

Type	Part Description	Location	Manufacturer	Manufacturer Part #	Supplier	Supplier Part #	Total # per pack	Total # 4 packs
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 BLACK	Packman P1 Connector	TE Connectivity AMP Connectors	556879-4	Digikey	556879-4-ND	1	4
	CONN HOUSING 2 POS .100 W/LATCH	Packman P2, P6 Connector	Molex	50579402	Digikey	WM2900-ND	2	8
	CONN SOCKET IDC 16 POS W/KEY GOLD	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	AIRs - Battery Connector Bar	Ametes	BBM-01	GMW Associates	BBM-01	1	4
	2/0 Battery Cable	TSV- Cable	McMaster-Carr	6948K96	McMaster-Carr	6948K96		
	300VAC Fuse Block	TSV+ Power Fuse	MERSEN/FERRAZ SHAWMUT	32031T	AllFuse	32031T	1	4
	Fuse 200 Amp 300VAC/160DC V Fast	TSV+ Power Fuse	MERSEN/FERRAZ SHAWMUT	A3T200	AllFuse	A3T200	1	4
	Panel Source	TSV+ Connector	ITT Cannon	NPS-N-BL-T4	Newark	44W4365	1	4
	Line Source	TSV- Battery Cable Connector	ITT Cannon	NLS-3-GY-S120-M40A	Newark	44W4352	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 2-4P HSG SNAP-IN RECEIPT	TSV-21 Charging Port Connector	Anderson Power Products	1470G1	Mouser	879-1470G1	1	4
	CONN PLUG 10 POS DUAL PANEL MNT	CAN/Safety Loop Pack Harness Plug	TE Connectivity AMP Connectors	1-1586018-0	Digikey	A111927-ND	2	8
	CONN RECEIPT 10 POS FREE HANGING	CAN/Safety Loop Pack Harness Rept.	TE Connectivity AMP Connectors	1-794954-0	Digikey	A30594-ND	2	8
	6 pin connector	6 Conductor Ribbon Cable for AMS to AMS and AMS to PacMAN	Molex	50-57-9706	Mouser	538-50-57-9706	14	56
	2 Position Rectangular Housing Connector Plug Natural	Cooling Fan Plug	TE Connectivity AMP Connectors	1586000-2	Digikey	A30654-ND	1	4
	2 Position Rectangular Housing Connector Receptacle Natural	Cooling fan Rept.	TE Connectivity AMP Connectors	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 Connectors	2-36161-2	Digikey	A27284CT-ND	1	4
	Terminals TERM 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		
	Contacto	AIRs	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 2-4P HSG-PLUG W/LATCH	Charging Harness Plug W/Latch	Anderson Power Products	1460G1	Mouser	879-1460G1	1	4
	Heavy Duty Power Connectors PP PAK 2-4P HSG-PLUG NO LATCH	Charging Harness Plug No Latch	Anderson Power Products	1461G1	Mouser	879-1461G1	1	4
	Heavy Duty Power Connectors PP15/45 FINGERPROOF HOUSING ONLY BLACK	Charging Harness Connector Insert	Anderson Power Pruducts	1327G6	Mouser	879-1327G6FP	1	4
	Heavy Duty Power Connectors PP15/45 FINGERPROOF HOUSING ONLY RED	Charging Harness Connector Insert	Anderson Power Products	1327	Mouser	879-1327FP	1	4
	Heavy Duty Power Connectors PP15/45 FINGERPROOF HOUSING ONLY GREEN	Charging Harness Connector Insert	Anderson Power Products	1327G5	Mouser	879-1327FP	1	4
	Heavy Duty Power Connectors PPMX 2-PIECE BLACK HOUSING ONLY		Anderson Power Products	4827G6	Mouser	879-4827G6	1	4
	Cell		AA Portable Battery Corp	LFP-G60	AA Portable Power Corp	LFP-G60	7	28
	Red 640nm LED Indication - Discrete 14V Radial	Control Panel	Kingbright	WP56BSRD/B	Digikey	754-1883-ND	1	4
	Plunger 8MM x 7MM	Control Panel	C&K Componants	5.46167.0910209	Digikey	5.46167.0910209-ND	4	16
	CONN HOUSING 4 POS .100 W/LATCH	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
	Cell Retainer Positive End	Inernal Frame (Parts) - Cell Retainer	Lafayette	L16-TSV-1.1			1	4
	Cell Retainer Negative End	Inernal Frame (Parts) - Cell Retainer	Lafayette	L16-TSV-2.1			1	4
	Top Bar of Cell Retainer (Alt. Side)	Inernal Frame (Parts) - Cell Retainer	Lafayette	L16-TSV-3.1			1	4
	Top Bar of Cell Retainer	Inernal Frame (Parts) - Cell Retainer	Lafayette	L16-TSV-4			1	4

Mechanical Parts	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 Top Panel	Lafayette	L16-TSV-20 D1 (20 in filename)		1	4
	Connector Panel	Outer Housing (Plates) Attaches to Positive end Top Panel	Lafayette	L16-TSV-21		1	4
	Splash Guard (External Side Mounting Holes)	Outer Housing (Plates)	Lafayette	L16-TSV-22-1		2	8
	LCD Cover Plate	Outer Housing (Plates) Plexiglass; Attaches to Positive end top panel	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 Holes	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	
	Rounded Fuse Bus Bar (shortened)	Electrical (connector)	Lafayette	L16-TSV-33		1	
	Aluminum Jumper Slotted	Electrical (connector)	Lafayette	L16-TSV-34 D1 (34.1 in filename)		5	20
	Middle Aluminum Jumper Slotted (extended)	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	
	AIRS Replacement Bar Mount	Internal Frame (Garolite)	Lafayette	L16-TSV-40.1, 40.2		1	
	AIRS Extender	Internal Frame (Garolite)	Lafayette	L16-TSV-41		1	3
	Replacement Bar - Lower Mounting	Mounting Mechanism	Lafayette	L16-TSV-66 D1			
	Replacement Bar 2 - Upper Mounting	Mounting Mechanism	Lafayette	L16-TSV-67 D1			
	Replacement Bar 3 - Upper Mounting	Mounting Mechanism	Lafayette	L16-TSV-68			
	Replacement Bar 4 - Upper Mounting	Mounting Mechanism	Lafayette	L16-TSV-69			
Mechanical Connectors	PCB Screws (PacMAN 37-pin Connector, Cont	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 x1-1/8 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 x1-1/4 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 Steel)	McMaster-Carr	91287A116			56	224