MASTER #10

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Form Approved
Budget Bureau No. 04-R0213

MAJOR REPAIR AND ALTERATION
(Airframe, Powerplant, Propeller, or Appliance)

FOR FAA USE ONLY
OFFICE IDENTIFICATION

INSTRUCTIONS: Print or type all entries. See FAR 43.[illegible] Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE: TAYLORCRAFT	MODEL: BC-12D1
	SERIAL NO.: 9931	NATIONALITY AND REGISTRATION MARK: N44131 U.S.A
2. OWNER	NAME (As shown on registration certificate): JORGE GONZALEZ	ADDRESS (As shown on registration certificate): STARR RT BOX 19A BROWNSVILLE, TEXAS 78521

3. FOR FAA USE ONLY

The data identified herein complied with applicable airworthiness requirements and is approved only for the above described aircraft subject to conformity inspection by a person authorized in FAR 43.7.

5-2-89 William R [illegible] SATF500
Date FAA Inspector OH

4. UNIT IDENTIFICATION

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE: REPAIR	5. TYPE: ALTERATION
AIRFRAME	********** (As described in item 1 above) **********				X
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE / MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
WILLIAM L. COLE P.O. BOX 8063 BROWNSVILLE, TEXAS 78526	✓ U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	461624933

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

DATE: MAY 5, 1989

SIGNATURE OF AUTHORIZED INDIVIDUAL: William L. Cole

7. APPROVAL FOR RETURN TO SERVICE

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ✓ APPROVED ☐ REJECTED

BY					OTHER (Specify)
	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	✓	INSPECTION AUTHORIZATION	
	FAA DESIGNEE	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
MAY 5, 1989	461624933	William L. Cole WILLIAM L. COLE

FAA Form 337 (7-67) (8330)

1. USING 4140 STEEL, MANUFACTURE AXLE STUB ADAPTER TO SLIP FIT OVER TAYLORCRAFT ORIGINAL AXLE. DRILL BOLT HOLES TO FIT CESSNA 150 AXLE STUB. REFER TO FIGURES 1 AND 2, PHOTOS 1 AND 2

2. CUT ORIGINAL TAYLORCRAFT AXLE $1\frac{3}{4}$ INCHES OUTBOARD OF EXISTING BRAKE FLANGE. SEE FIGURE 2.

3. INSTALL MANUFACTURED AXLE STUB ADAPTER OVER THE ORIGINAL TAYLORCRAFT AXLE WHICH HAS BEEN CUT OFF. PLACE ADAPTER 1 INCH FROM BRAKE FLANGE AND WELD IN PLACE. REFER TO FIGURE 2, PHOTOS 3 THRU 6.

4. ATTACH C 150 AXLE STUB TO ADAPTER USING REQUIRED AN HARDWARE. REFER TO FIGURE 3.

5. INSTALL COMPLETE WHEEL AND BRAKE ASSEMBLY, AND OTHER RELATED PARTS. SEE FIGURE 3, PHOTOS 7 AND 8.

THE BASE PLATE AS WELL AS THE RUDDER/BRAKE PEDAL AND MASTER CYLINDER ASSEMBLY BRACKETS MUST BE MANUFACTURED AND CUT TO FIT.

6. MANUFACTURE BASE PLATE USING .090 - 4130 CHROMOLY STEEL. BASE PLATE MUST BE CUT TO SIZE AND NOTCHED TO FIT OVER AREAS OF AIRCRAFT FRAME TUBING TO WHICH PLATE IS TO BE SECURED. THE PLATE SHOULD BE CUT AND/OR NOTCHED TO FIT APPROXIMATELY 4½ INCHES AFT OF STATION 17R/17L. SEE COPY OF AIRCRAFT FRAME FROM OWNERS MANUAL FOR LOCATION OF STATION.

7. MANUFACTURE BRACKETS AND/OR CLAMPS, TO FIT, AS SHOWN IN PHOTO 12, AND SECURE BASE PLATE TO AIRCRAFT FRAME 4½ INCHES AFT OF STATION 17R/17L AND TO DIAGONAL BRACING, USING AN HARDWARE AS REQUIRED FOR SECURITY. ALL BRACKETS AND CLAMPS TO BE MADE OF 4130 CHROMOLY SHEET METAL AND/OR TUBING.

8. MANUFACTURE BRAKE MASTER CYLINDER BRACKETS, TO FIT, AS SHOWN IN PHOTOS 11 THRU 14. ATTACH BASE OF MASTER CYLINDER TO BRACKET AND TOP TO PEDAL USING PROPER AN HARDWARE AS REQUIRED.

9. FOR CLEARANCE, THE LEFT BRAKE MASTER CYLINDER IS ATTACHED TO THE PILOT SIDE LEFT PEDAL, AND THE RIGHT BRAKE MASTER CYLINDER IS ATTACHED TO THE RIGHT PEDAL ON THE CO-PILOT SIDE. THE RIGHT SIDE

MASTER CYLINDER IS CONNECTED TO THE RIGHT PEDAL ON THE PILOT SIDE BY STANDARD C-150 TORQUE TUBE ASSEMBLY. REFER TO FIGURE 4, PHOTOS 10 AND 17.

10. REMOVE BRAKE PEDAL SHAFT, PN 0411778-2, FROM CO-PILOT RIGHT PEDAL AND REPLACE WITH AN BOLT 1 INCH LONGER THAN SHAFT. REMOVE BRAKE PEDAL SHAFT, PN 0411778-1, FROM PILOT LEFT PEDAL AND REPLACE WITH AN BOLT $2\frac{3}{4}$ INCH LONGER THAN SHAFT. USE SPACERS OF PROPER LENGTH ON EACH BOLT TO PREVENT CABLE FROM SLIPPING SIDE TO SIDE. THIS WILL ALLOW PROPER ANGLE OF TRAVEL FOR BOTH THE LEFT AND RIGHT RUDDER CABLES. SEE PHOTO 10 FOR INSTALLED BOLT AND SPACERS ON LEFT PEDAL, PILOT SIDE.

11. MANUFACTURE AND INSTALL REQUIRED BRAKE LINES FROM MASTER CYLINDERS TO WHEEL BRAKE ASSEMBLY.

LIST OF PARTS AND RELATED ITEMS REQUIRED

2 EA C-150 AXLE STUBS - PN 0541124
2 EA C-150 WHEEL ASSEMBLIES - PN C163001-0103
2 EA C-150 BRAKE ASSEMBLIES - PN C163030-0103
2 EA C-150 BRAKE DISC - PN 164-26
1 EA C150 BRAKE MASTER CYLINDER RH - PN 0541138-12
1 EA C150 BRAKE MASTER CYLINDER LH - PN 0541138-13
4 EA C150 BRAKE/RUDDER PEDALS WITH ALL ATTACHING PARTS
2 EA C150 TORQUE TUBE ASSEMBLIES - PN 0411565
2 EA C150 TORQUE PLATE ASSEMBLIES - PN 75-37
4 EA C150 INBOARD BEARING HALVES - PN S1675-1
4 EA C150 OUTBOARD BEARING HALVES - PN S1674-1
2 EA 2" X 3" X $\frac{3}{4}$" 4140 STEEL FOR AXLE STUB ADAPTERS
1 EA 6" X 60" X .090 - 4130 CHROMOLY STEEL
1 EA $\frac{3}{4}$" X 60" X .063 - 4130 CHROMOLY TUBING
NECESSARY HOSE, TUBING, AN FITTINGS, AND AN HARDWARE
TO COMPLETE THE JOB

1. PHOTOS 1 AND 2 SHOW AXLE STUB ADAPTER SLIPPED OVER ORIGINAL TAYLORCRAFT AXLE PRIOR TO THE AXLE BEING CUT.

2. PHOTOS 3 THRU 6 SHOWS AXLE STUB ADAPTER WELDED IN PLACE

3. PHOTOS 7 AND 8 SHOWS WHEEL AND BRAKE ASSEMBLY IN PLACE

4. PHOTO 9 SHOWS BRAKE LINE COMING OUT OF FUSELAGE TO WHEEL CYLINDER

5. PHOTOS 10 THRU 14 SHOWS BRAKE/RUDDER PEDALS AND BRAKE MASTER CYLINDERS ATTACHED TO BASE PLATE PRIOR TO INSTALLATION IN AIRCRAFT.

6. PHOTOS 15 THRU 18 SHOWS BRAKE/RUDDER PEDALS AND MASTER CYLINDERS INSTALLED IN AIRCRAFT.

- IMPORTANT -

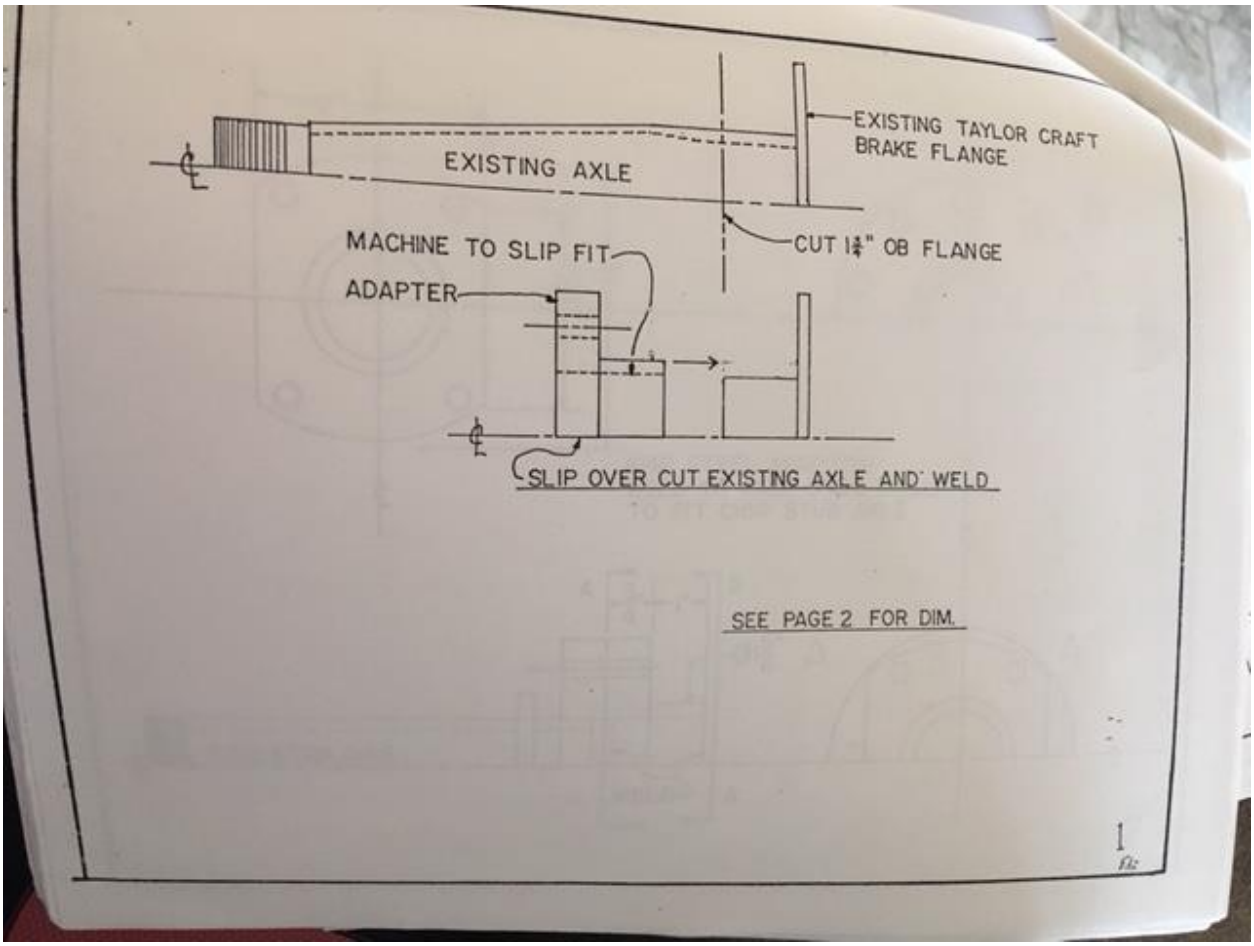
FOR MAINTENANCE AND/OR INSPECTION OF THE TAYLORCRAFT, CESSNA 150 SERIES SERVICE MANUAL, P/N D971-3-13-RPC-300-12/84 SHOULD BE USED FOR THE FOLLOWING:

1. MAIN LANDING GEAR BREAKDOWN: SECTION 5, FIGURE 5-1 SHEET 1, PAGE 5-4.

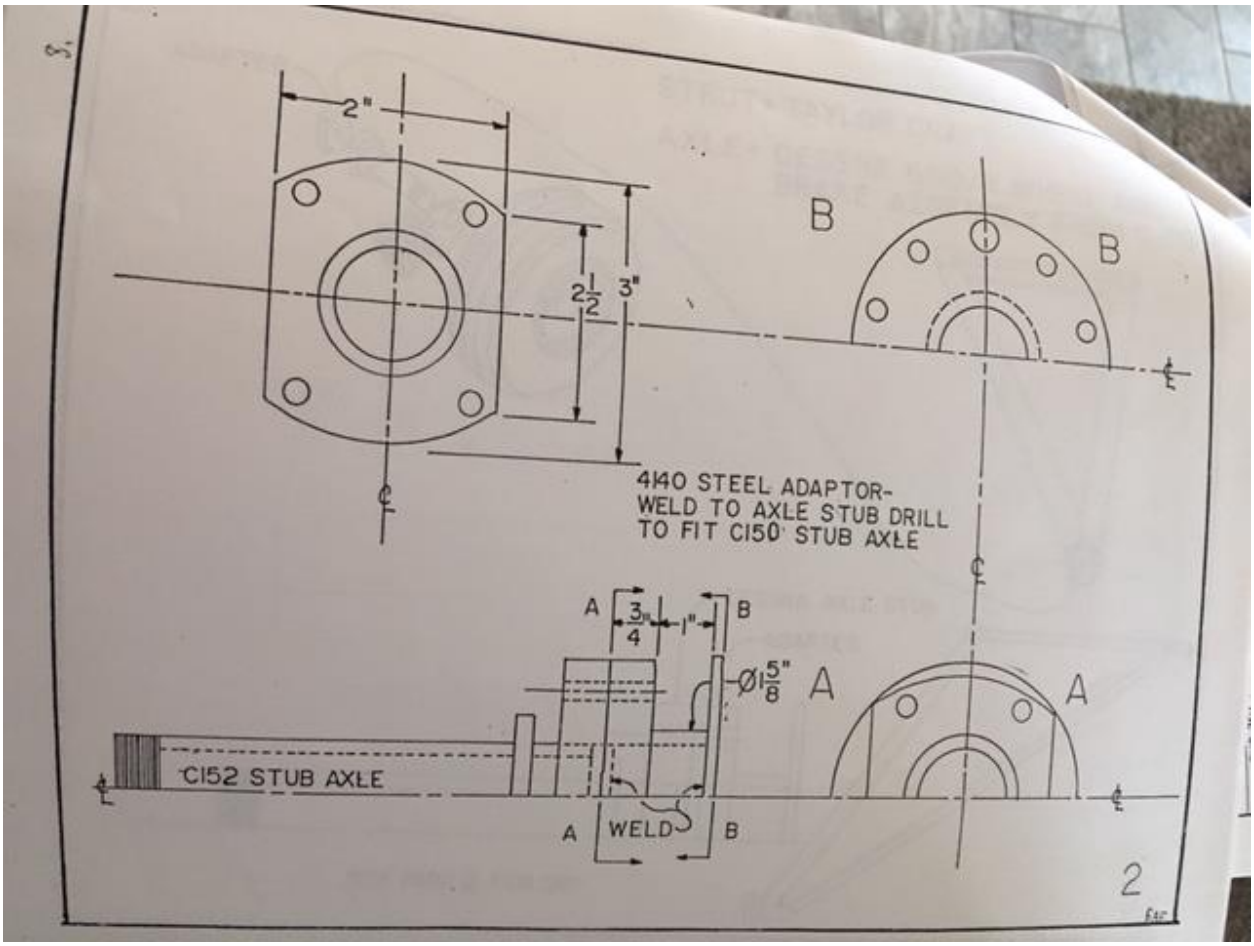
2. MAIN WHEEL ALIGNMENT AND BALANCING: SECTION 5, PARAGRAPHS 5-23 THRU 5-24, FIGURE 5-6 SHEETS 1 AND 2, PAGES 5-13 THRU 5-15.

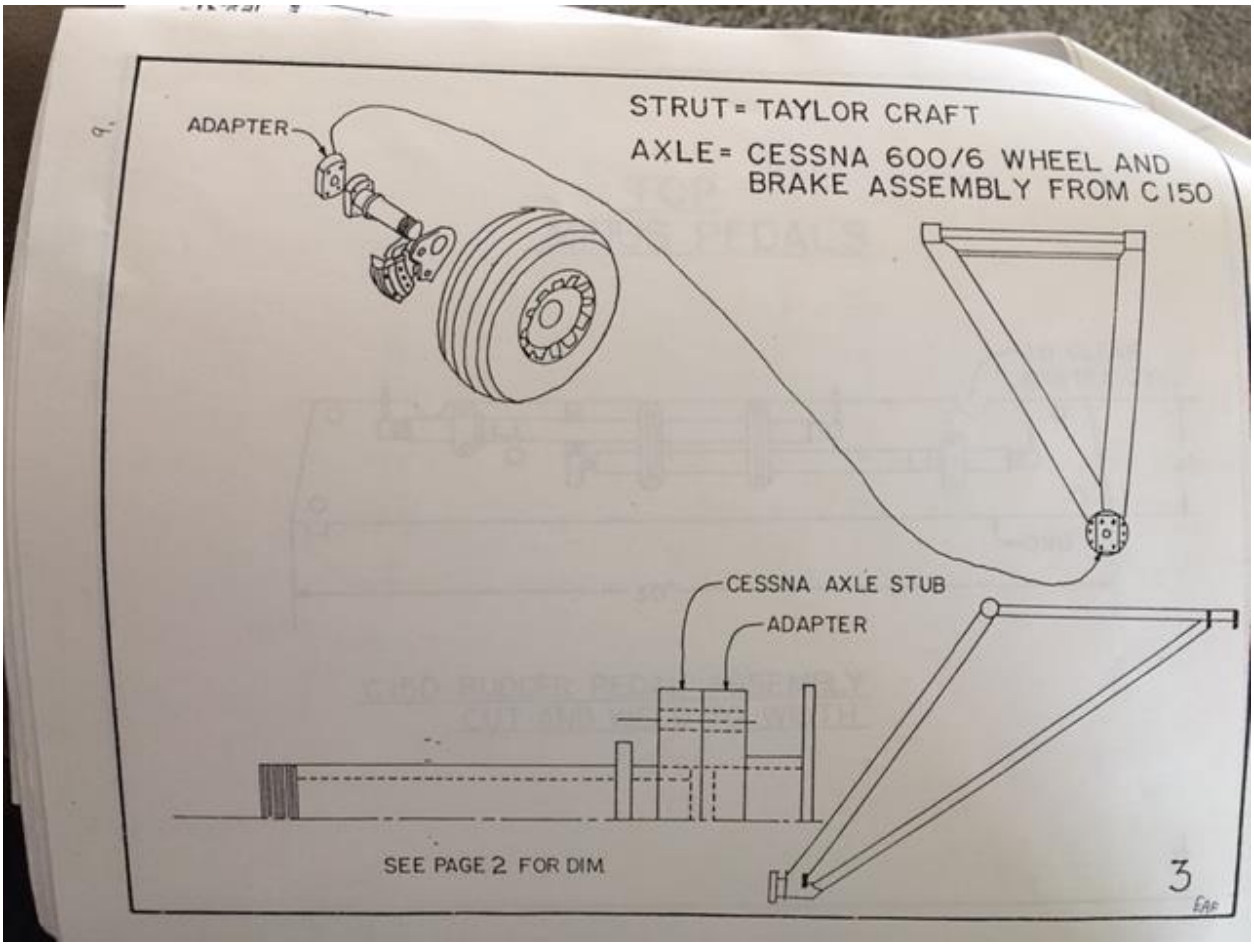
3. BRAKE SYSTEM: SECTION 5, PARAGRAPHS 5-45 THRU 5-58, FIGURE 5-12 SHEET 2, PAGES 5-24 THRU 5-28.

IT SHOULD BE NOTED SINCE THE TAYLORCRAFT DID NOT INCORPORATE A PARKING BRAKE, THIS SYSTEM WAS NOT INSTALLED DURING THE CONVERSION.

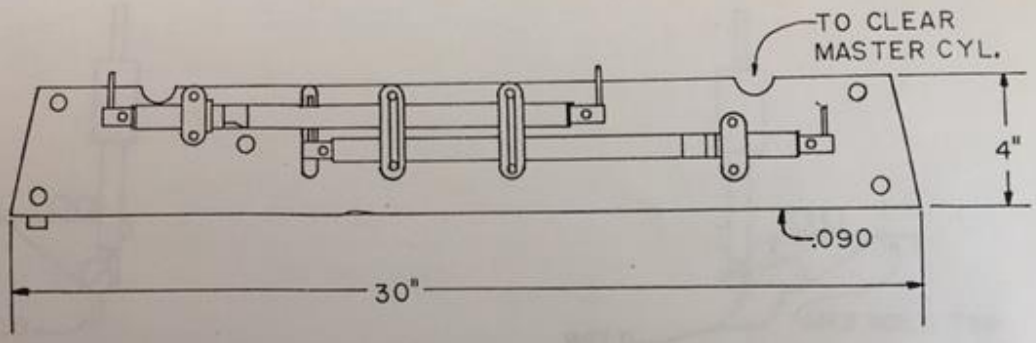


SEE PAGE 2 FOR DIM.

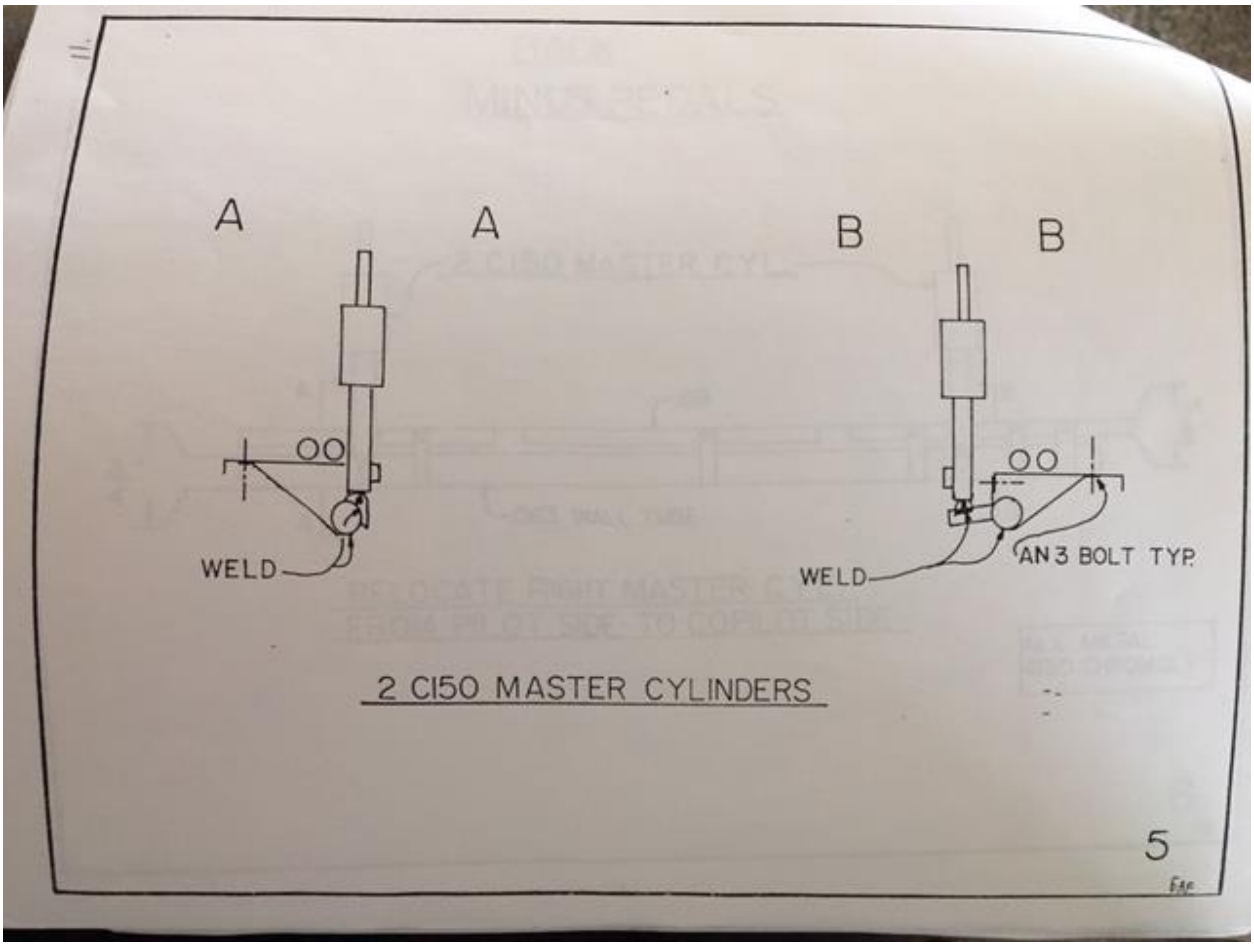

2"
2 1/2
3"
B
B
4140 STEEL ADAPTOR-
WELD TO AXLE STUB DRILL
TO FIT C150 STUB AXLE
A
3/4
1"
B
Ø1 5/8"
A
A
C152 STUB AXLE
A
WELD
B
2


STRUT = TAYLOR CRAFT
AXLE = CESSNA 600/6 WHEEL AND BRAKE ASSEMBLY FROM C150
ADAPTER
CESSNA AXLE STUB
ADAPTER
SEE PAGE 2 FOR DIM
3

TOP
MINUS PEDALS

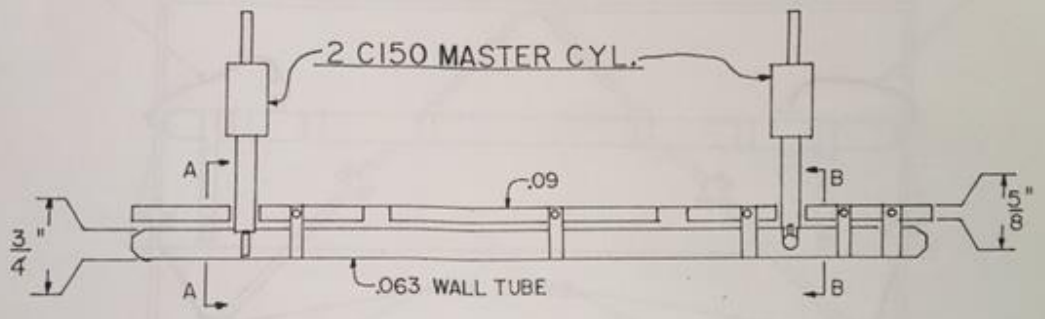


C150 RUDDER PEDAL ASSEMBLY
CUT AND WELD TO WIDTH


A
A
B
B
WELD
WELD
AN 3 BOLT TYP.
2 C150 MASTER CYLINDERS
5

12.

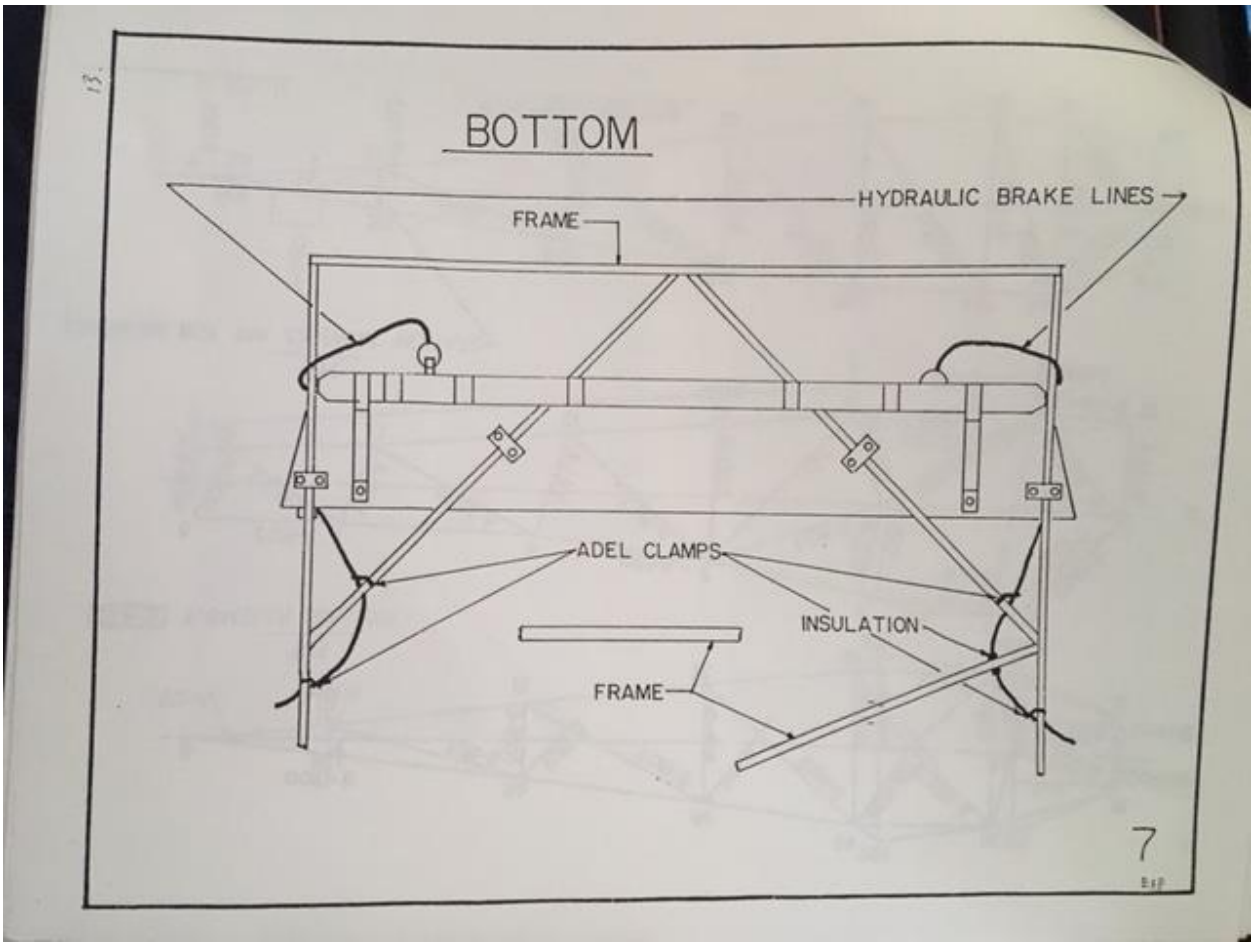
BACK
MINUS PEDALS

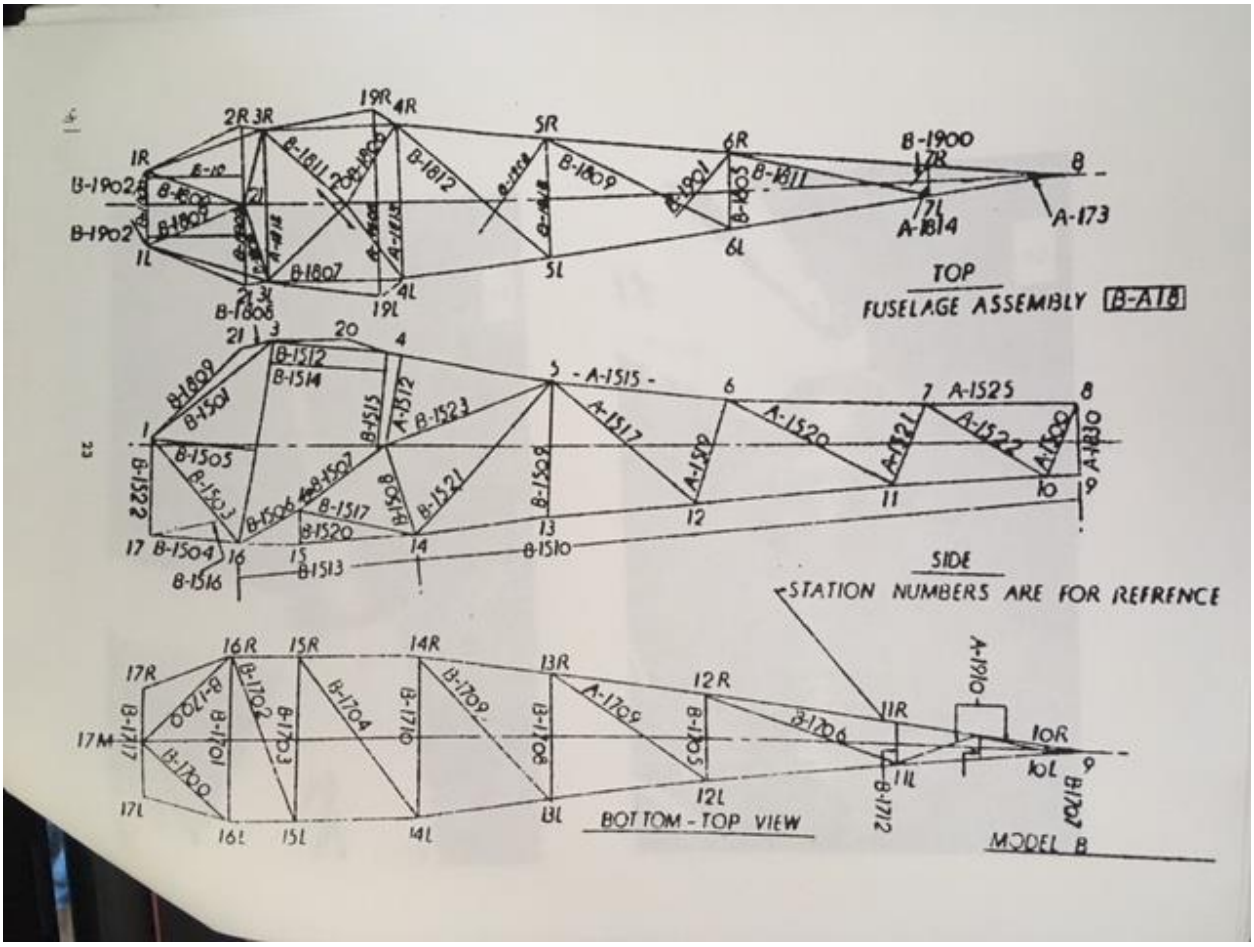


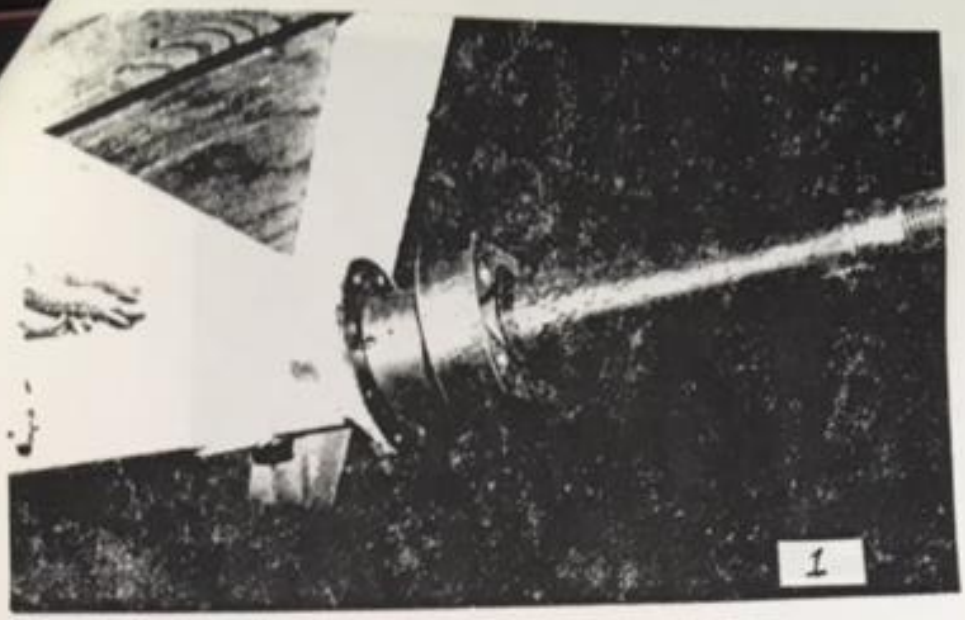
RELOCATE RIGHT MASTER CYL.
FROM PILOT SIDE TO COPILOT SIDE

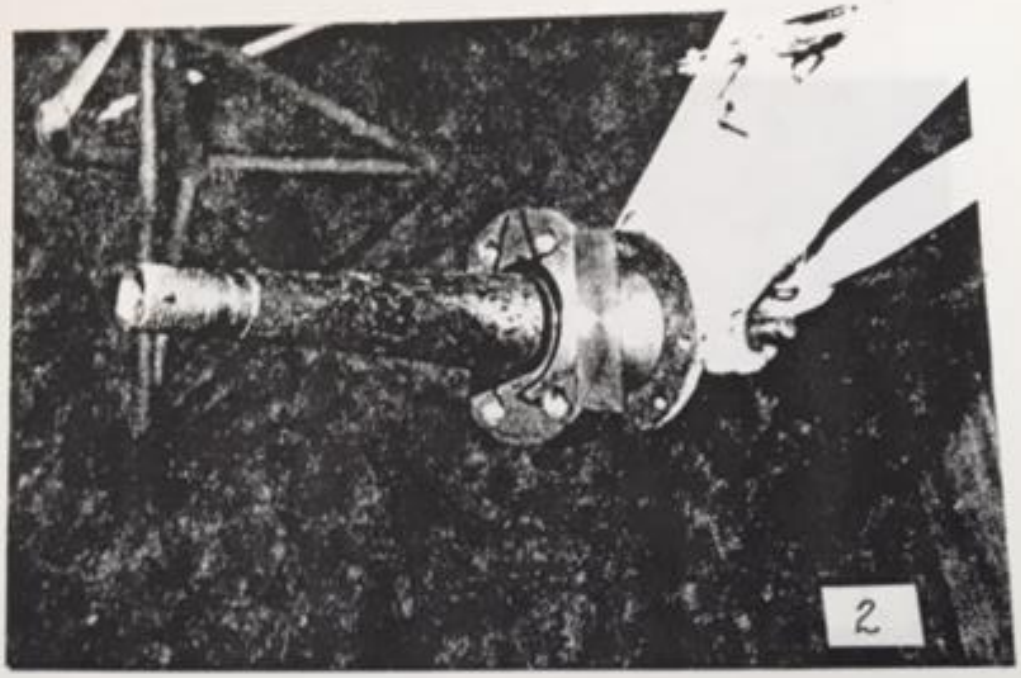
ALL METAL
4130 CHROMOLY

6


13.
BOTTOM
HYDRAULIC BRAKE LINES
FRAME
ADEL CLAMPS
INSULATION
FRAME
7


TOP
FUSELAGE ASSEMBLY B-AT8
SIDE
STATION NUMBERS ARE FOR REFRENCE
BOTTOM - TOP VIEW
MODEL B

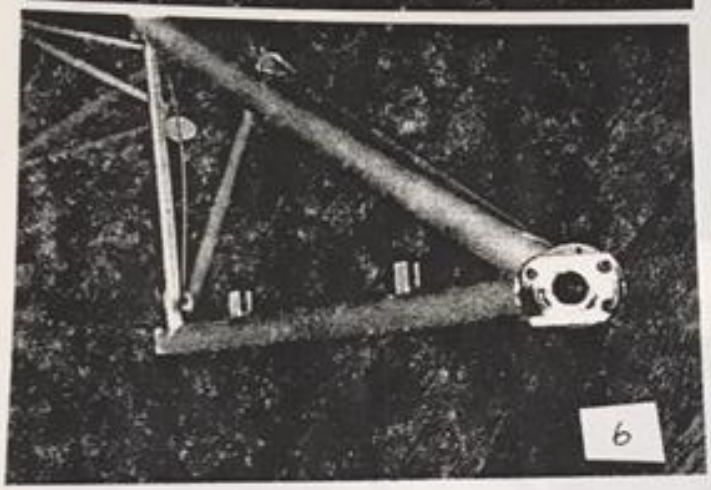

1

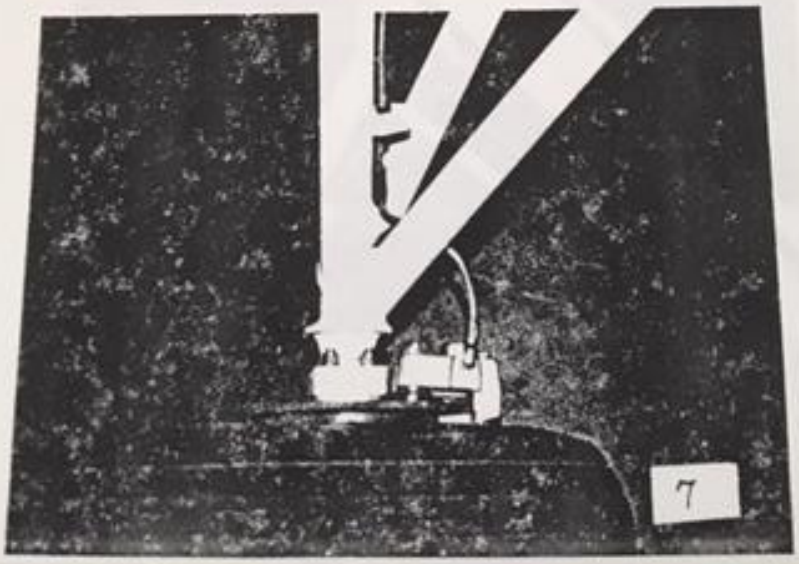

2

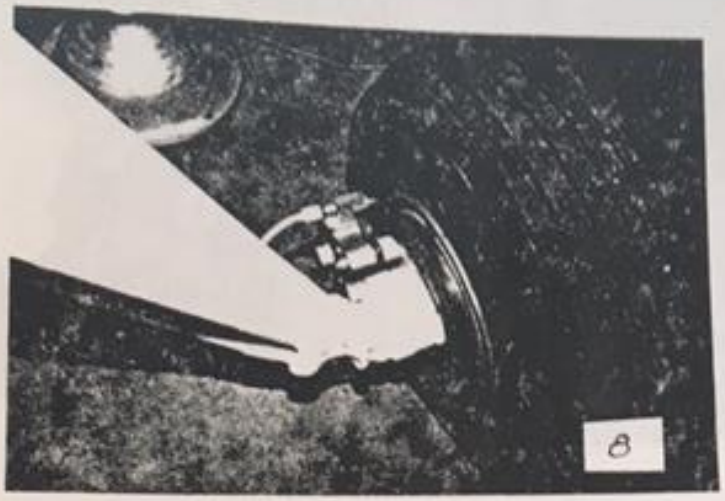

3


4


5

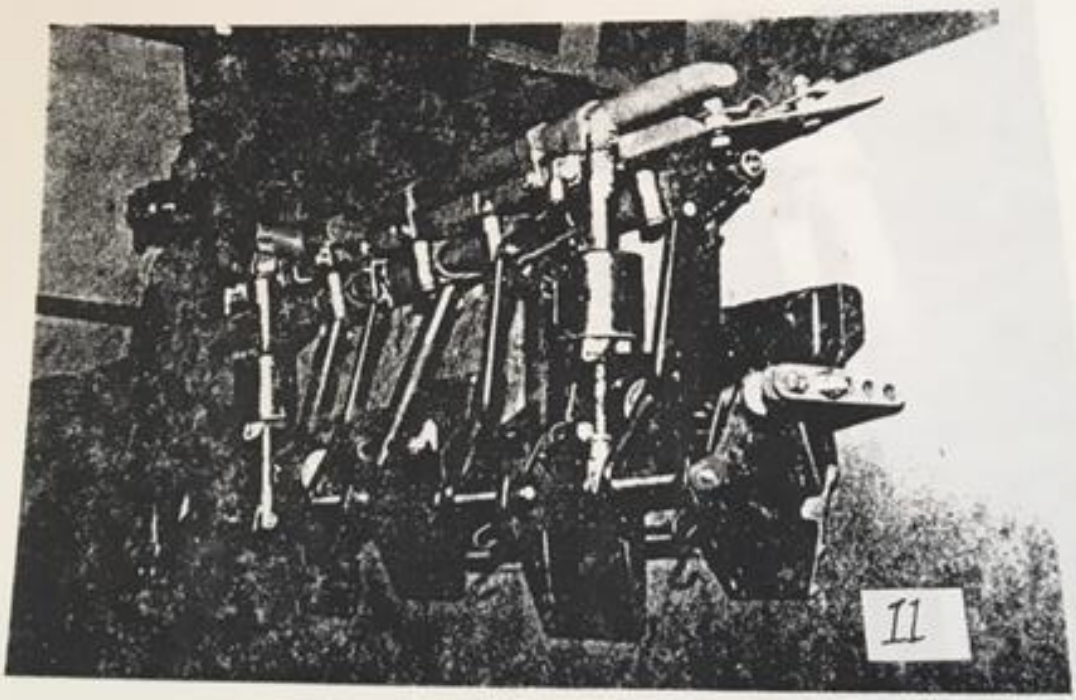

6


7

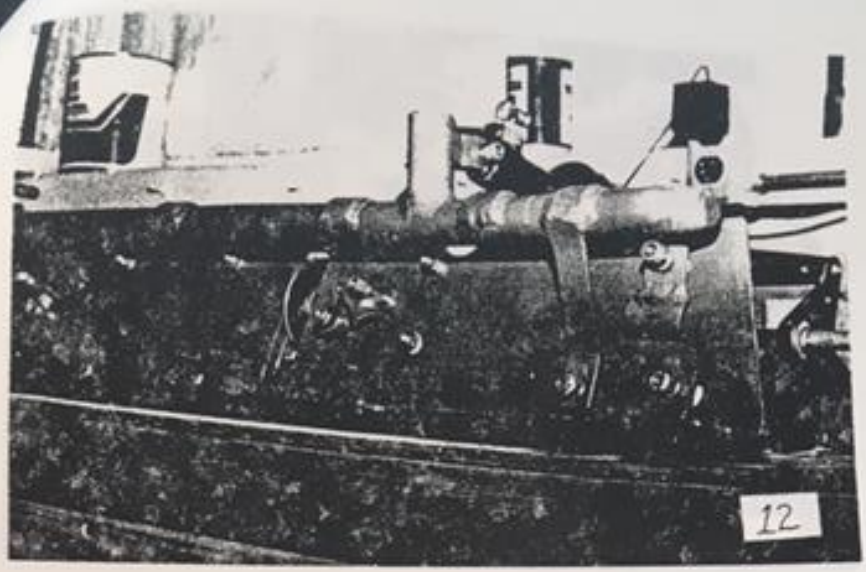

8


9

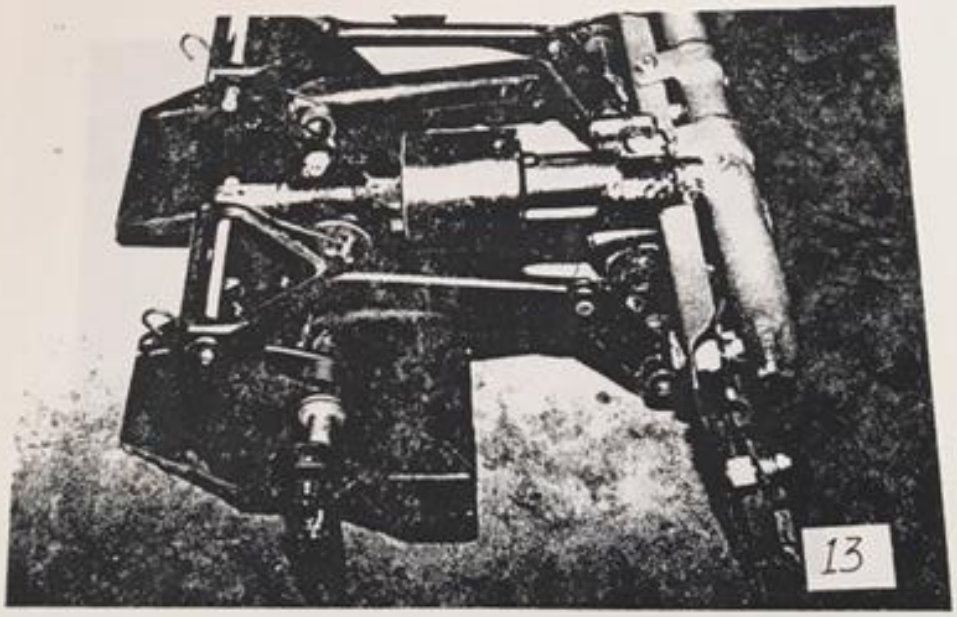
10



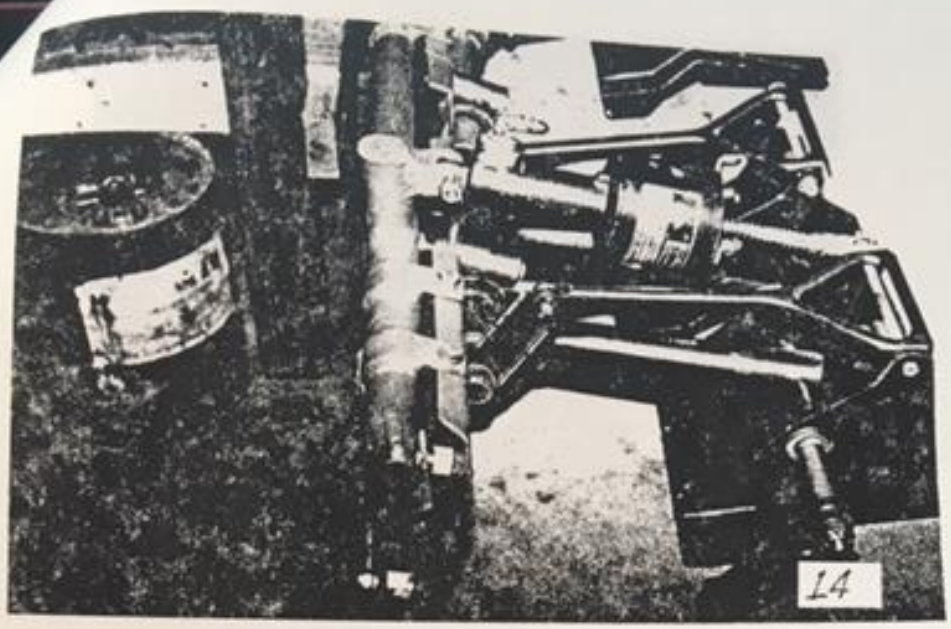
11



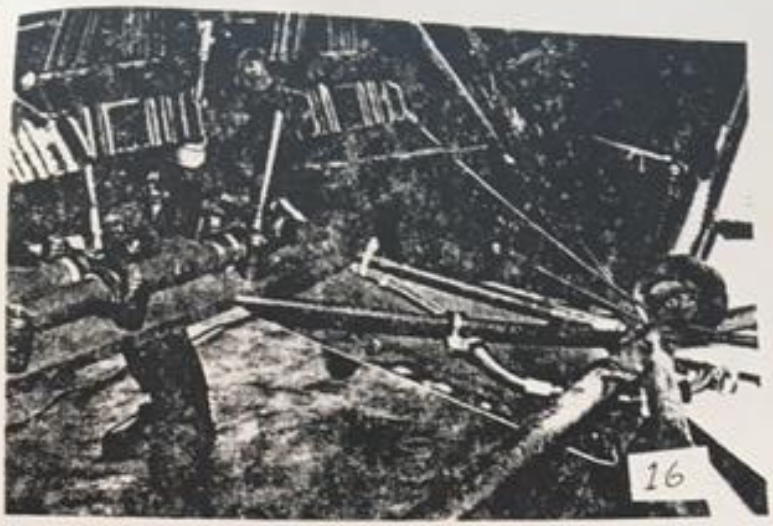
12



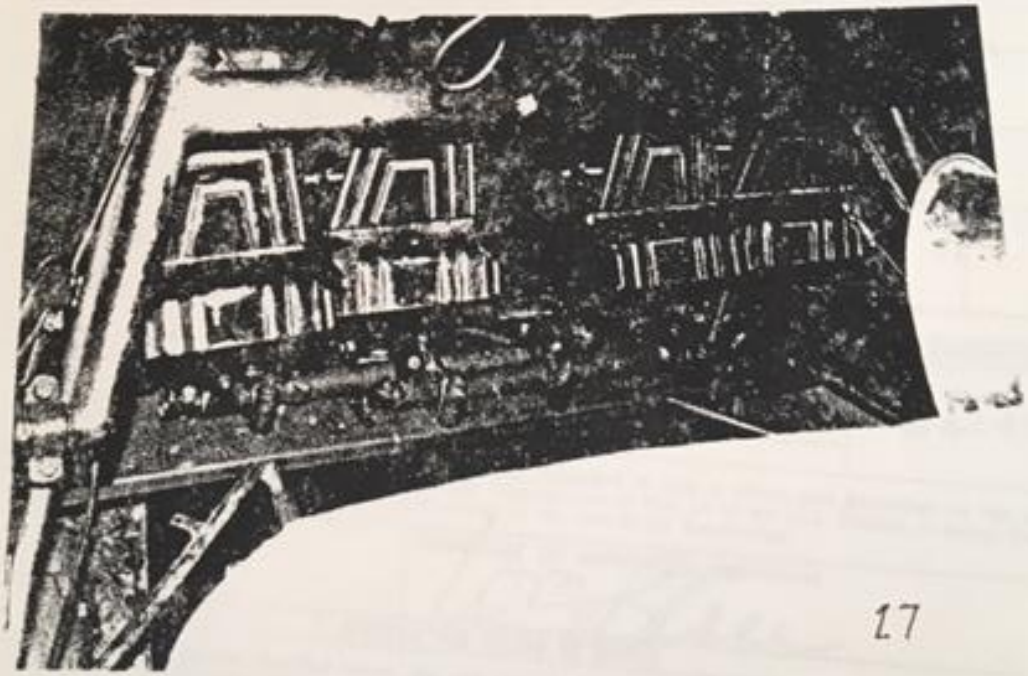
13


14


15



16



17