
Service Bulletin

BULLETIN NO: KX 155A-11
KX 155A VHF NAV/COMM Transceiver

EFFECTIVITY

KX 155A transceivers, P/N 069-01032-0101 and -0201, S/N 24100 and below. Units with serial numbers above those stated have Mod 11 incorporated during original manufacturing.

Mods 5 and 7 are both prerequisites for installing Mod 11. For information on these mods, refer to SB KX 155A-5, P/N 600-10030-005X, and SB KX 155A-7, P/N 600-10030-007X.

REASON

Mod 11 replaces the Transmitter Module with one that is more reliable in high VSWR installations.

DESCRIPTION

This modification consists of replacing the Transmitter Module and modifying the Main Board Assembly to convert it to a Main Board Assembly P/N 205-00900-0005 containing a Main Board P/N 200-09059-0050.

Due to the complexity of this modification, we recommend having Mod 11 installed by Honeywell in Olathe, Kansas.

COMPLIANCE

Required if the transmitter fails and needs to be replaced.

WARRANTY INFORMATION

Warranty credit or payment will be issued for this modification if the unit is still under the original new product warranty. If the unit is modified by an appropriately rated Honeywell Service Center, a properly completed warranty claim for seven (7.0) hours labor plus parts must be submitted. If the unit is modified by Honeywell in Olathe, Kansas, a properly completed warranty claim for one (1.0) hour labor for removal and re-installation must be submitted.

APPROVAL

This modification does not affect the original approval.

MANPOWER

Seven (7.0) hours labor including testing, removal, and re-installation, if the modification is completed by the field service center.

One (1.0) hour labor for removal and re-installation of the unit, if the modification is completed by Honeywell in Olathe, Kansas.

REFERENCES

KX 155A Maintenance Manual, P/N 006-15542-XXXX and Service Aid KX 155A-102, P/N 601-10030-002X.

MODIFICATION PROCEDURE

1. Disassemble the unit according to maintenance manual procedures to access the Transmitter Module.

CAUTION

Any disassembly/assembly of the KX 155A MUST be done at a static-safe workstation. Removed modules should be placed in static-safe bags when not installed in the unit.

CAUTION

The replacement ICs will be packed in conductive foam to protect them from static charges. Do not remove them from the foam until ready for installation in the unit. Please take all anti-static precautions when handling these devices.

2. Replace Transmitter Module P/N 200-09062-0010 with new Transmitter Module P/N 200-09062-0020.
3. Complete the following changes to the Main Board. These changes convert the Main Board from P/N 200-09059-0020 to P/N 200-09059-0050. Refer to Figure 1.
 - A. Remove and discard C1254, C1256, C1260, CR1106, R1271, R1277, R1331, and R1422.
 - B. Replace C1251 with new C1251 P/N 106-04474-0037.
 - C. Replace C1274 with new C1274 P/N 106-04332-0016.
 - D. Replace R1265 with new R1265 P/N 139-00000-0014.

- E. Replace R1283 with new R1283 P/N 139-02001-0010.
- F. Replace R1289 with new R1289 P/N 139-02002-0010.
- G. Replace R1292 with new R1292 P/N 139-00000-0014.
- H. Replace R1310 with new R1310 P/N 139-04222-0010.
- I. Replace R1333 with new R1333 P/N 139-01002-0010.
- J. Replace U1034 with new U1034 P/N 120-03552-0000.
- K. Replace U1035 with new U1035 P/N 120-03552-0000.
- L. Install new R1282 P/N 139-02001-0010.
- M. On the nearside of the board, cut the trace between U1035 pin 13 and R1282. Solder a magwire from U1035 pin 12 to the R1282 pad that is closest to U1035.
- N. Cut the trace that goes from U1034 pin 10. Install R1430 P/N 131-00203-0013 between U1034 pin 10 and the lead of R1285 that is closest to C1250. Apply insulating tubing P/N 150-00004-0010 as appropriate over the lead.
- O. Install C1340 P/N 111-00001-0001 between U1034 pin 10 and ground (the negative side of C1255).
- P. If the software level of the KX 155A is SW Mod 01/05, update it to SW Mod 01/06 using Software Diskette P/N 225-00014-0005.
- Q. If the board software label does not read "205-00900-0005," affix board software revision label P/N 057-05335-0005 over the last two digits of the board software label. The labels should then read "205-00900-0005."
- R. Change the part number tag on the Main Board to reflect the new P/N 200-09059-0050.

4. Reassemble the unit according to maintenance manual procedures.

IDENTIFICATION PROCEDURE

Stamp an X and/or make a permanent mark on the modification section of the Unit Serial Tag to indicate that Mod 11 is complete.

Attach SW Mod Tag P/N 057-05287-0106 in place of the old tag to indicate the change to SW MOD 01/06.

TESTING PROCEDURE

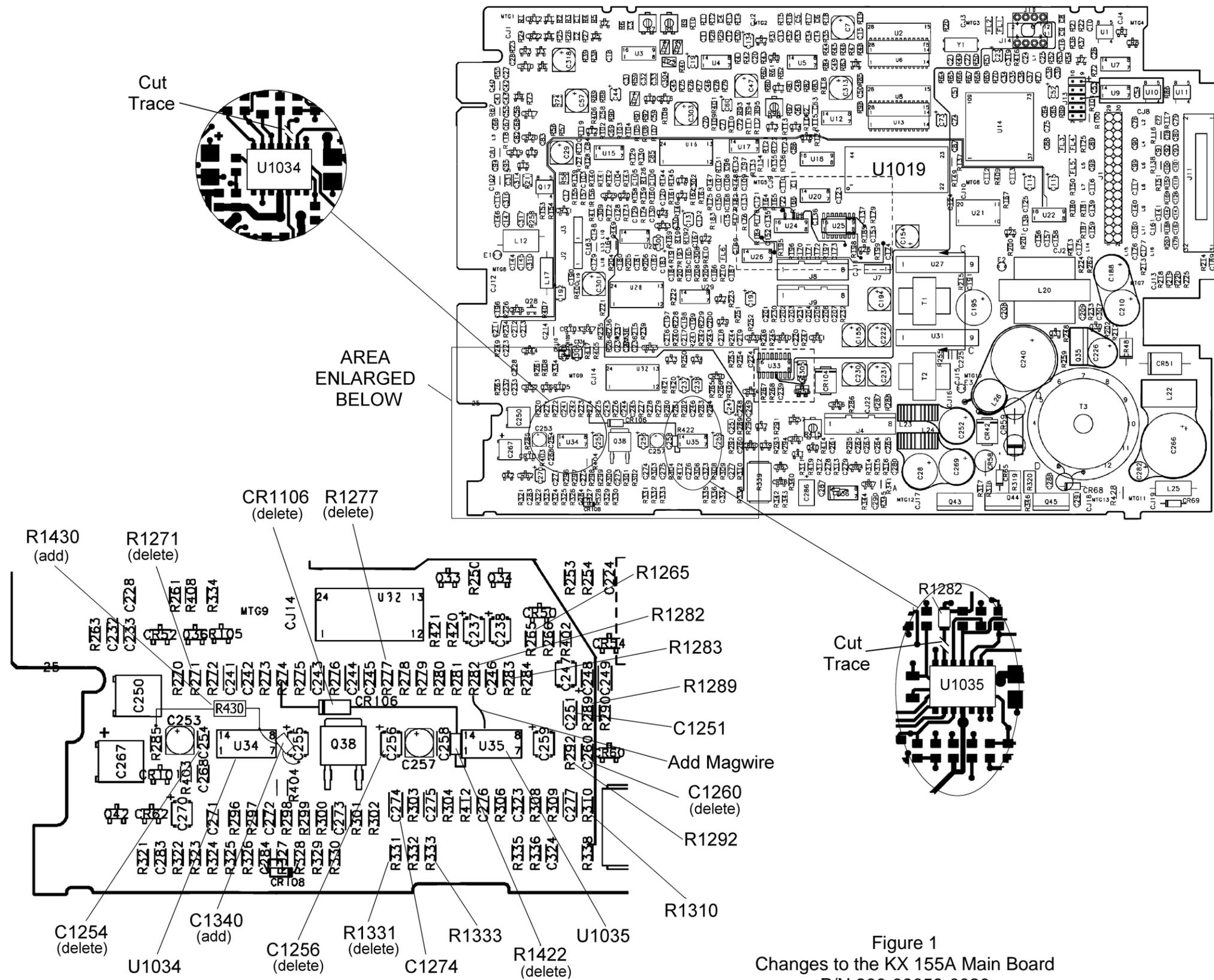
Complete a functional test of the unit according to the revised procedure given in Service Aid KX 155A-102, P/N 601-10030-002X.

MATERIAL INFORMATION

A parts kit is available under P/N 050-03649-0000 to modify one KX 155A according to this service bulletin. This kit contains the following items:

Part Number	Qty	Description
024-05019-0000	6 inches	Magwire - 30ga
057-05287-0106	1	SW Mod Tag
057-05335-0005	1	Board SW Rev Label
106-04332-0016	1	Cap CH 3300pF NP0 50V 5% (C1274)
106-04474-0037	1	Cap CH 0.47 μ F X7R 25V 10% (C1251)
111-00001-0001	1	Cap CR .1 μ F 50V (C1340)
120-03552-0000	2	Quad Op Amp (U1034, U1035)
131-00203-0013	1	Res CF 20K EW 5% (R1430)
139-00000-0014	2	Circuit Jumper 0805 (R1265, R1292)
139-01002-0010	1	Res CH 10K TW 1% (R1333)
139-02001-0010	2	Res CH 2.00K TW 1% (R1282, R1283)
139-02002-0010	1	Res CH 20K TW 1% (R1289)
139-04222-0010	1	Res CH 42.2K .1W 1% (R1310)
150-00004-0010	2 inches	Teflon Tubing - 22ga
200-09062-0020	1	Transmitter Board

Also needed is a Software Diskette P/N 225-00014-0005. Only one diskette is needed to update the software on any number of KX 155A units. The diskette is not warranty-reimbursable.



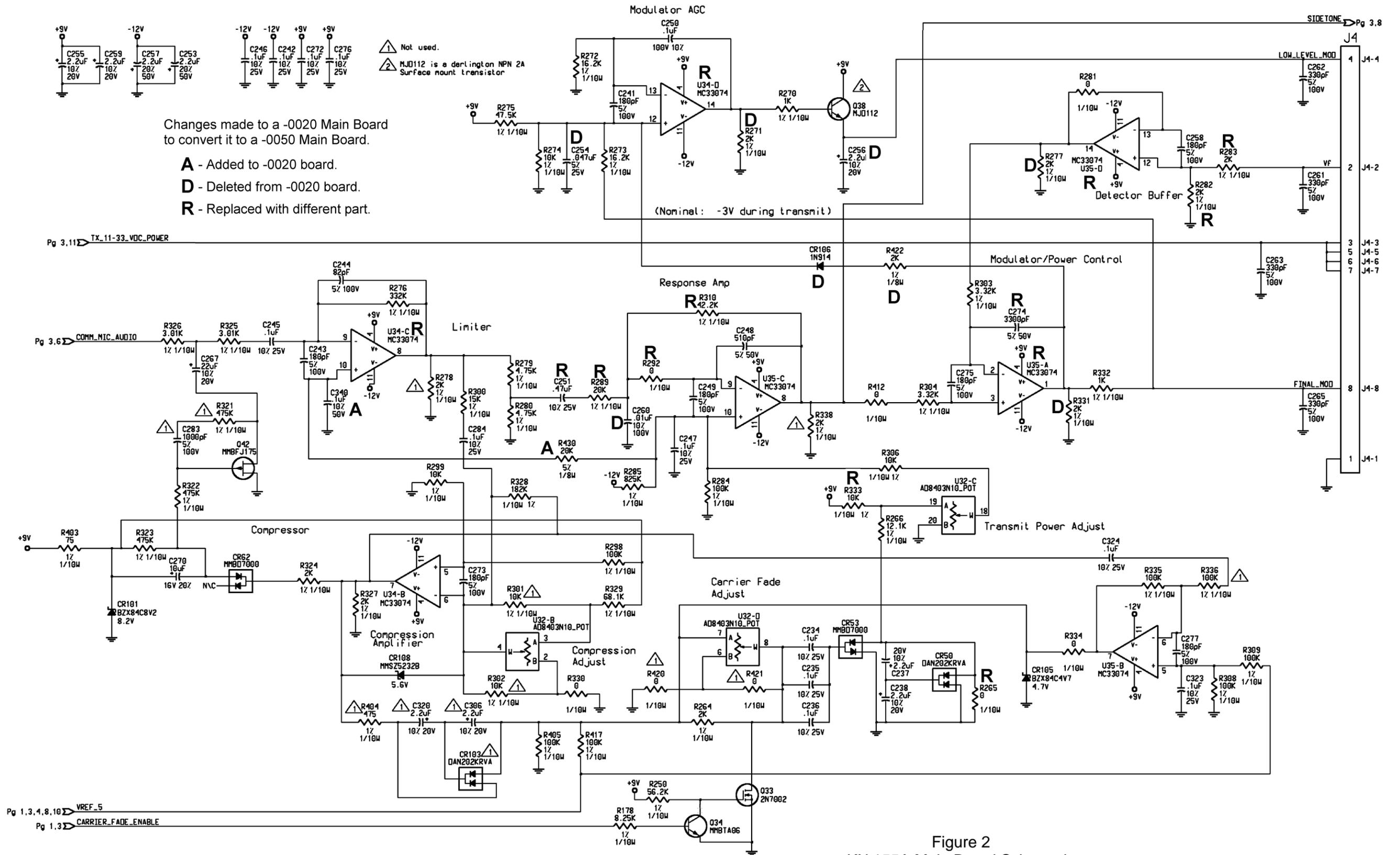


Figure 2
 KX 155A Main Board Schematic
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