Assembly instructions

for the cooler housing of the HybridPack-Drive Module according to application note AN-HPD-ASSEMBLY (Infineon)

1. **Please check the content** for completeness and damage:

Content:

- One cooler housing with mounted rubber gasket
- One foil bag with eight ejot screws with self-tapping thread
- One foil bag with four metric screws with four washers
- This description

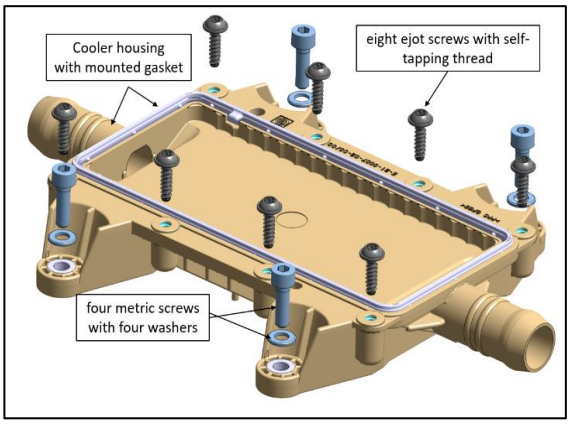
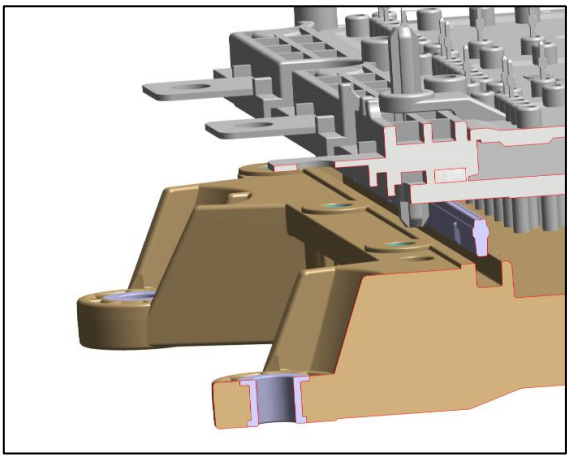


Figure 1 content

2. Check the rubber gasket

- For reliable tightness, there must be no damage or contamination at the sealing points. Please contact us if you have any questions or if you find any damage. Contact details at the end of the document. *(Figure2)*
- The seal is supplied assembled. Please ensure that the gasket is correctly positioned when installing the gasket. The gasket must be installed as shown in the picture. *(Figure 3 + 4)*
- Please check for the correct position of the tab in the recess on the housing. *(Figure 4* green marked*)*



- Please do not use mineral oil-based auxiliary materials for the seal. The seal is not resistant to mineral oil-based oils and greases.

Figure 2 - Assembly information

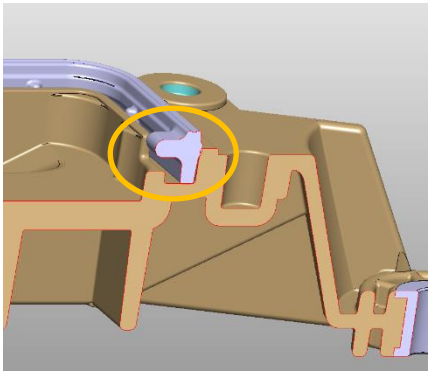


Figure 2 - Assembly the gasket

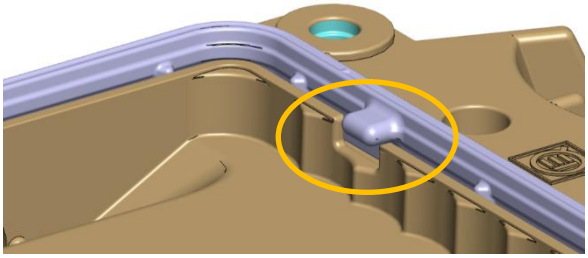


Figure 4 - Right position of the tap

3. Screwing the module onto the cooling housing

- Please mount the HP-Drive modul with the centering pins in the holes of the cooler housing *(Figure 5)*
- The screws must be tightened in two steps and according to the sequence shown below using a torque wrench:

  1. Tightening **with 1 Nm** all screws in the order shown.

  2. Tightening the screws with **the torque of 4 Nm**.

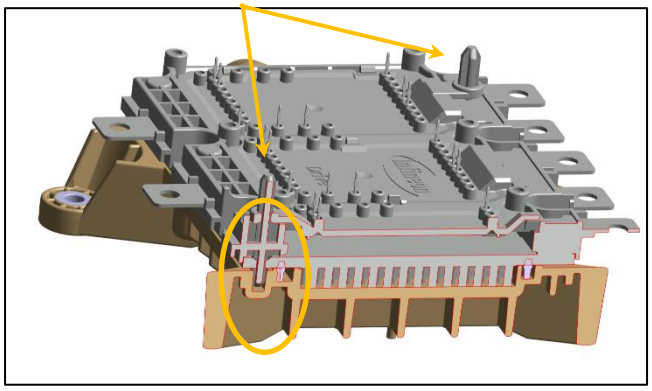


Figure 5 - Center pin

- Please note:

  Tightening the screws in two steps is very important in order not to damage the module due to the compression of the gasket

  The above screw connection specifications refer to the first installation. Repeated bolting is not recommended. If the components are screwed on several times, separate screw torques must be determined.

No.	Description	Min.	Typ.	Max.	Remarks
1	First mounting torque		1 Nm		for manual assembly
2	Mounting torque	3.1 Nm	3.3 Nm	3.5 Nm	
3	Max. mounting speed	400 rpm	450 rpm	500 rpm	
4	Length of screw in cooler	10 mm		14 mm	

Recommended is the screw: Ejot Evo PT WN7451 40x14/12 ISO4042/Zn5/An/T0

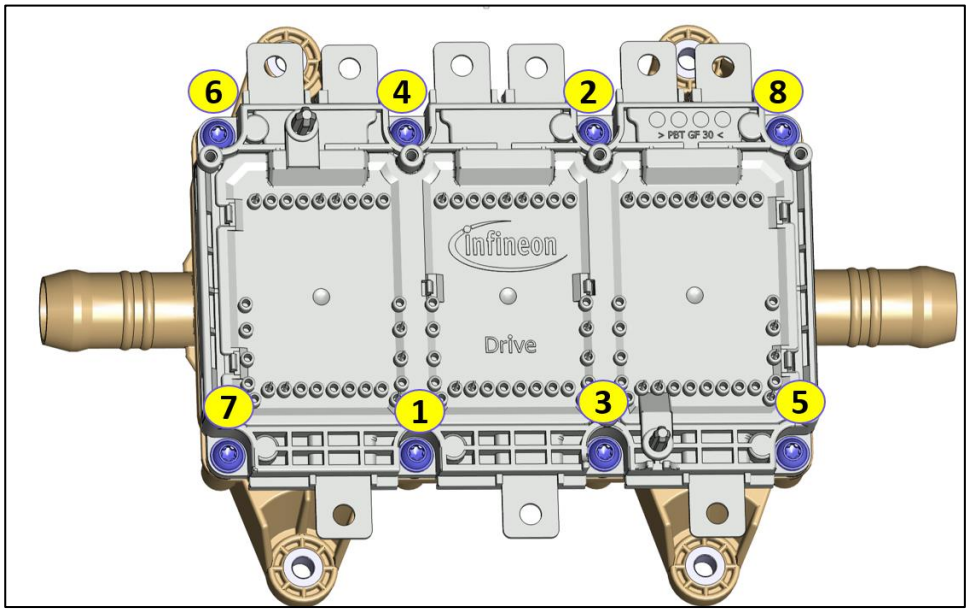


Figure 6: Sequence of tightening the screws in two steps (all screws with 1 Nm - then all screws with 4 Nm).

The mounting of the assembly on a plate

- The cooler assembly must be attached to the module on a flat plate (flatness deviation max. 0.15 mm).
- A metric screw incl. washer of size M5 should be used to fasten the assembly to a test table or carrier plate. *(Figure 6)*
- The screw connection should be made with a torque wrench.
- We recommend for test a suitable screw lock against unintentional loosening of the connection (e.g. Loctite screw lock).

Figure 3 - screw with washer

No.	Description	Min.	Typical	Max.
1	Thread length	17 mm	20 mm	25 mm
2	Thread size		M5	
2	Mounting torque	3.3 Nm	3.5 Nm	3.7 Nm
4	Effective length (2 x d)	11 mm	14 mm	

5. General notes

- Please follow Infineon's instructions in the application note AN-HPD-ASSEMBLY when using the system.
- The HP-Drive modules are designed for a maximum internal pressure of 2 bar. The module is damaged according to AN-HPD assembly when higher pressures are used.
- The seal of the system has a higher load capacity and can withstand pressure shocks of up to 4 bar in short time. However, at a higher pressure of 2 bar, the HP-Drive module can be damaged.

If you have any questions or problems please do not hesitate to contact us. We are happy to help you.

Contact address for further information:

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