



P and M Aviation Pvt. Ltd.

GT450 WING PARTS CATALOGUE

DOC No: PAM-015

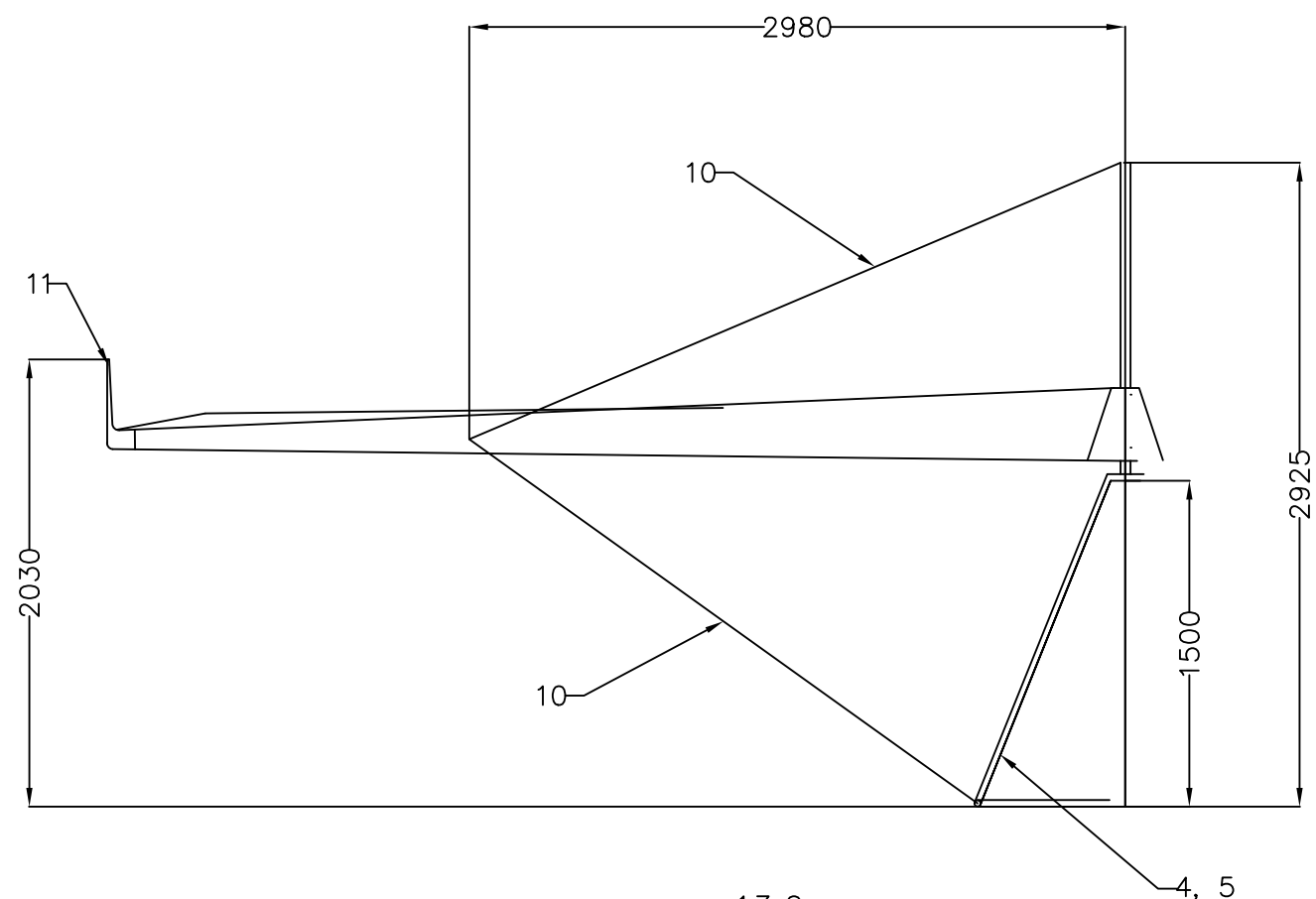
Issue 1, Rev 0 dt Jan 2022

Unit 2, Rampura, Byrathi - Avalahalli Main Road,
Bidarahalli Hobli, Bangalore – 560 049

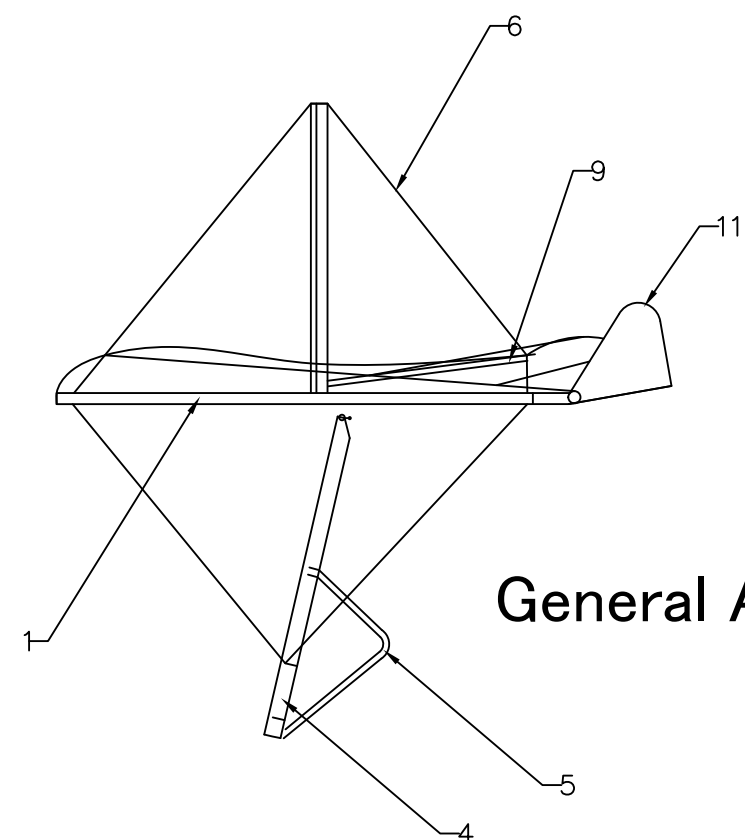
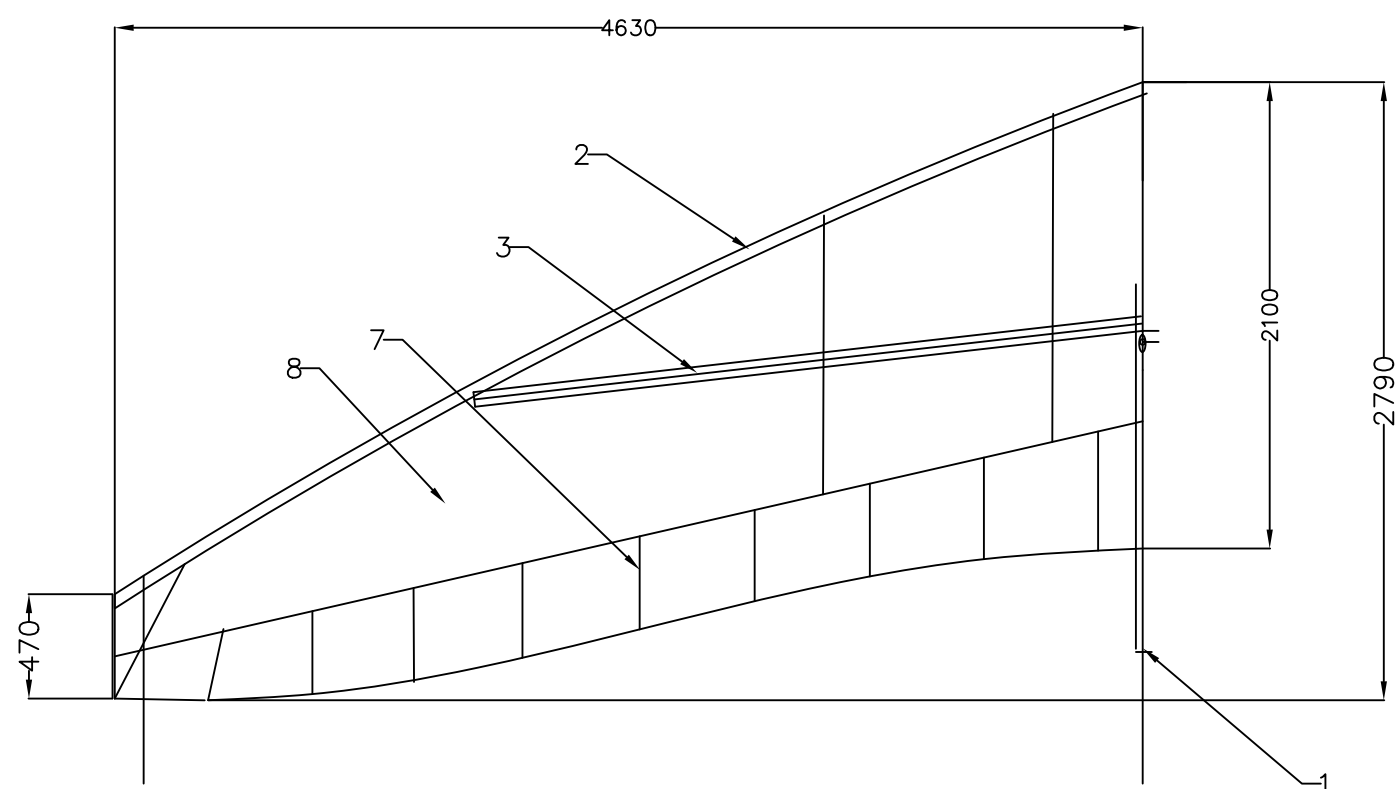
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area 13.0 sq.m
span 9260mm
aspect ratio 6.59
tip fin area 0.26 sq m (both fins)



General Arrangement

11	TIP FIN ASSEMBLY	YQD-080
10	RIGGING FINAL ASSEMBLY	YQD-050
9	FIN TUBE ASSEMBLY	YQD-070
8	SAIL GENERAL ARRANGEMENT	YQD-060
7	BATTEN PLANE ASSEMBLY	YQD-71000
6	UPPER RIGGING ASSEMBLY	YQD-059
5	TRAINING BAR ASSEMBLY	YQC-0401
4	CONTROL FRAME ASSEMBLY	YQD-040
3	CROSS SPAR ASSEMBLY	YQD-030
2	LEADING EDGE ASSEMBLY	YQD-020
1	KEEL ASSEMBLY	YQD-010

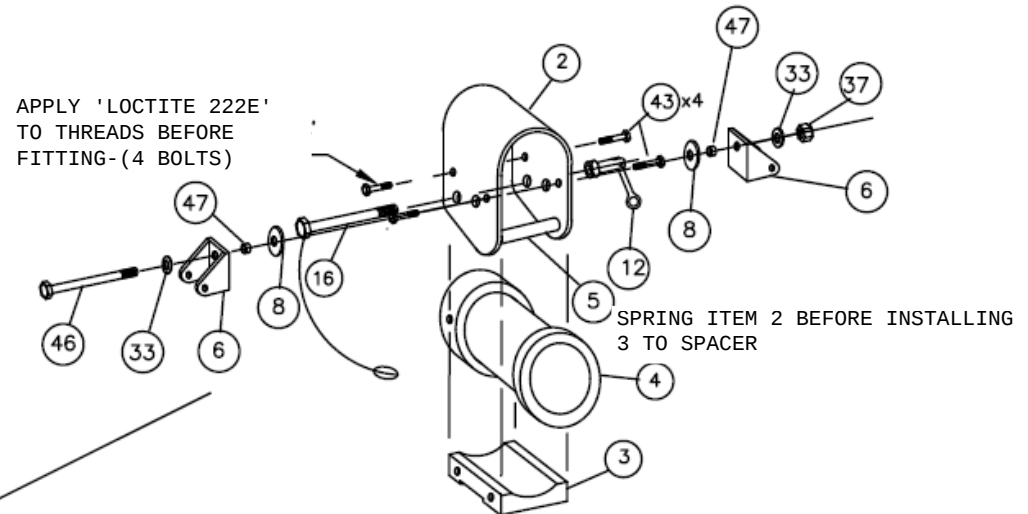
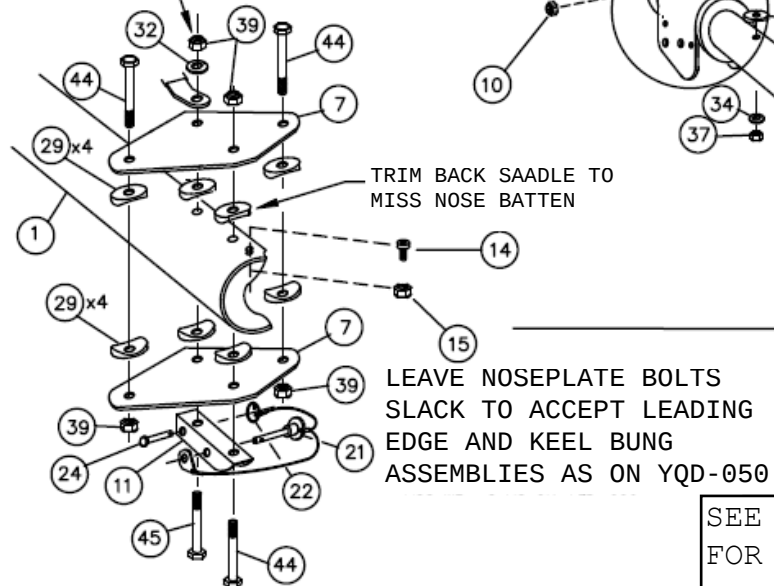
NEW ROLL BRACKET ASSEMBLY

USED ON A/C BUILT FROM JUNE
2018

KEEL ASSEMBLY

NOSE PLATE ASSEMBLY

LEAVE NUT SLACK
TO ACCEPT TOP
RIGGING ASSEMBLY



SEE ROLL BRACKET
ASSEMBLY

SEE NOSE PLATE
ASSEMBLY

ASSEMBLE KEEL WITH
NOSE BATTEN LOCATER SCREW UPPERMOST

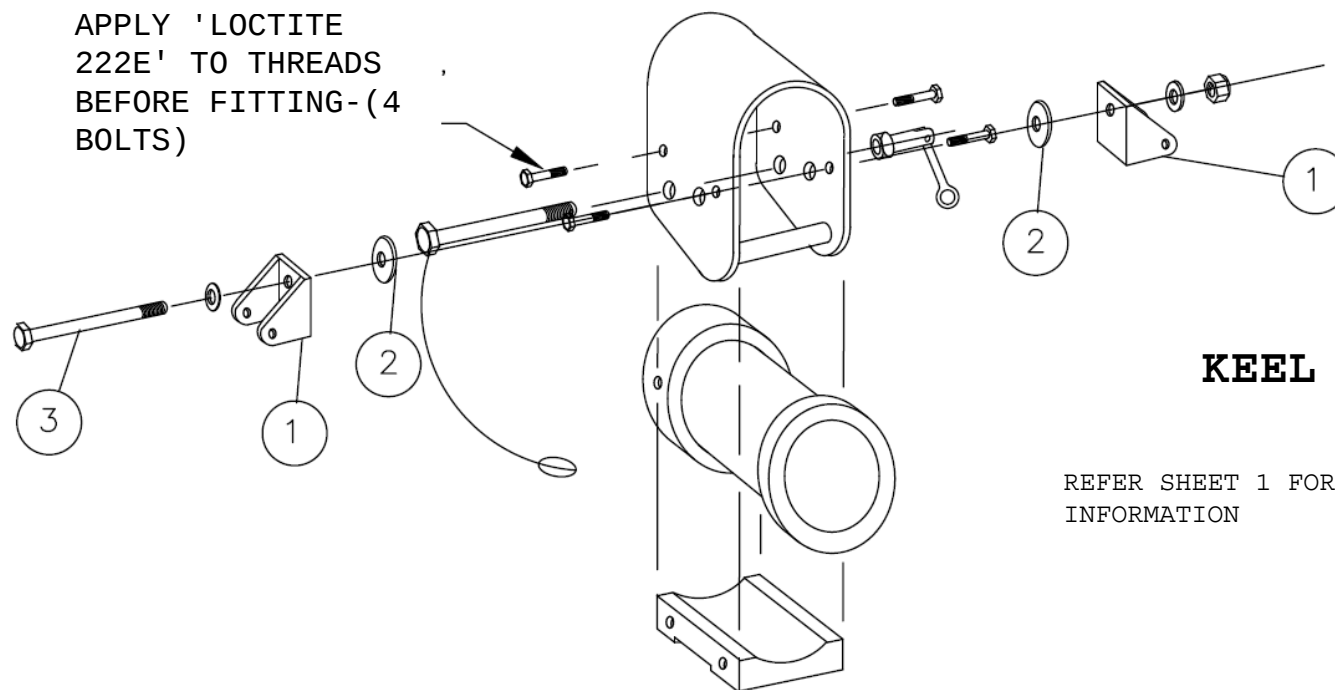
SEE ALSO WING FINAL ASSY
FOR KEEL FINAL ASSEMBLY

KEEL ASSEMBLY

ITEM NUMBER	DESCRIPTION	UNITS PER ASSEMBLY	PART NUMBER
1	KEEL TUBE COMPLETE	1	YQD-012
2	ROLL BRACKET	1	ZMA-041
3	ROLL BRACKET SPACER BLOCK (TYPE 2)	1	ZMA-023
4	ROLL BRACKET BEARING (TYPE 2)	1	ZMP-094
5	SPACER	1	ZSP-091
6	CONTROL FRAME CHANNEL UPPER	2	ZCH-017B
7	NOSE PLATE	2	ZPL-003
8	PLASTIC WASHER	2	FWP-012
10	6mm THIN NYLOCK NUT	1	FNM6-NT
11	NOSE CATCH CHANNEL	1	ZCH-006
12	PINCH NUT ASSEMBLY	1	YQB-31303
13	SOCKET HD M6 BOLT	1	FCM6-80
14	M5x12mm S/S CAP HEAD SCREW	1	FCM5-12SS
15	M5 NYLOCK NUT 'T' TYPE	1	FNM5-NT
16	HANG BOLT AND LANYARD	1	YQB-31302
18	KING POST BASE	1	ZMA-170
19	M8 8.8 SPEC SKT HEAD BOLT	1	FCM8-75
21	22mm PUSH PIN (WITH LANYARD)	1	FP-001
22	5/8" SAFETY RING	1	FPSR-001
24	1/4" x 13/16" SS CLEVIS PIN	1	FPCP-001
28	2 1/8" x M8 PLASTIC SADDLE	1	PMS-M8-21L
29	2 1/4" x M8 PLASTIC SADDLE	8	PMS-M8-22
32	1/4" WASHER-T4LP	1	FW4-T4
33	5/16" M/S T3LP WASHER	2	FW5-T3
34	8mm WASHER-FORM B	1	FWM8-B
37	8mm 'P' TYPE NYLOCK NUT	1	FNM8-NP
39	1/4" UNF 'P' TYPE NYLOCK NUT	4	FNU4-NP
43	M6 x 35mm CSK HT BOLT	4	FMS6-35
44	3 1/4" x 1/4" UNF HEX HT BOLT	3	FBU4-32
45	3 1/2" x 1/4" UNF HEX HT BOLT	1	FBU4-34
46	A/C CHANNEL HEX BOLT	1	AN5-44A
47	BUSH	2	ZSP-314

USED ON A/C BEFORE JUNE 2018

PART ZSP-314 NOT
USED IN THIS
ASSEMBLY



KEEL ASSEMBLY

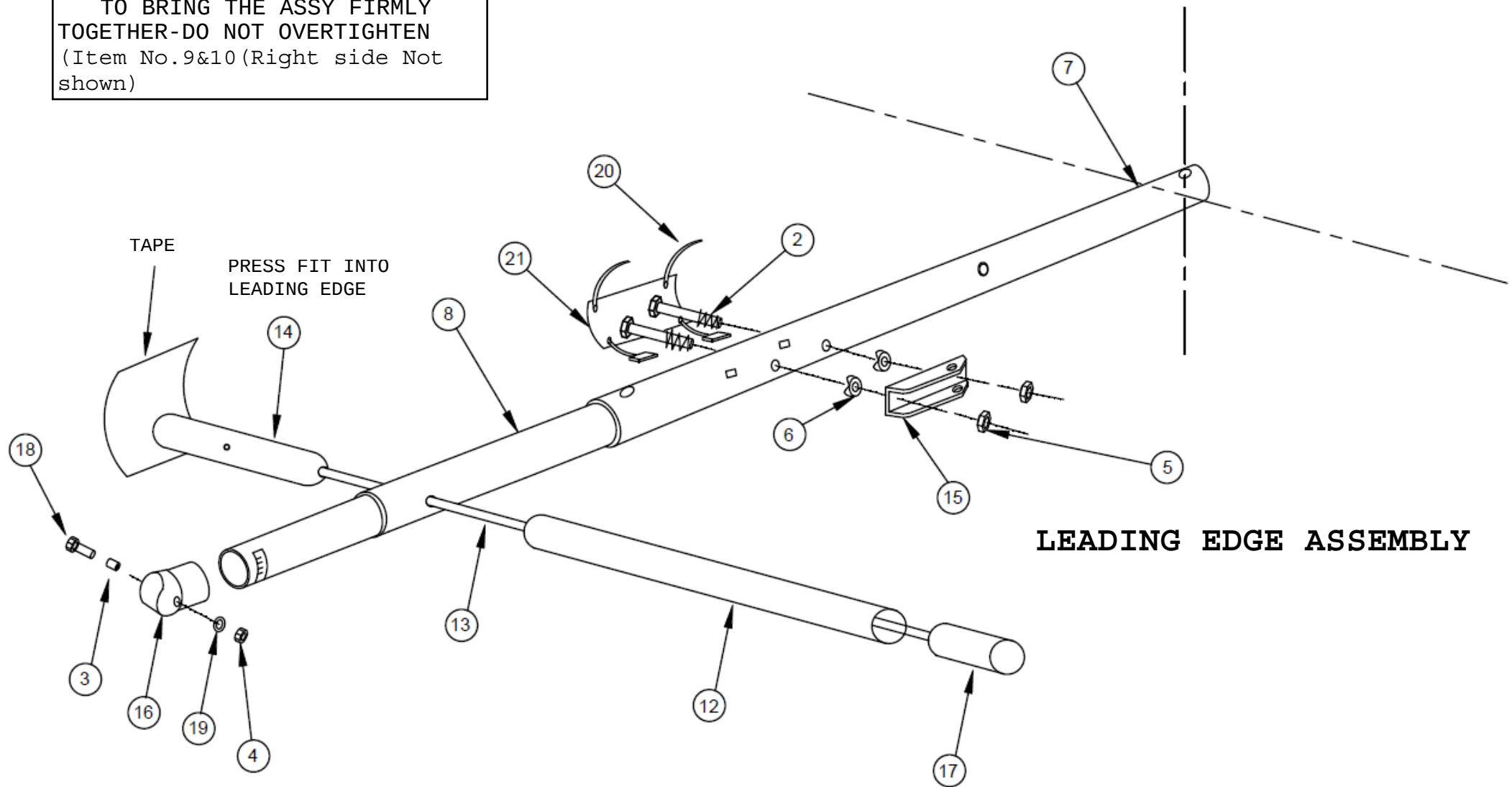
REFER SHEET 1 FOR OTHER PART
INFORMATION

ITEM NUMBER	DESCRIPTION	UNITS PER ASSEMBLY	PART NUMBER
1	CONTROL FRAME CHANNEL UPPER	2	ZCH-017
2	PLASTIC WASHER	2	FWP-002
3	CHANNEL BOLT	1	ZMF-010

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NOTE:

NYLOC NUTS SHOULD BE TIGHTENED
TO BRING THE ASSY FIRMLY
TOGETHER-DO NOT OVERTIGHTEN
(Item No.9&10(Right side Not
shown))



LEADING EDGE ASSEMBLY

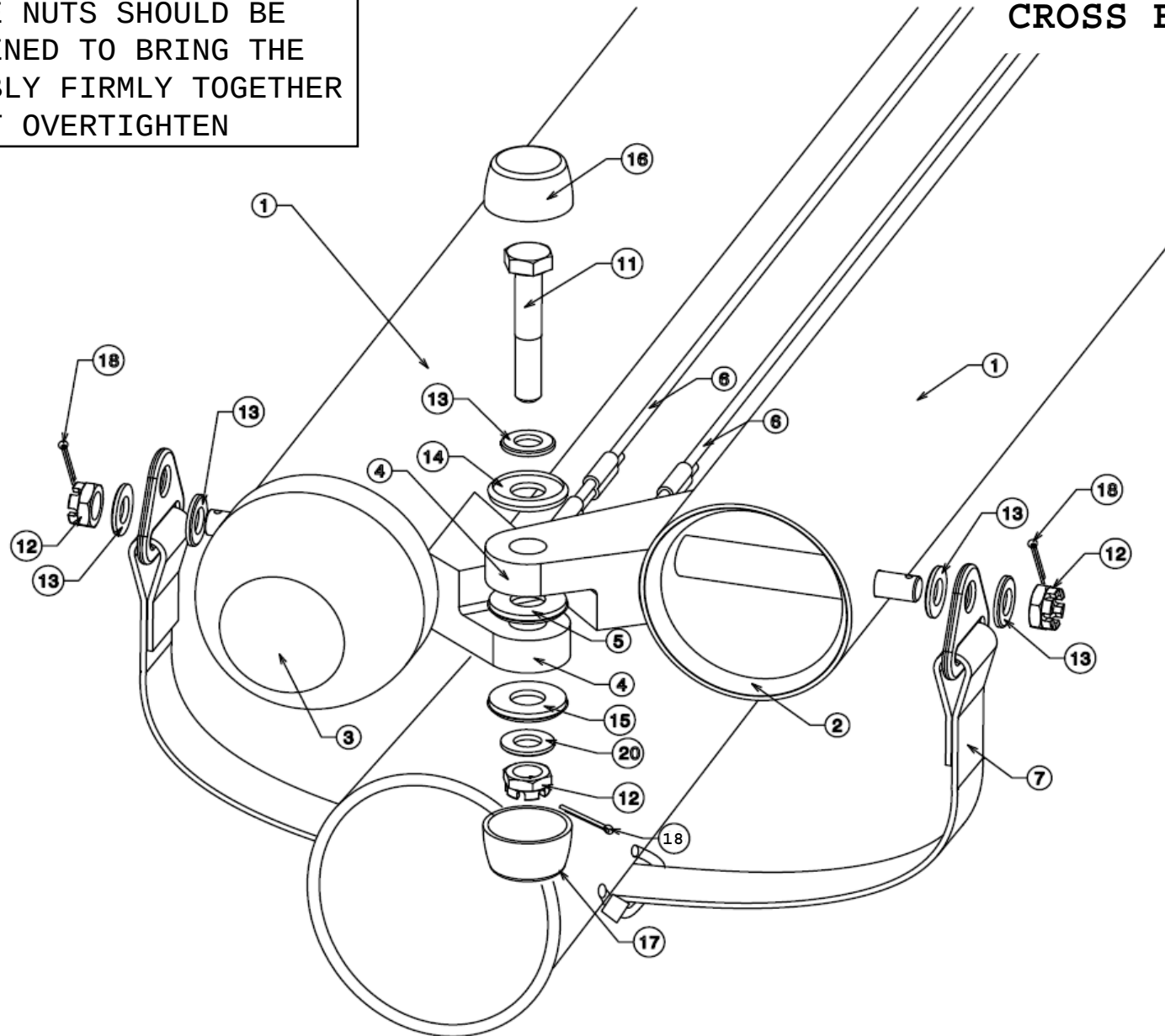
L/H LEADING EDGE SHOWN-MIRROR R/H

LEADING EDGE ASSEMBLY

ITEM NUMBER	DESCRIPTION	UNITS PER ASSEMBLY	PART NUMBER
2	1/4 UNF HEX BOLT	4	AN4-27A
3	PULLEY CENTRE SPACER	2	ZSP-039
4	M6 NYLOCK NUT 'T' TYPE	2	FNM6-NT
5	1/4 UNF 'P' TYPE NYLOCK NUT	6	FNU4-NP
6	2 1/4 x M8 PLASTIC SADDLE	8	PMS-M8-22
7	GT450 L/H LEADING EDGE FRONT SECTION	1	YQD-023
8	MULTI L/H LEADING EDGE REAR SECTION	1	YQC-025
9	GT450 R/H LEADING EDGE FRONT SECTION	1	YQD-024
10	MULTI R/H LEADING EDGE REAR SECTION	1	YQC-026
12	WASHOUT TUBE	2	YQB-72130
13	5mm SHOCK CORD	1.4M	VSC5-001
14	WASHOUT ROD INSERT PLUG	2	ZIN-010
15	M/LIGHT LEADING-EDGE CHANNEL	2	ZCH-018
16	TURN TIP PLUG	2	ZMP-055
17	5/8" BLACK END FITTING	2	PEP-003
18	M6x80mm HEX HT BOLT	2	FBM6-80
19	1/4" WASHERS AN THICK	2	008-035
20	10" CABLE TIE (WHITE)	4	HTW-003
21	6"x6" MYLAR SAIL PROTECTOR	2	ZMP-157

NOTE:
CASTLE NUTS SHOULD BE
TIGHTENED TO BRING THE
ASSEMBLY FIRMLY TOGETHER
DO NOT OVERTIGHTEN

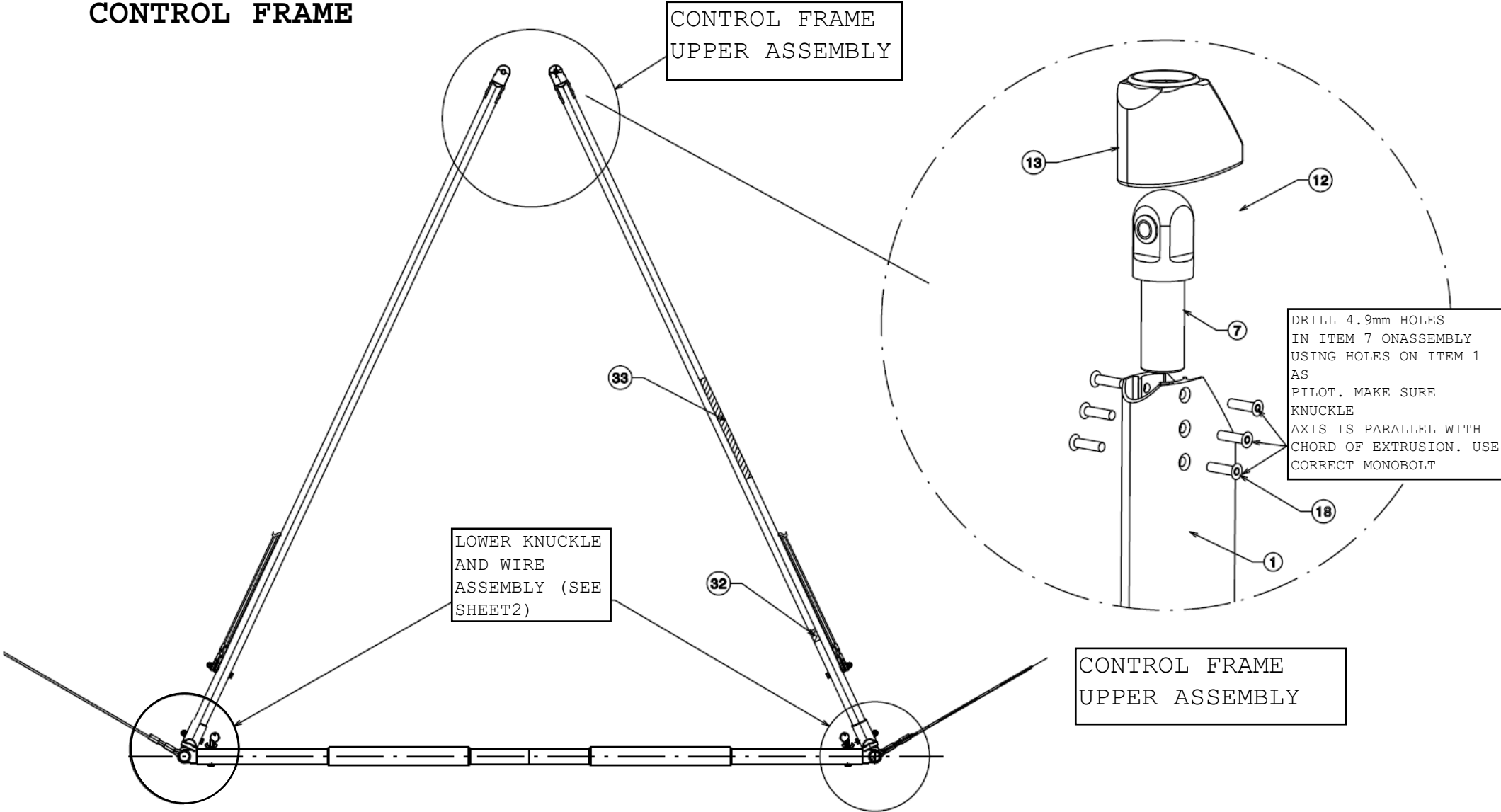
CROSS BOOM ASSEMBLY



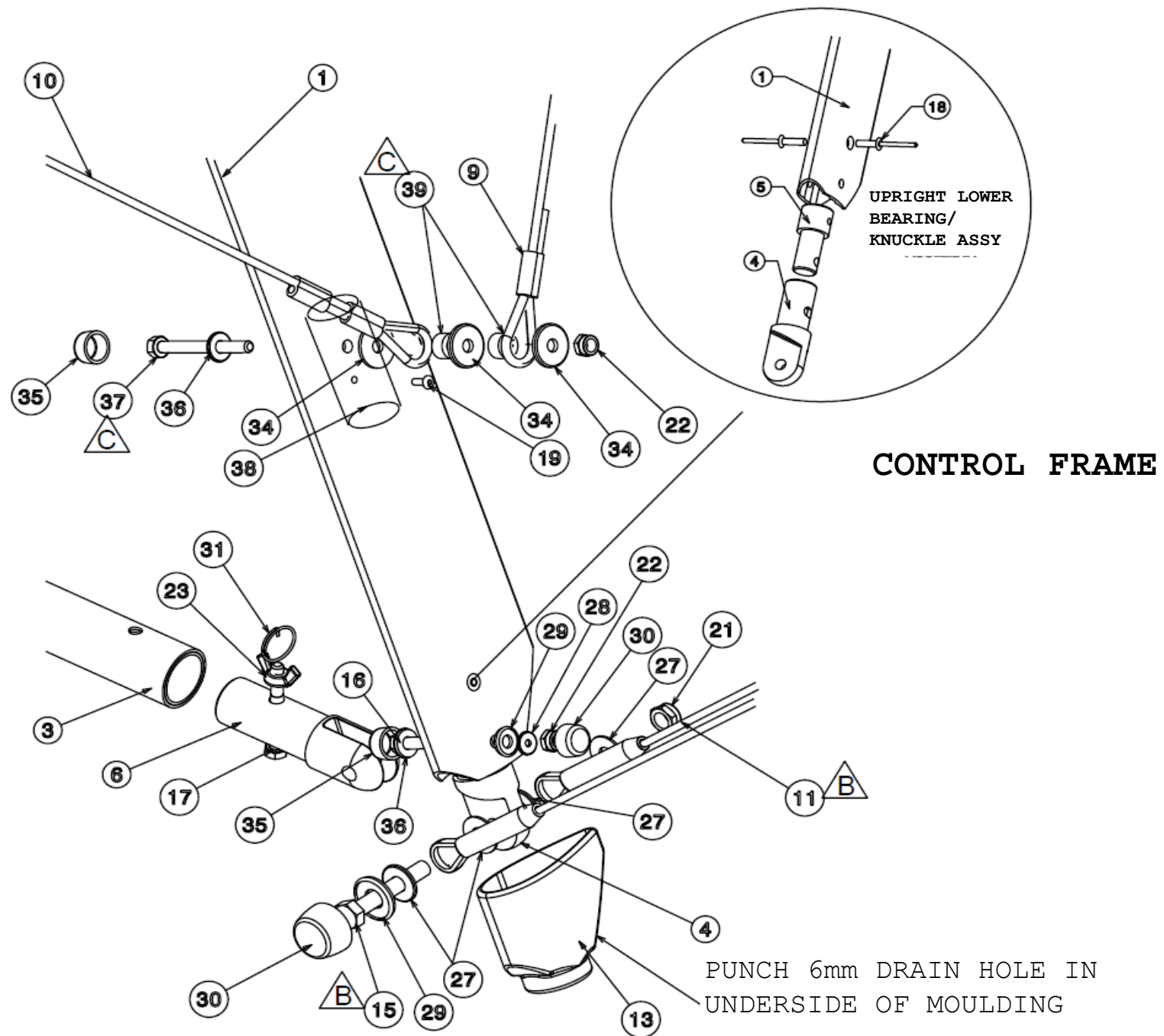
CROSS BOOM ASSEMBLY

ITEM NUMBER	DESCRIPTION	UNITS PER ASSEMBLY	PART NUMBER
1	MULTI CROSS SPAR (L/R)	2	YQD-031
2	CROSS SPAR BALL SEAT	1	ZIN-009
3	CROSS SPAR CENTRE BALL	1	ZMP-010
4	CROSS SPAR PIVOT BLOCK (11mm)	2	ZMA-002
5	PIVOT BLOCK SPACER	1	ZSP-008
6	QUIK GT450 RESTRAINT CABLE	1	YQD-032
7	QUIK ANTI FLOAT WEBBING	1	YQC-027
11	AN5-15 A/C HEX BOLT	1	AN5-15
12	5/16" CASTLE NUT	3	AN310-5
13	5/16" T3LP WASHER	5	FW5-T3
14	8mm SKIFFY WASHER	1	PMC-SB8
15	10mm SKIFFY WASHER	1	PMC-SB10
16	8mm RAISED SKIFFY CAP	1	PMC-SC8
17	10mm RAISED SKIFFY CAP	1	PMC-RSC10
18	1x1/16" SPLIT PIN	3	FPSP-002
20	5/16 M/S T4LP WASHER	1	FW5-T4

CONTROL FRAME



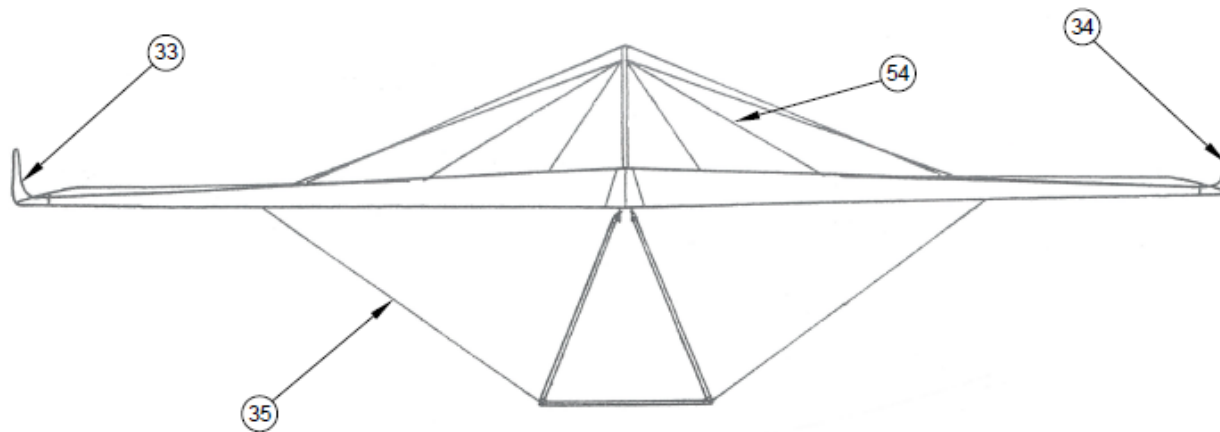
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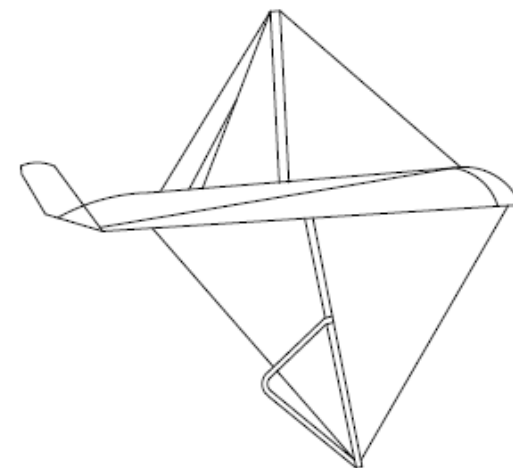
CONTROL FRAME

ITEM NUMBER	DESCRIPTION	UNITS PER ASSEMBLY	PART NUMBER
1	CONTROL FRAME UPRIGHT	2	YQD-041
3	COMTROL FRAME BASE TUBE	1	YQC-042
4	C FRAME SIDE LOWER KNUCKLE	2	ZKN-132
5	UPRIGHT ROTOR BEARING	2	ZMP-132
6	C FRAME BASE TUBE KNUCKLE	2	ZKN-126
7	C FRAME SIDE TOP KNUCKLE	2	ZKN-133
9	LOWER REAR RIGGING	2	YQD-046
10	LOWER FRONT RIGGING	2	YQD-047
11	LOWER SIDE RIGGING	4	YQD-045
12	FMB-0809.5DU FLANGED BEARING	4	BEA-GB-8
13	EXTRUSION END BOOT	4	PMM-048
15	AN5-21A A/C HEX BOLT	2	FBA5-21A
16	AN4-16A A/C BOLT	2	AN4-16A
17	AN4-15 A/C HEX BOLT	2	FBA4-15
18	3/16x3/8 C. SUNK AVDEL MONOBOLT	16	FR6-12-003
19	3.2mmx16mm ALY POP RIVET	2	FR3.2-16-001
21	5/16" UNF 'P' TYPE NYLOCK NUT	2	FNU5-NP
22	1/4" UNF 'T' TYPE NYLOCK NUT	2	FNU4-NT
23	1/4" UNF WINGNUT	2	FNU4-WN
27	5/16" M STEEL WASHER T4LP	8	FW5-T4
28	1/4" M STEEL WASHER	2	FW4-T4
29	8mm SKIFFY RING	4	PMC-SB8
30	8mm RAISED SKIFFY CAP	4	PMC-SC8
31	5/8" SAFETY RING	2	FPSR-001
32	MAUW & MAIN PLACARDS	1	DP-058
33	LARGE 2 COLOUR STICKER	2	DLV-042
34	1/4"x3/4 MS WASHER	6	FW4-12
35	6mm RAISED SKIFFY CAP	4	PMC-RSC8
36	6mm SKIFFY RING	4	PMC-SB6
37	AN4-22A HEX BOLT	2	FBA4-22A
38	AERORFOIL PLUG	2	ZMP-135
39	SPACER BUSH	8	ZSP-250

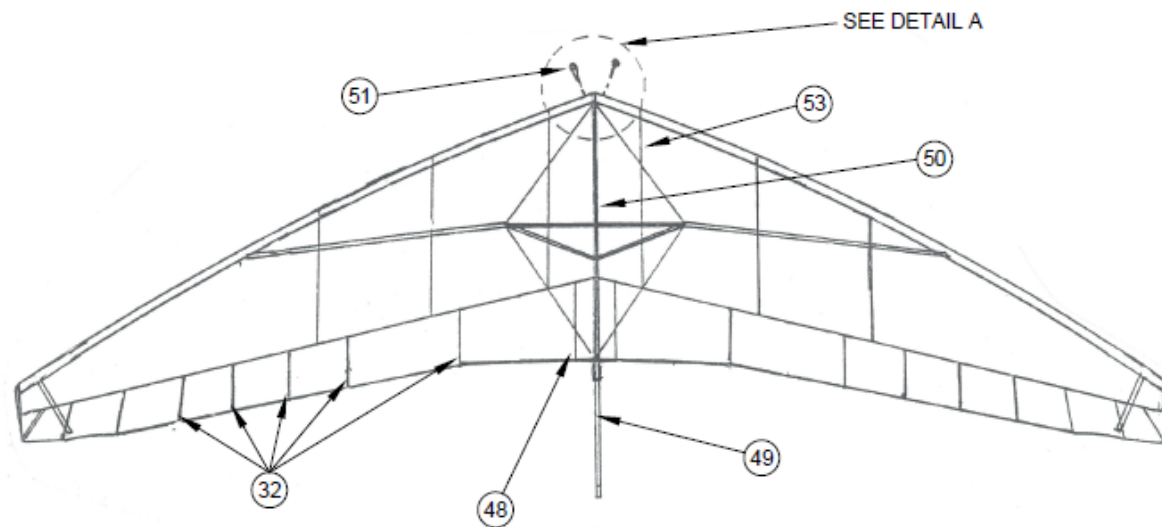
FRONT ELEVATION



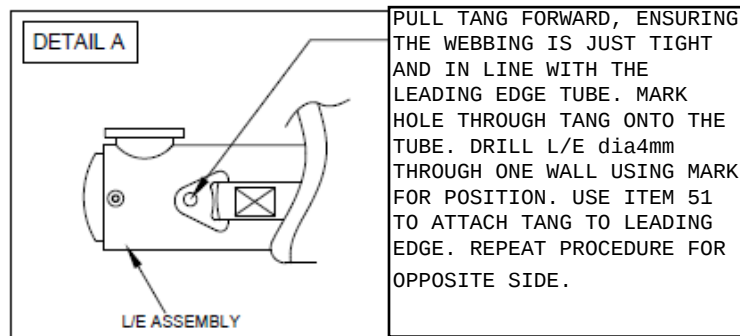
SIDE ELEVATION



UNDERSIDE ELEVATION

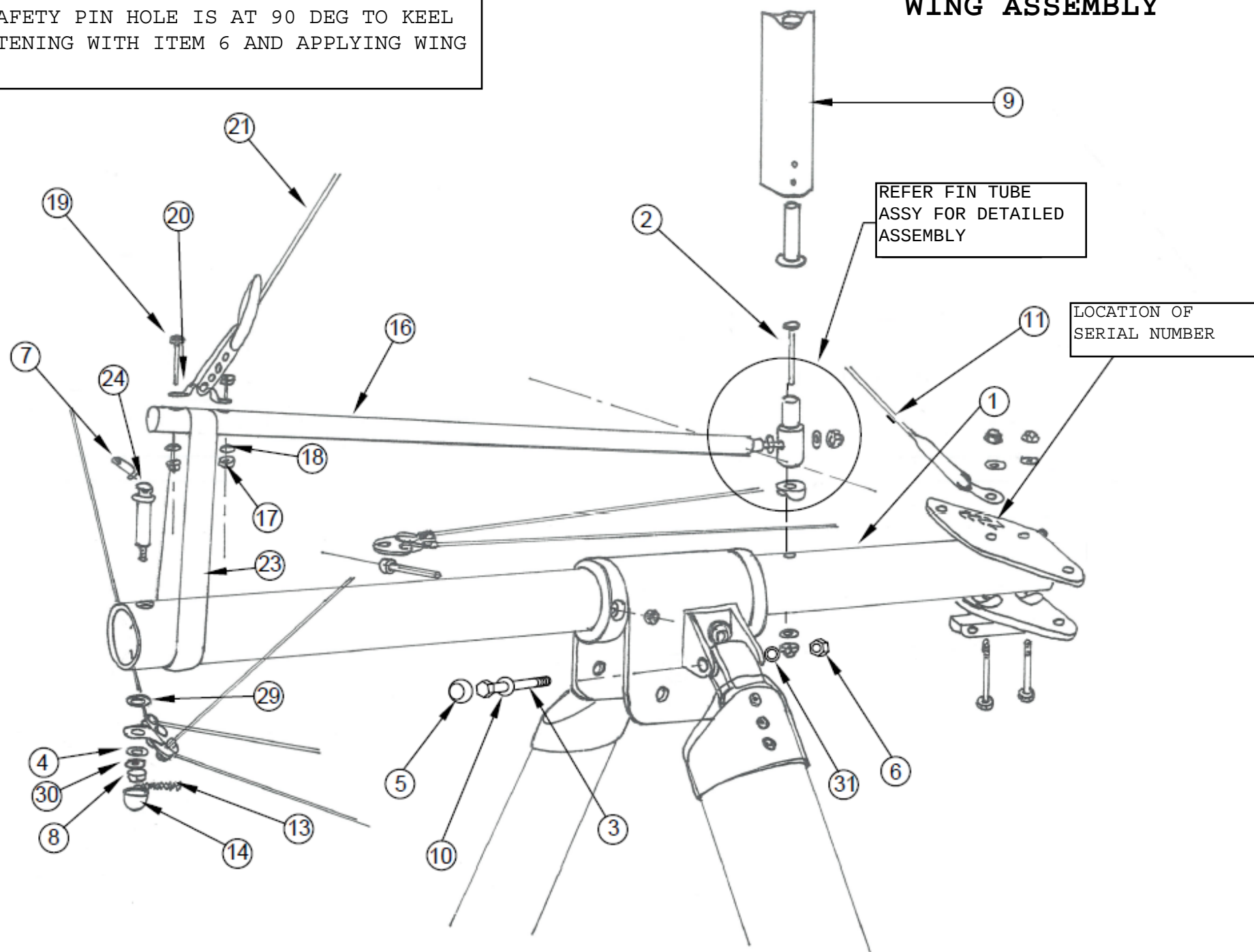


WING ASSEMBLY



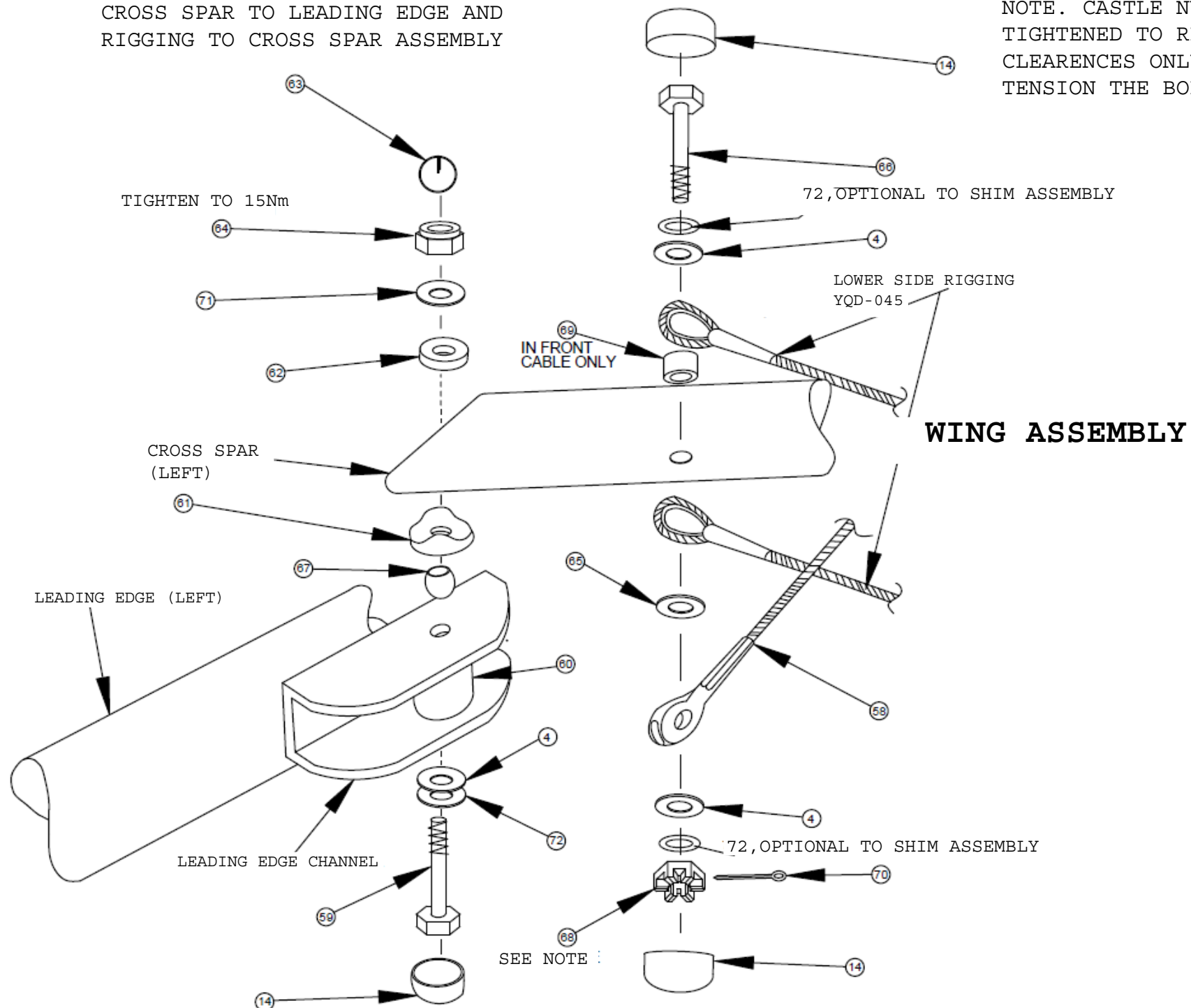
ENSURE RESTRAINT STUD IS FULLY LOCATED THROUGH KEEL AND SAFETY PIN HOLE IS AT 90 DEG TO KEEL BEFORE FASTENING WITH ITEM 6 AND APPLYING WING TENSION

WING ASSEMBLY



CROSS SPAR TO LEADING EDGE AND
RIGGING TO CROSS SPAR ASSEMBLY

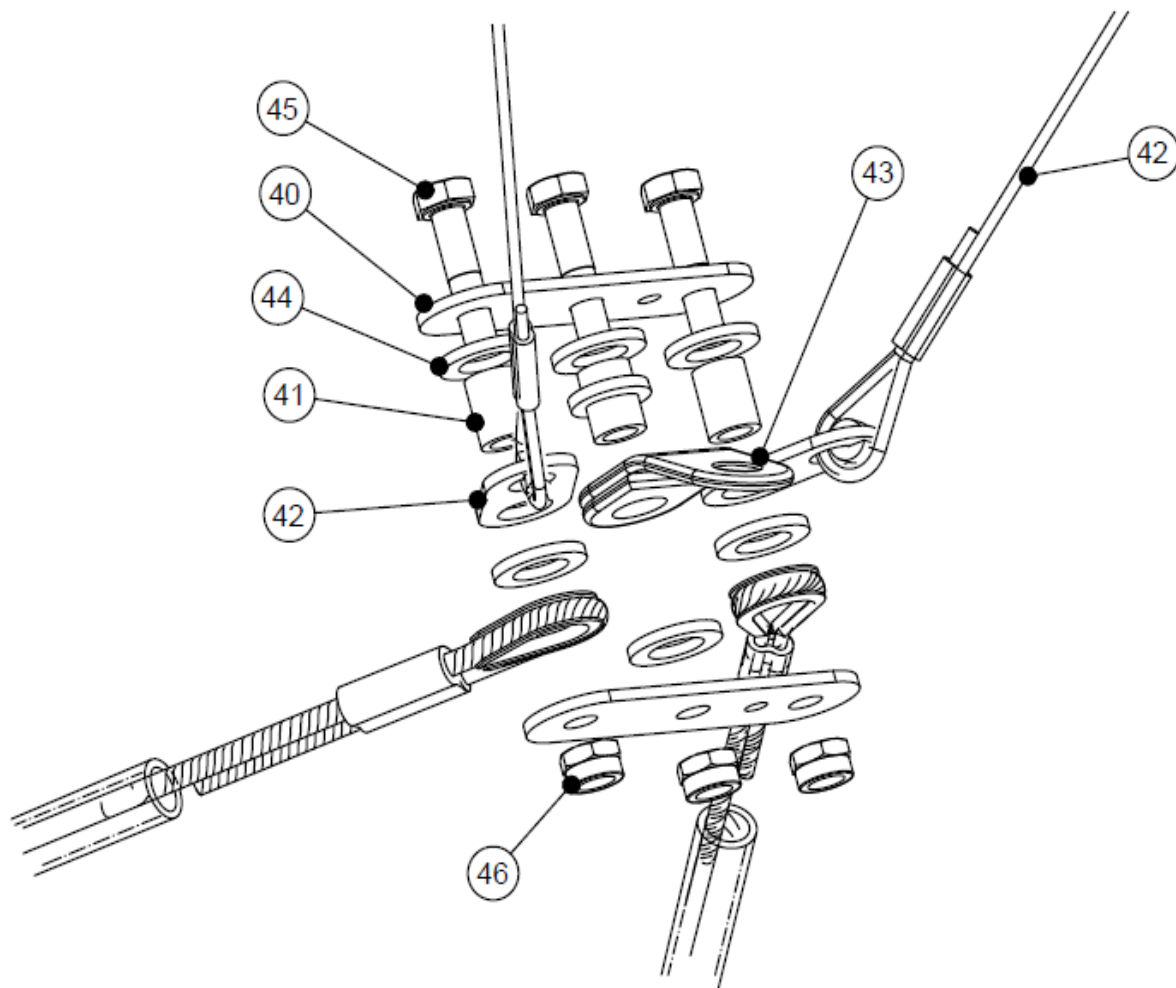
NOTE. CASTLE NUT SHOULD BE
TIGHTENED TO REMOVE ALL THE
CLEARANCES ONLY AND NOT TO PRE-
TENSION THE BOLT



WING FINAL ASSEMBLY

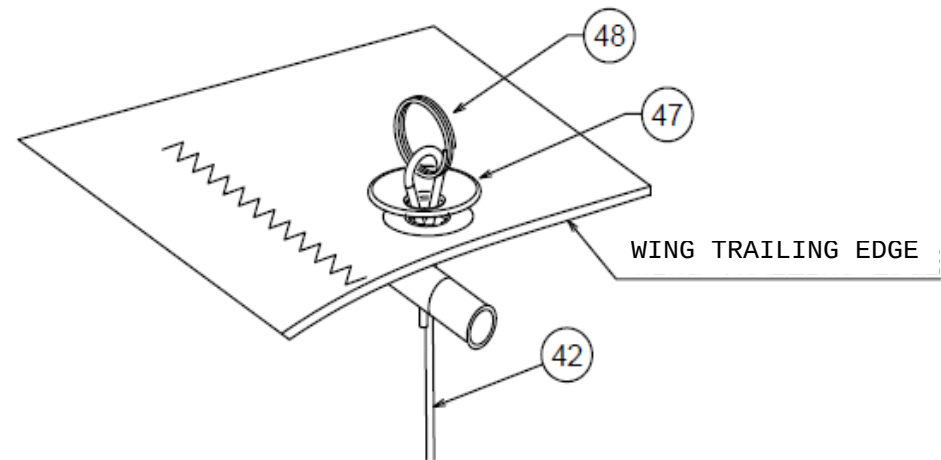
ITEM NUMBER	DESCRIPTION	UNITS PER ASSEMBLY	PART NUMBER
1	KEEL TUBE	1	YQD-010
2	M8 X 75 CAP HEAD SCREW	1	FCM8-75
3	AN5-20A HEX BOLT	2	AN5-20A
4	SKIFFY WASHER 10mm	7	PMC-SB10
5	SKIFFY CAP 8mm	2	PMC-SC8
6	AN5 NYLOC NUT	1	008-135
7	SAFETY CLIP	1	FP-003
8	1/4" CASTLE NUT	2	008-205
9	KING POST ASSEMBLY	1	YQD-051
10	8mm SKIFFY RING ONLY	2	PMC-SB8
11	UPPER RIGGING FRONT TO REAR	1	YQD-055
13	1/16 SPLIT PIN	1	FPSP-002
14	SKIFFY CAP 10mm RAISED	7	PMC-RSC10
16	FIN TUBE ASSEMBLY	1	YQD-070
17	M5 NYLOC 'T' TYPE NUT	2	FNM5-NT
18	3/16 WASHER AN THIN	2	008-025
19	M5x40 HEX HT BOLT	2	FBM5-40
20	S/STEEL DECK EYE	1	RM-1
21	UPPER RIGGING REAR LINK WIRE	1	YQD-054
23	KEEL POCKET LOAD STRAP	1	YQC-066
24	KEEL RESTRAINT STUD	1	FMSS-1
29	1/4" x 1" x 1/16" NYLON WASHER	1	FWP-001
30	1/4" x 1" MSTEEL WASHER	1	FW4-12
31	5/16" WASHER AN	2	008-040
32	MULTI BATTEN ASSEMBLY	1	YQD-71000
33	RH TIP FIN	1	YQD-082
34	LH TIP FIN	1	YQD-081
35	SIDE WIRES	4	YQD-045
40	S. STEEL TANG	2	ZPL-036

FIT ITEM 43 TO KEEL USING
STUD ITEM 24 SHEET 2



APPLY CHAIN WAX TO ASSEMBLY
AT ALL MOVING JOINTS

BOLT ITEMS 45 TIGHTEN TO 10NM.
ASSEMBLY MUST BE FREE TO ARTICULATE



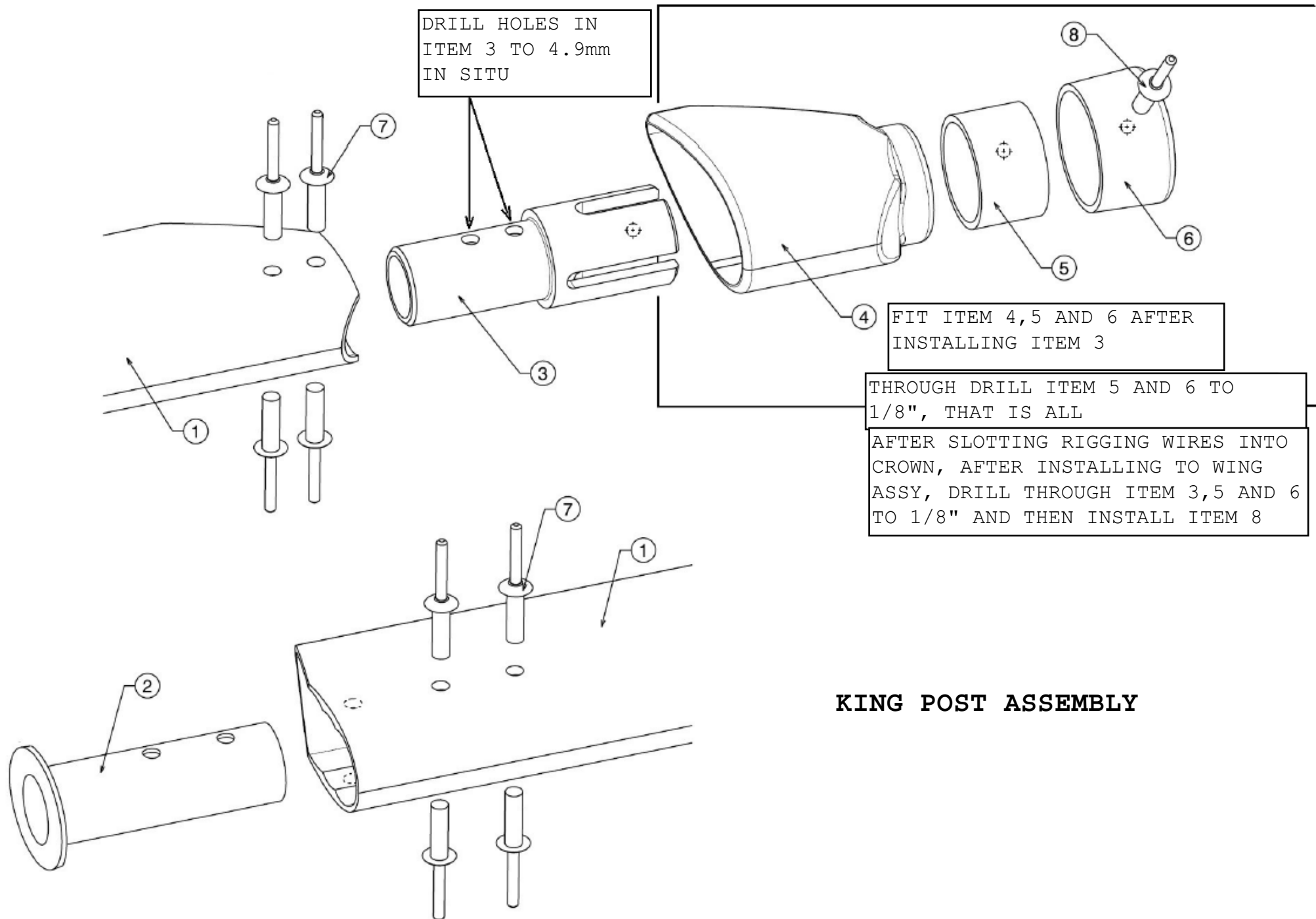
T/E SHIFT CABLE SECURING

AFTER INSTALLING BATTENS THREAD END OF
ITEM 42 THROUGH THE EYELET AS SHOWN AND
SECURE USING ITEM 47 AND 48

WING ASSEMBLY

WING FINAL ASSEMBLY

ITEM NUMBER	DESCRIPTION	UNITS PER ASSEMBLY	PART NUMBER
41	SPACER BRASS 12mm LONG	3	ZSP-308
42	T.E SHIFT CABLE	2	YQD-0511
43	ANGLED S.S TANG MODIFIED	1	RT-2H-HD3M
44	10x17x1.9 PLASTIC WASHER	7	FWP-011
45	M6x25 HEX HT BOLT	3	FBM6-25
46	M6 NYLOCK 'T' TYPE NUT	3	FNM6-NT
47	MILD STEEL DISH WASHER	2	034-380
48	STAINLESS STEEL SAFETY RING	2	FPSR-003
49	RIGGING STRUT	1	YQC-017
50	SAIL GA	1	YQD-060
51	SELF TAPPER	2	841-459
53	BATTENS SET	1	YQD-71000
54	REFLEX CABLES	1	YQD-056
58	MULTI UPPER SIDE RIGGING	1	YQD-621
59	MODIFIED M10x85 BOLT	2	ZMS-278
60	LEADING EDGE CHANNEL SPACER	2	ZSP-060
61	MODIFIED PLASTIC SADDLE	2	ZMP-089
62	GROMMET	2	PMM-008
63	5/8" SAFETY RING	2	FPSR-001
64	M10 NYLOC 'T' TYPE NUT (15NM)	2	FNM10-NT
65	10.5x32mm NYLON WASHER	2	FWP-002
66	AN6-41 AIRCRAFT HEXBOLT	2	FBA6-41
67	LEADING EDGE JOINT BALL	2	ZMS-348
68	3/8" UNF CASTLE NUT	2	FNU6-CN
69	7mm x 1/2" x16SWG RIGGING WIRE SPACER	2	ZSP-343
70	3/32 x 1" SS A2 SPLIT PIN	2	FPSP-003
71	M10 X 25mm m/s WASHER BZP	2	FWM10-002
72	10mm M/S FORM B WASHER	6	FWM10-B



KING POST ASSEMBLY

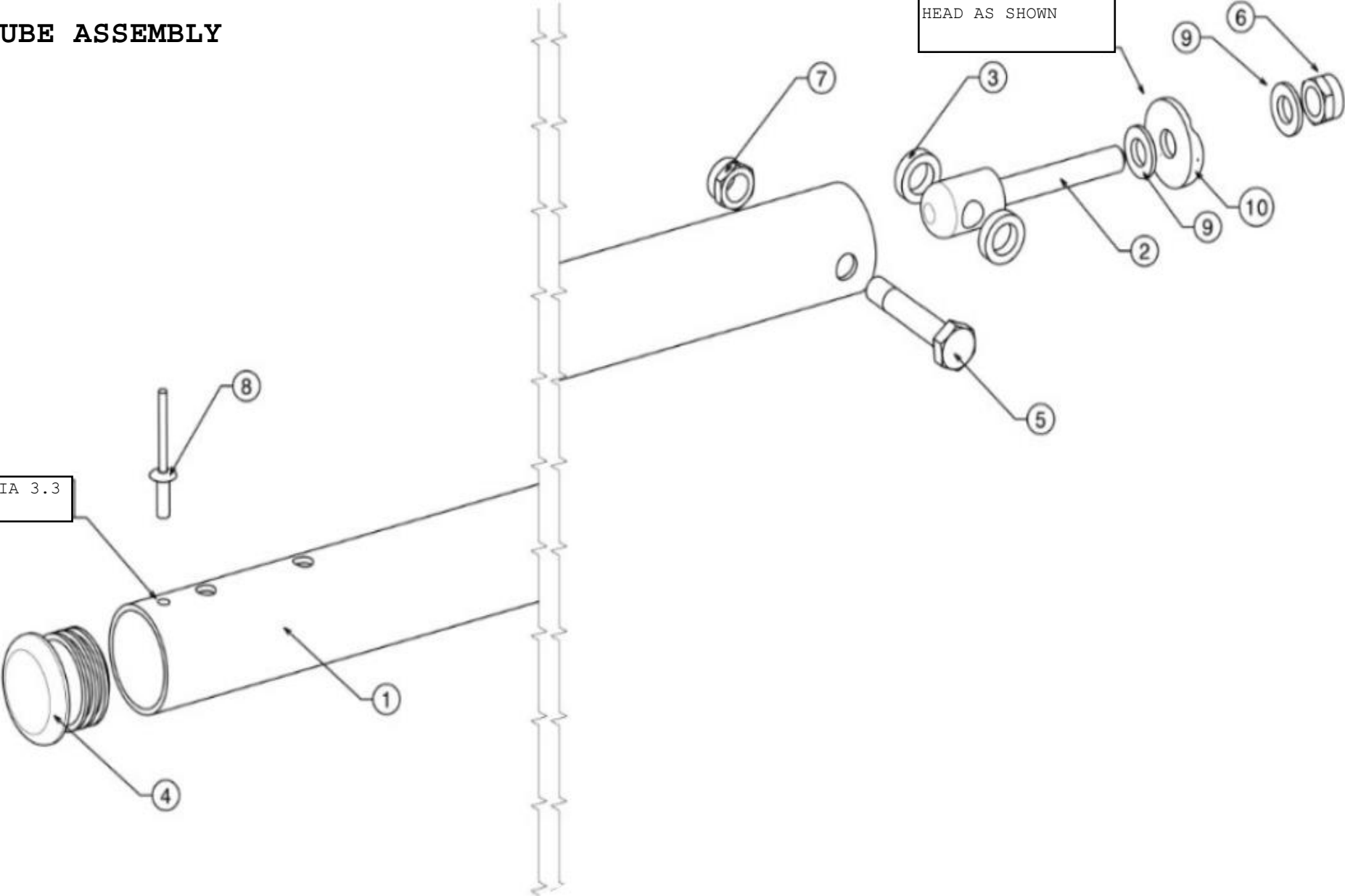
KING POST ASSEMBLY

ITEM NUMBER	DESCRIPTION	UNITS PER ASSEMBLY	PART NUMBER
1	QUIK GT450/MULTI KING POST	1	YQD-052
2	KINGPOST BASE INSERT	1	ZMS-329
3	KINGPOST CROWN	1	YQC-057
4	AIRFOIL STRUT END MOULDING	1	PMM-048
5	KINGPOST CROWN SLEEVE	1	YQB-41010
6	KINGPOST CROWN CAP	1	PEC10-001
7	3/16"x3/8" AVDEL MONOBOLTS	8	FR6-12-002
8	1/8" ALUMINIUM POP RIVET	1	FR3.2-16-001

FIN TUBE ASSEMBLY

DRILL DIA 3.3

MAKE SURE THAT
SADDLE IS
INCORPORATED
FACING COVE BOLT
HEAD AS SHOWN



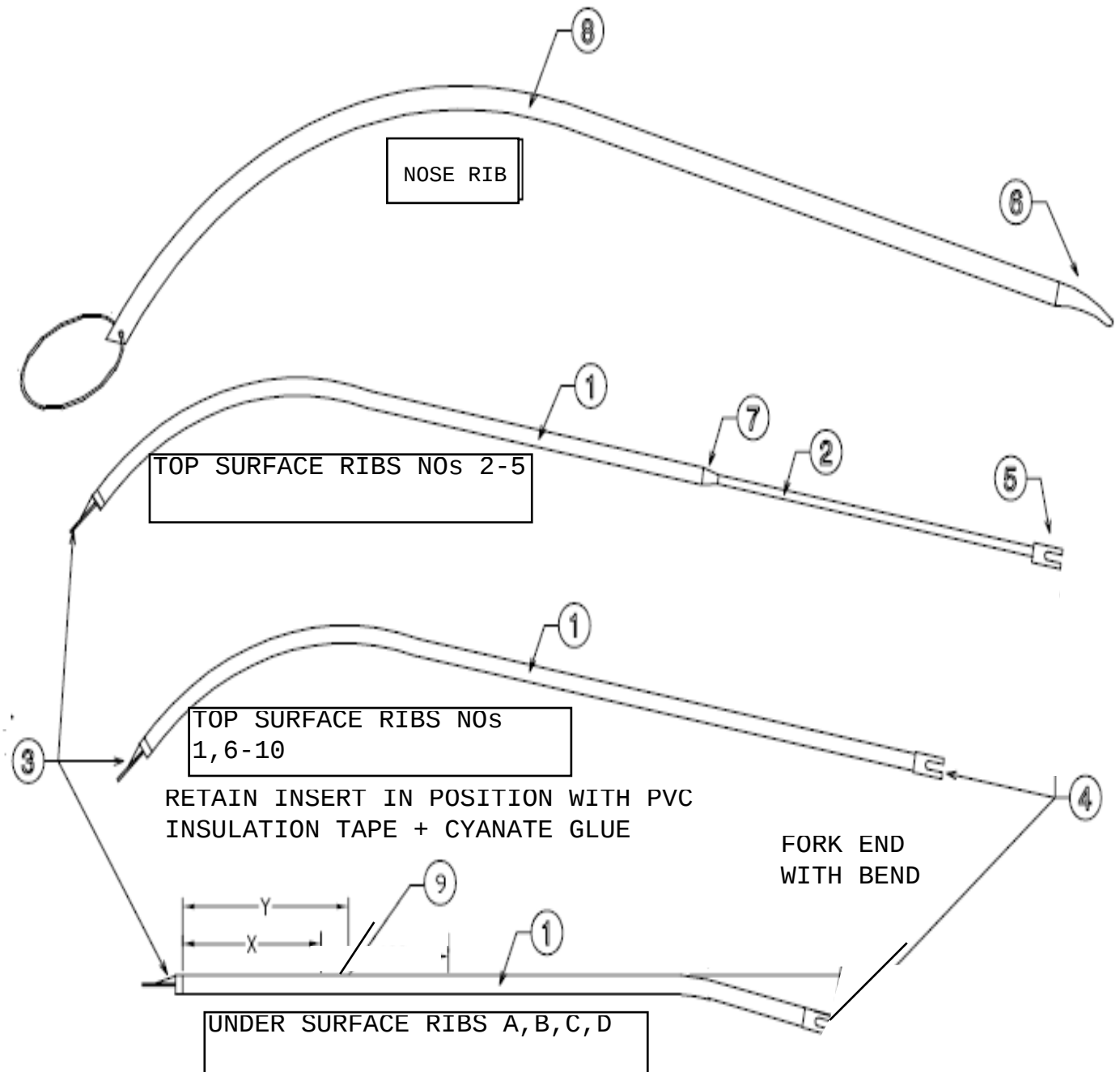
FIN TUBE ASSEMBLY

ITEM NUMBER	DESCRIPTION	UNITS PER ASSEMBLY	PART NUMBER
1	MULTI FIN TUBE	1	YQD-071
2	M6x40mm DOME BOLT	1	FDM6-40
3	M6 SKIFFY WASHER	2	PMC-SB6
4	1"X 14 BLACK END PLUG	1	PEP8-001
5	1/4"X 1 1/4" AN BOLT	1	AN4-12
6	M6 NYLOCK THIN TYPE	1	FNM6-NT
7	1/4" 'T' TYPE NUT	1	FNU4-NT
8	3.2mm DIA ALLY POP RIVT	1	FR3.2-8-001
9	T4LP WASHER	2	FW4-T4
10	M6x3/4 SADDLE WASHER	1	PMS-M6-11

WING RIB ASSEMBLY

SWAGE ENDS IN PLACE

REFER BATTEN PROFILE YQD-71000



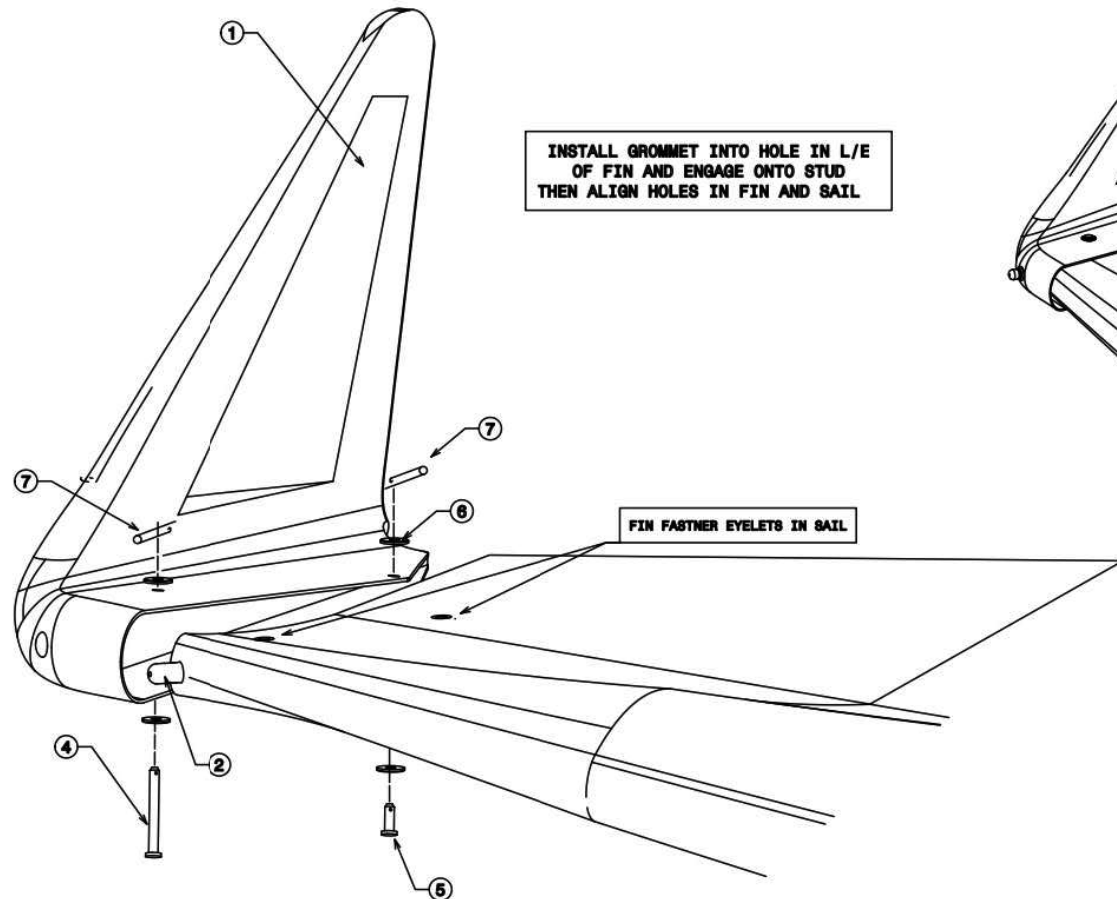
MULTI WING RIBS

ITEM NUMBER	DESCRIPTION	UNITS PER ASSEMBLY	PART NUMBER
1	RIB NUMBER	LEFT	RIGHT
	TOP SURFACE RIB 1	71100	71200
	TOP SURFACE RIB 2	71110	71210
	TOP SURFACE RIB 3	71120	71220
	TOP SURFACE RIB 4	71125	71225
	TOP SURFACE RIB 5	71130	71230
	TOP SURFACE RIB 6	71135	71235
	TOP SURFACE RIB 7	71140	71240
	TOP SURFACE RIB 8	71145	71245
	TOP SURFACE RIB 9	71150	71250
	TOP SURFACE RIB 10	71160	71260
	Lower Surface RIB A	72100	72200
	Lower Surface RIB B	72110	72210
	Lower Surface RIB C	72120	72220
	Lower Surface RIB D	72130	72230
2	GRP ROD		PCGR-001
3	FRONT RIB END	28	PMR5-DFR/G
4	REAR RIB END	20	PMR4-BFR/G
5	GRP END	8	PMR8-FR/G
6	NOSE RIB REAR	1	PMR4-CW
7	RIB REDUCER	8	PMR4-RED
8	NOSE RIB	1	ATU0-4-3
9	RIVET	1	FR6-001

TIP FIN ASSEMBLY

RH TIP FIN ASSEMBLY

ASSEMBLED VIEW

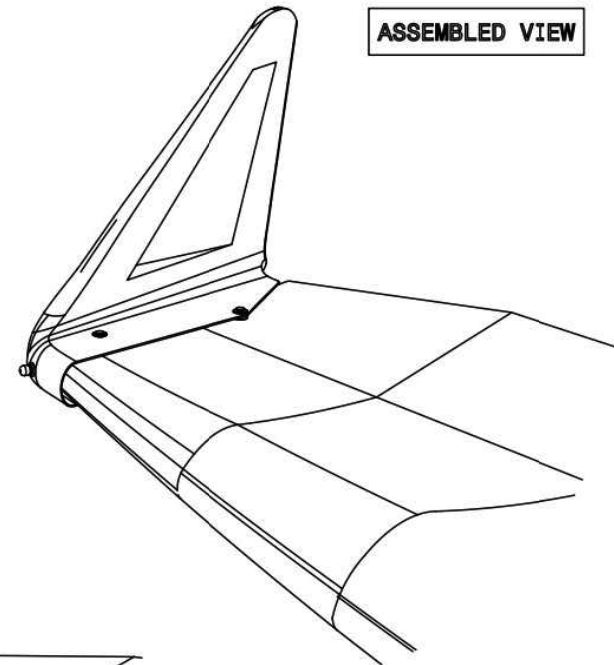


INSTALL GROMMET INTO HOLE IN L/E
OF FIN AND ENGAGE ONTO STUD
THEN ALIGN HOLES IN FIN AND SAIL

FIN FASTENER EYELETS IN SAIL

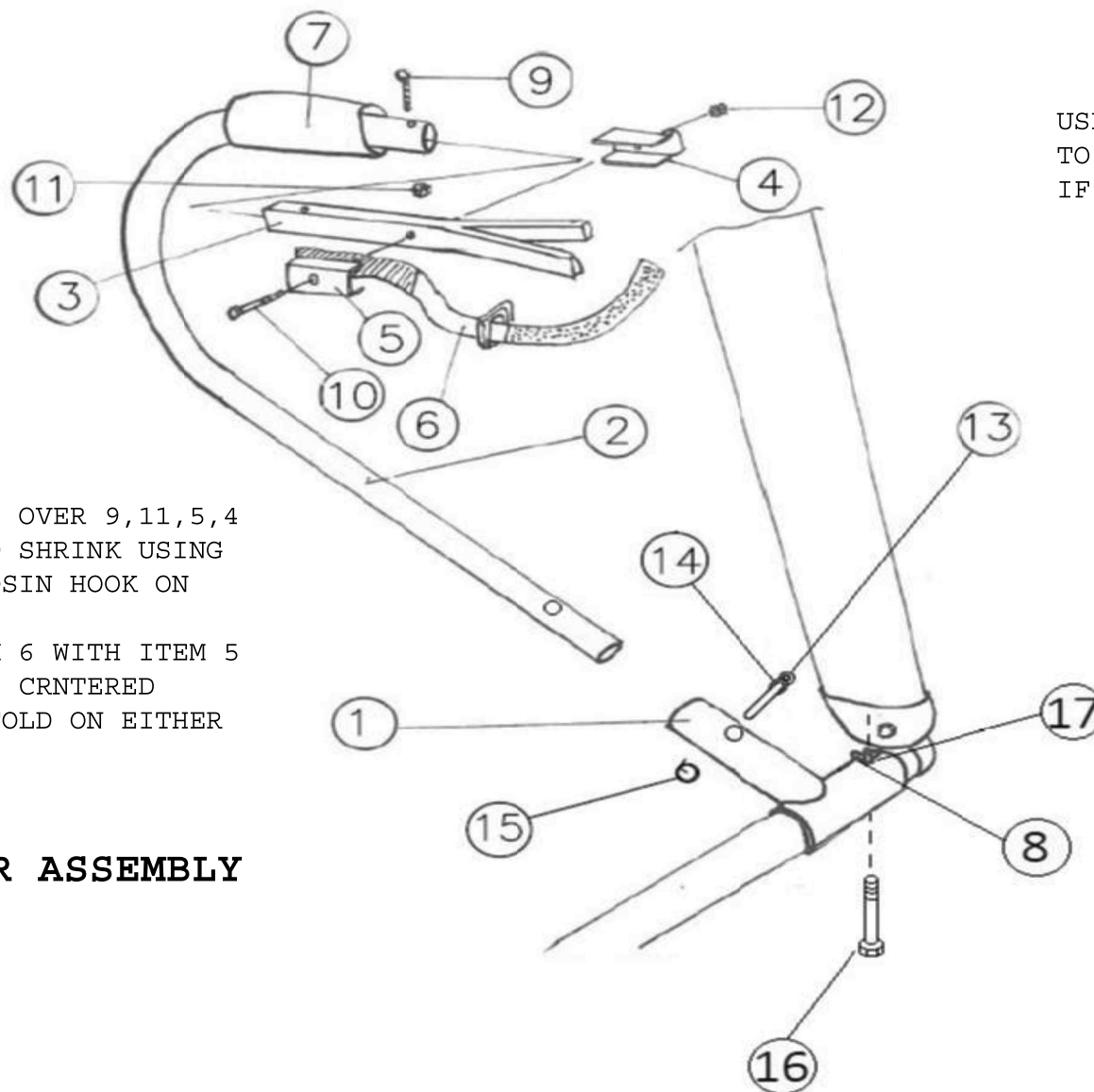
ITEM 2 ONLY APPLIES TO AIRCRAFT
PREE M233.
FASTEN INTO END BUNG SECURING
THROUGH EYELET IN SAIL L/E

ASSEMBLY OF RH FIN REPRESENTED
ASSEMBLY OF LH FIN IS IDENTICAL



TIP FIN ASSEMBLY

ITEM NUMBER	DESCRIPTION	UNITS PER ASSEMBLY	PART NUMBER
1	TIP FIN L/H OR R/H	2	YQD-081/082
2	19mm Spacer	2	ZSP-039
3	Removed		
4	6x50mm CLEVIS PIN	2	FPCP-011
5	6x16mm CLEVIS PIN	2	FPCP-010
6	6.1 X 16 X 1mm PLASTIC WASHER	8	FWP-013
7	SAFETY PIN	4	FP-003



USE SILICONE SPRAY
TO INSERT 3 INTO 2
IF NECESSARY

NOTE: SLIDE ITEM 7 OVER 9,11,5,4
AFTER ASSEMBLY AND SHRINK USING
HEAT GUN ONLY EXPOSIN HOOK ON
ITEM 4
WHEN CLAMPING ITEM 6 WITH ITEM 5
MAKE SURE STRAP IS CRNTERED
PROPERLY SO THAT FOLD ON EITHER
SIDE ARE THE SAME

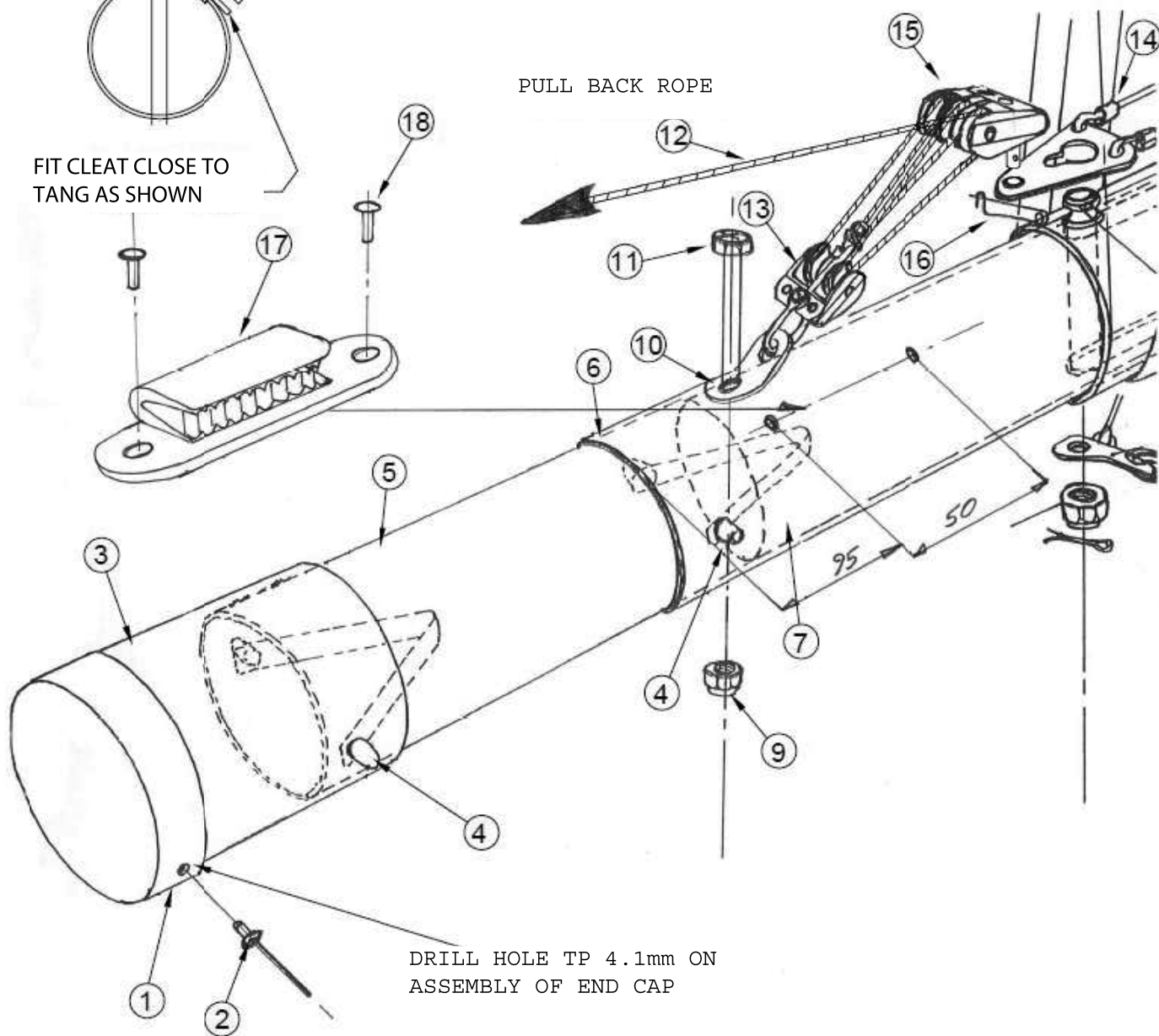
INSTRUCTOR BAR ASSEMBLY

INSTRUCTOR BAR ASSEMBLY

ITEM NUMBER	DESCRIPTION	UNITS PER ASSEMBLY	PART NUMBER
1	QUIK TRAINING BAR 'T' PIECE	2	YQC-068
2	QUIK TRAINING BAR HANDLE	2	YQC-067
3	TRAINING BAR UPPER MOUNT	2	ZMP-129
4	QUIK TRG BAR HOOK	2	ZMS-318H
5	QUIK TRG BAR WASHER	2	ZMS-318
6	QUIK TRAINING BAR STRAP	2	YQC-069
7	BLACK SHRINK SLEEVE	150mm	019-115
8	SAFETY RING	2	FPSR-001
9	M5 x 30 HEX HEAD BOLT	2	FBM5-30
10	M6 x 30 HEX HT BOLT	2	FBM6-30
11	M5 NYLOCK 'T' TYPE	2	FNM5-NT
12	M6 NYLOCK 'T' TYPE	2	FNM6-NT
13	WHIZ PIN -SHORT	2	FPWP-001
14	6mm SKIFFY RING	2	PMC-SB6
15	19mm SAFETY RING	2	FPSR-001
16	AN4-16 A/C HEX BOLT	2	AN4-16
17	1/4" UNF WING NUT	2	FNU4-WN

REAR VIEW

KEEL RIGGING STRUT ASSEMBLY



KEEL RIGGING STRUT ASSEMBLY

ITEM NUMBER	DESCRIPTION	UNITS PER ASSEMBLY	PART NUMBER
1	END CAP (YELLOW)	1	PEC50-001
2	4mm x 8mm ALLY POP RIVET	1	FR4-8-002
3	RIGGING TOOL EXT TUBE-OUTER	1	YQC-016
4	DBLE. BUTTON PIN MK2	2	FPBP-002
5	RIGGING TOOL EXT TUBE-INNER	1	YQC-015
6	RIGGING TOOL SLT TUBE-OUTER	1	YQC-013
7	RIGGING TOOL SLT TUBE-INNER	1	YQC-014
9	M6 NYLOC NUT 'T' TYPE	1	FNM6-NT
10	5/16 HOLE LIGHT DUTY TANG	1	RT-185
11	M6x60mm HEX HT BOLT	1	FBM6-60
12	6mm BRAIDED CORD	6m	052-091
13	TWIN PULLEY BLOCK	1	RP-9
14	PULL BACK RESTRAINT CABLE	1	YQD-032
15	MODIFIED TRIPLE PULLEY BLOCK	1	RP-8-M
16	SAFTEY PIN	1	FP-003
17	JAM CLEAT	1	CL-212
18	RIVET	1	FR6-12-003