4. Operating instructions.

4.1 Manual operation

Remove the beacon from the release mechanism.

Break the seal on the main switch and pull the locking pin. Press in the leftmost part of switch mechanism, then the switch will automatically go to the Emergency (ON) position.

The red indicator lamp and the Xenon flash on top of the beacon will start operating, indicating that the beacon is active.
The LED will only operate initially.

NOTE!
The beacon performs a complete selftest before any emergency signals are transmitted. The Transmitters will start after approx. 70 seconds. At the same time GPS receiver is started. This is done so the GPS receiver wouldn't be started in TEST position.

The transmission can be stopped by turning the switch back to the OFF position, and replacing the locking pin. Make sure the battery compartment is dry, to prevent activation of the seawater contacts.

4.2 Automatic operation.

When the beacon is removed from the release mechanism and placed into water it will automatically activate due to the sea water contacts. Transmission will stop when the beacon is lifted out of the water, and if necessary dried off.

When placed in the automatic release mechanism the seawater contacts is disabled.
When the mechanism is reaching a depth of 2-4 meters , the beacon will be released and transmission will start automatically.

Note! There is a time delay of approx. 10 seconds of activation/deactivation with the seawatercontacts.

4.3 Testing Tron 40GPS

To perform the selftest the beacon has to be removed from the release mechanism.
Turn the switch to the «TEST» position. The red indicator will start flashing for approx. 15 sec. This is to allow the internal OCXO (Oven Controlled Reference Oscillator) to warm up.
Then the output power of both transmitters are checked, the battery voltage and the PLL of the 406 transmitter.
A complete message on the 406 frequency is transmitted, with inverted frame sync.

If all tests are passed there will be one flash in the Xenon bulb, and the red indicator light will turn on and stay on until the switch is released.

A successful test will then consist of a series of rapid flashes in the test indicator , followed by one Xenon flash and continuos light in the test indicator.
Any other behaviour indicates a fault in the beacon.

4.4 Error messages

If the selftest detects a fault in the beacon on or more of the following indications are shown :

1. Flashing LED for 15 sec. followed by one (1) flash , no Xenon flash :
   Low power on 406 MHz transmitter

2. Flashing LED for 15 sec. followed by two (2) flashes, no Xenon flash :
   Low battery voltage.

3. Flashing LED for 15 sec. followed by three (3) flashes , no Xenon flash :
   Low power on 121.5 MHz transmitter

4. Flashing LED for 15 sec. followed by four (4) flash , no Xenon flash :
   PLL on 406 transmitter out of lock.

5. Five (5) flashes , no Xenon flash:
   Beacon not programmed or programming not complete.

5. Change of battery

The lower part of the beacon of the housing is replaced with a new one.

1. Remove split pin and pull the U-shaped bolt from the equator ring.
2. Remove the equator belt by pressing it out from the housing.
3. Separate the two parts of the housing.
4. Unplug the battery connector.
5. Check that the new battery is marked with date of expiration.
6. Place the new gasket on the battery housing.
7. Connect the battery connector.
8. Replace the upper part, taking care that the gasket is correctly fitted and taking note of the orientation marks on the two housings.
9. Replace the equator ring, U-shaped bolt and split pin.
10. Perform a Selftest.