



How to change front  
suspension strut on  
**MERCEDES-BENZ E-  
Class T-modell (S124)** –  
replacement guide

### SIMILAR VIDEO TUTORIAL



This video shows the replacement procedure of a similar car part on another vehicle

#### **i Important!**

This replacement procedure can be used for:

MERCEDES-BENZ E-Class T-modell (S124) E 300 TD (124.191), MERCEDES-BENZ E-Class T-modell (S124) E 200 T (124.079), MERCEDES-BENZ E-Class T-modell (S124) E 220 T (124.082), MERCEDES-BENZ E-Class T-modell (S124) E 280 T (124.088), MERCEDES-BENZ E-Class T-modell (S124) E 320 T (124.092), MERCEDES-BENZ E-Class T-modell (S124) E 250 TD (124.186), MERCEDES-BENZ E-Class T-modell (S124) E 300 T Turbo-D (124.193), MERCEDES-BENZ E-Class T-modell (S124) E 250 Turbo D

The steps may slightly vary depending on the car design.

This tutorial was created based on the replacement procedure for a similar car part on: MERCEDES-BENZ E-Class Saloon (W124) E 250 D (124.126, 124.129)

**REPLACEMENT: SUSPENSION STRUT – MERCEDES-BENZ E-CLASS T-MODELL (S124). LIST OF THE TOOLS YOU'LL NEED:**



- Wire brush
- WD-40 spray
- All-purpose cleaning spray
- Ceramic grease
- Torque wrench
- Combination spanner #13
- Combination spanner #19
- Combination spanner #22
- Drive socket # 13
- Drive socket # 19
- HEX bit no.H6
- HEX bit no.H7
- Wheel impact socket #17
- Ratchet wrench
- Tap wrench
- Water pump pliers
- Crow bar
- Strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

**Buy tools**

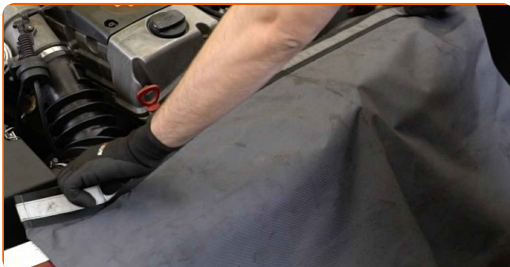
Replacement: suspension strut – MERCEDES-BENZ E-Class T-modell (S124).  
Tip from AUTODOC experts:

- Both shock struts of the front suspension should be replaced simultaneously.
- The replacement procedure is identical for the left and right shock struts of the front suspension.
- All work should be done with the engine stopped.

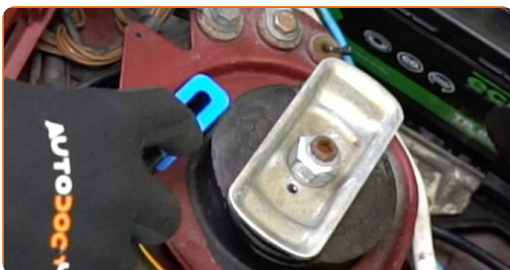
**REPLACEMENT: SUSPENSION STRUT – MERCEDES-BENZ E-CLASS T-MODELL (S124). USE THE FOLLOWING PROCEDURE:**

**1** Open the bonnet.

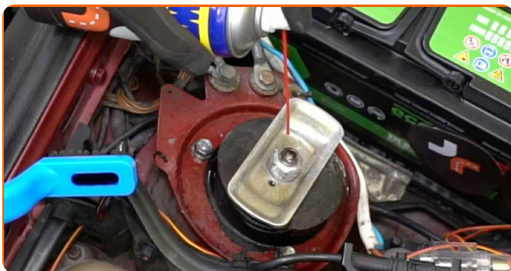
**2** Use a fender protection cover to prevent damaging paintwork and plastic parts of the car.



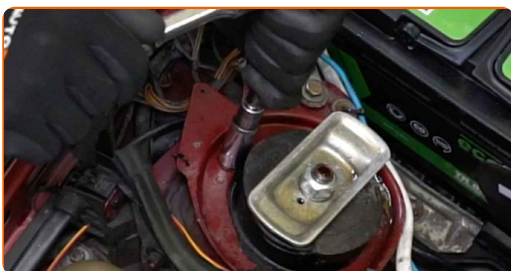
**3** Clean the fasteners of the shock absorber upper mount. Use a wire brush. Use WD-40 spray.



**4** Clean the shock absorber rod fastener. Use a wire brush. Use WD-40 spray.



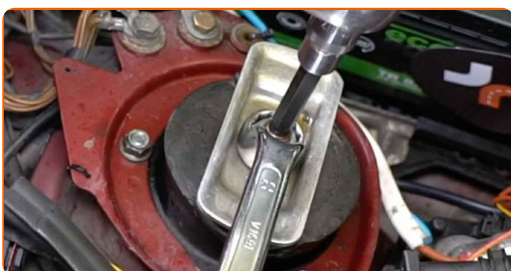
**5** Loosen the fasteners of the upper strut mount. Use a drive socket #13. Use a ratchet wrench.



**AUTODOC recommends:**

- Don't unscrew it completely.

**6** Loosen the fastener of the strut piston rod. Use a combination spanner #22. Use HEX No.H7. Use a ratchet wrench.



**Replacement: suspension strut – MERCEDES-BENZ E-Class T-modell (S124).**

**Tip:**

- Don't unscrew it completely.

**7** Secure the wheels with chocks.

**8** Loosen the wheel bolts. Use wheel impact socket #17. Use a tap wrench.



**9** Raise the car.

**AUTODOC recommends:**

- If you are using a jack, make sure it rests on a flat surface without any unevenness.
- Be sure to additionally secure the car with jack stands.

**10** Unscrew the wheel bolts.



**AUTODOC recommends:**

- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts.  
MERCEDES-BENZ E-Class T-modell (S124)

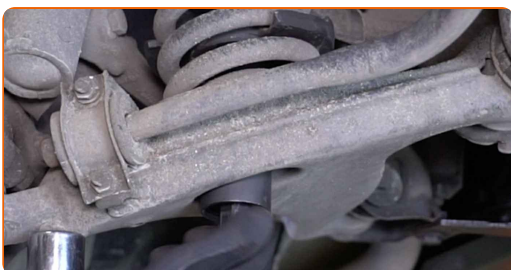
**11** Remove the wheel.



**12** Support the steering knuckle. Use a hydraulic transmission jack.



**13** Install the coil spring compressor on the coil spring.

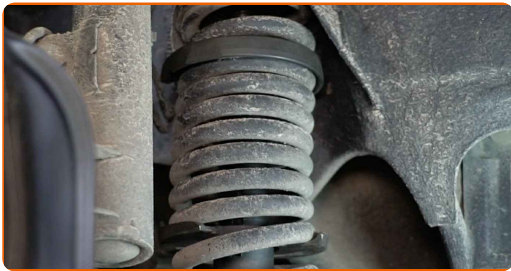


**AUTODOC recommends:**

- Use adapters and jaws of the appropriate size.
- The spring coils should be securely fixed with the coil spring compressor.
- Use high quality coil spring compressors.

**14**

Compress the spring.



Replacement: suspension strut – MERCEDES-BENZ E-Class T-modell (S124).  
AUTODOC recommends:

- Be careful. The compressed spring is powerful and can cause injury if it comes loose.

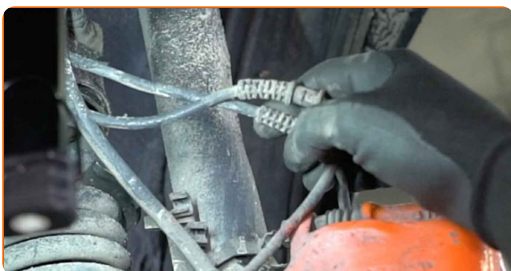
**15**

Clean the shock absorber fasteners. Use a wire brush. Use WD-40 spray.



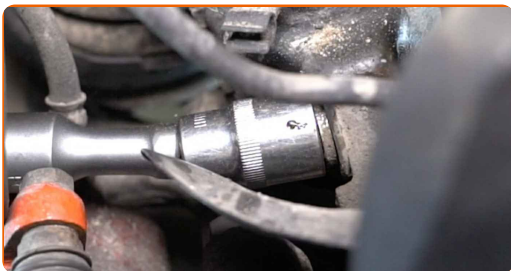
**16**

Disconnect the wiring from the strut.

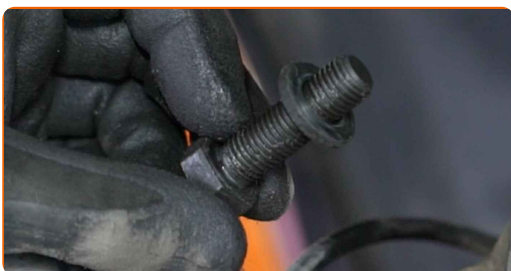




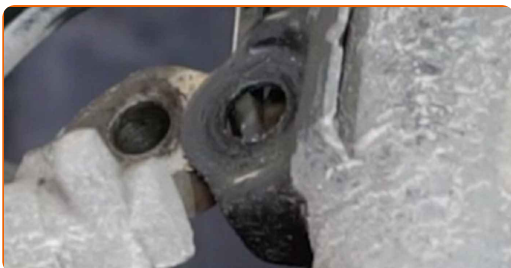
**17** Unscrew the lower fasteners on the shock absorber. Use a drive socket #19. Use a ratchet wrench.



**18** Remove the fastening bolts.



**19** Detach the strut from the steering knuckle. Use a crowbar.



**20** Clean the fasteners of the stabilizer bush brackets. Use a wire brush. Use WD-40 spray.



- 21 Unscrew the fasteners of the stabilizer bush brackets. Use a combination spanner #13. Use a drive socket #13. Use a ratchet wrench.



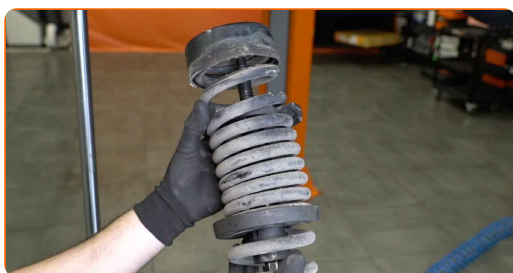
- 22 Remove the fastening bolts.



- 23 Remove the stabilizer bush brackets.



- 24 Remove the coil spring together with the coil spring compressor.



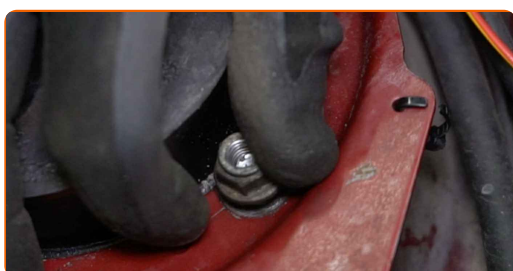
Replacement: suspension strut – MERCEDES-BENZ E-Class T-modell (S124).  
 AUTODOC experts recommend:

- While the spring is compressed, do not do any operations on it.

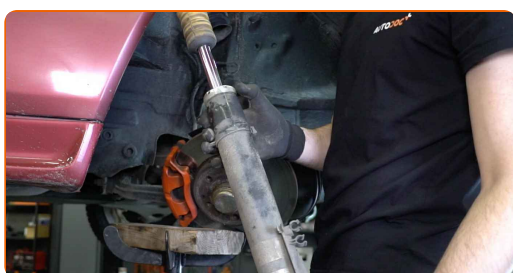
- 25 Remove the fastener of the shock absorber piston rod. Use a combination spanner #22. Use HEX No.H7. Use a ratchet wrench.



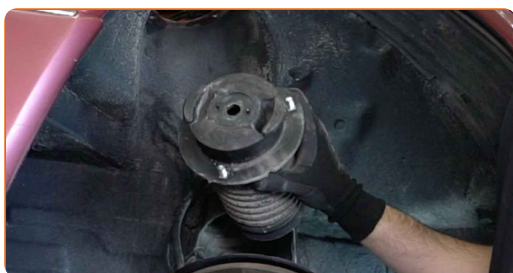
- 26 Unscrew the fasteners of the upper strut mount. Use a drive socket #13. Use a ratchet wrench.



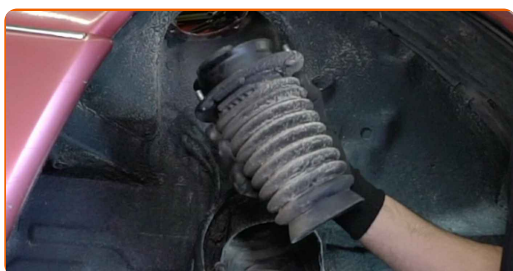
- 27 Remove the shock absorber.



- 28 Remove the strut mount.



- 29 Remove the shock absorber dust boot and bump stop.



**AUTODOC recommends:**

- Carefully inspect the dust boot and bump stop of the suspension strut. Replace them if necessary.

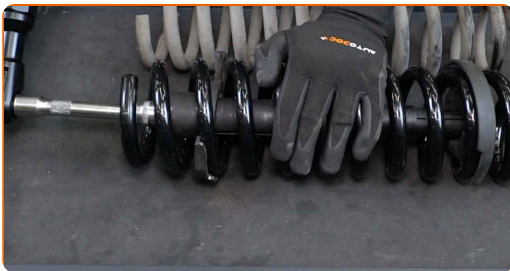
**30**

Decompress the spring.



**31**

Install the coil spring compressor on the coil spring.



**32**

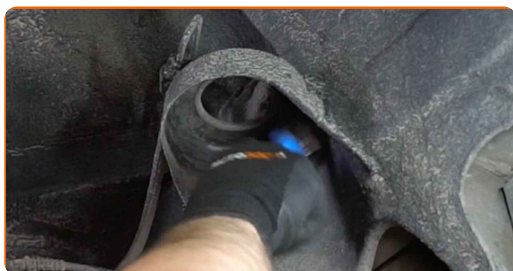
Compress the spring.



**AUTODOC recommends:**

- Be careful. The compressed spring is powerful and can cause injury if it comes loose.

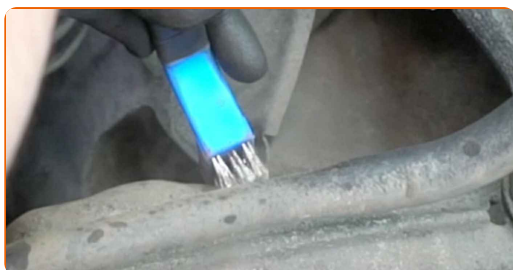
**33** Clean the coil spring mounting seats. Use a wire brush. Use all-purpose cleaning spray.



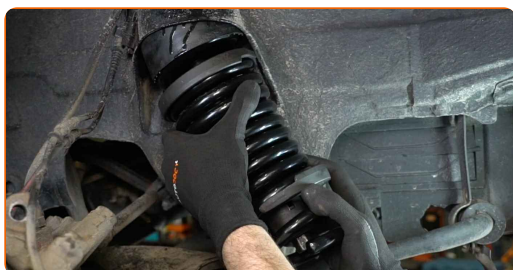
**34** Clean the shock absorber mounting seats. Use a wire brush. Use all-purpose cleaning spray.



**35** Clean the mounting seat of the suspension strut mount. Use a wire brush. Use all-purpose cleaning spray.



**36** Install the spring together with the compressor.



**AUTODOC recommends:**

- Make sure that the coil spring is correctly positioned in its mounting seats.

**37** Install the top suspension strut mount.

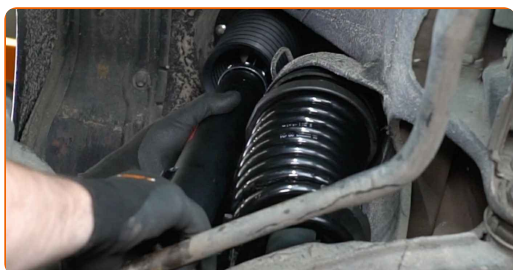


**38** Screw on the fasteners of the upper strut mount.

**39** Install the dust boot and the bump stop.



**40** Install a new suspension strut.

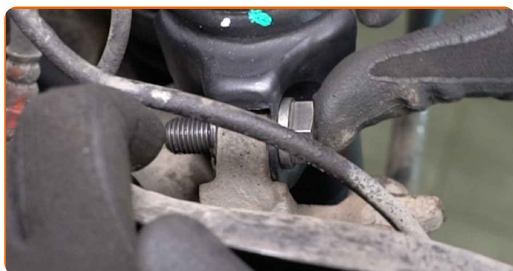


Replacement: suspension strut – MERCEDES-BENZ E-Class T-modell (S124).  
Tip from AUTODOC experts:

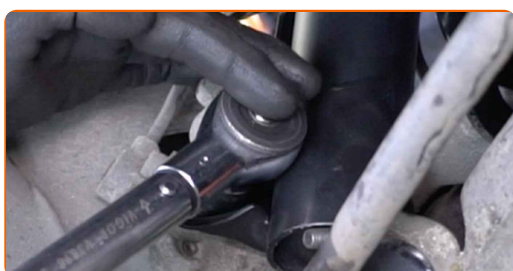
- Before installing a new shock absorber you should pump it 3–5 times by hand.

**41** Screw on the fastener of the strut piston rod.

**42** Install the fastening bolts.



**43** Tighten the lower fasteners on the shock absorbers. Use a drive socket #19. Use a torque wrench. Tighten it to 110 Nm torque.

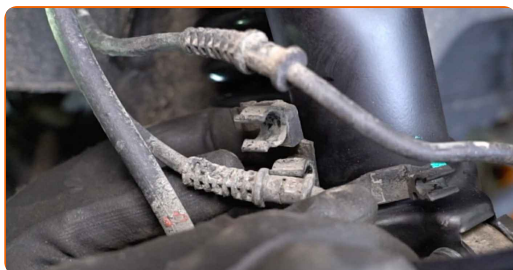


**44** Remove the support from under the steering knuckle.

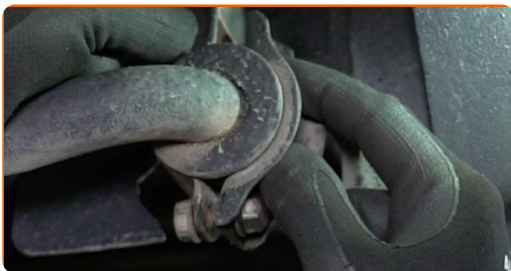
**AUTODOC recommends:**

- Lower the hydraulic transmission jack smoothly, without jerks, to avoid damaging assemblies and mechanisms.

**45** Secure the wiring to the strut.

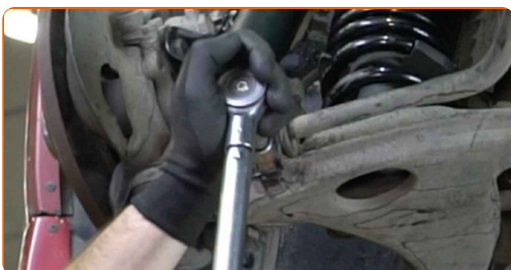


**46** Install the stabilizer bush brackets. Use water pump pliers.

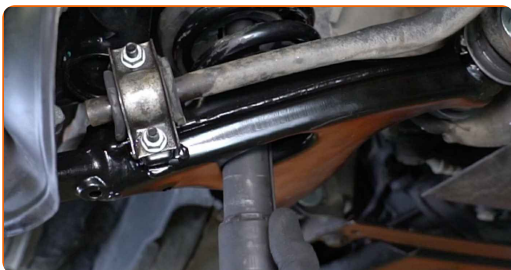


**47** Install the fastening bolts.

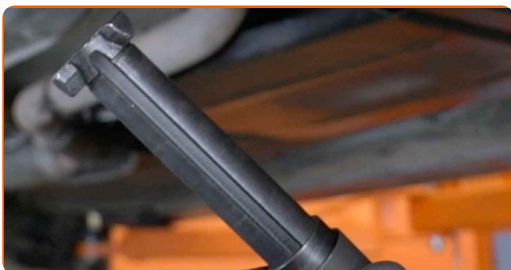
**48** Tighten the fasteners on the anti-roll bar bush brackets. Use a combination spanner #13. Use a drive socket #13. Use a torque wrench. Tighten it to 20 Nm torque.



**49** Decompress the spring.

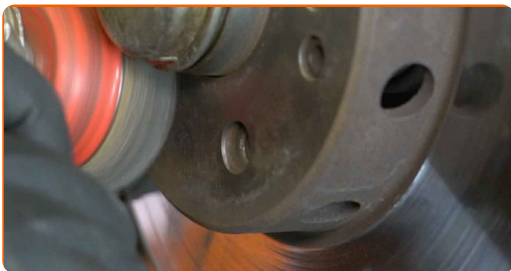


**50** Remove the coil spring compressor.

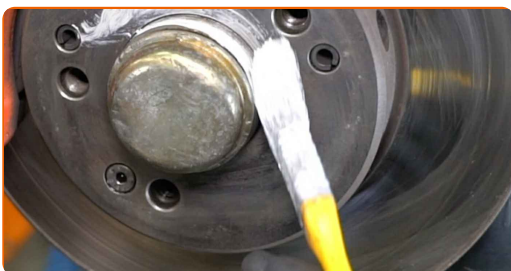




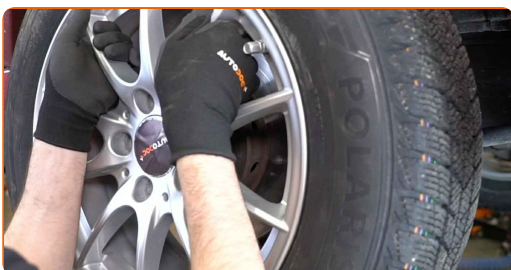
**51** Clean the wheel rim mounting seat. Use a wire brush. Use all-purpose cleaning spray.



**52** Treat the surface where the brake disc contacts the wheel rim. Use ceramic grease.



**53** Install the wheel.



Replacement: suspension strut – MERCEDES-BENZ E-Class T-modell (S124).  
AUTODOC recommends:

- To avoid injury, hold up the wheel when screwing in the fastening bolts.

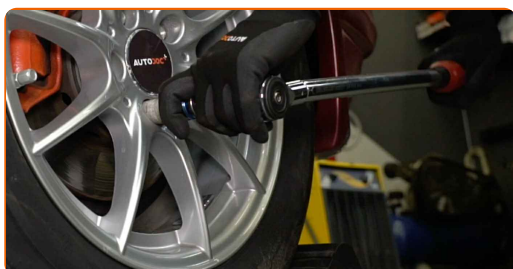
54

Screw in the wheel bolts. Use wheel impact socket #17. Use a ratchet wrench.



55

Lower the car and working in a cross order, tighten the wheel bolts. Use wheel impact socket #17. Use a torque wrench. Tighten it to 110 Nm torque.



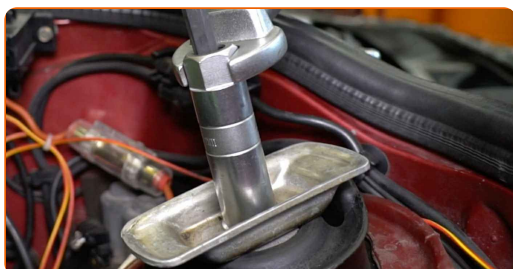
56

Remove the jacks and chocks.

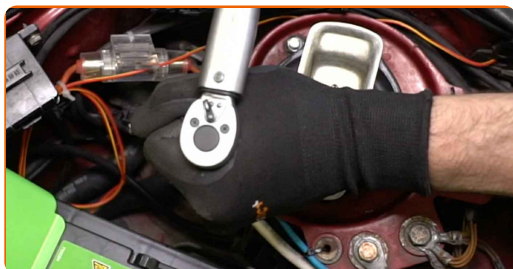


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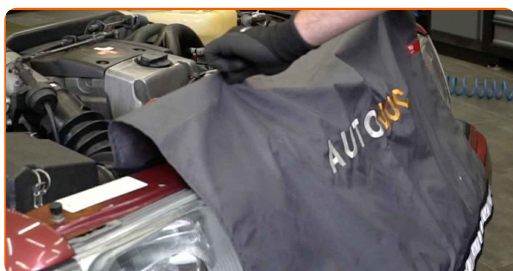
Tighten the shock absorber rod nut. Use a combination spanner #19. Use HEX No.H6. Use a torque wrench. Tighten it to 60 Nm torque.



- 58 Tighten the fasteners of the upper strut mount. Use a drive socket #13. Use a torque wrench. Tighten it to 20 Nm torque.



- 59 Remove the fender protection cover.



- 60 Close the bonnet.

**WELL DONE!** 

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