

## ***Lightweight, manually extended mast, field or vehicle mounted for general purpose military use***

### ***Introduction***

The PU family of lightweight telescopic masts have been in service with defence forces worldwide since 1970. The principle of manual extension and crosspin locking is extremely simple and reliable. Four extended heights are available from 5 to 11,4 metres. All may be vehicle mounted and used unguyed or fully guyed when erected as a field mast.

Laboratory environmental tests have been very extensive and all have been confirmed in real operations worldwide. Operating & Repair Handbooks are available with a guarantee of Nato codified spare parts for the indefinite future. In addition to the Standard PU masts, there are also several smaller PU masts having a reduced number of sections.



*Photo: PU mast field mounted, fully erected and guyed.*



*Photo: PU Mast vehicle mounted, unguyed.*

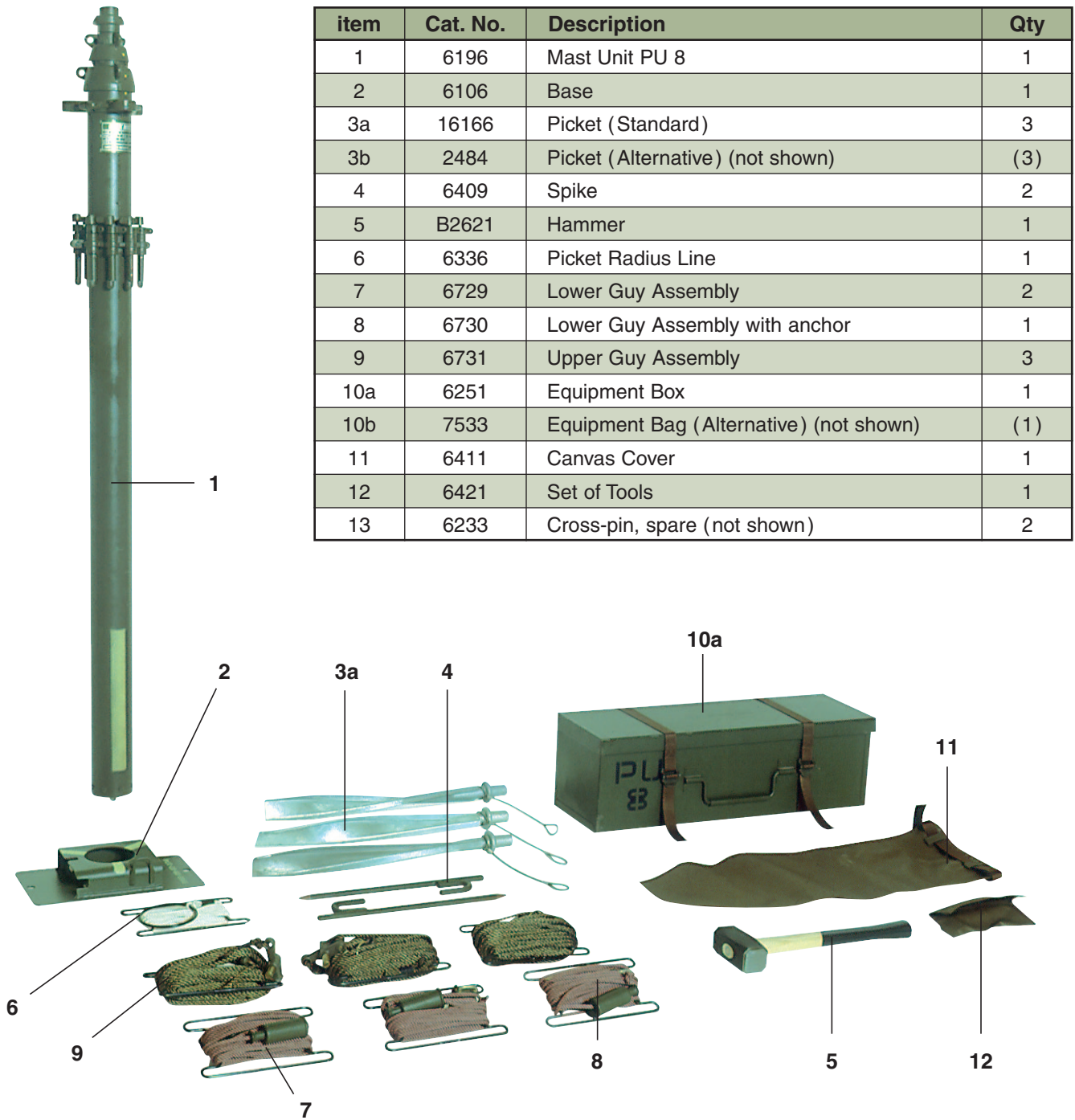
### ***General Description***

Standard PU masts have 8 telescopic sections constructed from high strength anodised aluminium alloy. The unique feature which identifies them is the simple crosspin, used to lock each mast section as extended. The pins are carried in a holder on the mast and experience shows that pin loss is negligible. As a safety feature, each mast section is fitted

with a pneumatic shock damper to protect the operator if care is not exercised when the mast is being retracted. Although simple in concept, PU masts are full of sound engineering detail. Mast sections slide in nylon bushes, whilst a bubble level assists setting up vertical. The mast can be completely dismantled using the small tool kit supplied.

# Standard PU Kit

## Contents of a Standard PU Kit (PU 8 shown)



item	Cat. No.	Description	Qty
1	6196	Mast Unit PU 8	1
2	6106	Base	1
3a	16166	Picket (Standard)	3
3b	2484	Picket (Alternative) (not shown)	(3)
4	6409	Spike	2
5	B2621	Hammer	1
6	6336	Picket Radius Line	1
7	6729	Lower Guy Assembly	2
8	6730	Lower Guy Assembly with anchor	1
9	6731	Upper Guy Assembly	3
10a	6251	Equipment Box	1
10b	7533	Equipment Bag (Alternative) (not shown)	(1)
11	6411	Canvas Cover	1
12	6421	Set of Tools	1
13	6233	Cross-pin, spare (not shown)	2

## Table of Standard PU Mast Kits

Mast Model	Kit Cat. No.	NSN Mast Unit	Closed Height (m)	Extended Height (m)	Maximum Headload (kg)	Weight of Mast Unit (kg)	Weight of Kit (kg)
PU 5	17378	-	1,05	5	10	7,0	28,0
PU 8	6198	5985-99-637-9873	1,40	8	10	9,5	30,5
PU 10	6331	5985-99-625-3744	1,68	10	10	10,8	31,8
PU 12	6104	5985-99-117-3751	1,86	11,4	10	11,7	32,7

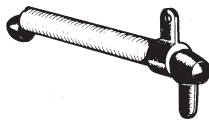
## General Description (cont.)

The top of the mast is fitted with an easy-to-clamp 24 mm socket. Terylene guys are colour coded for identification and all are fitted with ball type tensioners. The lowest guys are adjustable at the mast. The standard finish is Nato green paint with green anodised mast sections.

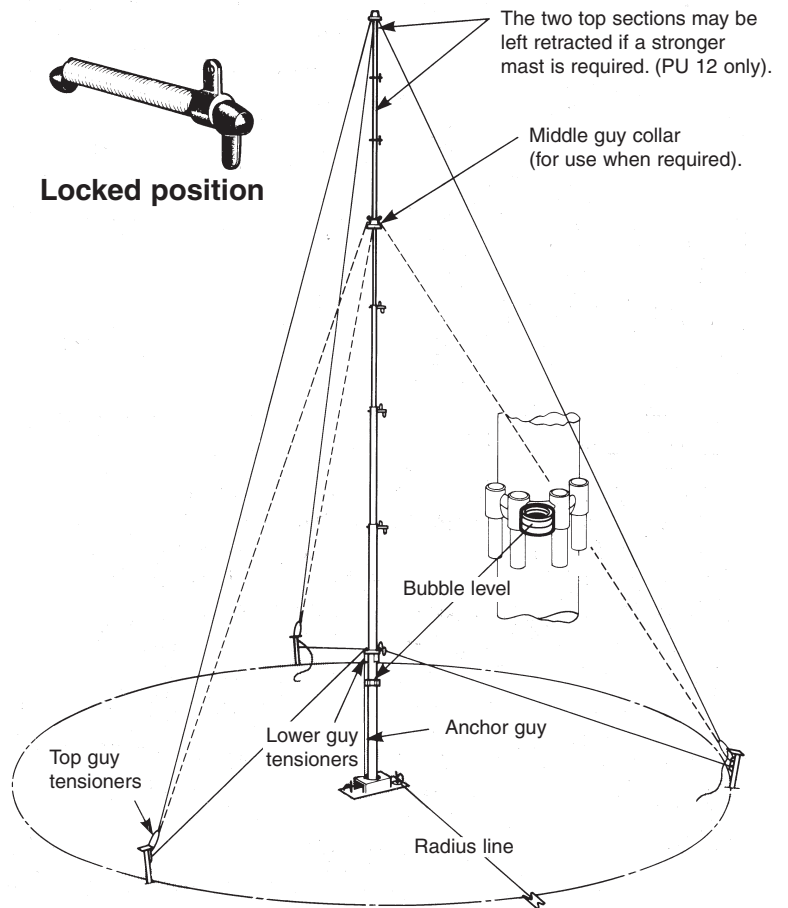
PU masts are not rotatable. If a direction antenna is to be supported, a rope operated rotator is optional.



Unlocked position



Locked position

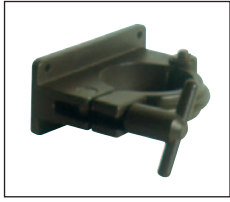


## Deployment

When set up as a field mounted mast, the layout is as shown above. Average time to set up by a team of two is 10 minutes including picket driving and antenna and feeder cable attachment. Antennas most commonly supported are end or centrefed broadband dipoles, typically 30-108 MHz. Using the halyard rope accessory, PU masts are also used by several defence forces to support HF wire antennas in various configurations.



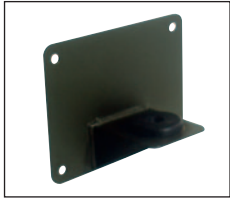
## Vehicle or Shelter Mounting



**MAST SADDLE CLAMP**  
Cat. No. 2433

Quick release non-adjustable fixing for shelter or vehicle.

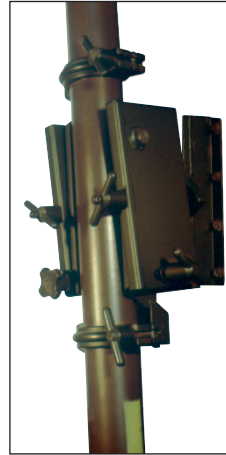
NSN 5820-99-214-7567  
Weight: 0,75 kg.



**LOWER MOUNTING BRACKET**  
Cat. No. 9425

To be used in combination with mast saddle clamp.

NSN 5340-13-116-7032  
Weight: 1 kg.

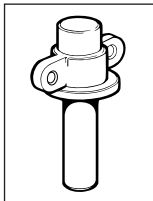


**SHELTER OR VEHICLE MOUNTING** Cat. No. 10481

May be mounted on vehicle or shelter wall. Mast quickly attached. Adjustment  $\pm 10^\circ$  in both planes.

NSN 5985-99-911-5631  
Weight: 11 kg.

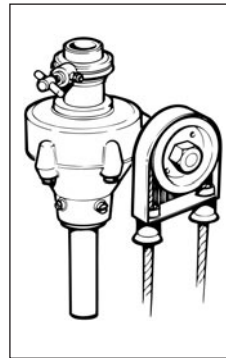
## Optional Equipment



**HALYARD ADAPTOR**  
Cat. No. 15036

This attachment slips into the top socket of the mast and provides lugs for one or two halyards for wire antennas.

NSN 5985-99-441-9879  
Weight: 0,2 kg.

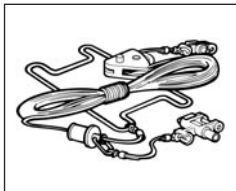


**ANTENNA ROTATOR**  
Cat. No. 6508/NG

When a directional antenna is to be carried this rotator is the method of turning the antenna after mast extension. It is operated from the ground by a cord. The bottom of the rotator has a 24 mm dia. spigot. The top has a 24 mm dia. normal mast socket.

NSN 5985-99-620-8958  
Weight: 1,45 kg.

**HALYARD ROPE ASSEMBLY. Cat. No. 6761 (PU 8)**

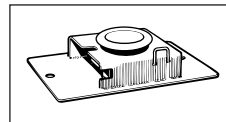


Comprises a terylene rope with pulley block which couples instantly onto the Halyard Adaptor. With automatic tensioner for attachment to mast baseplate.

NSN 5985-99-637-9878  
Weight: 1,1 kg.

**BASE INSULATOR Cat. No. 6581**

When the mast, field erected, must be insulated from the ground, this rubber insulating cup may be slipped into the standard base. If the mast is being used as a radiator, a continuity wire should be used.



NSN 5985-99-637-0533  
Weight: 0,8 kg.



**FEEDER CABLE STRAP Cat. No. 6765**

A canvas strap to restrain the feeder cable by strapping to the mast.

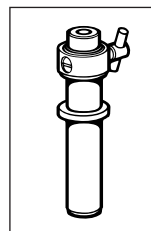
NSN 5340-99-717-1985  
Weight: Per Set of Five: 0,1 kg.

**HEIGHT EXTENDER Cat. No. 6974/NG**

This attachment adds 1 m to the mast. It is fitted with a guy collar to which the top guys should be fitted. Middle guys should be fitted to the mast when extender is used.



NSN 5985-21-889-0024  
Approx. Weight: 1,1 kg.



**10 mm SOCKET ANTENNA ADAPTOR**  
Cat. No. 6113

This is an efficient adaptor for a number of Military VHF Antennas having stems between 9 and 10 mm dia.

NSN 5985-99-117-3746  
Weight: 0,2 kg.

# CLARK MASTS™

All details given in this publication are approximate and may be subject to change without notice.

Distributor :

**TEKSAM COMPANY NV**, Woudstraat 21, 3600 Genk, Belgium

Tel : +32 (0)89 38 44 72 Fax : +32 (0)89 38 61 41 E-mail : info@teksamco.com Website : www.clarkmasts.be

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