

# REQUEST FOR FLOW TEST AND CALIBRATION OF FUEL INJECTION UNIT

## *Kinsler Fuel Injection*

PLEASE PRINT

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- 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: \_\_\_\_\_

**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) \_\_\_\_\_

| 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      |            |             |

