

# INSULATED TOOLS CATALOGUE





# **Why Gray Tools?**

# **Quality at the Core**

Underneath 2 layers of protective insulation is the same Gray tool professionals have trusted since 1912. People who do extraordinary work for essential service providers such as Ontario Hydro, Bell Canada, Toronto Transit, General Electric and many other industrial facilities across Canada trust the quality and dependability of Gray tools.

# **Highly Customizable Assortment**

With over 6,000 products in the standard catalogue assortment, Gray Tools is able to satisfy almost any professional's hand tool needs. A special partnership with a domestic insulation specialist combined with our manufacturing capabilities gives us the unique ability to insulate almost any tool in our assortment quickly and efficiently.

If your job requires an insulated tool that is not part of our current insulated tool assortment, let us know and we'll insulate it for you.

# **Limited Lifetime Warranty**

Apart from offering a wide assortment of insulated tools, Gray Tools has always stood behind its tools the same way you stand behind the quality of your work.

We've spent over a century earning your trust. A trust that we value and have always supported with a lifetime guarantee. See page 19 for details.

# **Exceptional Service**

Gray insulated tools are available through a network of specialty industrial retailers. For over 100 years, the most demanding users expecting professional grade quality and selection, dependability and immediate availability have relied on Gray Tools.

Fortunately, these specific needs are exactly what our distribution partners have built their business on.



# **Insulation Process**

Each Gray insulated tool goes through a very lengthy and labour-intensive process that spans many days with many steps largely completed carefully and painstakingly by hand.

# **Tool Preparation**

The process begins with modifying the original Gray tool to be insulated in order to meet the ASTM F1505 standards.

The goal is to ensure the tool operator is unable to contact any exposed metal that could potentially be energized during the normal operation of the tool.

Tool design and modification must be done in a way that will not compromise the strength and functionality of the tool for which it was originally designed.

# **Insulation Process**

Once the preparation phase is completed each tool moves to the insulation process. Insulating is a multi-step process that meets or exceeds the ASTM F1505 standards for insulating adhesion, dielectric properties, flammability, and durability.

Some of the steps include heating the tool to precise temperatures to maximize the adhesion of the insulating material, applying specially formulated chemical adhesives, coating the tool with two different uniquely formulated layers of insulation designed to limit conductivity and improve durability.

In the final stages the insulated tool is trimmed, cleaned and polished.

Most of the steps in the insulating process require a precise and often lengthy amount of curing time to achieve optimum results.

## **Individual Tool Testing**

With the insulation process completed, each tool is then subjected to a series of tests to ensure compliance to ASTM F1505. The goal of these tests is to ensure the adhesiveness of the insulating material under a variety of temperatures and conditions as well as making sure each tool meets or exceeds the dielectric minimums set forth in the specifications.

This means each tool is charged with 10,000 V of energy for 180 seconds to ensure its insulation resists potential electrical shock. Additional tests involve the flammability and the durability of the insulating material.

Only after a tool has passed every exhaustive test is it laser engraved with the ASTM F1505 double triangle symbol and the year the tool was insulated.

# **Our Goal - Maximum Protection**

Each Gray insulated tool is double insulated to ensure maximum protection for the operator.

In addition to providing protection for up to 1000V the dual coloured insulation also serves as an added visual safety indicator. Under the orange top layer of insulation is a second yellow layer. Should the yellow layer be visible through the outer orange layer the user is immediately alerted that the tool is no longer safe to use and must be discarded.

Insulated tools are an important link in the overall chain of safety when it comes to working on potentially energized material. Other important safety items include insulated gloves, insulated boots and arc flash protection suits and clothing.

# TABLE OF CONTENTS

#### **Table of Contents**

Insulated Ratchets & Extensions	/
Ratchets	,
Extensions	;
Insulated Sockets	)
1/4" Drive	)
3/8" Drive	0
1/2" Drive	1
Insulated Wrenches	2
Box End	2
Open End	3
	3
Insulated Screwdrivers	4
Slotted	4
Phillips <sup>®</sup>	4
Square Recess	4
Insulated Nut Drivers	5
Insulated Pliers	6
Linesman	6
Flat Nose	6
Needle Nose	6
Side Cutting	6
End Cutting	7
Tongue & Groove Slip Joint	7
Wire Strippers & Cutters	7
Insulated Hex Keys	8
Insulated Hacksaw	8

Phillips® is a registered trademark of Phillips Screw Co.



# RATCHETS



#### <sup>1</sup>/4" Dr. Round Head Ratchet

Part No.	Length in.	No. of Teeth	Weight Ibs.	
10842-l	53/4	42	0.50	

Individually insulated and tested to ASTM F1505 Standards.igtriangleup



#### 3/8" Dr. Round Head Ratchet

Part No.	Length in.	No. of Teeth	Weight Ibs.	
20842-I	81⁄4	42	1.00	

Individually insulated and tested to ASTM F1505 Standards.



#### 1/2" Dr. Round Head Ratchet

Part No.	Length	No. of	Weight
	in.	Teeth	Ibs.
30842-I	101⁄4	42	1.62

Individually insulated and tested to ASTM F1505 Standards. $riangleactric{A}$ 

# **EXTENSIONS**



#### 1/4" Ratchet Extension

Part No.	Length in.	Weight Ibs.
V606-I	6	0.19

Individually insulated and tested to ASTM F1505 Standards.



#### 3/8" Ratchet Extensions

Part No.	Length in.	Weight Ibs.
T31-I	3	0.25
T4-I	6	0.43
T41-I	8	0.56

Individually insulated and tested to ASTM F1505 Standards. $riangleactric{A}$ 



#### 1/2" Ratchet Extensions

Part No.	Length in.	Weight Ibs.
718-l	5	1.00
719-I	10	1.25

Individually insulated and tested to ASTM F1505 Standards.



# SOCKETS



#### 1/4" Drive 12 Point SAE

Hex Size	Part No.	Overall Length in.	Weight Ibs.
3/16″	V106-I	11/2	0.03
7/32″	V107-I	1 1/2	0.03
1/4″	V108-I	1 1/2	0.03
9⁄32″	V109-I	11/2	0.04
5⁄16″	V110-I	11/2	0.04
11/32″	V111-I	11/2	0.04
3/8″	V112-I	11/2	0.06
7/16″	V114-I	11/2	0.06
1/2″	V116-I	11/2	0.07
9/16″	V118-I	11/2	0.09

Individually insulated and tested to ASTM F1505 Standards. $ilde{ ext{A}}$ 



#### <sup>1</sup>/<sub>4</sub>" Drive 6 Point Metric

Hex Size	Part No.	Overall Length in.	Weight Ibs.
4 mm	M604-I	11/2	0.03
4.5 mm	M604.5-I	1 1/2	0.03
5 mm	M605-I	1 1/2	0.03
5.5 mm	M605.5-I	11/2	0.03
6 mm	M606-I	11/2	0.03
7 mm	M607-I	11/2	0.04
8 mm	M608-I	11/2	0.04
9 mm	M609-I	11/2	0.04
10 mm	M610-I	11/2	0.04
11 mm	M611-I	1 1/2	0.06
12 mm	M612-I	1 1/2	0.06
13 mm	M613-I	11/2	0.07
14 mm	M614-I	11/2	0.09
15 mm	M615-I	1 1/2	0.09

Individually insulated and tested to ASTM F1505 Standards. $\triangle$ 



Important: Insulated tools are an important link in the overall chain of safety when it comes to working on potentially energized material. Other important safety items include insulated gloves, insulated boots and arc flash prevention suits and clothing.





#### 3/8" Drive 12 Point SAE

Hex Size	Part No.	Overall Length in.	Weight Ibs.
3/8″	T12-I	13/4	0.12
7/16″	T14-I	13/4	0.14
1/2″	T16-I	13/4	0.15
9/16″	T18-I	13/4	0.17
5/8″	T20-I	13/4	0.18
11/16″	T22-I	13⁄4	0.20
3/4″	T24-I	13⁄4	0.21
<sup>13/</sup> 16 <sup>′′′</sup>	T26-I	13/4	0.25
7/8″	T28-I	13/4	0.28

Individually insulated and tested to ASTM F1505 Standards. $riangleactric{A}$ 



#### 3/8" Drive 12 Point Metric

Hex Size	Part No.	Overall Length in.	Weight Ibs.
8 mm	MT8-I	13⁄4	0.12
9 mm	MT9-I	13⁄4	0.12
10 mm	MT10-I	13⁄4	0.12
11 mm	MT11-I	13⁄4	0.14
12 mm	MT12-I	13⁄4	0.15
13 mm	MT13-I	13/4	0.15
14 mm	MT14-I	13⁄4	0.15
15 mm	MT15-I	13⁄4	0.18
16 mm	MT16-I	13⁄4	0.18
17 mm	MT17-I	13⁄4	0.25
18 mm	MT18-I	13⁄4	0.25
19 mm	MT19-I	13⁄4	0.26

Individually insulated and tested to ASTM F1505 Standards.



**Safety Tip**: If you are able to see the yellow safety insulated under-layer showing through the orange layer, the tool is no longer safe to use and should be replaced.



# SOCKETS



#### 1/2" Drive 12 Point SAE

Hex Size	Part No.	Overall Length in.	Weight Ibs.
3/8″	1406-l	2 1/4	0.21
7/16 <sup>″′</sup>	1407-l	2 1/4	0.23
1/2″	1408-l	2 1/4	0.25
9⁄16 <sup>″′</sup>	1409-l	2 1/4	0.26
5/8″	1410-l	2 1/4	0.28
11/16″	1411 <i>-</i> I	2 1/4	0.29
3/4″	1412-I	2 1/4	0.31
13/16″	1413-I	2 1/4	0.34
7/8″	1414-I	2 1/4	0.39
15/16″	1415-I	2 1/4	0.46
1″	1432-l	2 1/4	0.53

Individually insulated and tested to ASTM F1505 Standards.igtriangleup



#### 1/2" Drive 12 Point Metric

Hex Size	Part No.	Overall Length in.	Weight Ibs.
10 mm	M1210-I	21/4	0.15
11 mm	M1211-I	21/4	0.15
12 mm	M1212-I	21/4	0.17
13 mm	M1213-I	21/4	0.18
14 mm	M1214-I	21/4	0.20
15 mm	M1215-I	21/4	0.21
16 mm	M1216-I	21/4	0.23
17 mm	M1217-I	21/4	0.25
18 mm	M1218-I	21/4	0.26
19 mm	M1219-I	21/4	0.28
20 mm	M1220-I	21/4	0.29
21 mm	M1221-I	21/4	0.29
22 mm	M1222-I	21/4	0.31

Individually insulated and tested to ASTM F1505 Standards.  $\bigstar$ 



**Important**: An insulated extension is always required between the ratchet and the socket.

# WRENCHES



#### 12 Point Box End Wrenches - SAE

Hex Size	Part No.	Overall Length in.	Box End Width in.	Box End Thickness in.	Weight Ibs.
1/4″	157B-I	41/2	0.54	0.23	0.06
5/16″	158B-I	5	0.68	0.25	0.09
11/32″	159B-I	5	0.70	0.25	0.10
3/8″	160B-I	51/2	0.75	0.30	0.12
7/16″	161 B-I	51/2	0.89	0.33	0.15
1/2″	162B-I	6	0.94	0.31	0.21
9/16″	163B-I	61/4	1.06	0.33	0.25
5/8″	164B-I	63/4	1.12	0.38	0.31
11/16″	165B-I	71/2	1.24	0.40	0.43
3/4″	166B-I	8	1.29	0.44	0.53
13/16″	166SB-I	9	1.42	0.51	0.56
7/8″	167B-I	91/2	1.56	0.50	0.62
15/16″	168B-I	101⁄4	1.58	0.51	0.71
1″	169B-I	11	1.68	0.57	1.12

Individually insulated and tested to ASTM F1505 Standards. $\bigotimes$ 

#### 12 Point Box End Wrenches - Metric

Hex Size	Part No.	Overall Length in.	Box End Width in.	Box End Thickness in.	Weight Ibs.
6mm	MEB6-I	41⁄4	0.55	0.20	0.06
7mm	MEB7-I	41/2	0.56	0.20	0.07
8mm	MEB8-I	5	0.67	0.26	0.09
9mm	MEB9-I	51⁄4	0.76	0.32	0.12
10mm	MEB10-I	51/2	0.85	0.34	0.15
11mm	MEB11-I	51/2	0.85	0.32	0.18
12mm	MEB12-I	6	0.94	0.30	0.20
13mm	MEB13-I	6	0.94	0.32	0.21
14mm	MEB14-I	61⁄4	1.05	0.33	0.23
15mm	MEB15-I	61⁄4	1.02	0.33	0.25
16mm	MEB16-I	63/4	1.17	0.37	0.31
17mm	MEB17-I	71/4	1.24	0.44	0.37

Individually insulated and tested to ASTM F1505 Standards. $\bigotimes$ 



**Safety Tip**: Inspect insulated tools before each use. If you notice any cuts, cracks or any other sign of damage, replace the tool immediately.





# WRENCHES



#### **Open End Wrenches - SAE**

Hex Size	Part No.	Overall Length in.	Box End Width in.	Box End Thickness in.	Weight Ibs.
1/4″	E08-I	41/2	0.7	0.37	0.06
5/16″	E010-I	43/4	0.82	0.4	0.07
11/32″	E011-I	43/4	0.83	0.42	0.09
3/8″	E012-I	5	0.96	0.45	0.12
7/16″	E014-I	51/2	1.09	0.48	0.15
1/2″	E016-I	6	1.18	0.51	0.20
9/16″	E018-I	61/4	1.4	0.59	0.28
5/8″	E020-I	7	1.53	0.63	0.34
11/16″	E022-I	71/2	1.68	0.68	0.46
3/4″	E024-I	8	1.78	0.68	0.53
13/16″	E026-I	9	1.84	0.66	0.62
7/8″	E028-I	93/4	2.02	0.73	0.68
15/16″	E030-I	101/4	2.05	0.71	0.78
1″	E032-I	103/4	2.25	0.78	1.00

Individually insulated and tested to ASTM F1505 Standards.

#### **Open End Wrenches - Metric**

Hex Size	Part No.	Overall Length in.	Box End Width in.	Box End Thickness in.	Weight Ibs.
6mm	MEB06-I	41/4	0.74	0.40	0.06
7mm	MEB07-I	41/2	0.74	0.40	0.07
8mm	MEB08-I	43/4	0.85	0.43	0.09
9mm	MEB09-I	51/4	0.98	0.48	0.12
10mm	MEB010-I	51/2	1.11	0.50	0.17
11mm	MEB011-I	51/2	1.11	0.49	0.18
12mm	MEB012-I	6	1.21	0.54	0.20
13mm	MEB013-I	6	1.21	0.54	0.21
14mm	MEB014-I	61/4	1.38	0.60	0.28
15mm	MEB015-I	61/4	1.39	0.60	0.28
16mm	MEB016-I	7	1.46	0.57	0.34
17mm	MEB017-I	71⁄4	1.39	0.57	0.45

Individually insulated and tested to ASTM F1505 Standards.

#### **Adjustable Wrenches**

Part No.	Overall Length in.	Maximum Opening in.	Weight Ibs.
65308A-I	8″	1.08	0.75
65310A-I	10″	1.35	1.12
65312A-I	12″	1.5	1.87

Only handle provides protection against electrical shock.  $\triangle$ 



# SCREWDRIVERS



#### **Slotted - Round Shank**

Part No.	Blade Length in.	Overall Length in.	Tip Size	Shank Size in.	Weight Ibs.
30404-I	4	8	.016 x 1⁄8	1/8	0.25
30506-l	6	10	.020 x 5⁄32	5/32	0.28
30606-l	6	93/4	.028 x <sup>3</sup> /16	3/16	0.28

Individually insulated and tested to ASTM F1505 Standards. $\triangle$ 



#### Phillips<sup>®</sup> - Round Shank

Part No.	Blade Length in.	Overall Length in.	Tip Size	Shank Size in.	Weight Ibs.
50002-l	23/8	7	No 0	1/8	0.21
50103-I	31⁄4	7	No 1	3/16	0.25
50204-I	4	81⁄4	No 2	1/4	0.37
50306-l	6	103⁄4	No 3	5/16	0.50
50408-l	8	123⁄4	No 4	3/8	0.62

Individually insulated and tested to ASTM F1505 Standards.  $\stackrel{\wedge}{\bigtriangleup}$ 



#### Square Recess - Extra Long

Part No.	Blade Length in.	Overall Length in.	Tip Size	Shank Size in.	Weight Ibs.
RB221-I	6	10	No 1	5/16	0.37
RB222-I	6	101/4	No 2	5/16	0.40
RB223-I	6	101/4	No 3	5/16	0.40
RB224-I	6	11	No 4	5/16	0.50

Individually insulated and tested to ASTM F1505 Standards.



# **NUT DRIVERS**



#### Nut Drivers - SAE

Part No.	Hex Opening in.	Overall Length in.	Weight Ibs.
CH06-I	3/16	61⁄4	0.31
CH08-I	1/4	61/2	0.32
CH10-I	5/16	63/4	0.37
CH11-I	11/32	7	0.39
CH12-I	3/8	7	0.40
CH14-I	7/16	73/4	0.50
CH16-I	1/2	8	0.51

Individually insulated and tested to ASTM F1505 Standards.  $\,$ 



#### **Nut Drivers - Metric**

Part No.	Hex Opening in.	Overall Length in.	Weight Ibs.
CH05M-I	5 mm	6	0.22
CH06M-I	6 mm	61/2	0.25
CH07M-I	7 mm	7	0.28
CH08M-I	8 mm	7	0.28
CH09M-I	9 mm	7	0.29
CH10M-I	10 mm	73/4	0.50
CH11M-I	11 mm	73/4	0.50

Individually insulated and tested to ASTM F1505 Standards.  $\bigotimes$ 

Need a tool or size not in this catalogue? Contact us at info@graytools.com for a custom tool insulation quote.















#### Linesman's Combination with Cutter

Part No.	Overall Length in.	Jaw Length in.	Weight Ibs.
B212B-I	7	1 1/4	0.75
B214B-I	8	13/8	0.87
B218B-1	9	15⁄8	0.90

Individually insulated and tested to ASTM F1505 Standards.

#### Flat Nose

Part No.	Overall Length in.	Jaw Length in.	Weight Ibs.
B224A-I	61/2	2	0.50

Individually insulated and tested to ASTM F1505 Standards. $\bigotimes$ 

#### Needle Nose Straight Cutter

Part No.	Overall Length in.	Jaw Length in.	Weight Ibs.
B231B-I	61/2	2	0.37
B232B-I	8	23/4	0.62

Individually insulated and tested to ASTM F1505 Standards.

#### Needle Nose 45° Curved With Cutter

Part No.	Overall Length in.	Jaw Length in.	Weight Ibs.
B238B-I	61/2	2	0.50
B239B-I	8	23/4	0.62

Individually insulated and tested to ASTM F1505 Standards.

#### Side Cutting - Diamond Slim Nose

Part No.	Overall Length in.	Jaw Length in.	Weight Ibs.
B241B-I	61/2	7/8	0.62
B243B-I	71⁄4	1	0.75

Individually insulated and tested to ASTM F1505 Standards.  $\! \hat{\boxtimes} \!$ 

# PLIERS





C. Charles

#### **End Cutting**

Part No.	Overall Length in.	Jaw Length in.	Weight Ibs.
B255B-I	61/2	1/4	0.62

Individually insulated and tested to ASTM F1505 Standards.

#### Tongue & Groove Slip Joint

Part No.	Overall Length in.	Jaw Length in.	Capacity in.	Weight Ibs.
B45-10A-I	101/2	1 1/4	11/2	1.12
B45-12A-I	121/2	11/2	25/8	2.25

Individually insulated and tested to ASTM F1505 Standards.

#### Electrical/Electronic 5 in 1 Tool

Part No.	Description	Overall Length in.	Weight Ibs.
B121-I	Stripper, Crimper, Bolt Cutter. Strips: 22-20/18/16/14/12/10 AWG Crimps: Insulated and Non- Insulated: 22-14, 12-10 AWG Non-Insulated Auto 7 and 8 mm Bolt Cutter: 4-40/6-32/8-32/10- 32/10-24 inches	81⁄4	0.62

Individually insulated and tested to ASTM F1505 Standards.

# 

#### Stripper/Cutter

Part No.	Description	Overall Length in.	Weight Ibs.
B123-I	Strips: 22-20/18/16/14/12/10 AWG Crimps: Insulated and Non- Insulated: 22-14, 12-10 AWG Non-Insulated Auto 7 and 8 mm Bolt Cutter: 4-40/6-32/8-32/10- 32/10-24 inches	81⁄4	0.50

Individually insulated and tested to ASTM F1505 Standards.  $\stackrel{\wedge}{\bigtriangleup}$ 

# **HEX KEYS & HACKSAW**



#### T-Handle Hex Keys - SAE

Hex Size	Part No.	Overall Length in.	Blade Length in.	Weight Ibs.
3/32″	68606-l	41/2	2.56	0.18
7/64″	68607-l	43/4	2.75	0.18
1/8″	68608-l	5	2.95	0.21
9/64″	68609-l	5	2.95	0.25
5/32″	68610-l	51⁄4	3.35	0.31
3/16″	68612-l	6	3.94	0.37
7/32″	68614-I	61/2	4.33	0.43
1/4″	68616-l	61/2	4.72	0.43
5/16″	68620-l	8	5.83	0.81
3/8″	68624-l	91/4	7.01	0.87

Individually insulated and tested to ASTM F1505 Standards.



#### **T-Handle Hex Keys - Metric**

Hex Size	Part No.	Overall Length in.	Blade Length in.	Weight Ibs.
2mm	67602-l	41/4	2.17	0.18
2.5mm	67625-l	41/4	2.56	0.18
3mm	67603-l	5	2.95	0.21
4mm	67604-l	51/4	3.35	0.25
5mm	67605-l	6	3.94	0.37
6mm	67606-l	7	4.72	0.50
8mm	67608-l	8	5.83	0.87
10mm	67610-I	9	7.01	1.00

Individually insulated and tested to ASTM F1505 Standards.



Part No.	Description
2612HS-I	Oval frame design for greater cutting depth.

Individually insulated and tested to ASTM F1505 Standards. $ilde{ ext{A}}$ 

7 Important: Keep insulated tools away from heat sources, in order to avoid damage to the insulation material.





## **Insulated Tools Warranty Policy**

#### **Limited Lifetime Warranty:**

We stand behind the quality of the products we offer. As such, Gray Tools Canada Inc. warrants the original purchaser that every insulated tool is free from defects in materials or workmanship. Gray Tools will repair or replace at its discretion any insulated tool proven to fail due to a defect in workmanship or materials.

No warranty consideration can be made if the initial inspection shows that the tool has been subjected to abnormal use or has been:

- Hammered
- Heated
- · Used with any device to create additional leverage
- · Machined or modified in any way
- · Used for purposes other than those which it was designed for
- · Overstressed or over torqued
- · Improperly used
- · Used such that the top layer of insulation has worn or peeled away revealing the second layer below

In the unlikely event a product fails, warranty will be granted quickly and unconditionally, providing the products were used for the application intended.

#### Please keep your proof of purchase records, which will be required for warranty.

Gray Tools Canada will be the sole authority in evaluating the products and determining warranty claims and will be glad to replace products qualifying for warranty received prepaid. Gray Tools Canada shall not be liable for any damage or injury due to product failure.

If your product qualifies for warranty, please return it to your local distributor, or call our Customer Service department for a warranty inspection number and further instructions.

Gray Tools Canada Inc. 299 Orenda Road Brampton, Ontario, L6T 1E8 Available At:



#### **GRAY TOOLS CANADA INC.**

299 ORENDA ROAD, BRAMPTON, ONTARIO, CANADA L6T 1E8 TEL: 1.800.567.0518 • FAX: 1.800.264.6977 WWW.GRAYTOOLS.COM PRINTED IN CANADA **\$2.50** 

G2014-I