USDM Evo 9 pinout according to USDM Evo 9 Factory Service Manual plug C-121 = "A" plug on GEMs pinout, pins 1-8, 9-23, 24-35 plug C-119 = "B" plug on GEMs pinout, pins 41-47, 48-59, 60-68 plug C-117 = "C" plug on GEMs pinout, pins 71-77, 78-90, 91-100

(MU803784)

| 1 | 2 | 3 | 4 | JAE | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | | 26 | 27 | 28 | 29 | | 30 | 31 | 32 | 33 | 34 | 35 |

(C-119) (MU803782) 41|42|43|44| 45

| 41 |    |    |    |    |    |    |    |    | 45 | 46 | 47 |
|----|----|----|----|----|----|----|----|----|----|----|----|
| 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 |
| 60 | 61 |    | 62 | 63 | 64 |    | 65 | 66 |    | 67 | 68 |

(C-117) (MU803783)

|   |    | 72 |    | 73 |    |    |    | JAE | - 1 |    | 75 | 76 | 77  |
|---|----|----|----|----|----|----|----|-----|-----|----|----|----|-----|
| l | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85  | 86  | 87 | 88 | 89 | 90  |
|   | 91 | 92 | 93 |    | 94 | 95 |    | 96  | 97  | 98 |    | 99 | 100 |

(C-121) (MU803784)

| ſ | 1  | 2  |    | 3  | 4  |    |    | JAE | :  |    | 5  | 6  |    | 7  | 8  |
|---|----|----|----|----|----|----|----|-----|----|----|----|----|----|----|----|
| l | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16  | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|   | 24 | 25 |    | 26 | 27 | 28 | 29 |     | 30 | 31 | 32 | 33 |    | 34 | 35 |

| D:  | 0.1   | Description   |
|-----|-------|---|
| Pin | Color | Description 11.   |
| 1   |       | Injector #1   |
| 2   |       | Injector #4   |
| 3   |       | Front O2 heater control                                 |
| 4   |       | not used  |
| 5   |       | not used  |
| 6   |       | EGR solenoid relay ground (control)                     |
| 7   |       | not used  |
| 8   |       | Alternator control ground                               |
| 9   |       | Injector #2   |
| 10  |       | not used  |
| 11  |       | Ignition coil cyl #1, #4                                |
| 12  |       | Ignition coil cyl #2, #3                                |
| 13  |       | not used  |
| 14  |       | Idle air control  |
| 15  |       | Idle air control  |
| 16  |       | Evaporative purge solenoid relay ground (control)       |
| 17  |       | not used  |
| 18  |       | Cooling fan relay ground (control)                      |
| 19  |       | MAF signal filter?                                      |
| 20  |       | A/C   |
| 21  |       | Fuel pump relay ground (control)                        |
| 22  |       | CEL ground (control)                                    |
| 23  |       | not used  |
| 24  |       | Injector #3   |
| 25  |       | not used  |
| 26  |       | Rear O2 heater control                                  |
| 27  |       | not used  |
| 28  |       | Idle air control  |
| 29  |       | Idle air control  |
| 30  |       | A/C   |
| 31  |       | A/C   |
| 32  |       | MIVEC valve control                                     |
| 33  |       | not used  |
| 34  |       | Sensor ground   |
| 35  |       | Evaporative ventilation solenoid relay ground (control) |
| 55  | 1     | 2 supotative vontinuion solonola rolly ground (control) |

## (C-119) (MU803782)

|   | 41 | 42 | 43 | 44 |    |    |    |    |    |    | 46 | 47 |
|---|----|----|----|----|----|----|----|----|----|----|----|----|
| l | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 |
| l | 60 | 61 |    | 62 |    |    |    | 65 |    |    | 67 | 68 |

| Pin | Color | Description                                |
|-----|-------|--|
| 41  |       | Waste gate solenoid relay ground (control) |
| 42  |       | TPS power (+5 V)                           |
| 43  |       | Crankshaft position sensor signal          |
| 44  |       | Coolant sensor signal                      |
| 45  |       | RPM  |
| 46  |       | Ground to Chassis                          |
| 47  |       | Power out?                                 |
| 48  |       | Fuel pressure solenoid ground (control)    |
| 49  |       | Sensor ground                              |
| 50  |       | Exhaust cam position sensor signal         |
| 51  |       | MAF barometric pressure sensor signal      |
| 52  |       | Alternator signal?                         |
| 53  |       | Intake cam position sensor signal          |
| 54  |       | Power steering pressure sensor signal      |
| 55  |       | Fuel pump relay ground (control)           |
| 56  |       | not used                                   |
| 57  |       | MFI relay ground (control)                 |
| 58  |       | Ground to chassis                          |
| 59  |       | Power out?                                 |
| 60  |       | Power from battery                         |
| 61  |       | MAF sensor signal?                         |
| 62  |       | IAT sensor signal?                         |
| 63  |       | not used                                   |
| 64  |       | not used                                   |
| 65  |       | A/C  |
| 66  |       | not used                                   |
| 67  |       | not used                                   |
| 68  |       | Starter relay                              |

(C-117) (MU803783)

| l | 71 | 72 |    | 73 | 74 |    | ,  | JAE |    |    | 75 | 76 | 77  |
|---|----|----|----|----|----|----|----|-----|----|----|----|----|-----|
| l | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85  | 86 | 87 | 88 | 89 | 90  |
|   | 91 | 92 | 93 |    |    | 95 |    | 96  |    |    |    |    | 100 |

| Pin | Color | Description                                   |
|-----|-------|---|
| 71  |       | Front O2 sensor signal                        |
| 72  |       | not used                                      |
| 73  |       | Rear O2 sensor signal                         |
| 74  |       | not used                                      |
| 75  |       | not used                                      |
| 76  |       | not used                                      |
| 77  |       | not used                                      |
| 78  |       | TPS signal                                    |
| 79  |       | ACD   |
| 80  |       | Vehicle Speed Sensor signal                   |
| 81  |       | not used                                      |
| 82  |       | not used                                      |
| 83  |       | A/C   |
| 84  |       | not used                                      |
| 85  |       | Data link                                     |
| 86  |       | not used                                      |
| 87  |       | not used                                      |
| 88  |       | Clutch pedal                                  |
| 89  |       | not used                                      |
| 90  |       | not used                                      |
| 91  |       | Knock sensor signal                           |
| 92  |       | MAP sensor signal                             |
| 93  |       | Fuel tank differential pressure sensor signal |
| 94  |       | not used                                      |
| 95  |       | Fuel level sensor signal (main)               |
| 96  |       | Fuel temperature sensor signal                |
| 97  |       | Fuel level sensor signal (low fuel)           |
| 98  |       | Immobilizer                                   |
| 99  |       | Ignition ground                               |
| 100 |       | Data link                                     |