

Contents

Introductory pages

About this manual	0-5
Introduction to the Taurus/Sable	0-5
Vehicle identification numbers	0-6
Buying parts	0-7
Maintenance techniques, tools and working facilities	0-7
Booster battery (jump) starting	0-15
Jacking and towing	0-16
Automotive chemicals and lubricants	0-17
Conversion factors	0-18
Safety first!	0-19
Troubleshooting	0-20

Chapter 1

Tune-up and routine maintenance	1-1
---------------------------------	-----

Chapter 2 Part A

Overhead valve (OHV) engine	2A-1
-----------------------------	------

Chapter 2 Part B

Overhead camshaft (OHC) engine	2B-1
--------------------------------	------

Chapter 2 Part C

General engine overhaul procedures	2C-1
------------------------------------	------

Chapter 3

Cooling, heating and air conditioning systems	3-1
---	-----

Chapter 4

Fuel and exhaust systems	4-1
--------------------------	-----

Chapter 5

Engine electrical systems	5-1
---------------------------	-----

Chapter 6

Emissions and engine control systems	6-1
--------------------------------------	-----

Chapter 7

Automatic transaxle	7-1
---------------------	-----

Chapter 8

Driveaxles	8-1
------------	-----

Chapter 9

Brakes	9-1
--------	-----

Chapter 10

Suspension and steering systems	10-1
---------------------------------	------

Chapter 11

Body	11-1
------	------

Chapter 12

Chassis electrical system	12-1
---------------------------	------

Wiring diagrams

12-22

Index

IND-1

About this manual

Its purpose

The purpose of this manual is to help you get the best value from your vehicle. It can do so in several ways. It can help you decide what work must be done, even if you choose to have it done by a dealer service department or a repair shop; it provides information and procedures for routine maintenance and servicing; and it offers diagnostic and repair procedures to follow when trouble occurs.

We hope you use the manual to tackle the work yourself. For many simpler jobs, doing it yourself may be quicker than arranging an appointment to get the vehicle into a shop and making the trips to leave it and pick it up. More importantly, a lot of money can be saved by avoiding the expense the shop

must pass on to you to cover its labor and overhead costs. An added benefit is the sense of satisfaction and accomplishment that you feel after doing the job yourself.

Using the manual

The manual is divided into Chapters. Each Chapter is divided into numbered Sections, which are headed in bold type between horizontal lines. Each Section consists of consecutively numbered paragraphs.

At the beginning of each numbered Section you will be referred to any illustrations which apply to the procedures in that Section. The reference numbers used in illustration captions pinpoint the pertinent Section and the Step within that Section. That is, illustration 3.2 means the illustration refers to Section 3 and Step (or paragraph) 2 within

that Section.

Procedures, once described in the text, are not normally repeated. When it's necessary to refer to another Chapter, the reference will be given as Chapter and Section number. Cross references given without use of the word "Chapter" apply to Sections and/or paragraphs in the same Chapter. For example, "see Section 8" means in the same Chapter.

References to the left or right side of the vehicle assume you are sitting in the driver's seat, facing forward.

Even though we have prepared this manual with extreme care, neither the publisher nor the author can accept responsibility for any errors in, or omissions from, the information given.

NOTE

A **Note** provides information necessary to properly complete a procedure or information which will make the procedure easier to understand.

CAUTION

A **Caution** provides a special procedure or special steps which must be taken while completing the procedure where the Caution is found. Not heeding a Caution can result in damage to the assembly being worked on.

WARNING

A **Warning** provides a special procedure or special steps which must be taken while completing the procedure where the Warning is found. Not heeding a Warning can result in personal injury.

Introduction

This manual covers the second generation of Taurus and Sable models, introduced in 1996. Taurus and Sable models are available as four-door sedans and station wagons. The available engines are:

A 3.0-liter (182-cid) V6, called the "Vulcan" engine. The Vulcan V6 is a two-valve-per-cylinder, pushrod, overhead-valve (OHV) engine. Flexible-fuel versions of the Vulcan engine are available that run on gasoline and methanol-blend fuel or gasoline and ethanol-blend fuel.

A 3.0-liter (181-cid) overhead camshaft (OHC) V6, called the "Duratec" engine. The Duratec V6 is a four-valve-per-cylinder engine.

A 3.4-liter (207-cid) overhead-cam V8 engine, available in Taurus SHO models only through 1999. The SHO V8 is a 4-valve-per-cylinder engine.

Unique features of the SHO V8 and the flexible-fuel Vulcan V6 engines are not covered by this manual.

All models have a fifth-generation electronic engine control system (EEC-V) with second-generation onboard diagnostic (OBD-II) capabilities. All engines have electronically controlled multiport fuel injection and direct (distributorless) ignition systems. OBD-II monitors engine and emission control system operation for malfunctions. The malfunction indicator lamp (MIL) on the instrument panel (also called the CHECK ENGINE lamp) will light if a component malfunction occurs.

Power from the engine is transferred through a four-speed, electronically controlled automatic transaxle and final drive assembly to the front wheels. Front

driveaxles carry power from the transaxle to the front wheels.

Suspension is independent in the front, with MacPherson struts (combination coil springs and shock absorber struts) and lower control arms to locate the spindle assembly at each wheel. The rear suspension has independent control arms on each side with coil springs and shock absorbers. Sedans use a MacPherson-type strut, and station wagons have separate springs and shock absorbers.

The steering gear is a power-assisted rack-and-pinion type, mounted to the subframe.

The brakes are disc at the front and either drum or disc at the rear, with vacuum assist as standard equipment. An Anti-lock Brake System (ABS) is optional on all models.

Vehicle identification numbers

Modifications are a continuing and unpublicized process in vehicle manufacturing. Your individual vehicle identification number (VIN) and major component identification numbers often are necessary to identify proper diagnostic and repair procedures, as well as correct replacement parts.

Vehicle Identification Number (VIN)

This very important identification number is stamped on a plate attached to the dashboard inside the windshield on the driver's side of the vehicle (see illustration). The VIN also appears on the vehicle certificate of title and the vehicle registration certificate. The VIN contains information such as where and when the vehicle was manufactured, the body style or trim level, the individual serial number, and most importantly, the model year and the engine code.

VIN engine and model year codes

Two very important pieces of information in the VIN are the engine code and the model year code. Counting from the left, the

engine code letter is the 8th digit, and the model year code letter is the 10th digit.

On the models covered by this manual the engine codes are:

U.....3.0L (182-cid) OHV V6
S.....3.0L (181-cid) OHC V6

On the models covered by this manual the model year codes are:

T.....1996
V.....1997
W.....1998
X.....1999
Y.....2000
1.....2001
2.....2002
3.....2003
4.....2004
5.....2005

Vehicle Certification Label

The vehicle certification label is attached to the driver's side (left front) door or door pil-

lar (see illustration). Information on this label includes the name of the manufacturer, the month and year of production, and information on the options with which it is equipped. This label is especially useful for matching the color and type of paint for repair work.

Engine identification number

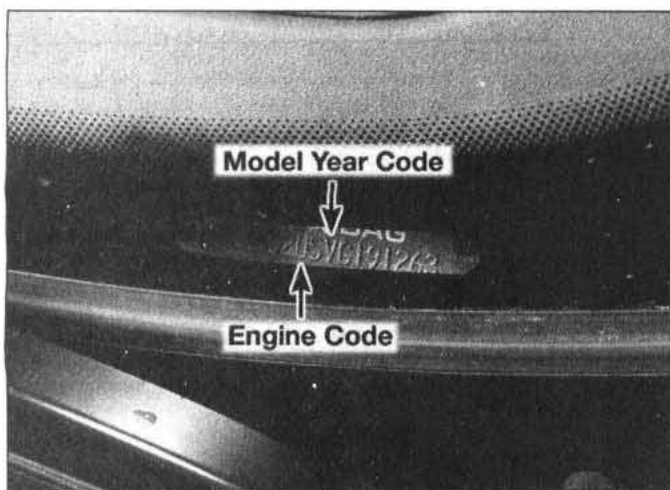
A label with the engine code and build date is on the valve cover. The engine number also is stamped on a machined pad on the outside of the engine block.

Automatic transmission identification number

The automatic transaxle ID number is on a label attached to top of the torque converter housing area of the transaxle case.

Vehicle Emissions Control Information label

This label is found in the engine compartment. See Chapter 6 for more information on this label.



The VIN is visible through the windshield on the driver's side



The Vehicle Certification label is on the driver's side door