Service

VALVE SPRING TESTING INFORMATION

(This bulletin supersedes Shop Dope Bulletin No. 366, which should be destroyed)

The information in this bulletin is to be used as a guide in replacing intake and exhaust valve springs which have weakened or "taken a set" due to excessive heat and extended service in the engine. Valve springs which are too weak will not close properly at high speeds causing erratic engine operation, and probable damage to the valve, valve guide and seat.

The following table lists valve spring testing specifications for new valve springs applying to all 4-cycle engine models. To use the information listed when testing springs, a valve spring compression testing device is needed which will compress the spring the specified distance and at the same time measure the pounds compression. It is recommended that Valve Spring Tester and Torque Wrench, Part No. 96797-47, be used for this purpose.

VALVE SPRING SPECIFICATIONS

MODEL	PART NO.	FREE LENGTH	VALVE CLOSED		VALVE OPEN	
			COMPRESSED LENGTH	POUNDAGE	COMPRESSED LENGTH	POUNDAGE
1941 and later 45 Side Valve (except K Model)	18201-41	2-19/32	2-3/16	50 to 60	1-7/8	90 to 100
1930 and later 74 & 80 Side V.	18200-30	2-7/16	2-1/8	55 to 65	1-3/4	125 to 135
1936 and later 61 & 74 O.H.V. (except FLH)	18203-36 (outer)	1-13/16	1-13/32	55 to 65	1-1/16	110 to 120
	18204-36 (inner)	1-15/32	1-1/4	25 to 35	29/32	70 to 80
1955 and later FLH Model 74 O.H.V.	18201-57 (outer)	1-31/32	1-3/8	105 to 115	1.00	180 to 190
	18202-57 (inner)	1-23/64	1-3/16	25 to 35	51/64	70 to 80
1952 and 1953 45 Side Valve (K Model)	18201-52	2-15/32	2-7/32	47 to 57	1-7/8	120 to 130
1954 to 1956 55 Side Valve (KH Model)	18200-32	2-15/64	1-15/16	53 to 63	1-19/32	120 to 130
1957 and later 55 O.H.V. (XL, XLH Model)	18203-57 (outer)	1-1/2	1-9/32	52 to 62	15/16	155 to 165
	18204-57 (inner)	1-23/64	1-3/32	30 to 35	3/4	75 to 85

Recommendation: A used valve spring testing 5 pounds or more below low limit poundage shown in table should be replaced with a new spring.