



The Importance of Addressing Front and Rear Clamp Stalls



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This note describes:

- what happens when the front or rear clamp motor stalls
- what could be causing the motor to stall
- what steps should be taken to prevent the motor from stalling
- why continual clamp motor stalls are detrimental to efficiency

Front and rear clamp motors will stall if resistance keeps the motor from moving to the commanded position. When the motor stalls, it rebounds to a “strong” position within the motor coils in the direction it was traveling from. There are eight steps in between “strong” motor positions, so the clamps can rebound to a position up to eight steps more open than intended.

Common causes of clamp motor stalls are improperly installed clamp sets, foam pads, or trapdoors, and too tight of a clamp closed position.

Check the setup of the clamps and foam pads. If the top of the foam pad on the outside clamp is too high, it will drag on the roof of the inside clamp. If it is too low, it will be hit by the trapdoor. Verify that the clamps are installed properly to the clamp holder mount plate (black fork). The top of the clamp set must be seated firmly against the shoulder on the holder mount plate.

Verify the trapdoor is seated all the way back into the trapdoor mount. The best way to check this is to

power down the line, and with the trapdoor in the closed position, manually cycle the clamps open and closed by pushing on the ends of the clamp rods. They should move smoothly and even, without hesitation or binding.

If the motor continues to stall, open the closed position of its clamps one step at a time until it stops stalling. If you have opened the closed position more than 5 or 6 steps beyond the default position and are still experiencing motor stalling, recheck the setup and installation of the clamps.

Continual clamp stalling is detrimental to efficient trailer operation:

- Because the stalled motor rebounds from 1 to 8 steps, the clamps are closing less, and therefore not holding the fish as securely as they would be if the closed position was correct. This can lead to increased hightails and fish movement, negatively impacting tag placement and clip quality.
- Allowing a line to clamp stall at a high rate can also mask other issues on the line that need to be addressed.
- Finally, continuous stalling could wear the clamp mechanisms.

In conclusion, the goal is to hold fish as securely and as consistently as possible. The way to achieve this is to set the front and rear clamp closed position such that the motor reaches that position without stalling.