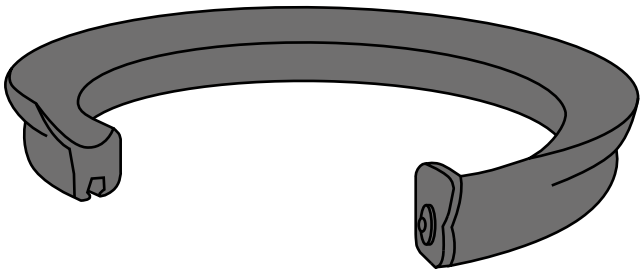


Installation Instructions

English

SPACCER®

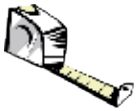
The SPACCER® installation requires the following tools and equipment:

Jack

Spring Compressor

Car Tool Kit

Adhesive Tape



Measuring Tape

Pen and Paper

Legend

Information	Correct
Note	False

Contents

Important Information and Instructions

We would like to congratulate you on choosing the SPACCER® lift system. SPACCER® is a high-strength special aluminum coil ring used to lift your vehicle. Using a SPACCER® you can lift all vehicle makes and models by up to 48 mm. A single SPACCER® will lift your car by 12 mm at any one wheel. You can lift the front axle, the rear axle, or front and rear axle of your vehicle.

Measures and dimensions for the lift
The TÜV/MOT lift specification is the difference between the vehicle height stated in your motor vehicle title an the height measured at the vehicle roof following the retrofitting. To obtain comparable measurements the impacts of wheel/tyre combination, damper type and condition, fuel tank level, as well as the current ride height tolerances have to be considered. These contributing external effects may lead to deviations concerning the actual degree of lift.

Lift
SPACCER® manufactures a range of different parts for various models and makes some of which are very similar. The installation and use of such parts in vehicles not suitable/intended can result in severe damage. Therefore, prior installation, please compare the TÜV test report with the title of your vehicle to verify that i) SPACCER® has been approved for your vehicle, ii) all designations and labels are correct, and iii) this SPACCER® is appropriate for your vehicle. This also applies to wheel types and tyre sizes not approved by the manufacturer. Strictly observe the notes in our TÜV test report concerning vehicle type and model. If unsure whether the offered product fits your specific vehicle type and model please contact SPACCER® or a qualified shop (authorized dealer). SPACCER® that have been custom-made according to the chassis number are generally excluded from exchange or return.

II Installation Notes

SPACCER® are manufactured permanently using quality assurance measures and highest precision, but even such high-quality products can become defective.

To prevent product defects, please observe the following notes:

- Neither overload the vehicle nor exceed the axle loads specified by TÜV or manufacturer
- Avoid aggressive or unconventionell driving posing excessive loads and demands on the vehicle

SPACCER® are designed solely for use in street-legal vehicles complying to applicable laws and regulations. Every other use is strongly advised against.

Have SPACCER only installed in authorized or qualified shops. Only these shops provide the required knowledge and tools.

1. Prior installation

- Please check the delivery for completeness
- Please check the items delivered against the delivery note
- Please compare the items delivered to the TÜV test report
- Please also compare the TÜV test report with the vehicle documents
- Vehicles with hybrid, hydrogen or electric drive may only be raised at specialist companies or workshops. Please refer to the workshop manual
- For all vehicles, especially those with electric drive, please pay attention to the pick-up points for raising the vehicle. Please refer to the workshop manual
- Please check that the tools required for installation are available You will find a list of the tools required on page 2.
- Please order parts which may be required additionally
- When there are any discrepancies or deviations please contact your local sales agent

- Please determine all measures required for the installation, especially the residual spring travel (see Chapter III)
- Should your vehicle have a towing attachment please ensure that the top of the tow bar doesn't exceed the legal statutory height limit of 420 mm after installation (Figure 1a) and does not fall below 350mm.

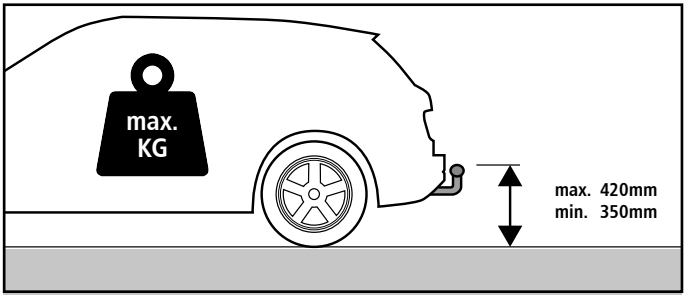


Figure 1: Dimensions for the upper edge of the trailer coupling after raising

Wichtig: Die Messung muss im voll beladenen Fahrzeugzustand (z.B. 4 Personen mit Gepäck, vollgetankt) erfolgen. Die Angabe zur zulässigen Gesamtmasse finden Sie im Fahrzeugschein.

2. During the Installation

- Adhere to specifications or to repair manual instructions of vehicle manufacturer
- Observe all instructions in this document
- Check the functionality of all parts removed
- Replace defective genuine parts with new genuine parts
- Only use suitable tools for installation/removal
- Don't attempt to make parts fit that don't

Should any product/part not fit stop the installation or removal process The installation of products in unsuitable vehicles can result in severe damage.

Should this be the case, please contact your sales agent and describe the problem in detail. Have your vehicle documents or technical documents ready to be able to answer any enquiry that may arise. After having finished the installation please check that the number of parts installed equals the number of parts removed.

The rubber of the strut mount is equipped with a mounting aid on the rear axle of some vehicles. This serves to prevent the rubber of the strut mount from slipping off the spring during production. When the vehicle is in operation, this is without function and can therefore be removed. If your vehicle has such a rubber bead as a mounting aid, you must remove it before installing the SPACCER® (see Figure 2).

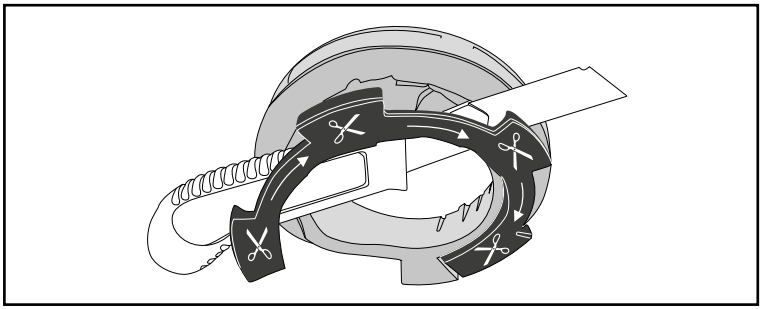


Figure 2, cut off rubber at top of strut bearing if necessary

3. After the lift

- Only apply manufacturer specified torque values
- Measure all values important to the lift
- Check and adjust, if necessary, the following:
    - Correct installation of all removed and mounted parts
    - Body-to-tyre clearance of wheel/tyre combination (with / without load)
    - Braking system and the load-sensitive proportioning valve setting

- o Clearances of all brake components and brake hoses (at all steering angles)
- o Headlight setting
- o Clearances of all axle and steering components (at all steering angles)
- o Level control setting
- o Axle settings

Not complying with these testing and adjusting procedures can result in complete failure of vehicle systems and fatal damage.

4. Test ride

- Installing the SPACCER® system can change the ride/behaviour of your vehicle
- Please use caution and drive carefully until getting used to the new ride/behaviour
- Unusual handling properties may be an indication for the fact that the installed SPACCER® is not suitable for your vehicle or that it has been installed faulty. Should this be the case please have your vehicle checked immediately in a qualified shop

Not complying with this procedure can result in fatal damage.

Improper and incorrect handling during the installation and removal of SPACCER® can result in damage. Therefore, the installation of SPACCER® must be performed by a qualified auto shop (certified repair shop, authorized dealer, etc.). The installation should not be performed by private individuals!

III Important information for experts and test engineers

The following information is provided for TÜV, DEKRA, GTÜ or other European and international organizations to make registration as easy as possible for them:

1. **Audit basis**
   Check the lifting according to VdTÜV data sheet 751/II.1, Assessment of vehicle lifting, Annex II.

2. **Strength test**
   The strength and conditions for our suspension system can be found in our test report no. 02/0149-02, 03/0149-02, 04/0149-02, 13/0029-00 and 13/0111-00 about a strength test of spring pads as a basis for vehicle approvals according to §21 or §19(2) StVZO.

3. **Residual spring travel**
   Be sure to measure the residual spring travel when the vehicle is stationary and when the suspension is released (see information sheet „Determining residual spring travel“). This must be at least 4 cm after conversion with the SPACCER® system (guideline according to VdTÜV leaflet II.4.3).

4. **Driving behavior**
   Since the characteristic curve of the spring is not changed, this also does not change the driving behavior. The spring is merely underlaid with the SPACCER® so that the car is higher.
   The pressure of the spring and suspension remains unchanged despite the raising, as long as a residual spring travel of at least 4cm is maintained.

5. **Track setting**
   As a rule, the track setting is not changed, since only the spring is underlaid with SPACCER®. The spring/shock absorber unit remains unchanged. However, it is still necessary to check the toe after installation for safety reasons.

6. **Light test**
   Please check the headlight setting after raising the height.

7. **Spring travel**
   Per SPACCER® a spring travel limiter is installed in the piston rod, the original spring travel is thus retained.

8. **Mounting**
   Each delivery is accompanied by detailed assembly instructions in which each step for the installation of SPACCER® is described in detail. Shock absorber and spring must be removed or installed according to the original manual.

IV Residual Suspension Travel

Why is there a residual spring travel?

Every vehicle has a legally prescribed minimum spring travel of 4cm ex works. In approx. 98% of all vehicles, this spring travel is longer than the legal minimum requirement and can therefore be used to install a suspension lift. The car manufacturer has therefore already technically provided for the possibility of raising the suspension.

What is the residual spring travel?

When the vehicle is compressed, the piston rod is in the damper. (Figure 3)

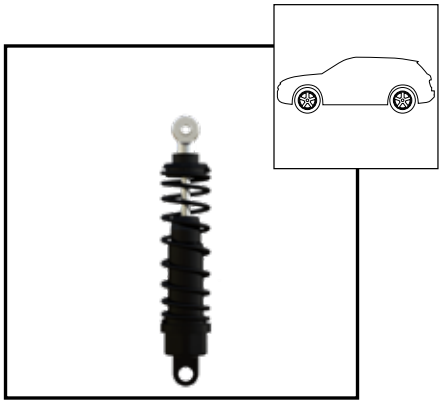


Figure 3, Vehicle at rest

When the vehicle is fully deflected (Figure 4), the spring travel F is obtained. The legal minimum requirement for this spring travel is 4cm, but in most cases it is significantly longer and forms the basis for raising the vehicle.

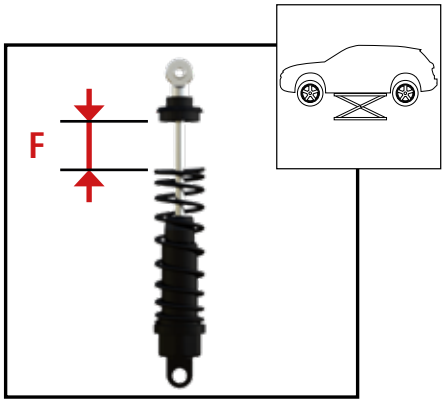


Figure 4, vehicle unsprung

If a suspension lift is installed and the vehicle is fully deflected (Figure 5), the spring travel F must still meet the legal minimum requirement of 4cm.

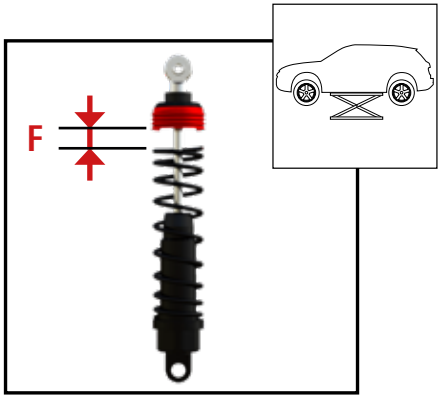


Figure 5, vehicle unsprung

In the compressed state (Figure 6), there is no difference in the damper and spring. Therefore, the characteristic curve of the spring and thus the suspension comfort remains the same.

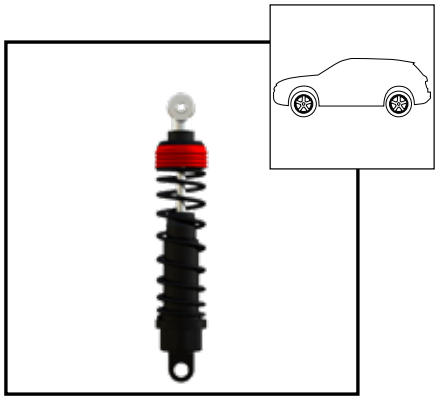


Figure 6, Vehicle at rest

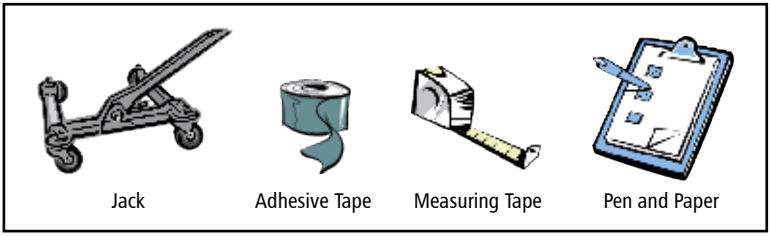
If you want to install SPACCER®, you must ensure before installation that the spring travel between compression and rebound (residual spring travel) will be greater than 4cm, even after raising.

To determine the residual spring travel, you can also visit our homepage to view the video instructions: www.spaccer.com

Determining the Residual Suspension Travel

Prior to installing the SPACCER® system you have to ensure that the remaining suspension spring travel between extension and compression must be at least 40 mm with the SPACCER® system installed.

To determine the residual suspension travel you will need:



How to find out the residual suspension travel:

1. Using a tape mark the hub center and measure perpendicular to the wing/fender edge.
2. With the vehicle standing measure the distance between the hub center mark and the wing/fender center (Figure 1), and note this value down (page 23 provides space for your notes).
3. Lift the chassis using a jack or a lifting platform.
4. Now the vehicle's suspension is fully extended and the wheels don't contact the ground (Figure 2). Measure again the distance between the centers of hub and wing/fender.
5. Determine the overall height of the SPACCER® to be installed (12 mm / SPACCER® , 15 mm / SPACCER® with rubber profile) and calculate the remaining suspension travel using the following formula:
   Suspension extended - suspension compressed - SPACCER® height

Residual Suspension Travel Measures

IMPORTANT! To ensure a correct measurement value, always measure the distance with the wheels still on the ground first.

	Front axle	Rear axle
Suspension extended	cm	cm
Suspension compressed	– cm	– cm
Lifting	– cm	– cm
Remaining suspension travel	= cm	= cm

If the minimum remaining spring travel is not maintained, the remaining spring travel can be increased by using dome cup washers (Figure 9). Fit these between the piston rod and the strut bearing as required. This increases the residual spring travel for more driving comfort. If this spring travel is not sufficient, we offer an optional piston rod extension, which can be ordered at www.spaccer.com.

To ensure that the measurement result is not falsified, please always measure the distance in compressed state first. The vehicle must not be lifted with a lifting platform or jack beforehand!

Determine residual spring travel / maximum possible lift

To ensure that the measurement result is not falsified, please always measure the distance in compressed state first. The vehicle must not be lifted with a lifting platform or jack beforehand!

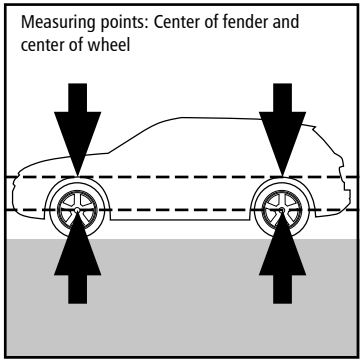


Figure 7, Vehicle at rest

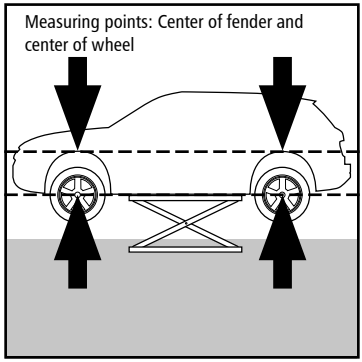


Figure 8, vehicle unsprung

The determined residual spring travel must be more than 40mm. If this value is not met, use only as many SPACCER® until the residual spring travel is met, longer shock absorbers or install a SPACCER® piston rod extension. These are available online at www.spaccer.com

If the value is higher, proceed to Chapter V on page 18.

Calculation example of residual spring travel / maximum possible height increase

Distance sprung (Fig. 2)	49,0 cm
Distance deflected (Fig. 1)	– 39,0 cm
Residual spring travel	– 4,0 cm
Max. possible elevation	**= 6,0 cm**

In the above example, a 12 / 24 / 36 / 48mm SPACCER® - or SPACCER® with optionally available rubber profile can be installed. The rubber profile is for an additional 3mm height increase per SPACCER®.

If the remaining spring travel is less than 4cm, we recommend utilizing the remaining thread by installing washers (Figure 9) to optimize the remaining spring travel.

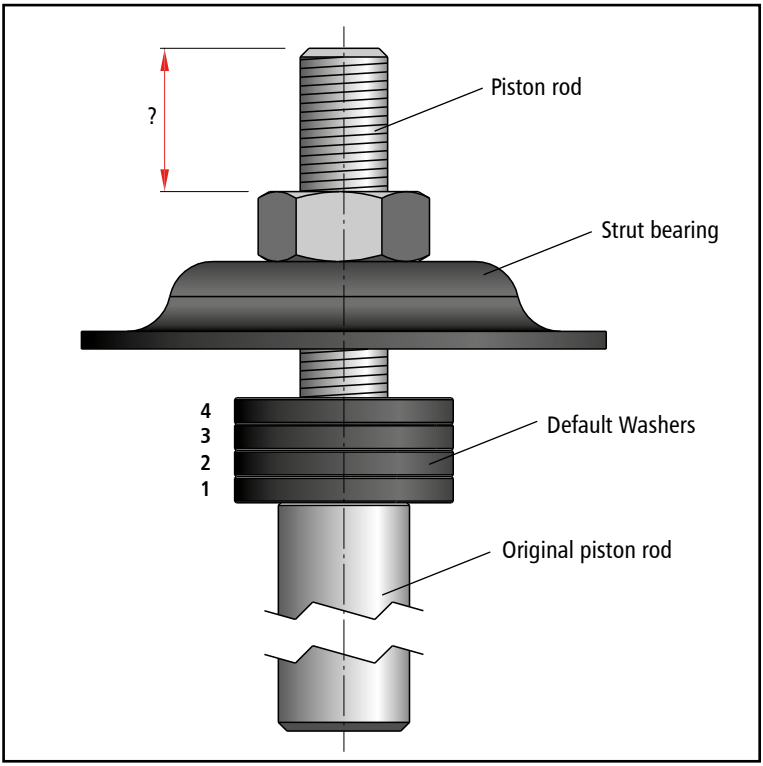


Figure 9, Mounting washers

Before loosening the shock absorber, measure how much thread is free at the top. Alternatively, you can then mount washers around the free dimension. This increases the Residual spring travel (more ride comfort)

IV Preparing the Strut

SPACCER® are inserted on top or underneath the spring.
Therefore, the strut must be prepared accordingly.

Follow the following procedure for preparing the strut:

Jack

Spring Compressor

Car Tool Kit

Ensure that the parking brake is set.
Lift the vehicle using a jack or a lifting platform (Figure 10).
Then, remove the wheels where you wish to install SPACCER® (Figure 11).

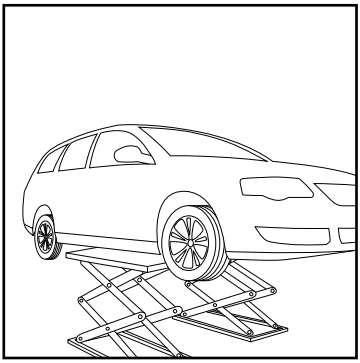


Figure 10: Jacking up the vehicle

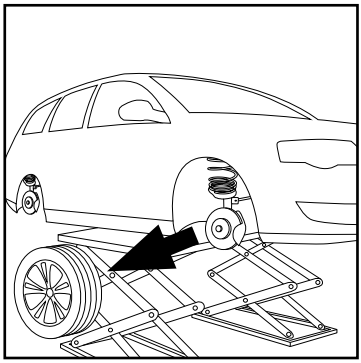
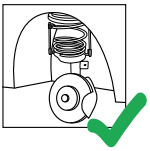


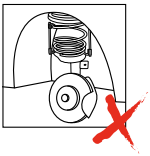
Figure 11: Removing the wheels

If you have the chance to compress the installed coil spring 'in situ' using a spring compressor, then SPACCER® can be mounted with the strut in place. Although, the removal of the strut will always facilitate the installation and is therefore highly advisable.



The spring can be compressed in place:

➔ Strut removal not required
continue with Chapter V A on page 20



The spring can't be compressed in place:

➔ Strut removal required
continue with Chapter V B on page 22

Whether the coil spring can be compressed in place using a spring compressor or not depends on your vehicle type/model and the type of the spring compressor used. If in doubt, remove the strut to avoid damaging your vehicle.

If the spring can be compressed in place please ensure also that the seat of the strut dampener stays in position with the spring compressed. If this can't be ensured continue with Chapter IV B.

V A Spring can be compressed in place

Compress the spring using a spring compressor (Figure 5).
While compressing the spring verify that the seat of the strut dampener stays in position.

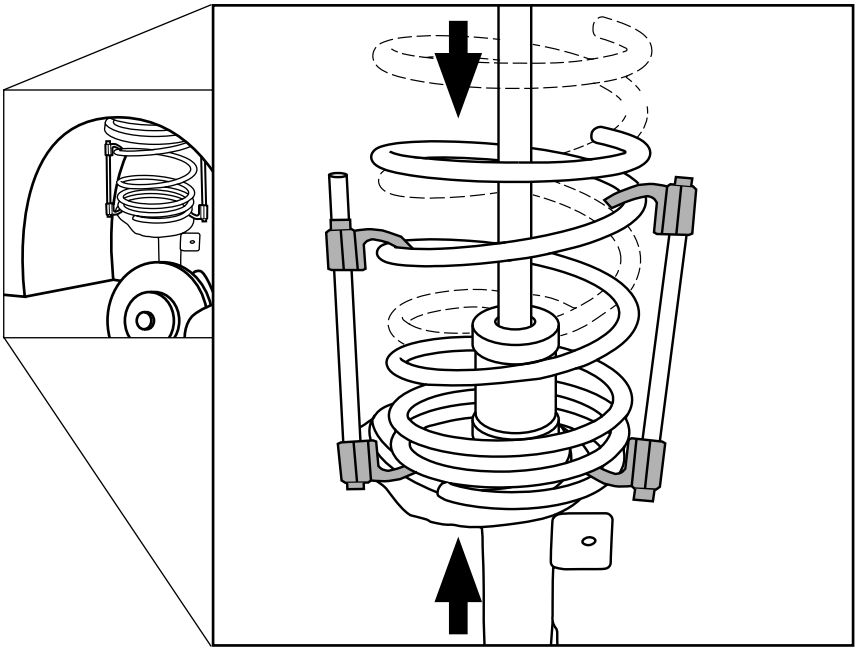


Figure 12, Spring and spring compressor

Place the SPACCER® at the position specified in the vehicle-specific supplementary sheet "Strut Exploded View".

Depending on the type of vehicle the SPACCER® must be installed either at the top or bottom end of the spring. Please refer to the supplementary sheet "Strut Exploded View" for detailed position information.

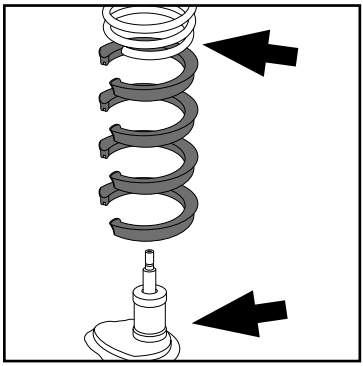


Figure 13: SPACCER® bottom mounted

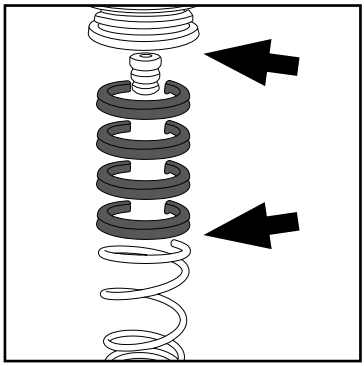


Figure 14: SPACCER® top mounted

SPACCER® are pre-fixed with a tape as a mounting aid (Figure 15). Place the SPACCER® on the spring at the top (alternatively at the bottom, depending on the vehicle). The end cap on the SPACCER® is placed against the outlet of the spring to prevent the camber from twisting. Then relax the spring with the spring compressor. Make sure that the SPACCER® fits snugly (Figure 16) on the spring and on the dome plate (for installation at the top, Figure 14) or strut (for installation at the bottom, Figure 13).

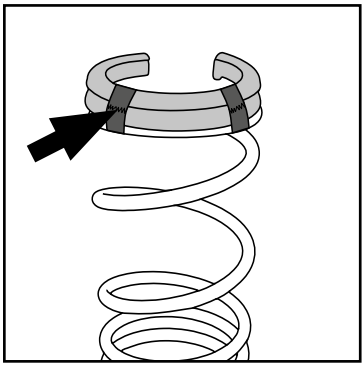


Figure 15: Adhesive tape as mounting aid

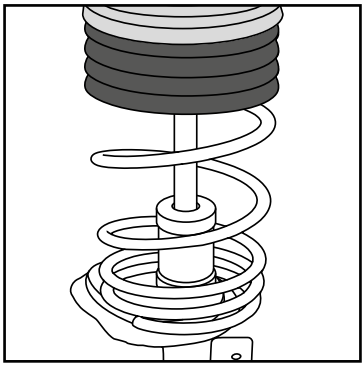


Figure 16: Verifying correct seating

For easier assembly, several SPACCER® can already be glued together at the factory. These can be easily separated from each other again with a little leverage.

V B Spring can't be compressed in place

Remove the struts of all wheels that you want to lift while observing the manufacturer's instructions.

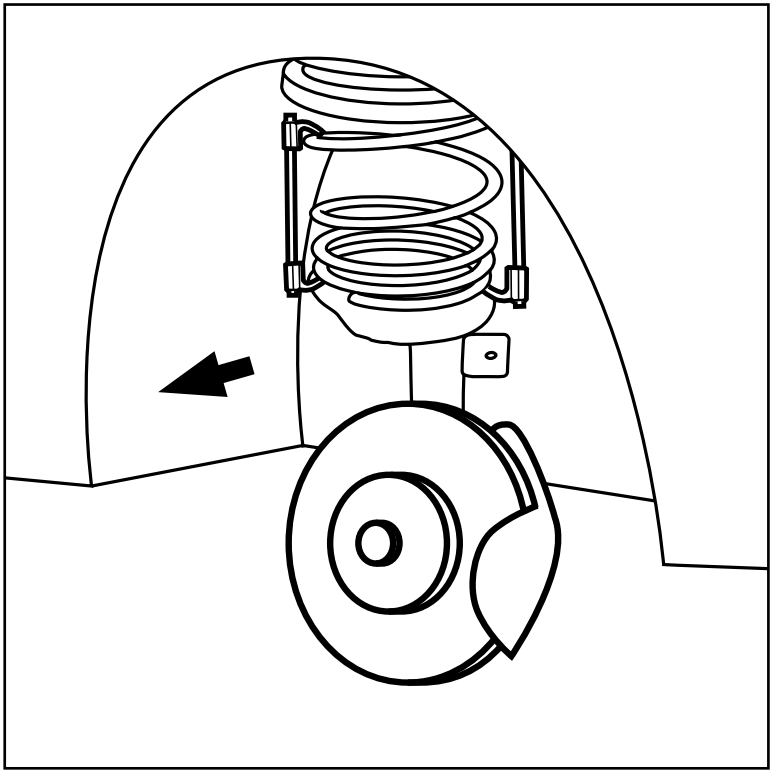


Figure 17: Strut removal according to service manual

Place the SPACCER® at the position specified in the vehicle-specific supplementary sheet "Strut Installation Position".

Ensure to use only documentation explicitly authorized by the manufacturer when installing or removing the strut.

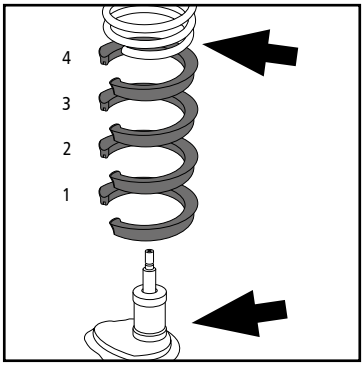


Figure 18: SPACCER® bottom mounted

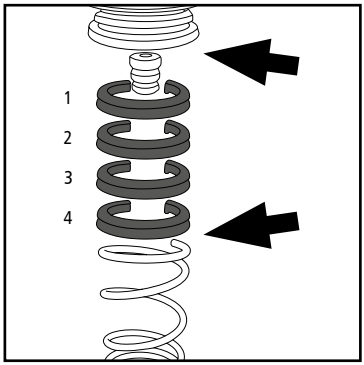


Figure 19: SPACCER® top mounted

Fix the SPACCER® with adhesive tape to facilitate installation (Figure 20). Verify that the SPACCER® fits accurately. Re-install the strut – now with the SPACCER® – into the vehicle. Verify that the SPACCER® at the spring and the strut dampener seat (top mount, Figure 19) or strut (bottom mount, Figure 18) fits snugly (Figure 21). The assembly aid can remain in place after assembly.

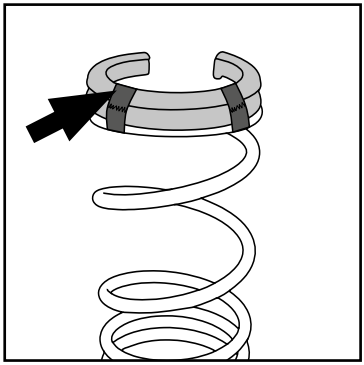


Figure 20: Adhesive tape as mounting aid

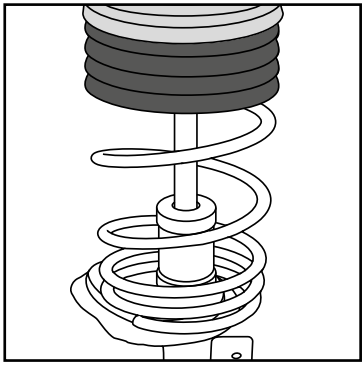


Figure 21: Verifying correct seating

!

Depending on the type of vehicle the SPACCER® must be installed either at the top or bottom end of the spring. Please refer to the supplementary sheet "Strut Exploded View" for detailed position information.

V Installing the Bump Stop

Depending on the type of strut different bump stops are being used. Spring and bump stop are either installed as one unit or separately. Select your axle design:

Shock Absorber and Spring Combined (MacPherson)

➔ continue with Chapter VI A on page 26

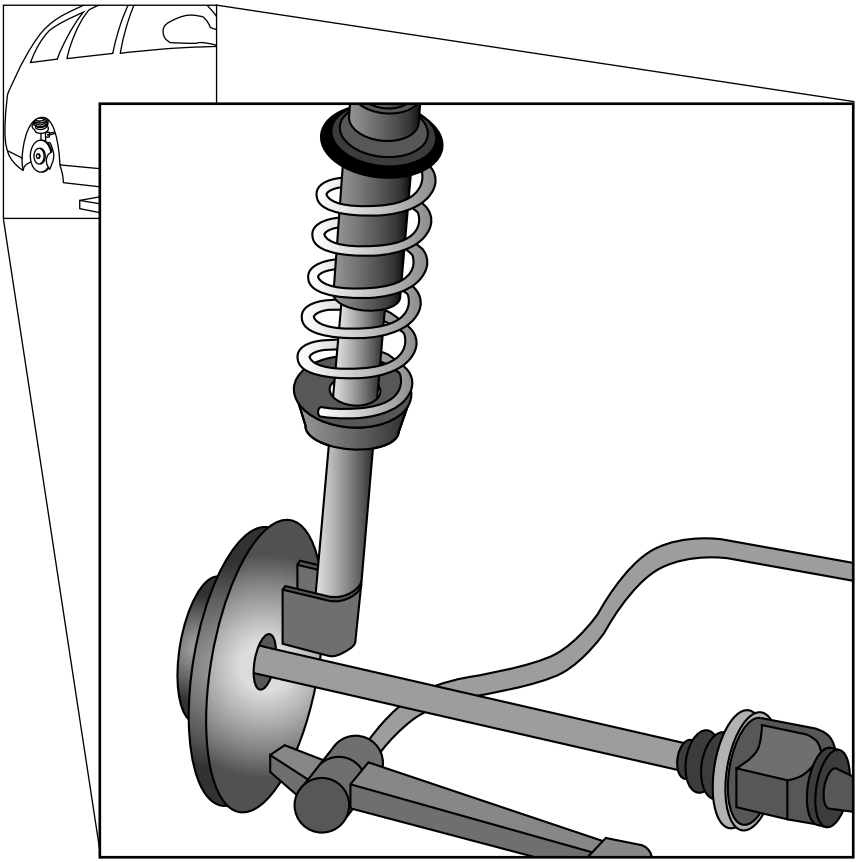


Figure 22: Strut with combined shock absorber / spring (MacPherson)

Shock Absorber and Spring Separate

➔ continue with Chapter VI B on page 28

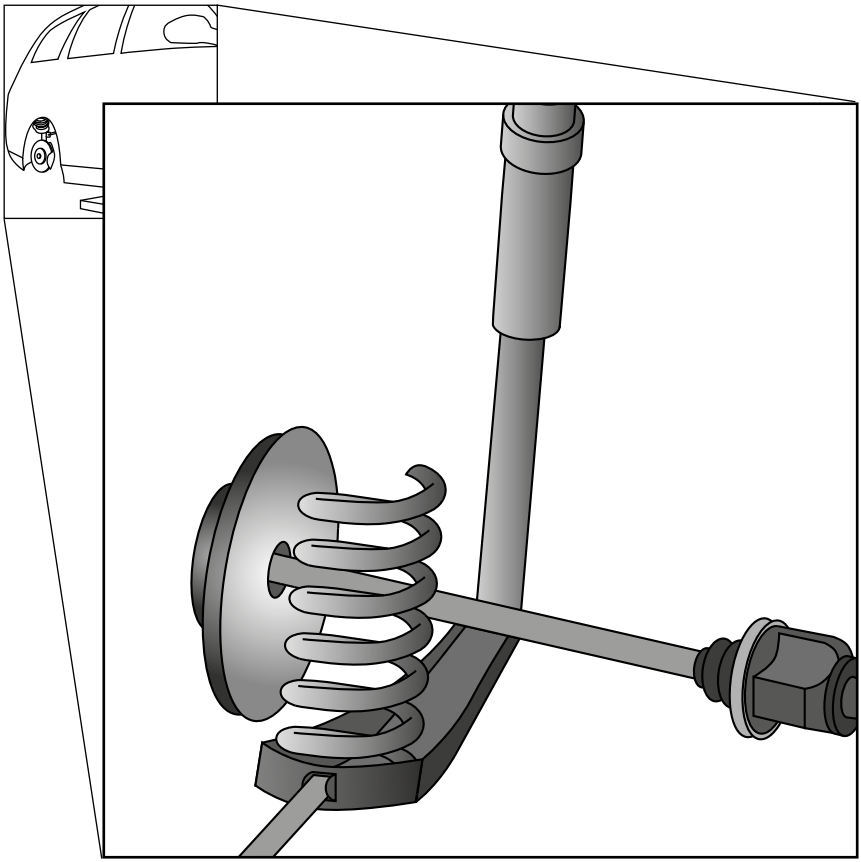


Figure 23: Strut with separate shock absorber / spring

VI A Installing the Bump Stop on Combined Shock Absorber and Spring (MacPherson)

In order to limit the spring travel back to the original length after raising, additional spring travel limiters must be installed. This means that the spring travel remains unchanged by the raising.

Insert the spring travel limiters at the position marked in Figure 24. You can simply clip them into the piston rod without tools. If necessary, the spring travel limiters can also be screwed together. The matching spring travel limiters are already included in every delivery.

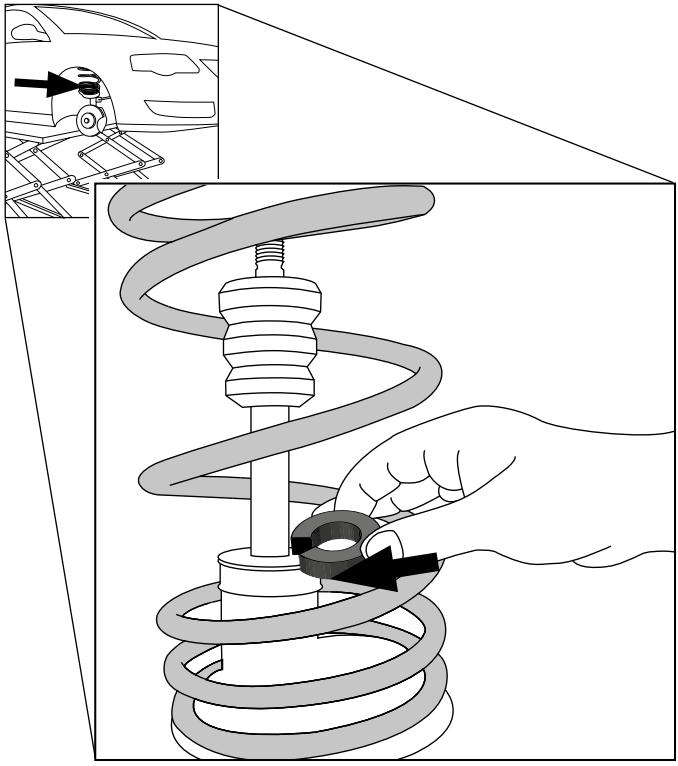


Figure 24: Bump stop installation position

One bump stop for each SPACCER®

One bump stop must be positioned for SPACCER® installed. The following figure depicts the SPACCER® in top mount position. The installation position on your vehicle may be different.

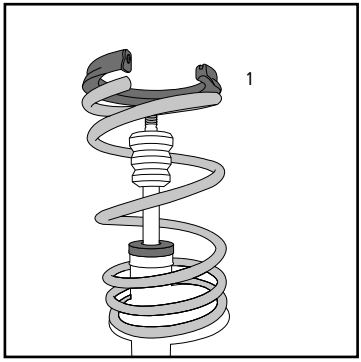


Figure 25: 1 bump stop
per strut for 1 SPACCER®

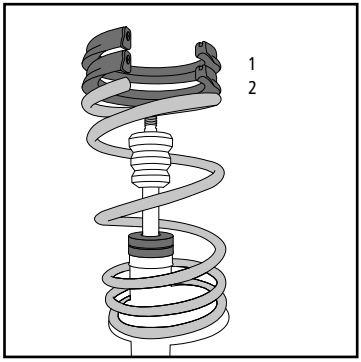


Figure 26: 2 bump stops
per strut for 2 SPACCER®

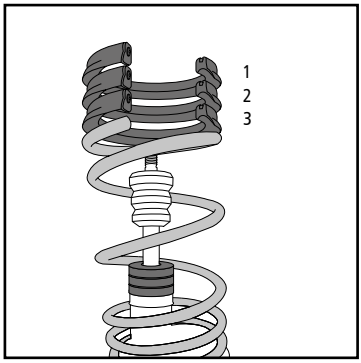


Figure 27: 3 bump stops
per strut for 3 SPACCER®

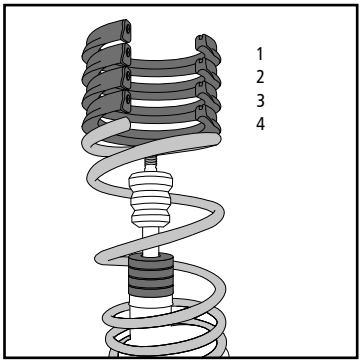


Figure 28: 4 bump stops
per strut for 4 SPACCER®

Suspension travel limiters should not be installed on vehicles with accessory lowering springs unless the original suspension travel limiter has been shortened.

Please also view the video instruction on installing the bump stops on our homepage www.spaccer.com

VI B Insert spring travel limiter with shock absorber / spring separated from each other

In order to limit the spring travel back to the original length after raising, additional spring travel limiters must be installed. This means that the spring travel remains unchanged by the raising.

To do this, use the extended bolt included in the scope of delivery (shorten if necessary, Figure 30) rivet nut and lock nut with washer to fasten the additional spring travel limiters to the body (be sure to pre-drill the body - Figure 29).

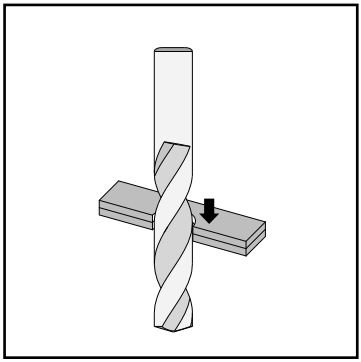


Figure 29, Pre-drilling the body

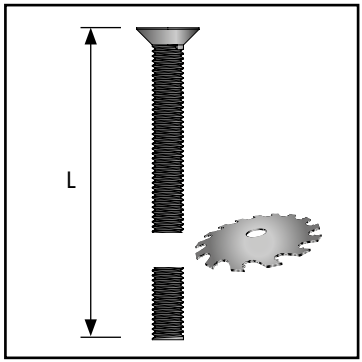


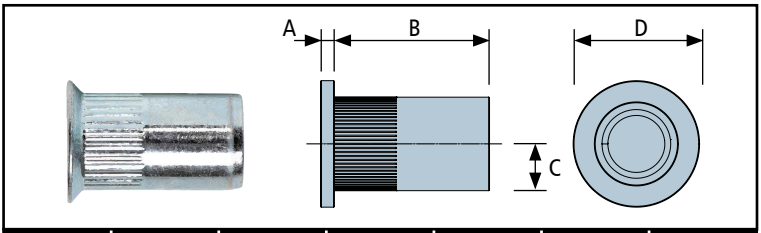
Figure 30, adjust length of long M8 screw if necessary

Use of the rivet nuts

To fasten the spring travel limiters, use the rivet nuts supplied (Figure 31). These combine the two fastening types of blind riveting and screw connection (Figure 32. This makes it possible to fasten the spring travel limiters in a twist-proof manner even to relatively thin-walled structural elements of the body.

Suspension travel limiters should not be installed on vehicles with accessory lowering springs unless the original suspension travel limiter has been shortened.

Before removing the spring, mark the top and bottom so that it will be reinstalled in the correct position afterwards.



Thread	Diameter Drill hole	Clamping area	Head diameter (D)	Head height (A)	Sleeve radius (C)	Sleeve height (B)
M8	11,0 - 11,1mm	1,5 - 4,0mm	13,5mm	1,5mm	10,9mm	17,5mm

Figure 31, aluminum countersunk head rivet nut

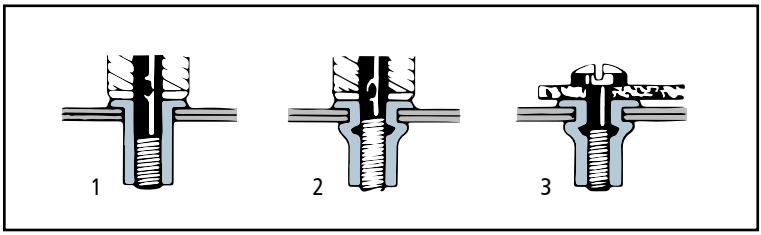


Figure 32, Functional principle of a rivet nut

Fix rivet nut

Drill a hole in the body (Figure 29). Screw the M8 bolt into the pull-in nut (Figure 33) and counter it with an M8 nut (Figure 34).

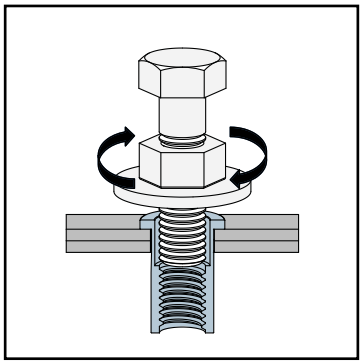


Figure 33, Tighten screw

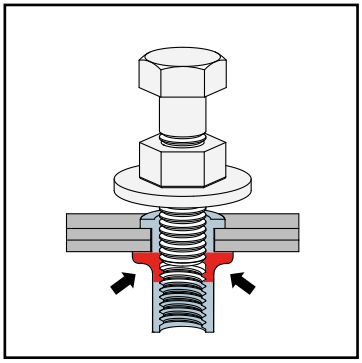


Figure 34, rivet nut is swaged in place

B1 Original spring travel limiter is bolted to the body

Replace the screw used to fix the original travel limiter with the extended screw. Install the additional travel limiters between the body and the original travel limiters (Figure 39). Then secure them with the supplied rivet nut and lock nut with washer (Figure 41). If the supplied screw does not fit the diameter of the original travel limiter, you may have to drill it out (Figure 40). The installation position may differ on your vehicle. One SPACCER® must be installed per SPACCER® (Figure 35 to 38). In the illustration below, the SPACCER® is inserted at the bottom.

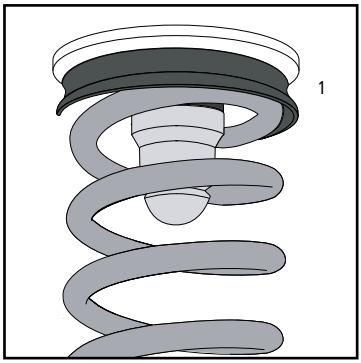


Figure 35, 1 spring travel limiter per strut for 1 SPACCER®

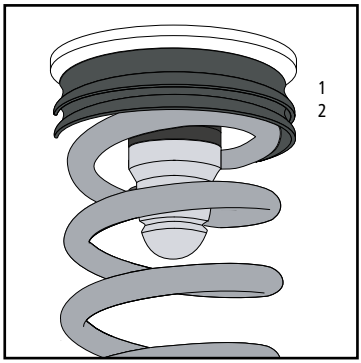


Figure 36, 2 spring travel limiters per strut for 2 SPACCER®

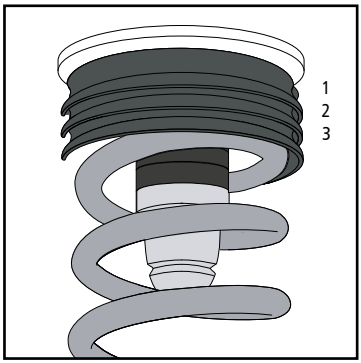


Figure 37, 3 spring travel limiters per spring strut for 3 SPACCER®

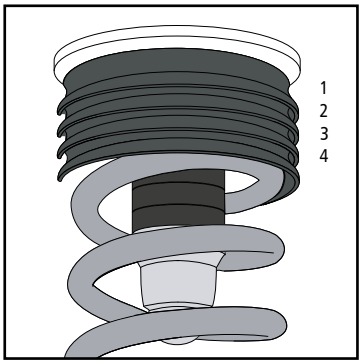


Figure 38, 4 spring travel limiters per shock strut for 4 SPACCER®

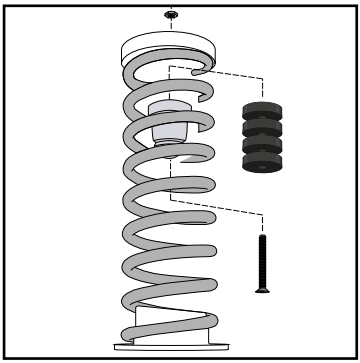


Figure 39, Installing additional spring travel limiters between body and original spring travel limiters

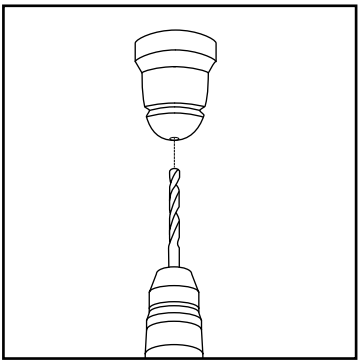


Figure 40, Drilling out original spring travel limiter if required

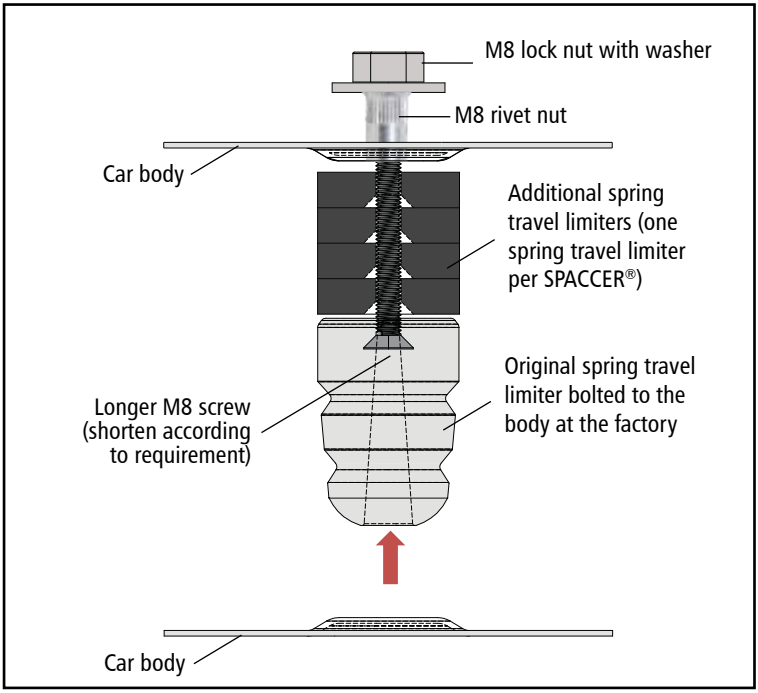


Abbildung 41, Einbau der zusätzlichen Federwegsbegenzer bei verschraubtem Original-Federwegsbegrenzer

B2 Original spring travel limiter is attached to the car body plugged or clamped

The additional spring travel limiters are fixed to the bottom of the body at the end stop (Fig. 46) opposite the clamped original spring travel limiter using the extended bolt, rivet nut and lock nut with washer (Fig. 48). Pre-drill the end stop if necessary (Fig. 47). One spring travel limiter must be inserted for each SPACCER® inserted (Figure 42 to 45). In the illustration below, the SPACCER® are inserted at the bottom. The installation position may differ on your vehicle.

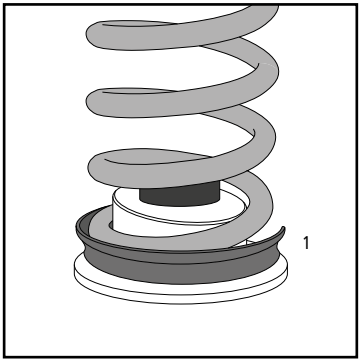


Figure 42, 1 spring travel limiter
per strut for 1 SPACCER®

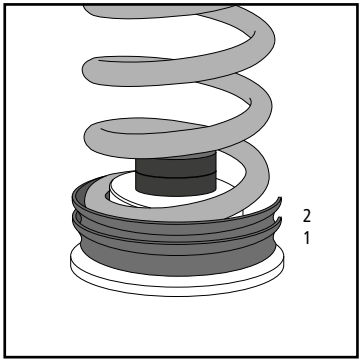


Figure 43, 2 spring travel limiters
per strut for 2 SPACCER®

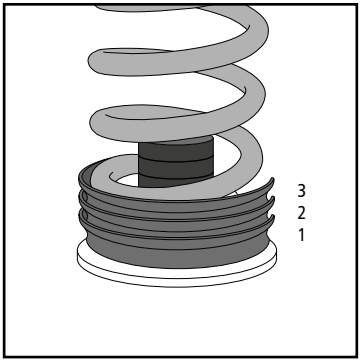


Figure 44, 3 spring travel limiters
per suspension strut for 3 SPACCER®

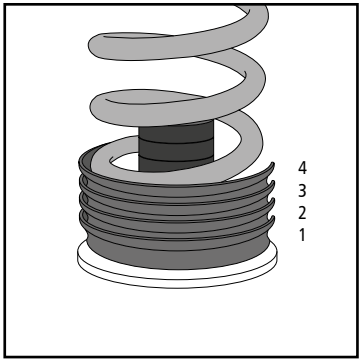


Figure 45, 4 spring travel limiters
per shock strut for 4 SPACCER®

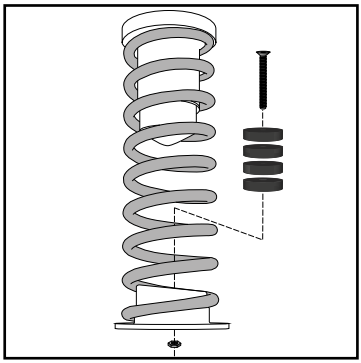


Figure 46, Installing additional spring travel limiters compared to original spring travel limiters on the end stop

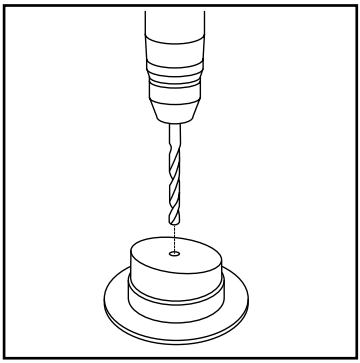


Figure 47, Pre-drilling the end stop of the original spring travel limiter

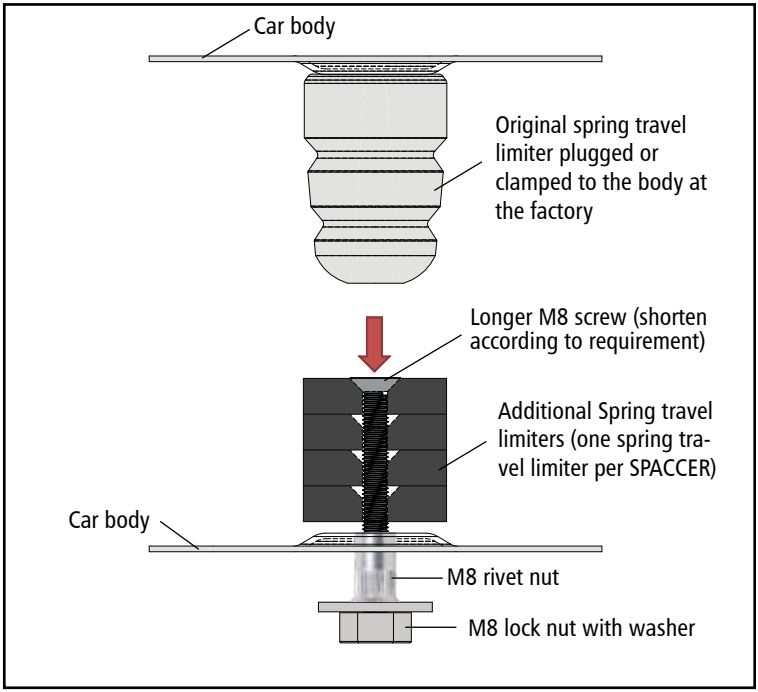


Figure 48, Installation of the additional spring travel reducers with the original spring travel limiter plugged in or clamped in place.

VII Installation of SPACCER® for leaf springs

Before installation (do not lift the vehicle yet)

Mark the original mounting position of the spring tension plate before removal (Figure 49). Note the centering axis of the leaf spring with the heart bolt for placement on the axle (Figure 50). Before removing the leaf spring, check that the new spring U-bolts will fit in length (original length plus raise dimension), width and radius. If necessary, order a matching accessory spring U-bolt (see following page for details).

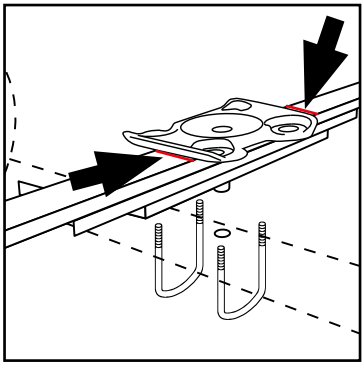


Figure 49, original installation position

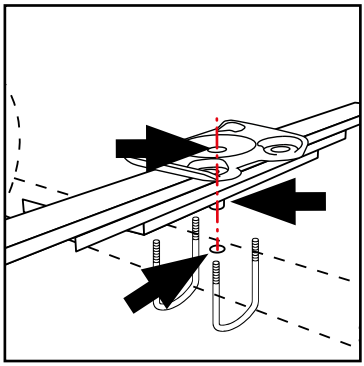


Figure 50, Centering axis

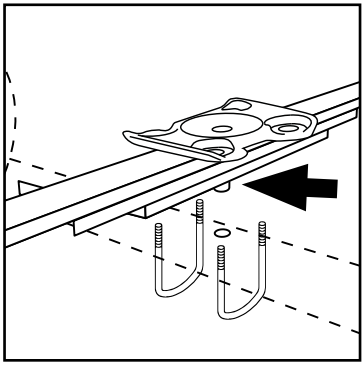


Figure 51, original heart bolt

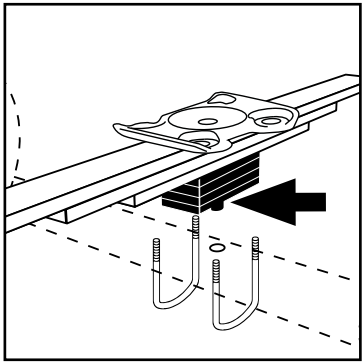


Figure 52, SPACCER heart bolt

Lift the vehicle with the aid of a lifting platform. Loosen the nuts of the spring shackle (bracket). Measure the diameter of the original kingpin (Figure 51) and check the fit of the SPACCER® kingpin (Figure 52). If necessary, replace it with an exact fit. Heart studs of different sizes are optionally available as accessories.

Install SPACCER® for leaf springs

Center the SPACCER® on the heart bolt of the leaf spring. Position the spring clamping plate at the previously marked original position. Make sure that the SPACCER® heart bolt fits snugly in the centering on the axle (Figure 53). Use the extended spring clips (clamps) and screw them back onto the spring clamping plate. Observe the manufacturer's torque specifications (workshop manual).

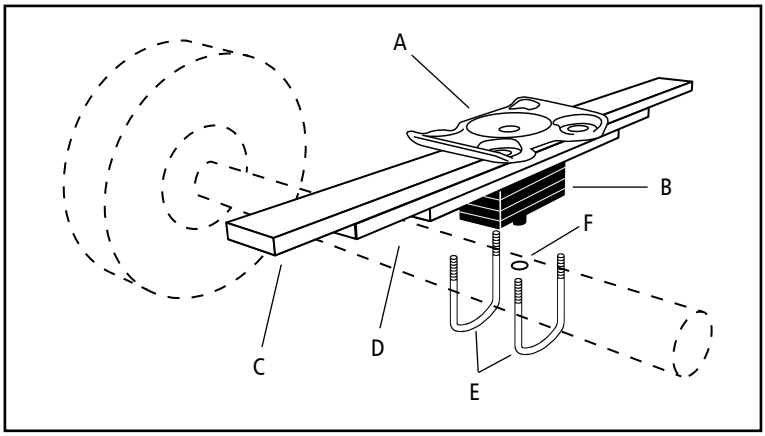


Figure 53, leaf spring with spring clamping plate (A), elevation (B), leaf spring (C), axle (D) and new, extended spring shackle (E) and centering on axle (F).

Follow the manufacturer's instructions for the installation and removal of the leaf springs on your vehicle.

Oversize spring shackle

Find suitable accessories spring shackle (bracket)

The spring U-bolts included in the scope of delivery are determined based on the chassis number to match their leaf spring and supplied.

If they do not match the leaf springs of your vehicle, you can easily exchange them. To do this, first enter the appropriate shape of your spring U-bolt in the table on the next page using Figure 54.

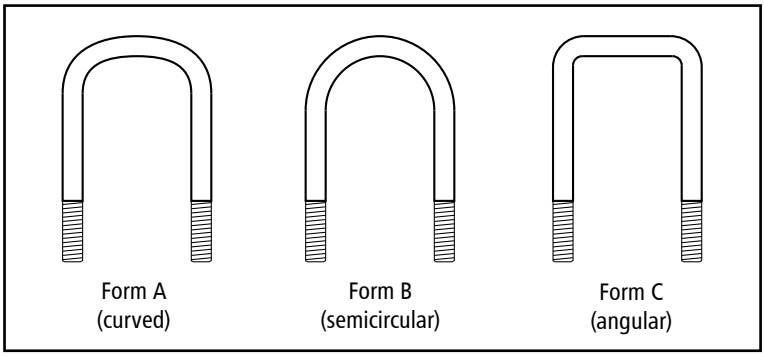


Figure 54, different spring clip shapes

In step 2, measure the dimension for the spring U-bolt width (Figure 55). Enter this in the table rounded to whole millimeters (e.g. 61mm - not 61.75mm).

In step 3, measure the thread diameters of the clamps in whole millimeters. Common thread diameters for spring U-bolts are 8mm, 10mm, 12mm, 14mm, 16mm, 18mm, 20mm, 22mm and 24mm with an M thread. As the 4th and final step, enter the thread pitch in the table on the next page. Common thread pitches for spring U-bolts are 1.5mm or 2.0mm.

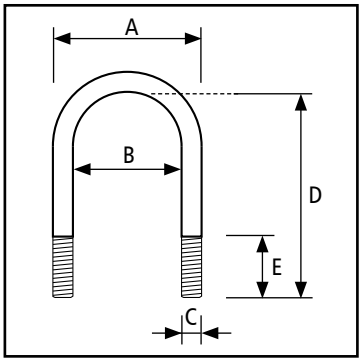


Figure 55, outside width (A), inside width (B), thread diameter (C), stirrup height to lower edge of stirrup (D) and thread height (E)

Measurement sheet for spring shackle

	Front axle	Rear axle
Spring shackle shape		
Spring shackle dimension A	mm	mm
Spring shackle dimension B	mm	mm
Spring shackle dimension C	mm	mm
Spring shackle dimension D	mm	mm
Spring shackle dimension E	mm	mm
Spring shackle dimension F	mm	mm
Thread diameter	mm	mm
Thread pitch	. mm	. mm

Matching spring shackles are always included in the scope of delivery.

Before removing the leaf spring, check whether the new spring shackle (bracket) correspond to the original in width and radius and whether the length of the spring shackle is longer by the amount of raising compared to the original spring shackle (Figure 54 and Figure 55).

VIII Installation of SPACCER® for barrel springs (double conical compression springs)

Before installation (do not lift the vehicle yet)

Mark the original installation position of the barrel spring before removal (Figure 56) as well as top and bottom. Note centering on the original spring plate or chassis, as well as diameter and height!

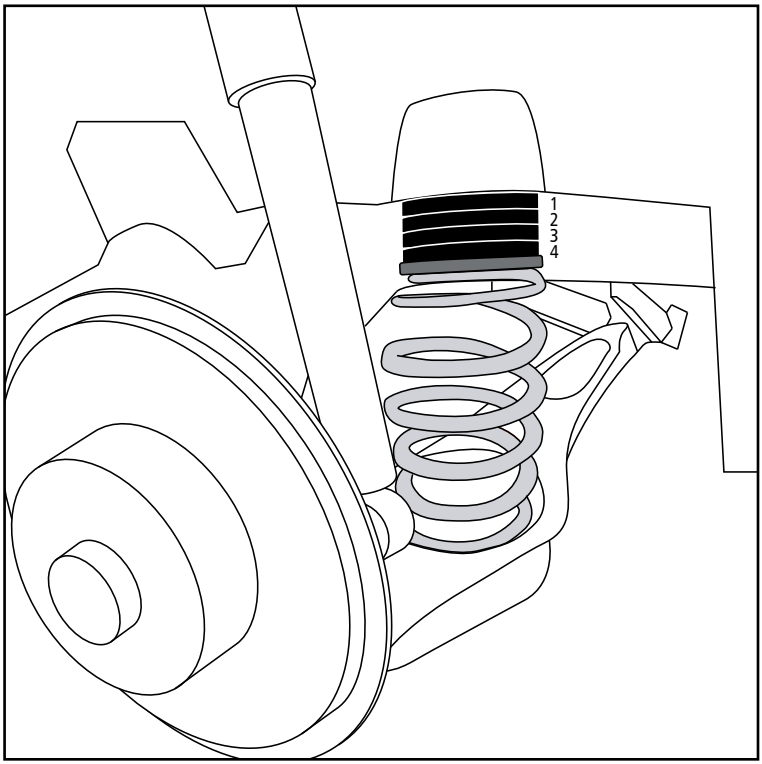


Fig. 56, Barrel spring (double conical spring) with SPACCER®

Lift the vehicle with the aid of a lifting platform. Loosen the shock absorber. Dismantle the spring strut on all wheels that you want to raise according to the manufacturer's instructions. Check the fit and diameter of the SPACCER® in the spring plate (Figure 57). Insert the SPACCER® centrally into the spring guide at the bottom and into the centering of the body at the top (Figure 58). Optionally, the SPACCER® and body can be glued together (silicone adhesive).

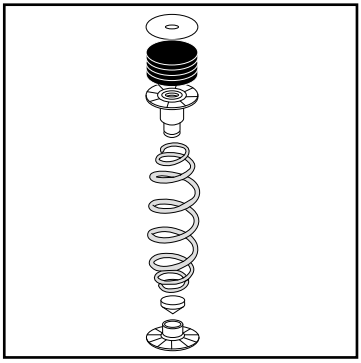


Fig. 57, Mount SPACCER® over the spring

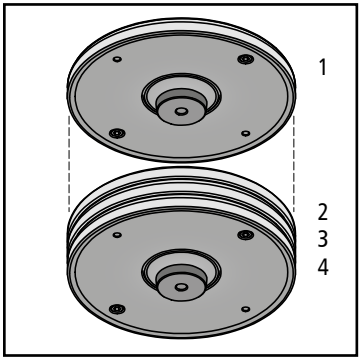


Fig. 58, SPACCER® for barrel springs

In the case of several SPACCER®, make sure that the centering pins of the SPACCER® engage correctly with each other.

IX SPACCER® Rubber Profile Installation

Use a set of rubber profiles, one on the left and one on the right side of the vehicle - and only together with SPACCER®.

Following additional equipment is required for installation:


Gloves


Lubricant
(Soap-suds or silicone)


Cutter


Scissors

1. **Apply lubricant**
   To make the rubber profile slide more easily into the SPACCER® groove (Fig. 59), apply the lubricant along the groove of the SPACCER® as well as on the bottom side of the profile (Fig. 60). Use week soapsuds or a silicone spray.

2. **Prepare rubber profile**
   Turn the shorter side of the rubber profile towards you (Fig. 61). Cut the rubber profile at an angle of 15 degrees (Fig 62). The cut-off part shouldn't be longer than 2 cm.

3. **Position and install rubber profile**
   Position the rubber profile in such a way that the longer side of it points towards the outside of the SPACCER®. Start at the SPACCER® end cap side (Fig. 63) with the angled profile end. Little by little, insert the rubber profile into the SPACCER® goove. Make sure that the rubber profile lies flat on the SPACCER® without forming waves.

4. **Cut-off excess length**
   Using a cutter or a pair of scissors cut-off the protruding end of the rubber profile on the end side of the SPACCER® (Fig. 64).

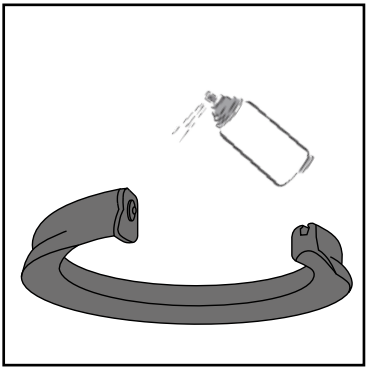


Fig. 59, Apply lubricant to SPACCER groove

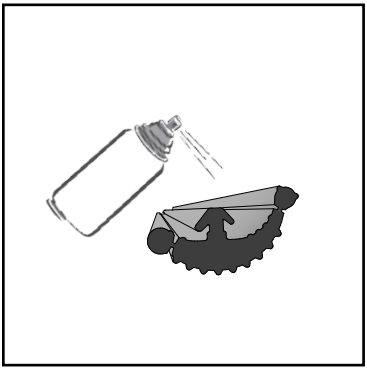


Fig. 60, Apply lubricant to bottom-side of rubber profile

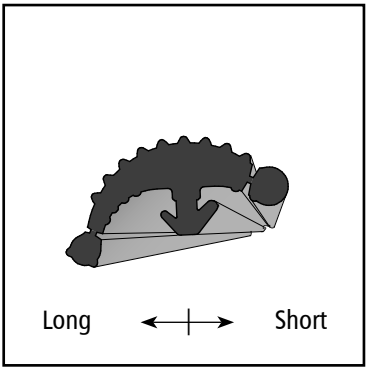


Fig. 61, Align rubber profile

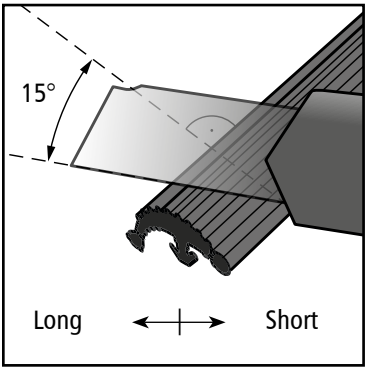


Fig. 62, Cut-off rubber profile at an angle of 15 degrees

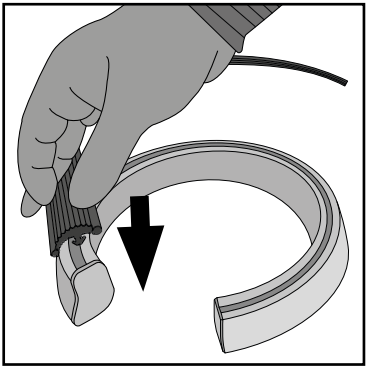


Fig. 63, Position rubber profile at SPACCER end cap and press into groove

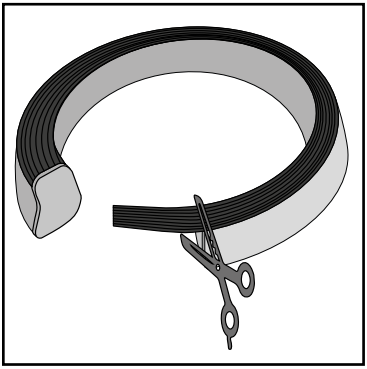


Fig. 64, Cut-off excess length

X Checking the Vehicle

With the SPACCER® installed install the wheels and lower the vehicle to the ground. Release the parking brake. Verify that a gear is selected or the automatic gear selection lever is in position „P“.

Check following items:

1. Check the alignment of your vehicle.
2. Adjust the headlight settings.
3. Depending on the type/model of your vehicle, re-adjusting of the proportioning valve may be required.
4. Stick the SPACCER® label on the door post.

A tick-off check list is provided on the next page.

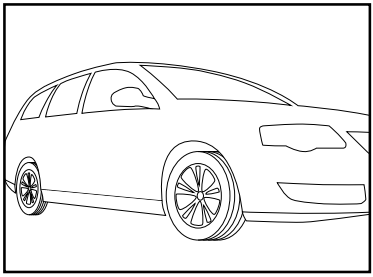


Figure 65: Vehicle prior lift

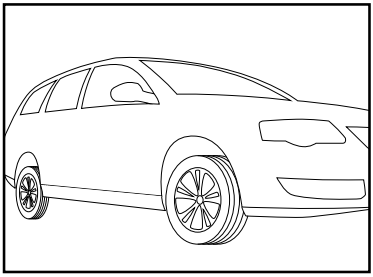


Figure 66: Vehicle after lift

Drive safely.

Vehicle Checklist

- ☐ Vehicle alignment
- ☐ Headlight setting
- ☐ Correct proportioning valve setting
- ☐ Label stuck to the door post

Notes

Installation combinations height table

The table below shows the combination of SPACCER® and SPACCER® rubber profiles that will give you the desired degree of elevation. The SPACCER® rubber profile is used for fine-tuning the desired height of the in 3mm (0.12“) increments.

	SPACCER (without rubber profile)	SPACCER +3mm (1 rubber profile)
		
1 SPACCER	12mm (0.47“)	15mm (0.59“)
		
2 SPACCER	24mm (0.94“)	27mm (1.06“)
		
3 SPACCER	36mm (1.42“)	39mm (1.54“)
		
4 SPACCER	48mm (1.89“)	51mm (2.01“)

You can also use SPACCER® without the rubber profile. The rubber profile cannot be used without installing a SPACCER®.

SPACCER +6mm (2 rubber profiles)	SPACCER +9mm (3 rubber profiles)	SPACCER +12mm (4 rubber profiles)
–	–	–
		
30mm (1.18“)	–	–
		
42mm (1.65“)	45mm (1.77“)	
		
54mm (2.13“)	57mm (2.24“)	60mm (2.36“)

SPACCER® Suspension Lift Kits, Industriestr. 27, 89257 Illertissen, Germany
Phone: +49 7303 - 2222, Fax: +49 7303 - 2002, Email: info@spaccer.com

www.spaccer.com