

**Revell®**

KIT 1433

85143300200

# PLYMOUTH HEMI

## Drag Race Engine

Here's a little word association game-what's the first thing that comes to mind when you hear the word "Hemi®"? We would bet that if you're a car nut, or even if you're just somewhat knowledgeable about cars, the first thing you thought of is: Big engine. Big, mean, powerful engine. There you go. The reputation of the mighty Hemi precedes itself. After all, no other engine in drag racing boasts more wins, more titles or more success than the Hemi.

Although engines with hemispherical combustion chambers are most often associated with Chrysler®, they actually saw use in internal combustion motors as far back as the early 1900's. To the engineers, the design is desirable because the inherent low surface-to-volume ratio of the engine minimized power loss due to combustion chamber deposits building up over time. Chrysler's development of the hemi-head engine began in the late 1940's and culminated in the 1951 introduction of the 331 cubic inch Firepower V-8 that developed 180 horsepower, a 40% increase over that of the straight eight used the previous year. But the engineers knew that there was even more potential there and further experiments with camshafts, compression ratios and multiple carburetors resulted in the 300 horsepower engine that was fitted into the 1955 Chrysler 300, which many consider to be the first true muscle car.

Due to economic reasons, the Hemi was overshadowed in the late '50's to engines with less expensive wedge shaped combustion chambers but the Dodge and Plymouth models with them

were not appearing in the winner's circles, especially on the oval tracks. Chrysler management made the decision to develop a new hemi-head V-8 which became the now-familiar 426 cubic inch monster motor that we all know and love. Development of the engine was pushed in order to have it ready for the 1964 Daytona 500. Hemi powered cars grabbed the first four positions in the race and you could almost hear the management at the other manufacturers sweat. The results at the drag strips were largely the same as Don Garlits, whose association with the Hemi dated back to 1956, was the first man to exceed 200 mph during 1964 in his dragster. That same year, Jim Thornton won the US Nationals in a Hemi-powered Dodge.

Since then, it really hasn't changed all that much. To attempt to list all the major races and titles the Hemi has clinched would be a book in itself. Aluminum block versions of the Hemi still dominate most of the top professional classes in drag racing to this day. Take Tony Schumacher, 2005 NHRA Top Fuel Champion, for example. The supercharged aluminum Hemi in his US Army sponsored dragster puts out between 6,000 and 7,000 horsepower running on nitromethane, which it consumes at the rate of ten gallons per quarter mile run. The thrust is so great that Tony and other pilots have to withstand 5 G's of force at launch, bringing new meaning to the term "getting thrown back in your seat".

The Hemi has become much more than just an engine; it's now a genuine automotive legend.



\* REPEAT SEVERAL TIMES  
\* A REPETER PLUSIEURS FOIS



\* CEMENT TOGETHER  
\* A COLLER



\* DO NOT CEMENT  
\* NE PAS COLLER

If you have any questions or comments, call our hotline at: **(800) 833-3570**  
or, please write to:

**Revell-Monogram Consumer Service Department, 725 Landwehr Road, Northbrook, Illinois 60062**

Be sure to include the plan number (85143300200), part number, description, your return address and phone number.

Visit our website: [www.revell.com](http://www.revell.com)

## 1

**ENGINE HOUSING ASSEMBLY**

FINE  
THREAD  
(LONG)



SELF  
TAPPING



FINE  
THREAD  
(SHORT)

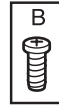


CHROME  
FLATHEAD  
SCREW

NOTE: FOR BEST RESULTS USE A CYANOACRYLATE SUPERGLUE (NOT INCLUDED). PLEASE READ AND FOLLOW THE DIRECTIONS AND WARNING LABEL ON THE CYANOACRYLATE SUPERGLUE.

TOOLS REQUIRED:  
SMALL PHILLIPS HEAD SCREWDRIVER

**A**

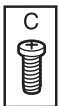


4X

ENGINE BLOCK

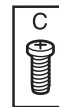
OIL PAN

**B**



2X

REAR  
ENGINE STAND



2X

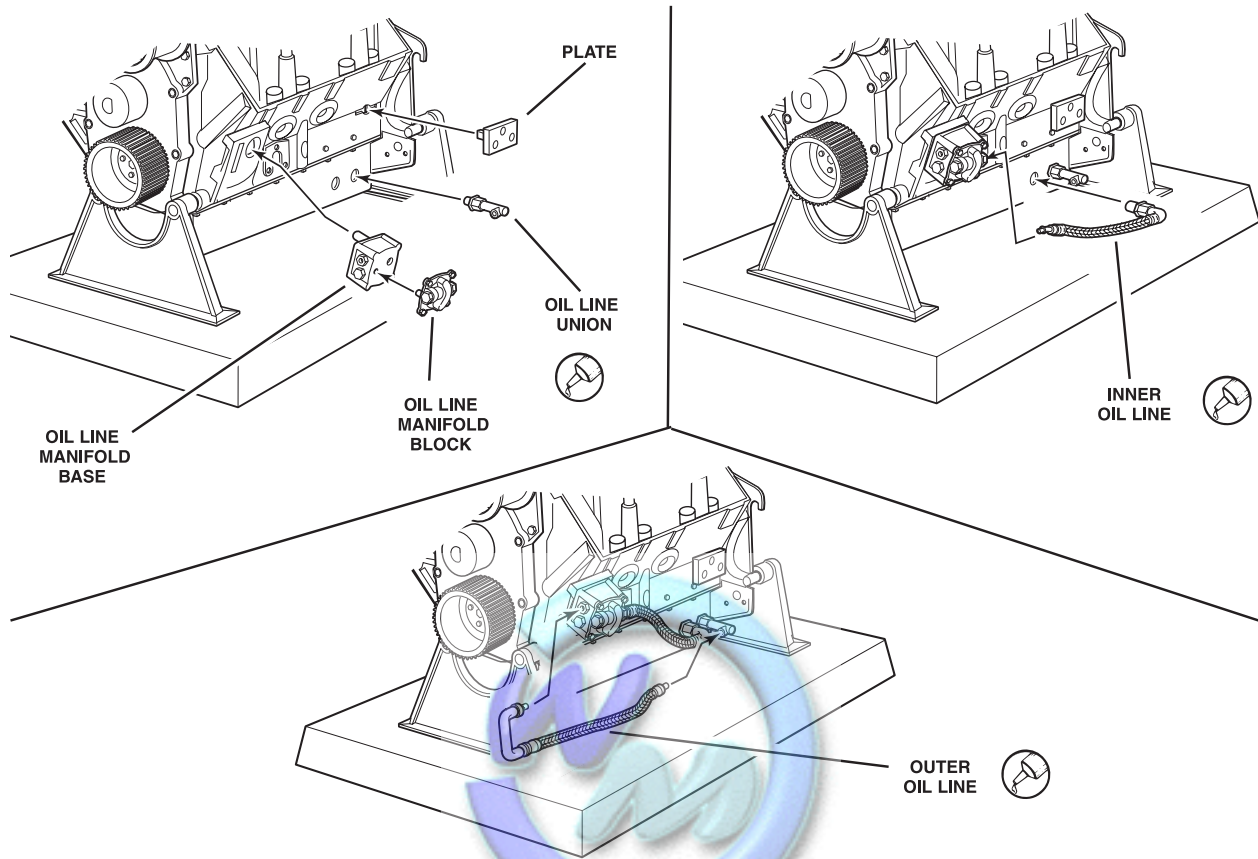
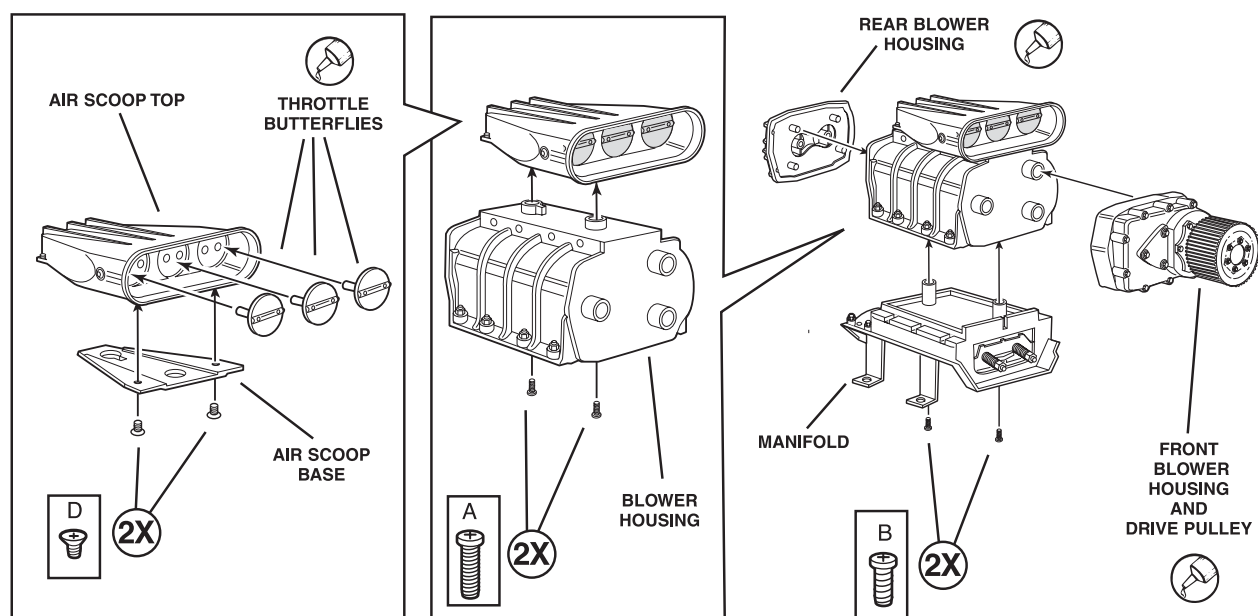
FRONT  
ENGINE STAND

**C**

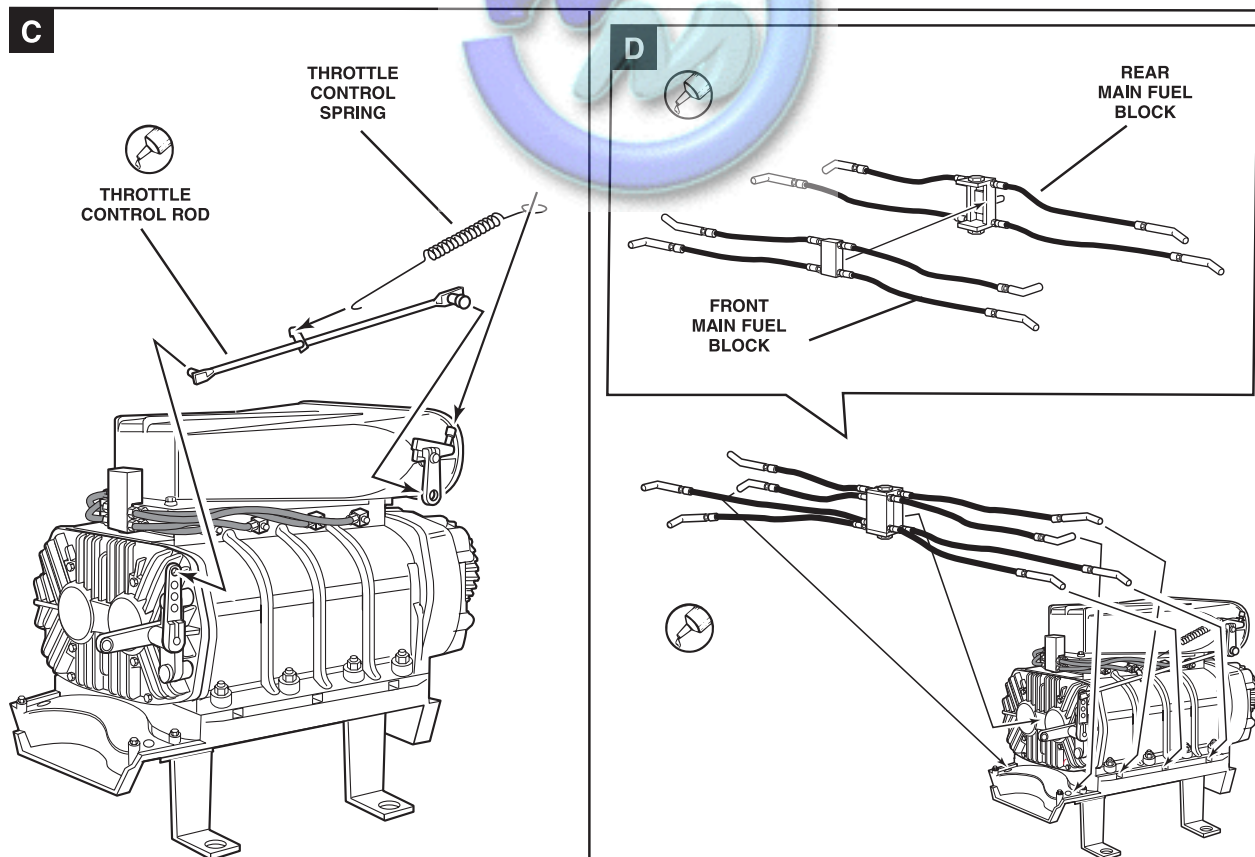
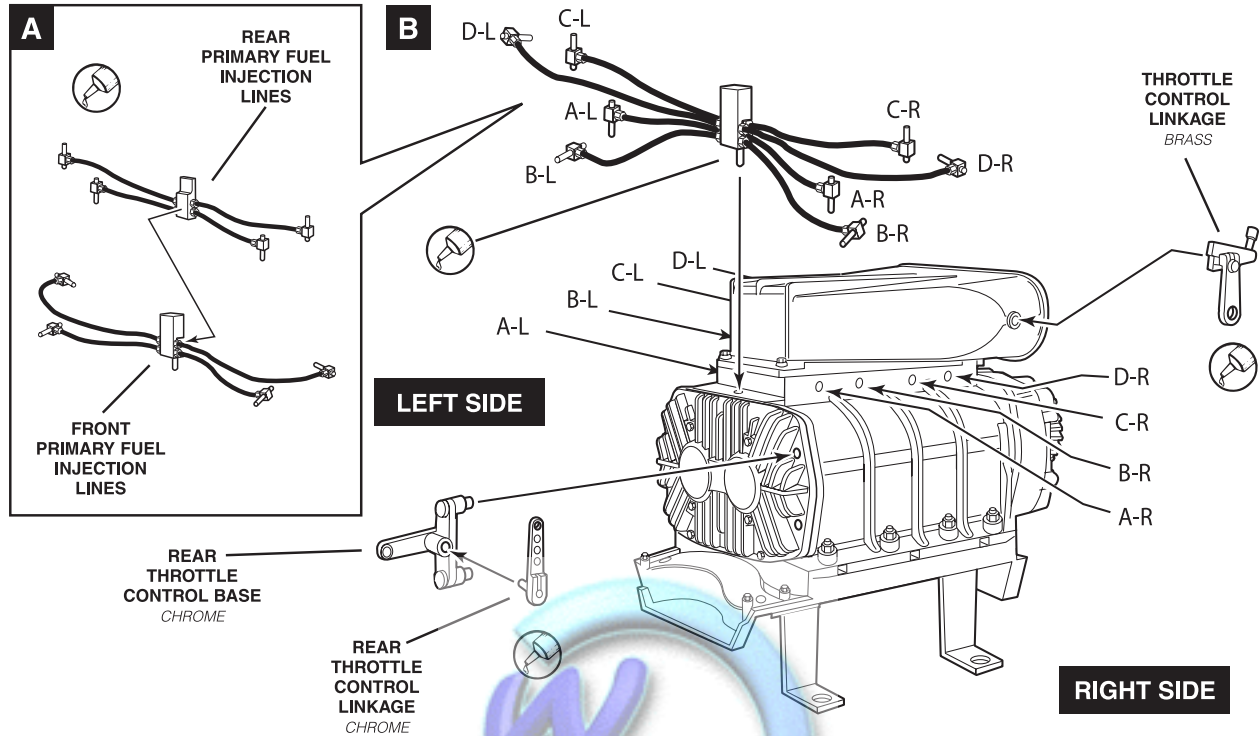
BASE

4X

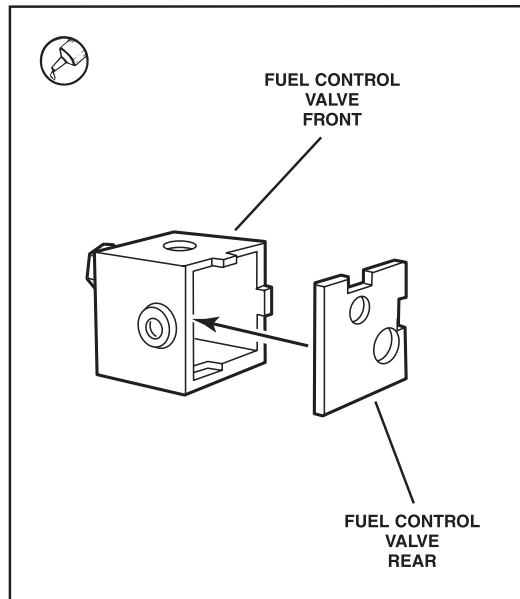
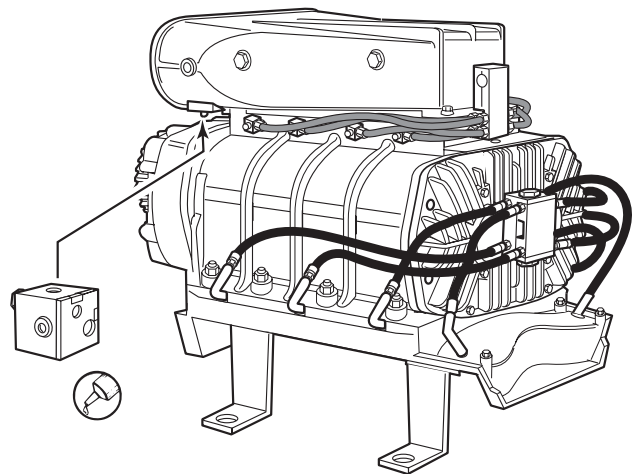
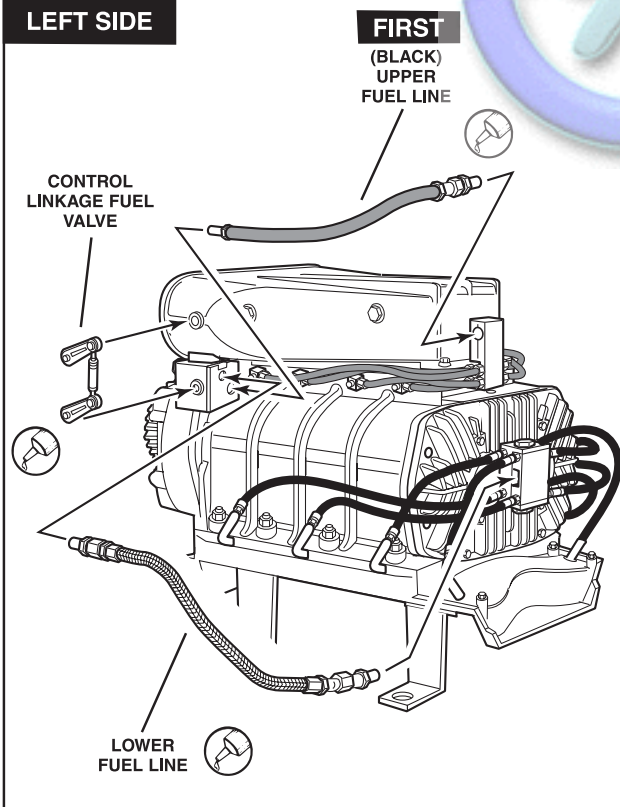
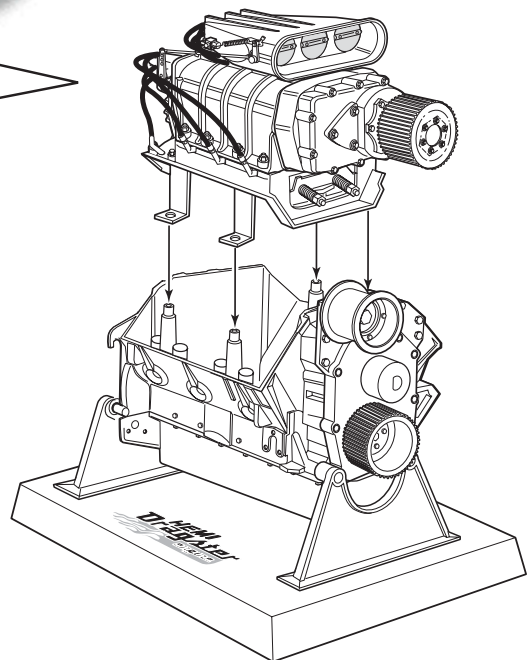


**2****LOWER LEFT SIDE ASSEMBLY****3****BLOWER ASSEMBLY**

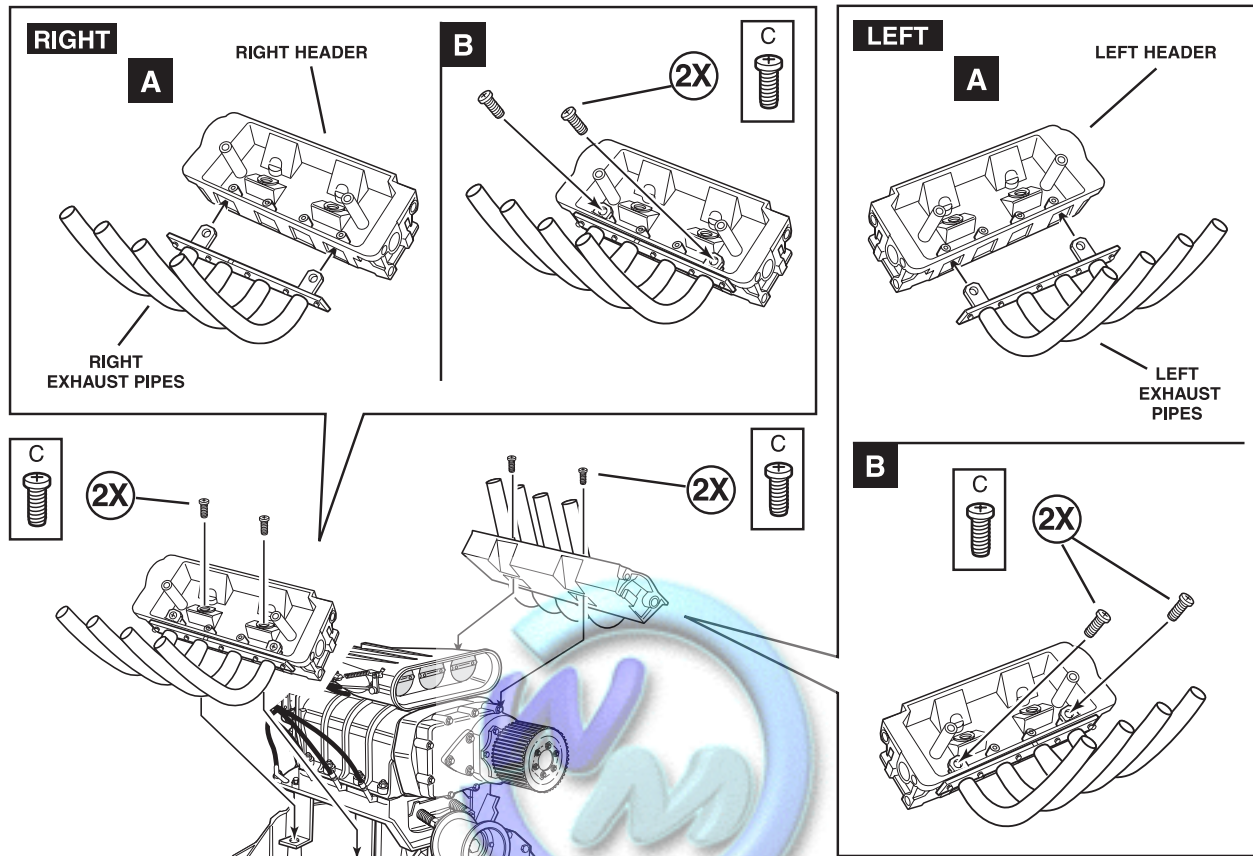
## 4

**FUEL LINE ASSEMBLY**

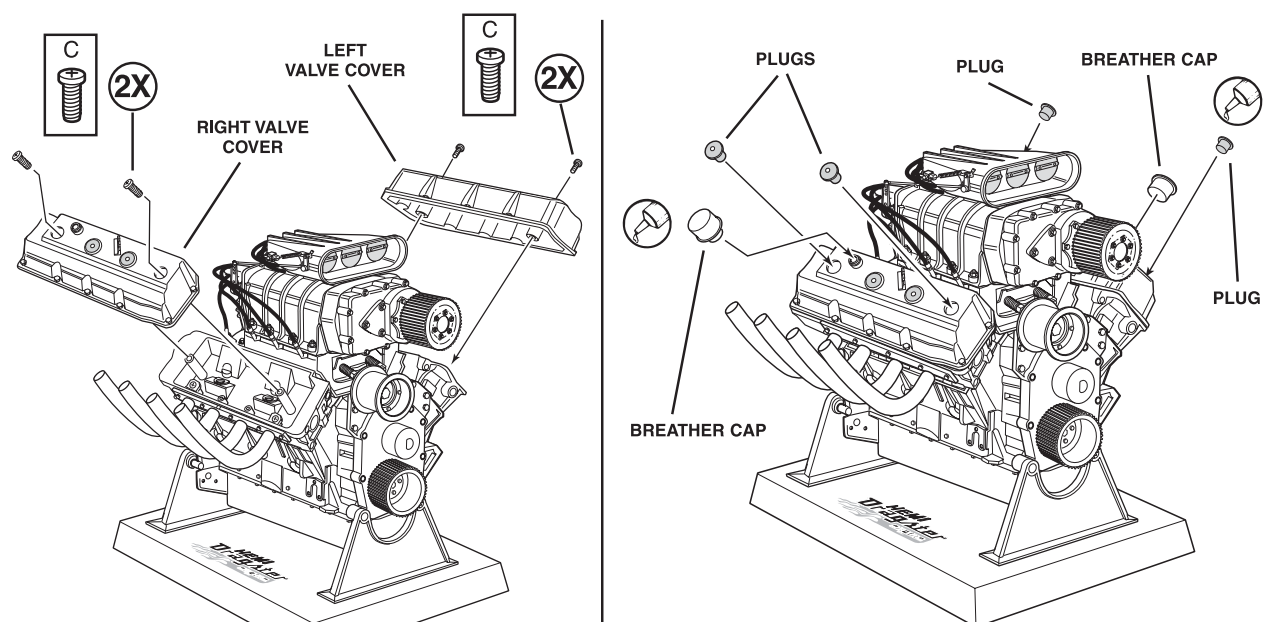


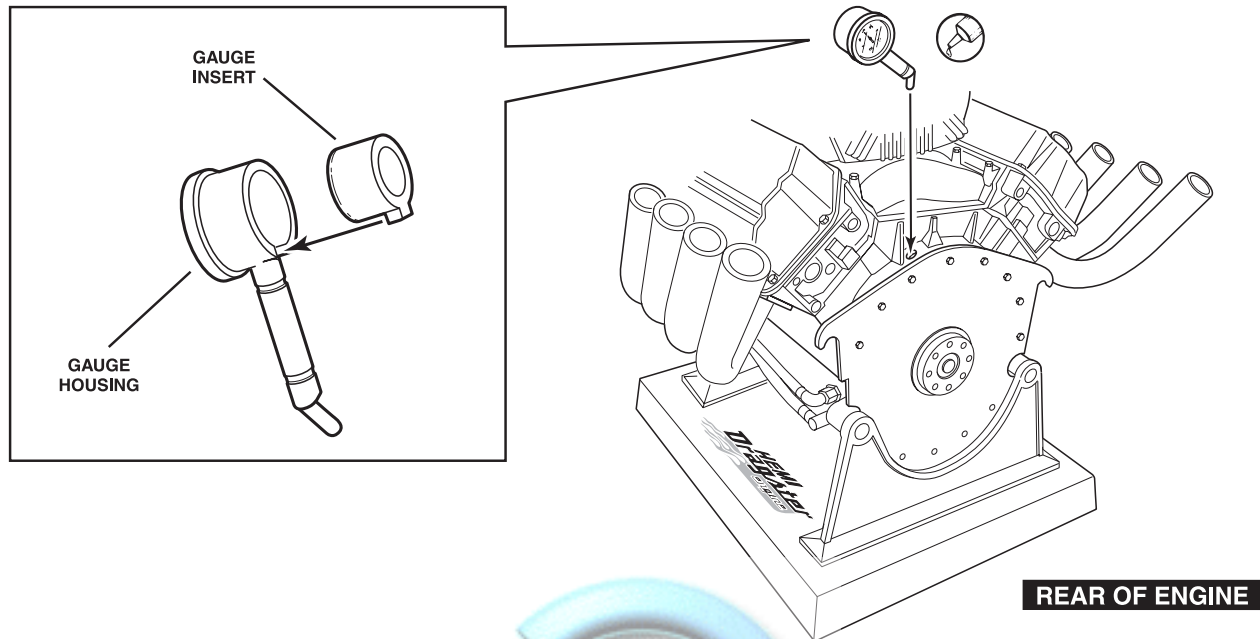
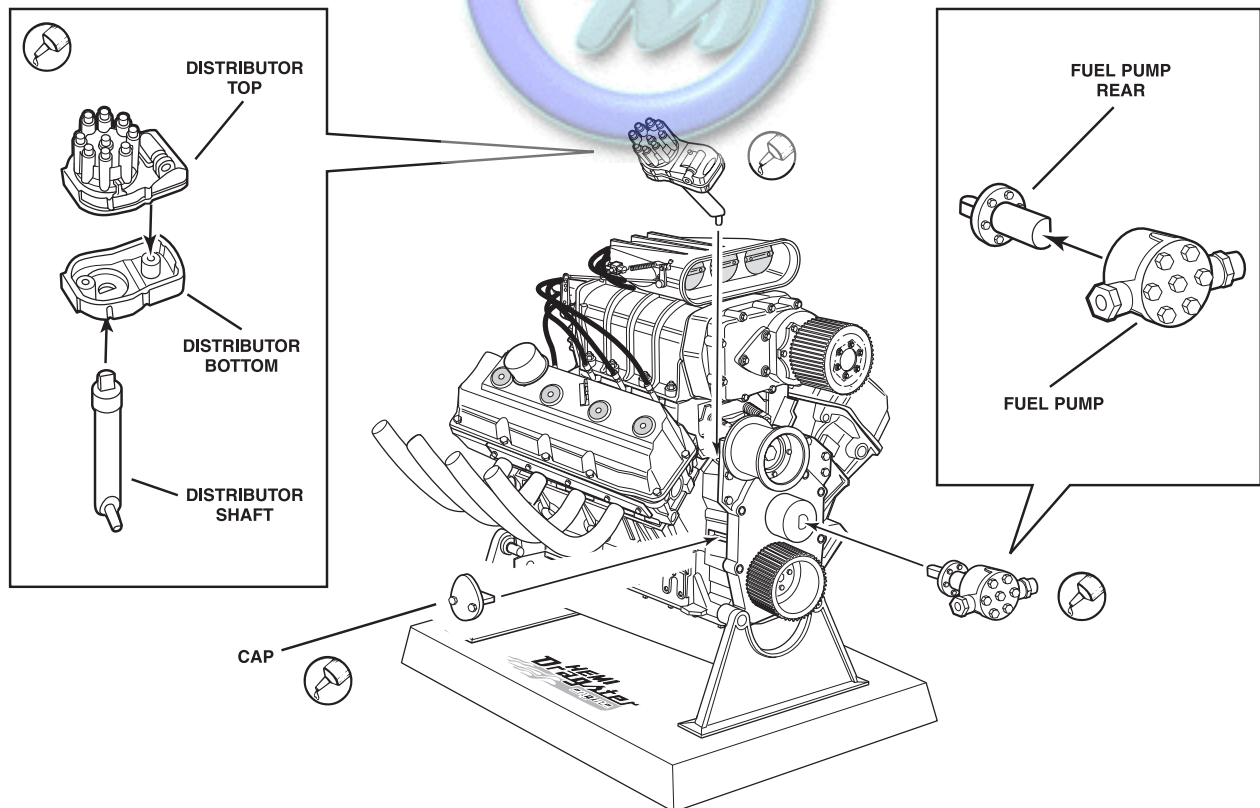
**5****CONTROL VALVE ASSEMBLY****LEFT SIDE****6****FUEL LINE ASSEMBLY****LEFT SIDE****BLOWER TO ENGINE BLOCK**

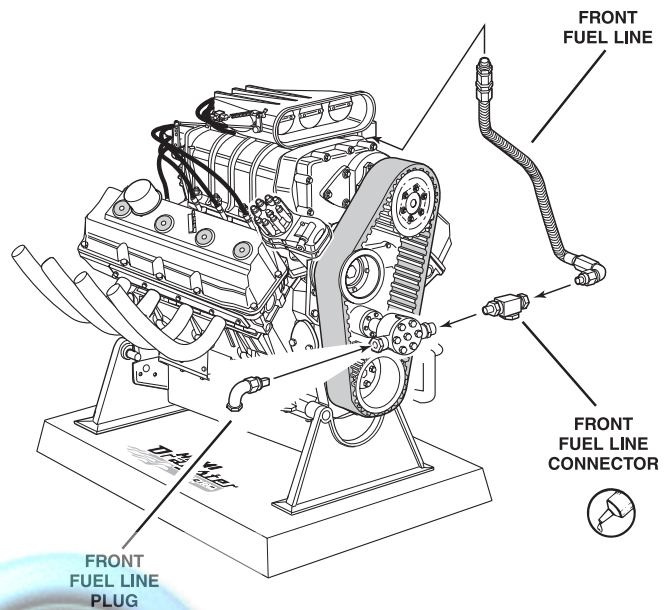
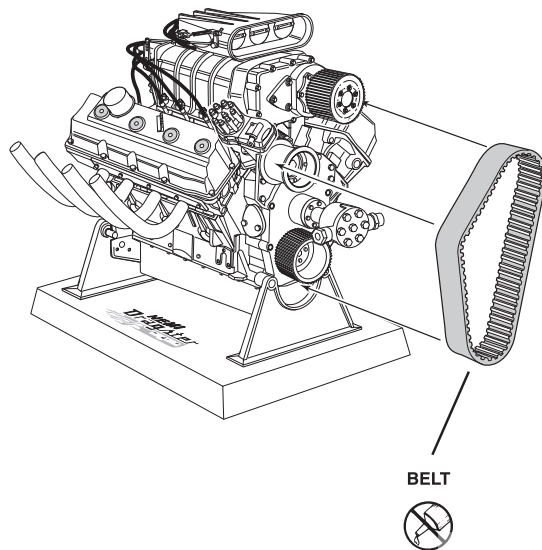
## 7

**EXHAUST ASSEMBLY**

## 8

**VALVE COVER ASSEMBLY**

**9****REAR GAUGE ASSEMBLY****10****DISTRIBUTOR / PUMP ASSEMBLY**

**11****FRONT ASSEMBLY****12****SPARKPLUG ASSEMBLY**