

## Cable Spiker

Product Data Sheet



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FOR GUIDANCE ON SAFE OPERATING INSTRUCTIONS FOR THE  
CABLE SPIKER PLEASE REFER TO **USE & MAINTENANCE MANUAL**

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## Key Features

### Cable Spiker

The Cable Spiker manufactured by Accles & Shelvoke Ltd is a high quality durable safety tool used worldwide. The tool was developed in 1952 in cooperation with the Central Electricity Generating Board. The Cable Spiker is a cartridge powered tool which when fired drives a steel spike through high voltage electricity cables short circuiting the power and making the cable dead and therefore safe to work on.

The ACVOKE Cable Spiker is available as standard and heavy duty versions:

**The standard Cable Spiker can accommodate cables up to 110mm diameter carrying voltages up to 275KV.**

**A heavy duty version is also available for cables up to 150mm diameter carrying voltages up to 400KV.**

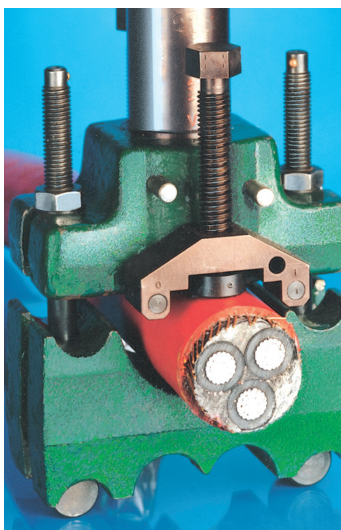


#### Key features:

- ▶ A high quality, durable safety tool is suitable for all cable designs, penetrating every form of normally applied cable coverings.
- ▶ Easy to assemble and simple to operate.
- ▶ Safest tool available for assured cable de-energization
- ▶ Employee safety achieved through positive remote operation
- ▶ Remote Firing – the tool uses a seven metre long lanyard and release pin which when operated completely separates from the tool at the moment of firing. This ensures total operator safety in the event of a 'live' cable being spiked.
- ▶ Safety – the tool has a unique self setting safety system which requires the deliberate action of pressing the Safety Catch to its 'fire' position. This eliminates the risk of operator inadvertently firing the tool when setting the firing mechanism.
- ▶ Portability – needs no external power source, the use of a blank cartridge as the source of energy means the tool can be used anywhere.
- ▶ Robust – the tools sturdy construction ensures years of trouble free use.
- ▶ Versatile – the use of different cartridge strengths and various clamping arrangements allows the tool to be used on a wide range of cables.

## Key Features

### Cable Spiker Jack



When spiking polymeric cables, difficulty can sometimes be experienced with blade removal. The Cable Spiker Jack offers a simple and effective solution to this problem.

#### Key features:

- ▶ Easy blade withdrawal from polymeric cable.
- ▶ Reduces operator fatigue.
- ▶ Protects tool from unnecessary damage during removal.
- ▶ Easy low cost modification to existing tool by manufacturer.
- ▶ Fits standard tool (not available for Heavy Duty model).

## A LIFE SAVER

### SCOPE

When it is intended to work on any Electrical Power Cable, either for the purpose of carrying out repairs or for tapping or arranging additional feeders, it is vital that special precautions be taken to secure the safety of the employees.

After the cable has been made dead and connected to earth at the point of supply, the cable is cut, usually by means of hacksaw or cutters.

### CRITERIA

It often happens that the cable to be cut is distant from the circuit disconnect, grouped with other cables and sometimes buried in the ground. In order to avoid any possibility of a mistake and a "live" cable being cut, most authorities insist that a sequential rigid four step procedure be followed which requires the disconnection of power at both circuit ends, identification of cable markers, electronic instrumentation signal checks and finally cable mechanical spiking.

The authorities made the final step mandatory which requires that a wide iron spike be driven, either with a hammer or an extended stick into the cable intended to be cut before allowing further work to proceed. If by any mischance a "live" cable is spiked, the resulting high magnitude short circuit current should trip out the feeder circuit breaker.

### SAFETY CONSIDERATIONS

This method was somewhat crude and there is grave danger to the employee carrying out the spiking operation, owing to the sudden thrust of substantial electrical fault energy capable of exploding the cable and creating a high velocity deadly spray of conductor, shield and/or sheath metal fragments. Even the sight of a fault flashover could cause permanent blindness.

### SAFETY FEATURES

In order to enable the spiking operation to be carried out in perfect safety, the Accles & Shelvoke Cable Spiker has the great advantage that it can be remotely controlled at the moment of firing by means of a lanyard (rope) release. The operator can thus stand at a point of safety and if by chance a "live" cable is spiked, the damage will be local to the cable.

As the speed of penetration of the spiking punch is so rapid, it has been found in practice that even if a "live" cable is spiked, usually no damage to the cable spiker results. If however, the fault current happens to be extremely high, it may be that the actual spiking punch itself may suffer, but yet be capable of tripping a normally operating breaker.

This punch, is of course, easily replaceable and a spare can be fitted in a matter of seconds. An added feature of the Cable Spiker is that the wide punch shears the cable partially or totally, depending on the cable size, hence reducing additional cable cutting effort.

### APPLICATIONS

The Cable Spiker is suitable for use with all types and voltages of power cable including single and multiple conductor laminated, polymeric, elastomeric, unshielded, shielded, concentric neutral, interlock armoured, steel wire armoured, leaded covered etc., designs in either fixed or portable installations.

### PREVENTS ACCIDENTS

The Cable Spiker is a quality durable tool designed to positively electrically ground out any required power cable for definite manpower accident prevention and life saving.

### SERVICING INFORMATION

#### Servicing

Accles & Shelvoke provide a comprehensive service and repair facility where customers can have their Cable Spiker serviced by our highly trained engineers:

- ▶ As the fitting of most parts often requires detailed instructions or expert knowledge it is generally advisable to return the Cable Spiker to Accles & Shelvoke where a full inspection and test can be carried out.
- ▶ Service and repair facility is generally open to UK customers; overseas customers are advised to contact their local distributor.
- ▶ Customers are advised to contact Accles & Shelvoke direct on 0121 313 4567 to make arrangements to return the Cable Spiker for service or repair.
- ▶ Quotation will be provided on inspection of the tool, listing service charges and replacement parts required.

**If in doubt and you require further advice and information on the Cable Spiker please contact Accles & Shelvoke direct or you're local Distributor.**

# Parts List

## Cable Spiker

PART NO.	DESCRIPTION
2233	Standard Cable Spiker – for use with steel wire armoured cable up to 110mm
2235	Cable Spiker as above complete with Jack Assembly
2234	Heavy Duty Cable Spiker – for use with steel wire armoured cable up to 150mm

NOTE: Above come complete with lanyard and release pin, cleaning tool, cranked lever and instructions manual.

PART NO.	DESCRIPTION
2260	Jack Assembly (fits Standard tool only)
2191	Conversion clamp – for 11 KV aluminium sheathed cables PT.1430/9S
2238	Clamp for polymetric cable PT.1430/9 EPR
2241	Clamp for triplex cable PT.1430/9T

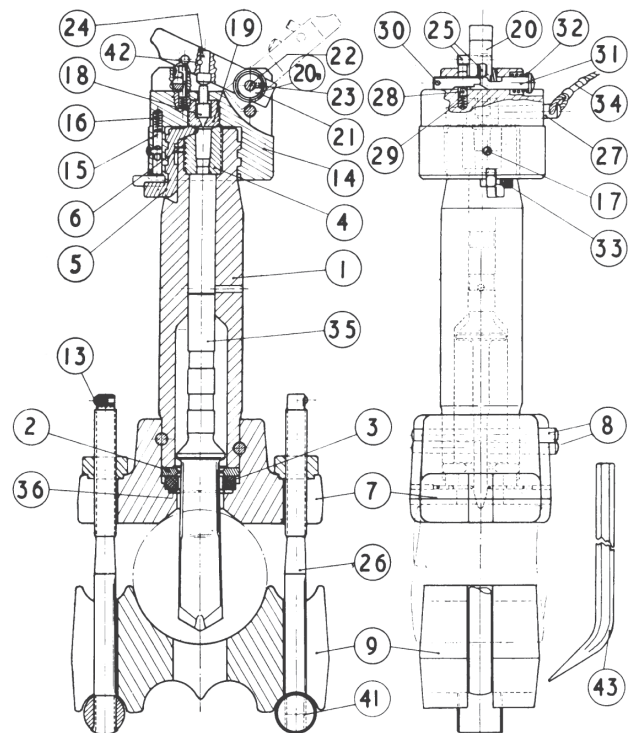
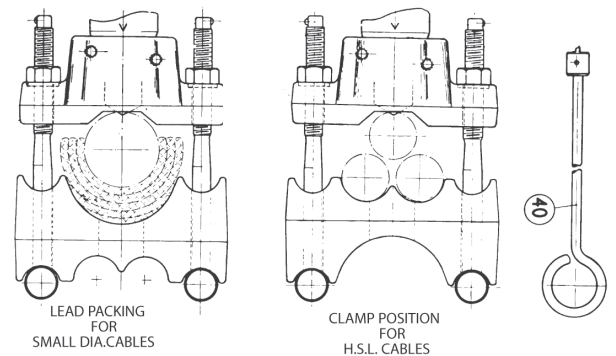
CARTRIDGES – .44 calibre supplied in boxes of 25

PART NO.	DESCRIPTION
7925	<b>YELLOW MARK</b> – Extra light charge for small polymeric type cables having no outer metallised sheath
7920	<b>SILVER MARK</b> – Light charge for all aluminium sheathed cables up to 300mm square
7900	<b>GREEN MARK</b> – Medium charge for plain covered cables and for armoured cables up to 85mm
7900	<b>RED MARK</b> – Heavy charge for armoured cables over 85mm with Standard Cable Spiker and up to 150mm with Heavy Duty Spiker)

### SPARE PARTS

NOTE when ordered spare parts please state model and serial number of the tool.

ITEM NO.	PART NO.	DESCRIPTION	NO. PER SET
1*	2182	Barrel	1
2	2183	Barrel Base Steel Washer	1
3	2184	Barrel Base Stop Washer	1
4*	2185	Breech Block	1
5*	2186	Extractor	1
6	2187	Extractor Retaining Screw	1
7*	2188	Barrel Base	1
8	2189	Barrel Base Taper Pin	2
9	2190	Cable Clamp	1
14*	2194	Breech cap	1
15	2195	Breech Cap Latch	1
16	2196	Breech Cap Latch Spring	1
17	2197	Breech Cap Latch Retaining Screw	1
18	2198	Firing Pin	1
19	2199	Firing Pin Bush	1
20*	2200	Hammer and 20B Hammer Bush	1
21	2202	Hammer Spring	1
22	2203	Hammer Spring Pivot	1
23	2204	Hammer Pivot Retaining Screw	1
24	2205	Hammer Button	1
25	2206	Stop Pin	2
26	2207	Clamp Bolt Complete	2
27	2208	Hammer Release Pin	1
28	2209	Hammer Safety Cross Pin	1
29	2210	Hammer Safety Cross Pin Spring	1
30	2211	Hammer Safety Cross Pin Dowel	1
31	2212	Safety Catch	1
32	2213	Safety Catch Spring	1
33	2214	Breech Cap Stop Screw	1
34	2215	Lanyard	1
35	2216	Piston Punch	1
36	2218	Piston Punch Locating Spring	1
40	2222	Cleaner Complete	1
41*		Trunnion	2
42	2224	Hammer Button Cross Pin	1
43	2225	Lever	1



### NOTE!

Parts marked \* are not available as spares, Accles & Shelvoke provide a service and repair facility for replacement of these parts.