McCULLOCH

SERVICE BULLETIN #1181

SUBJECT: TEST SPECIFICATIONS FOR McCULLOCH IGNITION COILS AND HOW TO CHECK THE COIL TESTER.

MODEL ALL ENGINES

DATE 6/13/62

This bulletin replaces Service Bulletin #1154.

Test specifications for various McCulloch Ignition Coils when tested on either a Graham, Model 51, or a Merc-O-Tronic, Model 88 Coil Tester are shown in the tables below. Values listed for one type of coil tester cannot be used for the other.

Following the specification tables for each type of coil tester are instructions in test procedures and a method for checking the accuracy of the coil tester being used.

GRAHAM, MODEL 51 COIL TESTER

Coil Identification *	Primary Continuity (1000 ohms)	Secondary Continuity (1000 ohms)	Coil Index	Coil Test	Gap Index
C-2 to I-7	0.025 to 0.50	3.5 to 5.0	60	13 min.	47 max.
J-7 to K-8	0.025 to 0.50	2.0 to 3.0	60	12 min.	67 max.
L-8 to F-1 **	1.1 to 1.5	3.0 to 4.0	60	24 min.	75 max.
F-1 on	0.7 to 1.2	5.5 to 7.2	60	22 min.	67 max.

MERC-O-TRONIC, MODEL 88, COIL TESTER

Coil Identification *	Operating Amperage	Primary Continuity	Secondary Continuity
C-2 to I-7	2.5	0.2 to 0.4	37 to 47
J-7 to K-8	2.5	0.2 to 0.4	20 to 30
K-8 to F-1 **	1.6	0.6 to 0.9	30 to 40
F-1 on	1.6	0.45 to 0.70	45 to 55

* Stamped on flywheel side of coil (bottom)

** Coils F-0 to F-1 with a red dot on the coil case near the primary ground terminal are Hi-Output coils and use the specifications for the F-1 on Hi-Output coils.

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TESTING PROCEDURE

ALL TESTING MUST BE DONE WITH THE COIL AND LAMINATION ASSEMBLY REMOVED FROM THE ENGINE!

If the coil and lamination assembly is tested on the engine, either the flywheel magnet or the flywheel counter-balance will be near enough to the coil to change the effective inductance of the coil and false readings will be obtained. Always remove the coil and lamination assembly from the engine and place on a dry non-metallic surface when making the test.

Follow the instructions given for the coil tester being used, connecting the positive or red lead (either model) to the primary connection on top of the coil. Connect the negative or black lead (either model) to the primary ground lead and to the lamination assembly. Use the specifications given in the coil tester table for the coil being tested.

CHECKING THE ACCURACY OF THE COIL TESTER

With the thorough check that every coil is given at the factory, it is unlikely that any sub-standard coil will reach the field. If, in making tests however, several such coils are found to be below specifications, there is reason to believe that the coil tester is defective rather than the coil itself.

Deterioration of any coil tester through long use will result in inaccurate readings. The Merc-O-Tronic, Model 88 is a battery type tester using a 7-1/2 volt dry cell battery which will gradually lose strength. With a weak battery or any other tester defect, coils being tested, even though they may be entirely satisfactory, will appear from the readings to be below standard. Knowing that good quality coils can appear to be sub-standard because of a defective tester, the service man should always be sure of the condition of the tester before accepting its readings.

Both types of testers may be checked quickly and easily with a coil which is known to be of good quality. Simply check the good coil on the tester. If the coil does not show the proper specifications the tester is at fault and steps should be taken to correct it. With a Merc-O-Tronic, the battery is probably at low strength and should be replaced.