

USA

Trailer #1

Trailer Towing Tips

And

Quick Reference

**Trailer #1**  
**Loading and Unloading**  
**THIS TRAILER IS UNUSABLE FOR THE TWIN ASTIR**

- This trailer loads and unloads over the trailer tongue. There is no rear access door.
- The door will not clear the hitch ball receiver and swing open unless the ball receiver lock is down.
- For improved towing behavior, there are four 40 pound bags of salt located in the trailer near the front access door. All four bags must be present during towing in order to provide enough tongue weight for a stable tow.
- The bags must be installed after the tongue has been manually lifted and lowered over a hitch ball. They must be removed prior to lifting the tongue off of the hitch ball.
- To load or unload a glider the trailer tongue must be lowered fully onto the ground.
- After the trailer tongue is fully on the ground place jack stands under the trailer 1-2 feet aft of the wheels. If not done the trailer will teeter during the loading or unloading process.
- Ensure both wheels are chocked.
- Install a hydraulic lift installed under front right side frame to stabilize.
- The trailer has a fuselage dolly locking mechanism in the floor, activated by a lanyard. To release the dolly pull on the lanyard prior to moving the glider fuselage out of the trailer. To secure the fuselage dolly, pull on the release lanyard while pushing the glider fuselage and dolly into place.
- There is no tail boom tie down strap. Rather, there is a docking port built into the trailer top that effectively captures the top of the stabilizer attach plate which is a part of the fin spar.
- The glider dolly rolls in and out of the trailer on a fold-up, two u-channel loading ramp that hinges out from the floor of the trailer.
- The fuselage dolly "locks" in position on the fuselage via metal straps that "pin" into wing attach sockets. DO NOT lose the securing pins when removed during glider assembly.
- Make sure the hold down straps/attachment strips are to rear of dolly when positioning the dolly during glider dis-assembly.

# **Pre-Towing Checklist**

## **Glider Security**

- Open all doors to trailer for interior inspection.
- Affirm glider is properly secured in trailer.
  - Each club trailer has different methods to secure glider.
- Make sure all parts are safely and securely stowed.
- Check proper padding has been installed for critical parts of the glider.
- Remove all loose parts from the inside of the glider trailer. This includes the rear area as well as the forward storage compartment. (Sand bags may be stored loosely during travel.)

## **Trailer to Vehicle connection**

- Receiver hitch secured in vehicle with installation pin and safety pin.
- Ball latch securely closed. Safety pin installed.
- Safety chain attached (two sides).
- Light connection is secure (all lights functioning).
- Trailer hand brake completely off.
- Trailer emergency brake cable connected to vehicle.
- Trailer tongue jack is raised completely, secured and swiveled (if swivel installed).

## **Trailer Walk-Around**

- Front compartment door latched closed (if installed).
- Chocks removed (vehicle and trailer).
- All jack stands removed from under the trailer.
- Rear door/clamshell door closed, latched and latches secured.

- All lights functioning:
  - Turn signals
  - Running lights
  - Brake lights
  - Emergency flashers
- Proper tire pressure (each club glider trailer has different tire pressure).
- Trailer hitch height: The trailer should be level, or slightly nose down.
- Make sure that prior to starting the journey you have proper slack in the safety chain, lights cable, and the emergency brake so there is no tension during sharp turns.
- Emergency road assistance equipment is present and available:
  - Jack
  - Flares/Traffic triangles
  - Lug wrench
  - Miscellaneous tools
  - Spare tire (check inflation)

## **Towing Tips**

- Plan your trip. If high winds are forecast, transport the trailer another day.
- Plan ahead. Give yourself plenty of time for the trip. You will be traveling much more slowly than normal.
- Use extreme caution when transiting dips in the road. This will occur when entering gas stations, driveways, and side streets. Try to pass through the dip on an angle. This will reduce the possibility of scraping the glider trailer tongue jack, as well as the glider trailer tail.
- When traveling on a downhill grade at highway speeds your vehicle/trailer combination is more susceptible to destabilization. Use caution.

- Sway can occur at any normal travel speeds. The causes may be:
  - Natural oscillation set up by driver steering.
  - Bow wave from passing trucks (especially large trucks/semi's).
  - Crosswind
- If the trailer starts to sway, slowly reduce speed. Carefully reduce accelerator pressure. Apply brake with extreme caution only when absolutely necessary. Plan far ahead during tow.
- An empty trailer behaves much differently than a trailer containing a glider.
- Deceleration will be reduced.
- Change lanes with caution.
- Hitch weight should be 10-12% of total weight.
  - A good rule of thumb is that a loaded trailer weighs 2400-2700 pounds.
  - 15% tongue weight is good, but may cause issues with the towing vehicle.
- Drive defensively.
- Use caution at all times.
- Do your own pre-tow checks, both interior and exterior.
- Each trailer tows differently. The vehicle type will also determine glider trailer behavior during tow.
  - Vehicles with long wheel bases tend to tow much better than vehicles with short wheel bases.
  - Stiffer sprung vehicles tow better than softly sprung vehicles.
- Each USA trailer is different. Familiarize yourself with the trailer you will be towing. Make sure any emergency equipment, spare tires, jacks and tools are readily available.