INSTALLATION KIT - CESSNA TRANSCEIVER 500

MODELS AFFECTED

180
185
A185

SERIALS AFFECTED

18051446 & ON
185-0777 THRU 185-1179
185-0968 & ON

NOTES

1. This kit is used to install AK205-70 or AK205-74 for a complete radio installation.

2. The following additional kits or parts are not included and are listed for reference. They may be ordered separately if needed. Refer to Accessory Kit Catalog (alphabetical index) for applicable kit numbers.

   a. PANEL UNIT SHOCKMOUNTS: One of the following shockmounts is required per aircraft:

      | NO. OF CESSNA 500 SERIES RADIOS INSTALLED | DUST COVER & SHOCKMOUNT ASSEMBLY |
      | PART NO. | DESCRIPTION |
      | 1 | 33370 | Single Unit |
      | 2 | 0770722-1 | Dual Unit |
      | 3 | 0770723-1 | 4-Unit |
      | 4 | 0770723-1 | 4-Unit |

   b. CESSNA 500 SERIES TSO RADIO COOLING KIT: This kit is required when 2 or more Cessna 500 Series radios are installed.

   c. MICROPHONE & AUDIO SELECTOR SWITCH KIT

   d. VHF ANTENNA KIT

   e. MAGNETO NOISE FILTER KIT (MODEL 180 ONLY)

   f. RADIO LIGHTS Rheostat:
      MODELS 180 & 185 ---- 0413126-5 Rheostat
      S1390-3 Knob

   g. MICROPHONE: S1342-5

   h. HEADSET: 0770039-1


   j. SPEAKER: 0770715-1
PARTS LIST:

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<tr>
<th>QUANTITY</th>
<th>PART NUMBER</th>
<th>NOMENCLATURE</th>
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<tr>
<td>8</td>
<td>AN515-6R6</td>
<td>Screw</td>
</tr>
<tr>
<td>4</td>
<td>AN515-8R16</td>
<td>Screw - (Attach dynavertor mount)</td>
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<td>Cable Assembly - Transceiver to Dynavertor</td>
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<td>1</td>
<td>UG-88C/U</td>
<td>Coax Connector</td>
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<td>Installation Instructions</td>
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CHANGE IN WEIGHT AND BALANCE:

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<th>MODEL</th>
<th>180, 185 &amp; A185</th>
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| WEIGHT INCREASE | 12.2 pounds      |
| ARM             | 55.7 inches      |
| RESULTANT MOMENT | 680 pound-inches |
| INDEX           | .680             |

1. DESCRIPTION OF INSTALLATION.

Installation of this kit consists of:

a. Installation of Dynavertor and Supporting Hardware.

b. Installation and Routing of Dynavertor Power Cable.

c. Installation and Connection of Primary Power and Audio Wiring.

d. Installation of Transceiver and Supporting Hardware.

2. INSTALLATION INSTRUCTIONS.

CAUTION

Disconnect negative battery lead to prevent short circuits.

a. Installation of Dynavertor and Supporting Hardware. (See figures 1 & 2.)

(1) Locate and drill 4 required holes in mounting plate. Position plate on cross angles as shown and drill 4 holes in angles to match plate.

(2) Assemble cross angles and plate.

(3) Position support angle in aircraft between station 108.00 and 140.00 bulkheads so that it rests on the flanges as shown. Adjust spacing between support angle and fuselage stringer so that plate and cross angle assembly fits between them.

(4) Mark and drill 2 holes in bulkhead flanges to match support angle. Install support angle as shown.

(5) Using plate and cross angle assembly as a pattern locate and drill 4 holes in support angle and fuselage stringer to match.

(6) Install plate and cross-angle assembly as shown.
(AK180-65)

(7) Install dynavertor shockmount on plate as shown.

(8) Install dynavertor on shockmount as shown.

b. Installation and Routing of Dynavertor Power Cable. (See figure 1.)

(1) Remove seats, access covers and trim as required to gain access to wire route.

(2) Connect cable to dynavertor and route forward through lightening holes under floorboards to transceiver position.

(3) Secure cable by tying into existing wire bundles or clamping to structure.

NOTE

Access covers and trim may be replaced at this time. Seats may be replaced later to allow easier access to panel.

c. Installation and Connection of Primary Power and Audio Wiring. (See figures 4 & 5.)

(1) Install circuit breakers in available space on circuit breaker panel.

(2) Referring to proper diagram, wire pigtails on dynavertor power cable into aircraft audio and power system.

(3) Install UG-88C/U connector on antenna cable.

d. Installation of Transceiver and Supporting Hardware. (See figure 3.)

(1) Make a cutout in instrument panel trim to accommodate the radio(s) to be installed.

(2) Drill holes in instrument panel angles to match shock mount assembly.

(3) Install mount in panel as shown.

(4) String power and antenna cables to transceiver through back of mount and connect to transceiver.

(5) Install transceiver in shockmount. Secure with locking mechanism at front lower edge of transceiver panel.

3. ADJUSTMENT PROCEDURE.

a. Transmitter Adjustment.

(1) Test transmitter by communicating with local VHF facility.

(2) Adjust R317 on end of dynavertor for desired sidetone level.

b. Receiver Adjustment.

(1) Adjust R344 under plug button on dynavertor to give desired maximum output from all receivers connected to the internal audio isolation amplifier.
Figure 1. Dynavertor Mounting and Cable Routing
Figure 2. Hole Locations for Dynavert Mounting
THE ABOVE DIAGRAM ILLUSTRATES RECOMMENDED LOCATIONS FOR A COMPLETE CESSNA 500 ELECTRONICS INSTALLATION. EXACT PLACEMENT OF UNITS MAY BE VARIED TO SUIT CUSTOMER PREFERENCE OR RADIO COMBINATION.

RADIOcoolingHOSE (REF)

0770722-1 MOUNT 1 REQD (FOR 2 STACK INSTALLATIONS)

0770723-1 MOUNT 1 REQD (FOR 3 OR 4 STACK INSTALLATIONS)

NO. 26 (.147) HOLE AS REQD TO MATCH MOUNT

33370 MOUNT 1 REQD (FOR SINGLE RADIO INSTALLATION)

AN515-6R6 SCREW AS REQD

Figure 3. Panel Unit Installation