

# JONARD

INDUSTRIES CORP.

**ok**® **OK Industries**  
Div. of Jonard Industries

Tools for Telecom, Fiber Optics, CATV, Satellite, Security & Alarm,  
Wireless and Electronics Industries



Catalog No. 112

Quality Tools for Today's Professionals since 1958



Established 1958



**OK Industries**  
Div. of Jonard Industries

Established 1946

## Quality Tools for Today's Professionals since 1958

### WE ARE JONARD INDUSTRIES

**Jonard Industries Corp.** was established in 1958 and through hard work and dedication experienced a meteoric rise to top tier manufacturer status for tools used in the Telecom, Fiber Optic, CATV, Satellite, Security & Alarm and Electronic Industries.

**OK Industries** was established in 1946 as a force in the Telecommunications and Electronics Industries. In February 2003 Jonard Industries acquired the OK Industries product line and merged it into the "Jonard Family of Companies." Together these two brands have forged a reputation built on manufacturing excellence.

#### OUR MISSION STATEMENT

"Jonard Industries has one objective - to fully satisfy our customer's requirements. We endeavor to work harder, work smarter and to produce the finest quality hand tools at the most competitive prices."

#### WARRANTY

Lifetime warranty – see details on our website [www.jonard.com](http://www.jonard.com)

#### CUSTOMER SERVICE

Our distribution network is present in all 50 states and on every continent. Check the "Where to Buy" section of our website to locate a dealer near you. Jonard Industries maintains stock in depth, provides technical support and we will meet your individual service requirements.

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# PLIERS-HEAVY DUTY



JIC-2488

## HIGH LEVERAGE DIAGONAL CUTTER ANGLED HEAD

Crafted with a 13° angled head for heavy-duty wire cutting in confined spaces, and made of specially forged alloy steel for strength and cutting ability. Red plastic handle.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS
JIC-2488	8 5/8"	13/16"	1 3/16"	3/8"



JIC-2288

## HIGH LEVERAGE DIAGONAL CUTTER

Crafted for heavy-duty wire cutting and made of specially forged alloy steel designed for strength and cutting ability. Red plastic handle.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS
JIC-2288	8 1/4"	7/8"	1 3/16"	7/16"



JIC-63050

## HIGH LEVERAGE CABLE CUTTERS

High leverage design for superior cutting ability. Designed with a shear-type jaw for cutting aluminum and soft copper. Not for use on steel or ACSR type cables. Cuts up to 100-pair cables. Red plastic handle.

JONARD PART NO.	LENGTH	JAW WIDTH	JAW THICKNESS	JAW LENGTH
JIC-63050	9 1/4"	13/16"	1/2"	1 3/8"



JIC-683  
SIDE CUT B9

## LINEMAN'S B SIDE CUT PLIERS

Designed for heavy duty use in construction and maintenance work. These pliers are high leverage for cutting bolts, nails, and many gauges of wire including high-strength wire. Cutting edges cut clean and remain sharp. The cushioned-grip, comfortable handles are red plastic to approximately .007". Also known as SIDE CUT B9.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS	CUTTER LENGTH
JIC-683	9 1/2"	1 19/32"	1 1/4"	5/8"	13/16"

All Jonard Industries Pliers come with a **LIFETIME WARRANTY**. For complete details see our website [www.jonard.com](http://www.jonard.com)

# CRIMPING PLIERS

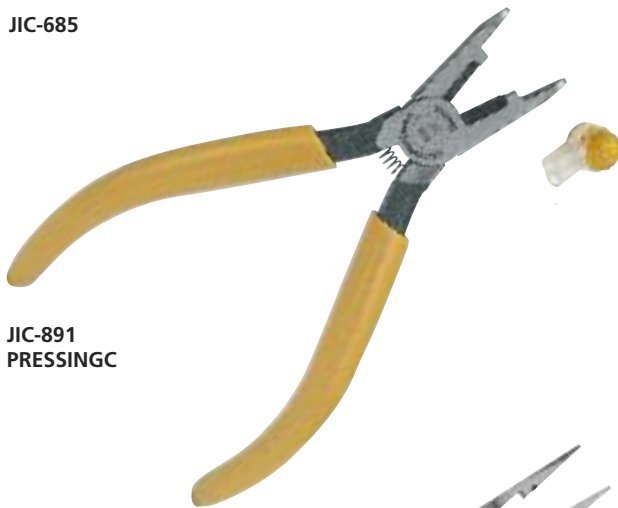


JIC-685

## LINEMAN PLIER WITH CRIMPER & FISH TAPE PULLER

Designed for heavy duty use in construction and maintenance work. These pliers are high leverage for cutting bolts, nails, and many gauges of wire including high-strength wire. Cutting edges cut clean and remain sharp. Fish tape pulling feature easily pulls 1/8" or 1/4" steel fish tape without damaging the tape. Built in crimper feature works best on non-insulated connectors, lugs and terminals. Cushioned grip, comfortable handles are yellow plastic coated to approximately .007".

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS	CUTTER LENGTH
JIC-685	9 1/2"	1 19/32"	1 1/4"	5/8"	3/4"



JIC-891  
PRESSINGC

## CONNECTOR-CRIMPING PLIERS WITH SIDE CUTTERS

Connector-Crimping Pliers with Side Cutters designed to press UG, UR, UY, 709 series connectors, crimping "B" type connectors, and AMP tel splice connectors. A special stop behind cut out prevents damage to connectors. Utilized on combinations of plastic and pulp insulated 19, 22, 24 and 26 gauge copper conductors as well as 20 gauge plastic insulated copper steel wire. Comes with side cutter and yellow plastic handle. Also known as PRESSINGC.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS	CUTTER LENGTH
JIC-891	5 3/16"	1"	13/16"	3/8"	1/2"



JIC-22148

## COMBO CRIMPER LONG NOSE PLIERS

Five tools in one, combines crimper for UR/UY/UG, AMP tel splice connectors, 709 series connectors, crimping "B" type connectors and a long nose pliers. With a crusher, cutter, .030" stripping hole, and yellow plastic handle.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS	CUTTER LENGTH
JIC-22148	6 7/8"	1 7/8"	13/16"	3/8"	13/32"



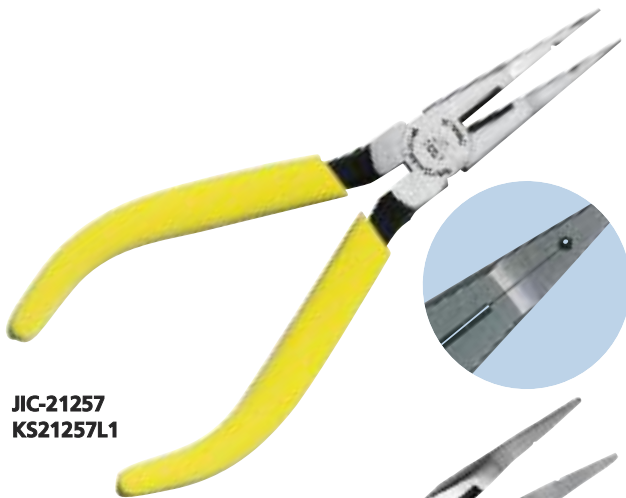
JIC-056  
LONGNOSEG

## LONG NOSE G PLIERS

This plier is designed with a long nose to close 700, 701 & 702 style connectors. Knurled jaws to facilitate gripping wire, red plastic handle. Also known as LONGNOSEG.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS
JIC-056	6 7/8"	1 7/8"	13/16"	3/8"

# LONG NOSE PLIERS

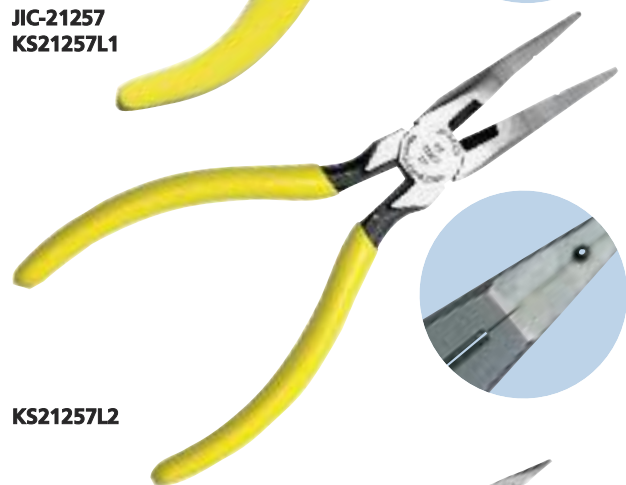


JIC-21257  
KS21257L1

## TELECOM LONG NOSE PLIERS

Long nose have side cutting blades, a crushing slot, one .030" stripping hole, and a thin knurled nose to facilitate handling of the wire at the terminals. The comfortable handles are yellow plastic. Also known as KS21257L1.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS	CUTTER LENGTH
JIC-21257	6 7/8"	1 7/8"	13/16"	3/8"	1/2"



KS21257L2

## LONG NOSE CUT CRUSH STRIP L2 PLIERS

Side cut pliers with crushing slot, one .030" stripping hole and a thin knurled nose to facilitate handling wire at the terminals. Aluminum oxide insulation coating on the outside nose surface. Yellow plastic handle.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS	CUTTER LENGTH
KS21257L2	6 7/8"	2"	3/4"	3/8"	7/16"



KS21257L3

## LONG NOSE CUT CRUSH STRIP L3 PLIERS

Long nose with side cutter, crushing slot, one .030" stripping hole and a thin knurled nose to facilitate handling wire at the terminals. Yellow plastic handle.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS	CUTTER LENGTH
KS21257L3	6 1/2"	1 1/2"	3/4"	3/8"	7/16"



KS21257L4

## LONG NOSE CUT CRUSH STRIP L4 PLIERS

Long nose with side cutter, crushing slot, one .030" stripping hole and a thin knurled nose to facilitate handling wire at the terminals. Aluminum oxide insulating coating on the outside nose surface. Yellow plastic handle.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS	CUTTER LENGTH
KS21257L4	6 1/2"	1 1/2"	3/4"	3/8"	7/16"

# LONG & SHORT NOSE PLIERS



**JIC-842**

## TELECOM LONG NOSE D PLIERS

Pliers are for general use looping, bending and cutting. Grips small wires and parts and reaches into tight spaces. Jaws are knurled, serrated and have side cutting blades. Cushion gripped yellow plastic handle.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS	CUTTER LENGTH
<b>JIC-842</b>	6 3/4"	1 7/8"	11/16"	3/8"	1/2"



**BLONGNOSE**

## LONG NOSE GENERAL USE PLIERS

Chain nose pliers for general use. Inner surface of the jaws are knurled near the end to facilitate gripping wire, binding post nuts etc. Orange plastic handle.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS
<b>BLONGNOSE</b>	6 7/8"	1 1/2"	3/4"	3/8"



**ELONGNOSE**

## LONG NOSE GRIPPING PRESSING PLIERS

Long nose pliers for gripping and pressing. Inner surface of the jaws are knurled near the end to facilitate gripping wire, binding post nuts etc. Aluminum oxide insulation coating on the outside nose surface. The inside gripping jaws are provided with mated grooves near the joint for use in pressing .032/.035" brass sleeves. One stripping hole .054" diameter Orange plastic handle.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS
<b>ELONGNOSE</b>	6 7/8"	1 7/8"	11/16"	3/8"



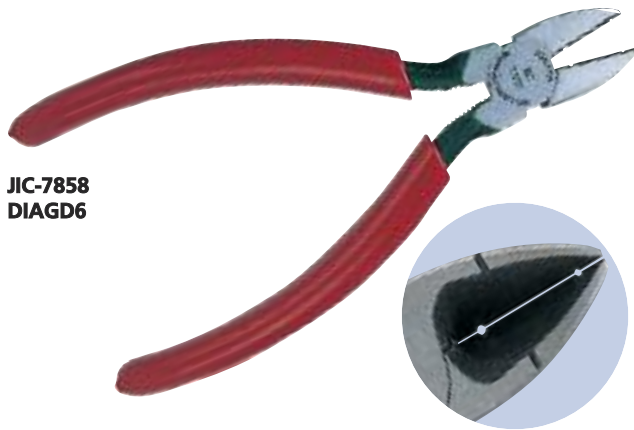
**BSHORTNOSE**

## SHORTNOSE PLIERS

Intended for use in skinning 22-24 AWG wire and crushing insulation in nose slot. The front portion of the jaws is narrowed, and a portion of the inner face of one jaw is relieved to skin insulation from wire. The inner surface of the jaws are serrated to facilitate gripping wire. Orange plastic handle.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS
<b>BSHORTNOSE</b>	6 1/2"	1 1/2"	3/4"	3/8"

# DIAGONAL PLIERS

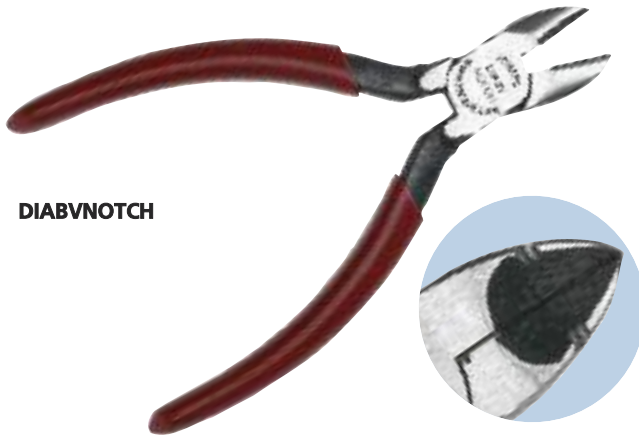


**JIC-7858  
DIAGD6**

## TELECOM DIAGONAL CUTTER PLIERS

Tapered nose diagonal cutting pliers with standard-bevel knives with .030" and .045" skinning holes, with crusher used for multi-purpose wire work, with two V-shaped stripping notches. The comfortable handles are red plastic. Also known as DIAGD6.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS
<b>JIC-7858</b>	6 1/2"	7/8"	3/4"	3/8"



**DIABVNOTCH**

## DIAGONAL PLIERS – CRUSHING & SLITTING

Used for cutting soft copper conductors. Has a "V" shaped notch between jaws, near the joint, for crushing the flameproof type of insulation on distributing frame wire. Also provides a "W" shaped notch on the plier jaws for slitting textile insulation. Red plastic handle.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS
<b>DIABVNOTCH</b>	6 3/16"	13/16"	1/2"	11/32"

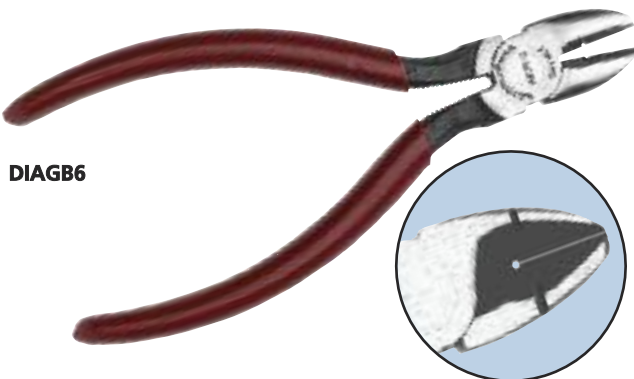


**DIAGB5**

## DIAGONAL GENERAL USE PLIERS

These are plain diagonal pliers for general use, for cutting soft copper conductors. Red plastic handle.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS
<b>DIAGB5</b>	5 1/8"	13/16"	1/2"	11/32"



**DIAGB6**

## DIAGONAL PLIERS – SKINNING & STRIPPING

Tapered nose diagonal cutting pliers with standard-bevel knives with one .045" skinning hole, crusher used for multipurpose wire work, and two V shaped stripping notches. Red plastic handle.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS
<b>DIAGB6</b>	6 1/2"	7/8"	3/4"	3/8"



# SPECIALTY PLIERS



JIC-453

## FLUSH CUT PLIERS

A close cutting plier used to trim conductors from the 710 connector modules without leaving exposed conductors. Ideal for close trimming of gates and sprue on injection molded plastic parts. Jaw design aids in use in confined areas. Turquoise color handle. Plier made from chrome vanadium steel.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS
JIC-453	4 1/2"	5/8"	7/16"	1/4"



PLS-5

## HEAT COIL PLIERS

Designed for installing and extracting heat coils, fuses from line amplifiers and other cylindrical shaped components. The thin nosed jaw allows easy access to tight restricted areas. Yellow plastic handle.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS
PLS-5	5"	1 13/16"	1/2"	5/16"



BCOMB

## SLIP JOINT SIDE CUT PLIERS

For heavy-duty use. Polished head, red plastic handles and flush bolt. Machined gripping teeth and 3/8" hardened wire cutter.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS	CUTTER LENGTH
BCOMB	7 5/8"	1 3/4"	1 1/4"	3/8"	3/8"



JIC-750

## 3/ 4" COAX CABLE CUTTER

Also known as a Banana Cutter, this cutter is designed to cut 3/ 4" coaxial cable. Tool cuts cleanly without compressed or frayed ends. Functions like a tube cutter – eliminates cable distortion during cable prep. NOT designed to cut steel cable. Yellow plastic handles.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH
JIC-750	8 3/4"	1 1/4"	5/8"

# CURVED NOSE & PUMP PLIERS



JIC-3026

## CURVED LONG NOSE PLIER

Nose is bent 70° for maximum visibility. Used in confined areas. Design includes knurled jaws for sure wrapping and looping. Comfortable ergonomic yellow plastic handles.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS
JIC-3026	6 7/8"	2"	11/16"	3/8"



JIC-3385

## CURVED NEEDLE NOSE PLIER

Nose is bent 60° for maximum visibility. Used in confined areas for bending and forming fine wire. Inside jaws and jaw edges are polished to prevent nicking the wire. Plier has a spring loaded ergonomic design. With a dark blue plastic handle.

JONARD PART NO.	LENGTH	JAW LENGTH	JAW WIDTH	JAW THICKNESS
JIC-3385	5 1/2"	1 1/2"	1/2"	1/4"



JIC-5026

## PUMP PLIERS

Manufactured with a secure tongue and groove design for a non-slip grip (even under heavy pressure).

The jaws provide a wide range of openings with a smooth, positive interlock between halves. Handles are plastic coated, but are not insulated and do not protect against electric shock.

JONARD PART NO.	LENGTH	MAX. JAW OPENING	NUMBER POSITIONS
JIC-5026	6"	1"	4
JIC-20210	10"	1 3/4"	6
JIC-50212	12"	2 1/4"	7



JIC-50210



JIC-50212

All Jonard Industries Pliers come with a **LIFETIME WARRANTY**. For complete details see our website [www.jonard.com](http://www.jonard.com)

# CAN, BOOTH, LINESMAN WRENCHES



M-216C/EX



M-216C/REX



M-216C/RX



M-216CS22



M-216CKIT

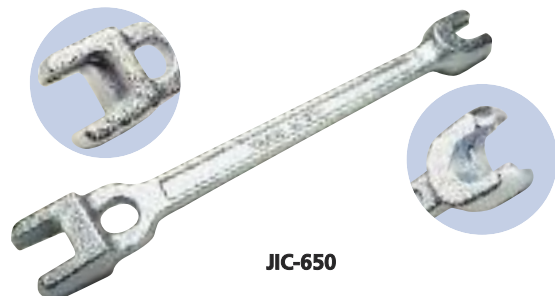
SK-51632



BW-532



BW-532-3



JIC-650

## CAN SOCKET WRENCH

Double end can socket wrench, 3/8" and 7/16" hex, orange plastic handle in either our standard or ergonomic design. Used in placing fuses in cable terminals and connecting wires to fuses and binding posts. The walls on both sockets are thin enough so they can be used to work locking devices on most terminals and cabinets. 7" long.

JONARD P/N	DESCRIPTION
M-216C/EX	Ergonomic 1" Dia. Handle, Hex Outer Socket
M-216C/REX	Ergonomic 1" Dia. Handle, Round Outer Socket
M-216C/RX	Standard Handle, Round Outer Socket
M-216CS22	Ergonomic 1" Dia. Handle, Hex Outer Socket with 22 AWG Stripper Blade
M-216CKIT	Ergonomic 1" Dia. Handle, Hex Outer Socket with 22 AWG Stripper Blade Can Wrench and Security Key Insert

## SECURITY KEY INSERT

Designed with a double-ended hex adapter for two sizes of pin-in-head security fasteners. Simply slip the key into the 3/8" side of a can wrench and you are ready for either a 5/16" or 5/32" hex security screw. This is a reversible insert tool. One end is for SLC Cabinets and the other is for most network interface boxes.

JONARD P/N	DESCRIPTION
SK-51632	Security Key Insert

## BOOTH WRENCH

Tamperproof hex screwdriver, also known as a booth wrench or security wrench. It features a 1" diameter screwdriver handle, 5/32" hex shaft with a hole drilled in the tip for use with security tamperproof screws used for telephone and CATV applications. BW-532 Booth Wrench is 9" long and the BW-532-3 Booth Wrench is 6" long.

JONARD P/N	DESCRIPTION
BW-532	Booth Wrench -Ergonomic design 9"
BW-532-3	Booth Wrench -Ergonomic design 6"

## LINEMAN'S B WRENCH

Forged and heat treated, this wrench is used on pole line hardware. It is open-end double-end type with two sizes of openings at each end and an oval hole for turning pole steps. The end openings accommodate nuts for 3/8", 1/2", 5/8" and 3/4" bolts and the head of the 1/2" drive screw. The faces of the wrench openings are offset to provide handle clearance. 13" Long.

JONARD P/N	DESCRIPTION
JIC-650	Lineman's B Wrench

# FIBER OPTIC & CATV TOOLS



JIC-375



JIC-175



JIC-125



FOD-2000

## FIBER OPTIC DROP CABLE SLITTER

The FOD-2000 Fiber Optic Drop Cable Slitter is a patent pending tool that simplifies the slitting of drop cable jackets at the end of the cable or mid-span. For Flat Cables.

The FOD-2000 puts a slit on both sides of the jacket allowing easy access to the fiber or strength member. The ease of use makes this tool truly unique. To use just position the tool around the cable, pull and slit. A simple solution for a vital task. The FOD-2000 comes completely assembled with two blades, which can be reversed once the blades are worn.

JONARD P/N	DESCRIPTION
FOD-2000	Fiber Optic Drop Cable Slitter
FOD-RB25	Replacement Blades 25/pk

## FIBER OPTIC STRIPPER THREE HOLE

Three hole Fiber Optic Stripper performs all common fiber stripping functions. Strips the 1.6-3 mm fiber jacket down to the 900 micron buffer coating. The second hole strips the 600-900 micron buffer coating down to the 250 micron coating and the third hole is used to strip the 250 micron cable down to the 125 micron glass fiber. JIC-375 is 6" long.

JONARD P/N	DESCRIPTION
JIC-375	Fiber Optic Stripper- 3 Hole

## ERGONOMIC FIBER OPTIC STRIPPER

Used for stripping the 250 micron coating from the 125 micron optical fiber. Preset at the factory so no adjustments are necessary. Yellow plastic formed handles, tool is 6" long.

JONARD P/N	DESCRIPTION
JIC-175	Fiber Optic Stripper Ergonomic

## FIBER OPTIC STRIPPER

For stripping 250 micron buffer coating from 125 micron optical fiber. Preset at the factory so no adjustments are necessary. Yellow plastic dipped handles 5 3/16" long

JONARD P/N	DESCRIPTION
JIC-125	Fiber Optic Stripper



CST-1900

## ROUND CABLE STRIPPER

The CST-1900 is designed for fast and precise jacket removal of PVC, rubber, PE and other jacket materials, and works well on round cables with diameters ranging from 3/16" to 1-1/8" (4.5-29 mm). This is a Triple Action Tool, cutting longitudinally for end stripping, spiral for end stripping and mid-span cuts, and circular for jacket removal. A simple versatile easy to use tool your customers will love. The Replaceable Cutting Blade is spring loaded, adjustable for various cable diameters, provides a 90° blade rotation and is designed for long life.

JONARD P/N	DESCRIPTION
CST-1900	Round Cable Stripper
CST-7915	Replaceable Cutting Blade

# FIBER OPTIC & CATV TOOLS



TK-375

## THREE PIECE FIBER OPTIC KIT

Kit includes the JIC-375 Fiber Optic Stripper three hole, ES-1964 Electrician's Scissor, and convenient molded plastic pouch made of durable PVC material and will accommodate belts up to 2" in width.

JONARD P/N	DESCRIPTION
TK-375	3 Piece Fiber Optic Kit
H-35	Plastic Molded Pouch
JIC-375	Fiber Optic Stripper- 3 Hole
ES-1964	Electrician Scissor



H-35



JIC-375



ES-1964



SD-63

## SCREWDRIVER, JEWELER'S TYPE

Used to terminate the battery backup in the fiber ONT. Screwdriver has concave swivel knob to fit the finger and hexagonal shape to prevent rolling. Solid blade made of high quality hardened tool steel. .100" blade width. 4" long.

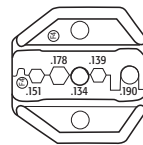
JONARD P/N	DESCRIPTION
SD-63	Jeweler's Screwdriver



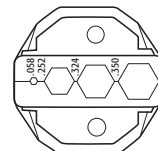
UC-8000

## UNIVERSAL CRIMPER

This fully ratcheted crimper offers exceptional performance. Designed for minimal closing force (higher crimp force produced with lower hand force), plus there is no break-over hand force making the last click easily achievable. The head is angled to lessen the need to bend the wrist awkwardly, die changes are made quickly and easily, ergonomic handles are dual component with a soft rubber insert plus the tool includes a built in safety release mechanism. Very durable steel housing accommodates both Fiber Optic and Coax dies.



UCD-2685



UCD-2045

JONARD P/N	DESCRIPTION
UC-8000	Universal Crimper
UC-8012	Universal Crimper with COAX Die
UC-8039	Universal Crimper with Fiber Optic Die
UCD-2045	Coax Crimping Die
UCD-2685	Fiber Optic Crimping Die

JONARD P/N		SPECIFICATIONS	CABLE SIZE
UCD-2685	Fiber Optic	.151"/.178"/.134"/.139"/.190" 3.84mm/4.52mm/3.40mm/3.53mm 4.83mm	Fiber Optic ST, SC, LC Connectors
UCD-2045	COAX	.068"/.262"/.324"/.360" 1.73mm/6.65mm/8.23mm/9.14mm	CATV "F" Connectors RG59/RG6

# FIBER OPTIC & CATV TOOLS



TSAB-40



TSPE-125



TSPF-125



TSUC-40

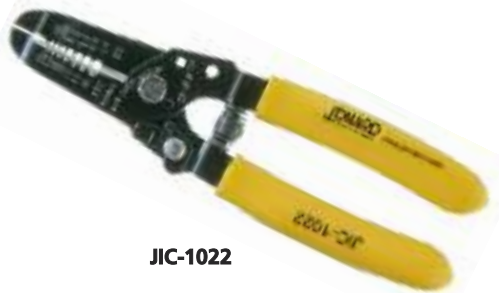
For Fitel, Fujikura and Ericsson fiber holders use the corresponding platforms, for LDF and all others without fiber holders use the Jonard Universal Clamp.

**THERMAL FIBER OPTIC STRIPPER FIXED BLADE**  
Thermo-mechanically remove coatings from optical fibers. High strength thermal stripper supports standard 125µm optical fibers, including 250 µm, 400 µm, and 900 µm coated fibers. The heater is adjustable to 200°C and facilitates stripping difficult and baked-on coatings. Adjustable temperature and time settings to adapt to a variety of different coatings. Compact design, weighs less than a pound. Includes A/C power supply, cord and cleaning brush. Platforms supplied separately.

**THERMAL FIBER OPTIC STRIPPER ADJUSTABLE BLADE**  
Thermo-mechanically remove coatings from optical fibers. High strength thermal stripper with adjustable stripping blade, which supports cladding diameters 40µm to 1000 µm acrylate coated fibers with buffer diameters up to 1200 µm. The heater is adjustable to 200°C and facilitates stripping difficult and baked-on coatings. Adjustable temperature and time settings to adapt to a variety of different coatings. Compact design, weighs less than a pound. Includes A/C power supply, cord and cleaning brush. Platforms supplied separately.

JONARD P/N	DESCRIPTION
TSPE-125	Ericsson Style Platform
TSPF-125	Fitel/Fujikura Style Platform
TSUC-40	Universal Clamp

JONARD P/N	DESCRIPTION
TSFB-125	Thermal Stripper Fixed Blade
TSAB-40	Thermal Stripper Adjustable Blade



JIC-1022

**FIBER JACKET STRIPPER**  
The Wire Stripper and Cutter is designed to strip and cut the most commonly used stranded and solid wire gauges 10 to 22 AWG and 1.6-3 mm fiber jackets.



JIC-4366

RB-2060

RB-2878

**OPTICAL FIBER CABLE SHEATH STRIPPER & RING TOOL**  
Used for stripping and butting tight buffer optical fiber cables. Use one blade to butt PVC sheathing and use the second blade to strip the sheathing. Adjustable for .018" or .031" thick plastic, rubber or fabric insulation. Also known as CT2860.

JONARD P/N	DESCRIPTION
JIC-1022	Fiber Jacket Stripper

JONARD P/N	DESCRIPTION
JIC-4366	Optical Fiber Sheath Stripper & Ring Tool
RB-2060/6	Pkg. of 6 Replacement Blades for ring feature of tool
RB-2878/6	Pkg. 6 replacement blades for stripper feature of tool

# FIBER OPTIC & CATV TOOLS

JIC-186



## ERGONOMIC FIBER OPTIC KEVLAR® CUTTER

High carbon stainless steel blades designed to cut Kevlar®, cabling insulation, tape, cable ties and other material. Ergonomic handles for user comfort and durability. Adjustable joint screw under protective cap, serrated blades grip material, sharp and durable 6" long.

JONARD P/N	DESCRIPTION
JIC-186	Wire & Kevlar Cutting Shears

ES-1964ERG



## ERGONOMIC ELECTRICIAN SCISSORS

These Ergonomic Electrician scissors are designed for heavy duty use. Made of high carbon steel with a special hardening process for greater durability and nickel plated for that professional look. Notched to strip 19 & 23 AWG wire and one blade is serrated. A scraper and file are on the back of the blade.

JONARD P/N	DESCRIPTION
ES-1964ERG	Ergonomic Electrician Scissors

ES-1964



## ELECTRICIAN SCISSORS

The Electrician Scissors are designed for heavy duty use. Made of high carbon steel with a special hardening process for greater durability and nickel plated for that professional look. Notched to strip 19 and 23 AWG wire and one blade is serrated. A scraper and file are on the back of the blade.

JONARD P/N	DESCRIPTION
ES-1964	Electrician Scissors

KN-7



## CABLE SPLICING KNIFE

The tough cutlery steel blade is extremely sharp and cuts easily through many types of insulation. It holds its edge with repeated use and features a non-slip easy grip handle for better control and reduced hand fatigue. Blade length is 1 3/4" and overall length is 6 1/4"

JONARD P/N	DESCRIPTION
KN-7	Cable Splicing Knife

KSS-1



## KNIFE & SCISSOR SHARPENER

Sharpen knives and scissors with one convenient sharpener. Made of high-grade tungsten-carbide steel and diamond polished. Will restore the edge on either scissors or knives with 3-4 simple strokes. Safety finger guard, lightweight compact design makes this the ideal tool for all your sharpening needs.

JONARD P/N	DESCRIPTION
KSS-1	Knife & Scissor Sharpener

TK-400



## SPLICER'S KIT TK-400

This compact kit contains an ergonomic splicers knife, scissor and leather pouch. The knife features a 1 3/4" tough, cutlery-steel blade and a non-slip handle. The scissors are made of high carbon steel with scraper and file on one side and 2 stripping notches on the other. Both items fit securely in the leather pouch which can be mounted on belts up to 2" wide.

JONARD P/N	DESCRIPTION
TK-400	3 Piece Splicer's Kit
H-40	Leather Pouch
KN-7	Ergonomic Cable Splicing Knife
ES-1964	Electrician Scissor

ES-1964

KN-7

H-40

# CATV & SATELLITE TOOLS



CT-200

## UNIVERSAL COMPRESSION TOOL

This universal compression tool is designed for use on F Connectors (RG59, RG6, & RG11), BNC Connectors (RG59 & RG6) and RCA Connectors (RG59 & RG6). Tool is designed with a dual head and adjustment dial for each unique connector application. COMPATIBLE CONNECTORS: PPC - CMP6, CMP62, CMP59Q, CMP11, EX6XL, EX59XL, EX59XLHE, EX6XLW9, EX7, EX7N716, EX11, EX11N716, EX320QR, EX320N716. T & B - Snap -n-Seal Digicon - DS6, DS59, DS59Q, DS11, DS7 Gilbert UE - GF-UE-59, GF-UE-59Q, GF-UE-6, GF-UE-6Q, GF-UE-5.1, RCA-UE, BNC-UE  
Plus many other brands and styles including F, RCA & BNC Types.



CTF-200

## FIXED COMPRESSION TOOL

Compression tool with a fixed design for use on many manufacturers F Connectors. Some compatible connectors are **Thomas & Betts**: Snap-N-Seal, **Digicon**: DS6, DS59, DS6Q, DS59Q, DS11, DS7, **Gilbert UltraEase**: GF-UE-59, GF-UE-59Q, GF-UE-6, GF-UE-6Q, GF-UE-5.1, **PPC**: CMP6, CMP6Q, CMP59, CMP59Q, CMP11, EX6XL, EX59XL, EX59XLHE, EX6XLWS, EX6LP, EX7, EX7N716, EX11, EX11N716, EX320QR, EX320N716

JONARD P/N	DESCRIPTION
CT-200	Universal Compression Tool
CTF-200	Fixed Compression Tool



FT-6

## FLARING & INSERTION TOOL

The flaring end of the tool facilitates the expansion of the cable providing easier insertion of "F" connectors. The insertion end makes "F" connector insertion fast and easy, even in cold weather. This tool is recommended for use on polyethylene jacketed cables and plenum cables, and is especially helpful when using tri-shield and quad-shield cables. 4 1/4" long



TT-4

JONARD P/N	DESCRIPTION
FT-6	Flaring & Insertion Tool



TT-7

## TERMINATOR TOOLS

Tool is used for various locking terminators including the Gilbert Engineering GTP (Morlock), PRC (Production Products Company), LFT, PCT (International Technology), TPG, TR 75 GTL (Viewsonics), and SV-LT & SV-LTA (Signal Vision) locking terminators. Ergonomic handle provides greater leverage and a superior grip. Available in three sizes 4 1/2", 8", and 9" Pronged locking terminators. Ergonomic handle provides greater leverage and a superior grip.



TT-7V

JONARD P/N	DESCRIPTION
TT-4	Terminator Tool 2 1/2" shaft, overall length 4 1/2"
TT-7	Terminator Tool 4" shaft, overall length 8"
TT-7V	Pronged Terminator Tool 4" shaft, overall length 9"



# CATV & SATELLITE TORQUE WRENCHES

## TORQUE WRENCH

Designed for "F" Connectors, these wrenches help prevent over tightening. An audible click tells you the connection has been properly achieved. These wrenches all have angled heads, sized for 7/16" F connectors and are designed with an ergonomic cushioned handle for user comfort and protection. The last two digits of the part number indicate the inch pounds of torque (either 20 or 30 inch pounds) and the first four letters indicate whether the head is a speed head or a full head (TWAF is full and TWAS is speed). Note that these wrenches work in tightening mode only. Torque wrenches are 6 1/2" long.



TWAF-71620



TWAS-71620



SST-716



SST-716AT



TWSW-40

JONARD P/N	DESCRIPTION
TWAF-71620	Torque Wrench Full Head 20 Inch Pounds
TWAS-71620	Torque Wrench Speed Head 20 Inch Pounds
TWAF-71630	Torque Wrench Full Head 30 Inch Pounds
TWAS-71630	Torque Wrench Speed Head 30 Inch Pounds

## SECURITY SHIELD TOOL

Used with 7/16" hex shielded F Connectors. Design includes extended 7/16" shank for ease of use with Torque Wrenches in security shield applications. Machined and heat-treated steel for maximum durability with black oxide finish. Knurled handle for secure gripping and includes a steel loop for turning leverage and carrying.

**Note:** SST-716AT is designed for use where security shield applications for PPC AquaTight® EX Series connectors are used.

JONARD P/N	DESCRIPTION
SST-716	Security Shield Tool
SST-716AT	Security Shield-Aqua Tight Tool

## TORQUE WRENCH SWIVEL HEAD

Used to properly torque cable shield bond connectors and other ground connections. Head swivels 90° in 2 directions and is factory set for 40 in./Lb. Can be used with any 3/8" drive sockets. Audible click when proper torque is achieved.

JONARD P/N	DESCRIPTION
TWSW-40	Torque Wrench Swivel Head 40 inch pounds

# CATV & SATELLITE TOOLS



ASW-716

## SPEED WRENCH DOUBLE ENDED

ASW-716 measures 7/16" at both ends. ASW-12 measures 1/2" at both ends and ASW-916 measures 9/16" at both ends. Speed head makes tightening and loosening quick and easy, plus head is angled (15°) to ease access. Speed wrenches are 6 1/2" long. High gloss chrome finish, and made of high carbon alloy steel. Patent Pending

JONARD P/N	DESCRIPTION
ASW-12	Speed Wrench double Ended 1/2"
ASW-716	Speed Wrench double Ended 7/16"
ASW-916	Speed Wrench double Ended 9/16"
ASW-7916	Speed Wrench double Ended 7/16" + 9/16"



CW-716

## COMBINATION WRENCH

Wrench measures 7/16" at both the open end and box end. Both ends have an angle offset (15°) to ease access in confined areas. The box end offers 12 points of contact. High gloss chrome finish and made of chrome vanadium steel. Tool is 6 5/8" long.

JONARD P/N	DESCRIPTION
CW-716	Combination Wrench



FP-600

## FUSE PULLER PLIERS

Designer for installing and extracting fuses from line amplifiers and other cylindrical shaped components including heat coils. The thin nosed jaw allows easy access to tight restricted areas. Handle is yellow colored plastic.

JONARD P/N	DESCRIPTION
FP-600	Fuse Puller Pliers



TK-50

H-50

ES-1964

KN-7

JIC-22035

M-216C/EX

## FIVE PIECE TELECOM INSTALLERS KIT TK-50

The perfect kit for simple installations—includes the basic necessities. Kit includes the M-216C/EX Can Wrench, KN-7 Ergonomic Cable Splicing Knife, ES-1964 Electrician's Scissors and the H-50 Pouch made of durable PVC material with metal clip.

JONARD P/N	DESCRIPTION
TK-50	Five Piece Telecom Installers Kit
H-50	Plastic Molded Pouch
KN-7	Ergonomic Cable splicing Knife
M-216C/EX	Can Wrench
JIC-22035	Probe Pick Spudger
ES-1964	Electrician Scissor

# CATV & SATELLITE TOOLS



TK-22148 H-36 JIC-22148 ES-1964

## TELEPHONE INSTALLER SPLICER KIT TK-22148

Designed for stripping, splicing and crimping. The perfect kit for telephone installers. Kit contains the ES-1964 Electrician's Scissors, JIC-22148 Combo Crimper Long Nose Plier and the H-36 Pouch made of durable PVC material with metal clip.

JONARD P/N	DESCRIPTION
TK-22148	Telephone Installer Splicer Kit
H-36	Plastic Molded Pouch
JIC-22148	Combo Crimper Long Nose Plier
ES-1964	Electrician Scissor



TK-21

M-216CS22

1964-ERG

JIC-22035

EPB-KIT66110

H-1000

UST-500

JIC-22148

## NETWORK INSTALLATION SERVICE KIT TK-21

The affordable and reliable punchdown tool kit that features six tools performing over 21 functions to complete any installation or repair. Kit contains: EPB-KIT66110 punchdown tool with 66 & 110 blades, UST-500 multipurpose Universal Cable Stripping Tool, ES-1964ERG Ergonomic Electrician Scissor, JIC-22035 Spudger, M-216CS22 Can Wrench with 22 AWG Wire Stripper, JIC-22148 multipurpose needle nose crimping plier with cutter and the H-1000 Cordura Pouch.

JONARD P/N	DESCRIPTION
TK-21	Network Installation Service Kit



TK-450M

KN-7

JIC-683

JIC-22148

UST-500

CT-200

JIC-22035

JIC-1626

JIC-750

ASW-716

TWAF-71630

ES-1964

M-216CS22

SK-51632

TT-7V

SST-716

PT-300

## CATV/TELECOM INSTALLERS KIT - TK-450M

Assembled in a convenient, easy to carry Cordura case, this kit contains the basic service tools essential for equipment installation, repairs and cable preparations. Whether it's Fiber Optic, Coax, or Copper this versatile kit contains the perfect tools for today's demanding technician. The TK-450M Kit is perfect for the VOIP installer, Fiber Technician or Communications Specialist and comes with Jonard's lifetime warranty. Each Kit contains: ASW-716, CT-200, UST-500, ES-1964, KN-7, JIC-683, JIC-22148, JIC-22035, JIC-1626, JIC-750, TWAF-71630, M-216CS22, SK-51632, TT-7V, SST-716, PT-300 & secured in a convenient easy to carry Cordura case.

JONARD P/N	DESCRIPTION
TK-450M	CATV/Telecom Installers Kit

# CATV & SATELLITE TOOLS

## POCKET CONTINUITY TESTER AND TONER

Drop cable continuity tester - accurate up to 5,000 feet (1,500 m). Identify cables in an MDU, and detect troublesome short circuits.

### FEATURES

1. Loud tone identifies line carrying signal
2. LED light indicates splitters, DC shorts and other self grounding devices in cable
3. Right angle male push-on connector for working in confined areas
4. Accurate up to 5,000 feet (1,500 m)
5. Common AAA battery for operation
6. Just 5" long, weighs 2 oz. (57 g)

Comes complete with LED light indicator, detachable tone detector, female push-on connector and 1.5V AAA battery.



PT-300

JONARD P/N	DESCRIPTION
PT-300	Pocket Continuity Tester and Toner
PT-350	Pocket Tester Replacement Speaker



UST-500



UST-205



UST-210

## UNIVERSAL CABLE STRIPPING TOOL

Use for Coax, Round Network Cables and Flat Cables - This versatile tool is five tools in one. Simply reverse the cassette for RG59/6 & 7/11 Coax Cables. Insert the Round Cable into the second hole (adjustable) for a fast and easy strip.

The third hole is for cutting all styles of cable while the fourth hole is designed for Flat Cable and 4P/6P style cable. The perfect wire stripper for most stripping applications.

**NOTE:** UST-596 is for RG59/6 Coax Cable only.

JONARD P/N	DESCRIPTION
UST-500	Universal Cable Stripping Tool
UST-205	Replacement Cassette for RG59/6 & 7/11
UST-596	Universal Cable Stripping Tool 59/6
UST-210	Twin Replacement Blade 59/6 for UST-596

## F CONNECTOR TOOL

Designed to provide easy access to connectors in high-density locations. The head measures 7/16" and is used specifically for "F" connectors. The socket extends 8" from the handle, the overall length is 12" and the back of the handle has an insertion device to aid in making connections.

JONARD P/N	DESCRIPTION
RF-12	F Connector Tool

## BNC CONNECTOR TOOL

Designed to provide easy access to connectors in high density locations. The head is formed specifically for BNC connectors. The socket extends 8" from the handle and the overall length is 12".

JONARD P/N	DESCRIPTION
RBNC-12	BNC Connector tool



RF-12

RBNC-12

# INSULATED TOOLS

Jonard Insulated Tools are manufactured to IEC 60900 Standards for hazardous work environments. Our tools are tested to 10,000 VAC and rated for 1,000 VAC live use.



1000V  
IEC 60900



JONARD P/N	DESCRIPTION
<b>TK-110INS</b>	11 Piece Insulated Tool Kit Kit contains: 7 Screwdrivers as shown plus INP-1072, INP-2065, INP-3062 & INP- 4065

JONARD P/N	DESCRIPTION
<b>TK-70INS</b>	7 Piece Insulated Screwdriver Set Screwdriver Set contains: 3 Philips, 4 Slotted as shown below

TK-110INS



## INSULATED SCREWDRIVERS- SLOTTED HEAD

JONARD P/N	DESCRIPTION
<b>INS-475</b>	3/32 X 3 Slotted Screwdriver
<b>INS-4100</b>	5/32 X 4 Slotted Screwdriver
<b>INS-6150</b>	1/4 X 6 Slotted Screwdriver
<b>INS-8175</b>	5/16 X 7 Slotted Screwdriver

## INSULATED SCREWDRIVERS- PHILLIPS HEAD

JONARD P/N	DESCRIPTION
<b>INS-180</b>	#1 X 3 Phillips Screwdriver
<b>INS-2100</b>	#2 X 4 Phillips Screwdriver
<b>INS-3150</b>	#3 X 6 Phillips Screwdriver

TK-70INS

## Care and Use Guide for Insulated Tool

Tools are not recommended for use on energized circuits. Work should only be performed by qualified professionals. Do not use this tool if the insulation becomes damaged in any way. Tools must be kept clean and dry. Always inspect before use.

Do not touch the uninsulated portion of the tool or any conductive object when either might make contact with an energized source. Always wear approved eye & clothing protection. Only use tools for their designed purpose and always follow OSHA 1910.333 (c)(2) and NFPA 70E 2004 when doing electrical work. Failure to observe proper safety precautions may result in serious injury or death.

## INSULATED WIRE STRIPPER

JONARD P/N	DESCRIPTION
<b>INP-4065</b>	Wire Stripper 6 1/2" Long

## INSULATED PLIERS

JONARD P/N	DESCRIPTION
<b>INP-2065</b>	Long Nose Plier 6 1/2" Long
<b>INP-3062</b>	Diagonal Plier 6 1/4" Long
<b>INP-1072</b>	Lineman's Combo Plier 7 1/4" Long

# ELECTRICAL TOOLS



ND-631

## HOLLOW SHAFT NUT DRIVERS

These are full length hollow shaft nut drivers intended for working with long bolts. They are designed with cushion gripped ergonomic color coded handles. Handles provide greater torque and user comfort. Overall length 7"

JONARD P/N	DESCRIPTION
ND-631	Nut Driver Set – 7 Piece 3/16", 1/4", 5/16", 11/32", 3/8", 7/16" & 1/2"
ND-630316	Nut Driver 3/16" (Black)
ND-63014	Nut Driver 1/4" (Red)
ND-630516	Nut Driver 5/16" (Yellow)
ND-6301132	Nut Driver 11/32" (Green)
ND-63038	Nut Driver 3/8" (Blue)
ND-630716	Nut Driver 7/16" (Brown)
ND-63012	Nut Driver 1/2" (Red)
ND-SET4	Nut Driver Set 4 piece, 1/2", 11/32", 3/8", 5/16"



PATENT PENDING



Push to loosen the knockout.

## PANEL KNOCKOUT KIT

Remove panel knockouts without cutting holes in the drywall (For use on electrical, security, alarm, and datacom panels)

JONARD P/N	Description
WBK-100	Panel Knockout Kit



WBK-100



SD-243

## 24 INCH LONG #3 PHILLIPS HEAD SCREWDRIVER

This 24" long #3 Phillips Head Screwdriver is designed for use when you need an extra long screwdriver to reach the diodes in back of the various rectifiers. Made of chrome vanadium steel with a matte finish and a custom ergonomic tri-color handle.

JONARD P/N	DESCRIPTION
SD-243	#3 Philips Head Screwdriver 24" long

# WIRE FISHING, SEWING, PULLING



## CABLE SEWING NEEDLE-METAL

Durable red anodized aluminum handle with curved notched sewing needle. Designed to harness or lace multiple lead bundles. 5 3/4" long. Replacement needles are also available.

JONARD P/N	DESCRIPTION
JIC-287	Cable Sewing Needle
RB-287/6	Pkg. of 6 Replacement Needles



## WIRE LOOP PULLER-METAL

Durable red anodized aluminum handle facilitates pulling wire through terminal blocks, rings on main frame or fanning strip holes. JIC-2257M overall length is 8 1/2" and JIC-2257M-12 overall length is 15".

JONARD P/N	DESCRIPTION
JIC-2257M	Wire Loop Puller Overall Length 8 1/2"
JIC-2257M-12	12" Wire Loop Puller Overall Length 15"
RB-2257/6	Pkg. of 6 Replacement Loops for JIC-2257M only



## CABLE RING TOOL

This cable ring tool is designed for cutting the sheathing of inside type plastic, fabric or rubber covered cable 3/16", 1/4", 3/8", & 1/2". Durable metal handle. Tool is supplied with 1 replacement blade. 5 1/2" long.

JONARD P/N	DESCRIPTION
JIC-2060	Cable Ring Tool
RB-2060/6	Pkg. of 6 Replacement Blades



## WIRE LOOP PULLER- INSULATED

Xylan insulated wire loop puller facilitates pulling wire through terminal blocks, rings on main frame, or fanning strip holes. The yellow plastic lightweight handle fits snugly and is easy to hold in your hand. 8" long.

JONARD P/N	DESCRIPTION
JIC-2257	Wire Loop Puller



## CABLE SEWING NEEDLE-INSULATED

Xylan insulated cable sewing needle has a yellow lightweight molded grip handle that will harness or lace multiple lead bundles. 5 1/2" long.

JONARD P/N	DESCRIPTION
JIC-3209	Cable Sewing Needle



## STRAIGHT METAL NEEDLE

This "Chicago type" straight metal needle is designed for cable sewing. This tool, made of the finest steel is for anyone in the cable industry. Needle is .016" thick and 12" long.

JONARD P/N	DESCRIPTION
JIC-284	Straight Metal Needle

# WIRE FISHING



MP-700

## MAGNETIC CABLE RETRIEVAL SYSTEM

A magnetic cable retrieval system which couples the cable with the pulling device through drywall, allowing the user complete control. Designed for both residential and commercial applications.

JONARD P/N	DESCRIPTION
MP-700	Magnetic Cable Retrieval System
MP-100	1/2" Drop magnet with leader
MP-210	3/4" Drop Magnet with leader
MP-220	3/4" Drop Magnet without leader

- New 30% stronger magnet!
- Pulls cable through insulation in seconds
- Reduces cable fishing time by 70%
- Eliminates wall damage from misplaced holes in the wall
- Learn to use the system in seconds
- Can be used as a stud finder
- Reduces time spent in attic
- Makes wire fishing a definable process

### MP-700 KIT INCLUDES:

- Retriever Unit
- 3/4" Drop Magnet with pull line
- Jack Chain
- Instructional DVD
- Convenient Carrying Case

Magnepull by Jonard Industries **PATENTED**

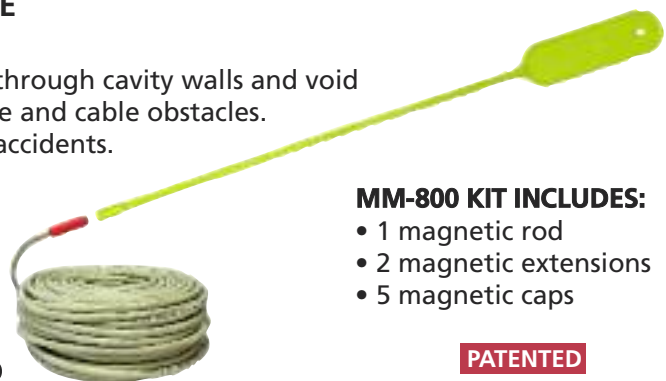
## MAGNAMOLE MAGNETIC CABLE FISHING GUIDE

Wire Fishing Made Easy! Quickly threads wire and cable through cavity walls and void spaces. Threads at an angle and safely through other wire and cable obstacles. Saves time, saves money, and sharply reduces the risk of accidents.

- 44% TIME SAVINGS Six Sigma certified
- Dramatically reduces shock risk
- Easy to use- No experience required
- Diamond Award Winning Design



MM-800



### MM-800 KIT INCLUDES:

- 1 magnetic rod
- 2 magnetic extensions
- 5 magnetic caps

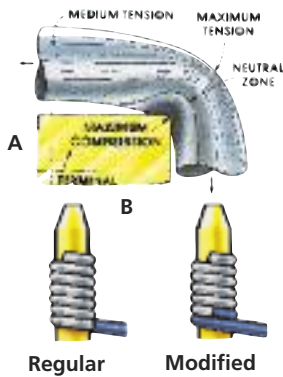
**PATENTED**

JONARD P/N	DESCRIPTION	CAP COLOR & CABLE DIAMETER ACCOMMODATION	USED WITH THE FOLLOWING CABLE	QUANTITY
MM-800	Magnamole Magnetic Cable retrieval System			
MM-110	Replacement Magnets	(Red) .169" to .205" (Blue) .230" to .295"	CAT5 RG6, RG6 TRI, RG6 QUAD	Includes 3 magnetic caps of each color
MM-120	Replacement Magnets	(White) .145" to .169"  (Gray) .173" to .201" (Black) .205" to .232"	CAT3, 3.1mm Simplex fiber Optic Cable, CAT5, CAT5e RG59, 12AWG Romex	Includes 2 magnetic caps of each color



# WIRE WRAPPING OVERVIEW

Wire Wrapping is a method of making a wire connection by coiling the bare wire around the sharp corners of a terminal under mechanical tension. The technology was developed as an alternative to soldering, which presents various safety and reliability problems in many applications. A principal advantage of wire wrapping is that it provides a high-reliability connection that is also easily removed to correct or modify a wiring layout. Wire wrapping subjects the wire to tremendous tension and compression forces, causing the oxide layer on both wire and terminal to be crushed or sheared, resulting in a clean, oxide-free metal-to-metal contact. A standard wrap is generally used for 24 AWG and larger diameter wires; a modified wrap is typically used for 26 AWG and smaller wires, and is used almost exclusively for 28 to 30 AWG wires. In either case, the wrap style affects only the connection's mechanical stability; both styles provide suitable electrical connections.



## METAL-TO-METAL CONTACT

By bending the wire around the sharp corner of the terminal, the oxide layer on both wire and terminal is crushed or sheared, and a clean, oxide-free metal-to-metal contact is obtained.

## TYPES OF WRAP

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.

## STRIP FORCE CHART\*

AWG	Wire Size		Min. number of turns (Bare Wire)	Min. strip force	
	Dia. inches	Dia. mm		lbs.	gms
16	.051	1.30	4	15	6800
18	.0403	1.00	4	15	6800
20	.032	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

## HOW TO MAKE WIRE WRAPPED CONNECTIONS



## SOME HINTS ON MAKING WRAPPED CONNECTIONS



**OVERWRAP**  
Do not press too hard. Let the OK tools do the work. Excessive pressure can lead to overwrapping. Backforce "BF" to prevent overwrapping is available on most power tools and is recommended for use with 26 through 30 AWG wire.



**OPEN WRAP & SPIRAL WRAP**  
Just keep the OK tool on the terminal until the wrap is complete. Early removal can result in spiral and open wraps.



**PIGTAIL**  
Wire wrapping is a precision technique and the wrong bit and sleeve just cannot do the job. Improper selection can cause problems ranging from "Pigtails" to loose wraps.

## TERMINAL DIAGONAL CHART

		DIMENSION B																		
		.010	.015	.020	.025	.030	.035	.040	.045	.050	.055	.060	.065	.070	.075	.080	.085	.090	.095	.100
DIMENSION A	In.	.010	.015	.020	.025	.030	.035	.040	.045	.050	.055	.060	.065	.070	.075	.080	.085	.090	.095	.100
	mm	0.25	0.38	0.51	0.64	0.76	0.89	1.02	1.14	1.27	1.40	1.52	1.65	1.78	1.91	2.03	2.16	2.29	2.41	2.54
	.010	.014	.018	.022	.027	.032	.036	.041	.046	.051	.056	.061	.066	.071	.076	.081	.086	.091	.096	.101
	0.25	0.36	0.46	0.56	0.69	0.81	0.91	1.04	1.17	1.30	1.42	1.55	1.68	1.80	1.93	2.06	2.18	2.31	2.44	2.57
	.015	.018	.021	.025	.029	.033	.038	.043	.047	.052	.057	.062	.067	.072	.077	.082	.087	.092	.097	.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	1.70	1.83	1.96	2.08	2.21	2.34	2.46	2.59
	.020	.022	.025	.028	.032	.036	.040	.045	.049	.053	.058	.063	.068	.073	.078	.083	.088	.093	.098	.103
	0.51	0.56	0.64	0.71	0.81	0.91	1.02	1.14	1.25	1.35	1.47	1.60	1.73	1.85	1.98	2.11	2.24	2.36	2.49	2.62
	.025	.027	.029	.032	.035	.039	.043	.047	.050	.056	.060	.065	.069	.074	.079	.084	.089	.094	.099	.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
	.030	.032	.033	.036	.039	.042	.046	.050	.054	.058	.062	.067	.071	.076	.080	.085	.090	.095	.100	.105
	0.76	0.81	0.84	0.91	0.99	1.07	1.17	1.27	1.37	1.47	1.58	1.70	1.80	1.93	2.03	2.16	2.29	2.41	2.54	2.67
	.035	.036	.038	.040	.043	.046	.049	.052	.056	.060	.064	.069	.073	.078	.082	.087	.091	.096	.101	.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
	.040	.041	.043	.045	.047	.050	.052	.056	.060	.064	.068	.072	.076	.080	.084	.089	.092	.097	.102	.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
	.045	.046	.047	.049	.050	.054	.056	.060	.063	.067	.071	.074	.078	.083	.087	.091	.096	.101	.105	.109
	1.14	1.17	1.19	1.25	1.27	1.37	1.42	1.52	1.60	1.70	1.80	1.88	1.98	2.11	2.21	2.31	2.44	2.57	2.67	2.77
	.050	.051	.052	.053	.056	.058	.060	.064	.067	.071	.074	.078	.082	.086	.090	.094	.098	.103	.107	.111
	1.27	1.30	1.32	1.35	1.42	1.47	1.52	1.63	1.70	1.80	1.88	1.98	2.08	2.18	2.29	2.39	2.49	2.62	2.72	2.82

Example: If "A"=.020", "B"=.060". The terminal diagonal is .063" as shown on chart.

# PTX SERIES ELECTRIC WIRE WRAPPING & UNWRAPPING TOOLS



The Patented PTX Series Wire Wrapping Tools from OK Industries bring revolutionary new benefits to installers, telecom technicians and other users. With worker safety in mind, we consulted a certified ergonomist and created an ergonomic tool, which includes a lightweight, well-balanced construction, dual-finger short-throw trigger, and a long handle to mitigate pressure on the palm. These features help to prevent repetitive stresses and result in an industry-leading design from a comfort and safety standpoint. Ask for the PTX Series Wire Wrapping Tools from OK Industries — and arm your workers with the tools that offer efficiency and worker safety in your interconnect activity.

## KEY FEATURES

- Ergonomic Design — Minimizes Repetitive Stress
- A 20' Long Power cord
- Rugged Construction
- Wraps and Unwraps 18 to 30 AWG Wire
- Rated Maximum Usage: 2,500 cycles/day
- For Bits & Sleeves: see Pages 28, 30-32

## ORDERING INFORMATION AND PRODUCT SPECIFICATIONS

Part No.	Description	Weight	Voltage	RPM
PTX-1	Electric Wrap/Unwrap Tool - 115V	2.0 lb.	115V	3700
PTX-1BF	Electric Wrap/Unwrap Tool w/Backforce - 115V	2.0 lb.	115V	3700
PTX-2	Electric Wrap/Unwrap Tool - 230V	2.2 lb.	230V	4200
PTX-2BF	Electric Wrap/Unwrap Tool w/Backforce - 230V	2.2 lb.	230V	4200
PTX-48	Electric Wrap/Unwrap Tool - 48V	2.0 lb.	48V	3700

## ACCESSORIES

- **DFB224** Wrap/Unwrap Bit & Sleeve Set
- **DFB2426** Wrap/Unwrap Bit & Sleeve Set
- **H-1000** Cordura Tool Pouch
- **PTX-FLA** Flashlight Attachment



DFB224



PTX-FLA



H-1000

# PTX SERIES BATTERY WIRE WRAPPING & UNWRAPPING TOOLS

## BATTERY POWERED LONG-LIFE NIMH BATTERY

The Patented PTX Series Wire Wrapping Tools from OK Industries bring revolutionary new benefits to installers, telecom technicians and other users. With worker safety in mind, we consulted a certified ergonomist and created an ergonomic tool, which includes a lightweight, well-balanced construction, dual-finger short-throw trigger, and a long handle to mitigate pressure on the palm. These features help to prevent repetitive stresses and result in an industry-leading design from a comfort and safety standpoint. Ask for the PTX Series Wire Wrapping Tools from OK Industries — and arm your workers with the tools that offer efficiency and worker safety in your interconnect activity.



### KEY FEATURES

- Ergonomic Design — Minimizes Repetitive Stress
- Rugged Construction
- Wraps and Unwraps 18 to 30 AWG Wire
- Rated Maximum Usage: 2,500 cycles/day
- For Bits & Sleeves: see Pages 28, 30-32

### ORDERING INFORMATION AND PRODUCT SPECIFICATIONS

Part No.	Description	Weight	Voltage	RPM
PTX	Battery Wrap/Unwrap Tool (Battery not included)	1.1 lb.	3.6V*	3700
PTX-KIT1	115V battery tool kit (tool, charger, 2 batteries)	3.5 lb.	3.6V*	3700
PTX-KIT1DH	PTX-KIT1 w/DFB224 and H-1000	3.6 lb.	3.6V*	3700
PTX-KIT2	230V battery tool kit (tool, charger, 2 batteries)	3.5 lb.	3.6V*	4200

\* Powered by long-life NiMH battery

### ACCESSORIES

- **PTX-B** PTX Battery, 3.6V
- **PTX-BC1** 115V Battery Charger
- **PTX-BC2** 230V Battery Charger
- **H-1000** Cordura Tool Pouch
- **PTX-FLA** Flashlight Attachment
- **DFB224** Wrap/Unwrap Bit & Sleeve Set
- **DFB2426** Wrap/Unwrap Bit & Sleeve Set



H-1000



PTX-BC1



PTX-B



PTX-FLA



DFB224

# DUAL FUNCTION WRAP/UNWRAP BIT & SLEEVE SETS



## DFB224 & DFB2426 DUAL FUNCTION BIT/SLEEVE SETS

This innovative Patented product represents a truly revolutionary approach to wire wrapping, by combining both the wrap and the unwrap functions into one bit/sleeve set. The bit is precision machined for high quality wrapping in the clockwise direction, but also includes the removal mechanism that is used to unwrap when operated counterclockwise. The user can quickly and easily switch back and forth between wrap and unwrap mode by retracting or extending the retractable sleeve, and flipping the switch on a wrap/unwrap power tool (i.e., a power wire wrapping tool with reversible motor). This product, which can wrap or unwrap 22–26 AWG wire (depending on set), enables the user to maximize operating efficiency while eliminating the need to purchase and carry extra tools or bits for unwrapping. Also, to prevent pin-to-pin shorting, the retractable sleeve is coated with a durable 1000V dielectric material.

**Note:** The DFB set can only be used with the PTX or other powered wire wrapping tools with a reverse mode.

Part #	Description	Wire Size AWG MM	Min. Terminal Diagonal		Max. Terminal Diagonal		Terminal Hole Depth		Terminal Hole Diameter		Effective Radius	
			IN.	MM	IN.	MM	IN.	MM	IN.	MM	IN.	MM
DFB224	Wrap/Unwrap Bit/Sleeve Set 22-24 AWG	22/24 .50/.65	.054	1.37	.073	1.85	0.50	12.70	.075	1.90	.111	2.82
KB-DF224	Replacement bit for DFB224											
P-DF224	Replacement Sleeve for DFB224											
DFB2426	Wrap/Unwrap Bit/Sleeve Set 24-26 AWG	24/26 .40/.50	.054	1.37	.065	1.65	0.50	12.70	.066	1.67	.098	2.48
KB-DF2426	Replacement bit for DFB2426											
P-DF2426	Replacement Sleeve for DFB2426											

## HOW TO USE THE DFB224 & DFB2426

The Wrap/Unwrap bit is shipped with the sleeve set in the wrap position. To change to the unwrap function simply pull the sleeve out approximately 1/4" (the sleeve is spring loaded and you should feel some tension while pulling forward), rotate the sleeve in either direction 180° and release. The sleeve should now be seated approximately 1/4" lower than in the wrap position. This will expose the unwrap feature on the bit.

To change back to the wrap position pull the sleeve out approximately 1/2" and rotate the sleeve in either direction 180° and release. The spout should be in the 12:00 position and the sleeve should be locked in position.

**Note:** If you cannot rotate the sleeve, you need to pull the sleeve out further before trying to rotate the sleeve.

# MANUAL WIRE WRAPPING TOOLS

## MANUAL WIRE WRAPPING TOOLS



G100/R3278 Aluminum



G200/R3278 Lexan™



G100/R3278FL



G100/R3278INS Insulated

- G200/R3278 : Lexan™
- G100/R3278 : Aluminum
- G100/R3278INS : Aluminum (insulated)
- G100/R3278FL Aluminum Insulated with LED Flashlight
- Bits & Sleeves : see pages 30-32

Also available– bits and sleeves for old style chuckless wire wrapping tools

For precise reliable wraps, choose the tool you want. We offer durability with our rugged aluminum tool, G100/R3278, added protection with our insulated version, G100/R3278INS, providing 1000V of dielectric strength across most of the housing, and the same reliability, light weight plus a lower cost with our Lexan® model, G200/R3278. G100/R3278FL is the insulated version with an LED flashlight attached. These tools accommodate wire sizes from 18 AWG (1.00mm) thru 32 AWG (0.20mm).

## WIRE WRAPPING FLASHLIGHT KIT



G100-FL



G100-FLA

Part No.	Construction	For Use With
G100-FL	Metal	G100/R3278, G100/R3278INS, WG-350, WG-350INS
G100-FLA	Plastic	Universal-for use with most manual wire wrapping guns



G100/R3394CT

## MANUAL WIRE UNWRAPPING TOOL

The combination of the G100/R3394CT unwrap tool and the PUW unwrap bit & sleeve set gives you the best tool for high speed wire unwrapping. High production, long life, low maintenance. Use Unwrap Set PUW2226 for wire AWG 20 thru 26 (0.80 thru 0.40mm).



- G100/R3394CT : Manual Wire Unwrapping Tool  
(See bit & sleeve listed below)

Unwrap Bit Part No.	Unwrap Sleeve Part No.	Bit and Sleeve Set Set No.	Wire Size		Terminal Hole Diameter	
			AWG	mm	Inches	mm
2026UB	SOK2230	PUW2226	20-26	0.80-0.40	.070	1.77

# BITS & SLEEVES WIRE WRAPPING



Fully compatible with any make or model wire wrapping tool. Modified bits provide 1 1/2–2 turns of insulation.

## 3" BITS AND SLEEVES CHART (AWG) INCHES

Wire Gauge (AWG)	Regular	Modified	Bit Part No.	Sleeve Part No.	Maximum Insulation Diameter Inches	Minimum Terminal Diagonal Inches	Maximum Terminal Diagonal Inches	Terminal Hole Depth Inches	Effective Radius Inches	Terminal Hole Diameter Inches
18	●		KB18	P194LN		.060	.073	1.000	.150	.075
20		●	WB20M	P194LN	.059	.042	.073	1.000	.150	.075
20-22	●		KB2075	P2224	-	.042	.073	1.000	.123	.075
22	●		KB22	P2224	-	.054	.073	.750	.117	.075
22		●	WB2275M	P2224	.052	.049	.074	1.000	.132	.075
22-24	●		KB224LH	P2224	-	.061	.085	1.000	.117	.086
22-24	●		KB224-1	P2224	-	.054	.073	1.000	.111	.075
22-24	●		KB224	P2224	-	.054	.073	.807	.111	.075
22-24		●	WB224M	P2224	.050	.049	.074	1.250	.121	.075
24		●	WB24DH	P2224	.046	.054	.073	1.750	.117	.075
24	●		KB24	P2426	-	.055	.074	.750	.100	.075
24		●	WB24SM*	P3032LN	.044	.024	.043	.750	.098	.044
24-26		●	WB2426M	P2224	.046	.054	.073	.750	.118	.075
24-26	●		KB2466	OK8519	-	.054	.065	1.000	.098	.066
26	●		KB26	P2426	-	.058	.073	1.000	.100	.075
26		●	WB26SM*	P26LN	.031	.023	.038	.750	.075	.040
26		●	WB26M	P2224	.046	.054	.073	1.000	.118	.075
26		●	WB2644M*	P3032LN	.046	.024	.043	.750	.098	.044
26		●	WB2669M	P2426	.041	.053	.068	1.000	.109	.069
28		●	WB28SHM	P3032	.030	.031	.035	.750	.066	.036
30		●	SB30MSH-B*	P3032	.027	.031	.035	.750	.064	.036
30-32		●	WB3032M*	P3032	.027	.034	.038	.750	.064	.040
30-32		●	WB3032MIL†	P3032	.027	.034	.038	.750	.064	.040
30-32	●		KB3032	P3032	-	.034	.038	.750	.064	.040

\*These tools are recommended for .025" square terminals on .100" center to center of the pins † Provides 2.5 turns of insulation

### WIRE WRAPPING EXTENSION ATTACHMENT

Precision device which attaches easily to your manual or power wire wrapping tool for applications requiring extra "reach".



Part No.	Extension	
EXT-400	Inches: 4.0	mm: 100

# BITS & SLEEVES WIRE WRAPPING



Fully compatible with any make or model wire wrapping tool. Modified bits provide 1 1/2-2 turns of insulation.

## 3" BITS AND SLEEVES CHART METRIC

Wire Gauge mm	Regular	Modified	Bit Part No.	Sleeve Part No.	Maximum Insulation Diameter mm	Minimum Terminal Diagonal mm	Maximum Terminal Diagonal mm	Terminal Hole Depth mm	Effective Radius mm	Terminal Hole Diameter mm
1.00	●		KB18	P194LN		1.52	1.85	25.40	3.81	1.90
0.80		●	WB20M	P194LN	1.50	1.07	1.85	25.40	3.81	1.90
0.65-0.80	●		KB2075	P2224	-	1.07	1.85	25.40	3.12	1.90
0.65	●		KB22	P2224	-	1.37	1.85	19.05	2.97	1.90
0.65		●	WB2275M	P2224	1.32	1.24	1.87	25.40	3.35	1.90
0.50-0.65	●		KB224LH	P2224	-	1.54	2.15	25.40	2.97	2.18
0.50-0.65	●		KB224-1	P2224	-	1.37	1.85	25.40	2.82	1.90
0.50-0.65	●		KB224	P2224	-	1.37	1.85	20.50	2.82	1.90
0.50-0.65		●	WB224M	P2224	1.27	1.24	1.87	31.75	3.07	1.90
0.50		●	WB24DH	P2224	1.17	1.37	1.85	44.50	2.97	1.90
0.50	●		KB24	P2426	-	1.39	1.87	19.05	2.54	1.90
0.50		●	WB24SM*	P3032LN	1.11	0.60	1.09	19.05	2.48	1.11
0.40-0.50		●	WB2426M	P2224	1.17	1.37	1.85	19.05	2.99	1.90
0.40-0.50	●		KB2466	OK8519	-	1.37	1.65	25.40	2.48	1.67
0.40	●		KB26	P2426	-	1.47	1.85	25.40	2.54	1.90
0.40		●	WB26SM*	P26LN	0.79	0.58	0.96	19.05	1.90	1.02
0.40		●	WB26M	P2224	1.17	1.37	1.85	25.40	2.99	1.90
0.40		●	WB2644M*	P3032LN	1.17	0.60	1.09	19.05	2.48	1.11
0.40		●	WB2669M	P2426	1.04	1.34	1.72	25.40	2.77	1.75
0.32		●	WB28SHM*	P3032	0.76	0.79	0.89	19.05	1.67	0.91
0.25		●	SB30MSH-B*	P3032	0.69	0.79	0.89	19.05	1.62	0.91
0.20-0.25		●	WB3032M*	P3032	0.69	0.86	0.96	19.05	1.62	1.02
30-32		●	WB3032MIL†	P3032	0.69	0.86	0.96	19.05	1.62	1.02
0.20-0.25	●		KB3032	P3032	-	0.86	0.96	19.05	1.62	1.02

\*These tools are recommended for .025" square terminals on .100" center to center of the pins † Provides 2.5 turns of insulation

### WIRE WRAPPING EXTENSION ATTACHMENT

Precision device which attaches easily to your manual or power wire wrapping tool for applications requiring extra "reach".



Part No.	Extension
EXT-400	Inches: 4.0 mm: 100

# SPECIALIZED BITS & SLEEVES



P2224INS

## 3" BITS AND INSULATED SLEEVES

The insulated sleeves are covered with a material that provides 1000V dielectric strength which helps to prevent shorting between pins and enhances worker safety.



KB22

Bit Part No.	Sleeve Part No.	Wire Size		Regular	Minimum Terminal Diagonal		Maximum Terminal Diagonal		Terminal Hole Depth		Effective Radius		Terminal Hole Diameter	
		AWG	mm		In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
KB22	P2224INS	22	0.65	●	.054	1.37	.073	1.85	.750	19.05	.117	2.97	.075	1.90
KB224	P2224INS	22-24	0.50-0.65	●	.054	1.37	.073	1.85	.807	20.50	.111	2.82	.075	1.90
KB24	P2426INS	26	0.50	●	.055	1.39	.074	1.87	.750	19.05	.100	2.54	.075	1.90
KB26	P2426INS	26	0.40	●	.058	1.47	.073	1.85	1.000	25.40	.100	2.54	.075	1.90
KB3032	P3032INS	30-32	0.32	●	.034	0.86	.038	0.96	0.750	19.05	.064	1.62	.040	1.02

## 5" BITS AND SLEEVES (EXTENDED LENGTH) INSULATED AND NON INSULATED SLEEVES

These bits and sleeves are designed for wire wrapping in areas requiring deep penetration. Their 5" (127mm) length ensures "true" connections in hard-to-get-at locations. Available with or without insulation.

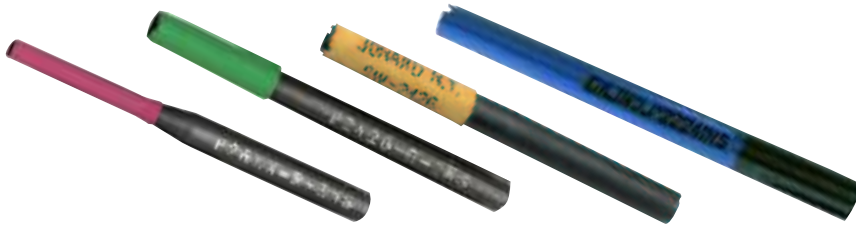


P2426-5INS



KB24-5

Bit Part No.	Insulated Sleeve Part No.	Uninsulated Sleeve Part No.	Wire Size		Regular	Minimum Terminal Diagonal		Maximum Terminal Hole Diagonal		Terminal Effective Depth		Hole Radius		Terminal Diameter	
			AWG	mm		In.	mm	In.	mm	In.	mm	In.	mm	In.	
KB22-5	P2224-5INS	P2224-5	22	0.65	●	.054	1.37	.073	1.85	.750	19.05	.117	2.97	.075	1.90
KB24-5	P2426-5INS	P2426-5	24	0.50	●	.055	1.39	.073	1.85	.750	19.05	.100	2.54	.075	1.90
KB26-5	P2426-5INS	P2426-5	26	0.40	●	.058	1.47	.073	1.85	.750	19.05	.100	2.54	.075	1.90



## 3" BIT & SLEEVE SETS WITH INSULATED COLOR CODED SLEEVES

Enjoy the convenience of pre-assembled sets with insulated color-coded sleeves for easy identification of wire sizes based on color.

Kit Number	Bit Part No.	Sleeve Part No. Color	Wire Size		Regular	Modified	Maximum Insulation Diameter		Minimum Terminal Diagonal		Maximum Terminal Diagonal		Terminal Hole Depth		Effective Radius		Terminal Hole Diameter	
			AWG	mm			In.	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	
KT22B	KB22	P2224INS Blue	22	0.65	●		-	-	.054	1.37	.073	1.85	.750	19.05	.117	2.97	.075	1.90
KT224B	KB224	P2224INS Blue	22-24	0.65-0.50	●		-	-	.054	1.37	.073	1.85	.807	20.05	.111	2.82	.075	1.90
KT24Y	KB24	SW-2426 Yellow	24	0.50	●		-	-	.055	1.39	.074	1.87	.750	19.05	.100	2.54	.075	1.90
KT26G	KB26	P2426-G-INS Green	26	0.40	●		-	-	.058	1.47	.073	1.85	1.000	25.40	.100	2.54	.075	1.90
KT26R	WB26SM	P26LN-R-INS Red	26	0.40		●	.031	0.79	.023	0.58	.038	0.96	.750	19.05	.750	1.90	.040	1.02



# MANUAL WIRE WRAPPING TOOL KITS

These are complete kits for technicians working at a Main Distributing Frame or for field service where wire wrapping is required.



**WWK-CO**

**WWK-CO Insulated Wire Wrapping Kit-**  
designed specifically for the Central Office.



**JIC-2257 JIC-22035 UW4 KB224 G100/R3278INS JIC-21257 P2224INS**

**Kit Contains:** G100/R3278INS, Insulated Wire Wrapping Tool, KB224 bit, 22-24 AWG, P2224INS Insulated sleeve, 22-24 AWG, H-1000 Cordura Pouch, JIC-21257 Telecom long nose pliers, JIC-22035 Probe pick, UW4 Sleeved unwrapping tool, JIC-2257 Insulated wire loop puller

Part No.	Description
WWK-CO	Wire Wrapping Kit, Central Office



**WWK-1**



**P2224 KB224 ST-100 HW-UW-224 G200/R3278**

**Kit Contains:** G200/R3278 Wire Wrapping Tool, KB224 bit 22-24 AWG, P2224 sleeve 22-24 AWG, HW-UW-224 Wrap/unwrap tool, ST-100 wire stripper 22-24 AWG, H-1000 Cordura Pouch

Part No.	Description
WWK-1	Wire Wrapping Kit



**WWK-1INS**



**UW4 ST-100 KB224 P2224INS G100/R3278INS**

**Kit Contains:** G100/R3278INS Insulated Wire Wrapping tool, KB224 bit 22-24 AWG, P2224INS Insulated sleeve, 22-24 AWG, UW4 sleeved unwrapping tool, 20-26 AWG, ST-100 Wire stripper 22-24 AWG, H-1000 Cordura Pouch

Part No.	Description
WWK-1INS	Insulated Wire Wrapping Kit



**TK-WW5**



**P2224INS KB224 HW-UW-224 OK-3907-2224 G100/R3278INS**

**Kit Contains:** G100/R3278INS Insulated Wire Wrapping tool, P2224INS Insulated sleeve, KB224 bit 22-24 AWG, HW-UW-224 Wrap/unwrap tool, 20-26 AWG, OK-3907-2224 Adjustable Precision Wire Stripper, TKC-WW5 Leather Holster

Part No.	Description
TK-WW5	Wire Wrapping Kit
TKC-WW5	Leather Holster for TK-WW5

# HAND WRAPPING AND UNWRAPPING TOOLS



Type "A"

HW-30

## HAND WRAPPING TOOLS

These Hand Wrapping Tools are carefully designed to produce perfect wire wrapped connections. Precision, long-lasting tools for use where occasional wraps are required or where power wire-wrapping tools are not practical. Compact and convenient.

Part No.	Reg.	Mod.	Type	Wire Size		Max. Insulation Diameter		Terminal Hole Diameter		Terminal Hole Depth		Outside Diameter	
				AWG	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
HW-20	●		A	20	0.80	-	-	.075	1.90	1.000	25.40	.218	5.53
HW-224	●		A	22-24	0.65-0.50	-	-	.075	1.90	.807	20.50	.218	5.53
HW-26	●		A	26	0.40	-	-	.075	1.90	1.000	25.40	.218	5.53
HW-30*		●		30	0.25	.027	0.69	.036	0.91	.750	19.05	.125	3.17

\*These tools are recommended for .025" (0.63mm) square terminals on .100" (2.54mm) centers



Type "B"

Type "C"

Type "D"

## HAND UNWRAPPING TOOLS

These tools are used to remove wire connections made with 20 thru 32 gauge wire.

Part No.	Type	Wire Size		Type of Unwrap	Terminal Hole Diameter		Terminal Hole Depth		Outside Diameter	
		AWG	mm		Inches	mm	Inches	mm	Inches	mm
UW1	D	20-26	0.80-0.40	Left Hand	.070	1.77	1.000	25.40	.156	3.96
UW2	C	20-26	0.80-0.40	Left and Right Hand	.070	1.77	1.000	25.40	.156	3.96
UW4	B	20-26	0.80-0.40	Left Hand	.070	1.77	2.360	60.00	.187	4.74
UW5	B	20-26	0.80-0.40	Left and Right Hand	.070	1.77	2.360	60.00	.187	4.74
UW093R	D	24-32	0.50-0.20	Left Hand	.038	0.96	1.000	25.40	.093	2.36
UWD93-93	C	24-32	0.50-0.20	Left and Right Hand	.038	0.96	1.000	25.40	.093	2.36
UW2832C	B	28-32	0.32-0.20	Left and Right Hand	.038	0.96	.750	19.05	.156	3.96

**PATENTED**



WSU-2224  
(Regular Wrap)

WSU-24M  
(Modified Wrap)

WSU-26M  
(Modified Wrap)

WSU-30  
(Regular Wrap)

WSU-30M  
(Modified Wrap)

## WRAP/STRIP/UNWRAP TOOLS

Each WSU tool wraps, unwraps and even strips the appropriate wire diameter with a unique built-in stripper blade. Ideal for bench use or tool kit in all service and repair applications. In addition to versatility, convenience, and reliability, the WSU Series offers exceptional value.

Part No.	Reg.	Mod.	Wire Size		Max. Insulation Diameter		Terminal Hole Diameter		Terminal Hole Depth		Outside Diameter		Square Post	
			AWG	mm	In.	mm	In.	mm	In.	mm	In.	mm	In.	mm
WSU-2224	●		22-24	0.65-0.50			.075	1.90	1.50	38.1	.213	5.4	.045	1.14
WSU-24M		●	24	0.50	.036	0.92	.075	1.90	1.50	38.1	.213	5.4	.045	1.14
WSU-26M		●	26	0.40	.034	0.86	.075	1.90	1.50	38.1	.213	5.4	.045	1.14
WSU-30	●		30	0.25			.036	0.91	1.50	38.1	.125	3.2	.025	0.63
WSU-30M		●	30	0.25	.021	0.53	.036	0.91	1.50	38.1	.125	3.2	.025	0.63

These tools are recommended for .025" (0.63mm) square terminals on .100" (2.54mm) centers

# HAND WRAPPING AND UNWRAPPING TOOLS



## HAND WRAPPING AND UNWRAPPING TOOLS

These Hand Wrapping and Unwrapping Tools are carefully designed to produce perfect wire wrapped connections. Precision, long-lasting tools for use where occasional wraps are required or where power wire-wrapping tools are not practical. Compact and convenient.



## HAND WRAPPING AND UNWRAPPING TOOLS

To switch from wire wrapping to unwrapping takes only seconds - just a quick change of the cap from one end to the other.

NOTE: WDUD-26DS has an insulated handle to prevent shocks (for use on DSL lines)

WRAPPING SIDE													UNWRAPPING SIDE							
Part Number	Reg	Mod	Wire Size		Max. Insulation Diameter		Terminal Hole Diameter		Terminal Hole Depth		Outside Diameter		Wire Size		Terminal Hole Diameter	Terminal Hole Depth	Outside Diameter			
			AWG	mm	In.	mm	In.	mm	In.	mm	AWG	mm	In.	mm			In.	mm		
HW-UW-18-19	●		18-19	1.00-0.91	-	-	.075	1.90	1.000	25.40	.250	6.35	18-19	1.00-0.91	.075	1.90	1.000	25.40	.187	4.74
HW-UW-20	●		20	0.80	-	-	.075	1.90	1.000	25.40	.218	6.35	20-26	1.00-0.91	.070	1.77	1.000	25.40	.156	3.96
HW-UW-224	●		22-24	0.65-0.50	-	-	.075	1.90	.807	20.50	.218	5.53	20-26	0.80-0.40	.070	1.77	1.000	25.40	.156	3.96
HW-UW-224-1	●		22-24	0.65-0.50	-	-	.075	1.90	1.000	25.40	.218	5.53	20-26	0.80-0.40	.070	1.77	1.000	25.40	.156	3.96
HW-UW-2426	●		24-26	0.50-0.40	-	-	.075	1.90	.750	19.05	.218	5.53	20-26	0.80-0.40	.070	1.77	1.000	25.40	.156	3.96
HW-UW-26	●		26	0.40	-	-	.075	1.90	1.000	25.40	.218	5.53	20-26	0.80-0.40	.070	1.77	1.000	25.40	.156	3.96
HW-UW-26SM*		●	26	0.40	.031	0.79	.040	1.02	.750	19.05	.125	3.17	24-32	0.50-0.20	.038	0.96	1.000	25.40	.093	2.36
HW-UW-2829M*		●	28-29	0.32-0.29	.036	0.91	.040	1.02	.750	19.05	.156	3.96	24-32	0.50-0.20	.038	0.96	1.000	25.40	.093	2.36
HW-UW-30*		●	30	0.25	.027	0.69	.036	0.91	.750	19.05	.125	3.17	24-32	0.50-0.20	.038	0.96	1.000	25.40	.093	2.36
WDUD-26DS†	●		26	0.40	-	-	.075	1.90	1.000	25.40	.218	5.53	20-26	0.80-0.40	.070	1.77	1.000	25.40	.156	3.96

\*These tools are recommended for .025" (0.63mm) square terminals on .100" (2.54mm) centers. A modified wrap provides 1.5 – 2 turns of insulation.

† Insulated handle for dielectric protection.

# COPPER WIRE CUT & STRIP TOOLS

## ADJUSTABLE PRECISION WIRE STRIPPERS OK-3907 SERIES



The OK-3907 Series from OK Industries is the industry's leading cut-and-strip tool for copper interconnect applications. Installers and telecom technicians enjoy its rugged construction, ergonomic plastic grips, and high-leverage handle design, which allows time savings through the simultaneous cutting of multiple wires. Blades are made from specially tempered spring steel for clean, nick-free wire stripping.

Part No.	Wire Size		Adjustable Strip-Off Length		Replacement Blade
	AWG	mm	Inchs	mm	
OK-3907-2224	22-24	0.65-0.50	1-1/2" to 1-3/4"	38.10 to 44.45	SB-2224
OK-3907-2426	24-26	0.50-0.40	1-1/2" to 1-3/4"	38.10 to 44.45	SB-2426
OK-3907-2830	28-30	0.32-0.25	7/8" to 1 1/8"	22.22 to 28.57	SB-2830
JIC-4473*	22-24	0.65-0.50	1-1/2" to 1-3/4"	38.10 to 44.45	SB-2224

\* Supplied with 2 blades, SB-2224 and SB-2426

## WIRE CUT-AND-STRIP TOOLS - ST-100 SERIES



A revolutionary concept for easy and clean stripping of wires for wire wrapping, electronic and appliance applications. Biomechanically designed for maximum efficiency.

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 easily adjustable for your application. Blades are made from specially tempered spring steel for clean, nick-free wire stripping.

Part No.	Wire Size		Adjustable Strip-Off Length		Replacement Blade
	AWG	mm	Inches	mm	
ST-100	22-24	0.65-0.50	1 5/16" to 1 9/16"	33.33 to 39.68	SB-2224
ST-100-2426	24-26	0.50-0.40	1 15/16" to 1 11/16"	39.68 to 42.86	SB-2426
ST-100-2830	28-30	0.32-0.25	7/8" to 1 1/8"	22.22 to 28.57	SB-2830

# COPPER WIRE CUT & STRIP TOOLS

## ADJUSTABLE PRECISION WIRE STRIPPERS



These Precision Wire Strippers feature an adjustment dial that allows the operator to select one of six different settings. A calibrated wire stop can then be adjusted for the desired insulation strip length. In a single motion, the operator squeezes and pulls the tool. This action engages four specially hardened blades to cleanly cut the wire insulation while the pulling motion breaks the insulation / conductor bond.

- Adjustable to six wire gauges:
  - ST-450 26 to 36 AWG (0.40 to 0.12mm)
  - ST-500 20 to 30 AWG (0.80 to 0.25mm)
  - ST-500ESD 20 to 30 AWG (0.80 to 0.25mm)
  - ST-550 18 to 28 AWG (1.00 to 0.30mm)
- Calibrated Wire Stop adjustable to 2" (50.8mm)
- Clean, precise strip of any insulation type
- Lightweight-weighs 1 oz.
- Blade is hardened steel (RC58)
- Dimensions 3.9" x 1.6" x 0.6"  
(99 mm x 42 mm x 14 mm)

Part No.	ST-450	ST-500	ST-500ESD For ESD Use	ST-550
Wire Gauge	26-36 AWG 0.40 to 0.12mm	20-30 AWG 0.80 to 0.25mm	20-30 AWG 0.80 to 0.25mm	18-28 AWG 1.00 to 0.30mm
Housing Material	ABS	ABS	ESD Safe Polycarbonate	ABS

## WIRE STRIPPER AND CUTTER



The JIC-1022 Wire Stripper and Cutter is designed to strip and cut the most commonly used stranded and solid wire gauges 10 to 22 AWG and 1.6-3 mm fiber jackets. The JIC-1626 Wire Stripper and Cutter is designed for 16 to 26 AWG wire. The JIC-2030 Wire Stripper and Cutter is designed for 20-30 AWG wire.

Other features include a coil spring opening to reduce fatigue, wire looping, bending holes conveniently located, black oxide finish, locking mechanism, and cutting surfaces that are hardened, tempered and ground for superior performance. 6 3/4" long and weighing just 4.5 ounces.

Part No.	Description
JIC-1022	Wire Stripper and Cutter 10-22 AWG
JIC-1626	Wire Stripper and Cutter 16-26 AWG
JIC-2030	Wire Stripper and Cutter 20-30 AWG

# WIRE WRAPPING WIRE



UL Listed

## KYNAR® Insulated, Silver Plated Copper Conductor

Ideally suited for wire wrapping and many other applications. OFHC (oxygen free high conductivity) provides a flexible yet abrasion resistant wire

Wire Size		Insulation Dia.		Roll Size		Blue	Yellow	White	Black	Red
AWG	mm	In.	mm	Feet	Meters					
24	0.50	.030	0.76	100	30.4	R24B-0100	R24Y-0100	R24W-0100	R24BLK-0100	R24R-0100
26	0.40	.027	0.69	100	30.4	R26B-0100	R26Y-0100	R26W-0100	R26BLK-0100	R26R-0100
28	0.32	.024	0.60	100	30.4	R28B-0100	R28Y-0100	R28W-0100	R28BLK-0100	R28R-0100
30	0.25	.020	0.50	100	30.4	R30B-0100	R30Y-0100	R30W-0100	R30BLK-0100	R30R-0100
				1000	304.4	R30B-1000	R30Y-1000	R30W-1000	R30BLK-1000	R30R-1000

## KSW Wire Wrapping Wire Rolls for Cut/Strip/Wrap Applications

Low strip force Kynar® insulated silver plated copper conductor wire is further processed to provide a low strip force for use with CSW bits and sleeves. Ideally suited for wire wrapping and many other applications. OFHC (oxygen free high conductivity) provides a flexible yet abrasion resistant wire

Wire Size		Insulation Dia.		Roll Size		Blue	Yellow	White	Black	Red
AWG	mm	In.	mm	Feet	Meters					
24	0.50	.030	0.76	100	30.4	KSW 24B-0100	KSW 24Y-0100	KSW 24W-0100	KSW 24BLK-0100	KSW 24R-0100
26	0.40	.027	0.69	100	30.4	KSW 26B-0100	KSW 26Y-0100	KSW 26W-0100	KSW 26BLK-0100	KSW 26R-0100
28	0.32	.024	0.60	100	30.4	KSW 28B-0100	KSW 28Y-0100	KSW 28W-0100	KSW 28BLK-0100	KSW 28R-0100
30	0.25	.020	0.50	100	30.4	KSW 30B-0100	KSW 30Y-0100	KSW 30W-0100	KSW 30BLK-0100	KSW 30R-0100
				1000	304.0	KSW 30B-1000	KSW 30Y-1000	KSW 30W-1000	KSW 30BLK-1000	KSW 30R-1000

## Wire Dispenser - WD-30 Series

- With 50ft. (15.2m) Roll of 30 AWG (0.25mm) Kynar® wire-wrapping wire
- Built-in Plunger cuts wire to desired length
- Built-in Stripper strips 1" (25.4mm) of insulation
- Refillable



WD-30-B



R-30R-0050

## Replacement Rolls of Wire For WD-30 Series

Wire for wire-wrapping. 30 AWG (0.25mm) Kynar® wire, 50ft. (15.2m) roll, silver plated, solid conductor easy stripping.

Part No.	Description
R-30B-0050	30 AWG (0.25mm) Blue 50ft. for WD-30-B
R-30Y-0050	30 AWG (0.25mm) Yellow 50ft. for WD-30-Y
R-30W-0050	30 AWG (0.25mm) White 50ft. for WD-30-W
R-30R-0050	30 AWG (0.25mm) Red 50ft. for WD-30-R
R-30-TRI	30 AWG (0.25mm) Red, White, Blue 50ft (15.2m) roll, each color for WD-30-TRI

Part No.	Description
WD-30-B	Dispenser with 50' of Blue wire
WD-30-Y	Dispenser with 50' of Yellow wire
WD-30-W	Dispenser with 50' of White wire
WD-30-R	Dispenser with 50' of Red wire
WD-30-TRI	Dispenser with 50' each Blue, White and Red wire

## Pre-Cut and Pre-Stripped Wire Wrapping Wire

- 50 pieces per package
- Kynar® insulated
- Silver plated copper conductor
- UL listed
- 1" of stripped wire on either end
- Add 2" to the insulation length (see chart below) for total length of wire



## 30 AWG (0.25mm) Pre-Cut/Pre-Stripped Wire 50 Pieces/Pkg.

Insulation Length	In.	mm	White	Yellow	Blue	Red
1	25		30-W-50-010	30-Y-50-010	30-B-50-010	30-R-50-010
2	51		30-W-50-020	30-Y-50-020	30-B-50-020	30-R-50-020
3	76		30-W-50-030	30-Y-50-030	30-B-50-030	30-R-50-030
5	127		30-W-50-050	30-Y-50-050	30-B-50-050	30-R-50-050

# IC INSERTION EXTRACTION TOOLS

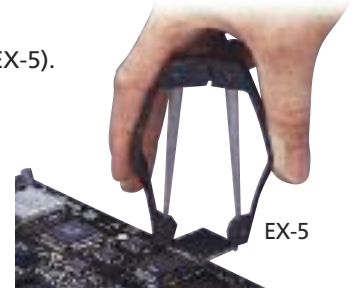
## UNIVERSAL PLCC EXTRACTION TOOL EX-5/EX-6



EX-6

### Features

- Extracts a range of PLCC sizes from 20 pins through 128 pins from any socket without damage to the chip.
- Spring loaded one-hand design requires no pulling, just squeeze handles and chip is lifted from the socket.
- ESD safe handles for use on all static safe components (EX-5).
- Machined stainless steel for long-life (EX-5).
- EX-6 - ABS handles and stamped steel.



EX-5

Part No.	Description
EX-5	ESD safe PLCC extraction tool
EX-6	PLCC extraction tool

## INSERTION/EXTRACTION KIT WK-7

WK-7 kit includes DIP IC extractors and inserters to accommodate all IC's from 8 to 40 pins. All tools are CMOS safe and include grounding lugs where appropriate except EX-1. The kit consists of extractors EX-1 for 8-24 pin devices, and EX-2 for 24-40 pin ICs, plus inserters MOS-1416, MOS-2428, and MOS-40 for 14-16, 24-28 and 36-40 pin IC's respectively.



S-340

### DIP/IC EXTRACTOR

This is a one-piece insulated spring steel extractor used to extract LSI, MSI and SSI devices from 8 to 24 pins. Will remove all types of DIP/IC's without bending pins. 4" long.

Part No.	Description
S-340	DIP/IC Extractor

EX-1

EX-2

MOS-1416  
(.3" Pitch)

MOS-40  
(.6" Pitch)

MOS-2428  
(.6" Pitch)



### Kit Includes

- EX-1 Extraction Tool (8-24 Pins).
- EX-2 Extraction Tool (24-40 Pins).
- MOS-1416 Insertion Tool (14-16 Pins).
- MOS-40 Insertion Tool (36-40 Pins).
- MOS-2428 Insertion Tool (24-28 Pins).

Part No.	Description
WK-7	5 piece insertion/extraction kit

Note: WK-7 items may be purchased individually.

# DESOLDERING PUMPS

## HIGH-VACUUM DESOLDERING PUMPS

A specially engineered desolder pump made to exacting specifications and providing precise repeatable operation. Fitted with a Teflon Tip. 13" long including tip



DP-100



DP-200



### Features

- Durable corrosion resistant plastic construction.
- Precision metal plunger.
- Corrosion treated springs.
- Insulated vacuum pulse.
- Regulated return (1 millisecond  $\pm 30\%$ ).
- Uniform reset pressure (11in. lbs.  $\pm 20\%$ ).
- Cushioned shock reduction (pulse release to minimize board damage).

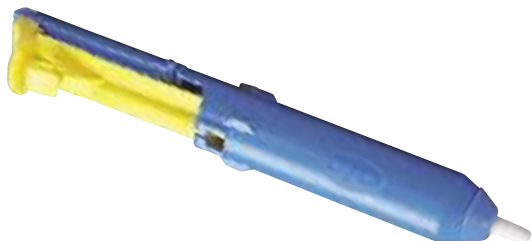


DPT-200



DPT-100

Part No.	Description
DP-100	High Vacuum Desoldering Pump
DP-200	High Vacuum Desoldering Pump, ESD Safe
DPT-100	1 Replacement Tip, DP-100/DP-140
DPT-200	1 Replacement Tip, DP-200



DP-140

### Features

- Precision regulated return.
- Replaceable tip.
- Compact, anti-corrosive plastic housing.
- Precision metal plunger.
- Sealed vacuum chamber.
- Easy cleaning.
- 8" Long including tip

Part No.	Description
DP-140	Desoldering Pump
DPT-100	1 Replacement Tip, DP-100/DP-140



# BENCHTOP FUME ABSORBERS

## SA-9-115/ SA-9-E-115



SA-9-115



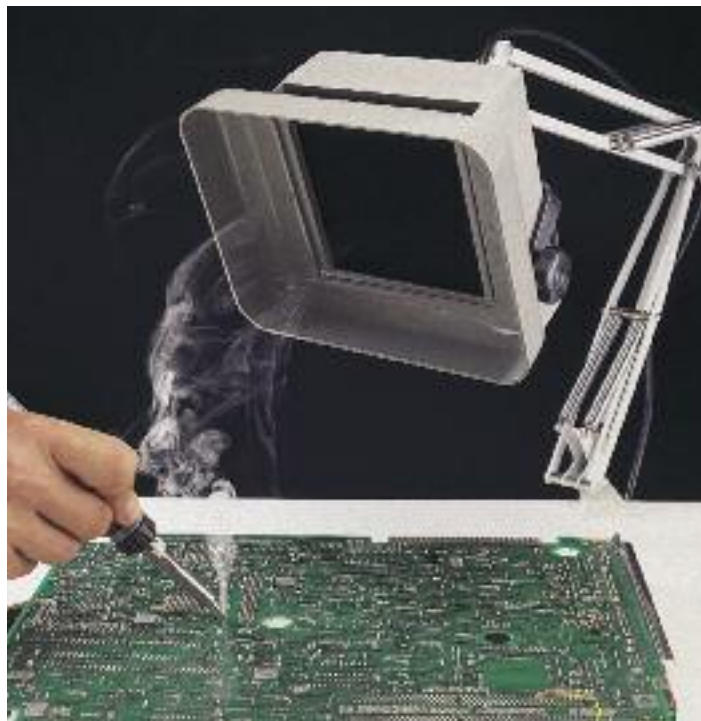
SA-9-E-115

- Aerodynamic hood design effectively draws irritating soldering fumes away from the work area.
- Carbon-impregnated filters trap a limited portion of the flux fumes.
- Compact size, low profile and adjustable stand allows convenient placement 6" to 8" (152 to 203mm) from work area.
- SA-9-E-115 feature static-dissipative housings.
- Dimensions: 8 1/2" H x 8 1/4" W x 4" D

### Benchtop

Part No.	Description
SA-9-115	Benchtop fume absorber, 115V AC with 3 filters
SA-9-E-115	ESD-Safe benchtop fume absorber, 115V AC with 3 filters

## SA-91/ SA-91-E



### Articulating Arm

Part No.	Description
SA-91	SA-9-115 with Articulating Arm, & Bracket
SA-91-E	SA-9-E-115 with Articulating Arm, & Bracket
SAK-90	Arm Assembly Kit Retro-fits SA-9/9-E to SA-91/SA-91-E
SAF-1	Replacement Filter Set, 3pcs.

- Articulating arm allows optimized positioning and saves bench space.
- Bench mounting clamp and 3 filters come complete with unit.
- SA-91-E features a static-dissipative housing.



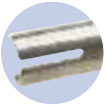
(5 1/4" square)

Specifications		
Part No.	SA-9-115 SA-9-E-115	SA-91 SA-91-E
Input Voltage	115V 60Hz	115V 60Hz
Maximum Air Volume	105 to 126 CFM	105 to 126 CFM
Activated Carbon Wt.	12g	12g
Unit Weight	2.2 lbs. (1 kg)	4 lbs. (1.8 kg)
Arm Length	-	24" (607mm)

# CONNECTOR & EXTRACTION TOOLS

## CONNECTOR INSERTION AND EXTRACTION TOOLS

These tools service virtually all connectors conforming to Mil-C-26482, Mil-C-26500 with front release contacts made by such manufacturers as Amp, Amphenol, Bendix, Burndy, Cannon, Cinch, Continental, Elco, Flight, Pyle National and Deutsch. These tools contain strong, durable, stainless steel probes & color coded handles.



JONARD P/N	MILITARY STANDARD (MS)	COLOR CODE	CONTACT SIZE	DIA
A-4598	MS24256-A20	RED	20	0.040"
A-4599	MS24256-A16	BLUE	16	0.063"
A-4600	MS24256-A12	YELLOW	12	0.093"

KA-260 Insertion Tool Kit (contains above 3 tools) in leather case



JONARD P/N	MILITARY STANDARD (MS)	COLOR CODE	CONTACT SIZE	DIA
R-4601	MS24256-R20	RED	20	0.040"
R-4602	MS24256-R16	BLUE	16	0.063"
R-9461	MS24256-R12	YELLOW	12	0.093"

KR-260 Removal Tool Kit (contains above 3 tools) in leather case



R-5926

### PIN EXTRACTOR

A plunger style pin extractor for pushing pins out from behind the connector blocks for contact sizes 16-20. 3" long.



AR-910672

### CONTACT INSERTION-EXTRACTION TOOL

A pin & socket insertion & extraction tool for contact size 20. Works on D subminiature connectors such as DB25, DB9 and contact size 20DM & 20DF. Tool constructed of brass and ABS plastic with the red side for insertion and the white side for extraction



S-339

### LAMP EXTRACTOR

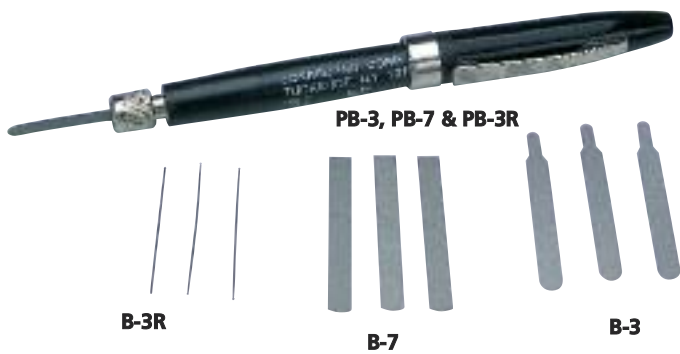
Mechanical type extractor used to remove or insert miniature lamps to remove or insert miniature lamps with bayonet type bases in panels and switchboards by firmly and gently grasping lamps. Grasp lever includes a return spring for fast lamp insertion and removal. Lamp grasp is limited to 5/16" to prevent shorts. Handle diameter 1/2". 4" long.

JONARD P/N	DESCRIPTION
R-5926	Pin Extractor

JONARD P/N	DESCRIPTION
AR-910672	Contact Insertion-Extraction Tool

JONARD P/N	DESCRIPTION
S-339	Lamp Extractor

# BURNISHERS



PB-3, PB-7 & PB-3R

B-3R

B-7

B-3



K-234



D-200, D-300, D-400

**D-200 Coarse (grit for rapid cleaning),**  
.019" Thick, two diamond faces, green shaft.

**D-300 Medium (grit for intermediate size contacts),**  
.017" Thick, two diamond faces, red shaft.

**D-400 Fine (grit for small sensitive contacts),**  
.011" Thick, single diamond face, blue shaft.

**K-234,** Three assorted spatulas in a leather case.

## POCKET TYPE BURNISHERS

Adjustment of flexible blade-length and rigidity - is possible by varying depth in chuck. Supplied with replaceable blades stored in pen barrel at other end. Plastic barrel and cap made of sturdy plastic for dielectric work. Length 4 1/2", diameter 3/8". Blades are 3/16" Wide x 1 1/2" long. Rods are .020" diameter x 1 1/4" long.

JONARD P/N	DESCRIPTION
PB-3	Pen With 6 Blades .0035" Thick
PB-3R	PB-3 plus 6 abrasive rods .020"
PB-7	Pen With 6 Blades, .007" thick
B-3/25	Pkg. 25 Replacement Blades for PB-3 (.0035")
B-3R/25	Pkg. 25 Replacement Rods for PB-3R (.020")
B-7/25	Pkg. 25 Replacement Blades for PB-7 (.007")

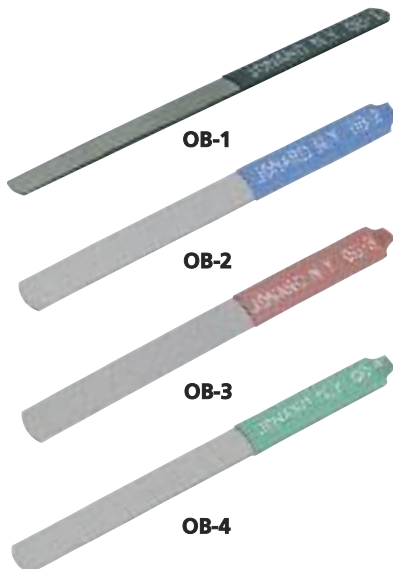
## DIAMOND BURNISHERS

These diamond contact burnishing spatulas consist of uniform abrasive diamond particles, set in a special metal for precise effective cleaning, polishing and burnishing with minimum pressure, so very little metal is removed. Diamond face 1" x 1/4". Total length 6".

JONARD P/N	DESCRIPTION
D-200	Diamond Burnisher Coarse
D-300	Diamond Burnisher Medium
D-400	Diamond Burnisher Fine
K-234	Diamond Burnisher Assortment Kit

## CONTACT BURNISHERS

Plastic insulated handles for working on live contacts. Tools are packaged in a clear plastic vial for protection from grease and moisture.



OB-1

OB-2

OB-3

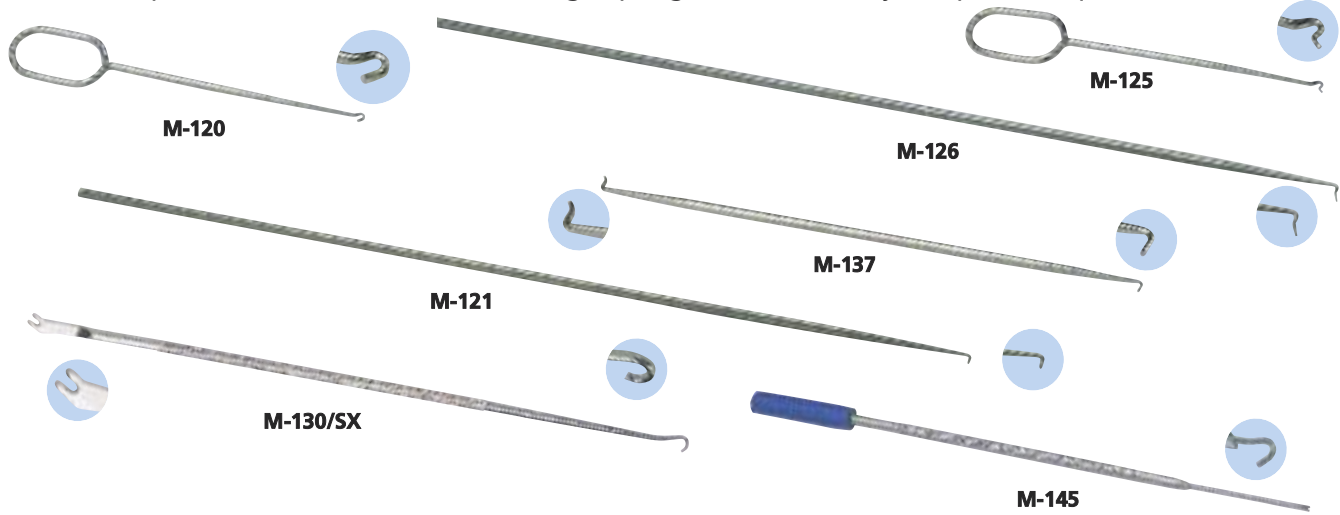
OB-4

JONARD P/N	DESCRIPTION
OB-1/3	<b>For Fine Contacts.</b> Black handle 3/16" wide, .007" thick. 3" long, Package of 3
OB-1/12	<b>For Fine Contacts.</b> Black handle 3/16" wide, .007" thick. 3" long, Package of 12
OB-2/12	<b>For Extra Sensitive Points.</b> Blue handle. 1/4" wide, .007" thick. 3" long, Package of 12
OB-3/12	<b>For General Purpose Contacts.</b> Red handle. 1/4" wide, .010" thick. 3" long, Package of 12
OB-4/12	<b>For Industrial Use.</b> Green handle. 1/4" wide. .020" thick 3" long, Package of 12

# ALIGNMENT TOOLS

## SPRING HOOKS/CLIP SETTER

Used for inserting, removing and adjusting fine springs and other small parts in tight areas. Indispensable for precision work in production and maintenance of precision production, electronics, electromechanics and even maintenance jobs. All spring hooks are tapered to a fine point. Produced of the finest quality high carbon steel with a nickel-plated finish. We will custom design Spring Hooks to meet your specific requirements.



**M-120** Pull Hook with looped handle for maximum control 6" long.

**M-121** Pull Hook for difficult to reach areas, 11" long.

**M-125** Push Hook with looped handle for maximum control 6" long.

**M-126** Push Hook for difficult to reach areas, 11" long.

**M-130/SX** Pull Hook and lifter. With a knurled grip. 8" long.

**M-137** Push & Pull 2 sided Hook, 7" long.

**M-145** Captive Spring Hook. Spring loaded hook is exposed by depressing plunger on top of tool. Internal spring retracts hook automatically. This hook is ideal for capturing small wires, springs or parts and holding them. 7" long.

JONARD P/N	DESCRIPTION
M-120	Pull Hook
M-121	Pull Hook
M-125	Push Hook

JONARD P/N	DESCRIPTION
M-126	Push Hook
M-130/SX	Pull Hook

JONARD P/N	DESCRIPTION
M-137	Push & Pull Hook
M-145	Captive Spring Hook



### CLIP SETTER

Clip Setter used for setting and withdrawing E and C clips with a inside diameter of .156" min. and thickness of .025" min. Max inside diameter of 3" and thickness of .093" One end of this tool has a hook with leaf spring tension for removing the clip. Other end of tool has leaf spring for holding clip in position to insert. Narrow shape allows access to confined places. This tool is 6 3/4" long .275" wide and 1/16" thick.

JONARD P/N	DESCRIPTION
CS-1022	Clip Setter



JIC-719A

### T KEY TOOL

*Pay telephone Tool*

The key is used to release the housing and door locking mechanism of the no. 1A type coin telephone sets 2 1/2" long.

JONARD P/N	DESCRIPTION
JIC-719A	T Key Tool



JIC-139B

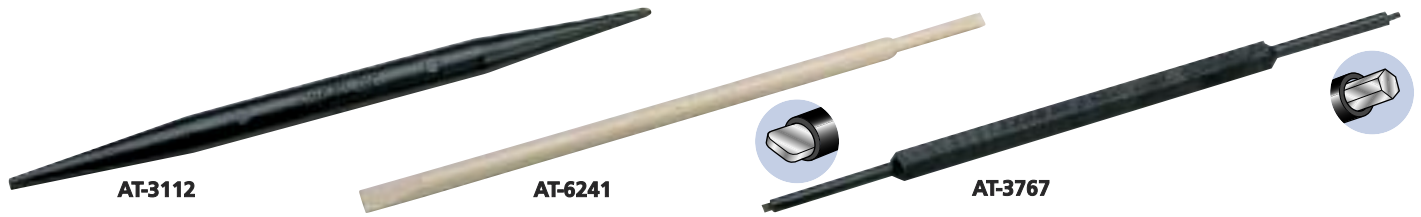
### COIN LEVELING TOOL

*Pay telephone Tool*

Tool used for leveling coins in coin collectors when the coin receptacle becomes so full as to interfere with operation of the collector. May also be used to measure the degree of fullness by means of a calibrated scale and metal slider. 7" long.

JONARD P/N	DESCRIPTION
JIC-139B	Coin Leveling Tool

# ALIGNMENT TOOLS



## SPUDGER

Plastic pencil type tool tapered to a point on one end and screwdriver tip on other end. Used to form, shape, guide, spudge and separate fine computer wire terminals, telephone wires and cables. Also used for breaking solder bridges, probing or positioning loose components. Made of a high impact non-conductive thermoplastic material. 6" double ended 5/16" diameter long.

JONARD P/N	DESCRIPTION
AT-3112	Spudger

## ALIGNMENT TOOL

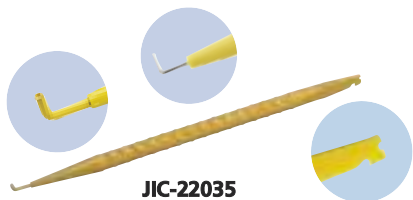
2-in1 nonconductive Alignment Tool 1/4" in diameter, stepped down to 5/32" in diameter. Ideal for most variable capacitors, coils and resistors. Also used to harness and separate fine wire terminals in computers, telephones and cables. Made of non-conductive thermoplastic material. 7" long.

JONARD P/N	DESCRIPTION
AT-6241	Alignment Tool

## TRIMPOT

Double ended Trimpot with a hex (allen) steel .050" and 3/32" long steel screwdriver tip. Ideal for aligning, adjusting, calibrating and fine tuning of electronic circuitry, potentiometers, oscilloscopes and electronic equipment. Made of a high impact non-conductive thermoplastic material. 5" long.

JONARD P/N	DESCRIPTION
AT-3767	Trimpot



## PROBE PICK

Tough resilient yellow nylon probe "spudger". One end is tapered to a 1/16" diameter point having an insulated "L" shaped wire hook extension. The other end tapers to a flat, 3/16" wide and 1/16" thick, with 2 small notches. Used in electrical contacts. 7" long.

JONARD P/N	DESCRIPTION
JIC-22035	Insulated Probe Pick
JIC-22035NT	Uninsulated Probe Pick

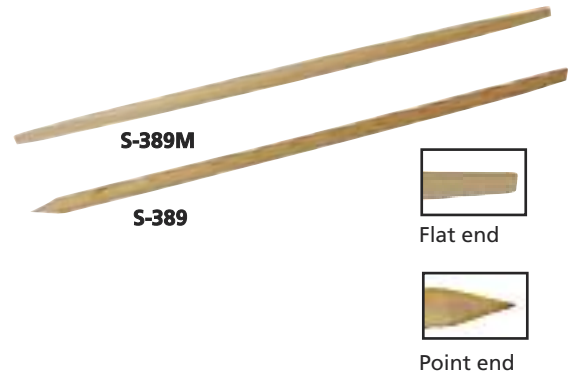


## ALIGNMENT TOOL KIT

This 5 piece pocket kit contains a selection of the most popular non-conductive tools for aligning and adjusting components.

AT-3767 Trimpot, AT-6241 Alignment Tool, AT-3112 Spudger, S-389 Orange Stick, JIC-22035 Probe Pick

JONARD P/N	DESCRIPTION
TK-AT5	Alignment Tool Kit



## ORANGE STICKS

Static free double ended economical tool made of birch wood. Used for cleaning electrical components and separating contact points, fine wires and other delicate components. 3/16" diameter x 7" long. The S-389 has one end tapered to a point and the other end to a flat screwdriver type tip. The S-389M has both ends tapered with a flat screwdriver type tip.

JONARD P/N	DESCRIPTION
S-389/10	Orange Sticks Point & Flat end Pk. of 10
S-389/100	Orange Sticks Point & Flat end Pk. of 100
S-389M/10	Orange Sticks 2 Flat ends Pk. of 10
S-389M/100	Orange Sticks 2 Flat ends Pk. of 100

# FORCE GAUGES TENSION PUSH-PULL GAUGES

Jonard force gauges are all ergonomically designed and have become the industry standard for measuring force. Our 3 different lines of force gauges are used by a multitude of industries and these gauges are being used in over 1000 different applications for measuring, calibrating, standardizing, testing and evaluating.

Measurement is extremely simple. Just place point of gauge arm perpendicular to the force to be measured. Reading can be taken in both directions - clockwise and counter-clockwise. Gauges offer extreme precision and durability. The measuring springs are made of hard tempered annealed beryllium copper. All gauges equipped with maximum reading pointer. Tolerance  $\pm .01$  (Reading + Maximum Scale Reading.)



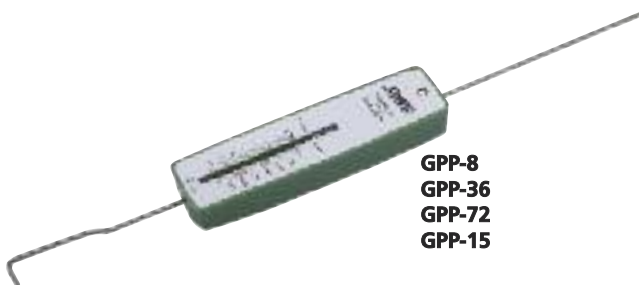
**Small Gauges**  
(Flat Tip, Dial Diameter 1 1/2")

JONARD PART NO.	RANGE IN GRAMS	GRADUATION IN GRAMS
GD-1	0-10	.25
GD-3	5-35	1.00
GD-5	10-50	1.00
GD-10	20-100	2.00
GD-15	50-150	5.00
GD-25	50-250	10.00
GD-30	40-350	10.00



**Large Gauges**  
(Round Tip, Dial Diameter 2 1/2")

JONARD PART NO.	RANGE IN GRAMS	GRADUATION IN GRAMS
GD-50	60-500	20.00
GD-100	150-1000	25.00
GD-200	300-2000	50.00
GD-400	700-4000	100.00



**GPP-8  
GPP-36  
GPP-72  
GPP-15**



**GPP-5**

## ECONOMY PUSH-PULL TENSION GAUGES

These high impact polystyrene cased instruments accurately measure push pull forces. Gauge is graduated in two scales: grams and ounces. Precision springs. Full scale accuracy is held to  $\pm 1$  graduation. Size: 1 1/2" wide x 1" deep x 14" long.

JONARD P/N	AVOIRDUPOIS CAPACITY	METRIC CAPACITY
GPP-8	8 oz. x 0.25 oz.	220 g x 5 g
GPP-36	36 oz. x 0.5 oz.	1,020 g x 20 g
GPP-72	72 oz. x 1 oz.	2,025 g x 25 g
GPP-15	15 lb. x 4 oz.	6,804 x 100 g

## PUSH-PULL PRECISION TENSION GAUGE

Precision, compact tubular-type mechanical force gauge slender shape permits its use in confined areas. Gauge is graduated in two scales: grams and ounces. Precision springs individually are calibrated. Full scale accuracy and permanent calibration is held to  $\pm 1$  graduation. Construction is brass with satin chrome finish. Size: 1/2" diameter x 15" long.

JONARD P/N	AVOIRDUPOIS CAPACITY	METRIC CAPACITY
GPP-5	1 lb X 1 oz.	500 g X 50 g

# PUNCHDOWN TOOLS

Insulation displacement connections to properly seat and trim wires used with connectors. Make effortless and uniform connections.

**A REVOLUTIONARY ERGONOMIC DESIGN GUARANTEEING OPERATOR SAFETY & EFFICIENCY**



EPB-66 EPB-110 EPB-KR

### Benefits:

- 36% Time Savings
- Reduces the risk of carpal tunnel and other repetitive stress injuries
- Effective means of combating fatigue
- Inexpensive option to promote worker safety

### Features:

- Over 1,000 impacts between charges
- Dual action trigger for LED task lighting and impact
- Quick-easy blade lock and release
- 90° Blade orientation adjustment for any angled impact
- Hi/Low impact settings easily adjusted
- Powerful, lightweight 7.2V lithium ion battery
- Quick charge battery charger
- Patented



EPB-1000

JONARD PART NO.	DESCRIPTION
EPB-1200	Punchdown Tool, Battery, 115V Charger (no blades included)
EPB-1066	Punchdown Tool, Battery, 115V Charger, 66 blade
EPB-1110	Punchdown Tool, Battery, 115V Charger, 110 blade
EPB-11066	Punchdown Tool, Battery, 115V Charger, 110 & 66 blades
EPB-1000KR	Punchdown Tool, Battery, 115V Charger, Krone blade
EPB-2200	Punchdown Tool, Battery, 230V Charger (no blades included)
EPB-2066	Punchdown Tool, Battery, 230V Charger, 66 blade
EPB-2110	Punchdown Tool, Battery, 230V Charger, 110 blade
EPB-211066	Punchdown Tool, Battery, 230V Charger, 110 & 66 blades
EPB-2000KR	Punchdown Tool, Battery, 230V Charger, Krone blade

### EPB STANDARD DOUBLE-ENDED BLADES

JONARD PART NO.	DESCRIPTION
EPB-66	66 Blade with & without cutter
EPB-110	110 Blade with & without cutter
EPB-KR	Krone Blade with & without cutter

### EPB-1000 ACCESSORIES

JONARD PART NO.	DESCRIPTION
EPB-B	EPB-1000 Lithium Ion Battery
EPB-BC1	EPB-1000 115V Battery Charger
EPB-BC2	EPB-1000 230V Battery Charger

- Ergonomic design to minimize repetitive stress and impact recoil
- The easiest high/low impact setting adjustment
- Convenient 2 blade storage compartment
- Non-slip handle
- Reliable fail safe mechanism
- Lifetime Warranty



EPB-500

EPBKIT-66110

JONARD PART NO.	DESCRIPTION
EPB-500	Ergonomic Punchdown Tool
EPB-KIT66	Ergonomic Punchdown Tool Plus 1 Blade (EPB-66)
EPB-KIT110	Ergonomic Punchdown Tool Plus 1 Blade (EPB-110)
EPB-KIT66110	Ergonomic Punchdown Tool Plus 2 Blades (EPB-66, EPB-110)
EPB-KITKR	Ergonomic Punchdown Tool Plus 1 Blade (EPB-KR Krone Blade)



JIC-950C

This multipurpose wire insertion tool performs several vital functions. The wire cutter is designed to cut 22 & 24 gauge wire, the hook at the back of the tool is used for both jumper and back-tap removal, and the bit inserts 22 or 24 gauge (0.5 mm or 0.6 mm) wire into the terminal block. Ideal for wire insertion in 3-beam (112 type blocks) and 4 beam (78 type blocks) terminals in Cosmic and Cosmic II distributing frames.

JONARD PART NO.	DESCRIPTION
JIC-950C	Quick Clip Insertion Tool
JIC-955	JIC-950C Replacement Blade

**Tools for Telecom, Fiber Optics, CATV, Satellite, Security & Alarm,  
Wireless and Electronics Industries**





Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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