The Design of Compress Springs Pressing Device of Shock Absorber On Motorcycle

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ABSTRACT

In the process of compress springs of shock absorber’s suppression on motorcycle, commonly the small workshops still have many difficulties caused by the process that still use a simple mechanical devices, by tilting the tip of springs which attach on shock absorber adjuster which then put the spanner to press and open the nut on shock absorber. It can cause a damage to working object. Therefore, it is made a device to press a compress spring shock absorber on motorcycle.

In the making of the compress spring pressing device of shock absorber on motorcycle was done by literature study and observation. After that, doing the test of object pressing to take the first data. Furthermore, doing the device design then making the device dimension. Then, doing an analysis and calculation used for selecting material process then continued by a device assembling. Henceforth, to find out whether the device could work properly or not was done by a device testing.

From the result of planning and calculation, it was acquired an energy needed to press a compress spring of shock absorber on motorcycle as much as 610 Kgf. In material selecting it used “ASTM Class 20 for chuck and AISI 1020 for hand chuck. The mechanism of device used jack to ease the pressing process of compress spring.

Key words : Compress Spring of Shock Absorber, Device design, ASTM Class 20, AISI 1020, jack.