

TOTAL OIL ECONOMY RUN

1976 to 1980 conducted under the auspices of CAMS



Tom Snooks was the Event Coordinator of the TOTAL Oil Economy Runs conducted between 1976 and 1980, over a four day course around Sydney and then from that city to Melbourne. The Run developed out of an economy run conducted by a CAMS Car Club in Newcastle in 1975, which TOTAL Oil sponsored. In the wake of the 1973 'oil shock' TOTAL saw the potential for conducting a well organised national economy run. Tom Snooks was heavily involved in the TOTAL Oil Southern Cross International Rally, and TOTAL seconded him to organise the TOTAL Oil Economy Run.

This site, based on the last of the Runs (1980) is compiled from records from that event. Not many people, other than those who participated in it, are aware of the size of the Run and the precision with which it had to be conducted, for it was of utmost importance that the results from the Run had integrity. Such was the interest in the event, the NRMA, RACV, DOT and MTA all contributed to its organisation.

The details are recorded for their historical value.



ABOUT THE EVENT

The TOTAL Oil Economy Run was conducted in the five years between 1976 and 1980, under the auspices of the Confederation of Australian Motor Sport (CAMS).

The event developed out of a series of economy runs out of Newcastle, conducted by Terry Anderson. TOTAL Sydney and Melbourne. As Tom Snooks was involved with TOTAL with the Southern Cross Rally he was approached to put together the Sydney-Melbourne concept.

It was conducted in March and finished to coincide with the Melbourne Motor Show.

The aim of the Run was to provide a guide to the motoring industry, media and public just what fuel consumption could be achieved on the open road from properly tuned standard cars driven by experienced drivers in an economical manner.

The TOTAL Oil Economy Run became an acceptable nationwide standard for open road fuel consumption testing, providing figures which may have seemed too good to be true. But they were achievable if the car was serviced and tuned to the manufacturer's specifications, and driven in a sensible, safe and economical manners.

This acceptance was brought about by the dramatic increase in the cost of fuel - which hit the man in the street heavy in the hip pocket. This in turn resulted in the public buying cars that had 'good' fuel consumption and by 1980 the public put fuel consumption on a high priority when purchasing a car. The two 'fuel crisises' of 1973 and 1978/79 hit the Australian economy hard (as it did in other countries) and the price of fuel skyrocketed like never before and became a major factor in the vehicle industry.

Vehicle marketers in Australia and Japan used the consumption figures in advertising campaigns, sometimes taking out full page advertisements in newspapers.

The average motorist could not expect to achieve the figures recorded. Consumption figures obtained by the latest passenger and commercial vehicles (and in 1980, motor cycles) were achieved by 'expert' drivers, driving stock standard but properly tuned vehicles for fuel economy.

The figures achieved therefore, could only be considered to be such that the average motorist would not achieve them. But, they could achieve within 15-20% of those figures obtained in the Run, provided they drove in an economical manner. The figures achieved in the Run at least provided the public with a comparison amongst the vehicles.

During the last three years of the TOTAL Oil Economy Run the organisers worked in conjunction with the Federal Government's department of Transport in testing and comparing 'bench test' figures produced under Australian Standard 2077 (AS2077). The vehicles entered in the Run were tested under AS2077 in the week prior to starting and the figures compared with those achieved during the event. In 1981 the Government introduced the 'bench test' system as the standard for advertising of fuel consumption figures and so the TOTAL Oil Economy Run was no longer needed.

Over the years the field varied from 25 in the first event, to 43 in 1980 plus, in 1980 14 motor cycles were involved with the event.

The importance of the TOTAL Oil Economy Run can be appreciated when it is realised that fuel consumption was the number two factor considered by the buying public when looking around for a vehicle, and the Run was the only nationally recognised 'yardstick' from which authentic consumption figures could be obtained. They were far more realistic than figures achieved from 'economy runs' conducted by a vehicle manufacturer for its own vehicles!!



CHIEF ORGANISING PARTICIPANTS

TOTAL Australia	Val McKenzie (Public Relations) and Ron Dowler (Advertising and Marketing)
Event Coordinator	Tom Snooks
Course Director	Peter Godden (from 1977)
Victorian Police Motor Spo	orts Club supplied some 50 observers, led by Joe Dunlop and Wally Walsh
Chief Technical Officer	Bruce Wilkinson
Technical Advisers	Fred Pearce (CAMS), Ray Bartlett (RACV), Tom Ward (NRMA), Bill Gaffney (NRMA), Peter Caldwell (NRMA), Ken Haw (DOT)
Chief Refueler	Vic Watkins
Chief Impound Official	Jack Mullins



Volkswagen Golf diesels were introduced and at this time they could almost travel from Sydney to Melbourne on one tank of fuel. On an observed run they made Seymour from Sydney before refueling - quite a feat in the late 70s.

TECHNICAL

Only car manufacturers, through distributors and dealers, could enter a vehicle in the event, it was not open to 'privateers'.

Vehicle eligibility was based on the latest examples of petrol or diesel models on sale to the Australian public, with 150 identical vehicles imported into Australia in a twelve months period or 1000 if manufactured or assembled in Australia. Engine size was permitted to be varied within those numbers. No more than one vehicle of any make/model of the same engine capacity could be entered. Additives were not permitted.

Where a vehicle was catalogued with options, the vehicle entered was to be the one which attained the higher national registration figure in the previous 12 months. For example, Option 2 would be the acceptable vehicle:

- Model A (standard) with cross ply tyres with 3.9 differential 30% of sales
- Model B (option 1) with radial tyres with 3.9 differential 45% of sales
- Model C (option 2) with radial tyres with 4.1 differential 25% of sales.

Vehicles were placed in the following categories:

- 1. Petrol driven models
 - manually operated transmissions
 - automatically operated transmissions
- 2 Diesel driven models
 - manually operated transmissions
 - automatically operated transmissions

If a vehicle weighed less than that stated by the manufacturer's specification ('kerb weight') lead ballast was added to the vehicle to weigh the correct weight.

The vehicles were required to conform in every respect to the manufacturer's specification, and were put through a thorough examination by the NRMA before the Run, and tested for conformity to emission levels under ADR 27A. Selected components were checked by the RACV after the Run. Random tests were carried out by the NRMA on carburetors and fuel injection equipment to ensure they were standard.

Once the vehicles were handed over to the organisers, some 7 to 10 days prior to the event, they were placed in an impound and kept under constant surveillance until the Run was over.

A Technical Committee, comprising the Chief Engineers of the NRMA and RACV, together with representatives of the Federal Department of Transport (Emission Control Branch), the Confederation of Australian Motor Sport and TOTAL Australia Limited, met regularly in the six months prior to the event to review and set technical standards and to supervise the scrutiny of the vehicles.

The Chief Technical Officer of all the TOTAL Oil Economy Runs was Bruce Wilkinson, of Melbourne, who devoted much time to the task, contributing greatly to the success of the event by ensuring the integrity of the technical issues.

Servicing of vehicles was prohibited, but servicing adjustments could be carried out at the overnight stops, but only with express permission of the Technical Committee, and under supervision.

All vehicles carried a TOTAL weight of at least 275kg, with drivers and observers carrying ballast to make their weight up to 90kg for each driver and 95kg for the observer.

ENTRY LIST OF VEHICLES/MOTOR CYCLES (1980)

	CONOMY				ERDANT LIST				ATT	ACHMENT A		
	SUN 1980 V		ΛΟΓΛΟ		ENTRANT LIST							
11	VOLVO (AUSTRALIA) PTY LTD.				BEBYMETTE					. W TRANS		. f u
NO		1.980	no reuk	VEHI	CLE DETAILS	131953	ALF 676	4	TE	CHNICAL		
NU.	ENIKANI/ATIKIBUIED ENIKANI	YEAR	MAKE	MODEL	STARTER SYSTEM	COLOUR	REG. NO.	CYL.	CC'S	TRANS.	NQ.GRS.	FUEL
10	BMW (AUSTRALIA) PTY. LTD.	1980	BMW	R65	Е	BROWN	MQ 151	2	645	M-S	5	Р
2C	BMW (AUSTRALIA) PTY. LTD.	1980	BMW	R100RT	Ê	BROWN	MQ 150	2	980	M-S	5	Р
3C	BENNETT HONDA PTY. LTD.	1980	HONDA	CX500	E-K	BLACK	RE 019	2	497	M-C	5	Р
-4C	BENNETT HONDA PTY. LTD.	1980	HONDA	CB650	CORDER	RED	RE 017	4	627	M-C	5	Р
5C	BENNETT HONDA PTY. LTD.	1980	HONDA	CB750KA	Е	BLUE	RE 018	4	749	M-C	5	Р
6C	KAWASAKI MOTORS PTY. LTD.	1980	KAWASAKI	Z250	HALCENACK	SILVER	RE 025	2	249	M-C	6	Р
7C	KAWASAKI MOTORS PTY. LTD.	1980	KAWASAKI	Z500	E	RED	RE 026	4	498	M-C	6	Р
8C	KAWASAKI MOTORS PTY. LTD.	1980	KAWASAKI	Z1300	Spore	BLUE	RE 010	6	1286	M-S	5	Р
90	SUZUKI AUSTRALIA PTY. LTD.	1980	SUZUKI	GS450	ELEVE	RED	QT 117	2	448	M-C	6	Р
100	SUZUKI AUSTRALIA PTY. LTD.	1980	SUZUKI	GS850	SEDVE	BLACK	QT 118	4	844	M-S	5	Р
11C	SUZUKI AUSTRALIA PTY. LTD.	1980	SUZUKI	GSX1100	E	BLUE	AT 116	4	1075	M-C	5	Р
12C	McCULLOCH OF AUST. PTY. LTD.	1980	YAMAHA	XS250	E-K	MAROON	RC 908	2	249	M-C	6	Р
13C	McCULLOCH OF AUST. PTY. LTD.	1980	YAMAHA	SR500G	К	BLACK	RC 909	1	499	M-C	5	Р
14C	McCULLOCH OF AUST. PTY. LTD.	1980	YAMAHA	XS11006	200VE CTA	SILVER	RC 910	4	1102	M-C	5	Р
67					BODY TYPE							Ь
1	PETER MANTON MOTORS LTD.	1979	ALFA ROMEO	ALFETTA 2000L	SEDAN	WHITE	JZM 464	4	1962	М	4	Р
2	BRIAN FOLEY PTY. LTD.	1979	ALFA ROMEO	ALFASUD 1.5Ti	SEDAN 2 DR	WHITE	BF 162	4	1490	М	5	Р
3	BMW (AUSTRALIA) PTY. LTD.	1980	BMW	318i CD	COUPE	YELLOW	APP 588	4	1767	М	4	Р
4	BMW (AUSTRALIA) PTY. LTD.	1979	BMW	528i	SEDAN	SILVER	AOR 301	6	2788	М	4	Р
5	CHRYSLER AUST. LTD.	1979	CHRYSLER	SIGMA	SEDAN	YELLOW	SDW 087	4	1598	М	4	Р
6	CHRYSLER AUST. LTD.	1979	CHRYSLER	LANCER	НАТСНВАСК	YELLOW	SDU 048	4	1598	М	5	Р
7	NISSAN MOTOR CO. (AUST.)	1980	DATSUN	SUNNY	SEDAN	SILVER	ARC 484	4	1172	М	4	Р

					ENTRANT LIST							
	R.C. C. B.L.C. B.W.Y	In St		VEHIC	LE DETATIC				TE	CUNICAL		197
NO.	ENTRANT/ATTRIBUTED ENTRANT	VEAD	MAKE	MODEL	DODY TYPE	COLOUR		CVI	CCIS	TDANC	NO GRS	FUEL
8	NISSAN MOTOR CO. (AUST.) PTY. LTD.	1980	DATSUN	STANZA	SEDAN	GREEN	ALF 676	4	1595	M	• 4	P
9	DAIHATSU DISTRIBUTORS	1980	DAIHATSU	CHARADE	SEDAN	BLUE	KOZ 124	3	993	М	5	Р
10	NISSAN MOTOR CO. (AUST) PTY. LTD.	1980	DATSUN	200B	SEDAN	ORANGE	ADQ 754	4	1952	М	4	Р
11	NISSAN MOTOR CO. (AUST.) PTY. LTD.	1980	DATSUN	1 TONNE UTILITY	COMMERCIAL	WHITE	APX 791	4	2164	М	4	D
12	FORD MOTOR COMPANY OF AUST. LTD.	1979	FORD	FALCON XD	SEDAN	BLUE	ARG 540	6	3268	М	4	Р
13	FORD MOTOR COMPANY OF AUST. LTD.	1980	FORD	FAIRLANE ZJ	SEDAN	BROWN	ARG 016	6	4070	М	3	Р
14	FORD MOTOR COMPANY OF AUST. LTD.	1979	FORD	COURIER XLT	COMMERCIAL	BLUE	AQN 019	4	1769	М	5	Р
15	GENERAL MOTOR'S - HOLDENS' SALES PTY. LTD.	1979	HOLDEN	GEMINI SL/X	SEDAN Roel Chr	YELLOW	404 NQM	4	1584	М	4	Р
17	GENERAL MOTOR'S - HOLDENS' SALES PTY. LTD.	1979	ISUZU	KB 25 UTILITY	COMMERCIAL	WHITE	ARN 058	4	1952	М	4	D
18	LEYLAND MOTOR CORP. OF AUST.	1979	ROVER	3.5	SEDAN	RED	SDI 011	8	3532	M.	5	Р
19	REGENCY LEYLAND	1979	ROVER	3.5	SEDAN	SILVER	KAX 059	8	3532	A	3	Р
20	LEYLAND MOTOR CORP. OF AUST.	1979	JAGUAR	XJ6 4.2	SEDAN	RED	SER 308	6	4228	М	3	Р
21	AUSWIDE PTY. LTD.	1979	FIAT	X1-9	SPORTS	RED	LN 239	4	1290	М	4	Р
22	BENNETT HONDA PTY. LTD.	1980	HONDA	CIVIC	3 DR SEDAN	BLUE	KLH 212	4	1335	М	5	Р
23	BENNETT HONDA PTY. LTD.	1980	HONDA	PRELUDE	COUPE	RED	PRE 001	4	1602	М	5	Р
24	BENNETT HONDA PTY. LTD.	1979	HONDA	ACCORD	3 DR SEDAN	BLUE	BH 797	4	1602	М	5	Р
25	SUBARU (AUST.) PTY. LTD.	1980	SUBARU	LEONE	SEDAN	WHITE	LN 244	4	1595	М	4	Р

		1980		SURAY E	NTRANT LIST				1172		4	
											1.18	- 6
2	CHNYSLER AUST, LTD	1838	OWARTEN	VEHICL	E DETAILS	ne grannara	204 093	19	TE	CHNICAL		
NO.	ENTRANT/ATTRIBUTED ENTRANT	YEAR	MAKE	MODEL	BODY TYPE	COLOUR	REG. NO.	CYL.	CC'S	TRANS.	NO.GRS.	FUEL
26	VOLKSWAGEN AUSTRALIA PTY. LTD.	1979	VOLKS- WAGEN	GOLF GLD	SEDAN	YELLOW	ANT 835	4	1471	М	·4	D
27	VOLKSWAGEN AUSTRALIA PTY. LTD.	1980	VOLKS- WAGEN	PASSAT GLD	SEDAN	RED	VW 949	4	1471	М	4	D
28	WESTCO AUSTRALIA PTY. LTD.	1979	MAZDA	323	SEDAN	WHITE	323 NQU	4	1416	М	5	Р
29	WESTCO AUSTRALIA PTY. LTD.	1979	MAZDA	626	SEDAN	WHITE	626 NQQ	4	1970	м.	5	Р
30	MAZDA MOTORS (SALES) PTY. LTD.	1980	MAZDA	929L	SEDAN	WHITE	KOF 929	4	1970	M c	4	Р
31	MAZDA MOTORS (SALES) PTY. LTD.	1980	MAZDA	RX 7	SPORTS	WHITE	RX 777	4	2292	M	5	Р
32	RENAULT (AUSTRALIA) PTY. LTD	. 1979	PEUGEOT	504 GLD	SEDAN	SILVER	AOB 644	4	2304	М	4	D
33	RENAULT (AUST.) PTY. LTD.	1980	RENAULT	18 GTS	SEDAN	WHITE	ARI 969	4	1647	М	5	Р
34	RENAULT (AUST.) PTY. LTD.	1979	RENAULT	20 TS	SEDAN	BLUE	AMA 300	4	1995	М	5	Р
35	SCUDERIA VELOCE MOTORS PTY. LTD.	1980	PORSCHE	924	SPORTS	RED	SVM 222	4	1984	M	5	Р
36	SAAB - SCANA AUST. PTY. LTD.	1980	SAAB	900 TURBO	HATCHBACK	WHITE	ALR 360	4	1985	M	5	Р
							NE 10385 5	1	A 740	N-C	2	Ь
37	MW MOTORS PTY. LTD.	1980	SUZUKI	НАТСН	COMMERCIAL	YELLOW	ARO 036	3	543	M	5	Р
38	AUSTRALIAN MOTOR INDUSTRIES LTD.	19	ΤΟΥΟΤΑ	COROLLA CS	SEDAN	BROWN	KNS 208	4	1293	M	4	P
39	AUSTRALIAN MOTOR INDUSTRIES LTD.	1979	ΤΟΥΟΤΑ	CORONA	SEDAN	CREEN	APD 009	4	1892	A	3	P
40	AUSTRALIAN MOTOR INDUSTRIES	1979	ΤΟΥΟΤΑ	CORONA	SEDAN	GREEN	APD 017	4	1892	M	NC 4083.	P
41	VOLVO (AUSTRALIA) PTY. LTD.	1979	VOLVO	242 GT	SEDAN	GREY	KCY 456	4	2316	М	4 OD	Р
42	VOLVO (AUSTRALIA) PTY. LTD.	1979	VOLVO	244 DL	SEDAN	GREEN	KMR 864	4	2127	4	3	Р

Motor Cycles

In the late seventies fuel consumption was second only to price when people considered buying a car and the motor cycle distributors decided to be involved with the Run so they could have authenticated consumption figures to advertise, in a move to convert people to motor cycles.

14 motor cycles were entered in 1980, and amongst the riders was Wil Hagon on a BMWR100T and Doug Chivas on a Yamaha 750KA. Wil was keen to ride the motor cycle as he was too heavy to be a car driver (power to weight ratio WAS important!).

In addition to these 14, another 4 riders (from the Victorian Police Motor Sport Club) acted as observers, traveling up and down the roads to keep an eye on the riders; also, the observers in the cars could report any irregularities.

Vehicles

The Run drivers were selected by the entrants and usually were a mixture of motoring journalists, rally and race drivers and experienced company personnel. In the early days celebrities were also included but as the fuel consumption figures became vital for car sales in the late seventies they tended not to be invited.

Each car carried three people, two drivers and one observer. The two drivers were ballasted to a TOTAL of 180 kilograms and the observer to 95 kilograms. If their weight was under these figures, lead ballast was placed in a bag, sealed and placed in the luggage compartment of the car, and checked periodically during the day.

The observers were members of the Victorian Police Motor Sport Club, led by Joe Dunlop*, and were changed twice daily, so that each car carried eight different observers throughout the four day event.

The task of the observer was to check that the car traversed the correct route (although the observer did not navigate, that was the role of the non-driver in the back seat), record any breaches of the traffic regulations and of 'normal' (and safe) driving techniques, to record the amount of fuel put into the vehicle and to ensure that no work was carried out on the car. Petrol caps and bonnets were sealed after each refuel point.

Breaches of regulations and driving techniques (like running the car out of gear, or de-clutching for a period of time) were penalised in the form of fuel added. Penalties were in litres/100 kilometres (l/100km) and manufacturers were only permitted to advertise 'nett' fuel consumption figures published by the organisers in any advertising campaign.

Both drivers were required to share the driving as equally as was reasonably possible, and the observers watched this closely, and it was compulsory that each driver must drive at least one-third of each day's distance.

The start order of the vehicles was rotated each day.

*An aside

Joe Dunlop, from Melbourne, held the record for a round Australia drive. In 1964 he drove, with Ray Christie, a Volkswagen 1500 Sedan some 13,000 kilometres from Melbourne to Melbourne in 5 days 22 hours and 17 minutes, the previous record being 7 1/4 days in a Volkswagen 1200 in 1962 - driven by Joe Dunlop!

From Melbourne the route followed was Sydney, Brisbane, Rockhampton, Ayr, Mt Isa, Dunmarra, Halls Creek, Anna Plains, Roebourne, Carnarvon, Geraldton, Perth, Adelaide and back to Melbourne. They rested for a few hours in Mt Isa and Geraldton whilst the Volkswagen underwent routine servicing.

When you think of the road conditions in those days, that wasn't a bad effort. Of course, there were no speed limits for most of the way.



The course took in 1 1/2 days through Sydney city and metropolitan streets before heading for Melbourne; then a half day running around Melbourne. Here is a Chrysler Regal in front of the Melbourne Flinders Street Station.

FUELING

Prior to the Run the cars were placed on special ramps and leveled by having four corners marked. At each major refuel location the cars were placed on the ramps and leveled to the original marks before they were refueled. This took into account any sagging of the suspension that may have occurred over the 1500 kilometre course.

Petrol pumps were checked just prior to the Run and a technician traveled with the event. Refueling of cars was carried out by trained operators who also traveled with the Run and to refuel them at all times.



Refueling was a precise operation; cars had to be leveled to the same degree that they were when they were first filled; and then spillage had to be avoided. That's Howard Marsden, looking after the Datsuns, behind the 'SUPER' pump.

THE COURSE

The first one and half days (Thursday and Friday) were held around Sydney and suburbs and included three peak-hour periods, even over the Sydney Harbour Bridge. More than 300 kilometres was spent around the city to provide the 'city cycle' fuel consumption figures.

When the city course was selected it was examined by the Urban Transport Study Group of New South Wales to check against density of traffic, traffic speed, length of delays, position of traffic lights, etc (as this data was available on computer). This was important as the drivers had a time limit to get through the course and the times allowed had to be representative ones, for they were penalised (in terms of consumption) if they took longer than the time allowed (thus indicating they were driving more slowly than the traffic flow).



















From Sydney the course headed towards Melbourne, taking in 40 kilometres of unsealed (but good dirt) road, 120 kilometres of very hilly terrain and the remainder of the distance on sealed highways and country roads. Only good roads were selected, but all were those normally traversed by the motoring public.



This is the road from Harrietville to Mount Hotham in 1978 - all dirt and no guard rail!





Two overnight stops (Friday and Saturday) were taken at major provincial centres (Goulburn and Wangaratta) before the Run finished in Melbourne.

Each day's course was divided into a series of sections and a time given in which the drivers were to complete the section. If a vehicle was late, it was penalised for each minute late and the penalty was in terms of I/100km deducted off the overall figure. If there were traffic snarls which resulted in the field being held up, the time allowed was deducted from the average time the field took, plus a pre-determined time allowance.

COURSE STATISTICS

TER		TAI ON	. OIL OMY 1980		by/Subur		361.65 1273.90			<u>STA</u>	TISTICS		<u>_</u>	TTACHMI	ENT D	
DAY D	DIV	SECTION	FRO	DMICEND	NGE: T0.0100	DIST/ Section	ANCE Refuel	Target	TIME Ave Spd	A110	ow Hold	T City	YPE OF Hwy M	TERRAI	N Country	Dirt
1	1	1 1	Rosebery	T EOK	Randwick	34.57	IN -NETO	85	24.4	6	151. GE of	34.57	159.82	153.0	98 60.3	4 4
-		2	Randwick		Warringah	58.67	30-5	100	35.2	.8	30	57.74	0 0 195	-118.6	le = 33/4	a -
		10.3	Warringah I	Mall	Randwick	83.23	176.47	130	38.4	6	90	83.23	-	-	-	-
		18.4	Randwick		Randwick	27.08	MI - 58	65	25.0	_ 5		27.08	38-65	40-1	ю ⁻ та ⁻ о	0 -
		13.5	Randwick		Merrylands	33.04	- 285	80	24.8	6	30	33.04	57 . 20	n_ 76.3	ot " 14")	1 -
		19 6	Merrylands	Mall	Camperdown	30.07	12 - 3	50	36.1	- 4	IMPOUND	30.07	-	- 1-1	5-1-1-1	-
				1	OTAL DAY 1:	266.66		8hr 30m	31.37-			266.66	1 - 1 - 1	-	-	-
					11 34 646 64	707 0	Non Strang	14 Jaies	HIS P	22	1.7	66° 866	10.01	210.4		
2	1	7	Camperdown		Randwick	35.35	1006 - 125	80	26.5	8	m 5	35.35	-	10000	ó -	-
		8	Randwick		Randwick	49.64	175.18	110	27.1	10	180	49.64		10 dars	- T1's	
	2	9	Randwick		Fitzroy	192.98	- 25	180	64.3	5	30	e 192	162.9	98 30.0	0 -	-
		10	Fitzroy Fa	11s	Goulburn	84.93	277.91	63	80.9	2	IMPOUND		84.9	93 -	-	-
				COCHA	TOTAL DAY 2:	362.90	abr 1360	7hr 13m	26.84 68.61	city count	ry	84.99	247.9	91 30.0	0 - 15 0	e -

Fuel consumption was based on the official distance of the course as measured by the organisers, and the amount of fuel dispensed by the organisers.

THE ROAD BOOKS

ACCUM.	DISTANCE	170	DISTANCE: 33.04 km TARGET TIME: 80 minut FIELD AVERAGE TIME ALLOWANCE: 6 minute:	es s
ACCUM.	DISTANCE		TARGET TIME: 80 minut FIELD AVERAGE TIME ALLOWANCE: 6 minute:	es s
ACCUM.	DISTANCE INTER	ANTICIDATE	FIELD AVERAGE TIME ALLOWANCE: 6 minute:	5 10
ACCUM.	DISTANCE INTER	ANTIGIDAMES		
ACCUM.	INTER	ANTELOTDATES	FOLLON CLEVELAND STREET.	
		ACTUAL	INSTRUCTION	TULIP
	0.00	1	STRAIGHT ON FROM CONTROL INTO KING STREET, THEN FOLLOW ROAD TO LEFT AROUND SERVICE STATION. THEN MOVE TO RIGHT HAND LANE ALONG ALISON ROAD.	TOTA
	750 m	2	TURN FIRST RIGHT (into Wansey Road) AT END OF RACECOURSE (Hard to see - turn is at apex of second right hand bend along Alison Road).	F
7,61	600 m	3	TURN RIGHT AT TEE WITH CAUTION AND FOLLOW HIGH STREET.	7
		12	STRATCHT ON ALONG PARRAMATTA ROAD PAST HUME	10
	900 m	4	TURN RIGHT AT LIGHTS AND FOLLOW ANZAC	
		13	STRAIGHT ON ALONG PARRAMATTA ROAD ACROSS	
23.47	1.6 km	5	STRAIGHT ON THROUGH FOURTH LIGHTS ALONG ANZAC PARADE PAST DACEY AVENUE.	1º
		14**	SP 'CITY'	1
:	700 m	• 6	MOVE TO LEFT HAND LANE AFTER NEXT LIGHTS TO TURN LEFT AT SECOND LIGHTS.	
		15	(into Cleveland Street)	
5	500 m	7	STRAIGHT ON THROUGH SECOND LIGHTS ACROSS SOUTH DOWLING STREET. SP 'REDFERN'	
	1	16	FOLLOW CLEVELAND STREET.	+

	DISTANCE			
ACCUM.	INTER.	ANTICIPATED /ACTUAL	INSTRUCTION	TULIP
	900 m	8	STRAIGHT ON THROUGH FIFTH SET OF LIGHTS ACROSS ELIZABETH STREET. FOLLOW CLEVELAND STREET.	
	550 m	9	STRAIGHT ON THROUGH FOURTH AND FIFTH SET OF LIGHTS ACROSS REGENT STREET. FOLLOW CLEVELAND STREET	
*	800 m	10	USE RIGHT HAND LANE TO TURN RIGHT AT FOURTH LIGHTS. SP 'CITY, ASHFIELD' THEN MOVE TO LEFT HAND LANE ALONG CITY ROAD (Highway 1).	070
7.61	350 m	11	TURN LEFT AT NEXT LIGHTS THEN FOLLOW PARRAMATTA ROAD (Great Western Highway 32) TO PARRAMATTA.	
	5.4 km	12	STRAIGHT ON ALONG PARRAMATTA ROAD PAST HUME HIGHWAY, MELBOURNE TURN OFF. (18th set of lights).	
23.47	10.5 km	13	STRAIGHT ON ALONG PARRAMATTA ROAD ACROSS ROUTE (45). SP 'PARRAMATTA'	A 39
	4.0 km	14	USE CENTRE OR RIGHT HAND LANES TO TURN RIGHT AT SEVENTH LIGHTS AT END OF PARRAMATTA ROAD TO FOLLOW ROUTE (55). SP 'PARRAMATTA (55), KATOOMBA (32)'	3
	800 m	15	USE LEFT HAND LANE TO TURN LEFT AT THIRD LIGHTS TO FOLLOW GREAT WESTERN HIGHWAY. SP 'KATOOMBA (32)'	
	1.15 km	16	USE LEFT HAND LANE TO TURN LEFT AT THIRD LIGHTS (after TOTAL service station) AND FOLLOW BURNETT STREET (Main road).	32 Total

The course for the 1980 TOTAL Oil Economy Run was selected to pass over roads normally used by the average motorist.



Highway running

The city course comprised 351km (21.6%) of the TOTAL Run of 1625km and covered areas to the north, south, east and west of Sydney, as well as in the city itself, and around the city of Melbourne. The course covered three peak-hour traffic periods around Sydney and suburbs, but a Sunday afternoon in Melbourne.



City running

Breaches of traffic regulations, unsafe driving practices and late running (times allowed were set for each section), were penalised by taking off a specified percentage of the vehicle's fuel consumption and only the 'nett' figure could be quoted in advertising or publicity.

PENALTIES

	ro		ATTACH	MENT F	
-					
	EC	JNUMY /			
	2U	N 1980		1 .5 /	
_			<u> </u>	1 OT 2	- COM
			Penalty	Points	TOER
Pen- alty	TOEP		NSW	VIC	Pen.
Code	Reg.	DESCRIPTION	damper f	Ro ion	
01	67.3	Late arrival at any control point per minute or part thereof.	N/A	N/A	1%**
02	67.5	Breaking of a seal to work on vehicle with Observer permission, each time.	N/A	N/A	2%**
11	67.1	Entering any control from wrong direction, or deliberate short cutting of the specified route, each time	N/A	N/A	40%*
12	67.2	Deliberate coasting or free wheeling, each time.	N/A	N/A	20%*
13	67.4	Early departure from control, per minute or part thereof.	N/A	N/A	4%*
14	67.7	Turning off engine contrary to regulation 29.10	N/A	N/A	2%*
21	67.8	Failing to wear seat belt correctly.	-	-	1%*
22	и,	Not keeping wholly within traffic lane (eg. making an 'extra' lane of traffic, cycles driving between	g n 2	-	1%*
		lanes).	2	1	1%*
23		Not observe stop or giveway sign.	- 2	1	1%*
24	And m	Not have proper control over vehicle	took pa	t in d	10/+
25		(eg. unnecessarily cornering) careless driving.	2	1	1%*
26	u	Passing a stationary tramcar, driving to right o safety zone.	-	1	1%*
31	67.8	Exceeding speed limit by not more than 15 kph.	3	2	1.5%*
32		Cross unbroken seperation or lane line.	3	5 -	1.5%*
33	"	Not cross seperation or lane line with safety. (eg. Dangerous lane crossing)	3	-	1.5%*
34	U .,	Drive on wrong side of seperation line.	3	1	1.5%
35	п	Not make proper left or right hand turn.	3	1	1.5%
36	н	Make an improper "U" turn (eg. Traffic lights, across unbroken seperation line).	-	-	1.5%
37	н	Not draw out from boundary carriageway with safe	ty. 3	-	2%*
41	67.8	Exceed speed limit by more than 15 kph	4	2	2%*
42	н	Cross centre line at grade or curve.	4	-	2%*
43		Drive negligently.	4		210
44	۰ ۱	Not give way to pedestrian at marked foot crossi or; failing to stop at a school crossing whilst person is thereon or; passing a stationary vehic	ng any le	3	2%*
		at a marked crossing.	4	5	2%*
4	5 "	Not give way to vehicle on right	4	3	2%*
40	5 "	Not comply with traffic light signal	4	5	

* Penalties to be applied to the overall consumption figure after inclusion of penalties specified in the following paragraph.
** In order to apply these penalties, an absolute quantity of fuel will be calculated based on that percentage of fuel used in division one (see Regulation 0). This quantity of fuel aggregated in respect of each penalty will be added to the total quantity of fuel actually used at the conclusion of the Run and prior to the addition of other penalties.

1980 RIDERS/DRIVERS

and the second						2 K - 2 K - 1 K - 1	1.11.075.2			2. 10 State			THACHMENT D	A STATE OF THE STATE OF
18	TELLU I	ALC				3532	VEH	HCLE/DE	REVER LIST	Eric L	ane	MSW	Heulwen Lane (L)	MSM
17	ECO	JNO	M	Y		1952		PROVIS	SIONAL	Peter	Cullen	MSW	Dave Boddy	MSM
16	RU	N 198	30		AILS	3298	VEH	ICLE/DF	RIVER LIST	Barry	NIX6#18#4th	SETAPE9	Grafiam Ward	Órd
13	НОГОЕИ	. Gemini TE		4 Sed	9N ·		100	L = Lac	dy driver	Barry	Ferguson	MSN	Evan Green	ATC
Veh.	FORD	Courter XI WODEF	VEHI	CLE DETA	(LS _{cial} C	APAGET	(. ^(R)	W G	cans PUEL	No. 1 1	DRIVER DET	AILS	David Jenkins	ATC
No.	MAKE	MODEL SUG	CÝL.	STYPE SSS	ENGINE CAPACITY	TRANS	No. GEARS	FUEL	RIDER	6944 6	State	KSN	Reserved	MSM
15	B M W	Res uar Xa	2	Shaft	645	M	5	Р	Lindsay Ur	ouhart	NIC NIC	NSM	B89n Bild Phier	MEN
	DATSUN ^{TVL}	PICKUP 72	0	Shaft	080	SIS4	5	P	Will Hagon	BARBak	See way	(LAASu	KUBFnHSRUFB165)	ALC
10	DATSUN DATSUN	RIUURI	2	Shart	900	1952	5	1	WITT Hugon	Gebrge	Leta Maria	NSW	HONED BUTTERFOR	ASG
3c	HONDA	Charade G	2	Shaft	497	M 203	5	M	Jim Airey	Hans 1	holskrap	NSIN	BOD DESERTIONS	MSM
4c	HONDA	CB650	2	Chain	627	M	5	P	Mike Hanlo	N ROSS U	VIC	MIA .	DELEK-RAWSON	MIC
5c	HONDA	CB750KA	4	Chain	749	Μ	5	Р	Doug Chiva	S	NSW	1314	perior pouromac	The second
6c	KAWASAKI	Z250	2	Chain	249	M	6	Р	Noel Chris	tensen	NSW	ASH	DRATH BENTAmora	M3.14
7c	KAWASAKI	Z500	4	Chain	498	M	6	Р	Hamish Cam	eron	NSW	NSN	. Wet Watting .	MEN
80	CHRASTER	21 duis	6	Shaft	1286	Pest	5	Р	Dick Hutch	inson	NSW	NSM	CAPPEtRhemutbson (L)	NSN
00	CUTUNT	2581	2	Chain	1100	2788	6	N D	Allan Tomk	HIKS K	PIG NSW		METHECOMERS ART	MSR NSR
УC	SUZUKI	GS450 2181	2		440 bg	T381	0		ATTAIL TOIL	James	Cathy Peach	NSN 1	04H 90114680	NSM
10c	SUZUKI	GS850	4 ·	Shaft 260	844 90 59L	M	5	P -	Myles Stiv	ano egaju.	Foley	WEN	RTChard"Marshall	NEM
11c	SUZUKI	GSX1100	4	Chain	1075	Mero	5	P	Graham Cor	nell	NSW		SACK -DOGDELIES L	MA
12c	YAMAHA	XS250	2	Chain	249	M	6	Р	John Testo	re	NSW		ATHE DESCRIPTION	APR. Int
13c	YAMAHA	SR500F	1	Chain	499	CIMUEL	. 5	M P CI	John Gooda	UL IN	NSW	State	MO. 2 DRIVER	State
14c	УАМАНА	XS1100G	4	Shaft	1102	MCIN	5	Р	Kris Sabat	ino (L)	NSW	Vic	Bob Jennings	SA SA

		a start and a	Sec. 1		VEHICLE	/DRIVER LIST			Sheet	: 2
		and the shall					rdi Saranya		TOER	80/66
Veh.		10 10 L	VEHICLE DETAILS	and the	She State	and the second	DRIVER	DETAILS		
No.	MAKE	MODEL	СҮЦ. 1 ЛҮРЕ 400	ENGINE CAPACITY	TRANS	No. FUEL	No. 1 DRIVER/RIDER	State	No. 2 DRIVER	State
1 12c	AWAYNY	X2520 5 Alfetta 2000L	CHain Sta 4 Sedan	1962	e b	4 b John Testo	Larry Perkins	VIC	Jack Godbehear	VIC
2	ALFA	Alfasud 1.5	4 Sedan 2dr	1490	e b	5 P	Gavin Foley	NSW	Richard Marshall	NSW
100	SUZUKI	02820 V 318i	4 Coupe	1767	S W P	2 b Myles Stiv	James Laing Peach	NSW	Jim Sullivan	NSW
ac	SUZUKI	65450 2	Chain 448	2788	е b	Allan Tonk	Mike Kable	NSW	Wayne Webster	NSW
8C	KARASAKI	21300 6	Shaft 1286	1500	2 Ь	Dick Hutch	IUZOU NEM	NSW	Vince Brown	NSW
5	CHRYSLER	Sigma	4 Segau 498	1598	м 6 b	Hamish Cam	GLON NSW	NSW.	VINCE DIOWN	non
6	CHRYSLER	Lancer	4 Hatchback	1598	M	5 P	David Balmain	NSW	Nick Munting	NSW
7	DATSUN	Sunny	4 Sedan	1172	M	4 P	Geoff Wade	VIC	Roger Bonhomme	VIC
80	DATSUN	Stanza	4 Sedan	1595	5 M	4 P	Ross Dunkerton	WA	Derek Rawson	VIC
9	DAIHATSU	Charade G10	CHAIN 627 3 Sedan	W 993	8 M	2 b Mike Hanlo	Hans Tholstrup	NSW	Bob De La Llande	NSW
10	DATSUN	200B	4 Sedan	1952	M	4 P	George Fury	NSW	Monty Suffern	VIC
50 11	DATSUN	Pickup 720	4 Commercial	2164	P M	4 D	Alan Mottram	VIC	Robin Sharpley	VIC
12	FORD	Falcon XD	6 Sedan	3268	M	4 P	Colin Bond	NSW	Bob Riley	NSW
13	FORD	Fairlane ZJ	6116E Sedan GIVE	4070	No. VFUE	L 3 RILLER	Dave Morrowrate	NSW	Peter Hopwood	NSW
14	FORD	Courier XLT	4 Commercial	1769	М	5 P	Gus de Brito	NSW	David Jenkins	VIC
15	HOLDEN	Gemini TE	4 Sedan	1584	M =	Lada driver b	Barry Ferguson	NSW	Evan Green	Vic
16	HOLDEN	Commodore	6 Sedan	3298	AFHMCTE	VDB 4AEK TI2P	Barry Nixon-Smith	QLD	Graham Ward	QLD
17	ISUZU	KB25	4 Commercial	1952	M	AT240WVF D	Peter Cullen	NSW	Dave Boddy	NSW
18	LEVIAND	Rover 3.5	8 Sedan	3532	M	5 P	Eric Lane	NSW	Heulwen Lane (L)	NSW

						VEHICLE	/DRIVER	LIST			Sneet 3	
						80 - A			L. S. A.		TOER 80/6	7
Veh.		Start Start	VEHJ	CLE DETAIL	5	MA	(p		DRIVER DI	ETAILS	States and states	
No.	MAKE	MODEL	CYL.	ТҮРЕ	ENGINE CAPACITY	TRANS.	No. GEARS	FUEL	No. 1 DRIVER/RIDER	State	No. 2 DRIVER	State
19	LEYLAND	Rover 3.5	8	Sedan	3532	A	3	P	Bill Stanley	NSW	Malcolm Mason	NSW
20	LEYLAND	Jaguar XJ6	6	Sedan	4228	A	3	Р	Bob Forbes	NSW	John Leffler	NSW .
21	LNC - FIAT	X1-9	4	Sports	1290	М	4	P	Barbara Beveridge	(L)NSW	Anne Heaney (L)	ACT
22	- HONDA	Civic	4	Sedan 3D	1335	M	5	Р	Mike McCarthy	NSW	Wayne Griffiths	NSW
23	- HONDA	Prelude	4	Coupe	1602	М	5	Р	Matt Whelan	NSW	Sue Ransom (L)	NSW
24	- HONDA	Accord	4	Sedan 3D	1602	M	5	P	Noel Law	NSW	Brian McIlvenna	NSW
25	- SUBARU	Leone	4	Sedan	1595	M	4	Р	Barry Lake	NSW	Peter McKay	NSW
26	- V.W.	Golf	4	Sedan	1471	М	4	D	Chris Heyer	NSW	Phil Scott	NSW
40 27	- A'M'	Passat	4	Sedan	1471	M	4	D	Fred Gibson	NSW	Christine Gibson	(L) NSW
38 28	MAZDA	323	4	Sedan	1416	M	5	P	Dianne Crase (L)	NSW	Gayle Coutts (L)	VIC
38 29	MAZDA	Corolla C5	4	Sedan	1970	M	5	P	Joe Camilleri	QLD	Don Holland	NSW
30	MAZDA	929L	4	Sedan	1970	м	. 4	S b P	Hank Kabel	QLD	Pat Hetherman	QLD
31	MAZDA	RX7	r=r ·	Sports	2292	M	GL2/RS	Pr	Jim Reddiex	QLD	Jim Bertram	QLD
30. No.	DELICEOT	FOAL CLD	4	Sedan	2304	M	NO A		Ken Tubman	NSW	Mike Browning	VIC
32 ∆6µ.	PEUGEUT	504 GLD	1	CHICLE DETA	TLS TOOL	and the second	N.A.		DI LA FRANCISCO DE	INER DELV	ALL Panninge	
33	RENAULT	18GTS	4	Sedan	1647	M	5	P	Chris de Fraga	VIC	BOD Jennings LOEB	80/67 ₂₄
34	RENAULT	20TS	4	Sedan	1995	AFNICT	S THE APR	P FI2D	Enzo Dozzi	VIC	Mal MacPherson	VIC
35	PORSCHE	924	4	Sports	1984	M	5	P	David Robertson	NSW	David McKay	NSW
36	SAAB	900 Turbo	4	Hatchback	1985	М	5	.P	Alan Pate	NSW	Len Goodwin	ACT

36	SAAB	900 Turbo	<i>d</i>	Hatchback	1985		C. MORAGES	- Contra	Alan Dates	nen	I an Canada Dicer	2 20.L
32				Sports	1984	NEUTOIL	CODIVED	LICT	David Robertson		Sheet 4	
"Øth.				CREARETAILS		VEHICLE	TORIVER	LISI		TAICS		AIC
44-	KENNOLI	19012	4	26090	EXDAXE	10	Ng:		CHLIS DE LISOS	AIC	TOER 8	30/67
Veh.			VE	EHICLE DETAI	ILS	CHIMID	GEARS	D	DRI	VER DET	AILS	State
No.	МАКЕ	MODEL	CYL.	TYPE	ENGINE CAPACITY	TRANS.	No. GEARS	FUEL	No. 1 DRIVER/RIDER	State	No. 2 Driver	State
30	MAZOA	asarsud 1.5	1	Şedan 2dr.	1630	W	ŧ	В	Hanku Kabeth	UEN	84 C/Hetherman 1,	dab
37	SUZUKI	Hatch	3	Commercial	543	М	5	Р	Sidney Fisher	VIC	Royce Fullard	VIC
38	ΤΟΥΟΤΑ	Corolla CS	4	Sedan	1293	М	4	Р	John Smith	NSW	Peter Tighe	NSW
< 39	ΤΟΥΟΤΑ	Corona	4	Sedan	1892	А	3	Р	Wes Nalder	VIC	Brian Hurley	VIC
40	ΤΟΥΟΤΑ	Corona	4	Sedan	1892	М	4	Р	Stan Pomroy	NSW	Brian Hilton	NSW
41	VOLVO	242GT	4	Sedan	2316	М	4 OD	Р	Lynn Jarman (L)	NSW	Mike Batten	NSW
42	VOLVO	244DL	4	Sedan	2127	A	3	P	Dianne Ross (L)	NSW	Geoff Jones	NSW
650												

THE DRIVERS

A wide variety of motor sport drivers participated in the TOTAL Oil Economy Runs. Some names were:

•	
Kevin BARTLETT	Race
Mike BATTEN	Rally
Dave BODDY	Rally
Colin BOND	Rally/Race
Roger BONHOMME	Rally
Vichael BROWNING	Journalist
John BRYSON	Rally
Peter CULLEN	Rally
Ross DUNKERTON	Rally
Barry FERGUSON	Rally
Harry FIRTH	Rally/Race
George FURY	Rally (at that time)
Bob FORBES	Race

Fred GIBSON	Race
Christine GIBSON (nee COLE)	Race
Evan GREEN	Rally/Journalist
Brian HILTON	Rally
Don HOLLAND	Race
Lynn JARMAN	Rally
Bob JENNINGS	Journalist
Henk KABEL	Rally
Mike KABLE	Journalist
James LAING-PEACH	Rally/Race/Journalist
Barry LAKE	Rally/Journalist
John LEFFLER	Race
Dennis LILLEE	Celebrity
Mal MACPHERSON	Rally
Mike MCARTHY	Journalist
David MCKAY	Rally/Race/Journalist
Peter MCKAY	Rally/Race/Journalist
Dave MORROW	Rally
Nick MUNTING	Journalist
Wes NALDER	Rally
Barry NIXON-SMITH	Race
Larry PERKINS	Rally/Race
Sue RANSOM	Rally/Race
Derek RAWSON	Rally
Jim REDDIEX	Rally
Bob RILEY	Rally
David ROBERTSON	Journalist
Phil SCOTT	Journalist
Doug STEWART	Rally
Monty SUFFERN	Rally
Jim SULLIVAN	Rally/Journalist

Hans THOLSTRUPRally/RaceKen TUBMANRallyGraham WARDRally/RaceWayne WEBSTERJournalistMatt WHELANJournalist

TOTAL AWARD OF MERIT (TOAM)

An Award of Merit was presented, determined by the following formula:

Figure of Merit = <u>Bogey I/100km</u> Net I/100km

Where the bogey I/100km = $\frac{140 \text{ L/M} + 0.006\text{W} + 5}{3.540062}$

Where: L = the swept volume in litres, calculated as follows: $\begin{array}{c} \underline{\text{Pie x D Squared}}_{4} & x \underline{\text{S}}_{1000} \\ \\ \underline{\text{Pie = 22/7; D = bore (mm); S = stroke (mm)}} \end{array}$

> M = mph per 1000rpm in the highest available gear, using tyresdeclared on the official scrutineering sheet and calculated as follows:<u>60 x 1000</u>tyres revs/mile x final drive ratio

Note: 15% allowance for slippage was allowed for automatic transmissions, and the result of M was multiplied by $0.85\,$

W = official weight of the vehicles in kilograms, plus the ballasted weight of the two drivers and the observer (275kgs).

Net I/100km = actual consumption figure achieved in the run, less penalties (if any).

PENALTIES

1.	Short cutting the specified course	40%
2.	Deliberate coasting or free-wheeling	20%

3.	Late arrival (per minute)	1%
4.	Early departure from time control	4%
5.	Breaking a seal, with the permission of the observer	2%
6.	Breaking a seal, without permission	exclusion
7.	Turning off engines in contrary to the regulations	2%
8.	Breach of traffic regulations, each time	2%

The percentage was added to the overall consumption figure to provide a lower I/100km

SOME RESULTS



B PETROL DRIVEN MANUAL CARS							
No. Veh	Make/Model	No. Cyl.	Capacity	No. of Gears	E L/100km	mpg	TAOM
1	Alfetta 2000L	4	1962	at 5	8.6 at	32.8	0.89
MOA2	Alfasud 1.5	405	1490	tar 5 of	7.50	37.7	0.89
3	BMW 318i	no 4ma	1767	4	7.5	37.6	1.03
E8.4	BMW 528i	6	2788	4	10.4	27.1	0.92
78.5	Sigma 1600	a 04 0er	1598	6d24	7.5	207.705	0.99
6,60	Lancer Hatchback	411	1598	1905	6.6	42.9	1.00
7	Datsun Sunny	4	1172	4	6.5	43.4	0.94
8	Datsun Stanza	4	1595	4	7.7	36.5	0.90
6.63	Daihatsu Charade	937	+993ai	ad05	AX05740 I	bo52.702	0.97
10	Datsun 200B	e 4 s	1952	6 dD 4	sak 9.5250	35.700	1.01
12	Falcon 3.3 Economy	6	3268	4	9.3	30.3	0.97
15	Gemini TE	4	1584	4	8.0	35.3	0.91
18	Rover 3.5	1286	3532	s ri 8 5 - 0	08 11.1 130	25.508	0.83
27 21	Fiat X1-9	6.8.4 in	1290	6110 4	037.5 L	wa37.90e	0.92
22	Honda Civic	4	1335	5	6.6	42.9	0.91
23	Honda Prelude	4	1602	5	6.2	45.7	1.05
2724	Honda Accord	1045	1602	sri05 0	6.9	40.5	0.94
82.25	Subaru Leone	. 4	1595	eno 4	7.2	39.2	0.97
28	Mazda 323	4	1416	5	7.2	39.4	0.84
29	Mazda 626	4	1970	5	8.1	34.8	0.91
57 30	Mazda 929	1.14.2	1970	é 4 Châ	018.2	16m 34.6° 4	0.96
31	Mazda RX7	Rotary	2292	5	10.2	27.6	0.78
33	Renault 18GTS	4	1647	5	6.9	40.9	0.97
34	Renault 20TS	4	1995	5	8.9	31.8	0.88
. 35	Porsche 924	4	1984	5	8.3	34.1	0.91
36	Saab 900 Turbo	4.	1985		8.2	OT 34.4AT	0.91
38	Corolla	4	1293	4	7.3	38.6	0.91
40	Corona	4	1892	4	8.1	35.1	0.97
41	Volvo 242 GT	4	2316	5	9.3	30.4	0.87

			- 14 -				
			- 13 -	TIT.	110	1.02.994	a and a second
10811	OMPAF	b) <u>CITY VS COUNTRY C</u>		RE	SULTS BY	CATEGORY	(Cont)
		OFFICIAL RESULTS			M MU	INO,	
С	PETH	ROL DRIVEN AUTOMATIC CAR	s	11	080		
-	Veh:	No.	30.	No of	TTY	COUN	TRY
	No.	Make/Model Cyl.	Capacity	Gears	L/100km	mpg	TAOM
	21	Flat X1-1		9.0	31.3	- 10	10.2
18.	13	Fairlane 4.1 Economy 6	4070	3	11.4	24.7	1.02
8	19	Rover 3.5 8	3532	2 6 650	12.9	21.9	0.88
C	20	Jaguar XJ6	4228	2 6 980	12.9	21.8	1.00
	39	Corona 4	1892	2 6 497	9.428	30.6	0.93
3	42	VOIVO 244DL 4	2127	4 6.627	Begorit.	23.0	0.80
	292	Maziz 62 0.13 4 9707	\$	4 1.849	878984		0234.8
0	-368	Mater 92 8.001 4 8.297		20.849	1 2,2,5,0	RAMASAN	00 34 , 8
D	DIES	SEL DRIVEN CARS	3	892.7 A	I 2590	RAWASAR	P 29.8
0	1. <u>92</u>	and a second a second		986199	006(S T	KARAMAN	- -
5	2.6	Volkswagen Golf 4	1471	2 4 648	4.8	58.9	1.39
4	27	Volkswagen Passat 4	1471	4 6 g 444	4.9	56.5	1.37
0	32	Peugeot 504 GLD 4	2304	27 Qf 4 4	6.4	43.9	1.37
I	.55	cordfla 0.87 4 7.529	gi	2 5. r249	XSI250	AHAMAY	1.8. BELZC
9	. 88	cofone - 9. 76 4 7. 89	24	661 ^{8.2} I	SEGUE	Анамах	1 1 26230
8	·15	10 843 4 53. Poch 5 842 0V		4 c. 1110 p	2004 tex	AHAMAY	20-432. A
E	PET	ROL DRIVEN COMMERCIALS	light states of the				*
	14	Ford Courier 4	2164	ALA CAR	MAM 8.6VI	32.9	R-
	37	Suzuki Hatch 3	543	4	6.6	42.9	
6	· <u>F</u> §	Parrane 48172 6 2.06		41.1962	1 2000£ 1	alietta	- 25.1
1	· <u><u>P</u>§</u>	Rofef 3.5 8.52 8 7.853		49.64	18:4 1	pheej tu	23.5
10	· 58	Jagoar \$36 7.78 . 6 8.522	6 P3	44.1767	18.31	84E1.WM8	8 23.1
F	DIE	SEL DRIVEN COMMERCIALS	2 43	60.2788	28.74	955 MMB	3.2*. 3
0		Volvo 24402.00 4 1.112	2164	468.34	23990.	34 7	9 26.5
8	17	Jacsun 720 Pickup 4	1052	4 ¥ 1596	7.6	37 1	1
2		ISUZU KB23 81 8.4	1932	4 * 11/2	Augns	unes.e.t	1
8	. 36	8.0 35,5 1.1		1595	Stanza	Datain	8
C	· 28	Volkskagen child 4 C. 14	1 64	ER64.6E	in Charade	Pathapa	6 2813
4	. 25	TAUM NOT applicable	1 14	SEEE 44	20082	Dataun	0154.8



