



# AeroTow T1

User manual



A better way to tug.  
**Plane and Simple.**

# Specs & Precautions



**Tires**  
10" x 3.00-4



**Weight capacity**  
5,000 lbs. on  
level ground



**T1 Weight**  
117 lbs.



**Drive train**  
445 W  
0.6 hp drive  
2.2 mph. max



**Controls**  
Electric. Power on/off  
Forward/reverse.  
Speed up/down.  
Light on/off



**Battery & Charger**  
x2 12V AGM batteries  
3 amp 72W charger

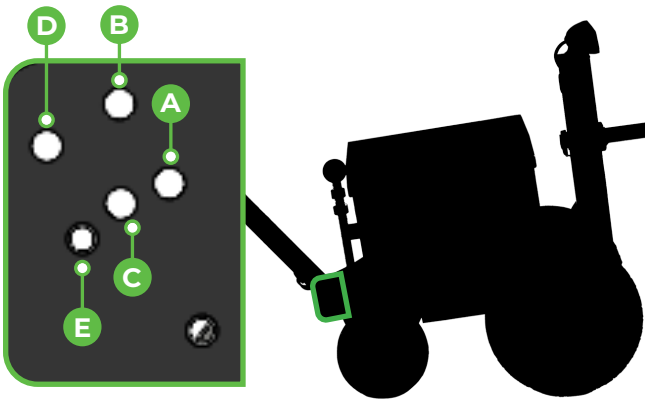
- The operator is responsible for safe tug operation and for any aircraft or hangar damage resulting from operational errors.
- Familiarize yourself with the tug's throttle and speed response before attaching an aircraft. The tug does not stop immediately; this is intentional to help protect the aircraft.
- Aircraft should never be moved on any type of uneven, sloping, or hilly terrain.
- Store your tug in a dry location when not in use.
- Always turn the tug off while not in use. The tug will automatically turn off after 25 minutes. Toggle the power switch to turn on.
- Leave your tug plugged in while not in use. The smart charge feature will prevent damage to the battery.
- Extreme cold can negatively impact the batteries, but climate control is not necessary in most circumstances.
- Recommended tire pressure is approximately 29 PSI. Always reference the tire sidewall for the exact pressure.

# Quick Start Guide

Before you use your T1, you will need to adjust the handle to your preferred height and install the fork assembly. Refer to pages 5-7 for detailed instructions.

## Suggested Handle Heights

We recommend using the chart below as a starting point. Each aircraft and individual is different and may require adjustments for optimal performance.



### Level Your Height

A	6'4" and up
B	6'0"-6'3"
C	5'7"-5'11"
D	5'1"-5'6"
E	5'0" and below

## Suggested Fork Heights

Top level if connection is above the front wheel.



Middle level if connection is on the front axle.



Bottom level if connection is on taildragger rear axle.



# Charging Information

To maximize range and battery life, keep the battery charged during periods of non-use and ensure it is fully charged before operation. Extended charging is beneficial. The charger includes built-in overcharge protection and is preprogrammed to optimize charging for the batteries.



## **WARNING**

Frequent deep discharges may permanently damage the battery. Charge often.

# Charging Indicators

The enclosure displays a battery gauge with 5 bars to show the current charge levels.



<10% remaining battery



50% remaining battery



+90% remaining battery

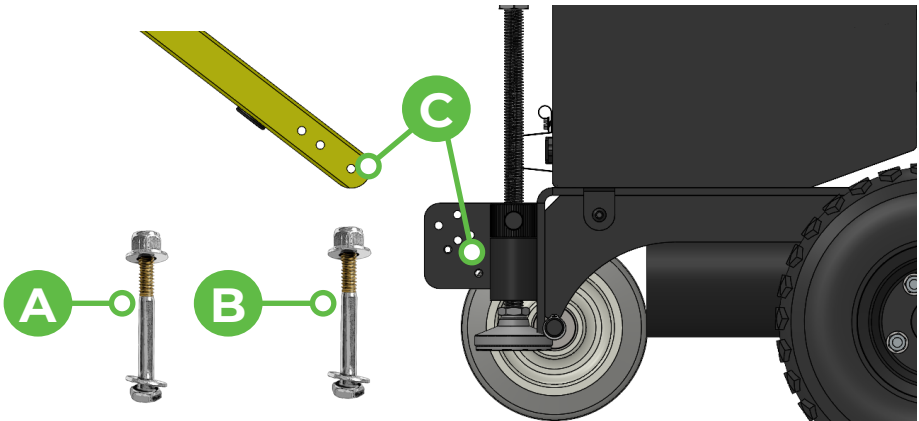
At the start of the charge cycle, the bars on the battery gauge will blink for 45 seconds and then stay lit. The bars will light up incrementally until all 5 are lit, indicating the batteries are fully charged.

All 5 bars will blink at the end of the charge cycle.

# Removing the Handle

1. Remove the cover from unit.
2. Unclip the wire connectors from the box, then unplug the two black wire connectors (see wiring diagram on page 12).
3. Pull the wire out from the bottom of the box.
4. Remove the two bolts from the handle to remove the handle from the frame.
5. Repeat steps in reverse order to attach the handle.

# Adjusting the Handle



- A. Height/angle adjustment bolt
- B. Frame attachment bolt
- C. Frame attachment holes

1. Loosen the nut on bolts A and B with a 7/16" wrench and remove them from the unit.
2. Insert bolt A through the selected adjustment hole in the handle and the aligned hole in the frame (see page 6 for handle heights). Secure and tighten the bolt.
3. Insert bolt B through hole C in the handle and frame to attach the handle to the unit. Secure and tighten the bolt.

## Handle Height Measurements

Choose a comfortable height adjustment for pulling your aircraft, not for maneuvering the T1 without an aircraft attached.



**Note:** Handle height is measured from the ground when the fork is parallel to the ground.

# Adjusting the Kickstand

### Lowering the Kickstand

1. Raise the rear of the unit off the ground.
2. Press the kickstand release button to lower the kickstand until it contacts the stops.

### Raising the Kickstand

1. Apply upward pressure to the handle to relieve load on the kickstand.
2. Press the kickstand release button while lifting the handle.
3. Release the button when the kickstand is fully raised.

# Connecting Your Aircraft

## 1. Fork prongs

Your T1 comes with prongs that are the recommended length for the aircraft you specified at the time of order.

## 2. Tow pin adapters

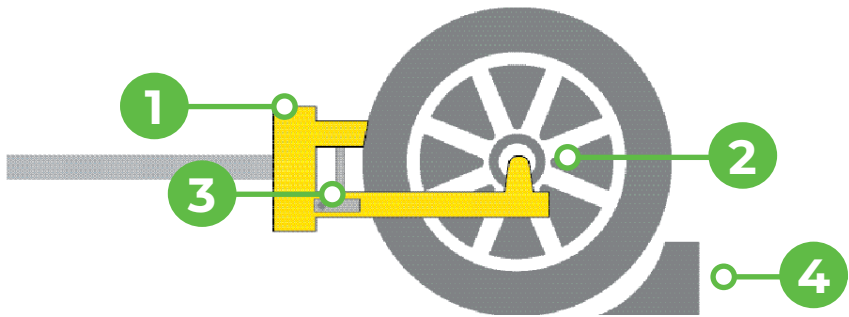
Your T1 comes with the recommended adapter for the aircraft you specified at the time of order.

## 3. Locking bar lever

The width of the fork prongs (1) can be adjusted by using the lever on the right fork prong to lock or unlock the locking bar.

## 4. Chocks

**Always** chock the aircraft wheels when parked, not in use, or when attaching your tug.

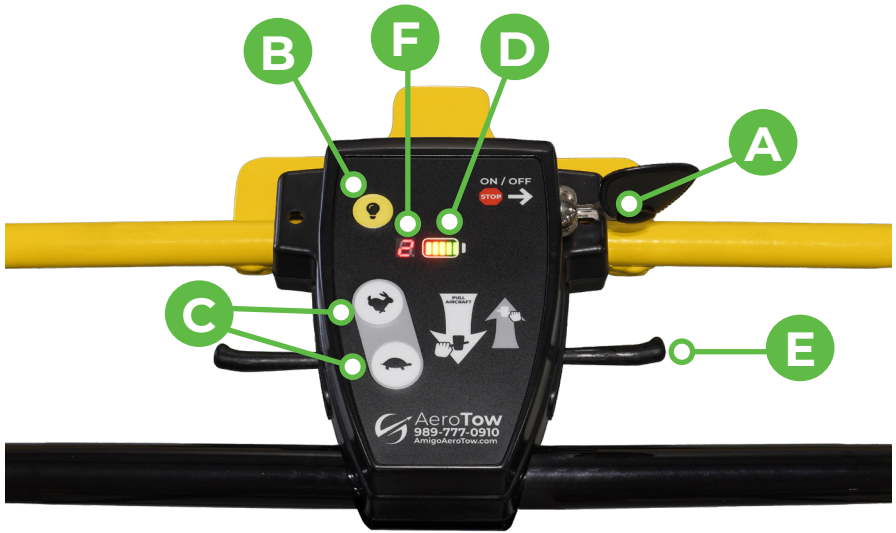


To connect the tug to your aircraft, loosen the locking bar (3) and adjust the width of the fork prongs (1) until they're fully open. With the power on, use the forward button to approach the wheel at a slight angle.

Position the tug so that the fork prongs are on both sides of the wheel. Turn the power off.

Close the width of the fork prongs and insert the tow pin adapters (2) into the tow connectors on the wheel. Lock the locking bar to secure the aircraft to the tug.

# Handle Controls



- A. T1 key on/off
- B. Toggles light on/off
- C. Faster/slower
- D. Battery gauge
- E. To move forward, pull the right throttle lever towards you. To operate in reverse, pull the left throttle lever towards you. Releasing the throttle lever will cause the T1 to roll to a stop.
- F. Speed indicator

**Note:** Speed does not indicate miles per hour. If the number is flashing, see page 10 for diagnostic information.

# Moving Your Aircraft

Check the surrounding area and remove any obstacles or obstructions before moving your aircraft. **Then remove the chocks.**

Return to the handle of the tug.

Turn the power on and move your aircraft using the throttle levers.

# Disconnecting Your Aircraft

**Chock your aircraft.**

Unlock the locking bar.

Move your tug using the reverse switch located on the front of the handle control box.

# How-To Video

Scan the QR code or visit [amigoaerotow.com/owners/](https://amigoaerotow.com/owners/) to watch a video on how to use your T1.



*You're ready to go!*

# Diagnostic Codes

If the tug requires service, the speed indicator will flash one of the following numbers. Use this guide to help diagnose the issue. For further support, contact the Amigo service department at 989-777-0910.

**Note:** The first solution listed for each diagnostic code has been shown to fix the problem 80% of the time. Attempt solutions in the order listed.

1

**Problem:**  
Brake circuit is shorted.

**Solution:**

1. Check all connections running from the brake to the controller.
2. Disconnect the brake wires from the controller. Restart the Amigo. If the code changes to a 2, replace the brake.
3. Replace the controller.

2

**Problem:**  
Brake circuit is open.

**Solution:**

1. Check all connections running from the brake to the controller.
2. Replace the brake.
3. Replace the controller.

3

**Problem:**  
Motor circuit is shorted.

**Solution:**

1. Check all connections running from the motor to the controller.
2. Disconnect the motor wires from the controller. Restart the Amigo. If the code changes to a 4, replace the motor.
3. Replace the motor controller.

4

**Problem:**  
Motor circuit is open.

**Solution:**

1. Check all connections running from the motor to the controller.
2. Replace the motor.
3. Replace the controller.

**5****Problem:**

Throttle circuit out of range.

**Solution:**

1. Check the handle cable, the receptacle on the controller and the throttle enclosure are in good condition.
2. Check to make sure the throttle levers move freely and returns to neutral position.
3. Replace the throttle device.

**7****Problem:**

Battery charger did not change to float mode during battery charging.

**Note:** This code will only appear while the tug is plugged in.

**Solution:**

1. Replace the DC Charge Cable and check by allowing the charger to run through a full charge cycle.
2. Replace the battery charger and check by allowing the charger to run through a full charge cycle.
3. Replace the controller and check by allowing the charger to run through a full charge cycle.

You must allow the battery charger to run through a full charge cycle to make sure the problem has been corrected.

**6****Problem:**

Throttle circuit out of range.

**Solution:**

1. Turn the Amigo off and sit idle for 15 minutes. Restart and drive for five minutes to see if the code disappears.
2. Replace the brake and motor if causing excessive amp draw.
3. Replace the controller.

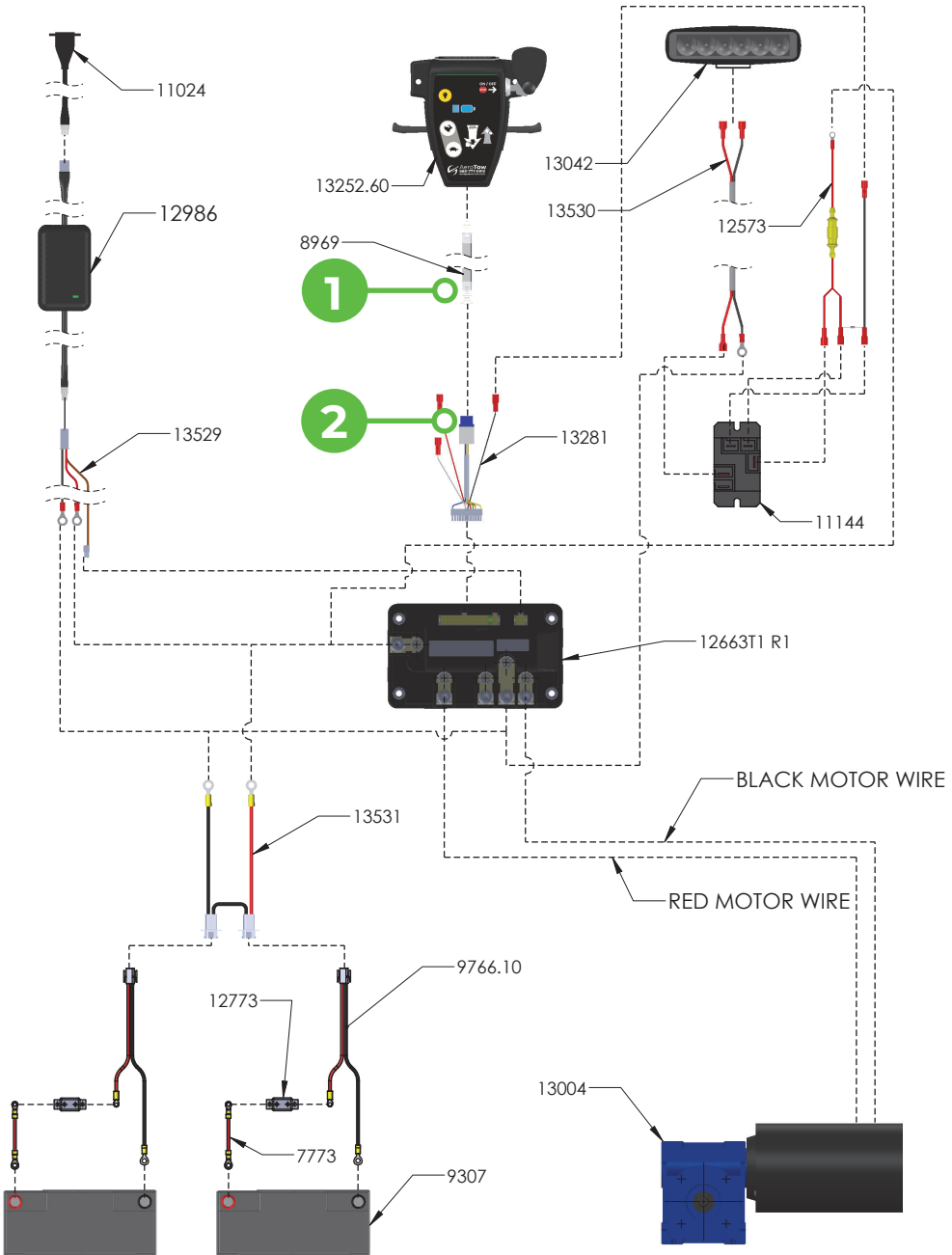
**8****Problem:**

Motor controller fault condition.

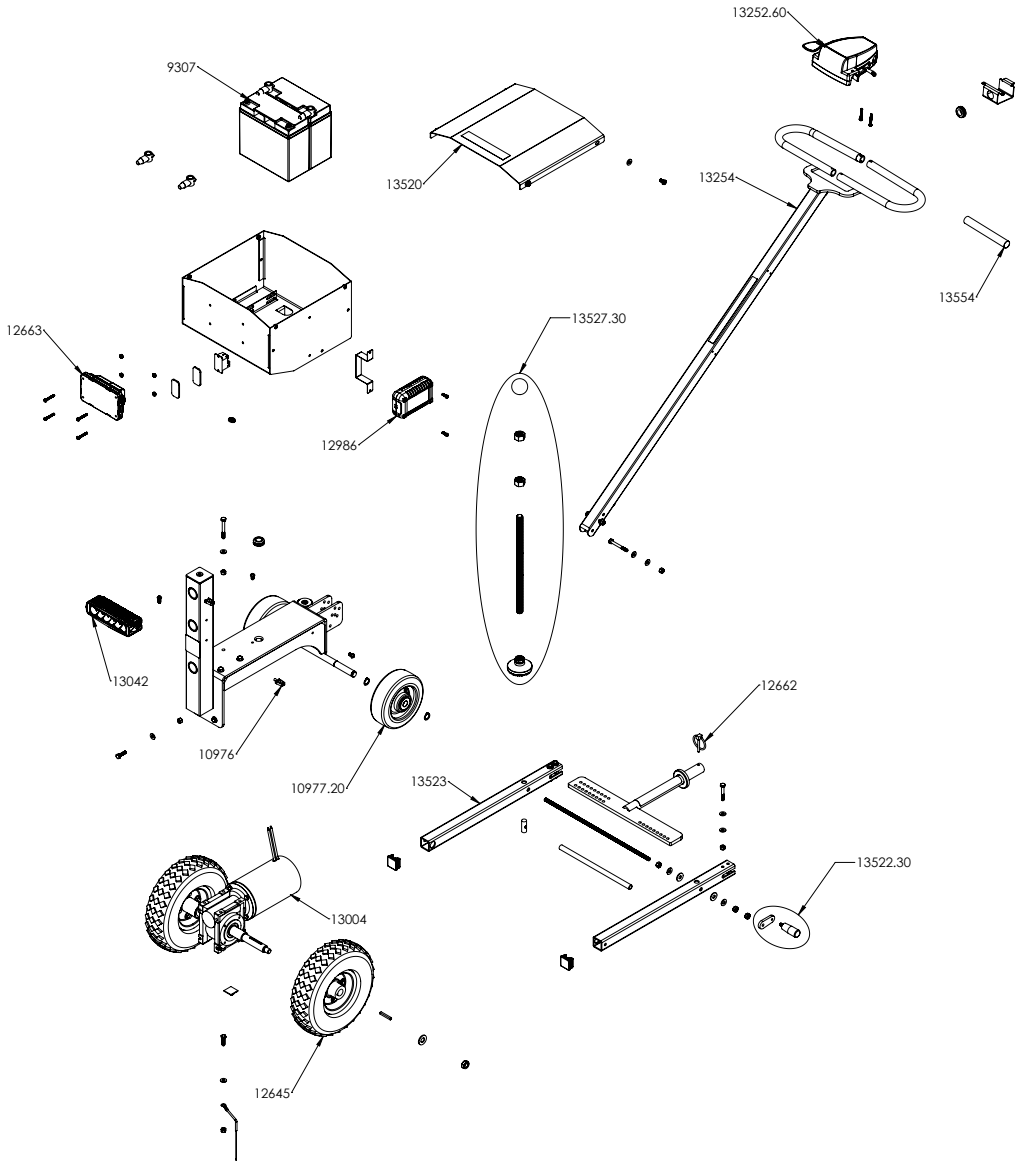
**Solution:**

1. Turn the Amigo off and sit idle for 1 minute. With a voltage meter connected to the batteries, restart the Amigo and measure the battery voltage, if it drops more than 1-volt then replace the batteries.
2. Replace the controller.

# Wiring Diagram



# Exploded View



# Parts List

Part No.	Description	QTY.
9307	Battery 12V 18Ah 216 WH Deep Cycle	2
10976	Clip wire guide	2
10977.20	Wheel 6" RER Solid Flat	2
12662	PIN .187 x 1.25 Linch	1
12663	Controller CSP190	1
19986	Charger 24V 3A 72W – SRD	1
13004	Drive 24V T1	2
13042	Light LED 6" Flood	1
13252.60	Enclosure Hi/Lo 1-4 key AeroTow	1
13254	Handle T2	1
13520	Powerbase top AeroTow T1	1
13523	Bracket arm AeroTow T1	2
13554	Grip Handle	2

# Warranty Coverage

## General Warranty Provisions

Amigo Mobility International, Inc. (AMI) disclaims any responsibility for personal injury or property damage resulting from the improper or unsafe use of its products. AMI warrants its products to the original purchaser and commences on the date of shipment.

The warranties do not cover the failure of any part or accessory due to:

- Shipping damage.
- Abuse, misuse, accidental damage, or acts of nature.
- Exceeding the specified weight capacity of the model.
- Modifying the product, or installing accessories not authorized by AMI.

## Warranty Coverage

AMI will repair or replace a part that is defective in material or workmanship under normal use. AMI may use factory re-manufactured parts rather than new parts for some warranty repairs.

Warranty replacement parts are covered for the remainder of the original AMI unit warranty.

- Electronic components have a two-year warranty.
- Batteries supplied by AMI have a six-month warranty.
- Damage caused by lack of charging, battery moisture, spillage, or leakage is exclusive of warranty.
- Batteries must be charged consistently; you can leave them plugged into the charger provided when not in use.
- AMI provides an ARS tag with warranty parts that are required to be returned to the factory (continental United States only).
- If inspection determines that a returned part is inoperable due to a non-warranty nature, credit for replacement parts ordered will not be issued.

This warranty supersedes and is in lieu of all other warranties expressed or implied, and no person, agent, or dealer is authorized to give any warranties on behalf of AMI, nor to assume for AMI any other liability concerning any of its products unless made in writing and signed by an official of AMI.

This warranty gives you specific rights, with the possibility of other rights, which vary depending upon your locality.

To register your tug, please scan the QR code below or visit [amigoaerotow.com/owners/warranty](http://amigoaerotow.com/owners/warranty).



## Customer Satisfaction

Your complete satisfaction is our main goal. Please contact us at 989-777-0910 or [service@myamigo.com](mailto:service@myamigo.com) if you have questions regarding service.



AeroTow  
By Amigo Mobility