



**TSB #52-99** Supplement  
 Replaces Service Campaign 2008  
**Supplement for the 99 Dash Electrical Wiring**  
 Revision 07-2002

**TSB # 52 -99**

All Epic X22 and any soft ballast system with Jabsco Brass Fill pump in the bilge.

Follow all steps in TSB 52 except for electrical. Epic X22's and any soft ballast system built prior to the release of the Millennium Dash

**To order kits call Toyota Marine Sports- East Coast call Rick Cohn 407-701-4430 – West coast call Jeff Dorge at 206-459-3698 Part kits need to be ordered with boat Hin Number.**

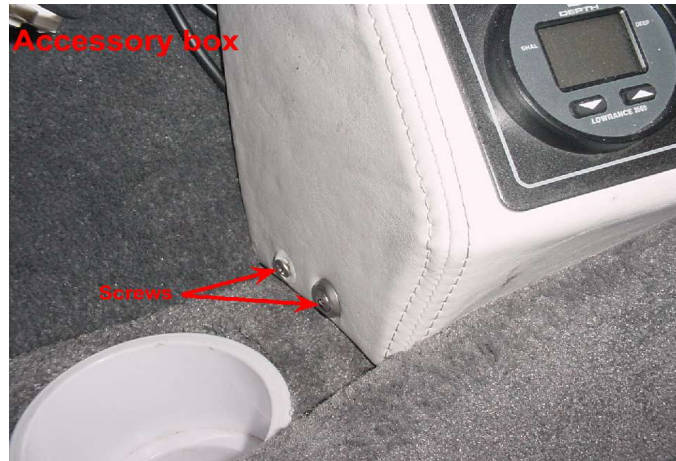
**\* Parts Needed**

<b>*2= MPM0010863 Rule Drain Pump,BallastSystem,1100GPH,12v</b>	2 = PVC 1" inch hose to hose
*1=MPL0011948 Thru Hull, BilgePump, 1", Plastic, White.	1= PVC ¾ street elbow male to female
*1= MPL001169706 Fitting,PVC,90deg,1"NPT female pipe ¾ to 1 " hose.	Hose Clamps #MFSY200303- #20
*18ft= MHO0011841 - CLEAR W braid Hose,Bulk,1"x200',Ballast,Poly,Reinforced,PerFt 13 ft for fill + 5 ft for drain of –	MHO001092603 reuse original hose cut as necessary Gate Valve To Pump, Pre Cut, B
1= PVC- ¾" – 1" Hose adapter for ballast bag drain.	1- inline 7 ½ amp fuse holder
*6 ft = MCW8000438- 1 ½"Split cable guard hose black.	7 amp fuse blade (dealer supply )
	MPL001086401 Fitting ballast bag

## Procedure

### Step – Remove the accessory box

First, remove the screws shown below securing the accessory box in place, making sure to store the screws in a safe location for later use. Finally, carefully remove the accessory box from its location, exposing the wiring. **NOTE:** Be careful when removing the box so as not to damage any existing wires.



### Ballast System Wiring Diagram

- Verify new style main fuse holder located within 6 inch's of battery switch.
- MDC0011276 Fuseholder in Line 30 AMP



Remove the alarm buzzer, and check valves, T and flow valves, hoses, except vent hose on starboard side.

Connect the Orange from the fill harness to the bottom connector of the fill switch same side as the orange wire.

The power wire goes to the switch center right side. Change the fuse to a 7 blade amp fuse.

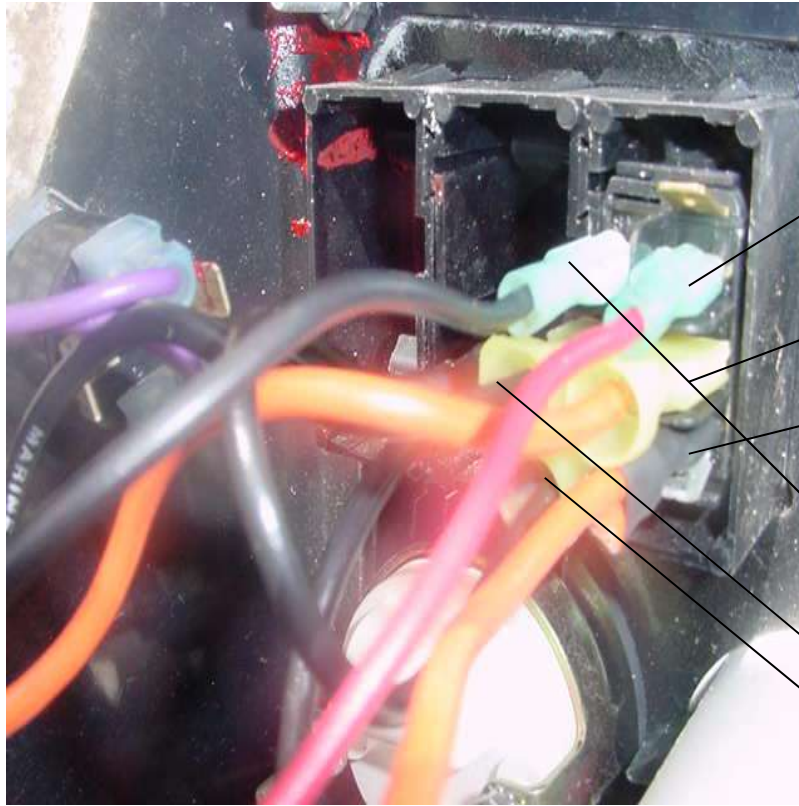
Remove all wire connected to switch. Cutting jumpers may be necessary.

The alarm wire from the drain bilge goes to the top of the switch (above the center wire that is red) and the ground goes to the top of the ground switch or ground block.

Pull the flow valve harness up to the top of the trunk area, so to connect to the pump drain. Use a heat shrink butt terminal or if available original Packard plug.

Verify negative wire is always black.

The fill pump should be a 7 amp Blade fuse to fill,  
The drain pump should be a 7amp fuse. Dealer to provide 7 amp blade fuse.



**+ Pump DRAIN wire orange #16**  
**+ Power wire red**  
**+Pump FILL orange**

**- Pump DRAIN #16 black**  
**Negative Ground**  
**- Pump FILL Ground**



**Located in trunk Install new Drain pump located under center bottom of ballast bag. Remove check valve.**

**Positive and negative from ballast switch.**

**Connect pump inlet direct to ballast bottom center fitting.**

**Cover Hose with Black plastic hose protector.**



**Drill hole Aft of vent hose.**





Mount rule pump after gate valve near battery. Use Teflon tape on the 3/4 male to 3/4 female PVC fitting. Clear braided hose or supplied poly hose. Heating hose might be necessary to install on fitting. Install threaded fitting with Teflon tape.

**Remove Jabsco pump from bilge or walk thru. If in walk thru allow power harness to go to bilge. Use 1 inch hose connectors to reuse hose cut.**

**against fuel tank. Use silicone to seal thru hull fitting. Clamp hose and run direct to drain pump.**



Running hose to port fill are via bilge or starboard walk thru area. Up along wire run to top of trunk bulkhead. Direct to port phat sack bag fitting.

**THE FILL HOSE MUST RUN AS HIGH AS POSSIBLE TO PREVENT SYPHONE FILLING OR DRAINING.**

**The hose can be run from bilge to aft port fill on phat sack bag. Using 1 " hose connector.**

## OPERATING INSTRUCTIONS



### Fill Instructions:

Operate at slow speeds. Open valve located under floor battery hatch. Valve handle in up position is open.

Press fill button and bag should fill in about 5 –10 minutes. When full the water will come out of starboard aft vent. Shut off switch and rotate shut off valve 90 degrees. If valve is left open water will fill bag.



### Drain instructions:

Turn on drain switch. Water will drain out starboard thru hull. In about 5 minutes bag will drain, indicated by no water flow out of forward starboard drain. Boat can be at operating at any speed to drain bag.

**Caution: Winterize ballast system by removing hoses and verify all hose and bags have been drained.**