



AN OO COMPANY

## Service report

**Order No:** 7028-07031

**Side 1**

08/03 2006

M, NÄSSTRÖM

**Date:**

**Issued by:**

**Vessel:** Jet Caribe & Auto Jet

**Place:** | Kap verdeVerde

**SUBJECT:** Commission of MJP system after dry-docking

### **WORK PERFORMED:**

#### **Jet Carrie**

Change 3 pc of EMT 10 modules for Indication.2 for port and stbd steering and 1 for port bucket.  
Calibrate al EM10 modules and check the isolation resistant. There areis bad isolation resistant at 2 indication cylinders on stbd side. I recommend changing the cable and contact at the hydraulic cylinders. Now the indications for bucker and steering on stbd side hunting because of bad isolation. Stbd steering cylinder had a broken sensor cable and bad isolation (27 K Ohm) also a los cable at the bayonet contact. Open up the contact and reaper and clean that. After that the isolation resistant are 1 M Ohm. I recommend that the contact on the hydraulic cylinder should be change

Calibrate the al indication at wheel house.

Calibrate the control system except the neutral trust.

Change battery in port and stbd central unit and down load the settings.

Port water jet has much more friction when we rotate the shaft with hands but no noise or that the impeller scrape to the impeller house could hearing.

Clutch in the port water jets. No noise ore vibrations detecting from the water jets

3 lock valve and 2 proportional valves not working because of dirt inside. After clean the valve they working normal.

2 lock valve missing 3 o-rings

1 lock valve was wrong assembled

Stbd coil for stbd steering direction on the back up vale are broken. I don't have that with me and can not reaper it. New coil must be order from MJP.

Clean the pressure control valve at the 2 lube oil to the water jet trust bearing system it was stack. Change the oil from hydraulic to lube oil. Flush the lube oil system. After 24 hour I

**MJP-ÖSTERBY**

**GJUTERI AB**

[www.mjp.se](http://www.mjp.se)

**S- 748 01Österbybruk**

**Telephone**

0295 - 244 250

**Telefax**

0295 - 244 260

**Postgiro**

3741-6

**Bankgiro**

833-9392

**Web**

find water in the stbd lube oil. Flush the system one more time. After run the system for 3 days I can not see any indication of water in the lube oil. Change one manometer at stbd pressure side

Calibrate the lube oil system set the pressure to 4 bars.

It is much dirt in the hydraulic system and I recommend that all hydraulic and lubrication filters and oil change before the boats start traffic and then change again after 100 hours operation.

Align shaft to give clearness between -drive shaft -and impeller.at Port side-water jet are the clearness 2.05mm on the top and 1.65mm on bottom, 2.20mm on port side and 1.50mm on stbd side.

Stbd water jet are the clearness 1.50mm on the top and 1.80mm on bottom, 1.90mm on port side and 1.40mm on stbd side.

-Those at readings are outside the tolerance. maximum deferens should not be +/- 0.15 mm

Especially on port water jet. With a deferens on the clearness of 0.70 mm between top and bottom.

Allowable deferens should not be more +/- 0.15 mm

I have not clutch in the water jet at stbd side because of problem with the clutch control. I have not checked the RPM in back up and normal because of problem with engine.

## Auto jet

Check all potentiometers at the hydraulic Cylinders. On the steering cylinders I find 2 bad potentiometers one on stbd inner water jet on port and on port side at port. Change the potentiometers and at port side steering cylinder I find also the feed back cable had bad isolation the cable and contact must be changed. I have no new with me and that must be ordered from MJP. It was bad damage on the piston at same cylinder. We welding reaper the damage. Feed back cable for stbd outer port bucket are broken. I have no new with me and that must be ordered from MJP.

Clean the pressure control valve at all 4 lube oil tank the lube oil to the water jet trust bearing system it was stuck. Change the oil from hydraulic to lube oil. Flush the lube oil system. After 24 hour I find water in the port inner lube oil. Flush the system one more time. After run the system for 3 days I can not see any indication of water in the lube oil. Calibrate the lube oil system set the pressure to 4 bars. All return filter must be changed it I now a pressure over 1 bar at the return filters that indicate that the filters are dirty.

Stbd hydraulic pump are in bad condition. Maximum pressures we can get are 70 bars. Check the leak oil from drain line and we get 10 L oil at 1 min. A hydraulic pump in good condition should give max 2 L. The hydraulic pump must be replaced. It was also a bad noise from one

**MJP-ÖSTERBY  
GJUTERI AB**

www.mjp.se

S- 748 01 Österbybruk

**Telephone**  
0295 – 244 250

**Telefax**  
0295 – 244 260

**Postgiro**  
3741-6

**Bankgiro**  
833-9392

**Web**

+46-295-244 250

of the check vale on the pressure line from the pump. Clean the check valve but was not able to se if it was ok after that because of the damage hydraulic pump.

Port hydraulic pump gives al the time 140 bars and can not go down to 30 bars stand bay pressure. Clean the regulator and find dirt inside. After cleaning we still have same problem. I think it is same dirt inside the hydraulic pump ore regulator is damage. Check the leak oil from draine line and we get 2 L oil at 1 min. That indicates the pump is ok.

-If the boat operates with 140-bars constant we are going to have big problem with overheating of the hydraulic system.

Relief valve at port and stbd was full of dirt. I clean them up and the working ok now.

It is much dirt in the hydraulic system and I recommend that al hydraulic and lubrication filters and oil change before the boats start traffic and than change again after 100 hours operation.

I have not clutch in the water jet ore check the alignmment because of engine installation are not finish yet.

I have only check the direction and indicator on stbd side in back up. That reason is the missing parts and soft wear to the control system and the hydraulic pumps are broken.

**Michael Näsström**  
SERVICE MANAGER  
Cellular +46703007611

**MJP-ÖSTERBY  
GJUTERI AB**

www.mjp.se

S- 748 01Österbybruk

**Telephone**  
0295 – 244 250

**Telefax**  
0295 – 244 260

**Postgiro**  
3741-6

**Bankgiro**  
833-9392

**Web**

+46-295-244 250