

FORD

SIERRA RS **COSWORTH**

and

ESCORT RS **COSWORTH**

Workshop Manual



Volume I

Volume II



This Workshop Manual reproduces pages from the Ford Sierra RS Cosworth and Ford Escort RS Cosworth service microfiche and details technical service information required for components not already covered in previously issued Dealer literature. Note that, unlike the previous issue, CG473, covering the Sierra RS Cosworth only, this manual does not include system test sections. For vehicle system tests, reference should be made to the appropriate Vehicle System Test Manual.

The manual is designed primarily for use by Ford dealerships and gives repair and adjustment procedures together with component illustrations, technical data and details of special tools or equipment which may be required. The repair and adjustment procedures are intended as a guide for both the fully qualified and the less experienced technician.

The repair operations numbering sequence used in all Sections corresponds to that used in the Ford Car Labour Time Schedule.

FOR ALL REPAIR OPERATIONS AND PROCEDURES WHICH ARE NOT DESCRIBED IN THIS MANUAL, REFERENCE SHOULD BE MADE TO THE FORD SIERRA '87 ONWARDS SERVICE MICROFICHE (CG1464), FORD SIERRA RS COSWORTH SERVICE MICROFICHE (CG534) OR THE FORD ESCORT/ORION '91 SERVICE MICROFICHE (CG1524) AS NECESSARY.

OWNERS AND OPERATORS ARE ADVISED TO ALLOW ONLY AUTHORISED FORD DEALERSHIPS TO CARRY OUT THE MORE COMPLEX REPAIRS SUCH AS THE OVERHAUL OF A TRANSMISSION OR DIFFERENTIAL ASSEMBLY, PARTICULARLY THOSE REQUIRING SPECIALISED TOOLING AND KNOWLEDGE.

REPLACEMENT PARTS

Behind all FORD and MOTORCRAFT products are the vast resources of the worldwide Parts Supply Operations which can supply replacement parts made to the same exacting standards as the original factory fitted components.

FOR THIS REASON, INSIST THAT ONLY GENUINE FORD OR MOTORCRAFT PARTS ARE USED AS SERVICE REPLACEMENTS.

SPECIAL TOOLS

The Special Service Tool recognition chart given at the start of each section shows all European sourced tools desirable or necessary to carry out a satisfactory repair. When possible, illustrations are given to assist in identifying the tool needed.

Special Service Tools may be ordered from:

V.L. Churchill Ltd.
P.O. Box No.3
London Road
Daventry
Northants NN11 4NF
ENGLAND

V. Löwener
W 4018 Langenfeld
Postfach 2262
Industriestrasse 67
GERMANY

O.P.T.O.M. S.A.
Polígono Industrial Del Henares
(Ampliacion)
Parcela No. 5B
19080 Guadalajara
SPAIN

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Volume I



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For operations and sections not included in this manual, refer to either the Sierra '87 Microfiche or the Escort/Orion '91 Microfiche, as appropriate.



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FORMATGroups

The manual is divided into six main groups:

0 - General Information	2 - Engine	4 - Body
1 - Chassis	3 - Electrical	5 - Maintenance

Sections

Each group is then sub-divided into section, eg:

Group 2 - Engine comprises:

21 - Engine	23 - Fuel System	25 - Exhaust System	29 - Engine Management
22 - Ignition System	24 - Cooling System	26 - Starting System	

USAGESection Contents

Where applicable, each section comprises the following:

Index This will be found at the beginning of the section and is an itemised list and page location of the content of the section. It also includes a list and page location of each operation covered in the section.

Technical Data - A listing of essential information required during service and repair operations, eg. tightening torques, ignition timings, critical dimensions etc.

Special Service Tool Recognition - This is an illustrated list of special tools and suitable equipment required to carry out the repair procedures described.

Service and Repair Operations - A series of procedures selected to give coverage of the normal repairs undertaken in the workshop.

The removal and installation of some components is not covered in detail because the procedure is essentially simple and straight forward. Where a repair procedure is not covered, it may be for one of the following reasons:

1. The component may have been introduced after the repair operations were issued.
2. The component may be classed as not repairable due to the requirement for specialist equipment to ensure its correct function and adjustment after repair. (Non-service Item).
3. The component may be classed as not economical to repair, with renewal being less costly than dismantling and overhaul.
4. The repair may be of specialist nature, possibly covered in another FORD publication. For instance: Tyre repairs, fuel injection equipment testing, overhaul and calibration.



VEHICLE IDENTIFICATION 02

Index Page

Code Definition 2



CODE DEFINITION (cont'd)

(Box 13) VERSION Provision for locally required codes by certain territories.

(BOX 14) BODY COLOUR

- A - Black '69 (XSC 632)
- B - Diamond White '73 (XSC 691)
- C -
- D - Galaxy Blue '87 (XSC 2101A)
- E - Burgundy '87 (XSC 2079A)
- F - Maritime Blue '91 (XSC 2009A)
- G -
- H -
- J - Pacifica Blue (XSC 2360CM)
- K - Tasman '86 (XSC 1903C)
- L - Aqua Jade '91 (XSC 2240C)
- M -
- N - Verona Green '91 (XSC 2398C) Polaris Grey (XCS 2455C)
- P - Radiant Red '89 (XSC 2251A)
- Q - Mercury Grey '87 (XSC 2076C)
- R -
- S -
- T - Flint Grey '89 (XSC 2228C)
- U - Crystal Blue '87 (XSC 2028C)
- V - Strato Silver '91 (XSC 1056C)
- W -
- X -
- Y - Special Vehicles
- Z -
- 0 - Aztec Gold '91 (XSC 2387C)
- 1 - Magenta '89 (XSC 2159CM)
- 2 -
- 3 - Biscayne Blue
- 4 - Mallard Green (XSC 2683 CM)
- 5 - Moonstone Blue '89 (XSC 1903C)
- 6 - Moondust Silver '91 (XSC 2431C)
- 7 -
- 8 - Olympic Gold '91 (XSC 2231C)
- 9 -

For vehicles built in Britain the second digit of the paint code denotes the current model year.
For vehicles built on the continent the second digit of the paint code denotes the model year the colour was introduced.

Box 15 EXHAUST EMISSIONS

Code	7	U	
Exhaust Emission Level	15:04	83 US	



CODE DEFINITION

(Box 7) STEERING

Code	1 or A	2 or B
Drive	Left-hand drive	Right-hand drive

(Box 8) ENGINE

Code	N 5	
Type	DOHC/I-4 EFI Turbo	
Capacity	litres	2,0
Power	kw (DIN)	4 x 2 150,0 4 x 4 161,0

(Box 9) TRANSMISSION

Code	J	L	8
Type	Man (5-speed) Borg Warner T5	Man (5-speed) Borg Warner	Man (5 speed) MT-75

(Box 10) AXLE

Code	3	U
Axle ratio	3,64	3,62

(Box 11) INTERIOR TRIM

Code	J	L	M	S
Colour	Bluestone	Shadow	Mace	Raven

(Box 12) TYPE

1st letter	2nd letter	3rd letter	4th & 5th letter	6th & 7th letter
Model	Body Type	Year of Homologation	20 = 2,0 litre	-
A = Escort B = Sierra	B = 3 Door F = 4 Door	G = 1986	Belgium & Luxemburg only	Identification not required



CODE DEFINITION

(Box 1) NATIONAL TYPE APPROVAL NUMBER

A unique code required by certain territories.

(Box 2) VEHICLE IDENTIFICATION NUMBER (VIN)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
*	W	F	O	F	X	X	G	B	B	F	K	C	1	2	3	4	5	*

eg Sierra 4-door saloon, manufactured in Genk, West Germany during September 1989.

(Digit 1): Constant asterisk - (*)A) (Digit 2 - 4): World Manufacturer Indicator

Ford Werke A.G. - West Germany - WFO (European vehicles) - WF1 (Federal vehicles)

B & G) (Digit 5 & 11): Model Variant:- BB - Saloon 3 door saloon BF - Sierra 4 door saloon
AM - Escort CosworthC) (Digit 6 & 7): Constant XD) (Digit 8): Product Source Company:- G - Ford of Germany - Own assemblyE) (Digit 9): Assembly Plant:- B - GenkF) (Digit 10): Model Range:- A - Escort B - SierraH) (Digit 12): Date of Manufacture - Year:- G - 1986 H - 1987 J - 1988
K - 1989 L - 1990 M - 1991
N - 1992 P - 1993I) (Digit 13): Date of Manufacture - Month

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1988	B	R	A	G	C	K	D	E	L	Y	S	T
1989	J	U	M	P	B	R	A	G	C	K	D	E
1990	L	Y	S	T	J	U	M	P	B	R	A	G
1991	C	K	D	E	L	Y	S	T	J	U	M	P
1992	B	R	A	G	C	K	D	E	L	Y	S	T
1993	J	U	M	P	B	R	A	G	C	K	D	E

J) (Digit 14 - 18): Vehicle Sequence Number:- Five digits.(Digit 19): Constant asterisk - (*)(Box 3) GROSS VEHICLE MASS Indicates maximum legal laden mass, in territories where this is required.(Box 4) GROSS TRAIN MASS Indicates the maximum combined mass of vehicle and trailer or caravan.(Box 5) PERMITTED FRONT AXLE LOADING Maximum permissible load on the front wheels of the vehicle.(Box 6) PERMITTED REAR AXLE LOADING Maximum permissible load on the rear wheels of the vehicle.