

| Document Number | Document Revision | Document Revision Date | Product Date Code Beginning With |
|-----------------|-------------------|------------------------|----------------------------------|
| L4086 | D | 04/2017 | A |

NOTICE:

Enerpac recommends that all parts included in a service assembly or repair kit be installed to ensure optimum performance of the repaired product.

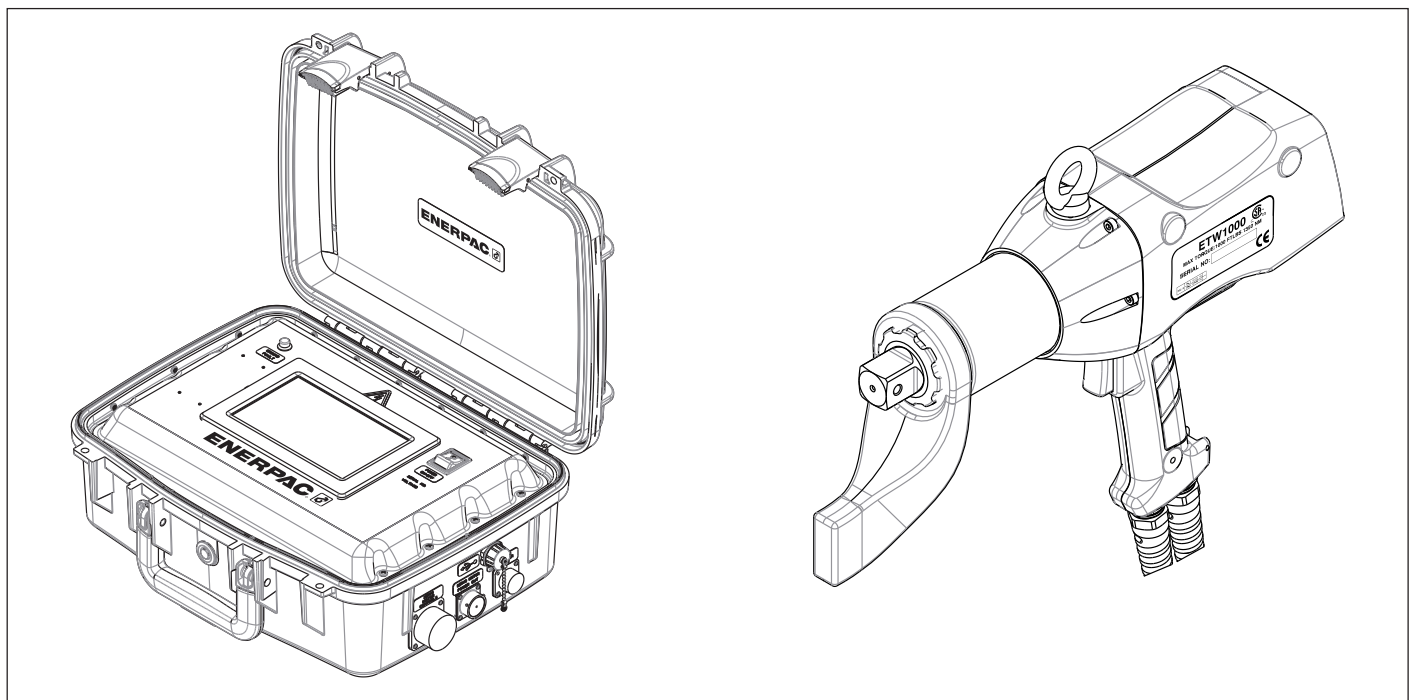
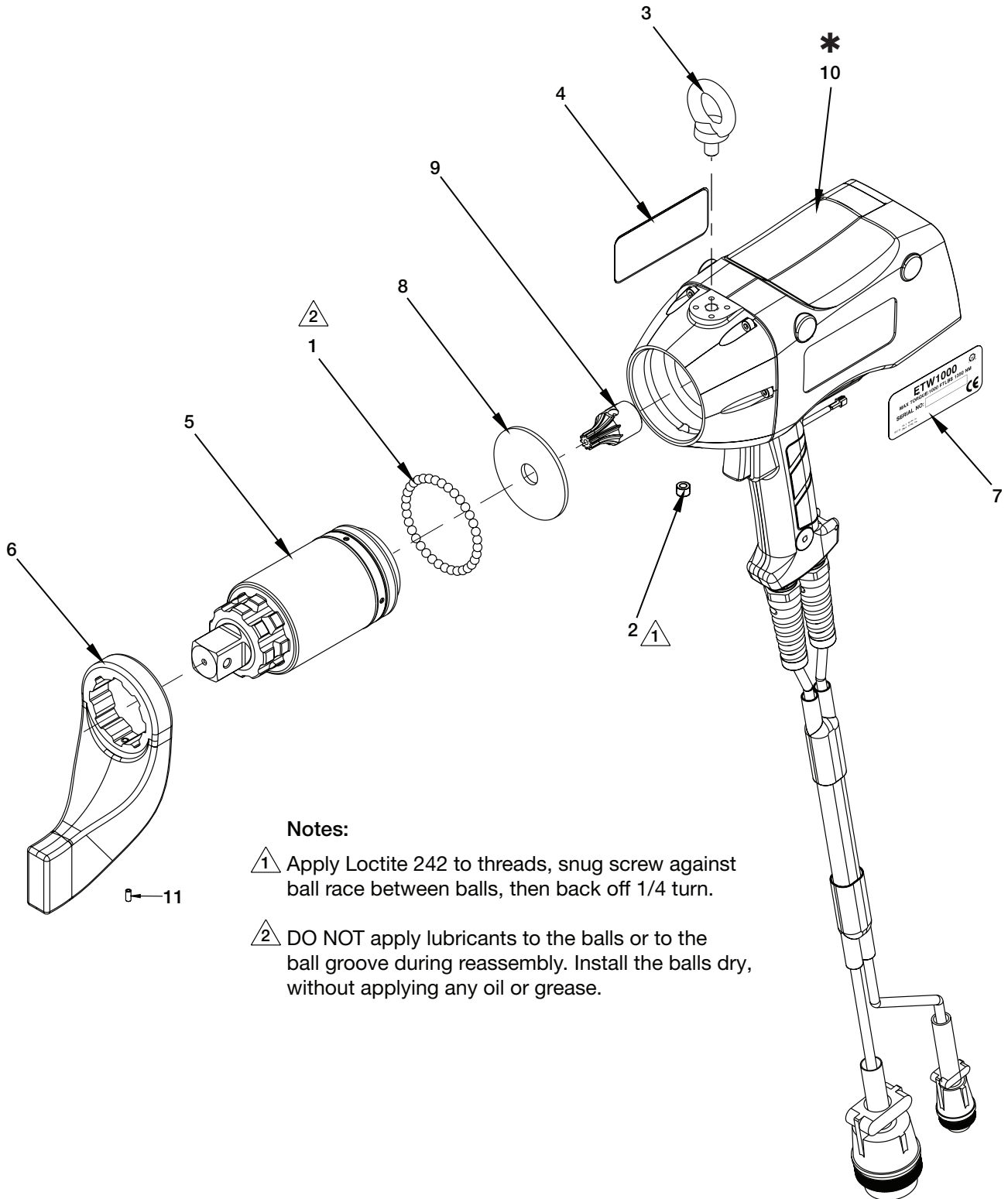


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⚠ WARNING Before beginning any maintenance, repair, adjustment or inspection procedures, disconnect electrical control box cord from AC power supply. Disconnect wrench electrical cables from control box. Failure to observe these precautions could result in death or serious personal injury.

Fig. 1, Main Assembly



Notes:

- 1 Apply Loctite 242 to threads, snug screw against ball race between balls, then back off 1/4 turn.
- 2 DO NOT apply lubricants to the balls or to the ball groove during reassembly. Install the balls dry, without applying any oil or grease.

*** NOTICE:** Recalibration of wrench and control box is required if electric motor (Fig 2, item #17) is replaced. Firmware version of control box must match firmware version of wrench. See Enerpac Authorized Service Center for additional information.

Repair Parts List, Fig. 1

L4086

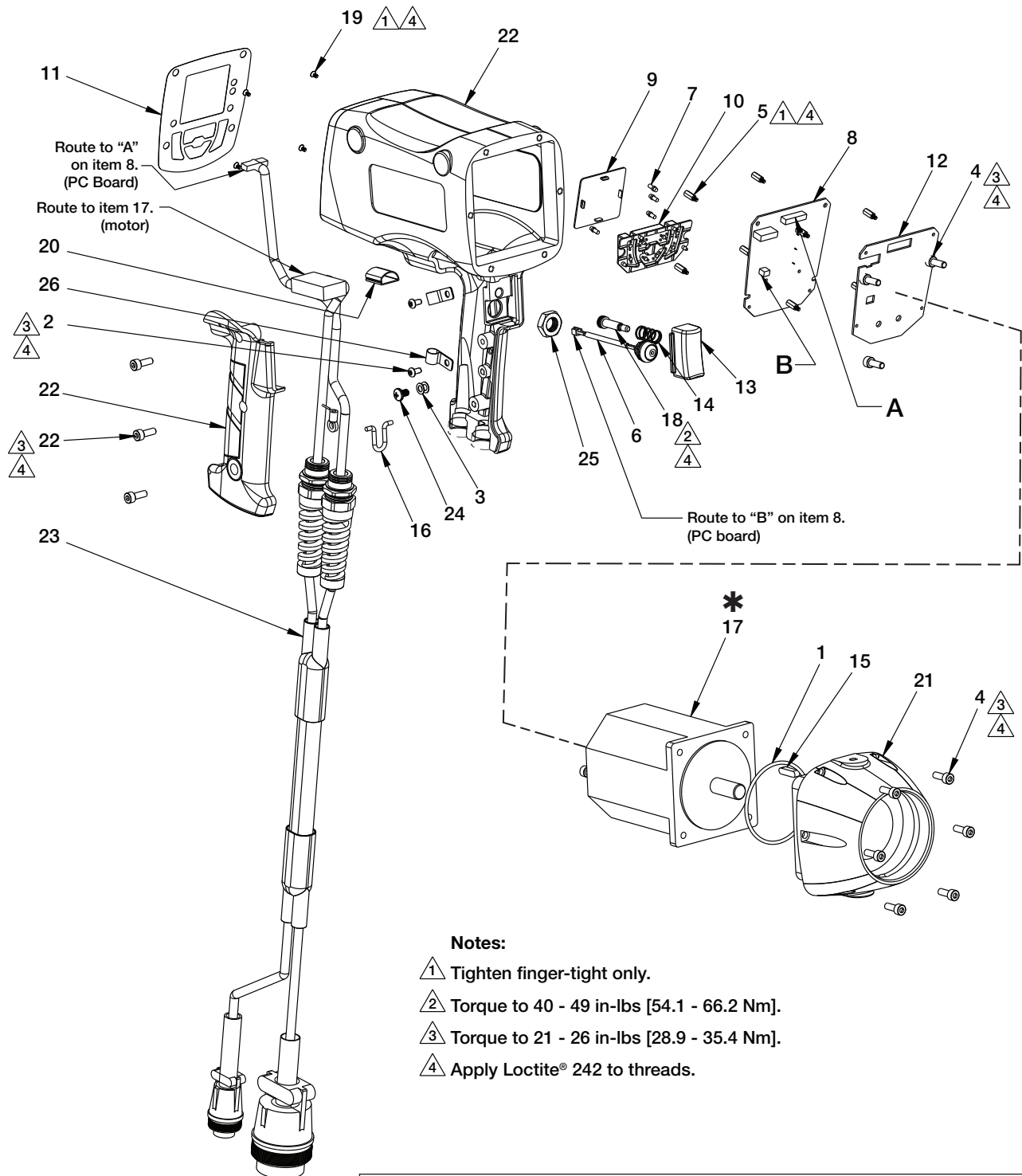
| Item | Part Number | Qty. | Description |
|-------------|--------------------|-------------|------------------------------|
| 1 | ☆ B1007016 | 35 | Ball, 1/4" diameter |
| 2 | ☆ BF3804027A | 1 | Set Screw |
| 3 | CAA1100028-4C | 1 | Eyebolt |
| 4 | + DD4517026 | 4 | Decal, Brand ETW |
| 5 | ◆ (See Fig. 3) | 1 | Assembly, Gear Box |
| 6 | *◆ DD5340900SR | 1 | Reaction Arm (standard) |
| 7 | DD5352026 | 1 | Decal, ETW1000, Serial No. |
| 8 | ☆ DD5356108 | 1 | Washer, Delrin, ETW |
| 9 | DD5357229 | 1 | Pinion, Input, ETW |
| 10 | + (See Fig. 2) | 1 | Assembly, Motor and Housing, |
| 11 | *◆ DD5448600SR | 1 | Set Screw, Reaction Arm |

Notes:

- ◆ Item included in service assembly TW1000RSR, Gear Box Assembly with Reaction Arm.
- * Item included in service assembly RATWS, Standard Reaction Arm.
- ☆ Item included in service assembly DD5356108SR, Swivel Hardware Kit.
- + Item included in service assembly DD5388900SR, Electric Motor Service Assembly.

NOTICE: Except as indicated, items included in service assemblies are not sold separately.

Fig. 2, Electric Motor and Keypad Display



Notes:

- ▲1 Tighten finger-tight only.
- ▲2 Torque to 40 - 49 in-lbs [54.1 - 66.2 Nm].
- ▲3 Torque to 21 - 26 in-lbs [28.9 - 35.4 Nm].
- ▲4 Apply Loctite® 242 to threads.

*** NOTICE:** Recalibration of wrench and control box is required if electric motor (item #17) is replaced. Firmware version of control box must match firmware version of wrench. See Enerpac Authorized Service Center for additional information.

Repair Parts List, Fig. 2

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| Item | Part Number | Qty. | Description |
|------|----------------|------|---|
| 1 | Ⓢ B1279503 | 1 | O-Ring (service only) |
| 2 | Ⓢ CBE413028-1E | 2 | Screw, BHCS, M4 x 8MM LG GR 10.9 Zinc |
| 3 | CCE1050108-6A | 2 | Lock Washer (Bulkhead) |
| 4 | Ⓢ DD3659028 | 14 | Screw, SHC, M5 x 0.8 x 14 Stainless Steel |
| 5 | Ⓢ ① DD3752111 | 9 | Standoff |
| 6 | ▲ ② DD3793960 | 1 | Switch Wires |
| 7 | ① DD3969186 | 4 | Light Pipe (display) |
| 8 | * ① DD3970827 | 1 | Printed Circuit Board w/display (includes firmware) |
| 9 | ① DD3971354 | 1 | Lens (display) |
| 10 | DD3972375 | 1 | Keypad (display) |
| 11 | ① DD3973026 | 1 | Label (display) |
| 12 | ① DD3974689 | 1 | Shield (display) |
| 13 | ② DD3977144 | 1 | Trigger |
| 14 | ② DD3979110 | 1 | Spring, Trigger |
| 15 | Ⓢ DD3980251 | 1 | Square Key, 5mm x 20mm, Rounded Ends |
| 16 | Ⓢ DD3982117 | 1 | Hanger |
| 17 | DD3985259 | 1 | Motor, Electric |
| 18 | ② DD4109028 | 1 | Screw, Shoulder, .25 Dia x .75 L, 10-24 |
| 19 | Ⓢ ① DD4519028 | 5 | Screw, Flat Head Cap, M2.50 x .45 x 5 |
| 20 | Ⓢ DD5119017 | 1 | Cable Holder, 1/2" |
| 21 | DD5165101 | 1 | Adapter Plate |
| 22 | DD5351900 | 1 | Housing |
| 23 | DD5421960 | 1 | Cable, Servo Power and Control |
| 24 | Ⓢ DD5679028 | 3 | Screw, M5 x 8 Philips Pan Hd |
| 25 | ② DD5680028 | 1 | Nut, M12 x 1.75 |
| 26 | Ⓢ F100299-27 | 3 | Clamp, Cable |

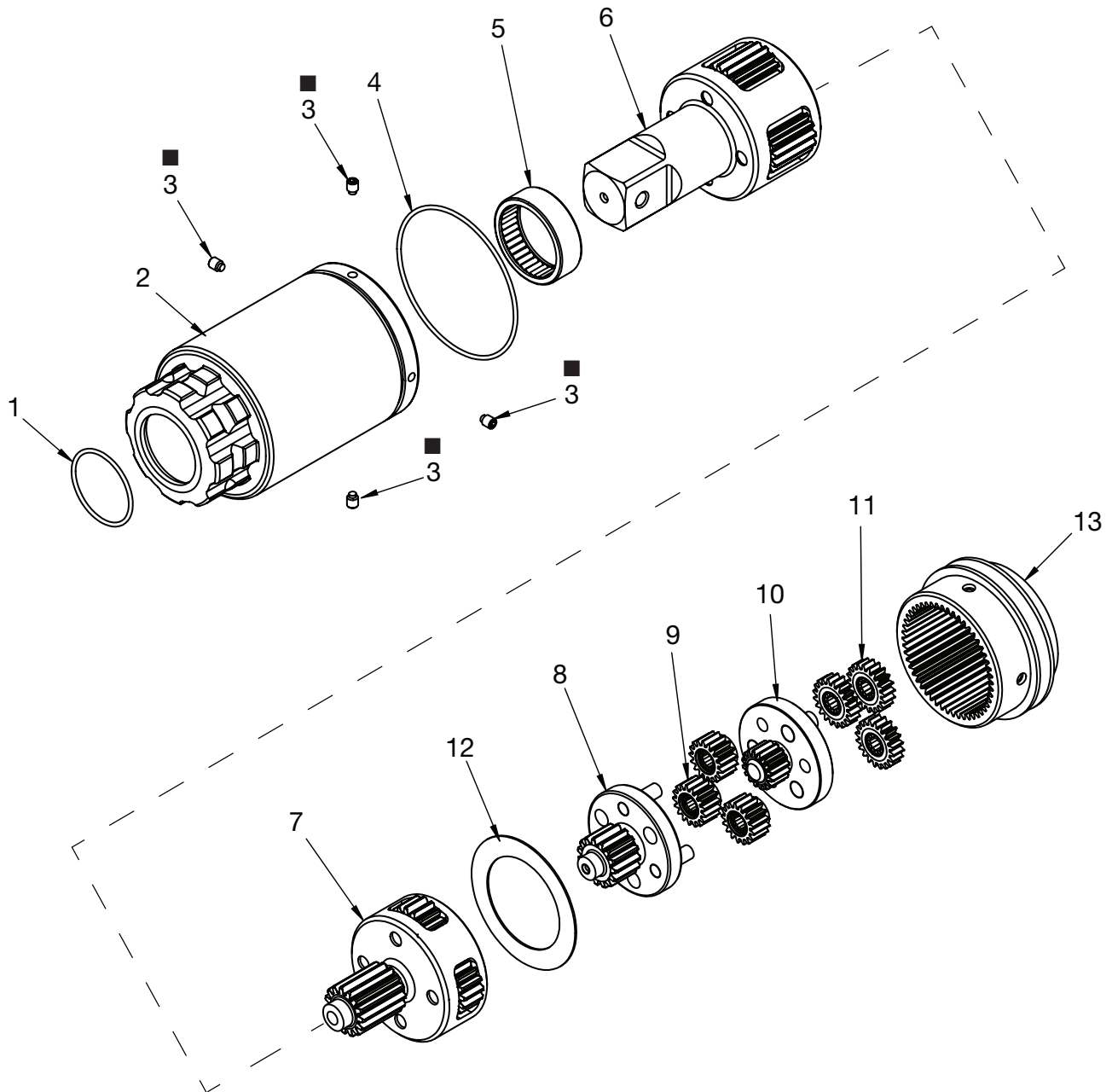
Notes:

- ① Item included in DD5963900 PCB Repair Kit ETW.
- ② Item included in DD5964900 Trigger Repair Kit ETW.
- Ⓢ Item included in DD5965900 Hardware Repair Kit ETW - Handle Assembly.
- ▲ Item included in a repair kit but may also be ordered separately.
- * Firmware version of wrench must match firmware version of control box. Contact Enerpac Authorized Service Center for additional information.

NOTICE: Except as indicated, items included in repair kits are not sold separately.

Fig. 3, Gear Box Assembly

NOTICE: Recalibration of wrench and control box is required if any gear box components are replaced. See Enerpac Authorized Service Center for additional information.



NOTICE: During reassembly, be sure that all gear teeth and bearing interfaces are coated with Moly grease. See Fig. 3 parts list, item 14.

■ **ITEM 3:** Apply Loctite 242 to setscrew threads. Install setscrew and tighten it until snug. Then, back-off setscrew 1/4 turn.

Repair Parts List, Fig. 3

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| Item | Part Number | Qty. | Description |
|------|---------------------------|------|--|
| 1 | ❖★◆ (not sold separately) | 1 | O-Ring, Small |
| 2 | ▲★◆ DD5440600SR | 1 | Gear Housing, TW1000 |
| 3 | ❖★◆ (not sold separately) | 4 | Set Screw |
| 4 | ❖★◆ (not sold separately) | 1 | O-Ring, Large |
| 5 | ▲★◆ DD5458600SR | 1 | Needle Roller Bearing, Drive Stage, TW1000 |
| 6 | ▲★◆ DD5441600SR | 1 | Assembly, Drive Stage, TW1000 |
| 7 | ▲★◆ DD5447600SR | 1 | Gear Carrier, Third Stage, TW1000 |
| 8 | ▲★◆ DD5445600SR | 1 | Gear Carrier, Second Stage, TW1000 |
| 9 | ▲❖★◆ DD5446600SR | 1 | Planetary Gears, Second Stage, TW1000 |
| 10 | ▲★◆ DD5443600SR | 1 | Gear Carrier, First Stage, TW1000 |
| 11 | ▲❖★◆ DD5444600SR | 1 | Planetary Gears, First Stage, TW1000 |
| 12 | ❖★◆ (not sold separately) | 1 | Thrust Washer |
| 13 | ▲★◆ DD5442600SR | 1 | Ring Gear, TW1000 |
| 14 | ❖ DD5587600SR | A/R | Grease, Moly, 16 oz, 454 g |

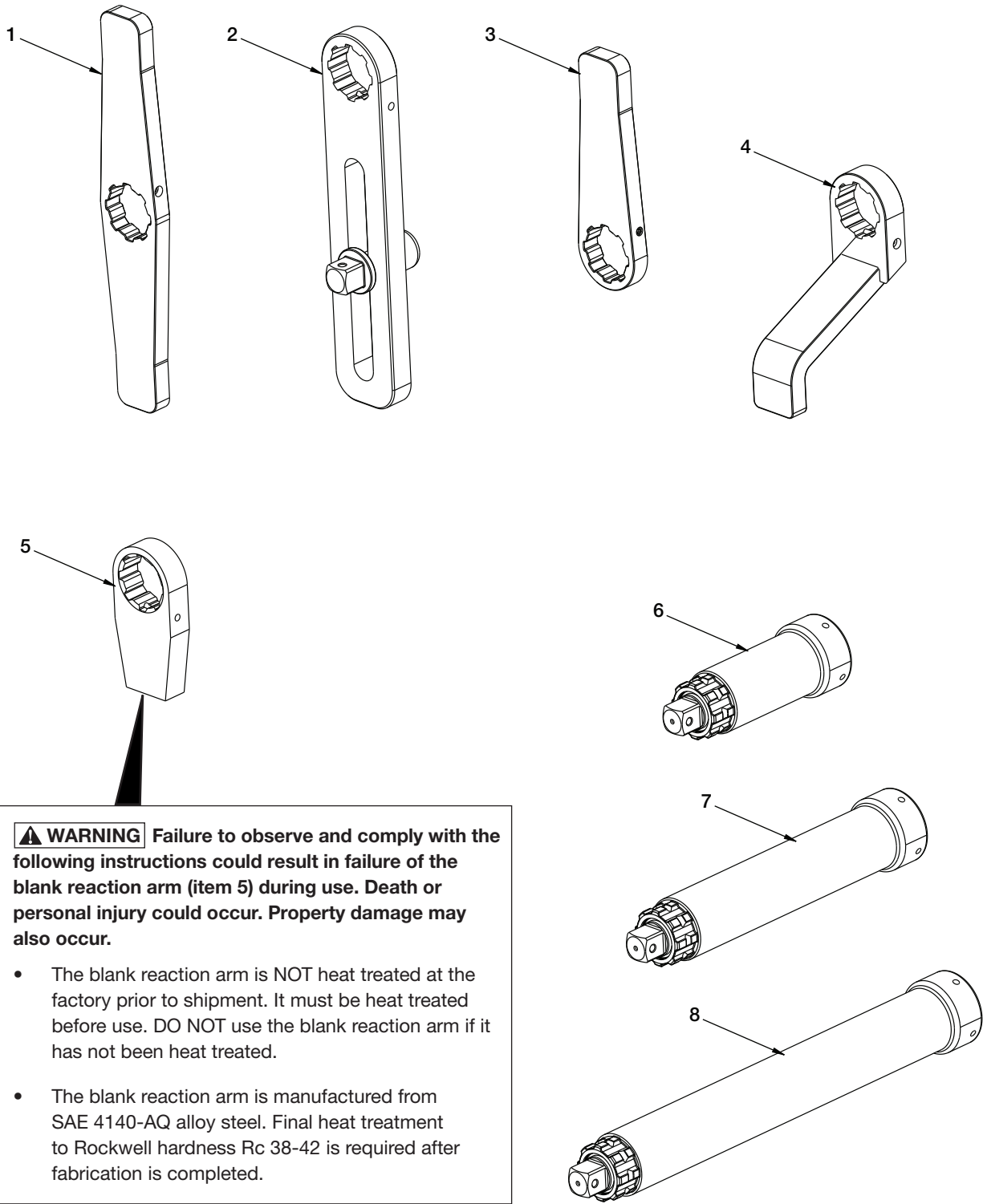
Notes:

- ❖ Item included in MKTW1000K Maintenance Kit.
- ★ Item included in service assembly TW1000SR, Replacement Gear Box Assembly.
- ◆ Item included in service assembly TW1000RSR, Replacement Gear Box Assembly with Reaction Arm.
(See Figure 1 for reaction arm and set screw)
- ❖ Item includes set of three planetary gears with bearings.
- ❖ During reassembly, be sure that all gear teeth and bearing interfaces are coated with Molybdenum Disulfide grease.
- ▲ Item included in a service assembly, but may also be ordered separately.

A/R = Order as required.

NOTICE: Except as indicated, items included in repair kits and service assemblies are not sold separately.

Fig. 4A, Accessories



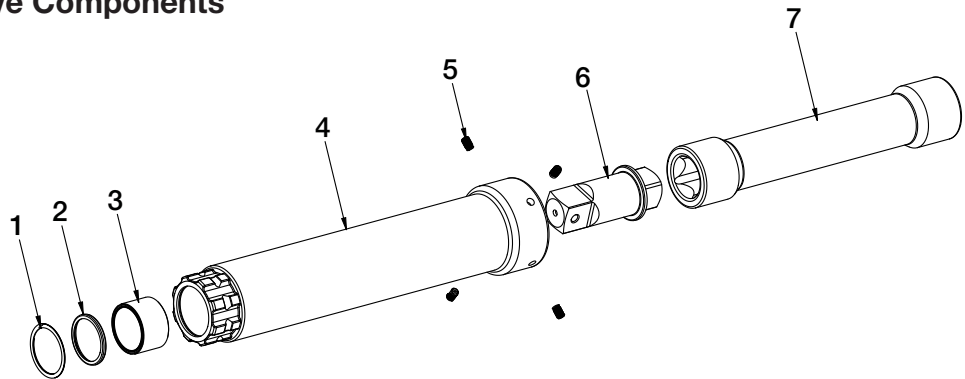
⚠ WARNING Failure to observe and comply with the following instructions could result in failure of the blank reaction arm (item 5) during use. Death or personal injury could occur. Property damage may also occur.

- The blank reaction arm is NOT heat treated at the factory prior to shipment. It must be heat treated before use. DO NOT use the blank reaction arm if it has not been heat treated.
- The blank reaction arm is manufactured from SAE 4140-AQ alloy steel. Final heat treatment to Rockwell hardness Rc 38-42 is required after fabrication is completed.

| Repair Parts List, Fig. 4A | | | | L4086 |
|----------------------------|-------------|------|---------------------------------|-------|
| Item | Part Number | Qty. | Description | |
| 1 | DSATWS | 1 | Reaction Arm, Straight, Double | |
| | | 1 | Screw, 1/4 - 28 x 2" long | |
| | | 1 | Nylon Hex Nut, 1/4 - 28 | |
| 2 | SLRATWS | 1 | Reaction Arm, Sliding | |
| | | 1 | Screw, 1/4 - 28 x 2 - 1/4" long | |
| | | 1 | Nylon Hex Nut, 1/4 - 28 | |
| 3 | SRATWS | 1 | Reaction Arm, Straight | |
| | | 1 | Screw, 1/4 - 28 x 2" long | |
| | | 1 | Nylon Hex Nut, 1/4 - 28 | |
| 4 | ERATWS | 1 | Reaction Arm, Extended | |
| | | 1 | Screw, 1/4 - 28 x 2" long | |
| | | 1 | Nylon Hex Nut, 1/4 - 28 | |
| 5 | BLTWS | 1 | Reaction Arm, Blank | |
| | | 1 | Screw, 1/4 - 28 x 2" long | |
| | | 1 | Nylon Hex Nut, 1/4 - 28 | |
| 6 | ED6TWS | 1 | Extended Drive, 6" long | |
| | | 1 | Screw, 1/4 - 28 x 3/8" long | |
| 7 | ED12TWS | 1 | Extended Drive, 12" long | |
| | | 1 | Screw, 1/4 - 28 x 3/8" long | |
| 8 | ED18TWS | 1 | Extended Drive, 18" long | |
| | | 1 | Screw, 1/4 - 28 x 3/8" long | |

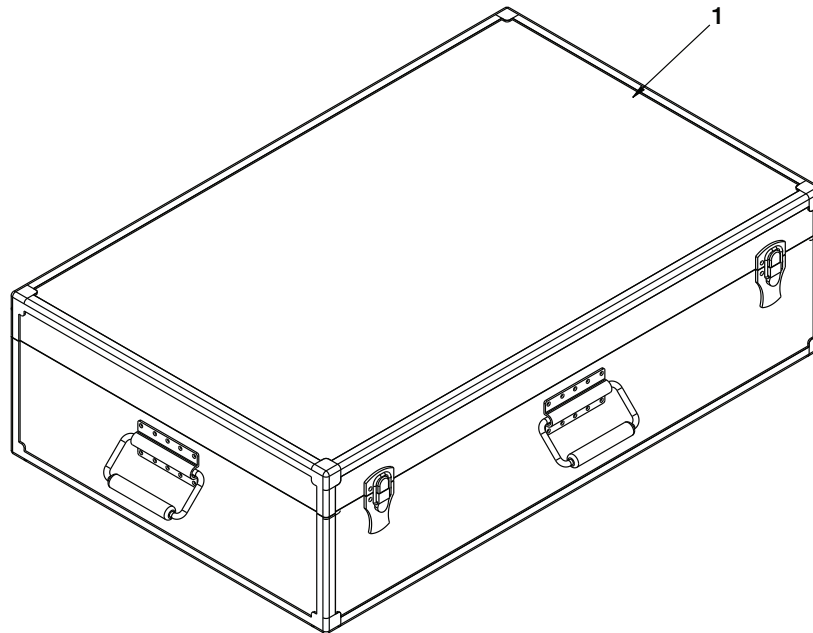
NOTICE: Mounting hardware not shown. See Figure 1 for standard reaction arm.

Fig. 4B, Extended Drive Components



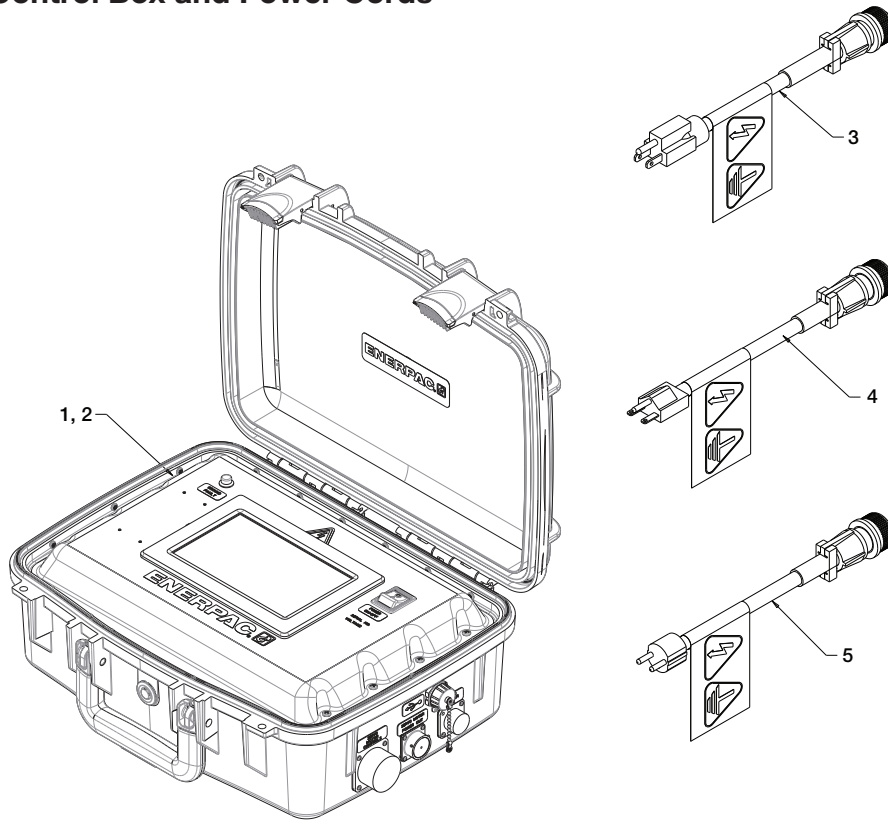
| Repair Parts List, Fig. 4B | | | | L4086 | |
|----------------------------|---------------------------|-------------|-------------|-------|-----------------------------|
| Item | Drive Model / Part Number | | | Qty. | Description |
| | ED6TWS | ED12TWS | ED18TWS | | |
| 1 | DD6632249SR | DD6632249SR | DD6632249SR | 1 | Snap Ring |
| 2 | DD6633503SR | DD6633503SR | DD6633503SR | 1 | O-Ring |
| 3 | DD6636039SR | DD6636039SR | DD6636039SR | 1 | Bushing |
| 4 | DD6621001SR | DD6622001SR | DD6623001SR | 1 | Housing |
| 5 | DD6638027SR | DD6638027SR | DD6638027SR | 1 | Set Screw (package of four) |
| 6 | DD6560229SR | DD6560229SR | DD6560229SR | 1 | Square Drive |
| 7 | DD6626104SR | DD6627104SR | DD6628104SR | 1 | Drive Extension |

Fig. 5, Wrench Protective Storage Case



| Repair Parts List, Fig. 5 | | | L4086 |
|---------------------------|-------------|------|-------------------------|
| Item | Part Number | Qty. | Description |
| 1 | DD4727530 | 1 | Protective Storage Case |

Fig. 6, Control Box and Power Cords

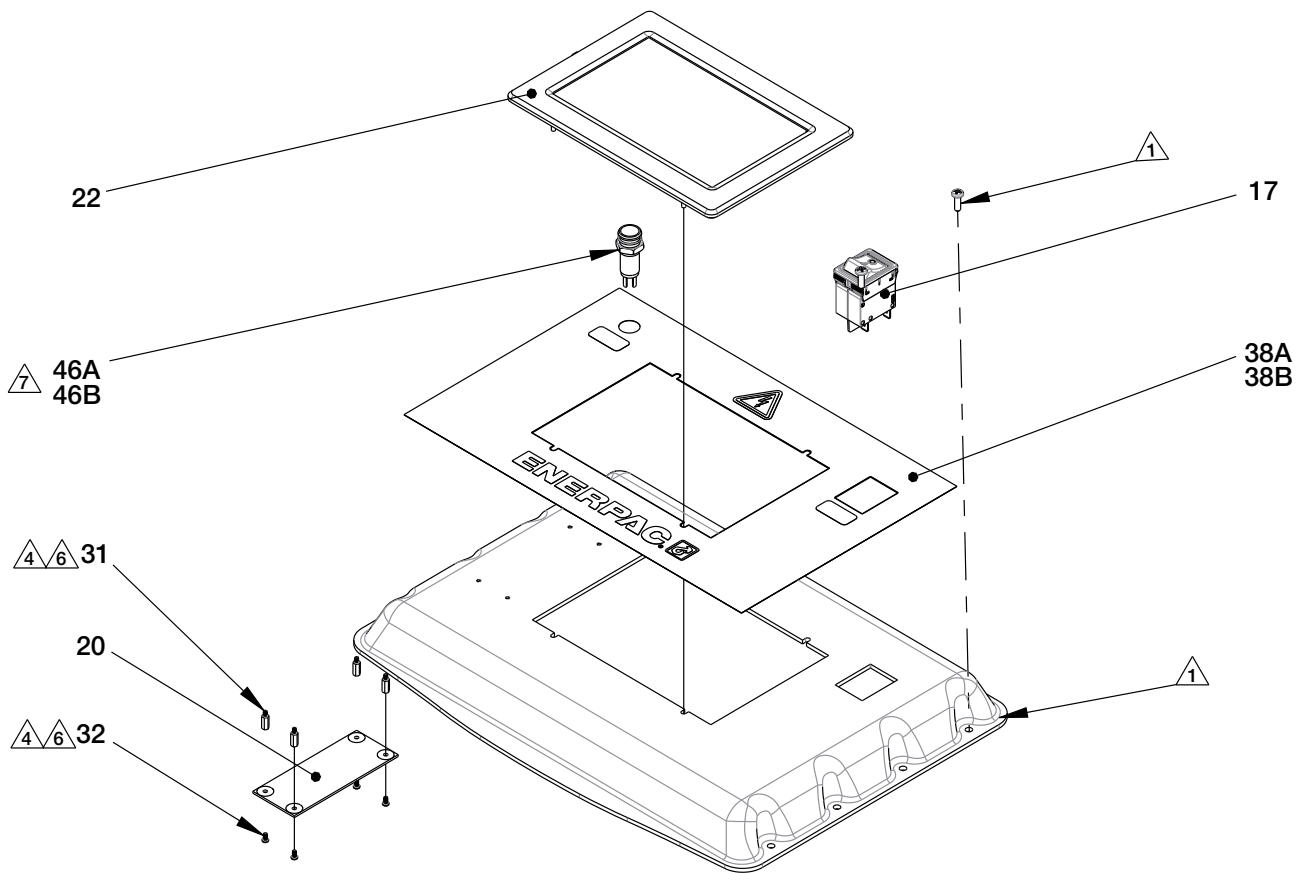


| Repair Parts List, Fig. 6 (115V Control Box) | | | | L4086 |
|--|-------------|------|---|-------|
| Item | Part Number | Qty. | Description | |
| 1 | DD5349900 | 1 | Control Box, Electrical, 115 volt | |
| 3 | DD3718960 | 1 | Power Cord, 115V, 60Hz (for use only with item 1) | |

| Repair Parts List, Fig. 6 (230V Control Box) | | | | L4086 |
|--|-------------|------|---|-------|
| Item | Part Number | Qty. | Description | |
| 2 | DD5350900 | 1 | Control Box, Electrical, 230 volt | |
| 4 | DD3719960 | 1 | Power Cord, 230V, 50Hz (for use only with item 2) | |
| 5 | DD3720960 | 1 | Power Cord, 230V, 60Hz (for use only with item 2) | |

NOTICE: Control box AND wrench must be recalibrated when a new control box is ordered. Firmware version of control box must match firmware version of wrench. See Enerpac Authorized Service Center for additional information.

Fig. 7A, Control Box Assembly - Touchscreen Panel



Notes:

- 1 Item included with control box case. See Figure 7B for additional information.
- 4 Tighten item 31 finger tight.
- 6 Apply Loctite® 242 to threads.
- 7 Apply heat shrink tubing over electrical connections.

NOTICE:

Recalibration of wrench and control box is required:

- *When the electric motor is replaced.*
- *When any gear box components are replaced.*
- *When the control box is replaced.*

Firmware version of control box must match firmware version of wrench.

See Enerpac Authorized Service Center for additional information.

Repair Parts List, Fig. 7A

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| Item | Part Number | Qty. | | Description |
|------|---------------|-------------|-------------|--|
| | | 115V Models | 230V Models | |
| 17 | DD3717372 | 1 | 1 | Switch, Main Power |
| 20 | ⑤ DD3725827 | 1 | 1 | Printed Circuit Board (Intermediate) |
| 22 | * ⑥ DD3731380 | 1 | 1 | Touchscreen Panel, Computer (includes microSD memory card - see Fig. 7F, item #66) |
| 31 | ⑤ DD3752111 | 4 | 4 | Standoff |
| 32 | ⑤ DD3753028 | 4 | 4 | Screw, BHSC, M2.5 x .45 x 5 |
| 38A | DD5985026 | 1 | - | Decal, Control Box Panel, 115V |
| 38B | DD5398026 | - | 1 | Decal, Control Box Panel, 230V |
| 46A | DD6017380 | 1 | - | LED, Dual Color |
| 46B | DD5984380 | - | 1 | LED, Dual Color |

Notes:

⑤ Item included in DD5967900 Intermediate PCB Repair Kit ETW.

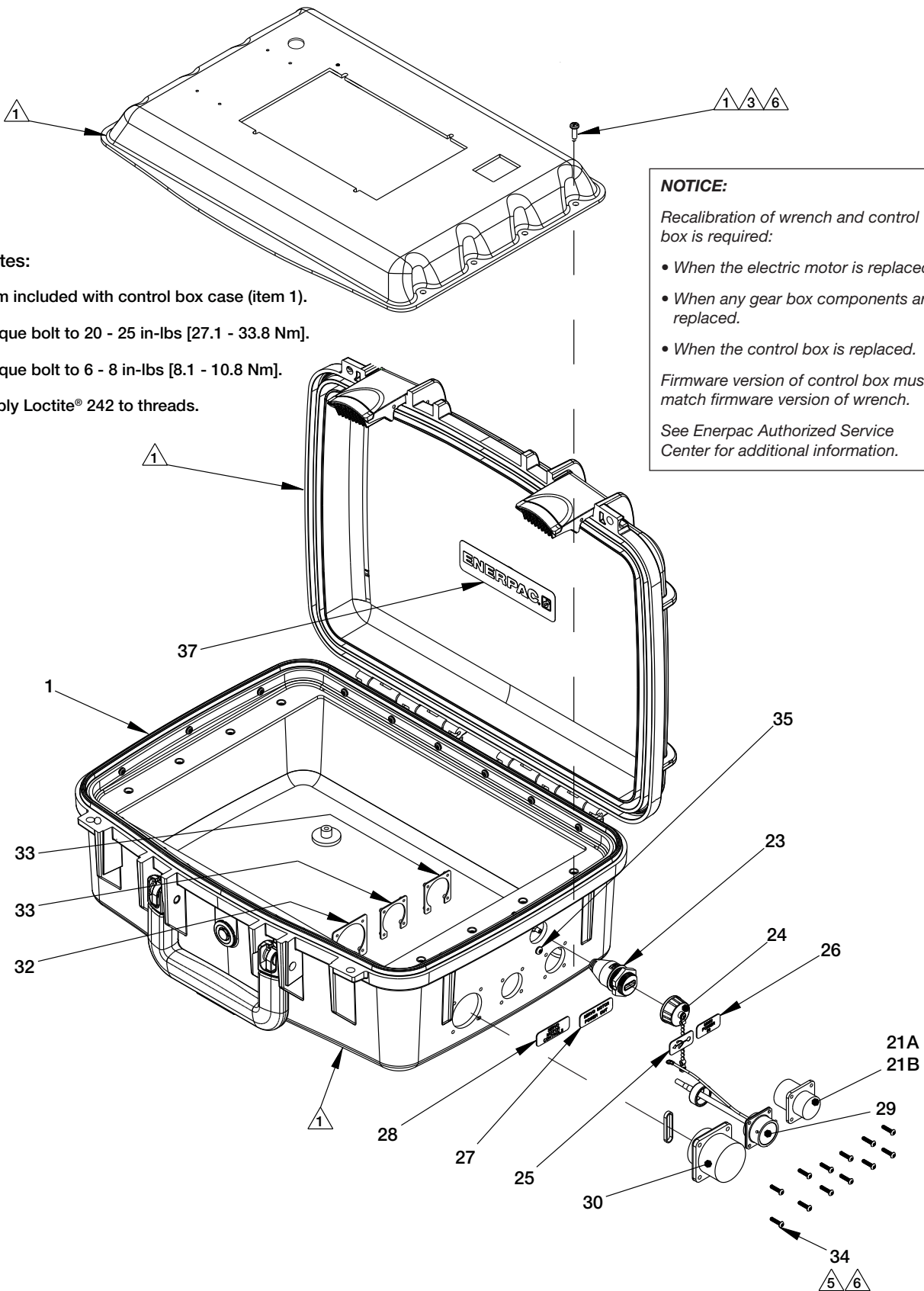
⑥ Item included in DD5968900 Touchscreen Repair Kit ETW.

▲ Item included in a service assembly, but may also be ordered separately.

* Firmware version of control box must match firmware version of wrench. Always check wrench firmware version whenever replacing the touchscreen panel or the microSD memory card. Contact Enerpac Authorized Service Center for additional information.

NOTICE: Except as indicated, items included in repair kits and service assemblies are not sold separately.

Fig. 7B, Control Box Assembly - Case, Cover and Side-Mounted Connections



Notes:

- ⚠ 1 Item included with control box case (item 1).
- ⚠ 3 Torque bolt to 20 - 25 in-lbs [27.1 - 33.8 Nm].
- ⚠ 5 Torque bolt to 6 - 8 in-lbs [8.1 - 10.8 Nm].
- ⚠ 6 Apply Loctite® 242 to threads.

NOTICE:

Recalibration of wrench and control box is required:

- When the electric motor is replaced.
- When any gear box components are replaced.
- When the control box is replaced.

Firmware version of control box must match firmware version of wrench.

See Enerpac Authorized Service Center for additional information.

Repair Parts List, Fig. 7B

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| Item | Part Number | Qty. | | Description |
|------|-------------------|-------------|-------------|--|
| | | 115V Models | 230V Models | |
| 1 | DD5274530 | 1 | 1 | Case, Control Box (includes lid and top panel) |
| 21A | ⑦ DD3726960 | 1 | - | Connector and Cable Assy., 115V Power In |
| 21B | ⑪ DD3801960 | - | 1 | Connector and Cable Assy., 230V Power In |
| 23 | ⑧ DD3733380 | 1 | 1 | USB Socket and Cable Assembly |
| 24 | ⑧ DD3734380 | 1 | 1 | Cover, USB Port (with ball chain) |
| 25 | ⑧ DD3738026 | 1 | 1 | Decal, Data Output |
| 26 | ⑪ ⑦ DD3739026 | 1 | 1 | Decal, Main Power In |
| 27 | ⑥ DD3740026 | 1 | 1 | Decal, Servo Motor Power Out |
| 28 | ⑤ DD3741026 | 1 | 1 | Decal, Servo Motor Controls |
| 29 | ⑥ DD3746960 | 1 | 1 | Connector and Cable Assy., Servo Motor Power Out |
| 30 | ⑤ DD3747960 | 1 | 1 | Connector and Cable Assy., Servo Motor Controls |
| 32 | ⑤ DD6254021 | 1 | 1 | Nut Plate, #4-40, Servo Motor Controls |
| 33 | ⑪ ⑦ ⑥ DD6255021 | 2 | 2 | Nut Plate, #4-40, Servo Motor Power Out & Control Box Power In |
| 34 | ⑪ ⑦ ⑥ ⑤ DD6252028 | 12 | 12 | Screw, BHCS, #4-40 x 1/2 |
| 35 | ⑧ DD3758028 | 1 | 1 | Screw, Thread Forming #6-19 |
| 37 | DD4971026 | 2 | 2 | Decal, Control Box, Enerpac |

Notes:

- ⑤ Item included in DD5977900 Data Cable Connector Repair Kit ETW.
- ⑥ Item included in DD5978900 Power Cable Connector Repair Kit ETW.
- ⑦ Item included in DD5979900 Mains Power Connector Repair Kit 115V ETW.
- ⑧ Item included in DD5980900 USB Cable Repair Kit ETW.
- ⑪ Item included in DD6055900 Mains Power Connector Repair Kit 230V ETW.

NOTICE: Except as indicated, items included in repair kits and service assemblies are not sold separately.

Fig. 7C, Control Box Major Components, 115V Models

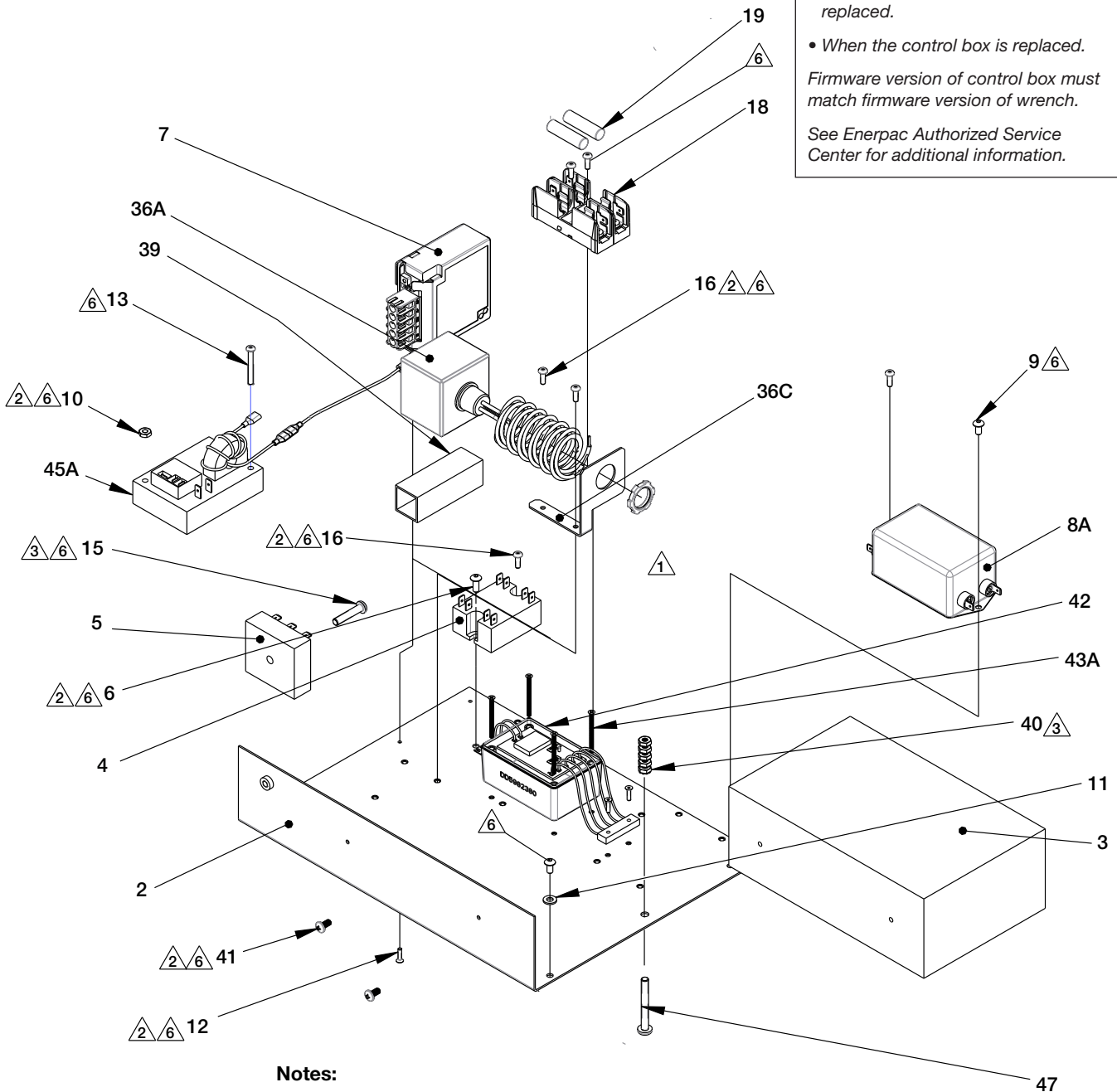
NOTICE:

Recalibration of wrench and control box is required:

- When the electric motor is replaced.
- When any gear box components are replaced.
- When the control box is replaced.

Firmware version of control box must match firmware version of wrench.

See Enerpac Authorized Service Center for additional information.



Notes:

- △1 See Figures 7E and 7F for additional components.
- △2 Torque bolt to 10 - 12 in-lbs [13.5 - 16.2 Nm].
- △3 Torque bolt to 20 - 25 in-lbs [27.1 - 33.8 Nm].
- △5 Torque bolt to 6 - 8 in-lbs [8.1 - 10.8 Nm].
- △6 Apply Loctite® 242 to threads of all threaded fasteners.

**115V
MODELS**

Repair Parts List, Fig. 7C

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| Item | Part Number | Qty. | Description |
|-------------|--------------------|-------------|--|
| 2 | DD5275101 | 1 | Subplate |
| 3 | ⑨ DD3724380 | 1 | Servo Drive |
| 4 | ① DD5285380 | 1 | Relay, Solid State Dual Pole |
| 5 | ⑧ DD5286380 | 1 | Timer, 24V |
| 6 | ① BF1906728 | 1 | Screw, #10-32 x .38 |
| 7 | ⑦ DD3730380 | 1 | Power Supply, 24 Volt DC |
| 8A | ② DD3781380 | 1 | EMI Filter, 20 Amps (for 115V) |
| 9 | ② BF1904728 | 2 | Screw, #10-32 x .25 |
| 10 | ⑩ B1018121 | 1 | Nut, Hex #10-32 |
| 11 | B1085108X | 1 | Washer, Flat, #10, Zinc Plated |
| 12 | ⑦ CBA317028-1B | 4 | Screw, Hex, Socket, CSK Head M3 x 12 |
| 13 | ⑩ CBA427028-1E | 1 | Capscrew, Button Hd M4.0 x 0.7 x 35.0 |
| 15 | ⑧ CBA625028-1E | 1 | Capscrew, Button Hd M6 x 30mm |
| 16 | ⑨④②① CCA417028-1E | 6 | Capscrew, Button Hd M4 x M7 x12 |
| 18 | ④ DD3721378 | 1 | Fuse Block, 2 Pole |
| 19 | ▲④ DD3722378 | 2 | Fuse, 10 Amp |
| 36A | ▲⑨ DD3768380 | 1 | Surge Suppressor, 115V |
| 36C | ⑨ DD3769380 | 1 | Bracket, Mounting |
| 39 | DD5407380 | 1 | Wire Duct, 3.00 inch |
| 41 | ⑨ DD5682028 | 2 | Screw, BHSC, 10-32 x .375 |
| 40 | DD5681028 | 5 | Lock Nut, M6 with Tooth Washer |
| 42 | DD6104900 | 1 | Voltage Monitor Module (includes item 43A) |
| 43A | DD5983028 | 4 | Screw, Flat Head Philips, M3 x 40L |
| 45A | ⑩ DD6015960 | 1 | Ground Fault Sensor, 115V |
| 47 | DD6026028 | 1 | Screw, Pan Head, Philips, M6 x 50L |

Notes:

- ① Item included in DD5973900 SSR Repair Kit ETW.
- ② Item included in DD5974900 EMI Filter Repair Kit 115V ETW.
- ④ Item included in DD5976900 Fuse Block Repair Kit ETW.
- ⑦ Item included in DD5969900 Power Supply Repair Kit ETW.
- ⑧ Item included in DD5970900 Timer Repair Kit ETW.
- ⑨ Item included in DD5981900 Servo Drive Repair Kit ETW.
- ⑩ Item included in DD5971900 Surge Suppressor Repair Kit 115V ETW.
- ⑩ Item included in DD6516900 Ground Fault Sensor Repair Kit 115V ETW.
- ▲ Item included in a repair kit or service assembly, but may also be ordered separately.

NOTICE: Except as indicated, items included in repair kits are not sold separately.

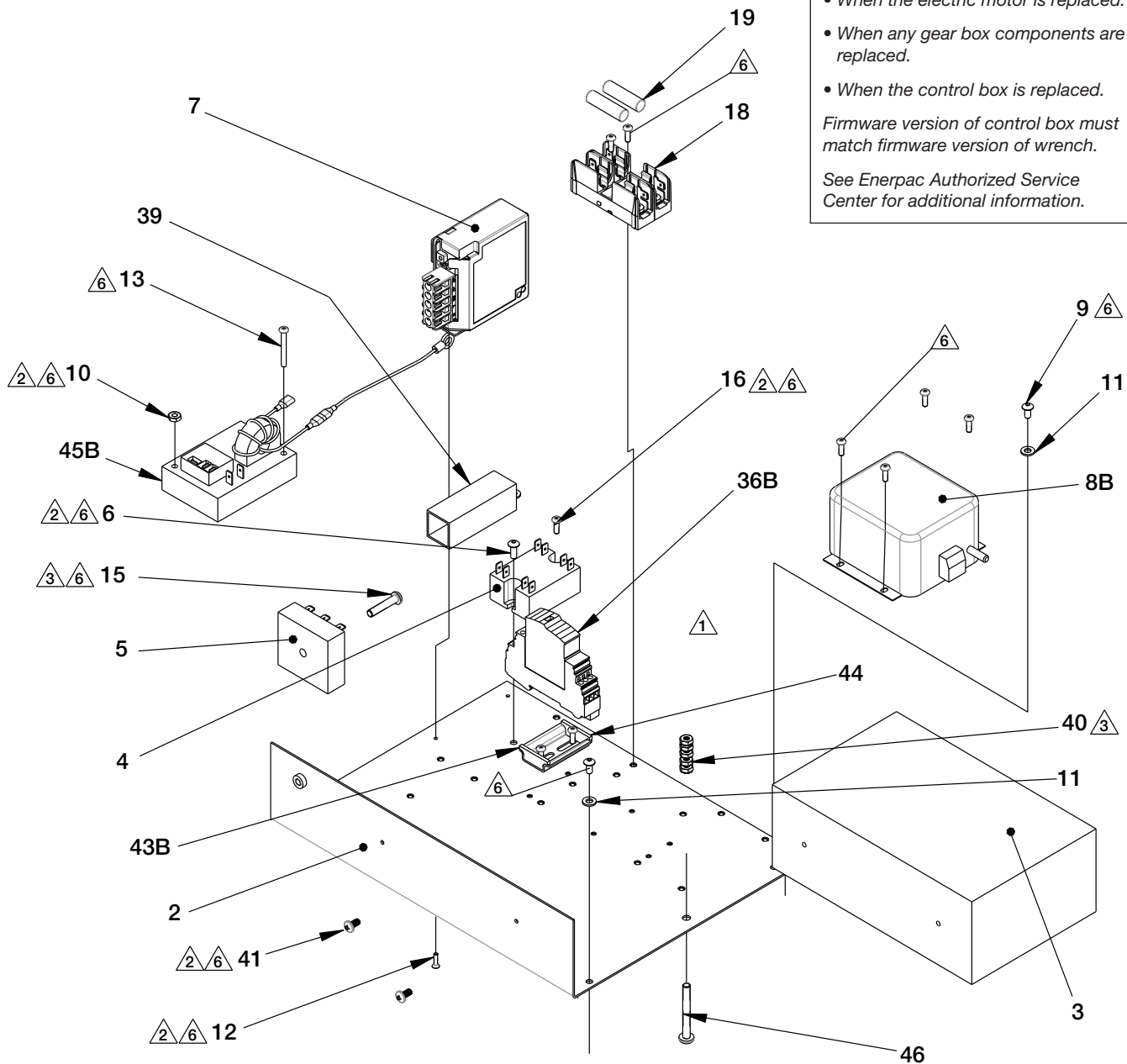
Fig. 7D, Control Box Major Components, 230V Models

NOTICE:
 Recalibration of wrench and control box is required:

- When the electric motor is replaced.
- When any gear box components are replaced.
- When the control box is replaced.

Firmware version of control box must match firmware version of wrench.

See Enerpac Authorized Service Center for additional information.



Notes:

- ① See Figures 7E and 7F for additional components.
- ② Torque bolt to 10 - 12 in-lbs [13.5 - 16.2 Nm].
- ③ Torque bolt to 20 - 25 in-lbs [27.1 - 33.8 Nm].
- ⑤ Torque bolt to 6 - 8 in-lbs [8.1 - 10.8 Nm].
- ⑥ Apply Loctite® 242 to threads of all threaded fasteners.

**230V
MODELS**

Repair Parts List, Fig. 7D

L4086

| Item | Part Number | Qty. | Description |
|-------------|--------------------|-------------|---------------------------------------|
| 2 | DD5275101 | 1 | Subplate |
| 3 | ⑨ DD3724380 | 1 | Servo Drive |
| 4 | ① DD5285380 | 1 | Relay, Solid State Dual Pole |
| 5 | ⑧ DD5286380 | 1 | Timer, 24V |
| 6 | ① BF1906728 | 1 | Screw, #10-32 x .38 |
| 7 | ⑦ DD3730380 | 1 | Power Supply, 24 Volt DC |
| 8B | ③ DD3723380 | 1 | EMI Filter, 12 Amps (for 230V) |
| 9 | BF1904728 | 2 | Screw, 10-32 x .25 |
| 10 | ⑩ B1018121 | 1 | Nut, Hex #10-32 |
| 11 | B1085108X | 2 | Washer, Flat, #10, Zinc Plated |
| 12 | ⑦ CBA317028-1B | 4 | Screw, Hex, Socket, CSK Head M3 x 12 |
| 13 | ⑩ CBA427028-1E | 1 | Capscrew, Button Hd M4.0 x 0.7 x 35.0 |
| 15 | ⑧ CBA625028-1E | 1 | Capscrew, Button Hd M6 x 30mm |
| 16 | ⑩④③① CCA417028-1E | 9 | Capscrew, Button Hd M4 x M7 x12 |
| 18 | ④ DD3721378 | 1 | Fuse Block, 2 Pole |
| 19 | ▲④ DD3722378 | 2 | Fuse, 10 Amp |
| 36B | ▲⑩ DD3718372 | 1 | Surge Suppressor, 230V |
| 39 | DD5407380 | 1 | Wire Duct, 3.00 inch |
| 40 | DD5681028 | 5 | Lock Nut, M6 with Tooth Washer |
| 41 | ⑨ DD5682028 | 2 | Screw, BHSC, 10-32 x .375 |
| 43B | ⑩ DD6007111 | 1 | DIN Rail, 35 x 7.5 x 50L |
| 44 | ⑩ DD6008111 | 1 | End Cap, DIN Rail |
| 45B | ⑩ DD6014960 | 1 | Ground Fault Sensor, 230V |
| 46 | DD6026028 | 1 | Screw, Pan Head, Philips, M6 x 50L |

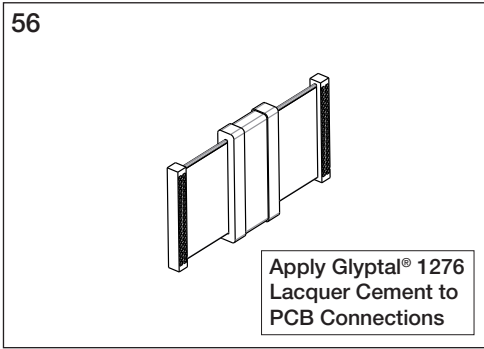
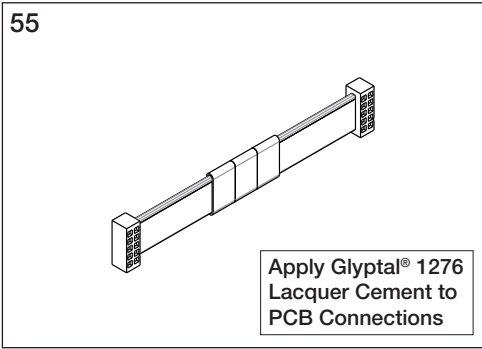
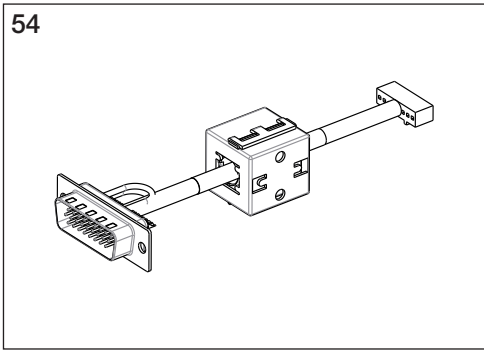
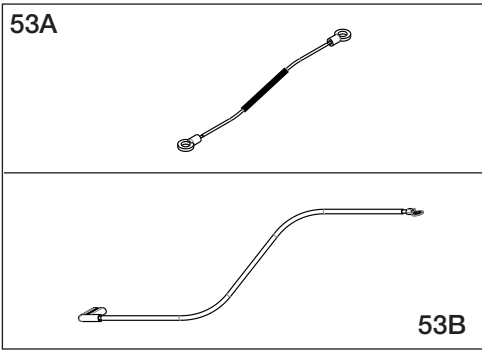
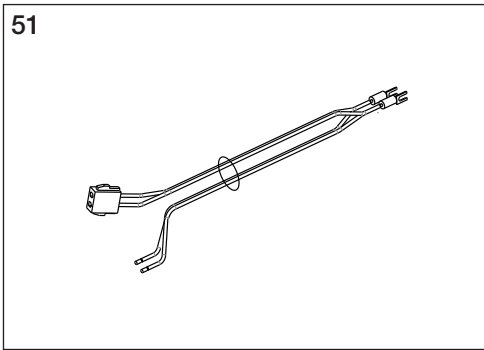
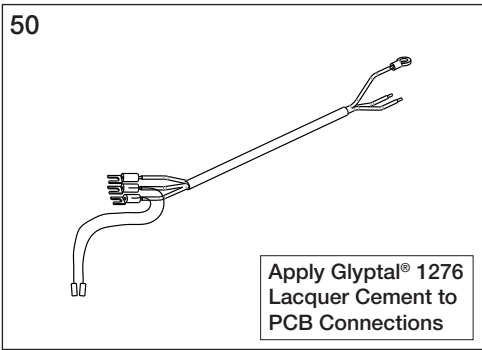
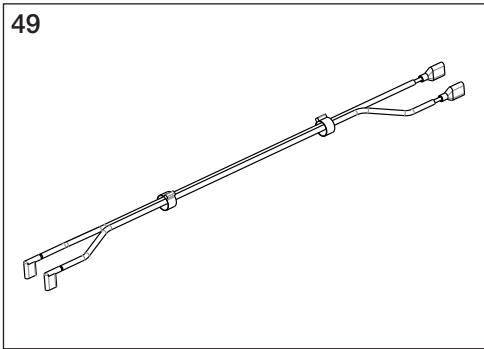
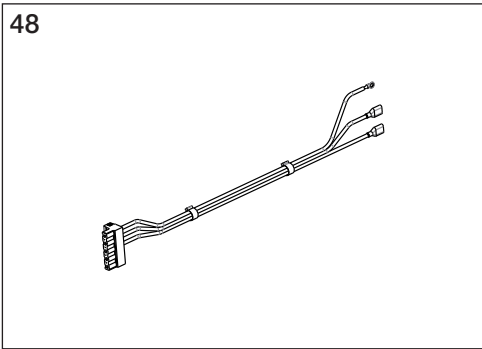
Notes:

- ① Item included in DD5973900 SSR Repair Kit ETW.
- ③ Item included in DD5975900 EMI Filter Repair Kit 230V ETW.
- ④ Item included in DD5976900 Fuse Block Repair Kit ETW.
- ⑦ Item included in DD5969900 Power Supply Repair Kit ETW.
- ⑧ Item included in DD5970900 Timer Repair Kit ETW.
- ⑨ Item included in DD5981900 Servo Drive Repair Kit ETW.
- ⑩ Item included in DD5972900 Ground Fault Sensor Repair Kit ETW.
- ⑩ Item included in DD6054900 Surge Suppressor Repair Kit 230V ETW.
- ▲ Item included in a repair kit or service assembly, but may also be ordered separately.

NOTICE: Except as indicated, items included in repair kits are not sold separately.

Fig. 7E, Additional Control Box Components

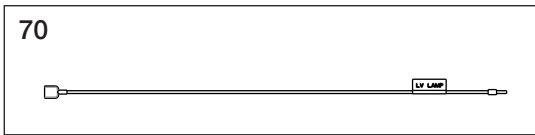
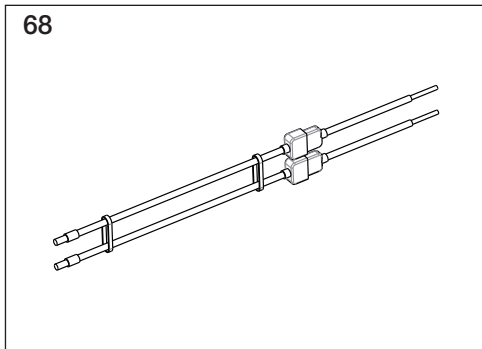
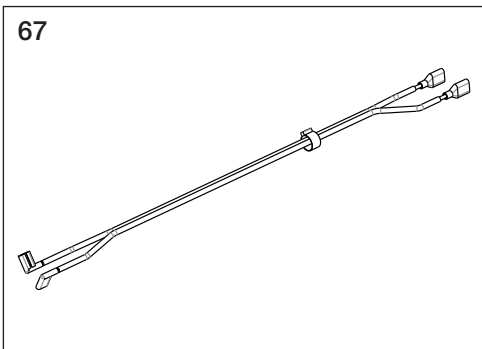
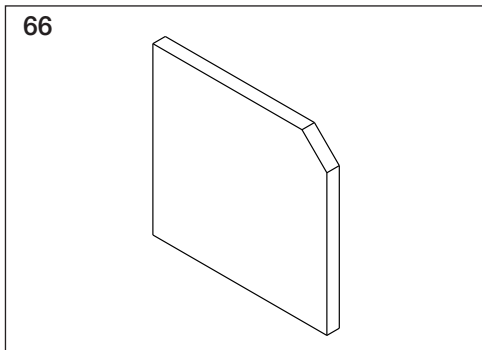
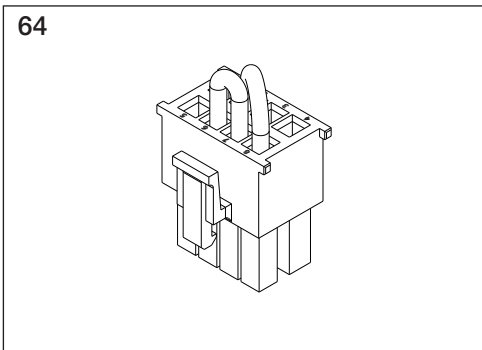
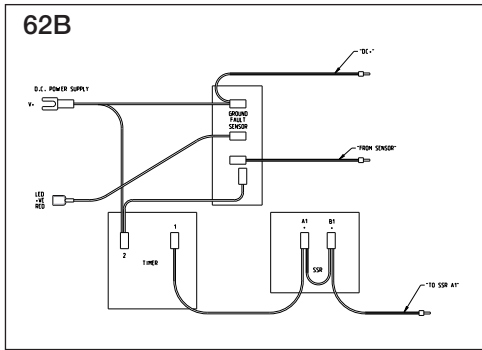
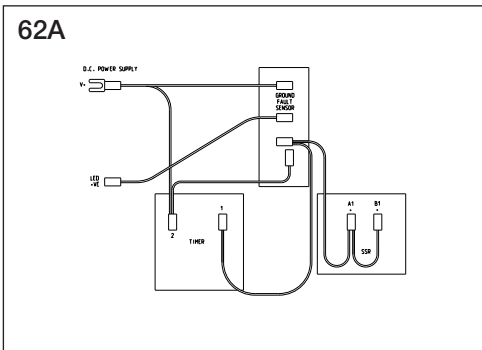
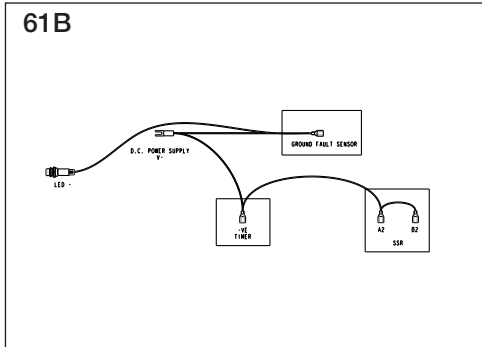
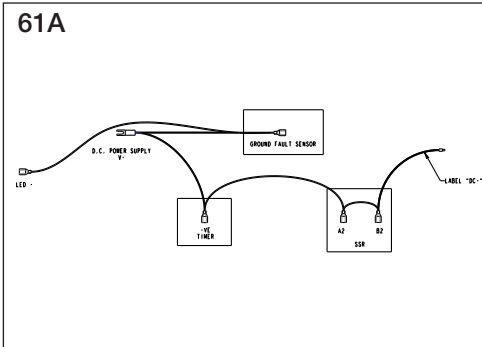
Note: See page 22 for parts list.



NOTICE: Figures 7C and 7F are provided for part identification purposes only. Items are drawn not to scale and may be larger or smaller than actual size.

Fig. 7F, Additional Control Box Components

Note: See page 22 for parts list.



Repair Parts List, Fig. 7E and 7F

L4086

| Item | Part Number | Qty. | | Description |
|------|-----------------|-------------|-------------|---|
| | | 115V Models | 230V Models | |
| 48 | DD3727960 | 1 | 1 | Power Cable 2 |
| 49 | DD3728960 | 1 | - | Power Cable 3 |
| 50 | DD3729960 | 1 | 1 | Power Cable 4 |
| 51 | DD3735960 | 1 | 1 | Power Cable 5 |
| 52 | * --- | 2 | 2 | Flag Connector, Female 1/4 Inch |
| 53A | DD3806960 | - | 1 | Ground Wire, J1 |
| 53B | DD3744960 | 1 | - | Ground Wire, J2 |
| 54 | DD3748960 | 1 | 1 | Harness, Servo Drive To Adapter PCB |
| 55 | DD3749960 | 1 | 1 | Harness, Ribbon Cable HMI COM 2 to J5 |
| 56 | DD3776960 | 1 | 1 | Flat Ribbon Cable, 40 Pin HMI |
| 57 | * --- | 11 | 12 | Wire Tie, 6" Long |
| 61A | DD6010960 | 1 | - | Wire Harness, DC Control Wires, Set 1 |
| 61B | DD5435960 | - | 1 | |
| 62A | DD6011960 | 1 | - | Wire Harness, DC Control Wires, Set 2 |
| 62B | DD5436960 | - | 1 | |
| 63 | * --- | 2 | 2 | Tie Wrap, Black, 8 Inch |
| 64 | Ⓣ DD3803380 | 1 | 1 | Safety Plug |
| 65 | * --- | 4 | 4 | Wire Tie Mount |
| 66 | * Ⓣ Ⓜ DD5675380 | 1 | 1 | Memory Card, microSD (includes firmware) |
| 67 | DD5678960 | 1 | 1 | Wire Harness |
| 69 | * --- | 1 | 2 | Pan Hd Philips Mach Screw, 4-40 x 1/4" ZP |
| 70 | DD6013960 | 1 | - | Wire Assembly, Low Voltage Lamp, 115V |

Notes:

Ⓜ Item included in DD5969900 Touchscreen Repair Kit ETW.

Ⓣ Item included in DD5981900 Servo Drive Repair Kit ETW.

Ⓜ ETW firmware program included on micro SD memory card.

* Item is not shown and is not available from Enerpac as a repair part (obtain locally).

* Firmware version of control box must match firmware version of wrench. Always check wrench firmware version whenever replacing the touchscreen panel or the microSD memory card. Contact Enerpac Authorized Service Center for additional information.

NOTICE: Except as indicated, items included in repair kits and service assemblies are not sold separately.

NOTES:

A large rectangular box with a thin black border, containing 21 horizontal lines for writing notes.

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