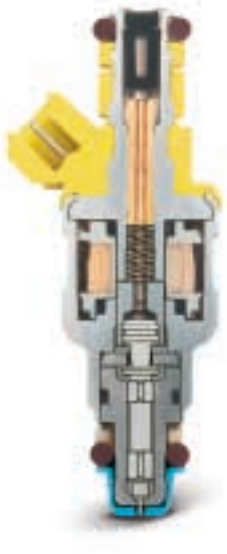
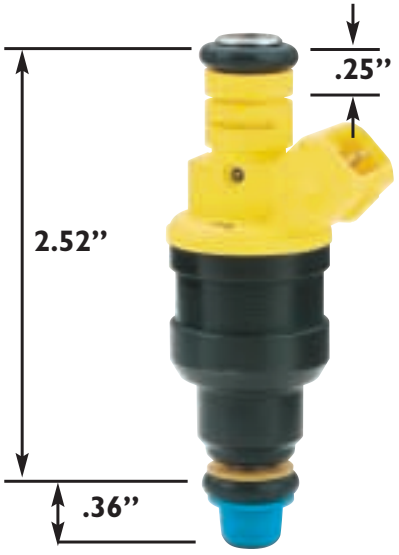
## ACCEL Performance Fuel Injectors provide precise control of fuel delivery and atomization for increased power, improved throttle response and better fuel economy.



Featuring a high-impedance design to function properly with the specified vehicle's ECUs, ACCEL's Performance Fuel Injectors are all-new units, not remanufacture from used cores. They utilize a precision-ground Bosch-style pintle design, which produces a wide-angle conical spray pattern of 150 micron diameter droplets, providing an ultra-fine fuel atomization and maximum emulsification for improved burn efficiency. This pintle design also produces a more accurate and consistently more repeatable fuel flow control than either the ball valve seat/deflector plate or disk injector designs. ACCEL Performance Fuel Injectors are 100% flow tested, balanced and matched to within +/- 1.5% of their nominal pound/flow rating.

ACCEL Performance fuel injectors also feature an anti-plugging vapor cap that virtually eliminates carbon build-up. ACCEL's low-mass internal needle valve and high-pressure spring assembly ensure faster response time and greater dramatic response range. These Injectors also feature their noted flow rating permanently laser etched into the ACCEL-yellow molded top for the unmatched combination of great looks and instant recognition. They come complete and ready for installation with precision-molded O-rings and fine mesh fuel strainers.


ACCEL Performance Fuel Injectors are available in the 14 different pound flow ratings from 14 lbs./hr to 48 lbs./hr. They come packaged in sets of 4, 6 and 8 packs to cover the most popular car, truck and SUV applications.




## ACCEL Performance Fuel Injector Program Technical data and specifications.

| ACCEL Indivigual Injector Catalog p/n | Catalog lbs/hr Flow Rating | Static lbs/hr Flow Rating @ 2.7 BAR or 39.2 PSI | Static lbs/hr Flow Rating @ 3.0 BAR or 43.5 PSI | Static cc/min Flow Rating @ 3.0 BAR or 43.5 PSI | High Impedance Resistance Ohms |
|---|---|---|---|---|---|
| 150114 | 14 | 13.4 | 14.1 | 137 | 14.4 |
| 150115 | 15 | 14.6 | 15.4 | 149 | 14.4 |
| 150117 | 17 | 16.4 | 17.3 | 168 | 14.4 |
| 150119 | 19 | 18.2 | 19.2 | 186 | 14.4 |
| 150121 | 21 | 20.0 | 21.1 | 205 | 14.4 |
| 150123 | 23 | 21.8 | 23.0 | 224 | 14.4 |
| 150124 | 24 | 23.1 | 24.3 | 236 | 14.4 |
| 150126 | 26 | 24.3 | 25.6 | 249 | 14.4 |
| 150130 | 30 | 27.9 | 29.4 | 286 | 14.4 |
| 150132 | 32 | 30.3 | 32.0 | 312 | 14.4 |
| 150136 | 36 | 35.2 | 37.1 | 360 | 14.4 |
| 150140 | 40 | 37.6 | 39.7 | 385 | 12.0 |
| 150144 | 44 | 41.6 | 43.9 | 426 | 12.0 |
| 150148 | 48 | 45.3 | 47.8 | 464 | 12.0 |

## Applications

| Cyl | Years | Application | Stock Replacement 4, 6 or 8 Pack | Plus Level 1 | Plus Level 2 | Plus Level 3 | Plus Level 4 | Plus Level 5 | Plus Level 6 | Plus Level 7 | Plus Level 8 | Plus Level 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Ford Cars** | | | | | | | | | | | | |
| 4 | 1988-94 | Tempo, Topaz 2.3L | 150414 | 150415 | 150417 | | | | | | | |
| | 1991 | Escort, Tracer 1.9L | 150414 | 150415 | 150417 | | | | | | | |
| | 1987-90 | Mustang 2.3L | 150414 | 150415 | 150417 | | | | | | | |
| 6 | 1986-98 | Taurus, Sable 3.0L exc. SHO & FFV | 150614 | 150615 | 150617 | | | | | | | |
| | 1988-90 | Taurus, Sable 3.8L | 150614 | 150615 | 150617 | | | | | | | |
| | 1990-92 | Probe 3.0L | 150614 | 150615 | 150617 | | | | | | | |
| | 1992-94 | Tempo, Topaz 3.0L | 150614 | 150615 | 150617 | | | | | | | |
| | 1988-90 | Thunderbird, Cougar 3.8L | 150614 | 150615 | 150617 | | | | | | | |
| 8 | 1986-89 | Thunderbird, Cougar 5.0L | 150814 | 150815 | 150817 | 150819 | | | | | | |
| | 1986-91 | Crown Vic, Grand Marquis 5.0L | 150814 | 150815 | 150817 | 150819 | | | | | | |
| 4 | 1991-93 | Mustang 2.3L | 150415 | 150417 | | | | | | | | |
| | 1992-96 | Escort, Tracer 1.9L | 150415 | 150417 | | | | | | | | |
| 6 | 1994-98 | Mustang 3.8L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1989-95 | Taurus, Sable 3.8L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1991-95 | Thunderbird 3.8L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1991 | Cougar 3.8L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1996-97 | Thunderbird 3.8L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| 8 | 1986-95 | Mustang 5.0L | 150819 | 150821 | 150823 | 150824 | 150826 | 150830 | 150832 | 150836 | 150840 | 150844 |
| | 1991-93 | Thunderbird 5.0L | 150819 | 150821 | 150823 | 150824 | 150826 | 150830 | 150832 | 150836 | 150840 | 150844 |
| | 1991 | Cougar 5.0L | 150819 | 150821 | 150825 | 150824 | 150826 | 150830 | 150832 | 150836 | 150840 | 150844 |
| 6 | 1994-95 | Taurus 3.8L Police | 150621 | 150623 | 150624 | | | | | | | |

| Cyl | Years | Application | Stock Replacement 4, 6 or 8 Pack | Plus Level 1 | Plus Level 2 | Plus Level 3 | Plus Level 4 | Plus Level 5 | Plus Level 6 | Plus Level 7 | Plus Level 8 | Plus Level 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Ford Cars (continued)** | | | | | | | | | | | | |
| 8 | 1996-98 | Mustang 4.6L SOHC | 150821 | 150823 | 150824 | 150826 | 150830 | 150832 | 150836 | 150840 | 150844 | 150848 |
| | 1992-97 | Crown Vic 4.6L SOHC | 150821 | 150823 | 150824 | 150826 | 150830 | 150832 | 150836 | 150840 | 150844 | 150848 |
| | 1992-97 | Grand Marquis 4.6L SOHC | 150821 | 150823 | 150824 | 150826 | 150830 | 150832 | 150836 | 150840 | 150844 | 150848 |
| | 1991-94 | Lincoln Town Car 4.6L SOHC | 150821 | 150823 | 150824 | 150826 | 150830 | 150832 | 150836 | 150840 | 150844 | 150848 |
| 8 | 1993-95 | Mustang Cobra 5.0L, Cobra R 5.8L | 150826 | 150830 | 150832 | 150836 | 150840 | 150844 | 150848 | | | |
| | 1993-98 | Lincoln Mark VIII 4.6L DOHC | 150826 | 150830 | 150832 | 150836 | 150840 | 150844 | 150848 | | | |
| | 1993-98 | Lincoln Continental 4.6L DOHC | 150826 | 150830 | 150832 | 150836 | 150840 | 150844 | 150848 | | | |
| | 1996-98 | Mustang 4.6L DOHC Cobra | 150826 | 150830 | 150832 | 150836 | 150840 | 150844 | 150848 | | | |
| 6 | 1989-90 | Thunderbird 3.8L SuperCoupe | 150630 | 150632 | 150636 | 150640 | 150644 | 150648 | | | | |
| | 1989-90 | Cougar 3.8L XR-7 Supercharged | 150630 | 150632 | 150636 | 150640 | 150644 | 150648 | | | | |
| 6 | 1991-93 | Thunderbird 3.8L SuperCoupe | 150632 | 150636 | 150640 | 150644 | 150648 | | | | | |
| | 1991 | Cougar 3.8L XR-7 Supercharged | 150632 | 150636 | 150640 | 150644 | 150648 | | | | | |
| 6 | 1994-95 | Thunderbird 3.8L SuperCoupe | 150636 | 150640 | 150644 | 150648 | | | | | | |
| **Ford / Mazda Trucks** | | | | | | | | | | | | |
| 4 | 1998 | Ranger 2.5L | 150414 | 150415 | 150417 | | | | | | | |
| | 1998 | B2500 | 150414 | 150415 | 150417 | | | | | | | |
| | 1985-94 | Ranger 2.3L | 150414 | 150415 | 150417 | | | | | | | |
| | 1994 | B2300 | 150414 | 150415 | 150417 | | | | | | | |
| | 1986-87 | Aerostar 2.3L | 150414 | 150415 | 150417 | | | | | | | |
| 6 | 1986 | Bronco II 2.3L | 150614 | 150615 | 150617 | 150619 | 150621 | | | | | |
| | 1986-92 | Ford Ranger / Bronco II 2.9L exc. 1990 Calib. 58F, T, H, S | 150614 | 150615 | 150617 | 150619 | 150621 | | | | | |
| | 1991-97 | Ranger 3.0L | 150614 | 150615 | 150617 | 150619 | 150621 | | | | | |
| | 1994-97 | B3000 | 150614 | 150615 | 150617 | 150619 | 150621 | | | | | |
| | 1986-97 | Aerostar 3.0L exc. 1990 Calib. 9-56J-R11 | 150614 | 150615 | 150617 | 150619 | 150621 | | | | | |
| | 1987-89 | Ford E-250 Truck 4.9L | 150614 | 150615 | 150617 | 150619 | 150621 | | | | | |
| | 1987-91 | Ford E-, F- Series Trucks 4.9L | 150614 | 150615 | 150617 | 150619 | 150621 | | | | | |
| | 1995-98 | Windstar 3.0L | 150614 | 150615 | 150617 | 150619 | 150621 | | | | | |
| 4 | 1995-97 | Ranger 2.3L | 150415 | 150417 | | | | | | | | |
| | 1995-97 | B2300 | 150415 | 150417 | | | | | | | | |
| 6 | 1990-96 | Ford E-, F- Series Trucks 4.9L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1995 | Windstar 3.8L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| 6 | 1990-92 | Ranger 4.0L | 150621 | 150623 | 150624 | 150626 | | | | | | |
| | 1991-92 | Explorer 4.0L | 150621 | 150623 | 150624 | 150626 | | | | | | |
| | 1991-92 | Navajo | 150621 | 150623 | 150624 | 150626 | | | | | | |
| | 1990-95 | Aerostar 4.0L | 150621 | 150623 | 150624 | 150626 | | | | | | |
| | 1996-98 | Windstar 3.8L | 150621 | 150623 | 150624 | 150626 | | | | | | |
| 8 | 1985-96 | Ford E-, F- Series Trucks 5.0L | 150821 | 150823 | 150824 | 150836 | | | | | | |
| | 1988-96 | Ford E-, F- Series Trucks 5.8L | 150821 | 150823 | 150824 | 150836 | | | | | | |
| | 1996-99 | Ford E-, F- Series Trucks 4.6L | 150821 | 150823 | 150824 | 150836 | | | | | | |
| | 1996-99 | Expedition 4.6L | 150821 | 150823 | 150824 | 150836 | | | | | | |
| | 1996-99 | Ford E-, F- Series Trucks 5.4L | 150821 | 150823 | 150824 | 150836 | | | | | | |
| | 1998 | Expedition, Navigator 5.4L SOHC | 150821 | 150823 | 150824 | 150836 | | | | | | |
| 8 | 1988-91 | Ford E-, F- Series Trucks 7.5L | 150824 | 150826 | 150830 | 150832 | | | | | | |
| 8 | 1992-97 | Ford E-, F- Series Trucks 7.5L | 150826 | 150830 | 150832 | 150836 | | | | | | |
| **GM Cars** | | | | | | | | | | | | |
| 6 | 1985-90 | Celebrity 2.8L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1985-92 | Camaro / Firebird 2.8L / 3.1L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1985-86 | Cavalier, Citation 2.8L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1990-94 | Lumina 3.1L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1990-93 | Corsica / Beretta 3.1L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1991-94 | Cavalier 3.1L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1985 | Skylark 2.8L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1989-93 | Century, Skylark 3.3L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1987-89 | Century, Regal 2.8L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1989-93 | Regal 3.1L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1985-86 | Cimarron 2.8L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1989-93 | Achiva, Calais, Ciera 3.3L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1985-87 | Firenza 2.8L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1988-93 | Cutlass Supreme 2.8L / 3.1L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1986-89 | Ciera 2.8L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1991-94 | Sunbird 3.1L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1992-93 | Grand Am 3.3L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1987-93 | Grand Prix 2.8L / 3.1L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1986-91 | 6000 2.8L / 3.1L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| | 1985-86 | Fiero 2.8L | 150615 | 150617 | 150619 | 150621 | | | | | | |
| 6 | 1993-95 | Camaro / Firebird 3.4L | 150617 | 150619 | 150621 | 150623 | | | | | | |
| | 1994-96 | Corsica / Beretta 3.1L | 150617 | 150619 | 150621 | 150623 | | | | | | |
| | 1995-99 | Lumina / Monte Carlo 3.1L | 150617 | 150619 | 150621 | 150623 | | | | | | |
| | 1997-99 | Malibu 3.1L | 150617 | 150619 | 150621 | 150623 | | | | | | |
| | 1994-98 | Century, Regal, Skylark 3.1L | 150617 | 150619 | 150621 | 150623 | | | | | | |
| | 1994-98 | Achiva, Ciera 3.1L | 150617 | 150619 | 150621 | 150623 | | | | | | |
| | 1993-97 | Cutlass Supreme 3.1L | 150617 | 150619 | 150621 | 150623 | | | | | | |
| | 1997-98 | Cutlass 3.1L | 150617 | 150619 | 150621 | 150623 | | | | | | |
| | 1994-99 | Grand Prix, Grand Am 3.1L | 150617 | 150619 | 150621 | 150623 | | | | | | |
| 6 | 1995-99 | Camaro / Firebird 3.8L | 150619 | 150621 | 150623 | 150624 | 150626 | | | | | |
| 8 | 1985-92 | Camaro / Firdbird 5.0L TPI | 150819 | 150821 | 150823 | 150824 | 150826 | | | | | |
| 6 | 1991-95 | GM 3.8L Series I Supercharged (1991-93 205hp, 94-95 225hp) | 150621 | 150623 | 150624 | 150626 | 150630 | | | | | |
| | 1991-93 | GM 3.4L DOHC (X) 215hp | 150621 | 150623 | 150624 | 150626 | 150630 | | | | | |
| 8 | 1986 | Corvette 5.7L iron head | 150821 | 150823 | 150824 | 150826 | 150830 | | | | | |
| | 1989-91 | Corvette 5.7L exc. ZR-1 | 150821 | 150823 | 150824 | 150826 | 150830 | | | | | |
| | 1989-92 | Camaro / Firebird 5.7L TPI | 150821 | 150823 | 150824 | 150826 | 150830 | | | | | |
| 8 | 1985 | Corvette 5.7L TPI | 150824 | 150826 | 150830 | 150832 | 150836 | | | | | |
| | 1986 | Corvette 5.7L Aluminum head TPI | 150824 | 150826 | 150830 | 150832 | 150836 | | | | | |
| | 1987-88 | Corvette 5.7L TPI | 150824 | 150826 | 150830 | 150832 | 150836 | | | | | |
| | 1987-88 | Camaro / Firebird 5.7L TPI | 150824 | 150826 | 150830 | 150832 | 150836 | | | | | |
| | 1992-93 | Corvette 5.7L LT-1 | 150824 | 150826 | 150830 | 150832 | 150836 | | | | | |
| | 1993 | Camaro / Firebird 5.7L LT-1 | 150824 | 150826 | 150830 | 150832 | 150836 | | | | | |
| 8 | 1994-96 | Corvette 5.7L LT-1 | 150826 | 150830 | 150832 | 150836 | 150840 | 150844 | | | | |
| | 1994-97 | Camaro / Firebird 5.7L LT-1 | 150826 | 150830 | 150832 | 150836 | 150840 | 150844 | | | | |
| | 1995-96 | Impala SS & Full size 5.7L LT-1 | 150826 | 150830 | 150832 | 150836 | 150840 | 150844 | | | | |
| | 1996 | Corvette 5.7L LT-4 | 150826 | 150830 | 150832 | 150836 | 150840 | 150844 | | | | |
| | 1996-97 | Camaro / Firebird 5.7L LT-4 | 150826 | 150830 | 150832 | 150836 | 150840 | 150844 | | | | |
| 6 | 1984-85 | Buick 3.8L Turbo (9) | 150630 | 150632 | 150636 | 150640 | 150644 | 150648 | | | | |
| | 1986-87 | Regal, GN 3.8L Turbo (7) | 150630 | 150632 | 150636 | 150640 | 150644 | 150648 | | | | |
| | 1989 | Trans Am Turbo (7) | 150630 | 150632 | 150636 | 150640 | 150644 | 150648 | | | | |
| **GM Trucks** | | | | | | | | | | | | |
| 6 | 1991-93 | GMC Syclone/Typhoon 4.3L Turbo | 150630 | 150632 | 150636 | 150640 | 150648 | | | | | |
| **European Cars** | | | | | | | | | | | | |
| 6 | 1992-94 | VW Corrado 2.8L VR-6 | 150621 | 150623 | 150624 | 150626 | | | | | | |
| | 1993-96 | VW Jetta 2.8L VR-6 | 150621 | 150623 | 150624 | 150626 | | | | | | |
| | 1993-97 | VW Passat 2.8L VR-6 | 150621 | 150623 | 150624 | 150626 | | | | | | |
| | 1994-96 | VW Golf 2.8L VR-6 | 150621 | 150623 | 150624 | 150626 | | | | | | |
| 6 | 1994-97 | Porsche 993 Carrera 3.6L (1994-95 270 hp, 1996-97 282 hp) | 150624 | 150626 | 150630 | 150632 | | | | | | |
| 6 | 1995-97 | Porsche 993 Carrera 3.6L Twin-Turbo | 150640 | 150644 | 150648 | | | | | | | |

Note: The last two digits of the injector p/n's denote the flow rate.


## ACCEL PERFORMANCE PLUS FUEL INJECTORS FOR HONDA & ACURA

ACCEL Performance Plus Fuel Injectors provide precise control of fuel delivery and atomization for increased power, improved throttle response. They have flow ratings from 8% to 14% higher than stock factory injectors to match the fuel flow requirements to the horse power gains produced from typical bolt-on performance items. Manufactured in both Low and High-impedance designs to function properly with the specified vehicles ECU's. Injectors are all new units, not remanufactured from used cores. Utilize a precision ground pintle, which produces a factory style spray pattern. These injectors are 100% flow tested, balanced and matched to within +/- 1.5% of their nominal pound / flow rating. Low-mass internal needle valve and high-pressure spring assembly ensures faster response time and greater dramatic response range.

The noted part number with inclusive cc/min flow rating is permanently laser etched into the molded top for instant recognition. They come complete, ready for bolt-in installation requiring no modifications to the fuel rail or intake manifold. Packaged individually.

## Acura/Honda ACCEL Fuel Injector Applications

| Make | Years | Cyl | Model | Engine Notes & Comments | Engine Size | Type | Stock Flow Rating | ACCEL Injector p/n cc/min | ACCEL Flow Rating cc/min |
|---|---|---|---|---|---|---|---|---|---|
| ACURA | 1995-96 | 5 | 2.5TL | | 2451cc | G25A4 | 235 | 152255 | 255 |
| | 1997 | 6 | 3.0L CL | SOHC 24V | 2997cc | J30A1 | 240 | 154260 | 260 |
| | 1996-97 | 6 | 3.2 TL | | 3210cc | | 240 | 153260 | 260 |
| | 1996-97 | 4 | Integra GS-R | DOHC 16V VTEC (170 HP) | 1797cc | B18C1 | 235 | 153255 | 255 |
| | 1994-95 | 4 | Integra GS-R | DOHC 16V VTEC (170 HP) | 1797cc | B18C1 | 235 | 152255 | 255 |
| | 1994-95 | 4 | Integra LS, RS | DOHC 16V (142 HP) | 1834cc | B18B1 | 235 | 152255 | 255 |
| | 1992-93 | 4 | Integra | DOHC 16V (130 HP) | 1834cc | B18A1 | 235 | 152255 | 255 |
| | 1992-93 | 4 | Integra | DOHC 16V VTEC (160 HP) | 1678cc | B17A1 | 235 | 152255 | 255 |
| | 1997 | 6 | NSX | DOHC 24V | 3179cc | C32A1 | 275 | 153310 | 310 |
| | 1995-98 | 6 | NSX | DOHC 24V | 2977cc | C30A1 | 325 | 151370 | 370 |
| HONDA | 1995-97 | 6 | Accord | | 2675cc | C27A4 | 235 | 151255 | 255 |
| | 1997 | 4 | Accord | SOHC 24V | 2997cc | J30A1 | 240 | 154260 | 260 |
| | 1994-96 | 4 | Accord DX, LX, SE | SOHC 16V (130 HP) | 2156cc | F22B2 | 235 | 151255 | 255 |
| | 1994-97 | 4 | Accord EX | SOHC 16V VTEC (145 HP) | 2156cc | F22B1 | 235 | 151255 | 255 |
| | | | except Honda | | | | | | |
| | | | p/n 06164-POA-AOO | | | | | | |
| | 1991-93 | 4 | Accord EX, SE | SOHC 16V (130 HP) | 2156cc | F22A6 | 235 | 151255 | 255 |
| | 1990-93 | 4 | Accord DX, LX | SOHC 16V (125 HP) | 2156cc | F22A1, 4 | 235 | 151255 | 255 |
| | 1987-89 | 4 | Accord | | 1955cc | A20A3 | 235 | 151255 | 255 |
| | 1986 | 4 | Accord | | 1955cc | BS | 235 | 151255 | 255 |
| | 1985 | 4 | Accord | | 1829cc | ES3 | 180 | 151195 | 195 |
| | 1996-97 | 4 | Civic CX, DX, LX | SOHC 16V (106 HP) | 1590cc | D16Y7 | 180 | 153195 | 195 |
| | 1996-97 | 4 | Civic EX | SOHC 16V VTEC (127 HP) | 1590cc | D16Y8 | 240 | 153260 | 260 |
| | 1992-95 | 4 | Civic | SOHC 16V VTEC (125 HP) | 1590cc | D16Z6 | 235 | 152255 | 255 |
| | 1992-93 | 4 | Civic | SOHC 16V (102 HP) | 1493cc | D15B7 | 235 | 152255 | 255 |
| | 1992 | 4 | CRX Si | SOHC 16V VTEC (125 HP) | 1590cc | D16Z6 | 235 | 152255 | 255 |
| | 1988-91 | 4 | Civic, CRX Si | | 1590cc | D16A6 | 235 | 151255 | 255 |
| | 1988-91 | 4 | CRX | | 1493cc | D15B6 | 180 | 151195 | 195 |
| | 1988 | 4 | CRX | | 1493cc | D15B6 | 235 | 151255 | 255 |
| | 1987 | 4 | Civic, CRX | | 1488cc | D15A3 | 180 | 151195 | 195 |
| | 1986 | 4 | Civic, CRX | | 1488cc | EW4 | 180 | 151195 | 195 |
| | 1985 | 4 | CRX | | 1488cc | EW3 | 180 | 151195 | 195 |
| | 1997 | 4 | CR-V | | 1973cc | B20B4 | 240 | 154260 | 260 |
| | 1996-97 | 4 | Del Sol Si | SOHC 16V VTEC (125 HP) | 1590cc | D16Y8 | 240 | 153260 | 260 |
| | 1996-97 | 4 | Del Sol Si | DOHC 16V VTEC (160 HP) | 1590cc | B16A3 | 240 | 153260 | 260 |
| | 1996-97 | 4 | Del Sol S | SOHC 16V (115 HP) | 1590cc | D16Y7 | 180 | 153195 | 195 |
| | 1994-95 | 4 | Del Sol Si | DOHC 16V VETC (160 HP) | 1590cc | B16A3 | 235 | 152255 | 255 |
| | 1993-95 | 4 | Del Sol S | SOHC 16V (102 HP) | 1493cc | D15B7 | 235 | 152255 | 255 |
| | 1993-95 | 4 | Del Sol Si | SOHC 16V VTEC (125 HP) | 1590cc | D16Z6 | 235 | 152255 | 255 |
| | 1995-97 | 4 | Odyssey | | 2156cc | F22B6 | 235 | 151255 | 255 |
| | 1997 | 4 | Prelude | DOHC 16V VETC (195 HP) | 2157cc | H22A4 | 275 | 153310 | 310 |
| | 1993-96 | 4 | Prelude | DOHC 16V VETC (190 HP) | 2157cc | H22A1 | 325 | 151370 | 370 |
| | 1992-96 | 4 | Prelude S | SOHC 16V (135 HP) | 2156cc | F22A1 | 235 | 151255 | 255 |
| | 1992-96 | 4 | Prelude SE, Si, SR | DOHC 16V (160 HP) | 2259cc | H23A1 | 235 | 151255 | 255 |
| | 1990-91 | 4 | Prelude Si | | 2056cc | B21A1 | 235 | 151255 | 255 |
| | 1988-91 | 4 | Prelude Si | | 1958cc | B20A5 | 235 | 151255 | 255 |
| | 1987 | 4 | Prelude | | 1955cc | A20A3 | 235 | 151255 | 255 |
| | 1985-86 | 4 | Prelude Si | | 1955cc | BT | 235 | 151255 | 255 |

Note: the last three digits of the injector p/n's denoted the flow rate in cc/min.

## Choosing The Correct Fuel Injector For Your Application

Fuel requirement in lbs./hr = (Max HP x BSFC) / (number of injectors x duty cycle)
Note: to convert from lbs./hr to the Metric measurement of cc/min, use this equation: [(lbs./hr) x 60] / 6.177 = cc/min

Max HP is a realistic horsepower estimate at the crankshaft or known value from engine dyno testing. Chassis dyno horsepower figures can only be used once you factor in the drive train losses, which can vary from vehicle to vehicle. Ask your chassis dyno operator to calculate the drive train horse power loss for your vehicle. Add the drive train horse power loss to the drive wheel horsepower to closely estimate crankshaft horsepower.

BSFC or brake-specific fuel consumption is the amount of fuel consumed per unit of power produced. It is an indication of the efficiency of the engine configuration and calibration. Actual BSFC is a function of compression, camshaft timing, cylinder head design, tune, ambient conditions, etc. The lower the BSFC number, the more efficiently the engine is making power. Engine dyno testing can provide exact BSFC data. To estimate the fuel requirements of your engine, use the examples below that best match your engine type. The reason we use a higher BSFC value to calculate fueling requirements for a supercharged engine is because of the parasitic losses or the power required to driving the supercharger that is never seen at the crank. In other words, a supercharged engine that dyno tests 450 hp at the crank, may actually be making 490 hp, but the supercharger and drive assembly is absorbing 40 hp, so you net out 450 hp. Also, the heating effect of pressurizing the intake charge in a non-intercooled system also increases the fueling requirement of a super/turbocharged engine. Always remember that too lean of a mixture can result in spark knock, high combustion temperatures and engine damage. It's smart to be slightly on the rich or safe side.

| Engine type | Gasoline | Alcohol |
|---|---|---|
| High compression | 0.45 to 0.55 | 0.90 to 1.10 |
| Low compression | 0.50 to 0.60 | 1.00 to 1.20 |
| Super/Turbocharged | 0.55 to 0.65 | 1.10 to 1.30 |

There is one other parameter involved in properly sizing fuel injectors: duty cycle. This is the percent of time that the injector is actually open (which is also referred to as pulse width) vs. total time between firing events. When an injector is open 100% of that time, the injector is in what is called a static condition. For road-racing engines that are at maximum power for extended periods of time, the desired maximum safe duty cycle is 0.85. This ensures that the injector is closed a sufficient time to keep it from overheating. For a typical street engine that spends less than 1% of its time at maximum power, you could argue that a higher duty cycle could be used to calculate fueling needs. Typically we would not do this because again we want to error on the safe side. Some may ask why not just install the biggest injector you can find. Well it's the same analogy of putting an 850cfm carburetor on a Chevette motor, overkill at best, more like a controlled leak. One other thing to remember is that an injector can only open and close so fast, this is called minimum dynamic flow range. If the ECU, in an attempt to lean out a rich mixture, selects a pulse width that is shorter than the injector's minimum dynamic flow range, the injector becomes inconsistent in its ability to supply the required fuel. This results in poor engine performance, surging and stumbling. In other words bigger isn't always better.

Let's calculate the fueling requirements of a few engines to illustrate what we have been talking about.

For the first example let's take a stock Ford 5.0L Mustang motor that makes an advertised 215 hp and look a the very conservative approach Ford used to calculate the injector size for the factory engine by using the O.E. typically safe 0.80 duty cycle limit.

Fuel injector size = (215 hp x 0.55) / (8 x 0.80) = 18.5 lbs./hr or the ACCEL p/n 150119 injector

Now let's upgraded the engine with more efficient GT-40 type components that will lower the BSFC and use a more realistic 0.85 duty cycle limit. Ford says this combination of GT-40 parts will produce about 275 hp. What injector size is required to support this?

Fuel injector size = (275 hp x.50) / (8 x 0.85) = 20.1 lbs./hr or the ACCEL p/n 150121 injector

Until now your only choice would have been to go with a 24 lbs./hr unit, which would be fine if the engine was making about 325 hp, but not ideal for 275 hp. Remember the comment about realistic horsepower; don't kid yourself! Now let's factor in an adjustable fuel pressure regulator as a tuning tool for this setup. By adjusting fuel pressure you can change the flow rating of a given injector. The calculation is simple, as long as you know the static flow rating of an injector at a specific pressure. For example ACCEL p/n 150121 flows 20.0 lbs./hr at 2.7 BAR or 39.6 PSI, which just happens to be where the stock Ford non-adjustable fuel pressure regulators are preset. As a point of reference, most GM factory fuel pressure regulators are preset at 3.0 BAR or 44.1 PSI. If we were to increase the fuel pressure from 39.6 PSI to 45 PSI, what will be the new flow rating of the ACCEL p/n 150121 injector?

New flow rating = [square root of (new pressure /old pressure)] x old flow rating
New flow rating = [square root of (45 PSI / 39.6 PSI)] x 20.0 lbs./hr = 21.3 lbs./hr

This increase in flow rating would support about 15 additional horsepower on our GT-40 engine. An adjustable fuel pressure regulator is an excellent tuning tool as long as the fuel pressure does not exceed 55 PSI, which is the limit that the stock fuel line fittings are designed to handle. So let's say we increase the fuel pressure up to 55 PSI, then the ACCEL p/n 150121 injector would be flowing 23.6 lbs./hr. But because ACCEL offers p/n 150123 that flows 23.1 lbs./hr at 39.6 PSI and 150124 that flows 24.3 lbs./hr at 39.6 PSI, radical increases in fuel pressure are not required to find the perfect match for your engine. The key is to make power efficiently, choosing the correct injector for your intended needs and using the adjustable pressure regulator as a fine tuning tool.

For the third example let's use Ford's new 392 crate motor p/n M-6007-A392. Out of the crate, using a 750cfm carburetor, this engine dyno tested at 453 hp with a .454 BSFC. Let's calculate the injector size you would need if the 392 were to be fuel injected.

Fuel injector size = (453 hp x 0.454) / (8 x 0.85) = 30.2 lbs./hr units or the ACCEL p/n 150130 injector.

As a point of reference, this same 392 crate engine has made over 530 hp on a dyno with Air Flow Research 185cc heads vs. stock GT-40X heads. To support this new-found power, using the same equation, larger 35.2 lbs./hr units or the ACCEL p/n 150136 would be needed. So when calculating injector size, if you are planning on large power adders in the future, keep in mind that you may have to upgrade your injector size. Just like if you might have had to put a bigger carburetor on a modified motor in the past.

# PERFORMANCE FUEL INJECTORS


### UNIVERSAL LOW IMPEDANCE INJECTORS

These are ACCEL's highest flowing, low impedance injectors. They also provide cone spray angle which results in excellent atomization of the fuel, improved fuel economy and throttle response. The Performance Injectors are also the new anti-plugging type which will forever eliminate problems that were once associated with carbon build up. Individually packaged.

| Static Flow Rating lbs/hr | Static Flow Rating cc/min | ACCEL Part # |
|---|---|---|
| 55 | 535 | 74612 |
| 72 | 700 | 74616 |
| 83 | 805 | 74607 |

# FUEL PRESSURE REGULATORS

74560

74562

74561

74566

74565

### FUEL PRESSURE REGULATORS

These premium quality pressure regulators provide stable fuel pressure under the most demanding conditions. Adjustable Fuel Pressure Regulators allow adjustments for increased fuel volume and superior fuel atomization. Stock Ford 5.0L systems operate at 39 psi, while 305 and 350 TPI systems are factory set at 45 psi (except 1985 350 TPI; 39 psi).

**Adj. Pressure Regulator - GM TPI . . . . . .74750**

**Non-Adj. Pressure Regulator**
**Fuel Rail Mounted (set at 45psi) . . . . . .74751**

**Adj. Pressure Regulator - Ford Multiport . . . . . .74753**

**Rail Mount Adjustable Regulator**
**(Fits all complete systems except**
**Small Block SuperRam or StreetRam) . . . . . .74560**

**Adj. Pressure Regulator - Ford 1993-86 5.0L . . . . . .74561**

**Adj. Pressure Regulator**
**Ford 1998-94 5.0L & 4.6L . . . . . .74562**
Will not work on some 1998-1/2 4.6L 2 valve engines.

**Adj. Pressure Regulator**
**Chevrolet 1996-92 Corvette LT1/LT4 . . . . . .74565**

**Adj. Pressure Regulator**
**Chevrolet 1997-94 F-Body LT1/LT4,**
**1996-94 Impala SS, Caprice LT1 . . . . . .74566**

*Products on this page are not legal for sale or use on California pollution-controlled motor vehicles.

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- One distributor generates two signals, RPM and cylinder sequentially for fuel injected motors
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- LED readout allows you to sink up without expensive equipment
- Billet distributor housings
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**Dual Sync Distributor, Chevy big cap . . . . . .77190**
**Dual Sync Distributor, small Ford small cap . . . . . .77201**
**Dual Sync Distributor, small Ford big cap . . . . . .77291**
**Dual Sync Distributor, big Ford small cap . . . . . .77204**
**Dual Sync Distributor, big Ford small cap . . . . . .77294**

## FORD FUEL RAILS
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Kit comes complete with rails, cross over liners and adjustable boost proportional (35-100 psi) fuel pressure regulator.

- Designed to work with all popular intake manifolds
- Adjustable brackets for easy mounting
- CNC-machined for exact fit
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**Ford Fuel Rails 5.0 & 5.8 liter engines . . . . . .77306**

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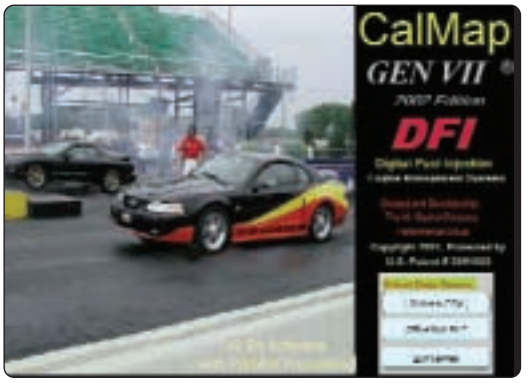


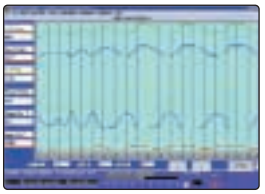

All-new CALMAP 2002 PC windows-driven calibration software provides fast, user-friendly access to all fuel and ignition related tables


**"Real Time" Data Display**

**Engine Configuration Screen**

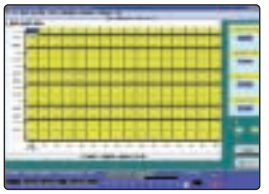
Software Selectable Ignition Compatibility eliminates the need to have your ECU modified by the factory because of ignition upgrades. The Gen VII ECU can understand and process signals from GM HEI and Opti-Spark Ignitions, Ford Thick Film Ignitons, Fixed Advance Magnetic Pick-up ignitions, (both Flying Lug and Flying Magnet), and Fixed Advance Hall-Effect ignitions.

**Data Logging Configuration**



**Data Logging Analysis**

New graphical "on-line" high-speed data recording for up to 30 minutes of data recovery that can be replayed in real time or adjusted in the configuration screen.



**Volumetric Efficiency Table**

New Volumetric Efficiency-based fuel tables can be adjusted a single point at a time, a portion at a time, or completely increased or decreased by a percentage with a few strokes of CALMAP 2002 software.

**Nitrous Oxide Configuration Table**

Every Gen VII ECU has the capability of operating up to 3 stages of Nitrous Oxide to calculate the amount of fuel enrichment for each stage.

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New ECU output accessories control include:

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## SMALL BLOCK FORD ENGINE MANAGEMENT SYSTEM

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**Small Block Ford Engine Management System . . . .77302**

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