Title CESSNA 300 NAV/COM WITH GLIDESLOPE - 14 VOLT

MODELS AFFECTED

<table>
<thead>
<tr>
<th>Model</th>
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<td>F150</td>
<td>F150-0068 &amp; on</td>
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<td>U206 &amp; TU206</td>
<td>U206-0657 &amp; on</td>
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<td>P206 &amp; TP206</td>
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<tr>
<td>T210</td>
<td>T210-0198 &amp; on</td>
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NOTES

1. This kit contains both basic electronics components and the hardware required to install them.

2. The following parts are not included in this kit and may be needed to complete the installation. Refer to Accessory Kits Catalog (Alphabetical Index) and/or the Electronics Installations Manual to determine applicability or need.
   a. RADIO COOLING KIT
   b. OMNI ANTENNA KIT
   c. VHF ANTENNA KIT
   d. TRANSMITTER AND AUDIO SELECTOR SWITCH KIT
   e. MAGNETO FILTER KIT
   f. RADIO LIGHTS RHEOSTAT
   g. MICROPHONE: C596502
   h. HEADSET: 0770039-1
   i. MICROPHONE AND HEADSET JACKS and wiring provisions
   j. SPEAKER
   k. OMNI ANTENNA TEE CABLE ASSEMBLY: 0570400-206 (Used with dual omni receivers)
   l. OMNI SELECT SWITCH (Needed when dual omnis are used with autopilot)

FCC LICENSING DATA

Application for an aircraft radio station license for the Cessna 300 Nav/Com must be made on FCC Form 404. In response to Question No. 5 on both FCC Form 404-1 and 404-2 (portions of Form 404), insert:

Manufacturer | Aircraft Radio Corporation
Type No.      | CC-304A
Boonton, New Jersey, U.S.A.
(Type RT-540A)

Complete technical information is on file with the Federal Communications Commission. In response to Question No. 13 (Part III, FCC Form 404-1), insert:

ON FILE WITH FCC
## PARTS LIST:

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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>177</th>
<th>206</th>
<th>150</th>
<th>172, F172</th>
<th>180, 185</th>
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<td>ARM (inches)</td>
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<td>115.0</td>
<td>115.0</td>
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<td>INDEX</td>
<td>1.699</td>
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<td>0.646</td>
<td>0.703</td>
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1. DESCRIPTION OF INSTALLATION.
   a. Installation of this kit consists of:
      (1) Addition of glideslope switch harness to 300 Nav/Com.
      (2) Installation and interconnection of wiring.
      (3) Installation of panel units.
      (4) Installation of glideslope antenna.
      (5) Installation of glideslope receiver.
      (6) Routing of glideslope receiver cables.

2. INSTALLATION INSTRUCTIONS.
   a. Installation of Glideslope Switch Harness. (See figure 1.)
      (1) Remove receiver-transmitter unit from aircraft.
      (2) Insert pins of P6 (4) into J6 (5) and secure cable assembly (2) as shown with clamp (3), screw (6) and nut (7).
      (3) Route cable assembly out rear of receiver-transmitter and secure grommet (1) in notch with pin (8).
   b. Installation and Interconnection of Wiring. (See figure 2.)
      (1) Remove connector plate from dust cover of the 300 Nav/Com receiver-transmitter.
--- NOTES ---

1. ALL CALLOUTS ARE FOR REFERENCE ONLY.

Figure 2. Wiring Details (Sheet 1 of 3)
Figure 2. Wiring Details (Sheet 2 of 3)
Figure 2. Wiring Details (Sheet 3 of 3)
Figure 3. Panel Units Installation.
Figure 4. Glideslope Antenna Installation.
Figure 5. Receiver Supports, Fabrication Details.
**MODEL 150**

1. 1270475-217 CABLE ASSEMBLY (REF) -
   ROUTE TO GLIDESLOPE ANTENNA
   FOLLOWING STANDARD ACFT
   WIRE ROUTE TO LEFT-HAND
   DOORPOST AND UP TO ANTENNA.

9. 1270475-265 CABLE ASSEMBLY
   1 REQD - (ROUTE TO NAV/COM
   300 FOLLOWING SHIP'S WIRING,
   USE ADDITIONAL OR LARGER
   CLAMPS AS REQUIRED TO PRO-
   TECT WIRING, COIL AND
   URE EXCESS CABLE.

8. AFT SUPPORT ANGLE
   1 REQD - (FABRICATE PER
   DETAIL "A" OF FIGURE 5)
   ATTACHING PARTS:
   AN515-8R10 SCREW
   NAS679A08 NUT
   2 EA REQD

5. FORWARD SUPPORT ANGLE
   1 REQD - (FABRICATE PER
   DETAIL "A" OF FIGURE 5)
   ATTACHING PARTS:
   AN515-8R10 SCREW
   NAS679A08 NUT
   2 EA REQD

7. #10 HOLES TWO
   PLACES - ALL
   OTHERS ARE #30

6. 0412011-1 STIFFENER - 2 REQD
   MS20470AD4-3 RIVETS - 16 REQD
   DRILL OUT FIRST FIVE RIVETS AFT OF STATION 95.00 BULKHEAD
   IN JUNCTURE OF TOP AND BOTTOM TAILCONE SKINS. CENTER
   STIFFENERS ON THIS HOLE PATTERN AND DRILL FIVE HOLES
   IN STIFFENERS TO MATCH SKINS. DRILL FIVE HOLES IN SKIN
   FLANGES TO MATCH STIFFENERS.

2. 36400-0000 RECEIVER
   1 REQD

3. 36450-0000 MOUNTING
   1 REQD
   ATTACHING PARTS:
   AN515-6R10 SCREW
   NAS679A06 NUT
   4 EA REQD
CANCELLED

NOTE...
LOCATION SHOWN IS TYPICAL, RELOCATE AS REQUIRED TO ACCOMODATE ADDITIONAL RADIOS.

Figure 6. Receiver Installation (Sheet 2 of 4).
MODELS 180 & A185

1. 1270475-217 CABLE ASSEMBLY (REF)
   ROUTE TO GLIDESLOPE ANTENNA
   FOLLOWING STANDARD ACFT
   WIRE ROUTE TO LEFT-HAND
   DOORPOST AND UP TO ANTENNA.

2. 36440-0000 RECEIVER
   1 REQD

3. 36450-0000 MOUNTING
   1 REQD
   ATTACHING PARTS:
   AN515-6R10 SCREW
   NAS679A06 NUT
   4 EACH REQD

4. RECEIVER SUPPORT ANGLES
   2 REQD (FABRICATE PER DETAIL
   "B" OF FIGURE 5)
   ATTACHING PARTS:
   AN515-8R10 SCREW
   S355 SPACER
   NAS679A08 NUT
   4 EA REQD

5. SIDE SUPPORT ANGLE
   1 REQD - (FABRICATE
   PER DETAIL "B" OF FIGURE 5)
   ATTACHING PARTS:
   AN515-8R10 SCREW
   S355 SPACER
   NAS679A08 NUT
   2 EACH REQD

#10 HOLE
STA. 140

#10 HOLE - 4 REQD
(TO MATCH RCVR
MOUNT AND SUPPORT
ANGLE ASSEMBLY)

EXISTING
STRINGER
(REF)

#10 HOLE
STA. 108

CANCELED

Figure 6, Receiver Installation (Sheet 3 of 4)
Figure 6. Receiver Installation (Sheet 4 of 4).
Figure 7. Cable Routing Details, Model 206 Series Only.

(2) Referring to detail "A" for 300 Nav/Com wiring and detail "C" for aircraft wiring, connect panel light wire to radio dial light rheostat and the A+ input wires to circuit breakers or fuses on aircraft bus bar.

(3) If the 300 Nav/Com is to be the only transmitter in the aircraft, interconnect the audio wiring per detail "D" or "E" as required. If an additional transmitter is installed, interconnect audio wiring per Transmitter/Audio Selector Switch Kit instructions.

(4) Connect antenna leads to connector plate coax connectors as shown in detail "B."

(5) Solder 4 leads from -265 cable assembly into indicator connector as shown in detail "A."

c. Installation of Panel Units. (See figure 3.)

(1) Locate and drill #10 mounting holes as required to mount dust covers for radios to be installed in the panel.

(2) Install indicator in unused instrument location on panel. Shock-mounted instrument panel is the preferred location.

(3) Reattach connector plate to dust cover of 300 Nav/Com and install dust cover as shown.

(4) Connect glideslope switching harness on receiver-transmitter unit to mating connector on -265 cable assembly. Slide and secure receiver-transmitter into cover.

d. Installation of Glideslope Antenna. (See figure 4.)

(1) Locate and drill hole (10).

NOTE

MODELS 180 and A185: Use hole for existing top screw in windshield center strip.

MODELS 150, 172, 182, 206 & 210: Drill hole in windshield approximately 2.5" down from top edge of windshield and 1.0" to the right or left of center as required to clear compass wire.
(2) Attach cable assembly (9) to antenna (4) and attach antenna to windshield using screw (1), washers (2, 3 & 6), and nut (5). Apply a small amount of epoxy cement to antenna base as shown before assembly on windshield.

(3) Secure cable assembly to forward carry-thru spar.

NOTE

Installer has the option of securing cable by means of: Clamps and screws (8) located 3 and 12 inches left of the aircraft centerline or, on aircraft equipped with upholstery retainers, the cable may be routed behind the retainer by cutting a .25" slot in the retainer as shown.

(4) Route cable to left door post and down under door post trim.

e. Installation of Glideslope Receiver. (See figure 6.)

NOTE

If installation is to be made in either a 150, 180, A185 or 206, fabricate receiver support angles per appropriate detail of figure 5.

(1) Install receiver unit per figure 6.

f. Routing of Glideslope Receiver Cable Assemblies.

(1) MODEL 206 SERIES: Bring the glideslope antenna and receiver cables together behind the instrument panel and route down center of firewall to cable feed-thru on floorboard. Route to radio compartment and install sleeving and clamps per figure 7 as required to protect cables.

(2) ALL OTHER SINGLE ENGINE MODELS: Locate tail light wire running from tailcone to the navigation lights switch on the panel. Remove sufficient seats, carpet and access plates to route cable assemblies to receiver location following tail light wire route.

3. OPERATIONAL CHECK-OUT

a. Perform post-installation adjustments, pre-flight checks, and flight checks in accordance with Cessna 300 Series Electronics Service/Parts Manual and the Cessna 400 Glideslope Service/Parts Manual.