



MAKING YOUR DREAMS A REALITY

HONDA NSR 250 Maintenance

Front fork overhaul on a MC28 NSR 250 SE



Front fork overhaul on a MC28 NSR 250 SE



1) MC28SE fork ready and awaiting surgery after removal. Do not forget to take a note of the preload and damper settings for resetting after the overhaul.



2) Fork cap should be loosened prior to fork removal from the machine as there is a lesser chance of damage if in the vice. Release the top triple clamp pinch bolts before loosening the cap. If the fork is free from the machine then clamp lightly in a vice with soft jaws.



3) With the fork cap loosened, pull down the station to reveal the preload adjuster locking nut as pictured on the left side.



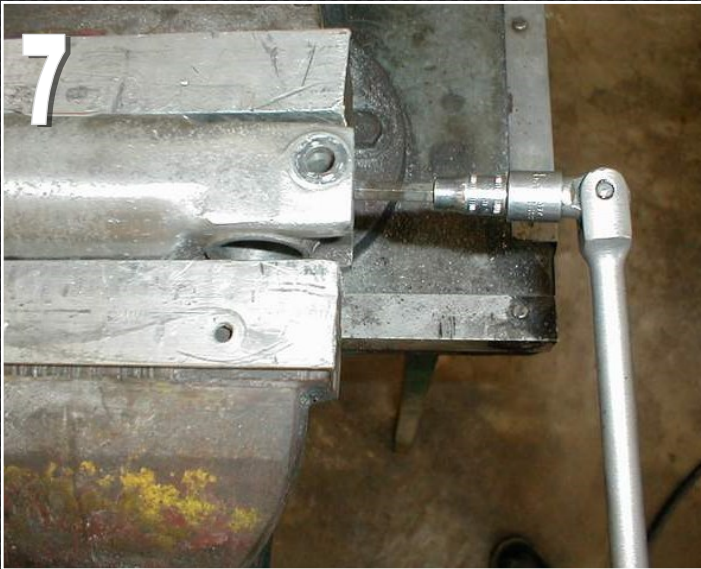
4) Two 14mm spanners are required for removing the locking nut (pictured on the left). You can then unscrew the fork cap and preload/rebound adjuster unit in one piece. To remove the preload adjuster wind it down through the fork cap. Same method with the rebound adjuster. Note : there is a small steel ball held in place by a spring around the preload adjuster. This is to locate the rebound adjuster when setting, and gives that satisfying click. Also remove the locknut on the damper rod.



5) Remove the dust seal with a large screwdriver or something else that is similar.



6) Remove oil seal retaining clip as shown in the picture.



7) Remove bolt at the bottom of the fork. A long reach allen key is required here. Some bolts are very stubborn and may require the use of an impact gun to remove.



8) Pull out the damper cartridge.



9) Now a little aggression is called for. You will need to use the station as a 'slide hammer' to knock out the oil seal and fork bush which is pictured on the left.

10



10) With the station removed, tip out the oil lock piece.

11



11) On the bottom of the damper cartridge, push in the compression valve and remove the circlip.

12



12) Push the compression damper unit out by tapping down with the rebound damper rod.



15) Push the rebound damper unit out through the bottom of the cartridge and remove completely.



14) Clean thoroughly, and inspect all parts for wear and damage. Oil seals and fork bushes can be reused if they are in acceptable condition, but renewing is the best option.



15) Reassembly is basically the same as above only reversed. Be sure to give all parts a good coating of fresh shock oil before fitting, especially the Teflon seal on the rebound damper unit in the cartridge and also all the O rings. Note special slide hammer tool for fitting fork bush and seal. Also note that the fork leg is protected by paper to avoid unnecessary scratches.



16) Do not over tighten the bottom bolt that holds the forks together. Usually it is tightened to 25N.m

Other important things to remember when reassembling.....

To set the oil level, hold the fork in the vice in the vertical position, with the fork fully compressed. Add the recommended quantity of oil. 383cc for SE and SP models, 450cc for R models. Pull the damper rod and the stantion up and down several times to bleed air from the system. Reassemble the top cap along with the preload and rebound adjusters. Make sure to wind both the preload and rebound adjusters out to their minimum (softest) setting. Now, wind the rebound adjuster in 12 clicks. Fit the steel locknut onto the damper rod and wind fully down. Install fork cap and adjuster assembly and wind down until the rebound adjuster needle just fits in the top of the damper rod. This must be done very carefully and lightly so as not to damage the needle. Wind the locknut up, finger tight onto the cap. hold the cap securely in your hand and wind the rebound adjuster out (soften) 4 - 5 clicks to clear the needle from the damper rod, and then fully tighten the locknut (two 14mm spanners required). Finally screw the cap back into the stantion and tighten. Check forks for smooth operation, and reset to original settings.



NSR fork oil levels

MC16	108mm
MC18 1988 model 2J and 4J	128mm
MC18 1989 model R5K	136mm
MC18 SP 1989 model R6K Terra colors	150mm
MC21 R	120mm
MC21 SE/SP	160mm
MC28 R	105mm
MC28 SE/SP	145mm

These are oil levels, which are measured from the top of the fork leg at full compression, with no spring. The Honda service manual recommends 10W oil.

NSR fork oil volume capacity

MC16	383cc
MC18 1988 model 2J and 4J	429cc
MC18 1989 model R5K	435cc
MC18 SP 1989 model R6K Terra colors	374cc
MC21 R	425cc
MC21 SE/SP	384cc
MC28 R	450cc
MC28 SE/SP	383cc

Front fork Air Pressure - MC16 only

This is only for use on the MC16 with it's unique front forks

MC16	0 - 0.4kg/cm2
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Check out our website for our range of products for the Honda NSR250 series



www.tyga-performance.com