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9V battery snap to .1" connector (Molex WMLX-101 or JST XH female. Used 2 pins of a .1 break away header on breadboard.)

Date Oct.6 2016 Oct.7 2016 Oct.7 2016 Oct.13, 2016 Oct.16, 2016 Oct.16, 2016 Oct.18, 2016	Revision/Addition/ Note Initial Drawing Added Notes on programming on breadboat Added Notes on a quick 5V source for bread Used M/M jumpers from Sparkfun, from PIC Reversed +5 and ground on one PIC. Regult would not connect. Device survived. Programmed to date: 16F86, 16F772, 12F67 Microchip date codes, YYWWNNN YY Year code (last 2 digits of calendar year) WW Week code (week of January 1 is week NNN Alphanumeric traceability code. If you get an error message, "Target device. expected", Data and clock lines are more t Added a green LED to the breadboard. Too of the DC input. Needed the visual feed back to good connection.	rd. Iboard. KIT3 to breadboard. Ator got hot and PK3 5, 16F628 201') does not match than likely reversed. easy to miss connect o ensue I made a	By: GSC GSC GSC GSC GSC GSC GSC	To program on a solder less breadboard: Programmer will power chip if proper box is checked on settings in MPLAB. It seemed intermittent so found an external 5 Volt supply on bread board worked better for me. Tie PICKIT3 VDD/VSS to external 5V, then to PIC with jumpers. Add .1uf capacitor on both sets of power rails on breadboard. So far have not needed them but Crystal or ceramic resonator may be required for larger chips. 10K resistor may be required between MCLR and external 5V. Anode (+) Cathode(-) Long Leg Short Leg Flat side of package $Out Gnd$ In $Out Gnd$ (Case)	12F629 1024 words 12F675 1024 words 16F59 2048 words 16F84 1024 words 16F86 8192 words 16F88 4096 words 16F88 2048 words 16F628 2048 words 16F722 2048 words 16F877 8192 words 16F877 8192 words 16F886 8192 words 16F887 8192 words 16F886 8192 words 16F8878 8192 words 16F18856 16384 words 16F18856 16384 words 16F18876 16384 words 16F18876 16384 words 16F18876 16384 words 16F18877 32768 words	
Drawn By:	Gerald Crenshaw WD4BIS Date: Oct. 6 2016		16	From the bench of:	Page 1	
Designed By:	Gerald Crenshaw WD4BIS	Date: Oct. 6 201	16	Title:	Scale: None	
Checked By:	Janet Crenshaw WB9ZPH	Date: Oct. 6 201	16	PICKit 3 Programmer connections		

