# LIGHT DUTY TRAILER ESSENTIALS

**Electrical harnesses and connections for light duty trailers and the RVs, SUVs, pick-up trucks and any other type of vehicles that tow them.**

## Electrical Harnesses

• STA-DRY® Tagalong, Equipment and Landscaping Trailers
• STA-DRY® Utility Trailers

## Connectors

• 4 and 6-Way Light Duty Cables
• 4 and 6-Way Connectors
• 7-Way Blade Connectors
• 4-Way Flat Connectors
• 7-Way Light Duty J560 Type Connectors

## Tools, Repair Products, and Accessories

• Testers
• Kits
• And More.....

For new and innovative products, visit **www.phillipsind.com**

(8-LDTE-ENG) REV1 3-22-18

12070 Burke Street, Santa Fe Springs, CA 90670

**800.423.4512   Fax 800.597.7757**

**PHILLIPS**

Protect against moisture, corrosion and failure by choosing an electrical harness system built to withstand the most extreme environmental conditions.  For large harness volumes, Phillips has the capacity to handle your custom harness needs from design through production.  All Phillips STA-DRY® harnesses are manufactured to your specifications and are corrosion resistant, easy to install and easy to maintain.  Send us your specs and we'll work with you to produce your custom harness today.

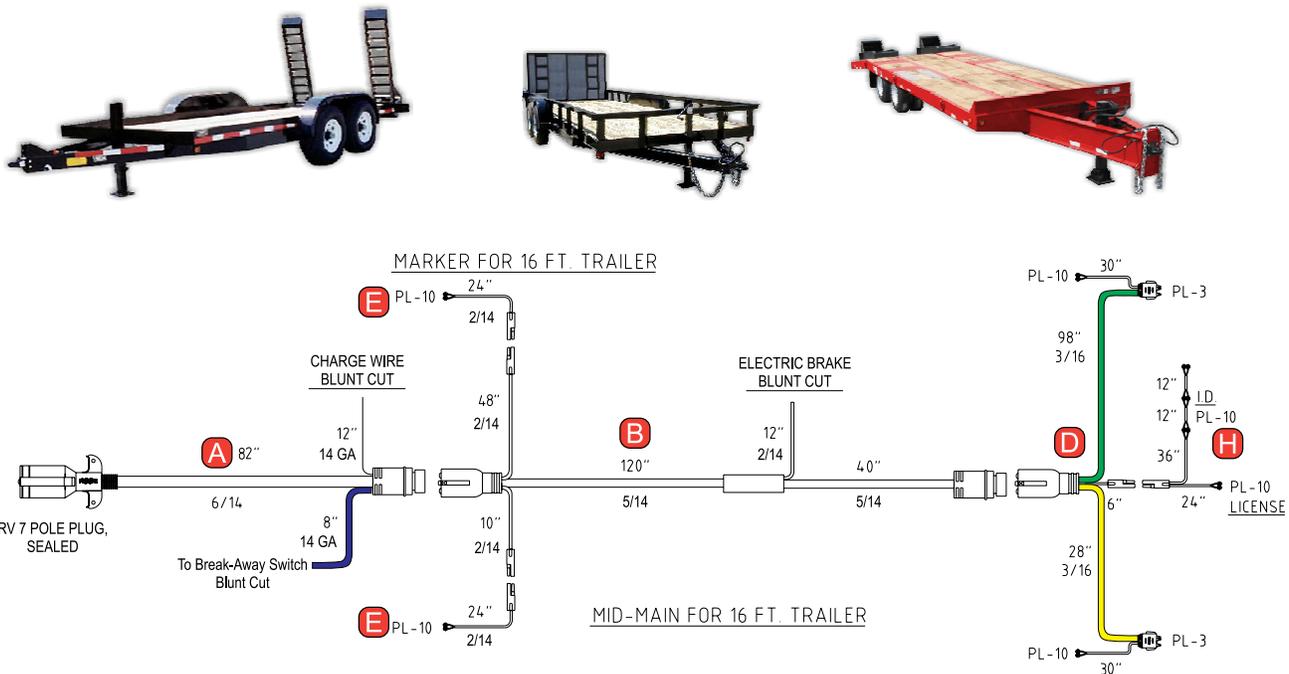### Superior Quality
- 100% factory tested components

### Corrosion Resistant
- Corrosion inhibiting grease on all modules
- Molded material on all plugs adheres/bonds to cables
- Molded connections keep moisture and contaminants from penetrating the electrical system

### Easy to Install and Maintain
- Industry standard lamp pigtails
- Indexed plugs ensure proper connection
- Harness modules allow for easy replacement should accidental damage occur
- Universal pigtail modules eliminate the need to stock separate "curbside" and "roadside" pigtails

## STAY-DRY® System - Tagalong, Equipment & Landscape - Electric Brakes





### Standard (Length as shown above)

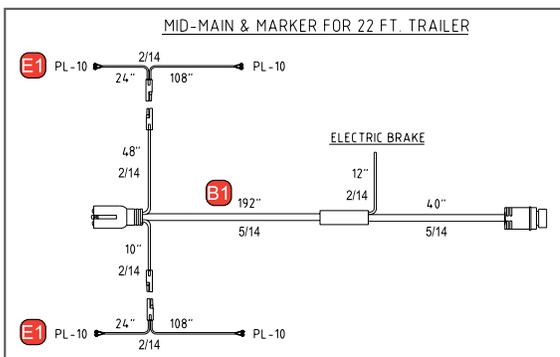| | | |
|---|---|---|
| 34-1703-082 | Main, 82" (6'-10") | A |
| 34-4010 | Rear sill | D |
| 36-9601-036 | ID / license | * H |

\* Will fit both 34 series (STA-DRY® SLIM-7™ System) and 36 series (STA-DRY® System)
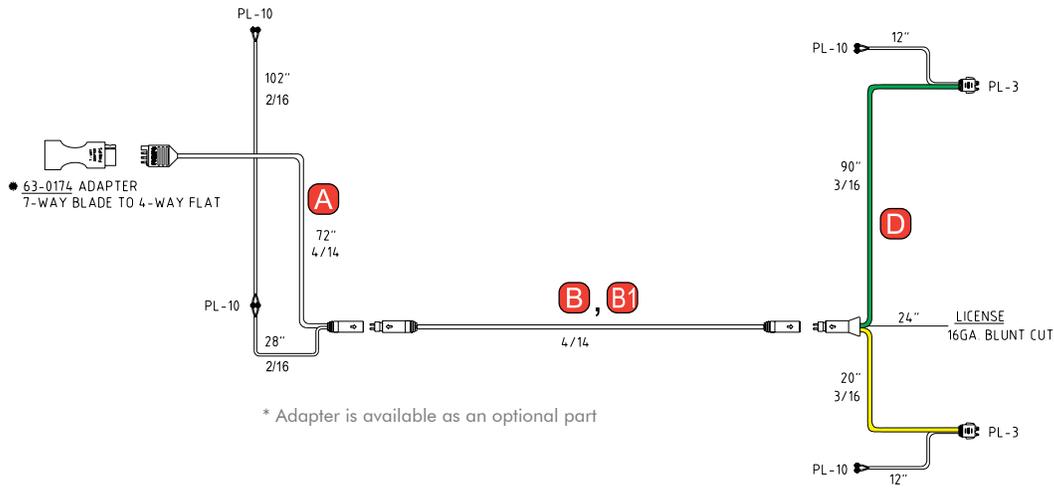
### Mid-Main Harness Options

| | | |
|---|---|---|
| 34-2023-160 | 16' trailer mid-main with marker and electric brake drop, 160" (13'-4") | B |
| 34-2023-232 | 22' trailer mid-main with marker and electric brake drop, 232" (19'-4") | B1 |

### Marker Lamp Lead Options

| | | |
|---|---|---|
| 34-5211-024 | 16' trailer mid-marker, 24" (2') | E |
| 34-5221-024108 | 22' trailer mid-marker, 24"/108" (2'/9') | E1 |

PL-10

102"
2/16

* 63-0174 ADAPTER
7-WAY BLADE TO 4-WAY FLAT

**A**

72"
4/14

PL-10

28"
2/16

**B** , **B1**

4/14

* Adapter is available as an optional part

PL-10   12"   PL-3

**D**

90"
3/16

24"   LICENSE
16GA BLUNT CUT

20"
3/16

PL-10   12"   PL-3

### Standard (Length as shown above)

| | | |
|---|---|---|
| 34-1824-072 | Main, 72" (6') | A |
| 34-4012 | Rear sill | D |

### Mid-Main Harness Options

| | | |
|---|---|---|
| 34-2004-066 | 8' trailer mid-main, 66" (5'-6") | B |
| 34-2004-114 | 12' trailer mid-main, 114" (9'-6") | B1 |



# 6 & 4-WAY ROUND LIGHT DUTY CONNECTIONS

## STA-DRY® 6 & 4-Way Light Duty Cables

### Coiled

| 6-Way | 4-Way | Description | |
|---|---|---|---|
| 19-6708 | 19-4708 | 8', with THERMOSEALED™ plugs | * |
| 19-6710 | 19-4710 | 10', with THERMOSEALED™ plugs | * |
| 19-6712 | 19-4712 | 12', with THERMOSEALED™ plugs | * |
| 19-6715 | 19-4715 | 15', with THERMOSEALED™ plugs | * |

* Working length - As measured by pull force per SAE J2222. Length of actual cable is significantly longer.

### Straight

| 6-Way | 4-Way | Description | |
|---|---|---|---|
| 19-6006 | 19-4006 | 6', with THERMOSEALED™ plugs | **NEW** |
| 19-6008 | 19-4008 | 8', with THERMOSEALED™ plugs | **NEW** |
| 19-6010 | 19-4010 | 10', with THERMOSEALED™ plugs | **NEW** |
| 19-6012 | 19-4012 | 12', with THERMOSEALED™ plugs | **NEW** |
| 19-6015 | 19-4015 | 15', with THERMOSEALED™ plugs | **NEW** |
| 19-6020 | 19-4020 | 20', with THERMOSEALED™ plugs | **NEW** |


19-6708


NEW 19-6008

• For light duty towing applications such as boats and utility trailers
• Plugs are molded for moisture and corrosion resistance
• Coiled cables have the same heavy duty jacket as our PERMACOIL™ and ABS PERMACOIL™
• Flexible from -87°F to 150°F (-66°C to 66°C)
• 16 ga. wires

# STA-DRY® 6 & 4-Way THERMOSEALED™ Plugs

NEW



19-6102

19-4104

| 6-Way 6/16 ga. | |
| --- | --- |
| **19-6102** | THERMOSEALED™ plug with 2' (24") blunt cut straight cable **NEW** |
| **19-6104** | THERMOSEALED™ plug with 4' (48") blunt cut straight cable **NEW** |

| 4-Way 4/16 ga. | |
| --- | --- |
| **19-4102** | THERMOSEALED™ plug with 2' (24") blunt cut straight cable **NEW** |
| **19-4104** | THERMOSEALED™ plug with 4' (48") blunt cut straight cable **NEW** |

• Plugs are molded for moisture and corrosion resistance
• Flexible from -87°F to 150°F (-66°C to 66°C)
• Heavy duty jacketing for long life

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# 6 & 4-Way Zinc Die-Cast Plugs



15-610

15-611
6-way insert

15-410

| 6-Way | |
| --- | --- |
| **15-610** | 6-way |
| **15-630** | 6-way plug with cable guard |

| 4-Way | |
| --- | --- |
| **15-410** | 4-way |
| **15-430** | 4-way plug with cable guard |

• Heavy duty, reinforced zinc die-cast housing
• Brass terminations for superior conductivity
• Wire insertion
• Rugged finger grips for easy coupling/uncoupling
• 15-611 6-pin replacement insert fits Phillips 15-610 and
  15-630 plugs

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# STA-DRY® 6 & 4-Way Molded Sockets

NEW



16-400

16-600

| 4-Way 4/14 ga. | |
| --- | --- |
| **16-400** | 4-way molded socket with 2' (24") blunt cut straight cable, split pin **NEW** |

| 6-Way 6/14 ga. | |
| --- | --- |
| **16-600** | 6-way molded socket with 2' (24") blunt cut straight cable, split pin **NEW** |

• Sockets are molded for moisture and corrosion resistance
• Elongated holes for mounting adaptability
• Stainless steel hinge pin and spring for long life
• Full opening lid
• Flexible from -87°F to 150°F (-66°C to 66°C)
• Heavy duty cable jacketing for long life

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# 6 & 4-Way Zinc Die-Cast Sockets



15-600

15-400

| 6-Way | |
| --- | --- |
| **15-600** | 6-way, wire insertion, split pin |

| 4-Way | |
| --- | --- |
| **15-400** | 4-way, wire insertion, split pin |

• Heavy duty, zinc die-cast housing for durability
• Elongated holes for mounting adaptability
• Stainless steel hinge pin and spring for long life
• Full-opening lid
• Reduce exposure to contaminants and moisture, use socket
  boot P/N 15-640
• Closed back design

# 7-WAY BLADE CONNECTORS

## 7-Way Blade Plug

| 16-713 | 7-way blade plug |
|---|---|

- Light duty truck and RV connections
- Non-corrosive housing
- Large finger grips for easy coupling/uncoupling
- Brass contacts for superior conductivity



## 7-Way Blade Socket

| 16-714 | 7-way blade socket |
|---|---|

- Light duty truck and RV OEM connections
- Non-corrosive housing for long life
- Brass terminations for superior conductivity



## 7-Way Blade Socket
### with Blunt Cut Cables

| 2/10, 1/12 & 4/14 ga. | | |
|---|---|---|
| 26-2305-024 | 7-way blade socket, with socket boot, with 2' (24") blunt cut cable | NEW |
| 26-2305-048 | 7-way blade socket, with socket boot, with 4' (48") blunt cut cable | NEW |

- Light duty truck and RV connections
- Non-corrosive housing for long life
- Brass terminations for superior conductivity
- Heavy duty cable jacketing for long life
- Flexible from -85°F to 150°F (-65°C to 66°C)



NEW

# 4-WAY FLAT CONNECTORS

## STA-DRY® 4-Way Molded Flat Connectors

| Vehicle Side | | |
|---|---|---|
| 15-421-024 | Molded 4-way flat connector, three female pins and one male pin, with 2' (24") cable | NEW |
| 15-421-048 | Molded 4-way flat connector, three female pins and one male pin, with 4' (48") cable | NEW |

| Trailer Side | | |
|---|---|---|
| 15-426-024 | Molded 4-way flat connector, three male pins and one female pin, with 2' (24") cable | NEW |
| 15-426-048 | Molded 4-way flat connector, three male pins and one female pin, with 4' (48") cable | NEW |

- Common connection for light duty towing - pickups, SUVs, small trailers
- Universal pin size and configuration
- Vehicle side has completely overmolded plug
- 14 ga. wires enclosed in jacketing for corrosion protection
- Flexible from -40°F to 150°F (-40°C to 66°C)
- Meets SAE J1239



NEW

15-421-024



15-426-024

# 7-WAY J560 TYPE CONNECTORS FOR LIGHT DUTY APPLICATIONS

## STA-DRY® WEATHER-TITE™ PERMAPLUG™



| Trailer Side | 2/10, 1/12 & 4/14 ga. | |
| --- | --- | --- |
| 26-2100-048 | 7-way WEATHER-TITE™ PERMAPLUG™ with 4' (48") blunt cut cable | **NEW** |
| 26-2100-060 | 7-way WEATHER-TITE™ PERMAPLUG™ with 5' (60") blunt cut cable | **NEW** |
| 26-2100-072 | 7-way WEATHER-TITE™ PERMAPLUG™ with 6' (72") blunt cut cable | **NEW** |

- Connects a light duty trailer to a vehicle with a J560 style socket*
- The WEATHER-TITE™ seal blocks all contaminants from entering the electrical system, creating a complete seal
- Large finger grips for coupling/uncoupling
- Floating brass pins for secure installation in misaligned sockets
- Unbreakable non-corrosive housing
- Flexible from -85°F to 175°F (-65°C to 115°C)
- 15-715 replacement insert
- 5-750 replacement rubber seal
- 16-730 replacement WEATHER-TITE™ PERMAPLUG™

16-730          15-715          5-750

*Important Note: A J560 type socket or plug, normally used for commercial vehicles, can be wired for light duty applications as an alternative connector. However, commercial tractor/trailer J560 connections and light duty applications using the same J560 plug/socket type connectors should never be coupled together. Commercial and light duty applications each have different wire color code configurations for their electrical system. If coupled together, lights will not function properly.
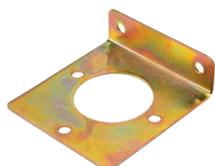
# LIGHT DUTY SOCKET ACCESSORIES

## Socket Boot



| | |
| --- | --- |
| 15-640 | Fits 15-400 and 15-600 |
| 15-740 | Fits 16-714 |

## Mounting Brackets



15-788          63-2724

| | |
| --- | --- |
| 15-788 | 90°, fits 15-400, 15-600, 16-400 and 16-600 |
| 63-2724 | Fits RV 7-way blade socket 16-714 |

# JUNCTION BOXES

## Junction Box



15-960          15-961

| | |
| --- | --- |
| 15-960 | Black junction box |
| 15-961 | CLEAR-VU™ grey junction box |

- Larger junction box accepts ABS cable and additional wiring
- Ring termination
- Pass-through grommets accommodate up to .80 O.D. cable
- Seven #10 stud posts
- Hole pattern is 7.37 in. center to center
- Box measures approximately 6 5/8 in. long x 3 3/4 in. wide x 2 1/2 in. deep at its widest points

# CONTINUITY TESTERS

- Checks conductivity of all circuits
- LED lights glow when circuit is functioning correctly
- All testers are internally grounded

- Handy and essential tool for every shop
- Many drivers carry these LED circuit checkers to quickly identify lighting problems prior to leaving the yard

## Digital Multimeter

| 4-532 | Digital multimeter |
|-------|--------------------|

- Pocket size
- Large LED display
- Temperature display
- Overload protection
- Accurate within .5%
- Low battery indicator

Check fuses, plugs, sockets, electrical cables, extension cords, control panels, small appliance, batteries, wall receptacles, etc.

## 7-Way E-Z Tester

| 63-0170 | 7-way tester for 7-way blade socket |
|---------|-------------------------------------|

- For 7-way RV type sockets

## 4-Way E-Z Tester

| 63-0040 | 4-way tester |
|---------|--------------|

- For 4-way flat connections

# BULK TRAILER CABLE

- Resistant to chemicals, oils and fuel
- Paper wrapped for ease of stripping
- Concentric jacketing - copper centered in jacket for consistent abrasion resistance

## ARCTIC SUPERFLEX™

| 7 CONDUCTOR - 1/12, 6/14 ga. .570 O.D. Black - Brown - Blue - Green - Red - White - Yellow | | | | |
|---|---|---|---|---|
| | Length | Package | Stranding 14 ga. | Stranding 12 ga. |
| 3-622 | 100' | Spool | 41 x 30 | 65 x 30 |

| 4 CONDUCTOR - 4/14 ga. .440 O.D. Brown - Yellow - Green - White | | | |
|---|---|---|---|
| | Length | Package | Stranding |
| 3-602 | 100' | Spool | 41 x 30 |

| 3 CONDUCTOR - 3/14 ga. .440 O.D. Black - Red - White | | | |
|---|---|---|---|
| | Length | Package | Stranding |
| 3-662 | 100' | Spool | 41 x 30 |

| 2 CONDUCTOR - 2/14 ga. .340 O.D. Black - White | | | |
|---|---|---|---|
| | Length | Package | Stranding |
| 3-652 | 100' | Spool | 41 x 30 |

For additional lengths, please visit our website or see our full line catalog

**FLEXIBLE TO -85°F**

- Designed for durability in extreme temperatures
- Stays flexible from -85°F to 175°F (-65°C to 79°C)
- Dark blue jacket color
- Resistant to chemicals, oils and fuels

## DURAFLEX™





- For general trailer rewiring
- Black jacket
- Stays flexible to -40°F (-40°C)
- Meets SAE J1128 specifications

**7 CONDUCTOR - 1/12, 6/14 ga. .500 O.D.**
**Black - Brown - Blue - Green - Red - White - Yellow**

| | Length | Package |
|---|---|---|
| **3-241** | 50' | Spool |
| **3-242** | 100' | Spool |

**6 CONDUCTOR - 6/14 ga. .500 O.D.**
**Black - Brown - Green - Red - White - Yellow**

| | Length | Package |
|---|---|---|
| **3-201** | 50' | Spool |
| **3-202** | 100' | Spool |

**4 CONDUCTOR - 4/14 ga. .400 O.D.**
**Brown - Yellow - Green - White**

| | Length | Package |
|---|---|---|
| **3-191** | 50' | Spool |
| **3-192** | 100' | Spool |

For additional lengths, please visit our website or see our full line catalog

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## STA-DRY® Flexible Dual Wall



| Color | Wire Gauge* | Expanded ID | After Recovery | Qty. | Length | Part No. |
|---|---|---|---|---|---|---|
| Black | 8-6 | 0.500" | 0.160" | 6 | 6" | **6-304** |
| Black | 1-2/0 | 0.750" | 0.250" | 6 | 6" | **6-305** |

*Recommended wire gauge

- Waterproofs, seals and insulates
- Adhesive lined cross-linked polyolefin
- Color-coded for polarity identification
- Dielectric strength: 700V

# STA-DRY® CRIMP & SEAL™ WIRE TERMINAL CONNECTORS

- Crimp provides mechanical reliability for excellent conductivity
- Seal prevents wire corrosion … Keeps out moisture and road salts
- RoHS compliant

## CLEAR-VU™ Window Butt Connectors



Heat Required 

| | Qty. | Color | Gauge |
|---|---|---|---|
| **1-1661** | 25 | Red | 22-18 |
| **1-1662** | 25 | Blue | 16-14 |
| **1-1663** | 25 | Yellow | 12-10 |

- CLEAR-VU™ crystal-clear tubing provides unparalleled visual inspection
- Window ensures the wire is stripped to the proper length and is fully seated to wire stop
- Color-coded stripes identify wire gauge size to use and where to crimp the connector
- Seamless barrel ensures superior crimp performance
- Wire-stop prevents over-insertion of wire
- Wire gauge imprint simplifies wire size identification

| | Qty. | | Qty. | Color | Gauge |
|---|---|---|---|---|---|
| **1-1961** | 25 | **1-1961C** | 5 | Red | 22-18 |
| **1-1962** | 25 | **1-1962C** | 5 | Blue | 16-14 |
| **1-1963** | 25 | **1-1963C** | 5 | Yellow | 12-10 |

• Crimp provides mechanical reliability for excellent conductivity
• Seal prevents wire corrosion … Keeps out moisture and road salts
• RoHS compliant



Heat Required

## Multiple Wire Connectors

| | Qty. | Color | Gauge |
|---|---|---|---|
| **1-1725** | 10 | Red | 22-18 |
| **1-1724** | 10 | Blue | 16-14 |
| **1-1723** | 10 | Yellow | 12-10 |

• Window ensures the wire is stripped to the proper length and is fully seated to the wire stop
• Allows for "daisy chain" by joining 3 wires in-line
• Active adhesive seals between multiple wires to prevent corrosion
• Tapered barrel has a uniform copper wall, making it easy to crimp with a strong termination
• Color-coded stripes identify wire gauge size to use and where to crimp the connector



Heat Required

## STA-DRY® CRIMP & SEAL™ Kit

| **1-1905** | STA-DRY® CRIMP & SEAL™ Kit |
|---|---|

Contents:

| **1-1961** | 22-18 ga. butt connector, 10 qty. |
|---|---|
| **1-1962** | 16-14 ga. butt connector, 10 qty. |
| **1-1963** | 12-10 ga. butt connector, 10 qty. |
| **4-054** | Mini-jet torch, 1 qty. |

• 4 part numbers, 30 pieces, 1 mini-torch
• 7 1/2 in. x 3 3/4 in.



# HEATING TOOLS

## Professional Torch

| **4-057** | Professional torch, box |
|---|---|

• For daily professional use
• Adjustable flame
• Refillable tank provides up to 220 minutes of butane capacity
• Brass body covered with a protective grip
• Waterproof piezoelectric ignition system
• Removable base provides for storage flexibility
• Meets Consumer Product Safety Commission 16CFR Part 1212 - Safety Standard for Multi-Purpose Lighters (Child Resistant)

**220 MINUTE CAPACITY**

| Specifications | |
|---|---|
| Length | 100 mm  (1.4 in) |
| Height W/O stand | 138 mm  (2.8 in) |
| Width | 36 mm  (0.8 in) |
| Weight (when gas-filled) | 280 g |
| Flame temperature | 1300°C (2500°F) |
| Gas container capacity | 60 ml |
| Operating capacity (one gas filling) | 220 min. |

## Mini-Jet Torch

**30 MINUTE CAPACITY**

| Specifications | |
|---|---|
| Length | 35 mm (1.4 in) |
| Height | 71 mm (2.8 in) |
| Width | 20 mm (0.8 in) |
| Weight (when gas-filled) | 46 g |
| Flame temperature | 1300°C (2500°F) |
| Gas container capacity | 5 ml |
| Operating capacity (one gas filling) | 30 min. |

**4-054**     Mini-jet torch, blister pack, 6 pcs.

- For small jobs and quick repairs
- Lifetime waterproof ignition system
- Refillable tank provides up to 30 minutes of butane capacity
- Adjustable gas flow with wind-resistant flame
- Protective flip-open cap
- See-through fuel tank
- Meets Consumer Product Safety Commission 16CFR Part 1212 - Safety Standard for Multi-Purpose Lighters (Child Resistant)

# HANDHELD CABLE & WIRE TOOLS

## Wire Stripping & Crimping Tool

**4-214**     Wire stripping and crimping tool

- Multi-purpose tool
- Strips wire sizes from 22 thru 10 ga.
- Crimps insulated and non-insulated terminals
- Machined for precision wire cuts and strips
- Color-coded to ensure proper crimp
- Overlapping teeth provide a consistent cut
- Insulated handles for safety

## Heavy Duty Handheld Cable Cutter

**4-101**     Heavy duty handheld cable cutter

- Cuts up to 2/0 cable
- For use with copper cable only

# CABLE TIES

## Assortment Pack

| Length | Per Pack | Tie Tensile | Bundle Diameter Inches (mm) | Part No. | Color |
|---|---|---|---|---|---|
| 4" | 200 | 18 lb. | 0.157" (4) - 0.9" (22) | | |
| 8" | 100 | 50 lb. | 0.276" (7) - 2.76" (70) | **8-61020** | UV Black |
| 11" | 100 | 50 lb. | 0.276" (7) - 1.97" (50) | | |

- UL recognized / CSA approved
- Clamshell dimensions: 15 in. x 7 1/8 in. x 2 in.
- Great for shop use
- Operating temperature -4°F to 185°F (-20°C to 85°C)
- Minimum installation temperature: 5°F (-15°C)