

AEROFINA S.A.



LM52M2/AS - MISSILE LAUNCHER FOR MAGIC 2

DESTINATION

LM52M2 / LM52AS Launcher provides for a locked flight, preparation and firing of MAGIC 2 auto guided infrared missile.

UTILISATION

LM52M2 / LM52AS Launcher equips MiG21 Lancer aircrafts.

TECHNICAL DATA

LM52M2 / LM52AS Launcher provides for:

- Transport of locked operational or training missile;
- Signaling and reconnaissance of operational or training missile;
- Normal firing sequence of operational or training missile;
- Transfer of operational or training missile firing sequence;
- Emergency firing sequence of operational or training missile;
- Safety on ground and in flight.

During the firing sequence, LM52M2 / LM52AS Launcher provides for performance of phases of missile putting into operation:

- PRE-HEATING;
- PREPARATION;
- AWAITING;
- SCANNING ACTUATION;
- LOCKING AND FOLLOW-UP;
- UNLOCKING;
- FIRING SEQUENCE.

Functions accomplished by LM52M2 equipment or sub-assemblies:

- Block for putting into operation and firing produces and provides for the following functions: preparation, battery heating, photodiode cooling pre-jettison, firing jettison and emergency jettison ;
- Relay and control box provides for scanning control of MAGIC-2 missile in autonomous and slaved regime;
- Power supply block supplied from aircraft on 115V/300–900Hz monophasic, it generates continuous voltages +12V stabilized and a continuous V_e voltage filtered obtained directly from 115Vac rectified. This voltage is designed to supply the Relay and control box;
- Frequency regulator unit is a AC/DC converter supplied from the aircraft at a frequency ranging between 300Hz-900Hz which produces 2 alternative voltages of 26V and 18,7V, at a frequency of 400Hz stabilized at +3%;
- Electromechanical lock performs of missile on launcher and clamps the missile on the front fairing; a firing pin system mechanically connected with the lock allows to establish an electric connection with the ignition contacts of the actuating motor;
- Cooling system provides for gaseous nitrogen necessary to cool the photocell of the missile homing head during flight with locked missile. It consists of steady equipment (electrovalves, liltres, pneumatic unions) and a full nitrogen bottle.
- Safety system having a safety flap (by aerodynamics effect mechanically connected to an electric contact that interrupts the following pyrotechnics connections:
 - Energizing the source;
 - Firing the actuation motor.

TESTING & QUALIFICATION

All testing are performed accomplished to full MIL-STD-810F requirements.

CHARACTERISTICS

Overall dimensions:

Length 2705 mm;

Width 96 mm;

Height 190 mm.

Weight: 53±1kg.

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