



# Safety Tools & Products

*Safety Tools to 1000 VAC*

*Insulating Products  
to 40,000 VAC*

## FR Clothing for all Hazard Risk Categories



Certified Insulated Products



# NFPA 70E COMPLIANCE GUIDE

This guide shall only be used in conjunction with performing the necessary calculations contained in a flash hazard analysis to determine the proper cal/cm<sup>2</sup>. If the results of the calculations exceed the cal/cm<sup>2</sup> that correspond to the HRC found on this guide, you must use clothing that complies with the calculation.

Panelboards Rated 240 V and Below - Notes 1 and 3				600 V Class Switchgear (with power circuit breakers or fused switches) - Notes 5 and 6				NEMA E2 (fused contactor) Motor Starters, 2.3 kV through 7.2 kV			
TASK (equipment is energized & work is done within the flash protection boundary)	V-Rated Gloves	V-Rated Tools	HRC	TASK (equipment is energized & work is done within the flash protection boundary)	V-Rated Gloves	V-Rated Tools	HRC	TASK (equipment is energized & work is done within the flash protection boundary)	V-Rated Gloves	V-Rated Tools	HRC
Circuit Breaker (CB) or fused switch operation with covers on			0	CB or fused switch operation with enclosure doors closed			0	Contactor operation with enclosure doors closed			0
CB or fused switch operation with covers off			0	Reading a panel meter while operating a meter switch			0	Reading a panel meter while operating a meter switch			0
Opening hinged covers (to expose bare, energized parts)			0	Work on control circuits with energized parts 120 V or below, exposed	Y	Y	0	Work on control circuits with energized parts 120 V or below, exposed	Y	Y	0
Removal of bolted covers (to expose bare, energized parts)			1	CB or fused switch operation with enclosure doors open			1	Insertion or removal (racking) of starters from cubicles, doors closed			2
Remove or Install CB's or fused switches	Y	Y	1	Insertion or removal (racking) of CB's from cubicles, doors closed			2	Contactor operation with enclosure doors open			2 *
Work on energized parts, including voltage testing	Y	Y	1	Opening hinged covers (to expose bare, energized parts)			2	Insertion or removal (racking) of starters from cubicles, doors open			3
Panelboards / Switchboards Rated 240 V to 600 V (with molded case or insulated case CB's) - Notes 1 & 3				Application of safety grounds, after voltage test	Y		2 *	Opening hinged covers (to expose bare, energized parts)	Y		3
TASK (equipment is energized & work is done within the flash protection boundary)	V-Rated Gloves	V-Rated Tools	HRC	Work on energized parts, including voltage testing	Y	Y	2 *	Application of safety grounds, after voltage test	Y	Y	3
CB or fused switch operation with covers on			0	Work on control circuits with energized parts >120 V exposed	Y	Y	2 *	Work on control circuits with energized parts >120 V exposed	Y	Y	3
CB or fused switch operation with covers off			1	Insertion or removal (racking) of CB's from cubicles, doors open			3	Work on energized parts, including voltage testing	Y	Y	3
Work on energized parts, including voltage testing	Y	Y	2 *	Removal of bolted covers (to expose bare, energized parts)			3	Removal of bolted covers (to expose bare, energized parts)			4
600 V Class Motor Control Centers (MCC's) - Notes 2 (except as indicated) and 3				Other 600 V Class (277 V to 600 V, nominal) Equipment - Lighting or small power transformers (600V Max) - Note 3				Metal Clad Switchgear, 1 kV and Above			
TASK (equipment is energized & work is done within the flash protection boundary)	V-Rated Gloves	V-Rated Tools	HRC	TASK (equipment is energized & work is done within the flash protection boundary)	V-Rated Gloves	V-Rated Tools	HRC	TASK (equipment is energized & work is done within the flash protection boundary)	V-Rated Gloves	V-Rated Tools	HRC
CB or fused switch or starter operation with enclosure doors closed			0	Opening hinged covers (to expose bare, energized parts)			1	Reading a panel meter while operating a meter switch			0
Reading a panel meter while operating a meter switch			0	Removal of bolted covers (to expose bare, energized parts)			2 *	CB or fused switch operation with enclosure doors closed			2
Work on control circuits with energized parts 120 V or below, exposed	Y	Y	0	Application of safety grounds, after voltage test	Y		2 *	Work on control circuits with energized parts 120 V or below, exposed	Y	Y	2
CB or fused switch or starter operation with enclosure doors open			1	Work on energized parts, including voltage testing	Y	Y	2 *	Opening hinged covers (to expose bare, energized parts)			3
Opening hinged covers (to expose bare, energized parts)			1	Other 600 V Class (277 V to 600 V Nom.) Equip - Revenue meters (kW/h at primary voltage & current) - Note 3				CB or fused switch operation with enclosure doors open			4
Removal of bolted covers (to expose bare, energized parts)			2 *	TASK (equipment is energized & work is done within the flash protection boundary)	V-Rated Gloves	V-Rated Tools	HRC	Insertion or removal (racking) of CB's from cubicles, doors open			4
Application of safety grounds, after voltage test	Y		2 *	Cable trough or tray cover removal or installation			1	Removal of bolted covers (to expose bare, energized parts)			4
Work on energized parts, including voltage testing	Y	Y	2 *	Miscellaneous equipment cover removal or installation			1	Opening voltage transformer or control power transformer compartments			4
Work on control circuits with energized parts >120 V exposed	Y	Y	2 *	Application of safety grounds, after voltage test	Y		2 *	Application of safety grounds, after voltage test	Y		4
Insertion or removal of individual starter "buckets" from MCC - Note 4	Y		3	Insertion or removal	Y		2 *	Work on energized parts, including voltage testing	Y	Y	4
				Work on energized parts, including voltage testing	Y	Y	2 *	Work on control circuits with energized parts >120 V exposed	Y	Y	4
Minimum Clothing Requirements											
HRC	Protective Clothing	Minimum Cal/cm <sup>2</sup>	PPE (Safety glasses, leather safety shoes required for all)	Other Equipment 1 kV and Above - Metal clad load interrupter switches, fused or unfused							
-1	Natural fiber short-sleeved shirt and long pants	N/A	Hard Hat	TASK (equipment is energized & work is done within the flash protection boundary)	V-Rated Gloves	V-Rated Tools	HRC	Switch operation, doors closed			2
0	Natural fiber long-sleeved shirt and pants	N/A	Hard hat	Outdoor disconnect switch operation (gang-operated, from grade)							2
1	Denim jeans and FR long-sleeved shirt OR FR long-sleeved shirt and pants OR FR coveralls	4	Hard Hat, Arc-Rated Face Shield*	Insulated cable exam, in open area	Y						2
2	FR long-sleeved shirt and pants OR FR coveralls	8	Hard Hat, Arc-Rated Face Shield	Opening hinged covers (to expose bare, energized parts)							3
2*	FR long-sleeved shirt and pants OR FR coveralls	8	Hard Hat, Hearing Protection, Arc-Rated Face Shield and 8 cal/cm <sup>2</sup> Stocking Hood* OR Multi-Layer Switching Hood	Outdoor disconnect switch operation (hookstick operated)	Y	Y					3
3	Multi-Layer flash suit over FR long-sleeved shirt and pants over natural fiber short-sleeved T-shirt and pants OR Multi-Layer flash suit over FR coveralls over natural fiber short-sleeved T-shirt and pants	25	Hard Hat, Multi-Layer Switching Hood, Hearing Protection, OR Arc-rated Goggle and Stocking Hood*	Removal of bolted covers (to expose bare, energized parts)							4
4	Multi-Layer flash suit over FR long-sleeved shirt and pants over natural fiber short-sleeved T-shirt and pants OR Multi-Layer flash suit over FR coveralls over natural fiber short-sleeved T-shirt and pants	40	Hard Hat, Multi-Layer Switching Hood, Hearing Protection, OR Arc-rated Goggle and Stocking Hood*	Insulated cable examination, in manhole or other confined space	Y						4
Note 7 ASTM Recommendations are noted with the *											

\* If the notes cannot be satisfied, work must be performed de-energized.

- Note 1 Maximum of 25 kA short circuit current available, 0.03 second (2 cycle) fault clearing time.
- Note 2 Maximum of 65 kA short circuit current available, 0.03 second (2 cycle) fault clearing time.
- Note 3 For < 10 kA short circuit current available, the HRC required may be reduced by one category.
- Note 4 Maximum of 42 kA short circuit current available, 0.33 second (20 cycle) fault clearing time.
- Note 5 Maximum of 35 kA short circuit current available, ≤ 0.5 second (30 cycle) fault clearing time.
- Note 6 For < 25 kA short circuit current available, the HRC required may be reduced by one category.
- \*Circuits over 40cal/cm<sup>2</sup> should only be worked de-energized.

Revised 8-05

Definitions: Y=Yes (Required)

V-Rated Gloves : gloves rated and tested for the maximum line-to-line voltage upon which work will be done. Leather protectors must be worn externally if v-rated rubber gloves could be damaged.

V-Rated Tools : tools rated and tested for the maximum line-to-line voltage upon which work will be done.

HRC : Hazard Risk Category

FR : Flame Resistant



Khaki Shirt & Blue Work Pants



**ARC SAFE**

**NEW ASTM F1506 AND  
NFPA 70E PPE**  
Chambray Shirts and  
Jeans made  
from INDURA Ultra Soft

Shirts are available in  
Chambray and Khaki colors.  
Chambray Arc rating 5.2  
(ATPV)  
Khaki Arc rating 8.2 (ATPV)  
Sizes from S to 5XL  
Available in Blue

**11 Cal/cm<sup>2</sup> Long Sleeve Knit Cotton  
Cool Tee Shirts**

Shirt Sizes	Khaki #	Chambray#	Blue*
S 36-38.	<b>53980</b>	<b>53996</b>	
M 40-42.	<b>53982</b>	<b>53998</b>	
L 44-46.	<b>53984</b>	<b>54000</b>	
XL 48-50.	<b>53986</b>	<b>54002</b>	
2XL 52-54.	<b>53988</b>	<b>54004</b>	
3XL 56-58.	<b>53990</b>	<b>54006</b>	
4XL 60-62.	<b>53992</b>	<b>54008</b>	
5XL 64-66.	<b>53994</b>	<b>54010</b>	

\*other colors are available

Western Style Jeans are  
available in Denim color.  
Arc rating 20.7 (ATPV)  
Sizes 28-56 inches (waist)  
Standard inseam is 32"

Shirt Sizes	Khaki #	Chambray#
S 36-38.	<b>53980</b>	<b>53996</b>
M 40-42.	<b>53982</b>	<b>53998</b>
L 44-46.	<b>53984</b>	<b>54000</b>
XL 48-50.	<b>53986</b>	<b>54002</b>
2XL 52-54.	<b>53988</b>	<b>54004</b>
3XL 56-58.	<b>53990</b>	<b>54006</b>
4XL 60-62.	<b>53992</b>	<b>54008</b>
5XL 64-66.	<b>53994</b>	<b>54010</b>

Pant Sizes	Jeans #	Blue Work #
XS 28-30.	<b>53960</b>	<b>53930</b>
S 32-34.	<b>53962</b>	<b>53934</b>
M 36-38.	<b>53964</b>	<b>53938</b>
L 40-42.	<b>53966</b>	<b>53942</b>
XL 44-46.	<b>53968</b>	<b>53946</b>
2XL 48-50.	<b>53970</b>	<b>53950</b>
3XL 52-54.	<b>53972</b>	<b>53954</b>
4XL 56-58.	<b>53974</b>	<b>53958</b>

Pants: Standard inseam = 32"

Longer add 15%

Shorter no additional charge

FR Blue Work Pants = 11 (ATPV)

Made in the U.S.A.

A Khaki Shirt and Denim  
Jeans protects the body to  
Hazard Risk Category 2, add  
a double layer arc hood and  
voltage rated gloves and this  
would bring you into  
compliance with Hazard Risk  
Category 2\*.

# Hazard Risk Category 1 & 2 - Arc Protection PPE - Face / Head / Eye

**HRC**  
0      1      2      2\*      3      4

See page 1 for 70 E Compliance Guide



**Code#**

52510

**Code#**

52509

**Code#**

52546

**Code#**

52547

**Code#**

52548

**Code#**

50311

**Code#**

52513

**Code#**

52510

**Description**

Arc Shield with hard hat

**Cal/cm<sup>2</sup>**

10

52511

Arc Shield ONLY

10

52512

Arc Shield / Helmet / Hood / Storage Bag

11

52508

Arc Shield / Hard Hat / Storage Bag

10

52500

Arc Shield / Hard Hat / Storage Bag / Back Pack

10

52501

Arc Shield / Hard Hat / Tool Back Pack

10

52502

Replacement Lenses

10

52503

Hard Hat Adapter

10

52504

Replacement Chin Cup

—

52509

Arc Shield / Hood Storage Bag

—

52549

Knit Balaclava Hood

11

**Description**

Knit Detachable Hood

**Cal/cm<sup>2</sup>**

11

52547

Stocking Hood-worn under hard hat and arc shield  
(Highly recommended for use with 52510)

17

52548

Arc Hood

11

50311

Thermographer Gloves

11

50313

Thermographer Gloves

45

50315

Thermographer Gloves

59

52513

Flash Protection Hot Back Pack

—

52514

Large Flash Protection Hot Back Pack

—

52540

Safety Helmet - Class E

—

52542

Safety Glasses

—

## Flash Protection Clothing (FR)

Ultra Soft INDURA® Knit fabric weight  
6.3 oz., ATPV 11 cal/cm<sup>2</sup>

**Navy Blue Parka  
Indura® NOMEX®**

Small **21780** **52620**

Medium **21781** **52622**

Large **21782** **52624**

X-Large **21783** **52626**

XX-Large **21784** **52628**

XXX-Large **21785** **52630**

XXXX-Large **21786** **52632**

**Navy Blue Lab Coat  
Indura® NOMEX®**

21790 **52635**

21791 **52636**

21792 **52637**

21793 **52638**

21794 **52639**

21795 **52640**

21796 **52641**

**Navy Blue Coveralls  
Indura® NOMEX®**

21770 **52590**

21771 **52592**

21772 **52594**

21773 **52595**

21774 **52596**

21775 **52597**

21776 **52598**

**Navy Blue Overalls  
Indura® NOMEX®**

52560 **52660**

52562 **52662**

52564 **52664**

52566 **52666**

52568 **52668**

52570 **52670**

52572 **52672**

\* Specify parka / coat / jacket and glove sizes when ordering kits

## Arc Protection Kits

<b>Anti-Fog Arc Shield</b>	52511 (10 cal/cm <sup>2</sup> )				
<b>Safety Glasses</b>	52542	52542	52542	52542	52542
<b>Flame Resistant Parka</b> 11 cal/cm <sup>2</sup> Ultra Soft INDURA® 11 cal/cm <sup>2</sup> Ultra Soft INDURA® 11 cal/cm <sup>2</sup> Ultra Soft INDURA® 5.6 cal/cm <sup>2</sup> NOMEX® 5.6 cal/cm <sup>2</sup> NOMEX®	52511 (11 cal/cm <sup>2</sup> )				
<b>Insulating Gloves</b>	500V Class 00	1,000V Class 0	20,000V Class 2	1,000V Class 0	20,000V Class 2
<b>Appropriate Glove Protectors</b>	Class 00	Class 0	Class 2	Class 0	Class 2
<b>Glove Bag</b>	<b>22100</b>	<b>22100</b>	<b>22200</b>	<b>22100</b>	<b>22200</b>
<b>Safety Helmet</b>	<b>52540</b>	<b>52540</b>	<b>52540</b>	<b>52540</b>	<b>52540</b>
<b>Flash Apparel Bag</b>	<b>52599</b>	<b>52599</b>	<b>52599</b>	<b>52599</b>	<b>52599</b>
<b>Complete Kit Code #</b>	<b>52790</b>	<b>52800</b>	<b>52801</b>	<b>52802</b>	<b>52803</b>
<b>Kit Without Gloves Code #</b>	<b>52804</b>	<b>52804</b>	<b>52804</b>	<b>52805</b>	<b>52805</b>

<b>Anti-Fog Arc Shield</b>	52511 (10 cal/cm <sup>2</sup> )				
<b>Safety Glasses</b>	52542	52542	52542	52542	52542
<b>Flame Resistant Lab Coat</b> 11 cal/cm <sup>2</sup> Ultra Soft INDURA® 11 cal/cm <sup>2</sup> Ultra Soft INDURA® 11 cal/cm <sup>2</sup> Ultra Soft INDURA® 5.6 cal/cm <sup>2</sup> NOMEX® 5.6 cal/cm <sup>2</sup> NOMEX®	52511 (11 cal/cm <sup>2</sup> )				
<b>Insulating Gloves</b>	500V Class 00	1,000V Class 0	20,000V Class 2	1,000V Class 0	20,000V Class 2
<b>Appropriate Glove Protectors</b>	Class 00	Class 0	Class 2	Class 0	Class 2
<b>Glove Bag</b>	<b>22100</b>	<b>22100</b>	<b>22200</b>	<b>22100</b>	<b>22200</b>
<b>Safety Helmet</b>	<b>52540</b>	<b>52540</b>	<b>52540</b>	<b>52540</b>	<b>52540</b>
<b>Flash Apparel Bag</b>	<b>52599</b>	<b>52599</b>	<b>52599</b>	<b>52599</b>	<b>52599</b>
<b>Flame Retardant Hood</b>	<b>52546</b>	<b>52546</b>	<b>52546</b>	<b>52545</b>	<b>52545</b>
<b>Complete Kit Code #</b>	<b>52791</b>	<b>52806</b>	<b>52807</b>	<b>52820</b>	<b>52822</b>
<b>Kit Without Gloves Code #</b>	<b>52808</b>	<b>52808</b>	<b>52808</b>	<b>52824</b>	<b>52824</b>

<b>Anti-Fog Arc Shield</b>	52511 (10 cal/cm <sup>2</sup> )				
<b>Safety Glasses</b>	52542	52542	52542	52542	52542
<b>Flame Resistant Coverall</b> 11 cal/cm <sup>2</sup> Ultra Soft INDURA® 11 cal/cm <sup>2</sup> Ultra Soft INDURA® 11 cal/cm <sup>2</sup> Ultra Soft INDURA® 5.6 cal/cm <sup>2</sup> NOMEX® 5.6 cal/cm <sup>2</sup> NOMEX®	52511 (11 cal/cm <sup>2</sup> )				
<b>Insulating Gloves</b>	500V Class 00	1,000V Class 0	20,000V Class 2	1,000V Class 0	20,000V Class 2
<b>Appropriate Glove Protectors</b>	Class 00	Class 0	Class 2	Class 0	Class 2
<b>Glove Bag</b>	<b>22100</b>	<b>22100</b>	<b>22200</b>	<b>22100</b>	<b>22200</b>
<b>Safety Helmet</b>	<b>52540</b>	<b>52540</b>	<b>52540</b>	<b>52540</b>	<b>52540</b>
<b>Flash Apparel Bag</b>	<b>52599</b>	<b>52599</b>	<b>52599</b>	<b>52599</b>	<b>52599</b>
<b>Flame Retardant Hood</b>	<b>52546</b>	<b>52546</b>	<b>52546</b>	<b>52545</b>	<b>52545</b>
<b>Complete Kit Code #</b>	<b>52792</b>	<b>52830</b>	<b>52832</b>	<b>52836</b>	<b>52838</b>
<b>Kit Without Gloves Code #</b>	<b>52834</b>	<b>52834</b>	<b>52834</b>	<b>52840</b>	<b>52840</b>

## SIZE CHARTS

### Jackets, Coats & Coveralls (Chest Sizes)

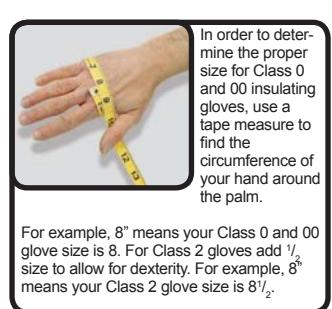
Coveralls: Standard Inseam = 32"

Small (36-38)	Medium (40-42)	Large (44-46)	XL (48-50)	2XL (52-54)	3XL (56-58)	4XL (60-62)	5XL (64-66)
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### Pants (Waist Sizes)

Pant: Standard Inseam = 32"

Xsmall (28-30)	Small (32-34)	Medium (36-38)	Large (40-42)	XL (44-46)	2XL (48-50)	3XL (52-54)	4XL (56-58)
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ARC Shield & PPE Clothing



Glove Storage



Electrical Test Gear



Slide Out Tool Pack

### Electrician's Backpack - The Hot Pack®

All in one solution for flash rated PPE clothing, V-rated tools and insulating gloves. CIP's new backpack has a top pouch designed to store gloves and two side pouches designed for electrical test gear and one back pouch with slide out sleeve for holding tools. All pouches include quick close velcro flaps. The large center pouch is designed to accommodate and protect the arc face shield and to store flash rated clothing. The waterproof backpack is available in kits with all PPE to bring you in compliance with the new 2004 NFPA 70E Safety Standards. Available in electrical safety orange and navy blue. (Custom logos available) (Patent # D 505,258)

<b>ARC Shield</b>	<b>Safety Helmet</b>	<b>Storage Bag</b>	<b>Tool Back Pack</b>	<b>Tool Kit 13302</b>	<b>Gloves &amp; Protectors</b>	<b>F/R Clothing</b>	<b>Style Clothing</b>	<b>Code #</b>
✓	✓	✓	✓	✓	Class 00	X	X	53800
✓	✓	✓	✓	✓	Class 0	X	X	53801
✓	✓	✓	✓	✓	Class 2	X	X	53802
✓	✓	✓	✓	✓	X	X	X	53803
✓	✓	✓	✓	✓	Class 00	X	X	53804
✓	✓	✓	✓	✓	Class 0	X	X	53805
✓	✓	✓	✓	✓	Class 2	X	X	53806
✓	✓	✓	✓	✓	X	X	X	53807
✓	✓	✓	✓	✓	Class 00	11 Cal/CM <sup>2</sup>	Parka	53808
✓	✓	✓	✓	✓	Class 0	11 Cal/CM <sup>2</sup>	Parka	53809
✓	✓	✓	✓	✓	Class 2	11 Cal/CM <sup>2</sup>	Parka	53810
✓	✓	✓	✓	✓	X	11 Cal/CM <sup>2</sup>	Parka	53811
✓	✓	✓	✓	✓	Class 00	11 Cal/CM <sup>2</sup>	Parka	53812
✓	✓	✓	✓	✓	Class 0	11 Cal/CM <sup>2</sup>	Parka	53813
✓	✓	✓	✓	✓	Class 2	11 Cal/CM <sup>2</sup>	Parka	53814
✓	✓	✓	✓	✓	X	11 Cal/CM <sup>2</sup>	Parka	53815
✓	✓	✓	✓	✓	Class 00	5.6 Cal/CM <sup>2</sup>	Parka	53816
✓	✓	✓	✓	✓	Class 0	5.6 Cal/CM <sup>2</sup>	Parka	53817
✓	✓	✓	✓	✓	Class 2	5.6 Cal/CM <sup>2</sup>	Parka	53818
✓	✓	✓	✓	✓	X	5.6 Cal/CM <sup>2</sup>	Parka	53819
✓	✓	✓	✓	✓	Class 00	5.6 Cal/CM <sup>2</sup>	Parka	53820
✓	✓	✓	✓	✓	Class 0	5.6 Cal/CM <sup>2</sup>	Parka	53821
✓	✓	✓	✓	✓	Class 2	5.6 Cal/CM <sup>2</sup>	Parka	53822
✓	✓	✓	✓	✓	X	5.6 Cal/CM <sup>2</sup>	Parka	53823
✓	✓	✓	✓	✓	Class 00	11 Cal/CM <sup>2</sup>	Coverall/Hood	53824
✓	✓	✓	✓	✓	Class 0	11 Cal/CM <sup>2</sup>	Coverall/Hood	53825
✓	✓	✓	✓	✓	Class 2	11 Cal/CM <sup>2</sup>	Coverall/Hood	53826
✓	✓	✓	✓	✓	X	11 Cal/CM <sup>2</sup>	Coverall/Hood	53827
✓	✓	✓	✓	✓	Class 00	11 Cal/CM <sup>2</sup>	Coverall/Hood	53828
✓	✓	✓	✓	✓	Class 0	11 Cal/CM <sup>2</sup>	Coverall/Hood	53829
✓	✓	✓	✓	✓	Class 2	11 Cal/CM <sup>2</sup>	Coverall/Hood	53830
✓	✓	✓	✓	✓	X	11 Cal/CM <sup>2</sup>	Coverall/Hood	53831
✓	✓	✓	✓	✓	Class 00	5.6 Cal/CM <sup>2</sup>	Coverall/Hood	53832
✓	✓	✓	✓	✓	Class 0	5.6 Cal/CM <sup>2</sup>	Coverall/Hood	53833
✓	✓	✓	✓	✓	Class 2	5.6 Cal/CM <sup>2</sup>	Coverall/Hood	53834
✓	✓	✓	✓	✓	X	5.6 Cal/CM <sup>2</sup>	Coverall/Hood	53835
✓	✓	✓	✓	✓	Class 00	5.6 Cal/CM <sup>2</sup>	Coverall/Hood	53836
✓	✓	✓	✓	✓	Class 0	5.6 Cal/CM <sup>2</sup>	Coverall/Hood	53837

## **Hazard Risk Category 1 & 2 - Arc Protection PPE - Hot Pack Kits**

See page 1 for 70 E Compliance Guide

<b>ARC Shield</b>	<b>Safety Helmet</b>	<b>Storage Bag</b>	<b>Tool Back Pack</b>	<b>Tool Kit 13302</b>	<b>Gloves &amp; Protectors</b>	<b>F/R Clothing</b>	<b>Style Clothing</b>	<b>Code #</b>
✓	✓	X	✓	✓	✓	5.6 Cal/CM <sup>2</sup>	Coverall/Hood	53838
✓	✓	X	✓	✓	X	5.6 Cal/CM <sup>2</sup>	Coverall/Hood	53839
✓	✓	✓	✓	✓	✓	11 Cal/CM <sup>2</sup>	Lab Coat/Hood	53840
✓	✓	✓	✓	✓	✓	11 Cal/CM <sup>2</sup>	Lab Coat/Hood	53841
✓	✓	✓	✓	✓	X	11 Cal/CM <sup>2</sup>	Lab Coat/Hood	53842
✓	✓	X	✓	✓	✓	11 Cal/CM <sup>2</sup>	Lab Coat/Hood	53843
✓	✓	X	✓	✓	✓	11 Cal/CM <sup>2</sup>	Lab Coat/Hood	53844
✓	✓	X	✓	✓	✓	11 Cal/CM <sup>2</sup>	Lab Coat/Hood	53845
✓	✓	X	✓	✓	✓	11 Cal/CM <sup>2</sup>	Lab Coat/Hood	53846
✓	✓	X	✓	✓	X	11 Cal/CM <sup>2</sup>	Lab Coat/Hood	53847
✓	✓	X	✓	✓	✓	5.6 Cal/CM <sup>2</sup>	Lab Coat/Hood	53848
✓	✓	X	✓	✓	✓	5.6 Cal/CM <sup>2</sup>	Lab Coat/Hood	53849
✓	✓	X	✓	✓	✓	5.6 Cal/CM <sup>2</sup>	Lab Coat/Hood	53850
✓	✓	X	✓	✓	X	5.6 Cal/CM <sup>2</sup>	Lab Coat/Hood	53851
✓	✓	X	✓	✓	✓	5.6 Cal/CM <sup>2</sup>	Lab Coat/Hood	53852
✓	✓	X	✓	✓	✓	5.6 Cal/CM <sup>2</sup>	Lab Coat/Hood	53853
✓	✓	X	✓	✓	X	5.6 Cal/CM <sup>2</sup>	Lab Coat/Hood	53854
✓	✓	X	✓	✓	✓	5.6 Cal/CM <sup>2</sup>	Lab Coat/Hood	53855
✓	✓	X	✓	✓	Class 00	X	X	53856
✓	✓	X	✓	✓	Class 0	X	X	53857
✓	✓	X	✓	✓	Class 2	X	X	53858
✓	✓	X	✓	✓	X	X	X	53859
✓	✓	X	✓	✓	Class 00	X	X	53860
✓	✓	X	✓	✓	Class 0	X	X	53861
✓	✓	X	✓	✓	Class 2	X	X	53862
✓	✓	X	✓	✓	X	X	X	53863
✓	✓	X	✓	✓	Class 00	11 Cal/CM <sup>2</sup>	Parka	53864
✓	✓	X	✓	✓	Class 0	11 Cal/CM <sup>2</sup>	Parka	53865
✓	✓	X	✓	✓	Class 2	11 Cal/CM <sup>2</sup>	Parka	53866
✓	✓	X	✓	✓	X	11 Cal/CM <sup>2</sup>	Parka	53867
✓	✓	X	✓	✓	Class 00	11 Cal/CM <sup>2</sup>	Parka	53868
✓	✓	X	✓	✓	Class 0	11 Cal/CM <sup>2</sup>	Parka	53869
✓	✓	X	✓	✓	Class 2	11 Cal/CM <sup>2</sup>	Parka	53870
✓	✓	X	✓	✓	X	11 Cal/CM <sup>2</sup>	Parka	53871
✓	✓	X	✓	✓	Class 00	5.6 Cal/CM <sup>2</sup>	Parka	53872
✓	✓	X	✓	✓	Class 0	5.6 Cal/CM <sup>2</sup>	Parka	53873
✓	✓	X	✓	✓	Class 2	5.6 Cal/CM <sup>2</sup>	Parka	53874
✓	✓	X	✓	✓	X	5.6 Cal/CM <sup>2</sup>	Parka	53875
✓	✓	X	✓	✓	Class 00	5.6 Cal/CM <sup>2</sup>	Parka	53876
✓	✓	X	✓	✓	Class 0	5.6 Cal/CM <sup>2</sup>	Parka	53877
✓	✓	X	✓	✓	Class 2	5.6 Cal/CM <sup>2</sup>	Parka	53878
✓	✓	X	✓	✓	X	5.6 Cal/CM <sup>2</sup>	Parka	53879
✓	✓	X	✓	✓	Class 00	11 Cal/CM <sup>2</sup>	Coverall/Hood	53880
✓	✓	X	✓	✓	Class 0	11 Cal/CM <sup>2</sup>	Coverall/Hood	53881
✓	✓	X	✓	✓	Class 2	11 Cal/CM <sup>2</sup>	Coverall/Hood	53882
✓	✓	X	✓	✓	X	11 Cal/CM <sup>2</sup>	Coverall/Hood	53883
✓	✓	X	✓	✓	Class 00	11 Cal/CM <sup>2</sup>	Coverall/Hood	53884
✓	✓	X	✓	✓	Class 0	11 Cal/CM <sup>2</sup>	Coverall/Hood	53885
✓	✓	X	✓	✓	Class 2	11 Cal/CM <sup>2</sup>	Coverall/Hood	53886
✓	✓	X	✓	✓	X	11 Cal/CM <sup>2</sup>	Coverall/Hood	53887
✓	✓	X	✓	✓	Class 00	5.6 Cal/CM <sup>2</sup>	Coverall/Hood	53888
✓	✓	X	✓	✓	Class 0	5.6 Cal/CM <sup>2</sup>	Coverall/Hood	53889
✓	✓	X	✓	✓	Class 2	5.6 Cal/CM <sup>2</sup>	Coverall/Hood	53890
✓	✓	X	✓	✓	X	5.6 Cal/CM <sup>2</sup>	Coverall/Hood	53900
✓	✓	X	✓	✓	Class 00	5.6 Cal/CM <sup>2</sup>	Coverall/Hood	53901
✓	✓	X	✓	✓	Class 0	5.6 Cal/CM <sup>2</sup>	Coverall/Hood	53902
✓	✓	X	✓	✓	Class 2	5.6 Cal/CM <sup>2</sup>	Coverall/Hood	53903
✓	✓	X	✓	✓	X	5.6 Cal/CM <sup>2</sup>	Coverall/Hood	53904
✓	✓	X	✓	✓	Class 00	11 Cal/CM <sup>2</sup>	Lab Coat/Hood	53905
✓	✓	X	✓	✓	Class 0	11 Cal/CM <sup>2</sup>	Lab Coat/Hood	53906
✓	✓	X	✓	✓	Class 2	11 Cal/CM <sup>2</sup>	Lab Coat/Hood	53907
✓	✓	X	✓	✓	X	11 Cal/CM <sup>2</sup>	Lab Coat/Hood	53908
✓	✓	X	✓	✓	Class 00	11 Cal/CM <sup>2</sup>	Lab Coat/Hood	53909
✓	✓	X	✓	✓	Class 0	11 Cal/CM <sup>2</sup>	Lab Coat/Hood	53910
✓	✓	X	✓	✓	Class 2	11 Cal/CM <sup>2</sup>	Lab Coat/Hood	53911
✓	✓	X	✓	✓	X	11 Cal/CM <sup>2</sup>	Lab Coat/Hood	53912
✓	✓	X	✓	✓	Class 00	5.6 Cal/CM <sup>2</sup>	Lab Coat/Hood	53913
✓	✓	X	✓	✓	Class 0	5.6 Cal/CM <sup>2</sup>	Lab Coat/Hood	53914
✓	✓	X	✓	✓	Class 2	5.6 Cal/CM <sup>2</sup>	Lab Coat/Hood	53915
✓	✓	X	✓	✓	X	5.6 Cal/CM <sup>2</sup>	Lab Coat/Hood	53916
✓	✓	X	✓	✓	Class 00	5.6 Cal/CM <sup>2</sup>	Lab Coat/Hood	53917
✓	✓	X	✓	✓	Class 0	5.6 Cal/CM <sup>2</sup>	Lab Coat/Hood	53918
✓	✓	X	✓	✓	Class 2	5.6 Cal/CM <sup>2</sup>	Lab Coat/Hood	53919
✓	✓	X	✓	✓	X	5.6 Cal/CM <sup>2</sup>	Lab Coat/Hood	53920

# ARC PROTECTION CLOTHING (FR) AND KITS

## Electrical Arc Hood



- The Flash Arc Hood incorporates UV- and IR-absorbing window providing protection up to 100 cal/cm<sup>2</sup>. Past generations of gold reflective faceshields only provided up to 7.33 cal/cm<sup>2</sup> of protection, and the typical clear faceshield only 1.2 cal/cm<sup>2</sup>.
- The green tint window is coated with a permanent anti-fog inner surface. Code #52509 Storage Bag Available for Hood
- Arc Hoods are supplied with Hard Hat Adapter and Safety Helmet.

Code#	Description	cal/cm <sup>2</sup>
<b>52515</b>	High Visibility Arc Hood	21
<b>52516</b>	High Visibility Arc Hood W/O Hard Hat	21
<b>52517</b>	Replacement Window	21
<b>52543</b>	Balaclava Hood	47
<b>52544</b>	Arc Goggle	38
<b>52685</b>	Flash Protection High Visibility Arc Hood- <b>Double Layered</b>	33
<b>52686</b>	Replacement Window	33/45
<b>52850</b>	Flash Protection High Visibility Arc Hood	45
<b>52687</b>	Flash Protection Arc Hood	62
<b>52688</b>	Replacement Window	62
<b>52880</b>	Flash Protection Arc Hood	76
<b>52689</b>	Flash Protection Arc Hood	100
<b>52699</b>	Replacement Window	100

## FR Jackets, Overalls and Coveralls

Flash jacket is approximately waist length and must be worn in combination with Flash Pants.



Overall Pattern

Boot Legs Open



Overall Pattern

### 21 cal/cm<sup>2</sup>

Single-layer 13oz. Navy Blue Ultra Soft INDURA® Thread -- NOMEX®/Kevlar

#### Jacket      Overall

Small	<b>21719</b>	<b>21729</b>	<b>52519</b>	<b>52770</b>
Medium	<b>21720</b>	<b>21730</b>	<b>52520</b>	<b>52771</b>
Large	<b>21721</b>	<b>21731</b>	<b>52521</b>	<b>52772</b>
X-Large	<b>21722</b>	<b>21732</b>	<b>52522</b>	<b>52773</b>
XX-Large	<b>21723</b>	<b>21733</b>	<b>52523</b>	<b>52774</b>
XXX-Large	<b>21724</b>	<b>21734</b>	<b>52524</b>	<b>52775</b>
XXXX-Large	<b>21725</b>	<b>21735</b>	<b>52525</b>	<b>52776</b>
XXXXX-Large	<b>21726</b>	<b>21736</b>	<b>52526</b>	<b>52777</b>
XXXXXX-Large	<b>21727</b>	<b>21737</b>	<b>52527</b>	<b>52778</b>

### 21 cal/cm<sup>2</sup>

Single-layer 13oz. Navy Blue Ultra Soft INDURA® Thread -- NOMEX®/Kevlar

#### Coat      Coverall

Small	<b>52678</b>	<b>53678</b>	<b>52756</b>
Medium	<b>52679</b>	<b>53679</b>	<b>52757</b>
Large	<b>52680</b>	<b>53680</b>	<b>52758</b>
X-Large	<b>52681</b>	<b>53681</b>	<b>52759</b>
XX-Large	<b>52682</b>	<b>53682</b>	<b>52760</b>
XXX-Large	<b>52683</b>	<b>53683</b>	<b>52761</b>
XXXX-Large	<b>52684</b>	<b>53684</b>	<b>52762</b>
XXXXX-Large	<b>52697</b>	<b>53685</b>	<b>52763</b>
XXXXXX-Large	<b>52698</b>	<b>53686</b>	<b>52764</b>

### 33 cal/cm<sup>2</sup>

Multi-layer 9oz. INDURA® Ultra Soft with over 7oz. INDURA® Ultra Soft Thread -- NOMEX®/Kevlar

#### Jacket      Overall      Coverall

Small	<b>52851</b>	<b>52858</b>
Medium	<b>52852</b>	<b>52859</b>
Large	<b>52853</b>	<b>52860</b>
X-Large	<b>52854</b>	<b>52861</b>
XX-Large	<b>52855</b>	<b>52862</b>
XXX-Large	<b>52856</b>	<b>52863</b>
XXXX-Large	<b>52857</b>	<b>52864</b>

### 51 cal/cm<sup>2</sup>

Multi-layer 9oz. INDURA® Ultra Soft with over 12oz. INDURA® Ultra Soft Thread -- NOMEX®/Kevlar

#### Jacket      Overall

Small	<b>52851</b>	<b>52858</b>
Medium	<b>52852</b>	<b>52859</b>
Large	<b>52853</b>	<b>52860</b>
X-Large	<b>52854</b>	<b>52861</b>
XX-Large	<b>52855</b>	<b>52862</b>
XXX-Large	<b>52856</b>	<b>52863</b>
XXXX-Large	<b>52857</b>	<b>52864</b>

### 62 cal/cm<sup>2</sup>

Multi-layer 12oz. INDURA® Ultra Soft over 12oz. INDURA® Ultra Soft

#### Jacket      Overall

Small	<b>52690</b>	<b>53690</b>
Medium	<b>52691</b>	<b>53691</b>
Large	<b>52692</b>	<b>53692</b>
X-Large	<b>52693</b>	<b>53693</b>
XX-Large	<b>52694</b>	<b>53694</b>
XXX-Large	<b>52695</b>	<b>53695</b>
XXXX-Large	<b>52696</b>	<b>53696</b>

### 83 cal/cm<sup>2</sup>

12oz. INDURA® Ultra Soft over 7 oz. and 12oz. INDURA® Ultra Soft

#### Jacket      Overall

Small	<b>52881</b>	<b>52888</b>
Medium	<b>52882</b>	<b>52889</b>
Large	<b>52883</b>	<b>52900</b>
X-Large	<b>52884</b>	<b>52901</b>
XX-Large	<b>52885</b>	<b>52902</b>
XXX-Large	<b>52886</b>	<b>52903</b>
XXXX-Large	<b>52887</b>	<b>52904</b>

### 100 cal/cm<sup>2</sup>

1 ply 10oz. Twaron® microfiber  
1 ply Carbon X® Felt  
1 ply 11oz. Carbon X® Twill

#### Jacket      Overall

Small	<b>52749</b>	<b>53749</b>
Medium	<b>52750</b>	<b>53750</b>
Large	<b>52751</b>	<b>53751</b>
X-Large	<b>52752</b>	<b>53752</b>
XX-Large	<b>52753</b>	<b>53753</b>
XXX-Large	<b>52754</b>	<b>53754</b>
XXXX-Large	<b>52755</b>	<b>53755</b>



Jacket Pattern

## Controlled Environment Flame Resistant Coveralls 6.0 cal/cm<sup>2</sup>



### Size

Code
Extra Small
Small
Medium
Large
X-Large
2X Large
3X Large
4X Large
5X Large
6X Large



**White Knight**  
Engineered Products Inc

"White Knight Engineered Products, Inc. makes no warranties and assumes no liability other than the workmanship of our garments. Customers must determine the efficacy of these items for their particular environmental needs and perform tests to confirm suitability."



**11 cal/cm<sup>2</sup> Arc Protection Parka**



**Hooded Sweat Shirt  
17 cal/cm<sup>2</sup> Arc Protection**



**Code #52811  
21 cal/cm<sup>2</sup> Arc Protection Kit**



**21 cal/cm<sup>2</sup> Coveralls shown without arc hood**

All kits listed below come with safety helmet (52540) and 21 cal/cm<sup>2</sup> Arc Hood (52515)

Please specify flame resistant clothing and insulating glove sizes

Safety Glasses	Style Clothing 21 cal/cm <sup>2</sup>	Insulating Gloves	Leather Protectors	Glove Bag	Carrying Bag 52599	Hot Back Pack 52513	Toolkit 13302	Code #
✓	Coat	Class 00	Class 00	✓	✓	✗	✗	52809
✓	Coat	Class 0	Class 0	✓	✓	✗	✗	52810
✓	Coat	Class 2	Class 2	✓	✓	✗	✗	52811
✗	Coat	X	X	✗	✓	✗	✗	52814
✓	Coveralls	Class 00	Class 00	✓	✓	✗	✗	52812
✓	Coveralls	Class 0	Class 0	✓	✓	✗	✗	52813
✓	Coveralls	Class 2	Class 2	✓	✓	✗	✗	52816
✗	Coveralls	X	X	✗	✓	✗	✗	52815
✓	Coveralls	Class 00	Class 00	✗	✗	✓	✗	52817
✓	Coveralls	Class 0	Class 0	✗	✗	✓	✗	52818
✓	Coveralls	Class 2	Class 2	✗	✗	✓	✗	52819
✗	Coveralls	X	X	✗	✗	✓	✗	52821
✓	Coat	Class 00	Class 00	✗	✗	✓	✗	52925
✓	Coat	Class 0	Class 0	✗	✗	✓	✗	52926
✓	Coat	Class 2	Class 2	✗	✗	✓	✗	52927
✗	Coat	X	X	✗	✗	✓	✗	52928
✓	Coat	Class 00	Class 00	✗	✗	✓	✓	52929
✓	Coat	Class 0	Class 0	✗	✗	✓	✓	52930
✓	Coat	Class 2	Class 2	✗	✗	✓	✓	52931
✗	Coat	X	X	✗	✗	✓	✓	52932
✓	Coveralls	Class 00	Class 00	✗	✗	✓	✓	52933
✓	Coveralls	Class 0	Class 0	✗	✗	✓	✓	52934
✓	Coveralls	Class 2	Class 2	✗	✗	✓	✓	52935
✗	Coveralls	X	X	✗	✗	✓	✓	52936
✓	Jacket/Overalls	Class 00	Class 00	✓	✓	✗	✗	53000
✓	Jacket/Overalls	Class 0	Class 0	✓	✓	✗	✗	53001
✓	Jacket/Overalls	Class 2	Class 2	✓	✓	✗	✗	53002
✗	Jacket/Overalls	X	X	✗	✓	✗	✗	53003
✓	Jacket/Overalls	Class 00	Class 00	✗	✗	✓	✗	53015
✓	Jacket/Overalls	Class 0	Class 0	✗	✗	✓	✗	53016
✓	Jacket/Overalls	Class 2	Class 2	✗	✗	✓	✗	53017
✗	Jacket/Overalls	X	X	✗	✗	✓	✗	53018
✓	Jacket/Overalls	Class 00	Class 00	✗	✗	✓	✓	53030
✓	Jacket/Overalls	Class 0	Class 0	✗	✗	✓	✓	53031
✓	Jacket/Overalls	Class 2	Class 2	✗	✗	✓	✓	53032
✗	Jacket/Overalls	X	X	✗	✗	✓	✓	53033

**Hooded Sweat Shirt  
17 cal/cm<sup>2</sup> Arc Protection**



Code#	Description	Code#	Description
54032	Small (36-38)	54037	3X Large (56-58)
54033	Medium (40-42)	54038	4X Large (60-62)
54034	Large (44-46)	54039	5X Large (64-66)
54035	X Large (48-50)	54040	6X Large (68-70)
54036	2X Large (52-54)		



**52514 Large HotPack  
For HRC 3 & 4 PPE**

All kits listed below come with safety helmet (52540) and 33 cal/cm<sup>2</sup> Arc Hood (52685)

Please specify flame resistant clothing and insulating glove sizes



**33 cal/cm<sup>2</sup> Kit #52703  
Hazard Risk Category 3**

**New - 33 cal/cm<sup>2</sup>  
Coveralls**

<b>Safety Glasses</b>	<b>Style Clothing 33 cal/cm<sup>2</sup></b>	<b>Insulating Gloves</b>	<b>Leather Protectors</b>	<b>Glove Bag</b>	<b>Carrying Bag 52599</b>	<b>Hot Back Pack 52514</b>	<b>Toolkit 13302</b>	<b>Code #</b>
✓	Jacket/Overalls	Class 00	Class 00	✓	✓	✗	✗	52700
✓	Jacket/Overalls	Class 0	Class 0	✓	✓	✗	✗	52701
✓	Jacket/Overalls	Class 2	Class 2	✓	✓	✗	✗	52703
✗	Jacket/Overalls	✗	✗	✗	✓	✗	✗	52702
✓	Coveralls	Class 00	Class 00	✓	✓	✗	✗	52787
✓	Coveralls	Class 0	Class 0	✓	✓	✗	✗	52788
✓	Coveralls	Class 2	Class 2	✓	✓	✗	✗	52789
✗	Coveralls	✗	✗	✗	✓	✗	✗	52765
✓	Jacket/Overalls	Class 00	Class 00	✗	✗	✓	✗	52766
✓	Jacket/Overalls	Class 0	Class 0	✗	✗	✓	✗	52767
✓	Jacket/Overalls	Class 2	Class 2	✗	✗	✓	✗	52768
✗	Jacket/Overalls	✗	✗	✗	✗	✓	✗	52769
✓	Coveralls	Class 00	Class 00	✗	✗	✓	✗	52940
✓	Coveralls	Class 0	Class 0	✗	✗	✓	✗	52941
✓	Coveralls	Class 2	Class 2	✗	✗	✓	✗	52942
✗	Coveralls	✗	✗	✗	✗	✓	✗	52943
✓	Jacket/Overalls	Class 00	Class 00	✗	✗	✓	✓	52954
✓	Jacket/Overalls	Class 0	Class 0	✗	✗	✓	✓	52955
✓	Jacket/Overalls	Class 2	Class 2	✗	✗	✓	✓	52956
✗	Jacket/Overalls	✗	✗	✗	✗	✓	✓	52957
✓	Coveralls	Class 00	Class 00	✗	✗	✓	✓	52970
✓	Coveralls	Class 0	Class 0	✗	✗	✓	✓	52971
✓	Coveralls	Class 2	Class 2	✗	✗	✓	✓	52972
✗	Coveralls	✗	✗	✗	✗	✓	✓	52974



**Description**

Hot Pack Tool Kit

\* CAN BE ALTERED

9" Linesman Pliers  
7½" Diagonal Cutting Pliers  
7" Needle Nose Pliers  
Combination Stripper & Crimper  
#2 x 6" Square (Robertson)  
Screwdriver\*  
¾" x 6" Slotted Screwdriver\*  
⅛" x 6" Slotted Screwdriver\*  
# 1 x 5" Phillips Screwdriver\*  
# 2 x 4" Phillips Screwdriver\*



**Code #52850  
New 45 cal/cm<sup>2</sup>  
High Visibility ArcShield**

All kits listed below come with safety helmet (52540) and the appropriate cal/cm<sup>2</sup> Arc Hood  
Please specify flame resistant clothing and insulating gloves sizes



**Code #52866  
45 cal/cm<sup>2</sup> Arc Protection Kit  
Hazard Risk Category 4**



**Code #52706  
62 cal/cm<sup>2</sup> Arc Protection Kit  
Hazard Risk Category 4**



**Code #52543  
47 cal/cm<sup>2</sup> Balaclava Hood  
Code #52544  
38 cal/cm<sup>2</sup> Arc Goggle**

\*Circuits over 40 cal/cm<sup>2</sup> should only be worked de-energized.

Safety Glasses	Style Clothing Jacket/Overall	Insulating Gloves	Leather Protectors	Glove Bag	Carrying Bag 52599	Hot Back Pack 52514	Toolkit 13302	Code #
✓	45 cal/cm <sup>2</sup>	Class 0	Class 0	✓	✓	X	X	52865
✓	45 cal/cm <sup>2</sup>	Class 2	Class 2	✓	✓	X	X	52866
X	45 cal/cm <sup>2</sup>	X	X	✓	✓	X	X	52867
✓	45 cal/cm <sup>2</sup>	Class 0	Class 0	X	X	✓	X	53050
✓	45 cal/cm <sup>2</sup>	Class 2	Class 2	X	X	✓	X	53051
X	45 cal/cm <sup>2</sup>	X	X	X	X	✓	X	53052
✓	45 cal/cm <sup>2</sup>	Class 0	Class 0	X	X	✓	✓	53065
✓	45 cal/cm <sup>2</sup>	Class 2	Class 2	X	X	✓	✓	53066
X	45 cal/cm <sup>2</sup>	X	X	X	X	✓	✓	53067
✓	62 cal/cm <sup>2</sup>	Class 0	Class 0	✓	✓	X	X	52705
✓	62 cal/cm <sup>2</sup>	Class 2	Class 2	✓	✓	X	X	52706
X	62 cal/cm <sup>2</sup>	X	X	✓	✓	X	X	52707
✓	62 cal/cm <sup>2</sup>	Class 0	Class 0	X	X	✓	X	53080
✓	62 cal/cm <sup>2</sup>	Class 2	Class 2	X	X	✓	X	53081
X	62 cal/cm <sup>2</sup>	X	X	X	X	✓	X	53082
✓	62 cal/cm <sup>2</sup>	Class 0	Class 0	X	X	✓	✓	53092
✓	62 cal/cm <sup>2</sup>	Class 2	Class 2	X	X	✓	✓	53093
X	62 cal/cm <sup>2</sup>	X	X	X	X	✓	✓	53094
✓	83 cal/cm <sup>2</sup>	Class 0	Class 0	✓	✓	X	X	52905
✓	83 cal/cm <sup>2</sup>	Class 2	Class 2	✓	✓	X	X	52906
X	83 cal/cm <sup>2</sup>	X	X	✓	✓	X	X	52907
✓	100 cal/cm <sup>2</sup>	Class 0	Class 0	✓	✓	X	X	52709
✓	100 cal/cm <sup>2</sup>	Class 2	Class 2	✓	✓	X	X	52710
X	100 cal/cm <sup>2</sup>	X	X	X	X	X	X	52711

**Table F-1, Simplified,  
Two-Category, Flame-Resistant  
Clothing System NFPA 70E-  
Compliance Guide-Page 1**

### Clothing

#### Everyday Work Clothing:

FR long-sleeve shirt (minimum ATPV of 5) worn over an untreated cotton T-shirt with FR pants (minimum ATPV of 8).

or

FR coveralls (minimum ATPV of 5) worn over an untreated cotton T-shirt (or an untreated natural fiber long-sleeve shirt) with untreated natural fiber pants.

#### Electrical "Switching" Clothing:

Double-layer FR flash jacket and FR bib overalls worn over either FR coveralls (minimum ATPV of 5) or FR long-sleeve shirt and FR pants (minimum ATPV of 5), worn over untreated natural fiber long-sleeve shirt and pants, worn over an untreated cotton T-shirt.

or

Insulated FR coveralls (with a minimum ATPV of 25, independent of other layers) worn over untreated natural fiber long-sleeve shirt with untreated denim cotton blue jeans ("regular weight," minimum 12oz/yd<sup>2</sup> fabric weight), worn over an untreated cotton T-shirt.

**F-1 Use of simplified approach.** The use of table F-1 is suggested as a simplified approach to assure adequate PPE for electrical workers within facilities with large and diverse electrical systems. The clothing listed in table F-1 fulfills the minimum FR clothing requirements of Tables 3-3.9.1 and 3-3.9.2. The clothing systems listed in this table should be used with other PPE appropriate for the Hazard / Risk Category. See Table 3-3.9.2.

### Applicable Tasks

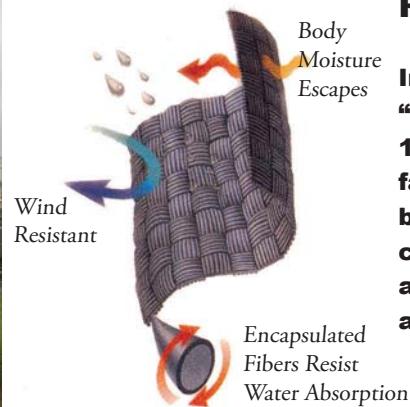
All Hazard / Risk Category 1 and 2 tasks listed in Table 3-3.9.1.  
On all systems operating at less than 1000 volts, these tasks include work on all equipment except

- Insertion or removal of low-voltage motor starter "buckets"
- Insertion or removal of power circuit breakers with the switchgear doors open or,
- Removal of bolted covers from switchgear

On systems operating at 1000 volts or greater, tasks also include the operation, insertion, or removal of switching devices *with equipment enclosure doors closed*.

All Hazard / Risk Category 3 and 4 tasks listed in Table 3-3.9.1.  
On systems operating at 1000 volts or greater, these tasks include work on exposed energized parts of all equipment.

On systems of less than 1000 volts, tasks include insertion or removal of low-voltage motor starter MCC "buckets," insertion or removal of power circuit breakers with the switchgear enclosure doors open, and removal of bolted covers from switchgear.



## Rain Gear Fabric

**Indura Ultra Soft with Epic** is a “soft shell”, 88 percent cotton, 12 percent high-tenacity nylon fabric designed for use in all but the most severe outdoor conditions. The fabric is breathable, washable, flame, water and wind-resistant.

### A Revolutionary All-Weather “Soft Shell” Flame Resistant Fabric

#### What is INDURA® Ultra Soft with EPIC?

It's a new breakthrough “soft shell” 88% cotton 12% high tenacity nylon, flame resistant, water resistant, wind resistant, breathable and washable fabric for use in all but the most severe outdoor conditions, making it a more useful, functional garment than laminated or coated “hard shell” garments.

#### How does the EPIC technology work?

EPIC is a proprietary and patented technology by Nextec Applications, which encapsulates fabric fibers with a micro-thin polymer creating a breathable barrier inside the fabric. Tiny “micro holes” between the encapsulated fibers allow water vapor to escape without allowing outside water and wind to penetrate, in all but the most severe conditions.

#### Can INDURA® Ultra Soft with EPIC be washed?

Yes. The EPIC water-resistant characteristics will be sustained even after 50 home launderings. Because the base fabric is INDURA® Ultra Soft, the flame resistance is guaranteed for the life of the garment. Please contact Westex for detailed laundering instructions.

#### Does INDURA® Ultra Soft with EPIC meet industry standards for flame resistant clothing?

Yes. It meets the requirements of OSHA 1910.269, ASTM 1506, NFPA 70E, 2112 and 1977.

#### Who will benefit from INDURA® Ultra Soft with EPIC?

Any outdoor workers that require flame resistant protection and all-weather performance such as electric & gas utilities, electrical contractors, oil, petrochemical, wildland firefighters, military and many more.

### Made in the USA does Count!

When it comes to Flame Resistant (FR) clothing you have many choices! Being made in the USA maybe one of the best decisions you will ever make. When it comes to Personal Protective Equipment (PPE), someone's life is on the line and that person's PPE is going to protect them from possible injury. Would you want to be the one who tells an injured worker's love ones it was cheaper to buy an imported product?

Benefits to buying “Made in the USA”

- Dependable Supply (International Political Actions could interrupt foreign supply unexpectedly & indefinitely.)
- Faster Delivery
- Special Lengths and Sizes ( ie Longs, Shorts 4X 5X 6X )
- Much Smaller Minimums (Offshore has large minimums & longer lead times)
- Event Verification (In the event of an Arc Incident the factory can be accessed for verification of components. This could be a very big deal in the event of litigation).
- Benefits the American Economy!

Trademark Information:  
NOMEX® is a registered trademark of E.I. du Pont de Nemours and Company.  
INDURA® INDURA ULTRA SOFT® are registered trademarks of Westex Inc.  
CIP® HOTBOX® HOTPACK® ELECTROSAFE® are registered trademarks of Certified Insulated Products.

# Insulating Gloves

## ASTM D120-2A

### Insulating Gloves

Even though you are using insulated tools, you must still wear the required gloves. The gloves protect the hands and wrist.

Employees working in areas where there are potential electrical hazards shall be provided with and shall use, electrical protective equipment that is appropriate for the specific parts of the body to be protected and for the work to be performed. OHSA 1910.335



Class 00 High Dexterity Gloves



Class 0 and Class 00 Glove Kit



Class 2 Glove Kit

Size	Length	Class	Description	Glove	+ Protector	+ Glove Bag	= Kit
7	11"	00	Low Voltage (500 V Max)	51296	51290	22100	52296
8	11"	00	Low Voltage (500 V Max)	51298	51291	22100	52298
8½	11"	00	Low Voltage (500 V Max)	51299	51291	22100	52299
9	11"	00	Low Voltage (500 V Max)	51300	51292	22100	52300
9½	11"	00	Low Voltage (500 V Max)	51301	51293	22100	52301
10	11"	00	Low Voltage (500 V Max)	51302	51293	22100	52302
10½	11"	00	Low Voltage (500 V Max)	51303	51294	22100	52303
11	11"	00	Low Voltage (500 V Max)	51304	51294	22100	52304
11½	11"	00	Low Voltage (500 V Max)	51305	51295	22100	52305
12	11"	00	Low Voltage (500 V Max)	51306	51295	22100	52306
7	11"	0	Low Voltage (1000 V Max)	51110	50301	22100	51100
8	11"	0	Low Voltage (1000 V Max)	51111	50302	22100	51101
8½	11"	0	Low Voltage (1000 V Max)	51112	50303	22100	51102
9	11"	0	Low Voltage (1000 V Max)	51113	50303	22100	51103
9½	11"	0	Low Voltage (1000 V Max)	51114	50305	22100	51104
10	11"	0	Low Voltage (1000 V Max)	51115	50305	22100	51105
10½	11"	0	Low Voltage (1000 V Max)	51116	50307	22100	51106
11	11"	0	Low Voltage (1000 V Max)	51117	50307	22100	51107
11½	11"	0	Low Voltage (1000 V Max)	51118	50309	22100	51108
12	11"	0	Low Voltage (1000 V Max)	51119	50309	22100	51109
8	14"	2	High Voltage (17 KV Max)	20160	20001	22200	20171
8½	14"	2	High Voltage (17 KV Max)	20161	20003	22200	20172
9	14"	2	High Voltage (17 KV Max)	20163	20003	22200	20173
9½	14"	2	High Voltage (17 KV Max)	20164	20005	22200	20174
10	14"	2	High Voltage (17 KV Max)	20165	20005	22200	20175
10½	14"	2	High Voltage (17 KV Max)	20166	20007	22200	20176
11	14"	2	High Voltage (17 KV Max)	20167	20007	22200	20177
11½	14"	2	High Voltage (17 KV Max)	20168	20009	22200	20178
12	14"	2	High Voltage (17 KV Max)	20169	20009	22200	20179

Size	Length	Class	Description	Glove	+ Protector	+ Glove Bag	= Kit
7	14"	00	Low Voltage (500 V Max)	51307	51318	22200	51325
8	14"	00	Low Voltage (500 V Max)	51308	51319	22200	51326
8½	14"	00	Low Voltage (500 V Max)	51309	51320	22200	51327
9	14"	00	Low Voltage (500 V Max)	51310	51320	22200	51328
9½	14"	00	Low Voltage (500 V Max)	51311	51321	22200	51329
10	14"	00	Low Voltage (500 V Max)	51312	51321	22200	51330
10½	14"	00	Low Voltage (500 V Max)	51313	51322	22200	51331
11	14"	00	Low Voltage (500 V Max)	51314	51322	22200	51332
11½	14"	00	Low Voltage (500 V Max)	51315	51323	22200	51333
12	14"	00	Low Voltage (500 V Max)	51316	51323	22200	51334
7	14"	0	Low Voltage (1000 V Max)	51120	51130	22200	51137
8	14"	0	Low Voltage (1000 V Max)	51121	51131	22200	51138
8½	14"	0	Low Voltage (1000 V Max)	51122	51132	22200	51139
9	14"	0	Low Voltage (1000 V Max)	51123	51132	22200	51140
9½	14"	0	Low Voltage (1000 V Max)	51124	51133	22200	51141
10	14"	0	Low Voltage (1000 V Max)	51125	51133	22200	51142
10½	14"	0	Low Voltage (1000 V Max)	51126	51134	22200	51143
11	14"	0	Low Voltage (1000 V Max)	51127	51134	22200	51144
11½	14"	0	Low Voltage (1000 V Max)	51128	51135	22200	51145
12	14"	0	Low Voltage (1000 V Max)	51129	51135	22200	51146
8	14"	1	High Voltage (7.5 KV Max)	20140	20001	22200	20150
8½	14"	1	High Voltage (7.5 KV Max)	20141	20001	22200	20151
9	14"	1	High Voltage (7.5 KV Max)	20142	20003	22200	20152
9½	14"	1	High Voltage (7.5 KV Max)	20143	20003	22200	20153
10	14"	1	High Voltage (7.5 KV Max)	20144	20005	22200	20154
10½	14"	1	High Voltage (7.5 KV Max)	20145	20005	22200	20155
11	14"	1	High Voltage (7.5 KV Max)	20146	20007	22200	20156
11½	14"	1	High Voltage (7.5 KV Max)	20147	20007	22200	20157
12	14"	1	High Voltage (7.5 KV Max)	20148	20009	22200	20158

### International IEC60903 Standard High Dexterity Gloves

Size	Length	Class	Description	Glove	+ Protector	+ Glove Bag	= Kit
8/8½	11"	00	Low Voltage (500 V Max)	51340	51291	22100	51350
9/9½	11"	00	Low Voltage (500 V Max)	51342	51292	22100	51352
10/10½	11"	00	Low Voltage (500 V Max)	51344	51293	22100	51354
11/11½	11"	00	Low Voltage (500 V Max)	51346	51294	22100	51356



In order to determine the proper size for Class 0 and 00 insulating gloves, use a tape measure to find the circumference of your hand around the palm.

For example, 8" means your Class 0 and 00 glove size is 8. For Class 2 gloves add 1/2" size to allow for dexterity. For example, 8" means your Class 2 glove size is 8½".



Code No.	Description
20334	72-ct saturated wipe dispenser (6/cs)
20335	1-quart bottle with sprayer (12/cs)
20336	1-gallon bottle (4/cs)
20337	5-gallon pail (1 ea)

**7.5 KV PVC  
Insulating Roll**



	<b>Code#</b>	<b>Description</b>	<b>Size</b>
• Meets ASTM F1742-03 Standard	20307	7.5 KV Insulating Roll	4' x 50'
• Transparent, tested @ 10 KV	20309	7.5 KV Insulating Roll	4' x 25'
• Cut amount needed, discard when finished	20312	Wood Container for Roll	
	20302	4' x 50' Kit (Roll and Container)	
	20317	4' x 25' Kit (Roll and Container)	

**Electrical Insulating Protective Shielding**

- Type 2 Insulating — Flame, Oil, and Ozone Resistant
- ASTM Standard F2320-03

Electrical insulating rubber shielding is engineered to protect personnel, equipment, and work areas from electrical hazards up to 7,500 volts. The shielding is flame, oil, ozone, and puncture resistant, remains flexible to -60° F, and will not melt. CIP's insulating shielding is available in convenient "safety yellow" rolls, and is 100% tested to meet ASTM standards.



**Code#    Size    Max Use Voltage**

20332	36" x 25'	1,000
20333	36" x 25'	7,500

**Type I Insulating Blankets & Accessories**

- Meets ASTM D1048-05 Standard



<b>Code#</b>	<b>Description</b>
20304	36" x 36" Class "O" Type I (1,000V Max.) Blanket
20305	36" x 36" Class "2" Type I (20,000V Max.) Blanket
20310	Blanket Canister
20300	36" x 36" Class "2" Blanket Kit (Blanket, Clamps & Canister)
20301	36" x 36" Class "O" Blanket Kit (Blanket, Clamps & Canister)
20320	Blanket Clamps (set of 2)

**Sleeves**



<b>Code#</b>	<b>Class</b>	<b>Max Volts</b>	<b>Size</b>
21080	0	1,000	Reg
21082	0	1,000	Large
21084	0	1,000	X-Large
21090	2	20,000	Reg
21092	2	20,000	Large
21094	2	20,000	X-Large

• ASTM Standard D1051-02

<b>Code#</b>	<b>Description</b>
21096	Sleeve Fasteners, 6/bag
21097	Sleeve Straps Regular, w/ buttons
21098	Sleeve Straps Extra Large w/ buttons
22300	Replacement Sleeve Bag

**Glove Inflator**



**Code#**

51200

Proper safety calls for frequent on-the-job inspection of equipment for mechanical damage. Inflators offer a quick, easy way to do a complete and thorough visual inspection of rubber gloves.

**Rubber Goods Cleaner**



**Code#**

See page 11

**Physical Properties**

• Rubber Property-Effect of Liquids (ASTM D471)	Passes all tests
• Specification for In-Service Care of Insulated Gloves and Sleeves (ASTM F496)	Passes all tests
• Flashpoint (ASTM D 93)	No flash via TCC
• Initial Boiling Point	~212°F/100°C
• pH	Neutral
• Cleaning Strength	Excellent

**Advantages**

- No mixing required
- Excellent cleaning power
- Harmless to all elastomers (rubbers)
- Multiple package options
- Environmentally friendly
- Non-toxic and non-corrosive
- Not an RCRA-regulated hazardous waste
- Not listed as a toxic chemical by SARA 313
- Does not require reporting

**Glove Liners, Pair**

Knit Cotton



**Code#    Size**

51210	10"
51212	14"

# Hot Sticks - Matting - Dielectric Boots - Body Harness

## Hot Sticks



## Code# Description Length

40091	Telescopic	8'
40092	Telescopic	12'
40093	Telescopic	16'
40094	Telescopic	20'
40095	Telescopic	25'
40096	Telescopic	30'
40097	Telescopic	35'
40098	Telescopic	40'

## Arc Rated Harness

### Code# Description

CIP-68300	Medium Arc Rated Harness
CIP-68302	Large Arc Rated Harness
CIP-68304	X-Large Arc Rated Harness



Front View

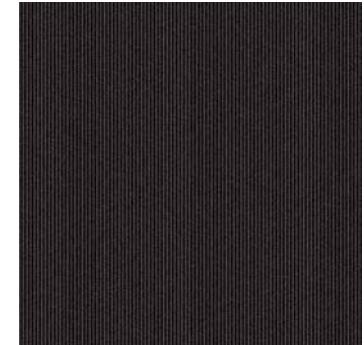


Rear View

## Switchboard Corrugated Matting

- ASTM D178-01 Type I Insulating — Non-Oil Resistant

Switchboard matting is rubber matting designed for electrical insulation, as a floor covering to prevent shock around high voltage electrical apparatus, fuse boxes, switchgear, control panels, and heavy machinery. It meets and exceeds current ASTM, ANSI, (plus IEC Division of ANSI, Tech. Committeee-78) specifications for this material. In addition, OSHA requirement's intent to eliminate the electrical hazards of high voltage shock in the workplace is abundantly clear. CIP switchboard matting is designed specifically for this purpose. IT IS NOT DESIGNED TO BE USED AS A "HOT" RAIL BLANKET. ALSO, MATTING WITH PUNCTURES OR CRACKS SHOULD NOT BE PLACED IN SERVICE.



### Code# Dielectric Test Voltage Thickness Size Class Max Use Voltage

20531	20,000	3/16"	36" x 12"	1	7,500
20532	20,000	3/16"	36" x 24"	1	7,500
20533	20,000	3/16"	36" x 36"	1	7,500
20534	20,000	3/16"	36" x 48"	1	7,500
20561	20,000	1/4"	36" x 12"	2	17,000
20562	20,000	1/4"	36" x 24"	2	17,000
20563	20,000	1/4"	36" x 36"	2	17,000
20564	20,000	1/4"	36" x 48"	2	17,000
20541	30,000	1/4"	36" x 12"	2	17,000
20542	30,000	1/4"	36" x 24"	2	17,000
20543	30,000	1/4"	36" x 36"	2	17,000
20544	30,000	1/4"	36" x 48"	2	17,000
20551	40,000	3/8"	36" x 12"	3	26,500
20552	40,000	3/8"	36" x 24"	3	26,500
20553	40,000	3/8"	36" x 36"	3	26,500
20554	40,000	3/8"	36" x 48"	3	26,500

## Dielectric Boots

Size	Deep Heal Overshoe	17" Full Cut Overshoe
5	21580	
6	21582	
7	21584	21407
8	21586	21408
9	21588	21409
10	21590	21410
11	21592	21411
12	21594	21412
13	21595	21413
14	21596	21414
15	21597	21415
16	21598	21416
17	21599	21417



Dielectric Deep Heel Overshoes provide extra safety when climbing ladders and poles where the deep heel cavity can lock onto the rungs. These boots and overshoes are made from an ozone resistant yellow rubber that's 100% waterproof. The construction is hand-layered in full-cut patterns to fit over work boots. The fabric lining makes them easy to get on and off. The sole is an anti-skid bar tread. All of these overshoes meet ANSI Z41 requirements and have been tested to 20,000 volts.

The 17" Super Dielectric Boot offers a high level of protection from electrical shock to utility workers, electric contractors, and others working dangerously close to electrical hazards. These boots meet ASTM F1117 requirements, and have been tested to 15,000 volts AC and 45,000 volts DC. The boots are completely waterproof and resistant to ozone. The tough fabric lining makes the fit comfortable and easy to take on and off.

Shoes with Insulated Soles are not allowed as primary electrical protection. The Standard requires the use of dielectric overshoes.

# Tee Shirt and Arc Goggle Kits and Grounding Sets, Voltage Detector Kits

## Safety Rescue Hook

Code#	Width	Length
32514	12"	9'



## HCR 4 Kits and HCR 2 Kits

### HCR 4 Kits

Safety Glasses	Style Clothing Jacket/Overall	Arc Goggle & Helmet/Hood	Insulating Gloves	Leather Protectors	Hot Back Pack	Toolkit 13302	Code #
X	45 cal/cm <sup>2</sup> (M)	✓	X	X	✓	X	50321
X	45 cal/cm <sup>2</sup> (L)	✓	X	X	✓	X	50322
X	45 cal/cm <sup>2</sup> (XL)	✓	X	X	✓	X	50323
X	45 cal/cm <sup>2</sup> (2XL)	✓	X	X	✓	X	50324
X	45 cal/cm <sup>2</sup> (3XL)	✓	X	X	✓	X	50325
X	45 cal/cm <sup>2</sup> (4XL)	✓	X	X	✓	X	50326
X	45 cal/cm <sup>2</sup> (5XL)	✓	X	X	✓	X	50327
X	45 cal/cm <sup>2</sup> (6XL)	✓	X	X	✓	X	50328

### HCR 2\* Kits

Safety Glasses	Tee Shirt	Arc Shield/Hood Helmet 10 Cal/cm <sup>2</sup>	Insulating Gloves	Leather Protectors	Hot Back Pack	Toolkit 13302	Code #
✓	11 cal/cm <sup>2</sup>	✓	Class 00	✓	✓	✓	54055
✓	11 cal/cm <sup>2</sup>	✓	Class 0	✓	✓	✓	54056
X	11 cal/cm <sup>2</sup>	✓	X	X	✓	✓	54058
✓	11 cal/cm <sup>2</sup>	✓	Class 00	✓	✓	X	54060
✓	11 cal/cm <sup>2</sup>	✓	Class 0	✓	✓	X	54061
X	11 cal/cm <sup>2</sup>	✓	X	X	✓	X	54063

Specify size of tee shirt and insulating gloves

NOTE 1: #52599 Carrying Bag

## Grounding Sets

### Code#

26800

- 21 kA 15 cycles
- ASTM Grade 5
- Set includes:
  - four-way Connector w/ sleeves
  - four 1 1/2" smooth jaw clamps w/ sleeves
  - double hangar stud
  - contact stud
  - 34' 1/0 Cu cable
  - four pair ferrules



## Voltage Detector Kits



43556  
43558



43560  
43562

- Non-contact, wide range of detection, 80 V to 275 kV, audible and visual indication
- 275 kV automatic self-test beep every two seconds

### Code# Description

43556	Non-Contact Selective Voltage Detector
43558	Non-Contact Automatic Voltage Detector
43560	Non-Contact Selective Voltage Detector Kit
43562	Non-Contact Automatic Voltage Detector Kit

# COMPOSITE TOOLS

One of the most interesting developments to evolve as a result of the new OSHA regulations on 1000 volt rated hand tools has been the introduction of composite tools.

Until recently, the way tool manufacturers complied with these regulations was to take steel shafted tools and coat or dip them with either a single or double layer of soft protective insulating material. This served the purpose of meeting the initial certification of the necessary 10,000 volt test.

Unfortunately this method enlarges the shafts to a point that they will not fit into restrictive areas. The other major problem is if the tool is used to pry, the soft insulating material can easily be harmed (cut) in such a way that a dangerous phase over could occur. Another major drawback to this type of manufacturing is the safety issue of maintaining or inspecting the integrity of the insulation.

Over the past few years composite tools have entered the market as an alternative to the dipped tools. A spin-off from the Department of Defense and Aerospace technologies, the composite concept was to take advantage of the inherent non-conductive, high strength, and light weight properties of composite materials to transmit torque and leverage to the working end of the tool. This technology allowed for the total elimination of insulating coatings that become nicked, cut, or torn due to normal use. Built much like a Hot Stick if kept clean and dry, there is no conductive path back to the user's hand. Consequently, the danger of flash over or a potential electrocution is significantly reduced.

In examining a cross section of a composite screwdriver, it is surprising to note that the metal tip only extends 5/8 of an inch into the composite shaft. As for the strength of the composite, it is not a concern. A strong person can torque 6 foot pounds, metal yields @ 10 foot pounds, and the composite fails at 20 foot-pounds. The concept is analogous to aircraft propellers that use a metal hub connection and a high strength composite blade, a construction commonly found on many commercial and military aircraft.

The nut drivers offer a similar self-insulating composite shaft with the working end fully shrouded in a protective fiberglass insulation that will allow access into extremely tight areas where double insulated tools will not fit. These tools are very durable and lightweight, exceeding torque values in excess of 34 foot-pounds.

One last advantage is that all composite tools carry a warranty that includes the integrity of the insulation. No other American manufacturer will do this.

Composite tools are slimmer, safer, more durable, and lighter in weight, and the only American made screwdrivers and nut drivers that pass the ASTM extreme cold weather tests.



# COMPOSITE TOOLS

## Leading Edge Technology



Manufactured from braided, military grade fiberglass composite over a tough polymer core, Composite Tools combine the latest in space age materials technology with traditional heat treated steel tips in a unique family of products ideal for the safety-minded professional tool user.

### Composite Screwdrivers



- Cushion grip
- Slotted electrician's tip
- Phillips tip
- Robertson tip
- Cabinet Tip

#### Slotted Tip

##### Code# Size

00813	1/8" x 3"
00814	1/8" x 6"
00820	1/4" x 7"
00822	5/16" x 4 1/2"
00823	5/16" x 7"
00843	3/16" x 7"
00844	3/16" x 5"
00846	3/16" x 6"
00847	1/4" x 4 1/2"
00848	1/4" x 6"
00849	5/16" x 6"
00850	3/8" x 7"
00932	7/32" x 3 1/2"

#### Phillips Tip

##### Code# Size

00851	#0 x 3"
00852	#1 x 5"
00853	#0 x 6"
00856	#2 x 4 1/2"
00857	#2 x 6"
00858	#2 x 7"
00859	#3 x 6"
00952	#1 x 3"

#### Screwdriver Sets

##### Code# Pcs. Sizes

00871	6	#1, #2, 1/8" x 3", 3/16" x 6", 1/4" x 6", 5/16" x 6"
00869	8	#1, #2, 1/8" x 3", 1/8" x 6", 3/16" x 6", 1/4" x 6", 5/16" x 6", 3/8" x 7"
00870	11	#1, #2, #3, 1/8" x 3", 1/8" x 6", 3/16" x 5", 5/16" x 6", 1/4" x 4 1/2", 1/4" x 6", 5/16" x 6", 3/8" x 7"
00872	5	#2, #3, 3/16" x 6", 1/4" x 6", 3/8" x 7"

### Composite Holding Screwdrivers & Nut Starters



- Convenient twist tip design for one-hand use
- Fiberglass composite (non-conductive) shaft
- Magnetic on opposite end to help retrieve fasteners.

#### Holding SD

##### Code# Size Length Type

00560	3/16"	6"	Slotted
00562	#2	6"	Phillips

#### Nut Starter

##### Code# Capacity

00563	4-40 (2.5)mm to 5/16" (8mm)
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### Bit Holder Extension Bar for Cordless Drill



##### Code#

00812

- 5" Length
- Accommodates most standard 1/4" hex bits

- Inherent safety — the insulating properties are built into the tool, not coated onto it
- Lightweight
- Better balanced
- Exceeds ASME torque standards
- Exceeds the strength of the proper fastener

### Composite Nut Drivers



#### 3" Length

##### Code# Size

00880	3/16"
00881	7/32"
00882	1/4"
00883	9/32"
00884	5/16"
00885	11/32"
00886	3/4"
00887	7/16"
00888	1 1/2"
00889	9/16"
00890	5/8"

#### 6" Length

##### Code# Size

00891	3/16"
00892	7/32"
00893	1/4"
00894	9/32"
00895	5/16"
00896	11/32"
00897	3/4"
00898	7/16"
00899	1 1/2"
00900	9/16"
00901	5/8"

#### Sets

##### 3" Code# 6" Code# Pcs. Sizes

00920	00925	7	3/16", 1/4", 5/16", 11/32", 3/8", 7/16", 1/2"
00921	00926	8	3/16", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2"
00922	00927	9	3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2"
00923	00928	10	3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2", 9/16"

### Composite Male Hexagon Drivers



#### 3" Length

##### Code# Size

00620	5/32"
00621	3/16"
00622	7/32"
00623	1/4"
00625	5/16"
00627	3/8"

#### 6" Length

##### Code# Size

00640	5/16"
00641	3/16"
00642	7/32"
00643	1/4"
00645	5/16"
00647	3/8"

#### Sets

##### 3" Code# 6" Code# Pcs. Sizes

00633	00653	4	3/16", 1/4", 5/16", 3/8"
00634	00654	6	5/16", 3/16", 7/32", 1/4", 5/16", 3/8"

### Composite Hand Driver



#### Code# Drive Length

00810	1/4"	3"
00811	1/4"	6"

- Accommodates 1/4" Sq. Dr. Sockets

### Composite Magnetic Bit Tip System



#### Code# Bits

10460	3/16" and 1/4" Flat, #1 and #2 Phillips
10461	3/16" and 1/4" Flat, #1 and #2 Robertson

- Accommodates 1/4" Sq. Dr. Sockets
- Powerful magnet (800 grams) securely holds bits in place
- Can also be used as a 1/4" nut driver
- Convenient see-through handle stores eight standard bits

# Pliers - Cutters - Joint Tools - Adjustable Wrench

## ASTM F1505-01

### Linesman Pliers



Code#	Length
10000	7 $\frac{5}{16}$ " Standard
10003	8 $\frac{1}{2}$ " Standard
10005	9 $\frac{1}{4}$ " Premium
10006	9 $\frac{1}{4}$ " Standard
10007	8 $\frac{3}{4}$ " Standard w/ Crimper

- New England style, high leverage

### Needlenose Pliers



Code#	Length
10008	4"
10010	6"
10013	7 $\frac{1}{2}$ "
10014	7" Bent Nose
10016	8"

- Side cutting feature

### Flat Nose Pliers



Code#	Length
10020	6"

- Duck bill

### Water Pump Pliers



Code#	Length	Capacity
10066	4"	1 $\frac{1}{2}$ "
10068	6"	1 $\frac{1}{2}$ "
10070	10"	1 $\frac{1}{2}$ "
10071	10"	1 $\frac{1}{2}$ " Box Joint
10073	12"	2 $\frac{1}{2}$ "
10075	12"	2" Box Joint

- Positive locking design

### Slip Joint Pliers



Code#	Length
10050	8"
10052	10"

- Milled teeth & jaws

### Crimping Pliers



Code#	Length	Capacity
10060	10"	#10-22 AWG

- Wire cutter built into base
- For insulated and non-insulated terminals

### Insulated Inspection Mirror



Code#
14301
14303

- 14" long with 2 $\frac{1}{4}$ " adjustable mirror
- 15" long with 3 $\frac{1}{4}$ " adjustable mirror

### Cable Cutters



Code#	Length	Capacity
10040	9 $\frac{1}{2}$ "	4/0 Alum, 2/0 Copper
10041*	10"	4/0 Alum, 2/0 Copper
10042	8"	2/0 Alum, 2/0 Copper

\* Easily slices up to 100-pair telephone cable

- High leverage

### Ratcheting Cable Cutter



Code#
10048

Note: This tool should never be used to cut steel or steel reinforced cable.

- Cuts copper communications cable up to 3" (76 mm) in diameter
- Compact, lightweight, weighs only 3 lbs. (1.13 kg.)
- Easy to use, one-handed operation
- Release lever disengages ratchet, allowing blades to open even in mid-cut
- Safety latch locks blades in closed position for storage
- Features a rubber boot to lodge stationary handle against work surface to multiply manual effort

### Insulated Adjustable Magnetic Retrieving Tool



Code#
14302

18" handle

### Diagonal Cutting Pliers



Code#	Length
10028	4"
10030	6"
10033	7"
10034	8"

- Standard bevel cutting knives

### Plastic Pliers



Code#	Length
10039	7"

- Fiberglass

### Adjustable Wrenches



Code#	Length	Jaw Opening
10090	6"	3 $\frac{3}{4}$ "
10092	8"	5 $\frac{15}{16}$ "
10094	10"	1 $\frac{1}{8}$ "
10096	12"	1 $\frac{5}{16}$ "
10098	15"	1 $\frac{11}{16}$ "

- WARNING: Not 1000V Rated  
Does not meet ASTM standards for insulated tools

### Stripper & Crimping Pliers



10080



10081

Code#	Capacity	Length
10080	#10-22 AWG	8 $\frac{1}{4}$ "
10081	#8-30 AWG	7"
10082	#10-28 AWG	6 $\frac{1}{2}$ " V-notch
10084	#10-18 AWG Solid	6 $\frac{1}{2}$ "
10085	#10-22 AWG	6 $\frac{1}{2}$ " In-line
10087	#10-18 AWG	STRANDED



10084



10085

### "T" Handle Hexagon Socket Wrench



- Overall length 10"
- Handle length 8"

#### Code# Size

10150	3/8"
10152	7/16"
10154	1/2"
10156	9/16"
10158	5/8"
10160	11/16"
10162	3/4"
10164	13/16"
10165	7/8"
10166	15/16"
10167	1"

### Offset Screwdriver



- Torx see Code #00590 thru #00603 in Price Sheet

#### Slotted

#### Code# Size

00564	2-4 x 3"
00566	4-6 x 3"
00568	6-8 x 4 $\frac{1}{4}$ "
00570	8-10 x 4 $\frac{1}{4}$ "
00572	10-12 x 5 $\frac{1}{4}$ "
00574	12-14 x 6"
00576	14-16 x 6"

#### Phillips

#### Code# Size

00578	#1 x 4 $\frac{3}{4}$ "
00580	#2 x 5 $\frac{1}{2}$ "
00582	#3 x 6"

### Pipe Wrench



#### Code# Size

01002	5/16"
01003	11/32"
01004	3/8"
01005	13/32"
01006	7/16"
01007	15/32"
01008	1/2"
01009	17/32"
01010	9/16"
01011	19/32"
01012	5/8"
01014	11/16"
01016	3/4"
01018	13/16"
01020	7/8"
01022	15/16"
01024	1"
01026	1 $\frac{1}{16}$ "
01028	1 $\frac{1}{8}$ "
01030	1 $\frac{1}{4}$ "
01032	1 $\frac{1}{2}$ "

#### Code# Size

00970	5 mm
00971	6 mm
00972	7 mm
00973	8 mm
00974	9 mm
00975	10 mm
00976	11 mm
00977	12 mm
00978	13 mm
00979	14 mm
00980	15 mm
00981	16 mm
00982	17 mm
00983	18 mm
00984	19 mm
00985	20 mm
00986	21 mm
00987	22 mm
00988	23 mm
00989	24 mm
00990	25 mm

#### Code# Size

00991	26 mm
00992	27 mm
00993	28 mm
00994	29 mm
00995	30 mm
00996	31 mm
00997	32 mm
00998	33 mm
00999	34 mm
01000	35 mm
01001	36 mm

### Hexagon Wrench



- Long Arm

#### Sets

#### Code# Pcs. Sizes

10141	7	5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4"
10142	10	1/8" thru 3/8", w/o 7/64" & 9/64"
10144	14	1/16" thru 1/2"

#### Metric Sets

#### Code# Pcs. Sizes

01042	9	1.5 mm thru 10 mm w/o 7 & 9 mm
01044	10	1.5 mm thru 10 mm w/o 9 mm
01064	10	1.5 mm thru 10 mm w/o 7 mm
01065	11	1.5 mm thru 10 mm
01046	12	1.5 mm thru 12 mm
01048	17	1.5 mm thru 24 mm

#### Code# Size

10123	1/16"
10124	5/32"
10125	3/8"
10126	7/16"
10127	1/2"
10128	9/16"
10129	5/8"
10130	7/8"
10131	1"
10132	1 1/8"
10134	5/16"
10136	3/8"
10138	7/16"
10140	1/2"
10145	9/16"
10146	5/8"
10147	9/16"
10148	7/8"
10149	1"

#### Code# Size

10100	5/64"
10105	3/32"
10106	7/64"
10107	1/8"
10108	9/64"
10109	5/16"
10110	3/8"
10111	7/16"
10112	1"
10114	5/8"
10116	7/8"
10117	1 1/16"
10118	1 1/8"
10119	9/16"

#### Sets

#### Code# Pcs. Sizes

01090	8	2 mm thru 10 mm w/o 7 & 9 mm
01092	10	2 mm thru 10 mm
10120	8	1/8" thru 3/8"
10122	10	3/32" thru 3/8"
10101	10	1/8" thru 1/2"
10102	11	1/8" thru 9/16"
10103	12	3/32" thru 1/2"
10104	13	3/32" thru 9/16"

### Fuse Puller



#### Code#

10440

### Insulated Knife & Sheath



#### Code# Blade

14299	Sickle
14300	Straight

- Fiberglass

### T Handle Wrench

#### Code# Drive

10170	3/8"
10172	1/2"



Moisture and surface contaminants are conductive, so it is imperative that insulated tools be kept clean, dry, and free of surface contaminants.

# Wrenches - Aussie Linesman Pliers

## ASTM F1505-01

### Geared Style Box Wrenches

Code#	Size	Code#	Size
10442	5/16"	10478	8 mm
10443	3/8"	10479	9 mm
10444	7/16"	10480	10 mm
10445	1/2"	10481	11 mm
10446	9/16"	10482	12 mm
10447	5/8"	10483	13 mm
10448	11/16"	10484	14 mm
10449	9/4"	10485	15 mm
10450	13/16"	10486	16 mm
10451	7/8"	10487	17 mm
10452	15/16"	10488	18 mm
10453	1"	10489	19 mm
		10491	21 mm
		10492	22 mm
		10494	24 mm



#### Sets

#### Code# Pcs. Sizes

10454	9	5/16" thru 13/16"
10455	10	5/16" thru 7/8"
10456	12	5/8" thru 1"
10498	11	8 mm thru 24 mm

### Connector Wrenches



#### Code# Length Size

10410	7"	3/8" X 7/16"
10411	8 3/8"	9/16" X 3/4"
10410	9 1/2"	3/4" X 7/8"

- Ratcheting
- Provides separation between the ratchet ends to eliminate accidental contacts on low voltage installations

### Ratcheting Wrenches



#### Code# Size

10421	1/4"
10422	5/16"
10423	3/8"
10424	7/16"
10425	1/2"
10426	9/16"
10427	5/8"
10428	11/16"
10429	3/4"
10432	7/8"

#### Sets

Code#	Pcs.	Sizes
10431	9	1/4" thru 3/4"
10433	10	1/4" thru 5/8"

### European Style Drivers



Slotted SD		Phillips SD	
Code#	Size	Code#	Size
13070	3/32" x 3"	13080	#0 x 2 1/2"
13072	5/32" x 4"	13082	#1 x 3"
13074	3/16" x 5"	13084	#2 x 4"
13076	1/4" x 6"	13086	#3 x 6"
13077	5/16" x 7"		
13078	3/8" x 8"		

#### Screwdriver Sets

#### Code# Pcs. Sizes

13090	7	3/32" x 3", 5/32" x 4", 3/16" x 5", 1/4" x 6", #0 x 2 1/2", #1 x 3", #2 x 4"
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### Metric Nut Drivers



Screwdriver Sets		
Code#	Pcs.	Sizes
05370	9	5.5 mm thru 13 mm

Code#	Description	Size	Length
05300	Metric Nut Driver	5.5 mm	125 mm
05305	Metric Nut Driver	6 mm	125 mm
05310	Metric Nut Driver	7 mm	125 mm
05315	Metric Nut Driver	8 mm	125 mm
05320	Metric Nut Driver	9 mm	125 mm
05325	Metric Nut Driver	10 mm	125 mm
05330	Metric Nut Driver	11 mm	125 mm
05335	Metric Nut Driver	12 mm	125 mm
05340	Metric Nut Driver	13 mm	125 mm

### Box End and Open Wrenches



#### Box End Wrenches

##### Standard Metric

Code#	Size	Code#	Size
10340	1/4"	01402	6 mm
10342	5/16"	01404	7 mm
10344	3/8"	01406	8 mm
10346	7/16"	01408	9 mm
10348	1/2"	01410	10 mm
10350	9/16"	01412	11 mm
10352	5/8"	01414	12 mm
10354	11/16"	01416	13 mm
10356	3/4"	01418	14 mm
10358	13/16"	01420	15 mm
10360	7/8"	01421	16 mm
10362	15/16"	01422	17 mm
10364	1"	01423	18 mm
10366	1 1/8"	01424	19 mm
10368	1 1/4"	01425	20 mm
10370	1 1/2"	01426	21 mm
10373	1 3/8"	01427	22 mm
10374	1 1/2"	01428	23 mm
10376	1 5/8"	01429	24 mm

#### Boxed End Sets

#### Code# Pcs. Sizes

10372	11	1/4" thru 7/8"
01438	11	10 mm thru 27mm
10371	8	3/8" thru 13/16"
10375	10	1/4" thru 13/16"
10377	13	1/4" thru 1"
10378	11	3/8" thru 1"

#### Open End Wrenches

##### Standard Metric

Code#	Size	Code#	Size
10300	1/4"	01302	6 mm
10302	5/16"	01304	7 mm
10304	3/8"	01306	8 mm
10306	7/16"	01308	9 mm
10308	1/2"	01310	10 mm
10310	9/16"	01312	11 mm
10312	5/8"	01314	12 mm
10314	11/16"	01316	13 mm
10316	3/4"	01318	14 mm
10318	13/16"	01320	15 mm
10320	7/8"	01321	16 mm
10322	15/16"	01322	17 mm
10324	1"	01323	18 mm
10326	1 1/16"	01324	19 mm
10328	1 1/8"	01325	20 mm
10330	1 1/4"	01326	21 mm
10337	1 3/8"	01327	22 mm
10338	1 1/2"	01328	23 mm
10339	1 5/8"	01329	24 mm
		01330	25 mm
		01331	26 mm
		01332	27 mm
		01333	28 mm
		01334	29 mm
		01335	30 mm
		01336	32 mm

#### Open End Sets

#### Code# Pcs. Sizes

10332	11	1/4" thru 7/8"
01338	11	10 mm thru 27mm
10329	11	3/8" thru 1"
10331	8	3/8" thru 13/16"
10335	13	1/4" thru 1"
10336	10	1/4" thru 13/16"

### Aussie Linesman Pliers

#### Code# Length

10007 8 3/4" Standard w/ Crimper



- High leverage, Scissor shearing action, Crimper included

## Torque Wrenches/ Screwdrivers



### Wrenches

Code#	Range	Length	Drive
10173	30 - 150" #	10"	1/4"
10184	30 - 150" #	10"	3/8"
10185	150 - 750" #	15"	3/8"
11185	15" - 75" #	15"	3/8"
11184	50 - 250" #	13"	3/8"
11186	50 - 250" #	22"	1/2"
10186	150 - 750" #	15"	1/2"
10187	30" - 150" #	19"	1/2"
16080	0 - 80" #	13"	5/8"

### Screwdrivers

Code#	Range	Length
10174	6 - 30" #	6 3/8"
10175	2 - 36" #	6 3/8"
10176	2 - 100" OZ	6 3/8"

10177 1/4" Hex to 1/4" Sq. Dr. Adapter  
16084 5/16" F to 3/8" M Drive Adapter  
16086 5/16" F to 1/2" M Drive Adapter

## Reversible Ratchet



- Raised lever allows reversing while wearing gloves
- Extension bars are required

## Extension Bars



### Code# Drive Length

10168	1/2"	20"
10189	1/4"	2"
10191	1/4"	6"
10188	3/8"	3"
10190	3/8"	6"
10192	3/8"	12"
10193	1/2"	2 1/2"
10194	1/2"	5"
10196	1/2"	10"

## Breaker Bar



### Code# Drive Length

10197	3/8"	9"
10198	1/2"	12"

## Hexagon Sockets



### 1/2" Drive

#### Standard Depth      Deep Depth

Code#	Size	Code#	Size	Code#	Size	Code#	Size
10200	5/16"	10220	3/8"	10240	3/8"	10270	3/8"
10201	1/4"	10222	7/16"	10242	7/16"	10272	7/16"
10202	3/8"	10223	5/16"	10244	1/2"	10274	1/2"
10204	7/16"	10224	1/2"	10246	9/16"	10276	9/16"
10206	1/2"	10226	9/16"	10250	11/16"	10280	11/16"
10208	9/16"	10228	5/8"	10252	3/4"	10282	3/4"
10210	5/8"	10230	11/16"	10254	13/16"	10284	13/16"
10212	11/16"	10232	3/4"	10256	7/8"	10286	7/8"
10214	3/4"	10233	13/16"	10258	15/16"	10288	15/16"
10216	13/16"	10234	7/8"	10260	1"	10290	1"
10217	15/16"	10235	15/16"	10262	1 1/16"	10292	1 1/16"
10218	7/8"	10236	1"	10264	1 1/8"	10294	1 1/8"
10221	1"			10266	1 1/4"	10295	1 1/4"
				10268	1 3/8"		
				10269	1 5/8"		

\* Other ranges available, see Price Sheet  
for details

### Code# Drive Range Depth

01100-01126	1/4"	5/32" - 9/16"	STD
01140-01157	1/4"	4 mm - 13 mm	STD
01166-01182	3/8"	6 mm - 22 mm	STD
01266-01282	3/8"	6 mm - 22 mm	DEEP
01192-01214	1/2"	10 mm - 32 mm	STD
01479-01496	1/2"	9 mm - 26 mm	DEEP

## Male Hexagon Adaptor



### 1/4" Drive - 2" Lg      3/8" Drive - 2 1/4" Lg      4" Lg

Code#	Size	Code#	Size	Code#
01231	1/8"	01244	1/8"	01370
01232	5/32"	01246	5/32"	01372
01234	3/16"	01248	3/16"	01374
01236	7/32"	01250	7/32"	01376
01238	1/4"	01252	1/4"	01378
01240	5/16"	01254	5/16"	01380
		01256	3/8"	01382
		01258	7/16"	01384
		01260	1/2"	01386

### Sets

### Code# Pcs. Drive Sizes

Code#	Pcs.	Drive	Sizes	1/2" Drive - 2" Lg
01241	6	1/4"	1/8" - 5/16"	01390
01261	4	3/8"	1/4" - 5/16", 3/8", 7/16"	01391
01262	7	3/8"	1/8" - 1/2", w/o 5/32" & 7/32"	01392
01263	9	1/2"	1/8" - 1/2"	01393
01230	8	1/2"	1/4" - 3/4"	01394
01348	7	3/8"	4 mm-10mm 5"	01395
01368	8	1/2"	1/8" - 3/4" 4"	01396
01388	9	3/8"	1/8" - 1/2" 4"	01397
01400	10	1/2"	6 mm - 19 mm	01398

### 3/8" Drive - 2 1/4" Lg      5" Lg

### Code# Size Code#

Code#	Size	Code#	1/2" Drive - 2 3/4"
01294	4 mm	01340	01350
01295	5 mm	01341	01352
01296	6 mm	01342	01354
01297	7 mm	01343	01356
01298	8 mm	01344	01358
01299	9 mm	01345	01360
01300	10 mm	01346	01362

Code#	Size
01218	1/4"
01219	5/16"
01220	3/8"
01222	7/16"
01224	1/2"
01226	9/16"
01228	5/8"
01229	3/4"

## Socket & Ratchet Sets



10199

### Code# Pcs. Description

01130	11	1/4" Dr. 6 Pt. Socket Set, 5/32" thru 9/16"
01131	11	1/4" Dr. Ratchet, 2" Ext., Sockets 7/32" thru 9/16"
01132	12	1/4" Dr. Ratchet, 2" Ext., Sockets 3/16" thru 9/16"
01133	18	1/4" Dr. Ratchet, 2" Ext., Sockets 3/16" thru 9/16", Male Hex Bits 1/8" thru 5/16"
01160	14	1/4" Dr. Ratchet, 2" Ext., Sockets 4mm thru 12mm
01188	15	3/8" Dr. Ratchet, 3" Ext., Sockets 10mm thru 22mm
01190	13	1/2" Dr. Deep Metric Socket Set 10mm thru 22mm
01215	17	1/2" Dr. Ratchet, 5" Ext., Sockets 10mm thru 32mm
01216	15	1/2" Dr. Socket Set, 10mm thru 32mm
01283	13	3/8" Dr. Ratchet, 3" Ext., Sockets 10mm thru 19mm & 22mm DEEP
01284	19	3/8" Dr. Ratchet, 3" Ext., Sockets 6mm thru 22mm DEEP
01719	12	1/4" Dr. Ratchet, 2" Ext., Sockets 3/16" thru 1/2"
01811	9	1/2" Dr. Ratchet, 3" Ext., Sockets 3/16" thru 3/4"
01833	14	1/2" Dr. Ratchet, 5" Ext., Sockets 3/8" thru 1" & Breaker Bar
01199	12	3/8" Dr. Ratchet, 3" Ext., Sockets 5/16" thru 7/8"
02119	10	3/8" Dr. Sockets 5/16" thru 7/8"
02328	9	3/8" Dr. Ratchet, 3" Ext., Deep Sockets 3/8" thru 3/4"
02339	12	3/8" Dr. Ratchet, 3" & 6" Ext., Sockets 3/8" thru 7/8"
11198	25	1/2" Dr. Ratchet, 5" Ext., 8" "T" Handle, Sockets 3/8" thru 1 1/2", Male Hex Bits 1/4" thru 3/4"
11199	11	3/8" Dr. Ratchet, 3" & 6" Ext., Sockets 3/8" thru 1 1/2"
11200	11	3/8" Dr. Ratchet, 3" and 6" Ext., Deep Sockets 3/8" thru 13/16"
11215	10	3/8" Dr. Metric Socket Set, 10mm thru 19mm
11210	17	1/2" Dr. Ratchet, 5" and 10" Ext., Deep Sockets 3/8" thru 1" Breaker Bar

# Tool Rolls

## ASTM F1505-01

### Basic Electrician's Roll (9 pcs.)



9" Linesman Pliers  
7½" Diagonal Cutting Pliers  
7" Needle Nose Pliers  
Combination Stripper & Crimper  
#2 x 6" Square (Robertson)  
Screwdriver\*  
¾" x 6" Slotted Screwdriver\*  
⅓" x 6" Slotted Screwdriver\*  
# 1 x 5" Phillips Screwdriver\*  
# 2 x 4½" Phillips Screwdriver\*

#### Code#

\* 13302

### Meter Reader (Routeman) Roll (10 pcs.)



8" Needle Nose Pliers  
¾" x 6" Slotted Screwdriver\*  
⅓" x 6" Slotted Screwdriver\*  
# 1 x 5" Phillips Screwdriver\*  
# 2 x 7" Phillips Screwdriver\*  
Fuse Puller  
Plastic Pliers  
⅓" Nut Driver\*  
⅓" Nut Driver\*  
⅓" Nut Driver\*

#### Code#

\* 13393 w/ Composite Tools 3" Nut Drivers  
\* 13394 w/ Composite Tools 6" Nut Drivers

### Meter Service Roll (12 pcs.)



9" Linesman Pliers  
7½" Diagonal Cutting Pliers  
8" Needle Nose Pliers  
⅓" x 3" Slotted Screwdriver\*  
#2 x 6" Square (Robertson)  
Screwdriver\*  
¾" x 6" Slotted Screwdriver\*  
⅓" x 6" Slotted Screwdriver\*  
Fuse Puller  
Plastic Pliers  
⅓" Nut Driver\*  
⅓" Nut Driver\*  
⅓" Nut Driver\*

#### Code#

\* 13383 w/ Composite Tools 3" Nut Drivers  
\* 13384 w/ Composite Tools 6" Nut Drivers

### Gas Service Roll (11 pcs.)



7" Linesman Pliers  
7½" Diagonal Cutting Pliers  
8" Needle Nose Pliers  
⅓" x 3" Slotted Screwdriver\*  
⅓" x 5" Slotted Screwdriver\*  
⅓" x 6" Slotted Screwdriver\*  
Fuse Puller  
Plastic pliers  
⅓" Nut Driver\*  
⅓" Nut Driver\*  
⅓" Nut Driver\*

#### Code#

\* 13372 w/ Composite Tools 3" Nut Drivers  
\* 13373 w/ Composite Tools 6" Nut Drivers

### Tool Roll (7 pcs.)



9" Linesman Pliers  
7½" Diagonal Cutting Pliers  
6" Needle Nose Pliers  
Combination Stripper & Crimper  
Fuse Puller  
Crimper  
Plastic Pliers

#### Code#

13360

### Nut Screwdriver Roll (11 pcs.)



⅓" x 3" Slotted Screwdriver\*  
#2 x 6" Square (Robertson)  
Screwdriver\*  
⅓" x 6" Slotted Screwdriver\*  
⅓" x 6" Slotted Screwdriver\*  
⅓" Nut Driver\*  
⅓" Nut Driver\*

#### Code#

\* 13352 3" Nut Drivers  
\* 13353 6" Nut Drivers

### Substation Roll



#### Code# Description

13432 Consists of #13352 and #13360\*  
13433 Consists of #13353 and #13360

### Telecommunications Tool Roll (16 pcs.)



9" Linesman Pliers  
6" Needle Nose Pliers  
8" Slip Joint Pliers  
⅓" x 5" Elect. Slotted Screwdriver  
w/Cushion Grip\*  
⅓" x 4½" Slotted Screwdriver  
w/Cushion Grip\*  
⅓" x 6" Slotted Screwdriver  
w/Cushion Grip\*  
⅓" x 7" Slotted Screwdriver  
w/Cushion Grip\*  
# 2 x 4½" Phillips Screwdriver  
w/Cushion Grip\*  
⅓" Reversible Ratchet  
⅓" Reversible Torque Wrench 30-150#  
⅓" Drive 3" Extension  
⅓", ⅓", ⅓", ⅓" Hex Sockets ⅓" Drive,  
STD Depth  
⅓" Hex Socket ⅓" Drive Deep Depth

#### Code#

\* 13442 Tools

### Belt Pouches



\* Flashlight and tape not included

\* 8" Adjustable Wrench not insulated per ASTM F1505 Standard - insulated against grounding only

#### 13202 Meter Service Pouch

Composite Knife  
 $\frac{1}{8}$ " x 3" Slotted Composite Screwdriver  
 $\frac{1}{8}$ " x 6" Slotted Composite Screwdriver  
 $\frac{5}{16}$ " x 6" Slotted Composite Screwdriver  
#2 x 4 $\frac{1}{2}$ " Phillips Composite Screwdriver  
Wire Stripper  
7 $\frac{1}{2}$ " Diagonal Cutter  
10 $\frac{1}{2}$ " Water Pump Pliers  
\* 8" Adjustable Wrench  
9" Linesman Pliers  
6" Needle Nose  
Slotted Composite Holding Screwdriver  
 $\frac{3}{8}$ " x 3" Composite Hex Nut Driver  
 $\frac{1}{2}$ " x 3" Composite Hex Nut Driver

#### 13204 Electrician's Service Pouch

Composite Knife  
 $\frac{1}{8}$ " x 3" Slot. Composite Screwdriver  
 $\frac{3}{16}$ " x 5" Slot. Composite Screwdriver  
 $\frac{1}{4}$ " x 6" Slot. Composite Screwdriver  
#2 x 4 $\frac{1}{2}$ " Phillips Composite Screwdriver  
Wire Stripper  
7 $\frac{1}{2}$ " Diagonal Cutter  
10 $\frac{1}{2}$ " Water Pump Pliers  
Fuse Puller  
9" Linesman Pliers  
6" Needle Nose  
 $\frac{3}{16}$ " x 3" Composite Hex Nut Driver  
 $\frac{1}{2}$ " x 3" Composite Hex Nut Driver  
 $\frac{5}{16}$ " x 3" Composite Hex Nut Driver  
 $\frac{3}{8}$ " x 3" Composite Hex Nut Driver

### Building Maintenance Tool Roll



Code#	Description
00887	7 $\frac{1}{16}$ " x 3" Nut Driver
10039	Plastic Pliers
10180	3 $\frac{1}{8}$ " Rev. Ratchet
10188	3" Extension Bar
10204	7 $\frac{1}{16}$ " Hex Socket
10208	9 $\frac{1}{16}$ " Hex Socket
10354	11 $\frac{1}{16}$ " Box End WR
10314	11 $\frac{1}{16}$ " Open End WR
14300	Knife

#### Code#

13548

### Paper Industry Basic Tool Roll



Code#	Description
00813	1 $\frac{1}{8}$ " x 3" Slotted Screwdriver
00814	1 $\frac{1}{8}$ " x 6" Slotted Screwdriver
00846	3 $\frac{1}{16}$ " x 6" Slot Screwdriver
00848	1 $\frac{1}{4}$ " x 6" Slot Screwdriver
00852	1 x 5" Phillips Screwdriver
00856	2 x 4 $\frac{1}{2}$ " Phillips Screwdriver
10013	7" Needle Nose Pliers
10060	Crimper
10084	Wire Strippers

#### Code#

13547

### Automotive Medium Tool Roll



#### Code# Description

00844	3 $\frac{1}{16}$ " x 5" Slotted Screwdriver
00848	1 $\frac{1}{4}$ " x 6" Slotted Screwdriver
00849	5 $\frac{1}{16}$ " x 6" Slotted Screwdriver
00852	1 x 5" Phillips Screwdriver
00856	2 x 4 $\frac{1}{2}$ " Phillips Screwdriver
10006	9" Linesman Pliers
10013	7" Needle Nose PI
10033	7" Diagonal Pliers
10080	Wire Strippers

#### Code#

00021

### Automotive Large Tool Roll



#### Code# Description

00846	3 $\frac{1}{16}$ " x 6" Slotted Screwdriver
00848	1 $\frac{1}{4}$ " x 6" Slotted Screwdriver
00849	5 $\frac{1}{16}$ " x 6" Slotted Screwdriver
00852	#1 x 5" Phillips Screwdriver
00858	#2 x 7" Phillips Screwdriver
00859	#3 x 6" Phillips Screwdriver
10013	7" Needle Nose Pliers
10034	8" Diagonal Pliers
10060	Crimper
10073	12" Water Pump Pliers
10080	Wire Strippers
10440	Fuse Puller

#### Code#

00015

### Automotive Stamping Tool Roll



#### Code# Description

00846	3 $\frac{1}{16}$ " x 6" Slotted Screwdriver
00848	1 $\frac{1}{4}$ " x 6" Slotted Screwdriver
00852	#1 x 5" Phillips Screwdriver
00856	#2 x 4 $\frac{1}{2}$ " Phillips Screwdriver
10010	6" Needle Nose Pliers
10030	6" Diagonal Pliers
10060	Crimper
10080	Wire Strippers
10440	Fuse Puller

#### Code#

13545

### Automotive Tool Roll



#### Code# Description

00813	1 $\frac{1}{8}$ " x 3" Slotted Screwdriver
00846	3 $\frac{1}{16}$ " x 6" Slotted Screwdriver
00848	1 $\frac{1}{4}$ " x 6" Slotted Screwdriver
00851	#0 x 3" Phillips Screwdriver
00852	#1 x 5" Phillips Screwdriver
00856	#2 x 4 $\frac{1}{2}$ " Phillips Screwdriver
10010	6" Needle Nose Pliers
10030	6" Diagonal Pliers
10060	Crimper
10084	Wire Strippers
10440	Fuse Puller

#### Code#

13546

### Utility Tool Kit



### Utility Field Kit (22 pcs.) 1/2" Drive



### Utility Field Kit (30 pcs.) 1/2" Drive



### Utility Service Kit



<b>Code#</b>	<b>Description</b>	<b>Code#</b>	<b>Description</b>
00562	#2 x 6" Phillips Holding Screwdriver	00856	#2 x 4 1/2" Phillips Composite CG Screwdriver
00558	8-10 x 2 1/2" Offset Screwdriver	00880	3/16" x 3" Hollow Hex Shank Composite Nut Driver
00559	8-10 x 5 3/8" Offset Screwdriver	00885	11/32" x 3" Hollow Hex Shank Composite Nut Driver
00570	8-10 x 4 1/4" Slotted Offset Screwdriver	00886	3/8" x 3" Hollow Hex Shank Composite Nut Driver
00813	1/8" x 3" Electrician's Slot Composite Screwdriver	01003	11/32" x 4" Pipe Wrench (Single End)
00844	3/16" x 5" Electrician's Slot Composite CG Screwdriver	10010	6" Needle Nose Pliers
00843	3/16" x 7" Electrician's Slot Composite Screwdriver	10030	6" Diagonal Cutting Pliers
00848	1/4" x 6" Electrician's Slot Composite CG Screwdriver	10060	10" Crimping Pliers
00852	#1 x 5" Phillips Composite CG Screwdriver	10084	Wire Stripper Solid

#### Code#

13402

#### Code#

16035

<b>Code#</b>	<b>Description</b>	<b>Code#</b>	<b>Description</b>
00813	1/8" x 3" Electrician's Slot Composite Screwdriver	10272	7/16" 1/2" Dr. Hex Socket 12 Pt. Deep
00847	1/4" x 4 1/2" Electrician's Slot Composite CG Screwdriver	10172	1/2" Dr. "T" Handle Wrench
00848	1/4" x 6" Electrician's Slot Composite CG Screwdriver	10182	10" 1/2" Dr. Reversible Ratchet
00852	#1 x 5" Phillips Composite CG Screwdriver	10194	5" 1/2" Drive Extension Bar
00895	5/16" x 6" Hollow Hex Shank Composite Nut Driver	10110	3/16" x 6" "T" Handle Hex Wrench
00897	3/8" x 6" Hollow Hex Shank Composite Nut Driver	10412	3/4" x 7/8" Bug Wrench
00898	7/16" x 6" Hollow Hex Shank Composite Nut Driver	10039	7" Plastic (Holding) Pliers
00899	1/2" x 6" Hollow Hex Shank Composite Nut Driver	10005	9 1/2" Premium Linesman Pliers with Crimper
00900	9/16" x 6" Hollow Hex Shank Composite Nut Driver	10033	7 1/2" Diagonal Cutting Pliers
00901	5/8" x 6" Hollow Hex Shank Composite Nut Driver	10060	10" Crimping Pliers
10274	1/2" 1/2" Dr. Hex Socket 12 Pt. Deep	10016	8" Needle Nose Pliers

#### Code#

16035

#### Code#

16034

<b>Code#</b>	<b>Description</b>	<b>Code#</b>	<b>Description</b>
00813	1/8" x 3" Electrician's Slot Composite Screwdriver	10110	3/16" x 6" "T" Handle Hex Wrench
00847	1/4" x 4 1/2" Electrician's Slot Composite CG Screwdriver	10172	1/2" Dr. "T" Handle Wrench
00852	#1 x 5" Phillips Composite CG Screwdriver	10182	10" 1/2" Dr. Reversible Ratchet
00848	1/4" x 6" Electrician's Slot Composite CG Screwdriver	10194	10" 1/2" Drive Extension Bar
00895	5/16" x 6" Hollow Hex Shank Composite Nut Driver	10272	5" 1/2" Drive Extension Bar
00897	3/8" x 6" Hollow Hex Shank Composite Nut Driver	10274	7/16" 1/2" Dr. Hex Socket 12 Pt. Deep
00898	7/16" x 6" Hollow Hex Shank Composite Nut Driver	10276	9/16" 1/2" Dr. Hex Socket 12 Pt. Deep
00899	1/2" x 6" Hollow Hex Shank Composite Nut Driver	10278	5/8" 1/2" Dr. Hex Socket 12 Pt. Deep
00900	9/16" x 6" Hollow Hex Shank Composite Nut Driver	10280	11/16" 1/2" Dr. Hex Socket 12 Pt. Deep
00901	5/8" x 6" Hollow Hex Shank Composite Nut Driver	10282	3/4" 1/2" Dr. Hex Socket 12 Pt. Deep
10005	9 1/2" Premium Linesman Pliers with Crimper	10284	13/16" 1/2" Dr. Hex Socket 12 Pt. Deep
10016	8" Needle Nose Pliers	10286	7/8" 1/2" Dr. Hex Socket 12 Pt. Deep
10033	7 1/2" Diagonal Cutting Pliers	10288	15/16" 1/2" Dr. Hex Socket 12 Pt. Deep
10039	7" Plastic (Holding) Pliers	10412	3/4" x 7/8" Bug Wrench
10060	10" Crimping Pliers		

#### Code#

16034

#### Code#

00001

Custom tool sets can be created from any combination of tools in this catalog.

### Insulated Tool Sets



- 9" Linesman Pliers
- 6" Diagonal Cutting Pliers
- 6" Needle Nose Pliers
- Crimper
- 8" Slip Joint
- 10" Water Pump Pliers
- $\frac{3}{16}$ " x 5" Cushion Grip Elect. Slotted Screwdriver\*
- $\frac{1}{4}$ " x 6" Cushion Grip Slotted Screwdriver\*
- $\frac{1}{4}$ " x 4 $\frac{1}{2}$ " Cushion Grip Slotted Screwdriver\*
- $\frac{5}{16}$ " x 6" Cushion Grip Slotted Screwdriver\*
- # 1 x 5" Cushion Grip Phillips Screwdriver\*
- # 2 x 4 $\frac{1}{2}$ " Cushion Grip Phillips Screwdriver\*
- $\frac{3}{16}$ ",  $\frac{1}{4}$ ",  $\frac{5}{16}$ ",  $\frac{3}{8}$ " Hex Wrench
- $\frac{1}{4}$ ",  $\frac{5}{16}$ ",  $\frac{3}{8}$ ",  $\frac{7}{16}$ ",  $\frac{1}{2}$ " Cushion Grip Hex Nut Driver (3" Shaft)\*

#### Code#

\* 13407 3" Nut Drivers  
\* 13409 6" Nut Drivers

### Aviation Industry Hot Box®



#### Code#

- |       |   |
|-------|---|
| 00813 | $\frac{1}{8}$ " x 3" Electrician's Slotted Screwdriver  |
| 00814 | $\frac{1}{8}$ " x 6" Electrician's Slotted Screwdriver  |
| 00844 | $\frac{3}{16}$ " x 5" Electrician's Slotted Screwdriver |
| 00848 | $\frac{1}{4}$ " x 6" Electrician's Slotted Screwdriver  |
| 00851 | #0 x 3" Insulated Phillips Screwdriver                  |
| 00856 | #2 x 4 $\frac{1}{2}$ " Insulated Phillips Screwdriver   |
| 00952 | #1 x 3" Insulated Phillips Screwdriver                  |
| 01100 | $\frac{5}{32}$ ", $\frac{1}{4}$ " Dr. Hex Socket STD    |
| 01102 | $\frac{3}{16}$ ", $\frac{1}{4}$ " Dr. Hex Socket STD    |
| 01104 | $\frac{7}{32}$ ", $\frac{1}{4}$ " Dr. Hex Socket STD    |
| 01106 | $\frac{1}{4}$ ", $\frac{1}{4}$ " Dr. Hex Socket STD     |
| 01108 | $\frac{9}{32}$ ", $\frac{1}{4}$ " Dr. Hex Socket STD    |
| 01110 | $\frac{5}{16}$ ", $\frac{1}{4}$ " Dr. Hex Socket STD    |
| 01112 | $\frac{11}{32}$ ", $\frac{1}{4}$ " Dr. Hex Socket STD   |
| 01114 | $\frac{3}{8}$ ", $\frac{1}{4}$ " Dr. Hex Socket STD     |
| 01118 | $\frac{7}{16}$ ", $\frac{1}{4}$ " Dr. Hex Socket STD    |
| 01122 | $\frac{1}{2}$ ", $\frac{1}{4}$ " Dr. Hex Socket STD     |
| 01126 | $\frac{9}{16}$ ", $\frac{1}{4}$ " Dr. Hex Socket STD    |
| 01310 | 10 mm Open End Wrench                                   |
| 01312 | 11 mm Open End Wrench                                   |
| 01314 | 12 mm Open End Wrench                                   |
| 01316 | 13 mm Open End Wrench                                   |
| 01318 | 14 mm Open End Wrench                                   |
| 01320 | 15 mm Open End Wrench                                   |
| 10003 | 8" Linesman Pliers                                      |
| 10030 | 6" Diagonal Cutting Pliers                              |
| 10080 | Combination Stripper and Crimping Pliers                |
| 10008 | 4" Needle Nose Pliers                                   |

#### Code#

- |       |  |
|-------|--|
| 10068 | 6" Water Pump Pliers   |
| 10073 | 12" Water Pump Pliers  |
| 10124 | $\frac{5}{64}$ " Long Arm Hex Key                            |
| 10125 | $\frac{3}{32}$ " Long Arm Hex Key                            |
| 10127 | $\frac{1}{8}$ " Long Arm Hex Key                             |
| 10129 | $\frac{5}{32}$ " Long Arm Hex Key                            |
| 10130 | $\frac{3}{16}$ " Long Arm Hex Key                            |
| 10131 | $\frac{7}{32}$ " Long Arm Hex Key                            |
| 10132 | $\frac{1}{4}$ " Long Arm Hex Key                             |
| 10178 | 6" $\frac{1}{4}$ " Dr. Reversible Ratchet                    |
| 10180 | 7" $\frac{3}{8}$ " Dr. Reversible Ratchet                    |
| 10188 | 3" $\frac{3}{8}$ " Dr. Extension Bar                         |
| 10189 | 2 $\frac{1}{4}$ " Extension Bar                              |
| 10190 | 6" $\frac{3}{8}$ " Dr. Extension Bar                         |
| 10202 | $\frac{7}{8}$ ", $\frac{3}{8}$ " Dr. Hex Socket 12 pt. STD   |
| 10204 | $\frac{7}{16}$ ", $\frac{3}{8}$ " Dr. Hex Socket 12 pt. STD  |
| 10206 | $\frac{1}{2}$ ", $\frac{3}{8}$ " Dr. Hex Socket 12 pt. STD   |
| 10208 | $\frac{9}{16}$ ", $\frac{3}{8}$ " Dr. Hex Socket 12 pt. STD  |
| 10210 | $\frac{5}{8}$ ", $\frac{3}{8}$ " Dr. Hex Socket 12 pt. STD   |
| 10212 | $\frac{11}{16}$ ", $\frac{3}{8}$ " Dr. Hex Socket 12 pt. STD |
| 10214 | $\frac{3}{4}$ ", $\frac{3}{8}$ " Dr. Hex Socket 12 pt. STD   |
| 10216 | $\frac{13}{16}$ ", $\frac{3}{8}$ " Dr. Hex Socket 12 pt. STD |
| 10300 | $\frac{1}{2}$ " Long Style Open End Wrench                   |
| 10302 | $\frac{5}{16}$ " Long Style Open End Wrench                  |
| 10304 | $\frac{3}{8}$ " Long Style Open End Wrench                   |
| 10306 | $\frac{7}{16}$ " Long Style Open End Wrench                  |
| 10308 | $\frac{1}{2}$ " Long Style Open End Wrench                   |
| 10310 | $\frac{9}{16}$ " Long Style Open End Wrench                  |
| 10440 | Fuse Puller  |

### Insulated Tool Set



#### Code#

16044

#### Code#

13404

#### Code#

- |       |                                   |
|-------|-----------------------------------|
| 10006 | 9 $\frac{1}{2}$ " Linesman Pliers |
| 10010 | 6" Needle Nose Pliers             |
| 10030 | 6" Diagonal Cutting Pliers        |
| 10040 | 9 $\frac{1}{2}$ " Cable Cutters   |
| 10050 | 8" Slip Joint Pliers              |
| 10060 | 10" Crimping Pliers               |
| 10070 | 10" Water Pump Pliers             |

### Food Processing Maintenance Hot Box®



#### Code#

13404

#### Code#

13451

#### Code#

- |       |   |
|-------|---|
| 00898 | $\frac{7}{16}$ " x 6" Hollow Hex Shank Composite Nut Driver |
| 00899 | $\frac{1}{2}$ " x 6" Hollow Hex Shank Composite Nut Driver  |
| 10005 | 9 $\frac{1}{2}$ " Premium Linesman Pliers                   |
| 10013 | 7" Needle Nose Pliers                                       |
| 10033 | 7 $\frac{1}{2}$ " Diagonal Cutting Pliers                   |
| 10060 | 10" Crimping Pliers   |
| 10070 | 10" Water Pump Pliers                                       |
| 10073 | 12" Water Pump Pliers                                       |

Custom tool sets can be created from any combination of tools in this catalog.

**Tool Boxes**



**All Sets Contain:**

- 9" Linesman Pliers
- 7½" Diagonal Cutting Pliers
- 7" Needle Nose Pliers
- Flash Light
- 1/8" x 3" Slotted Screwdriver\*
- 3/16" x 5" Slotted Screwdriver\*
- 1/4" x 6" Slotted Screwdriver\*
- # 1 x 5" Phillips Screwdriver\*
- # 2 x 4½" Phillips Screwdriver\*
- Foam Insert Case
- Tool Box Style

**Additional Contents**

**Deluxe Electrician's Tool Box**

- 1/2" Reversible Ratchet
- 5" Extension 1/2" Drive
- 10" Extension 1/2" Drive
- Hex Sockets:  
3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"
- Open End Wrench:  
3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

**Code#**

- Foam Insert Case → \* 13411
- Tool Box Style → \* 13413

**Std. Maintenance Tool Box**

- 1/2" Drive 8" "T" Handle

**Hex Sockets:**

- 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

**Open End Wrench:**

- 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

**Code#**

- \* 13401
- \* 13403

**Deluxe Maintenance Tool Box**

- 1/2" Reversible Ratchet
- 5" Extension 1/2" Drive

**Hex Sockets:**

- 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

**Open End Wrench:**

- 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"

**Code#**

- \* 13421
- \* 13423

**1/2" Drive Electrician's Hot Box®**



**Code#**

- 00880 3/16" x 3" Hollow Hex Shank Composite Nut Driver
- 00885 11/32" x 3" Hollow Hex Shank Composite Nut Driver
- 00850 3/8" x 7" Electrician's Slot Composite CG Screwdriver
- 01352 5/16" x 4" Long Male Hex Bit 1/4" Drive
- 01354 3/8" x 4" Long Male Hex Bit 1/2" Drive
- 01356 7/16" x 4" Long Male Hex Bit 1/2" Drive
- 01358 1/2" x 4" Long Male Hex Bit 1/2" Drive
- 01360 9/16" x 4" Long Male Hex Bit 1/2" Drive
- 01362 5/8" x 4" Long Male Hex Bit 1/2" Drive
- 10040 9/16" Cable Cutters
- 10073 12" Water Pump Pliers
- 10110 3/16" x 6" "T" Handle Hex Wrench
- 10112 1/4" x 6" "T" Handle Hex Wrench
- 10114 5/16" x 6" "T" Handle Hex Wrench
- 10116 3/8" x 6" "T" Handle Hex Wrench
- 10117 7/16" x 6" "T" Handle Hex Wrench
- 10118 1/2" x 6" "T" Handle Hex Wrench
- 10182 10" 1/2" Dr. Reversible Ratchet
- 10194 5" 1/2" Dr. Extension Bar

**Code#**

16053

**Code#**

- 10196 10" 1/2" Dr. Extension Bar
- 10187 19" 1/2" Dr. Torque Wrench 30 - 150 ft.#
- 10240 3/8" 1/2" Dr. Hex Socket 12 pt. STD
- 10242 7/16" 1/2" Dr. Hex Socket 12 pt. STD
- 10244 1/2" 1/2" Dr. Hex Socket 12 pt. STD
- 10246 9/16" 1/2" Dr. Hex Socket 12 pt. STD
- 10248 5/8" 1/2" Dr. Hex Socket 12 pt. STD
- 10250 11/16" 1/2" Dr. Hex Socket 12 pt. STD
- 10252 3/4" 1/2" Dr. Hex Socket 12 pt. STD
- 10272 7/16" 1/2" Dr. Hex Socket 12 pt. DEEP
- 10274 1/2" 1/2" Dr. Hex Socket 12 pt. DEEP
- 10276 9/16" 1/2" Dr. Hex Socket 12 pt. DEEP
- 10278 5/8" 1/2" Dr. Hex Socket 12 pt. DEEP
- 10280 11/16" 1/2" Dr. Hex Socket 12 pt. DEEP
- 10282 3/4" 1/2" Dr. Hex Socket 12 pt. DEEP
- 10284 13/16" 1/2" Dr. Hex Socket 12 pt. DEEP
- 10286 7/8" 1/2" Dr. Hex Socket 12 pt. DEEP
- 10288 15/16" 1/2" Dr. Hex Socket 12 pt. DEEP
- 10290 1" 1/2" Dr. Hex Socket 12 pt. DEEP

**Small Automotive Tool Kit**



**Code#**

- 00846 3/16" x 6" Slotted Screwdriver
- 00852 #1 x 5" Phillips Screwdriver
- 10080 Wire Stripper
- 10440 Fuse Puller

**Code#**

00020

**Code#**

- 10210 5/8" 3/8" Dr. Hex Socket 12 pt. STD
- 10212 11/16" 3/8" Dr. Hex Socket 12 pt. STD
- 10214 3/4" 3/8" Dr. Hex Socket 12 pt. STD
- 10216 13/16" 3/8" Dr. Hex Socket 12 pt. STD
- 10312 5/8" Long Style Open End Wrench
- 10310 9/16" Long Style Open End Wrench
- 10308 1/2" Long Style Open End Wrench
- 10306 7/16" Long Style Open End Wrench
- 10304 3/8" Long Style Open End Wrench
- 10302 5/16" Long Style Open End Wrench

**Telecommunications Hot Box® (21 pcs.)**



**Code#**

- 00897 3/8" x 6" Hollow Hex Shank Composite Nut Driver
- 00898 7/16" x 6" Hollow Hex Shank Composite Nut Driver
- 00899 1/2" x 6" Hollow Hex Shank Composite Nut Driver
- 00900 9/16" x 6" Hollow Hex Shank Composite Nut Driver
- 10180 7 3/8" Dr. Reversible Ratchet
- 10188 3" 3/8" Dr. Extension Bar
- 10190 6" 3/8" Dr. Extension Bar
- 10202 3/8" 3/8" Dr. Hex Socket 12 pt. STD
- 10204 7/16" 3/8" Dr. Hex Socket 12 pt. STD
- 10206 1/2" 3/8" Dr. Hex Socket 12 pt. STD
- 10208 9/16" 3/8" Dr. Hex Socket 12 pt. STD

**Code#**

16072

**Telecommunications  
Hot Box® (24 pcs.)**



**Telecommunications  
Hot Box® (35 pcs.)**



**Medium Telecomm.  
Hot Box®**



**Large Telecomm.  
Hot Box®**



**Code#      Description**

00846	3/16" x 6" Electrician's Slot Composite CG Screwdriver
00849	5/16" x 6" Electrician's Slot Composite CG Screwdriver
00856	#2 x 4 1/2" Phillips Composite CG Screwdriver
10006	9 1/2" Linesman Pliers
10016	8" Needle Nose Pliers
10033	7 1/2" Diagonal Cutting Pliers
10070	10" Water Pump Pliers
10180	7" 3/8" Dr. Reversible Ratchet
10184	10" 3/8" Dr. Torque Wrench 30 - 150" #
10188	3" 3/8" Dr. Extension Bar
10190	6" 3/8" Dr. Extension Bar
10204	7/16" 3/8" Dr. Hex Socket 12 pt. STD

**Code#**

16073

**Code#      Description**

10206	1/2" 3/8" Dr. Hex Socket 12 pt. STD
10208	9/16" 3/8" Dr. Hex Socket 12 pt. STD
10214	3/4" 3/8" Dr. Hex Socket 12 pt. STD
10306	7/16" Long Style Open End Wrench
10308	7/16" Long Style Open End Wrench
10310	9/16" Long Style Open End Wrench
10316	3/4" Long Style Open End Wrench
10344	3/8" Long Style Box End Wrench
10346	7/16" Long Style Box End Wrench
10348	1/2" Long Style Box End Wrench
10350	9/16" Long Style Box End Wrench
10356	3/4" Long Style Box End Wrench

**Code#**

16073

**Code#      Description**

01329	24 mm Open End Wrench
01429	24 mm Box End Wrench
10180	7" 3/8" Dr. Reversible Ratchet
10187	19" 1/2" Dr. Torque Wrench 30 - 150 ft. #
10188	3" 3/8" Dr. Extension Bar
10194	5" 3/8" Dr. Extension Bar
10200	5/16" 3/8" Dr. Hex Socket 3/8" 12 pt. STD
10202	3/8" 3/8" Dr. Hex Socket 12 pt. STD
10204	7/16" 3/8" Dr. Hex Socket 12 pt. STD
10206	1/2" 3/8" Dr. Hex Socket 12 pt. STD
10208	9/16" 3/8" Dr. Hex Socket 12 pt. STD
10210	5/8" 3/8" Dr. Hex Socket 12 pt. STD
10212	11/16" 3/8" Dr. Hex Socket 12 pt. STD
10214	3/4" 3/8" Dr. Hex Socket 12 pt. STD
10216	13/16" 3/8" Dr. Hex Socket 12 pt. STD
10274	1/2" 1/2" Dr. Hex Socket 12 pt. DEEP
10276	9/16" 1/2" Dr. Hex Socket 12 pt. DEEP
10282	3/4" 1/2" Dr. Hex Socket 12 pt. DEEP

**Code#**

16070

**Code#      Description**

10288	15/16" 1/2" Dr. Hex Socket 12 pt. DEEP
10292	11/16" 1/2" Dr. Hex Socket 12 pt. DEEP
10324	1" Long Style Open End Wrench
10326	1 1/16" Long Style Open End Wrench
10340	1/2" Long Style Box End Wrench
10342	5/16" Long Style Box End Wrench
10344	3/8" Long Style Box End Wrench
10346	7/16" Long Style Box End Wrench
10348	1/2" Long Style Box End Wrench
10350	9/16" Long Style Box End Wrench
10352	5/8" Long Style Box End Wrench
10354	11/16" Long Style Box End Wrench
10356	3/4" Long Style Box End Wrench
10358	13/16" Long Style Box End Wrench
10360	7/8" Long Style Box End Wrench
10362	15/16" Long Style Box End Wrench
10364	1" Long Style Box End Wrench

**Code#**

16070

**Code#      Description**

00844	3/16" x 5" Electrician's Slot Composite CG Screwdriver
00848	1/4" x 6" Electrician's Slot Composite CG Screwdriver
00850	3/8" x 7" Electrician's Slot Composite CG Screwdriver
00852	#1 x 5" Phillips Composite CG Screwdriver
00858	#2 x 7" Phillips Composite CG Screwdriver
10010	6" Needle Nose Pliers
10060	10" Crimping Pliers
10090	6" Adjustable Wrench
10094	10" Adjustable Wrench
10180	7" 3/8" Dr. Reversible Ratchet

**Code#**

13446

**Code#      Description**

10184	10" 3/8" Dr. Torque Wrench 30 - 150"
10188	3" 3/8" Dr. Extension Bar
10202	3/8" 3/8" Dr. Hex Socket 12 pt. STD
10204	7/16" 3/8" Dr. Hex Socket 12 pt. STD
10206	1/2" 3/8" Dr. Hex Socket 12 pt. STD
10208	9/16" 3/8" Dr. Hex Socket 12 pt. STD
10210	5/8" 3/8" Dr. Hex Socket 12 pt. STD
10212	11/16" 3/8" Dr. Hex Socket 12 pt. STD
10214	3/4" 3/8" Dr. Hex Socket 12 pt. STD
10216	13/16" 3/8" Dr. Hex Socket 12 pt. STD

**Code#**

13446

**Code#      Description**

00813	1/8" x 3" Electrician's Slot Composite Screwdriver
00844	3/16" x 5" Electrician's Slot Composite CG Screwdriver
00847	1/4" x 4 1/2" Electrician's Slot Composite Screwdriver
00849	5/16" x 6" Electrician's Slot Composite CG Screwdriver
00850	3/8" x 7" Electrician's Slot Composite CG Screwdriver
00856	#2 x 4 1/2" Phillips Composite CG Screwdriver
10010	6" Needle Nose Pliers
10070	10" Water Pump Pliers
10094	10" Adjustable Wrench
10180	7" 3/8" Dr. Reversible Ratchet
10184	10" 3/8" Dr. Torque Wrench 30 - 150" #
10188	3" 3/8" Dr. Extension Bar
10202	3/8" 3/8" Dr. Hex Socket 12 pt. STD
10204	7/16" 3/8" Dr. Hex Socket 12 pt. STD
10206	1/2" 3/8" Dr. Hex Socket 12 pt. STD

**Code#**

13446

**Deluxe Telecommunications  
Toolbox**



$\frac{1}{8}$ " x 3" Slotted Screwdriver  
 $\frac{3}{16}$ " x 5" Slotted Screwdriver  
 $\frac{1}{4}$ " x 6" Slotted Screwdriver  
# 1 x 5" Phillips Screwdriver  
# 2 x 4 $\frac{1}{2}$ " Phillips Screwdriver  
9" Linesman Pliers  
8" Needle Nose Pliers  
7 $\frac{1}{2}$ " Diagonal Cutting Pliers

$\frac{3}{8}$ " Drive Reversible Ratchet  
 $\frac{3}{8}$ " Drive 3" Extension  
 $\frac{3}{8}$ " Drive 6" Extension  
30" – 150" # Torque Wrench  
 $\frac{3}{8}$ " Drive Deep Sockets  $\frac{3}{8}$ " thru  $1\frac{3}{16}$ "  
Box Wrenches  $\frac{3}{8}$ " thru  $1\frac{3}{16}$ "  
Mini Flashlight

**Code#**

13449 "Briefcase" Style  
13447 Toolbox Style

**UPS Systems Kit**



**Code#**

00005

00813  $\frac{1}{8}$ " x 3" Slotted Screwdriver  
00846  $\frac{3}{16}$ " x 6" Slotted Screwdriver  
00848  $\frac{1}{4}$ " x 6" Slotted Screwdriver  
00849  $\frac{5}{16}$ " x 6" Slotted Screwdriver  
00852 1 x 5" Phillips Screwdriver  
00856 2 x 4 $\frac{1}{2}$ " Phillips Screwdriver  
00895  $\frac{5}{16}$ " x 6" Nut Driver  
10180  $\frac{3}{8}$ " Dr. Reversible Ratchet  
10184  $\frac{3}{8}$ " Dr. Torque Wrench  
10188 3" Extension Bar

**Code#**

10223  $\frac{5}{16}$ " Hex Socket DEEP  
10222  $\frac{7}{16}$ " Hex Socket DEEP  
10224  $\frac{1}{2}$ " Hex Socket DEEP  
10304  $\frac{3}{8}$ " Open End Wrench  
10306  $\frac{7}{16}$ " Open End Wrench  
10310  $\frac{9}{16}$ " Open End Wrench  
10348  $\frac{1}{2}$ " Box End Wrench  
10350  $\frac{9}{16}$ " Box End Wrench  
20320 Clamp Sets  
2' x 25' 7.5 kV Insulating Roll

**Small Telecommunications  
Tool Kit**



**Code#**

00500

00858 2" x 7" Phillips Screwdriver  
00895  $\frac{5}{16}$ " x 6" Nut Driver  
00897  $\frac{3}{16}$ " x 6" Nut Driver  
00898  $\frac{7}{16}$ " x 6" Nut Driver  
10092 8" Adjustable Wrench  
10030 6" Diagonal Pliers  
10040 Cable Cutter  
10180  $\frac{3}{8}$ " Dr. Reversible Ratchet

**Code#**

10188 3" Extension Bar  
10202  $\frac{3}{8}$ " Hex Socket  $\frac{3}{8}$ " Drive  
10204  $\frac{7}{16}$ " Hex Socket  $\frac{3}{8}$ " Drive  
10206  $\frac{1}{2}$ " Hex Socket  $\frac{3}{8}$ " Drive  
10302  $\frac{5}{16}$ " Open End Wrench  
10306  $\frac{7}{16}$ " Open End Wrench  
10422  $\frac{5}{16}$ " Ratcheting Box Wrench  
10424  $\frac{7}{16}$ " Ratcheting Box Wrench

**Global  
Telecommunication Set**



**Code#**

16065

00843  $\frac{3}{16}$ " x 7" Electrician's Slot Composite Screwdriver  
00856 #2 x 4 $\frac{1}{2}$ " Phillips Composite CG Screwdriver  
00893  $\frac{1}{4}$ " x 6" Hollow Hex Shank Composite Nut Driver  
00895  $\frac{5}{16}$ " x 6" Hollow Hex Shank Composite Nut Driver  
01170 10 mm  $\frac{3}{8}$ " Dr. Metric Hex Socket 12 pt. STD  
01270 10 mm  $\frac{3}{8}$ " Dr. Metric Hex Socket 12 pt. DEEP  
01310 10 mm Open End Wrench  
01410 10 mm Box End Wrench  
10180 7"  $\frac{3}{8}$ " Dr. Reversible Ratchet  
10188 3"  $\frac{3}{8}$ " Dr. Extension Bar

**Code#**

10190 6"  $\frac{3}{8}$ " Dr. Extension Bar  
10222  $\frac{7}{16}$ " x  $\frac{3}{8}$ " Dr. Hex Socket 12 pt. DEEP  
10224  $\frac{1}{2}$ " x  $\frac{3}{8}$ " Dr. Hex Socket 12 pt. DEEP  
10204  $\frac{7}{16}$ " x  $\frac{3}{8}$ " Dr. Hex Socket 12 pt. STD  
10206  $\frac{1}{2}$ " x  $\frac{3}{8}$ " Dr. Hex Socket 12 pt. STD  
10306  $\frac{7}{16}$ " Long Style Open End Wrench  
10308  $\frac{1}{2}$ " Long Style Open End Wrench  
10346  $\frac{7}{16}$ " Long Style Box End Wrench  
10348  $\frac{1}{2}$ " Long Style Box End Wrench

**Telecommunications  
Hot Box® (56 pcs.)**



<b>Code#</b>	<b>Description</b>
00846	3/16" x 6" Electrician's Slot Composite CG Screwdriver
00849	5/16" x 6" Electrician's Slot Composite CG Screwdriver
00856	#2 x 4 1/2" Phillips Composite CG Screwdriver
10006	9 1/2" Linesman Pliers
10016	8" Needle Nose Pliers
10033	7 1/2" Diagonal Cutting Pliers
10040	9 1/2" Cable Cutters
10070	10" Water Pump Pliers
10123	1/16" Long Arm Hex Key
10124	5/64" Long Arm Hex Key
10125	3/32" Long Arm Hex Key
10126	7/64" Long Arm Hex Key
10127	1/8" Long Arm Hex Key
10128	9/64" Long Arm Hex Key
10129	5/32" Long Arm Hex Key
10130	3/16" Long Arm Hex Key
10131	7/32" Long Arm Hex Key
10132	1 1/4" Long Arm Hex Key
10134	5/16" Long Arm Hex Key
10136	3/8" Long Arm Hex Key
10138	7/16" Long Arm Hex Key
10140	1 1/2" Long Arm Hex Key
10180	7 3/8" Dr. Reversible Ratchet
10184	10" 3/8" Dr. Torque Wrench 30 - 150" #
10188	3" 3/8" Dr. Extension Bar
10190	6" 3/8" Dr. Extension Bar
10200	5/16" 3/8" Dr. Hex Socket 3/8" 12 pt. STD
10202	3/8" 3/8" Dr. Hex Socket 3/8" 12 pt. STD

<b>Code#</b>	<b>Description</b>
10204	7/16" 3/8" Dr. Hex Socket 3/8" 12 pt. STD
10206	1/2" 3/8" Dr. Hex Socket 3/8" 12 pt. STD
10208	9/16" 3/8" Dr. Hex Socket 3/8" 12 pt. STD
10210	5/8" 3/8" Dr. Hex Socket 3/8" 12 pt. STD
10212	11/16" 3/8" Dr. Hex Socket 3/8" 12 pt. STD
10214	3/4" 3/8" Dr. Hex Socket 3/8" 12 pt. STD
10216	13/16" 3/8" Dr. Hex Socket 3/8" 12 pt. STD
10218	7/8" 3/8" Dr. Hex Socket 3/8" 12 pt. STD
10304	3/4" Long Style Open End Wrench
10306	7/16" Long Style Open End Wrench
10308	1/2" Long Style Open End Wrench
10310	9/16" Long Style Open End Wrench
10312	5/8" Long Style Open End Wrench
10314	11/16" Long Style Open End Wrench
10316	3/4" Long Style Open End Wrench
10318	13/16" Long Style Open End Wrench
10320	7/2" Long Style Open End Wrench
10322	13/16" Long Style Open End Wrench
10344	3/8" Long Style Box End Wrench
10346	7/16" Long Style Box End Wrench
10348	1/2" Long Style Box End Wrench
10350	9/16" Long Style Box End Wrench
10352	5/8" Long Style Box End Wrench
10354	11/16" Long Style Box End Wrench
10356	3/4" Long Style Box End Wrench
10358	13/16" Long Style Box End Wrench
10360	7/8" Long Style Box End Wrench
10362	15/16" Long Style Box End Wrench

**Code#**

13542

**Telecommunications  
Hot Box® (68 pcs.)**



<b>Code#</b>	<b>Description</b>
00560	3/16" x 6" Slotted Holding Screwdriver
00562	#2 x 6" Phillips Holding Screwdriver
00843	3/16" x 7" Electrician's Slot Composite CG Screwdriver
00844	3/16" x 5" Electrician's Slot Composite CG Screwdriver
00848	1/4" x 6" Electrician's Slot Composite CG Screwdriver
00849	5/16" x 6" Electrician's Slot Composite CG Screwdriver
00850	3/8" x 7" Electrician's Slot Composite CG Screwdriver
00852	#1 x 5" Phillips Composite CG Screwdriver
00856	#2 x 4 1/2" Phillips Composite CG Screwdriver
00858	#2 x 7" Phillips Composite CG Screwdriver
00859	#3 x 6" Phillips Composite CG Screwdriver
00880	3/16" x 3" Hollow Hex Shank Composite Nut Driver
00882	1/4" x 3" Hollow Hex Shank Composite Nut Driver
00884	5/16" x 3" Hollow Hex Shank Composite Nut Driver
00885	11/32" x 3" Hollow Hex Shank Composite Nut Driver
00886	3/8" x 3" Hollow Hex Shank Composite Nut Driver
00887	7/16" x 3" Hollow Hex Shank Composite Nut Driver
00888	1 1/16" x 3" Hollow Hex Shank Composite Nut Driver
10006	9 1/2" Linesman Pliers
10010	6" Needle Nose Pliers
10030	6" Diagonal Cutting Pliers
10040	9 1/2" Cable Cutters
10070	10" Water Pump Pliers
10080	Combination Stripper & Crimping Pliers
10094	10" Adjustable Wrench
10123	1/16" Long Arm Hex Key
10124	5/64" Long Arm Hex Key
10125	3/32" Long Arm Hex Key
10126	7/64" Long Arm Hex Key
10127	1/8" Long Arm Hex Key
10128	9/64" Long Arm Hex Key
10129	5/32" Long Arm Hex Key
10130	3/16" Long Arm Hex Key
10131	7/32" Long Arm Hex Key
10132	1 1/4" Long Arm Hex Key

<b>Code#</b>	<b>Description</b>
10134	5/16" Long Arm Hex Key
10136	3/8" Long Arm Hex Key
10138	7/16" Long Arm Hex Key
10140	1/2" Long Arm Hex Key
10180	7 3/8" Dr Reversible Ratchet
10184	10" 3/8" Dr. Torque Wrench 30 - 150" #
10188	3" 3/8" Drive Extension Bar
10190	6 3/8" Drive Extension Bar
10192	12 3/8" Drive Extension Bar
10200	5/16" 3/8" Dr. Hex Socket 3/8" 12 pt. STD
10202	3/8" 3/8" Dr. Hex Socket 12 pt. STD
10204	7/16" 3/8" Dr. Hex Socket 3/8" 12 pt. STD
10206	1/2" 3/8" Dr. Hex Socket 3/8" 12 pt. STD
10208	9/16" 3/8" Dr. Hex Socket 3/8" 12 pt. STD
10210	5/8" 3/8" Dr. Hex Socket 12 pt. STD
10212	11/16" 3/8" Dr. Hex Socket 12 pt. STD
10214	3/4" 3/8" Dr. Hex Socket 12 pt. STD
10216	13/16" 3/8" Dr. Hex Socket 12 pt. STD
10218	7/8" 3/8" Dr. Hex Socket 12 pt. STD
10340	1/2" Long Style Box End Wrench
10342	5/8" Long Style Box End Wrench
10344	3/8" Long Style Box End Wrench
10346	7/16" Long Style Box End Wrench
10348	1/2" Long Style Box End Wrench
10350	9/16" Long Style Box End Wrench
10352	5/8" Long Style Box End Wrench
10354	11/16" Long Style Box End Wrench
10356	3/4" Long Style Box End Wrench
10358	13/16" Long Style Box End Wrench
10360	7/8" Long Style Box End Wrench
14301	14" Long 2 1/4" Mirror
14302	18" Long Magnetic Retrieving Tool
14300	Straight Blade Insulated Knife

**Code#**

16030

**The Hot Box®**

**The Hot Box®**



**Pictured Code#**

16029

**Code# Description**

00813	1/8" x 3" Slotted Screwdriver
00866	#2 x 6" Square (Robertson) Screwdriver
00846	3/16" x 6" Slotted Screwdriver Cushion Grip*
00848	1/4" x 6" Slotted Screwdriver Cushion Grip*
00849	5/16" x 6" Slotted Screwdriver Cushion Grip*
00856	#2 x 4 1/2" Phillips Screwdriver Cushion Grip*
00858	#2 x 7" Phillips Screwdriver Cushion Grip*
10006	9" Linesman Pliers
10016	8" Needle Nose Pliers
10033	7 1/2" Diagonal Cutting Pliers
10040	9 1/2" Cable Cutters
10070	10" Water Pump Pliers
10080	Combination Stripper Crimper
10144	14 pcs. 1/16" - 1/2" Allen Hex Wrench Set

**Code# Description**

10180	3/8" Drive Reversible Ratchet
10188	3/8" Drive 3" Extension
10190	3/8" Drive 6" Extension
10219	10 pcs. 5/16" - 7/8" 3/8" Dr. Hex Socket Set
10372	11 pcs. 1/4" - 7/8" Box End Wrench Set
00891	3/8" x 6" Nut Driver Cushion Grip*
00893	1/4" x 6" Nut Driver Cushion Grip*
00895	5/16" x 6" Nut Driver Cushion Grip*
00896	11/32" x 6" Nut Driver Cushion Grip*
00897	3/8" x 6" Nut Driver Cushion Grip*
00898	7/16" x 6" Nut Driver Cushion Grip*
00899	1/2" x 6" Nut Driver Cushion Grip*
10184	30" - 150" # Torque Wrench*

**Code#**

16027	3/8" Drive Hot Box / without Torque Wrench
16029	3/8" Drive Hot Box w/ Torque Wrench 10184
16032	3/8" Drive Hot Box w/ Torque Wrench 10185
16024	w/ Metric Sockets, Nut Drivers and Box Wrenches
16028	w/ Torque Wrench, Metric Sockets, Nut Drivers and Box Wrenches

**Code#**

16051	w/ 1/2" Drive Ratchet, Sockets and Extensions
16052	w/ 1/2" Drive Torque Wrench, 1/2" Drive Ratchet, Sockets and Extensions
16054	w/ 1/2" Drive Metric Sockets, Nut Drivers and Extensions
16055	w/ 1/2" Drive Torque Wrench, Metric Sockets, Nut Drivers and Box Wrenches

**General Industrial Maint. Hot Box®**



**Code# Description**

00560	Slotted Holding Screwdriver
00562	Phillips Holding Screwdriver
00843	3/16" x 7" Slotted Screwdriver
00844	3/16" x 5" Slotted Screwdriver
00848	1/4" x 6" Slotted Screwdriver
00852	1" x 5" Phillips Screwdriver
00858	2" x 7" Phillips Screwdriver
00859	3" x 6" Phillips Screwdriver
00891	3/16" x 6" Nut Driver
00892	7/32" x 6" Nut Driver
00893	1/4" x 6" Nut Driver
00895	5/16" x 6" Nut Driver
00897	3/8" x 6" Nut Driver

**Code# Description**

00898	7/16" x 6" Nut Driver
10006	9" Linesman Pliers
10016	8" Needle Nose Pliers
10033	7" Diagonal Cutting Pliers
10040	Cable Cutter
10060	Crimper
10070	10" Water Pump Pliers
10084	Wire Stripper
14300	Cable Knife

**Code#**

00036

**Industrial Maintenance Hot Box®**



**Code# Description**

00820	1/4" x 7" Slotted Screwdriver
00844	3/16" x 5" Slotted Screwdriver
00847	1/4" x 4 1/2" Slotted Screwdriver
00849	5/16" x 6" Slotted Screwdriver
00852	1" x 5" Phillips Screwdriver
00856	2" x 4 1/2" Phillips Screwdriver
00882	1/4" x 3" Nut Driver
00884	5/16" x 3" Nut Driver
00886	3/8" x 3" Nut Driver
00887	7/16" x 3" Nut Driver
00888	1/2" x 3" Nut Driver

**Code# Description**

10006	9" Linesman Pliers
10010	6" Needle Nose Pliers
10030	6" Diagonal Cutting Pliers
10060	Crimper
10080	Wire Stripper
10070	10" Water Pump Pliers
10130	3/16" Hex Long Arm Hex Key
10132	1/4" Hex Long Arm Hex Key
10134	5/16" Hex Long Arm Hex Key
10136	3/8" Hex Long Arm Hex Key

**Code#**

13047

Petroleum/Gas  
Industrial Hot Box®



Code#	Description	Code#	Description
00813	1/8" x 3" Slotted Screwdriver	10111	7/32" x 6" "T" Handle Hex Wrench
00846	3/16" x 6" Slotted Screwdriver	10112	1/4" x 6" "T" Handle Hex Wrench
00850	3/8" x 7" Slotted Screwdriver	10114	5/16" x 6" "T" Handle Hex Wrench
00859	#3 x 6" Phillips Screwdriver	10116	3/4" x 6" "T" Handle Hex Wrench
00856	#2 x 4 1/2" Phillips Screwdriver	10117	7/16" x 6" "T" Handle Hex Wrench
00864	#2 x 4 1/2" Robertson Screwdriver	10118	1/2" x 6" "T" Handle Hex Wrench
00893	1/2" x 6" Nut Driver	10180	7/8" 3/4" Dr. Reversible Ratchet
00895	5/16" x 6" Nut Driver	10188	3" Extension Bar
00897	3/8" x 6" Nut Driver	10190	6" Extension Bar
00898	7/16" x 6" Nut Driver	10200	5/16" 3/8" Dr. Hex Socket 3/8" 12 pt. STD
00899	1/2" x 6" Nut Driver	10202	3/8" 5/16" Dr. Hex Socket 12 pt. STD
10013	7" Needle Nose Pliers	10204	7/16" 3/8" Dr. Hex Socket 12 pt. STD
10033	7" Diagonal Cutting Pliers	10206	1/2" 3/8" Dr. Hex Socket 12 pt. STD
10070	10" Water Pump Pliers	10208	9/16" 3/8" Dr. Hex Socket 12 pt. STD
10105	3/32" x 6" "T" Handle Hex Wrench	10210	5/16" 3/8" Dr. Hex Socket 12 pt. STD
10106	7/64" x 6" "T" Handle Hex Wrench	10212	11/16" 3/8" Dr. Hex Socket 12 pt. STD
10107	1/8" x 6" "T" Handle Hex Wrench	10214	3/4" 3/8" Dr. Hex Socket 12 pt. STD
10108	9/32" x 6" "T" Handle Hex Wrench	10216	13/16" 3/8" Dr. Hex Socket 12 pt. STD
10109	5/32" x 6" "T" Handle Hex Wrench	10218	7/8" 3/8" Dr. Hex Socket 12 pt. STD
10110	3/16" x 6" "T" Handle Hex Wrench	10440	Fuse Puller
		14300	Knife

Code#

16031

Complete Petroleum/Gas  
Industrial Hot Box®



Code#	Description	Code#	Description
00813	1/8" x 3" Electrician's Slot Composite Screwdriver	10105	3/32" x 6" "T" Handle Wrench
00844	3/16" x 5" Electrician's Slot Composite CG Screwdriver	10106	7/64" x 6" "T" Handle Wrench
00843	3/16" x 7" Electrician's Slot Composite CG Screwdriver	10107	1/8" x 6" "T" Handle Wrench
00848	1/4" x 6" Electrician's Slot Composite CG Screwdriver	10108	9/64" x 6" "T" Handle Wrench
00880	3/16" x 3" Hollow Hex Shank Composite Nut Driver	10109	5/32" x 6" "T" Handle Wrench
00881	7/32" x 3" Hollow Hex Shank Composite Nut Driver	10110	3/8" x 6" "T" Handle Wrench
00882	1/4" x 3" Hollow Hex Shank Composite Nut Driver	10111	7/32" x 6" "T" Handle Wrench
00883	9/32" x 3" Hollow Hex Shank Composite Nut Driver	10112	1/2" x 6" "T" Handle Wrench
00884	5/16" x 3" Hollow Hex Shank Composite Nut Driver	10114	5/16" x 6" "T" Handle Wrench
00885	11/32" x 3" Hollow Hex Shank Composite Nut Driver	10116	3/4" x 6" "T" Handle Wrench
00886	3/8" x 3" Hollow Hex Shank Composite Nut Driver	10123	1/16" Long Arm Hex Key
01050	1.5 mm Metric Long Arm Hex Key	10124	5/32" Long Arm Hex Key
01051	2 mm Metric Long Arm Hex Key	10125	3/32" Long Arm Hex Key
01052	2.5 mm Metric Long Arm Hex Key	10126	7/32" Long Arm Hex Key
01053	3 mm Metric Long Arm Hex Key	10127	1/8" Long Arm Hex Key
01054	4 mm Metric Long Arm Hex Key	10128	9/32" Long Arm Hex Key
01055	5 mm Metric Long Arm Hex Key	10129	5/32" Long Arm Hex Key
01056	6 mm Metric Long Arm Hex Key	10130	3/16" Long Arm Hex Key
01057	7 mm Metric Long Arm Hex Key	10131	7/32" Long Arm Hex Key
01058	8 mm Metric Long Arm Hex Key	10132	1/4" Long Arm Hex Key
01059	9 mm Metric Long Arm Hex Key	10134	5/16" Long Arm Hex Key
01060	10 mm Metric Long Arm Hex Key	10136	3/8" Long Arm Hex Key
01170	10 mm 3/8" Dr. Metric Hex Socket 12 pt. STD	10138	7/16" Long Arm Hex Key
01171	11 mm 3/8" Dr. Metric Hex Socket 12 pt. STD	10140	1/2" Long Arm Hex Key
01172	12 mm 3/8" Dr. Metric Hex Socket 12 pt. STD	10180	7/8" 3/8" Dr. Reversible Ratchet
01173	13 mm 3/8" Dr. Metric Hex Socket 12 pt. STD	10185	15" 3/8" Dr. Torque Wrench 150-750" #
01174	14 mm 3/8" Dr. Metric Hex Socket 12 pt. STD	10188	3" 3/8" Dr. Extension Bar
01175	15 mm 3/8" Dr. Metric Hex Socket 12 pt. STD	10190	6" 3/8" Dr. Extension Bar
01176	16 mm 3/8" Dr. Metric Hex Socket 12 pt. STD	10192	12" 3/8" Dr. Extension Bar
01177	17 mm 3/8" Dr. Metric Hex Socket 12 pt. STD	10202	3/8" 3/8" Dr. Hex Socket 12 pt. STD
01178	18 mm 3/8" Dr. Metric Hex Socket 12 pt. STD	10204	7/16" 3/8" Dr. Hex Socket 12 pt. STD
01179	19 mm 3/8" Dr. Metric Hex Socket 12 pt. STD	10206	1/2" 3/8" Dr. Hex Socket 12 pt. STD
01180	20 mm 3/8" Dr. Metric Hex Socket 12 pt. STD	10208	9/16" 3/8" Dr. Hex Socket 12 pt. STD
01181	21 mm 3/8" Dr. Metric Hex Socket 12 pt. STD	10210	5/8" 3/8" Dr. Hex Socket 12 pt. STD
01182	22 mm 3/8" Dr. Metric Hex Socket 12 pt. STD	10212	11/16" 3/8" Dr. Hex Socket 12 pt. STD
01310	10 mm Open End Wrench	10214	3/4" Long Style Box End Wrench
01312	11 mm Open End Wrench	10340	5/16" Long Style Box End Wrench
01314	12 mm Open End Wrench	10342	1/2" Long Style Box End Wrench
01316	13 mm Open End Wrench	10344	3/8" Long Style Box End Wrench
01318	14 mm Open End Wrench	10346	7/16" Long Style Box End Wrench
01320	15 mm Open End Wrench	10348	1/2" Long Style Box End Wrench
01322	16 mm Open End Wrench	10350	9/16" Long Style Box End Wrench
01324	17 mm Open End Wrench	10352	5/8" Long Style Box End Wrench
01327	22 mm Open End Wrench	10354	11/16" Long Style Box End Wrench
01329	24 mm Open End Wrench	10356	3/4" Long Style Box End Wrench
01332	27 mm Open End Wrench	10358	13/16" Long Style Box End Wrench
10071	10" Water Pump Pliers	10360	7/8" Long Style Box End Wrench

Code#

16038

**Local Distributor:**

