

BI 2000 Repair/Upgrade Kit

BI 2000 Replacement Reed Chain

Installation Notes

These notes describe the installation of the BI-2000 Reed Chain replacement which is supplied with the BI 2000 Repair/Upgrade kit.



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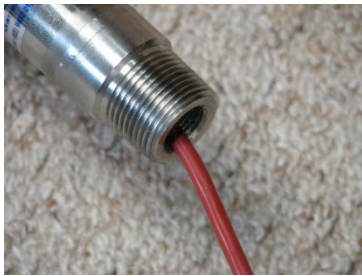
Level Sensor – Replace Reed Chain With Level Sensor Installed In Tank.



1. Clean the flange before inserting the reed chain. Check the thread is clean and free of dirt and metal burrs. Wire brush if necessary. Check that the inner chamber is as clean as possible to allow the reed chain to be inserted easily and without obstruction.



2. Insert the reed chain into the tube. Make certain it is inserted fully. You should be able to feel the reed chain contact the bottom of the tube.



3. When the reed chain is fully inserted, mark the cable level with the entrance. This will help identify the correct placement of the reed chain later on.



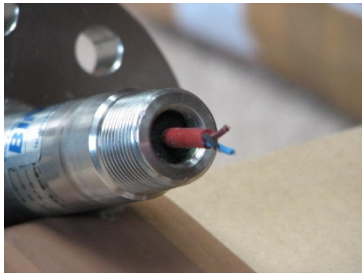
4. With the reed chain fully seated, and the mark on the cable level with the entrance, measure 20mm from the entrance and cut the wire through.



5. Trim the outer brown covering from the cable to within about 8 mm from the entrance. Be careful not to cut through the insulation covering the inner cables. Once the inner cables are bared, remove approximately 5mm of the silicon insulation from the blue, black and brown cables. They are now ready for soldering to the connector board.



6. The rubber grommet supplied is then fitted over the cables. Slide the grommet along the cable until it seats itself into the threaded tube by approximately 10mm.*



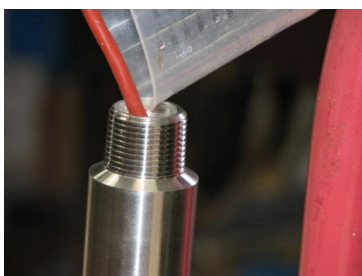
7. This picture show how the rubber grommet is seated inside the threaded tube. This is the stopper for the potting compound and prevents the reed chain from becoming bonded to the tube. The grommet is inserted about 10mm.



8. The bared wires, as previously prepared, are now soldered to the connector board. The extension wiring to the head of the sensor and pretop has been supplied with the wiring soldered in place. Make certain that each colour when soldered is matched with the same colour at the other end of the connector board.



9. Once the connector board is soldered and connects the reed chain to the upper wiring, the additional extension tube is then fitted. Hold the cable while tightening the tube. This prevents the cable turning and causing a break at the solder point. Once the tube has been tightened, fit the grub screw and tighten.



10. The sensor tube is ready for potting mix. If the sensor is not installed in the tank it needs to be held in the vertical position, and should stay vertical for approx 30 mins to 1 hr to allow the potting mix to firm before work continues. It takes approx 24 hr for the potting mix to fully cure. The potting mix flows to the rubber grommet* and will fill to the top of the extension tube. Allow air bubbles to rise and top up if necessary to fill to the top of the tube. Wipe any excess mixture from the thread and sensor surfaces before it sets. Should potting mix set in the thread it will need to be brushed out with a wire brush.



* Note, if the rubber grommet is not installed, the reed chain will be sealed for life!

11. Place Teflon tape around extension tube before attaching the head. Tighten the head.
12. Feed the cable supplied through the hole in the Pretop and mount the Pretop into the head. DO NOT over-tighten the screws as this may crack the plastic casing of the 5343B Pretop.
13. Connect the Brown Cable to Terminal 4
14. Connect the Black Cable to Terminal 6.
15. The Blue cable is sealed over with heat shrink material and can be fed back through the pretop centre hole. This keeps it out of the way.
16. Apply a small amount of nickel grease to the thread of the head and screw the lid on.

BI 2000 – Repair/Upgrade Kit Items

1. $\frac{3}{4}$ NPT M/F Seal Fitting – Drawing # 82
2. Cable soldered to connector circuit board – Drawing # 94
3. Spare bootlace ferrules should cable need to be resized.
4. Spare heatshrink for blue cable should cable need to be resized.
5. Black rubber grommet – Drawing # 84
6. Epoxy Hardener – 3 parts.
7. Epoxy Compound – 4 parts.
8. Icy Pole stick to stir epoxy.
9. Grub/Locking/Head screw.
10. Label Certificate – Silver/Aluminium
11. BI 2000 Repair/Upgrade Kit - BI 2000 Replacement Reed Chain Installation Notes