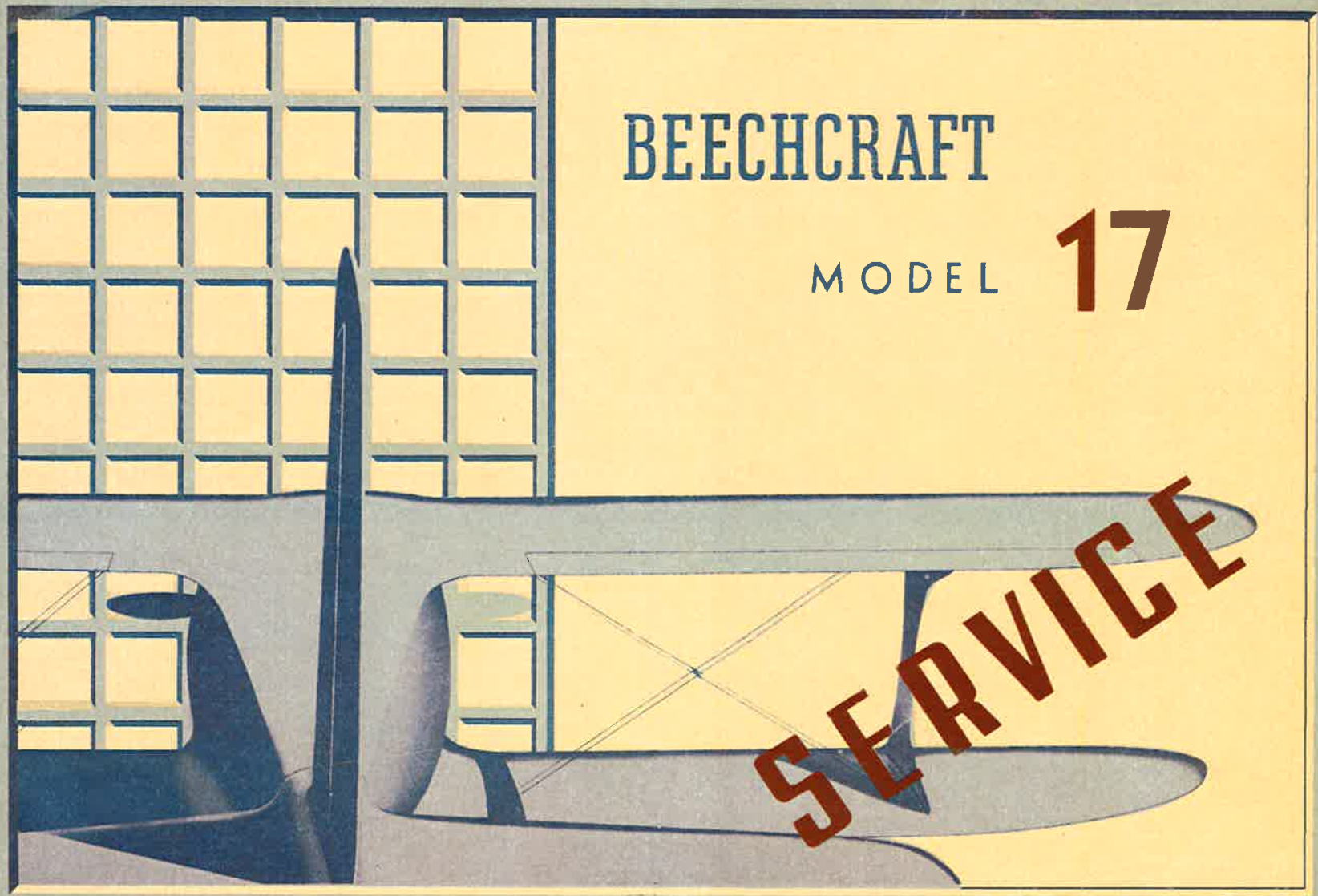
BEECHCRAFT

MODEL 17



SERVICE

ENGINEERING FIELD SERVICE DIVISION • • BEECH AIRCRAFT CORPORATION • • WICHITA, KANSAS

BEECHCRAFT 17
MODEL D
SERVICE AND OPERATION DATA

SECTION I—RIGGING AND ADJUSTING
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SECTION III—ELECTRICAL SYSTEMS
pages 27 to 34 inclusive

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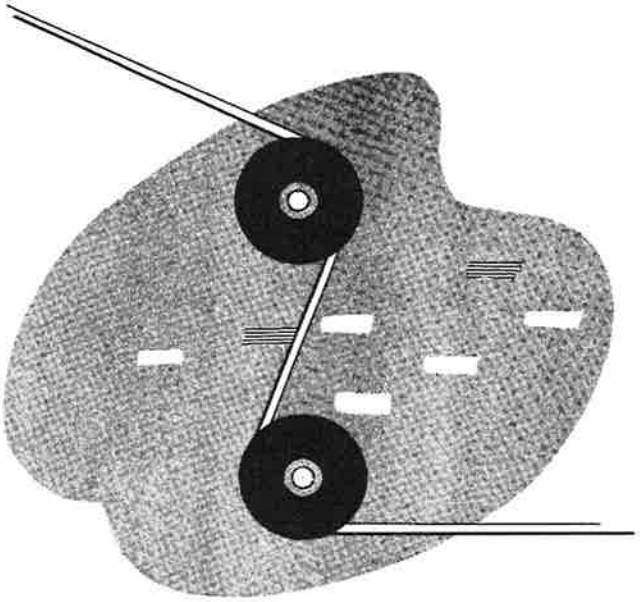
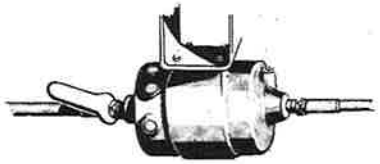
SECTION I



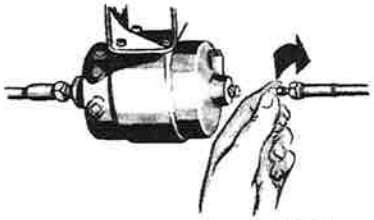
RIGGING AND ADJUSTING

RIGGING FLAPS
RIGGING AILERONS
HANGING WINGS
RIGGING WINGS
RIGGING ELEVATOR
RIGGING ELEVATOR TABS
RIGGING RUDDERS
RIGGING RUDDER TABS
RIGGING LANDING GEAR RETRACT CHAINS
RIGGING LANDING GEAR AND ADJUSTING RETRACT CHAINS
RIGGING MAIN LANDING GEAR FAIRING
RIGGING TAIL WHEEL AND TAILWHEEL DOORS
RIGGING THROTTLE STOPS
ADJUSTING BRAKES
BRAKE BLEEDING PROCEDURE

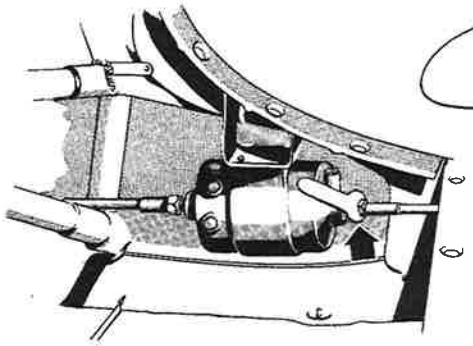
BEECHCRAFT MODEL 17



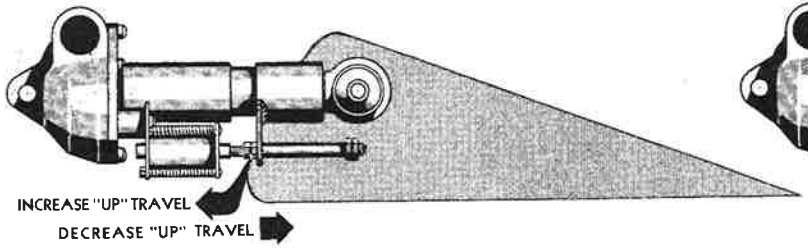
3. DISCONNECT LEFT FLAP SHAFT HOUSING AT LEFT SIDE OF FLAP MOTOR AND REPEAT OPERATIONS FOLLOWED IN ADJUSTING RIGHT FLAP.



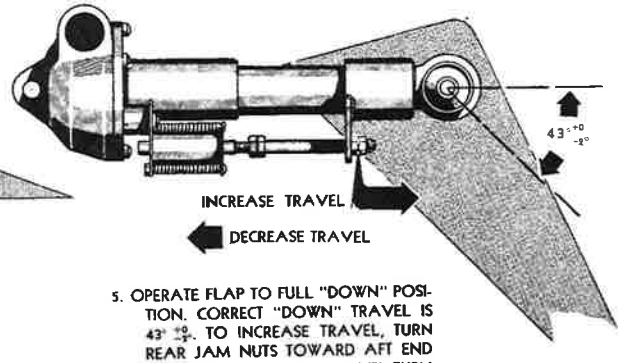
2. SET RIGHT FLAP IN NEUTRAL POSITION BY ROTATING SHAFT COUNTER CLOCKWISE TO RAISE TRAILING EDGE OF FLAP OR CLOCKWISE TO LOWER TRAILING EDGE OF FLAP. WITH RIGHT FLAP IN NEUTRAL "UP" POSITION CONNECT SHAFT AND HOUSING AT RIGHT OF FLAP MOTOR.



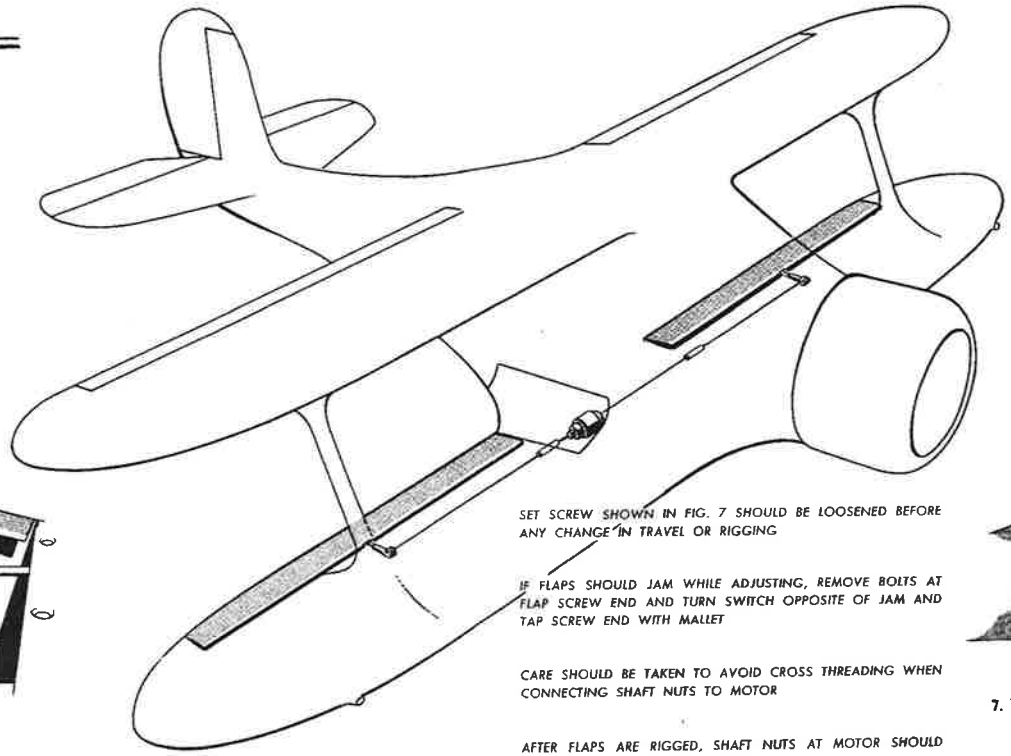
1. DISCONNECT FLAP SHAFT HOUSING AT RIGHT SIDE OF FLAP MOTOR.



4. TO ADJUST LIMIT SWITCH RUN FLAP TO FULL "UP" POSITION ELECTRICALLY. TO INCREASE "UP" TRAVEL, TURN FORWARD JAM NUTS TOWARD FORWARD END OF BOLT. TO DECREASE "UP" TRAVEL, TURN FORWARD JAM NUTS IN DIRECTION OF CENTER OF BOLT.



5. OPERATE FLAP TO FULL "DOWN" POSITION. CORRECT "DOWN" TRAVEL IS 43° +0 -2°. TO INCREASE TRAVEL, TURN REAR JAM NUTS TOWARD AFT END OF BOLT. TO DECREASE TRAVEL TURN JAM NUTS IN DIRECTION OF CENTER OF BOLT.



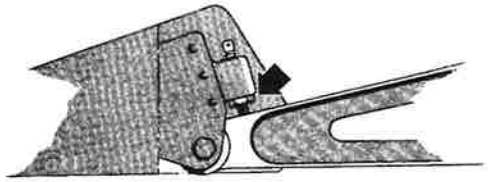
SET SCREW SHOWN IN FIG. 7 SHOULD BE LOOSENED BEFORE ANY CHANGE IN TRAVEL OR RIGGING

IF FLAPS SHOULD JAM WHILE ADJUSTING, REMOVE BOLTS AT FLAP SCREW END AND TURN SWITCH OPPOSITE OF JAM AND TAP SCREW END WITH MALLET

CARE SHOULD BE TAKEN TO AVOID CROSS THREADING WHEN CONNECTING SHAFT NUTS TO MOTOR

AFTER FLAPS ARE RIGGED, SHAFT NUTS AT MOTOR SHOULD BE SAFETIED

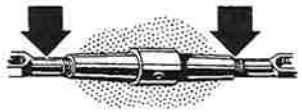
6. WITH FLAP ADJUSTED TO PROPER ELECTRICAL TRAVEL, SET SCREW LOCATED IN BLOCK AT RIGHT OF FLAP SCREW SHOULD BE SET SNUG AGAINST CENTER FLAP HINGE BRACKET.



7. TIGHTEN JAM NUTS ON SET SCREW STOP.

RIGGING FLAPS

BEECHCRAFT MODEL 17

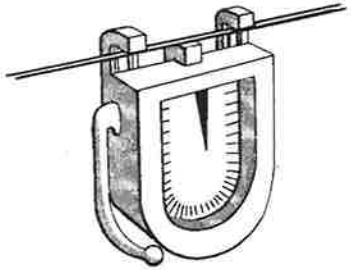


1. MAKE UP AILERON CABLES LEAVING APPROXIMATELY THREE THREADS SHOWING ON EACH END OF THE FOUR TURNBUCKLES LOCATED JUST OUTBOARD FROM FUSELAGE IN WING.

TURNBUCKLES ARE ACCESSIBLE THROUGH INSPECTION DOORS.

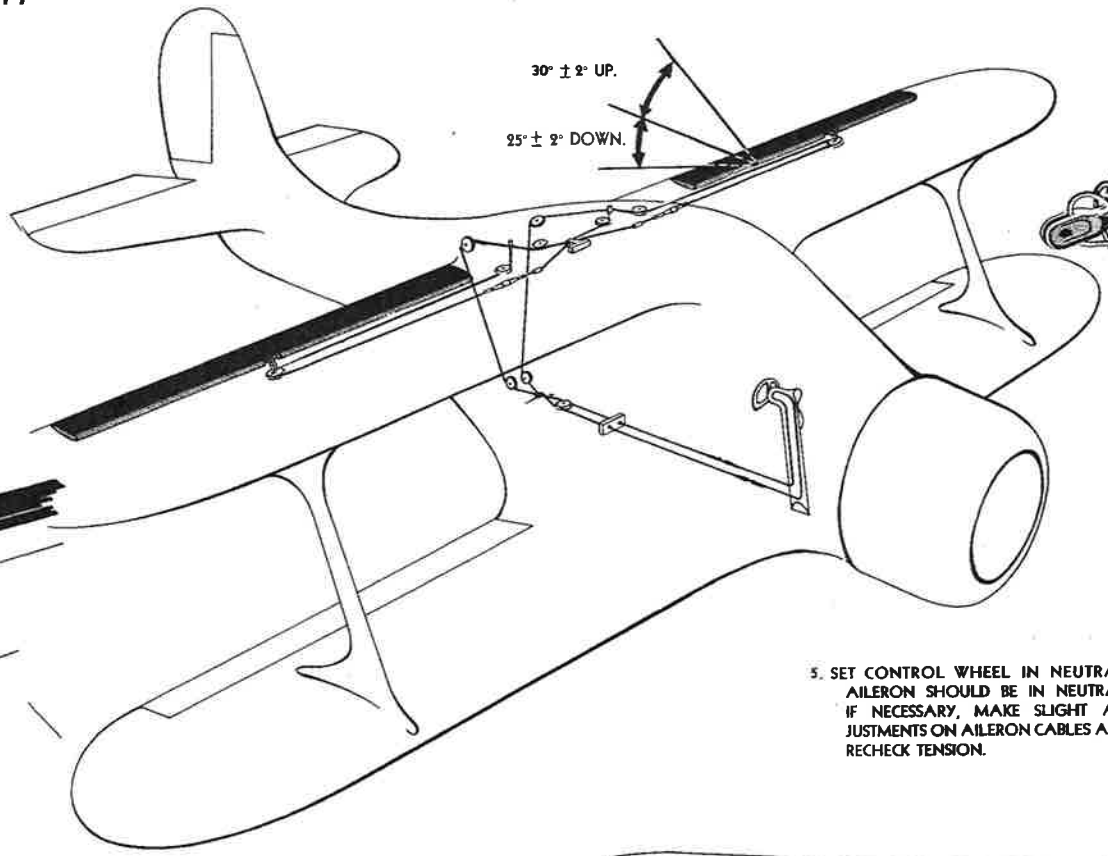
2. SET AILERONS AND CONTROL WHEEL IN NEUTRAL. ON PILOT'S SIDE ONLY.

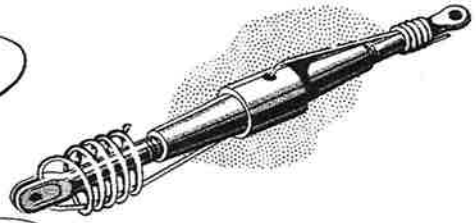
3. TIGHTEN TURNBUCKLES EVENLY, KEEPING AILERONS AND CONTROL WHEEL IN NEUTRAL, UNTIL CORRECT CABLE TENSION IS OBTAINED.



4. AILERON CABLE TENSION IS 45 ±5 POUNDS

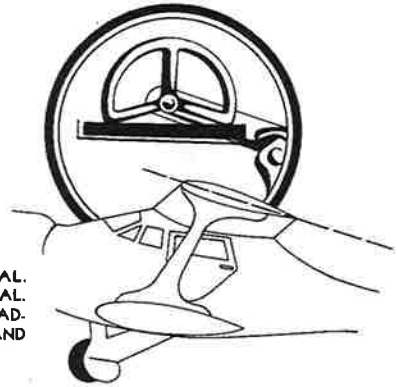
(TENSION SHOULD BE SET AT 55° TEMPERATURE.)



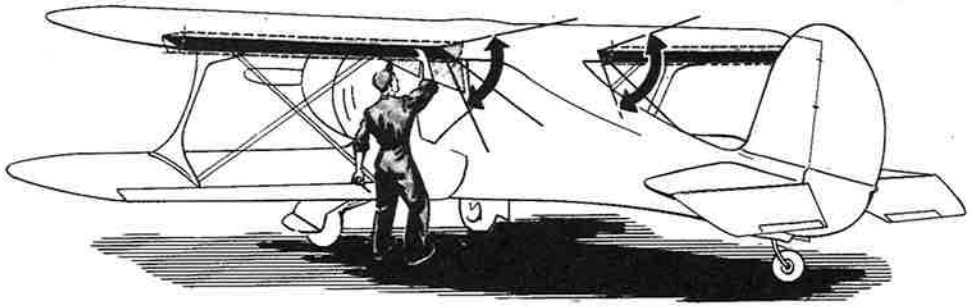


Safety All Turnbuckles

USE 18 GAUGE SAFETY WIRE.



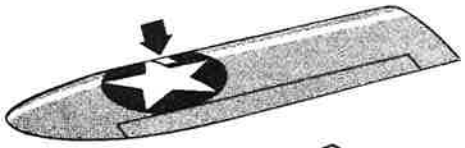
5. SET CONTROL WHEEL IN NEUTRAL. AILERON SHOULD BE IN NEUTRAL. IF NECESSARY, MAKE SLIGHT ADJUSTMENTS ON AILERON CABLES AND RECHECK TENSION.



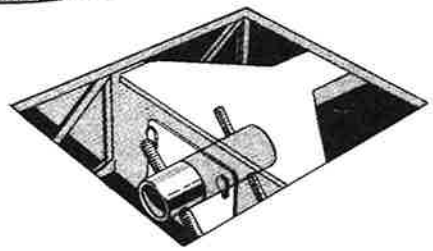
AILERON RIGGING

BEECHCRAFT MODEL 17

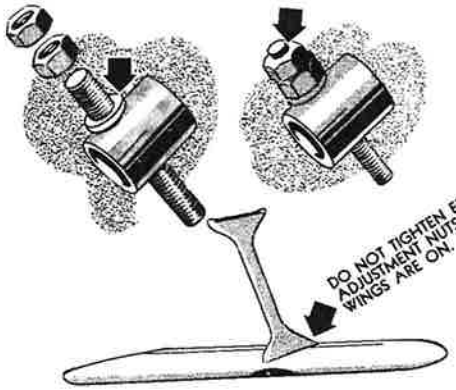
PREPARATION



1. REMOVE OUTBOARD INSPECTION PLATE ON UPPER WING TOP OUTBOARD SURFACE.



2. INSERT L. H. THREADED END OF 3/16" FLYING WIRES THROUGH HOLES IN UPPER WING OUTBOARD SPAR TRUNNION.

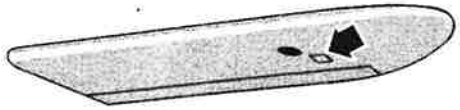


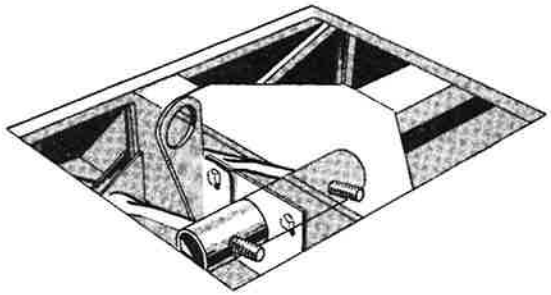
3. INSTALL BALL SEAT WASHER, SEAT TO TRUNNION, AND ADJUST JAM NUTS TO ALLOW TWO THREADS SHOWING FROM END OF WIRE TO FIRST JAM NUT.

4. INSTALL "I" STRUT ON UPPER WING, WING UPSIDE DOWN.

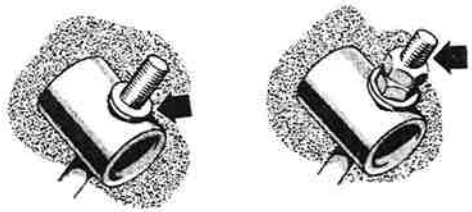
BE SURE ADJUSTMENT NUTS AND BALL SET WASHERS ARE INSTALLED CORRECTLY.

5. REMOVE OUTBOARD INSPECTION PLATE ON LOWER SURFACE OF LOWER WING.



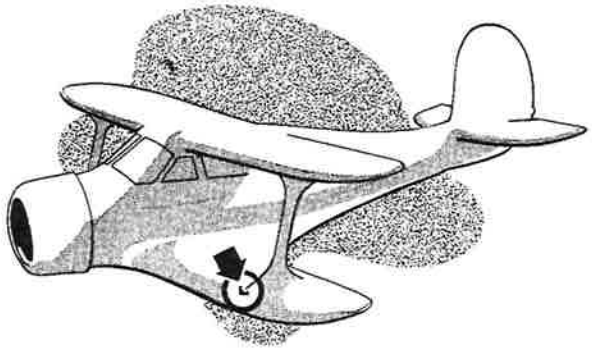


6. INSERT R. H. THREADED END OF 3/16" LANDING WIRES THROUGH HOLES IN OUTBOARD SPAR TRUNNION.

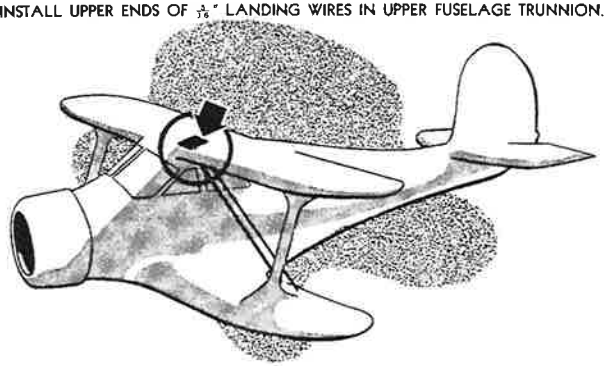


7. INSTALL BALL SEAT WASHER, SEAT TO TRUNNION, AND ADJUST JAM NUTS TO ALLOW 5/8" OF THREADS SHOWING FROM END OF WIRE TO FIRST JAM NUT.

12. INSTALL "I" STRUT BOLTS, FORWARD BOLT FIRST, IN LOWER WING.

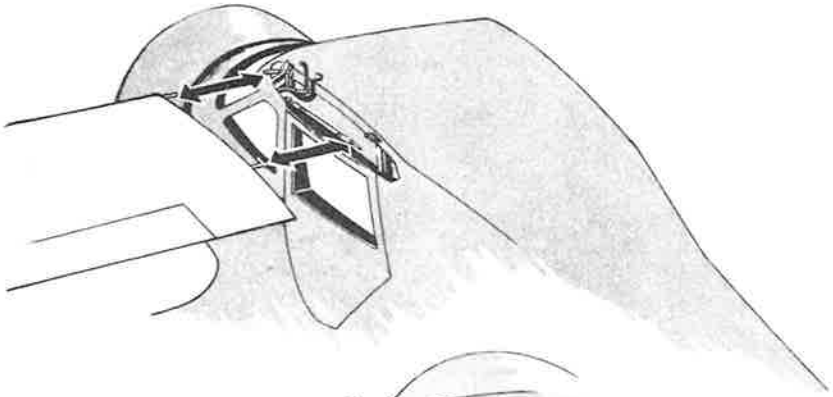


13. INSTALL UPPER ENDS OF 3/16" LANDING WIRES IN UPPER FUSELAGE TRUNNION.

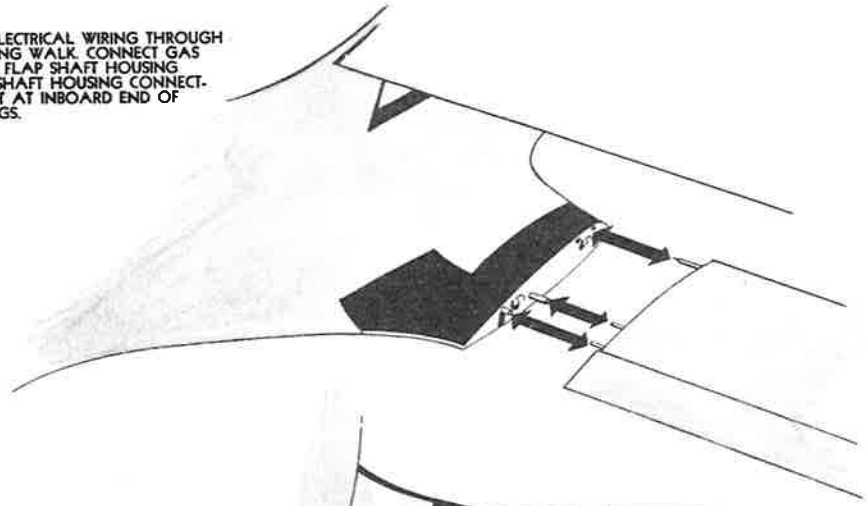


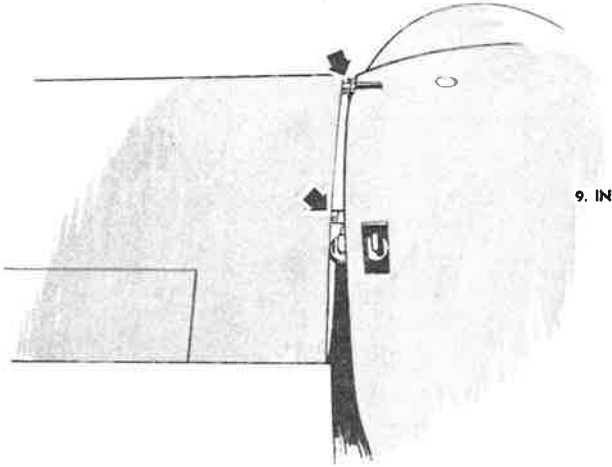
ASSEMBLY

8. CONNECT PITOT LINES AND GAS LINE AT UPPER LEFT FRONT HINGE FITTING.



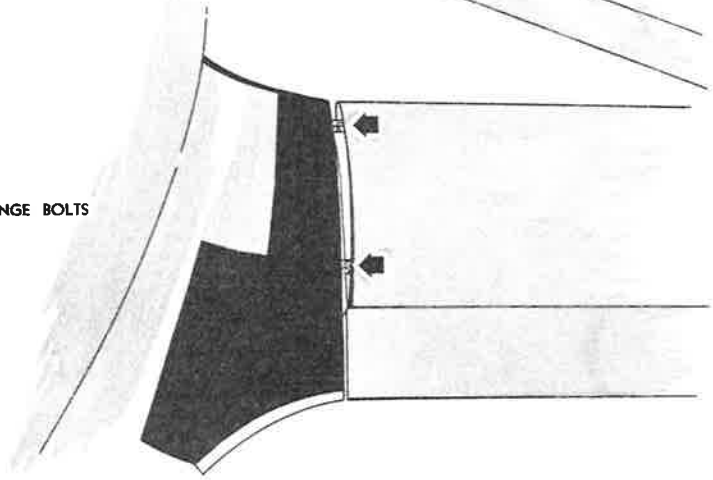
10. ROUTE ELECTRICAL WIRING THROUGH HOLE IN WING WALK. CONNECT GAS LINE. PLACE FLAP SHAFT HOUSING INTO FLAP SHAFT HOUSING CONNECTING BRACKET AT INBOARD END OF LOWER WINGS.





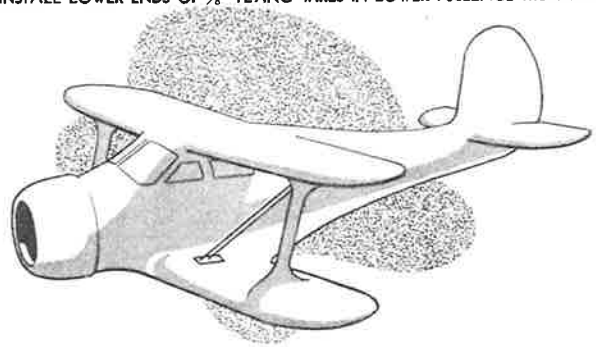
9. INSTALL UPPER WING HINGE BOLTS.

11. INSTALL LOWER WING HINGE BOLTS

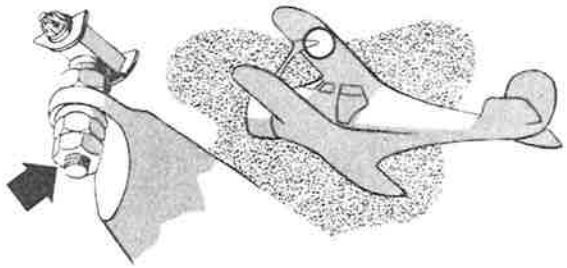


HEADS OF BOLTS AT FRONT SHOULD FACE REAR.
HEADS OF BOLTS AT REAR SHOULD FACE FORWARD.

14. INSTALL LOWER ENDS OF 3/8" FLYING WIRES IN LOWER FUSELAGE TRUNNION.

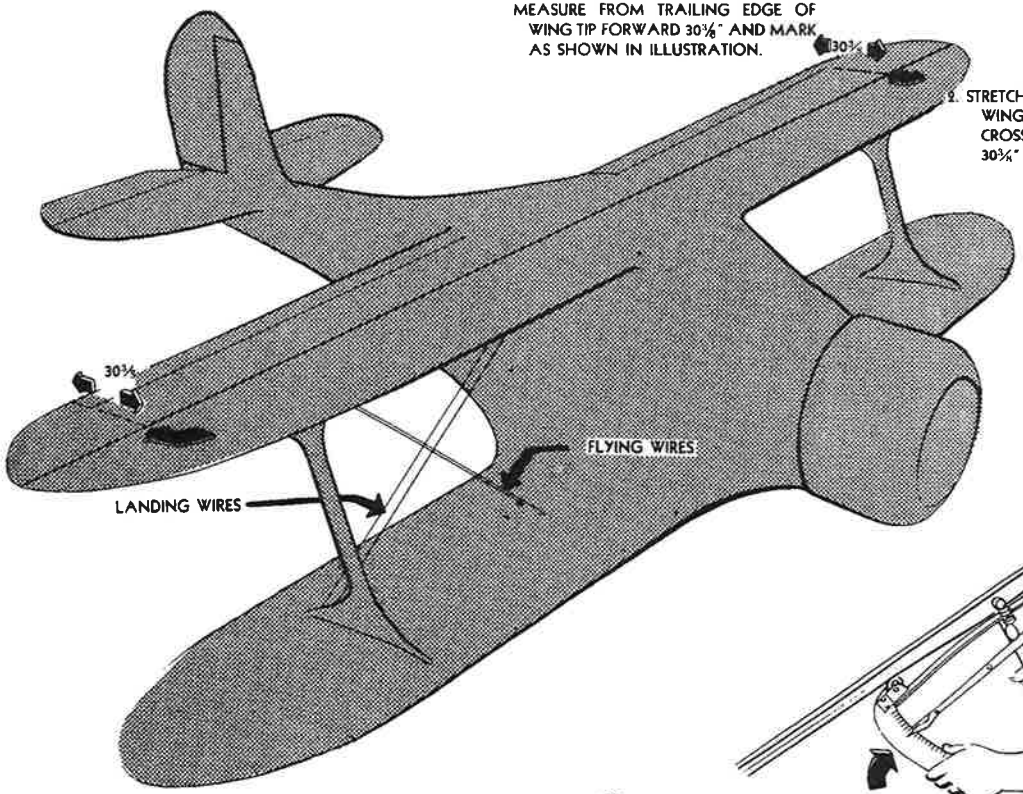


15. ADJUST "I" STRUT ADJUSTMENT BOLT TO ALLOW 1/16" OF THREADS SHOWING FROM END OF BOLT TO FIRST JAM NUT.



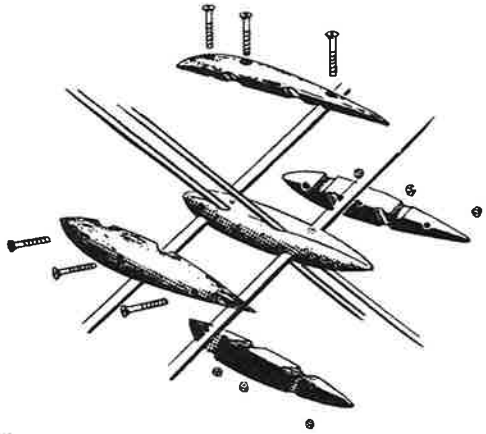
HANGING WINGS

BEECHCRAFT MODEL 17



MEASURE FROM TRAILING EDGE OF WING TIP FORWARD 30⅜" AND MARK AS SHOWN IN ILLUSTRATION.

2. STRETCH DIHEDRAL CHECK STRING FROM WING TIP TO WING TIP. STRING MUST CROSS DIRECTLY OVER POINTS MARKED 30⅜" FROM WING TIP TRAILING EDGES.



6. WRAP LANDING WIRES WITH THREE TURNS OF FRICTION TAPE AND WRAP FLYING WIRES WITH TWO TURNS OF TAPE, THEN INSTALL FLYING WIRE SPREADER AT WIRE INTERSECTION.

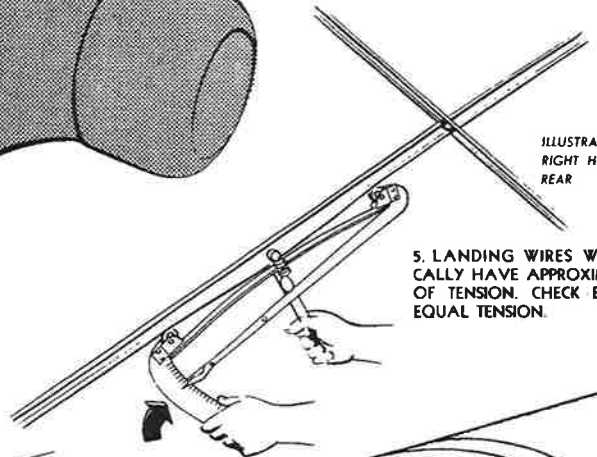
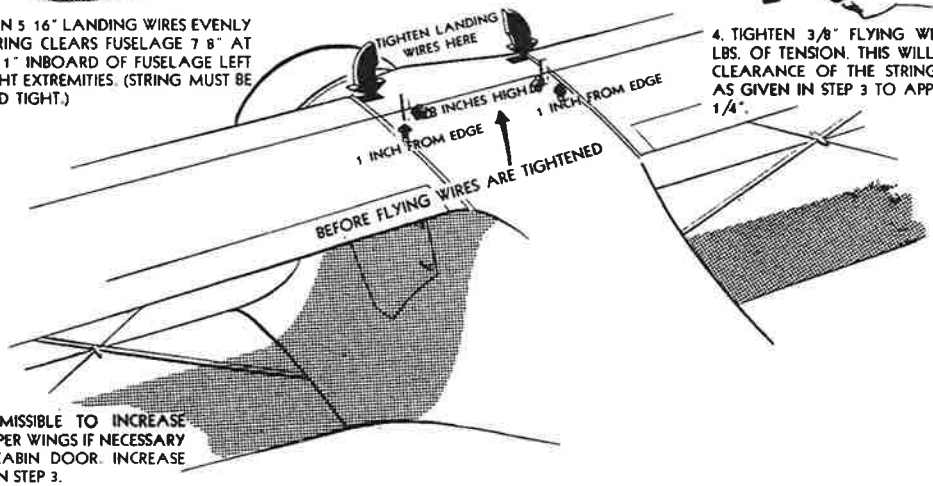


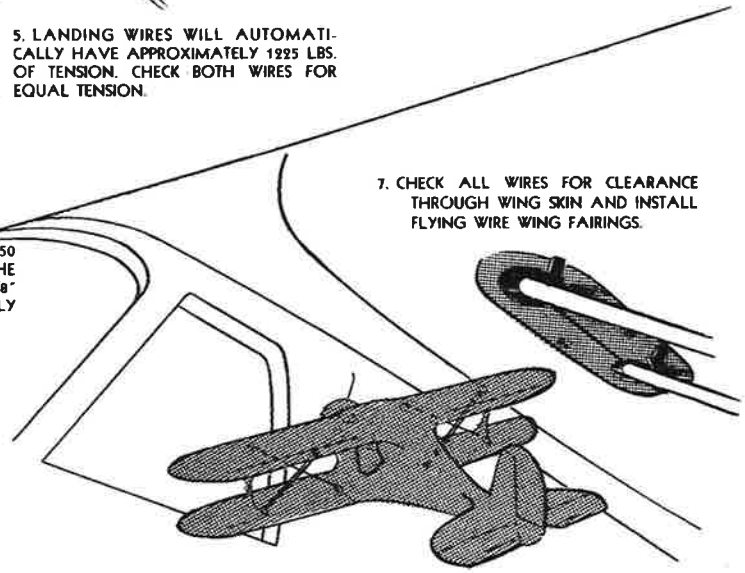
ILLUSTRATION SHOWS RIGHT HAND WING FROM REAR

5. LANDING WIRES WILL AUTOMATICALLY HAVE APPROXIMATELY 1225 LBS. OF TENSION. CHECK BOTH WIRES FOR EQUAL TENSION.

3. TIGHTEN 5 16" LANDING WIRES EVENLY UNTIL STRING CLEARS FUSELAGE 7 8" AT A POINT 1" INBOARD OF FUSELAGE LEFT AND RIGHT EXTREMITIES. (STRING MUST BE STRETCHED TIGHT.)



4. TIGHTEN 3/8" FLYING WIRES TO 1150 LBS. OF TENSION. THIS WILL REDUCE THE CLEARANCE OF THE STRING FROM 7/8" AS GIVEN IN STEP 3 TO APPROXIMATELY 1/4".

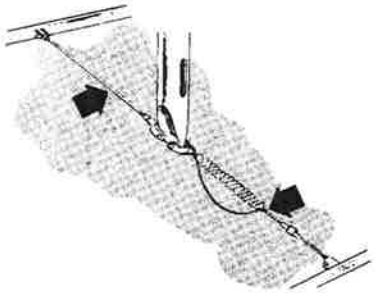


7. CHECK ALL WIRES FOR CLEARANCE THROUGH WING SKIN AND INSTALL FLYING WIRE WING FAIRINGS.

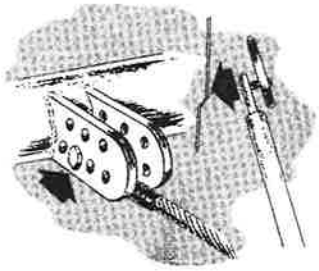
NOTE: IT IS PERMISSIBLE TO INCREASE DIHEDRAL ON UPPER WINGS IF NECESSARY TO CLEAR THE CABIN DOOR. INCREASE 7/8" DIMENSION IN STEP 3.

RIGGING WINGS

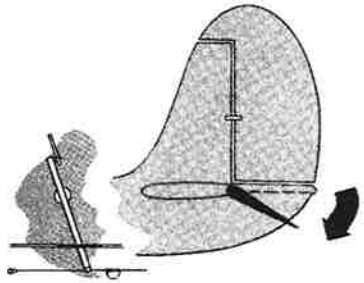
BEECHCRAFT MODEL 17



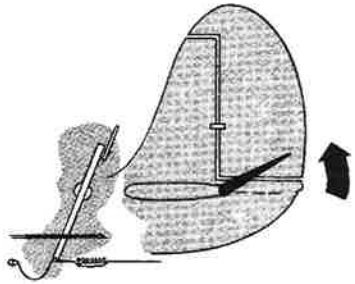
1. CORRECT TRAVEL OF ELEVATOR IS MAINTAINED BY ELEVATOR CONTROL COLUMN CHECK CABLES.



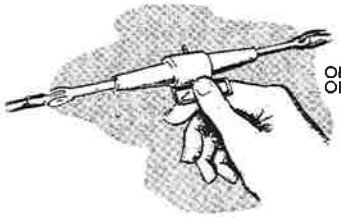
2. SELECT BOLT HOLE IN FORWARD CHECK CABLE BRACKET TO OBTAIN CLEARANCE OF AT LEAST ½" BETWEEN CONTROL COLUMN AND INSTRUMENT PANEL WHEN CONTROL COLUMN IS IN FULL FORWARD POSITION.



3. HOLD CONTROL COLUMN IN FULL FORWARD POSITION, AND ADJUST ELEVATOR CABLES TO OBTAIN CORRECT DOWN TRAVEL (28° ± 2°) ON ELEVATOR.

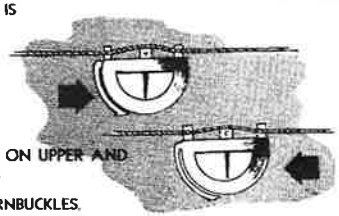


4. PULL ELEVATOR CONTROL COLUMN BACK UNTIL ELEVATOR HAS CORRECT "UP" TRAVEL (30° ± 2°) AND ADJUST CONTROL COLUMN CHECK CABLE.



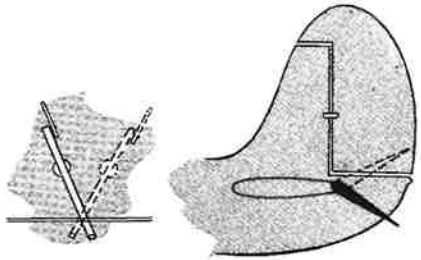
OBTAIN TENSION BY ADJUSTMENT OF EACH TURNBUCKLE.

5. ADJUST ELEVATOR CONTROL CABLES UNTIL CORRECT TENSION IS OBTAINED.

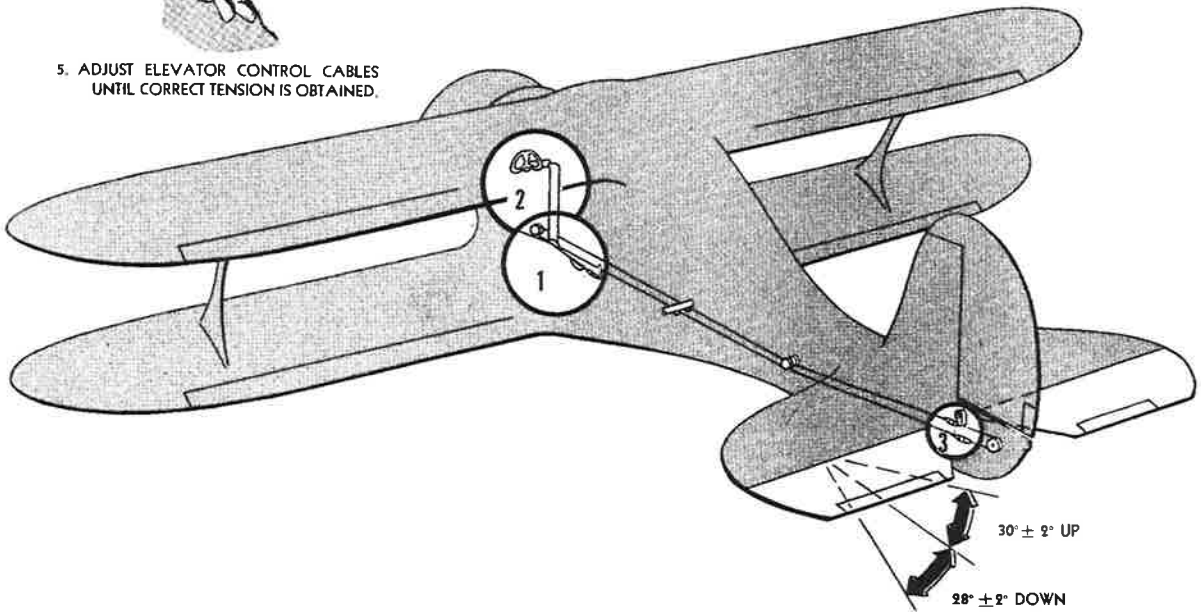


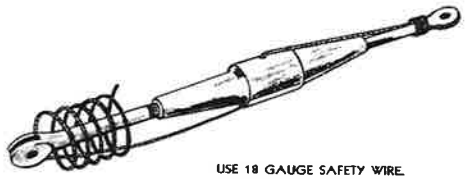
6. 65 ± 5 POUNDS ON UPPER AND LOWER CABLES

SAFETY TURNBUCKLES.



7. WORK ELEVATOR SEVERAL TIMES AND RECHECK ELEVATOR FOR CORRECT TRAVEL AND CABLE TENSION.



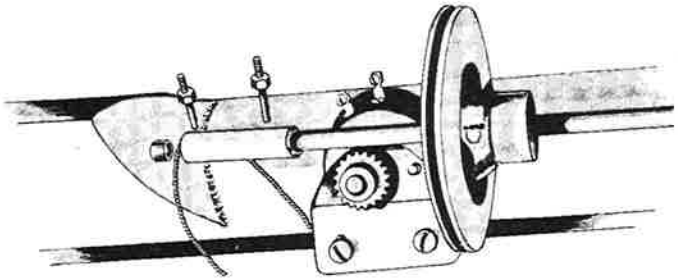


USE 18 GAUGE SAFETY WIRE.

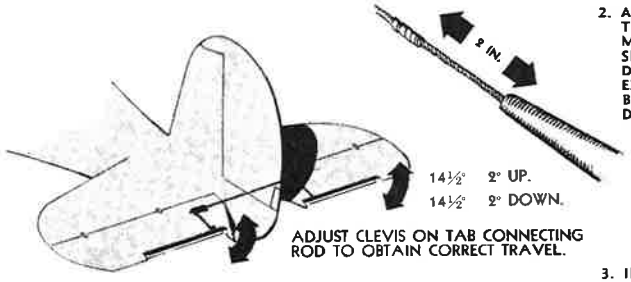
Safety All Turnbuckles

ELEVATOR RIGGING

BEECHCRAFT MODEL 17



1. REMOVE D17777 TAPER PINS THROUGH ELEVATOR TAB SHAFT AND SLIDE COUPLING TO ONE SIDE FAR ENOUGH TO ADMIT TAB CABLE.

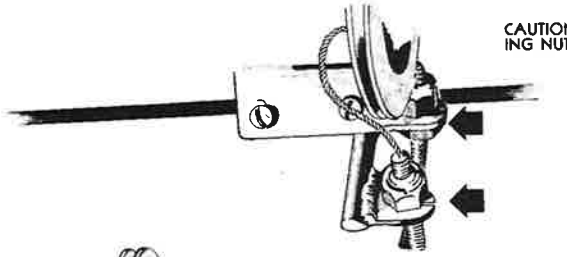


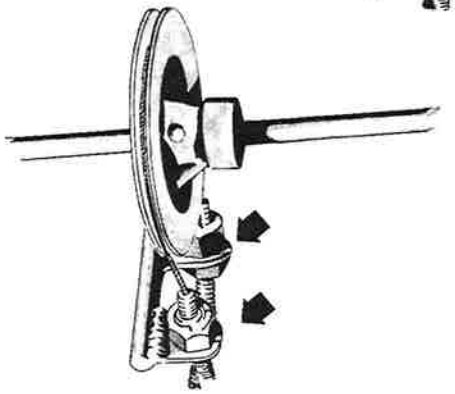
2. ADJUST SPLICE ON RUDDER TAB CABLE TO OBTAIN CLEARANCE OF APPROXIMATELY TWO INCHES BETWEEN CABLE SPLICE AND FORWARD END OF BOWDEN HOUSING. OPERATE TAB TO BOTH EXTREMES AND RECHECK CLEARANCE BETWEEN SPLICE AND END OF BOWDEN HOUSING.

ADJUST CLEVIS ON TAB CONNECTING ROD TO OBTAIN CORRECT TRAVEL.

3. INSTALL ELEVATOR TAB BOWDEN HOUSING THROUGH BOWDEN HOUSING MOUNTING BRACKETS.

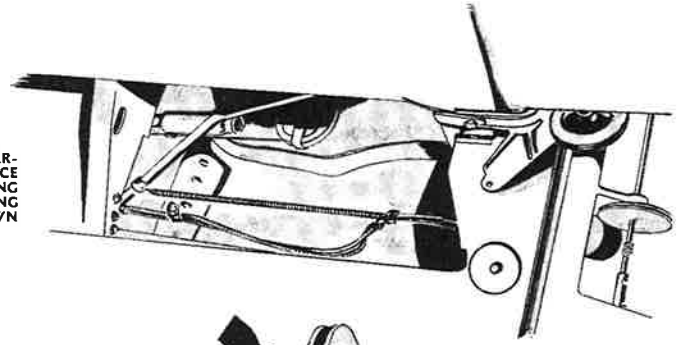
CAUTION! TIGHTEN BOWDEN HOUSING NUTS ONLY TILL SNUG.



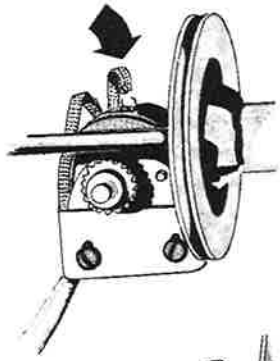


4. ROUTE TAB CABLE THROUGH TAB PULLEY AND ADJUST TO PROPER TENSION. CABLE TENSION IS OBTAINED BY ADJUSTING BOWDEN HOUSING AT MOUNTING BRACKETS. RIG CABLES TO FREE BUT POSITIVE TENSION.

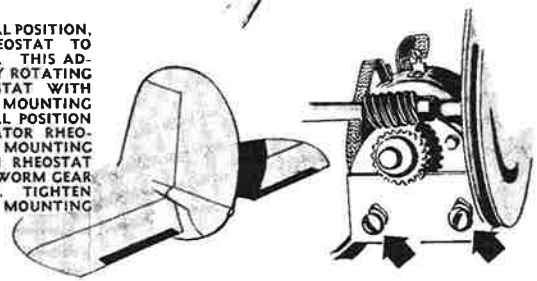
CHECK TO SEE THAT DIRECTION OF TRAVEL TAB WILL CORRESPOND WITH THAT OF INDICATOR.



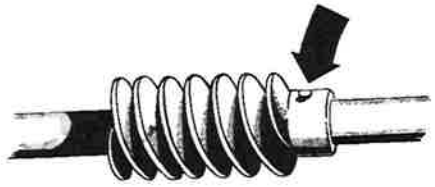
5. INSTALL S71 BOWDEN HOUSING CARRIER SPRING. CHECK FOR CLEARANCE OF SPRING AND BOWDEN HOUSING IN REAR FUSELAGE, OPERATING ELEVATOR TO FULL UP AND DOWN EXTREMES.



6. CONNECT TAB POSITION INDICATOR WIRES AT TAB INDICATOR RHEOSTAT TERMINALS.



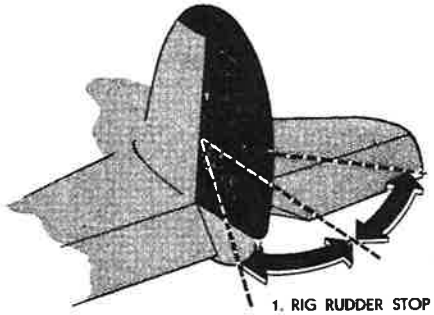
7. WITH TABS SET IN NEUTRAL POSITION, ADJUST INDICATOR RHEOSTAT TO SHOW NEUTRAL ON DIAL. THIS ADJUSTMENT IS OBTAINED BY ROTATING WORM GEAR ON RHEOSTAT WITH RHEOSTAT LOWERED IN MOUNTING BRACKET. AFTER NEUTRAL POSITION IS OBTAINED ON INDICATOR RHEOSTAT, RAISE RHEOSTAT IN MOUNTING BRACKET SO THAT BOTH RHEOSTAT WORM GEAR AND SHAFT WORM GEAR WILL MESH CORRECTLY. TIGHTEN SCREWS ON RHEOSTAT MOUNTING BRACKET.



8. WITH TABS AND RHEOSTAT IN NEUTRAL POSITION, ANCHOR WORM GEAR ON TAB SHAFT BY DRILLING 1/16 INCH HOLE THROUGH SHAFT AND CONNECTING COLLAR AND INSTALLING 102809-062-016 PIN.

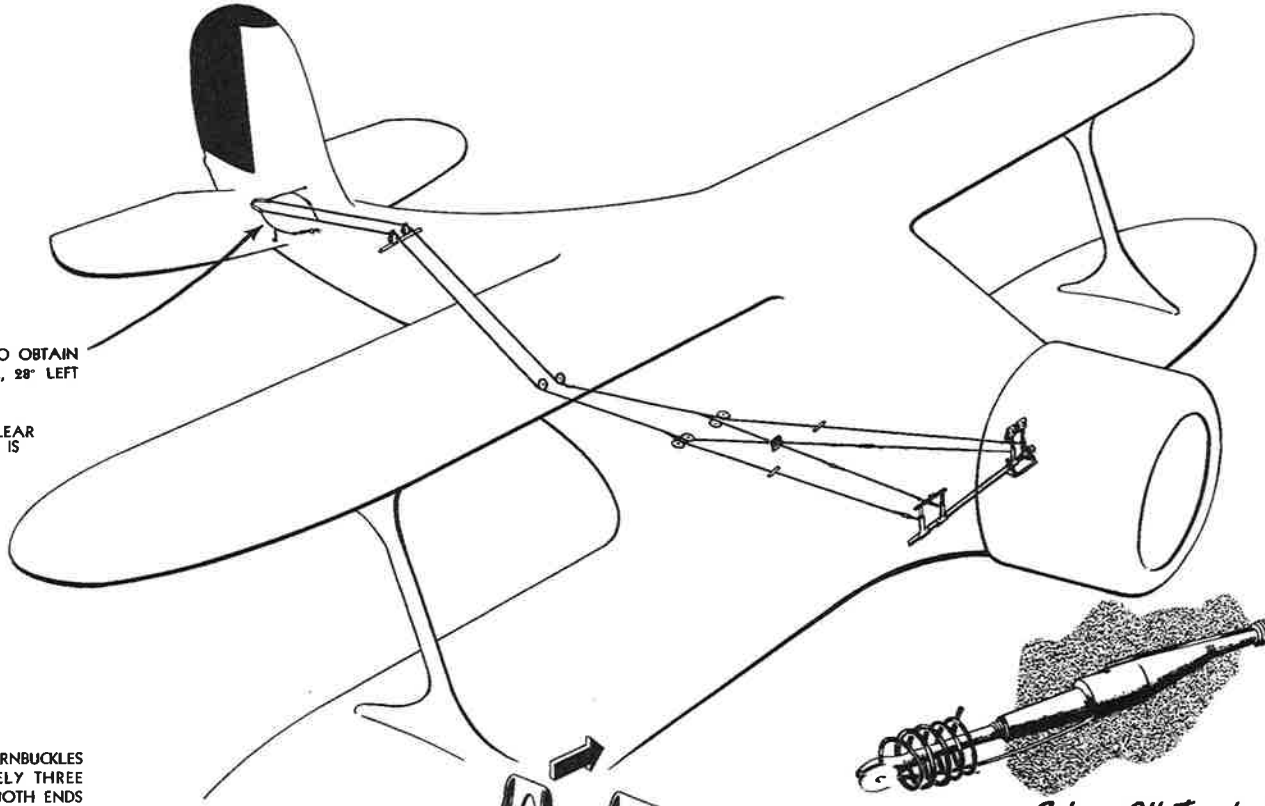
RIGGING ELEVATOR TABS

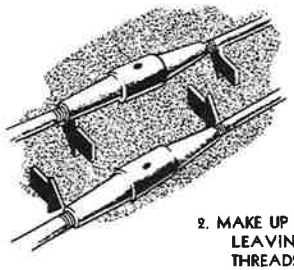
BEECHCRAFT MODEL 17



1. RIG RUDDER STOP CABLES TO OBTAIN CORRECT RUDDER TRAVEL, 28° LEFT AND RIGHT.

NOTE. RUDDER HORN MUST CLEAR FIN SPAR WHEN FULL TRAVEL IS OBTAINED.

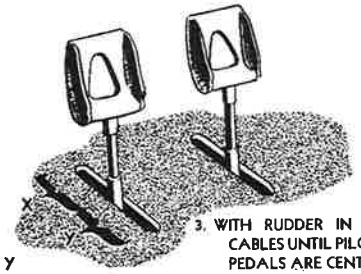




2. MAKE UP RUDDER CABLE TURNBUCKLES LEAVING APPROXIMATELY THREE THREADS SHOWING ON BOTH ENDS OF THE TURNBUCKLE.

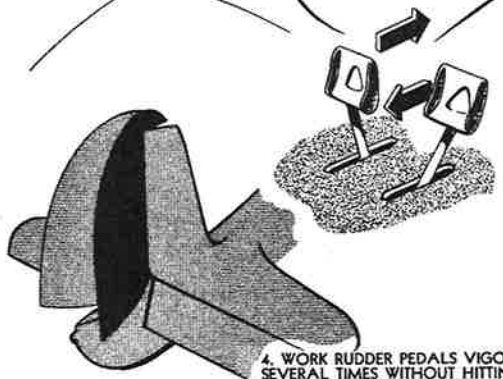
Safety All Turnbuckles

18 GAUGE SAFETY WIRE ON RUDDER CABLES.
20 GAUGE SAFETY WIRE ON RUDDER STOP CABLE

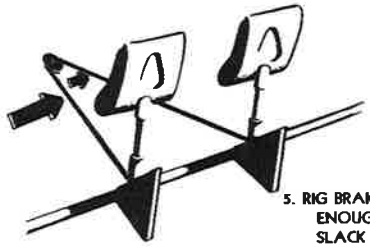


X = Y

3. WITH RUDDER IN NEUTRAL, TIGHTEN CABLES UNTIL PILOT'S AND CO-PILOT'S PEDALS ARE CENTERED FORE AND AFT IN THE RUDDER PEDAL SLOTS.



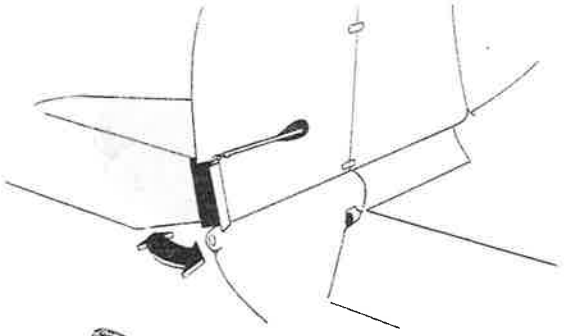
4. WORK RUDDER PEDALS VIGOROUSLY SEVERAL TIMES WITHOUT HITTING STOPS. RECHECK RUDDER PEDALS FOR NEUTRAL POSITION WITH THE RUDDER IN NEUTRAL.



5. RIG BRAKE BALANCE CABLE WITH JUST ENOUGH TENSION TO REMOVE ALL SLACK FROM CABLE.

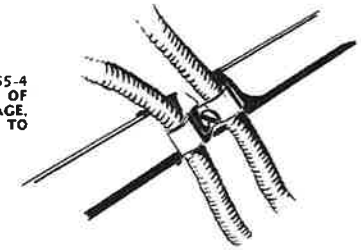
RIGGING RUDDERS

BEECHCRAFT MODEL 17

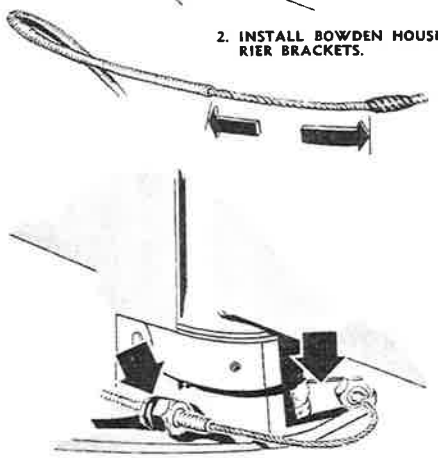


1. OPERATING RUDDER TAB TO BOTH EXTREMES, ADJUST SPLICE IN CABLE TO CLEAR FORWARD END OF BOWDEN HOUSING APPROXIMATELY THREE INCHES.

5. INSTALL 755-12 CLAMP AND 755-4 CLAMP. CHECK FOR CLEARANCE OF BOWDEN HOUSING IN REAR FUSELAGE, OPERATING RUDDER AND TAB TO FULL EXTREMES.

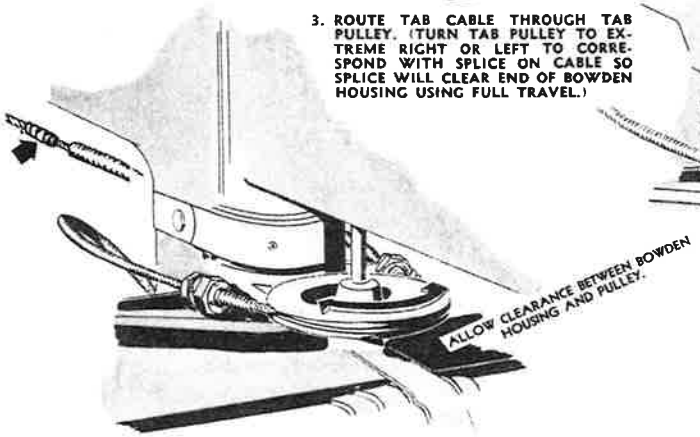


2. INSTALL BOWDEN HOUSING IN CARRIER BRACKETS.



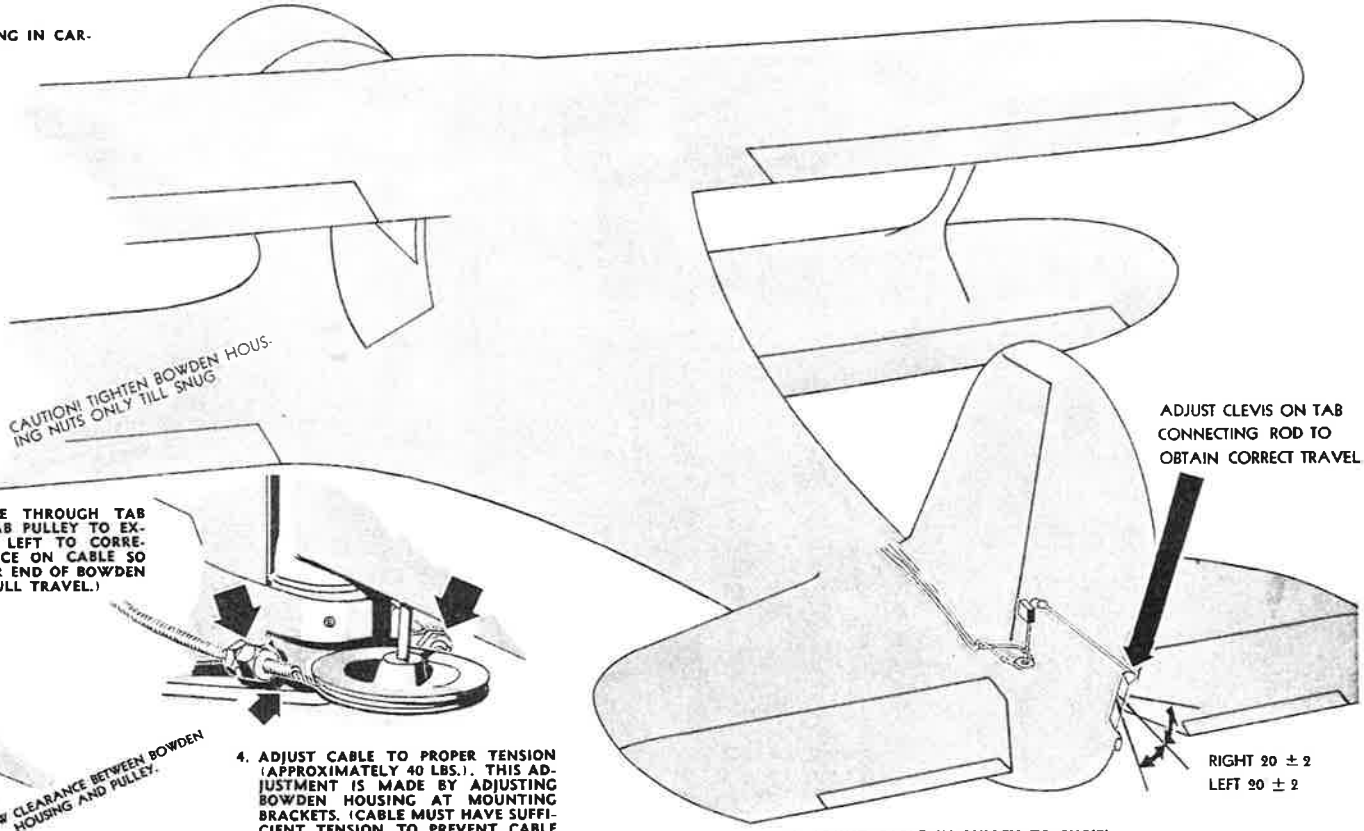
CAUTION! TIGHTEN BOWDEN HOUSING NUTS ONLY TILL SNUG

3. ROUTE TAB CABLE THROUGH TAB PULLEY. (TURN TAB PULLEY TO EXTREME RIGHT OR LEFT TO CORRESPOND WITH SPLICE ON CABLE SO SPLICE WILL CLEAR END OF BOWDEN HOUSING USING FULL TRAVEL.)



ALLOW CLEARANCE BETWEEN BOWDEN HOUSING AND PULLEY.

4. ADJUST CABLE TO PROPER TENSION (APPROXIMATELY 40 LBS.). THIS ADJUSTMENT IS MADE BY ADJUSTING BOWDEN HOUSING AT MOUNTING BRACKETS. (CABLE MUST HAVE SUFFICIENT TENSION TO PREVENT CABLE SLIPPING AT EXTREME ENDS OF TRAVEL.)



ADJUST CLEVIS ON TAB CONNECTING ROD TO OBTAIN CORRECT TRAVEL

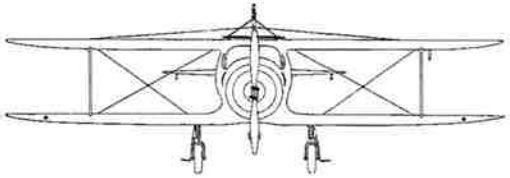
RIGHT 20 ± 2
LEFT 20 ± 2

6. ADJUST CABLE IN PULLEY TO SHOW CORRECT TRAVEL RIGHT AND LEFT CORRESPONDING WITH PLACARD AT CONTROL IN CABIN.

REFER TO CABLE DIAGRAM FOR ENTIRE SYSTEM

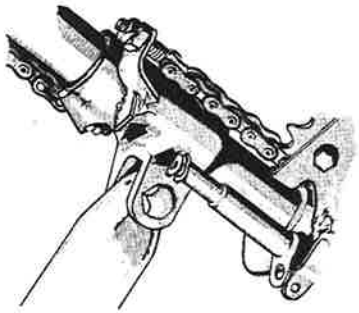
RIGGING RUDDER TABS

BEECHCRAFT MODEL 17

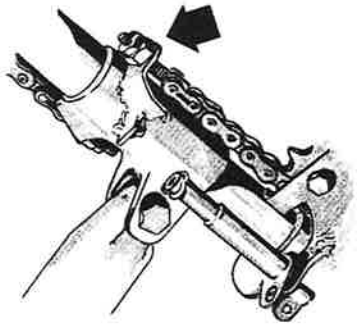


1. HOIST OR JACK AIRPLANE AND BLOCK LOWER WINGS AT STRUT POINTS BEFORE CHECKING LANDING GEAR.

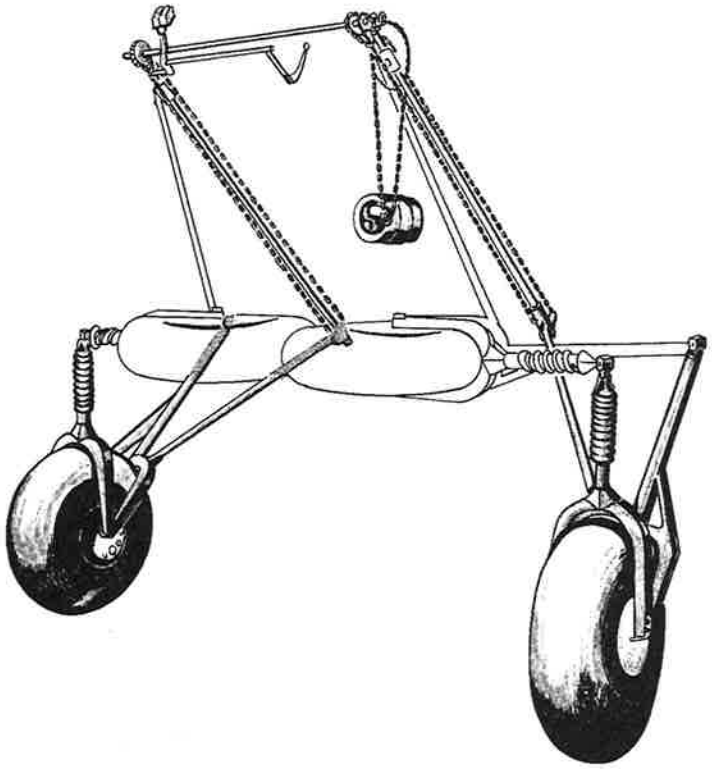
GEAR CAN BE OPERATED MANUALLY WITH MASTER SWITCH OFF OR ELECTRICALLY WITH MASTER SWITCH ON.

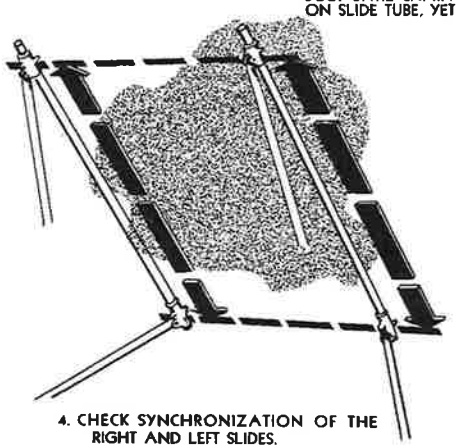


2. ROLL LANDING GEAR UP UNTIL LANDING GEAR SLIDE CLEARS THROTTLE STOP APPROXIMATELY ONE INCH.

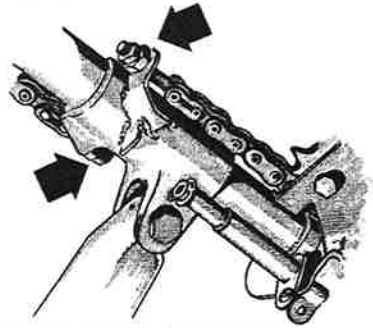


3. TIGHTEN LANDING GEAR CHAIN EYE BOLT UNTIL CHAIN DOES NOT DRAG ON SLIDE TUBE, YET OPERATES FREELY.

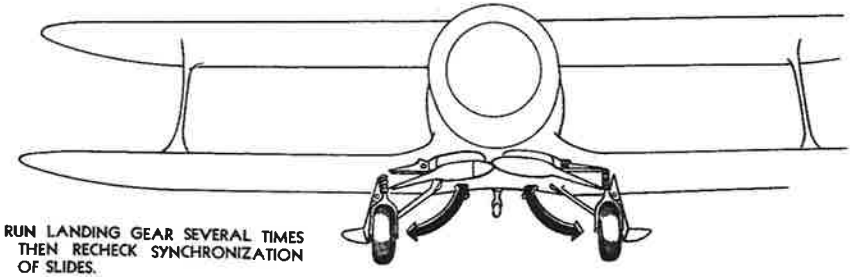




4. CHECK SYNCHRONIZATION OF THE RIGHT AND LEFT SLIDES.



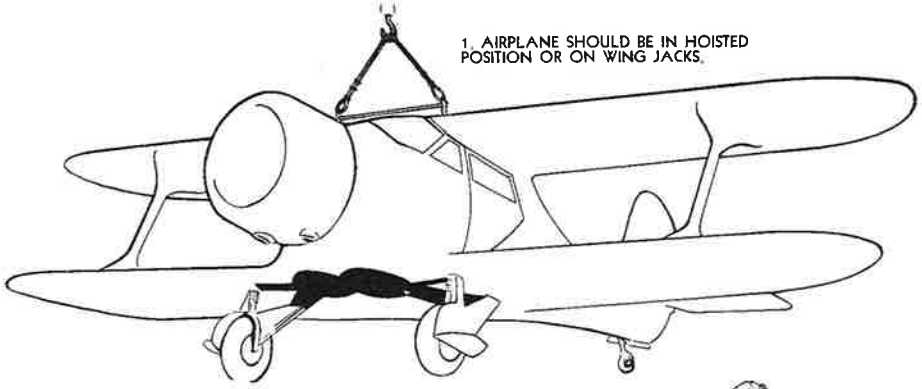
5. IF ONE SLIDE IS HIGHER, LOOSEN THE INBOARD EYEBOLT AND TIGHTEN THE OUTBOARD BOLT AN EVEN NUMBER OF TURNS UNTIL SLIDES ARE SYNCHRONIZED AT EXTENDED POSITION.



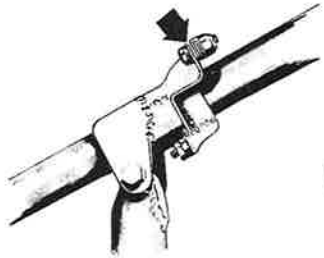
6. RUN LANDING GEAR SEVERAL TIMES THEN RECHECK SYNCHRONIZATION OF SLIDES.

RIGGING LANDING GEAR RETRACT CHAINS

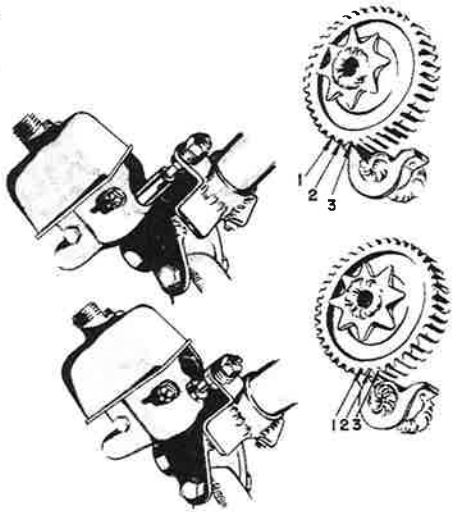
BEECHCRAFT MODEL 17



1. AIRPLANE SHOULD BE IN HOISTED POSITION OR ON WING JACKS.



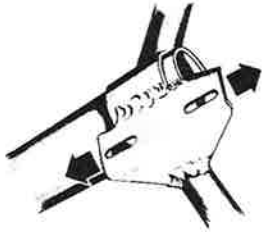
2. ADJUST LOWER LIMIT SWITCH BY ADDING OR REMOVING SHIMS TO RAISE OR LOWER BOLT HEAD IN LIMIT SWITCH ACTUATOR MOUNTING BRACKET AT RIGHT SIDE OF SLIDE ON SLIDE TUBE.



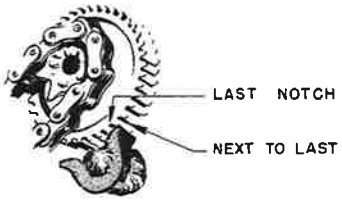
3. ADJUST LOWER SWITCH TO BREAK CIRCUIT ON THE THIRD TO LAST NOTCH OF TRAVEL OF RATCHET DOGS ON RATCHET COG WHEEL.

4. RUN GEAR ALL THE WAY DOWN ELECTRICALLY AND WITH GEAR IN FULLY EXTENDED POSITION, CHECK RATCHET TO MAKE SURE DOGS ARE FULLY ENGAGED IN COG WHEEL ON RATCHET.

5. POSITION OF RATCHET COG WHEEL MAY BE CHANGED BY ADJUSTING JAM NUTS AN EVEN NUMBER OF TURNS ON TOP AND LOWER LANDING GEAR CHAINS.

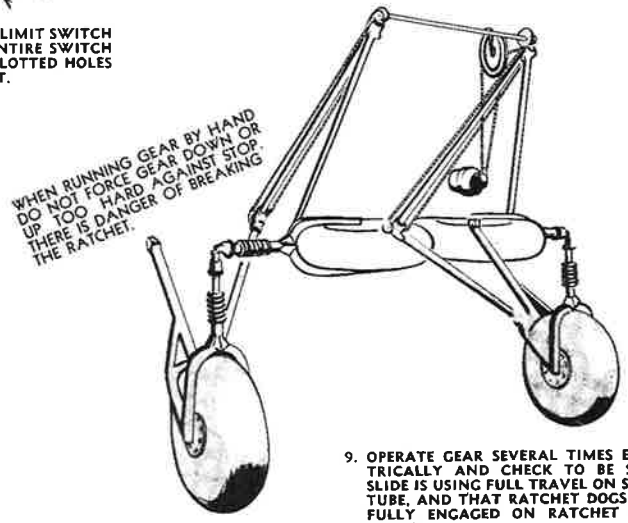


6. ADJUSTMENT OF UPPER LIMIT SWITCH IS MADE BY MOVING ENTIRE SWITCH BOX UP OR DOWN IN SLOTTED HOLES IN MOUNTING BRACKET.



7. UPPER LIMIT SWITCH SHOULD BE ADJUSTED TO BREAK CIRCUIT HALF WAY BETWEEN THE LAST AND NEXT TO LAST NOTCH OF TRAVEL OF RATCHET DOGS ON RATCHET COG WHEEL.

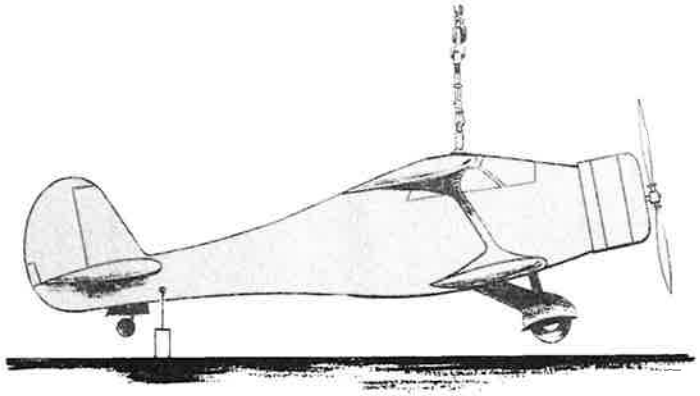
8. TRAVEL OF LEFT LANDING GEAR CHAIN SHOULD BE SYNCHRONIZED WITH RIGHT.



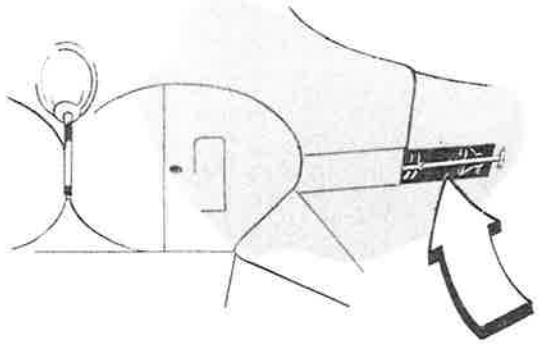
9. OPERATE GEAR SEVERAL TIMES ELECTRICALLY AND CHECK TO BE SURE SLIDE IS USING FULL TRAVEL ON SLIDE TUBE, AND THAT RATCHET DOGS ARE FULLY ENGAGED ON RATCHET COG WHEEL.

RIGGING MAIN LANDING GEAR AND ADJUSTING LIMIT SWITCHES

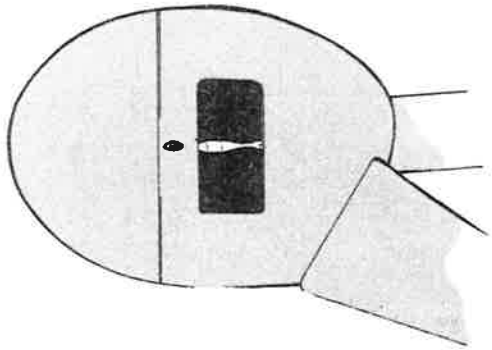
BEECHCRAFT MODEL 17



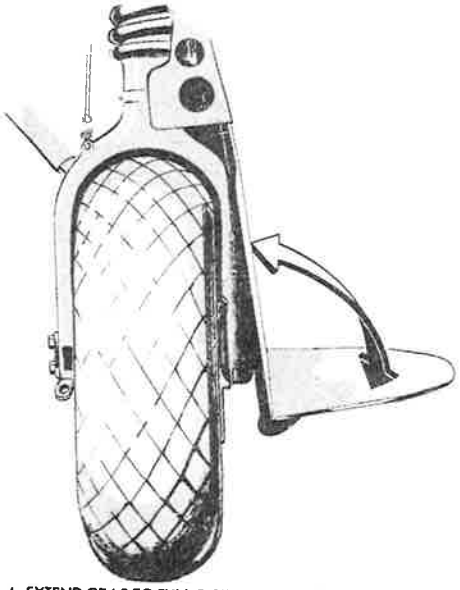
1. HOIST AIRPLANE.



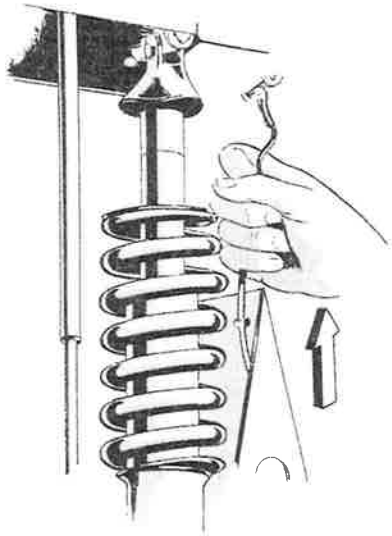
2. RETRACT LANDING GEAR TO FULL "UP" POSITION AND CHECK CABLE TENSION ON HINGED DOOR.



3. ADJUST DOOR BY TIGHTENING TURNBUCKLE TO INCREASE TENSION ON DOOR OR BY LOOSENING TURNBUCKLE TO RELIEVE TENSION.



4. EXTEND GEAR TO FULL DOWN POSITION. PLACE DOOR AT A 90° ANGLE WITH MAIN WHEEL FAIRING.

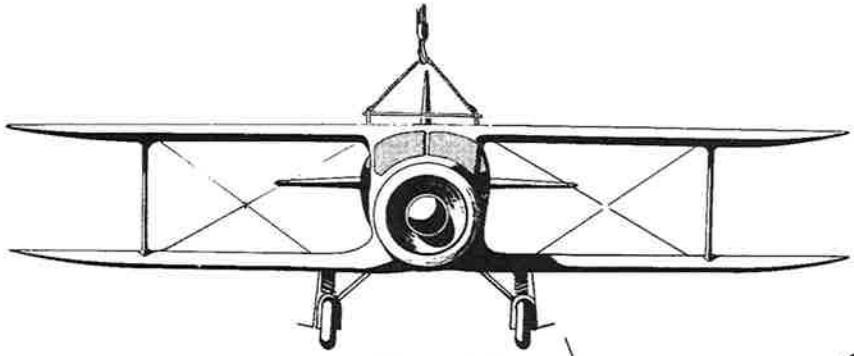


5. HOLDING DOOR AT 90° ANGLE WITH MAIN WHEEL FAIRING, PULL CABLE TIGHT AT INBOARD END.

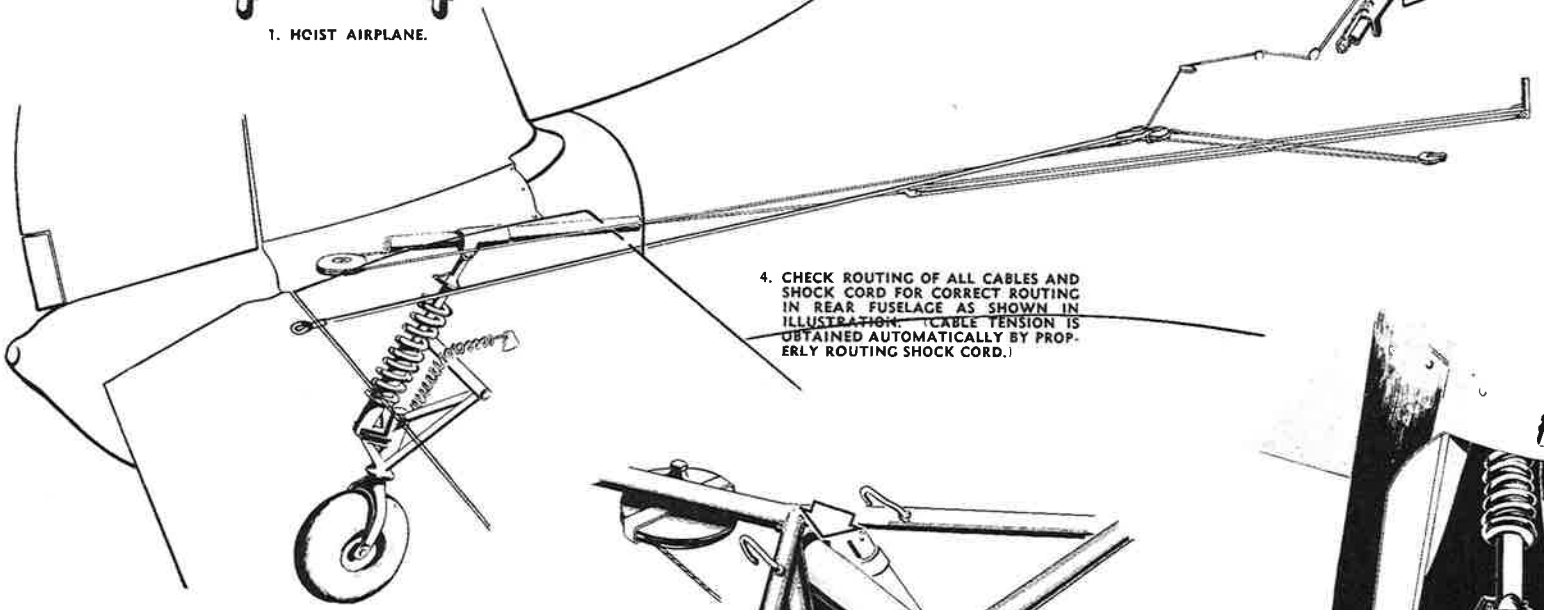
6. PLACE WASHER AND FERRULE SNUG AGAINST INBOARD CABLE FAIRLEAD AND SOLDER IN PLACE.

ALL FAIRING SHOULD HAVE 1/8 TO 3/16" CLEARANCE BETWEEN BELLY OPENINGS.

RIGGING MAIN LANDING GEAR FAIRING

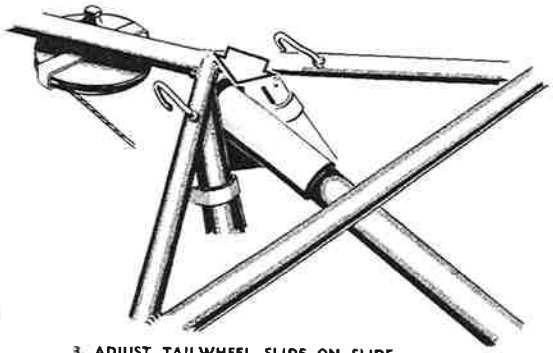


1. HOIST AIRPLANE.

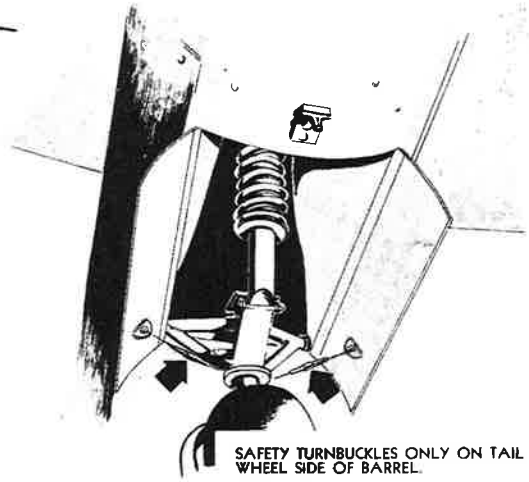


4. CHECK ROUTING OF ALL CABLES AND SHOCK CORD FOR CORRECT ROUTING IN REAR FUSELAGE AS SHOWN IN ILLUSTRATION. (CABLE TENSION IS OBTAINED AUTOMATICALLY BY PROPERLY ROUTING SHOCK CORD.)

2. ADJUST TRAVEL OF SLIDE ON SLIDE TUBE BY TURNING TURNBUCKLE, LOCATED JUST AFT OF BAGGAGE COMPARTMENT, TO RIGHT OR LEFT.



3. ADJUST TAILWHEEL SLIDE ON SLIDE TUBE TO ALLOW APPROXIMATELY 1/32 INCH OF CLEARANCE BETWEEN AFT END OF SLIDE AND SLIDE TUBE MOUNT AT AFT END OF SLIDE TUBE.

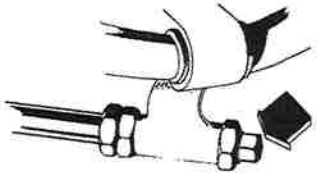


SAFETY TURNBUCKLES ONLY ON TAIL WHEEL SIDE OF BARREL.

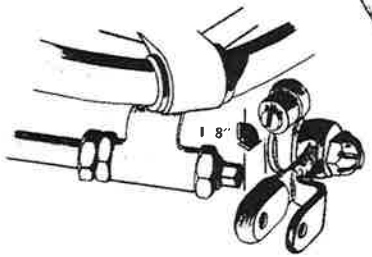
5. TAILWHEEL DOORS SHOULD BE RIGGED TO FIT SNUG TO CONTOUR OF REAR FUSELAGE. ADJUSTMENT IS MADE BY USE OF THE TWO TURNBUCKLES LOCATED IN THE CENTER OF THE DOOR ACTUATOR ARMS.

RIGGING TAIL WHEEL AND TAIL WHEEL DOORS

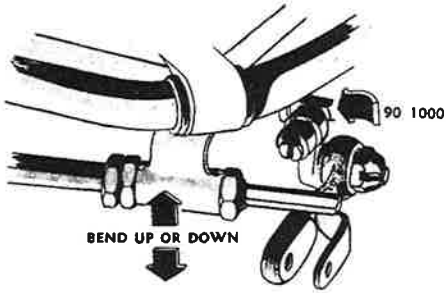
BEECHCRAFT MODEL 17



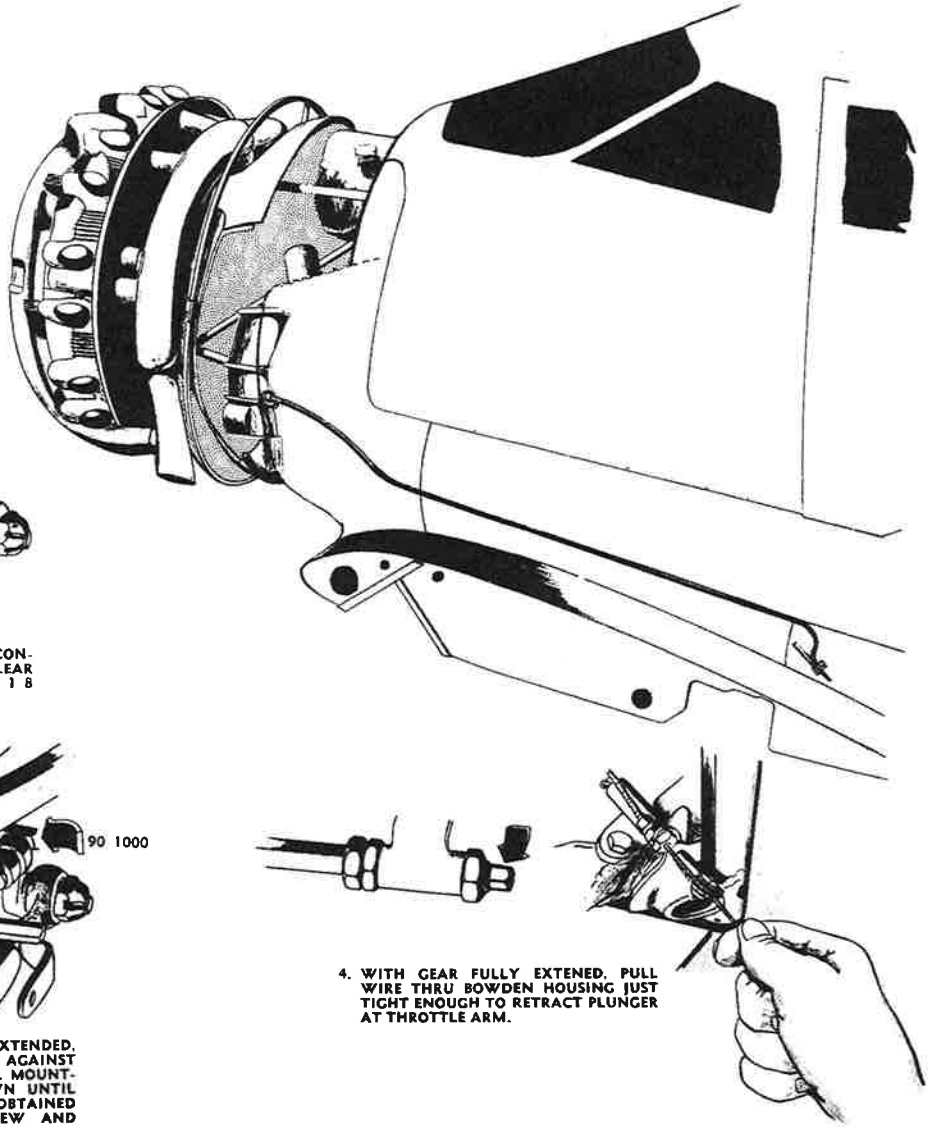
1. INSTALL PLUNGER END OF CONTROL IN MOUNTING BRACKET AT RIGHT REAR OF CARBURETOR.



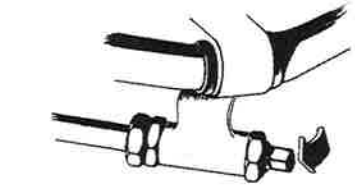
2. CUT PLUNGER OFF AT END OF CONTROL JUST LONG ENOUGH TO CLEAR THROTTLE ARM APPROXIMATELY 1 8 INCH.



3. WITH PLUNGER FULLY EXTENDED, AND THROTTLE ARM SNUG AGAINST PLUNGER, ADJUST CONTROL MOUNTING BRACKET UP OR DOWN UNTIL CLEARANCE OF 90/1000 IS OBTAINED BETWEEN ADJUSTING SCREW AND STOPS.



4. WITH GEAR FULLY EXTENED, PULL WIRE THRU BOWDEN HOUSING JUST TIGHT ENOUGH TO RETRACT PLUNGER AT THROTTLE ARM.



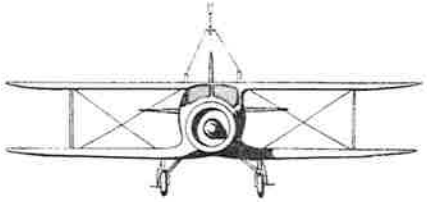
6. OPERATE LANDING GEAR UP AND DOWN SEVERAL TIMES ELECTRICALLY. WITH GEAR FULLY EXTENDED, PLUNGER AT THROTTLE ARM SHOULD BE FULLY RETRACTED.

TO CHECK THROTTLE STOP ROLL GEAR ½" FROM PLUNGER LOCATED AT LOWER END OF LEFT HAND SLIDE TUBE (REFER TO FIGURE 5 PAGE 9). OPEN THROTTLE ABOUT HALF — THEN CLOSE — ROLL GEAR CLEAR DOWN — THROTTLE SHOULD CLOSE ANOTHER ¼".

5. HOLDING WIRE IN THIS POSITION, BEND WIRE AROUND BOLT LOCATED IN THE END OF ACTUATING PLUNGER AT THE INBOARD END OF LEFT DIAGONAL LIFT LEG AND TIGHTEN DOWN NUT.

RIGGING THROTTLE STOPS

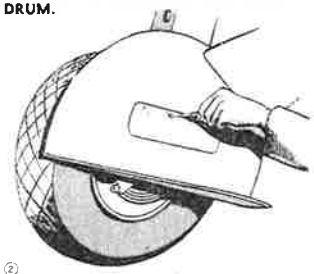
BEECHCRAFT MODEL 17

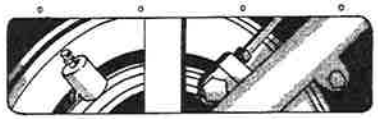


1. HOIST AIRPLANE.

ALWAYS DEFLATE TIRES BEFORE DOING ANY WORK ON WHEELS.

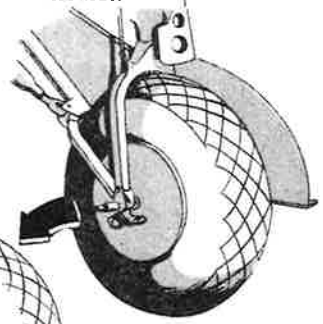
2. DISCONNECT BRAKE LINE AT WHEEL DRUM.

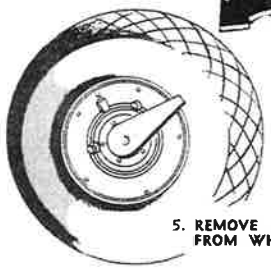




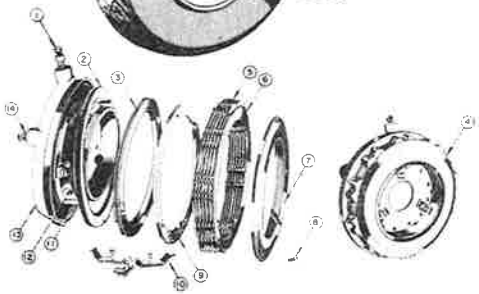
3. REMOVE INSPECTION PLATE ON WHEEL FAIRING.

4. REMOVE AXLE AND ENTIRE WHEEL ASSEMBLY.





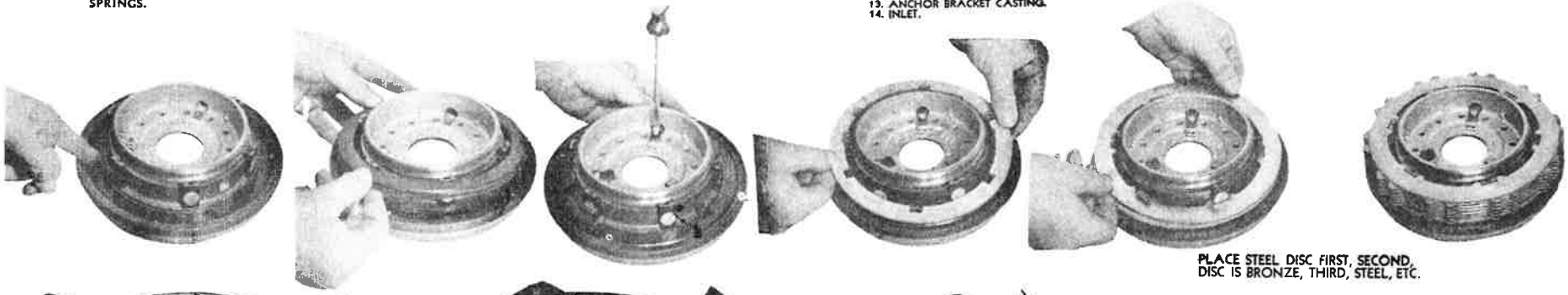
5. REMOVE ASSEMBLED BRAKE UNIT FROM WHEEL.



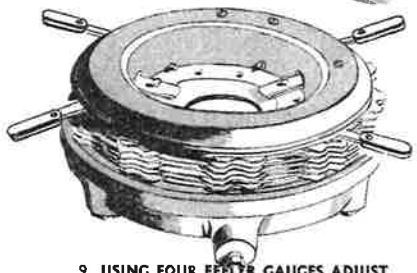
6. DISASSEMBLE BRAKE UNIT
   1. BLEEDER PLUG AND CAP.
   2. PISTON SEAL.
   3. PISTON.
   4. ASSEMBLED BRAKE UNIT.
   5. ROTATING BRONZE DISC.
   6. STATIONARY STEEL DISC.
   7. RETAINING AND ADJUSTMENT NUT.
   8. RETAINING NUT LOCK SCREW.
   9. ASBESTOS INSULATOR DISC.
   10. RETURN SPRINGS.
   11. KEYS FOR STEEL DISCS.
   12. SEAL EXPANSION SPRING.
   13. ANCHOR BRACKET CASTING.
   14. INLET.

7. WASH ALL PARTS OF BRAKE UNIT WITH INDUSTRIAL OR DENATURED ALCOHOL. DO NOT USE WOOD ALCOHOL, OIL OR GASOLINE ON BRAKE UNIT OR PARTS.

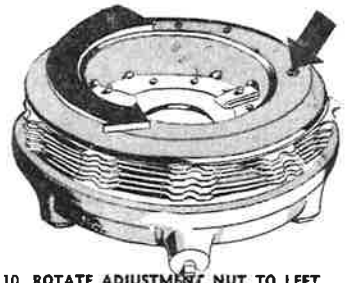
8. REASSEMBLE PARTS OF BRAKE UNIT IN THE ORDER SHOWN IN ILLUSTRATION, CAREFULLY INSPECTING EACH PART FOR DEFECTS. CHECK PISTON SEAL FOR CRACKS. CHECK ALL DISCS FOR WEAR AND ALIGNMENT. WARPED DISCS MUST BE REPLACED. SAFETY EACH OF THE THREE RETURN SPRINGS.



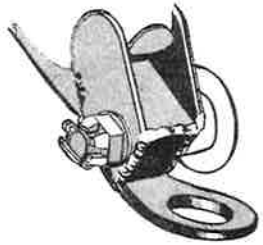
PLACE STEEL DISC FIRST, SECOND, DISC IS BRONZE, THIRD, STEEL, ETC.



9. USING FOUR FEELER GAUGES ADJUST BRAKE TO HAVE .040 CLEARANCE BETWEEN ADJUSTMENT NUT AND FACING STEEL DISC.

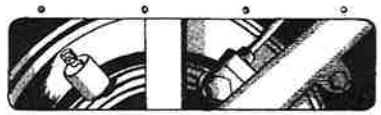


10. ROTATE ADJUSTMENT NUT TO LEFT TO FIRST RECESS PROVIDED FOR RETAINING NUT LOCK SCREW AND INSTALL LOCK SCREW.



11. INSTALL ASSEMBLED BRAKE UNIT IN WHEEL.

12. INSTALL WHEEL ON AIRPLANE. SAFETY LOCK NUT ON AXLE.

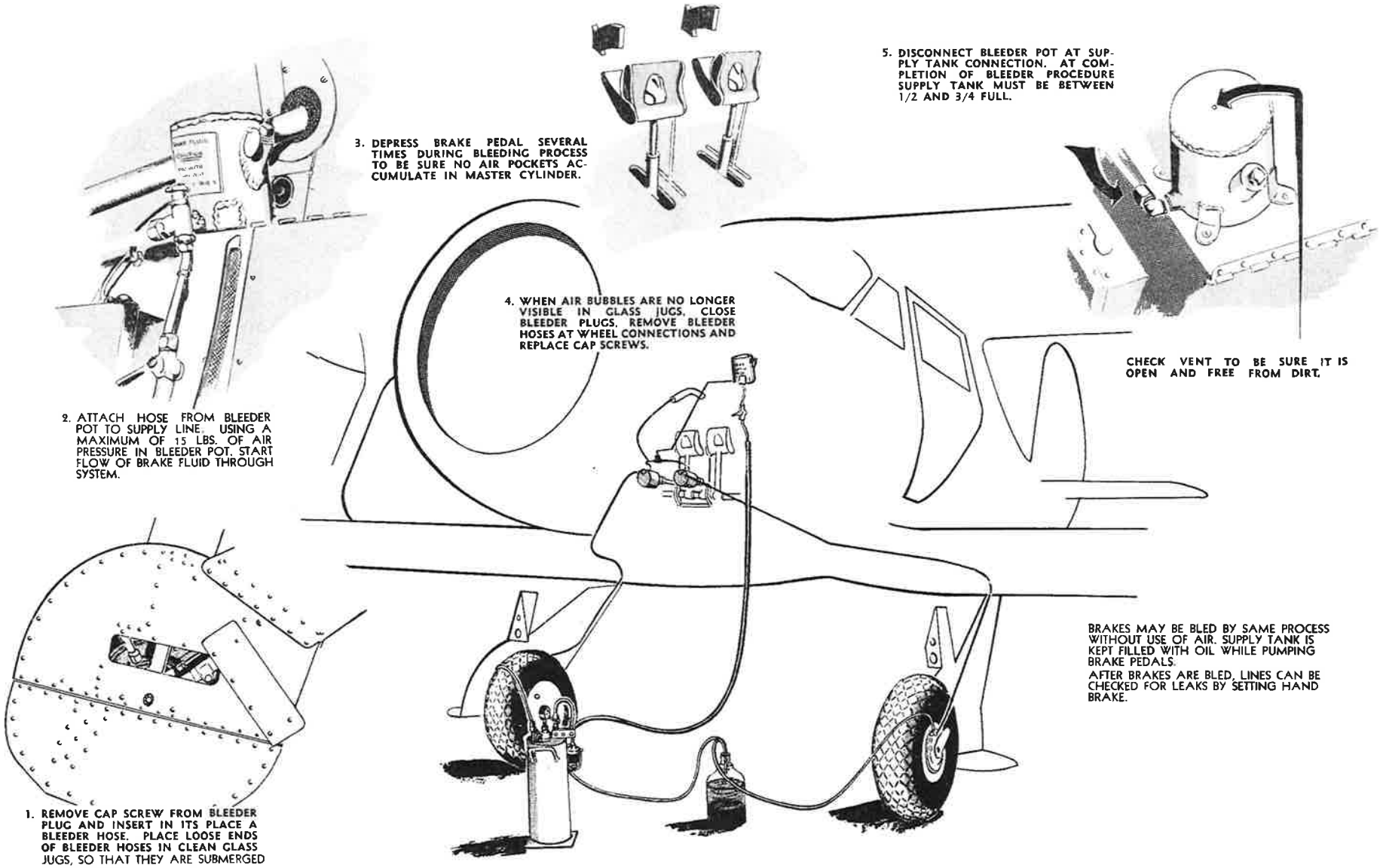


13. FLUSH BRAKE HYDRAULIC LINE FROM TOP TO BOTTOM WITH CLEAN BRAKE FLUID OF SAME SPECIFICATION USED IN SYSTEM.

14. CONNECT HYDRAULIC LINE AT FLUID INLET ON BRAKE DRUM.

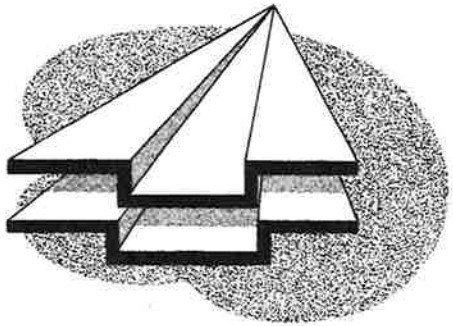
ADJUSTING BRAKES

BEECHCRAFT MODEL 17



BRAKE BLEEDING PROCEDURE

SECTION II



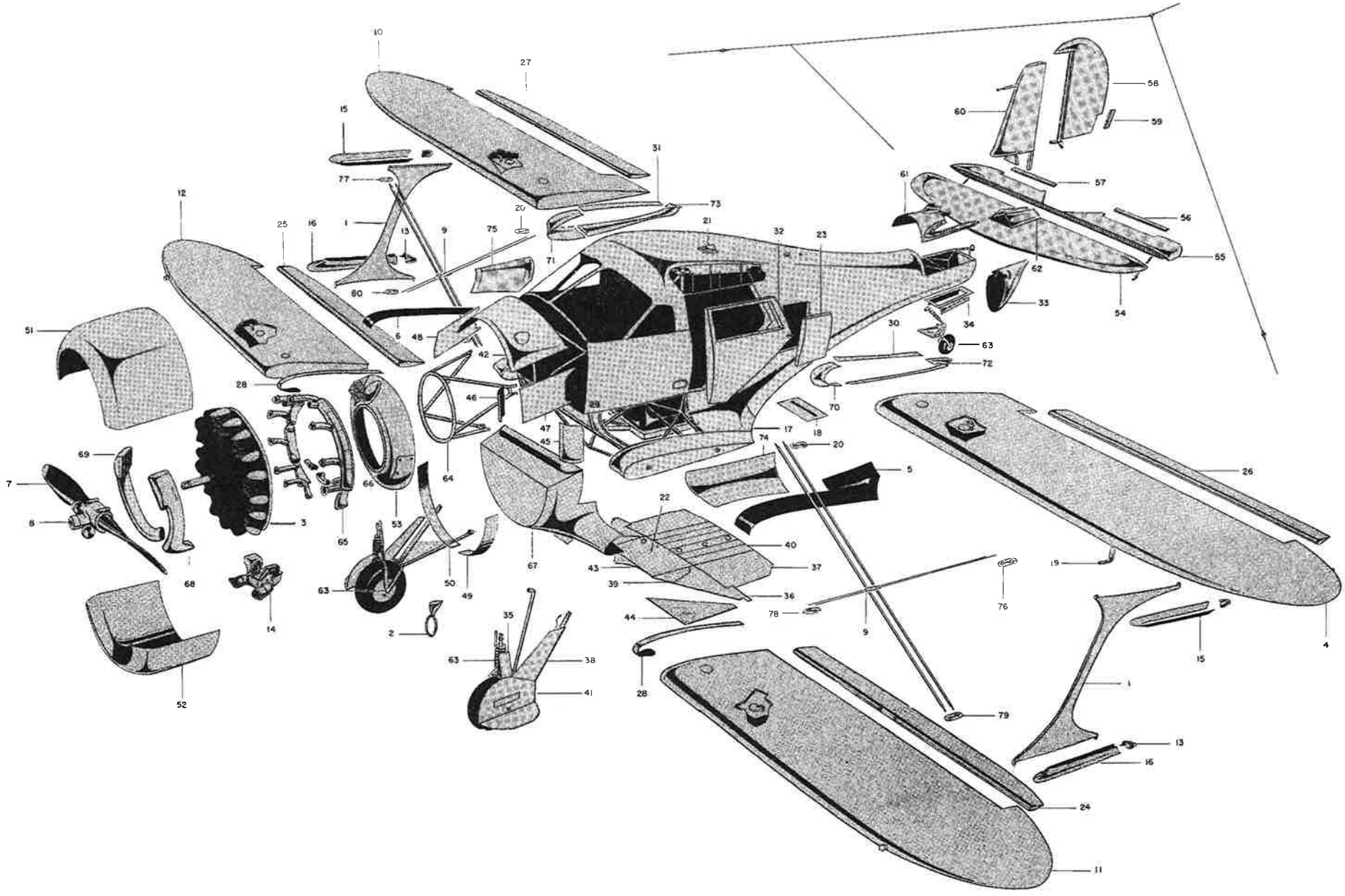
MAJOR ASSEMBLIES

EXPLODED AIRPLANE
WING ASSEMBLY UPPER
WING ASSEMBLY LOWER
LANDING GEAR AND TAILWHEEL LOCK ASSEMBLY
TAILWHEEL ASSEMBLY
RUDDER AND ELEVATOR ASSEMBLIES
FLAP SCREW AND LIMIT SWITCH
COLUMN CONTROL ASSEMBLY
ENGINE CONTROL SYSTEM
INSTALLATION—FUEL SYSTEM
INSTALLATION—OIL SYSTEM

EXPLODED VIEW

1. D17530	STRUT ASSEMBLY — 1
2. MN20C	LOOP — ANTENNAE
3. R985 AN-1 OR AN-2	ENGINE
4. D171006	WING ASSEMBLY — UPPER LEFT
5. D170890	MAT. — LEFT WING WALK
6. D170891	MAT. — RIGHT WING WALK
7. 6167A-15	BLADE — PROPELLER
8. 2D-30	HUB — PROPELLER
9. D17096	SPREADER — INTERPLANE WIRE
10. D171001	WING ASSEMBLY — UPPER RIGHT
11. D171004 L.H.	WING ASSEMBLY — LOWER LEFT
12. D171004 R.H.	WING ASSEMBLY — LOWER RIGHT
13. D175295	FAIRING — 1 STRUT LOWER REAR
14. D17S9150	SCOOP ASSEMBLY — CARBURETOR AIR
15. D175309	FAIRING ASSEMBLY — 1 STRUT UPPER
16. D175310	FAIRING ASSEMBLY — 1 STRUT LOWER
17. D175434-1 & -2	FILLET — LOWER WING REAR
18. D171711	PLATE — BELLY INSPECTION
19. D171742	TUBE ASSEMBLY — HEATED PITOT
20. D17175-1	PLATE — EXTERNAL TIE ROD UPPER ROOT
21. D173931	COVER — CABIN VENT
22. D175047	BULKHEAD ASSEMBLY — FRONT
23. D175250	DOOR ASSEMBLY — BAGGAGE
24. D17160 L.H.	FLAP ASSEMBLY — L.H.
25. D17160 R.H.	FLAP ASSEMBLY — R.H.
26. D17130 L.H.	AILERON ASSEMBLY — L.H.
27. D17130 R.H.	AILERON ASSEMBLY — R.H.
28. D175441	STRIP — WING WALK FAIRING L.H.
29. D175450	SHEET — SIDE
30. D175597	STRIP — WING ROOT FAIRING UPPER L.H.
31. D175597-1	STRIP — WING ROOT FAIRING UPPER R.H.
32. D17560	DOOR ASSEMBLY — CABIN
33. D175710	COWLING ASSEMBLY — TAIL
34. D175720	DOOR ASSEMBLY — TAIL WHEEL
35. D175780	FAIRING ASSEMBLY — SHOCK ABSORBER
36. D175793	FAIRING ASSEMBLY — REAR SIDE BELLY
37. D175794	COWLING ASSEMBLY — REAR BELLY SIDE
38. D175796	FAIRING ASSEMBLY — REAR LEG
39. D175797	DOOR ASSEMBLY — BELLY FAIRING BULKHEAD
40. D175799	COWL ASSEMBLY — REAR CENTER BELLY
41. D175800	FAIRING ASSEMBLY — WHEEL
42. D175864	SHEET — TOP WRAPPER
43. D175868	COWL ASSEMBLY — BULKHEAD POINT
44. D175869	FAIRING ASSEMBLY — FRONT SIDE BELLY
45. D175870 L.H.	GILL — ENGINE COMPARTMENT L.H.
46. D175870 R.H.	GILL — ENGINE COMPARTMENT R.H.
47. D175880 -2 L.H.	DOOR ASSEMBLY — ENGINE COMPARTMENT LOUVRE L.H.
48. D175880 -2 R.H.	DOOR ASSEMBLY — ENGINE COMPARTMENT LOUVRE R.H.
49. D175904	WRAPPER ASSEMBLY — SIDE COWL LEFT
50. D175905	WRAPPER ASSEMBLY — SIDE COWL RIGHT
51. D175911	COWLING ASSEMBLY — ENGINE UPPER
52. D175912	COWLING ASSEMBLY — ENGINE LOWER
53. D175950	COWLING ASSEMBLY — ENGINE INNER
54. D176050	STABILIZER ASSEMBLY
55. D17610	ELEVATOR ASSEMBLY
56. D176111 L.H.	TAB ASSEMBLY — ELEVATOR L.H.
57. D176111 R.H.	TAB ASSEMBLY — ELEVATOR R.H.
58. D17620	RUDDER ASSEMBLY
59. D176210	TAB ASSEMBLY — RUDDER
60. D176300	FIN ASSEMBLY
61. D176400	FAIRING ASSEMBLY — FIN AND STABILIZER
62. D176406	DOOR ASSEMBLY — TAIL FAIRING
63. D17800	GEAR ASSEMBLY — LANDING
64. D17S9100	MOUNT ASSEMBLY — ENGINE
65. D17S920	STACK ASSEMBLY — EXHAUST
66. D17925	HEATER — CABIN AND CARBURETOR
67. D179545	COWLING ASSEMBLY — REAR FIREWALL
68. 189123	DUCT ASSEMBLY — CARB. AIR FILTER L.H.
69. 189124	DUCT ASSEMBLY — CARB. AIR FILTER R.H.
70. D175431 L.H.	FILLET — UPPER WING NOSE L.H.
71. D175431 R.H.	FILLET — UPPER WING NOSE R.H.
72. D175432 L.H.	FILLET — UPPER WING REAR
73. D175432 R.H.	FILLET — UPPER WING REAR
74. D175433 L.H.	FILLET — LOWER WING FRONT
75. I 175469	RADIO ACCESS DOOR
76. D17175-2 L.H.	PLATE — EXTERNAL TIE ROD UPPER STRUT L.H.
77. D17175-2 R.H.	PLATE — EXTERNAL TIE ROD UPPER STRUT R.H.
78. D17175-3 L.H.	PLATE — EXTERNAL TIE ROD LOWER ROOT L.H.
79. D17175-4 L.H.	PLATE — EXTERNAL TIE ROD LOWER STRUT L.H.
80. D17175-4 R.H.	PLATE — EXTERNAL TIE ROD LOWER STRUT R.H.

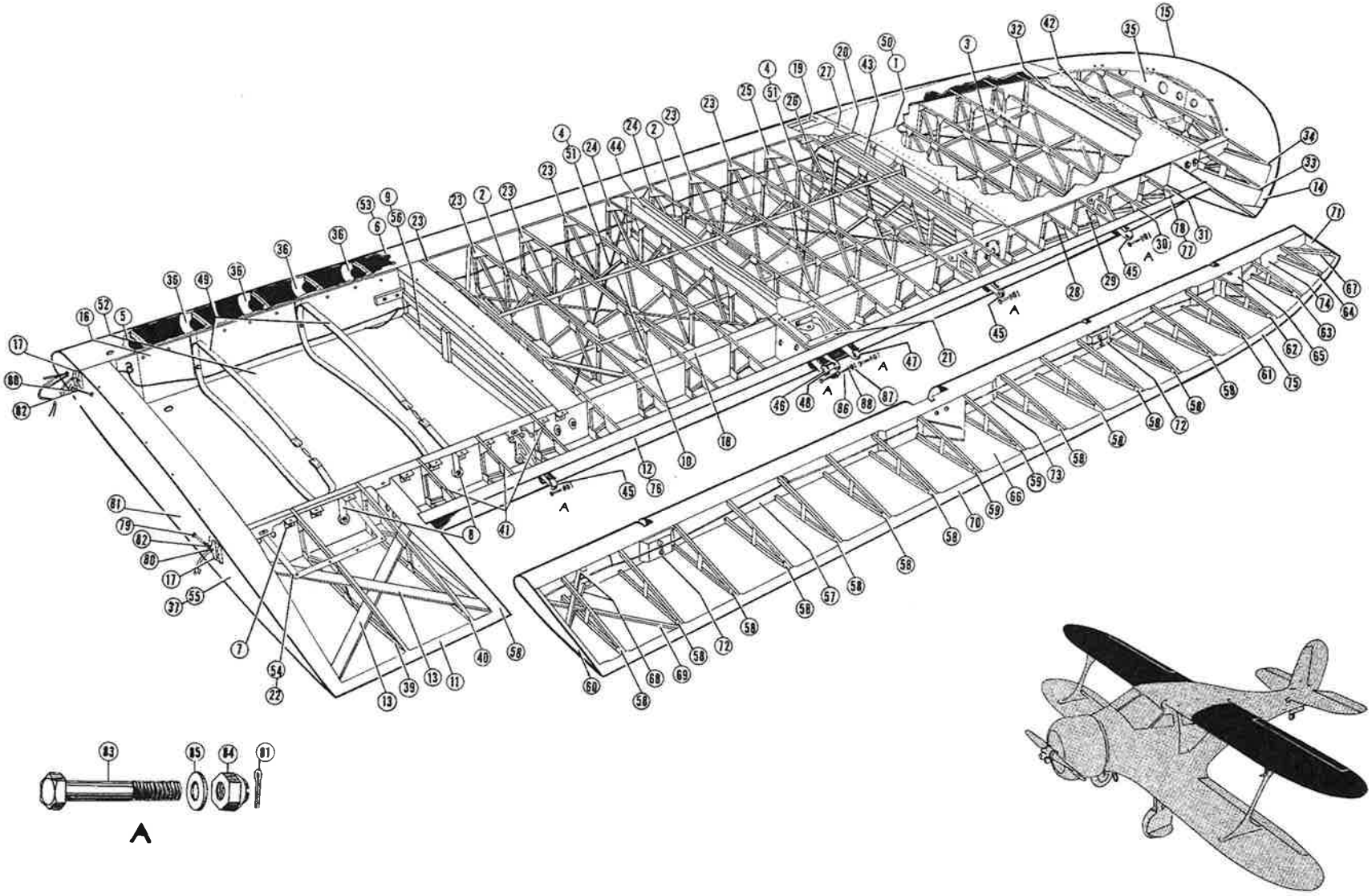
BEECHCRAFT MODEL 17



EXPLODED VIEW

WING ASSEMBLY—UPPER

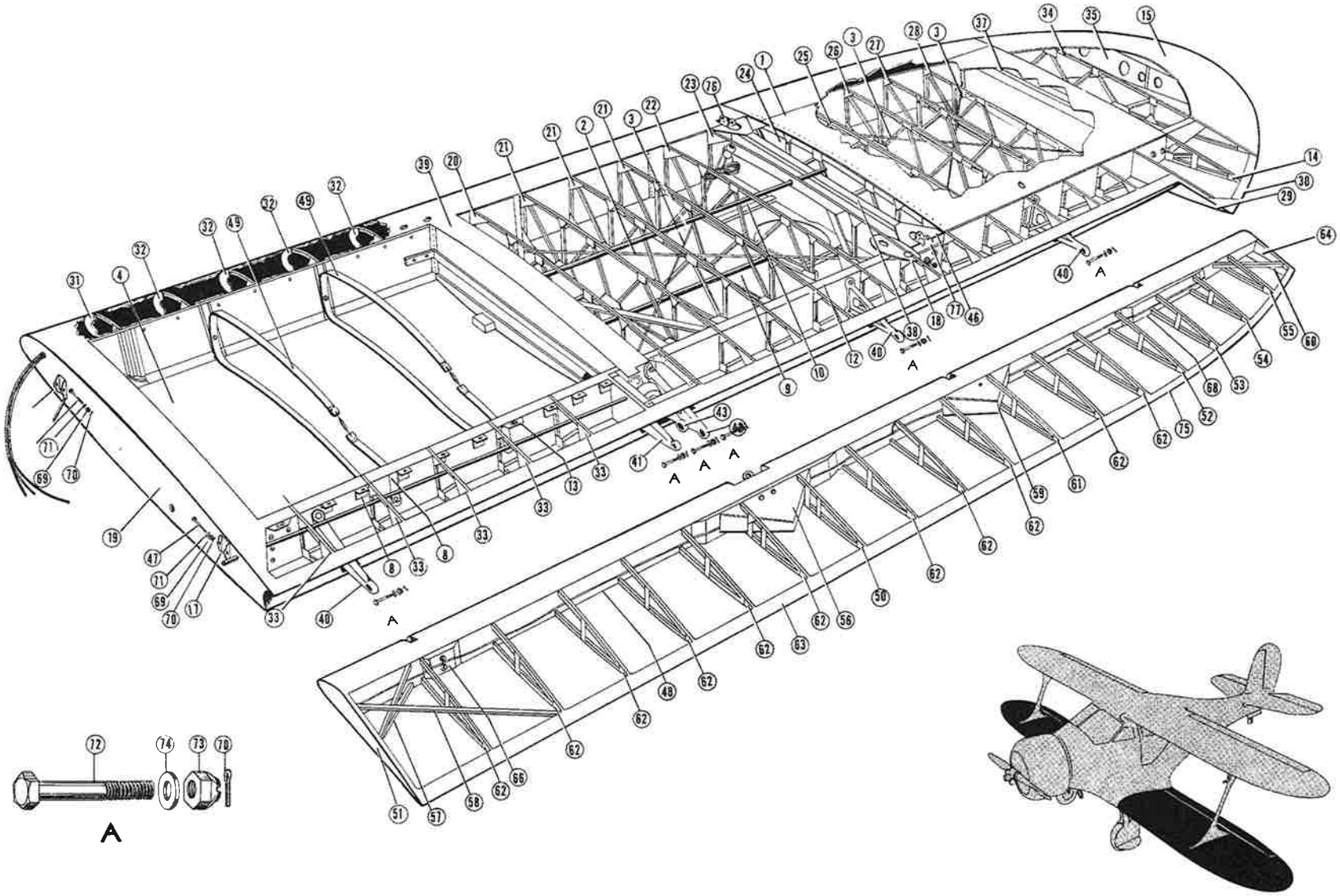
REF. NO.	PART NO.	PART NAME
1	D171001-3	PANEL — WING TIP REINFORCING UPPER
2	D17090-3	ROD ASSEMBLY — UPPER WING TIE
3	D17090-4	ROD ASSEMBLY — UPPER WING TIE
4	D17090-6	ROD ASSEMBLY — UPPER WING TIE
5	D171021	BOTTOM ASSEMBLY — UPPER WING TANK COMPARTMENT
6	D171031	EDGE ASSEMBLY — UPPER RIGHT WING LEADING
7	D171043	BRACKET ASSEMBLY — WING TANK COVER
8	D171045 LH	BRACKET ASSEMBLY — METAL WING TANK COVER LH
8	D171045 RH	BRACKET ASSEMBLY — METAL WING TANK COVER RH
9	D171064	MEMBER ASSEMBLY — UPPER WING COMPRESSION
10	D171076	STRIP ASSEMBLY — UPPER RIGHT WING RIB STRAIGHTENER
11	D171080	EDGE — UPPER WING TRAILING
12	D171001-7	STRIP — UPPER WING TRAILING
13	D171089	BRACE — ROOT AND TAIL RIB DIAGONAL
14	D171105 LH	STRIP ASSEMBLY — WING TIP FORMER LH
14	D171105 RH	STRIP ASSEMBLY — WING TIP FORMER RH
15	D171115 LH	COVER ASSEMBLY — WING TIP LH
15	D171115 RH	COVER ASSEMBLY — WING TIP RH
16	D17141-1 LH	SPAR ASSEMBLY — UPPER WING FRONT LH
16	D17141-1 RH	SPAR ASSEMBLY — UPPER WING FRONT RH
17	D17210-1 LH	FITTING ASSEMBLY — WING ROOT LH
17	D17210-1 RH	FITTING ASSEMBLY — WING ROOT RH
18	D17141-15 LH	SPAR ASSEMBLY — UPPER WING REAR LH
18	D17141-15 RH	SPAR ASSEMBLY — UPPER WING REAR RH
19	D171697	MEMBER ASSEMBLY — UPPER WING INSPECTION FRAME
20	D171698	MEMBER ASSEMBLY — UPPER WING INSPECTION FRAME
21	D171704	FRAME ASSEMBLY — UPPER WING INSPECTION
22	D171715	FRAME ASSEMBLY — UPPER WING INSPECTION
23	D171806	RIB ASSEMBLY — NO. 6, 7, 8, 9, 12, 13, UPPER
24	D171810 LH	RIB ASSEMBLY — NO. 10, 11, UPPER WING LH
24	D171810 RH	RIB ASSEMBLY — NO. 10, 11, UPPER WING RH
25	D171814	RIB ASSEMBLY — NO. 14 UPPER WING
26	D171815	RIB ASSEMBLY — NO. 15 UPPER WING
27	D171816 LH	RIB ASSEMBLY — NO. 16 UPPER WING LH
27	D171816 RH	RIB ASSEMBLY — NO. 16 UPPER WING RH
28	D171817	RIB ASSEMBLY — NO. 17 UPPER WING
29	D171818 LH	RIB ASSEMBLY — NO. 18 UPPER WING LH
29	D171818 RH	RIB ASSEMBLY — NO. 18 UPPER WING RH
30	D171819	RIB ASSEMBLY — NO. 19 UPPER WING
31	D171820	RIB ASSEMBLY — NO. 20 UPPER WING
32	D171821 LH	RIB ASSEMBLY — NO. 21 UPPER WING LH
32	D171821 RH	RIB ASSEMBLY — NO. 21 UPPER WING RH
33	D171822 LH	RIB ASSEMBLY — NO. 22 UPPER WING LH
33	D171822 RH	RIB ASSEMBLY — NO. 22 UPPER WING RH
34	D171823	RIB ASSEMBLY — NO. 23 UPPER
35	D171824	RIB ASSEMBLY — NO. 24 UPPER
36	D171831	RIB ASSEMBLY — UPPER RIGHT NO. 1, 2, 3, 4, 5, NOSE
37	D17184	RIB ASSEMBLY — UPPER WING RIGHT ROOT
38	D171840 LH	RIB ASSEMBLY — SOLID TAIL LH
38	D171840 RH	RIB ASSEMBLY — SOLID TAIL RH
39	D171841	RIB ASSEMBLY — UPPER NO. 1 TAIL
40	D171842	RIB ASSEMBLY — UPPER NO. 2 TAIL
41	D171843	RIB ASSEMBLY — NO. 3, 4, 5, UPPER RIGHT TAIL
42	D172121	MEMBER ASSEMBLY — UPPER WING TIP COMPRESSION
43	D172122	MEMBER ASSEMBLY — UPPER WING COMPRESSION
44	D172128	MEMBER ASSEMBLY — UPPER WING COMPRESSION
45	D17260-1	HINGE ASSEMBLY — AILERON
46	D17260-2 LH	HINGE ASSEMBLY — AILERON LH
46	D17260-2 RH	HINGE ASSEMBLY — AILERON RH
47	D17260-3 LH	HINGE ASSEMBLY — AILERON LH
47	D17260-3 RH	HINGE ASSEMBLY — AILERON RH
48	D17735 LH	CONTROL ASSEMBLY — AILERON LH
48	D17735 RH	CONTROL ASSEMBLY — AILERON RH
49	D17965	STRAP ASSEMBLY — WING FUEL TANK
50	D171006-3	PANEL — WING TIP REINFORCING UPPER
50	D171006-12	PANEL — WING TIP REINFORCING LOWER
51	D17090-3	ROD ASSEMBLY — UPPER WING TIE
52	D171022	BOTTOM ASSEMBLY — UPPER WING
53	D171029	EDGE ASSEMBLY — UPPER LEFT WING LEADING
54	D171695	FRAME ASSEMBLY — UPPER LEFT WING INSPECTION
55	D171832	RIB ASSEMBLY — UPPER LEFT WING ROOT
56	D172146	RIB ASSEMBLY — UPPER LEFT WING COMPRESSION
76	D171006-4	STRIP — UPPER WING TRAILING
77	D171001-11	STRIP — UPPER WING TRAILING
78	D171006-8	STRIP — UPPER WING TRAILING
79	AN5-22	BOLT
80	AN310-5	NUT
81	AN380-2-2	PIN
82	AN960-516	WASHER
		AILERON
57	D17130-1 LH	SPAR ASSEMBLY — AILERON
57	D17130-1 RH	SPAR ASSEMBLY — AILERON
58	D17130-2	RIB ASSEMBLY — AILERON
59	D17130-6 LH	RIB ASSEMBLY — AILERON CENTER
59	D17130-6 RH	RIB ASSEMBLY — AILERON CENTER
60	D17130-12	RIB ASSEMBLY — AILERON ROOT
61	D17130-13	RIB ASSEMBLY — AILERON
62	D17130-14	RIB ASSEMBLY — AILERON
63	D17130-15	RIB ASSEMBLY — AILERON
64	D17130-16	RIB ASSEMBLY — AILERON
65	D17130-19	GUSSET ASSEMBLY — AILERON HINGE OUTBOARD REINFORCING
66	D17130-24	GUSSET ASSEMBLY — AILERON HINGE CENTER REINFORCING
67	D17130-46	BRACE — AILERON OUTBOARD DIAGONAL
68	D17130-48	BRACE — AILERON INBOARD DIAGONAL
69	D17130-49	BRACE — AILERON INBOARD DIAGONAL
70	D17130-52	EDGE — AILERON TRAILING
71	D17130-96	RIB ASSEMBLY — AILERON OUTBOARD
72	D17130-34	STRIP — SPAR REINFORCEMENT
73	D17130-35	STRIP — SPAR REINFORCEMENT
74	D17130-36	STRIP — SPAR REINFORCEMENT
75	D17132-5	TUBE — AILERON TRAILING EDGE
83	AN4-11	BOLT
84	AN310-4	NUT
85	AN960-416	WASHER
86	AN3-12	BOLT
87	AN310-3	NUT
88	AN960-316	WASHER



WING ASSEMBLY—UPPER

WING ASSEMBLY—LOWER

REF. NO.	PART NO.	PART NAME
1	D171004-3	PANEL — WING TIP REINFORCING BOTTOM
1	D171004-31	PANEL — WING TIP REINFORCING UPPER
2	D17090-2	ROD ASSEMBLY — LOWER WING TIE
3	D17090-4	ROD ASSEMBLY — LOWER WING TIE
4	D171012	BOTTOM ASSEMBLY — LOWER WING TANK COMPARTMENT
5	D171032-4	EDGE ASSEMBLY — LOWER WING LEADING LH
6	D171032-3	EDGE ASSEMBLY — LOWER WING LEADING RH
7	D171043	BRACKET ASSEMBLY — WING TANK COVER
8	D171045 LH	BRACKET ASSEMBLY — METAL WING TANK COVER LH
9	D171077	STRIP ASSEMBLY — LOWER WING RIB STRAIGHTENER
10	D171078	STRIP ASSEMBLY — LOWER WING RIB STRAIGHTENER
11	D17142-1 LH & RH	SPAR ASSEMBLY — LOWER WING FRONT
12	D17142-15 LH & RH	SPAR ASSEMBLY — LOWER WING LOWER REAR
13	D171444 LH & RH	BLOCK ASSEMBLY — LOWER TANK COVER SPAR
14	D171105 LH & RH	STRIP ASSEMBLY — WING TIP FORMER
15	D171115 LH & RH	COVER ASSEMBLY — WING TIP
16	D171718 LH & RH	FRAME ASSEMBLY — INSPECTION
17	D17210-1 LH & RH	FITTING — WING ROOT LH
18	D171721-2	SUPPORT — EXTERNAL TIE ROD FABRIC
19	D17185 LH & RH	RIB ASSEMBLY — LOWER WING ROOT
20	D171857 LH & RH	RIB ASSEMBLY — NO. 7 LOWER WING
21	D171858	RIB ASSEMBLY — NO. 8, 9, 10, LOWER
22	D171861 LH & RH	RIB ASSEMBLY — NO. 11 LOWER WING
23	D171862	RIB ASSEMBLY — NO. 12 LOWER WING
24	D171863 LH & RH	RIB ASSEMBLY — NO. 13 LOWER WING
25	D171864	RIB ASSEMBLY — NO. 14 LOWER WING
26	D171865 LH & RH	RIB ASSEMBLY — NO. 15 LOWER WING
27	D171866	RIB ASSEMBLY — NO. 16 LOWER WING
28	D171867	RIB ASSEMBLY — NO. 17 LOWER WING
29	D171868 LH & RH	RIB ASSEMBLY — NO. 18 LOWER WING
30	D171869 LH & RH	RIB ASSEMBLY — NO. 19 LOWER WING
31	D171881 LH & RH	RIB ASSEMBLY — LOWER WING NO. 1 NOSE
32	D171882	RIB ASSEMBLY — LOWER WING NO. 2, 3, 4, 5, 6, NOSE
33	D171891	RIB ASSEMBLY — LOWER NO. 1, 2, 3, 4, 5, TAIL
34	D171823	RIB ASSEMBLY — NO. 20 LOWER
35	D171824	RIB ASSEMBLY — NO. 21 LOWER
36	D171896 LH & RH	RIB — NO. 6 LOWER WING TAIL
37	D172133	MEMBER ASSEMBLY — LOWER WING COMPRESSION
38	D172134 LH & RH	MEMBER ASSEMBLY — LOWER WING COMPRESSION
39	D172140 LH & RH	MEMBER ASSEMBLY — LOWER WING COMPRESSION
40	D17264-1	HINGE ASSEMBLY — FLAP
41	D17264-2	HINGE ASSEMBLY — FLAP
42	D172641	HINGE ASSEMBLY — FLAP
43	D172660	MECHANISM ASSEMBLY — FLAP OPERATING WING
44	D172668	HOUSING ASSEMBLY — FLEXIBLE SHAFT IN WING
45	D171004-36	BRACE — LOWER WING
46	D171004-32	BLOCK — LOWER WING
47	AN5-21	BOLT (THIS IS NOT ON PARTS LIST)
49	D17965	STRAP ASSEMBLY — WING FUEL TANK
76	D17210-8	FITTING — STRUT LOWER FRONT
77	D17210-4	FITTING — REAR STRUT
		FLAP D17160
48	D17160-1	SPAR ASSEMBLY — FLAP
50	D17160-9	RIB ASSEMBLY — FLAP
51	D17160-11	RIB ASSEMBLY — FLAP INBOARD
52	D17160-12	RIB ASSEMBLY — FLAP
53	D17160-13	RIB ASSEMBLY — FLAP
54	D17160-14	RIB ASSEMBLY — FLAP
55	D17160-15	RIB ASSEMBLY — FLAP
56	D17160-18	GUSSET ASSEMBLY — FLAP REINFORCING
57	D17160-27	BRACE — FLAP REINFORCEMENT
58	D17160-28	BRACE — FLAP REINFORCEMENT
59	D17160-34	GUSSET ASSEMBLY — FLAP REINFORCING
60	D17160-41	BRACE — FLAP REINFORCEMENT
61	D17160-47	RIB ASSEMBLY — FLAP
62	D17160-8	RIB ASSEMBLY — FLAP
63	D17160-71	EDGE — FLAP TRAILING
64	D17160-89	RIB ASSEMBLY — FLAP OUTBOARD
65	D17131-1	FITTING ASSEMBLY — FLAP HINGE
66	D17160-3	BLOCK — SPAR REINFORCEMENT
67	D17160-4	BLOCK — SPAR REINFORCEMENT
68	D17160-6	BLOCK — SPAR REINFORCEMENT
69	AN310-5	NUT
70	AN380-2-2	PIN
71	AN960-516	WASHER
72	AN4-11	BOLT
73	AN310-4	NUT
74	AN960-416	WASHER
75	D17132-5	TUBE — FLAP TRAILING EDGE



WING ASSEMBLY—LOWER

1	D178711-2	KNOB — TAIL WHEEL LOCK CONTROL LEVER
2	D178712	LEVER ASSEMBLY — TAIL WHEEL LOCK CONTROL
3	D178716	CABLE ASSEMBLY — TAIL WHEEL LOCK

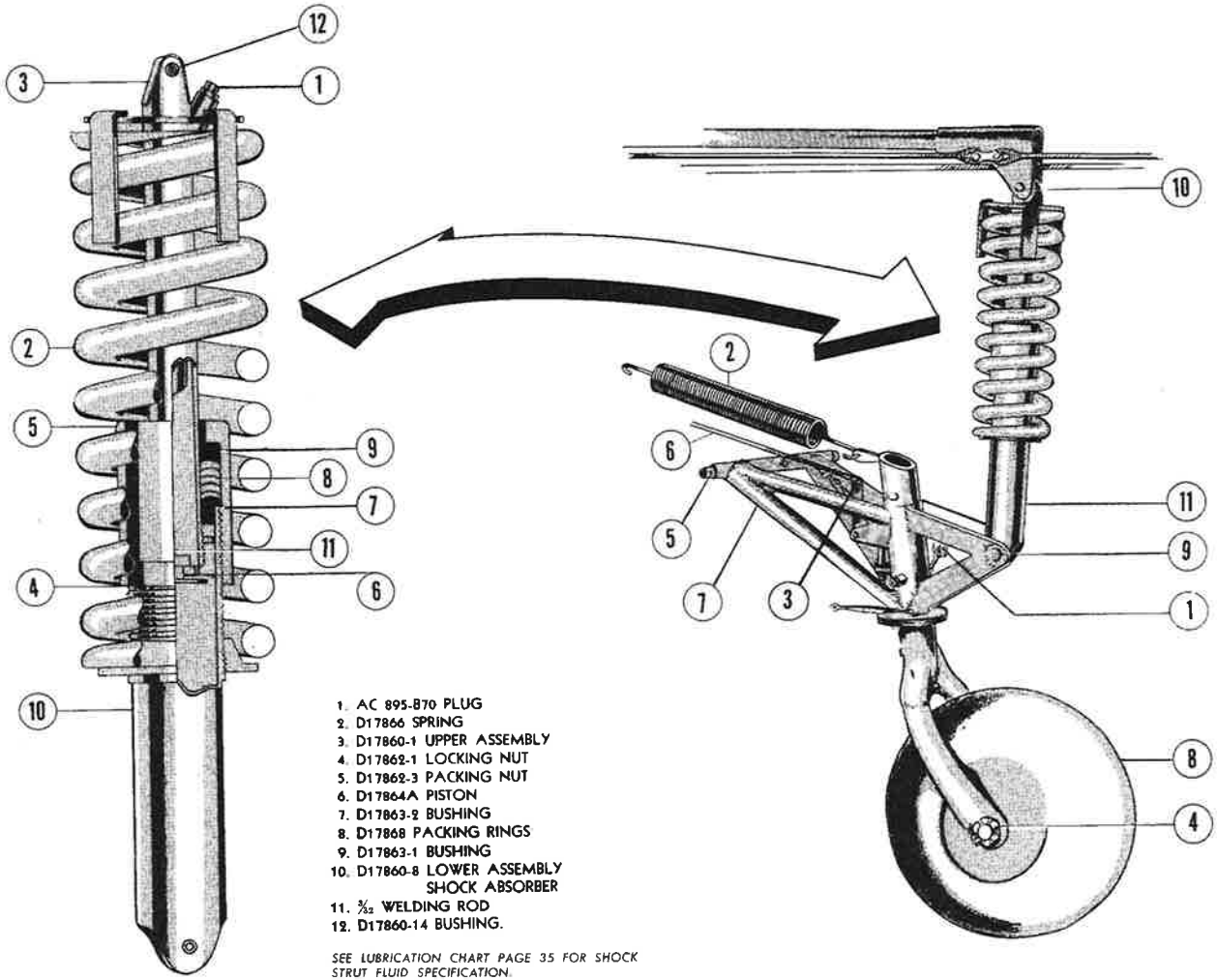
1. PC 1603 CLEVIS PIN
   AN 380-2-2 COTTER PIN
2. AN 393-13 PIN
   AN 380-2-2 COTTER PIN
3. AN 520-10-30 SCREW,
   AC 365-1032 NUT,
   AN960-10 WASHER,
   100695-X10-06-018
   SPACER
4. AN 3-20 BOLT
   AN 310-3 NUT
   AN 380-3-4 PIN
   AN 960-10 WASHER
5. AN 526-832-6 SCREW
   AN 340-8 NUT
   AN 935-8 WASHER
6. AN 526-832-6 SCREW
   AN 340-8 NUT
   AN 935-8 WASHER
7. AN 3-7 BOLT
   AN 310-3 NUT
   AN 380-2-2 COTTER PIN
8. BRAKE LINE VALVE
9. AN 310-8 NUT
   D17830-7 AXLE
10. D17815-6 BUSHING
    AN 6-20 BOLT
    AN 310-6 NUT
11. D17842 EXTENDING TUBE
12. WHEEL ASSEMBLY
13. FAIRING ASSEMBLY
14. AN 3-13 BOLT
    AN 310-3 NUT
15. D17815-7 BUSHING
    S113-17 BOLT
    AN 310-5 NUT
16. SHOCK ABSORBER
17. BLEEDER VALVE
18. BRAKE LINE
19. REAR LEG

1	D17840-1	SHOCK ABSORBER ASSEMBLY
2	D17576	COVER ASSEMBLY — HYDRAULIC BRAKE WHEEL
3	D178010	CABLE ASSEMBLY — TAIL WHEEL RETRACTING
4	D178011	CHAIN ASSEMBLY — LANDING GEAR RETRACTING
5	D178012	CABLE ASSEMBLY — TAIL WHEEL RETRACTING
6	D178013	CORD — TAIL WHEEL RETRACTING CABLE
7	D178014	CORD ASSEMBLY — TAIL WHEEL EXTENDING SHOCK
8	D178015	CABLE ASSEMBLY — TAIL WHEEL EXTENDING
9	D178016	CHAIN ASSEMBLY — LANDING GEAR RETRACTING CROSS SHAFT
10	D178017	CHAIN ASSEMBLY — LANDING GEAR RETRACTING MOTOR
11	D17860-1	SHOCK ABSORBER ASSEMBLY — TAIL WHEEL
12	D17810-1	LEG ASSEMBLY — LANDING GEAR DIAGONAL
13	D17815-1	UNIVERSAL — LANDING GEAR
14	D17815-2 LH	UNIVERSAL — LANDING GEAR LH
14	D17815-2 RH	UNIVERSAL — LANDING GEAR RH
15	D17820 LH	LEG ASSEMBLY — LANDING GEAR REAR LH
15	D17820 RH	LEG ASSEMBLY — LANDING GEAR REAR RH
16	D17830-1 LH	AXLE AND TORQUE ARM ASSEMBLY — LANDING GEAR LH
17	D17830-7	BOLT — AXLE
18	D17842-1	TUBE ASSEMBLY — SHOCK ABSORBER EXTENDING
19	D17850-1	CRANK ASSEMBLY — LANDING GEAR RETRACTING
20	D17850-14	SHAFT ASSEMBLY — LANDING GEAR CROSS
21	D17850-26 LH	SLIDE ASSEMBLY — LANDING GEAR LH
21	D17850-26 RH	SLIDE ASSEMBLY — LANDING GEAR RH
22	D17850-38	TUBE — LANDING GEAR SLIDE
23	D17869-1	SLIDE ASSEMBLY — TAIL WHEEL
24	D17869-10	TUBE ASSEMBLY — TAIL WHEEL SLIDE
25	D17865	HOUSING ASSEMBLY — TAIL WHEEL FORK
26	D17865-29	ARM ASSEMBLY — TAIL WHEEL LOCKING
27	D17865-30	ROD — TAIL WHEEL LOCKING STOP
28	D178701	FORK ASSEMBLY — TAIL WHEEL
29	B17871	SPRING — TAIL WHEEL SWIVEL
30	D178900	MOTOR ASSEMBLY — LANDING GEAR RETRACTING
31	A-124	PULLEY
32	A-138	PULLEY
33	AN2104-A	PULLEY — CONTROL
34	218264-M	WHEEL ASSEMBLY — LANDING GEAR (GOODYEAR)
35	510646-M	WHEEL ASSEMBLY — 10 INCH (GOODYEAR)
36	NO NUMBER	TIRE — LANDING GEAR FRONT (GOODYEAR)
37	NO NUMBER	TIRE — LANDING GEAR REAR (GOODYEAR)

SEE LUBRICATION CHART PAGE 35 FOR SHOCK STRUT FLUID SPECIFICATION.

1. 1/8 PIPE PLUG
2. D17841 SPRING
3. D17844-2 LOCK NUT
4. D17844-1 PACKING NUT
5. 1 21/32 x 1/8 WELD ROD
6. D17843 PISTON
7. D17845 BUSHING
8. D17848 PACKING RINGS
9. D17846 BUSHING
10. D178401-1 RUBBER BUSHING
11. D17840-8 UPPER SHOCK STRUT ASSEMBLY
12. D17840-8 UPPER SHOCK STRUT ASSEMBLY

LANDING GEAR AND TAIL WHEEL LOCK ASSEMBLY



1. AC 895-870 PLUG
2. D17866 SPRING
3. D17860-1 UPPER ASSEMBLY
4. D17862-1 LOCKING NUT
5. D17862-3 PACKING NUT
6. D17864A PISTON
7. D17863-2 BUSHING
8. D17868 PACKING RINGS
9. D17863-1 BUSHING
10. D17860-8 LOWER ASSEMBLY SHOCK ABSORBER
11. 3/32 WELDING ROD
12. D17860-14 BUSHING.

SEE LUBRICATION CHART PAGE 35 FOR SHOCK STRUT FLUID SPECIFICATION.

1. AC365-832 NUT, AN526-832-12 BOLT
2. B17871 SPRING
3. AN310-3 NUT, AN3-4 BOLT, AN380-2-2 COTTER PIN, AN960-10 WASHER
4. AN320-10 NUT, 95-917-10" AXLE, 95-916-10" SPACERS
5. AN3-10 BOLT, AN310-3 NUT, AN380-2-2 COTTER PIN, D17865-1 TUBE
6. D178018 TAIL WHEEL LOCK CABLE
7. D178700 TAIL WHEEL SWIVEL AND FORK ASSEMBLY
8. WHEEL ASSEMBLY
9. AN5-21 BOLT, AN310-5 NUT, AN960516 WASHER
10. AN5-14 BOLT, AN310-5 NUT, AN960-516 WASHER
11. D17860 SHOCK ABSORBER

EXPLODED TAILWHEEL ASSEMBLY

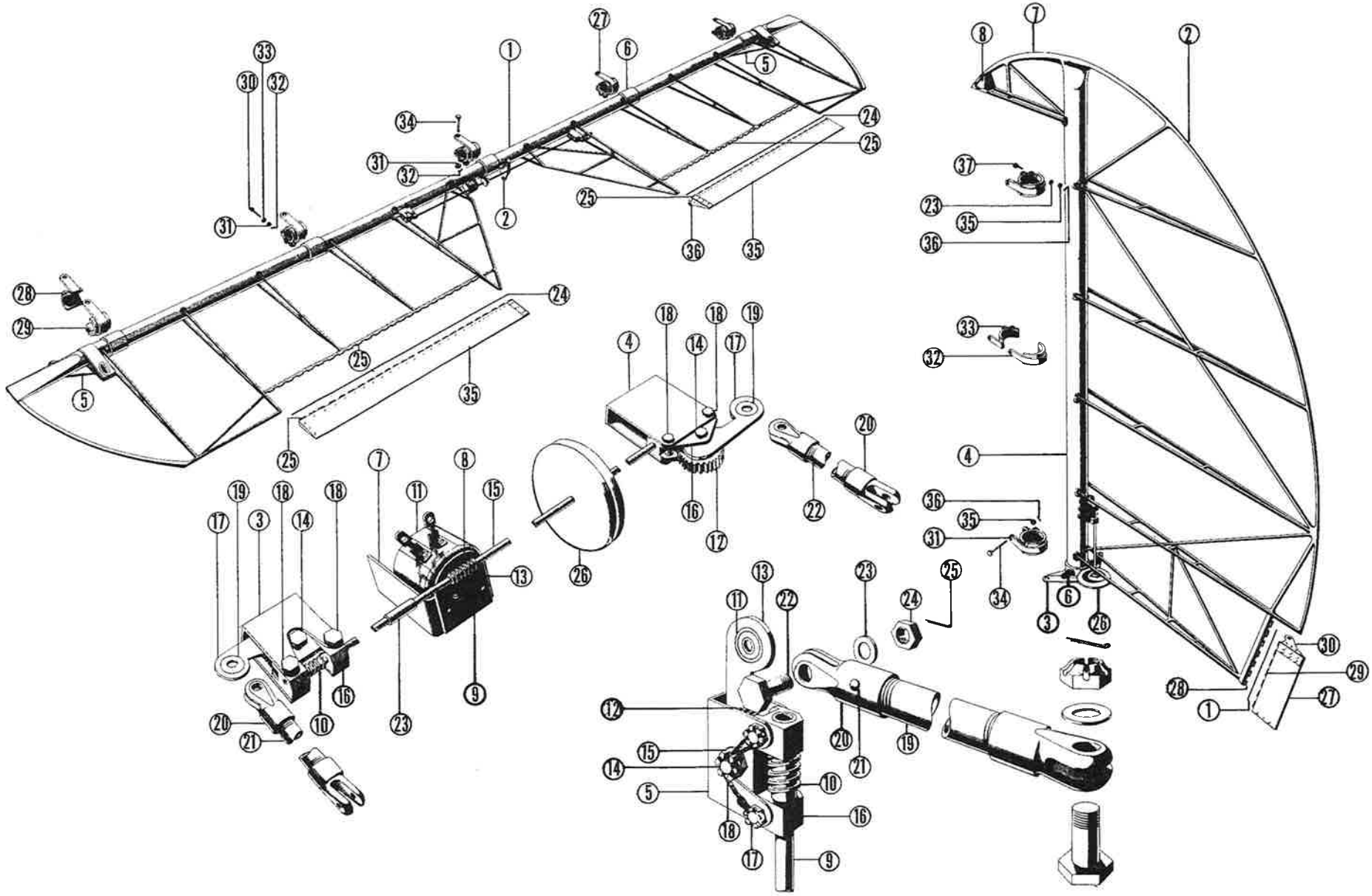
ASSEMBLY---TAIL SURFACES

ELEVATOR ASSEMBLY

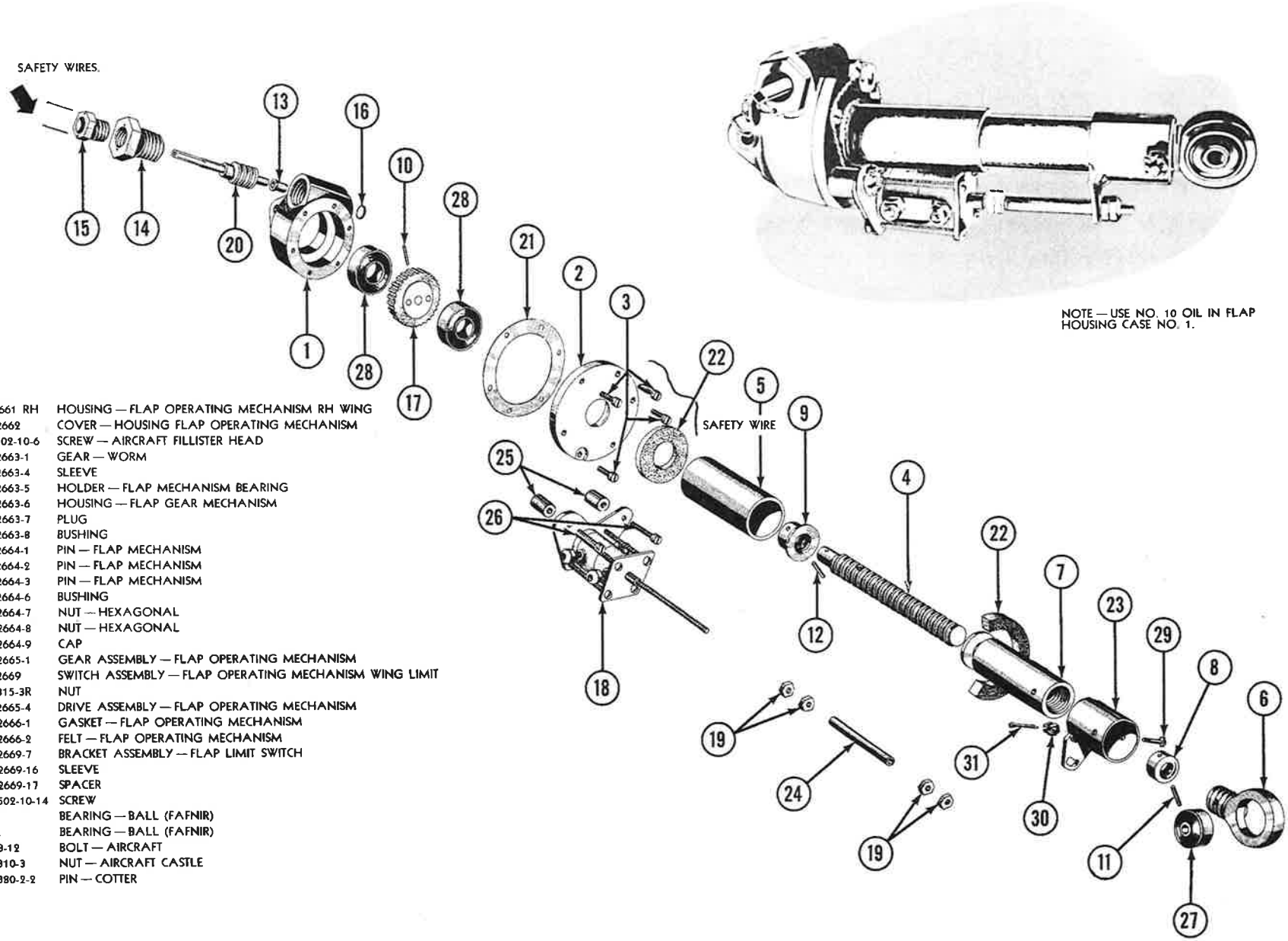
REF. NO.	PART NO.	PART NAME
1	D17610-2	SPAR — ELEVATOR
2	D17610-25	HORN ASSEMBLY — ELEVATOR
3	D17610-40	BRACKET — ELEVATOR LEFT TAB MECHANISM ATTACHING
4	D17610-41	BRACKET — ELEVATOR RIGHT TAB MECHANISM ATTACHING
5	D176101	ARM ASSEMBLY — ELEVATOR BALANCE
6	D176108	BEARING — ELEVATOR SPAR HINGE
7	D176113	BRACKET — ELEVATOR TAB RHEOSTAT SUPPORT
8	D176118	WORM — ELEVATOR TAB RHEOSTAT
9	D176115	PLATE — ELEVATOR TAB RHEOSTAT
10	D177721-2	WORM — ELEVATOR TAB CONTROL
11	D176116	RHEOSTAT — ELEVATOR TAB RHEOSTAT
12	D177721-1	GEAR — ELEVATOR TAB CONTROL
13	D176117	GEAR — ELEVATOR TAB RHEOSTAT
14	D177731	BOLT — ELEVATOR WORM GEAR TAB CONTROL ADJUSTING
15	D177736	SHAFT — ELEVATOR TAB CONTROL
16	D177734	BRACKET — TAB CONTROL WORM GEAR
17	D177724	ARM ASSEMBLY — ELEVATOR TAB CONTROL MECHANISM
18	AN3-11	BOLT
19	K3-L	BEARING
20	S-168	END — ELEVATOR TAB CONTROL ROD
21	D177726-3	ROD — ELEVATOR TAB CONTROL LH } ⅜ WELD ROD
22	D177726-4	ROD — ELEVATOR TAB CONTROL RH } ⅜ WELD ROD
23	D177737	COUPLING — ELEVATOR TAB CONTROL SHAFT
24	105774-C-063-03500	PIN — HINGE
25	D176111-4	HINGE — ELEVATOR TAB
26	D17776-1	PULLEY — ELEVATOR TAB CONTROL
27	D176025	HINGE ASSEMBLY — ELEVATOR SPAR
28	D176031	BASE ASSEMBLY — ELEVATOR SPAR HINGE
29	D176032	CAP ASSEMBLY — ELEVATOR SPAR HINGE
30	AN4-6	BOLT
31	AN310-4	NUT
32	AN380-2-2	PIN
33	AN960-416L	WASHER
34	S-74-27	BOLT
35	D176111-1	SKIN — ELEVATOR TAB
36	D176112	ARM ASSEMBLY — ELEVATOR TAB

RUDDER ASSEMBLY

REF. NO.	PART NO.	PART NAME
1	105774-C-063-01016	PIN — HINGE
2	D17620-2	EDGE — RUDDER TRAILING
3	D17620-19	HORN ASSEMBLY — RUDDER
4	D17620-26	SPAR — RUDDER
5	D17620-41	BRACKET — TAB MECHANISM
6	D17620-42	BRACKET — RUDDER TAB CABLE GUIDE
7	D17620-3	EDGE — RUDDER TIP
8	D17620-35	WEIGHT — RUDDER BALANCE
9	D177718	SHAFT — RUDDER TAB CONTROL
10	D177721-2	WORM — TAB CONTROL
11	D177725-1	ARM — RUDDER TAB CONTROL MECHANISM
12	D177721-1	GEAR — TAB CONTROL
13	K3-L	BEARING (FAFNIR)
14	D177731	BOLT — WORM GEAR TAB CONTROL ADJUSTING
15	AN320-3	NUT
16	D177734	BRACKET — TAB CONTROL WORM GEAR
17	AN3-10	BOLT
18	AC995-32-8	WIRE FOR LOCKING
19	D177727-1	ROD — RUDDER TAB CONTROL
20	S-168	END — ROD
21	NO NUMBER	PIN
22	AN3-6	BOLT — AIRCRAFT 10-32
23	AN960-416L	WASHER
24	AN310-3	NUT — AIRCRAFT CASTLE
25	AN-380-2-2	PIN — COTTER
26	D17776-1	PULLEY — TAB CONTROL
27	D176210-1	SKIN — RUDDER TAB
28	D176210-4	HINGE — RUDDER HALF
29	D176210-6	HINGE — RUDDER TAB HALF
30	D176112-1	ARM — ELEVATOR TAB
31	D176026	HINGE ASSEMBLY — RUDDER
32	D176029	CAP — HINGE ASSEMBLY
33	D176030	BASE — HINGE ASSEMBLY
34	S-74-27	BOLT
35	AN310-4	NUT
36	AN380-2-2	PIN
37	AN4-6	BOLT



EXPLODED RUDDER AND ELEVATOR ASSEMBLIES

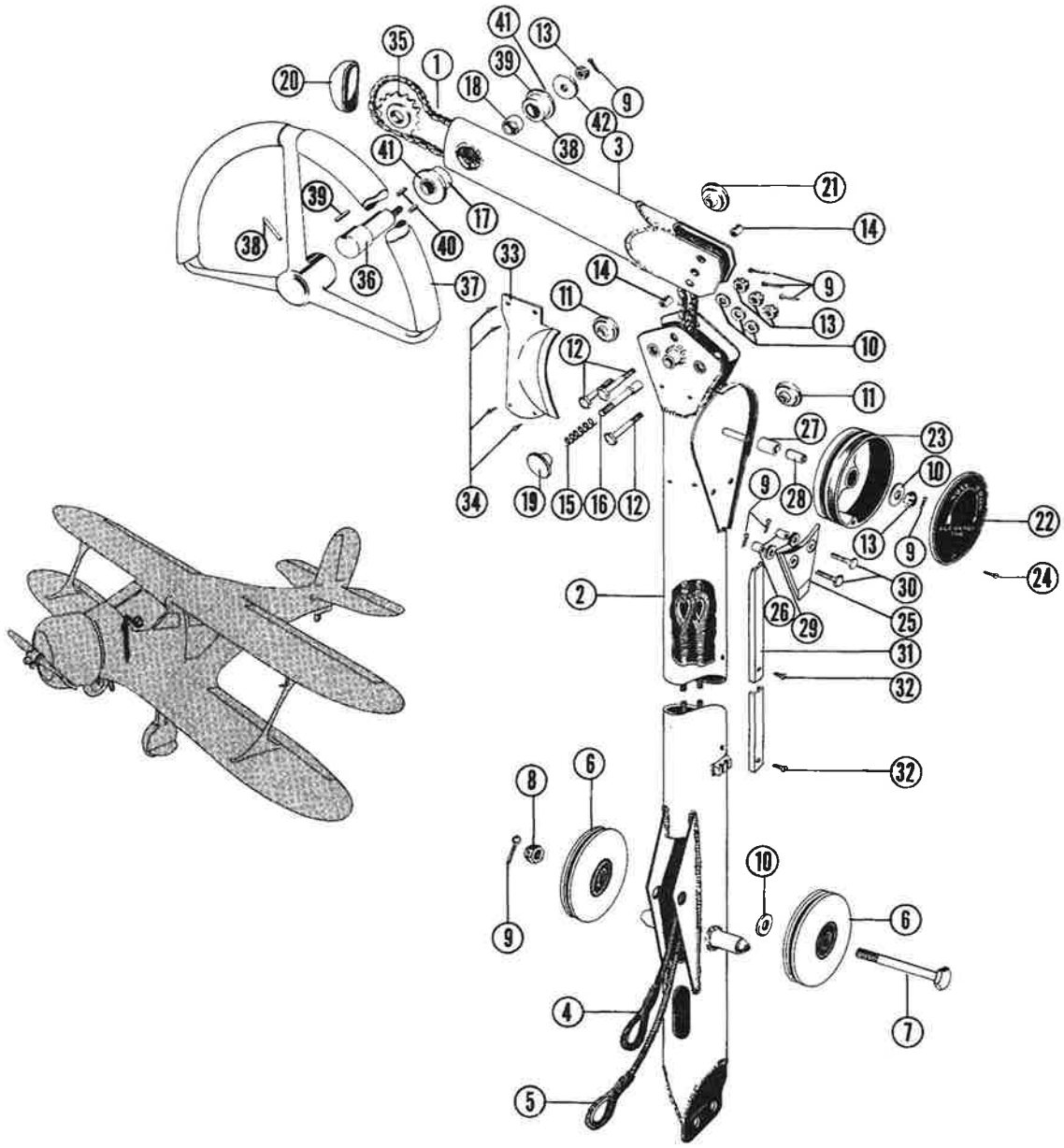


1	D172661 RH	HOUSING — FLAP OPERATING MECHANISM RH WING
2	D172662	COVER — HOUSING FLAP OPERATING MECHANISM
3	AN502-10-6	SCREW — AIRCRAFT FILLISTER HEAD
4	D172663-1	GEAR — WORM
5	D172663-4	SLEEVE
6	D172663-5	HOLDER — FLAP MECHANISM BEARING
7	D172663-6	HOUSING — FLAP GEAR MECHANISM
8	D172663-7	PLUG
9	D172663-8	BUSHING
10	D172664-1	PIN — FLAP MECHANISM
11	D172664-2	PIN — FLAP MECHANISM
12	D172664-3	PIN — FLAP MECHANISM
13	D172664-6	BUSHING
14	D172664-7	NUT — HEXAGONAL
15	D172664-8	NUT — HEXAGONAL
16	D172664-9	CAP
17	D172665-1	GEAR ASSEMBLY — FLAP OPERATING MECHANISM
18	D172669	SWITCH ASSEMBLY — FLAP OPERATING MECHANISM WING LIMIT
19	AN315-3R	NUT
20	D172665-4	DRIVE ASSEMBLY — FLAP OPERATING MECHANISM
21	D172666-1	GASKET — FLAP OPERATING MECHANISM
22	D172666-2	FELT — FLAP OPERATING MECHANISM
23	D172669-7	BRACKET ASSEMBLY — FLAP LIMIT SWITCH
24	D172669-16	SLEEVE
25	D172669-17	SPACER
26	AN502-10-14	SCREW
27	K4	BEARING — BALL (FAFNIR)
28	K8A	BEARING — BALL (FAFNIR)
29	AN3-12	BOLT — AIRCRAFT
30	AN310-3	NUT — AIRCRAFT CASTLE
31	AN380-2-2	PIN — COTTER

FLAP SCREW AND LIMIT SWITCH

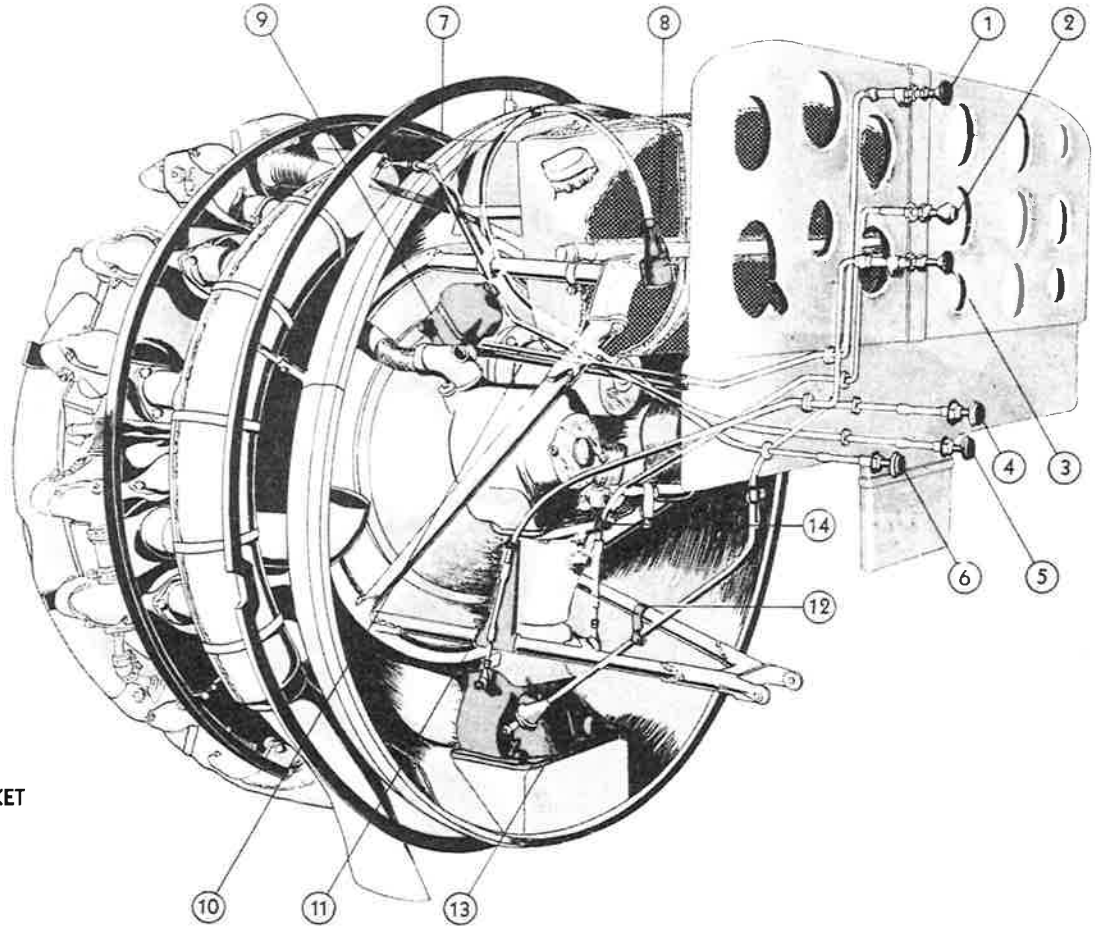
BEECHCRAFT MODEL 17

1	D17750A-5	CHAIN ASSEMBLY — THROWOVER CONTROL COLUMN
2	D177501	LEVER ASSEMBLY — THROWOVER CONTROL
3	D177502	ARM ASSEMBLY — CONTROL COLUMN THROWOVER
4	D177003	CABLE ASSEMBLY — THROWOVER CONTROL COLUMN
5	D177004	CABLE ASSEMBLY — THROWOVER CONTROL COLUMN
6	D17262-2	PULLEY — AILERON CONTROL
7	AN4-14	BOLT — AIRCRAFT
8	AN320-4	NUT — CASTLE
9	AN380-2-2	PIN — COTTER
10	AN960-416	WASHER
11	D17751-10	BEARING ASSEMBLY — THROWOVER CONTROL COLUMN
12	S-74-15	BOLT — ROUND HEAD
13	AN310-4	NUT — CASTLE
14	D17751-12	SPACER — THROWOVER CONTROL COLUMN
15	D17751-14	SPRING — THROWOVER LATCH PIN
16	D17751-15	PIN — THROWOVER LATCH
17	D17751-20	SPACER — THROWOVER CONTROL COLUMN OUTER
18	D17751-21	SPACER — THROWOVER CONTROL COLUMN INNER
19	D17751-27	KNOB — THROWOVER CONTROL COLUMN LATCH PIN
20	D17751-31	COVER — THROWOVER CONTROL
21	D17751-35	BEARING ASSEMBLY — CONTROL COLUMN CENTER
22	D170104	PLACARD — ELEVATOR TAB CONTROL
23	D177601	DISC — ELEVATOR TAB CONTROL
24	6 x 32 x 3/8	SCREW — ROUND HEAD MACHINE
25	D177602-5	COVER — ELEVATOR TAB
26	D177604	BUSHING — ELEVATOR TAB CONTROL PULLEY
27	D177605	BUSHING — ELEVATOR TAB CONTROL DISC
28	D177606	BUSHING — ELEVATOR TAB CONTROL DISC
29	D177607	PULLEY — ELEVATOR TAB CONTROL
30	AN3-5	BOLT — AIRCRAFT
31	D177608	GUARD — ELEVATOR TAB CONTROL CABLE
32	AN505-8-6	SCREW
33	D177612	FAIRING — ELEVATOR TAB CONTROL
34	AN535-0-3	SCREW
35	D17856-7	SPROCKET — CONTROL COLUMN
36	187518	SHAFT — CENTRAL COLUMN
37	302515	WHEEL — CONTROL COLUMN
38	102809-125-112	PIN — DRILL ROD
39	105693-01250	KEY — SQUARE
40	S-21-3	KEY — SQUARE
41	H110	BEARING (SCHATZ)
42	100951-S-008-012	WASHER



CONTROL COLUMN ASSEMBLY

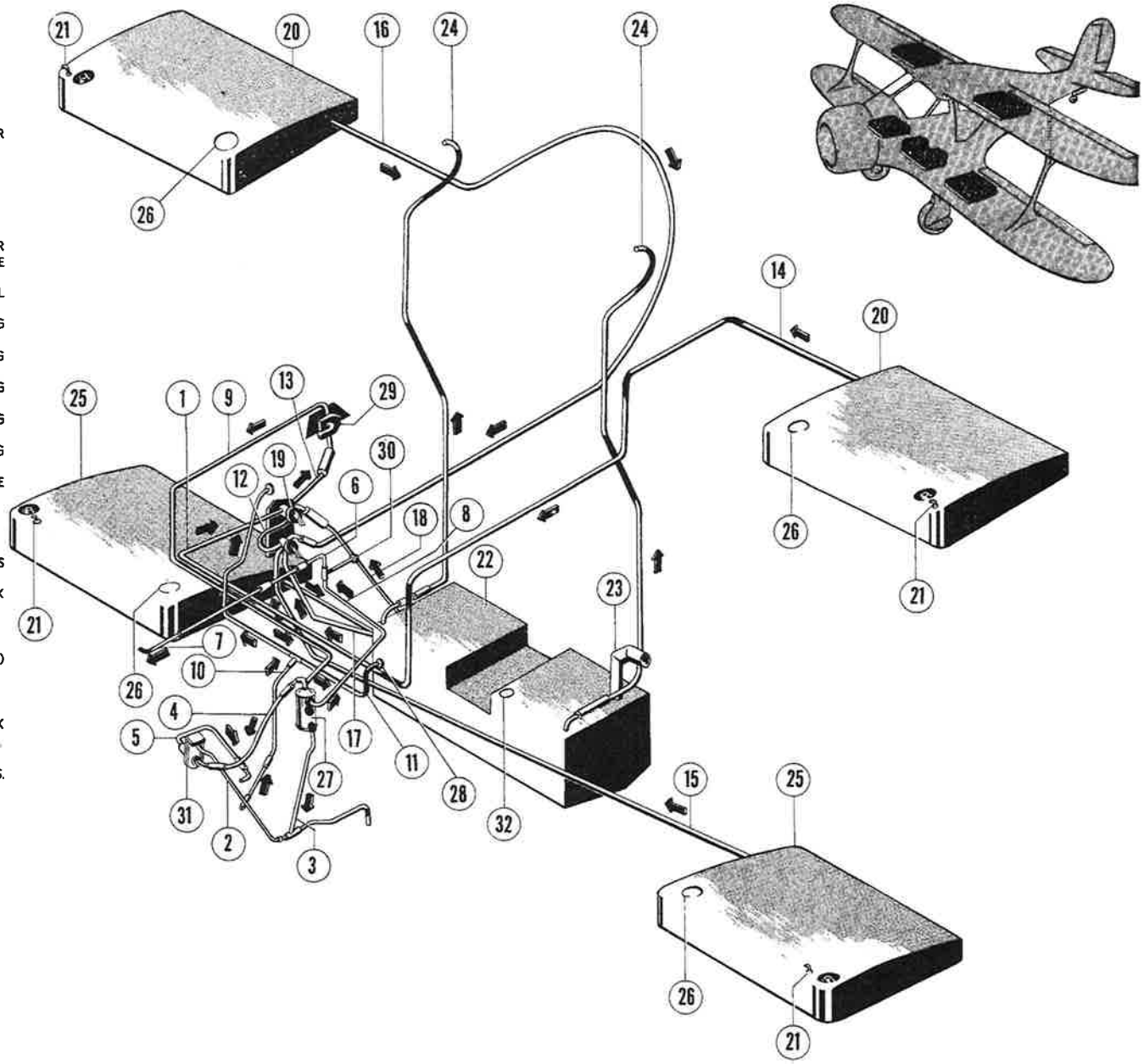
REF. NO.	PART NO.	PART NAME
1	D179349-2	PROPELLER CONTROL
2	D179347	THROTTLE CONTROL
3	D179349-1	MIXTURE CONTROL
4	D179348-1	CARBURETOR HEAT CONTROL
5	D179348-2	OIL HEAT CONTROL
6	D173986-1	CABIN HEAT CONTROL
7		OIL RADIATOR AIR DUCT
8		CABIN HEATER CONTROL VALVE
9		PROPELLER GOVERNOR
10	D1759072A	PROPELLER CONTROL BRACKET
11	D1759358	CARBURETOR MIXTURE CONTROL BRACKET
12	D179064	CARBURETOR HEAT CONTROL BRACKET
13		CARBURETOR
14	D179078	THROTTLE CONTROL SUPPORT BRACKET



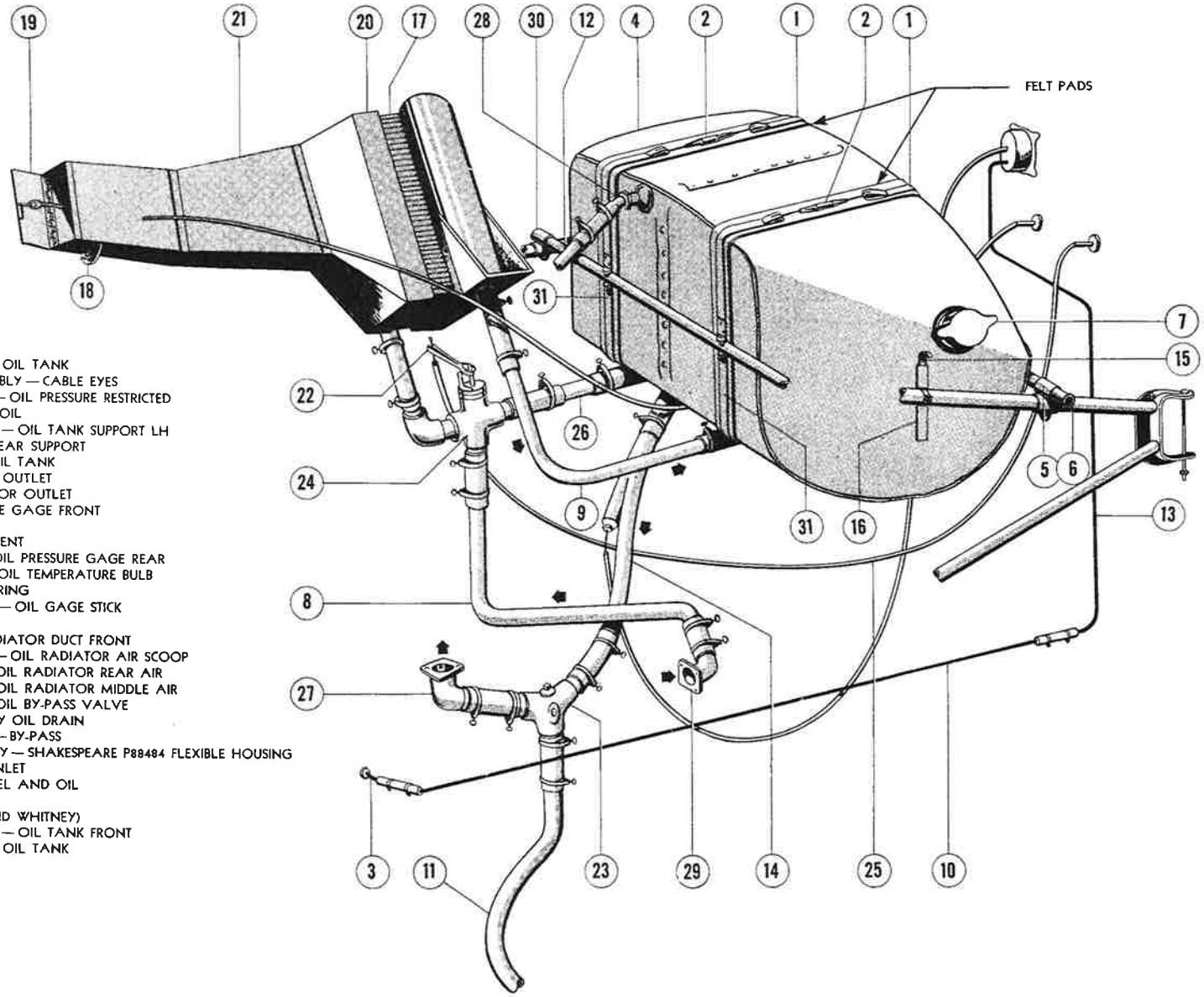
ENGINE CONTROL SYSTEM

BEECHCRAFT MODEL 17

1	D179262	TUBE — LEFT UPPER WING TANK
2	D179274	TUBE — FUEL PUMP DRAIN CENTER
3	D179277	TUBE ASSEMBLY — STRAINER DRAIN UPPER
4	D179278	TUBE — STRAINER TO FUEL PUMP
5	D179279	TUBE — FUEL PUMP TO CARBURETOR
6	D179280	TUBE ASSEMBLY — PRIMER TO ENGINE
7	D179283	TUBE ASSEMBLY — PRIMER TO ENGINE FORWARD
8	D179284	TUBE ASSEMBLY — PRIMER TO STRAINER
9	D179286	TUBE — WOBBLE PUMP TO STRAINER UPPER
10	D179288	TUBE ASSEMBLY — CARBURETOR TO ENGINE GAGE
11	D179290	TUBE ASSEMBLY — CARBURETOR TO FUEL WARNING
12	D179291	TUBE ASSEMBLY — FUEL COCK CONNECTING
13	D179292	TUBE — FUEL COCK TO WOBBLE PUMP
14	D179293	TUBE — FUEL COCK TO LEFT UPPER WING TANK
15	D179295	TUBE — FUEL COCK TO LEFT LOWER WING TANK
16	D179296	TUBE — FUEL COCK TO RIGHT UPPER WING TANK
17	D179297	TUBE — FUEL COCK TO RIGHT LOWER WING TANK
18	D179299	TUBE — FRONT FUSELAGE TANK TO VALVE
19	AN4004-1	VALVE — FUEL
20	D17960 R & L	TANK — UPPER WING FUEL
21	D17973-4	TUBE — WING FUEL TANK VENT
22	D17971	TANK — FUSELAGE FUEL
23	D179721	NECK ASSEMBLY — FRONT FUSELAGE GAS TANK FILLER
24	E17974	VENT ASSEMBLY — FUSELAGE GAS TANK
25	D17975 R & L	TANK — LOWER WING FUEL LH
26	D171056	UNIT — WING TANK FUEL LEVEL
27	C-1A (1239)	STRAINER ASSEMBLY (LUNKENHEIMER)
28	IS-5	UNIT — FUEL PRESSURE WARNING (PIONEER)
29	R X D 1563	PUMP — WOBBLE (ROMEC)
30	29894	PRIMER (ECLIPSE)
31	AN4100	FUEL PUMP (TYPE G-6)
32	D17984-1	GAGE ASSEMBLY — FUSELAGE GAS TANK
33	S2	GAS CAPS — MIDDLETOWN — 5 REQUIRED.
34	D179292	TUBE ASSEMBLY
35	D179310	INSTALLATION — FUEL SELECTOR VALVES.



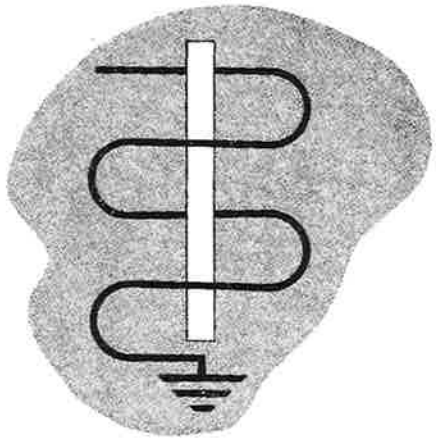
INSTALLATION—FUEL SYSTEM



1	D1789671-1	STRAP ASSEMBLY — OIL TANK
2	AN140-8S	TURNBUCKLE ASSEMBLY — CABLE EYES
3	189746	FITTING ASSEMBLY — OIL PRESSURE RESTRICTED
4	D17S980-15	TANK ASSEMBLY — OIL
5	D17S9803 LH	BRACKET ASSEMBLY — OIL TANK SUPPORT LH
6	D179804	TUBE — OIL TANK REAR SUPPORT
7	D179806	CAP ASSEMBLY — OIL TANK
8	D179810	TUBE — ENGINE OIL OUTLET
9	D179811	TUBE — OIL RADIATOR OUTLET
10	D179813	TUBE — OIL PRESSURE GAGE FRONT
11	D179814	TUBE — OIL DRAIN
12	D179815	TUBE — OIL TANK VENT
13	D179816	TUBE ASSEMBLY — OIL PRESSURE GAGE REAR
14	D179818	WELL ASSEMBLY — OIL TEMPERATURE BULB
15	D179823	STICK — OIL MEASURING
16	D179824	SHEATH ASSEMBLY — OIL GAGE STICK
17	94-189850	RADIATOR — OIL
18	D179059	SUPPORT — OIL RADIATOR DUCT FRONT
19	D179871	VALVE ASSEMBLY — OIL RADIATOR AIR SCOOP
20	D179876	DUCT ASSEMBLY — OIL RADIATOR REAR AIR
21	D179878	DUCT ASSEMBLY — OIL RADIATOR MIDDLE AIR
22	18S992	ARM ASSEMBLY — OIL BY-PASS VALVE
23	37D6114-4	COCK ASSEMBLY — Y OIL DRAIN
24	S-80	VALVE ASSEMBLY — BY-PASS
25	S-175-5 5/12	CONTROL ASSEMBLY — SHAKESPEARE P88484 FLEXIBLE HOUSING
26	D179812	TUBE — OIL TANK INLET
27	AC850-16	ELBOW — HOSE, FUEL AND OIL
28	18 — 9802	COUPLING
29	A10898	FLANGE (PRATT AND WHITNEY)
30	D17S9665	SUPPORT ASSEMBLY — OIL TANK FRONT
31	D17S9671-9	STRAP ASSEMBLY — OIL TANK

INSTALLATION—OIL SYSTEM

SECTION III



ELECTRICAL SYSTEMS

MASTER WIRING DIAGRAM

LANDING GEAR ELECTRICAL CIRCUIT

FLAP ELECTRICAL CIRCUIT

WIRING DIAGRAMS—LANDING AND POSITION LIGHTS—LANDING GEAR MOTOR

WIRING DIAGRAMS—MAGNETO, STARTER SOLENOID AND BATTERY—THERMOCOUPLE—PITOT—OUTSIDE AIR AND CARBURETOR TEMPERATURE

WIRING DIAGRAMS—CABIN LIGHTING, FUEL ANALYZER AND COMPASS—FLARE UNIT—RECOGNITION LIGHTS—FUEL PRESSURE WARNING UNIT

WIRING DIAGRAM—GENERATOR—FUEL TANK DETECTOR AND GAGE UNIT—FLAP MOTOR

MASTER WIRING DIAGRAM

ELECTRICAL EQUIPMENT

NO.	NAME	NO. REQ.	PART NUMBER
1	BATTERY—EXIDE	1	6TS-13-1
2	GENERATOR—ECLIPSE—TYPE 309	1	* MODEL 8
3	STARTER—ECLIPSE—TYPE 397	1	* MODEL 13
4	MOTOR—LANDING GEAR—DUMORE D-5	1	* 3843-C
5	MOTOR—FLAP—DUMORE K	1	* 4253
6	SWITCH—MASTER—CUTLER-HAMMER	1	° C.H.#8187 SPEC.
7	SWITCH—IGNITION	1	* D170771
8	STARTER BUTTON—DELCO REMY	1	* 1377
9	SWITCH—SOLENOID—DELCO REMY	1	* 1520
10	SWITCH—FLAP CONTROL—CUTLER-HAMMER	1	* C9A
11	SWITCH—FLAP LIMIT	1	* D172669
12	SWITCH—LANDING GEAR POSITION	1	* D17858
13	SWITCH—LANDING GEAR UPPER LIMIT	1	* D178550
14	SWITCH—LANDING GEAR LOWER LIMIT	1	* D178550
15	SWITCH—RIGHT LDG. LIGHT—C.H.	1	* B9A
16	SWITCH—LEFT LDG. LIGHT—C.H.	1	* B9A
17	SWITCH—GENERATOR—C.H.	1	* B5A
18	SWITCH—PITOT HEAT—C.H.	1	* B5A
19	SWITCH—MAP LIGHT—C.H.	1	* 8391
20	SWITCH—POSITION LIGHT—C.H.	1	* B9A
21	FUSE—40 AMP.—LITTELFUSE	3	* 4AG
22	FUSE—30 AMP.—LITTELFUSE	2	* 3AG
23	FUSE—20 AMP.—LITTELFUSE	5	* 3AG
24	FUSE—10 AMP.—LITTELFUSE	2	* 3AG
25	FUSE— 6 AMP.—LITTELFUSE	6	* 3AG
26	SWITCH—INSTRUMENT LIGHT—CLAROSTAT	1	* R18-20
27	SWITCH—GAS GAUGE SELECTOR—YAXLEY	1	* 1315L
28	SWITCH—REAR POSITION LIGHT—C.H.	1	* B9A
29	FRONT FUSELAGE TANK UNIT	1	* D17984-1
30	FUSE BOX	1	* D173885
31	TACHOMETER—TYPE E-13	1	* 94-27354
32	L.L. WING TANK UNIT	1	* D171056
33	R.U. WING TANK UNIT	1	* D171056
34	R.L. WING TANK UNIT	1	* D171056
35	ELEVATOR TAB RHEOSTAT UNIT S.-W.	1	* 106337
36	TAB INDICATOR—STEWART-WARNER	1	* 106336
37	FUEL INDICATOR	1	* AC#363779
38	UNIT—FUEL PRES. WARNING—C-2	1	* 94-32175
39	LAMP—FUEL PRES. WARNING—DRAKE	1	* #80—RED
40	LAMP—LDG. GEAR WARNING—DRAKE	1	* #80—RED
41	LAMP—LDG. GEAR WARNING—DRAKE	1	* #80—GREEN
42	COIL—BOOSTER—KINGSTON TYPE	1	* KW
43	MAGNETO—ENGINE RIGHT	1	*
44	MAGNETO—ENGINE LEFT	1	*
46	AMMETER—WESTERN	1	° 606 TYPE 14
47	LAMP ASSEM.—LEFT POSITION—GRIMES	1	* C—RED
48	LAMP ASSEM.—RIGHT POSITION—GRIMES	1	° C—GREEN
49	LAMP ASSEM.—REAR POSITION—TYPE D-2	1	° ARMY 94-32266
50	LAMP ASSEM.—LEFT LANDING—TYPE A-11	1	* 94-32220A
51	LAMP ASSEM.—RIGHT LANDING—TYPE A-11	1	° 94-32220A
52	RESISTOR—10 WATT 25 OHM—RADIOLAB. WICHITA—OR EQUIV.	1	TYPE ABA
53	LAMP ASSEM.—CABIN DOME—FORD	1	* 6813-777A
54	LAMP ASSEM.—INSTRUMENT—TYPE C-3	2	* AC32256
55	LAMP ASSEM.—MAP READING—FORD	2	* 09A-13777A
56	INDICATOR—FUEL ANALYZER—TYPE A-7A	1	* 94-27992A
57	CELL—FUEL ANALYZER—CAMBRIDGE	1	* S-1-A
58	FLARE UNIT—INTERNATIONAL	3	° MK. 1 MOD. 1
59	SWITCH—MASTER FLARE	1	*
60	SWITCH—FLARE RELEASE	1	*
61	INDICATOR—CARB. & OUTSIDE AIR TEMP.	1	* AN5790-6
62	SWITCH—SELECTOR—WESTON 2 POSITION	1	* ND21439
F 63	RESISTANCE BULB—CARB. TEMP.	1	AN5525-1
64	RESISTANCE BULB—OUTSIDE AIR	1	* AN5525-1
65	PLUG—FUSE BOX CON.—H. B. JONES	1	* P-412-AB
66	PLUG—FUSE BOX CON.—H. B. JONES	1	* P-410-AB
67	SOCKET—FUSE BOX CON.—H. B. JONES	1	* S-412-FHT
68	SOCKET—FUSE BOX CON.—H. B. JONES	1	* S-410-FHT
69	PITOT HEAT—TUBE—PIONEER	1	* 3202-3S
70	BLOCK—FLAP MOTOR JUNCTION	1	D177758
71	COMPASS—TYPE B-16	1	* 94-27807
72	CONDENSER—SPRAGUE PROD. CO., NORTH ADAMS, MASS.—OR EQUIV.	1	CA275X 4 MFD.
73	RESISTOR—INSTRUMENT	1	37A5222-5
74	RESISTOR—10 WATT 75 OHM—OHMITE OR EQUIV.	1	1011
76	WASHER (USE WITH CARB. AIR TEMP. BULB)	1	AN900-10
77	CONTROL BOX—RECOG. LIGHT	1	* D170845
78	LAMP ASSEM.—RED LENS—TYPE E-2	1	* 94-32374
79	LAMP ASSEM.—GREEN LENS—TYPE E-2	1	* 94-32374
80	LAMP ASSEM.—AMBER LENS—TYPE E-2	1	* 94-32374
81	LAMP ASSEM.—CLEAR LENS—TYPE E-1	1	* 94-32366
82	RESISTOR—25 WATT 10 OHM—RADIOLAB. WICHITA, OR EQUIV.	1	TYPE DHA
83	L.U. WING TANK UNIT	1	* D171056
84	BUSS BAR—L.H.	1	* D170712-4
85	BUSS BAR—R.H.	1	° D170712-5
86	DISCONNECT SPLICE—THOMAS & BETTS, ELIZABETH, N. J.	15	A57
87	DISCONNECT SPLICE—THOMAS & BETTS, ELIZABETH, N. J.	7	C58
88	PLUG—CANNON	1	* SK-L3-325
89	PLUG—CANNON	1	* GK-C3-325
91	CABLE—BATTERY GROUND CONNECTION	1	° D17941
92	CABLE ASSEM.—BATTERY	1	* D170715
93	CABLE ASSEM.—SOLENOID	1	* D170716
94	CABLE ASSEM.—STARTER	1	° D170719
95	TACHOMETER GENERATOR—TYPE B	1	* 94-27371
96	CONDUIT ASSEM.	1	* NAS-52-4BB-394
97	PLUG—FUEL ANALYZER CELL	1	AN3106-14S-2S
98	PLUG—FUEL ANALYZER INDICATOR	2	AN3106-12S-3S
99	PLUG—FREE AIR THERMOMETER	1	AN3106-14S-2S
100	CUTOUT—ECLIPSE—TYPE 350-3A	1	*
101	CHOKE BOX—ECLIPSE	1	° 111924
102	REGULATOR—ECLIPSE	1	° 111143

NOTE—° DENOTES REFERENCE ONLY; ITEMS MARKED IN THIS MANNER ARE CALLED OUT ON OTHER ASSEMBLIES

— PROTECTION FOR WIRES ON SOLDER CUPS OF PLUGS AND RECEPTACLES SHALL BE IN ACCORDANCE WITH ELECTRICAL SPEC. E. S. 217.

— C26 TERMINAL, A36 TERMINAL AND C-71 TERMINAL MAY BE PURCHASED FROM THOMAS & BETTS, ELIZABETH, N. J.

— #8 WIRE—50 AMP. TERMINAL A.C. 660-3—8 REQ.
#12 AND #14 WIRE—35 AMP. TERMINAL C-26—56 REQ. C-71 TERMINAL—1 REQ.
#18 WIRE—25 AMP. TERMINALS A36—118 REQ.
ALL SHIELDING CUT 1 INCH FROM TERMINALS; WRAP ENDS WITH COTTON WAXED CORD—ARMY 6-27.

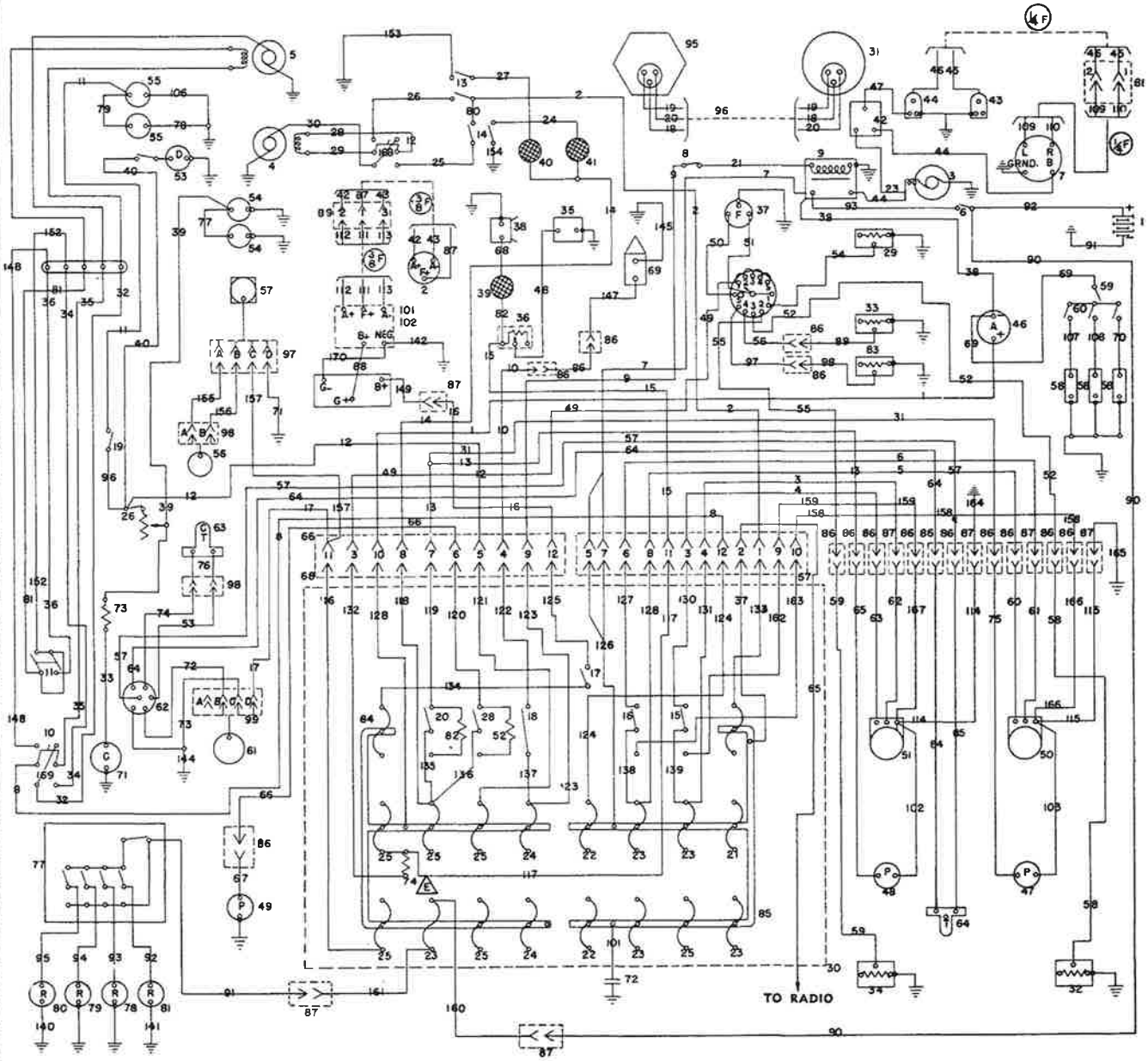
NOTE A—GREEN LIGHT BURNING—LANDING GEAR DOWN
B—SWITCH OPEN—LANDING GEAR DOWN
C—SWITCH CLOSED—LANDING GEAR DOWN
D—SWITCH CLOSED—FLAP UP
E—THIS FUSE MUST NOT BE CONNECTED TO BUSS BAR
F—GOVERNMENT FURNISHED EQUIPMENT

BEECHCRAFT MODEL 17

WIRE NO.	SIZE	SPEC. OR PART NO.	LENGTH
1	12	AN-J-C-48	24
2	12	"	42
3	12	"	92
4	18	"	92
5	12	"	92
6	18	"	92
7	8	"	48
8	12	"	36
9	18	"	32
10	18	"	123
11	18	"	139
12	18	"	36
13	18	"	96
14	18	"	36
15	18	"	42
16	12	"	72
17	18	"	36
18	20	"	41
19	20	"	41
20	20	"	41
21	18	※648 PACKARD	42
23	18	SHIELDED CABLE	42
24	18	AN-J-C-48	120
25	12	"	104
26	12	"	30
27	18	"	48
28	12	"	102
29	12	"	102
30	12	"	102
31	18	"	92
32	12	"	121
33	18	"	48
34	12	"	121
35	12	"	121
36	12	"	76
37	14	"	8
38	12	"	44
39	18	"	164
40	18	"	204
42	12	"	37
43	12	"	37
44	18	※648 PACKARD	
		SHIELDED CABLE	48
45	14	AN-J-C-48	17
46	14	"	33
47	—	7 MM. H.T. CABLE	
		95-28003-N	72
48	18	AN-J-C-48	346
49	18	"	42
50	18	"	18
51	18	"	18
52	18	"	66
53	18	"	55
54	18	"	74
55	18	"	102
56	18	"	143
57	18	"	104
58	18	"	28
59	18	"	28
60	12	"	115
61	18	"	115
62	12	"	115
63	18	"	115
64	18	"	104
65	18	"	138
66	18	"	342
67	18	"	24
68	18	"	36
69	18	"	123
70	18	"	140
71	18	"	50
72	18	"	12
73	18	"	12
74	18	"	55
75	18	"	138
77	18	"	28
78	18	"	15
79	18	"	87
80	12	"	96
81	12	"	76
82	18	"	56

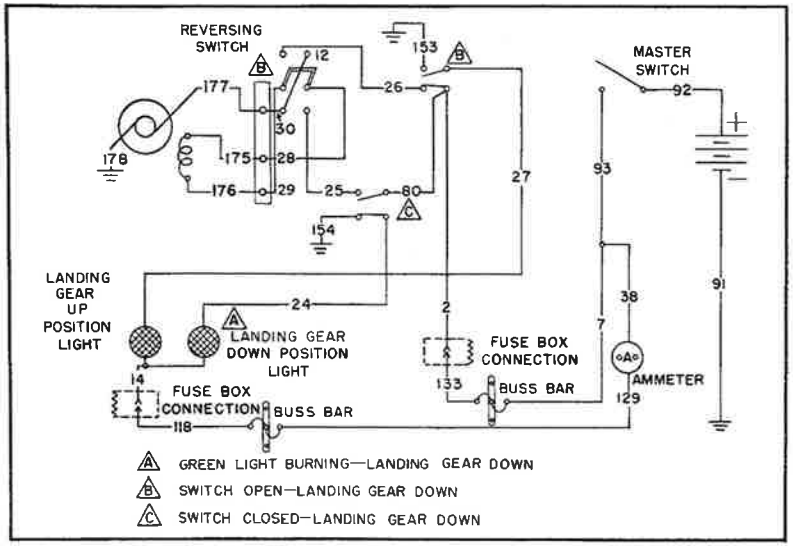
WIRE NO.	SIZE	SPEC. OR PART NO.	LENGTH
84	18	AN-J-C-48	96
85	18	"	96
86	18	"	130
87	16	"	37
88	12	※654 PACKARD	
		SHIELDED CABLE	16
89	18	AN-J-C-48	24
90	14	"	54
91	14	"	34
92	18	"	192
93	18	"	168
94	18	"	154
95	18	"	154
96	18	"	6
97	18	"	102
98	18	"	24
101	14	"	4
102	18	"	66
103	18	"	66
106	18	"	15
107	18	"	140
108	18	"	140
109	14	※662 PACKARD	18
110	14	SHIELDED CABLE	18
111	16	AN-J-C-48	9
112	12	"	9
113	12	"	9
114	12	"	115
115	12	"	115
116	18	"	8
117	18	"	10
118	18	"	8
119	18	"	8
120	18	"	8
121	18	"	8
122	18	"	8
123	18	"	8
124	12	"	8
125	12	"	8
126	8	"	8
127	18	"	8
128	12	"	8
129	12	"	8
130	18	"	8
131	12	"	8
132	18	"	8
133	12	"	6
134	12	"	6
135	18	"	4
136	18	"	4
137	18	"	3
138	18	"	3
139	18	"	3
140	18	"	18
141	18	"	14
142	12	"	14
144	18	"	8
145	18	"	12
146	12	"	13
147	18	"	14
148	12	"	121
152	12	"	76
153	—	106208-0060	—
154	—	106208-0060	—
155	18	AN-J-C-48	60
156	18	"	60
157	18	"	54
158	18	"	80
159	18	"	80
160	14	"	10
161	14	"	10
162	18	"	6
163	18	"	6
164	12	"	6
165	12	"	6
166	18	"	115
167	18	"	115
168	12	"	4
169	12	"	4
170	12	※654 PACKARD	
		SHIELDED CABLE	—

CABLE MAY BE PURCHASED FROM PACKARD ELECTRICAL DIVISION, WARREN, OHIO

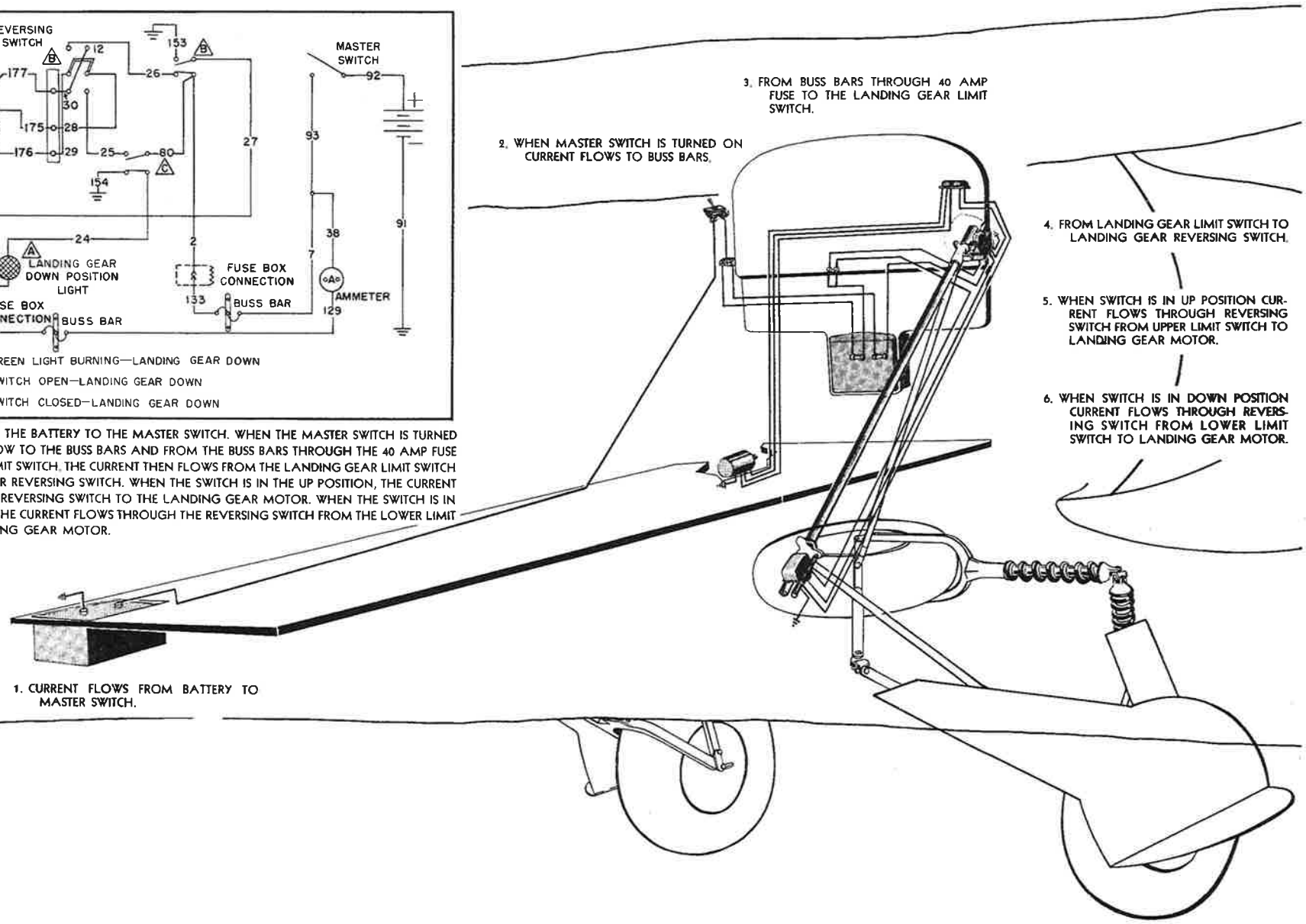


MASTER WIRING DIAGRAM

BEECHCRAFT MODEL 17

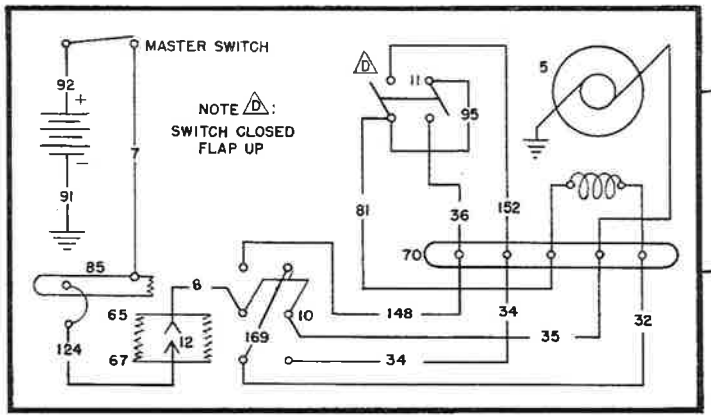


CURRENT FLOWS FROM THE BATTERY TO THE MASTER SWITCH. WHEN THE MASTER SWITCH IS TURNED ON, CURRENT WILL FLOW TO THE BUSS BARS AND FROM THE BUSS BARS THROUGH THE 40 AMP FUSE TO LANDING GEAR LIMIT SWITCH. THE CURRENT THEN FLOWS FROM THE LANDING GEAR LIMIT SWITCH TO THE LANDING GEAR REVERSING SWITCH. WHEN THE SWITCH IS IN THE UP POSITION, THE CURRENT FLOWS THROUGH THE REVERSING SWITCH TO THE LANDING GEAR MOTOR. WHEN THE SWITCH IS IN THE DOWN POSITION, THE CURRENT FLOWS THROUGH THE REVERSING SWITCH FROM THE LOWER LIMIT SWITCH TO THE LANDING GEAR MOTOR.



LANDING GEAR ELECTRICAL CIRCUIT

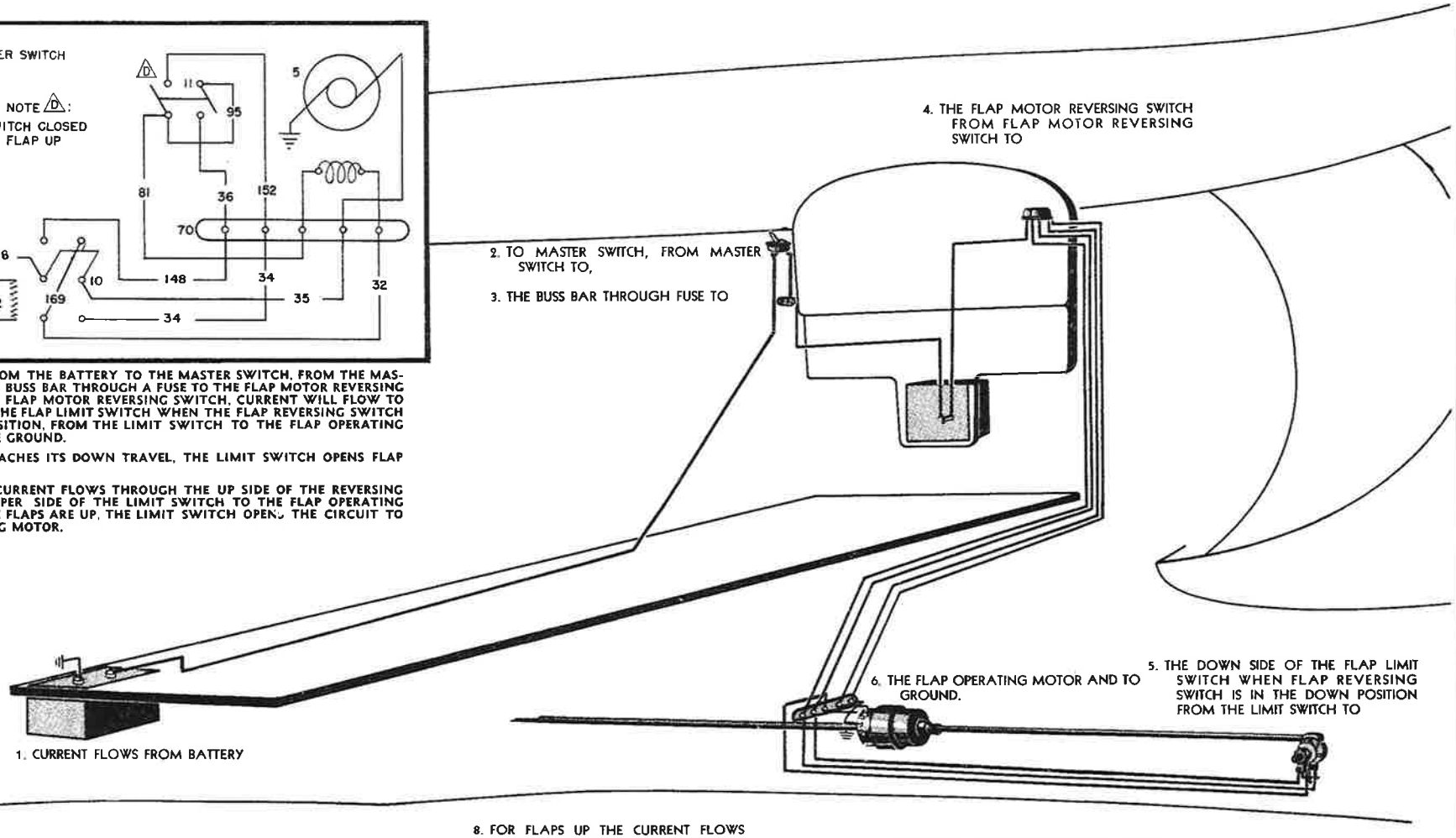
BEECHCRAFT MODEL 17



CURRENT FLOWS FROM THE BATTERY TO THE MASTER SWITCH, FROM THE MASTER SWITCH TO THE BUSS BAR THROUGH A FUSE TO THE FLAP MOTOR REVERSING SWITCH. FROM THE FLAP MOTOR REVERSING SWITCH, CURRENT WILL FLOW TO THE DOWN SIDE OF THE FLAP LIMIT SWITCH WHEN THE FLAP REVERSING SWITCH IS IN THE DOWN POSITION, FROM THE LIMIT SWITCH TO THE FLAP OPERATING MOTOR AND TO THE GROUND.

WHEN THE FLAP REACHES ITS DOWN TRAVEL, THE LIMIT SWITCH OPENS FLAP MOTOR CIRCUIT.

FOR FLAPS UP THE CURRENT FLOWS THROUGH THE UP SIDE OF THE REVERSING SWITCH TO THE UPPER SIDE OF THE LIMIT SWITCH TO THE FLAP OPERATING MOTOR. WHEN THE FLAPS ARE UP, THE LIMIT SWITCH OPENS THE CIRCUIT TO THE FLAP OPERATING MOTOR.



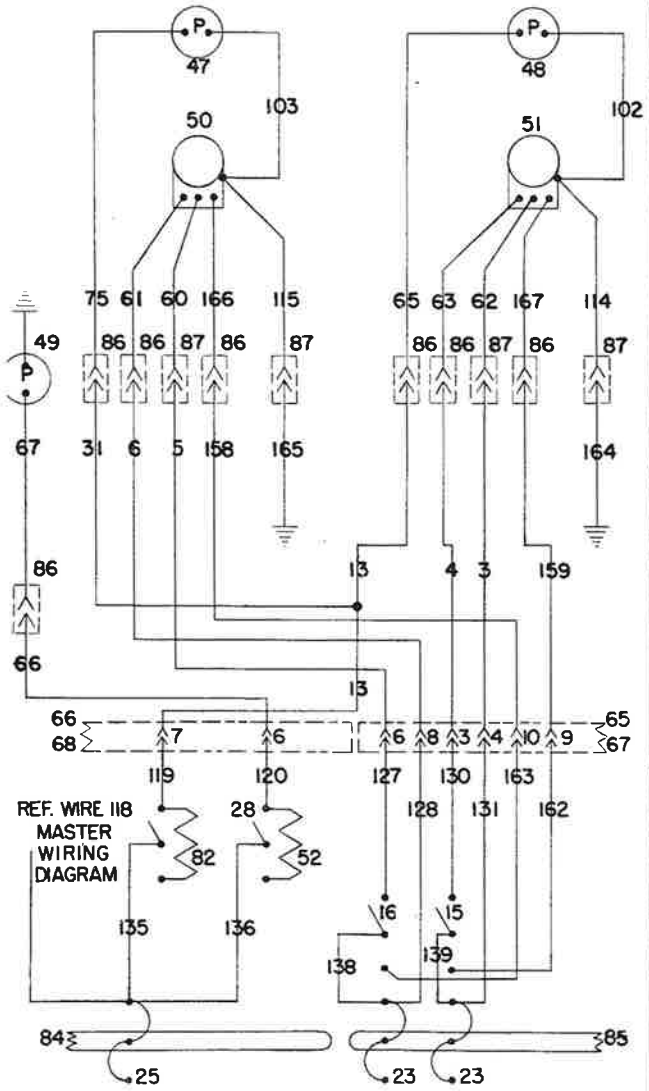
8. FOR FLAPS UP THE CURRENT FLOWS THROUGH THE UP SIDE OF THE REVERSING SWITCH TO THE UPPER SIDE OF THE LIMIT SWITCH TO FLAP OPERATING MOTOR. WHEN FLAPS ARE UP THE LIMIT SWITCH OPENS CIRCUIT TO THE FLAP OPERATING MOTOR.

7. WHEN FLAP REACHES ITS DOWN TRAVEL THE LIMIT SWITCH OPENS FLAP MOTOR CIRCUIT.

FLAP ELECTRICAL CIRCUIT

BEECHCRAFT MODEL 17

LANDING AND POSITION LIGHTS



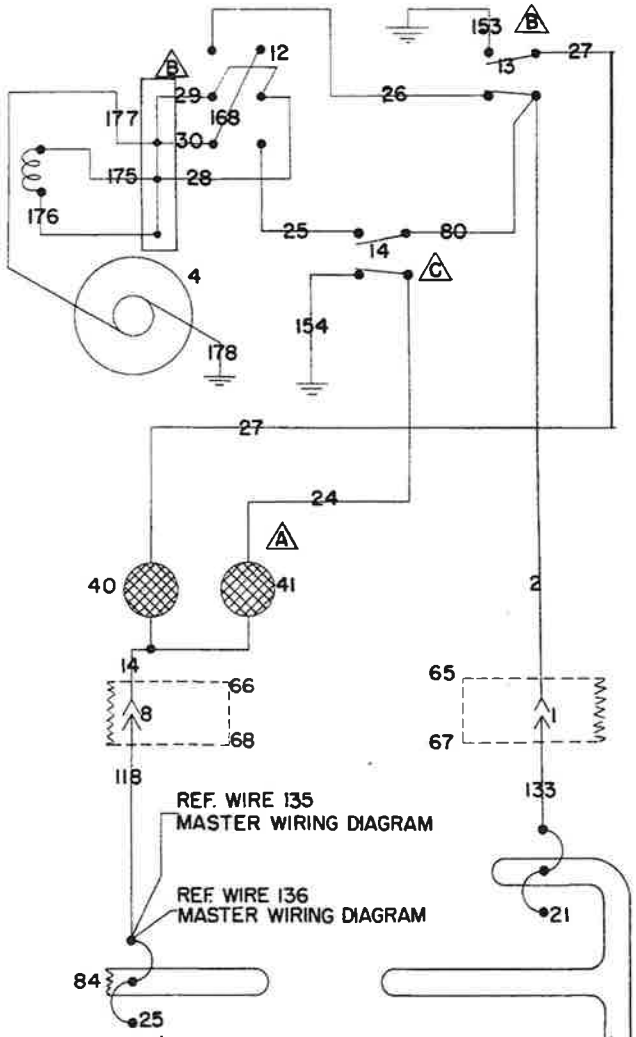
ELECTRICAL EQUIPMENT

ITEM NO.	NAME	VENDOR	PART NO.
4	MOTOR - LANDING GEAR	THE DUMORE CO. RACINE, WIS.	D5-3843C
12	SWITCH - LDG. GEAR POSITION	BEECH AIRCRAFT CORP. WICHITA, KANS.	D17858 (BEECH)
13	SWITCH - LDG. GEAR UPPER LIMIT	BEECH AIRCRAFT CORP. WICHITA, KANS.	D178550 (BEECH)
14	SWITCH - LDG. GEAR LOWER LIMIT	BEECH AIRCRAFT CORP. WICHITA, KANS.	D178550 (BEECH)
15	SWITCH - RIGHT LDG. LIGHT	CUTLER-HAMMER INC. MILWAUKEE, WIS.	B9A
16	SWITCH - LEFT LDG. LIGHT	CUTLER-HAMMER INC. MILWAUKEE, WIS.	B9A
20	SWITCH - POSITION LIGHT	CUTLER-HAMMER INC. MILWAUKEE, WIS.	B9A
21	FUSE - 40 AMP.	LITTELFUSE INC. CHICAGO, ILL.	4GA
23	FUSE - 20 AMP.	LITTELFUSE INC. CHICAGO, ILL.	3AG
25	FUSE - 6 AMP.	LITTELFUSE INC. CHICAGO, ILL.	3AG
28	SWITCH - REAR POSITION LIGHT	CUTLER-HAMMER INC. MILWAUKEE, WIS.	B9A
40	LAMP - LDG. GEAR WARNING	DRAKE PILOTLITE CO. CHICAGO, ILL.	#80 RED
41	LAMP - LDG. GEAR WARNING	DRAKE PILOTLITE CO. CHICAGO, ILL.	#80 GREEN
47	LAMP ASSEM. - LEFT POSITION	GRIMES AIRCRAFT LIGHTING EQUIP. URBANA, OHIO	C-RED
48	LAMP ASSEM. - RIGHT POSITION	GRIMES AIRCRAFT LIGHTING EQUIP. URBANA, OHIO	C-GREEN
49	LAMP ASSEM. - REAR POSITION	GOVT. FURNISHED	94-32266
50	LAMP ASSEM. - LEFT LANDING	GRIMES AIRCRAFT LIGHTING EQUIP. URBANA, OHIO	94-3220A
51	LAMP ASSEM. - RIGHT LANDING	GRIMES AIRCRAFT LIGHTING EQUIP. URBANA, OHIO	94-3220A
52	RESISTOR - 10 WATT 25 OHM	RADIOLAB, INC. WICHITA, KANS.	ABA
65	PLUG - FUSEBOX CONN.	HOWARD B. JONES CHICAGO, ILL.	P-412-AB
66	PLUG - FUSEBOX CONN.	HOWARD B. JONES CHICAGO, ILL.	P-410-AB
67	SOCKET - FUSEBOX CONN.	HOWARD B. JONES CHICAGO, ILL.	S-412-FHT
68	SOCKET - FUSEBOX CONN.	HOWARD B. JONES CHICAGO, ILL.	S-410-FHT
82	RESISTOR - 25 WATT 10 OHM	RADIOLAB, INC. WICHITA, KANS.	DHA
84	BUSS BAR - L. H.	BEECH AIRCRAFT CORP. WICHITA, KANS.	D170712-4
85	BUSS BAR - R. H.	BEECH AIRCRAFT CORP. WICHITA, KANS.	D170712-5
86	DISCONNECT SPLICE	THOMAS & BETTS CO. INC. ELIZABETH, N. J.	A-57
87	DISCONNECT SPLICE	THOMAS & BETTS CO. INC. ELIZABETH, N. J.	C-58

WIRES

WIRE NO.	SIZE	SPECIFICATIONS	LENGTH	WIRE NO.	SIZE	SPECIFICATIONS	LENGTH
2	12	AN-J-C-48	42	103	18	AN-J-C-48	66
3	12	AN-J-C-48	92	114	12	AN-J-C-48	115
4	18	AN-J-C-48	92	115	12	AN-J-C-48	115
5	12	AN-J-C-48	92	118	18	AN-J-C-48	8
6	18	AN-J-C-48	92	119	18	AN-J-C-48	8
13	18	AN-J-C-48	96	120	18	AN-J-C-48	8
14	18	AN-J-C-48	36	127	18	AN-J-C-48	8
24	18	AN-J-C-48	120	128	12	AN-J-C-48	8
25	12	AN-J-C-48	104	130	18	AN-J-C-48	8
26	12	AN-J-C-48	30	131	12	AN-J-C-48	8
27	18	AN-J-C-48	48	133	12	AN-J-C-48	6
28	12	AN-J-C-48	102	135	18	AN-J-C-48	4
29	12	AN-J-C-48	102	136	18	AN-J-C-48	4
30	12	AN-J-C-48	102	138	18	AN-J-C-48	3
31	18	AN-J-C-48	92	139	18	AN-J-C-48	3
60	12	AN-J-C-48	115	153		106208-0060 (BEECH)	
61	18	AN-J-C-48	115	154		106208-0060 (BEECH)	
62	12	AN-J-C-48	115	158	18	AN-J-C-48	80
63	18	AN-J-C-48	104	159	18	AN-J-C-48	80
65	18	AN-J-C-48	138	162	18	AN-J-C-48	6
66	18	AN-J-C-48	342	163	18	AN-J-C-48	6
67	18	AN-J-C-48	24	164	12	AN-J-C-48	6
75	18	AN-J-C-48	138	165	12	AN-J-C-48	6
80	12	AN-J-C-48	96	166	18	AN-J-C-48	115
102	18	AN-J-C-48	66	167	18	AN-J-C-48	115

LANDING GEAR MOTOR

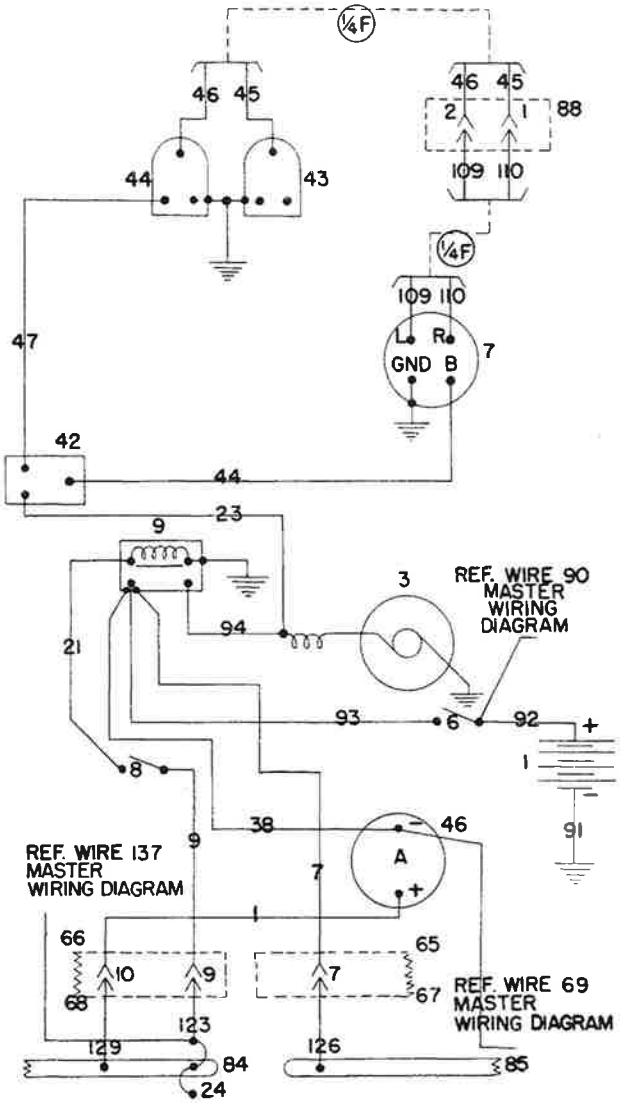


NOTE A—GREEN LIGHT BURNING—LANDING GEAR DOWN
B—SWITCH OPEN—LANDING GEAR DOWN
C—SWITCH CLOSED—LANDING GEAR DOWN

WIRING DIAGRAMS

BEECHCRAFT MODEL 17

MAGNETO, STARTER SOLENOID AND BATTERY



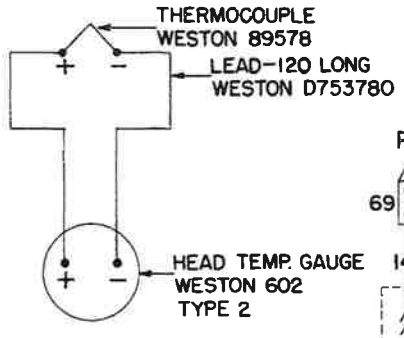
ELECTRICAL EQUIPMENT

ITEM NO.	NAME	VENDOR	PART NO.
1	BATTERY	EXIDE BATTERY CO. PHILADELPHIA, PA.	6TS-13-1
3	STARTER	ECLIPSE AVIATION CO. EAST ORANGE, N. J.	MODEL 13 TYPE 397
6	SWITCH - MASTER	CUTLER-HAMMER INC. MILWAUKEE, WIS.	※8187 SPECIAL
7	SWITCH - IGNITION	BEECH AIRCRAFT CORP. WICHITA, KANSAS	D170771 (BEECH)
8	STARTER BUTTON	DELCO REMY ANDERSON, IND.	1377
9	SWITCH - SOLENOID	DELCO REMY ANDERSON, IND.	1520
18	SWITCH - PITOT HEAT	CUTLER-HAMMER INC. MILWAUKEE, WIS.	B5A
24	FUSE - 10 AMP.	LITTELFUSE INC. CHICAGO, ILL.	3AG
25	FUSE - 6 AMP.	LITTELFUSE INC. CHICAGO, ILL.	3AG
42	COIL - BOOSTER	FORD MOTOR CO. DEARBORN, MICH.	KW
43	MAGNETO - ENGINE RIGHT		
44	MAGNETO - ENGINE LEFT		
46	AMMETER	WESTON ELEC. AIRCRAFT INST. CO., NEWARK, N. J.	606-TYPE 14
61	INDICATOR - CARB. & OUTSIDE AIR TEMPERATURE	WESTON ELEC. AIRCRAFT INST. CO., NEWARK, N. J.	AN5790-6
62	SWITCH - SELECTOR	WESTON ELEC. AIRCRAFT INST. CO., NEWARK, N. J.	ND21439
63	RESISTANCE BULB - CARB. TEMP.	WESTON ELEC. AIRCRAFT INST. CO., NEWARK, N. J.	AN5525-1
64	RESISTANCE BULB - OUTSIDE AIR	WESTON ELEC. AIRCRAFT INST. CO., NEWARK, N. J.	AN5525-1
65	PLUG - FUSEBOX CON.	HOWARD B. JONES CHICAGO, ILL.	P-412-AB
66	PLUG - FUSEBOX CON.	HOWARD B. JONES CHICAGO, ILL.	P-410-AB
67	SOCKET - FUSEBOX CON.	HOWARD B. JONES CHICAGO, ILL.	S-412-FHT
68	SOCKET - FUSEBOX CON.	HOWARD B. JONES CHICAGO, ILL.	S-410-FHT
69	PITOT HEAT TUBE	PIONEER INST. CO. BENDIX, N. J.	3202-3S
84	BUSS BAR L.H.	BEECH AIRCRAFT CORP. WICHITA, KANSAS	D170712-4 (BEECH)
85	BUSS BAR R.H.	BEECH AIRCRAFT CORP. WICHITA, KANSAS	D170712-5 (BEECH)
86	DISCONNECT SPLICE	THOMAS & BETTS CO. INC. ELIZABETH, N. J.	A57
88	PLUG - CANNON	CANNON ELECT. CO. LOS ANGELES, CALIF.	SK-L3-325
91	CABLE - BATTERY GROUND CONNECTING	BEECH AIRCRAFT CORP. WICHITA, KANSAS	D17941 (BEECH)
92	CABLE ASSEMBLY - BATTERY	BEECH AIRCRAFT CORP. WICHITA, KANSAS	D170715 (BEECH)
93	CABLE ASSEMBLY - SOLENOID	BEECH AIRCRAFT CORP. WICHITA, KANSAS	D170716 (BEECH)
94	CABLE ASSEMBLY - STARTER	BEECH AIRCRAFT CORP. WICHITA, KANSAS	D170719 (BEECH)
99	PLUG - FREE AIR THERMOMETER	BEECH AIRCRAFT CORP. WICHITA, KANSAS	AN3106-145-23

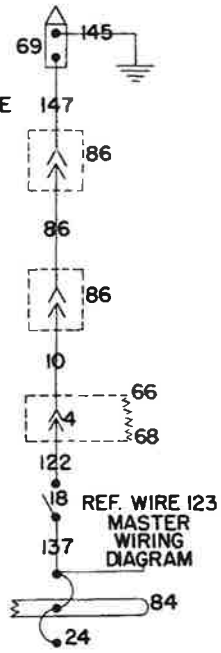
WIRES

WIRE NO.	SIZE	SPECIFICATIONS	LENGTH	WIRE NO.	SIZE	SPECIFICATIONS	LENGTH
1	12	AN-J-C-48	24	72	18	AN-J-C-48	12
7	8	AN-J-C-48	48	73	18	AN-J-C-48	12
9	18	AN-J-C-48	32	74	18	AN-J-C-48	55
10	18	AN-J-C-48	123	84	18	AN-J-C-48	96
17	18	AN-J-C-48	36	85	18	AN-J-C-48	96
21	18	※648 PACKARD SHIELDED CABLE	42	86	18	AN-J-C-48	130
23	18		42	109	14	※602 PACKARD SHIELDED CABLE	18
38	12	AN-J-C-48	44	110	14		18
44	18	※648 PACKARD SHIELDED CABLE	48	116	18	AN-J-C-48	8
				122	18	AN-J-C-48	8
45	14	AN-J-C-48	17	123	18	AN-J-C-48	8
46	14	AN-J-C-48	33	126	18	AN-J-C-48	8
47		7 M. M. H. T. CABLE 95-28003-N	72	129	18	AN-J-C-48	8
				137	18	AN-J-C-48	3
53	18	AN-J-C-48	55	144	18	AN-J-C-48	12
57	18	AN-J-C-48	104	145	18	AN-J-C-48	12
64	18	AN-J-C-48	104	156	18	AN-J-C-48	14

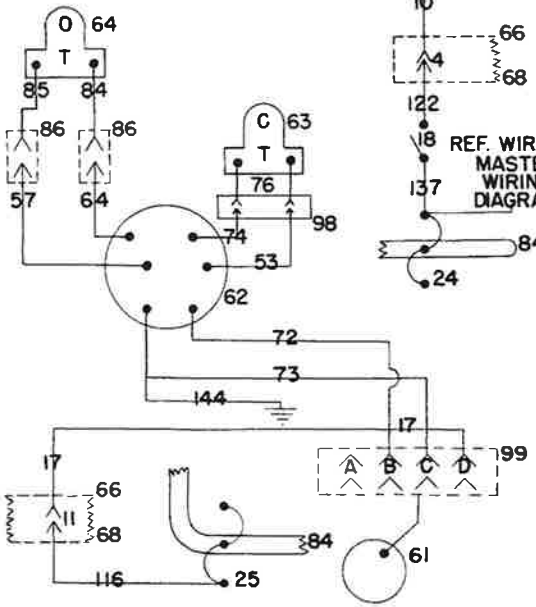
THERMOCOUPLE



PITOT



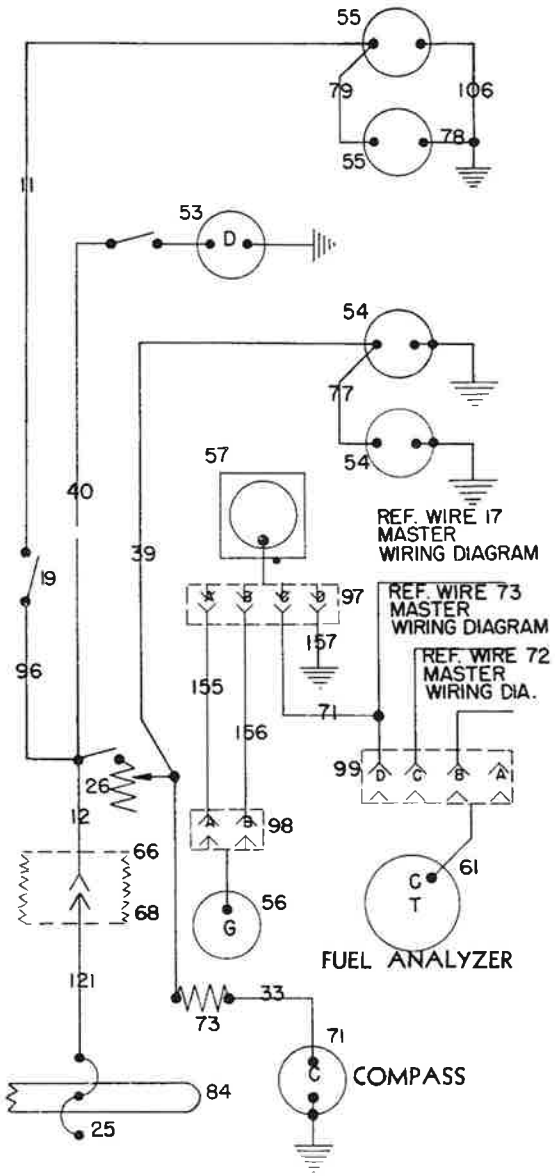
OUTSIDE AIR AND CARBURETOR TEMPERATURE



WIRING DIAGRAMS

BEECHCRAFT MODEL 17

CABIN LIGHTING



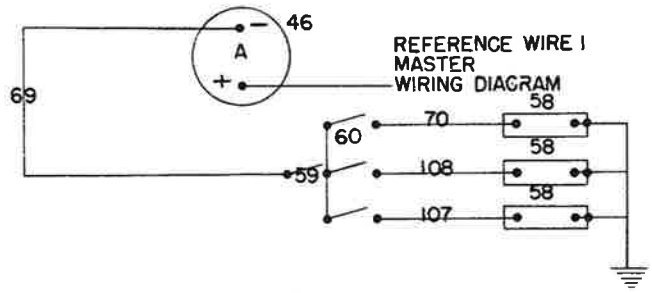
ELECTRICAL EQUIPMENT

ITEM NO.	NAME	VENDOR	PART NO.
6	SWITCH - MASTER	CUTLER-HAMMER INC. MILWAUKEE, WIS.	※8187 SPECIAL
19	SWITCH - MAP LIGHT	CUTLER-HAMMER INC. MILWAUKEE, WIS.	10 SW-75
23	FUSE - 20 AMP.	LITTELFUSE INC. CHICAGO, ILL.	3 AG
25	FUSE - 6 AMP.	LITTELFUSE INC. CHICAGO, ILL.	3 AG
26	RHEOSTAT SWITCH - INSTRUMENT LIGHT	CLAROSTAT CO BROOKLYN, N. Y.	R 18-20
35	ELEVATOR TAB RHEOSTAT UNIT	STEWART WARNER CORP.	106337 (BEECH)
36	TAB INDICATOR	STEWART WARNER CORP.	106336
38	UNIT - FUEL PRESSURE WARNING	GOVT. FURNISHED	C-2
39	LAMP - FUEL PRESSURE WARNING	DRAKE PILOTLITE CO. CHICAGO, ILL.	80 RED
46	AMMETER	WESTON ELEC. AIRCRAFT INST. CO., NEWARK, N. J.	606 TYPE 14
53	LAMP ASSEM. - CABIN DOME	FORD MOTOR CO. DEARBORN, MICH.	6813-777A
54	LAMP ASSEM. - INSTRUMENT	BEECH AIRCRAFT CORP. WICHITA, KANS.	D17078 (BEECH)
55	LAMP ASSEM. - MAP READING	FORD MOTOR CO. DEARBORN, MICH.	481A-13777
56	INDICATOR - FUEL ANALYZER	CAMBRIDGE INST. CO. NEW YORK, N. Y.	S-1-A
57	CELL - FUEL ANALYZER	CAMBRIDGE INST. CO. NEW YORK, N. Y.	S-1-A
58	FLARE UNIT		
59	SWITCH - MASTER FLARE	INTERNATIONAL FLARE SIGNAL CO., TIPPECANOE CITY, OHIO	MK. I MOD. 1
60	SWITCH - FLARE RELEASE		
61	INDICATOR - CARBURETOR & OUTSIDE AIR TEMPERATURE	WESTON ELEC. AIRCRAFT INST. CO., NEWARK, N. J.	602 TYPE 57
65	PLUG - FUSEBOX CONN.	HOWARD B. JONES CHICAGO, ILL.	P-412-AB
66	PLUG - FUSEBOX CONN.	HOWARD B. JONES CHICAGO, ILL.	P-410-AB
67	SOCKET - FUSEBOX CONN.	HOWARD B. JONES CHICAGO, ILL.	S-412-FHT
68	SOCKET - FUSEBOX CONN.	HOWARD B. JONES CHICAGO, ILL.	S-410-FHT
71	COMPASS	PIONEER INST. CO. BENDIX, N. J.	1818-3A
73	RESISTOR - INSTRUMENT		37A5222-5
77	CONTROL BOX - RECOG. LIGHT	BEECH AIRCRAFT CORP. WICHITA, KANS.	D170845 (BEECH)
78	LAMP ASSEM. - RED LENS		AC32374 TYPE E-2
79	LAMP ASSEM. - GREEN LENS		AC32374 TYPE E-2
80	LAMP ASSEM. - AMBER LENS		AC32374 TYPE E-2
81	LAMP ASSEM. - CLEAR LENS		AC32366 TYPE E-1
84	BUSS BAR — L.H.	BEECH AIRCRAFT CORP. WICHITA, KANS.	D170712-4 (BEECH)
85	BUSS BAR — R.H.	BEECH AIRCRAFT CORP. WICHITA, KANS.	D170712-5 (BEECH)

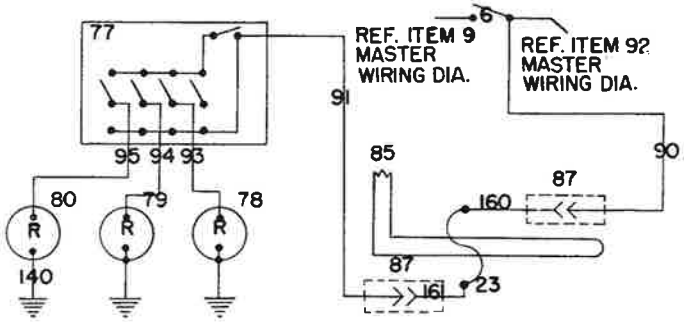
WIRES

WIRE NO.	SIZE	SPECIFICATIONS	LENGTH	WIRE NO.	SIZE	SPECIFICATIONS	LENGTH
11	18	AN-J-C-48	139	94	18	AN-J-C-48	154
12	18	"	36	95	18	"	154
15	18	"	42	96	18	"	6
33	18	"	48	99	18	"	10
39	18	"	164	100	18	"	36
40	18	"	204	104	14	"	
48	18	"	346	105	14	"	
68	18	"	36	106	18	"	15
69	18	"	123	107	18	"	140
70	18	"	140	108	18	"	140
71	18	"	50	117	14	"	10
77	18	"	28	121	18	"	8
78	18	"	15	140	14	"	18
79	18	"	87	141	18	"	14
82	18	"	56	146	18	"	25
90	14	"	54	147	18	"	3
91	14	"	34	155	18	"	60
92	14	"	192	156	18	"	60
93	14	"	168	157	18	"	54

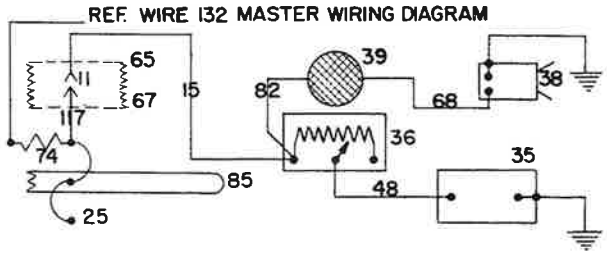
FLARE UNIT



RECOGNITION LIGHTS



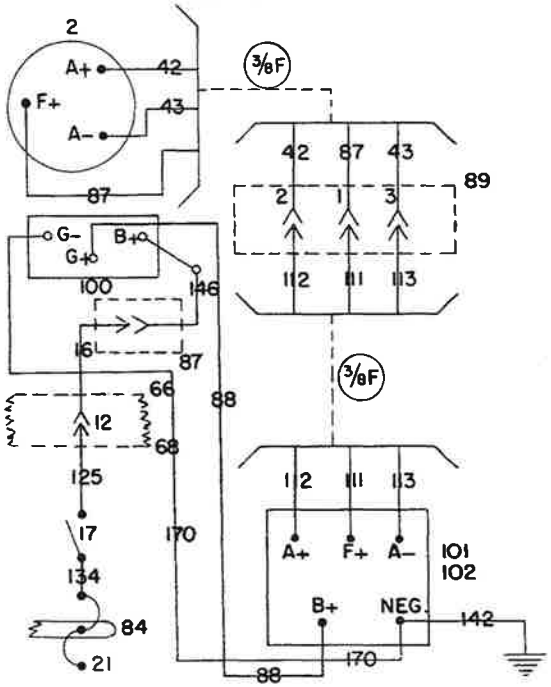
FUEL PRESSURE WARNING UNIT



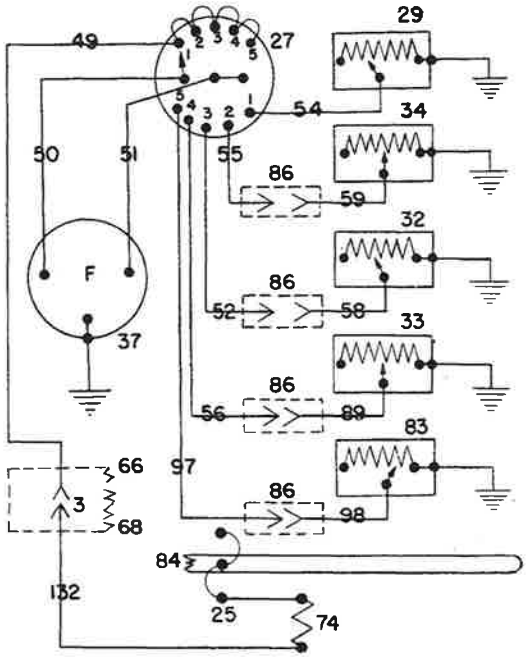
WIRING DIAGRAMS

BEECHCRAFT MODEL 17

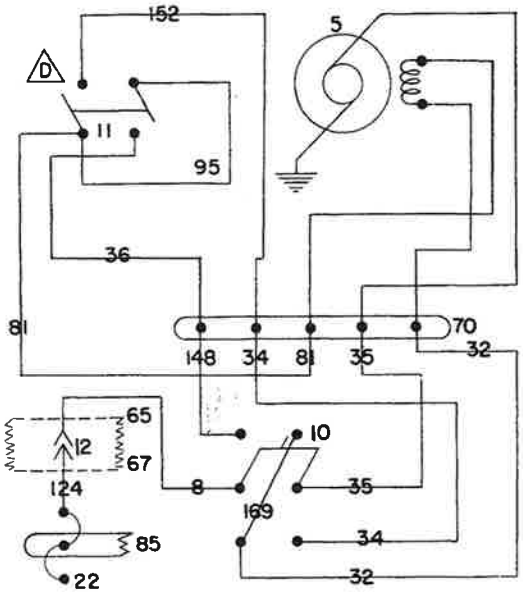
GENERATOR



FUEL TANK DETECTOR AND GAGE UNIT



FLAP MOTOR



NOTE D: SWITCH CLOSED– FLAP UP

ELECTRICAL EQUIPMENT

ITEM NO	NAME	VENDOR	PART NO.
2	GENERATOR	ECLIPSE AVIATION CO., EAST ORANGE, N. J.	MODEL 8 TYPE 309
5	FLAP MOTOR	THE DUMORE CO., RACINE, WIS.	DUMORE K#4253
10	SWITCH - FLAP CONTROL	CUTLER-HAMMER INC., MILWAUKEE, WIS.	C9A
11	SWITCH - FLAP LIMIT	BEECH AIRCRAFT CORP., WICHITA, KANS.	D172669 (BEECH)
17	SWITCH - GENERATOR	CUTLER-HAMMER INC., MILWAUKEE, WIS.	B5A
21	FUSE - 40 AMP.	LITTELFUSE, INC., CHICAGO, ILL.	4CA
22	FUSE - 30 AMP.	LITTELFUSE, INC., CHICAGO, ILL.	3AC
25	FUSE - 6 AMP.	LITTELFUSE, INC., CHICAGO, ILL.	3AC
27	SWITCH - GAS GAUGE SELECTOR	YAXLEY CO., INDIANAPOLIS, IND.	1315L
29	FRONT FUSELAGE TANK UNIT	BEECH AIRCRAFT CORP., WICHITA, KANS.	D17984-1 (BEECH)
32	L. L. WING TANK UNIT	BEECH AIRCRAFT CORP., WICHITA, KANS.	D171056 (BEECH)
33	R. U. WING TANK UNIT	BEECH AIRCRAFT CORP., WICHITA, KANS.	D171056 (BEECH)
34	R. L. WING TANK UNIT	BEECH AIRCRAFT CORP., WICHITA, KANS.	D171056 (BEECH)
37	FUEL INDICATOR	GOVERNMENT FURNISHED	AC 363779
65	PLUG - FUSE BOX CONNECTION	H. B. JONES, CHICAGO, ILL.	P-412-AB
66	PLUG - FUSE BOX CONNECTION	H. B. JONES, CHICAGO, ILL.	P-410-AB
67	SOCKET - FUSE BOX CONNECTION	H. B. JONES, CHICAGO, ILL.	S-412-FHT
68	SOCKET - FUSE BOX CONNECTION	H. B. JONES, CHICAGO, ILL.	S-410-FHT
70	BLOCK - FLAP MOTOR JUNCTION	BEECH AIRCRAFT CORP., WICHITA, KANS.	D177758 (BEECH)
74	RESISTOR - 10 WATT 75 OHM	OHMITE MFG. CO., CHICAGO, ILL.	1011
83	L. U. WING TANK UNIT	BEECH AIRCRAFT CORP., WICHITA, KANS.	D171056 (BEECH)
84	BUSS BAR L. H.	BEECH AIRCRAFT CORP., WICHITA, KANS.	D170712-4
85	BUSS BAR R. H.	BEECH AIRCRAFT CORP., WICHITA, KANS.	D170712-5
86	DISCONNECT SPLICE	THOMAS & BETTS CO. INC., ELIZABETH, N. J.	A57

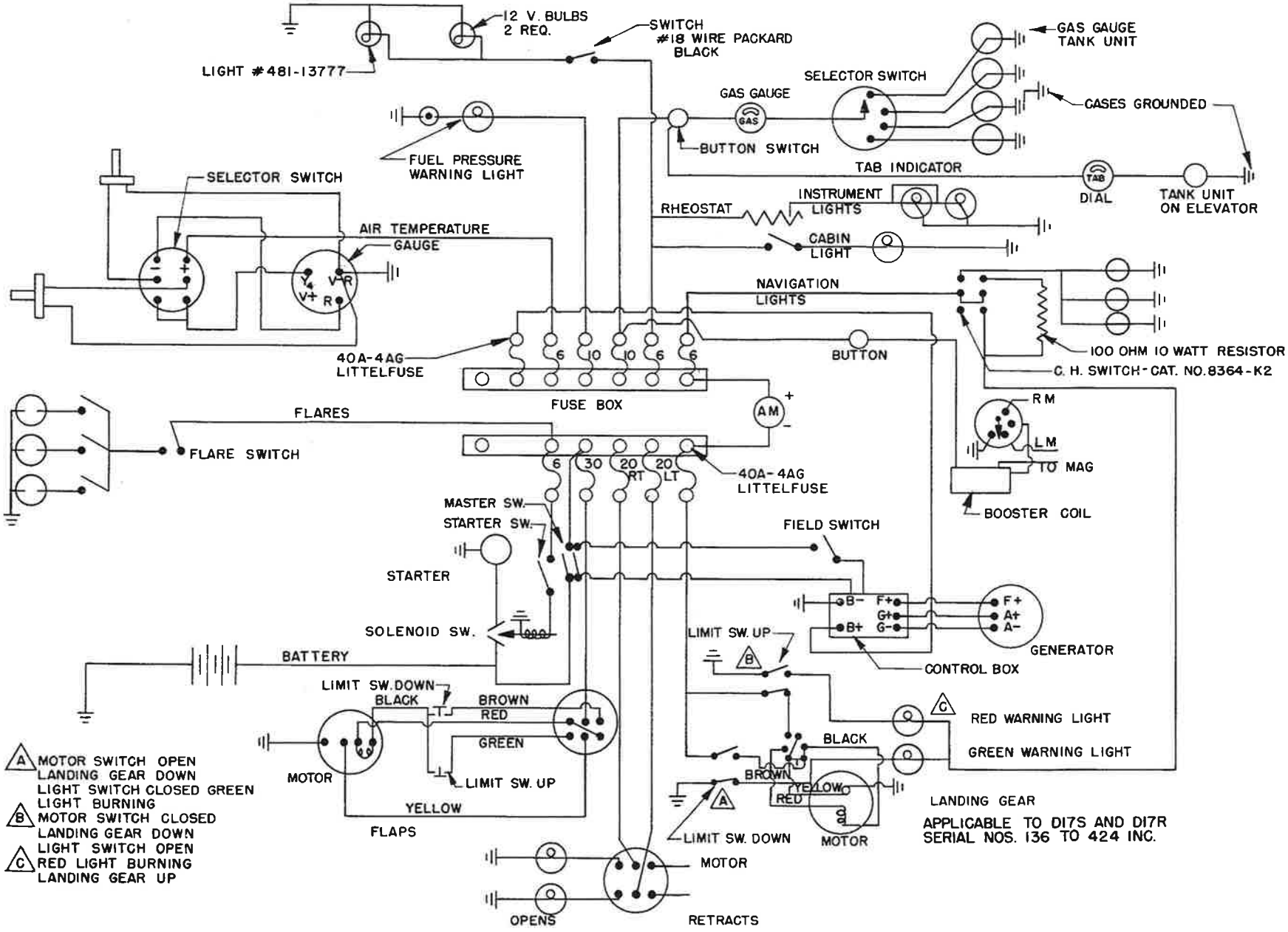
ITEM NO.	NAME	VENDOR	PART NO.
87	DISCONNECT SPLICE	THOMAS & BETTS CO. INC., ELIZABETH, N. J.	C58
89	PLUG	CANNON ELECTRIC CO., LOS ANGELES, CALIF.	GK-C3-325
95	STRAP - FLAP LIMIT SWITCH CONNECTING	BEECH AIRCRAFT CORP., WICHITA, KANS.	D172669-15 (BEECH)
100	CUTOUT - ECLIPSE TYPE 350-3A	ECLIPSE AVIATION CO., EAST ORANGE, N. J.	
101	CHOKE BOX - ECLIPSE	ECLIPSE AVIATION CO., EAST ORANGE, N. J.	111924
102	REGULATOR - ECLIPSE	ECLIPSE AVIATION CO., EAST ORANGE, N. J.	111143

WIRES

WIRE NO.	SIZE	SPECIFICATIONS	LENGTH	WIRE NO.	SIZE	SPECIFICATIONS	LENGTH	WIRE NO.	SIZE	SPECIFICATIONS	LENGTH
8	12	AN-J-C-48	36	54	18	AN-J-C-48	74	112	12	AN-J-C-48	9
16	12	"	72	55	18	"	102	113	12	"	9
32	12	"	121	56	18	"	143	124	12	"	8
34	12	"	121	58	18	"	28	125	12	"	8
35	12	"	121	59	18	"	28	132	18	"	8
36	12	"	76	81	12	"	76	134	12	"	6
42	12	"	37	87	16	"	37	142	12	"	14
43	12	"	37	88	12	#654 PACKARD SHIELDED CABLE	16	146	12	"	13
49	18	"	42	89	18	AN-J-C-48	24	148	12	"	121
50	18	"	18	97	18	"	102	152	12	"	76
51	18	"	18	98	18	"	24	170	12	#654 PACKARD SHIELDED CABLE	—
52	18	"	66	111	16	"	9				

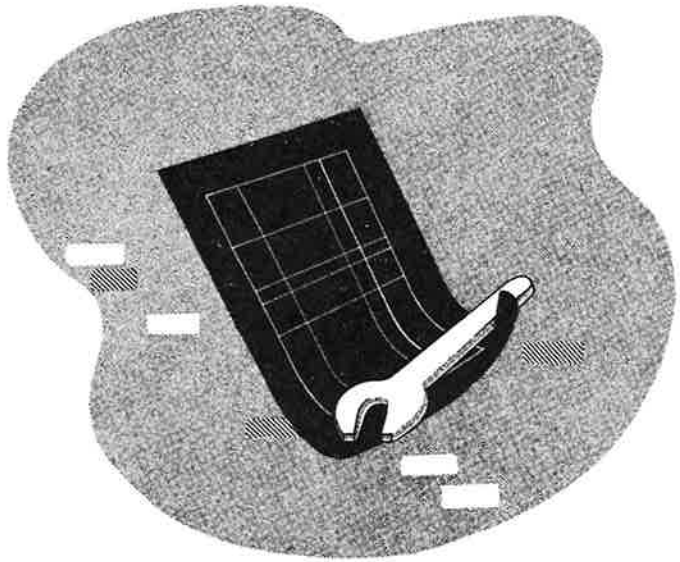
WIRING DIAGRAMS

BEECHCRAFT MODEL 17



MASTER WIRING DIAGRAM

SECTION IV



SPECIFICATIONS, REPAIR AND BASIC MAINTENANCE

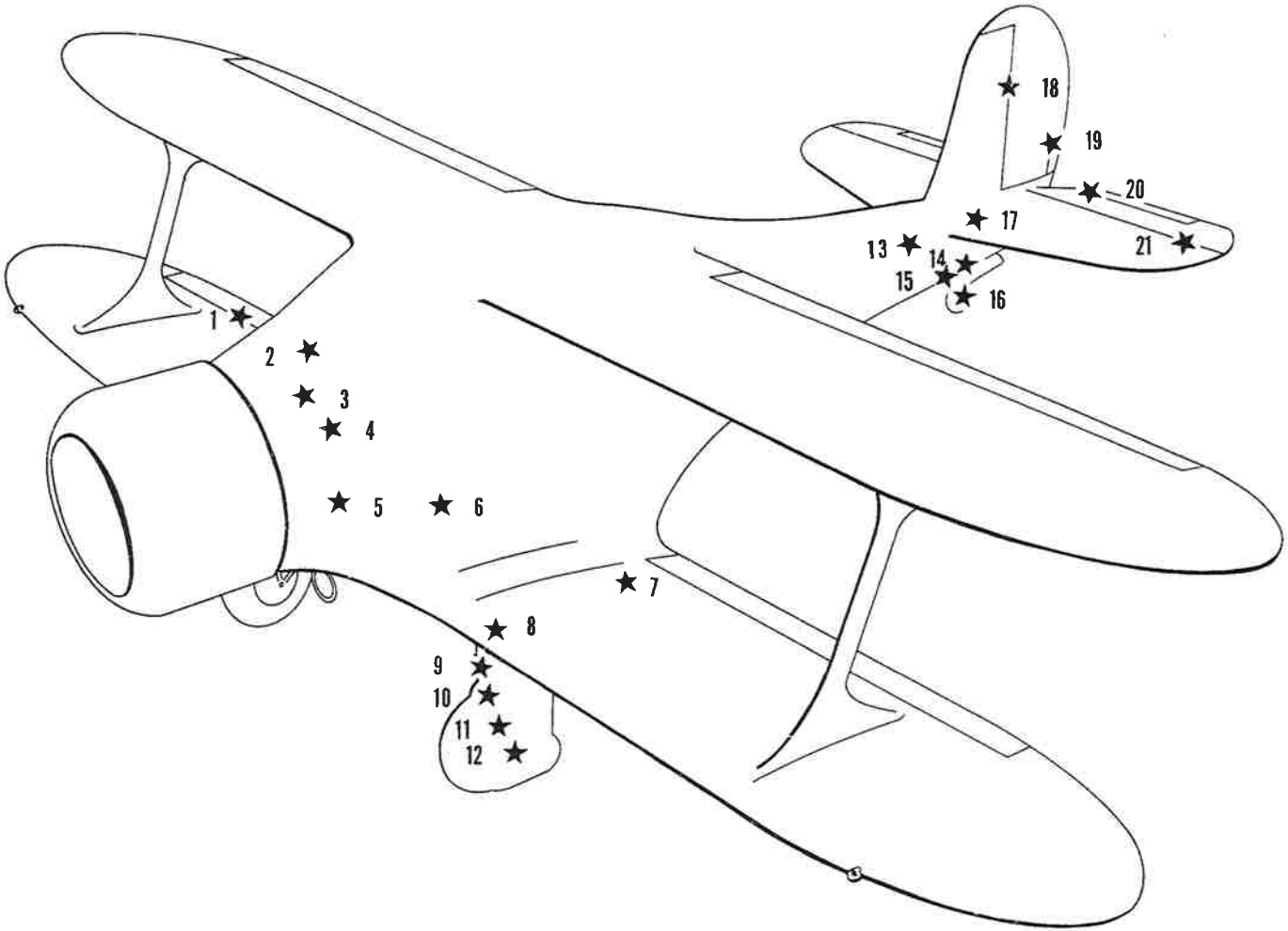
LUBRICATION CHART
SWINGING THE COMPASS
AIRPLANE HANDLING
WING RIB AND SPAR REPAIR
STEEL TUBE REPAIR
TUBING SPECIFICATIONS
CABLE SPECIFICATIONS

BEECHCRAFT MODEL 17

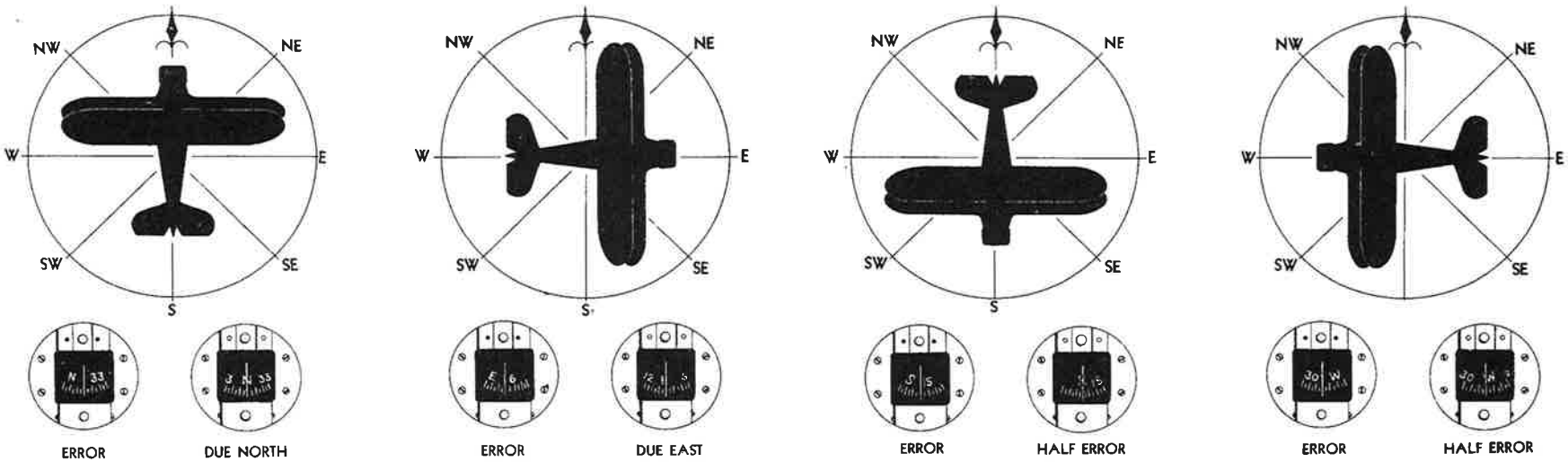
NOTE: ALL PARTS LUBRICATED WITH S.A.E. NO. 10 MOTOR OIL UNLESS NOTED.

1. D177750 FLAP OPERATING MECH. — (IF FLAP OPERATING MECHANISM SHOULD BECOME NOISY,) LUBRICATE FLEXIBLE SHAFT AND HOUSING WITH SPECIFIED OIL
2. D172660 FLAP OPERATING MECH. — LUBRICATE GEARS WITH SPECIFIED OIL
3. D17850-146 LANDING GEAR SWITCH CONTROL SHAFT (BEHIND INSTRUMENT PANEL)
4. D177449 HAND BRAKE CONTROL ASSEMBLY
5. D177943 LOWER PARTS OF RUDDER PEDALS, PILOT AND COPILOT
6. D17850-38 SLIDE TUBES (GRAPHITE ONLY) POWDERED
7. D17820 UNIVERSAL (TOP OF REAR LEG, LANDING GEAR)
8. D17840 UNIVERSAL (TOP OF SHOCK ABSORBER LANDING GEAR)
9. D17810 DIAGONAL LEG (OIL CUP ON LOWER LEG)
10. D17810 UNIVERSAL (LOWER END OF DIAGONAL LEG LANDING GEAR)
11. D17840 SHOCK ABSORBER ASSEMBLY (OIL CUPS ON EACH SIDE OF FORK)
12. WHEEL BEARINGS (LUBRICATE WITH MOBIL ZERO GREASE PD433 GRADE B SPECIFICATION AN3560)
13. D17869-10 TAIL WHEEL SLIDE TUBE POWDERED ONLY)
14. D178700 AT BOTH ZERK FITTINGS USE MOBIL ZERO GREASE PD433 GRADE B SPEC. AN3560
15. D178700 TAIL WHEEL HOUSING AND FORK ASSEMBLY — OIL TAIL WHEEL LOCK PLUNGER
16. TAIL WHEEL BEARINGS (LUBRICATE WITH MOBIL ZERO GREASE PD433 GRADE B SPEC. AN3560)
17. D17860 UNIVERSAL AT BOTH UPPER AND LOWER ENDS OF SHOCK ABSORBER
18. D176026 RUDDER HINGES
19. D177727 RUDDER TAB CONTROL ROD (AT TAB END)
20. D177726 ELEVATOR TAB CONTROL ROD (TAB END)
21. D176025 ELEVATOR HINGES

NOTE: SHOCK STRUT FLUID FOR MAIN GEAR AND TAIL WHEEL SHOCK IS AC3580C. (RED COLOR FLUID) COMMERCIAL EQUIVALENT — UNIVIS No. 40.



LUBRICATION CHART



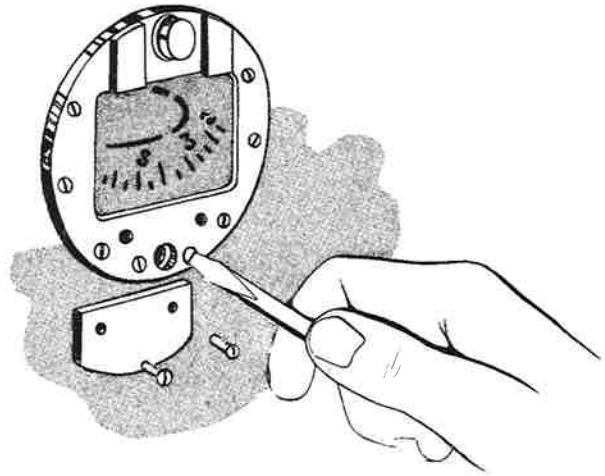
COMPASSES SHOULD BE CHECKED FOR ERROR (DEVIATION FROM MAGNETIC HEADINGS, CAUSED BY MAGNETISM PRESENT IN THE AIRCRAFT) AND COMPENSATED AT THE END OF EACH 100-HOURS FLYING TIME, AT EACH ENGINE OR ELECTRICAL EQUIPMENT CHANGE IF THE LATTER IS LIKELY TO AFFECT COMPASSES, OR AT LEAST ONCE DURING EACH THREE MONTH PERIOD.

GROUND SWINGING OF THE AIRPLANE COMPASS MAY BE ACCOMPLISHED BY MEANS OF A MAGNETIC BEARING SWINGING BASE (COMPASS ROSE WITH DIRECTIONS GIVEN FROM MAGNETIC NORTH), OR A MASTER COMPASS. USING THE MAGNETIC SWINGING BASE, HEAD THE AIRPLANE NORTH WITH ITS LONGITUDINAL AXIS PARALLEL TO THE N-S LINE. IF THE COMPASS DOES NOT INDICATE NORTH (0 DEGREES), ADJUST THE N-S COMPENSATOR. USE A NON-MAGNETIC SCREWDRIVER FOR MAKING THE ADJUSTMENTS. THEN, WITH ENGINES RUNNING AT SUFFICIENT RPM TO SHOW THE MAXIMUM CHARGE ON THE AMMETERS, RECHECK COMPASS, AND RE-ADJUST, IF NECESSARY. HEAD THE AIRPLANE EAST (90 DEGREES) AND REPEAT THE ABOVE PROCESS, ADJUSTING THE E-W COMPENSATOR, IF NECESSARY.

HEAD THE AIRPLANE SOUTH (180 DEGREES) AND IF THE COMPASS DOES NOT INDICATE SOUTH ADJUST THE N-S COMPENSATOR ONE-HALF OF THE ERROR. THEN HEAD THE AIRPLANE WEST (270 DEGREES) AND ELIMINATE ONE-HALF OF THE ERROR, IF ANY, BY ADJUSTING THE E-W COMPENSATOR.

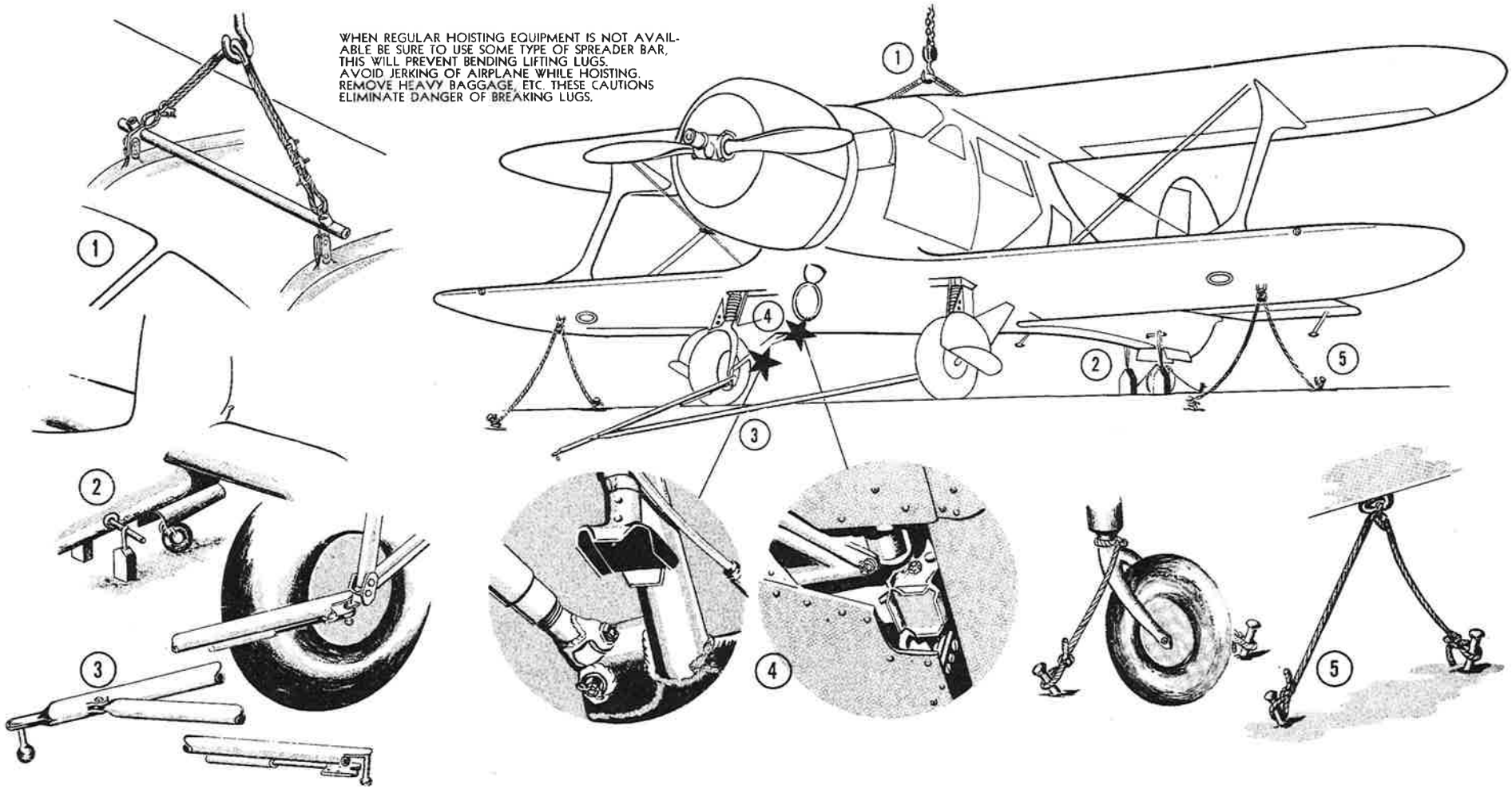
THE AIRPLANE SHOULD NEXT BE SWUNG ON EACH SUCCESSIVE 15-DEGREE HEADING, AND THE READINGS RECORDED IN THE "RADIO OFF" SPACE ON THE COMPASS CORRECTION CARD, FORM 57. THEN, WITH THE RADIO RECEIVER IN THE "ON" POSITION, THE AIRPLANE SHOULD AGAIN BE SWUNG ON EACH 15-DEGREE HEADING AND THE READINGS RECORDED IN THE "RADIO ON" SPACE ON THE COMPASS CORRECTION CARD.

TO SWING THE AIRPLANE, USING A MASTER COMPASS, THE SAME PROCEDURE WILL APPLY, EXCEPT THAT A SERVICEABLE, NONCOMPENSATED COMPASS, ATTACHED TO THE WING TIP, WILL BE USED TO DETERMINE THE POSITIONING (MAGNETIC HEADING) OF THE AIRPLANE.



SWINGING THE COMPASS

BEECHCRAFT MODEL 17



1. THE AIRPLANE IS HOISTED BY TWO HOISTING LUGS LOCATED ON TOP OF THE CABIN. A HOISTING SLING AS SHOWN IS FURNISHED WITH EACH AIRPLANE.

2. WHEN HOISTING AIRPLANE, APPROXIMATELY 300 LBS. SHOULD BE TIED TO THE FUSELAGE ON A ¾" DIAMETER TUBE OR BAR INSERTED IN LIFTING BRACKETS NEAR BOTTOM OF FUSELAGE AT LEADING EDGE OF STABILIZER. TIE WEIGHTS WITH A ROPE OR CABLE LONG ENOUGH TO ALLOW TAIL TO RISE ABOUT 2 OR 3 FEET SO TAIL WHEEL CAN RETRACT.

3. TOWING LUGS ARE PROVIDED AT POINTS SHOWN IN ILLUSTRATION.

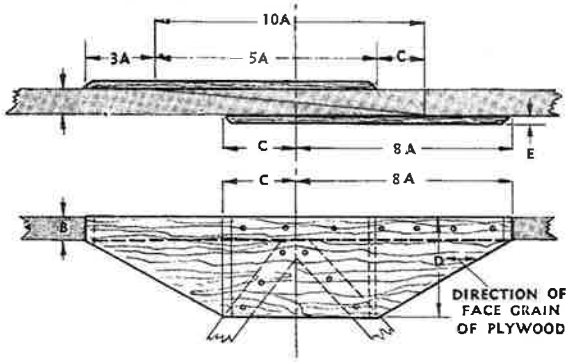
4. THE AIRPLANE SHOULD BE JACKED UP ONLY FOR MINOR REPAIR AND WHEN LENGTH OF TIME NECESSARY TO MAKE REPAIR IS OF SHORT DURATION. NONE OF MAJOR COMPONENT PARTS SHOULD BE REMOVED WHILE AIRPLANE IS ON JACKS. TWO SETS OF JACK PADS ARE PROVIDED, ONE SET AT LOWER END OF LANDING GEAR REAR LEG AND THE OTHER SET ON REAR FUSELAGE TRUSS NEAR WING ROOT ATTACHMENT POINTS. TAIL OF FUSELAGE SHOULD BE WEIGHTED DOWN.

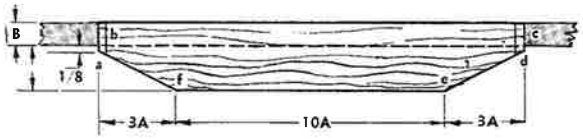
5. THE TAIL WHEEL SHOULD BE MOORED BY TYING AROUND THE SWIVEL HOUSING JUST ABOVE THE FORK. MOORING LUGS ARE PROVIDED ON LOWER SURFACE OF LOWER WINGS AT REAR STRUT ATTACHMENT POINTS.

AIRPLANE HANDLING

BEECHCRAFT MODEL 17

WING RIB REPAIR

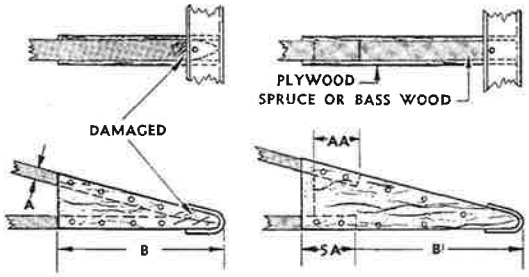




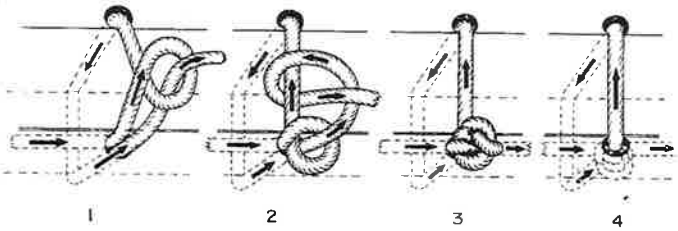
AT A JOINT OR BETWEEN JOINTS ADD SPRUCE BLOCK (abcdef) HAVING SAME WIDTH AS CAPSTRIP WHEN SPLICE IS MADE BETWEEN JOINTS. SIDE PLATES NEED ONLY EXTEND TO LOWER EDGE OF SPRUCE BLOCK IN THIS CASE.

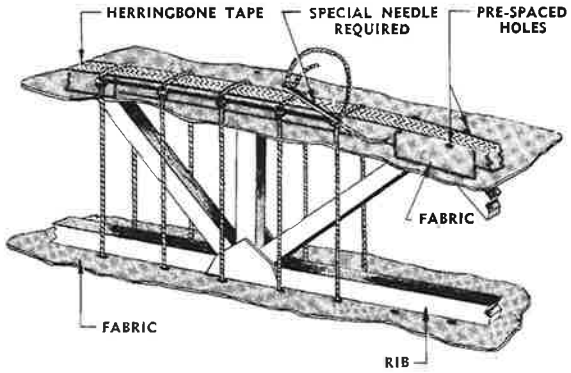
A, B, C, D, E = ORIGINAL DIMENSIONS. REINFORCEMENT PLATES SHALL BE PLYWOOD GLUED AND NAILED. NAIL HEADS SHALL NOT BE IMBEDDED IN THE PLYWOOD. DAMAGED MEMBERS SHALL BE REPLACED ENTIRELY.

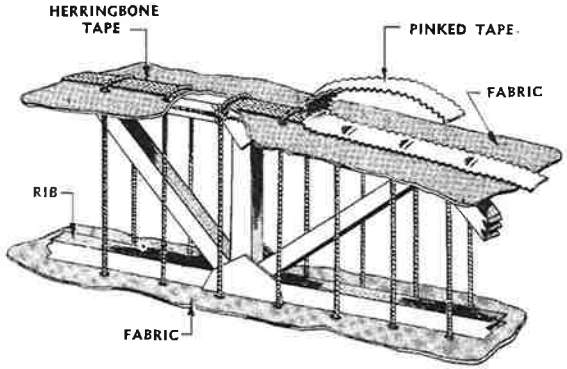
AT TRAILING EDGE



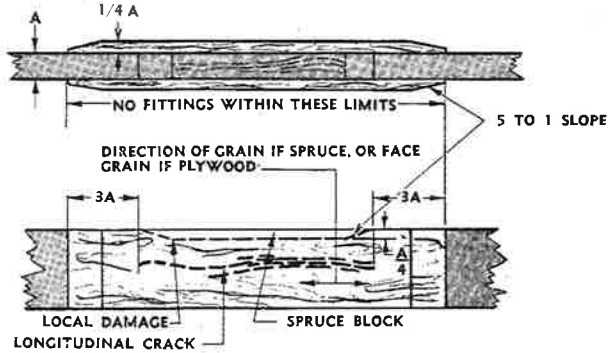
LACING FABRIC



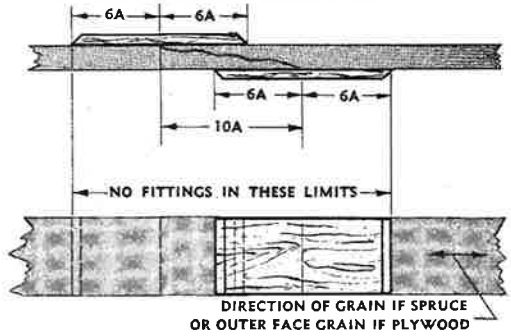




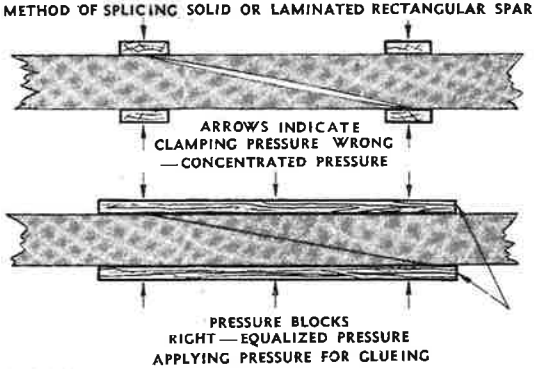
SPAR REPAIR



METHOD OF REINFORCING A LONGITUDINAL CRACK AND/OR LOCAL DAMAGE IN A SOLID BAR



METHOD OF SPLICING SOLID OR LAMINATED RECTANGULAR SPAR



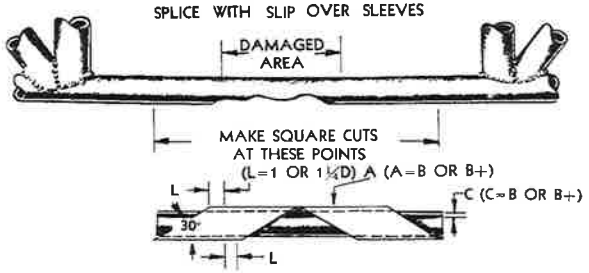
GLUE — PLASKON GLUE TYPE 250—2

CORD — ARMY 6 — 27

WING RIB AND SPAR REPAIR

BEECHCRAFT MODEL 17

SPLICE WITH SLIP OVER SLEEVES



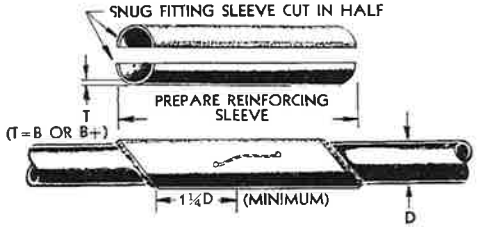
PREPARE SPLICE MEMBER AND DIAGONALLY CUT SLEEVE

INSERT SPLICE MEMBER IN CUT-AWAY PORTION

NOTE: SLEEVE MAY BE ROTATED FOR MAXIMUM REINFORCEMENT COMPLETED SPLICE USING DIAGONALLY CUT SLEEVES

REINFORCING ARRESTED GROWTH OF CRACK

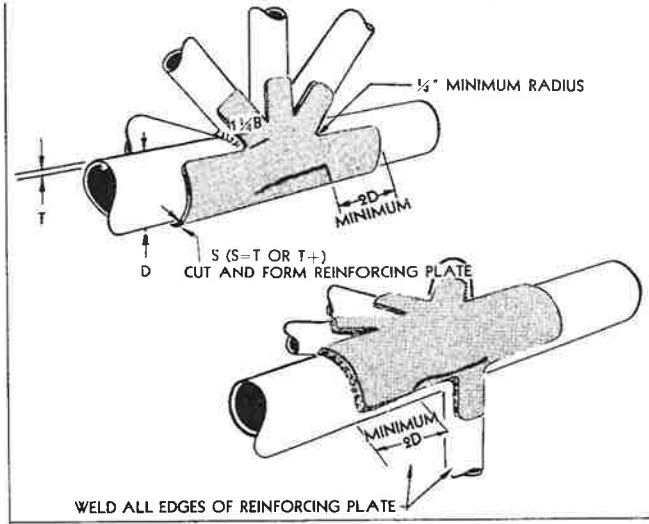
ARREST GROWTH OF CRACK



WELD SLEEVE OVER CRACK

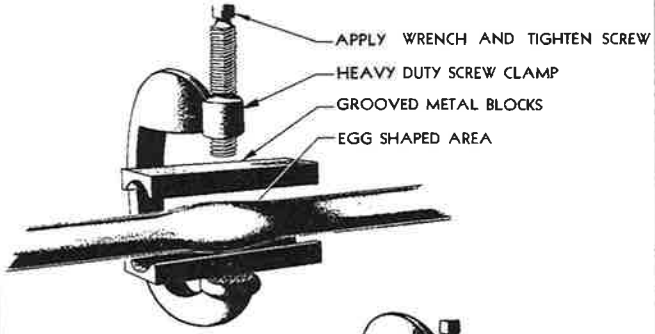
COMPLETE REPAIR ROTATED 90°

REINFORCING A DENT AT A STEEL TUBE CLUSTER JOINT

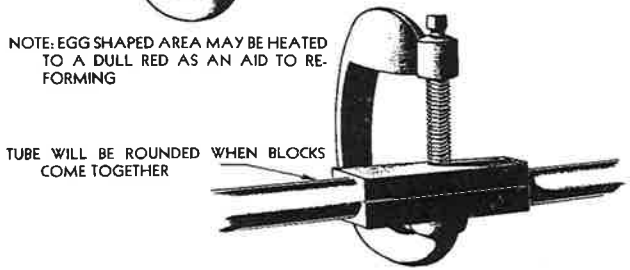


WELD ALL EDGES OF REINFORCING PLATE

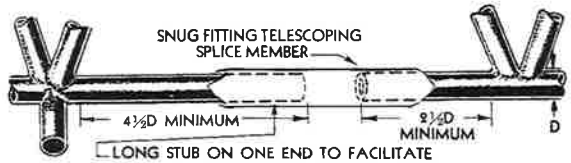
CORRECTING EGG SHAPED AREAS

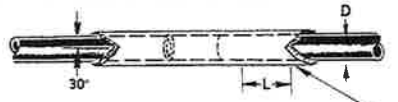


NOTE: EGG SHAPED AREA MAY BE HEATED TO A DULL RED AS AN AID TO RE-FORMING



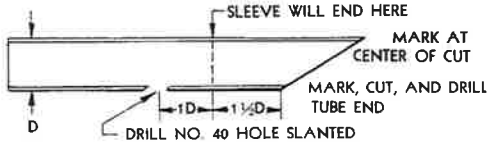
STEEL TUBE FISH MOUTH SPLICE

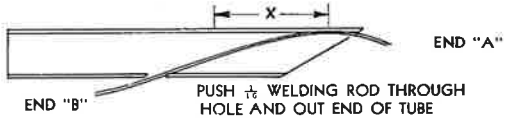




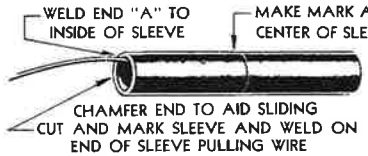
SNUG FITTING TELESCOPING SPLICE MEMBER REPAIR ROTATED 90°

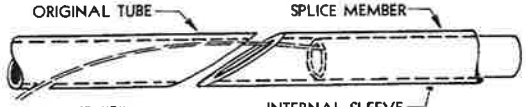
CENTERING INNER SLEEVE IN STEEL TUBE



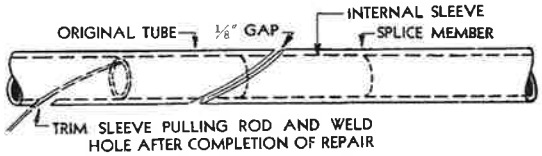


PUSH 1/16 WELDING ROD THROUGH HOLE AND OUT END OF TUBE





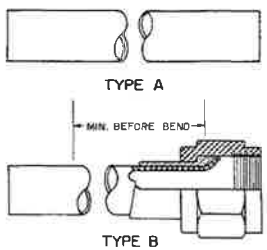
INSERT SLEEVE INTO SPLICE MEMBER AND ALIGN TUBES



PULL WELDING ROD UNTIL CENTER MARKS LINE UP

STEEL TUBE REPAIR

BEECHCRAFT MODEL 17

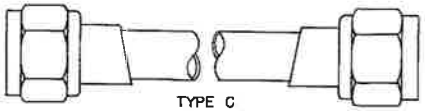


MINIMUM BEFORE BEND

1/8	TUBE	1 1/8	MIN.
3/16	"	1 1/4	"
1/4	"	1 3/8	"
5/16	"	1 1/2	"
3/8	"	1 1/2	"
1/2	"	1 3/4	"
5/8	"	2	"
3/4	"	2 3/8	"
1	"	2 3/8	"
1 1/4	"	2 7/8	"
1 1/2	"	3 1/8	"

FLARING DATA

Ⓐ O.D. OF TUBE	Ⓑ FLARE +.0000 -.010	Ⓒ ANGLE OF FLARE
1/4	.359	35°
5/16	.421	35°
3/8	.484	25°
1/2	.656	30°
5/8	.781	30°
3/4	.937	30°
1	1.187	30°



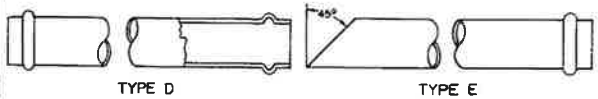
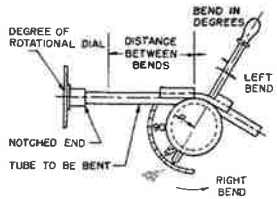
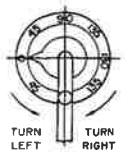


DIAGRAM OF TUBE BENDING MACHINE



PLAN VIEW



ROTATION R OR L IN DEGREE

END VIEW

BENDS PROGRESS FROM FRONT TO REAR, LEFT TO RIGHT, OR TOP TO BOTTOM WITH TUBE INSTALLED IN AIRPLANE.

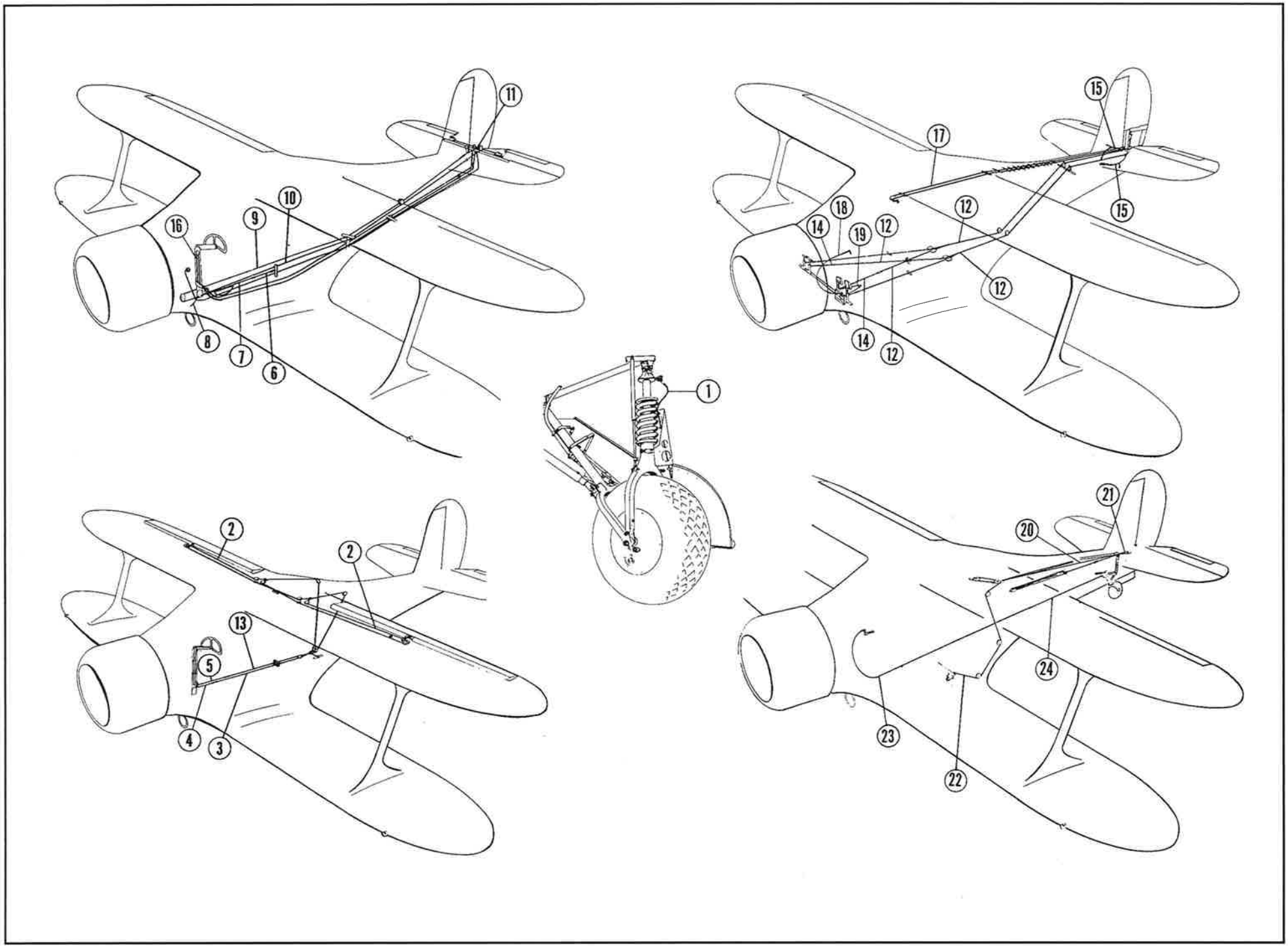
ALLOWANCE FOR SPRINGBACK

1/2"	TUBING	BEND 2 1/2°	MORE
3/8"	"	"	AS 15
3/8"	"	"	2 1/2° MORE

NOTE: ALL SLEEVES AND TUBE NUTS ARE PARKER BN TYPES.

PART NO.	REF.	MATERIAL	SIZE O.D.	SIZE GAGE	SIZE TRUE TUBE LENGTH	BEND NO. 1 DISTANCE FROM END TO BEND 1	BEND NO. 1 BEND R OR L IN DEGREES	BEND NO. 2 DISTANCE BETWEEN BEND 1 & 2	BEND NO. 2 ROTATION R OR L IN DEGREES	BEND NO. 2 R	BEND NO. 2 BEND R OR L IN DEGREES	BEND NO. 3 DISTANCE BETWEEN BEND 2 & 3	BEND NO. 3 ROTATION R OR L IN DEGREES	BEND NO. 3 R	BEND NO. 3 BEND R OR L IN DEGREES	BEND NO. 4 DISTANCE BETWEEN BEND 3 & 4	BEND NO. 4 ROTATION R OR L IN DEGREES	BEND NO. 4 R	BEND NO. 4 BEND R OR L IN DEGREES	DISTANCE FROM LAST BEND TO END	CAL. WT.	ACT. WT.	COLOR CODE	TUBE TYPE
OIL SYSTEM LINES							3/8" DIAMETER & OVER					SEE FIGURE						FOR REFERENCE						
D179812	1	52SO	1	.049	4 13/16	NO BENDS															.07	.06	Y	A
D179814	2	52SO	1	.049	14 3/8	3	3	L 62°	3	L 170°	3	L 81°								22	.20	.22	Y	E
D179017	3	52SO	3/4	.049	24 5/8	3	3	L 95°												17 7/16	.23	.24	RB	A
D179018	4	52SO	3/4	.049	12 3/8	4 1/8	2 1/4	L 50°	2 1/4	0°	2 1/4	L 48°								4 3/8	.11	.12	RB	A
D179019	5	52SO	3/4	.049	35 3/4	2 1/2	2 1/4	L 75°												29 13/16	.36	.38	RB	E
D179085	6	CORR. RESIST. STEEL	3/8	.035	13 1/8	9	1 1/8	L 40°	3	R 98°	1 1/2	L 112°								3 3/4	.14	.13	BYB	C
D175980-6	7	52SO	1	.049	17 11/16	3 1/8	3	L 44°												12 11/16	.26	.23	Y	A
D179810	8	52SO	1	.049	16	9	3	L 99°	3	L 91°	3	L 83°								2 3/16	.22	.20	Y	D
D179811	9	52SO	1	.049	12 3/4	5 1/4	3	L 92°												4 13/16	.20	.18	Y	D
D179815	10	52SO	1/2	.042	8 7/16	2	1 1/2	L 58°												5 1/4	.04	.03	RB	A
FUEL SYSTEM LINES							3/8" DIAMETER & OVER					SEE PAGE 25						FOR REFERENCE						
D170190-2	11	COPPER	3/8	.035	11 13/16	3	1 1/8	L 38°	3	0°	1 1/8	L 47°								3 3/16	.14	.13	BL BR	A
D170190-3	12	COPPER	3/8	.035	57 1/2	49	1 1/8	L 90°												7 1/2	.69	.67	BL BR	B
D170190-7	13	COPPER	3/8	.035	8 7/16	NO BENDS															.12	.10	BL BR	A
D170190-8	14	COPPER	3/8	.035	11 5/8	5 1/4	1 1/8	L 90°												5 5/16	.14	.13	BL BR	A
D170190-9	15	COPPER	3/8	.035	10 1/8	NO BENDS															.09	.10	BL BR	A
D17971-14	16	2SO	1/2	.035	11 13/16	2 1/4	1 1/4	L 70°												8 7/16	.06	.06	BR	A
D179262	17	52SO	1/2	.042	37 1/2	29	3	L 115°												2 3/8	.31	.33	R	D
D179271	18	52SO	3/8	.035	7 1/4	NO BENDS															.03	.02	R	D
D179272	19	52SO	3/8	.035	38 5/16	37	1 1/8	L 90°	29 1/2	L 90°	1 1/8	L 90°								1 1/8	.14	.14	R	D
D179278	20	52SO	1/2	.042	12 1/2	7 1/4	1 1/4	L 22°												4 1/8	.08	.07	R	D
D179279	21	52SO	1/2	.042	8 3/4	2 1/2	1 1/2	L 88°												2 11/16	.02	.03	R	D
D179285	22	52SO	1/2	.042	29 1/4	9	1 1/2	L 88°												17 3/4	.20	.22	R	D
D179286	23	52SO	1/2	.042	31 11/16	18 1/2	3	L 75°	3	L 75°	3	L 65°	8 1/2	R 165°	3	L 15°				9 7/16	.21	.24	R	D
D179291	24	52SO	1/2	.042	8 5/16	3 1/4	1 1/2	L 180°												2 3/8	.10	.12	R	C
D179292	25	52SO	1/2	.042	12 3/16	8 1/2	1 1/4	L 88°	3 1/4	R 42°	1 1/4	L 22°	2	L 130°	1 1/4	L 20°				2 1/16	.11	.13	R	D
FIRE EXTINGUISHER LINES							3/8" DIAMETER & OVER											FOR REFERENCE						
D179535-2	26	52SO	1/8	.042	10 1/8	4 3/4	1 1/8	L 123°	1 1/2	L 90°	1 1/4	L 50°								2 3/4	.07	.08	BR	C
D179535-3	27	52SO	1/2	.042	4 1/8	NO BENDS															.06	.08	BR	C
D179535-9	28	52SO	1/2	.042	37 3/8	32 1/2	1 1/2	L 65°	3 1/4	L 90°	1 1/2	L 80°								3 11/16	.21	.28	BR	C
D179535-10	29	52SO	1/2	.042	58 11/16	41	1 1/2	L 90°	4 1/2	0°	1 1/2	L 90°	2 1/2	R 165°	1 1/2	L 90°				3 11/16	.39	.41	BR	C
D179535-11	30	52SO	1/2	.042	8 3/8	2	1 1/2	L 90°	1 1/4	0°	1 1/2	L 90°								1 11/16	.03	.04	BR	C
AIR SYSTEM LINES							3/8" DIAMETER & OVER											FOR REFERENCE						
D170312	31	52SO	3/8	.032	9 7/16	2 5/8	1 1/8	L 95°												4 13/16	.05	.06	WG	C
D170313	32	52SO	3/8	.032	11 7/16	3 1/2	1 1/8	L 75°	3 1/4	0°	1 1/8	L 60°								1 7/8	.07	.07	WG	C
D170314	33	52SO	1/2	.035	13 3/4	10	1 1/2	L 83°	3 1/2	L 85°	1 1/2	L 47°								3 3/4	.10	.14	WG	C
D170319	34	52SO	1/2	.035	29 11/16	8	1 1/2	L 90°												19 1/2	.21	.25	WG	C
D170322	35	52SO	1/2	.035	41 1/4	37	1 1/2	L 85°	10 1/2	R 175°	1 1/2	L 85°								4 1/4	.18	.20	WG	C
D170324-3	36	52SO	3/8	.035	9 1/8	2	1 1/4	L 90°	2	0°	1 1/4	L 90°								2	.06	.07	WG	C
D170331	37	52SO	3/4	.035	6	3 1/2	1 1/8	L 90°	1 1/2	L 95°	1 1/4	L 22°								1 3/4	.05	.06	WG	C
D170333	38	52SO	1/2	.035	18 1/8	4	1 1/2	L 90°	3 3/4	L 85°	2 1/8	L 25°								3 3/4	.10	.13	WG	B
D170336	39	52SO	1/2	.035	15 3/8	2	1 1/2	L 95°												10 1/8	.12	.11	WG	B
D170484	40	52SO	3/8	.035	5	2 1/2	1 1/8	L 25°												1 11/16	.04	.05	WG	C
D179003	41	52SO	1/2	.042	24 11/16	21 1/2	1 1/2	L 53°	7 3/4	L 11°	1 1/2	L 35°	8 1/2	L 65°	1 1/2	L 105°				2 5/8	.14	.13	WG	D
D179005	42	52SO	1/2	.042	14 1/2	10 1/4	1 1/4	L 52°												3	.07	.08	WG	D
D179006	43	52SO	1/2	.042	25 1/2	18	1 1/2	L 90°	9 1/2	R 163°	1 1/2	L 85°	1 1/2	R 70°	1 1/4	L 27°				5 3/8	.17	.20	WG	B

TUBING SPECIFICATIONS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BEECHCRAFT MODEL 17

CABLE ASSEMBLY NUMBER	ASSEMBLY NAME	MADE UP OF CABLES	DESCRIPTION OF CABLES	CABLE SIZE	LENGTH (INCHES)	CABLES PER SHIP	CHART NO.	TURNBUCKLE BARREL	A	B	C	D	FITTINGS USED
D175822	WHEEL FAIRING	D175822-2	7 x 7 PREFORMED	1/16	36	2	1		AN100-3				S. E. E. 324
D177001	AILERON	D177001-2	1/8 CARBON STEEL	1/8	121 1/16	2	2		AN100-4	AN100-4			AN170-16LL
*D177002	RIGHT AILERON	D177002-2	1/8 CARBON STEEL	1/8	217	1	3	AN155-16L	AN100-4	AN100-4	100696-F16-06-100		AN115-21 AN170-16RL
		D177002-3	1/8 CARBON STEEL	1/8	20½	1	3	AN155-16L				AN100-4	AN170-16RL
D177003	CONTROL COLUMN	D177003-2	1/8 CARBON STEEL	1/8	18	1	4		AN100-4	AN100-4			
D177004	CONTROL COLUMN	D177004-2	1/8 CARBON STEEL	1/8	21½	1	5		AN100-4	AN100-4			
D177005	REAR CHECK	D177005-2	7 x 19 PREFORMED	1/16	13	1	6		AN100-4	AN100-4			AN140-16S
		D177005-4	7 x 19 PREFORMED	1/16	17⅝	1	7		AN100-4	AN100-4		AN380-3-4	
D177006	FRONT CHECK	D177006-2	1/8 CARBON STEEL	1/8	11½	1	8		AN100-4	AN100-4			
D177007	ELEVATOR TOP	D177007-2	3/32 CARBON STEEL	3/32	238½	1	9		AN100-4	AN100-4	100696-F16-06-100		AN130-21L AN115-32
D177008	ELEVATOR BOTTOM	D177008-2	3/32 CARBON STEEL	3/32	205½	1	10	AN155-21L	AN100-4	AN100-4	100696-F16-06-100		AN115-32 AN170-21RL
D177009	ELEVATOR REAR	D177009-2	3/32 CARBON STEEL	3/32	25⅛	1	11		AN100-4	AN100-4			AN170-21LL AN115-32
*D177010	RUDDER	D177010-2	1/8 CARBON STEEL	1/8	227½	2	12		AN100-4	AN100-4	100696-F16-06-100		AN130-21L
		D177010-3	1/8 CARBON STEEL	1/8	32¼	2	12	AN155-21L	AN100-4				AN170-21RL
*D177011	LEFT AILERON	D177011-2	1/8 CARBON STEEL	1/8	215	1	13	AN155-16L	AN100-4	AN100-4			AN115-21 AN170-16RL
		D177011-3	1/8 CARBON STEEL	1/8	20½	1	13	AN155-16L	AN100-4				AN170-16RL
D177012	RUDDER CONTROL L.&R.	D177012-2	1/8 CARBON STEEL	1/8	16	2	14		AN100-4	AN100-4			AN115-21 AN170-21LL
D177111	RUDDER STOP	D177111-1	7 x 7 PREFORMED	3/32	12	2	15		AN100-3	AN100-3	AN380-3-3		AN115-32 AN140-8S
D177613	ELEVATOR TAB CONTROL	D177613-1	7 x 7 PREFORMED	1/16	509⅝	1	16		100696-F10-03-100				
D177710	RUDDER TAB CONTROL	D177710-2	1/8 COR. RES. CABLE	1/8	405⅝	1	17						
D177949	PARKING BRAKE	D177949-1	3/32 CARBON STEEL	3/32	28½	1	18		AN100-4	AN100-4			AN115-16 AN115-8
D177955	BRAKE BALANCE	D177955-1	7 x 19 PREFORMED	1/16	22¼	1	19		AN100-4	AN100-4			AN130-16S AN115-8
D178010	TAIL WHEEL RETRACTING	D178010-1	3/32 CARBON STEEL	3/32	193	1	20		AN100-4				
D178012	TAIL WHEEL RETRACTING	D178012-2	1/8 COR. RES. CABLE	1/8	46	1	21		AN100-4	AN100-4			
D178015	TAIL WHEEL RETRACTING	D178015-1	7 x 19 PREFORMED	1/8	98¼	1	22		AN100-4	AN100-4			AN140-16S
D178716	TAIL WHEEL LOCK	D178716-1	7 x 7 PREFORMED	1/16	128¾	1	23		AN100-3	AN100-3			
		D178716-2	7 x 7 PREFORMED	1/16	99¼	1	24		AN100-3	AN100-3			AN140-8S

NOTE: WHERE THE ASTERISK IS SHOWN THE TWO CABLES ARE SPLICED TO MAKE ONE.

CHART NO. 1, 20

CHART NO. 2, 4, 5, 6, 7, 8, 9, 10, 11, 14, 18, 19, 21, 22, 23, 24

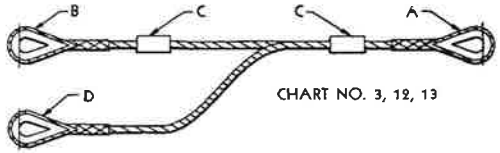


CHART NO. 3, 12, 13

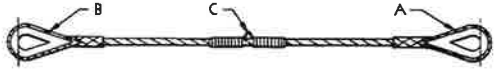


CHART NO. 15

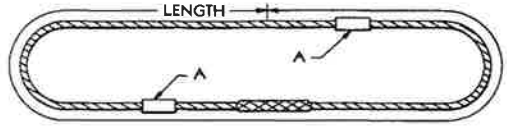
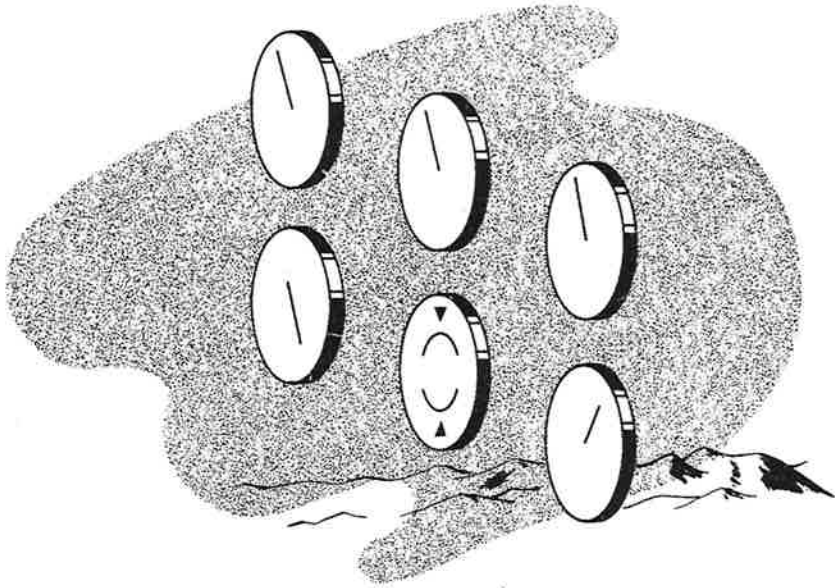


CHART NO. 16, 17

CABLE SPECIFICATIONS

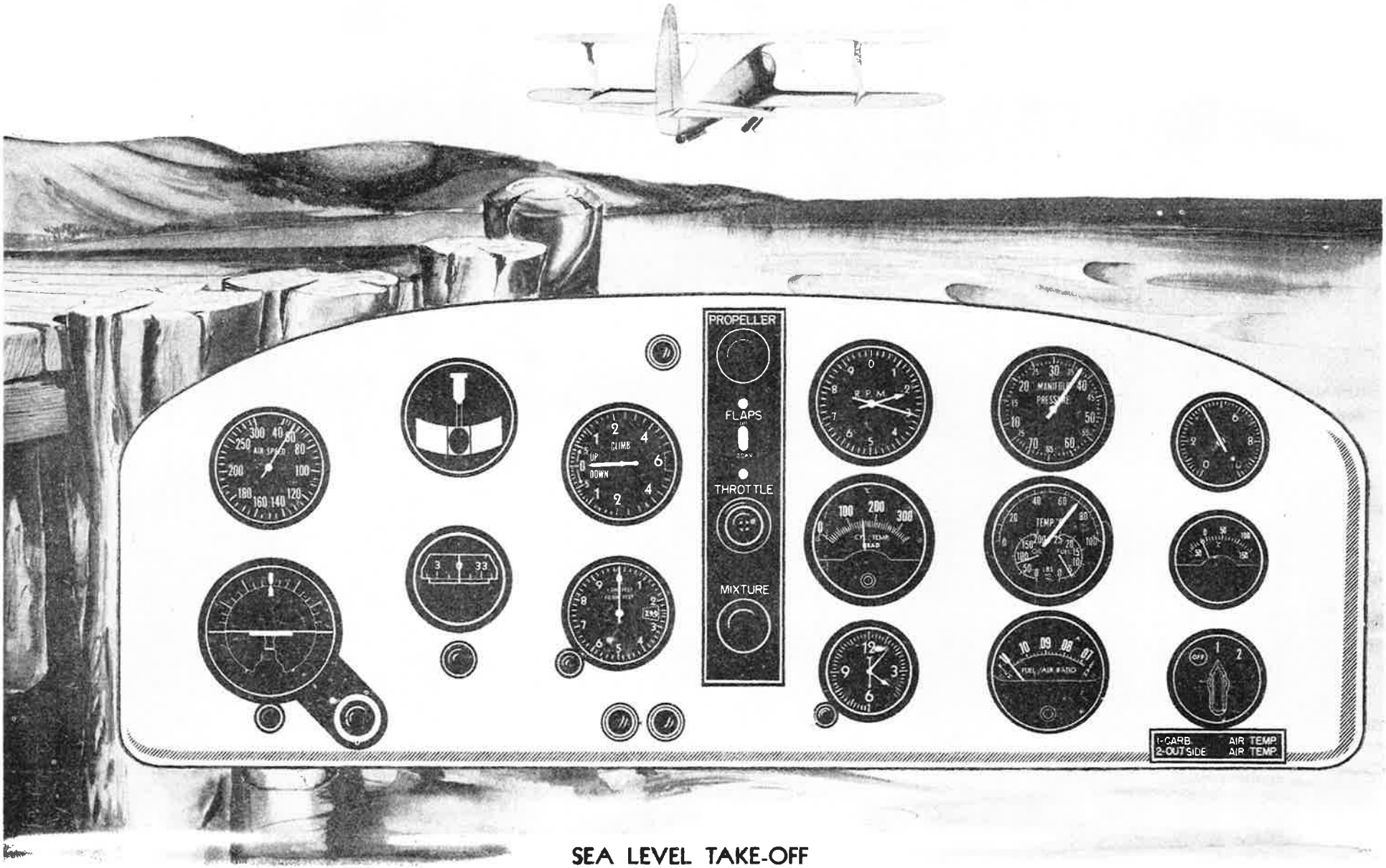
SECTION V



PERFORMANCE DATA

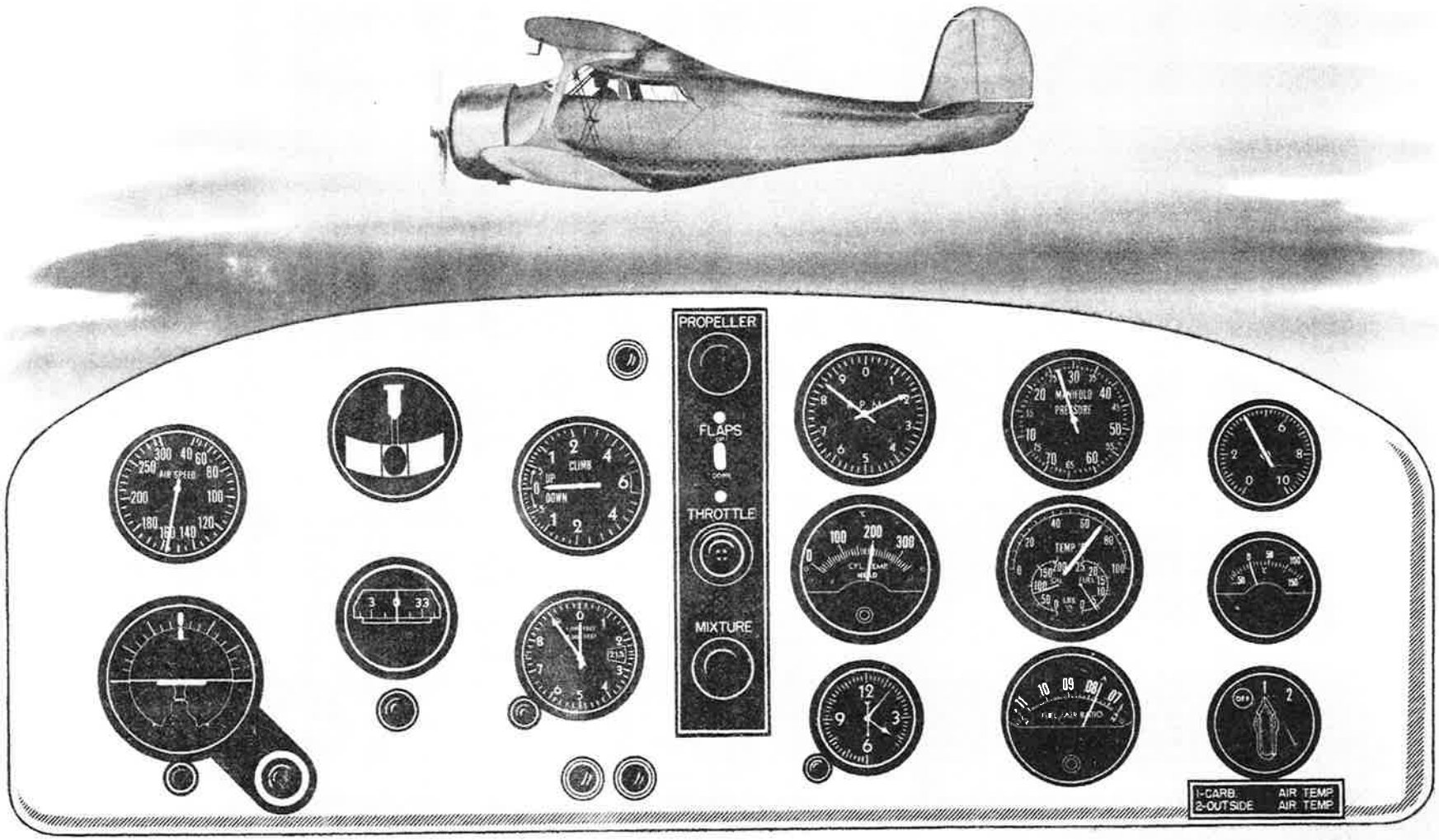
SEA LEVEL TAKE-OFF
OPTIMUM ALTITUDE CRUISING
CLIMB
MAXIMUM LONG RANGE CRUISING
TAKE-OFF 6000′
OPERATING CHARTS

BEECHCRAFT MODEL 17



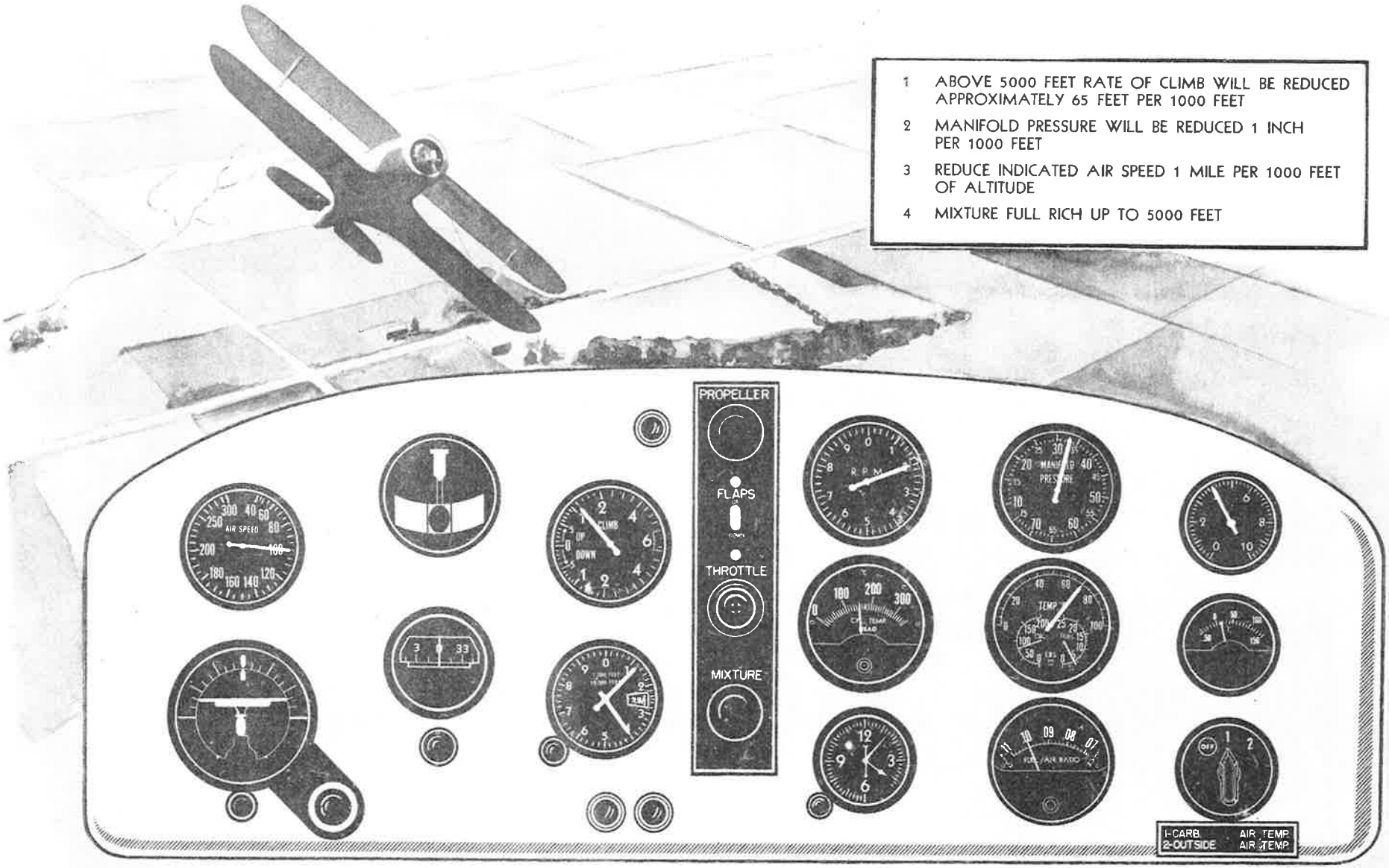
SEA LEVEL TAKE-OFF

BEECHCRAFT MODEL 17



OPTIMUM ALTITUDE CRUISING 65% POWER

BEECHCRAFT MODEL 17



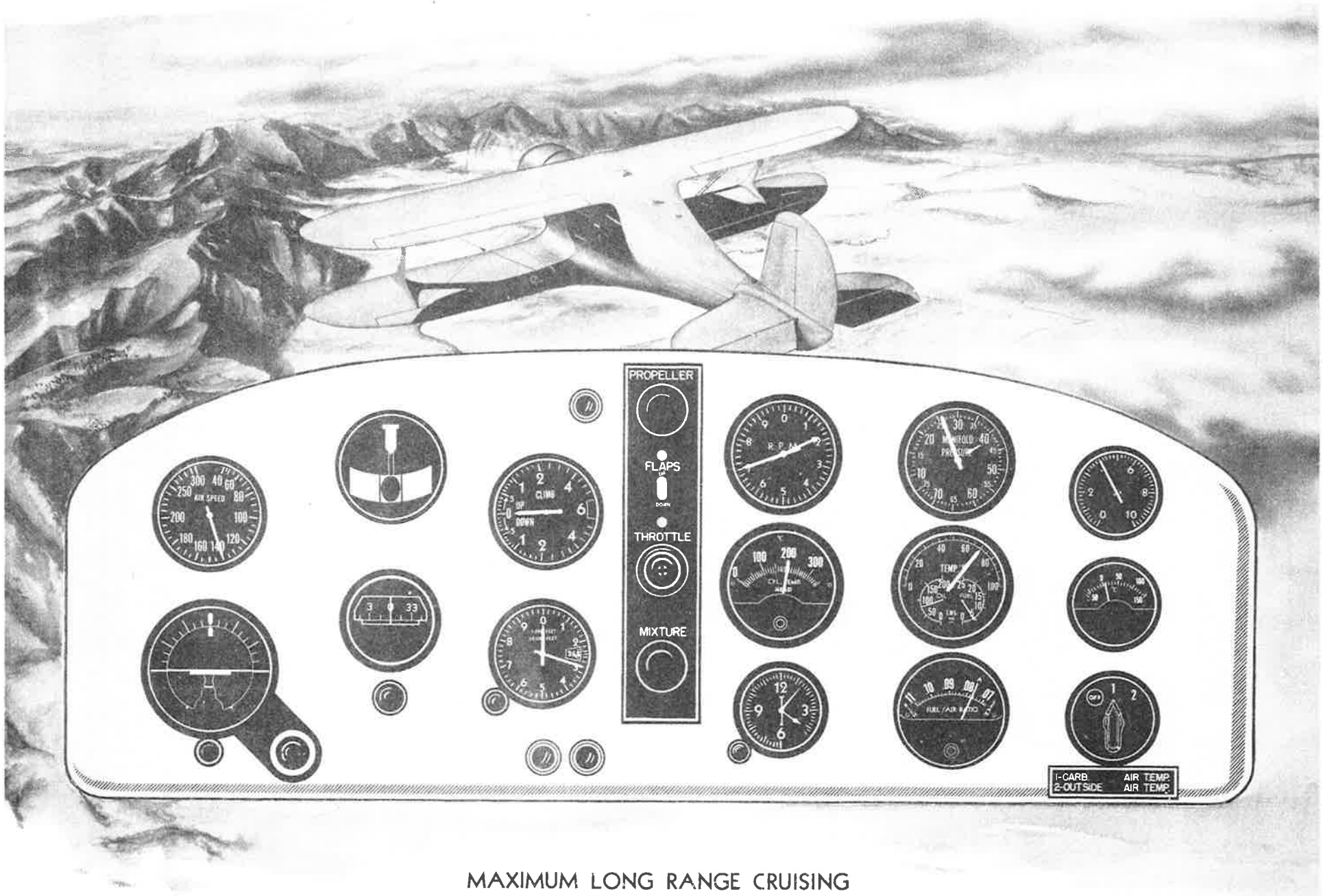
1 ABOVE 5000 FEET RATE OF CLIMB WILL BE REDUCED APPROXIMATELY 65 FEET PER 1000 FEET

2 MANIFOLD PRESSURE WILL BE REDUCED 1 INCH PER 1000 FEET

3 REDUCE INDICATED AIR SPEED 1 MILE PER 1000 FEET OF ALTITUDE

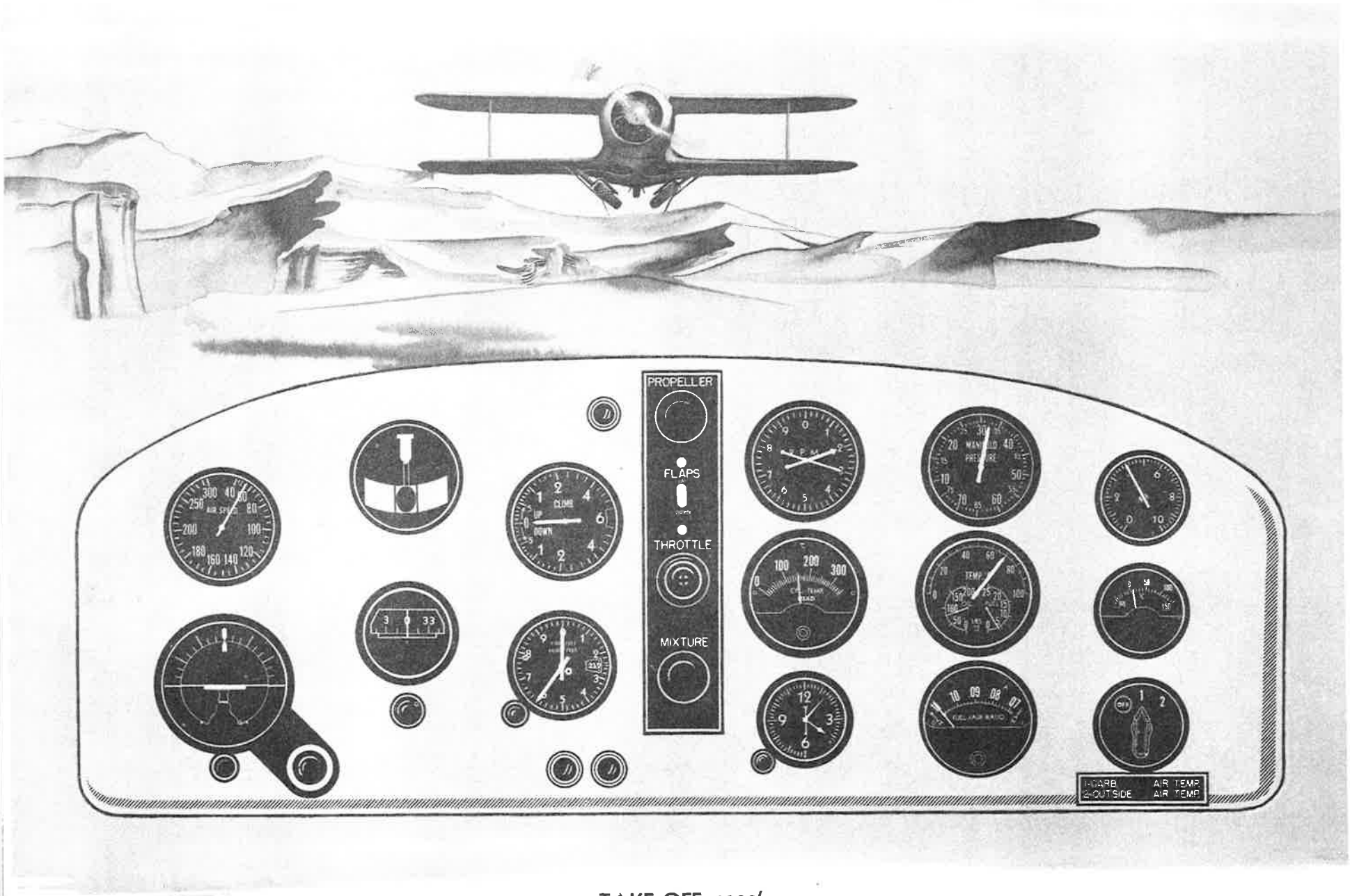
4 MIXTURE FULL RICH UP TO 5000 FEET

CLIMB

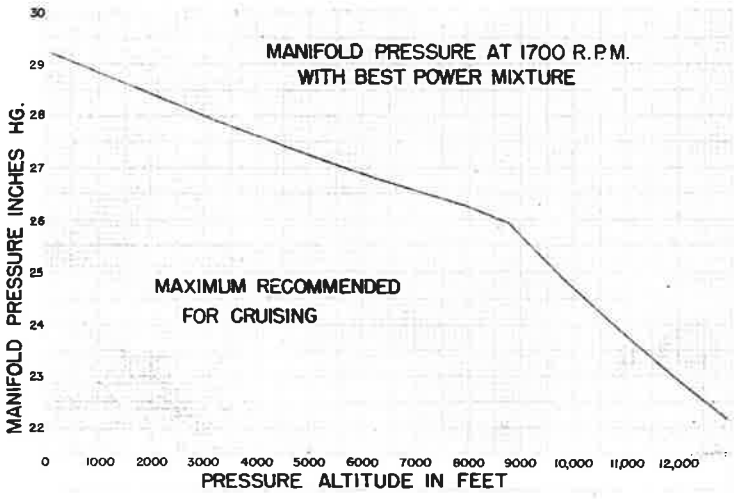


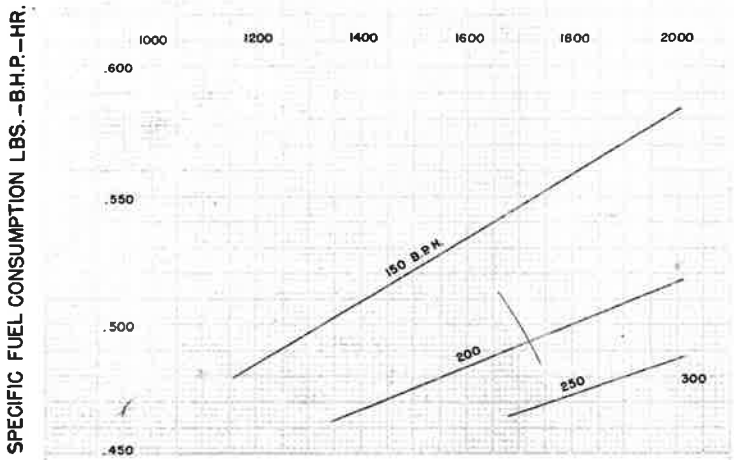
MAXIMUM LONG RANGE CRUISING

BEECHCRAFT MODEL 17



TAKE-OFF 6000′





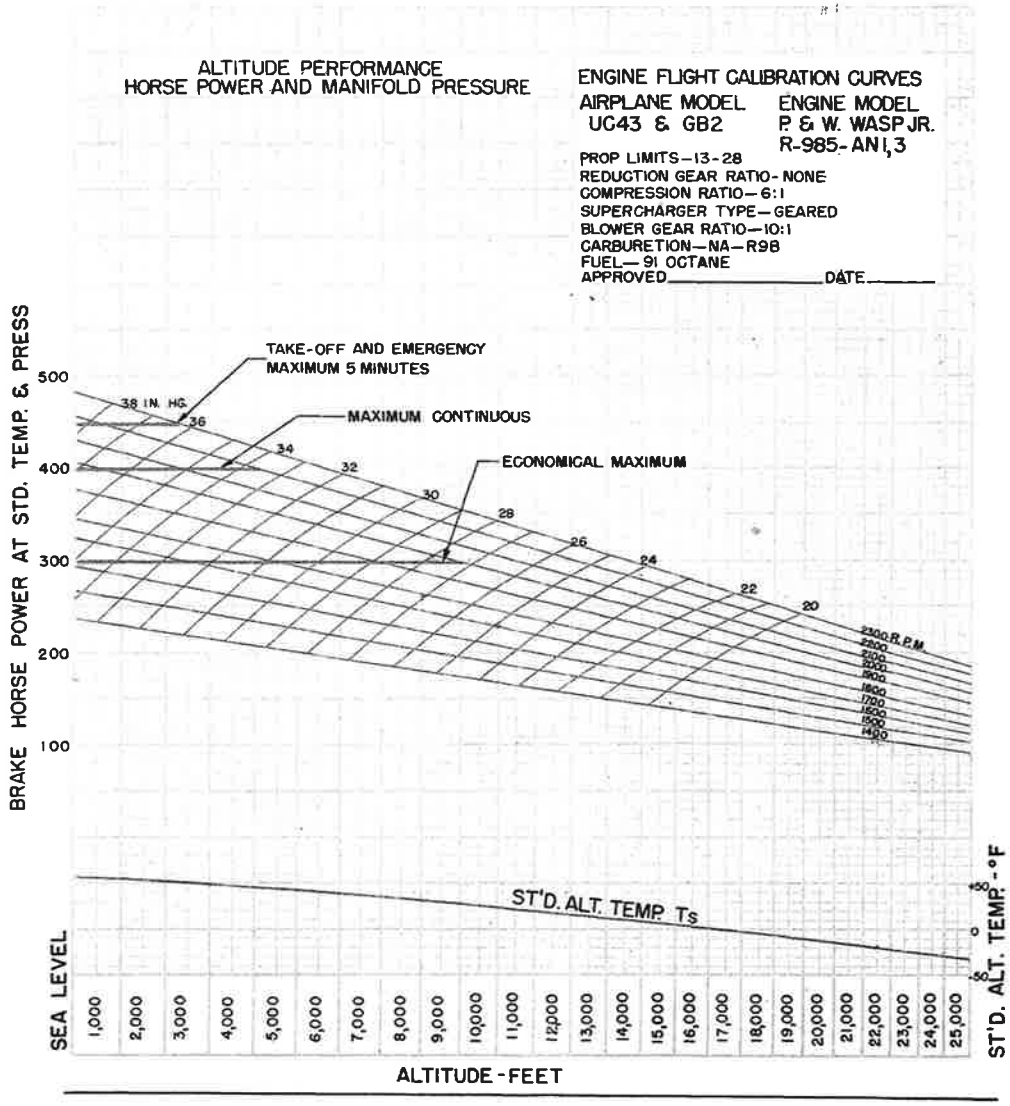
NOTE: THE SPECIFIC FUEL CONSUMPTIONS SHOWN ABOVE ARE INTENDED FOR LEVEL FLIGHT OPERATION AND ARE OBTAINABLE ONLY WITH THE USE OF THE MANUAL MIXTURE CONTROL AND WITH NOT MORE THAN 31 INCHES MERCURY ABSOLUTE ON THE EXHAUST

NOTE: APPLIES TO NAR-9C2 AND NAR-9B (SEE T-668 FOR REF.)

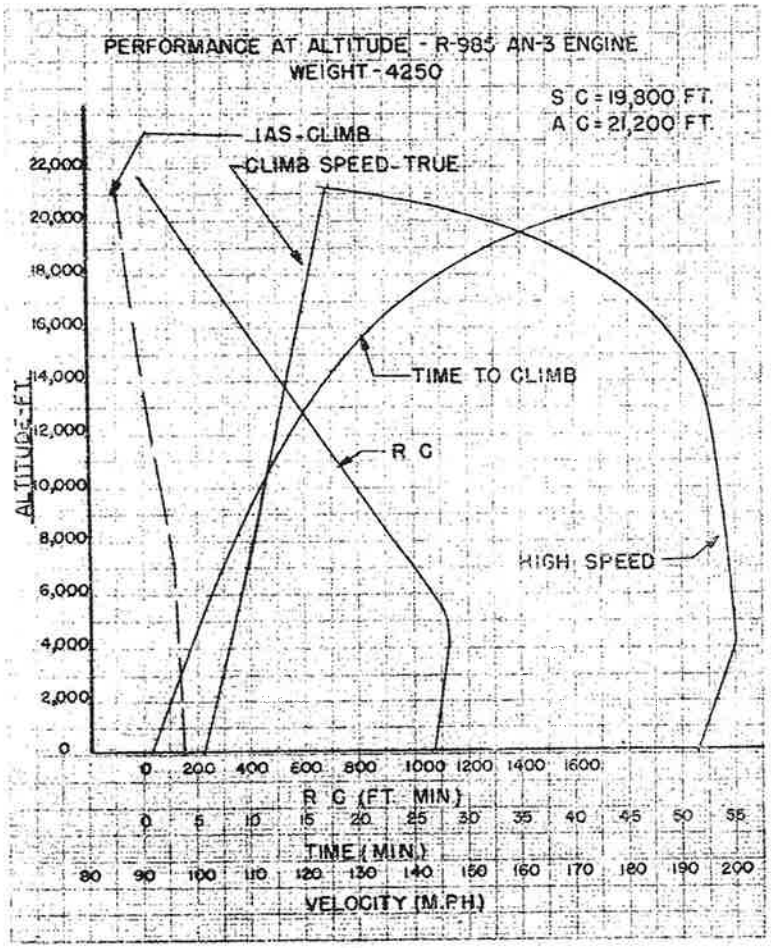
DATE: 9-4-40

MINIMUM CRUISING SPECIFIC FUEL CONSUMPTION ON AN R-985-AN-1,-2,-4,-6,-6B WASP JR. PRATT & WHITNEY AIRCRAFT

CURVE T-662-F



BEECHCRAFT MODEL 17



AIRPLANE MODELS
D17S
UC43 & GB2

SPECIFIC ENGINE FLIGHT CHART

ENGINE MODELS
P&W R-985-AN-1 (SINGLE SPEED BLOWER)
P&W R-985-AN-3 (SINGLE SPEED BLOWER)

CONDITION	FUEL PRESSURE LB./SQ. IN.	OIL PRESSURE LB./SQ. IN.	OIL TEMP. °C	COOLANT TEMP. °C		
DESIRED	5	70-90	60-75			
MAXIMUM	6	90	85			
MINIMUM	4	50	60			
IDLING	3	10				

SUPERCHARGER TYPE

MAX. PERMISSIBLE DIVING R.P.M. 2860

CONDITION	ALLOWABLE OIL CONSUMPTION
"MAX. CONTINUOUS"	8.8 IMP. PT./HR. 5.3 U.S.QT./HR
"ECONOMICAL MAX."	4.0 IMP. PT./HR. 2.4 U.S.QT./HR
"MIN. SPECIFIC"	IMP. PT./HR. U.S.QT./HR

OIL GRADE: (S) 1120 (W) 1100

FUEL OCTANE 91 - (SPEC. AN-VV-F-776)

OPERATING CONDITION	R.P.M.	MANIF. PRESS. (BOOST)	HORSE POWER	CRITICAL ALTITUDE (FEET)	BLOWER	USE LOW BLOWER BELOW	MIXTURE CONTROL POSITION	FUEL FLOW (GAL./HR.) ENG. U.S.	IMP.	MAXIMUM CYL. TEMP. °C	°F	MAXIMUM DURATION (MINUTES)	REMARKS
TAKE-OFF	2500	37	450	2000				49	41	260	500	5	
EMERGENCY MAXIMUM	2300	37	450	2000				49	41	260	500	5	
MAXIMUM CONTINUOUS	2200	33	4	4500				39	32	260	500		
ECONOMICAL MAXIMUM	2000	28	300	8300			.085	25	21	232	450		
RECOMMENDED SPECIFIC CONSUMPTION	1800	28	270	7200			.080	22	18	232	450		
	1700	26	240	6700			.080	21	17	232	450		
MINIMUM CRUISING	1700	26	240	6700			.080						

CONDITIONS TO AVOID: 1. AVOID OVERSPEED OVER OF 2860 R.P.M. FOR OVER 30 SECONDS

NOTE: CRITICAL ALTITUDE IS THAT AT WHICH MAXIMUM POWER IS OBTAINED WITH FULL THROTTLE UNDER CONDITIONS SHOWN.