



EZ - Ride Suspension

Part # 36004

2003 - June 2007 Dodge Ram 2500 / 3500
6" suspension system

<u>Part #</u>	<u>Description</u>	<u>Qty.</u>
36000-02	Upper control arms	2
36000-03	Lower control arms	2
36000-04	Track bar relocation bracket	1
DODDSSWAY-01	DS upper sway bar relocation bracket	1
DODPSSWAY-01	PS upper sway bar relocation bracket	1
34000-10	Pitman arm	1
36000NB1	Hardware bag	1
36005SL	Hardware bag	1
34000PL	Hardware bag	1
BL404	4" rear lifted blocks	2
5U-31215R	9/16" x 3 1/2" x 15" round u-bolts	4
5U-41817R	9/16" x 4 1/8" x 17" round u-bolts	4
916NW	Hardware bag	1
LUBE	Poly lube packs	2
36004INST	Instruction manual (customer copy)	1
36004INST	Instruction manual (installer copy)	1
MIRRORHANGER	Rear view mirror hanger	1
WARNINGDECAL	Warning decal	1
DECAL	Window sticker	1

Congratulations on your selection to purchase a Tuff Country EZ-Ride Suspension System. We at Tuff Country are proud to offer a high quality product at the industries most competitive pricing. Thank you for your confidence in us, and our product.

Before installation begins, it is the customers/installers responsibility to make sure that all parts are on hand. If any parts are missing, please feel free to call one of our customer service representatives @ (801) 280-2777.

Torque settings:

5/16"	15—18 ft lbs.
3/8"	28—32 ft lbs.
7/16"	30—35 ft lbs.
1/2"	65—85 ft lbs.
9/16"	85—120 ft lbs.
5/8"	95—130 ft lbs.
3/4"	100—140 ft lbs.

Installation manual

6" suspension system

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Part # 36004

sj111507rev.03

Important customer information:

Tuff Country EZ-Ride Suspension highly recommends that a qualified and/or certified mechanic performs this installation.

If you desire to return your vehicle to stock, it is the customers responsibility to save all stock hardware.

This vehicles reaction and handling characteristics may differ from standard cars and/or trucks. Modifications to improve and/or enhance off road performance may raise the intended center of gravity. Extreme caution must be utilized when encountering driving conditions which may cause vehicle imbalance or loss of control. **DRIVE SAFELY!** Avoid abrupt maneuvers, such as sudden sharp turns which could cause a roll over, resulting in serious injury or death.

It is the customers responsibility to make sure that a re-torque is performed on all hardware associated with this suspension system after the first 100 miles of installation. It is also the customers responsibility to do a complete re-torque after every 3000 miles or after every off road use.

After the original installation, Tuff Country EZ-Ride Suspension also recommends having the alignment checked every 6 months to ensure proper tracking, proper wear on tires and front end components. Tuff Country EZ-Ride Suspension takes no responsibility for abuse, improper installation or improper suspension maintenance.

It is the responsibility of the customer or the mechanic to wear safety glasses at all times when performing this installation.

It is the customers/installers responsibility to read and understand all steps before installation begins. OEM manual should be used as a reference guide.

Make sure to use lock tite on all new and stock hardware associated with this installation.

The Tuff Country EZ-Ride Suspension product safety label that is included in your kit box must be installed inside the cab in plain view of all occupants.

Recommended tools selection:

Cut off wheel
Sawzall
Torque wrench
Standard socket set
Standard wrench set
Metric socket set
Metric wrench set
Tape measure
Hydraulic floor jacks

Hardware bag 36000NB1 includes:

<u>Description</u>	<u>Quantity</u>
9166B (9/16"x 6" bolt)	1
916512B (9/16" x 5 1/2" bolt)	1
916312B (9/16" x 3 1/2" bolt)	1
9164B (9/16" x 4" bolt)	2
12WA (1/2" USS flat washer)	8
SUW-916 (9/16" u-bolt harden washer)	2
916UN (9/16" unitorque nut)	4
124B (1/2" x 4" bolt)	1
716WA (7/16" USS flat washer)	2
12UN (1/2" unitorque nut)	1
716112B (7/16" x 1 1/2" bolt)	4
38WA (3/8" USS flat washer)	8
716UN (7/16" unitorque nut)	4
M1480B (14 mm x 80 mm bolt)	1
M14WA (14 mm washer)	2
S10107 (fender washer)	4
38112B (3/8" x 1 1/2" bolt)	6
516WA (5/16" USS flat washer)	12
38NLN (3/8" Nylock nut)	6

Hardware bag 36005SL includes:

<u>Description</u>	<u>Quantity</u>
S10059 (.875" x .550" x 2.370")	4
S10060 (.875" x .640" x 2.630")	4
S10061 (1.130" x .610" x 2.270")	1
S10062 (1.130" x .610" x 1.330")	1
34000-07 (Nut bracket)	1

Hardware bag 34000PL includes:

<u>Description</u>	<u>Quantity</u>
MO2617 (control arm bushing)	16
MO3509 (front upper shock bushing)	2
MO3510 (front upper shock bushing)	2

Hardware bag 916NW includes:

<u>Description</u>	<u>Quantity</u>
SUW-916 (9/16" harden u-bolt washer)	8
916HN (9/16" u-bolt high nut)	8

Please follow instructions carefully:

Before installation begins, measure from the center of the hub, to the bottom of the fender well, and record measurements below.

Pre-installation measurements:

Driver side front: _____

Passenger side front: _____

At the end of the installation take the same measurements and compare to the pre-installation measurements.

Post-installation measurements:

Driver side front: _____

Passenger side front: _____

Front end installation:

1. Working on the driver side, remove the stock sway bar from the stock sway bar end link. Save the stock sway bar end link hardware for later re-installation. Repeat the procedure on the passenger side. Now remove the stock sway from the stock end links and let the stock sway bar hang.

Photo # 1

Step # 1 needs to be performed with weight of the vehicle on the ground. If this step is not performed with the weight of the vehicle on the ground, damage will occur to the stock sway bar end links.

2. Block the rear tires of the vehicle so that the vehicle is stable and can't roll backwards. Safely lift the front of the vehicle, and support the frame with a pair of jack stands. Place a jack stand on both the driver and passenger side. Next, remove the tires and wheels from both sides.

3. Place a pair of hydraulic floor jacks under the front axle. Place one on the driver side and one on the passenger side. Carefully raise up on both hydraulic floor jacks at the same time until the hydraulic floor jacks come into contact with the front axle.

4. Working on the driver side, remove the stock nut that connects the stock tie rod end to the stock pitman arm. Save the stock nut for later re-installation. Using a hammer, carefully break the taper on the stock tie rod that connects to the stock pitman arm. **Special note: Take special care not to rip or tear the stock outer tie rod boot. The new pitman arm has a reverse taper on it, after the new pitman arm has been installed, the stock outer tie rod needs to be rotated 180 degrees.**

Photo # 2

5. Next, remove the stock nut and lock washer from the sector shaft on the stock steering box. Save the stock hardware for later re-installation. Using a pitman arm puller,

the new upper control arm to the stock mounting location on the stock front axle. Secure using the new 9/16" x 4" bolt and hardware. **Do not tighten at this point. Special note: Carefully pushing the stock exhaust over to the driver side will help make clearance to perform this step on the passenger side.**

Photo # 15 / passenger side upper mount

Photo # 16 / driver side upper mount

17. Locate the new lower control arms. Locate (8) control arm bushings from hardware bag 34000PL. Also, locate (4) S10060 lower control arm sleeves from hardware bag 36005SL. **Special note: The new lower control arms are the longer of the 2 arms. Insert the new poly bushings into each end of the new lower control arms. Special note: Make sure to use a lithium or moly base grease prior to inserting the new bushings into the new lower control arms. This will increase the life of the bushing as well as prevent squeaking. Next, install the new lower control arm sleeves into the previously installed poly bushings.**

18. Locate the stock lower control arm mounting hardware. Working on the driver side, install the new lower control arm to the stock frame mount location and secure using the stock hardware. **Do not tighten at this point.** Next, install the new lower control arm to the stock mounting location on the stock front axle. Secure using the stock hardware. **Special note: Raising the axle to ride height and moving the axle up and down will make for easier lower control arm installation. Slight prying of the stock control arm bracket also may be needed to make installation easier.** Add some thread locker or lock tite to the stock lower axle mounting hardware and refer back to the marks that were scribed in step # 11 and torque the stock hardware to **85 ft lbs.**

Photo # 17 / driver side frame mount

Photo # 18 / passenger side axle mount

19. Locate the new front shocks. **Special note: Shocks are not included with this suspension system, shocks need to be ordered as a separate part number. Tuff Country EZ—Ride Suspension recommends using a 30" fully extended nitrogen gas shock. If you have not already ordered your shocks, please contact Tuff Country or your local Tuff Country dealer and order the proper front shocks.** Install the new poly bushings and crush sleeve into the bottom part of the new shock. **Special note: Make sure to use a lithium or moly base grease prior to inserting the new bushings and sleeves into the new lower eyelet of the new shock. This will increase the life of the bushing as well as prevent squeaking.**

20. Locate the new upper shock grommets from hardware bag 34000PL. Also, locate (4) S10107 upper shock washers from hardware bag 36000NB1. Install the new shock grommets and washers onto each of the new front shocks. Working on the driver side, install the new front shock back into the stock location. Repeat procedure on the passenger side. **Special note: Install the new shock through the engine compartment to make shock installation easier.**

21. Locate the stock lower shock hardware. Working on the

driver side, secure the lower portion of the new shock into the stock lower location using the stock hardware. Make sure to use thread locker or lock tite and torque to **85 ft lbs.** Repeat procedure on the passenger side.

Photo # 19

22. Locate the stock upper shock tower and the stock hardware. Working on the driver side, install the stock upper shock tower into the stock location and secure using the stock hardware. Make sure to use thread locker or lock tite and torque to **38 ft lbs.** **Special note: Make sure that the new shock that was installed fits properly into the upper shock tower.** Repeat procedure on the passenger side.

23. Locate the upper shock grommets and the new upper shock stud hardware that was supplied with new shocks. Working on the driver side, secure the new shock to the stock upper shock tower using the new shock stud hardware, new grommets and washer. Torque to **38 ft lbs.** Repeat procedure on the passenger side.

24. Locate the new track bar relocation bracket. Locate (1) 9/16" x 3 1/2" bolt, (2) 1/2" USS flat washers and (1) 9/16" unitorque nut from hardware bag 36000NB1. Also, locate (1) S10061 crush sleeve from hardware bag 36005SL. Working on the driver side, install the new track bar relocation bracket into the stock location and secure using the new 9/16" x 3 1/2" bolt, crush sleeve and hardware. **Do not tighten at this point.**

Photo # 20 / Photo # 21

Photo # 22

25. Hold the newly installed track bar relocation bracket up flush with the stock track bar location. Use the holes in the new track bar relocation bracket as guides, carefully drill (2) 1/2" holes into the stock track bar location. **Special note: To make drilling easier, remove the (3) stock bolts that hold the stock steering box to the inside of the stock frame rail. Move the stock steering box out of the way during drilling. After the (2) 1/2" holes have been drilled into the stock track bar bracket, re-install the stock steering box back into the stock location using the stock hardware. Make sure to use thread locker or lock tite. Torque the stock steering box hardware to 95 ft lbs.**

Photo # 23

26. Locate (1) 1/2" x 4" bolt, (2) 7/16" USS flat washers and (1) 1/2" unitorque nut from hardware bag 36000NB1. Also locate (1) S10062 crush sleeve from hardware bag 36005SL. Secure the new track bar bracket to the previously drilled holes using the new 1/2" x 4 1/4" bolt, crush sleeve and hardware. Make sure to use thread locker or lock tite. Torque the new 1/2" bolt to **85 ft lbs.** Move back to the new 9/16" x 3 1/2" bolt and add some thread locker or lock tite and torque to **95 ft lbs.**

Photo # 24 / Photo # 25

27. Locate (1) 14 mm x 80 mm bolt and (2) 14 mm flat washers from hardware bag 36000NB1. Also, locate the stock retaining nut. Install the stock track bar into the newly installed track bar relocation bracket and secure using the

Lower down approximately 4". **Special note: Make sure not to over extend any brake lines or hoses when lowering axle.**

43. Locate (2) new 4" lifted rear blocks. Working on the driver side, install (1) new 4" lifted block between the stock rear axle and the stock spring assembly. **Special note: The new 4" lifted block has a taper to it, the small end of the block needs to be installed towards the front of the vehicle.** Repeat procedure on passenger side.

44. Raise up on both hydraulic floor jacks at the same time until the driver and passenger side stock spring assembly seats flush with newly installed 4" block.

If the vehicle that you are working on is a Dodge Ram 2500 that does not have the 24 valve high output rear end please follow step # 45.

If the vehicle that you are working on is a Dodge Ram 2500 that has the 24 valve high output rear end or a Dodge Ram 3500, please follow step # 46.

45. Locate (4) new 9/16" x 3 1/2" x 15" round u-bolts. Locate (8) 9/16" u-bolt high nuts and (8) 9/16" u-bolt washers from hardware bag 916NW. Also, locate the stock upper u-bolt plates. Working on the driver side, install (2) new 9/16" x 3 1/2" x 15" round u-bolts into the stock location and secure using the new 9/16" high nuts and washers. Torque to 120 ft lbs. Repeat procedure on passenger side.

Photo # 30

46. Locate (4) new 9/16" x 4 1/8" x 17" round u-bolts. Locate (8) 9/16" u-bolt high nuts and (8) 9/16" u-bolt washers from hardware bag 916NW. Also, locate the stock upper u-bolt plates. Working on the driver side, install (2) new 9/16" x 4 1/8" x 17" round u-bolts into the stock location and secure using the new 9/16" high nuts and washers. Torque to 120 ft lbs. Repeat procedure on passenger side.

Photo # 30

47. Locate the new rear shocks. **Special note: Shocks are not included with this suspension system, shocks need to be ordered as a separate part number, Tuff Country EZ — Ride Suspension recommends using a 33" fully extended nitrogen gas shock.** Also, locate the stock upper and lower shock hardware. Install the new poly bushings into each end of the new shocks. **Special note: Make sure to use a lithium or moly base grease prior to inserting the new bushings into the new shock. This will increase the life of the bushing as well as prevent squeaking.** Install the proper shock sleeve into the upper and lower eyelets of the new shocks. Working on the driver side, install the new rear shocks absorbers into the stock location using the stock hardware. Repeat procedure on passenger side. Make sure to use thread locker or lock tite and torque to 85 ft lbs.

48. Check and double check to make sure that all steps related with the rear end were performed properly. Check and double check to make sure that all stock and new hardware is torqued to proper torque specifications.

49. Remove both hydraulic floor jacks from under the rear axle.

50. Install the tire wheels and carefully lower the vehicle to the ground.

51. Move back to the front upper and lower control arm hardware and add some thread locker or lock tite and torque the stock and new hardware to 95 ft lbs.

Photo # 31 / Photo # 32

52. Locate the sway bar end link hardware that was removed in step # 1. Working on the driver side, install the stock sway bar end link back to the stock sway bar and secure using the stock hardware. Make sure to add thread locker or lock tite and torque to 18 ft lbs.

Photo # 33

53. Move back to the new and stock hardware that connects the new sway bar relocation brackets to the stock frame rail and the stock sway bar to the new sway bar relocation brackets and add some thread locker or lock tite and torque the new and stock hardware to 38 ft lbs.

Photo # 34

Congratulations, installation complete!

Special note: After the completion of the installation, Tuff Country EZ-Ride Suspension recommends taking the vehicle to an alignment shop and having a proper front-end alignment performed.

Tuff Country EZ-Ride Suspension recommends that a complete re-torque is done on all bolts associated with this suspension system. It is the customers responsibility to make sure that a re-torque is performed on all hardware associated with this suspension system after the first 100 miles of installation. It is also the customers responsibility to do a complete re-torque after every 3000 miles or after every off road use. Neglect of following these steps could cause brackets to come loose and cause serious damage to the suspension system and to the vehicle.

Tuff Country EZ-Ride Suspension packages (2) sets of instruction sheets with this box kit. (1) is for the installer and (1) is for the customer. The (1) for the customer has some post installation procedure literature and it is the installers responsibility to make sure that the customer receives a copy of the installation manual along with the literature.

If you have any questions or concerns, please feel free to contact Tuff Country or your local Tuff Country dealer.

After completion of the installation, Tuff Country EZ-Ride Suspension highly recommends that the installer informs the customer that whenever they have their vehicle lifted in the air by the frame rail, the front sway bar end links need to be disconnected from the stock sway bar. If this is not done, damage will occur to the stock front end links.

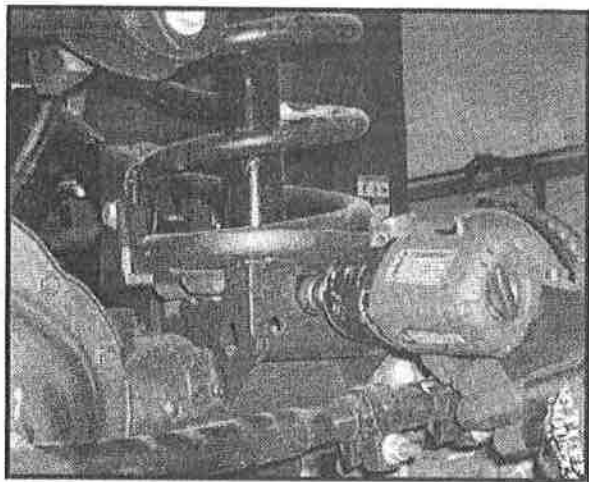


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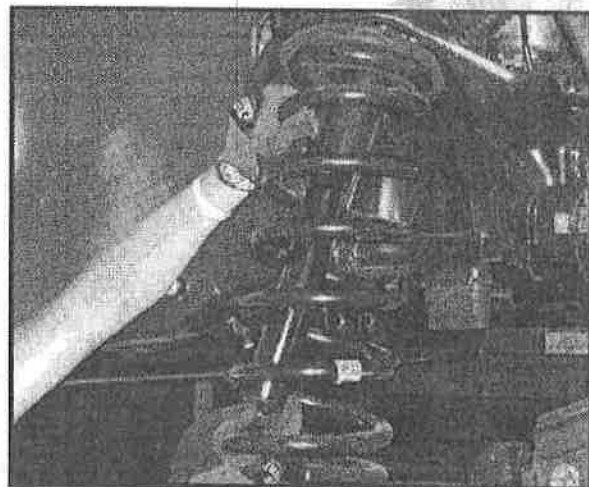


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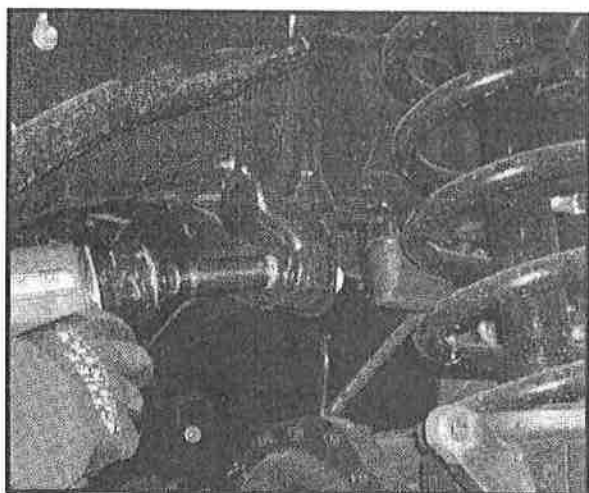


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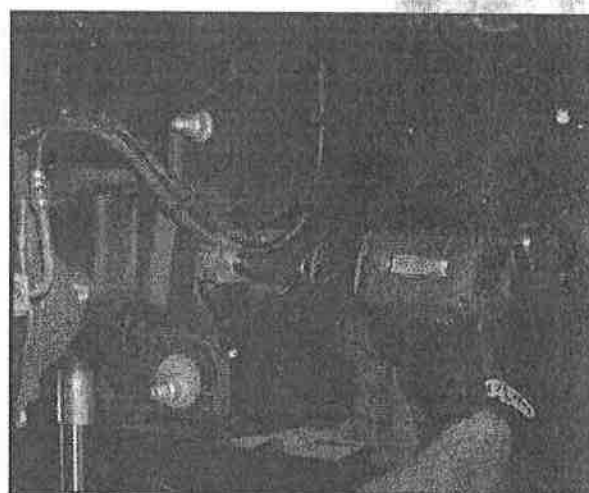


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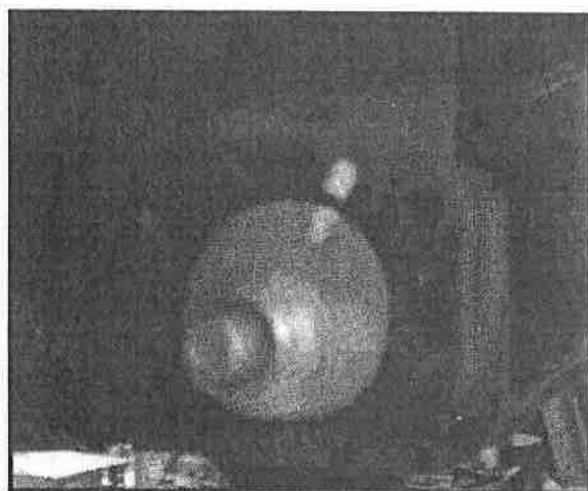


Photo # 11



Photo # 12

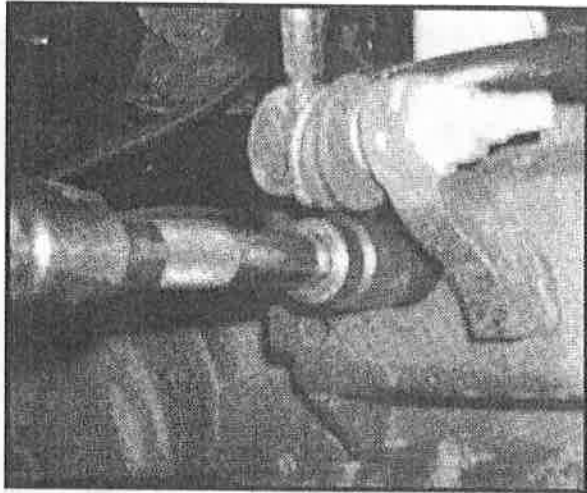


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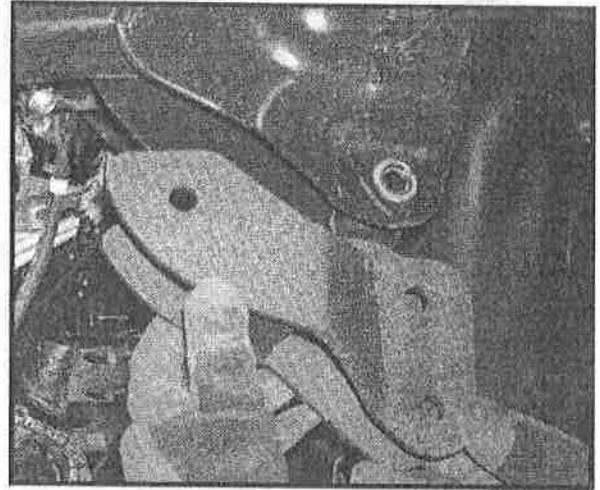


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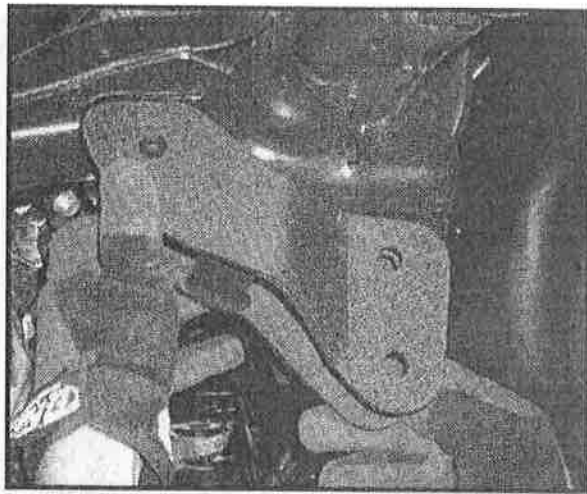


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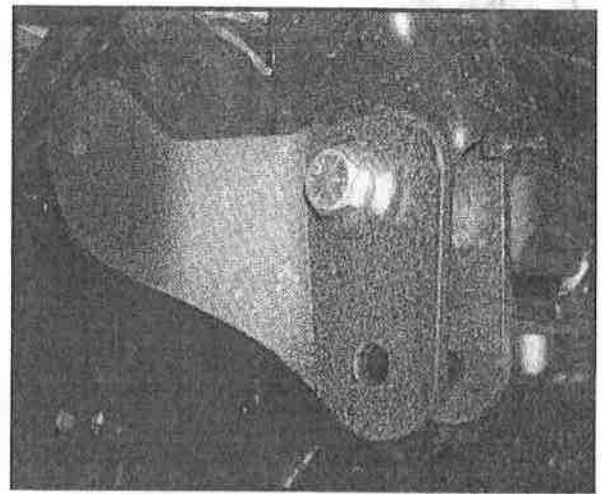


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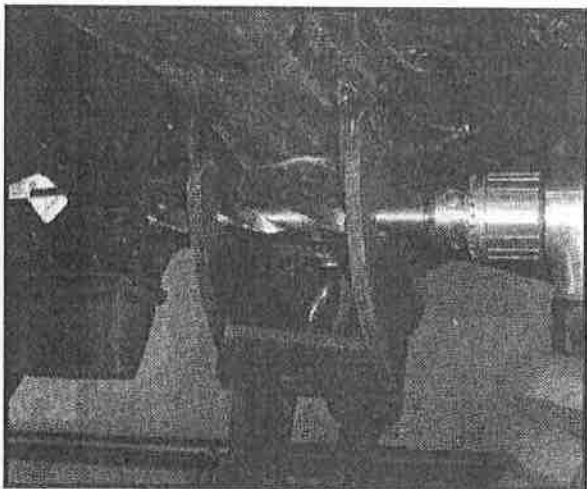


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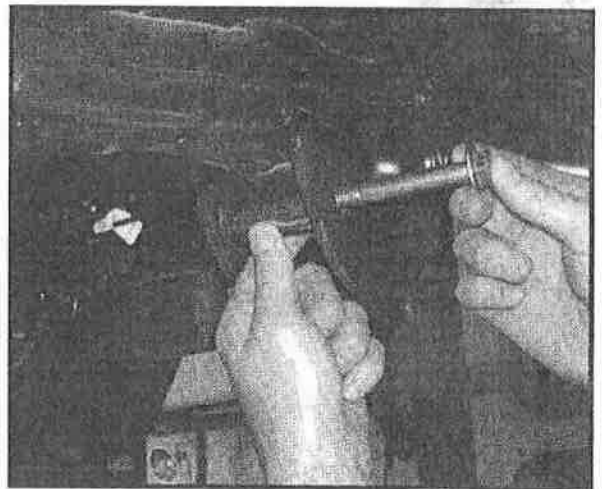


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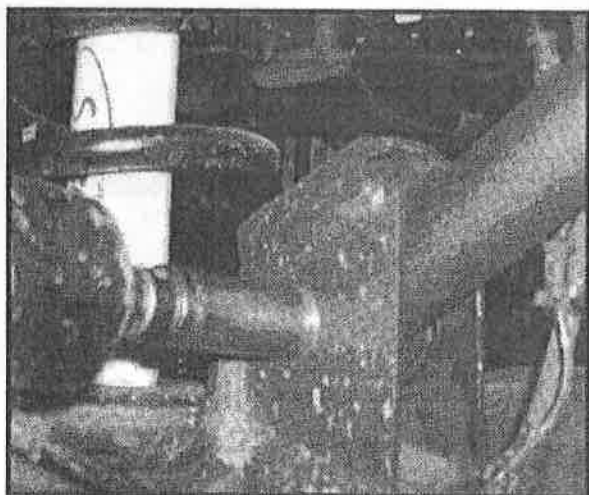


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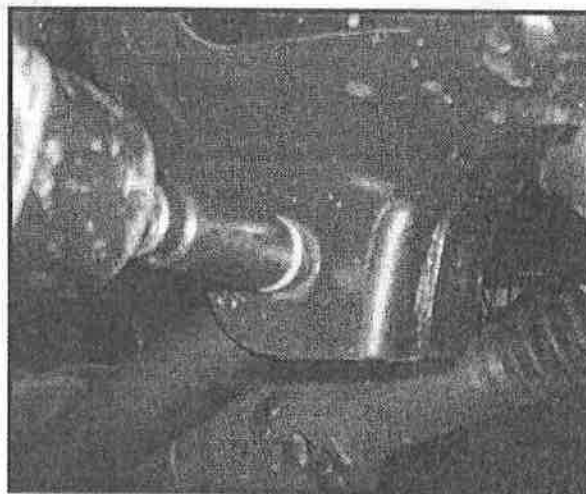


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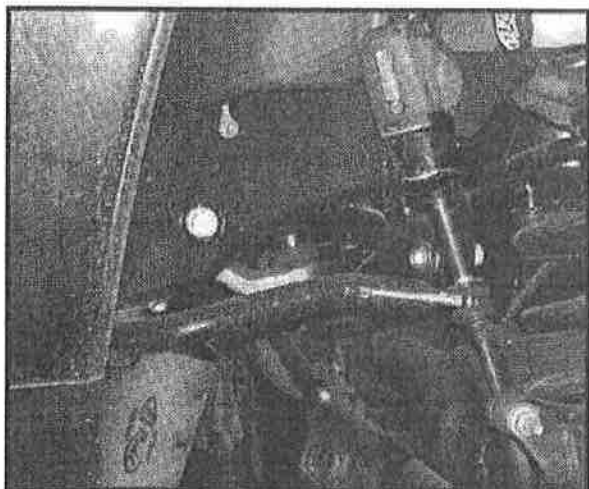


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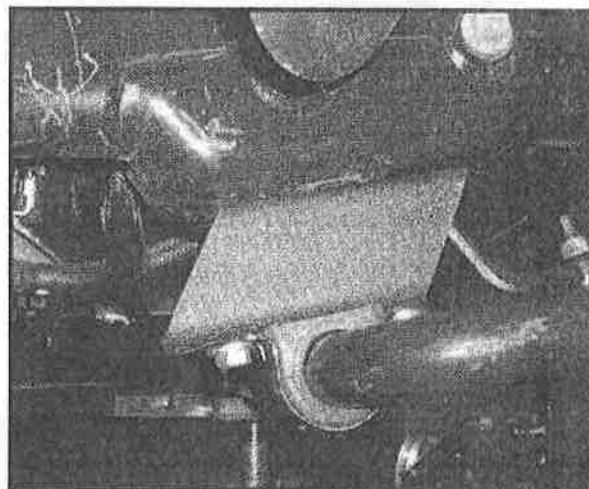


Photo # 34