



## Winches

Altron's standard winch is the Fulton hand winch. We have used it since 1985 and have supplied many thousands of winches into the marketplace. In the U.K. and E.U. there are no specific standards for this type of hand winch. The winch incorporates numerous safety features.

### 1. Automatic braking mechanism

This takes the form of a friction pad clutch. When the winch winds cable in (raises tower/pole), a conventional ratchet is used. When it winds rope out (lowers tower/pole), the primary shaft (the one the handle is attached to) opens itself up (unscrews) and traps a fibre disc (friction pad). The greater the load, the harder the friction pad is gripped. If the handle is released, the load will stay static - the only way to lower the load is to wind against the friction pad.

### 2. Double ratchet spring clip

On winches where there is a ratchet, this is operated under the tension of a spring (the ratchet is pushed into the gear cog by the load of the spring). If the spring should fail, the ratchet will not engage into the cog and the winch load will freefall. A modification Altron had Fulton make to the winch in 1989, was to put a second back-up spring on the winch (1000lb and 1500lb versions). This has now been increased to 2. no. ratchets on the 1500lb winch. This reduces the odds of a possible failure to virtually zero.

### 3. Winch drum gear guard

On 1000lb and 1500lb winches, a guard is fitted as standard and is soon to be introduced on the 2500lb winch. This stops the possibility of anything getting trapped in the gears of the winch during the winding operation such as loose clothing, etc. and also stops the possibility of the drum gears getting damaged (chipped) if the winch, for any reason, is dropped.

**4. Large diameter drum core** - Reduced flattening and kinking of winch cable, extending the usable life of the cable.

**5. Gearing ratio** - The gearing ratio used on all Fulton winches stops the winch being overloaded by manual winding of the winch handle.

## General use and Safety Precautions for Altron Winch Kits

Altron winch kits, incorporating the Fulton winch range, are designed to be as simple and safe as possible to use but, as with all mechanical lifting equipment, require the correct operating method to be employed and a regular maintenance programme. Prior to the raising or lowering of any Altron tower/pole, the operator should be familiar with the possible risks involved in the operation and necessary avoidance and safety precautions. The operator should have thoroughly read the operating instructions supplied, covering the operation of the specific product and be competent in the raising and lowering method. Instructions are always available by contacting Altron and regular training courses are run at our offices.

Under LOLER (The Lifting Operations and Lifting Equipment Regulations 1998), it is the owner's responsibility to carry out an annual inspection of the winch to ensure that it is kept in a serviceable condition. Details of the elements to be inspected can be obtained from Altron. Inspection should be carried out by a competent person and a local lifting gear company may need to be employed to carry out this inspection - on an annual basis.

Please contact us if you require any further information regarding Altron winch kits and their uses.