

# MAIN CONTENTS



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Customised Sticks, Stick Kits & Lifting Jibs



# Approach & Insulation Distance Information

**MAD** = Minimum Approach Distance is the minimum air gap or summation of air gaps measured between any part of the operator and live electrical apparatus.

Detailed information can be found in AS 5804 and a small extraction from this standard is adjacent for minimum standard distances based on ideal circumstances.



# Introduction TEN Manufacturing

TEN can customise fibreglass sticks and stick kits, end fittings and tools to suit your requirement. Utilising Hastings Fibreglass and components, you can be assured of a quality product.

# Live Line Working MAD's General Information

Live working tools are generally fibreglass tubes with solid unicellular foam filled cores. In most cases factory tested to 100kV/300mm of insulation.

Where stated the sticks comply with ASTM F711, IEC 60855 or OSHA standards. Minimum approach distances for Australia and New Zealand are stipulated by AS 5804, the actual distance is ultimately determined and specified by the local network provider.

A live line tool only achieves its insulation rating when the stick surface is clean, free of moisture, in good condition and hydrophobic. Hydrophobic means tending to repel and not absorb water. See from page D32 for cleaning instructions.

Live Working							
Minimum Approach Distance (MAD)*							
Nominal Voltage AC (kV)	Phase to Earth	Phase to Phase					
	Auto-reclose OFF	Auto-reclose OFF					
	Distance (mm)	Distance (mm)					
11	350	400					
22	400	500					
33	450	550					
50	550	700					
66	600	800					
88	700	1000					
110	800	1200					
132	900	1300					
220	1300	2000					
275	1600	2400					
330	1900	3000					
400	2400	3900					
500	2400	3900					

<sup>&</sup>lt;sup>1</sup>The above information is for reference only and is incomplete. Subject to numerous contributing factors such as environmental, etc.

Refer to local network providers and reference AS 5804 standard for specific area regulations.

<sup>\*</sup> Based on minimum 300mm ergonomic distance



# **Hand-guards & Warning Markers**

Australian standard AS 5804 states that "clearance markers shall be placed on hand sticks to define the insulated section and define the separation from the hand held section". It also states that the "markers shall be secured to the live work stick to prevent their movement".

TEN can provide a range of marker and hand-guard solutions. The A30002 and A30003 from Hastings (Refer to page D11) are the most popular as they are a safety red colour.



# **Tool Ratings**

Recommended voltage ratings of products within this catalogue section should be used as a guide only. The product specifications are mainly to US (OSHA and ASTM) standards which may not be applicable to your situation. Contact your local network provider for specific clearances required.





# **HASTINGS FIBREGLASS**

When it comes to making safe and dependable live line tools and equipment, Hastings is the number one choice for line-workers around the world. Helping line-workers get home safely since 1959.

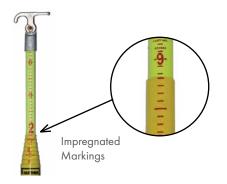
Hastings Competitor

# WHY HASTINGS

Unique FEATURES set Hastings Sticks apart from their competition

# **Foam Filling**

• Foam Uniquely Encased and heat treated ensuring a water-tight structure without voids which allows complete adhesion between fibreglass/resin and foam

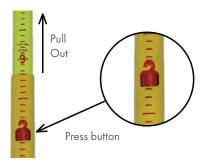


# **Easy to Read Markings**

• Heat impregnated "EASY TO READ" markings pass IEC-62193 abrasion tests. Will not Chip, Peel or Rub Off

# **Rigorously Tested**

- Low Deflection, great when locating Fuse Rings etc
- Manufactured with rigorously tested material, ensuring the production of the highest quality electrical and mechanical fibreglass tube in the world
- Meet all applicable ASTM F711, ASTM F1826, IEC-60885 and IEC-62193 standards and specifications
- Every stick is electrically tested in the factory



# Plug & Play

- Replace sections in seconds Plug & Play
- Replacement Sections "IN-STOCK"
- Remove and utilise only the sections required for the job at hand
- Easily dismantled for cleaning and maintenance



Double sided Sunrise Disconnect Hook

# **Sunrise Head**

• Double Sided Sunrise Disconnect Hook. For left or right facing applications



Quick disconnect head

# **Push Button Quick Connect**

• Connect & Disconnect Universal Tools with a press of a button.



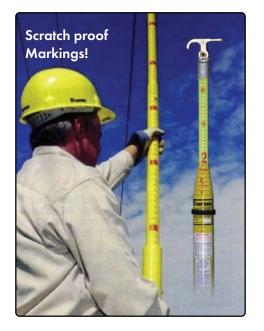
SCAN or CLICK the QR-Code for Quick Disconnect operation video

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**Triangular Profile** = NO Twist



**NO TOOLS ARE REQUIRED TO REPLACE SECTIONS** 

# **Telescopic Measuring & Operating Sticks**

# **Triangular Telescopic Measuring & Operating Sticks**

# **Part No. MV Series**

- Open and close switches, EDO's and service fuses
- Replaceable sections, no disassembly tools required
- Fluoro lime green tip section is foam filled
- Tested to ASTM F711 & OSHA
- Stick includes double sided Universal Disconnect Hook #P10431-2
- Measure elevated heights
- Supplied in metre/centimetre measuring graduations
- Eye level reading feature with measurement markings in large, red numbers
- Markings will not chip, peel or rub off

# **Ordering Information**

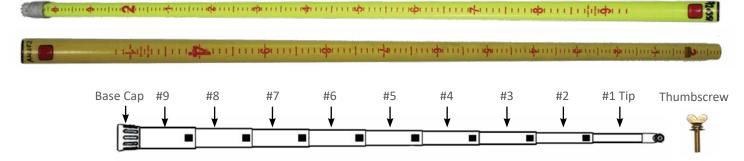
Part No.	Stick c/w Quick release head	Extended Length (m)	Retracted Length (m)	Base OD (mm)	Wt (kg)	Add "-K" for Storage Bag
MV-25	MV-25-Q	7.8	1.6	48.5	3.7	
MV-30	MV-30-Q	9.2	1.7	52.5	4.5	TENIMOO1
MV-35	MV-35-Q	10.6	1.7	56.0	5.5	TENM301
MV-40	MV-40-Q	12.0	1.8	60.4	6.5	



Storage Bag

# **MV-Series Replacement Parts**

- Refer to MV Matrix for replacement part numbers
- No tools are required for replacing as sections sold complete with lock assembly
- Order base cap separately if replacing base section



MV Series	Replacement Sections & Parts #										
Part No.	Base Cap	#9	#8	#7	#6	#5	#4	#3	#2	#1 Tip Section	Thumbscrew
MV-25	P18029	-	-	-	A20348	A20356	A20355	A20354	A20353	A20352	P16055
MV-25-Q	P18029	-	-	-	A20348	A20356	A20355	A20354	A20353	A20462	Not Required
MV-30	P18030	-	-	A20349	A20357	A20356	A20355	A20354	A20353	A20352	P16055
MV-30-Q	P18030	-	-	A20349	A20357	A20356	A20355	A20354	A20353	A20462	Not Required
MV-35	P18031	-	A20350	A20358	A20357	A20356	A20355	A20354	A20353	A20352	P16055
MV-35-Q	P18031	-	A20350	A20358	A20357	A20356	A20355	A20354	A20353	A20462	Not Required
MV-40	P18026	A20263	A20359	A20358	A20357	A20356	A20355	A20354	A20353	A20352	P16055
MV-40-Q	P18026	A20263	A20359	A20358	A20357	A20356	A20355	A20354	A20353	A20462	Not Required













Storage Bag TENM301

# **Triangular Telescopic Operating Sticks**

# **Part No. HV Series**

- Suitable for HV operations
- Open and close switches, EDO's and service fuses
- Replaceable sections, no disassembly tools required
- Fluoro lime green tip section is foam filled
- Tested to ASTM F711 & OSHA
- Stick includes double sided Universal Disconnect Hook #P10431-2

# **Ordering Information**

Part No.	Extended Length (m)	Retracted Length (mm)	Base Diameter (mm)	Wt (kg)	*Add "-K" for Storage Bag
	Switching	g Telescopic Sticl	c (No Measurem	ent Markings	)
HV-208	2.4	0.7	44.5	1.4	TENM308
HV-212	3.8	1.5	36.8	1.7	TENM309
HV-216	5.0	1.5	40.9	2.3	TENIM 201
HV-220	6.4	1.6	44.5	2.9	TENM301
EX2-1848 <sup>1</sup>	4.4	0.94	44.5	3.0	TENM309

<sup>1</sup>EX2-1848 does not include disconnect hook (P10431-2)

# **HV-Series Replacement Parts**

- Refer to HV Matrix for replacement part numbers
- No tools are required for replacing as sections sold complete with lock assembly
- Order base cap separately if replacing base section

HV Series	Replacement Sections & Parts #							
Part No.	Base Cap	5	4	3	2	1 - Tip Section		
HV-208	P14037	A20264	A20258	A20259	A20260	A20296		
EX2-1848	P14037	A20376	A20270	A20269	A20268	A20267		
HV-212	P18020	-	-	A20254-B	A20255	A20256		
HV-216	P18027	-	A20253-B	A20254	A20255	A20256		
HV-220	P18028	A20252-B	A20253	A20254	A20255	A20256		



# **Triangular Telescopic Operating Stick/Kit**

# Retracts to 940mm - Fits under lip of EWP

Ideal for removing & installing House-service fuses

Choose the short Tele-stick or a kit including fuse puller and carry bag

Part No.	Extended Length (m)	Retracted Length (m)	Wt (kg)			
EX2-1848	4.4	0.94	3			
EX2-1848-K	Kit includes 1 x EX2-1848/ 1 x LVDP/ 1 x TENM309					

# **Talon Hook Kit with Tele-Stick**

# Reduce the drop risk by securing drop out fuses

Part No. MV-35-K1

Part No.	Kit Includes
MV-35-K1	1 x MV-35/ 1 x 4440/ 1 x TENM301







# **Round Telescopic Operating Sticks - Tip Lock feature**

# **Part No. ST Series**

- Tip retracts and locks into larger section for extra stability
- Double button version available for easy locating when extending pole
- The Tip diameter for ST models (extended) is 22mm or (retracted) is 27.8mm

Part No.	Extended Length (m)	Retracted Length (m)	Base diameter (mm)	Bag	Wt (kg)
ST-225	5.1 - 6.4 - 7.8	1.52	55.5	TENM301	3.2
ST-230	5.1 - 6.4 - 7.9 - 9.1	1.57	60.3	TENM301	4.0
ST-235	5.1 - 6.4 - 7.9 - 9.1 - 10.6	1.61	68.3	TENM301	5.0
ST-240	5.1 - 6.4 - 7.9 - 9.1 - 10.6 - 12.1	1.66	81.0	TENM301	6.3

Sections and spare parts available for ST Series Telescopic sticks. Contact TEN for more information.

# **Extension Section**

• Suits MV, HV & ST sticks to extend the tip length

Part No.	Length (mm)	Wt (kg)
839-2	1420mm	0.9

# **Round Telescopic Measuring Sticks**

# **Part No. M Series**

- Measure elevated heights
- Foam filled tip section
- Tested to ASTM F711 & OSHA
- Kit with Storage Bag

- Meter/centimeter measuring graduations
- Eye level reading with measurement markings in large, red, easy to read numbers
- Markings will not chip, peel or rub off





Part No.	Stick Head	Extended Length (m)	Retracted Length (m)	*Add "K" for Storage Bag	Wt (kg)
M-25*	Hook	7.5	1.7	TENM301	1.5
M-35*	Hook	10.5	1.7	TENM301	2.7
M-40*	Hook	12.0	1.7	TENM301	3.4
M-50*	Hook	15.0	1.8	TENM301	6.0

Hook P30248-R	• 1	• <sub>2</sub>	e 3	<b>9</b> 4	₽ <sub>5</sub>				9	10	Bubbar
	•	10	10	1 0		0	•	•	۰	۰	Rubber
No.1	No.2	No.3	No.4	No.5	No.6	No.6	No.7	No.8	No.9	No.10	Cap

# **M-Series Replacement Parts**

Part No. (# Sections)	1	2	3	4	5	6	7	8	9	10	11	Base Cap
M-25 (6)	P21606	P21446	P21447	P21448	P21449	P21419	-	-	-	-	-	P18020
M-35 (8)	P21606	P21446	P21447	P21448	P21449	P21450	P21451	P21423	-	-	-	P18029
M-40 (9)	P21606	P21446	P21447	P21448	P21449	P21450	P21451	P21452	P21425	-	-	P18030
M-50 (11)	P21607	P21454	P21455	P21456	P21457	P21458	P21459	P21460	P21461	P21462	P21426	P18035
Complete Lock Assembly #	A14011	A 14012	A 14013	A 14014	A 14015	A14031	A14032	A14029	A14030	A14028	-	-
Drive Pin/Roll Pin#	P16513	P12022	P12022	P12022	P12022	P12022	P12022	P12022	P12022	P12022	-	-
Pin & Spring Assembly #	A 12018	A 12004	A12023	A12027	A12020	A 12012	A 12013	A 12015	A 12014	A 12015	-	-
Hook		For M25, M30, M35, M40, M50 use P30248-R										

Replacement parts available. Contact TEN for further information.



Refer to

Hydraulics section for

Impact Wrenches & Accessories

# FIBREGLASS EQUIPMENT

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# Part No. 10- Series

- Heat treated end with male end pin retainer for sockets
- Foam filled fibreglass insulating section tested to ASTM F-711 and OSHA

Part No.	Insulation Distance (mm)	OAL (mm)	Wt (kg)
10-199	455	695	1.2
10-200	760	1000	1.7
10-201	1070	1305	1.8
10-167	1675	1960	2.4

# Flexible Head Socket Wrench & Driver

- "½ square drive
- Foam filled fibreglass insulating section tested to ASTM F-711 and OSHA

Part No.	Description	Drive	OAL (mm)	Wt (kg)
10765	Socket Wrench	1/2"	1830	2.4
10768	Socket Wrench	1/2"	2440	2.7
SA50A	Ratchet Handle - ½" Female suits base of Socket Wrench & Extension	½″	-	0.7

# Pole Handling Tools - Insulated Ratchet Strap style - Hastings

# Part No. 6856 Series

- Suits wood, concrete, metal and fibreglass poles
- Foam filled stick handle tested per OSHA & ASTM F-711
- Nylon strap specially designed for gripping
- Heavy duty ratchet binder with extra wide handle
- Neoprene pad on base prevents damage to poles
- Two way turning feature can turned in both positions without reinstalling the tool

	Length of	Dimensio	ns (mm)	Wt (kg)	Suits pole
Part No.	Strap (m)	Stick OD	k OD Stick Length		Approx. Size (mm)
6856	1.8	50	1000	4.5	450
6856-3	2.4	50	1220	4.6	650

# **Cant Hook style - Hastings**

- Suits Wood Poles
- High strength forged steel hook
- Heavy duty protective steel sleeve on head end

Down No.	i	\A/4 /lem\		
Part No. Stick OD		Stick Length	Wt (kg)	
6705	45.0	915	3.4	

# **Strap Friction style - Chance**

- The two-in-one tool performs the functions of both a cant hook and a pole tong without spiking the pole.
- Latex-impregnated nylon-web strap
- Epoxiglas® handle

Part No.	Stick OD (mm)	Length (mm)	Working Load	Wt (kg)
C305-0021	51	1828	Strap rated at 3400kg	3.6



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# **Shotgun Sticks**

# Part No. 81 Series

- Full open side hook offers unobstructed view
- Precision cast slide gives complete control and extra firm grip
- Hook release trigger shielded to avoid accidental operation
- Hanger hook moulded into head
- Foam filled fibreglass main shaft
- Tested to ASTM F711 & OSHA
- Fixed shotguns tested to IEC 60855
- Solid fibreglass operating rod with guide
- Non-conductive polycarbonate head



# **Fixed**

Part No.	Type/Model	Over All Length (mm) <sup>1</sup>	Bag	Wt (kg)
8104	Fixed	1370	TENM309	2.0
8106	Fixed	1980	TENM301	2.35
8108	Fixed	2590	TENM310	2.95
8110	Fixed	3200	Custome	3.3
8112	Fixed	3810	Custome	3.5

# **Telescopic**

Part No.	Type/Model	Retracted Length (mm)*	Extended/OAL (mm) <sup>1</sup>	Bag	Wt (kg)
8158	Telescopic	1550	1550, 1980, 2440	TENM309	2.6
81611	Telescopic	1980	1980, 2440, 2895, 3350	TENM301	3.0
81-811	Telescopic	2440	2440, 2895, 3350, 3810	TENM310	3.3
81-814	Telescopic	2440	2440, 3050, 3655, 4265	TENM310	3.5

<sup>\*</sup> Collapsed lengths for storage or transport

# **Sectional**

# Part No. 81 Series

- Same features as Fixed and Telescopic shotguns
- Select Base & Head then required extension sections for height
- Contact TEN for storage bag solutions



Part No.	Section	OAL/ Base & Head (mm)	Wt (kg)
81-704	Base & Head	1524 (1219 & 304)	2.2
81-706	Base & Head	2133 (1828 & 304)	2.5
81-708	Base & Head	2743 (2438 & 304)	4.3
81-710	Base & Head	3352 (3048 & 304)	5.1
EX2-1464	Extension	600	0.6
81-604	Extension	1219	1.1
81-606	Extension	1828	1.6
81-608	Extension	2438	2.3
81-610	Extension	3048	2.7
81-4023-5	Head	304	0.7

Kits including hand guards, cleaning accessories & carry bag available. Contact TEN for further information.

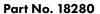


<sup>&</sup>lt;sup>1</sup> Lengths which can be locked for operating

<sup>#</sup> Custom Made



# **Shotgun Stick Kits**



- Fixed sectional shotgun kit (other options
- Complete range of adaptors & accessories
- Customised versions available



FIBREGLASS EQUIPMENT

Part No.	Item Description	Qty in Kit
8106	Shotgun Fixed 1.8m	1
10-090	Cloth Silicone	1
10-188-1	Wipes Silicone Single Sachet	2
MET GUARD	Met Guard Warning Ring	1
PLEGAAM1	Adaptor Shotgun to Universal Head	1
LVDP	Fuse Extraction Head	1
LLCR	Live Line Clamp Remover	1
P10431-2	Universal Disconnect Hook	1
TENM311	Carry Bag Red	1

See from page E36 to E40 of the Safety & PPE section for fibreglass stick Cleaning

# **Shotgun Stick Package**

Part No.	Length of Sections (mm)	No of Sections	Operating Lengths (m)	Description	Wt (kg)
81-544	1200	4	1.5 - 2.7 - 3.9 - 5.2	Sectional shotgun stick package complete with base, head, intermediate sections and carry case	7.1

Contact TEN to Design Your own Stick Package

# **Hand Guards**

# Part No. A3000 Series

- High visibility safety red for visual warning of approach distance
- Provides hand guard or barrier
- Split and double flat head screw design makes installation easy
- A30002 suits shotgun operating rod
- Non-conductive delrin



Part No.	Suits Stick OD (mm)	Weight (grams)
A30002	32	20
A30003	38	25
A30005	50	30

# Stick Mounts for truck boxes & compartments

















Part No.	SM25	SM32-38	SM45	SM63-76	SM32-ETS	A10009	10-151-2
Suits Sticks (mm) OD	25	32-38	45	63-75	32-38	32-38	32
Description	Stick Mount with Screw Holes No Mount Holes					Hange	r Hook
Use	Mounting Stick in Truck or on Wall					Hangir	ng Stick
Material	Polyurethane					S/S Hose Clamp & Bronze Hook	S/S Hose Clamp & PU Hook







# **Optional Extras**

# **Universal "Spiral" Hook**

Part No. 10-106



• Used for grabbing and holding branches or wire during tree trimming

# **Debris Removal Tool**

Part No. DV-1



- Universal aluminium base
- Two-prong angled tapered design for quick vegetation removal
- Can also be used to remove tree limbs and break ice

# **Rope Insulator**





# **Tree Trimming Equipment Tree Trimming Kits - Hastings**

# Part No. 4141 & 4142

- For line clearance crews, trouble shooting and emergency call outs
- Complete kit with sticks, cutter, saw and adaptors in Protective carry bag
- Tested to ASTM F-711, IEC 60855 & OSHA
- Refer to local network provider procedures for live line use

Part No	Stick OD (mm)	Length of Sections (m)	Maximum Height (m)	Description	Weight (kg)
4141	32	1.2	4.8	Tree Trimming Kit	6.8
4142	32	1.8	7.2	(Refer below for contents list)	8.6

Open the bag and you have choice of tree trimming tools in the length required, all in a convenient heavy-duty vinyl tool bag that offers maximum protection for the tools



# Spare parts & accessories available at TEN

Don't No.	ham Dannindian	Qty i	ty in Kits	
Part No.	Item Description	4141	4142	
546-4	Stick Sectional Extension 1.2m	4	-	
546-6	Stick Sectional Extension 1.8m	-	4	
4125	Cutter - Tree Pruner 600mm FG	1	1	
A18007	Base Cap 32mm Female		1	
A10012	Adaptor Male Universal 32mm	1	1	
P10046	Universal "S" Hook	1	1	
A11000	Universal Pruning Saw	1	1	
A10016	Universal Saw Handle	1	1	
A30007	Pruning Saw Scabbard	1	1	
TENM305	Bag Tree Trim to suit 1.2m		-	
TENM315	Bag Tree Trim to suit 1.8m	-	1	

- For insulating ropes used around energised lines
- Add one to your Tree Trimming Kit
- Blank fibreglass middle section with eyes each end

Part No	Fibreglass Length (mm)
4010	1100
4004-1	305
4005	860

Rope Insulator not included in Tree Trimming kits



CONTENTS

# **Tree Trimming Equipment & Adaptors - Hastings**











Part No.	10-019	A11002	A11004	A10033
Description	Tree Pruning Head Insulated with Rope	Tree Pruning Head	Replacement Head	Replacement Rope Pulley
Details	Drop Forged Steel Blades cut to 38mm Ø. 300mm Fibreglass Shaft – Twin Pulley with 7.6m Polypropylene Rope and Universal Head	Drop Forged Steel Blades cut to 38mm Ø. Single Pulley with Universal Head	Drop Forged Steel Blades cut to 38mm Ø	Cast Aluminium Pulley
Weight (kg)	1.3	0.88	0.79	0.11









Part No.	A11000	P11004	A30007	A11000-K
Description	Universal Pruning Saw	Replacement Blade	Saw Scabbard	Universal Pruning Saw & Scabbard
Details	Teflon Coated Fast Cutting. Curved Blade 400mm long with 7 Teeth per 25mm and Universal Head	Teflon Coated Fast Cutting. Curved Blade 400mm long with 7 Teeth per 25mm	For Safe Storage of # A11000 Saw, Heavy Duty Stitching	Kit Includes A 11000 + A30007
Weight (kg)	0.36	0.14	0.45	0.79









Part No.	P10032	A10016	10-106	P10046
Description	Pruning Saw Casting	Saw Handle	Universal Spiral Hook	Universal "S" Hook
Details	Aluminium Casting replacement for A 11000	Handle for # A 11000 Saw, Cast Aluminium with Wingnut	Used for Grabbing/Holding Branches/Wires	Used for Lifting Overhead Wires
Weight (kg)	0.22	0.22	0.34	0.10

CONTENTS





# **Sectional Sticks & Adaptors**

# **Universal Head - Extension - Base Section**

Sectional sticks - Foam filled tested per OSHA, ASTM F-711 - 32mm and 38mm OD sticks tested to IEC 60855

**Extension Section** 

## **Universal Head Universal Head with Removable Base Adaptor** OD OD Length Wt (mm) (mm) (kg) (m) (kg) 32 38 5467-2\* 0.47 0.6 \_ \_ 1.2 5467-4 0.90 5547-4 1.08 1.8 5467-6 1.07 5547-6 1.56

				$\smile$		
Extension Section						
Length (m)	OD (mm) 32	Wt (kg)	OD (mm) 38	Wt (kg)		
0.6	546-2	0.45	-	-		
1.2	546-4	0.56	5546-4	0.90		
1.8	546-6	0.93	5546-6	1.39		
2.4	546-8	1.13	5546-8	1.87		

BISMIT-SSKIST						
Base Section with Glued Rubber Base Cap						
Length (m)	OD (mm) 32	Wt (kg)	OD (mm) 38	Wt (kg)		
0.6	-	-	-	-		
1.2	552-4	0.68	5553-4	0.85		
1.8	552-6	0.90	5553-6	1.25		
2.4	552-8	1.30	5553-8	1.64		

2.4

1.41

# **Adaptors & Base Caps**



5547-8



2.04







**Base Section** 





Part No.	A10012	A10025	A10011	A10026	A18007	A18008	A14019
Suits Sticks (mm) OD	32	38	32	38	32	38	38
Description	Male Universal Button Adaptor Female Universal Adaptor			Female Bo	ise Cap	Snap-In Male	
Suits Stick Head	Universal head, sectional button type adaptors and base caps						
Material	FG, Al Alloy & Plastic				FG & Ru	ubber	FG

# **Fixed Length Universal Sticks**

# **Triangular Double-End universal**

**Round Single & Double-End universal** 



Universal Head each End – Triangular with Hanger Hook				
Length (m)	OD (mm) 28	Wt (kg)		
1.8	4679-6	1.45		
2.4	4679-8	1.72		
3.0	4679-10	1.90		
3.6	4679-12	2.13		

- Adapts to all standard universal fit tools
- Includes hanger hook
- Universal Head each end

Severe '	Severe Weather Tool with 2 Rain Sheds* and Hanger Hook					
Length (m)	OD (mm) 32	Wt (kg)	OD (mm) 38	Wt (kg)		
1.8	6801	1.45	-	-		
2.4	6802	1.81	-	-		
3.0	6803	2.18	-	-		
3.6	6804	2.54	6811	3.22		
4.2	-	-	6812	3.54		
4.8	-	-	6813	3.95		
5.4	-	-	6814	4.36		
6.0	-	-	6815	4.72		

	5	HIND   Jak		
	Jniversal H Circular wit			
Length (m)	OD (mm) 32	Wt (kg)	OD (mm) 38	Wt (kg)
1.2	4678-4	1.27	-	-

(m)	(mm) 32	(kg)	(mm) 38	(kg)
1.2	4678-4	1.27	-	-
1.8	4678-6	1.47	-	-
2.4	4678-8	1.86	4680-8	2.59
3.0	4678-10	2.25	4680-10	2.90
3.6	4678-12	2.63	4680-12	3.72
4.2	-	-	4680-14	4.54

\*Rain Sheds also available separately

Part No. P30773 - 32mm Part No. P30772 - 38mm



<sup>5467-8</sup> Base Adaptor not included with 5467-2

<sup>\*</sup>Use 552-2-TEN - for 600mm Universal head with fixed base cap



CONTENTS

# HASTINGS A WORLDWIDE SUPPLIER OF





# **Sectional Stick Kits**

- Customised stick kits made to customer specification or specific utility industry kits
- Below examples of current industry kits



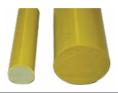
Camara and Band Na	Bana Banadasian	Kit Part No.		
Component Part No.	Item Description	TENK026	TENK908	
546-4	Stick Sectional Extension 1.2m, 32mm OD	4	-	
546-6	Stick Sectional Extension 1.8m, 32mm OD	-	4	
LVDP	Fuse Extraction Head	1	1	
A10012	Adaptor Male Universal Head 32mm		1	
A 18007 Base Cap 32mm Female		1	1	
A30002	Hand Guard to Suit 32mm		1	
P10431-2	Universal Disconnect Hook	1	1	
TENM302	Bag Sectional Kit, 4 x 1.2m & Acc Pock	1	-	
TENM313	TENM313 Bag Sectional Kit, 4 x 1.8m & Acc Pock		1	
10-188-1	10-188-1 Disposable Silicon Cleaning Wipe		2	
10-090	Silicon Wiping Cloth	1	1	

# Customisable substation kits available

# **Stick Parts & Components**

# **Blank Poles**

- Foam filled fibreglass tested per OSHA, ASTM F-711
- 32mm OD sticks tested to IEC 60855



Length	32mm OD		38mm	OD
(m)	Part No.	Wt (kg)	Part No.	Wt (kg)
1.2	464	0.56	534	0.90
1.8	466	0.93	536	1.39
2.4	468	1.13	538	1.87
3.0	4610	1.29	5310	2.41
3.6	4612	1.53	5312	2.95
4.2		-	5314	3.49
4.8		-	5316	4.01
5.4	-	-	5318	4.57
6.0	-	-	5320	5.11

50, 63 & 76mm poles available. Contact TEN for more information.

# **Stick Ends & Components**

Components to repair or modify sticks

















Part No.	P18006	P18008	A10017-R	A10018-R	5455-10	P10037	P10038	P10036
Suits Sticks (mm) OD	32	38	32	38	n/a	32	38	32
Description	Rubber Base Cap	Rubber Base Cap	Universal Head	Universal Head	Chuck Blank	Nema Disconnect Head	Nema Disconnect Head	Nema Disconnect Head - Notched
Material	Rubber	Rubber	Al Alloy	Al Alloy	Bronze Alloy	Manganese Bronze	Manganese Bronze	Manganese Bronze

# CONTENTS





DNOBHOOK sold separately



# **Universal Head Tools and Adaptors**

# **Fuse Cup**

- Installation, removal and changing EDO's
- Reduces flash over hazards & chance of dropping fuse barrel
- Made from fibreglass reinforced nylon
- A10-094 DNOB version has grooved inner surface for hanging 'Do Not Operate' markers
- Fuse barrels (suits most 100A & 200A)

Part No.	Description
10-094	Fuse Cup - EDO's install/removal Tool - Universal head
A10-094DNOB	Fuse Cup - with grooved inner for hanging DNOB markers - Universal head
DNOBHOOK	"DO NOT OPERATE" Hook danger tag, (Sold seperately)

# **House Service Fuse Remover/Installer**





Part No.	Description	Material	Wt (kg)
EX2-1824-K	Fits Tri-Angular Telescopic Stick 200mm Stick Section + LVDP*	One piece plastic universal fitting & pigtail + 200mm Stick Section	0.70
LVDP	Pigtail Fuse Puller	One piece plastic universal fitting & pigtail	0.25
A5455-10-PTU	Pigtail Fuse Puller	Brass universal fitting & plastic pigtail	
LVFP	Pigtail Fuse Puller	One piece aluminium universal fitting & pigtail	



LVDP



A5455-10-PTU



LVFP



# **Remote Spray Can Holder with Universal Fitting**

- Insert any size spray paint can Rust Inhibitor/CRC/WD40, Degreaser and Wasp or Insect Killer.
- Supplied with 9m of 6mm OD Polypropylene Rope (Use with Rope Insulator when working near live lines)
- Loosen rusted bolts and corroded pole line hardware
- Spray switched prior to opening
- Eliminate bee and wasp nests
- Products supplied in pressurized spray cans can be safely applied around energized apparatus from the ground, pole, or bucket truck
- Reduce conductive surface exposure with the ioptional spray can shroud

Part No.	Description	Material	Wt (kg)
10-115	Spray Can Holder	Al Alloy, S/S, Polypropylene & Delrin	0.70
10-115-SH	Shroud for Spray Can	Polymer	0.25



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Ph<mark>one Mount</mark>

# FIBREGLASS EQUIPMENT

CONTENTS

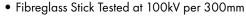
See Test & Measure

section for detailed

# GoPro™ Camera Stick Mounting Accessories

Modelled after the HASTINGS Tel-O-Pole series, this specially engineered hot stick allows for a GoPro™ Action Camera to be mounted and utilized for quick, easy, and safe inspection of and around energized lines, transformers, insulators, poles, buildings, bridges & other assets

The hot stick may even allow inspections to be completed without the use of a bucket truck, lift, or climbing gear.



- Camera Assembly Tested up to 40kV
- Extended 9.15m / Retracted 1.6m
- The camera mount adapter can be used in any position included with the R-30-G stick.
- The Clamp Claw Mount, sold separately, clamps to any hot stick.
- Camera Light, sold separately can be used on Camera Mounting Insulated Stick or the Clamp Claw Mount.
- Smart Phone Mount, sold separately, has adjustable strap to fit on most hot sticks.

Part No.	Description	Wt (kg)
R-30-G	Camera Mounting & Insulated 9.2m (30') Hot Stick	1.8
A30413	Smart Phone Mount	0.11
A30414	Clamp Claw Mount	0.22
10-150	Camera Light	0.11
C-35	Carry Case	0.26
5455-10-GOPRO	Rising sun attachment for camera	0.67

GoPro Action Camera and phone not included



R-30-G

Go Pro

Camera

Stick with

# **Conductor Diameter Sliding Gauge - TEN**

# Part No. CG-430-AU

HDPE slide gauge quickly & easily identify conductor OD

- Designed for Australian AL, CU & ACSR conductors
- Measure Live Conductors
- For conductors 4.0 30mm Ø
- Fits universal sunrise fitting

Reduce Incorrect Conductor Identification

Part No.	Dimensions (mm)	Weight (kg)
CG-430-AU	104 (W) x 287 (L) x 10 (D)	0.26



# Conductor Diameter Gauge - AL, CU & ACSR - TEN

# Part No. CG-EQL Series

Quickly & easily identify common overhead electrical distribution conductor or wire sizes in AL, CU & ACSR. Markings include conductor name, stranding and overall diameter.

- Hole in base for use with a shotgun stick and hanging storage
- Imperial and metric sizes included
- Precision machined from lightweight aluminium alloy

Tracinion macinica from fig. weight alanmin and									
Part No.	Conductor Range	Dimensions (mm)	Wt (kg)						
CG-EQL-ALCU	Copper 7/.064 – 4.87mm to 19/2.75 – 13.8mm Aluminium Locust – 7/.093 - 7.08mm to Taurus - 19/4.75 - 23.80mm	257 (L) × 91 (W) × 14 (D)	0.75						
CG-EQL-ACSR	ACSR Quince - 5.25mm to Wolf – 18.13mm	209 (L) x 91 (W) x 14 (D)	0.65						



tengroup.com.au

# CONTENTS





# LitFinger/LitLink

Both products have a built-in, high intensity LED light for safe and efficient operations in dark or low light areas. Connect to all hot sticks with a Universal sunrise fitting.

- 94 Lumens/4 Hr
- Bright, unbreakable 1-watt LED light
- Lightweight aluminium body
- HI-LOW switch for increased battery life
- Water resistant battery compartment with sealed silicone rubber push button
- Easy access battery compartment door
- Runs on three (3) AAA batteries
- Waterproof to 1 meter

## LitLink

• Passed 3000V, 8000A, ½ sec (30 cycles) arc blast test

# LitFinger

- Machined aluminium Notched straight arm to secure fuse while lowering or raising fuse barrel
- Pointed head for breaking off of ice or debris



# **Fixed Head Stick - SAPN**

# Part No. AKL

Part No.	Description	Dia (mm)	Length (m)	Head Type
AKL1711	ABS Operating Handle	32	0.75	14 TPI UNF Thread
AKL546-4	Sectional/Single end	32	1.2	Bayonet
AKL7294	Fixed Stick/Double end	32	2.5	Male bayonet/Universal
AKL7296	Fixed Stick/Double end	38	3.6	Male bayonet/Universal
AKL7298	Fixed Stick/Double end	38	4.5	Male bayonet/Universal
AKL7299	Fixed Stick/Double end	38	6.0	Male bayonet/Universal
AKL7300	Fixed Stick/Double end	38	6.0	Universal/Universal
AKL7301	Fixed Stick/Single end	50	6.0	Bayonet

# **Sectional Stick - SECV**

# Part No. Various

Part No.	Description	Fibreglass Length (m)
LLSP	Operating Stick SECV Female to disconnect podger	1.5
LLSPL	Operating Stick SECV Female to disconnect podger	3
LLSPI	Operating Stick SECV Female to SECV male - extension for LLSPL	1.5

 $<sup>{}^{\</sup>star}\mathsf{See}$  opposite page for SECV tool adaptors

# Stick & Tools Adaptors - Various Stick & Tools Adaptors















Part No.	AD06/AD07	AD03/AD02	AD14	MOD-C	MOD-E	MOD-EV	MOD-K
Suits Sticks	32mm stick extension	38mm stick extension	-	-	-	-	-
Top Adaptor	Bayonet AL/Nylon	Bayonet AL/Nylon	Bayonet (Al)	Modiewark	Modiewark	Modiewark	Modiewark
Suits Stick Head	Button Extension	Button Extension	Universal	Hex	Bayonet	Taplin	Universal
Use	Bayonet Earth Clamps (14.5mm Spindle, 24mm Long Pin)	Bayonet Earth Clamps (14.5mm Spindle, 24mm Long Pin)	Bayonet Earth Clamps (14.5mm Spindle, 24mm Long Pin)	Modiewark Holder Hexagon Fitting	Modiewark Holder Bayonet Fitting	Modiewark Holder with Taplin 40mm T-Bar	Modiewark Holder Universal Fitting
Material	FG, Al & Plastic	FG, Al & Plastic	FG, Bronze Alloy & Al	-	-	-	-



# Stick & Tools Adaptors - cont.











Part No.	CI-7-E	CI-4-E	CI-4-K	CI-5-K	AD
Top Adaptor	Bayonet	Bayonet	Universal	Universal	Bayonet (14.5mm Spindle)
Suits Stick Head	Universal	Hex	Hex	Shotgun	Universal
Use	For Bayonet Earthing Clamps (Specs)	For Bayonet Earthing Clamps (Specs)	Standard Universal Head	Standard Universal Head	Convert Universal to Bayonet
Material	FG & Al Alloy	FG & Al Alloy	FG & Al Alloy	FG & Al Alloy	Al Alloy









Part No.	*SECV-C	*SECV-K	*LLCR-SECV	LLCR	CI-6-C-2	CI-5-C
Description	SECV to Catu Adaptor	SECV to Universal Head	SECV to Live Line Clamp Remove	Universal to Live Line Clamp Remover	Universal to Adaptor for Catu Tools	Shotgun to Catu Tools
Use	Tool Adaptor For SECV sticks	Tool Adaptor For SECV sticks	Suits SECV stick for Taplin Clamps	Applies & removes Live Line Clamps	Universal to Catu Tool adaptor	Shotgun to Catu tool adaptor

<sup>\*</sup>See opposite page for Sectional Sticks

# **Universal Head Accessories - Various**

# **Universal Head Accessories**















							-
Part No.	5556	5558	P10431-2	A10400	P10046	MT-630-K	A10111
Description	Disconnect Hook	Disconnect Hook	Disconnect Hook	Disconnect Hook, Fluoro	"S" Hook	MT-613 application	Disconnect Pigtail, Fluoro
Use	Operating Fuse Switches suits Hastings 32mm Sectional stick	Operating Fuse Switches suits Hastings 38mm Sectional stick	Double sided sunrise for left and right facing Operating Fuse Switches	Operating Fuse Switches, Night Use	Lifting Conductors	MT-630-K (above) Universal Mount MT-630-C Hex Mount	Operating/ Installing/ Removing Fuse Switches, Night Use
Material	Male F/Glass / Bronze	Male F/Glass / Bronze	Chromed Bronze	Bronze Alloy Painted	Brass	Bronze Alloy	Bronze Alloy
Weight (kg)	-	-	0.2	0.2	0.1	1.0	0.2















Part No.	4440	A10022	PLEGAAM1	A10019	DH-1	5454-6	A10023
Description	Talon Hook	Clamp Stick Head	Shotgun – Universal Head	Shotgun – Universal Head	Double Header Universal Attachment	90° Universal Adaptor	Wire Tong
Use	Installing/ Removing/ Operating Fuses, EDO's & Switches	Operating Shotgun Ring Clamps	Convert Shotgun to Universal Head	Convert Shotgun to Universal Head	Attached two different Universal tools on one Hot-Stick	Change Angle of Universal Head	Light Tong for Holding, Max Ø 35mm
Material	Bronze Alloy	Al Alloy	Al Alloy	Bronze Alloy	Al Alloy	Bronze	Bronze/ Al Alloy
Weight (kg)	0.2	0.5	0.1	0.2	0.35	0.1	0.9







# **Universal Head Accessories - cont.**

Line specific universal head adaptors and accessories









Part No.	5455-21	13489	12737	5455-2	5455-15	5455-29
Description	Cotter Key Puller	NX Fuse Puller/ Disconnect	Cotter Key Pusher	Bolt Holder	Locking Pin	Ball Socket Adjuster
Use	For 3/16" Cotter Keys on Clevis Type Fittings	For removing and Installing NX Sand Fuses on URD Switchgear	For Transmission Insulator Strings, Pushes Legs on Cotter Key partially out of Socket so Ball can be Disconnected, Slot can Face to Either Side or Rear	For Replacing Pins on Clevis Type Hardware, Jaw Spring Actuated	For Lining Up Joints on Clevis Type Suspension Insulators and Hardware to Replace Pins	Supporting & Aligning Ball Socket Adaptor between Ball Fitting on Disc Insulator & Clevis Fitting on Suspension or Strain Clamp
Weight (kg)	0.4	0.1	0.8	0.3	0.2	0.3













		-				-
Part No.	5455-1	5454-2	10-096	5455-37	5455-57	5455-93
Description	Insulator Controller 254mm (10")	Ball Socket Fork	Armour Rod Applicator	Self Aligning Fuse Puller, Small	Adjustable Fuse Puller Large	Adjustable Fuse Puller Extra Large
Use	Clamps around 254mm (10") Disc Insulator between Porcelain & Cap for Removing Single Unit or Holding Insulator in Alignment as Cotter Key is Replaced.	Aligning & Holding Ball Socket Fittings for Cotter Key Removal	Installation & Removal of Conductor Ties & Armour Rods	For Fuse Tubes 12.7- 38.1 mm OD, Plastic Coated Jaws	For Fuse Tubes 22.22-50.8mm OD, Plastic Coated Jaws	For Fuse Tubes 38.1- 92mm OD, Plastic Coated Jaws
Weight (kg)	1.1	0.2	0.2	1.0	1.1	1.3















Part No.	A10020	A10021	P10055	P10056	12425	5455-8	A30152
Description	Rotary Prong Tie	Rotary Blade Tie	Prong Tie	Blade Tie	Cotter Key Replacer/Puller	Cotter Key Puller	Tie Wire Assist
Use	Loop End Tie Wire, Self Aligning & Swivels Freely	Removal of Ties without Looped Ends	Looped End Tie Wires	Tie Wires without Looped Ends	Cotter Key 3.22mm (1/8) in Clevis Pins of Distribution Hardware	Removal of Cotter Keys in Clevis Type Suspension Insulators & Hardware, Adjustable for Compound Angles	Attach on 32/38mm Universal & Tie End Sticks. Aid to remove Tie Wires, also Useful as Hanger
Weight (kg)	0.20	0.20	0.10	0.20	0.40	0.20	0.10



CONTENTS



# **Universal Head Accessories - cont.**

Line specific universal head adaptors and accessories

















	-					7.80		
Part No.	9785	USSK-1	5454-3	5454-7	5455-28	C4030177	5455-46	5455-35
Description	Mirror	Universal Skinning Knife	Ball Peen Hammer	Hacksaw, Light	Screw Drive Flat	All Angle Pliers	Socket Wrench	Universal Insulator Controller
Use	Inspection of Line Hardware, Rubber Trimmed with Ball Swivel Adjustment	Skinning Insulation Includes Sheath (Replaceable Blades)	Light Impact around Energised Equipment	Cutting Metal, 254mm Blade	Screwing Flat Head Bolts 9.5mm Wide Tip	Designed to grasp bolts and hardware from any angle	½" Square Drive for Sockets	Grips cap of suspension insulator. Adjustable jaws
Weight (kg)	0.36	0.18	0.59	0.45	0.18	0.68	0.45	1.50













Part No.	5455-25	5455-99	5455-98	TEO81RW-U	5455-6	M4455-87	M4455-97	10-178/10-179
Description	Paint Brush	Vice Grips 177mm	Vice Grips 254mm	Insulated Ratchet Wrench 1/2" Drive	Ratchet Wrench 1/2" Drive	Universal Ball Socket Adjuster	Universal Tool for W Keys	Scratch V-Brush Conductor Cleaner
Use	Painting near Energised Lines	Holds Cotter Pins, etc,	Holds Split Bolts & Parrallel Groove Clamps, etc	Use with 1/2 drive sockets Reversible	Sockets, Reversible	For socket clevises, where suspension and deadend clamps are attached to ball and socket insulators.	This tool is used for handling the "W" shaped keys used in suspension insulators	For use with Hand or Shot-Gun stick for cleaning conductors prior to connecting (Part No. 10-179 10 x Replacement Brushes)
Weight (kg)	0.31	0.54	0.72	0.45	0.86	0.30	0.40	0.30















Part No.	5455-74	M4455-22	M4455-103	M4455-19	M4455-2	5455-31	M4455-67
Description	Bolt Head Wrench	Universal Ball Socket Adjuster	Cotter Key Holder	Cotter Key Pusher	Pin Holder	Universal Shepherd Hook	Universal Adjustable Insulator Fork
Use	Tightening Through Bolts, Head Wedges Against Bolt Head to keep it from Turning	Useful in controlling the adapter between clevis clamps and ball and socket insulator pins	For holding Split pins closed during installation and easily releases after installation	Straight End pushes the Insulator Cotter to disengage. Curved end forces cotter key back into position	For replacing Pins & Bolts. Bolt head fit into a slot and is held tight by the spring action	Fits around the cap of suspension insulators to aid control during removal	Designed to grasp 9 & 10" disk insulators
Weight (kg)	0.50	0.25	0.22	0.27	0.30	1.05	0.70

CONTENTS





- Universal head with fibreglass insulating shaft & conductor capture hook
- Long lever arm and double pulley reduces pulling requirement on rope
- Shear drop forged cutter blade

Ideal for cutting away Lightning Arrester leads

Part No.	Description	Cuts	Max Cable OD	Wt (kg)
4186	Universal Cutter with 7.6m	ACSR/AI/Cu	14.3mm	2.1
10-019	Poly Rope	Branches	38.0mm	1.3
10-019		Al/Cu	50mm²	1.3

Refer to page D12 for information on rope insulators and tree cutter heads





# Part No. 4186-K

- Designed for emergency cutting of lines or conductors
- Ideal for cutting away Lightning Arrester leads
- Cutting head attaches to standard universal head operating stick

Part No.	Item Description	Qty
4186	Cutter with Universal Head, Cuts up to 14mm OD ACSR, 28mm OD Al/Cu	1
4010	Insulator for Rope with 1100mm of Fibreglass and Eyes each end	1
TENM413	Carry Bag for above	1



# **Lever Handle Ratchet Wire Cutter**

# Part No. Various

- Range of cable cutters for ACSR/Al/Cu
- Parrot Beak style
- Foam filled fibreglass main shaft with solid operating rod tested to ASTM F711 & OSHA
- Lever operation
- Cuts clean leaving no burrs, UG or OH operation
- Lightweight with fold up handle for easy storage

	Type Duty Cuts Cable OD (mm) Stick (mm)			Cable		OAL	Wt	Replacement Blade	
Part No.		(kg)	Prior to Oct 2006	Since Oct 2006					
11-005				20.7	20.7	1525	4.1	A11001	A11055
11-006			ACSR			1830	4.5	A11001	A11055
11-008						2440	4.8	A11001	A11055
11-010	Ratchet Lever	Standard				3050	5.2	A11001	A11055
11-015						1525	4.1	A11041	A11056
11-016			Al / Cu	25.5 / 18.0		1830	4.5	A11041	A11056
11-018				.5.0		2440	4.9	A11041	A11056

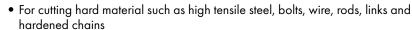




**Bolt & Steel Cutters** 

CONTENTS





FIBREGLASS EQUIPMENT

- Replaceable foam filled fibreglass handles tested to ASTM F711 & OSHA
- Comply with USA-F.S. No. GGG-C-740d Type II
- Great for everyday regular use



Part No.	Handle Length (mm)	OAL (mm)	Reinforcement Steel (HRC Brinell 140 49.6kg/mm)	Bar Steel (HRC 20 Brinell 230 77.5kg/mm)	Steel Wire (HRC 40 Brinell 370 133kg/mm)	Music Wire (HRC 48 Brinell 450 162kg/mm)	Replacement Heads
10-667	405	609	10	8	8	7	A11012
10-665	610	812	10	8	8	7	A11012

Other sizes available. Contact TEN for more information.



# **Cable & Guy Wire Cutters**

# Part No. 10-202

- Range of cable cutters for ACSR/Al/Cu/Guy Wire
- Insulating handles tested to ASTM F711

							Kepiacen	nenr
Part No.	Туре	Cuts	Max Cable OD (mm)	OAL (mm)	Handle Length (mm)	Wt (kg)	Blade	Handles
10-202	Parrot Beak	ACSR / Al / Cu	16 ACSR/Cu, 25 Al	787	685	2.7	10-203 (Handle & Blade)	-

Other sizes available. Contact TEN for more information.



# Mighty Cutter - Nagaki NGK

- Precision machined blades from high quality Japanese Steel
- Blades suitable for Cu and AL, as well as ACSR and Steel
- Reliable ratchet mechanism for durability and ease of use
- Fibreglass handles
- Half the weight of comparable cutters
- Weight: 2.8kg
- Stranded cable only

Part No MIGHTY-CUTTER						
Material Cutting Capacity (mm)						
ACSR/Cu	22					
AL	30					
St	12					

Refer to HYDRAULICS section for Battery and Hydraulic cutters and hand tools for other cutters.

# **Pliers Handles**

 Foam filled fibreglass handles for attaching to standard electrical pliers or cutters, pliers/ cutters not included

Part No.	Dimensions (mm)	Wt (kg)
1961-2 *	32 OD x 1220 L	2.0

<sup>\*</sup> Supplied as pair only

# CONTENTS





# **Cable Handling & Probe Tools**

# Part No. 6751 Series

- Tools for probing soil and lifting or moving cables
- 32mm OD foam filled stick handle tested per OSHA & ASTM F711

Part No.	Tool Model & Description	Maximum Cable OD (mm)	Length of Fibreglass Shaft (m)	Wt (kg)
6751-01	Cable Tool with Permanent Hook	89	0.6	0.9
6751-04	Cable 1001 With Fermanent Hook	89	1.2	1.4
6751-15	Probe Tool	n/a	0.3 (Spike 1.06)	1.1
6751-8	*Fibreglass Shaft with Sunrise head	-	0.61	0.67
6751-9	*Fibreglass Shaft with Sunrise head	-	0.91	0.85
6751-10	*Fibreglass Shaft with Sunrise head		1.2	1.04
6751-16	*Fibreglass Shaft with Sunrise head	-	1.82	1.23

<sup>\*</sup>Used with 10-106 Spiral Hook

Part No.	Description	Details	Wt (kg)
10-106	Universal Spiral Hook	Used for Grabbing/Holding Branches/ Wires	0.34



# **Temporary Conductor Support**

# Part No. Various

- This Conductor Support clamps to the crossarm, adjusting to crossarms from 82.5mm x 100mm to 150mm x 150mm
- The C-clamp is made of heat treated aluminum and can be installed with a Grip-All shotgun



Part No.	Description	Working Load (kg)	Height from Cross-arm (mm)	Insulated Length (mm)	Wt (kg)
C400-0517	Conductor Support	68	200	200	1.6
PSC4000517011	Conductor Support	68	800	600	1.9
PSC4000517009	Conductor S PSC400051	upport - Repl 7011 (No Cro	600	1.6	

# **Wire Holding Stick**

# Part No. C403-3068 Series

- Foam filled shaft and solid fibreglass operating rod tested per ASTM F-711 and OSHA
- Three position locking head

The Chance Epoxiglas® Wire-Holding Stick is used on or around energised lines for forming, bending and positioning jumper wires; and for holding conductors during splicing operations. The gripper, equipped with an eye so that other sticks can assist with heavy bending, will handle (4.5mm OD solid copper through 34mm ACSR).

Part No	art No.		Length OAL (mm)	Conductor Capacity (mm)	Wt (kg)
C403-30	68	32	1955	4.0 – 38.0	2.7



CONTENTS

2 Tonne WLL

# **Temporary Composite Fibreglass Cross-Arm**

# Part No. TENKO07

# **Features**

- Advantages over other temporary crossarms
  - "CAN" be used for Terminations
  - "CAN" be used in HV situations
- Chemically Inert:
  - Cross-Arm will not RUST, ROT or CORRODE
- 2Tonne WLL
- Lightweight: (15kg)
  - Composite Cross-Arm Approximately 1/3 the weight of timber
  - Bracket Manufactured with high strength Aluminium
- Cross-arm provides additional protective layer of insulation (BIL rating 673kV/m)
- Takes 3 time longer to ignite and does not sustain a flame

# Will not RUST, ROT or CORRODE



# **Composite Strain Arm**

- 2580mm OAL
- 125mm x 125mm (Square)
- 22mm OD attachment holes



- Rating 10kN per attachment point
- Non slip tape top and bottom "To prevent slippage on EWP baskets"
- Use as termination or strain crossarm

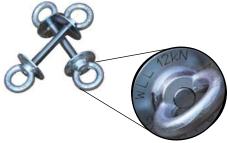
# **Bracket**

- Lightweight (Aluminium)
- Ratchet style web-strap attachment
- WLL 2T

# **Eye Bolts**

- Double Ended (for strain arms)
- WLL 12kN (marked not for lifting)





**Ideal for changing Live Termination Cross-Arms** 

Working side view



Part No.	Description	Qty
AEC047-00005	Cross-Arm 2.5 Wagner composite	1
FSXARMB1	Aluminium mounting bracket & ratchet strap	1
CCA20	20mm rated eye bolt & eye nut	4
TENM710	Carry bag (Cross-Arm) - Canvas RED (2640 x 170 x 100mm)	1
TENM426	Carry bag (Accessories) - Canvas RED	1





# **Temporary Cross-arm Storage Bag**

# Part No. TENM710

- Included in TENK007 Temp. Crossarm kit
- Made from durable tear stop canvas with reinforced edges
- Webbing carry straps
- Webbing carry handles, reinforced stitched on both ends of bag
- Fold over corner velcro flaps
- 3 reinforced adjustable webbing straps for closing bag
- Bag easily unwraps to access Cross-arm

tengroup.com.au

CONTENTS





# **Link Sticks**

# **Swivel Eye & Safety Hook**

# Part No. Various

- Provides insulation protection when using ratchet hoists on energised lines
- Foam filled fibreglass shafts
- Tested to ASTM F711 and OSHA, Pretested in factory to 2265kg
- Clevis Roller accepts up to 40mm wide strap
- Forged hooks
- Not to be used in place of insulators, rubber gloves or sleeves

Part No.	Туре	OD (mm)	Fibreglass Length (mm)	WLL (kg)	Wt (kg)
3414	Swivel Eye – Safety Hook Swivel Eye Both Ends		300		1.0
3414-1		25	300	1015	1.1
3415²			150	1815	1.0
3416			300		1.1

<sup>&</sup>lt;sup>2</sup> For LV only



# Strain, Roller & Spiral Link Stick

# Part No. Various

Provides insulation between energised conductors and pulling devices at different potential.

- Tested to ASTM F711 and OSHA
- Foam filled fibreglass shafts



Model	Strain	Roller	Spiral
Hardware	Heat treated aluminium or bronze Ball bearing		Heat treated aluminium or bronze alloy. Eye screws are plated steel. Ball bearing eye swivels. High strength heat treated steel spiral hook

Part No.	Туре	OD (mm)	Pole Length (mm)	OAL (mm)	Max Wire Size Ø (mm)	WLL (kg)	Wt (kg)
PSC4004372	Strain	32	546	1016	120 Max Crossarm	1588	3.6
5708-3	Strain	32	610	915	35.05	1360	2.0
9466		32	610	1065	31.75	450	1.8
9467	Roller	32	1220	1675	31.75	450	2.1
9468		32	1830	2285	31.75	450	2.4
3480		25	305	610	28.19	905	1.3
3481		25	610	915	28.19	905	1.5
3482	Spiral	25	915	1220	28.19	905	1.7
3483		25	1220	1525	28.19	905	1.9
H4722		32	390	700	31.75	1587	1.7

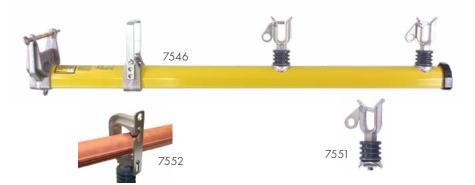
Additional sizes available see Hastings Catalogue.





# **Extension Arms Super "U" Extension Arms**

# Part No. Super "U" Series



- Used for temporary support, reconductoring and line maintenance
- Fixed conductor holders
- Great strength and durability "U" shape design
- Interchangeable hanger loop kits available for various size X-Arms
- Super "U" Arms include insulators
- Tested per OSHA & ASTM F-711
- FRP laminate resists weathering

Part No.	Description	Rating Ø – Ø (kV)	Wire Holders	Max Conductor (mm)	WLL (kg)	Max X-Arm Size (mm)	Wt (kg)			
7546	Standard w/Lrg Hanger Loop	35	2	27	181	150 x 150	9.3			
	Accessories and Replacement Parts									
<i>7</i> 551	Conductor Holder - Standard	-	1	27	90	-	0.5			
7552	Conductor Holder – Large Capacity	-	1	67	90	-	0.7			
A30008	Insulator	-	-	-	-	-	0.5			

# Adjustable conductor holders

# **Standard Extension Arms**

# **Part No. Standard Series**

- Used for temporary support, reconductoring and line maintenance
- Can be used for obtaining clearances in congested areas
- Easy to install

- Adjustable conductor holders
- Foam filled fibreglass shaft
- Tested per OSHA & ASTM F-711
- Eye bolts and nuts are silicone bronze to resist seizing



5006-F Bracket for Composite Arms





	63mm OD Arms											
	Maximum X-Arm Size = 100W x 175H (mm)					Maximum X-Arı	m Size = 125W	x 150H (mm)				
Part No.	Arm Length (m)	# Cond Holders	WLL (kg) per Cond Holder	Wt (kg)	Part No.	Arm Length (m)	# Cond Holders	WLL (kg)	Wt (kg)			
5000	1.50	1		5.1	5036	1 5	1		5.5			
5001	1.52	1 + Insulator		5.2	5037	1.5	1 + Insulator		5.7			
5006		2	68	6.6	5016	501/	2 68	68	6.7			
5006-F	1.82	2		6.6		1.8			0./			
5007		2 + Insulators		7.0	5016-1		2 + Insulators		7.0			



# **Composite Cross-Arm Retrofit Bracket**

Part No. 7560

Suitable for Super "U" and Standard Extension Arrms





Kit Includes

2 x Threaded Eye Bolts c/w composite tips

1 x Cross-Arm Hanger

1 x Lip Cover

1 x 626 Locktite

CONTENTS





# Conductor Holder Super U and Standard, Pole Mounted

- Used for temporary support, reconductoring and line maintenance
- Easy to install, large control handles and knobs for gloved hands
- Tested per OSHA & ASTM F-711





Model	Super "U" Ratchet Strap	Super "U' Chain	Standard Ratchet Strap	Standard Chain
Features	Great strength and durability "U" shape design	Great strength and durability "U" shape design	Adjustable conductor holders	Adjustable conductor holders
Hardware	Aluminium alloy base. Steel alloy grab hook. High strength FRP	Aluminium alloy base	Aluminium alloy base	Aluminium alloy base

# Super "U" style temp arm - fixed wire holders

Part N	No.	Tightener	Suits Poles OD (mm)	Max Use Ø – Ø (kV)		Max Cond Ø (mm)	Insulator	Arm OD (mm)	OAL (mm)	WLL Per Holder (kg)	Wt (kg)
504	.5	Strap	Strap length	34.5	1	27	Yes	- /	880	91	6.9
504	7		1120		2	2/	res	n/a	1265	91	8.2
504	.9			Replacemer	nt Strap with H	ook Only			1.10	N/A	0.5
504	.6	Ch -::	355*	34.5	1	27	Yes	-	880	91	7.7
504	.8	Chain	355	34.3	2	2/	res	-	1265	91	9.4

Standard style temp arm - adjustable wire holders

Part No.	Tightener	Suits Poles OD (mm)	Max Use Ø – Ø (kV)	Conductor Holders	Max Cond Ø (mm)	Insulator	Arm OD (mm)	OAL (mm)	WLL Per Holder (kg)	Wt (kg)
5038			15.0	1		No		865	91	5.5
5039	Stran	Strap length 1120mm	34.5	ı	27	Yes	63	865	91	5.9
5040			15.0	2	27	No		1230	68	6.8
5041			34.5			Yes		1230	68	7.3
5042			Replo	acement Strap	Only			1.10	N/A	0.2
5018			15.0	1		No		865	91	6.3
5019	Ch =::=	355*	34.5	ı	27	Yes	63	865	91	6.8
5020	Chain	333"	15.0	2	2/	No		1230	68	7.7
5021			34.5			Yes		1230	68	8.2

<sup>\*</sup>Chain extension #5031 available for large pole diameters (refer to page D30) Note: Ratchet straps should be inspected prior to use, straps showing signs of deterioration must be removed from service

# Temporary "V" Cross Arms, Pole Mounted



# Part No. Various

- Used when changing crossarms
- Easy to install two piece assembly
- Ratchet strap mounting base with arm bolt slots
- Solid fibreglass arms provide maximum strength

Part No.	Description	Max Use Ø – Ø (kV)	Length (mm)	Conductor Holders #	Cond Holder Model (With Insulator)	WLL (kg) per Side	Max Cond OD (mm)	Wt (kg)
5051	Arm & Mounting Base	35	1625	2	A10002	68	27	12.3
5053	Arm & Mounting Base	35	1625	2	A10039	68	67	12.7
5054	Arm & Mounting Base	35	2195	3	A10002	68	27	15.0
5055	Arm & Mounting Base	35	2195	3	A10039	68	67	15.4
				Replacement P	arts			
A30220	Arm Only	35	1625	-	-	-	-	10.0
A30233	Arm Only	35	2195	-	-	-	-	11.8
A30221	Mounting Assembly	-	-	-	-	-	-	6.4
5042	Strap Only	-	-		-	-	-	0.5



CONTENTS

# HASTINGS A WORLDWIDE SUPPLIER OF

# **Accessories and Replacement Parts for Arms**

# Part No. Various













Part No.	A10001	A10002	A30008	A10038	A10039
Description	Conductor Holder for 63mm Arms	Conductor Holder with Insulator for 63mm Arms	15kV Insulator Recommended on voltage over 15kV	Conductor Holder Large (67mm OD) Allows Line Hose, No Insulator	Conductor Holder Large (67mm OD) Allows Line Hose with Insulator
Weight (kg)	1.0	1.1	0.5	1.3	1.7

Glove and barrier, pole mounts and boom mounted auxiliary arms and kits available on request.

# H4862-51 Mast and Braces only (included: crossarm clamps and mast-base swivel fitting)

# **Auxiliary Arm Assembly**

Crossarm,crossarm clamp & wire holders can be used with H4862-51

H4862-F Crossarm Clamp Assembly

Wireholder Clamp Assembly M480516

H4862-8

Assembly (complete with mast, crossarm and wireholders)

- This Epoxiglas Auxiliary Arm Assembly is used to change crossarms, insulators, or poles on short spans up to and including 15 kV phase-to-phase
- Two M47405W wire tong saddles can be used to mount the mast to the pole (The saddles are not included and must be ordered separately) See next page for further details.
- Two mast pole lengths are available: 1.52m mast provides a lift of 0.76m above the top saddle and the 3.0m mast provides a lift to 1.17m, when the saddles are mounted a recommended 0.46m apart
- The arm has a balanced load rating of 272kg; unbalanced at 68kg
- Each wireholder is rated at 68kg
- Tested per OSHA & ASTM F711

Down No.	D	Wire Holders		Mast Pole	Crossarm Pole	Wt
Part No.	Description	Qty	Capacity (mm)	Size (mm)	Size (mm)	(kg)
H4862-8	Auxiliary Arm Assembly	4	63	63 x 1200	63 x 1600	18.9
H4862-51	Mast & Braces	Use H	14862-8	63 x 3050	Use H4862-8	16.65

CONTENTS





# **Wire Tongs and Accessories**

# **Wire Tongs**

Part No. Various



- Used to support and move energised conductors
- Foam filled fibreglass, tested to ASTM F711
- Heat treated aluminium and bronze alloy
- Interlocking conductor jaws with acme threads
- Medium head models feature spring loaded latch head

Medium Head				Large Head			
Part No.	Diameter (mm)	Length (m)	Wt (kg)	Part No.	Diameter (mm)	Length (m)	Wt (kg)
5679-8	38	2.7	2.5	5315-8	38	2.7	3.2
5679-10	38	3.3	2.9	5315-10	38	3.3	3.5
5671-8	50	2.7	3.4	5320-8	50	2.7	4.1
5671-10	50	3.3	3.9	5320-10	50	3.3	4.5
5671-12	50	3.9	4.4	5320-12	50	3.9	5.5
5672-10	63	3.3	6.5	5325-10	63	3.3	7.2
5672-12	63	3.9	7.3	5325-12	63	3.9	8.0
5672-14	63	4.5	8.2	5325-14	63	4.5	8.9
5672-16S*	63	5.1	10.1	-	-	-	-
5673-12	75	3.9	9.2	5330-12	<i>7</i> 5	3.9	9.9
5673-14	<i>7</i> 5	4.5	10.3	5330-14	<i>7</i> 5	4.5	11.0



# **Butt Swivel Ring**

# Part No. B-RING

• WLL: 1133kg

 Used for connecting ratchet hoist to a wire tong

# **Pole Saddles & Pole Clamps**

# Part No. Various

- Pole saddle chain tightener spring loaded for easy installation
- Pole clamps with large wingnuts for easy operation

Wire Tong Saddle			Pole Clamps			
Part No.	Suits (mm)	Wt (kg)	Part No.	Suits (mm)	Wt (kg)	
5745-15	38	4.2	5746-15	38	0.8	
5745-25	63	4.7	5746-25	63	1.0	
5745	Base Only	3.8	5747	Extension Only	0.5	

Part No.	Description	Wt (kg)
M4740-10W	Pole Saddle and Tightener Only	4
M4740-16W	Pole Saddle, Tightener, Pole Clamp and Extension	5
M4740-18W	Pole Saddle, Tightener, Pole Clamp and Extension	5.2

# **Chain Tightener & Extension**

# Part No. Various

Chain Tightener
• WLL: 1133kg

Base Only



Chain Extension
• WLL: 1133kg



	100				
Part No.	Description	Wt (kg)	Part No.	Description	Wt (kg)
5030	With 915mm chain & spring loaded take up.	2.5	5031	400mm chain with keeper & safety pin	1.1

Extension Only



CONTENTS

# **Lever Lifts**







Insulated Lever Lift			Lever	Lift Double Adaptor	Single/Double Lever Lift		
conductor	Used for lifting & supporting hea inductors. Lever lift allows installation congested areas. Accepts all wire t		Allows two wire tongs to be used for supporting/ lifting conductors with insulated lever lift.  Allows use of single or two loaded chain		ngle or two wire to led chain tightene		
Part No.	F/G Length (mm)	Wt (kg)	Part No.	Wt (kg)	Part No.	Length (mm)	Wt (kg)
5750-1	300	6.8	<i>57</i> 51	0.68	5749	300	5.9
5750-2	610	<i>7</i> .1					
5750-3	915	7.5					

# **Cross Arm Saddle**

- Slotted base and large operation wing nuts
- Suits 75mm x 75mm & 100 x 100mm cross arms



Cross Arm Saddles							
Part No. Suits (mm) Wt (kg)							
9723	38	3.1					
9724	50	3.2					
9725	63	3.4					
9722	Base Only	1.60					

# **Tower Saddles**

- Suits Angles
  - 65mm x 65mm
  - 50mm x 150mm
  - 152mm x 152mm



Tower Saddles							
Part No.	Suits (mm)	Wt (kg)					
5740-12	38	3.8					
5740-13	50	4.0					
5740-14	63	4.3					
5740-19	75	4.8					
12265	Saddle Base Only	3.4					

# **Bands, Clamps & Stirrups**







,	Wire Tong Band			Wire Tong Blocks Clamp			Wire Tong Stirrup		
Use with rope blocks for lifting or lowering conductors.			Use with rope blocks for controlling conductors and pulling in tension.			Prevents damage to small diameter conducto		ter conductors.	
Part No.	Suits (mm)	Wt (kg)	Part No.	Suits (mm)	Wt (kg)	Part No.	Suits (mm)	Wt (kg)	
1829	50	0.8	5748-15	38	1.0	1851	50	1.0	
1829-1	63	1.0	5748-16	50	1.2	1851-1	63	1.0	
1829-2	<i>7</i> 5	1.3	5748-17	63	1.4				
			5748-18	<i>7</i> 5	1.5				

# **Rope Snubbing Brackets**





Rop	e Snubbing Bracket	Wire Tong Snub Bracket		
Used for terminating block fall lines to hold blocks in position, with chain tightener. WLL 450kg, 915mm chain		Provides stationary base, also for auxiliary arms, with chain tightener.		
Part No.	Wt (kg)	Part No.	Wt (kg)	
M1846	3.4	5900-25	3.1	

# CONTENTS

# **Inspection, Cleaning & Maintenance**



Live line tools should be visually inspected daily before use for defects such as abrasions, blemishes, burns and surface deterioration.

Any defect is cause for rejection as it may impair the dielectric integrity. Rejection does not mean discarding the tool, only removing the tool from service and tagging.

# Common stick defects



Scratched



Sun Damaged



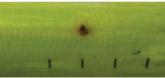
Abrasions



Mistreated



Cracked





Split



Large Chip

# Hot Sticks and Fibreglass Care & Maintenance

For instruction on how to clean hot sticks, watch our video by scanning or clicking the adjacent QR code.

To download a copy of the "Fibreglass Equipment Inspection, Cleaning & Maintenance PDF" visit the Download page on TEN's website by clicking the below link:

# https://www.tengroup.com.au/catalogues/downloads

For stripping back heavy contamination and prior to re-waxing, use the Hastings All-Purpose, Safe, nontoxic, biodegradable, PH neutral & non-flammable Cleaning Concentrate (10-195).

Once the surface has been cleaned thoroughly, it is critical to re-wax the stick. The Polywater® Fibreglass Wax and Buff Kit is a simple, easy to use, one application wipe ideal for this purpose.

The lint-free wipe is saturated with fast hazing wax and a soft lint-free towelette is included for buffing the wax to a shine

This improves the dielectric performance by restoring the water beading properties. Also available is the Polywater (W-16) bottle of wax and Hastings Hot Stick Wax 10-091.

It should be noted, waxing is best done after a thorough stick cleaning. Use of wax products over contaminated surfaces only locks the dirt in.

For spot cleaning the sticks and daily before use, the Polywater® Water Repellent Wipe (Part S-1) that (contains a minimum 60% isopropyl alcohol and silicone) helps clean and restore the water beading properties of the stick.

This will also work to sanitise the stick before and after use if used correctly. Also available for spot cleaning and daily before use is the Hastings (10-188) hot stick wipes containing silicone (note these do not have an alcohol content, these are petroleum based).

After extended periods of use and exposure to the elements your stick surface may require maintenance. Unless the tool is mechanically damaged your stick may be able to be repaired.

Stick repair should only be carried out by professionally trained personnel. Refinishing kits (10-100) and epoxy adhesive (10-097-1) are available.

Never lay your sticks directly on the ground, place them on a ground tarp (TENM705), stick rack (6780) or carry bag.

Always care for your live line tools and equipment by storing them in protective carry bags and/or in a dry area away from rain and light when not in use.

SCAN or CLICK to watch Hot Stick Cleaning & Maintenance



# **Boom & Basket Cleaning**

For washing booms, use the Polywater® Fibreglass Wash (FGW-640). This replaces the previous (BWC) Boom Wash Concentrate.

For spot cleaning of booms and baskets we recommend the Polywater (B-1) large format towels for cleaning grime, grease and contaminants from the surface.

See the following page for further information.

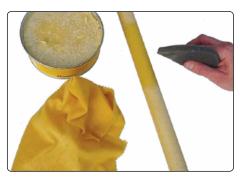
References: ASTM F711, OSHA, Hastings, Polywater

















CONTENTS

Wt (kg)

3.73

# **Inspection, Cleaning & Maintenance Products** Description

# Fibreglass Stick/Tool Rack

# **Part No. 6708**

- Tool racks made from fiberglass components
- Will accommodate up to 14 hot line sticks/tools
- Support legs collapse for easy storage and transportation

# Silicone Wiping Cloths - Disposable

- 50 wipes in a heavy duty cardboard dispenser box that can be installed on a wall or post in a convenient location to the line trucks, each are individually packaged
- Leaves a silicone moisture barrier which enables water to bead up. This eliminates the blanket effect when using hot sticks in wet conditions.
- Excellent for daily wiping of your hot sticks prior to use

Fibreglass stick tool

rack (Pair)

Part No.

6708

- Removes contaminates such as dirt, oils, creosote, and other undesirable matter
- Environmentally safe, the used wipes can be disposed of in normal waste containers

Part No.	Description	Pack
10-188	Hot Stick Wipes - box	50
10-188-1	Hot Stick Wipe - individual	1

# Silicon Treated Wiping Cloth

- Deposits a water repellent film while removing dust and dirt particles from the surface of hot sticks and insulated tool handles
- The 460mm x 460mm cotton cloth is an open-type weave specially selected for removing foreign material from the surface of insulated tools and has bound edges to eliminate fraying which extends the life of the cloth
- The cloth is packaged in a sealed plastic bag with instructions for compliance with OSHA regulations for cleaning and inspection of live line tools
- Regular use of the silicone treated cloth will add to the life and safety of the tools
- For added safety and increased life of live line tools

Part No.	Description	Wt (kg)
10-090	460 x 460mm Silicone Treated Wiping Cloth	0.05

# **Live Working Equipment Wax**

# Part No. 10-091

- High grade carnuba wax formulated for fibreglass application
- Used on booms, buckets, live line tools and equipment
- Provides hard, tack free weather resistant surface
- Applied by hand or machine



Part No.	Unit	Wt (kg)
10-091	Tin	0.4

# **Live Line Tool Wax**

- Convenient, wax-saturated, lint-free wipe
- Dual action tandem pack includes dry buffing towel
- Does not remove or adversely affect gel
- Superior quality, fast-hazing fiberglass wax
- Easy to apply
- Leaves non-conductive water repellent coating
- Prevents continuous water film on stick in wet weather

Part No.	Description
W-1	Fibreglass wax and buff - individual wipes
W-1-K	Fibreglass wax and buff - Box of 72 x wipes
W-16	470ml bottle fast-hazing fibreglass bulk wax

# CONTENTS









10-168



10-195



# Polywater Solutions at work.







# **All Purpose Cleaner Concentrate**

- Excellent cleaner for the following: hot line tools, trucks, buckets, booms, rigid cover up, painted surfaces and aluminum metal, shop machinery, hand cleaner, all plastic surfaces
- Can be applied with a soft cloth, sponge or hand dispenser
- Safe and gives the following benefits: biodegradable, non-toxic, non-alkali, non-acid, non-flammable, gentle to the skin, requires no ventilation
- Concentrate formula mixing ratio is 20 parts water to 1 part concentrate

Part No.	Description	Wt (kg)
10-168	All purpose cleaner concentrate 3.8L bottle	3.6
10-195	All purpose cleaner concentrate 19L Drum	18.2
10-19 <i>7</i>	6pk Cleaning Kit: 6 x 200ml ready to mix bottles/14 ultra fine non-metallic pads/6 adhesive identification bottle labels	1.6

# **Powerclean Concentrate**

- Powerful degreaser/cleaner detergent
- Ideal for cleaning rubber ground mats

Part No.	Package	Qty	Wt (kg)
RPC15	Drum	15 (L)	16.3

# **Boom Cleaner Wipes**

- Convenient, pre-saturated, lint-free wipes in two sizes
- Large and durable for maximum surface coverage
- Won't remove or adversely affect gel coat & prevents "build-up" over time
- Powerful cleaner removes grease, dirt, tar, and grime
- Removes road and sea spray salts (salt water is more conductive)
- Water soluble for easy water rinsing
- Designed for one time use and easy disposal
- Meets OSHA Maintenance Reg CFR 29 Part 1910

Part No.	Description	Pack
B-1	Individually saturated 610 x 610mm wipe in sealed foil	1
B-D72	Dispenser with 72 wipes	72

# **Boom & Basket Cleaner**

- Ideal for washing Fibreglass booms and Baskets
- Mix with water for a mild boom cleaner to spray wipe or pour on surface for easy cleaning

Part No.	Package	Qty (L)	Wt (kg)
FGW-640	Drum	19	16.3

# **Hot Stick Cleaner and Water Repellent Wipe**

- Convenient, pre-saturated, lint-free wipe
- Dual action cleans and applies water repellent
- Does not remove or adversely affect gloss coat
- Evaporates quickly
- No "build-up" over time

- Removes grease, dirt, and grime
- Prevents continuous water film on stick in wet weather
- Designed for one time use and easy disposal
- Meets IEEE maintenance recommendations (Std #978)

Part No.	Description	Pack
S-1	Pre-saturated lint-free 600mm² wipe in sealed foil (Single Pack)	1
S-1-K	Pre-saturated lint-free 600mm² wipe in sealed foil (Box of 144)	144





EXP DATE: 10-50-10







11=11



# **Fibreglass Cleaning and Refinishing Kit**

# Part No. 10-171

This kit helps keep your fibreglass sticks in top condition. Visual inspection can identify areas of wear that will require maintenance prior to putting sticks back into service.

All Purpose Cleaner - The all purpose cleaner provides a safe non-toxic liquid to aid in removing dirt, grease, metal oxides and other contaminants which accumulate on fiberglass

**Ultra Fine Non-Metalic Abrasive Pads** can be used with the all purpose cleaner to remove stubborn contamination. Note -fiberglass wax may be required after use of cleaner and/or pads to retain surface gloss.

**Clear Epoxy Refinishing Kit** - The two part refinish kit is used to bring the tool surface back to its original finish if normal cleaning is not sufficient

Silicone Treated Wiping Cloths - Wiping cloths are used to remove light dust and dirt from stick surfaces. It is also needed after light cleaning of tool with all purpose cleaner to allow moisture to bead up on tool.

# **Live Working Tool Epoxy Adhesive**

# Part No. 10-097-1

- Used for live line tool construction and repair
- High viscosity two part adhesive, safety yellow in colour
- High performance, high impact resistance with good flexibility

Part No.	Unit	Qty (L)	Wt (kg)
10-097-1	Tin	1 (500mL each of Part A & Part B)	1.36

# **Epoxy Refinishing Kits & Thinners**

- Kit provides all the necessary materials with complete instructions for restoring, fiberglass hot line tools and aerial lift booms and buckets equal to their original finish
- The epoxy coating provides a hard, tough, moisture resistant high-gloss finish of high dielectric strength and is easily cleaned
- Included in the kit are complete instructions, sandpaper, paint brush, and epoxy solvent
- 8 litres of epoxy coating covers approximately 3 metres of surface
- The coating is a two-part system, available in both white and clear, dries dust free in approximately 1 1/2 hours and cures completely within 24 hours

Part No.	Description	Wt (kg)
10-100	Epoxy Refinishing Kit - contains 475ml of each component (3)	1.8

# **Non-Metallic Cleaning Pads**

Cleaning pads can be used with the all purpose cleaner to remove stubborn contamination. Note: Fiberglass wax may be required after use of cleaner and/or pads to retain surface gloss.

Part No.	Description	Qty
10-170	Box of Ultra Fine Non metallic cleaning pads	20/box
EAGERBEAVER	Non-abrasive cleaning pad for cleaning rubber goods & fibreglass sticks	10/ box

# **Hot Stick Cleaning Kit**

 Kit provides the brushes and sectional fiberglass rods needed to thoroughly clean the inside of telescoping hot sticks and internal rod shotgun sticks

Part No.	Description	Wt (kg)
10-337	Complete cleaning kit	1.6

 Kit includes: (1) Heavy duty vinyl fold up storage case with pockets to sore cleaning rods and brushes - additional pockets are provided for storage of other cleaning items, (3) Fiberglass sectional rods each 910mm long, (5) Heavy duty industrial type nylon bristle brushes to accommodate all inside diameters of telescoping tools

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