GEN 3 LITE
MOTOR MOUNT
INSTRUCTION MANUAL

RADIUM

TOOLS REQUIRED

- 3mm Allen Key
- 4mm Allen Key
- **Solvent** Methylated Spirits or Acetone
- **Loctite** 243 or 290 recommended

PROCEEDURE

STEP 1 OF 6
Assembling the Motor Mounts

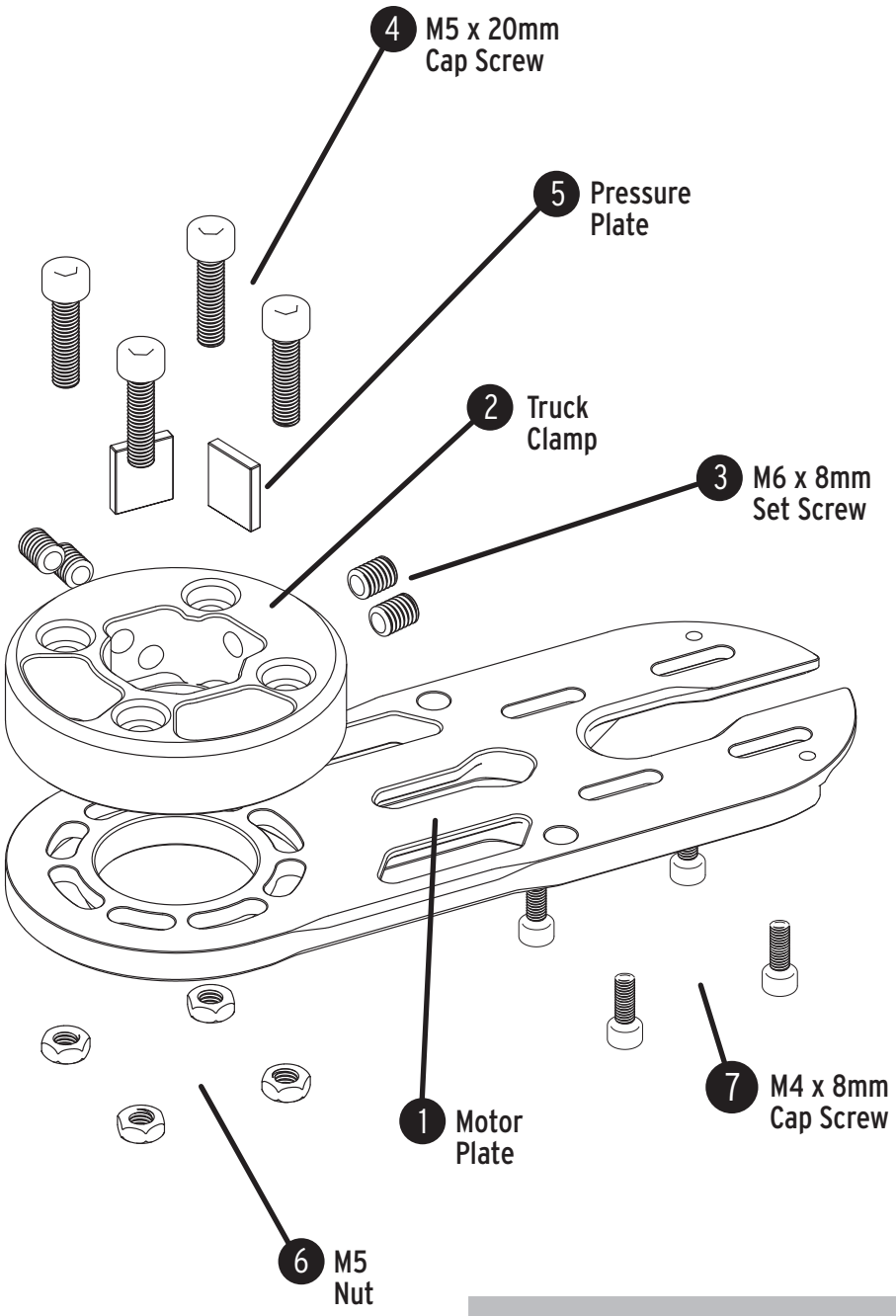
- Clean the M6 set screws to remove the protective oil film (Loctite does not like oil).
- Thread all the set screws into the clamps (but not all the way).
- Using the provided M5 cap screws and nuts, loosely fit the motor plates to the clamps with the nuts held captive by the recess in the motor plate. You can test fit them on the hangar to ensure the correct slots are chosen for desired mounting angle.

STEP 2 OF 6
Installing the Motor Mounts onto the truck

- Slide the mount onto the hangar, and then slide your complete wheel (with its pulley mounted) all the way onto the axle.
- Slide the pressure plates into the clamp, and position the mount so that the face of the motor plate is approximately 3mm from the wheel pulley.
- Tighten the 4 set screws, alternating between each side to make sure even pressure is applied. It can help the clamp to seat itself properly if you pull the motor plate up and down during this process, especially for the matrix 2 trucks. Do not use Loctite yet.

STEP 3 OF 6
Setting the motor plate angle

- Loosely fit both motors with the provided M4 x 8 screws (using longer than 8mm screws can damage motors).
- Set both motors to fully inward position on the adjustment slots, and then gently tighten two of the screws for each side.
- To get both motors sitting at the same height, the easiest method we have found is to place the board on a flat surface sitting the right way up with or without wheels, and then prop one motor up to desired height with a random object, and tighten at least 2 screws on the clamp. Then repeat for the other motor using the same object.



IN THE BOX

1. Motor Plate x 2
2. Truck Clamp x 2
3. M6 x 8mm Set Screw x 8
4. M5 x 20mm Cap Screw x 8
5. Pressure Plate x 5
6. M5 Nut x 8
7. M4 x 8mm Cap Screws

STEP 4 OF 6
Installing the motor pulleys

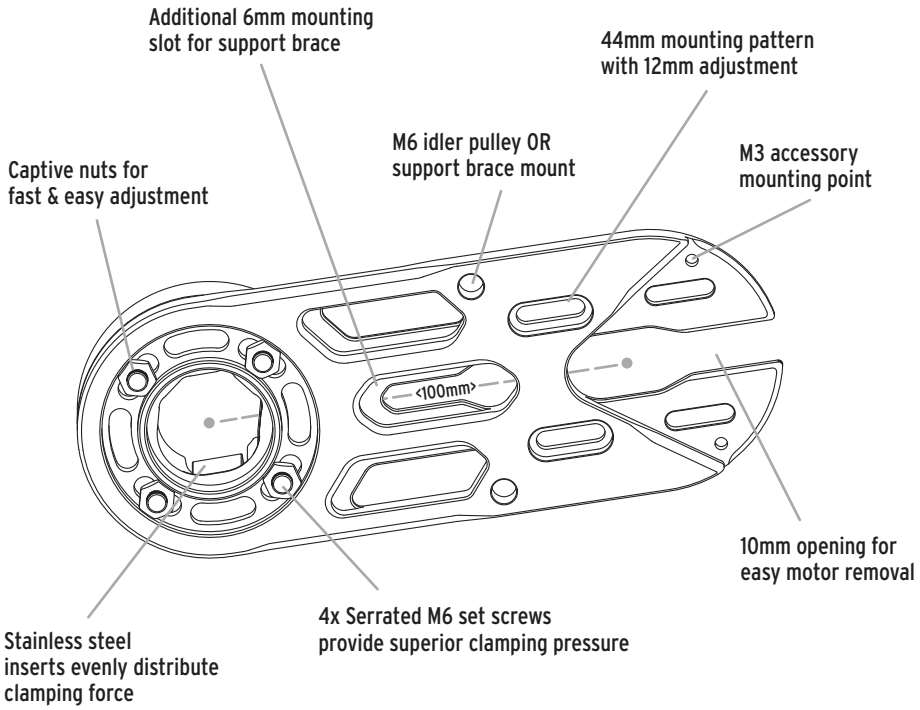
- Loosen motor screws and slide motor pulley on with key to approximately final position.
- Install the belt with the wheel pressed all the way onto the axle.
- Move motor to tension the belt, and tighten 2 diagonally opposing motor screws.
- Spin the wheel so that the belt self aligns, and adjust motor pulley position until the belt tracks down the centre of the wheel pulley for AT wheels, or the centre of the motor pulley or urethane setups.
- Remove the wheel and belt without losing the motor pulley position. You can then tighten one of the set screws on the pulley, and remove the other. It is important to clean any oil from the pulley set screws, and then reinstall with medium strength Loctite such as 243. **DO NOT** use 290 wicking grade for motor pulleys.

STEP 5 OF 6
Installing belts

- Loosen motor adjustment screws and slide motor to furthest inward position.
- Install the belt with the wheel pressed all the way onto the axle.
- Move motor until slightly looser than desired belt tension is reached, then partially tighten two diagonally opposing motor screws (you can use the long end of the allen key and push the belt out of the way to reach the inside screws). Check belt tension and readjust if necessary.
- Remove the wheel and belt, reinstall one motor screw at a time using Loctite 243. Tighten fully using an allen key. Larger tools may damage the screws.
- Reinstall the belt and wheel, tighten the axle nut, and validate belt tension is still as desired (tension may change as you rotate the wheel), as well as confirming the belt still tracks well when you spin the wheel in both directions.

STEP 6 OF 6
Important finishing proceedure

- Ensure all M6 clamp set screws are fully tightened and that the mounts cannot move by pulling on them. At this point we recommend taking the board for a short test ride to check that everything is setup correctly, but most importantly for the motor mount clamps to break in after experiencing some vibrations. Bring allen keys just in case, and frequently check that the mounts haven't moved during the ride. If installed correctly it is unlikely that they will budge.
- Remove one clamp set screw at a time, apply Loctite and fully tighten. Loctite 243 is recommended if you couldn't remove the oil film from the set screws with a solvent. With clean set screws Loctite 290 works extremely well.
- Recheck that all the set screws are tight, then allow 24hrs for the Loctite to cure before riding.



NEXT LEVEL ESK8 INNOVATION

Gen 3 Lite Motor Mounts

After 3 years of making some of the highest quality motor mounts in the industry, we decided it was time to take everything we have learned and all of our customers feedback, to produce our final generation of universal motor mounts.

Our Gen 1 mounts set the scene for the unique look and light weight design of our motor plates, as well as the quad M6 set screw clamping system.

Gen 2 introduced a new innovation - the addition of a stainless steel force spreader plate to prevent the clamp set screws from digging into soft aluminium hangars, causing hangar damage and mounts to loosen, no matter how much loctite was used. This new system proved to be exeptional, with little to no maintenance required on the boards running these mounts, as well as minimal hangar damage even after extreme abuse.

Gen 3 Lite takes our unique and proven clamping system, with the addition of 4 new angle adjustment slots to allow the same motor plates to be used for RKP, TKP and channel trucks at a wide variety of mounting positions. The length of the motor plate is now increased by 12% and the thickness from 6mm to 7mm for maximum rigidity. Also introduced is two new mounting points for idlers (or support braces), allowing for maximum gear reduction and harder braking.