CLARK
THREE LIGHT GEAR
POSITION INDICATOR
SYSTEM
FOR
BEECHCRAFT
MODELS
35-33, 35-A33, 35-B33, 35-C33, 35-C33A, E33, E33A, E33C, P33,
P33A, P33C, G33,
95, B95, B95A, D95A, E95, 95-55, 95-A55, 95-B55, 95-B55A,

July 14, 1975
Revised 10-21-75

BY

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PHONE - 206-491-3272
Title: Three Light Gear Position Indicator System.
Model: CTLB-1
Application: Beechcraft models:
35-39, 35-A33, 35-B33, 35-C33, 35-C33A, E33, E33A, E33C, P33, P33A
P33C, G33
95, B95, B95A, D95A, E95, 95-55, 95-A55, 95-B55, 95-B55A, 95-B55B

Description:
System consists of three (3) individual Korry 71810GL Indicator Light assemblies with push-to-test and dimmer control features. One (1) each is connected to the nose, left main and right main landing gear systems.

The existing landing gear position lights show only the position of the gearbox. These three additional lights show when each gear is in the "safe for landing" position.

Mechanical:
1. The three (3) indicator light assemblies are installed in the instrument panel in a position convenient for the pilot to monitor.
2. Micro switches and adapters are installed in the forward area of each main wheel well on the lower skin stiffener channel. The switches are actuated by tabs clamped to the 35-815102, or equivalent, brace assembly ("A" frame) in such a manner that the switches are actuated just prior to the gear coming to the full down position.
3. A micro switch and adapter are attached to the left hand side wall skin of the nose gear well. The switch is actuated by a tab that is clamped to the 35-825072, or equivalent, "V" brace assembly in such a manner that the switch is actuated just prior to the gear coming to the full down position.

Electrical:
1. Power is supplied from the circuit breaker* direct to each of the three micro switches. The switches are then wired direct to each of the respective indicator light assemblies.
   * Landing gear position indicator light
      D1 through D1500
      Landing gear motor
      D1501 through D6561
      Fuel pump
      D6562 through D9068
      Landing gear warning horn
      CD1 through CD387
      Landing gear and flap indicator lights
      CD388 through CD1234
      CE180 through CE269

Revision "A" 10-21-75
Model 55 Series
   TC1 through TC1607
   TE1 through TE942 less TE938
   TH1 through TH384
   Landing Gear Control

Model 56 Series
   TG1 and On
   Landing Gear Control

Model 95 Series
   TD1 and On
   Landing Gear Control

2. The light grounds are then connected to the negative terminal of the existing "Landing Gear Down" position light socket.
3. The new indicator light assembly "Push To Test" terminal shall be wired direct to the above listed circuit breaker.

Placards-

A placard shall be permanently installed adjacent to the Indicator Light Assemblies, identifying each light.

   LEFT NOSE RIGHT
   LANDING GEAR DOWN

Note:

This installation allows removal of the existing Nose Gear Pointer Assembly in the Nose Gear Well Cover by the owner, if desired.
## Revision Control Page

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<td>A</td>
<td>10-21-75</td>
<td>Title</td>
<td>Added multiengine models</td>
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<td>Adapter P/N change. Added multiengine models</td>
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<td>Indicator light P/N change</td>
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<td>Renumber Ind. light terminals</td>
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<td>Ind. light term. number change</td>
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**CLARK CTLB-1**  
Three Light Gear Position Indicator System

**REVISION CONTROL PAGE**

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<td>Item#9 changed screw size.</td>
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<td>Item#16 &amp; 17 changed screw and hole size.</td>
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<td>Removed#4 hardware &amp; increased #6 hardware. Added #6 rivnuts.</td>
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<td>11 of 16</td>
<td>View B-B changed switch attach. hardware.</td>
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<td>15 of 16</td>
<td>-1 Plate. Change all hole sizes to #30.</td>
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<td>Change hole size to (\frac{1}{8})&quot;.</td>
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END
CLARK CTLB-1
Three Light Gear Position Indicator
System

Applicable to: Beechcraft models:
S35, V35, V35A, 35R.
35-33, 35-A33, 35-B33, 35-C33, 35-C33A, E33, E33A, E33C, F33, F33A
F33C, G33.
95, B95, B95A, D95A, E95, 95-55, 95-A55, 95-B55, 95-B55A, 95-B55B

INSTALLATION INSTRUCTIONS

1. Remove forward jack pad covers on lower wing surface. (Before jacking airplane.)

2. Place airplane on jacks.

3. Raise gear until inboard gear doors are about 60 degrees open.

4. Loosen cabin upholstery side panels forward of the front wing truss.

5. Remove front seats and fuel unit cover (as applicable). Remove nose wheel well cover in cabin between pilots and copilots rudder pedals.

6. Locate -1 Plate per view A-A and B-B on drawing page 11, on aft face of forward flange of existing wheel well channel. Drill (2) #30 (.136 Dia) mounting holes through channel from -1 Plate.

7. Install -1 Plate using AN526-6-8 screw, AN960-6 washer and AN365-6 nut at two locations.

8. Complete items #5 and #7 on opposite side of airplane.


10. Complete item #9 on opposite side of airplane.

11. Attach wires (#20) to "NO" and "COM" terminals of each Micro switch. Route wires carefully on aft side of wing front spar in existing bundles to wing root. Pass through root rib, grommet and down and out through the jack pad area. Install and secure sleeving on wires where they will pass through center section fuselage cutout.

12. Complete wire attachment and routing this far on opposite side of airplane.
13. Lower landing gear.

14. Install steel AN742-16 (or equivalent) clamp on landing gear "A" frame (35-815102 or equivalent) with -2 Tab, using AN526-10-8 screw, and AN965-10 nut. Locate so that -2 Tab will strike and actuate Micro switch 1/16" before "A" frame is in full down position. NOTE: This clamp must be secure. See drawing page 12.

15. Complete item #14 for opposite side of airplane.

16. Models 33 and 35 only-
Locate AN3210-1 (BZ-R31) Micro switch, -4 tab, and AD5721R adapter assembly in nose wheel well on left side web so that front attach screw is 1.375" aft of fuselage station 33 frame centerline, and .75" above skin break. See drawing page 13. Drill (2)#30(.136)Dia. holes through wheel well skin from switch holes. Attach switch and adapter assembly to skin with (2)AN526-6-16 screws, (2)AN960-6 washers, and (2)AN365-6 nuts.

17. Models 55, 56 and 95 only-
Locate AN3210-1 (BZ-R31) Micro switch, -4 tab, and AD5721R adapter assembly in nose wheel well on left side web so that aft attach screw is 3.875" forward of "A" frame hinge bolt centerline, and .75" above skin break. See drawing page 14. Drill (2)#30(.136) Dia. holes through wheel well skin from switch holes. Remove switch and adapter assembly. Enlarge (2) holes in wheel well skin with #/2 drill (.089 Dia), and install #6 rivnut at each location. Attach switch and adapter assembly to skin with (2)AN526-6-16 screws, and (2)AN936-6 washers.

18. Attach wires (#20) to "N0" and "Com" terminals on switch. Route up and aft to the fire wall on the left wheel well skin. Secure well so as not to interfere with landing gear or controls. If there is no existing hole through the fire wall through which to pass these wires, carefully select a location on the firewall which is clear on both sides. Drill a ¼" hole through the fire wall at this spot and install AN931-2-4 grommet. Pass wires through this grommet.

19. Install steel AN742-12 (or equivalent) clamp on left leg of nose gear "A" frame, 35-825072 (or equivalent), with -3 Tab located so as to strike and actuate the Micro switch 1/16" before the frame is full down.

20. Route one wire from each of the Micro switches (3) to its respective light and attach to terminal #2. Route the other wire from each of the Micro switches (3) to the proper circuit breaker. Make all necessary connections.

21. Route and connect (#20) wire from circuit breaker to #3 terminal on each of the light assemblies (3).

22. Route and connect (#20) wire from each of the light assemblies (3) to the terminal on the existing Green Gear Down light socket that comes from the "Gear Down" limit switch.

23. The light assemblies (3) should be mounted in a position on the instrument panel that is convenient for the pilot to see. Refer to drawing page 16.
24. Install -5 Placard (or equivalent) adjacent to lights so as to identify the function of each light.

25. Operate the gear several times so as to verify that the system operates properly and wiring clearances are sufficient.

26. Remove jacks. Replace cabin upholstery, fuel unit cover and front seat(s). Replace all other items removed for this installation.

27. Complete FAA Form 337 and make entry in aircraft log book showing installation of this kit in accordance with STC# SA197NW. The weight change is negligible.
<table>
<thead>
<tr>
<th>PART NUMBER</th>
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<tr>
<td>71810GL BZ-R31 AD5721R</td>
<td>Indicator Light Assy Switch-Micro(AN3210-1) Adapter-Switch</td>
<td>Korry Mfg. Micro Products &quot; &quot;</td>
<td>&quot; &quot;</td>
<td>Install -4 Adapter Tab on one.</td>
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<td>#20 1/8&quot; I.D. AN742-12 AN742-16 AN931-2-4 AN526-6-8 AN526-6-16 AN960-6 AN365-6 AN365-10 AN936-6</td>
<td>Wire-Stranded A/C Sleeveing-Plastic Clamp-Support Grommet Screw Washer Nut Lockwasher Rivnut Ring Terminal(red) &quot; &quot;</td>
<td>Steel &quot; &quot; Rubber Steel &quot; &quot; &quot; &quot; &quot; &quot; Aluminum</td>
<td>8 ea on multiengine installation Multiengine instl. only. Multiengine instl. only.</td>
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Revision "C" 12-7-75
* Circuit Breaker Identification

**Model 33 Series**
- CD1 through CD987
  - Landing Gear Warning Horn C/B
- CD988 through CD1294
- CE180 through CE269
  - Landing Gear and Flap Indicator Lights C/B

**Model 35 Series**
- D1 through D1500
  - Landing Gear Position Indicator Light C/B
- D1501 through D6561
  - Landing Gear Motor C/B
- D6562 and On
  - Fuel Pump C/B

**Model 55 Series**
- TC1 through TC1607
- TE1 through TE942 less TE938
- TH1 through TH384
  - Landing Gear Control C/B

**Model 56 Series**
- TG1 and On
  - Landing Gear Control C/B

**Model 95 Series**
- TDI and On
  - Landing Gear Control C/B

Revision "A" 10-21-75
Revision "B" 11-16-75