

Tail-Dragger DRAGGER®

MODEL: TDE-1

ASSEMBLY AND OPERATING INSTRUCTIONS



Dragger-DRAGGER® / Airtug, LLC is not responsible for aircraft damage sustained when proper clearance is not maintained by the operator between the tug and the aircraft.

GENERAL

Thank you for purchasing the Electric Tail-Dragger Dragger! We hope that this unique powered Dragger aircraft tug will enable you to fly more by allowing easy ground handling. Like all other airplane moving devices, this unit has some limitations. It will not take your aircraft over large curbs or craters, but it will perform well on gentle slopes or hard smooth surfaces. The Tail-Dragger Dragger will handle wet surfaces and can be fitted with chains for operation in light snow. It is simple to operate. It takes some practice and planning to use, but once accustomed to the handling, it is like having a strong buddy along every time you must move your airplane. **PRACTICE IS HIGHLY RECOMMENDED.** Operating your Tail-Dragger Dragger before hooking up to the plane is essential. Practice moving the tug forward and reverse. Get familiar with handling, speed, maneuvering, etc. Then practice turning your airplane. Next, try moving your airplane in an open area, away from the hangar and other obstacles. When you move your airplane into the hangar for the first time, have a friend watch the wings and nose to help avoid hitting any obstructions. It also pays to have wheel chocks in place to prevent pushing back too far in the hangar. Safety lines painted on the hangar floor and ramp area will also guide you to safe parking. Always check for clearance.

Your new Tail-Dragger Dragger comes partially pre-assembled from the factory. The procedures listed below are all you need to get your new aircraft tug fully operational. If you experience any problems or have any questions, please do not hesitate to contact us at 1-800-972-5563.

Note: All reference to “right” and “left” orientation is made while standing behind the tug and looking forward.

SAFETY

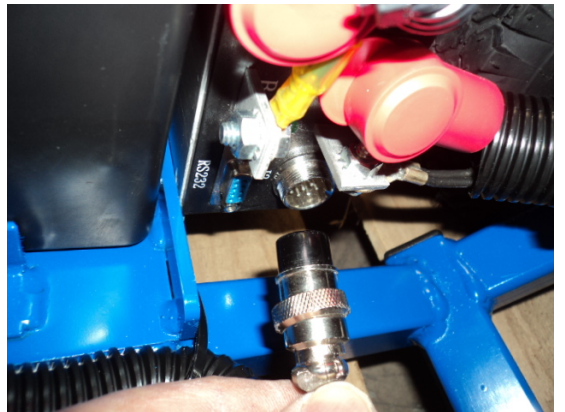
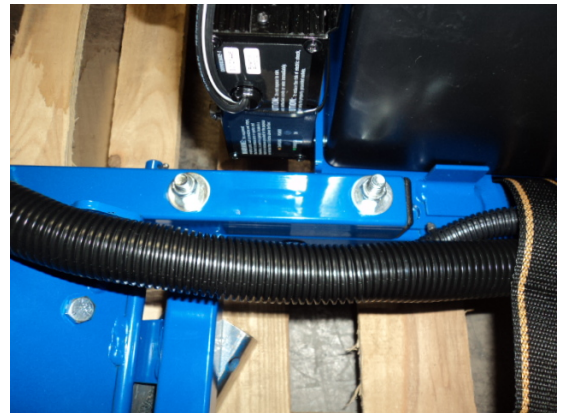
Read these instructions carefully. Be thoroughly familiar with the controls and the proper use of the Tail-Dragger Dragger. Know how to stop it and disengage the controls quickly. Never allow children to operate it and keep them away while it is operating. Never allow adults to operate the Dragger without proper instructions. Keep the area of operation clear of all persons, particularly small children and pets. Exercise caution to avoid slipping or falling, especially when operating in reverse. Thoroughly inspect the area where the Tail-Dragger Dragger will be used and remove all foreign objects from your path. Wear proper footwear that will improve footing on slippery surfaces. Never attempt to make any adjustments while the engine (motor) is running. Always wear safety glasses or shields during operation.

ASSEMBLY INSTRUCTIONS

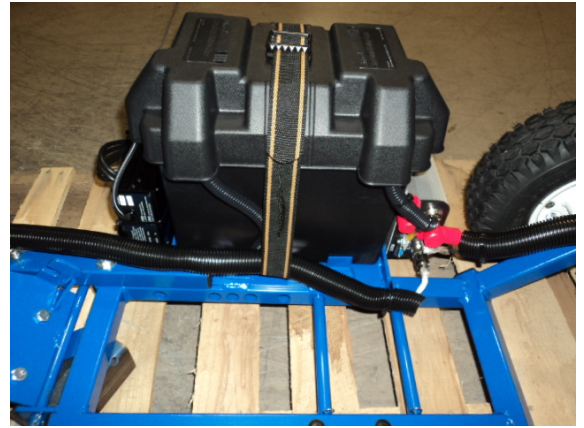
Step 1: Handle Installation: Remove each nut and washer from the two (2) bolts in the center of the tug frame and to the right of the battery box platform. DO NOT remove the bolts. Place the lower part of the tug handle over the two (2) bolts, install washers and secure firmly with the nuts. Notice the bottom of the rear bolt has several washers in place. This is the tug pivot point when the caster wheel is collapsed for positioning the tug when mounting the aircraft tail wheel to the tug.

Step 2: Connect the yellow inline fuse holder together from the handle to the red wire connected to battery in battery box.

Step 3: Connect J2 Cable from handle with the speed controller. Plug the J2 Cable into the Controller plug receiver marked J2.



Step 4: Install battery box strap through and under battery box platform and tighten. You can include the wiring tube inside the battery strap as seen in picture or you can use the supplied zip ties to hold it close to the battery box so it does not interfere with the loading operation.



Step 5: Tail Wheel Lifting Paddles: Remove the rear paddle on the right side of the tug frame by removing the safety pin underneath the center of the tug frame and sliding the paddle out from its mounted position. Reposition the paddle to the 2nd or 3rd hole behind the front paddle depending on the size of the aircraft tail wheel. If the paddles are too close or too far apart, you won't be able to properly mount the aircraft tail wheel to the tug. It may take an adjustment or two until there is a near perfect fit (the paddles sliding very closely behind and in front of the tail wheel when you are mounting the aircraft to the tug). **Note:** It is acceptable to remove the front paddle and use the front of the tug frame in its place for additional flexibility.



Step 6 : Check tire pressure and maintain 30 psi.

Step 7: Plug the charger into a 110V outlet and charge batteries until the “green” indicator light on the charger is lit. Keep the charger plugged in between use. See the charger manual for additional features and instructions. You are now ready for aircraft loading adjustments with the tug paddles once the batteries are fully charged.

Tug Operation

On/Off Switch: Ensure the On/Off Switch is in the OFF position when not in use. When ready to use the unit, flip the switch to the ON position. The tug will now move as soon as you begin to move the thumb throttle. It will move in the direction that the rocker switch indicates.

Handle Switch & Variable Speed Control: The directional rocker switch mounted on the tug handle has two (2) positions: forward and reverse. Twisting the thumb throttle forward will move the tug at the desired speed.

Video And Slide Show Examples Of Using The Tug: Refer to our Video Gallery on our Dragger.com website to view a video that shows an example of how to load and unload an aircraft (<http://dragger.com/dragger-video-gallery/>). Watch the slide show as a guide to demonstrate how to position the Dragger load pins around the tail wheel to load the aircraft (<http://dragger.com/tail-dragger-draggers/>).

Loading the Aircraft:

- (1) Drive up to the left side of the rear fuselage.
- (2) Collapse the caster by pulling the control rod and pin clear of the slot.
- (3) With the Dragger low, pull the Dragger back, positioning near the tail wheel.
- (4) Wiggle/walk the Dragger to position the load pin on the front of the tail wheel.
- (5) Swing the rear pin or paddle into place at the rear of tail wheel.
- (6) Align tail wheel between pins. Lift up the Tail-Dragger Dragger by the handle.
- (7) Pin the caster down by pushing on the control rod and push the pin into the slot.

CAUTION: Move the aircraft slowly. Be careful when turning not to hit the aircraft tail with the tug. Do not turn sharply. **Always remember the caster wheel must be fully collapsed to the right prior to and when loading and unloading the aircraft.**

Use Chocks: Always use chocks when backing into a tight parking space to protect against accidental collision with objects or walls nearby.

Operating Speed: The electric Tail-Dragger Dragger is designed to operate at a slow walking pace for safety. This slow speed may lead the operator to believe the motor lacks power or that the batteries are low. Actually, the motor has plenty of power, and the move from the hangar to the ramp will take only a minute or so.

Wheel Bearings: Wheels should receive light oil a few times each year.