

GENERAL INFORMATION



General information

Installation and repairs to the V-MAXX brake system may only be carried out by qualified specialists. The instructions in the installation manual must be taken into account. All undescribed items must be installed according to vehicle manufacturer's manuals/instructions

When installing new brake components, the following applies:

- When installing new brake discs, the brake pads need to be replaced also.
- Always replace brake discs and brake pads per axle .
- The bedding of the V-MAXX brake system always should be performed according to V-MAXX Autosport bedding instructions.
- Brake performance will be slightly reduced during the first 200 km.

After installation, check the brake function:

- Apply pressure to the brake pedal several times until the pedal feels hard.
- After several brake pedal applications, the brake pedal needs to stay in place with constant pedal pressure/feel .
- Check if the wheels run free (with no pedal pressure applied) .
- Check if all newly installed parts are free from brake fluid leaks.
- Check the brake fluid level and fill if necessary.
- Perform some test brake applications to check the function of the brake system.

Problems/solutions for V-MAXX brake systems

Overheated brakes

Problem: The brake pad surface does not detach from the brake disc and grinds permanently which leads to overheating of the brakes.

Possible causes:

- Brake pad is stuck on the inside of the caliper
- Brake piston is stuck in the caliper
- Driving while applying pressure to the brake pedal while driving down a mountain

Possible consequences:

- Poor braking due to glazing of the brake pad friction surface
- Disturbing noises coming from the brakes
- Possible warping of the brake disc, resulting in brake flapping and brakes rubbing

TIP:

- Note that all of the components are correctly installed and nothing is jammed during installation
- Do NOT use copper grease or ceramic paste during installation of the brakes.
- Avoid unnecessary grinding of the brakes

Overheated brakes during racetrack use

Problem: during racetrack use, the brake overheats.

Possible causes:

- ESP/ESC/DSC is on
- insufficient cooling of the brake disc
- Rotation of the brake discs is wrong (brake discs which are rotating in the wrong direction can lead to a heat rise up to 250 ° C)

Possible consequences:

- poor brake-performance and fading of the brake systems / soft pedal feel
- disturbing sounds
- Possibly warp the brake disc, causing brake flapping and brake rubbing
- Overheating of the complete system

TIP:

- In the case of racetrack use, systems such as ESP/ESC/DSC always need to be turned off as much as possible.
- In some cases, additional cooling to the brake system may be required.
- Install brake discs in the correct rotation direction .

Scoring and groove building on disc friction surface

Problem: Ridges and grooves have formed on the friction surface of the brake disk.

Possible causes:

- Foreign matters between brake disc and brake pad (dirt, stone, road salt, etc.) Corrosion
- inferior brake pad materials
- overloading the brake system

Possible consequences:

- Reduced braking performance
- Damaged brake friction surface
- annoying sounds

TIP:

- make sure that the brake system is free and stays free from foreign bodies such as (dirt, stone, road salt, etc.) .
- Always use new brake pads when replacing new brake discs!
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Corrosion

Problem: The brake surface of the brake disc shows strong rusting.

Possible causes:

- Weathering (road salt, moisture)
- Stuck brake piston in the brake caliper
- Brake piston is not retracted correctly

Possible consequences:

- Vibrations and brake pad rubbing due to deposits on the brake discs.
- Noise building
- Reduced brake performance
- Overheating of the brake discs due to rust spots (rust pimples)

TIP:

- Do not park for long periods.
- check the movability of the moving brake components.
- After a long standstill of the car , carefully clean the brake system by driving and applying the brakes , and make sure that rust spots have been removed.

Asymmetrical wear of the brake pads

Problem: The brake pad is not pressed equally against the friction surface.

Possible causes:

- Brake pad is stuck on the inside of the brake caliper
- The brake calipers is positioned on the wrong side of the vehicle.

Possible consequences:

- Asymmetrical wear of the brake pads
- Reduced braking performance
- Pulsating brake pedal / scratching
- vibration of the steering wheel
- Possible noise
- Excessive brake pad wear

TIP:

- check the movability of the moving brake components.
- Make sure the brake caliper is installed on the correct side of the vehicle.
- check the installation instructions.

Asymmetrical wear of the brake surface sides

Problem: Asymmetrical wear of the brake surface sides. It may come with blue-black heat spots (hotspots) on the friction surface .

Possible causes:

- Brake disc is not flat against the wheel hub
- Brake disc not aligned correctly
- Wheel hub runs obliquely through the caliper due to a damaged wheel hub.

Possible consequences:

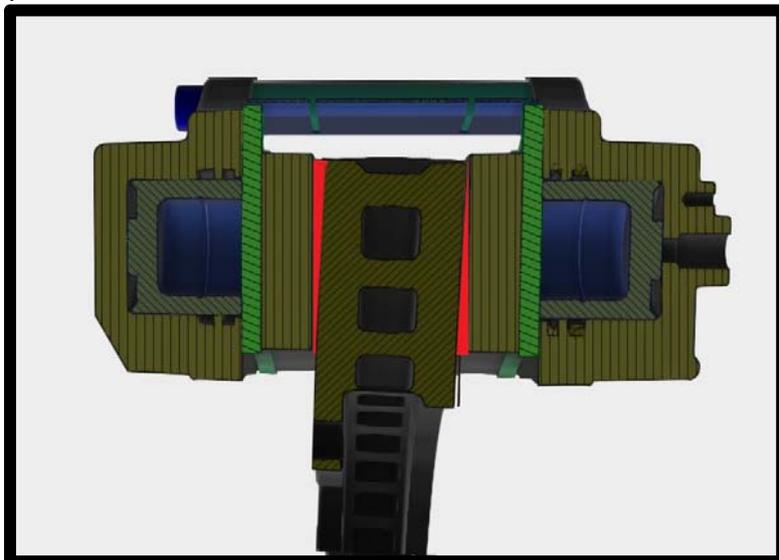
- Vibrating steering wheel
- Reduced braking performance
- Excessive brake pad and brake disc wear
- Pulsating brake pedal / scratching

TIP:

- Brake discs always need to be installed clean, dry and free from grease.
- Measure the plain running of the wheel hub, and check for outrunning before fitting the brake disc.
- Check the wheel hub for damages , before fitting the brake disc.

NOTE: Outrunning of the wheel hub will double due to enhanced diameter of the brake disc on a damaged or assembly-related outrunning of contact surface .

This can be checked directly on the vehicle, without a test drive: it can be measured with the help of a dial gauge and a magnetic-tripod.



Dirty contact surface, pressure points and corrosion

Problem: A plane-parallel installation is not or only partially possible.

Possible causes:

- Dirt and or rust particles were trapped between the brake disc and the wheel hub
- Grease or paste forms and or collects foreign particles between brake disc and wheel hub
- damaged heel hub due to earlier repairs
- warped wheel hub due to an accident
- excessive backlash on the wheel bearing.
- The contact surface of the wheel hub has not been, or insufficiently cleaned

Possible consequences:

- Asymmetric brake disc and pad wear
- Pulsating brake pedal / scratching
- vibrating steering wheel
- Reduced braking performance
- Excessive brake pad and brake disc wear

TIP:

- Brake discs always need to be installed clean, dry and free from grease
- Measure the plain running of the wheel hub, and check for outrunning before fitting the brake disc.
- Check the wheel hub for damages , before fitting the brake disc.

NOTE: Outrunning of the wheel hub will doubled due to enhanced diameter of the brake disc on a damaged or assembly-related outrunning of contact surface .

This can be checked directly on the vehicle, without a test drive: it can be measured with the help of a dial gauge and a magnetic-tripod.

Damaged contact surface on inside of the hub

Problem: Damaged contact surface in the inside of the brake disk hub

Possible causes:

- Wheel nuts / bolts were not tightened to the correct torque
- The contact surface of the wheel hub is not free from dirt and or rust particles
- The contact surface of the wheel hub is damaged
- No plane sitting of wheel hub and brake disc

Possible consequences:

- Brake disc vibrates immediately after assembly
- Deformation of the contact surface.
- Deformation of the brake disc hub

TIP:

- Contact surfaces always needs be clean, dry and rust-free from dirt and rust
- Always use manufacturer tightening torque and sequence
- Pay attention to plane-parallel installation of wheel hub and brake disc.

NOTE: plane-parallel running of the and brake disc can be checked directly on the vehicle, without a test drive: this can be measured with the help of a dial gauge and a magnetic-tripod.