

595 E. Lugbill Rd.  
Archbold, OH 43502  
419.445.4733 or 877.447.2648  
Fax 419.445.3304



# Electric Power Cart *Owners Manual*

97011-4





# OVERLAND CARTS LIMITED WARRANTY

Warranty begins on invoice date

## **Electronics – 1 year**

Controller Unit  
S-Drive Unit  
Wiring

## **Powertrain - 1 year**

Motor  
Differential  
Axle

## **Wheels, Casters & Tires - 1 year warranty**

Front Drive Tires  
Rear Drive Tires (4WD)  
Rear No Flat Tires & Casters  
Metal Wheel Hubs

## **Battery - 1 year warranty – prorated**

Batteries are prorated from the date of purchase

## **Brentwood Hopper**

1 year warranty

## **White Garden Hopper**

1 year warranty

## **Chassis - 3 year warranty**

Frame Structure  
Powder Coating

## **Terms**

Warranty starts from the invoice date of the cart.

We will repair, without charge, any defect due to faulty material or workmanship. These warranties do not cover failures due to abuse, misuse, improper installation, accidental damage or when repairs or modifications have been made or attempted to be made by anyone other than Granite Industries. Any defective products that meet warranty specifications and Granite Industries approval, may be returned to the factory to be repaired or replaced free of charge. (Granite Industries will pay to ship replacement item(s) to the customer; however the customer is responsible for shipment of products to the factory.)

This remedy is the sole remedy in contract, tort or otherwise, and Granite Industries is not liable for incidental, consequential or special damages.

These warranties give you specific legal rights, and you may have other rights which vary from state to state. Should you have any questions, contact Granite Industries (877-447-2648) (Proof of purchase may be required).



## OPERATION & MAINTENANCE

### **How long do the batteries last on a single charge?**

It is completely dependent upon how much weight is being carried, the type of terrain, and the softness or hardness of the surface. We estimate a range of 6-8 hours of “real world” use. PLEASE NOTE: Most use is not as intense as our “real world” estimates, so actual use time is typically much longer.

### **How long will the batteries last before needing to be replaced?**

The batteries are designed to last for 300-500 charge/discharge cycles, which translate into approximately 1-2 years. The batteries are common, and can be purchased from Granite or at your local hardware store.

### **Will tipping the unit hurt the batteries, electronics, or drive system?**

No. Batteries, electronics, and drives can operate in any orientation.

### **What is the maximum speed?**

All Power Carts can operate from approximately 0 to 3 miles per hour forward, and 0-3.0 miles per hour in reverse.

### **While pushing my Power Cart, it suddenly decelerates aggressively. What causes this?**

There is a safety feature on your Power Cart called “Push Too Fast.” It is designed to prevent the cart from running away when the brake is manually disengaged.

### **Why does my Power Cart lose traction when one wheel is off the ground?**

The drive system is an open differential that allows the machine to efficiently make turns without skidding the tires. The drawback is that if one of the drive tires leaves the ground, it will simply spin until all tires are back on the ground.

### **Is a balanced load important to the performance?**

Yes. Balancing the load so that it is not top-heavy or side-loaded, will allow much safer operation. Furthermore, most of the load should be located over top of the drive wheel(s) for better traction.

### **How do I clean my Power Cart?**

Simply remove all debris, hose it down with soapy water, and towel dry. We do not recommend using a pressure washer.

### **What maintenance is required?**

Not much, really! Simply remember to always recharge when not in use. If storing for an extended period of time, leave the unit on charge – especially in cold climates. The drive system is sealed for life, thus no lubrication is required. Keep the unit dry to enhance its life and appearance. It is recommended that the batteries be replaced once every 12 months.



## BATTERY REPLACEMENT

### 24v 12amp

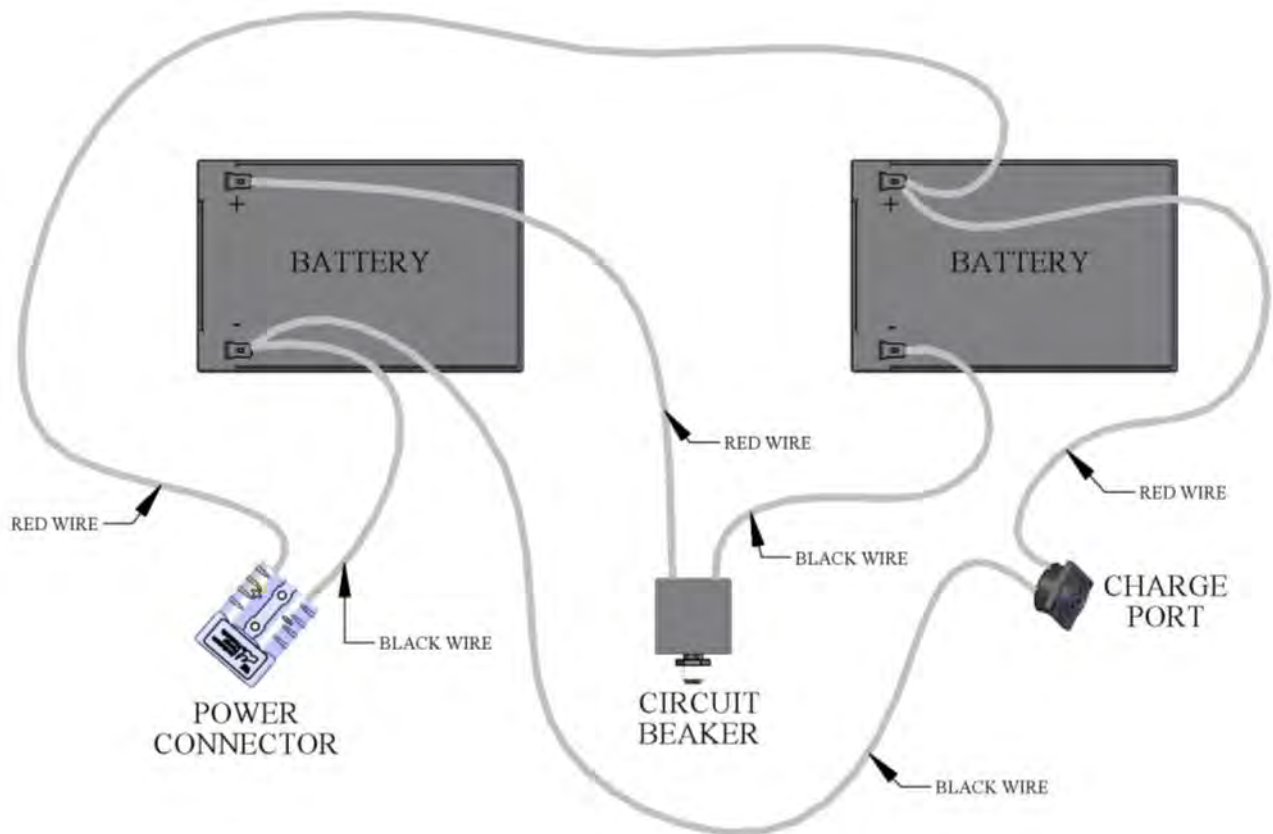
Replacement Battery Specs: 12v, 12 amp/hr lead acid sealed, AGM type. Universal Battery model UB12120 or equivalent. Two (2) Batteries required.

1. Remove the battery pack from the cart.
2. Remove the four (4) #10 screws holding the lid in place.
3. Carefully remove the batteries, and disconnect the spade terminals. **RECYCLE YOUR OLD BATTERIES.**
4. Reconnect the battery and circuit breaker wires to the new batteries as shown. It is helpful to make the connections with the batteries outside the box first. The batteries are wired in **SERIES**, not **PARALLEL**.
5. Place Battery A into the box first, then Battery B making sure the wires are nested in between. The fit is designed to be tight.
6. Replace the box lid and secure with four (4) #10 screws.



# BATTERY REPLACEMENT

## 24v 12amp



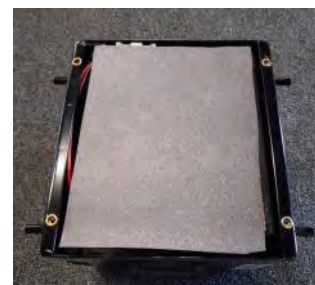


## BATTERY REPLACEMENT

### 24v 21amp

Replacement Battery Specs: 12v, 21 amp/hr lead acid sealed, AGM type. Powersonic PSH-12180FR or equivalent. Two (2) Batteries required.

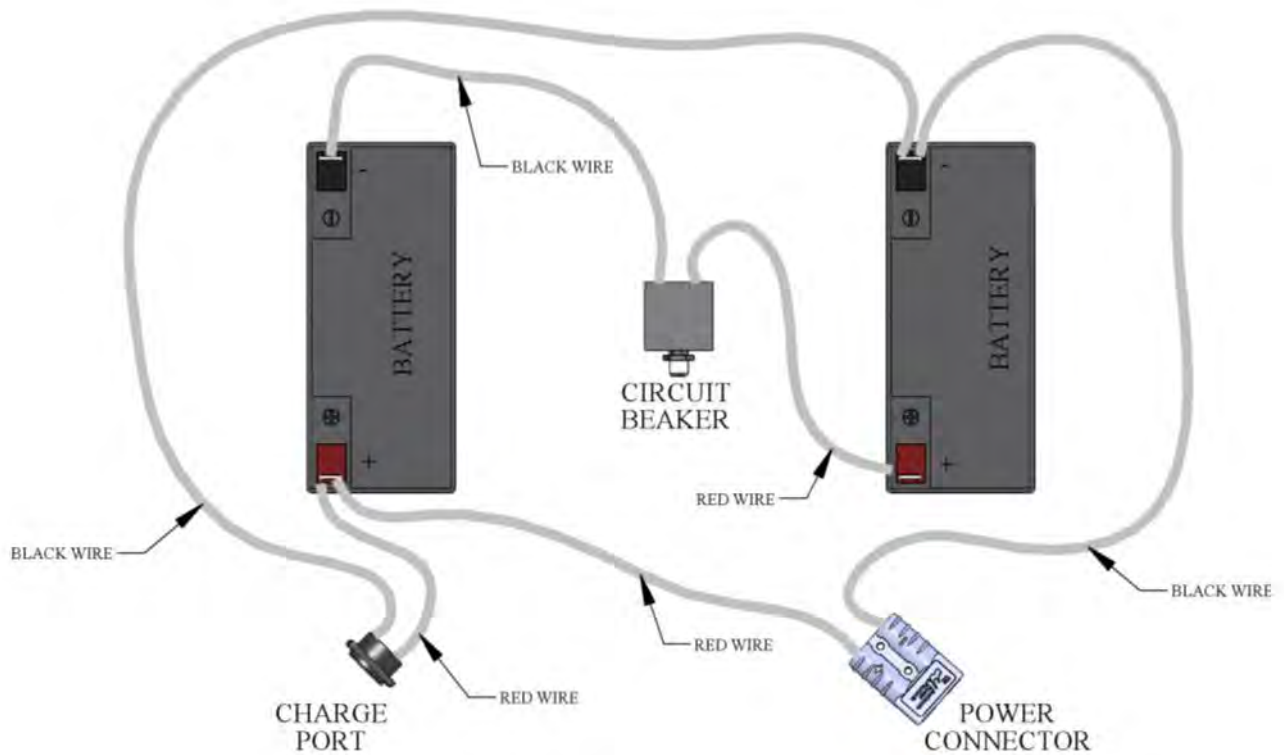
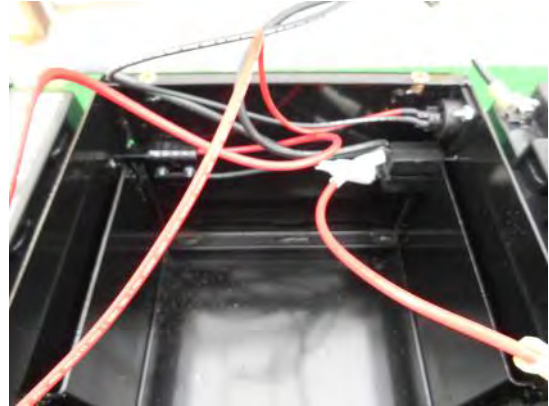
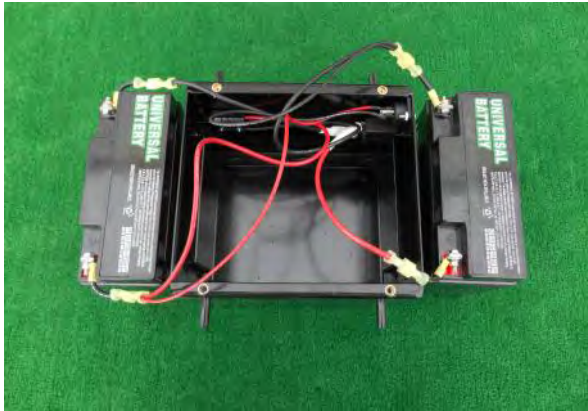
1. Remove the batter pack from the cart.
2. Remove the four (4) #10 screws holding the lid in place.
3. Carefully remove the batteries, and disconnect the spade terminals. **RECYCLE YOUR OLD BATTERIES.**
4. Reconnect the battery and circuit breaker wires to the new batteries as shown. It is helpful to make the connections with the batteries outside the box first. The batteries are wired in **SERIES**, not **PARALLEL**.
5. Place Battery A into the box first, then Battery B making sure the wires are nested in between. The fit is designed to be tight.
6. Replace the box lid and secure with four (4) #10 screws.





# BATTERY REPLACEMENT

## 24v 21amp





## CHARGING SYSTEM

### 24v Chargers

The battery charger is designed to charge any type of lead acid battery to full charge. The charger can be left connected to the batteries after full charge (green light) without harming the batteries. The charger uses minimum power in this standby-mode (after battery is fully charged), maintains the batteries at full charge and extends battery life.

The CHARGING light is normally Red, Yellow or Orange which changes to Green when the battery is fully charged. It is a good idea to leave the charger connected until battery is ready to use. It will give a long battery life.

Note: 5amp charger CANNOT be used to charge the 24v 12amp battery packs. The 2amp charger can be used to charge either pack.

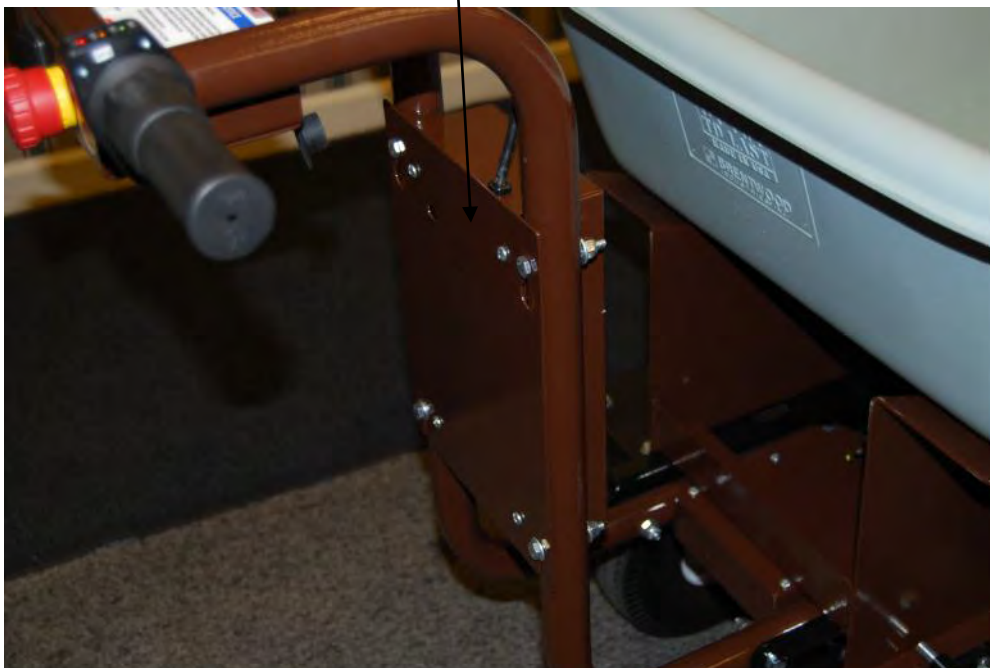
Complete Charger Pack  
2amp 70138  
5amp 70135



Individual chargers:  
5amp PI-11-0191 2amp PI-11-0027



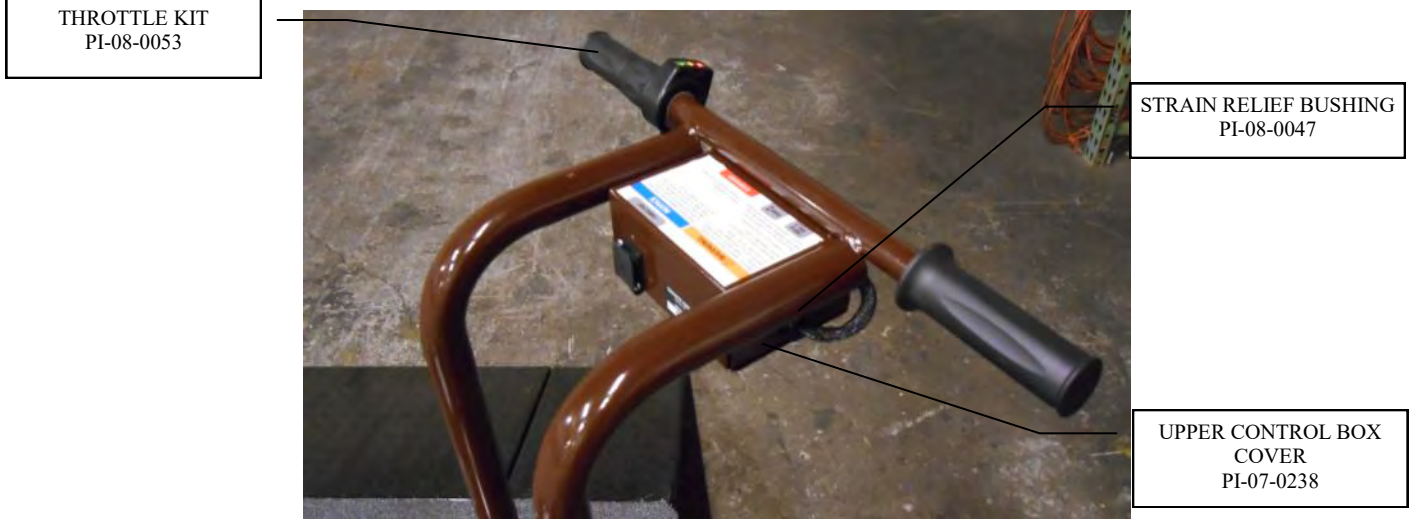
Charger Pack  
Mounted on Cart





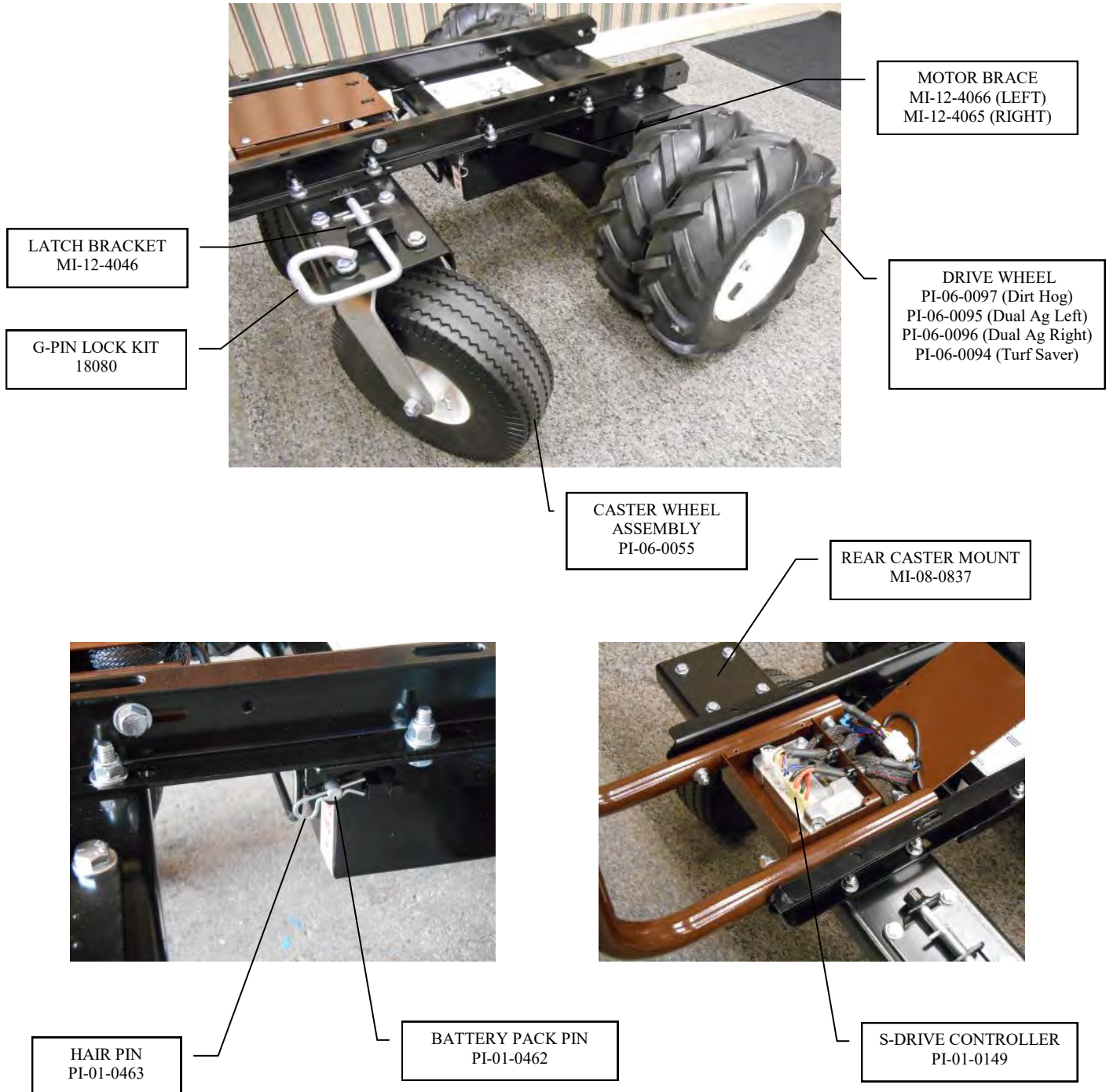


## Chassis Parts Diagram 27 and 44 Series

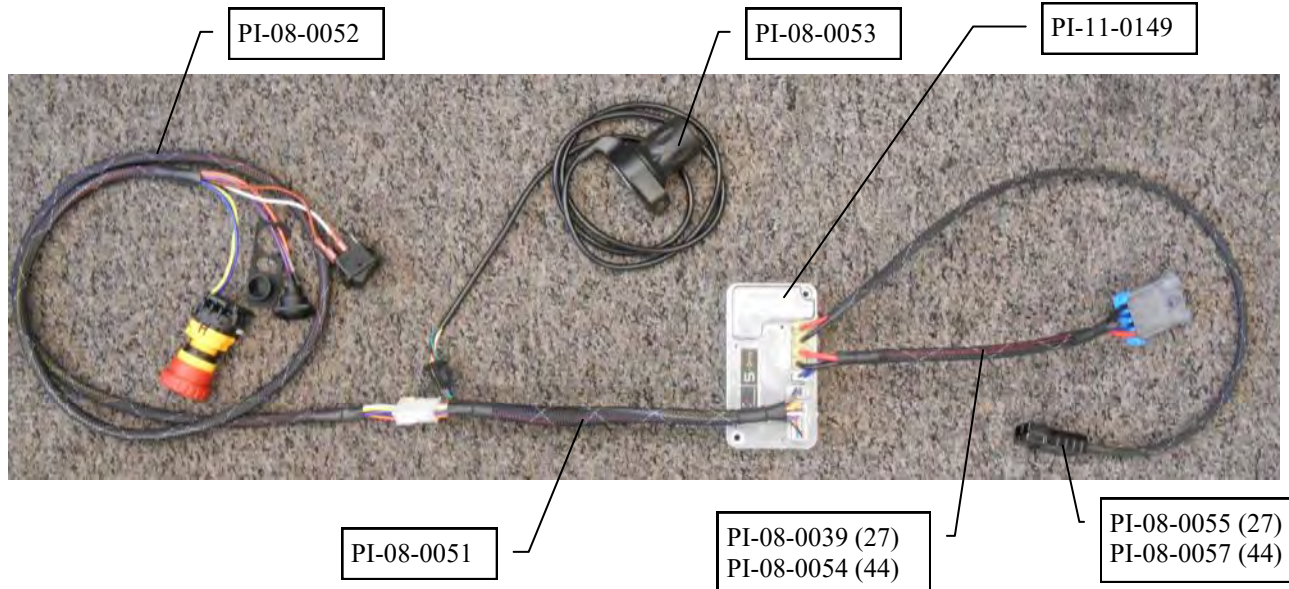




## Chassis Parts Diagram 27 and 44 Series



## Wiring 27 and 44 Series



S-DRIVE BOX  
 LOCATED ON CENTER  
 OF CHASSIS

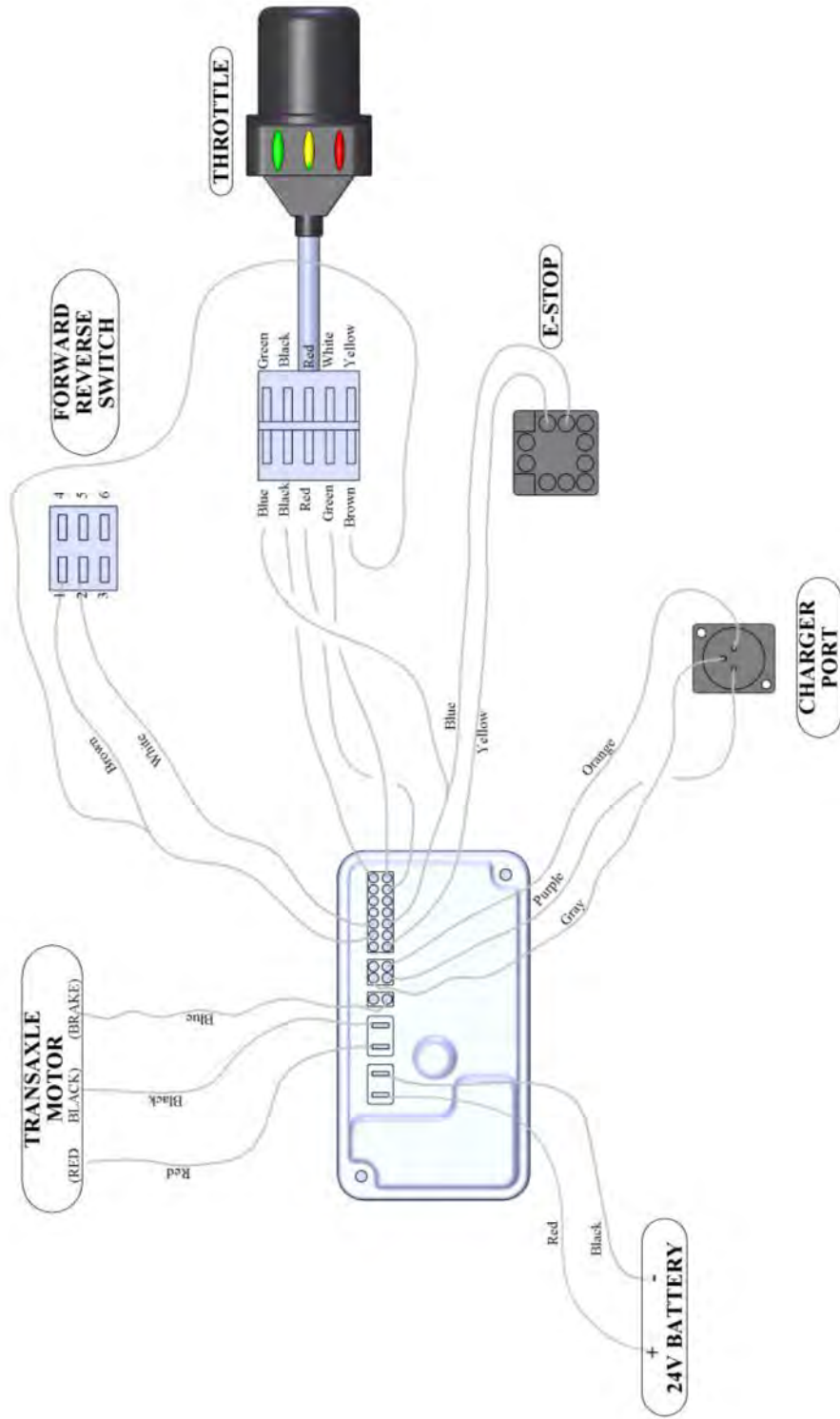


HANDLE CONTROL BOX  
 LOCATED AT CENTER  
 OF UPPER CONTROLS



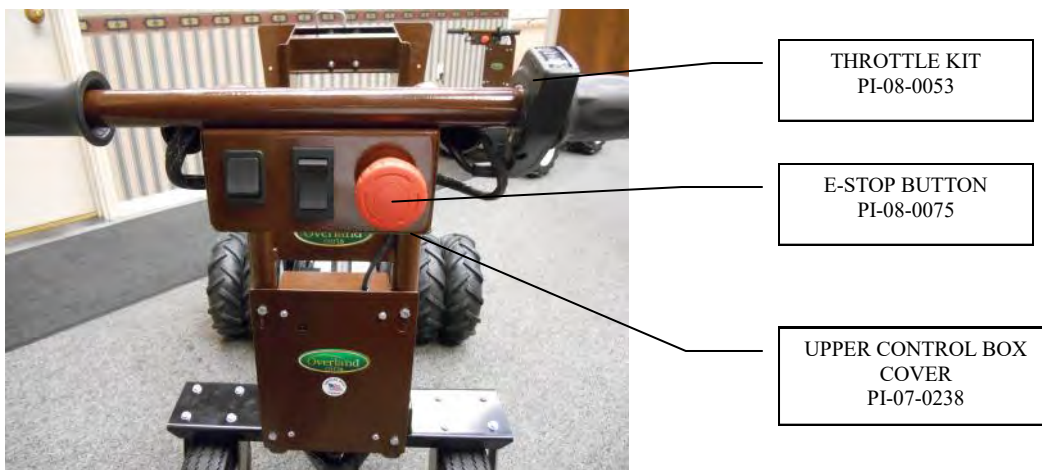
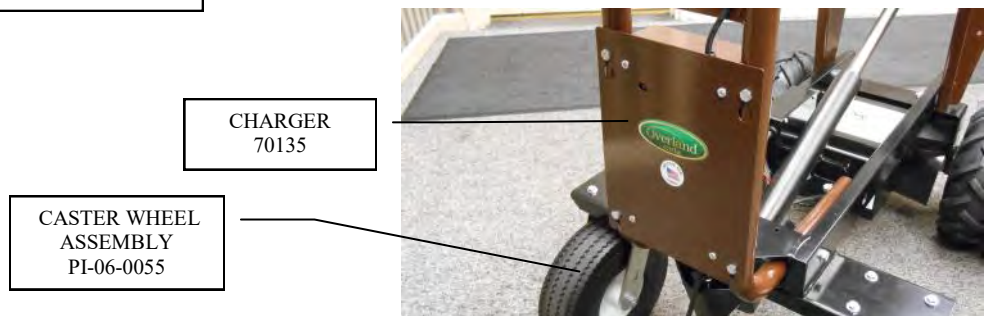
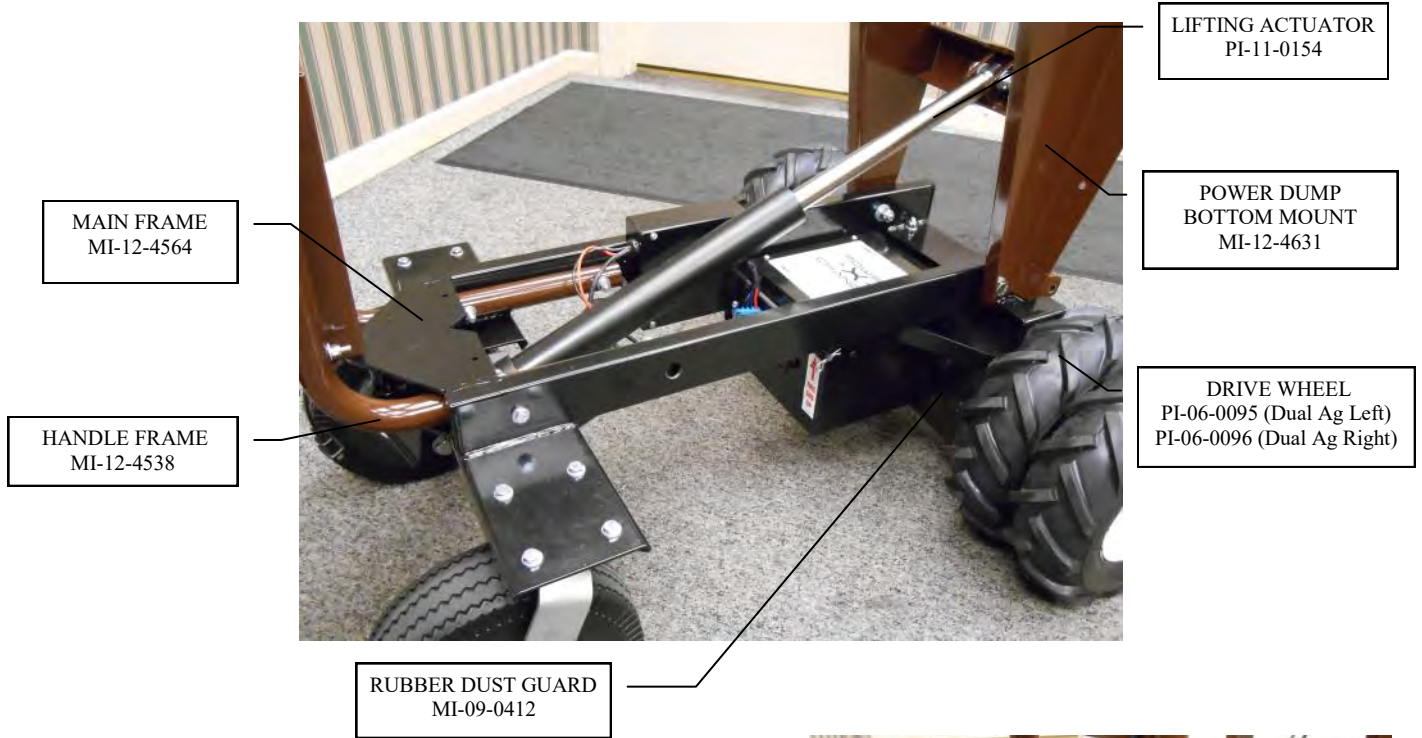


# Wiring Diagram 27 and 44 Series





## Chassis Parts Diagram 32 Series Power Dump





## Chassis Parts Diagram 32 Series Power Dump



HAIR PIN  
PI-01-0463

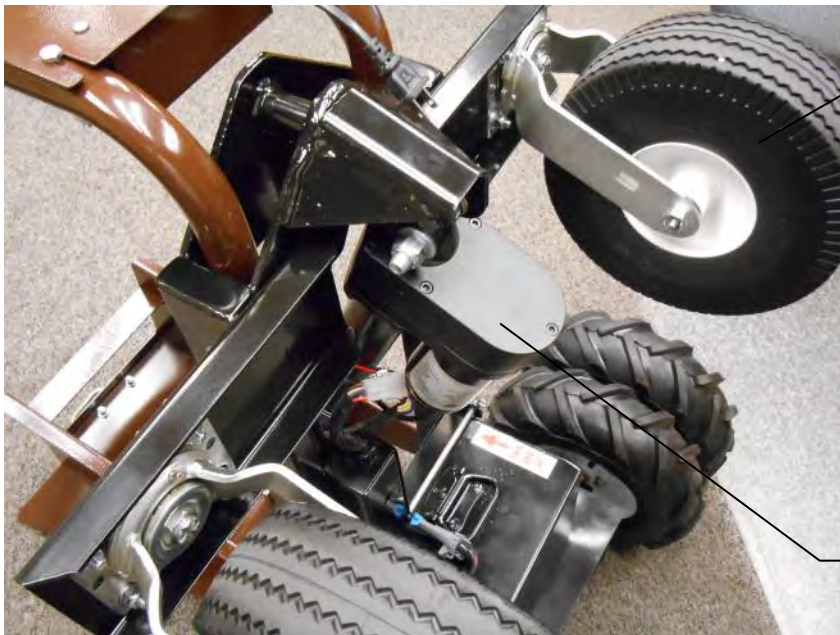
BATTERY PACK

BATTERY PACK PIN  
PI-01-0462



AXLE MOUNTING  
BRACKET  
MI-12-3568

TRANSAXLE  
PI-08-0048

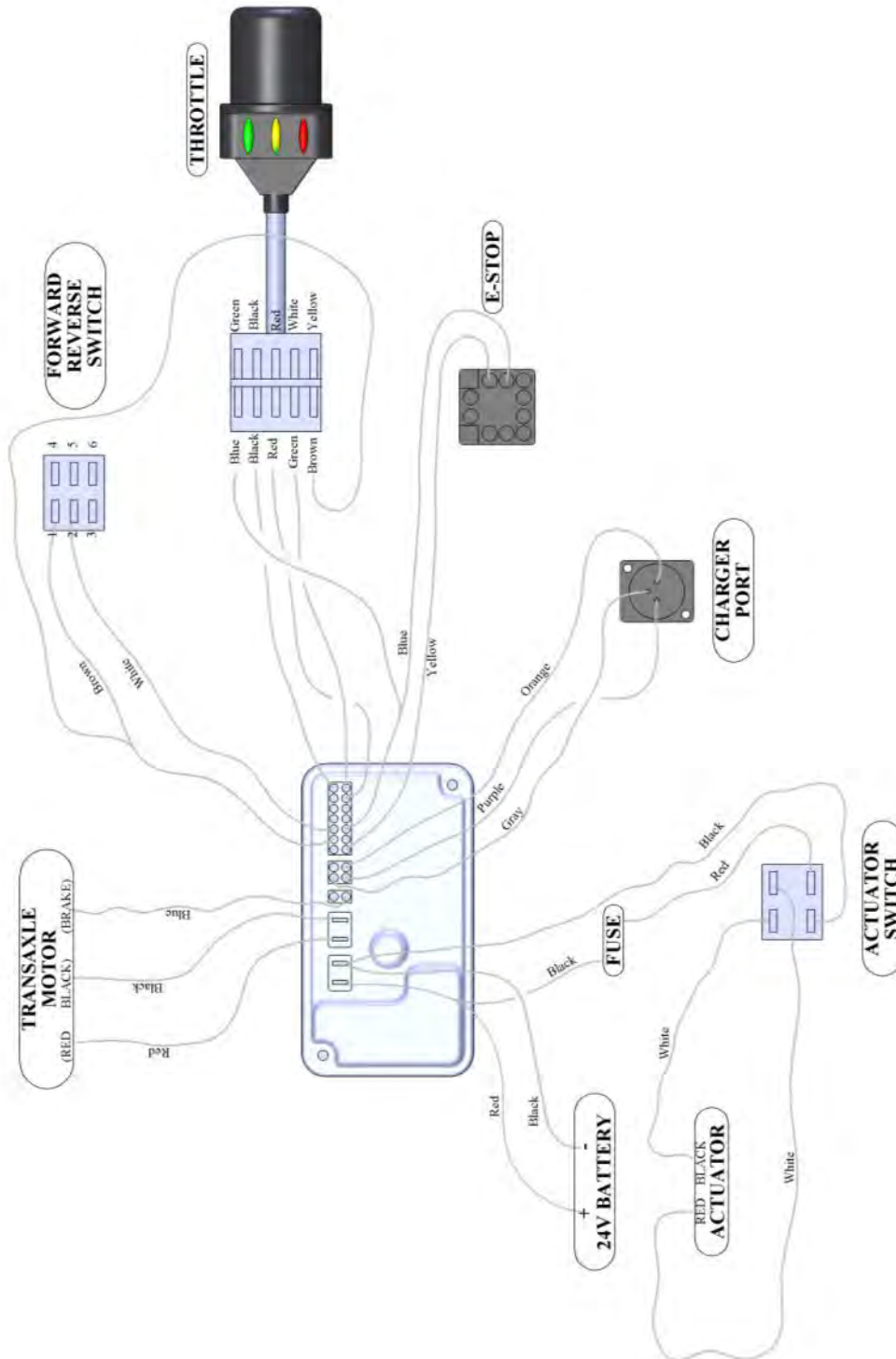


CASTER WHEEL  
ASSEMBLY  
PI-06-0055

LIFTING ACTUATOR  
PI-11-0154

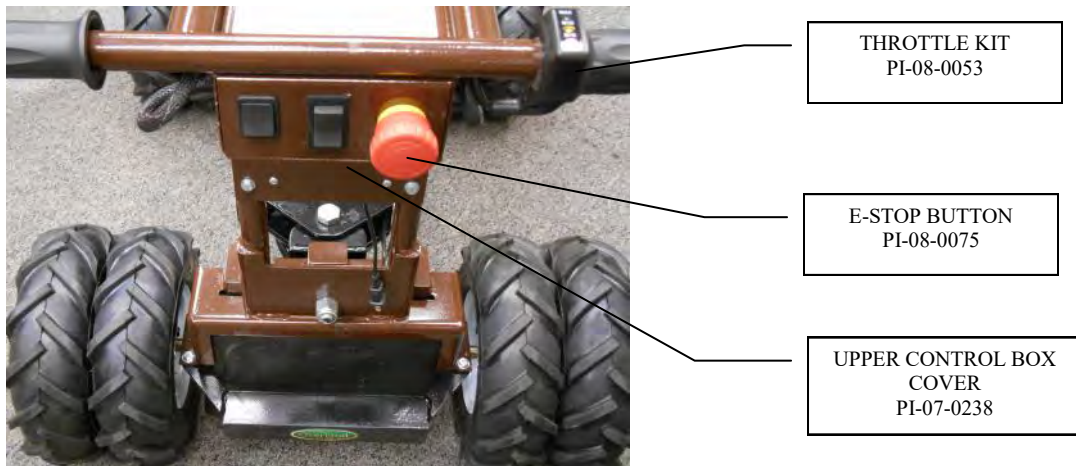
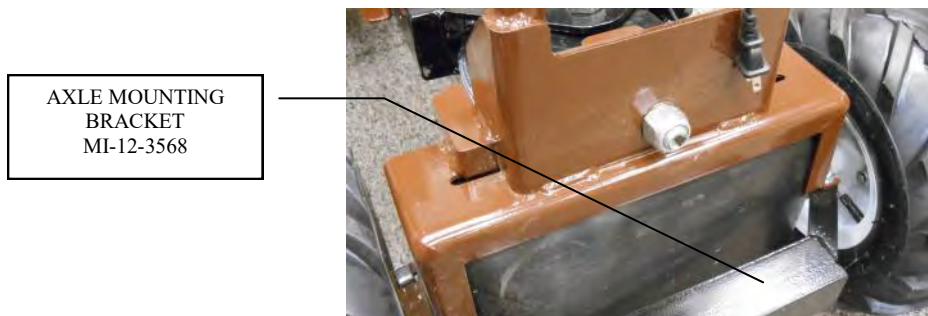


# Wiring Diagram 32 Series Power Dump





## Chassis Parts Diagram Articulated 34 Series Power Dump





## Chassis Parts Diagram Articulated 34 Series Power Dump



HAIR PIN  
PI-01-0463

BATTERY PACK

BATTERY PACK PIN  
PI-01-0462



AXLE MOUNTING  
BRACKET  
MI-12-3568



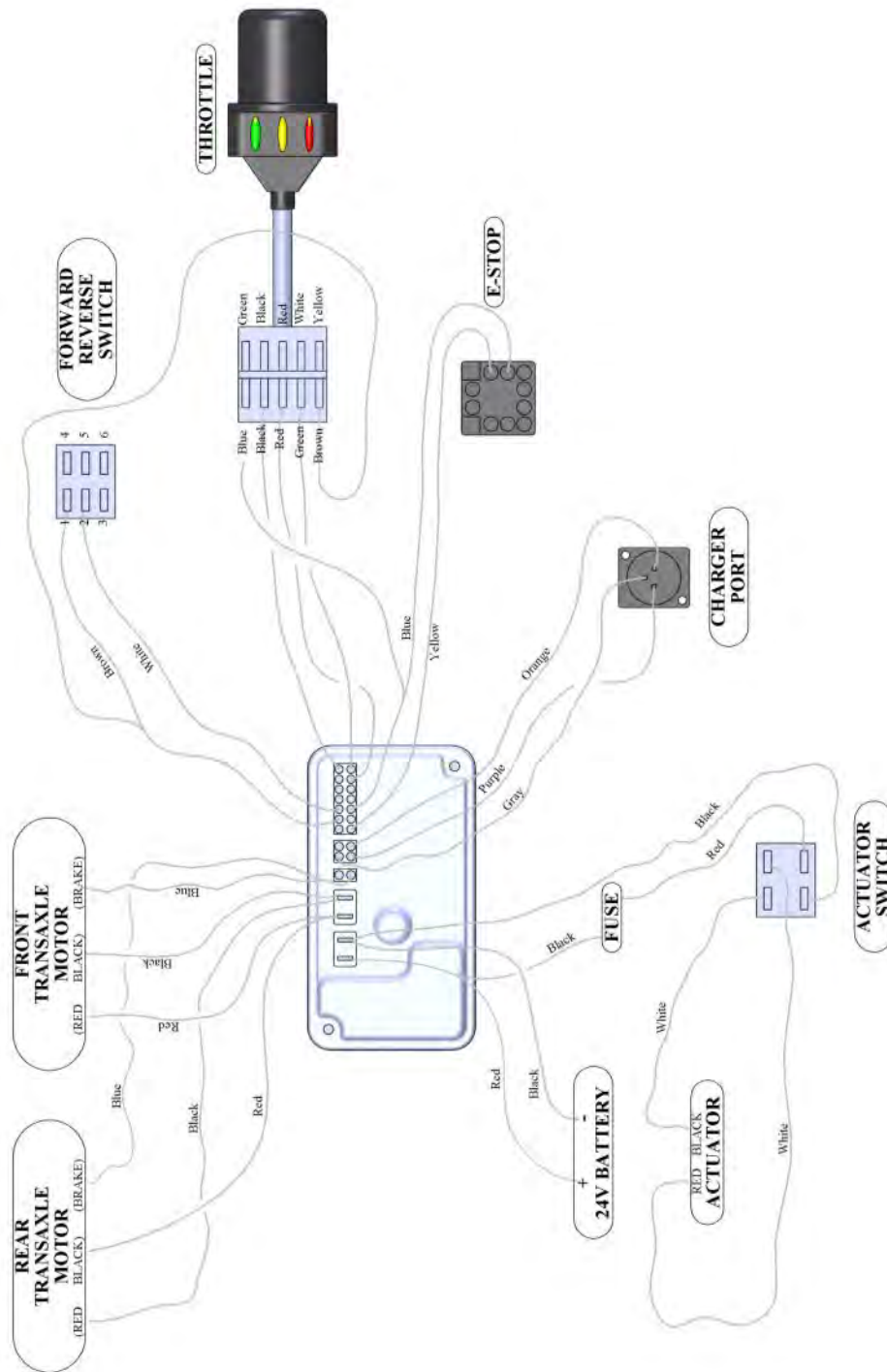
TRANSAXLE  
PI-08-0048

LIFTING ACTUATOR  
PI-11-0154



# Wiring Diagram

## Articulated 34 Series Power Dump



## Transaxle Brake Lever



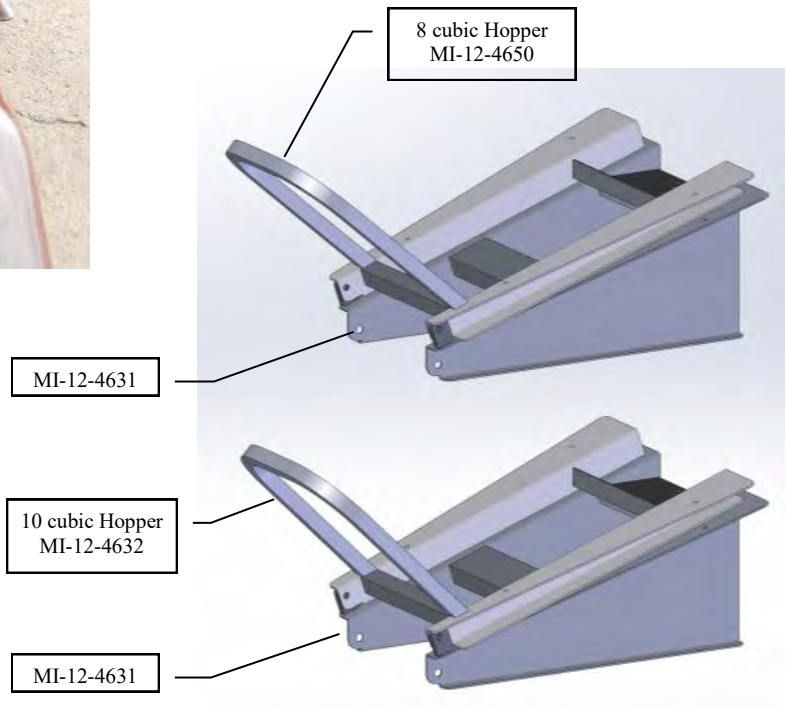
BRAKE  
OVERRIDE LEVER  
(ONE PER AXLE)

The brake lever allows you to override the electric brake when you need to push the cart manually, when loss of power had occurred. The lever moves approximately 15degrees down from horizontal, when lever is in the up position the brake is engaged, and when down it is disengaged. When you reset the brake system the unit will not operate until you toggle the power button off and back on, this process will need to be repeated every time the brake in manually disengaged.

While pushing my Power Cart, it suddenly decelerates aggressively. What causes this?  
There is a safety feature on your Power Cart called “Push Too Fast.” It is designed to prevent the cart from running away when the brake is manually disengaged.



## Manual Override Bucket 32 and 34 Series Carts





## Tires

**WARNING:** When disassembling the tires, you **MUST** remove air pressure first.



Air Pressure: 31psi



Dual Ag 13x5.00-6 Super Lug Right Side (PI-06-0096)  
Dual Ag 13x5.00-6 Super Lug Left Side (PI-06-0095)



Air Pressure: 32psi



Turf Saver 13x5.00-6 (PI-06-0094)

## Hoppers/Trays



Capacity : 10cubic feet  
Outside Dimensions: 35-3/4"x44-3/4"x19-1/2"



Capacity : 9cubic feet  
Outside Dimensions: 35-1/2"x62-1/4"x12-1/2"



Capacity : 8cubic feet  
Outside Dimensions: 33-3/8"x44"x16"



Capacity : 6cubic feet  
Outside Dimensions: 25-1/2"x54-1/4"x8-1/4"

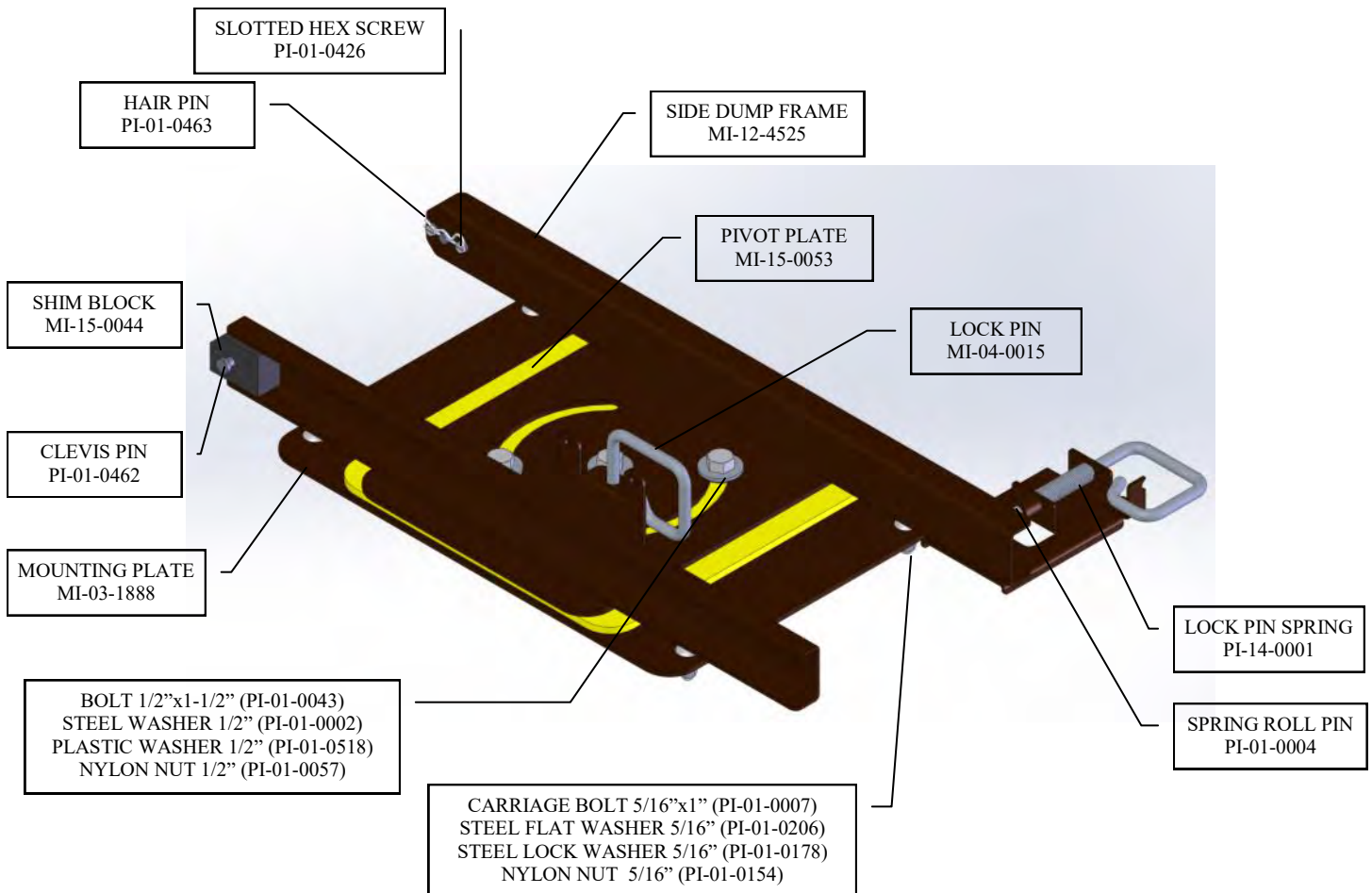


Capacity : 6cubic feet  
Outside Dimensions: 29"x45"x14"



Capacity : 7cubic feet  
Outside Dimensions: 23-1/2"x35-1/4"x19-1/4"

## Side Dump





## Trailer Dolly Attachment (fits on 27 and 44 series carts)

