



# JDV Products, Inc.

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GmbH    DOSIEREN · LÖTEN · ESD-SCHUTZ

**GLOBACO GmbH**

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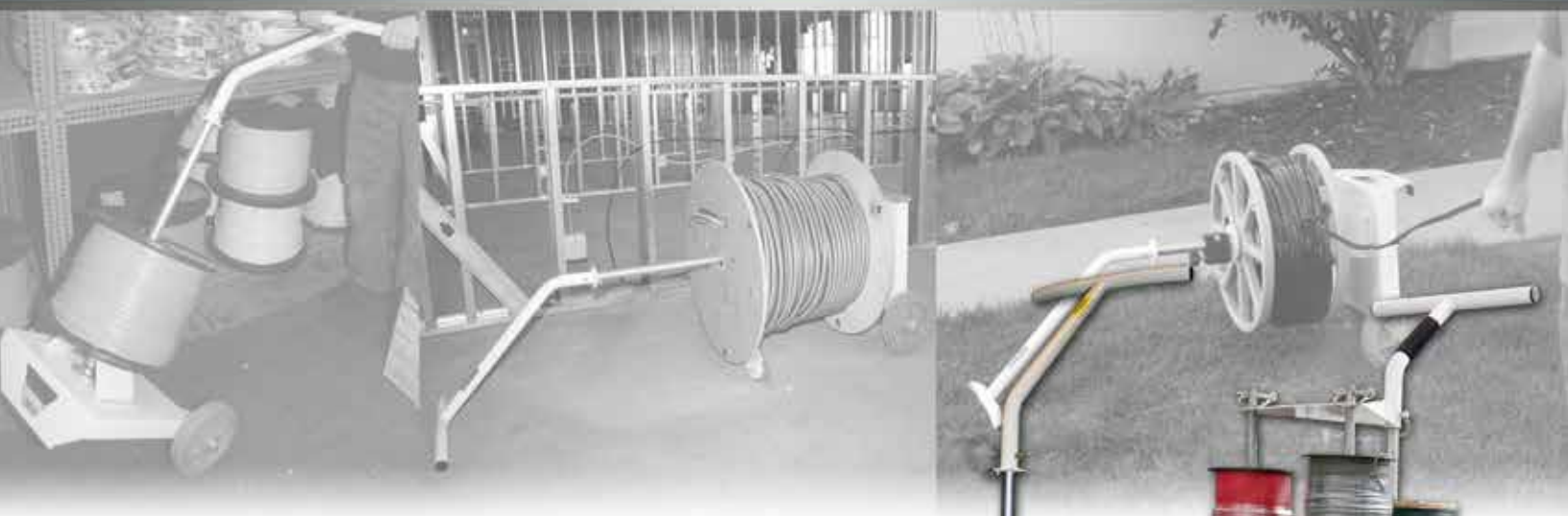
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## Tools for Telecom, Datacom, Electrical, and Electronics

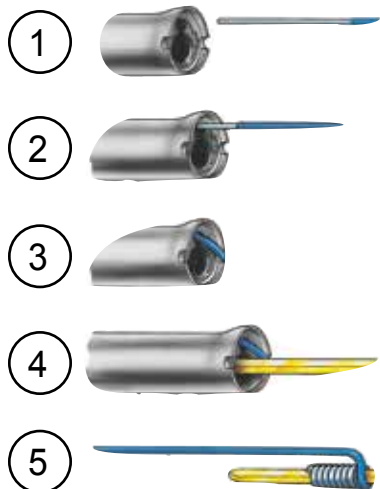


[www.reelcaddy.com](http://www.reelcaddy.com)

# THE TECHNOLOGY OF WIRE WRAPPING

A wire wrapped connection is made by coiling the wire around the sharp corners of a terminal under mechanical tension. This method of connection was developed by Bell Telephone Laboratories, Western Electric Company.

## Five Steps To Make A Wire Wrap Connection



## Regular



## Modified



A "Regular" bit wraps the bare wire around the terminal. A "Modified" bit wraps a portion of insulation around the terminal in addition to the bare wire. This greatly increases the ability to withstand vibration.

A distinct advantage of wire wrapping is the ease with which a wire may be removed from a terminal to correct errors or modify wiring. An unwrap tool is slipped over the terminal, engaging the first turn of the connection. Rotating the tool, the connection is removed in seconds, without damage to the terminal.

There is a constant surveillance of manufacturing dimensions. Each wrapping bit is subjected to a series of "Qualification Tests". These consist of wrapping groups of wire on various types of terminals. The wrapped wires are then subjected to a "strip" test to determine adequate tightness. "Unwrap" tests are also performed to ensure against an "Over Tight" wrap.

Solid wire is used for wire wrapped connections. Copper is the most commonly used wire. Minimum elongation of 15% is required for 24 through 32 AWG; 20% for larger wire.

## Wire Size Chart

Bare Wire Dia.		AWG (USA)	SWG (GB)
In.	mm		
.0403	1.022	18	
.040	1.016		19
.036	0.914	19	20
.032	0.813	20	21
.028	0.711	21	22
.0253	0.643	22	
.024	0.61		23
.0226	0.574	23	
.022	0.559		24
.0201	0.51	24	
.020	0.508		25
.018	0.457		26
.0179	0.455	25	
.0164	0.417		27
.0159	0.404	26	
.0148	0.376		28
.0142	0.361	27	
.0136	0.345		29
.0126	0.320	28	
.0124	0.315		30
.0116	0.295		31
.0113	0.287	29	
.0108	0.274		32
.0100	0.254	30	33
.0092	0.234		34
.0089	0.225	31	
.0084	0.213		35
0.008	0.203	32	

## "Strip" Force Chart\*

AWG	Wire Size		Minimum Number of Turns (Bare Wire)	Minimum Strip Force	
	Dia (in)	Dia. (mm)		lbs	g
16	.0510	1.30	4	15	6800
18	.0403	1.00	4	15	6800
20	.0320	0.80	5	8	3600
22	.0253	0.65	5	8	3600
24	.0201	0.50	6	7	3200
26	.0159	0.40	7	6	2700
28	.0126	0.32	7	5	2200
30	.0100	0.25	7	3.3	1500

\* Conforms to MIL-STD-1130B

## Terminal Diagonal Chart

In.	0.01	0.015	0.02	0.025	0.03	0.035	0.04	0.045	0.05	0.055	0.06	0.065	0.07	0.075	0.08	0.085	0.09	0.095	0.1
mm	0.25	0.38	0.51	0.64	0.76	0.89	1.02	1.14	1.27	1.4	1.52	1.65	1.78	1.91	2.03	2.16	2.29	2.41	2.54
0.01	0.014	0.018	0.022	0.027	0.032	0.036	0.041	0.046	0.051	0.056	0.061	0.066	0.071	0.076	0.081	0.086	0.091	0.096	0.101
0.25	0.36	0.46	0.56	0.69	0.81	0.91	1.04	1.17	1.3	1.42	1.55	1.68	1.8	1.93	2.06	2.18	2.31	2.44	2.57
0.015	0.018	0.021	0.025	0.029	0.033	0.038	0.043	0.047	0.052	0.057	0.062	0.067	0.072	0.077	0.082	0.087	0.092	0.097	0.102
0.38	0.46	0.53	0.64	0.74	0.84	0.97	1.09	1.19	1.32	1.45	1.58	1.7	1.83	1.96	2.08	2.21	2.34	2.46	2.59
0.02	0.022	0.025	0.028	0.032	0.036	0.04	0.045	0.049	0.053	0.058	0.063	0.068	0.073	0.078	0.083	0.088	0.093	0.098	0.103
0.51	0.56	0.64	0.71	0.81	0.91	1.02	1.14	1.25	1.35	1.47	1.6	1.73	1.85	1.98	2.11	2.24	2.36	2.49	2.62
0.025	0.027	0.029	0.032	0.035	0.039	0.043	0.047	0.05	0.056	0.06	0.065	0.069	0.074	0.079	0.084	0.089	0.094	0.099	0.104
0.64	0.69	0.74	0.81	0.89	0.99	1.09	1.19	1.27	1.42	1.52	1.65	1.75	1.88	2.01	2.13	2.26	2.39	2.52	2.64
0.03	0.032	0.033	0.036	0.039	0.042	0.046	0.05	0.054	0.058	0.062	0.067	0.071	0.076	0.08	0.085	0.09	0.095	0.1	0.105
0.76	0.81	0.84	0.91	0.99	1.07	1.17	1.27	1.37	1.47	1.58	1.7	1.8	1.93	2.03	2.16	2.29	2.41	2.54	2.67
0.035	0.036	0.038	0.04	0.043	0.046	0.049	0.052	0.056	0.06	0.064	0.069	0.073	0.078	0.082	0.087	0.091	0.096	0.101	0.106
0.89	0.91	0.97	1.02	1.09	1.17	1.25	1.32	1.42	1.52	1.63	1.75	1.85	1.98	2.08	2.21	2.31	2.44	2.57	2.69
0.04	0.041	0.043	0.045	0.047	0.05	0.052	0.056	0.06	0.064	0.068	0.072	0.076	0.08	0.084	0.089	0.092	0.097	0.102	0.107
1.02	1.04	1.09	1.14	1.19	1.27	1.32	1.42	1.52	1.63	1.73	1.83	1.93	2.03	2.13	2.26	2.34	2.46	2.59	2.72
0.045	0.046	0.047	0.049	0.05	0.054	0.056	0.06	0.063	0.067	0.071	0.074	0.078	0.083	0.087	0.091	0.096	0.101	0.105	0.109
1.14	1.17	1.19	1.25	1.27	1.37	1.42	1.52	1.6	1.7	1.8	1.88	1.98	2.11	2.21	2.31	2.44	2.57	2.67	2.77
0.05	0.051	0.052	0.053	0.056	0.058	0.06	0.064	0.067	0.071	0.074	0.078	0.082	0.086	0.09	0.094	0.098	0.103	0.107	0.111
1.27	1.3	1.32	1.35	1.42	1.47	1.52	1.63	1.7	1.8	1.88	1.98	2.08	2.18	2.29	2.39	2.49	2.62	2.72	2.82

# PNEUMATIC WRAPPING TOOLS

The WG300 is perfectly well balanced and is rated for delicate 32 AWG work, as well as heavy duty 18 AWG applications.

Part No.	Type	Free Speed (RPM)	Weight		Wire Size	
			oz	kg	AWG	mm
WG300	Standard	4500	10.6	0.30	18-32	1.0-0.20
WG300BF	ABF Backforce	4500	10.6	0.30	18-32	1.0-0.20

- WG300 & WG300BF include 6ft nylon braided air hose (Part No. A-10738)
- Full line of wire wrap bits and sleeves on page 7



Repair Service  
Please contact  
JDV Products  
for details.

These units are designed for mass production and aircraft maintenance applications. Both models are manufactured from a lightweight, high impact resistant, glass-filled nylon. These tools are lightweight, well balanced, and built to handle the rigors of everyday manufacturing requirements. The handle design reduces operator fatigue, and the high speed 4500 rpm motor produces fast, efficient wraps for 18 to 32 awg wire sizes.

Part No.	Type	Free Speed (RPM)	Weight		Wire Size	
			oz	kg	AWG	mm
SP 6001	Standard	4500	9.0	0.26	18-32	1.0-0.20
SP 6002	ABF Backforce	4500	9.5	0.27	18-32	1.0-0.20

- SP 6001 & SP 6002 include 6ft nylon braided air hose (Part No. A-10738)
- Full line of wire wrap bits and sleeves on page 7



Standard  
Pneumatic  
& Electric Tool Company  
A Division of JDV Products, Inc.

## CUT & STRIP TOOL ATTACHMENT

These cut/strip tool attachments allow the operator to cut to length and strip the wire in one simple operation. The length of wire to be cut is adjustable. Different gauge stripping blades can be changed out quickly and easily.



**Model# WS 650**  
For use with  
JDV Products  
brand pneumatic tools  
Strip blade (shown) sold separately



**Model# SP 650**  
For use with  
Standard Pneumatic  
brand electric and pneumatic tools  
Strip blade (shown) sold separately

Strip Blades	
Part No.	For Wire Size
SP 64520	20 AWG
SP 64522	22 AWG
SP 64524	24 AWG
SP 64526	26 AWG
SP 64528	28 AWG
SP 64530	30 AWG
SP 64533	22-24 AWG



Model# WS 650

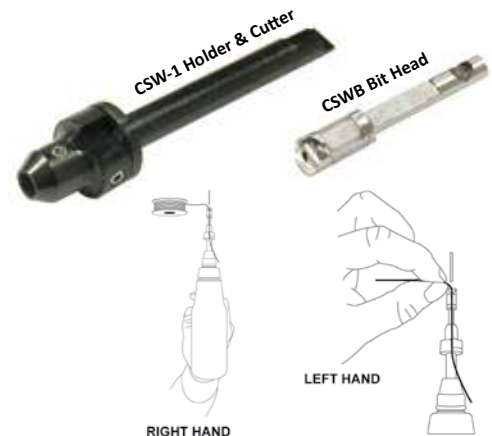
Model# SP 650

## OPEN-FACED CUT/STRIP/WRAP (CSW) TOOLS

JDV's "Open-Faced" CSW bit is fast and easy to use. It cuts, strips, and wraps the wire in one operation. There is no need for wire preparation since this tool can wrap directly from a reel or harness. The CSWB bit heads work in conjunction with the bit head holder (CSWH-1) to achieve all three functions: cut, strip, and wrap.

These CSW tools are designed to work with electric and pneumatic type wire wrap guns. Since these are precision tools, some wire may not be suitable. JDV may require sample wire for testing purposes to qualify a CSW bit head for a specific application. Please contact JDV for more details.

Part No.	Wire Size		Terminal Hole Diameter		Terminal Hole Depth		Strip Length		Head Diameter		Minimum Terminal Spacing	
	AWG	mm	in	mm	in	mm	in	mm	in	mm	in	mm
CSWB24	24	0.50	0.07	1.78	1.00	25.40	1.62	41.10	0.24	6.10	0.16	3.90
CSWB26	26	0.40	0.07	1.78	1.00	25.40	1.62	41.10	0.24	6.10	0.16	3.90
CSWH-1	Holder with built-in cutter (for CSWB24 and CSWB26)											





# ELECTRIC WIRE WRAP & UNWRAP TOOLS



These electric powered wire wrapping and unwrapping tools have been designed for production and field service work using 18 to 32 AWG wire.

These units feature a lightweight Lexan® housing, an ergonomically designed handle, and is equipped with a rugged high speed electric motor (4000 rpm) which requires no maintenance. Other features include a geared drive system, a positive indexing mechanism, and a convenient 20-foot power cord for optimum usage range from an electrical outlet.

For the inexperienced operator, we offer and recommend the anti-back force version (ABF) of the tool. The ABF model is designed so that, when the operator pulls the trigger, the bit retracts inside the sleeve, causing a symmetrical wrap to be achieved on the post. The ABF tools are used mostly for training and for those customers who use the tool so infrequently that they do not remember the technique.

## Electric Powered Wire WRAP Tools

Part No.	Voltage	Type	Cord	RPM	Weight	
					lb	kg
SP 6021	115V	Standard	3W-20ft	4000	0.75	0.34
SP 6022	115V	ABF Backforce	3W-20ft	4000	0.75	0.34
SP 6311	220V	Standard	2W-20ft	4000	0.94	0.43
SP 6312	220V	ABF Backforce	2W-20ft	4000	0.94	0.43
SP 6081	48V	Standard	2W-20ft	4000	0.75	0.34
SP 6082	48V	ABF Backforce	2W-20ft	4000	0.75	0.34

- 220V wrap tools do not include a power cord plug. This can be sourced locally, or contact JDV for details.
- Full line of wire wrap bits and sleeves on page 7

## Electric Powered Wire UNWRAP Tools

Part No.	Voltage	Type	Cord	RPM	Weight	
					lb	kg
SP 6024	115V	Unwrap	3W-20ft	1000	0.94	0.43
SP 6014	220V	Unwrap	2W-20ft	1000	0.94	0.43
SP 6084	48V	Unwrap	2W-20ft	1000	0.75	0.34

- 220V wrap tools do not include a power cord plug. This can be sourced locally, or contact JDV for details.
- To be used with SP unwrap bit sets (see below)

## UNWRAP Bits

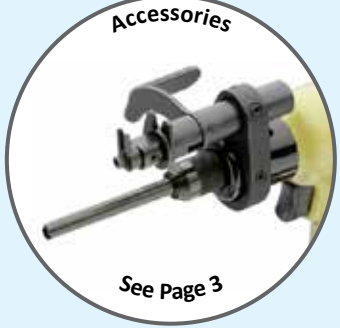
Part No.	Wire Sizes		Terminal Hole Diameter		Terminal Hole Depth		Bit Outside Diameter	
	AWG	mm	in	mm	in	mm	in	mm
SP 66692	20-26	0.81-0.40	0.70	1.78	1.00	25.4	1.125	3.18
SP 66693	26-32	0.45-0.20	0.40	1.02	1.00	25.4	0.093	2.36

- These unwrap bits are to be used with SP 6024, SP 6014, and SP 6084 electric unwrap tools.




\* Double Ended

Accessories




See Page 3

Wrap Bits & Sleeves



See Page 1

Repair Service



Contact JDV for Details

# MANUAL WIRE WRAP & UNWRAP TOOLS

## Fully Insulated Manual Wire WRAP Tool

JDV's WG800 is an innovative FULLY INSULATED Manual Wire Wrap Tool that stops electrical current right at the source!

Unlike conventional models, JDV's proprietary design allows the barrel of the wrap gun to be fully insulated so that electrical current cannot enter the inside of the tool, which helps to protect the operator from getting shocked or injured through the wrapping gun itself (such as from exposed metal screws or metal trigger area) while making wire wrap connections on hot circuits.

The WG800 is equipped with a rugged aluminum housing with orange dielectric coating, a solid chuck-style nose-piece, and can be used with any brand or model wrap bits and sleeves ranging from 22-32 AWG (0.64-0.20mm).

Part No.	Type	Housing
WG800	FULLY INSULATED	Aluminum with Orange Dielectric Coating

- Full line of wire wrap bits and sleeves on page 7



Model WG800 has been found to meet UL Safety Requirement. It was tested by a Third Party laboratory and certified to 1000V A/C under dielectric testing condition IAW UL Standard.

## Fully Insulated Manual Wire UNWRAP Tool

The WG800-R3278INS is FULLY INSULATED and offers the same safety design just like the WG800 model wrap tool. This reliable unwrap gun is outfitted with a durable aluminum housing with dielectric coating, a chuck style nose piece, and can be used with JDV's UP70 (22-26 AWG) or UP36 (24-32 AWG) unwrap bit sets.

Part No.	Type	Housing
WG800-R3394INS	FULLY INSULATED	Aluminum with Orange Dielectric Coating

- To be used with UP70 or UP36 unwrap bit sets (see below)



## UNWRAP Bit and Sleeve Sets

Part No.	Sleeve Part No.	Unwrap Bit Part No.	Collet Style	Wire Sizes		Terminal Hole Diameter	
				AWG	mm	in	mm
UP70	SP171	BU70	CHUCK	22-26	0.65-0.40	0.070	1.77
UP36	SP171	BU36	CHUCK	24-32	0.50-0.20	0.036	0.96

- To be used with chuck-type unwrap tools

## Replacement Parts for WG800 Series

Part No.	Description
RK-WG200	Kit includes spindle, large gear assembly, and small packet of grease.
RK-WG800	Kit includes spindle, large gear assembly, two coils, screws, rubber stop, and small packet of grease.



## REPAIR SERVICES

JDV offers repair service for JDV and Standard Pneumatic brand electric, pneumatic, or manual wire wrap tools. Please contact JDV Products for more details.



# WIRE WRAP TOOL KITS & ACCESSORIES

## KTW800 - Series



**Kit Contains:** (PATENTED) WG800 Fully Insulated Manual Wire Wrap Tool, Wrap bit, Insulated sleeve, Hand wrap tool, Hand unwrap tool with sleeve, Cut and strip tool, and TH251R Deep cavity right-handed tool pouch.

Part No.	Description	Weight
KTW800-224	Wire Wrap Tool Kit for 22-24 AWG (Includes WG800 Fully Insulated Manual Wrap Tool)	1.86 lbs / 0.84kg
KTW800-2426	Wire Wrap Tool Kit for 24-26 AWG (Includes WG800 Fully Insulated Manual Wrap Tool)	1.86 lbs / 0.84kg

## KTW6021 - Series



**Kit Contains:** SP 6021 (115v) Electric Wire Wrap Tool, Wrap bit, Insulated sleeve, Hand wrap tool, Hand unwrap tool with sleeve, Cut and strip tool, and TH251R Deep cavity right-handed tool pouch.

Part No.	Description	Weight
KTW6021-224	Wire Wrap Tool Kit for 22-24 AWG (Includes SP 6021 Electric Wrap Tool - 115V)	1.79 lbs / 1.27 kg
KTW6021-2426	Wire Wrap Tool Kit for 24-26 AWG (Includes SP 6021 Electric Wrap Tool - 115V)	1.79 lbs / 1.27 kg

## Items in KTW800 and KTW6021 Tool Kits





# 3" WIRE WRAP BITS & SLEEVES



**REGULAR TYPE:**  
Wrap bits leaves only the bare wire wrapped around the terminal.



**MODIFIED TYPE:**  
Leaves 1-1/2 turns of insulation on the terminal.



All Bits & Sleeves are Fully Compatible with any Make or Model Wire Wrapping Tool

Wire Gauge (AWG)	AWG (Inches)		Max Insulation Diameter	Min/Max Terminal Diagonal	Terminal Hole Depth	Effective Radius	Terminal Hole Diameter	BIT PART No.	SLEEVE PART No.	METRIC (mm)					
	Regular	Modified								Terminal Hole Diameter	Effective Radius	Terminal Hole Depth	Min/Max Terminal Diagonal	Max Insulation Diameter	Wire Gauge (mm)
18	●		N/A	.060/.073	1.000	0.150	0.075	BR18	S194	1.90	3.81	25.40	1.52/1.85	N/A	1.00
20		●	0.058	.042/.073	1.000	0.150	0.075	BM20	S194LN	1.90	3.81	25.40	1.07/1.85	1.47	0.80
20-22	●		N/A	.042/0.73	1.000	0.123	0.075	BR20	S171	1.90	3.12	25.40	1.07/1.85	N/A	0.65-0.80
22	●		N/A	.061/.085	1.000	0.125	0.086	BR22T	S171	2.18	3.17	25.40	1.54/2.15	N/A	0.65
22	●		N/A	.054/.073	0.750	0.117	0.075	BR22	S171	1.90	2.97	19.05	1.37/1.85	N/A	0.65
22		●	0.054	.049/.074	1.000	0.132	0.075	BM22	S171	1.90	3.35	25.40	1.24/1.87	1.37	0.65
22-24	●		N/A	.054/.073	1.000	0.111	0.075	BR224-1	S171	1.90	2.82	25.40	1.37/1.85	N/A	0.50-0.65
22-24	●		N/A	.054/.073	0.807	0.111	0.075	BR224	S171	1.90	2.82	20.50	1.37/1.85	N/A	0.50-0.65
22-24		●	0.050	.049/.074	1.250	0.121	0.075	BM224	S171	1.90	3.07	31.75	1.24/1.87	1.27	0.50-0.65
24	●		N/A	.024/.043	1.000	0.083	0.044	BR2444 *	S125LN *	1.11	2.10	25.40	0.60/1.09	N/A	0.50
24		●	0.044	.024/.043	0.750	0.098	0.044	BM2444 *	S125LN *	1.11	2.48	19.05	0.60/1.09	1.11	0.50
24	●		N/A	.055/.074	1.500	0.100	0.075	BR24D	S159	1.90	2.54	38.10	1.39/1.87	N/A	0.50
24		●	0.046	.054/.073	1.750	0.117	0.075	BM24DD	S171	1.90	2.97	44.50	1.37/1.87	1.17	0.50
24	●		N/A	.055/.074	0.750	0.100	0.075	BR24	S159	1.90	2.54	19.05	1.39/1.87	N/A	0.50
24		●	0.046	.054/.073	0.750	0.118	0.075	BM24	S171	1.90	2.99	19.05	1.07/1.85	1.17	0.50
24-26	●		N/A	.058/.073	0.750	0.100	0.075	BR2426	S159	1.90	2.54	19.05	1.47/1.85	N/A	0.40-0.50
24-26		●	0.046	.054/.073	0.750	0.118	0.075	BM2426	S171	1.90	2.99	19.05	1.37/1.85	1.17	0.40-0.50
26	●		N/A	.054/.073	1.000	0.112	0.075	BR16903	S159	1.90	2.84	25.40	1.37/1.85	N/A	0.40
26	●		N/A	.023/.038	0.750	0.068	0.040	BR2639 *	S93LN *	1.02	1.72	19.05	0.58/0.96	N/A	0.40
26		●	0.031	.023/.038	1.125	0.075	0.040	BM2640 *	S93 *	1.02	1.90	19.05	0.58/0.96	0.79	0.40
26		●	0.031	.023/.038	0.750	0.075	0.040	BM2640-1125 *	S93 *	1.02	1.90	28.57	0.58/0.96	0.79	0.40
26		●	0.044	.028/.044	0.750	0.098	0.044	BM2644 *	S125LN *	1.11	2.48	19.05	0.71/1.12	1.11	0.40
26	●		N/A	.058/.073	1.000	0.100	0.075	BR26	S159	1.90	2.54	25.40	1.47/1.85	N/A	0.40
26		●	0.046	.054/.073	1.000	0.118	0.075	BM26	S171	1.90	2.99	25.40	1.37/1.85	1.17	0.40
26		●	0.050	.053/.068	1.125	0.118	0.069	BM26D	S171	1.75	2.99	28.50	1.34/1.72	1.27	0.40
26		●	0.042	.053/.068	1.000	0.109	0.069	BM2669	S159	1.75	2.77	25.40	1.34/1.72	1.04	0.40
28		●	0.030	.031/.035	0.750	0.066	0.036	BM28 *	S93 *	0.91	1.67	19.05	0.79/0.89	0.76	0.32
28		●	0.030	.031/.035	1.125	0.066	0.036	BM28-1125 *	S93 *	0.91	1.67	28.57	0.79/0.89	0.76	0.32
28		●	0.030	.031/.035	1.250	0.066	0.036	BM28-1250 *	S93 *	0.91	1.67	31.75	0.79/0.89	0.76	0.32
28		●	0.034	.053/.068	1.000	0.103	0.070	BM2870	S159	1.78	2.61	25.40	1.35/1.72	0.86	0.32
28-29		●	0.036	.033/.038	0.750	0.091	0.040	BM2840 *	S125 *	1.02	2.31	19.05	0.83/0.96	0.91	0.29-0.32
30		●	0.023	.030/.035	0.750	0.061	0.036	BM30SW *	S93 *	0.09	1.54	19.05	0.99/1.06	0.58	0.25
30		●	0.027	.031/.035	0.750	0.064	0.043	BM3043 *	S93 *	1.09	1.62	19.05	0.79/0.89	0.69	0.25
30-32	●		N/A	.034/.038	0.750	0.064	0.040	BR30 *	S93 *	1.02	1.62	19.05	0.86/0.96	N/A	0.20-0.25
30		●	0.027	.031/.035	0.750	0.064	0.036	BM30 *	S93 *	0.91	1.62	19.05	0.79/0.89	0.68	0.25
30		●	0.027	.031/.035	1.125	0.064	0.036	BM30-1125 *	S93 *	0.91	1.62	28.57	0.79/0.89	0.68	0.25
30		●	0.023	.030/.035	0.750	0.064	0.036	BM30SI *	S93 *	0.91	1.62	19.05	0.76/0.89	0.58	0.25
30		●	0.027	.060/.064	1.000	0.106	0.066	BM3066	S159	1.67	2.70	25.40	1.52/1.62	0.69	0.25
30		●	0.027	.027/.030	0.750	0.066	0.031	BM3031 *	S93 *	0.79	1.67	19.05	0.69/0.76	0.69	0.25
30-32		●	0.027	.034/.038	0.750	0.064	0.040	BM3040 *	S93 *	1.02	1.62	19.05	0.86/0.96	0.69	0.20-0.25
30-32		●	0.029	.062/.065	1.000	0.100	0.067	BM3068	S125LD	1.70	2.54	25.40	1.57/1.65	0.74	0.20-0.25

\* These tools are recommended for 0.025" square terminals on 0.100" centers / 0.63mm on 2.54mm centers

# 5" EXTENDED BITS & SLEEVES

Wire Gauge (AWG)	AWG (Inches)		Max Insulation Diameter	Min/Max Terminal Diagonal	Terminal Hole Depth	Effective Radius	Terminal Hole Diameter	BIT PART No.	SLEEVE PART No.	METRIC (mm)					
	Regular	Modified								Terminal Hole Diameter	Effective Radius	Terminal Hole Depth	Min/Max Terminal Diagonal	Max Insulation Diameter	Wire Gauge (mm)
22	●		N/A	0.054/0.073	0.750	0.117	0.075	BR22-5	S171-5	1.90	2.97	19.05	1.37/1.85	N/A	0.65
22-24	●		N/A	0.054/0.073	0.807	0.111	0.075	BR224-5	S171-5	1.90	2.82	20.50	1.37/1.85	N/A	0.50-0.65
24	●		N/A	0.055/0.073	0.750	0.100	0.075	BR24-5	S159-5	1.90	2.54	19.05	1.39/1.87	N/A	0.50
26	●		N/A	0.058/0.073	1.000	0.100	0.075	BR26-5	S159-5	1.90	2.54	25.40	1.47/1.85	N/A	0.40

# 3" & 5" INSULATED SLEEVES

The insulated sleeves help prevent short circuiting adjacent terminal pins while making a wire-wrap connection. To order, please specify the insulation color on the end of the standard sleeve part number.  
(i.e. S171R, S159Y, etc.)

Color Options:  
R = Red  
B = Blue  
Y = Yellow  
G = Green  
W = White



Dielectric insulated sleeves available. Call JDV for details.



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# HAND WRAPPING & UNWRAPPING TOOLS

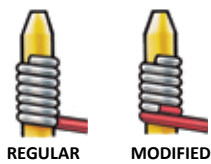


The **HWUR224** (22-24 AWG) wrap/unwrap tool has a longer 1.2" knurl grip, is only 5.5" long (when assembled), and resists loosening during the unwrapping operation.

Part No.	Wire Size		Wrap Side								Unwrap Side							
	AWG	mm	Regular Wrap	Modified Wrap	Max Insulation Diameter		Terminal Hole Diameter		Terminal Hole Depth		Outside Diameter		Terminal Hole Diameter		Terminal Hole Depth		Outside Diameter	
					in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
HWR18	18-19	1.00-0.91	●		-	-	0.075	1.90	1.000	25.40	0.250	6.35	0.075	1.90	1.000	25.40	0.187	4.74
HWR20	20	0.80	●				0.075	1.90	1.000	25.40	0.218	5.53	0.070	1.77	1.000	25.40	0.156	3.96
HWR22	22	0.65	●				0.075	1.90	0.750	19.05	0.218	5.53	0.070	1.77	1.000	25.40	0.156	3.96
HWM22	22	0.65		●	0.052	1.32	0.075	1.90	1.000	25.40	0.218	5.53	0.070	1.77	1.000	25.40	0.156	3.96
HWUR224	22-24	0.50-0.65	●				0.075	1.90	0.807	2.50	0.218	5.53	0.070	1.77	1.000	25.40	0.156	3.96
HWR224	22-24	0.50-0.65	●				0.075	1.90	0.807	20.50	0.218	5.53	0.070	1.77	1.000	25.40	0.156	3.96
HWR224-1	22-24	0.50-0.65	●				0.075	1.90	1.000	25.40	0.218	5.53	0.070	1.77	1.000	25.40	0.156	3.96
HWR24	24	0.50	●				0.075	1.90	0.750	19.05	0.218	5.53	0.070	1.77	1.000	25.40	0.156	3.96
HWM24	24	0.50		●	0.046	1.17	0.075	1.90	0.750	19.05	0.218	5.53	0.070	1.77	1.000	25.40	0.156	3.96
HWM2444 *	24	0.50		●	0.044	1.11	0.044	1.11	0.750	19.05	0.156	3.96	0.038	0.96	1.000	25.40	0.093	2.36
HWR24D	24	0.50	●				0.750	1.90	1.500	38.10	0.218	5.53	0.070	1.77	1.000	25.40	0.156	3.96
HWR2426	24-26	0.40-0.50	●				0.075	1.90	0.750	19.05	0.218	5.53	0.070	1.77	1.000	25.40	0.156	3.96
HWR2444 *	24	0.50	●				0.044	1.11	1.000	25.40	0.156	3.96	0.038	0.96	1.000	25.40	0.093	2.36
HWR26	26	0.40	●				0.075	1.90	1.000	25.40	0.218	5.53	0.070	1.77	1.000	25.40	0.156	3.96
HWM26	26	0.40		●	0.046	1.17	0.075	1.90	1.000	25.40	0.218	5.53	0.070	1.77	1.000	25.40	0.156	3.96
HWM2640 *	26	0.40		●	0.031	0.79	0.040	1.02	0.750	19.05	0.125	3.17	0.038	0.96	1.000	25.40	0.093	2.36
HWM28 *	28	0.32	●		0.030	0.76	0.036	0.91	0.750	19.05	0.125	3.17	0.038	0.10	1.000	25.40	0.093	2.36
HWM2840 *	28-29	0.29-0.32	●		0.036	0.91	0.040	1.02	0.750	19.05	0.156	3.96	0.038	0.96	1.000	25.40	0.093	2.36
HWM30 *	30	0.25	●		0.027	0.69	0.036	0.91	0.750	19.05	0.125	3.17	0.038	0.96	1.000	25.40	0.093	2.36
HWM3066	30	0.25	●		0.027	0.69	0.066	1.67	1.000	25.40	0.218	5.53	0.070	1.77	1.000	25.40	0.156	3.96

\* These tools are recommended for 0.025" square terminals on 0.100" centers / 0.63mm on 2.54mm centers

## HAND WRAPPING TOOLS



Custom order items are available. Please contact JDV for details.

Part No.	Wire Size (AWG)		Regular	Modified	Max Insulation Diameter		Terminal Hole Diameter		Terminal Hole Depth		Outside Diameter	
	AWG	mm			in	mm	in	mm	in	mm	in	mm
HM20	20	0.80		●	0.058	1.47	0.075	1.9	1.000	25.40	0.250	6.35
HR22	22	0.65	●				0.075	1.90	0.750	25.40	0.218	5.53
HM22	22	0.65		●	0.052	1.32	0.075	1.90	1.000	25.40	0.218	5.53
HR224	22-24	0.65-0.50	●				0.075	1.90	0.807	20.50	0.218	5.53
HM24	24	0.50		●	0.046	1.17	0.075	1.90	0.750	19.05	0.218	5.53
HM2426	24-26	0.50-0.40	●		0.046	1.17	0.075	1.90	0.750	19.05	0.218	5.53
HR26	26	0.40	●				0.075	1.90	1.000	25.40	0.218	5.53
HM2640 *	26	0.40		●	0.031	0.79	0.040	1.02	0.750	19.05	0.125	3.17
HM2840 *	28-29	0.32-0.29	●		0.036	0.91	0.040	1.02	0.750	19.05	0.156	3.96
HM30	30	0.25	●		0.027	0.69	0.036	0.91	0.750	19.05	0.125	3.17
HM3066	30	0.25	●		0.027	0.69	0.066	1.67	1.000	25.40	0.218	5.53
HM3040 *	30	0.25	●		0.027	0.69	0.040	1.02	0.750	19.05	0.125	3.17
HM3043 *	30	0.25	●		0.027	0.69	0.043	1.09	0.750	19.05	0.125	3.17

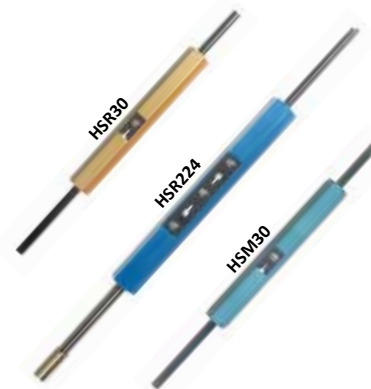
\* These tools are recommended for 0.025" square terminals on 0.100" centers / 0.63mm on 2.54mm centers



# WRAP / STRIP / UNWRAP TOOLS

**Three tools in one!** With a compact design, these economic tools wrap, strip, and unwrap copper wire with ease! Perfect for small repair, service work, and for any hobbyist. Models HSM30 and HSR30 have aluminum body and model HSR224 is equipped with a plastic handle.

Part No.	Wire Size		Regular	Modified	Terminal Hole Diameter		Terminal Hole Depth		Outside Diameter	
	AWG	mm			in	mm	in	mm	in	mm
HSR224	22-24	0.65-0.50	●		0.075	1.90	1.50	38.1	0.213	5.40
HSR30	30	0.25	●	●	0.036	0.91	1.50	38.0	0.125	3.18
HSM30	30	0.25	●	●	0.075	1.90	1.50	38.0	0.125	3.18



## HAND UNWRAPPING TOOLS

These tools are available in three different styles for unwrapping 20-32 AWG wire.

Part No.	Type	Wire Size		Direction of Unwrap		Terminal Hole Diameter		Terminal Hole Depth		Outside Diameter	
		AWG	mm	Left (CCW)	Right (CW)	in	mm	in	mm	in	mm
HU1	A	20-26	0.80-0.40	●		0.070	1.77	1.000	25.40	0.156	3.96
HU2	B	20-26	0.80-0.40	●	●	0.070	1.77	1.000	25.40	0.156	3.96
HU4	C	20-26	0.80-0.40	●		0.070	1.77	2.360	60.00	0.187	4.74
HU5	C	20-26	0.80-0.40	●	●	0.070	1.77	2.360	60.00	0.187	4.74
HU120	A	20-26	0.80-0.40	●		0.070	1.77	1.000	25.40	0.120	3.04
HU93120	B	24-32	0.50-0.20	●		0.038	0.96	1.000	25.40	0.093	2.36
		20-26	0.80-0.40			0.070	1.77	1.000	25.40	0.120	3.04
HU93	A	24-32	0.50-0.20	●		0.038	0.96	1.000	25.40	0.093	2.36
HU93L	A	24-32	0.50-0.20		●	0.038	0.96	1.000	25.40	0.093	2.36
HU93RL	B	24-32	0.50-0.20	●	●	0.038	0.96	1.000	25.40	0.093	2.36

CCW: Counter Clockwise direction

CW: Clockwise direction



Type C is popular for telecom field service work.

## KYNAR® INSULATED WIRE ROLLS

**Not for use with Cut-Strip-Wrap (CSW) tools.**

For CSW tools, please use Kynar® Low-Strip-Force, Tefzel, or PVC insulated wire.

Please contact JDV for more details.

Wire AWG	mm	Insulation Diameter		Roll Size		Part No.				
		in	mm	ft	m	White	Yellow	Blue	Red	Black
24	0.50	0.030	0.76	1000	304	WR24W-M	WR24Y-M	WR24B-M	WR24R-M	WR24BLK-M
26	0.40	0.027	0.69	1000	304	WR26W-M	WR26Y-M	WR26B-M	WR26R-M	WR26BLK-M
28	0.32	0.024	0.60	1000	304	WR28W-M	WR28Y-M	WR28B-M	WR28R-M	WR28BLK-M
30	0.25	0.020	0.50	1000	304	WR30W-M	WR30Y-M	WR30B-M	WR30R-M	WR30BLK-M



- Kynar® insulated wire
- Silver plated copper conductor
- Assorted colors and gauges
- UL Listed

## HEAVY-DUTY UTILITY KNIFE

- Ergonomic Curved Handle for Max Comfort
- High Carbon Double Edged 3.2" Steel Blade
- Rugged Construction for Tough Jobs
- Locking Sheath with Belt Loop

For electrical installation work, the LE-325 is ideal for splitting and peeling cable insulation jackets, cutting cables, opening up electrical outlets in plywood or sheetrock, along with other various cutting applications.

MADE IN JAPAN

Part No.	Description	Overall Length	Weight
LE-325	Heavy-Duty Utility Knife with Locking Sheath	9.2" (234mm)	0.7lb (0.3kg)



# WIRE CUT & STRIP TOOLS

## WS100 Series

A compact and simple tool for easy and clean stripping of wires for wire wrapping, as well as electronic and appliance applications. Easy to operate... place wire (up to 4) in stripping slot with ends extending beyond cutter blades... press tool and pull... wire is cut and stripped to proper "wire wrapping" length. The hardened steel cutting blades and sturdy construction of the tool ensure long life. Strip length is easily adjustable for your application.

Part No.	Wire Size (AWG)		Adjustable Strip-Off Length		Replacement Blade Assembly
	AWG	mm	In.	mm	
WS100-22	22	0.65	1-5/16" to 1-9/16"	33.33 to 39.68	WSA22
WS100-224	22-24	0.65-0.50	1-5/16" to 1-9/16"	33.33 to 39.68	WSA224
WS100-24	24	0.50	1-5/16" to 1-9/16"	33.33 to 39.68	WSA24
WS100-2426	24-26	0.50-0.40	1-5/16 to 1-11/16"	33.33 to 42.86	WSA2426
WS100-26	26	0.40	1-5/16 to 1-11/16"	33.33 to 42.86	WSA26



## WS3907 Series

For applications requiring multiple cuts and strips of the same gauge wire, these models are most effective. Easy to operate... place the wires in stripping slot with ends extending beyond cutter blades... press tool and pull... wire is cut and stripped to proper "wire wrapping" length. The plastic grips and soft rubber sleeve assures maximum handling comfort and slip-free gripping.

Part No.	Wire Size (AWG)		Adjustable Strip-Off Length		Replacement Blade Assembly
	AWG	mm	In.	mm	
WS3907-22	22	0.65	1-1/2" to 1-3/4"	38.10 to 44.45	WSA22
WS3907-224	22-24	0.65-0.50	1-1/2" to 1-3/4"	38.10 to 44.45	WSA224
WS3907-24	24	0.5	1-1/2" to 1-3/4"	38.10 to 44.45	WSA24
WS3907-2426	24-26	0.50-0.40	1-1/2" to 1-3/4"	38.10 to 44.45	WSA2426
WS3907-26	26	0.4	1-1/2" to 1-3/4"	38.10 to 44.45	WSA26
WS3907-28	28	0.32	7/8" to 1-1/8"	22.22 to 28.57	WSA28
WS3907-30	30	0.25	7/8" to 1-1/8"	22.22 to 28.57	WSA30
WS4473	22-24	0.65-0.50	7/8" to 2"	22.22 to 55.80	WSA224
	24-26	0.50-0.40	7/8" to 2"	22.22 to 55.80	WSA2426



## 3500 Series



These spring-loaded self-opening wire strippers are outfitted with a diamond polished blade for precision stripping. It includes a built-in wire cutter, looping holes to bend wire ends around screw terminals, and a serrated nose to help pull, bend, and shape wire. Also, the handle grip has a convenient conversion table (AWG, solid/mm, standard/mm<sup>2</sup>) for quick and easy reference.

Other features include a safety lock, lightweight and compact body, and a comfortable color grip handle for wire size identification.

MADE IN JAPAN

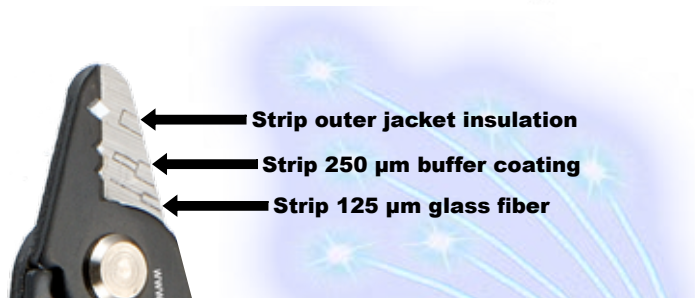
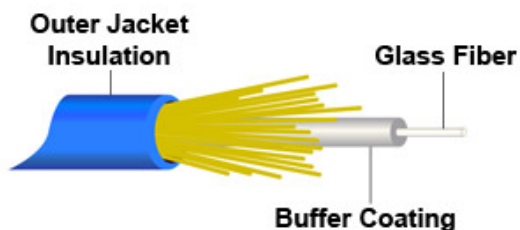
Part No.	Handle Color	Wire Core Sizes	
		AWG	Standard (mm)
3500E-1	Red	AWG	24, 22, 20, 18, 16, 14, 12
		Solid (mm)	2.0, 1.6, 1.3, 1.0, 0.8, 0.65, 0.5
		Stranded (mm)	3.3, 2.0, 1.3, 0.8, 0.5, 0.3, 0.2
3500E-2	Yellow	AWG	30, 28, 26, 24, 22, 20, 18
		Solid (mm)	1.0, 0.8, 0.65, 0.5, 0.4, 0.3, 0.25
		Stranded (mm)	0.8, 0.5, 0.3, 0.2, 0.13, 0.08, 0.05



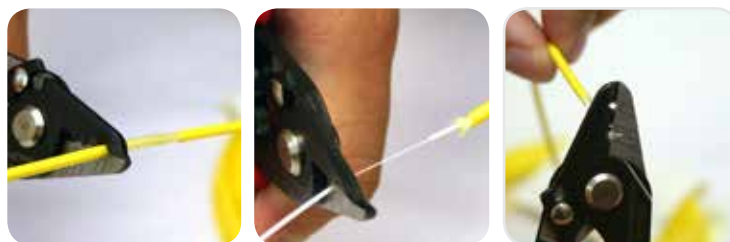
# 3-WAY FIBER OPTIC STRIP TOOL

JDV's FS216 fiber optic 3-way stripper is the ideal tool for stripping 125 micron glass fibers with 250 micron buffer coating without scratching or nicking the glass fiber.

Features include a spring-loaded handle, a safety lock, an adjustable stopper, and the tool has an overall length of 5.9" (150mm).



Part No.	Description	Overall Length	Weight
FS216	3-Way Fiber Optic Strip Tool	5.9" (150mm)	0.23lb (0.10kg)



## WRENCHES & ACCESSORIES

### Double-End Hex Can Wrench

This can wrench features a 3/8" black finish and 7/16" silver finish hex end for opening telecommunication cabinets, pedestals, placing fuses in cable terminals, connecting wires to fuses, and for tightening nuts on binding post terminals. The walls on both sockets are thin enough so it can be used to work locking devices on most terminals and cabinets. Handle is made of high quality plastic and has a 7 inch overall length.

Part No.	Description	Overall Length	Weight
CW737	Double-End Hex Can Wrench	7.0" (177.8mm)	0.27lb (0.12kg)



### "C" Regulator Wrench

JDV's YC1116 "C" Regulator Wrench is used for cylinder and hose connection nuts on pressure testing regulators and for the hex nuts on gas manifolds and cylinder connectors. The openings accommodate nut widths of 11/16", 1-1/8", and 1-3/16".

Part No.	Description	Overall Length	Weight
YC1116	"C" Regulator Wrench	9.88" (250.8mm)	1.3lb (0.59kg)



### "F" Connector Wrench

The FC100 unscrews tight connections and removes F-Connectors in high density and hard to reach locations. It provides 30 in/lb tightening torque using only your fingers and helps prevent signal leakage and service calls from loose connections. This tool is equipped with a durable plastic body and steel hex.

Part No.	Description	Overall Length	Weight
FC100	F Connector Wrench	2.0" (50.8mm)	0.07lb (0.03kg)





# REUSABLE CABLE REEL



- ✓ **COST EFFECTIVE**
- ✓ **LIGHTWEIGHT**
- ✓ **WEATHER-PROOF**
- ✓ **REUSABLE**

This rugged reusable cable reel is the perfect Eco-Friendly and Cost Saving Solution for handling most type of service wire that comes in a coil such as aerial or buried copper service wire (telecom), MC armored cable (electrical), Coax (cable), and more.

Part No.	Description	Weight
<b>CR1000</b>	SET: U-1000 Reusable Cable Reel and U-2000 Metal Stand	20.0 lb (9.1 kg)
<b>U-1000</b>	Reusable Plastic Cable Reel with Plastic Handle	9.50 lb (4.31 kg)
<b>U-1000/NH</b>	Reusable Plastic Cable Reel (No Handle)	9.45 lb (4.29 kg)
<b>U-2000</b>	Metal A-Frame Collapsible Stand (for U-1000 Cable Reel)	10.50 lb (4.76 kg)
<b>CR21</b>	Snap-in Plastic Handle (for U-1000 Cable Reel)	0.05 lb (0.02 kg)
<b>CR24</b>	Rugged Bolt-on Handle (for U-1000 Cable Reel)	0.36 lb (0.16 kg)

• Wire not included

## Fast & Easy Cable Loading Process



## Cost Saving & Space Reducing Solution

- ✓ Saves space on vehicle
- ✓ Reduces material costs
- ✓ Lowers transportation costs
- ✓ No disposal fees

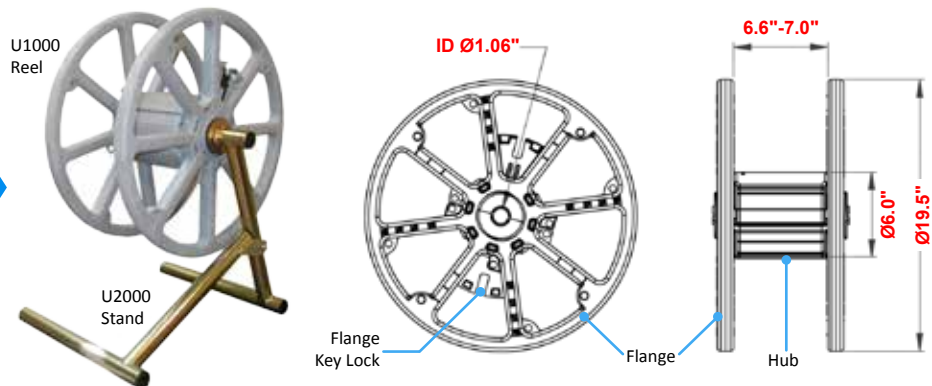


## Collapsible Metal Stand

The U-2000 a-frame stand easily converts into a handle, allowing you to roll the U-1000 reusable cable reel around with ease. Includes a brake mechanism which allows the operator to control the dispensing payout speed.



Model: CR1000



• Wire not included

# REUSABLE "REELSAVER" BOX



- ✓ **COST EFFECTIVE**
- ✓ **LIGHTWEIGHT**
- ✓ **STACKABLE DESIGN**
- ✓ **WEATHER-PROOF**
- ✓ **REUSABLE**

**The CR2000 is your economical solution!**

No more disposal fees and packaging waste. Minimize loss due to inaccurate measurement of remaining wire quantity. Save on storage and transportation cost by using a standard coiled wire, which maximizes cube efficiency.

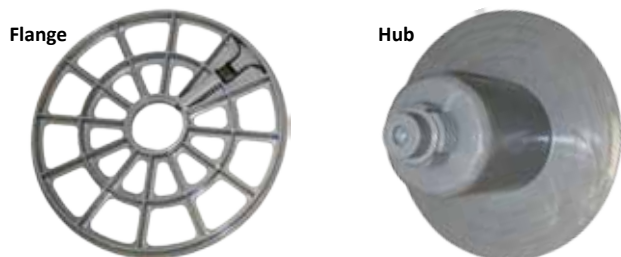
**Very user friendly!**

This rugged ReelSaver Box is easy to operate, reload, and install a new wire coil in seconds. Virtually any type of wire is compatible as long as it can be "coiled" to fit the CR2000's dimensions.



• Wire not included

Part No.	Description	Weight
CR2000	Reusable "ReelSaver" Box	9.0lb (4.1kg)

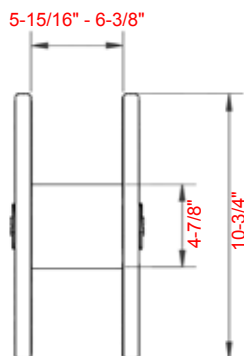


### Applications

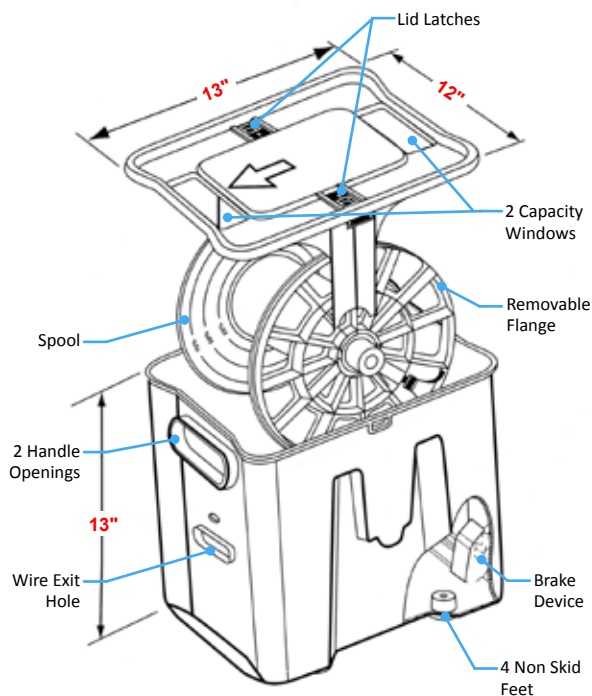
- 500ft of 2 Pair Aerial Drop Wire
- 1000ft to 1600ft of Station Wire
- 1000ft of 4 Pair Inside Wire



Spool with % indicator of remaining wire



Virtually any type of wire is compatible if it can be "coiled" to these dimensions



## Quick & Easy Loading Process





## ✓ Very Mobile & Compact Design

Designed to fit through most doorways, inside man lifts, and other small workspaces. Equipped with rugged 8" diameter wheels making it very user-friendly to wheel around on jobsites.

## ✓ Easy Loading Process

**No more pinched fingers! No more balancing act!**

This unit is designed to load the wire spools from the top which makes it easier for the operator.

## ✓ Handles Multiple Size Reels

Holds 12-14 spools of 250' THHN or 8 spools of 1500' wire reels, and accommodates most wire spools from 4" to 12" in diameter.

## ✓ Easy to Dispense Wire

The RC03 can convert from a mobile wire caddy (wire cart) to a reel dispenser by simply setting the unit down on it's side. The 16" wide T-handle provides additional balance support.

## ✓ Rugged Construction

Equipped with a welded box style constructed base (11-gauge steel), 8" premium wheels, 16" wide T-handle with quick-release ball-lock pins, and a powder-coat finish.



• Wire not included



Very mobile. Holds lots of cable.



Easily dispense multiple spools.

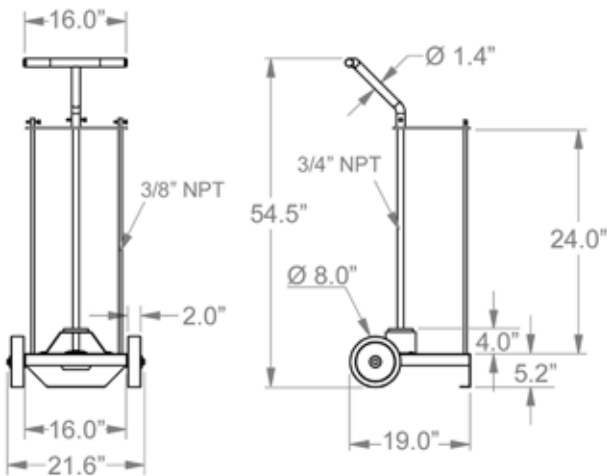


**Load From Top**

No pinched fingers.

Part No.	Description	Weight
RC03	ReelCaddy with three 36" Spool Rods	44.0lbs (19.96kg)

• All Weights are Approximate



• All Dimensions are Approximate





- ✓ Turns a Two-Man Job Into a One-Man Operation
- ✓ Very Mobile, Versatile, and Compact Design
- ✓ Dispenses Reels up to Ø 23" (depending on arbor hole size)
- ✓ Rugged Construction for Durability
- ✓ Quickly Disassemble and Store



• Shown with JDV's U-1000 reusable cable reel (sold separately)  
• Wire not included



Part No.	Description	Weight
RC01S	ReelCaddy with 24" Single Spool Rod	37.0lbs (16.8kg)
RC01L	ReelCaddy with 36" Single Spool Rod	39.0lbs (17.7kg)
RCB1	Optional Brake Kit (Brake & Washer)	0.8lb (0.4kg)
U-1000/NH	Reusable Cable Reel (No Handle)	9.5lbs (4.31kg)

• Replacement Spool Rods Available • All Weights are Approximate

## Ergonomic & Easy Loading Technique



Feed the spool rod through the reel's ID and use the spool rod as a mechanical advantage for lifting the cable reel in upright position.



Very mobile. Well balanced.



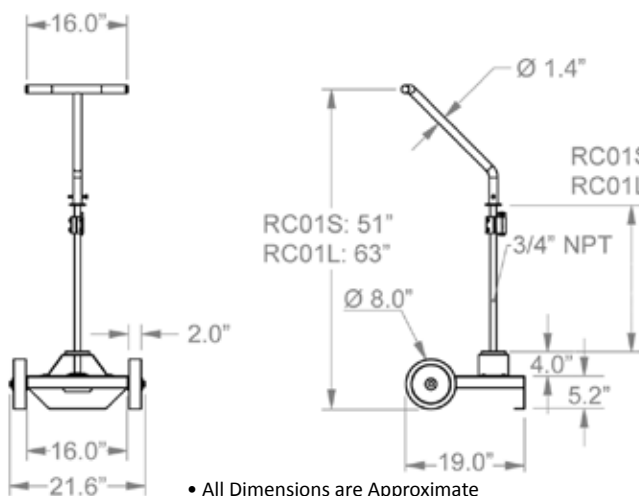
Easily handles 1000' MC cable reels.



Multiple reels.



Easy dispensing.

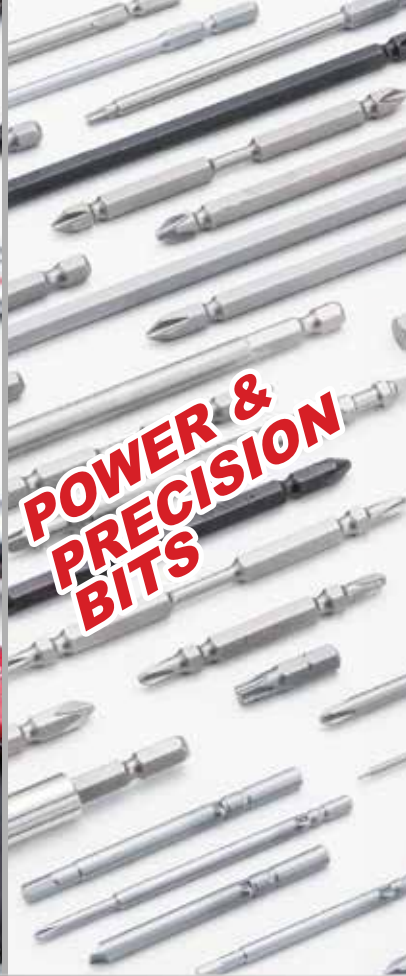


• All Dimensions are Approximate





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