

# Installation Instructions

ARK <u>Lowering Springs</u> GT-F (LF0802-0011) for Kia Optima (All Models) **Congratulations on purchasing an ARK Performance lowering spring set!** Please read and understand the installation instructions before beginning work on the installation of your new ARK Performance lowering springs.

We recommend that these lowering springs 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 lowering springs, 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 this ARK Performance lowering spring set 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 lowering springs.
- 2. ARK Performance will not warranty any damages caused by improper installation, use, and maintenance of the ARK Performance lowering springs. 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 lowering spring set on a vehicle model for which it was not intended for.
- 4. Technical specifications of ARK Performance lowering springs and related products are subject to change without notice.
- 5. Before removing the original springs 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 lowering springs may not correspond with the pictures entirely.
- 7. The process of uninstalling the original springs may vary depending on the existing springs on the vehicle, so please follow the original spring set manufacturer's instructions for removal.



## <u>Contents</u>

- Front Springs— 2
- Rear Springs—2

\*Orange Springs—GT-F

## Tools Required

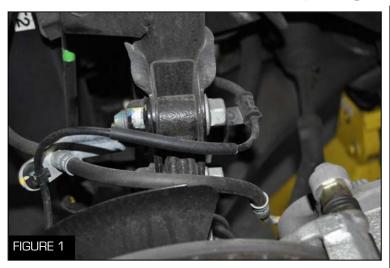
- Socket Wrench/Wrench:
  - 12 mm
  - 14 mm
  - 17 mm
  - 19 mm
  - 24 mm

- Socket Wrench Extension
- Lubricant (WD-40)
- Original scissor jack that came with the vehicle or something equivalent to it
- Spring Compressor

## <u>Warning</u>

- Before removing the original springs, 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 lowering springs.
- 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 2010+ Kia Optima (All Models). However, please be sure to specify the exact year when purchasing lowering springs.

## **Removal of OEM Front Springs**





1. Unbolt the (2) bolts on the bottom part of the 3. Unbolt the sway bar end link from the strut using strut using the 19 mm and 24 mm socket wrenches the 19 mm socket wrench (Figure 3) (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)



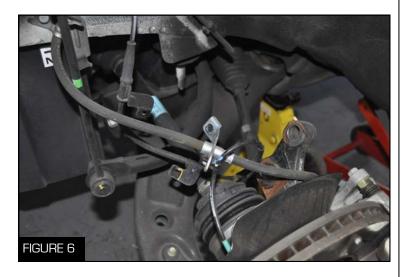
4. Unbolt the (3) nuts from the stop of the strut using the 14 mm socket wrench (Figure 4)



## **Removal of OEM Front Springs**



5. Compress the spring using a proper spring compressor and unbolt the center nut using the 17 mm socket wrench, be careful of the shock dropping out of the spring (Figure 5)



6. Be sure to keep all of the unbolted pieces in order and in the proper position when installing the ARK springs (Figure 6)

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

### **Removal of OEM Rear Springs**



1. Support the lower control arm with the OEM scissor jack or any similar jack (Figure 9)



3. Remove the bolt and nut from the lower control arm using a 19 mm wrench and a 19 mm socket wrench (Figure 11)

4. Slowly lower the scissor jack and then push down on the LCA and pull the OEM spring out (Figure 11)

5. Repeat these steps in reverse order to install the ARK springs



2. Unbolt the sway bar end link using a 19 mm socket wrench (Figure 10)



### 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 ARK Performance lowering springs.

