

ZS-100 Rev D

## AxelCut Emergency Cable Cutter Specification

## Part # ZL-1000-1 NSN# 5110-01-521-1998

**Purpose:** The AxelCut is a manually operated one handed cable cutter, designed to cut helicopter hoist cable .188 inches or 4.7 mm in diameter maximum. It is designed to cut the hoist cable and release the load in the event of entanglement in less than two seconds.

**Technical:** The AxelCut is designed to meet the environmental conditions inherent in a rescue or utility helicopter. It is made from the corrosion resistant materials, stainless steel and anodized aluminum. The AxelCut cutting blades are made of tool steel and coated with electro-less nickel plating. The AxelCut will produce a minimum of 1000 cuts. The cut is extremely clean and allows the use of the various types of quick splice plates.

The AxelCut is supplied with two PTFE coated stainless steel mounting brackets, and a quick release pin. It is also supplied with a mounting tether that has operating instructions labels attached to each side.

**Size:** The AxelCut is 74 cm (29 in) long and is 21 cm (8.2 in) wide at the hook. It is 51 cm (2 in) in depth. The opening for the cable is 6 mm minimum.

**Weight:** The AxelCut weighs less than 2.5 lbs not including the quick release brackets. The mounting brackets weigh .26 lbs.

**Mounting:** The AxelCut installation is shown on Drawing ZL-1000-10. It is recommended that the AxelCut be attached to one of the brackets the supplied mounting tether.

**Operation:** The AxelCut is removed from the mounting brackets by removing the quick release pin and grasping the handle. The AxelCut is controllable via the handle. The operator reaches out and captures the cable while holding on to the cable or aircraft with the other hand. Once the cable has been captured by the AxelCut hook, the operator braces the butt of the AxelCut against their body and draws the handle towards them in a quick motion. The handle actuates the cutting blades with a large mechanical advantage and cleanly cuts the cable.

**Operation recommendation:** The cable should be cut far enough below the hoist to enable a quick splice to be used. In this way the cartridge actuated cable cutter on the hoist is used as the emergency backup.

**Packaging:** The AxelCut comes in a properly sized cardboard box, enclosed in plastic and surrounded with minimum of 2.5 cm (1 in) of protective packaging materials on all dimensions.

Life: The AxelCut has no life limitation.

**Maintenance:** One or two drops of clean light oil should be applied to the cutting blade interface once every 6 months. WD-40 can be applied to the pulleys and handle shaft after a clean water rinse as required. When the AxelCut is used in a salty environment, rinse in fresh water as soon as possible, blow dry by compressed air, and apply clean light oil to the cutting blades and spray the pulleys and handle shaft with WD-40 afterwards. Important: Do not use solvents on the blades.