



## Grease Gun Training

August 2023

- POG Coverage
- Types of Grease Guns
- Various Grease Gun Components
- How a Grease Gun Works
- Loading a Grease Gun
- Gun Testing – Competitive Comparison
- Our Grease Gun Offering
- Highline Warren Advantage

# LUBRICATION - POG

Grease Guns are a small number of skus (10) on the POG, but drive a good portion of the dollars.

## Lubrication Training Sessions

**Grease Guns**  
**31% of the \$ Sales**  
**15% of the unit Sales**

Pumps

Fittings/Hoses/  
Accessories



# GREASE GUNS - TYPES

- Manual
  - Lever – two hand, more power
  - Pistol – one hand operation
  - Push-style – no mechanical assist, low pressure
  - Suction – no mechanical assist, low pressure
- Air Operated – air pressure assist
- Battery Operated - electrical assist



# GREASE GUNS - COMPONENTS

- Grease Gun Parts

- Coupler

- Jaws
- Tension adjustment
- Check valve

- Pipe / Hose

- Head Cap Assembly

- Head cap
  - Ports
- Piston
- Linkage
- Lever/Pistol

- Barrel

- End Cap/Plunger Assembly

- Plunger
- Rod
- Spring
- Handle



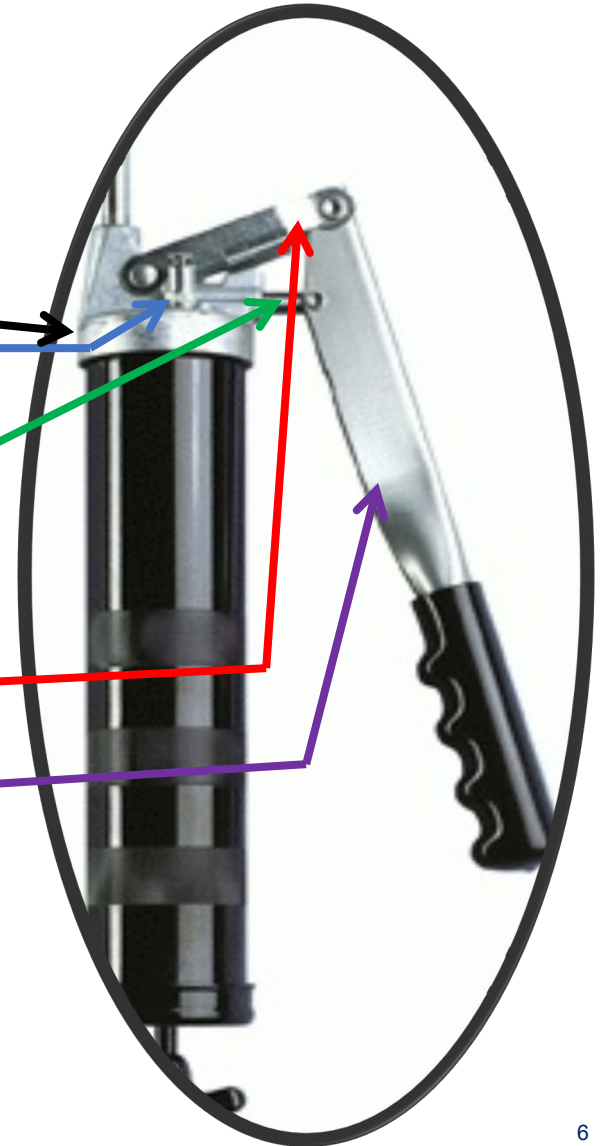
- Head Cap Assembly

- Head cap
  - Ports
    - Bleeder Valve
    - Loader Fitting

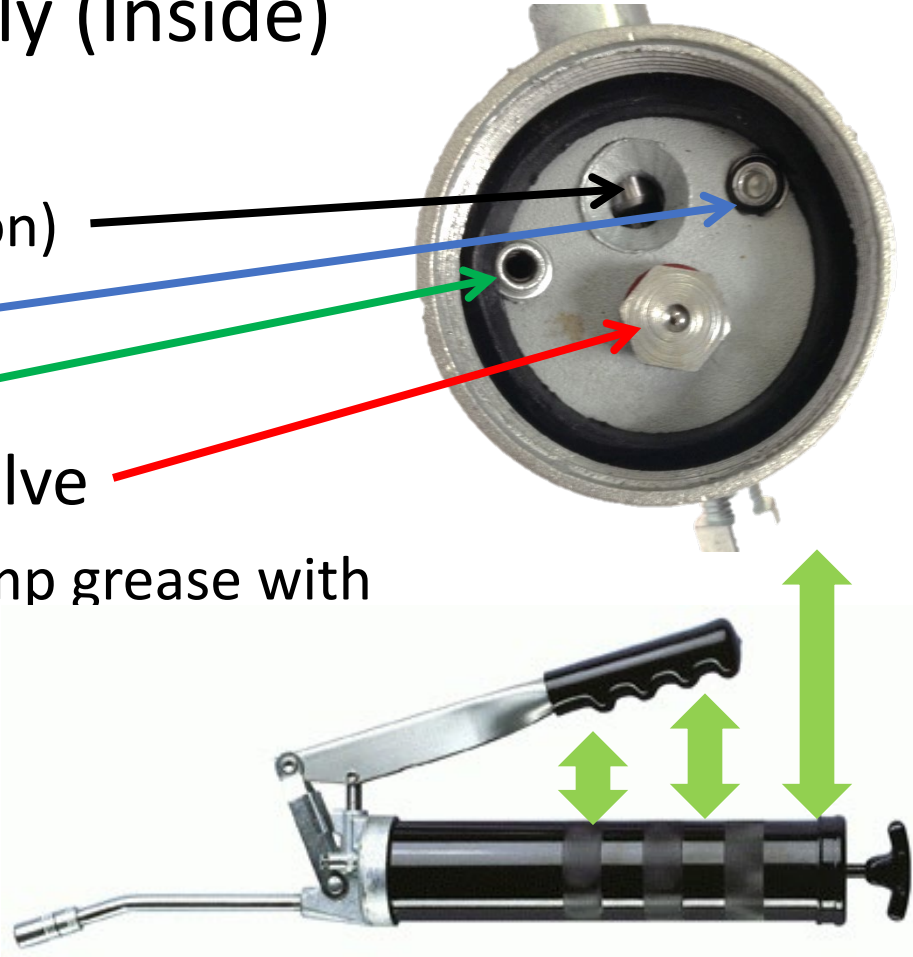
- Piston

- Linkage

- Lever/Pistol



- Head Cap Assembly (Inside)
  - Head cap
    - Grease Port (Piston)
      - Bleeder Valve
      - Loader Fitting
  - Variable Stroke Valve
    - Allows gun to pump grease with short stroke



- End Cap / Plunger Assembly

- Plunger

- Balloon (LubriMatic guns)
- Reversible (UltraView guns)

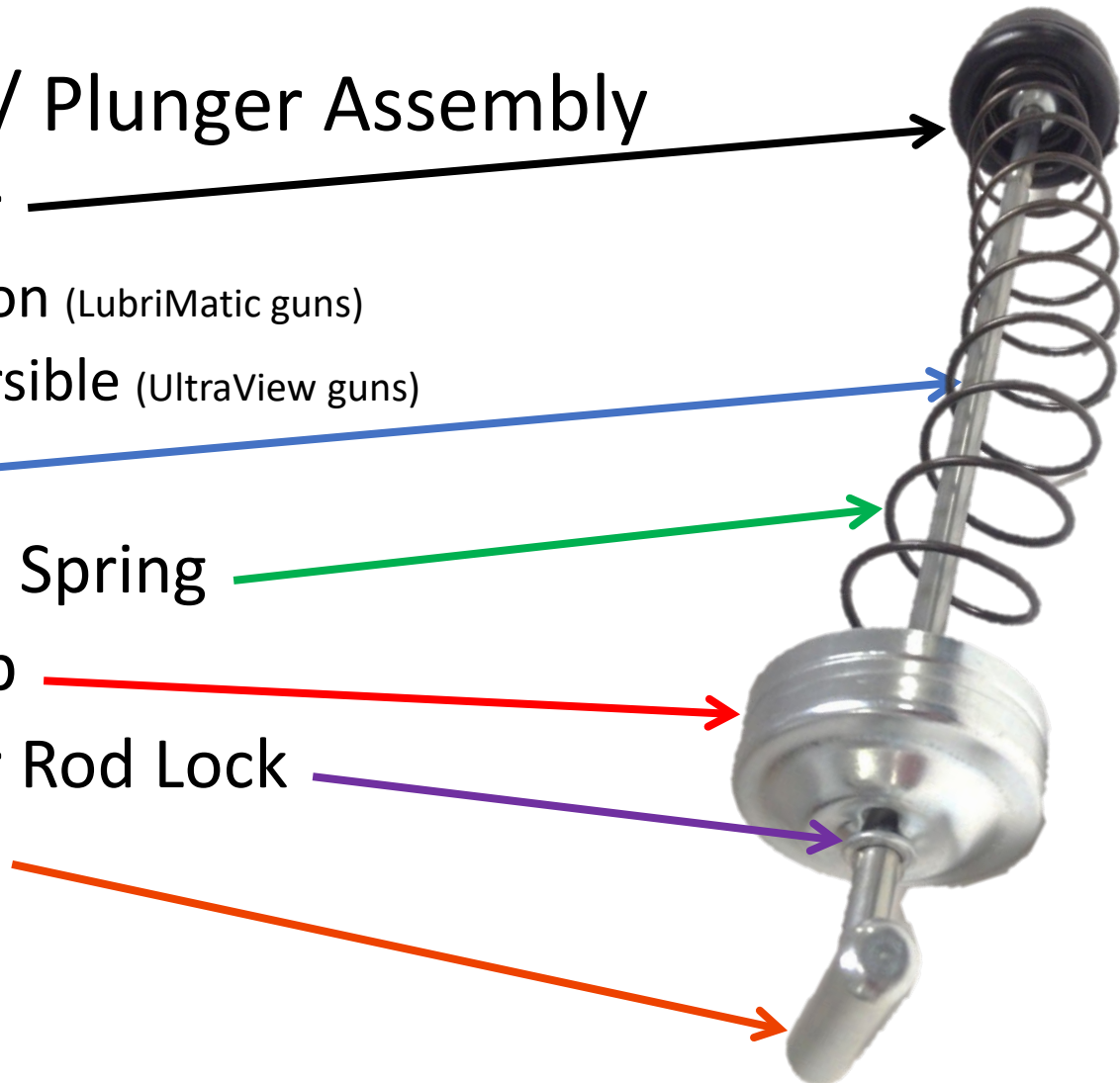
- Rod

- Tension Spring

- End Cap

- Plunger Rod Lock

- Handle





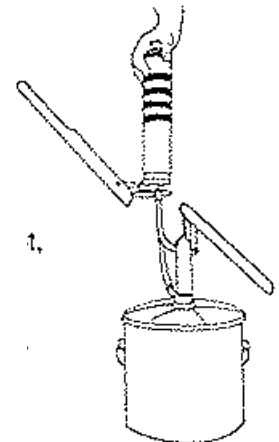
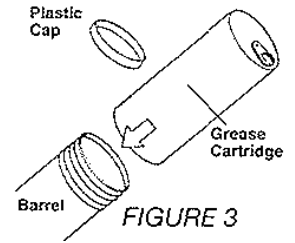
# GREASE GUN THREADS



- Grease Guns come with three (3) types of threads
  - Standard Threads take 12-14 twists to remove or install the headcap.
  - Speed Threads take 6-8 twists to remove or install the headcap.
  - Quarter Turn takes a fraction of one twist to remove or install the headcap

- How the Basic Grease Gun Works
  - The Plunger and spring put slight pressure on the grease forcing it into the head cap
  - Pulling the lever opens a cavity in the head cap and allows grease to be pushed by the spring and drawn by vacuum into the cavity
  - Pushing the lever closed rams a piston through the cavity and forces it to discharge under high pressure generated by the mechanical advantage gained by the lever

- Three Ways to Load a Grease Gun
  - Replaceable Cartridge
    - Clean and easy (see and demonstrate next slide)
  - Suction Load
    - Remove head cap
    - Stick open end of barrel in pail of grease
    - Pull back on plunger rod to suck grease into barrel
  - Bulk Load Using a Grease Pump
    - Requires loader fitting on grease gun and pail of grease with pump



# GREASE GUNS - LOADING

- How to Load a Grease Gun with Replaceable Cartridge
  1. Unscrew the head cap from the barrel
  2. Pull back the rod handle and lock into position (Figure 2)
  3. Remove the plastic cap from the top of the grease cartridge and insert open end first into the barrel (Figure 3)
  4. Push the grease cartridge into the barrel until the rim of the pull-tab end connects the rim of the barrel. (Figure 4) Then remove pull-tab seal from the end of the grease cartridge.
  5. Loosely install head cap to the barrel.
  6. Release rod from retaining slot in end cap
  7. Exert pressure on rod to force piston into cartridge and grease into head.
  8. Tighten head cap and depress air bleeder valve to expel trapped air if the grease gun is equipped with a bleeder valve.
  9. Pump the lever several times to prime the gun until grease flows from the coupler.
  10. If grease does not begin to flow after several pumps and the grease gun does not include bleeder valve, it may be necessary to loosen the head cap slightly to expel trapped air and return to step 8.

FIGURE 2

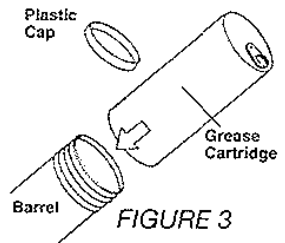
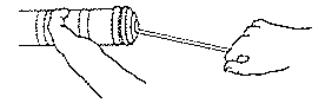


FIGURE 3

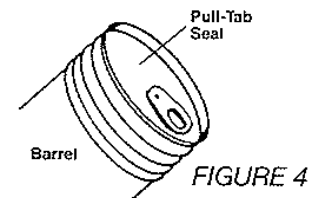


FIGURE 4

# STANDARD PISTOL GUN TEST

Our equipment meets all of the standards we call out on our packaging.

Standard Pistol Gun Test Performed	Lubrimatic 30300	Lubrimatic 30303	Lubrimatic 30310	Legacy L1320	Performance Tool/Wilmar W54204
Date Tested	5/22/2017	8/2/2018	8/8/2017	2/6/2020	2/25/2020
Retail Cost				\$17.99	\$21.99
Working pressure 5,000 PSI	Pass	Pass	Pass	Pass	Fail @ 2,300 psi Fail @ 2,000 psi
Max pressure	8,900 psi 9,400 psi	Over 6,000 psi Over 6,000 psi	5,500 psi 6,400 psi	6,700 psi 7,200 psi	3,000 psi 3,400 psi
Displacement (oz/40 strokes)	1.131 oz. 1.217 oz.	1.10 oz. 1.16 oz.	1.14 oz. 1.242 oz.	.913 oz. .841 oz.	.988 oz. 1.077 oz.
Grease coupler jaw type	4 jaw	4 jaw	4 jaw	3 jaw	3 jaw
Grease coupler working pressure	8,900 psi 9,400 psi	Over 6,000 psi Over 6,000 psi	5,500 psi 6,400 psi	6,700 psi 7,200 psi	3,000 psi 3,400 psi
Grease pipe length	5 ½"	5 ½"	5 ½"	4 7/8"	-
Whip hose length	-		12" - 12 ½"	-	12 ½"
Grease pipe burst pressure	-	24,389 psi - 25,346 psi	Terminated 34,000 psi	-	-
Whip hose burst pressure	-	-	17,500 psi - 18,500 psi	-	14,000 psi expelled fitting 15,000 psi Hose burst
Cartridge load (Pass/Fail)	Pass	Pass	Pass	Pass	Pass
Plunger type (Balloon/Biscuit)	Biscuit	Balloon	Biscuit	Balloon	Biscuit
Bulk Load Capable (Yes/No)	No	No	No	No	Yes
Air bleeder valve (Yes/No)	No	Yes	No	No	Yes
Handle Grip (Yes/No)	No	Yes	No	No	Yes
L1320 - Rust inside barrel and end cap					
L1320 - Removable end cap					
L1320 - Plunger Lok function					
W54204 - Leaked piston/bore 2,300 psi					
W54204 - Leaked piston/bore 2,300 psi					

# LEVER GUN TESTS

Standard Gun Test Performed	Lubrimatic 30200	Lubrimatic 30203	Legacy L1310	Autozone Sure Bilt L521A	THD Core Gear CG321
<b>Date Tested</b>	6/9/2017	8/2/2018	2/6/2020	3/18/2020	
<b>Retail Cost</b>			\$18.99	\$18.99	\$18.98
<b>Working pressure 6,000 PSI</b>	Pass Pass	Pass Pass	Pass Pass	Fail @ 3,700 PSI Pass	Pass Pass
<b>Max pressure</b>	7,800 psi 8,800 psi	Over 6,000 psi Over 6,000 psi	8,800 psi 8,700 psi	3,700 psi headcap canted on barrel 6,800 psi	7,300 psi 6,800 psi
<b>Displacement (oz/40 strokes)</b>	1.206 oz. 1.251 oz.	1.13 oz. 1.22 oz.	1.267 oz. 1.366 oz.	1.003 oz. .823 oz.	1.699 oz. 1.524 oz.
<b>Grease coupler jaw type</b>	4 jaw	4 jaw	4 jaw	4 jaw	4 jaw
<b>Grease coupler working pressure</b>	7,800 psi 8,800 psi	Over 6,000 psi	8,800 psi 8,700 psi	3,700 psi 6,800 psi	7,300 psi 6,800 psi
<b>Grease pipe length</b>	5 ½"	5 1/2"	5 ½	5 ⅞	5 ⅜"
<b>Whip hose length</b>	-	-	-	-	-
<b>Grease pipe burst pressure</b>	15,500 psi 17,000 psi	24,389 psi 25,346 psi	17,500 psi 18,000 psi	16,000 psi 17,500 psi	16,500 psi 20,000 psi
<b>Whip hose burst pressure</b>	-	-	-	-	-
<b>Cartridge load (Pass/Fail)</b>	Pass	Pass	Pass	Pass	Pass
<b>Plunger type (Balloon/Biscuit)</b>	Biscuit	Balloon	Biscuit	Balloon	Biscuit
<b>Bulk Load Capable (Yes/No)</b>	No	No	No	No	No
<b>Air bleeder valve (Yes/No)</b>	No	Yes	No	No	No
<b>Handle Grip (Yes/No)</b>	No	Yes	No	No	Yes

# PRO PISTOL TEST PERFORMED

Pro Pistol Test Performed	Lubrimatic 30416	Lucas L338	Performance Tool/Wilmar W54291
<b>Date Tested</b>	7/26/2017	3/17/2020	3/17/2020
<b>Retail Cost</b>		\$32.97	\$34.99
<b>Working pressure 7,000 PSI</b>	Pass	Fail @ 4,300 psi Could not build more pressure	Fail @2,000 psi leaked piston/bore, Fail @1,800 psi leaked piston/bore
<b>Max pressure</b>	7,400 psi	4,300 psi	3,800 psi 4,900 psi
<b>Displacement (oz/40 strokes)</b>	1.111 oz. 1.221 oz.	1.181 oz.	1.259 oz. 1.286 oz.
<b>Grease coupler jaw type</b>	4 jaw	4 jaw adjustable	4 jaw
<b>Grease coupler working pressure</b>	7,400 psi	4,300 psi	3,800 psi, 4,900 psi
<b>Grease pipe length</b>	N/A	5 3/8"	5 1/2" 5 1/2"
<b>Whip hose length</b>	18.85"	11 3/8" w/spring guard	11 7/8" w/spring guard 11 7/8" w/spring guard
<b>Grease pipe burst pressure</b>	N/A	18,500 psi	21,500 psi 18,500 psi
<b>Whip hose burst pressure</b>	18,000 psi - 19,000 psi	Terminated 20,500 psi	Expelled fitting 14,000 psi Expelled fitting 17,000 psi
<b>Cartridge load (Pass/Fail)</b>	Pass	Pass	Pass
<b>Plunger type (Balloon/Biscuit)</b>	Balloon	Biscuit	Biscuit
<b>Bulk Load Capable (Yes/No)</b>	Pass	Yes	Yes
<b>Air bleeder valve (Yes/No)</b>	Pass	Yes	Yes
<b>Handle Grip (Yes/No)</b>	Yes	Yes	Yes
<b>Variable Stroke (Yes/No)</b>	Yes	Yes	No

# GREASE GUNS

- **Economy Mini Grease Gun**
  - Reverse pistol style develops up to 3,500 PSI. Includes coupler, pipe and 3 oz. MP grease cartridge.
- **General Purpose Mini Grease Gun**
  - Pistol style gun develops up to 4,500 PSI. Allows for front and top pipe/hose placement.
  - Gun, coupler and pipe (retail and bulk).
  - Gun, coupler, pipe and MP grease.
  - Gun, coupler, pipe and marine grease.
- **Heavy Duty Mini Grease Gun**
  - Pistol style gun develops up to 4,500 PSI. Allows for front and top pipe/hose placement. Dipped handle and textured barrel provide a no-slip grip. Includes coupler, pipe and hose for maximum versatility.
  - **All mini grease guns are .5oz / 40 strokes.**





# GREASE GUNS

- **Standard Lever Grease Guns**

- Ideal for household and DIY automotive use. 6K PSI working pressure, 1 oz / 40 strokes.
  - Coupler and angled pipe
  - Coupler, angled pipe, bleeder valve, textured barrel and rubber handle grip

- **Heavy Duty Lever Grease Guns**

- Higher pressures and additional accessories over standard grease guns.
- 7K PSI, aluminum barrel, rubber handle grip, bleeder valve, bulk load fitting, coupler, pipe and hose. 1 oz / 22 strokes.
  - 10K PSI, variable/short stroke, rubber handle grip, bleeder valve, bulk load fitting, coupler and pipe (painted barrel and zinc-coated barrel options)

- **Extreme Duty Lever Grease Guns**

- Additional enhancements and heavier duty construction over HD lever grease guns
  - 10K PSI, variable/short stroke, extended handle with rubber grip, barrel grip, bleeder valve, bulk load fitting, HD coupler and longer pipe
  - Dual piston (high pressure/10K PSI or high output/1 oz. per 12 strokes), extended handle with rubber grip, aluminum barrel, bleeder valve, bulk load fitting, coupler, pipe and hose

- **SnapLock® Lever Grease Gun**

- Easiest to use heavy-duty threadless connection, a ¼" turn is all that's needed. Helps reduce load time while eliminating cross-threading. 10K PSI gun includes aluminum barrel, extended handle with rubber grip, variable/short stroke, auto bleeder valve, bulk load fitting, coupler, pipe and hose. 1 oz / 27 strokes.



# GREASE GUNS

- **Standard Pistol Grease Guns**

- Ideal for household and DIY automotive use. 6,000 PSI working pressure, 1 oz / 40 strokes.
  - Coupler and pipe (additional version with added hose)
  - Coupler, pipe, bleeder valve, textured barrel and rubber handle grip



- **Heavy Duty Pistol Grease Gun**

- 7K PSI working pressure for heavier duty applications. Includes coupler, hose, bleeder valve and bulk loader fitting. Variable/short stroke handle with rubber grip. 1 oz / 40 strokes.



- **SnapLock® Pistol Grease Gun**

- Easiest to use heavy-duty threadless connection, a ¼” turn is all that’s needed. Helps reduce load time while eliminating cross-threading. 8K PSI gun includes aluminum barrel, extended handle with variable/short stroke, auto bleeder valve, bulk load fitting, coupler, pipe and hose. 1 oz / 40 strokes.



# GREASE GUNS

- **Continuous Flow Pneumatic Grease Gun**

- Continuously pumps grease while trigger is depressed. Develops up to 3,600 PSI and delivers 5 oz. per minute. Includes pipe and coupler.



- **12v Battery Grease Gun**

- 12v NiCad battery gun for larger household and DIY automotive applications. Includes storage case, one battery, 1 hour quick charger, 30" hose, coupler and bleeder valve. Develops up to 7,700 PSI and delivers 2 oz. per minute. Can get 4-6 tubes of grease per charge.
- Replacement battery and charger SKUs available



- **20v SnapLock® Battery Grease Gun**

- 20v Lithium-Ion battery gun for large farm & ag, commercial and automotive applications. SnapLock design for faster reloading and zero cross-threading. Brushless motor reduces weight compared to competitive battery guns and has a limited lifetime guarantee. Developed with a variable speed trigger, balanced grip design and small LED light during use. Includes storage case, two batteries, 1 hour quick charger, 42" hose, coupler and auto bleeder valve. Develops up to 8K PSI and delivers more than 2 oz. per minute. Can get more than 6 tubes of grease per charge.
  - Replacement battery, charger and hose SKUs available



- **Jiffy Luber w/ Push Type Adapter**

- Designed for quick grease jobs. Squeeze tubes (not included) fit into the zinc die-cast body for easy dispensing. Includes 2-11/16" pipe.



- **Handi-Grip Pistol Luber®**

- All-purpose gun attaches to squeeze tubes of grease (not included). Includes spring-returned plated steel lever, zinc die-cast body, riveted plated steel link, 12" flex hose and standard duty coupler.



- **Suction Gun**

- Designed for draining and filling non-corrosive liquids. Barrel holds approximately one pint with 9" stroke. Features 12" plastic hose and durable corrosion-resistant finish. Hose OD 9//16", Hose ID 5/16".



# ULTRAVIEW - CLEAR GREASE GUNS

- To stop cross-contamination, the answer is clear.  
**UltraView® clear grease guns.**
  - Cross-contamination is the cause of 60 to 80% of bearing failures. The way to prevent this is clear: When the wrong product is used to lubricate machinery, it can get expensive, as damaged machinery may need to be replaced. Now you can eliminate the possibility of using the wrong grease with an innovative grease gun with a shatterproof, high-tech polycarbonate, see-through barrel. Lever is 1 oz / 27 strokes, pistol 1 oz / 40 strokes.













- **Benefits of UltraView clear grease guns:**
  - Identify which type of grease is in the gun
  - Equipment can be color-coded to grease gun
  - Prevent using incorrect grease in equipment
  - Eliminate cross-contamination
  - Eliminate costly mishaps
  - Determine amount of grease remaining in a bulk-loaded gun
  - Identify date code on grease (to ensure fresh lubes are used in airline industry)

- **The UltraView family**

- Lever grease guns (3 colors)
- Pistol grease guns (4 colors)
- Suction Gun (1 color)
- Replacement barrels (2 colors)



# COMPETITIVE LANDSCAPE

Overview		Competition within Product Categories				Commentary
Brand / Ownership	Location	Lubrication	Air Accessories	Air Hoses	Tire Repair	
	Memphis, TN	●	●	●	●	<ul style="list-style-type: none"> <li>Leading provider of products across lubrication, air accessories, air hose and tire repair categories</li> <li>Well-recognized brands with long track records</li> </ul>
	Marion, IA	●	◐	◐	○	<ul style="list-style-type: none"> <li>Professional and "upper DIY" markets</li> <li>Large presence in farm / ag channel</li> </ul>
 Wilmar Corp.	Tukwila, WA	◐	●	◐	●	<ul style="list-style-type: none"> <li>Primarily DIY products at lower prices</li> <li>Primarily in auto aftermarket channel</li> </ul>
	Fort Mill, SC	◐	○	○	○	<ul style="list-style-type: none"> <li>Large breadth of value lube products</li> <li>Presence in professional and DIY markets</li> </ul>
	St. Louis, MO	◐	◐	○	○	<ul style="list-style-type: none"> <li>Offers automatic / general lubrication products</li> <li>End markets include automotive aftermarket</li> </ul>
	Corona, CA	◐	○	○	○	<ul style="list-style-type: none"> <li>Presence in the grease guns category as a licensor</li> <li>End markets include racing, industrial, ag.</li> </ul>
	Long Grove, IL	○	◐	◐	○	<ul style="list-style-type: none"> <li>Serves automotive, consumer and logistics markets</li> <li>DeWalt license for air hoses</li> </ul>
	Cincinnati, OH	○	●	◐	○	<ul style="list-style-type: none"> <li>Presence in the retail channel</li> <li>Basic hose line priced similarly to Plews</li> </ul>
 Levine Leichtman	Chicago, IL	◐	●	●	○	<ul style="list-style-type: none"> <li>Presence in industrial and farm / ag channels</li> <li>Strong legacy of customer relationships</li> </ul>
 ITW Global Brands	San Luis Obispo, CA	○	○	○	●	<ul style="list-style-type: none"> <li>Strong brand recognition in DIY market</li> <li>Premium pricing for "Pro Series"</li> </ul>
 Hopkins	Emporia, KS	○	○	○	●	<ul style="list-style-type: none"> <li>Retail-focused category</li> <li>New distribution center</li> </ul>
 31 Inc.	Newcomerstown, OH	○	◐	●	●	<ul style="list-style-type: none"> <li>Focused approach on back shop products</li> <li>Does not carry line of inflators</li> </ul>

# HIGHLINE WARREN ADVANTAGE

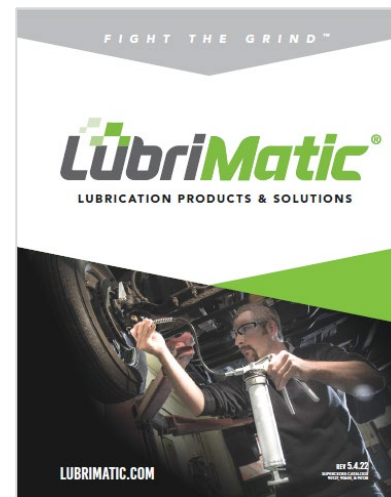
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- Competitively Priced
- Full Product Offering
- Professional Quality
- Proven Brands (Amflo, Tru-Flate, LubriMatic)
- Full Category Management Support
  - Customizable Planograms
  - Interchanges
  - Tailored Customer Presentations
  - In-person Customer Support
- Offer Bulk & Carded Product
- Low Minimums w/ other HW Items
- 1-2 Day Nationwide Delivery

# Questions?

Website: [www.lubrimatic.com](http://www.lubrimatic.com)

Catalog: <https://online.flippingbook.com/view/522923621/>



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