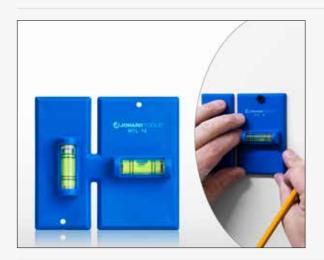




#### Adjustable Hole Cutter, 10" - AHC-10

The Jonard Tools AHC-10 adjustable hole cutter is designed for cutting round holes in ceilings, walls, and floors and is the perfect tool for installing recessed speakers, lighting, or other round objects.



#### Wallbox Template Leveler - WTL-12

Designed specifically for cutting out single and double gang old work boxes, this wall template level is perfect for ensuring the boxes are level every time. This wall template level features the following:

- Built-in levels assist in positioning the template perfectly
- Wide protective rubber strips hold the template in place and prevent scratching the wall
- Works with Carlon B114R & B12R single gang boxes, Carlon B225R double gang boxes, Carlon SC100RR low voltage plates, Arlington Industries LVL1 and LVL2 boxes, and many other brands of single and double gang boxes
- Screw holes added to hold it in place for hands-free use

Single gang cutout dimensions: 2 1/4" x 3 5/8" Double gang cutout dimensions: 4" x 3 5/8"



#### M22520/1-01 Military Grade Precision Crimper - CMP-1226

Designed for use with our CMP-3 (M22520/1-02) turret head and most other military grade turret heads, this precision crimping tool is perfect for crimping front release connector contact pins onto 12-26 AWG wire.



#### Fiber Scraps Disposal Can - FDC-66

The Fiber Scraps Disposal Can allows safe disposal of cleaved fiber ends. This disposal can features the following:

- Twist lock cover locks scraps in the disposal can for safe and easy disposal
- Disposal can has a 2 oz capacity with a paperboard body and plastic top and bottom
- Lightweight design to accommodate any tool kit or splice/connector station



#### Full Head Torque Wrenches - TWAF-2244 & TWAF-2288

The full head Torque Wrenches behave like traditional open-end wrenches. Designed for Amphenol RF 4.3-10 DIN connectors, these wrenches prevent over-tightening by tightening connectors to a present torque. An audible click also tells you the connection has been properly achieved.

SPECIFICATIONS	TWAF-2244	TWAF-2288	
CONNECTOR TYPE	Amphenol RF 4.3-10 DIN	Amphenol RF 4.3-10 DIN	
TORQUE	44 in-lb (5Nm)	88 in-lb (10Nm)	
LENGTH	6.68"	8.85"	
WEIGHT	.329 lb (149.23 gr)	.46 lb (210 gr)	



#### Torque Wrench, Full Head 7/16", 30 in-lb, Pink - TWAF-71630K

5% of all proceeds will be donated for Breast Cancer Awareness to BCFR - Breast Cancer Research Foundation!

Designed for 7/16" F Connectors, this full-size open head torque wrench provides a perfectly calibrated amount of torque to prevent damage from over-tightening or signal loss from under-tightening.



#### COAX Stripping Tool for RG7 and RG11 Cables - UST-135

The Jonard Tools UST-135 COAX stripping tool is designed to strip RG7 and RG11 coaxial cables for quick and easy termination. Included blade cartridge (UST-235) provides a 2-level strip for RG7 and RG11 Coaxial cables, removing 1/4" of jacket and 5/16" of shield and dielectric with each use.



#### **Universal Cable Stripping Tool with Cable Stop - UST-540**

The Jonard Tools UST-540 cable stripping tool is designed to strip COAX, Network Cables, and Telephone Cables for quick and easy termination. Included blade cartridge (UST-240) provides a 2-level strip on RG59 and RG6 COAX Cables for F, BNC, and RCA connector termination, removing 1/4" of jacket and 5/16" of shield and dielectric with each use.



#### Fiber Optic Mid Span Slit & Ring Tool Kit - TK-105

The TK-105 Fiber Optic Mid Span Slitting & Ringing Tool Kit provides an array of tools designed to provide easy access into fiber optic cables and buffer tubes.

#### Kit includes:

- MS-306 MS-306 Mid Span Slit & Ring Tool (1.2 3.3 mm)
- MS-316 MS-316 Mid Span Slit & Ring Tool (2.9 6.8 mm)
- MS-326 MS-326 Mid Span Slit & Ring Tool (5 10 mm)
- FOD-2000 FOD-2000 Fiber Optic Drop Cable Slitter
- CSR-1575 CSR-1575 Cable Slit & Ring Tool
- H-20 Rugged Nylon Carrying Case



#### COAX Cable Stub End Stripper (15 mm/6 mm) - CSS-5156

The CSS-5156 is a coaxial cable stripper specifically designed to strip the stub end of a coax cable in a wall outlet, exposing 15 mm of braid and 6 mm of the center conductor, which eliminates the need to run new cable.

Replacement cartridge: CSS-130



#### Mini COAX Stub End Stripper (9 mm/7 mm) - CSS-59M

The CSS-59M is a coaxial cable stripper specifically designed to strip the stub end of a mini coax cable in a wall outlet, exposing 9 mm of braid and 7 mm of the center conductor, which eliminates the need to run new cable.

Replacement cartridge: CSS-135



#### Mid Span Slit & Ring Tool (5.8 - 12 mm) - MS-426

The patented MS-426 Fiber Optic Mid Span Slit and Ring Tool is designed to provide easy access into mini flex tube fiber optic cables and other similarly sized cables. This tool features the following:

- Specifically designed for Prysmian ESMF Optical Mini FlexTube® cables and Prysmian 96 SM cables
- Slits and rings thin-walled jackets easily without damaging the buffer tubes
- Has 4 precision slitting and ringing grooves from 5.8 mm 12 mm (0.23" -
- Each blade in the tool can be used up to 5,000 times

Replacement blades (MS-426RB) can be purchased separately



#### Buffer Tube Ringer (up to 6mm) - BTR-6

The Jonard Tools BTR-6 Buffer Tube Ring tool provides quick access to fibers inside buffer tubes up to 6 mm in diameter and will work with buffer tubes with wall thicknesses up to 1mm. The tool is light and durable with a hardened steel blade for long life and includes a hole for tethering.



#### Fiber End-Face Ferrule Cleaners - FCCN-125 & FCCN-250

Fiber End-Face Ferrule Cleaners are designed to provide exceptional cleaning performance on fiber optic connectors. They clean ferrules in recessed fiber optic adapters or individual connectors, and have an adjustable angled head for getting into hard-to-reach places.

FCCN-125 for 1.25µm LC & MU connectors FCCN-250 for 2.5µm FC,SC, & ST connectors



#### Compact Glow Rod Kit 3/16" Diameter - RDG-9

The 9' Compact Glow Rod Kit extends a full 9 feet by combining six 18" x 3/16" diameter glow rods. It is ideal for technicians who want to be able to transport glow rods in the convenience of their backpack. The luminescent fiberglass glows in the dark and provides a splinter-free experience while also providing great flexibility. The rod pull strength is rated up to 500 lbs, and the steel connectors have standard 8-32 threads, compatible with many other glow rods.



#### Fiber Optic Connector Cleaning Kit - TK-182

The Jonard Tools TK-182 Fiber Optic Connector Cleaning Kit offers cleaning products for use on 1.25 mm and 2.5 mm connector end-faces and bulkhead adapters.

#### Kit includes:

- **FCC-125** Fiber Connector Cleaner 1.25 mm (for LC connectors)
- FCC-250 Fiber Connector Cleaner 2.5 mm (for use on FC, SC, ST connectors)
- **DW-90** Dry Fiber Cleaning Wipes
- FCF-3 Fiber Precision Cleaning Fluid
- H-20 Rugged Nylon Carrying Case

TK-182RF - Refill kit contains entire contents of TK-182 without the bag



#### **COAX Tool Kit with Universal Compression Tool - TK-86**

The TK-86 COAX Tool Kit is designed specifically for technicians working in the Security & Alarm industry or Home Automation market. This tool kit features the CT-200 Universal Compression Tool and UST-150 Cable Stripping Tool.

#### Kit includes:

- CT-200 Universal Compression Tool
- SD-61 Screwdriver Multi-Bit 6-in-1
- UST-150 COAX Stripping Tool for RG59, RG6, and CAT/TP Twisted Pair Cables
- FL-2000 LED Flashlight with Zoom Lens
- PT-300 Pocket Continuity Tester & Toner
- JIC-2288 High Leverage Diagonal Cutting Pliers, 8"
- TWAF-71630 Torque Wrench, Full Head 7/16", 30 in/lb
- H-85 Molded 8 Pocket Tool Pouch



#### Wire Stripper & Crimper (8 - 26 AWG) - WSC-826

The Jonard Tools WSC-826 is a multi-function wire stripper designed to cut and strip wire from 8 - 26 AWG (8.36 mm² - 0.13 mm²) without any adjustments needed. It also features a wire cutter and wire crimpers for non-insulated terminals 10-22 AWG and ignition wires 7-8mm².



#### **RJ45 CAT5E & CAT6 Pass-Through Connectors**

The Jonard Tools Pass-Through Connectors are used by network installers/ technicians in order to terminate network cables with a pass-through crimper. They are used in households and business and are ideal for terminating a round network cable or even replacing an existing connector.

**RJ45-550** for CAT5 and CAT5e, quantity 50 **RJ45-5100** for CAT5 and CAT5e, quantity 100 **RJ45-650** for CAT6 and CAT6a, quantity 50 **RJ45-6100** for CAT6 and CAT6a, quantity 100

SPECIFICATIONS	RJ45-550	RJ45-5100	RJ45-650	RJ45-6100
CABLE TYPE	CAT5, CAT5e	CAT5, CAT5e	CAT6, CAT6a	CAT6, CAT6a
QUANTITY	50	100	50	100



#### Wire Stripper and Cutter 8-22 AWG - WS-822

The Jonard Tools WS-822 Wire Stripper and Cutter was designed with the technician and tradesman in mind. This tool features the following:

- Rugged and precise design with precision machined holes and die-cast body with rugged coated finish
- Easily cuts and strips 8-20 AWG solid wire and 8-22 AWG stranded wire
- Gripping and stripping jaws grab, hold, and strip wire with one squeeze of the handle
- Jaw design holds wire securely in place when stripping
- Stripping blades are made of high durability SK5 steel
- Ergonomically designed handle with dual component thermoplastic rubber (TPR) grips



#### Hardline Strip & Core Tool Kit for QR715 Cable - HSC-715QR

The HSC-715QR hardline coring and stripping tool kit is designed to core and strip 0.715" (18.16 mm) diameter Quantum Reach cables such as QR715 cable and other similar sized cables. The kit is used by construction crews, cable splicers, and maintenance technicians on hardline cables whether aerial or underground and for distribution or drop applications.

Replacement Jacket Stripping Blade: **HS-RBQR** Replacement Coring Blade: **HC-RBQR** 



#### **Precision Fiber Cleaver - FC-500**

The Jonard Tools FC-500 precision fiber cleaver is designed to provide a precise cleave and prepare a fiber to be fusion spliced for 250µm and 900µm coated optical fiber. This fiber cleaver features the following:

- Provides a cleave with a cutting angle of less than 0.5° for optimal fiber preparation for fusion splicing
- Long life of 48,000 cuts with 16 position blades
- · Lightweight and rugged design for long term durability
- Holds 250µm and 900µm fiber and comes with built in fiber trash can
- Scaled holder for accurate cleave lengths from 5 to 20 mm (0.20" to 0.79")
- Ideal for fiber technicians, fiber splicers, and anyone that needs to cleave a fiber optic cable prior to performing a fusion splice



#### **Round Cable Stripper - FOR-3000**

The Jonard Tools FOR-3000 Round Cable Slitter is designed to easily and safely open round fiber optic cable jackets from 9 mm to 19 mm in diameter. It is ideal for any FTTH or maintenance technician that needs to work with round fiber optic cables, whether mid span or end-run. This round cable slitter features the following:

- Slits cables with outer diameter from 9 mm to 19 mm
- Provides easy fiber access for both mid span and end of cables
- Ability to slit and ring all in one tool
- Works on light armored cables also
- Blade is easily replaceable with replacement blade: FOR-3000RB
- Hinged tool easily separates for quick cable loading for mid span slitting
- Replacement Blade Part Number: FOR-3000RB (sold as a pack of 5)



#### Micro Duct Cutter - MDC-28

Designed to create quick, clean, and straight cuts, this duct cutter is perfect for cutting PVC, CPVC, HDPE, and other plastic tubing. It features a specially designed triangular blade and spring-loaded jaws to hold tubing in place while cutting.

Replacement blade: MDC-28RB



#### Fluid Dispenser for Fiber Cleaning 220mL - FD-220

The FD-220 Fluid Dispenser is designed to store and dispense cleaning fluids, such as isopropyl alcohol, to clean the end-faces of fiber optic cables. With a spill-proof lid, 220 ml capacity, and suction pump, this fluid dispenser is the most convenient way of carrying and dispensing cleaning fluid.



#### Solar Panel MC3 & MC4 Crimping Tool Kit - SPK-90

This tool kit is designed to facilitate the installation and maintenance of solar panels. It includes a crimper with MC3 and MC4 dies to crimp connectors onto 14, 12 or 10 AWG (2.5/4.0) (6.0mm2) solar panel wire, solar panel spanners for locking/unlocking connectors, and many other tools.

#### Kit includes:

- SPC-MC4 Crimper Solar Panel Contacts with...
- SPD-MC3 Solar Panel Crimper Die MC3
- SPS-2 Solar Panel Spanners for MC4 Connectors
- SDP-2 Screwdriver Phillips #2 X 4"
- SDC-3163 Screwdriver Cabinet Slotted 3/16" X 3"
- JIC-625 Copper COAX & Network Cable Cutter
- TKC-110 Rugged Nylon 11-Pocket Tool Case
- WS-822 Wire Stripper and Cutter 8-22 AWG



#### Micro Duct Cutter - MDC-28

Designed to crimp MC4 connectors onto 14, 12, or 10 AWG (2.5 / 4.0 / 6 mm2) solar panel wire, this crimper is the perfect tool for installing and maintaining solar panel connectors.

This tool comes with the **SPD-MC4** crimper die and is also compatible with the **SPD-MC3** crimper die (sold separately).



#### Solar Panel MC3 & MC4 Crimping Tool Kit - SPK-90

Designed to provide easy access to BNC connectors, this 3" BNC Connector Tool is perfect for installing or removing BNC connectors in high-density locations. This tool features the following:

- Compact design allows you to reach connectors in hard-to-reach places
- Knurled handle provides a secure grip while using the tool
- Steel loop can easily attach to a carabiner or key ring and can be used to facilitate removal or installation of connectors
- Made from a high carbon steel alloy with a nickel-plated finish for maximum durability



#### Cable Tester Tone & Probe Kit - TETP-800

Designed to quickly trace and identify cables, wires, and wire pairs, the Jonard Tools TETP-800 tone and probe kit is the perfect kit for any Voice Data Video (VDV) professional.

#### Kit includes:

- **TEP-100** Tone Tracing Probe
- TET-600 Cable Tester & Toner
- (2) 9V Batteries



#### Fiber Connector Tool for LC Connectors - FCT-200

Designed to insert and extract LC connectors in high-density patch panels, the FCT-200 is the perfect tool for working with LC connectors in tightly packed bulkheads. This tool features the following:

- Unique jaws of the tool easily grasp LC connectors firmly without damaging them or the surrounding connectors
- Rubber protection on the jaws safely and securely grips connectors without damaging them
- Spring-loaded handle with ergonomic grip provides maximum comfort and control



#### Fiber Connector Tool for LC Connectors - FCT-200

Specifically designed to strip 3.1mm(W)x2.0mm(H) FTTH drop cables, this tool strips the outer jacket of drop cables and cuts the strength members exposing the fiber inside. This drop cable stripper features the following:

- Works on cables with FRP or steel strength members
- Removes the outer jacket without damaging or nicking the fiber
- Non-slip ergonomic handle helps prevent hand grip fatigue
- Fiber support is scaled to help determine strip length

### **FOUNDED IN 1958**

Jonard Tools® manufactures tools for the Telecom, CATV, Fiber Optic, Home Automation, Security & Alarm, and Electrical markets. Jonard Tools designs and engineers patented products by utilizing customer partnerships to create innovative solutions for industry needs. New tools are released each month and are all Made For Life® with lifetime warranties. Through quality and innovation Jonard Tools aims to move the industry forward and connect the world.

#### Warranty

We stand by our brand with a Lifetime Warranty - see details on our website www.jonard.com.

#### **Contact Us**

**Customer Service Email**: sales@jonard.com

**Phone**: 914.793.0700

Website: www.jonard.com Fax: 914.793.4527





#### MADE FOR LIFE®

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# FIBER OPTIC TOOLS

Fiber optics uses flexible fibers of glass to transmit light signals that allow for higher bandwidths and longer distances than traditional wires. Optical fibers are as thin as a human hair and carry large amounts of data for telecommunication, television, and computer networking. Fiber optic cables usually consist of a core surrounded by cladding, buffer tubes, and an outer jacket. For simplex fiber cables, drop cables for FTTH, distribution, and blown fiber cables, our tools aid in stripping, prepping, connecting, cleaning, and terminating these fiber cables.

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- **Thermal Strippers & Ultrasonic Cleaners**







#### Fiber Optic Stripper - JIC-125

The Fiber Optic Stripper is used for stripping 250 micron buffer coating from 125 micron optical fiber. Preset at the factory so no adjustments are necessary. Unique design prevents nicks or scratches on the optical fiber plus blades are ground and hardened for long life. Yellow plastic dipped handles



#### **Ergonomic Fiber Optic Stripper - JIC-175**

Used for stripping the 250 micron coating from the 125 micron optical fiber. Preset at the factory so no adjustments are necessary, this unique Ergonomic design prevents nicks or scratches on the optical fiber. The stripping blades are ground and hardened for durability and long life. Handle is made of TPR (Thermoplastic Rubber).



#### Ergonomic Fiber Optic Stripper, 200 micron - JIC-200

Used for stripping the 200 micron coating from the 125 micron optical fiber. Preset at the factory so no adjustments are necessary, this unique Ergonomic design prevents nicks or scratches on the optical fiber. The stripping blades are ground and hardened for durability and long life. Handle is made of TPR (Thermoplastic Rubber).



#### Fiber Optic Stripper Three Hole - JIC-375

Three hole Fiber Optic Stripper model performs all common fiber stripping functions. The first hole of this Fiber Optic Stripper strips the 1.6-3 mm fiber jacket down to the 600-900 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 without nicks or scratches. Handle is made of TPR (Thermoplastic Rubber).



#### Cable Slit & Ring Tool - CSR-1575

The CSR-1575 is designed to slit and ring cables, buffer tubes and jackets on fiber optic cables up to 7.5mm (0.3") in diameter. The tool features an easily adjustable slit blade and ring blade as well as a removable and reversible V block that improves slitting performance and accommodates smaller to larger diameter cables.

Replacement Blade Set: CSR-2



#### **Ratcheting Cable Slitter - RCS-25**

Slits and rings PVC, PE, rubber, and other cable jacket materials. Will work on small cables as well as cables larger than 25mm. Designed with reversible double-ended replaceable blade with adjustable cutting depth 0-5mm for each unique cable application. 10/20/30mm scaled on tool for slitting length reference. For midspan or end cable slit and ring applications.

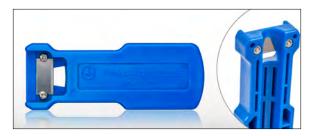
Replacement Blade: RCS-25RB



#### Fiber Optic Drop Cable Slitter - FOD-2000

The **PATENTED** FOD-2000 Fiber Optic Drop Cable Slitter is a tool that simplifies the slitting of drop cable jackets at the end of the cable or mid-span and was developed specifically for FTTH technicians working with flat fiber drop cables. The FOD-2000 puts a slit on both sides of the jacket allowing easy access to the fiber and strength members. The ease of use makes this tool truly unique!

Replacement Blades: FOD-RB25



#### Riser Slitting Tool - RST-8514

The RST-8514 is a mid-span slitting tool used to create an access window in round FTTH riser cables as well as microducts. It works with 8.5mm to 14mm round cables. **RST-RB25** Replacement Blades (Pkg of 25 blades).

#### Easy to use:

- 1. Press the tool against the cable to be accessed.
- 2. Grip the tool and the cable firmly in one hand and pull.







#### **Mid Span Slitters**

These **PATENTED** tools are designed to open fiber jackets and loose buffer tubes to provide easy fiber access. The buffer tube slitting is done without damage to the fiber. Blades are replaceable. Note: MS-326 is designed for cables used in ducts and microducts.

#### Simple to use:

- Select the correct groove. Grooves marked with the recommended fiber size
- Place the fiber in the groove to be used
- Note: The arrow on the top of the tool indicates the pulling direction and the line indicates the blade location
- Close the tool making sure lock is engaged and pull to slit the fiber
- For ring operation repeat steps above and, instead of pulling, rotate the tool
   3-6 times to ring the cable

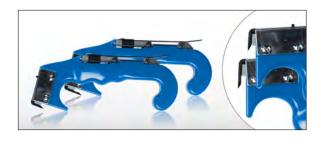
SPECIFICATIONS	MS-6	MS-26	MS-306	MS-316	MS-326	
DESCRIPTION	Mid Span Slitter (1.2mm-3.3mm)	Mid Span Slitter (2.9mm-6.8mm)	Mid Span Slit & Ring Tool (1.2mm-3.3mm)	Mid Span Slit & Ring Tool (2.9mm-6.8mm)	Mid Span Slit & Ring Tool (5mm-10mm)	
NO. OF PRECISION GROOVES	6	5	12 (6 Slitting, 6 Ringing)	10 (5 Slitting, 5 Ringing)	10 (5 Slitting, 5 Ringing)	
GROOVE SIZES (MM)	1.2-1.5, 1.5-1.8, 1.8- 2.1, 2.1-2.5, 2.5-2.9, 2.9-3.3	2.9-3.6, 3.6-4.4, 4.4- 5.2, 5.2-6.0, 6.0-6.8	1.2-1.5, 1.5-1.8, 1.8- 2.1, 2.1-2.5, 2.5-2.9, 2.9-3.3	2.9-3.6, 3.6-4.4, 4.4- 5.2, 5.2-6.0, 6.0-6.8	5.0-5.6, 6.0-6.6, 7.2- 7.8, 7.8-8.4, 9.4-10	
REPLACEMENT CARTRIDGE	MSB-1533	MSB-2968	MS-306RB	MS-316RB	MSB-5010	



#### Mid Span Slitter Replacement Cartridges

JONARD P/N	DESCRIPTION		
MSB-1533	Replacement Blades for MS-6		
MSB-2968 Replacement Blades for MS-26			
MS-306RB	Replacement Blades for MS-306		
MS-316RB Replacement Blades for MS-316			
MSB-5010	Replacement Blades for MS-326		





#### Slit & Ring Tools

The **JIC-4366 Cable Slit & Ring Tool** and the **JIC-4377 Fiber Jacket Slit & Ring Tool** are used as cable sheath and jacket slitters. They can slit and ring-cut many types of buffer tubes, breakout cables, and jacketed fiber cables. The built in slitting blade opens the cable sheath and the ring cut blade works on diameters from 1/8" to 3/8". The JIC-4377 has a shorter tapered slitting blade specifically for easier use with the OFS Minicord EZ Bend and other similar cables.

Both come with a set of spare blades:

**RB-2060/6** Replacement blades for ring cut on JIC-4366, JIC-4377, and JIC-2060 **RB-2878/6** Replacement blades (package of 6) for stripping feature of the JIC-4366 and JIC-4377.



#### Wire & Kevlar Cutting Shears - JIC-186

High carbon stainless steel blades (heat treated to HRC 58-60) 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, a serrated blade for gripping, sharp and durable. 6" long. Handle material is dual component Nylon and Santoprene.



#### Micro Duct Tube Cutter - MDC-14

Cuts micro ducts and other types of tubing made from PVC, Nylon, Polyethylene and other materials quickly and with less effort so cuts are clean and straight. Maximum duct diameter 14mm (9/16"). Tool is made from Polypropylene with TPR (Thermoplastic Rubber) grips for comfort. Blade is made from heat treated stainless steel for longer life. Overall Length: 4.5" (114.3mm)

#### Large Fiber Duct Cutter - MDC-64

The MDC-64 Is a large Fiber Duct tube cutter designed to cut Fiber Ducts (up to 64mm/2.52" in diameter), PVC, CPVC, PE, HDPE, PEX and other nonmetallic tubing. This ratcheting cutter provides high leverage to facilitate cutting with minimal effort. Comfortable one hand operation and easy open release. Provides square and straight cuts with no mess when compared to other saw type pipe cutters. The Triangular blade shape helps to hold the tubing as well as to reduce cutting force. Tool body is Die Cast Aluminum alloy and cutting blade is made from Stainless Steel for long life. Overall Length: 9.5" (241.3 mm)





Fiber Optic Crimping Die UCD-2685



#### Crimper With Fiber Die - UC-8039

The UC-8039 Universal Crimper with Fiber Optic Die (UCD-2685) 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.

#### Kit includes:

UC-8000 Universal Crimper Without Die UCD-2685 Fiber Optic Crimping Die



#### **Visual Fault Locator Kit - VFL-150**

Visual Fault Locator Kit - Includes: VFL-25, 2 AAA Batteries, VFL-25125 FC/LC Adapter. This pen style VFL is specially designed for field personnel who need a portable light source tool for fiber tracing, fiber routing, continuity testing, to locate breakpoints (bending or cracking in fiber optic cables), and poor connections. VFL-150 works on FC, SC, ST connectors and will work on LC connectors when used with the included VFL-25125 adapter. Distance: Up to 5km (3.10 miles).



#### **Fiber Inspection Microscopes**

Fiber inspection microscopes have a focus wheel and features 2.5mm and 1.25mm adapters for use on most fiber connectors. The achromatic lens offers excellent imaging and integrated laser filters for safety (not intended for use with illuminated fibers). Coaxial illumination provides clear view of connector face and fiber.

The FIM-200 has 200x magnification The FIM-400 has 400x magnification







After Cleaning



#### Fiber Optic Power Meter - FPM-50

An intelligent fiber optic power meter designed to measure wavelengths with high precision. Used for absolute and relative power measurements. Wavelengths Measured (mm): 850, 980, 1300, 1310, 1490, 1550, 1625, 1650.

#### Features:

- Measures a wide range of wavelengths
- Auto-off feature
- Special function allows manual calibration of the unit
- LCD back-lite for viewing in low light locations

#### Includes:

- Power Meter
- Protective Cover
- 3 AA Batteries

- Cotton Swabs
- (1) FC and (1) SC Adapter
- Nylon Carry Case





#### **Fiber Connector Cleaners**

Designed to provide exceptional cleaning performance by cleaning connectors beyond the critical fiber core area and cleaning deep into the contact area of a bulkhead adapter or connectors on fiber optic cables. The tethered dust cap provides protection for the micro fiber cleaning fabric and is an adapter for connector end face cleaning.

Features a **PATENTED** 360 degree Rotational Tip for extra wide cleaning, easy one push operation and extendable nozzle, providing an additional 1.5 inches for a nozzle length of 4 inches to aid in accessing deep ports or crowded access panels. Additionally the Fiber Connector Cleaners use a non-woven micro fiber that is lint free. The FCC-120 provides 500+ cleanings and both the FCC-125 and FCC-250 provide 800+.

The outer bodies are made from static dissipative material for ESD safe work.

SPECIFICATIONS FCC-120 F		FCC-125	FCC-250	
<b>DESCRIPTION</b> Fiber Connector Cleaner MPO		Fiber Connector Cleaner 1.25mm	Fiber Connector Cleaner 2.5mm	
FIBER CONNECTORS MPO		LC	FC, SC, ST	



#### **Universal Fiber Connector Cleaner - FCC-300**

The new, **FCC-300** Universal Fiber Connector Cleaner incorporates a new non-woven, synthetic cleaning cloth offering greater durability, usability and improved reliability. And this cloth can handle wet or dry cleanings and there is never a fiber residue on the end face.

The FCC-300 is a handheld connector cleaner that is strong enough for aggressive cleaning of a wider range of contaminates, soils and end-face debris. Stable, consistent, cleaning performance regardless of operator skill thanks to its **PATENT PENDING** Slide-Guide™ connector holder.

#### **Key Features:**

- Extra durable, compact and highly reliable cleaner for connector end-face cleaning in the field and factory.
- Automatic "Clean and Advance" tape technology provides a fresh cleaning surface after each swipe eliminating waste and guaranteeing long tool life. Cleaning

and tape advance occurs in either direction, only one swipe needed to clean connector end face. Packaged in a handy palm sized unit, for over 500 cleanings.

- Warles with hath Circular as Dualer and it attach
- Works with both Simplex or Duplex applications.
- ESD Anti-static materials. Supports both PC and APC end face designs.



#### Fiber Wipes, Pack of 50 - FW-50

Alcohol Wipes. Pure 91% Isopropyl Alcohol.

- Excellent Cleaner for optical surfaces, glass fibers, and connector end faces
- Fast evaporating, residue-free solvent
- Mild, non-abrasive solvent
- Compatible with most plastics, glass and metals
- Convenient, safe package



#### Fiber Scribe - FS-616

Housed in a protective metal housing with pocket clip, the FS-616 has a 6mm wide blade with a 35-degree beveled edge. It features a wide carbide blade, allowing the cleaving of standard as well as larger diameter fibers and miniature rod shaped lenses. Ideal for scratch and pull scribing of fiber optic cables.



#### Fiber Cleaver - FC-220

The FC-220 is a single fiber cleaver designed to accommodate either 900µm buffered or 250µm coated fiber. The quick and easy three-step operation is well suited for mechanical splice and quick termination field connector applications. The leaf spring base is ruled to allow for cleave lengths of 2 to 20mm. The standard carbide blade will perform up to 6000 cleaves.

Replacement Carbide Steel Blade: FC-4, Replacement Leaf Spring: FC-65



#### **Fiber Connector Tools**

The perfect tools for inserting and extracting fiber connectors in high density patch panels. Both include a spring-loaded comfortable grip to allow for easy operation.

**FCT-100** is designed to work with LC, SC simplex and duplex connectors as well as with MU, MT-RJ and other similar type connectors.

**FCT-200** is designed to work with current LC connectors and next version LC connectors.







#### Fiber Connector Cleaning/Inspection Kits

Provides you with all the tools needed for cleaning and inspecting fiber connector end faces.

- TK-186 Fiber Connector Cleaning Kit
- TK-188 Fiber Connector Cleaning and Inspection Kit 200x Magnification
- **TK-189** Fiber Connector Cleaning and Inspection Kit 400x Magnification

JONARD P/N	DESCRIPTION	TK-186	TK-188	TK-189
FCC-125	Fiber Connector Cleaner 1.25mm	X	X	X
FCC-250	Fiber Connector Cleaner 2.5mm	X	X	X
FCC-300	Universal Fiber Connector Cleaner		X	X
FCT-100	Fiber Connector Insertion and Removal Tool	X	X	X
FIM-200	Fiber Inspection Microscope 200x Magnification		X	
FIM-400	Fiber Inspection Microscope 400x Magnification			X
FL-2000	LED Flashlight with Zoom Lens	X	X	X
FW-50	Fiber Wipes (Pkg. of 50)	X	X	X
H-90	Rugged 21 Pocket Tool Case	X	X	X



#### **Fiber Optic Tool Kits**

The **TK-325** Scissor & Pouch Kit consists of the JIC-186 Wire & Kevlar Cutting Shears and the H-25 Pouch with belt clip.

The **TK-350** Fiber Kit with Kevlar Cutter includes the JIC-375 Fiber Optic Stripper Three Hole, JIC-186 Ergonomic Fiber Optic Kevlar Cutter, and the convenient H-60 Molded Two Pouch with a convenient metal clip.

The **TK-375** Fiber Stripper & Scissor Kit includes the JIC-375 Fiber Optic Stripper, ES-1964 Electrician's Scissor, and convenient molded two tool plastic pouch (with metal clip).

JONARD P/N	DESCRIPTION	TK-325	TK-350	TK-375
ES-1964	Electrician Scissor			X
H-25	Plastic Molded Pouch For JIC-186 & JIC-195	X		
H-36	Molded Pouch			X
H-60	Molded Two Tool Pouch		X	
JIC-186	Ergonomic Fiber Optic Kevlar Cutter	X	X	
JIC-375	Fiber Optic Stripper- 3 Hole		Х	Х



#### **Fiber Prep Kits**

Provides you with all the tools needed to access and prepare a fiber optic cable for termination.

- TK-120 Fiber Prep Kit
- **TK-150** Fiber Prep Kit, W/ Connector Cleaner, Fiber Cleaver & Visual Fault Locater
- TK-160 Fiber Prep Kit W/ Connector Cleaners, Visual Fault Locater
- TK-170 Fiber Prep Kit with Small & Large Mid Span Slitters

JONARD P/N	DESCRIPTION	TK-120	TK-150	TK-160	TK-170
CSR-1575	Cable Slit & Ring Tool	Х	X	X	Х
CST-1900	Round Cable Stripper	Х	X	Х	X
FC-220	Fiber Cleaver		X		
FCC-125	Fiber Connector Cleaner 1.25mm			Х	
FCC-250	Fiber Connector Cleaner 2.5mm		X	X	
FL-2000	LED Flashlight with Zoom Lens	X	X	X	
F0D-2000	Fiber Optic Drop Cable Slitter	X	X	X	
FW-5	Fiber Wipes (Pkg. of 5)	X	X	X	
H-90	Rugged 21 Pocket Tool Case	X	X	X	X
JIC-1022	Fiber Jacket Stripper				X
JIC-186	Ergonomic Kevlar Cutter	X	X	X	X
JIC-22035	Probe Pick - Spudger				X
JIC-2288	High Leverage Diagonal Cutter	X	X	X	X
JIC-375	Fiber Optic Stripper	X	X	X	X
JIC-842	Telecom Long Nose D Pliers	X	X	X	X
KN-7	Cable Splicing Knife				X
MS-26	Mid Span Slitter (2.9mm-6.8mm)				X
MS-6	Mid Span Slitter (1.2mm-3.3mm)	Х	X	X	X
SD-61	Screwdriver Multi-Bit 6-In-1	X	X	X	X
UST-500	Universal Cable Stripping Tool				X
VFL-150	Visual Fault Locator		X	X	





#### Thermal Strippers Adjustable & Fixed Blade

The Jonard Thermal Strippers are compact, easy-to-use fiber stripping units designed to thermo-mechanically remove coatings from optical fibers. The heater is adjustable up to 200°C; far hotter than any competing product. This feature facilitates stripping extremely difficult and baked-on coatings and in some cases can even remove fluoroacrylate undercoatings.

Our **TSAB-40 Adjustable Blade Thermal Stripper** supports optical fibers with cladding diameters from 30µm to 1000µm, with buffer diameters up to 1200µm. This includes standard 250µm, 400µm, and 900µm coated fibers. Adjustable temperature and time settings allow it to adapt to stripping a variety of different acrylate coatings and cladding sizes.

Our **TSFB-125 Fixed Blade Thermal Stripper** supports standard 125µm optical fibers, including 250µm, 400µm, and 900µm coated fibers. Adjustable temperature and time settings allow it to adapt to stripping a variety of different coatings. The precision, self-centering blade design produces high strength stripping performance unmatched by previous flat blade strippers.

#### Features:

- Compact, low-maintenance bench top design
- Adjustable temperature and time settings to accommodate different fiber coatings

Includes: Power Supply, Power Cord, Cleaning Brush



#### **Thermal Stripper Platforms & Universal Clamp**

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

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





#### **Ultrasonic Cleaner - TSUC-5000**

The Jonard Tools TSUC-5000, compact, low maintenance Ultrasonic Cleaner is a purpose-built ultrasonic fiber cleaner that has been designed specifically for fiber splicing applications.

Easy to use, an audible and visual indicator will signify when the fiber should be removed. Versatile settings allow user to adjust for cycle duration and intensity levels for maximum results. Options include a solid lid to reduce evaporation, and custom rails that can be adapted to the most popular fiber holders such as Fitel, Fujikura and Ericsson. Reservoir holds 70ml of alcohol.

#### **Ultrasonic Cleaner Rails & Cover**

JONARD PART #	DESCRIPTION
TSUC-516	Ultrasonic Cleaner 16mm Fitel Fujikura Rail
TSUC-512	Ultrasonic Cleaner 12mm Ericsson Rail
TSUC-518	Ultrasonic Cleaner 18mm Fitel Rail
TSUC-510	Ultrasonic Cleaner Cover

















#### Coax Stub End Strippers

The CSS Series tools are coaxial cable strippers specifically designed to strip a stub end of a coax cable in a wall outlet box, which eliminates the need to run new cable, saving time and money. Each CSS tool provides a two step strip of an RG59/6 cable to a specific braid length and center conductor length (shown in the chart below). The built-in strip stop insures the strip lengths are consistent.

#### Easy to use:

Squeeze handles to open jaws and insert cable, release to close jaws, rotate like a screwdriver and remove. Tool will not cut the braid or score the center conductor.

Blades cartridges are easily changed and replaced.

SPECIFICATIONS	CSS-596	CSS-5097	CSS-5110	CSS-5127	CSS-5610	
DESCRIPTION	Coax Stub End Stripper (RG59/RG6)	Coax Stub End Stripper (9mm/7mm)	Coax Stub End Stripper (10mm/10mm)	Coax Stub End Stripper (12mm/7mm)	Coax Stub End Stripper (6mm/10mm)	
BLADE	CSS-105	CSS-115	CSS-120	CSS-110	CSS-125	
BLADE CARTRIDGE COLOR	Black	Light Blue	Blue Grey		Burgandy	
BRAIDED STRIP LENGTH	1/4"	9mm	10mm	12mm	6mm	
CENTER CONDUCTOR STRIP LENGTH	5/16"	7mm	10mm	7mm	10mm	





#### **Coax Stripping Tools**

The UST Series creates a two step strip on a multitude of cables (and the UST-175 provides a three step strip). These tools includes a Velcro strip for folding back the braided shield of the cable. Cartridge blades are interchangeable and capable of making over 5,000 cuts.

SPECIFICATIONS	UST-100	UST-125	UST-150	UST-175	UST-185	UST-1596	UST-500	UST-525	UST-596
DESCRIPTION	RG59/6 & 7/11 COAX Stripping Tool	Coax Stripping Tool For RG59/6 & 7/11 With Cable Stop	CAT/TP & RG59/6 Cable Stripping Tool	Mini-Coax Cable Stripper	Mini Coax Cable Stripper	Coax Stripping Tool With Twin RG59/6 Blade	Universal Cable Stripping Tool	Universal Cable Strip Tool With UST-225 Blade	Universal Cable Stripping Tool RG59/6
CABLE TYPE	Coax	Coax	Coax	Coax	Coax	Coax	Coax, RG5, CAT6, Flat 4P/6P	Coax, RG5, CAT6, Flat 4P/6P	Coax, RG5, CAT6, Flat 4P/6P
CABLE SIZE	RG59/6, 7/11	RG59/6, 7/11	RG59/6, UTP	Mini Coax	Mini Coax	RG59/6	RG59/6, UTP, 7/11, Flat Telephone UST-205	7/11, RG59/6, UTP, Flat Telephone	RG59/6, UTP, Flat Telephone
CARTRIDGE	UST-205 Blade for RG59/6 & 7/11	UST-225 Blade for RG59/6 & 7/11 With Cable Stop	UST-215 Blade for RG59/6 711 With Cable Stop & Unshielded Twisted Pair	UST-220 Blade Three Level Mini-Coax	UST-230 Blade Two Level 1/4" x 1/4" Mini-Coax	UST-210 RG59/6 Twin Blades with Cable Stop	UST-205 Blade for RG59/6 & 7/11	UST-225 Blade RG59/6, 7/11" with Cable Stop	UST-210 RG59/6 Twin Blades with Cable Stop





#### **Compression Tools**

COAX cables RG6 and RG59 utilize many different fittings to terminate cables. Jonard offers compression tools to work with all types of connectors (BNC, PPC, Belden, and more).

CT-200 - Universal Compression Tool designed for use on most F connectors (RG59, RG6, & RG11), BNC connectors (RG59 & RG6) and RCA connectors (RG59 & RG6).

**CTF-200** - Compression tool with a fixed design for use on the longer style F connectors (such as PPC® EXXLWS Aquatight connector, EX-XL and other similar length connectors)

**CTF-200CG** - Compression tool with a fixed design for use on Corning Gilbert connectors. Tool also works with brands such as PPC & Thomas Betts. **CTF-230** - This dual compression tool is two tools in one, combing the features of the CTF-200 and the CTF-300. It is designed for use on either short or long F connectors (such as PPC EX6 and PPC EX6XL), and also works on most RG 11 connectors. The Green ring side of the plunger is for the "short" PPC EX6 style

**CTF-300** - Compression tool with a fixed design for use on the shorter style F connectors (such as PPC Aquatight Connector EX or shorter connectors and other similar length connectors).

SPECIFICATIONS	CT-200	CTF-200	CTF-200CG	CTF-230	CTF-300
DESCRIPTION	Universal Compression Tool	Compression Tool Fixed - Long	Compression Tool Fixed - Long CG	Dual Compression Tool - Short and Long	Compression Tool Fixed - Short
CONNECTOR TYPE	Adjustable	Fixed	Fixed	Fixed	Fixed
CONNECTOR LENGTH	Short & Long	Long	Long	Short & Long	Short
HANDLE COLOR	Green/Blue	Blue	Blue	Green/Blue	Green
REPLACEABLE PLUNGER P/N	21881	N/A	N/A	21912	N/A



#### 360 Degree Compression Tool for RG59/6 - CTF-180

Fixed compression tool with reversible plunger and 360 degree F connector support for use with most short and long F connectors. This compression tool works on F connectors for RG6 and RG59 cables. The tool is solid steel construction, protected with a black oxide finish, spring loaded and fitted with blue cushioned grips making this tool rugged yet comfortable to use. Includes integrated handle lock for storage.



Coax Crimping Die UCD-2045



#### **Crimper With Coax Die - UC-8012**

The UC-8012 Universal Crimper with COAX Die (**UCD-2045**) crimps CATV "F" connectors used on RG59 and RG6 cables. Hole sizes are 0.068", 0.262", 0.324", 0.360" (1.73mm, 6.65mm, 8.23mm, 9.14mm). 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. Very durable steel housing accommodates both Fiber Optic and Coax dies.

#### Kit includes:

**UC-8000** Universal Crimper Without Die **UCD-2045** Coax Crimping Die



#### Modular Crimping Tool 6 In 1 - UC-864

A rugged modular crimping and stripping tool for voice and data applications. The tool has 2 crimping slots; one slot used for 8 position modular plugs and the other slot is used for both 6 and 4 position modular plugs. The tool also has a round cable jacket stripper as well as a flat cable stripper and cutter. Tool works with the following modular plugs: RJ11, RJ12, RJ22 and RJ45.

Replacement Blade: UC-866



#### Regular and Feed-Thru Connector Crimper Tool - UC-4568

Durable all-steel construction crimp tool with built-in cutter and stripper.

#### eatures:

- Crimp and trim off excess conductors with a simple squeeze of the tool
- Cleanly shears excess conductors leaving a smooth flat finish
- Ratcheted, ultra-stable platform for consistent terminations with low hand force
- Tool includes built in jacket stripper for round cables as well as flat cables plus a flat cable cutter
- Crimping dies are precision ground. Crimps 2,4,6 and 8 position RJ11 and RJ45 regular and feedthrough type modular connectors
- Heavy duty cutting blade good for 3,000 cuts
- Ergonomic handles for greater comfort





#### **Professional CATV Communications Tool Kit - TK-822**

All these tools are provided in a 25 Pocket Tool Roll Up Pouch (**H-125**) with extra pockets for extra tools, connectors and many other items, including an extra storage area at the end of the pouch.

#### Kit includes:

JONARD P/N	DESCRIPTION
JIC-750	3/4" COAX Cable Cutter
JIC-2288	Plier, Diagonal, Cutter, 8"
JIC-22148	Combo Crimper, Long Nose Pliers
JIC-50210	Pump Plier 10"
M-216CS22	Can Wrench, Ergo, W/ Wire Stripper
PT-300	Pocket Continuity Tester & Toner
SD-61	Screwdriver Multi-Bit 6 In 1
SST-716	Security Shield Tool 7/16"
SST-916	Security Shield Tool 9/16"
SK-51632	Security Key Insert
TT-7V	Terminator Tool With Prongs
TTS-716	Trap And Security Combo Tool
TWAF-71630	Torque Wrench, Full Head 7/16", 30 in/lb
UST-125	COAX Stripping Tool For RG59/6 & 7/11 With Cable Stop
VT-1000	Voltage Detector
WS-5	Adjustable Wire Stripper & Cutter









#### **Coax Tool Kits**

A CATV technician's service kit designed for repair and maintenance of CATV cable networks.

JONARD P/N	DESCRIPTION	
TK-78 Coax Tool Kit with 360 Degree Compression Tool		
TK-78E 360 Degree Compression Tool for RG59/6		
TK-82	Coax Tool Kit Long Connectors	
TK-83	Coax Tool Kit Short Connectors	
TK-85	Coax Tool Kit Universal	
TK-87	Coax Tool Kit Dual Connectors	
TK-89	Mini Coax Tool Kit	

#### **Kits Contains:**

JONARD P/N	DESCRIPTION	TK-78	TK-78E	TK-82	TK-83	TK-85	TK-87	TK-89
CT-200	Universal Compression Tool					X		X
CTF-180	360 Degree Compression Tool for RG59/6	Х	Х					
CTF-200	Compression Tool Fixed - Long			Х				
CTF-230	Dual Compression Tool						X	
CTF-300	Compression Tool Fixed - Short				X		X	
FL-2000 LED Flashlight with Zoom Lens		Х	X	X	X	X	X	X
H-85	Molded 8 Tool Pouch	Х	X	X	X	X	X	X
JIC-2288	Plier, Diagonal, Cutter, 8"	Х	X	Х	X	X	X	X
PT-300	Pocket Continuity Tester & Toner	Х	X	X	X	X	X	X
SD-61	Screwdriver Multi-Bit 6 In 1	Х	X	Х	X	X	X	X
TWAF-1130	Torque Wrench, Full Head 11mm, 30 in./lb.		X					
TWAF-71630 Torque Wrench, Full Head 7/16", 30 in./lb.		Х		Х	Х	Х	Х	Х
UST-125 Cable Stripper RG59/6 & RG7/11 with Cable Stop		X	Х	Х	Х	Х	Х	
UST-185	Mini Coax Cable Stripper							Х



#### **Hardline Strip & Core Tools**

The Jonard all-in-one coring tools provide a complete coring solution for multiple types and sizes of hardline cables. These tools include a jacket stripper at the front of the tool, a coring tool with an adjustable center conductor beveler and a stop to insure consistent coring lengths with a comfortable ratcheting handle. The jacket stripper is removable so you can use it as a standalone jacket stripper or just use the coring portion. Remove the ratcheting handle and you can connect the coring tool to a drill for faster coring. The tool is rugged with an all-aluminum housing and rugged T shaped ratcheting handle. Blades are easily replaced as is the coring bit and beveler. Tools are designed to work on Commscope P3, QR and Times Fiber T10 cables.

In-One	SPECIFICATIONS	HSC-50	HSC-75	HSC-625	HSC-540QR	HSC-860QR
	DESCRIPTION	Hardline Strip & Core Tool 1/2"	Hardline Strip & Core Tool 3/4"	Hardline Strip & Core Tool 5/8"	Hardline Strip & Core Tool Kit 540QR	Hardline Strip & Core Tool Kit 860QR
	SIZE OF CABLE	1/2" (12.7mm)	3/4" (19.05mm)	5/8" (15.86mm)	QR540 (13.72mm)	QR860 (21.84mm)
4	REPLACEMENT PARTS	HS-RB, HC-RB, HCB-50	HS-RB, HC-RB, HCB-75	HS-RB, HC-RB, HCB-625	HS-RBQR, HC-RBQR, HCB-540QR	HS-RBQR, HC-RBQR, HCB-860QR

ers	SPECIFICATIONS	HS-50	HS-75	HS-625
Stripp	DESCRIPTION	Hardline jacket stripper 1/2"	Hardline jacket stripper 3/4"	Hardline jacket stripper 5/8"
cket	SIZE OF CABLE	1/2" (12.7mm)	3/4" (19.05mm)	5/8" (15.86mm)
	REPLACEMENT PARTS	HS-RB	HS-RB	HS-RB

	SPECIFICATIONS	HC-50	HC-75	HC-625
ing	DESCRIPTION SIZE OF CABLE	Hardline coring tool 1/2"	Hardline coring tool 3/4"	Hardline coring tool 5/8"
Col	SIZE OF CABLE	1/2" (12.7mm)	3/4" (19.05mm)	5/8" (15.86mm)
	REPLACEMENT PARTS	HC-RB, HCB-50	HC-RB, HCB-75	HC-RB, HCB-625



#### Coax Center Conductor Cleaner - CC-120

The CC-120 Coax Center Conductor Cleaner is designed to clean away excess dielectric from the center conductor of distribution or trunk cables without nicking or scratching the center conductors surface.

The CC-120 comes with a set of Flat blades installed and a pair of saw tooth blades to provide flexibility. Replacement set of 4 blades available Part number: **CC-4** 



### Torque Wrench, Swivel Head, 40 in/lb - TWSW-40

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



#### 3/8" Socket For TWSW-40 - Pkg 10 - TWS-38/10

3/8" Socket For TWSW-40 Torque Wrench - Pkg 10







#### **Torque Wrenches**

The full head Torque Wrenches behave like traditional open end wrenches. Designed for "F" Connectors, these wrenches help prevent over tightening. An audible click tells you the F Connector has been torqued to the proper torque requirement. These wrenches all have angle heads, sized for 1/2", 7/16", 9/16" applications, and are designed with an ergonomic cushioned handle for user comfort and protection. These wrenches work in tightening mode only. Note: Speed Head wrenches are designed to act like a ratcheting wrench, skipping over corners of nuts/bolts (allowing for continuous turning).

TORQUE	WRENCH SIZE	HEAD TYPE	JONARD P/N
	7/16" (11.11mm)	Full	TWAF-71620
20 inch lho /2 26 NIM\	7/16" (11.11mm)	Speed	TWAS-71620
20-inch-lbs (2.26 NM)	1/2" (12.7mm)	Full	TWAF-1220
	9/16" (14.29mm)	Full	TWAF-91620
25-inch-lbs (2.82 NM)	7/16" (11.11mm)	Full	TWAF-71625
	11mm	Full	TWAF-1130
20 inch lho (2.20 NM)	7/16" (11.11mm)	Full	TWAF-71630
30 inch-lbs (3.39 NM)	7/16" (11.11mm)	Speed	TWAS-71630
	9/16" (14.29mm)	Full	TWAF-91630
40 inch lho (4.52 NM)	7/16" (11.11mm)	Full	TWAF-71640
40 inch-lbs (4.52 NM)	9/16" (14.29mm)	Full	TWAF-91640



#### **Torque Wrenches with Attached Security Shield Tool**

The security shield tool is permanently attached, 4 3/4" (120mm), and pivots in 90-degree increments.

These tools are ideal for hard to reach shielded F Connector fittings where a pre-set torque is required.

The **TWAFST-71622** is set at 22 in./lb (2.49 NM) The **TWAFST-71630** is set at 30 in./lb (3.39 NM)

SPECIFICATIONS	TWAFST-71622	TWAFST-71630	
DESCRIPTION	Torque Wrench w/ SST 7/16", 22 in/lb	Torque Wrench w/ SST 7/16", 30 in/lb	
TORQUE	22 in-lbs (2.49 NM)	30 inch-lbs (3.39 NM)	





#### **Speed Wrenches**

Our **PATENTED** speed wrenches are designed to get your job done more efficiently. This line of speed wrenches is made to work on splitters, F Connectors, and all 7/16" connections. These wrenches are made of chrome vanadium steel, chrome plated, and polished to a high gloss finish.

Speed heads make tightening and loosening quick and easy while the circular hole in the tool allows you to add this to your carabiner and/or tool belt.

SPECIFICATIONS	ASW-12	ASW-716	ASW-916	ASW-R12	ASW-R716	ASW-7916	ASWS-716	ASWS-R716
DESCRIPTION	Angled Head Speed Wrench 1/2"	Angled Head Speed Wrench 7/16"	Angled Head Speed Wrench 9/16"	Speed Ratchet Wrench 1/2"	Speed Ratchet Wrench 7/16"	Speed Wrench Double End 7/16 & 9/16	Angled Speed Wrench Stub- by 7/16"	Ratcheting Speed Wrench Stubby 7/16"
WRENCH TYPE	Speed	Speed	Speed	Combination, Speed, Ratch- eting	Combination, Speed, Ratch- eting	Speed	Speed	Combination, Speed, Ratch- eting



#### **Combination Wrenches**

These combination wrenches measure 7/16" at both ends and have an angled offset (15°) to ease access in confined areas. Chrome plated, polished to a high gloss finish and made of chrome vanadium steel. The ratcheting end of the **CWRR-716** allows you to toggle from tightening to loosening.

CWS-716 - Combination Wrench Stubby 7/16"

CW-716 - Combination Wrench 7/16"

CWRR-716 - Combo Wrench, Ratcheting, Reversible



#### Open End Wrench 3/8" & 7/16" - OW-38716

Wrench measures 3/8" on one end and 7/16" at opposite end. Both ends are designed with an angled offset (15°) for work in confined areas. Polished to a high gloss finish and made of chrome vanadium steel. Tool is 6.25" (158.8mm) long. The wrench can be used on 7/16 "F" fittings and can be used to tighten the nuts and bolts on traps and taps. Can also be used on CATV hardware.







#### **Terminator Tools**

Jonard creates tools for all kinds of locking terminators. Termination is essential when running cable to ensure a quality service and prevent theft. Our tools provide ergonomic handles for greater leverage and superior grip.

Jonard termination tools are made of stainless steel and are available in several lengths and termination styles.





SPECIFICATIONS	TT-4	TT-7	TT-7V	TT-7PT	
DESCRIPTION	Terminator Tool 4"	Terminator Tool 7"	Terminator Tool With Prongs	Terminator Tool For PPC & T&B	
TERMINATION STYLE	Spring Ears	Spring Ears	Spring Ears, 2 Prong	Spring Ears	
USED ON	Gilbert Morlock, PCT LT, PPC PST, Signal Vision LT, Signal Vision SV-LTA	Gilbert Morlock, PCT LT, PPC PST, Signal Vision LT, Signal Vision SV-LTA	Gilbert Morlock, PCT LT, PPC PST, Signal Vision LT, Signal Vision SV-LTA, Viewsonics 2 Prong, Viewsonics 3 Prong	Gilbert Morlock, PCT LT, PPC PST, Signal Vision LT, Signal Vision SV-LTA, PPC 502, T&B CLF, TRL	



#### **Cam Style Locking Terminator Tools**

A Cam Style locking terminator tool for Corning Gilbert style terminators. Works on Gilbert NS-5762-3 (plus -9, -11, -13 & -15 terminators). High quality aluminum construction, blue color.

TTCG-6270-5 Locking Terminator Tool 5"
TTCG-6270-9 Locking Terminator Tool 9"





#### P Key For Self Lock Pedestal Lock - TTK-225

This P Key is designed to work with Channell Locks and other similar pedestal locks. This P key fits many popular pedestals and opens most heavy duty spring lock cabinets. Also referred to as a skeleton key, made of brass and fits easily on a key chain. For authorized personnel only.



#### **Trap And Security Combo Tool - TTS-716**

Two tools in one - a trap wrench with a security wrench. The perfect tool for all standard traps and equally adaptable for all sizes of metal security shields (The security wrench fits all metal 7/16" hex fittings). Made of lightweight aluminum with a security socket made of hardened steel for longer life.

2 Prong termination style.



#### **Low Torque Termination Tool - TT-812**

Tightens F-Connectors Right The First Time and Every Time. This indoor torque tool is great for connecting coax connectors to consumer electronic devices with the proper amount of torque 8-12 in/lbs, 1 3/8" long. **PATENTED**.



#### Terminator Tool For PPLT-75 & PPLT-LR - TT-PPLTT4

This terminator tool is designed for use with PPLT Series locking terminators, specifically the PPLT-75 and PPLT-LR. Specially designed to overcome problems of theft and tool breakage. Loop for clipping to belt. Plunger diameter .218". Aluminum body.



#### **Barrel Lock Plunger Key - TTB-6**

The TTB-6 Barrel Lock Plunger Key is compatible with barrel locks with inside diameters ranging from 0.176" to 0.196" made by Channell, Highfield and Innertite. Works on Channell LK03029817, Highfield 93180775-S and used in CATV Pedestal Applications.

This key may also fit other locks used in the electric, gas and water utilities. Know your lock size before purchasing.

The key is made of high carbon alloy steel, designed for heavy duty use and engineered for superior tamper resistance. Smooth plunger and heavy duty spring for strength and durability, and serialized for added security.

# MADE FOR LIFE®





SSK-876

#### Star Keys & Star Key Slam Lock Sets

The SSK-716 can wrench is specifically designed to work with all of our SSK Series Keys. The SSK-716 can wrench has two 7/16" hex sockets 1 ½" deep on either end and can be used to open enclosures that require a 7/16" socket.

#### Star Key Kits:

JONARD P/N	SSK-716 CAN WRENCH	SSK-70 SLAM LOCK STAR KEY	SSK-75 SLAM LOCK STAR KEY	SSK-80 SLAM LOCK STAR KEY	SSK-85 SLAM LOCK STAR KEY	SSK-90 P-KEY
SSK-700	X	X				
SSK-750	X		X			
SSK-800	X			X		
SSK-850	X				X	
SSK-876	X		X		X	
SSK-900	X					X
SSK-950	X				X	X

The SSK-70 star key has a LK flower pattern on one side and a LB 8 point star pattern on the other. The SSK-75 star key has a LG flower pattern on one side and a LC 7 point star pattern on the other. The SSK-80 star key has a LG flower pattern on one side and a LB 8 point star pattern on the other. The SSK-85 Star Key has a LB 8 point star pattern on one end and a LS 5 point star pattern on the other. Keys are two-sided, just switch from one side to the other for each pattern (SSK-90 is single sided P Key).

For authorized personnel only.

#### Star Keys:

DESCRIPTION	SSK-70 SLAM LOCK STAR KEY	SSK-75 SLAM LOCK STAR KEY	SSK-80 SLAM LOCK STAR KEY	SSK-85 SLAM LOCK STAR KEY	SSK-90 P-KEY
KEY PATTERN	LB 8 point star LK flower	LC 7 point star LG flower	LB 8 point star LG flower	LB 8 point star LS 5 point star	P Key



#### **Pocket Continuity Tester & Toner - PT-300**

Locate cables in an MDU, home, business or anyplace where you need to identify a cable. This drop cable continuity tester can detect troublesome short circuits or other self-grounding devices and is accurate up to 5,000 feet (1,500 m). The right angle connector helps work in confined areas and is voltage protected up to 52 volts. An LED light indicates splitters and a loud tone identifies line carrier signals, but when not in use the tool can be turned off to preserve the AAA batteries inside and avoid corrosion.

Replacement Pocket Toner Speaker Part No. PT-350



#### Voltage Detector - VT-1000

The VT-1000 is a Non Contact voltage detector and is useful in identifying the presence of AC voltage at outlets, switches, circuit breakers, fuses, wires and cables. Compact and lightweight with built in pocket clip. CAT IV rating provides expanded operation and protection.

Voltage detection between 90 to 1000 VAC.



#### **Cable Mappers & Toners**

Find and identify multiple coax cables in main cable boxes. For use on Coax Cables for CATV, Satellite Installations, Audio Video Equipment, CCTV and Security & Alarm Installations. The CM-8 Coax Cable Mapper & Toner is designed to quickly find and identify multiple cables and easily map runs to and from a central cable bundle.



CM-8 Kit contains:

Cable Mapper & Toner, 8 Cable Identifiers (numbered & color coded), 2 Alligator Clip Sets, Rugged Nylon Case & Instruction sheet

#### CM-17 Kit contains:

Contents of the CM-8 kit & 9 RJ45 connectors



#### Modular Cable Tester - MCT-468

The MCT-468 is designed to check and troubleshoot the pin connections of RJ45, RJ12, and RJ11 connectorized cables. It is ideal for testing the continuity of a cable with RJ11 or RJ45 connectors prior to installation.

#### Features:

- Can test RJ45, RJ12, and RJ11 terminated cables
- Tests for opens, shorts and miswiring
- Full LED indication lights on both main and remote unit.
- Auto tests when switched on
- Move switch to S to slowdown auto test feature
- Small size and lightweight
- Carry case included
- Uses a 9V battery (included)





#### Multi-Function Cable Tester Tone & Probe Kit - TETP-900

Ideal for VDV (Voice Data Video) professionals in telecommunications, this multifunction cable tester works on RJ45 LAN cable, BNC & F coaxial cable, 6P2C/4P2C jacks and provides tone generation.

#### Kit includes:

- TET-700 Multi-Function Cable Tester & Toner
- TEP-200 Tone Tracing Probe
- **TET-6** Accessory Kit for TET-700
- Two 9V batteries
- Zippered case



#### Copper COAX & Network Cable Cutter - JIC-625

The JIC-625 is designed to cut all types of soft copper coax and network cables. Will cut solid, stranded and flexible cables to 6 AWG. Not for use on steel, aluminum alloys or hard drawn copper cables.

Made from heat treated chrome vanadium steel for longer life. The blades are precision ground for easier cutting.

Jaw Thickness: .4" (10.2mm), Overall Length: 6-1/2" (165mm)



#### **COAX Cable Cutter Steel - JIC-725**

A plier designed specifically for coax cables with a steel center conductor. This plier has been tested (over 25,000 cuts) on cables with steel centers, and specifically CCSC (copper clad steel center) conductor cables without degradation to the cutting blades. Made from chrome vanadium steel. Plier will also cut many other cable types.

Jaw Thickness: .1/4" (6.35mm), Overall Length: 6-1/4" (158.75mm)



#### 3/4" COAX Cable Cutter - JIC-750

Also known as a Banana Cutter, this cutter is designed to cut up to 3/4" hard line coaxial cable as well as larger fiber cables. Made from chrome vanadium steel, pliers are heat treated for added strength and longer lasting cutting edges. 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.

Cable Diameter: .3/4" (19.05mm), Overall Length: 8-3/4" (222mm)



#### 1" COAX Cable Cutter - JIC-755

Designed to cut up to 1" coaxial cable. This tool works like a tube cutter to eliminate cable deformation during cable preparation.

Tool provides precision one-handed cutting action. Made from Chrome Vanadium steel with hardened cutting blades. Not designed for ACSR or other steel cables.

Cable Diameter: .1" (25.4mm), Overall Length: 8-1/4" (165mm)



#### **Connector Tools**

The Jonard connector tools are designed to provide easy access to cable connectors in high-density locations. The sockets provide a reach of either 12 or 18 inches and have a comfortable grip to avoid slipping.

The RF-18 and RF-12 options include an insertion device on the back of the handle to aid in making connections and work with F Connectors and BNC Connectors. The RBNC-12 connector tool works on BNC connector types.

RBNC-12 BNC Connector Tool 12" Total Length

RF-12 F Connector Tool 12" Total Length

RF-18 F Connector Tool 18" Total Length



#### **Security Shield Tools**

SST-716 Security Shield Tool 7/16" & SST-716AT Security Shield Tool Water Tight are 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. 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.

**SST-916 Security Shield Tool 9/16"** is used with 9/16" hex F Connectors. Nickel plated finish. Loop attachment to allow for connecting to your key ring or carabiner for easy access. Shaft length 1.625".



## **Outer Conductor Flaring Tool - FT-2075**

Designed to flare the outer conductor on Eupen7168, A7168 and CommScope CA519 75 ohm corrugated copper cable. Handle is sized to make gripping and flaring easier and more comfortable, and flaring feature has a black oxide finish. 4 5/8" long.



## Flaring & Insertion Tool - FT-6

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.





## Telescoping Pole (18 Feet) - RDT-18K

The RDT-18K is the perfect tool to install or retrieve a cable in drop ceilings or other hard to reach places. This Telescopic Pole is self-supporting, so it is perfectly suited for spanning ceilings and voids to route or retrieve cable. Simply grab the wire with our hook and expand or contract the pole as needed.



## Accessory Replacement Kit For RDT-18K - RDT-3RH

Three piece accessory kit for RDT-18K.

#### Kit includes:

- RDC-35 C Hook
- RDK-5 K Hook
- Adapter for use in tight locations



## **Fish Tapes**

Jonard Tools **FTS-50** and **FTS-240 Fish Tape** use a 1/8" wide x 1/16" thick steel tape with permanent laser-etched measurement markings (in English and metric units) every foot (0.3m) to assist in the process of pulling wire or cables. Ideal for long runs and where heavy duty wire pulling is required through conduit, walls, under carpets, and many other places.

The case and handle use rugged plastic for superior impact resistance, has a comfortable ergonomic grip and is designed for superior payout and rewind. The **FTS-50 (50' length)** has 3 viewing ports and the **FTS-240 (240' length)** has 2 viewing ports.

SPECIFICATIONS	FTS-50	FTS-240
DESCRIPTION	Fish Tape 50 Feet	Fish Tape, 240 Feet
DIMENSIONS	1/8" (3.175mm) wide x 1/16" (1.59mm) thick x 50 feet (15.24 meters)	1/8" (3.175mm) wide x 1/16" (1.59mm) thick x 240 feet (73.152 meters)
WEIGHT	2.5 lbs (1.13 kg)	6.8 lbs (3.08 kg)

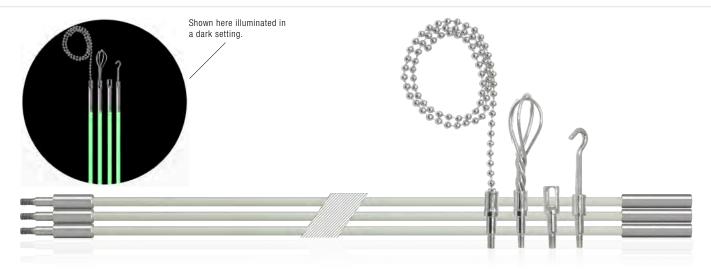


#### Kit includes:

- 24" Flexible Magnetic Retriever
- 10' of Ball Chain w/ 34" Diameter Stop Ring and Eye Loop
- MRS-RH20 Expandable Retriever Hook
- Storage Pouch

#### Easy to use:

- Drill a hole in the wall or attic plate less than ¾"
- Drop ball chain in the hole, the ¾" ring stop will keep the chain from falling through
- Make a roughly 1/23" hole at the wall
- Use blue magnetic retriever to find the chain and use the MRS-RH20 hook to help pull chain through hole



## Glow Rod Kits 3/16" Diameter

These glow rods (made of luminescent fiberglass) are designed to provide splinter free use over the life of the product while also providing excellent flexibility. The luminescence of the rods is brighter and lasts longer than the competition. The metal ends of the rods are secured in place and provide superior strength. The threads on the metal ends are standard 8-32 so the rods and accessories can be used with many other manufacturers glow rods.

## RDG-15 (pictured above)

15' Glow Rod Kit 3/16" Diameter extends a full 15 feet.

#### Kit includes:

- Three 5 foot long Rods, 3/16" diameter, for greater flexibility
- Eyelet
- Ball Chain attachment
- Wisk
- Hook
- Kit packaged in clear reusable plastic tube

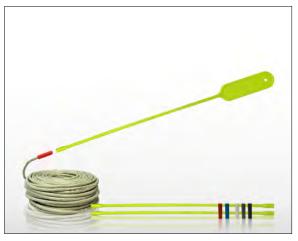
## RDG-30

30' Glow Rod Kit 3/16" Diameter extends a full 30 feet.

Kit includes the same as above with three additional 5 foot long Rods (for a total of six).

Four Piece Replacement Kit Part No. **RDG-RP4** (contains Eyelet, Ball Chain Attachment, Wisk, and Hook)





## Magnamole Magnetic Cable Guide Kit - MM-800

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.

To use the MM-800 follow these four simple steps:

- 1. Drill a hole and remove the dust and debris.
- 2. Next simply place the MM-800 specially designed magnetic rod through the hole you wish to snake the wire.
- 3. Screw on the appropriate magnetic cap to the cable or wire end and align the magnets.
- 4. Push the cable into the hole and through the other side of the wall. That's it!

## PATENTED.

JONARD P/N	DESCRIPTION	CAP COLOR & CABLE DIAMETER	CABLE USED WITH	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



## Cable Caddy - CC-2721

The Jonard Tools Cable Caddy is constructed of sturdy 0.060" thick tubular steel 7/8" diameter.

No setup is required, just place it on the floor, remove the cotter pin and slide the bar out of the way. Position wire spool and slide bar back in place. Reinsert cotter pin

Includes anti-skid rubber feet to prevent the caddy from sliding while also protecting floors. Will hold Cable spools up to 20" in diameter and 17" in height.

SPECIFICATIONS	
OVERALL WIDTH	21" (533.4mm)
OVERALL HEIGHT	27" (685.8mm)
SPOOL ROD DIAMETER	5/8" (15.88mm)
MAXIMUM SPOOL DIAMETER	20" (508mm)
WEIGHT	8 lbs.



## Magnetic Cable Retrieval System - MP-700

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. Pulls cables through insulation in seconds. Reduces cable fishing time by 70%. Eliminates wall damage from misplaced holes in the wall. Makes wire fishing a definable process. Kit includes: Retriever Unit, ¾" Drop Magnet with pull line Jack Chain, Convenient Carrying Case. **PATENTED.** 

JONARD P/N	DESCRIPTION
MP-700	Magnetic Cable Retrieval System
MP-100	1/2" Drop Magnet Without Leader
MP-210	3/4" Drop Magnet W/ Leader
MP-220	3/4" Drop Magnet W/ Leader



#### **Reference Point Locator - MP-800**

Drill or cut through walls with complete location certainty. A two component kit (transmitter & locator) allows you to pinpoint the exact location to drill or cut through a wall. Place the transmitter on one side of the wall and from the opposite side watch as the receiver draws you to the exact location of the transmitter. Mark the spot and drill. Accurate to within ½" and up to 40 inches away. Kit includes: Transmitter, Receiver, 2 9V Batteries, Tack Adhesive, Carrying Case. **PATENTED.** 



## **Electrical Wall Outlet Cutter - EBC-400**

The EBC-400 Cuts drywall in seconds making installation of plastic, metal or low voltage existing construction electrical boxes fast and easy. Can be used with most brands of oscillating multi-tool power tools.

Made from stamped steel, tool cuts a hole 2-3/8" x 3 3/4".



## **Electrical Knockout Kit - WBK-100**

Remove panel knockouts from electrical panels embedded in drywall without cutting holes in the drywall. For use on electrical, security, alarm and datacom panels. WARNING: DO NOT USE KIT NEAR LIVE CIRCUITS. INTENDED FOR USE BY LICENSED PROFESSIONALS.

PATENT PENDING. Lifetime Warranty.





## Straight Metal Needle - JIC-284

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.

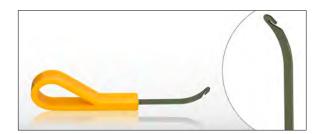
Needle is .016" thick and 12" long.



#### Metal Cable Sewing Needle - JIC-287

This Cable Lacing Needle (A/K/A Cable Sewing Needle) has a durable red anodized aluminum handle with curved notched sewing needle. Designed to harness or lace multiple lead bundles.

Replacement Needles: RB-287/6 (Pkg of 6)



## **Insulated Cable Sewing Needle - JIC-3209**

Xylan insulated cable lacing needle is designed to harness or lace multiple lead bundles. Yellow lightweight molded grip handle.

The tip is made of Spring steel and coated with a xylan insulative coating.

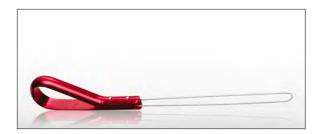
5 1/2" long.



## **Insulated Wire Loop Puller - JIC-2257**

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.

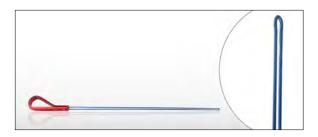
8" long.



#### Metal Wire Loop Puller - JIC-2257M

This Wire Loop Puller has a durable red anodized aluminum handle. Tool is designed to facilitate pulling wire through terminal blocks, rings on main frame or fanning strip holes. Loop is 5 1/2" long. Overall length 8 1/2".

Replacement Loops: RB-2257/6 (Pkg of 6)



## Metal Wire Loop Puller 12"Long - JIC-2257M-12

Durable red anodized aluminum handle facilitates pulling wire through terminal blocks, rings on main frame or fanning strip holes. Loop is 12" long. Overall length 15". Loop is crimped for a narrower profile and easier use in tight terminal blocks.

The loop is **coated with blue Xylan** to prevent shorts and electrical shocks.



## **PLIERS**

All Jonard pliers are heat treated and made of chrome vanadium or high carbon alloy steel for increased strength and precision cutting. These ultra durable pliers have machine cut edges to provide exceptionally smooth action and are





## Plier, Diagonal, Cutter, 8" - JIC-2288

Crafted for heavy-duty wire cutting and made from chrome vanadium steel with improved heat treatment to the cutting edges for increased strength. Use for the most demanding applications, precision machined cutting edges provide exceptionally smooth action.

Jaw Length: 7/8" (22.23mm), Overall Length: 8-1/4" (209mm)



## **High Leverage Diagonal Cutter Curved - JIC-2488**

Crafted with a 13° angled head for heavy-duty wire cutting in confined spaces and made from chrome vanadium steel with improved heat treatment to the cutting edges for increased strength. Use for the most demanding applications, precision machined cutting edges provide exceptionally smooth action.

Jaw Length: 13/16" (20.64mm), Overall Length: 8" (203mm)



## **Telecom Diagonal Cutter Pliers - JIC-7858**

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 dipped. Made of chrome vanadium steel.

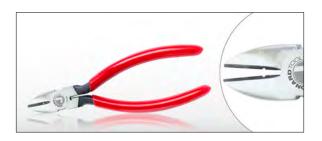
Jaw Length: 7/8" (22.23mm), Overall Length: 6-1/4" (158mm)



## **Diagonal Cutter Pliers, Tapered Nose - JIC-600**

Tapered nose diagonal cutting pliers with standard bevel knives. Made of Chrome Vanadium steel and precision machined with cutting knives that are induction hardened, providing outstanding durability and extra long life. Includes crusher for multi-purpose wire work. The handles are red plastic and 6 1/4" long. Made to exceed ASME/ANSI standards.

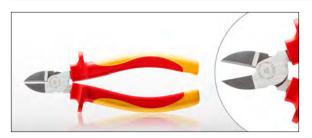
Jaw Length: 7/8" (22.23mm), Overall Length: 6-1/4" (158mm)



## **Diagonal Skinning Stripping Pliers - DIAGB6**

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.

Jaw Length: 7/8" (22.23mm), Overall Length: 6-1/2" (158mm)



## Diagonal Plier 6 1/4" Insulated - INP-3062

Made from 60 CRV (Chrome Vanadium Steel) for durability and long life. The high leverage design provides superior cutting ability, and the rivets are made of 40 CRV (chrome vanadium steel) for toughness and to minimize side play. Guards are integrated into the dual color TPE plastic handle design to prevent contact with conductive parts while the soft ergonomic grips meet and exceed applicable IEC (IEC 60900) and VDE standards for high voltage protection. Tested to 10,000 VAC and rated to 1,000 VAC live use.

Overall Length: 6-1/4" (158mm)



## **Diagonal Pliers Crushing Slitting - DIABVNOTCH**

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 pliers jaws for slitting textile insulation.

Jaw Length: 3/4" (19.05mm), Overall Length: 5-1/8" (130mm)



#### **Diagonal General Use Pliers - DIAGB5**

These are plain diagonal pliers for general use, including cutting soft copper conductors.

Jaw Length: 3/4" (19.05mm), Overall Length: 5-1/8" (130mm)



## Semi-Flush Cut Pliers - JIC-453

A close cutting pliers 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. Made from chrome vanadium steel.

Jaw Length: 5/8" (15.88mm), Overall Length: 4-1/2" (114mm)



## Flush Cut Plier - JIC-2755

Made of high carbon steel, this lightweight flush cutter can be used on wire up to 18 AWG while minimizing fly-off. Cantilevered spring automatically opens the plier, and the head fits easily in confined work areas.

Jaw Length: 1/2" (12.7mm), Overall Length: 5" (127mm)

# JONARDTOOLS\*



#### Lineman's Side Cut Pliers - JIC-683

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 dipped to approximately .007". Made of chrome vanadium steel.

Cutter Length: 13/16" (20.64mm), Overall Length: 9-1/2" (241mm)



#### Lineman's Plier W/ Fish Tape Puller & Crimper - JIC-685

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. 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 red plastic coated to approximately .007". Made of chrome vanadium steel.

Cutter Length: 3/4" (19.05mm), Overall Length: 9-1/2" (241mm)



#### Lineman's Combo Plier 7 1/4" Insulated - INP-1072

These pliers are made from 60 CRV (chrome vanadium steel). The cutting edges are strengthened using high frequency induction hardening for superior strength. Guards are integrated into the dual color TPE plastic handle design to prevent contact with conductive parts while the soft ergonomic grips meet and exceed applicable standards for high voltage protection.

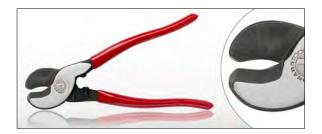
Cutter Length: 3/4" (19.05mm), Overall Length: 7-1/4" (184mm)



## 9" Curved Jaw Cable Cutter - JIC-63020

High leverage design for superior cutting ability. The curved jaws provide superior holding for a cleaner and more concentric cut. Tool is for cutting aluminum and soft copper and not for use on steel or ACSR type cables. The shear type jaws cuts up to 100-pair cables (24 AWG). Lock has a unique feature where lock is released by squeezing handles together. Made of chrome vanadium steel.

Jaw Length: 1" (25.4mm), Overall Length: 9" (228mm)



## High Leverage Cable Cutter - JIC-63050

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 (24 AWG). Made of chrome vanadium steel.

Jaw Length: 1-3/8" (34.93mm), Overall Length: 9-1/4" (234mm)



#### Connector-Crimper Pliers - JIC-891

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 handles.

Jaw Length: 1" (25.4mm), Overall Length: 5-3/16" (131mm)



## Long Nose Switchboard Plier - JIC-203

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. Two stripping holes for 19 & 22 AWG wire. Cushion gripped yellow plastic handles.

Overall Length: 6-7/8" (174mm)



#### Telecom Long Nose Pliers - JIC-21257

This Long nose pliers has side cutting blades, a crushing slot, one .030" stripping hole, and a thin knurled nose to facilitate handling of the wire at the central office terminals. The comfortable handles are yellow plastic dipped. Made of chrome vanadium steel.

Jaw Length: 1-7/8" (47.63mm), Overall Length: 6-7/8" (174mm)



## Combo Crimper, Long Nose Pliers - JIC-22148

**Five tools in one**. Combines the functionality of a long nose plier with a crimper, stripper, cutter, and crusher. Crimper works for UR/UY/UG, AMP tel splice connectors, 709 series connectors, and crimping "B" type connectors. Stripping hole is .030". See website for more details.

Jaw Length: 1-7/8" (47.63mm), Overall Length: 6-7/8" (174mm)



## **Curved Long Nose Plier - JIC-3026**

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

Jaw Length: 2" (50.80mm), Overall Length: 6-7/8" (174mm)



#### Long Nose and Side Cutting Pliers - JIC-842

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. Made of chrome vanadium steel.

Jaw Length: 1-7/8" (47.63mm), Overall Length: 6-3/4" (171mm)



## Long Nose Plier 6 1/2" Insulated - INP-2065

These pliers are made from 60 CRV (chrome vanadium steel) for durability and long life. The cutting edges are strengthened using high frequency induction hardening for superior strength. The high leverage design provides superior cutting ability, and the rivets are made of 40 CRV (chrome vanadium steel) for toughness and to minimize side play. Guards are integrated into the dual color TPE plastic handle design to prevent contact with conductive parts while the soft ergonomic grips meet and exceed applicable IEC (IEC 60900) and VDE standards for high voltage protection. Tested to 10,000 VAC and rated to 1,000 VAC live use.

Overall Length: 6-1/2" (165mm)





## Long Nose General Use Pliers - BLONGNOSE

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

Jaw Length: 1-1/2" 38.10mm), Overall Length: 6-7/8" (174mm)



#### Long Nose Gripping Pressing Pliers - ELONGNOSE

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.

Jaw Length: 1-7/8" (47.63mm), Overall Length: 6-7/8" (174mm)



## **Short Nose B Type Plier - BSHORTNOSE**

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.

Jaw Length: 1-1/2" 38.10mm), Overall Length: 6-1/2" (165mm)



#### **Heat Coil Pliers - PLS-5**

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

Jaw Length: 1-13/16" (46.04mm), Overall Length: 5" (127mm)



#### L3 Type Cut Crush Strip Pliers - KS21257L3

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

Jaw Length: 1-1/2" (38.10mm), Overall Length: 6-1/2" (165mm)



## **Tabbing Shear - TS-850**

Tabbing or Cable Sheath Shear for making longitudinal cuts in the cable sheath and the metallic shield for placement of inner sheath bond clamps. Made of chrome vanadium steel. Plastic formed ergonomic handles for safety and comfort and a latch to keep the handles closed when not in use. The volute spring allows for easy opening and closing.

Overall Length: 8-1/2" (216mm)



## **Curved Needle Nose Plier - JIC-3385**

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.

Bend Angle: 60°, Overall Length: 5-1/2" (139mm)



## Slip Joint Side Cut Pliers - BCOMB

For heavy-duty use. Black phosphate finish, machined gripping teeth and 3/8" hardened wire cutter. Red plastic dipped handle.

Number of Positions: 2, Overall Length: 7-5/8" (194mm)



## Wire Rope and Cable Cutter - WRC-14

Made from chrome vanadium steel. Jaws are heat treated and precision ground for greater performance. Tool design provides greater leverage for easier cutting.

Jaw Length: 0.48" (12mm), Overall Length: 8" (203mm)

MaterialMax. Wire Rope SizeSoft Wire Rope1/4" (6mm)Hard Wire Rope3/16" (5mm)Spring Wire3/32" (2.4mm)Copper/Aluminum Cable3/16" (5mm)



## **Ratcheting Cable Cutter - RC-600**

Cuts up to 600 mcm stranded copper cable, 750 mcm stranded aluminum cable. Maximum capacity is 1 3/4" (45mm) diameter. Cleanly cut copper or aluminum & multi-conductor cable up to 600 mcm (750 mcm for aluminum). Unique design to hold and cut cable quickly, easily with minimum effort. Spring design to hold cutter in the open position when needed. Quick release for easy opening. Large ergonomic handle design. (Not designed for cutting ACSR or steel).

Maximum Capacity: 1-3/4" (45mm), Overall Length: 12" (305mm)



## **Pump Pliers**

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

Made from high quality tool steel, with a smooth positive interlock between halves.

SPECIFICATIONS	JIC-5026	JIC-50210	JIC-50212
DESCRIPTION	Pump Pliers 6", 4 Positions	Pump Plier 10", 6 Positions	Pump Plier 12", 7 Positions
MAX JAW OPENING	1" (25.4mm)	1-3/4" (44.45mm)	2-1/4" (57.15mm)
LENGTH	6" (152mm)	10" (254mm)	12" (305mm)

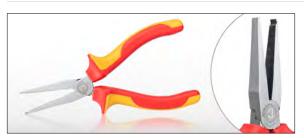
# JONARDTOOLS®



#### Fuse Puller - FP-600

Designed for installing and extracting fuses from line amplifiers and other cylindrical shaped components including heat coils. The thin nosed jaws allow for easy access to tight restricted areas. Works great on automotive mini fuses that are packed tight. Handle color is yellow plastic dipped.

Jaw Length: 1-13/16" (46.04mm), Overall Length: 5" (127mm)



#### Fuse Puller Insulated - FP-600INS

Designed for installing and extracting fuses from line amplifiers and other cylindrical shaped components including heat coils. The thin nosed jaws allow for easy access to tight restricted areas. Works great on automotive mini fuses that are packed tight. Fully insulated grips are manufactured to VDE standards.

Overall Length: 6-1/2" (165mm)



## Wire Stripper 6 1/2" Insulated - INP-4065

The INP-4065 Insulated Wire Stripper can be used on various types of wire, whether single conductor or stranded, from 8 AWG down to 30 AWG. 6 1/2" Long. Fully insulated grips are manufactured to VDE standards.

Overall Length: 6-1/2" (165mm)



## **Insulated Tool Kits**

Perfect for Tech Professionals and Electricians, these pliers and screwdrivers are tested to 10,000 VAC and rate to 1,000 VAC live use. They are VDE approved, made from 60 CRV (chrome vanadium steel) for strength and durability and insulated to IEC 60900 Standards. Lifetime mechanical warranty and one year insulation warranty.

#### TK-70INS

## 7 Piece Insulated Screwdriver Set

## Kit includes:

- INS-180 #1 X 3 Phillips Screwdriver
- INS-2100 #2 X 4 Phillips Screwdriver
- INS-3150 #3 X 6 Phillips Screwdriver
- INS-4100 5/32 X 4 Slotted Screwdriver
- INS-475 1/8 X 3 Slotted Screwdriver
- INS-6150 1/4 X 6 Slotted Screwdriver
- INS-8175 5/16 X 7 Slotted Screwdriver

## TK-110INS 11 Piece Insulated Tool Set

**Kit includes** (all tools included in TK-70INS with these additions):

- INP-1072 Lineman's Combo Plier 7 1/4"
- INP-2065 Long Nose Plier 6 1/2"
- INP-3062 Diagonal Plier 6 1/4"
- INP-4065 Wire Stripper 6 1/2"

Note: TK-70INS and TK-110INS include **TKC-70 7-Pocket Tool Case** and **TKC-110 11-Pocket Tool Case** respectively.



## Precision Screwdriver Phillips #00 x 60mm - SD-00/10

Precision screwdriver has a #00 Phillips tip and a 3mm diameter by 60mm long shaft. Shaft is made from SU11 steel. The handle is made from polypropylene and thermoplastic rubber for added comfort with a swivel at the end for ease of use. Overall tool length is 6". Tips are magnetic. Pack of 10.

Overall Length: 6" (152mm)



#### Precision Screwdriver Slotted 2mm x 60mm - SD-080/10

Precision screwdriver has a slotted tip 2mm wide and a 3mm diameter by 60mm long shaft. Shaft is made from SU11 steel. The handle is made from polypropylene and thermoplastic rubber for added comfort with a swivel at the end for ease of use. Overall tool length is 6". Tips are magnetic. Pack of 10.

Overall Length: 6" (152mm)



#### Fiber ONT Screwdriver - SD-63

Precision Jeweler's Screwdriver with concaved swivel knob to fit the finger and hexagonal shape to prevent rolling, knurled body for ease of use. This Jeweler's Screwdriver is commonly used to terminate the battery backup wires in the fiber ONT and is the perfect tool to terminate battery backup sensor wires at the battery backup unit. Solid blade made of high quality hardened tool steel.

Overall Length: 4" (101mm)



#### Screwdriver 24" Philips #3 - SD-243

This 24" long #3 Philips Head Screwdriver is designed for use when you need an extra long screwdriver to reach the diodes in back of the rectifier. Made of chrome vanadium steel with a matte finish and a custom ergonomic tri-color handle. Tough, and durable, this is the perfect screwdriver for those unique applications. Tips are magnetic.

Overall Length: 27" (685mm)



#### Screwdriver Multi-Bit 6 In 1 - SD-61

This screwdriver eliminates the need for multiple tools in your belt. This tool is configured to include: #1 & #2 Phillips Head. 9/32" & 3/16" slotted heads. Two nut drivers 5/16" & 1/4". This screwdriver is made of special alloy steel for exceptional strength and long life. Tips are magnetic.

Kit includes: **SD-RB1** Repl Bit Phillips #1 Slot 3/16", **SD-RB2** Repl Bit Phillips #2 Slot 9/32"

Overall Length: 7-1/2" (190mm)



#### 6-In-1 Robertson Screwdriver - SD-1223

This screwdriver eliminates the need for multiple tools in your belt. This tool is configured to include: #2 Phillips Head & 9/32" Slotted Head, S1 & S2 Robertson Heads, Two nut drivers 5/16" & 1/4", and is made of special alloy steel for exceptional strength and long life. Tips are magnetic.

Kit includes: **SD-RB1** Repl Bit Phillips #1 Slot 3/16", **SD-RB3** Repl Bit S1 & S2

Overall Length: 7-1/2" (190mm)



Jonard Slotted, Phillips and Robertson Screwdrivers are made of special alloy steel for exceptional strength, long life and corrosion resistant. Soft rubber handles offer comfort and greater torque. The end of the handle is marked to identify the tool's size, and the tips are magnetic. Meets and exceeds applicable ASME/ANSI specifications.



#### **Slotted Screwdrivers**

SPECIFICATIONS	SDC-3163	SDC-3166	SDC-144	SDC-3810	SDC-5166
SHAFT	3/16" X 3"	3/16" X 6"	1/4" X 4"	3/8" X 10"	5/16" X 6"
OVERALL LENGTH	6-3/4" (171mm)	9-3/4" (248mm)	8-11/32" (212mm)	14-3/8" (365mm)	10-3/8 (264mm)



## **Phillips Screwdrivers**

SPECIFICATIONS	SDP-1	SDP-2	SDP-3	SDP-28
SHAFT	#1 X 3"	#2 X 4"	#3 X 6"	#2 x 8"
OVERALL LENGTH	6-3/4" (171mm)	8-5/16" (211mm)	11" (279mm)	12" (305mm)



#### **Robertson Screwdrivers**

SPECIFICATIONS	SDR-24	SDR-34
SHAFT	#2 X 4"	#3 X 4"
OVERALL LENGTH	8-1/2" (216mm)	8-1/2" (216mm)



## Stubby Screwdriver Set - Phillips & Slotted - SDS-142

Stubby Screwdriver Set (SDSP-2 & SDSC-14). Jonard Stubby Slotted and Phillips Screwdrivers are made of special alloy steel for exceptional strength, long life and corrosion prevention. Soft rubber handles offer comfort and greater torque. The end of the handle is marked to identify the tool's size, and the tips are magnetic. Meets applicable ASME/ANSI specifications. Overall Length 3 1/2" (89mm) each.

#### Set includes:

**SDSP-2** Screwdriver Phillips #2 Stubby **SDSC-14** Screwdriver Slotted 1/4" Stubby



#### 8 Piece Screwdriver Set - SDK-8

Our screwdrivers are made of special alloy steel for exceptional strength and long life. The shafts are corrosion resistant and the soft rubber handles offer user comfort with greater torque. The tips are magnetic and the size and style are marked on the end of each handle. Meets applicable ASME/ANSI specifications.

## Kit includes:

- **SDSP-2** Screwdriver Phillips #2 Stubby
- **SDP-1** Screwdriver Phillips #1 x 3"
- **SDP-2** Screwdriver Phillips #2 x 4"
- SDP-3 Screwdriver Phillips #3 x 6"
- SDSC-14 Screwdriver Slotted 1/4" Stubby
- SDC-3163 Screwdriver Slotted 3/16" x 3"
- SDC-144 Screwdriver Slotted 1/4" x 4"
- SDC-5166 Screwdriver Slotted 5/16" x 6"



## **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". ASME Standard/YR: B107.12-2004.

SPECIFICATIONS	ND-63012	ND-63014	ND-63038	ND-630316	ND-630516	ND-630716	ND-6301132
DRIVER SIZE	1/2" (12.7mm)	1/4" (6.35mm)	3/8" (9.53mm)	3/16" (4.763mm)	5/16" (7.94mm)	7/16" (11.11mm)	11/32" (8.73mm)
COLOR CODE	Red	Red	Blue	Black	Yellow	Brown	Green

#### **Hollow Shaft Nut Driver Kits**

- ND-SET4 4 Piece Nut Driver Set (Includes: ND-63012, ND-63038, ND-630516, ND-6301132)
- **ND-631** 7 Piece Nut Driver Set (Includes: ND-63012, ND-63014, ND-63038, ND-630316, ND-630516, ND-630716, ND-6301132)



## LED Flashlight With Zoom Lens - FL-2000

A high quality Osram LED Flashlight powered by a single AA alkaline battery. Housing is rugged aluminum suspended from a clip-on lanyard. Brightness is 120 lumens and the beam is adjustable to meet the working environment. Zoom in for a tight narrow beam and zoom out for a wide light. Hold the head of the flashlight with one hand and the body with the other. Simple in and out movement adjusts the light. Simple push-button operation.





## **Adjustable Wrenches**

Wrenches made of chrome vanadium steel with a chrome plated finish. Wrenches are forged and heat treated for greater strength. Handles are covered with a red vinyl grip for user comfort. The knurled worm gear is precision formed and the operation is smooth and trouble free. For accurate and faster adjustments use the metric or English scales on either side of the jaws. With extra wide jaws, a smaller wrench works on bigger jobs. Great for tight spaces.

Available kit: AW-6810 Adjustable Wrench Set - 6", 8" & 10" with Extra Wide Jaws.

#### 3- Piece Kit includes:

AW-6 Adjustable Wrench 6" with Extra Wide Jaws AW-8 Adjustable Wrench 8" with Extra Wide Jaws AW-10 Adjustable Wrench 10" with Extra Wide Jaws

SPECIFICATIONS	AW-6	AW-8	AW-10	AW-12
DESCRIPTION	Adjustable Wrench 6" with Extra Wide Jaws	Adjustable Wrench 8" with Extra Wide Jaws	Adjustable Wrench 10" with Extra Wide Jaws	Adjustable Wrench 12" with Extra Wide Jaws
JAW CAPACITY	15/16" (24 mm)	1-1/8" (29 mm)	1-5/16" (33 mm)	1-1/2" (38 mm)
OVERALL LENGTH	6" (152mm)	8" (203mm)	10" (254mm)	12" (305mm)



## **Self Adjusting Wire Stripping Tools**

The perfect solution for stripping PVC and other insulated wire. This innovative squeeze and strip design uses precision carbon steel laminated stripping blades that automatically grasp the insulation to provide quick and accurate wire stripping. Can be used to strip one or several wires at the same time. The patented stripping mechanism is smooth, efficient and ergonomic. The built in adjustable wire stop allows you to set the stripping length and comes with a wire cutter to help make cutting and stripping even faster. Tool life expectancy over 150,000 cycles. Rugged and made from high strength plastic and the stripping blades are made from high quality carbon steel.

SPECIFICATIONS	WSA-1024	WSA-1430
DESCRIPTION	Self-Adjusting Wire Stripping Tool, 10-24 AWG	Self-Adjusting Wire Stripping Tool, 14-30 AWG
WIRE GAUGE 10-24 AWG (2.6-0.20 mm)		14-30 AWG (1.63-0.25 mm)
REPL. BLADES	WSA-1024RB	WSA-1430RB



#### **Electrician's Scissors**

Designed for heavy duty use. Made of chrome vanadium steel with a special hardening process for greater durability and nickel plated for that professional look. Notched to strip 18-20 & 22-24 AWG wire and one blade is serrated. A scraper and file are on the back of the blade.

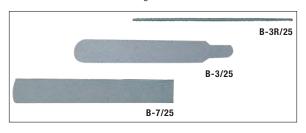
Note: **ES-1964DS** features a free-fall fingertip operation. **ES-1964ERG** features an ergonomic handle.

JONARD P/N	DESCRIPTION
ES-1964	Electrician Scissor
ES-1964DS	Free Fall Electrician Scissor
ES-1964ERG	Ergonomic Electrician's Scissors



## **Pocket Type Burnishers**

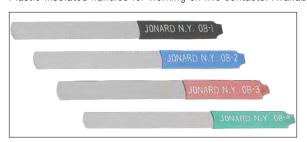
Adjustment of flexible blade-length and rigidity is possible by varying depth in chuck. Supplied with replaceable blades stored in pen barrel at other end. Plastic barrel and cap made of sturdy plastic for dielectric work. Length 4 1/2", diameter 3/8". Blades are 3/16" wide x 1 1/2" long. Rods are .020"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



JONARD P/N	DESCRIPTION
PB-3	Pen w/ 6 Blades .0035" Thick
PB-3R	PB-3 Plus 6 Abraisive Rods .020"
PB-7	Pen w/ 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")

#### **Contact Burnishers**

Plastic insulated handles for working on live contacts. Available in four styles for fine, extra sensitive, general purpose and industrial use.



JONARD P/N	DESCRIPTION
0B-1/3	Burnisher Files (Pkg. 3), Fine
0B-1/12	Burnisher Files (Pkg. 12), Fine
0B-2/12	Burnisher Files (Pkg. 12), Extra Sensitive
0B-3/12	Burnisher Files (Pkg. 12), General Purpose
0B-4/12	Burnisher Files (Pkg. 12), Industrial

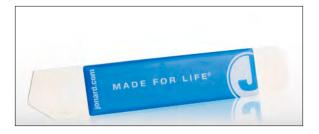


## **Smart Phone & Tablet Repair Tool Kit - TK-19**

For opening and repairing all series of smartphones, tablets and many "i" series computers (iPhones & iPads). Kit contains all the tools you need to take apart these highly specialized electronic devices. Perfect for DIY repair jobs. Tools are neatly organized and labeled in a convenient storage case.

#### Kit includes:

- Ergonomic Handle
- Thirteen 4mm bits
- 2 Plastic Prying Tools
- Guitar Pick
- Opening Tool
- Suction Vacuum Opener
- SIM Eject Tool
- Tweezer



## Opener for Tablets & Smartphones - SP-4

The Jonard Tools SP-4 makes opening today's smartphones and tablets easy. This tool is a Must have for repair professionals and DIYer's alike. Its thin and flexible stainless steel blade easily slides between screen and frame of most common electronic devices to pop them open quickly and easily. Unlike plastic spudgers which are too thick and for one time use, the SP-4 is thin and designed to be used over and over again.





## **Pouches**

JONARD P/N	DESCRIPTION	SECURING METHOD
H-25	Pouch For JIC-186 & JIC-195	Plastic Belt Clip
H-36	Molded 2 Tool Pouch	Metal Belt Clip
H-40	Leather 2 Tool Pouch	Belt Loop
H-50	Molded 5 Tool Pouch	Belt Loop
H-60	Molded 2 Tool Pouch	Metal Belt Clip
H-75	Molded 7 Tool Pouch	Metal Belt Clip
H-85	Molded 8 Tool Pouch	Metal Belt Clip
H-125	25 Pocket Tool Roll Up Pouch	Carrying Handle
H-1000	Rugged Nylon 5-Pocket Tool Pouch	Belt Loop



## Rugged 21 Pocket Tool Case - H-90

A rugged versatile 21 pocket tool case with a removable top, made from special heavy duty material for greater durability and long life. The case is reinforced with a tough thick backing material to maintain its shape — even when loaded with tools.

Additional features include a carry strap, two additional straps for securing the case to a ladder, a metal clip on the exterior for holding a tape measure and pockets galore









## **Round Cable Stripper - CST-1900**

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 mid-span and end strips, spiral cuts for mid-span access and circular cuts for mid-span jacket removal as well as jacket removal on end cuts. A simple versatile easy to use tool. Patented.

Replacement Blade: CST-7915





## Cyclops Wire Stripper - CST-1i

CST-1i Cyclops - Fast easy removal of outer insulation from all unshielded twisted pair, shielded twisted pair and multi-core cables. The Cyclops features a self adjusting blade and is perfect for PVC and plenum type insulation, plus other materials without damaging the inner braids, foils or conductors. Cable performance is not impacted using this cable stripper. Patented.



## Cable Ring Tool - JIC-2060

This cable ring tool is designed for cutting the sheathing of inside type plastic, fabric or rubber covered cable 3/16" (135.38 mm), 1/4" (6.35 mm), 3/8", & 1/2" (12.7 mm). Durable metal handle. Tool is supplied with 1 replacement blade.

Replacement Blades: RB-2060/6 (Pkg of 6)



## Torque Wrench Swivel Head w/ 5/32 Hex Socket - TWSW-10SK

Used to properly torque 5/32" security screws used for mid mounting. Head swivels 90° and is factory set for 10 in./Lb. Can be used with any 3/8" drive sockets. NOTE: For optimum functionality be sure to use a Full-Hand Grip centered on the handle.

Includes the TWS-532.



## 5/32" Hex Security Socket 3/8" Drive (Pkg 10) - TWS-532/10

5/32" hex security socket 3/8" drive. Used on the TWSW-10 torque wrench. Made of chrome vanadium steel. Pack of 10.

Note: TWSW-10 Torque Wrench Swivel Head 10 in/lb sold separately.



## **EPD Series Punchdown Tools**

Sleek ergonomic design for easy effective wire termination. Tested up to 100,000 cycles at high-impact setting. Use to properly set, seat and terminate wire. Simply position the wire, push tool, and listen for confirming click. Wire is properly seated.

## Features include:

- Hi/Low impact setting
- Combination Hook/Spudger stored in the chassis
- Color coded yellow on the CUT side
- Enlarged blade storage compartment
- Lifetime Warranty (Essentially means unlimited impacts)

#### **Punchdown Tool Kits**

JONARD P/N	EPD-914	EPB-66	EPB-110	EPB-116	EPB-KR	EPB-630	EPB-KRONE
EPD-91466	X	X					
EPD-914110	X		X				
EPD-914KR	X				X		
EPD-914116	X			X			
EPD-91461	X	X	X				
EPD-9KRONE	X						X
EPD-914630	Х					X	

## **Punchdown Tool Blades**

JONARD P/N	DESCRIPTION
EPB-66	66 Blade With & Without Cutter
EPB-110	110 Blade With & Without Cutter
EPB-116	66 & 110 Blade Combined With Cutter
EPB-KR	Krone Blade With & Without Cutter
EPB-630	Punchdown Blade For 630 Modular Jack
EPB-KRONE	Krone Blade Scissor Style







**EPB-116** 







EPB-KRONE



## **BIX Punchdown Tool - EP-16A**

This tool is designed to terminate cables, pigtails, and jumper wires on all GigaBIX, BIX and UMOXS cross-connect system connectors. This single action, spring activated tool will terminate 22-26 AWG plastic insulated solid copper conductors. Button on the handle adjusts the tool for seating only, or for seating and cutting the conductors.



## Non-Impact Punchdown Tool - ENI-110

Designed for use on 110 terminal blocks. Perfect for do-it-yourself small jobs on a 110 terminal block. Fits neatly in the palm of your hand. Quickly and easily switch from cutting and non-cutting blade side with one hand. Simple - Fast - Easy.

Patent Pending.



#### Termination & Removal Tool - EP-QTH38B

The EP-QTH38B tool is used for terminating, bridging, and removing wires from 2-beam or 3-beam, insulation-slicing, quick-clip terminals found on QCM486 (MPC) and 391Q connectors, and on Versa blocks with quick-clip pins.

Tool can be used for seating wires only or for seating and cutting operations. Tool has built in wire pick for removing already terminated cables.



#### **Quick Clip Insertion Tool - 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.

Replacement Blade: JIC-955



## Modular Crimping Tool 6 In 1 - UC-864

A rugged modular crimping and stripping tool for voice and data applications. The tool has 2 crimping slots; one slot used for 8 position modular plugs and the other slot is used for both 6 and 4 position modular plugs. The tool also has a round cable jacket stripper as well as a flat cable stripper and cutter. Tool works with the following modular plugs: RJ11, RJ12, RJ22 and RJ45.

Two Sets of Replacement Blades: UC-866



## Regular and Feed-Thru Connector Crimper Tool - UC-4568

Durable all-steel construction crimp tool with built-in cutter and stripper.

#### Features:

- Crimp and trim off excess conductors with a simple squeeze of the tool
- Cleanly shears excess conductors leaving a smooth flat finish
- Ratcheted, ultra-stable platform for consistent terminations with low hand force
- Tool includes built in jacket stripper for round cables as well as flat cables plus a flat cable cutter
- Crimping dies are precision ground. Crimps 2,4,6 and 8 position RJ11 and RJ45 regular and feedthrough type modular connectors
- Heavy duty cutting blade good for 3,000 cuts
- Ergonomic handles for greater comfort





#### **Can Wrenches**

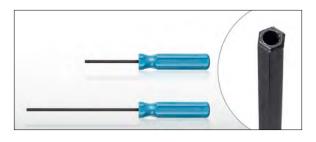
Double end can socket wrench, 3/8" and 7/16", orange Impact resistant thermoplastic ergonomic handle. Used in placing fuses in cable terminals and connecting wires to fuses and binding posts. The walls on both sockets are thin enough so they can be used to work locking devices on most terminals and cabinets.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

JONARD P/N	DESCRIPTION
M-216C/EX	Ergonomic Hex 7/8" Diameter Handle Hex Socket
M-216C/REX	Ergonomic Round 7/8" Diameter Handle Round Socket
M-216C/RX	Standard Round 11/16" Diameter Handle Round Socket
M-216CKIT	Security Key Kit 7/8" Diameter Handle Hex Socket
M-216CS22	Ergo, W/ Wire Stripper 7/8" Diameter Handle Hex Socket (Built In 22-24 AWG Wire Stripper)



## Security Key Insert - SK-51632

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. The 5/16" side of the SK-51632 is used on tamper-proof cross-connect cabinets, MESA,CATV closures and any other closure that requires a 5/16" tamper proof hex tool to gain access. This is a reversible insert tool. One end is for SLC Cabinets and the other is for most Network Interface Boxes.



## **Booth Wrenches**

Tamper proof hex screwdrivers, 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 tamper proof screws used for telephone and CATV applications.

**BW-532-3** Booth Wrench 3" Long Shaft **BW-532** Booth Wrench 6" Long Shaft



## T Handle Security Wrench 5/16" - BW-516

Tamper proof wrench for use on tamper-proof cross-connect cabinets, MESA and CATV closures using 5/16" tamper proof screw. Recessed at both ends, 1/4" deep. Red plastic handle for user comfort.



#### Linesman B Wrench - JIC-650

Forged and heat treated, this Lineman's 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 Lineman's Wrench openings are offset to provide handle clearance. 13" Long.









#### **Electrician's Scissors**

Designed for heavy duty use. Made of chrome vanadium steel with a special hardening process for greater durability and nickel plated for that professional look. Notched to strip 18-20 & 22-24 AWG wire and one blade is serrated. A scraper and file are on the back of the blade.

#### Note:

**ES-1964DS** features a free-fall fingertip operation **ES-1964ERG** features an ergonomic handle.

JONARD P/N	DESCRIPTION
ES-1964	Electrician Scissor
ES-1964DS	Free Fall Electrician Scissor
ES-1964ERG	Ergonomic Electrician's Scissors



## **Heavy Duty Scissor With Wire Stripper - JIC-183**

Heavy duty multi-function scissor designed to cut copper, aluminum, leather, plastic and other materials. Not designed to cut steel or other hardened/heat treated metals. Made from high carbon stainless steel blades. Three stripping holes marked 1.0, 1.5, 2.0 which is equivalent to 18, 14 & 12 AWG wire. One blade serrated for a secure grip and handles are dual component polypropylene and TPR. Includes safety locking mechanism and adjustment screw.



## **Communication Scissor - JIC-195**

High carbon stainless steel blades, 1/4" notch for cutting & stripping, two stripping notches for 18-20 AWG and 22-24 AWG wires, one serrated non-slip blade. High carbon stainless steel blades that are both sharp and durable with serrated blade that grips and holds the wire. Ergonomic dual component nylon & santoprene handles, for user comfort and durability. A 1/4" notch cuts and strips, and the two stripping notches strip 18-20 and 22-24 AWG wires. Designed with an adjustable joint screw under the protective cap.



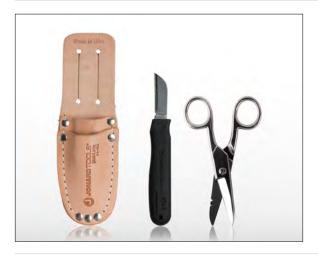
## **Ergonomic Cable Splicing Knife - KN-7**

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 ergonomic handle made from TPR (thermoplastic rubber) for better control and reduced hand fatigue. Blade length is 134" and overall length is 614"



## Knife And Scissor Sharpener - KSS-1

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.



## Splicer's Kit - TK-400

The compact TK-400 Splicer's Kit contains ES-1964 Electrician's Scissors, H-40 Leather Two Tool Pouch, and a special purpose KN-7 Ergonomic Cable Splicing Knife. The scissors are made of chrome vanadium steel with scraper and file on one side plus 2 stripping notches. The knife features a short 1 3/4" tough, cutlery-steel blade and a non-slip handle.

#### Kit includes:

- KN-7 Ergonomic Cable Splicing Knife
- ES-1964 Electrician's Scissor
- H-40 Leather Two Tool Pouch



## Telephone Installer Splicer's Kit - TK-22148

The TK-22148 Telephone Installer Splicer's Kit is designed for stripping, splicing and crimping. The perfect kit for telephone installers.

#### Kit includes:

- JIC-22148 Combo Crimper Long Nose Pliers
- ES-1964 Electrician's Scissor
- H-36 Molded Pouch



## 5 Piece Telecom Installer's Kit - TK-50

The perfect kit for simple installations, the TK-50 5 Piece Telecom Installer's Kit includes the basic necessities for telecom installations.

#### Kit includes:

- M-216CS22 Can Wrench, ERgo, W/ Wire Stripper
- KN-7 Ergonomic Cable Splicing Knife
- ES-1964 Electrician's Scissor
- JIC-22035 Probe Pick
- H-50 Molded Five Tool Pouch





## 14 Pc Security & Alarm Tool Kit - TK-610

Designed specifically for the security and alarm industry, the TK-610 14 Pc Security & Alarm Tool Kit provides all the tools needed to prep coax and power cables for termination. Also includes tools for tracing and testing applications.

## Kit includes:

JONARD P/N	DESCRIPTION
CST-1i	Cyclops Wire Stripper
CT-200	Universal Compression Tool
EPD-91461	Punchdown Tool With 2 Blades 66 & 110
FL-2000	LED Flashlight With Zoom Lens
H-90	Rugged 21 Pocket Tool Case
JIC-1626	Wire Stripper 16-26 AWG
JIC-22148	Combo Crimper, Long Nose Pliers
JIC-2288	Plier, Diagonal, Cutter, 8"
PT-300	Pocket Continuity Tester & Toner
SD-61	Screwdriver Multi-Bit 6 In 1
TETP-900	Multi-Function Cable Tester Tone & Probe Kit
UC-864	Modular Crimping Tool 6 In 1
UST-125	COAX Stripping Tool For RG59/6 & 7/11 With Cable Stop
VT-1000	Voltage Detector



## Punchdown Tool Kit - TK-17

An ideal combination of tools for electrical technicians, main frame telecommunications professionals, security & alarm and datacom professionals. Kit includes punchdown tool with 66 & 110 blades, ergonomic electrician scissor, LED flashlight with zoom lens, spudger, multi-bit screwdriver, cyclops wire & cable stripper, combo crimper long nose plier and convenient pouch with metal belt clip.

#### Kit includes:

- EPD-91461 Punchdown Tool With 2 Blades 66 & 110
- JIC-22148 Combo Crimper Long Nose Pliers
- SD-61 Screwdriver Multi-Bit 6 In 1
- ES-1964ERG Ergonomic Electrician's Scissor
- CST-1i Cyclops Wire Stripper, can use on UTP/STP Cable
- **FL-2000** LED Flashlight with Zoom Lens
- **H-75** Molded 7 Pocket Pouch with Belt Clip
- JIC-22035 Probe Pick





## **Ratcheting Cable Slitter - RCS-25**

Slits and rings PVC, PE, rubber, and other cable jacket materials. Will work on small cables as well as cables larger than 25mm. Designed with reversible double-ended replaceable blade with adjustable cutting depth 0-5mm for each unique cable application. 10/20/30mm scaled on tool for slitting length reference. For mid-span or end cable slit and ring applications.

Replacement Blade: RCS-25RB



## Cable Slit & Ring Tool - CSR-1575

The CSR-1575 is designed to slit and ring cables, buffer tubes and jackets on fiber optic cables up to 7.5mm (0.3") in diameter. The tool features an easily adjustable slit blade and ring blade as well as a removable and reversible V block that improves slitting performance and accommodates smaller to larger diameter cables.

Replacement Blade Set: CSR-2



## **Round Cable Stripper - CST-1900**

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. **Patented.** 

Replacement Blade: CST-7915



## Cyclops Wire Stripper - CST-1i

Fast easy removal of outer insulation from all unshielded twisted pair, shielded twisted pair and multicore cables. The Cyclops features a self adjusting blade and is perfect for PVC and plenum type insulation, plus other materials without damaging the inner braids, foils or conductors. Cable performance is not impacted using this cable stripper. **Patented.** 





## Adjustable Wire Stripper & Cutter - WS-5

The WS-5 is designed with a precision ground "V"notch blade for superior stripping results. This tool is spring loaded for comfort and has a locking latch to keep the tool closed when not in use. A handy bending hole in the jaw is great for bending solid wire. The tool has an adjustable blade stop and the handle is marked for easy and consistent adjustments. The tool works on both stranded and solid wire from 30 AWG to 10 AWG. Made from high carbon steel with a black oxide coating. Vinyl cushion grips provide excellent comfort.



#### **Wire Strippers**

The **JIC-1022**, **JIC-1626**, **JIC-2030** are wire strippers and cutters designed for 10-20 AWG, 16-26 AWG, 20-30 AWG wire respectively. 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.

**JIC-1022** Wire Stripper, 10-22 AWG (2.60-0.64 mm) **JIC-1626** Wire Stripper, 16-26 AWG (1.29-0.40 mm) **JIC-2030** Wire Stripper, 20-30 AWG (0.81-0.25 mm)



## **Adjustable Wire Strippers**

The **ST-450**, **ST-500**, **ST-500ESD**, **ST-550** are adjustable wire strippers and cutters designed for 26-36 AWG, 20-30 AWG, 20-30 AWG ESD Safe, 18-28 AWG wire respectively. These Precision Wire Strippers feature an adjustment dial that allows the operator to select one of the 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.

**ST-450** Adjustable Wire Stripper, 26-36 AWG **ST-500** Adjustable Wire Stripper, 20-30 AWG **ST-500ESD** Adjustable Wire Stripper, 20-30 AWG ESD Safe **ST-550** Adjustable Wire Stripper, 18-28 AWG







#### **Insertion & Extraction Tool Kits**

These tools service virtually all connectors conforming to Mil-C-26482, Mil-C-26500 with front release contacts. These tools contain strong, durable, stainless steel probes & color coded handles. Items sold individually as well in kits. The kits are supplied in a leather Jonard tool case.

## **KA-260 Insertion Tool Kit Includes:**

**A-4598** Insertion Tool Contact Size 20 (Military Standard: MS24256-A20) **A-4599** Insertion Tool Contact Size 16 (Military Standard: MS24256-A16) **A-4600** Insertion Tool Contact Size 12 (Military Standard: MS24256-A12)

## **KR-260 Removal Tool Kit Includes:**

R-4601 Removal Tool Contact Size 20 (Military Standard: MS24256-R20)
R-4602 Removal Tool Contact Size 16 (Military Standard: MS24256-R16)
R-9461 Removal Tool Contact Size 12 (Military Standard: MS24256-R12)



## **Insertion And Extraction Tool - AR-910672**

A pin & socket insertion & extraction tool for contact size 20. Tool constructed of brass and ABS plastic with the red side for insertion and the white side for extraction. Mil standard M81969/1-02.

For use on TE Connectivity Amplimite series HDP-20 plugs and pins and other similar manufacturers products. Use with: 215712-1 Plug 15 POS Crimp Snap, 215711-1 Plug 9 POS Crimp Snap, 1218266-1 Pin 18 AWG Gold Crimp, 194081-1 Pin 1.04mm without Louver Band, 205089-2 D-sub Pin 20-24 AWG Crimp



## Pin Removal Tool - R-5926

The pin extractor is a plunger style pin extractor for pushing pins out from behind the connector blocks for contact sizes 16-20. 3" long. This Amp style connector tool can be used on AMP CPC type connectors.





## **PLCC Extractors**

This PLCC Extraction Tool 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 the handles and chip is lifted from the socket. Machined stainless steel for long life.

JONARD P/N	DESCRIPTION
EX-5	PLCC Extractor - ESD (Electrostatic Discharge) Safe
EX-6	PLCC Extractor



## Wire Extractor - M-724A

Metal construction wire extractor with insulated handle to remove wire from quick-connect clips and 66~&~110 terminal blocks. 3/16" diameter with a .052" slot width. 5~1/2" long.



## **IC Insertion & Extraction Tools**

JONARD P/N	DESCRIPTION
EX-1/10	DIP IC Extractor (8-24 Pins) (Pack of 10)
EX-2	DIP IC Extractor (24-40 Pins)
MOS-1416	Insertion Tool (14-16 Pins)
MOS-2428	Insertion Tool (24-28 Pins)
S-339	Lamp Extractor
S-340	DIP/IC Extractor
WK-7	IC Insertion/Extraction Kit (Kit includes: EX-1/10, EX-2, MOS-1416, MOS-2428)



## **Benchtop Fume Absorbers**

#### Features:

- 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
- 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
- Noise level 45-50 DB A

JONARD P/N	DESCRIPTION	
SA-9-115	Fume Absorber, 115V	
SA-9-E-115	Fume Absorber, ESD Safe 115V	
SAF-1	Replacement Filter Set, 3 pcs.	
SAK-90	Arm Assembly Kit Retro-fits SA-9/9-E to SA-91-E	
SA-91-E	SA-9-E-115 with Articulating Arm & Bracket (ESD Safe)	
SA-91	SA-9-115 with Articulating Arm & Bracket	



## **High-Vacuum Desoldering Pumps**

A specially engineered desolder pump made to exacting specifications and providing precise repeatable operation. Fitted with a Teflon Tip with ID .125", OD .22" and included cleaning mechanism. DP-100 and DP-200. 13" long, DP-140 8" long.

JONARD P/N	DESCRIPTION		
DP-100	High Vacuum Desoldering Pump		
DP-140	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		





## KYNAR ® Insulated, Silver Plated Copper Conductor

Ideally suited for wire wrapping and many other applications. The Kynar insulation provides a flexible yet abrasion resistant wire and the conductor is made from silver plated OFHC (Oxygen Free High Conductivity) copper.

WIRE	SIZE	INSULAT	ION DIA.	ROLL	SIZE	DI UE	VELLOW		D1 4 0 1/	0.50	00554
AWG	mm	In.	mm	Feet	Meters	BLUE	YELLOW	WHITE	BLACK	RED	GREEN
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 1000	30.4 304.4	R30B-0100 R30B-1000	R30Y-0100 R30Y-1000	R30W-0100 R30W-1000	R30BLK-0100 R30BLK-1000	R30R-0100 R30R-1000	R30G-0100 R30G-1000

## **Pre-Cut & Pre-Stripped Wire Wrapping Wire**

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

- 50 pieces per package
- Kynar<sup>®</sup> 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

INSULATION LENGTH		BLUE	YELLOW	WHITE	RED	
ln.	mm	DLUE	TELLOW	WHILE	NED	
1	25	30-B-50-010	30-Y-50-010	30-W-50-010	30-R-50-010	
2	51	30-B-50-020	30-Y-50-020	30-W-50-020	30-R-50-020	
3	76	30-B-50-030	30-Y-50-030	30-W-50-030	30-R-50-030	
5	127	30-B-50-050	30-Y-50-050	30-W-50-050	30-R-50-050	



## 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. The Kynar insulation provides a flexible yet abrasion resistant wire and the conductor is made from silver plated OFHC (Oxygen Free High Conductivity) copper.

WIRE	SIZE	INSULATION DIA.		. ROLL SIZE		DI UE	VELLOW		D1 4 01	959	0.055.0
AWG	mm	In.	mm	Feet	Meters	BLUE	YELLOW	WHITE	BLACK	RED	GREEN
24	0.50	.030	0.76	100	30.4	KSW24B-0100	KSW24Y-0100	KSW24W-0100	KSW24BLK-0100	KSW24R-0100	
26	0.40	.027	0.69	100	30.4	KSW26B-0100	KSW26Y-0100	KSW26W-0100	KSW26BLK-0100	KSW26R-0100	
28	0.32	.024	0.60	100	30.4	KSW28B-0100	KSW28Y-0100	KSW28W-0100	KSW28BLK-0100	KSW28R-0100	
30	0.25	.020	0.50	100 1000	30.4 304.4	KSW30B-0100 KSW30B-1000	KSW30Y-0100 KSW30Y-1000	KSW30W-0100 KSW30W-1000	KSW30BLK-0100 KSW30BLK-1000	KSW30R-0100 KSW30R-1000	KSW30G-0100 KSW30G-1000



## Wire Dispenser - WD-30 Series

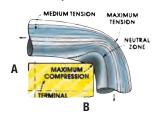
- 50 ft. (15.2m) roll of 30 AWG (0.25mm) Kynar® wire-wrapping wire
- Built-in plunger cuts wire to desired length
- Built-in stripper strips 1" (25.4mm) of insulation
- Refillable

JONARD P/N	DESCRIPTION	REPLACEMENT ROLL OF WIRE
WD-30-B	Dispenser with 50' of Blue wire	R-30B-0050
WD-30-Y	Dispenser with 50' of Yellow wire	R-30Y-0050
WD-30-W	Dispenser with 50' of White wire	R-30W-0050
WD-30-R	Dispenser with 50' of Red wire	R-30R-0050
WD-30-TRI	Dispenser with 50' of Blue, White and Red wire	R-30-TRI





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 18 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\*

	WIRE SIZE		MIN NUMBER OF	MIN. STR	IP FORCE
AWG	DIA. INCHES	DIA. MM	TURNS (BARE WIRE)	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**

Modified



Regular

Step 1: Bit, Sleeve and Pre-Stripped Wire

Step 2: Wire Insertion

Step 3: Wire Anchoring

Step 4: Terminal Insertion

Step 5: Finished Connection

#### **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 thought 30 AWG wire.



#### INSUFFICIENT TURNS

It's easy to feed wire into the slot in the OK bit correctly. Be sure the stripped end of the wire is "pushed-in" all the way.



#### 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**

	ln.	.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
	<b>0.25</b>	<b>0.36</b>	<b>0.46</b>	<b>0.56</b>	<b>0.69</b>	<b>0.81</b>	<b>0.91</b>	<b>1.04</b>	<b>1.17</b>	<b>1.30</b>	<b>1.42</b>	<b>1.55</b>	<b>1.68</b>	<b>1.80</b>	<b>1.93</b>	<b>2.06</b>	<b>2.18</b>	<b>2.31</b>	<b>2.44</b>	<b>2.57</b>
	.015 <b>0.38</b>	.018 <b>0.46</b>	.021 <b>0.53</b>	.025 <b>0.64</b>	.029 <b>0.74</b>	.033 <b>0.84</b>	.038 <b>0.97</b>	.043 <b>1.09</b>	.047 <b>1.19</b>	.052 <b>1.32</b>	.057 <b>1.45</b>			.072 <b>1.83</b>		.082 <b>2.08</b>	.087 <b>2.21</b>	.092 <b>2.34</b>	.097 <b>2.46</b>	.102 <b>2.59</b>
	.020 <b>0.51</b>	.022 <b>0.56</b>	.025 <b>0.64</b>	.028 <b>0.71</b>		.036 <b>0.91</b>					.058 <b>1.47</b>		.068 <b>1.73</b>				.088 <b>2.24</b>	.093 <b>2.36</b>	.098 <b>2.49</b>	.103 <b>2.62</b>
	.025 <b>0.64</b>	.027 <b>0.69</b>	.029 <b>0.74</b>	.032 <b>0.81</b>	.035 <b>0.89</b>	.039 <b>0.99</b>	.043 <b>1.09</b>		.050 <b>1.27</b>	.056 <b>1.42</b>	.060 <b>1.52</b>						.089 <b>2.26</b>		.099 <b>2.52</b>	.104 <b>2.64</b>
	.030	.032	.033	.036	.039	.042	.046	.050	.054	.058	.062	.067	.071	.076	.080	.085	.090	.095	.100	.105
	<b>0.76</b>	<b>0.81</b>	<b>0.84</b>	<b>0.91</b>	<b>0.99</b>	<b>1.07</b>	<b>1.17</b>	<b>1.27</b>	<b>1.37</b>	<b>1.47</b>	<b>1.58</b>	<b>1.70</b>	<b>1.80</b>	<b>1.93</b>	<b>2.03</b>	<b>2.16</b>	<b>2.29</b>	<b>2.41</b>	<b>2.54</b>	<b>2.67</b>
)	.035	.036	.038	.040	.043	.046	.049	.052	.056	.060	.064	.069	.073	.078	.082	.087	.091	.096	.101	.106
	<b>0.89</b>	<b>0.91</b>	<b>0.97</b>	<b>1.02</b>	<b>1.09</b>	<b>1.17</b>	<b>1.25</b>	<b>1.32</b>	<b>1.42</b>	<b>1.52</b>	<b>1.63</b>	<b>1.75</b>	<b>1.85</b>	<b>1.98</b>	<b>2.08</b>	<b>2.21</b>	<b>2.31</b>	<b>2.44</b>	<b>2.57</b>	<b>2.69</b>
	.040	.041	.043	.045	.047	.050	.052	.056	.060	.064	.068	.072	.076	.080	.084	.089	.092	.097	.102	.107
	<b>1.02</b>	<b>1.04</b>	<b>1.09</b>	<b>1.14</b>	<b>1.19</b>	<b>1.27</b>	<b>1.32</b>	<b>1.42</b>	<b>1.52</b>	<b>1.63</b>	<b>1.73</b>	<b>1.83</b>	<b>1.93</b>	<b>2.03</b>	<b>2.13</b>	<b>2.26</b>	<b>2.34</b>	<b>2.46</b>	<b>2.59</b>	<b>2.72</b>
	.045	.046	.047	.049	.050	.054	.056	.060	.063	.067	.071	.074	.078	.083	.087	.091	.096	.101	.105	.109
	<b>1.14</b>	<b>1.17</b>	<b>1.19</b>	<b>1.25</b>	<b>1.27</b>	<b>1.37</b>	<b>1.42</b>	<b>1.52</b>	<b>1.60</b>	<b>1.70</b>	<b>1.80</b>	<b>1.88</b>	<b>1.98</b>	<b>2.11</b>	<b>2.21</b>	<b>2.31</b>	<b>2.44</b>	<b>2.57</b>	<b>2.67</b>	<b>2.77</b>
	.050	.051	.052	.053	.056	.058	.060	.064	.067	.071	.074	.078	.082	.086	.090	.094	.098	.103	.107	.111
	<b>1.27</b>	<b>1.30</b>	<b>1.32</b>	<b>1.35</b>	<b>1.42</b>	<b>1.47</b>	<b>1.52</b>	<b>1.63</b>	<b>1.70</b>	<b>1.80</b>	<b>1.88</b>	<b>1.98</b>	<b>2.08</b>	<b>2.18</b>	<b>2.29</b>	<b>2.39</b>	<b>2.49</b>	<b>2.62</b>	<b>2.72</b>	<b>2.82</b>

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

Dimension A



#### **Battery Wire Wrap Tools**

The ergonomic and patented PTX Series Wire Wrap Tools are the telecom industry standard for wire wrapping needs on main distribution frames as well as local and remote installations. It's rugged construction and high speed motor make the tool suitable for electronic assembly work and many other wire wrapping applications.







JONARD P/N	DESCRIPTION	WEIGHT	RPM
PTX	Battery Powered Wrap/Unwrap Tool	1.13 lbs (0.51 g)	3700
PTXFL	PTX Plus Flashlight Attachment	1.13 lbs (0.51 g)	3700
PTX-KIT1	PTX Tool, 115V Battery Charger, 2 Batteries	3.15 lbs (1.42 kg)	3700
PTX-KIT1DH	PTX Tool, DFB224, 115V Battery Charger, 2 Batteries, H-1000	3.44 lbs (1.56 kg)	3700
PTX-KIT1DHFL	PTX-KIT1DH Plus Flashlight Attachment	3.52 lbs (1.60 kg)	3700
PTX-KIT1FL	PTX-KIT1 Plus Flashlight Attachment	3.23 lbs (1.47 kg)	3700
PTX-KIT2	PTX Tool, 230V Battery Charger, 2 Batteries	3.18 lbs (1.44 kg)	4200
PTX-KIT2DH	PTX Tool, DFB224, 230V Battery Charger, 2 Batteries, H-1000	3.60 lbs (1.63 kg)	4200
PTX-KIT2DHFL	PTX-KIT2DH Plus Flashlight Attachment	3.60 lbs (1.63 kg)	4200
PTX-KIT2FL	PTX-KIT2 Plus Flashlight Attachment	3.51 lbs (1.59 kg)	4200

All battery wire wrap tools above operate with a 3.6 Volt NiMH Battery.

#### Accessories

JONARD P/N	DESCRIPTION	WEIGHT
PTX-B	PTX Battery For Wrap/Unwrap Tool	0.39 lbs (0.18 kg)
PTX-BC1	PTX Battery Charger, 115V	0.77 lbs (0.35 kg)
PTX-BC2	PTX Battery Charger, 230V	0.86 lbs (0.39 kg)
PTX-FLA	Universal Flashlight Kit For PTX	0.08 lbs (0.04 kg)

#### **Electric Wire Wrap Tools**

JONARD P/N	DESCRIPTION	WEIGHT	VOLTAGE	RPM
PTX-1	Electric Wrap/Unwrap Tool, 115V	1.20 lbs (0.54 kg)	115V	3700
PTX-1BF	Electric Wrap/Unwrap Tool W/Backforce, 115V	2.00 lbs (0.90 kg)	115V	3700
PTX-1BFFL	PTX-1BF with Flashlight	2.08 lbs (0.94 kg)	115V	3700
PTX-1FL	PTX-1 with Flashlight	2.07 lbs (0.93 kg)	115V	3700
PTX-2	Electric Wrap/Unwrap Tool, 230V	2.20 lbs (0.99 kg)	230V	4200
PTX-2BF	Electric Wrap/Unwrap Tool W/Backforce, 230V	2.17 lbs (0.98 kg)	230V	4200
PTX-2BFFL	PTX-2BF with Flashlight	2.25 lbs (1.02 kg)	230V	4200
PTX-2FL	PTX-2 with Flashlight	2.28 lbs (1.03 kg)	230V	4200

All tools with "BF" in the part number include back force protection to prevent overwrapping.





#### **Manual Wire Wrap Tools**

Manual Wire Wrap Tools from Jonard OK Industries are ideal for between 50 and 200 wire wrap jobs per day. The nose piece should be tightened when the trigger is squeezed to minimize drag and ensure the wire wrapping bit and sleeve (sold separately) are properly oriented.

JONARD P/N	DESCRIPTION
G100/R3278	Aluminum Wire Wrapping Tool
G100/R3278FL	Insulated Aluminum Wire Wrapping Tool with Flashlight
G100/R3278INS	Insulated Aluminum Wire Wrapping Tool
G200/R3278	Wire Wrapping Tool with Lexan® Housing



## LED Flashlight Kit For G100 Tools - G100-FL

For use with G100/R3278 & G100/R3278INS. Add the convenience of task lighting to your wire wrapping gun with this Wire Wrapping Flashlight Kit. Compatible with all wire wrapping tools.



## Universal Flashlight Kit For WW Gun - G100-FLA

Universal - for use with most manual wire wrapping guns. Add the convenience of task lighting to your wire wrapping gun with this Wire Wrapping Flashlight Kit. Compatible with all wire wrapping tools.



#### Manual Wire Unwrapping Tool - G100/R3394CT

The G100/R3394CT is an insulated aluminum wire unwrapping tool great for high speed wire unwrapping. The PUW2226 is the kit containing the bit and sleeve to unwrap wire AWG 20 - 26 (0.80 - 0.40mm). You can also purchase the bit and sleeve separately (part numbers below).



JONARD P/N	WIRE	SIZE	TERMINAL HOLE						
JUNARD P/N	AWG	MM	INCHES	MM					
2026UB	20-26	0.80-0.40	.070	1.77					
S0K2230	20-26	0.80-0.40	.070	1.77					
PUW2226	20-26	0.80-0.40	.070	1.77					





#### 3" Wire Wrap Bits & Sleeves

Fully compatible with any make or model wrapping tool. Modified bits provide an additional 1 ½" turns of insulated wire to the wrap.

WIRE GAUGE	REGULAR	MODIFIED	BIT P/N	SLEEVE P/N	MAXIMUM Insulation Diameter	MINIMUM TERMINAL DIAGONAL	MAXIMUM TERMINAL DIAGONAL	TERMINAL Hole Depth	EFFECTIVE RADIUS	TERMINAL HOLE DIAMETER
18 AWG	•		KB18	P194LN		.060"	.073"	1.000"	.150"	.075"
1.00mm	•		KB18	P194LN		1.52mm	1.85mm	25.40mm	3.81mm	1.90mm
20-22 AWG	•		KB2075	P194LN		.042"	.073"	1.000"	.123"	.075"
0.65-0.80mm	•		KB2075	P194LN		1.07mm	1.85mm	25.40mm	3.12mm	1.90mm
22 AWG	•		KB22	P2224		.054"	.073"	.750"	.117"	.075"
0.65mm	•		KB22	P2224		1.37mm	1.85mm	19.05mm	2.97mm	1.90mm
22 AWG		•	WB2275M	P2224	.052"	.049"	.074"	1.000"	.132"	.075"
0.65mm		•	WB2275M	P2224	1.32mm	1.24mm	1.87mm	25.40mm	3.35mm	1.90mm
22-24 AWG	•		KB224LH	P2224		.061"	.085"	1.000"	.117"	.086"
0.50-0.65mm	•		KB224LH	P2224		1.54mm	2.15mm	25.40mm	2.97mm	2.18mm
22-24 AWG	•		KB224-1	P2224		.054"	.073	1.000"	.111"	.075"
0.50-0.65mm	•		KB224-1	P2224		1.37mm	1.85mm	25.40mm	2.82mm	1.90mm
22-24 AWG	•		KB224	P2224		.054"	.073"	.807"	.111"	.075"
0.50-0.65mm	•		KB224	P2224		1.37mm	1.85mm	20.50mm	2.82mm	1.90mm
22-24 AWG		•	WB224M	P2224	.050"	.049"	.074"	1.250"	.121"	.075"
0.50-0.65mm		•	WB224M	P2224	1.27mm	1.24mm	1.87mm	31.75mm	3.07mm	1.90mm
24 AWG		•	WB24DH	P2224	.046"	.054"	.073"	1.750"	.117"	.075"
0.50mm		•	WB24DH	P2224	1.17mm	1.37mm	1.85mm	44.50mm	2.97mm	1.90mm
24 AWG	•		KB24	P2426		.055"	.074"	.750"	.100"	.075"
0.50mm	•		KB24	P2426		1.39mm	1.87mm	19.05mm	2.54mm	1.90mm
24 AWG		•	WB24SM*	P3032LN	.044"	.024"	.043"	.750"	.098"	.044"
0.50mm		•	WB24SM*	P3032LN	1.11mm	0.60mm	1.09mm	19.05mm	2.48mm	1.11mm
24-26 AWG		•	WB2426M	P2224	.046"	.054"	.073"	.750"	.118"	.075"
0.40-0.50mm		•	WB2426M	P2224	1.17mm	1.37mm	1.85mm	19.05mm	2.99mm	1.90mm
24-26 AWG	•		KB2466	OK8519		.054"	.065"	1.000"	.098"	.066"
0.40-0.50mm	•		KB2466	OK8519		1.37mm	1.65mm	25.40mm	2.48mm	1.67mm
26 AWG	•		KB26	P2426		.058"	.073"	1.000"	.100"	.075"
0.40mm	•		KB26	P2426		1.47mm	1.85mm	25.40mm	2.54mm	1.90mm
26 AWG		•	WB26SM*	P26LN	.031"	.023"	.038"	.750"	.075"	.040"
0.40mm		•	WB26SM*	P26LN	0.79mm	0.58mm	0.96mm	19.05mm	1.90mm	1.02mm
26 AWG		•	WB2669M	P2426	.041"	.053"	.068"	1.000"	.109"	.040"
0.40mm		•	WB2669M	P2426	1.04mm	1.34mm	1.72mm	25.40mm	2.77mm	1.02mm
28 AWG		•	WB28SHM	P3032	.030"	.031"	.035"	.750"	.066"	.069"
0.32mm		•	WB28SHM	P3032	0.76mm	0.79mm	0.89mm	19.05mm	1.67mm	1.75mm
30 AWG		•	SB30MSH-B	P3032	.027"	.031"	.035"	.750"	.064"	.036
0.25mm		•	SB30MSH-B	P3032	0.69mm	0.79mm	0.89mm	19.05mm	1.62mm	0.91mm
30.32 AWG		•	WB3032M*	P3032	.027"	.034"	.038"	.750"	.064"	.040"
0.20-0.25mm		•	WB3032M*	P3032	0.69mm	0.86mm	0.96mm	19.05mm	1.62mm	1.02mm
30.32 AWG		•	WB3032MIL†	P3032	.027"	.034"	.038"	.750"	.064"	.040"
0.20-0.25mm		•	WB3032MIL†	P3032	0.69mm	0.86mm	0.96mm	19.05mm	1.62mm	1.02mm

<sup>\*</sup>These tools are recommended for .025" square terminals on .100" center to center of the pins 'Provides 2.5 turns of insulation





#### 3" Wire Wrap Bits & 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. These bits and sleeves provide a regular wrap.

BIT P/N	SLEEVE P/N	WIRE	SIZE	MIN. TERM On			IINAL DIAG- IAL	TERMIN Dei	AL HOLE PTH	EFFECTIV	E RADIUS	TERMINAL HOLE DIAM- ETER		
		AWG	ММ	IN.	ММ	IN.	ММ	IN.	ММ	IN.	ММ	IN.	ММ	
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	



#### 5" Wire Wrap Bits & Sleeves (Extended Length)

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. These bits and sleeves provide a regular wrap.

BIT P/N INSULATED SLEEVE P/N		UNINSULATED	WIRE SIZE		MIN. TERMINAL DIAGONAL		MAX. TERMINAL DIAGONAL		TERMIN. Dei	AL HOLE PTH	EFFECTIV	E RADIUS	TERMINAL HOLE DIAMETER		
	SLEEVE P/N	AWG	ММ	IN.	ММ	IN.	MM	IN.	ММ	IN.	ММ	IN.	ММ		
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	

#### **DFB Series Wrap & Unwrap Bit & Sleeve Sets**

JONARD P/N	DESCRIPTION	WIRE SIZE		MIN. TERMINAL DIAGONAL		MAX. TERMINAL DIAGONAL		TERMINAL HOLE DEPTH		TERMINAL HOLE DIAMETER		EFFECTIVE Radius	
		AWG	ММ	IN.	ММ	IN.	MM	AWG	MM	AWG	ММ	AWG	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
DFB2426	Wrap/Unwrap Bit & Sleeve Set, 24-26 AWG	24/26	.40/.50	.54	1.37	.065	1.65	0.50	12.70	.066	1.67	.098	2.48

DFB224 Includes: KB-DF224 Bit, P-DF224 Sleeve; DFB2426 Includes: KB-DF2426 Bit, P-DF2426 Sleeve



#### Wire Wrapping Extension Attachment - EXT-400

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





#### **Hand Wire Wrap & Unwrap Tools**

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

	WRAPPING SIDE														UNWRAPPING SIDE								
JONARD P/N	DESCRIPTION	REG	MOD	WIRE SIZE INSULA DIAMI		ATION	ATION HOLE		TERMINAL HOLE DEPTH		OUTSIDE DIAMETER		WIRE SIZE		TERMINAL HOLE DIAMETER		TERMINAL HOLE DEPTH		OUTSIDE DIAMETER				
				AWG	ММ	IN.	ММ	AWG	MM	AWG	ММ	AWG	ММ	AWG	MM	AWG	ММ	AWG	ММ	AWG	MM		
HW-UW-18-19	Wrap-Unwrap Tool, 18-19 AWG	•		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	Wrap-Unwrap Tool, 20 AWG	•		20	0.80	-	-	.075	1.90	1.000	25.40	.250	6.35	20-26	1.00 - 0.91	.075	1.90	1.000	25.40	.156	3.96		
HW-UW-224	Wrap-Unwrap Tool, 22-24 AWG	•		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	Wrap-Unwrap Tool, 22-24 AWG	•		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	Wrap-Unwrap Tool, 24-26 AWG	•		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-26SM*	Wrap-Unwrap Tool, 26 AWG		•	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*	Wrap-Unwrap Tool, 28-29 AWG		•	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*	Wrap-Unwrap Tool, 30 AWG		•	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		

<sup>\*</sup>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 Hand Wire Wrap & Unwrap Tools**

				INS	ULATED	HAND \	WRAP A	ND UNW	RAP TO	OLS										
HW-UW-224INS†	Wrap-Unwrap Tool, 22-24 AWG Insulated	•	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
WDUD-26DS†	DSL Wrap And Unwrap Tool	•	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

†Insulated handle for dielectric protection.



#### **Hand Unwrap Tools**

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

JONARD P/N	DESCRIPTION	TYPE	WIRE	E SIZE	TYPE OF UNWRAP	MAX. TERMINAL DIAMETER		TERMINAL HOLE DEPTH		OUTSIDE DIAMETER	
			AWG	ММ		IN.	ММ	AWG	ММ	AWG	мм
UW1	Unwrap Tool, 20-26 AWG	D	20-26	0.80-0.40	Left Hand	.070	1.77	1.000	25.40	.156	3.96
UW2	Unwrap Tool, 20-26 AWG	С	20-26	0.80-0.40	Left and Right Hand	.070	1.77	1.000	25.40	.156	3.96
UW4	Unwrap Tool, 20-26 AWG	В	20-26	0.80-0.40	Left Hand	.070	1.77	2.360	60.00	1.95	4.95
UW5	Unwrap Tool, 20-26 AWG	В	20-26	0.80-0.40	Left and Right Hand	.070	1.77	2.360	60.00	1.95	4.95
UW093R	Unwrap Tool, 24-32 AWG	D	24-32	0.50-0.20	Left Hand	.038	0.96	1.000	25.40	.093	2.36
UWD93-93	Unwrap Tool, 24-32 AWG	С	24.32	0.50-0.20	Left and Right Hand	.038	0.96	1.000	25.40	.093	2.36
UW2832C	Unwrap Tool, 28-32 AWG	В	28.32	0.32-0.20	Left and Right Hand	.038	0.96	.750	19.05	.156	3.96





#### **Hand Wrap Tools**

These Hand Wire 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.

JONARD	DESCRIPTION	REG	MOD TYPE		WIRE SIZE		MAX. TERMINAL Diagonal		TERMINAL HOLE DIAMETER		TERMINAL HOLE Depth		OUTSIDE DIAMETER	
P/N					AWG	ММ	IN.	ММ	AWG	ММ	AWG	ММ	AWG	ММ
HW-20	Hand Wrap Tool, 20 AWG	•		А	20	0.80	-	-	.075	1.90	1.000	25.40	.218	5.53
HW-224	Hand Wrap Tool, 22-24 AWG	•		А	22-24	0.65-0.50	=	=	.075	1.90	.807	20.50	.218	5.53
HW-26	Hand Wrap Tool, 26 AWG	•		А	26	0.40	-	-	.075	1.90	1.000	25.40	.218	5.53
HW-30*	Hand Wrap Tool, 30 AWG		•		30	0.25	.027	0.69	.036	0.91	.750	19.05	.125	3.17

<sup>\*</sup>This tool are recommended for .025" (0.63mm) square terminals on .100" (2.54mm) centers. A modified wrap provides 1.5 - 2 turns of insulation.



#### 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.

JONARD	DESCRIPTION	CRIPTION REG MO	MOD	WIRE	SIZE		SULATION IETER		AL HOLE IETER	TERMIN Dei	AL HOLE PTH	OUT DIAM	SIDE IETER	SQU PO	ARE ST
P/N				AWG	MM	IN.	MM	AWG	MM	AWG	MM	AWG	MM	AWG	MM
WSU-2224	Wrap-Strip-Unwrap Tool, 22-24 AWG	•		22-24	0.65 - 0.50	-	-	.075	1.90	1.50	38.1	.213	5.4	.045	1.14
WSU-24M	Wrap-Strip-Unwrap Tool, 24 AWG		•	24	0.50	.036	0.92	.075	1.90	1.50	38.1	.213	5.4	.045	1.14
WSU-26M	Wrap-Strip-Unwrap Tool, 26 AWG		•	26	0.40	.034	0.86	.075	1.90	1.50	38.1	.213	5.4	.045	1.14
WSU-30	Wrap-Strip-Unwrap Tool, 30 AWG	•		30	0.25	-	-	.036	0.91	1.50	38.1	.125	3.2	.025	0.63
WSU-30M	Wrap-Strip-Unwrap Tool, 30 AWG		•	30	0.25	.021	0.53	.036	0.91	1.50	38.1	.125	3.2	.025	0.63





#### Adjustable Precision Wire Strippers - OK-3907 Series

The OK-3907 Series 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.

JONARD P/N	WIRE	SIZE	ADJUSTABLE ST	REPLACEMENT	
JUNARD P/N	AWG	MM	AWG	ММ	BLADE
OK-3907-2224	22-24	0.65-0.50	1-1/2" to 1-3/4"	38.10 to 44.45	SB-2224
0K-3907-2426	24-26	0.50-0.40	1-1/2" to 1-3/4"	38.10 to 44.45	SB-2426
0K-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 24-26	0.65-0.50	1-1/2" to 1-3/4"	38.10 to 44.45	SB-2224 SB-2426

\*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 of 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.

JONARD P/N	WIRE	SIZE	ADJUSTABLE ST	REPLACEMENT			
JUNARU P/N	AWG	MM	AWG	мм	BLADE		
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		





#### **Manual Wire Wrap Tool Kits**

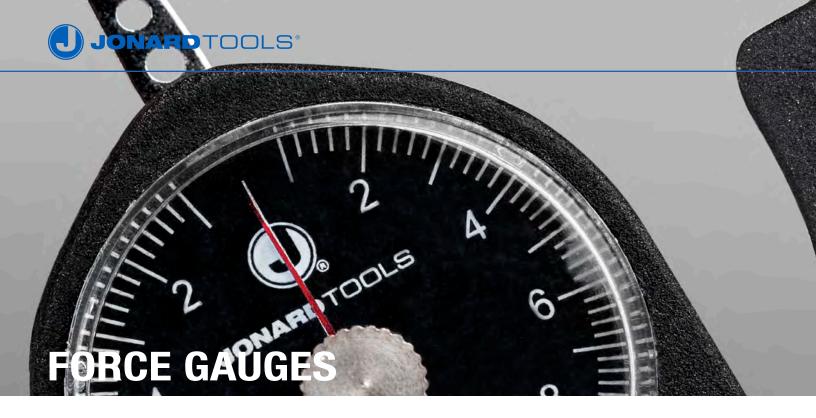
These are complete kits for technician's working at a main distributing frame or for field service where wire wrapping is required.

- **WWK-1** Wire Wrapping Kit
- **WWK-1INS** Insulated Wire Wrap Kit
- **WWK-CO** Wire Wrap Kit Central Office

#### Kits Include:

JONARD P/N	DESCRIPTION	WWK-1	WWK-1INS	WWK-CO
G100/R3278INS	Insulated Wire Wrapping Tool		X	X
G200/R3278	Lexan® Wire Wrapping Tool	X		
H-1000	Rugged Nylon 5-Pocket Tool Pouch	X	X	X
HW-UW-224	Wrap-Unwrap Tool, 22-24 AWG	X		
JIC-21257	Telecom Long Nose Pliers			X
JIC-22035	Probe Pick			X
JIC-2257	Insulated Wire Loop Puller			X
KB224	Wire Wrapping Bit, 22-24 AWG	X	X	X
P2224	Wire Wrapping Sleeve, 22-24 AWG	X		
P2224INS	Wire Wrapping Sleeve, Insulated, 22-24 AWG		X	X
ST-100	Cut-Strip Tool 22-24 AWG	X	X	
UW4	Unwrap Tool, 20-26 AWG		X	Х





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.





JONARD P/N	RANGE IN GRAMS	GRADUATION IN GRAMS	ACCURACY
GD-1	0-10	.20	± .20
GD-3	5-35	1.00	± 1
GD-5	10-50	1.00	± 1
GD-10	20-100	2.00	± 2
GD-15	50-150	5.00	± 5
GD-25	30-250	10.00	± 10
GD-30	40-350	10.00	± 10

JONARD P/N	RANGE IN GRAMS	GRADUATION IN GRAMS	ACCURACY
GD-50	60-500	20.00	± 20
GD-100	100-1000	25.00	± 25
GD-200	300-2000	50.00	± 50
GD-400	700-4000	100.00	± 100

(Round Tip, Dial Diameter 2 1/2")

**Small Gauges** 

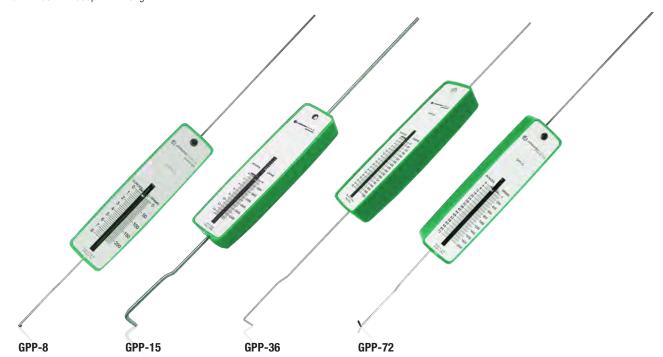
(Flat Tip, Dial Diameter 1 1/2")



#### **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.



### **Economy Push-Pull Tension Gauges**

JONARD P/N	AVOIRDUPOIS CAPACITY	METRIC CAPACITY
GPP-8	8 oz. x 0.25 oz.	220 g x 5 g
GPP-15	15 lb. x 4 oz.	6,804 x 100 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





#### Trimpot (Pkg of 10) - AT-3767/10

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."

#### Alignment Tool (Pkg of 10) - AT-6241/10

2-in-1 non-conductive Alignment Tool 1/4" diameter, stepped down to 5/32" 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.



#### Clip Setter - CS-1022

For setting and withdrawing E and C clips with inside diameter of .156" min. and thickness of .025" min. Max inside diameter of 3" and thickness of .093" One end has a hook with leaf spring tension for removing the clip, the other end has leaf spring for holding clip in position to insert.



#### **Orange Sticks**

Static free double ended economical tool made of birch wood. Used for cleaning electrical components and separating contact points, fine wire 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 Pkg of 10
S-389/100	Orange Sticks Point & Flat end Pkg of 100
S-389M/10	Orange Sticks 2 Flat End Pkg of 10
S-389M/100	Orange Sticks 2 Flat End Pkg of 100



#### **Probe Picks**

Tough resilient yellow nylon probe "spudger." One end is tapered to a 1/16" diameter point having an "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	AVOIRDUPOIS CAPACITY
JIC-22035/10	Insulated Probe Pick Pkg of 10
JIC-22035NT/10	Uninsulated Probe Pick Pkg of 10



#### Spudger (Pkg of 10) - AT-3112/10

Plastic pencil type spudger 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" long double ended 5/16" diameter.



#### **Alignment Tool Kit - TK-AT5**

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

Kit Includes:

AT-3112 Spudger

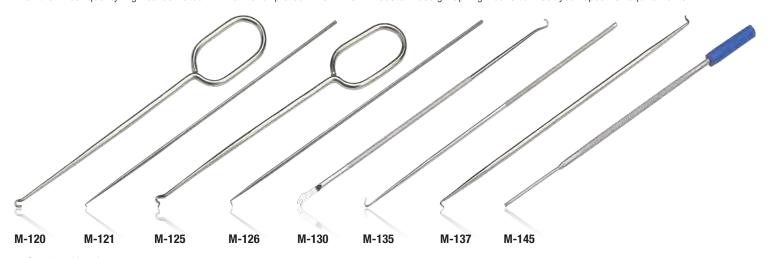
AT-3767 Trimpot

AT-6241 Alignment Tool

S-389 Orange Stick

JIC-22035 Probe Pick

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 products, electronics, electronechanics 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.



#### **Spring Hooks**

JONARD P/N	DESCRIPTION	DETAILS
M-120/5	Spring Hook, Pull, 6" (Pkg of 5)	Pull Hook with looped handle for maximum control
M-121/5	Spring Hook, Pull, 11" (Pkg of 5)	Pull Hook for difficult to reach areas
M-125/5	Spring Hook, Push, 6" (Pkg of 5)	Push Hook with looped handle for maximum control
M-126/5	Spring Hook, Push, 11" (Pkg of 5)	Push Hook for difficult to reach areas
M-130/SX5	Spring Hook, Pull & Lifter (Pkg of 5)	Pull Hook and lifter with a knurled grip
M-135/5	Hook Pull (Pkg of 5)	Pull Hook
M-137/5	Spring Hook, Push & Pull, 7" (Pkg of 5)	Push & Pull 2 sided Hook
M-145/5	Spring Hook, Captive, 7" (Pkg of 5)	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.



#### T Key Tool - JIC-719A

Ergonomic design hand grip T Key Tool made from a formed metal rod with a smooth tapered end which allows easier access. The solid pin at the end of the tool is a special heat treated alloy. The T Key is used to release the housing and door locking mechanism of the number 1A type coin telephone sets.



#### Coin Leveling Tool - JIC-139B

Coin Leveling Tool - JIC-139B.Coin Leveling Tool is 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.



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08-2/12 46 R30BLK-0100 61 SDP-28 43 TSPE-125 13 VT-1000 26 OB-3/12 46 R30G-0100 61 SDR-24 43 TSPF-125 13 VT-1000 26 OB-4/12 46 R30G-0100 61 SDR-34 43 TSUC-40 13 OK-3907-2224 71 R30G-1000 61 SDR-8B1 42 TSUC-510 13 WB24DH 67 OK-3907-2426 71 R30R-0100 61 SD-RB2 42 TSUC-510 13 WB24SM 67 OK-3907-2830 71 R30R-0100 61 SD-RB3 42 TSUC-516 13 WB24SM 67 OK-3907-2830 71 R30R-0100 61 SDS-142 43 TSUC-516 13 WB26SM 67 OK-3907-2830 71 R30R-0100 61 SDS-142 43 TSUC-516 13 WB26SM 67 OK-38716 22 R-30-TRI 62 SDSC-14 43 TSUC-5000 13 WB28SHM 67 P.30W-0050 62 SDSP-2 43 TI-4 23 WB26SM 67 P.30W-0050 62 SDSP-2 43 TI-4 23 WB224M 67 P.26LN 67 R30W-0100 61 SK-51632 52 TI-7 23 WB224SM 67 P.26LN 67 R30W-1000 61 SOK2230 66 TI-7PT 23 WB246M 67 P.2224 67 R30Y-1000 61 SSK-70 25 TI-812 24 WB3032M 67 P.2224-5 68 R30Y-1000 61 SSK-75 25 TIB-6 24 WB3032ML 67 P.2224-5 68 R-4601 58 SSK-80 25 TICG-6270-5 23 WB-30-R 62 P.2426 67 R-5926 58 SSK-80 25 TICG-6270-9 23 WD-30-R 62 P.2426 67 R-5926 58 SSK-90 25 TICG-6270-9 23 WD-30-R 62 P.2426 67 R-5926 58 SSK-700 25 TIK-225 24 WD-30-R 62 P.2426-5 68 RB-987/6 33 SSK-716 25 TIS-716 24 WD-30-R 62 P.2426-5 68 RB-987/6 33 SSK-716 25 TIS-716 24 WD-30-R 62 P.2426-5 68 RB-987/6 33 SSK-716 25 TIS-716 24 WD-30-R 62 P.2426-5 68 RB-987/6 33 SSK-716 25 TIS-716 24 WD-30-R 62 P.2426-5 68 RB-987/6 33 SSK-716 25 TIS-716 24 WD-30-R 62 P.2426-5 68 RB-987/6 33 SSK-716 25 TIS-716 24 WD-30-R 62 P.2426-5 68 RB-987/6 33 SSK-716 25 TIS-716 24 WD-30-R 62 P.2426-5 68 RB-987/6 33 SSK-716 25 TIS-716 24 WD-30-R 62 P.2426-5
0B-4/12 46 R30G-0100 61 SDR-34 43 TSUC-40 13 W 0K-3907-2224 71 R30G-1000 61 SD-RB1 42 TSUC-510 13 WB24DH 67 0K-3907-2426 71 R-30R-0050 62 SD-RB2 42 TSUC-512 13 WB24DH 67 0K-3907-2830 71 R30R-0100 61 SD-RB3 42 TSUC-516 13 WB24SM 67 0K8519 67 R30R-1000 61 SDS-142 43 TSUC-516 13 WB24SM 67 0W-38716 22 R-30-TRI 62 SDSC-14 43 TSUC-518 13 WB28SHM 67 0W-38716 22 R-30W-0050 62 SDSP-2 43 TL-4 23 WB28SHM 67 0P26LN 67 R30W-0100 61 SK-51632 52 TL-7 23 WB224M 67 0P26LN 67 R30W-1000 61 SOK2230 66 TL-7PT 23 WB246M 67 0P2224 67 R30Y-0050 62 SP-4 46 TL-7V 23 WB246M 67 0P2224 67 R30Y-0100 61 SSK-70 25 TL-812 24 WB3032M 67 0P2224 67 R30Y-0100 61 SSK-70 25 TTB-6 24 WB3032MI 67 0P2224-5 68 R-4601 58 SSK-80 25 TTCG-6270-5 23 WBK-100 32 0P2224INS 68 R-4602 58 SSK-80 25 TTCG-6270-9 23 WD-30-R 62 0P2426 67 R-5926 58 SSK-90 25 TTCG-6270-9 23 WD-30-R 62 0P2426 67 R-5926 58 SSK-700 25 TTCG-6270-9 23 WD-30-R 62 0P2426 68 R-9461 58 SSK-700 25 TTC-716 24 WD-30-TRI 62 0P2426-5 68 R-9461 58 SSK-716 25 TTS-716 24 WD-30-W 62
0K-3907-2426 71         R-30R-0050 62         SD-RB2 42         TSUC-512 13         WB24DH 67           0K-3907-2830 71         R30R-0100 61         SD-RB3 42         TSUC-516 13         WB24SM 67           0K8519 67         R30R-1000 61         SDS-142 43         TSUC-516 13         WB26SM 67           0W-38716 22         R-30-TRI 62         SDSC-14 43         TSUC-5000 13         WB28SHM 67           P         R-30W-0050 62         SDSP-2 43         TT-4 23         WB224M 67           P26LN 67         R30W-1000 61         S0K2330 66         TT-7T 23         WB2426M 67           P194LN 67         R-30Y-0050 62         SP-4 46         TT-7T 23         WB2426M 67           P2224 67         R-30Y-0100 61         SSK-70 25         TT-812 24         WB3032M 67           P2224-5 68         R30Y-1000 61         SSK-75 25         TTB-6 24         WB3032MIL 67           P2224-INS 68         R-4601 58         SSK-80 25         TTCG-6270-5 23         WD-30-B 62           P2426INS 68         R-9461 58         SSK-90 25         TTCG-6270-9 23         WD-30-B 62           P2426INS 68         R-946
OK8519         67         R30R-1000         61         SDS-142         43         TSUC-518         13         WB26SM         67           OW-38716         22         R-30-TRI         62         SDSC-14         43         TSUC-518         13         WB28SHM         67           P         R-30W-0050         62         SDSP-2         43         TT-4         23         WB224M         67           P26LN         67         R30W-0100         61         SK-51632         52         TT-7         23         WB2275M         67           P194LN         67         R30W-1000         61         SOK2230         66         TT-7PT         23         WB2426M         67           P2224         67         R-30Y-0050         62         SP-4         46         TT-7V         23         WB2669M         67           P2224-5         68         R30Y-1000         61         SSK-70         25         TT-812         24         WB3032M         67           P2224-5INS         68         R-4601         58         SSK-80         25         TTB-6         24         WBK-100         32           P2242INS         68         R-4602         58         SSK-85
P         R-30W-0050         62         SDSC-14         43         TSUC-5000         13         WB228HW         67           P         R30W-0050         62         SDSP-2         43         TT-4         23         WB224M         67           P26LN         R30W-0100         61         SK-51632         52         TT-7         23         WB2426M         67           P194LN         67         R30W-1000         61         SOK2230         66         TT-7PT         23         WB2426M         67           P194LN         67         R-30Y-0050         62         SP-4         46         TT-7V         23         WB2669M         67           P2224         67         R30Y-0100         61         SSK-70         25         TT-812         24         WB3032M         67           P2224-5         68         R30Y-1000         61         SSK-75         25         TTB-6         24         WB3032ML         67           P2224-5 in/S         68         R-4601         58         SSK-80         25         TTCG-6270-5         23         WBK-100         32           P2224/INS         68         R-4602         58         SSK-85         25         TTCG-6
P
P194LN 67 R-30Y-0050 62 SP-4 46 TT-7V 23 WB2669M 67 P2224 67 R30Y-0100 61 SSK-70 25 TT-812 24 WB3032M 67 P2224-5 68 R30Y-1000 61 SSK-75 25 TTB-6 24 WB3032MIL 67 P2224-5INS 68 R-4601 58 SSK-80 25 TTCG-6270-5 23 WB-100 32 P2224INS 68 R-4602 58 SSK-85 25 TTCG-6270-9 23 WD-30-B 62 P2426 67 R-5926 58 SSK-90 25 TTK-225 24 WD-30-TRI 62 P2426-5 68 R-9461 58 SSK-700 25 TTS-716 24 WD-30-TRI 62 P2426-5 68 RB-2876 33 SSK-716 25 TTS-716 24 WD-30-W 62
P2224-5 68       R30Y-1000 61       SSK-70 25       TT-812 24       WB3032MIL 67         P2224-5 68       R30Y-1000 61       SSK-75 25       TIB-6 24       WB3032MIL 67         P2224-5.INS 68       R-4601 58       SSK-80 25       TTCG-6270-5 23       WBK-100 32         P2224INS 68       R-4602 58       SSK-85 25       TTCG-6270-9 23       WD-30-B 62         P2426 67       R-5926 58       SSK-90 25       TTK-225 24       WD-30-R 62         P2426INS 68       R-9461 58       SSK-700 25       TT-PPLTT4 24       WD-30-TRI 62         P2426-5 68       BB-287/6 33       SSK-716 25       TTS-716 24       WD-30-W 62
P2224-5INS 68       R-4601 58       SSK-80 25       TTCG-6270-5 23       WBK-100 32         P2224INS 68       R-4602 58       SSK-85 25       TTCG-6270-9 23       WD-30-B 62         P2426 67       R-5926 58       SSK-90 25       TTK-225 24       WD-30-R 62         P2426INS 68       R-9461 58       SSK-700 25       TT-PPLTT4 24       WD-30-TRI 62         P2426-5 68       RB-287/6 33       SSK-716 25       TTS-716 24       WD-30-W 62
P2426 67 R-5926 58 SSK-90 25 TTK-225 24 WD-30-R 62 P2426INS 68 R-9461 58 SSK-700 25 TT-PPLTT4 24 WD-30-TRI 62 P2426-5 68 RB-287/6 33 SSK-716 25 TTS-716 24 WD-30-W 62
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P3032 67 RB-2257/6 33 SSK-800 25 TWAF-1130 21 WD-30-Y 62 P3032 67 RB-2257/6 33 SSK-800 25 TWAF-1220 21 WDUD-26DS 69
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P-DF2426 68 RDC-35 29 SST-716AT 28 TWAF-91630 21 WSA-1430 45 PLS-5 39 RDG-15 30 SST-916 28 TWAF-91640 21 WSA-1430RB 45
PT-300 26 RDG-30 30 ST-100 71 TWAFST-71622 21 WSU-24M 70
PTX 65 RDK-5 29 ST-100-2830 71 TWAS-71620 21 WSU-30 70
PTX-1 65 RDT-3RH 29 ST-450 57 TWAS-71630 21 WSU-30M 70 PTX-1BF 65 RDT-18K 29 ST-500 57 TWS-38/10 20 WSU-2224 70
PTX-1BFFL 65 RF-12 28 ST-500ESD 57 TWS-532/10 49 WWK-1 /2 PTX-1FL 65 RF-18 28 ST-550 57 TWSW-10 49 WWK-1INS 72
PTX-2 65 RST-8514 5 TWSW-10SK 49 WWK-C0 72

