

DMS North America

Unit P-Q-R

3225, de L'Industrie

St-Mathieu-de-Beloeil, QC

J3G 4S5

Tel: (415) 462-1575

Fax: (450) 281-2100



Visit our new website at
www.dmsnorthamerica.com

50MM SERVICE INSTRUCTIONS

DISCLAIMER

THESE INSTRUCTIONS ARE DESIGNED TO SUIT
DMS SUSPENSION KITS. DMS OR ITS AFFILIATES ARE NOT
RESPONSIBLE FOR ANY FAILURES OR DAMAGE AS A
RESULT OF IMPROPER INSTALLATION OR SETUP.

IT IS IMPORTANT
THAT THESE INSTRUCTIONS ARE
READ CAREFULLY BEFORE USE AND SETUP.

DMS SHOCK ABSORBERS ARE DESIGNED FOR COMPETITION AND
HIGH END USE. AS SUCH THESE UNITS WILL REQUIRE
MAINTENANCE AND REBUILDS FROM TIME TO TIME BASED ON
USAGE AND CONDITIONS.

IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT
YOUR LOCAL DISTRIBUTOR OR MANUFACTURER.

DMS North America

Unit P-Q-R
3225, de L'Industrie
St-Mathieu-de-Beloeil, QC
J3G 4S5
Tel: (415) 462-1575
Fax: (450) 281-2100



Visit our new website at
www.dmsnorthamerica.com

SERVICE INSTRUCTIONS

CUSTOMER SERVICING INSTRUCTIONS.

50mm (all models) - STRUT TYPE:

STEP 1:

Remove the shock absorbers from the car. Do not rest shock absorbers on the adjusters, breathers or brackets.

STEP 2:

Remove any protection that is around the thread of the Strut Body below where the spring seat is located (diagram no.1). DMS recommends that a cloth tape (race tape) or duct tape be wrapped around the exposed thread to protect it upon reassembly.





STEP 3:

Remove the top mount assembly and the spring from the strut. Measure the position of the spring seat on the strut before removing the spring seats so that the same ride height can be found upon re-assembling the strut.

STEP 4:

Clean any dirt and grease off of the strut. It is recommended to use a high-pressure water sprayer with mild detergent and/or degreaser to remove excess debris, etc.

STEP 5:

Clamp the inverted strut (place up-side down) into a vice, being careful not to damage the threads for the spring perches (wrap a rag around the thread and do not tighten excessively, or use soft jaws on an air vice). Once clamped in position the bottom nut needs to be removed. To be able to undo the nut without damaging anything and with relative ease, intense heat must be applied to the nut using an electric heat gun.

*****Caution: Do not use a naked flame*****

*****Caution: Do not use an impact gun excessively*****

Use only short bursts, and avoid spinning the shaft. If the nut does not break loose immediately, heat some more until there is a light smoke coming from the nut (zinc coating will smoke when sufficiently heated). Avoid continuous spinning and excessive force. Use the impact gun on a low torque setting in short sharp bursts.

*****Caution: Avoid spinning the shaft at high speed *****

This can cause damage to the shock absorber which will require trained personnel to repair. Once the bottom nut has been removed slide the Strut Body off of the insert.



STEP 6:

Check the insert for any bends in the tube, the maximum acceptable bend is 0.75mm (.030"inch) from one end to the other.

*****Caution: Performance is severely affected if bent and will cause excessive wear on other components*****

The easiest way to check for this is to use a lathe chuck and a dial indicator (diagram no.2). If a lathe is not accessible then V-Blocks can be used as a substitute. Remember to always turn the insert by hand; do not start the lathe to spin the insert. If the maximum acceptable bend is exceeded the tube will need to be replaced by DMS. Also verify and clean all threads and test the adjuster. If the insert tube is in the accepted range then clean the insert with a rag and a house hold spray or light detergent, then sit the insert aside ready for re-assembling.

DIAGRAM NO.2





STEP 7:

Clean the old grease and any dirt out of the inside of the strut tube with a parts washer (non-caustic) and toilet soft brush. Be careful not to strip the Teflon coating off of the bushes. Rinse in hot water and set aside to dry. New grease needs to be applied between the two bushes inside the Strut Body (diagram no.3). **Only** DMS grease should be used as it is specially formulated to prolong the life of the strut and increase performance.

*****Caution: Non DMS grease will affect performance and cause premature bushing wear as well as void any manufacturers warranty*****

A hacksaw blade or arc welding stick makes a good tool for positioning the grease evenly between the two bushes. Place the grease so it is level with the bushes. If the Dust Seal at the top of the strut body needs to be replaced with a new one, do so at this time using only authentic parts purchased from DMS. You will need to remove the old one by levering it out with a flat bladed screw driver. Insert screw driver between bottom of seal and top of ledge, rotate 90 degrees. To fit the new Dust Seal you will need a solid block of material so that the Seal can be tapped in to the bore of the tube. Place the solid block over the seal and tap the other end of the block with a hammer. Verify that the seal has been fitted correctly and is seated down in the bore evenly. Fill final gap with grease.

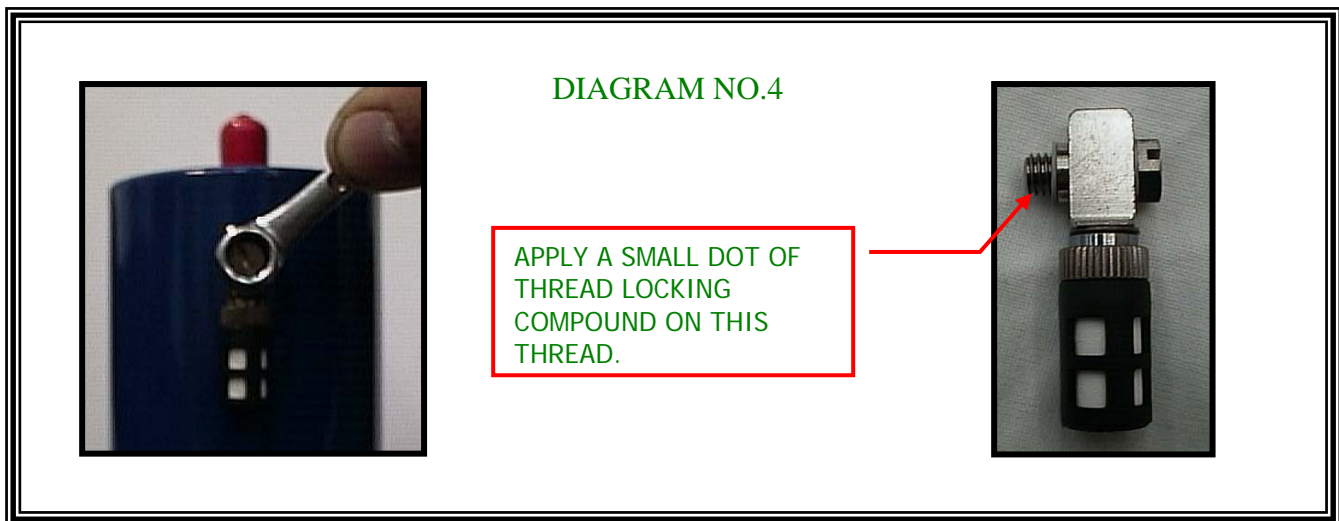
DIAGRAM NO.3





STEP 8:

Remove the breather from the strut body using a 7mm wrench (diagram no.4) and clean any dirt and grease from the assembly. If the breather is too clogged then it may need to be replaced (replacement filters are available from DMS). Refit the breather to the strut body using a small amount of thread locking compound on the thread, do not over tighten the breather (1 to 1.5Nm or 8.5 inch/lb is sufficient).



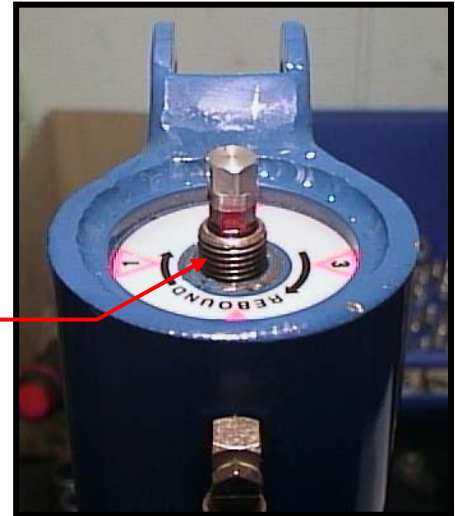
Step 9:

Clamp the Strut Body into a vice again so that the breather is facing the operator (diagram no.5), being careful not to damage the thread. Slide the original Bump Rubbers down the $\varnothing 14$ mm shaft of the Insert, (new Bump Rubbers can be purchased from DMS if originals are worn or damaged). Reset the Rebound adjuster so that it lines up with the zero mark on the threaded shaft (Rebound is now set at full soft "0"). Slide the Insert Tube up the Strut tube so that the zero mark on the shaft and rebound adjuster line up with the zero point on the dial sticker and the breather (diagram no.6). Apply a small amount of thread locking compound to the top three threads on the shaft (being careful not to get any thread locker on the Rebound or Bump adjusters).



DIAGRAM NO.5

DIAGRAM NO.6



APPLY A SMALL DOT OF THREAD LOCKING COMPOUND ON THESE THREADS.

Now fasten the M12 x 1.25 Nut with the m3 Grub Screw hole in it onto the shaft. Torque the nut up to 30Nm (22 ft/lbs) using a manually operated torque wrench.

*****Caution: Do not use excessive force*****

*****Caution: Avoid spinning the shaft at high speed *****

Step 10:

Verify that the zero mark on the shaft still lines up with the dial sticker and the breather. If they have moved then undo the nut immediately and clean both the shaft and the taper inside the Strut tube thoroughly and re-fasten the nut. Check that the Rebound and Bump adjusters are correctly operating (only turn the Rebound adjuster in a clockwise direction). Apply a small dot of thread locking compound to the M3 x 8 Grub Screw and fasten it through the M12 x 1.25 Half Nut. Clean any residue from the nut and adjuster assembly. Verify the adjuster once again (30 clicks from full hard to full soft.)



STEP 11:

Re-fit the springs, top mounts assembly to the strut, adjust ride height recorded in step 3. Re-cover the exposed thread area with cloth tape as per DMS recommendations (diagram no.1).

Follow the original fitting and adjusting instructions supplied with the shock absorbers for installation and to set the damping to the required setting.

If you have any problems or questions please call your local trained DMS representative or DMS North America.

All contact info is on <http://www.dmsnorthamerica.com/distributors/>