DEUTSCHE HYDRAPRO
SUPERIOR BRAKING POWER

TROUBLESHOOTING GUIDE

1

ELECTRONICS TEST.

Connect the Black 'Positive' wire to positive and White to Ground/Negative.

If the unit does NOT operate, Then the electronics are working as intended.

If the unit does operate, The Unit has a faulty electronics board.

2

CONTROL TEST.

Connect the Black 'positive' and the blue 'Control' wires to positive and connect White to Ground/Negative.

If the unit does operate, Then the electronics are working as intended.

If the unit does NOT operate, the unit is faulty

3

BREAK-AWAY TEST.

Connect the yellow 'Break-away' to positive and connect White to Ground/Negative.

Note: The Black 'positive' wire is not connected for this test as the break-away is designed to solely run the unit from battery power.

If the unit does operate, Then the electronics are working as intended.

If the unit passes all 3 steps, then the unit is electronically functional.

FURTHER DIAGNOSIS - Notes

If the unit fails on step 2 but the relay can be heard "clicking" then fault is in the motor or pump.

- Disconnect all power and ground, disconnect circuit board and apply 12v to red motor wire and ground to black motor wire.
- If the motor and pump does power up, the fault is in the electronics board.

If the motor does not operate when power is applied directly then the motor or pump is faulty.

- Remove the motor from the pump manifold and check for operation (apply power), if the motor turns freely then the fault is in the pump.

Check the pump for movement by turning counter-clockwise, if the pump is moving freely with minimal restriction, then the pump should be working.

- If the pump is tight or not turning, remove the tank from the pump and check torque on 2 x pump housing bolts and 2 x Allen head bolts. The pump should have 5nm torque on them more than this could be causing excess friction and overloading the motor.

NOTES:
Do not use impact drivers on end plate set screws. Please tighten and untighten using a 2.5mm Hex Key by hand.