

Cobra 148FGTL DX+ FET Mode

ITEM	QTY	REFERENCE NUMBER	DESCRIPTION
1	3	Q47,Q48,Q49	FET IRF520
2	3	D90,D91,D92	ZENER DIODE 5.6V 0.5W
3	3	VR10,VR11,VR12	RES. VAR. 100K
4	2	L33, L34	RES. 1K 1/8W
5	1	L37	RES. 10K 1/8W
6	3	R241, R242, C291	RES. 100K 1/8W
7	2	R244, R245	RES. 47K 1/8W
8	2	C209, C210	CAP. 1500p 50V
9	1	C203	CAP. 150p 50V
10	1	CP-1	Compressor
11	1	MD-1	Modulator

Mouser Electronics, Inc.
 1000 North Main Street
 Mansfield, TX 76063

(800) 346-6873

Local: (817) 804-3888

Fax: (817) 804-3899

<http://www.mouser.com/index.cfm?handler=home>

Item 1 512-IRF520A

Item 2 512-1N5231B

Item 3 652-3306F-1-104 or 512-N6-L50T0C-100K

Item 4 299-1K-RC

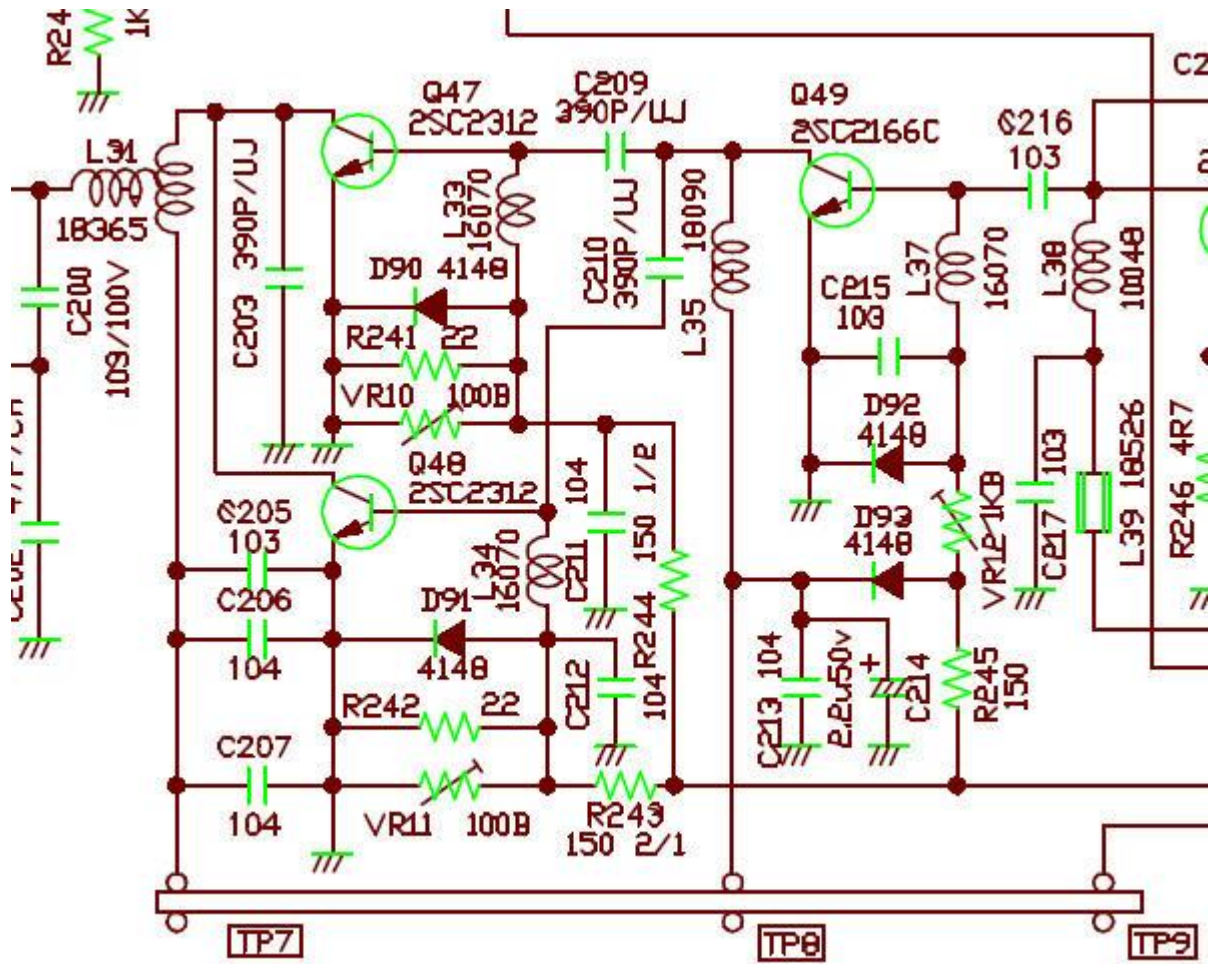
Item 5 299-10K-RC

Item 6 299-100K-RC

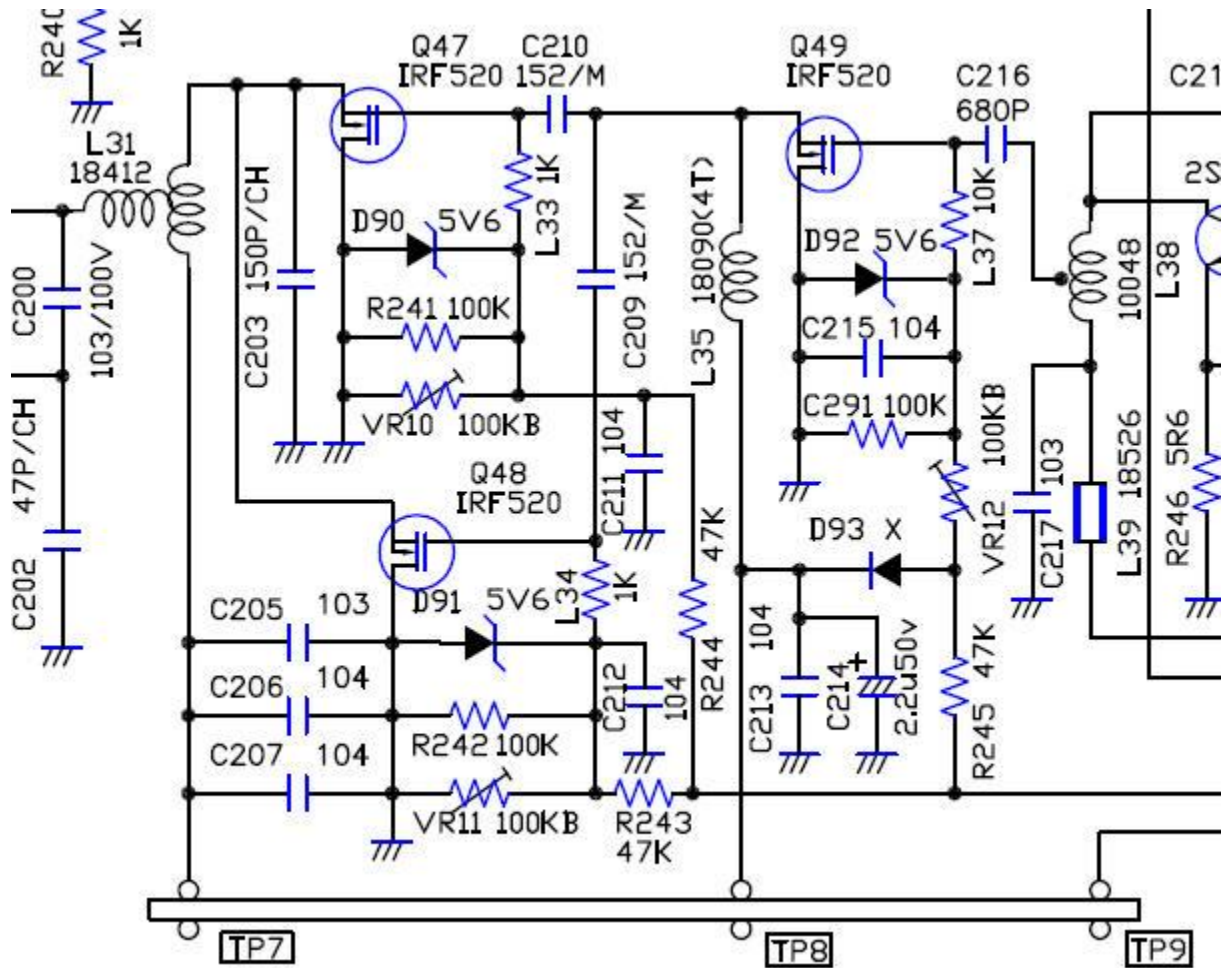
Item 7 299-47K-RC

Item 8 140-50P2-152K-RC

Item 9 140-50N5-151J-RC



Cobra 148F GTL DX+



New Cobra 148F DX+ (MOSFET)

Sparkys CB Shack
 PO Box 291
 Westville, Illinois 61883
 Attn; Customer Service
 (217) 267-7257

<http://www.sparkyscbshack.com/topgun.html>

Item 10 CP-1 Top Gun Speech Compressor
 Item11 MD-1 Top Gun Modulator

TGT CP-1 Compressor Installation Instructions

The following installation requires the removal of 1 or 2 resistors and the connection of 2 wires to the microphone preamplifier op-amp IC. See the chart for the resistor, IC and pin numbers for your particular radio application.

Locate the mic preamp IC and mount the CP-1 board as close to pins 1 & 2 as possible using the mounting tape supplied. Mount it on the top side of the board on surface mount radios and the bottom or solder side of the through hole radios.

Remove the resistors located near the Mic Preamp IC listed for your radio below.

Connect the orange wire to the Mic Preamp IC pin 1.

Connect the yellow wire to the Mic Preamp IC pin 2.

This completes the installation of the Top Gun Compressor. No adjustments are required

Radio	Mic Preamp IC	Remove Resistors
Cobra 148F GTL DX+	IC7	R176 270K, R186 1K

TGT MD-1 Modulator Installation Instructions

The following installation requires the removal of 1 resistor and the connection of 7 wires to the main circuit board of the radio. See the chart for the resistor, AM modulator transistor, AM Power, and AMC controls for your particular radio application.

Mount the MD-1 toward the rear of the radio near the Modulator Regulator transistor on a flat surface of the PC board using the mounting tape supplied. Mount it on the topside of the board on surface mount radios and the bottom or solder side of the through hole radios.

Remove the resistor located near the AM Power control listed for your radio below.

Connect the **RED** wire to 13.8 volts at the audio amp IC or after the On/Off switch.

Connect the **BLACK** wire to ground.

Connect the **ORANGE** wire to the hole of the resistor removed that connects to the power control trimmer potentiometer.

Connect the **YELLOW** wire to the other hole of the removed resistor.

Connect the **WHITE** wire to the center pin of the AM Mod/Regulator.

For a switch-able modulator, connect the **GRAY** wires to a SPST switch. In the closed position the modulator is off. If a switch is not desired, leave the **GRAY** wires disconnected and insulate them with shrink tubing.

For the higher power radios such as the RCI 2970DX, Galaxy 93T, and other radios a 15K resistor may be required across the gray wires of the MD-1. These radios may require 10-Watts minimum dead carrier for the modulator to work properly

Set the power and modulation to your desired settings. Higher modulation creates more swing.

Radio	Remove Resistor	AM Mod/Regulator	AM Power	AMC
Cobra 148F GTL DX+	R264 5.6K	Q54 2SB754	VR14	VR16