# Cable Prep Tools for Drop Cable Applications

User Guide





#### **Standard Product Warranty**

Ben Hughes Communication Products Co., (BHCP) warrants that the company's tools are free from defects in workmanship and material.

BHCP will repair or replace its tools, which fail to give satisfactory service, due to defective workmanship or material. Repairs or replacement should be at the election and expense of BHCP and is your exclusive remedy in place of all other rights and remedies.

Plastic tool components are warranted for as long as you own your tools.

Metal components are a consumable product. A consumable product is warranted at the time of sale, only against defects in workmanship and materials that prevent its use.

Consumable products are goods reasonably expected to be used up or damaged during use including, but not limited to core bits, strip core bits, jacket strip blades, CPT series blades, gator teeth and crimp and compression tools, links and pins.

BHCP shall not be liable for any incidental, special or consequential cost or damages incurred by the purchaser or others (including without limitation, lost profits, revenues, anticipated sales, business opportunities, goodwill or interruption of business and any other injury or damage).

We reserve the right to make changes in design or construction at any time, without incurring any obligation in incorporating such changes in tools previously sold.

We also reserve the right to discontinue the manufacture or offering for sale through our exclusive distributors of any tools at such time as we consider necessary.

We cannot accept responsibility for tools which have been abused, worn, altered, repaired by others or used incorrectly.

To make a claim, call Cable Prep toll-free at 800-394-4046. Upon authorization, US Customers may ship product prepaid to Ben Hughes Communication Co., 207 Middlesex Ave., P.O. Box 373, Chester, CT 06412. Customers outside continental US must ship product to point of purchase. Damage occurring during transit is not covered by this warranty.

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#### **Contents:**

CPT Cable Stripping Tools2
Super CPT™ Cable Stripping Tools5
Cobra 360 Compression Tools8
MCT Multi-Compression Tools
HPT Hybrid Pocket Tools13
Torque Wrenches14
Wing Ding Torque Wrenches15
Hex Crimp Tool16
Carpet Cutter and Drill Guide17

**Read instructions carefully.** Tool performance is subject to the care and judgement exercised by the user, so a thorough review of the instructions presented in this guide is essential.

**To view instructional videos,** visit our website: www.cableprep.com.

**To order parts**, additional products, blades and cartridges, contact your distributor or visit our website: www.cableprep.com.

CAUTION: THE BLADES USED IN CABLE PREP TOOLS
ARE EXTREMELY SHARP. BE SURE TO KEEP YOUR FINGERS
CLEAR OF THEM.

CAUTION: ALWAYS WEAR EYE PROTECTION WHEN USING ANY HAND TOOLS.

# **CPT Cable Stripping Tools**

Factory-calibrated to remove the right amount of cable jacket, cut the braid and dielectric to the proper length, and expose the center conductor in one smooth operation.



#### **To Strip Cable**

- Cut the cable to ensure that you have a square, cleanly cut end. For best results, use Cable Prep drop cable cutters.
- While holding the tool, depress the lever. Insert the cable across the cartridge so that its end is facing in the direction of the arrow embossed on the lever.
- 3. Let go of the lever. Supporting the cable with one hand close to the tool, insert forefinger of other hand into the large hole on the opposite end of the tool. Spin the tool approximately three revolutions. You will hear the blade cutting through the braid and feel the tool spin freely. At this point you can reverse the spin. Depending on the cable you are using, the number of reverse spins will vary.
- Grasp tool firmly around the cartridge without depressing the lever and pull the tool away from the cable.

"☐ TIP: If a longer center conductor is required, extend the end of the cable past the edge of the cartridge to the desired length, unless the tool body is one that includes a stop.

\* TIP: If it is necessary to clean additional debris from the sides of the cartridge, the center conductor of the cable you just stripped may be used for this purpose.

\*\*TIP: If you stripped flooded cable, remove the flooding compound residue from the tool using a cotton swab and Cable Clear® cleaning solution, available from Cable Prep.

NOTE: The notched blade in the cartridge eliminates the risk of scoring the center conductor and cuts through the jacket, braid, foil and dielectric, leaving the center conductor exposed. The shallow blade cuts through the cable jacket only.

CAUTION: THE BLADES IN THE CPT CARTRIDGES ARE EXTREMELY SHARP. BE SURE TO KEEP YOUR FINGERS CLEAR OF THE BLADES.

**TOOL CARE:** Ensure that the tool is clean and free of debris. **Do not** use oil on the tool as it may damage the plastic. Although Cable Prep blades are made of hardened tool steel for long life and easy cutting, they may need replacing after extended use. If you see that the cut is not as clean, the braid is straggled, or the tool takes more revolutions to cut, **replace the cartridge immediately**.

#### To Replace a Cartridge on Tools with a Release Tab

- **1.** Push the tab button over the cartridge to release it. Discard the cartridge in a proper receptacle.
- Insert the new cartridge, and squeeze the tool closed to seat the cartridge properly.

# To Replace a Cartridge on Tools without a Release Tab

While holding the tool, depress the lever and grasp the cartridge on both sides. Then pull cartridge straight down and out. If necessary, tap the tool on a hard surface to free the cartridge. Reverse this process for cartridge installation and snap the cartridge in place. Move fingers away from cartridge and let go of lever.

#### Matching Tool and Cartridge Colors to Cable Types

Tool Color	Cartridge Color	Cable Type
Yellow	Black	6 and 59
Yellow	Blue	6 and 59 Plenum
Yellow	Blue	7/11 Plenum
Blue	Blue	7 and 11
Yellow	White	6 Tri-Shield
Green	Yellow	Belden Mini
Green	Smoke Gray	CommScope and Times Fiber Mini

#### When Using the CPT for 11 Series Cable

- For best results with the CPT-1100, spin the tool slowly in one direction only. If you are righthanded, turn the tool away from you. If you are left-handed, turn the tool toward you.
- Extend the cable slightly past the end of the tool, and then once stripped, cut your center conductor to length.

#### When Preparing Quad Shield Cables

- 1. When using quad shield cable, it is important not to remove any of the braid.
- After jacket is removed: Fold back first layer of braid, remove foil, fold back second layer of braid.

Super CPT<sup>™</sup>Cable Stripping Tools

Holds two cartridges to enable working on large- and small-diameter cables without changing tools. Connector support sockets eliminate need for separate insertion tool.



#### To Strip a Cable

Note that the Super CPT tool has a spring action that closes the tool around the cable automatically. Where the head of the tool opens to grab the cable, there is a "V" that secures the cable when the tool is closed around it. The opposite end of the tool has a large finger hole.

- Cut the cable to ensure that you have a square, cleanly cut end. For best results, use Cable Prep drop cable cutters. (Visit cableprep.com for details.)
- 2. Be sure to use the correct front (slot A) or rear (slot B) cartridge for your application Place the cable between the jaws in the "V" of the tool. Orient the cable so that its end is facing in the direction of the arrow embossed on the lever of the tool. To obtain the center conductor exposure dimension set for the cartridge, place the cable end flush with the side of the cartridge. If you require a longer center conductor exposure, extend the cable beyond the side of the tool to the appropriate length.
- 3. Place your finger in the hole at the back of the tool. Rotate the tool around the cable in either direction until you hear that braid is no longer being cut. This will usually require no more than 2 or 3 rotations.

- 4. Rotate the tool in the opposite direction another few turns. Exception: For RG-7 and -11 cables, do not rotate the tool in the opposite direction. Because these cables have low braid coverage, doing so tends to wind the braid around the dielectric.
- 5. For small-diameter cables, you can pull the jacket and dielectric off the cable with the tool. Leave the tool closed around the cable, grasp the head of the tool, and pull it off the end of the cable. This action will remove the jacket, excess braid, and dielectric. For large cables, squeeze the handles together to open the tool, and remove it from the cable. Using your fingers, pull the jacket and dielectric from the cable.

**NOTE:** As you squeeze the handles, a patented clean-out feature automatically removes debris from between the cutting blades of the rear cartridge whenever you open the tool.

<sup>☼</sup> TIP: If a longer center conductor is required, extend the end of the cable past the edge of the cartridge to the desired length, unless the tool body is one that includes a stop.

\*\*Q: TIP: If it is necessary to clean additional debris from the sides of the cartridge, the center conductor of the cable you just stripped may be used for this purpose.

\*\*Q: TIP: If you stripped flooded cable, remove the flooding compound residue from the tool using a cotton swab and Cable Clear\* cleaning solution, available from Cable Prep.

ARE EXTREMELY SHARP. BE SURE TO KEEP YOUR FINGERS CLEAR OF THE BLADES.

TOOL CARE: Ensure that the tool is clean and free of debris. Do not use oil on the tool as it may damage the plastic. Although Cable Prep blades are made of hardened tool steel for long life and easy cutting, they may need replacing after extended use. If you see that the cut is not as clean, the braid is straggled, or the tool takes more revolutions to cut, replace the cartridge immediately.

#### To Replace a Super CPT Cartridge

- **1.** Push the button over the cartridge to release it. Discard the cartridge in a proper receptacle.
- **2.** Insert the new cartridge, and squeeze the tool closed to seat the cartridge properly.

#### **Matching Cartridge Colors to Cable Types**

Cartridge Color	Slot	Cable Type
Black	В	6 & 59
Blue	В	6 & 59 Plenum; 6 & 59 (1/8 braid prep)
Blue	Α	7/11 Plenum
White	В	6 Tri-Shield
Grey	Α	7 & 11
Orange	Α	7 & 11 (1/8 braid prep)
Yellow	Α	Commscope F50 and Times Fiber
		Flex Feeder

# Cobra 360 Compression Tool

Attaches all F-type compression connectors used on RG-6, -59, -7, -11 and mini coax cables. It features a performance-driven design that delivers easy, powerful leverage and ensures consistent, precise connections, every time.



#### To Terminate a Connector

- Prep the cable according to the connector requirements to achieve the proper braid exposure and center conductor length with the corresponding Cable Prep Drop Cable Stripping Tool. Push the connector onto the cable.
- 2. Two sets of connector support dogs are built into the Cobra. The support jaws for RG 6/59 are *gold*, while the support jaws for RG 7/11 are *silver*. When both sets of dogs are aligned, your tool is adjusted to the RG 6/59 setting.
- 3. To adjust your Cobra tool for RG 7/11 connectors, simply hold the tool in one hand, grasp the gold dogs with the other and pull them straight back, away from the silver dogs, and then over to the side. Reverse the action to reset for RG 6/59.
- 4. Once the tool is adjusted to the appropriate setting for your cable, insert the connector into the plunger tip and push the cable down through the 360 degree connector support dogs.

- **5.** Depress the lever towards the tool body until they are fully closed.
- **6.** Open the lever to remove the compressed connector assembly from the tool.

**TOOL CARE:** We advise periodic use of "3 in 1" oil on the plunger and other moving parts.

#### To Adjust for PCT TRS and PPC EX Connectors

**NOTE:** Cobra models installed with a fixed plunger tip (indicated by an .830 or .710 label) are not adjustable.

Cobra tools with adjustable plunger tips are factory adjusted to the universal .830 close dimension. To change to the .710 dimension for connectors such as PCT TRS and PPC EX, follow these easy steps:

- **1.** Loosen the lock nut with a 3/8" open end wrench and thread it forward to free the plunger tip.
- 2. Place the connector in-between the tip and dogs as you normally would to compress the connector and squeeze the handle. You will see that the connector is not fully compressed. Using the same connector, screw plunger tip out approximately 5 turns and close the tool again. This will compress the connector a little more. Repeat this process until the connecter is completely compressed and the handle has a slight spring back feeling.
- **3.** Thread the lock nut back up against the plunger away from the connector.
- 4. Tighten the lock nut with a 3/8" open end wrench to stop the tip from coming out of adjustment

# **MCT Multi-Compression Tools**

Provide dual-tool versatility using an innovative "spin & store" wheel. Individual

models attach all RCA, BNC and F-type compression connectors used on RG-6, -59, -11 and mini coax cables.



#### To Terminate a Connector

Prep the cable according to the connector requirements to achieve the proper braid exposure and center conductor length with the corresponding Cable Prep Drop Cable Stripping Tool. Push the connector onto the cable.

- 1. Open MCT lever by depressing trigger.
- Rotate MCT wheel until correct dogs are in position. Seat the spring-loaded wheel stops properly by rotating wheel slightly past position and then back to position.
- 3. Align connector and cable along tool, and place open end of connector on plunger tip.
- For RCA connectors, insert connector tip into slot at top of plunger.
- 5. Push cable into support dogs.
- 6. Squeeze lever to secure connector.
- Depress trigger to open lever and remove cable and connector from tool.
- 8. Squeeze lever to close and lock it for storage.

The connector is now properly attached to the cable.

**TOOL CARE:** We advise periodic use of "3 in 1" oil on the plunger and other moving parts.

#### To Recalibrate MCT-101 Tools to Factory Settings

- Remove wrench from storage compartment, labeled "Tool Box".
- 2. Loosen lock nut on plunger.
- 3. Open lever by depressing trigger.
- 4. Rotate wheel to full stop in blue position.
- 5. Use wrench as a gauge by positioning it horizontally between support dogs and plunger tip. Place legs of wrench against support dogs and flat end of gauge across plunger tip.
- **6.** Close lever while rotating plunger until it touches flat end of gauge. Rotate plunger clockwise to reduce gap and counterclockwise to increase gap.
  - Set plunger depth to hold gauge firmly when lever is in closed position.
- 7. Release gauge by depressing trigger.
- **8**. Rotate plunger another 1/4 turn until slot in plunger tip is at top of tool.
- Tighten lock nut with wrench to secure plunger and return wrench to Tool Box compartment.

The MCT-101 tool is now calibrated for connectors on all RG-6, -59 and -11 cables (except PCT TRS and PPC EX connectors, which require a .710 dimension).

(Continued next page)

# To Recalibrate MCT-102 Tools for F and RCA Connectors

- 1. Remove wrench from storage compartment.
- 2. Loosen lock nut on plunger.
- 3. Rotate wheel to full stop in yellow position.
- **4.** Note throw distance of connector by observing its slip length.
- 5. Close lever.
- **6.** Place an uncompressed, unattached connector on side of plunger tip.
- 7. Rotate plunger so that distance from end of connector to back side of dogs is slightly more than throw distance noted in step 4. Rotate plunger clockwise to reduce gap and counterclockwise to increase gap.
- 8. Remove connector and rotate plunger another 1/4 turn until slot in plunger tips is at top of tool.
- Tighten lock nut with wrench to secure plunger and return wrench to "Tool Box" compartment.

#### To Recalibrate MCT-102 Tools for BNC connectors

**NOTE:** Due to the wide range of connector lengths, it may be necessary to recalibrate the tool when switching between BNC connectors.

- 1. Remove wrench from storage compartment.
- 2. Loosen lock nut on plunger.
- Rotate wheel to red position. Seat spring-loaded wheel stops properly by rotating wheel slightly past position and then back to position.
- 4. Follow steps 4 9 for F and RCA connectors, above.

# **HPT Hybrid Pocket Tools**

Compact and easy to use with either hand, individual models attach all RCA, BNC and F-type connectors used on RG-6,-59, -11 and mini coax cables.



#### To Terminate a Connector

- Prep the cable according to the connector requirements to achieve the proper braid exposure and center conductor length with the corresponding Cable Prep CPT Tool. (Note that HPT and CPT tools are color coded to match.) Push the connector onto the cable by utilizing the appropriate integrated insertion port located on the front of your HPT tool.
- 2. Release the latch on the tool lever, allowing the lever to swing open so that you are able insert the connector and cable.
- 3. Insert the connector into the plunger tip and push the cable down through the 360 degree connector support dogs. Start to close the handles of the tool together. As the handles close, the plunger slides toward the dogs. When the handles are fully closed together, the connector has been terminated.
- 4. Open handles to remove the connector. Back the connector away from the plunger slot and grasping the cable behind the connector, lift the assembly out of the tool.

#### To Adjust for PCT TRS and PPC EX Connectors

Please refer to instructions given on page 9.

**TOOL CARE:** We advise periodic use of "3 in 1" oil on the plunger and other moving parts.

# **Torque Wrenches**

Prevent damage to equipment from over tightening or signal loss due to loose connectors.
End caps are color coded for easy identification of different torque settings. Knurled tool body ensures a firm hold during use.

#### **Matching End Cap Colors to Torque Requirements**

End Cap Color	Torque Setting
Blue	12 inch pounds
Yellow	20 inch pounds
Orange	25 inch pounds
Green	30 inch pounds
Black	40 inch pounds

#### To Assemble Connector

- Place the connector on the tap port and hand tighten.
- Position the torque wrench on the connector and rotate wrench clockwise. Turn until you hear and feel the "click" in the handle, indicating that you have reached the desired torque.
  - **NOTE:** do not over-tighten beyond the "click" otherwise you risk causing damage to the connector or the wrench

#### **To Remove Connector**

 Position the torque wrench on the connector and rotate counter-clockwise until the connector loosens. **NOTE:** You may hear the wrench "click" at this time as it works to overcome the breakaway force of the tightened connector. This is fine, however; damage may occur with *excessive* force.

Once loosened, grasp the connector and unscrew by hand.

# Wing Ding Torque Wrenches

Color coded to match F-connector ports to the appropriate cables and ensuring that connectors are tightened with the correct torque.



Each Wing Ding set comprises two parts: a ring that is placed on the port, and a finger wrench of the same color that is placed on the corresponding F-connector.

#### **To Install Wing Ding Torque Wrenches**

- 1. Slide the port ring over the threads of the port on the box chassis all the way to the base of the port.
- 2. Install the F-connector part over the hex nut on the connector. For best results, Install before the connector and cable are attached, orienting the hex-shaped opening toward the front of the connector. This will secure the wrench in place.
- **3.** Once the Wing Ding wrench, connector and cable are assembled, use the wrench to finger-tighten the F-connector onto the port. This will ensure the correct tightness for the connector.
- 4. Repeat the above steps for each port, using differently colored Wing Ding wrenches. This will ensure that disconnected cables are reconnected to the correct ports.

# **Hex Crimp Tool**

Crimps connectors and center pins on drop cables. The HCT/ACT series of coax crimp tools crimp connectors requiring hex sizes .178" through .475" and center pins requiring crimp sizes .068" through .110".

Before crimping the connector, remove all foreign material from the jaw area.

TOOL CARE: Oil should be applied at regular intervals to all exposed pin points. These tools were designed as a crimp tool to do a specific task and effective work. Do not use these tools as a hammer and do not use these tools as pliers.

#### To Readjust your Hex Crimp Tool

- **1.** Remove the fastener holding the adjustment wheel in place.
- Lift the adjustment wheel until it just clears the compression bump but is not removed from the D-pin.
- **3.** Rotate the D-pin and cogged wheel together in a counterclockwise direction one notch.
- **4.** Reset the cogged wheel down onto the D-pin and against the compression bump, and lock down the adjustment wheel. Fully compress the handles and the restored toggle should be evident.

If no toggle is felt, repeat steps 1 through 4, rotating another notch until toggle action has been restored.

**NOTE:** The adjustment wheel lock down may vary due to design changes.

Field Maintenance Kits for the Hex Crimp Tool (MK-1050) are available from your distributor. They consist of 4 retaining pins, fasteners, U-shaped spring washers, 1 set of links, adjustment wheel and retaining rings.

# Carpet Cutter and Drill Guide

Cuts easily and safely through carpet and pad, avoiding snags, pulls, and the "snowball" effect. 7/16" x 8" drill bit available.



- Position tool to cut carpet by placing tip of tool on designated spot, apply pressure and twist in a back and forth manner. The serrated tip of the carpet cutter will make an almost instantaneous cut, leaving a small circular incision with no ragged or frayed edges.
- 2. Remove cutter. The carpet plug is retained in the tool when the cutter is removed. The plug will be pushed out when the drill bit is inserted. Homeowners or maintenance personnel may store the plug for subsequent, almost invisible replacement if wiring is removed at some future date. Wiring installers report customers are particularly enthusiastic about this feature.
- 3. To drill flooring, position the tool in the carpeting hole, insert the bit and proceed to drill through the floor. The drill bit will be guided by the tool, thus preventing it from walking and preventing entanglement with loose threads.

CAUTION: AS A SAFETY PRECAUTION, ALWAYS
REPLACE PLASTIC CAP ON BLADE WHEN TOOL IS NOT IN USE.



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