**Title**  
CESSNA 400 TRANSCEIVER - 14 VOLT  
(INCLUDES BASIC ELECTRONICS)

<table>
<thead>
<tr>
<th>MODELS AFFECTED</th>
<th>SERIALS AFFECTED</th>
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<tbody>
<tr>
<td>180</td>
<td>18051870 &amp; on</td>
</tr>
<tr>
<td>182</td>
<td>18258506 &amp; on</td>
</tr>
<tr>
<td>A185</td>
<td>185-1301 &amp; on</td>
</tr>
<tr>
<td>U206</td>
<td>U206-0915 &amp; on</td>
</tr>
<tr>
<td>TU206</td>
<td>U206-0915 &amp; on</td>
</tr>
<tr>
<td>P206</td>
<td>P206-0420 &amp; on</td>
</tr>
<tr>
<td>TP206</td>
<td>P206-0420 &amp; on</td>
</tr>
<tr>
<td>210</td>
<td>21058937 &amp; on</td>
</tr>
<tr>
<td>T210</td>
<td>T210-0308 &amp; on</td>
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**NOTE**

1. The following parts are not included in this kit but may be needed to complete the installation. Refer to the Accessory Kits Catalog and/or the Electronics Installation Manual to determine applicability or need.

   a. VHF Antenna Kit  
   b. Transmitter and Audio Selector Switch Kit  
   c. Radio Lights Rheostat  
   d. Microphone  
   e. Headset  
   g. Speaker  
   h. Flap Noise Filter

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**FCC LICENSING DATA**

Application for an aircraft radio station license for the Cessna 400 Transceiver must be made on FCC Form 404. In response to Question No. 14 on Form 404, insert:

Manufacturer: Cessna Type No.  
Aircraft Radio Corporation CC-401A  
Boonton, New Jersey, U.S.A. (Type RT-532A)

Complete technical information for the Cessna 400 Transceiver is on file with the Federal Communications Commission.

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**PARTS LIST:**

<table>
<thead>
<tr>
<th>QUANTITY</th>
<th>PART NUMBER</th>
<th>NOMENCLATURE</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>1270475-274</td>
<td>Dust Cover &amp; Cable Assembly</td>
</tr>
<tr>
<td>1</td>
<td>S1360-5</td>
<td>Circuit Breaker</td>
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PARTS LIST (Cont)

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<th>NOMENCLATURE</th>
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<tr>
<td>2</td>
<td>1270056-1</td>
<td>Spacer</td>
</tr>
<tr>
<td>4</td>
<td>AN507-632R32</td>
<td>Screw</td>
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<tr>
<td>8</td>
<td>NAS879A06</td>
<td>Nut</td>
</tr>
<tr>
<td>1</td>
<td>37243-0000</td>
<td>Filter</td>
</tr>
<tr>
<td>1</td>
<td>36600-0000</td>
<td>Transceiver Accessory Unit</td>
</tr>
<tr>
<td>4</td>
<td>S1648-06-75</td>
<td>Rivnut</td>
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<tr>
<td>4</td>
<td>AN515-6R10</td>
<td>Screw</td>
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<tr>
<td>1</td>
<td>35540-0000</td>
<td>Mounting (Accessory Unit)</td>
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<td>1</td>
<td>36363-0000</td>
<td>Connector</td>
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<tr>
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<td>UG-88C/U</td>
<td>Connector - Do Not Substitute</td>
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<td>10150-009-1</td>
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<td>Nut</td>
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<tr>
<td>6</td>
<td>S255</td>
<td>Spacer</td>
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<td>1</td>
<td>33570-1000</td>
<td>Receiver-Transmitter</td>
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<tr>
<td>2</td>
<td>AN515-6R8</td>
<td>Screw</td>
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<tr>
<td>4</td>
<td>AN938A8</td>
<td>Washer</td>
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<tr>
<td>6 ft</td>
<td>S1460-18-2</td>
<td>Wire - Red</td>
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<tr>
<td>1 ft</td>
<td>S1460-18-0</td>
<td>Wire - Black</td>
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<tr>
<td>1</td>
<td></td>
<td>Installation Instructions</td>
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CHANGE IN WEIGHT AND BALANCE:

<table>
<thead>
<tr>
<th>MODEL</th>
<th>180-182-A185</th>
<th>206 Series</th>
<th>210 Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEIGHT INCREASE</td>
<td>8.5 lbs</td>
<td>7.6 lbs</td>
<td>9.1 lbs</td>
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<tr>
<td>ARM</td>
<td>46.9 inches</td>
<td>3.9 inches</td>
<td>60.0 inches</td>
</tr>
<tr>
<td>RESULTANT MOMENT</td>
<td>399.0 lb-in.</td>
<td>30.0 lb-in.</td>
<td>546.0 lb-in.</td>
</tr>
<tr>
<td>INDEX</td>
<td>0.399</td>
<td>0.030</td>
<td>0.546</td>
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</tbody>
</table>

1. DESCRIPTION OF INSTALLATION.

a. (Refer to figure 1.) Installation of this kit consists of:
   (1) Installation of accessory unit.
   (2) Installation of panel unit.
   (3) Installation of A+ filter.
   (4) Installation and interconnection of wiring.

2. INSTALLATION INSTRUCTIONS.

a. (Refer to figure 3, sheet 1.) Installation of Accessory Unit.
   (1) Models 182, 210 & T210.
      (a) Remove seats, carpets and access plates as required to gain access to standard wire route under floorboard and to radio shelf area in the tailcone.

NOTE

On Models 210 and T210 access to radio shelf area is obtained by removing bulkhead cover plate on aft side of main landing gear wheel well.
Figure 1. Cessna 400 Transceiver Installed.
Figure 2. Support Fabrication Details
Figure 3: Accessory Unit Installation (Sheet 1 of 3)
Figure 3. Accessory Unit Installation. (Sheet 2 of 3)
WARNING

Before working in the wheel well area, make certain the master switch is OFF and one of the cables is disconnected from the battery, to prevent possible injury to personnel by doors being inadvertently closed by movement of gear handle.

(b) Select an unused space on the standard radio shelf in tailcone which will accommodate the accessory unit. Using mount (4) as a pattern, locate and drill holes (5).

(c) Install riv nuts (5) in holes.

(d) Install mount (4) with screws and washers (6).

(e) Starting at the instrument panel, route cable assembly (7) to accessory unit location following standard wire route. Secure as required to prevent chafing of wires and obstruction of controls.

NOTE

If a VHF communications antenna kit is to be installed with this radio kit, accomplish antenna installation at this time. Route antenna cable (8) with accessory unit cable (7).

(f) Cut cables (7 & 8) to length required and install connectors (1 & 2). Wire connector (1) in accordance with wiring diagram in figure 6.

(g) Install accessory unit (3) and safety wire retention nut on mount (4).

(h) Attach cables (7 & 8) to accessory unit and safety wire locking clips on connector (1).

(i) Reinstall cover plates on floorboard.

(2) (Refer to figure 3, sheet 2.) Model 206 Series.

(a) Remove lower cowl panel for access to radio compartment below engine.

(b) Compare existing radio installations, if any, with the installation shown on sheet 2 of figure 3. Determine if any existing support hardware may be used to mount the remote unit of the 400 Transceiver. Fabricate additional support angles (4 & 6) as required.

(c) Install support angles (6) as shown. Blind rivets may be substituted for driven rivets as desired to facilitate installation.

(d) Drill holes (7) in angles (4) to match mount (5).

(e) Attach mount (5) to angles (4) with screws and nuts (7).

(f) Attach assembled parts from step (e) to angles (6) with nuts and screws (2).

(g) Starting at the instrument panel, route cable assembly (8 & 9) from radio panel unit location, down center of firewall to cable exit point on cabin floorboard just aft of firewall. Route through sleeving in nose wheel well to accessory unit location in radio compartment. Secure cable as required to prevent chafing of wires or obstruction of the aircraft's controls.

NOTE

If a VHF communications antenna kit is to be installed with this radio kit, accomplish antenna installation at this time. Route antenna cable (9) with accessory unit cable (8).

(h) Cut cables (8 & 9) to length required and install connectors (10 & 11). Wire connector (10) in accordance with wiring diagram in figure 6.

(i) Install accessory unit (1) and safety wire retention nut on mount (5).
(j) Attach cables (8 & 9) to accessory unit and safety wire locking clips on connector (10).

(k) Reinstall lower cowl panel.

(3) Models 180 & A185. (Refer to figure 3, sheet 3).

(a) Remove seats, carpets and tailcone access panel at rear of baggage compartment. Locate tail light wire routing and remove floorboard cover plates as required for access to wire route.

(b) Compare existing radio installations, if any, with the installation shown on figure 3, sheet 3. Determine if any existing support hardware may be used to mount the remote unit of the 400 Transceiver. Fabricate additional support angles (4 & 6) as required.

(c) Drill holes (12) in angles (4) to match mount (3).

(d) Attach mount (3) to angles (4) with screws and nuts (12).

(e) Drill two holes (8) in angle (6) to match assembled parts from step (d).

(f) Attach assembled parts to angle (6) with two nuts, screws and spacers (9).

(g) Using parts assembled in step (f) as a pattern, locate and drill two holes (8) in angle (11), one hole in bulkhead (7), and one hole in bulkhead (5) to match.

(h) Use remaining nut, screws, and spacers (9) to attach assembly to airplane.

(i) Starting at the instrument panel, route cable assembly (14) to accessory unit location following standard wire route. Secure as required to prevent chafing of wires or obstruction of controls.

NOTE

If a VHF communications antenna kit is to be installed with this radio kit, accomplish antenna installation at this time. Route antenna cable (13) with accessory unit cable.

(j) Cut cables (13 & 14) to length required and install connectors (1 & 15). Wire connector (15) in accordance with wiring diagram in figure 6.

(k) Install accessory unit (2) and safety wire retention nut on mount (3).

(l) Attach cables (13 & 14) to accessory unit and safety wire locking clips on connector (15).

(m) Replace access plates on floorboard and access panel into tailcone. Leave carpets and seats out until installation is complete.

b. (Refer to figure 4.) Installation of Panel Unit.

NOTE

If a transmitter and audio selector switch kit is to be installed with this radio kit, accomplish installation at this time.

(1) Remove decorative cover from radio location in center of instrument panel (1).

(2) Using holes in spacers (4), mark the four holes (2) in desired location of panel (1) as shown.

(3) Drill holes (2) and install cover (3) and spacers (4) with screws and nuts (6).

(4) Trim decorative cover to clear dust cover (3).

(5) Reinstall decorative cover in radio area.

(6) Install receiver-transmitter and tighten retention screw.
Figure 3. Accessory Unit Installation. (Sheet 3 of 3)
Figure 4. Panel Unit Installation.

1. INSTRUMENT PANEL (REF)

2. #26 (.147) HOLE 4 REQD
   (TO MATCH DUST COVER)

3. 1270475-274 DUST COVER & CABLE ASSY 1 REQD

4. 1270056-1 SPACER 2 REQD

5. 33570-1000 RECEIVER-TRANSMITTER 1 REQD

6. AN507-632R32 SCREW
   NAS679A06 NUT
   4 EACH REQD
MODELS 180 & A185
VIEW LOOKING OUTBOARD

ALTERNATE LOCATION—WHEN SECOND 400 SERIES TRANSCEIVER IS INSTALLED

#26 (.147) HOLE (TO MATCH FILTER)
AN515-8S SCREW
NAS879A06 NUT
2 EA. REQD

NOTE: MOUNT FILTER FOR NO. 2 RADIO INSTL ON INBOARD SIDE OF SUPPORT ASSEMBLY USING SAME HOLES AND HARDWARE.

MODELS 206 & 210 SERIES
VIEW LOOKING INBOARD

Figure 5. Filter Installation.
c. (Refer to figure 5.) Installation of A+ Filter.

(1) Lay out and drill holes (3) to match filter.
(2) Install filter (1) with screws and nuts (3).

NOTE
To facilitate wiring, step 2 may be postponed until the related wiring has been accomplished.

d. (Refer to figures 6, 7, & 8.) Installation and Interconnection of Wiring.

(1) Fabricate a red, 18 gage jumper wire (figure 6, item 2) to connect the A+ filter ("IN") with the circuit breaker. Also fabricate a short black, 18 gage jumper wire (figure 6, item 1) to ground the A+ filter. Interconnect these wires as shown.

(2) Terminate and attach red/white wire to circuit breaker as shown.

(3) Terminate and attach red/white wire to "OUT" terminal of the A+ filter as shown.

(4) Route yellow wire to "RADIO LTS DIM" rheostat. Strip, tin and solder to load side of rheostat.

NOTE
The two numbers on the ends of wires in figure 6 correspond to terminals on the audio terminal board shown in figures 7 and 8. For example, the first number of (28/29) denotes that terminal No. 28 is to be used if the radio is the only transceiver, or the first of two transceivers. The second number denotes that terminal No. 29 is to be used if the radio is the second of two transceivers.
NOTE 1  PHONE OUTPUTS OF TRANSCEIVERS ARE CONNECTED TO TERMINALS 16 THRU 20.

NOTE 2  INPUTS TO ISOLATION AMPLIFIER IN TRANSCEIVER ARE CONNECTED TO TERMINALS 11 THRU 15.

Figure 7. Audio & Control Wiring - Single Transceiver & Multiple Receivers,
NOTE 1  PHONES OUTPUTS OF TRANSCEIVERS ARE CONNECTED TO TERMINALS 16 THRU 20.

NOTE 2  INPUTS TO AUDIO ISOLATION AMPLIFIER IN EACH TRANSCEIVER ARE CONNECTED TO TERMINALS 11 THRU 15.

Figure 8. Audio & Control Wiring - Dual Transceivers & Multiple Receivers.
(5) If this kit is being installed as an only or "first" of two transceivers, interconnect the audio wiring in accordance with figure 7, using the first number in the terminal designations on figure 6.

(6) If this kit is being installed as a "second" of two transceivers, interconnect the audio wiring in accordance with figure 8, using the second number in the terminal designation on figure 7.

(7) Secure all wiring behind the instrument panel to prevent chafing of wires and obstruction of the controls.

(8) Reinstall all items previously removed to facilitate installation.

3. OPERATIONAL CHECKOUT.

a. Perform post installation adjustments, preflight check, and flight checks in accordance with Cessna 490, COM, NAV, NAV/COM and ADF Service Parts Manual.

CANCELLED