



SIL RS-85

SMALL RECIPROCATING ENGINES

Service Information Letter - Fuel Systems

Issued 5/30/07

Page 1 of 1

SUBJECT: Regulator Spring Identification

PURPOSE: To advise overhaul facilities of the use of constant head and constant effort springs.

- A. EFFECTIVITY: This Service Information Letter is applicable to all RSA Fuel Injection Servos
- B. DESCRIPTION: As new servos have been created it has become necessary to widen the choice of springs available to obtain the correct flow bench readings.

It is now recommended that the initial parts list springs be tried first. If correct readings cannot be obtained, then any combination of constant head and constant effort springs, as listed, may be used. It is also acceptable to not have a constant effort spring installed if flow requirements in the mid-range are not lean enough. If it is necessary to use shim P/N 341748 with the constant head spring, a maximum of three shims are permitted.

Each spring is to be identified by one of the following three means:

1. Color - covering 70% of all coils
2. A colored line running the length of the coils
3. Color on the circumference of one end of the coil

CONSTANT EFFORT SPRINGS

PART NUMBER	WIRE DIAMETER (INCH)	FREE LENGTH (INCH)	LOAD (lbs) @	LENGTH (INCH)	COLOR
2520652	0.018	0.796	0.100	0.212 - 0.268	ORANGE
2523688	0.020	0.600	0.137	0.110 - 0.211	RED
2523247	0.022	0.785	0.218	0.212 - 0.268	BLACK
2537968	0.022	0.907	0.310	0.212 - 0.268	GREEN
2539512	0.022	0.843	0.350	0.212 - 0.268	YELLOW
2577224	0.025	0.850	0.410	0.212 - 0.268	BLUE

CONSTANT HEAD SPRINGS

PART NUMBER	WIRE DIAMETER (INCH)	FREE LENGTH (INCH)	LOAD (lbs) @	LENGTH (INCH)	COLOR
2541439	0.016	0.400	0.230	0.170 - 0.210	WHITE
2520625	0.016	0.383	0.290	0.170 - 0.210	BLACK
2537779	0.016	0.467	0.330	0.170 - 0.210	RED
2523155	0.016	0.560	0.440	0.170 - 0.210	DARK BLUE
2523387	0.020	0.352	0.500	0.170 - 0.210	YELLOW