



# TITAN<sup>®</sup>

## GRAVITY LED LIGHT BAR SYSTEM

The next generation GRAVITY LED Light Bar System is engineered to utilize the TITAN<sup>®</sup> LED Optical Inserts and revolutionary Patented Light Linking System. The industry's first adjustable and configurable lighting system just got better and more functional.

- Patented Light Linking System: US Patent No. 9,676,322
- Powered by Patented Gravity GRD<sup>™</sup> Technology
- Optical Insert Beams: Spot & Wide-40<sup>™</sup>
- Dual Mode Functionality: High Power White & Amber Dust Light
- Trademark Four-Tab Signature Styling



# SAFETY | REGISTRATION | WARRANTY

## Liability Disclaimer

KC HiLiTES Inc. takes extreme measures to engineer products with the most advanced features available in the industry and tested under the most extreme conditions - it's through this rigorous process that complementary accessories are tested and developed. KC will not be liable under any circumstances if damages are sustained due to use of unapproved mounting, improper installation and mis-use of the TITAN LED Light Bar System.



## WARNING

The TITAN LED Light Bar was engineered, designed and tested using KC approved overhead mounts. KC assumes no responsibility for any damages sustained, due to use of mounting solutions that have not undergone the same testing of KC-Mounting Solutions. For questions about Approved TITAN LED Light Bar Mounts or proper installation beyond this manual, please visit: <http://www.kchilites.com/support>.

- It is highly recommended that the installation is performed by an Authorized Dealer to ensure proper installation and wiring.
- Please exercise caution during installation. Due to the size and weight of the light system, it is recommended that the installation is performed by at least 2 people.
- TITAN LED LIGHT BAR configurations of 6-Lights (or more) will include a reinforcement bumpstop assembly for added stability and vibration dampening.
- For UTV or Heavy Off Road vehicles, the center support should be bolted directly to the vehicle.

## PRODUCT REGISTRATION

Thank you for becoming part of the KC HiLiTES family and purchasing one of our premium KC products! With over 45 years of history in the auxiliary lighting market, you have become a part of our ever growing family, and we encourage you to register your product online at [HTTP://REGISTER.KCHILITES.COM](http://register.kchilites.com) to ensure you get all the benefits of owning a KC HiLiTES product.

- **Receive a unique serial number certifying your purchase**
- **Fast and Easy Returns and Warranties**
- **Special offers and promotions**

**KC's 23-Year Warranty** offers a guarantee from manufacturers defects from the optics, electronics and workmanship. For more details about our Warranty Policy please visit: <http://www.kchilites.com/warranty>.

# APPLICATION GUIDE

The TITAN LED Light Bar is the industry's first expandable and configurable LED lighting system. This instruction manual will guide you through proper installation of your TITAN LED Light Bar to allow you to take full advantage of all its features.

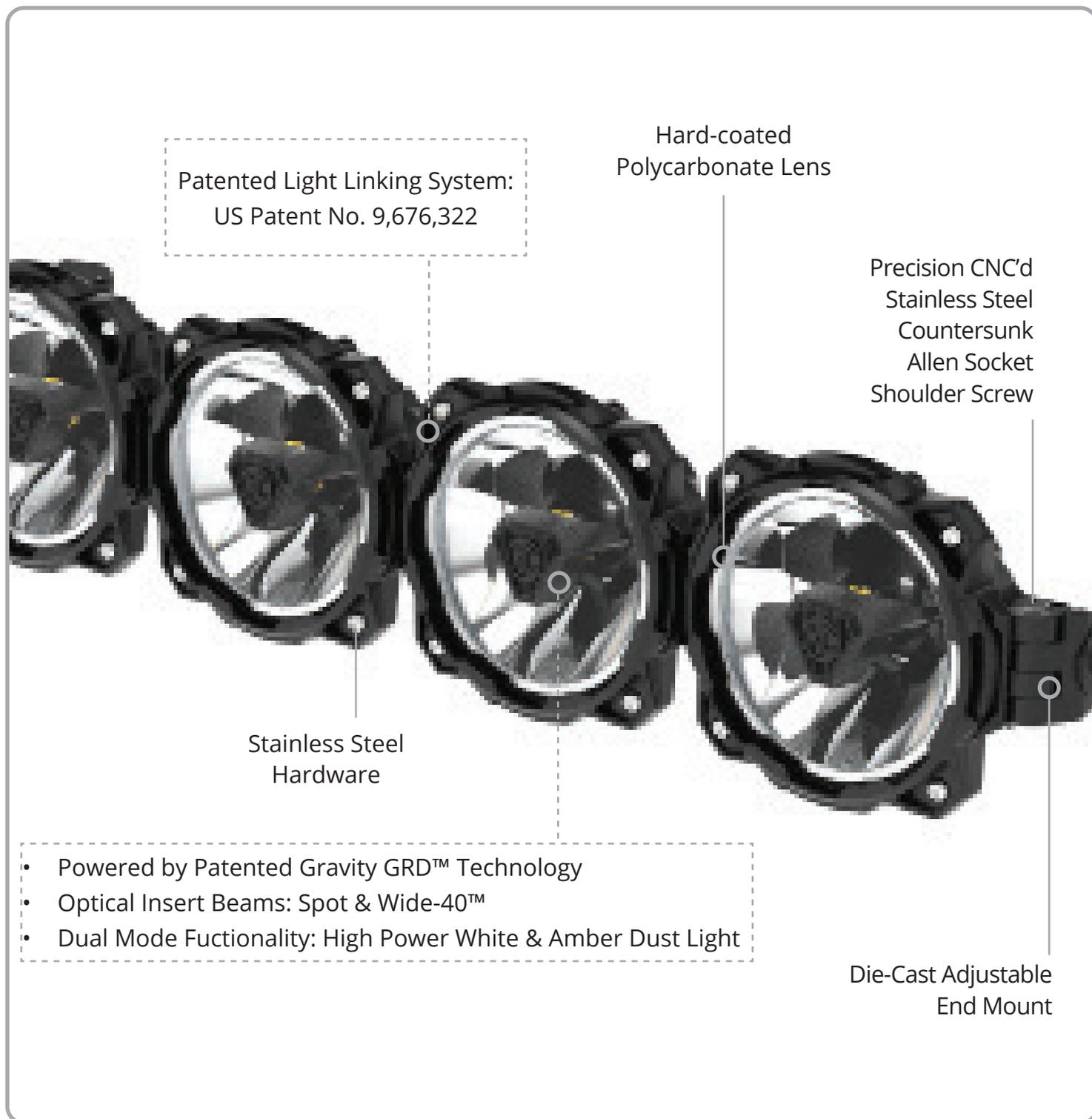
## General Sizing

The height of the TITAN LED Light Bar is 6" (top to bottom) with a depth of 3" (center mount to back of light). Due to the dynamic nature of the adjustable Linking Rings, the width of the light bar changes based on the configuration. When considering the application, please reference the size range in the table below.

APPLICATION	WIDTH (MIN-MAX) Full Radius - Straight	RADIUS POINTS	WATTAGE CLEAR/DUST
<b>20" TITAN 3-LIGHT SYSTEM</b>	20.31" - 20.33"	2	118W / 33W
<b>27" TITAN 4-LIGHT SYSTEM</b>	26.56" - 26.58"	3	158W / 45W
<b>32" TITAN 5-LIGHT SYSTEM</b>	32.71" - 32.83"	4	197W / 56W
<b>39" TITAN 6-LIGHT SYSTEM</b>	38.87" - 39.08"	5	237W / 67W
<b>45" TITAN 7-LIGHT SYSTEM</b>	45.00" - 45.33"	6	276W / 78W
<b>50" TITAN 8-LIGHT SYSTEM</b>	51.09" - 51.58"	7	315W / 90W
<b>56" TITAN 9-LIGHT SYSTEM</b>	57.13" - 57.83"	8	355W / 101W

# INTRODUCTION

The GRAVITY LED Light Bar is driven by an interchangeable TITAN LED Insert. Encapsulated in our race-proven Infinity Ring System. The modular linking design allows straight, partial-radius and full-radius LED Light Bar configurations to suit the needs of a specific performance application. A race-tested bumpstop is included that provides additional support and vibration dampening under extreme off-road conditions in 6-Ring and above Light Bar Systems.



Patented Light Linking System:  
US Patent No. 9,676,322

Hard-coated  
Polycarbonate Lens

Precision CNC'd  
Stainless Steel  
Countersunk  
Allen Socket  
Shoulder Screw

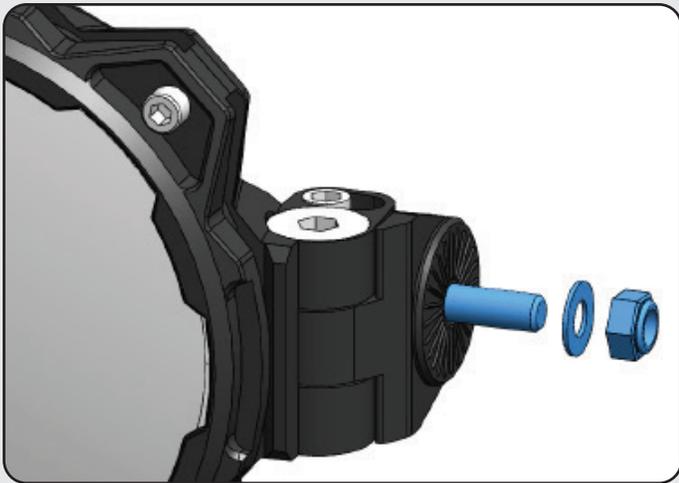
Stainless Steel  
Hardware

- Powered by Patented Gravity GRD™ Technology
- Optical Insert Beams: Spot & Wide-40™
- Dual Mode Fuctionality: High Power White & Amber Dust Light

Die-Cast Adjustable  
End Mount

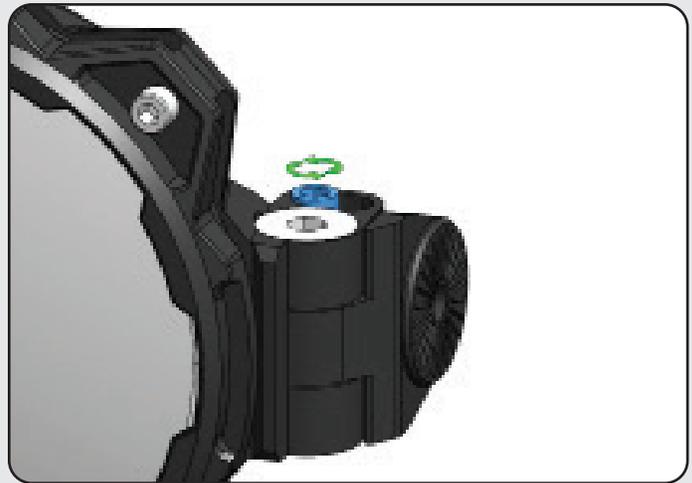
# TITAN GRAVITY LIGHT BAR INSTALLATION

## 1. Remove End Mount Hardware



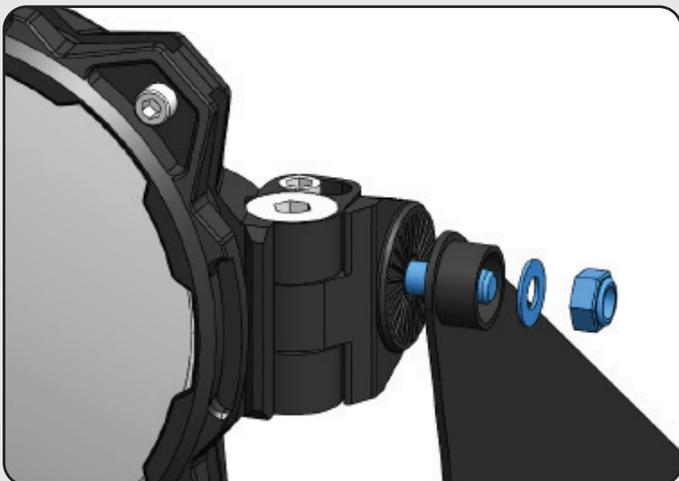
Remove the M8 Mounting hardware from End Mounts on both sides of the bar. This will allow for easier installation on fixed mounting applications.

## 2. Loosen End Mount Adjustment Screws



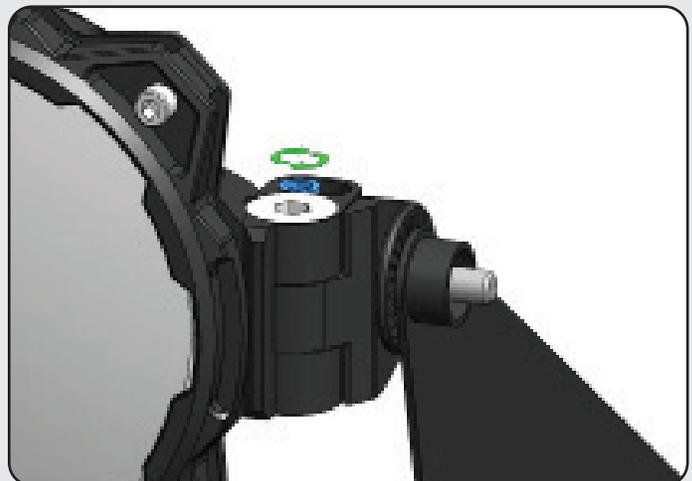
Loosen the M6 Socket-cap Adjustment Screws from End Mounts on both sides of the bar to allow alignment and self-centering.

## 3. Mounting the Light Bar to Vehicle



Safely install the Light Bar by aligning the M8 Hardware on the End Mounts to the Vehicle Mounts. (The ambidextrous design of the mounts allow for the threads to be installed in either direction.)

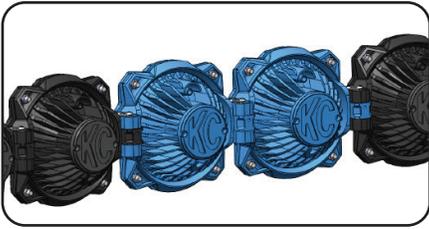
## 4. Level & Final Tightening Down



Set the final level & pitch of the Light bar: 1) Tighten the M8 Horizontal Mounting Hardware, allowing the Light Bar to center itself. 2) Torque the M6 Adjustment Screws to 100 in/lbs to lock Light Bar into position.

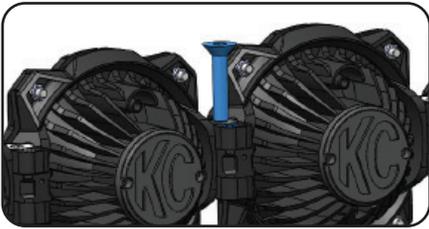
# TITAN BUMPSTOP INSTALLATION

## INSTALLATION & ADJUSTMENT



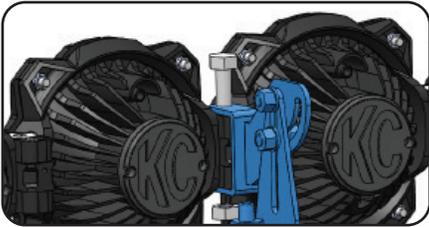
### 1. Positioning the Bump-stop Assembly

The Bump-stops are anchored on the pivot points between the Linking Ring(s). Make sure to select pivot point that will not interfere any moving parts on the vehicle.



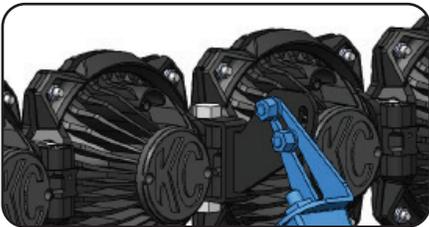
### 2. Removing Hardware

Once a pivot point has been selected, loosen the M6 adjustment screw (to reduce tension) and remove (only) the custom stainless steel M10 Countersunk Shoulder Bolt.



### 3. Attaching Bump-stop to the LED Light Bar

Begin by re-tightening the M6 adjustment screw. Using the supplied M10 shoulder bolt and nyloc nut, firmly attach the Bump-stop Assembly to the LED Light Bar.



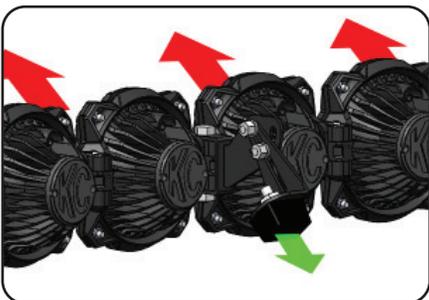
### 4. Position Bump-stop Armature

Adjust the angle of the Bump-stop so that the face of the bushing is mated as flat as possible to the stable surface. The bushing itself can also be loosened and adjusted to help achieve a desired angle. When tightening M10 Fasteners, do not exceed **150 in/lbs** (12.5ft/lbs)



### 5. Apply Paint Protective Film

Included in every Gravity Light Bar Wire Harness Kit are (2) translucent adhesive Paint Protective Film. To apply, first make sure to loosely position the bumpstop and mark the edges with some painters tape as a guide. Then ensure the surface of the paint is clean before the final application.



### 6. Pre-Load Bar & Final Tightening

Before the final tightening down of the Bump-stop armature, make sure to pre-load the bar to ensure tension is already achieved for maximum stability and vibration dampening. This is accomplished by lifting the bar away from the surface before tightening down the armature.

# TITAN LED LIGHT BAR CONFIGURATIONS

## STRAIGHT | SEMI-RADIUS | FULL RADIUS

A unique feature of the TITAN LED Light Bar is the ability to go from a Straight configuration, to a full-radius configuration. The Ring system allows for radius adjustments at every link - depending on the application, the Pro6 can offer a multitude of configurations to provide all customization that one may need for their particular requirements.



### Straight

The LED Light Bar System comes standard straight.



### Semi-Radius

For specific application, a partial radius can be configured. Here there is only 2-radiused points between 2nd/3rd and 6th/7th Linking Rings.

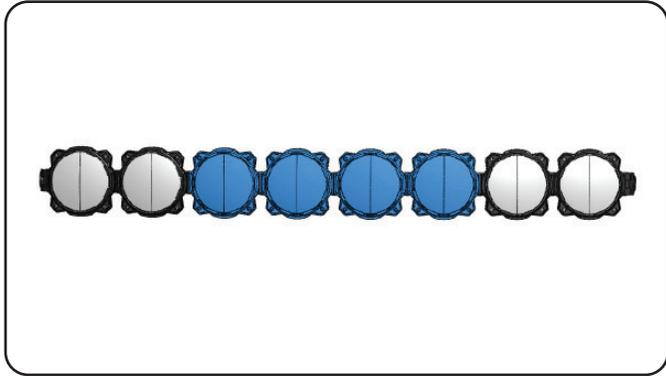


### Full Radius

All the radius points have been configured giving the TITAN LED Light Bar a full radius.

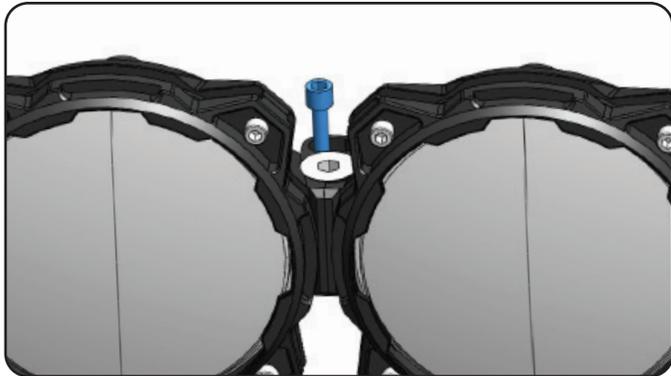
# ADVANCED TITAN LIGHT BAR ADJUSTMENTS

## SETTING THE RADIUS CONFIGURATION



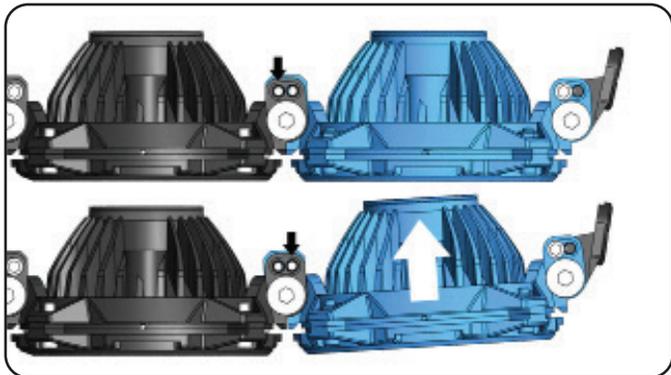
### 1. Preparing to set radius

Before configuring the LED Light Bar, first reference the Application Table for the desired set-up, to identify the radius point(s) needing for adjustment.



### 2. Remove Adjustment Screw

Remove the M6 socket-cap adjustment screw and loosen the M10 Countersunk Shoulder bolts to allow repositioning the linked Infinity Ring assemblies easier.



### 3. Align Radius Position Holes

To set the Infinity Rings into a radius position, adjust the ring assembly so that the adjacent position holes are aligned.

*Note: The previous straight position holes will no longer be in alignment.*



### 4. Set Adjustment Screw

Re-apply the M6 socket-cap adjustment screw(s) into the newly aligned radius position holes and re-tighten the M10 Countersunk Shoulder bolts.

*Note: Hand-tighten the screws before using tools to prevent cross threading. Torque the M6 & M10 to 100in/lbs (8 ft/lbs) & 150in/lbs (12.5 ft/lbs) respectively to prevent stripping.*

# ADVANCED TITAN LED LIGHT BAR ADJUSTMENTS

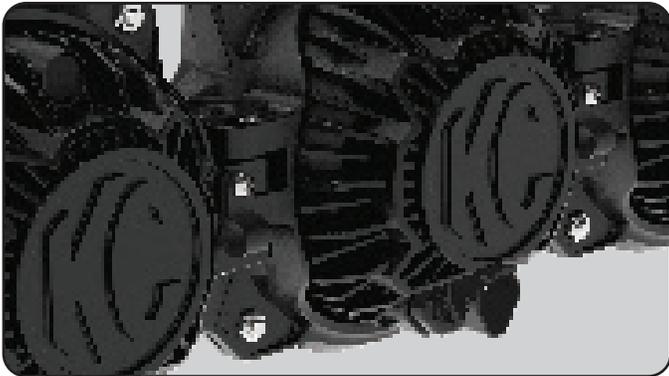
## TITAN LED INSERT REMOVAL & CLOCKING



### 1. Dis-assemble Front Ring

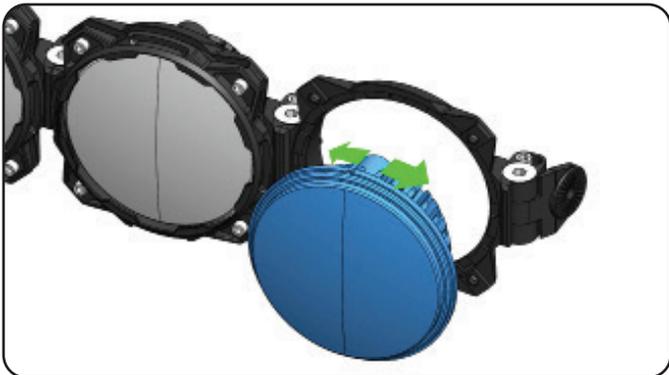
To remove or rotate TITAN LED Insert, loosen and remove the four M6 Socket Allen-Cap Screws and remove Front Ring.

*Caution: Once loosened, the G6 Optical Insert could fall out and sustain or cause damage to light or vehicle.*



### 2. TITAN Insert Removal

After the front ring has been removed, to remove or replace the TITAN LED Insert - simply locate the connection to the harness, and unplug the connector.



### 3. TITAN Insert Clocking

The TITAN LED Inserts have an indexing tab - that when used in conjunction with the Infinity Ring System, it allows the Inserts to be clocked in 22.5° increments.

*Note: If the indexing tab on the TITAN LED Insert is not seated with the Infinity Rings correctly, the rings will not fasten together.*



### 4. Re-assemble Front Ring

After the desired adjustment is in place, re-assemble the front ring with the M6 Socket Allen-Cap Screws, **torquing to 60 in/lbs** to prevent over-tightening.