### Working instruction No. 1 for TN1000/22 Installation of a Pierburg coolant pump

#### A Installation of the coolant pump at the powerplant

- 1. Remove the old coolant pump. To accomplish this remove Ty-raps (see Photo 2 + 3). Remove the heat shrink tubing from the connector plugs (see Photo 3) and disconnect the plugs. The existing adapter ring (10M180) won't be needed for the new pump.
- 2. Install the new pump with adapter ring 10M280 and plug with wiring 10E213 (see Photo 1). Connect the blade terminals and cover with heat shrink tubing. Install new Ty-raps (see Photos 2 + 3).

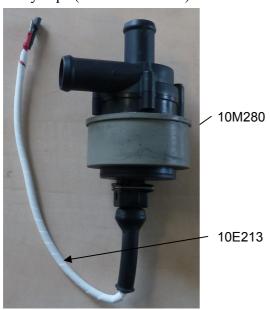




Photo 1 Photo 2



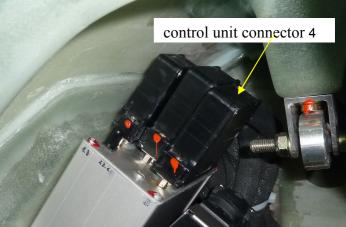


Photo 3 Photo 4

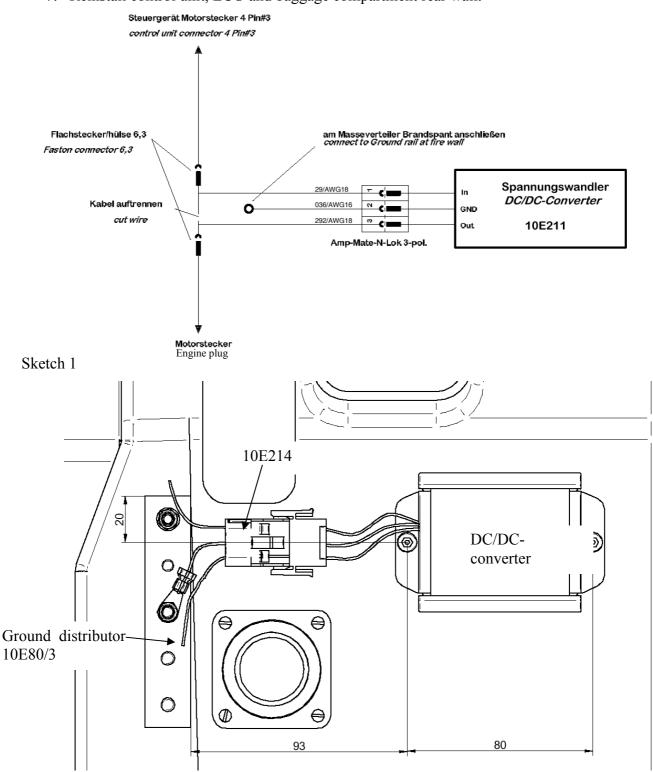
#### B Installation of the DC/DC-converter

- 1. Remove the baggage compartment rear wall.
- 2. Switch off the main switch.
- 3. Disconnect the control unit connector 4 (see wiring plan 10E202 and Photo 4) from the control unit. To accomplish this you have to remove the ECU and the control unit from the fuselage wall. Open the cover of the wiring harness. Cut wire 29 (at Pin 3) and crimp blade terminal and blade receptacle to the ends according to sketch 1. Connect blade terminal and blade receptacle to the terminals of coupling 10E214. Cover the terminals with heat shrink tubing
- 4. Screw wire 036 (at the coupling 10E214) to the ground distributor 10E80/3 at the upper rear main bulkhead (see sketch 2), use a self-locking nut M5.

Author: Wilhelm Dirks Issue: 17. October 2012

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- 5. Install the DC/DC-Converter. To accomplish this drill 2 holes dia. 5.5 mm into the rear main bulkhead (see sketch 2). Fix the converter with bolts M5x12 DIN912-8.8 zn and washers 5,3 DIN9021 St zn and self-locking nuts M5 DIN 985-8.8 zn (from the rear side).
- 6. Connect the plug of the converter to the coupling 10E214.
- 7. Reinstall control unit, ECU and baggage compartment rear wall.



Sketch 2

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### C Function check

Test run the engine and watch the coolant temperature. The temperature should stabilize below  $80^{\circ}\text{C}$ .

Retrofit kit part No. 40863149 consisting of:

Amount	Part No	Designation
1	60001210	Coolant pump Pierburg modified
1	41072800	10M280 adapter ring
1	41072130	10E213Plug with wiring for coolant pump
1	60510953	Ty-rap 186x4,8
1	60510952	Ty-rap 140x3,6
1	41075211	10E211 DC/DC-Converter with plug
1	41072112	10E214 Coupling with wiring for DC/DC-Converter
1	60510616	Blade terminal 6,3-2,5
1	60510618	Blade receptacle 6,3-2,5
2	50051202	Bolt M5x12 DIN912-8.8 zn
2	52050020	Washer 5,3 DIN9021 St zn
3	51050020	Self-locking nut M5 DIN985-8.8 zn
	_	Miscellaneous pieces of heat shrink tubing

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