



Miller
INDUSTRIES

12 & 16 Series
LCG Carriers

Century & Vulcan

12 and 16 Series LCG



OPTIONAL EQUIPMENT SHOWN IN PICTURES

- **Steel Decks available in 12,000 and 16,000 lbs. deck capacities**
- **Aluminum Decks available in 12,000 and 16,000 lbs. deck capacities**



Due to a revolutionary new design, the LCG deck height is 5"- 6" lower than conventional carriers



Major Benefits

Low Load Angle



With the air dumped on most air-ride chassis, the load angle lowers to under 11 degrees, making it ideal to load vehicles with low bumpers, spoilers and exhaust systems with out the use of wood or ramps.



LCG CARRIER-LOW LOAD ANGLE

This Series 12 LCG carrier has a load angle of 10.7 degrees measured digitally.

Major Benefits

Lower Center of Gravity



When loaded, the lower center of gravity means more stability when traveling down the road, especially through curves and turns.

Major Benefits

Lower Deck Height - Easier Access



The lower deck height allows the operator to more easily tie down their load without straining to reach across or climb on to the deck. This makes it easier with the bed down as well as installing front tie-downs with the bed slid back and angled.

Major Benefits

Lower Deck Height - Increased Clearance



With the lower deck height the operator has the ability to haul taller loads such as forklifts, man lifts or back hoes as well as providing better clearance when under awnings or garages.

Major Benefits

Higher Dump Angle



12 Series - With a 20 degree dump angle, the LCG makes it quick and easy to unload damaged and disabled vehicles or machinery.

16 Series - The 21'-22' decks will have a 20 degree dump angle. Longer deck lengths will have lower dump angles due to the lift cylinder placement.

Deck Lengths and Required C.A.

12 Series

- 21' 138"
- 21 1/2' 144"
- 22' 150"

16 Series

- 21' 138"
- 21 1/2' 144"
- 22' 150"
- 23' 156"
- 24' 166"
- 25' 170"
- 26' 182"

Chassis frame (each rail) R.B.M for the 12 Series is 600,000 Inch Pounds for 21'-22' deck lengths.

Chassis frame (each rail) R.B.M for the 16 Series:

800,000 inch pounds - 21', 21 1/2' and 22' Decks

1,200,000 inch pounds - 23' & 24'

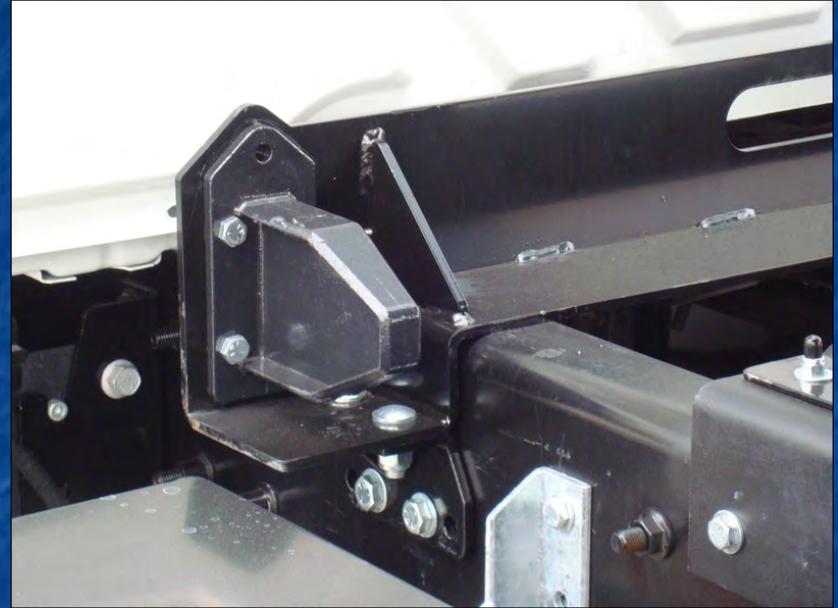
1,600,000 inch pounds - 25' & 26'

Steel LCG Carriers come standard with an 11 Key Slot Package

Aluminum LCG Carriers come standard with a 4 Key Slot Package

Mounting and Frame Photos

Front Bed Locks

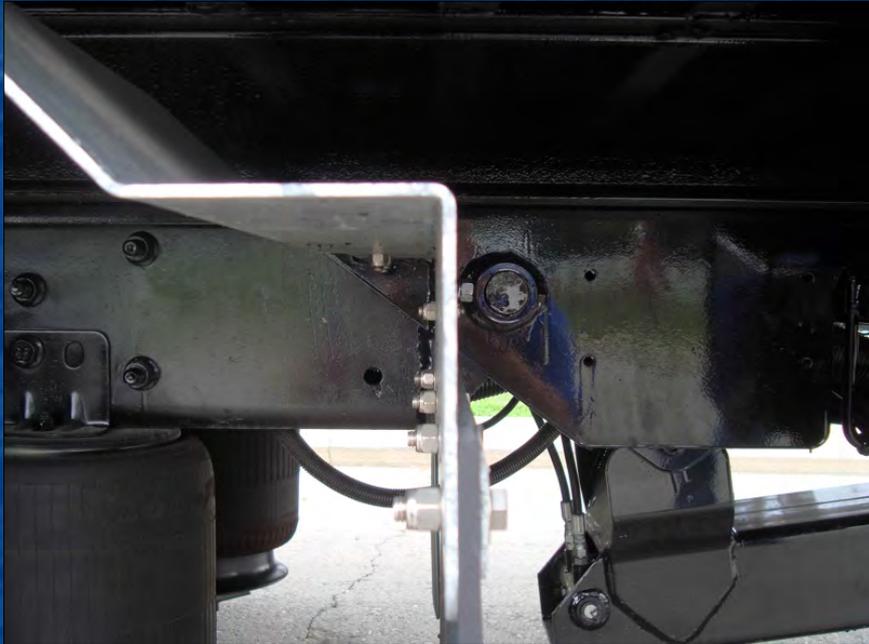


With the bed locks and subframe slide rails located outboard and below the chassis frame, clearance behind the cab is critical

Deck main-beams are located outside of the truck frame and sit 2" lower than the top of the chassis frame. It is recommended that fuel tanks, battery boxes, etc., not extend behind the cab. Fuel Tanks, Battery boxes must clear the bed rails, bed locks, and the frame mounted pylons. Additional CA is required for frame mounted pylons or the SP8,000 or SP 12,000 Sidepuller.

Mounting and Frame Photos

Pivot Pin



The pivot pin is located rearward of and below the chassis frame to help achieve lower clearance.

Pylon Options



Bed Mounted



**Frame Mounted - Requires 6"
Additional C.A.**



**Tri-Box - Requires 6" - 8"
Additional C.A.**

Chassis Requirements & Restrictions

The LCG Carrier is not compatible with chassis that have inboard mid-ship fuel tanks such as the Ford 550, GM 5500, and Dodge 5500.

Air-bag rear suspensions are recommended for the lowest possible load angle but the LCG can be mounted on chassis with leaf spring suspensions. For leaf spring suspensions, the bed slide rails are 2" below the top of the truck frame so the helper spring pads must be at least 2 inches below the top of the truck frame for clearance. Hino chassis will need the helper spring pads lowered and the Nissan 2000 and 2300 are compatible, but only in the K model wheelbase (153 CA) because of the exhaust tail pipe interfering with the tilt cylinder saddle.

A minimum frame height of 33" is required for the 12 Series and 36" for the 16 Series and a maximum frame height for the 12 & 16 Series is 40".

Minimum Frame length behind the center of the rear axle is 36"

Fuel Tanks must be under cab, and not extend behind the cab. Chassis components directly behind the cab and must be 2" below the truck frame. Fuel fill must not be behind the cab. The preferred location for the battery box is under the passenger seat, battery boxes in other locations may require relocation.

Tall toolboxes or boxes with deep tray tops may not be compatible due to having to be mounted lower than the top of the chassis frame.

Standard & Optional Items

Winch

8,000 lb. Worm (Manual Clutch Release)	STD
8,000 lb. Ramsey Planetary*	OPT
9,000 lb. Warn Planetary*	OPT
12,000 lb. Warn Planetary*	OPT

* Air Shift is Optional, requires air on chassis

9,000 or 12,000 lb. Warn Planetary Winch available with the Side Mounted Winch Option.

Deck

3/16" Thick Floorplate	STD
Diamond Plate Floor	STD
Smooth Floor	N/C OPT
12 Series Crossmember Size	2"x2" Cor-Ten Steel
16 Series Crossmember Size	3"x3" Cor-Ten Steel
LED Bed Lighting	STD

Bed Siderails - Aluminum (12 Series)

Aluminum Tri-Hollow	STD
Alum. Solid Narrow Profile	N/C OPT
Floor Level with Stake Pockets	OPT
Removable Tube Steel Rails	OPT
Removable Tube Alum. Rails	OPT
Removable Alum. Blade Rails	OPT

Bed Siderails - Steel (12 & 16 Series)

Floor Level with Stake Pockets	STD
Removable Tube Steel Rails	OPT
Removable Tube Alum. Rails	OPT
Removable Alum. Blade Rails	OPT
*Fixed Polished Alum. Overlay Sides	OPT
Fixed Solid Tube Side	OPT
Floor Level Sides w/ Trailer Style Rub Rails	OPT

* Not available on the 16 Series

Standard & Optional Items

Tailboard

Conventional Wheel Lift (Slide in L-Arms)	STD
12 Series Extended Reach	68"
16 Series Extended Reach	72"
12 Series Lift Capacity (ext.)	3,500 lbs.
16 Series Lift Capacity (ext.)	4,000 lbs.
Tow Rating	10,000 lbs.
3-Way Pivoting L-Arms	OPT
Vulcan Wheel Retainers	OPT
Fixed Stabilizer	OPT
Hydraulic Stabilizer	OPT
Autogrip Crossbar	OPT
Large Safety Chain Pockets	STD
Anti-Theft L-Arm Storage*	STD

*N/A w/ Vulcan Scoops



Dual Lift Cylinders on the LCG Series

LCG CARRIER-HOW WE DID IT

This is a Series 10 carrier with slide rails above the truck frame.



Shown here is a Series 12 LCG carrier with slide rails beside and below the top of the truck frame.



LCG CARRIER-HOW WE DID IT

This is a Series 10 carrier with slide rails typically located above the truck frame.



Shown here is a Series 12 LCG carrier with slide rails below the top of the truck frame.



CARRIER TO CHASSIS COMPATIBILITY

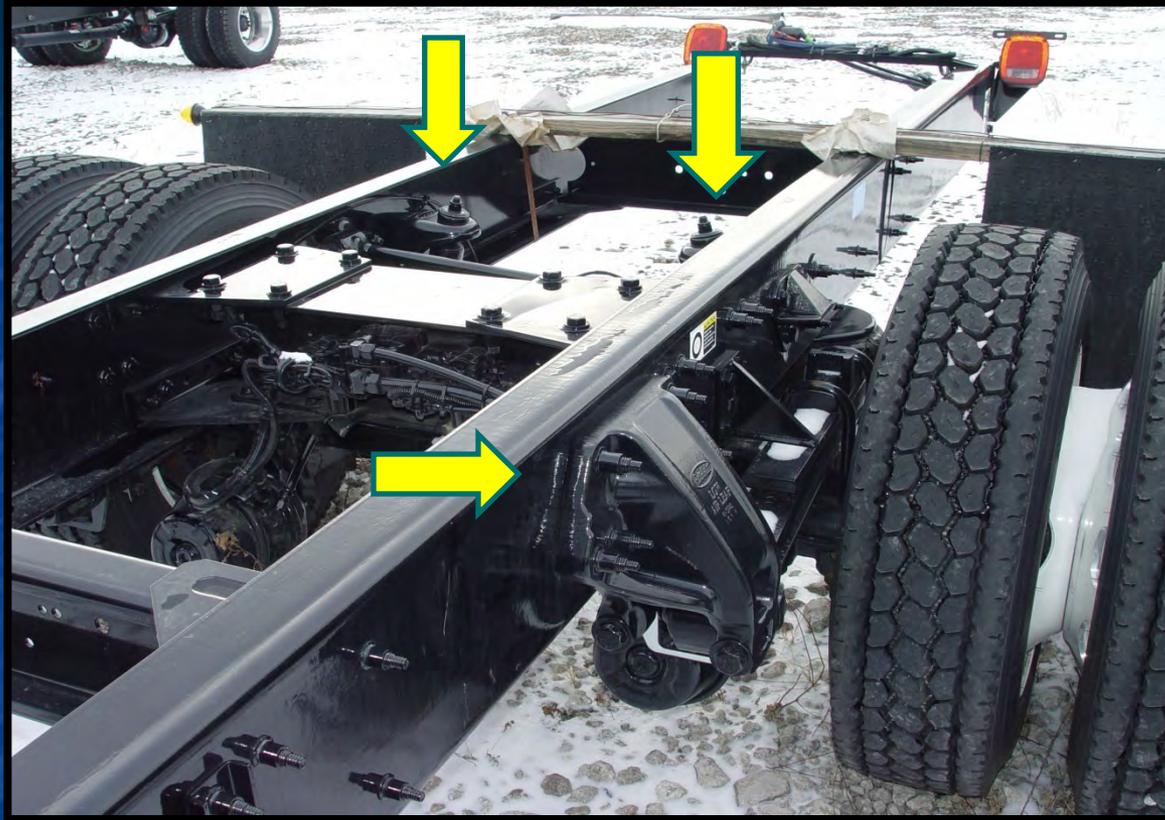
Series 10 Carrier Fits:

- GM 5500
- Dodge 5500
- Ford F550-F650
- Nissan 1800-2300
- Isuzu/GM W4-W5
- International 4300
- Peterbilt 330-337
- Kenworth T300 Series
- Freightliner M2
- Hino 238

Series 12 LCG Carrier Fits:

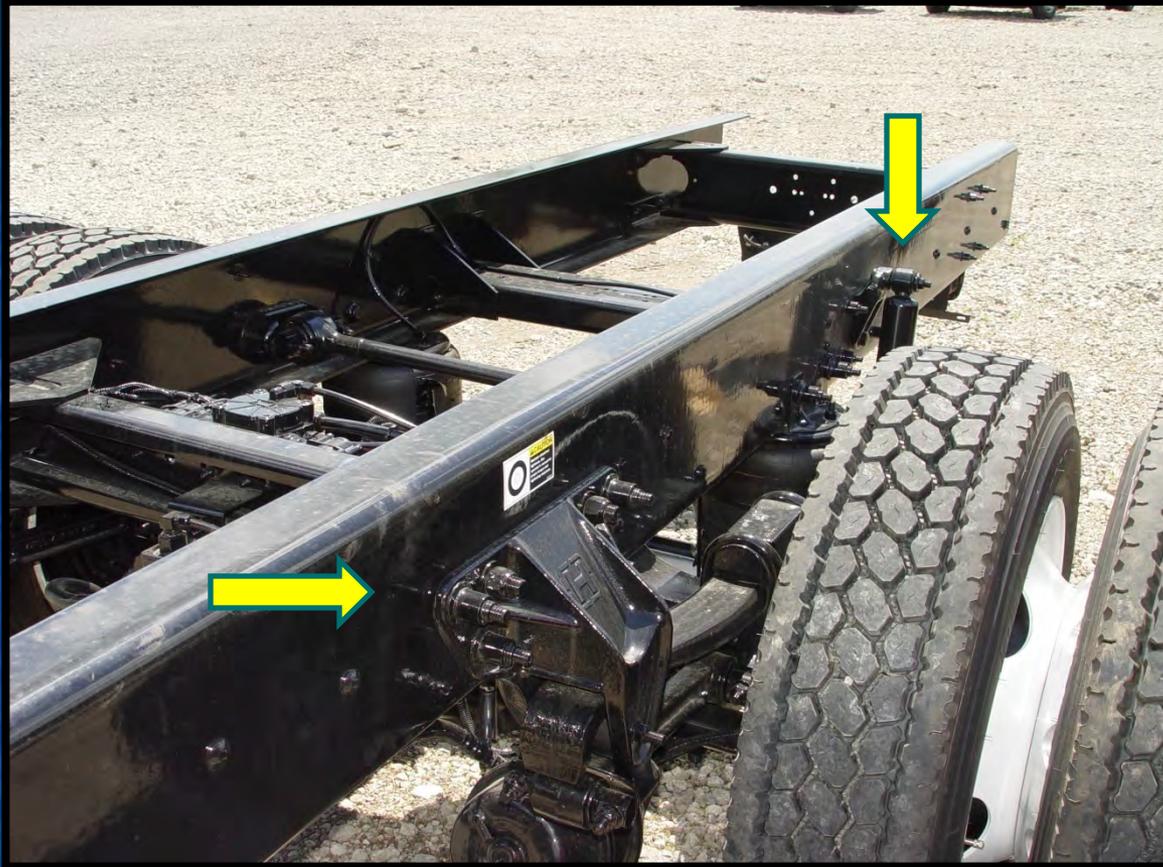
- Ford F650
- International 4300
- Peterbilt 330-337
- Kenworth T300 Series
- Freightliner M2
- Hino 238

The LCG carrier is a specialized low profile design, but it fits a smaller population of chassis than the Series 10 carrier.



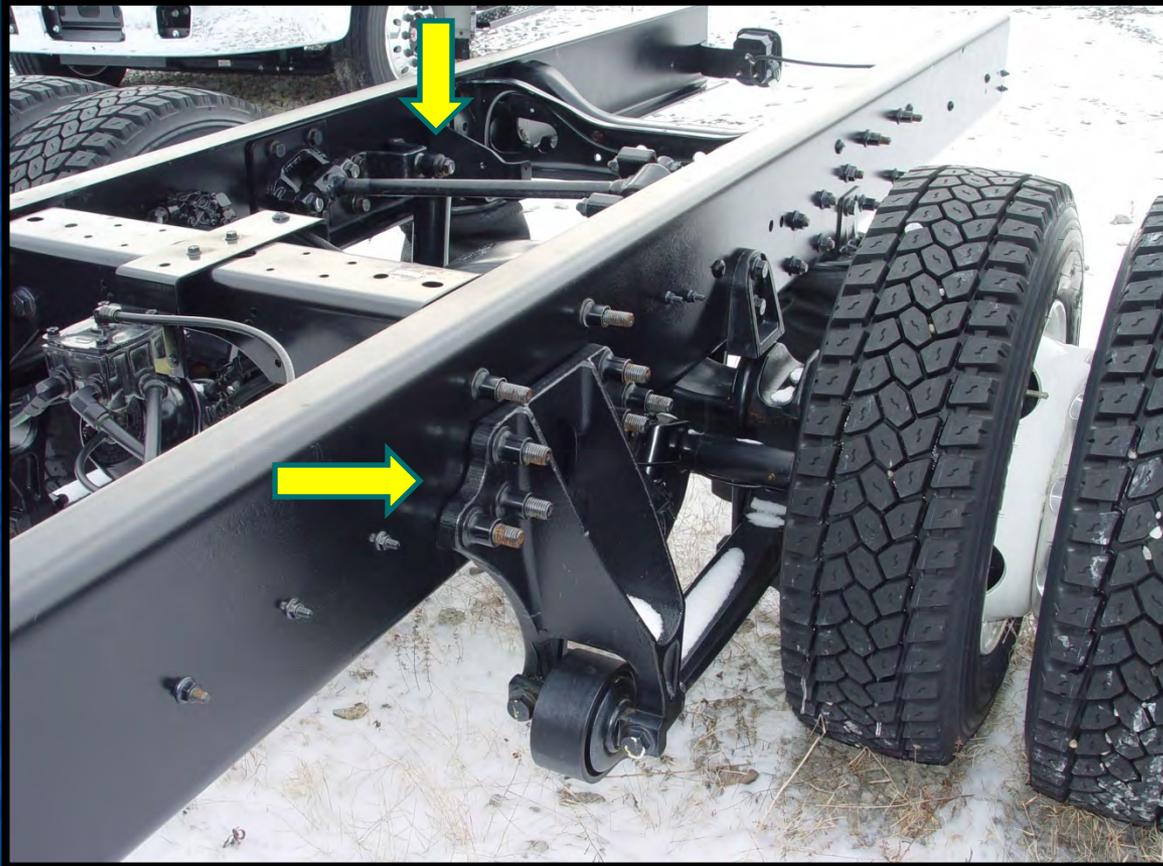
LCG INSTALLATION-PETERBILT

The Peterbilt shock absorbers are inside the truck frame which is the ideal location for LCG carriers. The front spring hanger is close to the top of the truck frame, but it slants downward quick enough to clear the bed slide rails on steel beds. Aluminum carrier installations must be shimmed up $\frac{1}{4}$ inch for the slide rails to clear the spring hangers.



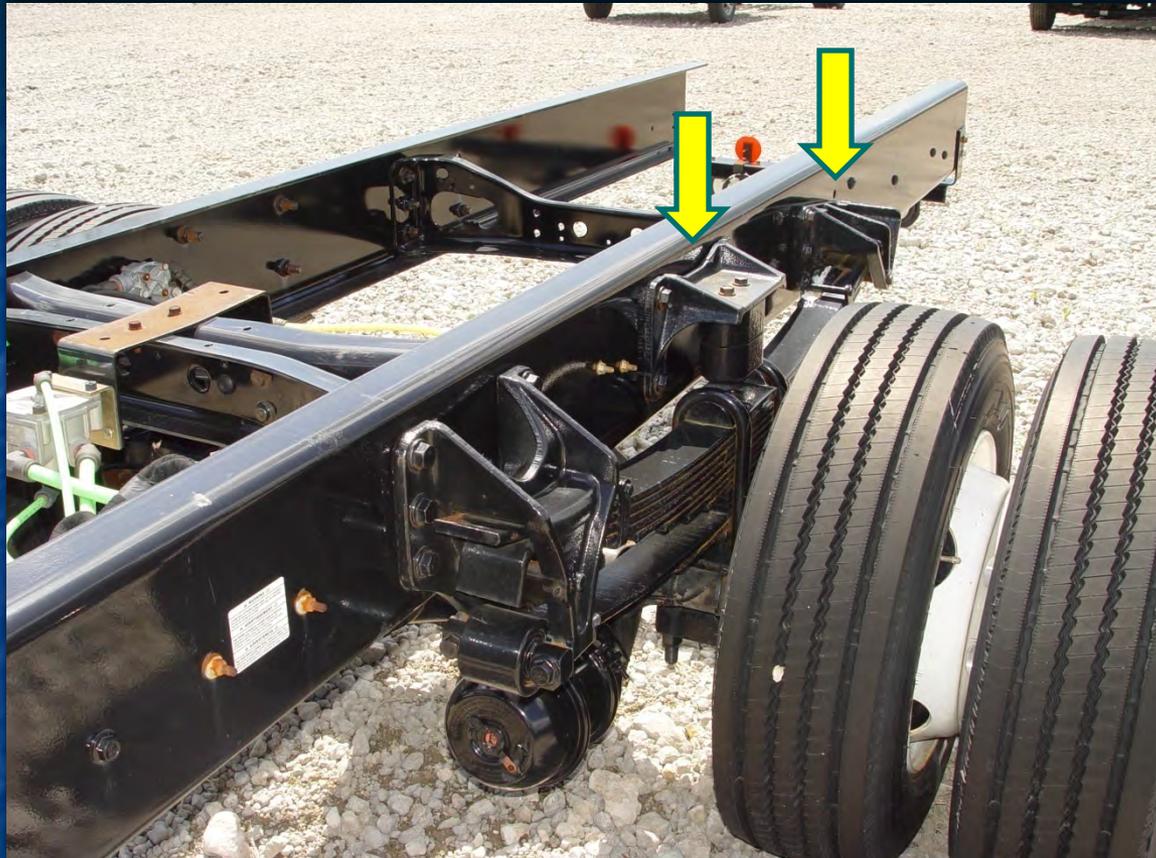
LCG INSTALLATION-KENWORTH

The Kenworth spring hangers and shock absorbers are low enough below the top of the truck frame to clear the LCG bed rails.



LCG INSTALLATION-INTERNATIONAL 4300/FORD F650

The shock absorbers are located inside the frame rails and the spring hangers are far enough below the truck frame to provide plenty of clearance to the LCG bed slide rails.

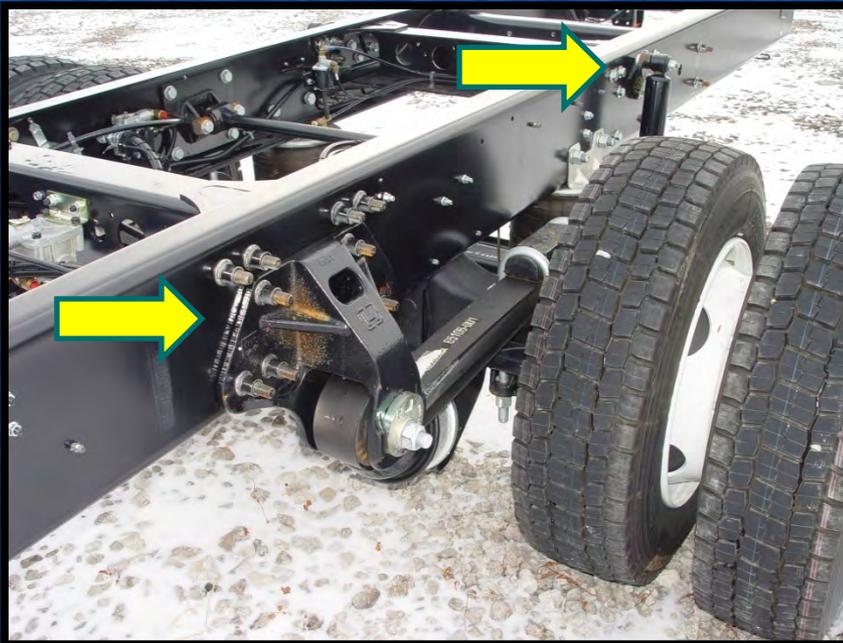


LCG INSTALLATION-LEAF SPRING SUSPENSION

Shown here is an International with a leaf spring rear suspension. The rear spring hanger is just low enough to clear the hinge plates on the subframe. The center snubber bracket barely clears the slide rails on a steel bed.

LCG INSTALLATION-HINO 238

The spring hangers are far enough below the top of the truck frame to provide plenty of clearance to the LCG bed slide rails.



This shock absorber is too close to the top of the truck frame and must be lowered at least 2 inches to clear the subframe.

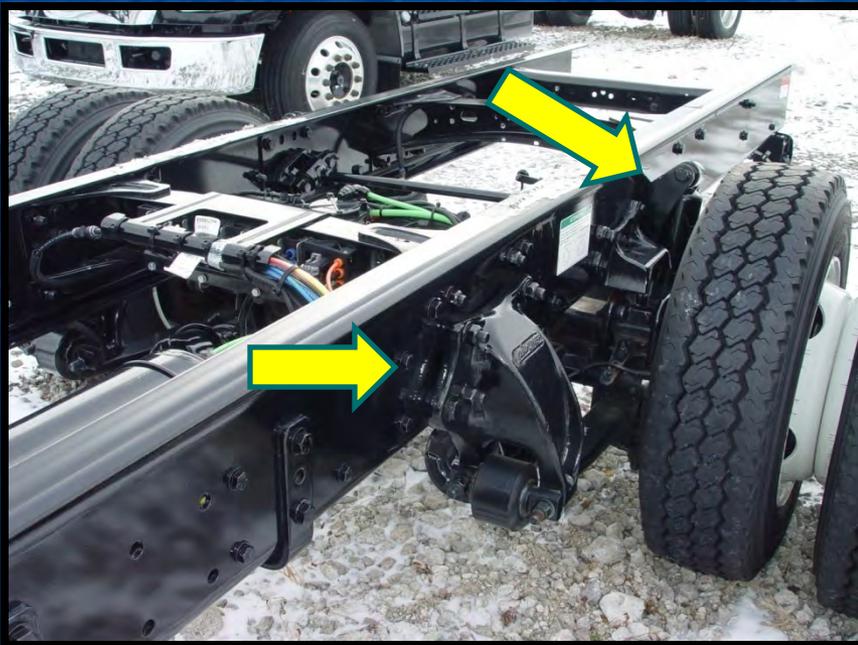


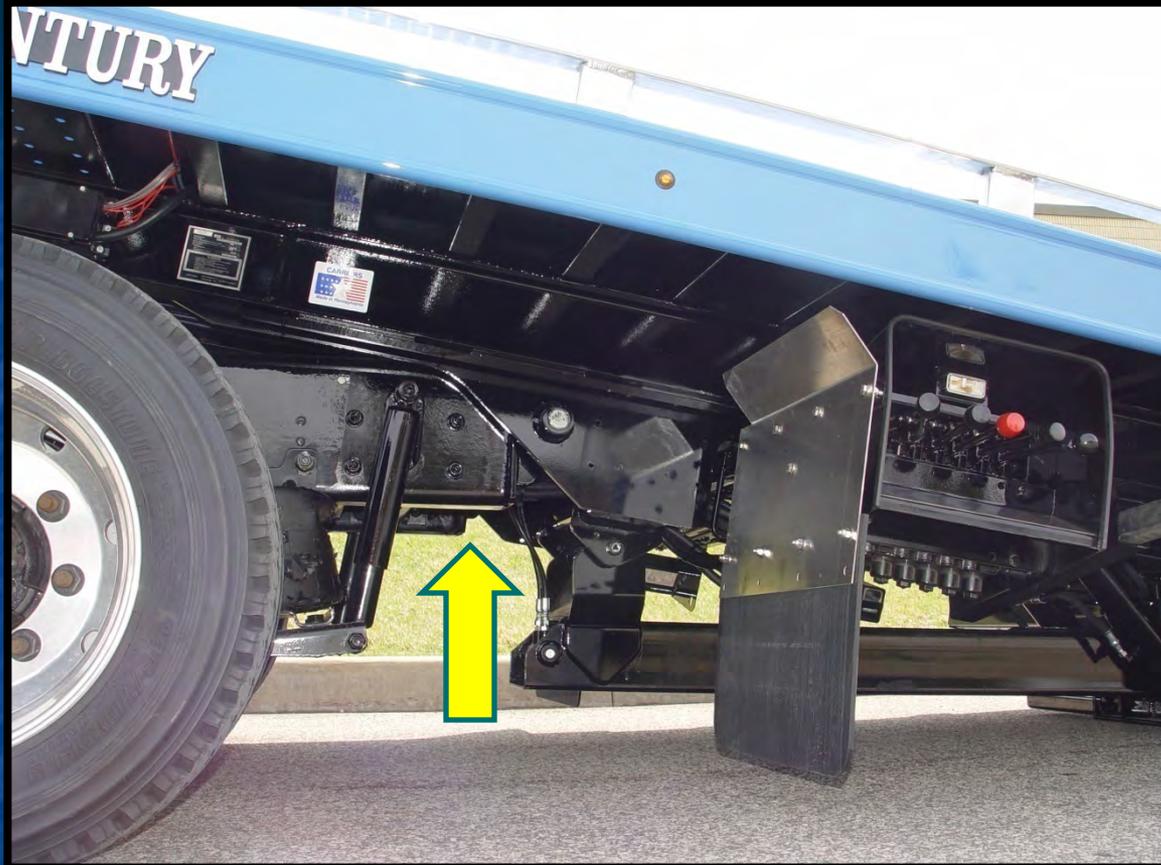
LCG INSTALLATION-FREIGHTLINER

M2

This spring hanger is far enough below the top of the truck frame to clear the LCG bed slide rails. Notice the frame is below the top of the tires with the air bags inflated. Down travel due to air bag deflation must be limited to prevent the bed from setting on the tires.

The Freightliner shock absorber is mounted too high on the frame for the LCG carrier. The Freightliner shock mounting bracket is on the left. Replace it with the Miller shock mounting bracket on the right. The Part Number is 0751224.



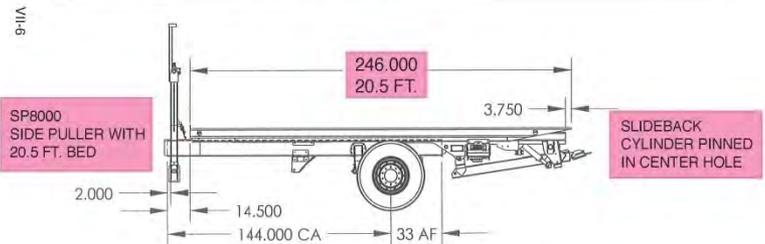
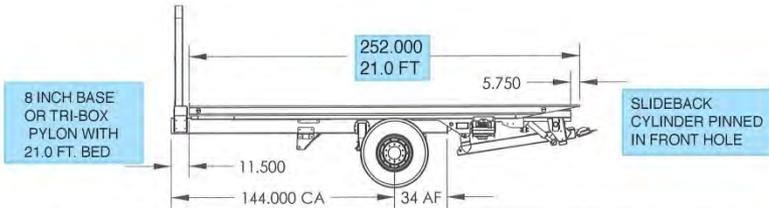
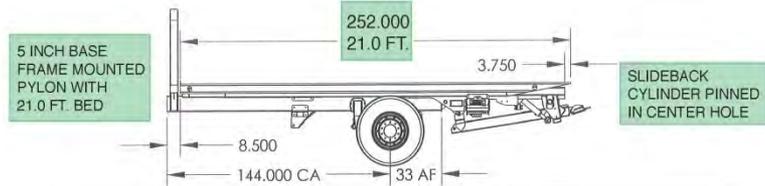
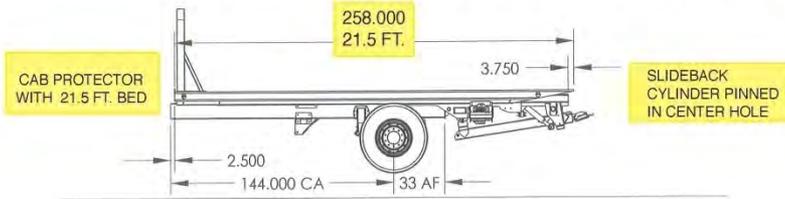


LCG INSTALLATION-FRAME CUTOFF

The frame cutoff is usually 33 inches behind the center of the rear axle. Shown here is a Kenworth T300 and the shock absorber is low enough below the top of the truck frame to clear the bed slide rails.

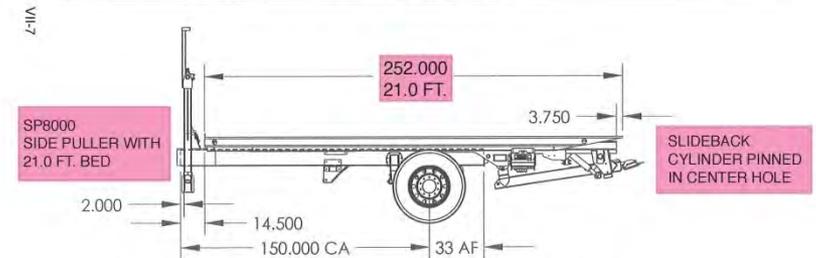
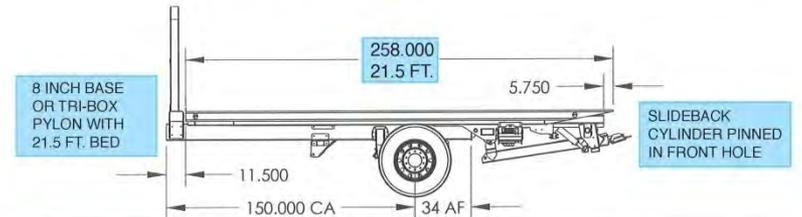
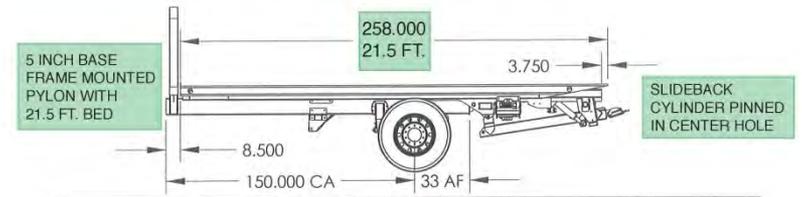
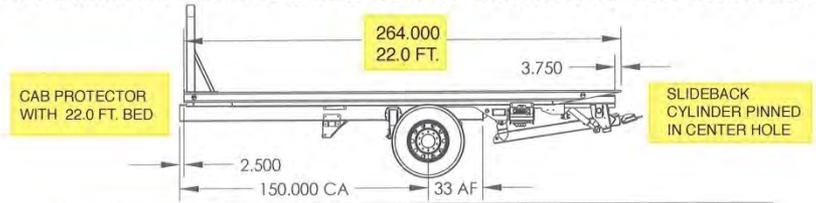
LCG INSTALLATION-CHASSIS LAYOUT

RECOMMENDED LCG CARRIER LAYOUT CONFIGURATION FOR 144 CA



CA = CAB TO AXLE AF = AFTER FRAME

RECOMMENDED LCG CARRIER LAYOUT CONFIGURATION FOR 150 CA

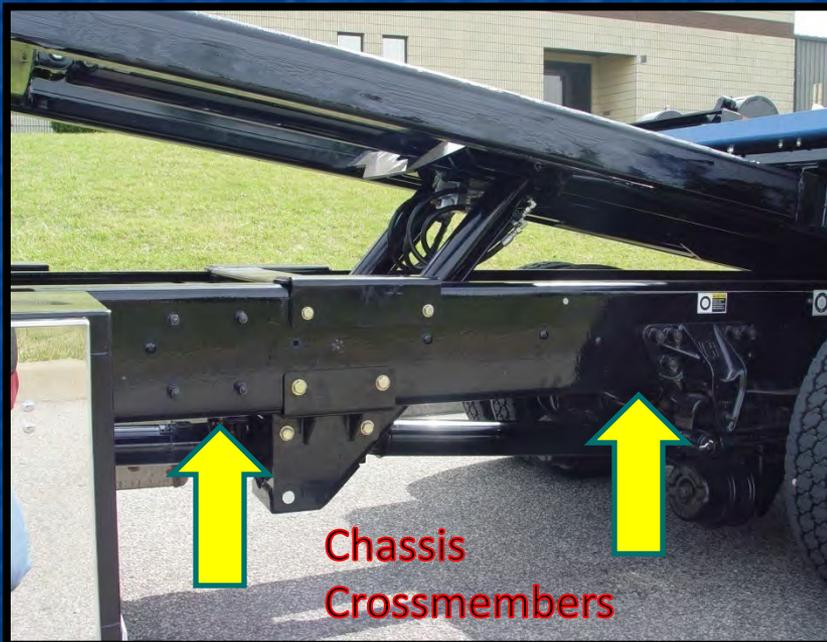


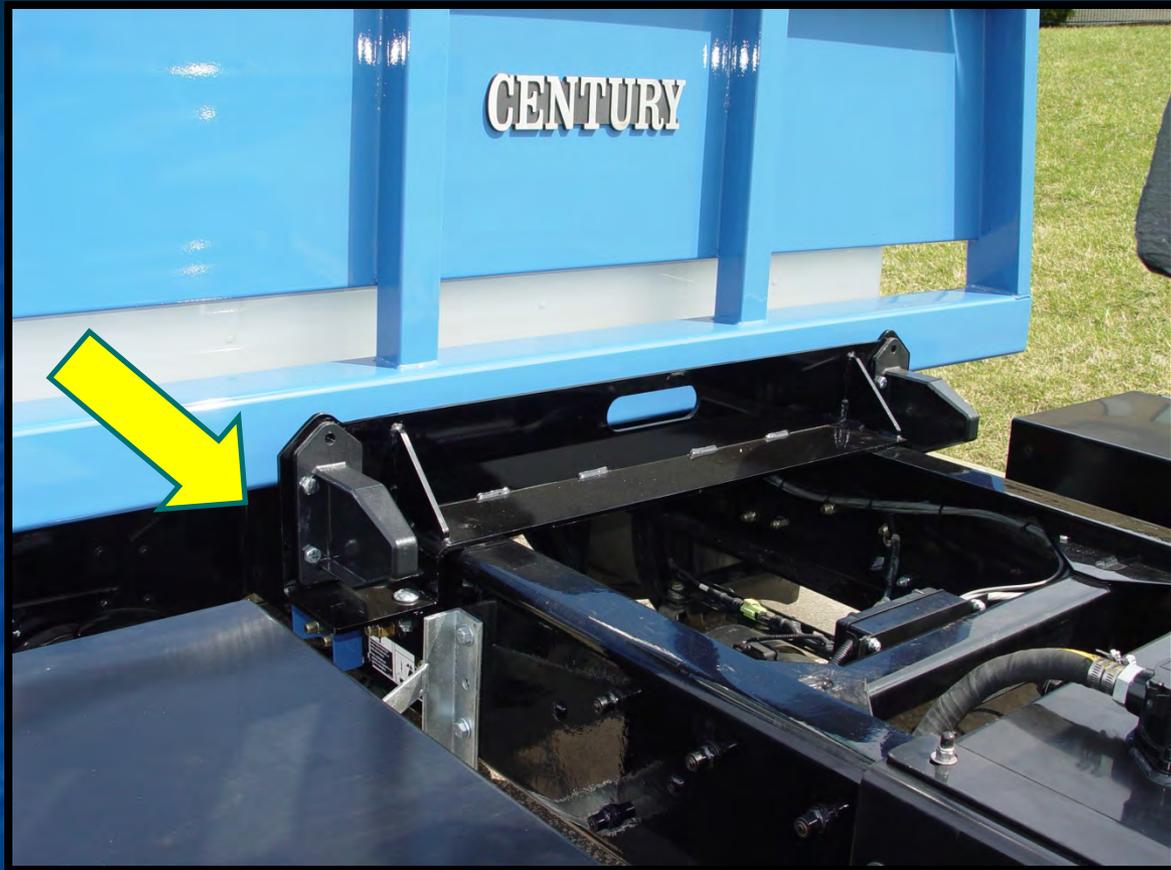
CA = CAB TO AXLE AF = AFTER FRAME

LCG INSTALLATION-TILT CYLINDERS

The tilt cylinders and saddle are positioned between the truck frame rails and the chassis crossmembers located between and forward of the front spring hangers.

This tilt cylinder configuration is necessary for the LCG's low profile, and it limits the ability to adjust the position of the carrier on the chassis forward and rearward.





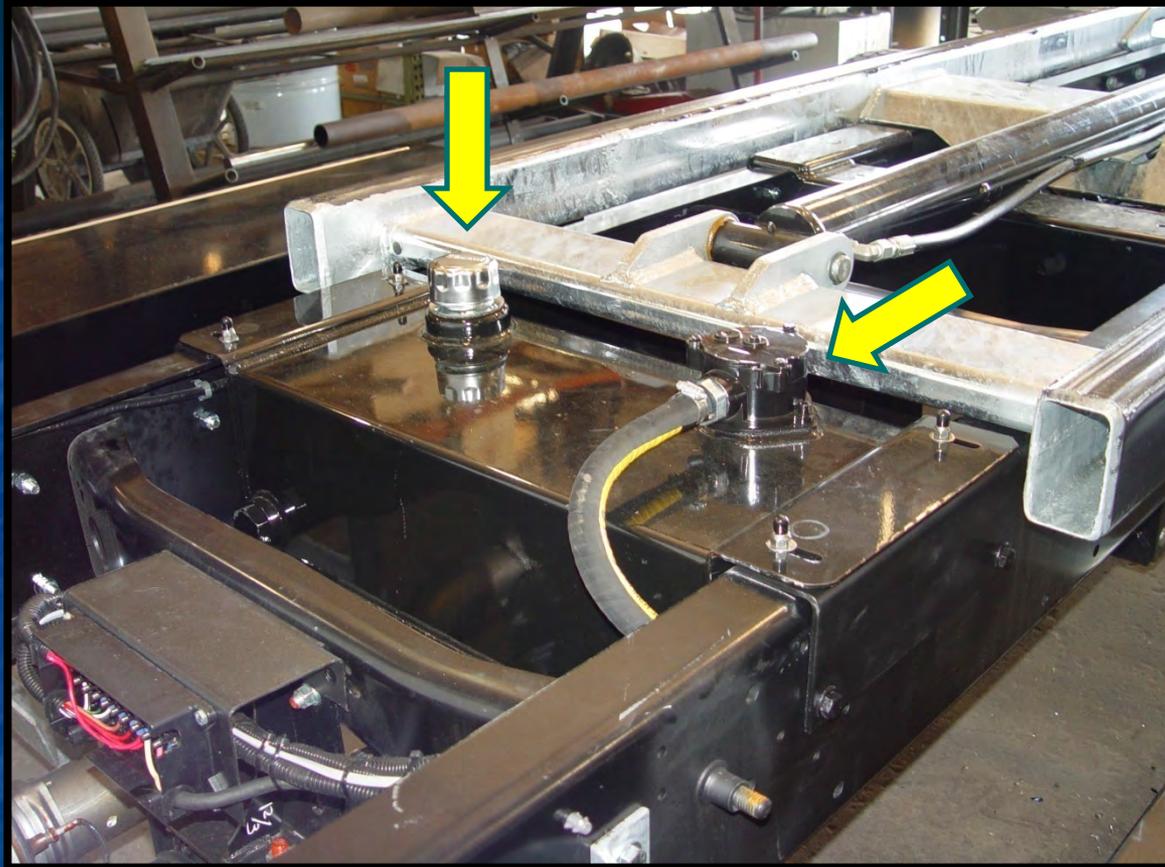
LCG INSTALLATION-BED LOCK

The bed lock hold-downs are below the top of the truck frame. Chassis components behind the cab must be clear of this area.



LCG CARRIER-RECENT UPDATES

The main rail I-Beams have been modified by trimming the outside flange and reinforcing the web to create more clearance for 22.5 tires. This modification has reduced the required space between the inside tires from 50 inches to 49 inches.

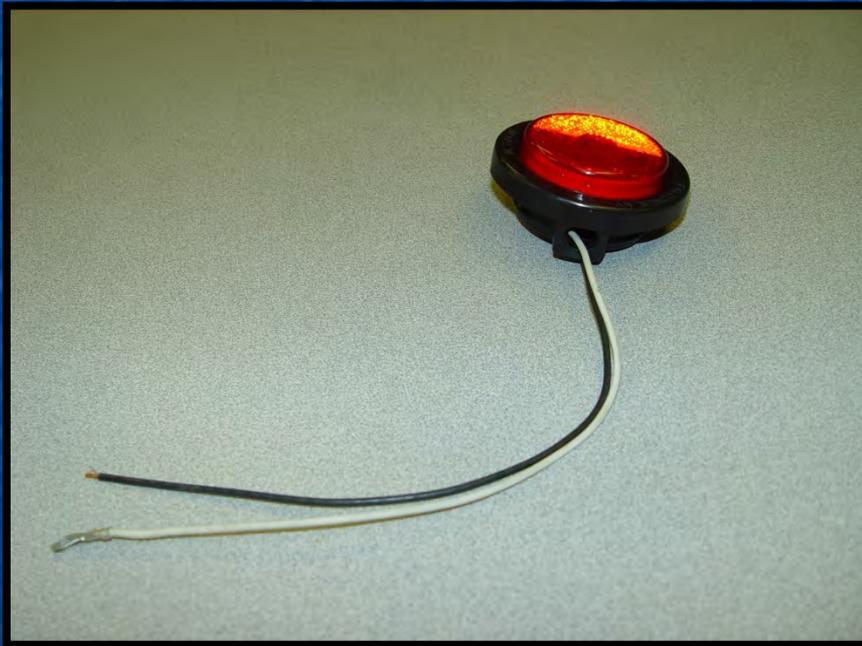


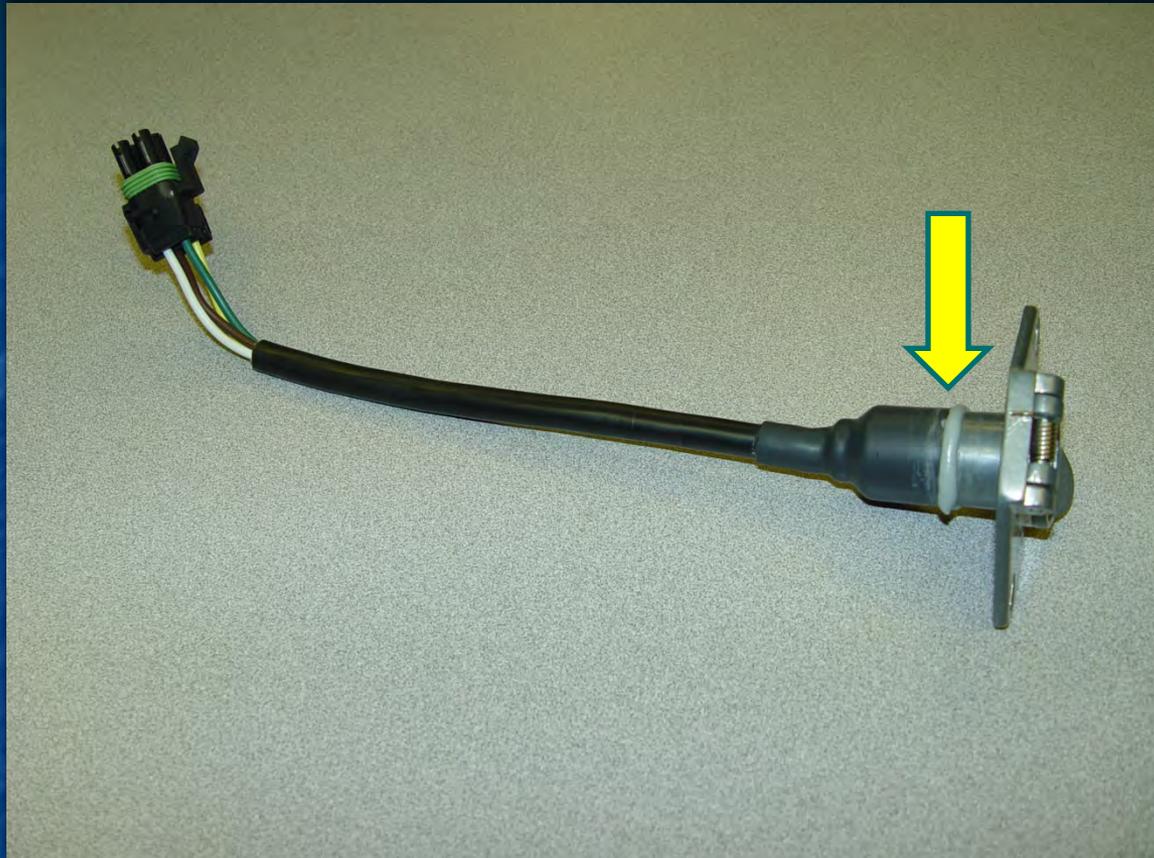
LCG CARRIER-RECENT UPDATES

The hydraulic oil reservoir has been updated with all O-Ring ports and a screened filler-breather cap. The filler port and filter have been strategically located to allow the reservoir to be positioned under the slideback cylinder.

LCG CARRIER-RECENT UPDATES

The bed marker light grommets have closed back to shield corrosive road spray.





LCG CARRIER-RECENT UPDATES

The edge of the rubber shrink tube on the tow light plug is now sealed with silicone or drip-check.



LCG CARRIER-SPECIALIZED OPTIONS

The LCG carriers can be equipped with specialized options like the Tri-Box pylon and the SlideWinder side mounted winch system shown here.

LCG CARRIER-SLIDEWINDER WINCH SYSTEM

Below, the sliding roller guide is adjusted to the left.



Shown here, the sliding roller guide is adjusted to the right.

