

# **Honeywell**

***MAINTENANCE MANUAL***

***BENDIX/KING<sup>®</sup>***

***KT 76C***

***ATCRBS  
TRANSPONDER***

***MANUAL NUMBER 006-15545-0002  
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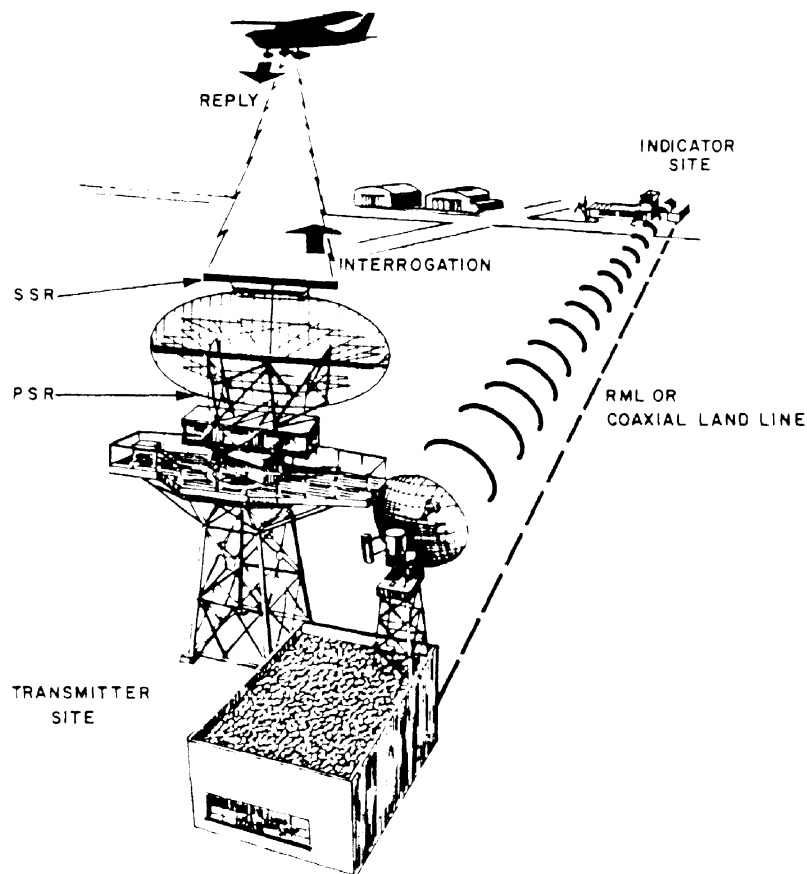
**SECTION IV**  
**THEORY OF OPERATION**

**4.1 INTRODUCTION**

General description of the KT 76C Transponder and its use in the Air Traffic Control Radar Beacon System:

The KT 76C Transponder is an integral part of the Air Traffic Control Beacon System (ATCRBS). In the aircraft, its function is to transmit a coded response to a coded interrogation transmitted by an air traffic control ground radar station.

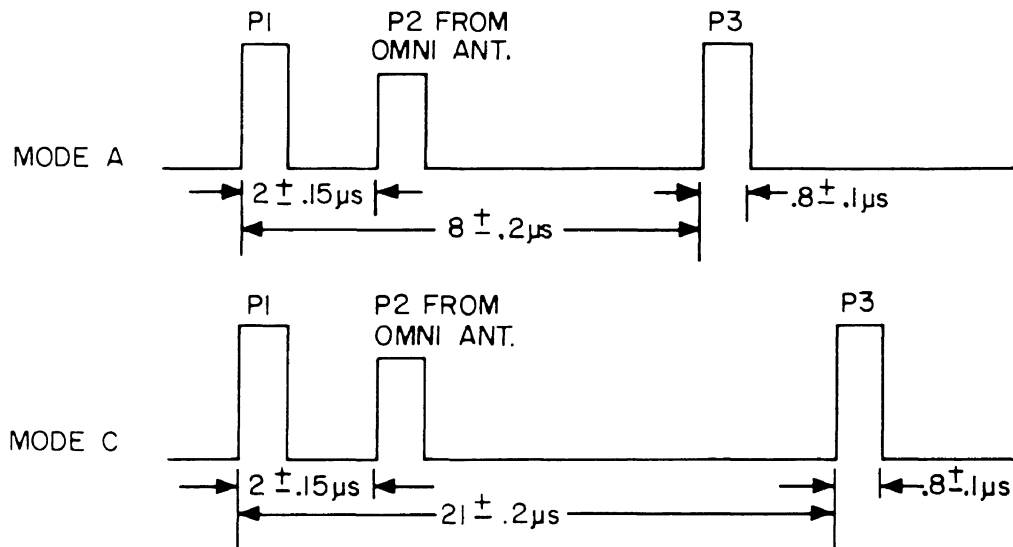
There are two types of radar at each of these ATC ground stations. The first, called the Primary Surveillance Radar (PSR), operates on the normal radar principle of receiving energy reflected from the aircraft under surveillance. The second, called the Secondary Surveillance Radar (SSR), operates on the coded reply from the airborne transponder. Both radars are used in conjunction to develop the total air traffic situation and to display it on a single radar scope. A typical air traffic control ground station is shown in **Figure 4-1**.



**FIGURE 4-1 ATCRBS TRANSMITTER SITE**

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The SSR interrogates the KT 76C in one of two modes. These are referred to as Mode "A" or Mode "C" interrogations. The type of interrogation is determined by the spacing between two pulses transmitted by the SSR on a carrier of  $1030 \pm .2$  MHz. Each interrogation contains a third pulse at the same frequency which is not transmitted by the SSR but by an omni directional antenna which is located at the ground radar station. This pulse is transmitted  $2 \mu\text{sec}$  after the first pulse transmitted by the SSR. Mode "A" and Mode "C" interrogation characteristics are shown in **Figure 4-2**.



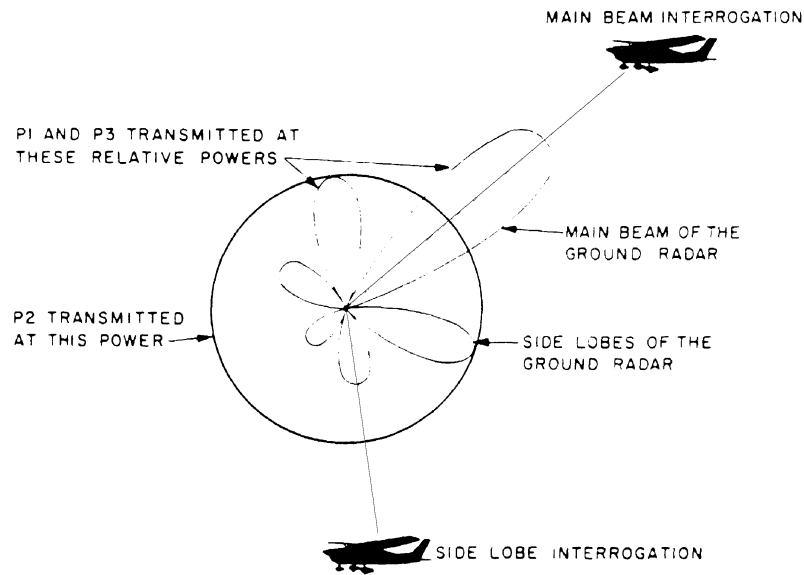
**FIGURE 4-2 INTERROGATION CODING CHARACTERISTICS**

The purpose of P2, the signal from the omni-directional antenna, is to allow the airborne transponder to determine whether the interrogation came from the main beam or a side lobe of the SSR. If the KT 76C has been interrogated by a side lobe, no reply is generated. A reply to a side lobe interrogation would give the ground radar operator an erroneous position reading of the aircraft carrying the transponder. The KT 76C determines by an amplitude comparison between P1 and P2, if the interrogation is a valid main beam interrogation. If P2 is equal to or larger than P1, the interrogation is from the side lobe of the SSR. The reason these conditions exist can be explained with the composite antenna pattern of the ground station as shown in **Figure 4-3**.

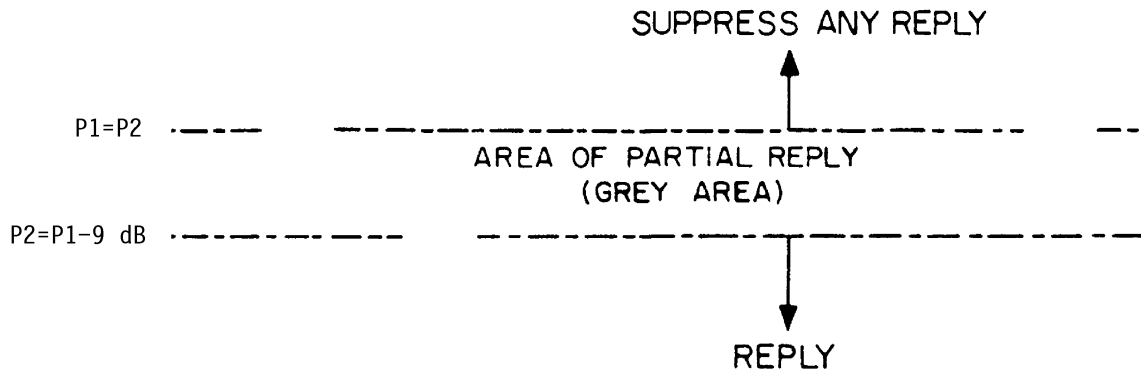
It is seen that the power received from the omni directional antenna is less than the power received from the main beam but larger than the power received from any of the side lobes of the SSR. This is why in a main beam interrogation, P1 is larger than P2; and in a side lobe interrogation, P2 is equal to or larger than P1. The detailed specifications of transponder reply and side lobe suppression characteristics for the ATCRBS are shown in **Figure 4-4**.



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**KT 76C ATRCBS TRANSPONDER**



**FIGURE 4-3 COMPOSITE ANTENNA PATTERN OF THE GROUND STATION**



**FIGURE 4-4 CONDITION OF REPLY AND SIDE LOBE SUPPRESSION**

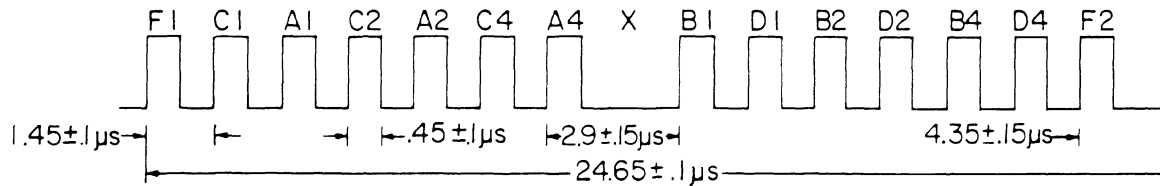
The KT 76C Transponder replies to both the Mode "A" and Mode "C" interrogations with a coded pulse group on a carrier of  $1090 \pm 3$  MHz. In a Mode "A" reply, the coding of the pulsed waveform represents an identification number of the plane carrying the transponder. The identification number which will be transmitted is entered by means of eight push-button switches. This number consists of four octal digits (0-7) which gives the transponder the capability of 4096 different identification numbers. The coding of a Mode "A" reply can consist of up to fifteen pulses. Twelve of these pulses carry the identification number. Two others, called the framing pulses, come before and after the twelve information pulses. The last is a special identification pulse to aid the radar operator. The control head identification numbers and the reply coding characteristics for the full 15 reply pulses are shown in [Figure 4-5](#).

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A	B	C	D
7	7	7	7

**FIGURE 4-5A CONTROL HEAD IDENTIFICATION NUMBERS**

DIGIT	x1	x2	x3
0	0	0	0
1	0	0	1
2	0	1	0
3	0	1	1
4	1	0	0
5	1	0	1
6	1	1	0
7	1	1	1



**FIGURE 4-5B REPLY CODING CHARACTERISTICS**

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## 4.2 CIRCUIT THEORY

The following sections provide circuit theory information for the KT 76C. Theory is explained in simplified and detailed forms, where applicable, or in a combined manner. Refer to [figures 4-6 and 4-7](#) for block diagrams and [section 6](#) for schematics. The block diagrams show the interconnections of the functional parts of the KT 76C.

### 4.2.1 POWER SUPPLY

#### 4.2.1.1 Power Supply (Simplified)

The KT 76C incorporates two switching power supplies to generate the voltages required for unit operation. The primary switching supply employs a ringing choke regulator to produce +11 V dc, +6 V dc, +185 V dc, -8 V dc, and -6 V dc. The primary supply also generates +9 V dc and +5 V dc through the use of linear regulators. The primary supply enables the KT 76C to run on any voltage from +11 V dc to +33 V dc with no modification or rewiring.

The secondary switching supply utilizes the +11 V output to generate the +1300 V dc required for the transmitter tube and the +17 V dc required for the suppression circuit.

#### 4.2.1.2 Power Supply (Detailed)

##### 4.2.1.2.1 Primary Supply

Power is applied to the KT 76C via J1 pins 11 and 12 with respect to J1 pins 1 and A. The input power is filtered by input filter (L22, L23, L30, and L31 and associated circuitry) before passing to T3, U30 and Q45. The fuse (F1) provides protection in the event of input circuitry failure.

Power flowing through the primary windings of the power transformer (T3) is alternately switched on and off by Q45. When Q45 is on, energy is stored in the transformer's magnetic field. When Q45 shuts off, the energy is dissipated into the transformer's secondary windings. Four taps on the secondary windings are then rectified and filtered to produce the various voltages required by the KT 76C.

##### 4.2.1.2.2 Start-Up Regulator

Power is applied to the pulse width modulation controller (U30) as soon as aircraft power is applied. The controller is held in the OFF state when ground is applied to pin 11. When the KT 76C is switched from the OFF condition, ground is removed from pin 11 thus allowing the controller to turn ON. At turn-on U30 receives its power from the aircraft bus (Vin). As the +11 V line (Vdd) increases to above +8 V dc, U30 receives its power from the +11 V line through CR24. C210 provides current to U2 during the transition from Vin to Vdd.

##### 4.2.1.2.3 Pulse Width Modulation Controller

The heart of the KT 76C power supply is U30. This device achieves voltage regulation by varying the duty cycle of the switching signal that drives Q45. By adjusting the amount of time Q45 is turned on, the amount of energy transferred to the secondary of the transformer is controlled. The base switching frequency of U30 is set by R468 to approximately 80 kHz. Under light load conditions the controller may "skip" a switching interval, extending the base frequency to essentially 40 kHz. However, the fundamental switching frequency remains 80 kHz. The +6 V output of the power supply is divided down by R483 and R463 and compared to an internal 4.0 V reference in U30 enabling regulation of the +6 V output. The other output voltages are primarily determined by the secondary turns ratios of the transformer and loading. C202 and R469 provide compensation for the controller circuit which determines a balance between output response time and controller loop stability.

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Resistor R461 allows Q45 to shut off in the event that the drive from U30 fails with an “open” condition. Resistor R482 and CR43 controls the switching time of Q45, thus aiding in the reduction of electromagnetic interference.

The current through Q45 is continuously monitored by U30 through R455. The mirror output of Q45 provides an output current proportional to the total current flowing through the device (typically 1/2700 of the device current). Resistor R455 provides a current sense voltage which is fed through the low pass filter comprised of R437 and C211 to U30. The current sense input to U30 will cut-off Q45 if the current flowing through the device becomes excessive. (Typically 15 amps peak). This current feedback is active for every switching cycle of the power supply.

The voltage spike generated by transformer T3 when Q45 is shut off is clamped by the snubber network comprised of CR32, CR26, R547, C213, C269, C270, R546, and CR39.

#### 4.2.1.2.4 Post Regulation

A ringing-choke power supply topology provides good output regulation only for the output monitored by the power supply controller. The remaining outputs are loosely regulated and are affected by total power supply loading, individual output loading, transformer winding resistance and inductance, the switching speed and forward voltage drop across the rectifier diodes, and other parasitic effects. An output that is unloaded will tend to float to a very high and potentially destructive voltage.

#### 4.2.1.2.5 Secondary Supply

The secondary supply is derived from the +11 V output of the primary supply through a +9 V regulator, U18. Power is applied through the filter C33, L2, and C40. The filter isolates the primary supply from the secondary supply's converter frequency of 20 kHz.

#### 4.2.1.2.6 Oscillator Operation

The 40 kHz clock for this supply is generated by U11-B. Flip-flop U2-A divides the 40 kHz clock by two and creates two 50% duty cycle 20 kHz clock signals. The 20 kHz clock at U2-A pin 5 is 180 degrees out of phase with the 20 kHz clock at U2-A pin 6. The clock signals from U2-A Pin 5 and U2-A Pin 6 drive U32-D and U32-A respectively. R25, R26 and C20 provide a feed back signal and time constant from Q3 to ensure that Q1 is not turned on at the same time Q3 is on. Conversely, R17, R18 and C19 provide a feed back signal and time constant from Q1 to ensure that Q3 is not turned on at the same time Q1 is on. T1 has a split primary that is driven by Q1 and Q3.

#### 4.2.1.2.7 Output Voltages

The +17 V output is derived from the “flyback” on the primary of T1. It is full-wave rectified by CR40 and filtered by C275. The +17 V output drives the external suppression circuitry and R543 provides loading during the suppression OFF time.

The secondary supply incorporates a voltage doubler to derive the +1300 V dc required by the transmitter tube. The 650 V rms output of T1 is doubled by the circuitry consisting of C43, C44, CR7 and CR8. C45 provides filtering for the +1300 V output.

#### 4.2.1.2.8 Output Regulation

The 1300 V output is divided down by the network consisting of R68 through R75, R104 and R105. This voltage is compared by U13-A to the reference voltage generated by U35. The voltage generated by U13-A is used to “steer” the output of U18 to maintain regulation of the +1300 V output.

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#### 4.2.2 LOCAL OSCILLATOR

The Local Oscillator is shown on sheet 3 of the schematic. The 48 MHz oscillator consists of Y1 and Q4. Q5 buffers the signal which is fed to the digital section. The 48 MHz is squared up with U15-A. U17-A provides the proper DC bias to the input of U15. The 48 MHz square wave is rich in harmonics and is fed into a 240 MHz filter to select the 5th harmonic. This signal is amplified by U19 and the 4th harmonic (960 MHz) is selected by filter FL2. The 960 MHz signal is amplified to approximately -10 dBm by U33.

#### 4.2.3 RF AND IF

The RF and IF amps are shown on sheet 4 of the schematic. FL1 is the 1030 MHz preselector. U20 is the RF amp and supplies approximately 17 dB of gain. The signal goes through an 8 dB pad before being presented to the mixer U21 where it is combined with the 960 MHz LO. The output of the mixer is 70 MHz. The signal is filtered with an LC network before it is presented to the IF amplifier. The 5 transistor IF amplifier both amplifies and detects the IF signal. The detected signal is logarithmic in nature. It is amplified by the video amp consisting of Q18 and Q17. Q14 and Q15 provide the correct bias for the video amp so that the output of the amplifier is close to ground potential under no-signal conditions.

#### 4.2.4 VIDEO DETECTION

The output of the video amp is detected with circuits on sheet 5 of the schematic. Comparator U14-A switches when the video signal is above approximately .3 volts. U11-D and Q10 increase this switching voltage if the transmitter is replying at a level exceeding 1400 replies per second. The height of P2 is compared to the height of P1 using a sample and hold circuit consisting of switch U16, hold capacitor C93 and comparator U14-B. If the height of P2 is 9 dB below P1, the output of U14-B will be low during P2. If P2 is equal to P1, U14-B will be high during P2. The transponder must not reply if P2 is equal to P1. U12-A senses the leading edge of the video pulse. The edge circuit helps the ASIC measure the width of the video pulse correctly even when the amplitude is high.

#### 4.2.5 ASIC

The ASIC contains the digital logic to generate a reply based on the input pulses supplied by the U14 dual comparator. It makes sure the pulses are of the proper width and spacing for a legal mode A or mode C interrogation. It takes in altitude and front panel switch information. The front panel push button information is relayed to the microcontroller over serial switch lines, clock, data and sync. The altitude data is relayed to the microcontroller via serial altitude lines clk, data, and sync. Mode A reply data is received in serial format from the controller over the XPDR clock, data and sync lines. Mode C data is obtained in buffered parallel format from the rear connector. The ASIC logic is a CMOS ram design and therefore must be loaded on power up by serial EPROM U1. The ASIC will not load until the comparator line M2 goes high at power up. Modulation data to the tube can be seen at test point 9 after a 45 second warm up period. The microcontroller controls the 45 second warm up period and hence the controller must be functional for the transponder to reply. The microcontroller can force a reload function of the ASIC through U23 if an error is detected by the controller.

#### 4.2.6 MICROCONTROLLER

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The microcontroller controls the following functions:

- Display Anode control (digit multiplexing)
- Display Cathode (segment) control
- Push-button to Mode A code conversion
- ASIC serial communication
- Photocell monitoring
- Display dimming
- Power down Mode A code storage

Reset to the controller is provided by a comparator built into U35. Code sequencing is timed off of the clock input from U22. The processor multiplexes the display at a 1 kHz rate. The display has ten anodes but the entire display is updated every 7 milliseconds due to some anodes firing simultaneously. The controller shuts down all anodes and then loads the cathode data (i.e. which segments and letters will be lit) on U29 pins 12-20, 21, 22, 24, 40. Then, the controller drives U29 to activate the corresponding anode (or anode pair, i.e. A5 and A10) with a 3-bit code at U29 pins, 1,2, and 3. The photocell along with the resistor R514 form a voltage at pin 25 of the controller. The controller has a built-in PWM and an A/D converter which converts this voltage into a pulse width modulated signal which controls the on-time duty cycle on pin 4 and hence the brightness of the display. The cathode current is also controlled by a duty cycle appearing on pin 35.

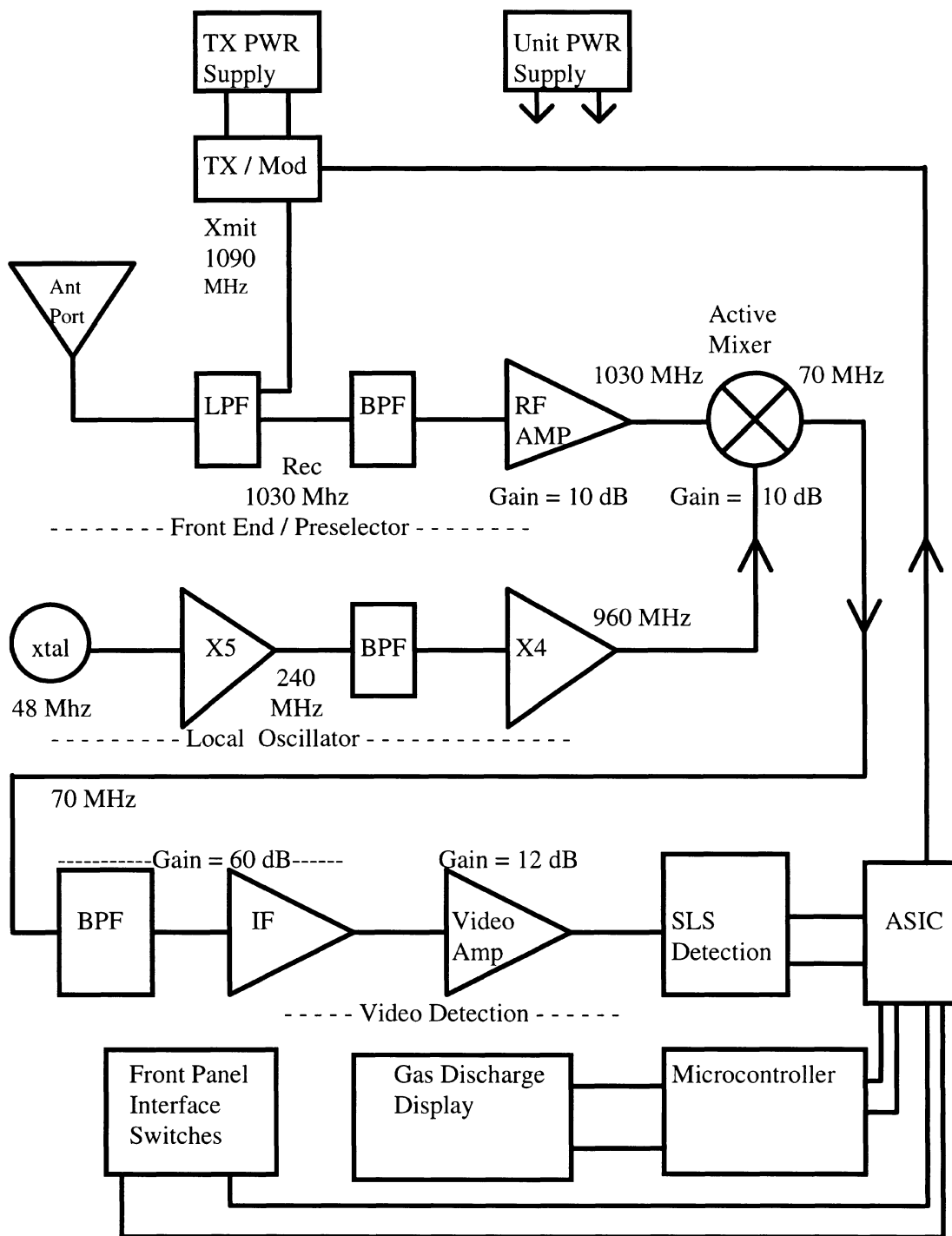
#### 4.2.7. ALTITUDE AND SUPPRESSION INPUTS

The altitude and suppression inputs are buffered by comparators on sheet 7 of the schematic. The high input impedance offers protection and limits the amount of EMI which can be passed to the outside of the box. Diode decoupling is used so that the pullups inside the transponder will not be seen by other aircraft equipment. The external suppression is AC coupled so that a DC fault condition will not prevent the transponder from replying. The switching level of the inputs is approximately 4.4 volts.

#### 4.2.8. DISPLAY CIRCUITS

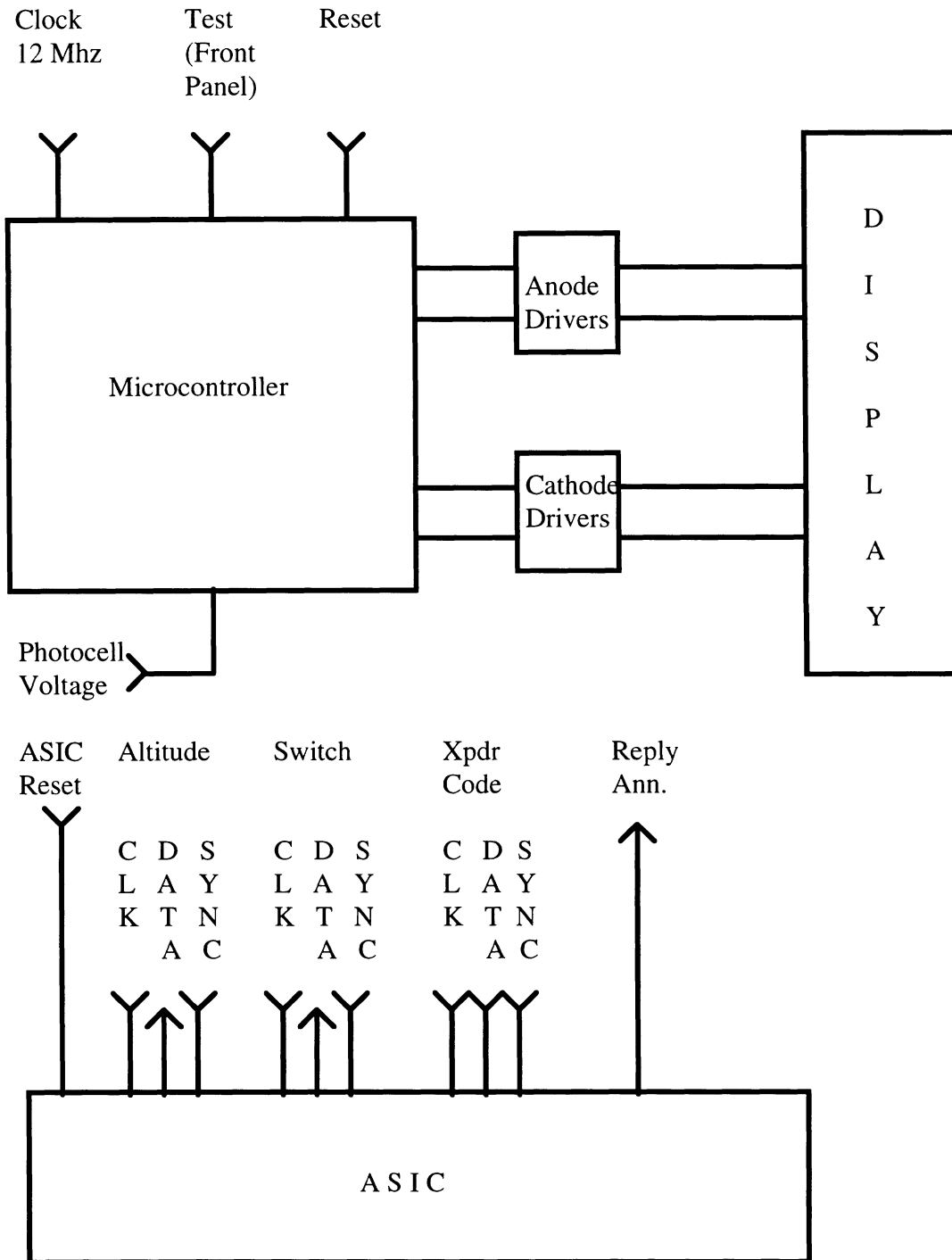
The cathode display drivers are on sheet 8. Q49 is a typical cathode driver. The emitter resistance as well as the voltage of the output of U31-B control the amount of current. The outputs are pulled up through a collector resistor R497 to approximately 70 volts when the segment is off. The current in the segments is approximately 700  $\mu$ a at high brightness levels.

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**FIGURE 4-6 MAIN BOARD/DISPLAY BLOCK DIAGRAM**

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**FIGURE 4-7 SOFTWARE INTERFACE BLOCK DIAGRAM**



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**SECTION V**  
**MAINTENANCE**

5.1 GENERAL

Before maintenance of the KT 76C is attempted, a thorough understanding of the Theory of Operation (Section IV) as well as the information of semiconductor maintenance is needed.

5.2 TEST AND ALIGNMENT

5.2.1 TEST EQUIPMENT

The transponder test set-up is shown in **Figure 5-1**.

DESCRIPTION		CHARACTERISTIC REQUIRED	REPRESENTATIVE TYPE
1)	Power Supply	11 - 33 volts at 5 amps	
2)	VTVM	High Impedance Meter	HP Model 410B
3)	VOM		Simpson Model 260
4)	Oscilloscope	Dual Trace	Tektronix 454
		H-P 180A	
5)	Line Stretcher	Constant Impedance Adjustable 50 ohm line	General Radio 874-LK20L or Microlab/FAX SR-05N
6)	ATC Test Set		HP 8925A
	a) Signal Generator		HP HO1 8614A
	b) Modulator		HP H01 8403A
	c) Frequency Counter		HP 5245L
	d) Frequency Converter		HP 5245A
	e) Isolator Monitor		Boonton 13505A
	f) Wave Meter		Boonton 8905A
	g) Peak Power Calibrator		Boonton 8900B
	h) Interrogation Pulse		Collins 578X-1
	i) Crystal Detector		HP423A
		or	
7)	Instrument Flight Research Corp.		1200Y3
		or	
8)	Instrument Flight Research Corp.		ATC 1400

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5.2.2 ALIGNMENT PROCEDURE

5.2.2.1. Power Supply

1. Adjust power supply for 27.5 V dc.
2. Connect unit under test to test equipment and apply power to unit.
3. Verify the following power supply voltages are within their specified tolerances.

Supply	Location	Voltage	Tolerance
HEATER_+6V	C258(+)	+6.3 Vdc	±0.3 V dc
+11.0 V	C262(+)	+11.0 V dc	±0.5 V dc
-8.0 V	C228(-)	-7.0 V dc	±1.5 V dc
+200 V	C215(+)	+195 Vdc	±15.0 V dc
+9.0 V	C104(+)	+9.0 V dc	±0.4 V dc
+5.0 V	U35(Pin 3)	+5.0 Vdc	±0.3 V dc
+17 V	C275(+)	+17.5 V dc	±1.0 V dc
+1300 V	C45	+1300 Vdc	±100 V dc

5.2.2.2. Receiver

1. Attach a scope probe to TP5. Verify interrogation signal is present.
2. Set RF amplitude to -20 dBm. Using the gain adjust pot, R165, adjust height of P1 to  $4.25 \pm 0.1$  volts.
3. Set RF amplitude to a level such that the reply rate is approximately 50%. Adjust R571 for maximum reply rate. Repeat until a maximum reply rate is obtained that is less than 100%.

NOTE

R571 alignment applies to units containing main board (200-09098-0020) only. This alignment does not apply to units containing main board (200-09098-0000).

4. Set the RF amplitude to -76 dBm. Adjust the Detector Gain pot, R179 so that the difference between P1 and P2 is greatest. The actual height of P1 or P3 is not important for this step.

NOTE

R179 is not planned to be installed at this time so this step can be ignored if it is not present on the board.

5. Adjust MTL, pot R132 so that the reply rate on the Test Set XPDR Reply % reads  $90\% \pm 3\%$ .

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NOTE

On units containing main board (200-09098-0020), it may be necessary to desensitize the unit by adjusting R571 to obtain an MTL reading  $\geq -77$  dBm. This does not apply to units containing main board (200-09098-0000).

5.2.2.3. Photocell Calibration

NOTE

Photocell calibration is performed at the factory. Recalibration is necessary only if the microcontroller (U28) or the photocell (R1046) is replaced.

1. Turn unit to TST. Press "4".
2. Turn unit under test OFF.
3. Ground U28 Pin 28.
4. Subject the unit photocell to a 40 Foot Candle light source and turn the unit to stand by (SBY) mode.
5. Verify the unit display indicates "CAL" followed by "End."
6. Photocell calibration is complete. Turn unit OFF and remove ground from U28 Pin 28.
7. Turn unit on, cover the photocell, and verify the display does not flicker.

5.2.2.4. Transmitter

1. Set the interrogation rate to 500 per second and the transponder code to 0000.
2. Using the transmitter tube coupling nut and frequency adjust screw, adjust the transmitter for peak power and a frequency of  $1090 \pm 1$  MHz.

NOTE

If Circulator **is** installed, skip step 3. If Circulator **is not** installed, skip step 4.

3. Turn the coupling nut counter-clockwise until one of the following conditions occur:
  - a) The power drops 15%.
  - b) The rise time drops to 55ns.
  - c) The pulse width increases to 520 ns.

NOTE

Decoupling the tube will decrease frequency "pulling" at installation time.

4. Decrease unit peak power from 1 to 5 percent by turning the coupling nut counter-clockwise.

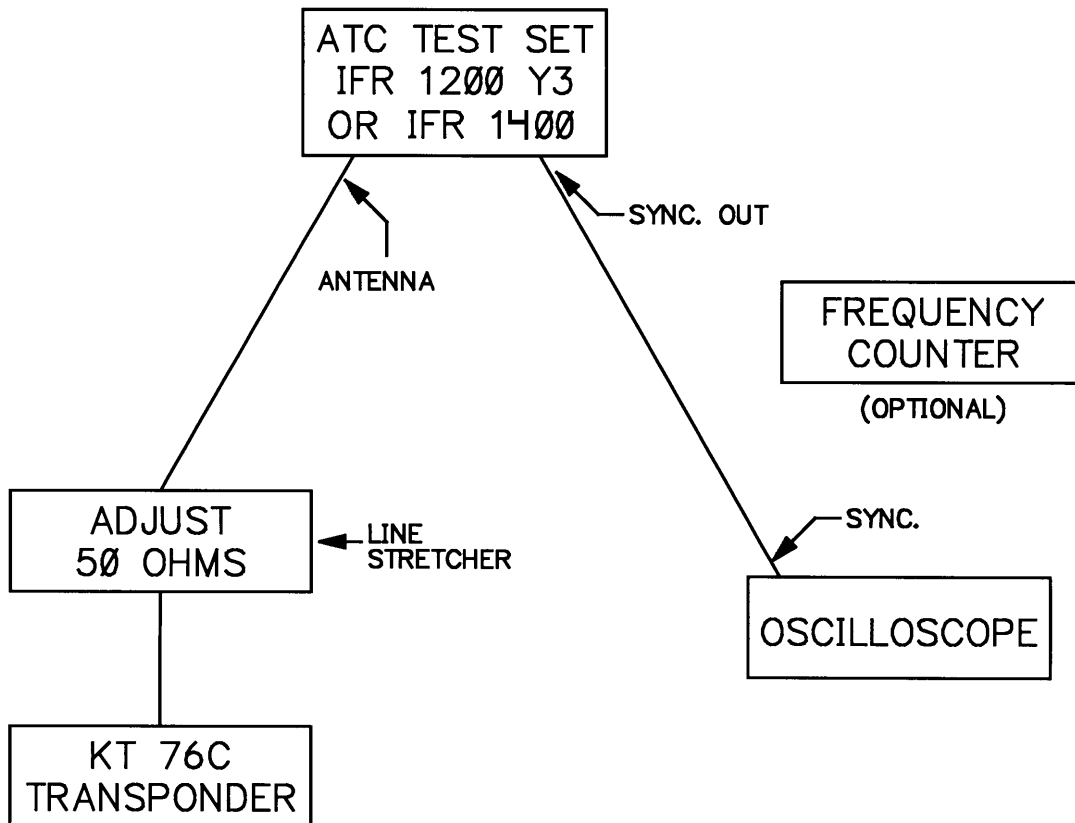
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- Adjust the frequency nut to bring back the frequency to  $1090.00 \pm .2$  MHz. Verify that rise time is between 50 and 100 ns, power is greater than 200 watts, and pulse width is  $450 \text{ ns} \pm 70 \text{ ns}$ . If not, repeat the last two steps until all conditions are met.

NOTE

For 200-09098-0060 main boards, use R587 for pulse width adjustment.

- Connect the unit under test to a line stretcher with a 1.2:1 SWR load. Adjust the line stretcher through all phase angles and verify the transmitter frequency. Units without the circulator shall have a frequency pull of  $1090.00 \pm 3$  MHz or less. Units with the circulator shall have a frequency pull of  $1090.00 \pm .75$  MHz or less.
- Pull the line stretcher and note the maximum and minimum frequency deviation. Set the HP 8905 wave meter to center of the frequency deviation and pull the line stretcher until a peak indication is reached. Without moving the line stretcher, adjust the transmitter oscillator frequency trim for a 1090 MHz reading. Re-check the frequency deviation by pulling the line stretcher to see that it is centered about 1090 MHz. Check to see that the drain voltage of Q26 does not exceed 140 volts as the line stretcher is pulled.



**FIGURE 5-1 COMPLETE ATC TEST SET-UP**

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5.2.3 TEST SPECIFICATIONS

5.2.3.1 PURPOSE

The following specifications are the minimum performance standards which all KT 76C transponders must meet.

5.2.4 MINIMUM PERFORMANCE UNDER STANDARD CONDITIONS

Ambient room temperature and pressure. Specifications are to be met after a 15 minute warm-up.

5.2.4.1 POWER SUPPLY

Power supply voltage shall be as follows:

<b>Location</b>	<b>Voltage (Vdc)</b>	<b>Tolerance (Vdc)</b>
<b>J1-N</b>	<b>+ 9</b>	<b>± 0.4</b>
<b>J1-5</b>	<b>+ 5</b>	<b>± 0.3</b>
<b>J1-6</b>	<b>- 7.0</b>	<b>± 1.5</b>
<b>Xmit Oscillator *</b>	<b>+ 1300 Transmitting 500 prf</b>	<b>± 100</b>

\* Measure voltage between R74 and R75 and multiply by 8.

5.2.4.2 TURN ON DELAY AND IDENT TIMER

The turn on delay shall be less than 60 seconds and the ident time shall be between  $18 \pm 2$  seconds.

5.2.4.3 RECEIVER SENSITIVITY

The receiver shall reply to 90% of all interrogations at an interrogation signal of between -71 dBm and -79 dBm. This specification applies to both Mode "A" and Mode "C" interrogations.

5.2.4.4 DYNAMIC RANGE (P2 9 dB below P1)

The transponder shall reply to greater than 90% of all interrogations from MTL (minimum trigger level) to 50 dBm above MTL.

5.2.4.5 DECODING SPECIFICATIONS

The transponder shall not reply with greater than a 10% reply efficiency, to any interrogations whose pulse spacing is greater than  $\pm 1\mu\text{s}$  from 8 or  $21\mu\text{s}$ .

5.2.4.6 SIDE LOBE SUPPRESSION

The transponder shall not reply to more than 1% of the interrogations when P2 is equal to or greater than P1 and spaced  $2.0 \pm 0.15\mu\text{s}$  from P1. This standard applies from MTL +3 dB to 50 dBm above MTL.

5.2.4.7 TRANSMITTER POWER

The minimum peak power of the transmitted reply pulses shall be 200 watts for the KT 76C. This test is performed at a reply rate of 500/sec of code 0000.

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5.2.4.8 TRANSMITTER FREQUENCY

The frequency of the reply shall be set to  $1090.75 \pm 1$  MHz when observed into a load with a VSWR of 1.05: 1 or less. With a line stretcher and a 1.2:1 VSWR load frequency pulling shall be less than 4 MHz total.

5.2.4.9 INFORMATION PULSES

The transponder shall provide 4096 codes of reply in Mode "A". It shall also provide the SPI pulse, in a Mode "A" reply when the ident feature is initiated. There will be ten (10) pulses used for Mode "C" operation.

These pulses are A1, A2, A4, B1, B2, B4, C1, C2, C4, D4. A ground on each of the Mode "C" input pins shall cause the corresponding pulse to be present in a Mode "C" reply. The relative spacing of the reply is as follows.

PULSE	POSITION ( $\mu$ s)
F1	0.00 (Reference)
C1	1.45
A1	2.90
C2	4.35
A2	5.80
C4	7.25
A4	8.70
B1	11.60
D1	13.05
B2	14.50
D2	15.95
B4	17.40
D4	18.85
F2	20.30
SPI	24.65

The pulse spacing of any information pulse must not differ from these spacings by more than  $\pm 0.1 \mu$ s. The pulse spacing tolerance of any pulse in the reply group with respect to any other pulse (except the first framing pulse) must be no more than  $\pm 0.15 \mu$ s.

5.2.4.10 OUTPUT PULSE WIDTH

The output pulse width shall be set to  $.45 \pm .07 \mu$ s measured at the 50% voltage points on the detected video of the transmitter reply.

5.2.4.11 REPLY ANNUNCIATOR

The reply annunciator shall be illuminated when the unit replies to an interrogation. The reply annunciator shall be illuminated during the period the IDENT pulse is present in Mode "A" replies.

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5.2.4.12           FUNCTIONS

The transponder shall not reply when the function switch is in the SBY position. Mode "C" replies shall consist only of framing pulses when the function switch is in the ON position. Mode "A" and/or Mode "C" shall be transmitted when the function switch is in the ALT position. The Display shall be illuminated when the function switch is in the TST position.

5.2.4.13           PANEL LIGHTING

With 14 V dc applied to pin 2 and ground on pin 3, all panel lamps shall be illuminated.

**FINAL TEST DATA SHEET**

1.       Power Supply (+9 ± 0.4; +5 ± 0.3; -7.0 ± 1.5; 1300 ± 100)   (    )
2.       Turn-on and Ident delays (Turn on < 60 s) (Ident 18 ± 2s)   (    )
3.       MTL\_\_\_\_\_ (-71 to -79 dBm)                                   (    )
4.       Dynamic Range: 90% from MTL to 50 dBm above MTL,  
          P2 = P1 -9dB   (    )
5.       Decoding (less than 10% at ± 1 μs)
 

Mode	Advance P3	Retard P3
A	(    )	(    )
C	(    )	(    )
6.       S.L.S. (Less than 1% reply, MTL +3 dB to 50 dBm above MTL, P2 = P1)
 

<u>Signal Level (dBm)</u>	<u>% Reply</u>
MTL +3 dB	_____
-60	_____
-50	_____
-40	_____
-30	_____
50 dBm above MTL	_____
7.       Transmitter Power (KT 76C: 200 W Min)                       \_\_\_\_\_
8.       Transmitter Frequency (1090.00 ± .2 MHz)                   \_\_\_\_\_
9.       Reply   Spacing
 

Mode "A" Code	8 μsec ± .2 μsec	(    )
Mode "C" Code	21 μsec ± .2 μsec	(    )
10.      Transmit Pulse Width (0.45 ± 0.07 μs)                       \_\_\_\_\_
11.      Reply Indicator, "R" (Ident, Reply)                         (    )
12.      Mode Functions (SBY, TST, ON, ALT)                         (    )
13.      Pushbutton Functions (VFR, CLR)                           (    )
14.      Panel Lighting   (    )

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## 5.3 OVERHAUL

### 5.3.1 INSPECTION

This section contains instructions to assist in determining by inspection the condition of the KT 76C. Defects resulting from wear, physical damage, deterioration, or other causes can be found by these inspection procedures. To aid inspection, detailed procedures are arranged in alphabetical order.

A. Capacitors, Fixed

Inspect capacitors for case damage, body damage, and cracked, broken, or charred insulation. Check for loose, broken, or corroded terminal studs, lugs, or leads. Inspect for loose, broken, or improperly soldered connections. On chip caps be especially alert for hairline cracks in the body and broken terminations.

B. Capacitors, Variable

Inspect trimmers for chipped and cracked bodies, damaged dielectrics and damaged contacts.

C. Chassis

Inspect the chassis for deformation, dents, punctures, badly worn surfaces, damaged connectors, damaged fastener devices, loose or missing hardware, component corrosion, and damage to the finish.

D. Connectors

Inspect connectors for broken parts, and other irregularities. Inspect for cracked or broken insulation and for contacts that are broken, deformed, or out of alignment. Also, check for corroded or damaged plating on contacts and for loose, improperly soldered, broken, or corroded terminal connections.

E. Covers and Shields

Inspect covers and shields for punctures, deep dents, and badly worn surfaces. Also, check for damaged fastener devices, corrosion and damage to finish.

F. Flex Circuits

Inspect flex circuits for punctures, and badly worn surfaces. Check for broken traces, especially near the solder contact points.

G. Fuse

Inspect for blown fuse and check for loose solder joints.

H. Insulators

Inspect insulators for evidence of damage, such as broken or chipped edges, burned areas, and presence of foreign matter.

I. Jacks



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Inspect all jacks for corrosion, rust, deformations, loose or broken parts, cracked insulation, bad contacts, or other irregularities.

J. Potentiometers

Inspect all potentiometers for evidence of damage or loose terminals, cracked insulation or other irregularities.

K. Resistors, Fixed

Inspect fixed resistors for cracked, broken, blistered, or charred bodies and loose, broken, or improperly soldered connections. On chip resistors be especially alert for hairline cracks in the body and broken terminations.

L. RF Coils

Inspect all RF coils for broken leads, loose mountings, and loose, improperly soldered, or broken terminal connections. Check for crushed, scratched, cut or charred windings. Inspect the windings, leads, terminals and connections for corrosion or physical damage. Check for physical damage to forms and tuning slug adjustment screws.

M. Terminal Connections soldered

1. Inspect for cold-soldered or resin joints. These joints present a porous or dull, rough appearance. Check for strength of bond using the points of a tool.
2. Examine the terminals for excess solder, protrusions from the joint, pieces adhering to adjacent insulation, and particles lodged between joints, conductors, or other components.
3. Inspect for insufficient solder and unsoldered strands of wire protruding from conductor at the terminal. Check for insulation that is stripped back too far from the terminal.
4. Inspect for corrosion at the terminal.

N. Transformers

1. Inspect for signs of excessive heating, physical damage to case, cracked or broken insulation, and other abnormal conditions.
2. Inspect for corroded, poorly soldered, or loose connecting leads or terminals.

O. Wiring/Coaxial Cable

Inspect wiring in chassis for breaks in insulation, conductor breaks, cut or broken lacing and improper dress in relation to adjacent wiring or chassis.

5.3.2 CLEANING

- A. Using a clean, lint-free cloth lightly moistened with soap and water only, remove the foreign matter from the equipment case and unit front panel. Wipe dry using a clean, dry, lint-free cloth.
- B. Using a hand controlled dry air jet (not more than 15 psi), blow the dust from inaccessible areas. Care should be taken to prevent damage by the air blast.

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- C. Clean the receptacles and plugs with a hand controlled dry air jet (not more than 25 psi), and a clean, lint-free cloth lightly moistened with soap and water only. Wipe dry with a clean, dry, lint-free cloth.

### 5.3.3 REPAIR

This section describes the procedure along with any special techniques for replacing damaged or defective components.

- A. Connectors

When replacing a connector, refer to the appropriate PC board assembly drawing and follow the notes to insure correct mounting and mating of each connector.

- B. Crystal

The use of other than a Bendix/King crystal is considered an unauthorized modification.

- C. Diodes

Diodes used are silicon and germanium. Use long nose pliers as a heat sink under normal soldering conditions. Note the diode polarity before removal.

- D. Integrated Circuits

Refer to Appendix A for removal and replacement instructions.

- E. Wiring/Coaxial Cable

When repairing a wire that has broken from it's terminal, remove all old solder and pieces of wire from the terminal, restrip the wire to the necessary length and resolder the wire to the terminal. Replace a damaged wire or coax with one of the same type, size and length.

### 5.3.4 DISASSEMBLY PROCEDURE

The unit is disassembled for maintenance and testing purposes by removing the two rear cover assembly screws and the two bottom black screws on the bezel. The faceplate can be removed by removing the remaining two black flat screws that fasten it to the chassis.

## 5.4 TROUBLESHOOTING

This section is intended for use as a guide in isolating circuit malfunctions. The guidance presented here and the figures referenced by no means profess to include all possible causes of failure, but are presented as a guideline to be used in locating the approximate section of the unit that has failed. **Figure 5-2 through 5-7** are the KT 76C Troubleshooting Flow Charts and are arranged in a manner that will expedite finding the area of failure. Following the Flow Charts are the waveforms that should be found at various test points in the KT 76C.

KT76C General Troubleshooting Flow Chart

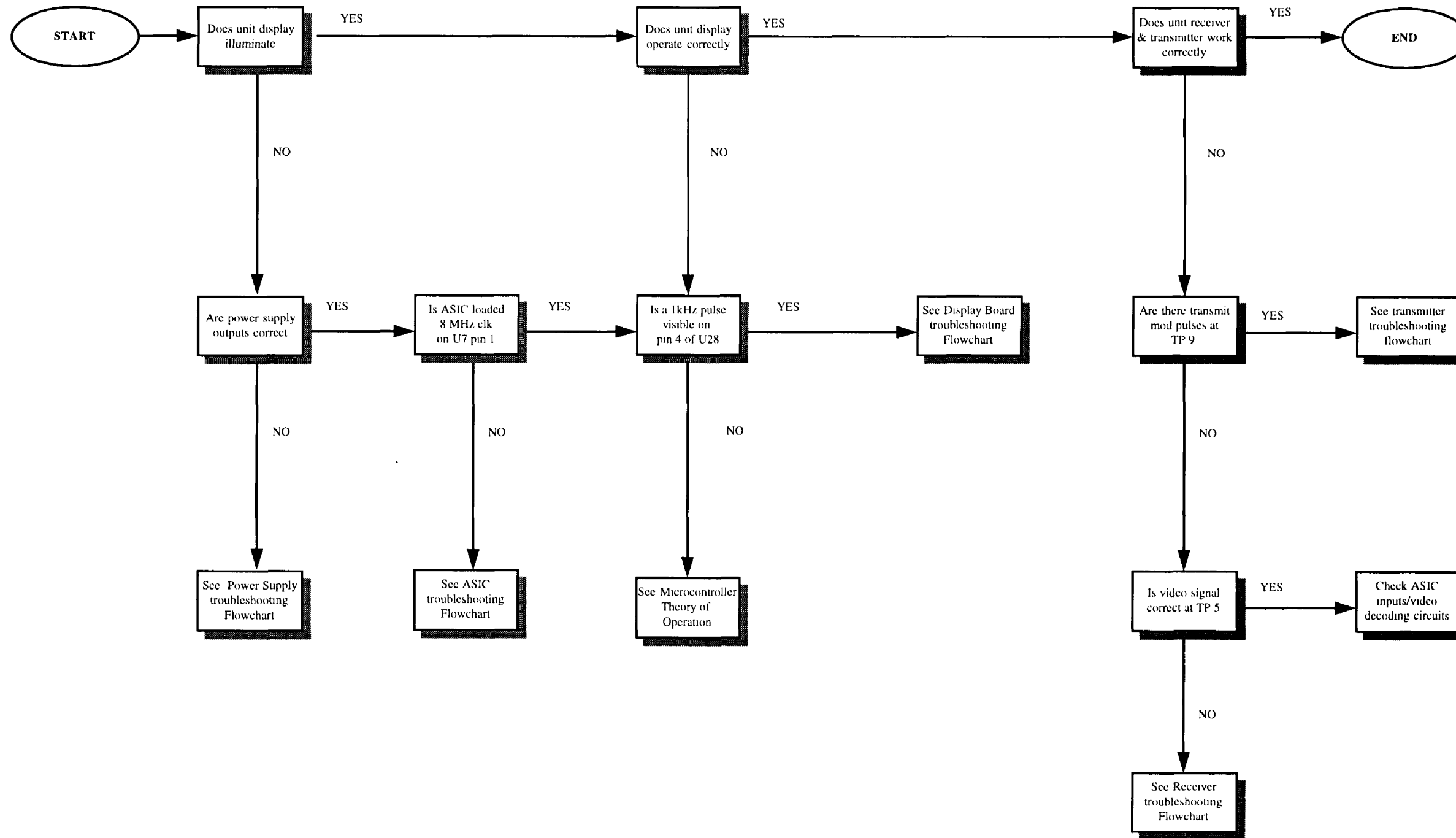


FIGURE 5-2 KT 76C General Troubleshooting Flowchart

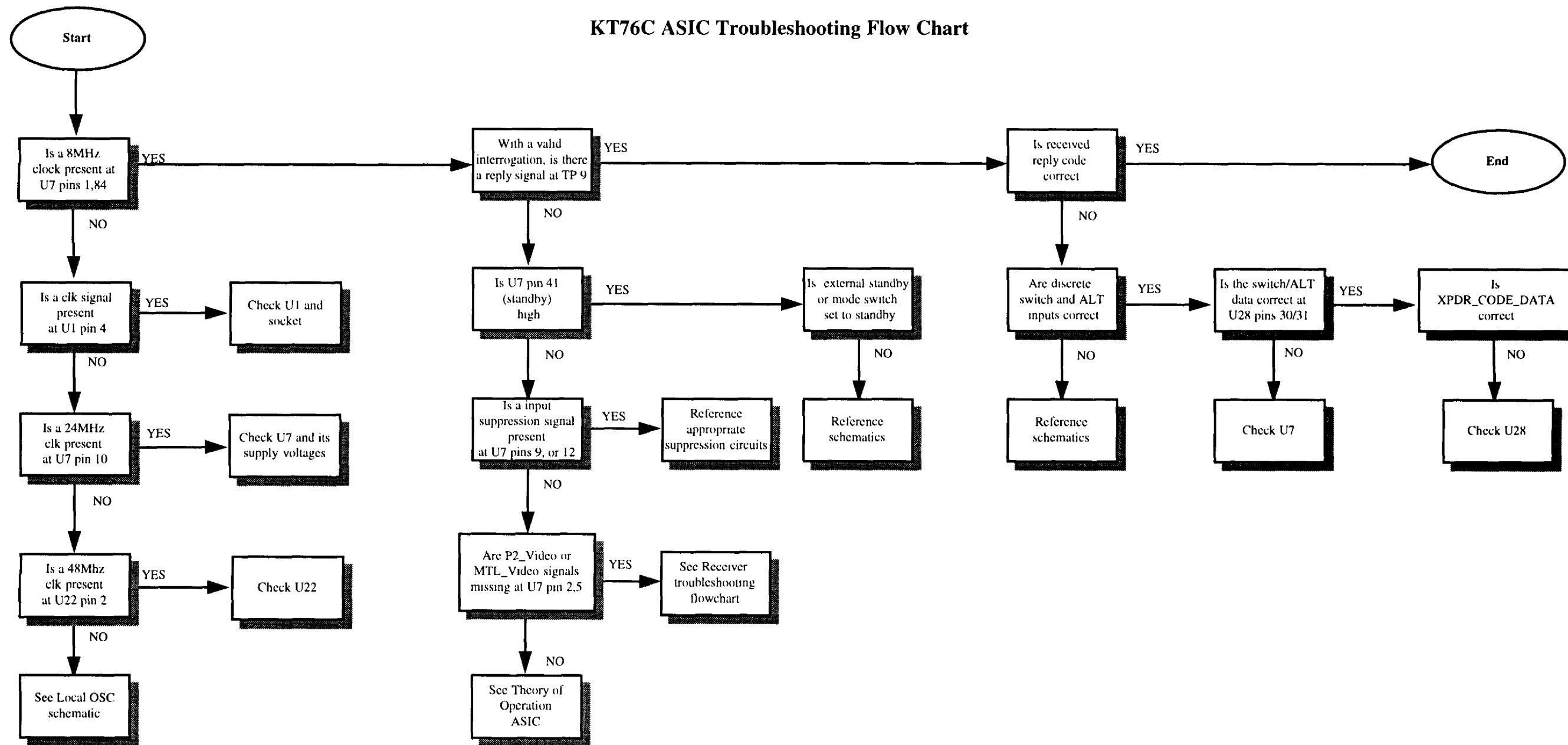


FIGURE 5-3 KT 76C ASIC Troubleshooting Flowchart

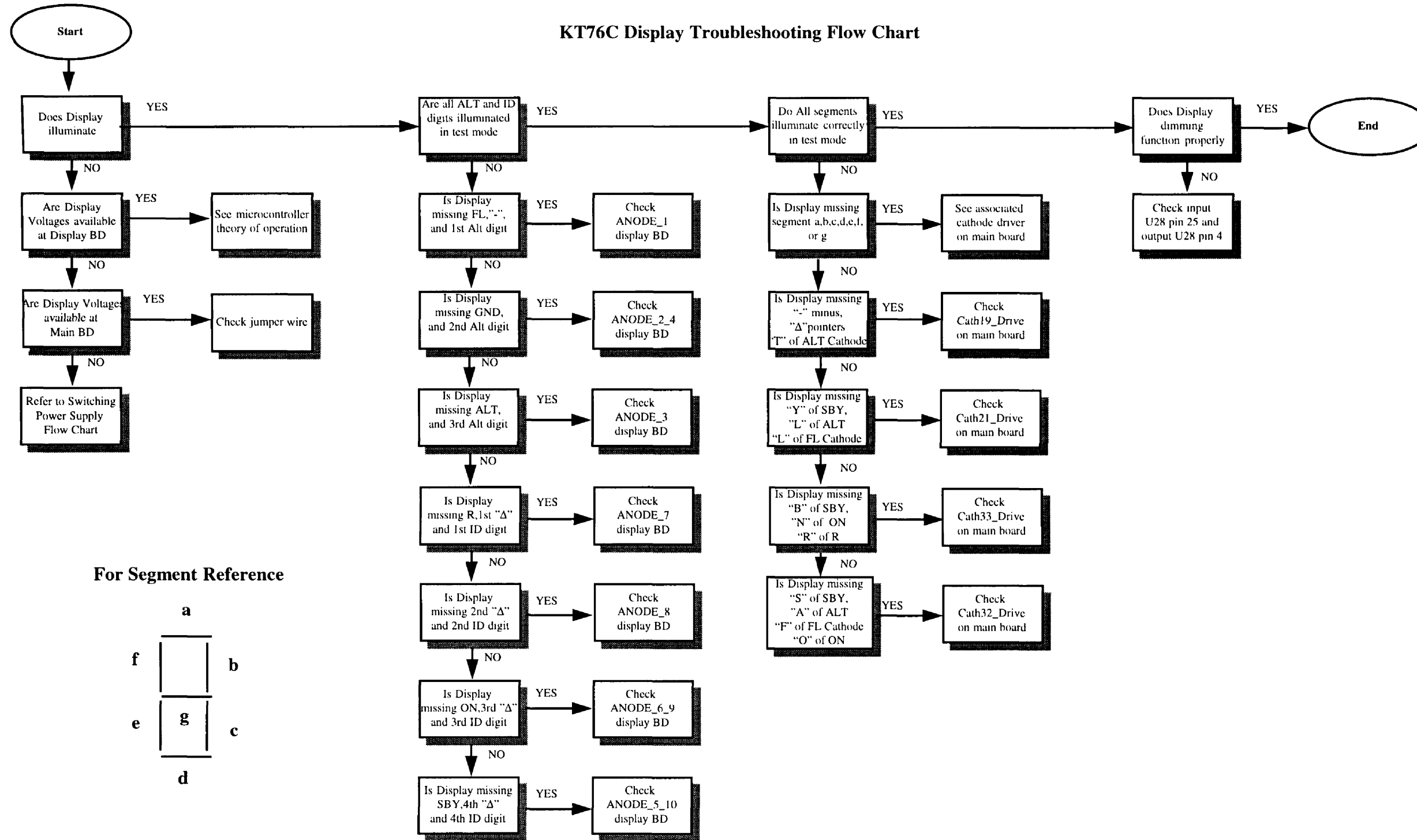


FIGURE 5-4 KT 76C Display Troubleshooting Flowchart

### KT76C High Voltage Power Supply Flow Chart

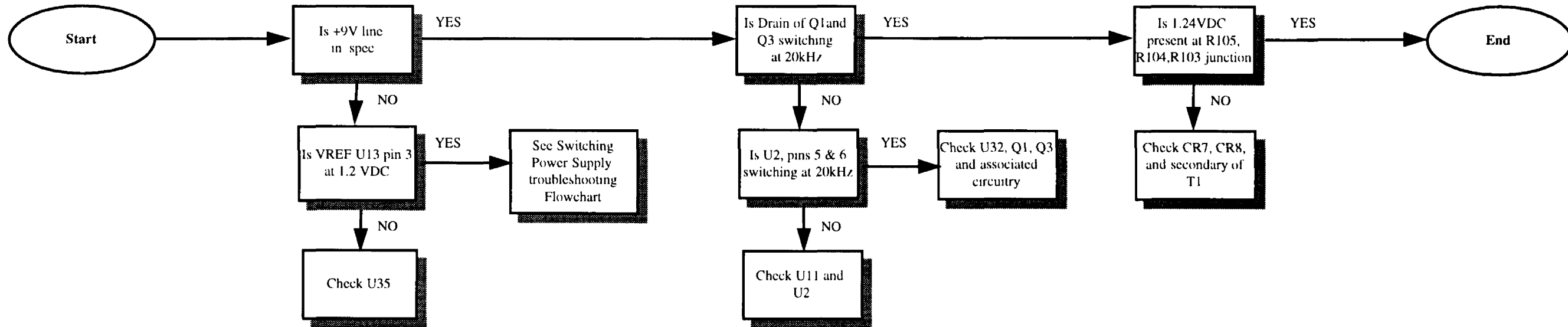


FIGURE 5-5 KT 76C High Voltage Power Supply Troubleshooting Flowchart

KT76C Receiver Troubleshooting Flow Chart

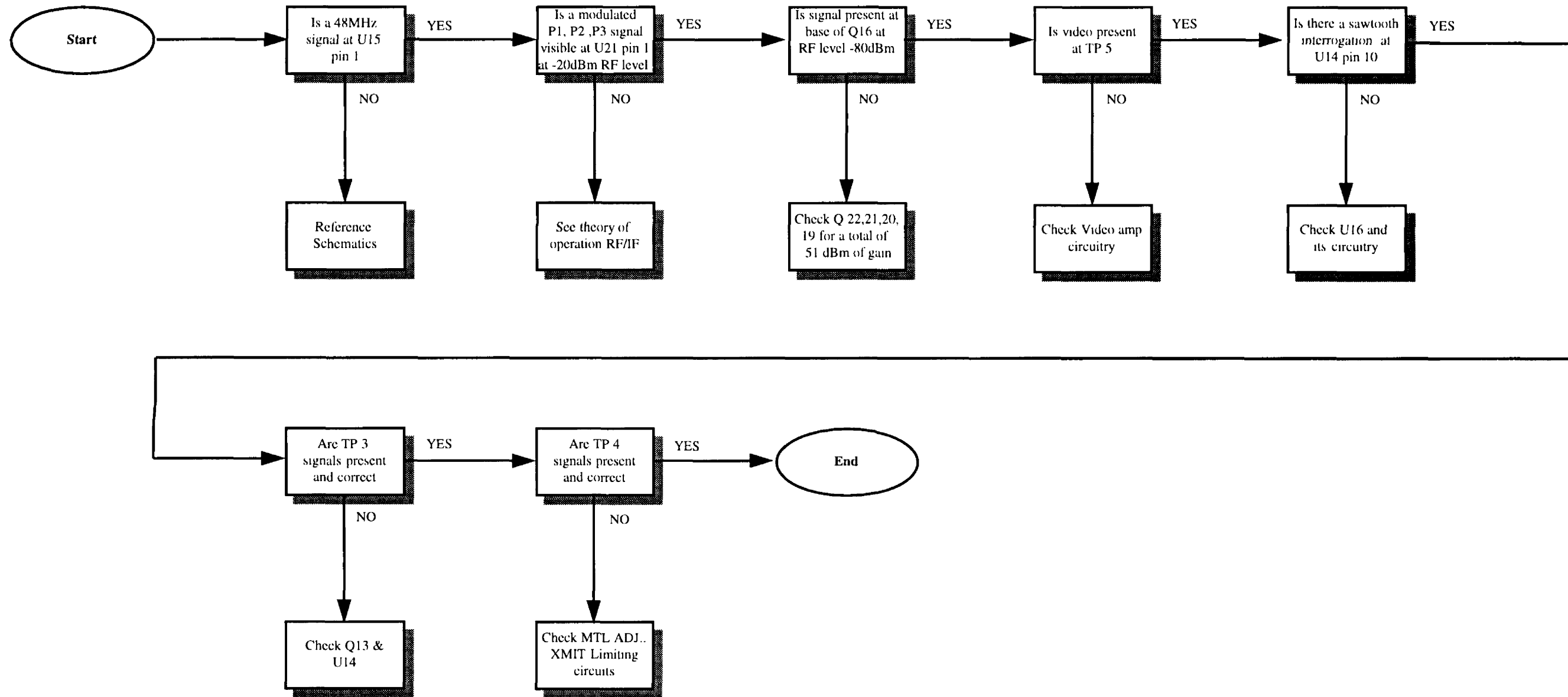


FIGURE 5-6 KT 76C Receiver Troubleshooting Flowchart

KT76C Switching Power Supply Flow Chart

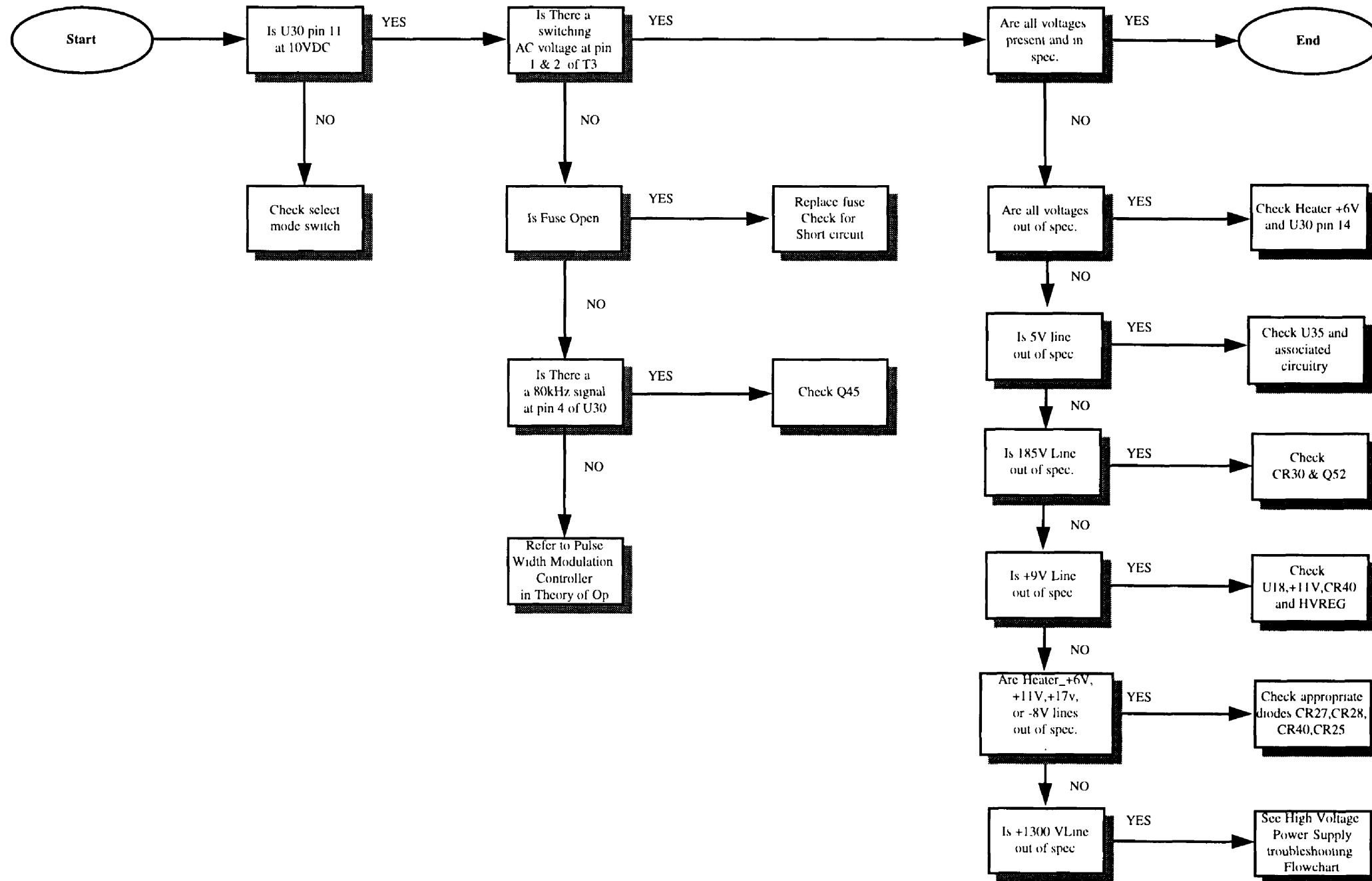


FIGURE 5-7 KT 76C Switching Power Supply Troubleshooting Flowchart



### KT76C Transmitter Troubleshooting Flow Chart

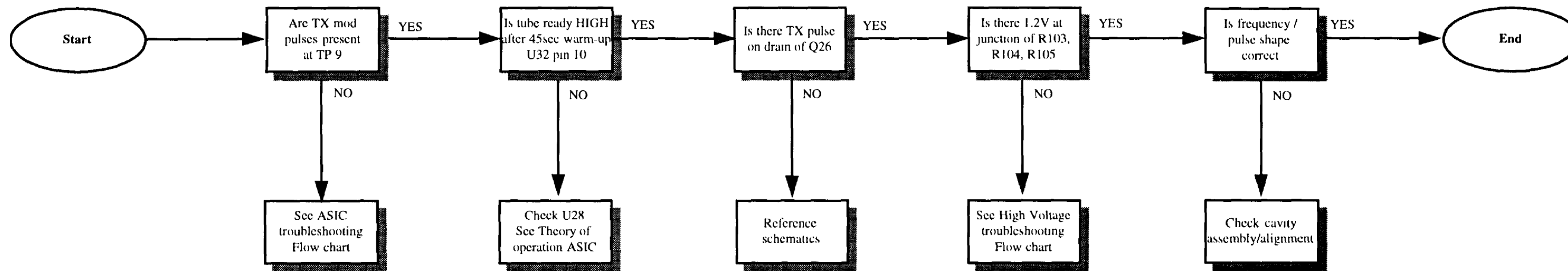
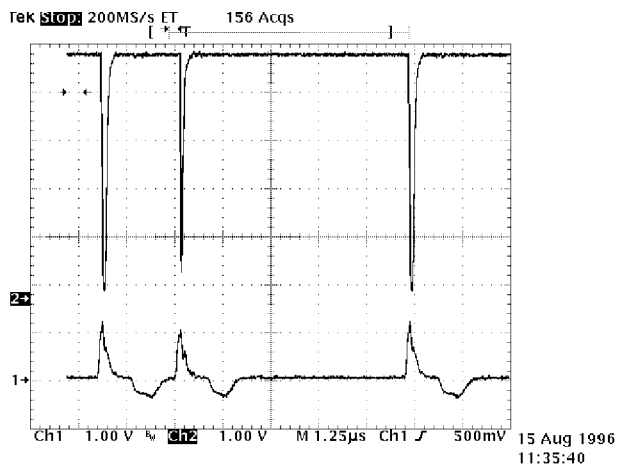


FIGURE 5-8 KT 76C Transmitter Troubleshooting Flowchart

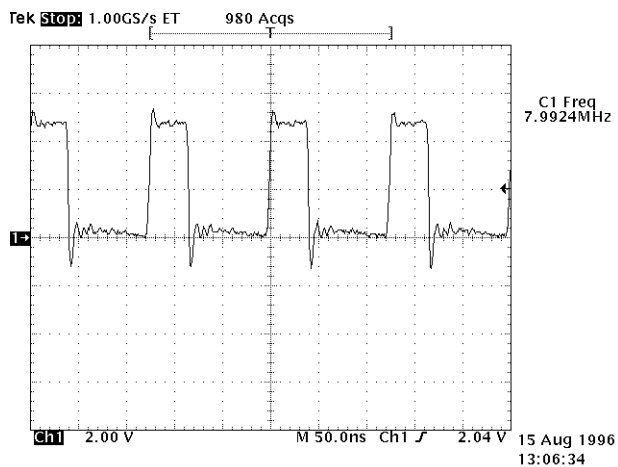
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**WAVEFORMS**

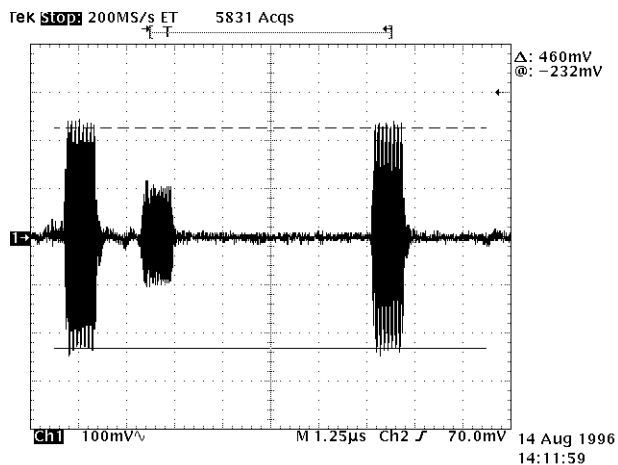
Tek00  
RF -30dBm  
CH 1, DC, U12 Pin 5  
CH 2, DC, U12 Pin 12



Tek01  
RF -30dBm  
CH 1, DC, U1 Pin 1

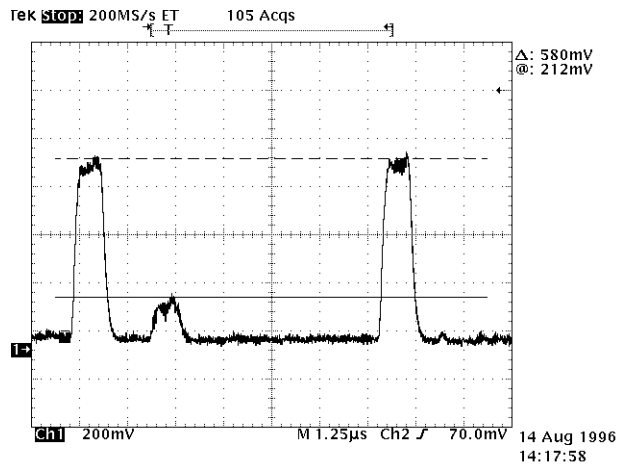


Tek02  
RF -20dBm  
CH 1, AC, U21 Pin 1

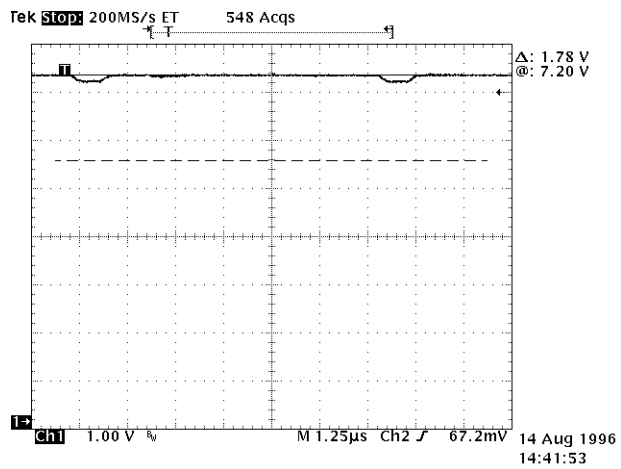


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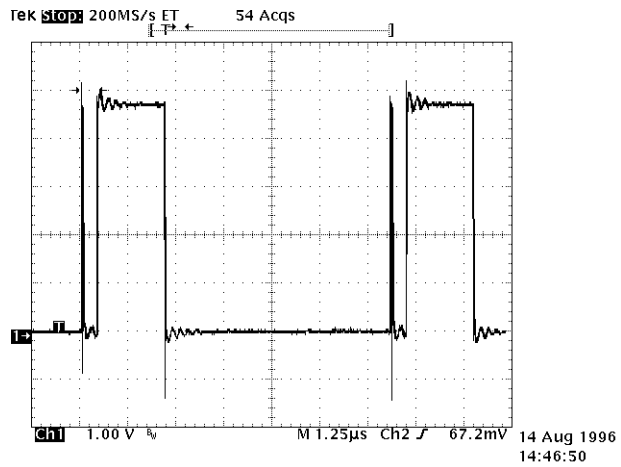
Tek03  
MTL P2-9  
CH 1, DC, TP5



Tek04  
RF MTL  
CH 1, DC, Base Q18

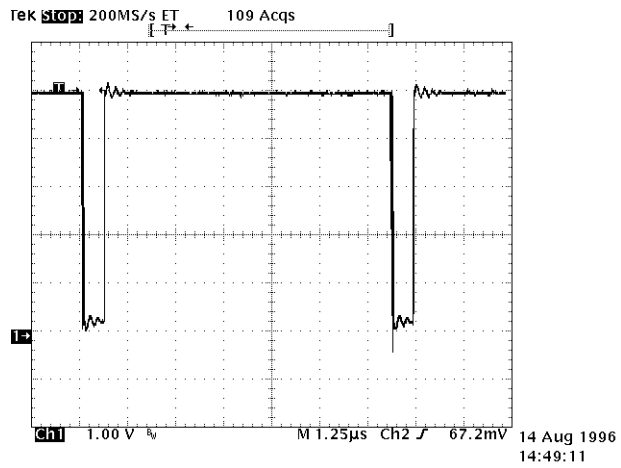


Tek05  
RF MTL  
CH 1, DC, U16 Pin 6

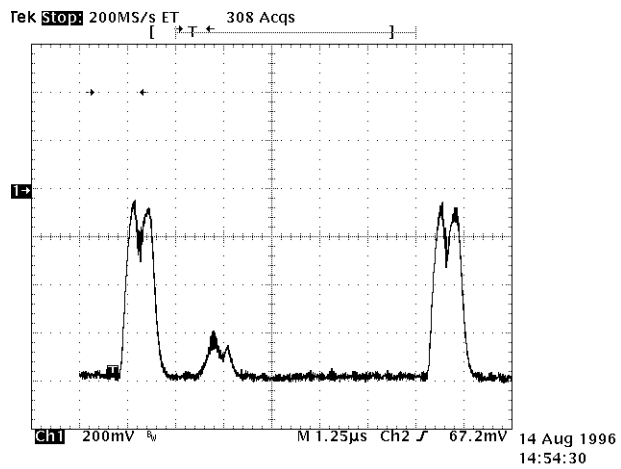


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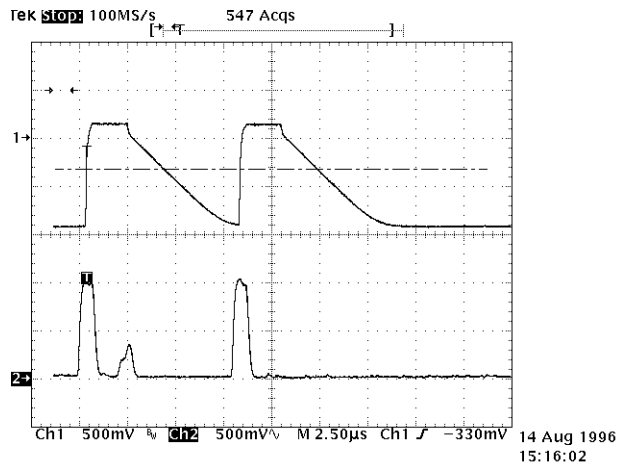
Tek06  
RF MTL  
CH 1, DC, U16 Pin 9



Tek07  
RF MTL  
CH 1, DC, U16 Pin 12

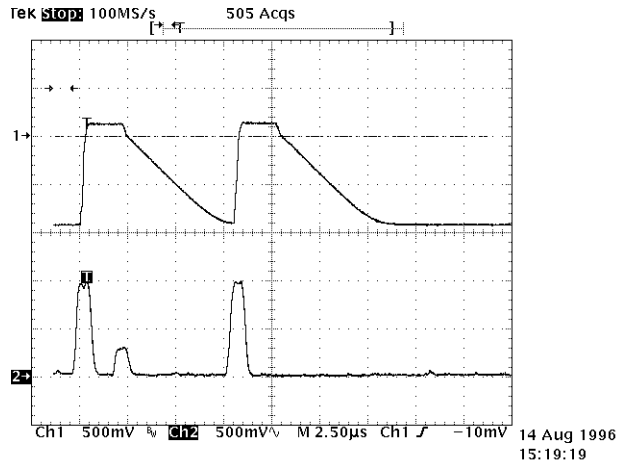


Tek08  
RF MTL +3 dBm  
CH 1, DC, U14 Pin 10  
CH 2, DC, TP5

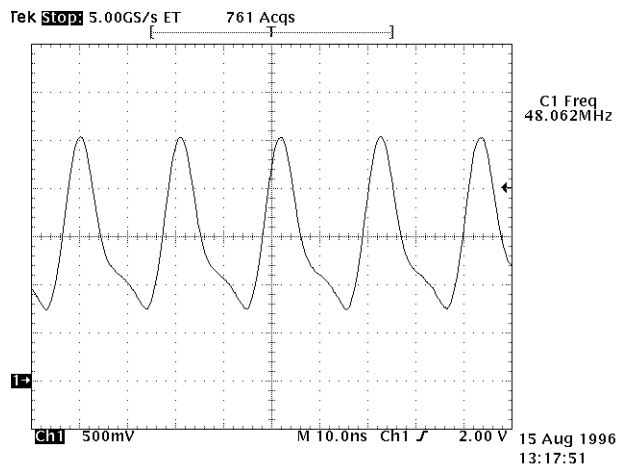


**BENDIX/KING**  
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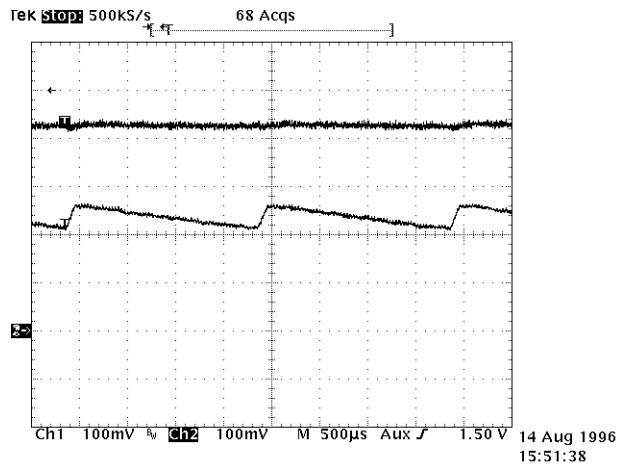
Tek09  
RF MTL +3 dBm  
CH 1, DC, U14 Pin 10  
CH 2, DC, U14 Pin 9



Tek10  
RF MTL  
CH 1, DC, U22 Pin 2

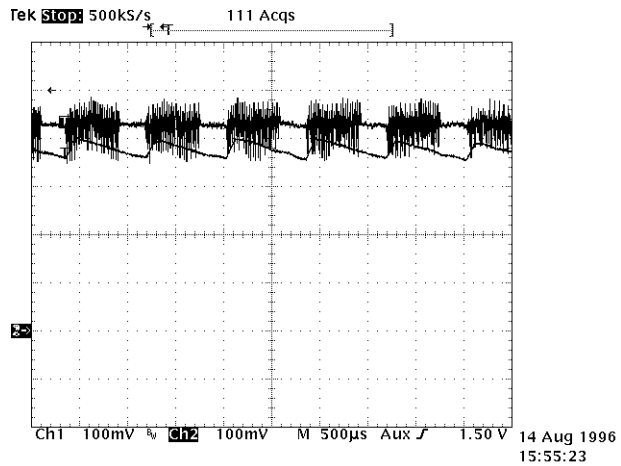


Tek11  
RF MTL +3 dBm  
500 PRF  
CH 1, DC, U11 Pin 10  
CH 2, DC, U11 Pin 11

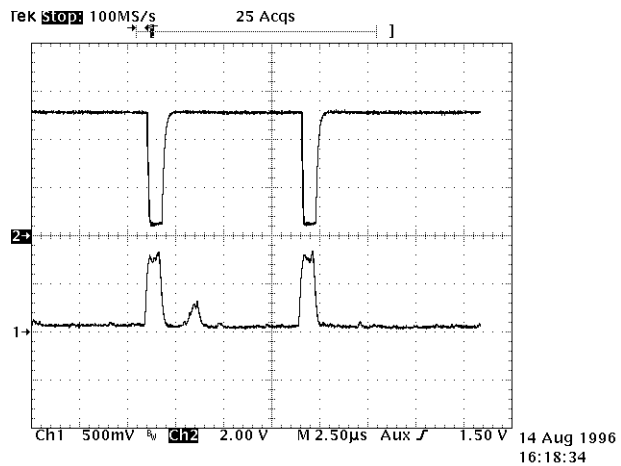


**BENDIX/KING**  
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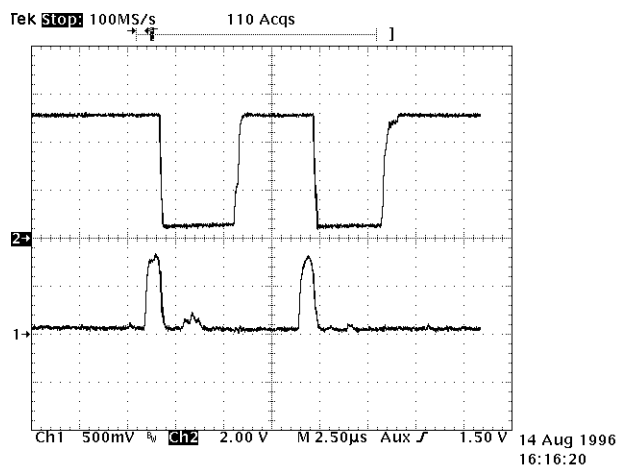
Tek12  
RF MTL +3 dBm  
1200 PRF  
CH 1, DC, U11 Pin 10  
CH 2, DC, U11 Pin 11



Tek13  
RF MTL  
CH 1, DC, TP4  
CH 2, DC, TP5

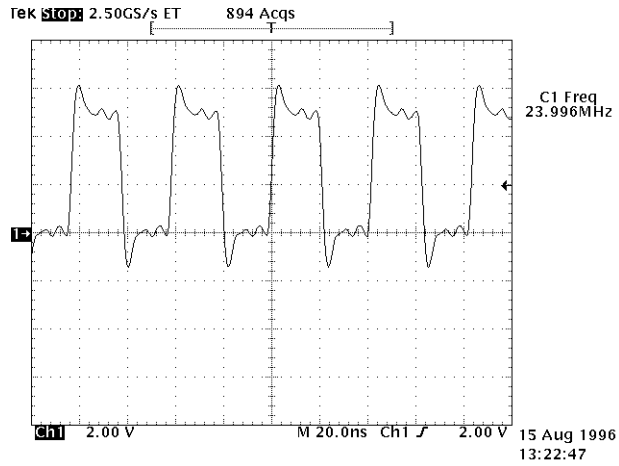


Tek14  
RF MTL  
CH 1, DC, TP3  
CH 2, DC, TP5

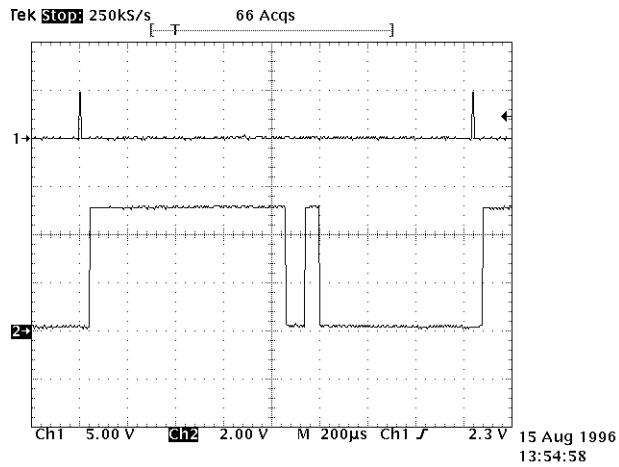


**BENDIX/KING**  
**KT 76C ATRCBS TRANSPONDER**

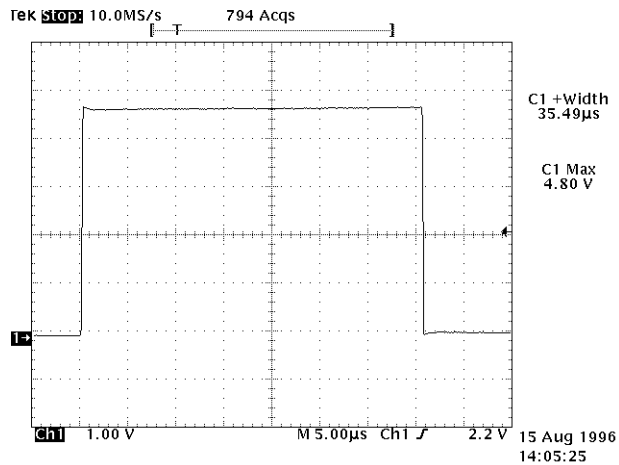
Tek15  
 RF MTL  
 CH 1, DC, U7, Pin 10



Tek17  
 RF MTL  
 SWITCH SET TO TEST  
 CH 1, DC, U28 Pin 41  
 CH 2, DC, U28 Pin 30

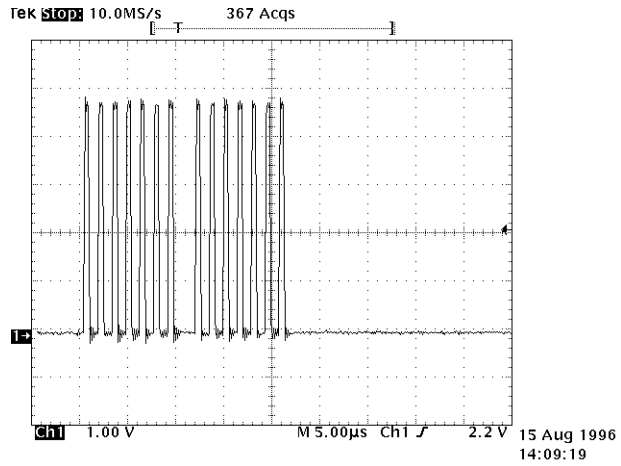


Tek18  
 RF MTL +3 dBm  
 CH 1, DC, TP1

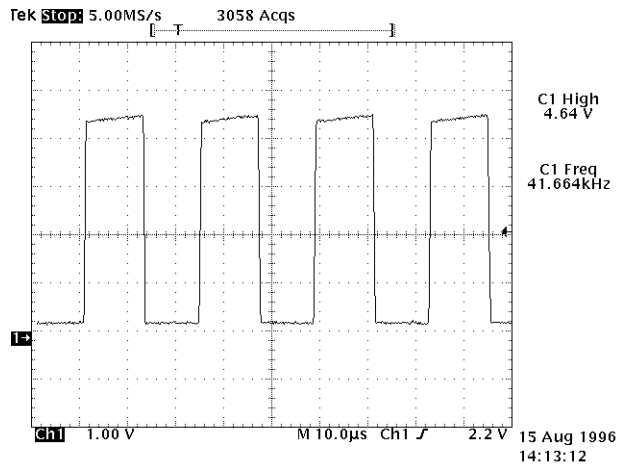


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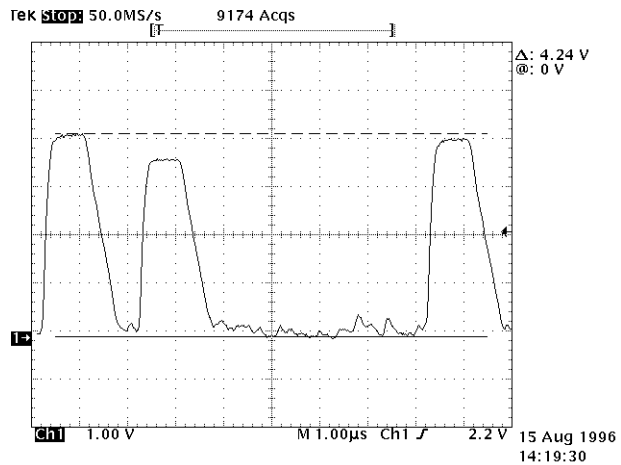
Tek19  
RF MTL +3 dBm  
SWITCH ALT  
CODE 7777  
CH 1, DC, TP9



Tek20  
CH 1, DC, U11 Pin 1



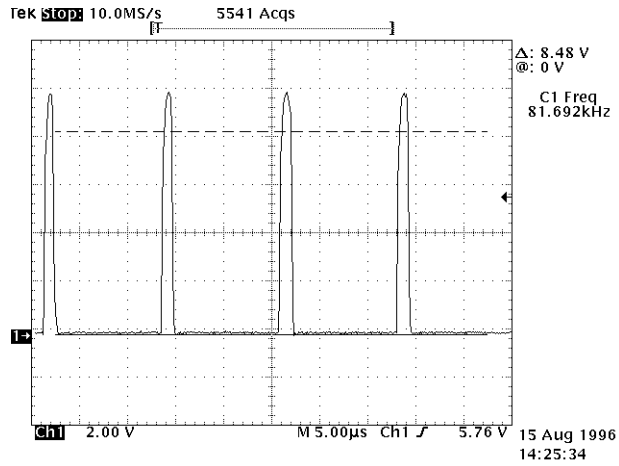
Tek21  
RF -20 dBm  
CH 1, DC, TP5  
VIDEO ALIGNMENT AT 4.25 VDC



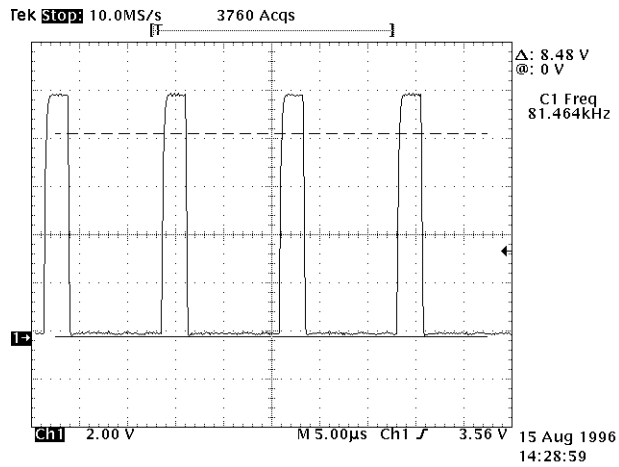


**BENDIX/KING**  
**KT 76C ATRBS TRANSPONDER**

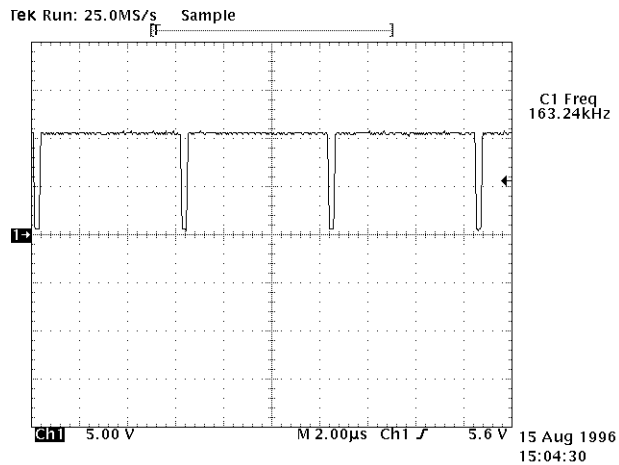
Tek22  
UNIT 28V INPUT  
RF OFF  
SWITCH TEST  
CH 1, DC, U28, Pin 4



Tek23  
UNIT 14V INPUT  
RF OFF  
SWITCH TEST  
CH 1, DC, U28, Pin 4



Tek24  
UNIT 28V INPUT  
CH 1, DC, U30, Pin 7



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**ILLUSTRATED PARTS LIST**

**6.1 General**

The Illustrated Parts List (IPL) is a complete list of assemblies and parts required for the unit. The IPL also provides for the proper identification of replacement parts. Individual parts lists within this IPL are arranged in numerical sequence starting with the top assembly and continuing with the sub-assemblies. All mechanical parts will be separated from the electrical parts used on the sub-assembly. Each parts list is followed by a component location drawing.

Parts identified in this IPL by AlliedSignal part number meet design specifications for this equipment and are the recommended replacement parts. Warranty information concerning AlliedSignal replacement parts is contained in Service Memo #1, P/N 600-08001-00XX.

Some part numbers may not be currently available. Consult the current AlliedSignal catalog or contact your AlliedSignal representative for equipment availability.

**6.2 Revision Service**

The manual will be revised as necessary to reflect current information.

**6.3 List of Abbreviations**

Abbreviation	Name
B	Motor or Synchro
C	Capacitor
CJ	Circuit Jumper
CR	Diode
DS	Lamp
E	Voltage or Signal Connect Point
F	Fuse
FL	Filter
FT	Feedthru
I	Integrated Circuit
J	Jack or Fixed Connector
L	Inductor
M	Meter
P	Plug

Table 1  
Abbreviations

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

Abbreviation	Name
Q	Transistor
R	Resistor
RT	Thermistor
S	Switch
T	Transformer
TP	Test Point
U	Component Network, Integrated Circuit, Circuit Assembly
V	Photocell/Vacuum Tube
W	Waveguide
Y	Crystal

Table 1 (Continued)  
Abbreviations

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

6.4 Sample Parts List

BOM NUMBER	UNIT/BOARD NAME	UNIT USED ON	ASSEMBLY VERSION
200-08366-0000	MST67 IOP/DLP	R: 2	MST0067A
200-08366-0000	MST67 IOP/DLP	R: 2	MST0067A
SYMBOL	PART NUMBER	DESCRIPTION	A UM 0000 9900
	009-08366-0000	PC BD IOP/DLP	A EA 1.00 1.00
	016-01040-0000	COATING TYPE AR	AR 1.00 1.00
	033-00114-0021	SOCKET IC DIP 28C	A EA 3.00 3.00
	047-09680-0001	KEYING BRACKET	A EA 3.00 3.00
	090-00087-0000	CLIP CRYSTAL	EA 1.00 1.00
PROGRAMMABLE DEVICE SET	092-05003-0015	EYELET .049	EA 2.00 2.00
	126-00030-0000	MST67A ASIC SFTWR	A EA 1.00 1.00
C 9001	106-04104-0047	CH 100KX7R/50V	EA 1.00 1.00
C 9002	106-04104-0047	CH 100KX7R/50V	EA 1.00 1.00
C 9003	106-04104-0047	CH 100KX7R/50V	EA 1.00 1.00
CR 9001	007-06180-0000	DIO SW MMBD6050	EA 1.00 1.00
CR 9002	007-08092-0000	QUAD SD DIODE	EA 1.00 1.00
CR 9003	007-08092-0000	QUAD SD DIODE	EA 1.00 1.00
DS 9001	007-06408-0000	COM CATH 7 SEG LED	EA 1.00 1.00
J 9002	030-02174-0000	PIN CONT	EA 50.00 1.00
P 9003	155-02688-0003	RIBBON CABLE ASSY	A EA 1.00 1.00
Q 9003	007-00065-0001	XSTR 2N3906 (SOT)	EA 1.00 1.00
Q 9006	007-00383-0004	SOT-23 2N2222A XST	EA 1.00 1.00
Q 9011	007-00530-0000	XSTR NPN MMBT3903	A EA 1.00 1.00
R 9001	130-05104-0023	RES CH 100K EW 5%	EA 1.00 1.00
R 9002	015-00207-0020	RECTAL SD RESISTOR	EA 1.00 1.00
R 9003	130-05472-0023	RES CHIP 4.7KEW5%	EA 1.00 1.00
R 9004	130-05471-0023	RES CHIP 470EW5%	EA 1.00 1.00
R 9005	130-05104-0023	RES CH 100K EW 5%	EA 1.00 1.00
R 9006	130-05104-0023	RES CH 100K EW 5%	EA 1.00 1.00
R 9007	130-05000-0025	RES CHIP 0 EW CJ	EA 1.00 1.00
TP 9001	008-00096-0001	TERMINAL TEST PNT	EA 1.00 1.00
TP 9002	008-00096-0001	TERMINAL TEST PNT	EA 1.00 1.00
U 9001	120-02208-0004	UPRGSSR 10MHZ16B.T	A EA 1.00 1.00
U 9002	120-06129-0009	6264-15 8K X 8 RAM	EA 1.00 1.00
U 9003	120-06129-0009	6264-15 8K X 8 RAM	EA 1.00 1.00
U 9004	122-01195-9999	*MST67 PRGMD ODD	A RF X.
U 9005	122-01194-9999	*MST67 PRGMD EVEN	A RF X.
U 9006	124-00574-0003	IC 74HCT574	EA 1.00 1.00
U 9007	123-00138-0003	74HC138 SD PKG	EA 1.00 1.00
Y 9001	044-00009-0019	XTAL 14.75MHZ	EA 1.00 1.00
Y 9002	044-00293-0000	20 MHZ OSC	EA 1.00 1.00

Figure 6-1  
Sample Parts List

**BENDIX/KING**  
KT 76C ATRBS TRANSPONDER

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

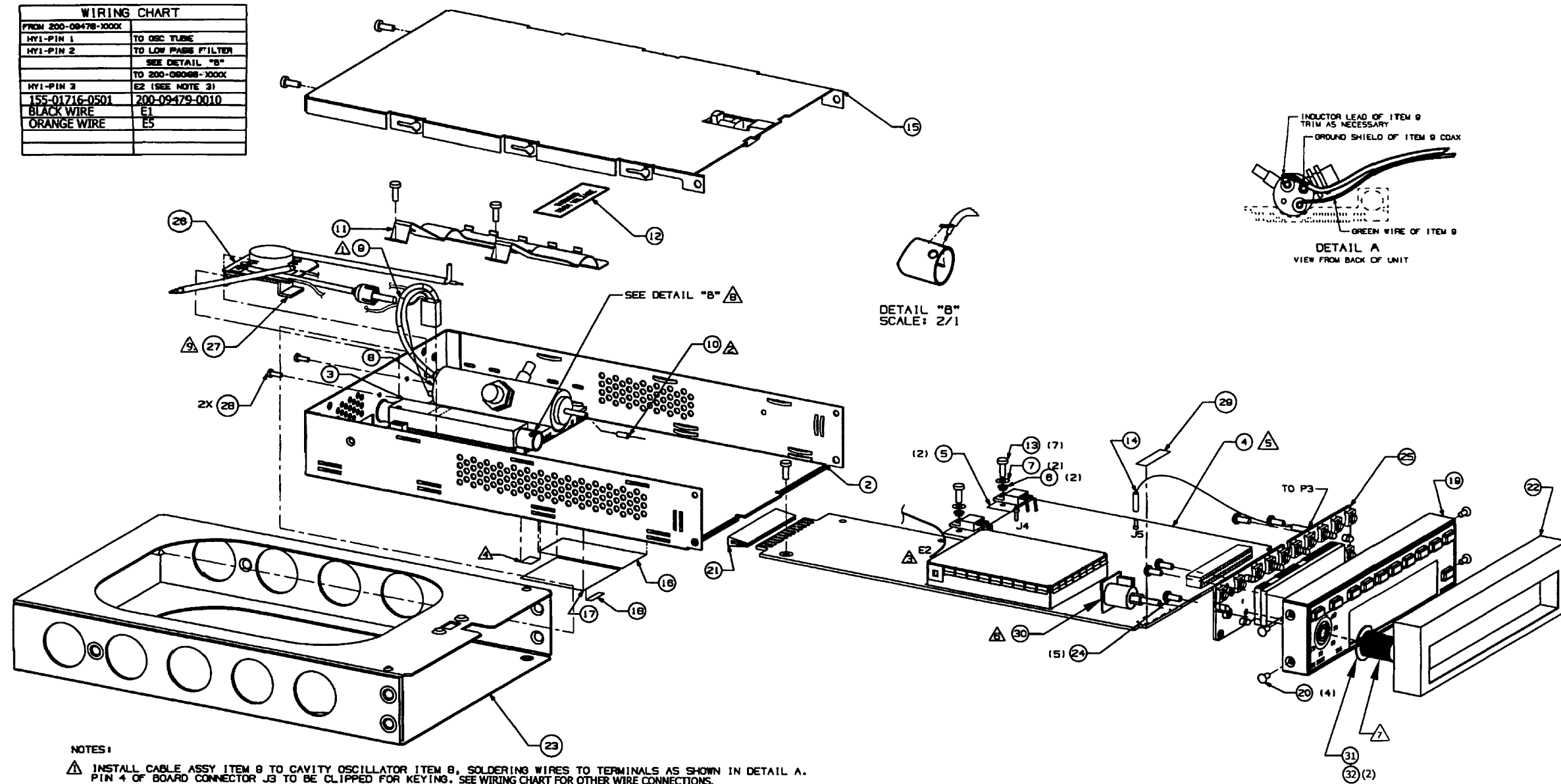
**6.5 066-01156-0101 KT 76C FINAL ASSY.**

SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0101
ASY 4	206-00371-0101	SYSTEM SW KT 76C	[EA]	1
ASY 15	047-11070-0016	COVER ASSY FINISHED	[EA]	1
ASY 19	200-05679-0010	BEZEL ASSEMBLY BOM	[EA]	1
ASY 23	047-09628-0004	RACK MOUNTING KT70	[EA]	1
ASY 25	200-09097-0020	DISPLAY BOARD BOM	[EA]	1
ASY 26	200-09478-0010	CIRCULATOR BOARD	[EA]	1
ASY 30	200-09488-0000	ROTARY SWITCH BOARD	[EA]	1
ITM 1	047-11071-0023	TOP FRAME	[EA]	1
ITM 2	012-01652-0001	INSULATOR, BOX	[EA]	1
ITM 3	200-05669-0001	FITLER/HEATSINK ASSY	[EA]	1
ITM 5	091-00581-0003	INSUL XSTR .687	[EA]	2
ITM 6	091-00156-0000	BUSHING	[EA]	2
ITM 7	089-08065-0030	WSHR FLT STD .128	[EA]	2
ITM 8	021-00038-0000	TUBE OSC	[EA]	1
ITM 9	155-01716-0501	BOM	[EA]	1
ITM 10	019-02084-0000	CH .15UH 5%	[EA]	1
ITM 11	047-11072-0002	TUBE RETAINER	[EA]	1
ITM 12	057-01540-0000	WARNING HV TAG	[EA]	1
ITM 13	089-05878-0005	SCR PHP 4-40X5/16	[EA]	7
ITM 14	155-02880-0001	HV CABLE, DISPLAY	[EA]	1
ITM 16	057-03511-0001	DECAL, CAUTION	[EA]	1
ITM 17	057-05823-0001	SERIAL TAG, PART	[EA]	1
ITM 18	057-03186-0101	FLAVOR TAG	[EA]	1
ITM 20	089-06366-0004	SCR FHP 3-48X4/16	[EA]	4
ITM 21	090-00991-0000	PROTECTIVE CLOSURE	[EA]	1
ITM 22	035-01361-0001	PROTECTIVE CVR	[EA]	1
ITM 24	089-05901-0004	SCR PHP 3-48X1/4	[EA]	5
ITM 27	016-01082-0000	DC RTV 3145	[AR]	1
ITM 28	089-05899-0003	SCR PHP 2-56X3/16	[EA]	2
ITM 29	012-01005-0003	TAPE MYLAR .250 W	[IN]	1
ITM 31	073-00998-0006	MODE CONTROL KNOB	[EA]	1
ITM 32	089-06200-0004	SCR SET 2-56X1/8	[EA]	2
REF 1	300-05684-0000	KT 76C FINAL ASSY. DWG.	[RF}	X

**BENDIX/KING**  
KT 76C ATRBS TRANSPONDER

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

WIRING CHART	
FROM 200-09478-XXXX	
HY1-PIN 1	TO OSC TUBE
HY1-PIN 2	TO LOW PASS FILTER
	SEE DETAIL "B"
	TO 200-09088-XXXX
HY1-PIN 3	E2 (SEE NOTE 3)
155-01716-0501	200-09479-0010
BLACK WIRE	E1
ORANGE WIRE	E5



**NOTES:**

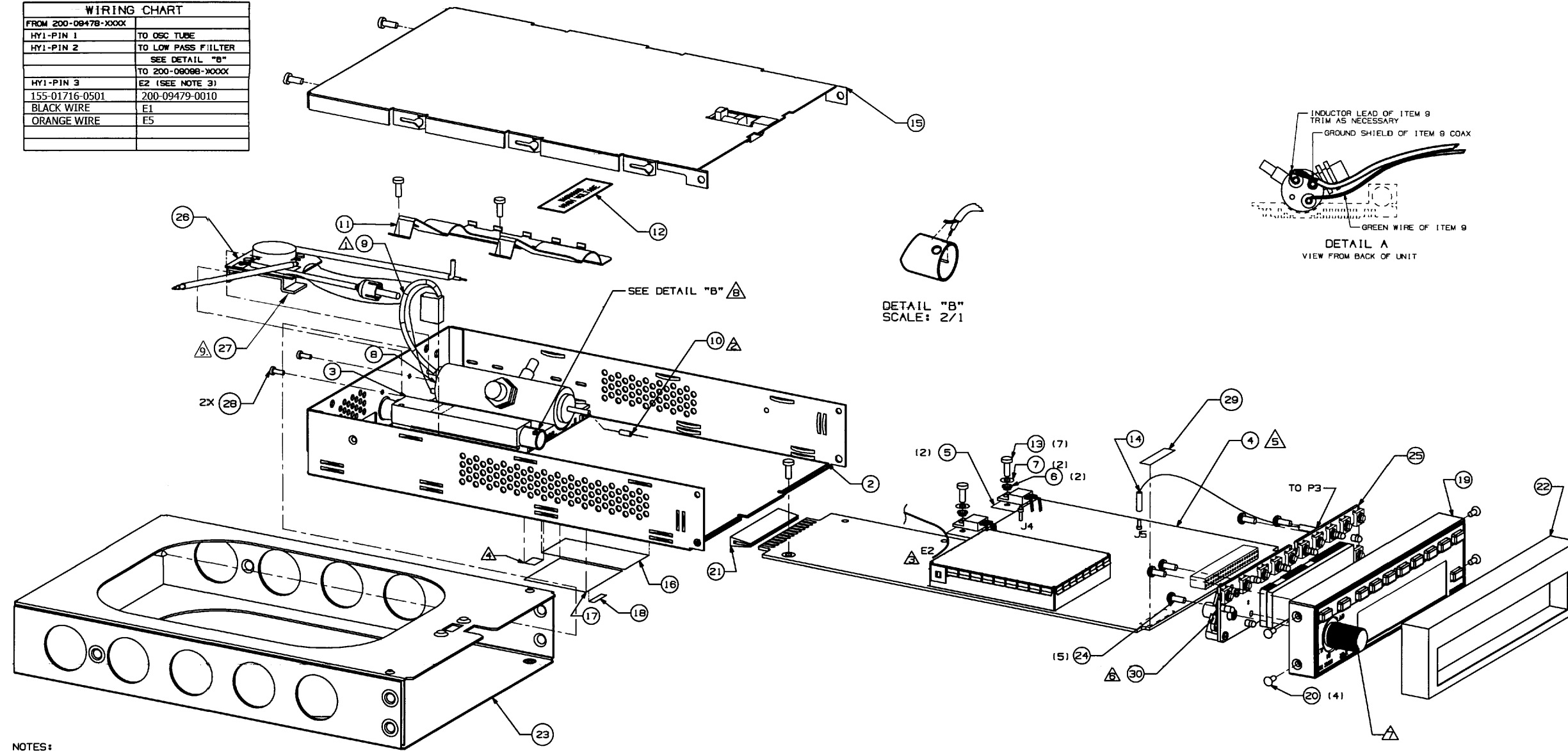
- ▲ INSTALL CABLE ASSY ITEM 9 TO CAVITY OSCILLATOR ITEM 8, SOLDERING WIRES TO TERMINALS AS SHOWN IN DETAIL A. PIN 4 OF BOARD CONNECTOR J3 TO BE CLIPPED FOR KEYING. SEE WIRING CHART FOR OTHER WIRE CONNECTIONS.
- ▲ SOLDER INDUCTOR ITEM 10 TO TERMINAL OF CAVITY OSCILLATOR ITEM 8 AND TO BOARD TERMINAL J4. TRIM LEADS AS NECESSARY.
- ▲ SOLDER CENTER CONDUCTOR TO E2. SOLDER SHIELD TO GROUND PAD AND TO THE SIDE OF THE FENCE.
- ▲ SOFTWARE ID TAG IS CALLED OUT ON 208-00371-XXXX.
- ▲ BOARD WITH SOFTWARE IS CALLED OUT ON 208-00371-XXXX (REF 205-00885-0001).
- ▲ USE LOCK WASHER & NUT PART OF ASSY 30 TO SECURE ASSY 30 TO ASSY 25.
- ▲ BUMP ON SHAFT OF KNOB MUST FIT INTO GROOVE OF SWITCH DETENT WHICH IS INSTALLED ON ASSY 25. TO ACCOMPLISH THIS EASILY, SET KNOB TO "SBY" POSITION WITH GROOVE OF SWITCH DETENT FACING UP.
- ▲ INSERT END OF CABLE THRU HOLE IN FILTER AND SOLDER LEAD OF COAXIAL CABLE TO CENTER CONDUCTOR OF FILTER AND SOLDER THE SHIELD OF CABLE TO THE SIDE OF THE FILTER AS SHOWN IN DETAIL "B".
- ▲ APPLY A SMALL AMOUNT OF RTV, ITEM 27, TO BOTTOM OF FOOT AS SHOWN.

Figure 6-2  
Final Assembly S/N ≥ 8700 (Dwg. No. 300-05684-0000 Rev. AH)



**BENDIX/KING**  
KT 76C ATRCBS TRANSPONDER

WIRING CHART	
FROM 200-08478-XXXX	
HY1-PIN 1	TO OSC TUBE
HY1-PIN 2	TO LOW PASS FILTER
	SEE DETAIL "B"
	TO 200-09098-XXXX
HY1-PIN 3	E2 (SEE NOTE 3)
155-01716-0501	200-09479-0010
BLACK WIRE	E1
ORANGE WIRE	E5

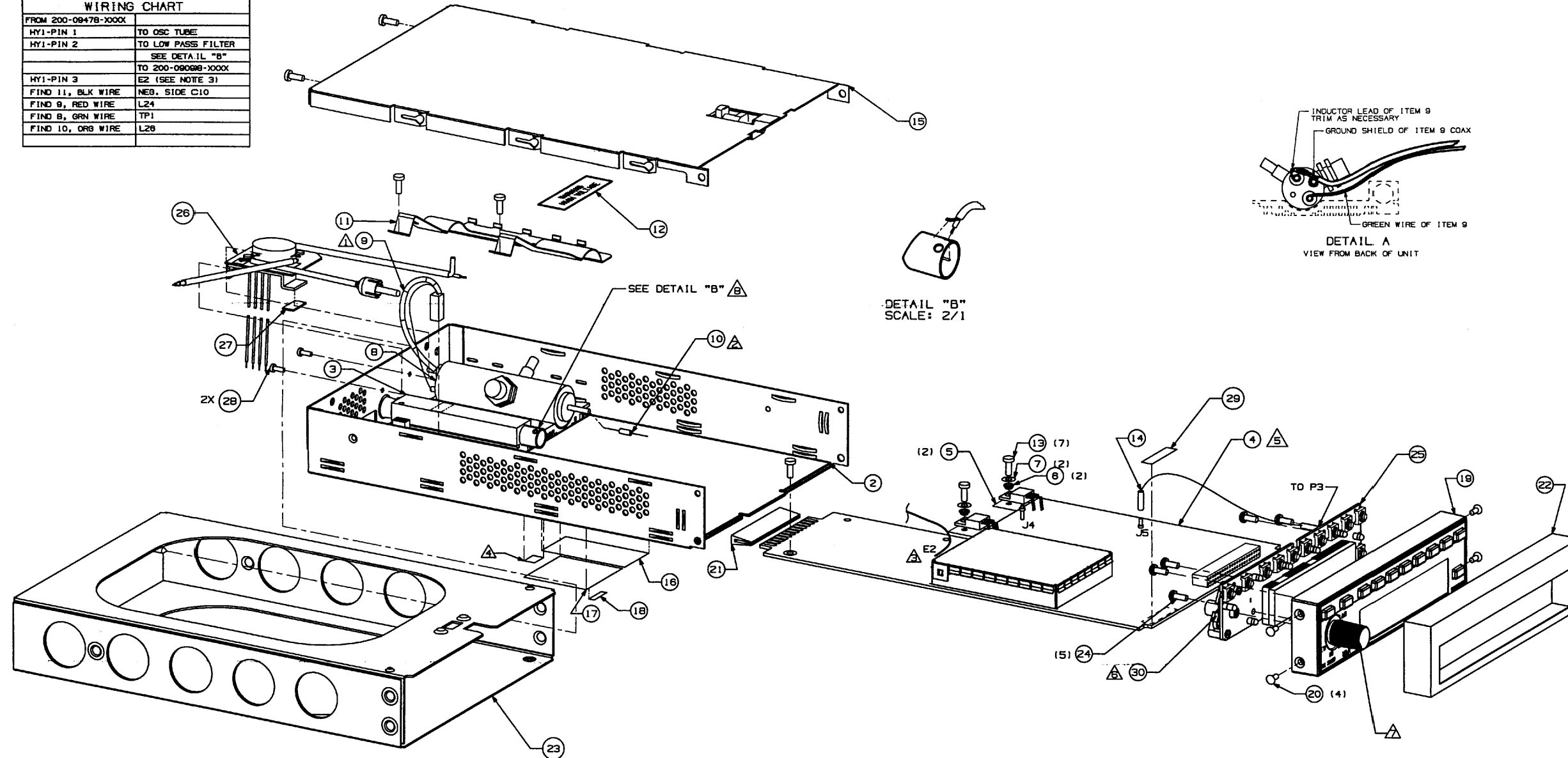


- NOTES:
- ▲ INSTALL CABLE ASSY ITEM 9 TO CAVITY OSCILLATOR ITEM 8, SOLDERING WIRES TO TERMINALS AS SHOWN IN DETAIL A. PIN 6 OF BOARD CONNECTOR J3 TO BE CLIPPED FOR KEYING, SEE WIRING CHART FOR OTHER WIRE CONNECTIONS.
  - ▲ SOLDER INDUCTOR ITEM 10 TO TERMINAL OF CAVITY OSCILLATOR ITEM 8 AND TO BOARD TERMINAL J4. TRIM LEADS AS NECESSARY.
  - ▲ SOLDER CENTER CONDUCTOR TO E2. SOLDER SHIELD TO GROUND PAD AND TO THE SIDE OF THE FENCE.
  - ▲ SOFTWARE ID TAG IS CALLED OUT ON 206-00371-XXXX.
  - ▲ BOARD WITH SOFTWARE IS CALLED OUT ON 206-00371-XXXX (REF 205-00885-0001).
  - ▲ APPLY SMALL AMOUNT OF ITEM 30 BETWEEN SPRING AND DETENT WHEEL.
  - ▲ BUMP ON SHAFT OF KNOB MUST FIT INTO GROOVE OF SWITCH DETENT WHICH IS INSTALLED ON ASSY 25. TO ACCOMPLISH THIS EASILY, SET KNOB TO "SBY" POSITION WITH GROOVE OF SWITCH DETENT FACING UP.
  - ▲ INSERT END OF CABLE THRU HOLE IN FILTER AND SOLDER LEAD OF COAXIAL CABLE TO CENTER CONDUCTOR OF FILTER AND SOLDER THE SHIELD OF CABLE TO THE SIDE OF THE FILTER AS SHOWN IN DETAIL "B".
  - ▲ APPLY A SMALL AMOUNT OF RTV, ITEM 27, TO BOTTOM OF FOOT AS SHOWN.

Figure 6-2A  
Final Assembly S/N ≥ 8200 (Dwg. No. 300-05684-0000 Rev. AF)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

WIRING CHART	
FROM 200-09478-XXXX	
HY1-PIN 1	TO OSC TUBE
HY1-PIN 2	TO LOW PASS FILTER
	SEE DETAIL "B"
HY1-PIN 3	TO 200-09098-XXXX
	E2 (SEE NOTE 3)
FIND 11, BLK WIRE	NEG. SIDE C10
FIND 9, RED WIRE	L24
FIND 8, GRN WIRE	TP1
FIND 10, DRG WIRE	L28



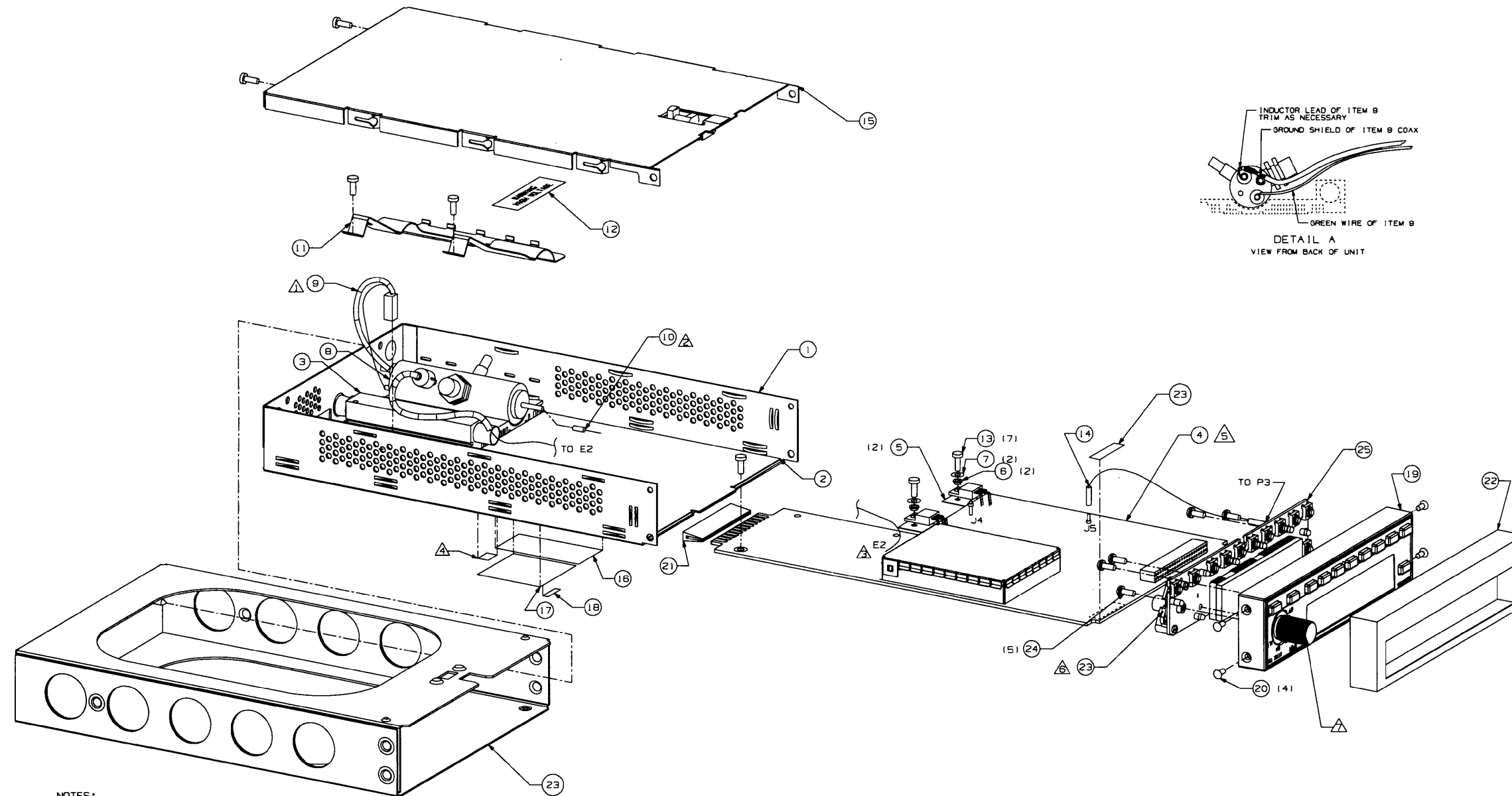
NOTES:

- ▲ INSTALL CABLE ASSY ITEM 9 TO CAVITY OSCILLATOR ITEM 8, SOLDERING WIRES TO TERMINALS AS SHOWN IN DETAIL A. PIN 4 OF BOARD CONNECTOR J3 TO BE CLIPPED FOR KEYING.
- ▲ SOLDER INDUCTOR ITEM 10 TO TERMINAL OF CAVITY OSCILLATOR ITEM 8 AND TO BOARD TERMINAL J4. TRIM LEADS AS NECESSARY.
- ▲ SOLDER CENTER CONDUCTOR TO E2. SOLDER SHIELD TO GROUND PAD AND TO THE SIDE OF THE FENCE.
- ▲ SOFTWARE ID TAG IS CALLED OUT ON 206-00371-XXXX.
- ▲ BOARD WITH SOFTWARE IS CALLED OUT ON 206-00371-XXXX (REF 205-00885-0001).
- ▲ APPLY SMALL AMOUNT OF ITEM 30 BETWEEN SPRING AND DETENT WHEEL.
- ▲ BUMP ON SHAFT OF KNOB MUST FIT INTO GROOVE OF SWITCH DETENT WHICH IS INSTALLED ON ASSY 25. TO ACCOMPLISH THIS EASILY, SET KNOB TO "SBY" POSITION WITH GROOVE OF SWITCH DETENT FACING UP.
- ▲ INSERT END OF CABLE THRU HOLE IN FILTER AND SOLDER LEAD OF COAXIAL CABLE TO CENTER CONDUCTOR OF FILTER AND SOLDER THE SHIELD OF CABLE TO THE SIDE OF THE FILTER AS SHOWN IN DETAIL "B".

Figure 6-2B

Final Assembly S/N ≥ 6600 (Dwg. No. 300-05684-0000 Rev. AE)

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

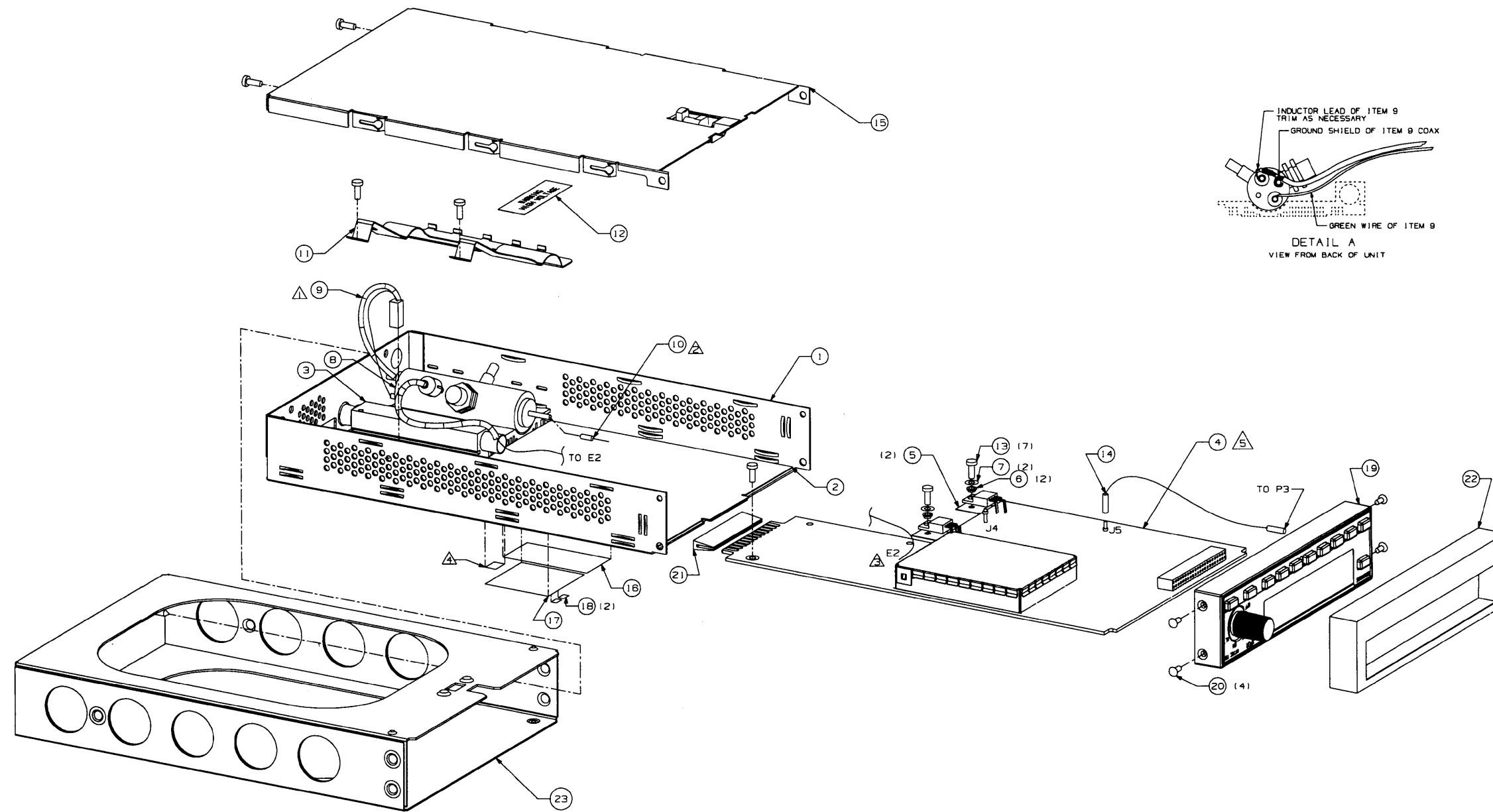


NOTES:

- ▲ INSTALL CABLE ASSY ITEM 9 TO CAVITY OSCILLATOR ITEM 8. SOLDERING WIRES TO TERMINALS AS SHOWN IN DETAIL A. PIN 4 OF BOARD CONNECTOR J3 TO BE CLIPPED FOR KEYING.
- ▲ SOLDER INDUCTOR ITEM 10 TO TERMINAL OF CAVITY OSCILLATOR ITEM 8 AND TO BOARD TERMINAL J4. TRIM LEADS AS NECESSARY.
- ▲ SOLDER CENTER CONDUCTOR TO E2 AND SHIELD TO GROUND PAD.
- ▲ SOFTWARE ID TAG 15 CALLED OUT ON 206-00371-XXXX.
- ▲ BOARD WITH SOFTWARE 15 CALLED OUT ON 206-00371-XXXX (REF 205-00885-0001).
- ▲ APPLY SMALL AMOUNT OF ITEM 23 BETWEEN SPRING AND DETENT WHEEL.
- ▲ BUMP ON SHAFT OF KNOB MUST FIT INTO GROOVE OF SWITCH DETENT WHICH IS INSTALLED ON ASSY 25. TO ACCOMPLISH THIS EASILY, SET KNOB TO "SBY" POSITION WITH GROOVE OF SWITCH DETENT FACING UP.

Figure 6-2C  
 Final Assembly (Dwg. No. 300-05684-0000 Rev. 5)

**BENDIX/KING**  
**KT 76C ATRCBS TRANSPONDER**



- NOTES:
- ▲ INSTALL CABLE ASSY ITEM 9 TO CAVITY OSCILLATOR ITEM 8, SOLDERING WIRES TO TERMINALS AS SHOWN IN DETAIL A. PIN 4 OF BOARD CONNECTOR J3 TO BE CLIPPED FOR KEYING.
  - ▲ SOLDER INDUCTOR ITEM 10 TO TERMINAL OF CAVITY OSCILLATOR ITEM 8 AND TO BOARD TERMINAL J4. TRIM LEADS AS NECESSARY.
  - ▲ SOLDER CENTER CONDUCTOR TO E2 AND SHIELD TO GROUND PAD.
  - ▲ SOFTWARE ID TAG IS CALLED OUT ON 206-00371-XXXX.
  - ▲ BOARD WITH SOFTWARE IS CALLED OUT ON 206-00371-XXXX (REF 205-00885-0001).

Figure 6-2D  
 Final Assembly (Dwg. No. 300-05684-0000 Rev. 3)

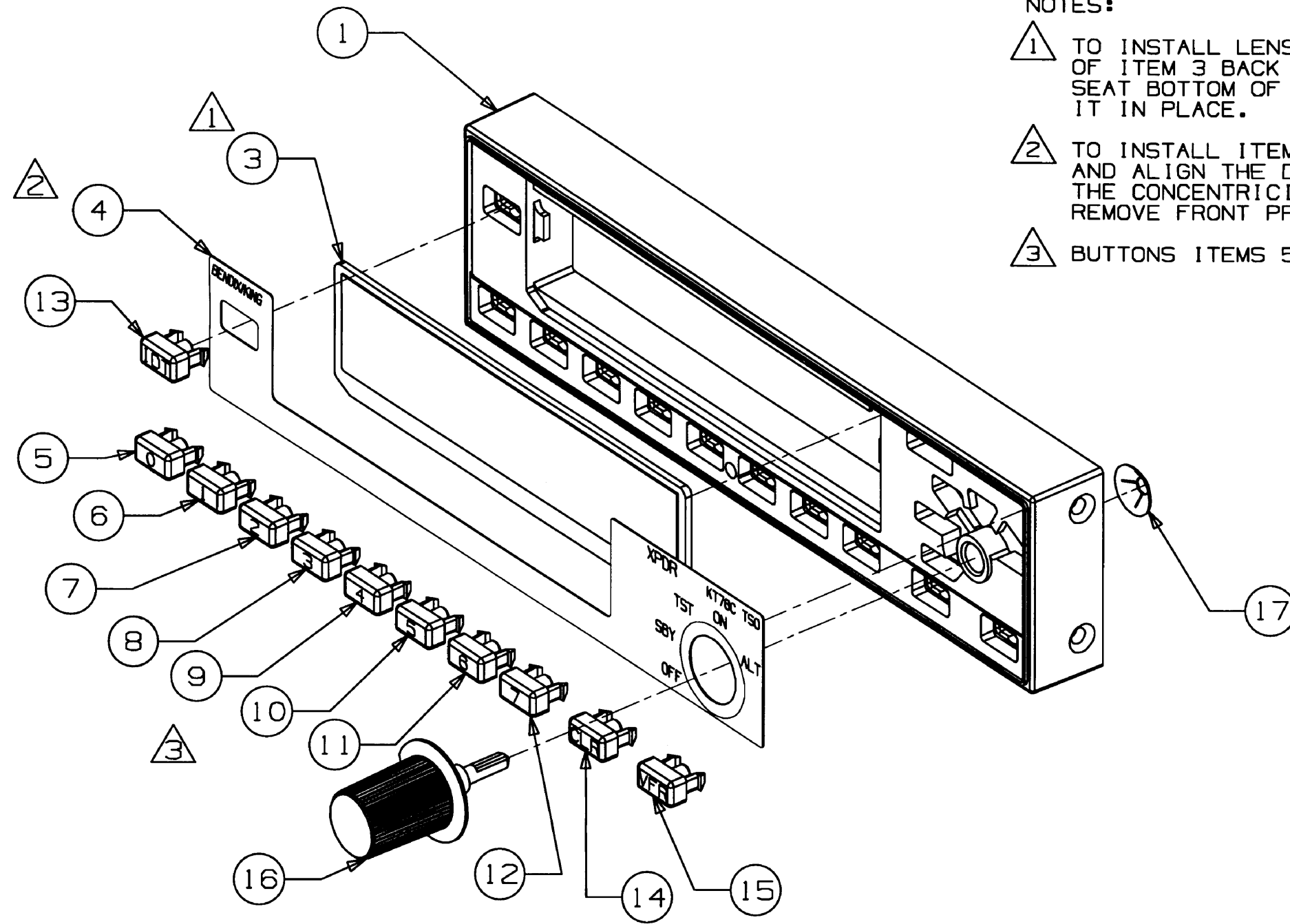
**BENDIX/KING**  
**KT 76C ATRCBS TRANSPONDER**

**6.6 200-05679-0000 KT 76C BEZEL ASSY. Rev. 3**  
**200-05679-0010 KT 76C BEZEL ASSY. Rev. -**

SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0010
ITM 1	073-00996-0004	BEZEL WITH PAINT	[EA]	1	1
ITM 3	088-03226-0002	KT76C LENS	[EA]	1	1
ITM 4	057-05817-0001	KT 76B DECAL	[EA]	1	1
ITM 5	088-03227-0041	PUSHBUTTON W/ DAUBER '0'	[EA]	1	1
ITM 6	088-03227-0042	PUSHBUTTON W/ DAUBER '1'	[EA]	1	1
ITM 7	088-03227-0043	PUSHBUTTON W/ DAUBER '2'	[EA]	1	1
ITM 8	088-03227-0044	PUSHBUTTON W/ DAUBER '3'	[EA]	1	1
ITM 9	088-03227-0045	PUSHBUTTON W/ DAUBER '4'	[EA]	1	1
ITM 10	088-03227-0046	PUSHBUTTON W/ DAUBER '5'	[EA]	1	1
ITM 11	088-03227-0047	PUSHBUTTON W/ DAUBER '6'	[EA]	1	1
ITM 12	088-03227-0048	PUSHBUTTON W/ DAUBER '7'	[EA]	1	1
ITM 13	088-03227-0049	PUSHBUTTON W/ DAUBER 'IDT'	[EA]	7	1
ITM 14	088-03227-0050	PUSHBUTTON W/ DAUBER 'CLR'	[EA]	1	1
ITM 15	088-03227-0051	PUSHBUTTON W/DAUBER 'VFR'	[EA]	1	1
ITM 16	073-00998-0003	PAINTED PLATED KNOB	[EA]	1	
ITM 17	089-02322-0001	NUT SPD PUSH-ON	[EA]	1	
REF 1	300-05679-0000	BEZEL ASSY. DWG.	[RF]	X	
REF 1	300-05679-0010	BEZEL ASSY. DWG.	[RF]		X

**BENDIX/KING**  
KT 76C ATRBS TRANSPONDER

**BENDIX/KING**  
KT 76C ATRCBS TRANSPONDER

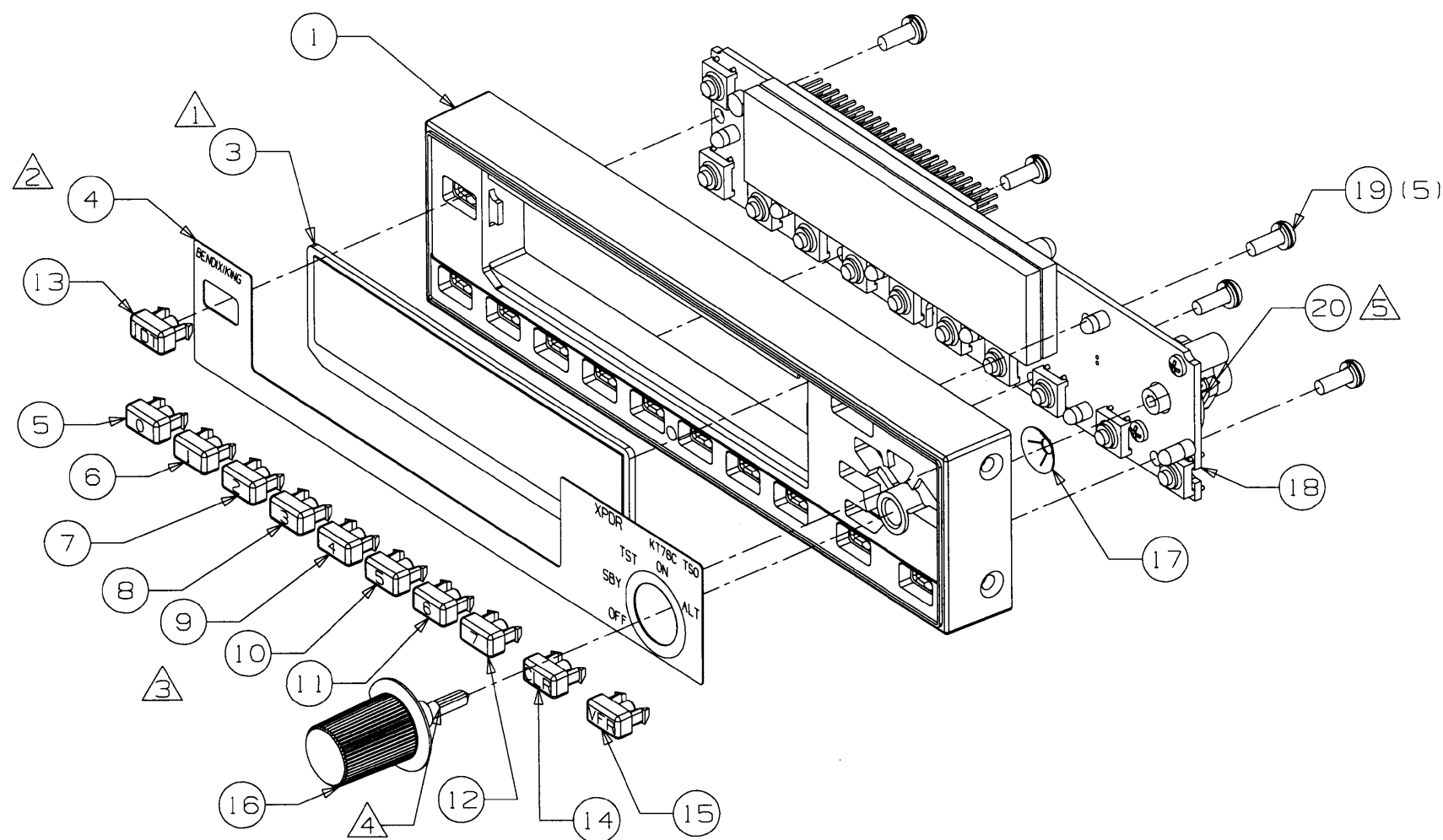


**NOTES:**

- ① TO INSTALL LENS ITEM 3 INTO BEZEL ITEM 1, TILT TOP OF ITEM 3 BACK AND SLIP UNDER LEDGE OF ITEM 1. SEAT BOTTOM OF LENS AND APPLY DECAL ITEM 4 TO HOLD IT IN PLACE.
- ② TO INSTALL ITEM 4, REMOVE BACK PROTECTOR FROM ADHESIVE AND ALIGN THE DECAL'S POSITION CAREFULLY, ESPECIALLY THE CONCENTRICITY OF THE HOLE TO THE SELECTOR SHAFT. REMOVE FRONT PROTECTOR AFTER INSTALLED.
- ③ BUTTONS ITEMS 5 THROUGH 15 TO SNAP INTO BEZEL ITEM 1.

Figure 6-3  
Bezel Assembly (Dwg. No. 300-05679-0000 Rev. 1)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER



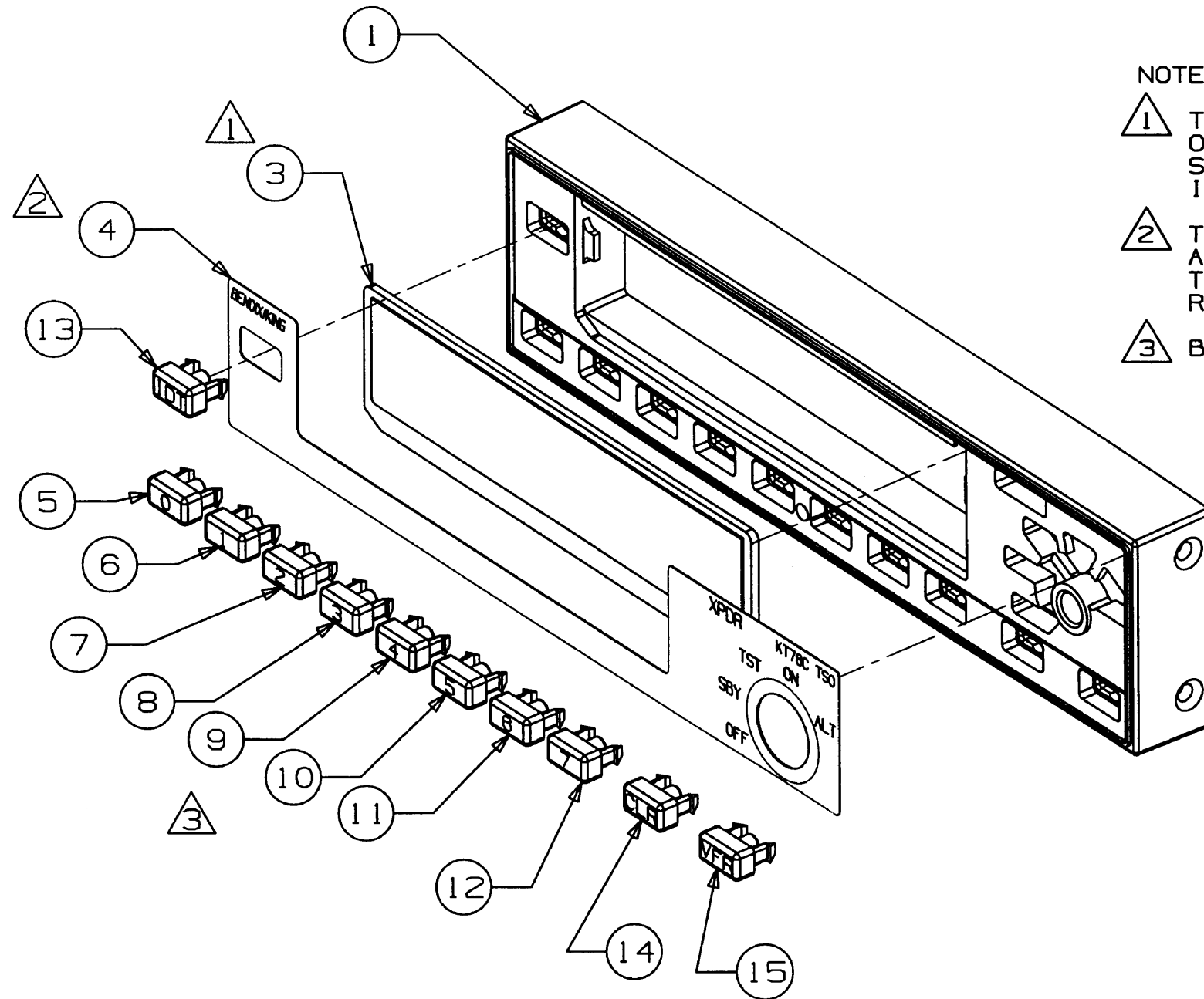
NOTES:

- ① TO INSTALL LENS ITEM 3 INTO BEZEL ITEM 1, TILT TOP OF ITEM 3 BACK AND SLIP UNDER LEDGE OF ITEM 1. SEAT BOTTOM OF LENS AND APPLY DECAL ITEM 4 TO HOLD IT IN PLACE.
- ② TO INSTALL ITEM 4, REMOVE BACK PROTECTOR FROM ADHESIVE AND ALIGN THE DECAL'S POSITION CAREFULLY, ESPECIALLY THE CONCENTRICITY OF THE HOLE TO THE SELECTOR SHAFT. REMOVE FRONT PROTECTOR AFTER INSTALLED.
- ③ BUTTONS ITEMS 5 THROUGH 15 TO SNAP INTO BEZEL ITEM 1.
- ④ BUMP ON SHAFT OF ITEM 16 MUST FIT INTO GROOVE OF SWITCH DETENT WHICH IS INSTALLED ON ASSY 18. TO ACCOMPLISH THIS EASILY, SET ITEM 16 TO "SBY" POSITION WITH GROOVE OF SWITCH DETENT FACING UP.
- ⑤ PLACE VACUUM GREASE BETWEEN SPRING AND DETENT WHEEL.

Figure 6-3A  
Bezel Assembly (Dwg. No. 300-05679-0000 Rev. 0)



**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER



**NOTES:**

- ① TO INSTALL LENS ITEM 3 INTO BEZEL ITEM 1, TILT TOP OF ITEM 3 BACK AND SLIP UNDER LEDGE OF ITEM 1. SEAT BOTTOM OF LENS AND APPLY DECAL ITEM 4 TO HOLD IT IN PLACE.
- ② TO INSTALL ITEM 4, REMOVE BACK PROTECTOR FROM ADHESIVE AND ALIGN THE DECAL'S POSITION CAREFULLY, ESPECIALLY THE CONCENTRICITY OF THE HOLE TO THE SELECTOR SHAFT. REMOVE FRONT PROTECTOR AFTER INSTALLED.
- ③ BUTTONS ITEMS 5 THROUGH 15 TO SNAP INTO BEZEL ITEM 1.

Figure 6-4  
Bezel Assembly (Dwg. No. 300-05679-0010 Rev. -)

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

**6.7 200-09097-0000 KT 76C DISPLAY/BUTTON BD. Rev. AB**  
**200-09097-0020 KT 76C DISPLAY/BUTTON BD. Rev. C**

SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0020
CR 1001	007-05117-0021	DIO Z 24V SOT	[EA]	1	1
CR 1002	007-05117-0021	DIO Z 24V SOT	[EA]	1	1
CR 1003	007-05117-0022	DIO Z 27V SOT	[EA]	1	1
CR 1004	007-05117-0022	DIO Z 27V SOT	[EA]	1	1
DS 1001	037-00012-0000	LAMP MIN T-1 18V	[EA]	1	1
DS 1002	037-00012-0000	LAMP MIN T-1 18V	[EA]	1	1
DS 1003	037-00012-0000	LAMP MIN T-1 18V	[EA]	1	1
DS 1004	037-00012-0000	LAMP MIN T-1 18V	[EA]	1	1
DS 1005	037-00012-0000	LAMP MIN T-1 18V	[EA]	1	1
DS 1006	037-00012-0000	LAMP MIN T-1 18V	[EA]	1	1
DS 1007	037-00012-0000	LAMP MIN T-1 18V	[EA]	1	1
DS 1008	037-00012-0000	LAMP MIN T-1 18V	[EA]	1	1
DS 1009	037-05098-0000	KT70 G D DISPLAY	[EA]	1	1
ITM 1001	009-09097-0000	FRONT DISPLAY BUTTON	[EA]	1	
ITM 1001	009-09097-0020	PWB DISPLAY BOARD	[EA]		1
ITM 1002	088-03214-0001	WHEEL,DTNT/REFLCTR	[EA]	1	
ITM 1003	088-00765-0000	HOUSING SWITCH	[EA]	1	
ITM 1004	089-06414-0003	SCR PHP 2-28X3/16	[EA]	2	
ITM 1005	047-05018-0000	SPRING SW 8 POS	[EA]	1	
ITM 1006	016-01013-0000	VAC GREASE DC 976	[AR]	1	
ITM 1007	012-01668-0002	TAPE .500 WIDE	[IN]	3	3
ITM 1008	016-01040-0000	COATING TYPE AR	[AR]	1	1
P 1001	030-02383-0006	HDR STRGT 6P	[EA]	1	1
P 1002	030-02453-0022	CONNECTOR 44P	[EA]	1	1
P 1003	008-00048-0000	SLDRLS PIN & RECPT	[EA]	1	1
Q 1001	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1
Q 1002	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1
Q 1003	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1
Q 1004	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1
Q 1005	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1
Q 1006	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1
Q 1007	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1
Q 1008	007-00254-0001	XSTR S PNP SOT-23	[EA]	1	1
Q 1009	007-00254-0001	XSTR S PNP SOT-23	[EA]	1	1
Q 1010	007-00254-0001	XSTR S PNP SOT-23	[EA]	1	1
Q 1011	007-00254-0001	XSTR S PNP SOT-23	[EA]	1	1
Q 1012	007-00254-0001	XSTR S PNP SOT-23	[EA]	1	1
Q 1013	007-00254-0001	XSTR S PNP SOT-23	[EA]	1	1
Q 1014	007-00254-0001	XSTR S PNP SOT-23	[EA]	1	1
R 1001	139-01001-0010	RES CH 1000 .1W 1%	[EA]	1	1
R 1002	139-01001-0010	RES CH 1000 .1W 1%	[EA]	1	1
R 1003	139-01001-0010	RES CH 1000 .1W 1%	[EA]	1	1
R 1004	139-01001-0010	RES CH 1000 .1W 1%	[EA]	1	1
R 1005	139-01001-0010	RES CH 1000 .1W 1%	[EA]	1	1
R 1006	139-01001-0010	RES CH 1000 .1W 1%	[EA]	1	1
R 1007	139-01001-0010	RES CH 1000 .1W 1%	[EA]	1	1
R 1008	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1
R 1009	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1
R 1010	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1
R 1011	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1
R 1012	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

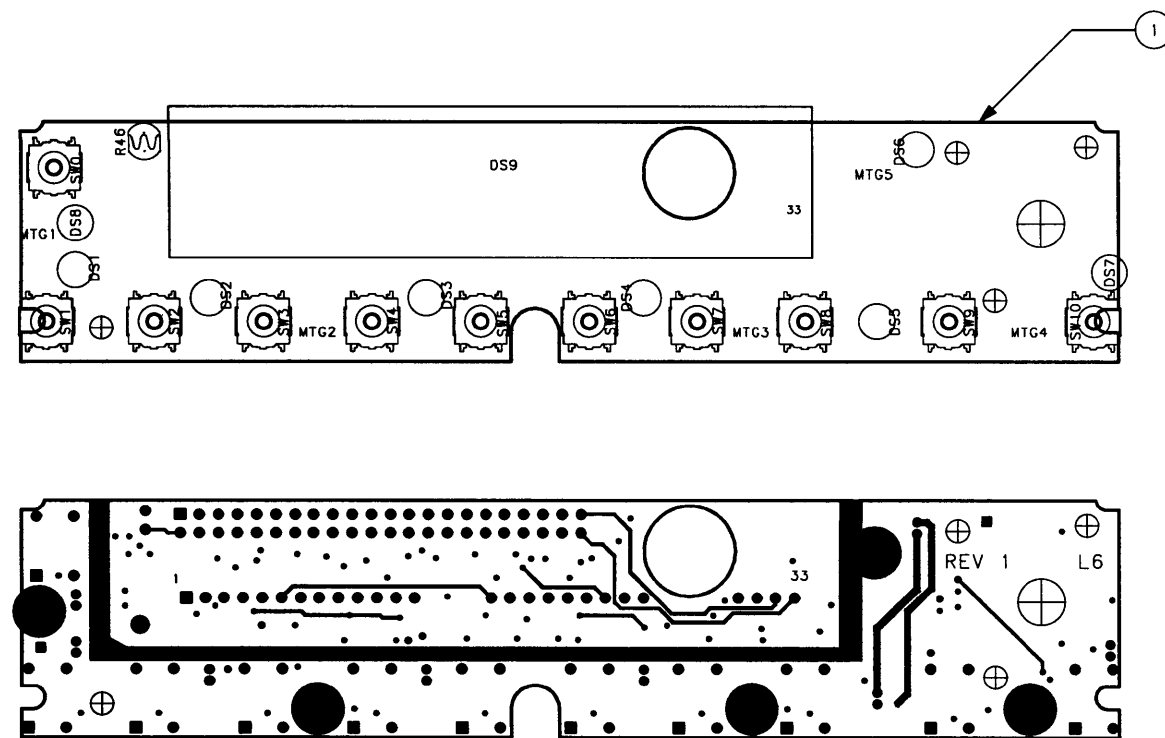
SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0020
R 1013	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1
R 1014	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1
R 1015	139-05113-0010	RES CH TW 1%	[EA]	1	1
R 1016	139-05113-0010	RES CH TW 1%	[EA]	1	1
R 1017	139-05113-0010	RES CH TW 1%	[EA]	1	1
R 1018	139-05113-0010	RES CH TW 1%	[EA]	1	1
R 1019	139-05113-0010	RES CH TW 1%	[EA]	1	1
R 1020	139-05113-0010	RES CH TW 1%	[EA]	1	1
R 1021	139-05113-0010	RES CH TW 1%	[EA]	1	1
R 1022	139-04752-0020	RES CH 47500 QW 1%	[EA]	1	1
R 1023	139-04752-0020	RES CH 47500 QW 1%	[EA]	1	1
R 1024	139-04752-0020	RES CH 47500 QW 1%	[EA]	1	1
R 1025	139-04752-0020	RES CH 47500 QW 1%	[EA]	1	1
R 1026	139-04752-0020	RES CH 47500 QW 1%	[EA]	1	1
R 1027	139-04752-0020	RES CH 47500 QW 1%	[EA]	1	1
R 1028	139-04752-0020	RES CH 47500 QW 1%	[EA]	1	1
R 1029	139-04752-0020	RES CH 47500 QW 1%	[EA]	1	1
R 1030	139-04752-0020	RES CH 47500 QW 1%	[EA]	1	1
R 1031	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1
R 1032	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1
R 1033	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1
R 1034	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1
R 1035	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1
R 1036	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1
R 1037	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1
R 1038	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1
R 1039	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1
R 1040	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1
R 1041	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1
R 1042	139-03323-0000	RES CH 332K EW 1%	[EA]	1	1
R 1043	139-03323-0000	RES CH 332K EW 1%	[EA]	1	1
R 1044	139-01004-0000	RES CHIP 1M EW 1%	[EA]	1	1
R 1045	139-01004-0000	RES CHIP 1M EW 1%	[EA]	1	1
R 1046	134-05005-0002	PHOTODETECTOR	[EA]	1	1
SW 1000	031-00753-0000	SWITCH TACTILE	[EA]	1	1
SW 1001	031-00753-0000	SWITCH TACTILE	[EA]	1	1
SW 1002	031-00753-0000	SWITCH TACTILE	[EA]	1	1
SW 1003	031-00753-0000	SWITCH TACTILE	[EA]	1	1
SW 1004	031-00753-0000	SWITCH TACTILE	[EA]	1	1
SW 1005	031-00753-0000	SWITCH TACTILE	[EA]	1	1
SW 1006	031-00753-0000	SWITCH TACTILE	[EA]	1	1
SW 1007	031-00753-0000	SWITCH TACTILE	[EA]	1	1
SW 1008	031-00753-0000	SWITCH TACTILE	[EA]	1	1
SW 1009	031-00753-0000	SWITCH TACTILE	[EA]	1	1
SW 1010	031-00753-0000	SWITCH TACTILE	[EA]	1	1
REF 100	300-09097-0000	DISPLAY/BUTTON ASSY. DWG.	[RF]	X	
REF 100	300-09097-0020	DISPLAY/BUTTON ASSY. DWG.	[RF]		X
REF 200	002-09097-0000	DISPLAY/BUTTON SCHEMATIC	[RF]	X	
REF 200	002-09097-0020	DISPLAY/BUTTON SCHEMATIC	[RF]		X

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

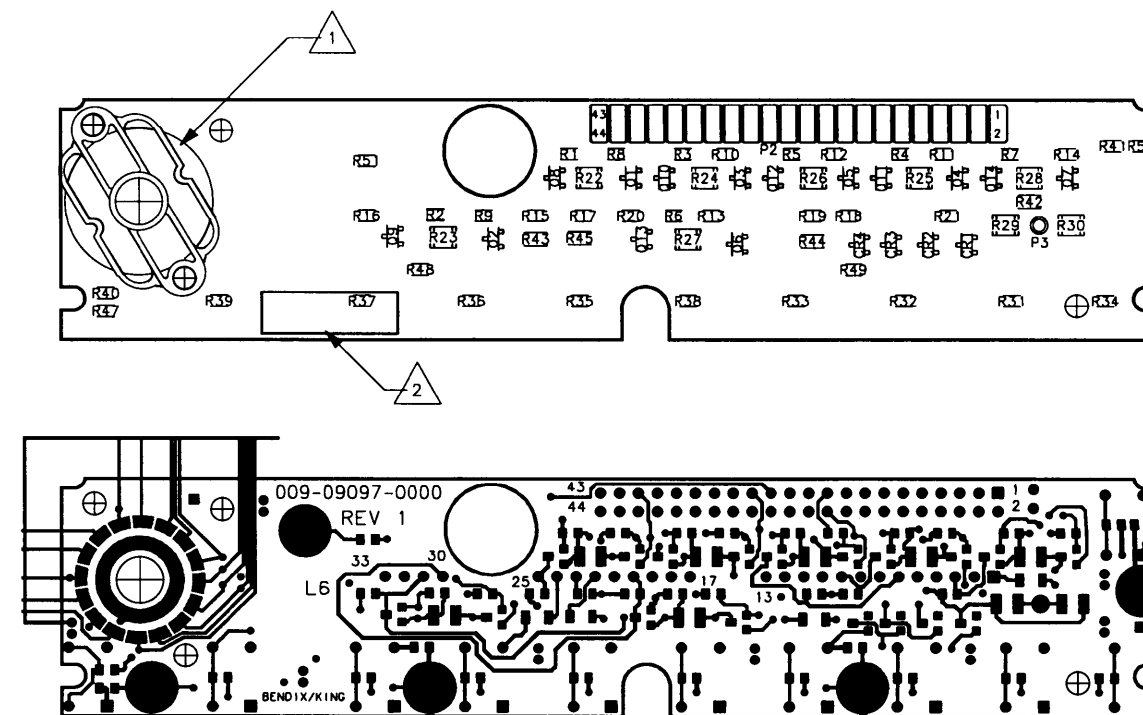
NOTE: ADD 1000 TO ALL REFERENCE DESIGNATORS.  
 EX: C1 = C1001

NOTES:

1. PRIOR TO POST COATING BOTH SIDES OF P.C. BOARD WITH ITEM 8, MASK OFF ALL MOUNTING AREAS AND REFERENCE DESIGNATORS: DS1-DS9, P2-P3, SW0-SW10 ITEMS 2, 3, 5, AND 6
2. PRINTED CIRCUIT ASSEMBLY IDENTIFICATION MUST BE IN ACCORDANCE WITH SPEC. 001-01101-0000.
3. LIQUID STAKE ALL FASTENERS PER SPEC. 001-01080-0000.



NEARSIDE VIEW OF PC BOARD



FARSIDE VIEW OF PC BOARD

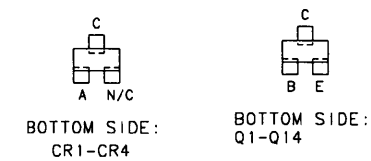


Figure 6-5 S/N  $\geq$  1850  
 Display Board (Dwg. No. 300-09097-0000 Rev. 2, Sheet 1 of 2)

**BENDIX/KING**  
KT 76C ATRBS TRANSPONDER

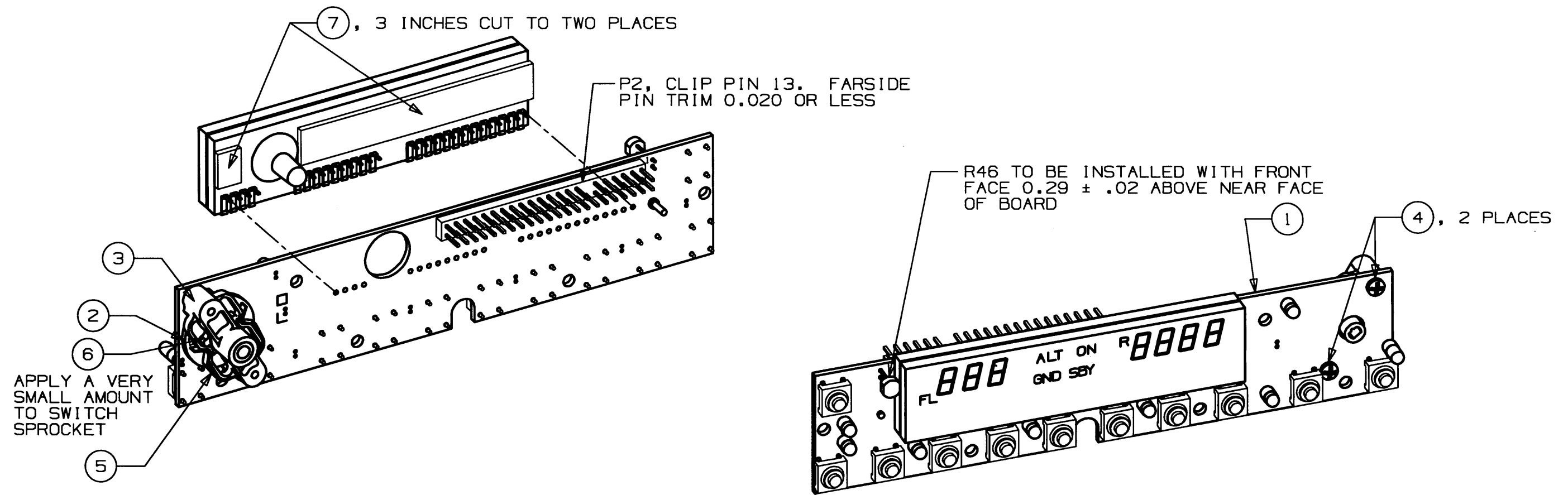


Figure 6-5 S/N ≥ 1850  
Display Board (Dwg. No. 300-09097-0000 Rev. 2, Sheet 2 of 2)

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

NOTE: ADD 1000 TO ALL REFERENCE DESIGNATORS.  
 EX: C1 = C1001

NOTES:

1. PRIOR TO POST COATING BOTH SIDES OF P.C. BOARD WITH ITEM 8, MASK OFF ALL MOUNTING AREAS AND REFERENCE DESIGNATORS: DS1-DS9, P2-P3, SWO-SW10 ITEMS 2, 3, 5, AND 6
2. PRINTED CIRCUIT ASSEMBLY IDENTIFICATION MUST BE IN ACCORDANCE WITH SPEC. 001-D1101-0000.
3. LIQUID STAKE ALL FASTENERS PER SPEC 001-01080-0000

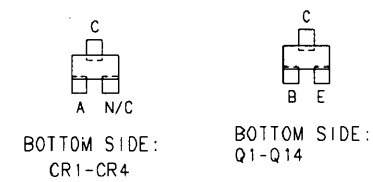
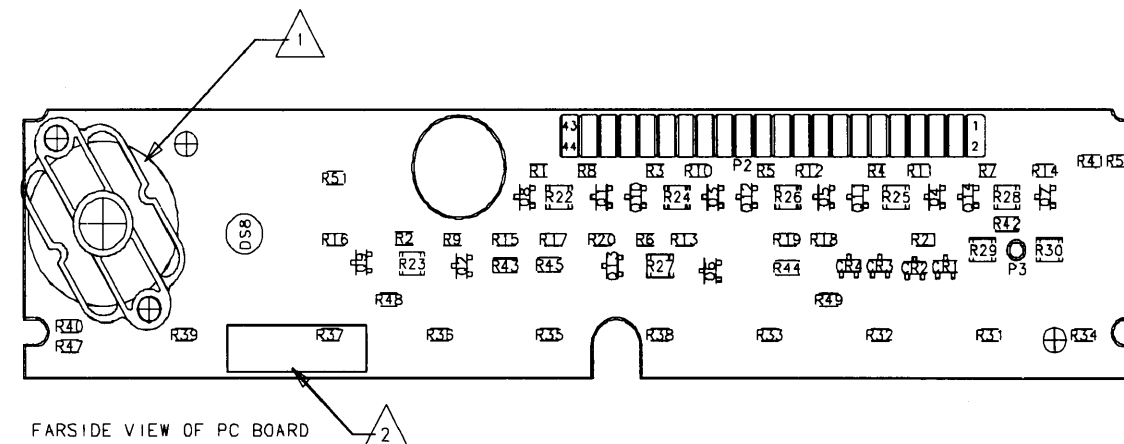
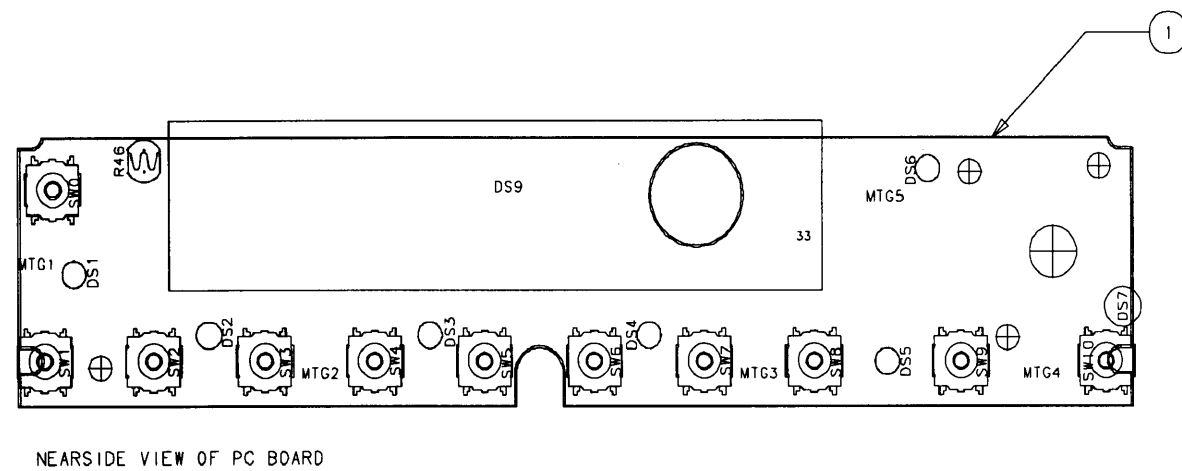


Figure 6-5A S/N < 1850  
 Display Board (Dwg. No. 300-09097-0000 Rev. 1, Sheet 1 of 2)

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

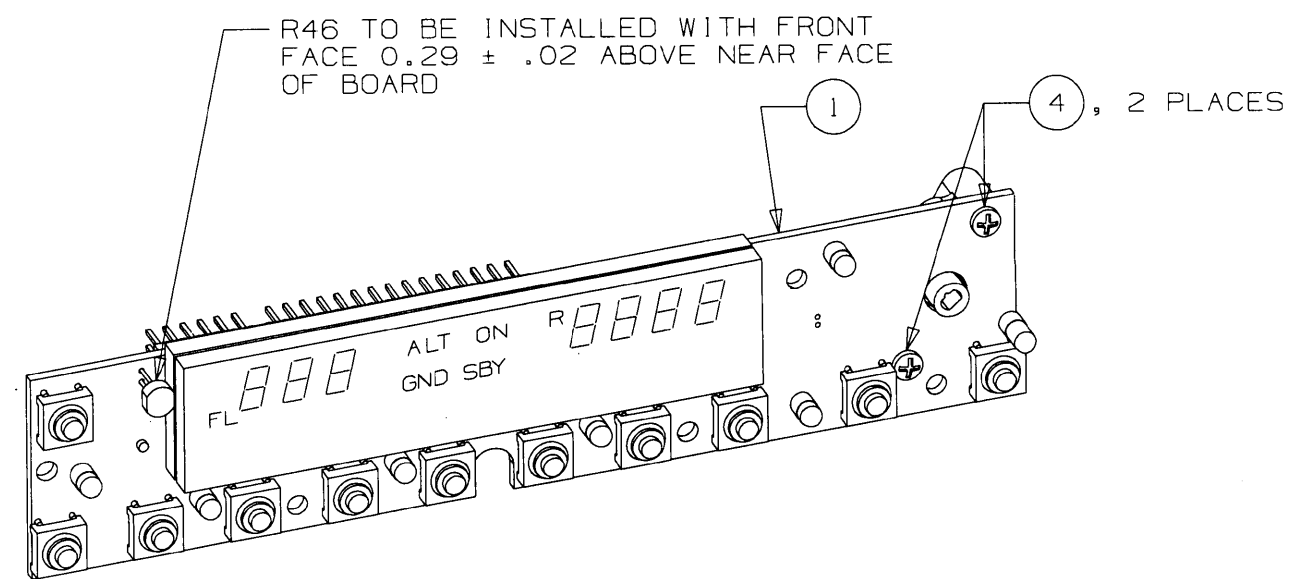
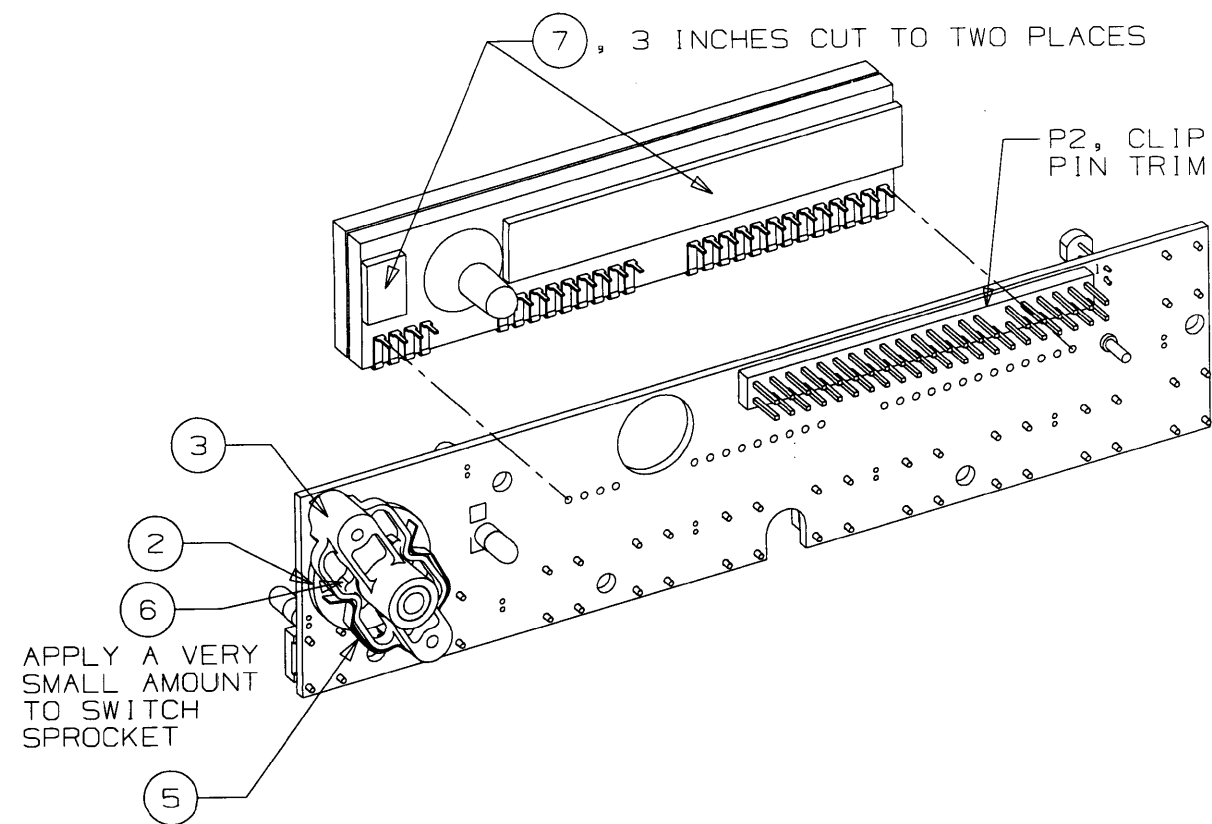


Figure 6-5A S/N < 1850  
 Display Board (Dwg. No. 300-09097-0000 Rev. 1, Sheet 2 of 2)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

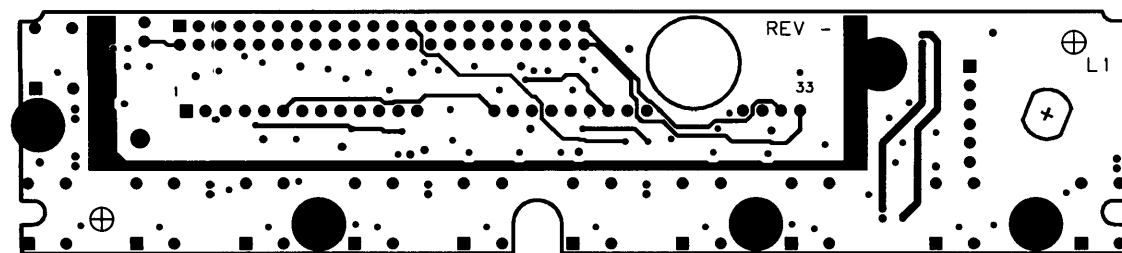
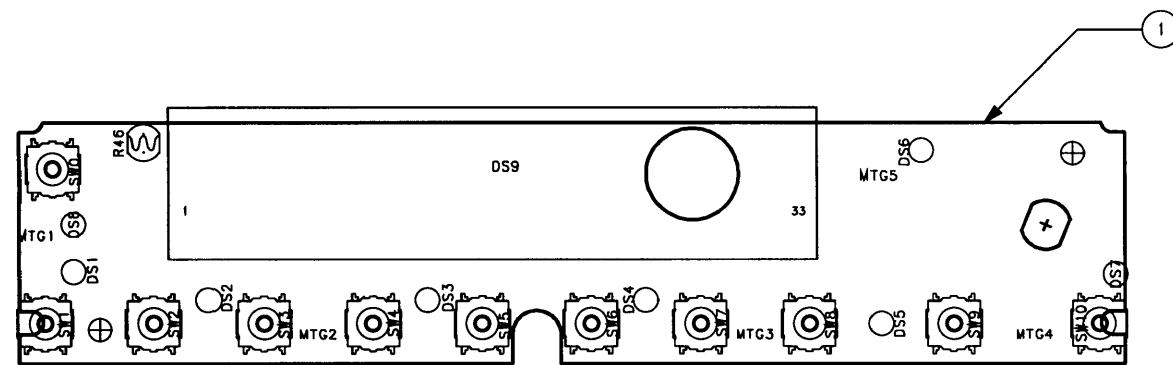
NOTE: ADD 1000 TO ALL REFERENCE DESIGNATORS.  
EX: C1 = C1001

NOTES:

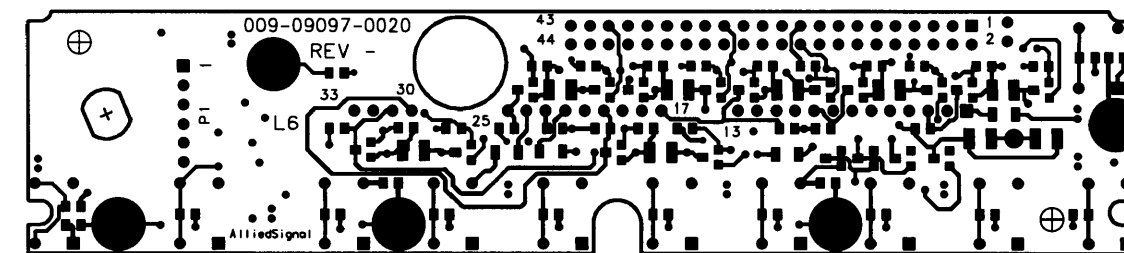
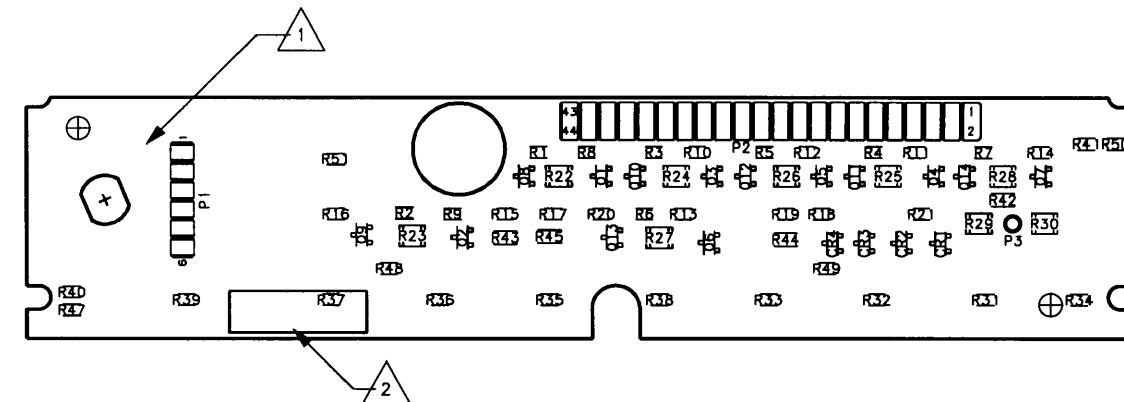
1. PRIOR TO POST COATING BOTH SIDES OF P.C. BOARD WITH ITEM B, MASK OFF ALL MOUNTING AREAS AND REFERENCE DESIGNATORS: DS1-DS9, P1, P2, P3

2. PRINTED CIRCUIT ASSEMBLY IDENTIFICATION MUST BE IN ACCORDANCE WITH SPEC. 001-01101-0000.

3. LIQUID STAKE ALL FASTENERS PER SPEC. 001-01080-0000.



NEARSIDE VIEW OF PC BOARD



FAR SIDE VIEW OF PC BOARD

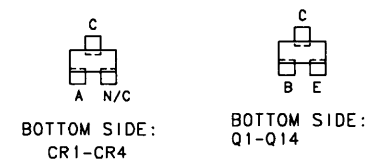


Figure 6-6

Display Board S/N ≥ 8700 (Dwg. No. 300-09097-0020 Rev. A, Sheet 1 of 2)



BENDIX/KING  
KT 76C ATRBS TRANSPONDER

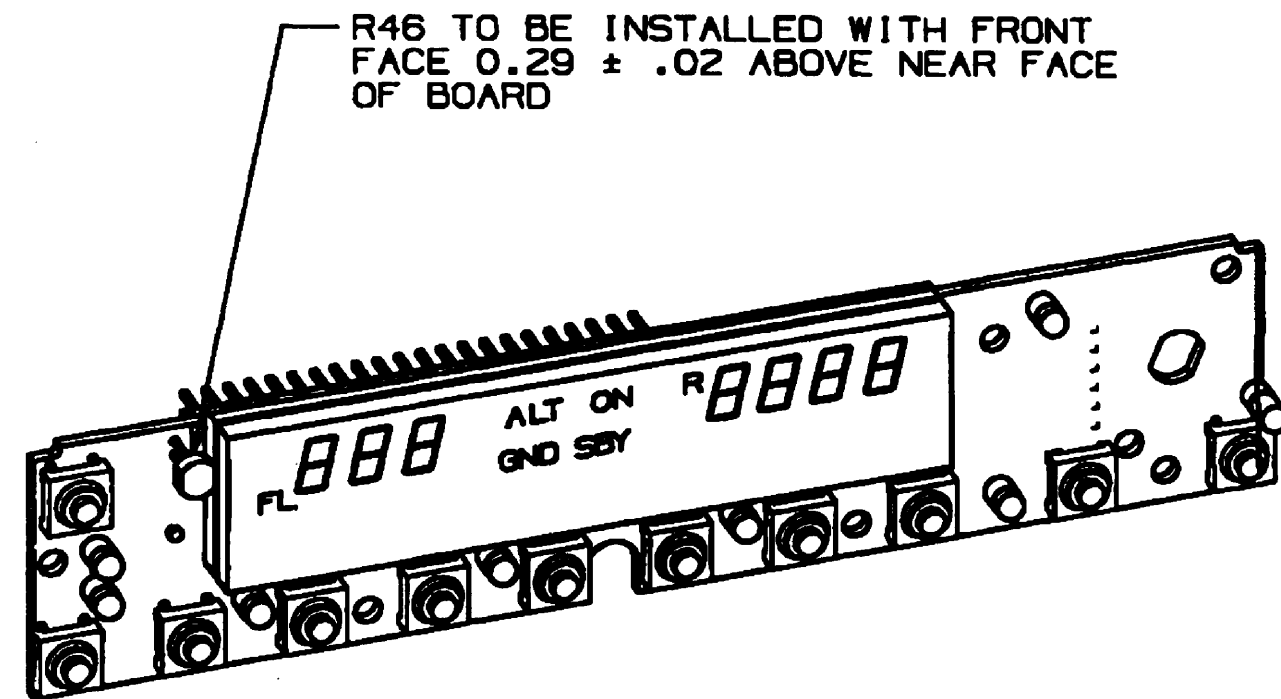
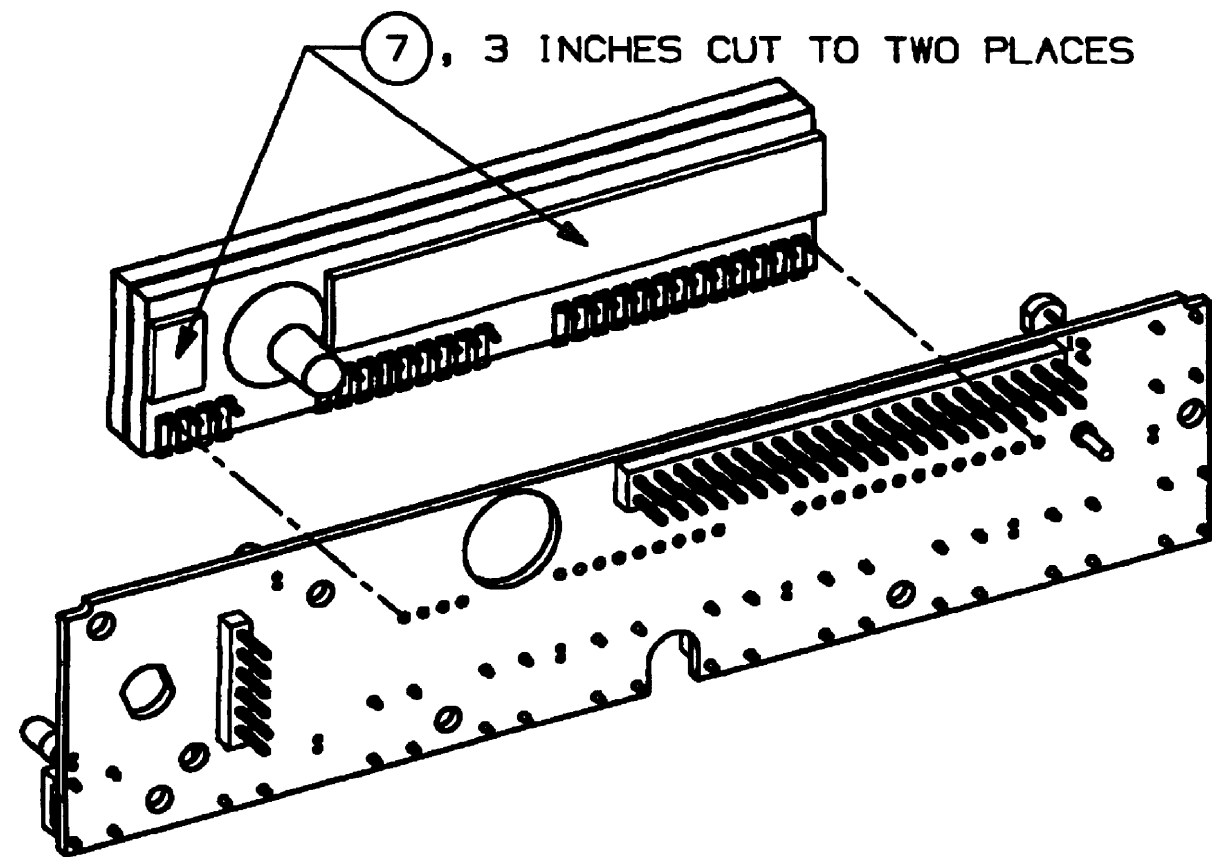
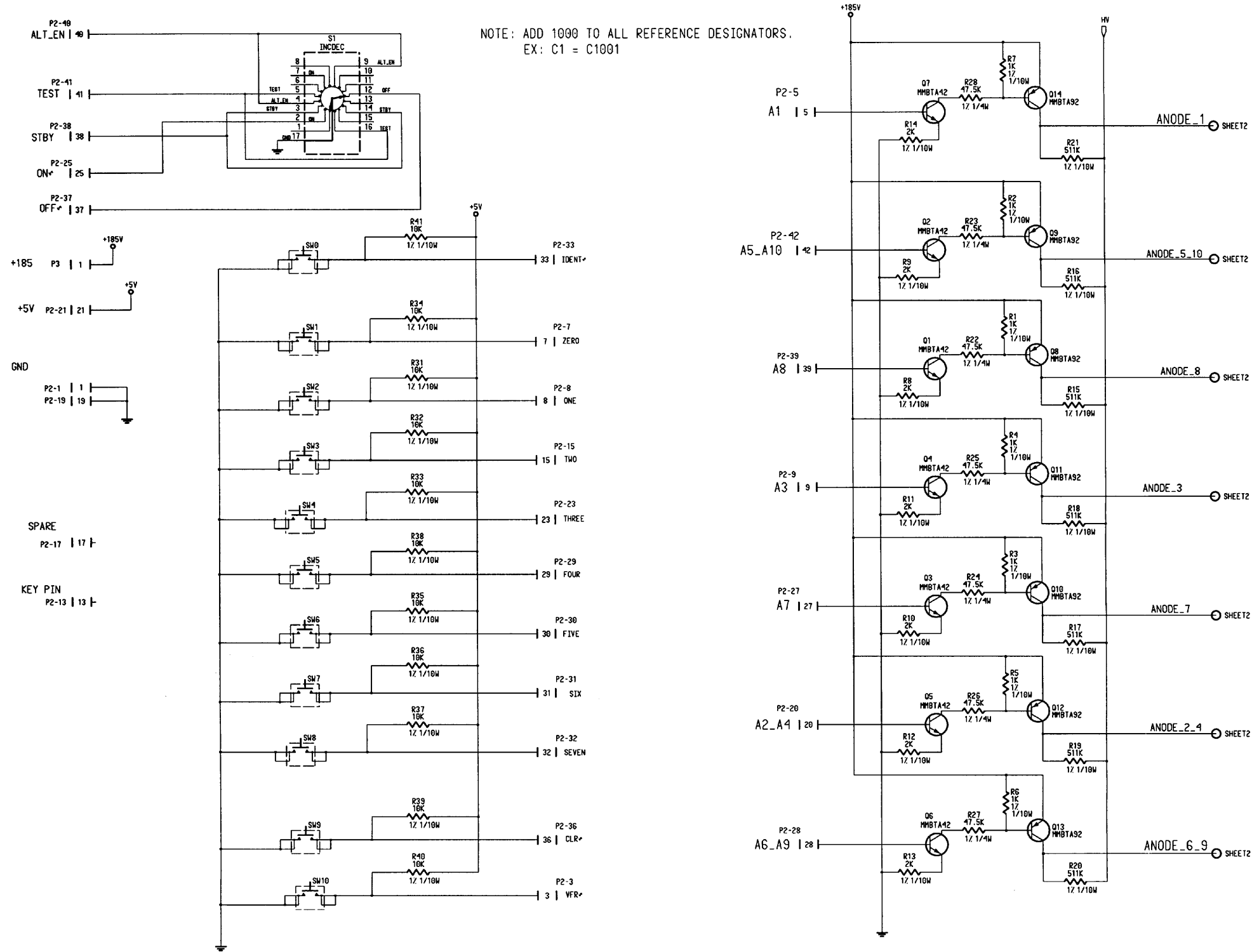


Figure 6-6  
Display Board S/N ≥ 8700 (Dwg. No. 300-09097-0020 Rev. A, Sheet 2 of 2)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER



**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

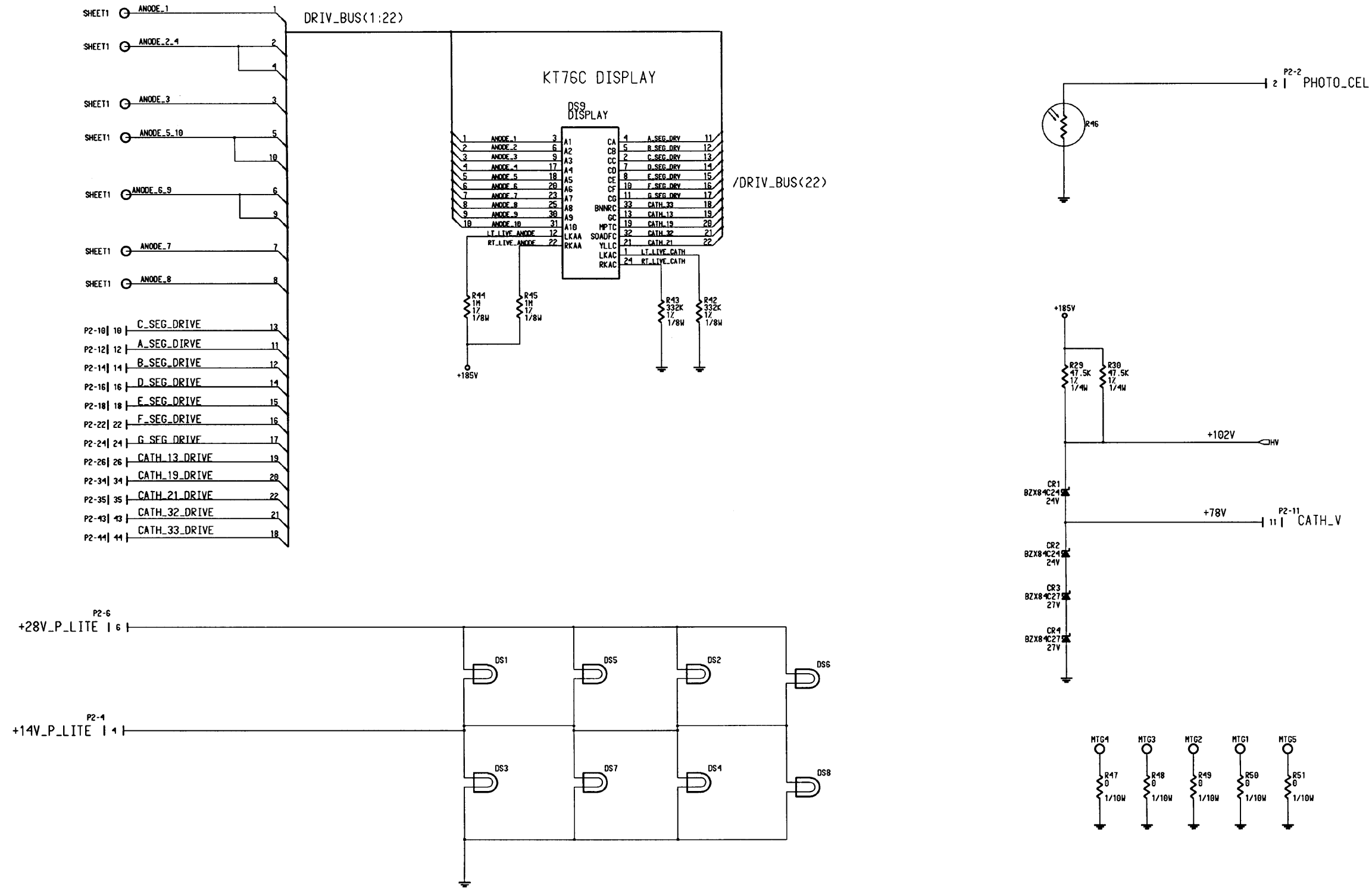


Figure 6-7 S/N  $\geq$  1850  
Display Board Schematic (Dwg. No. 002-09097-0000 Rev. AA, Sheet 2 of 2)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

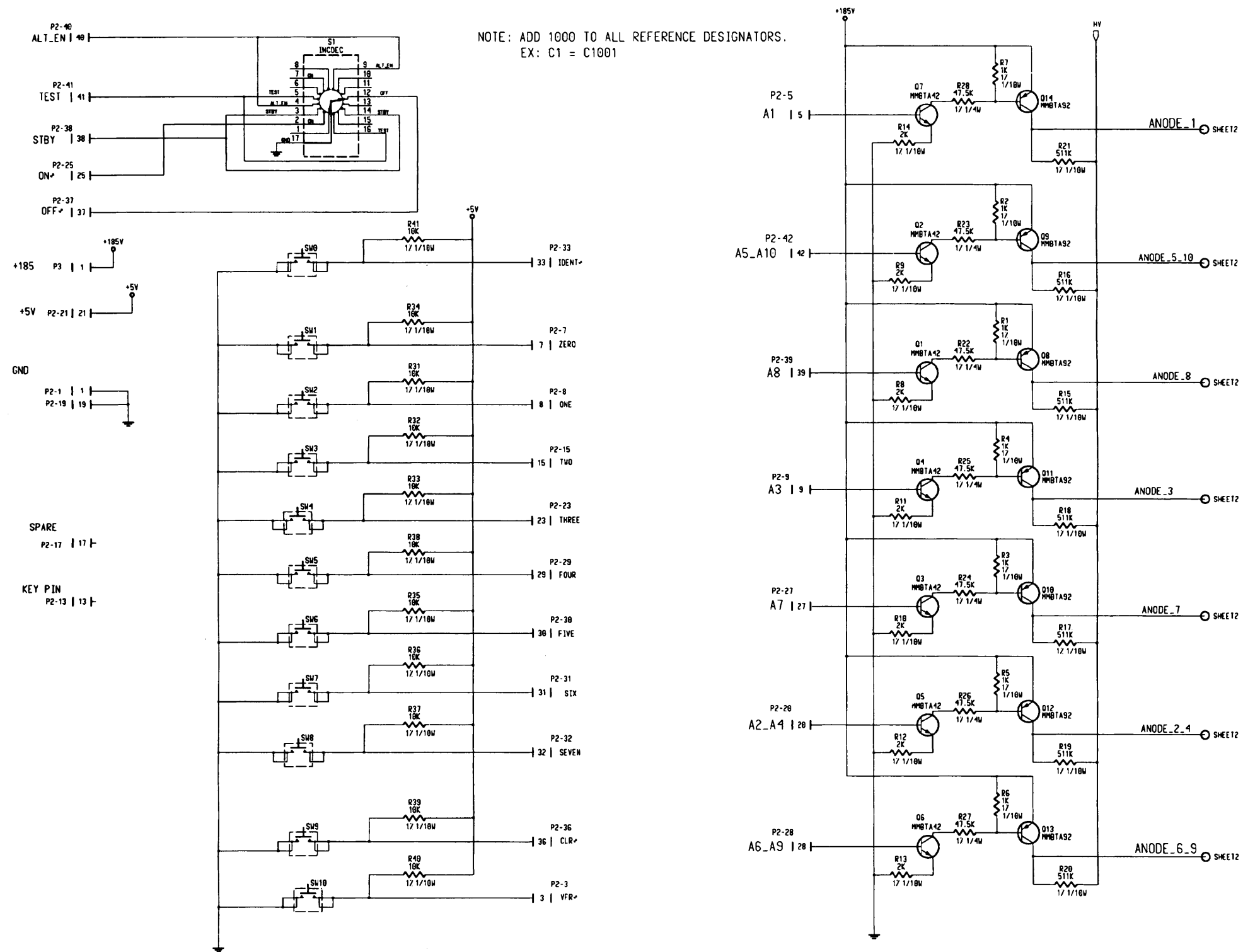


Figure 6-7A S/N  $\geq$  1850

Display Board Schematic (Dwg. No. 002-09097-0000 Rev. 1, Sheet 1 of 2)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

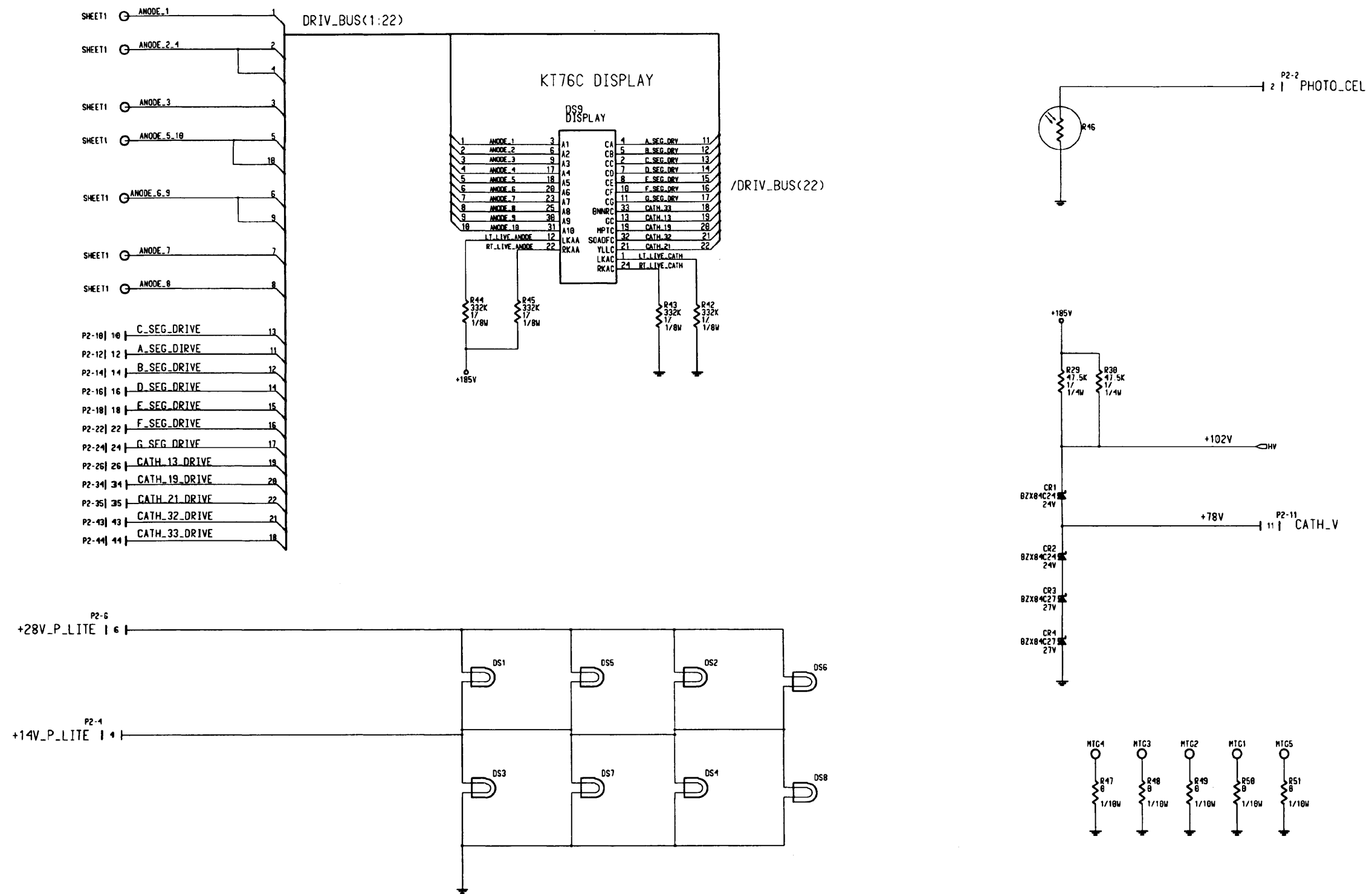
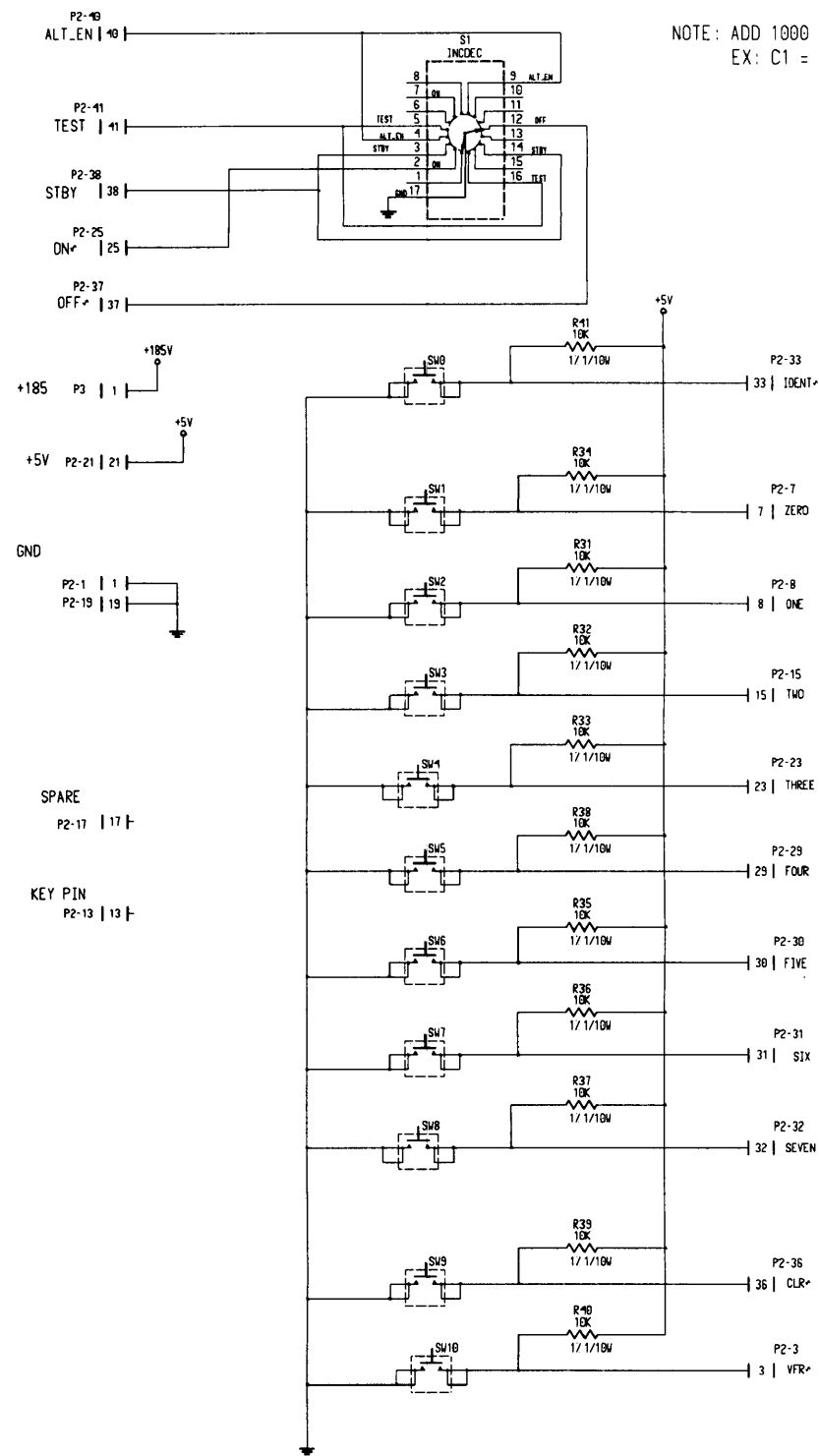


Figure 6-7A S/N ≥ 1850  
Display Board Schematic (Dwg. No. 002-09097-0000 Rev. 1, Sheet 2 of 2)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER



NOTE: ADD 1000 TO ALL REFERENCE DESIGNATORS.  
EX: C1 = C1001

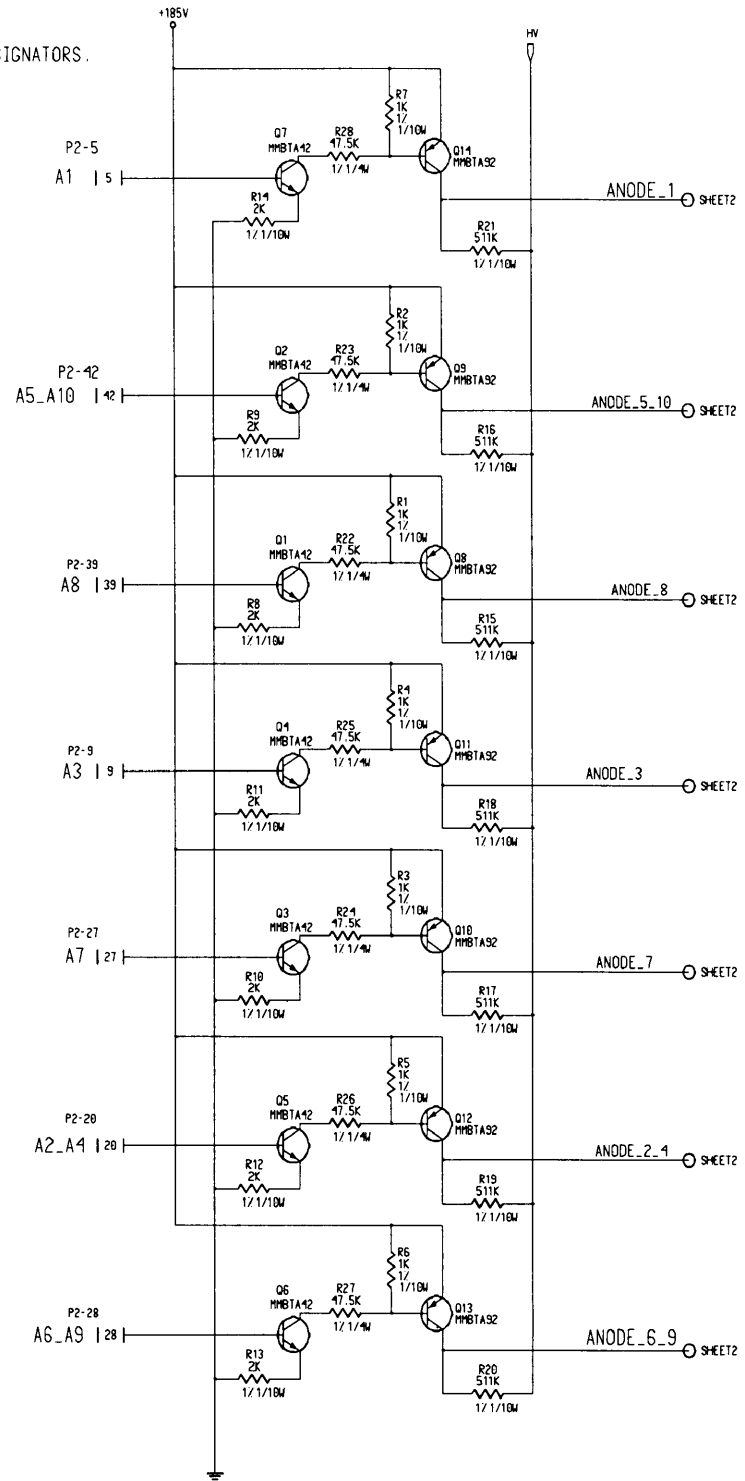


Figure 6-7B S/N < 1850  
Display Board Schematic (Dwg. No. 002-09097-0000 Rev. 0, Sheet 1 of 2)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

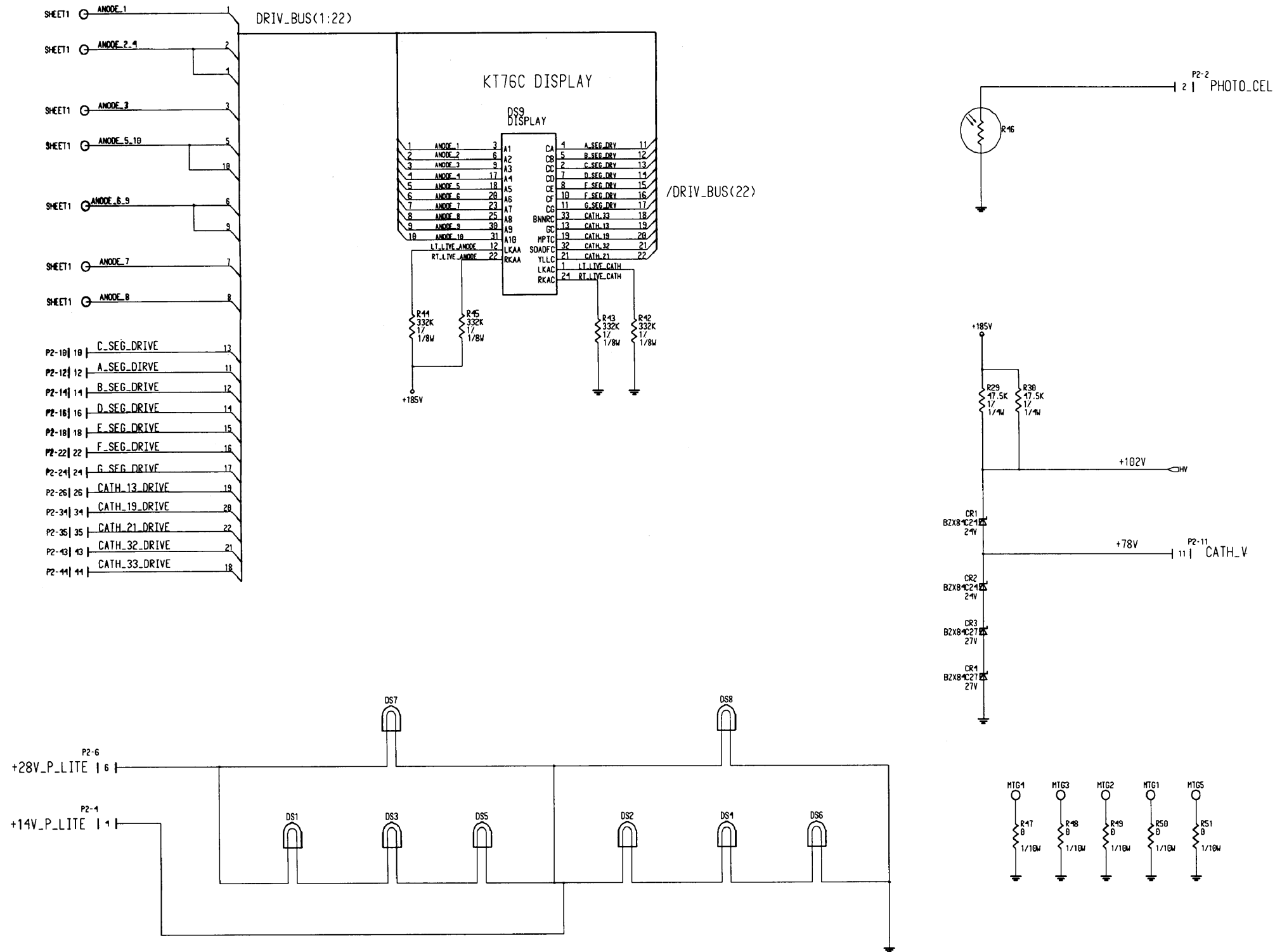
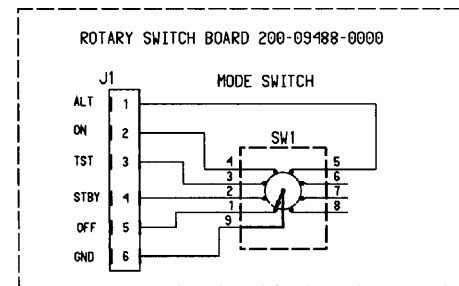
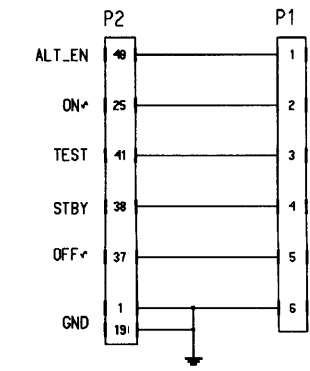


Figure 6-7B S/N < 1850  
Display Board Schematic (Dwg. No. 002-09097-0000 Rev. 0, Sheet 2 of 2)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER



NOTE: ADD 1000 TO ALL REFERENCE DESIGNATORS. EX: C1 = C1001

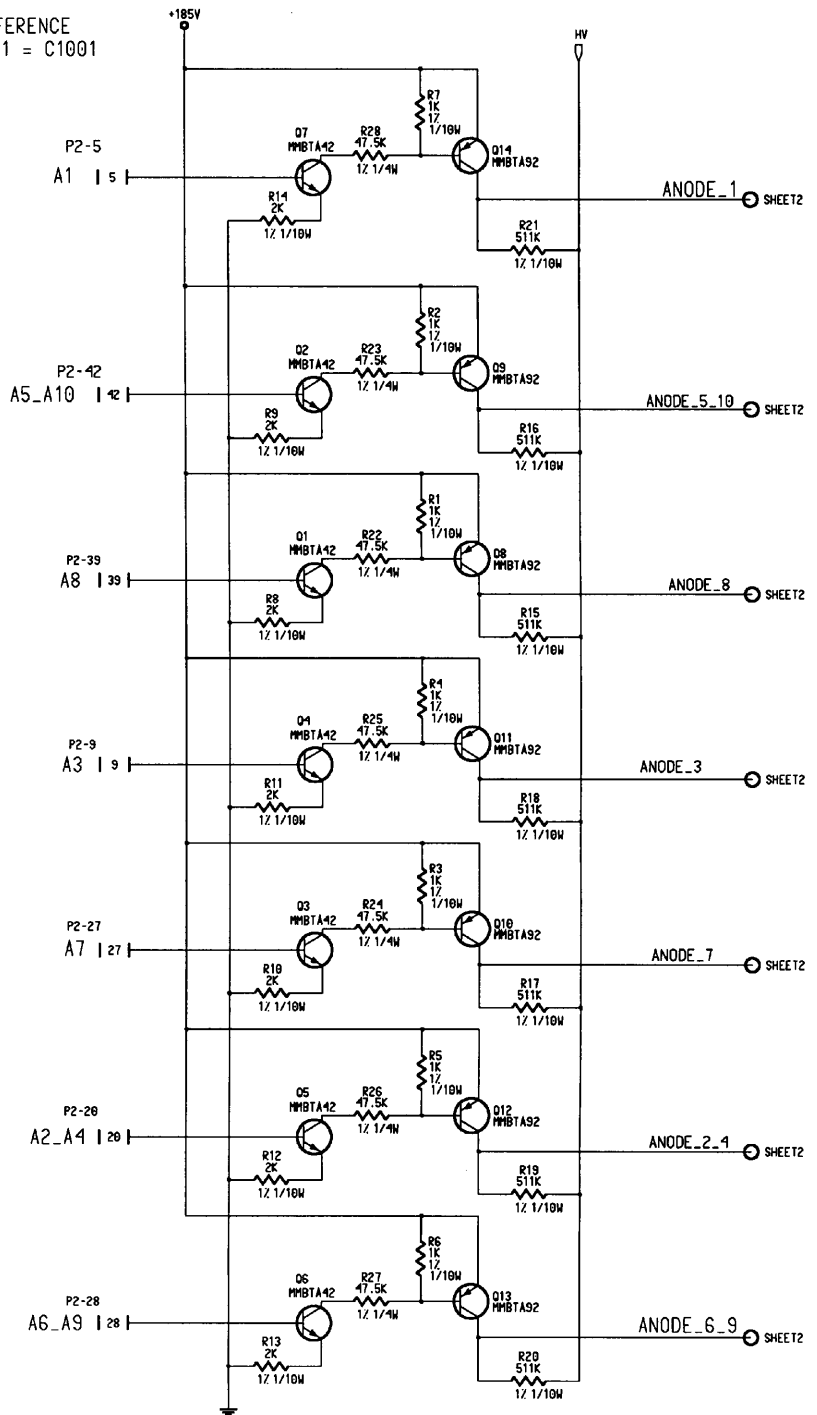
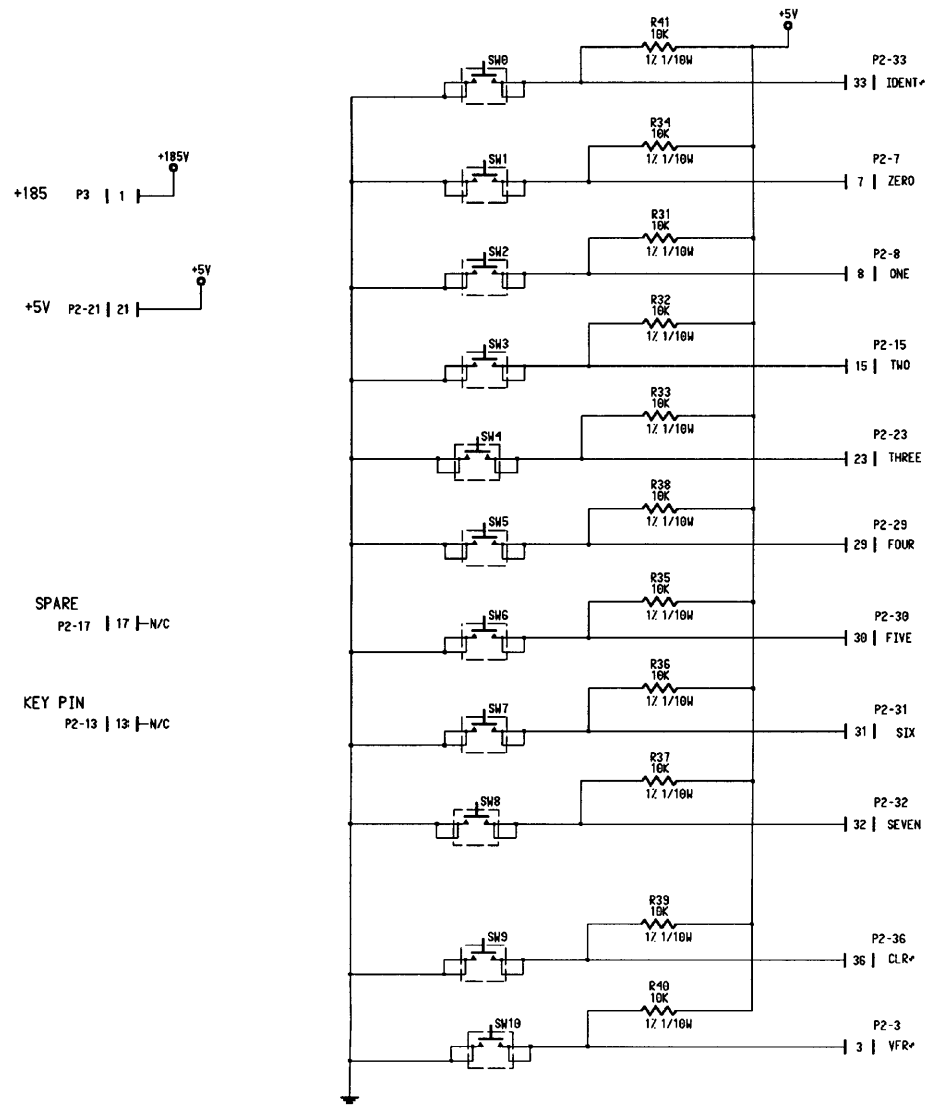


Figure 6-8

Display Board Schematic (Dwg. No. 002-09097-0020 Rev. A, Sheet 1 of 2)



**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

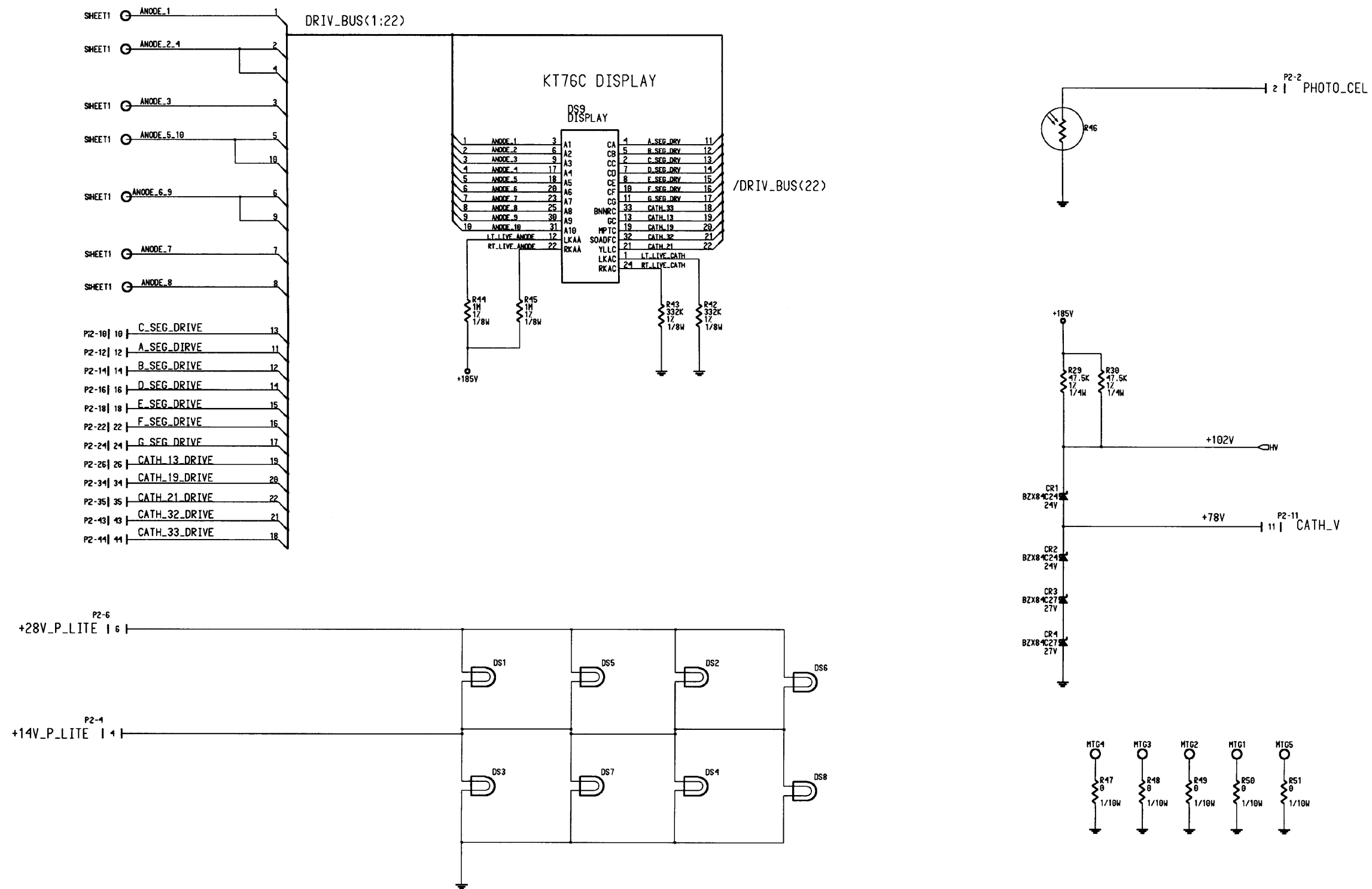


Figure 6-8  
Display Board Schematic (Dwg. No. 002-09097-0020 Rev. A, Sheet 2 of 2)

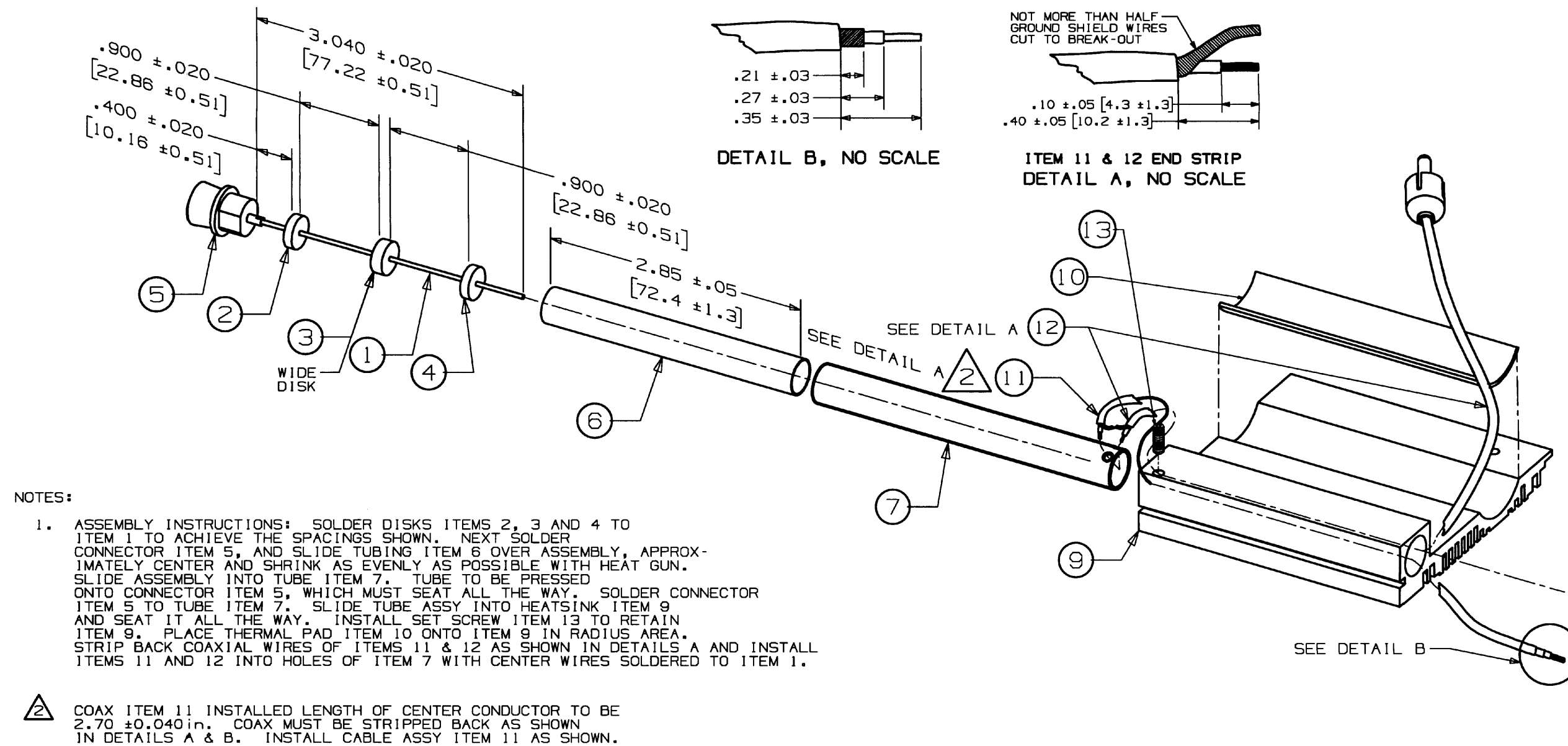
**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

**6.8 200-05669-0000 KT 76C FILTER/HEATSINK ASSY. Rev. 3**  
**200-05669-0001 KT 76C FILTER/HEATSINK ASSY. Rev. -**

SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0001
ITM 1	026-00027-0000	WIRE, CU, 18AWG	[IN]	3.04	3.04
ITM 2	047-12015-0001	CAPACITIVE DISK .083	[EA]	1	1
ITM 3	047-12015-0007	CAPACITIVE DISK	[EA]	1	1
ITM 4	047-12015-0001	CAPACITIVE DISK .083	[EA]	1	1
ITM 5	030-00059-0000	CONN COAX PNL MTD	[EA]	1	1
ITM 6	150-00026-0010	TUBING SHRINK 6&4G	[IN]	2.85	2.85
ITM 7	047-12016-0002	FILTER DIPLEXER END	[EA]	1	1
ITM 8	075-00173-0003	EXTRUSION, PLATED	[EA]		1
ITM 9	012-01653-0002	THERMAL PAD	[EA]		1
ITM 9	075-00173-0003	EXTRUSION, PLATED	[EA]	1	
ITM 10	012-01653-0002	THERMAL PAD	[EA]	1	
ITM 10	089-06691-0000	SET SCREW, HEX	[EA]		1
ITM 11	026-00013-0000	WIRE, COAX, RG-178B/U	[IN]	2.7	
ITM 12	155-02857-0001	CABLE HARNESS, CAVITY	[EA]	1	
ITM 13	089-06691-0000	SET SCREW, HEX	[EA]	1	
REF 1	300-05669-0000	FILTER/HEATSINK ASSY.	[RF]	X	
REF 1	300-05669-0001	FILTER/HEATSINK ASSY.	[RF]		X

**BENDIX/KING**  
KT 76C ATRBS TRANSPONDER

**BENDIX/KING**  
KT 76C ATRCBS TRANSPONDER

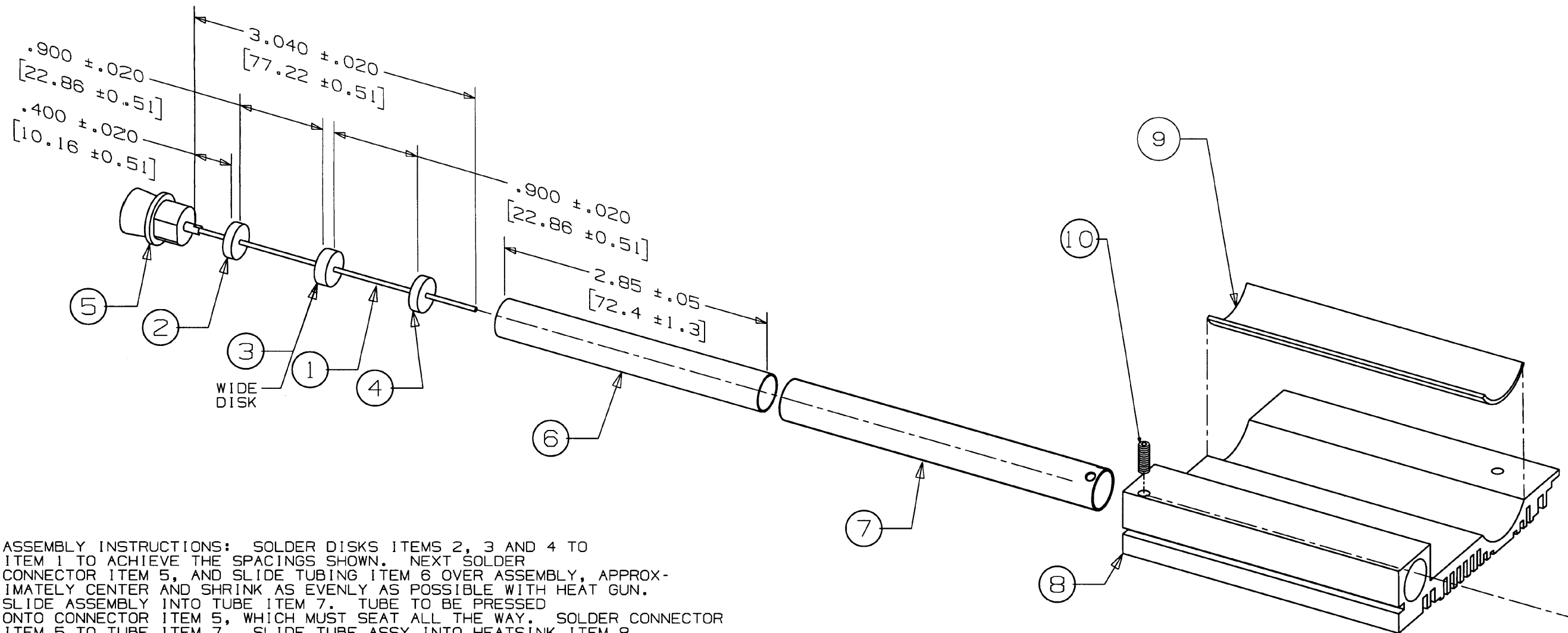


**ELECTRICAL SPECIFICATIONS:**

- S21 -- INSERTION LOSS 0.6 dB MAX FOR 1.03 GHz AND 1.09 GHz 30 dB MIN FOR 2.18 GHz.
- S11 -- RETURN LOSS = ≥ 10dB AT 1.03 GHz AND 1.09 GHz.

Figure 6-9  
Filter/Heatsink Assy. (Dwg. No. 300-05669-0000 Rev. 4)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER



NOTES:

1. ASSEMBLY INSTRUCTIONS: SOLDER DISKS ITEMS 2, 3 AND 4 TO ITEM 1 TO ACHIEVE THE SPACINGS SHOWN. NEXT SOLDER CONNECTOR ITEM 5, AND SLIDE TUBING ITEM 6 OVER ASSEMBLY, APPROXIMATELY CENTER AND SHRINK AS EVENLY AS POSSIBLE WITH HEAT GUN. SLIDE ASSEMBLY INTO TUBE ITEM 7. TUBE TO BE PRESSED ONTO CONNECTOR ITEM 5, WHICH MUST SEAT ALL THE WAY. SOLDER CONNECTOR ITEM 5 TO TUBE ITEM 7. SLIDE TUBE ASSY INTO HEATSINK ITEM 8 AND SEAT IT ALL THE WAY. INSTALL SET SCREW ITEM 10 TO RETAIN ITEM 7. PLACE THERMAL PAD ITEM 9 ONTO ITEM 8 IN RADIUS AREA.

ELECTRICAL SPECIFICATIONS:

- S21 -- INSERTION LOSS 0.6 dB MAX FOR 1.03 GHz AND 1.09 GHz 30 dB MIN FOR 2.18 GHz.
- S11 -- RETURN LOSS =  $\geq$  10dB AT 1.03 GHz AND 1.09 GHz.

Figure 6-10  
Filter/Heatsink Assy. (Dwg. No. 300-05669-0001 Rev. -)

**BENDIX/KING**  
**KT 76C ATRCBS TRANSPONDER**

**6.9 206-00371-0101 KT 76C SYSTEM SOFTWARE Rev. 0**  
**206-00371-0102 KT 76C SYSTEM SOFTWARE Rev. 0**

SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0101	-0102
-	057-05287-0101	SW MOD TAG	[EA]	1	
-	057-05287-0102	UNIT SFTWR V0102	[EA]		1
-	205-00885-0001	MAIN HW / SW	[EA]	1	
-	205-00885-0002	MAIN HW/SW KT 76C	[EA]		1

**205-00885-0001 KT 76C HARDWARE/SOFTWARE Rev. AA**  
**205-00885-0002 KT 76C HARDWARE/SOFTWARE Rev. 0**

SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0001	-0002
-	057-05252-0885	IDT	[EA]	1	1
-	057-05335-0001	DECAL 205 DASH 01	[EA]	1	
-	057-05335-0002	DECAL 205 DASH 02	[EA]		1
-	125-00929-0001	SW DEVICE SET	[EA]	1	1
	200-09098-0020	MAIN BD BOM KT76C	[EA]		1
	200-09098-0060	KT 76C MAIN BD ASSEMBLY	[EA]	1	
RF 1	300-09098-0000	MAIN BOARD ASSY. DWG.	[RF]		X
RF 1	300-09098-0060	MAIN BOARD ASSY. DWG.	[RF]	X	

**125-00929-0001 KT 76C SOFTWARE DEVICE Rev. 0**

SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0001
-	122-01613-0001	SW MAIN KT 76C	[EA]	1

**122-01613-0001 KT 76C MAIN SOFTWARE Rev. 0**

SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0001
-	120-02560-0001	PROCESSOR TMS370C742	[EA]	1

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

200-09098-0000 KT 76C MAIN BOARD Rev. AB  
 200-09098-0020 KT 76C MAIN BOARD Rev. AD  
 200-09098-0040 KT 76C MAIN BOARD Rev. AB  
 200-09098-0060 KT 76C MAIN BOARD Rev. -

SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0020	-0040	-0060
-	126-00136-0004	FIRMWARE	[EA]	1	1	1	1
C 3	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 7	106-05681-0016	CAP CH680PFNPO/50V	[EA]	1	1	1	1
C 8	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 9	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 10	096-01186-0014	CAP 10.0UF 16V 10%	[EA]	1	1	1	1
C 12	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 14	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 15	106-05681-0016	CAP CH680PFNPO/50V	[EA]	1	1	1	1
C 19	106-05330-0026	CAP CH33PFNPO/100V	[EA]	1	1	1	1
C 20	106-05330-0026	CAP CH33PFNPO/100V	[EA]	1	1	1	1
C 21	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	1
C 24	106-05391-0026	CAP CH390PFNPO/100	[EA]	1	1	1	1
C 29	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 32	106-05681-0016	CAP CH680PFNPO/50V	[EA]	1	1	1	1
C 33	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	1
C 35	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 36	106-05391-0026	CAP CH390PFNPO/100	[EA]	1	1	1	1
C 37	096-01186-0014	CAP 10.0UF 16V 10%	[EA]	1	1	1	1
C 38	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 39	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 40	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	1
C 41	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	1
C 42	106-05681-0016	CAP CH680PFNPO/50V	[EA]	1	1	1	1
C 43	117-07103-0000	CAP DC .01UF 2KV	[EA]	1	1	1	1
C 44	117-07103-0000	CAP DC .01UF 2KV	[EA]	1	1	1	1
C 45	101-00005-0000	CAP PP .05UF 2KV	[EA]	1	1	1	1
C 46	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 47	106-05391-0026	CAP CH390PFNPO/100	[EA]	1	1	1	1
C 48	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 49	106-05330-0026	CAP CH33PFNPO/100V	[EA]	1	1	1	1
C 50	106-05330-0026	CAP CH33PFNPO/100V	[EA]	1	1	1	1
C 51	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	1
C 52	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 53	106-05391-0026	CAP CH390PFNPO/100	[EA]	1	1	1	1
C 55	106-05681-0016	CAP CH680PFNPO/50V	[EA]	1	1	1	1
C 57	106-05101-0026	CAPCH100PFNPO/100V	[EA]	1	1	1	1
C 58	106-05391-0026	CAP CH390PFNPO/100	[EA]	1	1	1	1
C 61	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 62	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	
C 63	106-05681-0016	CAP CH680PFNPO/50V	[EA]	1	1	1	
C 64	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	
C 65	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 66	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	
C 67	106-05681-0016	CAP CH680PFNPO/50V	[EA]	1	1	1	1

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SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0020	-0040	-0060
C 68	106-05101-0026	CAPCH100PFNPO/100V	[EA]	1	1	1	1
C 69	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 70	106-05681-0016	CAP CH680PFNPO/50V	[EA]	1	1	1	1
C 72	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	1
C 73	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 76	106-05330-0026	CAP CH33PFNPO/100V	[EA]	1	1	1	1
C 78	106-05681-0016	CAP CH680PFNPO/50V	[EA]	1	1	1	1
C 79	106-05569-0020	CAP CH 5.6 PF	[EA]	1	1	1	1
C 80	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	1
C 81	106-05681-0016	CAP CH680PFNPO/50V	[EA]	1	1	1	1
C 82	106-05681-0016	CAP CH680PFNPO/50V	[EA]	1	1	1	1
C 83	106-05330-0026	CAP CH33PFNPO/100V	[EA]	1	1	1	1
C 84	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	1
C 85	106-05030-0020	CH 3.0PF NPO/100V	[EA]	1	1	1	1
C 86	106-05100-0023	CAP CH 10PF NPO100	[EA]	1	1	1	1
C 87	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	1
C 88	106-05103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 89	106-05681-0016	CAP CH680PFNPO/50V	[EA]	1	1	1	1
C 90	106-05391-0026	CAP CH390PFNPO/100	[EA]	1	1	1	1
C 91	096-01186-0032	CAP 2.2UF 35V 10%	[EA]	1	1	1	1
C 92	106-05103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 93	106-05391-0026	CAP CH390PFNPO/100	[EA]	1	1	1	1
C 94	106-05681-0016	CAP CH680PFNPO/50V	[EA]	1	1	1	1
C 95	106-05471-0026	CAP CH470PFNPO/100	[EA]	1	1	1	1
C 96	106-05030-0020	CH 3.0PF NPO/100V	[EA]	1	1	1	1
C 97	106-05100-0023	CAP CH 10PF NPO100	[EA]	1	1	1	1
C 98	106-05100-0023	CAP CH 10PF NPO100	[EA]	1	1	1	1
C 99	106-05100-0023	CAP CH 10PF NPO100	[EA]	1	1	1	1
C 100	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 101	106-05391-0026	CAP CH390PFNPO/100	[EA]	1	1	1	1
C 102	106-05330-0026	CAP CH33PFNPO/100V	[EA]	1	1	1	1
C 103	106-05101-0026	CAPCH100PFNPO/100V	[EA]	1	1	1	1
C 104	096-01186-0014	CAP 10.0UF 16V 10%	[EA]	1	1	1	1
C 105	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	1
C 106	106-05391-0026	CAP CH390PFNPO/100	[EA]	1	1	1	1
C 107	106-05103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 108	106-05150-0026	CAP CH15PFNPO/100V	[EA]	1	1	1	1
C 109	106-05681-0016	CAP CH680PFNPO/50V	[EA]	1	1	1	1
C 111	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 112	106-05330-0026	CAP CH33PFNPO/100V	[EA]	1	1	1	1
C 113	106-05150-0026	CAP CH15PFNPO/100V	[EA]	1	1	1	1
C 114	106-05330-0026	CAP CH33PFNPO/100V	[EA]	1	1	1	1
C 115	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 116	106-05150-0026	CAP CH15PFNPO/100V	[EA]	1	1	1	1
C 118	096-01186-0014	CAP 10.0UF 16V 10%	[EA]	1	1	1	1
C 119	106-05681-0016	CAP CH680PFNPO/50V	[EA]	1	1	1	1
C 120	106-05101-0026	CAPCH100PFNPO/100V	[EA]	1	1	1	1
C 121	106-05150-0026	CAP CH15PFNPO/100V	[EA]	1	1	1	1
C 122	106-05150-0026	CAP CH15PFNPO/100V	[EA]	1	1	1	1
C 123	106-05330-0026	CAP CH33PFNPO/100V	[EA]	1	1	1	1
C 124	106-05681-0016	CAP CH680PFNPO/50V	[EA]	1	1	1	1
C 125	106-05330-0026	CAP CH33PFNPO/100V	[EA]	1	1	1	1



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SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0020	-0040	-0060
C 126	106-05689-0020	CH 6.8PF NPO/100V	[EA]	1	1	1	1
C 127	106-05100-0023	CAP CH 10PF NP0100	[EA]	1	1	1	1
C 128	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	1
C 129	106-05681-0016	CAP CH680PFNP0/50V	[EA]	1	1	1	1
C 130	106-04759-0020	CAP CH 7.5 NPO/100	[EA]	1	1	1	1
C 131	106-04759-0020	CAP CH 7.5 NPO/100	[EA]	1	1	1	1
C 132	106-04759-0020	CAP CH 7.5 NPO/100	[EA]	1	1	1	1
C 133	106-04759-0020	CAP CH 7.5 NPO/100	[EA]	1	1	1	1
C 134	106-05470-0023	CAP CH 47PF NPO	[EA]	1	1	1	1
C 135	106-05240-0023	CAP CH 24PF NPO	[EA]	1	1	1	1
C 136	106-05820-0023	82PF 100V 1% CHIP CAP	[EA]	1	1	1	1
C 138	096-01186-0014	CAP 10.0UF 16V 10%	[EA]	1	1	1	1
C 139	106-05101-0026	CAPCH100PFNP0/100V	[EA]	1	1	1	1
C 140	106-05103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 141	106-05103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 142	106-05101-0026	CAPCH100PFNP0/100V	[EA]	1	1	1	1
C 143	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	1
C 144	106-04681-0016	CH 680PF NPO/50V	[EA]	1			
C 144	106-05681-0016	CAP CH680PFNP0/50V	[EA]		1	1	1
C 145	106-05101-0026	CAPCH100PFNP0/100V	[EA]	1	1	1	1
C 146	106-05101-0026	CAPCH100PFNP0/100V	[EA]	1	1	1	1
C 147	106-05101-0026	CAPCH100PFNP0/100V	[EA]	1	1	1	1
C 148	106-05101-0026	CAPCH100PFNP0/100V	[EA]	1	1	1	1
C 149	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	1
C 150	106-05820-0023	82PF 100V 1% CHIP CAP	[EA]	1	1	1	1
C 151	106-05100-0023	CAP CH 10PF NP0100	[EA]	1	1	1	1
C 202	106-04122-0016	CAPCH1200PFNP0/50V	[EA]	1	1	1	1
C 207	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	1
C 210	111-00002-0015	CAP CR3.3UF100V20%	[EA]	1	1	1	1
C 211	106-05101-0026	CAPCH100PFNP0/100V	[EA]	1	1	1	1
C 212	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 213	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 215	097-00215-0000	CAP AL ELECTROLYTC	[EA]	1	1	1	1
C 216	096-01186-0012	CAP 1.0UF 16V 10%	[EA]	1	1	1	1
C 217	097-00214-0002	CAP AL 220UF 25V	[EA]	1	1	1	1
C 218	097-00104-0056	CAP AL 220UF 100V	[EA]	1	1	1	1
C 219	106-05681-0016	CAP CH680PFNP0/50V	[EA]	1	1	1	
C 220	106-05103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 221	106-05103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 222	106-05103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 223	106-05103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 224	106-05103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 226	106-00110-0001	CAP CH22K X7R 500V	[EA]	1	1	1	1
C 227	106-04102-0026	CH 1KPF NPO/100V	[EA]	1	1	1	1
C 228	096-01186-0014	CAP 10.0UF 16V 10%	[EA]	1	1	1	1
C 229	096-01186-0014	CAP 10.0UF 16V 10%	[EA]	1	1	1	1
C 231	096-01186-0014	CAP 10.0UF 16V 10%	[EA]	1	1	1	1
C 233	106-04221-0026	CAP CH220PFNP0/100	[EA]	1	1	1	1
C 235	097-00217-0013	CAP EL 220UF 10V	[EA]	1	1	1	1
C 238	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	1
C 241	106-04223-0057	CAP CH 22KX7R/100V	[EA]	1	1	1	1
C 242	096-01186-0023	CAP 15UF 25V 10%	[EA]	1	1	1	1

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SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0020	-0040	-0060
C 243	106-05121-0026	CAPCH120PFNPO/100V	[EA]	1	1	1	1
C 244	106-05121-0026	CAPCH120PFNPO/100V	[EA]	1	1	1	1
C 245	106-05101-0026	CAPCH100PFNPO/100V	[EA]	1	1	1	1
C 246	106-05101-0026	CAPCH100PFNPO/100V	[EA]	1	1	1	1
C 247	106-05101-0026	CAPCH100PFNPO/100V	[EA]	1	1	1	1
C 248	106-05101-0026	CAPCH100PFNPO/100V	[EA]	1	1	1	1
C 249	106-05101-0026	CAPCH100PFNPO/100V	[EA]	1	1	1	1
C 250	106-05101-0026	CAPCH100PFNPO/100V	[EA]	1	1	1	1
C 251	106-05101-0026	CAPCH100PFNPO/100V	[EA]	1	1	1	1
C 252	106-05101-0026	CAPCH100PFNPO/100V	[EA]	1	1	1	1
C 253	106-05101-0026	CAPCH100PFNPO/100V	[EA]	1	1	1	1
C 254	106-05101-0026	CAPCH100PFNPO/100V	[EA]	1	1	1	1
C 255	106-05101-0026	CAPCH100PFNPO/100V	[EA]	1	1	1	1
C 256	106-05101-0026	CAPCH100PFNPO/100V	[EA]	1	1	1	1
C 257	106-05101-0026	CAPCH100PFNPO/100V	[EA]	1	1	1	1
C 258	096-01186-0014	CAP 10.0UF 16V 10%	[EA]	1	1	1	1
C 259	096-01186-0014	CAP 10.0UF 16V 10%	[EA]	1	1	1	1
C 260	096-01186-0014	CAP 10.0UF 16V 10%	[EA]	1	1	1	1
C 261	096-01186-0014	CAP 10.0UF 16V 10%	[EA]	1	1	1	1
C 262	096-01186-0014	CAP 10.0UF 16V 10%	[EA]	1	1	1	1
C 263	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 264	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 265	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 266	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 267	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 268	096-01186-0012	CAP 1.0UF 16V 10%	[EA]	1	1	1	1
C 269	106-04102-0557	CAP CH 1000PF 500 V	[EA]	1	1	1	1
C 270	106-04102-0557	CAP CH 1000PF 500 V	[EA]	1	1	1	1
C 271	118-00006-0000	CAP DC 470PF 500V	[EA]	1	1	1	1
C 272	097-00104-0056	CAP AL 220UF 100V	[EA]	1	1	1	1
C 273	111-00002-0015	CAP CR3.3UF100V20%	[EA]	1	1	1	1
C 274	111-00002-0015	CAP CR3.3UF100V20%	[EA]	1	1	1	1
C 275	096-01186-0023	CAP 15UF 25V 10%	[EA]	1	1	1	1
C 276	106-06473-0057	CAP CH .047UF 100V	[EA]	1	1	1	1
C 277	106-06473-0057	CAP CH .047UF 100V	[EA]	1	1	1	1
C 279	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 280	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 281	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	1
C 282	096-01186-0014	CAP 10.0UF 16V 10%	[EA]	1	1	1	1
C 283	106-04104-0047	CH 100KX7R/50V	[EA]	1	1	1	1
C 284	097-00081-0074	CAP AL 1KUF 10V	[EA]	1	1	1	1
C 285	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1	1	1	1
C 286	106-04103-0057	CAP CH 10KX7R/100V	[EA]	1			
C 287	106-05221-0026	CAP CH220PFNPO/100	[EA]	1	1	1	1
C 288	106-05330-0026	CAP CH33PFNPO/100V	[EA]	1	1	1	1
C 291	106-05681-0016	CAP CH680PFNPO/50V	[EA]		1	1	
C 292	106-05681-0016	CAP CH680PFNPO/50V	[EA]		1	1	1
C 293	106-05681-0016	CAP CH680PFNPO/50V	[EA]		1	1	1
C 294	106-04104-0047	CH 100KX7R/50V	[EA]		1	1	1
C 295	106-04104-0047	CH 100KX7R/50V	[EA]		1	1	1
C 297	106-04103-0057	CAP CH 10KX7R/100V	[EA]		1	1	
C 298	106-05472-0057	CAPCH4700PFX7R/100	[EA]	1	1	1	1

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SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0020	-0040	-0060
C 299	106-04103-0057	CAP CH 10KX7R/100V	[EA]				1
C 300	106-05681-0016	CAP CH680PFNPO/50V	[EA]				1
C 301	106-05103-0057	CAP CH 10KX7R/100V	[EA]				1
C 302	106-04104-0047	CH 100KX7R/50V	[EA]				1
C 304	106-04104-0047	CH 100KX7R/50V	[EA]				1
C 305	106-04104-0047	CH 100KX7R/50V	[EA]				1
C 306	106-04104-0047	CH 100KX7R/50V	[EA]				1
CJ 1	139-00000-0014	CKT JUMPER 0805	[EA]	1	1	1	1
CJ 2	139-00000-0014	CKT JUMPER 0805	[EA]	1	1	1	1
CR 4	007-06180-0000	DIO SW MMBD6050	[EA]	1	1	1	1
CR 5	007-06180-0000	DIO SW MMBD6050	[EA]	1	1	1	1
CR 6	007-06180-0000	DIO SW MMBD6050	[EA]	1	1	1	1
CR 7	007-05037-0002	DIO, 2KV	[EA]	1	1	1	1
CR 8	007-05037-0002	DIO, 2KV	[EA]	1	1	1	1
CR 9	007-06180-0000	DIO SW MMBD6050	[EA]	1	1	1	1
CR 10	007-06180-0000	DIO SW MMBD6050	[EA]	1	1	1	1
CR 11	007-06180-0000	DIO SW MMBD6050	[EA]	1	1	1	1
CR 12	007-06180-0000	DIO SW MMBD6050	[EA]	1	1	1	1
CR 13	007-06180-0000	DIO SW MMBD6050	[EA]	1	1	1	1
CR 14	007-06180-0000	DIO SW MMBD6050	[EA]	1	1	1	1
CR 15	007-06180-0000	DIO SW MMBD6050	[EA]	1	1	1	1
CR 16	007-06184-0000	DIO DUAL SWITCHING	[EA]	1	1	1	1
CR 17	007-06180-0000	DIO SW MMBD6050	[EA]	1	1	1	1
CR 18	007-06180-0000	DIO SW MMBD6050	[EA]	1	1	1	1
CR 19	007-06180-0000	DIO SW MMBD6050	[EA]	1	1	1	1
CR 21	007-06452-0000	SCHOTTKY, DUAL, SE	[EA]	1	1	1	1
CR 22	007-06184-0000	DIO DUAL SWITCHING	[EA]	1	1	1	1
CR 24	007-06177-0000	SMD DIO SI MMBD914	[EA]	1	1	1	1
CR 25	007-06437-0003	DIO 3A 200V SMD	[EA]	1	1	1	1
CR 26	007-06444-0002	DIO 1A 150V SMD	[EA]	1	1	1	1
CR 27	007-06437-0003	DIO 3A 200V SMD	[EA]	1	1	1	1
CR 28	007-06437-0003	DIO 3A 200V SMD	[EA]	1	1	1	1
CR 30	007-06129-0000	DIO S HV VAR223-40	[EA]	1	1	1	1
CR 31	007-06175-0001	DIO RECT	[EA]	1			
CR 32	007-05241-0003	TRNSRB 1500W 15V	[EA]	1	1	1	1
CR 33	007-06180-0000	DIO SW MMBD6050	[EA]	1	1	1	1
CR 34	007-06184-0000	DIO DUAL SWITCHING	[EA]	1	1	1	1
CR 35	007-06177-0000	SMD DIO SI MMBD914	[EA]	1	1	1	1
CR 36	007-06177-0000	SMD DIO SI MMBD914	[EA]	1	1	1	1
CR 37	007-06180-0000	DIO SW MMBD6050	[EA]	1	1	1	1
CR 38	007-05117-0000	DIO Z 3.3V SOT	[EA]	1	1	1	1
CR 39	007-06437-0003	DIO 3A 200V SMD	[EA]	1	1	1	1
CR 40	007-06227-0000	SOT23 DIO MMBD6100	[EA]	1	1	1	1
CR 41	007-06184-0000	DIO DUAL SWITCHING	[EA]	1	1	1	1
CR 42	007-06180-0000	DIO SW MMBD6050	[EA]	1	1	1	1
CR 43	007-06227-0000	SOT23 DIO MMBD6100	[EA]	1	1	1	1
CR 44	007-06180-0000	DIO SW MMBD6050	[EA]				1
E 3	008-00008-0001	TERM SPLIT TURR	[EA]	1	1	1	1
E 4	008-00008-0001	TERM SPLIT TURR	[EA]	1	1	1	1
F 1	036-00057-0015	FUSE 275 125V 7A	[EA]	1	1	1	1
FL 1	017-00263-0000	FLTR DIE BP 1030MH	[EA]	1	1	1	1
FL 2	017-00264-0000	FLTR DIE BP 959MHZ	[EA]	1	1	1	1

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SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0020	-0040	-0060
ITM 1	009-09098-0000	MAIN BOARD KT76C	[EA]	1			
ITM 1	009-09098-0020	MAIN BD. PC BOARD	[EA]		1		
ITM 1	009-09098-0040	KT 76C MAIN PC BOARD	[EA]			1	
ITM 1	009-09098-0060	KT 76C PC BOARD	[EA]				1
ITM 2	016-01082-0000	DC RTV 3145	[AR]	1	1	1	1
ITM 3	016-01040-0000	COATING TYPE AR	[AR]	1	1	1	1
ITM 4	033-00224-0000	SKT PLCC SM 20 PIN	[EA]	1	1	1	1
ITM 5	033-00224-0004	SKT PLCC SM 44 PIN	[EA]	1	1	1	1
ITM 6	047-12008-0004	IF FENCE ASSY	[EA]	1	1	1	1
ITM 7	047-12009-0002	IF COVER, PLATED	[EA]	1	1	1	1
ITM 8	025-00234-0000	20 KV WIRE	[IN]		4		
ITM 10	024-05021-0006	STRAP COPPER .035 X 10	[IN]	0.5			
ITM 11	024-05021-0004	STRAP COPPER .250 X 10	[IN]	0.5			
J 2	030-02170-0022	CONN CARD 44C	[EA]	1	1	1	1
J 3	030-02453-0002	CONNECTOR 4P	[EA]	1	1	1	
J 3	030-02453-0003	CONNECTOR 6P	[EA]				1
J 4	008-00048-0000	SLDRLS PIN & RECPT	[EA]	1	1	1	1
J 5	008-00048-0000	SLDRLS PIN & RECPT	[EA]	1	1	1	1
L 2	013-00172-0001	FERR BEAD SRFC MT	[EA]				1
L 2	013-00186-0000	FERR CHOKE Z-MAX	[EA]	1	1	1	
L 3	019-02660-0073	IND SM 470 NH 5%	[EA]	1	1	1	1
L 5	019-02660-0062	IND SM 15 5%	[EA]	1	1	1	1
L 6	019-02660-0062	IND SM 15 5%	[EA]	1	1	1	1
L 7	019-02660-0056	IND SM 56 2%	[EA]	1	1	1	1
L 8	019-02660-0056	IND SM 56 2%	[EA]	1	1	1	1
L 9	019-02660-0072	IND SM 680 NH 5%	[EA]	1	1	1	1
L 10	019-02660-0072	IND SM 680 NH 5%	[EA]	1	1	1	1
L 11	019-02660-0072	IND SM 680 NH 5%	[EA]	1	1	1	1
L 12	019-02660-0035	IND SM 3900 10%	[EA]	1	1	1	1
L 13	019-02660-0072	IND SM 680 NH 5%	[EA]	1	1	1	1
L 14	019-02660-0056	IND SM 56 2%	[EA]	1	1	1	1
L 15	019-02660-0073	IND SM 470 NH 5%	[EA]	1	1	1	1
L 22	013-00172-0001	FERR BEAD SRFC MT	[EA]	1	1	1	1
L 23	013-00172-0001	FERR BEAD SRFC MT	[EA]	1	1	1	1
L 24	013-00172-0001	FERR BEAD SRFC MT	[EA]	1	1	1	1
L 25	013-00172-0001	FERR BEAD SRFC MT	[EA]	1	1	1	1
L 26	013-00172-0001	FERR BEAD SRFC MT	[EA]	1	1	1	1
L 27	013-00172-0001	FERR BEAD SRFC MT	[EA]	1	1	1	1
L 28	013-00172-0001	FERR BEAD SRFC MT	[EA]	1	1	1	1
L 29	013-00172-0001	FERR BEAD SRFC MT	[EA]	1	1	1	1
L 30	019-02369-0001	IND 15UH	[EA]	1	1	1	1
L 31	019-02369-0001	IND 15UH	[EA]	1	1	1	1
Q 1	007-01041-0000	HEXFET IRLLO14 NCH	[EA]	1	1	1	
Q 1	007-01078-0001	DUAL N-CHANNEL 30V MOS	[EA]				1
Q 3	007-01041-0000	HEXFET IRLLO14 NCH	[EA]	1	1	1	
Q 4	007-00539-0000	XSTR MMBTH10	[EA]	1	1	1	1
Q 5	007-00383-0004	SOT-23 2N2222A XST	[EA]	1	1	1	
Q 10	007-01042-0000	XSTR PNP MMBT3640	[EA]	1	1	1	1
Q 11	007-00383-0004	SOT-23 2N2222A XST	[EA]	1	1	1	1
Q 12	007-00383-0004	SOT-23 2N2222A XST	[EA]	1	1	1	1
Q 13	007-00383-0004	SOT-23 2N2222A XST	[EA]	1	1	1	1
Q 14	007-00383-0004	SOT-23 2N2222A XST	[EA]	1	1	1	1

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SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0020	-0040	-0060
Q 15	007-00383-0004	SOT-23 2N2222A XST	[EA]	1	1	1	1
Q 16	007-00539-0000	XSTR MMBTH10	[EA]	1	1	1	1
Q 17	007-00383-0004	SOT-23 2N2222A XST	[EA]	1	1	1	1
Q 18	007-01042-0000	XSTR PNP MMBT3640	[EA]	1	1	1	1
Q 19	007-00539-0000	XSTR MMBTH10	[EA]	1	1	1	1
Q 20	007-00539-0000	XSTR MMBTH10	[EA]	1	1	1	1
Q 21	007-00539-0000	XSTR MMBTH10	[EA]	1	1	1	1
Q 22	007-00539-0000	XSTR MMBTH10	[EA]	1	1	1	1
Q 26	007-01018-0000	MOS FET LOGIC N-CH	[EA]	1	1	1	1
Q 34	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1	1	1
Q 35	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1	1	1
Q 36	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1	1	1
Q 37	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1	1	1
Q 38	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1	1	1
Q 39	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1	1	1
Q 40	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1	1	1
Q 41	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1	1	1
Q 42	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1	1	1
Q 45	007-01055-0001	XSTR IRC640 SENSEFET	[EA]	1	1	1	1
Q 46	007-00383-0004	SOT-23 2N2222A XST	[EA]	1	1	1	1
Q 47	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1	1	1
Q 48	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1	1	1
Q 49	007-00257-0001	MMBTA42 SO PKG	[EA]	1	1	1	1
Q 50	007-00903-0000	2N7002 MOSFET	[EA]	1	1	1	1
Q 51	007-00532-0000	XSTR MMBT4403	[EA]	1	1	1	1
Q 52	007-00254-0001	XSTR S PNP SOT-23	[EA]	1	1	1	1
Q 54	007-00903-0000	2N7002 MOSFET	[EA]				1
Q 55	007-00903-0000	2N7002 MOSFET	[EA]				1
Q 56	007-00261-0003	XSTR 2N2907A (SOT)	[EA]				1
Q 57	007-00903-0000	2N7002 MOSFET	[EA]				1
Q 58	007-00539-0000	XSTR MMBTH10	[EA]				1
R 2	139-02210-0010	RES CH 221 .1W 1%	[EA]	1	1	1	1
R 10	139-02000-0010	RES CH 200 OHMS 1% TW	[EA]	1	1	1	
R 10	139-02430-0010	RES CH 243 TW 1%	[EA]				1
R 17	139-01003-0010	RES CH 100K TW 1%	[EA]	1	1	1	1
R 18	139-01003-0010	RES CH 100K TW 1%	[EA]	1	1	1	1
R 24	139-00511-0010	RES CH 51.1 .1W 1%	[EA]	1	1	1	1
R 25	139-01003-0010	RES CH 100K TW 1%	[EA]	1	1	1	1
R 26	139-01003-0010	RES CH 100K TW 1%	[EA]	1	1	1	1
R 27	139-01001-0010	RES CH 1000 .1W 1%	[EA]				1
R 27	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	
R 28	139-01001-0010	RES CH 1000 .1W 1%	[EA]				1
R 28	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	
R 29	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 30	139-01003-0010	RES CH 100K TW 1%	[EA]	1	1	1	1
R 32	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	1
R 36	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 37	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 38	139-04021-0000	RES CH 4.02K EW 1%	[EA]	1	1	1	1
R 39	139-04021-0000	RES CH 4.02K EW 1%	[EA]	1	1	1	1
R 40	139-00200-0010	RES CH 20.0 .1W 1%	[EA]				1
R 40	139-01000-0010	RES CH 100 .1W 1%	[EA]	1	1	1	

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SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0020	-0040	-0060
R 47	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 48	139-04021-0000	RES CH 4.02K EW 1%	[EA]	1	1	1	1
R 49	139-04021-0000	RES CH 4.02K EW 1%	[EA]	1	1	1	1
R 54	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 55	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 56	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 57	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 58	139-04021-0000	RES CH 4.02K EW 1%	[EA]	1	1	1	1
R 59	139-04021-0000	RES CH 4.02K EW 1%	[EA]	1	1	1	1
R 60	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 61	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 62	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	1
R 63	139-00200-0010	RES CH 20.0 .1W 1%	[EA]	1			1
R 63	139-00511-0010	RES CH 51.1 .1W 1%	[EA]		1	1	
R 64	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 65	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 68	139-07503-0000	RES CHIP 750KEW1%	[EA]	1	1	1	1
R 69	139-07503-0000	RES CHIP 750KEW1%	[EA]	1	1	1	1
R 70	139-07503-0000	RES CHIP 750KEW1%	[EA]	1	1	1	1
R 71	139-07503-0000	RES CHIP 750KEW1%	[EA]	1	1	1	1
R 72	139-07503-0000	RES CHIP 750KEW1%	[EA]	1	1	1	1
R 73	139-07503-0000	RES CHIP 750KEW1%	[EA]	1	1	1	1
R 74	139-07503-0000	RES CHIP 750KEW1%	[EA]	1	1	1	1
R 75	139-07503-0000	RES CHIP 750KEW1%	[EA]	1	1	1	1
R 76	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 77	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 78	139-04021-0000	RES CH 4.02K EW 1%	[EA]	1	1	1	1
R 79	139-04021-0000	RES CH 4.02K EW 1%	[EA]	1	1	1	1
R 82	139-01000-0010	RES CH 100 .1W 1%	[EA]	1	1	1	1
R 83	139-02430-0010	RES CH 243 TW 1%	[EA]	1	1	1	
R 84	139-00511-0010	RES CH 51.1 .1W 1%	[EA]		1	1	
R 84	139-02000-0010	RES CH 200 OHMS 1% TW	[EA]	1			
R 85	139-04750-0010	RES CH 475 .1W 1%	[EA]	1	1	1	
R 86	139-00511-0010	RES CH 51.1 .1W 1%	[EA]		1	1	
R 86	139-01000-0010	RES CH 100 .1W 1%	[EA]	1			
R 87	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 88	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 89	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 90	139-03011-0010	RES CH 3.01K .1W 1%	[EA]	1		1	
R 90	139-03571-0010	RES CH 3.57K TW 1%	[EA]		1		1
R 91	139-02432-0010	RES CH 24300 .1W 1%	[EA]		1	1	1
R 91	139-03322-0010	RES CH 33.2K TW 1%	[EA]	1			
R 92	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 93	139-04021-0000	RES CH 4.02K EW 1%	[EA]	1	1	1	1
R 94	139-04021-0000	RES CH 4.02K EW 1%	[EA]	1	1	1	1
R 101	139-01001-0010	RES CH 1000 .1W 1%	[EA]	1	1	1	
R 102	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	
R 103	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	
R 104	139-02432-0010	RES CH 24300 .1W 1%	[EA]	1	1	1	
R 105	139-07501-0010	RES CH 7.5K .1W 1%	[EA]	1	1	1	1
R 106	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 107	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1

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SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0020	-0040	-0060
R 108	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 109	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 110	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 111	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 112	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 113	139-04021-0000	RES CH 4.02K EW 1%	[EA]	1	1	1	1
R 114	139-04021-0000	RES CH 4.02K EW 1%	[EA]	1	1	1	1
R 115	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 116	139-01001-0010	RES CH 1000 .1W 1%	[EA]	1	1	1	1
R 117	139-00511-0010	RES CH 51.1 .1W 1%	[EA]	1	1	1	1
R 118	139-01001-0010	RES CH 1000 .1W 1%	[EA]	1	1	1	1
R 124	139-03921-0010	RES CH 3.92K TW 1%	[EA]	1	1	1	1
R 125	139-01001-0010	RES CH 1000 .1W 1%	[EA]	1	1	1	1
R 126	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 128	139-03011-0010	RES CH 3.01K .1W 1%	[EA]	1	1	1	1
R 130	139-00681-0010	RES CH 68.1 OHMS 1% TW	[EA]	1	1	1	1
R 131	139-00100-0010	RES CH 10 OHMS 1% TW	[EA]	1	1	1	1
R 132	133-00560-0004	RES VA SMD 200 QW	[EA]	1		1	
R 132	133-00560-0005	RES VA SMD 500 QW	[EA]				1
R 132	133-00560-0006	RES VA SMD 1K QW	[EA]		1		
R 133	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 134	139-01001-0010	RES CH 1000 .1W 1%	[EA]	1	1	1	1
R 135	139-01001-0010	RES CH 1000 .1W 1%	[EA]	1	1	1	1
R 136	139-00511-0010	RES CH 51.1 .1W 1%	[EA]	1	1	1	1
R 137	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 138	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 139	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 140	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 141	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 143	139-04750-0010	RES CH 475 .1W 1%	[EA]	1	1	1	1
R 144	139-00100-0010	RES CH 10 OHMS 1% TW	[EA]	1	1	1	1
R 145	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 146	139-03011-0010	RES CH 3.01K .1W 1%	[EA]	1	1	1	
R 147	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	
R 147	139-03011-0010	RES CH 3.01K .1W 1%	[EA]				1
R 148	139-03011-0010	RES CH 3.01K .1W 1%	[EA]	1	1	1	1
R 149	139-02430-0010	RES CH 243 TW 1%	[EA]	1	1	1	1
R 150	139-03572-0010	RES CH 35700 .1W 1%	[EA]	1	1	1	1
R 151	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	1
R 152	139-00332-0010	RES CH 33.2 OHM TW 1%	[EA]	1	1	1	
R 152	139-00681-0010	RES CH 68.1 OHMS 1% TW	[EA]				1
R 153	139-04750-0010	RES CH 475 .1W 1%	[EA]	1	1	1	1
R 154	139-03011-0010	RES CH 3.01K .1W 1%	[EA]	1	1	1	1
R 155	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 156	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 157	139-01000-0010	RES CH 100 .1W 1%	[EA]	1	1	1	1
R 158	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	1
R 159	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	1
R 160	139-03011-0010	RES CH 3.01K .1W 1%	[EA]	1	1	1	1
R 161	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	1
R 162	139-00332-0010	RES CH 33.2 OHM TW 1%	[EA]	1	1	1	
R 162	139-00681-0010	RES CH 68.1 OHMS 1% TW	[EA]				1

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SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0020	-0040	-0060
R 163	139-00511-0010	RES CH 51.1 .1W 1%	[EA]	1	1	1	1
R 164	139-01300-0010	RES CH 130 .1W 1%	[EA]	1	1	1	1
R 165	133-00560-0004	RES VA SMD 200 QW	[EA]	1	1	1	1
R 167	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	1
R 171	139-00100-0010	RES CH 10 OHMS 1% TW	[EA]	1	1	1	1
R 172	139-04750-0010	RES CH 475 .1W 1%	[EA]	1	1	1	1
R 174	139-04750-0010	RES CH 475 .1W 1%	[EA]	1	1	1	1
R 175	139-00100-0010	RES CH 10 OHMS 1% TW	[EA]	1	1	1	1
R 176	139-01300-0010	RES CH 130 .1W 1%	[EA]	1	1	1	1
R 177	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	1
R 178	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 182	139-00332-0010	RES CH 33.2 OHM TW 1%	[EA]	1	1	1	
R 182	139-00681-0010	RES CH 68.1 OHMS 1% TW	[EA]				1
R 183	139-04750-0010	RES CH 475 .1W 1%	[EA]	1	1	1	1
R 184	139-00200-0010	RES CH 20.0 .1W 1%	[EA]	1			
R 184	139-00332-0010	RES CH 33.2 OHM TW 1%	[EA]		1	1	1
R 185	139-03011-0010	RES CH 3.01K .1W 1%	[EA]	1	1	1	1
R 186	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 187	139-03010-0010	RES CH 301 .1W 1%	[EA]	1	1	1	1
R 188	139-03011-0010	RES CH 3.01K .1W 1%	[EA]	1	1	1	1
R 189	139-00100-0010	RES CH 10 OHMS 1% TW	[EA]	1	1	1	
R 189	139-00243-0010	CHIP RES. 24.3 OHMS 1/	[EA]				1
R 190	139-04750-0010	RES CH 475 .1W 1%	[EA]	1	1	1	
R 190	139-06191-0010	RES CH 6.19K TW 1%	[EA]				1
R 191	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	
R 191	139-01003-0010	RES CH 100K TW 1%	[EA]				1
R 192	139-04750-0010	RES CH 475 .1W 1%	[EA]	1	1	1	1
R 193	139-04750-0010	RES CH 475 .1W 1%	[EA]	1	1	1	1
R 194	139-04750-0010	RES CH 475 .1W 1%	[EA]	1	1	1	1
R 195	139-04750-0010	RES CH 475 .1W 1%	[EA]	1	1	1	1
R 199	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 200	139-01001-0010	RES CH 1000 .1W 1%	[EA]	1	1	1	1
R 201	139-00100-0010	RES CH 10 OHMS 1% TW	[EA]	1	1	1	1
R 202	139-01001-0010	RES CH 1000 .1W 1%	[EA]	1	1	1	1
R 203	139-04750-0010	RES CH 475 .1W 1%	[EA]	1	1	1	1
R 204	139-00332-0010	RES CH 33.2 OHM TW 1%	[EA]	1	1	1	1
R 205	139-02430-0010	RES CH 243 TW 1%	[EA]	1	1	1	1
R 206	139-02430-0010	RES CH 243 TW 1%	[EA]	1	1	1	1
R 207	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	1
R 208	139-02430-0010	RES CH 243 TW 1%	[EA]	1	1	1	1
R 209	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	1
R 210	139-02430-0010	RES CH 243 TW 1%	[EA]	1	1	1	1
R 211	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	1
R 212	139-01000-0010	RES CH 100 .1W 1%	[EA]	1	1	1	1
R 213	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	1
R 412	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 413	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 414	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 415	139-01002-0010	RES CH 10K TW 1%	[EA]	1			
R 416	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 420	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 421	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1



**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0020	-0040	-0060
R 423	139-03921-0010	RES CH 3.92K TW 1%	[EA]	1	1	1	1
R 424	139-05621-0010	5.62K RESISTOR	[EA]	1	1	1	1
R 425	139-05621-0010	5.62K RESISTOR	[EA]	1	1	1	1
R 426	139-05621-0010	5.62K RESISTOR	[EA]	1	1	1	1
R 427	139-05621-0010	5.62K RESISTOR	[EA]	1	1	1	1
R 428	139-05621-0010	5.62K RESISTOR	[EA]	1	1	1	1
R 430	139-03571-0010	RES CH 3.57K TW 1%	[EA]	1	1	1	1
R 431	139-05621-0010	5.62K RESISTOR	[EA]	1	1	1	1
R 432	139-03921-0010	RES CH 3.92K TW 1%	[EA]	1	1	1	1
R 433	139-02431-0010	RES CH 2.43K .1W 1%	[EA]	1	1	1	1
R 434	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	1
R 435	139-05621-0010	5.62K RESISTOR	[EA]	1	1	1	1
R 437	139-01001-0010	RES CH 1000 .1W 1%	[EA]	1	1	1	1
R 439	139-03011-0010	RES CH 3.01K .1W 1%	[EA]	1			
R 439	139-03320-0010	RES CH 332 .1W 1%	[EA]		1	1	
R 441	139-01001-0010	RES CH 1000 .1W 1%	[EA]		1	1	
R 441	139-07501-0010	RES CH 7.5K .1W 1%	[EA]	1			
R 442	139-03921-0010	RES CH 3.92K TW 1%	[EA]	1	1	1	1
R 443	139-03921-0010	RES CH 3.92K TW 1%	[EA]	1	1	1	1
R 451	139-00000-0004	RES CH 0 EW	[EA]			0.9	
R 451	139-00000-0014	CKT JUMPER 0805	[EA]	0.9	0.9		0.1
R 451	139-01004-0010	RES CH 1M TW 1%	[EA]	0.1	0.1	0.1	0.9
R 452	139-00000-0004	RES CH 0 EW	[EA]			0.1	
R 452	139-00000-0014	CKT JUMPER 0805	[EA]	0.1	0.1		
R 452	139-01004-0010	RES CH 1M TW 1%	[EA]	0.9	0.9	0.9	1
R 453	139-01004-0010	RES CH 1M TW 1%	[EA]	1	1	1	1
R 455	139-02210-0010	RES CH 221 .1W 1%	[EA]	1	1	1	1
R 456	139-05113-0010	RES CH TW 1%	[EA]	1	1	1	1
R 458	139-00200-0010	RES CH 20.0 .1W 1%	[EA]	1	1	1	1
R 459	139-03572-0010	RES CH 35700 .1W 1%	[EA]	1	1	1	1
R 460	139-00909-0000	RES CH 90.9 EW 1%	[EA]	1	1	1	1
R 461	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 463	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 467	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 468	139-02373-0010	RES CH 237K TW 1%	[EA]	1	1	1	1
R 469	139-02373-0010	RES CH 237K TW 1%	[EA]	1	1	1	1
R 482	139-03320-0010	RES CH 332 .1W 1%	[EA]	1	1	1	1
R 483	139-01102-0010	RES CH 11K .1W 1%	[EA]	1	1	1	1
R 488	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 489	139-01004-0010	RES CH 1M TW 1%	[EA]	1	1	1	1
R 490	139-01004-0010	RES CH 1M TW 1%	[EA]	1	1	1	1
R 491	139-01004-0010	RES CH 1M TW 1%	[EA]	1	1	1	1
R 492	139-01004-0010	RES CH 1M TW 1%	[EA]	1	1	1	1
R 493	139-01004-0010	RES CH 1M TW 1%	[EA]	1	1	1	1
R 494	139-01004-0010	RES CH 1M TW 1%	[EA]	1	1	1	1
R 495	139-01004-0010	RES CH 1M TW 1%	[EA]	1	1	1	1
R 496	139-01004-0010	RES CH 1M TW 1%	[EA]	1	1	1	1
R 497	139-01004-0010	RES CH 1M TW 1%	[EA]	1	1	1	1
R 498	139-01004-0010	RES CH 1M TW 1%	[EA]	1	1	1	1
R 499	139-01004-0010	RES CH 1M TW 1%	[EA]	1	1	1	1
R 500	139-01004-0010	RES CH 1M TW 1%	[EA]	1	1	1	1
R 503	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0020	-0040	-0060
R 504	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 505	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	1
R 506	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	1
R 507	139-09092-0010	RES CH 90.9K TW 1%	[EA]	1	1	1	1
R 508	139-00332-0000	RES CH 33.2 EW 1%	[EA]	1	1	1	1
R 509	139-07501-0010	RES CH 7.5K .1W 1%	[EA]	1	1	1	1
R 510	139-01001-0000	RES CHIP 1K EW 1%	[EA]	1	1	1	1
R 512	139-08061-0000	RES CH 8.06K EW 1%	[EA]	1	1	1	1
R 513	139-08061-0000	RES CH 8.06K EW 1%	[EA]	1	1	1	1
R 514	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 515	139-00909-0000	RES CH 90.9 EW 1%	[EA]	1	1	1	1
R 516	139-01001-0010	RES CH 1000 .1W 1%	[EA]		1	1	1
R 516	139-04751-0010	RES CH 4.75K .1W 1%	[EA]	1			
R 517	139-00100-0010	RES CH 10 OHMS 1% TW	[EA]	1	1	1	1
R 518	139-00100-0010	RES CH 10 OHMS 1% TW	[EA]	1	1	1	1
R 519	139-00000-0004	RES CH 0 EW	[EA]				1
R 519	139-00100-0010	RES CH 10 OHMS 1% TW	[EA]	1	1	1	
R 520	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	1
R 521	139-02001-0010	RES CH 2.00K TW 1%	[EA]	1	1	1	1
R 522	139-01000-0010	RES CH 100 .1W 1%	[EA]	1	1	1	
R 523	139-01001-0010	RES CH 1000 .1W 1%	[EA]	1	1	1	1
R 524	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 525	139-01002-0010	RES CH 10K TW 1%	[EA]	1	1	1	1
R 526	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 527	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 528	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 529	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 530	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 531	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 532	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 533	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 534	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 535	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 536	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 537	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 538	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 539	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 540	139-04752-0010	RES CH 47.5K TW 1%	[EA]	1	1	1	1
R 542	139-02003-0010	RES CH 200K .1W 1%	[EA]	1	1	1	1
R 543	139-04021-0000	RES CH 4.02K EW 1%	[EA]	1	1	1	1
R 544	139-07503-0000	RES CHIP 750KEW1%	[EA]	1	1	1	1
R 545	139-07503-0000	RES CHIP 750KEW1%	[EA]	1	1	1	1
R 546	139-01001-0030	RES CH 1000 HW 1%	[EA]	1	1	1	1
R 547	139-01001-0030	RES CH 1000 HW 1%	[EA]	1	1	1	1
R 548	139-00332-0010	RES CH 33.2 OHM TW 1%	[EA]				1
R 548	139-00511-0010	RES CH 51.1 .1W 1%	[EA]	1	1	1	
R 549	139-00332-0010	RES CH 33.2 OHM TW 1%	[EA]				1
R 549	139-00511-0010	RES CH 51.1 .1W 1%	[EA]	1			
R 549	139-03010-0010	RES CH 301 .1W 1%	[EA]		1	1	
R 550	139-00511-0010	RES CH 51.1 .1W 1%	[EA]	1	1	1	1
R 551	139-00511-0010	RES CH 51.1 .1W 1%	[EA]	1	1	1	1
R 552	139-01003-0010	RES CH 100K TW 1%	[EA]	1	1	1	1

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

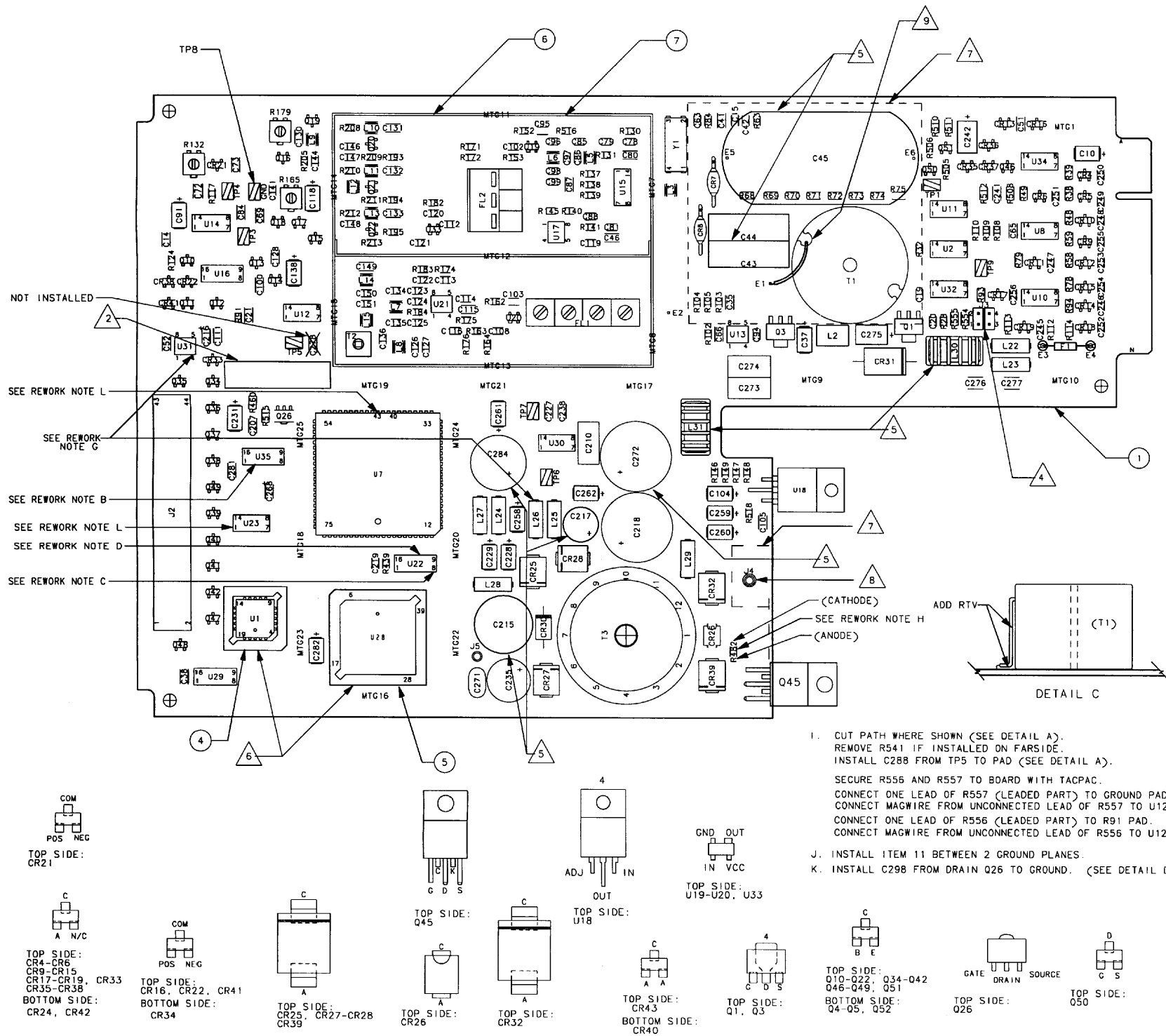
SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0020	-0040	-0060
R 553	139-02002-0010	RES CH 20K TW 1%	[EA]	1	1	1	1
R 554	139-00000-0004	RES CH 0 EW	[EA]	1	1	1	1
R 555	139-00000-0004	RES CH 0 EW	[EA]	1	1	1	1
R 556	136-01002-0062	RES PF 10K EW 1%	[EA]	1			
R 556	139-01002-0010	RES CH 10K TW 1%	[EA]		1	1	1
R 557	136-02001-0062	RES PF 2K EW 1%	[EA]	1			
R 557	139-02001-0010	RES CH 2.00K TW 1%	[EA]		1	1	1
R 558	131-00200-0013	RES CF 20 EW 5%	[EA]	1			
R 558	139-00200-0010	RES CH 20.0 .1W 1%	[EA]		1	1	1
R 559	136-01002-0062	RES PF 10K EW 1%	[EA]	1			
R 559	139-01002-0010	RES CH 10K TW 1%	[EA]		1	1	1
R 560	139-01002-0010	RES CH 10K TW 1%	[EA]		1	1	1
R 562	139-00000-0004	RES CH 0 EW	[EA]		1	1	1
R 563	139-00000-0044	RES CH 0 1W	[EA]		1	1	1
R 566	139-00511-0010	RES CH 51.1 .1W 1%	[EA]		1	1	1
R 567	139-01000-0010	RES CH 100 .1W 1%	[EA]		1	1	
R 568	139-00511-0010	RES CH 51.1 .1W 1%	[EA]		1	1	
R 569	139-00511-0010	RES CH 51.1 .1W 1%	[EA]		1	1	1
R 570	139-00000-0014	CKT JUMPER 0805	[EA]		1	1	
R 571	133-00560-0008	RES VA SMD 5K QW	[EA]		1	1	1
R 573	139-01002-0010	RES CH 10K TW 1%	[EA]				1
R 574	139-01002-0010	RES CH 10K TW 1%	[EA]				1
R 575	139-01002-0010	RES CH 10K TW 1%	[EA]				1
R 576	139-02430-0010	RES CH 243 TW 1%	[EA]				1
R 577	139-01001-0010	RES CH 1000 .1W 1%	[EA]				1
R 578	139-02001-0010	RES CH 2.00K TW 1%	[EA]				1
R 579	139-02001-0010	RES CH 2.00K TW 1%	[EA]				1
R 580	139-01001-0010	RES CH 1000 .1W 1%	[EA]				1
R 581	139-00511-0010	RES CH 51.1 .1W 1%	[EA]				1
R 584	139-01003-0010	RES CH 100K TW 1%	[EA]				1
R 586	139-07501-0010	RES CH 7.5K .1W 1%	[EA]				1
R 587	133-00560-0006	RES VA SMD 1K QW	[EA]				1
R 588	139-01501-0010	RES CH 1500 .1W 1%	[EA]				1
R 589	139-01002-0010	RES CH 10K TW 1%	[EA]				1
R 590	139-01002-0010	RES CH 10K TW 1%	[EA]				1
R 591	139-01002-0010	RES CH 10K TW 1%	[EA]				1
R 592	139-02002-0010	RES CH 20K TW 1%	[EA]				1
R 593	139-02002-0010	RES CH 20K TW 1%	[EA]				1
R 594	139-01003-0010	RES CH 100K TW 1%	[EA]				1
R 595	139-01003-0010	RES CH 100K TW 1%	[EA]				1
R 596	139-04752-0010	RES CH 47.5K TW 1%	[EA]				1
R 597	139-01001-0010	RES CH 1000 .1W 1%	[EA]				1
T 1	019-07275-0001	HV TRANSFORMER	[EA]	1	1	1	1
T 3	019-07278-0001	TRANSFORMER POWER	[EA]	1	1	1	1
TP 1	008-00309-0000	TEST POINT SURF MNT	[EA]	1	1	1	1
TP 3	008-00309-0000	TEST POINT SURF MNT	[EA]	1	1	1	1
TP 4	008-00309-0000	TEST POINT SURF MNT	[EA]	1	1	1	1
TP 5	008-00309-0000	TEST POINT SURF MNT	[EA]	1	1	1	1
TP 6	008-00309-0000	TEST POINT SURF MNT	[EA]	1	1	1	1
TP 7	008-00309-0000	TEST POINT SURF MNT	[EA]	1	1	1	1
TP 8	008-00309-0000	TEST POINT SURF MNT	[EA]	1	1	1	1
TP 9	008-00309-0000	TEST POINT SURF MNT	[EA]	1	1	1	1

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0020	-0040	-0060
TP 10	008-00309-0000	TEST POINT SURF MNT	[EA]				1
TP 12	008-00309-0000	TEST POINT SURF MNT	[EA]				1
U 1	122-30129-9999	SEE 12600136XXXX FOR L	[RF]	0	0	0	1
U 2	123-00074-0003	IC 74HC74 SO PKG	[EA]	1	1	1	1
U 7	120-02556-0000	FPGA AT6002	[EA]	1	1	1	1
U 8	120-03163-0001	LM2901 SO-14 COMP	[EA]	1	1	1	1
U 10	120-03163-0001	LM2901 SO-14 COMP	[EA]	1	1	1	1
U 11	120-03163-0001	LM2901 SO-14 COMP	[EA]	1	1	1	1
U 12	120-03177-0005	COMPARATOR, DUAL, LM3	[EA]	1	1	1	1
U 13	120-03053-0010	IC LM2904 SO PKG	[EA]	1	1	1	1
U 14	120-03177-0005	COMPARATOR, DUAL, LM3	[EA]	1	1	1	1
U 15	123-00004-1003	74AC04 SO PKG	[EA]	1	1	1	1
U 16	123-04053-0004	MUX, 2/CHAN ALOG	[EA]	1	1	1	1
U 17	120-03053-0010	IC LM2904 SO PKG	[EA]	1	1	1	1
U 18	120-03580-0000	1.5A LOW DROPOUT	[EA]	1	1	1	1
U 19	120-03644-0000	MMIC 1GHZ LONO AMP	[EA]	1	1	1	1
U 20	120-03644-0000	MMIC 1GHZ LONO AMP	[EA]	1	1	1	1
U 21	120-03526-0000	IAM81008	[EA]	1	1	1	1
U 22	124-00163-1003	74ACT163 SO PKG	[EA]	1	1	1	
U 23	123-00003-0003	IC 74HC03 SOIC	[EA]	1	1	1	1
U 28	122-01613-9999	KT 76C S/W MPU-8K EPRO	[RF]	0	0	0	1
U 29	124-00237-0003	74HCT237 3 TO 8 LINE D	[EA]	1	1	1	1
U 30	120-03661-0001	HV9110NG PWM CONTROL	[EA]	1	1	1	1
U 31	120-03053-0010	IC LM2904 SO PKG	[EA]	1	1	1	1
U 32	124-00008-1003	74ACT08 SOIC	[EA]	1	1	1	
U 32	124-00011-0003	IC 74HCT11 SO PKG	[EA]				1
U 33	120-03644-0000	MMIC 1GHZ LONO AMP	[EA]	1	1	1	1
U 34	120-03163-0001	LM2901 SO-14 COMP	[EA]	1	1	1	1
U 35	120-03667-0001	REGULATOR ADJ + V	[EA]	1	1	1	1
U 36	120-02679-0001	NAND GATE, SINGLE 2-I	[EA]				1
U 37	124-00008-1003	74ACT08 SOIC	[EA]		1	1	
U 39	124-00008-1003	74ACT08 SOIC	[EA]				1
U 40	120-03163-0001	LM2901 SO-14 COMP	[EA]				1
U 41	123-00074-2003	DUAL D-TYPE FLIP-FLOP	[EA]				1
Y 1	044-00344-0000	XTAL SM 48MHZ	[EA]	1	1	1	1
Y 2	044-00349-0005	XTAL SMT 24.000MHZ	[EA]				1
REF 1	300-09098-0000	KT 76C MAIN ASSY. DWG.	[RF]	X			
REF 1	300-09098-0020	KT 76C MAIN ASSY. DWG.	[RF]		X		
REF 1	300-09098-0040	KT 76C MAIN ASSY. DWG.	[RF]			X	
REF 1	300-09098-0060	KT 76C MAIN ASSY. DWG.	[RF]				X
REF 1	002-09098-0000	KT 76C MAIN SCHEMATIC	[RF]	X			
REF 1	002-09098-0020	KT 76C MAIN SCHEMATIC	[RF]		X		
REF 1	002-09098-0040	KT 76C MAIN SCHEMATIC	[RF]			X	
REF 1	002-09098-0060	KT 76C MAIN SCHEMATIC	[RF]				X

**BENDIX/KING**  
KT 76C ATRBS TRANSPONDER

**BENDIX/KING**  
**KT 76C ATRCBS TRANSPONDER**



**NOTES:**

1. PRIOR TO POST COATING BOTH SIDES OF P.C. BOARD WITH ITEM 3, MASK OFF ALL MOUNTING AREAS AND REFERENCE DESIGNATORS: E1-E6, J2-J5, MTG1, MTG10-MTG25, MTG7-MTG9, R132, R165, R179, TP1, TP3-TP9, BODIES OF Q45 AND U18, ITEM 5, U1, U28, FL1, FL2, GOLD FINGERS OF J1.
2. PRINTED CIRCUIT ASSEMBLY IDENTIFICATION MUST BE IN ACCORDANCE WITH SPEC. 001-01101-0000.
3. LIQUID STAKE ALL FASTENERS PER SPEC. 001-01080-0000.
4. CLIP PIN #4 OF J3 FOR KEYING.
5. APPLY ITEM 2 RTV TO HOLD C43, C44, AND C45 TOGETHER AND FORM A .25" FILLET ON BOTH BOTTOM SIDES OF C45. AVOID PLACING ITEM 2 RTV ON R74 AND R75. APPLY ITEM 2 RTV TO HOLD C218 AND C272 TOGETHER. APPLY ITEM 2 RTV TO HOLD L30 AND L31 TO P.C. BOARD. APPLY ITEM 2 RTV TO HOLD C284, C215, C235, C217 AND E1 TO P.C. BOARD.
6. U28 AND U1 WILL BE INSTALLED WITH A SOCKET.
7. THE FOLLOWING AREAS ARE TO RECEIVE .004" TO .008" OF POSTCOAT (ITEM 3) ON BOTH FAR AND NEARSIDE OF P.C. BOARD. ALL SURFACES WITHIN HIGH VOLTAGE POWER SUPPLY AREA, C43, C44, C45, CR7, CR8, E1, R68, R69, R70, R71, R72, R73, R74, R75, J4 AREA FAR SIDE AND AREA SURROUNDING J4 NEAR SIDE.
8. J4 TO RECEIVE .002" TO .004" OF POSTCOAT (ITEM 3) DURING FINAL ASSEMBLY.
9. WIRE E1 IS TO FOLLOW SHAPE OF REFERENCE DRAWING. (SEE DETAIL C)

**REWORK NOTES:**

USE TACPAC 016-01144-0000 AND ACCELERATOR 016-01144-0001 AS NEEDED.

- A. (REVISION NOTE A DELETED)
- B. TACPAC R558 TO TOP OF U35. CONNECT R558 BETWEEN U35 PIN 3 AND U35 PIN 15.
- C. CONNECT MAGWIRE FROM U22 PIN 8 TO U28 PIN 39. REWORK CAN ALSO BE DONE BY USING VIA HOLES OF THE RESPECTIVE PADS ON FAR SIDE OF BOARD.
- D. TACPAC R559 TO TOP OF U22. CONNECT ONE LEAD OF R559 TO U22 PIN 16. MAGWIRE OTHER LEAD OF R559 TO U28 PIN 28. REWORK CAN ALSO BE DONE BY USING VIA HOLES OF THE RESPECTIVE PADS ON FAR SIDE OF BOARD.
- E. INSTALL C144 BETWEEN PAD AND GROUND. INSTALL C287 BETWEEN R205 PAD AND GROUND. (SEE DETAIL B)
- F. INSTALL ITEM 10 BETWEEN 2 GROUND PLANES.
- G. LIFT U31 PIN 4. CONNECT MAGWIRE FROM LIFTED U31 PIN 4 TO L26.
- H. TACPAC CR43 ACROSS R482. (ONE ANODE LEAD ONLY NEEDS TO MAKE CONNECTION)
- L. 1. REMOVE MAG WIRE FROM U7 PINS 40 & 43. 2. REMOVE PINS 12 & 13 OF U23 FROM GROUND. 3. CONNECT MAG WIRE FROM U23 PINS 12 & 13 TO U 23 PIN B. 4. CONNECT MAG WIRE FROM U23 PIN3 TO U23 PIN 11. 5. ADD R415 TO BOARD.

I. CUT PATH WHERE SHOWN (SEE DETAIL A). REMOVE R541 IF INSTALLED ON FAR SIDE. INSTALL C288 FROM TP5 TO PAD (SEE DETAIL A). SECURE R556 AND R557 TO BOARD WITH TACPAC. CONNECT ONE LEAD OF R557 (LEADED PART) TO GROUND PAD. CONNECT MAGWIRE FROM UNCONNECTED LEAD OF R557 TO U12 PIN 4. CONNECT ONE LEAD OF R556 (LEADED PART) TO R91 PAD. CONNECT MAGWIRE FROM UNCONNECTED LEAD OF R556 TO U12 PIN 4.

J. INSTALL ITEM 11 BETWEEN 2 GROUND PLANES.

K. INSTALL C298 FROM DRAIN Q26 TO GROUND. (SEE DETAIL D)

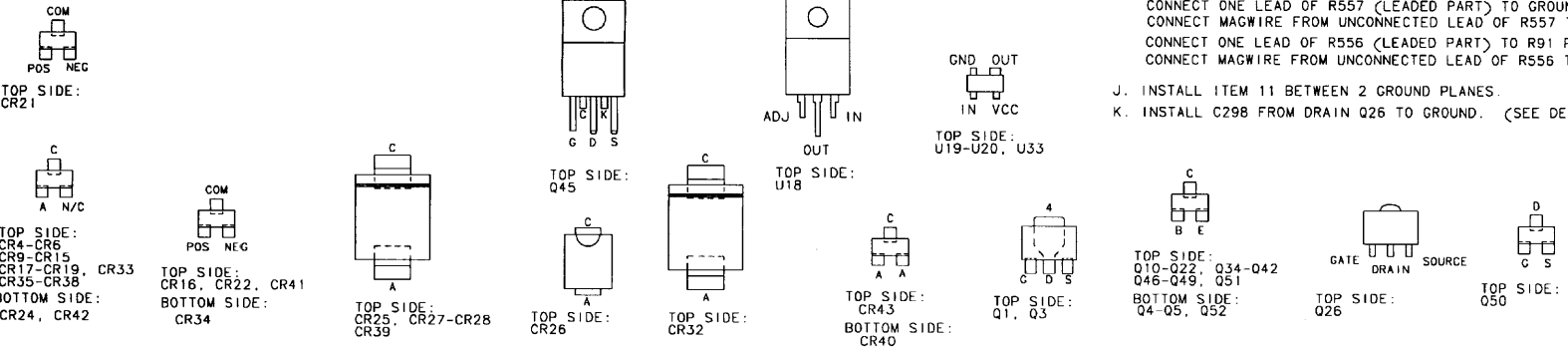


Figure 6-11  
Main Board (Dwg. No. 300-09098-0000 Rev. 5, Sheet 1 of 3)

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

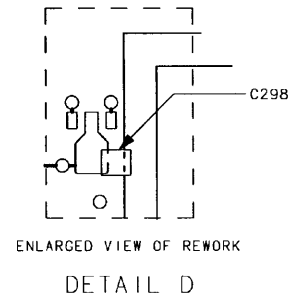
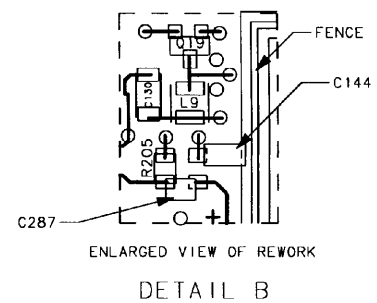
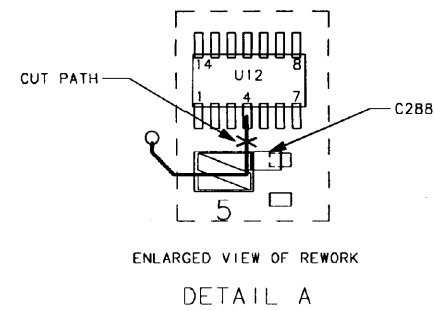
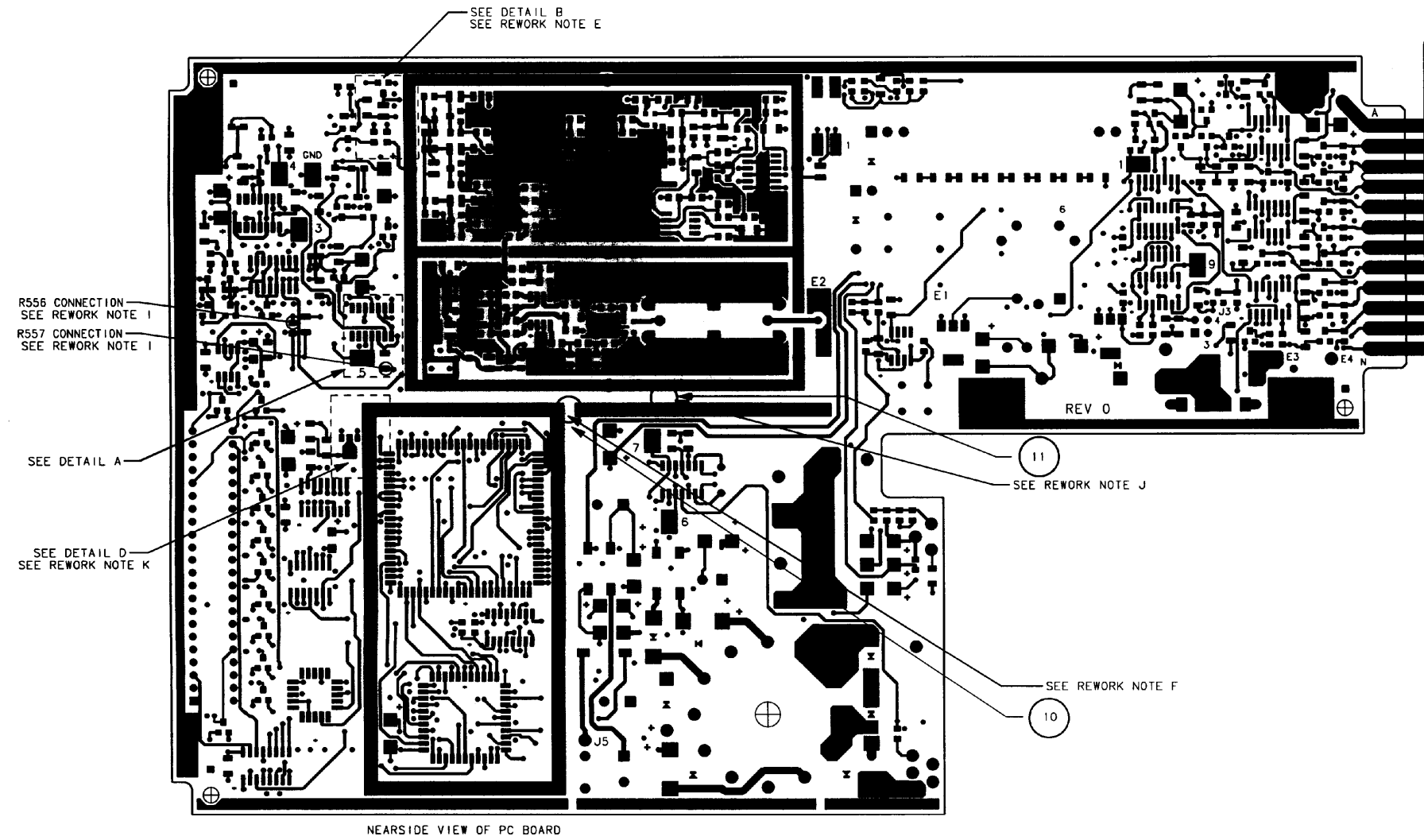
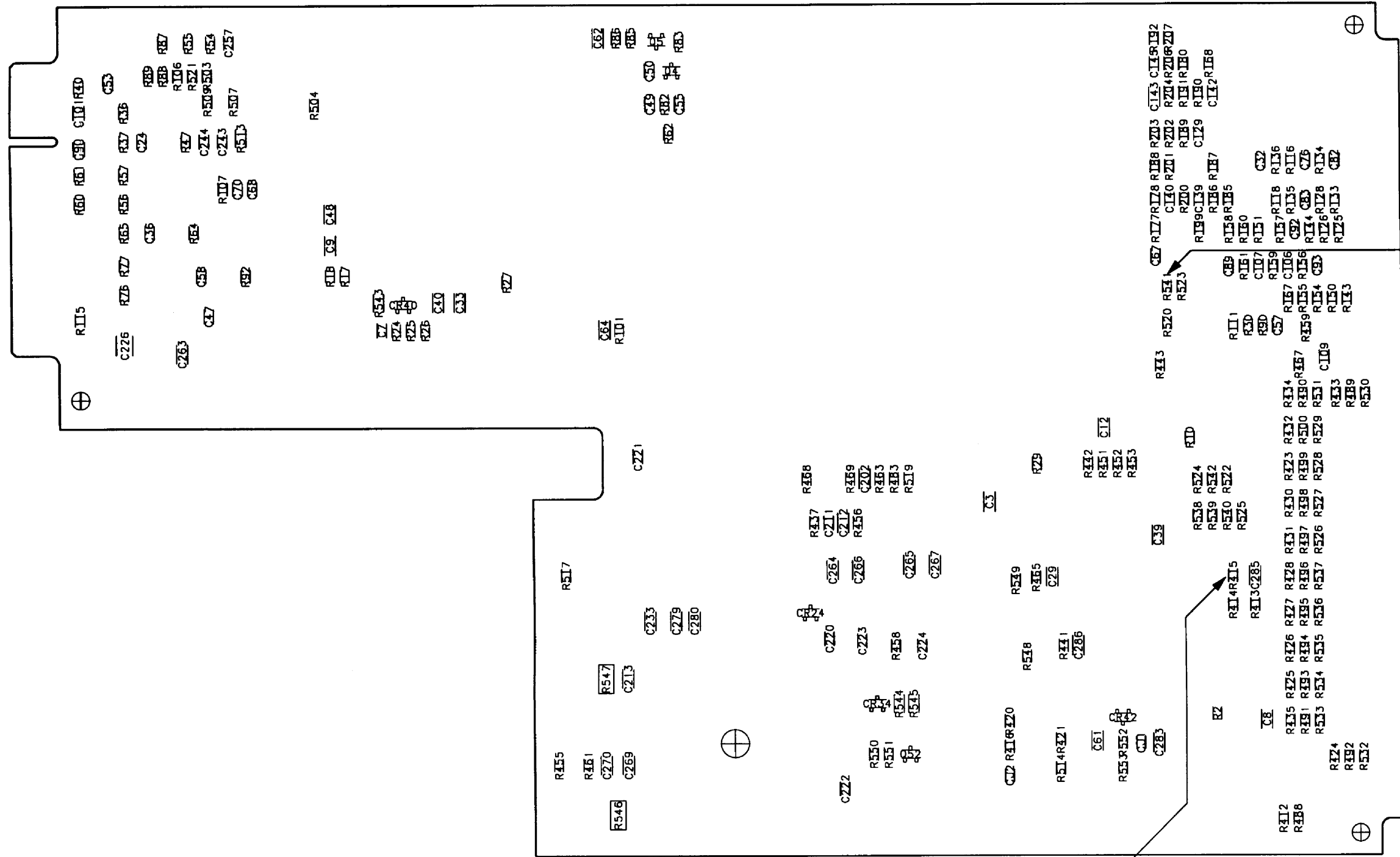


Figure 6-11  
 Main Board (Dwg. No. 300-09098-0000 Rev. 5, Sheet 2 of 3)

**BENDIX/KING**  
KT 76C ATRBS TRANSPONDER

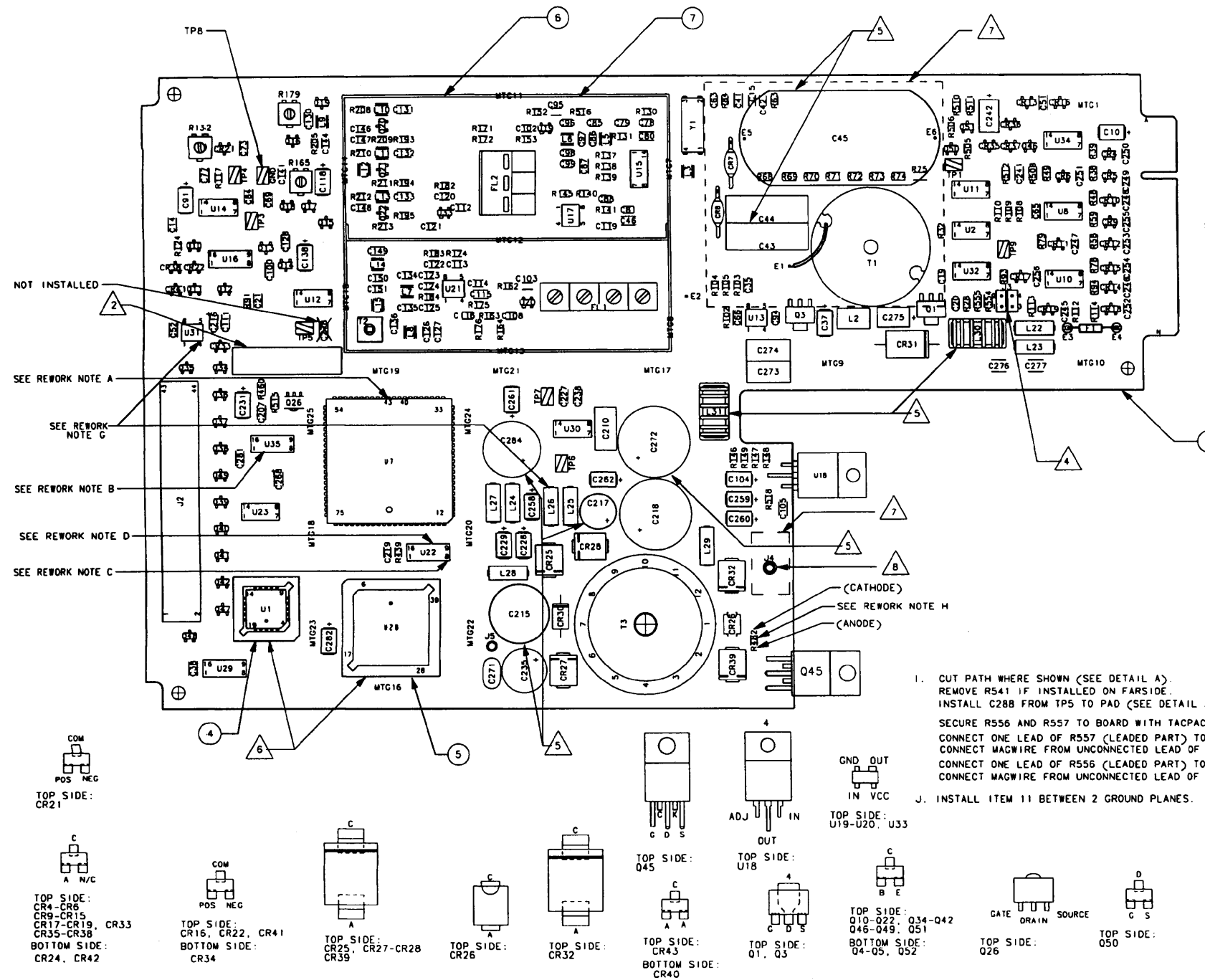


SEE REWORK NOTE L

Figure 6-11  
Main Board (Dwg. No. 300-09098-0000 Rev. 5, Sheet 3 of 3)



**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER



- NOTES:**
1. PRIOR TO POST COATING BOTH SIDES OF P.C. BOARD WITH ITEM 3, MASK OFF ALL MOUNTING AREAS AND REFERENCE DESIGNATORS: E1-E6, J2-J5, MTC1, MTC10-MTC25, MTC7-MTC9, R132, R165, R179, TP1, TP3-TP9, BODIES OF Q45 AND U1B, ITEM 4, ITEM 5, U1, U28, FL1, FL2, GOLD FINGERS OF J1.
  2. PRINTED CIRCUIT ASSEMBLY IDENTIFICATION MUST BE IN ACCORDANCE WITH SPEC. 001-01101-0000.
  3. LIQUID STAKE ALL FASTENERS PER SPEC. 001-01080-0000.
  4. CLIP PIN #4 OF J3 FOR KEYING.
  5. APPLY ITEM 2 RTV TO HOLD C43, C44, AND C45 TOGETHER AND FORM A .25" FILLET ON BOTH BOTTOM SIDES OF C45. AVOID PLACING ITEM 2 RTV ON R74 AND R75. APPLY ITEM 2 RTV TO HOLD C218 AND C272 TOGETHER. APPLY ITEM 2 RTV TO HOLD L30 AND L31 TO P.C. BOARD. APPLY ITEM 2 RTV TO HOLD C284, C215, C235, AND C217 TO P.C. BOARD.
  6. U28 AND U1 WILL BE INSTALLED WITH A SOCKET.
  7. THE FOLLOWING AREAS ARE TO RECEIVE .004" TO .008" OF POSTCOAT (ITEM 3) ON BOTH FAR AND NEAR SIDE OF P.C. BOARD. ALL SURFACES WITHIN HIGH VOLTAGE POWER SUPPLY AREA, C43, C44, C45, CR7, CR8, E1, R68, R69, R70, R71, R72, R73, R74, R75, J4 AREA FAR SIDE AND AREA SURROUNDING J4 NEAR SIDE.
- REWORK NOTES:**
- A. USE TACPAC 016-01144-0000 AND ACCELERATOR 016-01144-0001 AS NEEDED.
  - B. CONNECT MAGWIRE FROM U7 PIN 40 TO U7 PIN 43.
  - C. TACPAC R558 TO TOP OF U35. CONNECT R558 BETWEEN U35 PIN 3 AND U35 PIN 15.
  - D. CONNECT MAGWIRE FROM U22 PIN B TO U28 PIN 39. REWORK CAN ALSO BE DONE BY USING VIA HOLES OF THE RESPECTIVE PADS ON FAR SIDE OF BOARD.
  - E. TACPAC R559 TO TOP OF U22. CONNECT ONE LEAD OF R559 TO U22 PIN 16. MAGWIRE OTHER LEAD OF R559 TO U28 PIN 28. REWORK CAN ALSO BE DONE BY USING VIA HOLES OF THE RESPECTIVE PADS ON FAR SIDE OF BOARD.
  - F. INSTALL C144 BETWEEN PAD AND GROUND. INSTALL C287 BETWEEN R205 PAD AND GROUND. (SEE DETAIL B)
  - G. INSTALL ITEM 10 BETWEEN 2 GROUND PLANES.
  - H. LIFT U31 PIN 4. CONNECT MAGWIRE FROM LIFTED U31 PIN 4 TO L26.
  - I. TACPAC CR43 ACROSS R482. (ONE ANODE LEAD ONLY NEEDS TO MAKE CONNECTION)
  - J. INSTALL ITEM 11 BETWEEN 2 GROUND PLANES.

Figure 6-11A  
Main Board (Dwg. No. 300-09098-0000 Rev. 3, Sheet 1 of 3)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

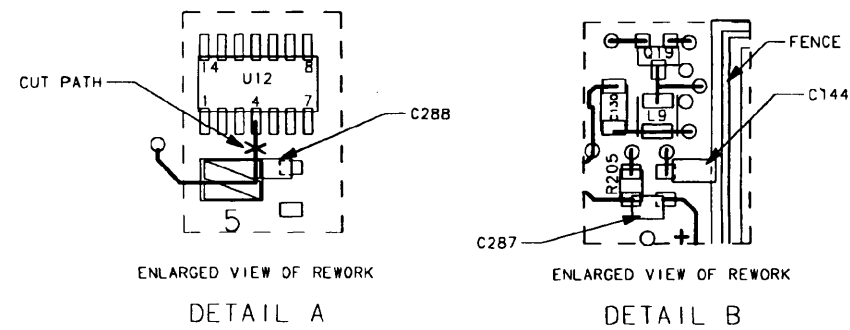
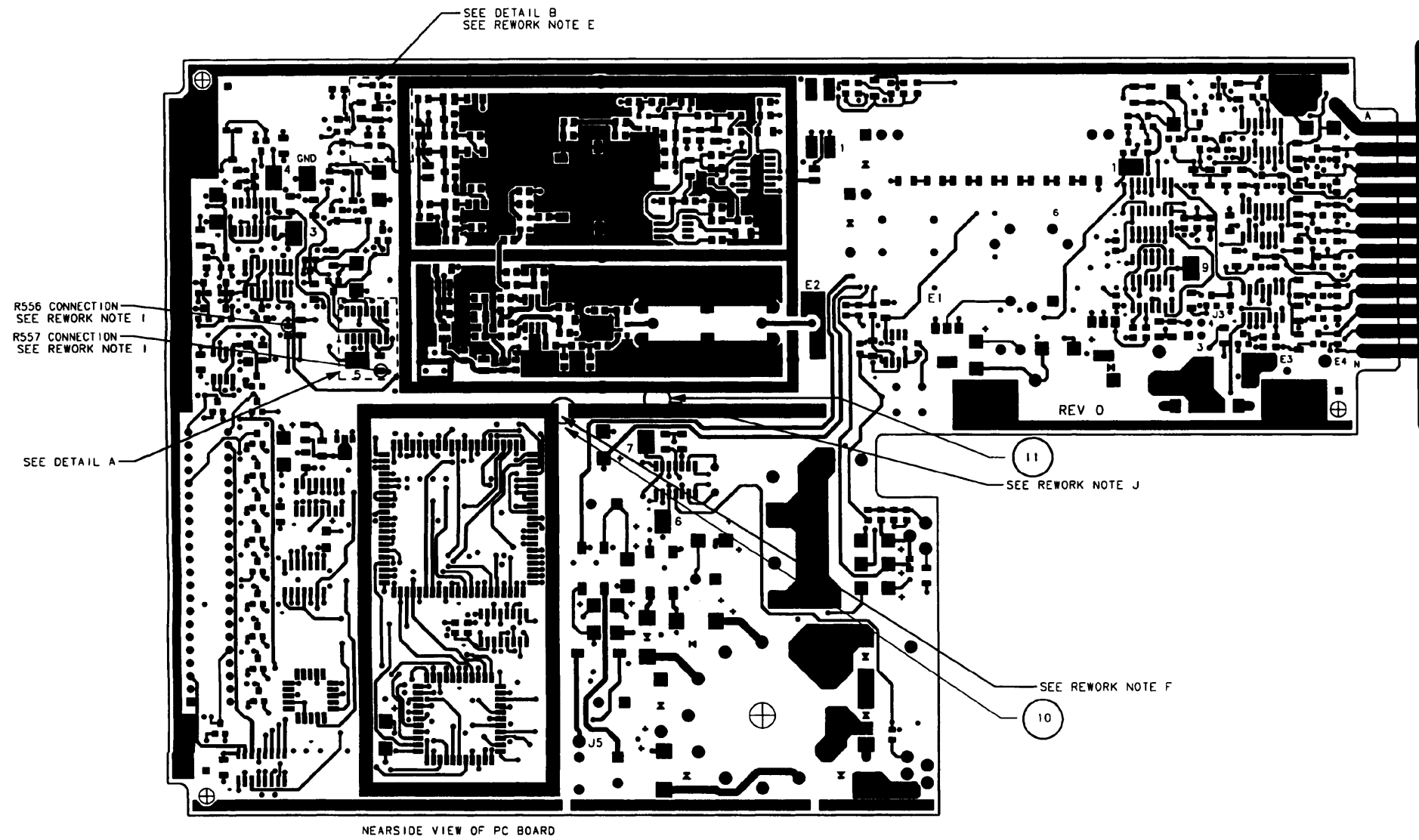


Figure 6-11A  
Main Board (Dwg. No. 300-09098-0000 Rev. 3, Sheet 2 of 3)

BENDIX/KING  
KT 76C ATCRBS TRANSPONDER

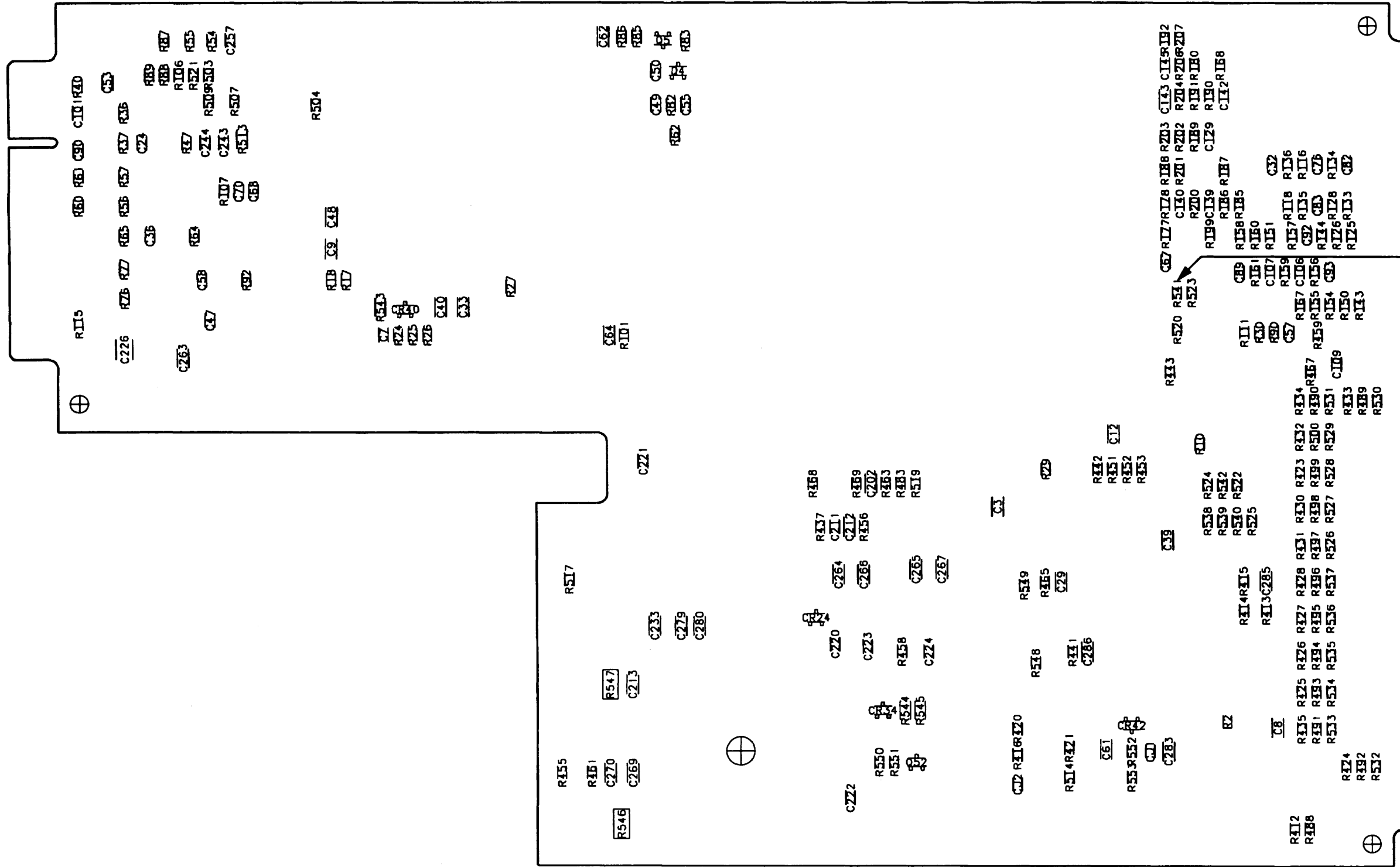
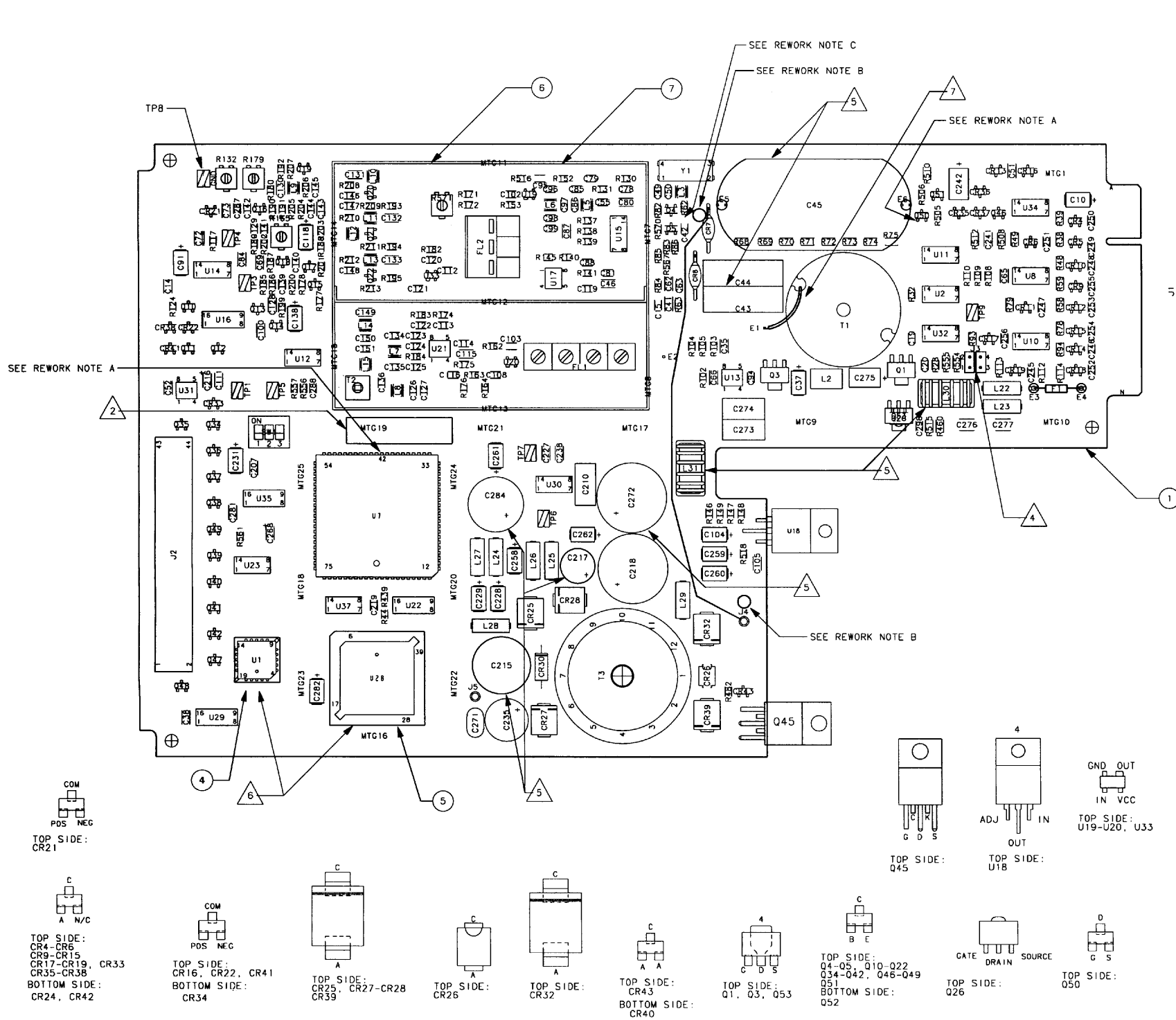


Figure 6-11A  
Main Board (Dwg. No. 300-09098-0000 Rev. 3, Sheet 3 of 3)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER



- NOTES:
1. PRIOR TO POST COATING BOTH SIDES OF P.C. BOARD WITH ITEM 3, MASK OFF ALL MOUNTING AREAS AND REFERENCE DESIGNATORS: E1-E6, J2-J5, MTG1, MTG10-MTG25, MTG7-MTG9, R132, R165, R179, TP1, TP3-TP9, BODIES OF Q45 AND U18, ITEM 4, ITEM 5, U1, U28, FL1, FL2, GOLD FINGERS OF J1.
  2. PRINTED CIRCUIT ASSEMBLY IDENTIFICATION MUST BE IN ACCORDANCE WITH SPEC. 001-01101-0000.
  3. LIQUID STAKE ALL FASTENERS PER SPEC. 001-01080-0000.
  4. CLIP PIN #4 OF J3 FOR KEYING.
  5. APPLY ITEM 2 RTV TO HOLD C43, C44, AND C45 TOGETHER AND FORM A .25" FILLET ON BOTH BOTTOM SIDES OF C45. AVOID PLACING ITEM 2 RTV ON R74 AND R75. APPLY ITEM 2 RTV TO HOLD C218 AND C272 TOGETHER. APPLY ITEM 2 RTV TO HOLD L30 AND L31 TO P.C. BOARD. APPLY ITEM 2 RTV TO HOLD C284, C215, C235, AND C217 TO P.C. BOARD.
  6. U28 AND U1 WILL BE INSTALLED WITH A SOCKET.
  7. WIRE E1 IS TO FOLLOW SHAPE OF REFERENCE DRAWING. (SEE DETAIL A)

- REWORK NOTES
- A. INSTALL MAGWIRE BETWEEN U7 (PIN 42) AND Q50 (GATE). CORRESPONDING VIAS MAY BE USED ON NEAR OR FAR SIDE OF THE PC BOARD.
  - B. DRILL .12 +/- .01 HOLE 2 PLACES APPROX. AS SHOWN TO ISOLATE 1300 V. TRACE BETWEEN CR7 AND J4. CONNECT CR7 TO J4 USING ITEM 8 ROUTED APPROX. AS SHOWN. FILL .12 DIA HOLES AND COVER CONNECTIONS AT CR7 AND J4 WITH ITEM 2.
  - C. 1: CUT PATH CONNECTING ANODE OF CR8 TO C41, C62 & C63 (SEE SHEET 2 OF 4)  
2: CONNECT MAG WIRE FROM GROUND SIDE OF R62 TO GROUND SIDE OF C41 OR C62.

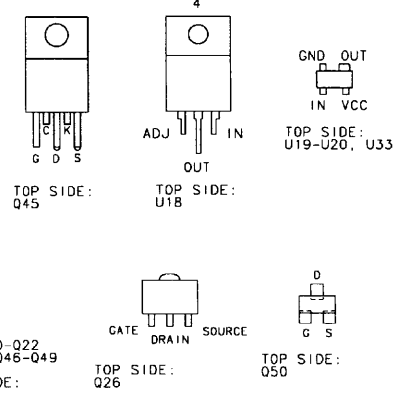
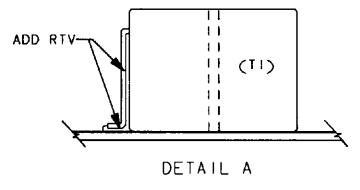


Figure 6-12  
Main Board (Dwg. No. 300-09098-0020 Rev. 3, Sheet 1 of 3)

BENDIX/KING  
KT 76C ATCRBS TRANSPONDER

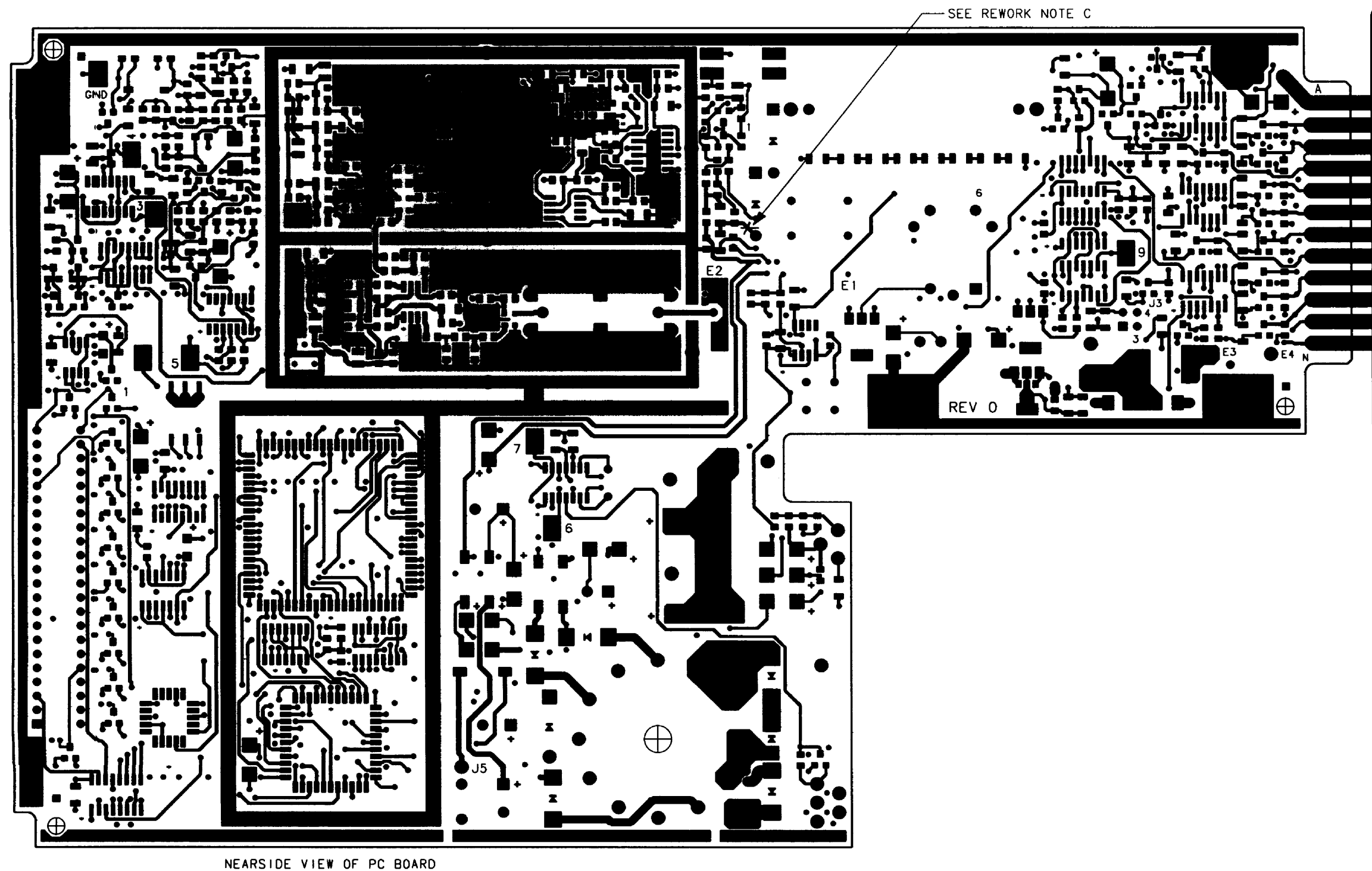


Figure 6-12  
Main Board (Dwg. No. 300-09098-0020 Rev. 3, Sheet 2 of 3)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

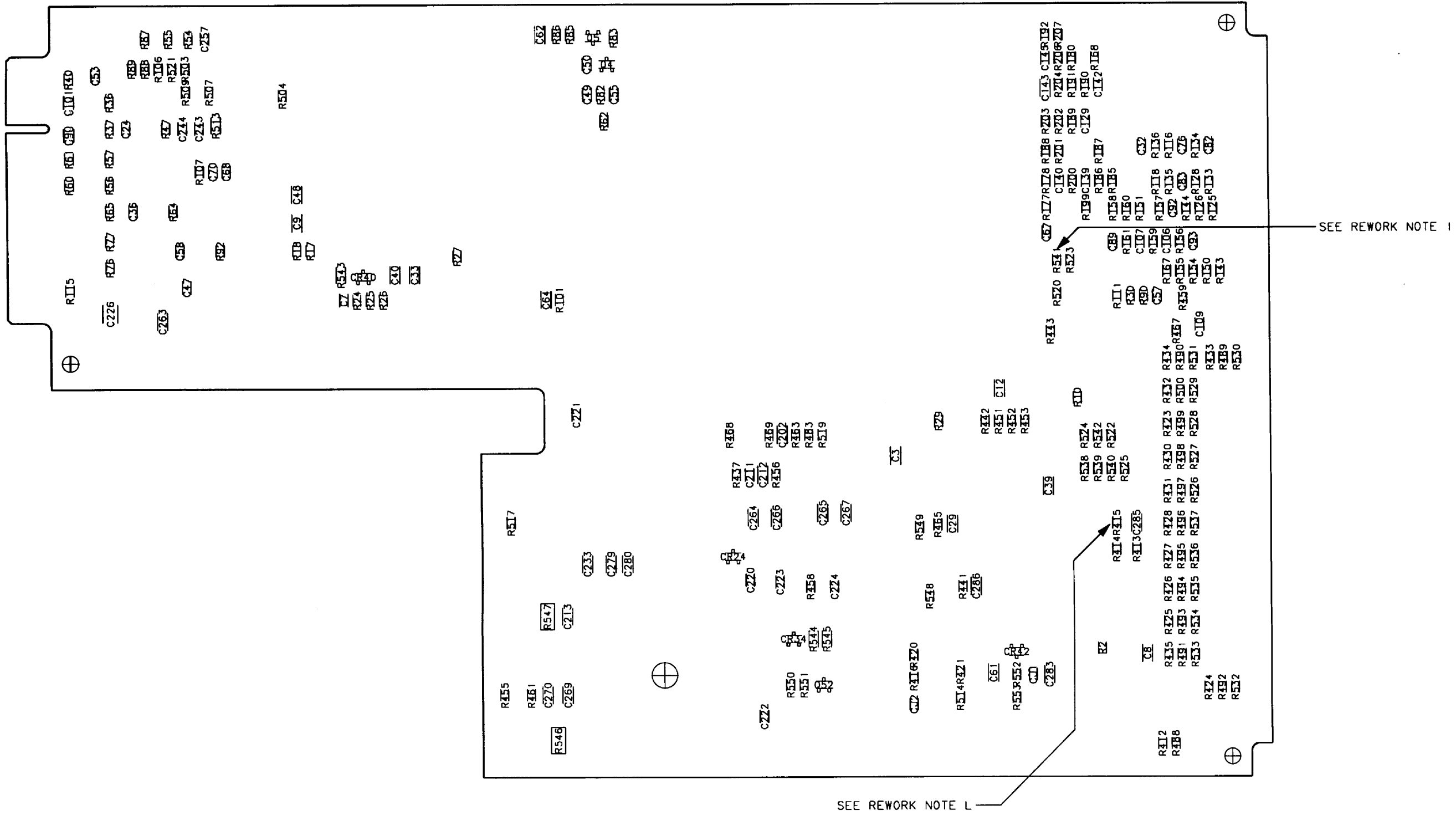
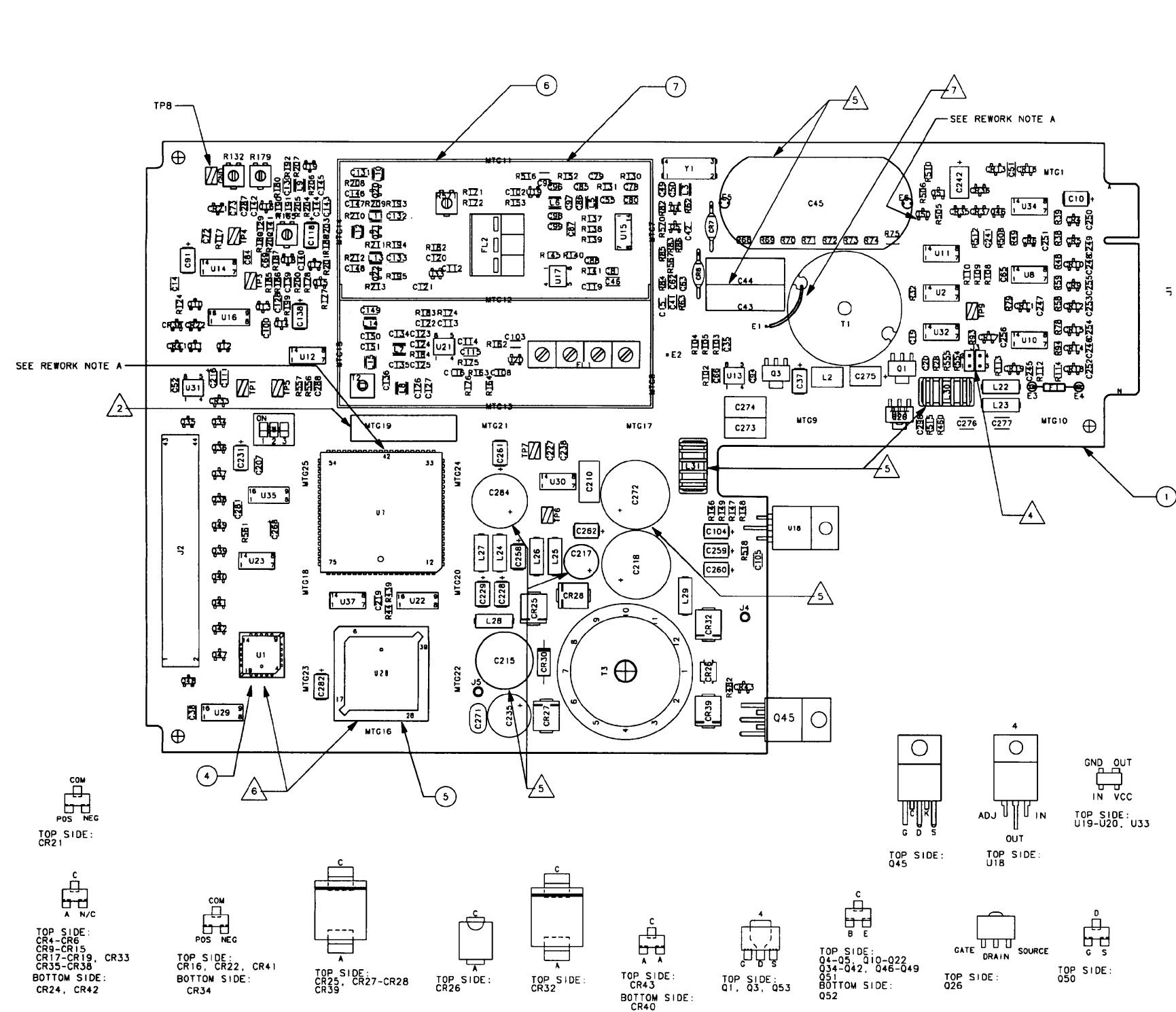


Figure 6-12  
Main Board (Dwg. No. 300-09098-0020 Rev. 3, Sheet 3 of 3)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER



- NOTES:
1. PRIOR TO POST COATING BOTH SIDES OF P.C. BOARD WITH ITEM 3, MASK OFF ALL MOUNTING AREAS AND REFERENCE DESIGNATORS: E1-E6, J2-J5, MTG1, MTG10-MTG25, MTG7-MTG9, R132, R165, R179, TP1, TP3-TP9, BODIES OF Q45 AND U18, ITEM 4, ITEM 5, U1, U28, FL1, FL2, GOLD FINGERS OF J1.
  2. PRINTED CIRCUIT ASSEMBLY IDENTIFICATION MUST BE IN ACCORDANCE WITH SPEC. 001-01101-0000.
  3. LIQUID STAKE ALL FASTENERS PER SPEC. 001-01080-0000.
  4. CLIP PIN #4 OF J3 FOR KEYING.
  5. APPLY ITEM 2 RTV TO HOLD C43, C44, AND C45 TOGETHER AND FORM A .25" FILLET ON BOTH BOTTOM SIDES OF C45. AVOID PLACING ITEM 2 RTV ON R74 AND R75. APPLY ITEM 2 RTV TO HOLD C218 AND C272 TOGETHER. APPLY ITEM 2 RTV TO HOLD L30 AND L31 TO P.C. BOARD. APPLY ITEM 2 RTV TO HOLD C284, C215, C235, AND C217 TO P.C. BOARD.
  6. U28 AND U1 WILL BE INSTALLED WITH A SOCKET.
  7. WIRE E1 IS TO FOLLOW SHAPE OF REFERENCE DRAWING (SEE DETAIL A)

REWORK NOTES:  
A. INSTALL MAGWIRE BETWEEN U7 (PIN 42) AND Q50 (GATE). CORRESPONDING VIAS MAY BE USED ON NEAR OR FAR SIDE OF THE PC BOARD.

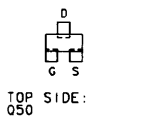
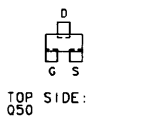
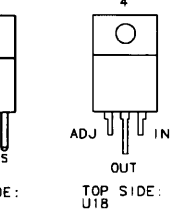
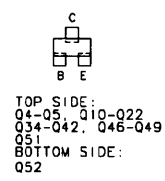
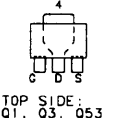
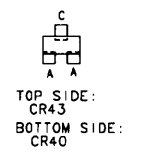
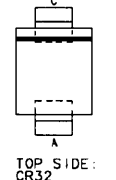
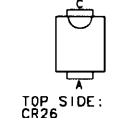
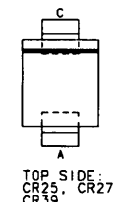
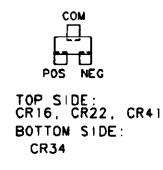
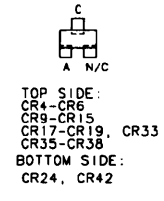
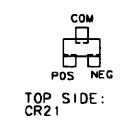
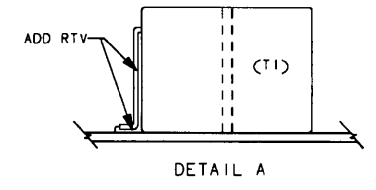


Figure 6-12A  
Main Board (Dwg. No. 300-09098-0020 Rev. 1, Sheet 1 of 2)

BENDIX/KING  
KT 76C ATCRBS TRANSPONDER

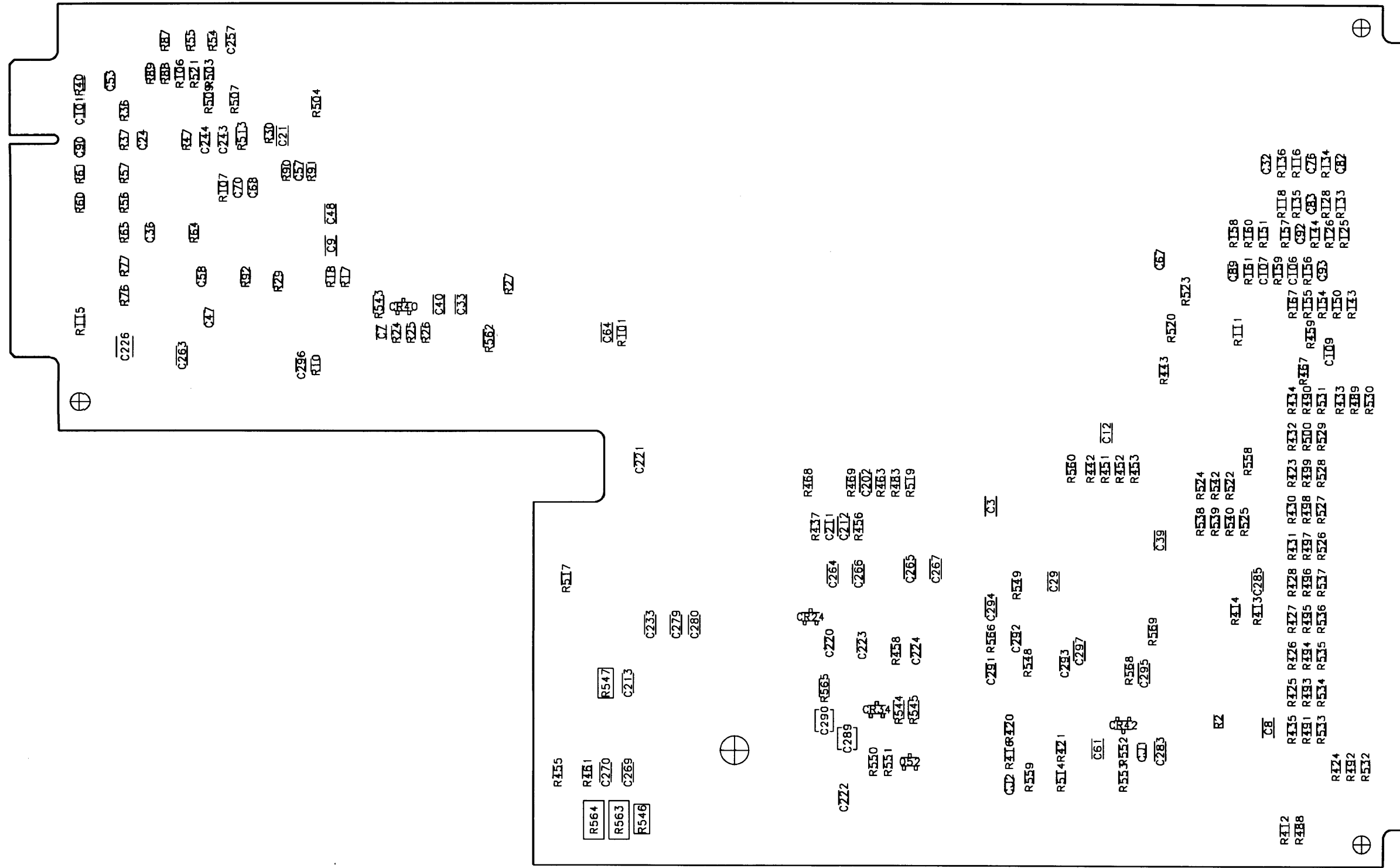


Figure 6-12A  
Main Board (Dwg. No. 300-09098-0020 Rev. 1, Sheet 2 of 2)



**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

- NOTES:
1. PRIOR TO POST COATING BOTH SIDES OF P.C. BOARD WITH ITEM 3, MASK OFF ALL MOUNTING AREAS AND REFERENCE DESIGNATORS: E1-E6, J2-J5, MTG1, MTG10-MTG25, MTG7-MTG9, R132, R165, R179, TP1, TP3-TP9, BODIES OF Q45 AND U18, ITEM 4, ITEM 5, U1, U28, FL1, FL2, GOLD FINGERS OF J1.

2. PRINTED CIRCUIT ASSEMBLY IDENTIFICATION MUST BE IN ACCORDANCE WITH SPEC. 001-D1101-0000.
3. LIQUID STAKE ALL FASTENERS PER SPEC. 001-D1080-0000.
4. CLIP PIN #4 OF J3 FOR KEYING.
5. APPLY ITEM 2 RTV TO HOLD C43, C44, AND C45 TOGETHER AND FORM A .25" FILLET ON BOTH BOTTOM SIDES OF C45. AVOID PLACING ITEM 2 RTV ON R74 AND R75. APPLY ITEM 2 RTV TO HOLD C218 AND C272 TOGETHER. APPLY ITEM 2 RTV TO HOLD L30 AND L31 TO P.C. BOARD. APPLY ITEM 2 RTV TO HOLD C284, C215, C235, AND C217 TO P.C. BOARD.
6. U28 AND U1 WILL BE INSTALLED WITH A SOCKET.
7. WIRE E1 IS TO FOLLOW SHAPE OF REFERENCE DRAWING. (SEE DETAIL A)

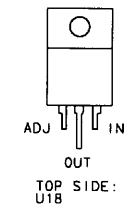
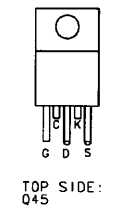
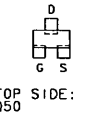
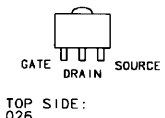
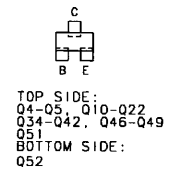
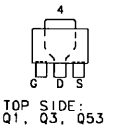
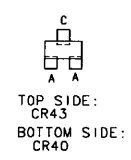
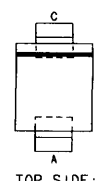
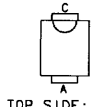
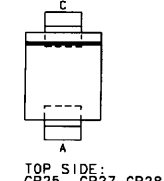
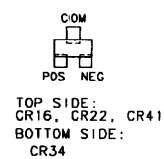
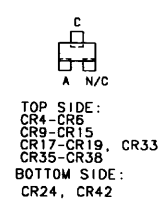
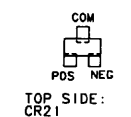
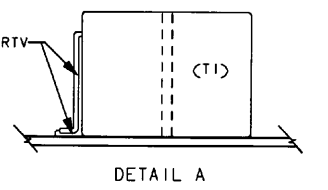
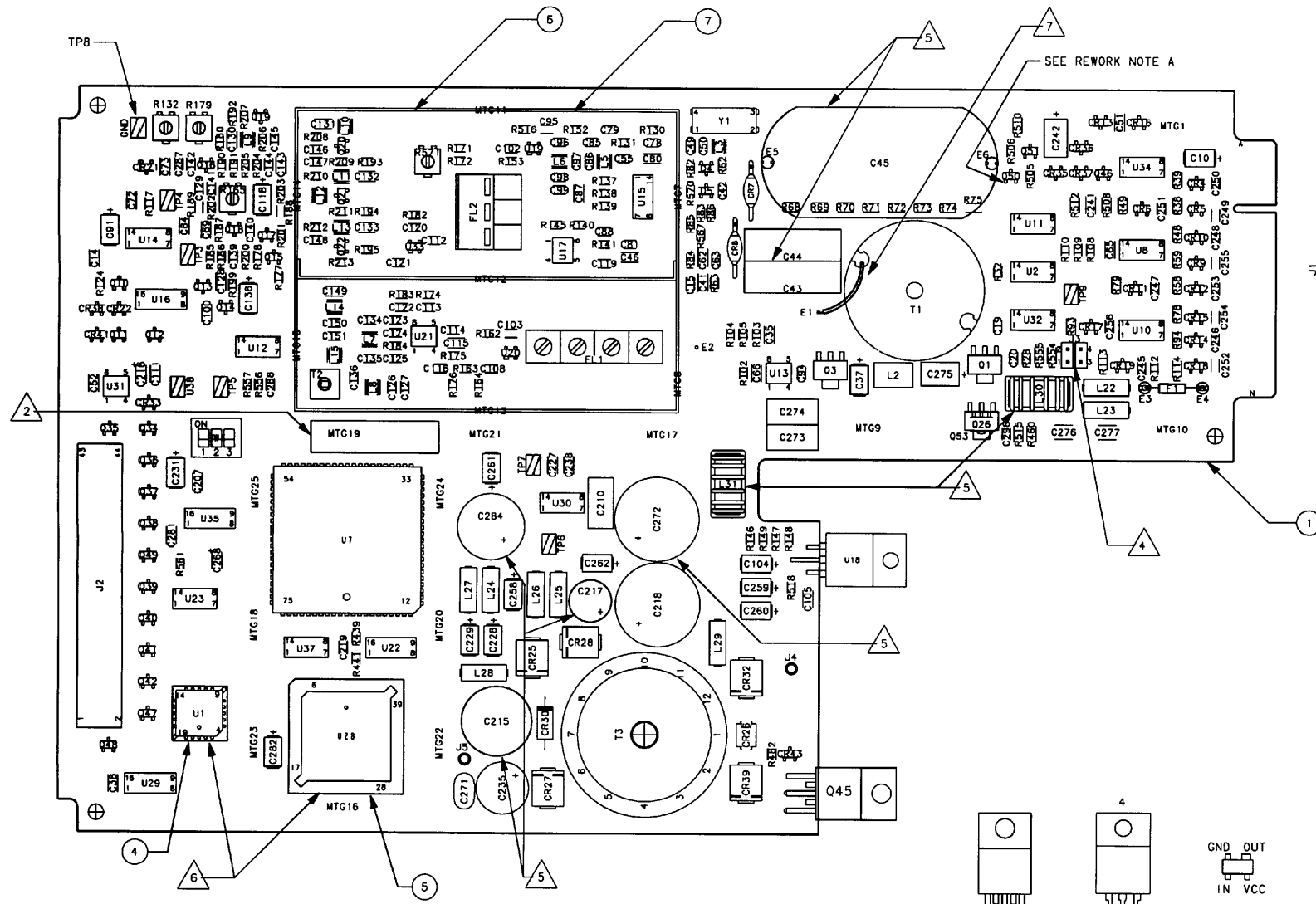
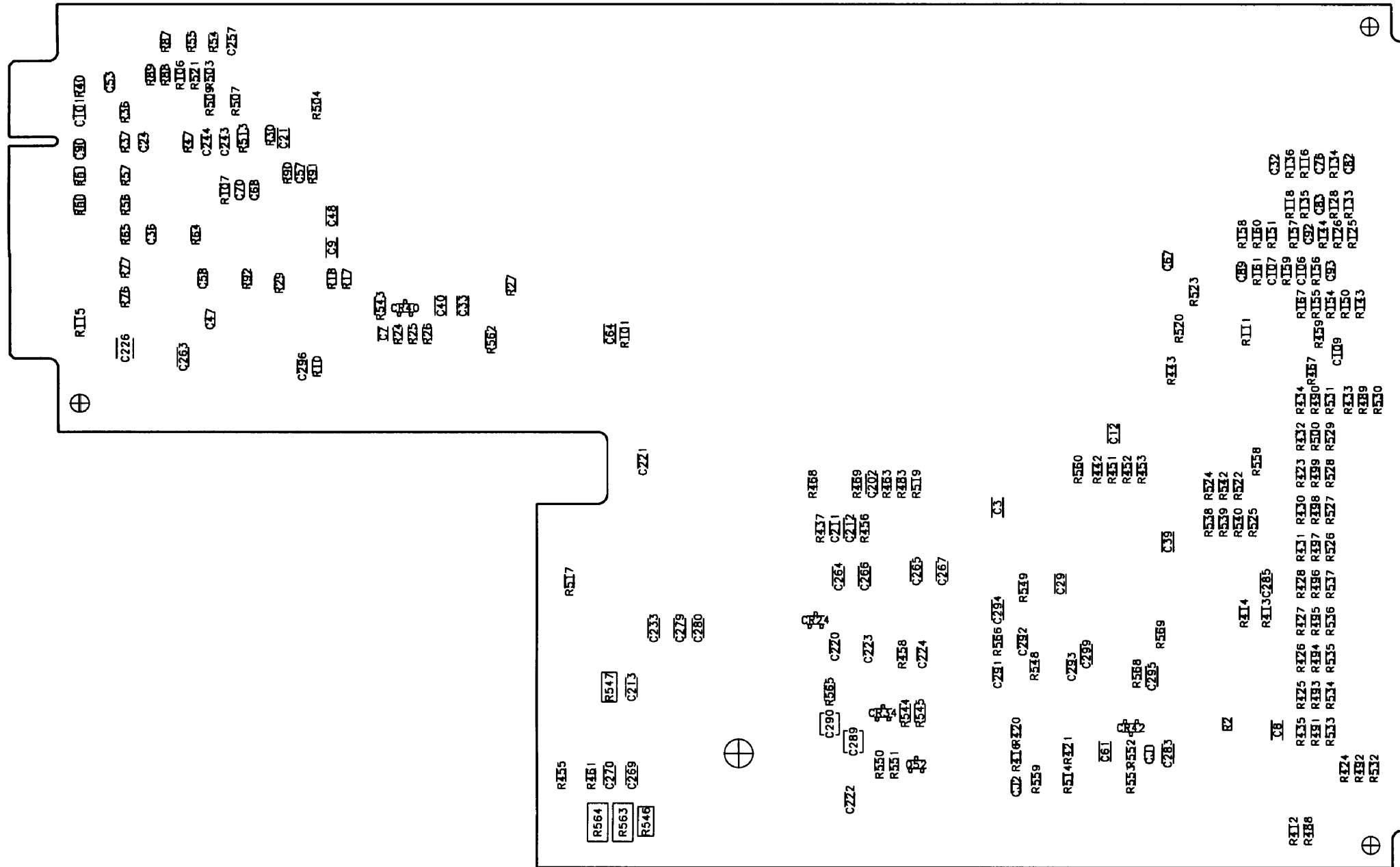


Figure 6-13  
Main Board (Dwg. No. 300-09098-0040 Rev. 0, Sheet 1 of 2)

BENDIX/KING  
KT 76C ATCRBS TRANSPONDER



FAR SIDE VIEW OF PC BOARD

Figure 6-13  
Main Board (Dwg. No. 300-09098-0040 Rev. 0, Sheet 2 of 2)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

- NOTES:
1. PRIOR TO POST COATING BOTH SIDES OF P.C. BOARD WITH ITEM 3, MASK OFF ALL MOUNTING AREAS AND REFERENCE DESIGNATORS: E1-E6, J2-J5, MTG1, MTG10-MTG15, MTG17, MTG20-MTG22, MTG24, MTG7-MTG9, R132, R165, R179, R571, R587, TP1, TP3-TP6, TP8, TP9, TP10, TP12, BODIES OF Q45 AND U18, ITEM 4, ITEM 5, U1, U28, FL1, FL2, SW1, GOLD FINGERS OF J1.

2. PRINTED CIRCUIT ASSEMBLY IDENTIFICATION MUST BE IN ACCORDANCE WITH SPEC. 001-01101-0000.
3. WHERE APPLICABLE, LIQUID STAKE ALL FASTENERS PER SPEC. 001-01080-0000.
4. CLIP PIN #1 OF J3 FOR KEYING.
5. APPLY ITEM 2 RTV TO HOLD C43, C44, AND C45 TOGETHER AND FORM A .25" FILLET ON BOTH BOTTOM SIDES OF C45. AVOID PLACING ITEM 2 RTV ON R74 AND R75. APPLY ITEM 2 RTV TO HOLD C218 AND C272 TOGETHER. APPLY ITEM 2 RTV TO HOLD L30 AND L31 TO P.C. BOARD. APPLY ITEM 2 RTV TO HOLD C284, C215, C235, AND C217 TO P.C. BOARD.
6. U28 AND U1 WILL BE INSTALLED WITH A SOCKET.
7. WIRE E1 IS TO FOLLOW SHAPE OF REFERENCE DRAWING. (SEE DETAIL A)

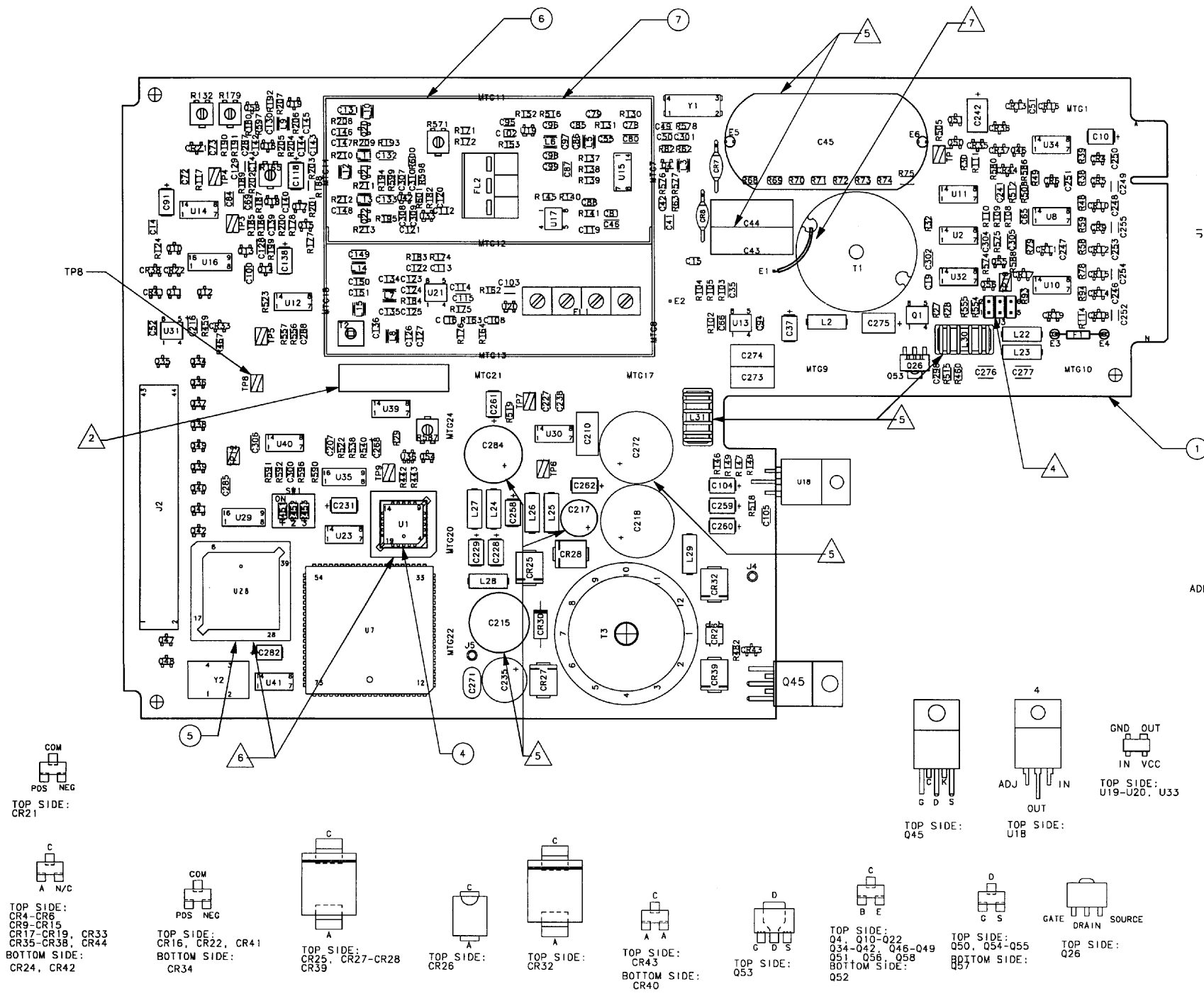
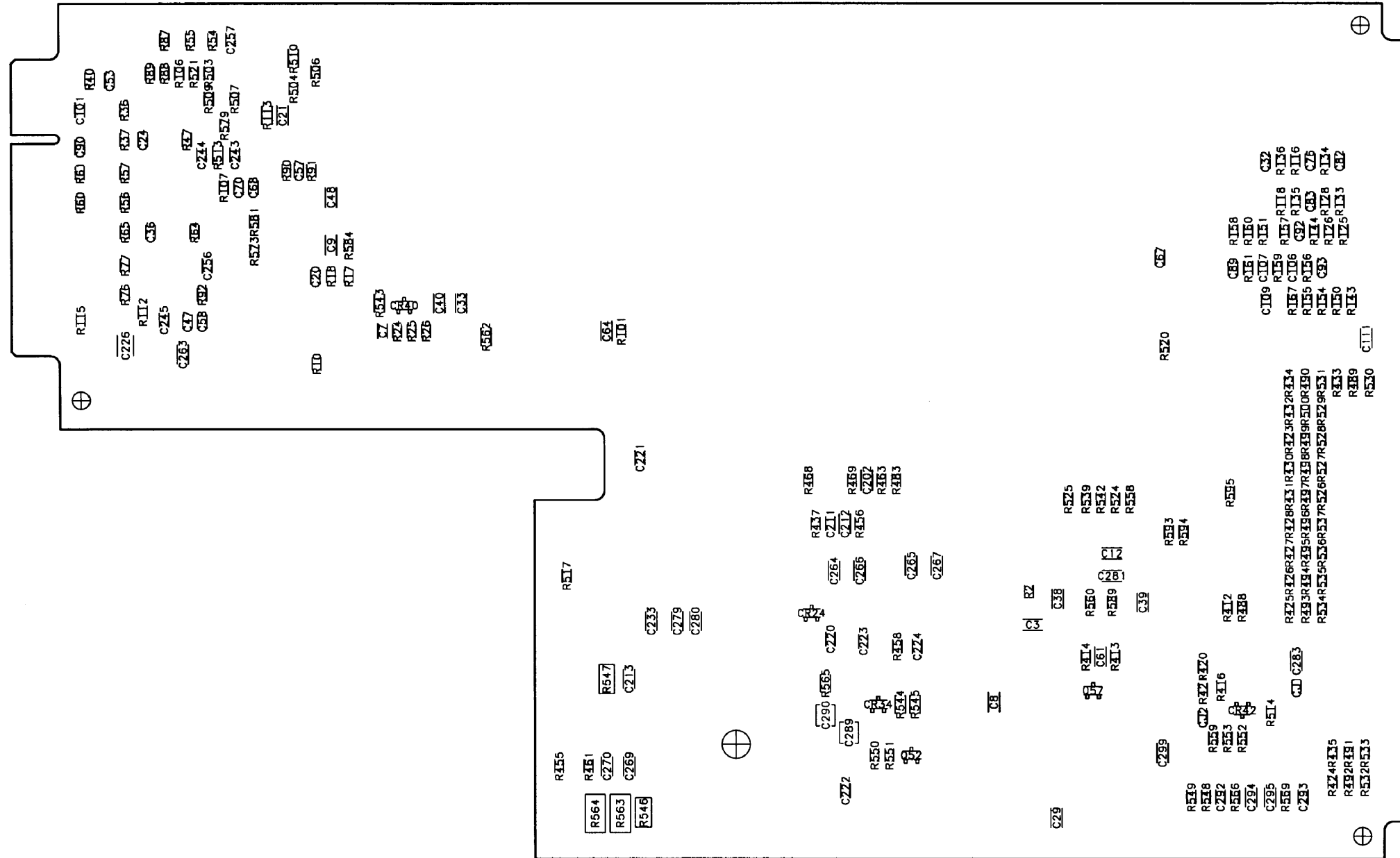


Figure 6-14  
Main Board S/N ≥ 8200 (Dwg. No. 300-09098-0060 Rev. -, Sheet 1 of 2)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER



FAR SIDE VIEW OF PC BOARD

Figure 6-14  
Main Board S/N ≥ 8200 (Dwg. No. 300-09098-0060 Rev. -, Sheet 2 of 2)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

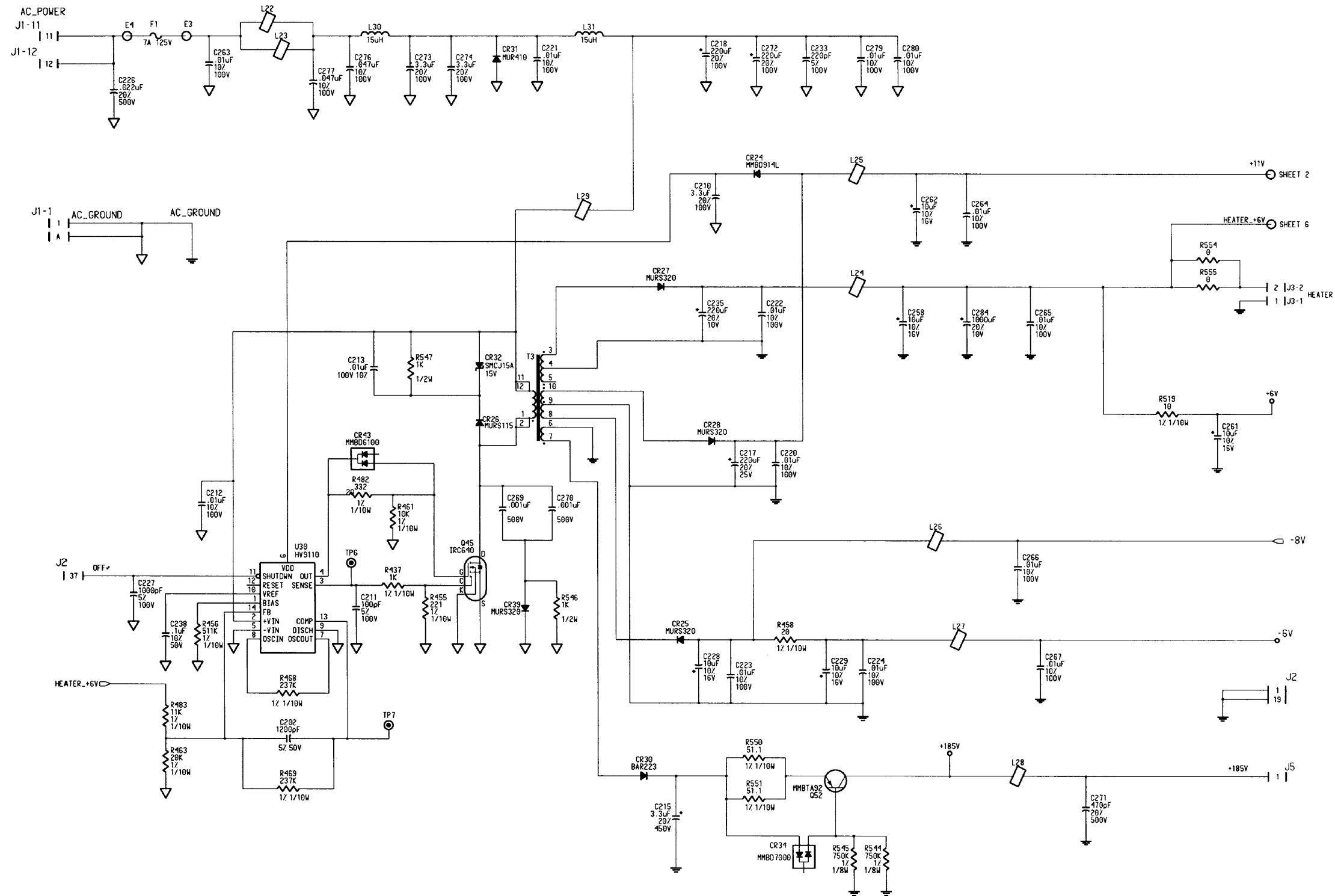
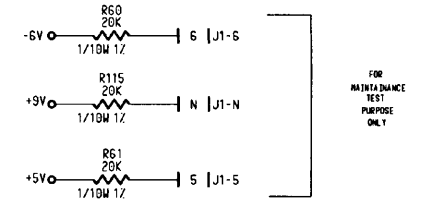
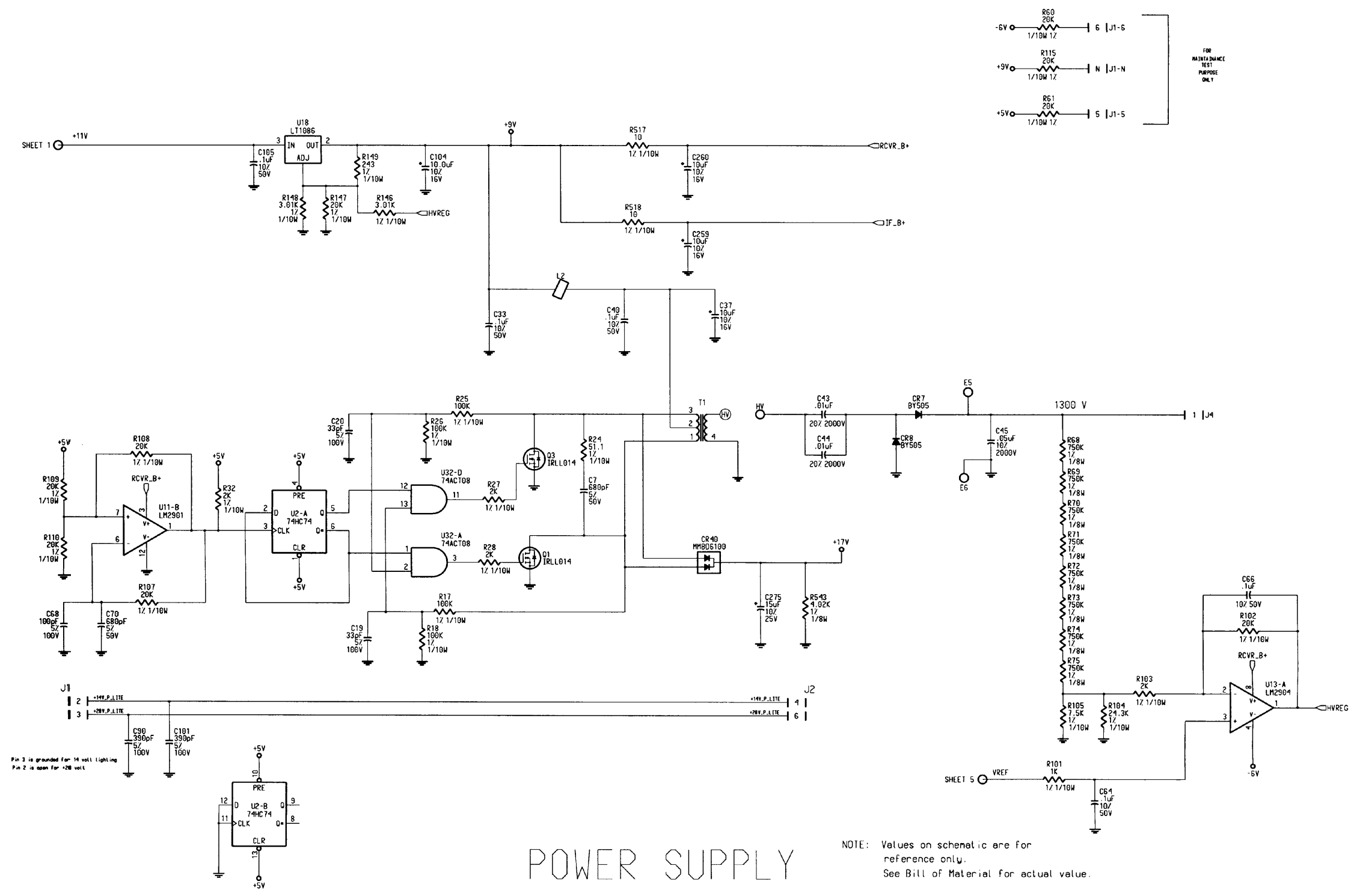


Figure 6-15  
Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 6, Sheet 1 of 8)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER



POWER SUPPLY

NOTE: Values on schematic are for reference only.  
See Bill of Material for actual value.

Figure 6-15  
Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 6, Sheet 2 of 8)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

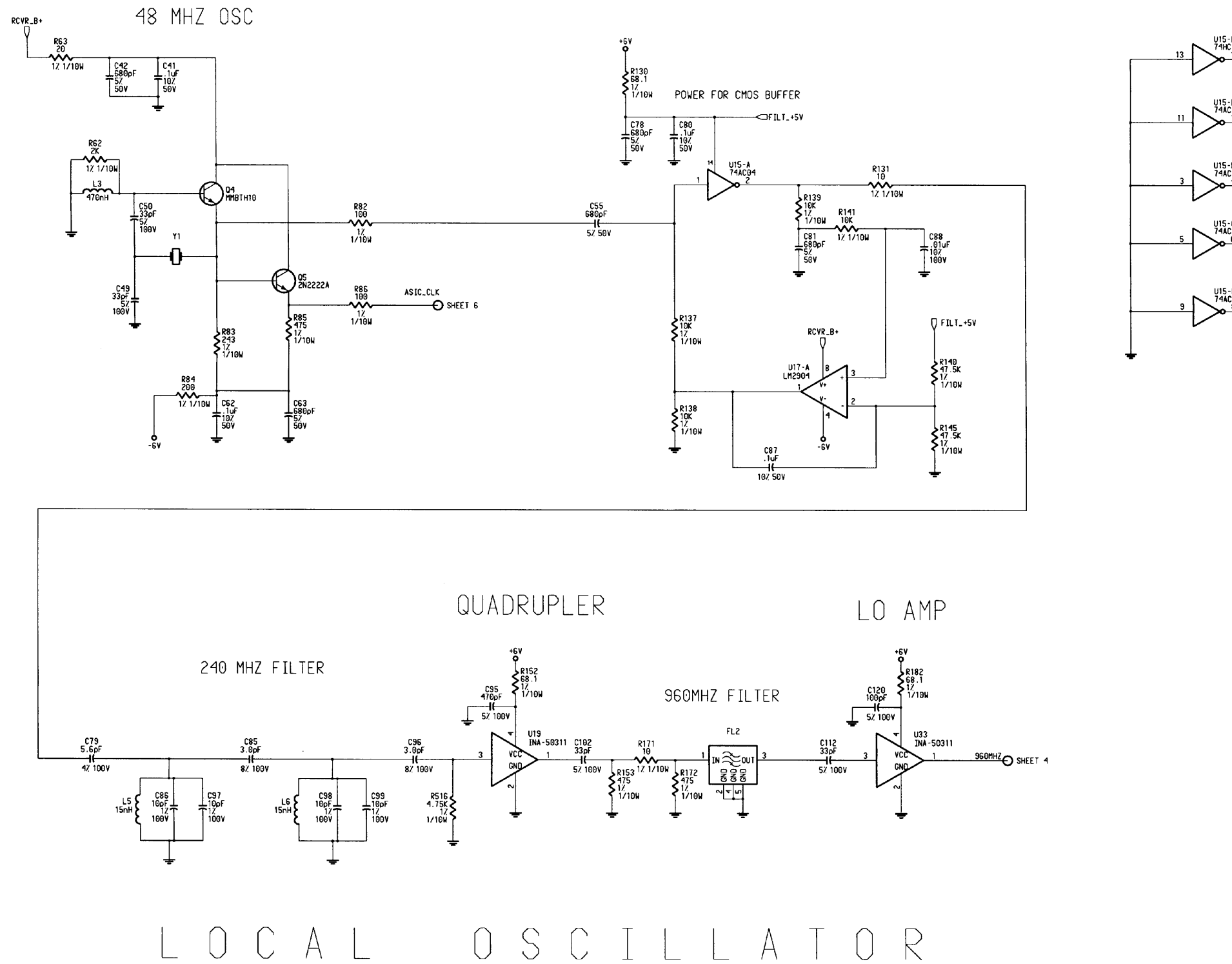


Figure 6-15

Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 6, Sheet 3 of 8)

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

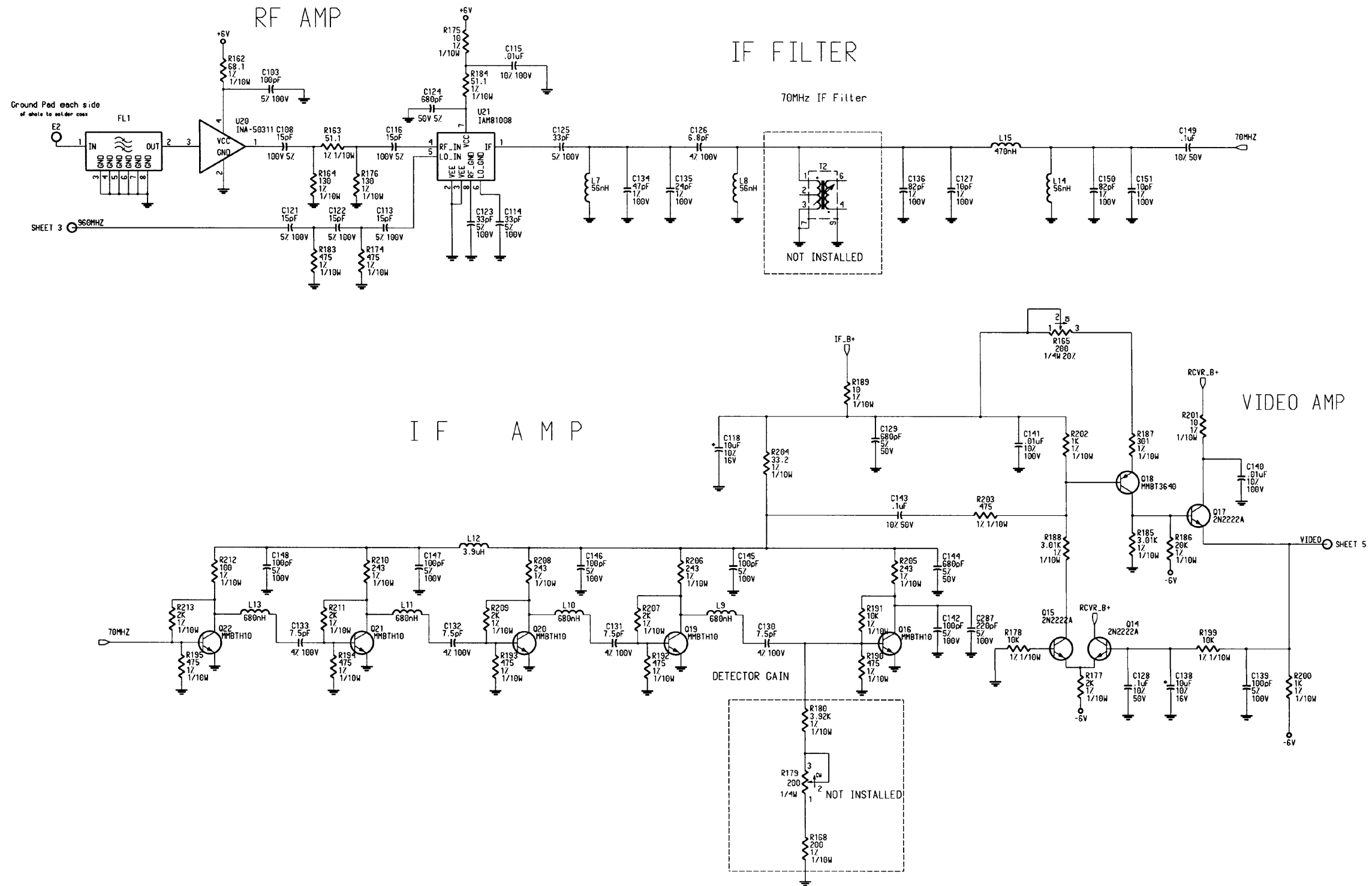


Figure 6-15  
 Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 6, Sheet 4 of 8)



**BENDIX/KING**  
KT 76C ATRCBS TRANSPONDER

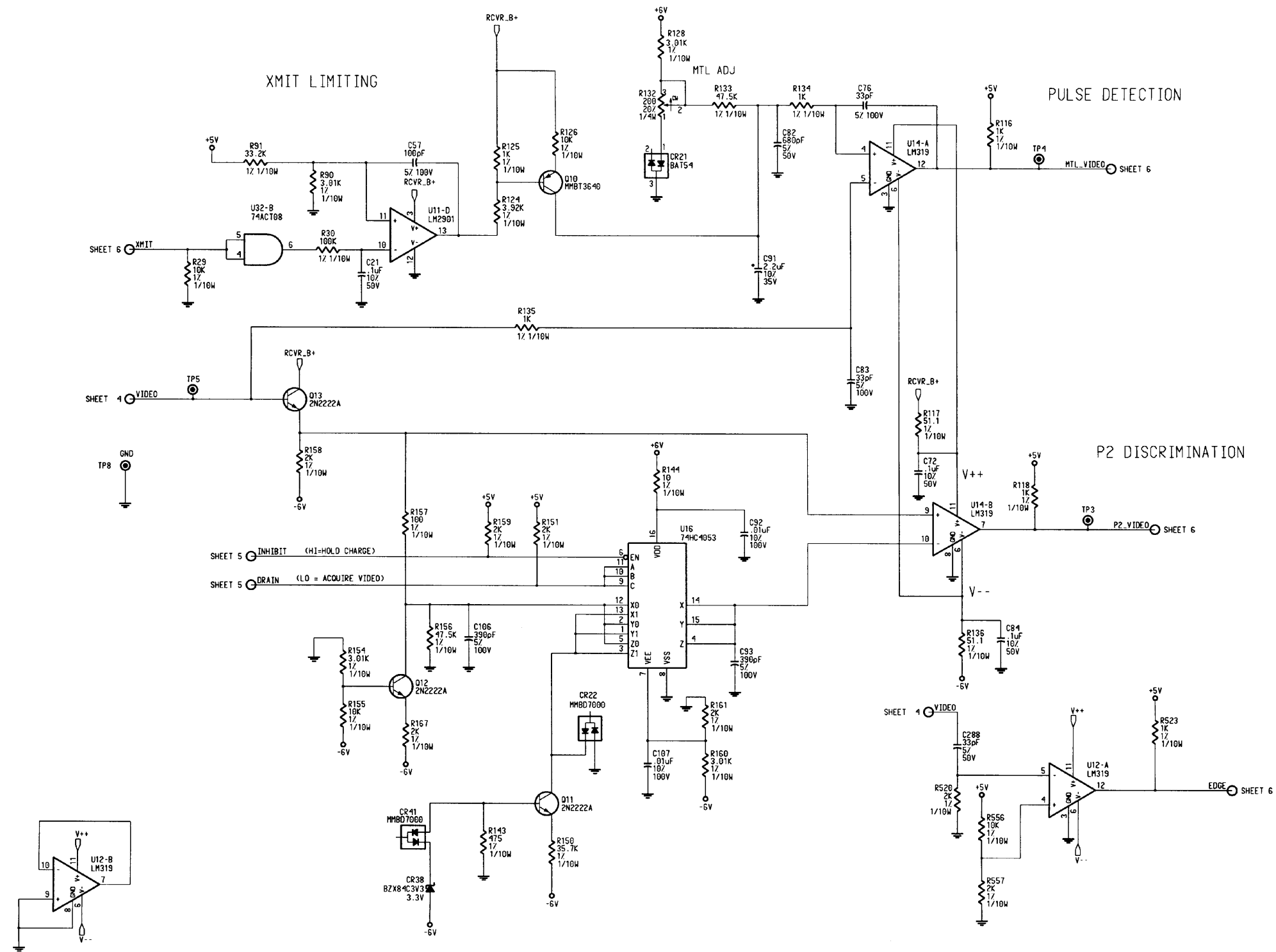


Figure 6-15  
Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 6, Sheet 5 of 8)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

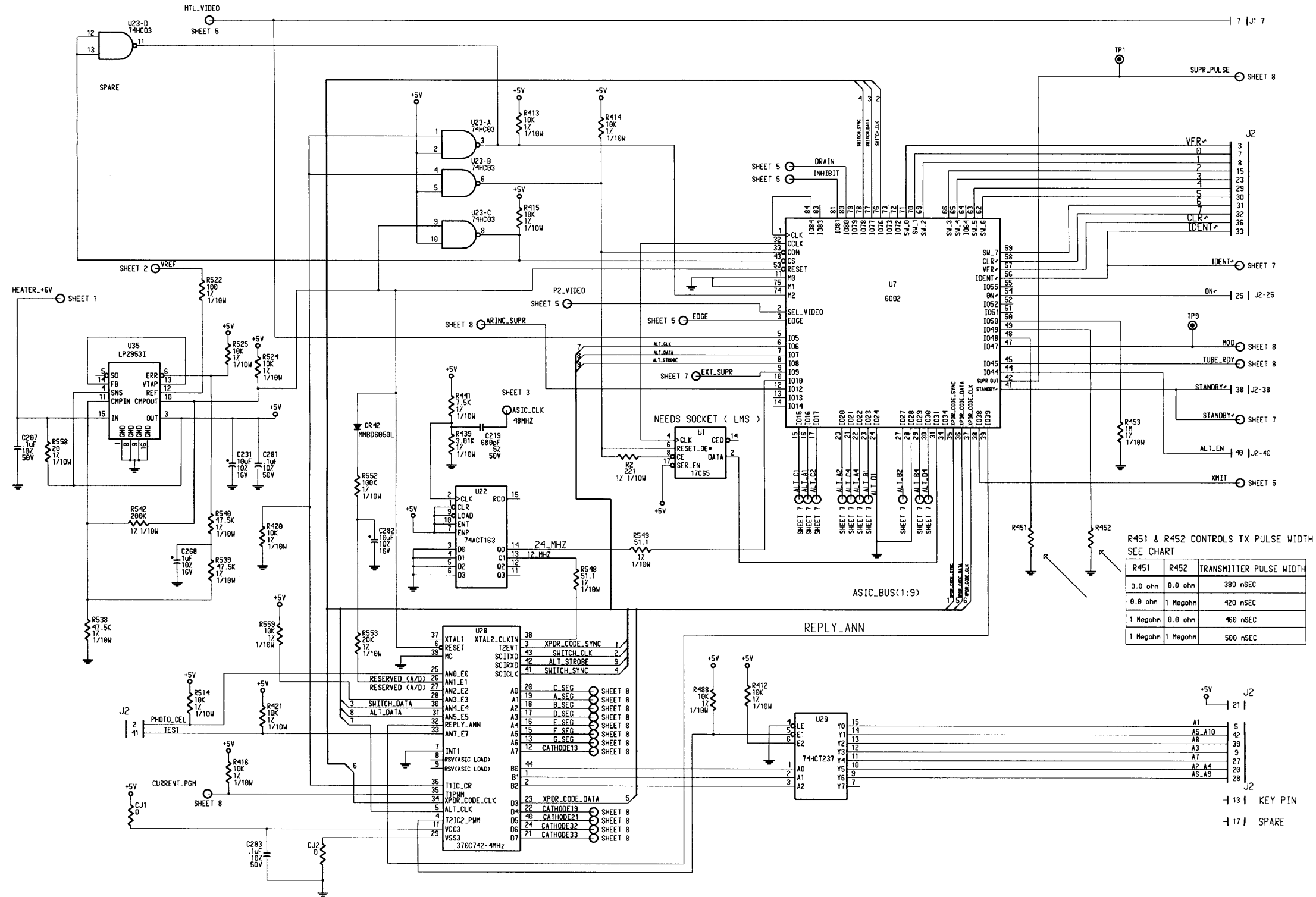


Figure 6-15  
Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 6, Sheet 6 of 8)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

ALTITUDE INPUTS

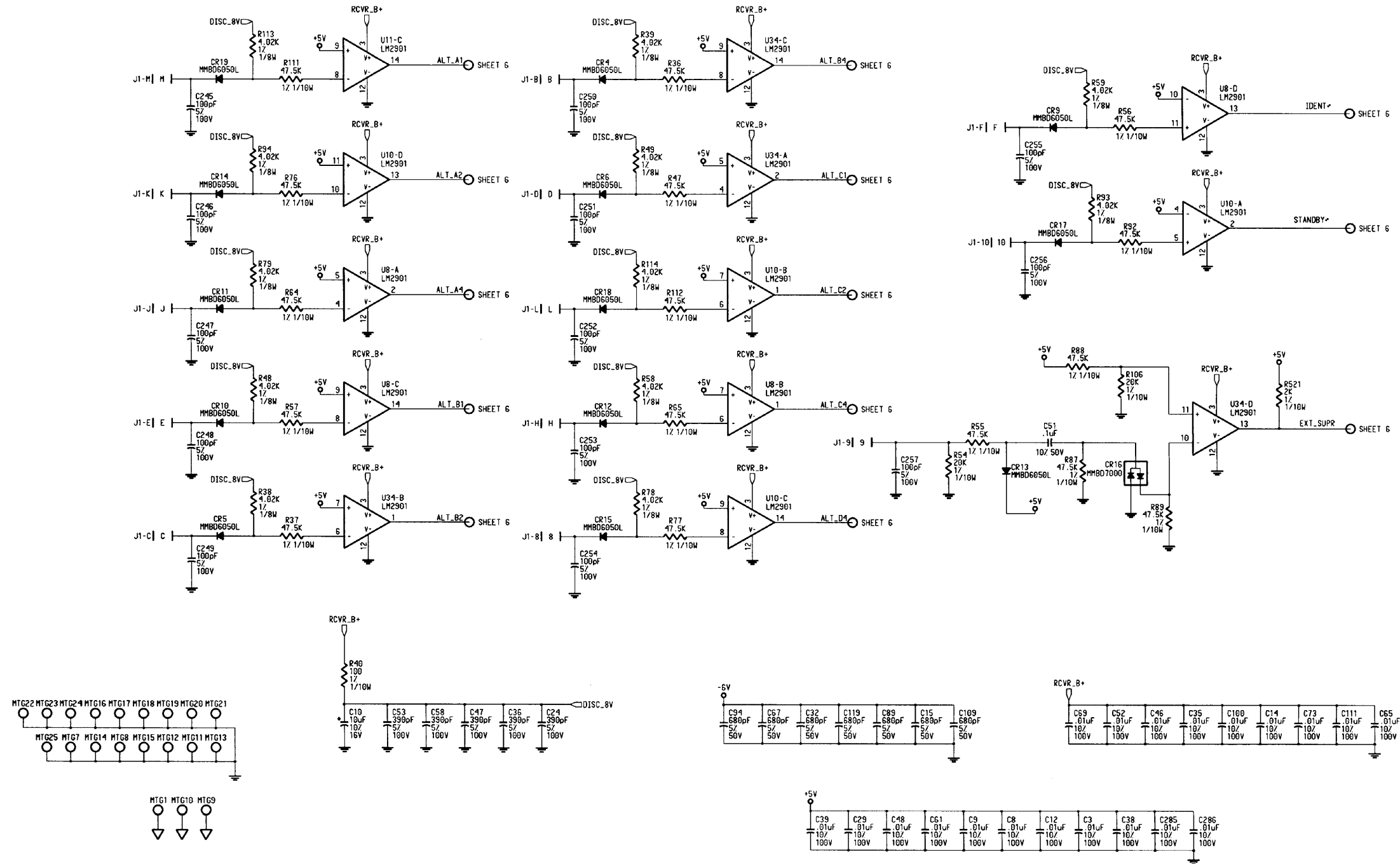


Figure 6-15

Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 6, Sheet 7 of 8)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

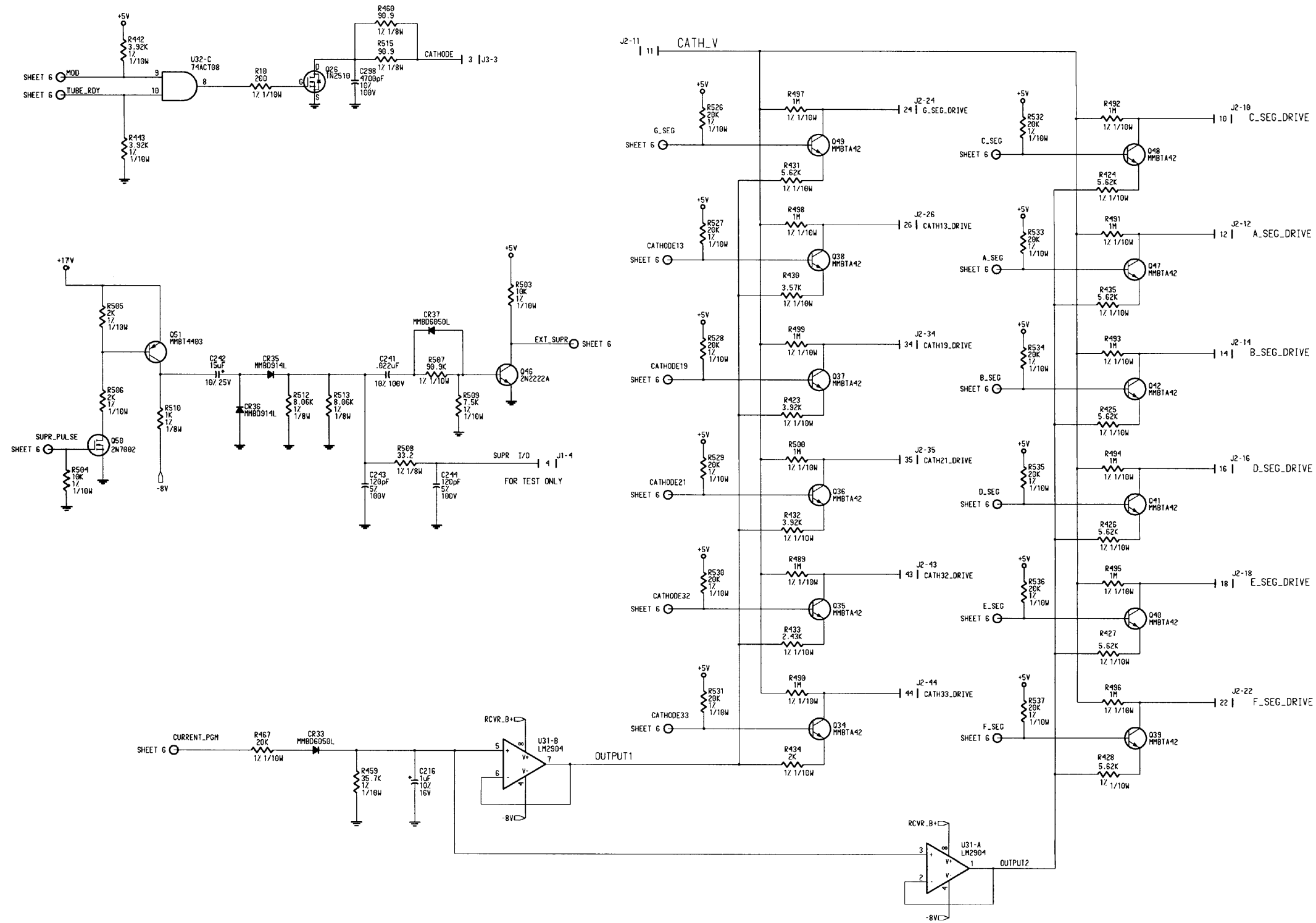


Figure 6-15  
Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 6, Sheet 8 of 8)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

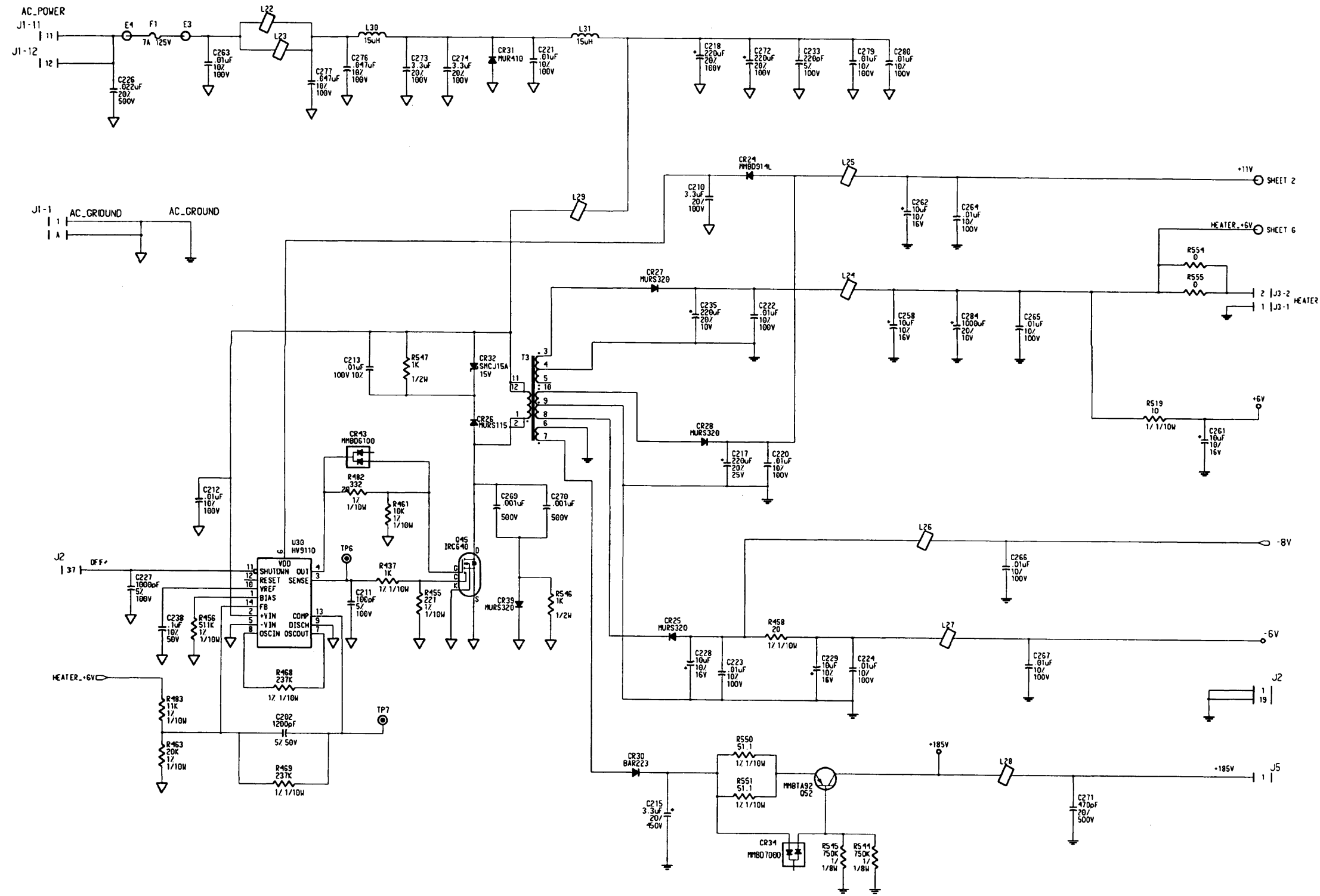
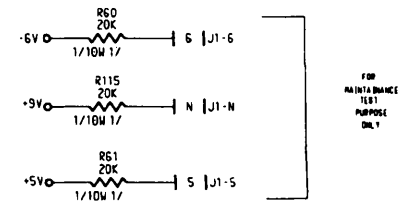
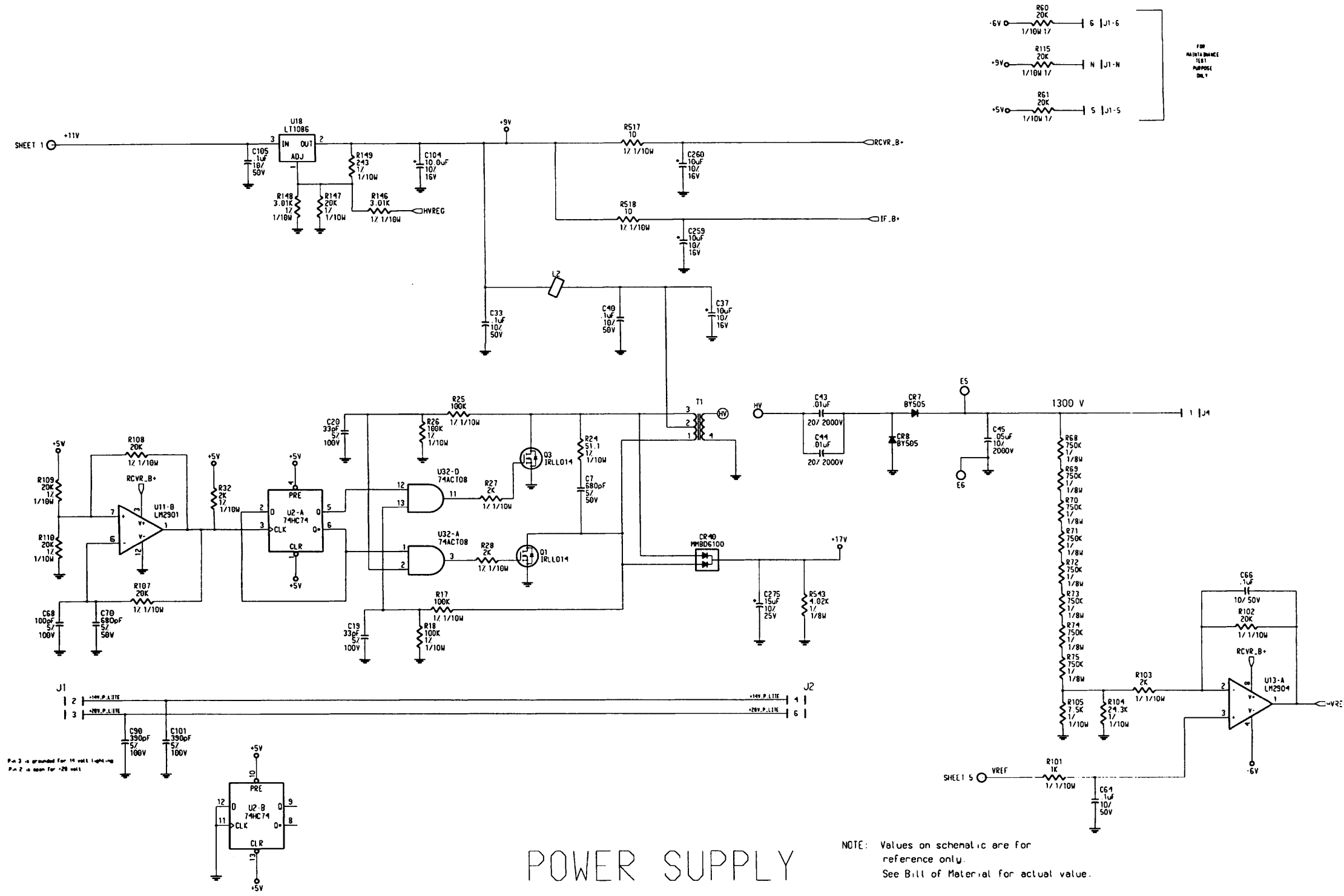


Figure 6-15A  
Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 5, Sheet 1 of 8)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER



Pin 3 is grounded for 16 volt lighting  
Pin 2 is open for +28 volt

Figure 6-15A  
Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 5, Sheet 2 of 8)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

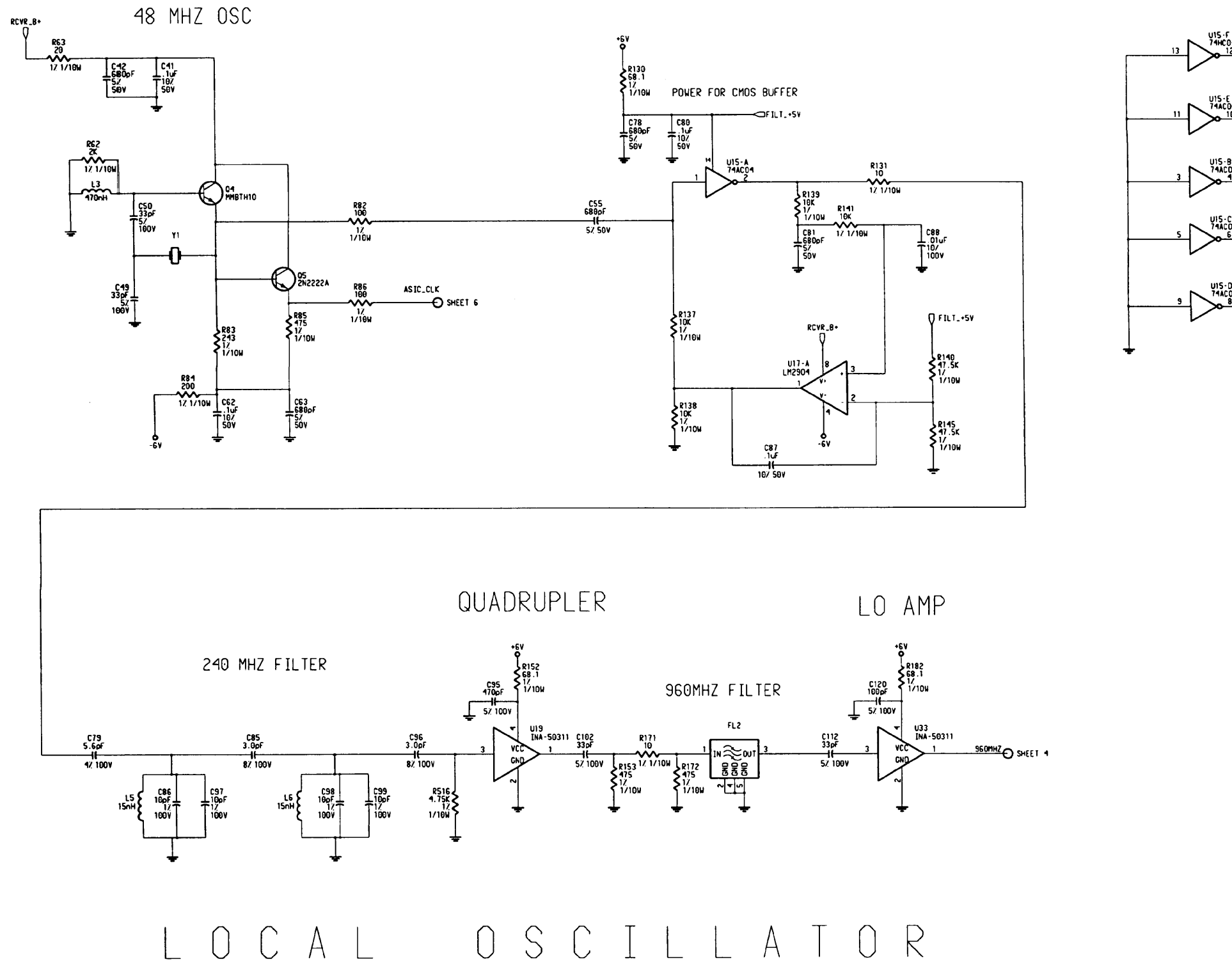


Figure 6-15A

Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 5, Sheet 3 of 8)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

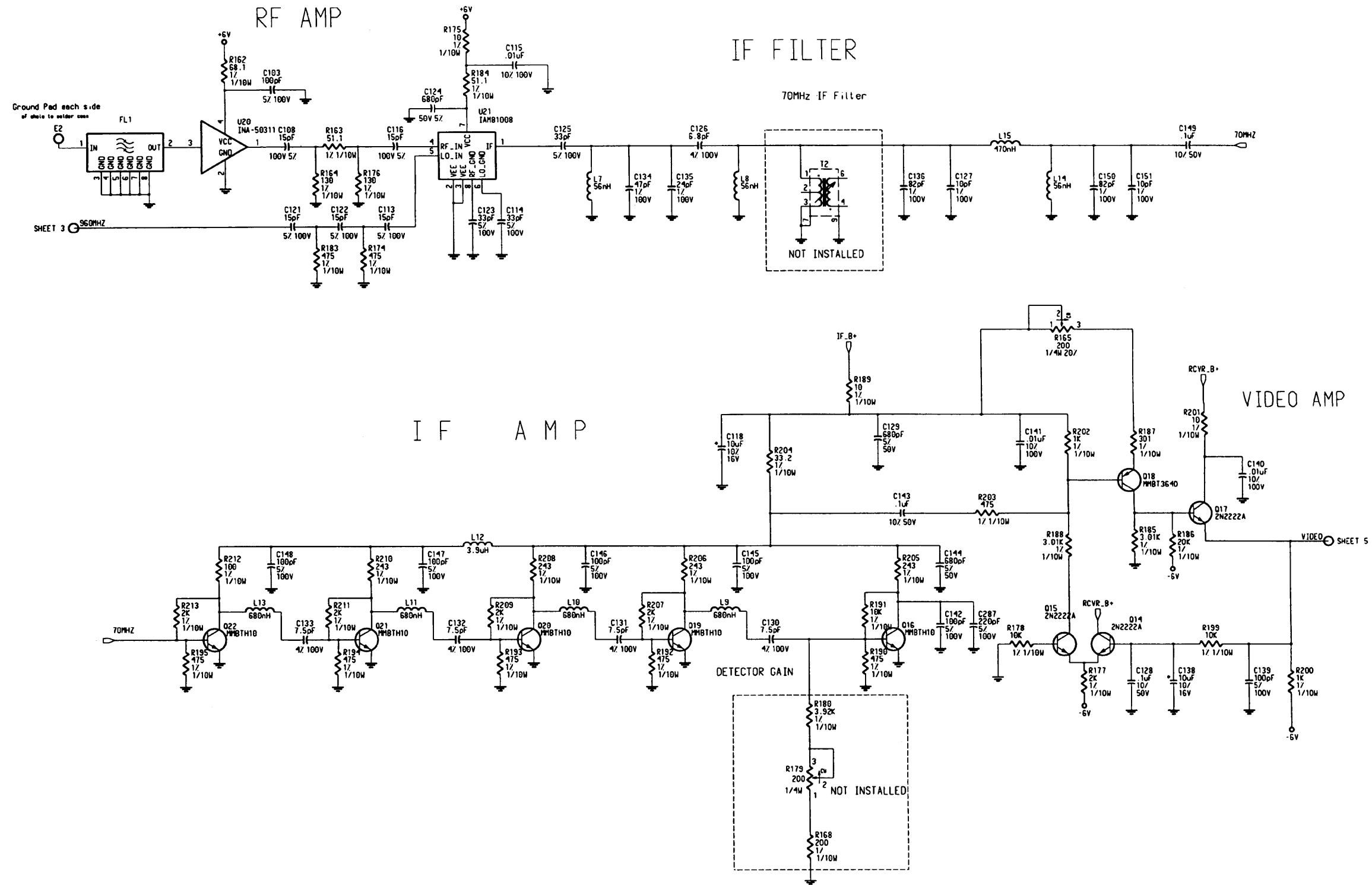


Figure 6-15A

Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 5, Sheet 4 of 8)



**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

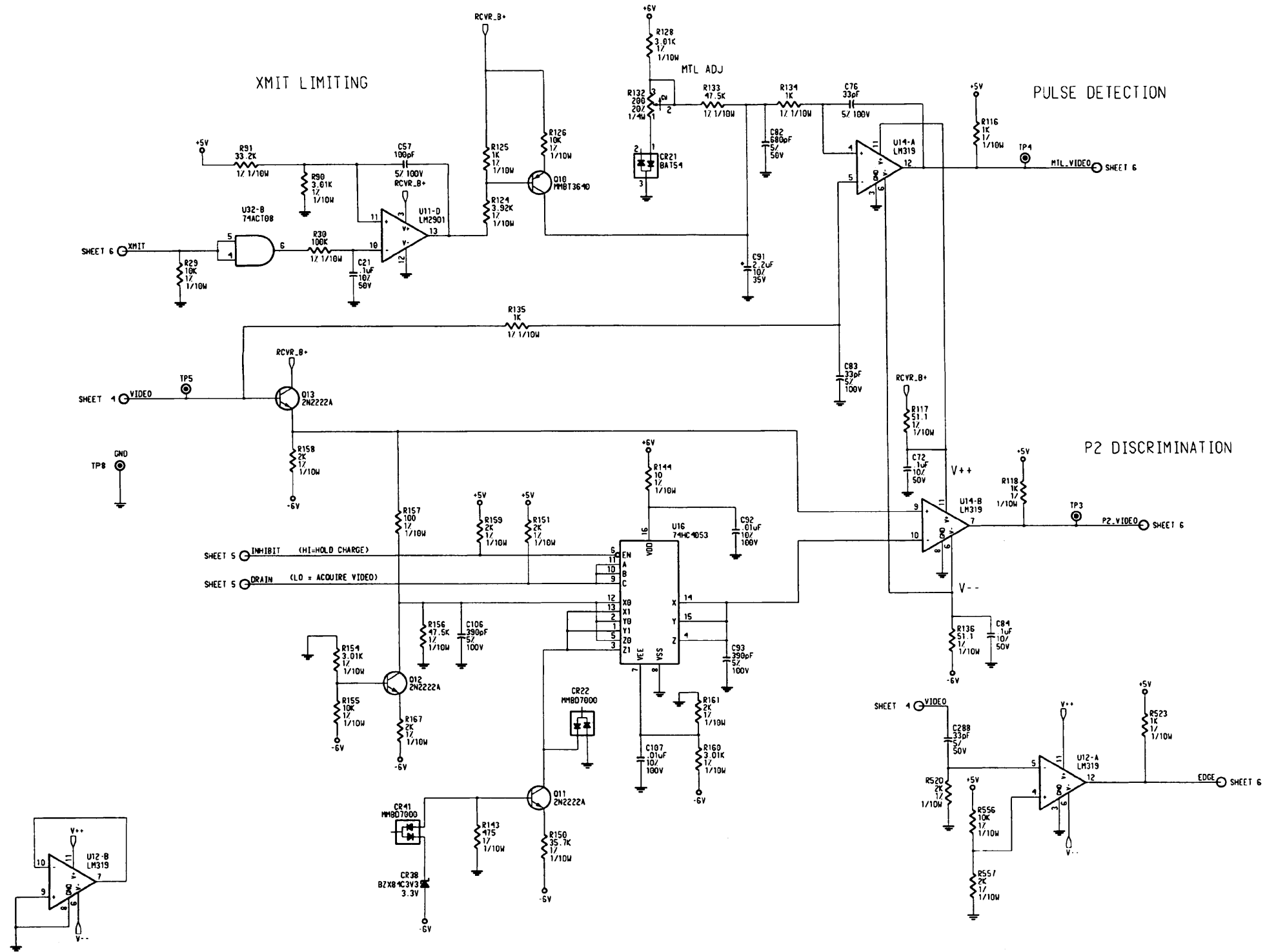


Figure 6-15A

Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 5, Sheet 5 of 8)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

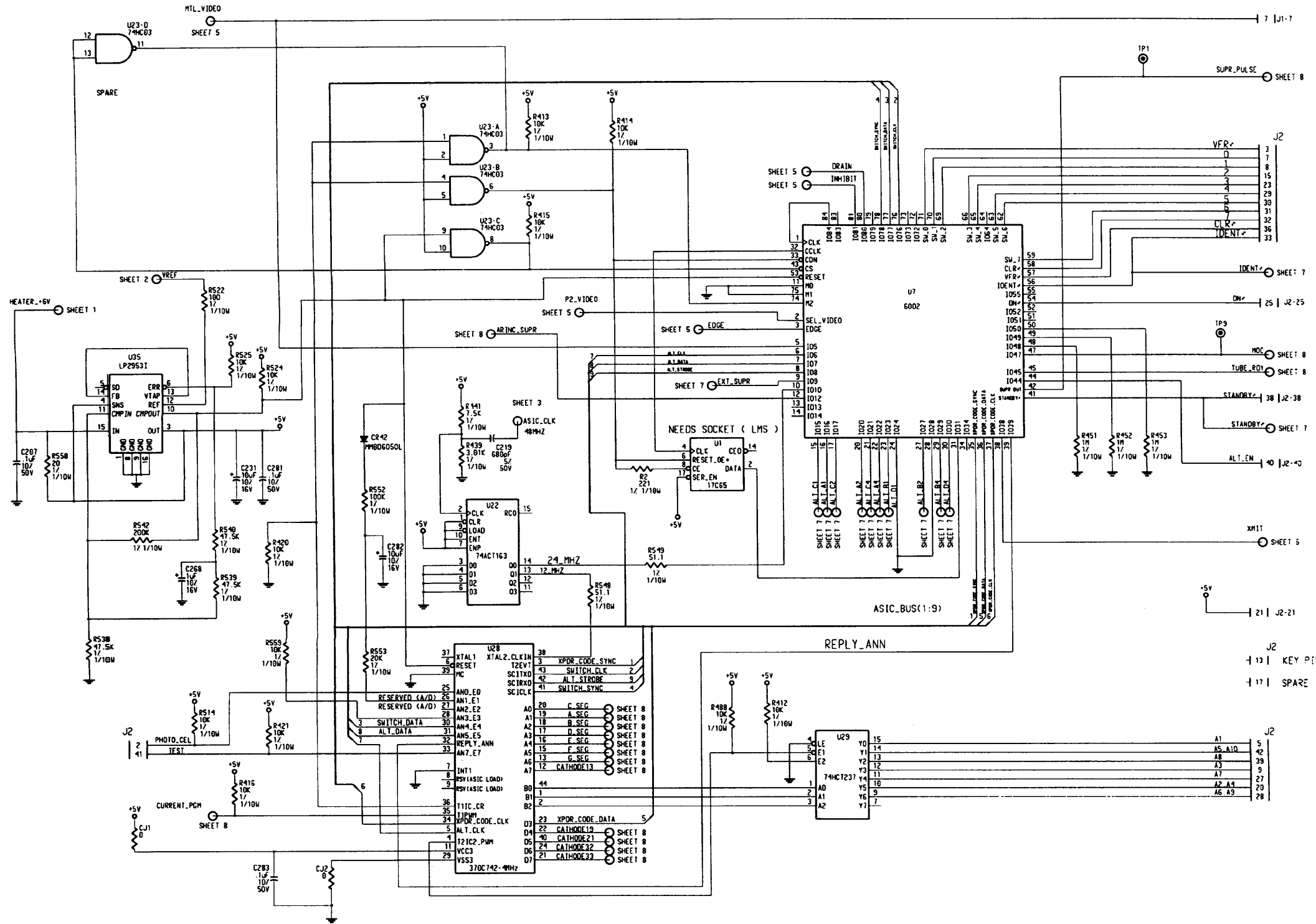


Figure 6-15A  
Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 5, Sheet 6 of 8)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

ALTITUDE INPUTS

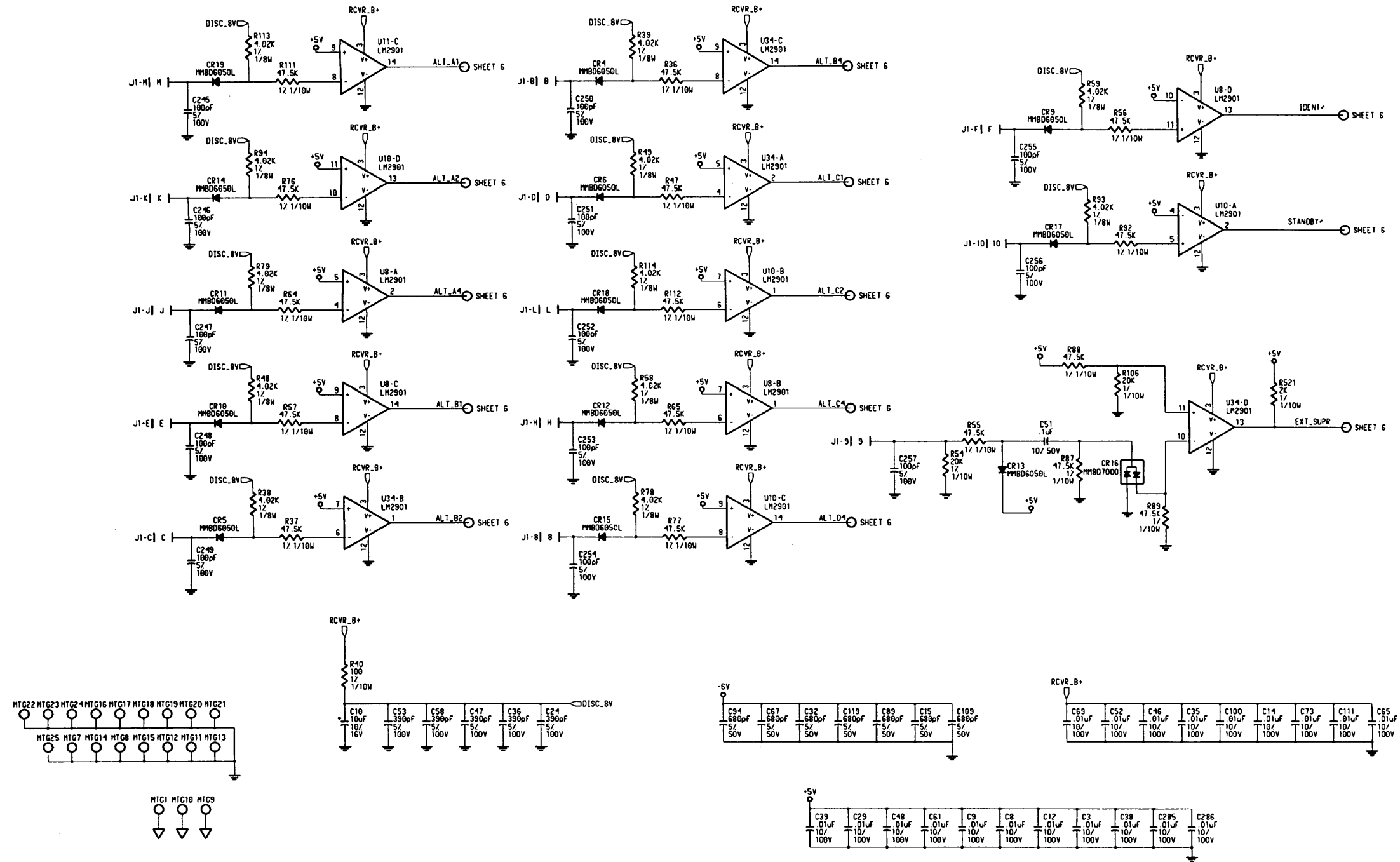


Figure 6-15A

Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 5, Sheet 7 of 8)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

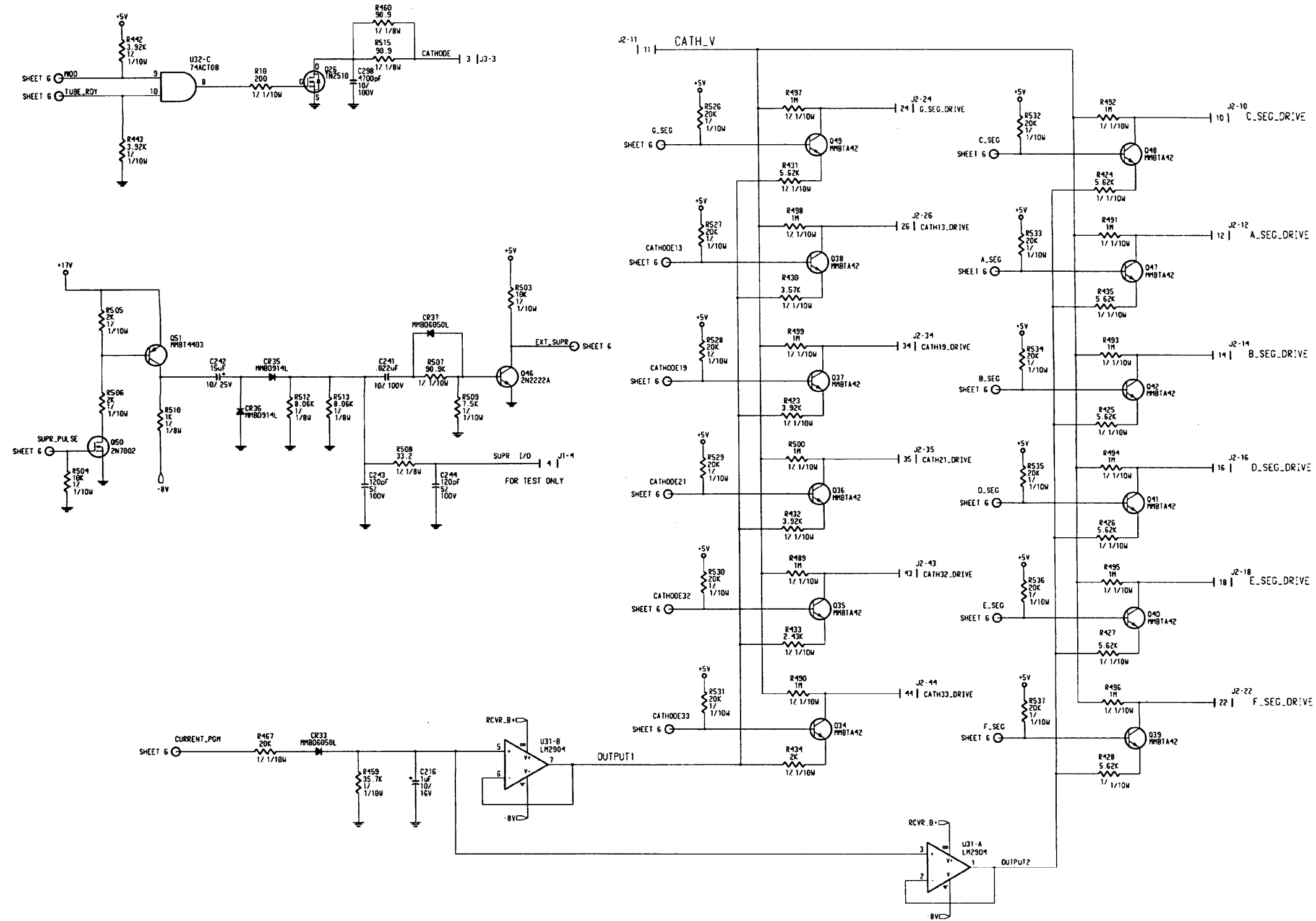


Figure 6-15A  
Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 5, Sheet 8 of 8)

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

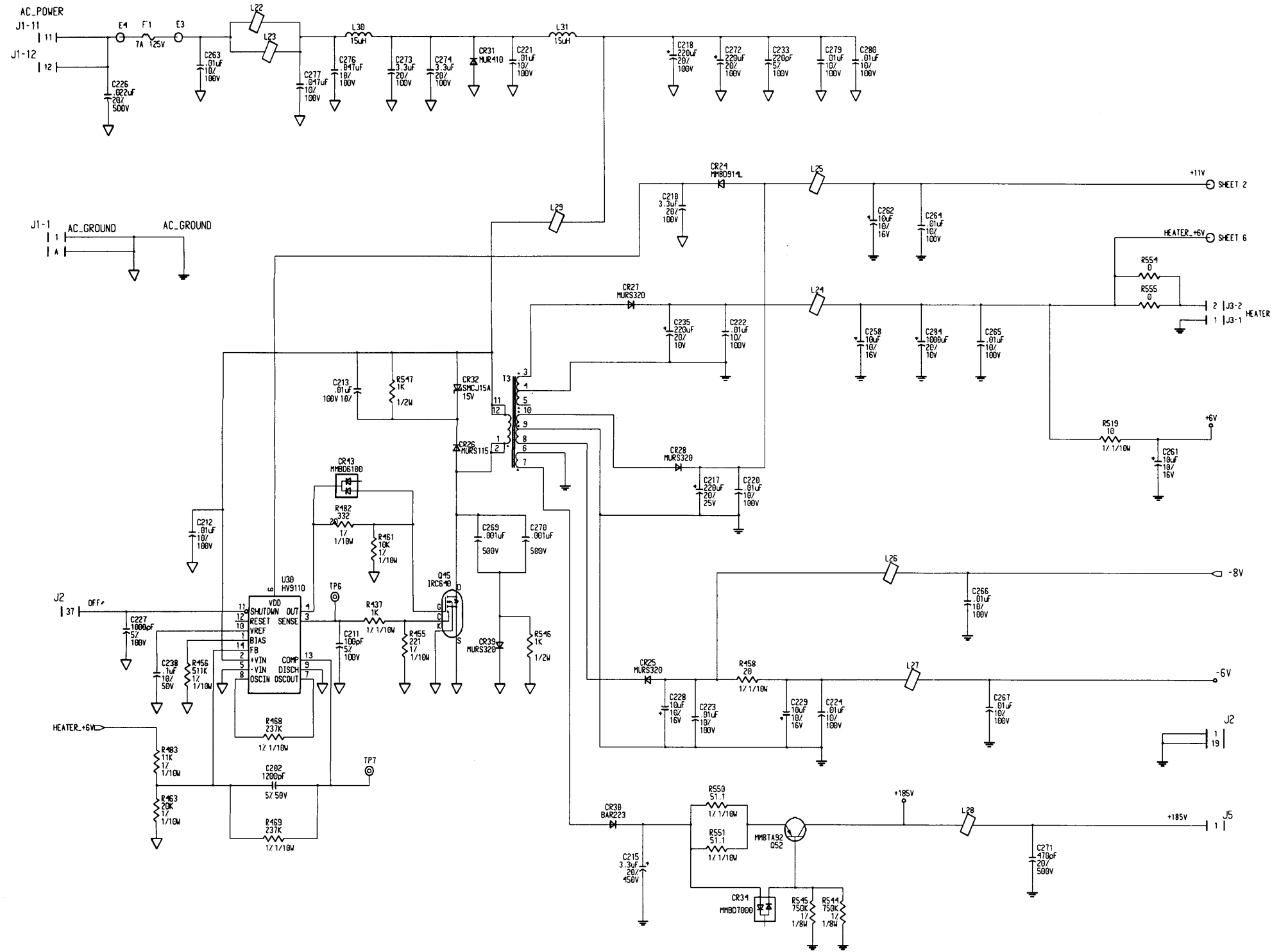


Figure 6-15B  
Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 2, Sheet 1 of 8)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

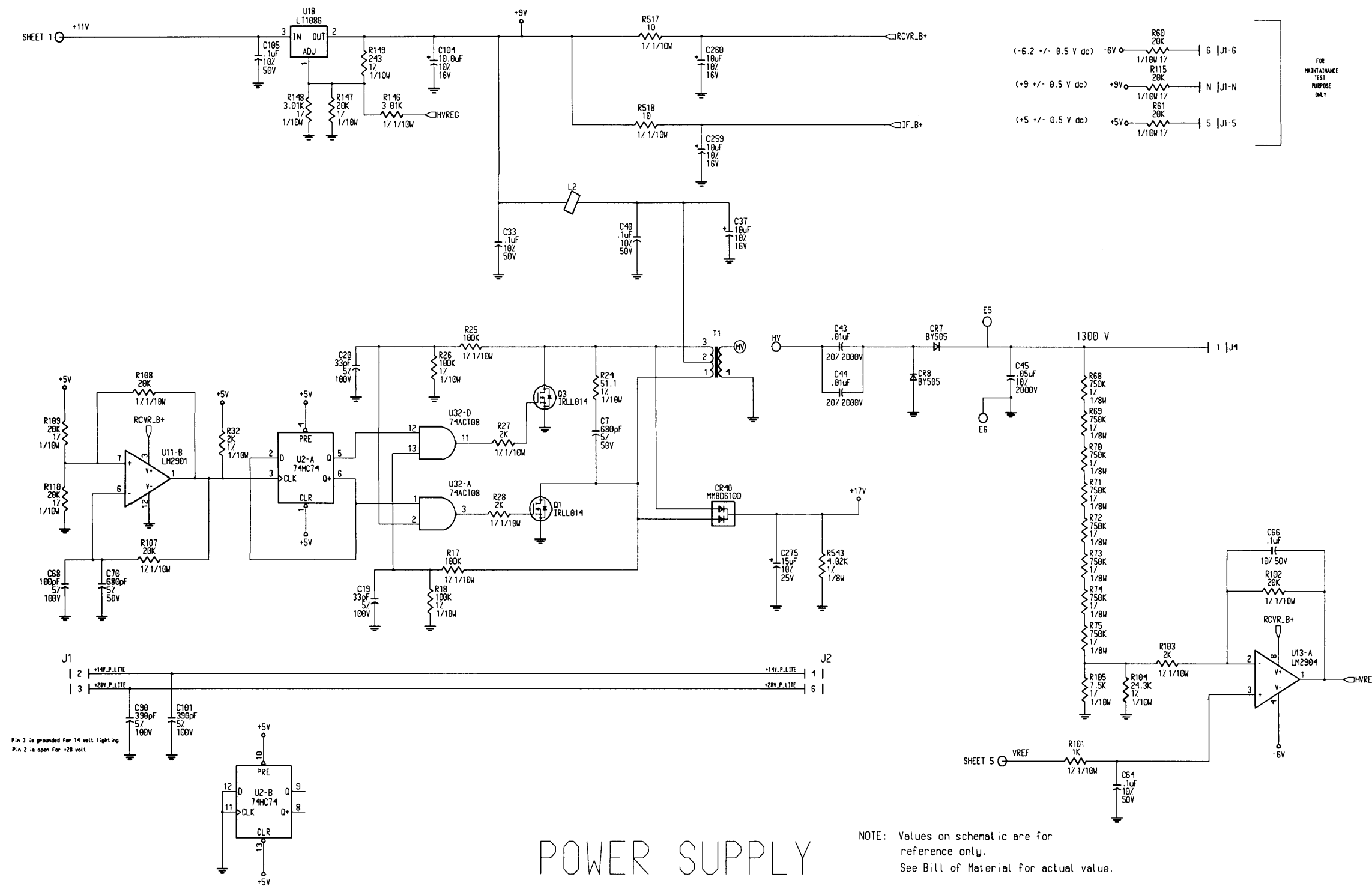


Figure 6-15B

Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 2, Sheet 2 of 8)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

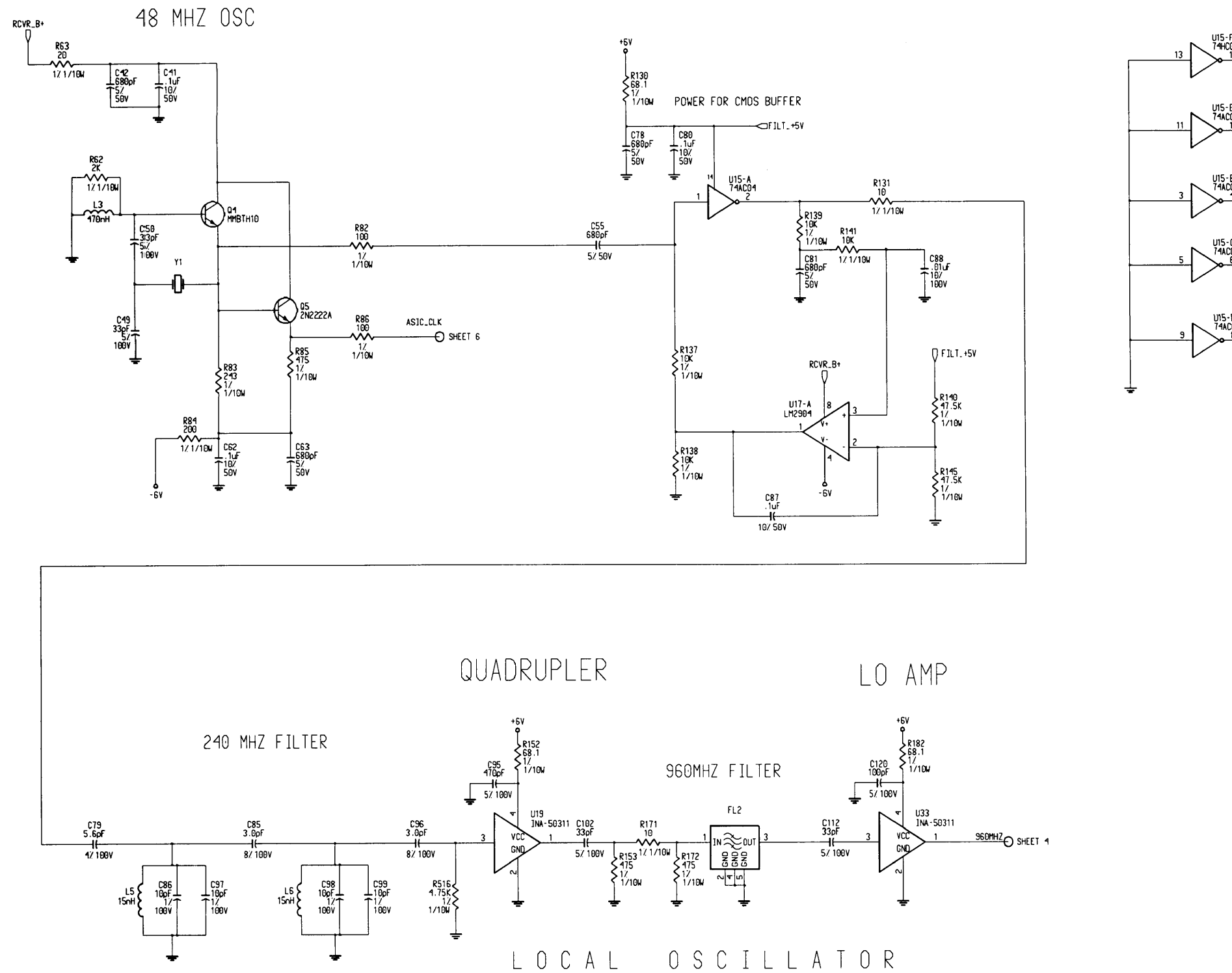


Figure 6-15B

Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 2, Sheet 3 of 8)

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

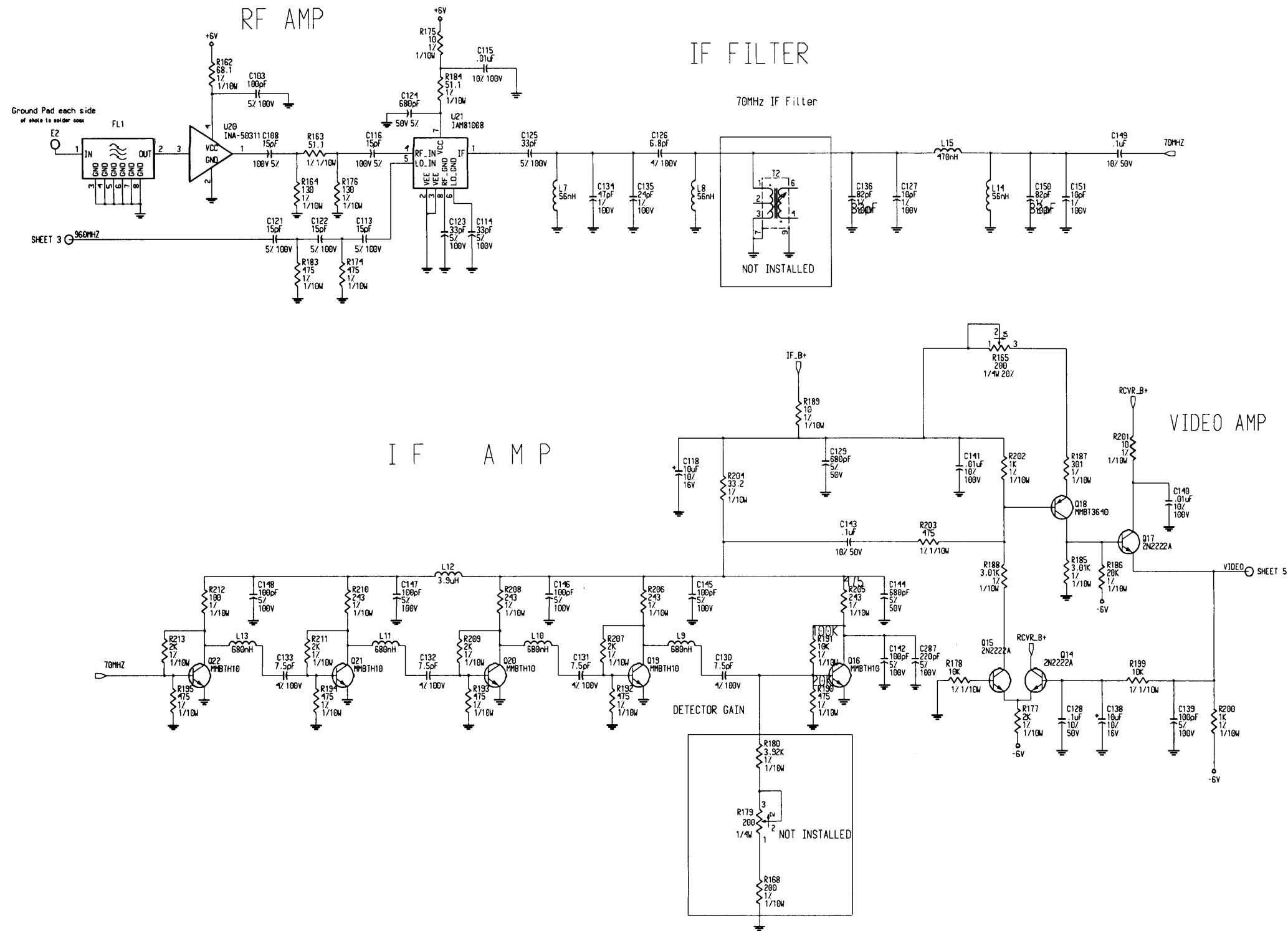


Figure 6-15B  
 Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 2, Sheet 4 of 8)



**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

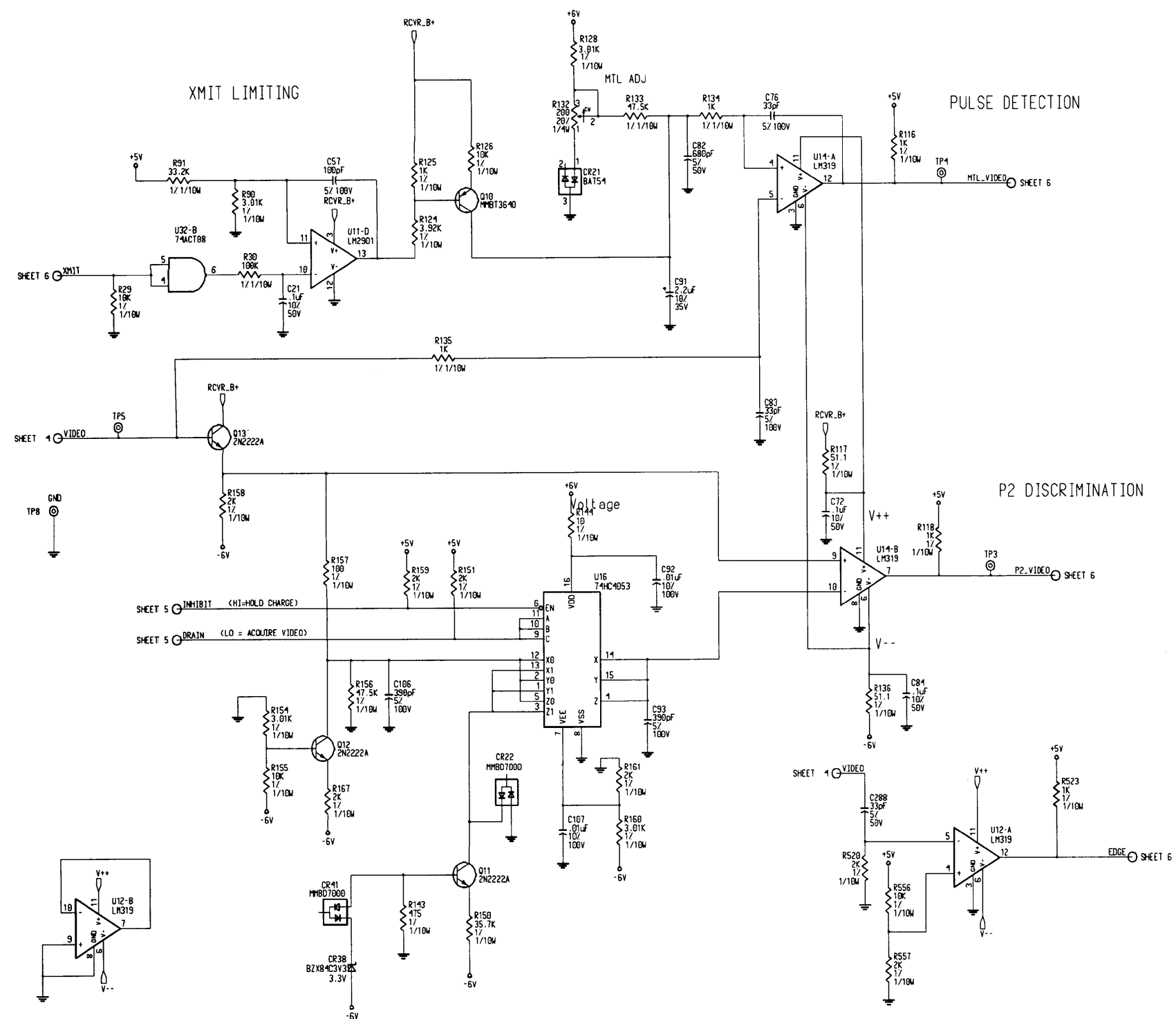


Figure 6-15B  
 Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 2, Sheet 5 of 8)

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

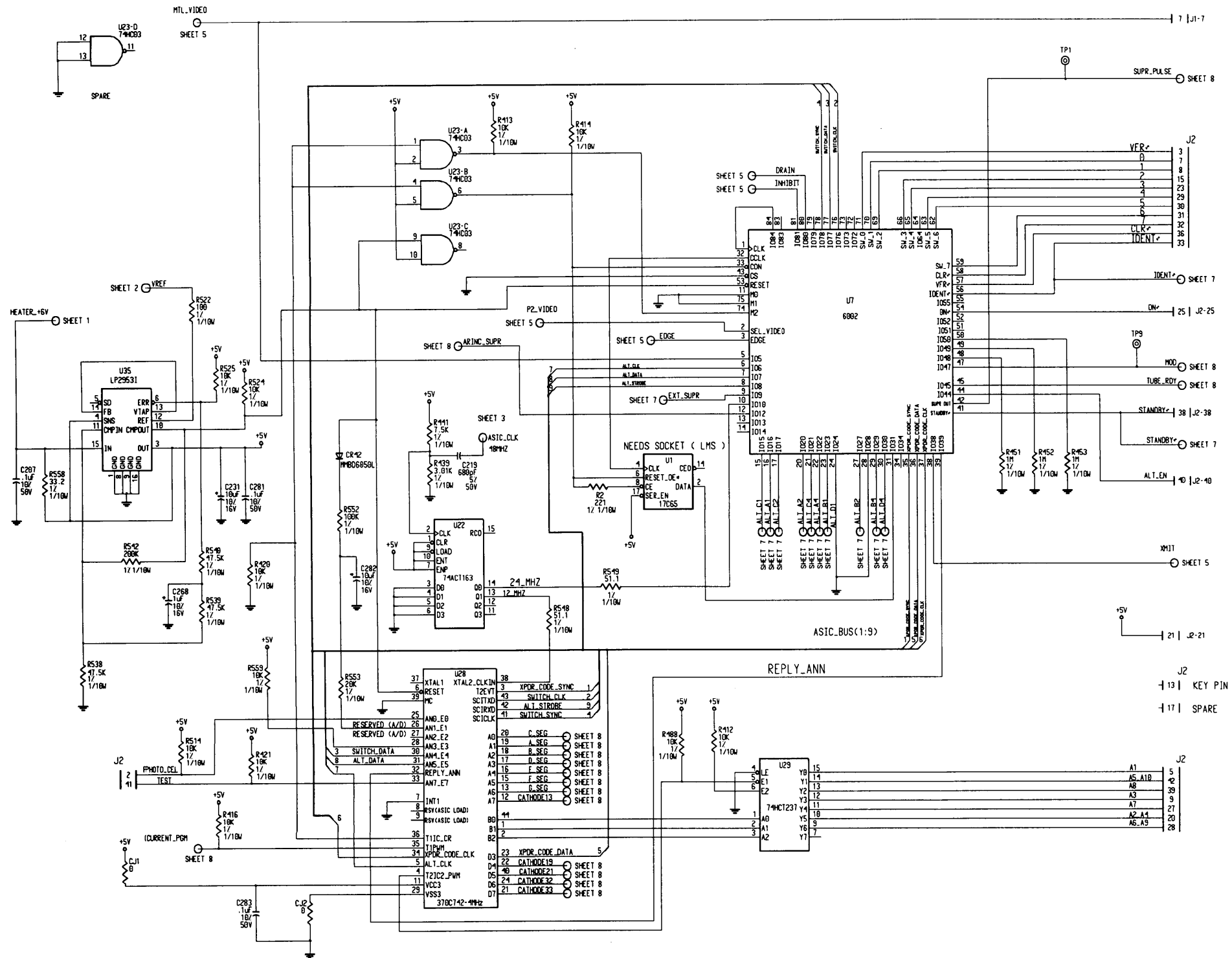


Figure 6-15B  
 Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 2, Sheet 6 of 8)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

ALTITUDE INPUTS

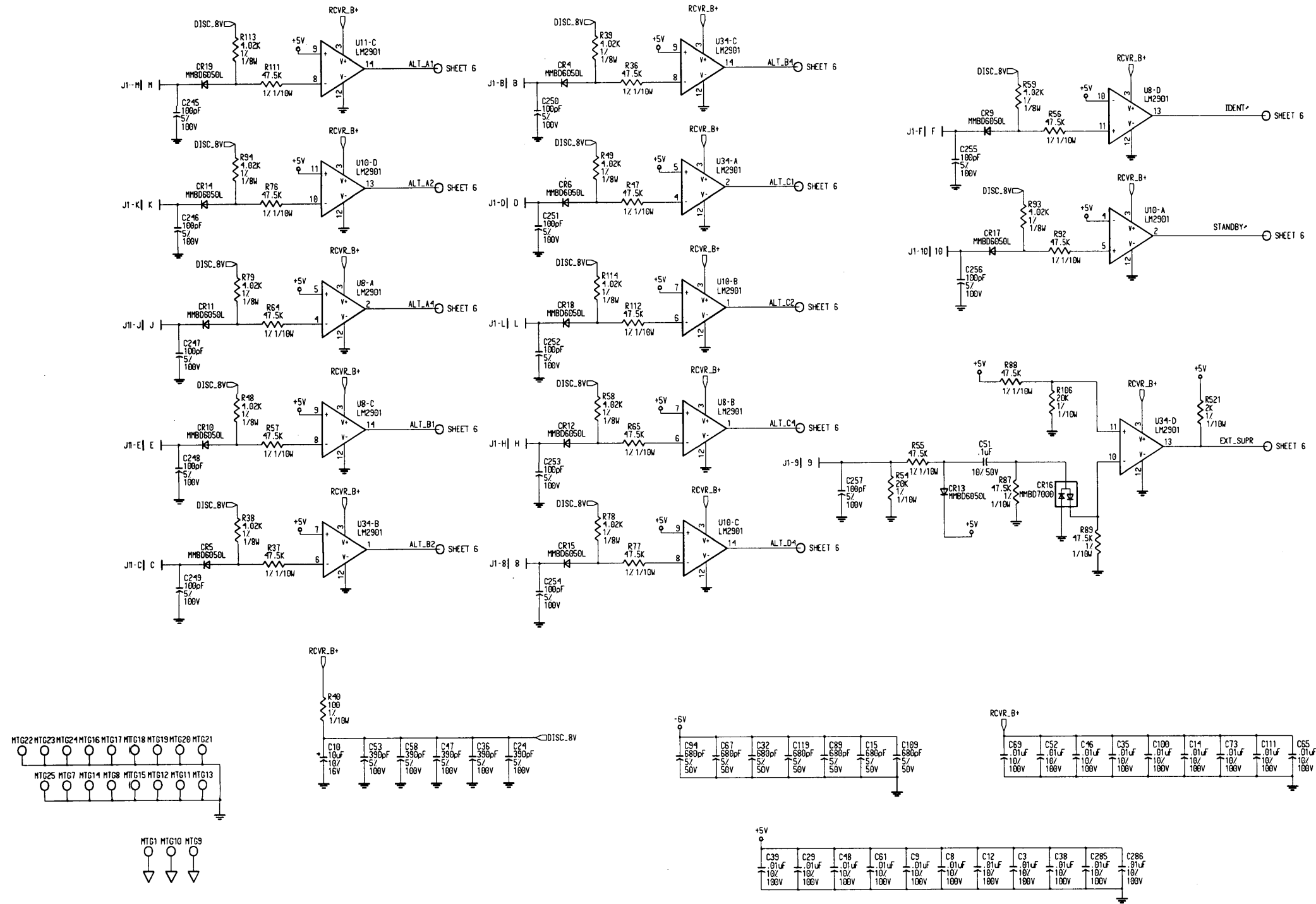


Figure 6-15B  
Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 2, Sheet 7 of 8)

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

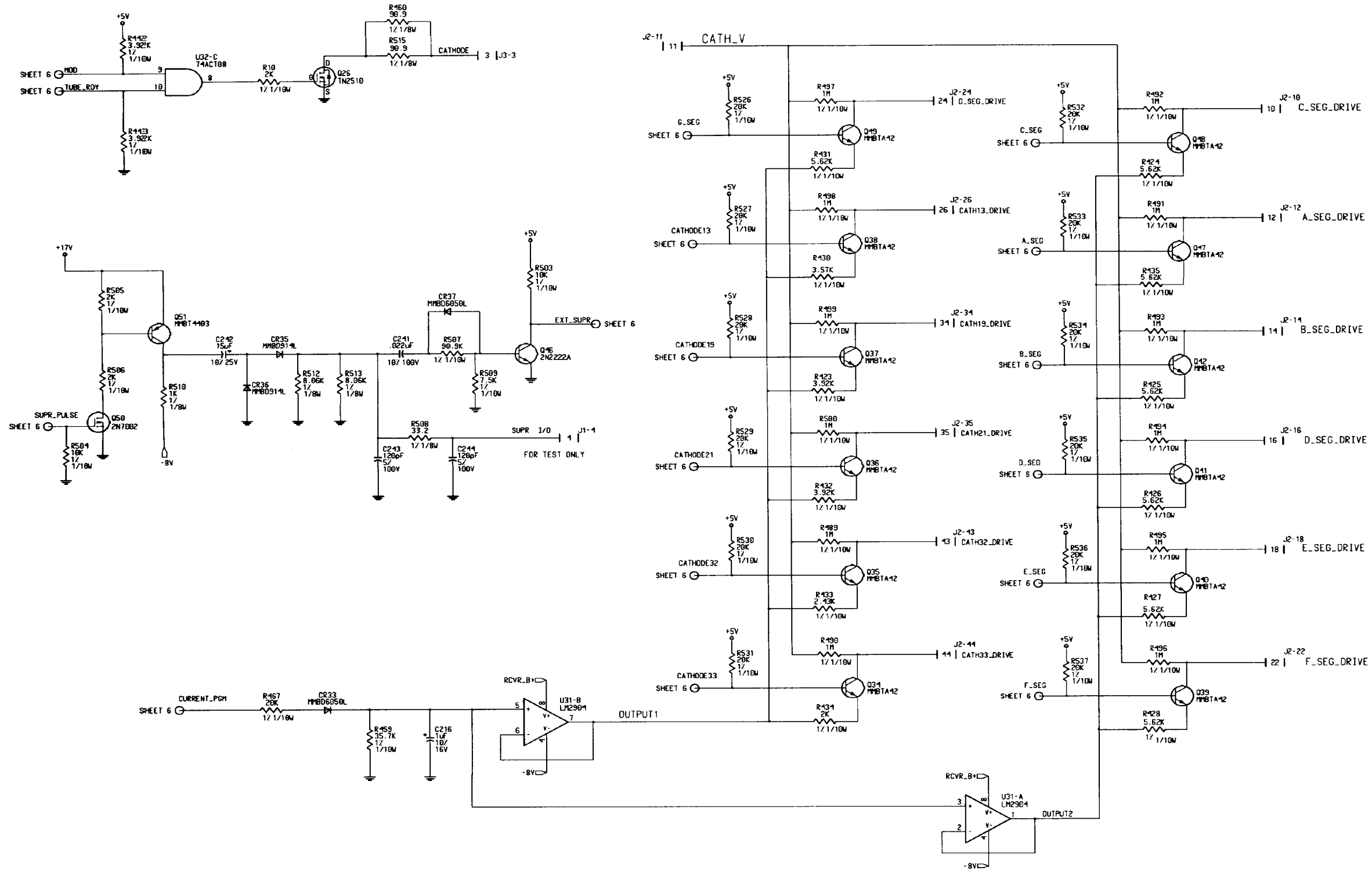


Figure 6-15B  
 Main Board Schematic (Dwg. No. 002-09098-0000 Rev. 2, Sheet 8 of 8)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

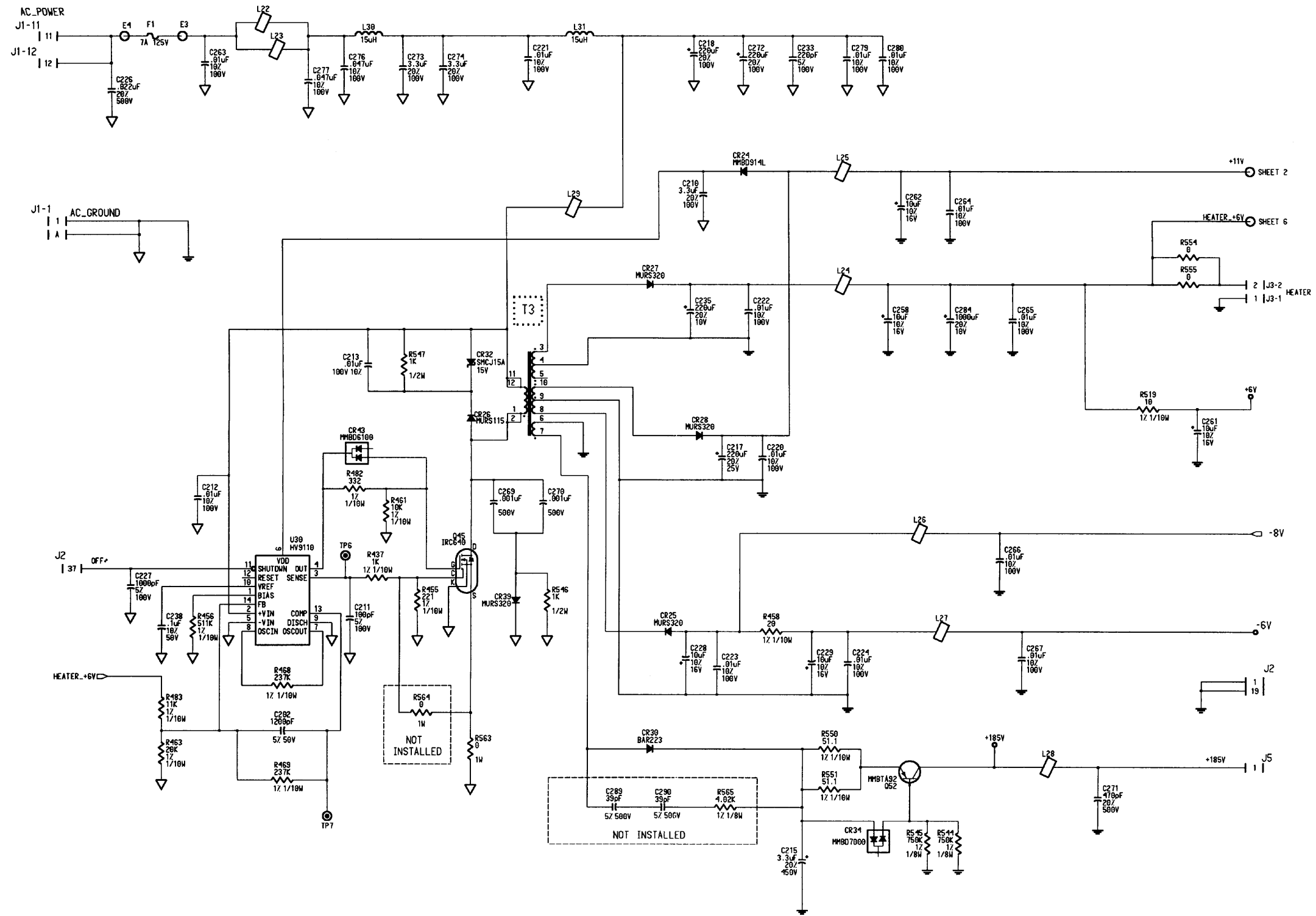


Figure 6-16

Main Board Schematic (Dwg. No. 002-09098-0020 Rev. AB, Sheet 1 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

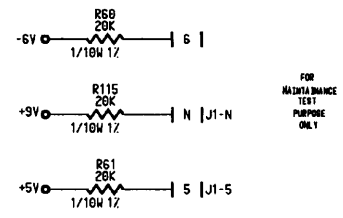
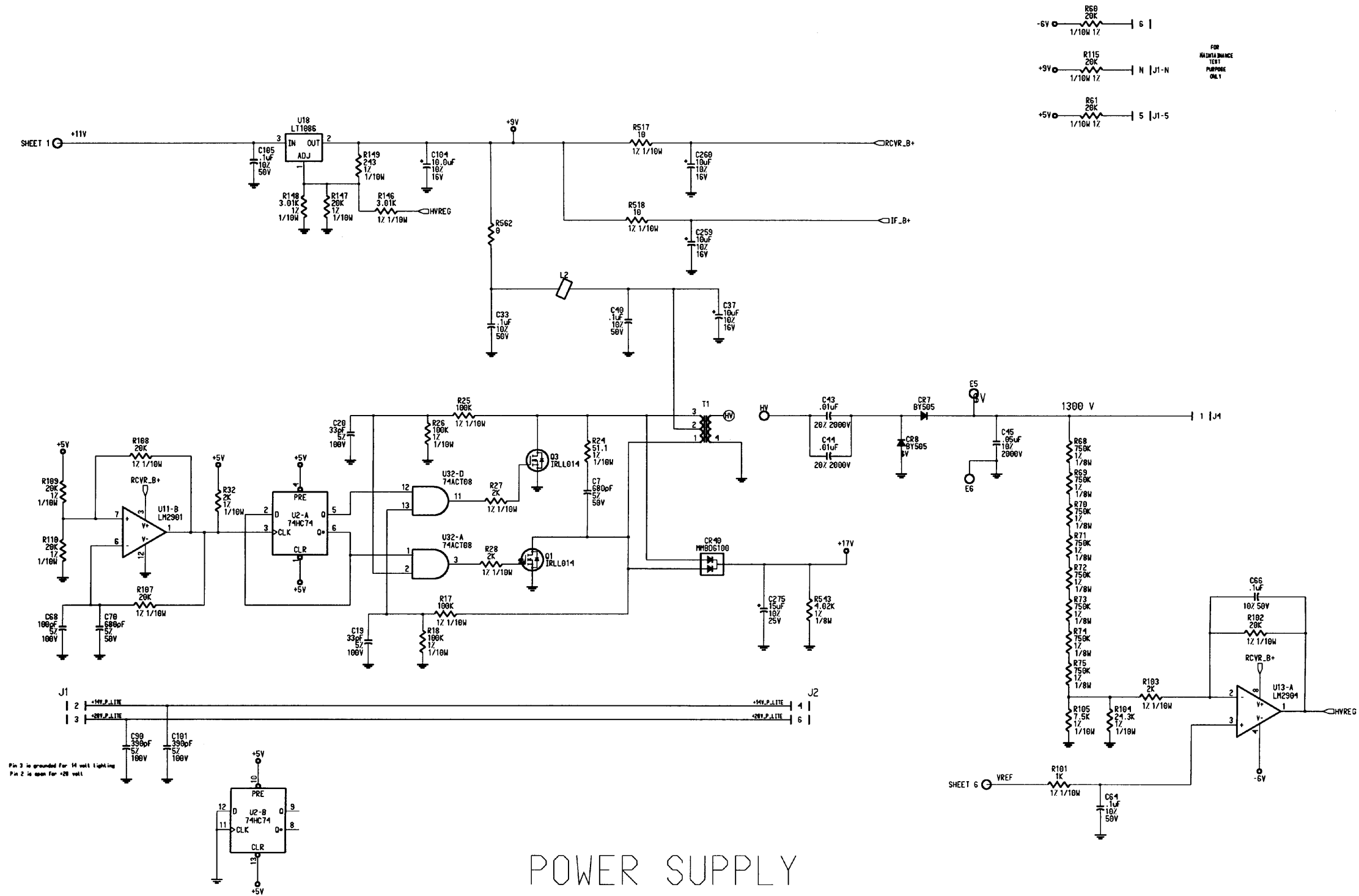


Figure 6-16  
Main Board Schematic (Dwg. No. 002-09098-0020 Rev. AB, Sheet 2 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

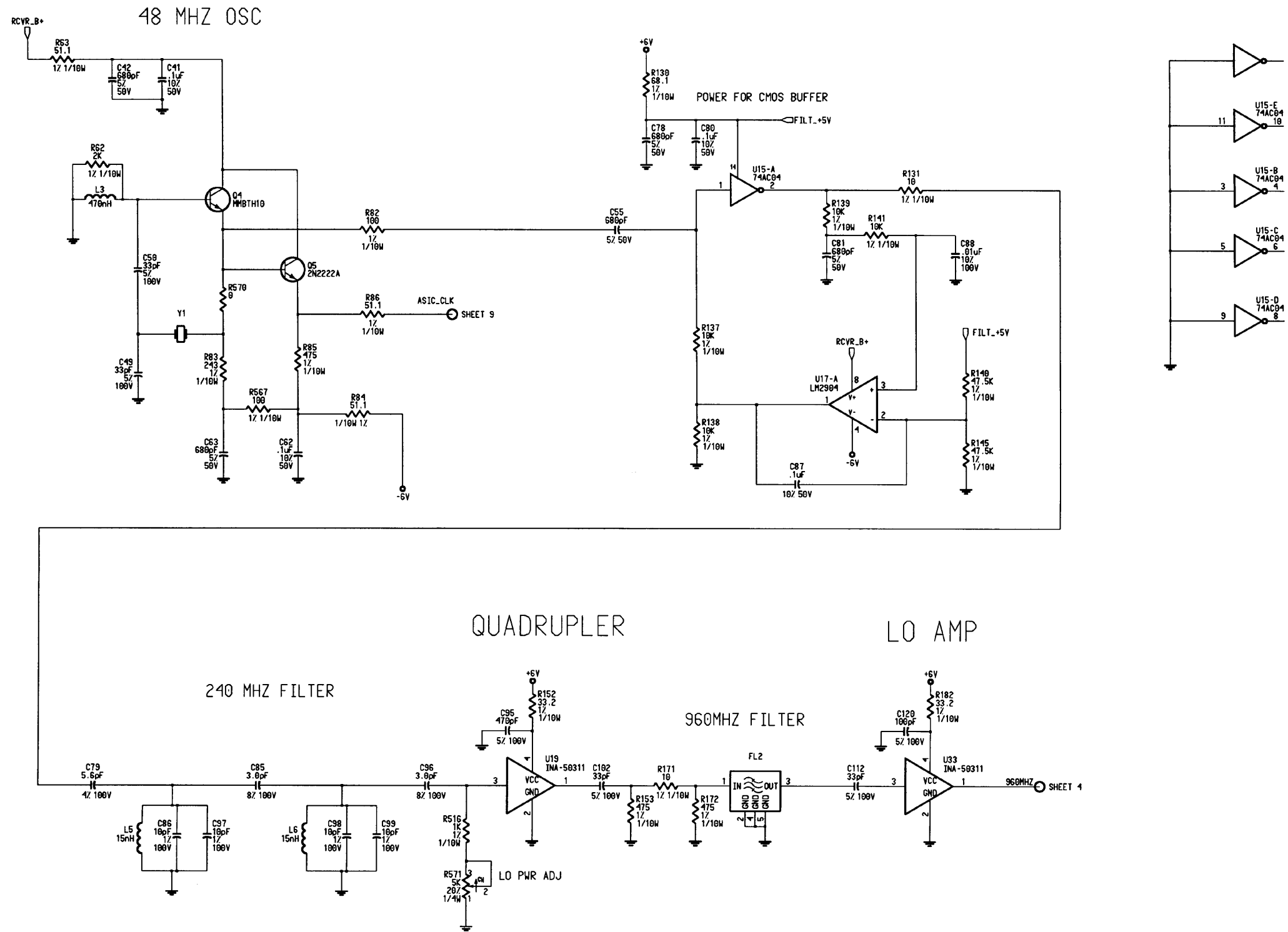


Figure 6-16

Main Board Schematic (Dwg. No. 002-09098-0020 Rev. AB, Sheet 3 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

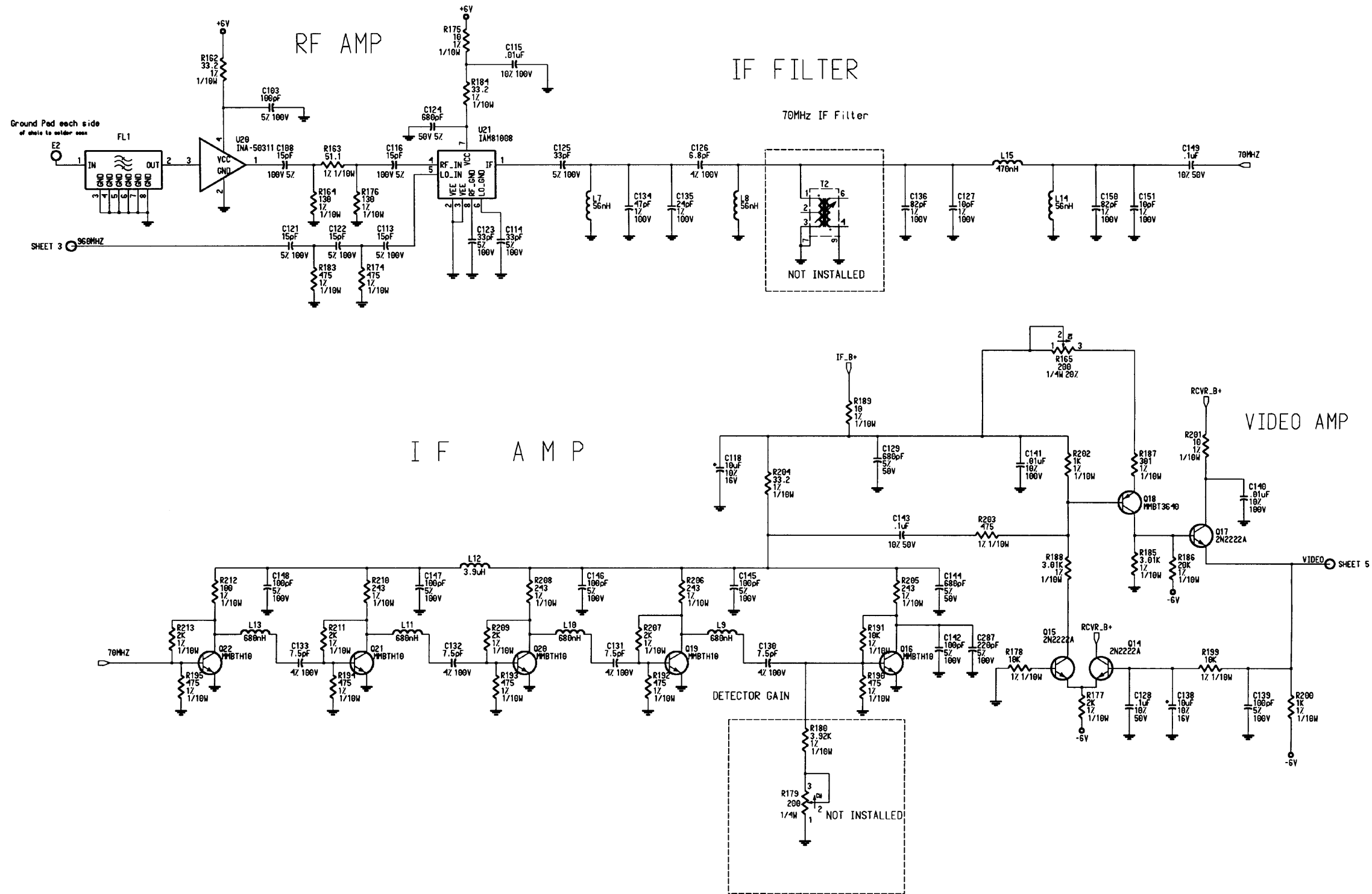


Figure 6-16

Main Board Schematic (Dwg. No. 002-09098-0020 Rev. AB, Sheet 4 of 9)



**BENDIX/KING**  
KT 76C ATRCBS TRANSPONDER

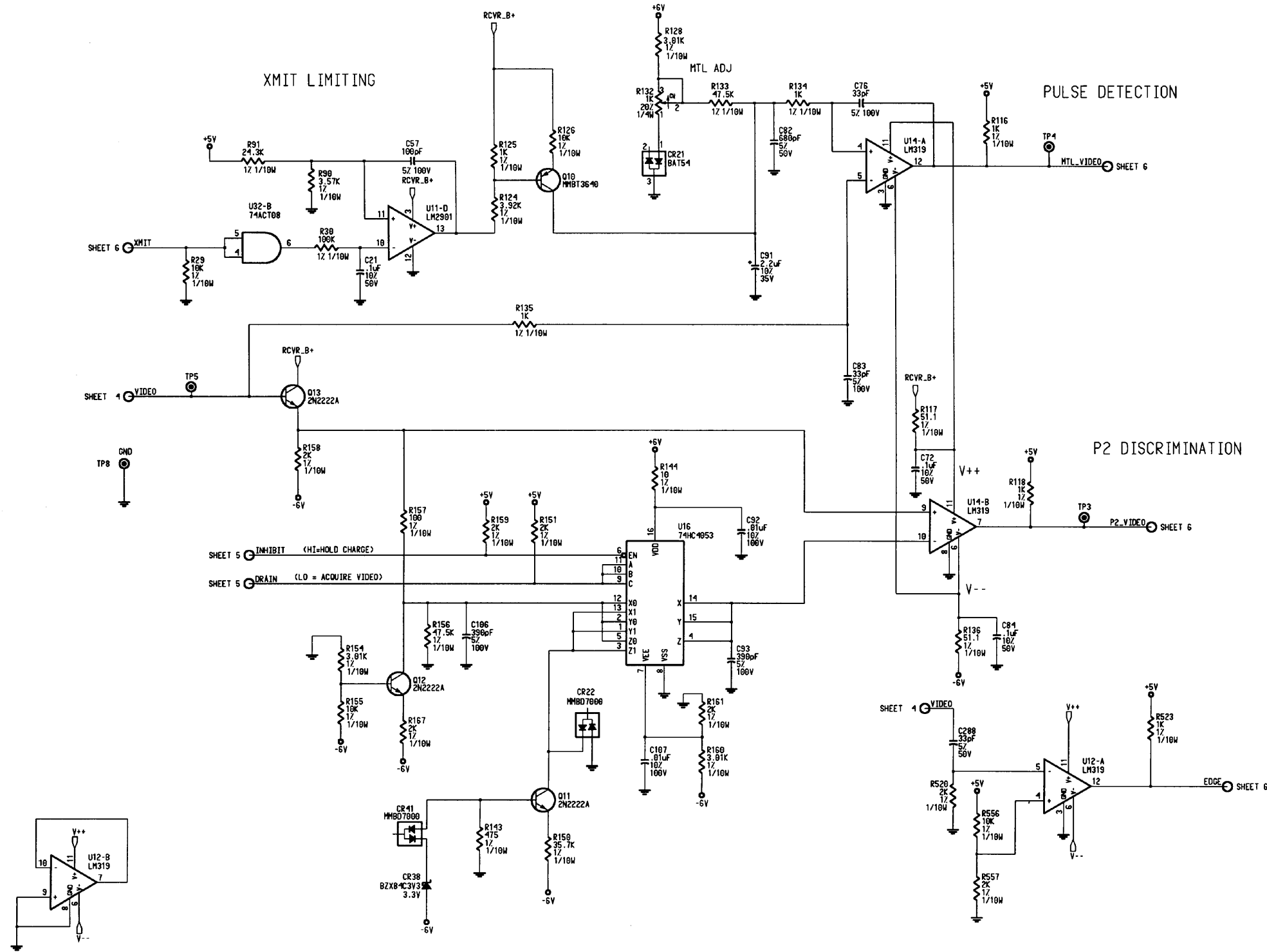
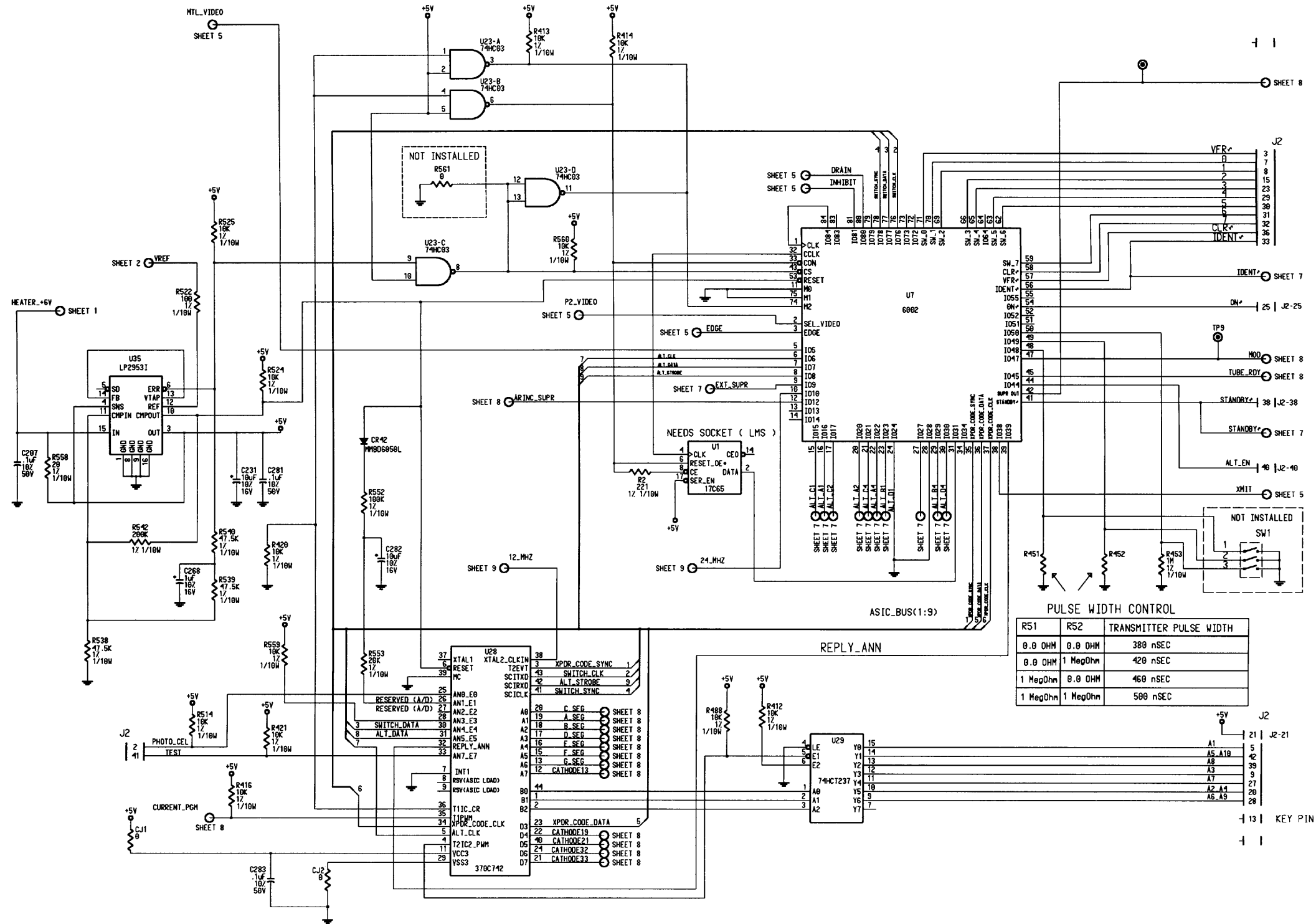


Figure 6-16  
Main Board Schematic (Dwg. No. 002-09098-0020 Rev. AB, Sheet 5 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER



**PULSE WIDTH CONTROL**

R51	R52	TRANSMITTER PULSE WIDTH
0.0 OHM	0.0 OHM	380 nSEC
0.0 OHM	1 MegOhm	420 nSEC
1 MegOhm	0.0 OHM	460 nSEC
1 MegOhm	1 MegOhm	500 nSEC

Figure 6-16  
Main Board Schematic (Dwg. No. 002-09098-0020 Rev. AB, Sheet 6 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

ALTITUDE INPUTS

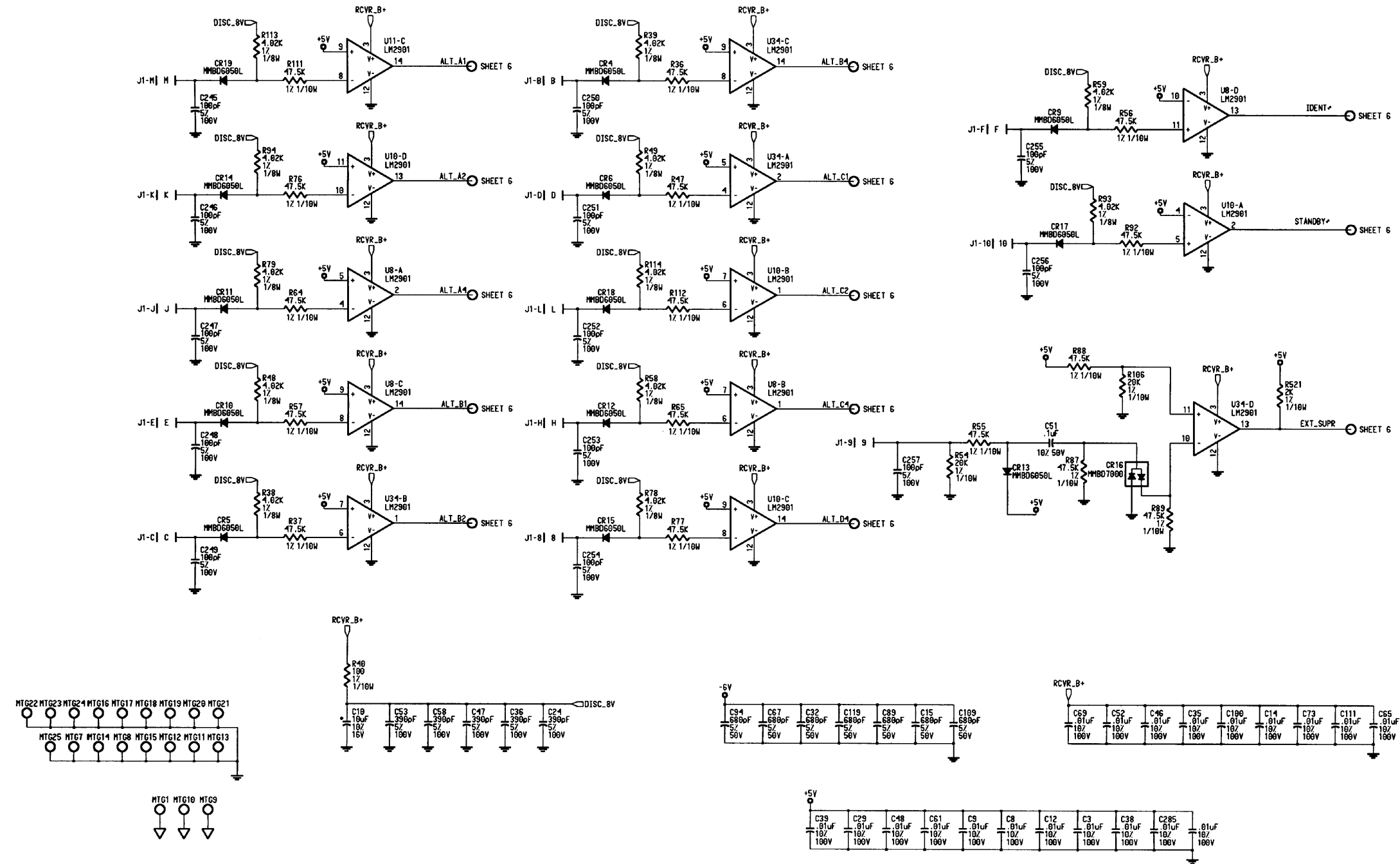


Figure 6-16

Main Board Schematic (Dwg. No. 002-09098-0020 Rev. AB, Sheet 7 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

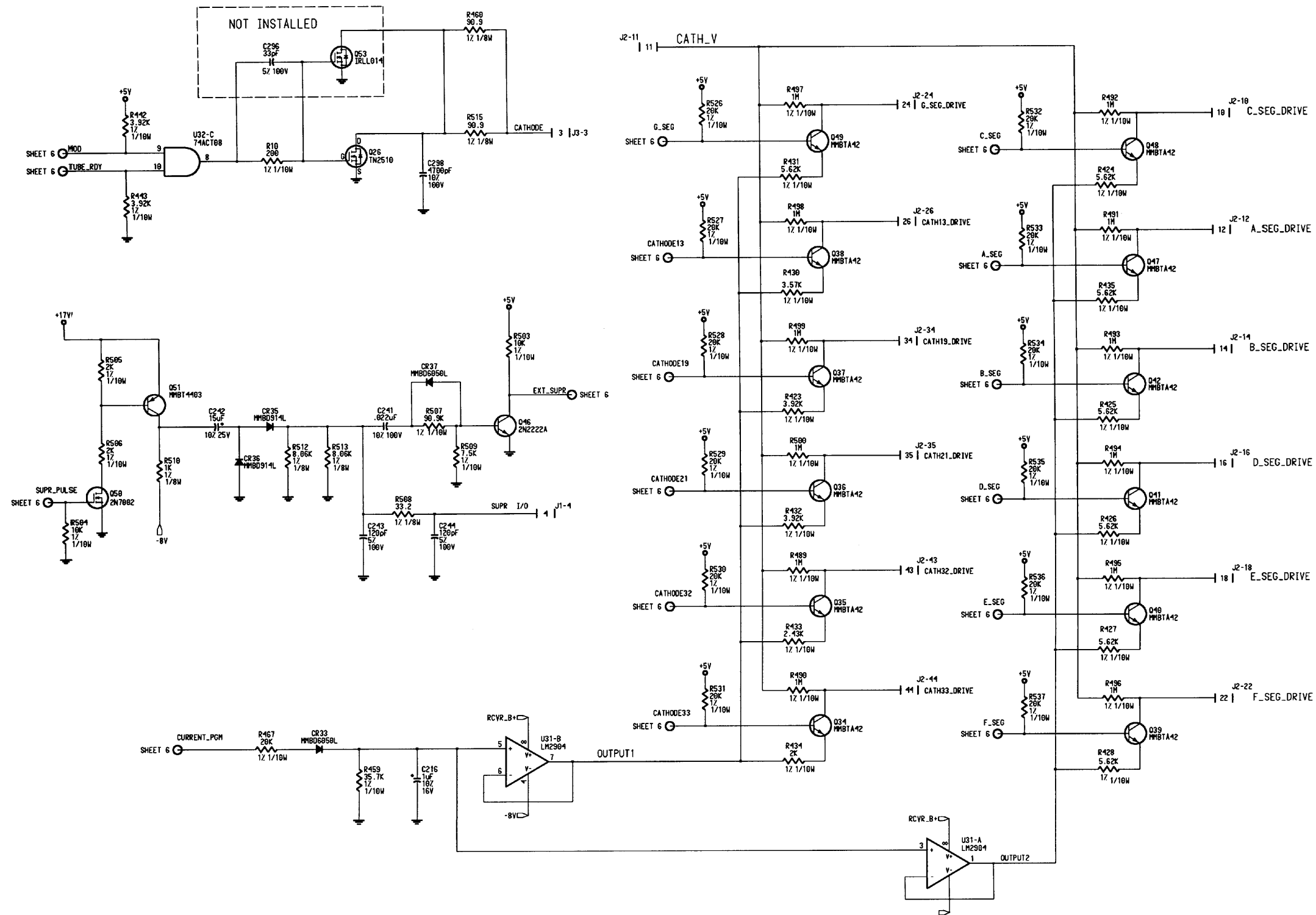


Figure 6-16  
Main Board Schematic (Dwg. No. 002-09098-0020 Rev. AB, Sheet 8 of 9)

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

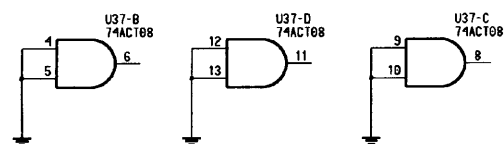
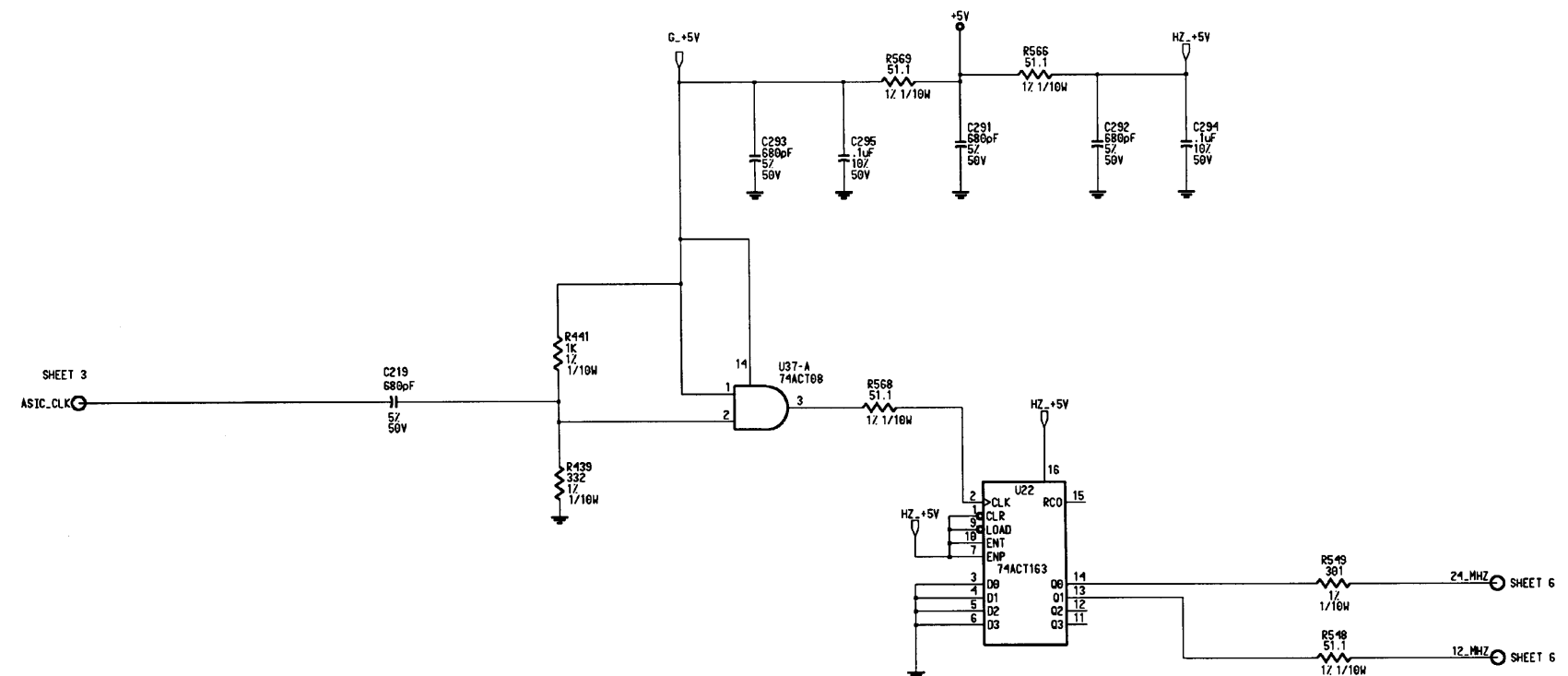


Figure 6-16  
 Main Board Schematic (Dwg. No. 002-09098-0020 Rev. AB, Sheet 9 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

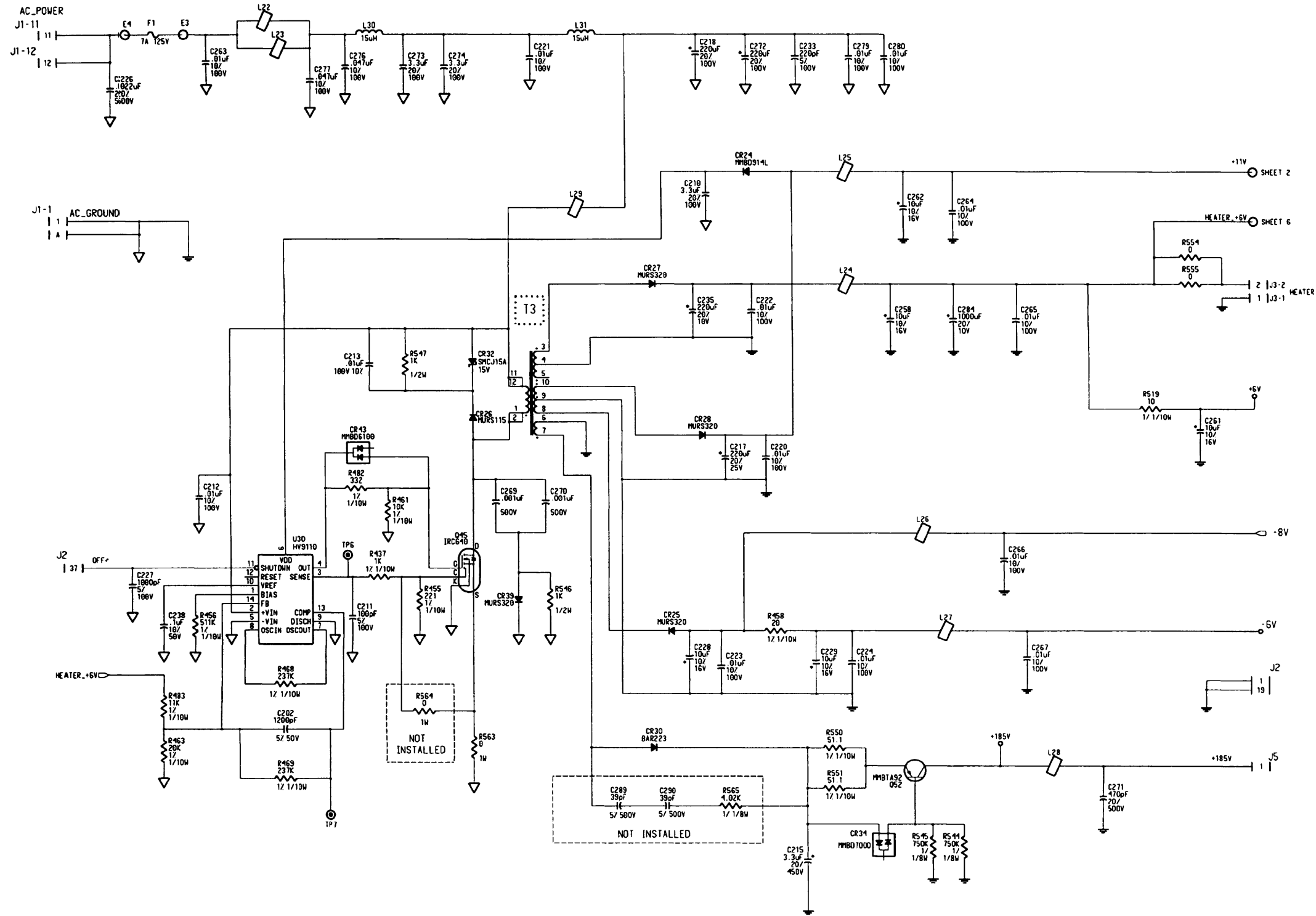


Figure 6-16A

Main Board Schematic (Dwg. No. 002-09098-0020 Rev. 3, Sheet 1 of 9)

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

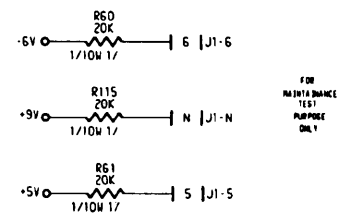
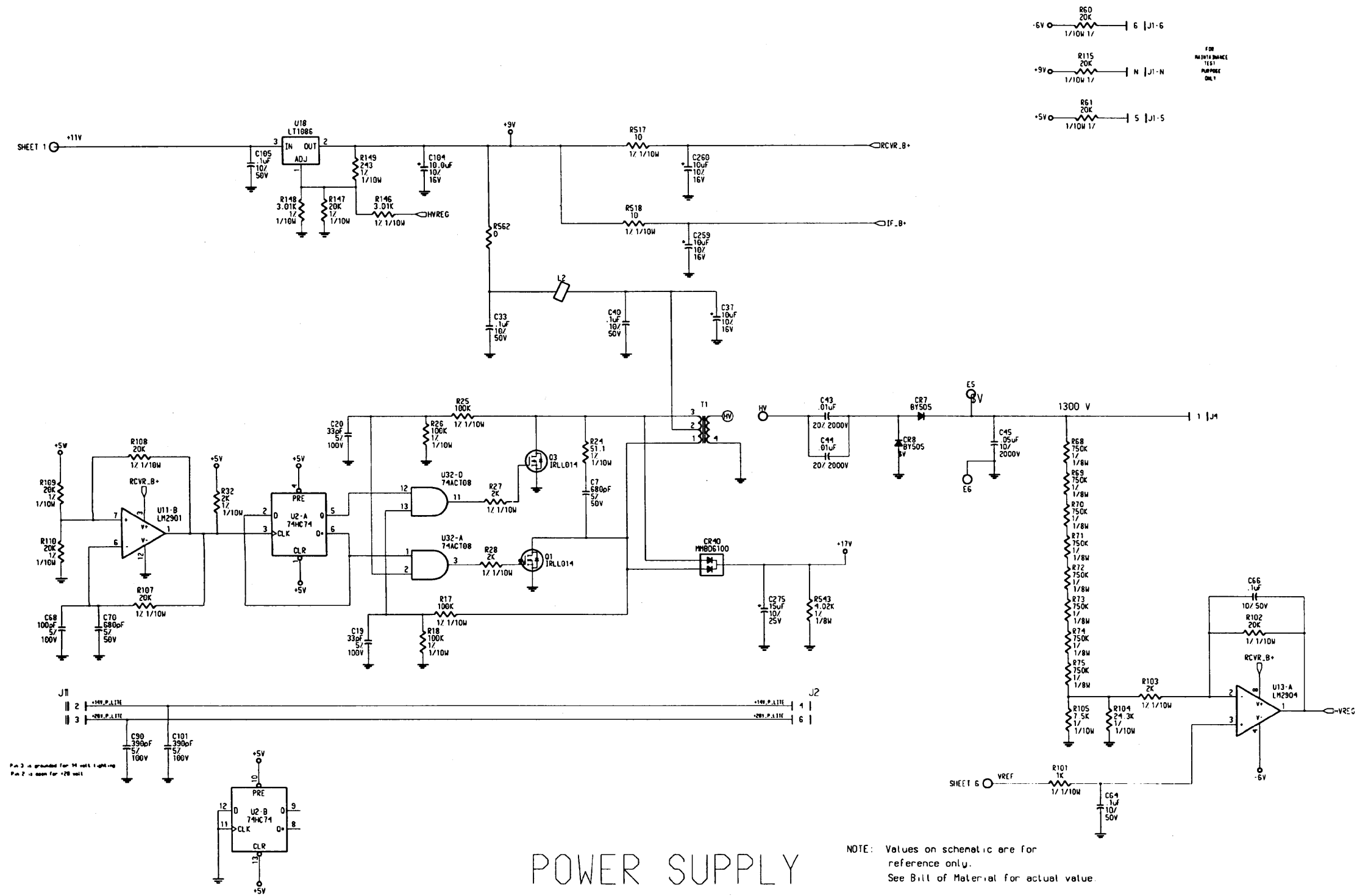


Figure 6-16A

Main Board Schematic (Dwg. No. 002-09098-0020 Rev. 3, Sheet 2 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

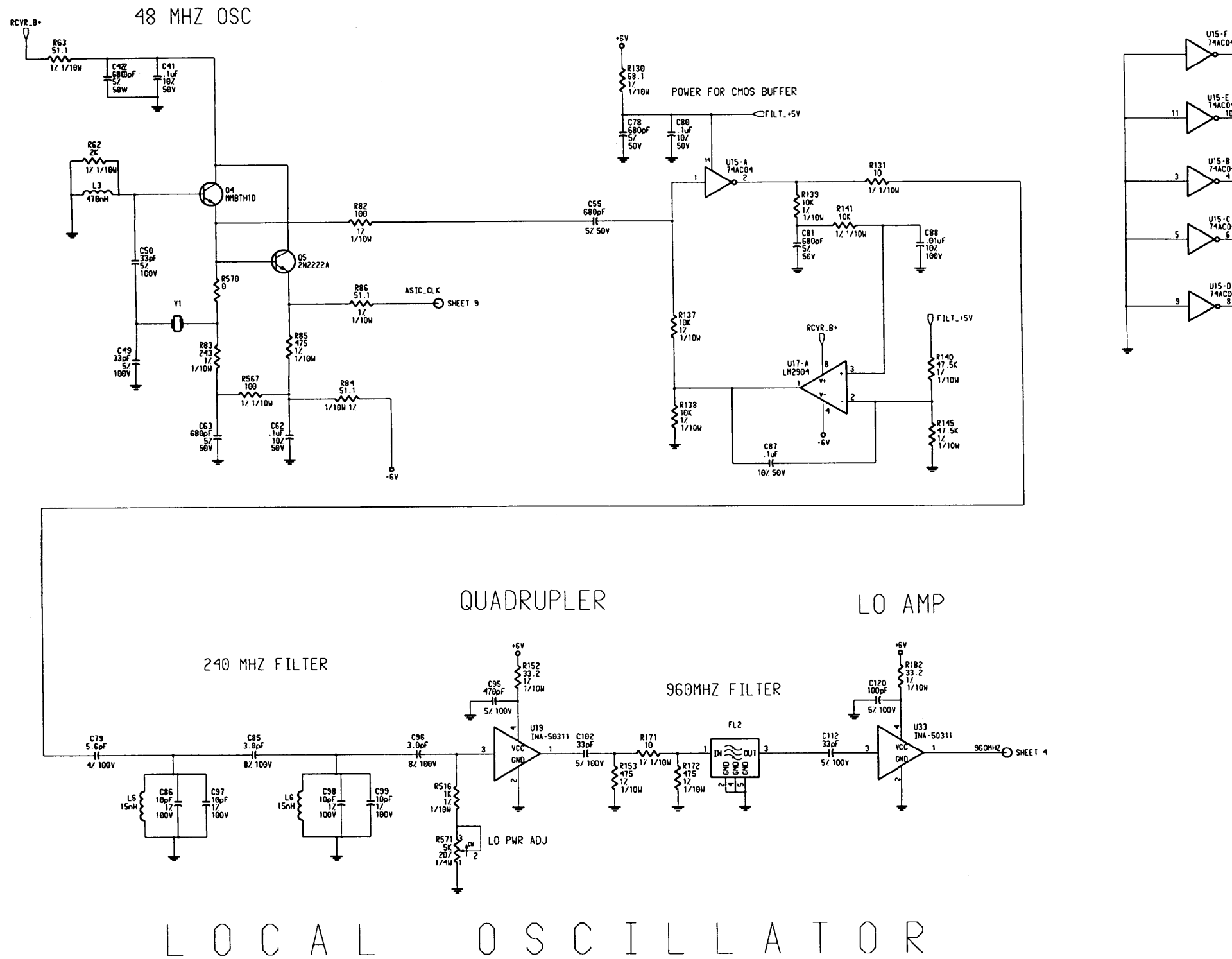


Figure 6-16A  
Main Board Schematic (Dwg. No. 002-09098-0020 Rev. 3, Sheet 3 of 9)



**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

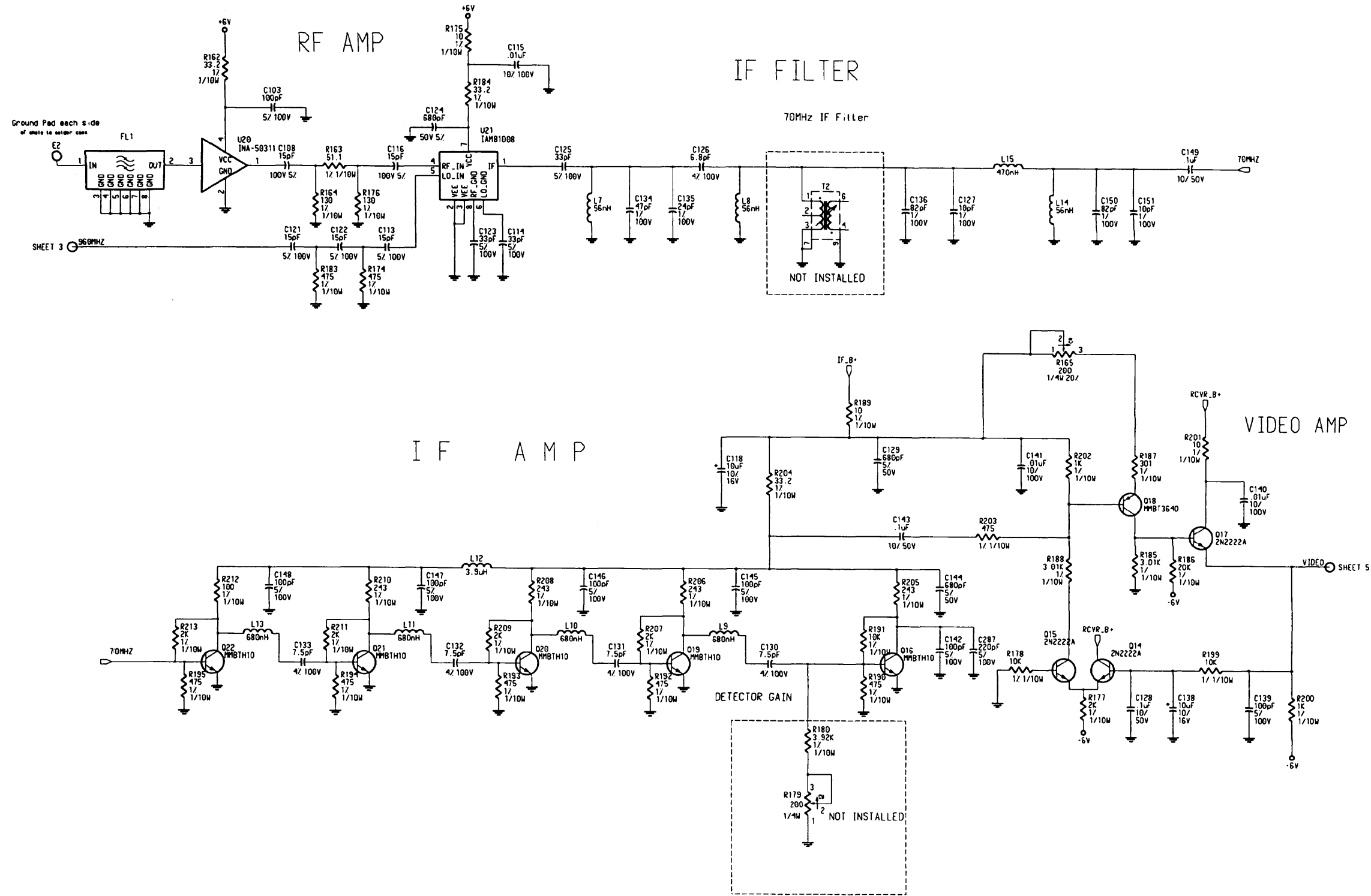


Figure 6-16A  
Main Board Schematic (Dwg. No. 002-09098-0020 Rev. 3, Sheet 4 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

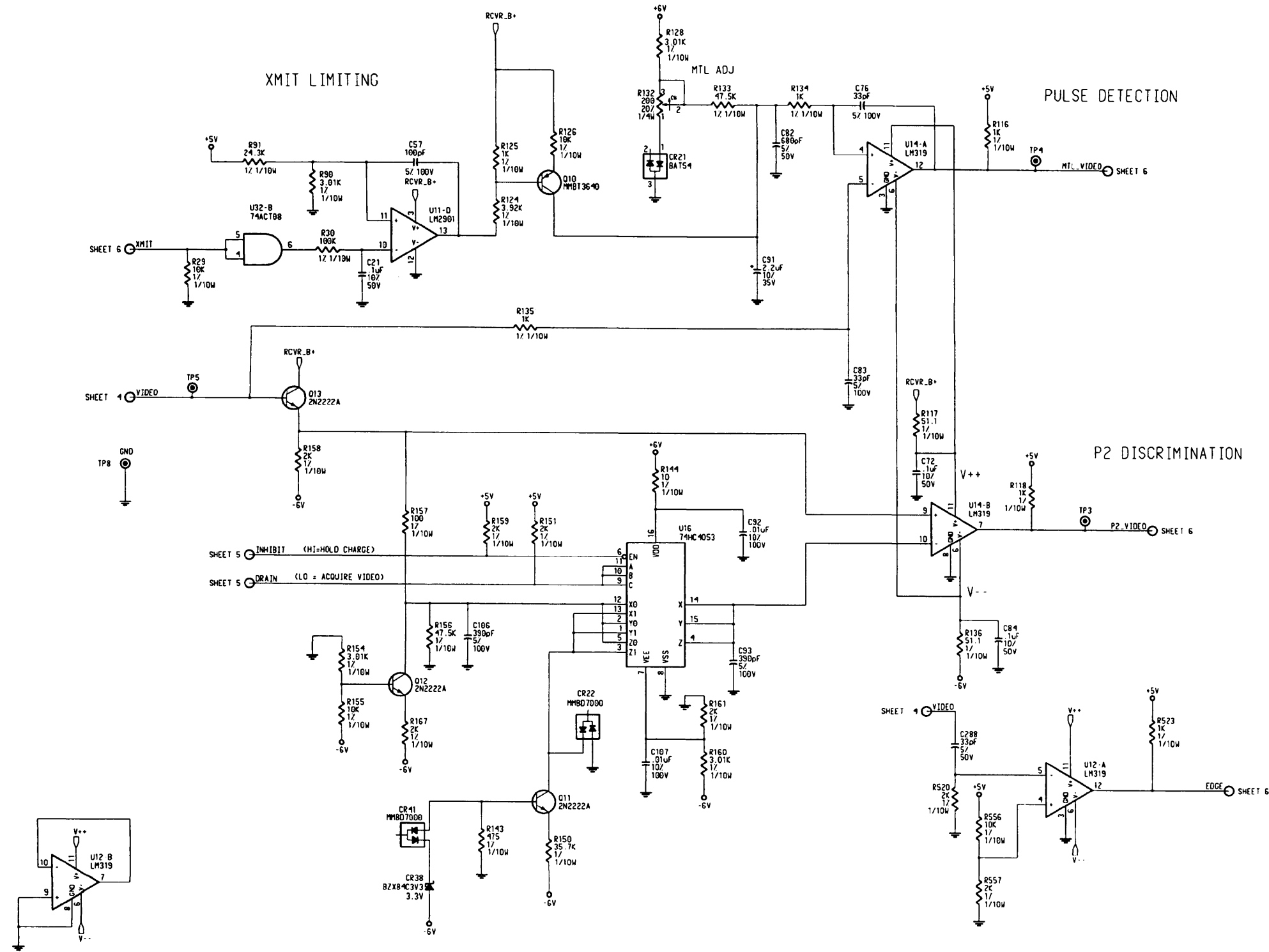


Figure 6-16A

Main Board Schematic (Dwg. No. 002-09098-0020 Rev. 3, Sheet 5 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

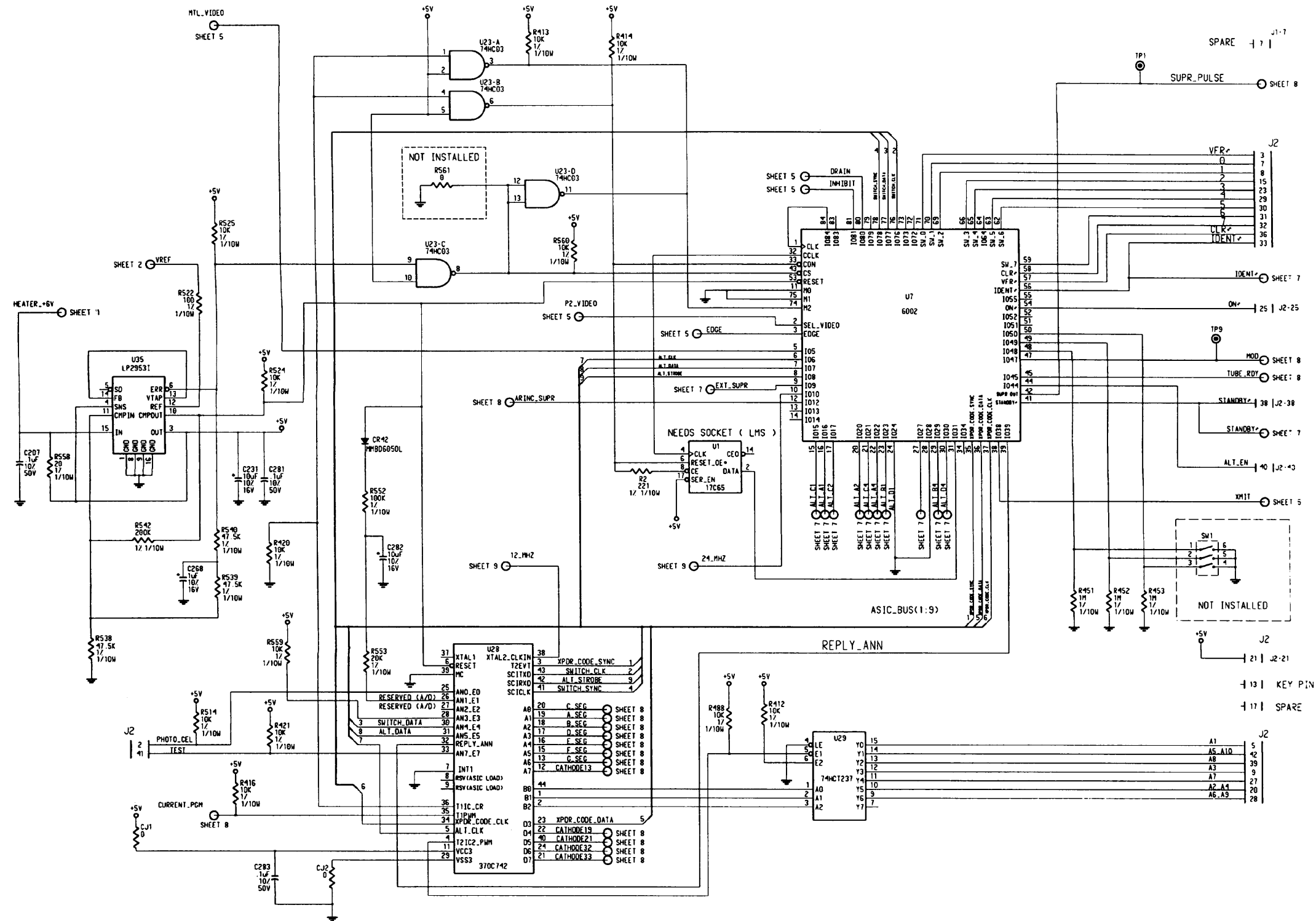


Figure 6-16A  
Main Board Schematic (Dwg. No. 002-09098-0020 Rev. 3, Sheet 6 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

ALTITUDE INPUTS

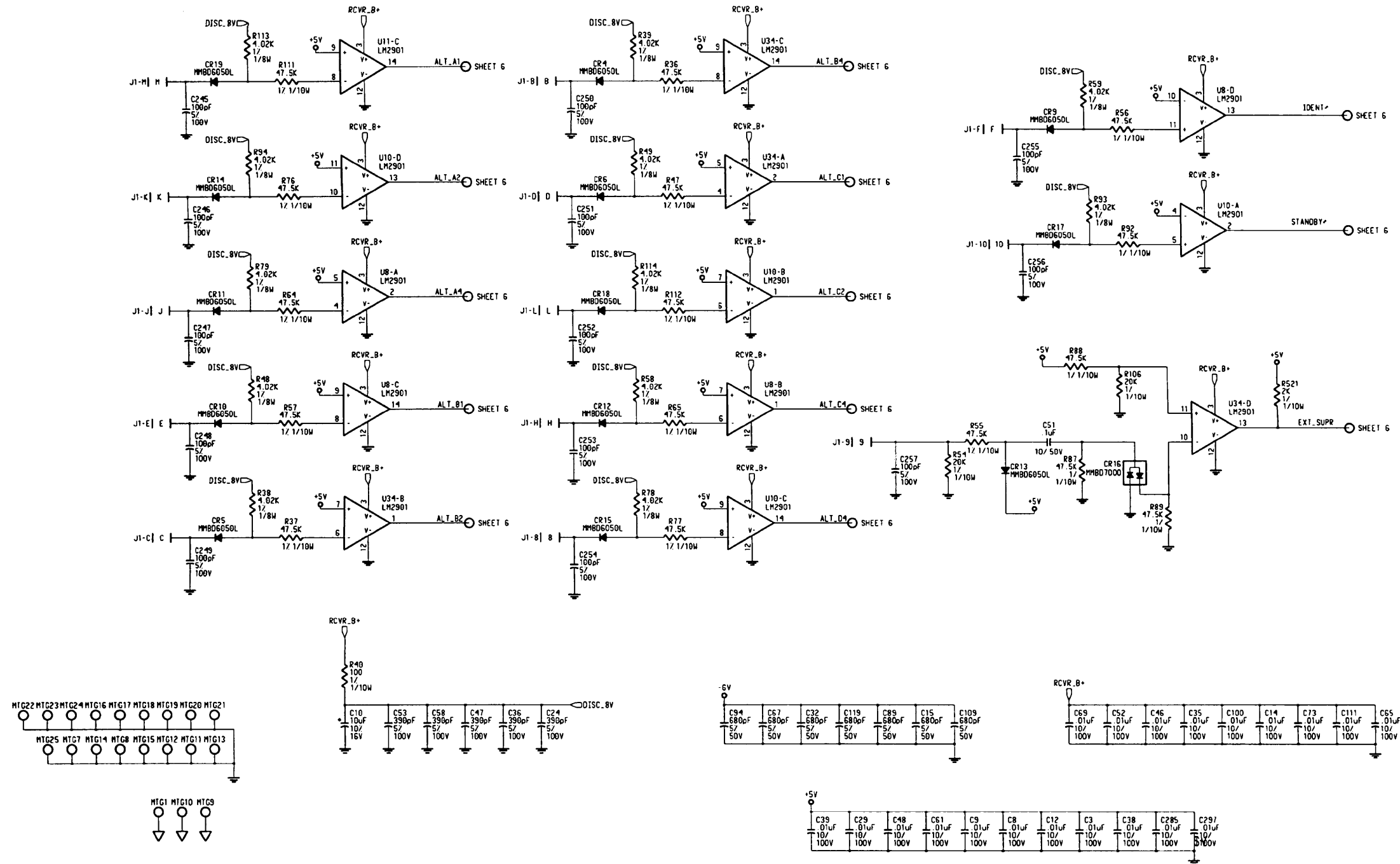


Figure 6-16A

Main Board Schematic (Dwg. No. 002-09098-0020 Rev. 3, Sheet 7 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

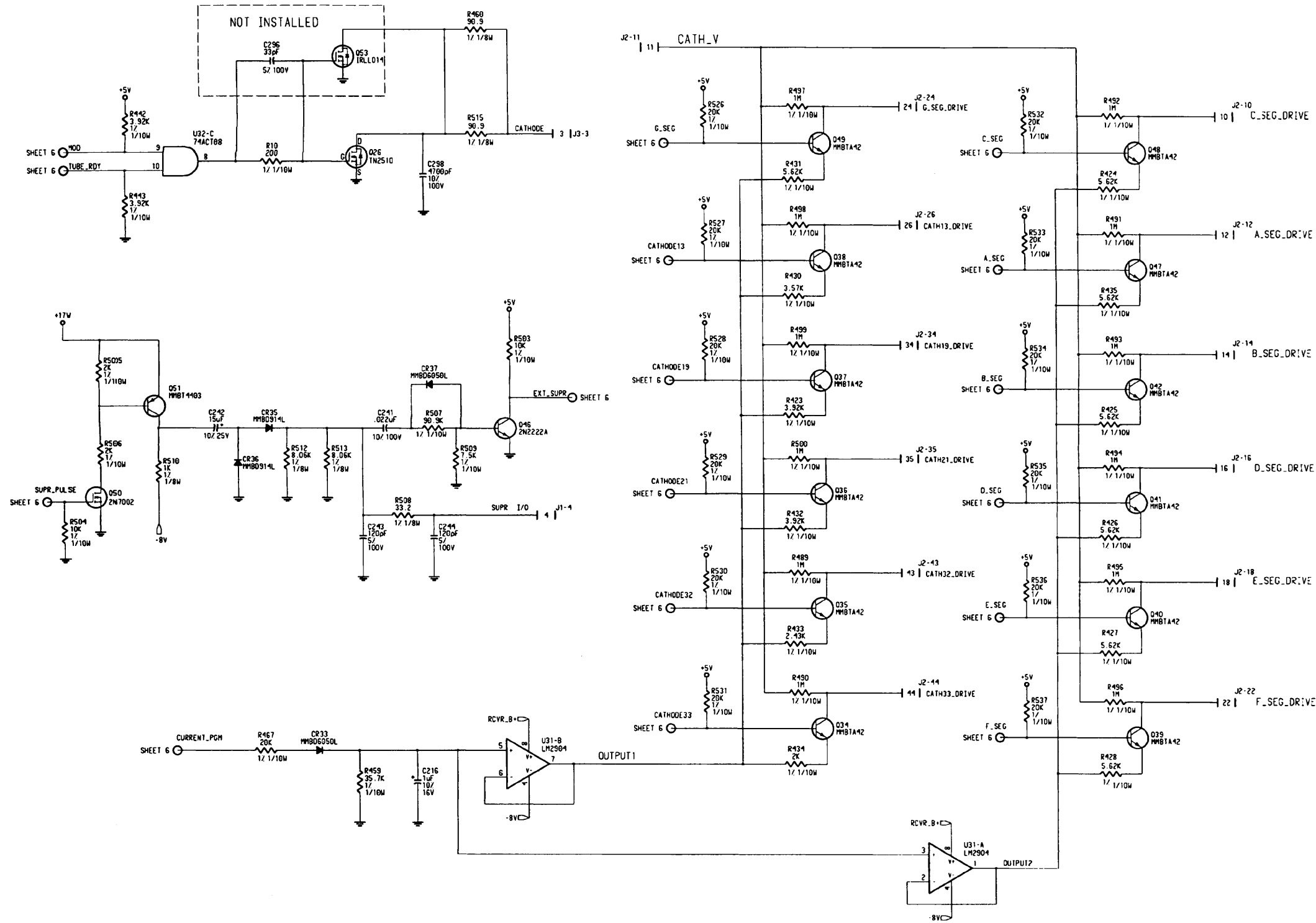


Figure 6-16A  
Main Board Schematic (Dwg. No. 002-09098-0020 Rev. 3, Sheet 8 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

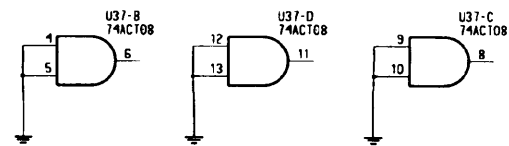
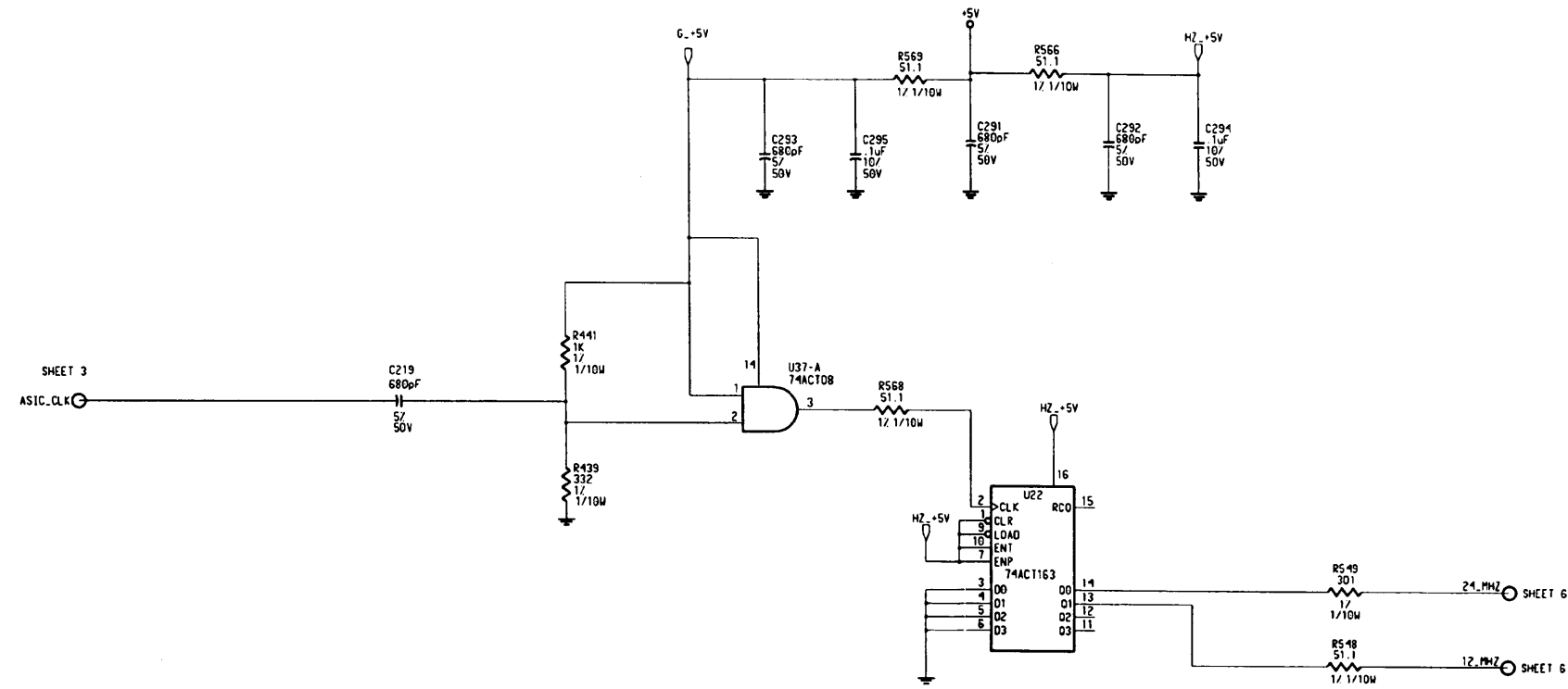


Figure 6-16A  
Main Board Schematic (Dwg. No. 002-09098-0020 Rev. 3, Sheet 9 of 9)

**BENDIX/KING**  
KT 76C ATRCBS TRANSPONDER

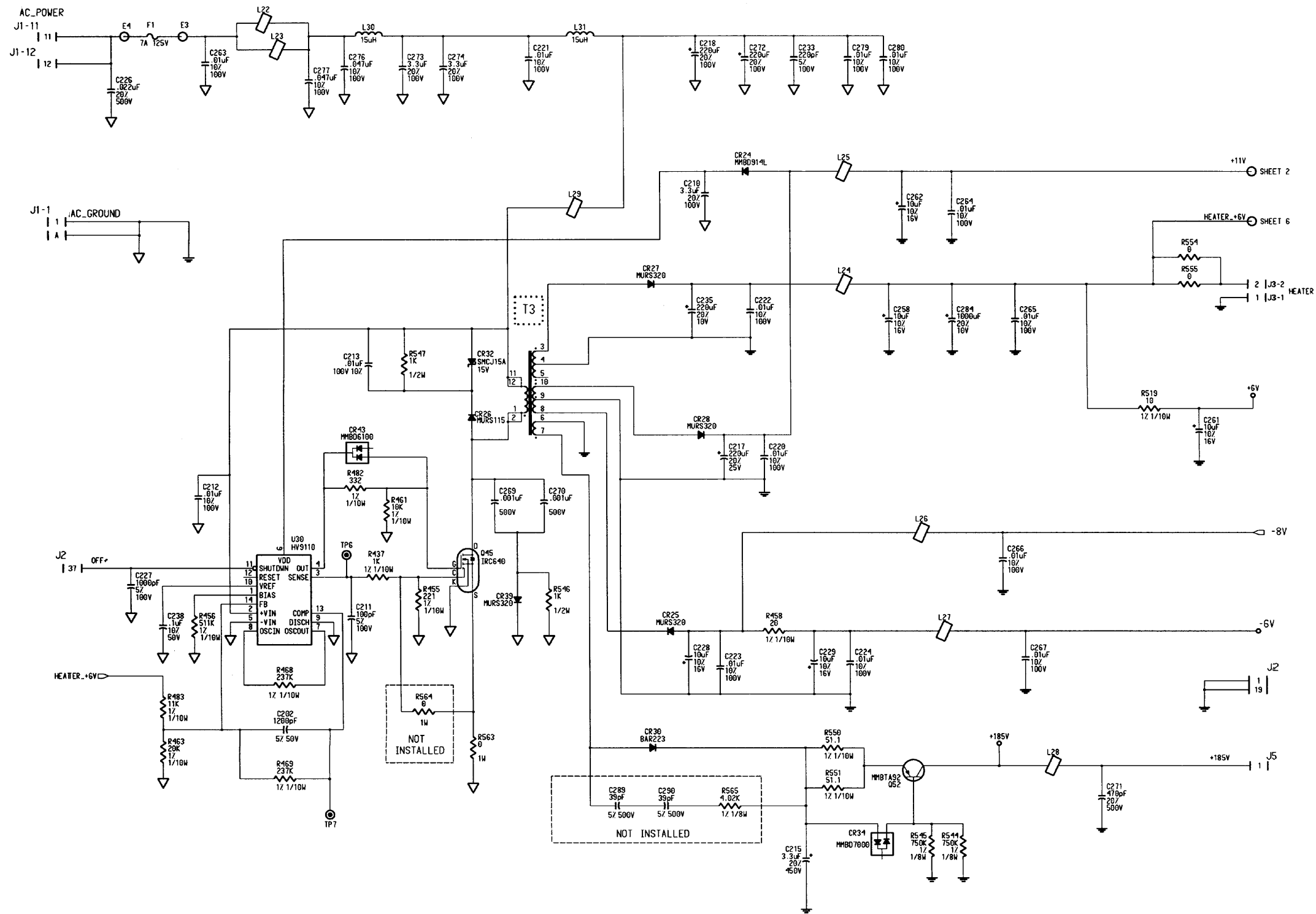
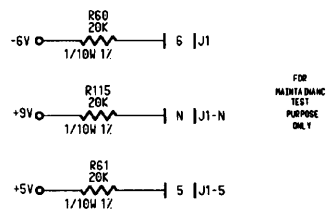
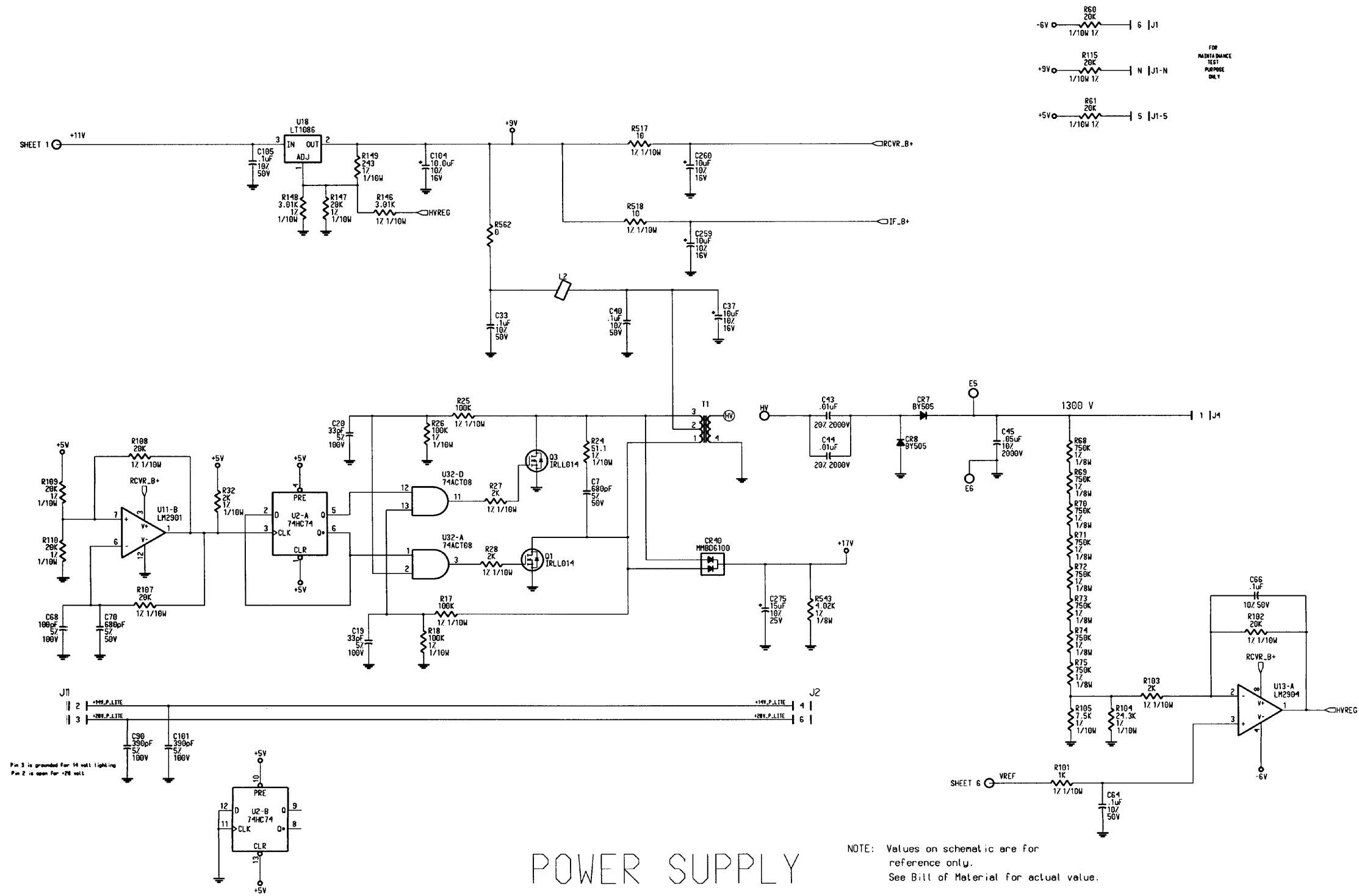


Figure 6-17  
Main Board Schematic (Dwg. No. 002-09098-0040 Rev. 0, Sheet 1 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER



POWER SUPPLY

NOTE: Values on schematic are for reference only. See Bill of Material for actual value.

Figure 6-17  
Main Board Schematic (Dwg. No. 002-09098-0040 Rev. 0, Sheet 2 of 9)



**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

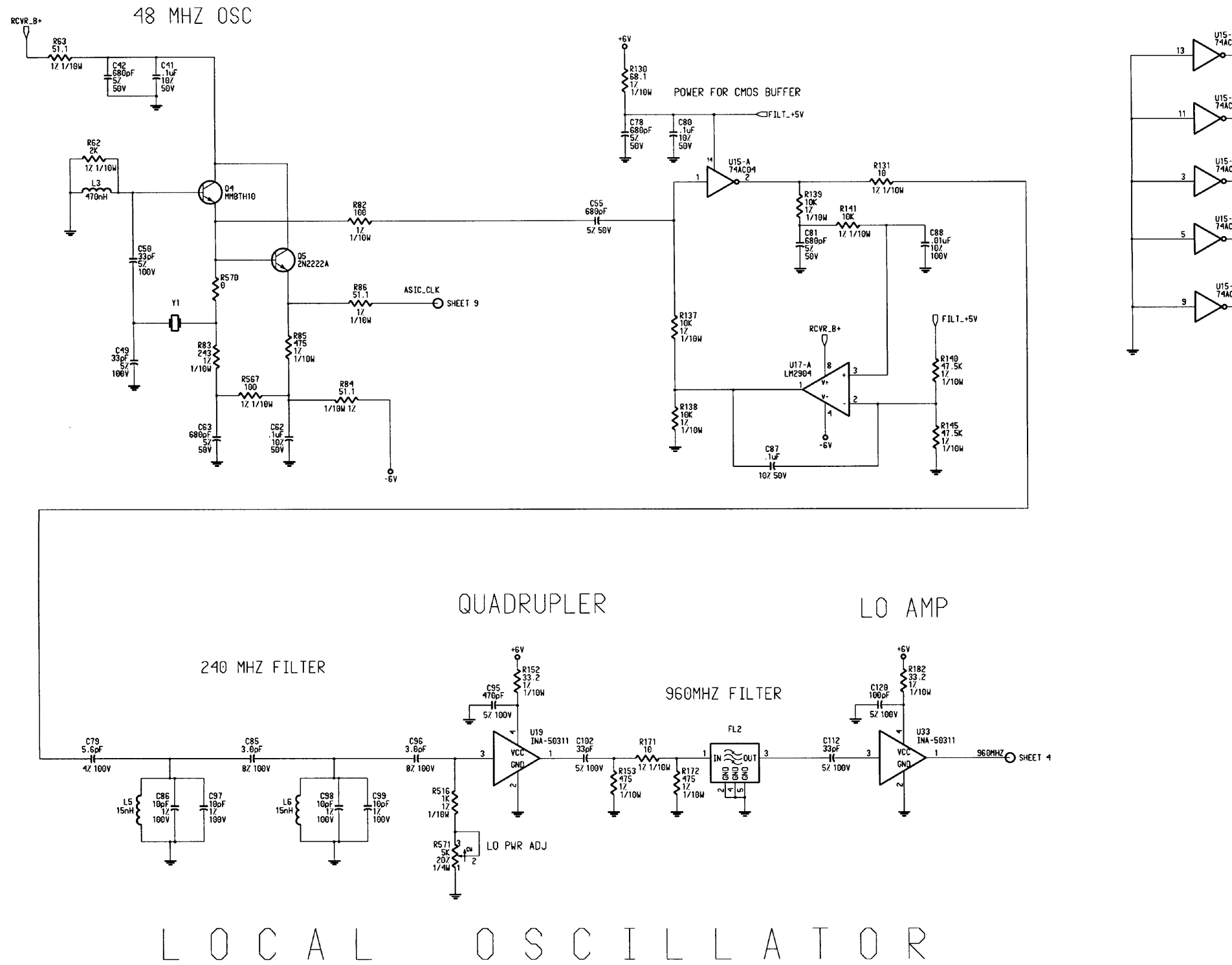


Figure 6-17  
Main Board Schematic (Dwg. No. 002-09098-0040 Rev. 0, Sheet 3 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

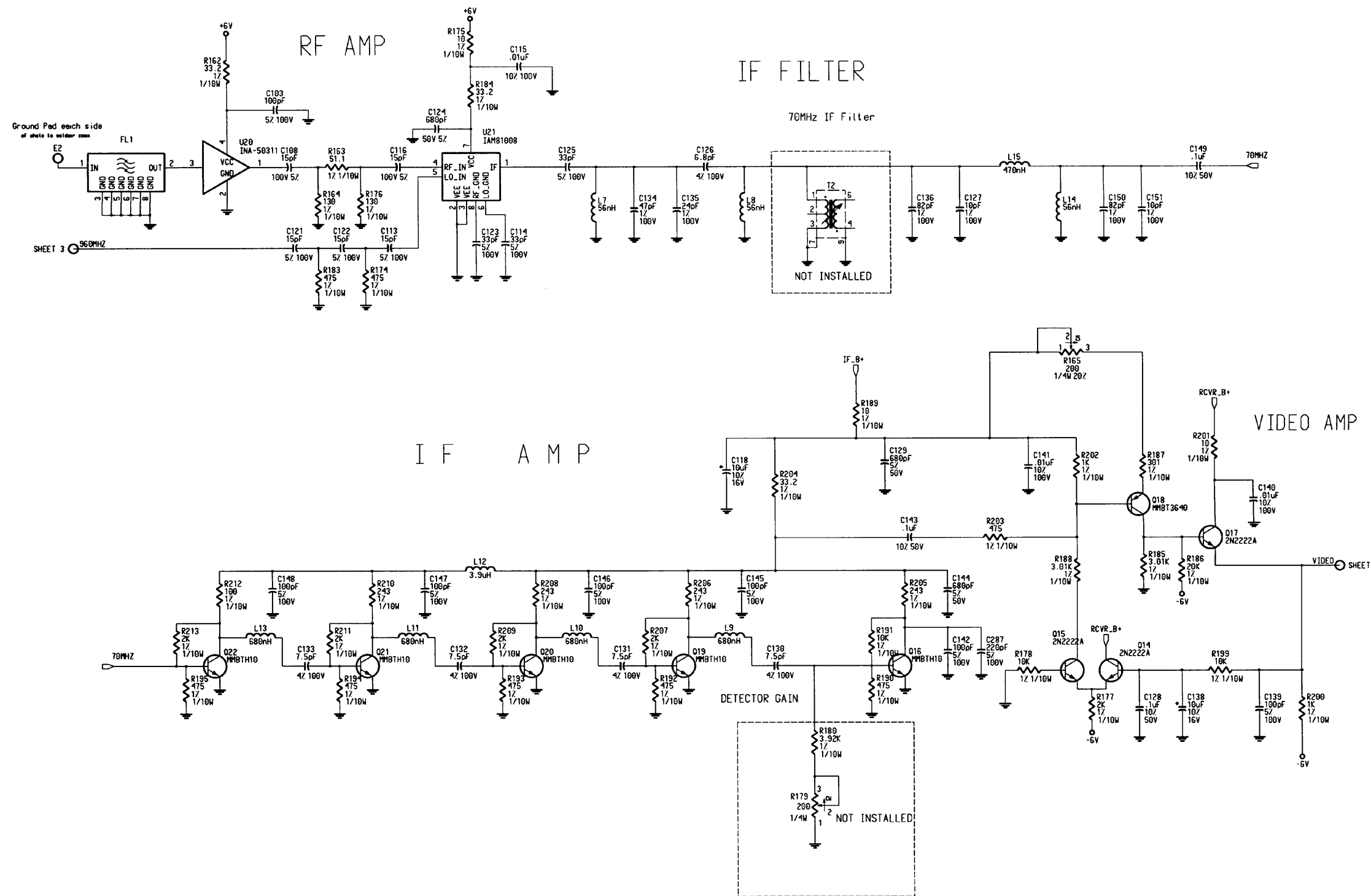


Figure 6-17

Main Board Schematic (Dwg. No. 002-09098-0040 Rev. 0, Sheet 4 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

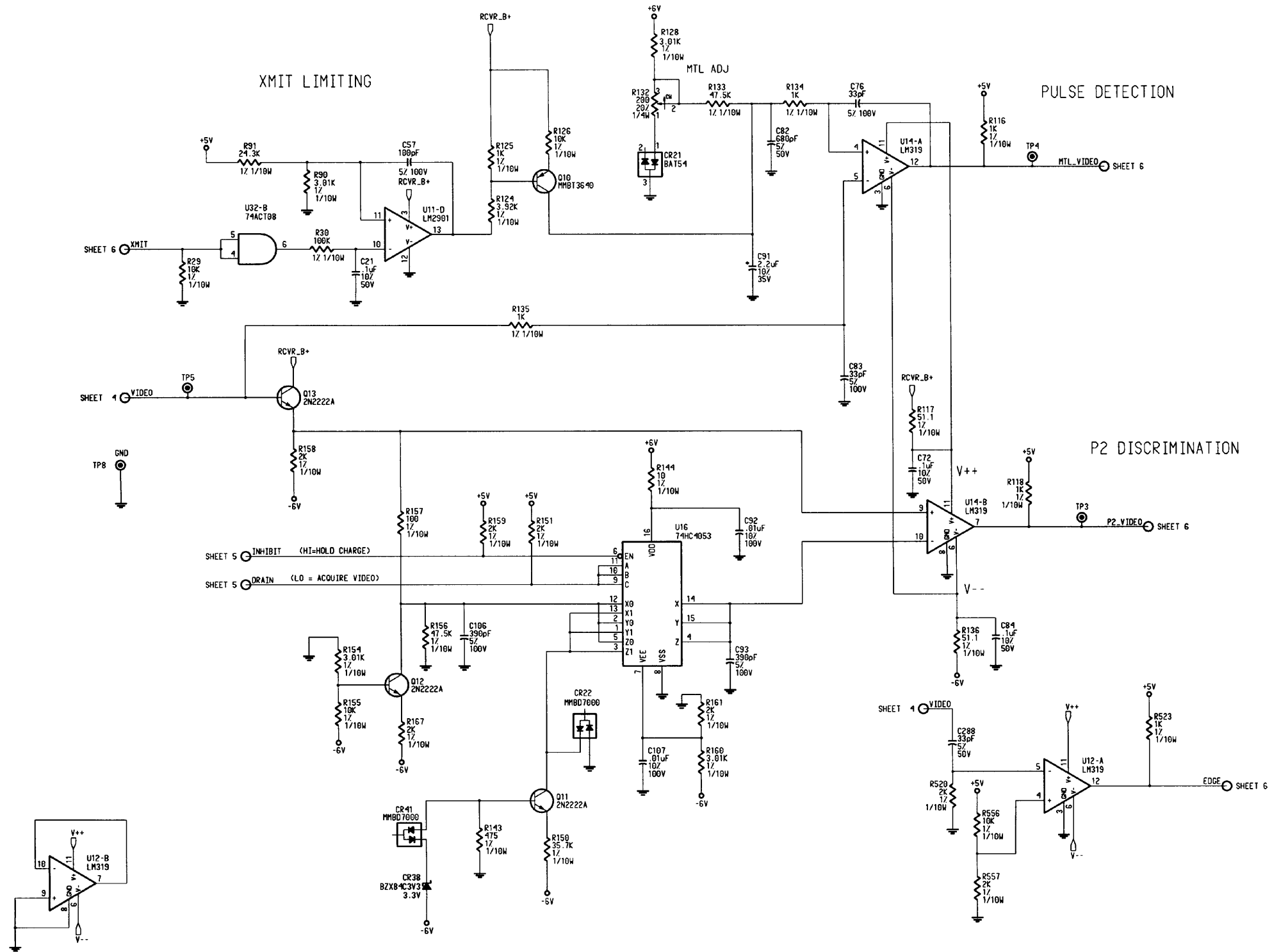


Figure 6-17

Main Board Schematic (Dwg. No. 002-09098-0040 Rev. 0, Sheet 5 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

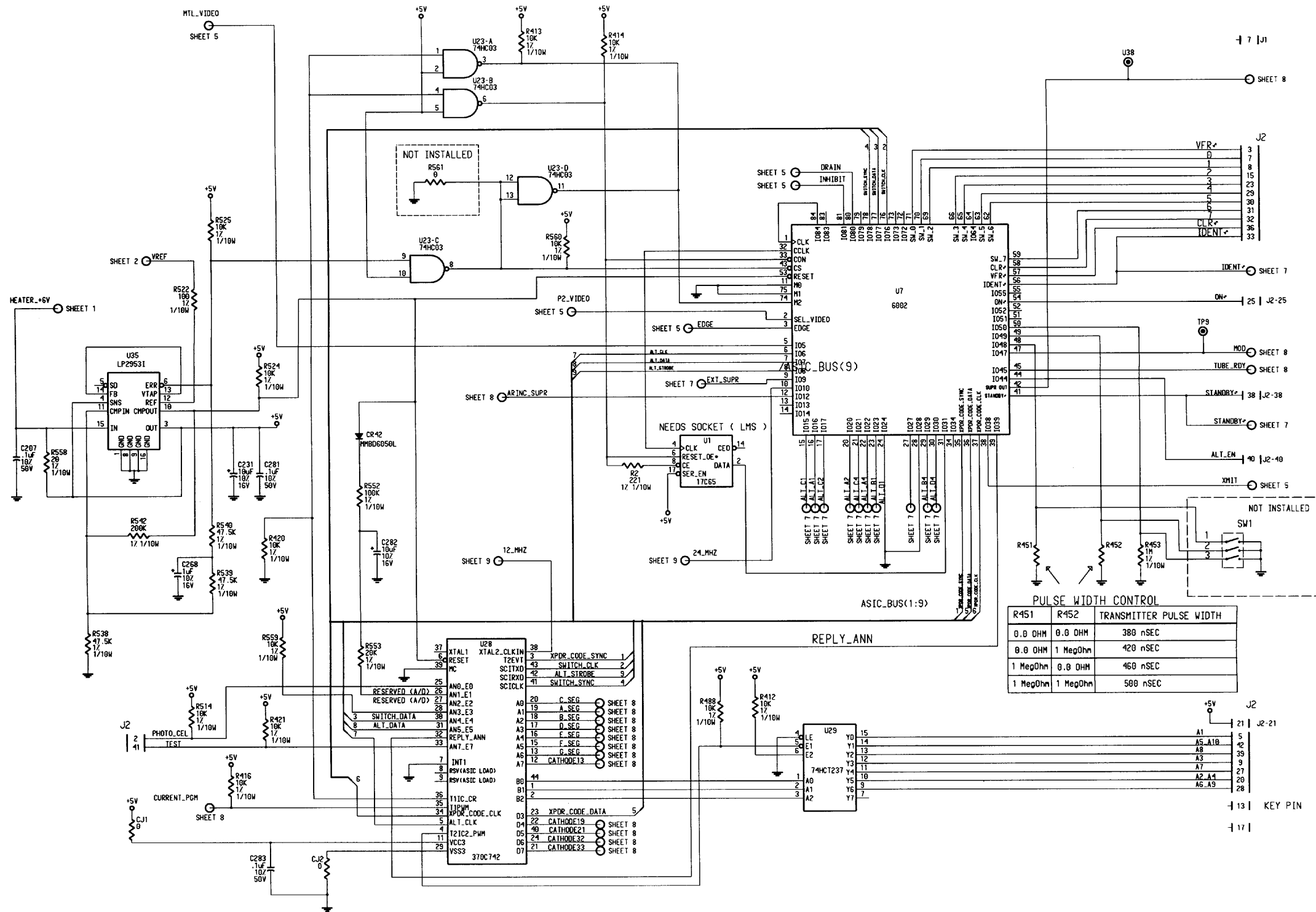


Figure 6-17  
Main Board Schematic (Dwg. No. 002-09098-0040 Rev. 0, Sheet 6 of 9)



**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

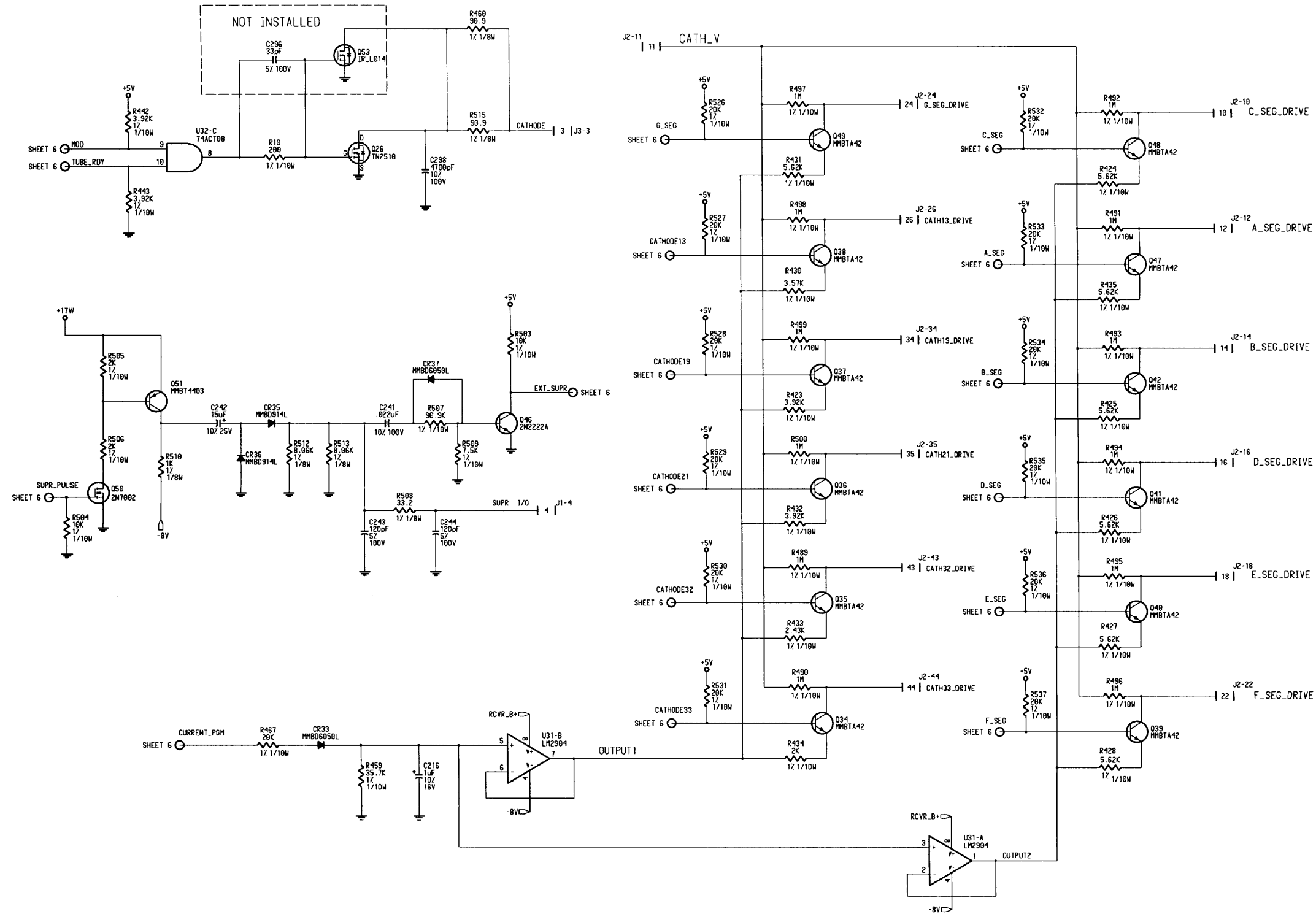


Figure 6-17  
Main Board Schematic (Dwg. No. 002-09098-0040 Rev. 0, Sheet 8 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

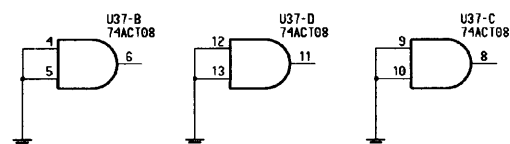
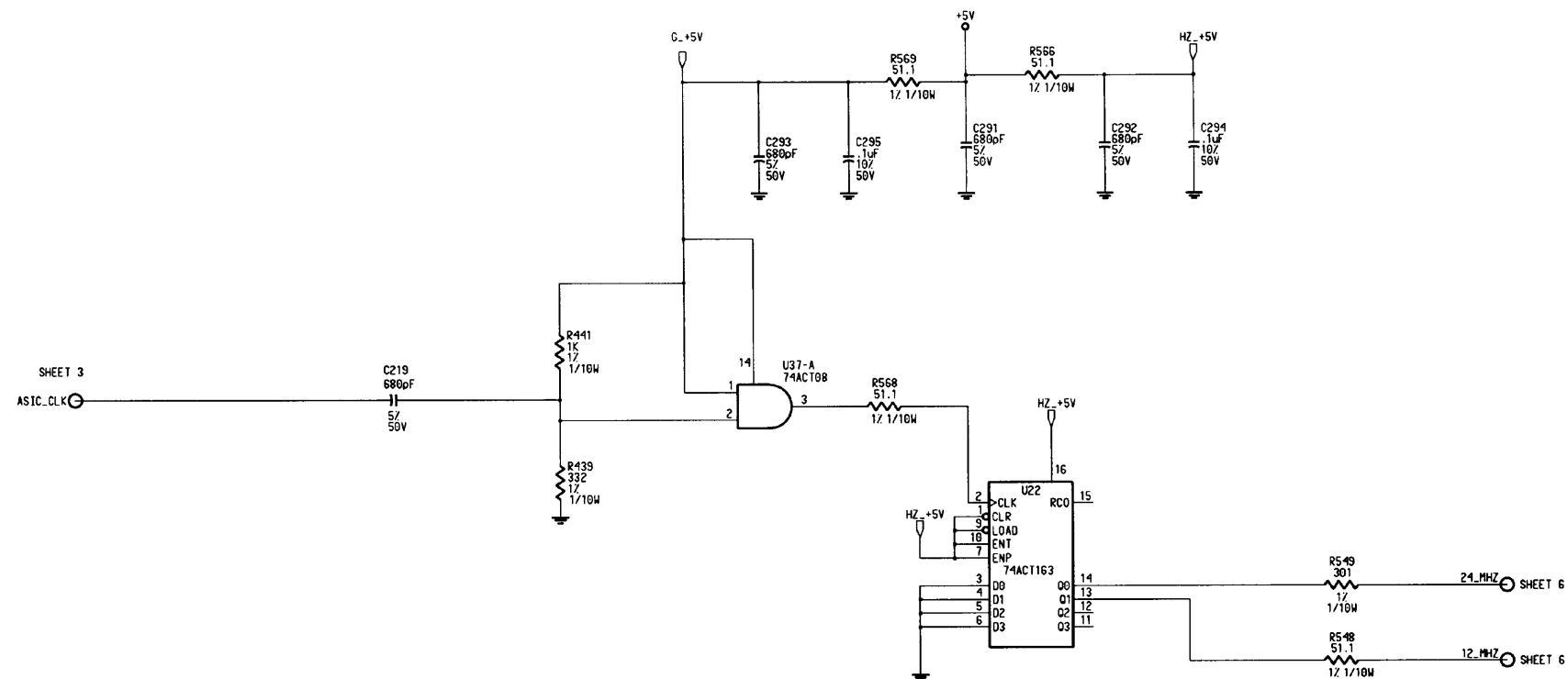


Figure 6-17  
Main Board Schematic (Dwg. No. 002-09098-0040 Rev. 0, Sheet 9 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

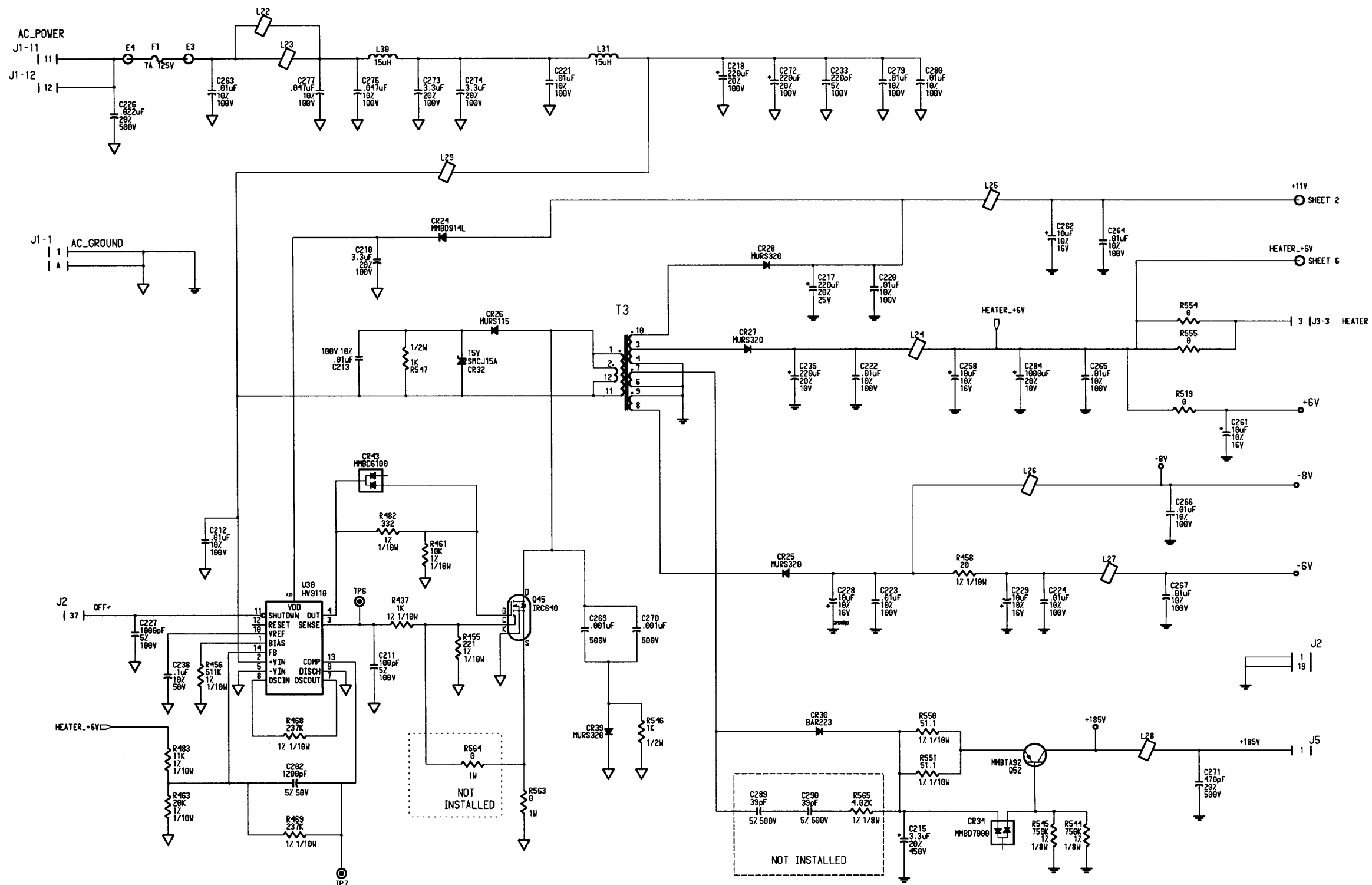
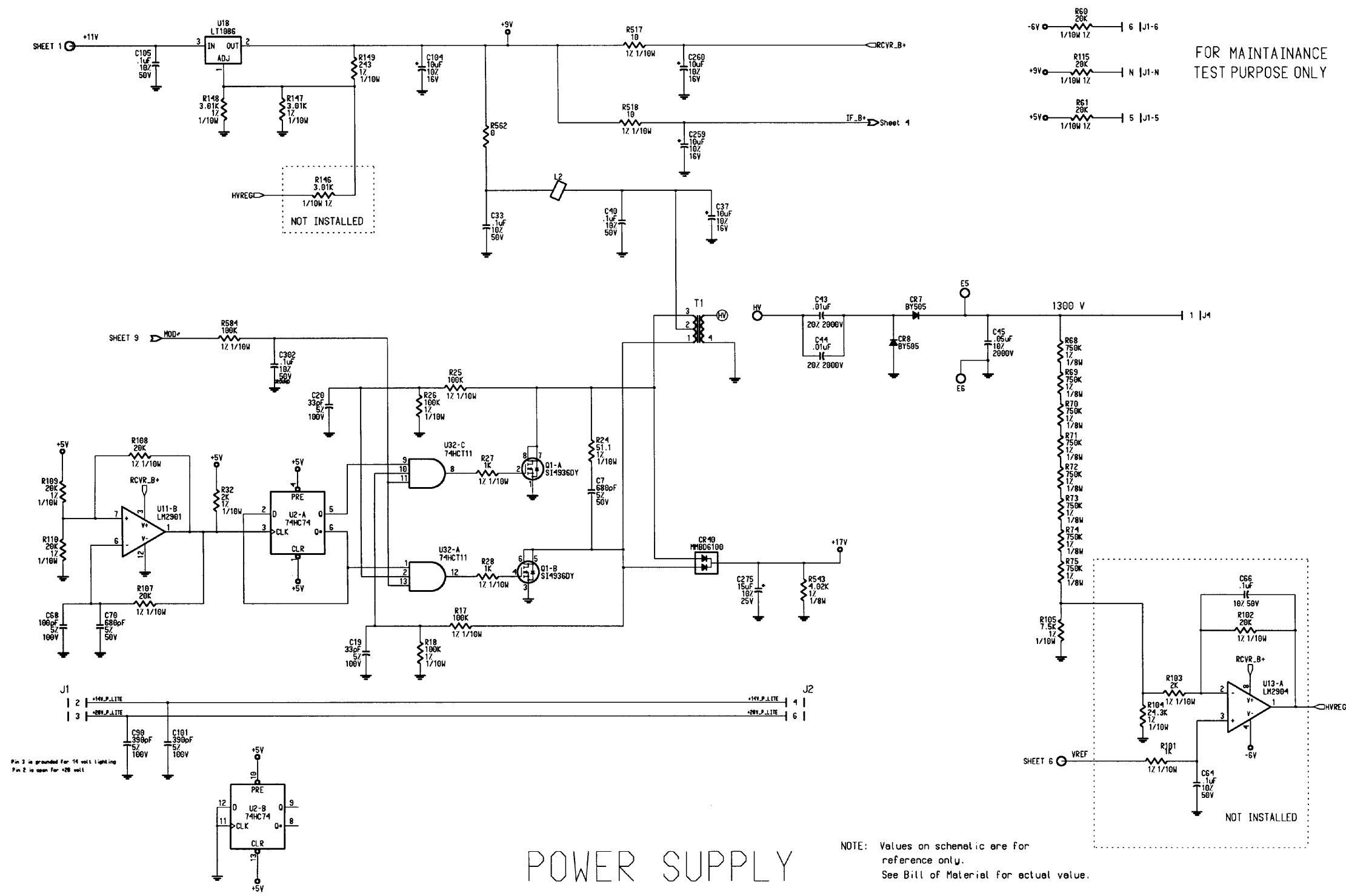


Figure 6-18  
Main Board Schematic (Dwg. No. 002-09098-0060 Rev. A, Sheet 1 of 9)



**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER



POWER SUPPLY

NOTE: Values on schematic are for reference only.  
See Bill of Material for actual value.

Figure 6-18

Main Board Schematic (Dwg. No. 002-09098-0060 Rev. A, Sheet 2 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

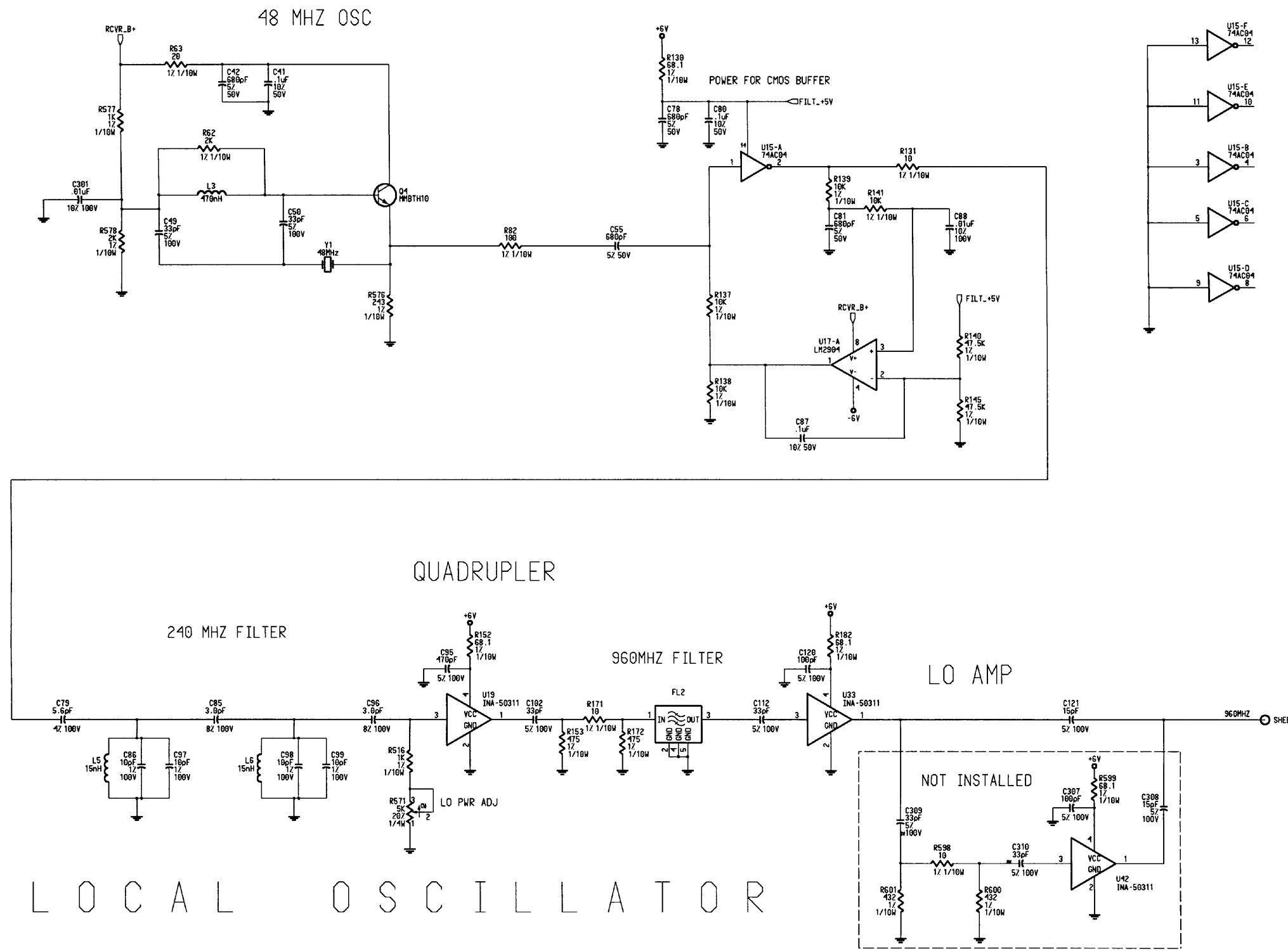


Figure 6-18  
Main Board Schematic (Dwg. No. 002-09098-0060 Rev. A, Sheet 3 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

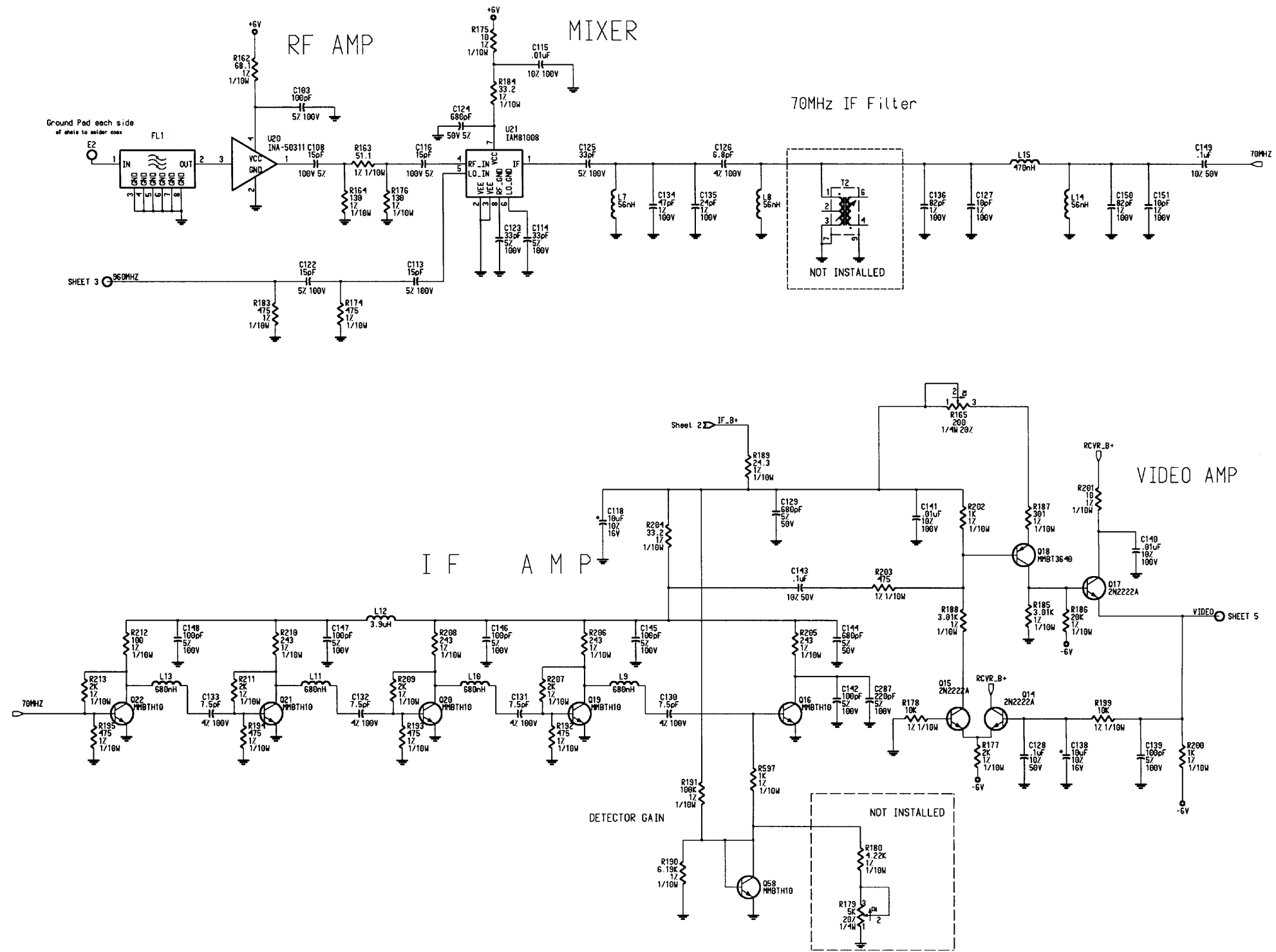


Figure 6-18  
Main Board Schematic (Dwg. No. 002-09098-0060 Rev. A, Sheet 4 of 9)

**BENDIX/KING**  
KT 76C ATRCBS TRANSPONDER

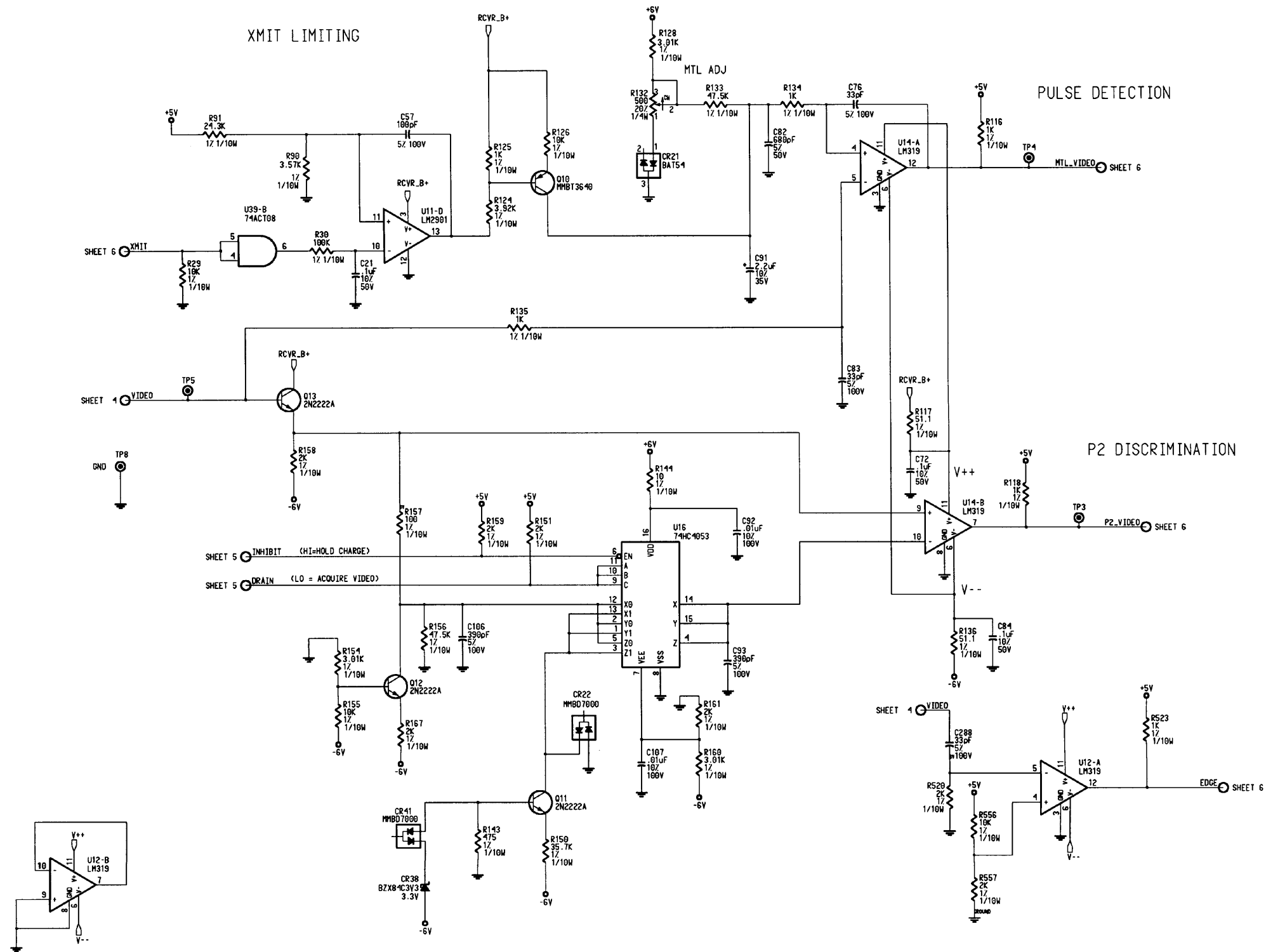
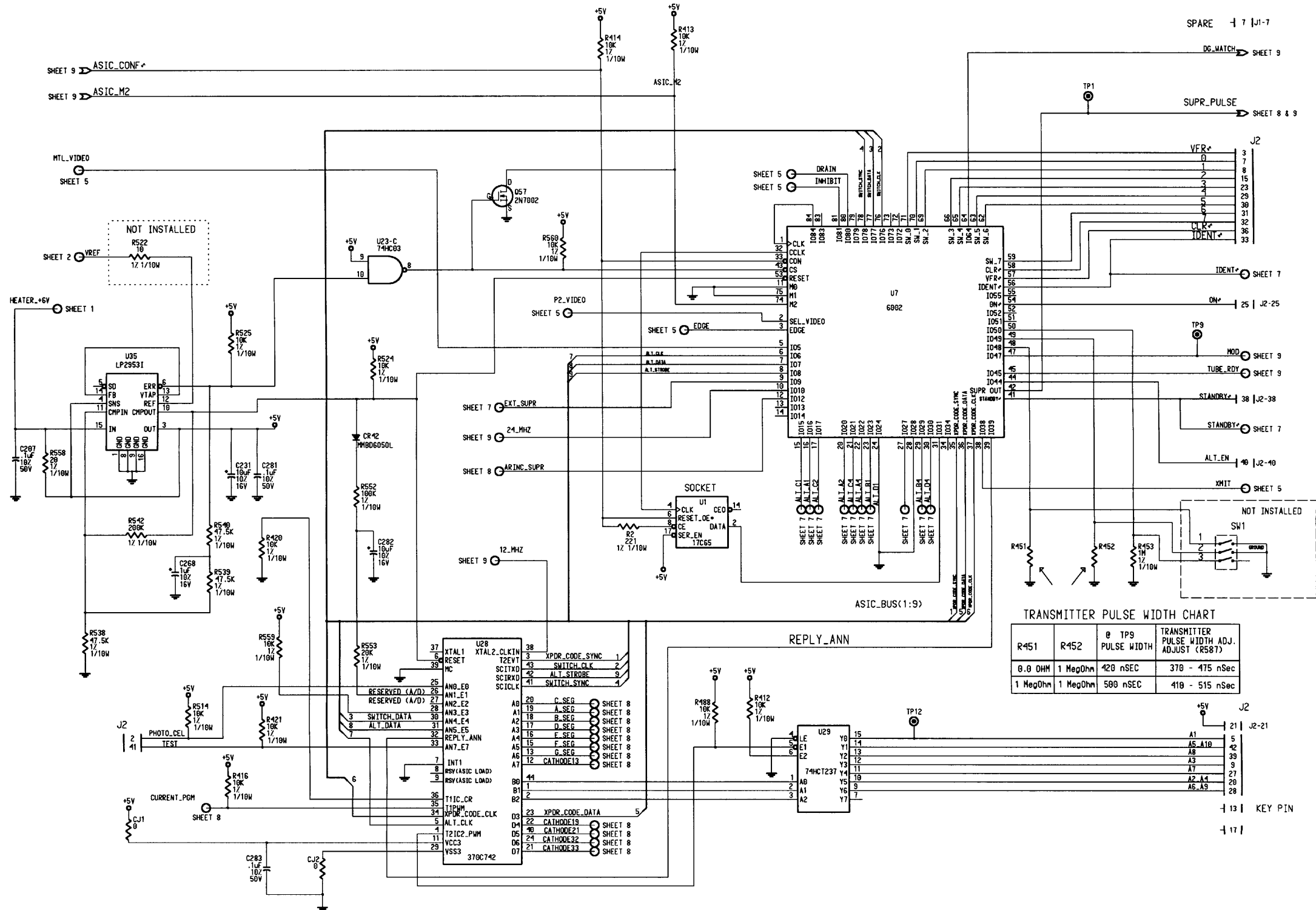


Figure 6-18  
Main Board Schematic (Dwg. No. 002-09098-0060 Rev. A, Sheet 5 of 9)

**BENDIX/KING**  
KT 76C ATRCBS TRANSPONDER



**TRANSMITTER PULSE WIDTH CHART**

R451	R452	θ TP9 PULSE WIDTH	TRANSMITTER PULSE WIDTH ADJ. ADJUST (R587)
0.0 OHM	1 MegOhm	420 nSEC	370 - 475 nSec
1 MegOhm	1 MegOhm	500 nSEC	410 - 515 nSec

Figure 6-18  
Main Board Schematic (Dwg. No. 002-09098-0060 Rev. A, Sheet 6 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

ALTITUDE INPUTS

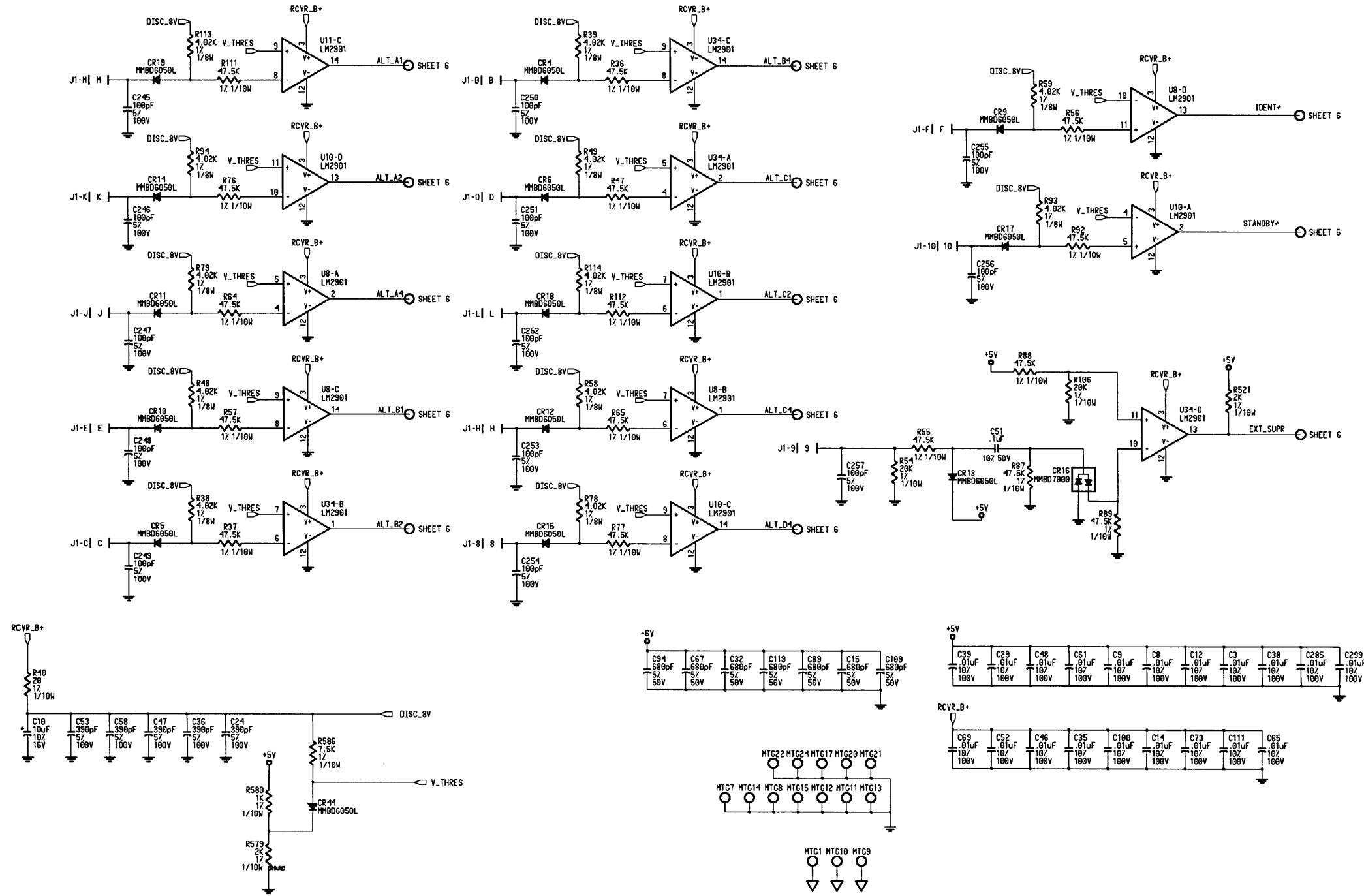


Figure 6-18  
Main Board Schematic (Dwg. No. 002-09098-0060 Rev. A, Sheet 7 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

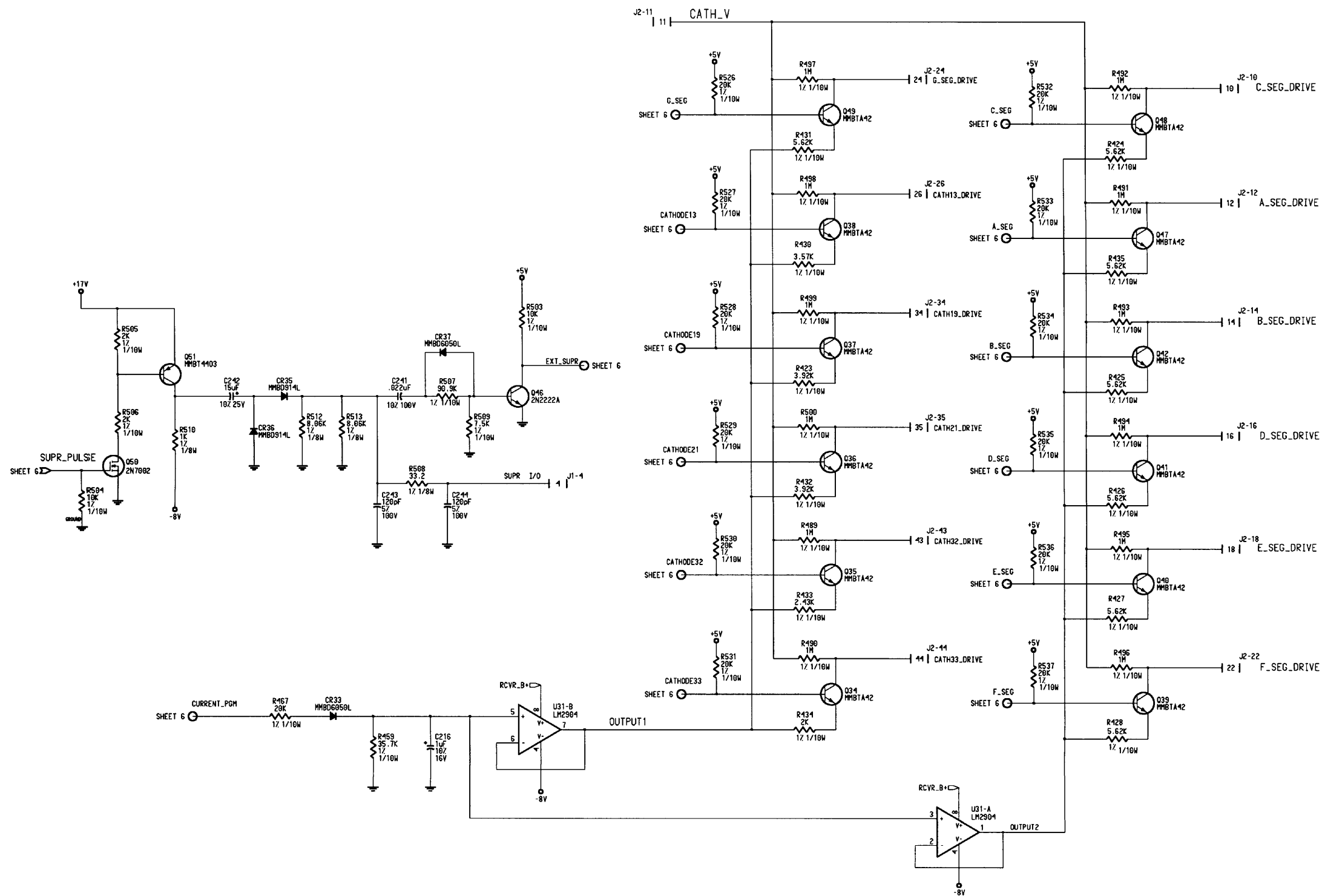
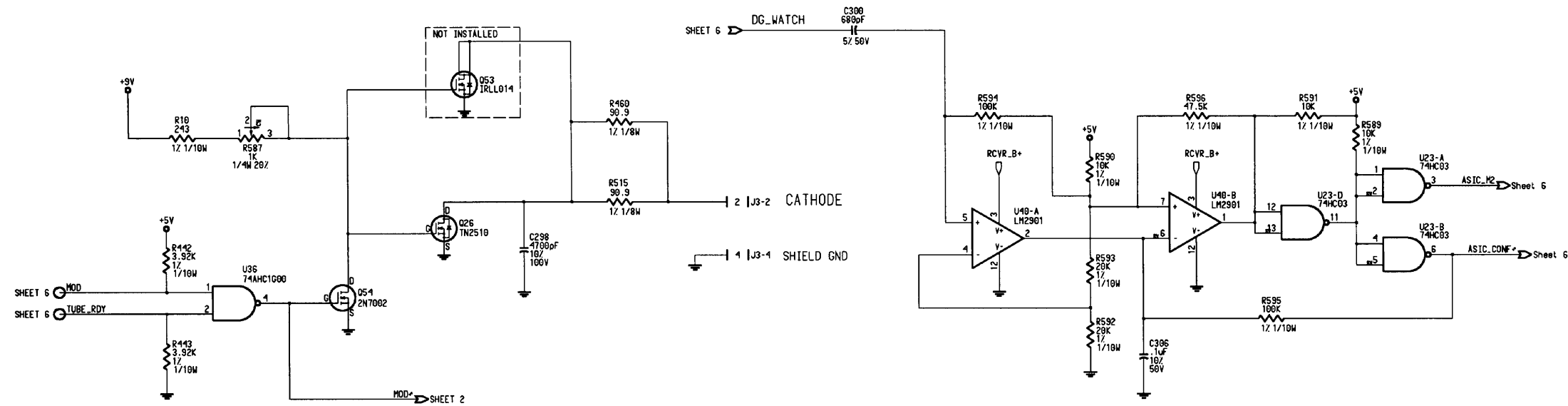


Figure 6-18  
Main Board Schematic (Dwg. No. 002-09098-0060 Rev. A, Sheet 8 of 9)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

MODULATOR



CIRCULATOR DRIVER

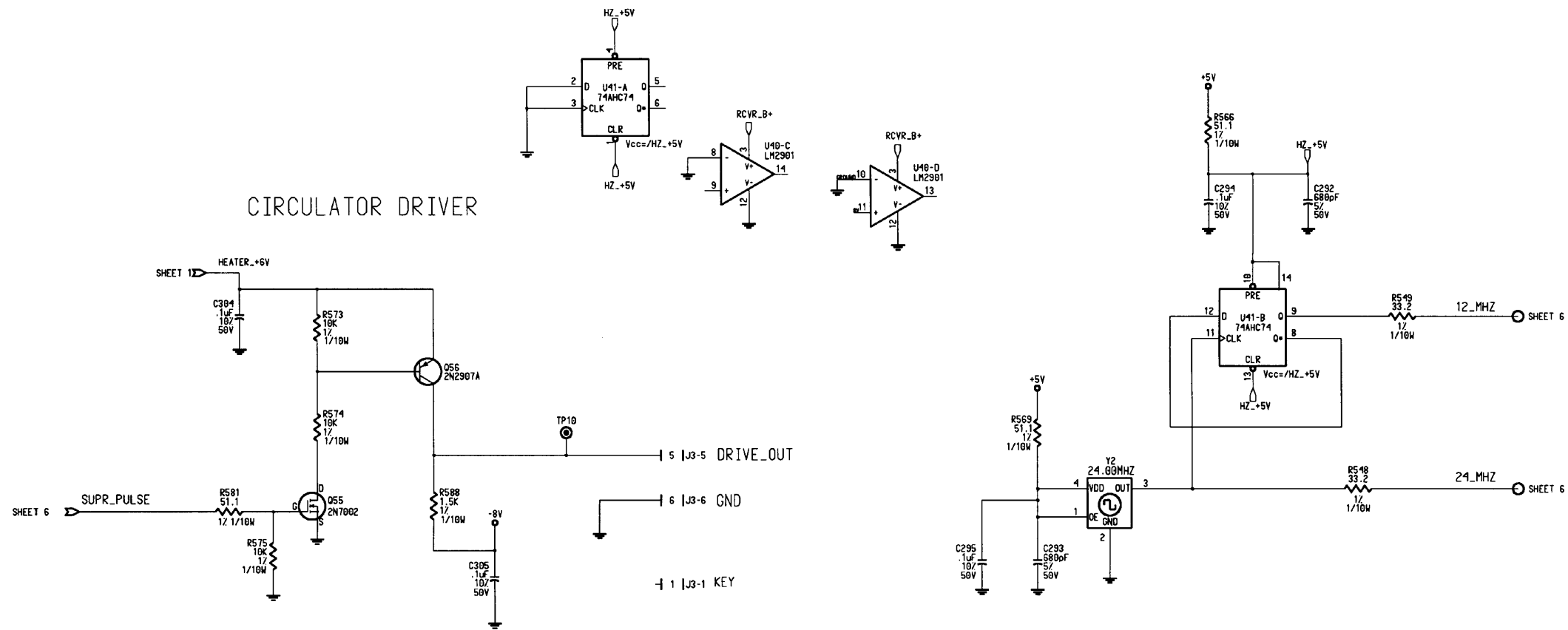


Figure 6-18

Main Board Schematic (Dwg. No. 002-09098-0060 Rev. A, Sheet 9 of 9)



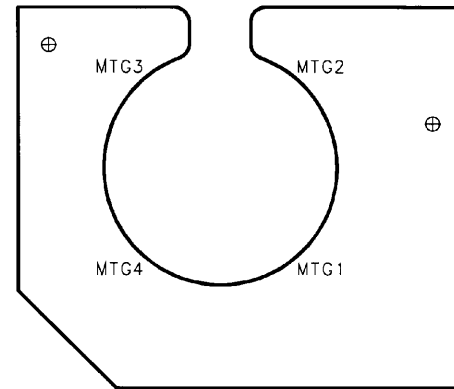
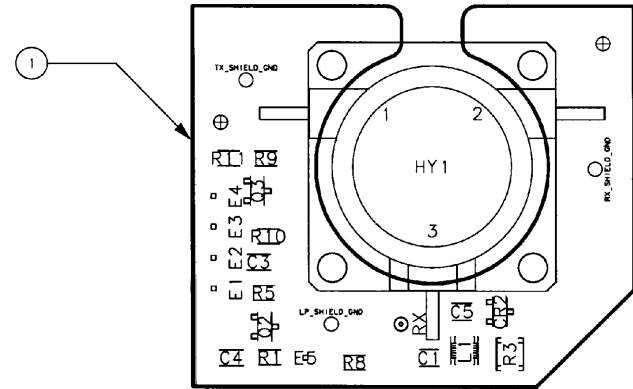
**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**

**6.10 200-09478-0000 KT 76C CIRCULATOR BOARD Rev. G**  
**200-09478-0010 KT 76C CIRCULATOR BOARD Rev. -**

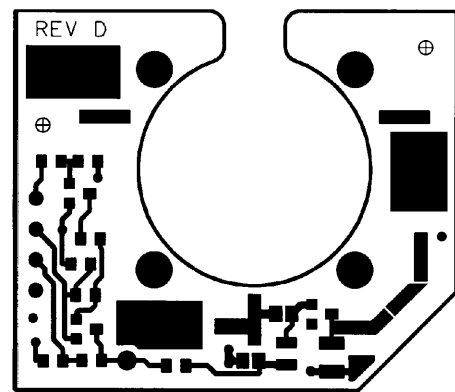
SYMBOL/ FIND	PART NUMBER	DESCRIPTION	[UOM]	-0000	-0010
1	009-09478-0000	CIRCULATOR BOARD	[EA]	1	1
7	016-01040-0000	COATING TYPE AR	[AR]	1	1
2,3	024-00058-0000	COAX DBL SHLD RG316	[IN]	6.2	6.2
11	025-00024-0000	WIRE 22AWG BLK	[IN]	9	
9	025-00024-0002	WIRE 22AWG RED	[IN]	9	
10	025-00024-0003	WIRE 22AWG ORN	[IN]	9	
8	025-00024-0005	WIRE 22AWG GRN	[IN]	9	
6	047-12272-0501	BOM CIRCULATOR BRACKET	[EA]	1	1
5	089-05899-0005	SCR PHP #2-56X5/16	[EA]	4	4
4	155-01715-0501	BOM	[EA]	1	1
C 1	106-00116-0049	CAP CHIP PORCELAIN	[EA]	1	1
C 3	106-05104-0037	CAP CH 100KX7R/25V	[EA]	1	
C 4	106-05104-0037	CAP CH 100KX7R/25V	[EA]	1	
C 5	106-00116-0061	CAP CH POR 100PF	[EA]	1	1
CR 2	007-06439-0002	PIN DIODE SINGLE	[EA]	1	1
HY 1	015-00282-0001	DROP-IN CIRCULATOR	[EA]	1	1
L 1	019-02660-0013	IND SM 100 10%	[EA]	1	1
Q 2	007-00261-0003	XSTR 2N2907A (SOT)	[EA]	1	
Q 3	007-00903-0000	2N7002 MOSFET	[EA]	1	
R 1	139-01501-0010	RES CH 1500 .1W 1%	[EA]	1	
R 3	139-00511-0020	RES CH 51.1 QW 1%	[EA]	1	1
R 5	139-01002-0010	RES CH 10K TW 1%	[EA]	1	
R 8	139-03010-0010	RES CH 301 .1W 1%	[EA]	1	1
R 9	139-01002-0010	RES CH 10K TW 1%	[EA]	1	
R 10	139-01002-0010	RES CH 10K TW 1%	[EA]	1	
R 11	139-00511-0010	RES CH 51.1 .1W 1%	[EA]	1	
REF 1	300-09478-0000	CIRCULATOR ASSY. DWG	[RF]	X	
REF 1	300-09478-0010	CIRCULATOR ASSY. DWG	[RF]		X
REF 1	300-09478-0091	CIRCULATOR ASSY. DWG	[RF]		X
REF 1	002-09478-0000	CIRCULATOR SCHEMATIC	[RF]	X	X

**BENDIX/KING**  
KT 76C ATRBS TRANSPONDER

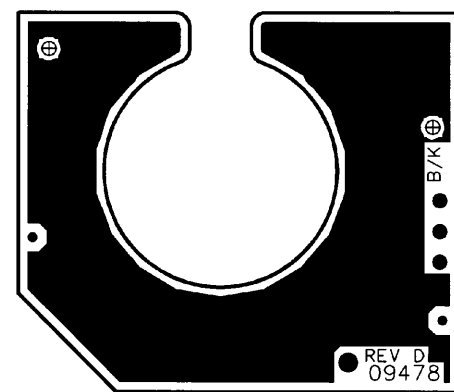
**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER



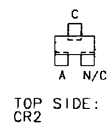
- NOTES:
- PRIOR TO POST COATING NEAR SIDE ONLY OF P.C. BOARD WITH KPN 016-01040-0000, MASK OFF ALL MOUNTING AREAS AND REFERENCE DESIGNATORS: LP, LP\_SHIELD\_GND-MTG1, MTG4, RX, RX\_SHIELD\_GND, TX, TX\_SHIELD\_GND
  - PRINTED CIRCUIT ASSEMBLY IDENTIFICATION MUST BE IN ACCORDANCE WITH SPEC. 001-01101-0000.
  - WHERE APPLICABLE, LIQUID STAKE ALL FASTENERS PER SPEC. 001-01080-0000.



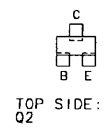
NEARSIDE VIEW OF PC BOARD



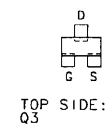
FARSIDE VIEW OF PC BOARD



TOP SIDE: CR2



TOP SIDE: Q2

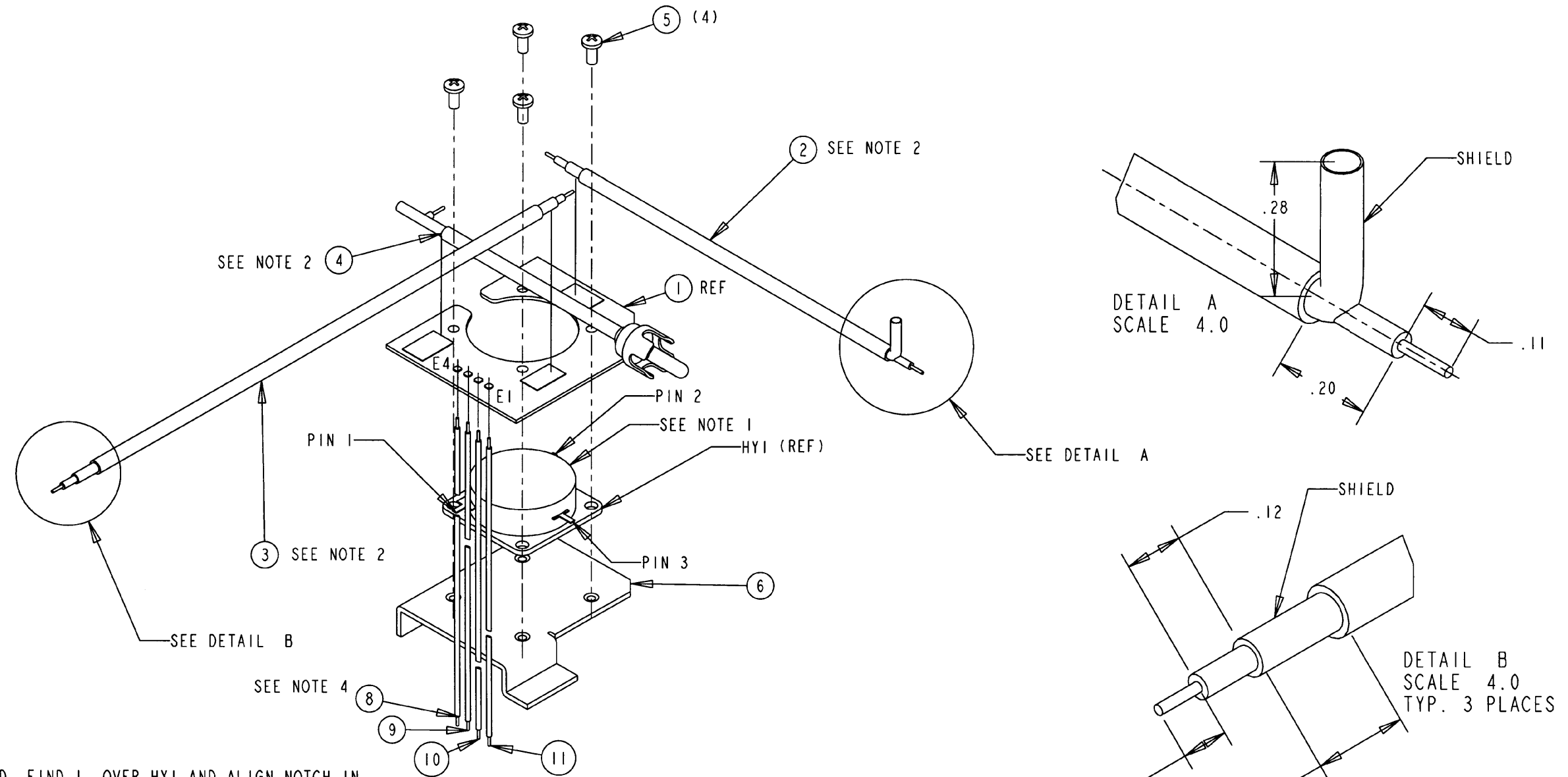


TOP SIDE: Q3

Figure 6-19

Circular Board S/N ≥ 6600 (Dwg. No. 300-09478-0000 Rev. B, Sheet 1 of 2)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER



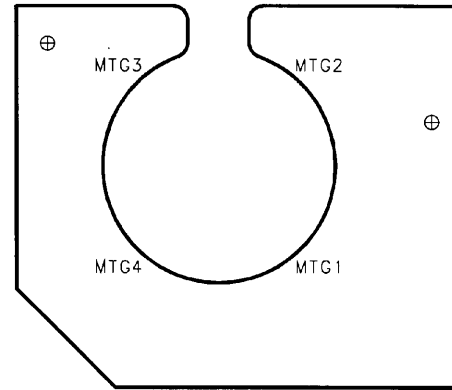
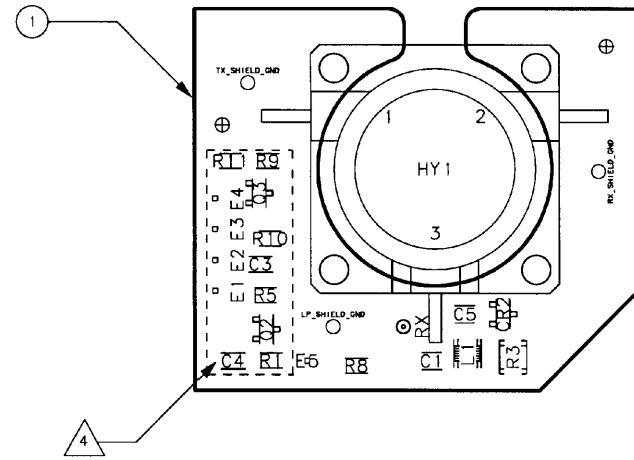
**NOTES:**

1. CAREFULLY PLACE BOARD, FIND 1, OVER HYI AND ALIGN NOTCH IN THE BOARD WITH 1 OF 3 LEADS OF HYI. TILT THE BOARD AND ROTATE SO THE LEAD IS ON THE TOP SURFACE OF THE BOARD. REPEAT UNTIL ALL LEADS ARE ON THE TOP AND ARE IN PROPER ORIENTATION.
2. SOLDER LEAD OF FIND 4 TO HYI-1, SOLDER LEAD OF FIND 2 TO HYI-2, AND SOLDER LEAD OF FIND 3 TO HYI-3, CABLES ARE TO BE ORIENTED AS SHOWN, AND SOLDER SHIELDING OF CABLES TO GROUND PLANS OF FIND 1.
3. ALL DIMENSIONS IN DETAIL A AND B ARE REFERENCE DIMENSIONS.
4. SOLDER ONE END OF FIND NO.S 8 THRU 11 TO E1 THRU E4 OF FIND 1 AS SHOWN.

Figure 6-19

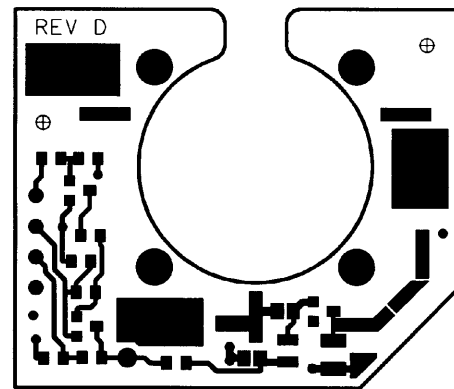
Circular Board S/N ≥ 6600 (Dwg. No. 300-09478-0000 Rev. B, Sheet 2 of 2)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

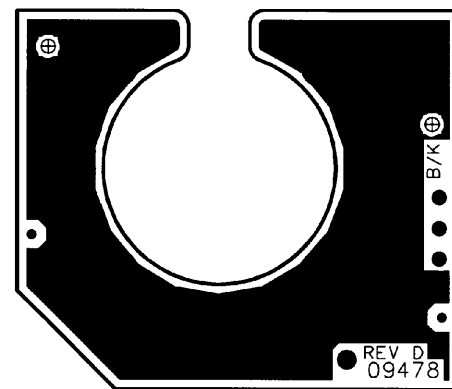


NOTES:

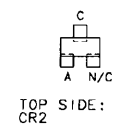
1. PRIOR TO POST COATING NEAR SIDE ONLY OF P.C. BOARD WITH KPN 016-01040-0000, MASK OFF ALL MOUNTING AREAS AND REFERENCE DESIGNATORS:  
LP, LP\_SHIELD\_GND-MTG1, MTG4  
RX, RX\_SHIELD\_GND, TX  
TX\_SHIELD\_GND
2. PRINTED CIRCUIT ASSEMBLY IDENTIFICATION MUST BE IN ACCORDANCE WITH SPEC. 001-01101-0000.
3. WHERE APPLICABLE, LIQUID STAKE ALL FASTENERS PER SPEC. 001-01080-0000.
4. THE FOLLOWING COMPONENTS ARE NOT INSTALLED:  
C3, C4, Q2, Q3, R1, R5, R9, R10, AND R11



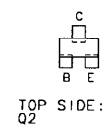
NEARSIDE VIEW OF PC BOARD



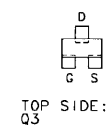
FAR SIDE VIEW OF PC BOARD



TOP SIDE:  
CR2



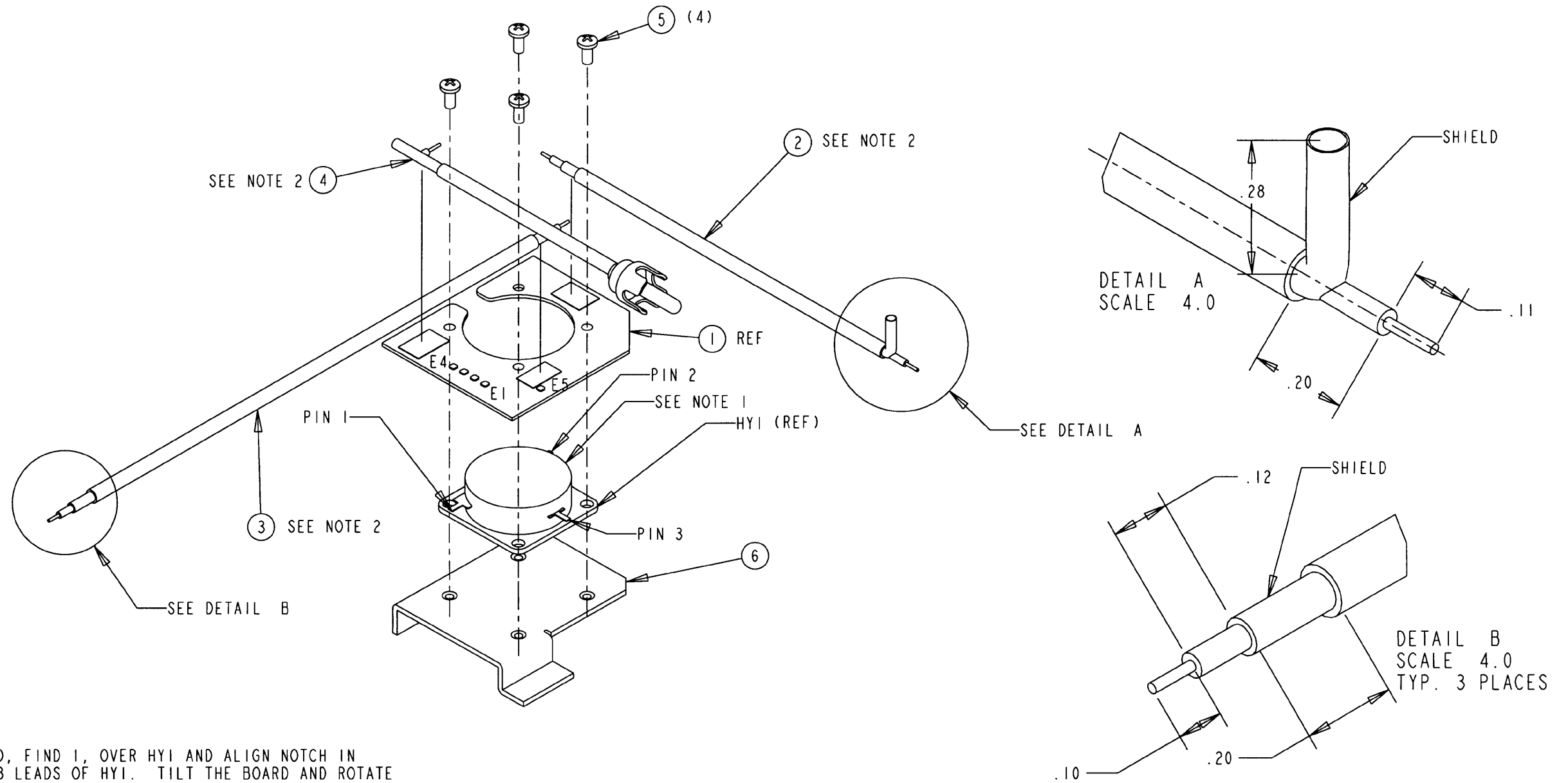
TOP SIDE:  
Q2



TOP SIDE:  
Q3

Figure 6-20  
Circular Board S/N ≥ 6600 (Dwg. No. 300-09478-0010 Rev. A)

**BENDIX/KING**  
**KT 76C ATCRBS TRANSPONDER**



**NOTES:**

1. CAREFULLY PLACE BOARD, FIND 1, OVER HYI AND ALIGN NOTCH IN THE BOARD WITH 1 OF 3 LEADS OF HYI. TILT THE BOARD AND ROTATE SO THE LEAD IS ON THE TOP SURFACE OF THE BOARD. REPEAT UNTIL ALL LEADS ARE ON THE TIP AND ARE IN PROPER ORIENTATION.
2. SOLDER LEAD OF FIND 4 TO HYI-1, SOLDER LEAD OF FIND 2 TO HYI-2, AND SOLDER LEAD OF FIND 3 TO HYI-3, CABLES ARE TO BE ORIENTED AS SHOWN, AND SOLDER SHIELDING OF CABLES TO GROUND PLANS OF FIND 1.
3. ALL DIMENSIONS IN DETAIL A AND B ARE REFERENCE DIMENSIONS.

Figure 6-21  
 Circular Board S/N ≥ 6600 (Dwg. No. 300-09478-0091 Rev. B)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

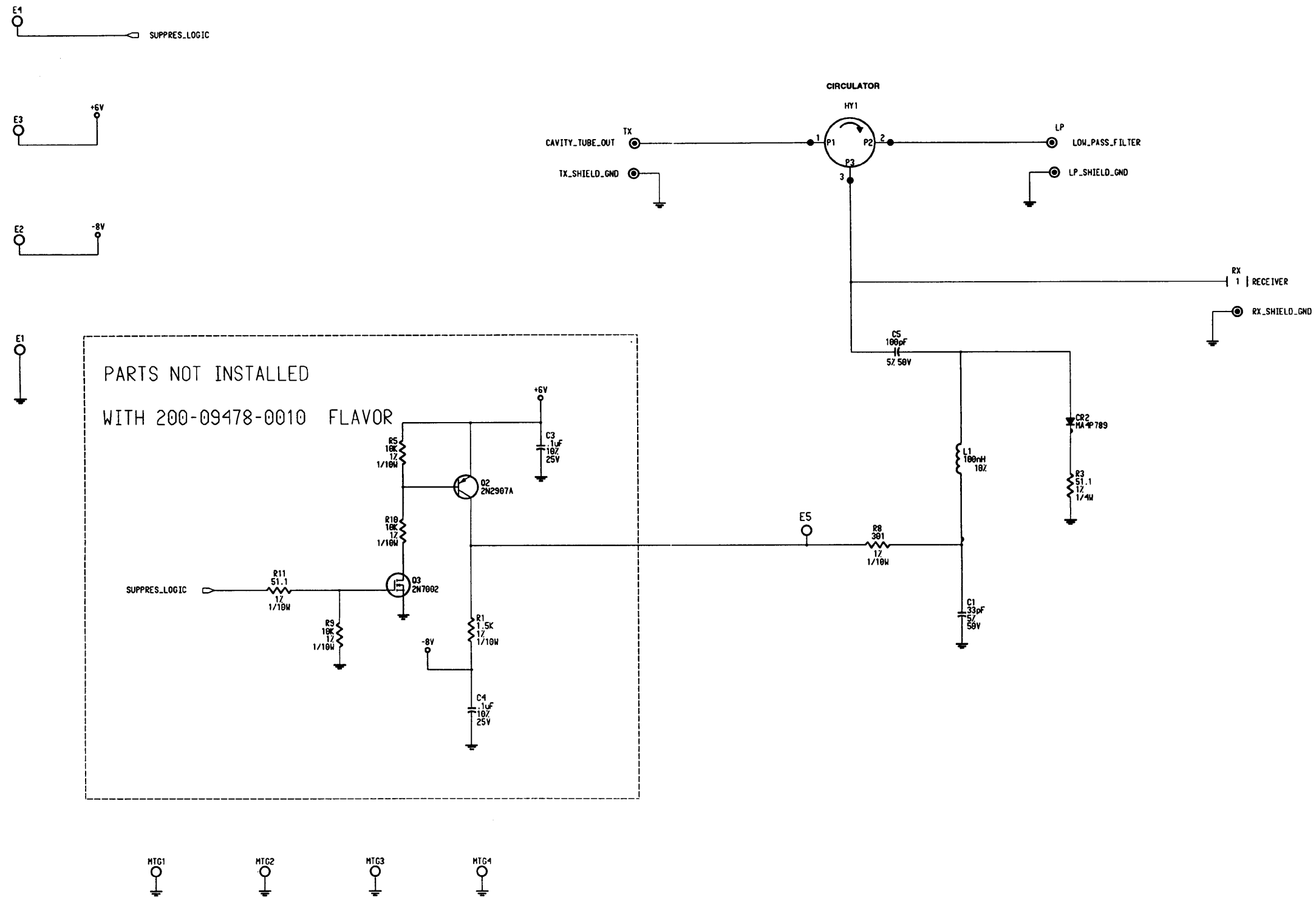


Figure 6-22  
Circular Board Schematic (Dwg. No. 002-09478-0000 Rev. A)

**BENDIX/KING**  
KT 76C ATCRBS TRANSPONDER

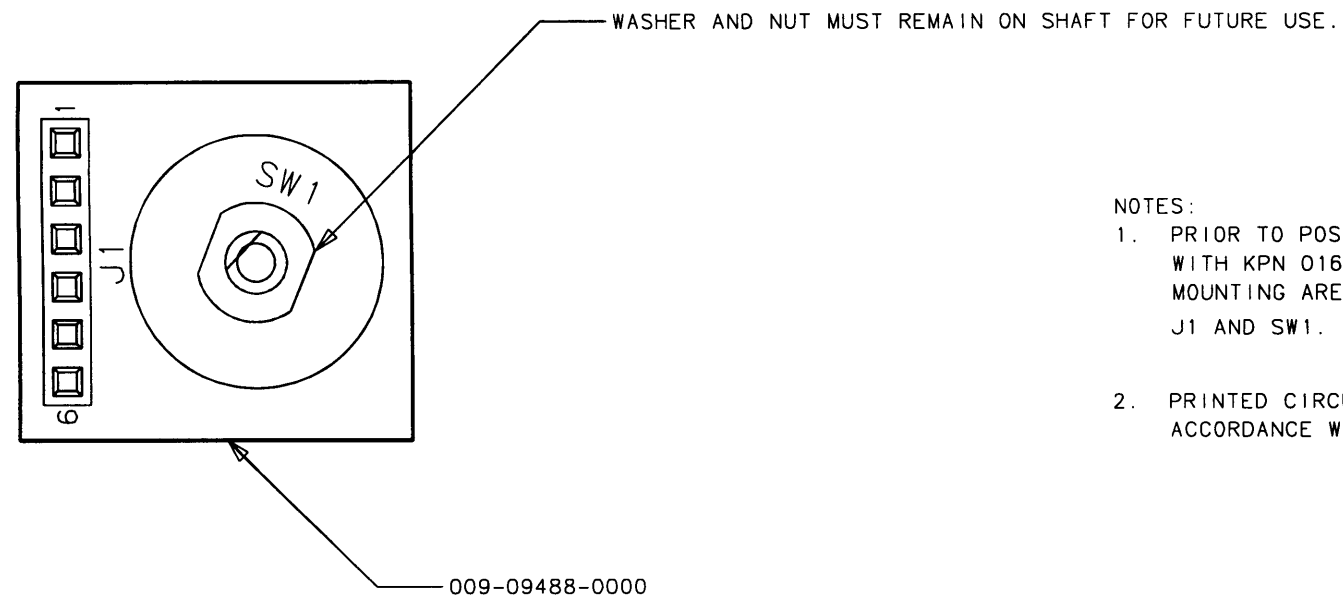
6.11 200-09488-0000 KT 76C ROTARY SWITCH BOARD Rev. -

SYMBOL	PART NUMBER	DESCRIPTION	[UOM]	-0000
ITM 1	009-09488-0000	KT-76C PCB ROTARY SW. BD.	[EA]	1
J 1	030-02200-0006	VERT CRD CONN 6P	[EA]	1
SW 1	031-00798-0001	SWITCH, ROTARY, 8 POS	[EA]	1
REF 1	300-09488-0000	ASSY. DWG.	[RF]	X
REF 2	002-09488-0000	SCHEMATIC	[RF]	X



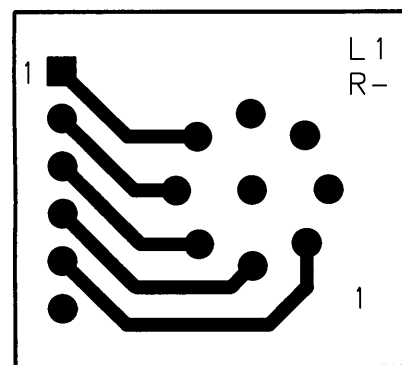
**BENDIX/KING**  
KT 76C ATRBS TRANSPONDER

**BENDIX/KING**  
KT 76C ATRBS TRANSPONDER



NOTES:

1. PRIOR TO POST COATING BOTH SIDES OF P.C. BOARD WITH KPN 016-01040-0000, MASK OFF ALL MOUNTING AREAS AND REFERENCE DESIGNATORS: J1 AND SW1.
2. PRINTED CIRCUIT ASSEMBLY IDENTIFICATION MUST BE IN ACCORDANCE WITH SPEC. 001-01101-0000.



NEARSIDE VIEWS OF PC BOARD

Figure 6-23  
Rotary Switch Board (Dwg. No. 300-09488-0000 Rev. -)

**BENDIX/KING**  
KT 76C ATRBS TRANSPONDER

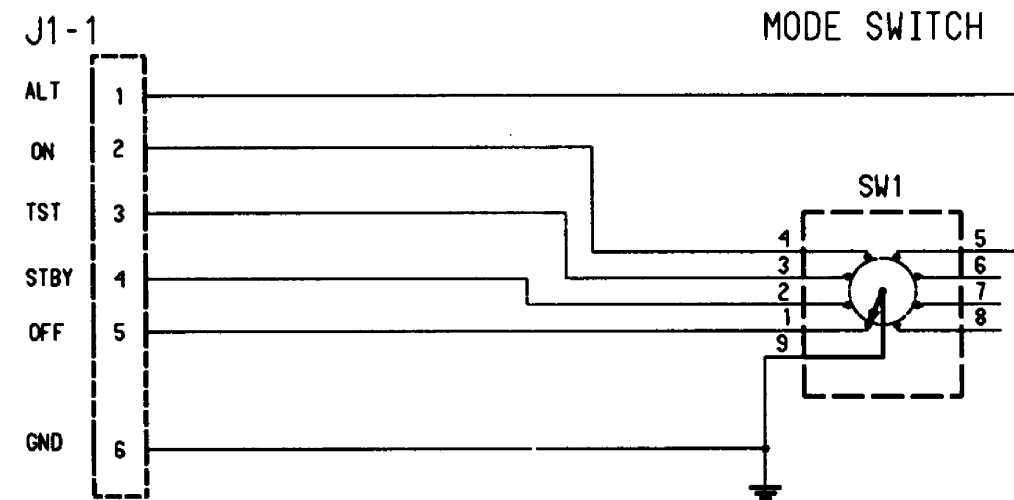


Figure 6-24  
Rotary Switch Board Schematic (Dwg. No. 002-09488-0000 Rev. -)

## REVISION HISTORY AND INSTRUCTIONS

MANUAL:           KT 76C Maintenance Manual

REVISION:        2, December 1999

PART NUMBER: 006-15545-0002

This is a complete reprint. All sections and pages are revised and reformatted.

## REVISION HISTORY AND INSTRUCTIONS

MANUAL:           KT 76C Maintenance Manual

REVISION:        1, May 1997

PART NUMBER:    006-15545-0001

Add, delete, or replace pages as indicated below and retain all tabs and dividers. Insert this page immediately behind the title page as a record of revisions.

ITEM	ACTION
Title Page	Remove and Replace
Revision History	Insert Behind Title Page
KT 76C MM Table of Contents	Remove and Replace
KT 76C MM Section 5, Pages 1-12	Remove and Replace
KT 76C MM Section 6	Remove and Replace