

1.0 Parts List :

Description of Devices:

TABLE 1 : FUNCTION OF ACTIVE ELEMENTS

DESIGNATOR	FUNCTION
IC400	D Flip Flop, TC7WH74
IC401	Logic X OR, NC7SZ86
IC101	Microprocessor, PIC18F4520
IC300	RF Transmitter, ADF7017
IC2	Switching Controller, LM3485
IC1	Switching Regulator, LM2736Y
IC402	TCXO, TCXO-50 (E3499)
IC100	Gps Receiver, GPS-ZX4150P-4
IC301	RF POWER AMP, RA07M4047M
Q103	Dual NPN Transistors, MBT3904DW
Q100	Mosfet N, IRLML2502PBF
Q105	Mosfet N, BSS138
Q104	Mosfet P, IRLML6401
Q102	NPN Transistor, UMT3904T
Q106	NPN Transistor, MMBT3904
Q200 Q203	NPN Transistor, PBR941
Q201 Q202 Q300 Q301	NPN Transistor, NE85633
Q1 Q101	Power Mosfet P, FDC658P
CR300	Diode, HSMS2800
D1	Diode, 20BQ030
D2 D100 D101	Diode, MBRS130T3G
D3 D102 D104	Schottky Diode, BAT54HT1G

2.0 Tune-up Procedures :

There is no tuning required for the 406 MHz 5 watt signal. There is no tuning required for the 121.5 MHz 0.050 watt signal. The antenna-matching network is tuned at 406 MHz by adjusting C311 and measuring the return loss into the antenna coupler network. The antenna matching network is tuned at 121.5 MHz by adjusting C329 and measuring the return loss into the antenna coupler network.