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**BMW 3-Series and Z4 (99-05) Includes 2006 325ci/330ci Coupe and Convertible models Haynes Online Manual.**

## 13 Rear suspension trailing arm - removal, overhaul and installation

### Warning:

Dust created by the brake system is harmful to your health. Never blow it out with compressed air and don't inhale any of it. Do not, under any circumstances, use petroleum-based solvents to clean brake parts. Use brake system cleaner only.

## Removal

1 Loosen the wheel bolts. Chock the front wheels, then raise the rear of the vehicle and support it securely on jackstands. Remove the relevant wheel.

2 Remove the relevant driveaxle (see [Chapter 8](#) ).

3 Unscrew the two bolts securing the brake caliper mounting bracket in position, then slide the caliper assembly off the disc. Using a piece of wire or string, tie the caliper to the rear suspension coil spring, to avoid placing any strain on the hydraulic brake hose.

4 Referring to [Chapter 9](#) , disconnect the parking brake cable from the rear wheel.

5 Remove the rear wheel ABS sensor as described in [Chapter 9, Section 20](#) .

6 Remove the rear stabilizer bar as described in [Section 16](#) .

7 Remove the retaining bolt and release the brake line bracket from the trailing arm.

8 Position a jack underneath the rear of the trailing arm, and support the weight of the arm.

9 Loosen and remove the shock absorber lower mounting bolt.

10 Pry out the plastic expansion rivets, and detach the trim panel adjacent to the fuel tank from the left- or right-hand rear underside of the vehicle.

11 Using paint or a suitable marker pen, mark the relationship between the lower control arm eccentric bolt and the arm itself (see illustration) . **Note:** *This is necessary to ensure that the rear wheel alignment and camber are correct on installation.*

**13.11 Make an alignment mark between the eccentric bolt and the lower control arm**



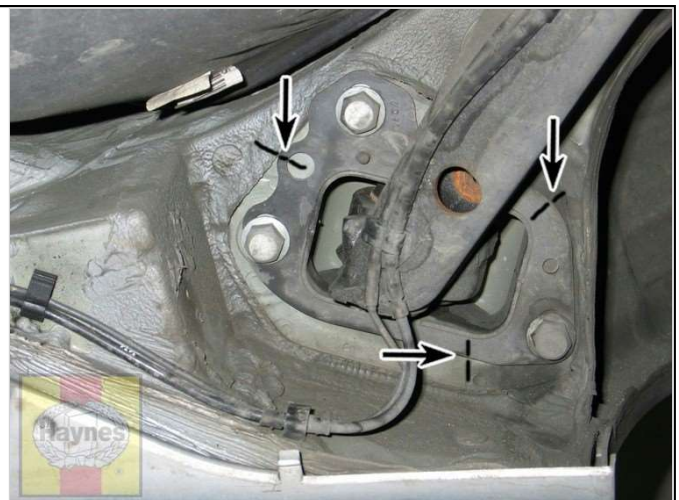
12 Slowly lower the jack and remove the coil spring.

13 Loosen and remove the nut and washer from the lower control arm pivot bolt. Withdraw the pivot bolt.

14 Loosen and remove the nut and pivot bolt securing the upper control arm to the trailing arm. Note the bolt's direction.

15 Mark the relationship between the trailing arm front mounting bracket and the vehicle chassis (see illustration) . Unscrew the three bolts securing the trailing arm mounting bracket to the vehicle body and remove the trailing arm. **Note:** *Do not loosen the trailing arm pivot bushing bolt unless replacement of the bushing/mounting bracket is necessary.*

**13.15 The trailing arm mounting bracket with alignment marks to the chassis**



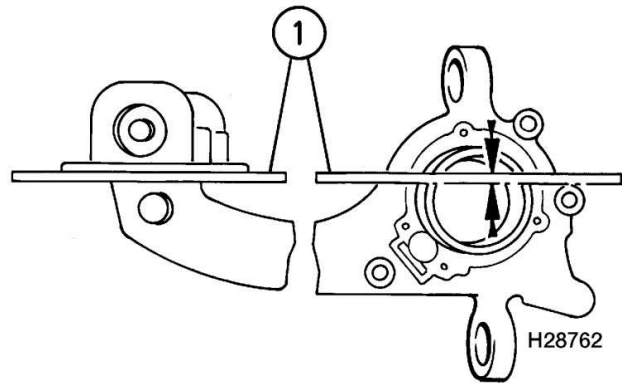
## Overhaul

16 Loosen and remove the nut and pivot bolt and separate the front mounting bracket and trailing arm.

17 Thoroughly clean the trailing arm and the area around the arm mountings, removing all traces of dirt and underseal if necessary. Check carefully for cracks, distortion or any other signs of wear or damage, paying particular attention to the mounting bushings. If either bushing requires replacement, the arm should be taken to a BMW dealer or suitably-equipped garage. A hydraulic press and suitable spacers are required to press the bushings out of position and install the new ones. Inspect the pivot bolts for signs of wear or damage and replace as necessary.

18 Install the mounting bracket to trailing arm, and install the pivot bolt and nut. Position the bracket using a 5/16-inch (8 mm) rod, and tighten the pivot bolt to the specified torque (see illustration) .

**13.18 Place a 5/16-inch (8 mm rod) (1) against the mounting bracket and rest it on the trailing arm to position the mounting bracket**



## Installation

19 Position the trailing arm assembly, and reinstall the mounting bracket retaining bolts. Align the marks made prior to removal, then tighten the mounting bracket bolts to the specified torque.

20 Engage the upper control arm with the trailing arm and install the pivot bolt and nut. Note that the bolt should be inserted from the rear. Tighten the bolt by hand only at this stage.

21 Reinstall the coil spring making sure it is correctly aligned with the spring seats, then raise the trailing arm with the jack, and install the lower arm pivot bolt, eccentric washer and nut. Align the washer with the mark made prior to removal, then reinstall the shock absorber lower mounting bolt. Tighten both the pivot bolt and mounting bolt by hand only.

22 Reinstall the fuel tank panel to the underside of the vehicle.

23 Reinstall the brake pipe retaining bracket to the trailing arm, and fully tighten the bolts.

24 Reinstall the rear stabilizer bar as described in [Section 16](#) .

25 Referring to [Chapter 9](#) , reconnect the parking brake cable to the expander lever and reinstall the ABS wheel sensor. Slide the caliper into position over the disc, making sure the pads pass either side of the disc, and

tighten the caliper bracket mounting bolts to the specified torque setting.

26 Reinstall the driveaxle as described in Chapter **8** and lower the car to the ground.

27 With the car on its wheels, rock the car to settle the disturbed components in position, then tighten the shock absorber lower mounting bolt and the upper control arm pivot bolts to the specified torque. Check that the lower arm eccentric washer is still correctly aligned with the mark, then tighten it to the specified torque.

**Note:** *On completion, it is advisable to have the camber angle and wheel alignment checked and, if necessary, adjusted.*

28 Tighten the wheel bolts to the specified torque.

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