

# REQUEST FOR FLOW TEST AND CALIBRATION OF FUEL INJECTION UNIT

---

## *Kinsler Fuel Injection*

PLEASE PRINT

1834 Thunderbird Street  
Troy, Michigan 48084 USA  
Phone: (248) 362-1145 Fax: (248) 362-1032 [www.kinsler.com](http://www.kinsler.com)

PLEASE PRINT

- 1) Owners name: \_\_\_\_\_ Date: \_\_\_\_\_  
It is **important** to have the owner's name. All flow data is filed under the owners name and the date the system is flowed.
  - 2) Return to: Name /Company: \_\_\_\_\_  
Street: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Country: \_\_\_\_\_ ZIP: \_\_\_\_\_
  - 3) Phone (area code) and number: Work: ( \_\_\_\_\_ ) \_\_\_\_\_  
Mobile: ( \_\_\_\_\_ ) \_\_\_\_\_ Email : \_\_\_\_\_
  - 4) Date you will need unit: \_\_\_\_\_ Note: If this is to be a priority air freight shipment, call before sending unit. Fast delivery may be available at special time and a half labor rates.
  - 5) If flow tested by us previously: Owner's name \_\_\_\_\_ Flow test date \_\_\_\_\_
  - 6) Make of unit: \_\_\_\_\_ Throttle bore size: \_\_\_\_\_
  - 7) Where will your throttle linkage attach to the manifold: \_\_\_\_\_
  - 8) If the unit was run on the engine specified, leave the jet in the jet can that it ran best with and record the following information: Main jet diameter: \_\_\_\_\_ Secondary pressure: \_\_\_\_\_  
High speed pressure setting: \_\_\_\_\_ High speed jet size: \_\_\_\_\_ Barrel valve leakage: \_\_\_\_\_
  - 9) Type of fuel: \_\_\_\_\_ If Nitro, percentage: \_\_\_\_\_
  - 10) Type \_\_\_\_\_ Drag Race: Track 1/8 / 1/4 mile Class: \_\_\_\_\_ Asphalt / Sand Past ET: \_\_\_\_\_ MPH: \_\_\_\_\_  
of  
Racing: \_\_\_\_\_ Oval Track: Track length \_\_\_\_\_ Class: \_\_\_\_\_ Asphalt / Dirt  
\_\_\_\_\_ Road Racing: Class: \_\_\_\_\_ Car make & style: \_\_\_\_\_  
\_\_\_\_\_ Pulling: Tractor / Truck 2 / 4 WD Class: \_\_\_\_\_  
\_\_\_\_\_ Boat: Hull style: \_\_\_\_\_ Drive style: \_\_\_\_\_ Class: \_\_\_\_\_
  - 11) Approximate altitude (actual elevation) vehicle will operate at: \_\_\_\_\_
  - 12) Weight of vehicle: \_\_\_\_\_
  - 13) Type of transmission: \_\_\_\_\_ Style of converter or clutch: \_\_\_\_\_ Stall Speed: \_\_\_\_\_  
Trans Brake: \_\_\_\_\_ If drag race, do you stage the vehicle from wide open throttle with the  
brake or rev. limiter: \_\_\_\_\_  
Min. Operating RPM seen under racing conditions: \_\_\_\_\_
  - 14) Type and style of ignition/distributor: \_\_\_\_\_
  - 15) Fuel tank/cell location: \_\_\_\_\_ 16) Fuel pump drive ratio: \_\_\_\_\_
  - 17) Do you run water in the block: \_\_\_\_\_ In the heads: \_\_\_\_\_
- 
-

**INFORMATION NEEDED BY KINSLER TO COMPUTER MODEL YOUR ENGINE**

18) Engine Make: \_\_\_\_\_ Cylinder head make and model: \_\_\_\_\_ # of cylinders: \_\_\_\_\_

Actual cubic inches: \_\_\_\_\_ Comp. Ratio: \_\_\_\_\_ Min. & Max. RPM: \_\_\_\_\_ / \_\_\_\_\_

Bore: \_\_\_\_\_ Stroke: \_\_\_\_\_ Deck height: \_\_\_\_\_ Connecting Rod length: \_\_\_\_\_

Firing Order: \_\_\_\_\_ Ignition timing, total advance: \_\_\_\_\_° all in @ \_\_\_\_\_ RPM

Piston rings (circle one): Standard tension, Low tension, Gapless Crankcase windage: Std., Low, Dry sump

**Camshaft specifications:** Flat-tappet or Roller / Solid or Hydraulic lifters Rocker ratio: \_\_\_\_\_ INT \_\_\_\_\_ EX

Duration @ .050" lift: \_\_\_\_\_ INT \_\_\_\_\_ EX

Lobe lift: \_\_\_\_\_ INT \_\_\_\_\_ EX

Valve Timing in Crankshaft Degrees  
Measured at .050" Tappet Lift **Check boxes**

	Open Degrees		Close Degrees	
INT	ATDC	BTDC	BBDC	ABDC
EX	ABDC	BBDC	ATDC	ABDC

Lobe separation: \_\_\_\_\_ Intake lobe installed position: \_\_\_\_\_ Valve Lash: \_\_\_\_\_ INT \_\_\_\_\_ EX

Port dimensions:

Intake Port Length \_\_\_\_\_" Volume \_\_\_\_\_ cc

Valve size \_\_\_\_\_

Exhaust port length \_\_\_\_\_" Volume \_\_\_\_\_ cc

Valve Size \_\_\_\_\_

Cylinder head flows @ \_\_\_\_\_ inches of water 

Tested on \_\_\_\_\_ bore size

**Alternate method: Less accurate**

Head intake port flow \_\_\_\_\_ CFM @ (circle one) .500" or .550"

Valve lift @ \_\_\_\_\_ inches of water

Head exhaust port flow \_\_\_\_\_ CFM @ (circle one) .500" or .550"

Valve lift @ \_\_\_\_\_ inches of water

Useful if you have, otherwise we will provide our best guess:

Cylinder head flow with intake: \_\_\_\_\_ CFM @ \_\_\_\_\_ inches of water Intake manifold runner length: \_\_\_\_\_

Valve Lift	Intake CFM	Exhaust CFM
0.100		
0.200		
0.300		
0.400		
0.500		
0.550		
0.600		
0.650		
0.700		
0.750		
0.800		
0.850		
0.900		

**Header style:** \_\_\_\_\_ Primary tube **inside diameter:** \_\_\_\_\_ Primary tube length: \_\_\_\_\_

(If stepped header) Secondary tube inside diameter: \_\_\_\_\_ Secondary tube length: \_\_\_\_\_

Collector length: \_\_\_\_\_ Collector tube **inside diameter:** \_\_\_\_\_ Mufflers: \_\_\_\_\_

19) **If Supercharged:** Supercharger size: \_\_\_\_\_ Drive ratio: \_\_\_\_\_ Max. Boost: \_\_\_\_\_

Type of Supercharger: Roots / Screw / Centrifugal Intercooled type: \_\_\_\_\_ Anticipated Charge Air Temp: \_\_\_\_\_

20) **If Turbocharged:** Island CFM (peak efficiency) \_\_\_\_\_

Island Pressure ratio: (over one atmosphere, "gauge boost") \_\_\_\_\_ Island efficiency %: \_\_\_\_\_

Surge CFM: (point where surge line intersects pressure ratio line @ 2.0 bar) \_\_\_\_\_

Turbine nozzle diameter or area: (smallest diameter, opening at exhaust flange entering the turbine) \_\_\_\_\_

Maximum flow, CFM: (flow @ 2.0 pressure ratio and 40-45% efficiency) \_\_\_\_\_

