

Belt Loader Fact Sheet **Preventing Vehicle Accidents and Collisions**

Purpose: To provide possible solutions for the prevention of injuries and aircraft/equipment damage.

Pre-Operation Inspection

- **Check vehicles** at the beginning of each shift or prior to 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) Free:** Check on and around the equipment for FOD. No newspapers, soda cans, etc.
- **Overall Appearance:** Check the vehicle and undercarriage for loose or hanging parts that may fall off or cause a malfunction.



Operational Check

- Conduct an operational check after the visual check is completed. The vehicle must be running.
- **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.
 - For walk-behind belt loaders, ensure the e-stop and handle brakes are working properly.

Belt loader Operation

Potential Hazards:

- Danger of gas/diesel powered belt loader left running and unattended.
 - The electric belt loaders are left in the ON position.
- Danger of colliding with an aircraft, another ground support vehicle / equipment or other objects.
- Employee body parts being caught between the end of conveyor and the aircraft fuselage or between end of the conveyor and GSE.
- Danger of injuring the operator.
- Danger of striking employees and/or pedestrians.

Possible Solutions:

- Make sure the belt loader is in neutral or park (if applicable), and the parking brake is set prior to starting and disembarking.



- Belt loaders must be chocked whenever the engine is running without an operator in the driver's seat.
- Ground service equipment must NOT be left running and unattended.
 - Unattended is defined as leaving equipment without the intent to operate
 - For extreme weather conditions, ensure belt loader is chocked or corralled to deter unwanted movement.
- Seatbelts shall be worn while driving the belt loader if equipped, unless operating in the footprint of the aircraft.
- The belt loader shall always be driven with the conveyor platform in the lowered position.
 - Do not raise or lower the belt while the vehicle is in motion.
- The belt loader should not be driven with baggage or other items on the vehicle.
- Operating Speeds
 - Follow all local posted speeds for driving on the ramp (if multiple are posted, follow most stringent).
 - Approach aircraft at a walking pace.
 - Test brakes at a safe distance when approaching aircraft.
 - When operating in an area congested with ground service equipment or other vehicles, drive at a walking pace.

- When driving to a non-adjacent gate, the vehicle service road (VSR) should be utilized.
- While driving on the VSR, follow the 3 second rule to maintain a safe distance between your vehicle and the vehicle in front of you.



- While maneuvering, pay special attention to the clearances due to the vehicle's length.
 - Do not operate in prohibited areas based on local restrictions (i.e. some enclosed or narrow tunnels).
 - Do not drive a belt loader under any portion of an aircraft.
- Utilize an engine speed governor to reduce speeding.
- Driver must remain seated while vehicle is in motion.
- "No seat/no ride" rule applies to all vehicles. Riding on any part of a vehicle other than a seat is not permitted.
- Keep arms and feet and all other body parts within the operating plane of the belt loader.
- Application of a non-slip surface on the brake pedal and/or brake pedal guard located on the right side of the brake pedal may reduce the operator's foot from slipping while operating the brake.

- Whenever guide persons are used for belt loader positioning to an aircraft, the guide person should stand to the driver's side and not directly in front of the vehicle.



- When positioning the belt loader to the aircraft cargo bin sill plate the belt loader rubber spacer should be positioned one inch away and parallel to the sill plate to protect the employee from being pinned between the belt loader conveyor and aircraft fuselage.
- Yield to pedestrians.
- Maintain a safe distance from customer walkways during boarding and deplaning.
- Before moving the belt loader or other GSE, look 360 degrees and look up to ensure clearance.
- When parking or staging a belt loader, ensure it is positioned in a manner that will not cause congestion or obstruction to the immediate area.

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