

RANS - S-12XL AIRAILE - PARTS MANUAL - 503 ENGINE

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* Base Packing Parts List

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4600 Highway 183 Alternate
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(785) 625-6346

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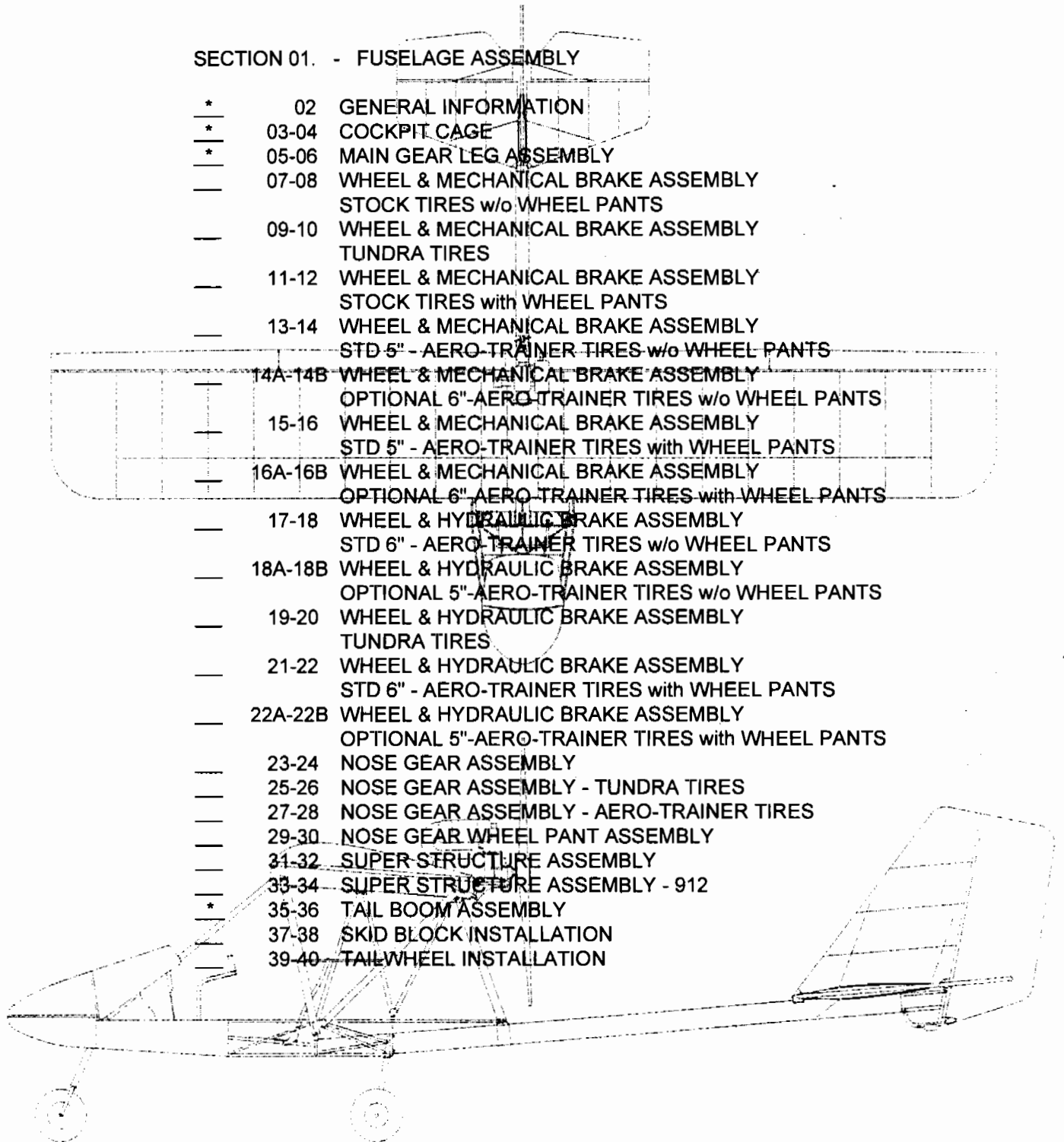
RANS, INC.
4600 Highway 183 Alternate
Hays, KS 67601
(785) 625-6346

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All variations of the S-12 enclosure are covered under the Fuselage Enclosure headings of the Manuals.

If you purchased the entire Full enclosure, all the section details under the Fuselage Enclosure heading will need to be completed except those designated Mini-pod only. The sections move in order, no matter which enclosure system you purchased; Mini-pod, Partial, Full Enclosure or any combination of the three. If you purchase the standard S-12 (Mini-pod), only the sections pertaining to your purchase should be completed. Skip sections which do not pertain to your purchase; however remember the sections will still follow sequence. The following lists show which sections are applicable to each of the enclosure stages.

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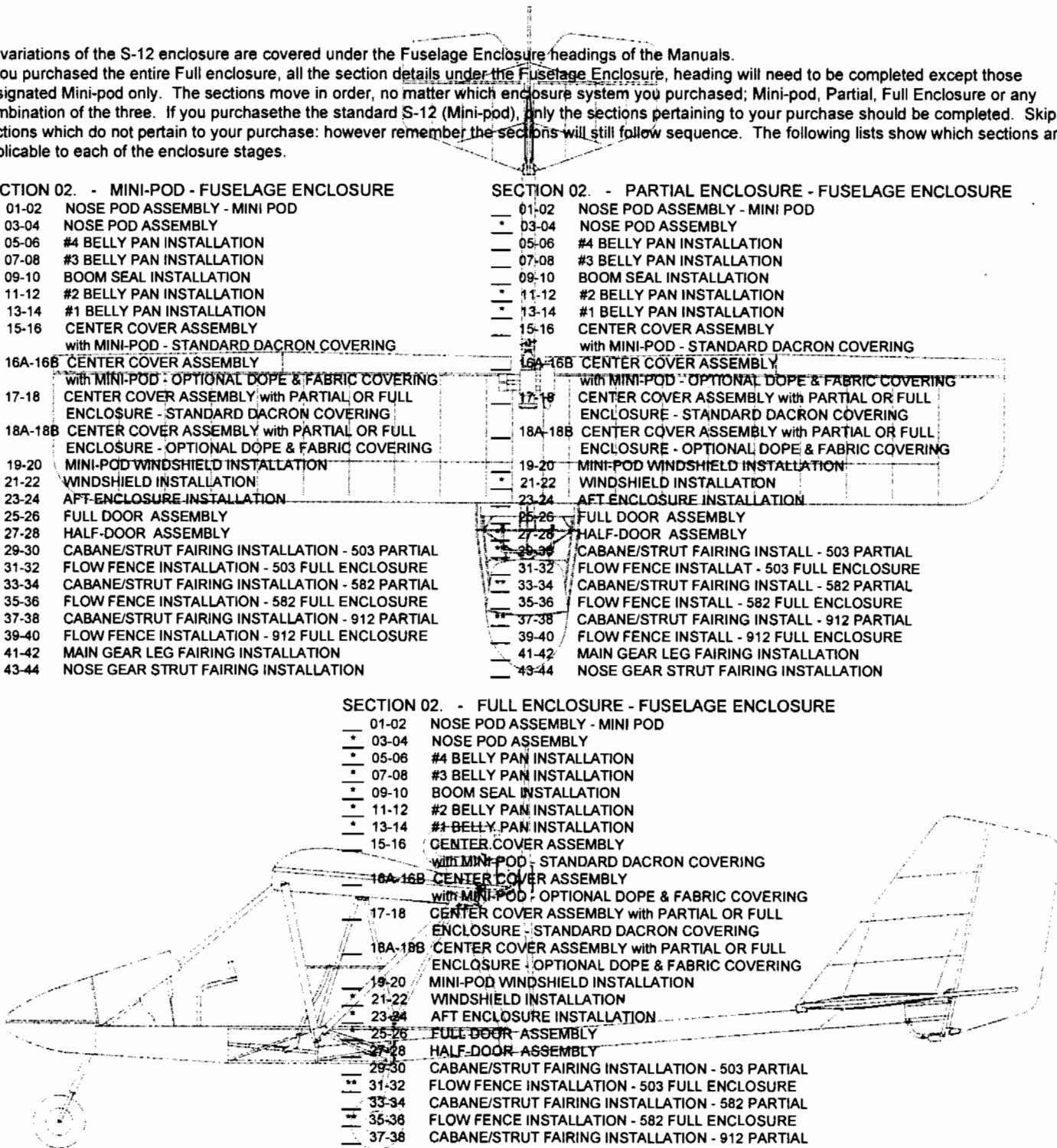
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ENCLOSURE - STANDARD DACRON COVERING
- 18A-18B CENTER COVER ASSEMBLY with PARTIAL OR FULL
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- 23-24 AFT ENCLOSURE INSTALLATION
- 25-26 FULL DOOR ASSEMBLY
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- 31-32 FLOW FENCE INSTALLAT - 503 FULL ENCLOSURE
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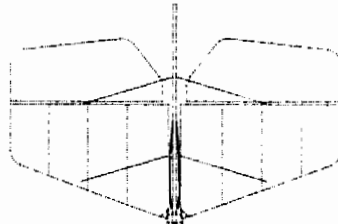
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** Depends on Engine



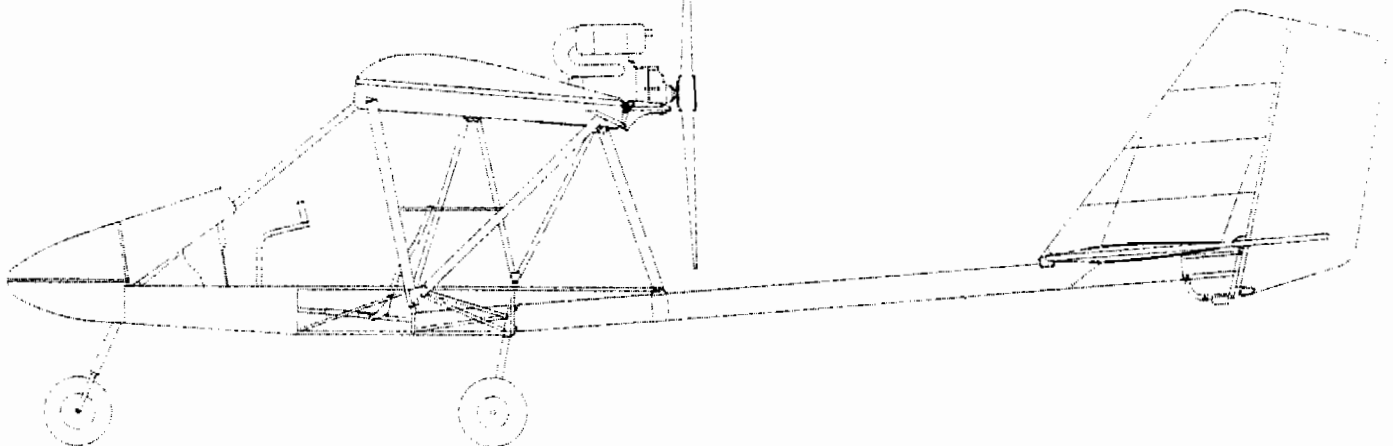
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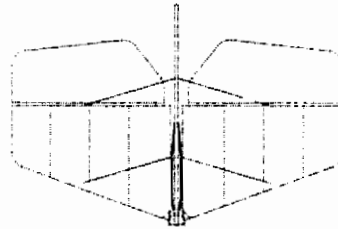
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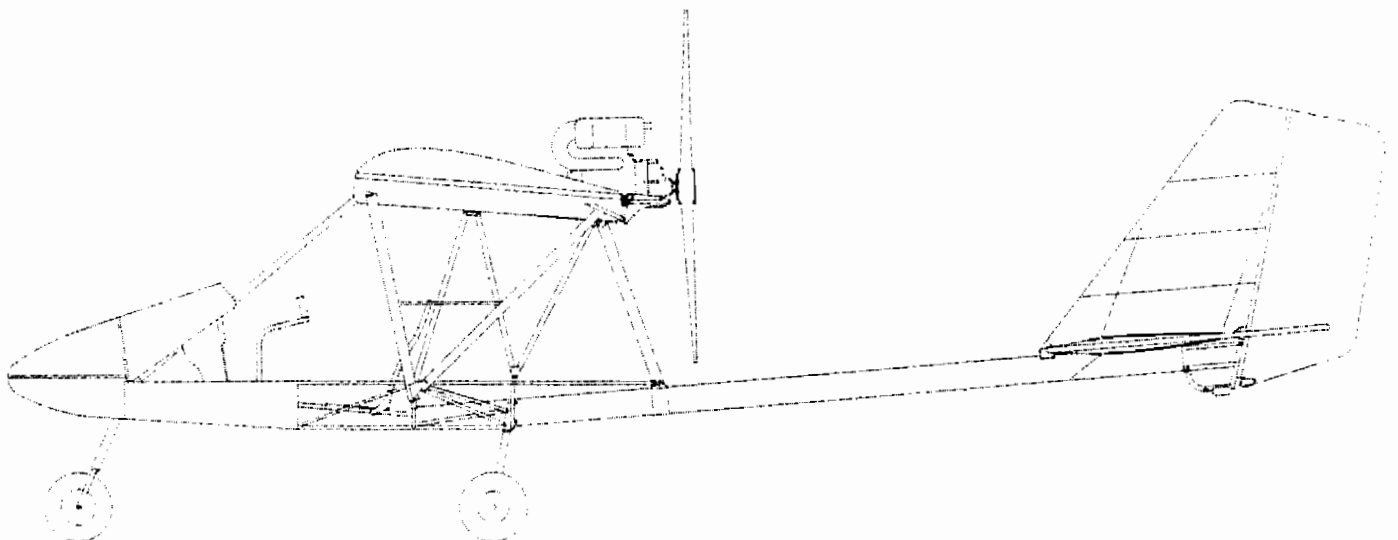
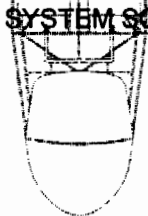
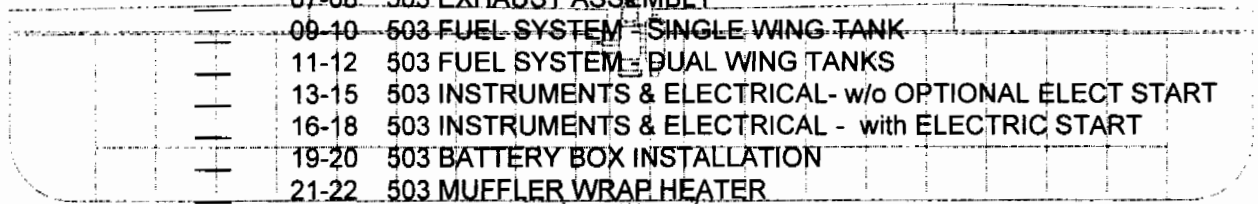
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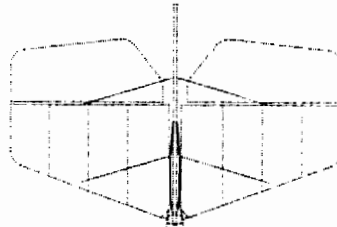
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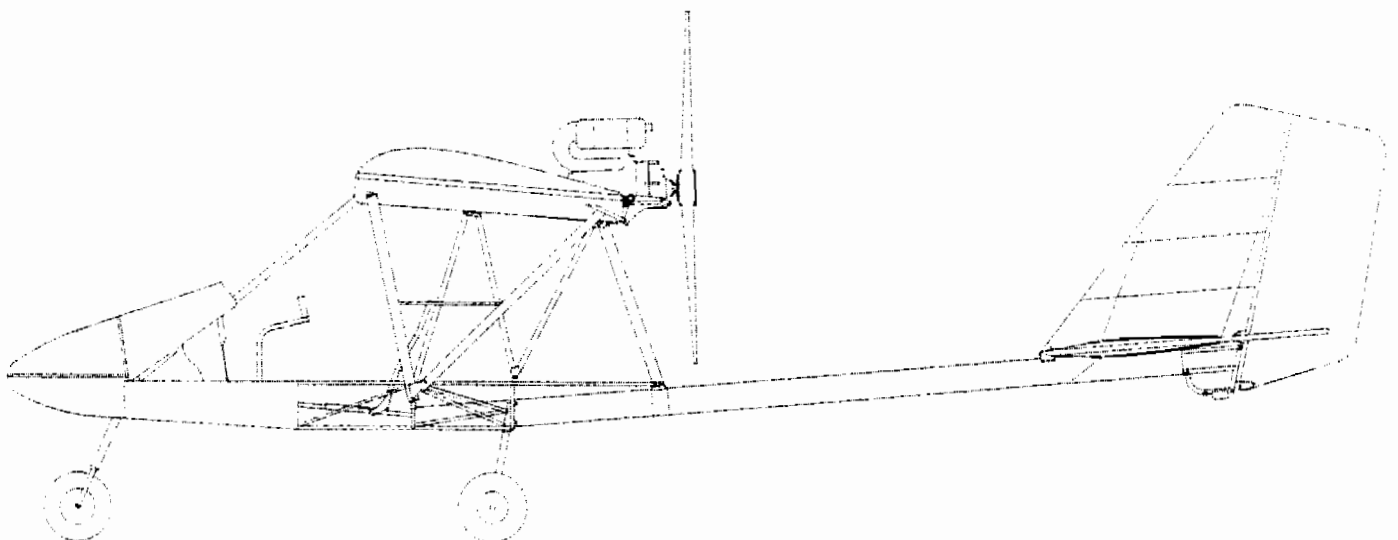
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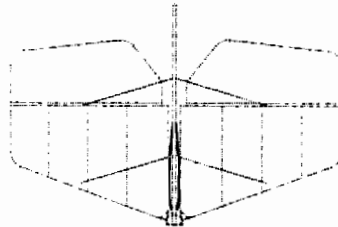
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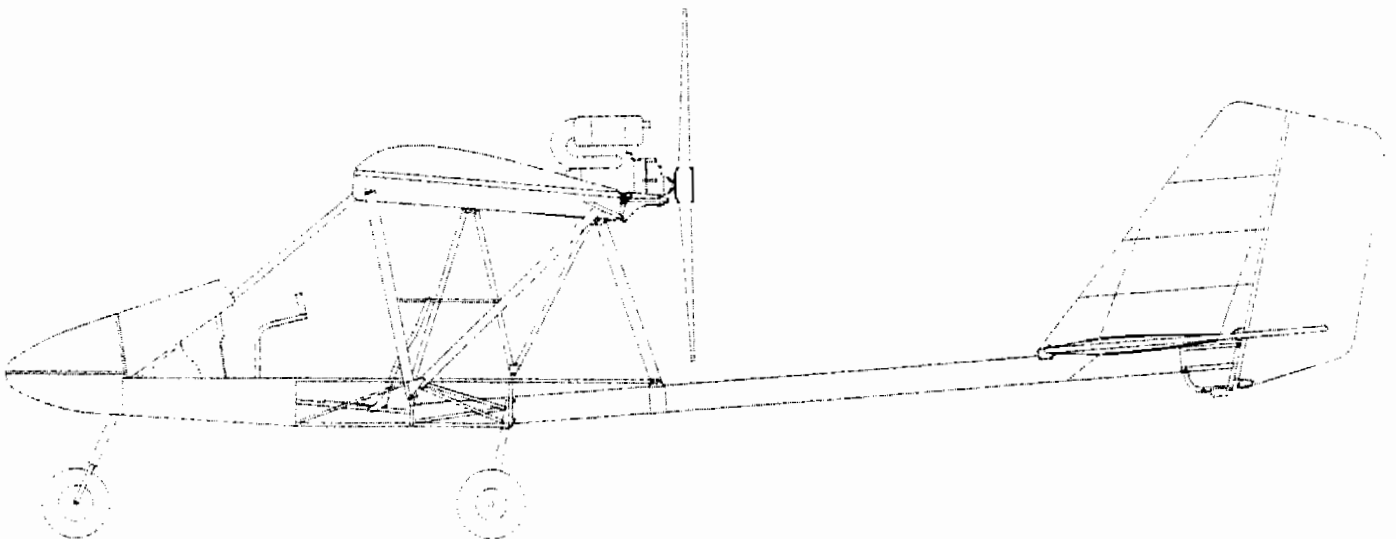
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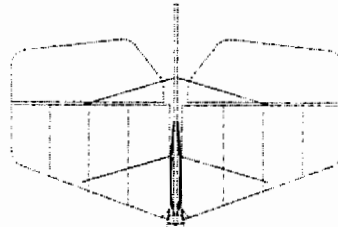
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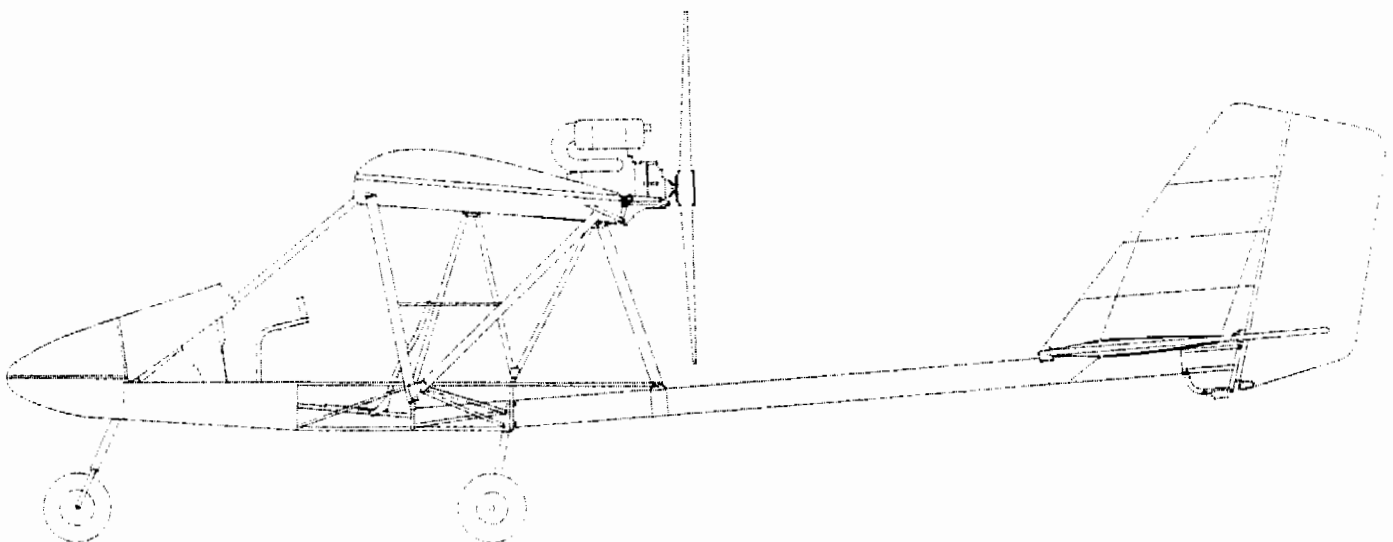
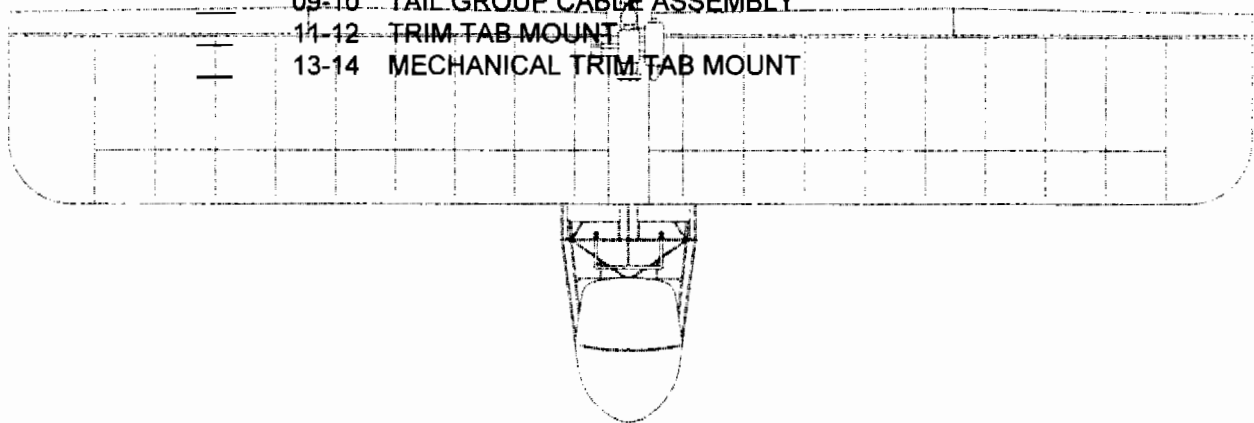
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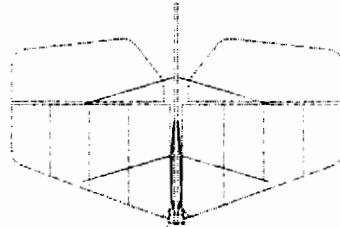
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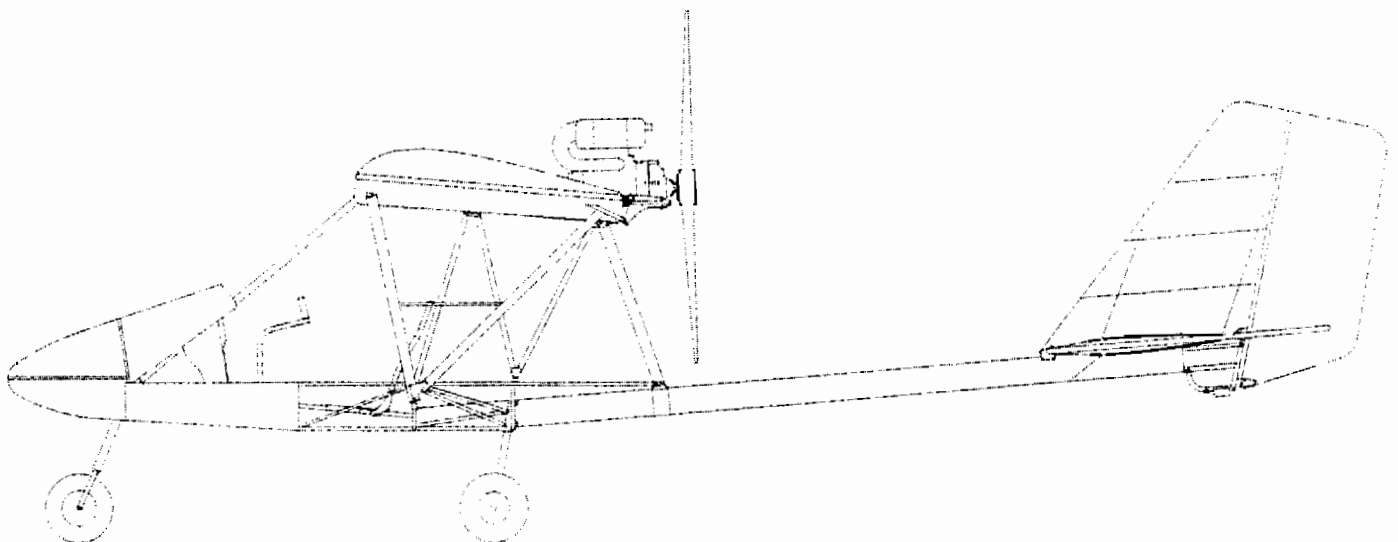
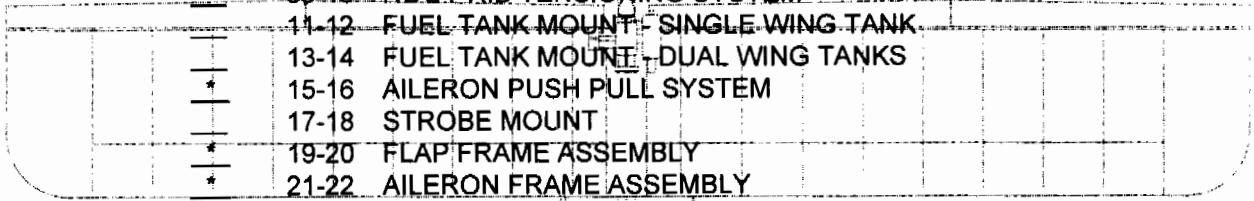
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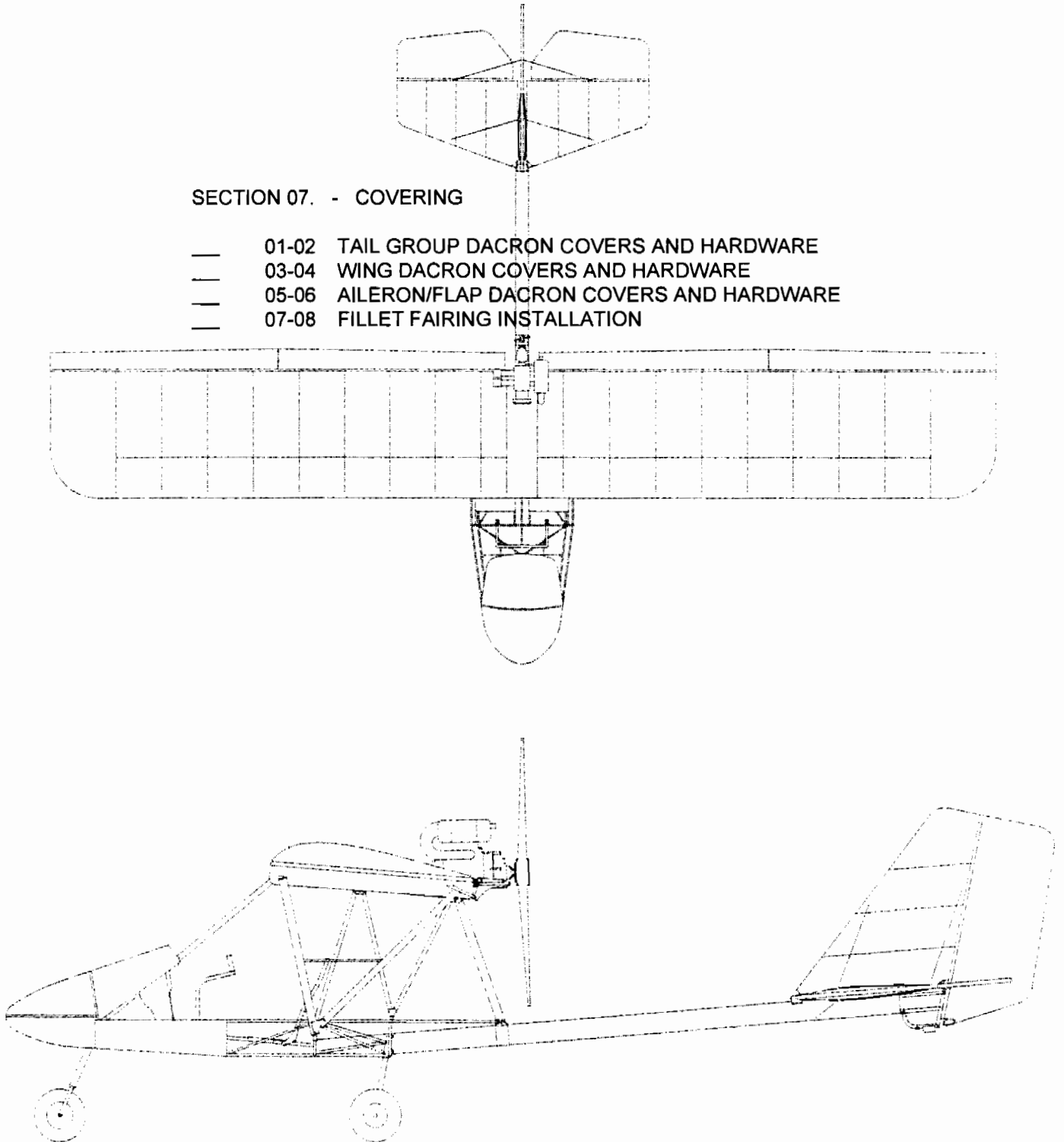


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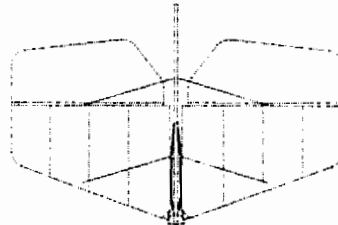
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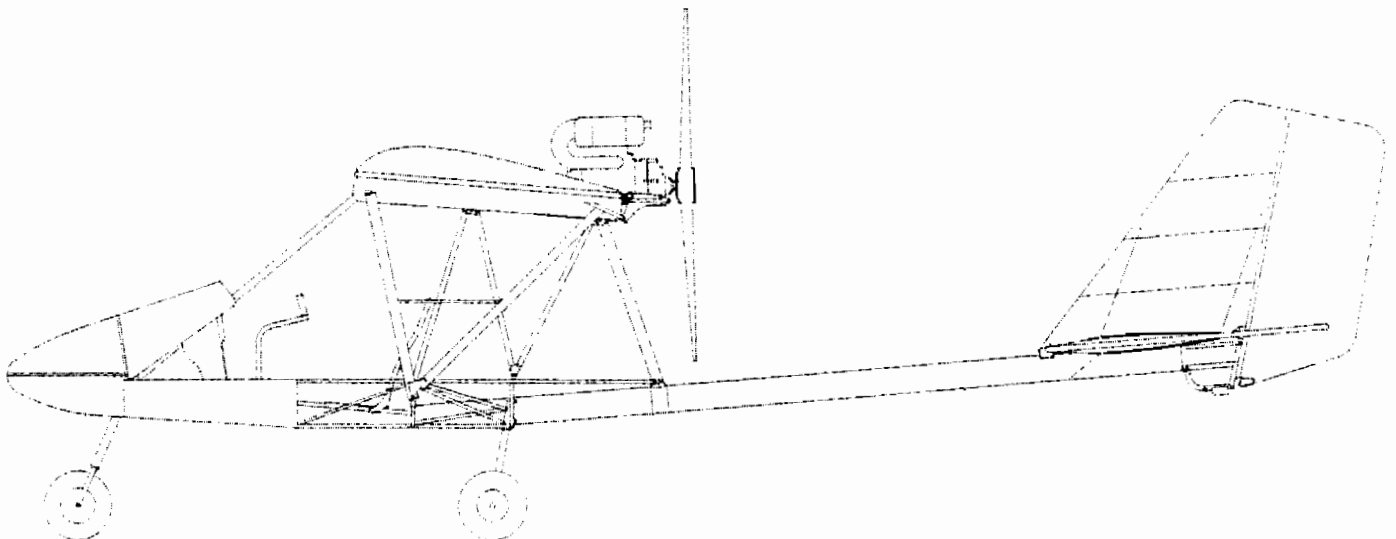
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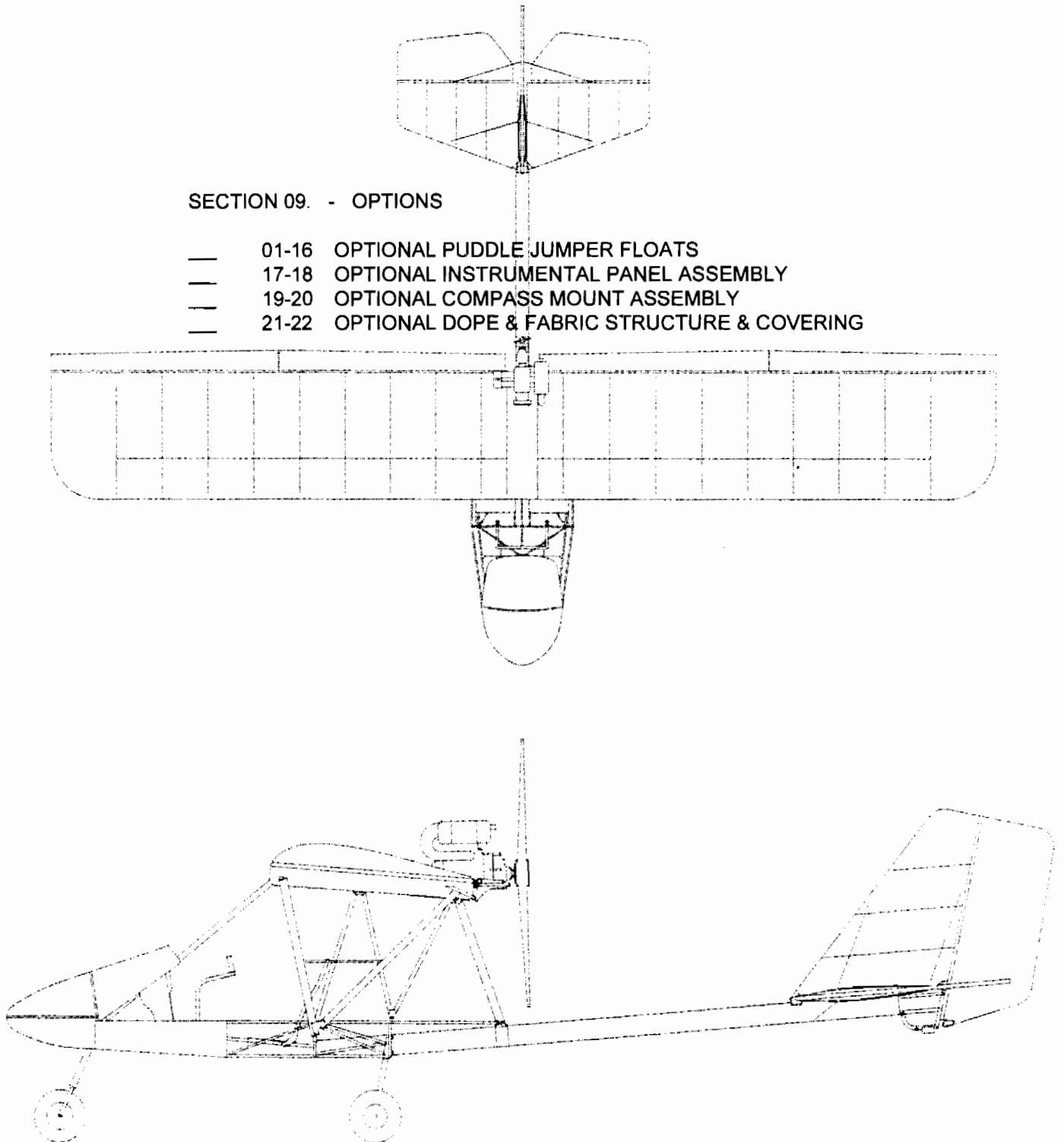


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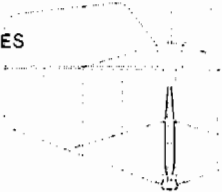
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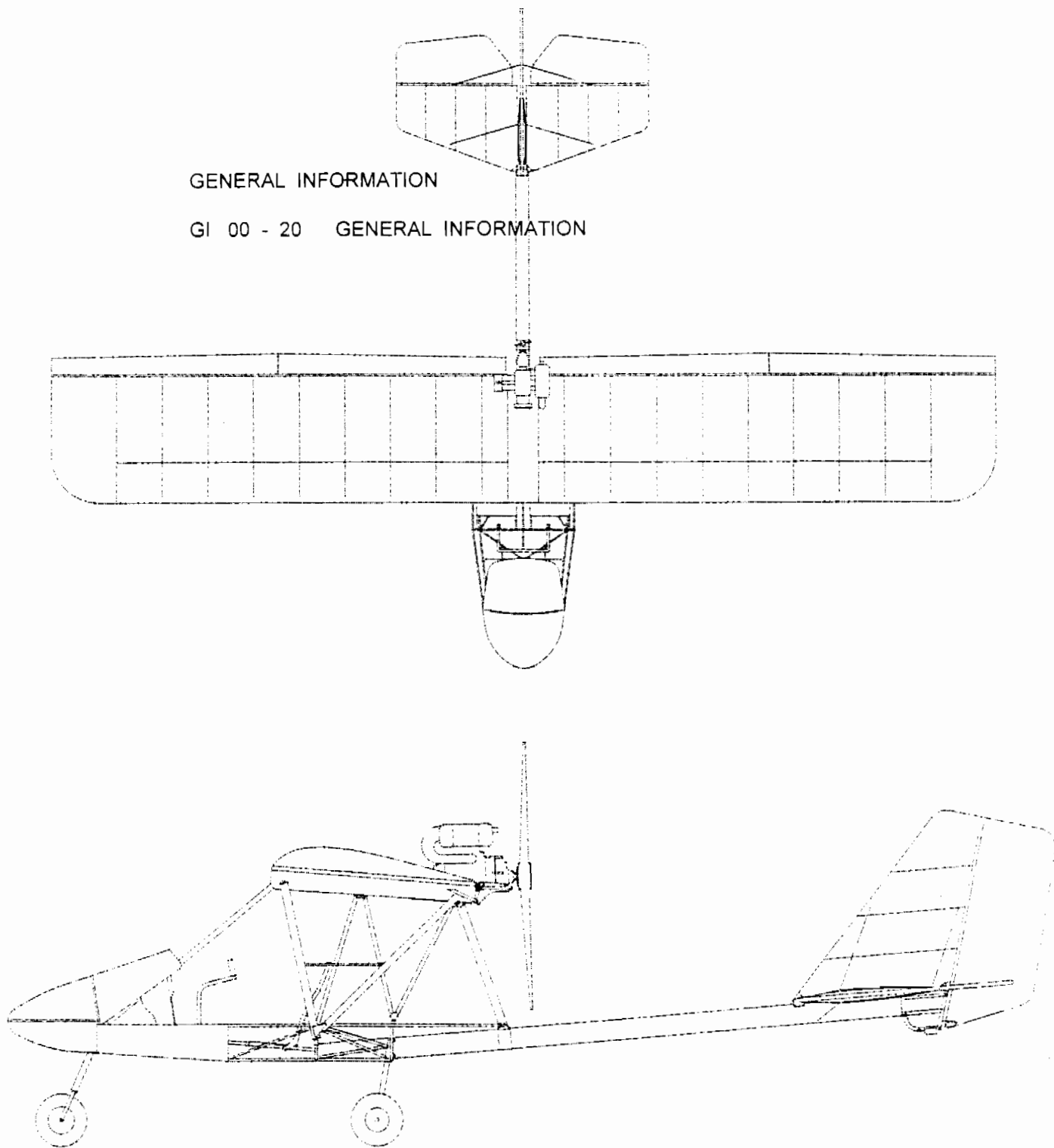
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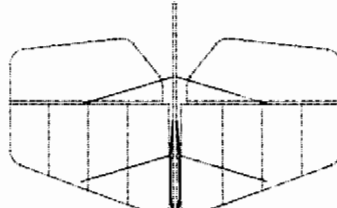
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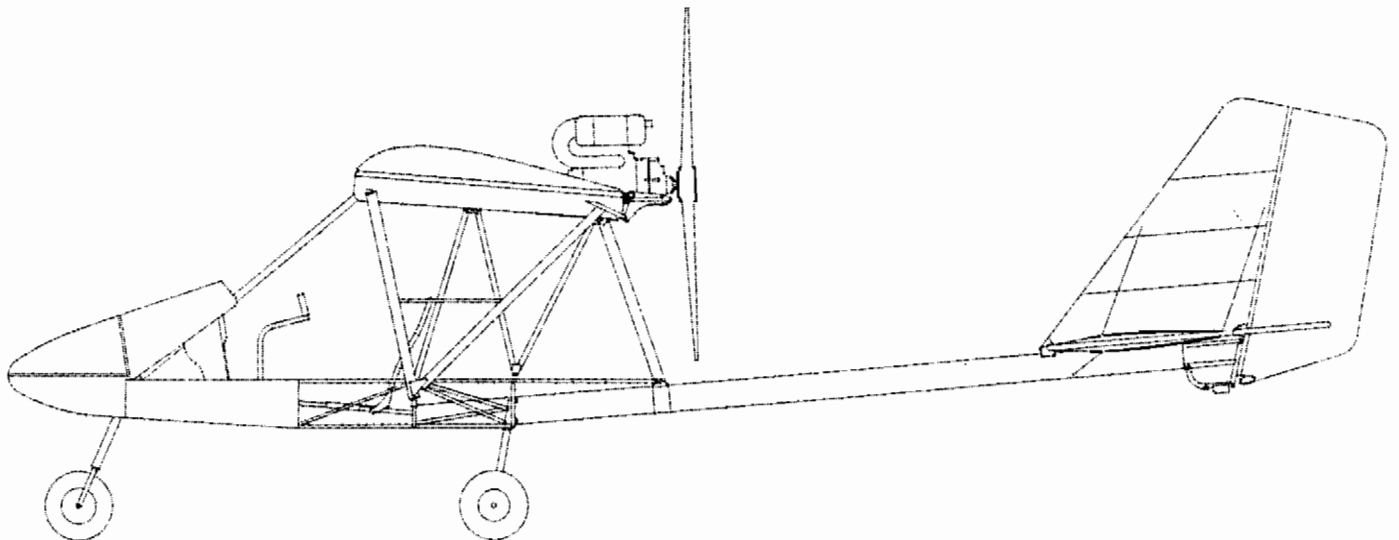
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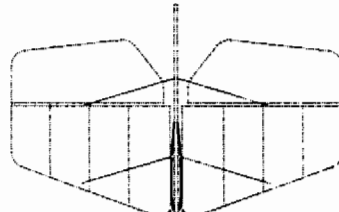
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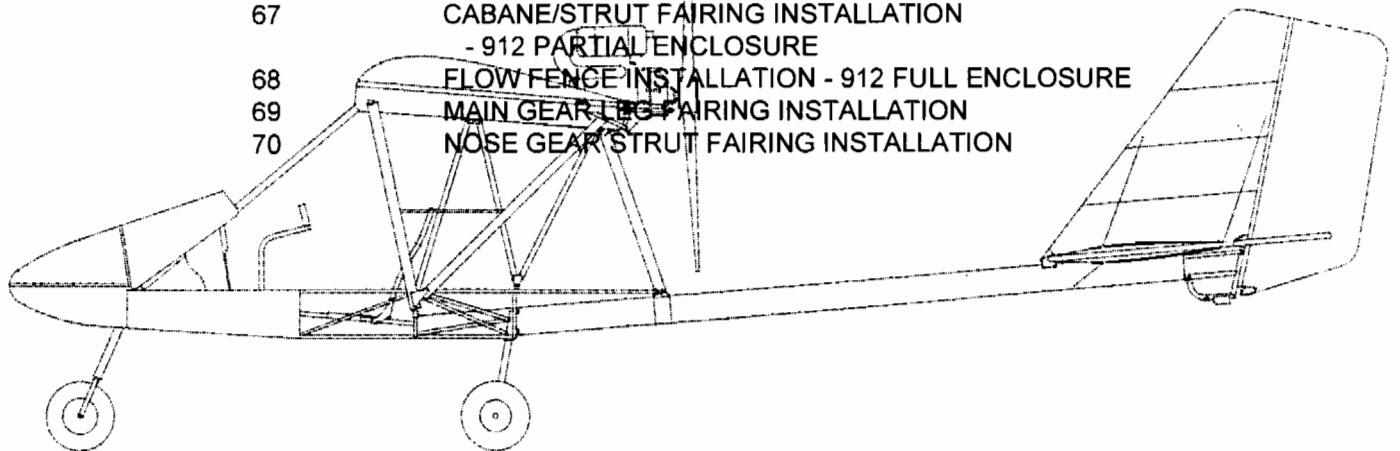
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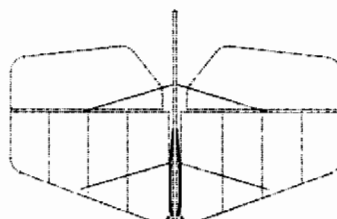
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| 66 | FLOW FENCE INSTALLATION - 582 FULL ENCLOSURE |
| 67 | CABANE/STRUT FAIRING INSTALLATION
- 912 PARTIAL ENCLOSURE |
| 68 | FLOW FENCE INSTALLATION - 912 FULL ENCLOSURE |
| 69 | MAIN GEAR LEG FAIRING INSTALLATION |
| 70 | NOSE GEAR STRUT FAIRING INSTALLATION |



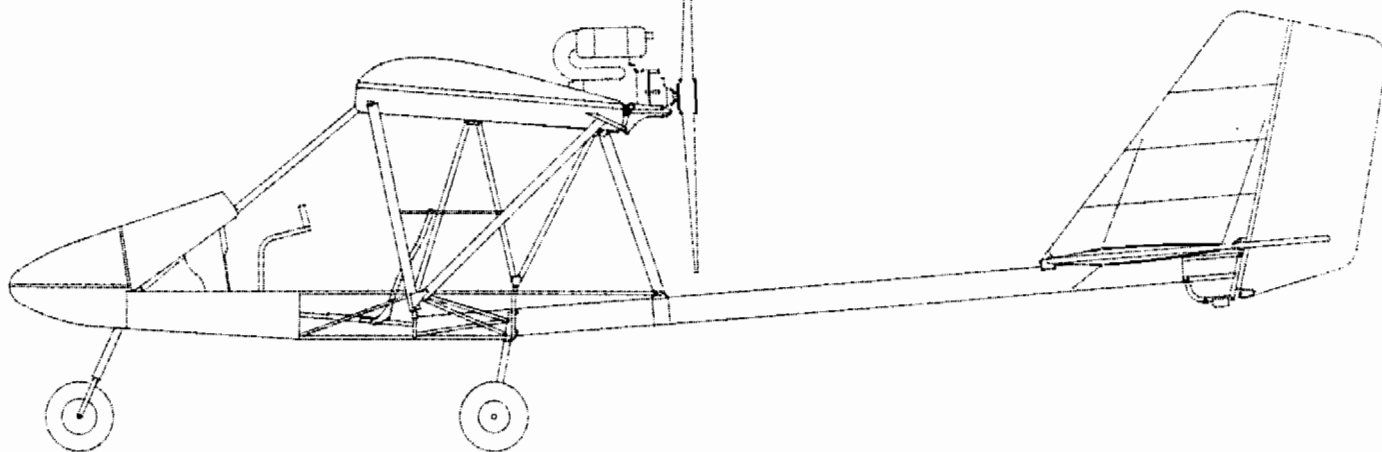
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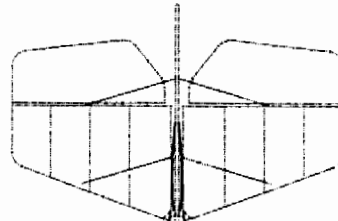
SECTION 03. - INTERNAL SYSTEMS

1	FLOORBOARD INSTALLATION
2	RUDDER PEDAL ASSEMBLY - w/o TOE BRAKES
3	RUDDER PEDAL ASSEMBLY - with HYDRAULIC TOE BRAKES
4	RUDDER CABLE SYSTEM ASSEMBLY
5 - 6	BRAKE SYSTEM - HAND BRAKE ASSEMBLY
7 - 8	BRAKE SYSTEM - HAND BRAKE ASSEMBLY with IN-FLIGHT ADJUSTABLE FLAP
9 - 9A	BRAKE SYSTEM - SINGLE HYDRAULIC TOE BRAKES
10	BRAKE SYSTEM - DUAL HYDRAULIC TOE BRAKES
11	SEAT ASSEMBLY
12 - 13	OPTIONAL HEADREST ASSEMBLY
14	SEAT BELT INSTALLATION
15	CONTROL STICK MOUNT & ASSEMBLY
16	AILERON CABLE SYSTEM ASSEMBLY
17 - 18	FLAP SYSTEM ASSEMBLY
19	THROTTLE LEVER MOUNT
20 - 22	503/582 INSTRUMENT PANEL ASSEMBLY - w/o PANEL TRIM
23 - 25	503/582 INSTRUMENT PANEL ASSEMBLY - with PANEL TRIM
26 - 27	912 INSTRUMENT PANEL ASSEMBLY
28	TRIM WHEEL ASSEMBLY - PANEL MOUNT
29	TRIM WHEEL ASSEMBLY - FLAP LEVER MOUNT
30	STROBE BOX MOUNT



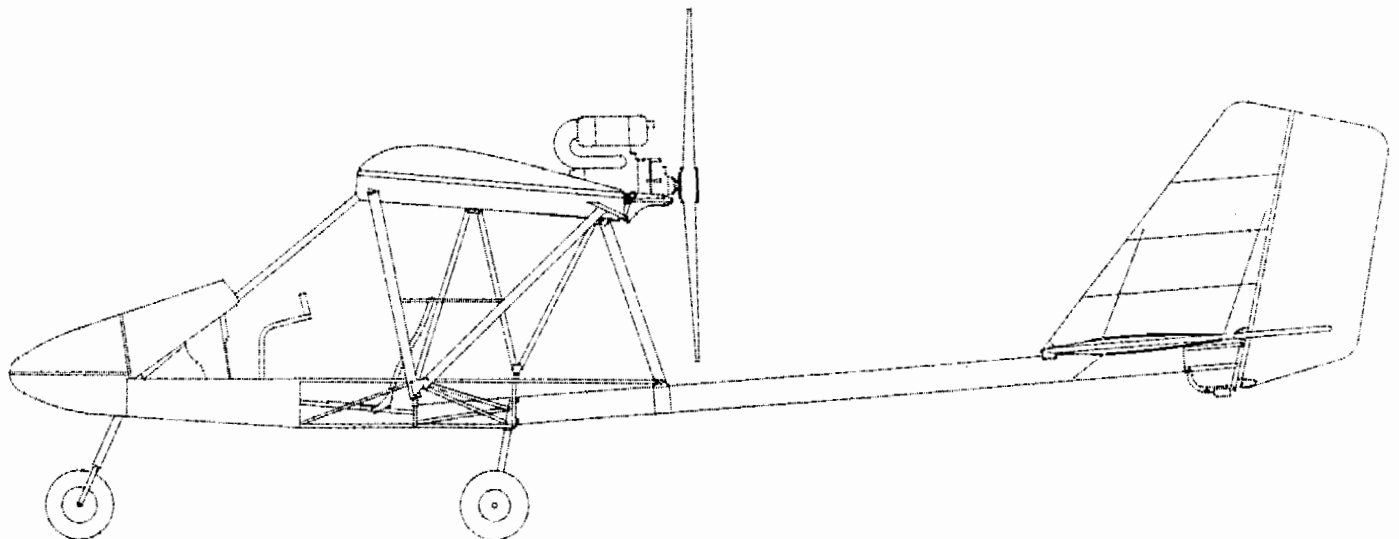
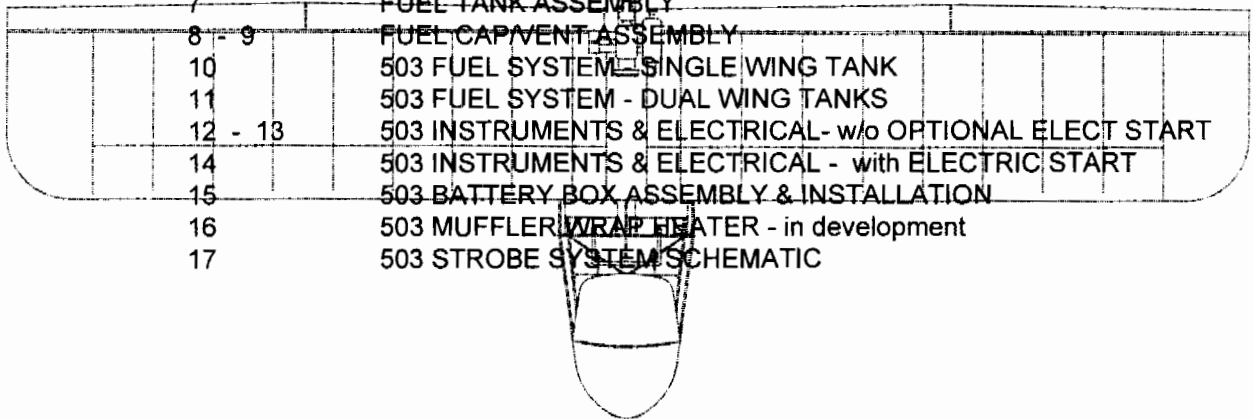
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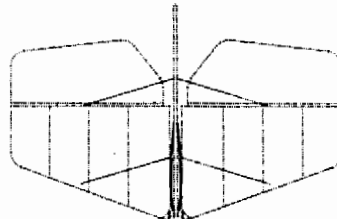
SECTION 04. - 503 ENGINE, INSTRUMENTATION, and ELECTRICAL SYSTEMS

1	503 ENGINE MOUNT ASSEMBLY
2 - 3	503 SINGLE CARB ENGINE INSTALLATION
4 - 5	503 DUAL CARB ENGINE INSTALLATION
6	503 EXHAUST ASSEMBLY
7	FUEL TANK ASSEMBLY
8 - 9	FUEL CAP/VENT ASSEMBLY
10	503 FUEL SYSTEM - SINGLE WING TANK
11	503 FUEL SYSTEM - DUAL WING TANKS
12 - 13	503 INSTRUMENTS & ELECTRICAL - w/o OPTIONAL ELECT START
14	503 INSTRUMENTS & ELECTRICAL - with ELECTRIC START
15	503 BATTERY BOX ASSEMBLY & INSTALLATION
16	503 MUFFLER/WRAP HEATER - in development
17	503 STROBE SYSTEM SCHEMATIC



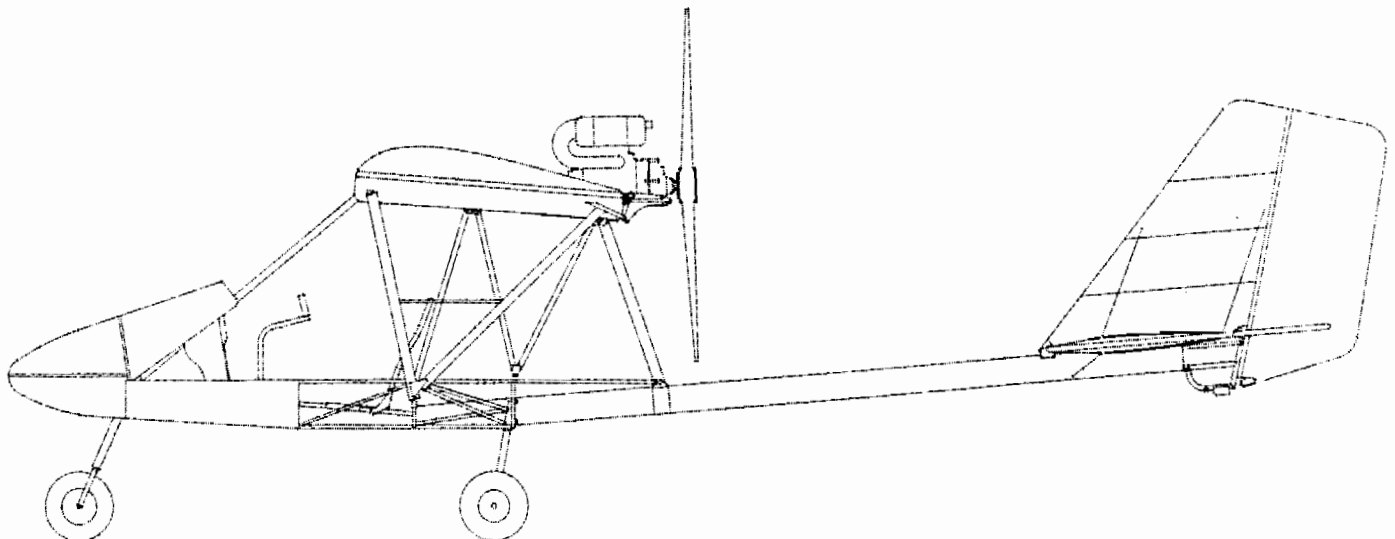
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SECTION 04. - 582 ENGINE, INSTRUMENTATION, and ELECTRICAL SYSTEMS

1	582 ENGINE MOUNT ASSEMBLY
A-1 - A-3	582 ENGINE INSTALLATION
B-1 - B-2	582 EXHAUST ASSEMBLY
C-1	FUEL TANK ASSEMBLY
D-1 - D-2	FUEL CAP/VENT ASSEMBLY
E-1	582 FUEL SYSTEM - SINGLE WING TANK
F-1	582 FUEL SYSTEM - DUAL WING TANKS
G-1 - G-5	582 OIL INJECTION TANK & MOUNT
H-1 - H-5	582 COOLING SYSTEM - MINI-POD OR PARTIAL ENCLOSURE
I-1 - I-5	582 COOLING SYSTEM - FULL ENCLOSURE
J-1 - J-2	582 INSTRUMENTS & ELECTRICAL - w/o OPTIONAL ELECT START
K-1	582 BATTERY BOX INSTALLATION
L-1	582 INSTRUMENTS & ELECTRICAL - with ELECTRIC START
M-1	582 STROBE SYSTEM SCHEMATIC
27	582 MUFFLER WRAP HEATER - in development
28	582 RADIANT HEATER CORE ASSEMBLY - in development
29	582 RADIANT HEATER INSTALLATION - in development

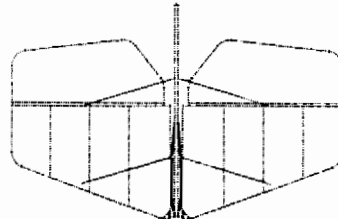


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SECTION 04	912 ENGINE, INSTRUMENTATION, and ELECTRICAL SYSTEMS
04	912 ENGINE MOUNT ASSEMBLY
04A	912 ENGINE, THROTTLE/FUEL HOOK UPS
04B	912 EXHAUST ASSEMBLY
04C	FUEL TANK ASSEMBLY
04D	FUEL CAP/VENT ASSEMBLY
04E	912 FUEL SYSTEM - SINGLE WING TANK
04F	912 FUEL SYSTEM - DUAL WING TANKS
04G	912 OIL TANK & COOLER MOUNT
04G	912 PRE ENGINE START UP
04H	912 COOLING SYSTEM - MINI-POD OR PARTIAL ENCLOSURE
04I	912 COOLING SYSTEM - FULL ENCLOSURE
04J	912 INSTRUMENTS & ELECTRICAL
04J	912 BATTERY BOX INSTALLATION
04J	912 STROBE SYSTEM SCHEMATIC

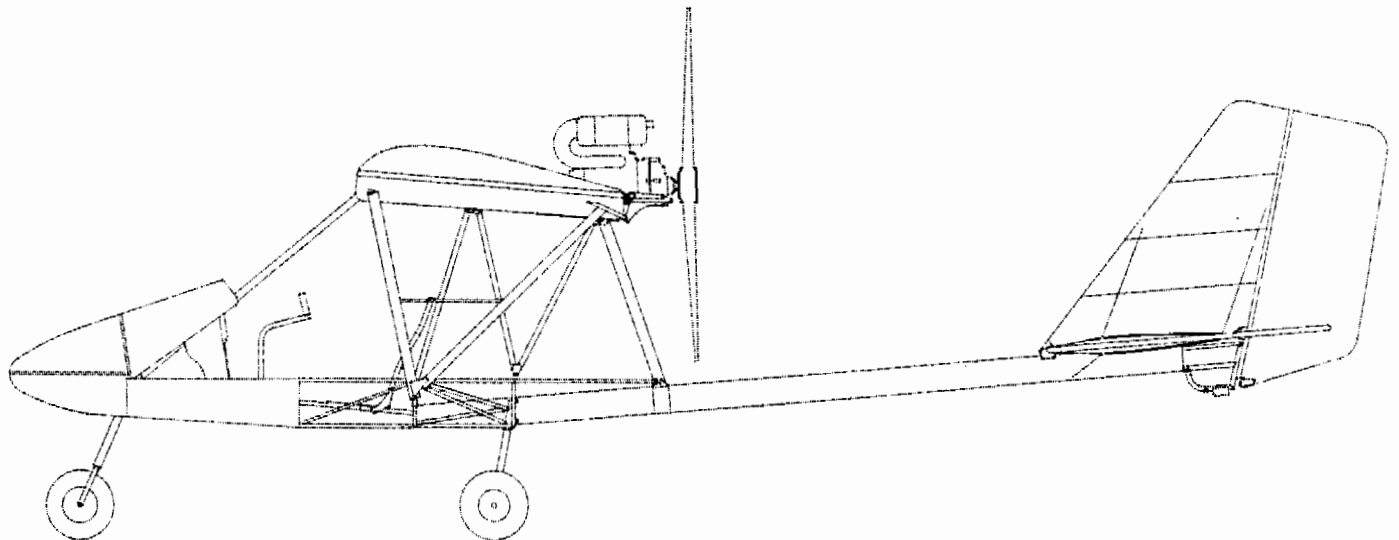
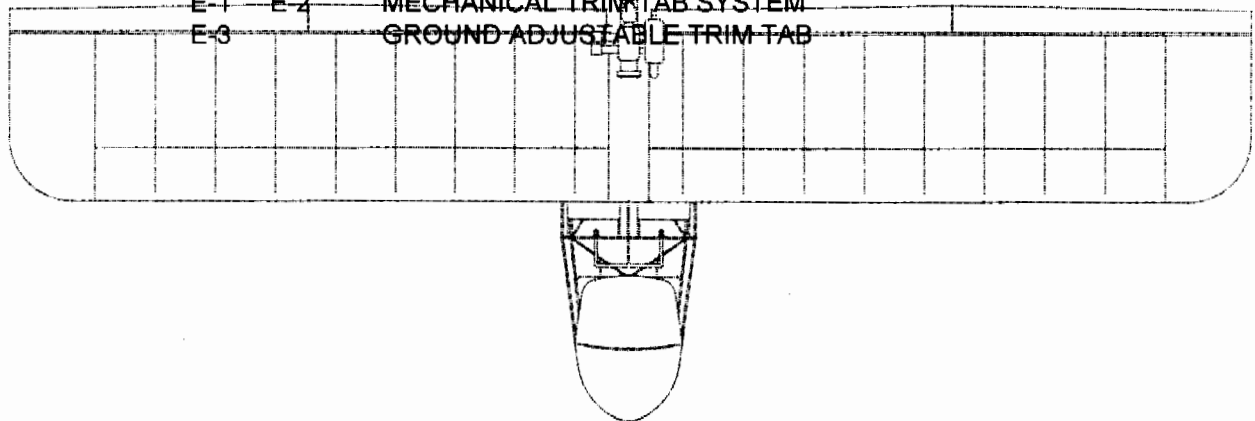
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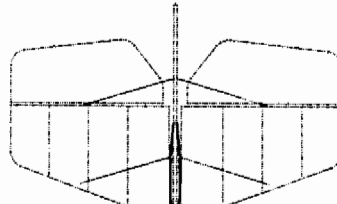
SECTION 05. - TAIL GROUP FRAME ASSEMBLY

- 1 - 5 VERTICAL STABILIZER FRAME ASSEMBLY
- A-1 - A-2 HORIZONTAL STABILIZER FRAME ASSEMBLY
- B-1 - B-2 ELEVATOR FRAME ASSEMBLY
- C-1 RUDDER FRAME ASSEMBLY
- D-1 - D-2 TAIL CABLE ASSEMBLY
- E-1 - E-2 MECHANICAL TRIM TAB SYSTEM
- E-3 GROUND ADJUSTABLE TRIM TAB



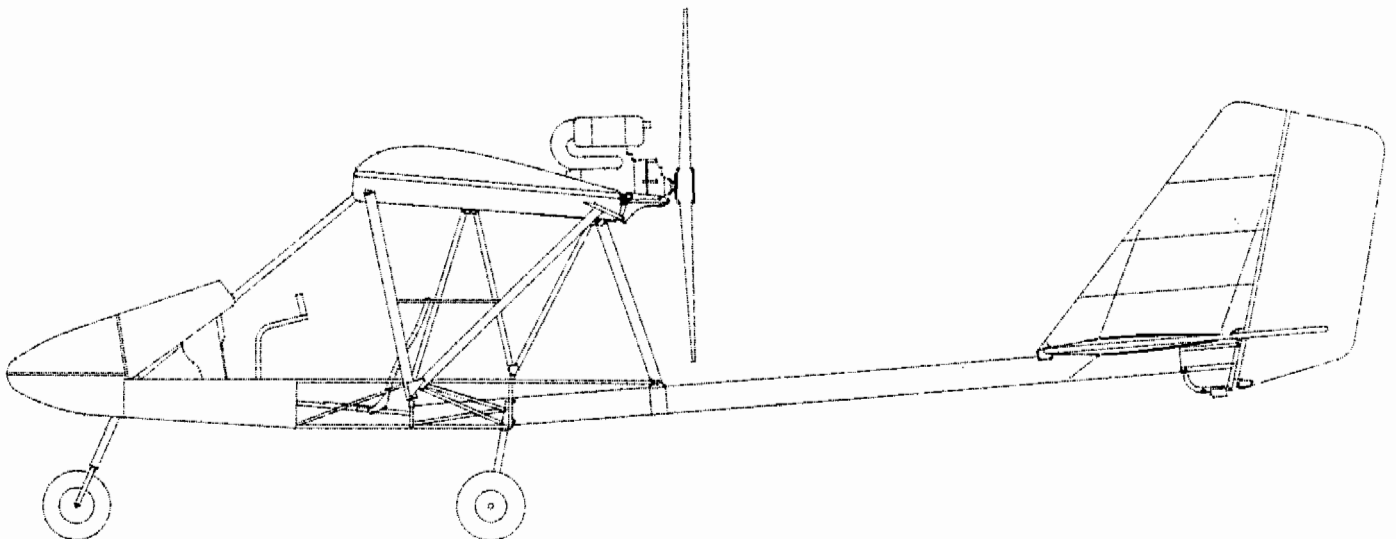
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SECTION 06. - WING FRAME ASSEMBLY

1	LEADING & TRAILING EDGE SPAR ASSEMBLY
2	TRAILING EDGE SPAR ASSEMBLY
3	UNIVERSAL HINGE ASSEMBLY
4 - 8	INTERNAL STRUCTURE
9 - 10	OUTBOARD RIB ASSEMBLY
11	ROOT RIB TENSIONING SYSTEM
12	FUEL TANK MOUNT - SINGLE WING TANK
13	FUEL TANK MOUNT - DUAL WING TANKS
14 - 16	AILERON PUSH PULL SYSTEM
17	STROBE MOUNT
18 - 19	FLAP FRAME ASSEMBLY
20 - 21	AILERON FRAME ASSEMBLY
22	FLAP SYSTEM - GROUND ADJUSTABLE
23	FLAP SYSTEM - IN FLIGHT ADJUSTABLE
24	INSPECTION OF LIFT STRUTS
25 - 29	LIFT STRUT ASSEMBLY - NON-ADJUSTABLE
30 - 34	LIFT STRUT ASSEMBLY - ADJUSTABLE
35 - 36	JURY STRUT ASSEMBLY
37	JURY STRUT FAIRING INSTALLATION
38	FLAP FILLET INSTALLATION

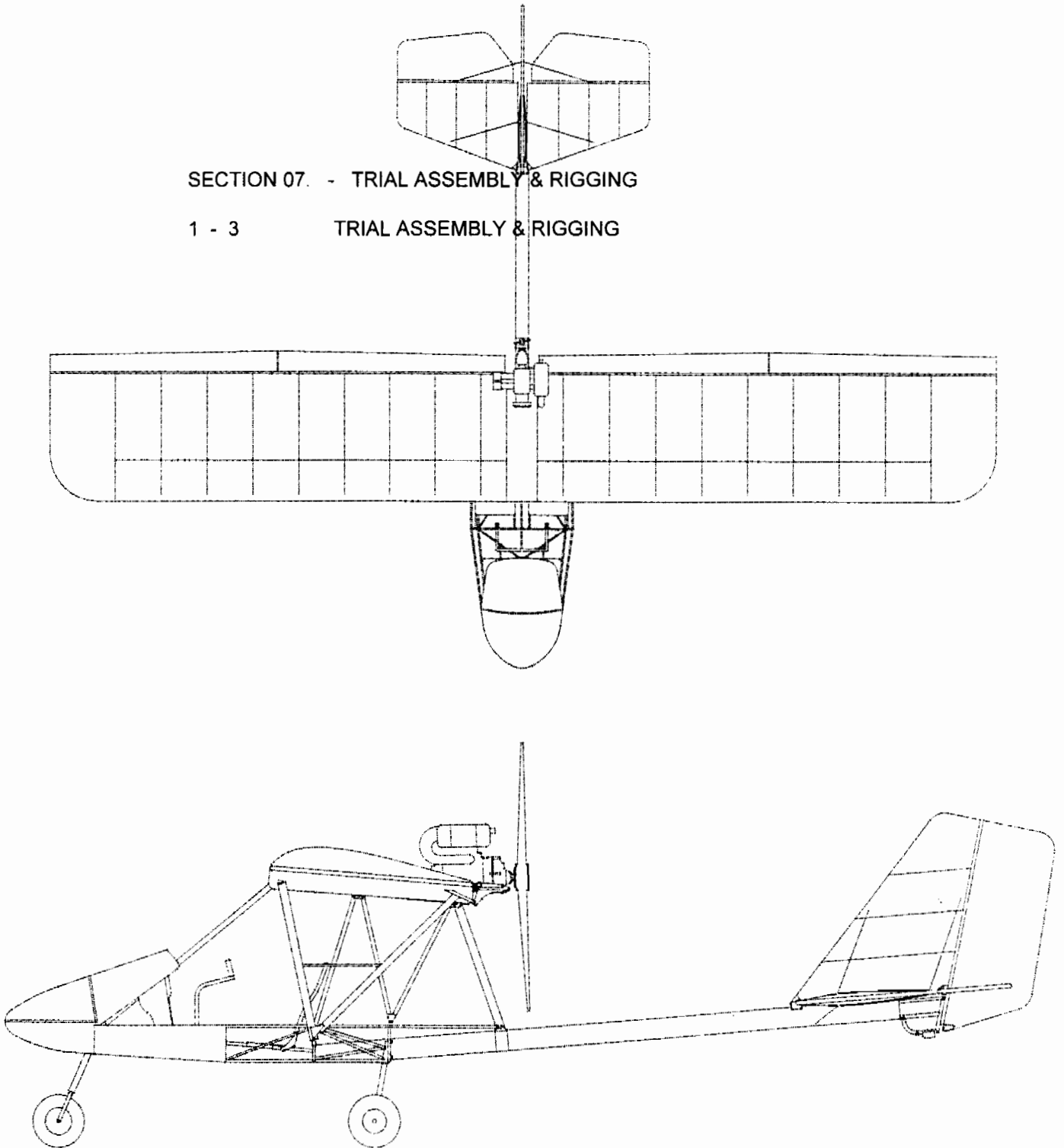


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SECTION 07. - TRIAL ASSEMBLY & RIGGING

1 - 3 TRIAL ASSEMBLY & RIGGING

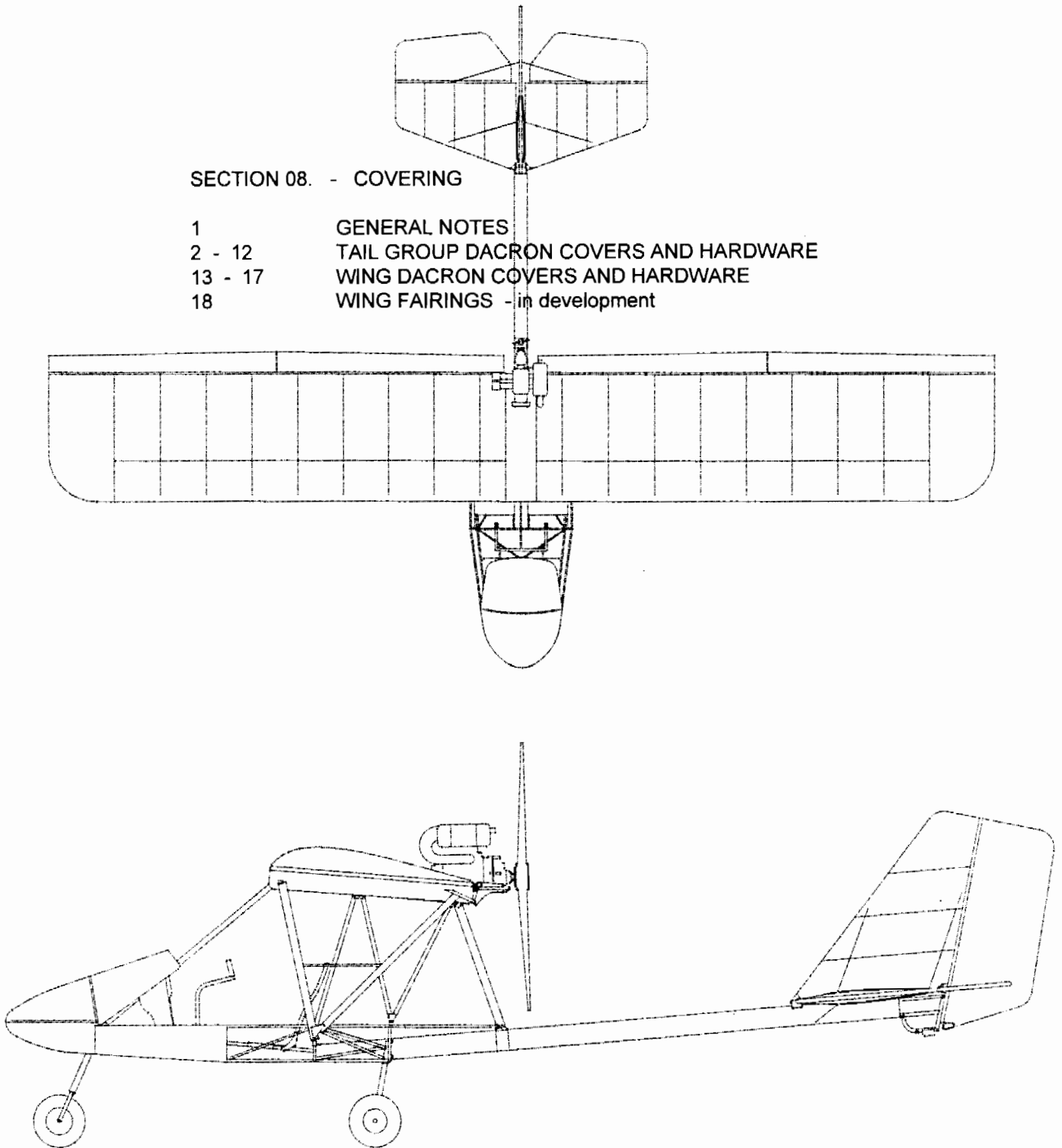


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SECTION 08. - COVERING

- | | |
|---------|---------------------------------------|
| 1 | GENERAL NOTES |
| 2 - 12 | TAIL GROUP DACRON COVERS AND HARDWARE |
| 13 - 17 | WING DACRON COVERS AND HARDWARE |
| 18 | WING FAIRINGS - in development |



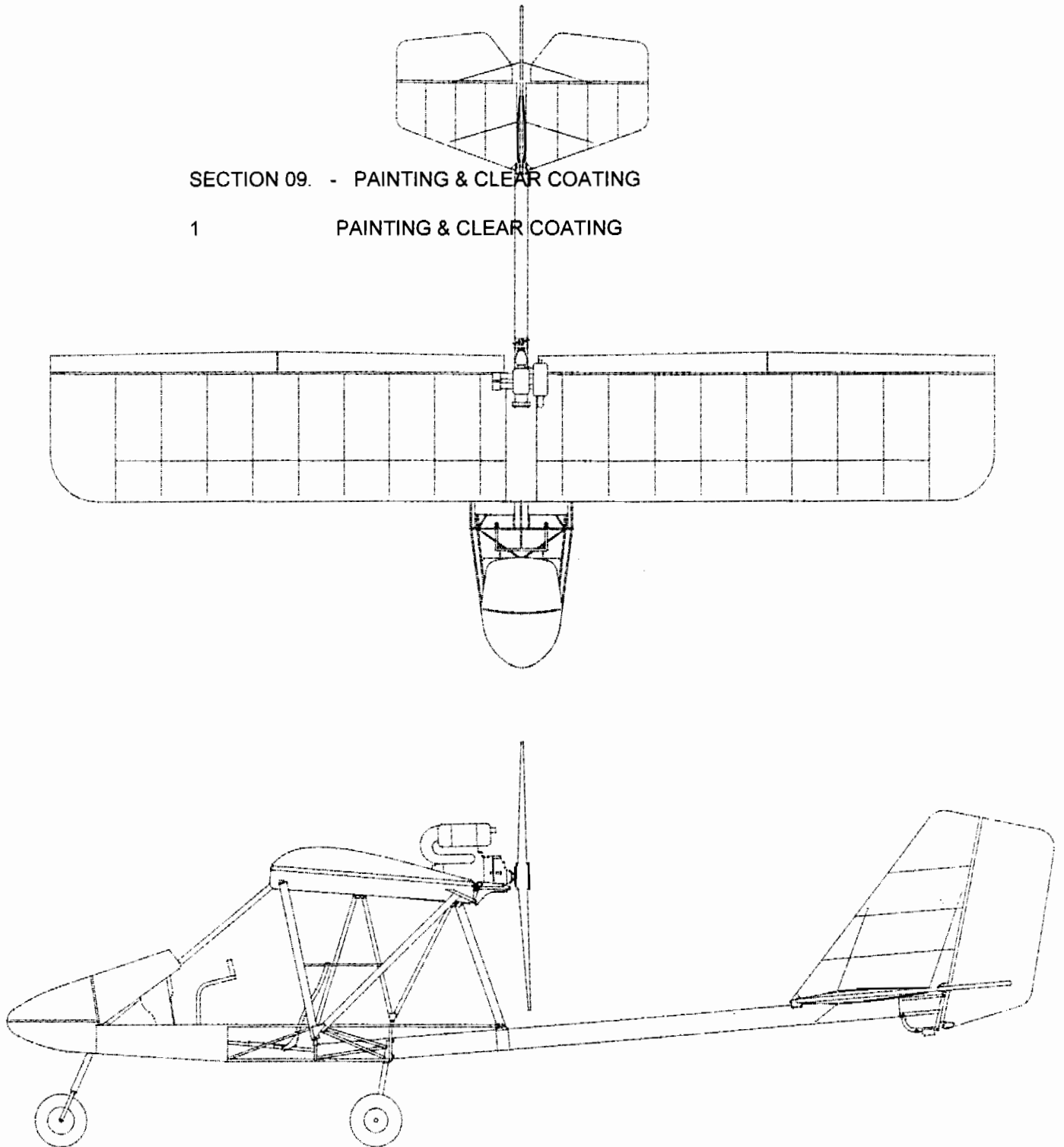
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SECTION 09. - PAINTING & CLEAR COATING

1

PAINTING & CLEAR COATING

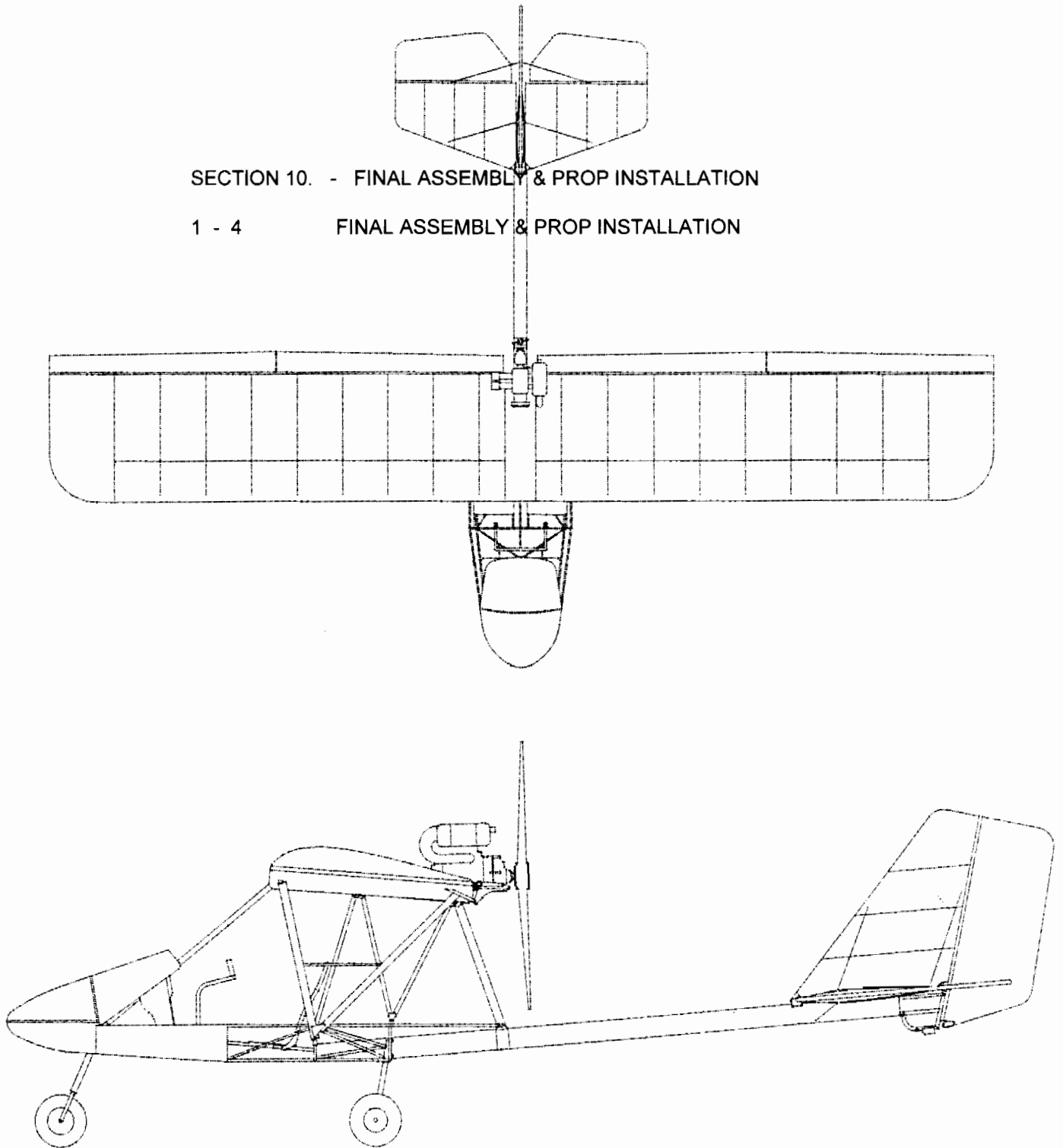


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SECTION 10. - FINAL ASSEMBLY & PROP INSTALLATION

1 - 4 FINAL ASSEMBLY & PROP INSTALLATION

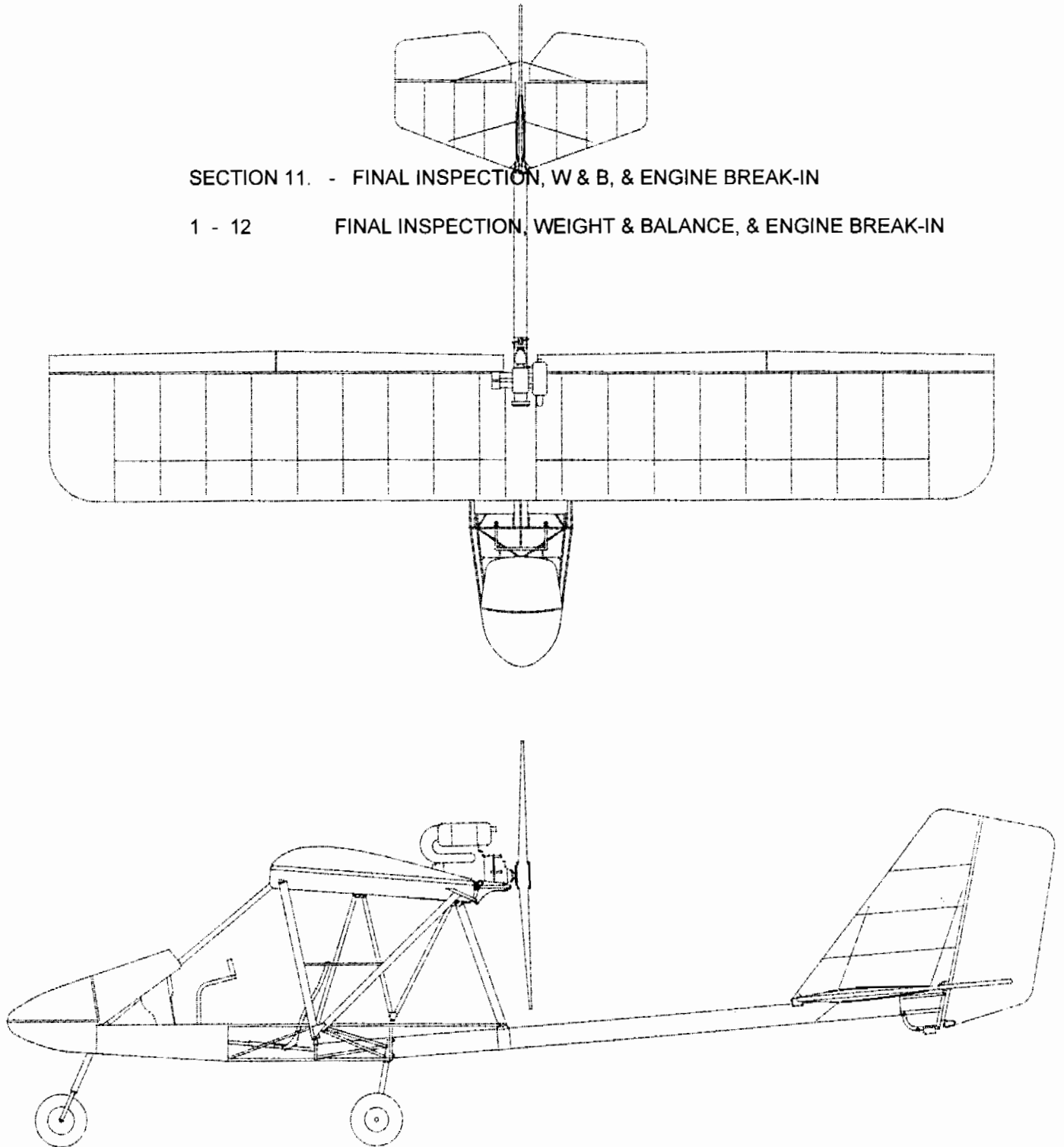


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SECTION 11. - FINAL INSPECTION, W & B, & ENGINE BREAK-IN

1 - 12 FINAL INSPECTION, WEIGHT & BALANCE, & ENGINE BREAK-IN

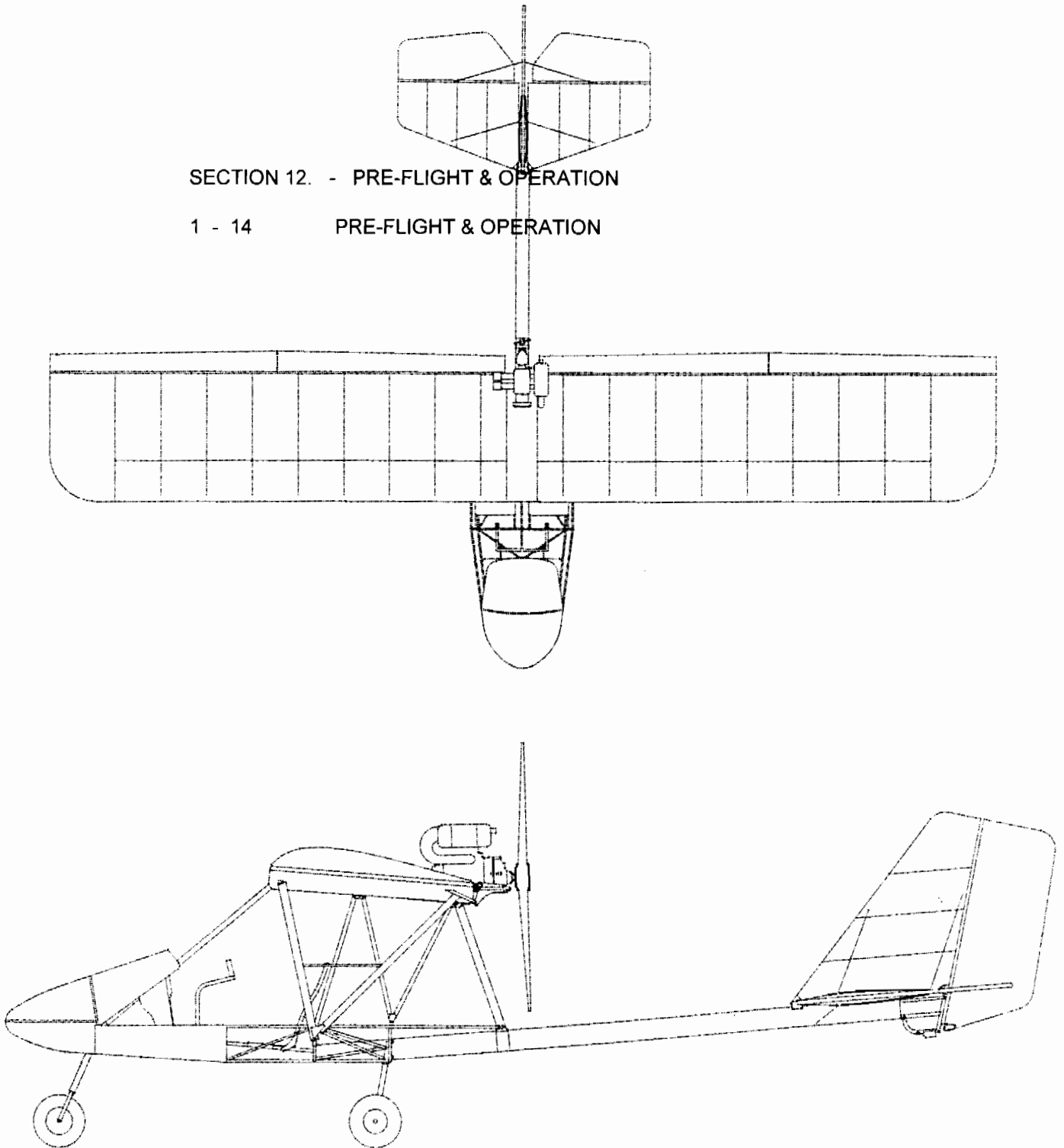


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SECTION 12. - PRE-FLIGHT & OPERATION

1 - 14 PRE-FLIGHT & OPERATION

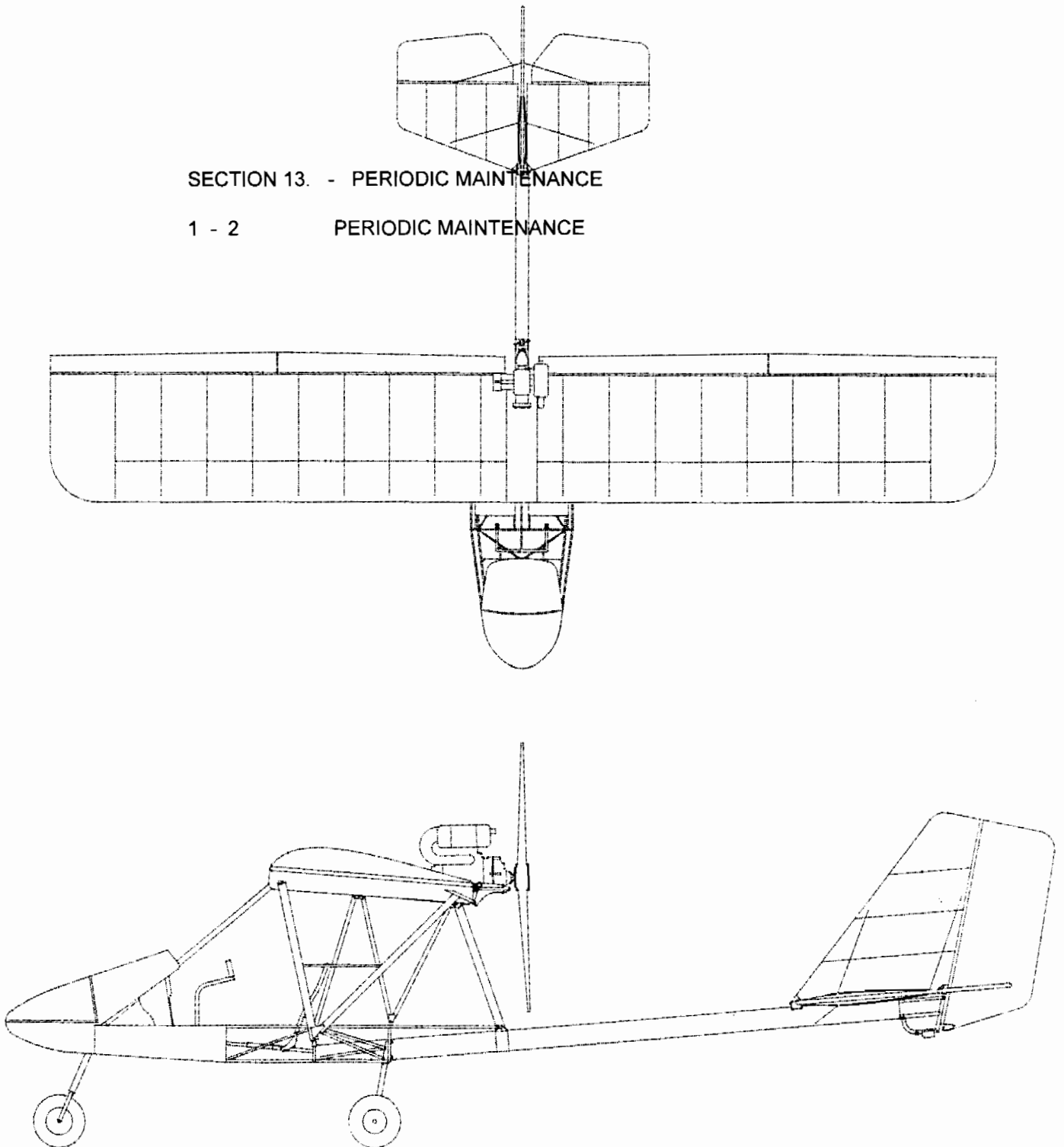


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SECTION 13. - PERIODIC MAINTENANCE

1 - 2 PERIODIC MAINTENANCE



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SECTION 14. - OPTIONS

- 1 - 16 OPTIONAL PUDDLE JUMPER FLOATS
- A-1 - A-2 OPTIONAL INSTRUMENTAL PANEL ASSEMBLY
- B-1 ROTAX NOTE
- C-1 - C-3D OPTIONAL DOPE & FABRIC STRUCTURE & COVERING

