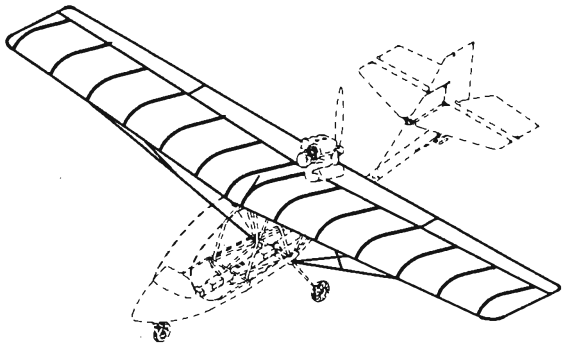
SECTION 7 - FINAL ASSEMBLY



DOC # 902-1 DATE 03/28/90

SECTION 7

FINAL ASSEMBLY

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ELEVATOR PUSHROD TO ELEVATOR BELLCRANK ATTACHMENT

1. Assemble as illustrated. Tighten ALL Locknuts to proper torque. Bend ALL Cotter Pins (12) correctly.

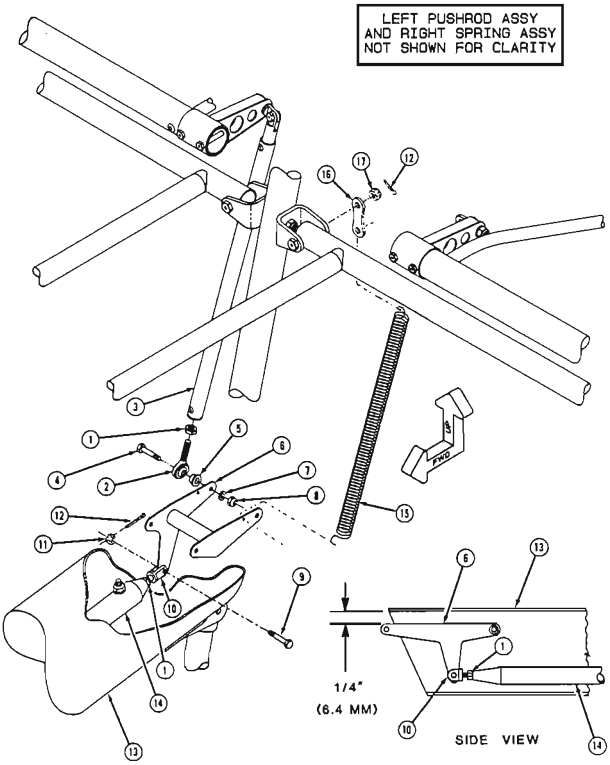
NOTE: Adjust the Eyebolt (10) as illustrated to allow 1/4" (6.4 mm) clearance between the Elevator Bellcrank (6) and the Tail Boom Tube (13). Tighten the Jam Nut (13) as illustrated AFTER adjustment is complete.

2. Attach the opposite (Left) side in "mirror image".

3. Adjust the Evevator linkage so that BOTH Elevator halves deflect EQUALLY in BOTH UP and DOWN directions. Refer to Section I for correct angle deflection. There must be AT LEAST TEN threads of the Rod End Bearing (2) INSIDE the Elevator Pushrod (3). Be sure to retighten Jam Nut (1).

4. Attach BOTH Elevator Balance Springs (15) as illustrated.

Item	P/N	Qty	Description
1	10631		1/4" -28 Jam Nut
2	10700		1/4" Male Rod End Bearing
3	45039		Elevator Pushrod
4	10020		AN3-7A Bolt
5	20241		"T" Bushing
6	45074		Elevator Bellcrank Assembly
7	10550		3/16" Washer
8	10500		3/16" Locknut
9	10009		AN3-5 Bolt
10	10388		1/4" x 1" Full Thread Forkbolt
11	10517		3/16" Castle Nut
12	10635	2	Cotter Pin
13	45012		Tail Boom Tube Assembly
14	45013		Elevator Push/Pull Tube
15	10801	2	Elevator Balance Spring
16	20361	2	Light Weight Flat Spring
17	10521	2	1/4" Castle Nut

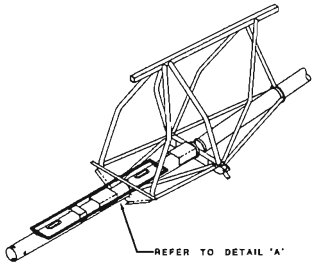

LEFT PUSHROD ASSY
AND RIGHT SPRING ASSY
NOT SHOWN FOR CLARITY
1/4"
(6.4 MM)
SIDE VIEW

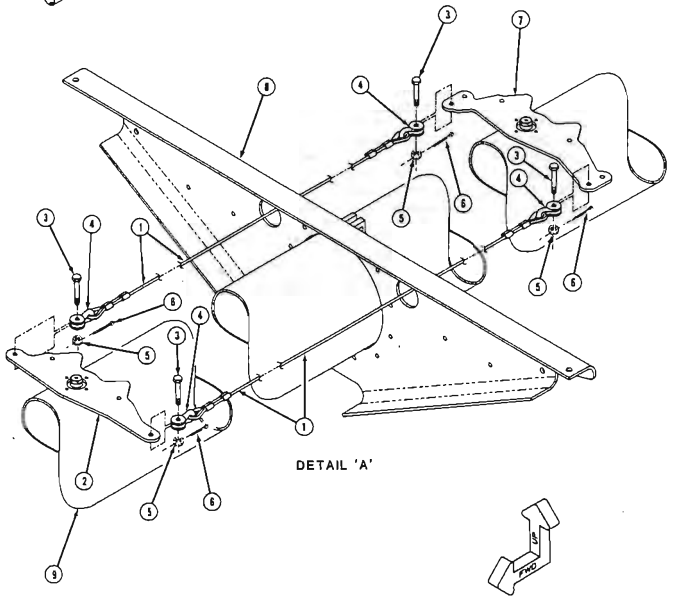
FORWARD RUDDER CABLE ATTACHMENT

1. Assemble as illustrated. Bend ALL Cotter Pins correctly.

NOTE: Twist the Rudder Cables (1) in the direction as required, if necessary, to LENGTHEN or SHORTEN (remove any slack in the system).

Item	P/N	Qty	Description
1	45108	2	Forward Rudder Cable
2	45476		Forward Rudder Pedal Bellcrank
3	10009	4	AN3-5 Bolt
4	20320	4	3/16" Shackle
5	10517	4	3/16" Locknut
6	10635	4	Cotter Pin
7	45474		Aft Rudder Pedal Bellcrank
8	45404		Forward Fuselage Bulkhead
9	45545		Forward Fuselage Assembly


REFER TO DETAIL 'A'


DETAIL 'A'
UP
FWD

AFT RUDDER CABLE ATTACHMENT

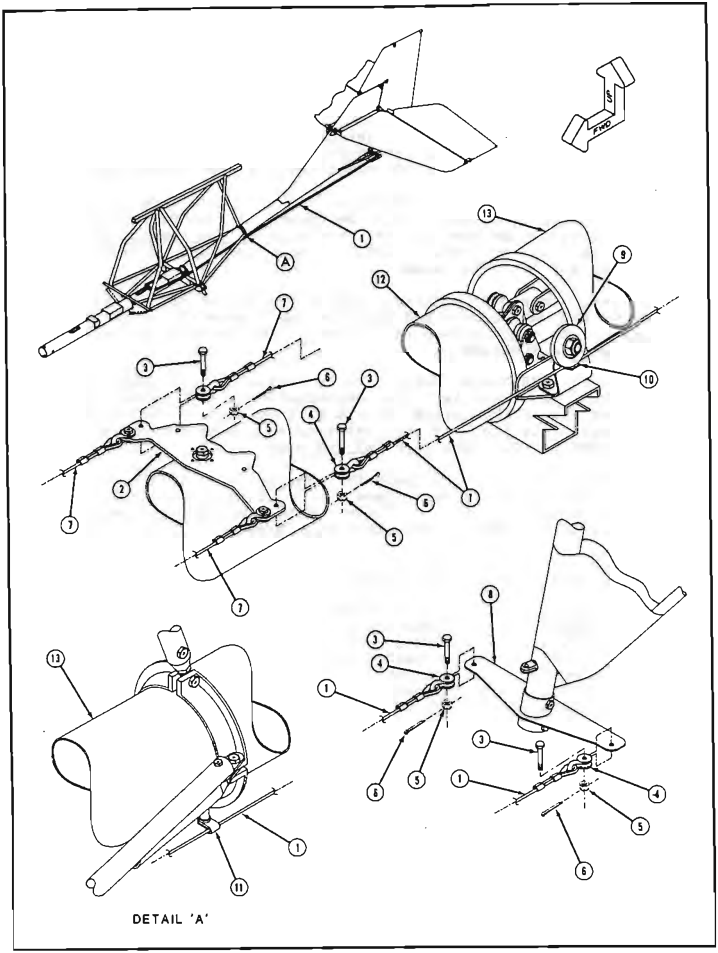
1. Assemble as illustrated. Bend ALL Cotter Pins correctly.

2. Loosen the Bolt holding Pulley (9) and slide the Cable (1) onto the Pulley between the Cable Guard (10) as illustrated.

3. Remove the Cable Guide (11) and install the Rudder Cable (1) as illustrated.

NOTE: Twist the Rudder Cables (1) and (7) in the appropriate direction as required to LENGTHEN or SHORTEN them if necessary to remove any slack in the system.

Item	P/N	Qty	Description
1	45110	2	Aft Rudder Cable
2	45474		Aft Rudder Pedal Bellcrank
3	10009	4	AN3-5 Bolt
4	20320	4	3/16" Shackle
5	10517	4	3/16" Castle Nut
6	10635	4	Cotter Pin
7	45108		Forward Rudder Cable
8	45087		Rudder Bellcrank Assembly
9	91008		1 3/4" Pulley
10	91110		Cable Pulley Guard
11	91118		Cable Guide
12	45545		Forward Fuselage Tube Assembly
13	45012		Tail Boom Tube Assembly


A
DETAIL 'A'

RUDDER PEDAL ADJUSTMENT

1. The Rudder Pedals may be changed to a comfortable angle by adjusting the Male Rod End Bearings (1) in the Rudder Pedal Pushrods (2). Note: Only ONE set of Pedals are illustrated.

2. Refer to Detail A. Ensure that the Pedals are adjusted EVENLY with the Rudder Pedal Bellcrank (3) at 90 degrees to the Forward Fuselage Tube (4) and a least ten threads of the Bearings (1) are still INSIDE the Pushrods. Adjust BOTH FORWARD and AFT Bellcranks.

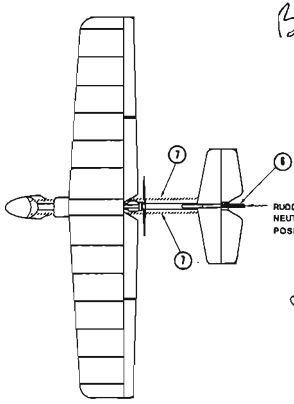
3. When properly adjusted, ensure the Rudder (6) is in the EXACT NEUTRAL positon and that the Bellcranks (3) are still 90 degrees to the Fuselage (4). Tighten the Jam Nuts (5) back up against the Pushrods (2).

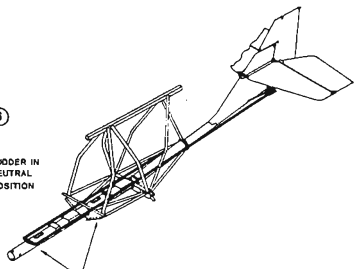
4. Check BOTH Rudder Cables (7) for any slackness along their length. If there is slack, disconnect the AFT Rudder Cable (7) at the AFT Bellcrank (3) and CAREFULLY twist the Cable (7) as shown. Little, if any, twisting should be necessary - a HALF-TURN to FOUR FULL turns at the most.

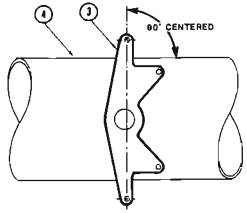
5. Reconnect the AFT Cable (7) to the AFT Bellcrank (3). Check for slack. Ensure there are NO kinks in the Cable (7). Check Rudder Position. Check BOTH Bellcrank positions. Readjust as necessary. Retighten ALL hardware.

Item	P/N	Qty	Description
1.	10700		Male Rod End Bearings
2.	45448		Rudder Pedal Pushrod
3.	45476		Rudder Pedal Bellcrank
4.	45545		Forward Fuselage Tube
5.	10631		Jam Nut
6.			Rudder
7.	45110		Aft Rudder Cable

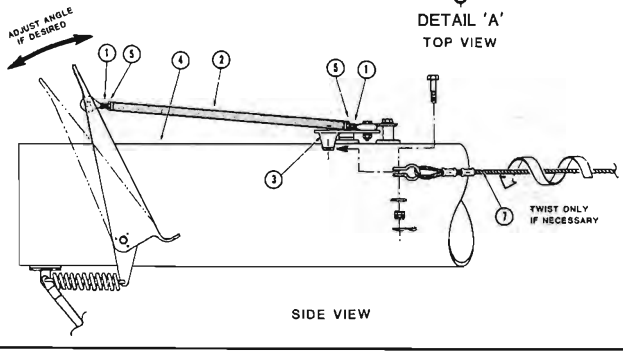
Bivette Rudder Axes







DETAIL 'A'
TOP VIEW



SIDE VIEW

WING ATTACHMENT

BEFORE starting the following sequence you will need to lay some protective material on the ground to protect the Wing Tips from becoming damaged.

NOTE: To complete the following sequence you will need the help of TWO [2] volunteers from the "studio audience" and an area AT LEAST 34 feet (10.4 meters) in width.

1. Remove the FOUR [4] Channels (1) and the Hardware (3,4,8,9 and 11) previously attached to the Wing Jig.

2. Measure 5 7/16" (13.84 cm) along the SIDES, AFT from the FORWARD edge of the Root Tube (2) and locate the factory drilled 1/4" (6.4 mm) hole. Attach the Leading Edge Channels (1) as illustrated. Tighten ALL Locknuts to proper torque.

3. Measure 15 1/4" (38.79 cm) along the SIDES, and FORWARD from the AFT edge of the Root Tube (2) and locate the factory drilled 1/4" (6.4 mm) hole. Attach the Leading Edge Channels (1) as illustrated. Tighten ALL Locknuts to proper torque.

4. Attach the LEFT Wing as illustrated. DO NOT OVER TORQUE the Castle Nut (9) and DISTORT the Channels (1). Bend ALL Cotter Pins (10) correctly.

5. Attach the opposite (RIGHT) Wing in "mirror image".

Item	P/N	Qty	Description
1	20050	4	S-1.75 Channel
2	45668		Root Tube
3	10270	2	AN4-30A Bolt
4	10560	4	1/4" Washer
5	10510	2	1/4" Locknut
6	45690		Forward Leading Edge Spar Root Bracket
7	45625		Left Trailing Edge Wing Spar Assembly
	45626		Right Trailing Edge Wing Spar Assembly (not illustrated)
8	10260	1	AN4-27 Bolt
9	10521	2	1/4" Castle Nut
10	10635	2	Cotter Pin
11	10205	1	AN4-23 Bolt
12	45691		Aft Leading Edge Spar Root Bracket

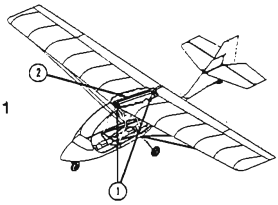

2
1

FIG. 1


UP
PIVOT

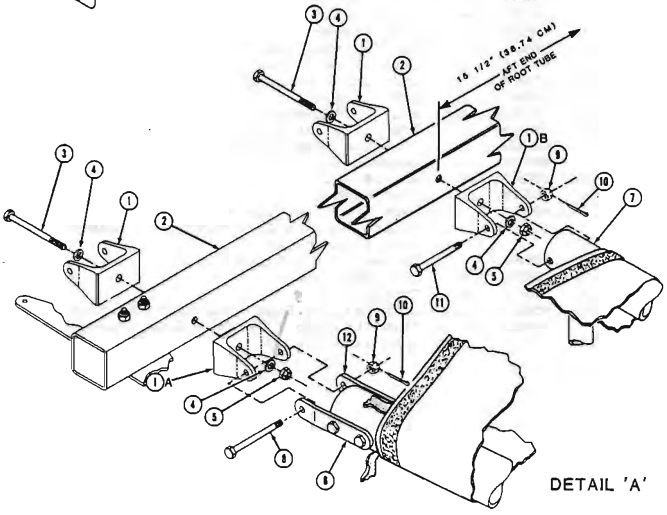
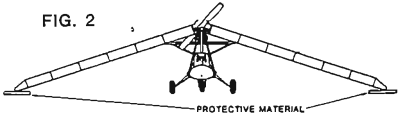

3
4
1
2
16 1/2" (38.7.4 CM)
AFT END OF ROOT TUBE
1B
8
10
7
5
11
9
12
1A
6
DETAIL 'A'

FIG. 2

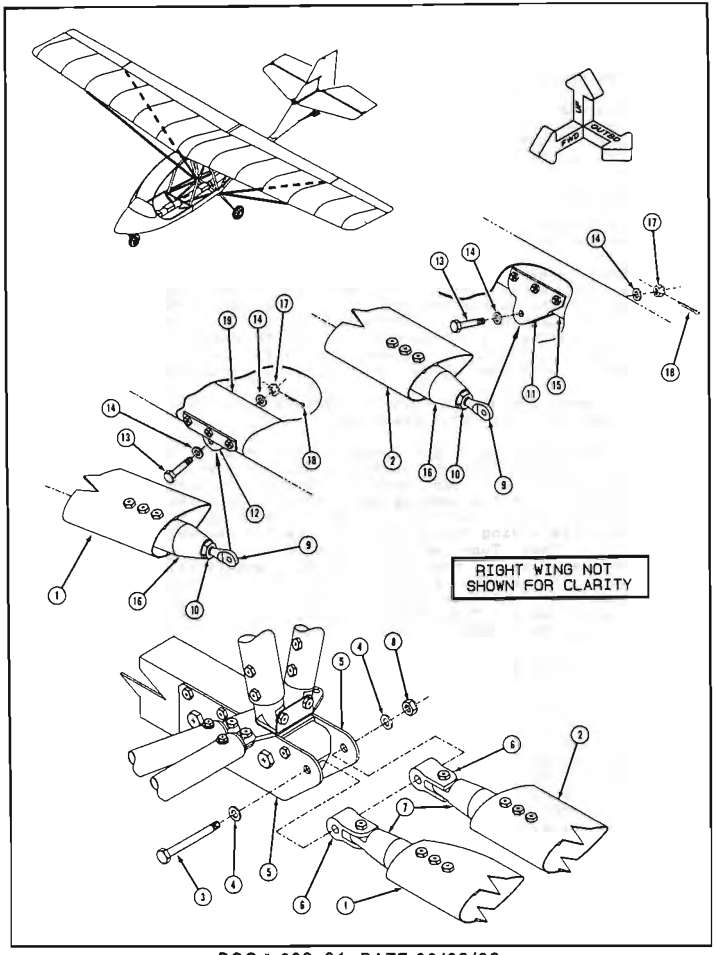

PROTECTIVE MATERIAL

LIFT STRUT ATTACHMENT

1. Attach the Clevis Fittings (6) to the Strut Attach Plates (5) using Hardware (3,4 and 8). Tighten until "snug".

2. Attach the Eyebolts (9) to the respective Spar Fittings (11 and 12). TEMPORARILY install the Hardware (13,14 and 17).

Item	P/N	Qty	Description
1	45620		Leading Edge Lift Strut
2	45621		Trailing Edge Lift Strut
3	10397	4	AN6-27A Bolt
4	10575	4	3/8" Washer
5	45403		Strut Attach Plate
6	45689		Lift Strut Clevis
7	45688		Lift Strut Fitting
8	10547	2	3/8" Locknut
9	10382	4	3/8" - 24 Eyebolt
10	10549		3/8" - 24 Jam Nut
11	45722		Trailing Edge Lift Strut Fitting
12	45721		Leading Edge Lift Strut Fitting
13	10063	2	AN4-10 Bolt
14	10560	8	1/4" Washer
15	45625		Left Trailing Edge Wing Spar Assembly
	45626		Right Trailing Edge Wing Spar Assembly (not illustrated)
16	45696		Threaded Lift Strut Fitting
17	10521	4	1/4" Castle Nut
18	10635	4	Cotter Pin
19	45623		Left Leading Edge Wing Spar Assembly
	45624		Right Leading Edge Wing Spar Assembly (not illustrated)


RIGHT WING NOT
SHOWN FOR CLARITY

WING WASHOUT ADJUSTMENT

IMPORTANT: The following procedure MUST be done on a LEVEL surface. Preferably INSIDE a building to avoid errors caused by wind. DO NOT ROTATE the Angle Finder 180 Degrees between the LEFT and RIGHT Wing Tips.

Refer to Detail 'A'. Wing Washout is correct when the Trailing Edge Wing Spar is HIGHER than the Leading Edge Wing Spar and the Wing Tip Angle is ONE to TWO Degrees LOWER than the Root Tube Angle.

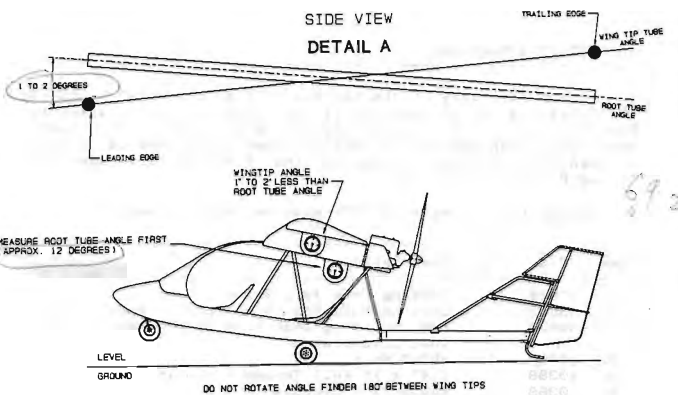
With the Aircraft resting on its Tail Skid, the Root Tube angle will be APPROXIMATELY TWELVE Degrees. The Wing Tip angle must read TEN to ELEVEN Degrees. As a guide, the Threaded Clevis (1) in the Leading Edge (FORWARD) Lift Strut (7) will indicate APPROXIMATELY 1/2 a thread and the Threaded Clevis (1) in the Trailing (AFT) Edge Lift Strut (8) will indicate APPROXIMATELY FIVE (5) threads. Adjust as required for accuracy.

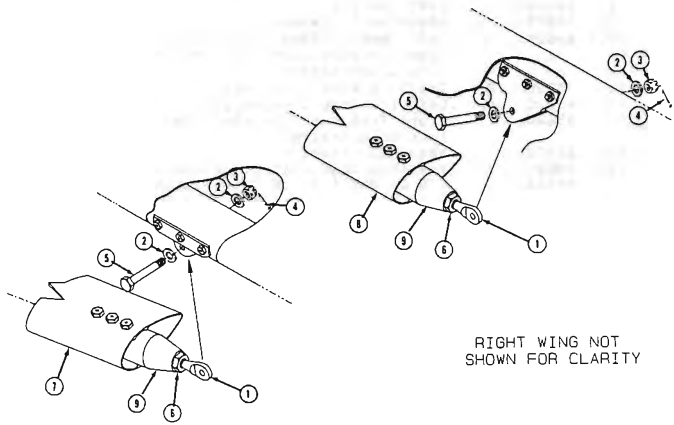
1. Using the Angle Finder measure the Root Tube angle as illustated. Note the measurement.

2. Position the Angle Finder in the MIDDLE of the Wing Tip Tube (on the BOTTOM surface) as illustrated and measure the angle at the Wing Tip. Note the measurement. Adjust the Threaded Clevis (1) in the Leading Edge (FORWARD) Lift Strut (7) and the Trailing Edge (AFT) Lift Struts (8) until the Angle Finder indicates a Wing Tip angle of ONE to TWO Degrees LESS than that of the Root Tube angle. When the correct Wing Washout is achieved, attach the Hardware (2, 3 and 4) to the Bolt (5) which attaches the Eyebolt (1) to Spar Fittings (9). Tighten until "snug". Secure with a Cotter Pin (4). Bend ALL Cotter Pins correctly. Tighten the Jam Nut (8) back AGAINST the Strut Fitting (9) on BOTH Struts.

3. Repeat Steps 1 and 2 for the opposite (RIGHT) Wing.

Item	P/N	Qty	Description
1	10382		3/8" - 24 Eyebolt
2	10560	8	1/4" Washer
3	10521	4	1/4" Castle Nut
4	10635	4	Cotter Pin
5	10063	4	AN4-10 Bolt
6	10549		3/8" - 24 Jam Nut
7	45620		Leading Edge Lift Strut
8	45621		Trailing Edge Lift Strut
9	45696		Threaded Lift Strut Fitting


SIDE VIEW
DETAIL A
TRAILING EDGE
WING TIP TUBE ANGLE
1 TO 2 DEGREES
ROOT TUBE ANGLE
LEADING EDGE
WINGTIP ANGLE 1° TO 2° LESS THAN ROOT TUBE ANGLE
MEASURE ROOT TUBE ANGLE FIRST (APPROX. 12 DEGREES)
LEVEL GROUND
DO NOT ROTATE ANGLE FINDER 180° BETWEEN WING TIPS

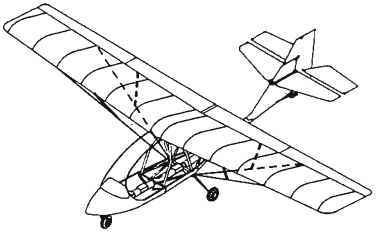

RIGHT WING NOT SHOWN FOR CLARITY

JURY STRUT ATTACHMENT

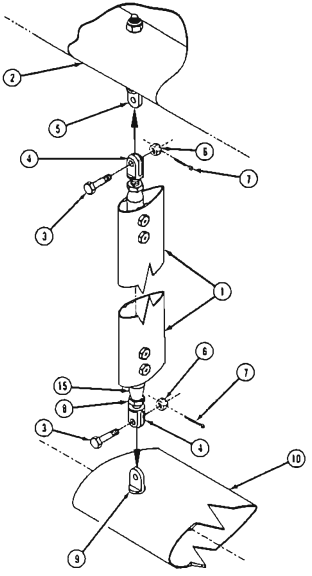
1. Attach the Jury Struts (1) and (11) as illustrated. Adjust the Forkbolts (4) at each end of the Jury Struts to allow the Forkbolt holes to align. Keep the SAME amount of threads showing at each end of the Struts. When adjustment is complete tighten the Jam Nuts (8) against the Fittings (15). Bend ALL Cotter Pins (7) correctly.

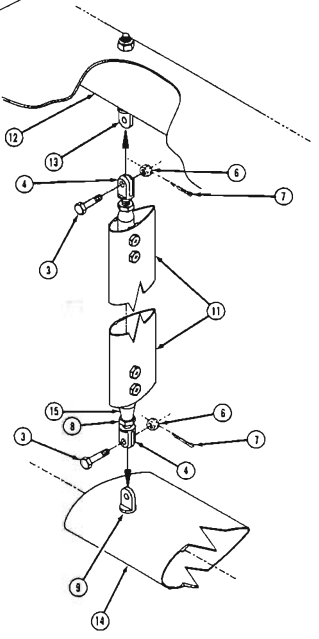
2. Attach the opposite (RIGHT) side in 'mirror image'.

Item	P/N	Qty	Description
1	45628	2	Leading Edge Jury Strut
2	45623		Left Leading Edge Wing Spar Assembly
	45624		Right Leading Edge Wing Spar Assembly (not illustrated)
3	10009	8	AN3-5 Bolt
4	10388		1/4" x 1" Full Thread Forkbolt
5	10368		AN43B-24 A Eyebolt
6	10517	8	3/16" Castle Nut
7	10635	8	Cotter Pin
8	10631		1/4" Jam Nut
9	10372		AN43B-20 A Eyebolt
10	45620	2	Left Leading Edge Lift Strut Assembly Right Forward Lift Strut Assembly (not illustrated)
11	45629	2	Trailing Edge Jury Strut
12	45625		Left Trailing Edge Wing Spar Assembly
	45626		Right Trailing Edge Wing Spar Assembly (not illustrated)
13	10373		AN43B-22A Eyebolt
14	45621	2	Trailing Edge Lift Strut Assembly
15	45494		.75 x .035 1/4"-28 Tube Fitting




AFT
FWD
OUTER


2
5
4
8
7
3
1
6
15
8
7
3
4
10
9


12
13
6
4
7
3
11
15
8
6
3
7
4
9
14

AILERON AND FLAP ATTACHMENT

1. Refer to Detail 'A'. Attach the LEFT Aileron (1) to the LEFT Wing (2) using Hardware (3,4 and 5) as illustrated. Bend ALL Cotter Pins (5) correctly.

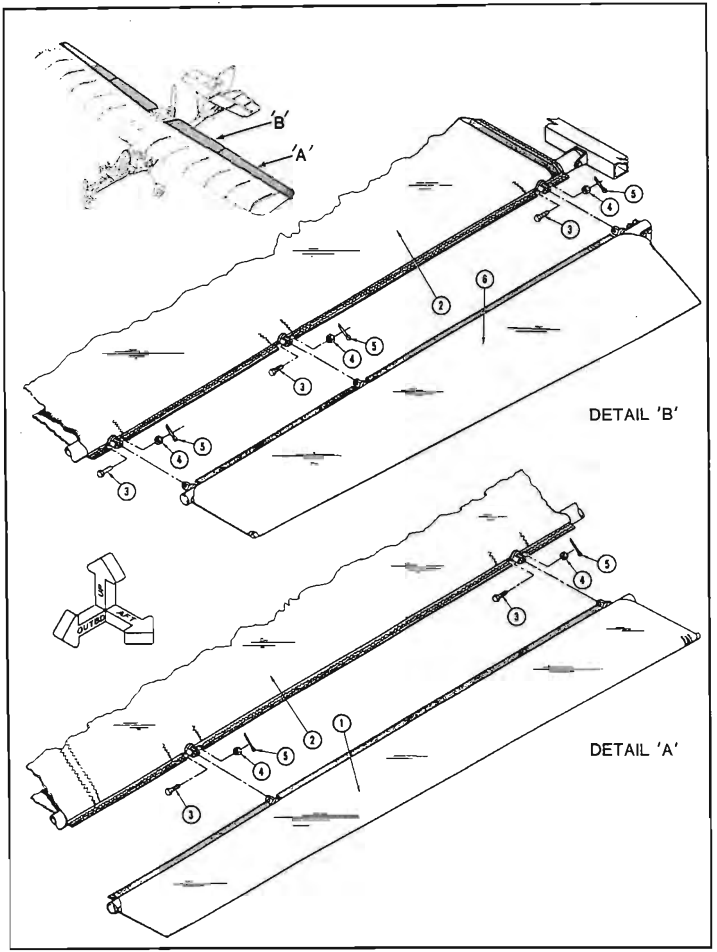
2. Repeat Step 1 in "mirror image" on the opposite (RIGHT) Wing.

3. Refer to Detail 'B'. Attach the LEFT Flap (6) to the Wing using Hardware (3,4 and 5) as illustrated. Bend ALL Cotter Pins (5) correctly.

4. Repeat Step 3 in "mirror image" on the opposite (RIGHT) Wing.

5. Compress the Velcro Gap Seal together along the length of the Wing (2) and each Aileron (1) and Flap (6).

Item	P/N	Qty	Description
1			LEFT Aileron Assembly
2			LEFT Wing
3	10009	10	AN3-5 Bolt
4	10517	10	3/16" Castle Nut
5	10635	10	Cotter Pin.
6			LEFT Flap Assembly


'B'
'A'
DETAIL 'B'
DETAIL 'A'
OUTBD

AILERON AND FLAP PUSHROD ATTACHMENT

1. Refer to Figure 1 and Detail 'A'. Insert the Aileron Pushrod (1) through the previously cut-out hole in the BOTTOM surface of the LEFT Wing.

2. Attach the Aileron Pushrod as illustrated. **DO NOT TIGHTEN** the remaining Locknut (8) attached to Bolt (5) as the Aileron Pushrod (1) will be adjusted in a later sequence on Pages 7-22 and 7-23.

NOTE: Attaching the FORWARD end of the Aileron Pushrod (1) to the INBOARD most attachment hole of the Aileron Bellcrank (4) will give you LESS Aileron deflection and LOWER Aileron Control pressures. Attaching the Pushrod to the OUTBOARD most hole will give you MORE Aileron deflection and HIGHER Aileron pressures.

3. Attach the opposite (RIGHT) Aileron Pushrod with Hardware (5,6,7, and 8) in "mirror image".

4. Refer to Figure 1 and Detail 'B'. Attach the Flap Pull Rods (11) with Hardware (9,7 and 8) previously installed as illustrated. The LEFT Flap Pull Rod (14) must pass ABOVE the Forward Seat Belt Attach Brackets and between the Forward Down Tubes. Tighten ONLY Locknut (8) attached to Bolt (16) to proper torque. The Pull Rods will be adjusted in a later sequence on Pages 7-24 and 7-25.

NOTE: Refer to Detail 'B' only. You may wish to substitute an AN3-7 Bolt (P/N 10018) for item # 9 and a 3/16" Castle Nut (P/N 10517) for item # 7 if you plan on breaking down your aircraft for transport as the Flap Pull Rods will need to be disconnected. You may obtain these parts from your **QUICKSILVER** Dealer.

Item	P/N	Qty	Description
1	45699		Aileron Pushrod Assembly
2	10631		1/4" - 28 Jam Nut
3	10700		1/4" Male Rod End Bearing
4	42009		Aileron Bellcrank
5	10025	2	AN3-11A Bolt
6	20241	2	"T" Bushing
7	10550	8	3/16" Washer
8	10500	4	3/16" Locknut
9	10020	2	AN3-7A Bolt
10	45260		Aileron/Flap Horn
11	45225		Aft Flap Pull Rod

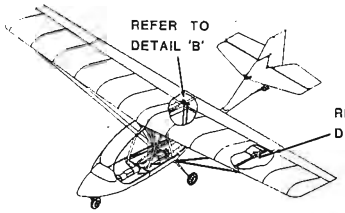

REFER TO
DETAIL 'B'
REFER TO
DETAIL 'A'

FIG. 1

DETAIL 'A'
PREVIOUSLY
ATTACHED.
CERTAIN PARTS NOT
SHOWN FOR CLARITY
DETAIL 'B'

AILERON DEFLECTION ADJUSTMENT

1. Uncoil the LEFT Aileron Cables (1). Ensure that the Aileron Bellcrank (2) is orientated as illustrated and that the Cables are NOT twisted and PARALLEL to each other. Attach the Cables (1F) and (1A) to the Root Tube Bellcrank (3) using the Hardware (4,10,5 and 12). Bend ALL Cotter Pins (5) correctly.

2. Refer to Detail 'A'. Disconnect the Male Rod End Bearing of the Aileron Pushrod Assembly (6) at the LEFT Aileron Horn (7). Position a STRAIGHT Edge on the UNDER SIDE of the LEFT Wing as illustrated. Tie it in that position.

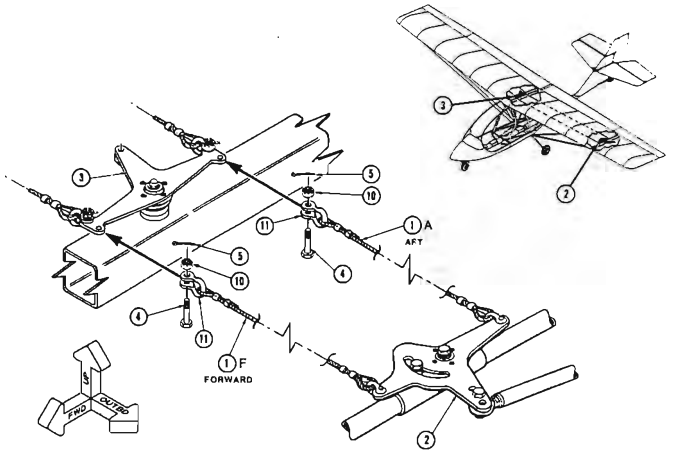
3. Have a "volunteer from the studio audience" sit in the FRONT Seat and hold the Control Wheel (not illustrated) EXACTLY "LEVEL" or "NEUTRAL".

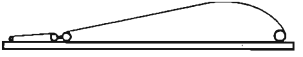
4. Refer to Detail 'B'. Thread the Jam Nut (8) up to the shoulder of the Male Rod End Bearing (9). Rotate the Pushrod (6) "ALL the WAY" onto the Bearing (9). "Back-off" the Pushrod until the Holes in the AFT Rod End Bearing and the Horn (7) align EXACTLY. Reinsert the Hardware, it should slip back in easily, without moving the Horn (7). Adjust as necessary. Retighten the Hardware until "snug". Bend the Cotter Pin (5) Correctly. Always make sure there is AT LEAST TEN threads of the Rod End Bearing INSIDE the Pushrod.

5. Refer to Detail 'C'. Tighten the Jam Nut (8) back AGAINST the Pushrod (6).

6. Repeat on the opposite (RIGHT) Aileron.

Item	P/N	Qty	Description
1	45713		Aileron Cable
2	42009		Aileron Bellcrank
3	46005		Root Tube Bellcrank
4	10009	4	AN3-5 Bolt
5	10635	4	Cotter Pin
6	45699		Aileron Pushrod Assembly
7	45620		Aileron/Flap Horn
8	10631		1/4" - 28 Jam Nut
9	10700		1/4" Male Rod End Bearing
10	10517	4	Castle Nut
11	20320	4	3/16" Shackle

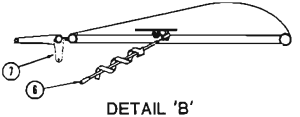




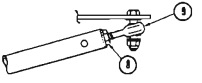
DETAIL 'A'



SIDE VIEW



DETAIL 'B'



DETAIL 'C'

FLAP PULL ROD ATTACHMENT AND FLAP HANDLE STOP ADJUSTMENT

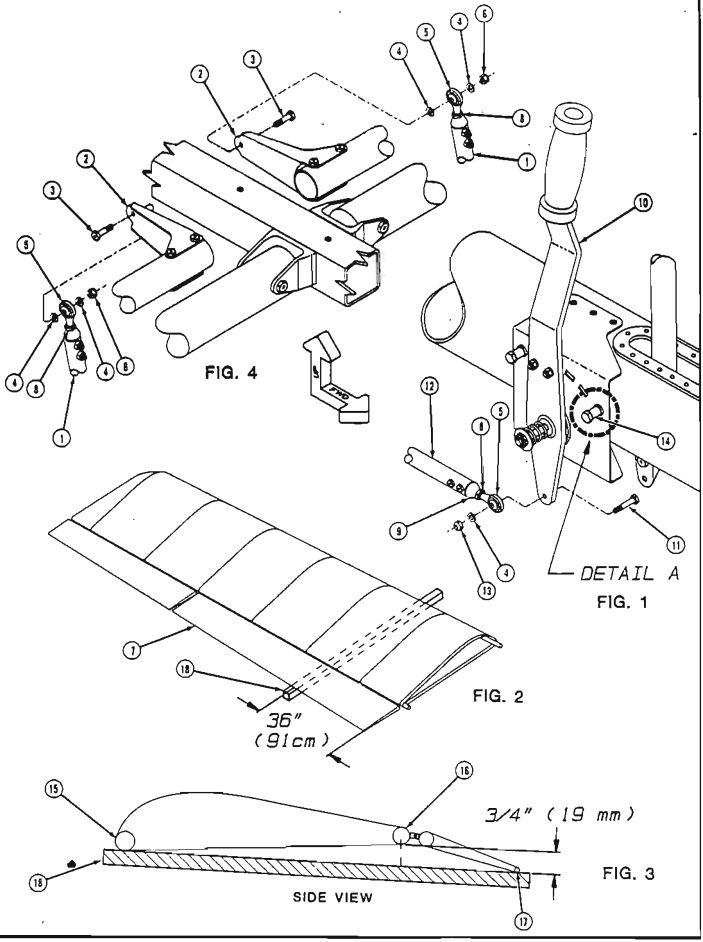
1. Refer to Figure 1. Set the Flap Handle (10) in the FULLY "AFT" or "RETRACTED" position. Assemble Hardware (11,5,4 and 13) FINGER TIGHT ONLY. Refer to Figure 4. Temporarily remove the Hardware (4) and (6) from the Bolt (3) which attaches the LEFT Flap Horn (2) to the LEFT Flap Pull Rod (1).
Refer to Figures 2 and 3. Position a Staight Edge UNDER the Left Flap (15) as illustrated.
Preload the Flap by raising it UPWARD with the Staight Edge.

2. Adjust the Bearing (5) attached to the LEFT Flap Pullrod (1) until there is 3/4" (19 mm) between the BOTTOM edge of the Trailing Edge Wing Spar (16) and the TOP of the straight edge. Replace the Hardware (3,4 and 6). Ensure there is a MINIMUM of TEN [10] threads of the Rod End Bearing INSIDE the Pullrod (1). **NOTE:** If more adjustment is needed adjust the Bearing (5) attached to the Forward Flap Pullrod (12). When adjustment is completed tighten the Locknut (6) to proper torque. Tighten the Jam Nut (8) against the Fitting (9).

3. Repeat on the opposite (RIGHT) side in "mirror image".

4. Refer to Figure 1. Secure Locknut (13) and the Jam Nut (8). AFTER BOTH Flaps have been adjusted set the Flaps into the FOURTH [4th] detent position which is "FULLY FORWARD" or "FULLY EXTENDED". Refer to Detail 'A'. Ensure the Flap Handle Stop (14) is positioned as to allow the Flap Handle (10) to rest or make contact against the Stop when the Flaps are "FULLY" extended. Tighten the Locknut on the Flap Handle Stop.

Item	P/N	Qty	Description
1	45225		Aft Flap Pull Rod
2	45260		Flap Horn
3	10020		AN3-7A Bolt
4	10550		3/16" Washer
5	10700		1/4" Male Rod End Bearing
6	10500		3/16" Locknut
7			Left Flap Assembly
8	10631		1/4" - 28 Jam Nut
9	45494		1/4" - 28 x 3/4" x .035" Fitting
10	45267		Flap Handle
11	10024		AN3-10A Bolt
12	45136		Forward Flap Pull Rod
13	10500		3/16" Locknut
14			Forward Flap Handle Stop
15			Leading Edge Wing Spar
16			Trailing Edge Wing Spar
17			Flap Trailing Edge
18			Straight Edge


FIG. 4
DETAIL A
FIG. 1
FIG. 2
36"
(91cm)
3/4" (19 mm)
FIG. 3
SIDE VIEW

GAP COVER ATTACHMENT

1. Attach the LOWER Gap Cover (1) between the Wings LOWER surface with the Velcro UP, clear portion FORWARD (to allow view of the Fuel Tank).

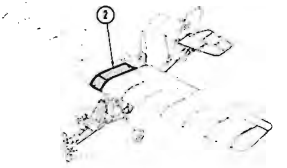
NOTE: The Upper Gap Cover (2) has Velcro Fasteners on the FORWARD end.

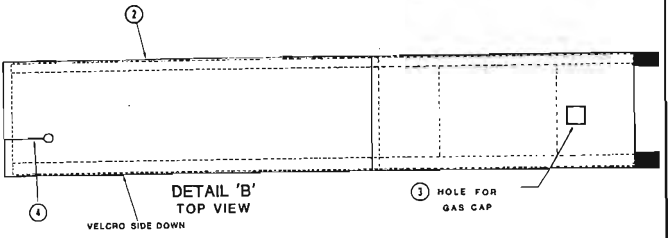
2. Attach the UPPER Gap Cover (2) by placing the TWO Velcro Fasterners on the FORWARD end of the Gap cover (2) on the LOWER Gap cover (1) already attached.

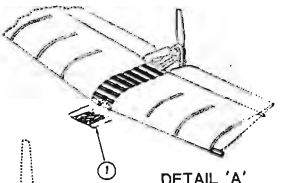
3. Position the cut-out for the Fuel Tank Cap CENTERED OVER the Cap. Finish attaching the Gap Cover along the UPPER surface of the Wing to the rear.

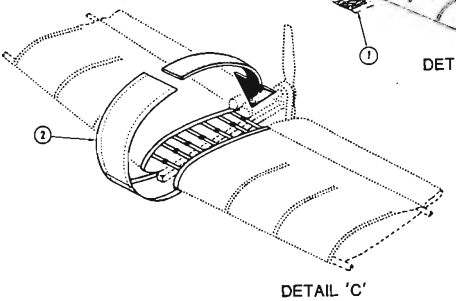
4. Cut slit (4) and hole for Throttle and Choke Cables coming from the Powerplant as required.

Item	P/N	Qty	Description
1	45649	1	Lower Gap Cover
2	45648	1	Upper Gap Cover
3			Fuel Cap cut-out (factory made)
4			Cable Slit and Hole


2


2
DETAIL 'B'
TOP VIEW
3 HOLE FOR GAS CAP
4
VELCRO SIDE DOWN


1
DETAIL 'A'


2
DETAIL 'C'

LABEL PLACEMENT

1. Refer to Figures 1, 2 and 3. Attach Labels as illustrated.

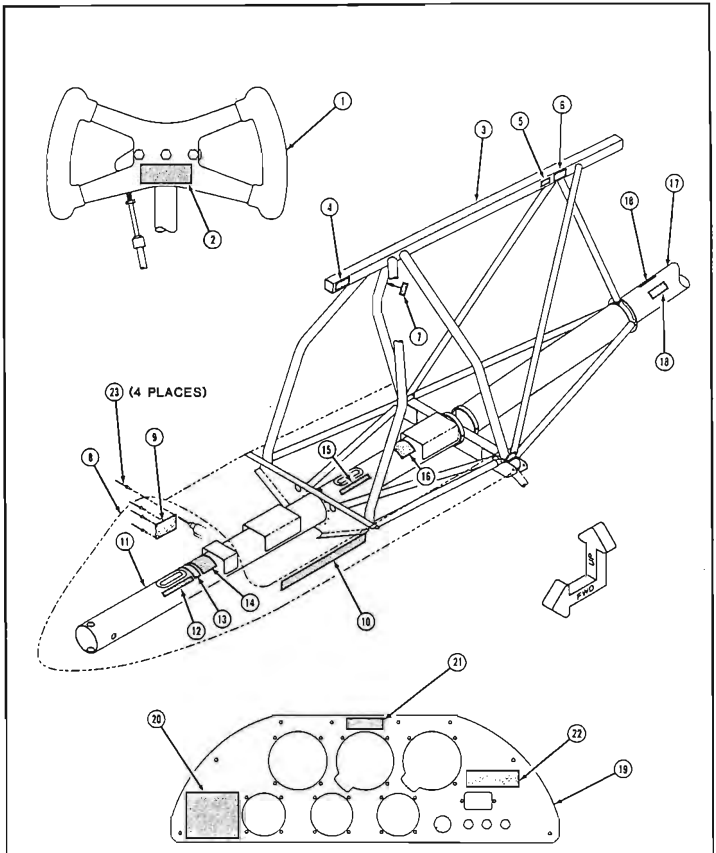
NOTE: Attach a Passenger Warning Label (2) to BOTH FORWARD and AFT Control Wheels (1). Position the Propeller Arc Labels (18) on the each SIDE and CENTERED on the Arc of the Propeller on the Tail Boom Tube (17) as illustrated.

2. Attach the FAA Namplate (9) to the SIDE of the Pilot Enclosure (8) as illustrated. Position the Nameplate in the desired location. Using the EXISTING attachment holes in the Nameplate CAREFULLY drill FOUR 1/8" (3.2 mm) diameter holes through the side of the Pilot Enclosure and attach the Nameplate with FOUR Rivets (24) with the heads of the Rivets located on the OUTSIDE of the Pilot Enclosure (8).

NOTE 1: When drilling through Fiberglass, it tends to splinter on the back side as the drill bit comes through it. You may wish to drill from the OUTSIDE of the Enclosure.

NOTE 2: Attach the "EXPERIMENTAL" Label (10) to the OUTSIDE of the Pilot Enclosure AFTER the Enclosure has been painted.

Item	P/N	Qty	Description
1	45555		Control Wheel
2	50420-17	2	Passenger Warning Label
3	45668		Root Tube
4	90601	1	50:1 Fuel Mixture Label
5	50420-09	1	Service Bulletin Label
6			GT 500 Serial Number Label (Factory Installed)
7	846-17	1	Monitor Fuel Level Label
8	45578		Pilot Enclosure
9	50420-18	1	FAA Nameplate
10	50420-16	1	"Experimental" Label
11	45545		Forward Fuselage Tube Assembly
12	50420-15	1	Trim Label
13	846-21	1	Read Markings and Placards Label
14	846-18A		Warning Label (Factory Installed)
15	50420-15	1	Trim Label
16	906-05	1	Solo Front Seat Only Label
17	45012		Tail Boom Tube Assembly
18	50420-05	2	Propeller Arc Label
19	45574		Instrument Panel
20	906-03	1	GT 500 Flight Speeds Label
21	846-17	1	Monitor Fuel Level Label
22	846-01A	1	Preflight Check Label
23	20200	4	1/8" x 1/4" Grip Aluminum Rivet (AAP-44)


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23 (4 PLACES)
FWD

WINDSHIELD ATTACHMENT

1. Refer to Figure 1. and Detail 'A'. Clamp or tape (clamps are preferred) the LEFT Windshield Frame Tube (1) to the Windshield Frame Bracket (2) CENTERED over the 3/16" (4.8 mm) diameter attachment hole in the Bracket with the AFT end of the tube located APPROXIMATELY 1" (25.4 mm) AFT from the CENTER of the hole as illustrated.

2. Refer to Figure 1 and Detail 'B'. Position the FORWARD end of the Windshield Frame Tube (1) against the Pilot Enclosure (3). **DO NOT** allow the Windshield Frame Tube (1) to make contact or rub against the Instrument Panel (not illustrated).

3. Repeat Steps 1 and 2 on the opposite (RIGHT) side in "mirror image".

Item	P/N	Qty	Description
1	46310	2	Windsheild Frame Tube
2	46002		Windshield Frame Bracket
3	45578		Pilot Enclosure

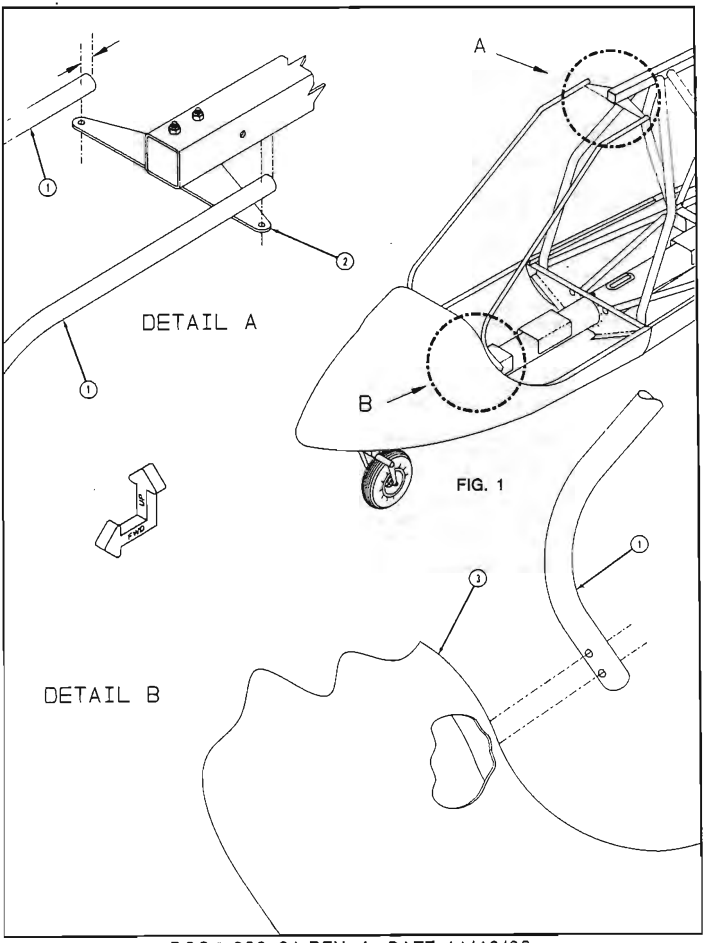


FIG. 1

WINDSHIELD ATTACHMENT (CONT'D.)

NOTE: If you plan on painting the Pilot Enclosure (1). You may wish to TEMPORARILY attach the Windshield then remove it after all the required holes are drilled.

1. Refer to Figure 1 and Detail 'A'. Locate the CENTERLINE of the Pilot Enclosure (1) and TEMPORARILY mark this location.

2. Locate the factory punched 3/16" (4.8 mm) diameter hole on the CENTERLINE, at the FORWARD end of the Windshield (2), as illustrated.

3. Locate the 1 1/2" (3.81 cm) wide flattened area around the UPPER surface of the Pilot Enclosure (1). Position the FORWARD edge of the Windshield (2) at FORWARD edge of this location.

4. Using the EXISTING 3/16" (4.8 mm) diameter hole punched in the Windshield (2), back-drill thru the CENTER hole in the Windshield and into the Pilot Enclosure (1) on its CENTERLINE.

NOTE: The hole drilled in the Pilot Enclosure should be located APPROXIMATELY 9 3/4" (24.76 cm) FORWARD of the FLAT portion of the Pilot Enclosure supporting the Instrument Panel.

5. Align the CENTER hole of the Windshield and Pilot Enclosure Attach them with a Washer Head Screw (3) TWO Washers (4) and Locknut (5). Tighten the Locknut FINGER TIGHT ONLY.

NOTE: Slip a Washer (4) BETWEEN the Windshield (2) and the Pilot Enclosure (1). This will allow you to more easily remove (by washing away) any dirt or debris which may become trapped between the Windshield and Pilot Enclosure at this location.

Item	P/N	Qty	Description
1	45578		Pilot Enclosure
2	45568	1	Curved Windshield
3	11075	1	AN525-10R10 Washer Head Screw
4	10550	2	3/16" Washer
5	10500	1	3/16" Locknut

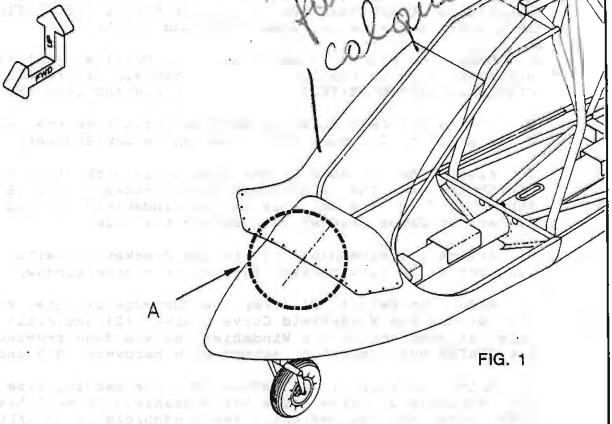
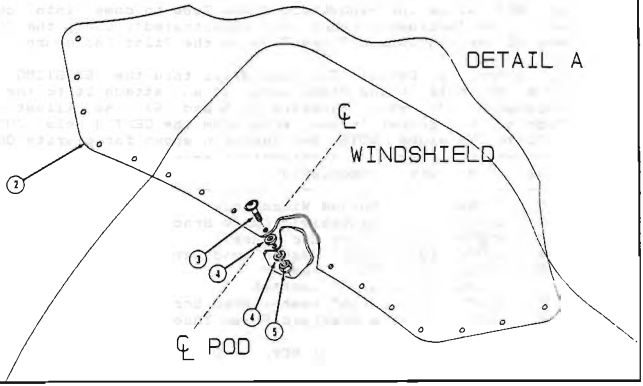


FIG. 1



7-28C

WINDSHIELD ATTACHMENT (CONT'D.)

NOTE: There must be enough Windshield (1) wrapped around the Windshield Frame Tube (8) to install Rivets (not illustrated) in a later sequence on Pages 7-28E and 7-28E.

1. Refer to Figure 1 and Detail 'A'. Drill a 3/16" (4.8 mm) diameter hole in the TOP of the Windshield (1) on the VERTICAL CENTERLINE APPROXIMATELY 5/16" (8 mm) FORWARD from the AFT end.

2. Locate the CENTERLINE in BOTH directions on the Windshield Curve Bracket (2). Mark this location on the Bracket.

3. Align the AFT edge of the Windshield with the HORIZONTAL CENTERLINE on the Windshield Curve Bracket (2). Back-drill thru the 3/16 (4.8 mm) hole in the Windshield (1) and thru the Windshield Curve Bracket (2). Deburr the hole.

4. Attach the Windshield (1) to the Bracket (2) with hardware (4,5 and 6) as illustrated. Tighten to proper torque.

5. Refer to Detail 'D'. Wrap the TOP edge of the Windshield (1) around the Windshield Curve Bracket (2) and drill one [1] hole at each end of the Windshield as was done previously for the CENTER hole location. Attach with hardware (4,5 and 6).

6. Refer to Figure 1 and Detail 'B'. Use masking tape to shape the Windshield curve. Move the Windshield Frame Tubes (8) at BOTH ends as required until the Windshield is PARALLEL with the tubes and the edge distance is EVEN on BOTH sides. Note where the Tubes (8) make contact with the Pilot Enclosure (3) **DO NOT** allow the Windshield Frame Tube to come into contact with the Instrument Panel (not illustrated). Clamp the FORWARD end of the Windshield Frame Tube to the Pilot Enclosure.

7. Refer to Detail 'C'. Back-drill thru the EXISTING 3/16" (4.8 mm) hole in the Windshield (1) and attach it to the Pilot Enclosure (3) with Hardware (7,5 and 6) (as illustrated). Tighten to proper torque. Work from the CENTER hole OUTBOARD ALTERNATING sides. **NOTE:** End location shown for clarity ONLY.

Item	P/N	Qty	Description
1	45568		Curved Windshield
2	46003		Windshield Curve Bracket
3	45578		Pilot Enclosure
4	11074	13	3/16" Washer Head Screw (AN525-10R9)
5	10550	35	3/16" Washer
6	10500	19	3/16" Locknut
7	11075	16	3/16" Washer Head Screw (AN525-10R10)
8	46310		Windshield Frame Tube

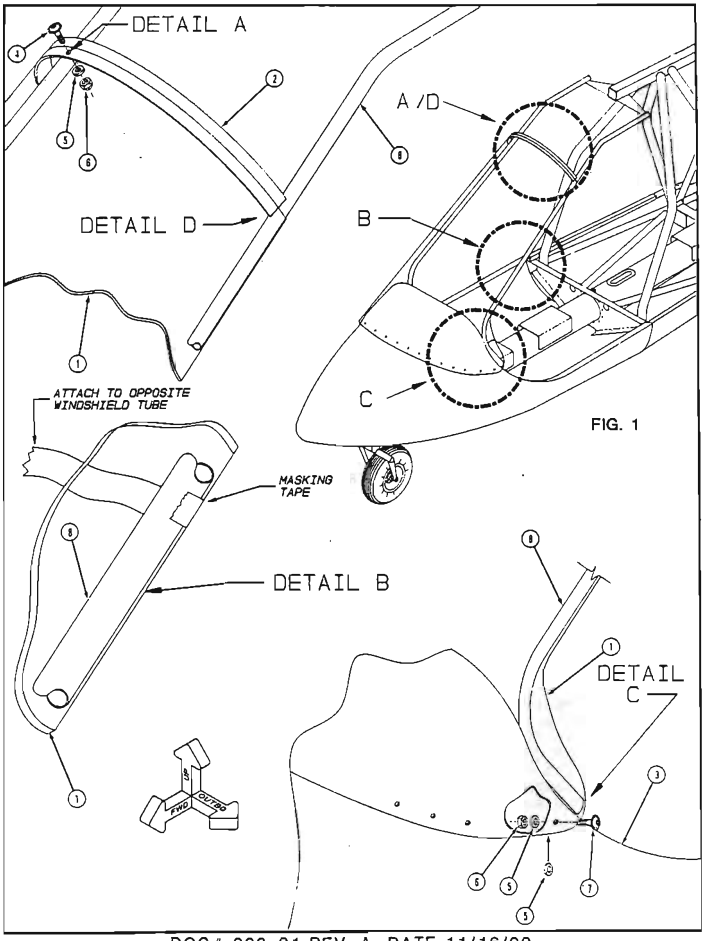

DETAIL A
A /D
DETAIL D
B
C
ATTACH TO OPPOSITE WINDSHIELD TUBE
MASKING TAPE
DETAIL B
DETAIL C
FWD
OUTBD

FIG. 1

WINDSHIELD ATTACHMENT (CONT'D.)

1. Refer to Figure 1 and Detail 'A'. Verify the AFT end of the LEFT Windshield Frame Tube (1) is CENTERED over the 3/16" (4.8 mm) diameter attachment hole on the LEFT side of the Windshield Frame Bracket (2).

NOTE: There should be APPROXIMATELY 1" (25.4 mm) from the AFT end of the Windshield Frame Tube (1) and the CENTER of the Windshield Frame Bracket (2) attachment hole.

2. Back-drill thru the EXISTING 3/16" (4.8 mm) diameter attachment hole in the LEFT side of the Windshield Frame Bracket (2) and thru BOTH walls of the Windshield Frame Tube (1). Deburr the hole. Attach the Windshield Frame Tube to the Windshield Tube Bracket (2) with Hardware (3,4 and 5) as illustrated. Tighten to correct Torque. DO NOT DISTORT THE TUBE.

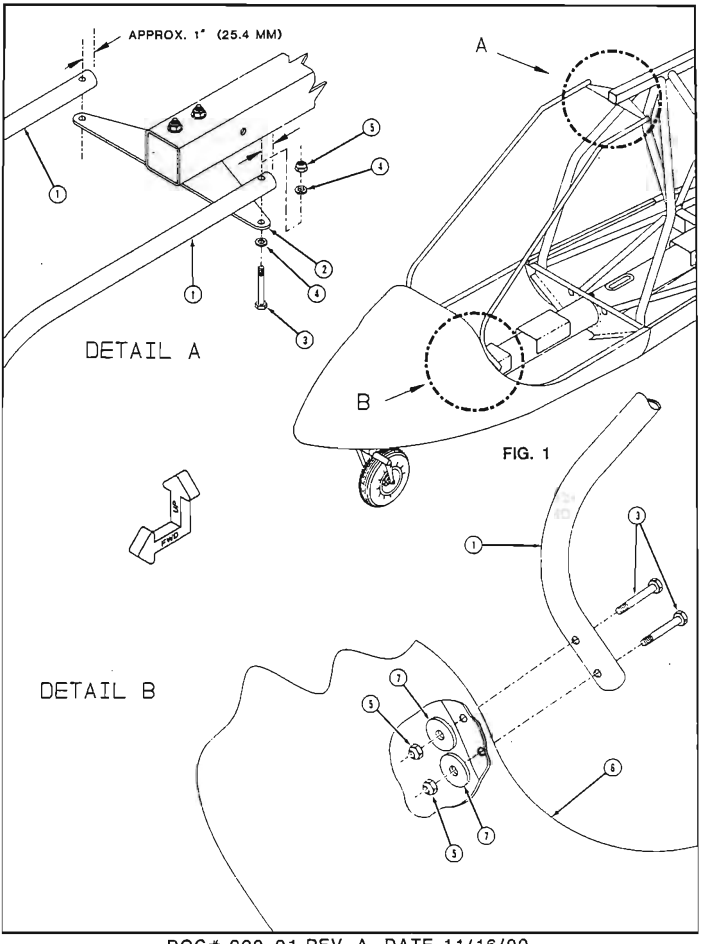
NOTE: Before completeing the next step, ensure the Winshield Frame Tube (1) does NOT come into contact or rub against the Instrument Panel (not illustrated).

3. Refer to Figure 1 and Detail 'B'. Back-drill thru the EXISTING holes at the LOWER end of the LEFT Windshield Frame Tube with a 3/16" (4.8 mm) diameter Drill Bit the LEFT Windwshield Frame Tube (1)

4. Attach the LEFT Windshield Frame Tube (1) to the Pilot Enclosure (6) with Hardware (3,7 and 5) as illustrated. Tighten to correct torque. DO NOT DISTORT THE TUBE.

5. Repeat Steps 1 thru 4 for the opposite (RIGHT) Windshield Frame Tube.

Item	P/N	Qty	Description
1	46310		Windshield Frame Tube
2	46002		Windshield Frame Bracket
3	10030	6	AN3-13A Bolt
4	10550	4	3/16" Washer
5	10500	6	3/16" Locknut
6	45578		Pilot Enclosure
7	10563	4	3/16" Fender Washer


APPROX. 1" (25.4 MM)
1
5
4
2
7
4
3
DETAIL A
A
B
FIG. 1
END
3
1
DETAIL B
7
5
6
5
7

UPPER WINDSHIELD ATTACHMENT

1. Refer to Figure 1 and Detail 'A'. Temporarily position the Upper Formed Windshield (1) over the Windshield Frame Tube (2).

2. Refer to Detail 'D'. Move the FORWARD edge of the Upper Formed Windshield (1) as to allow contact with the AFT edge of the Windshield (4).

3. Refer to Detail 'C'. Trim the AFT edge of the Upper Formed Windshield (1) as required to match the angle of the Wing Leading Edge. Ensure the Upper Windshield DOES NOT come into contact or rub against the Wing Cover (5).

NOTE: The Upper Formed Windshield (1) should be positioned LOWER than the TOP of the Fuel Tank Cap (not illustrated) when positioned correctly.

4. Align the edges of the Upper Formed Windshield (1) with the Windshield Frame Tubes (2) the SAME as was previously done for the Windshield (4). Use Masking Tape to hold it into position.

5. Trim any EXCESS Upper Formed Windshield (1) material if required.

6. Refer to Detail 'B'. Drill 1/8" (3.2 mm) diameter holes thru ONE [1] wall ONLY and attach the Upper Formed Windshield (1) and Windshield (4) to the Windshield Frame Tube (2) with Rivets (6) at APPROXIMATELY 4" (10.16 cm) intervals.

7. Refer to Detail 'C'. Cut and attach a piece of Edge Trim (7) (not illustrated) as required to the AFT edge ONLY of the Upper Formed Windshield (1).

IMPORTANT: Secure the Edge Trim (7) to the AFT edge of the Upper Windshield (1) with THREE [3] Rivets (6). One [1] at each end and ONE [1] in the CENTER of the Upper Formed Windshield.

Item	P/N	Qty	Description
1	45567		Upper Formed Windshield
2	46310	2	Windshield Frame Tube
3	46003		Windshield Curve Bracket
4	45568		Curved Windshield
5			Wing Cover
6	20200	A/R*	1/8" x 1/4" Grip Aluminum Rivet (AAP-44)
7	90475	A/R*	Edge Trim (not illustrated)

* As required.

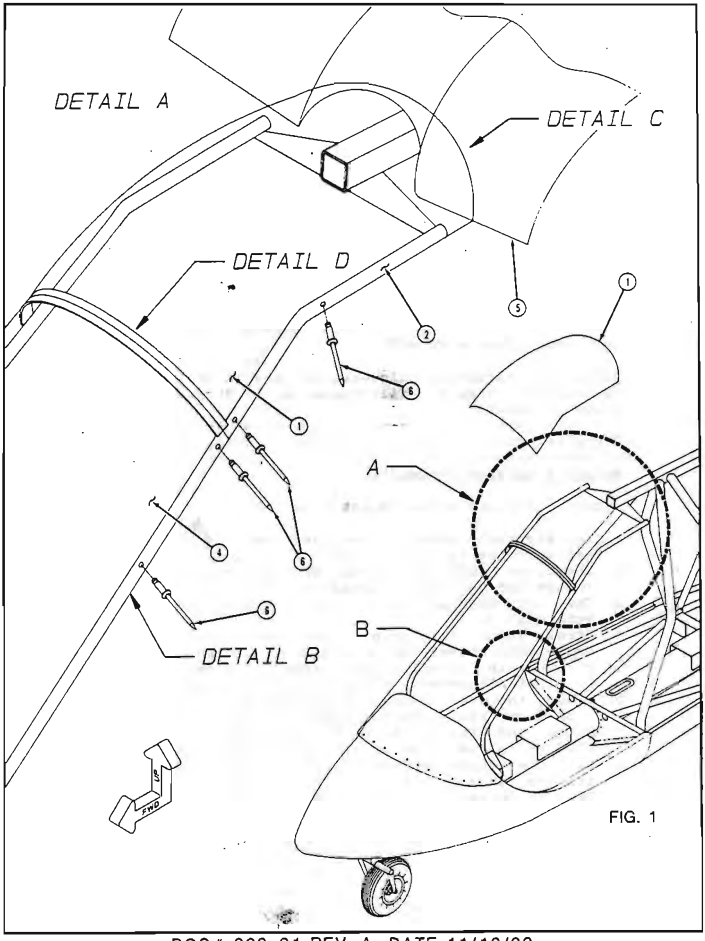


FIG. 1

INTRODUCTION

To achieve the balance your aircraft was designed to have, your **QUICKSILVER DEALER** will use the following procedure when you've completed the assembly of the kit. Thereafter, if you change the weight of an existing part or position any other weight on the aircraft (such as a Ballistic Recovery System) or the weight of the Pilot or his equipment (Winter/Summer Flight Gear) changes significantly, it is ESSENTIAL that the resulting change in the Center of Gravity (CG) is established within the design limits **BEFORE THE AIRCRAFT IS FLOWN.**

THE FORMULA
To determine the location of the CG for this aircraft:

TOTAL MOMENT OF AIRCRAFT
---------- = DISTANCE OF CG FROM DATUM
GROSS WEIGHT OF AIRCRAFT

NOTE: The following calculations are in inches. The Formula to convert inches to millimeters is : Inches x 25.4
Weighing Points

Empty Weight.....Main Landing Gear and Tail Skid

Weight & Balance Procedure

Note A loading sytem is not required.

1. The aircraft should be weighed inside a closed building to avoid errors caused by wind.
2. The floor MUST BE LEVEL, or the scales must be securely wedged and accurately levelled.
3. The accuracy of the three Weighing Scales must be established.
4. First weigh the Pilot, including his complete flying equipment, helmet, parachute, etc. and any baggage which he will use in normal flight when strapped in seat (Such as a Wrist-Altimeter). Record the weight for use in Chart 2.
5. Place the two Scales so that their top surfaces are 6" (152.4 mm) above ground level, in the Main Wheel position. Place the third Scale so that its top surface is 35" (889 mm) above floor level, in the Tail Skid position.
6. With the assistance of a friend, lift the aircraft so that its Main Wheels are CENTERED on the Scales and the Tail Skid is centered on its Scale.

NOTE: If it is necessary to wedge the wheels to prevent the aircraft from rolling off the Scales, then those wedges must be weighed separately and entered as "Tare Weight".

WEIGHT AND BALANCE PROCEDURE (CONT'D.)

7. Refer to Figure 6-1. Using the Angle Finder Tool measure the angle of the Root Tube. It must read ZERO (0) degrees. If it doesn't, shim as necessary between the boxes and the Scales or between the floor and the Tail Skid scale, until it does.
8. Mark the LATERAL CENTERLINE of the Main Wheels on the floor.

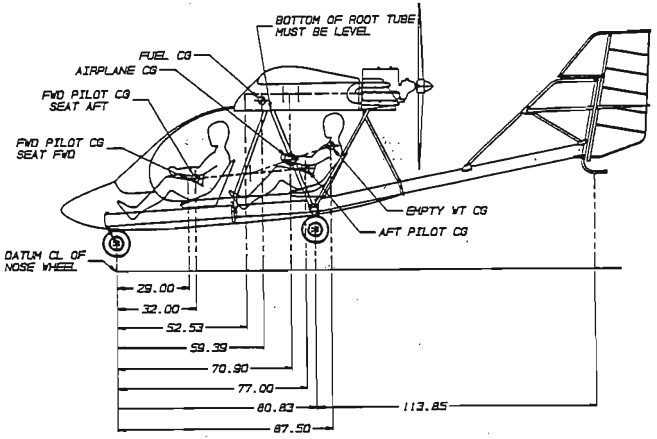


Figure 7-1 : WEIGHT AND BALANCE CONFIGURATION.

Aircraft on boxes. Angle Finder reads ZERO (0) degrees. Moment Arm of Seat, Fuel Tank, Wheels and Tail Skid accurately shown.

EQUIPMENT LIST:

1) Airspeed Indicator
2) Tachometer
3) Water Temperture Gauge
4) Hour Meter

DETERMINATION OF EMPTY WEIGHT CG LOCATION (CONT'D.)

9. Measure the distance from the "datum" (front edge of the Forward Fuselage Tube) to the middle of the lateral centerline of the Main Wheels. This establishes the "moment arm" and should read 77.0"(1955mm)(see CHART 1).
10. Record the individual weight on each wheel and the tail skid into CHART 1 under "Gross Weight". Subtract the "Tare" from each weight and record the results under "Net Weight". Add the weights in the Net Weight column and record the total in "Total Empty Weight".
11. Multiply the Net Weight of the left wheel by the "left wheel moment arm". The result is the left wheel Moment (in.lbs.). Record this result in the right-hand column.
12. Repeat (11) above for the right wheel and the tail skid.
13. Add and record the result of the above Moments to find the "Total Moment (Empty)".
14. Divide the Total Moment by the Total Empty Weight. The result is the Empty Weight CG "Moment Arm".

CHART 1

Weight includes: **ALL instruments & accessories, ARS installed**
Weight **DOES NOT** include: fuel, pilot and/or pilot equipment.

EMPTY WEIGHT CALCULATION

ITEM	GROSS WEIGHT		TARE WEIGHT		NET WEIGHT		MOMENT ARM (inches to Datum) (millimeters to Datum)		MOMENT (in.lbs.) (kg/mm)
Left Wheel		-		=		X	77.0"(1955 mm)	=	
Right Wheel		-		=		X	77.0"(1955 mm)	=	
Tail Skid		-		=		X	194.7"(4945 mm)	=	
TOTAL EMPTY WEIGHT:							TOTAL MOMENT: (EMPTY)		

TOTAL MOMENT (EMPTY) / TOTAL EMPTY WEIGHT = _____ = _____ EMPTY WEIGHT CG (Moment Arm)

DETERMINATION OF LOADED WEIGHT CG LOCATION (CONT'D.)

15. Record the "TOTAL EMPTY WEIGHT" from CHART 1 into CHART 2 under "AIRCRAFT EMPTY WEIGHT" on the following page.
16. Add the Weight of the pilot/pilots and pilot equipment (as recorded earlier).
17. Add any "OTHER #" normally carried weight and enter in CHART 2.
18. Refer to the results of the calculations in CHART 1 and ensure that the TOTAL EMPTY WEIGHT, EMPTY WEIGHT CG (Moment Arm), and the TOTAL MOMENT (EMPTY) are recorded accurately in CHART 2.
19. Refer to Figure 6-1. Note that the Fuel Tank Moment Arm is 53.53" (1508 mm), the Forward Seat Moment Arm in the FORWARD position is 29.0" (736 mm), and the Forward Seat Moment Arm in the AFT position is 32" (812 mm).
20. If you have positioned the Forward Seat in the FORWARD position the PILOT and EQUIPMENT MOMENT ARM is 29.0" (736 mm); in the AFT position, it is 32" (812 mm). IMPORTANT: The calculation in CHART 2 MUST be made for BOTH seat positions to determine if it is possible to exceed the MAXIMUM FORWARD or REARWARD CG LIMITS for a given PILOT and EQUIPMENT Weight.
21. Refer to (17) above and calculate the Moment Arm of the "OTHER" weight and record the results on CHART 2.
    NOTE: "OTHER" refers to additional fuel, baggage, non-standard equipment (such as radios, etc.). Their Moment Arms are measured from the Datum to their respective center of mass.
22. Multiply the AICRAFT EMPTY "WEIGHT" by its "MOMENT ARM" (verification of step (18) above). The result is the AIRCRAFT EMPTY "MOMENT (in.lbs.)"
23. Multiply the FUEL Weight by 53.53" (1508 mm) and record its "MOMENT (in.lbs.)". For this procedure assume 8.5 gal. which will Weigh 51 lbs. (21.3 kg) Weight of Fuel (approx.) 6 lbs/gal (27.3 L).
24. Multiply the PILOT and EQUIPMENT Weight by 29.0" (736 mm) (for the first Weight & Balance computation) and record its "MOMENT (in.lbs.)(kpa)". If the rear seat is occupied repeat same procedure as the front seat.
25. Multiply "OTHER" weight by its respective MOMENT ARM and record the resultant "MOMENT (in.lbs.)(kpa)" for each.
26. Add all the Weights in the WEIGHT column and record the "TOTAL GROSS WEIGHT". Add all the Moments in the MOMENT column and record the "TOTAL MOMENT (LOADED).
27. Divide the "TOTAL MOMENT (LOADED)" by the "TOTAL GROSS WEIGHT". The result is the "GROSS WEIGHT CG" in inches from the Datum. Check the Value with the LIMITS on the following page.
28. Repeat STEPS 24,25,26 and 27 using the Moment Arm for the AFT seat position - 32" (812 mm).

CHART 2

LOAD DATA SHEET

ITEM	WEIGHT	MOMENT ARM (in. to Datum)	MOMENT (in. lbs)
Aircraft Empty Weight		x	=
Fuel Tank	30.5 lbs(13.8kg)	x 53.53"(1508mm)	=2107.55(14531kg/mm)
Pilot and Equipment		x 29.0"(736mm) (FWD) 32.0"(812mm) (AFT)	=
Rear Pilot and Equipment		x 77.0"(1955mm) (AFT)	=
Other •		x	=

TOTAL GROSS WEIGHT: _____ (850 lbs (385kg) - MAX.)

TOTAL MOMENT (LOADED): _____

• "Other" means additional Fuel, Baggage or non-standard equipment such as Radio's etc. Their Moment Arms must be measured from the Datum to their center of mass.

TOTAL MOMENT (LOADED) / TOTAL GROSS WEIGHT = _____ = _____in. GROSS WEIGHT C.G.

LIMITS

DO NOT EXCEED THESE SPECIFICATIONS!

Quicksilver GT 500

Maximum Gross Weight.....850 lbs. (385 kg)
Maximum Forward CG.....68.25" (1733 mm) Aft of Datum
Maximum Rearward CG.....74.5" (1892 mm) Aft of Datum

••••••••••••••••••••••••ESSENTIAL••••••••••••••••••••••••

IF YOUR MAXIMUMS ARE EXCEEDED DO NOT ATTEMPT TO FLY YOUR AIRCRAFT! CONSULT YOUR Quicksilver DEALER IMMEDIATELY.

CG LIMITS ACCORDING TO SEAT POSITION:

At a given weight distribution, if the Aircraft is within CG Limits in one seat position, but it is outside the Limits at another seat position; it is the Pilot's responsibility to ensure that the Aircraft isnotflown in the "Out-of-CG Limit" position. This procedure is ESSENTIAL.

POWERLANT BREAK-IN

1. Consult your Rotax Owners Manual.

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PREFLIGHT INSPECTION

NOTES:

ATTACHMENT HARDWARE includes ALL fasteners, such as: Bolts, Nuts, Clevis Pins, Cotter Pins, Safety Rings, etc.

All Nuts attached to Bolts must have at least TWO (2) Bolt threads exposed thru the Nut. All Locknuts must be replaced if loosened and retightened more than twice.

All hardware and corresponding attachments and safety devices, **MUST** be thoroughly inspected during each preflight. At periodic intervals, the attachment hardware must be removed from the aircraft and inspected, as prescribed in the maintenance section.

Checking the **INTEGRITY** of a tube means to check for bends, dents, scratches, cracks, etc. Checking the "integrity" of a wire means to check the wire for broken strands, kinks, abrasion, proper tension, etc. Inspect the wire ends for secure swages, twisted or jammed thimbles, and bolts and/or fasteners for security.

SECURITY means that all attachment hardware is free from bends, scratches, cracks, etc. and are attached in a manner that would make it impossible for the attachments to come apart in flight.

Visually check aircraft for general condition during walkaround. In addition to items on the preflight checklist, look for signs of visible moisture or ice. The presence of moisture on the aircraft will adversely affect its performance. In all cases, remove the moisture before commencing any flight operations. Always exercise due care and good judgement. Flight should only be attempted in acceptable and safe weather conditions and when you and your vehicle are in an airworthy condition.

WARNING:

The wing covering must be removed and a complete wing inspection performed if one of the following conditions exist.

1. Hard landing.
2. Ground loop in which a wing makes contact with the ground
3. Any flight or ground operation in which a wing, strut, or cable receives a strong blow.
4. Any time it is suspected that the aircraft was over stressed in flight, on the ground, or during storage or transport.
5. At periodic intervals, as prescribed in the maintenance schedule (SECTION 10).

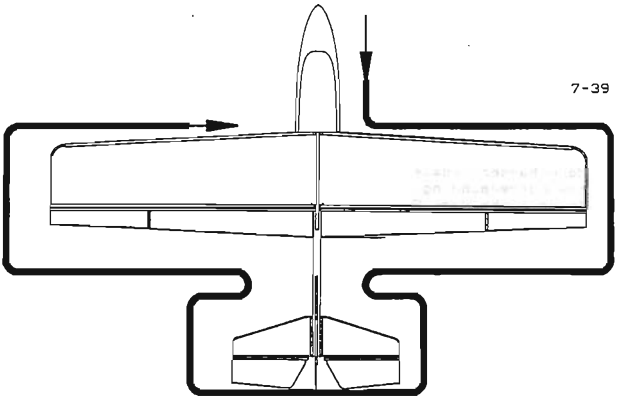


Figure 7-1 : Preflight Inspection Sequence.

CHECKLIST

[ ] Indicates procedure for Cable Braced GT ONLY.

(1) Check Ignition - OFF
(2) Inspect Pilot Seat and attachment hardware for integrity and security.
(3) Place Helmet Bag on Pilot Seat.
(4) Adjust Pilot Seat for position.
(5) Inspect Seat Tracks. Ensure Seat Track locking pins are locked.
(6) Check Seat Belts for security.(rear seat belt must be secured even if not occupied.
(7) Flap Selector - Full Down.
(8) Remove Wing Gap Cover, inspect Spar Channels and attachment hardware. [Inspect King Posts, King Post Tracks, and Locking Pins for security. Ensure King Posts are properly adjusted.]
(9) Inspect Flap Selector assembly, forward section of Root Tube, Forward Downtubes and attachment hardware.
(10) Inspect Control Wheel, Control Wheel Support Tube, Aileron Teleflex Cable and attachment hardware.
(11 Check both Control Wheels for movement (forward, aft, right, left) for free travel in all directions. Visually check that all Flight Control surfaces move in the correct corresponding directions.

(12) Inspect Elevator Push/Pull Tubes and Pivot Bolts.
(13) Inspect Forward Fuselage Tube.
(14) Inspect Rudder Pedals, Cables, Bellcranks and Pushrods, Brake Pedal and attachment hardware.
(15) Move Rudder Pedals and ensure that the Rudder moves in the corresponding direction.
(16) Inspect the Nose Gear assembly - Struts, Axle, Wheel, Tire, Steering Springs, Brake Plate and attachment hardware.
(17) Inspect Pilot Fairing for security. Inspect Pitot Tube - ensure it is clear and correctly aligned.
(18) Run your hand along the right Leading Edge Spar checking for bends and kinks in the Spar. Inspect exterior Wing L.E. attachment points.
(19) Inspect Right Wing Tip. Sight down the Leading Edge Spar to insure it is straight.
(20) Move under the Right Wing. Unzip Wing inspection ports. At each port, thoroughly inspect the interior of the Wing. Inspect each Compression Strut and Diagonal Strut for security and integrity. Visually and physically inspect the junction of each Strut at the Leading and Trailing Edge Spar. Inspect the Aileron Bellcrank, Pushrods, Cables, Clevis Pins, Safety Rings and all related hardware. [Check the Upper Wing Wires attached to the Leading Edge for security.]
(21) Close the Right Wing inspection ports and stow zipper handles.
(22) At the Right Wing root, Inspect the Wing Cover Tension Buckles. Ensure they are properly tensioned and locked.
(23) Inspect the Root Tube Bellcrank, Teleflex Cable integrity, Aileron Cables, Clevis Pins, Safety Rings and all related hardware.
(24) Inspect center section of Root Tube.
(25) Inspect Right Main Landing Gear assembly, including: Landing Gear Carry-thru, Lift Struts (Lower Wing Wires), Landing Gear Leg, Wheel, Tire, and attachment hardware.
(26) Return to the Right Wing Tip and sight down the Trailing Edge to ensure that the Trailing Edge Spar is straight.
(27) Run your hand along the Right Trailing Edge Spar and check integrity. Inspect the exterior Wing T.E. attachment points, related hardware and Safety Rings.
(28) Inspect the Right Aileron, Hinges, Horn, Pushrod and related hardware for integrity.
(29) Inspect the Right Flap, Hinges, Tension Rods, related hardware and Safety devices.

(30) Inspect T.E. Spar Channels for integrity. [Inspect King Posts and attachment hardware.]
(31) Inspect Aft Downtubes for integrity.
(32) Inspect AFT section of Root Tube.
(33) Inspect the Engine, Mounts, Gear Reduction Drive, Propeller, Exhaust System, Fuel Lines and connections, Electrical system, Throttle and Choke Cables, Starter Rope & Pulleys, all attachment hardware and Safety devices.
(34) Inspect the Tail Boom for integrity.
(35) Inspect the Horizontal Stabilizer Angle of Incidence setting and attachment hardware.
(36) Inspect the forward portion of the Rudder and its hinges.
(37) Inspect the Right Horizontal Stabilizer, Support Struts and attachment hardware.
(38) Inspect the Elevator, Hinges, Stops, Balance Springs and attachment hardware.
(39) Inspect the Elevator Bellcrank, Push/Pull Tube and attachment hardware inside the Tail Boom Tube.
(40) Inspect the Rudder Cables, Horn, Hinges and attachment hardware. Inspect trim system pushrods and bellcranks top and bottom(unzip vertical cover)

(41) Inspect the LEFT SIDE of the Aircraft using the same Checklist.

(42) At the Inboard Section of the Left Wing, Unzip the Wing Pylon Cover (if installed).
(43) Inspect the Fuel Tank, Restraint Strap Assembly, Filter, Primer Bulb, all Fuel Lines and related hardware. Check for contamination and correct Fuel quantity. Squeeze Primer Bulb and observe the Fuel flow.
(44) Inspect the AFT end of the Forward Fuselage Tube.
(45) Inspect the Elevator Push/Pull Tubes and roller guides.
(46) Inspect the Rudder Cable Guides, Pulleys and attachment hardware.
(47) Inspect Root Tube, all Downtubes, Side Struts, Flap Tension Rods and attachment hardware.
(48) Close all Zippers at inspection ports.
(49) Replace the Wing Gap Cover.