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SECTION**

**2008 ENGINE MASTERS CHALLENGE**

# **ENGINE MASTERS**

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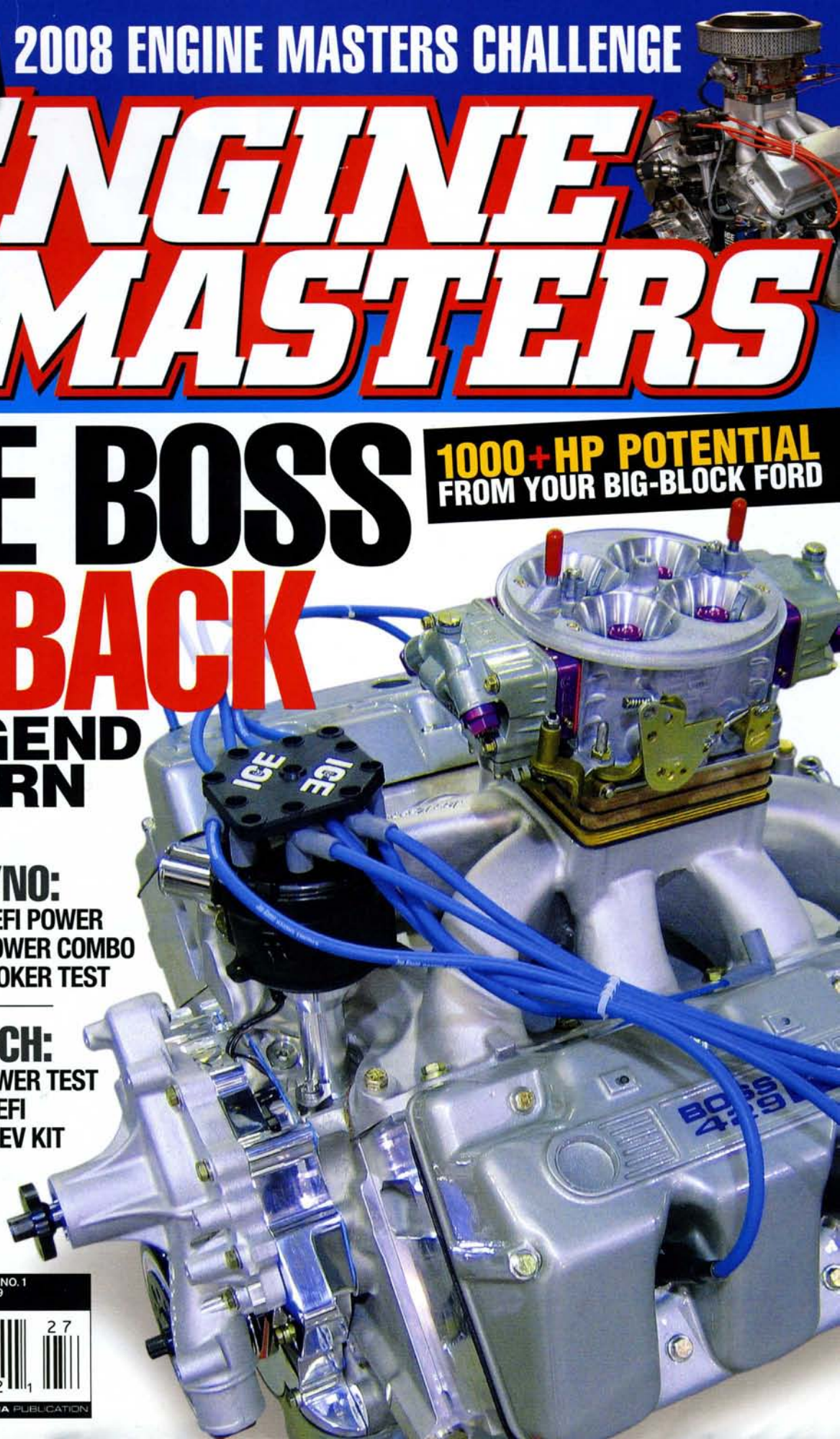
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# 2008 ENGINES AND TEAMS

**O**ur 2008 Engine Masters Challenge brought out a wide range of builders, from scrappy independents looking to show their stuff, to well-known and competition-seasoned professionals doing their best to take the crown. We had the engine types that you'd naturally expect to see, such as the ever-popular small-block Chevy, but the specialists were out in force with engines such as Mopar's early Hemi, the big late Buick, and even a pair of Oldsmobiles. Although there is only one builder who leaves the competition with the title of "Engine

**Masters Champion,"** there are 29 competitors in the field who put it on the line and show their stuff.

As you might notice from the rundown that follows, the engine power output of the various engines seems to be all over the map, but remember that our scoring is designed to even out competition engines of greatly varying displacement. We had engines ranging from as little as 302 cubic inches from the Porting Dynamics and Power Shop teams, both with small-block Chevrolts, to as high as 464 ci from the big Buick fielded by Automotive Machine and Performance. The scoring sorted them out as far as the competition was

concerned, based on average power and torque per cubic inch over the full dyno sweep from 2,500 to 6,500 rpm.

Probably more useful for our readers is the raw peak power numbers these engines produced, giving an indication of the power possible under your own hood for all kinds of different high-performance engines. Want to see what a hot 455 Pontiac can put out for your own project? Look at the 618hp result seen from the DCI Motorsports engine and imagine building a beast like that for your Firebird. Happen to be a Traditional Ford man? You'd be proud to have an engine like Barry Rabotnick's 669hp Ford 427 High-Riser in a

# How They

heavy-hitting Mercury Cyclone street machine. Many of these builders are at the ready to put together similar engines for whatever your needs.

With that, we'd like to congratulate the participants of the 2008 Engine Masters Challenge. It takes a remarkable amount of planning, testing, and skill to take an engine from idea to real-

ity and make it to the competition. All these competitors showed that they have what it takes. Also note that some of the engines are listed as DNF; these engines did not make it through the qualifying process for whatever reason, while a DQ meant that the engine did not run due to a rules infraction. We can state that all the engines listed as DQ were disquali-

fied for unfortunate violations on equipment or meeting strict time guidelines, with none of them breaking the rules in a manner that we would have considered an effort to cheat or gain an unfair advantage in competition. As a result, a thorough preliminary teching procedure will be incorporated next year to avoid unnecessary disqualifications. **EM**



### **JON KAASE RACING 400M SMALL-BLOCK FORD**

**Claimed Displacement:** .....403 CI  
**Qualifying score:** .....2,592.1  
**Team leader:** ..... Jon Kaase  
**Team members:** .....Cliff Moore,  
 Greg Brown,  
 Bob Bertsch,  
 Clark Baker  
**Hometown:** .....Winder, GA  
**Bore:** .....4.002 inch  
**Stroke:** .....4.000 inch  
**Peak Torque:** .....617 @ 5,200  
**Peak Power:** .....663 @ 6,000



### **BES RACING ENGINES 400 SMALL-BLOCK CHEVY**

**Claimed Displacement:** .....403 CI  
**Qualifying score:** .....2,567  
**Team leader:** ..... Tony Bischoff  
**Team members:** .....Cameron Jackson,  
 Bradley Nagel,  
 Richard Kolb  
**Hometown:** .....Guilford, IN  
**Bore:** .....4.125 inch  
**Stroke:** .....3.763 inch  
**Peak Torque:** .....604 @ 4,900  
**Peak Power:** .....681 @ 6,500



### **SCHOOL OF AUTOMOTIVE MACHINISTS 400M SMALL-BLOCK FORD**

**Claimed Displacement:** .....409 CI  
**Qualifying score:** .....2,532.2  
**Team leader:** ..... Judson Massingill  
**Team members:** Shawn Hooper, Ryan Fisher  
**Hometown:** .....Houston, TX  
**Bore:** .....4.034 inch  
**Stroke:** .....4.000 inch  
**Peak Torque:** .....619 @ 5,100  
**Peak Power:** .....673 @ 6,500



# Qualified



**EMC DYNO  
NUMBERS  
SCHOOL OF  
AUTOMOTIVE  
MACHINISTS  
400M FORD**

**DISPLACEMENT: 409 CI  
DTS DYNO  
TESTED AT UNOH**

RPM	TQ	HP
2,500	497	237
2,600	503	249
2,800	506	270
3,000	487	278
3,200	470	286
3,400	461	299
3,600	487	333
3,800	542	392
4,000	581	443
4,200	597	477
4,400	605	507
4,600	610	534
4,800	615	562
5,000	620	590
5,200	616	610
5,400	606	623
5,600	595	635
5,800	590	651
6,000	580	662
6,200	564	666
6,400	551	672
6,500	545	675

## SCHOOL OF AUTOMOTIVE MACHINISTS FORD 400M

Judson Massingill and his team of students from the School of Automotive Machinists never fail to bring a serious competitor to the Engine Masters Challenge. The Cleveland-head 409-cube Ford brought to the competition was definitely within striking distance of taking it all, coming through qualifying in third position, and looking for more in the finals. The stock block engine was carefully machined, assembled, and tested at SAM's Texas facilities, utilizing the popular CHI cylinder head and manifold combination. We have to credit the discipline and expertise shown in the dyno cell by the SAM's team during the tuning period, as well as the professionalism of the student team members.

The SAM's Cleveland came in with a really solid torque number right at the bottom of the rpm range at 2,500 rpm, and utilized the top end of the curve to reach 675 hp by 6,500 rpm. As the final field was established, the SAM's Ford was just edged out for Third Place by the Kaase Boss, for a final Fourth Place finish. We are proud that such a fine organization is consistently involved with the Engine Masters Challenge.

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