



Series:

PSB05-TH

PSB06-TH

(for 0.5" and 0.6" PC Strand)

- **Easy to use in the field**

The unit should leave a cut end that is even and free of burrs, at a specified dimension from the anchor face.

- **Does not pull, push or heat the strand, anchor or wedges**

It simply rotates one cutting blade in relation to another. All of this is accomplished within the confines of the unit with no external moving parts except the rotation of the clamp assembly.

- **Operation requires standard safety precaution to be adhered to,**

as any trained operator of field hydraulic equipment should be aware.

All applicable OSHA rules and standards should be applied when utilizing this device.

- **PSB05-TH for 0.5" Strand**

Is manufactured in configuration for most elevated structures.

The unit is shipped in a configuration to allow 1" of strand from the anchor face. This also allows caps on encapsulated anchors to be placed effectively.

- **PSB06-TH for 0.6" Strand**

Is manufactured in configuration for most elevated structures.

The unit is shipped in a configuration to allow 1¼" of strand from the anchor face. This also allows caps on encapsulated anchors to be placed effectively.

Cut Tendon Tails in

the Pocket —

Quickly, Safely and Flameless

1 Unpacking and Assembly



Wear protective eye wear at all times.

Remove the BatteryShear® from the travelbox in which it was shipped. Remove the 28 VDC Lithium-Ion batteries from the case. Read the battery instruction sheets carefully and make sure the chargers are set for the proper input power based on your location. Place the battery in the charger to bring the pack up to full charge, following the instructions carefully. The BatteryShear® is now ready to be used.

The following are parts shipped with the Battery Powered PocketShear® Model PSB05-TH and PSH06-TH Series:

- 1 PocketShear®
- 2 Two 28 VDC Battery Pack
- 3 One 28 VDC Battery Charger
- 4 One Carrying Case
- 5 Grease Gun
- 6 Tubes of Moly Grease (Part #385355)
- 7 Instruction Sheet

2 Safety Information

The PocketShear® is a special purpose device designed to cut the remaining tail of a stressed .5" or .6" PC strand, in the pocket, at a specific dimension from the face of the ductile iron anchor. Any other use is considered a misuse and it is the responsibility of the purchaser to ensure that this does not occur. The following are important Safety Rules:

- Only trained, qualified operators should use this device
- Cutting .5" or .6" strand shorter than 16" can cause flying debris and potentially damage the device
- Cutting .5" or .6" strand without the clamp fully engaged can cause severe damage to the unit and injury to the operator
- Wear eye protection at all times
- Do not hang off of edge of building to use this device
- NEVER PLACE HANDS OR FINGERS NEAR THE OPENING INTENDED FOR .5" or .6" PC STRAND
- Periodically check the mounting bolts on the nosepiece to make sure they are tight
- Perform cutting test (see Section 4) periodically to assure proper functioning of unit
- Do not operate unit if in conflict with other .5" or .6" PC strands

2.1 Safe Use of the PocketShear®

The .5" Model PSB05-TH Series is intended for use ONLY on .5" PC Strand that has been stressed. The .6" Model PSB06-TH Series is intended for use ONLY on .6" PC Strand that has been stressed.



Wear protective eye wear at all time.



Never place hands or fingers near the tendon or clamp during operation!

Check to make sure that the nosepiece mounting bolts are tight.

Confirm that elongations have been approved by the engineer of record prior to cutting any tendons!!

1. With the PocketShear® in its "Home" position place the unit over the tendon tail left after the stressing operation.
2. Push the nose of the PocketShear® into the pocket, pressing the nosepiece firmly on the anchor face.
3. The tendon should now protrude through the BatteryShear® unit and clamp.
 - Actuate the tool
4. When the cut is complete and tool removed from the pocket and the risk of dropping the tendon is over, remove the tendon from the rear clamp and discard according to job site criteria.

3

Charging the Batteries

When your battery powered PocketShear is first removed from the case, every effort is made to have the (2) two batteries charged and ready to use. The battery level can be determined by using the "fuel gauge" on the battery pack. If the battery is in need of charging then charge using the supplied charger for at least one hour.



CAUTION: The MET 28 VDC are the only batteries to be used on the Battery PocketShear. Use of any other type of battery pack will void the warranty and may result in damage to the unit or personal injuries.



CAUTION: *The MET 28 VDC batteries must be charged with the proper charging system. A one-hour fast charger is provided with the tool and will charge a discharged battery in approximately 1-hour. Use of any other charger will void the warranty and may damage the battery pack and cause personal injuries.*

4 LED Readout

The Battery Powered PocketShear is designed to provide feedback to the operator through a panel of three colored LED's. This panel is located below the handle on the right-side of the tool. The panel features three LED's, one RED, one GREEN and one YELLOW. These lights provide status information and also alert the operator to pending maintenance issues. Below is a list of the LED information:

- All lights flashing: Unit was powered on and is not in home position. Pull trigger and release to have unit seek home position
- Green-solid: Unit is in Home position and ready to cut
- Green-Flashing: Unit is in cutting cycle
- Yellow-solid: Grease nose piece – Press reset button two (2) seconds to continue
- Yellow – Flashing: Change fixed shear blade. Press reset button five (5) seconds to continue
- Red-Solid: Not Ready / Fault condition- Red light will be on when yellow lights are on
- Red-Flashing: Unit returning to home position



Wear protective eye wear at all time.

5 Cutting Tendons with the Battery PocketShear®

Place the Battery PocketShear over the exposed tendon tail until the nose-piece is fully into the pocket, and it is pressing up against the anchorage. Holding the Shear steady, press the trigger and hold until the Shear finished its cut, or fully rotates and starts returning. During this time, the trigger can be released and the return-cycle continues automatically.

Releasing the trigger anytime before the cutting cycle is complete will cause the tool to automatically return to the home position. Once in the home position, the tool will stop and await the next cut-cycle.

During the Auto-return part of the cycle, the RED LED will flash, indicating that the tool is returning to home. Once in the home position, the GREEN LED will light, indicating the tool is ready for the next cutting cycle.

The retention clamp in the back of the Shear will automatically retain the cut tendon. The tendon can be removed by pulling out the tendon from the back of the Shear

6 Care and Maintenance

The BatteryShear® is easy to use and intuitive to maintain once a qualified operator is properly trained on the unit.

The BatteryShear® does not require extensive maintenance. However, a few issues must be dealt with regularly in order to extend the life of the unit. Review all subsections of this heading for pertinent information.

6.1 Storage

Always store the Battery PocketShear® in the travel box in a safe, dry area that is out of traffic lanes and not near the edge of any area that could allow it to be knocked off of a ledge when stored on a job site.

The BatteryShear® should always be cleaned prior to placement in storage.

6.2 Cleaning and Lubrication

The Battery PocketShear® should be kept clean at all times. The outer surfaces are aluminum and should need only water and a clean rag to maintain.



Grease fitting for blade liubrication

All Enerpac produced units are hard-coated aluminum. Clean with a damp rag and water.

Approximately every 250 cuts the unit should be greased using the grease fitting on the nose piece. Pump injected three or

more pumps of approved Moly-fortified multi-purpose grease using the supplied grease gun. Additional grease cartridges may be ordered from the factory. This may be required more frequently if the cutting conditions are extremely dirty.

6.3 Cleaning the Clamp

The clamp will attract considerable dirt, especially in Slab-on-Grade conditions. The clamp should be cleaned regularly, based on the job site conditions.

This can be accomplished by removing the rear clamp housing and cleaning the clamp cavity, including all areas. An air hose or stiff brush can be used. The rest of the components are aluminum and should not be affected.



View of clamp housing removed.

7 Lubrication and Replacement

Shear Blade Replacement and Lubrication

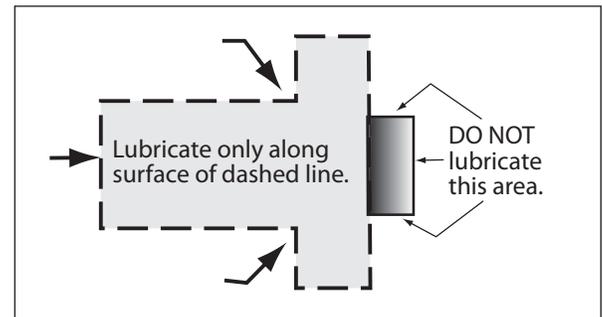
The cutting blades should be lubricated using the supplied lubrication gun every 200-300 cuts depending on the cutting conditions. This is completed by injecting 3-4 pumps of moly-fortified lube through the lubrication fitting on the nose piece. The lube will be distributed most effectively if the unit is cycled once during the lube process. The unit will need cleaning and lubrication every 1,000 to 1,250 cuts. This coincides with the need to replace the fixed shear blade.

In order to lubricate the rotating blade it is necessary to remove the nose of the unit. This is accomplished by removing the six (6) mounting bolts in the nose.

Upon removal of the nose, the wear plate is exposed. Check for excessive wear and replace if necessary prior to reassembly. The wear plate should be cleaned and lubricated, with an approved lubricant (**Moly-Fortified Multi Purpose Grease, or equivalent**), at the area of contact with the rotating blade only, prior to reassembly.

Hold the nose vertical with the base at the bottom. Gently shake the nose, up and down, to help the rotating blade fall free. The newer the unit, the tighter the fit. It may be necessary to turn the blade and pull on the square drive hub with a large pair of channel lock pliers to remove the blade. Inspect the blade for cracks and chips at the cutting surface. It is common to see slight "ding marks" at the cutting surface. This is not necessarily a cause for replacement of the rotating blade. Replace if necessary with a new blade. Over use of the rotating shear blade may cause poor tendon cutting and excess cutting forces.

Clean and lubricate the blade, with an approved lubricant, **Moly-Fortified Multi Purpose Grease, or equal**, on the surfaces shown in figure 6.3 below prior to re-assembly.



Gently tap the base of the nose flatly on a clean, dry surface to cause the small "fixed" blade to drop out of its pocket. As with the rotating blade, the fit is tight. The newer the unit, the tighter the fit. Clean and inspect the fixed blade for cracks. (**NOTE: DO NOT FORCE THE BLADE INTO THE POCKET. PROPERLY ORIENTED, THE BLADE WILL "FALL" INTO PLACE.**) Lubricate the center hole in the nose and insert the lubricated rotating blade. Orient the blade to match the opening in the nose. Re-attach the nose to the body of the BatteryShear® with the six bolts previously removed during the disassembly process.

8 Troubleshooting

This section corresponds to the FAQ on the PocketShear® website, located at: <http://www.PocketShear.com>. The latest and most complete list of troubleshooting items are listed in the FAQ on the website.

NOTE: The most common cause for problems with a Battery PocketShear® is an operator that does not fully engage the shear all the way up to the anchor.

Q The unit doesn't do anything when I press the switch.

A The battery is either not fully charged or not fully engaged into the mount.

Q What size strand can I cut with a Battery PocketShear®?

A The Model PSB05-TH will cut ½" PC strand. The Model PSB06-TH is used for cutting .6" PC strand.

Q I hear a "clicking" sound when the unit nears the end of the cut cycle or the return cycle. Is this OK?

A Yes. This is the sound of the tool shearing the strand, which sometimes shears one wire at a time.

Q The clamp seems too loose to hold the unit in the pocket.

A Clean the clamp area of debris.

Q One wire was left after I cut the PC Strand. What went wrong?

A PC Strand is 7 wire strand. This means that six wires are wrapped around one. The Battery PocketShear® actually cuts one wire at a time. Incomplete cutting cycles will leave wires uncut.

1. Put the Battery PocketShear® back in the pocket and actuate fully to cut the remaining wire.
2. Check for excessive wear on the blades. Worn blades will also cause this condition.

Q Why do I hear a different "popping" sound from time to time during the actual cutting cycle?

A The PC Strand is manufactured under the ASTM A416 specification in the U. S. and abroad. Within this

specification, there is no reference to allowable surface hardness ranges on the wires that make up the strand. Hard and soft spots occur randomly along the length of the strand.

Q Why does blade life seem better in some batches as opposed to other batches?

A All shear blades are manufactured to strict manufacturing standards. Each blade is checked through a detailed QA procedure. The variance you experience is generally due to the actual strand hardness variance. See answer above.

Q Why won't the Battery PocketShear® fit over the strand?

A There can be several factors:

1. Check to see that the strand has not been "flattened", or otherwise deformed, during the stressing operation. Generally, a pair of channel lock pliers can fix the problem.
2. Check to see that the Battery PocketShear® is fully returned to its "HOME" position. If the shear does not return to "HOME" position, it should be sent back for service.

Q Why did the nose fall off during cutting?

A There are two causes for this occurrence. Both are considered operator error.

1. Due to the repeated shock of cutting, the nose bolts on a unit can tend to work themselves loose during cutting. Check periodically for tightness of the bolts.
2. Use "Loctite" to secure bolts.
3. Cutting with loose nose bolts allows the cutting surfaces of the blades to separate. Loose bolts also leave fewer engaged threads to accomplish the designed load transfer to the housing and will lead to unit damage and/or premature failure.

FOR MORE INFORMATION: See the FAQ (Frequently Asked Questions) section of the PocketShear® website at: <http://www.PocketShear.com>

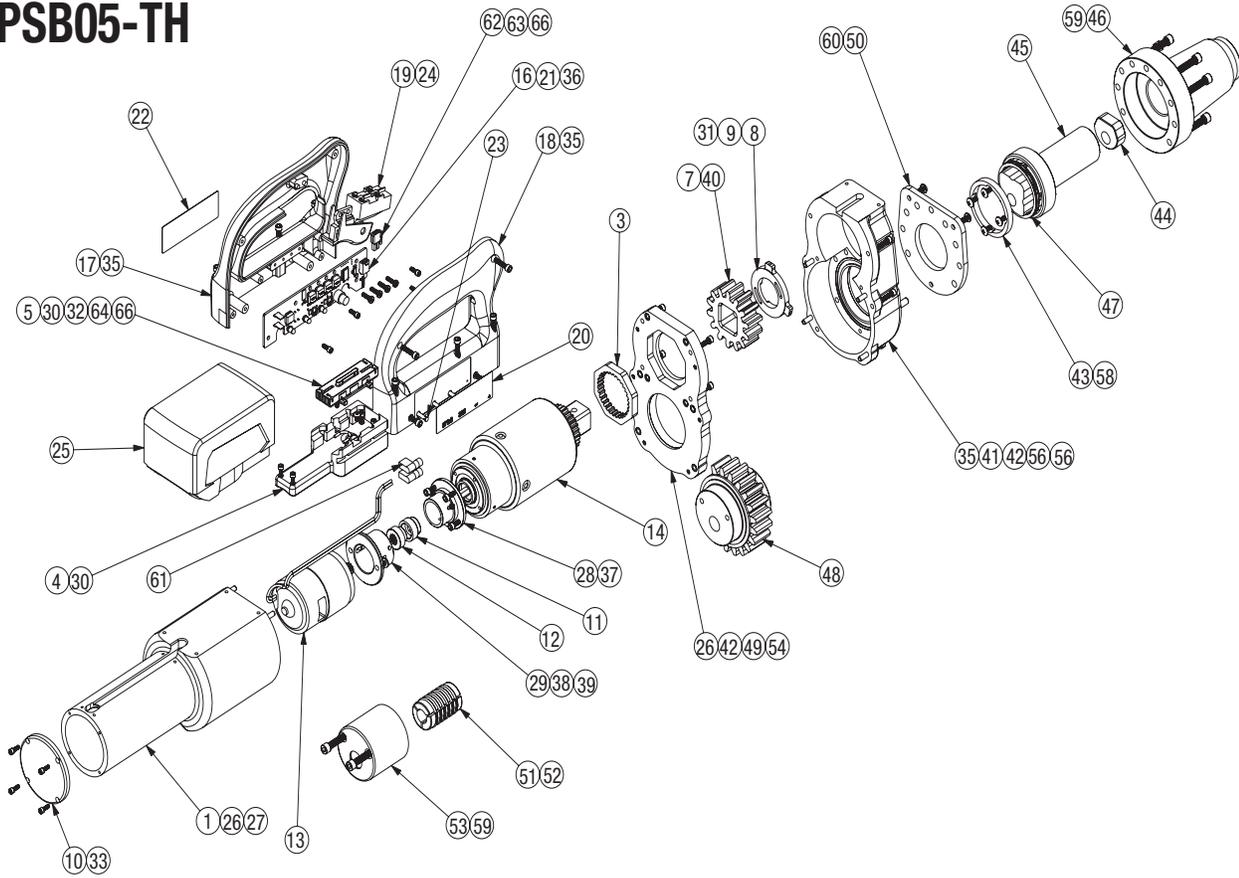
If you have found issues that should be listed in this manual, please don't hesitate to call or write to us in order to have your suggestions included.

PSL0106

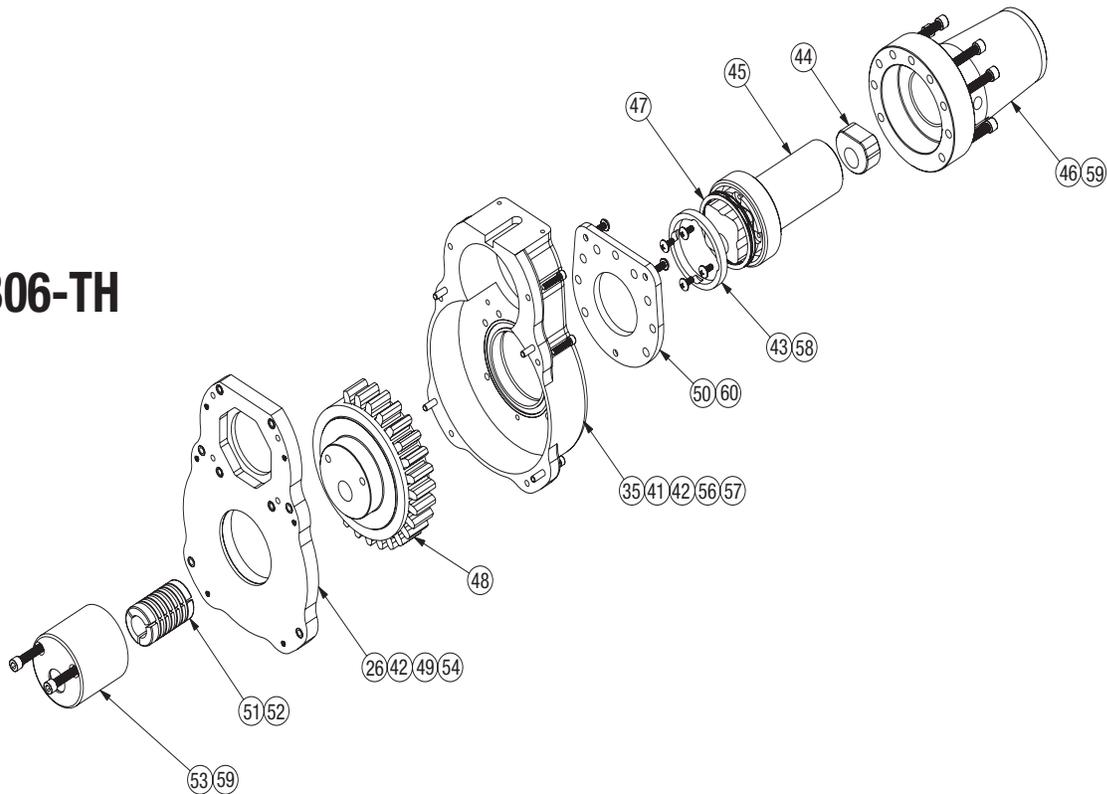
Rev. A

12/12

PSB05-TH



PSB06-TH



Repair Parts List for PSB05-TH

Item	Part No.	Qty.	Description
1	460498	1	PSB0X-TH Main Drive Housing
3	460125	1	PSB0X-TH Gearbox Spline Lock
4	460152	1	PSB0X-TH Battery Shoe
5	385225	1	PSB Battery Connector
6	385226	1	PSB Switch Wire-18GA Blk Strd
7	460115	1	PSB0X-TH Primary Drive Gear
8	460150	1	Psb0x-Th Sensor Adj Plate
9	385212	2	PSB Sensor Magnet Ø.125X.375
10	460145	1	PSB0X-TH Main Drive HSG Cover
11	460170	1	PSB0X-TH Hex Motor Coupler
12	460172	1	PSB0X-TH Spline Motor Coupler
13	385216	1	PSB0X-TH 28V Drive Motor
14	385222	1	PSB0X-TH Gearbox
15	385380	1	PSB ~16" - 14ga Wire - Red
15	385385	1	PSB ~16" - 14ga Wire - Black
16	385238	1	PSB PCB Assembly
17	460155	1	PSB0X-TH Left Handle
18	460160	1	PSB0X-TH Right Handle
19	385228	1	PSB Trigger Switch
20	385115	1	PSB Branding Label - Right
21	385130	4	PSB 6-32 X .5 PPH Plastic Scrw
22	385120	1	PSB branding label - left
23	385125	3	PSB LED Light Pipe for PCB
24	385226	1	PSB Switch Wire-18GA Blk Strd
25	385236	2	PSB 28V Lithium Battery/MT3544
26	385135	10	PSB 8-32 Helicoil -.5 l w/Tang
27	385140	4	PSB Dowel Pin .1875 X 1.25
28	460165	1	PSB0X-TH Gearbox Mount
29	460175	1	PSB0X-TH Motor Mount
30	385145	4	PSB 6-32x.5 SHCS
31	385150	2	PSB 4-40x.375 Hex Btn Head Scr
32	385155	2	PSB 6-32 x.25, Truss Hd Screw
33	385165	4	PSB 6-32 x .50 SHCS
35	385170	14	PSB 8-32 x .75 SHCS
36	385175	4	PSB 6-32 x .375 SHCS
37	385180	4	PSB 8-32 x .5 SHCS
38	385185	2	PSB 10-32 x .375 SHCS
39	385190	3	PSB 10-32 x .25 SHSS
40	385195	1	PSB 8-32 X .25 SHSS
41	460060	1	PSB05-TH Drive Front Housing
42	385200	2	PSB 6812 RS Bearing
43	460135	1	PSB0X-TH Rot Shr Pressure Ring
44	460080	1	PSB05-TH .5" Fixed Shear Blade
45	460075	1	PSB05 .5' Rotatng Shear Blade
46	460070	1	PSB05-TH .5" Std Nose Piece
47	385205	1	PSB Wave Spring
48	460072	1	PSB05-TH Main Drive Gear

Repair Parts List for PSB06-TH

Item	Part Number	Qty.	Description
26	385135	10	PSB 8-32 Helicoil -.5 l W/TANG
35	385170	14	PSB 8-32 x .75 SHCS
41	460630	1	PSB06-TH Drive Front Housing
42	385200	2	PSB 6812 RS Bearing
43	460135	1	PSB0X-TH Rot Shr Pressure Ring
44	460605	1	PSB06-TH Fixed Shear Blade
45	460610	1	PSB06-TH rotatng shear blade
46	460600	1	PSB06-TH .6" Std Nose Piece
47	385205	1	PSB wave spring
48	460640	1	PSB06-TH Drive Gear
49	460650	1	PSB06-TH Front Hsg Mounting PI
50	460085	1	PSB0X-wear plate
51	460660	1	PSB06-TH .6 wedge clamp 3pc
52	385210	6	PSB O-RING
53	460670	1	PSB06-TH .6 Clamp Housing
54	385215	3	PSB Bushing Ø.1890 x 1/2
56	385340	3	PSH & PSB 1/4 X 1 Dowel Pin
57	385220	4	PSB dowel pin .1875 X .875
58	385250	1	PSB 8-32 x .375 PH truss screw
59	385255	8	PSB 1/4-20 x 1.25 SHSC
60	385260	3	PSB 10-32 x .50 Ph Btn Hd Screw

Cont. on next page

Repair Parts List for PSB05-TH

Item	Part No.	Qty.	Description
49	460065	1	PSB05-TH Front HSG Mounting Plate
50	460085	1	PSB05-.5" Wear Plate
51	460095	1	PSB05-TH .5" Wedge Clamp 3 pc
53	460090	1	PSB05-TH Clamp Housing
54	385215	3	PSB Bushing Ø.1890 x 1/2
56	385340	3	PSH & PSB 1/4 X 1 Dowel Pin
57	385220	4	PSB Dowel Pin .1875 X .875
58	385250	1	PSB 8-32 x .375 PH Truss Screw
59	385255	8	PSB 1/4-20 x 1.25 SHSC
60	385260	3	PSB 10-32 x .50 Ph Btn Hd Scre
61	385265	4	PSB Crimp Connector
62	385390	2	PSB Connector Pin - Trigger
63	385395	1	PSB Connector Plug - Trigger
64	385400	1	PSB Lead Wire Assembly-Black
66	385405	1	PSB Lead Wire Assembly-Red

