

Perkoz De-Rigging Checklist

Prerequisites

- Minimum of 4 people
- Perkoz toolkit
- 2 x trestle/wing stand
- Check condition, pressure and age of trailer tyres
Trailer tyres must be changed if older than 6 years
- Ensure trailer is level
The fuselage is not stable when in the trailer. It can easily tip to one side while being pushed in or pulled out, particularly if the trailer is leaning slightly to one side or if the cradle goes over a rope or strop.
- Allow 90 minutes

Item	Comment
Position Perkoz on flat (ideally hard) ground	If the tail is higher than the main wheel it is difficult to get the cradle past the nose wheel.
Position trailer in front of aircraft, apply handbrake, lower rear stands	
Open and empty the trailer	Ensure all runners are clear. Do not extend the ramp yet (it's a trip hazard, particularly when stowing wings).
Wings on stands	Keep wings level
Tape off wings and tail	Save some tape for the airbrakes. Ensure tailplane is completely free of tape it won't come off if any tape remains
Tape airbrakes	
Aileron locks on	
Remove perspex cover under tailplane	Undo the 4 screws and store these securely with the cover. The transparent perspex cover under the tailplane is very fragile and can easily be broken while removing/attaching the tailplane. Best to remove before derigging and store carefully if possible.
Tailplane safety pin out	Don't lose it!
Unscrew tailplane allen bolt	Allen key is in the toolkit. When unscrewed bolt will move up and down, but will not come out
Slide tailplane backwards and remove	May be stiff. May need to raise elevator by hand. Beware: the transparent plastic cover under elevator is very fragile. The tailplane is removed first so if the fuselage tips after wings or wing tips have been removed the tailplane is not damaged
Replace tailplane safety pin into bolt	
Stow tailplane	
Remove long tips (if attached)	Tip removal tool should be in the tool bag. Beware: take care not to lose the shims from the wingtips when they're removed - they can easily drop out
Stow long tips in trailer	Port tip goes in the starboard holder with control surface upwards. Have someone lower the trailer lid to facilitate access
Attach short tips	Wings won't be secure in the trailer without tips

Remove total energy probe and store in protective tube	Tube should be in front of trailer
Slide cradle into position	May have to lift nose to get cradle past nose wheel. The front edge of the cradle needs to be aft of the 'P' in the "Perkoz" text.
Remove drag spar pins	This can be tricky! Insert pin removal tool and turn clockwise to tighten onto pin. Ensure removal tool is fully engaged. Ensure port pin removal tool is marked - the pins must go back into the same wing when rigging. Twist clockwise and pull. It might be very stiff. May have to move wing tip gently forwards and backwards to remove pressure on pin to release it. If the port pin is too difficult to remove, try the starboard pin first. Note: Once the pins are removed, you need to break (loosen) the thread tightness on the drag spar removal tool as it may be too tight to unscrew from the pins when they are re-installed. To do this, it may be necessary to wrap the pin in emery paper, cloth, or similar, and then grip the pin with pliers.
Put drag spar pins in tool bag	Leave pin attached to removal tool. Ensure port removal tool is marked
Remove front wing safety pins	These are inside the cockpit
Put front wing safety pins in tool bag	
Raise fuselage cradle and <u>LOCK IT</u>	Have someone holding a wingtip to stabilise aircraft
Adjust wing stands	
Ensure wing dollies in position at rear of trailer, runners are clear, and ramp is stowed	The ramp is a trip hazard.
Place carpet covers on trailer corners	May be needed to rest wing spar
Remove main pin	Store small safety pin on rear seat strap
Main pin in tool bag	
Remove either wing	Recommend 2 people holding tip and 2 people positioned at root, one at leading edge, one at trailing edge Second person at tip can remove wing stand Jiggle wing tip while pulling to expose wing spar If needed wing spar can be rested on trailer corner carpet
Stow wing in trailer	To get wing fully in it is necessary to lift tip and push
Repeat for other wing	
Move fuselage into final position on the cradle	Have someone at the fin to keep fuselage vertical Someone holds cradle steady while remaining crew lift and push fuselage forward in cradle
Tie fuselage tightly onto cradle	Check metal clasp does not foul the airframe
Strap parachutes tight into seat with tools and pins underneath	
Check rigging tool secured in luggage rack	

Check electrics off	
Tape total energy probe securely in cockpit	The total energy probe should be in its travelling tube
Canopy closed and locked with DV panels shut	Ensure there are no loose objects in the cockpit that could damage canopy or foul controls if trailer is bumped or rolled.
Slide ramp rails out of trailer	Ensure that locking nuts are in place and ramp cannot detach from trailer.
Ensure rear stopping bolts prevent the ramp from sliding off the back of the trailer	
Ensure tail boom tie-down strap is all well between the rails	Fuselage cradle may tip if it hits the tie-down
<u>Use pulling ropes at bottom of cradle</u> to pull fuselage into trailer	Do not push the fuselage until well into the trailer. Failure to use pulling ropes could topple the cradle resulting in damage to the fuselage
Once cradle is in the trailer ensure pulling ropes are central and pointing backward	In order to prevent pulling ropes from interfering with the cradle wheels
Ensure trailer top is fully open	Fin will strike the clamshell if it is not fully raised
<u>While watching the fin</u> , push fuselage the rest of the way into the trailer ensuring clamshell is fully open	Anything fouling the wheels could cause fuselage cradle to topple, BE CAREFUL Have someone at the fin to stabilise the fuselage
Strap down fuselage	Position protective sleeves as appropriate
Double check all steps have been followed and no loose objects are in the trailer	
Once satisfied, remove carpet corner covers and close the trailer hood ensuring wing tips are positioned in supports on upper clamshell and wing roots are also aligned correctly.	The wing tips may fail to line up with the support in the trailer hood and get on the wrong side of it when the hood is lowered. The wing root may also fail to line up with the trailer hood fitting and get on the wrong side of it when the hood is lowered.

Postrequisites

- Water ballast
The trailer is very light. You may need to add up to 50 kg of ballast (water tanks) to achieve a safe loading on the tow hook.
- Trailer number plate
- Sandbag
- Wing trestles
- Wing tape
- Battery charger
- Ballast weights
- Canopy cover
- Wing covers
- Parachute