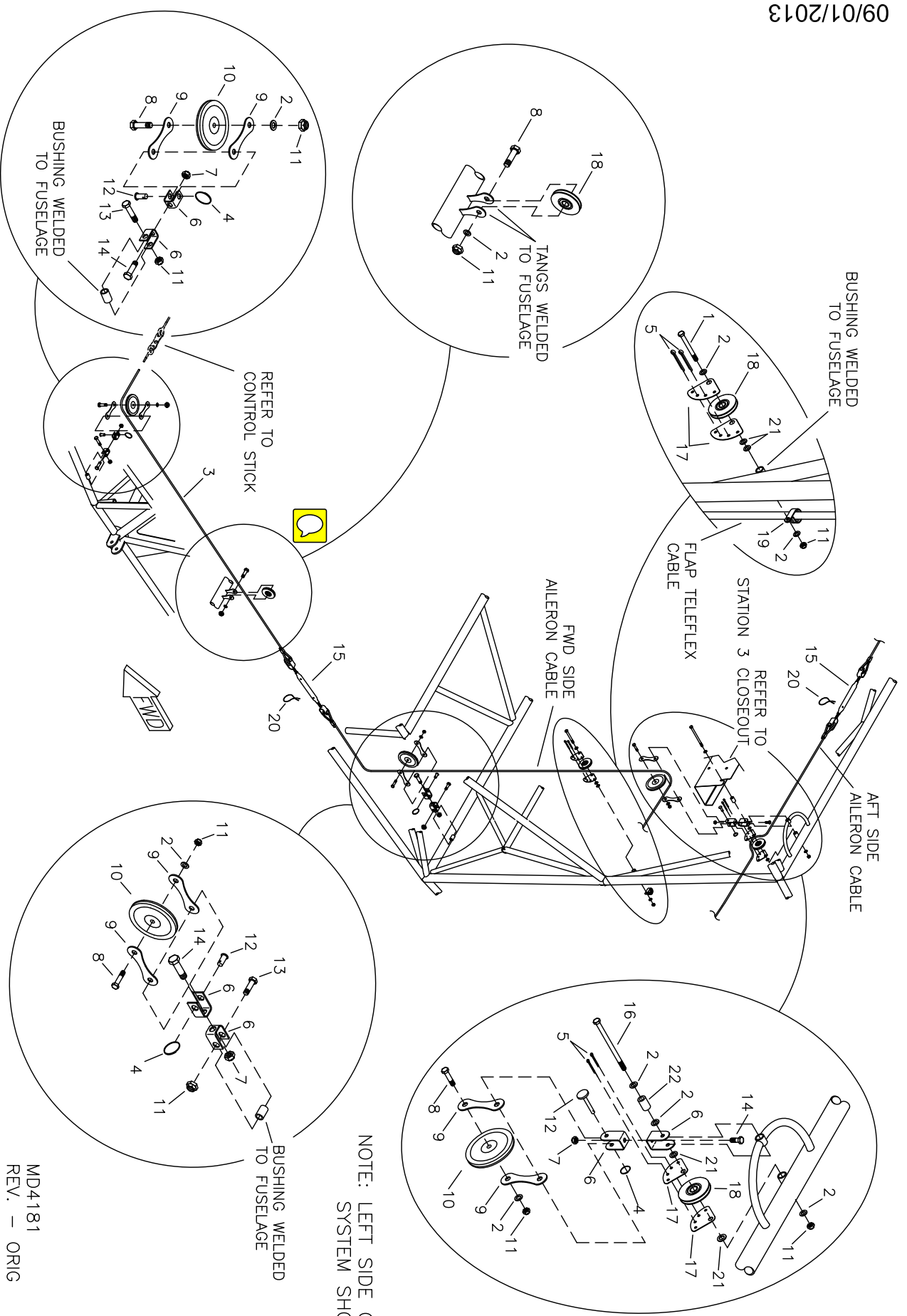




REVISED S-20 RAVEN

141 WING - AILERON CABLE SYSTEM INSTALLATION - FUSELAGE

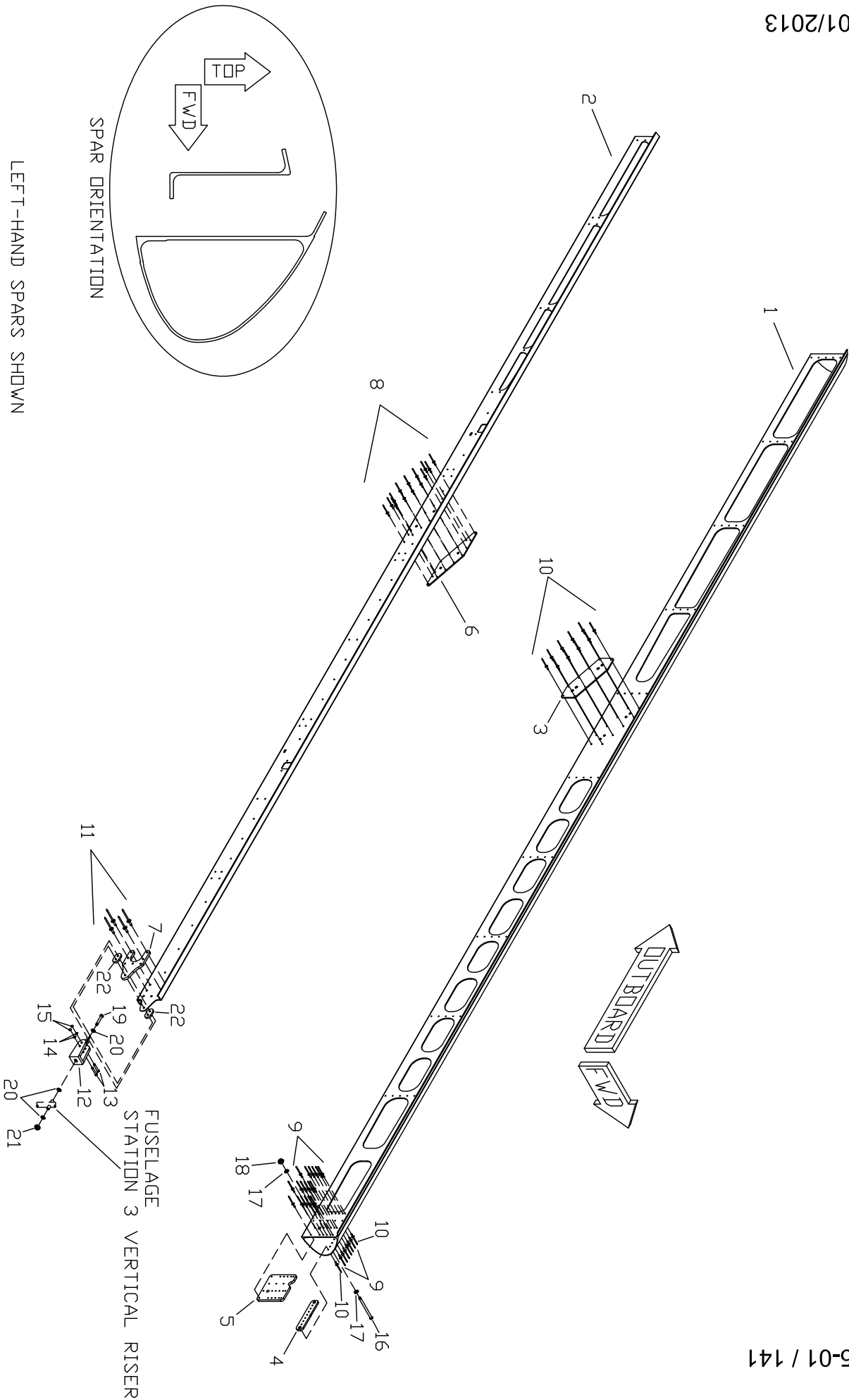
MD4181
REV. - ORIG

RANS S-20 RAVEN - 141 WING - AILERON CABLE SYSTEM INSTALLATION - FUSELAGE

#	DESCRIPTION	PART NUMBER	QUANTITY
1.	3/16" Bolt	AN3-16A	2
2.	3/16" Thin Washer	AN960-10L	16
3.	Aileron - Control Stick Cable	KPCS0269	1
4.	Loc Ring	RL 27 1/4	6
5.	Small Cotter Pin	MS24665-134	8
6.	U-Bracket	RL-205-T	12
7.	3/16" Tensile Nut	AN365-1032A	6
8.	3/16" Bolt	AN3-6A	8
9.	Hummer Tang	T12-HT6	12
10.	Pulley	AN210-2A	6
11.	3/16" Shear Nut	AN364-1032A	16
12.	3/16" Clevis Pin	MS20392-2C17	6
13.	3/16" Bolt	AN3-7A	4
14.	3/16" Bolt	AN3-3A	6
15.	Turnbuckle	RL-335-AT	3
16.	3/16" Bolt	AN3-32A	2
17.	Small Cable Keeper *	KPCS0207	2
18.	Small Pulley	AN210-1A	6
19.	3/8" Cushion Clamp	MS21919-WDG6	2
20.	Safety Wire **	-----	0
21.	3/16" Thick Washer	AN960-10	8
22.	Aluminum Bushing, 3/8" x .095" x 7/8" *	KPAC0060	2

* Builder Modifies

** Builder Supplied

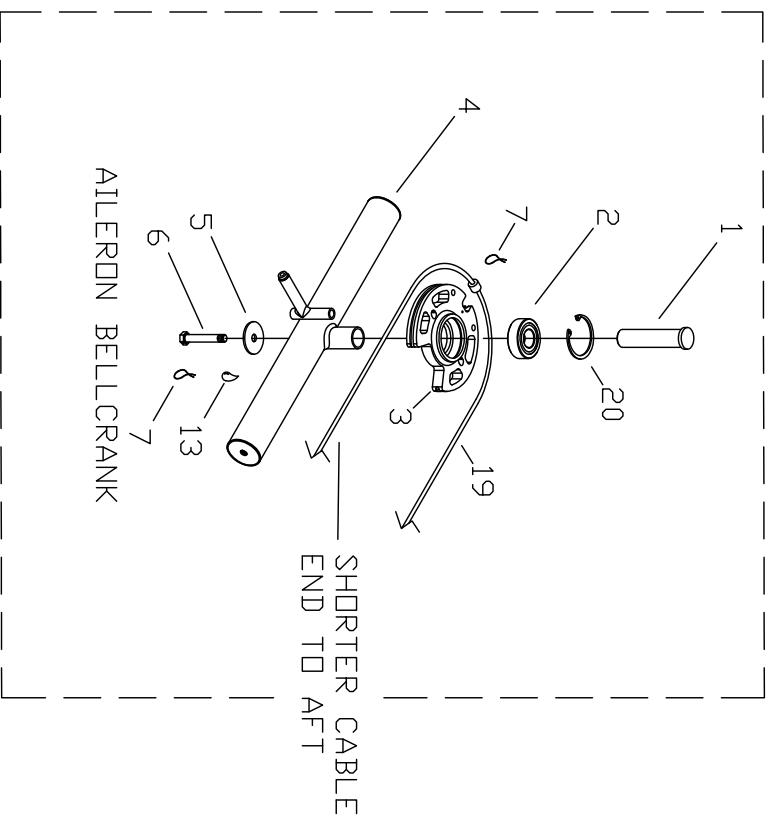


REF ID: A12345 S-20 RAVEN
141 WING - SPAR ASSEMBLY

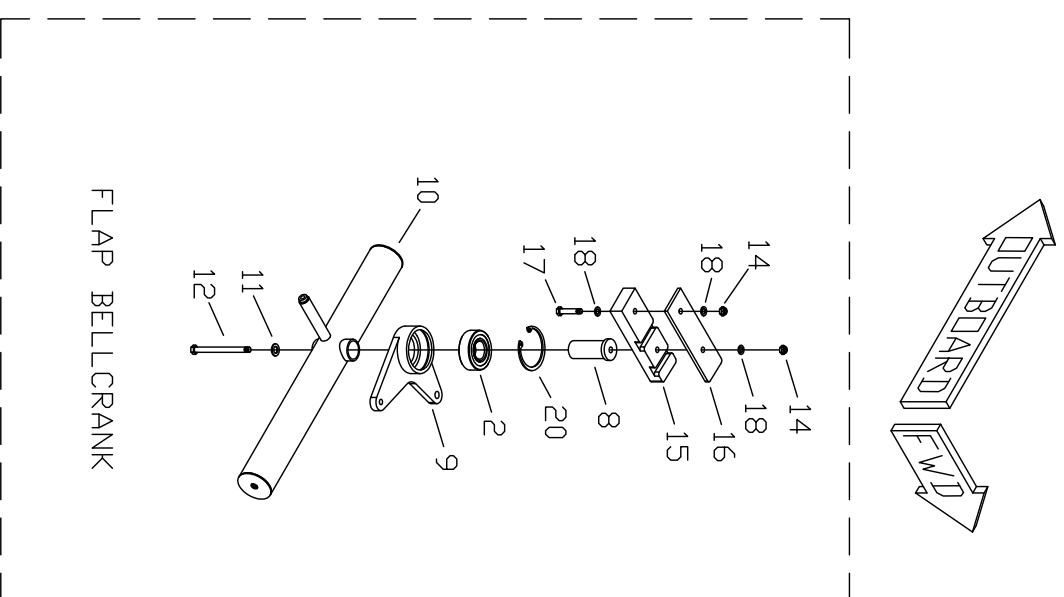
MD5649
REV. - ORIG

RANS S-20 RAVEN - 141 WING - SPAR ASSEMBLY

#	DESCRIPTION	PART NUMBER	QUANTITY
1.	Forward Wing Spar - LH	KPWI0650-L	1
1.	Forward Wing Spar - RH	KPWI0650-R	1
2.	Rear Wing Spar - RH	KPWI0649-R	1
2.	Rear Wing Spar - LH	KPWI0649-L	1
3.	FWD Spar Truss Doubler	KPWI0642	2
4.	FWD Spar FWD Attach Doubler	KPWI0667	2
5.	FWD Spar AFT Attach Doubler	KPWI0678	2
6.	AFT Spar Truss Doubler	KPWI0643	2
7.	AFT Spar Attach Doubler	KPWI0671	2
8.	1/8" Stainless Steel Rivet - Cherry Q	CCPQ-43	28
9.	1/8" Stainless Steel Rivet - Cherry Q	CCPQ-46	48
10.	1/8" Stainless Steel Rivet - Cherry Q	CCPQ-44	24
11.	3/16" Stainless Steel Rivet - Cherry Q	CCPQ-66	8
12.	AFT Spar Attach Fitting	KPWI0672	2
13.	3/16" Bolt	AN3-15A	4
14.	3/16" Thick Washer	AN960-10	4
15.	3/16" Shear Nut	AN364-1032A	4
16.	3/8" Bolt	AN6-35A	2
17.	3/8" Thick Washer	AN960-616	4
18.	3/8" Tensile Nut	AN365-624A	2
19.	5/16" Bolt	AN5-20A	2
20.	5/16" Thick Washer	AN960-516	6
21.	5/16" Tensile Nut	AN365-524A	2
22.	AFT Spar Attach Shim	KPWI0688	4



LEFT-HAND BELLCRANKS SHOWN



FLAP BELLCRANK

141 WING - BELLCRANK ASSEMBLIES

MD5649
REV. - ORIG

RANS S-20 RAVEN - 141 WING - BELLCRANK ASSEMBLIES

#	DESCRIPTION	PART NUMBER	QUANTITY
1.	Aileron Bellcrank Spindle	KPAL0138	2
2.	Bearing	KSCS0019	4
3.	Aileron Bellcrank Pulley	KPAL0137	2
4.	Aileron Bellcrank Mount	KPAL0139	2
5.	1/4" Large Washer	AN970-4	2
6.	1/4" Bolt - Drilled Head	AN4H-7A	2
7.	Safety Wire *	-----	0
8.	Flap Bellcrank Spindle	KPFL0169	2
9.	Flap Bellcrank - LH	KPFL0163-L	1
9.	Flap Bellcrank - RH	KPFL0163-R	1
10.	Flap Bellcrank Mount - LH	KPFL0164-L	1
10.	Flap Bellcrank Mount - RH	KPFL0164-R	1
11.	3/16" Thick Washer	AN960-10	2
12.	3/16" Bolt	AN3-31A	2
13.	Loctite - Blue *	-----	0
14.	3/16" Shear Nut	AN364-1032A	4
15.	Aileron Cable Guide - LH	KPFL0170-L	1
15.	Aileron Cable Guide - RH	KPFL0170-R	1
16.	Aileron Cable Guide Top	KPFL0171	2
17.	3/16" Bolt	AN3-10A	2
18.	3/16" Thin Washer	AN960-10L	6
19.	Aileron Cable	KPCS0303	2
20.	1 3/8" Retaining Ring	KSHW0101	4

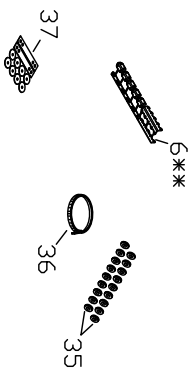
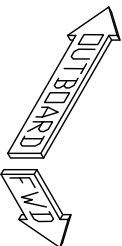
* Builder Supplied

FLANGE BUSHING WILL INSTALL TO
OUTBOARD SIDE OF OUTBOARD AILERON
HINGE ARM AND TO INBOARD SIDE OF
INBOARD AILERON HINGE ARM.

TYPICAL ALL AILERON &
FLAP HINGE ARMS
(EXCEPT ROOT)

* USE AS NECESSARY TO FILL GAP
** BUILDER MODIFIES

LEFT-HAND WING SHOWN



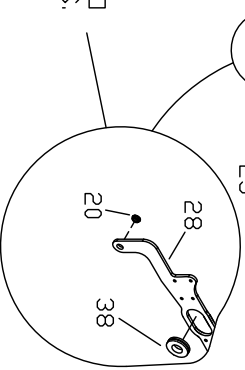
FLANGE BUSHINGS WILL INSTALL TO
OUTBOARD SIDE OF ALL FLAP HINGE ARMS.

REF ID: A12345 S-20 RAVEN

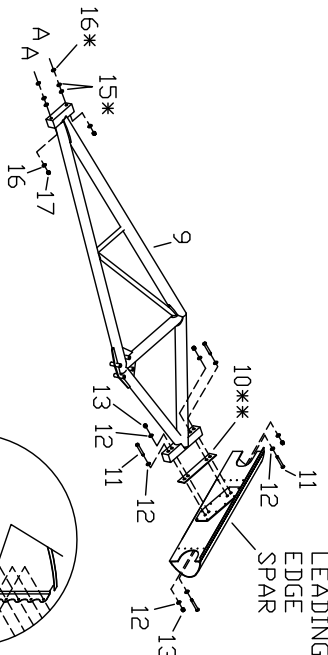
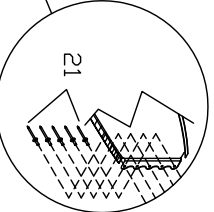
141 WING - FRAME ASSEMBLY

FLAP HINGE
ARM - ROOT

MD5649
REV. - ORIG



TYPICAL RIBS #2 THRU
#6 AND #8 THRU #11



RANS S-20 RAVEN - 141 WING - FRAME ASSEMBLY

#	DESCRIPTION	PART NUMBER	QUANTITY
1.	Wing Tip Rib - LH	KPWI0641-L	1
1.	Wing Tip Rib - RH	KPWI0641-R	1
2.	Inner Wing Rib - LH	KPWI0638-L	8
3.	Inner Wing Rib - RH	KPWI0638-R	8
4.	Outside Root Rib - RH	KPWI0640-R	1
4.	Outside Root Rib - LH	KPWI0640-L	1
5.	Inside Root Rib - RH	KPWI0639-R	1
5.	Inside Root Rib - LH	KPWI0639-L	1
6.	Attach Angle - Part Assembly *	KAWI0037	1
7.	Root Rib FWD Attach Angle **	KPWI0670	0
8.	Rib AFT Attach Angle **	KPWI0669	0
9.	Wing Truss	KPWI0664	2
10.	Lexan Shim Sheet - Truss ***	KPWI0645	0
11.	5/16" Bolt	AN5-16A	8
12.	5/16" Thick Washer	AN960-516	16
13.	5/16" Tensile Nut	AN365-524A	8
14.	1/4" Bolt	AN4-16A	4
15.	1/4" Thick Washer	AN960-416	8
16.	1/4" Thin Washer	AN960-416L	16
17.	1/4" Tensile Nut	AN365-428A	4
18.	Wing Tie Down Angle - LH	KPWI0677-L	1
18.	Wing Tie Down Angle - RH	KPWI0677-R	1
19.	1/8" Stainless Steel Rivet - Cherry Q	CCPQ-46	16
20.	Bronze Flange Bushing	KSAC0071	12
21.	1/8" Stainless Steel Rivet - Cherry Q	CCPQ-42	180
22.	Aileron Hinge Arm	KPWI0654	4
23.	Aileron Bellcrank Outer Rib Support	KPWI0653	2
24.	Flap Hinge Arm	KPWI0655	6
25.	1/8" Aluminum Rivet - Cherry Q	AAPQ-43	168
26.	1/8" Aluminum Rivet - Cherry Q	AAPQ-45	14
27.	1/8" Aluminum Rivet - Cherry Q	AAPQ-44	20
28.	Flap Hinge Arm - Root	KPWI0683	2
29.	3/16" Stainless Steel Rivet - Cherry Q	CCPQ-66	4
30.	Flap Teleflex and Bellcrank Mount	KPWI0652	2
31.	1/8" Stainless Steel Rivet - Cherry Q	CCPQ-43	4
32.	3/16" Bolt	AN3-5A	2
33.	3/16" Thin Washer	AN960-10L	2
34.	3/16" Shear Nut	AN364-1032A	2
35.	3/4" Rubber Grommet	MS35489-11	18
36.	Serrated Grommet Strip	KSAC0023	4 ft
37.	Lexan Wing Parts Sheet	KAWI0041	1
38.	Grommet	KSAC0076	2

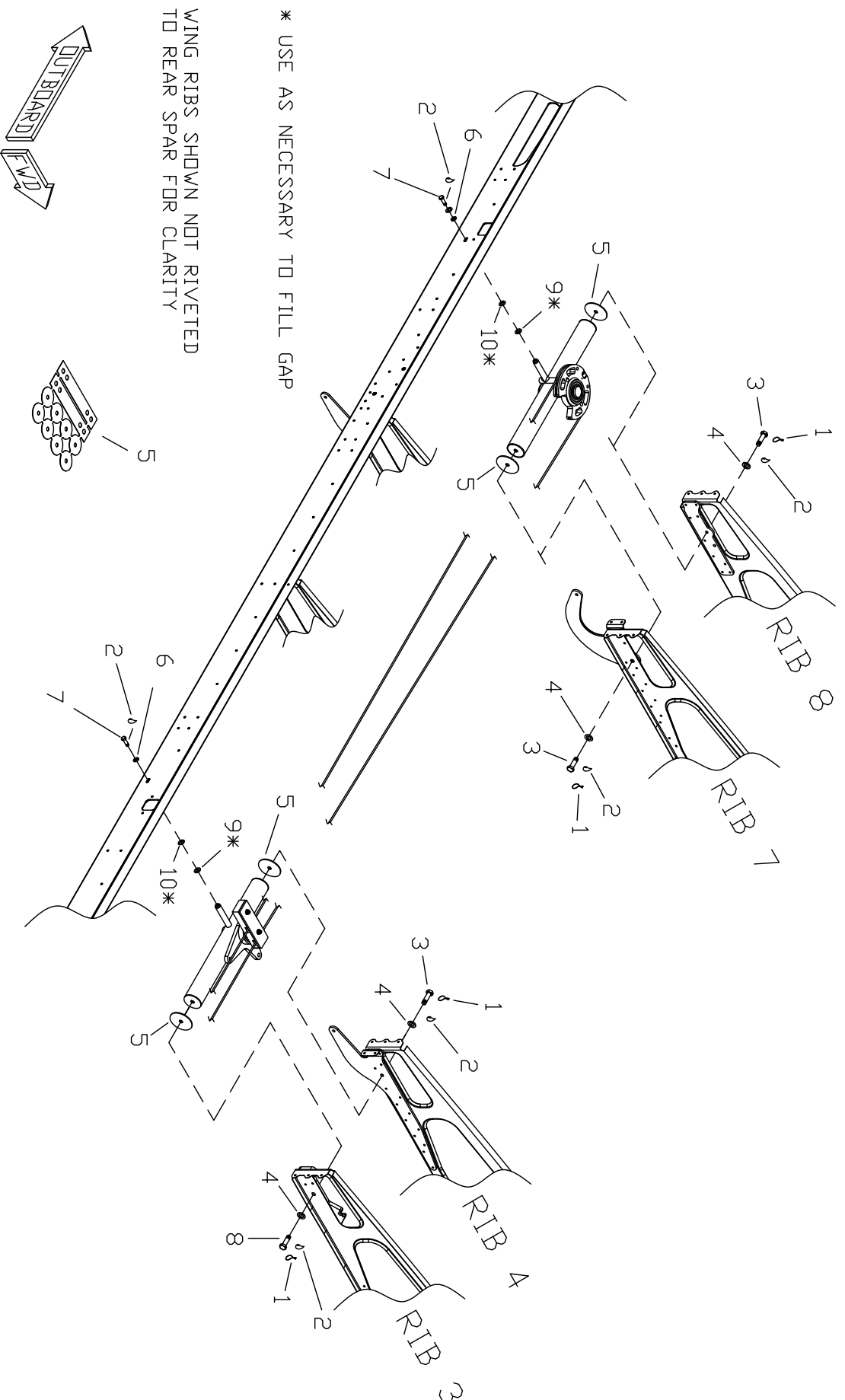
* Builder Modifies

** Part of KAWI0037

*** Part of KAWI0041

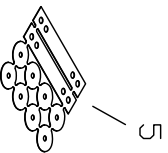
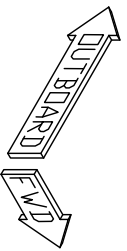
9/1/2013

REV. - ORIG



* USE AS NECESSARY TO FILL GAP

WING RIBS SHOWN NOT RIVETED
TO REAR SPAR FOR CLARITY



LEFT-HAND WING SHOWN

REF ID: A12345 S-20 RAVEN 141 WING - BELLCRANK INSTALLATION

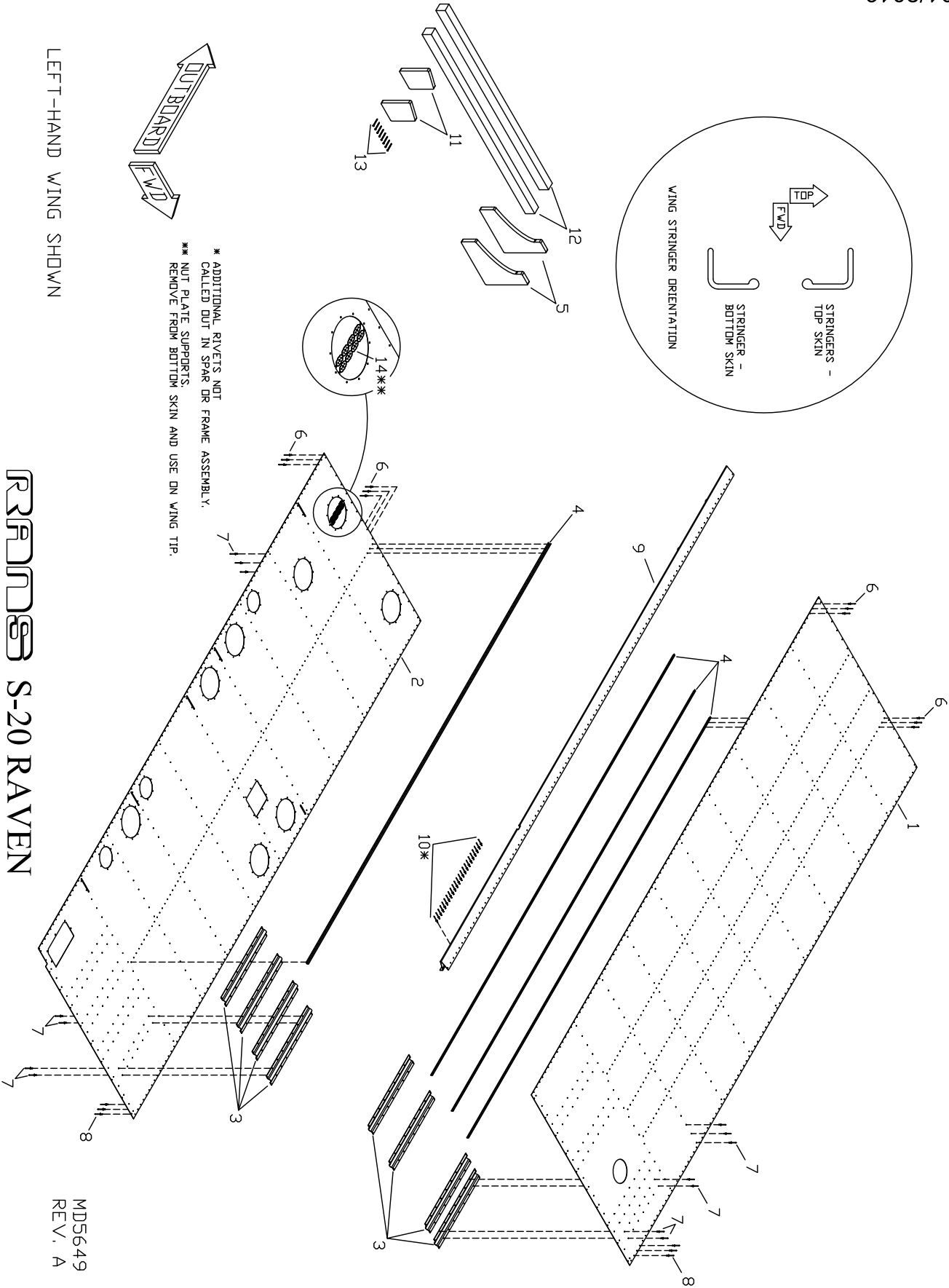
MD5649
REV. - ORIG

RANS S-20 RAVEN - 141 WING - BELLCRANK INSTALLATION

#	DESCRIPTION	PART NUMBER	QUANTITY
1.	Safety Wire *	-----	0
2.	Loctite Blue *	-----	0
3.	1/4" Bolt - Drilled Head	AN4H-5A	6
4.	1/4" Thick Washer	AN960-416	8
5.	Lexan Shim Sheet - Bellcrank Mount **	KPWI0684	0
6.	3/16" Star Lock Washer	MS35333-39	4
7.	3/16" Bolt	AN3-3A	4
8.	1/4" Bolt - Drilled Head	AN4H-6A	2
9.	3/16" Thick Washer	AN960-10	4
10.	3/16" Thin Washer	AN960-10L	4

* Builder Supplied

** Part of KAWI0041



S-20 RAVEN
141 WING - SKIN INSTALLATION

MD5649
REV. A

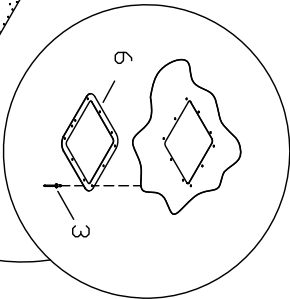
RANS S-20 RAVEN - 141 WING - SKIN INSTALLATION

#	DESCRIPTION	PART NUMBER	QUANTITY
1.	Wing Skin - Top	KPWI0646	2
2.	Wing Skin - Bottom	KPWI0647	2
3.	Tank Support	KPWI0651	16
4.	Wing Stringer	KPWI0648	8
5.	Wing Jig - FWD	KPWI0687-A	2
6.	1/8" Aluminum Rivet - Cherry Q	AAPQ-42	1164
7.	1/8" Aluminum Rivet - Cherry Q	AAPQ-41	1068
8.	1/8" Stainless Steel Rivet - Flush	CCC-42	412
9.	Wing Gap Seal - RH	KPWI0665-R	1
9.	Wing Gap Seal - LH	KPWI0665-L	1
10.	1/8" Stainless Steel Rivet - Cherry Q	CCPQ-42	52
11.	Wing Jig - AFT	KPWI0687-B	2
12.	Wood - 2" x 2" *	-----	0
13.	Wood Screws *	-----	0
14.	Nut Plate Support **	KPWI0703	0

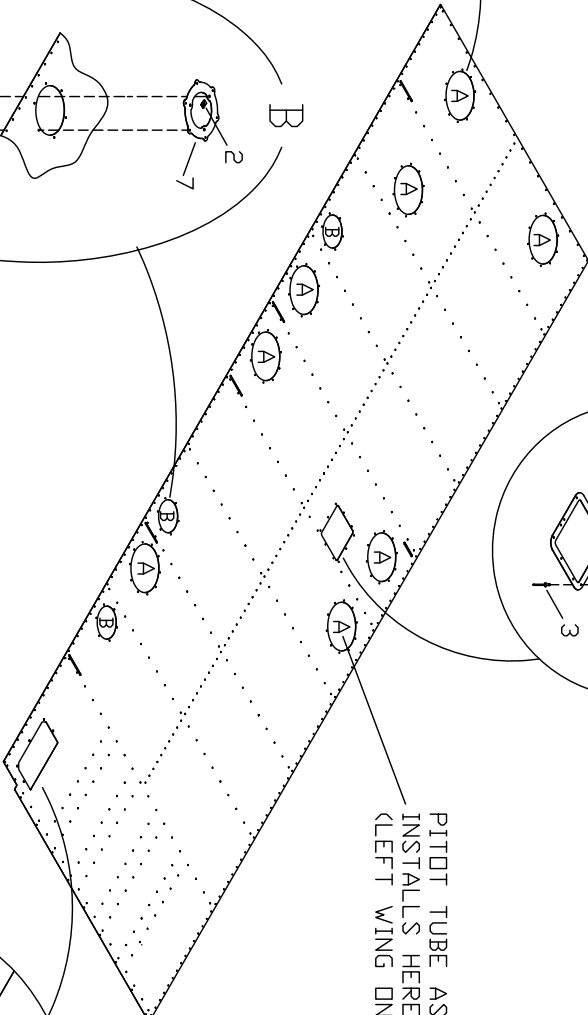
* Builder Supplied

** Part of KPWI0647. Used on Wing Tips

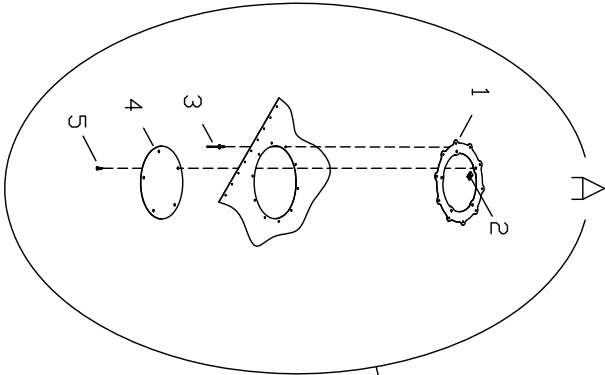
LIFT STRUT EXIT
DOUBLER INSTALLATION



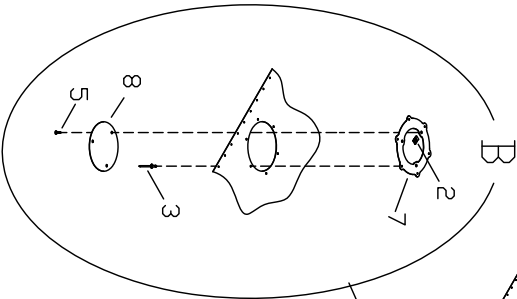
PITOT TUBE ASSEMBLY
INSTALLS HERE
(LEFT WING ONLY)



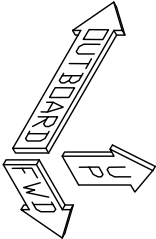
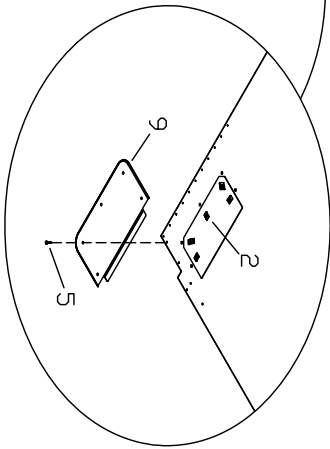
5" INSPECTION PANEL
ASSEMBLY



3" INSPECTION PANEL
ASSEMBLY



FUEL WITHDRAWAL
ACCESS PLATE
INSTALLATION



LEFT-HAND WING SHOWN

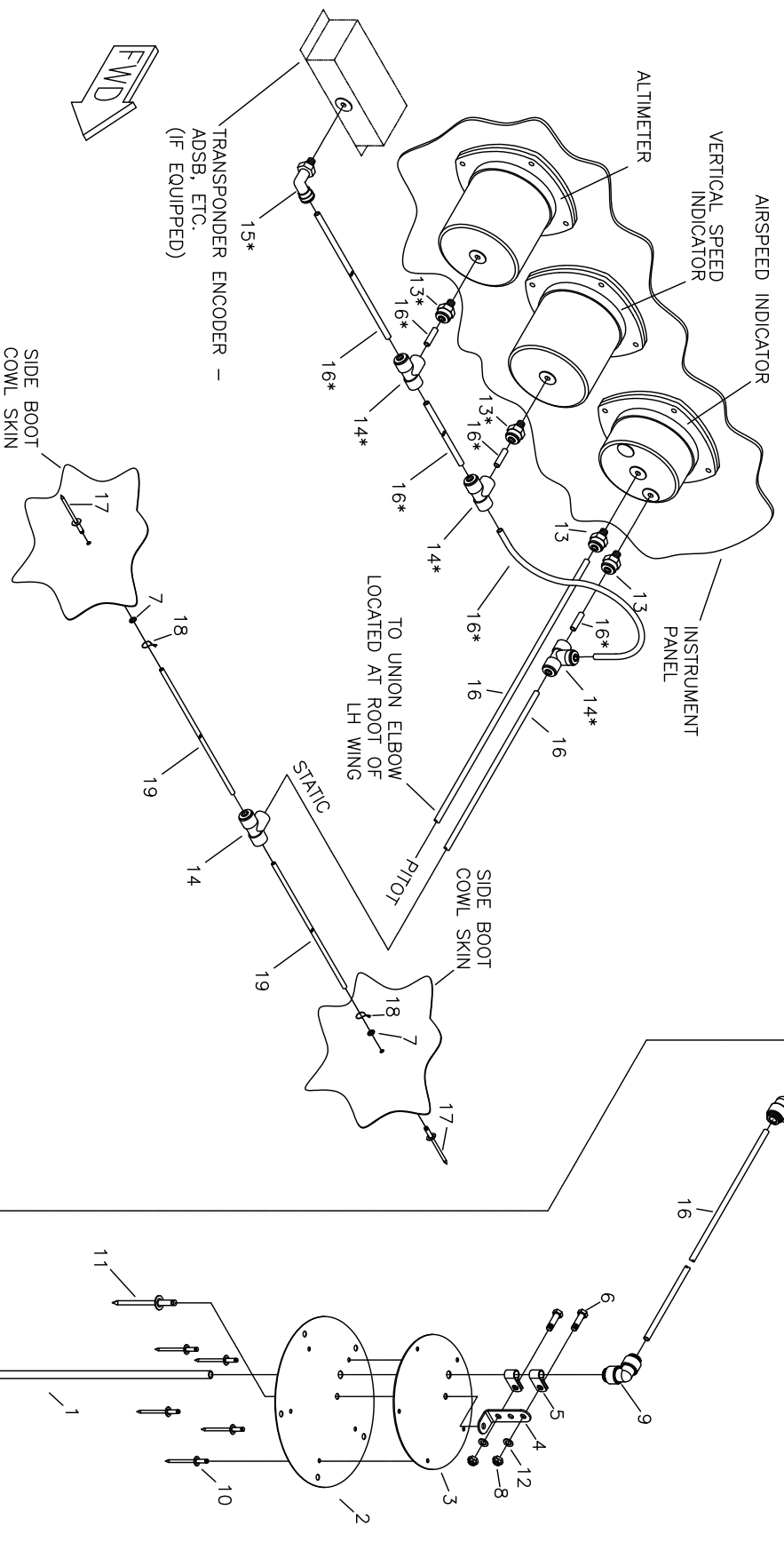
MD5649 S-20 RAVEN
141 WING - BOTTOM SKIN
INSPECTION PANEL INSTALLATION

MD5649
REV. - ORIG

RANS S-20 RAVEN - 141 WING - BOTTOM SKIN - INSPECTION PANEL INSTALLATION

#	DESCRIPTION	PART NUMBER	QUANTITY
1.	5" Inspection Cover Tab Ring	KPWI0656	16
2.	Tinnerman	A1789-8Z1	108
3.	1/8" Aluminum Rivet - Cherry Q	AAPQ-41	216
4.	5" Inspection Cover	KPWI0659	16
5.	#8 Pan Head Screw	8X1/2 PHS	108
6.	Lift Strut Exit Doubler	KPWI0662	2
7.	3" Inspection Cover Tab Ring	KPWI0680	6
8.	3" Inspection Cover	KPWI0682	6
9.	Fuel Withdrawal Access Plate	KPWI0674	2

TYPICAL ANALOG INSTRUMENT INSTALLATION SHOWN



* THESE ITEMS BUILDER SUPPLIED, AS NEEDED FOR ADDITIONAL INSTRUMENTS.

OPTION S-20 RAVEN 141 WING – OPTIONS – PITOT/STATIC SYSTEM

RANS S-20 RAVEN - 141 WING - OPTIONS - PITOT/STATIC SYSTEM

#	DESCRIPTION	PART NUMBER	QUANTITY
1.	Pitot Tube	KPPT0014	1
2.	5" Inspection Cover * **	KPWI0659	0
3.	Pitot Doubler Plate	KPPT0015	1
4.	Angle Bracket	KPAC0004	1
5.	1/4" Conduit Clamp	S1-CC	2
6.	3/16" Bolt	AN3-4A	2
7.	1/8" Small Brass Washer	AN960-B4	2
8.	3/16" Shear Nut	AN364-1032A	2
9.	Union Elbow	KSPT0005	2
10.	1/8" Aluminum Rivet - Cherry Q	AAPQ-42	5
11.	3/16" Aluminum Rivet - Cherry Q	AAPQ-62	1
12.	3/16" Thin Washer	AN960-10L	2
13.	Male Connector ***	KSPT0002	2
14.	Union Tee ***	KSPT0003	1
15.	90 Degree Elbow ***	KSPT0006	2
16.	Pitot/Static Tubing ***	KSPT0004	22 ft
17.	1/8" Stainless Steel Rivet - Cherry Q	CCPQ-46	2
18.	Safety Wire ****	-----	0
19.	1/8" Primer Line	PRIMER LINE	4 ft

* Refer to 141 Wing - Bottom Skin Inspection Panel Installation

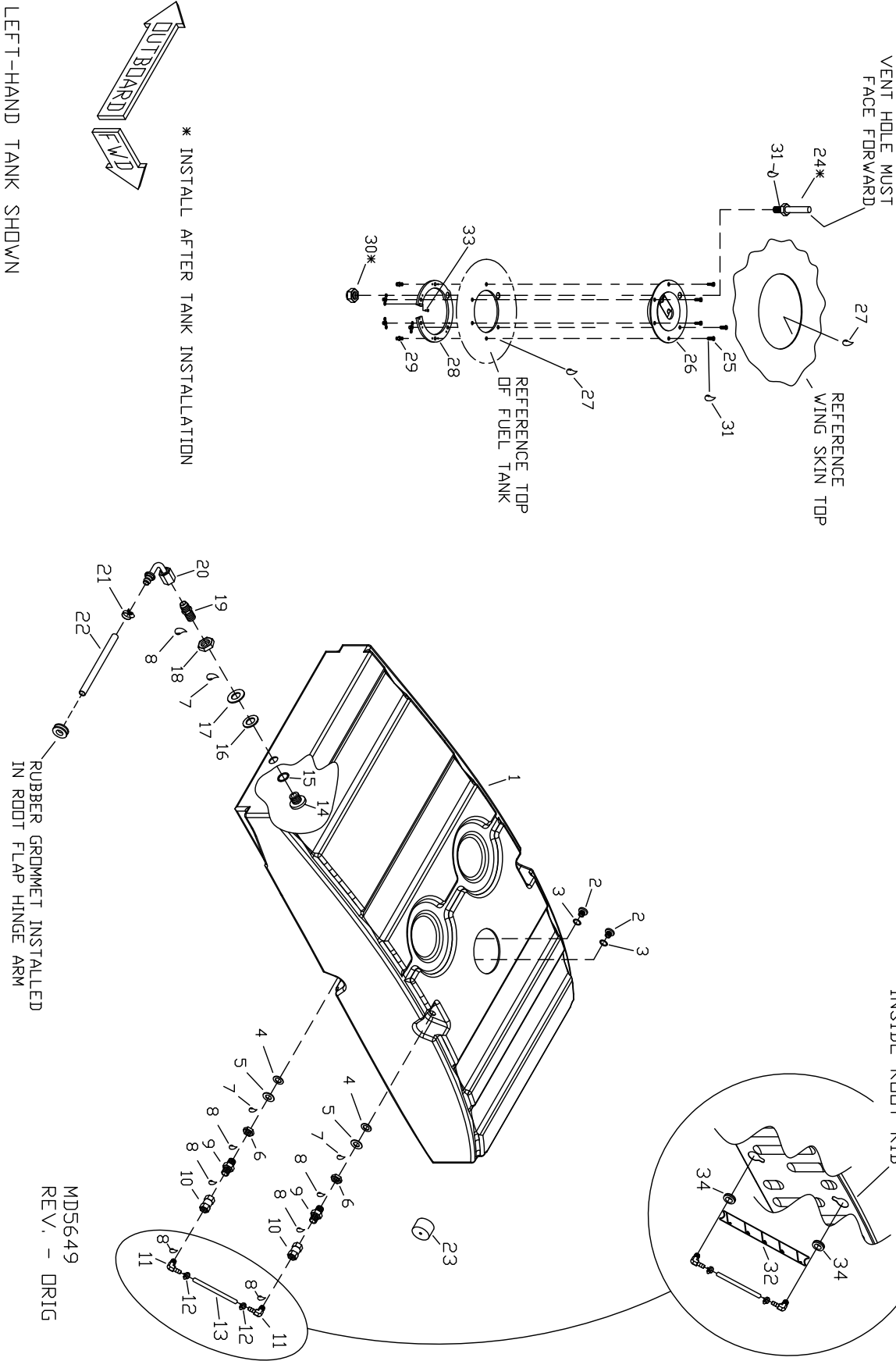
** Builder Modifies

*** May be purchased separately, call RANS Parts Dept. for pricing

**** Builder Supplied

9/1/2013

REV. - ORIG



141 WING - FUEL TANK ASSEMBLY

RANS S-20 RAVEN - 141 WING - FUEL TANK ASSEMBLY

#	DESCRIPTION	PART NUMBER	QUANTITY
1.	Fuel Tank	KPFS0112	2
2.	Tank Withdrawal Fitting	KPFS0017	4
3.	O-Ring	KSFS0009	4
4.	Rubber Washer	KSFS0010	4
5.	1/2" Thick Washer	AN960-816	4
6.	Nut - Flared Tube Bulkhead	AN924-5D	4
7.	Loctite Blue *	-----	0
8.	Thread Sealant *	-----	0
9.	1/8" NPT Nipple	KSAC0032	4
10.	1/8" Coupler	AN910-1D	4
11.	90-Degree Withdrawal Fitting	8342	4
12.	Hose Clamp - 5/8"	5-6202	4
13.	Clear Fuel Line - 1/4"	KSFS0008	18 in
14.	3/4" Bulkhead Fitting	KSFS0037	2
15.	O-Ring - 3/4" Bulkhead	KSFS0039	2
16.	Rubber Washer	KSFS0016	2
17.	3/4" Thick Washer	AN960-1216	2
18.	Nut - 3/4" Bulkhead - Reverse Thread	KSFS0038	2
19.	Nipple - Flared Tube & Pipe Thread	AN816-6D	2
20.	90-Degree 3/8" Hose Fitting	33982-6-6	2
21.	Hose Clamp - 7/8"	5-6203	2
22.	Black Fuel Line - 3/8"	27004	13 ft
23.	1.5" Dia. Wood Dowel *	-----	0
24.	Fuel Vent	KPFS0101	2
25.	3/16" Countersunk Machine Screw	MS24694-S53	10
26.	Fuel Cap Assembly - Flush	KSFS0035	2
27.	Pro-Seal Sealant *	-----	0
28.	Retainer	KPWI0614	2
29.	3/16" Nut Plate	K-1000-3	10
30.	3/8" Shear Nut	AN364-624A	2
31.	PRC or DOW 730 Sealant *	-----	0
32.	Fuel Sight Gauge Decal - LH **	KPPL0024-L	0
32.	Fuel Sight Gauge Decal - RH **	KPPL0024-R	0
33.	3/32" Solid Rivet - Flush	AN426AD-3-5	20
34.	Rubber Grommet	MS35489-17	4

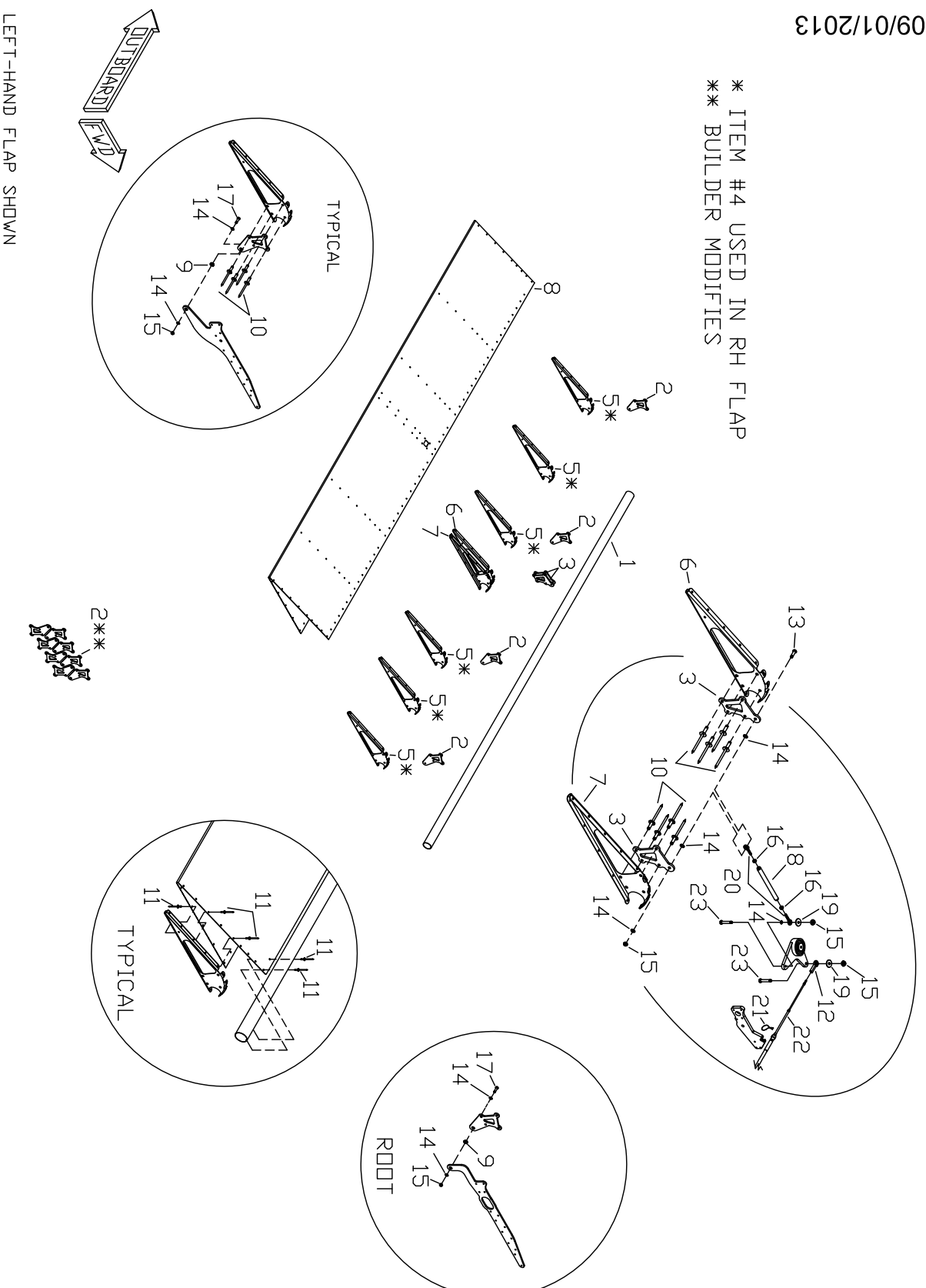
* Builder Supplied

** Referenced from Placards/Labels/Markers

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** ITEM #4 USED IN RH FLAP
** BUILDER MODIFIES

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141 WING-FLAP ASSEMBLY

RANS S-20 RAVEN - 141 WING - FLAP ASSEMBLY AND INSTALLATION

#	DESCRIPTION	PART NUMBER	QUANTITY
1.	Flap Spar	KPFL0167	2
2.	Flap Hinge - Part Assembly * **	KAFL0019	1
3.	Flap Push-Pull Tube Attach	KPFL0165	4
4.	Aileron / Flap Rib - RH	KPAL0146-R	6
5.	Aileron / Flap Rib - LH	KPAL0146-L	6
6.	Aileron / Flap Action Rib - LH	KPAL0147-L	2
7.	Aileron / Flap Action Rib - RH	KPAL0147-R	2
8.	Flap Skin - RH	KPFL0168-R	1
8.	Flap Skin - LH	KPFL0168-L	1
9.	Bronze Flange Bushing	KSAC0071	8
10.	3/16" Aluminum Rivet - Cherry Q	AAPQ-62	48
11.	1/8" Aluminum Rivet - Cherry Q	AAPQ-41	420
12.	Female Rod End	NF-3	2
13.	3/16" Bolt	AN3-10A	2
14.	3/16" Thin Washer	AN960-10L	24
15.	3/16" Shear Nut	AN364-1032A	16
16.	3/16" Plain Nut	AN345-10	4
17.	3/16" Bolt	AN3-6A	8
18.	Flap Push-Pull Tube	KPFL0172	2
19.	#10 Stainless Steel Washer	BSHW0022	4
20.	3/16" Male Rod End	CM-3	4
21.	Safety Wire ***	-----	0
22.	12' Teleflex Cable	TELEFLEX-12	2
23.	3/16" Bolt	AN3-7A	4

* Builder Modifies

** Individual parts may be purchased as KPFL0166

*** Builder Supplied

9/1/2013

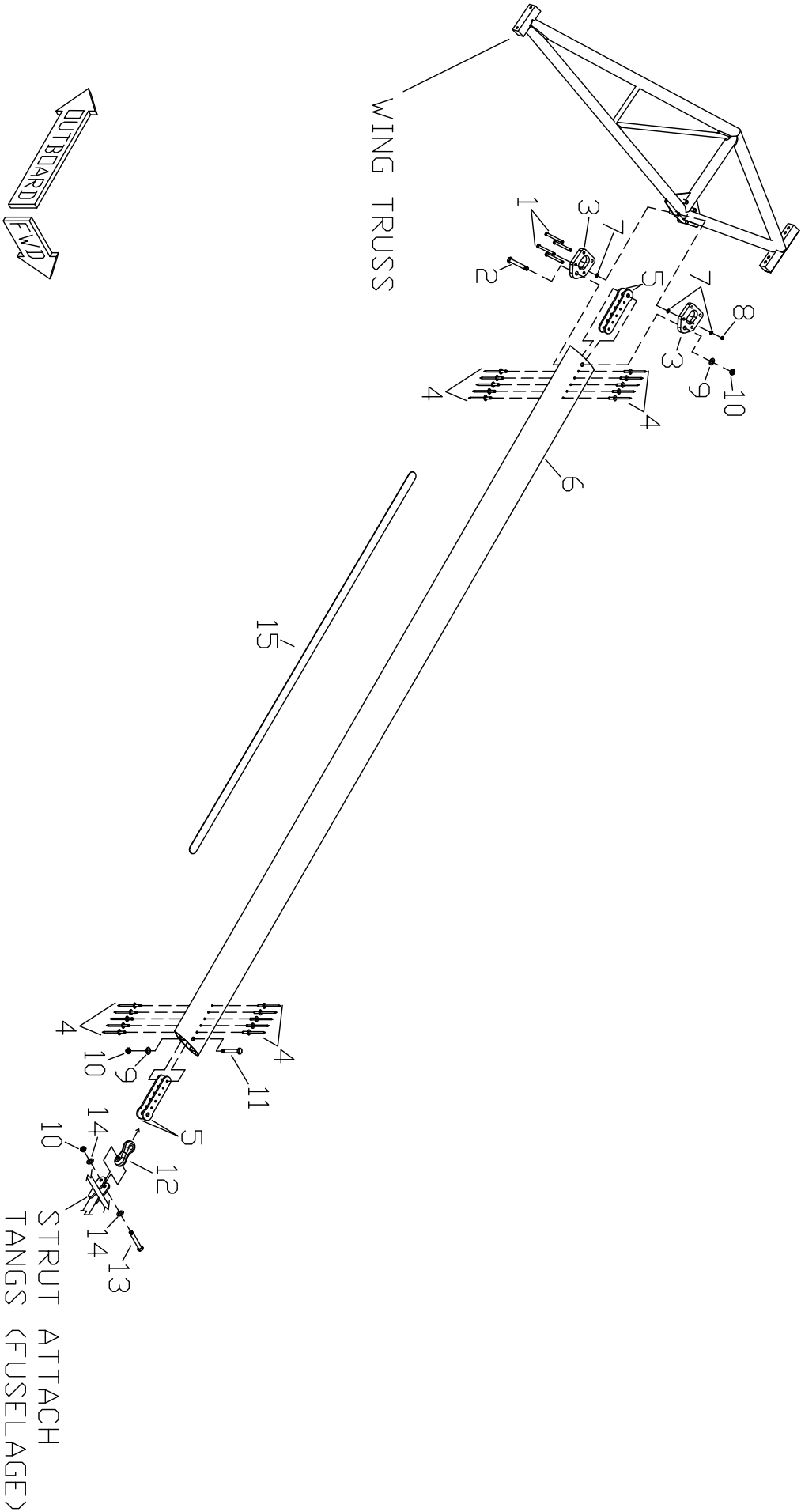
REV. - ORIG

RANS S-20 RAVEN - 141 WING - AILERON ASSY AND INSTALLATION

#	DESCRIPTION	PART NUMBER	QUANTITY
1.	Aileron Spar	KPAL0140	2
2.	Aileron Hinge	KPAL0144	4
3.	Aileron Push-Pull Attach	KPAL0143	4
4.	Aileron / Flap Rib - RH	KPAL0146-R	5
5.	Aileron / Flap Rib - LH	KPAL0146-L	5
6.	Aileron / Flap Action Rib - LH	KPAL0147-L	2
7.	Aileron / Flap Action Rib - RH	KPAL0147-R	2
8.	Aileron Skin - LH	KPAL0145-L	1
8.	Aileron Skin - RH	KPAL0145-R	1
9.	Bronze Flange Bushing	KSAC0071	4
10.	3/16" Aluminum Rivet - Cherry Q	AAPQ-62	28
11.	1/8" Aluminum Rivet - Cherry Q	AAPQ-41	400
12.	3" Inspection Cover Tab Ring	KPWI0680	4
13.	Tinnerman	A1789-8Z1	12
14.	#8 Pan Head Screw	8X1/2 PHS	12
15.	3/16" Male Rod End	CM-3	4
16.	3/16" Plain Nut	AN345-10	4
17.	Aileron Push-Pull Tube	KPAL0148	2
18.	3/16" Thick Washer	AN960-10	10
19.	3/16" Thin Washer	AN960-10L	14
20.	Spacer Bushing *	KPAC0060	1
21.	3/16" Bolt	AN3-16A	2
22.	3/16" Shear Nut	AN364-1032A	8
23.	3/16" Bolt	AN3-6A	4
24.	#10 Stainless Steel Washer	BSHW0022	2
25.	3" Inspection Cover	KPWI0682	4
26.	3/16" Bolt	AN3-11A	2
27.	Lead Shot or BB's **	-----	0
28.	Expanding Foam Sealant **	-----	0

* Builder Modifies

** Builder Supplied



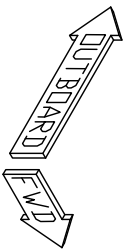
REVISION S-20 RAVEN
141 WING - LIFT STRUT ASSEMBLY

MD5649
REV. - ORIG

RANS S-20 RAVEN - 141 WING - LIFT STRUT ASSEMBLY & INSTALLATION

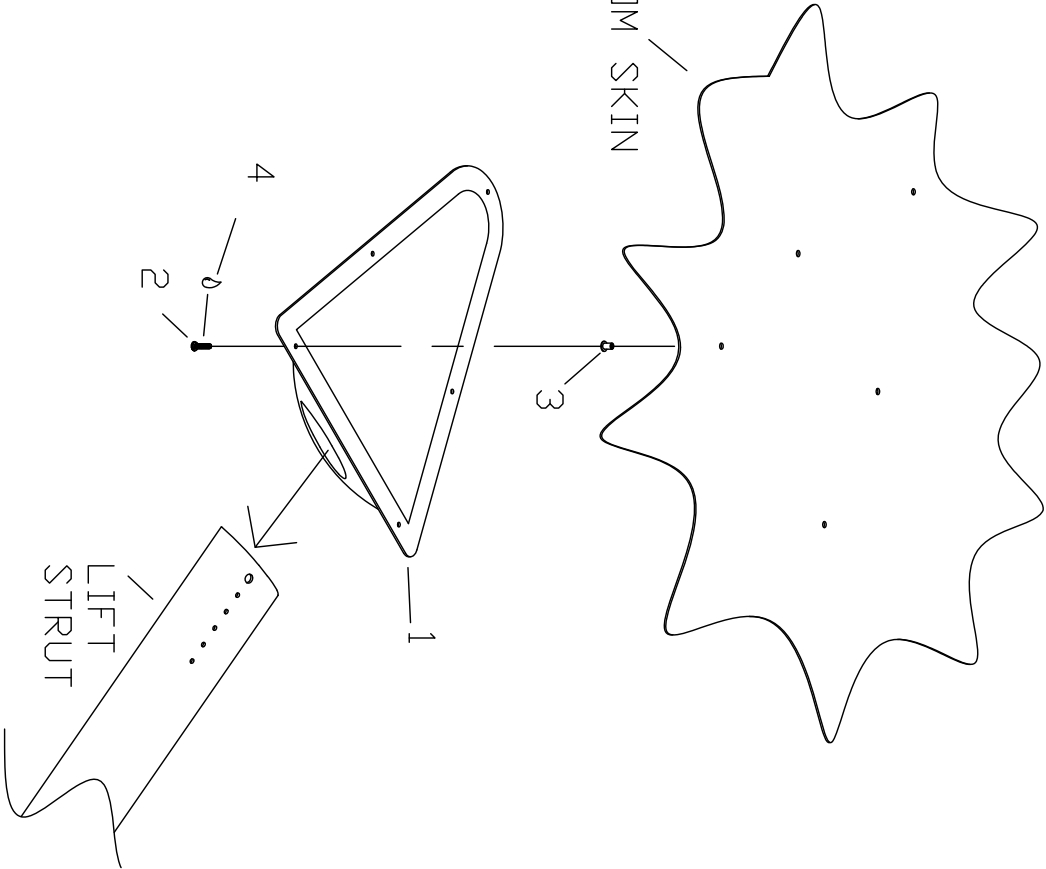
#	DESCRIPTION	PART NUMBER	QUANTITY
1.	1/4" Bolt	AN4-26A	8
2.	5/16" Bolt	AN5-27A	2
3.	Strut Truss Fitting	KPLS0055	4
4.	3/16" Stainless Steel Rivet - Cherry Q	CCPQ-66	40
5.	Strut Fitting Doubler	KPLS0053	8
6.	Lift Strut	KPLS0054	2
7.	1/4" Thick Washer	AN960-416	24
8.	1/4" Shear Nut	AN364-428A	8
9.	5/16" Thick Washer	AN960-516	4
10.	5/16" Shear Nut	AN364-524A	6
11.	5/16" Bolt	AN5-17A	2
12.	Lower Strut Fitting (S-20)	KPLS0057	2
13.	5/16" Bolt	AN5-14A	2
14.	5/16" Thin Washer	AN960-516L	4
15.	Anti-Slip Tape - 1" x 48" *	KSAC0075	8 ft

* Builder Modifies



LEFT-HAND SHOWN

WING BOTTOM SKIN



141 WING - OPTIONS - UPPER LIFT STRUT FAIRING

141 WING - OPTIONS - UPPER LIFT STRUT FAIRING

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RANS S-20 RAVEN - 141 WING - OPTIONS - UPPER LIFT STRUT FAIRING

#	DESCRIPTION	PART NUMBER	QUANTITY
1.	Upper Lift Strut Fairing - LH	KPWI0692-L	1
1.	Upper Lift Strut Fairing - RH	KPWI0692-R	1
2.	3/16" Truss Head Screw	AN526-C1032-R12	10
3.	3/16" Rivet Nut	MS27130-A25K	10
4.	Loctite Blue *	-----	0

* Builder Supplied

RANS S-20 RAVEN - 141 WING - WING TIP ASSEMBLY AND INSTALLATION

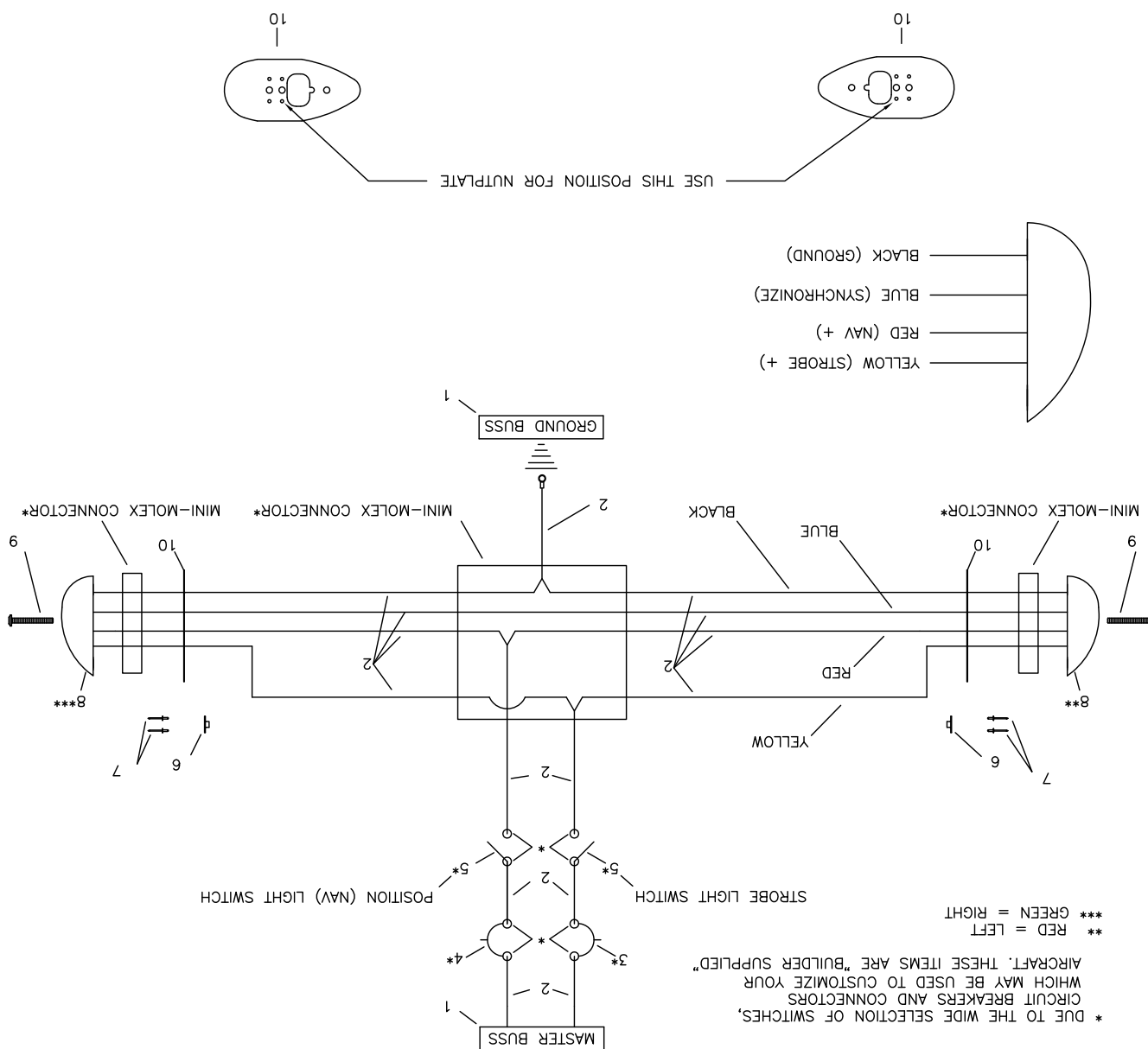
#	DESCRIPTION	PART NUMBER	QUANTITY
1.	Wing Tip - LH	KPWI0685-L	1
1.	Wing Tip - RH	KPWI0685-R	1
2.	#8 Nut Plate	MS21047-8	16
3.	PVC Cement *	-----	0
4.	Wing Tip Support Rib - RH	KPWI0686-R	1
4.	Wing Tip Support Rib - LH	KPWI0686-L	1
5.	#8 Washer	AN960-8	16
6.	8-32 Bolt	KSHW0102	16
7.	3/32" Aluminum Rivet	40APR1/8	32
8.	Nut Plate Support **	KPWI0703	0

* Builder Supplied

** Trimmed from KPWI0647.

MD2668

* DUE TO THE WIDE SELECTION OF SWITCHES, CIRCUIT BREAKERS AND CONNECTORS WHICH MAY BE USED TO CUSTOMIZE YOUR AIRCRAFT. THESE ITEMS ARE "BUILDER SUPPLIED"

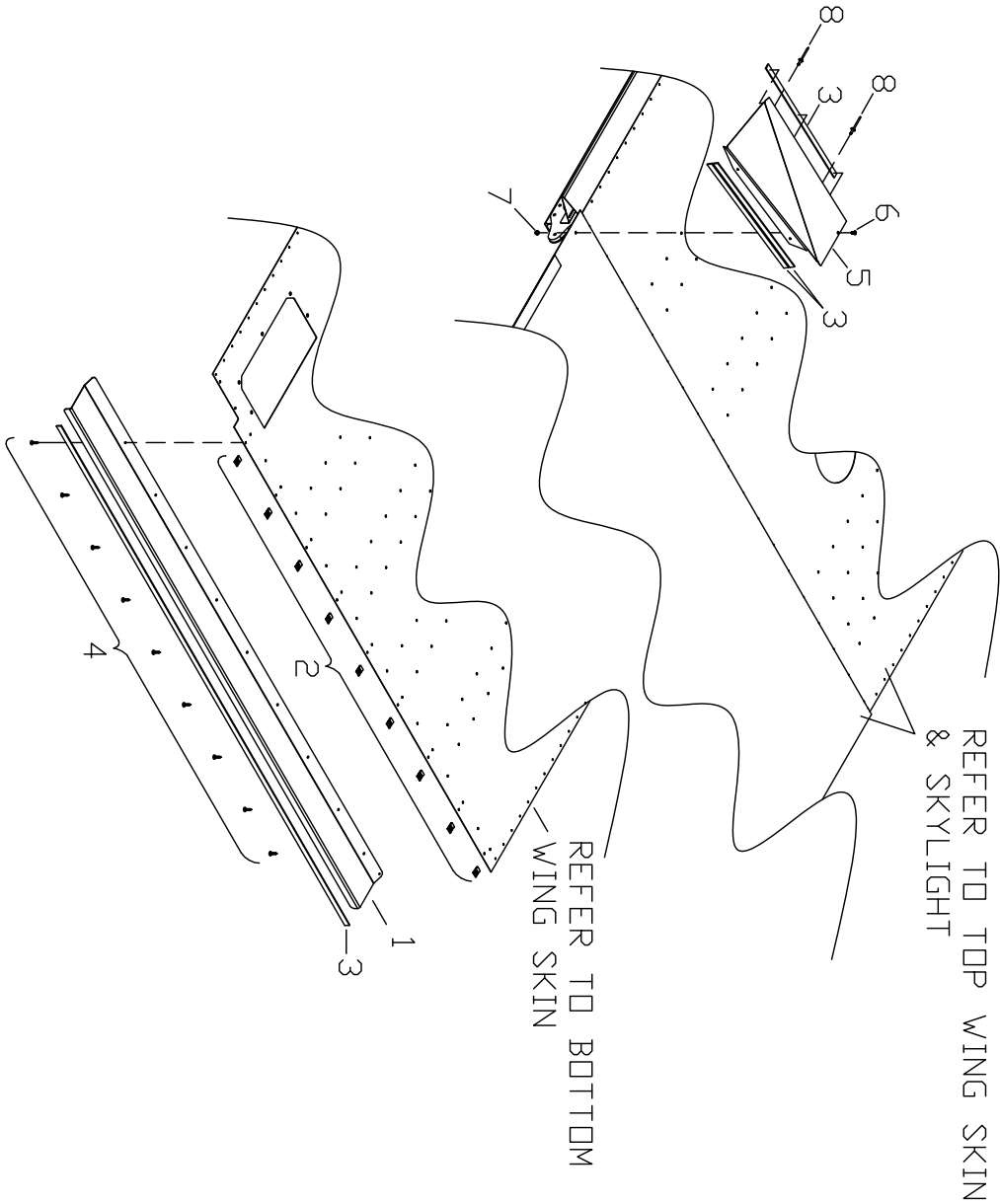


RANS S-20 RAVEN - 141 WING - OPTIONS - AVEO STROBE INSTALLATION

#	DESCRIPTION	PART NUMBER	QUANTITY
1.	Electrical Buss Bar * **	AMW 636	0
2.	18 Gauge Wire *	-----	0
3.	Circuit Breaker - 5 amp *	-----	0
4.	Circuit Breaker - 5 amp *	-----	0
5.	Switch *	-----	0
6.	3/16" Nut Plate	K-1000-3	2
7.	3/32" Aluminum Rivet	40APR1/8	4
8.	Strobe Light Set - AVEO	KSES0059	1 set
9.	3/16" Countersunk Machine Screw	KSHW0088	2
10.	Strobe Light Mount - AVEO	KPWI0541	2

* Builder Supplied

** May be purchased seperately, call RANS Parts Dept. for pricing



LEFT-HAND SHOWN

141 WING - ROOT SEAL INSTALLATION

MD5649
REV. - ORIG

RANS S-20 RAVEN - 141 WING - ROOT SEAL INSTALLATION

#	DESCRIPTION	PART NUMBER	QUANTITY
1.	Wing Root Bottom Gap Seal - LH	KPWI0690-L	1
1.	Wing Root Bottom Gap Seal - RH	KPWI0690-R	1
2.	Tinnerman	A1789-8Z-1	18
3.	1/2" Black Foam Tape	KSAC0021	14 ft
4.	#8 Pan Head Screw	8X1/2 PHS	18
5.	Wing Gap Seal - LH	KPWI0691-L	1
5.	Wing Gap Seal - RH	KPWI0691-R	1
6.	#6-32 Pan Head Machine Screw	MS35206-228	2
7.	#6-32 Nut	AN364-632A	2
8.	1/8" Aluminum Rivet - Avex	1691-0410	4