

Pit Cart Upgrade

Friday, September 5, 2025 8:31 PM



The pit cart has some areas which are not very usable since objects placed there can fall out easily. The open space on the rear of the cart (with the open wheel well) has historically been used to store driver gear bags. The open space on the front of the cart, however, has been completely useless. Can either put a small barrier to stop items there from falling, or make it a waterproof container for sensitive items.

And while we're here, check if we need to replace wheels.

Assigned: David Gastou

9/11/25 Wasim tasked David Gastou with upgrading the pit cart, this included adding walls to the bottom part of the pit cart to keep things from hitting the wheels and the upper deck of the bottom part so that to be able to store small equipment/tools.

David took measurements and cadded the "upper deck" of the bottom of the pit cart.

Wasim also told David to ask subgroups for changes they would like to see in the pit cart.

TJ suggested to improvise the support for the DAQ antenna and to add a spot to charge the EV batteries

David suggested to make the "upper deck" a type of charging station for the batteries, Wasim thought this was fine but to focus on the antenna support

After some research and a home depot trip David came to the conclusion to use a 1 ½" pvc pipe would sway the least while not being exaggerated, and a type of flange to be able to easily screw down the base of flange and then simply twist the pvc on. Wasim approved of this idea.

Exact model is (2" PVC Shower Drain Base)

Then using a 1 ½" to 2" rubber flexible coupling we can put a rubber seal meant to hug both the flange and pvc pipe together that way it would not sway and then drill a hole through all 3

(flange, pipe, and rubber) to insert a cotter pin.

David also suggested attaching 3 strings equally spaced to further support the pvc pipe against any weather.



IMG_8800



IMG_8801



IMG_8802



IMG_8803



IMG_8804

Milwaukee M18 Inflator Warranty Receipt

Sunday, September 28, 2025 13:25




m18inflTor



Packing List

Date 08/11/2025 06:56 AM

Milwaukee Tool
2198 SOUTHTECH DR
GREENWOOD, IN 46143
US

SHIP TO: WASIM ALAM SMYRNA, GA 30080 US				SOLD TO: ESERVICE GENERIC ACCOUNT US BROOKFIELD, WI 53005 US							
Shipment Number:						Carrier Name:					
Customer PO Number:						Tracking Number:					
Order Number:											
SV8145358											
Serial Number: M26AB224803708Y											
Customer Ref No:											
PO Number	Order Number	Line No	Item Number	Description	Customer Part Number	Qty Shipped	UOM	Net Wt (LB)	Ext Net Wt (LB)	Carton ID	Pallet ID
	SV8145358	1	284820	M18 INFLATOR		0		0	0		

Service Summary: OUR FACTORY TRAINED TECHNICIAN HAS COMPLETED YOUR WARRANTY EVALUATION. YOUR REPAIR ORDER HAS BEEN COMPLETED UNDER WARRANTY. THE FOLLOWING ITEMS HAVE BEEN REPLACED AT NO CHARGE.

Parts Replaced:

Description	Qty
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Please direct inquiries regarding the delivery of this order (accuracy, packing, etc.) to the following.
Phone Toll Free in US: 800.729.3878 Fax Toll Free in US: 800.638.9582
Phone Toll Free in Canada : 800.268.4015 Fax Toll Free in Canada: 866.285.9049



Packing List

Date 08/11/2025 06:56 AM

Milwaukee Tool
2198 SOUTHTech DR
GREENWOOD, IN 46143
US

Milwaukee Tool Repair Policy

~~Advertisement Policy~~

Milwaukee Warranty Information

Please refer to the Milwaukee Tool Website for specific warranty information on your tool:
milwaukeetool.com/Support/Registration-and-Warranty

Milwaukee Safety Policy

Caution: unrepai red power tools are unsafe and potentially dangerous. Injury or death can occur from an electrical shock or mechanical malfunction of an unrepai red tool. The electrical safety of an unrepai red tool has not been determined. Therefore, it is recommended that the tool be repaired and safety-checked before being used. All tools unrepai red are returned disassembled.

Lightning Max Repair (LMR)

Our Lightning Max Repair program guarantees that you won't pay more than the quoted price. You'll be charged the lower of either the current published Lightning Max Repair price or the actual repair cost, plus any shipping, handling, and sales tax. If your tool's repair meets or exceeds our Lightning Max threshold, we reserve the right to replace it with one of equal or higher value. For more information on the Lightning Max program, visit our website at MILWAUKEETOOL.COM.

Unclaimed tool policy

Milwaukee Tool will dispose of tools that haven't been claimed within 35 calendar days after you receive the assessment notice.

Missing tools

Thursday, October 30, 2025 4:58 PM

Allen keys

- Metric long ish allen keys
 - 1.5
 - 2
 - 2.5
 - 4
 - 5
 - 8
- SAE long ish allen keys
 - 1/16
 - 1/8
- Metric short allen keys
 - 4
 - 5
- SAE short allen keys
 - 1/16
 - 1/8
 - 5/32

Allen sockets

- Metric ¼ in drive
 - 4
- Sae ¼ in drive
 - 5/32
- ¼ in drive sockets
 - SAE
 - 5/16
 - 7/16
 - Metric
 - 5.5
- 3/8 drive sockets
 - metric
 - 12

SAE ratcheting wrenches

- ¼
- 7/16
- 9/16

SAE stubby ratchets

- 3/8

SAE stubby non ratchet

- 7/16

¼ in drive ratchet handle

½ in drive 3 In long extension

Nice to haves for main box

- Small needle nose pliers
- Line wrenches
- Slip joint pliers
-

Pitcart missing tools

Inch wrenches

- 5/16
- 1/4

Inch long allen keys

- 1/8

Inch short allen keys

- 5/32

Metric short allen keys

- 2
- 2.5

1/4 in drive sockets

- Inch
- 1/4
- 7/16
- 1/2

3 in 1/4 drive extension
1/4 drive ratchet handle

3/8 drive tools

- 7/16
- 5/32 allen socket+

Trailer Packing items

Monday, November 3, 2025 6:36 PM

General Team Items

- ☒ Food Boxes
- ☐ Folding tables
 - ☐ Long Ones
 - ☒ Regular Ones
- ☐ Pit Cart
 - ☐ Tool Check?
- ☐ 4 Fire Extinguishers
- ☐ Hardware Boxes
- ☐ Tents/Canopys
 - ☐ All Operable?
- ☐ Coolers
 - ☐ Cleaned/Washed out

General Team Items

Monday, November 3, 2025 6:46 PM

General Team Items

- ☒ Food Boxes
- ☐ Folding tables
 - ☐ Long Ones
 - ☒ Regular Ones
- ☐ Pit Cart
 - ☐ Tool Check
 - ☐ Add important missing tools here
- ☐ Big Toolbox
 - ☐ Tool Check?
 - ☐ Add important missing tools here
- ☐ 4 Fire Extinguishers
- ☐ Hardware Boxes
- ☐ Tents/Canopys
 - ☐ All Operable?
- ☐ Coolers
 - ☐ Cleaned/Washed out

VD/DI/Sus

Monday, November 3, 2025 6:46 PM


VD/DI/Sus



Insert


EV Powertrain

Monday, November 3, 2025 6:47 PM

 EV Powertrain
Insert

Manufacturing

Monday, November 3, 2025 6:47 PM

 Manufacturing
Insert

Welding

Monday, November 3, 2025 6:47 PM

Welding



Insert

Lol Voltage

Tuesday, November 04, 2025

1:39 PM

Priority A: Mission critical and essential tools only. Minimal repair tools. No hot work tools but HV ppe is included.

Priority B: Very highly suggested to bring. Includes repair tools and components for most common/detrimental failures. Repair substitutes are used wherever feasible. Some organizers can be consolidated into smaller quantities.

Priority C: Would be nice to have to get the job done correctly but certainly not required. Only bring if we have the space.

Low Voltage:

MISSION CRITICAL:

LV Batteries 1 & 2

EITHER: BK Precision Power Supply OR: Trailer NOCO Battery Charger

LV and HV Keys (part of ESO bag)

D.A.Q. Backpack & Laptop running Foxglove

=====SOLDERING=====

(C) Hakko FM-203 soldering station

(A) Yihua 948 Hot Air Gun

(B) Chipquik Solder Flux

(B) Big spool of copper wick

(A) Lead-Free Solder

(C) Leaded Solder

(C) KimTech Kimwipes

=====CRIMPERS+Tools=====

(B) DTM

(B) DT

- (B) KNIPEX
- (B) Molex
- (B) Ferrule
- (B) Deutsch Depinning Tool
- (B) Klein Tools Dark Red handle
- (C) Flytuo
- (B) Flush Cutters
- (C) Scissors
- (B) "Electric Screwdriver"
- (A) X-ACTO Knives (the wooden box)
- (A) FLIR C5
- (C) Round Connector Depinning tool
- (A) Tweezer Kit

=====CONNECTORS=====

- (B) DTM Organizer
- (B) DT Organizer
- (C) Bag of additional DT male and female pins

=====ORGANIZERS=====

- (B) Clear LV Box labeled "Through Hole Resistor"
- (B) Small Parts Drawer (MUST be sealed to block draws from opening)
- (B) Heat Shrink organizers
- (B) EV Powertrain MODULE
- (C) Ferrules + Ring Terminal
- (B) Molex Conn
- (B) RING TERMINALS
- (B) BOX ALL
- (C) "Resistor Pokemon"
- (A) Fuse Box
- (C) Zener Diodes

- (C) M3 Plastic Spacers
- (C) M4 Plastic Spacers
- (C) Anderson's
- (C) Micro Controller

=====Other=====

- (B) Velcro "Fuzzy Side"
- (B) Velcro "Rough Side"
- (C) Split Sheathing
- (A) Saran Wraps (priority A if rainy weather, priority C otherwise)
- (A) Super Glue Gel
- (C) Super Glue Liquid
- (C) AAA Batteries
- (C) AA Batteries
- (A) Spare VCU
- (C) Pocket Scale
- (A) Kapton Polyimide Tape
- (A) Orange Electrical Tape
- (A) Black Electrical Tape
- (A) Spare E-Stop
- (B) Spare Key Switches
- (A) At least multiple IEC C13 Power cords

=====DAQ=====

- (B) Chance's DAQ Stuff Box
- (A) DAQ Pack
- (B) Toughbook (Dell)
- (B) Softbook (Panasonic)
- (B) Milwaukee batteries
- (B) Milwaukee battery chargers

Charge Cart

Acc insertion lift thing + blocks

Aero/Composites

Monday, November 3, 2025 6:48 PM

☐ Aero
Insert

LV/DAQ

Monday, November 3, 2025 6:48 PM

☐ Low Voltage/DAQ/Firmware
Insert