MAINTAINING CASTLE MOTORS IN WET CONDITIONS

Although Castle sensored and sensorless motors are not affected by water while they are running, the water can wreak havoc to the steel components when you store them; rusting of the bearings and the stator can cause major issues down the road. So, our motors need some TLC and maintenance to keep your vehicle "over-powered". You can ride them hard, but it's not recommended to put them away wet.

After you've dominated the trails and water ways, it is recommended to remove the motor from the vehicle and pull it apart to allow it to dry.

1. Remove the front-end bell (shaft side) by taking out the three cap head screws.
2. With the end bell removed, use a pair of pliers to remove the rotor/shaft assembly from the can; there may be spacers on either side of the rotor so keep track of them!
3. Be very careful with the magnet, it is quite powerful and can cause injury if you get caught between the magnet and a metal surface.

Once you have the rotor removed you can either let the motor sit overnight to allow the water to evaporate; or to speed up the process you can use gentle compressed air to blow out any standing water within the motor housing. Let it

dry completely before re-assembling. Adding a small amount of oil to the bearings will help extend the life expectancy of the bearings.

If you're using a sensored motor, there are some extra precautions you can take. The sensor wire connections can be affected by water and may cause momentary loss of sensored capabilities. *Apply a small amount of dielectric grease to the outside of the sensor wire connections can help water from causing loss of contact with the sensors; do NOT apply the grease directly to the ports as this will prevent proper connection.*

NOTE: For excessively dirty or salty water, rinse with clean water under a faucet before drying.

We know it's not convenient to go through this process, but these extra steps will keep your motor running smooth and efficiently for years to come.

Castle Tech Support