## Working instruction No. 1 for TN 1000/31 Modification of the electrical system

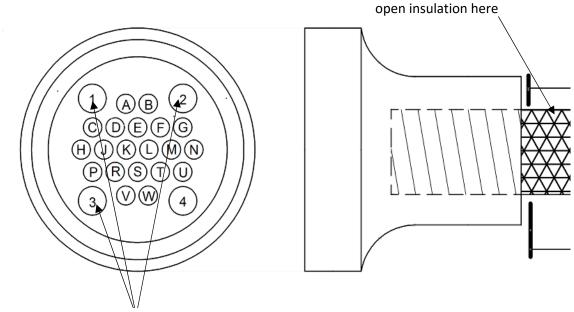
- 1. Remove the engine doors according to MM section 4.10.1.
- 2. Remove baggage compartment floors and rear wall.
- 3. Extend the powerplant.
- 4. Unscrew the pipe clamp which holds the engine wiring loom from the firewall.
- 5. Unlock and pull off the main-plug (located at the firewall).
- 6. Pull of positive and earth wire from the ignition box.
- 7. Unlock and pull off the plug from the sensor of the emergency system.
- 8. Unscrew the CFRP clamp (10M218) from the drive mount.
- 9. In case TN 1000/30 instruction 3 hasn't been performed so far, install now the required protection against chafing.
- 10. Unlock and pull off the grey plug for the generator wiring.
- 11. Now pull out the engine wiring loom rearwards so far that the main-plug is located behind the starter motor.
- 12. Open the housing of the main-plug
- 13. Identify pins 1, 2 and 3 according to sketch 1. Cut off the wires from these pins directly behind the strain relief at the plug housing.
- 14. Use the new generator-wiring loom 10E205, connect the grey plug for the generator wiring.
- 15. Insert the generator wiring loom into the insulation of the engine wiring loom.
- 16. Diverge the generator wiring loom 10 cm in front of the main-plug out of the insulation.
- 17. Re-assemble the main-plug.
- 18. Re-position the wiring loom and re-install it with the CFRP clamp at the drive mount. In case the clamp can't be closed enlarge the holes in the clamp to long-holes as far as necessary.
- 19. Re-connect the wires to the ignition box.
- 20. Re-connect the plug of the sensor of the emergency system.
- 21. Make the cut out and drill the holes for the new generator-plug in the fire-wall according to sketch 2.
- 22. Insert the housing 3W3 55F5602 of the new generator-socket from the front (through baggage compartment) and screw it together with the 2 locks 55F5198 according to sketch 3. Use bolts M3x12 DIN84 and washers 3.3 DIN125 underneath the bolt-heads, secure with Loctite 221.
- 23. Remove the main-socket from the fire-wall. This has to be accomplished from the front (through baggage compartment).
- 24. Open the main-socket and open the insulation at the plug and identify pins 1, 2 and 3 see sketch 1. Cut off the wires directly at these pins.
- 25. Dismantle these 3 wires and solder the female pins 55F5650 to these wires.
- 26. Plug the female pins into the housing 3W3 55F5602 of the new socket: Wire 52 in A3, 53 in A2, 54 in A1. The pins must positively engage.
- 27. Re-assemble the main socket and re-install it to the fire-wall.
- 28. Connect and lock main-plug and generator-plug.
- 29. Re-assemble the engine wiring loom with the pipe clamp to the fire-wall. Check that the wiring loom is positioned so that the powerplant can be extended and retracted without introducing tension on the wiring loom. Use new cable ties at the same positions as prior to their removal.

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- 30. Re-install baggage compartment floors and rear wall.
- 31. Re-install engine doors.
- 32. Execute an engine test run (see MM section 3.6.1 items 28-31). Watch if any generator-failure messages appear.

Material-kit for TN1000/31 instruction 1 part No. 21000134 consisting of:

Part No.	designation	amount
41075205	generator wiring loom 10E205	1
60510760	locks for socket 55F5198	1
60510766	female pins 55F5650	3
60510763	housing for female pins 3W3 55F5602	1
50031240	bolts with slotted heads M3x12 DIN84	2
52030001	washers 3,3 DIN125	2
60510953	cable ties186x4,8	10
10009041	drawing 10E202 issue h	1
30000308	Loctite 221 10ml	1



cut off the wires from these 3 pins

Sketch 1

