

SUBJECT: SUSPENSION TUNING

A motorcycle suspension system must cope with a widely variable loading. No manufacturer can create one suspension setting which will be correct for all loads. The suspension must be tailored to the requirements of the individual rider depending upon load, riding style accessories and their location. BMW offers factory made suspension components to permit this adjustability in order to provide maximum comfort and safety. All other components, i.e.; forks, steering head bearings, frame, swingarm, wheels and tires must be in good condition and properly adjusted before suspension modifications are attempted. Listed below is a guideline of BMW fork parts which may be used together for this purpose.

1 Approx. load (lbs.)	2 Fork Spring	3 Rebound damper orifice	4 Bump damper # of Holes	5 Fork Oil Weight
150 w/fairing ⁶	358 358	STD. STD.	4 4	4 or 5 W 4 or 5 W
200 w/fairing	358 358 w/spacer	STD. STD.	4 2	4 or 5 W 4 or 5 W
250 w/fairing	358 017	STD. H.D.	2 2	4 or 5 W 4 or 5 W
300 w/fairing	358 w/spacer 017	STD. H.D.	2 2	7 1/2 W 7 1/2 W
350 ⁷ w/fairing	017 017 w/spacer	H.D. H.D.	2 2	7 1/2 W 10W

NOTES:

¹Load = Rider Weight + Passenger + Weight of Luggage and Accessories. In no event may gross vehicle weight exceed manufacturer's suggested GVWR as listed in the Owner's Manual.

²Fork Springs-Number indicates last three digits of part number. Two springs are currently available:

Standard-#31 42 1 231 358-Length=567mm.-Wire Dia.= 4.0mm.
Heavy Duty-#31 42 1 232 017-Length=543mm.-Wire Dia.=4.25mm.

Preload spacer #31 42 2 000 399, fitted under top spring retainer in cases as referred to above.

Additionally, /5 models were fitted with a softer spring which is no longer factory available, #31 42 1 230 664, which may be substituted for #358 spring where total load is less than 150 lb. This spring is not suitable for dual disc brake models.

³Rebound Damper Orifice-Restriction of I.D. regulates oil flow on rebound. Two orifices are available. Part numbers:

#31 42 1 232 045 - Standard - 15.7mm. I.D.
#31 42 1 234 506 - Heavy Duty- 15.5mm. I.D.

The H.D. orifice may be identified by a groove machined around the outer circumference.