



AQUISIÇÃO / IMPORTAÇÃO DE UM PLANADOR



Volovelistas, montei um breve relato (com algumas dicas) compilando a experiência que obtive com a aquisição / importação de um planador puro.

A motivação de escrever este relato foi a dificuldade de obter informações e o "pano-preto" que alguns proprietários de planador colocam quanto à importação do primeiro brinquedo.

1. Requisitos - Definir o que você quer ? (Considerando o quanto pode gastar!)

- Categoria no Brasil (clube, racing, open, ...)
- handicap;
- desempenho (planeio, velocidades, variação de carga-alar, ...);
- monoplacé ou biplacé;
- puro, *sustainer*, *self-launch*;
- Intervalo de preço

Vale a pena despende um bom tempo neste primeiro item, pois ele será a base / guia para que tenha sucesso no item seguinte. É muito fácil se perder caso não tenha as condições acima definidas.

2. Busca / Prospecção

Os sites para a busca são conhecidos por boa parte dos pilotos, mas vale destacar:

- <https://adverts.gliderpilot.net/> (Os planadores localizados na Inglaterra, a depender da razão GBP/EUR pode fazer muito sentido!)
- <http://planeur.net/index.php/achat-vente> (Pouco conhecido, porém muito difundido na França. Aparecem boas oportunidades de planadores da classe clube, como Pégase, ASW15 e Cirrus Std)
- <https://wingsandwheels.com/classifieds/?m=glider>
- <http://www.segelflug.de/osclass/>

3. Short-list

- Planador usado tem liquidez variável e sazonal. Evite querer planador localizado no hemisfério norte durante a primavera! A data mais indicada é a partir de outubro.



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- Liste os planadores que satisfaçam os requisitos que você levantou. Não se preocupe, pois quanto melhor for a definição de requisitos, menor será sua *short-list*
- Idealmente, tente planadores localizados no mesmo continente. Imaginou visitar um planador na Austrália, Canadá e França ? Vai fazer uma volta ao mundo e vai consumir boa parte de quanto pode gastar!

4. Consultor / Despachante

- Nesta etapa vale a pena contratar um consultor / despachante. Não dependa da boa vontade de contatos. Esta etapa é importante, pois você vai gastar aproximadamente R\$10.000 (incluindo RAB, serviço de despacho aduaneiro, ...) que vai ser uma força a favor de finalizar as etapas seguintes. Afinal, ninguém vai querer "queimar" dinheiro. No meu caso, contratei a turma da Tower Aduana (track-record positivo) e a Jazz Aeronáutica para o processo inicial de experimental de competição aérea.
- Sempre interpretei este item como um seguro, desta forma negocie um contrato com cláusulas atreladas aos compromissos de cada fornecedor.
- Exija sempre uma orientação quanto à documentação que irei listar adiante

5. Obtenção de Informações / Negociação

- Antes da visita, agende algumas "ligações" *skype*. A comunicação apenas por email é ineficiente para entender os motivos da venda.
- Sugiro solicitar informações adicionais que seja úteis para traçar o "histórico" mais provável do planador:
 - Picture (or scan) of the 1st page of the logbook with the informations of old registration of your glider or comment how many owners before you have had?
 - If available, the virtual logbook. If not, pictures (or scan) of the main registers in the logbook (repairs, damages, etc.) with the information of # hours of flight in that moment or comment any big repair?
 - Last Weight Report
 - First weight report
 - Além disso, tenha em mente que algumas informações são importantes para regularizar o planador perante a ANAC!
- Sugestão de documentos para a transação (solicitar modelos do consultor)



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- Contrato bilateral com termos de pagamento e calendário
- Bill-of-Sale
- Invoice
- Packing-list

6. Transporte / Logística

Principais dicas:

- Possibilidade de carregar o planador com seu recipiente no container em um depósito, garagem; O custo do transporte terrestre é muito afetado por este item (+2kUSD)
- Composição do custos (o imposto de importação do planador agrega algumas componentes do frete)
- Seguro de transporte
- Cote uns 3 fornecedores. As transportadoras tentam se apropriar da pouca informação que temos e cobrar quase o valor do planador por este item;

7. Regularização ANAC

A idéia deste item é você entender quais documentos a ANAC vai solicitar. O que o proprietário não tiver, consulte um especialista (*Jazz* ou outro prestador deste serviço para lhe responder e **garantir** a regularização):

- ✓ Valid Airworthiness Certificate;
- ✓ Bill of Sale ---> notarized; consularized
- ✓ TC letter/fax to ANAC-RAB about deregistration -> Seller ask for the CAA send a FAX (or EMAIL) to the ANAC copying the seller and buyer;
- ✓ Weight & Balance Report;
- ✓ Annual Inspection within 12 months (100h inspection);
- ✓ Logbook updated with last annual inspection registered;
- ✓ Registration Certificate;
- ✓ Maintenance/Repair Manual updated;
- ✓ Flight Manual updated;
- ✓ Service Bulletins and any AD's applicable (if any, must be registered on Logbooks);

Anexo

INSPECTION GUIDE

Main objective: to look for any visible issue that can cause unexpected cost for the new syndicate (or owner).

Sailplane: DG-400

Manufacturer: Glaser Dirks

Type-Certificate Data Sheet: EASA.A.239

I. Glider Parts / Nomenclature

a. Common glider parts

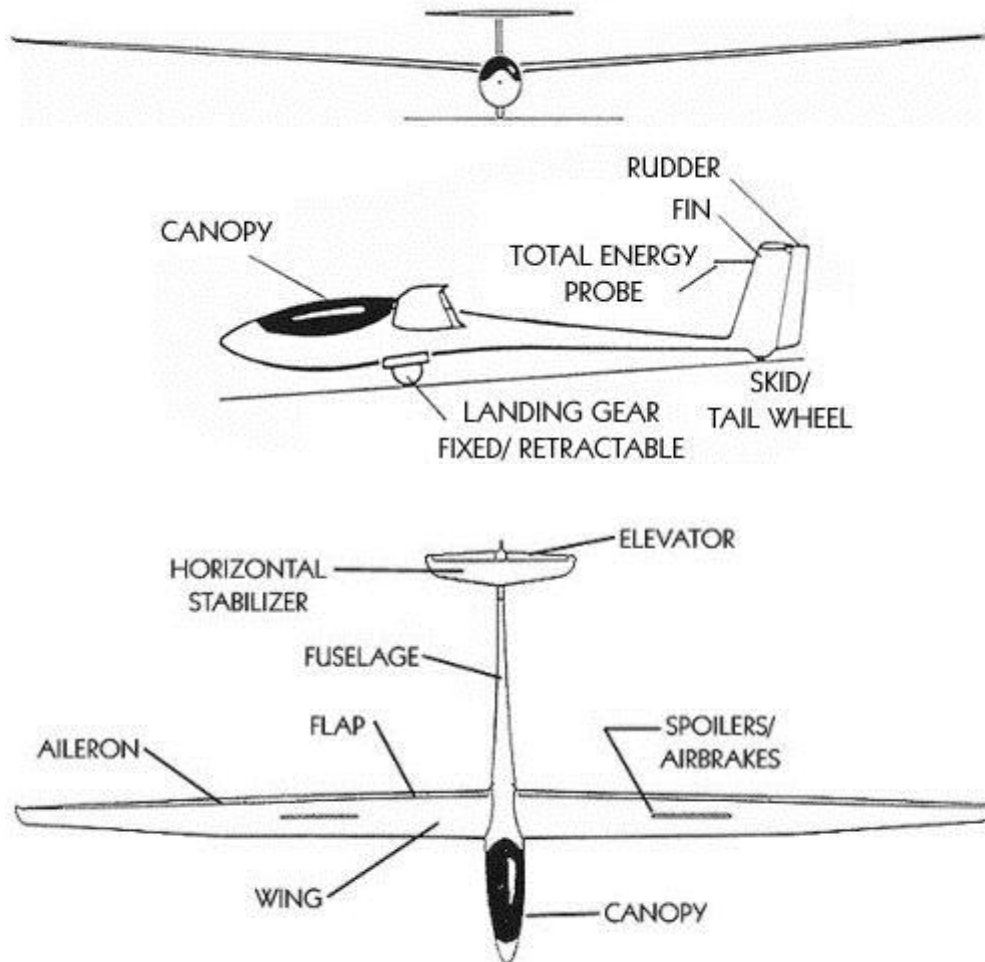


Figure 1 - Glider anatomy.

b. Specific DG-400 parts

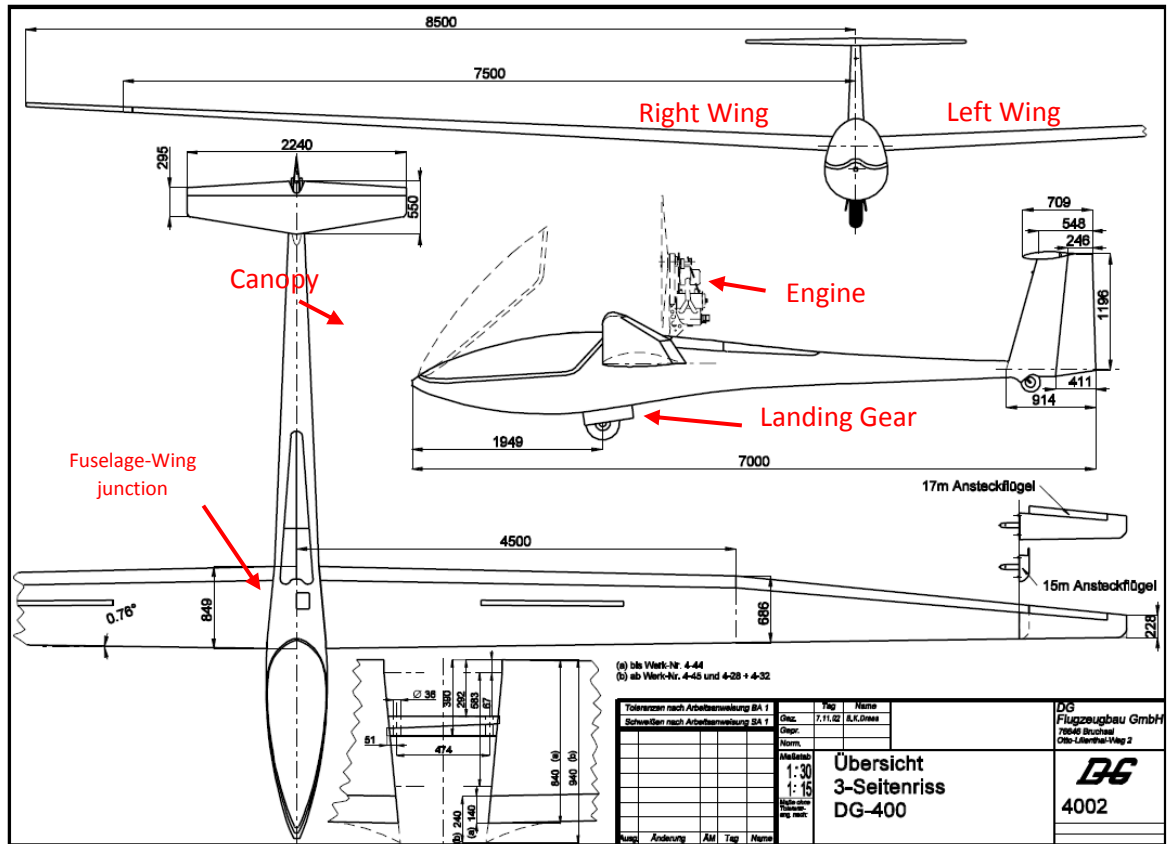


Figure 2 - DG-400 3-view drawings.

II. Important Notes

a. Finish (surfaces of the glider)

Look for cracks in the surfaces of wings, fuselage, rudder and stabilizers.

Take pictures if you find something different.



Figure 3 - Glider surfaces.

b. Canopy

Try to see if the canopy fits well with the fuselage (see the gap between the fuselage and the canopy).

Take pictures if you find something different.

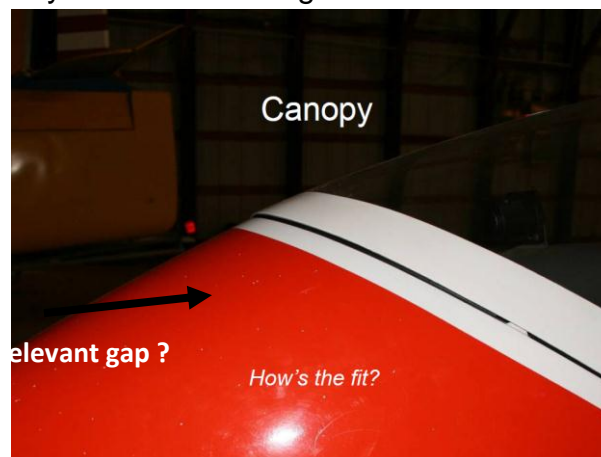


Figure 4 - Glider canopy.

Try to see if there are pesky cracks.

Take pictures if you find something different.

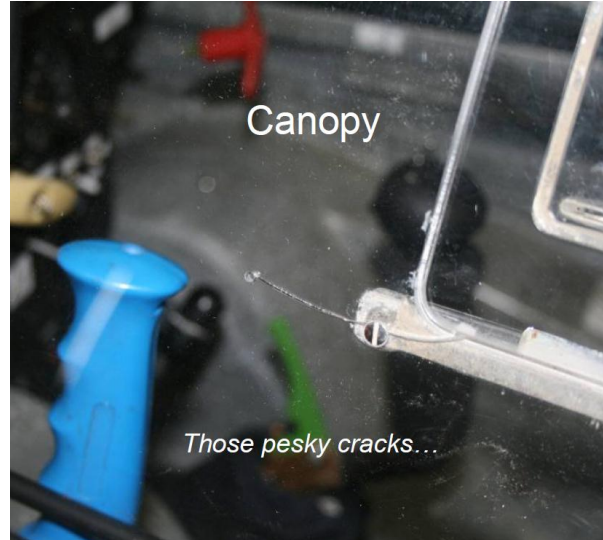


Figure 5 - Canopy air window.

c. Wing root fittings

If possible, remove the wings from the fuselage (not mandatory - only if the owner allows that):

Check around the sockets for cracks.

Take pictures for the both sides.

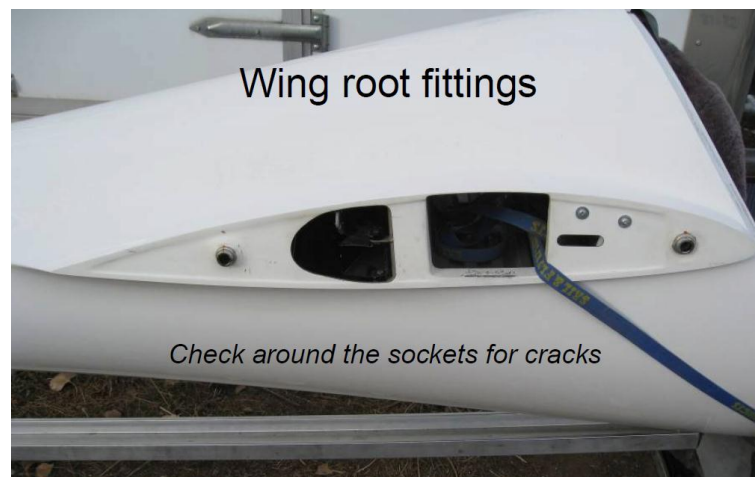


Figure 6 – Fuselage-wing junction (fuselage).

Take pictures for the both wings.

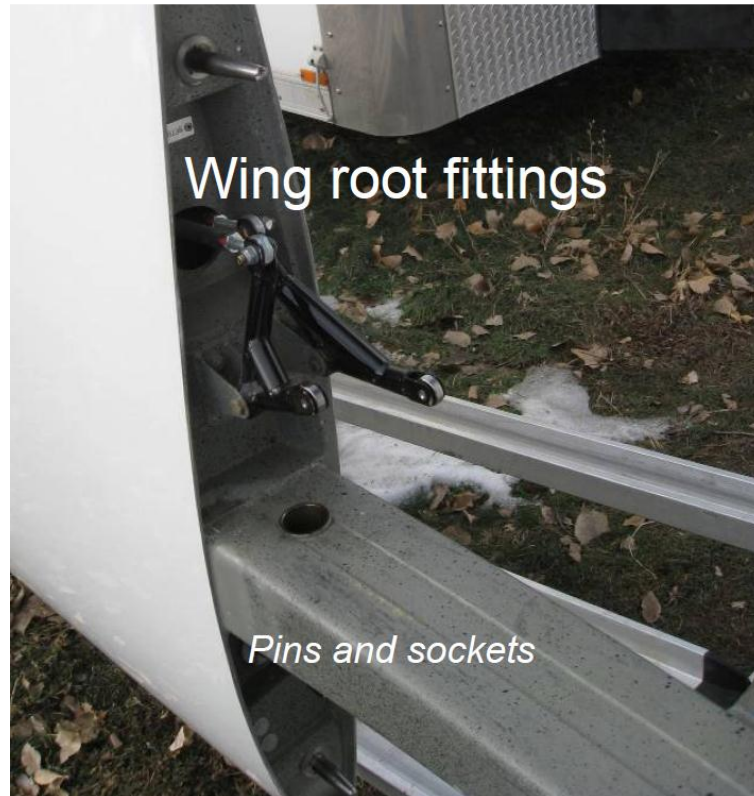


Figure 7 - Wing root.

d. Main fittings / wing pins

If possible, check the wing pins.



Figure 8-Wing pins.

e. Controls

Ask the owner to show you the controls (connection linkages).

Take pictures of that.

Are they clean?

Are they tight ?

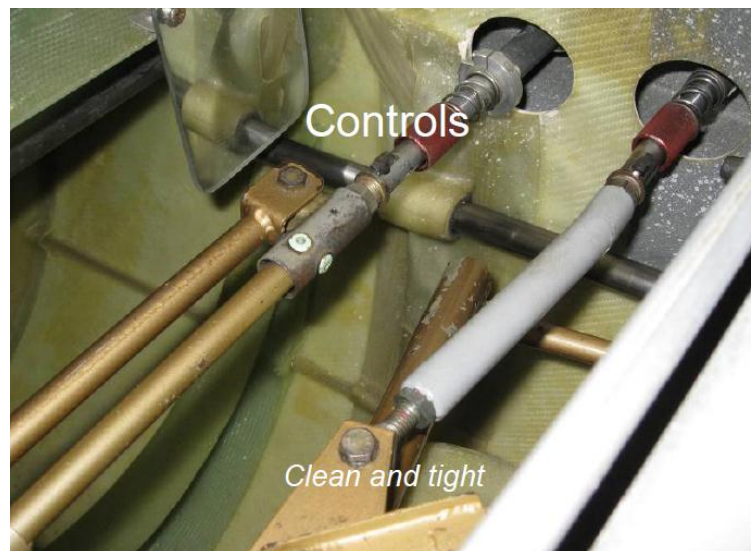


Figure 9 - Controls linkages.

f. Landing Gear

Condition?

Wear ?

Last change ?

Take pictures of the wheel and of the system.

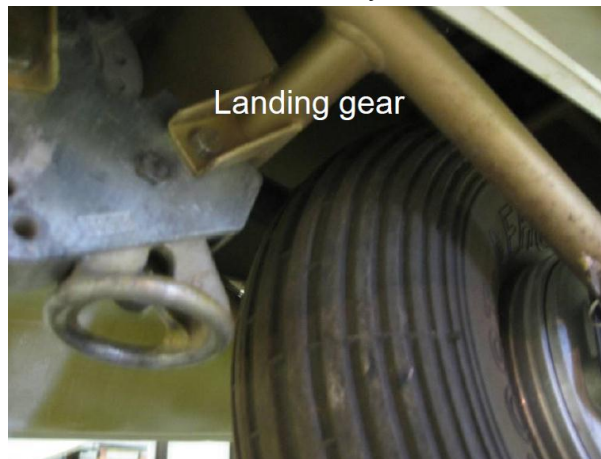


Figure 10 - Landing gear.

g. Panel

Take picture of the instruments panel



Figure 11- DG400 Panel example.

III. Daily Inspection (as presented in the flight manual)

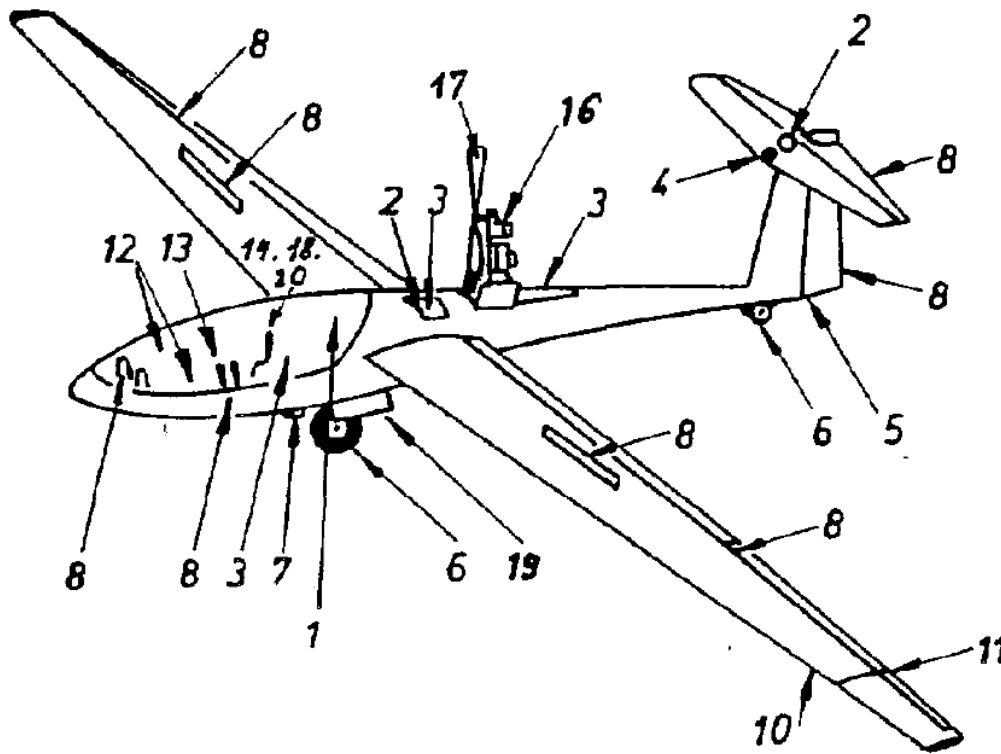


Figure 12- Glider inspection order.

Ask the owner to perform the daily inspection with you.

1. Are the main wings pins in and secured ?
 - a. Please take pictures of that.
 - b. If possible, take photos of that
2. Are the control quick connections properly fastened ?
 - a. As explained in the item **II.e**.
3. Any foreign objects?
 - a. Take pictures of them.
4. Is the stabilizer secured?
 - a. Try to shuck a little bit if you can find any strange noise or if the stabilizer has significant movement. If a significant movement is found it, please do a video of the movement.
 - b. Take photos of the connection pin
5. Check the rudder for hinge play and proper locking of connections
 - a. Take photos of the connections
6. Check the tire and landing gear.



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- a. As explained in the item II.f.
7. Hook-up check. Is the tow release clean ?
 - a. Take a picture
 - b. Ask the owner if the glider has been launched by winch or aero tow sometime
8. Check all control surfaces for free movement and play.
 - a. Try to hear some strange noise and record a video if you find any strange noise.
 - b. Ask the owner to perform this test and take notes if he has any comment.
9. Look for flaws such as bubbles, holes, bumps and cracks in the surface
 - a. Take pictures of any anomaly
 - b. Take Pictures of the surfaces trying to copy the 3-view drawing of the glider plus glider lower surfaces.
10. Are the removeable wing tips rigged correctly?
 - a. Ask the owner remove the wing tips and take picture of the spar and wing tip pins.
11. Are the wing tip ailerons correctly connected?
 - a. Please take pictures of the aileron and of the wing tip (lower and upper surface)
12. Are the batteries installed ?
 - a. Ask if there is any electrical issue with the glider.
13. Are the battery fuses OK?
 - a. Ask if there is any specific issue ?
14. Check fuses and circuit breaker
 - a. Not mandatory
15. Check extension-retraction mechanism by running it in both directions. The extension time should not exceed 13 sec.
 - a. Kindly ask the owner to perform that.
 - b. Record a video of the mechanism.
16. Visual check of the engine (extend engine) (please ask the owner to show you these itens and take pictures of them)
 - a. Check all bolts and screws and their respective safety locking. (take picture of it)
 - b. Check the proper functioning of the throttle, choke and propeller brake. (take picture of it)
 - c. Check the ignition boxes, ignition cables and sparkplug connection for tightness (take picture of the drive belt)
 - d. Check the drive belt for any wear (take picture of the drive belt)



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Check the drive belt tensioning

A sudden loosening of the drive belt tension can indicate damage at some point of the engine assembly (record a video if you find something strange)

- e. Engine retaining cables and their connections in the engine compartment should be checked. (take picture of that)
 - f. Check for any signs of wear on fuel lines, electrical cables or structural parts. (take photos)
 - g. Check the muffler, engine mount assembly and accessories for any cracking. (ask the owner to show you and take picture of that)
 - h. Apply strong forward pressure on the propeller shaft, thereby check if the screwed connection of the propeller mount to the engine block became loose or damaged. (record a video if you find something strange).
17. Visual check of the propeller, check if the propeller became loose.
- a. Take pictures of the propeller.
18. Check the fuel level
- a. Not mandatory. If the fuel level is high means that the glides has flown in the last days.
19. Drain the condensed water from the fuel tank. The drainer is located in the undercarriage box on its rear wall
- a. Not necessary
20. Check function of instrumentation and radio. Also check the fuel gauge if the read out corresponds to the amount of fuel in the tank
- a. Ask the owner to do that. (record a video of the check)

IV. Known “blemishes”

- a. The fuselage is generally excellent, with only the odd stone chip on the underside. Please, take picture of it.
- b. There is a dent in one of the undercarriage operating arms. Please, take picture of it.
- c. There is a little crazing of the gel coat at the trailing edge of the rudder. Please, take picture of it.
- d. The tailplane is in excellent condition with the original gel coat. The tailplane locking device has been changed from the piece of spring steel fitted at manufacture. The steel fatigued and we replaced it with a very secure locking plug that drops over the securing bolt. Please, take picture of this piece.

- e. We endured more cases of 'rash' despite the new finish and in 2013 had the wings redone by Les Clark. Please, take picture of these "rashes"
- f. So far the finish has held up, but there are traces of pustules recurring, but they are few and far between. Please, take picture of these pustules.
- g. There is some scratching on the underside of the stbd wing towards the tip after traversing some rough ground. We rubbed this down as far as we were able but it is still noticeable. Please, take picture of these pustules.

V. Trailer Inspection

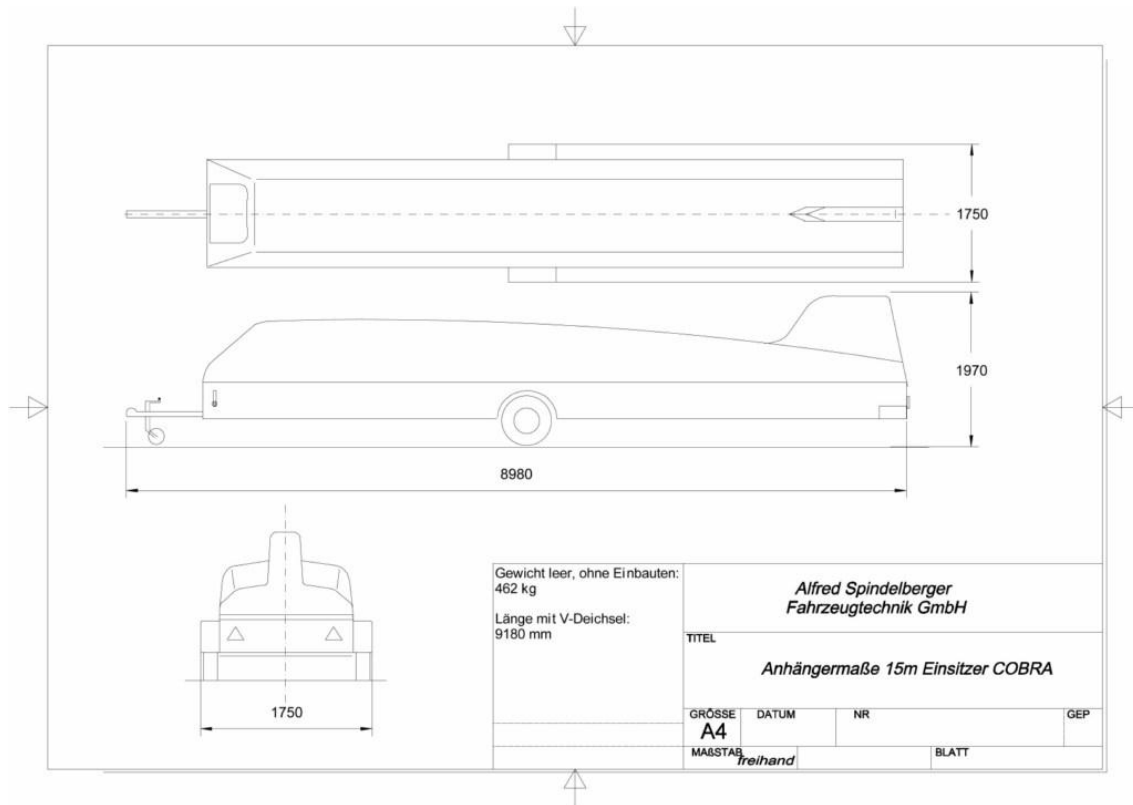


Figure 13 - 3view drawing of the trailer.

- a. Take pictures of the coupling:



Figure 14 - Coupling.

- b. Take pictures of the joint points of the coupling in the trailer:



Figure 15 - Coupling - trailer connection.

- c. Take pictures of bottom part and its connection points (axle, wheel, draw bar, etc.):



Figure 16 – Bottom part. Axle and draw bar of the trailer

Observation: For the shipment will be necessary disassemble the axle, draw bar, wheels and the coupling. Please, take pictures of the screws and how these parts are attached to the trailer.