## **NEXUS Autopilot 1510 summary of known checkpoints**

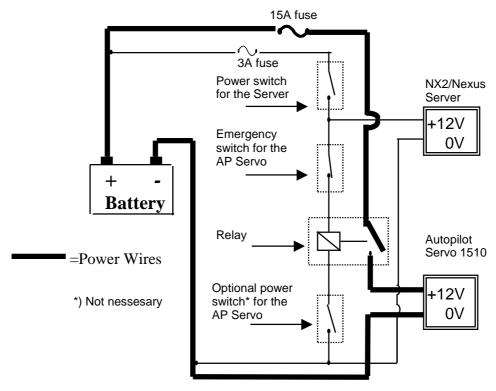
All Autopilot systems are complex systems dependant of a number of transducers and control algorithms why faultfinding needs to be done carefully to lead to correct remedy.

### **Checkpoints:**

#### Power:

It is essential to Power the Pilot servo and the Pump motor to get current enough without risk of voltages drops.

Wireing can be effective by **using Relay** to get shorter length of cables.



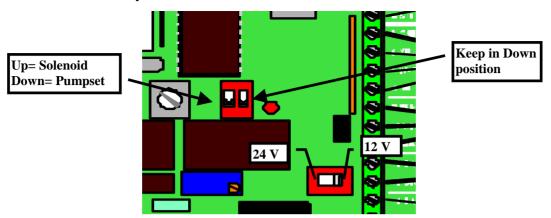
In a system without relay the Nexus system should never be powered up later than the AP Servo.

To avoid "backdrain" of current do **not connect the Green wire** (+12V) from the Nexus system.

# Wire thickness dependant of Power Cable length:

| Cable Length<br>Max. m. (ft) | Wire Area<br>mm² | Wire Area<br>AWG |
|------------------------------|------------------|------------------|
| 3 (10)                       | 2,5              | 14               |
| 5 (16)                       | 4                | 12               |
| 7,5 (25)                     | 6                | 10               |
| 12 (40)                      | 8                | 8                |

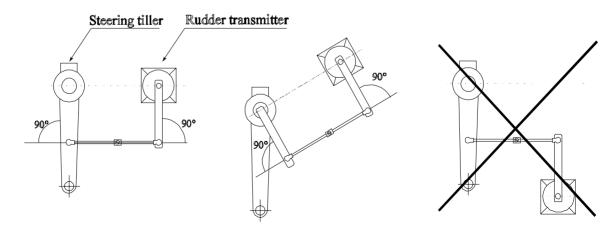
### **Check dip switches:**



Note! With all Silva Pumpsets both dip-switch shall be in down position.

# Rudder angle Transmitter RAT/RFU:

The Rudder angle Transmitter must be proper installed so that the turn of the RAT is given the same angle as the turn of the Quadrant/rudder shaft.



If a linear Rudder angle transmitter is used there should be two endresistors, one on Black and one on Red wire from the RAT/RFU according to separate instruction, see Silva support: Autopilot Installation of the Linear rudder angle transmitter.

#### **Hydraulics:**

Check for Air in the system and bleed if needed (not valid for Silva HP 40 pumpset).

### **Compass transducer:**

If the system has a Nexus Server, connect the Compass transducer to the Server for optimal function.

#### **Auto-deviation:**

Confirm that the Auto-deviation is good. In the Autopilot Manual § 5.5.5 you find the "Auto CHK", C4.

#### **Automatic Pilot Calibration "APC":**

Is the APC successfully performed in a speed close to the crushing speed of the boat?

### Autopilot set-up group "P".

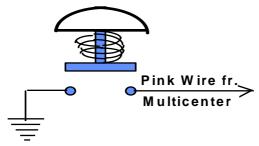
The APC will set the "RUD", "SEA", "CRD", "ATC", and "RRS". Be aware of those settings are not altered to unfavourable values.

#### **Remote Control:**

If a Nexus Remote Control is used in the system check that it is of **Version 1.14** or higher to avoid risk for Err 25.

#### **Multi Center:**

The Autopilot button according to § 9 in Installation & Operation Manual for the Multi Center (P/N 21646-1) should be of momentary type, not a switch.



#### **Further investigations:**

If further investigations is needed, Note! Serial No. and Version No. on units.