

# JKS™

## Installation Instructions

Product: Adjustable BumpStops™

Part Number: PN 1150

### Welcome

CONGRATULATIONS on your purchase of a new JKS Adjustable Bumpstop™ system! At JKS Manufacturing, we are committed to providing you with the best products available and your satisfaction is our first priority.

PLEASE READ these Installation Instructions carefully, and save them for future reference, as they contain important installation and maintenance information.

### Tools Required

- Metric/Standard Socket Wrench Set
- Torque Wrench
- Adjustable Oil Filter Wrench \*  
(for tightening 2.00" BumpStop Spacer)
- Tape Measure
- Anti-Seize Lubricant
- Hydraulic Floor Jack & Jack Stands
- Factory Service Manual (recommended)

\* Asterisk denotes tools that are not required for some applications. Thoroughly read instructions first to determine which tools will be required for your application.

### Parts



	DESCRIPTION	QTY
<b>A</b>	2.00" BumpStop Spacer	2
<b>B</b>	1.25" BumpStop Spacer	2
<b>C</b>	0.75" BumpStop Spacer	2
<b>D</b>	Spring Plates	2
<b>E</b>	1/2" x 2-1/2" Bolt	2
<b>F</b>	1/2" x 1-1/2" Bolt	4
<b>G</b>	1/2" x 1-1/4" Bolt	2
<b>H</b>	Split Washer	4

## Installation

### ❑ REMOVE REAR SPRING PLATES

- Raise and support the vehicle chassis with jack stands positioned in front of the leaf springs.
- Raise and support the axle housing with a hydraulic jack to relieve the axle weight.
- Remove the original U-bolts, retaining nuts and spring plates from the axle per the factory service manual instructions for your vehicle. Retain the original mounting hardware if re-using U-bolts.

Depending on the application, it may be necessary to completely or partially remove any of the following components before the spring plate can be free.

(Refer to the factory service manual for procedures not covered in these instructions.)

- Shock Absorber
- Swaybar Bracket

### ❑ INSTALL NEW SPRING PLATES

- Position the new Spring Plates (D) on top of the leaf springs with the bump stop extension on inboard side. The small hole in center of spring plate must fit over leaf spring center pin.
- Install U-bolts per the factory service manual instructions for your vehicle, and tighten retaining nuts. Also re-install any other components that were removed during the REMOVE REAR SPRING PLATES section of this installation.

### ❑ DETERMINE BUMP STOP LENGTH

JKS Adjustable BumpStops can be installed in six (6) possible configurations (0.75", 1.25", 2.00", 2.75", 3.25", or 4.00"), depending on the individual spacer(s) used.

- To determine the ideal BumpStop length for your application, consider the clearance between vehicle tires and body panels during full suspension compression.
- Choose the spacer(s) that provides maximum unobstructed suspension compression for your application from the list below.

### BUMPSTOP PARTS REQUIRED

#### 0.75" BumpStop Configuration

- ↻ SPACER: **0.75" only**
- ↻ HARDWARE: **1/2" x 1-1/4" Bolt + Split Washer + 1/2" Coarse-Thread Nylock Nut** (not supplied)

#### 1.25" BumpStop Configuration

- ↻ SPACER: **1.25" only**
- ↻ HARDWARE: **1/2" x 1-1/2" Bolt + Split Washer + 1/2" Coarse-Thread Nylock Nut** (not supplied)

#### 2.00" BumpStop Configuration

- ↻ SPACER: **2.00" only**
- ↻ HARDWARE: **1/2" x 1-1/2" Bolt + Split Washer**

#### 2.75" BumpStop Configuration

- ↻ SPACERS: **2.00" + 0.75"**
- ↻ HARDWARE: **1/2" x 1-1/2" Bolt + 1/2" x 1-1/4" Bolt + 2 Split Washers**

#### 3.25" BumpStop Configuration

- ↻ SPACERS: **2.00" + 1.25"**
- ↻ HARDWARE: **1/2" x 1-1/2" Bolt + 1/2" x 1-1/2" Bolt + 2 Split Washers**

#### 4.00" BumpStop Configuration

- ↻ SPACERS: **2.00" + 1.25" + 0.75"**
- ↻ HARDWARE: **1/2" x 1-1/2" Bolt + 1/2" x 2-1/2" Bolt + 2 Split Washers**

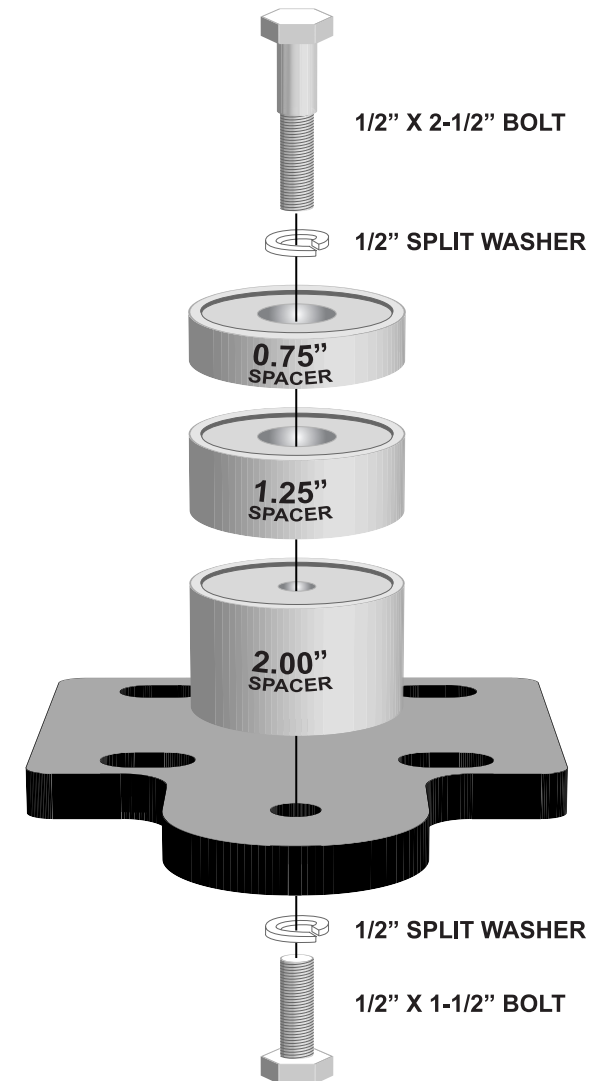


Illustration of 4.00" BumpStop Configuration

## ❑ INSTALL BUMPSTOP SPACERS ON SPRING PLATE EXTENSION

### FOR 0.75" or 1.25" BUMPSTOP CONFIGURATION:

- Locate the BumpStop spacers and hardware required for your application – refer to DETERMINE BUMP STOP LENGTH section.
- Place BumpStop Spacer(s) on Spring Plate (D) and align with mounting hole.
- Place Split Washer (H) on appropriate 1/2" Bolt (F or G) and insert through BumpStop Spacer(s) and Spring Plate mounting hole.
- Apply anti-seize lubricant to protruding threads of 1/2" Bolt.
- Secure spacers to Spring Plate with a 1/2" Coarse Thread Nylock Nut from below.

**HINT:** 1/2" Coarse Thread Nylock Nuts not supplied by JKS.

- Using a torque wrench, tighten the 1/2" Bolt to 25 ft-lbs.

### FOR 2.00" BUMPSTOP CONFIGURATION :

- Locate the BumpStop Spacers and hardware required for your application – refer to DETERMINE BUMP STOP LENGTH section.
- Place Split Washer (H) on 1/2" x 1-1/2" Bolt (F) and insert through bump stop extension hole from beneath Spring Plate (D).
- Apply anti-seize lubricant to protruding threads of 1/2" x 1-1/2" Bolt (F).
- Thread 2.00" BumpStop Spacer (A) onto 1/2" x 1-1/2" Bolt (F). Recessed end of spacer must face up.
- Tighten the 2.00" BumpStop Spacer (A) using an adjustable oil filter wrench or similar tool.

**HINT:** A rubber strap-type oil filter wrench will prevent damage to the finish when tightening aluminum spacer. Other types of adjustable oil filter wrenches are also effective for gripping the spacer, although it may be necessary to protect the finish with tape or a rag first.

### FOR 2.75", 3.25", or 4.00" BUMPSTOP CONFIGURATION:

- First, install 2.00" BumpStop Spacer (A) according to the preceding instructions.
- Locate the remaining BumpStop Spacers and hardware required for your application – refer to DETERMINE BUMP STOP LENGTH section.
- Place additional BumpStop Spacer(s) on top of 2.00" Spacer (A).  
**HINT:** When stacking spacers, make sure they interlock before inserting hardware.
- Apply anti-seize lubricant to appropriate 1/2" Bolt (E, F or G). Place Split Washer (H) on bolt and insert through spacer(s). Thread bolt into hole on top of 2.00" BumpStop Spacer (A).
- Using a torque wrench, tighten the 1/2" Bolt to 25 ft-lbs.

## ❑ TIGHTEN U-BOLTS

- Once all Adjustable BumpStop Spacers have been properly installed, lower the vehicle to the ground until leaf springs are supporting the full weight of vehicle.
- Using a torque wrench, tighten the U-bolt retaining nuts accordingly.

### U-Bolt Torque Specifications

- OE U-Bolts: **52 ft-lbs.**
- 1/2" U-Bolts: **65-80 ft-lbs.**
- 9/16" U-Bolts: **75-90 ft-lbs.**

## ❑ POST-INSTALLATION INSTRUCTIONS

Before operating vehicle off-road, test for proper bump stop operation by fully cycling the suspension and checking for obstructions. Add, remove or replace BumpStop Spacers if necessary until maximum unobstructed suspension compression is achieved.

## Maintenance

Regular cleaning with pressurized water is recommended to maximize ease of operation and reliability.

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