

Type	Part Description	Location	Manufacturer	Manufacturer Part	Supplier	Supplier Part	Total # per	Total # 4	
Accumulator	Pack 1		Lafayette College	L17-TSV-4			-	1	
	Pack 2, Pack 4		Lafayette College	L17-TSV-5			-	2	
	Pack 3		Lafayette College	L17-TSV-6			-	1	
Electrical Connectors	DT - 4 Pin Flanged Connector	Safety Loop Connector	Deutsch	DT04-4P-L012	wirecare.com	DT04-4P-L012	2	8	
	DT - 6 Pin Flanged Connector	GLV/Scada Connector	Deutsch	DT04-6P-CL09	wirecare.com	DT04-6P-CL09	2	8	
	CONN HSG PLUG 4 POS 11.18MM	Packman P1 Connector	TE Connectivity AMP	556879-4	Digikey	556879-4-ND	1	4	
	CONN HOUSING 2 POS .100	Packman P2, P6 Connector	Molex	50579402	Digikey	WM2900-ND	2	8	
	CONN SOCKET IDC 16 POS W/KEY	Packman P4 Connector	On Shore Technology Inc	101-166	Digikey	ED10502-ND	2	8	
	AXIAL FAN 60X15MM	Cooling Fan	Delta Electronics	AFB0605MB	Digikey	603-1284-ND	1	4	
	USB Port	TSV-21 USB Port	Harting	945421901	Digikey	1195-3481-ND	1	4	
	USB Port Cover	TSV-21 USB Port	Harting	9455020000	Digikey	1195-2189-ND	1	4	
	USB 2.0 Cable/Scanner Right Angle	USB Port -Packman J1	YCSbasics	U2CERA-5-B	Yourcablestore	A3283Q	1	4	
	Bus Bar Module DC Current Sensor	AI Rs - Battery Connector Bar	Ametes	BBM-01	GMW	BBM-01	1	4	
	2/0 Battery Cable	TSV- Cable	McMaster-Carr	6948K96	McMaster-Carr	6948K96	1	4	
	300VAC Fuse Block	TSV+ Power Fuse	MERSEN/FERRAZ	32031T	AllFuse	32031T	1	4	
	Fuse 200 Amp 300VAC/160DC V Fast	TSV+ Power Fuse	MERSEN/FERRAZ	A3T200	AllFuse	A3T200	1	4	
	Receptacle	TSV+ Connector	Amphenol Powerlok	PL28W-301-70	Amphenol	PL28W-301-70	1	4	
	Receptacle	TSV- Connector	Amphenol Powerlok	PL28X-301-70	Amphenol	PL28X-301-70	1	4	
	FUSE HOLDER BLADE 30A IN LINE	Tractive System Power to Packman P1 Connector	Littlefuse Inc	FHAC0002LXN	Digikey	F5984-ND	2	8	
	30A Blade Fuse	Tractive System Power to Packman P1 Connector	Littlefuse Inc	0287025.PXCN	Digikey	F4195-ND	2	8	
	Heavy Duty Power Connectors PP PAK	TSV-21 Charging Port Connector	Anderson Power Products	1470G1	Mouser	879-1470G1	1	4	
	CONN PLUG 10 POS DUAL PANEL	CAN/Safety Loop Pack Harness Plug	TE Connectivity AMP	1-1586018-0	Digikey	A111927-ND	2	8	
	CONN RECEPT 10 POS FREE	CAN/Safety Loop Pack Harness Rcpt.	TE Connectivity AMP	1-794954-0	Digikey	A30594-ND	2	8	
	6 pin connector	6 Conductor Ribbon Cable for AMS to AMS and	Molex	50-57-9706	Mouser	538-50-57-	14	56	
	2 Position Rectangular Housing	Cooling Fan Plug	TE Connectivity AMP	1586000-2	Digikey	A30654-ND	1	4	
	2 Position Rectangular Housing	Cooling fan Rcpt.	TE Connectivity AMP	794954-2	Digikey	A30590-ND	1	4	
	I2C/TWI LCD2004 Module	LCD Display	DFRobot	DFR0154	DFRobot	DFR0154	1	4	
	CONN RING 10-12 AWG #10 PIDG	Fuse Holder/Battery Bar Connection	TE Connectivity AMP	2-36161-2	Digikey	A27284CT-ND	1	4	
	Terminals TERN SOLIS R 2/0 M10	TSV- Battery Cable Connection	TE Connectivity	160001	Mouser	571-160001	1	4	
	Plastic Submersible Cord Grips	TSV- Battery Cable Cord Grip	McMaster-Carr	1013N13	McMaster-Carr	1013N13	1	4	
	Contactor	AI Rs	Gigavac	GX14CB	Gigavac	GX14CB	1	5	
	Tap Connector 22-16 AWG RED		3M	558	Digikey	920074-07-ND	2	8	
	Heavy Duty Power Connectors PP PAK	Charging Harness Plug W/Latch	Anderson Power Products	1460G1	Mouser	879-1460G1	1	4	
	Heavy Duty Power Connectors PP PAK	Charging Harness Plug No Latch	Anderson Power Products	1461G1	Mouser	879-1461G1	1	4	
	Heavy Duty Power Connectors PP15/45	Charging Harness Connector Insert	Anderson Power Products	1327G6	Mouser	879-1327G6FP	1	4	
	Heavy Duty Power Connectors PP15/45	Charging Harness Connector Insert	Anderson Power Products	1327	Mouser	879-1327FP	1	4	
	Heavy Duty Power Connectors PP15/45	Charging Harness Connector Insert	Anderson Power Products	1327G5	Mouser	879-1327FP	1	4	
	Heavy Duty Power Connectors PPMX	Charging Harness Connector Insert	Anderson Power Products	4827G6	Mouser	879-4827G6	1	4	
	Cell	AA Portable Battery Corp	LFP-G60	AA Portable	LFP-G60	7	28		
	Red 640nm LED Indication - Discrete	Control Panel	Kingbright	WP56BSRD/B	Digikey	754-1883-ND	1	4	
	Plunger 8MM x 7MM	Control Panel	C&K Components	5.46167.0910209	Digikey	5.46167.09102	4	16	
	CONN HOUSING 4 POS .100	Control Panel P1 Connector	Molex	50579404	Digikey	WM2902-ND	2	8	
	Wire Connector	Control Panel P2 Connector	On Shore Technology Inc.	101-166	Digikey	ED10502-ND	1	4	
PCBs	AMS Board		Lafayette	L17-TSV-2			7	28	
	Control Panel		Lafayette	L17-TSV-3			1	4	
	PacMAN		Lafayette	L17-TSV-1			1	4	
Mechanical Parts	Cell Retainer Positive End	Internal Frame (Parts) - Cell Retainer	Lafayette	L16-TSV-1.1			1	4	
	Cell Retainer Negative End	Internal Frame (Parts) - Cell Retainer	Lafayette	L16-TSV-2.1			1	4	
	Top Bar of Cell Retainer (Alt. Side)	Internal Frame (Parts) - Cell Retainer	Lafayette	L16-TSV-3.1			1	4	
	Top Bar of Cell Retainer	Internal Frame (Parts) - Cell Retainer	Lafayette	L16-TSV-4			1	4	
	Mid-Cell Internal Wall (shortened)	Internal Frame (Parts) - Cell Retainer	Lafayette	L16-TSV-5.1			1	4	
	Mounting Bar for Internal Wall	Internal Frame (Parts) - Cell Retainer	Lafayette	L16-TSV-6.1			2	8	
	Side Bar for Cells	Internal Frame (Parts) - Cell Retainer	Lafayette	L16-TSV-7.1			2	8	
	Front/Back Outer Housing	Outer Housing (8020)	Lafayette	L16-TSV-10			2	8	
	Side Outer Housing	Outer Housing (8020)	Lafayette	L16-TSV-11			2	8	
	Removable Cover Removable Panel/Lid	Outer Housing (Plates)	Lafayette	L16-TSV-13.1			1	4	
	Negative End Top Panel	Outer Housing (Plates)	Lafayette	L16-TSV-14.1, L16-TSV-14.2			1	4	
	Positive End Top Panel	Outer Housing (Plates)	Lafayette	L16-TSV-15.1, L16-TSV-15.2			1	4	
	Back Side Panel	Outer Housing (Plates)	Lafayette	L16-TSV-16.1			1	4	
	Front Side Panel	Outer Housing (Plates)	Lafayette	L16-TSV-17.1			1	4	
	Bottom Internal Panel	Outer Housing (Plates)	Lafayette	L16-TSV-18 (18.1 in filename)			1	4	
	PacMAN & Fan Inlet Plate Positive Side	Outer Housing (Plates)	Lafayette	L16-TSV-19 (19.3 in filename)			1	4	
	GLV/CAN Panel	Outer Housing (Plates) Attaches to Negative End Connector Panel	Lafayette	L16-TSV-20 D1 (20 in filename)			1	4	
	Connector Panel	Outer Housing (Plates) Attaches to Positive end	Lafayette	L16-TSV-21			1	4	
	Splash Guard (External Side Mounting)	Outer Housing (Plates)	Lafayette	L16-TSV-22-1			2	8	
	LCD Cover Plate	Outer Housing (Plates) Plexiglass; Attaches to	Lafayette	L16-TSV-23.1			1	4	
	Fan Plate Outlet Negative Side	Outer Housing (Plates)	Lafayette	L16-TSV-24 D1 (24-1 in filename)			1	4	
	Bottom Cover	Outer Housing (Plates)	Lafayette	L16-TSV-25			1	4	
	Positive Bus Bar w. Current Sensor Hole	Electrical (connector)	Lafayette	L16-TSV-30.1 (30 in filename)			1	4	
	Airs Replacement Bar	Electrical (connector)	Lafayette	L16-TSV-31.1			1	3	
	Fuse Airs Connector Rounded	Internal Frame (Parts)	Lafayette	L16-TSV-32 D1 (32 in filename)			1	4	
	Rounded Fuse Bus Bar (shortened)	Electrical (connector)	Lafayette	L16-TSV-33			1	4	
	Aluminum Jumper Slotted	Electrical (connector)	Lafayette	L16-TSV-34 D1 (34.1 in filename)			5	20	
	Middle Aluminum Jumper Slotted (exten)	Electrical (connector)	Lafayette	L16-TSV-35 D1 (35.2 in filename)			1	4	
	Slotted Bus Bar	Electrical (connector)	Lafayette	L16-TSV-36.2 (36.4 in filename)			1	4	
	LCD Bracket	Electrical (LCD) Garolite	Lafayette	L16-TSV-39.1			1	4	
	AIRS Replacement Bar Mount	Internal Frame (Garolite)	Lafayette	L16-TSV-40.1, 40.2			1	4	
	AIRS Extender	Internal Frame (Garolite)	Lafayette	L16-TSV-41			1	3	
	Replacement Bar - Lower Mounting	Mounting Mechanism	Lafayette	L16-TSV-66 D1			1	4	
	Replacement Bar 2 - Upper Mounting	Mounting Mechanism	Lafayette	L16-TSV-67 D1			1	4	
	Replacement Bar 3 - Upper Mounting	Mounting Mechanism	Lafayette	L16-TSV-68			1	4	
	Replacement Bar 4 - Upper Mounting	Mounting Mechanism	Lafayette	L16-TSV-69			1	4	
	Mechanical Connectors	PCB Screws (PacMAN 37-pin Connector)	4-40 x 5/8 Button Head Socket Cap Screw	McMaster-Carr	92949A112			5	20
		PacMAN Mounting	4-40 x 1/4 Button Head Socket Cap Screw	McMaster-Carr	90272A106			4	16
		Control Panel Mounting	4-40 Locknut	McMaster-Carr	91831A005			3	12
			5-40 x 3/8 Phillips Head Flat Machine Screw	McMaster-Carr	91771A126			10	40
		6-32 x 1/2 Button Head Socket Cap Screw	McMaster-Carr	92949A148			4	16	
		6-32 x 1-1/8 Button Head Socket Cap Screw	McMaster-Carr	92949A816			4	16	
		8-32 x 3/8 Button Head Socket Cap Screw	McMaster-Carr	92949A192			4	16	
		8-32 x 5/8 Button Head Socket Cap Screw	McMaster-Carr	92949A196			10	40	
		8-32 Locknut	McMaster-Carr	91831A009			10	40	
		8-32 x 1-1/4 Button Head Socket Cap Screw	McMaster-Carr	92949A201			2	8	
		8-32 x 2 Button Head Socket Cap Screw	McMaster-Carr	92949A207			2	8	
		10-24 x 1/2 Button Head Socket Cap Screw	McMaster-Carr	92949A242			4	16	
		10-32 x 1/2 Button Head Socket Cap Screw	McMaster-Carr	92949A265			4	16	
		10-32 x 1-1/4 Button Head Socket Cap Screw	McMaster-Carr	92949A272			4	16	
		1/4-20 x 3/8 Button Head Socket Cap Screw	McMaster-Carr	92949A535			8	32	
		1/4-20 x 1/2 Button Head Socket Cap Screw	McMaster-Carr	92949A537			20	80	
		1/4-20 x 5/8 Button Head Socket Cap Screw	McMaster-Carr	92949A539			6	24	
		1/4-20 x 1-1/8 Button Head Socket Cap Screw	McMaster-Carr	92949A835			4	16	
		1/4-20 x 1-1/4 Button Head Socket Cap Screw	McMaster-Carr	92949A544			2	8	
		1/4-20 x 1-1/2 Button Head Socket Cap Screw	McMaster-Carr	92949A546			6	24	
		1/4-20 x 5/16 Phillips Head Flat Machine Screw	McMaster-Carr	92949A533			2	8	
		1/4-20 x 3/8 Phillips Head Flat Machine Screw	McMaster-Carr	92949A535			50	200	
		1/4-20 x 5/8 Phillips Head Flat Machine Screw	McMaster-Carr	92949A539			6	24	
		3/8-16 x 1" Hex Head Bolt	McMaster-Carr	92240A624			1	4	
		3/8-16 Lockwasher	McMaster-Carr	91831A127			2	8	
		3/8-16 x 1/2" Hex Head Bolt	McMaster-Carr	92240A619			1	4	
PacMAN Mounting		4-40 Board Stand Off	McMaster-Carr	91075A436			4	16	
Bars		M4 Stainless Steel Split Lock Washer	McMaster-Carr	92148A160			56	224	
Bars		M4 Stainless Steel Flat Washer	McMaster-Carr	93475A230			56	224	
Bars		M4 x 10 x 20mm Hex Head Cap Screw (Stainless)	McMaster-Carr	91287A116			56	224	