



# BUILT FOR TRAVEL

UCA & LONG TRAVEL SUSPENSION **SALES GUIDE** 



# STOCK LENGTH UPPER CONTROL ARMS

## 2007 - 2009 FJ CRUISER



## **PART # 96504**



Travel	Lift	Track Increase
1" additional	2-3"	0"



**INSTALLATION INSTRUCTIONS** 



**ADDITIONAL PRODUCT INFO & IMAGES** 

#### **Bolt On**

#### **Optional Heim Pivot Upgrade**

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

# 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
285/75/R16	16 x 8	4.5"
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-25001-124A-EXT



## **ACCESSORIES SPECIFIC TO PART #96504**

## **FRONT**



#### KING 2.5" EXTENDED TRAVEL COILOVERS W/ COMPRESSION KNOBS



- Adjustable ride height ranging from 2"-3" of lift.
- 1" extra droop wheel travel when combined with 96504 upper control arms.
- Compression adjuster knobs allow user to fine tune ride for optimum performance.
- All necessary mounting brackets and hardware are included along with detailed instructions.

Part # KNG-25001-124A-EXT



## A

#### **EXPEDITION SERIES LOWER CONTROL ARMS - SINGLE SHOCK**



Part # 86555-E-NSS

- 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 arm.
- Vehicles with KDSS require PT#: 86555-E-KDSS-NSS



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



Part # 86555-E

- 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.
  - Vehicles with KDSS require PT#: 86555-E-KDSS



#### STOCK LENGTH STANDARD SERIES LOWER CONTROL ARMS



Part # 86500

Lower ball joints are upgraded to a 1" stainless steel uniball for maximum wheel travel and added component strength.

3/16" main body stock length fully boxed lower

■ Features a two-bolt billet machined uniball adapter.

- control arms are CNC laser cut and include internal gussets.
- Boxed arms feature replaceable urethane pivot bushings. Pivots include zerk fittings to maintain the equipment while bolted on the vehicle.
- 1/4" thick steel skid plate is integrated into the control arm for rock crawling protection.



#### SPINDLE GUSSET



- 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



#### SPINDLE GUSSET W/ SWAYBAR MOUNTS



Part # 59698-SB

- 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.
- 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.



#### **LOWER CONTROL ARM CAM TAB GUSSETS**

impacts.













CNC laser cut 1/8" 4130 chromoly replacement cam platers weld to the frame.
 1/4" thick lower cam alignment tabs will not bend

Reinforces weak factory cam alignment tab plates

that bend during bottom outs or hard front

- like factory tabs.
- Welding and grinding are required to install.

Part # 59860





#### ACCESSORIES SPECIFIC TO PART #96504

## **FRONT**



#### STOCK LENGTH BOLT-ON LOWER CONTROL ARM SKID PLATES



- Reduce hang-ups on the trail with factory lower control arms.
- Bolt-on steel skid plates can be welded to factory lower arm for maximum strength.
- Mounting hardware is included.



#### KING SECONDARY SHOCKS



- Externally adjustable for both compression and
- Designed for use with TC secondary shock hoops (PN: 86610 or 86612 listed below).
- Requires a lower control arm with dual shock capability.

Part # 86006



Part # KNG-TC1119-25



#### SECONDARY SHOCK HOOP - EXPEDITION / RACE SERIES LOWERS



Part # 86610

- 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 while lower profile design keeps the hoop from contacting the inner fender well.
- Maximize vehicle dampening control when you install a dual 2.5" shock mount system.
- 4130 pre-bent chromoly shock hoops are designed to install secondary 2.5" bypass shocks.
- Designed for use with TC stock length Race or Expedition Series lower control arms.



#### **SECONDARY SHOCK HOOP - STANDARD SERIES LOWERS**



Part # 86612

- 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 while lower profile design keeps the hoop from contacting the inner fender well.
- Maximize vehicle dampening control when you install a dual 2.5" shock mount system.
- 4130 pre-bent chromoly shock hoops are designed to install secondary 2.5" bypass shocks.
- Lower shock mounting clevis and bump stop relocation brackets are included.
- This kit is designed to be installed with the TC 86500 Standard Series boxed lower control arms.



#### **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.



#### COIL BUCKET TOWER GUSSETS



- Reduces upper coil bucket flex and double shears factory upper control arm bolt.
- Compatible only with TC UCA's or L/T kits not intended for use with factory control arms.
- Welding and grinding are required to install.

Part # 59850

Part # 59651



#### 1" DIFF DROP SPACER



- Reduces inner CV angle by 3 degrees.
- Reduces friction wear and tear on stock length axle inner CV boots with auto locking hubs.
- 1" thick zinc plated steel spacers and Grade 8 hardware are included.
- Some vehicles may require additional washers to reinstall the factory skid plate.







#### ACCESSORIES SPECIFIC TO PART #96504



#### KING 2.5" REAR SHOCKS W/ COMPRESSION KNOBS

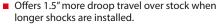


- Compression adjuster knobs allow user to fine tune ride for optimum performance.
- 2.5" diameter shock bodies with remote reservoirs for optimum cooling.
- Application-specific valving for improved ride

Part # KNG-25001-125A



#### **CHROMOLY ADJUSTABLE REAR LINKS**





Part # 86400

- Upper, lower and pan hard bars are designed to incorporate a heim joint making the entire rear link system length adjustable.
- 100% bolt on.
- 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 mounts on the vehicle's frame.
- 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



#### **REAR WELD-ON BUMP STOP MOUNTING KIT - KING 2.0"**



Part # 48624K

- packed in the rear of the SUV. Designed to reduce rear-end "bucking" sensation
- and the harsh bottom out with factory rubber

■ Increase rear suspension dampening control and

reduce harsh bottom outs with added weight

- 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
- 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)



- Double sealed Schrader cover that mounts to the body, not the valve itself creates a positive seal and keeps dirt and moisture out.
- 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.



#### **HITCH SKID**



- 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

Part # 48420

Part # KNG-BS2120

SUPPORT - (951) 737 9682



## **ACCESSORIES SPECIFIC TO PART #96504**





#### 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





- 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 hammer.
- Prevents damage to new uniball during reassembly.

Part # 96006



Part # FK-REP KIT

#### URETHANE BUSHING KIT: UPPER CONTROL ARMS



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



#### **URETHANE BUSHING KIT: LOWER CONTROL ARMS**



- Complete TC lower control arm replacement urethane 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

Part #

69770-R fits all Expedition & Race Series 69770 fits all Standard Series

## TC stocks all replacement parts necessary to maintain your performance equipment. Call to order today!





# **2" EXPEDITION SERIES LONG TRAVEL SYSTEM** 2007 - 2009 TOYOTA FJ CRUISER



#### PART # 86222-E [king/fox/radflo]



Travel	Lift	Track Increase
11.5"	3-4"	4"



**INSTALLATION INSTRUCTIONS** 



**ADDITIONAL PRODUCT INFO & IMAGES** 

**Bolt On** 

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 lower control arm serving as an evolution of the Race Series LCA's with select features to improve component strength, function and vehicle handling.
- A newly 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
285/75/R16	16 x 8	4.5"
285/70/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 )	86305

#### **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 not required on FJ Cruisers.



# 2" STANDARD SERIES LONG TRAVEL SYSTEM

## 2007 - 2009 TOYOTA FJ CRUISER



#### PART # 86002 [KING/FOX/RADFLO]



Travel	Lift	Track Increase
11.5"	3-4"	4"



**INSTALLATION INSTRUCTIONS** 



**ADDITIONAL PRODUCT INFO & IMAGES** 

**Bolt On** 

# 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

#### **Features and Benefits**

HI-MISALIGNMENT SPACERS

- 2" extended upper and lower control arms bolt to factory mounting locations. 11.5" of travel.
- Two-bolt adapters convert lower ball joint to a 1" uniball.
- 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 20).

- Boxed lower control arms include dual 2.5" shock tabs. Primary coil over 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
285/75/R16	16 x 8	4.5"
285/70/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 )	86305

#### **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 not required on FJ Cruisers.



## ACCESSORIES SPECIFIC TO PART #86222-E & 86002

## **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



#### KING LONG TRAVEL SECONDARY SHOCKS



- Serious levels of performance are achieved when a secondary shock is used with a TC long travel kit.
- Externally adjustable for both compression and
- 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
- 1/8" prebent laser cut mild steel brackets.
- Eliminates the factory sway bar.
- Welding and grinding are required to install.



59698





59698-SB





- 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.



#### WELD - ON UPPER COIL BUCKET TOWER GUSSETS



- Reduces upper coil bucket flex and double shears factory upper control arm bolt.
- Compatible only with TC UCA's or L/T kits, not intended for use with factory control arms.
- Welding and grinding are required to install.



#### LOWER CONTROL ARM CAM TAB GUSSETS

impacts.





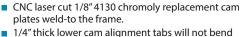




59860







■ Reinforces weak factory cam alignment tab plates

that bend during bottom outs or hard front

- like factory tabs.
- Welding and grinding are required for installation.

59653



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

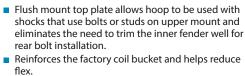


- Bolt-on aluminum lower skid plates are designed to fit TC 2" long travel system lower control arms.
- Slide over rocks with an angled approach front lip.
- Grade 8 mounting hardware is included.
- Fits Standard Series long travel kits ONLY.



86610

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



- 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.





## ACCESSORIES SPECIFIC TO PART #86222-E & 86002

## **FRONT**



#### WELD-ON BODY MOUNT CHOP PLATES



Part # 59850

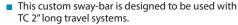
 Designed to reinforce factory body mounts after the required trimming to clearance the installation of larger tires.

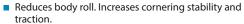
- 1/8" thick laser cut plates.
- Instructions included.
- Welding & cutting required to install.



Part # 86090







- Lighter rate than the stock sway bar. Does not limit wheel travel or articulation.
- Re-uses the stock sway bar bushings, clamps and stock sway bar end links.
- Includes machined sway bar drop spacers to clearance the lower radiator hose and creates reservoir mounting clearance on the 4 Runner -Lexus - FJ models.
- Hardware is included.
- Powder coated black.
- Does not fit vehicles with KDSS system.

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
- Axles are vehicle-specific and are not cross compatible with other Toyota models.







#### ACCESSORIES SPECIFIC TO PART #86222-E & 86002

## **REAR**



#### KING 2.5" REMOTE RESERVOIR SHOCKS w/ COMPRESSION KNOBS



- Compression adjuster knobs allow user to fine tune ride for optimum performance.
- 2.5" diameter shock bodies with remote reservoirs for optimum cooling.
- Application-specific valving for improved ride quality.



#### **CHROMOLY ADJUSTABLE REAR LINKS**

Offers 1.5" more droop travel over stock when longer shocks are installed.



86400

- Upper, lower and pan hard bars are designed to incorporate a heim joint making the entire rear link system length adjustable.
- 100% bolt on.
- Constructed from 1 1/4".375 wall 4130 chromoly tubing for maximum strength.
- Includes urethane pivot bushings.
- Hi-misalignment spacers are included.

Part # KNG-25001-125-A



#### **LOWER LINK SKIDS**



- 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.







#### **WELD-ON REAR BUMP STOP MOUNTS**



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)



- Double sealed Schrader cover that mounts to the body, not the valve itself creates a positive seal and keeps dirt and moisture out.
- 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



ACCESSORIES SPECIFIC TO PART #86222-E & 86002

## **PREP**



#### 1" STAINLESS STEEL UNIBALL 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. These uniball's also features a military grade PTFE woven fabric liner that helps prevent noise.
- Performance parts will require periodic maintenance based on your driving habits & local
- Snap rings included.
- Sold as a pair.





#### **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





#### **URETHANE BUSHING KIT - STANDARD SERIES**



- Complete TC long travel suspension system replacement urethane bushing kit.
- Performance parts will require periodic maintenance based on your driving habits & local
- Inspect bushings and other equipment regularly.



#### **URETHANE BUSHING KIT - RACE SERIES**

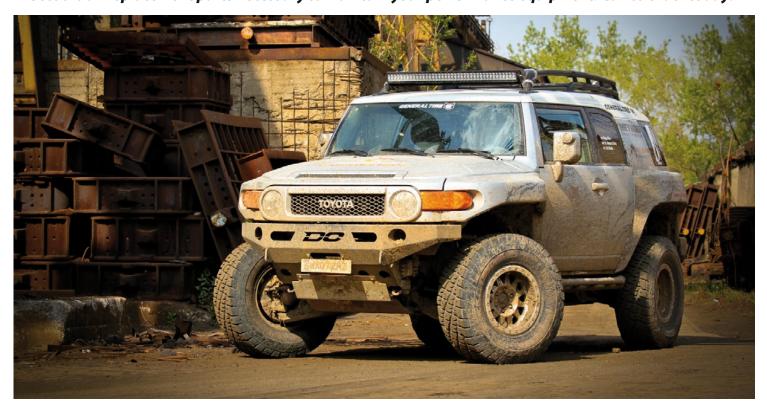


- Complete TC long travel suspension system replacement urethane bushing kit.
- Performance parts will require periodic maintenance based on your driving habits & local
- Inspect bushings and other equipment regularly.

Part # 69700

Part # 69700-R

#### TC stocks all replacement parts necessary to maintain your performance equipment. Call to order today!



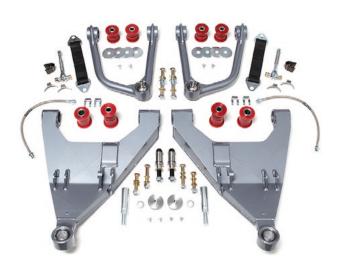


# 3.5" RACE SERIES LONG TRAVEL SYSTEM

## 2007 - 2009 TOYOTA FJ CRUISER



#### PART # 86004-R [king/fox/radflo]



12" 2 1" 7"	e	Track Increase	Lift	Travel
13 3-4 /		7″	3-4"	13"



**INSTALLATION INSTRUCTIONS** 



**ADDITIONAL PRODUCT INFO & IMAGES** 

**Bolt On** 

# Kit Includes UPPER A-ARI

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**

- 100% chromoly constructed race system offers maximum ground clearance and weighs 10 pounds less than the standard TC +3.5"LT kit.
- 3.5" extended upper and lower control arms bolt to factory mounting locations. Fiberglass fenders are required. 13" 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 21).

- Boxed lower control arms include dual 2.5" shock tabs. 2.5" long travel coil over 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
285/75/R16	16 x 8	4.5"
285/70/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 )	86300

#### **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.



# 3.5" STANDARD LONG TRAVEL SYSTEM

## 2007 - 2009 TOYOTA FJ CRUISER



#### PART # 86004 [KING/FOX/RADFLO]



Travel	Lift	Track Increase
13"	3-4"	7"



**INSTALLATION INSTRUCTIONS** 



**ADDITIONAL PRODUCT INFO & IMAGES** 

**Bolt On** 

#### 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**

- 3.5" extended upper and lower control arms bolt to factory mounting locations. Fiberglass fenders are required. 13" of travel.
- Two-bolt adapters convert lower ball joint to a 1" uniball.
- 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 22).

- Boxed lower control arms include dual 2.5" shock tabs. Primary coil over 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
285/75/R16	16 x 8	4.5"
285/70/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 )	86300

#### **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.



#### ACCESSORIES SPECIFIC TO PART #86004 & 86004-R

## **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.

Part #

KNG-TC 5119-03-A



#### KING LONG TRAVEL SECONDARY SHOCKS

SPINDLE GUSSETS WITH SWAY BAR MOUNTS

run hard in the dirt!

run wheel spacers.



- 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).

Must have reinforcement for anyone who wants to

Strengthens spindle uprights and prevents the

Retains the factory sway bar and includes an

■ Trucks running factory back spacing wheels must

■ 1/8" prebent laser cut mild steel brackets.

■ Welding and grinding are required to install.

additional steering arm gusset.

knuckle from damage during hard impacts under

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.

Part #

59698



#### WELD - ON UPPER COIL BUCKET TOWER GUSSETS



- Reduces upper coil bucket flex and double shears factory upper control arm bolt.
- Compatible only with TC UCA's or L/T kits, not intended for use with factory control arms.
- Welding and grinding are required to install.



#### LOWER CONTROL ARM CAM TAB GUSSETS

impacts.

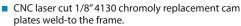




59698-SB







■ Reinforces weak factory cam alignment tab plates

that bend during bottom outs or hard front





59860

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



59653



## LT LOWER CONTROL ARM SKID PLATES +2"

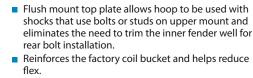


- Bolt-on aluminum lower skid plates are designed to fit TC 2" long travel system lower control arms.
- Slide over rocks with an angled approach front lip.
- Grade 8 mounting hardware is included.
- Fits Standard Series long travel kits ONLY.



Part # 86610

## DUAL SHOCK HOOPS - LONG TRAVEL ARMS



- 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.



86007



## **FRONT**

ACCESSORIES SPECIFIC TO PART #86004 & 86004-R



#### 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 # 59850



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



## ACCESSORIES SPECIFIC TO PART #86004 & 86004-R





#### KING 2.5" REMOTE RESERVOIR SHOCKS w/ COMPRESSION KNOBS



- Compression adjuster knobs allow user to fine tune ride for optimum performance.
- 2.5" diameter shock bodies with remote reservoirs for optimum cooling.
- Application-specific valving for improved ride quality.

Part # KNG-25001-125A



#### **CHROMOLY ADJUSTABLE REAR LINKS**



86400

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

packed in the rear of the SUV.



#### **LOWER LINK SKIDS**



- Protects rear link mounts 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.

48650



#### **WELD-ON REAR BUMP STOP MOUNTS**



48624K

Designed to reduce rear-end "bucking" sensation and the harsh bottom out with factory rubber

Increase rear suspension dampening control and

reduce harsh bottom outs with added weight

- 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)



- Double sealed Schrader cover that mounts to the body, not the valve itself creates a positive seal and keeps dirt and moisture out.
- 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



ACCESSORIES SPECIFIC TO PART #86004 & 86004-R

## **PREP**



#### 1" STAINLESS STEEL UNIBALL 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. These uniball's also features a military grade PTFE woven fabric liner that helps prevent noise.
- Performance parts will require periodic maintenance based on your driving habits & local conditions.
- Snap rings included.
- Sold as a pair.

Part # FK-REP KIT



#### **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



#### **URETHANE BUSHING KIT - STANDARD SERIES**



- Complete TC long travel suspension system replacement urethane bushing kit.
- Performance parts will require periodic maintenance based on your driving habits & local
- Inspect bushings and other equipment regularly.



#### **URETHANE BUSHING KIT - RACE SERIES**



- Complete TC long travel suspension system replacement urethane bushing kit.
- Performance parts will require periodic maintenance based on your driving habits & local
- Inspect bushings and other equipment regularly.

Part # 69700

Part # 69700-R

## TC stocks all replacement parts necessary to maintain your performance equipment.





# 2" EXPEDITION SERIES LONG TRAVEL SYSTEM W/ HEIMS 2007 - 2009 TOYOTA FJ CRUISER



## PART # 86222-E-H [KING/FOX/RADFLO]



Travel	Lift	Track Increase
11.5"	3-4"	4"



**INSTALLATION INSTRUCTIONS** 



**ADDITIONAL PRODUCT INFO & IMAGES** 

**Bolt On** 

Kit Includes
UPPER A-ARMS W/ HEIMS
LOWER A-ARMS W/ BUSHINGS
TIE-ROD EXTENSIONS
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 lower control arm serving as an evolution of the Race Series LCA's with select features to improve component strength, function and vehicle handling.
- A newly 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
285/75/R16	16 x 8	4.5"
285/70/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 )	86305

#### **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 not required on FJ Cruisers.



# 2" STANDARD SERIES LONG TRAVEL SYSTEM W/ HEIMS 2007 - 2009 TOYOTA FJ CRUISER



## PART # 86002-H [KING/FOX/RADFLO]



Travel	Lift	Track Increase
11.5"	3-4"	4"



INSTALLATION INSTRUCTIONS



**ADDITIONAL PRODUCT INFO & IMAGES** 

**Bolt On** 

Kit Includes
UPPER A-ARMS W/ HEIMS
LOWER A-ARMS W/ BUSHINGS
TIE-ROD EXTENSIONS
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**

- 2" extended upper and lower control arms bolt to factory mounting locations. 11.5" of travel.
- Two-bolt adapters convert lower ball joint to a 1" uniball.
- Upper and lower ball joints are upgraded to 1" stainless steel uniballs for max travel and component strength.
- 4130 chromoly tubing 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 coil over shocks bolt into the factory coil bucket location.
- Several spring rate options allow the ability to customize your ride for your specific application.
- TC includes 3/4" chromoly lined heim joints for the pivots.
- 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
285/75/R16	16 x 8	4.5"
285/70/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 )	86305

#### **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 not required on FJ Cruisers.



# 3.5" RACE SERIES LONG TRAVEL SYSTEM W/ HEIMS

## 2007 - 2009 TOYOTA FJ CRUISER



#### PART # 86004-R-H [KING/FOX/RADFLO]



Travel	Lift	Track Increase
13"	3-4"	7″



**INSTALLATION INSTRUCTIONS** 



**ADDITIONAL PRODUCT INFO & IMAGES** 

**Bolt On** 

Kit Includes	
UPPER A-ARMS W/ HE	EIMS
LOWER A-ARMS W/ BI	JSHINGS
TIE-ROD EXTENSIONS	
D.O.T. BRAIDED BRAK	E LINES
1" UNIBALLS W/ RETA	INING CLIPS
LIMIT STRAPS W/ ADJ	USTERS & MOUNTS
GRADE 8 HARDWARE	
HI-MISALIGNMENT SP	PACERS

#### **Features and Benefits**

- 100% chromoly constructed race system offers maximum ground clearance and weighs 10 pounds less than the standard TC +3.5" LT kit.
- 3.5" extended upper and lower control arms bolt to factory mounting locations. Fiberglass fenders are required. 13" of travel.
- Upper and lower ball joints are upgraded to 1" stainless steel uniballs for max travel and component strength.
- 4130 chromoly tubing 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 coil over shocks bolt into the factory coil bucket location.
- Several spring rate options allow the ability to customize your ride for your specific application.
- TC includes 3/4" chromoly lined heim joints for the pivots.
- 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
285/75/R16	16 x 8	4.5"
285/70/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 )	86300

#### **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.



# 3.5" STANDARD SERIES LONG TRAVEL SYSTEM W/ HEIMS 2007 - 2009 TOYOTA FJ CRUISER

#### PART # 86004-H [king/fox/radflo]



Travel	Lift	Track Increase
13"	3-4"	7"



**INSTALLATION INSTRUCTIONS** 



**ADDITIONAL PRODUCT INFO & IMAGES** 

**Bolt On** 

Kit Includes
UPPER A-ARMS W/ HEIMS
LOWER A-ARMS W/ BUSHINGS
TIE-ROD EXTENSIONS
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**

- 3.5" extended upper and lower control arms bolt to factory mounting locations. Fiberglass fenders are required. 13" of travel.
- Two-bolt adapters convert lower ball joint to a 1" uniball.
- Upper and lower ball joints are upgraded to 1" stainless steel uniballs for max travel and component strength.
- 4130 chromoly tubing 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 coil over shocks bolt into the factory coil bucket location.
- Several spring rate options allow the ability to customize your ride for your specific application.
- TC includes 3/4" chromoly lined heim joints for the pivots.
- 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
285/75/R16	16 x 8	4.5"
285/70/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 )	86300

#### **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.