

TYFON ETD 100/350 with amplifier MTK 250

1. Maintenance

Maintenance period is 60 weeks.

Compression drivers:

Using a calibrated multi-meter, measure the resistance directly on each driver separately (ensure that the amplifier MTK 250 is disconnected first). Typical value: 4.2 ohm (resistive). If the difference is more than 1 ohm replace the driver.

Heating element and thermostat:

Disconnect power supply at the TYFON. When the thermostat is closed the resistance value is 25 ohms and when in open contact the value should be open circuit. If a value greater than +/- 25% deviation in the above resistance is noted replace the heating element.

The thermostat contact closes at 5°C ambient temperature and opens at 17.2°C ambient temperature.

Bell piece:

If any cracks or damage are found replace the bell piece Troubleshooting

2. Troubleshooting

No signal when activated

Disconnect TYFON from the amplifier. Set the multi-meter to measure resistance at its lowest scale. Measure the resistance of the compression drivers across the wire. The measured resistance of approximately 2,5 ohms +/- 1 ohms. If the resistance value is found to be outside of this range, check each driver individually.

When the resistance value is within this range.

Set the multi-meter to measure DC Volts and measure the power supply to the amplifier MTK 250. Voltage value should be 24 V DC +/- 30%. If the voltage value found is within this range, replace the Amplifier.

3. Repair

TYFON ETD 100/350

If any cracks or damage are found replace the bell piece. The bell piece is fastened with a locking screw.

The compression driver element should be replaced when its measured values are found to exceed the tolerances specified herein. The element is fastened with a locking screw.

Heating elements and thermostats found to possess out of tolerance resistance values should be replaced with new ones.

TYFON amplifier MTK 250

The complete unit of the TYFON amplifier MTK 250 on the vessel to be replaced by a new unit from stock.

The faulty amplifier can be sent to Kockum Sonics AB for repair and refurbishment.

4. Spare parts, to be kept onboard

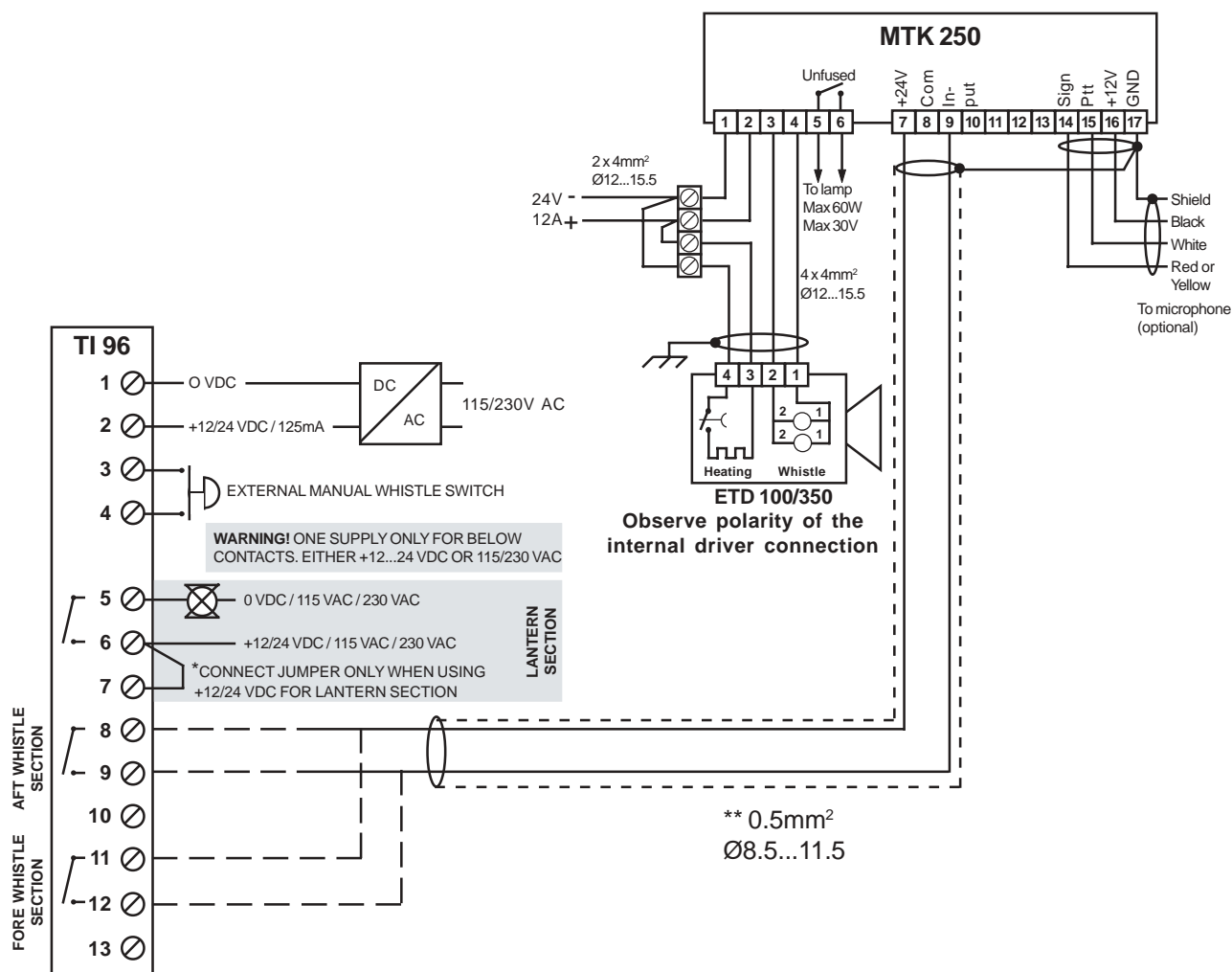
Spare parts TYFON ETD 100/350

Description	KSA ref no
Driver	20620019
Heating device	20320031

Spare parts amplifier MTK 250

Description	Data	KSA ref no
Fuse	15 A	
Fuse	10 A	20556106

For one Signal Controller TI96 with
Amplifier MTK 250 and
Electronic TYFON Whistle ETD 100/350



* These jumpers enables inbuilt sparc suppressors when +12/24 VDC is used for lantern.

**Screened 2-lead cables are carrying low voltage (24V) and low load (less than 10mA).

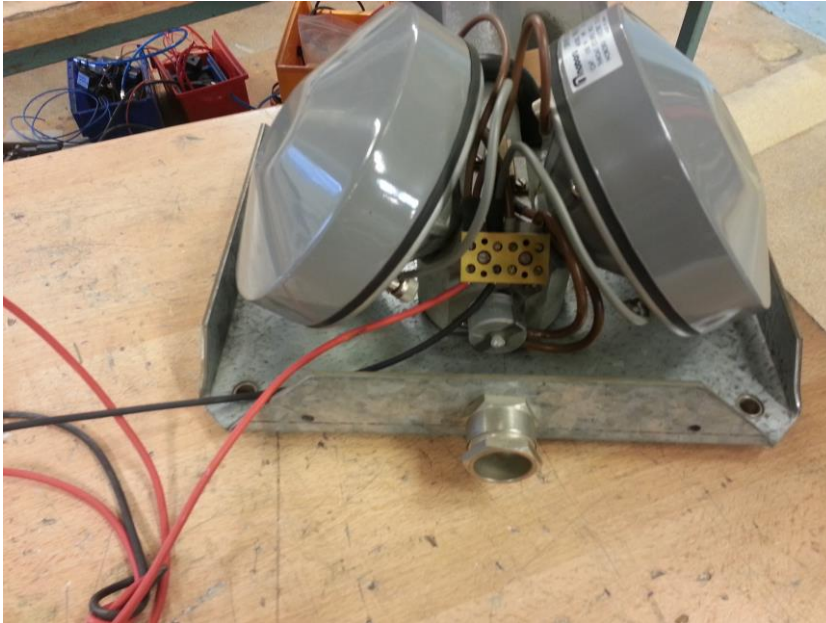
Technical Data

	<i>MTK 250</i>	<i>TI 96</i>
Voltage supply	20...27V DC	9...15,6V DC or 18...31,2V DC
Power consumption	max 250 W	max 5 W

Subject to alteration without notice.

Instruction on replacement of driver on ETD 100/350

ETD 100/350



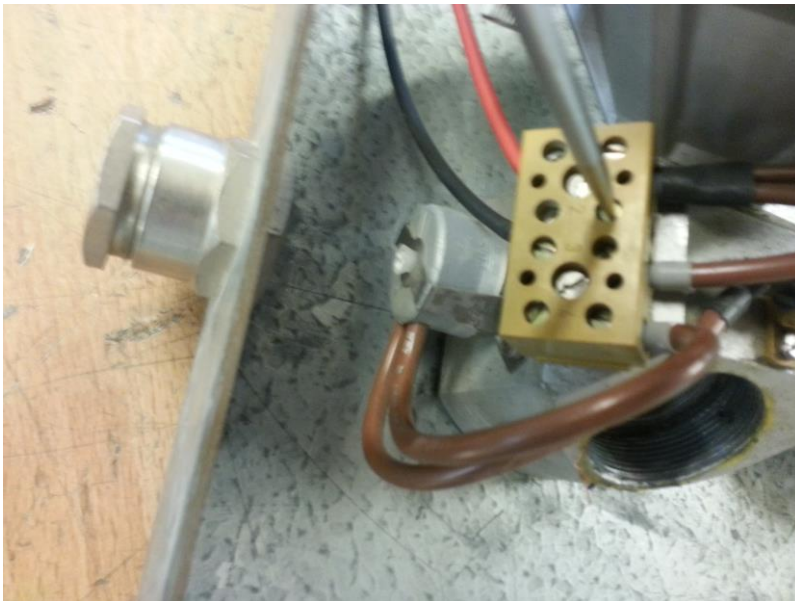
Make old drivers free from adapter (use screwdriver)



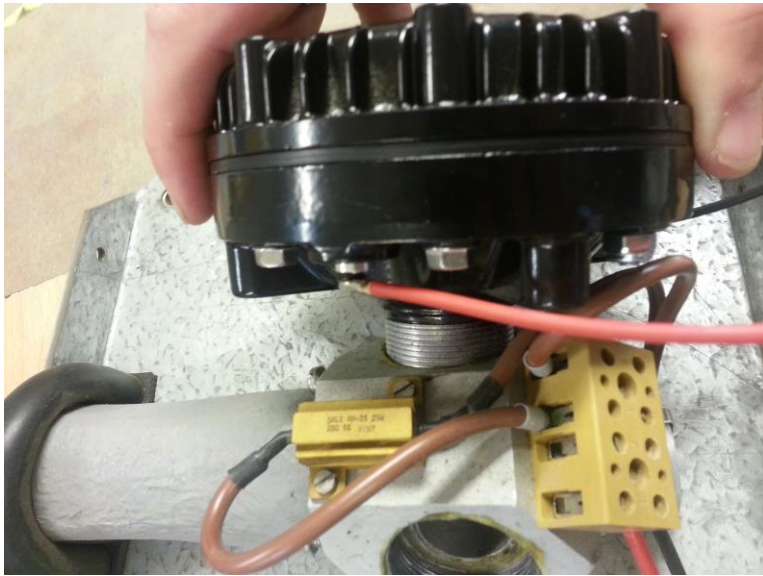
Remove cables from both old drivers



Remove cables from plinth



Remove both old drivers from ETD 100/350 and replace with new (2 pcs)

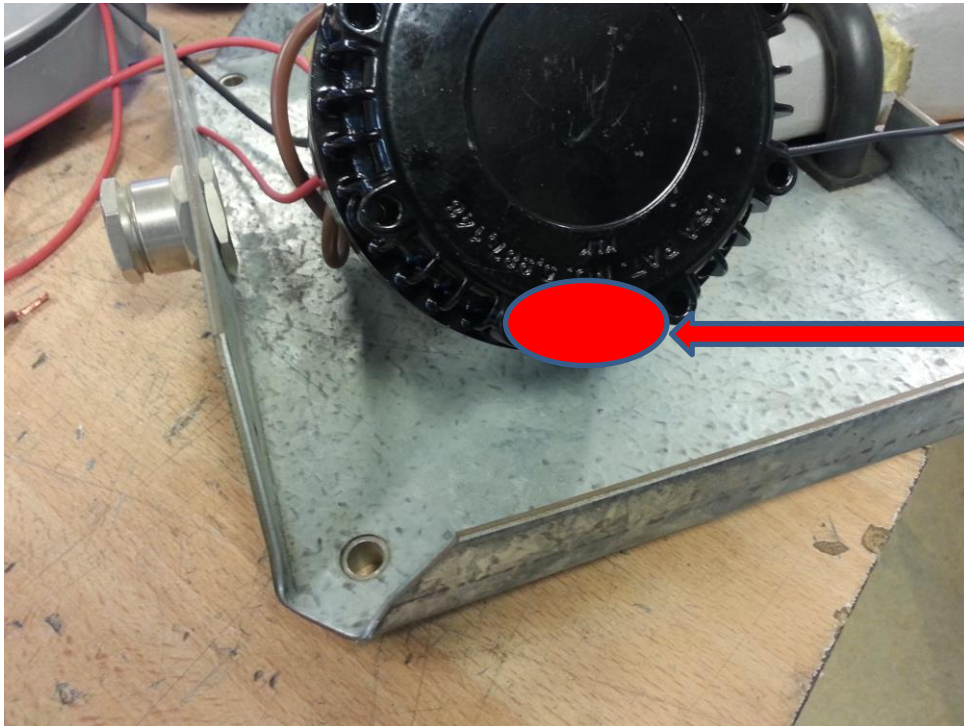


Drivers with drain hole down



Drain hole

Drain hole



Drain hole must be placed close to bottom (somewhere in circle area).

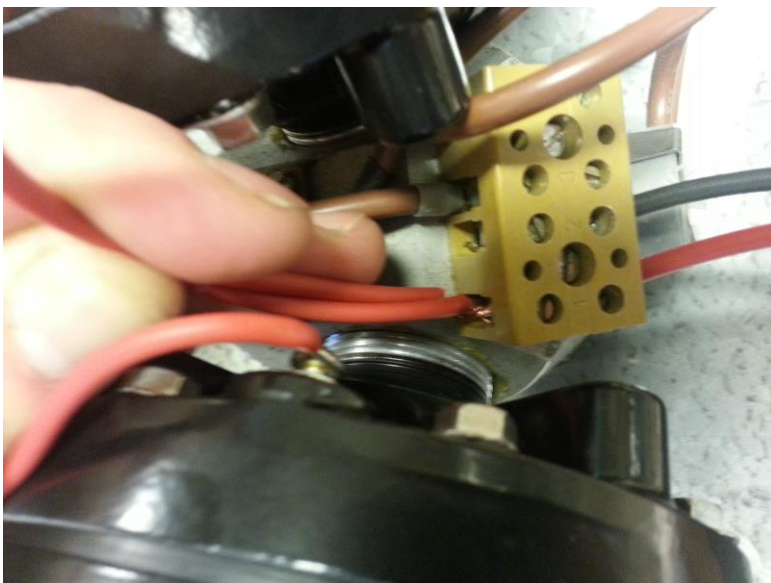
Drivers must be fixed with help of screwdriver



Connect the wires in parallel (red cable with red)



Place them in plinth position 1



Repeat process with black cables and use position 2