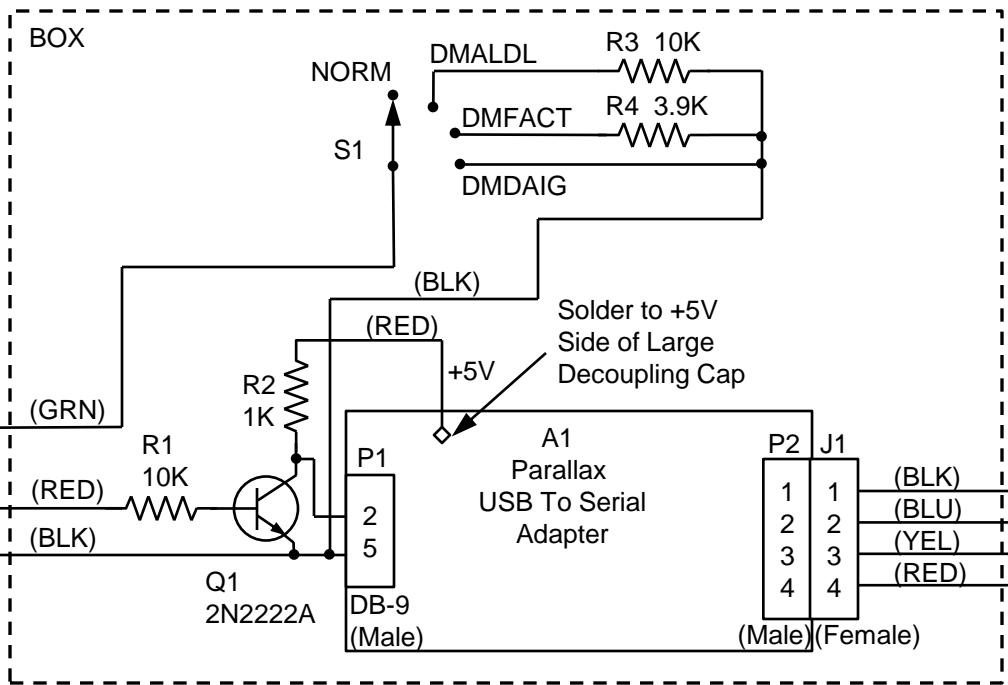
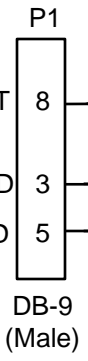


### Fiero ALDL Adapter Schematic V2.0

Because the Fiero 12-Pin Diag Connector Mates (see DAIG-P1 below) are hard to find, a DB-9 Female connector is mounted in the car and wired to the 12-Pin Diag Connector. This allows easy connection without having to remove the Cigarette Lighter Plate.



To DB-9 Female (Mounted In Car)

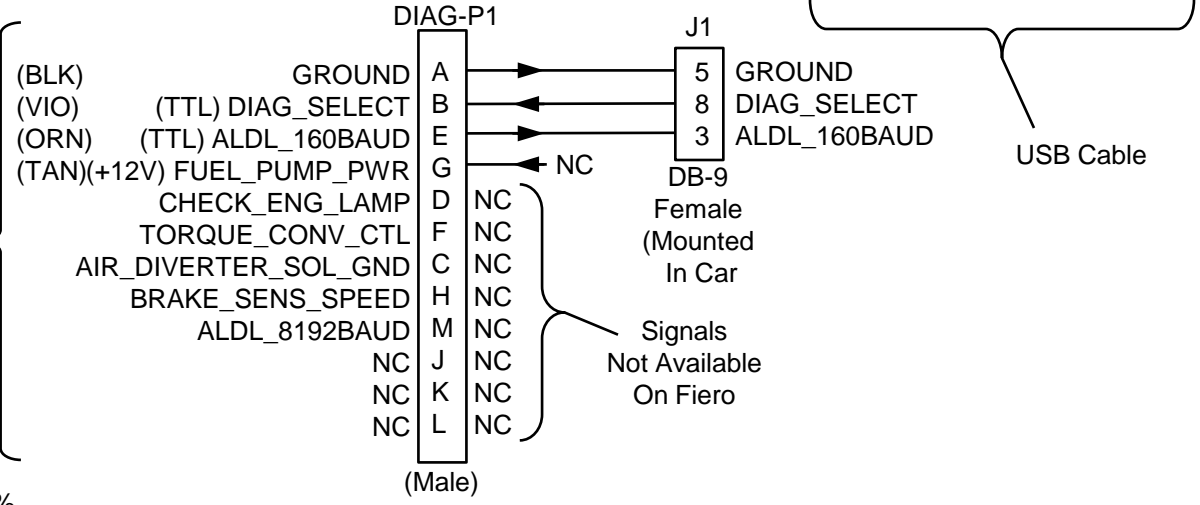


Solder to +5V Side of Large Decoupling Cap

To PC USB Port



To Fiero ALDL Diagnostic Connector



Notes:

1. ALL RESISTORS ARE 0.25W 10%
2. P1 AND J1 PINS NOT SHOWN (1, 2, 6, 7, 8, AND 9) ARE NO CONNECT (NC)
3. A1-P1 PINS NOT SHOWN (1, 3, 4, 6, 7, 8, AND 9) ARE NO CONNECT (NC)
4. Q1 EMITTER IS SOLDERED DIRECTLY TO A1-P1-5 MATING PIN
5. Q1 COLLECTOR IS SOLDERED DIRECTLY TO A1-P1-2 MATING PIN

# Fiero ALDL Adapter V2.0 Parts List

| REF   | SUPPLIER | PART NUMBER     | MFG      | U/M | COST  | QTY | DESCRIPTION   |
|-------|----------|-----------------|----------|-----|-------|-----|---|
| A1    | DIGIKEY  | 28030-ND        | PARALLAX | EA  | 14.99 | 1   | ADAPTER, USB/SERIAL RS-232  |
| W2    | DIGIKEY  | Q326-ND         |          | EA  | 2.26  | 1   | CABLE, USB, A-MNI, B-CON, 3 FOOT  |
| Q1    | DIGIKEY  | 2N2222ACS-ND    |          | EA  | 1.80  | 1   | TRANSISTOR, NPN, 2N2222A, ANY CASE  |
| R1,R3 | DIGIKEY  | CF14JT10K0CT-ND |          | EA  | 0.10  | 2   | RESISTOR, CARBON, AXIAL, 10K, 0.25W,<br>10% TOL   |
| R4    | DIGIKEY  | CF14JT3K90CT-ND |          | EA  | 0.10  | 1   | RESISTOR, CARBON, AXIAL, 3.9K, 0.25W,<br>10% TOL  |
| R2    | DIGIKEY  | CF14JT1K00CT-ND |          | EA  | 0.10  | 1   | RESISTOR, CARBON, AXIAL, 1K, 0.25W, 10%<br>TOL  |
| S1    | DIGIKEY  | CT2121-ND       |          | EA  | 8.61  | 1   | SWITCH, ROTARY, 12 POSITIONS, 0.25 INCH<br>SHAFT, BREAK BEFORE MAKE, OR EQUIV (4<br>POSITIONS MIN)                                  |
| P1    | DIGIKEY  | 679-3545-ND     |          | EA  | 1.98  |     | KNOB, 0.25 INCH SHAFT, PLASTIC, SMALL   |
|       | DIGIKEY  | AE10972-ND      |          | EA  | 0.51  | 1   | CONNECTOR, DB-9, MALE   |
|       | DIGIKEY  | 909GME-ND       |          | EA  | 1.02  | 1   | BACKSHELL, DB-9, STRAIN RELIEF,<br>PLASTIC, METALIZED   |
|       | DIGIKEY  | HM361-ND        |          | EA  | 3.34  | 1   | BOX, PLASTIC, BLACK,<br>3.34 X 2.21 X 1.02" L W H, WITH<br>HARDWARE   |
| W1    | DIGIKEY  | C2462-100-ND    |          | FT  | 0.45  | 1   | CABLE, 3 CONDUCTOR, 0.163 INCH DIA,<br>GREY, 24 AWG STRAINDED, MULTICOLOR,<br>100 FOOT ROLL, OR EQUIV (COST FOR 1<br>FOOT OFF ROLL) |
|       | DIGIKEY  |                 |          | AR  |       |     | SOLDER, 40/60 LEAD/TIN, 26 AWG, ROSEN<br>CORE   |
|       | DIGIKEY  |                 |          | AR  |       |     | FLUX, LIQUID, NO WASH   |
|       | DIGIKEY  |                 |          | AR  |       |     | TAPE, ELECTRICAL, 0.5 INCH WIDE, BLACK  |
|       | DIGIKEY  |                 |          | AR  |       |     | WIRE, HOOK-UP, 24 AWG, STRANDED,<br>PLASTIC SHEATH, RED   |
|       | DIGIKEY  |                 |          | AR  |       |     | WIRE, HOOK-UP, 24 AWG, STRANDED,<br>PLASTIC SHEATH, BLACK   |

ESTIMATED TOTAL COST \$36.00

EA = Each  
FT = Foot  
RL = Roll  
AR = As Required

MOST PART EQUIVILENTS MAY ALSO BE PURCHASED FROM RADIO SHACK

# Fiero ALDL Monitor GUI Main Screen



# Fiero ALDL Monitor GUI Main Screen



# Fiero ALDL Monitor GUI Playback Screen

Fiero GT ALDL Monitor
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Mode Word 2 0x024 036  Flags          DMALDL          REF
PROM ID (MSB) 0x000 000  ~
PROM ID (LSB) 0x016 022  0x0016
IAC Present Motor Position 0x017 023  91.0 %
Coolant Temperature, A/D counts 0x097 151  80 °C
Vehicle Velocity (Speed) 0x029 041  65 km/h
Manifold Air Pressure Variable 0x040 064  2167 mBar
Engine Speed in RPM 0x04C 076  1900 RPM
Throttle Position, A/D counts 0x037 055  7 %
Base Pulse (Fuel) Closed Loop Correction 0x07D 125  +3 us
Oxygen Sensor Minor Loop Filtered Value 0x04D 077  +51 units
Malfunction Flag Word 1 0x000 000  Flags
Malfunction Flag Word 2 0x020 032  Flags          EGR
Malfunction Flag Word 3 0x040 064  Flags          O2_LEAN
Mode Word 1 - Air/Fuel 0x0E1 225  Flags  CL_LOOP  RCH_LEN  CL/SLRL          LORPMHY
MCU I/O 1st Status Word 0x025 037  Flags          A/C_DIS          IAC_ON          IAC_A
MCU I/O 2nd Status Word 0x01E 030  Flags          BIT6_4? COP2    TCC          COOL_PU
Battery Voltage in A/D Counts 0x08B 139  13.9 V
Block Learn Multiplier, Base Pulse Fuel Correction 0x089 137  -9 units
Oxygen Sensor Voltage Transition Counter 0x04A 074  8 +Delta
Unlimited Spark Advance 0x06B 107  36.968 °
EGR Duty Cycle 0x05D 093  36 %
Manifold Air Temperature, A/D Counts 0x0C3 195  90 °C
Injector Base Pulse Width MSB 0x000 000  ~
Injector Base Pulse Width LSB 0x07A 122  0.122 ms
                    
```

Playback ● ALDL Activity

00000137

Stop

Playback

Monitor

Record

Capture

Set-Up

0013

80 °C

25 %

2.5 X1000

13.9 V

2167 mBar

Throttle %

7 %

RESET

90 °C

36.968 °

2250

Mal Flags Error Codes

1 3 5

2 4 R

About Exit

BLM INT O2 Knocks