USA Trailer #3

Trailer Towing Tips

And

Quick Reference

Trailer #3 Loading and Unloading

- Chock both main wheels.
- Disconnect the trailer from the towing vehicle when loading/unloading the glider. The rear of the trailer must be lowered to achieve proper ramp positioning.
- Support the tongue and rear of trailer with blocks/jacks. The trailer has a light tongue weight when it's empty.
- For loading and unloading the glider, ensure the clamshell door is lifted to the highest position.
- There is an extendable ramp used for loading and unloading.
- The trailer has a strap used to secure the tail boom during transport.
- When loading and unloading the glider, lift the tail of the glider so it does not contact
 the rear edge of the trailer. Caution: The tail boom will easily strike the floor of
 the trailer.
- Move glider forward in trailer until tail wheel rests in holding detent. Secure hold down strap to tail of glider.
- Place protecting pads:
 - At front end of glider to protect wing root
 - At wing tips
 - Inside of horizontal stabilizer housing
- Use extreme caution when closing the top clamshell door! The sidewalls of the trailer must be manipulated to align the shell for closing. DO NOT FORCE CLOSED!

Twin Astir loading/unloading cautions:

• The glider fuselage nose will not fit in the nose cone docking station. Secure protective padding in place.

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. Ensure the cable length is sufficient enough so the brake is not activated during sharp turns.
- 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:
 - o Natural oscillation set up by driver steering.
 - o 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.
 - o A good rule of thumb is that a loaded trailer weighs 2400-2700 pounds.
 - o 15% tongue weight is good, but may cause issues with the towing vehicle.
- Drive defensively.
- Use caution at <u>all</u> 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.