



ZT-3100

TRIM AND EDGE WITHOUT
LEAVING YOUR SEAT



OPERATOR'S MANUAL

ASSEMBLY • OPERATION • MAINTENANCE

MANUAL PART#: Q0610

Initial Release - May 2024

TABLE OF CONTENTS

SECTION	PAGE	SECTION	PAGE
Safety	-2-4	V Trimmer Line-	8
Safety Alert Symbols	3		
I Introduction	4	VI Tips and Recommendations	8
Overall Parts List	5	Exploded Views & Parts Lists	9-11
II Mounting Instructions	6	Z-Trimmer Wiring Kit	12
III Operating Instructions	6	Safety Decals	13
Trimming	6-7	Torque Specifications	14
Edging	7	Warranty	15
IV Height Adjustment	7		

SAFETY

1. Read the operator's manual carefully and familiarize yourself with the proper use of your attachment. Do not allow anyone who is not acquainted with the Safety Instructions to use your attachment.
2. Know the controls and how to stop them quickly. **READ THE OPERATOR'S MANUAL!**
3. Do not allow children to operate the machine. Do not allow adults to operate it without proper instruction.
4. Be especially watchful of children and pets entering into the area while operating.
5. Keep your eyes and mind on your machine while operating your attachment. Don't let others distract you.
6. Do not attempt to operate your machine when not in the driver's seat.
7. Stop machine, shut off deck attachment, set parking brake, shut off engine and remove ignition key before performing any maintenance.
8. Inspect your lawn and remove any foreign objects before mowing. Never deliberately run the mower across any foreign object.
9. Wear hearing protection.
10. Wear eye protection to prevent debris from getting into your eyes.

SAFETY

WARNING! Do not work around the mower deck area until you are certain that the mower blades and the trimmer have stopped rotating.

WARNING! To avoid serious injury, perform maintenance on your unit; **ONLY AFTER STOPPING THE MOWER'S ENGINE AND WAITING FOR ALL MOVING PARTS TO COME TO A COMPLETE STOP.** Set the parking brake. Always remove the ignition key before beginning maintenance.

WARNING! For your own personal safety, **ALWAYS** mow **ACROSS** the face of slopes and **NEVER UP** and **DOWN** the face. **NEVER** attempt to mow excessively steep slopes, and use caution when turning on any slope.

Safety Alert Symbol

This Safety Alert Symbol means:

“ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!”

This symbol is used to call attention to safety precautions that should be followed by the operator to avoid accidents. When you see this symbol, carefully read the message that follows and heed its advice. Failure to comply with safety precautions could result in death or serious bodily injury.



Safety Signs

The signal words **DANGER**, **WARNING**, and **CAUTION** are used on the equipment safety signs. These words are intended to alert the viewer to the existence and the degree of hazard seriousness.



White letters on **RED**

This signal word indicates a potentially hazardous situation which, if not avoided, will result in death or serious injury.



Black letters on **ORANGE**

This signal word indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

It may also be used to alert against unsafe practices.



Black letters on **YELLOW**

This signal word indicates a potentially hazardous situation which, if not avoided, will result in minor or moderate injury.

It may also be used to alert against unsafe practices.

Section 1 Introduction

Thank you for purchasing the newly re-designed PECO Z-Trimmer model number ZT-3100. We took all the great features our customers have grown to love, and improved them for greater durability and performance.

The Z-Trimmer is an attachment for your riding mower, zero-turn mower or tractor, that allows you to trim and mow at the same time. Your productivity and efficiency will improve and you will save time and labor.

The Z-Trimmer is designed for light duty trimming, and is equipped with a thermal circuit breaker. If the breaker trips while in operation, your electric motor is operating at a higher temperature than recommended. Use of the Z-Trimmer in heavy duty applications may create excessive draw from the electrical system for the machine on which the trimmer is mounted, resulting in incomplete charging of the machine's battery. For optimum performance, alternating use of the Z-Trimmer and normal mowing is recommended.

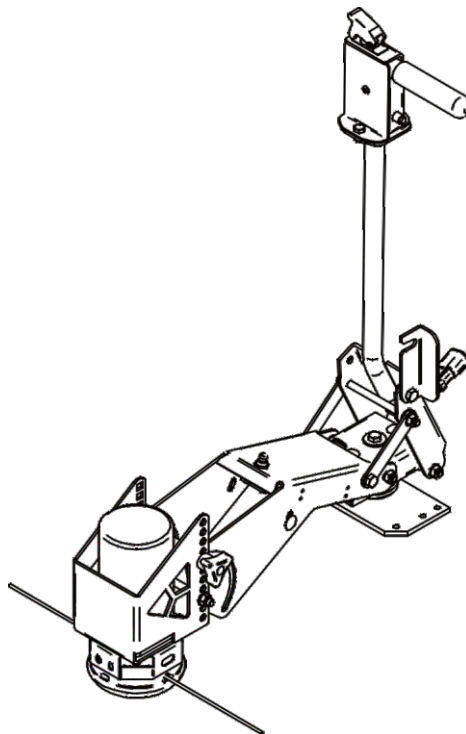
Note: Always operate the Z-Trimmer with the mower or tractor at full throttle.

The trimmer line should be no longer than 6" per side of the trimmer head. Longer lengths will cause excessive power consumption and reduce the efficiency of the trimmer.

The breakaway action of the Z-Trimmer is intended to provide relief when hitting objects. Many zero turn radius mowers travel at speeds of 8+ MPH. At speeds greater than 2 MPH, hitting objects with the Z-Trimmer **will** cause damage to the unit. The trimmer is intended to trim at a speed of 1 MPH, depending on the material that is being trimmed. Trimming at faster speeds will decrease performance of the trimmer.



NOTE: Always wear the proper personal protection equipment when operating the PECO Z-Trimmer.



Model #: ZT-3100

Desc: Z-Trimmer (2024)

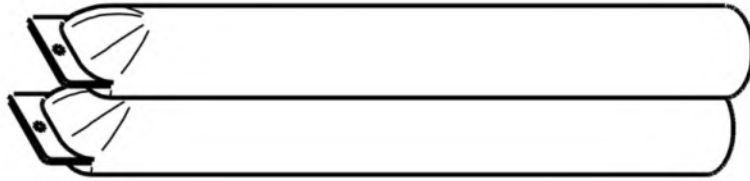
Owner's Manual: Q0610

Revision #: 0



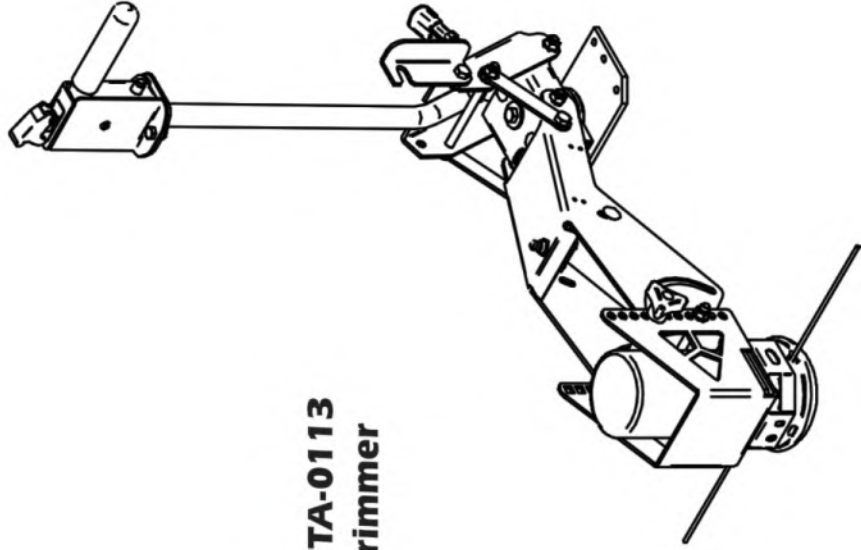
ZT-3100

**(1) HB0891
Hardware
Bag**



**(2) ZT-0017
Vortex Trimmer
Line**

**(1) ZTA-0113
Z-Trimmer**



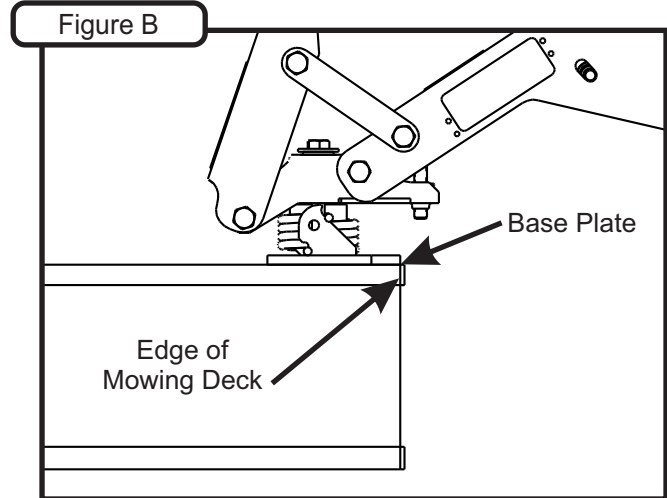
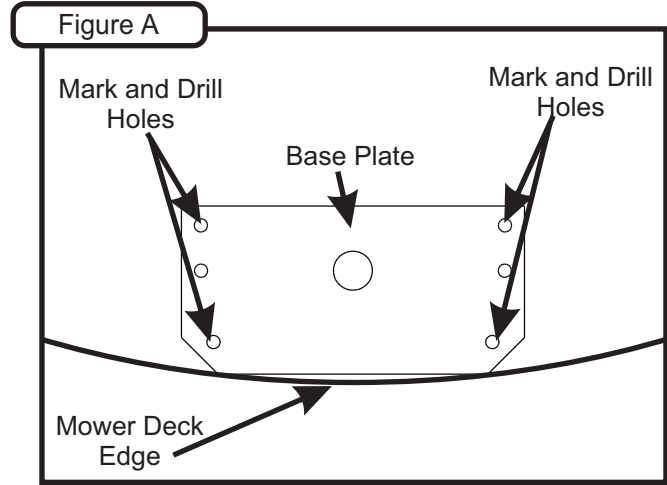
Section 2 Mounting Instructions

NOTE: The Z-Trimmer is designed to fit most styles of mowing decks. We recommend using 4 mounting holes to secure the Z-Trimmer to the mowing deck. The style of mowing deck on your machine will determine which mounting holes you will use.

Before drilling any holes into your mowing deck, locate the best position for the Z-Trimmer. Things you should consider before drilling any holes:

- Clearance for the Z-Trimmer in both the up and down positions.
- Accessibility to the handle from the operator's seat.
- Distance between the trimmer head and the mowing deck when the Z-Trimmer is in the engaged position.
- Check for possible blade interference.

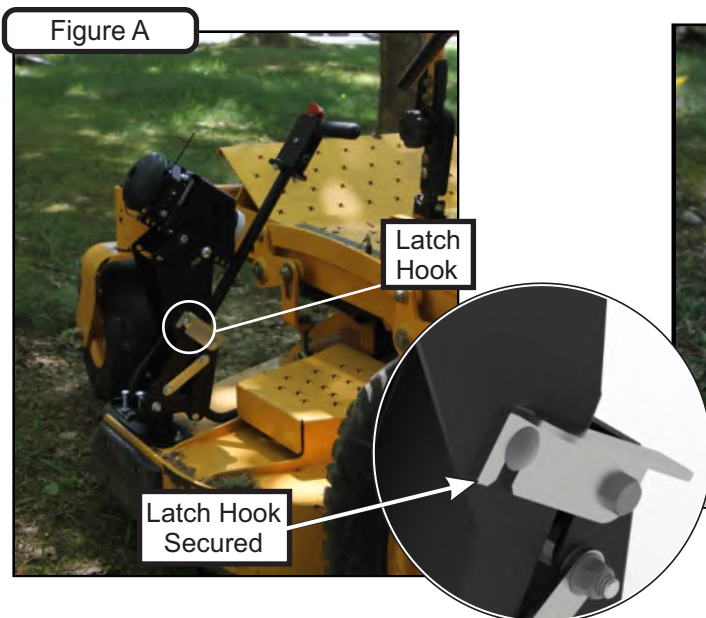
Place the Z-Trimmer to the side of the mowing deck opposite of the grass discharge chute. Position the base plate so that the plate is flush with the edge of the deck and on center. Once in position, mark four holes from the base plate onto your mowing deck. Drill the holes with a 1/4" (.250-.257) drill bit. Secure the Z-Trimmer to the mower deck using (4) 1/4"-20 x 1" Hex Bolts P#(K1125) and (4) 1/4"-20 Nylon Flange Locknuts P#(K2014). Refer to Figure A and B.



NOTE: Route the power cable before connecting the cable to the battery. After the Z-trimmer has been secured to the mowing deck, connect the main power cable to the mower battery (connect the **red** wire to the **positive** terminal and the **black** wire to the **negative** terminal). Route the cable around the outside of the operator seat so that the cable does not interfere with the seat or the control arms. Keep cable away from all heat sources. Use zip-ties to secure the power cable, once the best routing has been determined.

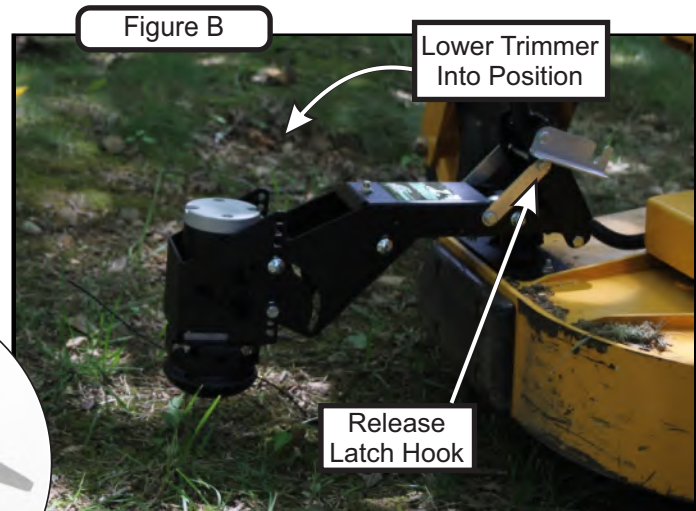
Section 3 Operating Instructions

When not in use, the Z-Trimmer should be in the upright position with the latch hook secured. See Figure A.



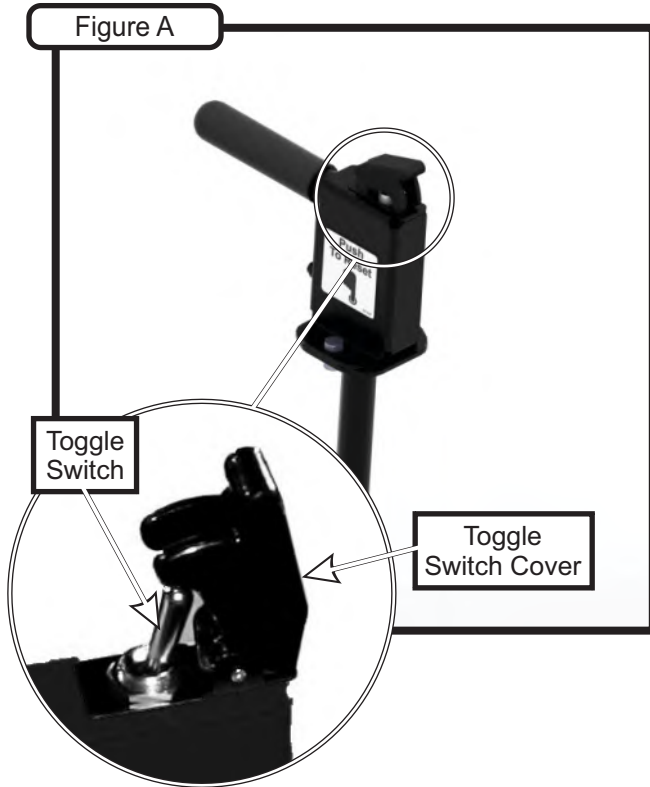
Trimming

1. Release the latch hook and lower the trimmer into the down position. Refer to Figure B.



Trimming (cont.)

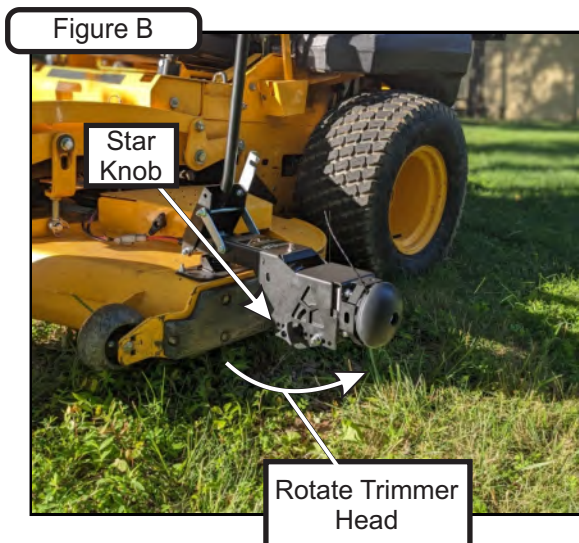
To activate trimmer head, lift the toggle switch cover and flip the toggle switch forward. To de-activate the trimmer head, push the toggle switch cover down. Refer to Figure A.



NOTE: If the circuit breaker on the Z-Trimmer trips, close the toggle switch cover, wait five seconds and then push the reset button before turning on.

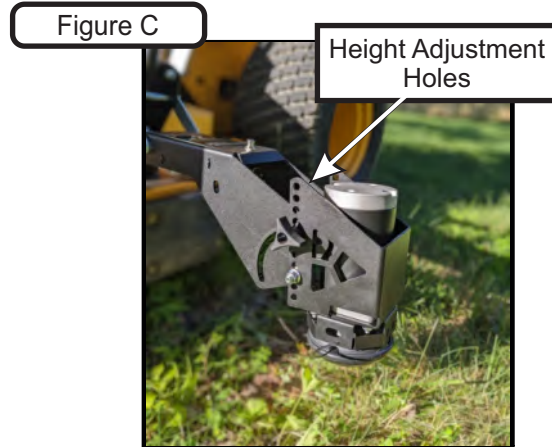
Edging

To position the trimmer head for edging, loosen the star knob shown in Figure B, rotate the trimmer head into the position desired for edging and re-tighten the star knob.



Section 4 Height Adjustment

While in the down position, adjust the height of the trimmer head so that it is in line with the blades on the mower deck.



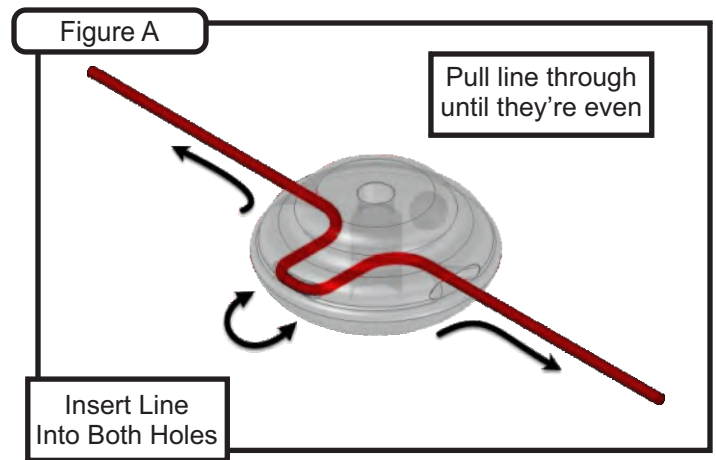
For fine tuning adjustment of the height, use the adjustment bolt shown in Figure D. Turn the bolt clockwise to lower the swing arm, or counter-clockwise to raise the swing arm.



Section 5 Trimmer Line

To replace trimmer line, bend a new line into two equal lengths, insert the line ends into the holes on the trimmer head. The head will automatically route the line out the correct hole. Pull each end taught and adjust if uneven. Refer to Figure A.

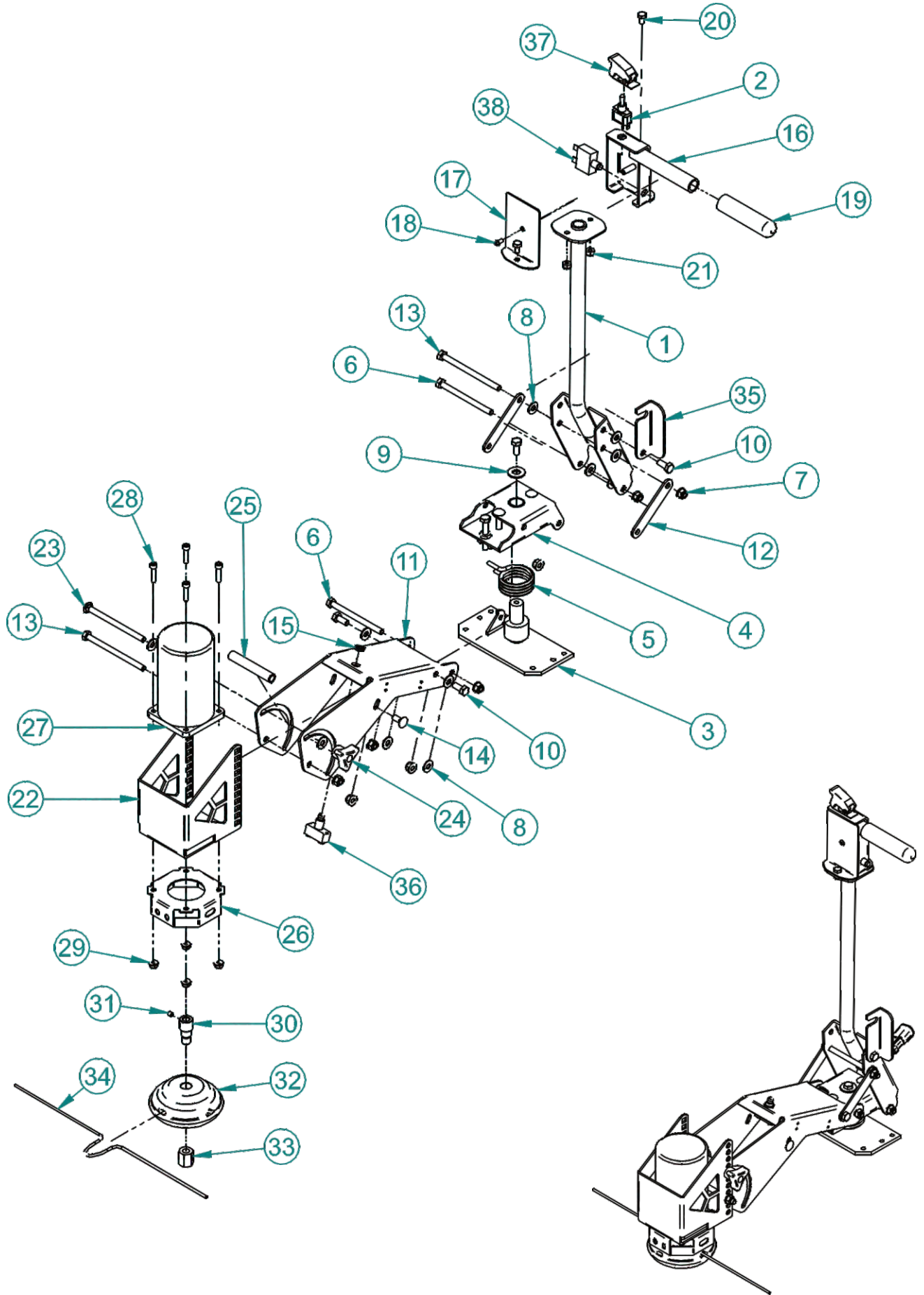
To order more trimmer line P#(ZT-0017), contact PECO at (800) 438-5823.



Section 6 Tips and Recommendations

- Because the Z-Trimmer runs off your machine's charging system, it is recommended to operate the machine at full throttle when using the Z-Trimmer.
- Inspect the Z-Trimmer before each and every use. Examine the base plate to ensure the Z-Trimmer is tightly secured to your machine. Make sure the power cable is secure. Check all moving parts for damage or obstruction. Inspect the trimmer head and line.
- Check the head shroud for any debris before using the Z-Trimmer. Clean if necessary.
- If the circuit breaker trips repeatedly, slow your speed and/or adjust your height setting.
- Keep your trimmer line in an easily accessible, but secure place on your machine. Practice replacing the trimmer line from the operator seat to save time.
- If the Z-Trimmer gets hung up or caught on something, **STOP** and **TURN THE POWER OFF** before inspecting the situation.
- Ensure the Z-Trimmer is in the correct angle (trimming/edging) and that the star knob is tightened securely before use.
- Always inspect the area you are trimming before operating your Z-Trimmer. Look for anything that could potentially get caught up in the trimmer head, or damage the trimmer.

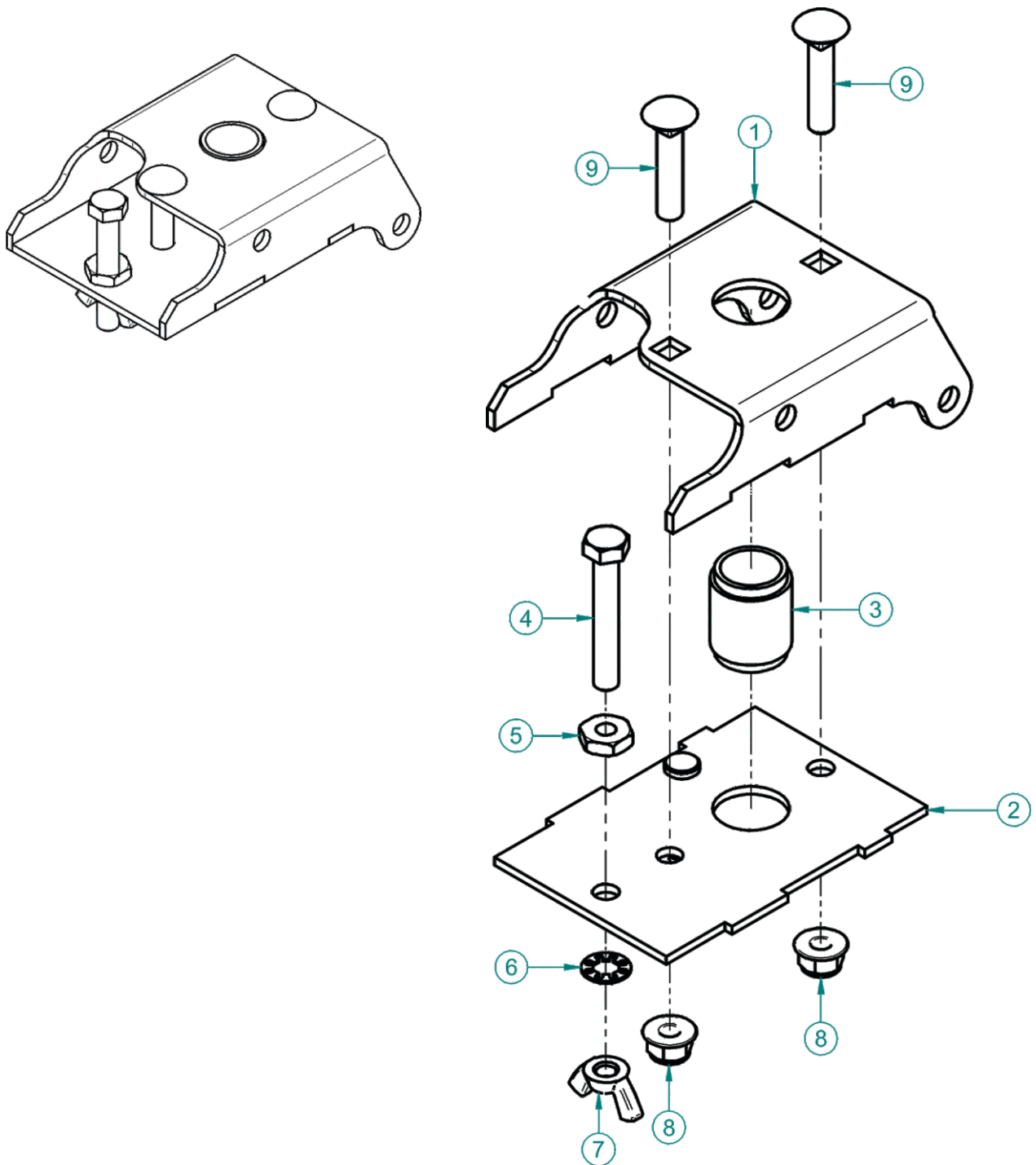
ZTA-0113 Z-Trimmer Assembly Exploded View



ZTA-0113 Z-Trimmer Assembly Exploded Parts List

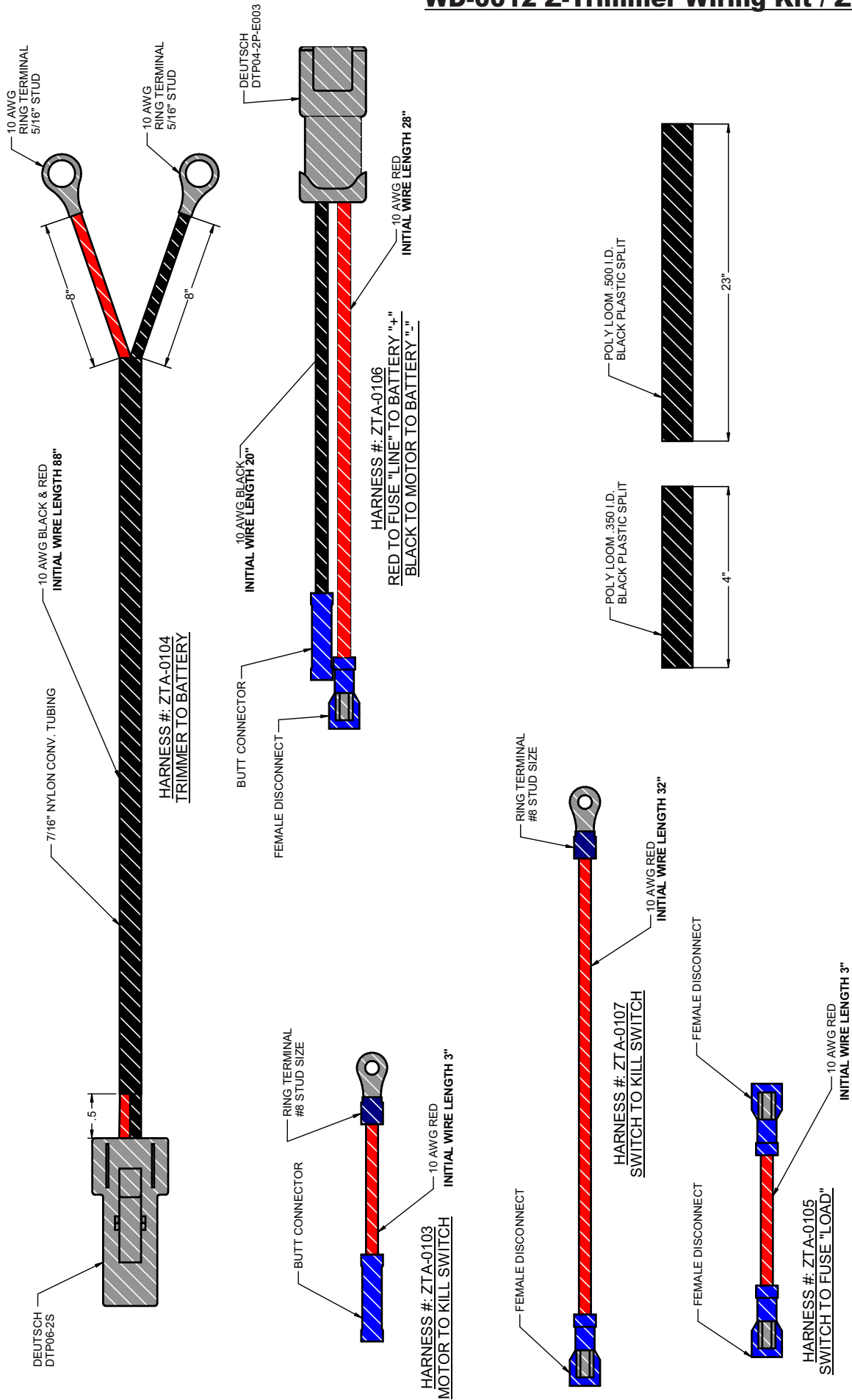
Item #	Part #	Desc.	Qty.
1	ZTA-0112	Lower Handle Assembly	1
2	J2001	Power Toggle Switch	1
3	ZTA-0102	Base Plate Assembly	1
4	ZTA-0004_01	Pivot Block Assembly	1
5	ZT-0010	Pivot Spring	1
6	K0293	5/16"-18 x 4" HHCS	2
7	K2516	Ny-Flange Lock Nut 5/16"-18	8
8	K0037	Flat Washer / 1/4" (.75 OD x .312 ID x .060 T)	11
9	K0047	Flat Washer 3/8" / 1.00 OD x .446 ID x .075 T	1
10	K1153	HHCS 5/16"-18 x 3/4"	4
11	ZT-0106	Swing Arm	1
12	ZT-0004	Swing Arm Bracket	2
13	K0294	5/16"-18 x 4-1/2" HHCS	2
14	K1142	5/16"-18 x 3/4" Carriage Bolt	1
15	J2005	15/32"-32 Hex Panel Nut	2
16	ZTA-0111	Upper Handle Assembly	1
17	ZT-0032	Electrical Cover	1
18	K0320	10-32 x 3/8" Pan Head Screw	1
19	V1158	Handle Grip	1
20	K1105	1/4"-20 x 1/2" HHCS	2
21	K1128	1/4"-20 Nyloc Nut	2
22	ZT-0137	Motor Mount	1
23	K0292	5/16"-18 x 4-1/2" Carriage Bolt	1
24	J0256	Star Knob	1
25	ZT-0135	Pivot Lock Bushing	1
26	ZT-0122	Vine Guard	1
27	ZT-0138	12v Motor	1
28	K1401	1/4"-20 x 1" SHCS / Zinc / GR8	4
29	K2014	1/4"-20 Ny-Flange Lock Nut	4
30	ZT-0012	Shaft Bushing	1
31	K0295	1/4"-28 x 1/4" Set Screw	1
32	V0065	Z-Trimmer Head / Unibody	1
33	ZT-0013	Shaft Nut	1
34	ZT-0017	Trimmer Line / Vortex	1
35	ZT-0026	Latch Hook	1
36	P0082	OPS SWITCH	1
37	P0073	Safety Cover for Toggle	1
38	P0018	20 Amp Manual Circuit Breaker	1

ZTA-0004 01 Pivot Block Assembly Exploded Parts List



Item #	Part #	Desc.	Qty.
1	ZT-0023_01	Pivot Block Top	1
2	ZTA-0015	Pivot Block Stiffner Weldment	1
3	ZT-0021	Pivot Block Bushing	1
4	K1159	5/16"-18 x 2" All Thread HHCS	1
5	K0120	5/16"-18 JAM NUT	1
6	K0044	I/T Tooth Lock Washer 5/16"	1
7	K0141	WIng Nut 5/16"-18 Zinc	1
8	K2516	Ny-Flange Lock Nut 5/16"-18	2
9	K1147	5/16"-18 x 1-1/2" Carriage Bolt	2

WD-0012 Z-Trimmer Wiring Kit / ZT-3100



SAFETY DECALS

To promote safe operation, New PECO, Inc. supplies safety decals on all products manufactured. Damage can occur to safety decals either through shipment, use or reconditioning. Contact your local Service Center for replacement decals.



Z-Trimmer Logo
Part# R1104_01



Danger/ Caution Label
Part# R1105



Push To Reset Label
Part# R1107



Serial/ Model Number Tag

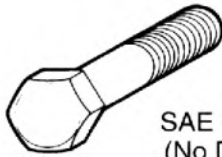
DOCUMENT THE FOLLOWING INFORMATION FOR FUTURE REFERENCE

Unit Model Number: _____
Unit Serial Number: _____
Date of purchase: ____/____/____
Dealer/Distributor Name: _____
Address: _____ **State:** _____ **Zip:** _____
Phone Number: _____

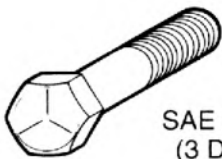
TORQUE SPECIFICATIONS

Proper torque for American fasteners used on PECO equipment.
Recommended Torque in Foot Pounds (Newton Meters).*

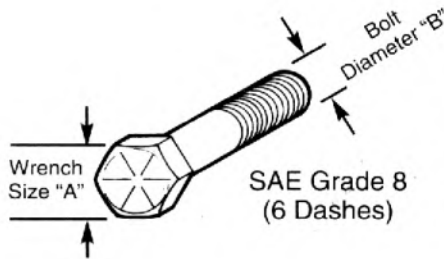
AMERICAN Bolt Head Markings



SAE Grade 2
(No Dashes)



SAE Grade 5
(3 Dashes)

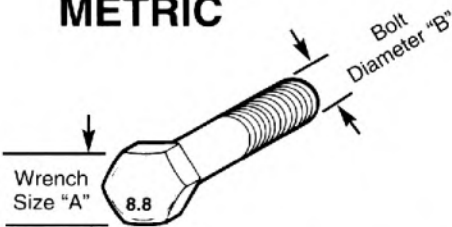


SAE Grade 8
(6 Dashes)

WRENCH SIZE (IN.) "A"	BOLT DIAMETER (IN.) "B" AND THREAD SIZE	SAE GRADE 2	SAE GRADE 5	SAE GRADE 8
7/16	1/4 - 20 UNC	6 (7)	8 (11)	12 (16)
7/16	1/4 - 28 UNF	6 (8)	10 (13)	14 (18)
1/2	5/16 - 18 UNC	11 (15)	17 (23)	25 (33)
1/2	5/16 - 24 UNF	13 (17)	19 (26)	27 (37)
9/16	3/8 - 16 UNC	20 (27)	31 (42)	44 (60)
9/16	3/8 - 24 UNF	23 (31)	35 (47)	49 (66)
5/8	7/16 - 14 UNC	32 (43)	49 (66)	70 (95)
5/8	7/16 - 20 UNF	36 (49)	55 (75)	78 (106)
3/4	1/2 - 13 UNC	49 (66)	76 (103)	106 (144)
3/4	1/2 - 20 UNF	55 (75)	85 (115)	120 (163)
7/8	9/16 - 12 UNC	70 (95)	109 (148)	153 (207)
7/8	9/16 - 18 UNF	79 (107)	122 (165)	172 (233)
15/16	5/8 - 11 UNC	97 (131)	150 (203)	212 (287)
15/16	5/8 - 18 UNF	110 (149)	170 (230)	240 (325)
1-1/8	3/4 - 10 UNC	144 (195)	266 (360)	376 (509)
1-1/8	3/4 - 16 UNF	192 (260)	297 (402)	420 (569)
1-5/16	7/8 - 9 UNC	166 (225)	430 (583)	606 (821)
1-5/16	7/8 - 14 UNF	184 (249)	474 (642)	668 (905)
1-1/2	1 - 8 UNC	250 (339)	644 (873)	909 (1232)
1-1/2	1 - 12 UNF	274 (371)	705 (955)	995 (1348)
1-1/2	1 - 14 UNF	280 (379)	721 (977)	1019 (1381)
1-11/16	1-1/8 - 7 UNC	354 (480)	795 (1077)	1288(1745)
1-11/16	1-1/8 - 12 UNF	397 (538)	890 (1206)	1444 (1957)
1-7/8	1-1/4 - 7 UNC	500 (678)	1120 (1518)	1817 (2462)
1-7/8	1-1/4 - 12 UNF	553 (749)	1241 (1682)	2013 (2728)
2-1/16	1-3/8 - 6 UNC	655 (887)	1470 (1992)	2382 (3228)
2-1/16	1-3/8 - 12 UNF	746 (1011)	1672 (2266)	2712 (3675)
2-1/4	1-1/2 - 6 UNC	870 (1179)	1950 (2642)	3161 (4283)
2-1/4	1-1/2 - 12 UNF	979 (1327)	2194 (2973)	3557 (4820)

Proper torque for metric fasteners used on PECO equipment.
Recommended Torque in Foot Pounds (Newton Meters).*

METRIC



Numbers appearing on bolt heads indicate ASTM class.

WRENCH SIZE (mm) "A"	BOLT DIA. (mm) "B"	ASTM 4.6	ASTM 8.8	ASTM 9.8	ASTM 10.9
8	5	1.8 (2.4)		5.1 (6.9)	6.5 (8.8)
10	6	3 (4)		8.7 (12)	11.1 (15)
13	8	7.3 (10)		21.1 (29)	27 (37)
16	10	14.5 (20)		42 (57)	53 (72)
18	12	25 (34)	74 (100)	73 (99)	93 (126)
21	14	40 (54)	118 (160)	116 (157)	148 (201)
24	16	62 (84)	167 (226)	181 (245)	230 (312)
30	20	122 (165)	325 (440)		449 (608)
33	22		443 (600)		611 (828)
36	24	211 (286)	563 (763)		778 (1054)
41	27		821 (1112)		1138 (1542)
46	30	418 (566)	1119 (1516)		1547 (2096)

*Use 75% of the specified torque value for plated fasteners. Use 85% of the specified torque values for lubricated fasteners.

PECO LIMITED WARRANTY FOR NEW PRODUCTS

New PECO, Inc. extends the following warranties to the ORIGINAL PURCHASER of each New PECO, Inc. consumer product purchased from one of our Dealers or directly from New PECO, Inc., subject to the following limitations:

A. ITEMS COVERED UNDER WARRANTY

1. **PRODUCT WARRANTY** – Any part or parts which are deemed defective in material or workmanship, as delivered to the original purchaser, will either be repaired or replaced, as New PECO, Inc. elects, without charge for parts or labor, if the defect appears within 12 months from the date of purchase of the product to the Original Purchaser.
2. **PARTS REPLACED DURING WARRANTY** – Any New PECO, Inc. part which is furnished in performance of this warranty and is defective in material or workmanship as delivered to the purchaser will be repaired or replaced, as New PECO, Inc. elects, before the expiration of the original warranty period.

B. WARRANTY DISTINCTIONS

1. **RESIDENTIAL** - Products put to a personal use around a single household or residence are considered Residential. Products designated as “Residential” are warranted for 12 months from the date of purchase of the product, to the ORIGINAL PURCHASER with proof of purchase, when used for or in residential applications.
2. **COMMERCIAL** – Products put to any business use (agricultural, commercial or industrial) or used at multiple locations are considered Commercial. Products designated as “Commercial” are warranted for 12 months from the date of purchase of the product, to the ORIGINAL PURCHASER with proof of purchase, when used for or in commercial applications. Products designated as “Residential” are warranted for 90 days from the date of purchase of the product, to the ORIGINAL PURCHASER with proof of purchase, when used for or in Commercial applications.
3. **RENTAL** – Products used for Rental or Lease Purposes are warranted for 45 days from date of purchase of the product, to the ORIGINAL PURCHASER with proof of purchase, when used for or in a rental business.

C. ITEMS NOT COVERED BY NEW PECO WARRANTY

1. **ENGINES & BATTERIES:** Engines and Batteries attached to New PECO, Inc. products are covered under their respective separate manufacturer warranties and those companies must be contacted directly to file a warranty claim. Briggs & Stratton: https://www.briggsandstratton.com/na/en_us/support/warranty.html
2. **UNAPPROVED ALTERATION OR MODIFICATION:** All obligations of New PECO, Inc. under this warranty shall be terminated if products are altered or modified in any way not approved by New PECO, Inc.
3. **ACCIDENTS & NORMAL MAINTENANCE:** This warranty covers ONLY manufacturers defective material and workmanship. It does not cover depreciation or damage caused by normal wear & tear, accident, improper maintenance, misuse or abuse of products. New PECO, Inc. products must be operated and maintained in accordance with the instructions furnished in the manuals. The cost of normal maintenance and normal replacement of service items such as belts, cutting blades, hoses, bags, etc., which are not defective shall be paid for by the purchaser.
4. **NO SERVICE CENTER WARRANTY:** The selling Service Center/Dealer makes no warranty on his own on any item warranted by New PECO, Inc. unless he delivers to purchaser a separate written warranty certificate specifically warranting the item. The Service Center or Dealer has no authority to make any representation or promise on behalf of New PECO, Inc. or to modify the terms of the original warranty in any way.
5. **NO REPRESENTATIONS ADDITIONAL WARRANTIES, DISCLAIMER:** Neither New PECO, Inc. nor any company affiliated with New PECO, Inc. makes any warranties, representations or promises as to the quality of performance of its products other than those set forth herein. Except as described above, New PECO, Inc. makes no other warranties **AND SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES OF FITNESS AND MERCHANTABILITY.**
6. **REMEDIED EXCLUSIVE:** The only remedies the purchaser has in connection with the breach or performance of any warranty on New PECO, Inc. consumer products are set forth above. In no event will New PECO, Inc. be liable for special incidental or consequential damages.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, search by your zip code on www.lawnvac.com or contact our Sales Department at New PECO, Inc. 800-438-5823 or email Sales@lawnvac.com.



New PECO, Inc.

10 Walden Dr | Arden, North Carolina 28704

Phone: 1-800-438-5823 | 828-684-1234

Fax: 828-684-0858

Email: peco@lawnvac.com

Website: www.lawnvac.com