

According to **NfL II-7/90** (German notice to airmen) the removing of the power-plant is regarded as a maintenance task according to § 6 LuftBO. A special inspection according to

§ 9 LuftBO

is therefore not necessary in that case.

The reinstallation of the power-plant, however, has to be done in accordance with Section 4 LuftGerPO and must therefore be certified by an appropriately licensed person (§ 31 LuftGerPO).

Dismantling the Power Unit

1. Propeller must be completely extended.
2. Unhook elastic tensioning cords of the engine bay doors and dismantle both doors.
3. Detach Bowden cable off the propeller stop block [26].
4. Detach Bowden cable off the throttle linkage [27].
5. Remove the locking wire at the fuel hose connection and loosen connector [28].

CAUTION: In order to prevent the contamination of the carburettor and the fuel hoses, the two open hoses must be protected by means of clean plastic bags.

6. Disconnect the blue ground cable [24] and the red starter cable [25]. To achieve this, first the lock plates [43] at the front plug end must be removed (see Fig.2.3-10).

Note: according to TN 13 both starter cables can be united in a common self-locking plug. The lock plates are no longer required.

7. Remove both nuts at the front engine support bearing [1]; pay attention to any shims, if fitted.

7. The rear engine mounting bolt [29] must be threaded into the thread of the rear engine support mount by carefully moving the engine unit. After having tightened the bolt secure it with locking wire.

Locking wire (see Fig.2.3-10):

The locking wire can fulfil its proper function only if the wire meets the screw head at the shallowest possible angle in order to prevent the screw from undoing itself (see direction of arrow in Fig.2.3-10). In the illustrated case, a locking wire connected to hole 1 or 2 would be ineffective!

Always use fresh locking wire.

8. Connect bowden cables and plug connectors. Do not forget to secure the starter cable with the lock plate.

Note: according to TN 13 both starter cables can be united in a common self-locking plug. The lock plates are no longer required.

9. Check fuel lines for contamination. After having connected them, test them for leaks and secure with wire.
10. Re-assemble engine bay doors and safety them.
11. Refit the elastic tensioning cords for the doors.
12. Carry out a thorough inspection of the engine unit and a full engine ground run prior to the next flight.

WARNING: In order to re-establish the correct C.G. position after having refitted the power-plant, the engine batteries must be reinstalled in the battery compartment beneath the control stick (see also Section 2.3.6) !

2.5 Landing gear

2.5.1 Main Wheel

The sprung main wheel consists of a Cleveland rim (P/N 40 78B) with a Goodyear tire 5.00-5 6pr TT and inner tube 5.00-5 TR67A. The wheel is equipped with a hydraulic brake:-

- Cleveland wheel brake cylinder 30-9
and Master Cylinder 10-20.

The landing gear trailing arm is damped and sprung by a system of four polyurethane elements:

- Fibroflex springs 90 Shore A,
P/N 246.5.032.063 of Messrs. FIBRO.

2.5.2 Tail Wheel or Steerable Tail Wheel

As standard the aircraft comes with one of the following tail wheels:

Tail wheel "Moritz" 210 x 65 (Tost)

Tail wheel 210 x 65 (Streifeneder)

Tire with inner tube 210 x 65

NOTE: By replacing the steerable tail wheel, the different masses of the two possible versions must be noted. The influence on the in flight C.G. must be considered by calculation or weighing.

As an optional extra the tail wheel can be replaced by a steerable tail wheel. An installation description is given in Flight Manual Section 7.13.

The mass is the same as for the standard tail wheel. So that interchanging the tail wheel and steerable tail wheel will not change the C.G.

NOTE: If any modification to the steerable tail wheel changes its mass, the influence on the in flight C.G. must be considered by

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Detail numbers [x] relating to Figures:

No.	Detail	In Figure	
[1]	Front engine support bearing	2.3-2	
[2]	Rear engine support bearing	2.3-2	
[3]	Spindle	2.3-1	
[4]	Toggle crank	2.3-1	
[5]	Propeller assembly, entire	2.3-1	
[6]	Gas spring	2.3-2	
[7]	Starter	2.3-1	
[8]	Exhaust silencer	2.3-2	
[9]	Oil metering pump	2.3-3	
[10]	Engine oil tank	2.3-3	
[11]	Oil level photo-electric diode	2.3-3	
[12]	Primer valve	2.3-5	
[13]	Carburettor	2.3-2	
[14]	Radiator	2.3-2	2.3-8
[15]	Expansion tank	2.3-2	2.3-8
[16]	Radial fan	2.3-2	
[17]	Generator	2.3-3	
[18]	Internal cooling air duct to exhaust pipe	2.3-2	
[19]	Venturi at exhaust silencer	2.3-2	
[20]	Air intake filter	2.3-2	
[21]	Ram pipe	2.3-2	
[22]	Trailing edge propeller shaft	2.3-2	
[23]	25-pin connector block	2.3-3	
[24]	blue ground cable Starter	2.3-3	
[25]	red starter cable	2.3-1	
NOTE: according to TN 13 both starter cables can be united in a common self-locking plug. The lock washer is no longer required.			
[26]	Propeller stop block	2.3-1	
[27]	Throttle linkage	2.3-5	
[28]	Fuel line connector	2.3-3	
[29]	Rear engine mounting bolt	2.3-4	
[30]	Tractor strut	2.3-2	
[31]	Fan channel	2.3-3	
[32]	Propeller head fairing	2.3-7	

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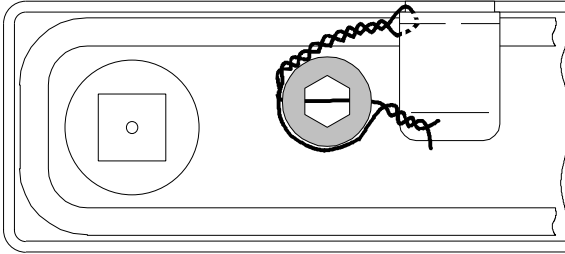
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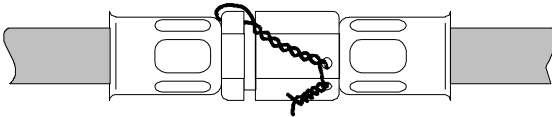
2.61

Fig. 2.3 – 10 Locking Wire and Lock plates

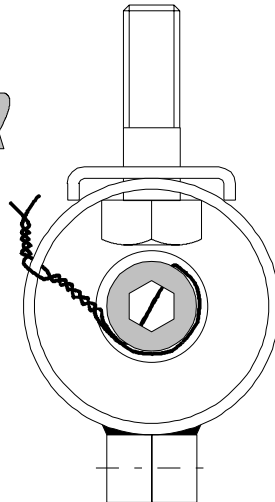
rear mounting screw at oil tank:



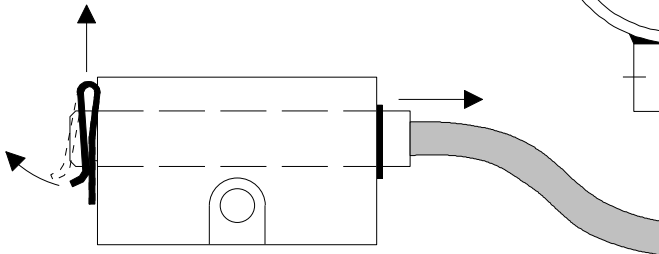
Fuel hose line disconnent piont:



front engine mounting bearing:



Lock plates at both starter cables:



NOTE: according to TN 13 both starter cables can be united in a common self-locking plug. The lock plates are no longer required.

Propeller

According to the Technical Note no. 2 for AS-propellers the propeller type AS2F1 is subject to a service life limitation.

Fuel Lines

According TN 13 the ASH 26 E can be fitted with **PUR**-fuel-lines without limited service life (series standard for new built aircrafts or for retrofiting). Exception: the fuel line connection of the two halves of the fuel tank in the fuselage. The service life of these fuel lines is now "**on condition**".

The previously used fuel lines from **elastomers** have a limited service life. External influences compromises the properties of the fuel lines, that after the fixed life time a operational safety can no longer be assumed. This fuel lines have a **maximum service life of five years**. The duration of storage of fuel lines still not installed may not exceed four years from date of vulcanisation.

PUR-fuel-lines can be recognised by the slotted fabric enclosure which allows the inspection of these transparent hoses or in the engine compartment by the red fire protection coating.

Fuel lines from **elastomers** (rubber) can be recognised by the metal braiding.

Flexible Wing Fuel Tanks

The flexible fuel tanks are subject to a service life limitation. The service life is specified in the currently valid edition of the "Installation, Test & Inspection Instructions for flexible fuel tanks HFK T-LF.

CFRP Exhaust Fairing

Because of the extreme heat influence the CFRP exhaust fair-ing is subject to a service life limitation of 150 operating hours. Upon this time limit the fairing must be replaced by a fairing version with further improved heat resistance. This version is available from Schleicher as of November 1999.

- Disassemble the exhaust silencer and then remove its CFRP fairing so that the exhaust silencer can be visually inspected for damages. Check the condition of the heat damming material in the CFRP fairing; if necessary replace.
- Check the elastic rubber coupling between crank shaft and lower drive pulley for cracks and replace where necessary.

After one year:

- Inspect the engine in accordance with the engine manual.
- Check coolant level and its anti-freeze contents.
- Remove residuals caused by oil, exhaust gases and fuel from power-plant and engine compartment wherever access is possible with the power-plant installed.

After three years:

- Inspection and maintenance works as prescribed in the engine manual.

After five years:

- Replace all rubber fuel hose lines.

Note: According TN 13 the ASH 26 E can be fitted with **PUR**-fuel-lines without limited service life, Section 4.2!

b.) Once-Only Maintenance Tasks

After 1 hour and every time the propeller has been reinstalled respectively after 1 hour:

- Check and re-tighten the six mounting bolts of the propeller (observe the prescribed torque settings given in Section 5.3!).-

ASH 26 E

POWER-PLANT MAINTENANCE INTERVALS

Once-only Maintenance after 1 hour:	
Retighten M8 bolts at prop.flange	<input type="radio"/>

	Engine Hours Period						Years Period				
	0 - 150	<input type="radio"/>		450 - 600	<input type="radio"/>		1 - 5	<input type="radio"/>			
	150 - 300	<input type="radio"/>		600 - 750	<input type="radio"/>		5 - 10	<input type="radio"/>			
	300 - 450	<input type="radio"/>		750 - 900	<input type="radio"/>		10 - 15	<input type="radio"/>			
	Hour Intervals						Year Intervals				
	25	50	75	100	125	150	1	2	3	4	5
Coolant level check	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Retighten propeller bolts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Check elastic tensioning cords of engine compmt.door	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Check guide pulleys	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Clean power-plant (while installed) & engine compart.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Replace fuel filter	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Check fuel hose lines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Disassemble and clean drainer valve	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Check electric wiring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Inspect throttle control cables & prop. brake	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Check & adjust idling speed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Check firm seating of engine mounting bolts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Check locking wire for the rear engine mounting bolt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Check gas strut/extending spindle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Inspect rubber suspension buffers of engine mounting for cracks or other changes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Check engine compartment door hinges for firm seat or cracks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Check propeller stop block for function. If required, replace.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Check & retighten 4 lateral set screws at the propeller head	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Check secure seat of the lock nuts for the 3 tighteners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Check propeller shaft for radial play in the bearing seatings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Oil sliding fit of front prop.bearing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>					
Inspect engine as per engine manual Section 5 Maintenance Schedule		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>					
Check timing belt for wear		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>					
Check belt pulleys for wear		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>					
Check exhaust noise emission during engine ground run		<input type="radio"/>		<input type="radio"/>		<input type="radio"/>					
Inspect engine as per engine manual				<input type="radio"/>							
Inspect belt pulley bearings for play in the ball bearings				<input type="radio"/>							
Inspect engine as per engine manual						<input type="radio"/>					
Disassemble and check exhaust silencer and its CFRP fairing						<input type="radio"/>					
Inspect rubber coupling between crank shaft and lower drive pulley for cracks						<input type="radio"/>					
Inspect engine as per engine manual							<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Check coolant level and its anti-freeze contents							<input type="radio"/>				
Clean power-plant (while installed) & engine compartment							<input type="radio"/>				
Inspect engine as per engine manual									<input type="radio"/>		
Replace all rubber fuel hose lines (not applicable if PUR fuel lines installed, see section 4.2)											<input type="radio"/>

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