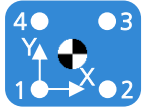


INSTALLATION ADVICES FOR MARINE MOUNTS

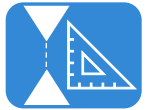


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Importance of position

Page 3



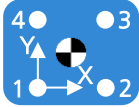
Importance of alignment

Page 4



Installation

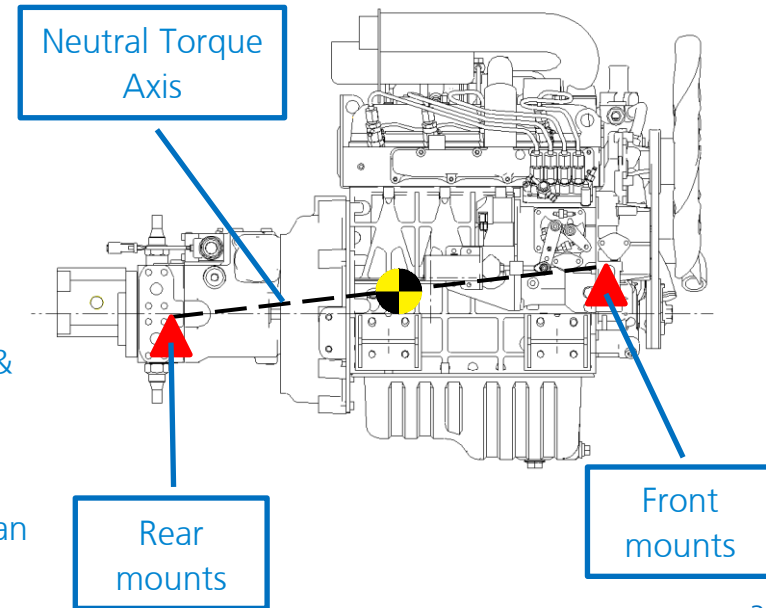
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Importance of position

❑ The correct position of the mounts can vary the vibration modes and reduce the natural frequencies of the suspended element, increasing the isolation ratio:

- ❑ All the mounts should withstand a similar static load. So, in longitudinal direction, the mounts should be installed symmetrically to the total COG.
- ❑ In order to achieve the lowest natural frequencies possible and better dynamic load distribution, in transverse direction, the mounts should be installed symmetrically to the total COG.
- ❑ In order to minimize the dynamic forces transmitted by the mounts, it is recommended to install the mounts on the imaginary Neutral Torque Axis NTA, which connects the front & rear mounts with the total center of gravity. The imaginary rotation axis of the motion is referred to as the NTA.
- ❑ If the mounts are soft (in order to minimize the transmitted forces) and they are installed on the NTA, the dynamic forces can be effectively isolated.





Importance of alignment



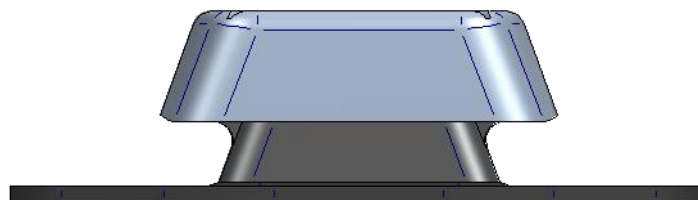
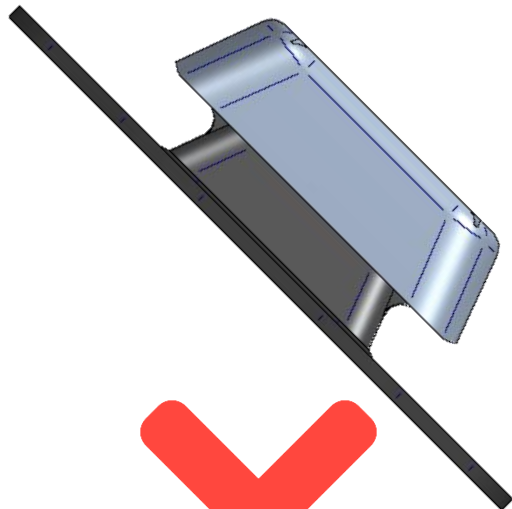
NOISE AND
VIBRATION
SOLUTIONS

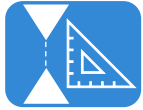
- ❑ The Marine Mounts are conceived to be installed in vertical position. If they are installed angled, the weight of the suspended equipment would create static radial loads, which might make the internal bushing to reach the end of stroke and dramatically increase its stiffness and therefore reduce the vibration isolation.
- ❑ Due to this, AMC recommends to install Hydraulic Mounts in vertical position, so the weight of the suspended system acts in the axial direction of the mounts.



Importance of alignment

- It is important to install the Marine Mounts in vertical position:





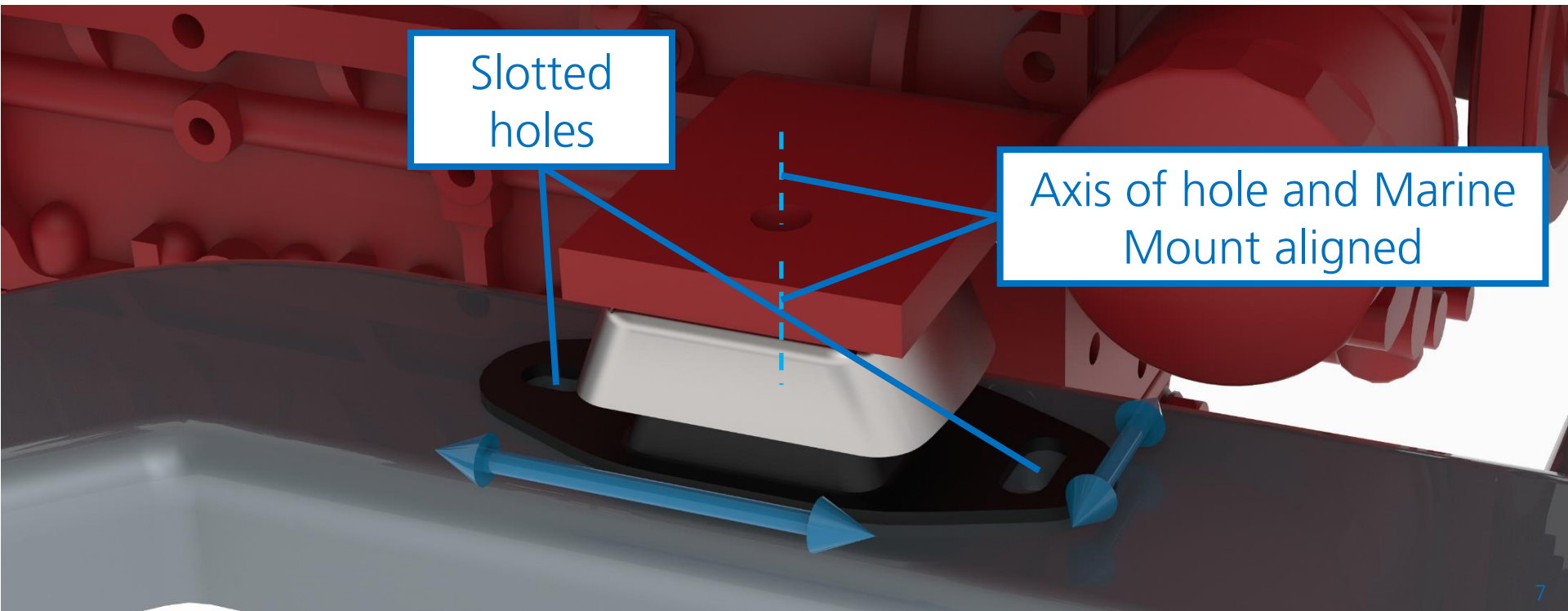
Importance of alignment

- ❑ Place the suspended equipment on the mounts, trying to keep the alignment between the anti vibration mount and the fixation brackets.
- ❑ Fastening the mounts misaligned can greatly increase the stiffness of the mount and reduce vibration isolation. It can also produce a hammering effect if the internal bushing reaches the end of stroke.
- ❑ Moreover, the misalignment would also create additional stress on the elastomer, potentially reducing its durability.
- ❑ The slotted holes help to accommodate the position of the Marine Mounts to keep the alignment.



Importance of alignment

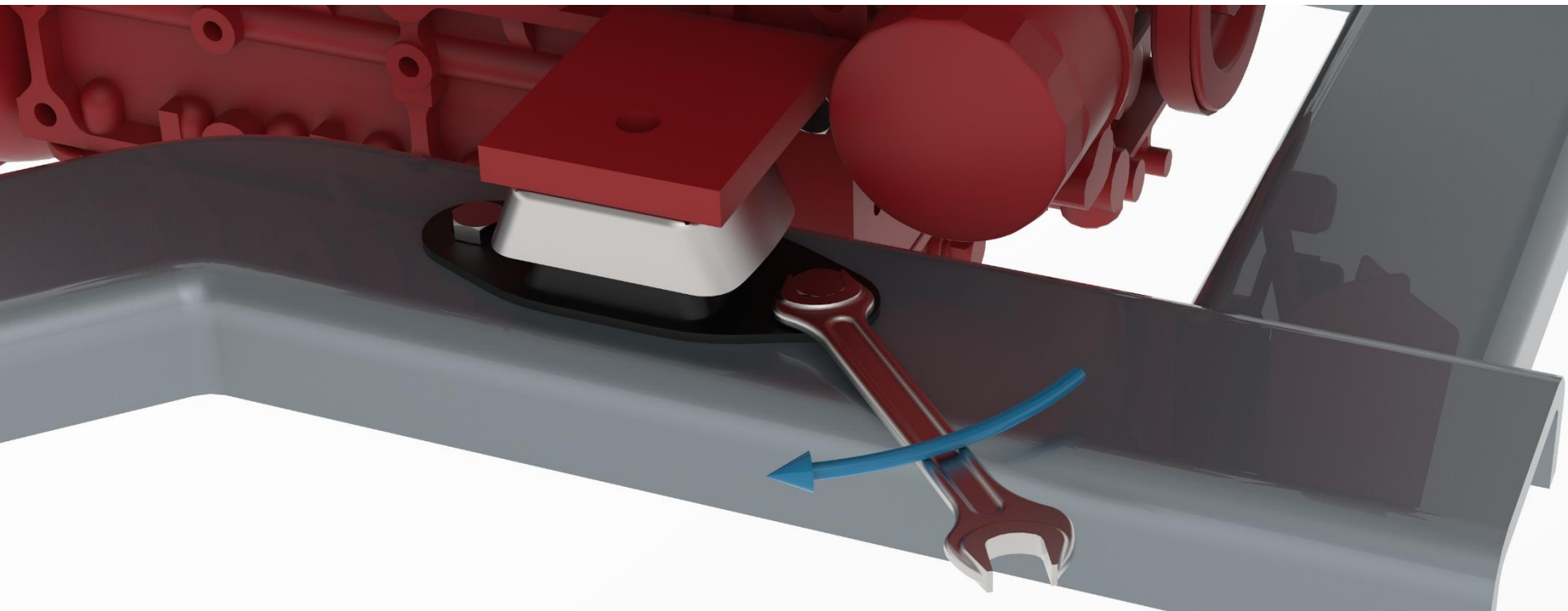
- ❑ The slotted holes help to accommodate the position of the Marine Mounts to keep the alignment:





Installation

- Once aligned, the baseplate of the Marine Mounts can be fastened:





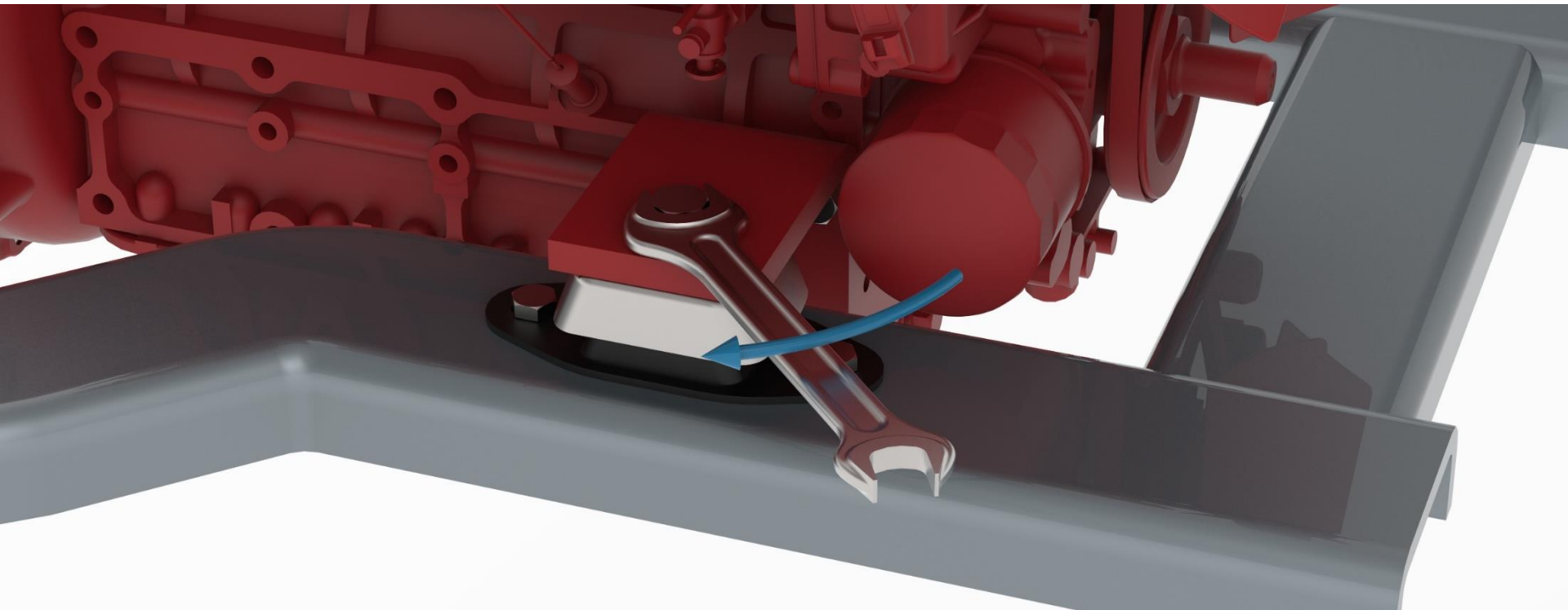
Installation

- ❑ During the fastening of the top screw, it is important to not to twist the rubber. Twisting the rubber unnecessarily increases the stress on the rubber and on the bonding surfaces, which might lead to premature appearance of cracks or premature failure of the adhesion between the rubber and the baseplate.
- ❑ To avoid the twisting of the rubber, there are several methods:
 - ❑ 1) Sometimes the friction between surfaces is enough to avoid twisting the rubber.
 - ❑ 2) Tighten the top screw using a pair of bolt-nut. While one wrench holds the bolt, the other can tighten the nut.



Installation

- 1) Sometimes, the friction between surfaces is enough to avoid twisting the rubber:



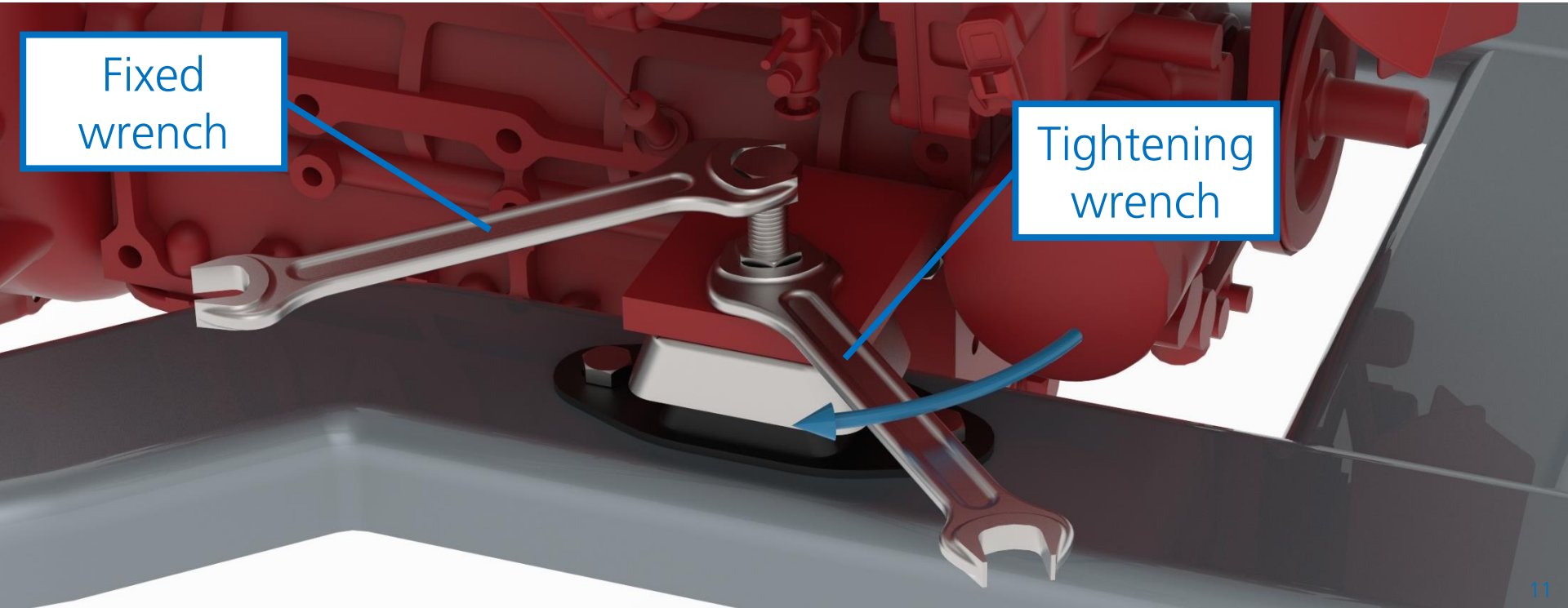


Installation

- 2) Tighten the top screw using a pair of bolt-nut. While one wrench holds the bolt, the other can tighten the nut:

Fixed
wrench

Tightening
wrench





Using advanced technology, AMC MECANOCAUCHO focuses on the reduction of noise and vibration. More than 50 years of experience to solve a wide range of applications and environmental challenges in industrial or building acoustics. Specialised on isolation, attenuation and suspension solutions, we have a reputation for high quality, extraordinary performance and long service life. Our commitment to find the correct polymer technology optimize comfort, health and safety while creating a maximum business value through improved longevity, productivity and cost effectiveness.

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