

**After Dive** - Log your use of the camera in the “rite in the rain” notebook found in the camera case. Note any problems encountered in the dive log and notify Tim Siwiec.

## **NORMAL CLEANING PROCEDURES-**

*PERFORM AFTER EVERY DIVE*

### *Immediately After Diving*

**Soak** the camera (in housing) & strobe in FW (If unavailable, use seawater). Soak in between dives and before cleaning to prevent salt crystal formation.

1. **Soak** the camera & strobe in FW for at least 10 minutes with the camera & strobe mountings taken apart. Warning! Make sure lens cap is on to prevent lens scratches.
2. **Place** the camera & strobe on a towel **to dry**.
3. **Remove** camera & strobe batteries compartments, **o-rings** and o-ring surfaces using guitar pick. **Clean**, re-silicone, and replace on strobe but not camera.
4. **After** a day of **drying, replace** into the case and return to the locker.
5. Store with camera inside housing (no o-rings) foam housing cap. (see diagram in side case.
7. Do not kink, or tangle fiber optic sink cord. Wrap one loop of fiber cord around strobe arm)

### **Storing Notes**

- Remove two large o-rings from housing with guitar pick or rounded end of paper clip in bag under case lid and put them in the bag velcroed to lid
- Keep lens cap on camera for soaking & storing
- Remove batteries from strobe and place bottom down in storage case. Store strobe with battery compartment open (to prevent o-ring flattening”)
- See diagram under case lid of where different parts are stored in case

### **Downloading Flash Card Via USB**

- Plug in USB card reader to computer
- Insert Flash card into reader. Wait about 2 minutes until computer recognizes reader as a removable storage device
- Copy pictures off of removable storage device to somewhere safe on computer

## **SOP for:**

### **Olympus C5050 Digital Still Camera (inside Olympus PT 015 housing) with Sea&Sea YS90Auto Strobe**

Rev. 4/2007



## **EPA Region 10 Dive Team**

4/25/07

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## BEFORE YOU LEAVE THE DIVE LOCKER

### 2+ Days Before-

1. Check batteries. 4 sets of 4.
2. Check for 2 flash cards at 256MB each. 1 D card at 32MB.
3. Check to see if memory card is clear. If it needs to be cleared the procedure is as follows: Put camera in "Play" mode via swivel knob. Then push "OK" button, then right for "Mode Menu", then down twice to "Card" then right twice for "Erase All". Then push "OK"

### 1 Day Before-

1. Check condition of o-rings: **Strobe battery** – dark blue, **Sync cord** – strobe end, **Sync cord** – camera end, **Camera Housing** (Make sure to check BOTH (2) red o-rings)  
-Check for slack in the o-rings (replace if necessary)  
-Check for any buildup of salt/dirt and the proper amount of silicone clean if necessary) & also clean o-ring surfaces.
2. Apply small dab of "Sea Gold" lens defogger to housing lens, then wipe clean with lens paper.
3. Load Fresh Batteries. 4 AA NiMH. Recharge old batteries with AA NiMH smart battery charger. Smart battery charger can be used in "fast" mode for 1 hr or "slow" for 8hrs. Backup charger: charge no more than 9 hrs. Use backup charger only when smart charger is in use.
4. Load fresh desiccant packs into camera housing. Blue = fresh, Purple/pink = bad. Bad packs can be recharged in OEA microwave on Hi at 20 sec intervals.
5. Check cameras "My" settings to make sure they haven't been accidentally erased (see complete "My" setting below\*) If no batteries are in the camera then you must redo "My" settings.
6. Make sure the camera is not set to low quality such as "HQ" image mode. It should be set to higher resolution "SHQ" mode. This can be accomplished under the "pic" window of "Menu Mode" see instructions below\* but navigate to "pic" mode instead of "camera".
7. Connect Sync Cord to Velcro patch on camera housing.
8. Set Strobe to "Auto 1."
9. Day of Dive take a practice picture to see if the camera is configured properly and strobe is timed properly.
10. Day off dive bring cooler filled with Freshwater (FW) on the dive to soak the camera between and after dives.

### \*Customized "My" settings:

To get into "My" settings area put camera in "My" mode via swivel knob. Push "OK". Then right to "Mode Menu", then go right to "camera," then scroll down to see settings. Set them to the following:

**Drive** - one normal rectangle. **ISO** - 100 **MyMode** – My1. **F Stop** – 5.0. **Shutter Speed** – 1/100.

**Flash** – slave. **Slow** – Slow1. **Noise Reduction** – off. **Digital Zoom** – off. Full Time AF – on. **AF Mask** – spot. **Mic** – off. **Panorama** – off. **2 in 1** - off. **Function** – off **Graph symbol** –off. Strobe set to "Auto 1"

## THE DIVE SITE

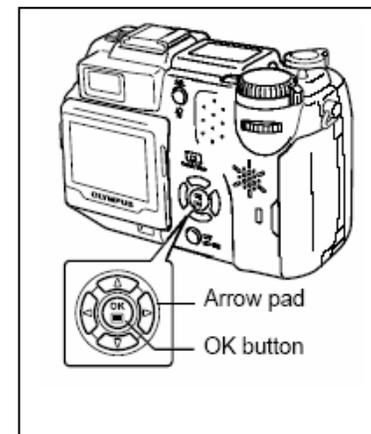
### Testing Leaks- dump in cooler & check

### Shooting-

1. Turn camera on with power knob on top. Make sure there is a snug fit between housing power knob and camera power knob. Note the "on" button on the digital should be turned on before inserting the camera in the housing. The "on" setting can be difficult to set underwater.
2. Set camera to "My" setting via swivel knob.
3. Make sure camera doesn't slip into "Video" mode from "My" mode. If this happens LCD displays "remaining minutes" & microphone symbol (on top). Set to resolution mode "SHQ". In the proper mode "SHQ" 70 pics are available on an empty card (256MB Compact Flash). In "HQ" mode 200 pics are available. [See Manual to set]
4. Tenders should turn the camera to on, then put in "sleep" mode by pushing once on the uppermost button near viewer (see figure below)

### *Warning – Indications of a flooding*

- Droplets appear inside the camera lens or housing
- Strobe Light is autoflashing without shutter release
- Failure to strobe to flash
- Red Light (strobe ready light) is flashing



## My Mode setting check:

- Turn swivel knob to line up  with the Red line on left
  - Turn on camera, should see  1 in viewfinder, top left, 1/100 and F5.0 across the top, and SHQ 2560 x 1920 and CF across bottom
  - Press QUICK VIEW button to blank to a blue screen
  - Press OK button and then choose MODE MENU with right arrow
  - You should be in CAMERA with DRIVE, ISO, MY MODE, etc. in a list
  - Press right arrow, you will be in DRIVE and able to scroll down
  - Make sure the settings are:
    - DRIVE =  one rounded rectangle outline
    - ISO = 100
    - MY MODE =  1
    -  FLASH = SLAVE
    -  SLOW =  SLOW 1
    - NOISE REDUCTION = OFF
    - DIGITAL ZOOM = OFF
    - FULLTIME AF = OFF
    - AF MODE = SPOT
    -  = OFF
    - PANORAMA (GREYED OUT)
    - 2 IN 1 {skip this}
    - FUNCTION = OFF
    -  = OFF
  - Left arrow, then down arrow to PIC, then right arrow
  - You should be in PICTURE make sure settings are:
    -  = SHQ
    - WB = AUTO
    -  right arrow to check = AUTO, then left arrow
    - CUSTOM WB = {skip this}
    - SCENE MODES = NORMAL
    - SHARPNESS =  $\pm 0$
    - CONTRAST =  $\pm 0$
    - SATURATION =  $\pm 0$
  - Left arrow, then down arrow twice to SET, then right arrow
  - You should be in SETUP, make sure settings are:
    - REC VIEW = ON
- You can ignore the rest.

## Reconfigure MY MODE 1 – step by step

- Get into SETUP:
  - Select MY MODE SETUP select CUSTOM, select MY MODE 1
-  = M
- FN0 = F 5.0
- SHUTTER = 1/100
- Skip 
- xD-SM/CF = CF
- LCD = skip
- ZOOM = 35mm
- FLASH MODE =  SLOW
-  =  $\pm 0$
-  = 
-  /  = OFF
- AF /  / MF =  = 8.4 “ to 31 “
- DRIVE = 
- ISO = 100
-  FLASH = SLAVE
-  SLOW =  SLOW 1
- NOISE REDUCTION = OFF
- DIGITAL ZOOM = OFF
- FULLTIME AF = OFF
- AF MODE = SPOT
-  = OFF
- 2 IN 1 = OFF
- FUNCTION = OFF
-  = OFF
-  = SHQ
- WB = AUTO
-  right arrow to check = AUTO, then left arrow
- SCENE MODES = NORMAL
- SHARPNESS =  $\pm 0$
- CONTRAST =  $\pm 0$
- SATURATION =  $\pm 0$