



## AIRTUG® Dumpster Tugs

### Assembly & Operating Instructions

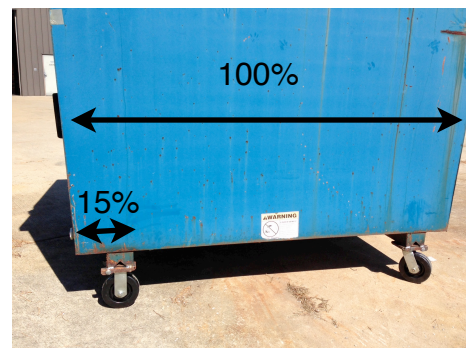
#### MODEL: HD Dumpster Tug Electric (TT-HD-EA-8) 5,000 Lbs

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 from a higher speed can seriously damage the differential ring gear. This is considered abuse and will not be covered by the transaxle warranty.

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

**Recommendations:** Ensure the rear wheels of the dumpster are fixed in place and DO NOT caster or rotate. The front wheels can and should rotate or caster for ease of movement when not using the Airtug®. At least 15% of length of dumpster needs to be beyond rear caster (ie - 100 inch long dumpster - need at least 15 inches from center of fixed caster to rear edge of dumpster). For dumpsters with a gross weight over 3,000 pounds, the rear fixed caster should be placed such that 20% of the dumpster is beyond the fixed caster (ie. - 100 inch long dumpster - need at least 20” from center of fixed caster to rear edge of dumpster).



#### Dumpster Attachment Installation:

Components that come with the HD Dumpster Attachment:

##### Hardware

- a. 3/8-16 x 1.5” bolts - 4 pcs
- b. 3/8-16 Nylon Lock Nuts - 4 pcs
- c. 3/8 washers - 8 pcs
- d. 1/2 x 3” clevis pin and hairpin - 1 pc each

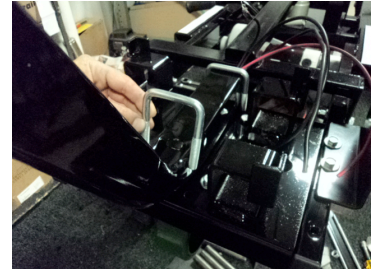


**SAVE THIS DOCUMENT AND ENSURE ALL OPERATORS READ IT PRIOR TO MOVING ANY DUMPSTERS**

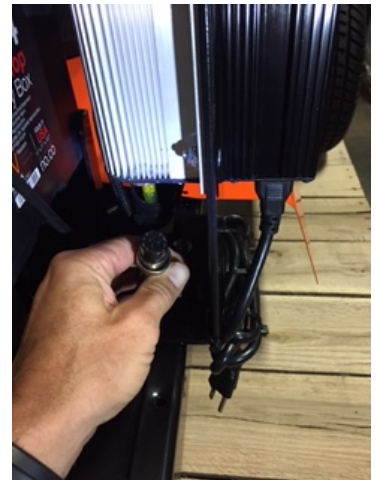
## Assembly Instructions

**Step 1: HANDLE** Slide the handle through the “U” bolt (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). Insert second U bolt as shown

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



**Step 2:** Connect cannon plug from handle into the “J2” socket on speed control



**Step 3:** Connect bullet terminal from handle to the wire coming from the parking brake





**Step 4:** Connect red wire with fuse holder from the handle to the mating fuse holder on the side of the batteries



**Step 5:** Connect the yellow in line fuse holder(25A- red wire) and black with male bullet from the handle to the corresponding wire coming out the front of the battery box.



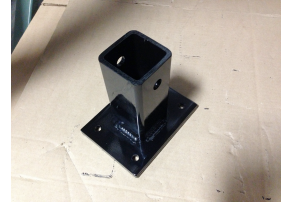
**Step 6:** Connect the male and female spade terminals from the handle to the corresponding terminals coming from the cylinder.



## Dumpster Attachment Installation:

1. Dumpster Attachment - to be bolted or welded to dumpster

It is preferred that the Dumpster Attachment is welded to the dumpster but it can also be bolted to the dumpster with the hardware included.



2. Dumpster Attachment Arm: Pinned to Dumpster Attachment; incorporates ball receiver



3. Install the Dumpster Attachment Arm with the ball receiver into the Dumpster Attachment



4. Place the Dumpster attachment on the dumpster in the middle of the end with the castoring wheels so that the bottom of the ball receiver is approximately 22" off the ground. The actual height off the ground should be just high enough to get the ball of the tug under it when the ball is at its lowest position.

**Approx. 23"**



5. Mark the dumpster where the attachment needs to be mounted to the dumpster. We recommend welding it to the dumpster, if possible. If you are bolting it, mark the holes and drill 3/8" holes and secure it in place using the hardware supplied.



**Hooking Up the Dumpster:** The ball receiver on the dumpster should be positioned so that when the tug has the automatic ball all the way down that the ball will just barely fit under the ball receiver. Move the tug so the ball on the tug goes just under the ball receiver on the dumpster. Push the button to raise the ball up into the receiver and lift the dumpster up into the air so the castoring wheels of the dumpster are just off the ground. This will do two things: add weight to the drive wheels for traction and take the castoring wheels off ground so you are not fighting them when you are turning or switching directions. Do not hold the button continuously when the cylinder is maxed out on stroke. This can cause damage to the cylinder motor and electronic circuits.



## Operating Instructions

**Step 1:** Prior to the first use, plug the charger cable into a 110V outlet or extension cord and charge the batteries fully as indicated by the green light at the top of the charger. The orange light indicates batteries are charging. Keep the battery charger plugged in between use. See the battery charger manual for more information.

**Step 2:** Turn switch at end of handle to the “On” position. Select “FWD” or “REV” and slowly rotate the thumb throttle to slowly begin movement of the tug. Begin movement as slowly as possible.

**Tug Operation:** There is an On/Off switch at the top of the handle. Flip the switch to “On” when ready to use the tug. This powers the unit and disengages the parking brake. Leave the switch in the “Off” position between use and to engage the parking brake. Always, remember to turn the unit off when you are finished. Select the direction you want to go: forward or reverse. The thumb throttle control operates the transaxle. The transaxle provides smooth, variable control of the tug speed. In tight quarters the tug can be operated very slowly offering greater safety when moving your dumpster. When tugging the dumpster an extended distance, it is easiest and safest to face forward with the tug and dumpster behind you while controlling the tug speed with the thumb throttle. Always return the toggle switch at the top of the handle to the “Off” position when leaving the tug momentarily or between each use to engage the parking brake. While moving the dumpster on a reasonable downgrade, the tug will only move as fast as the operator allows.



There is a sticker on the handle that lists recommendations to improve traction. Lowering the tire pressure on the tug could improve traction. Airtug® sells additional weight packs if you are having problems with traction and have tried all the recommendations on the handle. For best practice, safety, and for the best traction, begin movement as slowly as possible to put the dumpster in motion.

## General Maintenance

**Tire Pressure:** The tire pressure can range from 30 psi to the maximum tire pressure of 70 psi. It should be reduced for added traction for lighter dumpsters. Lower pressures improve traction.

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

**Transaxle:** This is a sealed unit and should not require maintenance or fluid.

**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.

### **Battery Maintenance:**

1. New batteries require a full charge before use and need to be cycled several times before reaching full capacity.
2. Battery connections should be kept tight at all times. Periodic inspection is recommended.
3. Keep batteries clean from all dirt and corrosion.
4. Batteries should not be discharged to the point of no longer being able to power the tug. Keeping the batteries fully charged will greatly reduce the risk of a dead battery when you need it most.
5. Batteries should be brought up to a full charge at the earliest opportunity using the built in 24V battery charger with reverse polarity protection and float mode. The battery charger should be left on when the tug is parked to maintain proper charging and maintenance of batteries at all times. Keeping the batteries fully charged will reduce the risk of freezing in cold temperatures.
6. Avoid charging the batteries when the ambient temperature exceeds 120°F.
7. Older batteries will take longer to fully charge.
8. Periodic battery testing is an important preventative maintenance procedure. Voltage tests (open circuit, charged or discharged) can identify a bad or weak battery. Load testing will identify a bad battery when other methods fail. A weak battery will cause premature failure of a companion battery.
9. Extreme temperatures can substantially affect battery performance and charging. Cold temperatures reduce battery capacity and retard charging.

### **CAUTION:**

- \* Read, study and understand all warnings and operating instructions prior to use
- \* ALWAYS WORK WITH YOUR "LOAD"/TRAILER BELOW THE TUG FOR SAFETY. THERE SHOULD NEVER BE A PERSON BETWEEN THE OBJECT BEING MOVED AND A FIXED OBJECT.
- \* 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. Disconnect the motor, or jack up the tug, and get the drive wheels off the ground before attempting any work on the motor control circuitry.
- \* HIGH CURRENT ARCS - Electric vehicle batteries can supply very high power, and arcs can occur if they are short circuit. Always turn off the battery circuit before working on the motor control 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.
- \* Failure to heed these warnings may result in personal injury and/or property damage.