INSTALLATION INSTRUCTIONS & TECHNICAL MANUAL

3″ BUMP STOP KIT

JK WRANGLER & UNLIMITED FRONT

Part No. **CE-9807FBSK**

3″ front bump stop kit for the front of 2007–2018 Jeep JK Wrangler and Wrangler Unlimited models: a black urethane bump stop puck on a 1″ aluminum spacer, bolted to each front axle coil spring hub inside the coil spring.

WARNING

Read and understand this entire manual and all product safety labels before beginning installation or operating the vehicle.

Failure to follow these instructions and safety messages can result in component separation, loss of bump stop function, loss of vehicle control, a crash, serious injury, or death.

→ Keep this manual with the vehicle for future reference. If you do not understand any part of it, have the kit installed by a qualified professional shop.

PROFESSIONAL INSTALLATION RECOMMENDED. This kit requires drilling and tapping the vehicle: the front coil springs are removed, the center of each front axle coil spring hub is center punched, drilled, and tapped, and a urethane bump stop puck and aluminum spacer are bolted to each hub inside the coil spring. The work requires supporting the vehicle safely off the ground, removing and reinstalling the front coil springs, and correctly torquing bolts that thread into sheet metal (Sections 1–3).

1 SAFETY INFORMATION — HOW TO USE THIS MANUAL

This manual uses the hazard-communication system defined by the American National Standard **ANSI Z535.6** (Product Safety Information in Product Manuals, Instructions, and Other Collateral Materials). Safety messages are flagged with a **signal word** and, where personal injury is possible, the **safety alert symbol** ⚠. Each message states the **hazard**, the **consequence** of not avoiding it, and **how to avoid it**.

SIGNAL WORDS USED IN THIS MANUAL

⚠ **DANGER**	**Indicates a hazardous situation which, if not avoided, WILL result in death or serious injury.**
⚠ **WARNING**	**Indicates a hazardous situation which, if not avoided, COULD result in death or serious injury.**
⚠ **CAUTION**	**Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.**
NOTICE	**Addresses practices not related to personal injury — typically a risk of property or product damage.**

INTENDED USE

The RockJock **CE-9807FBSK** kit is a 3″ front bump stop kit for the front of 2007–2018 Jeep JK Wrangler and Wrangler Unlimited models. On each side, a black urethane bump stop puck sits on a 1″ aluminum spacer inside the bottom of the coil spring; the spacer sits on the axle housing first, with the urethane puck on top of it. The assembly is bolted to the coil spring indexing hub on the front axle housing: the center of the hub is center punched using the spacer as a guide, drilled 7/16″, and tapped 1/2″-13, and the assembly is retained by a 1/2″-13 hex bolt with a lock washer, a flat washer, and blue medium-strength threadlocker. The bolt threads into sheet metal only, so its torque is limited (Section 3). The bump stops are not a recovery point, jacking point, step, or load-bearing structural member. Do not use the kit for any purpose other than as described in this manual. Use only the supplied components and RockJock-specified replacement parts.

WHO SHOULD INSTALL THIS KIT

Installation requires drilling and tapping the front axle coil spring hubs with the tools listed in Section 3. The work also requires supporting the vehicle safely off the ground, removing and reinstalling the front coil springs, and correctly torquing the bump stop bolts. If you are not competent in automotive suspension work and in drilling and tapping steel, stop and have the kit installed by a qualified shop. An incorrectly installed bump stop can allow suspension, tire, and body contact without warning.

2 SAFETY INFORMATION — READ BEFORE YOU BEGIN

The following hazards apply to this installation. Review every message below before starting. These hazards are repeated, where relevant, at the individual steps in Section 4.

WARNING

Vehicle supported off the ground. You will work beneath and around a raised vehicle with the front suspension partly disassembled.

A vehicle that shifts or falls can crush you, causing serious injury or death.

→ Work on a level, hard surface. Set the parking brake, place the transmission in gear/Park, and chock the rear wheels. Support the vehicle on a rated lift or on jack stands rated for its weight. Never rely on a jack alone.

WARNING

Coil springs store energy. The front coil springs are removed and reinstalled during this installation (Section 4, Steps 1 and 4).

A coil spring that releases suddenly, or an axle that drops unsupported, can strike or crush you.

→ Follow the vehicle manufacturer's service procedure for front coil spring removal and installation. Control the axle with a floor jack at all times, lower it slowly and only as far as needed, and keep hands and body clear of the springs.

WARNING

Drilling and tapping. The coil spring hubs are center punched, drilled, and tapped on the vehicle (Section 4, Steps 2 and 3).

Drilling throws hot, sharp metal chips that can cause eye injury and cuts, and a drill bit that grabs as it breaks through can wrench the drill from your hands. A bit or tap can also damage lines or wires near the work.

→ Wear ANSI Z87.1 eye protection and work gloves, keep loose clothing clear of the drill, hold the drill firmly with both hands, and confirm that no lines or wires are in the path of the bit before drilling.

WARNING

Incorrect assembly or torque. The spacer bolts thread into sheet metal only. An over-tightened bolt strips the tapped threads; an under-tightened bolt, or one installed without threadlocker, can back out.

A loose or separated bump stop can fall out of the coil spring, reduces the up-travel limit, and can allow tire, body, shock, and suspension contact, component damage, and loss of vehicle control.

→ Follow the assembly sequence exactly, apply blue medium-strength threadlocker to the bolt threads, and torque the bolts to the specification in Section 3 — never more. The threadlocker secures the bolts, so there is no need to re-check or re-tighten them afterward (Section 6).

WARNING

California Proposition 65 — chemical exposure.

These products can expose you to chemicals including chromium, lead and lead compounds, nickel (metallic) and nickel compounds, di-isononyl and di(2-ethylhexyl) phthalates (DINP/DEHP), which are known to the State of California to cause cancer and birth defects or other reproductive harm.

→ Wash hands after handling. For more information visit www.P65Warnings.ca.gov.

NOTICE

Be mindful of lines and wires as the front axle lowers.

Brake lines, hoses, and wiring that are still connected or clipped can be ripped off as the axle drops far enough for the coil springs to come out.

→ Watch every line and wire as the axle lowers, release or disconnect anything that reaches its limit, and lower the axle only as far as needed.

NOTICE

DO NOT over-tighten the bump stop bolts — you are only bolting into sheet metal.

More than the Section 3 maximum torque strips the tapped threads in the coil spring hub.

→ Use a calibrated torque wrench and stop at the specification in Section 3.

3 TOOLS, MATERIALS & KIT CONTENTS

REQUIRED TOOLS

- Basic hand tools, including a 3/4" socket and wrench (Step 4)
- Vehicle lift, or floor jack and rated jack stands; wheel chocks
- Center punch and hammer (Step 1)
- Drill and 7/16" drill bit (Step 1)
- 1/2"-13 tap and tap handle (Step 2)
- Calibrated torque wrench (Step 4)

KIT CONTENTS

2	CE-9807FBS	Black urethane bump stop
2	CE-9807FBSS	1" aluminum spacer
2	CE-91247A722	1/2"-13 x 2.5" bolt
2	CE-H0013	1/2" flat washer
2	CE-91102A770	1/2" lock washer

Verify all parts before starting; report any shortage to RockJock.

PERSONAL PROTECTIVE EQUIPMENT

- ANSI Z87.1 safety glasses / goggles
- Work gloves

CONSUMABLES

- Blue medium-strength threadlocker (Step 4)

FASTENER TORQUE REFERENCE

NOTICE

Tighten every fastener to the specification below — it is a maximum.

The spacer bolts thread into sheet metal only; over-tightening strips the tapped threads.

→ Use a calibrated torque wrench. Section 4 and Section 6 refer back to this table.

FASTENER / JOINT	HARDWARE	TORQUE
Bump stop bolts (Step 4)	CE-91247A722 hex bolts, blue threadlocker, 3/4" socket	30 lb-ft max.

4 INSTALLATION PROCEDURE

WARNING

The following steps are performed beneath and around a raised vehicle.

A vehicle that shifts or falls can crush you, causing serious injury or death.

→ Confirm the vehicle is on rated jack stands or a rated lift, with the wheels chocked, before going underneath.

1 CENTER PUNCH AND DRILL THE COIL SPRING HUBS

WARNING

Coil springs store energy, and the axle is lowered to remove them.

A spring that releases suddenly or an axle that drops can strike or crush you.

→ Follow the vehicle manufacturer's service procedure, support the axle at all times, and lower it slowly.

With the vehicle safely supported and the front coil springs removed, use one of the aluminum spacers as a guide: center the spacer over the coil spring indexing hub on the front axle housing. Use a center punch through the hole in the spacer to center punch the center of the coil spring hub.

Drill a 7/16" hole where you've center punched. Repeat on the other side.

WARNING

Drilling throws hot, sharp chips, and the bit can grab as it breaks through.

Eye injury, cuts, or a wrenched wrist can result.

→ Wear ANSI Z87.1 eye protection and gloves, hold the drill with both hands, and keep lines and wires clear.

2 TAP THE HOLES

Now go back and tap threads into the holes using a 1/2"-13 tap.

Keep the tap square to the hub, and clear the chips from the hole when you are done.

FIG. 1 Tap each drilled hole 1/2"-13.

3 INSERT THE BUMP STOPS AND SPACERS INTO THE SPRINGS

Insert the new urethane bump stop pucks and the aluminum spacers into the bottom of the coil spring when installing. Install the components as an assembly. The spacer should sit on the axle housing first, with the urethane puck on top of it.

4 BOLT THE BUMP STOPS DOWN

Apply blue medium-strength threadlocker to the bolt threads. Insert the bolts and washers through the side of the spring and bolt the bump stops down snugly to the coil spring hubs. **Do not tighten too tight, as you are only bolting into sheet metal!** Torque the bolts to the specification in Section 3, which is a maximum.

Reinstall the coil springs fully before putting weight on them, and lower the vehicle to the ground.

NOTICE

DO NOT over-tighten — the bolt threads into sheet metal only.

Exceeding the Section 3 maximum strips the tapped threads.

→ Use a calibrated torque wrench and stop at the specification.

FIG. 2 Bolt and washers inserted through the side of the coil spring onto the bump stop.

5 APPLICATION CHECK & SERVICE REFERENCE

This bump stop kit is a fixed 3″ height (1″ spacer plus the urethane bump stop) and has no adjustment. Determine that the unit is ideal for your application before relying on the vehicle:

⚠ WARNING

The vehicle is articulated to full up-travel for this check.

An articulated vehicle can roll, slide, or drop, and a loaded suspension can crush hands and limbs.

→ Articulate slowly on stable equipment, use a spotter, and keep all people and body parts clear.

1. With the vehicle back on the ground (Section 4, Step 4), articulate it, via whatever means available, until the urethane bump stop on the axle meets the upper bump stop.
2. At full up-travel on each side, confirm that the tires, shocks, and suspension components clear the body and frame, and that the upper bump stop meets the urethane bump stop squarely.
3. If anything contacts before the bump stop does, the unit is not ideal for your application as built. Do not operate the vehicle; contact RockJock.
4. Repeat this check whenever tires, wheels, shocks, or suspension components are changed.

SERVICE PARTS

CE-9807FBS	Black urethane bump stop
CE-9807FBSS	1″ aluminum spacer
CE-91247A722	1/2″-13 x 2.5″ bolt

Whenever a bump stop bolt is removed, clean the threads and apply fresh blue medium-strength threadlocker before reinstalling it to the Section 3 specification.

6 BREAK-IN, INSPECTION & MAINTENANCE

WARNING

Inspect the bump stops and up-travel clearance before relying on the vehicle.

A damaged bump stop or a change to the vehicle can allow tire, shock, or body contact.

→ Complete the checklist below before the first drive, after 100 miles (160 km), and at every service.

BEFORE THE FIRST DRIVE

- Both bump stop bolts installed with lock and flat washers and blue threadlocker, torqued to the Section 3 specification — not more.
- Spacer on the axle housing with the urethane puck on top of it; both coil springs seated top and bottom.
- Lines and wires intact and clear; parts removed for spring removal reinstalled and torqued to the manufacturer's specifications.
- At full up-travel, tires, shocks, and suspension components clear the body and frame (Section 5).

AFTER THE FIRST 100 MILES / FIRST OFF-ROAD USE

- **There is no need to re-check or re-tighten the bump stop bolts** — they are secured with blue threadlocker, and turning a cured bolt breaks the bond.
- Re-check the clearance at full up-travel.

ROUTINE (EVERY SERVICE INTERVAL)

- Visually inspect the bump stops, spacers, and coil spring hubs for wear, cracks, or damage; replace with RockJock parts. There is no need to re-tighten the bolts.
- Repeat the Section 5 check whenever tires, wheels, shocks, or suspension parts are changed.

CAUTION

Inspect more often under severe-duty or off-road use.

Trail impacts and articulation accelerate wear and can damage components.

→ Inspect after any significant trail use or impact; replace damaged parts before further use.

7 WARRANTY, DISCLAIMER & DOCUMENT CONTROL

LIMITED WARRANTY

RockJock 4x4 warrants this product to be free from defects in materials and workmanship for the period and under the terms stated in the current RockJock limited-warranty policy. This warranty applies only to products installed, adjusted, used, and maintained in accordance with this manual.

EXCLUSIONS

This warranty does not cover, and RockJock is not responsible for, damage or loss resulting from: improper installation or setup (including incorrectly drilled or tapped holes, stripped threads from over-tightening, and use in an application where the fixed bump stop height allows tire, shock, or body contact at full up-travel); fasteners not torqued to the specifications in Section 3; lines or wires damaged during installation; use of non-specified parts; modification beyond what this manual describes; accident, abuse, competition, or off-road damage; or corrosion.

SAFETY DISCLAIMER

Off-road driving and vehicle modification involve inherent risks. This product changes the vehicle's suspension up-travel limit and requires drilling and tapping the axle's coil spring hubs. The installer and owner are responsible for correct installation and clearance and for safe operation within the vehicle's limits. If any part of this procedure is beyond your training or equipment, have the work performed by a qualified professional.