(Page 1 of 2)

#### State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-14-133-A Relating to Certification of New Motor Vehicles

#### TOYOTA MOTOR CORPORATION

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1989 model-year Toyota Motor Corporation exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

| Engine Family | D     | Isplacement             | Exhaust Emission Control Systems   |  |  |  |  |
|---------------|-------|-------------------------|--|--|--|--|--|
|               | Liter | <u>s (Cubic Inches)</u> | (Special Features)   |  |  |  |  |
| KTY2.0V5FCC1  | 2.0   | (121.9)                 | Exhaust Gas Recirculation<br>Three-Way Catalysts (2)<br>Oxygen Sensors (2)<br>(Electronic Port Fuel Injection)<br>(On-Board Diagnostics) |  |  |  |  |

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The following are the emission standards for this engine family:

| Hydrocarbons     | Carbon Monoxide  | Nitrogen Oxides  |  |  |
|------------------|------------------|------------------|--|--|
| (Grams per Mile) | (Grams per Mile) | (Grams per Mile) |  |  |
| 0.39             | 7.0              | 0.4              |  |  |

The following are the certification emission values for this engine family:

| Hydrocarbons<br>Grams per Mile)<br>0.17 | Carbon Monoxide         | Nitrogen Oxides         |  |  |  |
|---|-------------------------|-------------------------|--|--|--|
| <u>(Grams per Mile)</u>                 | <u>(Grams per Mile)</u> | <u>(Grams per Mile)</u> |  |  |  |
| 0.17                                    | 1.6                     | 0.1                     |  |  |  |

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles".

BE IT FURTHER RESOLVED: That the ilsted vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" (Title 13, California Administrative Code, Section 2290) for the aforementioned model-year. TOYOTA MOTOR CORPORATION

EXECUTIVE ORDER A-14-133-A (Page 2 of 2)

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high altitude requirements and highway emission standards as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Tune-Up Label Specifications" (Title 13, California Administrative Code, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the vehicle models listed also comply with the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s]..." (Title 13, California Administrative Code, Section 1968) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2035 <u>et sec</u>.).

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California this \_\_\_\_\_ day of August, 1988.

K. D. Drachand, Chief Mobile Source Division

### 17.11.00 Supplemental data sheets

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

## B.O. + A-14-133-4

| Page | 1 |
|------|---|
|      |   |

| Manufacturer Toyota Motor Corporation | Engine Family <u>KTY2.0V5FCC1</u> |
|---------------------------------------|-----------------------------------|
| Evaporative Family EV-E               | Engine Type <u>4 cyl. in-line</u> |
|                                       | Liters (CID) <u>2.0 (121.9)</u>   |

#### ABBREVIATIONS

.

| Ignition System               | Exhaust Emissions Control System | Special Features         |  |  |  |
|-------------------------------|----------------------------------|--------------------------|--|--|--|
| Ca-Centrifugal Advance        | ATR-Air Injection - Pump         | CFT-Central Ruel         |  |  |  |
| RCH-Rlectronic Control Unit   | ATV-Air Injection - Valve        |                          |  |  |  |
| ET-Electronic Ignition        | RGR-Ryhaust Gas Recirculation    | Throttle Body            |  |  |  |
| RSAC-Riectronic Spark Advance | RIC-Riectronic Injection Control | Injection                |  |  |  |
| Control                       | (Diesel Only)                    | EPFI-Electronic Port     |  |  |  |
| VA-Vacuum Advance             | EM-Engine Modification           | Fuel Injection           |  |  |  |
| VR-Vacuum Retard              | SPL-Smoke Puff Limiter or        | MPFI-Mechanical Port     |  |  |  |
|                               | Throttle Delay                   | Fuel injection           |  |  |  |
|                               | TOC-Trap Oxidizer, Continual     | SFI-Sequential Fuel      |  |  |  |
|                               | TOP-Trap Oxidizer, Periodical    | Injection                |  |  |  |
| -                             | DBC-Dual Bed Catalyst            | DID-Diesel Injection-    |  |  |  |
|                               | OC-Oxidation Catalyst            | Direct                   |  |  |  |
| Fuel System                   | TWC-Three-Way Catalyst           | DIP-Diesel Injection-    |  |  |  |
| CFI, EPFI, MPFI, SFI,         | WUOC-Warm-up Oxidation Catalyst  | Prechamber               |  |  |  |
| DID, DIP, HOS, OS             | WUTWC-Warm-up Three-Way Catalyst | TC-Turbocharger          |  |  |  |
| nV-nVenturi Carburetor        | OS-Oxygen Sensor                 | SC-Supercharger          |  |  |  |
| VV-Variable Venturi           | HOS-Heated Oxygen Sensor         | IC-Intercooler or        |  |  |  |
| Carburetor                    |                                  | Aftercooler              |  |  |  |
|                               |                                  | CCV-Combustion           |  |  |  |
|                               |                                  | Chamber Valve            |  |  |  |
| · · ·                         |                                  | OBD-On-Board             |  |  |  |
|                               |                                  | Diagnostics              |  |  |  |
|                               |                                  |                          |  |  |  |
| VEHICLE MODELS :              |                                  |                          |  |  |  |
| <u>Camry</u> Camry            | wagon <u>Celica</u> <u>C</u>     | <u>elica convertible</u> |  |  |  |
| SV21L-UEMDKA SV21LG-          | UWMDKA ST162L-BCMSKA S           | T162L-BKMVKA             |  |  |  |
| -UEMBKA -                     | uwpdka –Bcmvka                   | -BKPVKA                  |  |  |  |
| -UEPDKA -                     | UWPNKA -BCPSKA                   |                          |  |  |  |
| -UEPNKA                       | -BCPVKA                          |                          |  |  |  |
| -UEPBKA                       | -BLMVKA                          |                          |  |  |  |
|                               | -BLPVKA                          |                          |  |  |  |
|                               |                                  |                          |  |  |  |
| Engine: Front <u>x</u> Mid    | Rear                             |                          |  |  |  |

Drive: FWD \_\_\_\_\_ RWD \_\_\_\_\_ 4WD Full time \_\_\_\_\_ 4WD Part time \_\_\_\_\_

.

Page : 17.11-25

E.O. # A-14-133-A

| Ç |     |          | 1989 A  | IR RESO | URCES BO                         | DARD SUPPLEM               | ENTAL DATA S  | HEET               | a 7  |
|---|-----|----------|---|---------|----------------------------------|----------------------------|---|--------------------|--|
|   | Pas | senger ( | Cars <u>x</u> Light-Du                              | ity Tru | cks                              | Medium-Duty                | Vehicles  | _ Gas <u>x</u> Die | esel   |
|   | Man | ufactur  | er <u>Toyota Mo</u>                                 | tor Cor | poration                         | n Engin                    | e family  | KTY2.0V            | 5FCC1  |
|   | Lit | er (CID  | ) 2.0   | (121.9) |                                  | Eng. 1                     | Type <u>4 cyl</u>   | . in-line          |  |
|   | Emi | ssion C  | ontrol Sys. (Spec                                   | cial Fe | atures)                          | EGR + 1                    | <u>rwc + twc + (</u>  | OS + OS (EPF)      | <u>I + OBD)</u>                                    |
|   | En  | gine     | Vehicle Models<br>(If Coded see                     | Trans.  | Equiv.<br>Test                   | Ign. System<br>ECU,EI,ESAC | Fuel System<br>EPFI, OS                                     | EGR Valve          | Catalyst   |
| • | C   | ode      | attachment)<br>(Dyno Hp: Refer<br>to 08.13.02.00)   | Туре    | Weight                           | Part No.<br>[Computer]     | Part No.<br>[Computer]<br>[Air flow<br>meter]<br>[Injector] | Part No.           | Part No.   |
|   | 1 & | 2        | SV21L-UEMDKA<br>-UEMBKA<br>SV21LG-UWMDKA            | M5      | 3,000<br>3,125<br>3,250          | 89661-32350                | 89661-32350<br>22250-74101<br>23250-74060                   | 25620-74140        | Manifold<br>converter :<br>25508-74070<br>(Sll) #1 |
|   | 3 & | 4        | SV21L-UEPBKA  | A4      | 3,125                            | 89661-32350                | 89661-32350<br>22250-74101<br>23250-74060                   | 25620-74150        | Under floor<br>18450-74190<br>(01) *1              |
| G | •   | 6        | SV21L-UEPDKA<br>-UEPNKA<br>SV21LG-UWPDKA<br>-UWPNKA | A4      | 3,125<br>3,250                   | 89661-32360                | 89661-32360<br>22250-74101<br>23250-74060                   |                    | •••  |
|   | 7 & | 8        | ST162L-BCMSKA<br>-BCMVKA<br>-BKMVKA<br>-BLMVKA      | M5      | 2,875<br>3,000<br>3,125          | 89661-32350                | 89661-32350<br>22250-74120<br>23250-74060                   | 25620-74140        |  |
|   | 9&  | 10       | ST162L-BCPSKA<br>-BCPVKA<br>-BKPVKA<br>-BLPVKA      | A4      | 2,875<br>3,000<br>3,125<br>3,250 | 89661-32350                | 89661-32350<br>22250-74120<br>23250-74060                   | 25620-74150        |  |

Note \*1 : Parenthetical information represents identifying marks found on production parts.

Comments : See page one for abbreviations and evaporative emission family identification. Please lefer to manafacturers HP list for correct dyno test HP settings based on model and equipment.

Mage : 17.11-26

Issued : 05/26/88

Rev.1 : 06/24/88

#### 17.11.00 Supplemental data sheets

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

8.0. + A-14-133-A

د است. <u>مسیحیت (میشمونی)</u>

Page 1

| Manufacturer Toyota Motor Corporation | Engine Family KTY2.0V5FCC1        |
|---------------------------------------|-----------------------------------|
| Evaporative Family EV-B               | Engine Type <u>4 cyl. in-line</u> |
|                                       | Liters (CID)2.0 (121.9)           |

#### ABBREVIATIONS

Ç

| Ignition System               | Exhaust Emissions Control Syste      | E Special Peatures          |
|-------------------------------|--------------------------------------|-----------------------------|
| CA-Centrirugal Advance        | Alp-Air injection - pump             | Cri-Central Fuel            |
| ECU-Electronic Control Unit   | AIV-Air Injection - Valve            | Injection or                |
| EI-Electronic Ignition        | <b>EGR-Exhaust Gas Recirculation</b> | Throttle Body               |
| ESAC-Electronic Spark Advance | BIC-Blectronic Injection Contro      | l Injection                 |
| Control                       | (Diesel Only)                        | <b>BPFI-Blectronic</b> Port |
| VA-Vacuum Advance             | EM-Engine Modification               | Fuel Injection              |
| VR-Vacuum Retard              | SPL-Smoke Puff Limiter or            | MPFI-Mechanical Port        |
|                               | Throttle Delay                       | Fuel injection              |
|                               | TOC-Trap Oxidizer, Continual         | SFI-Sequential Fuel         |
|                               | TOP-Trap Oxidizer, Periodical        | Injection                   |
| -                             | DBC-Dual Bed Catalyst                | DID-Diesel Injection-       |
|                               | OC-Oxidation Catalyst                | Direct                      |
| Fuel System                   | TWC-Three-Way Catalyst               | DIP-Diesel Injection-       |
| CPT. RORT. MORT. SRT.         | WINC-Warm-up Oxidation Catalyst      | Prechamber                  |
| DID DID HOS OS                | WITHC-Warm-up Three-Way Catalyse     | t TC-Turbocharger           |
| nV-nVenturi Carburator        | OS-Orvien Sensor                     | SC-Supercharger             |
| W-Variable Venturi            | UC-Hastad Orygon Sancar              | TC-Intercooler or           |
|                               | nos-neated oxygen sensor             |                             |
| Carpuretor                    |                                      | Artercooler                 |
|                               |                                      | ccv-combustion              |
|                               | · · ·                                | Chamber Valve               |
|                               |                                      | OBD-On-Board                |
|                               |                                      | Diagnostics                 |
| VEHICLE MODELS :              |                                      |                             |
| Camry Camry                   | wagon Celica                         | <u>Celica convertible</u>   |
| SV21L-UEMDKA SV21LG           | -uwndka st162l-bcmska s              | st162l-bkmvka               |
| -UEMBKA                       | -UWPDKA -BCMVKA                      | -BKPVKA                     |
| -UEPDKA                       | -UWPNKA -BCPSKA                      |                             |

FWD \_\_\_\_\_ AWD \_\_\_\_\_ 4WD Full time \_\_\_\_\_ 4WD Part time \_\_\_\_\_

-BCPVKA

-BLMVKA -BLPVKA

Drive:

-UEPNKA

-UEPBKA

Engine: Front x Mid. Rear

17.11.00

| E.O. # | <u>A-</u> | 14- | <u>133-A</u> |  |
|--------|-----------|-----|--------------|--|
|--------|-----------|-----|--------------|--|

|            | 1989 A  | IR RESO   | urces b                          | Dard Supplem               | ental data si   | HEET               |  |
|------------|---|-----------|----------------------------------|----------------------------|---|--------------------|--|
| Passenger  | Cars <u>x</u> Light-De                              | ity Tru   | cks                              | Medium-Duty                | Vehicles  | _ Gas <u>x</u> Die | e <u>2</u><br>esel                                 |
| Manufactur | er <u>Toyota Mo</u> l                               | tor Cor   | poratio                          | n Engine                   | e family  | <u>KTY2.0V</u>     | 5FCC1  |
| Liter (CID | 2.0   | (121.9)   |                                  | Eng. 1                     | Type <u>4 cyl</u>   | . in-line          |  |
| Emission C | Control Sys. (Spec                                  | cial Fe   | atures)                          | EGR +                      | <u>TWC + TWC + (</u>  | os + os (epp       | I + OBD)   |
| Engine     | Vehicle Models<br>(If Coded see                     | Trans.    | Equiv.<br>Test                   | Ign. System<br>ECU,EI,ESAC | Fuel System<br>BPFI, OS                                     | EGR Valve          | Catalyst   |
| code       | attachment)<br>(Dyna Hp: Refer<br>to 08.13.02.00)   | Туре      | Weight                           | Part No.<br>[Computer]     | Part No.<br>[Computer]<br>[Air flow<br>meter]<br>[Injector] | Part No.           | Part No.   |
| 1 & 2      | SV21L-UENDKA<br>-UENBKA<br>SV21LG-UWNDKA            | M5        | 3,000<br>3,125<br>3,250          | 89661-32350                | 89661-32350<br>22250-74101<br>23250-74060                   | 25620-74140        | Manifold<br>converter :<br>25508-74070<br>(Sll) tl |
| 3 & 4      | SV21L-UEPBKA  | R4        | 3,125                            | 89661-32350                | 89661-32350<br>22250-74101<br>23250-74060                   | 25620-74150        | Under floor :<br>18450-74190<br>(01) *1            |
| 5 & 6      | SV21L-UEPDKA<br>-UEPNKA<br>SV21LG-UWPDKA<br>-UWPNKA | <b>A4</b> | 3,125<br>3,250                   | 89661-32360                | 89661-32360<br>22250-74101<br>23250-74060                   |                    |  |
| 7 & 8      | ST162L-BCMSKA<br>-BCMVKA<br>-BKMVKA<br>-BLMVKA      | M5        | 2,875<br>3,000<br>3,125          | 89661-32350                | 89661-32350<br>22250-74120<br>23250-74060                   | 25620-74140        |  |
| 9 & 10     | ST162L-BCPSKA<br>-BCPVKA<br>-BKPVKA<br>-BLPVKA      | 74        | 2,875<br>3,000<br>3,125<br>3,250 | 89661-32350                | 89661-32350<br>22250-74120<br>23250-74060                   | 25620-74150        |  |

Note \*1 : Parenthetical information represents identifying marks found on production parts.

B.O. # A-14-133-A 17.11.00 1989 MODEL-YEAR CERTIFICATION REVIEW SHEET EXHAUST/EVAPORATIVE SYSTEM & FILL SPECIFICATION COMPLIANCE (1/2) 49.1 (.4, NOx) 1.8 (0.7 MA Engine Family \_ Mfr. Toyota Motor Corporation KTY2.0V5FCC1 PC <u>x</u> LDT <u>MDV</u> Gas <u>x</u> Diesel <u>LPG</u> Cert. Type - CA <u>x</u> 495 <u>505</u> CID <u>121.9</u> Liters <u>2.0</u> Rated HP <u>115</u> @ <u>5,200</u> RPM Rated Torque <u>124</u> @ <u>4,400</u> RPM Type Cert - 50K x 100K \_\_\_\_ Evaporative Family EV-E \_\_\_ Eng. Type 4 cyl. in-line Exhaust Control Sys. and (Special Features) <u>EGR + TWC + TWC + OS + OS (EPFI + OBD)</u> Section/Page 1 Authorized Representative 01.02.02 2 Fuel, Test Equipment Procedures & Route 03.00.00, 04.00.00, 05.00.00 3 Warr. State & Parts List 17.10.00, 19.03.00, 20.02.11 4 Maint: Cert/Reg'd/Recm'd 06.00.00 5 Tune-Up Lab./Vac. Hose Diag. 07.00.00, 17.06.00 19.00.00 6 Evap. Control System 7 Engine Parameters 20.01.00 8 Fuel/Ignition Systems 08.01.01.01, 08.02.01.00, 02.03.00 20.02.00 9 Exhaust Control System 10 Projected Sales 17.13.00 11 Vehicle Descript. 20.02.08 12 Test Veh. Information Emis. Dur. C/O MY or C/A EF 88 MY N/A Zero Mile Books 88-D5 \*1 89-5V2 \*2 Vehicle Logs 88-D5\_\*1 89-sv2 \*2 88-D5 \*1 N/A Maint. Logs & Engr. Eval. 13 Evap. Bench Test Procedure 13.02.00 14 Gen. Std., Increase in Em., 17.01.01 Safety, Mtg. All Reg'ments. 15 Prod. Veh. Same as Test Veh. 17.01.01 16 Label Durability 17.06.00 17.01.02 17 Driveability 18 Fill Pipe Specs. 17.04.02 19 Altitude A/F Reg'ment 17.02.00 17.03.00 20 Tamperproof Regiment 21 CK for DF. Outlier, Line Xing Checked 22 EPA Certificate Not Applicable 23 Two yr./24K Warranty See Owner's Manual 24 Alcohol Compatible Already submitted 25 Cert. Preview Program 26 OBD system 17.05.00 Not Applicable 27 OBD Extension

8.0. <u>\* A-14-1334</u>

(2/2)

PROJECTED EMISSIONS(1)

|                       | Code        |             | Axle        |               |              | 1     | NPG            | Test          |                      |                     |                     | Hwy        |                     |      |
|-----------------------|-------------|-------------|-------------|---------------|--------------|-------|----------------|---------------|----------------------|---------------------|---------------------|------------|---------------------|------|
| Veh, ID               | (D1spl)     | Trans       | Ratio       | ETV           | RLHP         | C1    | ty/Hwy         | Loc.          | NMHC                 | <u>co</u>           | NOX                 | NOX        | Evap                | Part |
| 89-5V2<br>(00)        | 4           | λ4          | 3.53        | 3,125         | 8.1          | 28.3  | 1/40.5         | MFR           | 0.17                 | 1.6                 | 0.10                | 0.074      | 0.64                | -    |
| 89-RN11 <sup>*3</sup> | 8<br>(2.4L) | <b>A4</b>   | 4.56        | 3,875         | 15.7         | -     | / -            | MPR           | -                    | -                   | -                   | -          | 0.43                | -    |
| 89-RN11 *4<br>(01)    | 8<br>(2.4L) | λ4          | 4.56        | 3,875         | 15.7         |       | / -            | MFR           | -                    | -                   | -                   | -          | 0.40                | -    |
|                       |             |             |             |               |              |       |                |               |                      |                     |                     |            |                     |      |
|                       |             |             |             |               |              |       |                |               |                      |                     |                     |            |                     |      |
| (1) The em            | ission (    | '<br>data v | ,<br>ehicle | '<br>/s abo'  | ı<br>Ve COI  | nply  | with           | 1             | •                    | 1                   | 1                   | 1          | 1                   | 1    |
|                       | and i       | nclude      | s dete      | riorat        | sta<br>ion f | ndaro | is of<br>rs of |               | <u>0.39</u><br>1.147 | $\frac{7.0}{1.000}$ | <u>0.4</u><br>1.054 | <u>0.5</u> | $\frac{2.0}{0.004}$ |      |
|                       |             |             |             |               |              |       | 88             | -D3,          | 85-D1,               |                     |                     |            |                     |      |
| •                     |             |             |             |               |              |       | 88<br>86       | -D4,<br>-D3.  | 88-D5,<br>88-D6,     |                     |                     |            |                     |      |
|                       |             |             |             |               |              |       | 88             | -D7,          | 84-DT6               | ,                   |                     |            |                     |      |
| Evapora               | tive DF     | is th       | e aver      | aqe of        | Vehi         | cle I | 88<br>DF 89    | -DT1,<br>-DT3 | 87-DT<br>& 88-D      | l,<br>T3 and        | Bench               | DF         | 83-BV               | -30  |
| (2) Trap (            | xidizer     | :Yes        | No          | <u>x</u> ;    | Conti        | nual  | Pe             | riodi         | c                    |                     |                     |            |                     |      |
| Remarks <u>*1</u>     | See 1       | 7.12.0      | 0 in 8      | <u>8 MY a</u> | pplic        | atio  | n              |               |                      |                     |                     |            |                     |      |
| *2                    | See 2       | 0.03.0      | 4 and       | 20.03.        | 05           |       |                |               |                      |                     |                     |            |                     |      |
| *3                    | Teste       | d on r      | eqular      | unlea         | ded g        | asol  | ine            |               |                      |                     |                     |            |                     |      |
| *4                    | Teste       | d on p      | remium      | unlea         | ded g        | asol  | ine            |               |                      |                     |                     |            |                     |      |
|                       |             |             |             |               |              |       |                |               |                      |                     |                     |            |                     |      |
|                       |             |             |             |               |              |       |                |               |                      |                     |                     |            |                     |      |
|                       |             |             |             |               |              |       |                |               |                      |                     |                     |            |                     |      |
|                       |             |             |             |               |              |       | ,              |               |                      |                     |                     |            |                     |      |
|                       |             |             |             |               |              |       |                |               |                      |                     |                     |            |                     |      |
| Applicatio            | on i        |             | _           |               |              | _     |                |               |                      |                     | <b>.</b> .          |            |                     |      |
| Processed             | ЪУ          |             | Dat         | e             | <u></u>      | R     | ev1ewe         | α δγ          |                      |                     | Date _              |            |                     |      |
|                       |             |             |             |               |              |       |                |               |                      |                     |                     |            |                     |      |
|                       |             |             |             |               |              |       |                |               |                      |                     |                     |            |                     |      |
| Page : 1              | 7.11-28     | <u>.</u>    |             |               |              |       |                |               |                      |                     |                     |            |                     |      |
| Issued : 0            | 5/26/88     | Re          | ev. 2 :     | 07/26         | /88          |       |                |               |                      |                     |                     |            |                     |      |

17.11.00

(

1

.

### 17.11.00 Supplemental data sheets

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

## B.O. # A- 14- 133- E

Page 1

| Manufacturer Toyota Notor Corporation | Engine Family <u>KTY2.0V5FCC1</u> |
|---------------------------------------|-----------------------------------|
| Evaporative Family EV-E               | Engine Type <u>4 cyl. in-line</u> |
|                                       | Liters (CID) 2.0 (121.9)          |

ABBREVIATIONS

2

(;;

| Ignition System               | Exhaust Emissions Control System        | <u>Special Features</u>     |  |  |  |
|-------------------------------|---|-----------------------------|--|--|--|
| CA-Centrifugal Advance        | AIP-Air Injection - Pump                | CFI-Central Fuel            |  |  |  |
| BCU-Blectronic Control Unit   | AIV-Air Injection - Valve               | Injection or                |  |  |  |
| <b>BI-Blectronic Ignition</b> | EGR-Exhaust Gas Recirculation           | Throttle Body               |  |  |  |
| ESAC-Electronic Spark Advance | <b>BIC-Blectronic Injection Control</b> | Injection                   |  |  |  |
| Control                       | (Diesel Only)                           | <b>EPFI-Blectronic</b> Port |  |  |  |
| VA-Vacuum Advance             | EM-Engine Modification                  | Fuel Injection              |  |  |  |
| VR-Vacuum Retard              | SPL-Smoke Puff Limiter or               | MPFI-Mechanical Port        |  |  |  |
|                               | Throttle Delay                          | Fuel injection              |  |  |  |
|                               | TOC-Trap Oxidizer, Continual            | SFI-Sequential Fuel         |  |  |  |
|                               | TOP-Trap Oxidizer, Periodical           | Injection                   |  |  |  |
|                               | DBC-Dual Bed Catalyst                   | DID-Diesel Injection-       |  |  |  |
|                               | OC-Oxidation Catalyst                   | Direct                      |  |  |  |
| <u>Fuel System</u>            | TWC-Three-Way Catalyst                  | DIP-Diesel Injection-       |  |  |  |
| CFI, BPFI, MPFI, SFI,         | WUOC-Warm-up Oxidation Catalyst         | Prechamber                  |  |  |  |
| DID, DIP, HOS, OS             | WUTWC-Warm-up Three-Way Catalyst        | <b>TC-Turbocharger</b>      |  |  |  |
| nV-nVenturi Carburetor        | OS-Oxygen Sensor                        | SC-Supercharger             |  |  |  |
| VV-Variable Venturi           | HOS-Heated Oxygen Sensor                | IC-Intercooler or           |  |  |  |
| Carburetor                    |   | Aftercooler                 |  |  |  |
|                               |   | CCV-Combustion              |  |  |  |
|                               |   | Chamber Valve               |  |  |  |
|                               |   | OBD-On-Board                |  |  |  |
|                               |   | - Diagnostics               |  |  |  |

VEHICLE MODELS :

Camry SV25L-UEPDKA -UEPNKA

Engine: Front <u>x</u> Mid. \_\_\_\_\_

Drive:

Rear \_\_\_

RWD

4WD Full time <u>x</u> 4WD Part time \_\_\_\_\_

Page : 17.11-29

FWD

\_\_\_\_\_

E.O. + A- 14-133-B

17.11.00

1

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET Page Passenger Cars <u>x</u> Light-Duty Trucks <u>Medium-Duty Vehicles</u> Gas <u>x</u> Diesel Manufacturer \_\_\_\_\_ Toyota Motor Corporation \_\_\_\_\_ Engine family \_\_\_\_\_ KTY2.0V5FC1 2.0(121.9)Eng. Type <u>4 cyl. in-line</u> Liter (CID) Emission Control Sys. (Special Features) <u>BGR + TWC + TWC + OS (EPFI + OBD)</u> Vehicle Models Trans. Ign. System Fuel System BGR Valve Equiv. Catalyst Engine (If Coded see ECU, BI, ESAC Test EPFI, OS attachment) Туре Weight Part No. Part No. Part No. Part No. code [Computer] (Dyno Hp: Refer [Computer] to 08.13.02.00) [Air flow

meter]
[Injector]

Comments : See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment.

Note \*1 : Parenthetical information represents identifying marks found on production parts.

E.O. + A-14-133-B 17.11.00 1989 MODEL-YEAR CERTIFICATION REVIEW SHEET EXHAUST/EVAPORATIVE SYSTEM & FILL SPECIFICATION COMPLIANCE (1/2) 1.8 (.7NOK) Mfr. <u>Toyota Motor Corporation</u> Engine Family \_\_\_\_ KTY2.0V5FCC1 PC x LDT \_\_\_ MDV \_\_\_ Gas x Diesel \_\_\_ LPG \_\_\_ Cert. Type - CA x 495 \_\_\_ 505 \_\_ CID 121.9 Liters 2.0 Rated HP 115 @ 5,200 RPM Rated Torque 124 @ 4,400 RPM Type Cert - 50K x 100K Bvaporative Family BV-B Eng. Type 4 cyl. in-line Bxhaust Control Sys. and (Special Features) \_\_\_\_\_ BGR + TWC + TWC + OS (EPFI + OBD) Section/Page 1 Authorized Representative 01.02.02 2 Fuel, Test Equipment 03.00.00, 04.00.00, 05.00.00 Procedures & Route 3 Warr. State & Parts List 17.10.00, 19.03.00, 20.02.11 06.00.00 4 Maint: Cert/Req'd/Recm'd 5 Tune-Up Lab./Vac. Hose Diag. 07.00.00, 17.06.00 6 Evap. Control System 19.00.00 20.01.00 7 Engine Parameters 8 Fuel/Ignition Systems 08.01.01.01, 08.02.01.00, 02.03.00 9 Exhaust Control System 20.02.00 17.13.00 10 Projected Sales 11 Vehicle Descript. 20.02.08 12 Test Veh. Information Dur. Emiş. N/A' 89 C/O MY OF C/A EF 88 MY Zero Mile Books 88-D5 \*1 89-5V4 \*2 89-5V4 \*2 88-D5 \*1 Vehicle Logs Maint. Logs & Engr. Eval. 89-5V4 \*3 88-D5 \*1 13 Evap. Bench Test Procedure 13.02.00 14 Gen. Std., Increase in Em., Safety, Mtg. All Reg'ments. 17.01.01 17.01.01 15 Prod. Veh. Same as Test Veh. 16 Label Durability 17.06.00 17.01.02 17 Driveability 18 Fill Pipe Specs. 17.04.02 19 Altitude A/F Reg'ment 17.02.00 17.03.00 20 Tamperproof Regiment 21 CK for DF. Outlier, Line Xing Checked 22 EPA Certificate Applicable 23 Two yr./24K Warranty 24 Alcohol Compatible See Owner's Manual Already submitted 25 Cert. Preview Program 17.05.00 26 OBD system 27 OBD Extension Not Applicable

Page : 17.11-31

# B.O. + A-14-133B

17.11.00

(2/2)

PROJECTED EMISSIONS(1)

|                   | Code             |            | Axle          |                 |                | MPG                                | Test         | ,      |  |       | Hwy    |         |            |
|-------------------|------------------|------------|---------------|-----------------|----------------|------------------------------------|--------------|--------|--|-------|--------|---------|------------|
| <u>Veh, ID</u>    | (D1spl)          | Trans      | Rat10         | ETW             | RLHP           | City/Hwy                           | Loc.         | NMHC   | ço                                     | NOX   | NOX    | Evap    | Part       |
| 89-s∨4<br>(00)    | 2                | λ4         | 4.40          | 3,500           | 9.4            | 24.9/32.0                          | MFR          | 0.22   | 2.1                                    | 0.09  | 0.012  | -       | -          |
| 89-RN11 *4        | 8                | λ4         | 4.56          | 3,875           | 15.7           | -/-                                | MFR          | -      | _                                      | -     | -      | 0.43    | <b>-</b> ' |
| 89-RN11 *5        | (2.4L)           | <b>A</b> 4 | 4.56          | 3.875           | 15.7           | - / -                              | MFR          | -      | -                                      | -     | -      | 0.40    | -          |
| (01)              | (2.4L)           |            |               |                 |                |                                    |              |        |  |       |        |         |            |
|                   |                  |            |               |                 | 1              |                                    |              |        |  | ļ     |        |         | ļ          |
|                   |                  |            |               |                 |                |                                    |              |        |  |       |        |         |            |
| (1) The co        | l<br>            | <br>       |               | <br>/           |                |                                    |              |        | 1                                      | l     | 1      | 1       | I          |
| (I) The en        | aission (        | lata ve    | enicie        | S ado           | ve coi<br>stai | ndards of                          |              | 0.39   | 7.0                                    | 0.7   | 0.9    | 2.0     |            |
|                   | and in           | ncludes    | s deter       | riorat          | ion fa         | actors of                          | -            | 1.147  | 1.000                                  | 1.054 | 1.054  | 0.004   | -          |
|                   |                  |            |               |                 |                | 88 <sup>.</sup>                    | -D3,         | 85-D1, |  |       |        |         |            |
|                   |                  |            |               |                 |                | 88 <sup>.</sup><br>86 <sup>.</sup> | -D4,<br>-D3. | 88-D6. |  |       |        |         |            |
|                   |                  |            | •             |                 |                | 88                                 | -D7,         | 84-DT6 | ,                                      |       |        |         |            |
| Buanara           | ative DR         | to the     |               |                 | Voble          | 88 <sup>.</sup>                    | -DT1,        | 87-DT  | l,<br>m2 and                           | Danah | DB     | 0.2. DV | 20         |
| (2) Trap (        | Dxidizer         | :Yes       | e avera<br>No | age or<br>X : ( | Conti          | nual Per                           | riodi        | 6 88-D | rs and                                 | Bench |        | 83-80-  | 30         |
| -                 |                  | -          |               |                 |                |                                    |              |        |  |       |        |         |            |
| Remarks <u>*1</u> | l See l'         | 7.12.00    | ) in 88       | <u>3 MY a</u> j | oplica         | ation                              |              |        |  |       |        |         |            |
| *2                | 2 <u>See 2</u> ( | 0.03.04    | and 2         | 20.03.0         | 05             |                                    |              |        | ······································ |       |        |         | ·          |
| *3                | B See 17         | 1.12.00    | )             |                 |                |                                    |              |        |  |       |        |         |            |
| *4                | 1 Tested         | l on re    | egular        | unlead          | led ga         | asoline                            | ····         |        |  |       |        |         |            |
| *5                | <u>5 Tested</u>  | l on pr    | emium         | unlead          | led ga         | asoline                            |              |        |  |       |        |         |            |
|                   |                  |            |               |                 |                |                                    |              |        |  |       |        |         |            |
|                   |                  |            |               |                 |                |                                    |              |        |  |       |        |         |            |
|                   |                  |            |               |                 |                |                                    |              |        |  |       |        |         |            |
|                   |                  |            |               |                 |                |                                    |              |        |  |       |        |         |            |
| Applicatio        | n                |            |               |                 |                |                                    |              |        |  |       |        |         |            |
| Processed         | by               |            | _ Date        |                 |                | _ Reviewed                         | by _         |        | D                                      | ate _ |        |         | _          |
|                   |                  |            |               |                 | •              |                                    |              |        |  |       |        |         |            |
|                   |                  |            |               |                 |                |                                    |              |        |  |       |        |         |            |
|                   |                  |            |               |                 |                |                                    |              |        |  |       |        |         |            |
|                   |                  |            |               |                 |                |                                    |              |        |  |       |        |         |            |
|                   | 7 11-22          |            |               |                 |                |                                    |              |        |  |       | ······ |         |            |

Page : 17.11-32

Issued : 05/26/88 Rev. 2 : 07/26/88