

John Cooper Works Tuning. Installation Instructions.



Retrofit - John Cooper Works Sport Suspension

MINI ONE (R 56)

MINI COOPER (R 56)

MINI COOPER S (R 56)

Retrofit kit No. 33 50 0 429 708 Retrofit kit, sport suspension

Installation time

The installation time of **approx. 4 hours** may vary depending on the vehicle's condition and equipment. An additional time of 2.0 hours is required for optical measurement (alignment) and the adjustment of the suspension.

The vehicle must be updated to the latest I-level status by flashing before installing the retrofit. Different programming times are necessary depending on the production age of the vehicle and the work already performed on the vehicle so that no time requirements can be specified here. The installation time does not include the time required for programming/encoding which depends on the vehicle's age and equipment.

Important information

These installation instructions are primarily designed for use within the MINI dealership organisation and by authorised BMW service companies.

In any event, the target group for these installation instructions is specialist personnel trained on MINI cars with the appropriate specialist knowledge.

All work must be completed using the latest MINI repair manuals, circuit diagrams, servicing manuals and work instructions, in a rational order, using the prescribed tools (special tools) and observing current health and safety regulations.

In the event of installation or functional problems, limit troubleshooting to 0.5 hours for mechanical jobs and 1.0 hours for electrical jobs.

To avoid unnecessary work and costs, send a corresponding enquiry via the Aftersales Assistance Portal (ASAP) using the technical parts support application.

Please quote the following:


- Vehicle identification number
- Part number of retrofit kit
- Exact description of the problem
- Work already carried out

Do not archive the hard copy of these installation instructions since daily updates are made by ASAP!

All pictures show LHD cars; proceed accordingly on RHD cars.

The installation instructions describe the procedure on the left-hand side of the vehicle only. The same procedure should be followed analogously on the right-hand side of the vehicle.

Pictograms

 Denotes instructions that draw your attention to special features.

◀ Denotes the end of the instruction or other text.

Installation information

Corresponding to the optional equipment, the correct coil springs must be ordered based on the table of coil springs in the EPC.

The steering angle limiter must be additionally installed if 18" John Cooper Works light alloy wheels are fitted.

After the parts kit has been installed, a standard wheel alignment procedure with DIN loading must be carried out in accordance with TIS No. 31 00 150 (see Section 4, Page 7 for values).

All fine thread nuts must be replaced.

Special tools required

00 2 040 Basic support

31 2 210 Socket insert, WAF21

31 2 310 Puller

31 3 341 Spring tensioner

31 3 350 Spring holder

31 4 050 Set of supports

31 4 090 Support adapter 3 and 4

31 5 220 Support

32 3 090 Press-off tool

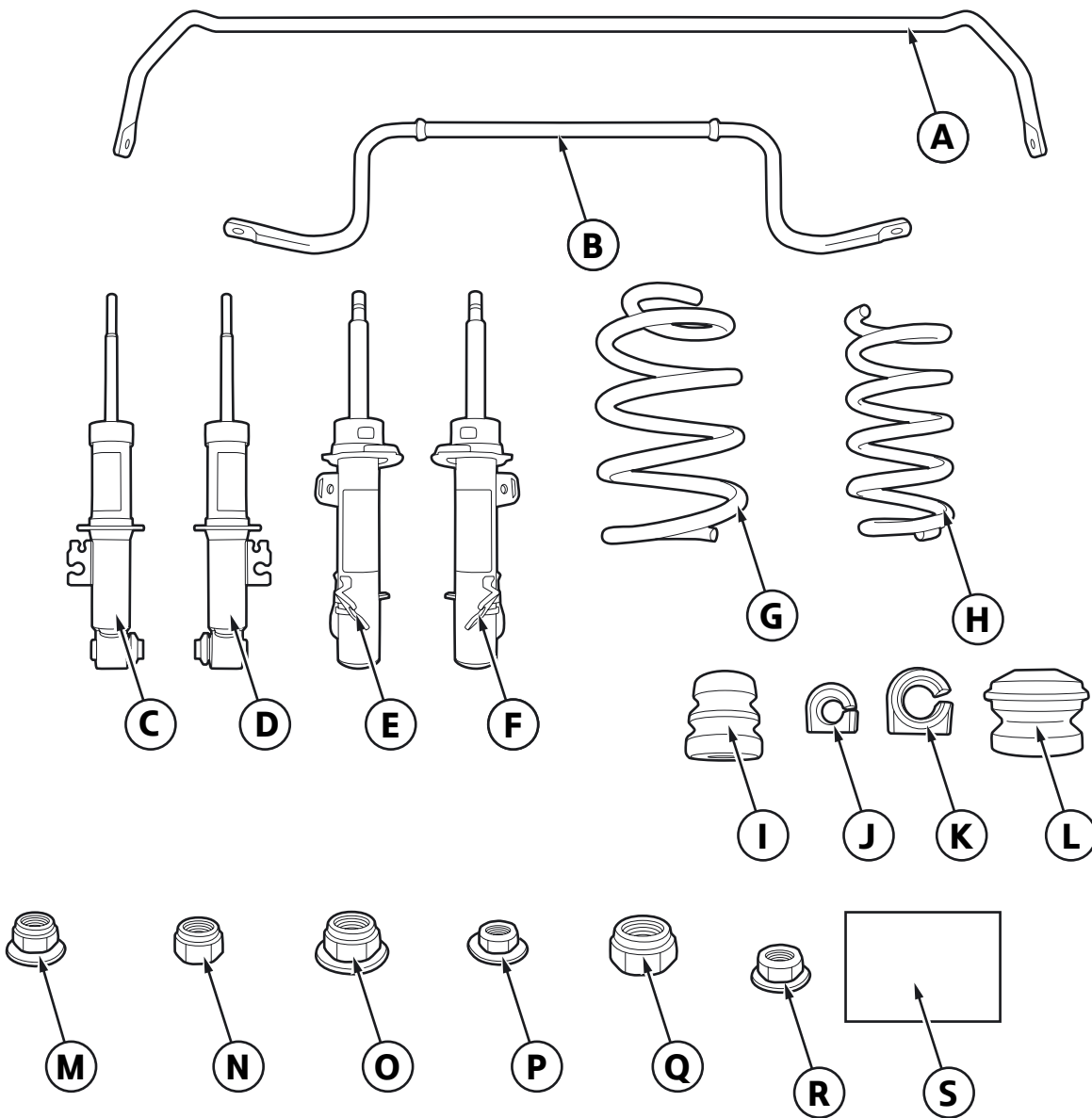
36 1 250 Wheel hub grinder

36 1 300 Set of wheel bolt adapters

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1. Parts Overview



056 0280 V

Legend

- A** Stabilizer bar, rear
- B** Stabilizer bar, front
- C** Spring strut shock absorber, rear right
- D** Spring strut shock absorber, rear left
- E** Spring strut shock absorber, front right
- F** Spring strut shock absorber, front left
- G** Coil spring, rear (2x) (not included in parts kit)
- H** Coil spring, front (2x) (not included in parts kit)
- I** Additional damper, rear (2x)
- J** Rubber mount, rear stabilizer bar (2x)
- K** Rubber mount, front stabilizer bar (2x)
- L** Additional damper, front (2x)
- M** Nut with washer M10 x 1.5 (4x)
- N** Nut M10 x 1.25 (2x)
- O** Flanged nut M12 x 1.5 (2x)
- P** Self-locking collar nut M8 x 1.25 (6x)
- Q** Self-locking nut M12 x 1.5 (2x)
- R** Nut M10 x 1 (2x)
- S** Adhesive label

2. Preparatory work

| | TIS No. |
|--|----------------|
| Perform quick test | — |
| Disconnect negative terminal of battery | 12 00 ... |
| Remove the following components | |
| Front and rear wheel | 36 10 300 |
| Ride-height sensor if necessary | — |
| Front left and right spring struts | 31 31 000 |
| Shock absorber strut, front left and right | 31 31 031 |
| Complete exhaust system | 18 00 020 |
| Trim cover on front grille | 51 13 003 |
| Centre section of front grille | 51 13 000 |
| Trim finisher on front left and right wheel arch | 51 13 102 |
| Front bumper trim panel | 51 11 156 |
| Underbody panelling on left and right | 51 47 ... |
| Lower front axle subframe | 31 11 506 |
| Shock absorber strut, rear left and right | 33 52 100 |
| Rear left and right shock absorbers | 33 52 000 |

3. Installation

Front axle

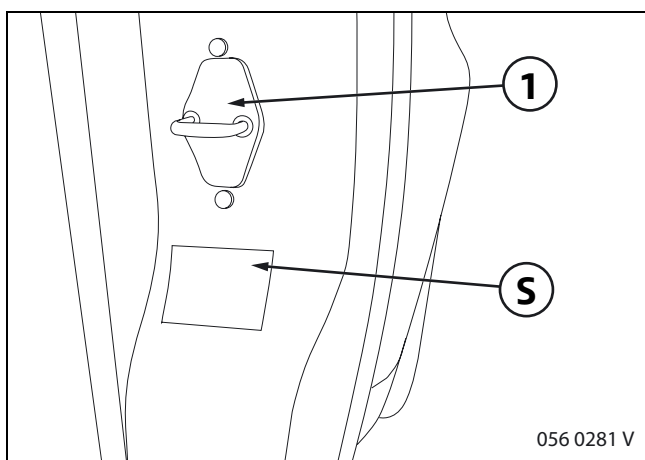
Install front coil springs **H** according to TIS repair instructions 31 31 031 in spring strut shock absorbers **E** and **F**.

Install front stabilizer bar **B** and front spring strut shock absorbers **E** and **F** according to TIS repair instructions 31 31 031 in the vehicle.


Rear axle

Install rear coil springs **G** according to TIS repair instructions 33 52 000 in spring strut shock absorbers **C** and **D**.

Install rear stabilizer bar **A** and rear spring strut shock absorbers **C** and **D** according to TIS repair instructions 33 52 100 in the vehicle.



For all vehicles:

 The adhesion area for the adhesive label **S** must be free of dust and grease ◀

Affix adhesive label **S** on the driver's side B-pillar under the door lock (1).

4. Concluding work and coding

The retrofit system does not require encoding.

- Reconnect battery
- Perform quick test
- Reassemble vehicle in reverse order of removal.
- Perform standard wheel alignment check with DIN loading in accordance with TIS No. 31 00 150

John Cooper Works wheel alignment, sport suspension

MINI One (R56)

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Front axle:

| | | |
|---|---------|---------|
| Total toe | 0° 12' | +/- 10' |
| Camber | -35' | +/- 25' |
| Toe offset angle | -1° 16' | +/- 30' |
| Caster | 4° 16' | +/- 30' |
| Max. steering lock angle at inside of wheel | 36° 2' | |

Rear axle:

| | | |
|----------------------------|--------|---------|
| Total toe | 0° 24' | +/- 8' |
| Camber | 2° 05' | +/- 20' |
| Geometric axial difference | 0° | +/- 10' |