

## **Baggage Tug and Carts Fact Sheet** **Preventing Vehicle Accidents and Collisions**

*Purpose:* To provide possible solutions for the prevention of injuries and aircraft/equipment damage while operating baggage tugs and carts.

### **Baggage Tug Operation**

#### **Potential Hazards:**

- Un-commanded movement
- Distracted or unsafe driving practices
- Malfunction
- Rollovers

#### **Possible Solutions:**

- Prior to starting and/or turning off the bag tug, ensure it is in neutral or park (if applicable) and the parking brake is set.
- If bag tug must be left running and unattended, ensure it is chocked.
  - Running and unattended - When the operator is 25 ft. or more away, or it is out of view.
- Baggage or other items should only be transported in/on approved bag tug areas.



**Figure 1 - Correctly chocked vehicle**



**Figure 2 - Never load baggage or freight in operator cabin**

- Follow all local speed limits.
- While driving in congested areas, operate at a walking pace.
- When driving to a non-adjacent gate, the vehicle service road (VSR) should be utilized.
- While driving, maintain a safe distance (follow the 3 second rule) between your bag tug and the vehicle in front of you.
- Do not engage in horseplay while driving.
- While maneuvering, pay special attention to the clearances due to the bag tug's length and the number of carts being towed.
- Slow down for wet and/or slippery surfaces.
- Do not use personal electronic devices while on the bag tug.
- Do not drive under any portion of an aircraft unless authorized.
- Driver must remain seated and within the confines of the vehicle while in motion.

- Seatbelts shall be worn while driving the bag tug if equipped, unless operating in the footprint of the aircraft.
- Riding on any part of a vehicle other than a seat is not permitted. "No seat no ride" rule applies to all vehicles.
- Always yield to pedestrians and aircraft.
- Maintain a safe distance from customer walkways during boarding and deplaning.
- When parking or staging a bag tug, ensure it is positioned in a manner that will not cause congestion or obstruction.
- To minimize vehicle malfunction, perform the following:

### Pre-Operation Inspection

Check vehicles at the beginning of each shift or prior to daily use for operational and or safety defects.

- **Tires:** Check tire condition for low pressure, cracks, tears, and low tread. Ensure lug nuts are tight and secure.
- **Engine Fluids/Leaks:** Check primary engine fluid levels (oil, radiator, brake, and hydraulic and/or power steering). If the vehicle is an automatic, check fluid level while engine is running. Inspect the ground beneath the vehicle for engine, transmission, and axle fluid leaks.
- **Fuel Level / Battery Level** (if electric): Verify enough fuel / battery life to perform the job.
- **Foreign Object and Debris (FOD):** Check on and around the equipment for FOD. Newspapers, soda cans, etc., should be disposed of in the proper containers.
- **Overall Appearance:** Check the vehicle and undercarriage for loose or hanging parts that may fall off or cause a malfunction.
- **Horn:** Press horn to ensure that it is functional. This is critical for safety in noisy ramp areas.
- **Lights:** Turn headlights on and off. They should be operational and used at night/low light or adverse weather conditions. Apply brakes and have a co-worker verify the rear brake lights work. Put the vehicle in reverse and have a co-worker verify back up lights are in good working condition.
- **Steering:** Turn the wheel SIDE to SIDE to test the range of steering. This ensures full control of the vehicle in any steering position.
- **Transmission:**
  - (Automatic) Test each gear selection to ensure that they operate as indicated.
  - (Manual) Check clutch adjustment and shifting ability. Press down the clutch pedal. Place in gear and slowly release the clutch. Clutch should be fully engaged after pedal reaches midpoint of travel, but before pedal is fully released. Place vehicle in gear. Release clutch slightly to determine if gear is fully engaged.
- **Brakes:** Prior to entering the vehicle into operation, check the brakes' stopping ability by moving the vehicle and then applying the brakes. Also perform a safety stop prior to approaching an aircraft.
- **Parking Brakes:** Ensure brake will hold when in forward or reverse gear at idle speed.

### Baggage Carts

#### Possible Hazards:

- Carts becoming un-hitched
- Carts tipping over

- Un-commanded movement
- Malfunction

### Possible solutions

- Check hitch to ensure it is properly secured to bag tug or cart.



**Figure 3 - Hitch carts by hand**



**Figure 4 - Pull on hitch to ensure tongue is secure**



**Figure 5 and 6 - Be aware of each hitch type**

- Inspect the hitch assembly for proper operation, worn, damage or missing parts.
- Test the hitch by grasping the tow bar and sharply pulling upward to verify the hitch will not open.



**Figure 7 - Always pull on hitch to ensure it will not open**

- To prevent carts from tipping, slow down to appropriate speeds when driving around corners and avoid sharp or abrupt turns.
- When leaving carts unattended, apply parking brake by lifting cart tongue.
- Check that all tires, wheels, and brakes are in good condition.



**Figure 8 - Never leave tongue in down position when left unattended**



**Figure 9 - Always lock tongue in the upright position when left unattended**

### **Additional Resources**

Federal Aviation Administration (FAA)

- [14 CFR 139](#), Certification and Operations: Land Airports Servicing Certain Air Carriers. This is part of the electronic code of federal regulations. Specific areas of interest for the airline industry may include:
  - 139.101, Certification requirements: General
  - 139.203, Contents of airport certification manual
  - 139.205, Amendment of contents of airport certification manual
  - 139.329, Ground vehicles

[Part 139 Certification](#). Requires the FAA to issue airport operating certificates to airports that serve scheduled and unscheduled air carrier aircraft with more than 30 seats or that the FAA Administrator requires to have a certificate.

*Through the OSHA and Airline Group Safety Panel Alliance, the Airline Ground Safety Panel developed this Fact Sheet for informational purposes only. It does not necessarily reflect the official views of OSHA or the U.S. Department of Labor. 01/2013*