



# BUILT FOR **TRAVEL**

UCA & LONG TRAVEL SUSPENSION SALES GUIDE



# **STOCK LENGTH UPPER CONTROL ARMS** 2010+ LEXUS GX460

#### PART # 96504



Travel	Lift	Track Increase
1" additional	2-3″	0″
INSTALLATION INSTRUCTIONS		
ADDITIONAL PRODUCT INFO & IMAGES		
Bolt On		

#### Optional Heim Pivot Upgrade - Part # 96504-H

- Heim upper control arms are fully adjustable to allow maximum tuning of caster and camber.
- Designed for use on 6" or higher drop bracket lift kits.
- TC includes 3/4" chromoly heim joints for the pivots.

#### Kit Includes

UPPER A-ARMS W/ BUSHINGS
PLATED END WASHERS
1" UNIBALLS W/ RETAINING CLIPS
GRADE 8 HARDWARE
GREASE FITTINGS
TAPERED SPINDLE ADAPTERS

#### Features and Benefits

- UCA's are designed with added caster to aid in retaining factory alignment specs when aftermarket lift kits are installed. This reduces the darting or wandering in the vehicle's steering when 2.5"-3" lift kits are installed.
- Upper control arms combined with extended length coilover shocks will allow for up to 1" of additional wheel travel.
- Urethane bushings reduce bushing deflection compared to stock rubber bushings.
- 4130 chromoly tubular upper control arms are 100% bolt on and hand crafted in the U.S.A.
- CNC machined tapered spindle adapters convert the factory ball joint to a 1" uniball for added component strength & maximum wheel travel.

- TOTAL CHAOS includes 1"I.D. uniballs that feature a heat treated stainless steel ball & heat treated stainless steel race for maximum corrosion resistance and component longevity. These uniballs also feature a military grade PTFE woven fabric liner that helps prevent noise.
- Custom profile upper and lower hi-misalignment spacers maximize droop wheel travel and are machined from heat treated 17-4 stainless steel.
- Control arm pivots include zerk fittings to grease the urethane bushings & inner sleeves without disassembly.
- 3 stage powder coat process includes a durable clear coat to provide a long lasting finish.
- Complete Grade 8 hardware kit is included.

#### **Recommended Tire & Wheel Combination**

Tire	Wheel	Backspace
285/70/R17	17 x 8.5	4.75″

#### Recommended Primary Shock Setup 2.5" Diameter Extended Travel Coilover Shocks

Shock Manufacturer	Part #
Fox Shocks	883-06-130
King Shocks	KNG-25001-243A-EXT

#### SUPPORT - (951) 737 9682

Part # KNG-25001-243A-EXT (KDSS)

KING 2.5" EXTENDED TRAVEL COILOVERS W/ COMPRESSION KNOBS

96504 upper control arms.

ride for optimum performance.

## **LEXUS GX460 STOCK LENGTH ACCESSORIES** ACCESSORIES SPECIFIC TO PART #96504

Adjustable ride height ranging from 2"-3" of lift.
 1" extra droop wheel travel when combined with

Compression adjuster knobs allow user to fine tune

All necessary mounting brackets and hardware are included along with detailed instructions.

# FRONT



#### EXPEDITION SERIES LOWER CONTROL ARMS - DUAL SHOCK

- Newly integrated steering stop tabs retain factory turning angle with no modification necessary to OEM ball joint cradles.
- Pocket added at the coilover shock tabs increases clearance allowing for a wider range of shocks to be used - up to 3.0".
- New billet CNC machined uniball cup provides more turning clearance & increases strength.
- Urethane bushings reduce bushing deflection compared to stock rubber bushings.
- Stock length replacement lower control arms.
- 1.25" wheel spacers required for secondary shock mount clearance.

#### Part # 86555-E-10FJ-KDSS

#### SPINDLE GUSSET

- **P 1** 
  - Must have reinforcement for anyone who wants to run hard in the dirt!
  - Strengthens spindle uprights and prevents the knuckle from damage during hard impacts under braking.
  - 1/8" prebent laser cut mild steel brackets.
  - Eliminates the factory sway bar.
  - Welding and grinding are required to install.

Part # 59698



Part # 59860-10FJ





# LEXUS GX460 STOCK LENGTH ACCESSORIES

ACCESSORIES SPECIFIC TO PART #96504



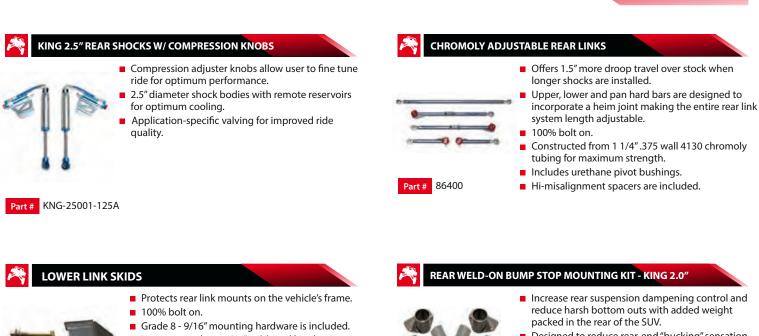
BODY MOUNT CHOP PLATES



 Designed to reinforce factory body mounts after the required trimming to allow the installation of larger tires.

- 1/8" thick laser cut plates.
- Welding and cutting required to install.

Part # 59850



- Laser cut pre bent 3/16" mild steel brackets.
- Compatible only with TC or stock links.
- Can be welded on for maximum protection.

Part # 48650

- 2000
- Part # 48624K
- Designed to reduce rear-end "bucking" sensation and the harsh bottom out with factory rubber bump stops.
- No need to remove the rear coil spring to adjust nitrogen settings like other brands.
- CNC laser cut brackets weld to the outer frame rail and offer easy access to adjust the nitrogen pressure.
- Designed to work with KING 2.0" compact threaded adjustable bump stops.
- KING bump stops offer adjustable nitrogen pressure to custom tune your vehicle for your specific use and off-road application (NOT INCLUDED with mounting kit).
- Cutting, welding, and basic fabrication are required.
- Bump stops sold separately KING PT#BS2120.



# LEXUS GX460 STOCK LENGTH ACCESSORIES

ACCESSORIES SPECIFIC TO PART #96504

#### KING BUMP STOP 2.0" x 2.0" TRAVEL (REQUIRES PN: 48624K)



- Aluminum components are machined from aircraft quality billet.
- Large diameter shafts have a minimum tensile strength of 75,000 PSI.
- Long wearing nylon contact pad ensures quiet operation and mounts with a simple yet effective single bolt design.
- Sold individually.

#### Part # KNG-BS2120



# Protects receiver and chain safety tabs from contact

- damage on the trail.
- Skid plate is designed to prevent hitch hang-ups while climbing or ascending in rocks and ditches.
- Features a 3/16" steel skid plate.
- Installs with any hitch pin (not included).
- Powder coated black.



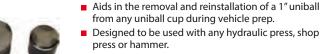
REA

#### 1" STAINLESS STEEL FK UNIBALL AND SNAP RING REPLACEMENT KIT



- 1"I.D. uniballs feature a heat treated stainless steel ball & heat treated stainless steel race for maximum corrosion resistance and component longevity.
- Performance parts will require periodic maintenance based on your driving habits & local conditions.
- Uniballs include a military grade PTFE woven fabric liner that helps prevent noise.
- Snap rings included.
- Sold as a pair.

## 1" UNIBALL REMOVAL / INSTALL TOOL



Prevents damage to new uniball during reassembly.

Part # 96006

Part # FK-REP KIT

#### POLYURETHANE BUSHING KIT: UCA

- Complete TC upper control arm urethane replacement bushing kit.
- Performance parts will require periodic maintenance based on your driving habits & local conditions.
- Inspect bushings and other equipment regularly.
- Contact our facility direct to order these items.

Part # 69000

#### URETHANE BUSHING KIT: LOWER CONTROL ARMS

- Complete TC lower control arm replacement urethane bushing kit.
- 8888
  - Performance parts will require periodic maintenance based on your driving habits & local conditions.
  - Inspect bushings and other equipment regularly.
  - Contact our facility direct to order these items.

Part # 69770-10FJ

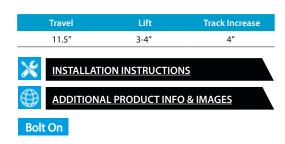
#### 100% MADE IN THE USA



# 2" EXPEDITION SERIES LONG TRAVEL SYSTEM 2010+ LEXUS GX460 - KDSS EQUIPPED

#### PART # 86222-E-10FJ-KDSS [king/fox/radflo]





#### Kit Includes

UPPER A-ARMS W/ BUSHINGS & ZERK FITTINGS
LOWER A-ARMS W/ BUSHINGS & ZERK FITTINGS
TIE-ROD EXTENSIONS
PLATED A-ARM END WASHERS
D.O.T. BRAIDED BRAKE LINES
1" UNIBALLS W/ RETAINING CLIPS
LIMIT STRAPS W/ ADJUSTERS & MOUNTS
GRADE 8 HARDWARE
HI-MISALIGNMENT SPACERS

#### **Features and Benefits**

- The 2" Expedition Series kit features a redesigned KDSS compatible lower control arm serving as an evolution of the Race Series LCA's with select features to improve component strength, function and vehicle handling.
- An integrated steering stop tab retains the factory turning angle with no modification necessary to the OEM ball joint cradles.
- 2" extended upper and lower control arms bolt to factory mounting locations. Fiberglass fenders are required. 11.5" of travel.
- Upper and lower ball joints are upgraded to 1" stainless steel uniballs for max travel and

component strength.

- Urethane bushings reduce bushing deflection compared to stock rubber bushings.
- Heim pivot upper control arms can be custom ordered for this kit (see page 19).
- Boxed lower control arms include dual 2.5" shock tabs. Primary coilover shocks bolt into the factory coil bucket location.
- Maximize tunability, overall articulation & performance.
- TC custom extended 4340 axles insert into the factory inner and outer CV's to retain 4wd (not included).

# Recommended Tire &

Wheel Combination			
	Tire	Wheel	Backspace
285	5/70/R17	17 x 8.5	4.75″

#### Recommended Primary Shock Setup 2.5" Diameter Long Travel Coilover Shocks

Shock Manufacturer	Part #
Fox Shocks	880-06-953
King Shocks	KNG-TC 5119-03-A

# Recommended Secondary Shock Setup 2.5" External Bypass Shocks

Shock Manufacturer	Part #	
Fox Shocks	982-02-954	
King Shocks	TC1119-34	
Note: TC Hoop Part # 86610 is required		

# Required Additional Parts for Installation

Part	Part #
Coilover Shocks	See chart above
TC Extended Axles (4WD MODELS )	86305T

#### Application Notes

- Suspension travel varies on every vehicle.
  Welding is required to mount the limit strap mounts and bump stop spacer.
- This kit was not intended to use air bumps.
- Fiberglass fenders are required to run this kit.

100% MADE IN THE USA

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# HAND MADE IN THE USA

# LEXUS GX460 ACCESSORIES FOR 2" KITS

# FRONT

### KING LONG TRAVEL COILOVERS W/ ADJUSTERS

- Long travel specific shocks add 3-4" of lift when paired with a TC long travel kit. 2.5" diameter shocks with remote reservoirs for
  - optimum cooling.
- Compression adjuster knobs allow user to fine tune ride for optimum performance.

#### KNG-TC 5119-03-A Part #





#### Serious levels of performance are achieved when a secondary shock is used with a TC long travel kit.

- Externally adjustable for both compression and rebound.
- Designed for use with TC secondary shock hoops (PN: 88610).

#### Part # KNG-TC1119-34

#### **WELD - ON SPINDLE GUSSETS**

- Must have reinforcement for anyone who wants to run hard in the dirt!
- Strengthens spindle uprights and prevents the knuckle from damage during hard impacts under braking.
- 1/8" prebent laser cut mild steel brackets.
- Eliminates the factory sway bar.
- Welding and grinding are required to install.

### SPINDLE GUSSETS WITH SWAY BAR MOUNTS

KING LONG TRAVEL SECONDARY SHOCKS

- braking.
- Must have reinforcement for anyone who wants to run hard in the dirt! Strengthens spindle uprights and prevents the
  - knuckle from damage during hard impacts under
  - Retains the factory sway bar and includes an additional steering arm gusset.
  - 1/8" prebent laser cut mild steel brackets.
  - Trucks running factory back spacing wheels must run wheel spacers.
  - Welding and grinding are required to install.

#### LT LOWER CONTROL ARM SKID PLATES +2"

- Bolt-on aluminum lower skid plates are designed to fit TC 2" long travel system lower control arms.
  - Slide over rocks with an angled approach front lip. Grade 8 mounting hardware is included.
- Fits Standard Series long travel kits ONLY.

#### Part # 86007

59698

Part #

#### **DUAL SHOCK HOOPS - LONG TRAVEL ARMS**



86610

Part #

- Flush mount top plate allows hoop to be used with shocks that use bolts or studs on upper mount and eliminates the need to trim the inner fender well for rear bolt installation.
- Reinforces the factory coil bucket and helps reduce flex.
- 4130 prebent chromoly shock hoops are designed to install secondary 2.5" bypass shocks for maximum IFS dampening control.
- Upper shock tabs are tacked in place to aid in secondary shock location set up.
- Includes Grade 8 hardware.
- Welding and grinding are required to install.
- Maximize vehicle dampening control when you install a dual 2.5" shock mount system.

#### LOWER CONTROL ARM CAM TAB GUSSETS

Reinforces weak factory cam alignment tab plates

59698-SB

impacts. CNC laser cut 1/8" 4130 chromoly replacement cam plates weld-to the frame.

that bend during bottom outs or hard front

- 1/4" thick lower cam alignment tabs will not bend like factory tabs.
- Welding and grinding are required for installation.

#### 59860-10FJ Part #

#### WELD-ON BODY MOUNT CHOP PLATES



- Designed to reinforce factory body mounts after the required trimming to clearance the installation of larger tires.
- 1/8" thick laser cut plates.
- Instructions included.
  - Welding & cutting required to install.





Part #



LONG TRAVEL SUSPENSION SALES GUDE

# **LEXUS GX460 ACCESSORIES FOR 2" KITS**

## 4WD

#### LT 4WD 4340 AXLES +2" EXTENDED

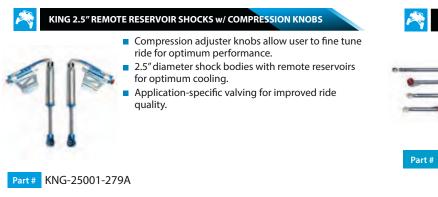
- Designed for use with TC +2" 4Runner long travel systems.
- 4340 heat treated 2" extended axle shafts and clamps are included.
- Re-uses factory Toyota inner and outer CV joints and boots.
- Axles are vehicle-specific and are not cross compatible with other Toyota models.

Part # 86305



# **LEXUS GX460 ACCESSORIES FOR 2" KITS**

# REAR



# CHROMOLY ADJUSTABLE REAR LINKS Offers 1.5" more droop travel over stock when longer shocks are installed. Upper, lower and pan hard bars are designed to incorporate a heim joint making the entire rear link system length adjustable. 100% bolt on.

WELD-ON REAR BUMP STOP MOUNTS

- Constructed from 1 1/4".375 wall 4130 chromoly tubing for maximum strength.
- Includes urethane pivot bushings.
- Hi-misalignment spacers are included.

#### LOWER LINK SKIDS

- Protects rear link mount on the vehicle's frame.
  - 100% bolt on.
- Grade 8 9/16" mounting hardware is included.
- Laser cut pre bent 3/16" mild steel brackets.
- Compatible only with TC or stock links.Can be welded on for maximum protection.

#### Part # 48650

86400

Part # 48624K

- Increase rear suspension dampening control and reduce harsh bottom outs with added weight packed in the rear of the SUV.
- Designed to reduce rear-end "bucking" sensation and the harsh bottom out with factory rubber bump stops.
- No need to remove the rear coil spring to adjust nitrogen settings like other brands.
- CNC laser cut brackets weld to the outer frame rail and offer easy access to adjust the nitrogen pressure.
- Designed to work with KING 2.0" compact threaded adjustable bump stops.
- KING bump stops offer adjustable nitrogen pressure to custom tune your vehicle for your specific use and off-road application (NOT INCLUDED with mounting kit).
- Cutting, welding, and basic fabrication are required.
- Bump stops sold separately KING PT#BS2120.

#### KING BUMP STOP 2.0" x 2.0" TRAVEL (REQUIRES PN: 48624K)

- Aluminum components are machined from aircraft quality billet.
- Large diameter shafts have a minimum tensile strength of 75,000 PSI.
- Long wearing nylon contact pad ensures quiet operation and mounts with a simple yet effective single bolt design.
- Sold individually.

#### TOYOTA HITCH SKID PLATE

- Protects receiver and chain safety tabs from contact damage on the trail.
- Skid plate is designed to prevent hitch hang ups while climbing or ascending in rocks and ditches.
- Universal design fits all OEM Toyota receivers for: 2003+ 4Runner | 2005+ Tacoma | 2007+ Tundra | 2007+ FJ's | 2003+ Lexus GX 470/460
- Features a 3/16" steel skid plate.
- Installs with any hitch pin (not Included).
- Powder coated black.

Part # 48420





Part # KNG-BS2120





# LEXUS GX460 ACCESSORIES FOR ALL 2" KITS

# PREP



- Inspect bushings and other equipment regularly.
- Contact our facility direct to order these items.

#### Part # 69700-10FJ

#### UNIBALL REMOVAL & RE-INSTALLATION TOOL

- Aids in the removal and reinstallation of a 1" uniball from any uniball cup during vehicle prep.
- Designed to be used with any hydraulic press, shop press or a hammer.
- Prevents damage to new uniball during reassembly.

#### Part # 96006

#### ADDITIONAL REPLACEMENT PARTS

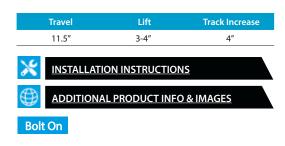
- TC stocks all replacement parts necessary to maintain your performance equipment.
- Tie-Rod Extensions
- Plated A-Arm End Washers
- D.O.T. Braided Brake Lines
- Limit Straps w/ Adjusters & Mounts
- Grade 8 Hardware
- Hi-Misalignment Spacers
- Please have your customers contact TC directly for any individual replacement parts.



# 2" EXPEDITION SERIES LONG TRAVEL SYSTEM W/ HEIMS 2010+ LEXUS GX460 - KDSS EQUIPPED

#### PART # 86222-E-H-10FJ-KDSS [king/fox/radflo]





#### Kit Includes

UPPER A-ARMS W/ BUSHINGS & ZERK FITTINGS
LOWER A-ARMS W/ BUSHINGS & ZERK FITTINGS
TIE-ROD EXTENSIONS
PLATED A-ARM END WASHERS
D.O.T. BRAIDED BRAKE LINES
1" UNIBALLS W/ RETAINING CLIPS
LIMIT STRAPS W/ ADJUSTERS & MOUNTS
GRADE 8 HARDWARE
HI-MISALIGNMENT SPACERS

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- An integrated steering stop tab retains the factory turning angle with no modification necessary to the OEM ball joint cradles.
- 2" extended upper and lower control arms bolt to factory mounting locations. Fiberglass fenders are required. 11.5" of travel.
- Upper and lower ball joints are upgraded to 1" stainless steel uniballs for max travel and

component strength.

- Heim upper control arms are fully adjustable to allow maximum tuning of caster and camber.
- Boxed lower control arms include dual 2.5" shock tabs. Primary coilover shocks bolt into the factory coil bucket location.
- Several spring rate options allow the ability to customize your ride for your specific application.
- Maximize tunability, overall articulation & performance.
- TC custom extended 4340 axles insert into the factory inner and outer CV's to retain 4wd (not included).

Recommended Tire & Wheel Combination

Tire	Wheel	Backspace
285/70/R17	17 x 8.5	4.75″

# Recommended Primary Shock Setup 2.5" Diameter Long Travel Coilover Shocks

Shock Manufacturer	Part #
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# Required Additional Parts for Installation

Part	Part #
Coilover Shocks	See chart above
TC Extended Axles (4WD MODELS )	86305T

#### Application Notes

- Suspension travel varies on every vehicle.
  Welding is required to mount the limit strap mounts and bump stop spacer.
- This kit was not intended to use air bumps.

# • Fiberglass fenders highly recommended for this kit.

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