Fuel Economy Test Car List Database Files

The Test Car List data are the vehicle information and test results that were used in calculating the Gas Mileage GUIDE. For information on the acronyms and how these data are used in the calculation of the GUIDE values, please refer to 40 CFR Part 600 - Fuel Economy of Motor Vehicles.

Database Formats

Instructions for Reading the Test Car List/Database Files.

The ZIP'd versions of these files are named *??***MFTCL.ZIP** for 1997 or earlier model years and *??***TSTCAR.ZIP**? for 1998 and later model years where "??" is equal to the last two digits of the model year.

1998 and later model years:
Once unZIP'd, the files are in comma-delimited (.csv) or Excel Spreadsheet (.xls) format, which can be read by most spreadsheet programs.

1997 and earlier model years:
These files, after being unZIP'd, have file names such as
96MFTCL.TXT (or .DAT or ASC). They are plain ASCII (DOS) text files and in fixed column format.

Different formats apply to different model years, one for 1984-1985, one for 1986-1997 and one for 1998 and later.
The format for 1998 and later is presented first, followed by the one for 1986-1997 and then for the 1984-1985 files.

This information is provided by the U.S. Environmental Protection Agency,
Office of Transportation Air Quality, National Vehicle and Fuel Emissions Laboratory,
2000 Traverwood, Ann Arbor, MI 48105 (734-214-4200).

Field Descriptions for 1998 and Later Files:

The files are in comma-delimited format which can easily be read by spreadsheet program of a user's choice.

Field Name	Description
yr	- model year

mfr - mfr code

Mfr Code	Manufacturer Name
20	DAIMLERCHRYSLER
30	FORD MOTOR COMPANY
40	GENERAL MOTORS
70	ASTON MARTIN
90	FIAT AUTO S.P.A.
108	ROVER GROUP LTD. (AR)
120	BMW
178	DAEWOO
190	DAIHATSU MOTOR COMPANY LTD.
196	MITSUBISHI MOTOR MANUF OF AMERIC
200	MERCEDES BENZ
220	FERRARI
230	FIAT
260	HONDA
265	HYUNDAI
290	ISUZU
305	JAGUAR CARS INC
338	KIA MOTORS CORPORATION
350	LOTUS
380	NISSAN
407	PANOZ AUTO-DEVELOPMENT CORP.
420	PORSCHE
440	ROLLS-ROYCE MOTOR CARS LTD.
460	LAND ROVER GROUP LTD.
470	SAAB
490	MITSUBISHI
491	MITSUBISHI MOTOR SALES AMERICA
492	MITSUBISHI MOTORS AUSTRALIA LTD
540	SUZUKI MOTOR CORPORATION
560	MAZDA MOTOR CORP.
570	TOYOTA
576	NEW UNITED MOTOR MFG INC
590	VOLKSWAGEN
600	VOLVO
640	AUDI
660	FUJI HEAVY IND - MAZDA
691	LAMBORGHINI

bidx - basic engine index number identifying a unique basic engine or sub-basic

engine (if a basic engine is divided into two or more groups)

vid - manufacturer defined vehicle identification number within EPA's computer system (not a VIN number)

carline - car line name (test vehicle model name)

car/truck - 'C' for passenger vehicle and 'T' for truck (classification of the tested vehicle)

cfg - configuration number identifying a unique configuration within a vid

cid - cubic inch displacement of test vehicle

police - indicator for police vehicle (Y or N)

rhp - rated horsepower

ec1 - exhaust emission control system code

ec2 - exhaust emission control system code

ec3 - exhaust emission control system code

ec4 - exhaust emission control system code

ec5 - exhaust emission control system code

Code	Description
002	Engine modification
005	Thermal reactor
008	Exhaust recycle
010	Air pump
011	Pulsating air system
016	Oxidation catalyst
017	Reduction catalyst
018	Three-way catalyst
019	Closed loop control of air/fuel ratio
020	Three-way catalyst and closed loop control of air/fuel ratio
021	Closed loop air injection
099	Other

evc - evaporative emission control system code

101	Crankcase
102	Canister
103	Tank
104	None
105	Canister and charcoal air cleaner
199	Other

trns - transmission code

C4	Manual 4-Speed (Creeper) (M-4)
M3	Manual Three-Speed
M4	Manual Four-Speed (No Creeper)
M5	Manual Five-Speed
SA	Semi-Automatic
A3	Automatic 3-Speed (No Lockup)
L3	Lock-Up/Automatic/3-Speed
A4	Automatic 4-Speed (No Lockup)
L4	Lock-Up/Automatic/4-Speed
C5	Manual 5-Speed (Creeper) (M-5)
S2	Semi-Automatic Two Speed

S3 - Semi-Automatic Three Speed
S4 - Semi-Automatic Four Speed
S5 - Semi-Automatic Five Speed
AV - Automatic Variable Gear Ratios
M6 - Manual Six Speed
A5 - Automatic 5-Speed (No Lockup)
L5 - Lock-Up/Automatic/5-Speed
C6 - Manual 6-Speed (Creeper) (M-6)
A6 - Automatic 6-Speed (No Lockup)
S6 - Semi-Automatic Six Speed

drv - drive system code

F - Front wheel drive
R - Rear wheel drive
4 - 4-wheel or all-wheel drive

od - overdrive code

1 - No gear ratio <1
2 - Top gear ratio <1
3 - Electronically operated overdrive
4 - Computer-controlled automatic electronic overdrive
5 - Computer-controlled automatic electronic overdrive with lockout switch

trans_desc - Transmission descriptor (it is constructed according to the following logic: Transmission descriptors are constructed based on the data submitted on G2 record of the General Label subsystem

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If Shift Indicator Light is (Y)	SIL
If Engine Management System is (Y or L)	EMS
If Number of Transmission Mode is an x which is V, C or a number between 2 and 9 (If x is 1, this item is not to be used)	xMODEM
If Variable Lockup Point is an x which is V, C or a number between 2 and 9 (If x is 1, this item is not to be used)	xLKUP
If Declutching/Freewheeling is Y or L	DC/FW

Any combination of the above, with a blank in between and in the order as shown and not to exceed 15 columns, makes up a transmission descriptors field.

If the last three (xMODE, xLKUP, DC/FW) are the only descriptors, it is to be displayed as xMODE xLKUP FW.

etw - equivalent test weight
cmp - compression ratio
axle - axle ratio
n/v - n/v ratio (engine speed versus vehicle speed at 50 mph)

a/c - indicates air conditioning simulation
dhp - dynamometer horsepower
sil - shift indicator light for standard transmissions (y = yes or n = no,, indicates if test was performed used the sil to upshift during the test driving cycle.)
prc - test procedure code
- 2 - CVS 75 & later (EPA city w/o canister loading)
- 3 - HWFE (highway test)
- 21 - Fed fuel 2-day exhaust (C4H10 canister load)
- 25 - Calif fuel 2-day exhaust (C4H10 canister load)
- 31 - Federal fuel 3-day exhaust (C4H10 canister load)
- 35 - Calif fuel 3-day exhaust (C4H10 canister load)
- 41 - Federal fuel 2-day exhaust (heat fuel tank to load canister)
- 45 - Calif fuel 2-day exhaust (heat to load)

prp - test purpose code
- 01 - Emission data
- 08 - Manufacturers' development
- 31 - Fuel economy
- 32 - Analytical fuel economy

tnum - test number, a unique identifier for a set of test data performed performed at the manufacturer or EPA test lab.

fuel - fuel type code
- 06 - Unleaded (at EPA 96 RON)
- 09 - Diesel (at EPA #2 Diesel)
- 22 - Special unleaded (91 RON)
- 23 - Carb Phase II Gasoline
- 33 - Methanol(M85)
- 39 - Ethanol
- 41 - CNG

C/H - city (C) or highway (H) test identifier
avcd - averaging code for weighting test fuel economy in cases like testing with and without use of shift indicator light
wt - weighting factor for averaging mpg values
hc - HC(hydrocarbon emissions) Test level composite results
co - CO(carbon monoxide emissions) Test level composite results
co2 - CO2(carbon dioxide emissions) Test level composite results
nox - NOX(nitrogen oxide emissions) Test level composite results
pm - particulate matter (for diesel powered vehicles) Test level composite results
mpg - mpg(fuel economy, miles per gallon) Test level
target-a - electric dynamometer target coefficient a
target-b - electric dynamometer target coefficient b
target-c - electric dynamometer target coefficient c

set-a - electric dynamometer set coefficient a
set-b - electric dynamometer set coefficient b
set-c - electric dynamometer set coefficient c

Database Format for 1986-1997 Fuel Economy Test Car List Database Files.

The ZIP'd versions of these files are named ??MFTCL.ZIP, e.g., 93MFTCL.ZIP.

DATA FILE DEFINITION
FOR 1986 - 1997

FILE DESCRIPTION

FIELD NUMBER	FIELD NAME	STARTING COLUMN	WIDTH	TYPE	# DEC. PLACES	COMMENTS
1	ACT-YR	1	4	I	0	FOUR DIGIT ACTIVE MODEL YEAR
x	NOT USED	5	1	H	0	NOT USED
2	VEHICLE TYPE	6	1	A	0	Code representing the car-line class (V=PASSENGER CAR T=TRUCK)
3	VI-MFR-CODE	7	3	I	0	VEHICLE INFORMATION MANUFACTURER CODE (See the above list of manufacturer names for 1998 & later)
4	BAS-ENG-INDX	10	5	I	0	5 DIGIT CODE IDENTIFYING A SET OF DATA FOR A BASIC ENGINE INDEX
5	DISP-CU-IN	15	4	I	0	DISPLACEMENT (CU IN) FROM THE LABEL INPUT DATA
6	FUEL-SYSTEM	19	2	A	0	NUMBER VENTURIS/BARRELS OR 'FI' FOR FUEL INJECTION
7	CONT-SYS-1-6	21	2	A	0	CONTROL SYSTEMS CODE VALUES 1-5. EVAP CONTROL SYSTEM IN 6 AFTER / .
8	TRANS-CODE	44	2	A	0	TRANSMISSION CODE NAME FROM VI (PART OF TRANSMISSION CONFIGURATION)
9	HYPHEN	46	1	H	0	HYPHEN (PART OF TRANSMISSION CONFIGURATION)
10	OVR-DRV-CODE	47	1	I	0	OVERDRIVE CODE (PART OF TRANSMISSION CONFIGURATION) -- FROM VI (1=NO, 2=TOP GEAR<1, 3=ELEC O/D, 4=COMPUTER CONTROLLED, 5=COMPUTER CONTROLLED W/LOCKOUT)
11	NOT USED	48	3	H	0	NOT USED
12	EQUIV-TST-WT	51	4	I	0	EQUIVALENT TEST WEIGHT (POUNDS) -- FROM VI (Curb weight plus 300 pounds - refer to 40 CFR Part 86 for Equivalent Test Weight groups)
13	AXLE-RATIO	55	2	F	2	AXLE RATIO - FROM VI
14	N-V-RATIO	59	4	F	1	ENGINE RPM DIVIDED BY VEHICLE SPEED IN MILES -- FROM VI
15	DAT-TIM-ENTD	63	12	I	0	DATE/TIME RECORD ENTERED – YYMMDDHHMMSS
16	REL-DAT	75	6	I	0	RELEASE DATE OF MPG VALUES TO PUBLIC-- YYMMDD
17	CARLINE-MFR	81	3	I	0	CARLINE MANUFACTURER CODE
18	ABBR-MFR-NAM	84	5	A	0	ABBREVIATED MANUFACTURER NAME
19	SUPRESS-CODE	89	1	A	0	SUPPRESSION CODE
20	TST-TYP	90	1	A	0	* IF 31, # IF 32
21	NOT USED	91	10	H	0	NOT USED
22	VEH-ID	101	16	A	0	VEHICLE ID -- FROM VI
23	COMP-RATIO	117	4	F	1	COMPRESSION RATIO -- FROM VI
24	RATED-HP	121	3	I	0	RATED ENGINE HORSEPOWER – FROM VI
25	A-C-SIM	124	3		0	SIMULATED AIR CONDITIONING APPLIED, YES OR NO -- FROM VI
26	ACT-DYNO-HP	127	4	F	1	DYNAMOMETER HORSEPOWER SETTING USED WHEN TESTED -- FROM VI
27	NOT USED	131	5	H	0	NOT USED
28	BAS-ENG-DES1	136	10	A	0	BASIC ENGINE DESCRIPTOR 1
29	BAS-ENG-DES2	146	10	A	0	BASIC ENGINE DESCRIPTOR 2
30	BAS-ENG-DES3	156	10	A	0	BASIC ENGINE DESCRIPTOR 3
31	CARLINE-NAME	166	25	A	0	CARLINE NAME - MODEL NAME OF TEST VEHICLE
32	CTY-AVG-CDE	191	1	I	0	CODE IDENTIFYING USE OF SIL WEIGHTING

						FOR LINK TO CITY
33	HWY-AVG-CDE	192	1	I	0	CODE IDENTIFYING USE OF SIL WEIGHTING FOR LINK TO HWY
34	CTY-WT	193	4	I	0	CITY WEIGHT VALUE FOR SIL USAGE
35	HWY-WT	197	4	I	0	HIGHWAY WEIGHT VALUE FOR SIL USAGE
36	SIL	201	3	I	0	SHIFT INDICATOR LIGHT
37	DRV-SYS	204	3	A	0	DRIVE SYSTEM - (FWD = FRONT WHEEL DRIVE, ETC)
38	EVAP-PART	207	1	A	0	EVAPORATIVE/PARTICULATES (E=EVAP, P=PART, BLANK=NOTHING)
39	NOT USED	208	3	H	0	NOT USED
40	TRANS-DES	211	15	A	0	TRANSMISSION DESCRIPTOR
41	NOT USED	226	5	F	1	NOT USED
42	NOT USED	231	5	F	1	NOT USED
43	AVG-CMB	236	5	F	1	HARMONIC AVERAGE COMBINED CITY/HIGHWAY MPG VALUE FOR VEHICLE CONFIGURATION
44	NOT USED	241	26	H	0	NOT USED
45	NO-CITY-TSTS	267	2	I	0	NUMBER OF CITY-TESTS
46	NO-HWY-TESTS	269	2	I	0	NUMBER OF HIGHWAY TESTS
47	TST-RSLTS-01	271	30		0	TEST RESULTS-01 (1)F5.3-HC, (2)F5.2-CO, (3)F5.0-CO2, (4)F5.2-NOX, (5)F5.2-EVAP/PART, (6)F5.1-MPG
48	TST-RSLTS-02	301	30		0	TEST RESULTS-02 (1)F5.3-HC, (2)F5.2-CO, (3)F5.0-CO2, (4)F5.2-NOX, (5)F5.2-EVAP/PART, (6)F5.1-MPG
49	TST-RSLTS-03	331	30		0	TEST RESULTS-03 (1)F5.3-HC, (2)F5.2-CO, (3)F5.0-CO2, (4)F5.2-NOX, (5)F5.2-EVAP/PART, (6)F5.1-MPG
50	TST-RSLTS-04	361	30		0	TEST RESULTS-04 (1)F5.3-HC, (2)F5.2-CO, (3)F5.0-CO2, (4)F5.2-NOX, (5)F5.2-EVAP/PART, (6)F5.1-MPG
51	TST-RSLTS-05	391	30		0	TEST RESULTS-05 (1)F5.3-HC, (2)F5.2-CO, (3)F5.0-CO2, (4)F5.2-NOX, (5)F5.2-EVAP/PART, (6)F5.1-MPG
52	TST-RSLTS-06	421	30		0	TEST RESULTS-06 (1)F5.3-HC, (2)F5.2-CO, (3)F5.0-CO2, (4)F5.2-NOX, (5)F5.2-EVAP/PART, (6)F5.1-MPG
53	TST-RSLTS-07	451	30		0	TEST RESULTS-07 (1)F5.3-HC, (2)F5.2-CO, (3)F5.0-CO2, (4)F5.2-NOX, (5)F5.2-EVAP/PART, (6)F5.1-MPG
54	TST-RSLTS-08	481	30		0	TEST RESULTS-08 (1)F5.3-HC, (2)F5.2-CO, (3)F5.0-CO2, (4)F5.2-NOX, (5)F5.2-EVAP/PART, (6)F5.1-MPG

[end]

Database Format for 1984-1985 Fuel Economy Test Car List Database Files.

The ZIP'd versions of these files are named ??MFTCL.ZIP, e.g., 93MFTCL.ZIP

DATA FILE DEFINITION
FOR 1984 and 1985
FILE DESCRIPTION

FIELD NUMBER	FIELD NAME	STARTING COLUMN	WIDTH	TYPE	# DEC. PLACES	COMMENTS
1	ACT-YR	1	4	I	0	FOUR DIGIT ACTIVE YEAR
2	SALES CLASS	5	2	A	0	SALES CLASS: FV=49STATE VEH FT=TRK CV=CALIF VEH CT=TRK
3	VI-MFR CODE	7	3	I	0	VEHICLE INFORMATION MANUFACTURER CODE
4	BAS-ENG-INDX	10	5	I	0	5 DIGIT CODE IDENTIFYING A SET OF DATA FOR A BASIC ENGINE INDEX
5	DISP-CU-IN	15	4	I	0	DISPLACEMENT (CU IN) FROM CARD 5'S
6	FUEL-SYSTEM	19	2	A	0	NUMBER VENTURIS/BARRELS OR 'FI' FOR FUEL INJECTION
7	CONT-SYS-1-6	21	23	A	0	CONTROL SYSTEMS CODE VALUES 1-5. EVAP CONTROL SYSTEM IN 6 AFTER / .
8	TRANS-CODE	44	2	A	0	TRANSMISSION CODE NAME FROM VI (PART OF TRANSMISSION CONFIGURATION)
9	HYPHEN	46	1	H	0	HYPHEN (PART OF TRANSMISSION CONFIGURATION)
10	OVR-DRV-CODE	47	1	I	0	OVERDRIVE CODE (PART OF TRANSMISSION CONFIGURATION) -- FROM VI (1=NO, 2=TOP GEAR<1, 3=ELEC O/D, 4=COMPUTER CONTROLLED, 5=COMPUTER CONTROLLED W/LOCKOUT)
11	NOT USED	48	3	H	0	NOT USED
12	EQUIV-TST-WT	51	4	I	0	EQUIVALENT TEST WEIGHT (POUNDS) -- FROM VI
13	AXLE-RATIO	55	4	F	2	AXLE RATIO - FROM VI
14	N-V-RATIO	59	4	F	1	ENGINE RPM DIVIDED BY VEHICLE SPEED IN MILES -- FROM VI
15	DAT-TIM-ENTD	63	12	I	0	DATE/TIME RECORD ENTERED – YYMMDDHHMMSS
16	REL-DAT	75	6	I	0	RELEASE DATE -- YYMMDD
17	CARLINE-MFR	81	3	I	0	CARLINE MANUFACTURER CODE
18	ABBR-MFR-NAM	84	5	A	0	ABBREVIATED MANUFACTURER NAME FROM SAQE:1001D
19	SUPRESS-CODE	89	1	A	0	SUPPRESSION CODE
20	TST-TYP	90	1	A	0	* IF 31, # IF 32
21	NOT USED	91	10	H	0	NOT USED
22	VEH-ID	101	16	A	0	VEHICLE ID -- FROM VI
23	COMP-RATIO	117	4	F	1	COMPRESSION RATIO -- FROM VI
24	RATED-HP	121	3	I	0	RATED ENGINE HORSEPOWER – FROM VI
25	A-C-SIM	124	3		0	SIMULATED AIR CONDITIONING APPLIED, YES OR NO -- FROM VI
26	ACT-DYNO-HP	127	4	F	1	DYNAMOMETER HORSEPOWER SETTING USED WHEN TESTING -- FROM VI
27	NOT USED	131	5	H	0	NOT USED
28	BAS-ENG-DES1	136	10	A	0	BASIC ENGINE DESCRIPTOR 1
29	BAS-ENG-DES2	146	10	A	0	BASIC ENGINE DESCRIPTOR 2
30	BAS-ENG-DES3	156	10	A	0	BASIC ENGINE DESCRIPTOR 3
31	CARLINE-NAME	166	25	A	0	CARLINE NAME FROM CAR/TRUCK FILE 1236D-ACRTRK
32	CTY-AVG-CDE	191	1	I	0	CODE IDENTIFYING USE OF SIL WEIGHTING FOR LINK TO CITY
33	HWY-AVG-CDE	192	1	I	0	CODE IDENTIFYING USE OF SIL WEIGHTING FOR LINK TO HWY
34	CTY-WT	193	4	I	0	CITY WEIGHT VALUE FOR SIL USAGE
35	HWY-WT	197	4	I	0	HIGHWAY WEIGHT VALUE FOR SIL USAGE

FIELD NUMBER	FIELD NAME	STARTING COLUMN	WIDTH	TYPE	# DEC. PLACES	COMMENTS
36	SIL	201	3	I	0	SHIFT INDICATOR LIGHT
37	DRV-SYS	204	3	A	0	DRIVE SYSTEM - (FWD = FRONT WHEEL DRIVE, ETC)
38	EVAP-PART	207	1	A	0	EVAPORATIVE/PARTICULATES (E=EVAP, P=PART, BLANK=NOTHING)

39	NOT USED	208	3	H	0	NOT USED
40	TRANS-DES	211	15	A	0	TRANSMISSION DESCRIPTOR
41	NOT USED	226	5	F	1	NOT USED
42	NOT USED	231	5	F	1	NOT USED
43	AVG-CMB	236	5	F	1	HARMONIC AVERAGE COMBINED MPG VALUE FOR VEHICLE CONFIGURATION
44	NOT USED	241	26	H	0	NOT USED
45	NO-CITY-TSTS	267	2	I	0	NUMBER OF CITY-TESTS
46	NO-HWY-TESTS	269	2	I	0	NUMBER OF HIGHWAY TESTS
47	TST-RSLTS-01	271	30		0	TST RES-01 F5.3-HC,F5.2-CO,F5.0-CO2,F5.2-NOX,F5.2-EVAP/PART,F5.1-MPG
48	TST-RSLTS-02	301	30		0	TST RES-02 F5.3-HC,F5.2-CO,F5.0-CO2,F5.2-NOX,F5.2-EVAP/PART,F5.1-MPG
49	TST-RSLTS-03	331	30		0	TST RES-03 F5.3-HC,F5.2-CO,F5.0-CO2,F5.2-NOX,F5.2-EVAP/PART,F5.1-MPG
50	TST-RSLTS-04	361	30		0	TST RES-04 F5.3-HC,F5.2-CO,F5.0-CO2,F5.2-NOX,F5.2-EVAP/PART,F5.1-MPG
51	TST-RSLTS-05	391	30		0	TST RES-05 F5.3-HC,F5.2-CO,F5.0-CO2,F5.2-NOX,F5.2-EVAP/PART,F5.1-MPG
52	TST-RSLTS-06	421	30		0	TST RES-06 F5.3-HC,F5.2-CO,F5.0-CO2,F5.2-NOX,F5.2-EVAP/PART,F5.1-MPG
53	TST-RSLTS-07	451	30		0	TST RES-07 F5.3-HC,F5.2-CO,F5.0-CO2,F5.2-NOX,F5.2-EVAP/PART,F5.1-MPG
54	TST-RSLTS-08	481	30		0	TST RES-08 F5.3-HC,F5.2-CO,F5.0-CO2,F5.2-NOX,F5.2-EVAP/PART,F5.1-MPG

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