M+D FLUGZEUGBAU				Doc. No.:	MD10-WOI-77-001
Type:	JS-MD Single	Subject:	Service Bulletin	ATA:	77-20
Model/s:	JS-MD 3	Title:	Work Instructions for EGT Sensor Location Correction	Rev.:	00

Title:	Work Instructions for EGT Sensor Location Correction
	Service Bulletin

1 Document Management

1.1 List of Revisions

Rev.	Date	Description	Author	Affected Sections / Pages
00	07.07.2020	Initial Issue	Philip Goralski	all

Unless shown impracticable due to the scope of the revision, the changes due to the latest revision are marked by a vertical line at the right page margin.

1.2 List of Validity

Rev.	Valid for / Restrictions	Type Def. Reference
00	JS-MD Single, Model JS-MD 3	EASA.A.616

1.3 Document Acceptance

The **CVE** checks the form and content of the document according to section 1.1 and 1.2 and correctness and completeness of the content. The **HOA** approves the document.

	Name	Function	Signature
Prepared	Philip Goralski	DE	
Checked	Sören Pedersen	CVE	
Approved	Sören Pedersen	НОА	

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3 Summary

This document contains all necessary steps to complete the content of the Service Bulletin SB-MD10-001.

4 Planning Information

4.1 Material

- Loctite 243
- Cable ties

4.2 Special Tools

- Calibrated Torque Wrench capable of 1.3Nm
- Windows computer with Turbine Tool
- Connector Cable

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5 Work Instructions

The engine assembly is illustrated in Figure 5-1: Engine Assembly.

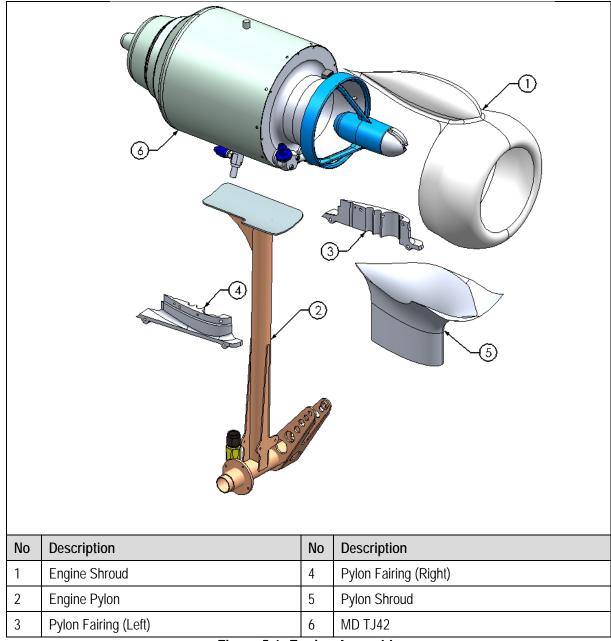


Figure 5-1: Engine Assembly

- 1. Turn the system on by switching the main switch on the JDU to "On"
- 2. Extend the Engine
- 3. Turn off the system and disconnect the battery

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CAUTION: A small voltage is still being drawn by the ECU even when the JDU is turned off. If the battery is not disconnected, and the exposed wires touch, a short circuit might result and damage the ECU.

5.1 Removing the pylon and engine shroud

- 1. Remove the Engine Pylon Shroud Assembly by removing the 4 M3AB5 screws and two expanding rivets.
- 2. Remove the shroud by sliding it forward over the pylon.
- 3. Loosen the screws at the engine, clamping the Engine Shroud (see Position 2 in Figure 5-2), and remove the shroud by sliding it forward.

5.2 Disassembly Nozzle

- Loosen the clamping nut of the EGT Sensors at the Nozzle assembly and pull out the Sensor tip.
- 2. Remove all 12 pcs. M3x10 cap screws DIN 912 (04-682) and 12 pcs. washers at Position 1 in Figure 5-2 and remove the nozzle.

CAUTION: Only loosen the screw which hold the nozzle and not the screws (4 pcs.), which are in direct contact with the housing

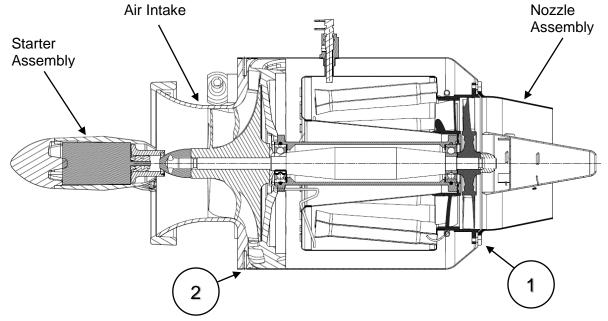


Figure 5-2: Jet Engine Assembly; Front cover not depicted

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5.3 Reorientation and mounting of the nozzles

- 1. The nozzle is turned by 90° to the left, when looking from the back to the front (The EGT Sensor Retainer is pointing towards the sky respectively 12 o'clock position).
- 2. Screw the nozzle with 12 pcs. M3x10 cap screws DIN 912 (04-682) and 12 pcs. washers crosswise with the 1.3 Nm torque. Use Loctite 243 to secure the screws.

5.4 Relocating the EGT sensor

- 1. Loosen the EGT Sensor support bracket at Position 2 at Figure 5-2.
- 2. If needed, remove the Cables of the EGT sensor from the Sensorboard.
- 3. Plug the sensor into the EGT sensor retainer at the new position and tighten the nut.
- 4. By bending, the sensor wire will be routed along the housing, where later the pylon of the engine shroud is located, see Figure 5-3.



Figure 5-3: Sensor wire routing

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- 5. Fix the EGT sensor cable with the cable harness using cable ties.
- 6. Connect EGT Sensor wire to the Sensorboard acc. to Figure 5-4, if disconnected before.

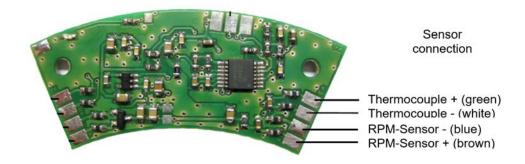


Figure 5-4: Sensor connection on sensor board

5.5 Attaching the pylon and engine shroud

- 1. Attach the engine shroud to the engine in the original position. Assure, that the EGT Sensor wire is located under the pylon.
- 2. Attach the pylon shroud to its original position and connect both shrouds with the two expanding rivets.
- 3. Screw in all screws of the pylon shroud without tightening.
- 4. Tighten all screw of the engine shroud with 1.3Nm of torque (see Position 2 in Figure 5-2). Use Loctite 243.
- 5. Tighten the pylon shroud screws.

5.6 ECU Configuration Update

Follow the instructions according to Chapter 8 of the JS-MD 3 Jet Sustainer AMM Supplement, see Ref /3/, to install the turbine tool and update the ECU configuration.

5.7 Engine Test Run

Perform a Ground Start of the Engine according to Ref /2/.

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5.8 Logbook Entry

Record the execution of this Service Bulletin in the aircraft logbook and the engine logbook. Use Service Letter for Engine logbook entry instruction, see Ref /4/, as guidance for the engine logbook.

6 References

- /1/ SB-MD10-001
- /2/ MD10-AFM-00-002 JS-MD 4 Jet Sustainer Flight Manual Supplement
- /3/ MD10-AMM-00-002 JS-MD 3 Jet Sustainer AMM Supplement
- /4/ SL-MD02-004 Engine logbook entry instruction

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