

PEGASUS TRAILER PROCEDURE

DISASSEMBLY

PREREQUISITES: Minimum three people, four preferred. Level ground, moderate to zero wind.

In trailer forward end: Two wing stands. Two jacks for rear sides of trailer, if not already attached.

Chocks for wheels. Fuselage dolly jack handle. Rear fuselage sling. Green bag with special key wrench. Trailer registration. Grease and rags. Some trailers have glider wheel ramp, not essential but helpful.

1.0 Setup.

1.1 Position trailer, nose into any wind if possible. Chock Wheels.

1.2 If present, disconnect front trailer locking pin, so tow bar can break at hinge under trailer floor.

Otherwise, it may later be necessary to place chock under front jack to raise nose.

1.3 Unlock rear door, tilt outwards, and disconnect lights. Stow door safely (Over wheel on some trailers)

1.4 Remove clip from fuselage dolly ramp, lower ramp, and attach ramp jack (in sprung retainer on floor) to dolly track. Jack nut should be on right side, when facing trailer. Raise jack about two inches.

1.5 Place or extend jacks, one on each side of trailer, halfway between rear and wheels. Raise trailer nose until fuselage dolly ramp makes a straight line, i.e. in same plane, as dolly tracks on trailer floor, by adjusting side jacks, or chocking front jack. *Ensure trailer is secure and cannot move.*

1.6 Remove horizontal stabilizer cradle and wing leading edge dollies for later use. Lock wing spar dollies to rear position in trailer with removable pins, and ensure spar lock is folded clear. Position fuselage dolly at end of ramp. (Ensure rope link on dolly points towards glider.) Ensure all straps and restraints are clear of dolly tracks.

1.7 Place glider wheel ramp, if available. Position glider nose to trailer, and remove tail dolly.

1.8 Making sure glider wings are level, push glider forward onto fuselage dolly, until dolly is close to, but not touching, wheel doors. (A one to two inch gap is OK). Raise dolly ramp with jack as necessary to stabilize and clear main wheel. Place wing stands. Remove all tape.

Open canopy and *note clearance between canopy and trailer.* Take care not to damage canopy.

2.0 Horizontal Stabilizer.

2.1 Remove total energy probe and stow safely in cockpit.

2.2 Place horizontal stabilizer cradle on rear fuselage, engage with vertical fin and secure bungee.

2.3 Remove elevator control quick disconnect.

2.4 Ease lock pin to side, and remove stabilizer retaining bolt with special wrench. (Found in green bag).

2.4 With two people,, ease stabilizer forward, lift out, and place in cradle.

2.5 Return retaining bolt to vertical fin, and return wrench to green bag.

3.0 Wings.

3.1 Place both wing leading edge dollies, position aileron locks, and secure with bungee over wings.

3.2 Disconnect both water bag nuts. Remove rear seat speaker panel and stow securely in cockpit.

3.3 Remove fuselage access plate, (over wings), and disconnect all four control quick connects. Stow safety pins securely, if they are the removable type.

3.4 Pull wing spar pin safety clip and rotate to one side. Remove both wing spar pins by rotating and pulling wing spar pin handles. It will be necessary to have one person raise a wing tip quite high. The person removing the wing spar pins will feel, by free pin movement, when the wing tip is correctly positioned. Stow wing pins in green bag and place securely in cockpit.

3.5 Ensure control linkages are free. With one person on wing tip, and two at root, remove left wing. Position wing parallel to fuselage, rotate 90 degrees with leading edge down, push spar into wing dolly, and lock in position with hinged pin. Remove pin preventing movement of dolly, and gently insert wing into trailer, *taking care not to scrape on fuselage pins or trailer.* Push until pin on wing spar dolly mates with front frame, and secure with wingnut.

3.6 Repeat for right wing. Secure both wing tips with straps and clips provided.

4.0 Fuselage.

4.1 Check documents, log book, T/E probe, bag with wing pins and wrench, Hotellier safety pins, seat cushion, parachute, speaker panel, canopy cover. Raise and lock main wheel.

4.2 Remove battery if needed. Replace fuselage access plate. Close and lock canopy for transport. Secure fuselage dolly for transport by passing cord through wing spar openings and attaching to dolly.

4.2 Using two people and sling at tail end of boom, lift fuselage, and insert gently into trailer, **being careful not to scrape boom or vertical fin**. Place tail wheel in recess, and secure boom with strap.

5.0 Ready for Transport.

5.1 Remove fuselage dolly ramp jack, close, and stow in clips provided. Raise ramp and secure.

5.2 Position rear door on lip of trailer and connect lights. Close and lock door, ensuring both pins engage.

5.3 Stow wing stands, jacks, glider tail dolly, and all rigging gear in front of trailer.

5.4 Reconnect front tow bar locking pin and safety, if present, to prevent hinge break of tow bar.

5.5 Check Registration. Close and lock door.

5.6 Connect Trailer to tow vehicle, stow front jack for travel, and connect safety chain.

5.7 Check lights, check tire pressures, and perform final inspection of readiness to tow.

ASSEMBLY

PREREQUISITES: As for disassembly, except green bag with special key wrench and wing pins should be in cockpit, and glider tail wheel dolly will be in front of trailer.

1.0 Setup. Steps 1.1, through 1.5 as for disassembly. Place glider wheel ramp, if available.

2.0 Fuselage.

2.1 Unstrap fuselage boom. Using two people and sling at tail end of boom, lift fuselage, and remove gently from trailer, being careful not to scrape boom or vertical fin, and ensuring fuselage dolly wheels **do not run out at end of ramp**. Remove cord holding dolly to fuselage.

2.2 Remove stabiliser cradle from fuselage, and stow securely.

2.3 Open canopy. **Note small clearance between open canopy and trailer rear**. Check cockpit contents as per 4.1 of disassembly.

2.3 Remove wing spar pins, clean and grease lightly. Ditto wing root pins on fuselage.

3.0 Wings.

3.1 Place wing stands, and remove wingnut from front RIGHT spar dolly lock. With one person at wing tip, and one or two ready to take weight of spar, gently withdraw wing, **taking care not to scrape**. Place one person on left side of cockpit as safety. (Duty is to prevent fuselage rolling as wing spar is inserted). Rotate wing, and offer spar to fuselage opening, inserting fully until fuselage pins engage.

3.2 Repeat for left wing. Remove both leading edge dollies, and stow in front of trailer.

3.3 Ensure spar pin holes are aligned, and insert wing spar pins, using technique as in 3.4 of disassembly.

3.4 Connect all four control quick connects through fuselage access plate. Connect water bags.

4.0 Horizontal Stabilizer.

4.1 Clean and lightly grease engagement pins on horizontal stabilizer. Remove retaining bolt from fin.

4.2 Remove stabilizer from cradle and lower onto vertical fin. Connect elevator control. Ease stabilizer backward to engage pins. Using special wrench, tighten retaining bolt, and stow wrench in green bag.

4.3 Install total energy probe, and place horizontal stabilizer cradle in trailer.

5.0 Preparation for flight.

5.1 Replace rear speaker panel, and check battery and radio. Lower main wheel. (Now is a good time to check tire pressures and operation of dive brake alarm). Close canopy, and push glider clear of trailer.

5.2 **Have second person check proper control connections, and perform a full positive control check. Sign off reassembly in log book**. Replace and tape fuselage access plate.

6.0 Stow trailer. Perform steps 5.1 through 5.4 of "Ready for Transport" in disassembly above.

6.5 Move trailer to storage site and tie down. Lock doors, and return key to BASA maintenance trailer.