



# Owner's Manual

Models LG: 301, 302, 304, 309, 312, 320, 401,  
403, 404, 439, 475, 476 and 490

1911 Gov't & Officers; Beretta 92/96, Vertec, Bobcat & Tomcat  
Browning Hi-Power; CZ 75/76; Ruger Mark II/III; Sig P220 & P239

***L A S E R G R I P S***<sup>®</sup>

## LASER SAFETY LABELING

**IMPORTANT:** Laser products must only be operated with the safety label applied to the firearm.

Labels could not be affixed to the product but are supplied and must be installed as indicated below:

1. Before handling any firearm, check several times both visually and by feel that it is unloaded. Check again.
2. Attach the “Danger” warning label to the outside of the firearm.
3. Attach the “Aperture” warning label with the arrow pointing to the laser diode lens.



***Thank you for selecting the finest laser sighting system: Crimson Trace Lasergrips.***

When it comes to speed, accuracy and security, Crimson Trace is the top choice of law enforcement, militaries and legally armed citizens around the world.

Feel free to contact us at 1.800.442.2406 with any questions you may have regarding your Lasergrips.

We also encourage you to visit us online at ***[www.crimsontrace.com](http://www.crimsontrace.com)***. Here you can register your product, find valuable information on training and tactics or join fellow Crimson Trace users on our online forums.

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***Before installing Lasergrips, please read the entire manual.***

Failure to follow these instructions and procedures may result in injury or death.

- Always follow firearms safety rules as outlined by the firearms manufacturer.
- Do not point the laser beam at eyes. Permanent eye damage can result.
- Keep this and all firearm related products locked and secured from children or other unauthorized users.

## INSTALLATION INSTRUCTIONS

1. Make sure firearm is unloaded. Remove magazine and double check that chamber is empty.
2. Remove existing grips. Screws will be reused with Lasergrips.
3. Place one battery in each Lasergrips panel with positive (+) side up.
4. Install dust guard panels between Lasergrips and frame of pistol.  
**Note: Some models do not use dust shields. (See fit notes on page 8)**
5. Wrap Lasergrips around frame of pistol. Replace and tighten screws.
6. Attach laser “Danger” sticker to outside of pistol.
7. Ensure that master ON/OFF switch is in “ON” position. (See pages 4 through 8 for details)
8. Confirm that laser and iron sights are in alignment. Lasergrips are sighted-in at the factory, but can be fine-tuned for windage and elevation. (See pages 13 and 14 for complete sighting info)

## OPERATING INSTRUCTIONS

Lasergrips are activated by strategically located pressure pad(s). With a normal shooting grip, your middle fingertip will naturally hit a pressure pad whether shooting right or left-handed. (Ring finger activates LG-490.)

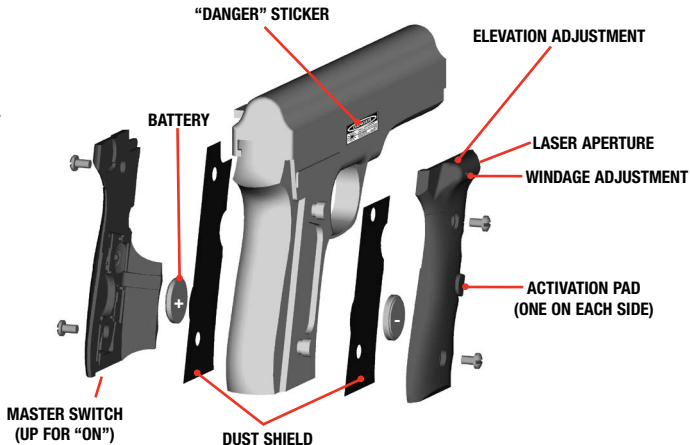
A master ON/OFF switch is also provided in the left panel to turn the laser off. (LG-490 does not use a master ON/OFF switch.) The laser should be left in the 'ON' position under most circumstances.

**Turning the master switch "OFF" will NOT increase battery life.**

Use caution when activating the laser to avoid direct eye exposure, which can result in permanent eye damage. Follow all precautions as outlined by the firearms manufacturer. Keep this and all firearm related products locked and secured from children or other unauthorized users.

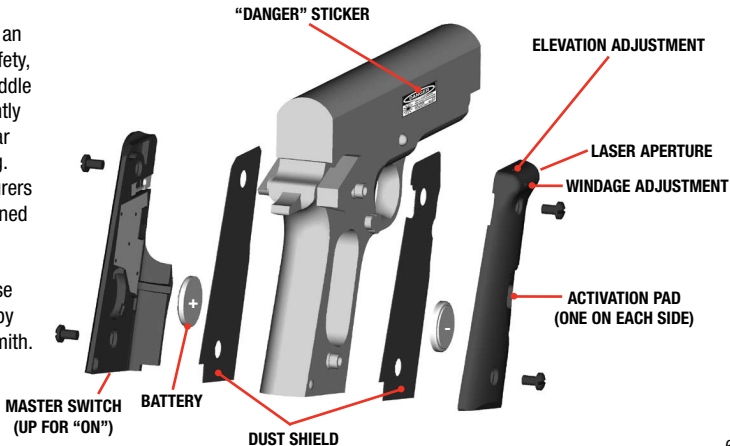
## BERETTA 92/96, VERTEC (LG302 / LG312)

A black plastic, dime-sized spacer is included in the LG302 accessory bag. This spacer fits in a recess at top of the left-side grip panel. Use this spacer on older 92 models only. The spacer will not fit on newer pistols and should not be used.



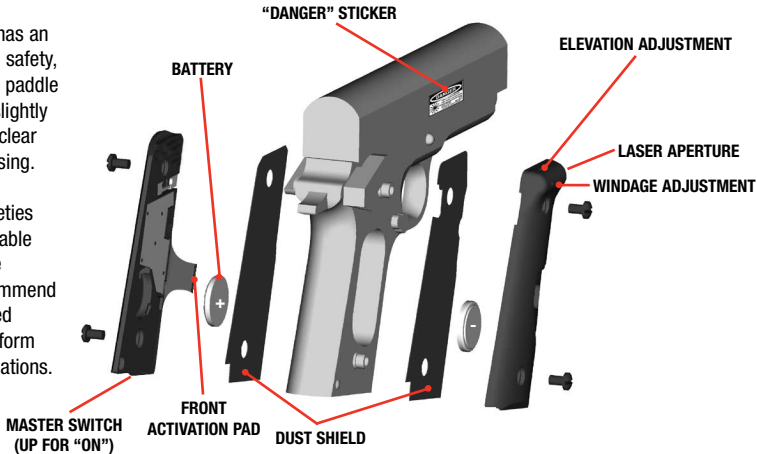
## 1911 GOVERNMENT/COMMANDER, OFFICERS (LG301 / LG304)

If your 1911 has an ambidextrous safety, the right-side paddle needs to be slightly shortened to clear the laser housing. Some manufacturers make pre-shortened safeties that will clear the diode housing, but these should be fitted by a qualified gunsmith.



## 1911 GOVERNMENT/COMMANDER (LG401 / LG404)

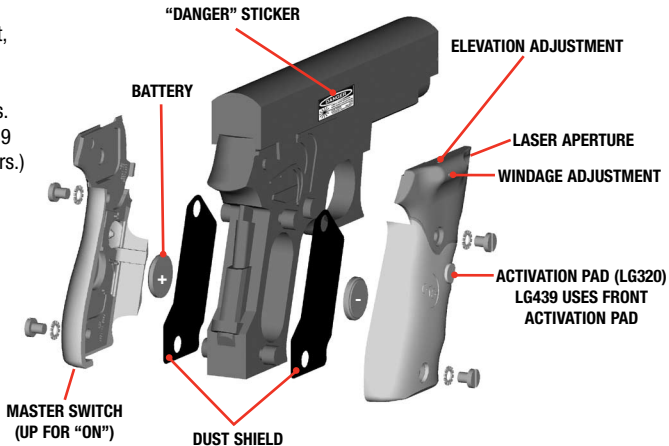
If your 1911 has an ambidextrous safety, the right-side paddle needs to be slightly shortened to clear the laser housing. Pre-shortened Ed Brown safeties are also available from CTC. We strongly recommend that a qualified gunsmith perform these modifications.





## SIG SAUER P220, P239 (LG320 / LG439)

Install left panel first,  
then right panel.  
Use original grip  
screws and washers.  
(LG-320 only. LG-439  
does not use washers.)

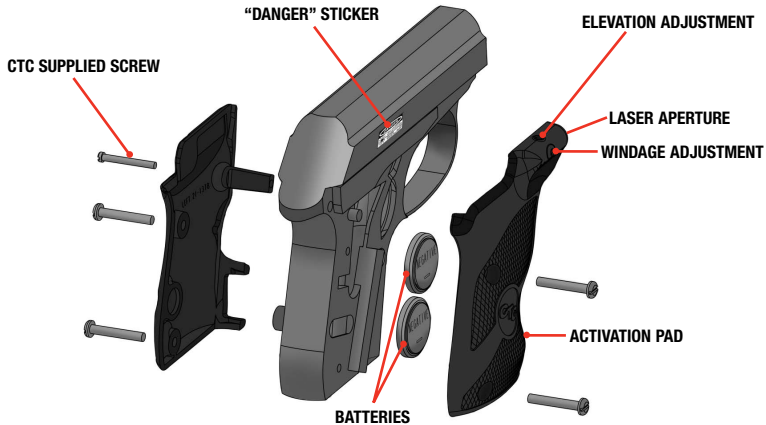


## BERETTA BOBCAT AND TOMCAT (LG490)

1. Check to make sure that firearm is unloaded. Check again.
2. Remove factory grip panels by removing screws from each side. Factory grip halves are held tightly in place and must be pried off of gun frame. Carefully pry up grip halves, starting at the bottom of the frame, while pulling off the grip panel from the front. (Consult manufacturer if you have difficulty.) Do not use any tool or implement that will scratch or damage the firearm frame.
3. Install batteries into right-hand Lasergrips panel, with positive (+) side facing out.
4. Place right-hand grip into position. Left-hand grip must be rotated counter-clockwise into position in order for top-right corner of grip to slide under safety lever. Do not overtighten the long, CTC-supplied screw or you will damage the grip.

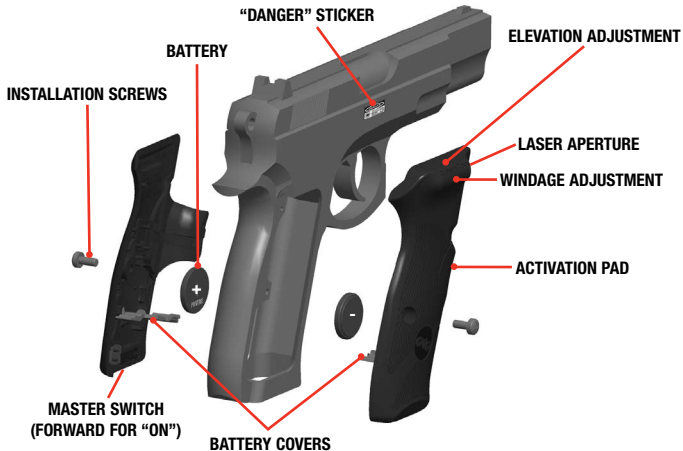
**Note: Will not fit stainless or Inox models. Uses .050 Allen wrench.**

## BERETTA BOBCAT AND TOMCAT (LG490)



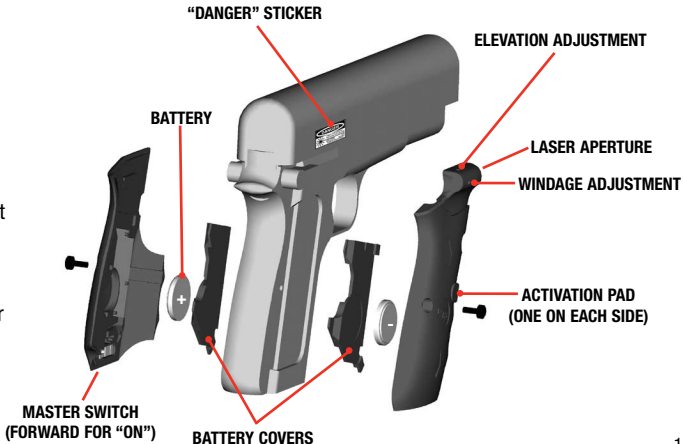
## CZ 75 FULL-SIZE & COMPACT (LG475/LG476)

Be sure to snap the battery covers closed after installing batteries.

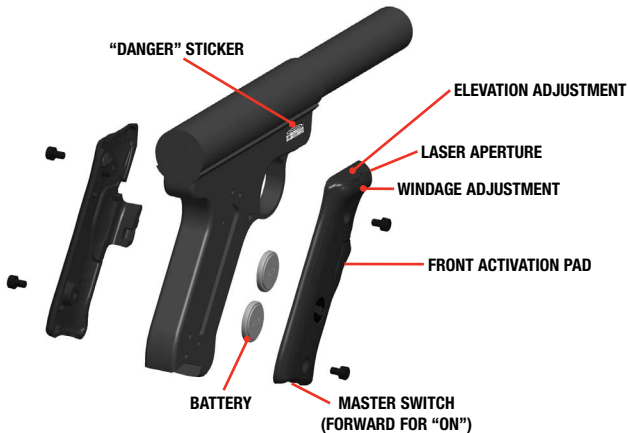


## BROWNING HI-POWER (LG309)

Plastic battery covers, labeled L (left) and R (right) are included with the LG309. Place one battery in each panel with the positive (+) side up. Place R battery cover over right battery. Hold panel against gun frame while installing screw to ensure battery cover does not move. Then install left panel the same way.



## Ruger Mark II/III (LG403)

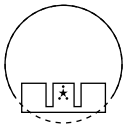


## SIGHTING ADJUSTMENTS

Lasergrips are pre-sighted at the factory for 50ft. Many times no further adjustments are required. Lasergrips are fully adjustable for windage and elevation if further adjustments are desired. A good starting point is to align the laser with your fixed sights (fig. 1)

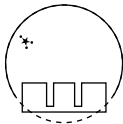
A two-screw alignment system is used to adjust for windage and elevation. The adjustment screws are located just behind the laser aperture. Place the included allen wrenches into the adjustment screws. To move the laser to the right, turn the windage screw clockwise. To move the laser up, turn the elevation screw clockwise.

fig. 1



beam lined up with proper sight picture

fig. 2



beam moved to line up with impact point

**DO NOT overturn adjustment screws. A little adjustment goes a long way.  
Rarely is more than one complete turn required.**

## SIGHTING ADJUSTMENTS

Start by tuning the beam to line up with your fixed sights at the desired distance. Most people sight in their laser at between 20 and 50 feet. However, because of the small amount of mechanical offset between the laser and the bore, the actual change in point-of-impact from these distances is very small.

Further adjustment can be made at the range to determine where your pistol impacts in relation to its fixed sights. The laser should be moved to the actual impact point of the bullet. (fig. 2)

Occasionally, one of the adjustment screws will turn but not adjust the beam. If this happens, turn the opposite adjustment screw (i.e. windage screw if the elevation is stuck). This normally will free up the adjustment mechanism. To finish adjustment, turn the screw that was not rotating first, then complete the other adjustment.

Lasergrips can be removed from the pistol for maintenance and cleaning without losing “zero”.



## MAINTENANCE

Lasergrips require minimal attention and are designed to resist most common firearms chemicals and lubricants. However, excessive exposure to these chemicals can be detrimental. To ensure the safe and effective operation of your Lasergrips:

- Remove Lasergrips before cleaning gun.
- Do not use pressurized or compressed air on Lasergrips.
- Do not immerse Lasergrips in cleaning fluid or lubricate firearm excessively. A pistol that has too much oil will foul the lens of the laser and create an unfocused beam. This can be easily cleaned and causes no permanent damage.
- Do not allow cleaning solution to enter lens area.
- Do not allow solvents to contact your grips that contain: VOCs or TCE such as: carb/brake cleaner, acetone, MEK, gasoline. Grip damage will result.

After extensive shooting, you may notice a degradation of beam quality or “beam spread”. This is the result of fouling on the lens surface. This is normal and can be easily cleaned with the included cleaning tools or a small cotton swab dipped in isopropyl alcohol or window cleaner. Dry the lens with a clean swab. **When cleaning the lens do not touch lens with any sharp objects.**

## BATTERY GUIDELINES / REPLACEMENT AND SPECIFICATIONS

Batteries typically last over 4 hours of actual “ON” time under normal intermittent use. If the laser becomes dim or fades, replace batteries. Keep battery compartment free of dirt or other contaminants. Debris inside battery compartment may affect laser operation.

Lasergrips use commonly available **CR2032** or **DL2032** type batteries. To replace batteries:

1. Ensure that pistol is unloaded.
2. Check again to make sure pistol is unloaded.
3. Remove Lasergrips and old batteries.
4. Install new batteries with positive (+) polarity up.



**This product complies with 21 CFR 1040.10**  
**Manufactured by Crimson Trace Corporation**

<b>Laser Type:</b>	Class IIIa visible laser diode
<b>Peak Power:</b>	5mW
<b>Wavelength:</b>	633nm
<b>Beam Color:</b>	Red
<b>Beam Size:</b>	Approx. 0.5" at 50'
<b>Battery Type:</b>	(2) CR2032 or DL2032 lithium cells
<b>Battery Life:</b>	Over 4 hours; 5 year shelf life

## WARRANTY

CRIMSON TRACE CORPORATION (CTC) warrants that this product will be free from defects in materials and workmanship for a period of three years from date of original retail purchase. CTC will repair or replace, at its option, any product or part which is found to be defective under normal use and service, without charge during the warranty period. CTC's obligation to repair or replace, shall be the purchaser's sole and exclusive remedy under this warranty. This warranty does not cover normal maintenance and service and does not apply to any products or parts which have been subject to modification, misuse, carelessness, accident, improper maintenance or repair other than by CTC. Warranty does not cover batteries or problems arising from faulty batteries.

This limited warranty is in lieu of any and all other warranties, either expressed or implied, including but not limited to, merchantability and fitness for particular purpose. CTC shall not be liable for indirect, incidental, consequential or special damages arising out of, or in connection with, product use and performance, even if it has been informed of the possibility of such damages.

For warranty service, carefully package the unit along with dated proof of purchase and an explanation of the problem, and mail it to:

**Crimson Trace Corporation, Attn: Customer Service**  
**9780 SW Freeman Drive, Wilsonville, OR 97070**  
**Phone: (800) 442-2406**



9780 SW Freeman Drive, Wilsonville, OR 97070

Phone: (800) 442-2406 or (503) 783-5333

Fax: (503) 783-5334

Customer Service E-mail: [customer@crimsontrace.com](mailto:customer@crimsontrace.com)

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

US PATENT 5,435,091, 5,179,235, 5,706,600 6,671,991, 6,578,311 and 6,526,688; Other patents pending