



# **RECON ATTACHMENTS**

## **MINI SKID STEER TRENCHER**

### **OWNER'S OPERATOR SERVICE MANUAL**

For additional information, please see us at  
[www.badboycountry.com](http://www.badboycountry.com)



## **Owners/Operators Manual**

Model Number \_\_\_\_\_

Serial Number \_\_\_\_\_

Serial Numbers 260979 and Greater  
Date Created 05/07/26  
Revised Date 05/07/26

# Warranty Statement

## 1. WHAT THIS WARRANTY COVERS, AND FOR HOW LONG:

Bad Boy Mowers, LLC will, at its option, repair or replace without charge, any part covered by the warranty which is found to be defective in material and/or workmanship for one (1) year after the date of sale to the original retail purchaser **unless the product is used for rental purposes, in which case there is no warranty.**

At Bad Boy Mowers, LLC's request, customer will make the defective part available for inspection by Bad Boy Mowers, LLC and/or return the defective part to Bad Boy Mowers, LLC, with **transportation charges prepaid.**

## 2. WHAT THIS WARRANTY DOES NOT COVER:

- A. This warranty does not cover defects caused by depreciation or damage caused by normal wear, accidents, improper maintenance, improper use or abuse of the product, alterations, or failure to follow the instructions contained in the Owner's Manual for operation and maintenance.
- B. The customer shall pay any charges for making service calls and/or for transporting the implement to and from the place where the inspection and/or warranty work is performed. Bad Boy Mowers, LLC will not be responsible for the pickup and delivery of the implement for warranty purposes.
- C. Normal maintenance services or normal deterioration of exterior finish due to use or exposure.
- D. Replacement of services and items are subject to normal service replacement.

## 3. HOW TO OBTAIN SERVICE UNDER THIS WARRANTY:

- A. Warranty service can be arranged by contacting the dealer where you purchased the implement or by sending an email to [warranty@badboycountry.com](mailto:warranty@badboycountry.com). Proof of the date of purchase may be required to verify warranty coverage. Warranty repairs must be completed by an authorized Bad Boy center.
- B. Warranty claims will not be reviewed or paid unless the warranty registration is received by Bad Boy Mowers, LLC within 30 days of the retail purchase date.
- C. Warranty claims requiring parts returned will be settled upon return of parts to Bad Boy for inspection.
- D. All warranty issues must be handled through an authorized service center or dealership.

4. **WARRANTY LIMITATION:**

A. **THERE IS NO OTHER EXPRESS WARRANTY. ANY WARRANTY THAT MAY BE IMPLIED FROM THIS PURCHASE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IS HEREBY LIMITED TO THE DURATION OF THIS WARRANTY AND TO THE EXTENT PERMITTED BY LAW. ANY AND ALL IMPLIED WARRANTIES ARE EXCLUDED.** Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

B. **BAD BOY MOWERS, LLC WILL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES AND/OR EXPENSES IN CONNECTION WITH THE PURCHASE OR USE OF THE IMPLEMENT.** Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation(s) or exclusion(s) may not apply to you.

C. Only the warranty expressed in this limited warranty shall apply and no dealer, distributor, or individual is authorized to amend, modify, or extend this warranty in any way. Accordingly, additional statements such as dealer advertising or presentations, whether oral or written, do not constitute warranties by Bad Boy Mowers, LLC and should not be relied on.

D. This warranty extends only to implement operated under normal conditions and properly serviced and maintained. The warranty expressly does not cover (i) any defects, damage, or deterioration due to normal use, wear and tear, or exposure; (ii) normal maintenance services; (iii) damage or defects arising out of or relating to misuse, neglect, alteration, negligence, or accident; (v) repair or replacement arising from operation of or use of the implement which is not in accordance with operating instructions as specified in the Operator's Manual or other operational instructions provided by Bad Boy Mowers, LLC; (vi) repair or replacement arising as a result of any operation from implement that has been altered or modified so as to, indetermination of Bad Boy Mowers, LLC, adversely affect the operation, performance, or durability of the implement or that has altered, modified, or affected the implement so as to change the intended use of the product; (vii) repair or replacement necessitated by use of parts, accessories, or supplies, including gasoline, oil, or lubricants that are incompatible with the implement or other than as recommended in the Operator's Manual or other operational instructions provided by Bad Boy Mowers, LLC; (viii) repairs or

replacements resulting from parts or accessories which have adversely affected the operation, performance, or durability of the implement; or (ix) damage or defects due to or arising out of repair of implement by person or persons other than an authorized Bad Boy Mowers, LLC service dealer or the installation of parts other than genuine Bad Boy Mowers, LLC recommended parts. **As a condition of this warranty, customer shall have read the Operator's Manual and ensured the implement has been registered within 30 days of purchase.**

- E. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

**BAD BOY MOWERS, LLC  
102 INDUSTRIAL DRIVE  
BATESVILLE, AR 72501**

**WWW.BADBOYCOUNTRY.COM**

Technical Support:.....techsupport@badboycountry.com  
Warranty:.....warranty@badboycountry.com  
Parts:.....partsdept@badboycountry.com

## **Warranty Registration**

**Ensure selling dealership has registered the implement within 30 days of purchase to validate warranty. Please record the serial number, date of purchase, and dealership information for your records.**

Serial # \_\_\_\_\_

Date of Purchase \_\_\_\_\_

Dealer Information \_\_\_\_\_

# Features of Bad Boy Mini Skid Steer Trencher include:

- 1.654" Anti-Back Flex (ABF) chain for tough digging conditions.
- Dig depths of 36" and 48" available in 4", 6" and 8" chain widths (not all chain widths available with all dig depths).
- 4-position depth adjustment system allows operator to set desired trenching depth.
- 2-position manual side shift and removable auger allows closer trenching to structures.
- Direct drive utilizing a planetary with shaft output.
- Bi-directional chain rotation to expel objects.
- Large 12 1/2" diameter removable/replaceable spoil auger pushes excavated soil away from trench.
- Greaseable idler bearing at trencher boom end for longevity.
- Two idler compression springs act as a damper providing protection for the chain and drive components when encountering obstructions while trenching.
- Standard crumber aids in removing loose soil from trench resulting in a clean bottom to the trench.
- Multiple chain/tooth configurations available including Single Standard, Double Standard, 70/30 Combo and 50/50 Rock. (Other chain/tooth configurations available upon request).
- Machine specific hydraulic package to best utilize machine hydraulics.
- Recommended for loaders with an operating capacity greater than 800 lbs.

## Mini Skid Steer Trencher Specs

| MODEL  | CTR36-18                | CTR48-18         |
|--|-------------------------|------------------|
| Dig Depth (Inches)   | 36.0                    | 48.0             |
| Overall Width (Inches): Toro® / Bobcat® / ASV®                 | 41.0 / 41.0 / 49.7      |                  |
| Overall Length (Inches)  | 73.0                    | 86.0             |
| Side Shift Travel From Center (Inches): Toro® / Bobcat® / ASV® | 21.0 / 21.0 / 25.0      |                  |
| Auger Diameter (Inches)  | 12.5                    |                  |
| Spoiler Auger Discharge Reach (Inches)                         | 19.5                    |                  |
| Optimal Trenching Angle (Degrees)                              | 60                      |                  |
| Recommended Flow Rate (GPM)                                    | 10-18                   |                  |
| Approximate Weight (Pounds)                                    | 640 <sup>1</sup>        | 760 <sup>1</sup> |
| Recommended Loader Capacity                                    | Greater than 635 pounds |                  |

<sup>1</sup>With 70/30 Combo chain Bobcat® mount adds 15 pounds to model weight, and ASV® mount adds approximately 10 pounds.

# Safety

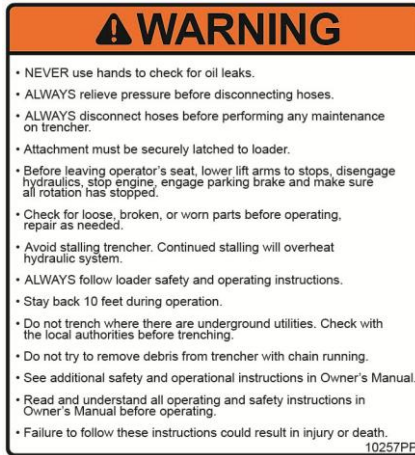
- Always follow safety and operating information in this manual.
- Always follow all safety and operating instructions of the loader.
- Never remove material deflectors or warning labels.
- Never operate a trencher unless you have been properly trained.
- Make sure all safety labels are in place. Look in the “Label Locations” section in this manual for their locations.
- Stay alert for any hazards that may be located in the area being trenched. Unseen hazards could result in attachment or machine breakage, as well as possible injury to operator or bystanders, or damage to surroundings. If a hazard is struck, immediately shut down trencher and inspect for damage. Repair as needed.
- Never dig near underground utilities. If unsure of utilities, call local authorities to have all utilities located. Make sure to check how close you can dig to flags/markings they have positioned.
- Keep bystanders back 10 feet.
- Always relieve pressure before connecting or disconnecting hydraulic hoses.
- Clean any debris from attachment. Pay special attention to any debris in quick-tach area before hooking up attachment.
- After the trench has been dug, keep people and equipment away as a cave in may occur.

## Mini Skid Steer Trencher Labels



10258PP - TRENCHER DANGER LABEL

# Mini Skid Steer Trencher Labels (cont.)



10257PP - TRENCHER WARNING LABEL



5263PP - PINCH POINT WARNING LABEL

| <b>TRENCHER DEPTH ADJUSTMENT GUIDE</b> |                     |                     |                     |
|--|---------------------|---------------------|---------------------|
| <b>DEPTH</b>                           | <b>36" TRENCHER</b> | <b>48" TRENCHER</b> | <b>60" TRENCHER</b> |
| <b>MINIMUM</b><br>(TOP BOLT HOLE)      | <b>18"</b>          | <b>30"</b>          | <b>42"</b>          |
| <b>MID DEPTH 1</b>                     | <b>24"</b>          | <b>36"</b>          | <b>48"</b>          |
| <b>MID DEPTH 2</b>                     | <b>30"</b>          | <b>42"</b>          | <b>54"</b>          |
| <b>MAXIMUM</b><br>(BOTTOM BOLT HOLE)   | <b>36"</b>          | <b>48"</b>          | <b>60"</b>          |

15927PP

15927PP – TRENCHER DEPTH DECAL

# Initial Use

- Read and understand all warning information in this manual before operating this attachment.
- Never exceed the maximum attachment operating pressure of 3800 psi.
- Check that quick-tach on frame fits onto loader properly. Pins must engage through the plates at bottom of quick-tach.
- Slowly roll back attachment. Make sure there is no interference between attachment and loader.
- Connect hydraulic hoses making sure hoses do not pinch during roll back.
- Lift trencher and slowly roll forward to the full dump position making sure the hoses do not catch on the quick-tach frame and that they are not stretched at any point.
- After connecting hydraulic hoses, engage the machines hydraulics using the machines detent position. If the trencher is spinning in the wrong direction, the couplers on the lead hoses can be switched to match the machine's detent position.
- After 10 to 20 minutes of operation, the chain tension should be checked. It is common for the chain to need adjustment after the initial seating of the chain and drive sprocket. See "Maintenance" section for adjustment procedure.

# Operation

- Never drop the trencher boom to contact the ground while the chain is moving. This may cause a sudden and unexpected movement of the machine.
- Engage and disengage the trencher hydraulics at low engine speeds. This will help prolong the life of the hydraulic components.
- To begin trenching, position the trencher in desired location and set the boom at a shallow angle (15°), set engine speed at half throttle and slowly lower the trencher until the chain contacts the ground. Slowly roll the trencher forward to increase the cutting depth and angle. The preferred trenching angle is approximately 60°. After the preferred angle is reached, set the engine speed at full throttle and lower the machine boom to achieve the desired depth and move the machine slowly in reverse. (Trenching is a slow process so the machine ground speed is dependent on soil conditions, depth and width of the trench. If the trencher is stalling frequently, slow down the machine travel speed. Frequent stalling may contribute to machine overheating).

## Operation (cont.)

- If the trencher should stall, either drive the machine forward a couple of inches or lift the trencher a couple of inches to allow the chain to restart. If this does not restart the trencher chain, shut off the machines hydraulics and reverse hydraulic flow to run the chain in reverse until obstruction is cleared. Stop hydraulic flow, reengage hydraulics in digging direction and proceed with trenching.
- To side shift the trencher:
  - Disconnect the hydraulic hoses of the trencher from the machine.
  - Remove the bolt securing the pin at the bottom of the trencher quick tach frame and trencher head and remove pin.
  - Remove the clamp securing the hydraulic hoses to the quick tach frame.
  - Using the machine, lower the boom and back up to disengage from the trencher head with the trencher quick tach frame attached to the loader. Move to the new location, drive into the head and lift machine boom.
  - Reinstall pin and secure with bolt.
  - Secure hoses with the clamp to the side of the quick tach frame. Hoses should be clamped in approximately the same location on the hose before side shifting.
  - Reconnect the hydraulic hoses to the machine and proceed with trenching. After moving the head, check to make sure the hydraulic hoses do not pinch or stretch during boom motions.
- Do not make sharp turns with the trencher boom in the ground. This could cause damage to the trencher unit.
- Trencher performance can be affected by several factors. Ground speed, soil conditions, trencher chain wear and trencher chain type all affect trencher performance. Below are some general recommendations for chain type and soil conditions.
  - Single Standard: Used in soft to medium digging conditions and for sticky materials such as clay.
  - Double Standard: Used in soft materials such as sandy conditions.
  - 70/30 Combo: Used in medium to hard digging conditions to break hard ground and remove material.
  - 50/50 Rock: Used in hard digging conditions to break hard ground/rocks/frost and remove material

# Maintenance

| Procedure   | Before Each Use | Every 10 Hours | After First 50 Hours |
|---|-----------------|----------------|----------------------|
| Grease idler shaft pin (1 fitting). See "Chain Connection and Idler Shaft" section.   | ✓               | ✓              |                      |
| Make sure all safety labels are in place, look in the "Label Locations" section of this manual for locations.   | ✓               | ✓              |                      |
| Check for loose, worn, or missing parts, repair or replace as needed.   | ✓               | ✓              |                      |
| Remove any foreign debris such as string, wire, etc. that may have wrapped around the trencher chain, spoil auger or planetary.   | ✓               | ✓              |                      |
| Inspect chain, motor, planetary, hydraulic fittings, and hoses for leaks and hydraulic pressure is relieved before checking for leaks. <u>Never</u> use hands to check for high pressure hydraulic leaks. | ✓               | ✓              |                      |
| Replace the planetary oil.  |                 |                | ✓                    |

- Proper chain tension is critical to provide the most efficient operation of the trencher. When the chain is tensioned properly, there should be approximately 1" of slack between the chain and the bottom of the boom with the trencher boom off of the ground. If there is more than 1" of slack, the boom needs to be adjusted using the following procedure:
  - Loosen the jam nuts on the tensioning bolts.
  - Tighten the adjustment nuts to push the boom away from the trencher head, thus tightening the chain. Make sure to adjust both sides by the same amount to ensure the boom is straight.
  - Retighten the jam nuts.
  - Whenever the boom is adjusted, the crumber should also be adjusted.
    - Loosen the 2 nuts holding the crumber arm tube.
    - The 3 bolts that secure 1 of the mounting angles may also need to be loosened to allow the crumber arm tube to move.
    - Slide the crumber outward to maintain a minimum of 2" of clearance between the crumber cleanout plate and chain teeth.
    - Retighten the 2 nuts holding the crumber arm tube first, then retighten the 3 nuts holding the mounting angle, making sure that the crumber is in-line with the trencher boom.

## Maintenance (cont.)

- Even though the planetary may not have an obvious leak; the oil level should be checked. With the trencher boom sitting level with the ground or slightly downward (5-10 degrees), remove the plug on the planetary facing the quick-tach of the trencher. If oil comes out of the hole, the oil level is fine. If no oil comes out, add enough oil so that it does come out of the hole. Reinstall plug.
- Add oil (SAE 80W-90 gear lubricant, API-GL-5 approved) as required. Do not overfill. Overfilling may cause oil to be forced out between the planetary and the motor as the oil heats up from use. A planetary that is run dry will not be covered by warranty.
- If the trencher is still under warranty, contact your dealer before attempting any repairs. A planetary and/or motor that has been disassembled without prior approval will not be covered under warranty. The planetary and/or motor needs to be intact for Bad Boy to get any warranty reimbursement from the component manufacturer. If the component manufacturer declines warranty due to tampering or misuse, Bad Boy reserves the right to void warranty as well.
- Contact your dealer for any required replacement parts.
- When replacing the planetary oil:
  - Position trencher on a flat surface, with the boom sitting level with the ground.
  - Remove lower drain plug located on the planetary below the hydraulic motor. Drain oil into a suitable container. Dispose of oil in a proper manner.
  - Position trencher on a flat surface, with the boom sitting level with the ground. Add 16 ounces oil (SAE 80W-90 gear lubricant, API-GL-5 approved) into the upper plug located on the planetary, near or just above the hydraulic motor.

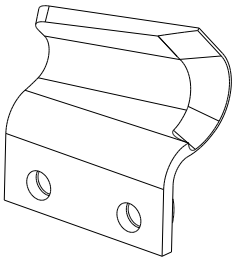
## Chain Replacement Instructions

- Position trencher so that the chain is not contacting the ground. This can be done by blocking up the head of the trencher (under the skid plate).
- Remove the spoil auger.
- Removal of the crumber may provide easier access to the chain. To remove, loosen and remove the ½" hardware holding the crumber tube and 1 mounting angle to the trencher. This step is optional.
- Loosen the jam nuts on the tensioning bolts. The jam nuts and adjustment nuts can be moved as close to the head of the tensioning bolts as possible.

## Chain Replacement Instructions (cont.)

- Locate the chain pin with the cotter pin. The best position for the chain pin is about 12"-18" in front of the drive sprocket. If the chain pin is not in this location, connect the hydraulic couplers together and manually turn the chain until this location is reached.
- Straighten and remove the cotter pin.
- Using a hammer and punch, remove the chain pin.
- At this point, the chain should be able to be removed. Use caution since the chain is heavy and there may be sharp edges with many pinch points. (The use of a lifting device such as an overhead crane or cherry picker would greatly aid in handling of the chain.)
- Layout new chain making sure the digging teeth are in the proper orientation (digging teeth should be facing the trencher head on the bottom side of the trencher boom).
- Install chain so that the connecting link is on the top side of the trencher boom.
- Using some sort of a clamping or tightening device, pull the ends of the trencher chain together until the chain pin can be installed. (Remember the orientation of the chain pin when it was removed from the new chain and reinstall in the same orientation—the pin only installs in one direction.) Using a hammer, pound in the pin until the cotter pin can be installed. Bend over the cotter pin so that it will not come out.
- Tighten the adjustment nuts until there is approximately 1" of slack between the bottom of the trencher boom and the chain. Make sure to tighten both sides evenly to keep the boom straight. Tighten jam nuts.
- Reinstall crumber, if removed and make sure the trencher boom and crumber are in-line.
- Adjust crumber to maintain a minimum clearance of 2" between crumber cleanout plate and chain teeth and tighten crumber hardware.
- Reinstall spoil auger, making sure to use the correct cross hole in the trencher drive shaft weldment for the chain width installed.

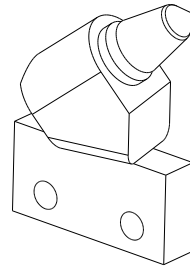
## Tooth Guide



Cup Style Tooth



Combo Tooth



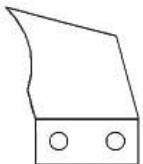
Rock Style Tooth

- Cup Style: Face hardened, used in soft and/or sticky materials and for material removal.
- Combo Style: Carbide insert at the tip, used to break up hard ground.
- Rock Style: Replaceable carbide tipped tooth, used to break up hard ground, rocks and frost.

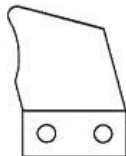
All trencher teeth are available as left and right hand options. Terminator and Rock style teeth are available with various pitches to accommodate various chain patterns.

## Tooth Wear

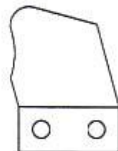
The following diagram is a guide to determine the performance percentage of tooth wear when compared to a new tooth. The greater the percentage, the better the performance. Teeth that are at 25% should be replaced shortly, while teeth that are at 0% should be replaced immediately. Severely worn teeth will greatly reduce the performance of the trencher.



100%



75%



50%



25%



0%

# Chain Configurations

- Single Standard – All Cup Style Tooth.
  - For soft to medium soils. For wet and sticky soils such as wet clay.
- Double Standard – All Cup Style Tooth.
  - For soft to medium soils. For sandy, dry and loosely-packed soils.
- 70/30 Combo – 70% Combo Tooth, 30% Cup Style tooth.
  - For soft to hard soils as well as rocky. The most versatile chain type.
- 50/50 Rock – 50% Rock Style Tooth, 50% Cup Style Tooth.
  - For rocky soils and frost. Has replaceable, rotating carbide rock teeth.

Additional chain configurations are also available. Please contact your dealer for availability.

There are several different naming conventions for a similar style chain in the industry. Below are listed some of the more common alternative names:

- Single Standard: Half Set, Tooth Every Other Station
- Double Standard: Full Set, Tooth Every Station, Double Cup
- Combo: Shark Tooth, Terminator, Scorpion, Aggressive Shark
- Rock: Bullet, Rock and Frost, Carbide

# Chain Assemblies

| Depth | Width | Single Standard | Double Standard | 70/30 Combo | 50/50 Rock |
|-------|-------|-----------------|-----------------|-------------|------------|
| 36    | 4     | 15899PP         | 15900PP         | 15901PP     | 15902PP    |
|       | 6     | 15903PP         | 15904PP         | 15905PP     | 15906PP    |
|       | 8     | 15907PP         | 15908PP         | 15909PP     | 15910PP    |
|       | 10    | N/A             | N/A             | N/A         | N/A        |
| 48    | 4     | 15911PP         | 15912PP         | 15913PP     | 15914PP    |
|       | 6     | 15915PP         | 15916PP         | 15917PP     | 15918PP    |
|       | 8     | N/A             | N/A             | N/A         | N/A        |
|       | 10    | N/A             | N/A             | N/A         | N/A        |

Additional chain configurations are also available. Please contact your dealer for availability.

# Bolt Torque Chart

| SIZE  | GRADE 5 |      | GRADE 8 |      | SHCS*  |      |
|-------|---------|------|---------|------|--------|------|
|       | COARSE  | FINE | COARSE  | FINE | COARSE | FINE |
| 1/4"  | 6       | 7    | 9       | 10   | 10     | 12   |
| 5/16" | 13      | 15   | 18      | 20   | 22     | 24   |
| 3/8"  | 23      | 26   | 33      | 37   | 38     | 43   |
| 7/16" | 37      | 41   | 52      | 58   | 61     | 68   |
| 1/2"  | 57      | 64   | 80      | 90   | 93     | 105  |
| 9/16" | 82      | 91   | 115     | 128  | 134    | 150  |
| 5/8"  | 113     | 128  | 159     | 180  | 179    | 202  |
| 3/4"  | 200     | 223  | 282     | 315  | 317    | 354  |

\*SHCS—Socket Head Cap Screw

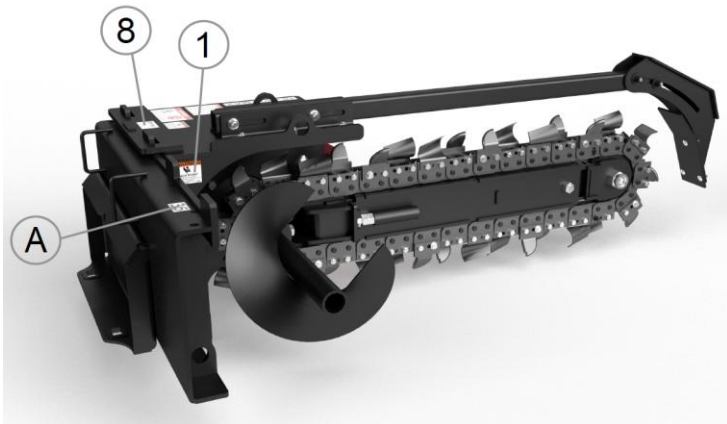
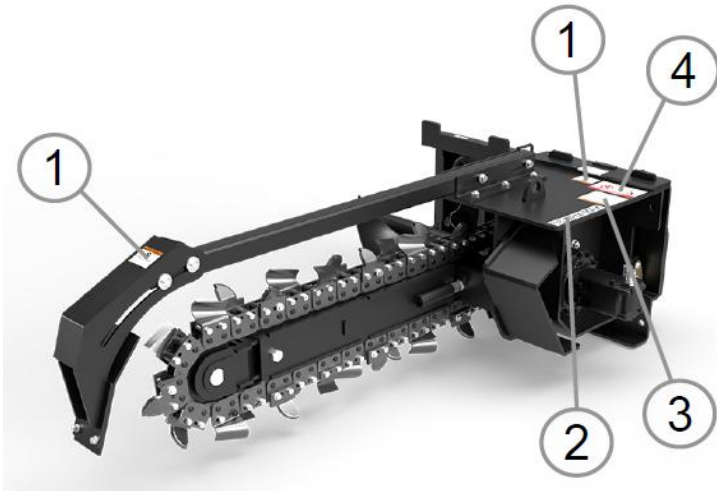
Values are in ft.-lb. and are recommended unless otherwise noted.

# Mini Skid Steer Trencher Labels Parts List

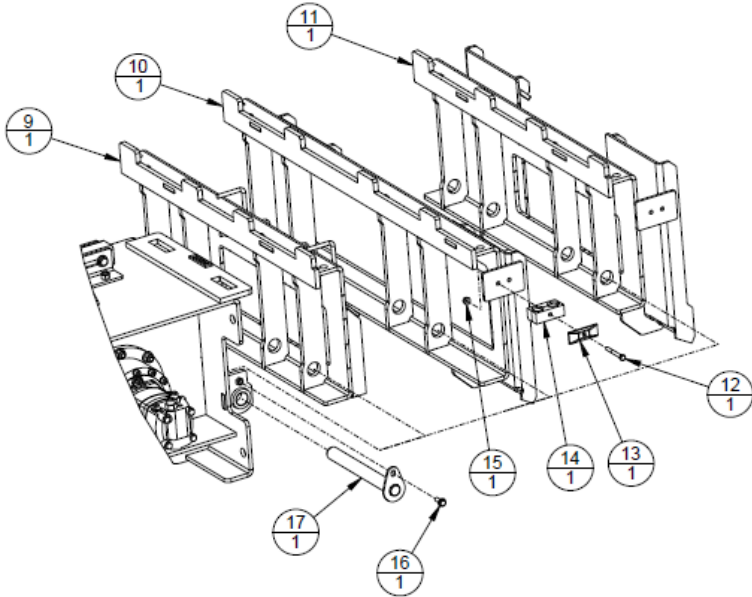
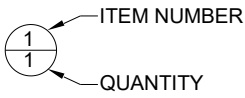
| ITEM | PART NO. | QTY | DESCRIPTION               |
|------|----------|-----|---------------------------|
| 1    | 5263PP   | 3   | PINCH POINT WARNING LABEL |
| 2    | 14972PP  | 1   | 18 GPM MAX-MINI           |
| 3    | 10257PP  | 1   | TRENCHER WARNING LABEL    |
| 4    | 10258PP  | 1   | TRENCHER DANGER LABEL     |
| A    | 5        | 1   | 36 WIDTH LABEL            |
| A    | 6        | 1   | 48 WIDTH LABEL            |
| B    | 7        | 1   | TRENCHER DEPTH DECAL      |
| 8    | 18333PP  | 1   | BAD BOY SERIAL TAG        |

A – Only one is needed depending on the configuration.

B – Item not shown.



# Main Component Assembly

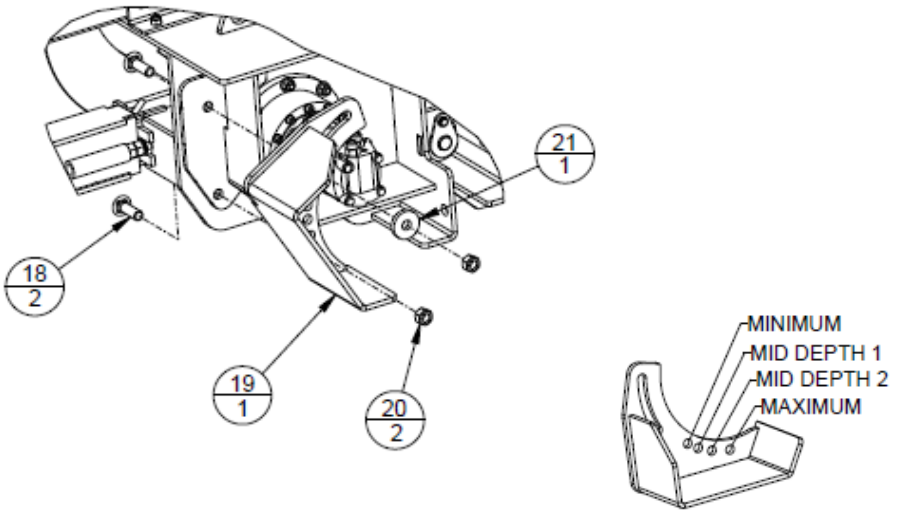
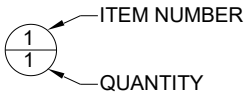


|   | ITEM | PART NO. | QTY | DESCRIPTION                    |
|---|------|----------|-----|--------------------------------|
| A | 9    | 15442VW  | 1   | TRENCHER QT MOUNT WDT MINI     |
| A | 10   | 15446VW  | 1   | TRENCHER QT MOUNT WDT ASV      |
| A | 11   | 15450VW  | 1   | TRENCHER QT MOUNT WDT BOBCAT   |
| B | 12   | 14327PP  | 1   | 5/16"-18 X 2 3/4" LG HHCS      |
| B | 13   | 10655PP  | 1   | HOSE CLAMP TOP PLATE 1/2"      |
| B | 14   | 10654PP  | 1   | HOSE CLAMP INSERT 1/2"         |
| B | 15   | 7672PP   | 1   | 5/16"-18 TOP LOCK FLANGE NUT   |
|   | 16   | 13378PP  | 1   | 3/8"-16 X 1" LG HHSFS GR8      |
|   | 17   | 15433VW  | 1   | TRENCHER QT MOUNT PIN WELDMENT |

A – Only one is needed depending on the configuration.

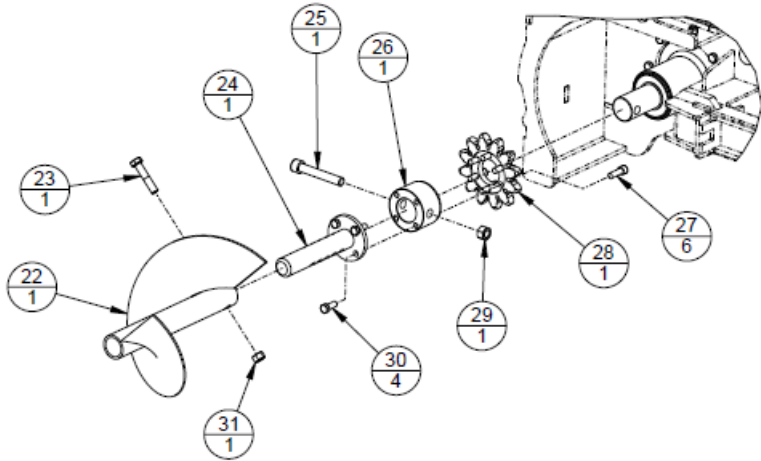
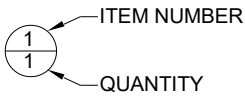
B – Only used on the Bobcat and ASV mounts.

# Skid Shoe Installation

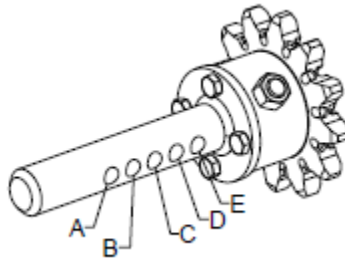


| ITEM | PART NO. | QTY | DESCRIPTION                   |
|------|----------|-----|-------------------------------|
| 18   | 15506PP  | 2   | 3/4" -10 X 2 1/2" LG CB       |
| 19   | 15493VW  | 1   | TRENCHER SKID SHOE WDT CUL    |
| 20   | 1011PP   | 2   | 3/4" -10 TOP LOCK NUT         |
| 21   | 15435VP  | 1   | WASHER 3/8" X 13/16" X 2 1/4" |

# Drive and Spoil Auger Installation



Note: Apply Locktite 242 or equivalent to Item #27 prior to assembly.

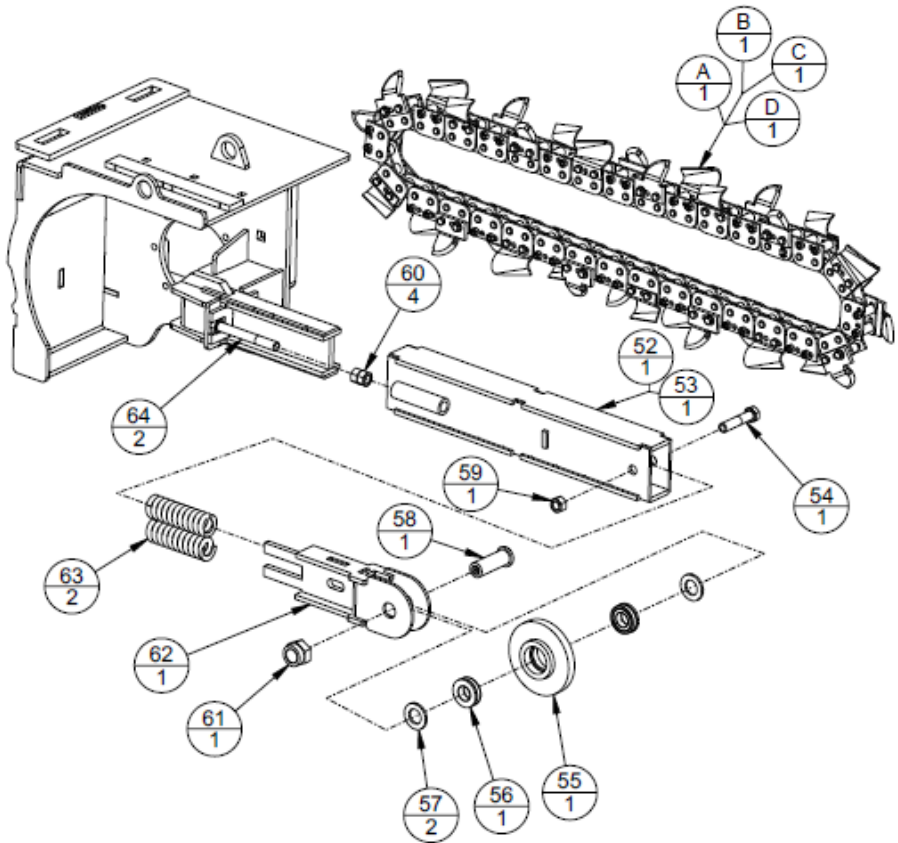
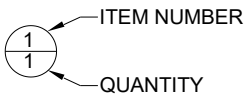


| LOCATION | CRUMBER WIDTH |
|----------|---------------|
| A        | Not Used      |
| B        | Not Used      |
| C        | 8"            |
| D        | 6"            |
| E        | 4"            |

# Drive and Spoil Auger Installation Parts List

| ITEM | PART NO. | QTY | DESCRIPTION                    |
|------|----------|-----|--------------------------------|
| 22   | 15479VW  | 1   | TRENCHER SPOIL AUGER WDT CUL   |
| 23   | 7486PP   | 1   | 5/8"-11 X 3" LG HHCS           |
| 24   | 15412VW  | 1   | TRENCHER SPOIL AUGER SHAFT WDT |
| 25   | 15437PP  | 1   | 3/4"-10 X 4 3/4" LG SHCS       |
| 26   | 15307VP  | 1   | SPROCKET MNT COLLAR TRN CUL    |
| 27   | 6719PP   | 6   | 1/2"-13 X 1 1/2" LG SHCS       |
| 28   | 15438PP  | 1   | TRENCHER SPROCKET CUL          |
| 29   | 1011PP   | 1   | 3/4"-10 TOP LOCK NUT           |
| 30   | 7487PP   | 4   | 1/2"-13 X 1 1/4" LG HHCS       |
| 31   | 1008PP   | 1   | 5/8"-11 TOP LOCK NUT           |

# Boom Installation



Tighten 1 1/4" Idler Shaft Nut (Item #61) to engage locking portion of nut (nut and end of idler shaft should be approximately flush). Do not over tighten. The Trencher Idler Wheel Weldment needs to spin freely on the Idler Shaft. Over tightening could result in premature failure of the Idler Bearing Assembly and prevent the Idler Wheel Weldment from turning.

## Boom Installation Parts List

| SINGLE STANDARD |      |          |     |                               |
|-----------------|------|----------|-----|-------------------------------|
|                 | ITEM | PART NO. | QTY | DESCRIPTION                   |
| A               | 32   | 15899PP  | 1   | 36" MINI GLOBAL SINGLE STD 4" |
| A               | 33   | 15903PP  | 1   | 36" MINI GLOBAL SINGLE STD 6" |
| A               | 34   | 15907PP  | 1   | 36" MINI GLOBAL SINGLE STD 8" |
| A               | 35   | 15911PP  | 1   | 48" MINI GLOBAL SINGLE STD 4" |
| A               | 36   | 15915PP  | 1   | 48" MINI GLOBAL SINGLE STD 6" |

A – Only one is used depending on the configuration, reference to the table in Chain Assemblies section.

| DOUBLE STANDARD |      |          |     |                               |
|-----------------|------|----------|-----|-------------------------------|
|                 | ITEM | PART NO. | QTY | DESCRIPTION                   |
| B               | 37   | 15900PP  | 1   | 36" MINI GLOBAL DOUBLE STD 4" |
| B               | 38   | 15904PP  | 1   | 36" MINI GLOBAL DOUBLE STD 6" |
| B               | 39   | 15908PP  | 1   | 36" MINI GLOBAL DOUBLE STD 8" |
| B               | 40   | 15912PP  | 1   | 48" MINI GLOBAL DOUBLE STD 4" |
| B               | 41   | 15916PP  | 1   | 48" MINI GLOBAL DOUBLE STD 6" |

B – Only one is used depending on the configuration, reference to the table in the Chain Assemblies section.

| 70/30 COMBO |      |          |     |                                |
|-------------|------|----------|-----|--------------------------------|
|             | ITEM | PART NO. | QTY | DESCRIPTION                    |
| C           | 42   | 15901PP  | 1   | 36" MINI GLOBAL 70/30 COMBO 4" |
| C           | 43   | 15905PP  | 1   | 36" MINI GLOBAL 70/30 COMBO 6" |
| C           | 44   | 15909PP  | 1   | 36" MINI GLOBAL 70/30 COMBO 8" |
| C           | 45   | 15913PP  | 1   | 48" MINI GLOBAL 70/30 COMBO 4" |
| C           | 46   | 15917PP  | 1   | 48" MINI GLOBAL 70/30 COMBO 6" |

C – Only one is used depending on the configuration, reference to the table in the Chain Assemblies section.

| 50/50 ROCK |      |          |     |                               |
|------------|------|----------|-----|-------------------------------|
|            | ITEM | PART NO. | QTY | DESCRIPTION                   |
| D          | 47   | 15902PP  | 1   | 36" MINI GLOBAL 50/50 ROCK 4" |
| D          | 48   | 15906PP  | 1   | 36" MINI GLOBAL 50/50 ROCK 6" |
| D          | 49   | 15910PP  | 1   | 36" MINI GLOBAL 50/50 ROCK 8" |
| D          | 50   | 15914PP  | 1   | 48" MINI GLOBAL 50/50 ROCK 4" |
| D          | 51   | 15918PP  | 1   | 48" MINI GLOBAL 50/50 ROCK 6" |

D – Only one is used depending on the configuration, reference to the table in the Chains Assemblies section.

## Boom Installation Parts List (cont.)

| CTRN36 |          |     |                                |
|--------|----------|-----|--------------------------------|
| ITEM   | PART NO. | QTY | DESCRIPTION                    |
| 52     | 15467VW  | 1   | TRENCHER BOOM WELDMENT CUL 36" |

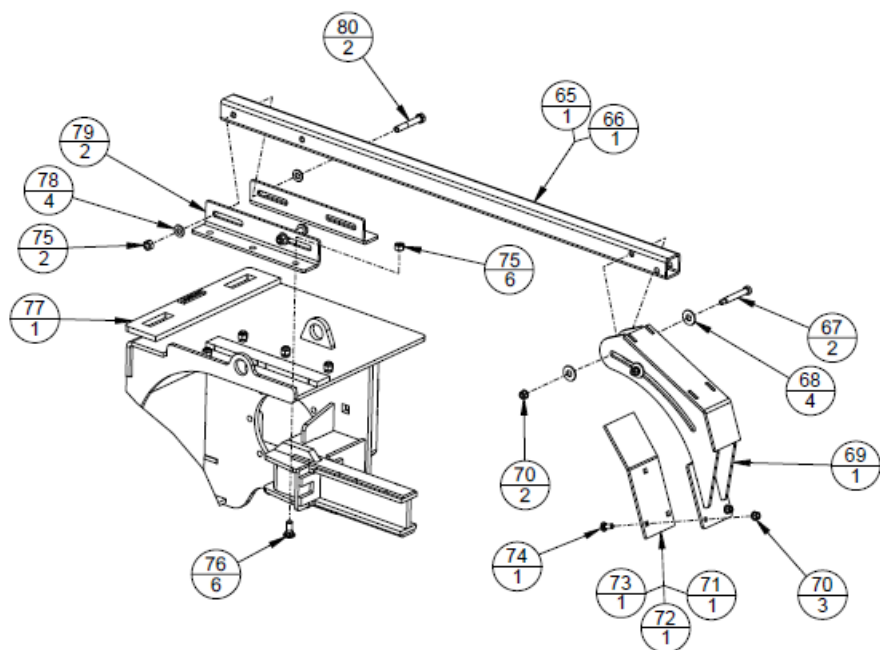
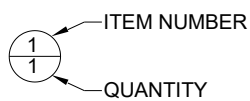
\* This table is model specific.

| CTRN48 |          |     |                                |
|--------|----------|-----|--------------------------------|
| ITEM   | PART NO. | QTY | DESCRIPTION                    |
| 53     | 15471VW  | 1   | TRENCHER BOOM WELDMENT CUL 48" |

\* This table is model specific.

| ITEM | PART NO. | QTY | DESCRIPTION                  |
|------|----------|-----|------------------------------|
| 54   | 15507PP  | 1   | 3/4"-10 X 3 1/2" LG HHCS     |
| 55   | 15488VW  | 1   | TRENCHER IDLER WHEEL WDT CUL |
| 56   | 9849PP   | 1   | IDLER BEARING ASSEMBLY       |
| 57   | 15491VP  | 2   | TRENCHER IDLER SPACER CUL    |
| 58   | 15439PP  | 1   | IDLER SHAFT 3 1/2" LG        |
| 59   | 1011PP   | 1   | 3/4"-10 TOP LOCK NUT         |
| 60   | 9933PP   | 4   | 3/4"-10 HEX NUT GR8          |
| 61   | 9929PP   | 1   | 1 1/4"-12 HEX JAM NUT        |
| 62   | 15474VW  | 1   | TRENCHER IDLER MOUNT WDT CUL |
| 63   | 10029PP  | 2   | SPRING COMPRESSION TRENCHER  |
| 64   | 9927PP   | 2   | 3/4"-10 X 6" LG HHCS GR8     |

# Crumber Installation



# Crumber Installation Parts List

| CTRN36 |          |     |                               |
|--------|----------|-----|-------------------------------|
| ITEM   | PART NO. | QTY | DESCRIPTION                   |
| 65     | 15482VP  | 1   | TRENCHER CRUMBER TUBE CUL 36" |

\* This table is model specific.

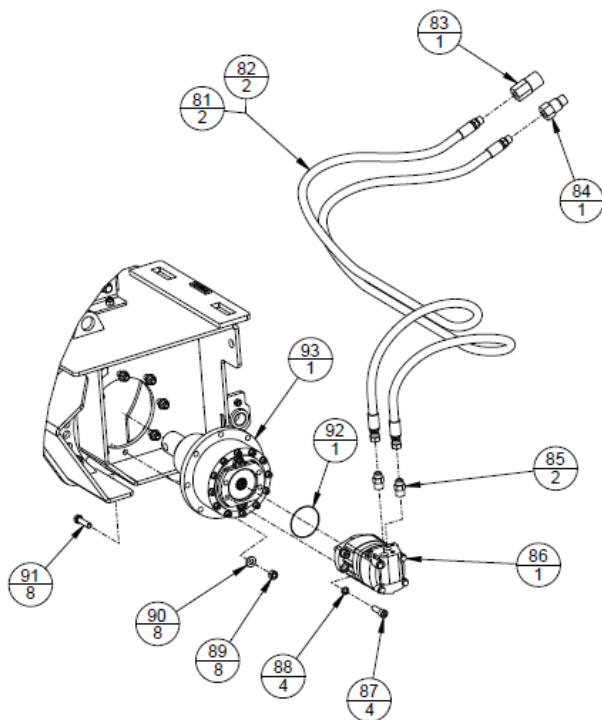
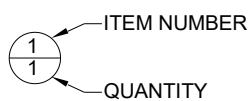
| CTRN48 |          |     |                               |
|--------|----------|-----|-------------------------------|
| ITEM   | PART NO. | QTY | DESCRIPTION                   |
| 66     | 15483VP  | 1   | TRENCHER CRUMBER TUBE CUL 48" |

\* This table is model specific.

|   | ITEM | PART NO. | QTY | DESCRIPTION                   |
|---|------|----------|-----|-------------------------------|
|   | 67   | 15661PP  | 2   | 3/8"-16 X 1/2" X 3" LG BOLT   |
|   | 68   | 5148PP   | 4   | 1/2" USS FLAT WASHER          |
|   | 69   | 15484VW  | 1   | TRENCHER CRUMBER WDT CUL      |
|   | 70   | 6140PP   | 5   | 3/8"-16 TOP LOCK FLANGE NUT   |
| A | 71   | 15492VP  | 1   | TRENCHER CRUMBER PLATE 4"     |
| A | 72   | 9923VP   | 1   | 6" CRUMBER CLEANOUT PLATE     |
| A | 73   | 9930VP   | 1   | 8" CRUMBER CLEANOUT PLATE     |
|   | 74   | 1089PP   | 3   | 3/8"-16 X 1" LG CARRIAGE BOLT |
|   | 75   | 1003PP   | 8   | 1/2"-13 REVERSE LOCK NUT      |
|   | 76   | 7964PP   | 6   | 1/2"-13 X 1 1/4" LG CB        |
|   | 77   | 15451VW  | 1   | TRENCHER HEAD FRAME WDT CUL   |
|   | 78   | 12651PP  | 4   | 1/2" SAE HARD PLATED WASHER   |
|   | 79   | 15481VP  | 2   | TRENCHER CRUMBER MOUNT CUL    |
|   | 80   | 9435PP   | 2   | 1/2"-13 X 3 1/4" LG HHCS      |

A – Only one is needed depending on the configuration.

# Hydraulic System Installation



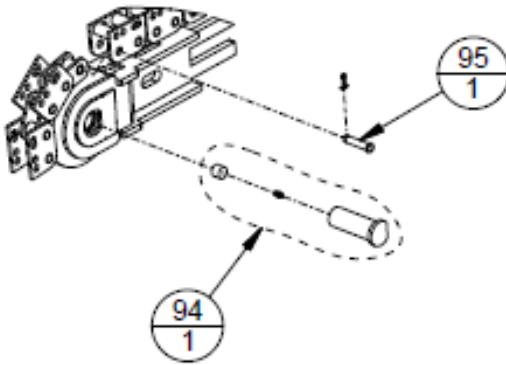
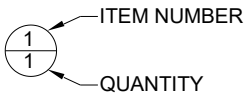
Male coupler (Item #84) plumbed to motor Port "B", Female coupler (Item #83) plumbed to motor Port "A".

# Hydraulic System Installation Parts List

|   | ITEM | PART NO. | QTY | DESCRIPTION                 |
|---|------|----------|-----|-----------------------------|
| A | 81   | 15118PP  | 2   | HYD HOSE 1/2" X 84" LG      |
| A | 82   | 15929PP  | 2   | HYD HOSE 1/2" X 96" LG      |
|   | 83   | 8494PP   | 1   | COUPLER FEMALE 8FB          |
|   | 84   | 8495PP   | 1   | COUPLER MALE 8FB            |
|   | 85   | 13567PP  | 2   | ADAPTER 8MJ TO 10MB         |
|   | 86   | 15293PP  | 1   | MOTOR TRENCHER 4.9          |
|   | 87   | 6719PP   | 4   | 1/2"-13 X 1 1/2" LG SHCS    |
|   | 88   | 6720PP   | 4   | 1/2" HI-COLLAR LOCK WASHER  |
|   | 89   | 1003PP   | 8   | 1/2"-13 REVERSE LOCK NUT    |
|   | 90   | 12651PP  | 8   | 1/2" SAE HARD PLATED WASHER |
|   | 91   | 5149PP   | 8   | 1/2"-13 X 2" LG HHCS        |
|   | 92   | 6730PP   | 1   | O-RING FOR AUGER            |
|   | 93   | 15192PP  | 1   | PLANETARY TRENCHER          |

A – Only one is needed depending on the configuration.

# Chain Connection and Idler Shaft



Item #95 is supplied with the chain. To remove 15945PP (Item #95-Pin w/Keeper), bend the cotter pin straight and remove. Use a punch to pound out pin. Take note of chain pin orientation as the pin can only be installed from one side of the chain. Reinstall cotter pin and bend to secure the pin (a new cotter pin may be required).

Item #94 (15439PP-Idler Shaft) contains a grease fitting. To grease, remove the plug on the nut side of the Idler Shaft, grease and reinstall plug.

| ITEM | PART NO. | QTY | DESCRIPTION                              |
|------|----------|-----|--|
| 94   | 15439PP  | 1   | IDLER SHAFT 3 1/2" LG                    |
| 95   | 15945PP  | 1   | PIN W/KEEPER GLOBAL CHAIN (1.654" PITCH) |

