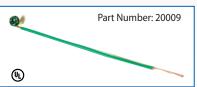
# **GROUND BONDING PRODUCTS**

# GROUND BONDING PIGTAILS – INSULATED SOLID WIRE (12 AWG AND 14 AWG)

- EPCO's Solid Wire Ground Bonding PigTails are recommended for use in metal box applications.
- Features a captive GSH or GSC Green Ground Screw on one end, the other end is pre-stripped 1".
- Available in 6.5", 8", 10" and 12" lengths.
- Typical applications:
  - Ground bonding in a power distribution box, junction box or multi-gang receptacle box.
  - When a standard Stranded Wire PigTail is not required.
- Meets the requirements of the 2011 National Electrical Code: Articles 110.14(A) and (B) and 250.8.
- UL Listed.





Catalog Number	UPC Number	Description	Order Unit	Unit Qty	Unit Pkg	Units/ Case	TL Case Qty	Min Order Qty	MM Req	Ship Wt (Lbs)
20016	20016	6.5" PigTail: Captive GSC Ground Screw — Stripped 1"	EA	50	PKG	10	500	50	Yes	9
20086	20086	8" PigTail: Captive GSC Ground Screw — Stripped 1"	EA	50	PKG	10	500	50	Yes	11
20088	20088	10" PigTail: Captive GSC Ground Screw — Stripped 1"	EA	50	PKG	10	500	50	Yes	13
20090	20090	12" PigTail: Captive GSC Ground Screw — Stripped 1"	EA	50	PKG	10	500	50	Yes	1
20009*	20009	6.5" PigTail: Captive GSH Ground Screw — Stripped 1"	EA	50	PKG	10	500	50	Yes	9
20011*	20011	8" PigTail: Captive GSH Ground Screw — Stripped 1"	EA	50	PKG	10	500	50	Yes	11
20087	20087	10" PigTail: Captive GSH Ground Screw — Stripped 1"	EA	50	PKG	10	500	50	Yes	13
20089	20089	12" PigTail: Captive GSH Ground Screw — Stripped 1"	EA	50	PKG	10	500	50	Yes	15
20010	20010	6.5" PigTail (14 AWG): Captive GSH Ground Screw — Stripped 1"	EA	50	PKG	10	500	50	Yes	7
20091	20091	8" PigTail (14 AWG): Captive GSH Ground Screw — Stripped 1"	EA	50	PKG	10	500	50	Yes	9

<sup>\*</sup>Contractor preferred

### Reference Guide - Insulated Solid Wire PigTails (12 AWG and 14 AWG)

#### **Part Numbers**

20016: 6.5-Inch 20086: 8-Inch 20088: 10-Inch 20090: 12-Inch



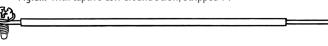


PigTail: With captive GSH Ground Screw, Stripped 1".

20011: 8-lnch\* 20087: 10-lnch 20089: 12-lnch

20009: 6.5-Inch\*

20010: 6.5-Inch (14 AWG) 20091: 8-Inch (14 AWG)





#### **UNITS OF MEASURE KEY**

Order Unit: The Unit to be ordered; Order Qty: Number of pieces in each Unit; Unit Pkg: Packaging types - BG (Bag), BX (Box), PKG (Package); Units/Case: Unit packages contained in the Case; TL Case Qty: The total number of items in each Master Case; Min Order Qty: The smallest Unit that can be ordered; MM Req: Must order multiples of the Unit in the stated quantities; Ship Wt (Lbs): Total weight of the Units per Carton

Specifications subject to change without prior notice.

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# **GROUND BONDING PIGTAILS -INSULATED STRANDED WIRE (12 AWG AND 14 AWG)**

- Labor and Time Savings!
- EPCO's Stranded Wire Ground Bonding PigTails can save the Contractor up to 50 cents per installation.
- Meets the requirements of the 2011 National Electrical Code: Articles 110.14(A) and (B) and 250.8.
- Factory-crimped Flanged Spade Terminal or Ring Terminal meets the requirements of the 2011 National Electrical Code: Article 110.4 and provides precise electrical terminations.
- Typical applications: Ground bonding in a power distribution box, junction box or multi-gang receptacle box.
- UL Listed.



Catalog Number	UPC Number	Description	Order Unit	Unit Qty	Unit Pkg	Units/ Case	TL Case Qty	Min Order Qty	MM Req	Ship Wt (Lbs)
20008*	20008	8" PigTail: 1 Flanged Spade Terminal — Stripped 5/8"	EA	50	PKG	10	500	50	Yes	13
20082	20082	10" PigTail: 1 Flanged Spade Terminal — Stripped 5/8"	EA	50	PKG	10	500	50	Yes	13
20084	20084	<b>12" PigTail:</b> 1 Flanged Spade Terminal — Stripped 5/8"	EA	50	PKG	10	500	50	Yes	15
20041	20041	<b>8" PigTail:</b> Ring Terminal, captive GSC Ground Screw, 1 Flanged Spade Terminal	EA	50	PKG	10	500	50	Yes	13
20020	20020	<b>10" PigTail:</b> Ring Terminal, captive GSC Ground Screw, 1 Flanged Spade Terminal	EA	50	PKG	10	500	50	Yes	15
20026	20026	<b>12" PigTail:</b> Ring Terminal, captive GSC Ground Screw, 1 Flanged Spade Terminal	EA	50	PKG	10	500	50	Yes	17
20036	20036	<b>8" PigTail:</b> Ring Terminal, captive GSC Ground Screw — Stripped 5/8"	EA	50	PKG	10	500	50	Yes	12
20035	20035	<b>10" PigTail:</b> Ring Terminal, captive GSC Ground Screw — Stripped 5/8"	EA	50	PKG	10	500	50	Yes	14
20044	20044	<b>12" PigTail:</b> Ring Terminal, captive GSC Ground Screw — Stripped 5/8"	EA	50	PKG	10	500	50	Yes	16
20004*	20004	<b>8" PigTail:</b> 1 Flanged Spade Terminal, captive GSH Ground Screw	EA	50	PKG	10	500	50	Yes	13
20019	20019	<b>10" PigTail:</b> 1 Flanged Spade Terminal, captive GSH Ground Screw	EA	50	PKG	10	500	50	Yes	15
20025	20025	<b>12" PigTail:</b> 1 Flanged Spade Terminal, captive GSH Ground Screw	EA	50	PKG	10	500	50	Yes	17
20029*	20029	<b>8" PigTail:</b> Ring Terminal, captive GSH Ground Screw — Stripped 5/8"	EA	50	PKG	10	500	50	Yes	12
20034	20034	<b>10" PigTail:</b> Ring Terminal, captive GSH Ground Screw — Stripped 5/8"	EA	50	PKG	10	500	50	Yes	14
20043	20043	12" PigTail: Ring Terminal, captive GSH Ground Screw — Stripped 5/8"	EA	50	PKG	10	500	50	Yes	16
20007	20007	7" PigTail (14 AWG): 1 Flanged Spade Terminal — Stripped 5/8"	EA	50	PKG	10	500	50	Yes	11
20040	20040	<b>8" PigTail (14 AWG):</b> Ring Terminal, captive GSC Ground Screw, 1 Flanged Spade Terminal	EA	50	PKG	10	500	50	Yes	11
20003	20003	8" PigTail (14 AWG): 1 Flanged Spade Terminal, captive GSH Ground Screw	EA	50	PKG	10	500	50	Yes	16

\*Contractor preferred



EPCO Ground Bonding PigTails are Made in the USA. Complies with the American Recovery and Reinvestment Act - Buy American Provision.

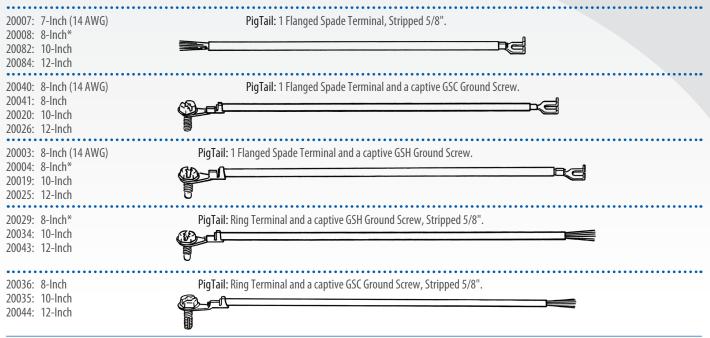
## **UNITS OF MEASURE KEY**

Order Unit: The Unit to be ordered; Order Qty: Number of pieces in each Unit; Unit Pkg: Packaging types - BG (Bag), BX (Box), PKG (Package); Units/Case: Unit packages contained in the Case; TL Case Qty: The total number of items in each Master Case; Min Order Qty: The smallest Unit that can be ordered; MM Req: Must order multiples of the Unit in the stated quantities; Ship Wt (Lbs): Total weight of the Units per Carton

Specifications subject to change without prior notice.

# Reference Guide — Insulated Stranded Wire PigTails (12 AWG and 14 AWG)

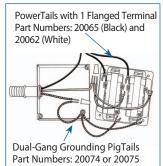
#### **Part Numbers**



# SINGLE AND DUAL-GANG GROUND BONDING PIG TAILS™ (12 AWG)

- Labor and Time Savings!
- UL Listed.
- Matched Flanged Spade and Ring Terminals ensure a safe, reliable ground connection.
- Meets the requirements of the 2011 National Electrical Code: Articles 110.14(A) and (B) and 250.8.

Reprinted from the 2011 National Electrical Code: Article 250.148 – Continuity and Attachment of Equipment Grounding Conductors to Boxes: Where circuit conductors are spliced within a box, or terminated on equipment within, or supported by a box, any equipment grounding conductor(s) associated with those circuit conductors shall be connected within the box or to the box with devices suitable for the use in accordance with 250.148(A) through (E).





Catalog Number	UPC Number	Description	Order Unit	Unit Qty	Unit Pkg	Units/ Case	TL Case Qty	Min Order Qty	MM Req	Ship Wt (Lbs)
20067	20067	<b>Single-Gang PigTail:</b> 8" Solid Wire Incoming Lead, Stripped 1", 8" Stranded Wire Conductor with 1 Flanged Spade Terminal, captive GSH Ground Screw	EA	20	PKG	10	200	20	Yes	9
20068	20068	Single-Gang PigTail: 8" Stranded Wire Incoming Lead, Stripped 5/8", 8" Stranded Wire Conductor with 1 Flanged Spade Terminal, captive GSH Ground Screw	EA	20	PKG	10	200	20	Yes	9
20070*	20070	<b>Dual-Gang PigTail:</b> Two 8" Stranded Wire Conductors, each with 1 Flanged Spade Terminal, captive GSH Ground Screw	EA	20	PKG	10	200	20	Yes	10
20074*	20074	<b>Dual-Gang PigTail:</b> 8" Solid Wire Incoming Lead, Stripped 1", Two 8" Stranded Wire Conductors, each with 1 Flanged Spade Terminal, captive GSH Ground Screw	EA	20	PKG	10	200	20	Yes	11
20075	20075	<b>Dual-Gang PigTail:</b> 8" Stranded Wire Incoming Lead, Stripped 5/8", Two 8" Stranded Wire Conductors, each with 1 Flanged Spade Terminal, captive GSH Ground Screw	EA	20	PKG	10	200	20	Yes	13

#### **UNITS OF MEASURE KEY**

Order Unit: The Unit to be ordered; Order Qty: Number of pieces in each Unit; Unit Pkg: Packaging types - BG (Bag), BX (Box), PKG (Package); Units/Case: Unit packages contained in the Case; TL Case Qty: The total number of items in each Master Case; Min Order Qty: The smallest Unit that can be ordered; MM Req: Must order multiples of the Unit in the stated quantities; Ship Wt (Lbs): Total weight of the Units per Carton

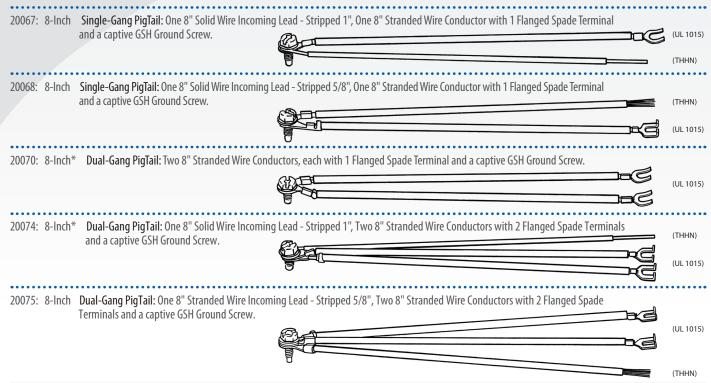
Specifications subject to change without prior notice.



# **GROUND BONDING PRODUCTS**

### Reference Guide — Single and Dual-Gang Ground Bonding PigTails (12 AWG)

#### **Part Numbers**



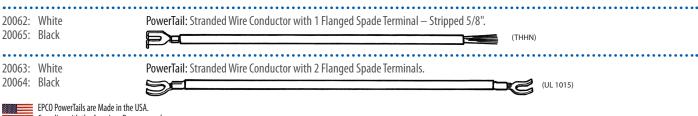
### **POWERTAILS® DEVICE WIRING CONDUCTORS (12 AWG)**

- Labor and Time Savings!
- EPCO's Stranded Wire Ground Bonding PigTails can save the Contractor up to 50 cents per installation.
- Meets the requirements of the 2011 National Electrical Code: Articles 110.14(A) and (B) and 250.8.
- Factory-crimped Flanged Spade Terminal or Ring Terminal meets the requirements of the 2011 National Electrical Code: Article 110.4 and provides precise electrical terminations.
- Typical applications: Ground bonding in a power distribution box, junction box or multi-gang receptacle box.
- UL Listed.

Catalog Number	UPC Number	Description	Order Unit	Unit Qty	Unit Pkg	Units/ Case	TL Case Qty	Min Order Qty	MM Req	Ship Wt (Lbs)
20062	20062	<b>8" PowerTail:</b> White, Stranded Wire Conductor with 1 Flanged Spade Terminal — Stripped 5/8"	EA	50	PKG	10	500	50	Yes	8
20063	20063	<b>8" PowerTail:</b> White, Stranded Wire Conductor with 2 Flanged Spade Terminals	EA	50	PKG	10	500	50	Yes	9
20064	20064	<b>8" PowerTail:</b> Black, Stranded Wire Conductor with 2 Flanged Spade Terminals	EA	50	PKG	10	500	50	Yes	8
20065	20065	<b>8" PowerTail:</b> Black, Stranded Wire Conductor with 1 Flanged Spade Terminal — Stripped 5/8"	EA	50	PKG	10	500	50	Yes	9

### Reference Guide – PowerTails Device Wiring Conductors (12 AWG)

### **Part Numbers**



EPCO PowerTails are Made in the USA.

Complies with the American Recovery and
Reinvestment Act — Buy American Provision.

Specifications subject to change without prior notice.

# SINGLE AND DUAL-GANG GROUND BONDING PIGTAILS - APPLICATION EXAMPLES

# SINGLE-GANG SOLID WIRE: 20067

The ground screw is screwed into and bonds the metal junction box. The single stranded wire grounding conductor with the flanged spade terminal from this same PigTail grounds the receptacle. The solid wire grounding conductor on the PigTail will ground the receptacle. The solid wire grounding conductor on the PigTail connects to the MC Cable and bonds back to the service panel.



# SINGLE-GANG STRANDED WIRE: 20068

The ground screw is screwed into and "grounds" the metal junction box. The single stranded wire grounding conductor with the flanged spade terminal from this PigTail grounds the receptacle. The stranded wire grounding conductor on the PigTail connects (by wire nut) the incoming ground conductor in the MC Cable and bonds back to the service panel.



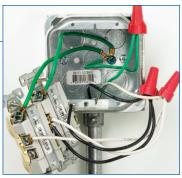
# **DUAL-GANG STRANDED WIRE: 20070**

The ground screw is screwed into the 10/32 tapped grounding hole opening in the metal junction box, bonding the junction box to the conduit system and grounded back to the service panel. The two stranded wire ground PigTails with the flanged spade terminals would then connect to the grounding screw of the receptacles or switches to be wired.



# **DUAL-GANG SOLID WIRE: 20074**

The ground screw is screwed into and bonds the metal junction box. The two stranded wire grounding conductors with the flanged spade terminals from this PigTail grounds each receptacle. The solid wire conductor on the PigTail connects by wire nut to the incoming ground conductor in the conduit and bonds back to the service panel.



# **DUAL-GANG STRANDED WIRE: 20075**

The ground screw is screwed into and "grounds" the metal junction box and is bonded back to the service-grounded panel. Two (2) stranded wire grounding conductors with flanged spade terminals from this PigTail ground each receptacle. The stranded wire grounding conductor on the PigTail connects by wire nut to the ground conductor from the incoming cable.



Specifications subject to change without prior notice.

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### **GROUND SCREWS**

Engineered Products Company's Ground Screws and Ground Clip products are manufactured in compliance with the Restriction of Hazardous Substances (RoHS) European Directive. EPCO's Green Ground Screws (#10-32 x .375") meet the requirements of the 2011 National Electrical Code: Article 250.8.

**GSC – Cutting Point Screw** – Combination hex head, slotted, phillips and square drive screw for use in metal boxes when holes have not been pre-tapped.

**GSH – Hex Head Screw** – Combination slotted, phillips and square drive tapered point screw used to simplify wiring installations when pre-tapped holes exist in metal boxes.

**Note:** Beginning July 1, 2006, Directive 2002/95/EC, of the European Union (EU), restricts the use of certain hazardous substances in electrical and electronic equipment. Those substances are Lead, Mercury, Cadmium, Hexavalent Chromium, PBBs.







Catalog Number	UPC Number	Description	Order Unit	Order Qty	Unit Pkg	Units/ Case	TL Case Qty	Min Order Qty	MM Req	Ship Wt (Lbs)
GSC	10053	GSC: Slotted, #2 Phillips, Hex Head with Cutting Point - Green	EA	100	PKG	10	1000	100	Yes	1
GSCT	30053	GSC: Slotted, #2 Phillips, Hex Head with Cutting Point - Green	EA	250	PKG	10	2500	250	Yes	2
20053	20053	GSC: Bulk	C	1000	ВХ	0	0	1000	Yes	10
GSH	10051	<b>GSH:</b> Slotted, #2 Phillips, Hex Head, #2 Robertson with Tapered Die Point - Green	EA	100	PKG	10	1000	100	Yes	1
GSHT	30051	<b>GSH:</b> Slotted, #2 Phillips, Hex Head, #2 Robertson with Tapered Die Point - Green	EA	250	PKG	10	2500	250	Yes	2
20051	20051	GSH: Bulk	C	1000	ВХ	0	0	1000	Yes	10

**Note:** Ground Screws listed above are used in EPCO Ground Bonding PigTails.

#### **GROUND CLIPS**

- Excellent time and labor saving alternative to using Ground Screws.
- Meets the requirements of the 2011 National Electrical Code: Article 250.8.

EPCO's Ground Clips are specifically designed for termination of the grounding conductor and should be used when a 10-32 hole is not pre-drilled or tapped into a metallic junction box.

Since ground clips are forced onto the junction box, EPCO recommends using a "new" ground clip instead of re-using the old ground clip. Ground clips should never be forced onto the round portion of a plaster ring or a poor electrical connection will result.

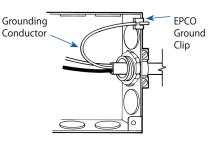
#### **Installation Procedure:**

The correct way to install a ground clip is to feed the grounding conductor into the ground clip with the shorter part of the ground clip placed inside the junction box.

Then use the flat blade of a screwdriver to force the ground clip onto the junction box to ensure a good electrical connection. See illustration.







Catalog Number	UPC Number	Description	Order Unit	Order Qty	Unit Pkg	Units/ Case	TL Case Qty	Min Order Qty	MM Req	Ship Wt (Lbs)
GC	10052	Ground Clip: for 14-12 AWG Solid Wire	EA	100	BG	10	1000	100	Yes	1
GCT	30052	Ground Clip: for 14-12 AWG Solid Wire	EA	250	PKG	10	2500	250	Yes	2
20052	20052	GC: Bulk	C	1000	ВХ	0	0	1000	Yes	10

EO2-024-000 A2 (6/12-5P)
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