

at one time using a mass programmer. The microprocessor continuously controls the integrity of the mine functioning and the efficiency of the battery which makes the mine fail safe. The electronics also deactivates the mine if any malfunction occurs. These mines can also be programmed with different anti-lifting and life times varying from 1 hour up to 365 days, depending on each fuse manufacturer features, in interval of 1 hour and the anti-removal life time length being always shorter or equal than the mine life time.

The change of the mine's status, from safe to arm conditions will only occur after the arming delay varying from 10 to 30 minutes is elapsed, which may be chosen when ordering the mine and depending on the manufacturers' specifications. Once the transportation safety pin and the arming lever have been removed and the mine activated by a remote control device or by the mine itself, both the mechanical and electronic safety devices still remain. Both these safety systems will be switched off after the arming delay.

The mechanical safety device consists of a shutter mechanism that maintains the detonator separated from the booster by a mechanical barrier while the electronic safety maintains the fire capacitors not charged during the arming delay and the neutralization phase if such option has been previously selected. The alignment occurs only when the mine, previously armed, is triggered by a valid target or, in case of a mine provided with a self destruct feature, at the end of its active life time. When the anti-removal life time is expired, the sensor will disable allowing the mine recovery only if the mine is equipped with a self neutralization device. The mine will self destruct or self neutralize at the end of its active life time according to the selected feature. This feature will have to be selected at the time of manufacture of the mine. The alignment system is composed of a sliding barrier, always kept in misaligned position until a short time before the detonator is fired. This mechanical device aligns the explosive train only if the mine has been properly armed and triggered.

8.2 Fuses

The fuse controls the life of the mine according to the programmed values entered in its memory. The electronic and electrical components are operated by lithium battery which