

# TSV Accumulator List of Suggested Parts

ECE 492 Spring 2017

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This list provides suggested extra parts and materials for the TSV accumulator in the LFEV project. This includes the AMS boards, PacMAN, Control Panel, and mechanical parts. See the respective BOMs for information about manufacturers, suppliers, P/Ns, and unit cost. The BOMs are linked here for convenience:

- [PacMAN BOM](#)
- [AMS BOM](#)
- [Control Panel PCB BOM](#)
- [Pack BOM](#)

For Pack: Refers to the recommended number of spare parts for a single Pack.

For Accumulator: Refers to the recommended number of spare parts for an accumulator (four packs).

Subsystem	Part Description	For Pack	For Accumulator
PacMAN	F1: 5A Blade Fuse	5	20
	X1: 10MHz Crystal	2	8
	Rly2: General Purpose Relay SPST, 30A, 5V	2	5
	U10: IC Dual Inverter	1	5
	U4: I2C Current and Power Monitor IC	1	5
	Note: This list of PacMAN spare parts is not intended to be a comprehensive list for all PacMAN materials, but rather reflective of the parts we had to replace because of part failure or bad soldering causing the part to fail. <i>We recommend having spare of all the PacMAN parts.</i>		

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<b>AMS PCB</b>	U2: DC/DC Converter for 5V Boost Regulator	5	5
	C3, C4: 22uF Cap	10	15
	C2: 0.01uF Cap	5	10
	L1: 10uH Inductor	5	5
	U5A, B: Temperature Sensor IC	5	10
	Note: This list of AMS PCB spare parts is not comprehensive, but rather reflective of the parts we had to replace because of part failure or bad soldering causing the part to fail. <i>We recommend having spare of all the AMS PCB parts.</i>		
<b>Control Panel</b>	Standoff: 3/16" Nylon Spacer	6	20
<b>Pack</b>	L17-TSV-1: Assembled PacMAN PCB	1	2
	L17-TSV-2: Assembled AMS PCBs	7	7
	L17-TSV-3: Assembled Control Panel PCB	1	2
	LCD	1	1
	200A, 300V Fuse	5	20
	25A Blade Fuse	7	28
	Cells	7	7