

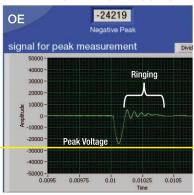
# NAPA® Echlin® Ignition Coil Testing

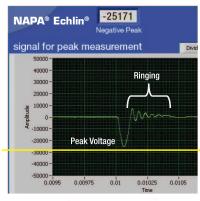
### NAPA® Echlin® Coils Match or Outperform the OES in Every Performance Test.

#### WINDING RESISTANCE / INDUCTANCE AND OUTPUT VOLTAGE / SPARK ENERGY

	Primary		Secondary		Output Voltage	Spark Energy	
	Resistance	Inductance	Resistance	Inductance	50pf	60 Hz	60 Hz
Part No.	(mohms)	(mH)	(kohms)	(H)	(Peak kV)	(mV-S)	(mJ)
NAPA® Echlin® IC386	492	1.53	5.36	9.59	25.2	3.70	29.6
NAPA® Echlin® IC369	489	1.49	5.28	9.47	25.2	3.74	29.9
Average NAPA® Echlin®	491	1.51	5.32	9.53	25.2	3.72	29.8
OES DG500	515	1.63	5.55	8.61	24.4	3.72	29.8
OES DG508	511	1.58	5.50	8.19	24.2	3.69	29.5
Average OES	513	1.61	5.53	8.40	24.3	3.71	29.7

#### WAVEFORM TEST RESULTS





NAPA<sup>®</sup> Echlin<sup>®</sup>

#### **The Testing Method**

We performed an extensive engineering analysis of OES DG500 and DG508 to NAPA® Echlin®. The engineers measured winding resistance, inductance and output voltage, spark energy, waveform peak voltage and ringing, as well as a complete physical and sectioned comparison to OES.

#### The Findings

NAPA<sup>®</sup> Echlin<sup>®</sup> Ignition Coils look, fit and perform like the original they replace with 100% end of the line production testing.

 The NAPA<sup>®</sup> Echlin<sup>®</sup> coils also provide an improved secondary winding design (additional winding bays) that helps prevent internal arcing and high-voltage breakdown

#### **Comparative Performance Data**

- The NAPA® Echlin® coils were equal to OES in spark energy
- In waveform testing, NAPA<sup>®</sup> Echlin<sup>®</sup> coils' peak output voltage was about 1000 volts higher than 0ES
- The NAPA® Echlin® coils tested 3.7% higher than OES in output voltage
- The NAPA<sup>®</sup> Echlin<sup>®</sup> coils had a longer spark duration than the OES, resulting in more energy supplied to the spark plugs

#### Conclusion

• The NAPA® Echlin® coils match or exceed the OES coils in all categories and are an excellent replacement exceeding the OES performance

## LOOKS RIGHT. FITS RIGHT. PERFORMS RIGHT. THE BEAR IS BACK

NAPA<sup>®</sup> ECHLIN<sup>®</sup> Ignition Coils Outperform the OES



NAPA<sup>®</sup> Echlin<sup>®</sup> IC369

NAPA® Echlin® IC386

