LINEAR BURNING ROPE

EQUIPMENT STATISTICS

	TL	Type	Vol	Wt	Price
☐	13	Linear Burning Rope-13 (Pack containing 8 metres of LBR & 2 x initiators)	23.6 ltrs	41.2 kg	Cr 800 / pack
☐	13	Linear Burning Rope-13 (1 metre length)	2.85 ltrs	5.0 kg	Cr 150 / Metre
☐	13	Pull-cable Pyro Initiator-13	0.4 ltrs	0.5 kg	Cr 50 / each

Usage record

☐ LBR-13 Pack ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

☐ LBR-13 1m length ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

☐ PPI-13 Initiator ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

DESCRIPTION

General:

Linear Burning Rope is a cutting tool similar to (and outwardly resembling) a length of linear cutting charge, but for use in environments where the use of an explosive would either be catastrophic or highly dangerous, for example in pressurised vessels, such as starships.

Usage:

After the 8 metre-long coil of LBR is removed from the outer packaging, the inner cellophane wrapping around the rope must be removed. The putty-like material of the rope is malleable with ease, even in cold temperatures (operating temperature range: 100ºK to 285ºK). The rope should be moulded to the edge of the surface to be burned through, and tamped to provide as equilateral a triangular cross-section as possible. Each rope is powerful enough to burn through a standard thickness ships hull.

Two initiators are supplied for times when stress is high: It is not uncommon for an initiator to go 'walkies' in high-stress situations, thus having a second initiator to hand is a measure of insurance against stress-induced forgetfulness. One initiator is sufficient to ignite an entire length of Linear Burning Rope; the initiator, the end of a 8mm wide x 1 metre-long cable connected to the bottom of a 10cm long x 5cm diameter tubular ergonomic grip, is pushed into a convenient place in the rope, much like a plastic explosives detonator plug might be. The red and yellow striped tab is peeled off the top of the grip tube, to reveal a bright red and yellow pull ring, which connects to 1mm thick by 30cm long internally spring-tension-wound cable, which runs a wind-up detonator within the body of the initiator. Pulling the cable out swiftly runs a miniature dynamo inside the initiator, which charges a high-charge capacitor, which on reaching full capacity, discharges after five seconds into the rope, which then ignites.

Effect:

The rope burns extremely brightly (in a similar way to magnesium, and with a significant UV element involved) and with very high temperature within the material being burned through; surrounding temperatures are high, but not excessively so. It takes about thirty seconds for a standard section of hull metal to be burned through, and the edges of the metal will be exceedingly hot to the touch for about half an hour after burning.

The manufacturer of the rope recommends in the literature that an insulating blanket of some kind be affixed to affected surfaces to prevent burn injuries after penetration (they recommend a product they manufacture, as it happens).

TASK LIBRARY

All three tasks must be run *in sequence*.

To successfully set a length of LDR in the proper place in order to achieve the desired cutting result:
Routine, Demolitions, 5 minutes, Fateful
(Failure means the actual result of detonation will be very different from the intended outcome)

To successfully insert the Pull-cable Pyrotechnic Initiator into a length of LBR:
Hazardous, Demolitions, 1 minute, Fateful
(Failure could mean the PPI being incorrectly inserted, it being faulty, or breakage of some form)

To successfully initiate a PPI to fire an LBR charge:
Hazardous, Demolitions, 10 seconds, Fateful
(Failure could result in the charge not firing, firing incorrectly, and/or a combination of the above failures)

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