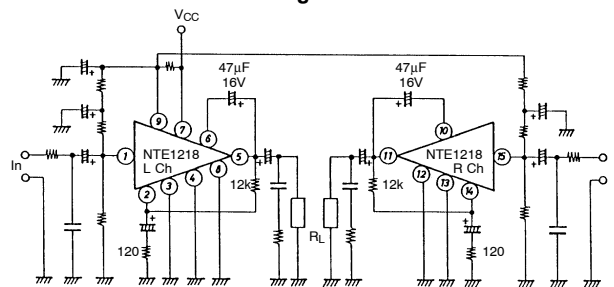


# SPECIAL REPLACEMENT DATA SECTION

- NTE539** = When replacing part numbers 530165-12, MH1011B01, and MH1031C01 with NTE539, cut the "G" lead at the surface of the failed multiplier. Strip and connect to the "G" terminal of the replacement multiplier.
- NTE1081A** = When an NTE1081A is used to replace a UPC563H, the following modifications must be performed:
1. The 680 $\Omega$  resistor from Pin3 and Pin4 along with Diode SD45 or 1S953 must be removed.
  2. The 10k $\Omega$  resistor at Pin9 must be removed.
  3. The 220pF capacitor must be changed to 47pF. This capacitor is located between Pin4 and Pin5.
  4. Connect the heat sink fin to GND.
- The NTE1081A directly replaces the UPC563H2 just by grounding the heat sink.
- NTE1091** = To replace a UPC48C with an NTE1091, connect a 3.3k $\Omega$ , 1/2W resistor between Pin15 and GND.
- NTE1140** = To replace a UPC575C with an NTE1140, the following modifications must be performed:
1. If there is a resistor between Pin5 and Pin6, remove it.
  2. Remove any existing resistor between Pin8 and GND.
  3. Connect a 47 $\mu$ F capacitor from Pin8 to GND.
- NOTE: There are no required modifications when replacing a UPC575C2 with an NTE1140.

- NTE123A** = To replace a 13-17-6 transistor with an NTE123A, place a 15k $\Omega$  resistor from the base of the NTE123A to GND.
- NTE1218** = The STK413 and STK415 are discontinued devices and are not directly replaceable. To replace these devices with an NTE1218, the following modifications must be performed (See Figure 1):
1. Pin6 (L Ch) and Pin12 (R Ch) must be disconnected from their loads. In some cases, this may involve cutting out a section of foil on the PC board.
  2. The 15 $\Omega$  resistors in series with the capacitors from Pin2 to GND and from Pin14 to GND must be removed and replaced with 120 $\Omega$  resistors.
  3. A 12k $\Omega$  resistor must be placed between Pin2 and Pin5, and a 12k $\Omega$  resistor must be placed between Pin11 and Pin14.
  4. Between Pin5 and Pin6, connect a 47 $\mu$ F, 16V capacitor, and between Pin10 and Pin11, connect a 47 $\mu$ F, 16V capacitor.

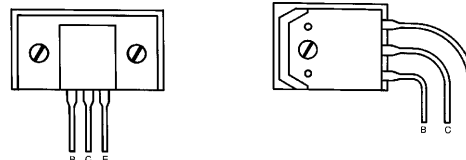
Figure 1



- NTE1115A** = The TBA810S-H is replaced by an NTE1115A with the following change:  
A 100 $\Omega$ , 1/4W resistor must be connected between Pin1 and Pin4.

- NTE159** = Two (2) NTE159 transistors may be used to replace a UPA41C.  
(See Figure 2)

- NTE36/37** = When an NTE36 or NTE37 is used to replace an NTE380 or NTE381, the following modifications must be performed:
1. Nip the transistor leads and solder the attached wires to them as shown below before installing. Be careful not to apply too much solder lest it should touch the heat sink.
  2. Install the new transistor sideways using one of the old mounting screws, as shown below.



Old

New

- NTE1471** = When an NTE1471 is used to replace an HA11441, Pin16 is to be grounded.
- NTE1823** = When an NTE1823 is used to replace an STK5481 or a Zenith 905-1224, solder a jumper between Pin8 and Pin11.
- NTE1837** = When using an NTE1837 to replace an LA7911, a 33V Zener diode is needed between Pin6 and GND.

Figure 2

