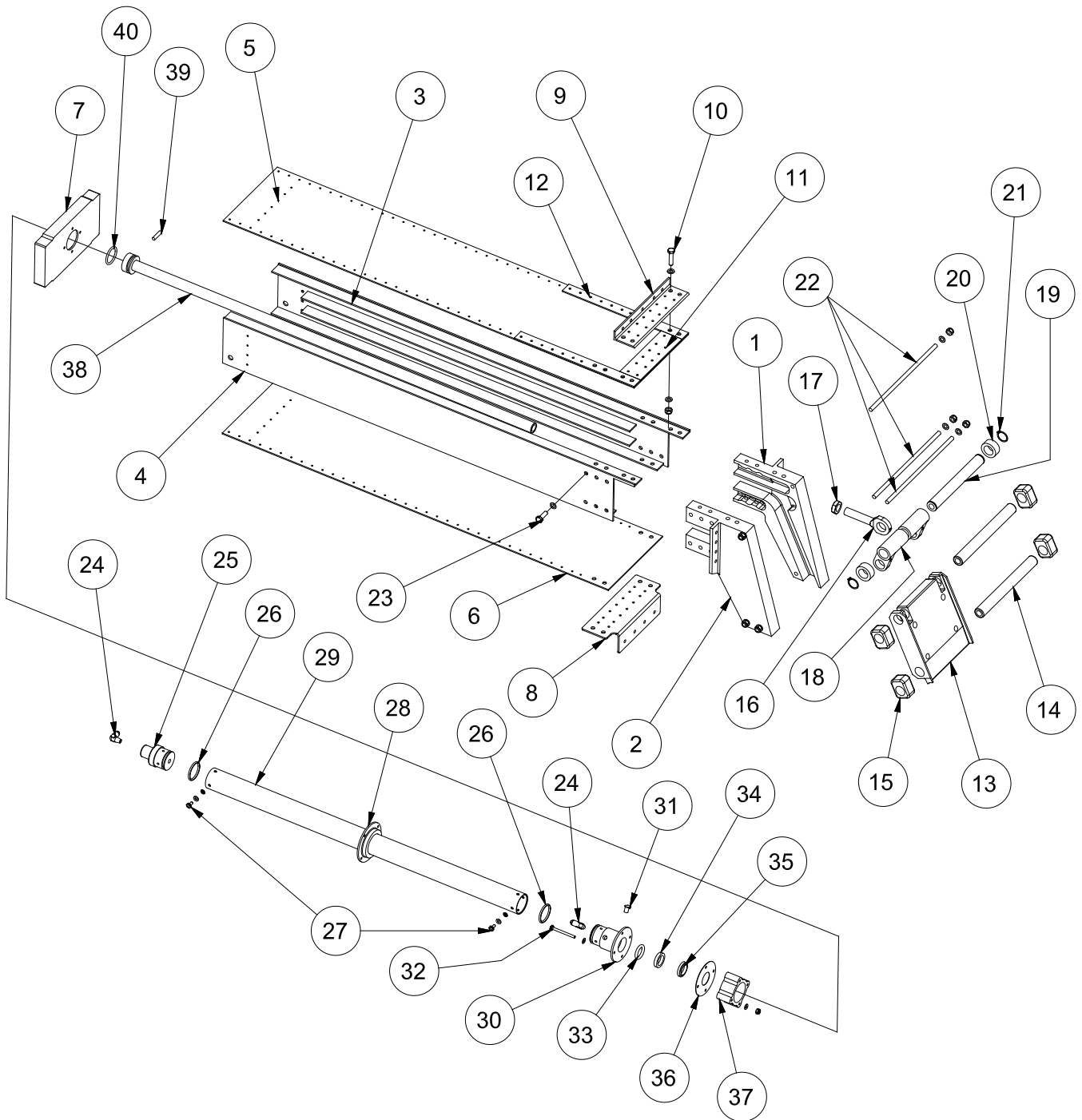
| ITEM | QTY | PART DESCRIPTION        | PART NO.      |
|------|-----|-------------------------|---------------|
| 17   | 1   | JAMB NUT                | AN316C10R     |
| 18   | 2   | LINK - NOSE GEAR RAM    | 13A07185-004  |
| 19   | 1   | AXLE - LINK - NOSE GEAR | 13A07475-002  |
| 20   | 2   | ROLLER - LOCK           | 13A07543-003  |
| 21   | 2   | SNAP RING               | 5100-87-H     |
| 22   | 3   | ROD - NOSE GEAR TRACK   | 13A07476-001  |
|      | 6   | WASHER                  | NAS1149F0463P |
|      | 6   | NUT                     | MS21044N4     |
| 23   | 12  | BOLT                    | AN5-7A        |
|      | 24  | WASHER                  | NAS1149F0532P |
|      | 12  | NUT                     | MS21044N5     |
| 24   | 2   | ELBOW                   | MS20822-4D    |
| 25   | 1   | CYLINDER - END CAP      | 1002011       |
| 26   | 2   | T SEALS                 | 1002229       |
| 27   | 8   | BOLT                    | NAS1103-2     |
|      | 8   | WASHER                  | NAS1149F0363P |
|      | 8   | WASHER - LOCK           | MS35333-39    |
| 28   | 1   | SUPPORT RING - CYLINDER | 6A05181-001   |
|      | 1   | "O" RING                | MS28775-327   |
| 29   | 1   | CYLINDER - OUTSIDE      | 1002014       |
| 30   | 1   | FLANGE - NOSE CYLINDER  | 1002013       |
| 31   | 1   | OILER                   | 1205K12       |
| 32   | 4   | BOLT                    | AN3-20A       |
|      | 8   | WASHER                  | NAS1149F0363P |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

ASSEMBLY NOSE GEAR RETRACTION - FIGURE 19

| ITEM | QTY | PART DESCRIPTION | PART NO.     |
|------|-----|------------------|--------------|
|      | 4   | NUT              | MS21044N3    |
| 33   | 2   | "O" RING         | 1002230      |
| 34   | 1   | FELT - WIPER     | 6A07580-005  |
| 35   | 1   | WIPER - NYLON    | 8880510      |
| 36   | 1   | PLATE - FLANGE   | 6A07158-129  |
| 37   | 1   | SPACER - FLANGE  | 6A07264-003  |
| 38   | 1   | ASS"Y - RAM      | 13A07000-012 |
| 39   | 1   | MAGNET           | 3A05701-001  |
| 40   | 1   | T SEALS          | 1002229      |

**ASSEMBLY NOSE GEAR RETRACTION (O-RINGS INSTALLED)**



WIPLINE MODEL 13000 FLOAT PARTS MANUAL  
ASSEMBLY NOSE GEAR RETRACTION - FIGURE 20

| ITEM | QTY | PART DESCRIPTION          | PART NO.      |
|------|-----|---------------------------|---------------|
| 1    | 1   | TRACK - FRONT L.          | 13A07104-001  |
| 2    | 1   | TRACK - FRONT R.          | 13A07104-002  |
| 3    | 1   | TRACK - SIDE L.           | 13A07373-001  |
| 4    | 1   | TRACK - SIDE R.           | 13A07373-002  |
| 5    | 1   | COVER - NOSE BOX - TOP    | 13A07156-082  |
|      | 4   | BOLT                      | AN5-6A        |
|      | 8   | WASHER                    | NAS1149F0563P |
|      | 4   | NUT                       | MS21044N5     |
| 6    | 1   | COVER - NOSE BOX - BOTTOM | 13A07156-083  |
| 7    | 1   | END CAP - NOSE BOX        | 13A07201-003  |
| 8    | 1   | ANGLE - NOSE BOX - BOTTOM | 13A07160-011  |
|      | 4   | BOLT                      | AN5-6A        |
|      | 8   | WASHER                    | NAS1149F0563P |
|      | 4   | NUT                       | MS21044N5     |
| 9    | 1   | ANGLE - NOSE BOX - TOP    | 13A07357-048  |
| 10   | 4   | BOLT                      | AN5-12A       |
|      | 8   | WASHER                    | NAS1149F0563P |
|      | 4   | NUT                       | MS21044N5     |
| 11   | 1   | SPACERS - NOSE BOX        | 13A07156-086  |
| 12   | 2   | SPACERS - NOSE BOX        | 13A07156-087  |
| 13   | 1   | TROLLEY - NOSE GEAR       | 13A07080-001  |
| 14   | 2   | AXLE - NOSE GEAR TROLLEY  | 13A07475-001  |
| 15   | 4   | BLOCK - SLIDE             | 13A07603-004  |

## WIPLINE MODEL 13000 FLOAT PARTS MANUAL

## ASSEMBLY NOSE GEAR RETRACTION - FIGURE 20

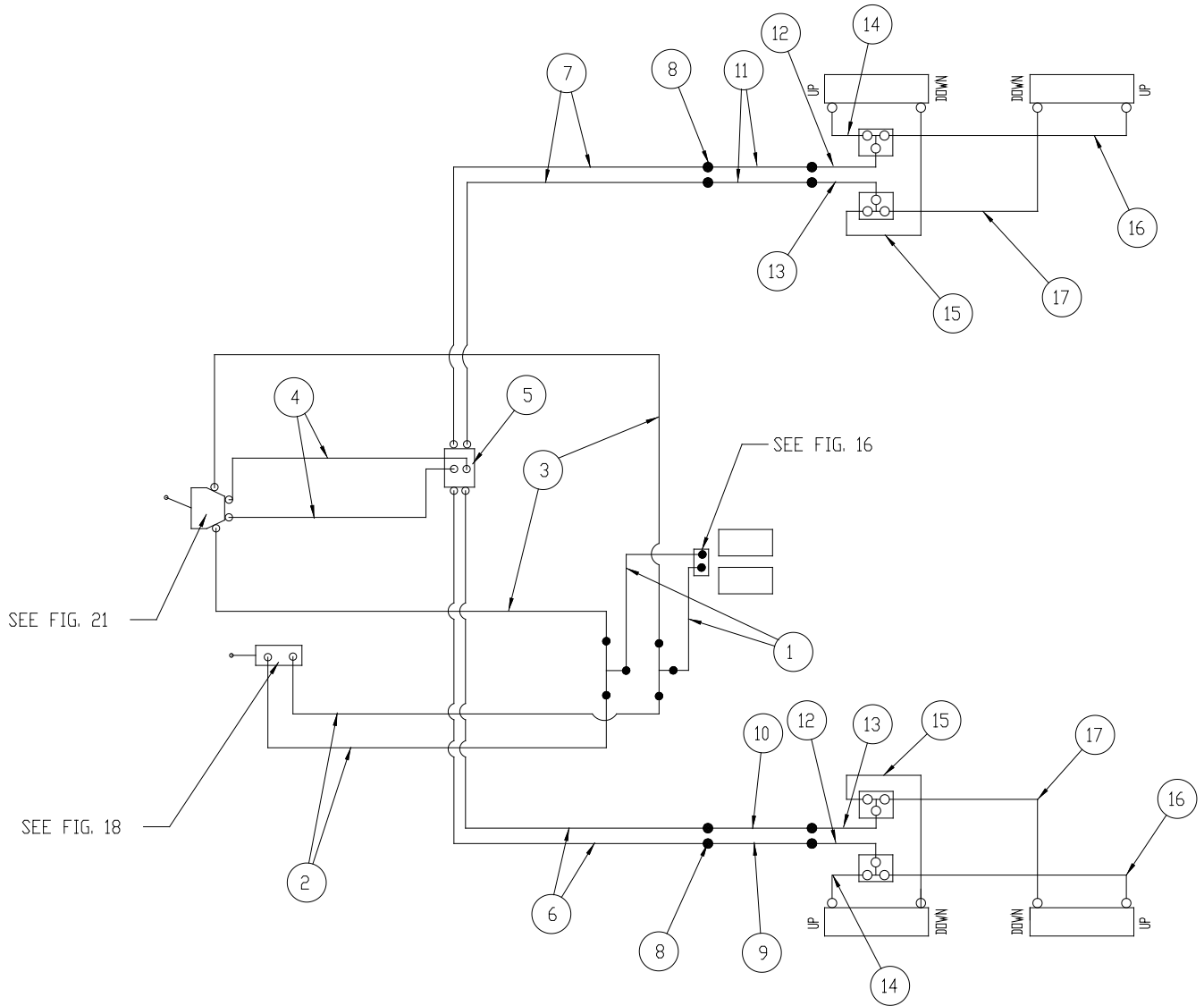
| ITEM | QTY | PART DESCRIPTION        | PART NO.      |
|------|-----|-------------------------|---------------|
| 16   | 1   | ROD END                 | 13A07257-003  |
| 17   | 1   | JAMB NUT                | AN316C10R     |
| 18   | 2   | LINK - NOSE GEAR RAM    | 13A07185-004  |
| 19   | 1   | AXLE - LINK - NOSE GEAR | 13A07475-002  |
| 20   | 2   | ROLLER - LOCK           | 13A07543-003  |
| 21   | 2   | SNAP RING               | 5100-87-H     |
| 22   | 3   | ROD - NOSE GEAR TRACK   | 13A07476-001  |
|      | 6   | WASHER                  | NAS1149F0463P |
|      | 6   | NUT                     | MS21044N4     |
| 23   | 12  | BOLT                    | AN5-7A        |
|      | 24  | WASHER                  | NAS1149F0532P |
|      | 12  | NUT                     | MS21044N5     |
| 24   | 2   | ELBOW                   | MS20822-4D    |
| 25   | 1   | CYLINDER - END CAP      | 6A05268-001   |
| 26   | 2   | "O" RING                | MS28775-220   |
| 27   | 8   | BOLT                    | NAS1103-2     |
|      | 8   | WASHER                  | NAS1149F0363P |
|      | 8   | WASHER - LOCK           | MS35333-39    |
| 28   | 1   | SUPPORT RING - CYLINDER | 6A05181-001   |
|      | 1   | "O" RING                | MS28775-327   |
| 29   | 1   | CYLINDER - OUTSIDE      | 13A07116-006  |
| 30   | 1   | FLANGE - NOSE CYLINDER  | 6A07264-002   |
| 31   | 1   | OILER                   | 1205K12       |
| 32   | 4   | BOLT                    | AN3-20A       |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

ASSEMBLY NOSE GEAR RETRACTION - FIGURE 20

| ITEM | QTY | PART DESCRIPTION | PART NO.      |
|------|-----|------------------|---------------|
|      | 8   | WASHER           | NAS1149F0363P |
|      | 4   | NUT              | MS21044N3     |
| 33   | 1   | "O" RING         | MS28775-316   |
| 34   | 1   | FELT - WIPER     | 6A07580-005   |
| 35   | 1   | WIPER - NYLON    | 8880510       |
| 36   | 1   | PLATE - FLANGE   | 6A07158-129   |
| 37   | 1   | SPACER - FLANGE  | 6A07264-003   |
| 38   | 1   | ASS"Y - RAM      | 13A07000-012  |
| 39   | 1   | MAGNET           | 3A05701-001   |
| 40   | 1   | "O" RING         | MS28775-219   |

**HYDRAULIC SCHEMATIC**



**FIGURE 21**

## WIPLINE MODEL 13000 FLOAT PARTS MANUAL

## HYDRAULIC SCHEMATIC - FIGURE 21

| ITEM | QTY | PART DESCRIPTION                        | PART NO.      |
|------|-----|---|---------------|
| 1    | 2   | ASSY HOSE (PUMP MANIFOLD TO TEE)        | 13A09000-134  |
| 2    | 2   | ASSY HOSE (TEE TO HAND PUMP)            | 13A09000-136  |
| 3    | 2   | ASSY HOSE (TEE TO SELECTOR VALVE)       | 13A09000-135  |
| 4    | 2   | ASSY HOSE (SELECTOR VALVE TO FUSE.      | 13A09000-137  |
| 5    | 1   | ASSY FUSELAGE MANIFOLD                  | 6A09000-027   |
|      | 2   | SCREW-ATTACH                            | MS24694S53    |
|      | 2   | WASHER                                  | NAS1149F0363P |
|      | 2   | NUT                                     | MS21044N3     |
| 6    | 2   | ASSY - HOSE L.                          | 13A09000-138  |
| 7    | 2   | ASSY - HOSE R.                          | 13A09000-139  |
| 8    | 4   | ELBOW-FUSELAGE                          | AN833-4D      |
|      | 4   | WASHER                                  | NAS1149F0763P |
|      | 4   | NUT                                     | AN924-4D      |
| 9    | 1   | ASSY HOSE - UP L.                       | 13A09000-141  |
| 10   | 1   | ASSY HOSE - DOWN L.                     | 13A09000-142  |
| 11   | 2   | ASSY HOSE - UP- DOWN                    | 13A09000-143  |
| 12   | 2   | ASSY HOSE (DOCK TO FLOAT MANIFOLD UP)   | 13A09000-144  |
| 13   | 2   | ASSY HOSE (DOCK TO FLOAT MANIFOLD DOWN) | 13A09000-145  |
| 14   | 2   | ASSY HOSE (MANIFOLD TO NOSE CYL. UP)    | 13A09000-146  |
| 15   | 2   | ASSY HOSE (MANIFOLD TO NOSE CYL. DOWN)  | 13A09000-147  |
| 16   | 2   | ASSYHOSE (MANIFOLD TO MAIN CYL. UP)     | 13A09000-148  |
| 17   | 2   | ASSY HOSE (MANIFOLD TO MAIN CYL. DOWN)  | 13A09000-149  |



**INSTALLATION HYDRAULIC PUMP**

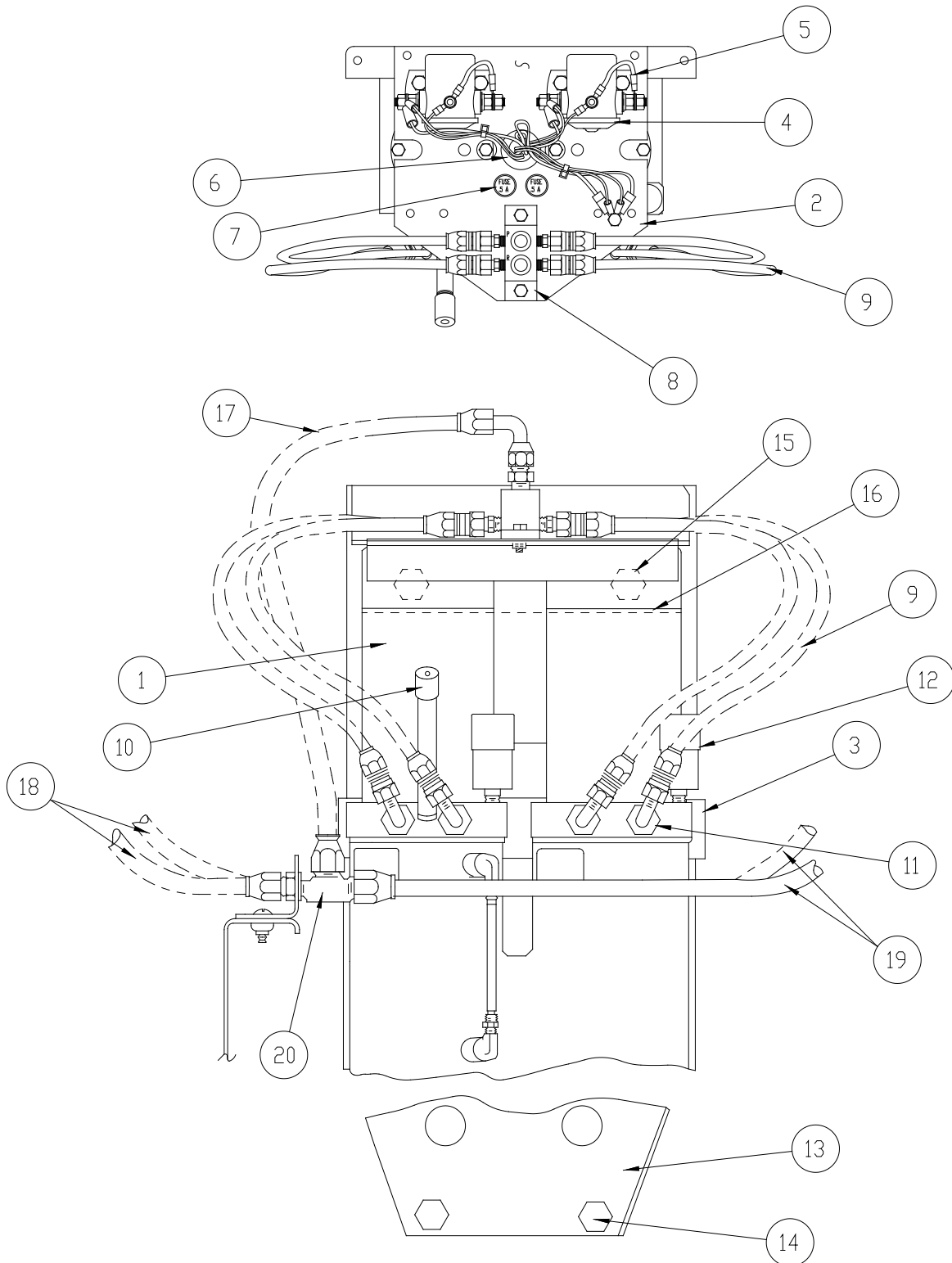


FIGURE 22

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

INSTALLATION HYDRAULIC PUMP - FIGURE 22

| ITEM | QTY | PART DESCRIPTION                             | PART NO.        |
|------|-----|--|-----------------|
| 1    | 1   | ASSY-HYD. PUMP                               | 13A09000-130    |
|      | 2   | PUMP ASSY (SEE FIGURE 20)                    | 636603A         |
| 2    | 1   | ASSY-TOP BRACKET (INCLUDES ITEMS #6, 7, & 8) | 6A09000-030     |
| 3    | 1   | ANGLE-PUMP MOUNT                             | 13A09348-012    |
| 4    | 4   | CAP SCREW-ATTACH                             | 3/8-16 x 5/8    |
| 4    | 4   | LOCK WASHER, 3/8"                            | 3/8" LOCKWASHER |
| 4    | 2   | SOLENOID                                     | S1580A1         |
|      | 4   | BOLT-ATTACH                                  | AN4-5A          |
|      | 4   | WASHER                                       | NAS1149D0463J   |
|      | 4   | NUT  | MS21044N4       |
| 5    | 2   | DIDODE-ASSY                                  | 3A10000-002     |
| 6    | 1   | GROMMET                                      | MS35489-17      |
| 7    | 1   | FUSEHOLDER ASSY, RT                          | 6A09000-128     |
|      | 1   | FUSEHOLDER ASSY, LT                          | 6A09000-129     |
| 8    | 1   | ASSY MANIFOLD                                | 6A09000-027     |
| 9    | 4   | ASSY HOSE                                    | 8A09000-048     |
| 10   | 1   | FILLER PIPE                                  | 13A09398-002    |
|      | 1   | FILTER                                       | 6A09706-001     |
| 11   | 4   | ELBOW  | AN833-4D        |
|      | 4   | NUT  | AN924-4D        |
|      | 4   | "O" RING                                     | MS28775-012     |
| 12   | 2   | PRESSURE SWITCH                              | GPP1250-40      |
| 13   | 1   | ASSY PUMP MOUNT                              | 13A09000-132    |
| 14   | 2   | BOLT MOUNT ATTACH                            | AN6-15A         |
| 15   | 2   | BOLT MOUNT ATTACH                            | AN6-44A         |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

INSTALLATION HYDRAULIC PUMP - FIGURE 22

| ITEM | QTY | PART DESCRIPTION | PART NO.      |
|------|-----|------------------|---------------|
| 16   | 1   | SPACER-SQUARE    | 13A09341-003  |
| 17   | 1   | ASSY-HOSE        | 13A09000-134  |
| 18   | 2   | ASSY-HOSE        | 13A09000-136  |
| 19   | 2   | ASSY-HOSE        | 13A09000-135  |
| 20   | 2   | TEE FITTING      | AN804-5D      |
|      | 2   | WASHER           | NAS1149D0863J |
|      | 2   | NUT              | AN924-5D      |
|      | 1   | BRACKET-ATTACH   | 13A09150-084  |
|      | 2   | SCREW-ATTACH     | AN526-832R8   |
|      | 2   | WASHER LOCK      | MS35333-38    |
|      | 2   | RIVNUT           | MS2147L08     |

**HYDRAULIC PUMP ASSEMBLY**

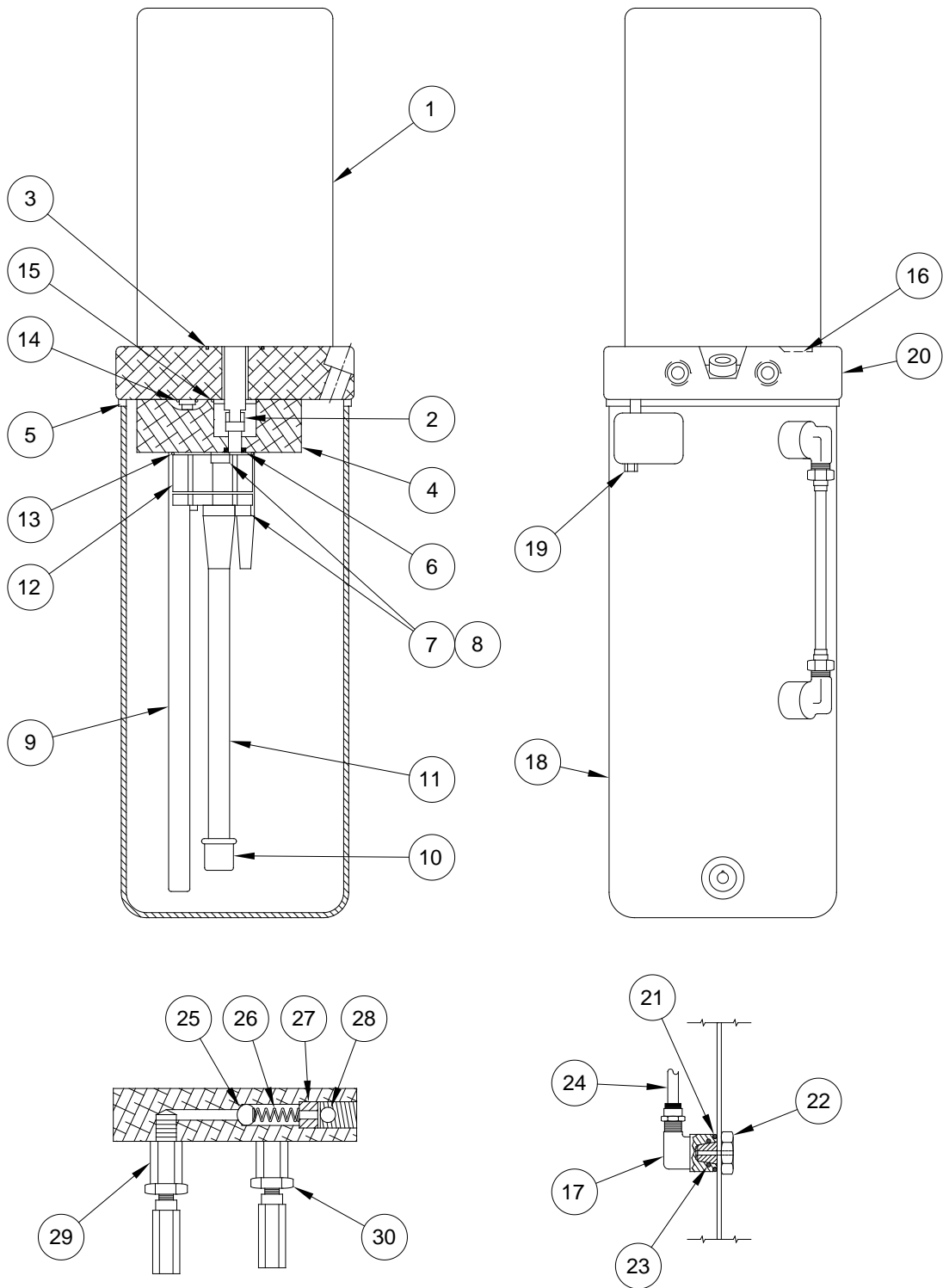


FIGURE 23

## WIPLINE MODEL 13000 FLOAT PARTS MANUAL

## HYDRAULIC PUMP ASSEMBLY - FIGURE 23

| ITEM | QTY | PART DESCRIPTION              | PART NO.       |
|------|-----|-------------------------------|----------------|
|      | 1   | ASSEMBLY-MOTOR AND PUMP (24V) | 636603A        |
| 1    | 1   | MOTOR (24V)                   | MB56N1         |
|      | 1   | BRUSH AND BEARING SERVICE KIT | MB56C902-3 KIT |
| 2    | 1   | COUPLING                      | 361730         |
| 3    | 1   | "O" RING                      | 409406         |
| 4    | 1   | SPACER                        | 361726         |
| 5    | 1   | SEAL RESERVOIR                | 410958         |
| 6    | 1   | OIL SEAL                      | 410512         |
| 7    | 4   | LOCK WASHER                   | 410410         |
| 8    | 4   | SCREW                         | 406187         |
| 9    | 1   | PIPE NIPPLE (RETURN)          | 4A09392-001    |
| 10   | 1   | FILTER                        | 410521         |
| 11   | 1   | TUBE EXTENSION (PICK UP)      | 4A09393-001    |
| 12   | 1   | PUMP                          | 633383         |
| 13   | 2   | "O" RING                      | 405387         |
| 14   | 2   | "O" RING                      | 401273         |
| 15   | 1   | "O" RING                      | 404070         |
| 16   | 2   | SPACER (OLD STYLE)            | 361615         |
| 17   | 2   | ELBOW                         | 410330         |
| 18   | 1   | ASSEMBLY RESERVOIR            | 13A09000-131   |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

HYDRAULIC PUMP ASSEMBLY - FIGURE 23

| ITEM | QTY | PART DESCRIPTION               | PART NO. |
|------|-----|--------------------------------|----------|
| 19   | 2   | SCREW                          | 406187   |
|      | 2   | WASHER                         | 409357   |
| 20   | 1   | ADAPTOR                        | 361473   |
| 21   | 1   | "O" RING                       | 361049   |
| 22   | 2   | SCREW SIGHT GAUGE              | 360824   |
| 23   | 2   | "O" RING                       | 402266   |
| 24   | 1   | TUBE SIGHT GAUGE               | 361507   |
| 25   | 1   | STEEL BALL                     | 490405   |
| 26   | 1   | SPRING                         | 410462   |
| 27   | 1   | LOCK SCREW                     | 409211   |
| 28   | 1   | PIPE PLUG                      | 409263   |
| 29   | 1   | ASSEMBLY VALVE PRESSURE RELIEF | 704520   |
| 30   | 1   | ASSEMBLY VALVE THERMAL RELIEF  | 704522   |

**INSTALLATION HYDRAULIC HAND PUMP**

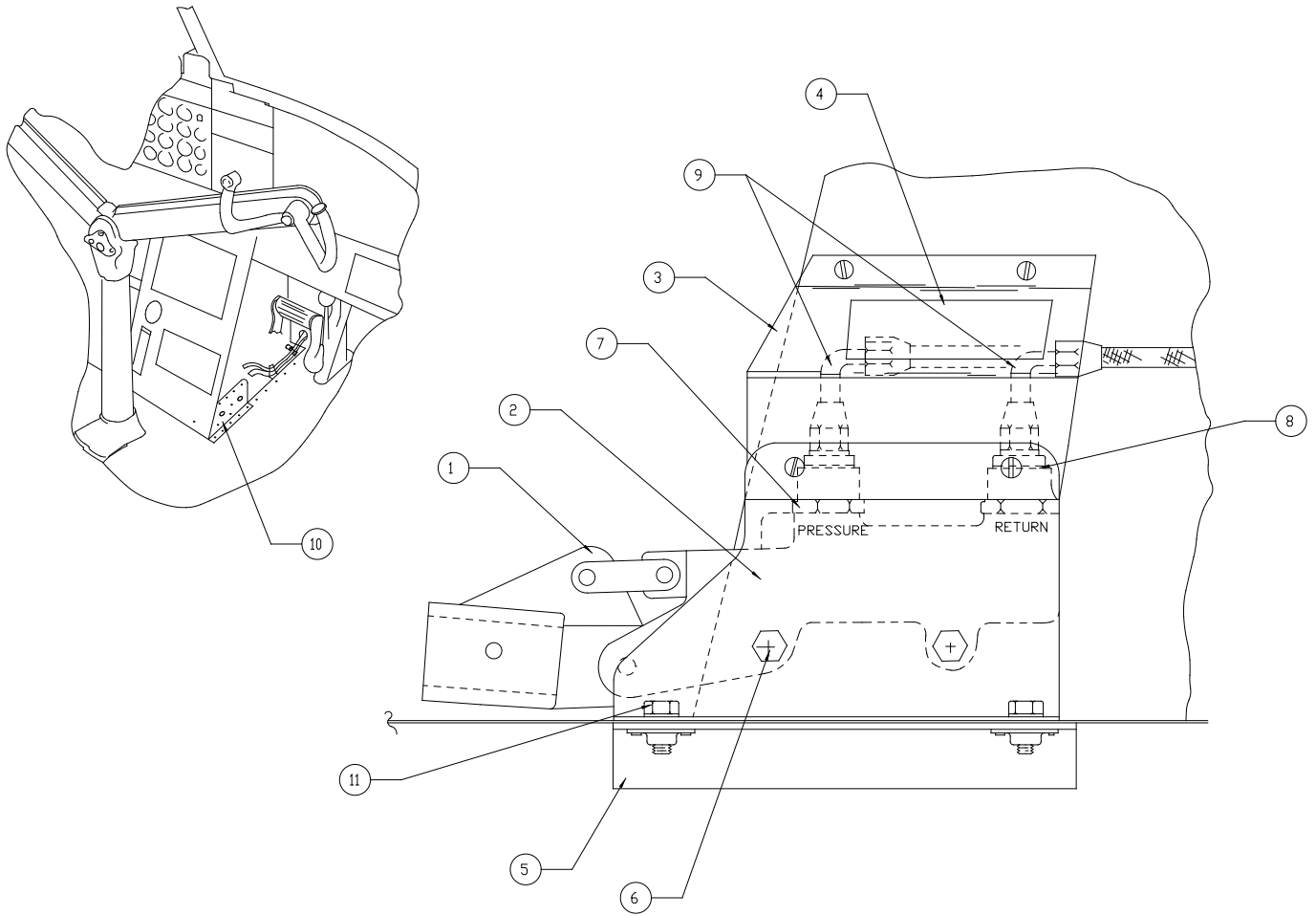


FIGURE 24

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

INSTALLATION HYDRAULIC HAND PUMP - FIGURE 24

| ITEM | QTY | PART DESCRIPTION                                 | PART NO.      |
|------|-----|--|---------------|
| 1    | 1   | HAND PUMP  | 914-8D27      |
| 2    | 1   | SUPPORT OUTSIDE                                  | 13A09000-172  |
| 3    | 1   | COVER  | 13A09158-122  |
|      | 2   | RIVNUT-ATTACH                                    | MS21078-08    |
|      | 2   | SCREW-ATTACH                                     | AN526-832R8   |
| 4    | 1   | PLACARD  | 5B3-595-3     |
| 5    | 1   | ANGLE-LOWER SUPPORT                              | 13A09359-162  |
| 6    | 2   | BOLT-ATTACH                                      | AN4-27A       |
|      | 2   | WASHER   | NAS1149F0463P |
|      | 2   | PLATE NUT  | MS21078-4     |
| 7    | 1   | REDUCER-PRESSURE                                 | AN919-7D      |
|      | 1   | "O" RING   | MS28775-013   |
| 8    | 1   | REDUCER-RETURN                                   | AN919-11D     |
|      | 1   | "O" RING   | MS28775-016   |
| 9    | 2   | ASSY HOSE  | 13A09000-136  |
| 10   | 1   | SUPPORT-INSIDE                                   | 13A09163-023  |
| 11   | 2   | BOLT-ATTACH                                      | AN3-5A        |
|      | 2   | WASHER   | NAS1149F0363P |
|      | 2   | WASHER-OPTIONAL (MAY BE USED IN PLACE OF ITEM 5) | AN970-10      |



**INSTALLATION BRAKE LINES**

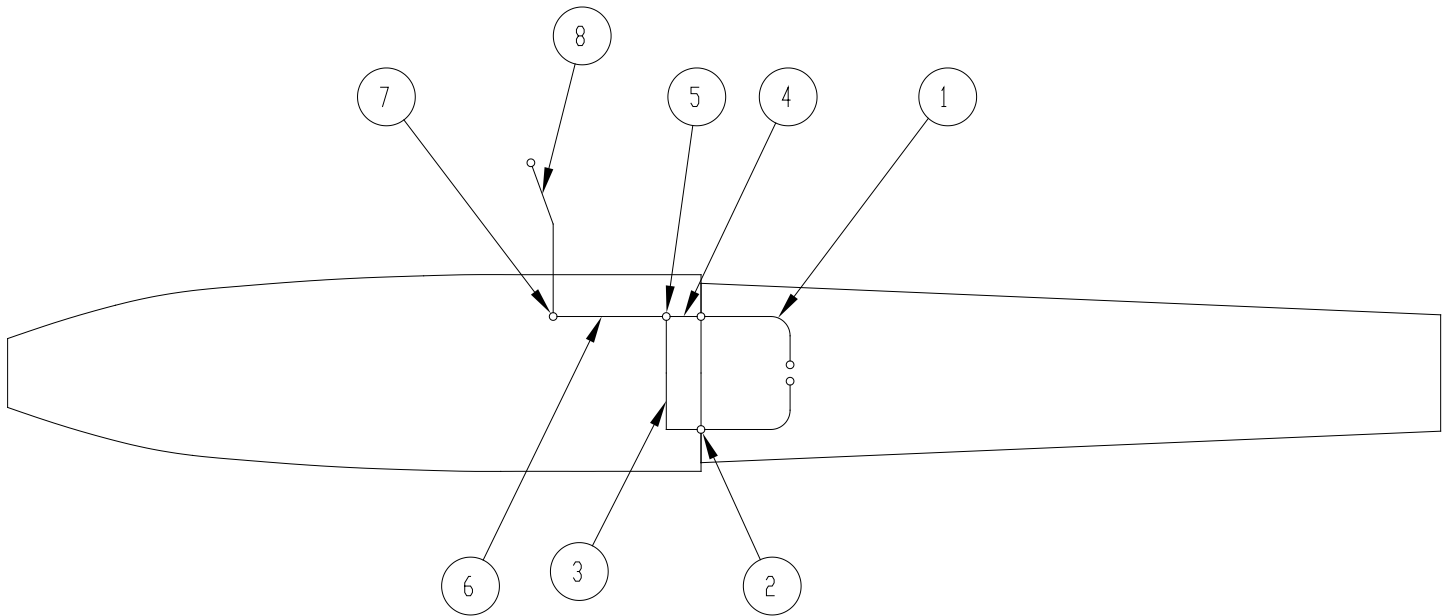


FIGURE 25

| ITEM | QTY | PART DESCRIPTION                       | PART NO.     |
|------|-----|--|--------------|
| 1    | 2   | HOSE ASSY BRAKE LINE (STEP BULKHEAD TO | 13A04000-068 |
| 2    | 2   | FITTING-BULKHEAD (STEP BULKHEAD)       | AN832-4D     |
| 3    | 1   | BRAKE LINE ASSY                        | 13A04000-066 |
| 4    | 1   | BRAKE LINE ASSY                        | 13A04000-065 |
| 5    | 1   | "T" FITTING                            | AN824-4D     |
| 6    | 1   | BRAKE LINE ASSY ("T" TO DECK FITTING)  | 13A04000-067 |
| 7    | 1   | FITTING 90° BULKHEAD (TOP DECK)        | AN833-4D     |
| 8    | 1   | BRAKE LINE ASSY (INSIDE MAIN STRUT)    | 13A04000-069 |

**ELECTRICAL SCHEMATIC**

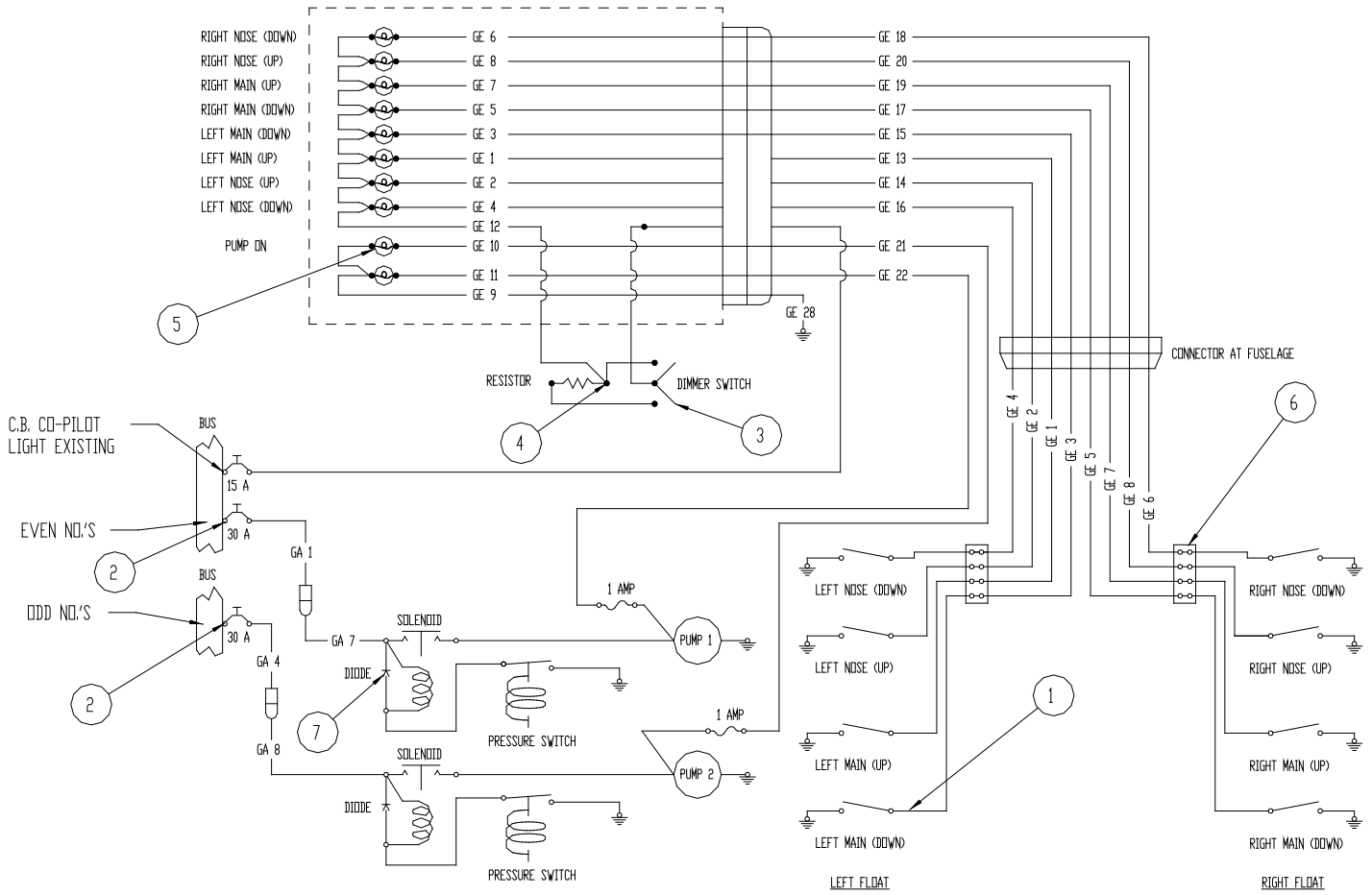


FIGURE 26

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

ELECTRICAL SCHEMATIC - FIGURE 26

| ITEM | QTY | PART DESCRIPTION     | PART NO.          |
|------|-----|----------------------|-------------------|
| 1    | 8   | PROXIMITY SWITCH     | 5801              |
| 2    | 2   | CIRCUIT BREAKER      | 30 AMP            |
| 3    | 1   | SWITCH DIMMER        | A101SYCB          |
| 4    | 1   | RESISTOR             | RH-5-180          |
| 5    | 4   | LIGHT BULB-BLUE 24V  | 507-3918-1434-600 |
|      | 4   | LIGHT BULB-GREEN 24V | 507-3918-1432-600 |
|      | 2   | LIGHT BULB-RED 24V   | 507-3918-1431-600 |
| 6    | 2   | TERMINAL BLOCK       | 4-140             |
| 7    | 2   | DIODE ASSY           | 3A10000-002       |

**GEAR CONTROL ASSEMBLY**

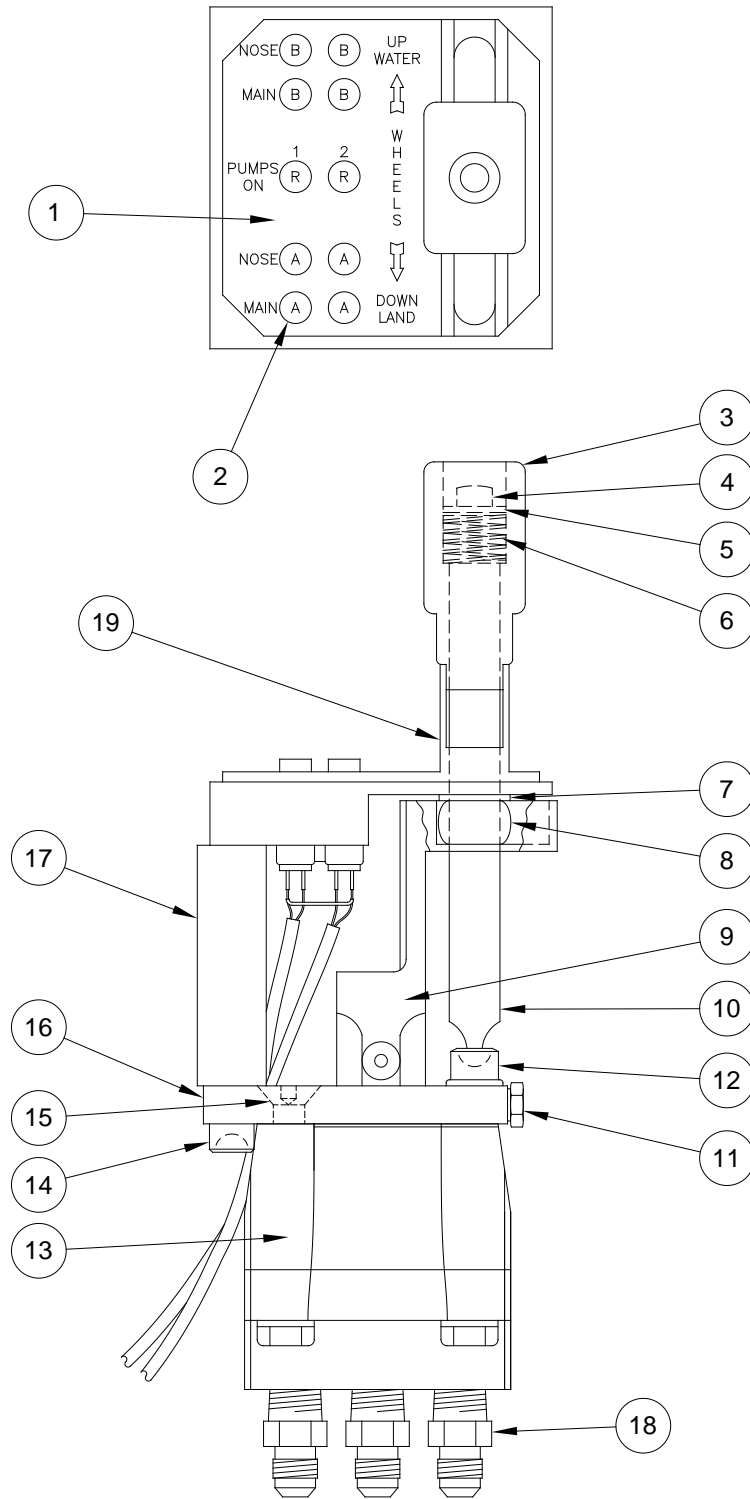


FIGURE 27

## WIPLINE MODEL 13000 FLOAT PARTS MANUAL

## GEAR CONTROL ASSEMBLY - FIGURE 27

| ITEM | QTY | PART DESCRIPTION            | PART NO.          |
|------|-----|-----------------------------|-------------------|
|      | 1   | HYD, CONTROL VALVE ASSEMBLY | 13A09000-156      |
| 1    | 1   | PLACARD                     | 5A3-694           |
| 2    | 2   | LIGHT BULB-RED 28V          | 507-3918-1431-600 |
|      | 4   | LIGHT BULB-BLUE 28V         | 507-3918-1434-600 |
|      | 4   | LIGHT BULB-GREEN 28V        | 507-3918-1432-600 |
|      | 10  | SOCKET                      | 515-0012          |
|      | 3   | SCREW                       | AN526-832R8       |
| 3    | 1   | KNOB                        | 6A11603-002       |
| 4    | 1   | SCREW                       | MS16996-10        |
| 5    | 1   | WASHER                      | 6A11274-002       |
| 6    | 1   | SPRING                      | 6A09713-001       |
| 7    | 2   | WASHER                      | NAS1149D0616J     |
| 8    | 1   | ROLLER                      | 6A11704-001       |
| 9    | 1   | LINK                        | 6A11032-002       |
| 10   | 1   | SHAFT                       | 6A11506-001       |
| 11   | 1   | BOLT                        | 6A11072-010       |
|      | 1   | WASHER                      | MS35333-39        |
| 12   | 2   | CAP SCREW-SOCKET HD.        | MS16997-80        |
|      | 2   | WASHER                      | NAS1149F0563P     |
| 13   | 1   | VALVE                       | 6A09000-080       |
|      | 1   | SEAL KIT                    | KD70119           |
| 14   | 2   | CAP SCREW                   | MS16997-88        |
| 15   | 2   | SCREW-FLAT HEAD             | MS24667-40        |

WIPLINE MODEL 13000 FLOAT PARTS MANUAL

GEAR CONTROL ASSEMBLY - FIGURE 27

| ITEM | QTY | PART DESCRIPTION           | PART NO.    |
|------|-----|----------------------------|-------------|
| 16   | 1   | PLATE, GEAR SELECTOR MOUNT | 6A11190-001 |
| 17   | 2   | SPACER                     | 6A11278-001 |
| 18   | 4   | NIPPLE                     | AN816-5-4D  |
| 19   | 1   | BLOCK-HOUSING              | 8A11199-006 |

**INSTALLATION MISC. FUSELAGE ITEMS**

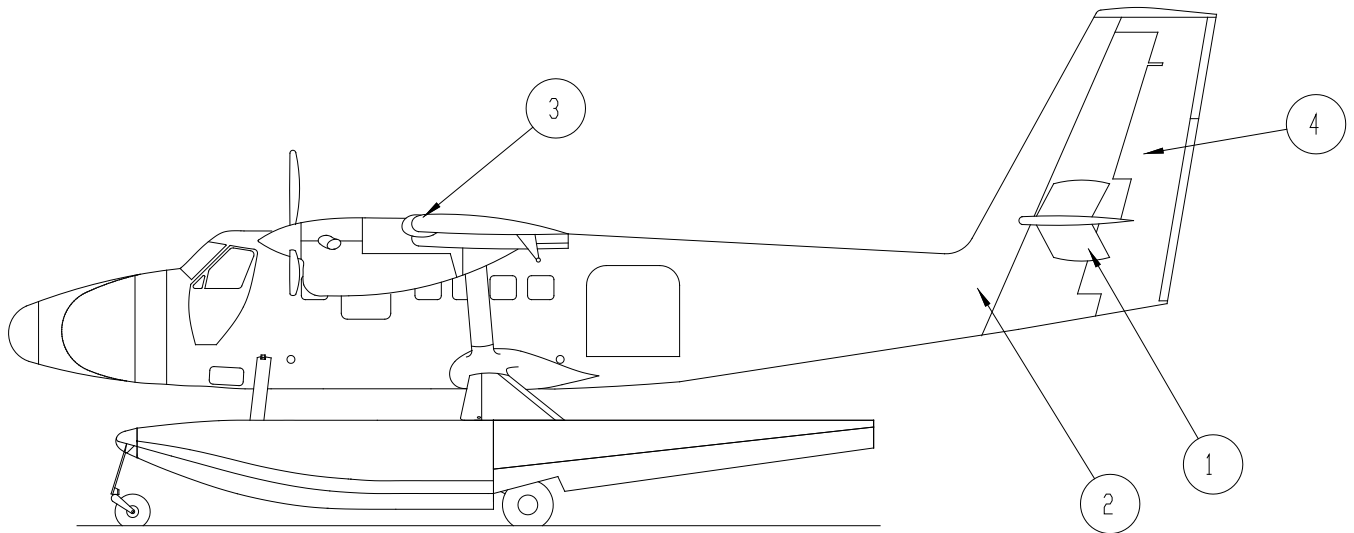


FIGURE 28

| ITEM | QTY | PART DESCRIPTION            | PART NO.      |
|------|-----|-----------------------------|---------------|
| 1    | 2   | ASSY FINLET UPPER           | 13A12000-018  |
|      | 2   | ASSY FINLET LOWER           | 13A12000-015  |
|      | 4   | BLIND NUT-ATTACH            | BN360-428-2   |
|      | 4   | BOLT-ATTACH                 | AN4-6A        |
|      | 4   | WASHER                      | NAS1149F0463P |
| 2    | 2   | ASSY CORD ELEV. FEEL SPRING | 13A08000-120  |
|      | 1   | CLAMP-CABLE-LARGE           | 13A12001-036  |
|      | 1   | CLAMP-CABLE-SMALL           | 13A12001-034  |
| 3    | 1   | STALL BAR-L.E. RT. WING     | 13A12564-001  |
|      | AR  | GLUE-CEMENT                 | 1300L         |
| 4    | 1   | LEVER-SERVO TAB             | 13A11074-001  |

PARTS MANUAL  
For  
MODEL 13000 WIPLINE FLOAT  
Item No. 1001021



1700 Henry Ave. – Fleming Field  
South St. Paul, MN 55075  
U.S.A.

Phone: (651) 451-1205

Fax: (651) 451-1786

[www.wipaire.com](http://www.wipaire.com)