



Installation Instructions

ARK Coilover System
DTP
(CD0802-0112)
for
Kia Optima (All Models)

Congratulations on purchasing an ARK Performance coilover system! Please read and understand the installation instructions before beginning work on the installation of your new ARK Performance coilover system.

We recommend that the coilover system be **installed by someone qualified for this work or by a certified mechanic** with access to the appropriate hand or power tools. It is also recommended that proper jacks and jack stands be used. By installing these ARK Performance coilovers, you indicate that you have read the installation instructions and you agree with the terms and conditions stated.

It is your responsibility to **follow the installation instructions provided** for the ARK Performance coilover system and exercise all necessary safety precautions. ARK Performance assumes no responsibility for damages occurring from improper installation, operation, maintenance, or from incompatibility with other manufacturer's products.

Important Information:

Exclusion of Certain Liability

1. The manufacturer, importer, and dealer of ARK Performance products hold no responsibility for any incidental damage such as personal injury or any other damages due to improper installation or operation of ARK Performance coilover systems.
2. ARK Performance will not warranty any damages caused by improper installation, use, and maintenance of the ARK Performance coilover systems. The warranty is limited to defects that are recognized by our technical department, this excludes items subject to normal wear. This warranty is void in the case of an accident, modification, improper use, or competition use.
3. Do not install any ARK Performance coilover systems on a vehicle model for which it was not intended for.
4. Technical specifications of ARK Performance coilover systems and related products are subject to change without notice.
5. Before removing the original suspension from your vehicle, please compare the parts that you received with the list of materials provided in the installation instructions. If anything is missing, contact ARK Performance before beginning installation.
6. The instructions for installation should serve as a guideline only, actual installation of the coilover system may not correspond with the pictures entirely.
7. The process of uninstalling the original suspension may vary depending on the existing parts on the vehicle, so please follow the original suspension manufacturer's instructions for removal.



Contents

- Front Strut/Spring— 2
- Rear Spring—2
- Rear Strut—2
- Spanner Wrench—2

Tools Required

- Socket Wrench/Wrench:
 - 12 mm
 - 14 mm
 - 17 mm
 - 19 mm
 - 24 mm
- Socket Wrench Extension
- Lubricant (WD-40)
- Original scissor jack that came with the vehicle or something equivalent to it

Warning

- Before removing the original suspension, be sure to read over the installation instructions and fully understand them.
- If any items in the package are missing please contact your authorized dealer before installation.
- We advise you to have an experienced person or certified mechanic install the coilover system.
- Loosely fasten all nuts and bolts until everything is installed, then tighten them down to the proper torque specs as you align the suspension parts properly.
- These instructions are specific to the 2012-13 Kia Optima [All Models]. However, please be sure to specify the exact year when purchasing the coilover system.

Removal of OEM Front Strut/Spring

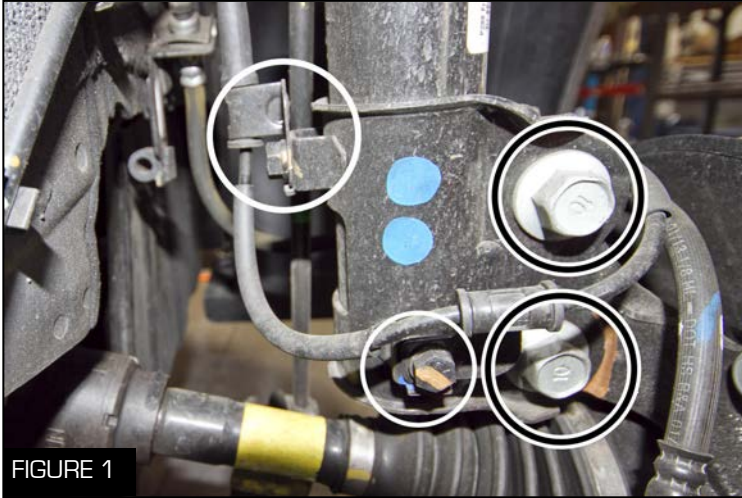


FIGURE 1



FIGURE 2

1. Unbolt the (2) bolts on the bottom part of the strut using the 19 mm and 24 mm socket wrenches (Figure 1)

2. Unbolt the brake line from the strut by removing the (3) brackets around the strut using the 12 mm socket wrench (Figure 2)

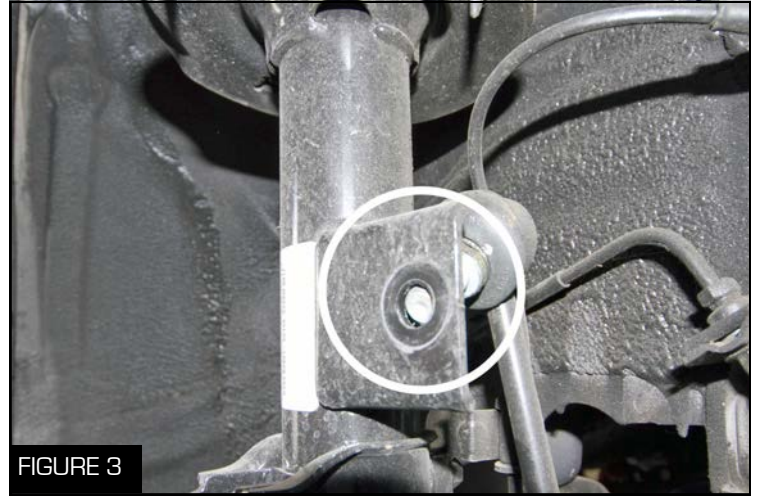


FIGURE 3

3. Unbolt the sway bar end link from the strut using the 19 mm socket wrench (Figure 3)



FIGURE 4

4. Unbolt the (3) nuts from the stop of the strut using the 14 mm socket wrench and remove the suspension from the car (Figure 4)

Removal of OEM Front Strut/Spring



5. Be sure to keep all of the unbolted pieces in order and in the proper position when installing the ARK coilovers (Figure 5)

6. Follow the installation instructions in reverse order to complete the installation of the ARK coilovers (Figure 5)

Removal of OEM Rear Strut/Spring



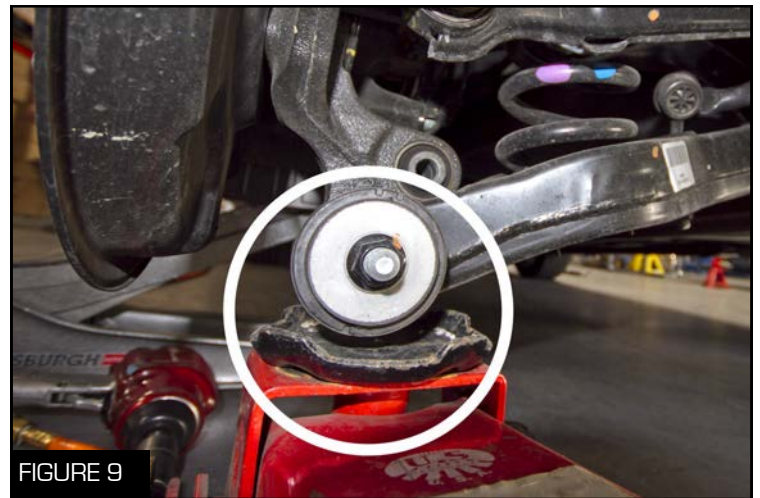
1. Unbolt the strut from the vehicle using the 14 mm socket wrench (Figure 6)



3. Unbolt the strut tower from the suspension assembly using the 19 mm socket wrench (Figure 8)



2. Unbolt the sway bar end link using a 19 mm socket wrench (Figure 7)



4. Remove the bolt and nut from the lower control arm using a 19 mm wrench and a 19 mm socket wrench, using a jack slowly lower the LCA once the bolt is removed (Figure 9)

5. Remove the spring and strut from the car (Figure 9)

6. Follow the instructions in reverse to install the ARK coilovers.



First Operation/Maintenance

Be sure to check that the wheel lug nuts are tightened down to the proper torque specifications.

Take the vehicle for a test drive and listen for any odd clunking noises or vibrations. If there are any, go back through the installation instructions and be sure everything is properly tightened.

Be sure to take the vehicle to a professional suspension alignment shop to have your vehicle re-aligned after installing an ARK Performance coilover system.

