



## AIRTUG® Trailer Tugs Assembly & Operating Instructions MODEL: TT-HD-GA-15

Airtug, LLC is not responsible for damage sustained when proper clearance is not maintained by the operator between the tug and its surroundings.

**Caution:** Braking too abruptly or moving too fast can seriously damage the differential ring gear. This is considered abuse and is not covered by the transaxle warranty.

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

**WARNING:** This tug is shipped WITH oil in the engine. Always Check oil level prior to use.



**Engine Operation:** Slide engine throttle on side of engine to the “choke” position. Press the **starter button by foot** located on the tug frame behind the engine. Once the engine starts you can adjust the engine RPM as necessary. To stop the engine, slide the engine throttle (on side of engine) in the opposite direction of the “choke” position. Use a low amp battery charger (available at Airtug 216-941-9781) to maintain a fully charged battery between use and especially in colder environments.

**Tug Operations:** The twist grip handle operates the hydrostatic transaxle. Rotating the twist grips forward or aft moves the Airtug accordingly. Rotating the grip slightly in either direction will move the tug very slowly. As you increase the rotation of the handle grips, the tug speed increases. Maximum torque is applied at very slow speeds ensuring excellent maneuverability while rotating the hand grips fully results in maximum speed. The hydrostatic transaxle provides smooth variable speed control throughout the entire range of grip motion. The twist grip is spring loaded to “return -to-brake position.” Nevertheless, it is not recommended to walk away from the tug while the engine is running. While moving the trailer, braking is effected by gradually returning the grip to the neutral or brake position. Even while moving the trailer on a downgrade, the tug will only go as fast as you have the twist grip turned. Braking too abruptly with a heavy trailer or moving too fast can seriously damage the differential ring gear. This is considered abuse and is not covered by the transaxle warranty. When moving over the door weather edge or door rail, it’s recommended to have a little momentum. Ramps or steps can be purchased from Airtug, if necessary, to overcome high door sills or rough pavement.

**SAVE THIS DOCUMENT AND ENSURE ALL OPERATORS READ IT  
PRIOR TO MOVING ANY TRAILERS**

It is recommended for safety, best practice, and for traction to begin movement as slowly as possible to put the trailer in motion. There is also a sticker on the handle for other recommendations for best practices and improved traction. Please note that if the weight on the tongue of the trailer is not set up properly that additional weight may be needed on the drive wheels of the tug. Airtug® sells additional weight packs if you are having problems with traction and have tried all the recommendations on the handle.

**Loading:** Position the ball of tug under the receiver of the trailer and stop. Push the button to raise the ball up into the ball receiver and lift the tongue of the trailer up into the air.

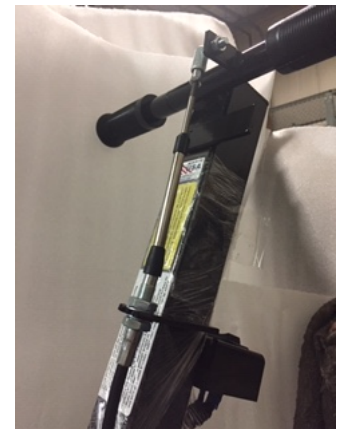
## Assembly Instructions

**Step 1: HANDLE** Slide the handle through the “U” bolts (take care while sliding the wires through as well) (leave the nuts loose for now to allow the handle to slide into the “U” bolt).

Tighten the “U” bolt nuts (4) securely under the tug frame (9/16” socket).



**Step 2:** Attach the transmission cable to the handle as shown. Tighten the mounting nuts with an 11/16” wrench. Attach the socket at the end of the cable to the ball on the twist grip. Then attach the wires coming out of the bottom of the handle to the battery leads(quick disconnects). Lastly run the longer two wires under the right side of the engine and connect them to the mating connections coming from the cylinder.



**WHEELIE BARS:** Wheelie Bars are located on the back of the tug to prevent the tug from lifting the handle in extreme circumstances (i.e. starting too quickly or stopping too abruptly).



## General Maintenance

**Tire Pressure:** The tire pressure can range from 30psi for lighter trailers to the maximum tire pressure (70 PSI) for heavier trailers. Lower pressures improve traction.

**Battery:** Keep the battery fully charged. The battery performance will diminish measurably as the ambient air temperature drops.

**Hydrostatic Transaxle:** This should be checked for oil level. Add 20W-50 oil if level is low.

**Drive Wheel Bearings:** Permanently lubricated.

**Caster Zerk Fittings:** Needs to be lubed periodically to ensure ease of caster wheel steering.

**Drive Chains:** Apply chain lube periodically depending on use and environment.

**Tractive Ability:** If the tug seems to be losing tractive ability, it's an indication of a loose drive belt. The engine plate is mounted on slotted holes and can be moved rearward to tighten the drive belt if necessary. Simply loosen the nuts, push the engine plate towards the rear of the tug and tighten the nuts firmly.

**Engine:** DO NOT ADD OIL BEFORE CHECKING LEVEL! Oil is added before shipping, verify level is between marks on dipstick before every use. Add 10W-30 oil when needed.

### SAFETY WARNINGS:

- \* Read, study and understand all warnings and operating instructions prior to use
- \* When working on the tug:
  - \* Put the tug up on blocks to get the drive wheels off the ground before beginning any work.
  - \* Do not allow anyone to stand directly in front of or behind the vehicle during testing.
  - \* Make sure the Power switch is off.
  - \* Use well-insulated tools.
- \* Runaways - Some conditions could cause the tug to run out of control. Jack up the tug and get the drive wheels off the ground before attempting any work on the engine control circuitry.
- \* High Current Arcs - Batteries can supply very high power and arcs can occur if they are short circuit. Wear safety glasses, and use properly insulated tools to prevent short circuit.
- \* Do not overload this tug beyond the rated capacity.
- \* This tug is designed for use only on hard level surfaces capable of sustaining the load.
- \* No alterations to the tug shall be made.
- \* Electronic components may be damaged if exposed to water! This is not covered under warranty.
- \* Failure to heed these warnings may result in personal injury and/or property damage.

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