



### REPAIR PLAN

Name of Ship: PACIFIC GLORY Date: 11-01-2018

Servcies: Hydraulic line for Remote valve operation -- Control Box Repair

#### Preface:

As per the request of ship's owner (THOME SHIP MANAGEMENT PTE LTD), arranged to carry out an on-site inspection on board with C/E, and handovered repair plan as follows:

#### Repair plan:

1. Cut the feet of box & shift the box together with v/vs inside to E.R work shop.
2. Position new pipes according to old ones, overhaul v/vs (change o-ring), renew bottom plate.
3. Refit the hyd. pipes by adding one union joint between the manifold and the v/v base.
4. Make special angle bar for fixing the v/v base to box instead of direct welding; fix the modified box's feet by bolts.

#### Illustration:



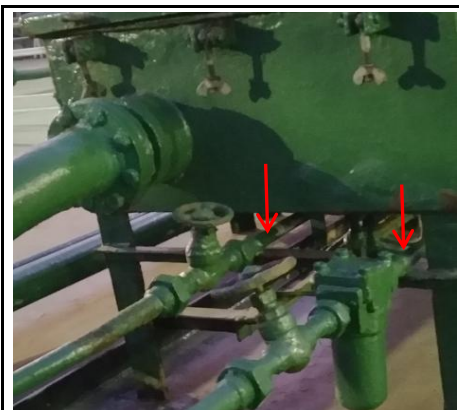
1. View inside box.
2. Cut off elec. power & hyd. oil.
3. Remove the elec. cables (by crew).



1. Disconnect all pipes & union joints & connections.



1. Dismantle the covers.
2. Cut the feet of box by cutting machine.
3. Shift the box with v/vs to E.R work shop



1. Position the location of newly fabricated hyd. pipes in advance at E.R work shop.



1. Cut the hyd. pipe from the red line marked.



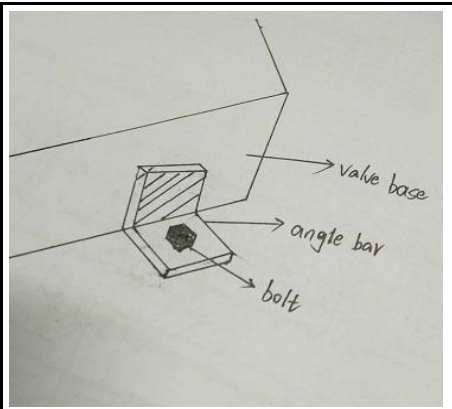
1. Remove the welding joints.
2. Take the v/v block out of box.
3. Maintenance overhaul for v/vs by repair kits (provided by ship side.)



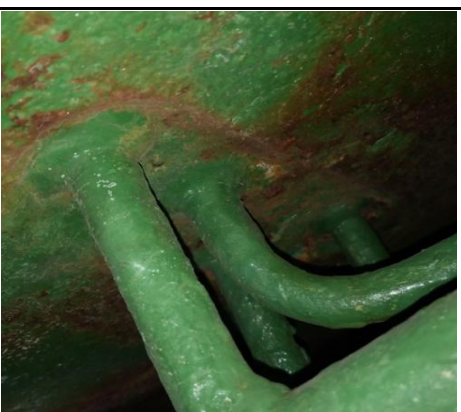
1. Remove all v/v blocks & etc out of box.
2. Crop the rusty bottom plate.
3. Fabricate new plate according to original & finish welding.



1. Renew all pipes which connect to v/v base. (each base has 4 pcs)
2. Install one union joint at position ② (for easier maintenance of v/v blocks)



1. Make angle bar as the draft shows.
2. Fix the angle bar to v/v base by welding, fix the v/v base to box by bolts.



1. Inspect all boxes on deck (from No.2-No.5), found No.4 box is in bad condition.
2. The others are as pictures show.

**Remark:**

1. No hot work on deck.
2. Must use argon arc welding for SUS repair.
3. If arrange 4 welders to repair by sailing with vessel, it would take about 4-5 days to complete the project.
4. It is impossible to adjust the height of box, because the position of main hyd. pipe is fixed.
5. All boxes are same designed, and our repair plan is general duty for all boxes.