

# **PATRIOT**

## **OWNER'S AND OPERATOR'S MANUAL**

### **FOR PATRIOT MINI GREASE GUN**





Manual Part #888000267, Rev. A  
Revised 01/05/23


# Safety-Messages


## General Look & Meaning

Everyone's safety is very important to us. We have provided you with important safety-messages in this manual and on the equipment. Read these messages, carefully.

A safety-message alerts you to potential hazards that could hurt you or others. Each safety-message is preceded by a safety-alert symbol  and one (1) of the three (3) words: DANGER, WARNING, or CAUTION. The following are samples of each alert and what that type of alert means.

 <b>DANGER</b>
You WILL be KILLED or SERIOUSLY HURT if you don't follow these instructions.

 <b>WARNING</b>
You CAN be KILLED or SERIOUSLY HURT if you don't follow these instructions.

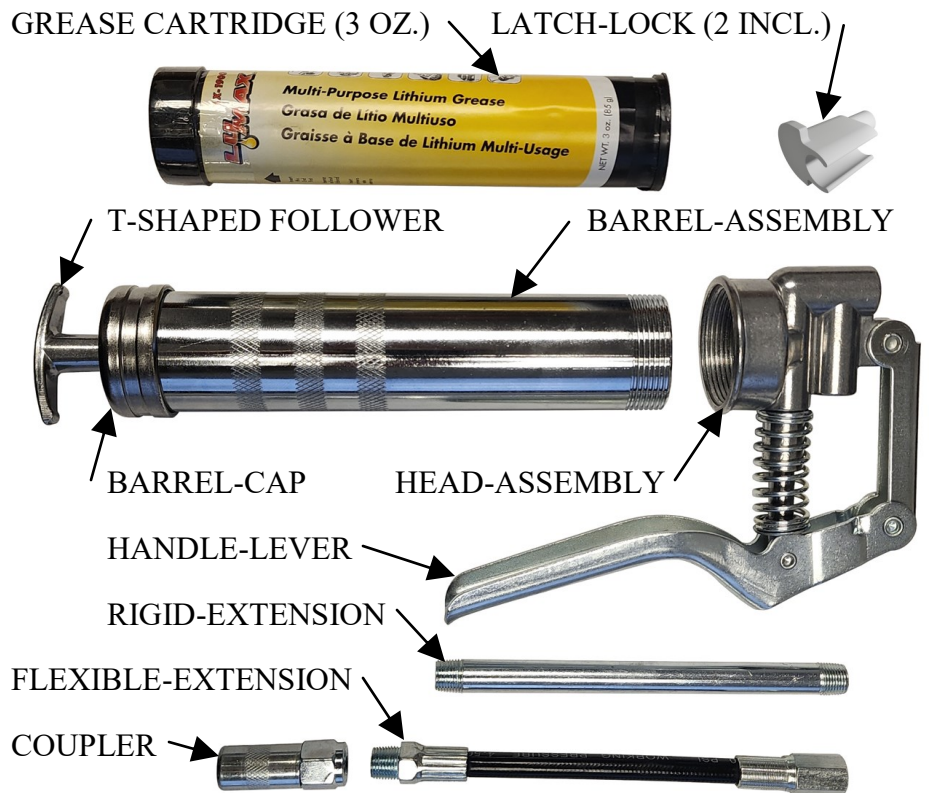
 <b>CAUTION</b>
You CAN be HURT if you don't follow these instructions.

# Grease Gun Instructions

## General

Your Patriot Mini Grease Gun is designed to provide you with a convenient means for lubricating the outboard-bearing of your Patriot Chipper-Shredder-Vac (CSV).

The Patriot Mini Grease Gun comes with all of the required components, including grease. These components are identified in the picture below.



The steps to complete assembly of your product: required by you, are very easy and straight-forward.

## Tools – Required

The following tools are required to properly complete the **Product Assembly Procedure**:

- [ ] 12 mm combination-wrench
- [ ] 14 mm combination-wrench

Always use the proper hand-tools. Personal-injury can result when using the improper type-or-size of tool, as well as through the use of a worn-or-damaged tool that may slip off of hardware being tightened.

# Grease Gun Instructions

## Tools – Recommended

The following tools are recommended to properly complete the **Product Assembly Process**:

- [ ] Work-gloves (either all-rubber or rubber-palmed to improve grip)
- [ ] Paper towels

## Product Assembly

DO NOT PROCEED UNTIL YOU HAVE VERIFIED:  
YOU RECEIVED ALL PICTURED COMPONENTS  
**AND**

YOU HAVE ALL OF THE REQUIRED TOOLS

1. Identify a clean work-area, where the grease gun components can be handled comfortably. The area should have a hard, level surface that won't be harmed if it gets grease on it.
2. Hand-tighten the barrel-assembly completely into the head-assembly.

*Note: **DO NOT** install the grease cartridge at this time.*

3. Referring to the adjacent image, slide either end of the rigid-extension through the opening in the handle-lever and carefully thread it into the discharge-port of the head-assembly; only hand-tighten this connection, at this time.
4. Thread the female-end of the flexible-extension onto the exposed-end of the rigid-extension and hand-tighten.
5. Using a 12 mm wrench on the female-end of the flexible-extension, start to tighten the connection.

*Note: As you turn the wrench you will simultaneously be tightening the connections at both ends of the rigid-extension; Continue tightening until the connections at both ends of the rigid-extension are snug. **DO NOT OVERTIGHTEN!** While you don't want the connections to leak, you don't want to damage the connections.*

6. Thread the coupler onto the exposed-end of the flexible-extension and hand-tighten.
7. To complete this connection, use a 12 mm wrench to hold the end of the flexible-extension; Then, use a 14 mm wrench to tighten the coupler until it is snug.

### NOTICE

This product may become damaged or appear not to work properly if you do not follow the instructions provided.

You should thoroughly read **AND** completely understand each instruction step **BEFORE** you attempt to execute the step.

Hastily presuming you know what to do will cause more frustration and waste more time than doing the task correctly the first time.

DISCHARGE-PORT





### **⚠ NOTICE**

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## **Grease Gun Instructions**

### **Product Assembly (continued)**

#### **8. CONGRATULATIONS! You have completed the assembly of your Patriot Mini Grease Gun.**

*Please, be sure to carefully read and understand the operating instructions, provided in this manual, before attempting to use this product.*

### **Barrel-Assembly Removal/Grease Cartridge Installation**

To minimize your potential frustration, we feel it is important to point out: the barrel-assembly consists of the obvious components that you can see at a glance PLUS a spring-loaded plunger! This is a helpful piece of information, because attempting to remove a barrel-assembly that still contains a fair amount of grease can result in an unpleasant mess to clean up.

1. You should only remove the barrel-assembly if you are confident you are out of grease; the best way to determine this is as follows:
  - a. If the grease gun is new and has never had a grease cartridge installed, proceed to step 2.
  - b. Make sure the coupler is not connected to a grease-zerk.
  - c. Gripping the knurled-area of the barrel-assembly, loosen it **ONLY** 1 1/2 TURNS within the head-assembly. Wait for 15 seconds; then, hand-tighten the barrel-assembly completely into the head-assembly. *This helps purge any potential air gaps.*
  - d. Place a clean paper towel on an appropriate work-area.
  - e. With the coupler positioned over the paper towel, pump the handle-lever, up to twenty (20) times, until you get three (3), consecutive, full pumps of grease coming out of the coupler. Wipe off the end of the coupler and discard the paper towel.
    - [I] If you got three (3), consecutive, full pumps of grease coming out of the coupler, you **DO NOT** need to install a new grease cartridge. You can proceed to the **Operating Instructions**.
    - [II] If you **DID NOT** get three (3), consecutive, full pumps of grease coming out of the coupler, you **NEED** to install a new grease cartridge. Proceed to step 2.
2. This grease gun requires one (1) 3 oz., lithium-based grease cartridge. One (1) was initially provided with the grease gun.

## Grease Gun Instructions

### Barrel-Assembly Removal/Grease Cartridge Installation (continued)

Prepare the grease cartridge as follows:

- a. Place a clean paper towel on an appropriate work-area.
- b. Locate the flanged-end of the cartridge, as shown. COMPLETELY remove, and discard, the foil-seal.

*Note: The grease should be right up to the end of the cartridge.*

- c. Remove the plastic seal and cap from the other end of the cartridge.

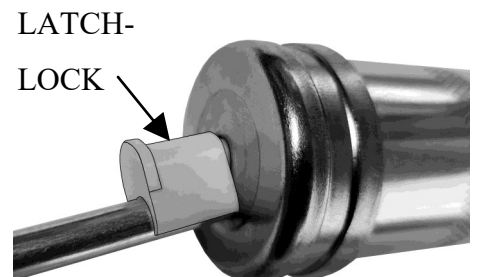
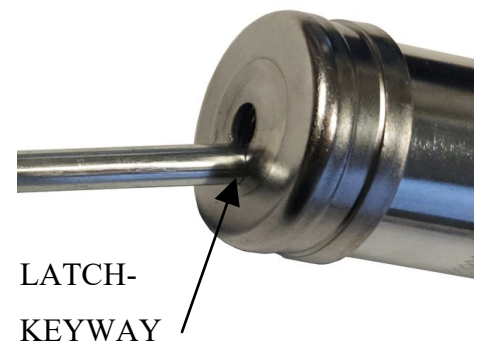
*Note: The grease will start about 2" in from this non-flanged-end of the cartridge; this "dead-space" is intentional to allow space for the plunger to fit inside of the grease cartridge.*

- d. Lay the grease cartridge on the paper towel until told to install it.
3. Gripping the knurled-area of the barrel-assembly, unscrew it COMPLETELY from the head-assembly. Lay the head-assembly on the paper towel with the grease cartridge.
  4. Hold the barrel-assembly in one hand and use your other hand to pull the T-shaped follower; this will retract the attached, spring-loaded follower-rod from the barrel-cap. Continue to pull the T-shaped follower, about 5", until you locate the latch (groove) in the follower-rod. Once the latch is located, lock the latch into the latch-keyway, found in the barrel-cap; refer to the adjacent image.

*Note: The latch may release, relatively easily, if accidentally bumped. Patriot has provided a latch-lock that should be clipped onto the follower-rod and then slid along the rod until the protruding tip slides into the barrel-cap, as shown. The latch-lock will prevent the latch from accidentally being released.*

5. If there is an old grease cartridge in the barrel-assembly, it should be removed and discarded.
6. Install the new grease cartridge, from step 2, by inserting the non-flanged-end (with the "dead-space") into the barrel-assembly. GENTLY push the grease cartridge into the barrel-assembly until you feel resistance, **THEN STOP**; this should leave about 1" of the grease cartridge extending from the end of the barrel-assembly.

*Note: DO NOT try to force the grease cartridge completely into the barrel-assembly; doing this will likely waste grease by pushing it out of the grease cartridge.*



## Grease Gun Instructions

### Barrel-Assembly Removal/Grease Cartridge Installation (continued)

7. Attach the barrel-assembly to the head-assembly as follows:
  - a. Grasp the knurled-area of the barrel-assembly in your dominant hand, so the exposed, flanged-end of the grease cartridge is pointing toward your non-dominant hand.
  - b. Grasp the head-assembly in your non-dominant hand, so the threaded connection, which the barrel-assembly attaches to, is aligned with the exposed flanged-end of the grease cartridge.
  - c. Slowly begin to press the exposed flanged-end of the grease cartridge into the head-assembly; continue until the threads of the barrel-assembly meet the threads of the head-assembly.
  - d. While maintaining pressure, carefully rotate the barrel-assembly to engage the threads, *making sure you do not cross-thread the connection.*
  - e. Continue to rotate the barrel-assembly until you have **COMPLETELY, HAND-TIGHTENED** the connection. **DO NOT** get in a rush to use the grease gun; It's critical that you follow the remaining steps.

*For reference: It takes APPROXIMATELY three (3), full turns to tighten the connection, once the threads first engage.*

8. Engage the spring-loaded plunger as follows:
  - a. Disengage the latch-lock by sliding it, along the follower-rod, away from the barrel-cap .
  - b. Pull the T-shaped follower slightly: shifting it out of the latch-keyway, so that the follower-rod is aligned with the barrel-assembly, and slowly release the T-shaped follower. **DO NOT** push on the T-shaped follower.

*Note: The spring inside the barrel-assembly will begin to draw the follower-rod slightly into the barrel, causing the plunger to apply a slight pressure on the grease, for proper operation of grease gun.*

- c. Remove the latch-lock, and store it for future use.
9. While counter-intuitive, grip the knurled-area of the barrel-assembly and loosen it **ONLY 1 1/2 TURNS** in the head-assembly.
10. Wait for 15 seconds; then, hand-tighten the barrel-assembly completely into the head-assembly. Don't be surprised if the T-shaped follower moves slightly.

## Grease Gun Instructions

### Barrel-Assembly Removal/Grease Cartridge Installation (continued)

*Note: Steps 9 and 10 are designed to purge the vast majority of the air from in between the grease cartridge and head-assembly. Not purging this air can cause the grease gun to appear dysfunctional.*

11. The next step in preparing the grease gun for use is purging the ENTIRE head-assembly, as follows:
  - a. Make sure the coupler is not connected to a grease-zerk.
  - b. Place a clean paper towel on an appropriate work-area.
  - c. With the coupler positioned over the paper towel, pump the handle-lever twenty (20) times; The last pump should be a full pump of grease coming out of the coupler. Wipe off the end of the coupler and discard the paper towel.
    - [I] If the last pump IS NOT a full pump of grease coming out of the coupler, you should repeat steps 8 thru 10. If the problem persists, contact Patriot.
    - [II] If the last pump IS a full pump of grease coming out of the coupler, the entire head-assembly has been purged of air.
12. Use a clean paper towel to wipe down the grease gun to make sure it is dry, clean, and free from oil and grease, before you operate or store it. DO NOT use solvents or immerse the grease gun in any liquids to aid cleaning!

### Operating Instructions

While the Patriot Mini Grease Gun is capable of being used for lubricating numerous items, our intent is to provide you with a convenient means for lubricating the outboard-bearing of your Patriot Chipper-Shredder-Vac (CSV); Therefore, our instructions are tailored to address that specific purpose.

1. Use a clean paper towel to wipe down the grease gun to make sure it is dry, clean, and free from oil and grease, before you continue.
2. Make sure the coupler is not connected to a grease-zerk
3. Place a clean paper towel on an appropriate work-area.
4. With the coupler positioned over the paper towel, pump the handle-lever, until you get one (1), full pump of grease coming out of the coupler.

#### NOTICE

This product may become damaged or appear not to work properly if you do not follow the instructions provided.

You should thoroughly read **AND** completely understand each instruction step **BEFORE** you attempt to execute the step.

Hastily presuming you know what to do will cause more frustration and waste more time than doing the task correctly the first time.

#### WARNING

##### MOVING PARTS HAZARD

Serious personal-injury can occur if you come into contact with the chipper-shredder's moving parts.

##### FOR ALL UNITS:

Before attempting to service the chipper-shredder, turn off the motor/engine and wait for the rotor to come to a complete stop.

##### FOR ELECTRIC UNITS:

Also, disconnect the extension-cord (from the electric motor).

## ⚠ WARNING

### MOVING PARTS HAZARD

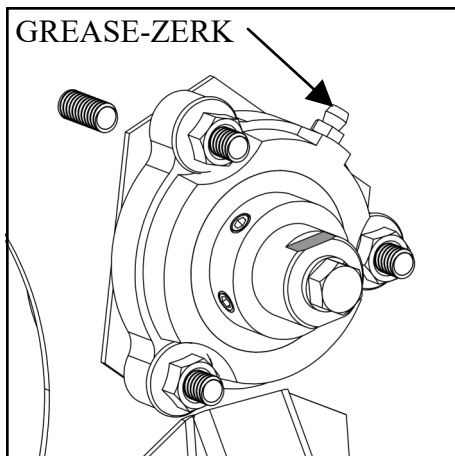
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Before attempting to service the chipper-shredder, turn off the motor/engine and wait for the rotor to come to a complete stop.

#### FOR ELECTRIC UNITS:

Also, disconnect the extension-cord (from the electric motor).



## Grease Gun Instructions

### Operating Instructions (continued)

*Note: The purpose of this step is make sure: the grease gun is primed and the coupler is purged of any dirt and debris that may have collected. You don't want to push contaminants into the bearing.*

- a. If you did not get one (1), full pump of grease coming out of the coupler, you may be out of grease or have an air pocket in the grease gun; Follow the **Barrel-Assembly Removal/Grease Cartridge Installation Procedure** to resolve the issue.
  - b. If you got one (1), full pump of grease coming out of the coupler, use the paper towel to carefully clean off excess grease from the coupler.
5. Locate the grease-zerk on outboard-bearing on the front of your Patriot Chipper-Shredder-Vac (CSV); refer to the adjacent image.
  6. Use a paper towel to carefully clean off the grease-zerk.
  7. Bring the grease gun to the bearing. While grasping the coupler with your fingers, VERY FIRMLY push the coupler onto the grease-zerk.

*Note: When properly installed, the coupler will snap/lock onto the zerk and require a reasonable amount of effort to be removed. It is important that the coupler is locked onto the zerk so enough pressure can be exerted to push the grease into the bearing.*

8. With your non-dominant hand, **FIRMLY** hold the coupler onto the grease-zerk. With your dominant hand, squeeze the handle-lever, **ONLY ONCE**, to properly lubricate the bearing.

*The bearing has been factory lubricated and we recommend: you grease the bearing with **ONE (1) PUMP** of lithium-based grease after every twenty (20) hours of operation; this minimizes the chances of moisture and dirt entering the bearing. **DO NOT OVERGREASE THE BEARING!** More grease is **NOT** better. If you overgrease the bearing, you will unknowingly blow the inner-seal off the bearing, ruining the bearing.*

- a. If the coupler popped off of the grease-zerk or the pump of grease oozed out of the connection between the coupler and grease-zerk, you most likely did not get grease into the bearing. Go back to step 7.
- b. If the coupler stayed in place and you did not see grease ooze out of the connection between the coupler and grease-zerk, the bearing has been properly lubricated!



# Grease Gun Instructions

## Operating Instructions (continued)

9. Firmly grasp the hex-end of the coupler and pull it away from the chipper-housing to disconnect the coupler from the grease-zerk; refer to the adjacent image.
10. Use a clean paper towel to clean off both the grease-zerk and the coupler.
11. Follow the **Storage Recommendations** for the grease gun.

## Storage Recommendations

1. Use a clean paper towel to wipe down the grease gun to make sure it is dry, clean, and free from oil and grease. **DO NOT** use solvents or immerse the grease gun in any liquids to aid cleaning!
2. Hand-tighten the cylindrical-outer-end of the coupler; it may have loosened when it was last removed from the grease-zerk.
3. If you suspect: the grease gun is out, or nearly out, of grease, make a note to get a new 3 oz., lithium-based grease cartridge, now. Not realizing you are out of grease, until you need to lubricate the bearing, means you are much more likely to put off or skip this important maintenance.
4. Store the grease gun in a clean, dry, and safe location: away from children.

## Troubleshooting Instructions

### Symptom 1: Grease gun does not dispense grease

#### I. Common Causes:

##### *A. Grease gun is out of grease or contains trapped-air*

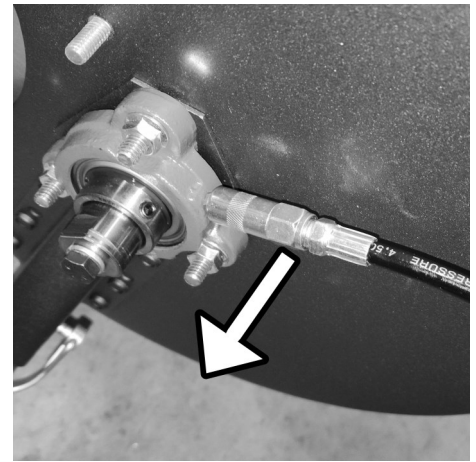
1. Follow the **Barrel-Assembly Removal/Grease Cartridge Installation Procedure**.

##### *B. Plunger is not moving properly inside the grease cartridge*

1. Pull the T-shaped follower straight out from the barrel-cap and then allow the spring-loaded plunger to draw the follower-rod back into the barrel.
2. Proceed to **Barrel-Assembly Removal/Grease Cartridge Installation Procedure** step 1.b.

#### II. Uncommon Causes:

Contact Patriot.



### **Patriot Products, Inc.**

To contact Patriot directly, you can email us at:

[info@patriot-products-inc.com](mailto:info@patriot-products-inc.com)

or call us at:

(800) 798-2447

or

(262) 523-4580

Our normal business hours are Monday through Friday, between 9 a.m. and 4 p.m. CT. Voicemail is available after normal business hours.