

1960 1961 1962

FALCON & COMET



SHOP MANUAL

Ford Motor Company of Canada Version

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1960-62 Falcon and Comet Shop Manual

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1960 • 1961 • 1962 FALCON AND COMET

SHOP MANUAL

Ford Motor Company of Canada
LIMITED

SERVICE PUBLICATIONS

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FOREWORD

This manual contains the recommended procedures for servicing and repairing 1960, 1961 and 1962 Falcon and Comet. Included in these procedures are detailed instructions regarding the use of special tools and necessary service specifications.

Tools shown in this manual (or their approved equivalents) are available from Jobborn Manufacturing Company Limited, 11 Brock Street, Hamilton, Ontario.

All procedures are generally applicable to both Falcon and Comet vehicles. Separate detailed sections are provided for repair and maintenance of bodies.

The service procedures for the 1962 Ford Falcon Club Wagons are covered in the 1961 Ford Econoline Shop Manual and the 1962 Ford Econoline Shop Manual Supplement.

All of the information in this publication was in effect at the time that it was approved for printing. Ford Motor Company of Canada, Limited does, however, reserve the right to discontinue models at any time, or change specifications or design, without notice and without incurring any obligations whatsoever.

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SERVICE PUBLICATIONS

1962 FALCON AND COMET IDENTIFICATION CANADIAN BUILT VEHICLES

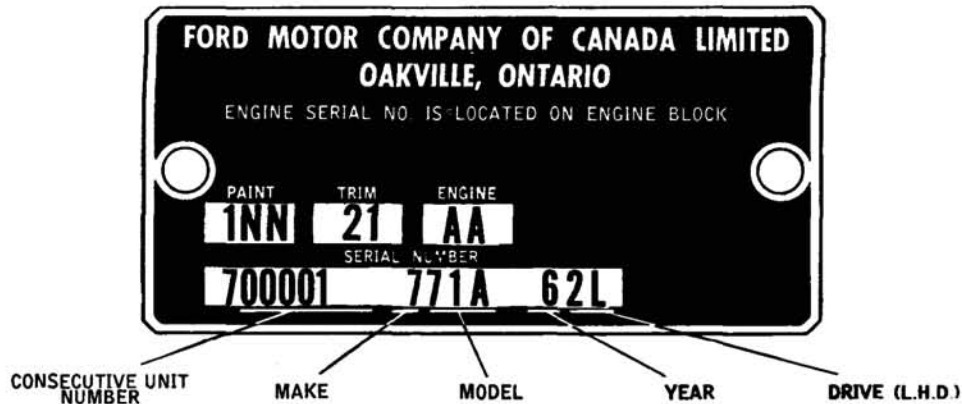


FIG. 1—Falcon and Comet Identification Plate—1962
(see page XI for 1961, page XVII for 1960)

1 IDENTIFICATION PLATE

Figure 1 illustrates a typical Canadian Built Falcon or Comet identification plate. The plate is located on the rear face of the left front door inner panel.

CONSECUTIVE UNIT NUMBER

Each model year, the assembly plant begins with a consecutive unit number and continues on for each unit built.

MAKE

Digit 7 indicates Falcon.

Digit 9 indicates Comet.

MODEL

	TWO-DOOR SEDAN	FOUR-DOOR SEDAN	TWO-DOOR ST. WAGON	FOUR-DOOR ST. WAGON	SEDAN DELIVERY	FALCON FUTURA	COMET S-22
FALCON	64A	58A	59A	71A	78A	64A	
COMET	62A	54A	59A	71A			62C
COMET CUSTOM	62B	54B	59B	71B			

YEAR

62 Indicates 1962 Model

L Indicates Left Hand Drive (R-Right Hand Drive)

	FALCON		COMET	
ENGINE	STANDARD	AUTOMATIC	STANDARD	AUTOMATIC
144 CID	AA	AB	AC	AD
170 CID	BA	BB	BC	BD

2 RADIO IDENTIFICATION

The 1962 Falcon and Comet radio receivers are identified by a prefix to the serial number which is stamped on the back of the radio chassis; for example, serial CA-24-PDM-50683 or CA-24-PG-90030.

CA — Canadian

2 — 1962

4 — 4-tube radio

P — Receiver of Philips design

D — Falcon

G — Comet

M — Manual receiver

50683 or 90030 — Serial number

3 PAINT AND TRIM—1962

MODELS	FALCON																		COMET							COMET CUSTOM					KEY																								
	Sedans 64A-58A						Futura 64C			Wagons 59A-71A			Sed. Del. 78A	Sed.	Wag.	S-22 62C			Sedans 62B-54B			Wag. 59B	1 — Indicates Solid Colour 2 — Conventional Tu- Tone Paint Combina- tion *Falcon RPO trim is part of the deluxe trim pkg.—Option 420. Both the option and the RPO trim must be coded.																																
	17	EXPORT BLACK*	12	GRAY	13	RPO TURQUOISE*	14	RPO BLUE*	15	RPO BEIGE*	16	RPO RED & GRAY*	24	BLUE	25	BEIGE	26	RED	27	BLACK	18	BEIGE		19	RPO RED & WHITE*	20	RPO BLUE*	21	RPO BEIGE*	22	BEIGE	23	RPO RED & WHITE*	01	WHITE & BLACK	06	WHITE & BLACK	94	BLUE	95	BEIGE	96	RED	97	BLACK	02	BLUE	03	TURQUOISE	04	RED & BLACK	05	BEIGE	07	WHITE & RED
TRIM CLOURS	Trim Code																																																						
PAINT CODE	PAINT																																																						
BB	1	1	1	1		1	1		1	1	1	1	1		1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Raven Black	
DD	1	1	1										1	1												1	1																									1	Light Aqua		
FF	1	1		1			1						1	1												1	1	1	1																							1	Viking Blue		
GG	1	1			1			1					1	1												1	1			1																						1	Silver Moss		
HH	1	1		1			1						1	1											1		1	1	1																							1	Baffin Blue		
KK	1	1			1			1					1	1											1	1	1	1	1	1																					1	1	Sandshell Beige		
LL	1	1		1		1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Silver Gray	
NN	1	1			1			1					1	1											1	1	1	1	1	1																					1	1	Fieldstone Tan		
RR	1	1				1			1	1	1	1													1	1	1	1	1																						1	1	Rangoon Red		
TT	1	1	1											1	1											1	1																									1	Ming Green		
WW	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Corinthian White		
YY	1	1			1			1					1	1												1	1																										1	1	Tucson Yellow

1 — Indicates Solid Colour

2 — Conventional Tu-Tone Paint Combination

*Falcon RPO trim is part of the deluxe trim pkg.—Option 420. Both the option and the RPO trim must be coded.

3 PAINT & TRIM (Continued)

MODELS	FALCON																COMET		COMET CUSTOM						KEY																								
	Sedans 64A-58A						Futura 64C			Wagons 59A-71A			Sed. Del. 78A		Sed.	Wag.	Sedans 62B-54B			Wag. 59B-71B		1—Indicates Solid Colour 2—Conventional Tu-Tone Paint Combination. * — Falcon RPO Trim is part of the deluxe trim pkg. — Option 420. Both the option and the RPO trim must be coded.																											
TRIM COLOURS	Trim Code	17	EXPORT BLACK 58A*	12	GRAY	13	RPO TURQUOISE*	14	RPO BLUE*	15	RPO BEIGE*	16	RPO RED & GRAY*	24	BLUE	25	BEIGE	26	RED	27	BLACK	18	BEIGE	19	RPO RED & WHITE*	20	RPO BLUE*	21	RPO BEIGE*	22	BEIGE	23	RPO RED & WHITE*	01	WHITE & BLACK	06	WHITE & BLACK	02	BLUE	03	TURQUOISE	04	RED & BLACK	05	BEIGE	07	WHITE & RED	08	WHITE & BLACK
PAINT CODE																															PAINT																		
WB		2	2	2	2			2	2			2	2		2	2		2	2		2	2		2	2		2	2		2	2		2	2		2	2		2	2		2	2		White & Raven Black				
WD		2	2	2																2	2						2	2																	2		White & Light Aqua		
WF		2	2		2							2								2	2					2			2																2		White & Viking Blue		
WG		2	2			2											2			2	2							2	2														2		2		White & Silver Moss		
WH		2	2		2															2	2					2			2	2	2														2		White & Baffin Blue		
WK		2	2			2														2	2						2	2	2	2	2												2	2			White & Sandshell Beige		
WL		2	2		2			2	2			2	2		2	2		2	2	2	2		2	2		2	2	2	2	2									2			2	2			White & Silver Gray			
WN		2	2			2														2	2					2	2	2	2	2													2	2			White & Fieldstone Tan		
WR		2	2					2											2	2	2	2				2	2	2	2	2										2			2	2			White & Rangoon Red		
WT		2	2	2																2	2						2	2											2						2		White & Ming Green		
WY		2	2			2														2	2						2	2														2				2		White & Tucson Yellow	
HF		2	2		2															2	2					2			2	2	2														2		Baffin Blue & Viking Blue		
KN		2	2			2														2	2						2	2	2	2	2												2	2			Sandshell Beige & Fieldstone Tan		
DT		2	2	2																2	2						2	2											2						2		Light Aqua & Ming Green		
RB		2	2																	2	2	2	2				2	2	2	2	2									2			2	2			Rangoon Red & Raven Black		

PAINT	
COLOUR	PART NUMBER
RAVEN BLACK	M30J-1724-SE
LIGHT AQUA	M30J-1452-SE
VIKING BLUE (Medium Metallic)	M30J-1448-SE
SILVER MOSS (Medium Metallic)	M30J-1454-SE
BAFFIN BLUE (Light)	M30J-1449-SE
SANDSHELL BEIGE	M30J-1543-SE
FIELDSTONE TAN (Metallic)	M30J-1427-SE
RANGOON RED	M30J-1515-SE
MING GREEN (Medium Metallic)	M30J-1451-SE
CORINTHIAN WHITE	M30J-1238-SE
TUCSON YELLOW	M30J-1456-SE
SILVER GRAY	M30J-1371-SE
PRIME SURFACER—GRAY (1 Quart)	CB9CZ-19568-A
PRIME SURFACER—GRAY (1 Gallon)	CB9CZ-19568-B
PRIME SURFACER—RED OXIDE (1 Quart)	CB9CZ-19574-A
PRIME SURFACER—RED OXIDE (1 Gallon)	CB9CZ-19574-B

EXAMPLE: CODE 2HW. —CONVENTIONAL TU-TONE
—BAFFIN BLUE ROOF
—CORINTHIAN WHITE BODY

1960, 1961, 1962 FALCON IDENTIFICATION U.S. BUILT VEHICLES

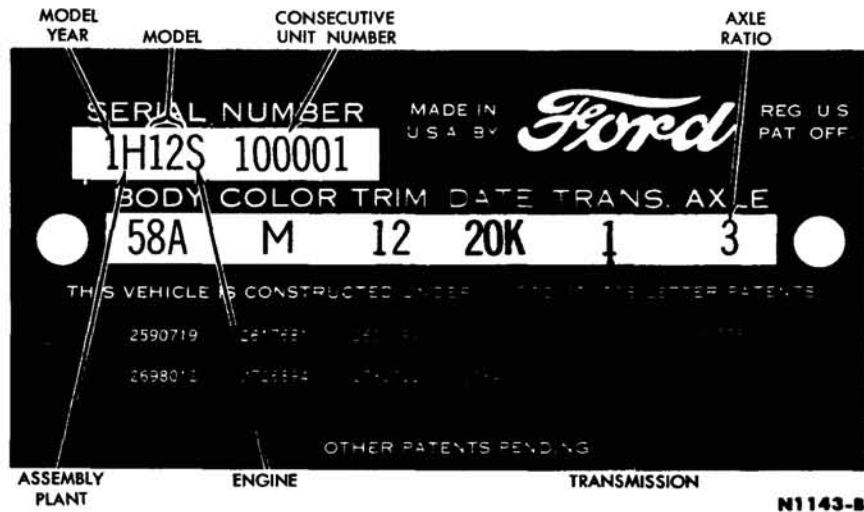


FIG. 2—1960-61 Falcon Patent Plate

PATENT PLATE

Fig. 2 illustrates a Falcon patent plate and its elements. The plate is on the rear face of the left front door inner panel.

The 1962 Falcon patent plate is similar to the one used in 1960-61 (Fig. 2). The serial number and vehicle data lines have exchanged locations for 1962. Also, a DSO space is shown on the vehicle data line, and the axle and transmission codes exchanged locations.

MODEL YEAR

Symbol	Year
0	1960
1	1961
2	1962

ASSEMBLY PLANT

A—Atlanta	R—San Jose
H—Lorain	S—Pilot Plant
K—Kansas City	T—Metuchen

MODEL

The model code number shows the product line series in the first digit. The second digit shows the body type: an odd number shows a two-door model, while an even number shows a four-door model.

SERIES 10—PASSENGER CARS

11	2-Door
12	4-Door
17	2-Door Futura

SERIES 20—STATION WAGONS

21	2-Door
22	4-Door
26	4-Door Country Squire
27	Ranchero
29	Sedan Delivery

ENGINE

S	6 Cylinder OHV 144 cubic inch
D	6 Cylinder OHV 144 cubic inch (Low compression—84 octane)
U	6 Cylinder OHV 170 cubic inch
E	6 Cylinder OHV 170 cubic inch (Low compression—84 octane)

CONSECUTIVE UNIT NUMBER

Each model year, each assembly plant begins with consecutive model numbers 100001 and continues on for each car built.

BODY

58A	4-Door Sedan
59A	2-Door Wagon
64A	2-Door Sedan
64A (RPD)	1961 2-Door Futura
64C	1962 2-Door Futura
66A	Ranchero
71A	4-Door Wagon
71B	4-Door Country Squire Wagon
78A	Sedan Delivery

COLOR

Two-tone paint codes use the same symbols as the single colors except that two symbols are used. The first symbol is the lower color, the second symbol is the upper color.

Code	Year	M30J Number	Color	Promotional Name
A	AI	1724	Black	Raven Black
C	1961	1139	Light Turquoise	Aquamarine
D	1961	1361	Light Blue	Starlight Blue
	1962	1451	Medium Turquoise Metallic	Ming Green
E	1960	1225	Medium Blue Metallic	Belmont Blue
	1961	1364	Medium Green Metallic	Laurel Green
	1962	1448	Medium Blue Metallic	Viking Blue
F	1960	1226	Light Blue	Sky Mist Blue
	1962	1449	Light Blue	Baffin Blue
H	1960	1230	Beige Metallic	Beachwood Brown
	1961	1367	Dark Blue Metallic	Chesapeake Blue
	1962	1447	Dark Blue Metallic	Oxford Blue
J	1960	1232	Red	Montecarlo Red
	1961			
	1962	1515	Red	Rangoon Red
K	1960	1233	Turquoise Metallic	Sultana Turquoise
	1961	1369	Bronze Metallic	Algiers Bronze
M	AI	1238	White	Corinthian White
P	1962	1454	Medium Green Metallic	Silver Moss
Q	1961	1371	Light Gray Metallic	Silver Gray
	1962			
R	1961	1372	Medium Blue Metallic	Cambridge Blue
	1962	1456	Yellow	Dorado Gold
S	1961	1373	Light Green	Mint Green
T	1960	1273	Medium Green Metallic	Meadowvale Green
	1962	1543	Honey Beige	Sandshell Tan
W	1960	1274	Light Green	Adriatic Green
	1961	1385	Turquoise Metallic	Garden Turquoise
Z	1960	1287	Light Gray Metallic	Platinum
	1962	1427	Beige Metallic	Fieldstone Tan

TRIM

The trim code includes 2 digits.

First Digit	Material Type	Second Digit	Color Scheme
1	Vinyl and Body Cloth	0	Silver or White
2	Vinyl and Body Cloth	1	Gray
4	Vinyl and Tweed Body Cloth	2	Blue or Light Blue and Medium Blue Green
5	All Vinyl	3	Brown, Tan, or Beige
6	Vinyl and Woven Plastic or Body Cloth	4	Red or Red and White
7	Vinyl and Vinyl	5	Black or Black and White
8	Futura Vinyl	6	Turquoise
		7	

DATE

A number signifying the date precedes the month code letter.

Month	CODE		Month	CODE	
	First Year	Second Year		First Year	Second Year
January	A	N	July	G	U
February	B	P	August	H	V
March	C	Q	September	J	W
April	D	R	October	K	X
May	E	S	November	L	Y
June	F	T	December	M	Z

DSO

Units built on a Domestic Special Order, Foreign Special Order, or other special orders will have the complete order number in this space. If the unit is a regular production unit, this space will be blank.

TRANSMISSION

1 Manual-Shift
3 Automatic

AXLE RATIO

CODE	1960	1961	1962
1	3.56	—	—
2	3.89	—	3.10
3	—	3.10	—
4	—	4.00	—
5	—	3.20	3.50
9	—	—	4.00
J	—	3.50	—

1962 COMET IDENTIFICATION U.S. BUILT VEHICLES

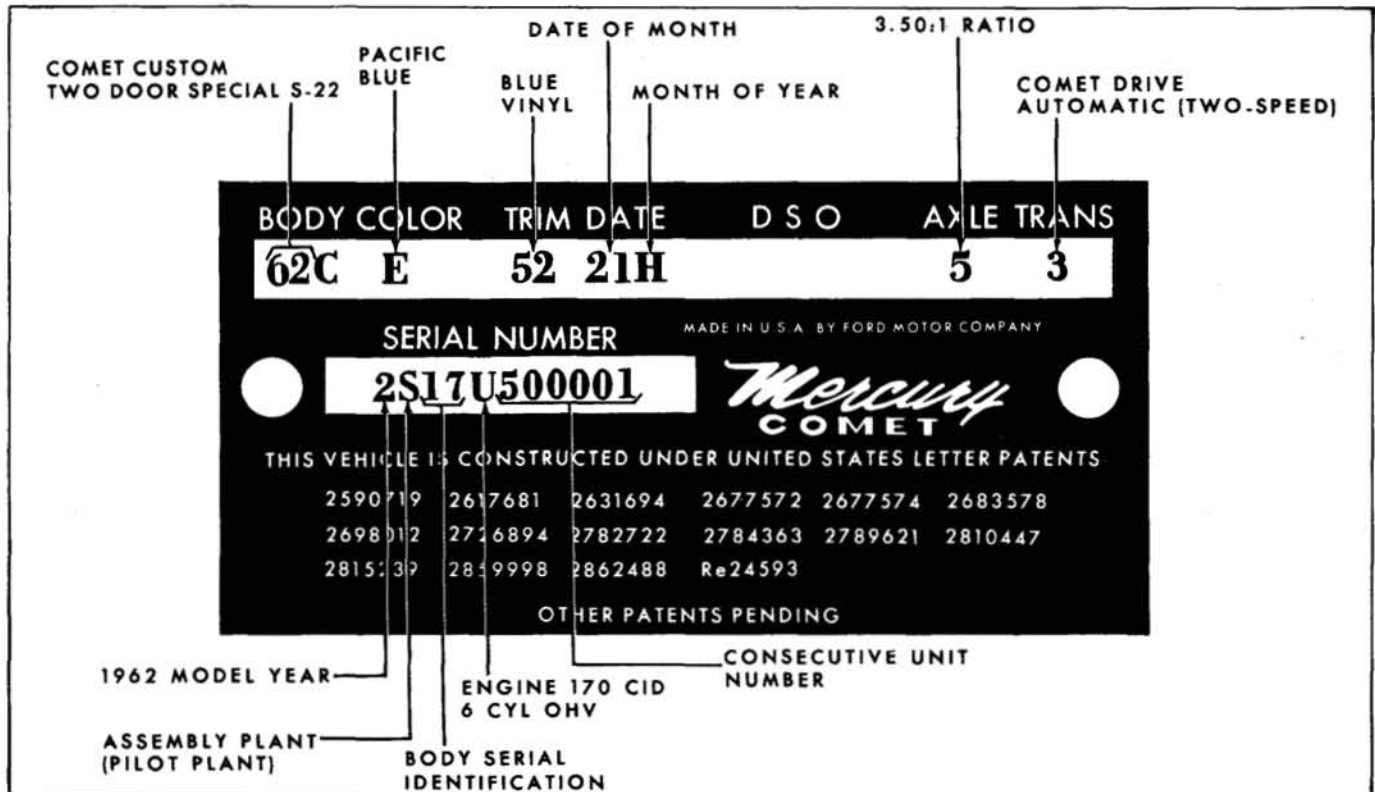


FIG. 3—1962 Comet Identification Plate

PATENT PLATE

The Vehicle Numbering System is basically a 1961 carryover. However, in 1962, the consecutive serial number will begin with 500001 instead of 800001 as was the case in Production Year 1961.

The serial number line and the vehicle data line have exchanged locations and a space has been provided in the vehicle data line for D.S.O. items.

Body Style Code

CODE NUMBER	BODY STYLE	BODY TYPE	SERIES
02	54A	4-Door Sedan	Mercury Comet
01	62A	2-Door Sedan	
21	59A	2-Door Station Wagon	
22	71A	4-Door Station Wagon	
12	54B	4-Door Sedan	Mercury Comet Custom
11	62B	2-Door Sedan	
17	62C	2-Door Special Sedan (S-22)	
23	59B	2-Door Station Wagon	
24	71B	4-Door Station Wagon	

Color Code

A single letter code designates a solid body color and two letters denote a two-tone—the first letter, the lower color and the second letter, the upper color.

CODE	COLOR	"M" NUMBER
A	Presidential Black	M30J-1724
D	Ocean Turquoise	M30J-1451
E	Pacific Blue	M30J-1448
F	Sea Blue	M30J-1449
H	Blue Satin	M30J-1447
J	Carnival Red	M30J-1515
K	Light Aqua	M30J-1452
M	Sultana White	M30J-1238
P	Scotch Green	M30J-1454
Q	Sheffield Gray	M30J-1371
R	Jamaica Yellow	M30J-1456
T	Champagne	M30J-1543
X	Black Cherry	M30J-1444
Z	Desert Frost	M30J-1427

Trim Code

A two digit number indicates the type of trim and trim color.

If due to unavailability or other difficulties in production, a particular trim set is not intended for service (minor deviation from intended trim), the patent plate code will be followed with a numerical designation—For example: 52-1, 52-2.

If the trim set is serviced directly, the patent plate code will bear an alphabetical suffix—For example: 52-A, 52-B.

CODE	TRIM SCHEME
12	Blue Vinyl & Blue 3D B/Cloth
14	Beige Vinyl & Beige 3D B/Cloth
15	Red Vinyl & Black 3D B/Cloth
17	Turquoise Vinyl & Turquoise 3D B/Cloth
40	White Vinyl & Black Bethany B/Cloth
42	Blue Vinyl & Blue Bethany B/Cloth
45	Red Vinyl & Black Bethany B/Cloth
47	Turquoise Vinyl & Turquoise Bethany B/Cloth
52	Blue Vinyl
54	Beige Vinyl
55	Red Vinyl
56	Black Vinyl
57	Turquoise Vinyl
75	White & Red Vinyl
76	White & Black Vinyl

Rear Axle Ratio Code

CODE	RATIO
3	3.20 to 1
5	3.50 to 1
9	4.00 to 1

Engine Identification Code

CODE	ENGINE (C.I.D.)
S	144
*D	144
U	170
*E	170

*Low Compression.

KEY CODES

The key code for the front door locks and the ignition switch appears on the door lock cylinder in the right hand door for emergency use. If it is necessary to determine this number, use the following procedure:

1. Pull back the weatherstrip on the rear door face in the area of the door lock cylinder to expose the spring clip.
2. Using a screwdriver and pliers, remove the spring clip.
3. Pull the lock cylinder from the door. The key code number appears on the underside of the lock cylinder.
4. Replace the cylinder, spring clip and weatherstrip.

1961 FALCON AND COMET IDENTIFICATION CANADIAN BUILT VEHICLES

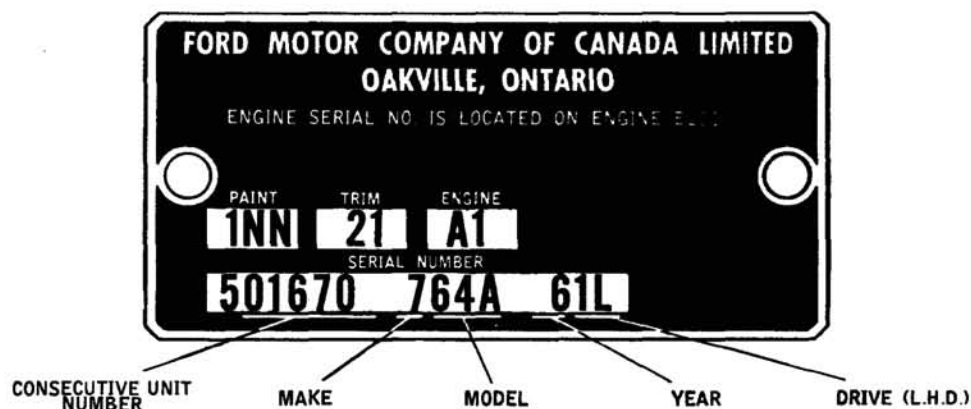


FIG. 4—Falcon and Comet Identification Plate

1 IDENTIFICATION PLATE

Figure 4 illustrates a typical Canadian Built Falcon or Comet identification plate. The plate is located on the rear face of the left front door inner panel.

CONSECUTIVE UNIT NUMBER

Each model year, the assembly plant begins with a consecutive unit number and continues on for each unit built.

MAKE

Digit 7 indicates Falcon.

Digit 9 indicates Comet.

MODEL

Body Type

Falcon	Comet	
58A	62A	Four-Door Sedan
64A	54A	Two-Door Sedan
59A	59A	Two-Door Station Wagon
71A	71A	Four-Door Station Wagon

YEAR

61 indicates 1961 Model.

L indicates left hand drive (R—right hand drive)

ENGINE

A1 indicates 6-cylinder O.H.V., 144 cubic inch displacement engine with standard transmission—Falcon

A2 indicates 6-cylinder O.H.V., 144 cubic inch displacement engine with automatic transmission—Falcon

A3 indicates 6-cylinder O.H.V., 144 cubic inch displacement engine with standard transmission—Comet

A4 indicates 6-cylinder O.H.V., 144 cubic inch displacement engine with automatic transmission—Comet

B1 indicates 6-cylinder O.H.V., 170 cubic inch displacement engine with standard transmission—Falcon

B2 indicates 6-cylinder O.H.V., 170 cubic inch displacement engine with automatic transmission—Falcon

B3 indicates 6-cylinder O.H.V., 170 cubic inch displacement engine with standard transmission—Comet

B4 indicates 6-cylinder O.H.V., 170 cubic inch displacement engine with automatic transmission—Comet

2 RADIO IDENTIFICATION

The 1961 Falcon and Comet radio receivers are identified by a prefix to the serial number which is stamped on the back of the radio chassis; for example, serial CA-14-PDM-50683 or CA-14-PG-90030.

CA — Canadian
 1 — 1961
 4 — 4-tube radio
 P — Receiver of Philips design
 D — Falcon
 G — Comet
 M — Manual receiver
 50683 or 90030 — Serial number

3 PAINT AND TRIM

MODELS	FALCON								COMET								KEY	
	SEDANS				WAGONS				SEDANS				WAGONS				1 — INDICATES SOLID COLOUR 2 — CONVENTIONAL TU-TONE PAINT COMBINATION * FALCON TRIM OPTIONS 24, 25, 26, 28, 29 AND 30 AND COMET TRIM OPTIONS 02, 03, 04, 05, 07 AND 08 INCLUDE REAR ARM RESTS AND REAR ASH TRAY.	
	58A-64A				59A-71A				54A-62A				59A-71A					
TRIM COLOURS	GRAY	GRAY RPO*	BLUE RPO*	RED & GRAY RPO*	BROWN	BROWN RPO*	BLUE RPO*	RED & WHITE RPO*	WHITE & BLUE-GREEN	BLUE RPO*	GREEN RPO*	RED & BLACK RPO*	WHITE & BLACK RPO*	WHITE & BLUE-GREEN	WHITE & RED RPO*	WHITE & BLACK RPO*	TRIM CODE	
21	24	25	26	27	28	29	30	01	02	03	04	05	06	07	08			
PAINT CODE																	PAINT	
AA	1	1			1	1			1		1			1		1	Mint Green	
BB	1	1	1	1	1	1	1	1	1			1	1	1	1	1	Raven Black	
CC	1		1		1	1	1		1	1				1		1	Starlight Blue	
EE	1		1		1	1	1		1	1				1		1	Chesapeake Blue	
FF	1		1		1	1	1		1	1				1		1	Cambridge Blue	
GG	1	1			1	1			1		1			1		1	Laurel Green	
LL	1	1		1	1	1		1	1	1		1	1	1	1	1	Silver Gray	
NN					1	1											Algiers Bronze	
RR	1	1		1	1	1		1	1			1	1	1	1	1	Monte Carlo Red	
TT	1	1							1					1	1		Garden Turquoise	
WW	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Corinthian White	

3 PAINT AND TRIM—Continued

MODELS	FALCON										COMET								KEY	
	SEDANS					WAGONS					SEDANS				WAGONS				1 — INDICATES SOLID COLOUR 2 — CONVENTIONAL TU-TONE PAINT COMBINATION * FALCON TRIM OPTIONS 24, 25, 26, 28, 29 AND 30 AND COMET TRIM OPTIONS 02, 03, 04, 05, 07 AND 08 INCLUDE REAR ARM RESTS AND REAR ASH TRAY.	
	58A-64A					59A-71A					54A-62A				59A-71A					
TRIM COLOURS	GRAY	GRAY RPO*	BLUE RPO*	RED & GRAY RPO*	BROWN	BROWN RPO*	BLUE RPO*	RED & WHITE RPO*	WHITE & BLUE-GREEN	BLUE RPO*	GREEN RPO*	RED & BLACK RPO*	WHITE & BLACK RPO*	WHITE & BLUE-GREEN	WHITE & RED RPO*	WHITE & BLACK RPO*				
TRIM CODE	21	24	25	26	27	28	29	30	01	02	03	04	05	06	07	08				
PAINT CODE																	PAINT			
WA	2	2			2	2											White & Mint Green			
WB	2	2	2	2	2	2	2	2									White & Raven Black			
WC	2		2		2	2	2										White & Starlight Blue			
WE	2		2		2	2	2										White & Chesapeake Blue			
WF	2		2		2	2	2										White & Cambridge Blue			
WG	2	2			2	2											White & Laurel Green			
WL	2	2		2	2	2		2									White & Silver Gray			
WN					2	2											White & Algiers Bronze			
WR	2	2		2	2	2		2									White & Monte Carlo Red			
WT	2	2															White & Garden Turquoise			
AG	2	2			2	2											Mint Green & Laurel Green			
CE	2		2		2	2	2										Starlight Blue & Chesapeake Blue			
CF	2		2		2	2	2										Starlight Blue & Cambridge Blue			
FE	2		2		2	2	2										C'bridge Blue & Chesapeake Blue			
AW									2								Mint Green & White			
BW									2			2	2	2	2	2	Raven Black & White			
CW									2								Starlight Blue & White			
EW									2	2				2		2	Chesapeake Blue & White			
FW									2	2				2		2	Cambridge Blue & White			
GW									2		2			2		2	Laurel Green & White			
TW									2				2	2		2	Garden Turquoise & White			
RW									2			2	2	2	2	2	Monte Carlo Red & White			
AG									2		2			2		2	Laurel Green & Mint Green			
EC									2	2				2		2	Chesapeake Blue & Starlight Blue			
FC									2	2				2		2	Cambridge Blue & Starlight Blue			
EF									2								Chesapeake Blue & C'bridge Blue			

PAINT	
COLOUR	PART NUMBER
MINT GREEN (Light)	M-30J-1373-SE
RAVEN BLACK	M-30J-1724-SE
STARLIGHT BLUE (Light)	M-30J-1361-SE
AQUAMARINE	M-30J-1139-SE
CHESAPEAKE BLUE METALLIC (Dark)	M-30J-1367-SE
CAMBRIDGE BLUE METALLIC (Medium)	M-30J-1372-SE
LAUREL GREEN METALLIC (Medium)	M-30J-1364-SE
TAWNY BEIGE	M-30J-1262-SE
SILVER GRAY METALLIC (Platinum)	M-30J-1371-SE
ALGIERS BRONZE METALLIC	M-30J-1369-SE
GOLD DUST METALLIC	M-30J-1276-SE
MONTE CARLO RED	M-30J-1232-SE
SUMMER ROSE (Pink)	M-30J-1265-SE
GARDEN TURQUOISE METALLIC	M-30J-1385-SE
CORINTHIAN WHITE	M-30J-1238-SE
DESERT GOLD (Yellow)	M-30J-1366-SE
PRIME SURFACER—GRAY (1 quart)	CB9CZ-19568-A
PRIME SURFACER—GRAY (1 gallon)	CB9CZ-19568-B
PRIME SURFACER—RED OXIDE (1 quart)	CB9CZ-19574-A
PRIME SURFACER—RED OXIDE (1 gallon)	CB9CZ-19574-B

CONVENTIONAL TU-TONE

EXAMPLE: CODE 2WB WHITE ROOF
BLACK BODY

1961 COMET IDENTIFICATION U.S. BUILT VEHICLES

6 PATENT PLATE

The patent plate lists the serial number, body style, body color, trim code, date of assembly, transmission code, and axle ratio code. It is riveted to the rear face of the left front door. See figure 5 for an illustration of a typical patent plate.

Serial Number

The serial number designates the model year of the vehicle, the plant which assembled the vehicle, body type identification code number, engine identification, and consecutive unit number.

MODEL YEAR

The numeral one (1) denotes Model Year 1961.

ASSEMBLY PLANT CODE LETTERS

CODE LETTER	ASSEMBLY PLANT
H	Lorain
K	Kansas City
R	San Jose

BODY STYLES

CODE NUMBER	BODY STYLE	BODY TYPE
11	62A	2-Door Sedan
12	54A	4-Door Sedan
21	59A	2-Door Station Wagon
22	71A	4-Door Station Wagon

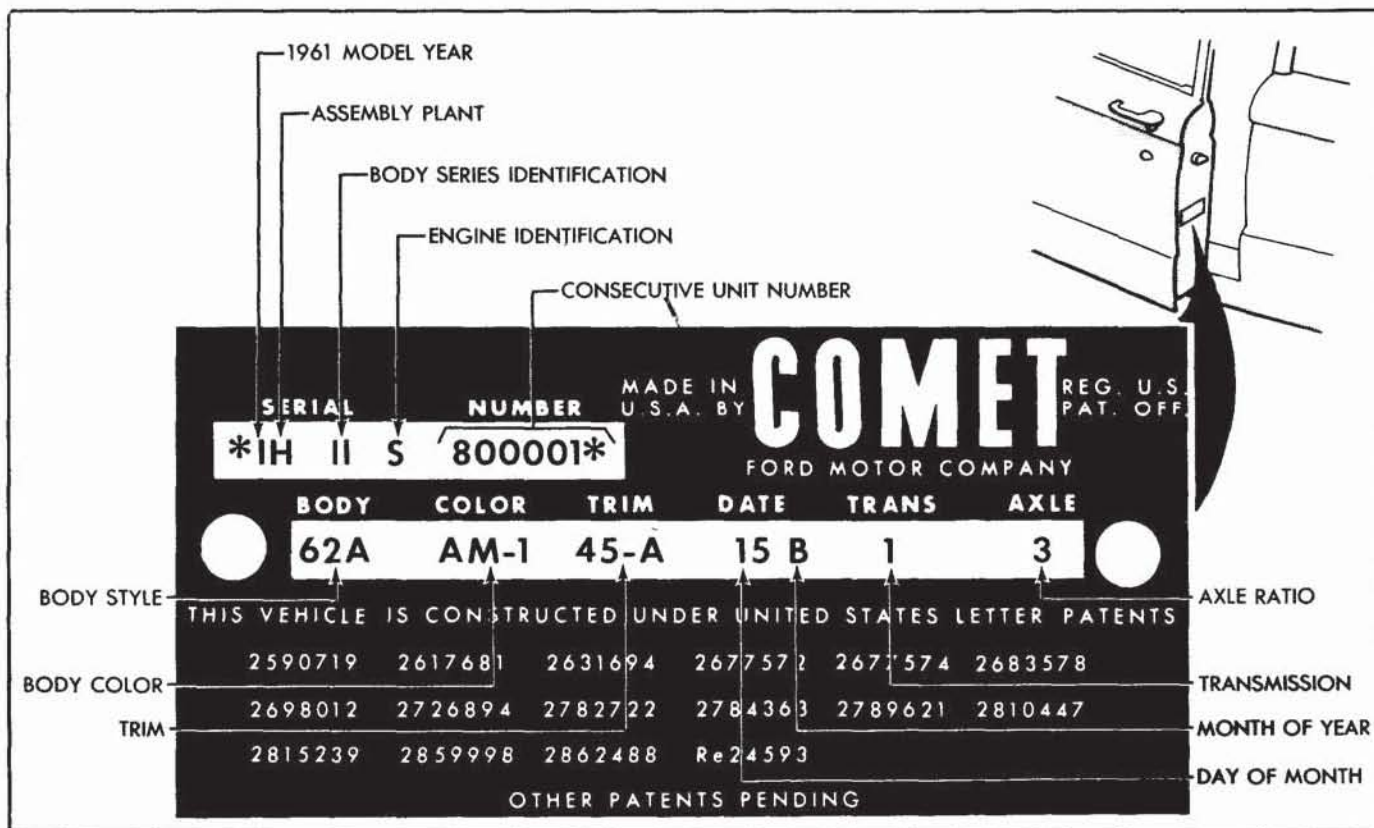


FIG. 5—Comet Patent Plate

ENGINE IDENTIFICATION CODE LETTERS

CODE LETTER	ENGINE
S	144 CID 6 Cyl. O.H.V.
D*	144 CID 6 Cyl. O.H.V.
U	170 CID 6 Cyl. O.H.V.
E*	170 CID 6 Cyl. O.H.V.

*Low Compression

CONSECUTIVE UNIT NUMBER

Each assembly plant consecutive unit number begins with 800001.

Vehicle Specifications

The vehicle specification codes contain body style, color, trim, day and month the vehicle was assembled, transmission code, and rear axle code.

COLOR CODE

A single letter designates a solid body color and two letters and a number suffix denote a conventional two-tone — the first letter, the lower color and the second letter, the upper color. The numeral "1" following the two-tone paint codes designates a conventional arrangement.

CODE LETTER	COLOR	"M" NUMBER
A	Presidential Black	M30J-1724
D	Blue Haze	M30J-1361
E	Saxon Green Metallic	M30J-1364
H	Empress Blue Metallic	M30J-1367
J	Signal Red	M30J-1232
M	Sultana White	M30J-1238
Q	Sheffield Gray Metallic	M30J-1371
R	Columbia Blue Metallic	M30J-1372
S	Green Frost	M30J-1373
W	Regency Turquoise Metallic	M30J-1385

TRIM CODE

A two digit number indicates the type of trim and the trim color.

If, due to unavailability or other difficulties in production, a particular trim set is not intended for service (minor deviation from intended trim), the patent plate

code will be followed with a numerical designation — For example: 45-1.

If the trim set is serviced directly, the patent plate code will bear an alphabetical suffix — For example: 45-A.

TRIM CODE	TRIM SCHEME
10*	White Vinyl and Black 3-D B/cloth
12*	Blue Vinyl and Blue 3-D B/cloth
13*	Green Vinyl and Green 3-D B/cloth
15*	Red Vinyl and Black 3-D B/cloth
40	White Vinyl and Blue-Green B/cloth
42	Blue Vinyl and Blue-Green Tweed B/cloth
43	Green Vinyl and Blue-Green Tweed B/cloth
45	Red Vinyl and Red-Gray Tweed B/cloth
75*	White and Red Vinyl
76*	White and Black Vinyl

*Deluxe RPO Trim

DAY AND MONTH OF YEAR CODE

The number indicates the day of the month vehicle was built and the letter indicates the month. Following is the month of year code chart:

CODE LETTER	MONTH	CODE LETTER	MONTH
A	January	G	July
B	February	H	August
C	March	J	September
D	April	K	October
E	May	L	November
F	June	M	December

TRANSMISSION CODE

The transmission code number indicates the type of transmission installed in the vehicle.

CODE NUMBER	TRANSMISSION
1	Standard
3	Comet Drive (Two Speed)

REAR AXLE RATIO CODE

CODE NUMBER	RATIO
1	3.56:1
2	3.89:1
J	3.50:1

1960 FALCON AND FRONTENAC IDENTIFICATION CANADIAN BUILT VEHICLES

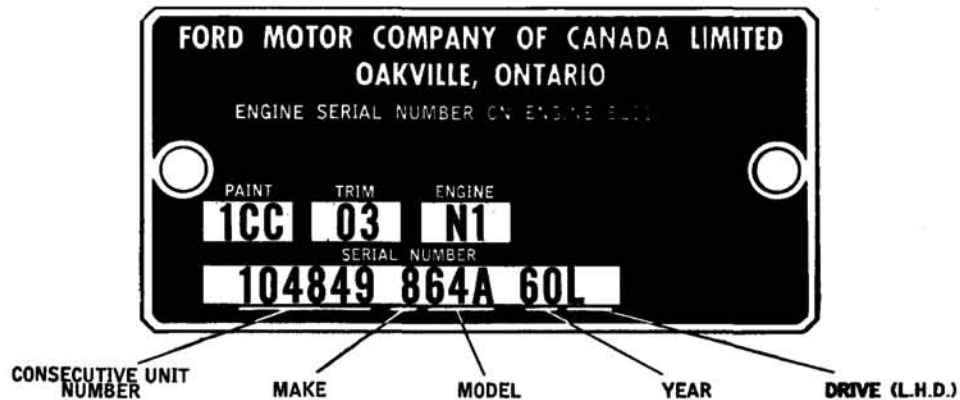


FIG. 6 — Falcon and Frontenac Identification Plate

1 IDENTIFICATION PLATE

Figure 6 illustrates a typical Canadian Built Falcon or Frontenac identification plate. The plate is located on the rear face of the left front door inner panel.

CONSECUTIVE UNIT NUMBER

Each model year, the assembly plant begins with a consecutive unit number and continues on for each unit built.

MAKE

Digit 7 indicates Falcon

Digit 8 indicates Frontenac

MODEL

Indicates the Body Type

58A	Four-Door Sedan
64A	Two-Door Sedan
59A	Two-Door Ranch Wagon
71A	Four-Door Station Wagon

YEAR

60 indicates 1960 Model

L indicates left hand drive (R—right hand drive)

ENGINE

N1 indicates 6-cylinder O.H.V., 144 cubic inch displacement engine with standard transmission.

N2 indicates 6-cylinder O.H.V., 144 cubic inch displacement engine with automatic transmission.

2 RADIO IDENTIFICATION

The 1960 Falcon and Frontenac radio receivers are identified by a prefix to the serial number which is stamped on the back of the radio chassis; for example, serial CA-04 PDM-00000.

- CA denotes Canadian (Philips)
- 0 denotes year 1960
- 4 denotes 4-tube radio
- P denotes receiver of Philips design
- D denotes Falcon and Frontenac model
- M denotes manual receiver

3 PAINT AND TRIM

Paint Code (Solid Colours)			Trim Code and Colour	
		Paint Part No.	Standard	*Optional at Extra Cost
1AA	Adriatic Green	MC28J-1274SE	01 Gray	04 Green
1BB	Raven Black	MC28J-1724SE	01 Gray	02 Gray
1CC	Skymist Blue	MC28J-1226SE	01 Gray	03 Blue
1FF	Belmont Blue	MC28J-1225SE	01 Gray	03 Blue
1GG	Meadowvale Green	MC28J-1273SE	01 Gray	04 Green
1PP	Platinum	MC28J-1287SE	01 Gray	02 Gray
1RR	Monte Carlo Red	MC28J-1232SE	01 Gray	02 Gray
1TT	Sultana Turquoise	MC28J-1233SE	01 Gray	02 Gray
1WW	Corinthian White	MC28J-1238SE	01 Gray	02 Gray
1WW	Corinthian White	MC28J-1238SE	01 Gray	03 Blue
1WW	Corinthian White	MC28J-1238SE	01 Gray	04 Green

Paint Code (Tu-Tone Combination)		AS ABOVE	Trim Code and Colour	
+2WB	White and Black		01 Gray	02 Gray
+2WF	White and Belmont Blue		01 Gray	03 Blue
+2WG	White and Meadowvale Green		01 Gray	04 Green
2WP	White and Platinum		01 Gray	02 Gray
+2WR	White and Monte Carlo Red		01 Gray	02 Gray
2WT	White and Sultana Turquoise		01 Gray	02 Gray
+2AG	Adriatic Green and Meadowvale Green		01 Gray	04 Green
+2CF	Skymist Blue and Belmont Blue		01 Gray	03 Blue

*Includes Rear Arm Rests and Rear Ash Tray.

+Reversible Tu-Tone Combinations.

1960 COMET IDENTIFICATION U.S. BUILT VEHICLES

PATENT PLATE

The patent plate lists the serial number, body style, body color, trim code, date of assembly, transmission code, and axle ratio code. It is riveted to the rear face of the left front door. See figure 7 for an illustration of a typical patent plate.

SERIAL NUMBER

The serial number designates the model year of the vehicle, the plant which assembled the vehicle, body type identification code number, engine identification and consecutive unit number.

MODEL YEAR

The numeral zero (0) denotes Model Year 1960.

ASSEMBLY PLANT CODE LETTERS

CODE LETTER	ASSEMBLY PLANT
H	Lorain
K	Kansas City
R	San Jose
T	Metuchen

BODY STYLES

CODE NUMBER	BODY STYLE	BODY TYPE
01	62A	2-Door Sedan
02	54A	4-Door Sedan
06	59A	2-Door Station Wagon
07	71A	4-Door Station Wagon

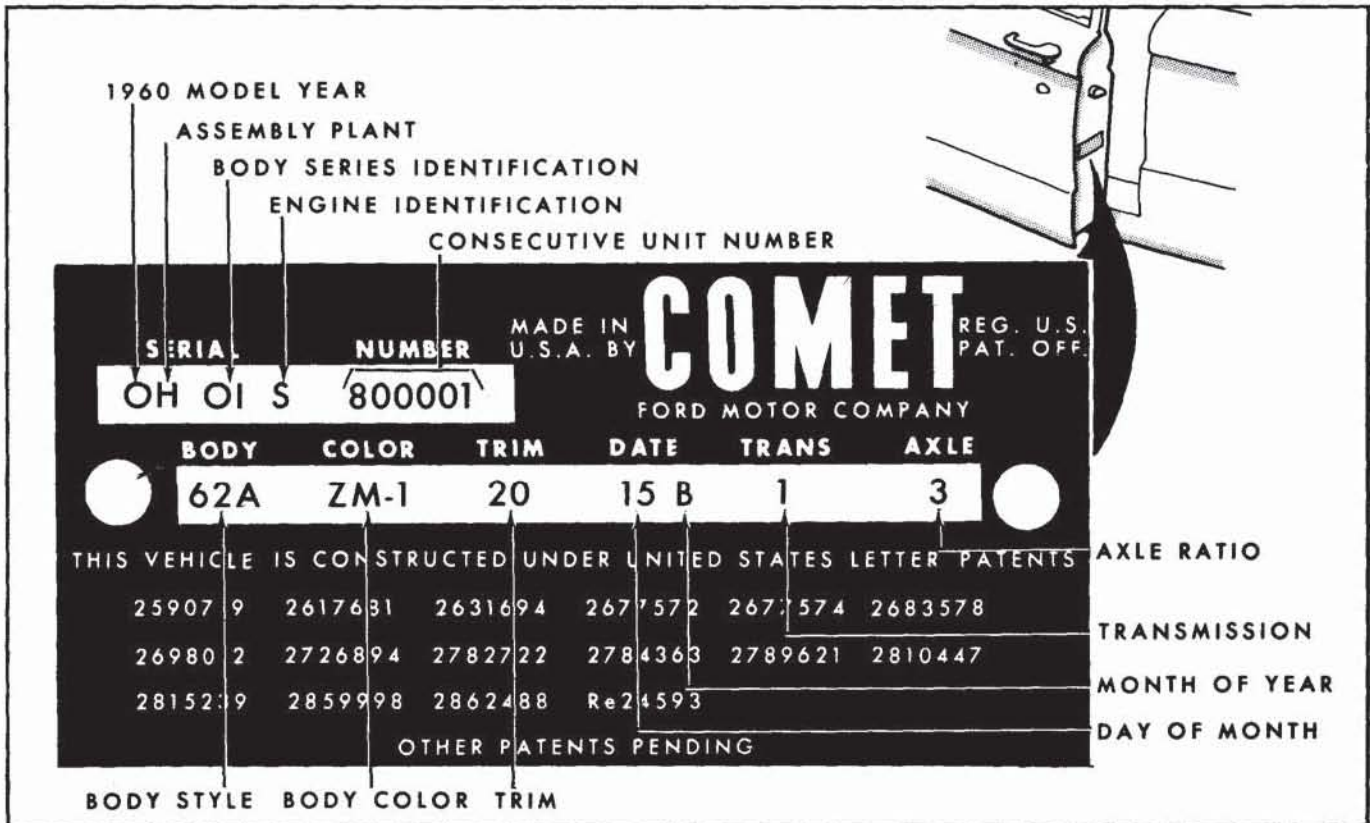


FIG. 7—Patent Plate—(60C-8048)

ENGINE IDENTIFICATION CODE LETTERS

CODE LETTER	ENGINE
S	144 CID 6 Cyl. O.H.V.
D	144 CID 6 Cyl. O.H.V. (Low Compression)

CONSECUTIVE UNIT NUMBER

Each assembly plant consecutive unit number begins with 800001.

Vehicle Specifications

The vehicle specification codes contain body style, color, trim, day and month the vehicle was assembled, transmission code, and rear axle code.

COLOR CODE

A single letter designates a solid body color and two letters and a number suffix denote a conventional two-tone — the first letter, the lower color and the second letter, the upper color.

PLATE PATENT	COLOR	"M" NUMBER
A	Tuxedo Velvet	M30J-1724
C	Crystal Turquoise	M30J-1139
E	Cote D'Azure Blue Metallic	M30J-1225
F	Inlet Blue	M30J-1226
H	Javelin Bronze Metallic	M30J-1230
J	Signal Red	M30J-1232
K	Twilight Turquoise Metallic	M30J-1233
M	Sultana White	M30J-1238
N	Sahara Beige	M30J-1249
Q	Royal Lilac Metallic	M30J-1248
R	Buttercup Yellow	M30J-1275
T	Valley Green Metallic	M30J-1273
U	Bronze Rose Metallic	M30J-1266
W	Cameo Green	M30J-1274
Z	Cloud Silver Metallic	M30J-1287

TRIM CODE

A two digit number indicates the type of trim and the trim color.

TRIM CODE	TRIM SCHEME
01	White Vinyl & Sapphire Tweed B/cloth
02	Green Vinyl & Sapphire Tweed B/cloth
03	Red Vinyl & Sapphire Tweed B/cloth
04	Turquoise Vinyl & Sapphire Tweed B/cloth
05*	Green Vinyl & Green Honeycomb B/cloth
06*	Red Vinyl & Black Honeycomb B/cloth
07*	Turquoise Vinyl & Turquoise Honeycomb B/cloth
08*	White & Black Vinyl
09	Red and Black Vinyl

*Deluxe RPO Trim

DAY AND MONTH OF YEAR CODE

The number indicates the day of the month vehicle was built and the letter indicates the month. Following is the month of year code chart:

CODE LETTER	MONTH	CODE LETTER	MONTH
A	January	G	July
B	February	H	August
C	March	J	September
D	April	K	October
E	May	L	November
F	June	M	December

TRANSMISSION CODE

The transmission code number indicates the type of transmission installed in the vehicle.

CODE NUMBER	TRANSMISSION
1	Standard
3	Comet Drive (Two Speed)

REAR AXLE RATIO CODE

The rear axle ratio code "1" indicates a ratio of 3.56:1. No other axle is presently specified.

SECTION 1

WHEELS AND TIRES

Part 1 of 1

DESCRIPTION AND MAINTENANCE

Page

1. General Description	1-1
2. Hubs, Bearings and Oil Seals or Grease Retainers	1-3

1 GENERAL DESCRIPTION

Thirteen-inch diameter disc-type wheels are used on all vehicles.

Refer to "Specifications—Wheels and Tires" in this section of the manual for complete specifications.

The front hubs are attached to the front brake drums. The front wheel bearing cones and rollers rotate in bearing cups which are pressed into each hub. Grease retainers are installed at the inner ends of the hubs to prevent lubricant from leaking into the brake drums.

The rear hubs and bearings are installed on the rear axle shafts, and the oil seals are installed between the axle housing and the axle shafts. All service procedures for rear hubs, bearings and oil seals are outlined in "Section 5—Rear Axle and Drive-line."

PERIODIC MAINTENANCE

Tires should be checked frequently when cool to be sure that air pressures agree with those specified for the tire being checked.

Wheel stud nuts should be inspected regularly to avoid accidental loosening of the wheels.

Keep wheels and hubs clean. Pebbles and lumps of mud or grease wedged between the wheel or drum can unbalance a wheel and tire.

A tire inspection and inflation pressure check should be performed at 6,000 mile intervals. If unusual tire wear is noted, front wheel alignment and/or balance should be checked and adjusted, as required. Cross-switch wheel and tire assemblies at 12,000 mile intervals and balance them, if necessary.

Lubrication and adjustment of front wheel bearings is recommended at 12,000 mile intervals.

WHEEL AND TIRE BALANCE

Original balance of a wheel and tire assembly may be lost due to wheel misalignment, irregularities in tread wear caused by sudden braking or skidding, an under-inflated tire, or incorrect tire repair. Preliminary information regarding static and dynamic balance is thus included in this section. The wheel and tire assembly should also be checked for static and dynamic balance, whenever the original tires are replaced.

Static Wheel Balance

A wheel is statically balanced when the weight about the axis of rotation is equally distributed and there is no tendency for the wheel to revolve in either direction when suspended on frictionless bearings. Static unbalance causes vibrations or "tramp" and will result in uneven tire wear.

Correcting Static Unbalance

Before balancing the wheel and tire assembly, remove all dirt and weights. The tires must be in good condition and properly mounted. Tires must be inflated to correct pressure and valve caps in place.

Accurate static balance may be obtained with use of commercial balancing equipment. The placement of balancing weights and use of the equipment is explained in instructions furnished with the unit.

If a front wheel hub and drum is removed, clean bearings and repack with recommended wheel bearing grease.

Dynamic Wheel Balance

A wheel is dynamically balanced when it runs smoothly both on its axis of rotation and on an axis through the center of the tire and rim perpendicular to the axis of rotation. Wheel "shimmy" and vibration result from dynamic unbalance, causing excessive tire wear and loosening of car body and parts. A wheel must always be put in static balance before attempting dynamic balancing.

Correcting Dynamic Unbalance

Dynamic unbalance can be corrected with use of available commercial test fixtures which include the necessary instructions for use and placement of balancing weights.

Corrections of dynamic unbalance must be made without destroying static balance by proper installation of weights.

WHEEL AND TIRE REMOVAL AND INSTALLATION

The unitized body-frame construction of the vehicle requires special precautions and procedures when the car is jacked-up or hoisted. In some cases, special hoist adapters must be used as recommended by specific hoist manufacturers. (Refer to Section 13 for recommended lifting procedures.)

1. Pry off the wheel cover and loosen, but do not remove the wheel stud nuts.
2. Raise the car until the wheel and tire clear the floor.
3. Remove the wheel stud nuts and the wheel and tire from the hub and drum.
4. Clean all dirt from the hub and drum. Be sure that the replacement wheel and tire are clean.

5. Position the wheel and tire on the hub and drum, and install the wheel stud nuts. For proper balance, line up the notch on the drum with the valve stem on the wheel. Tighten the nuts enough to hold the wheel firmly in place. **Always tighten alternate nuts to draw the wheel evenly against the hub and drum.**
6. Lower the car to the floor, and torque the wheel stud nuts to 55-85 lbs. ft. Snap the wheel cover into place securely.

TIRE INSPECTION

Inspect the tire treads, and remove all stones, nails, glass, or other objects that may be wedged in the tread grooves. Check for holes or cuts that may permit air leakage from the tire, and make the necessary repairs.

Inspect the tire side walls for cuts, bruises and other damage. If internal damage is suspected, remove the tire from the wheel for further inspection and repair or replacement.

Check the tire valve for air leaks, and replace the valve if necessary. If the valve cap is missing, install a new cap.

TIRE REPLACEMENT

After the wheel and tire have been removed from the car, the tire can be removed on a mounting machine. If the tire irons are used to remove the tire, use the following procedure:

1. Remove the valve core, and deflate the tire completely.
2. Loosen the tire beads with the tool shown in figure 1.

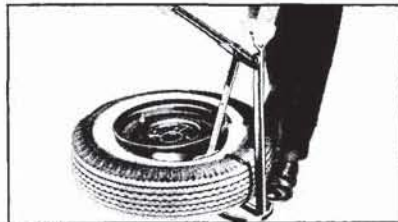


FIG. 1—Bead Loosening Tool
—Typical—(60C-2801)

3. With the outside of the wheel down, insert two tire irons about 8 inches apart between the tire bead and the back side of the wheel rim. **Use only tire irons with rounded edges or irons designed for removing tubeless tires.**
4. Leave one tire iron in position, and pry the rest of the bead over the rim with the other iron. **Take small "bites" around the tire with the iron to prevent damaging the tire bead.**
5. Stand the wheel and tire upright with the tire bead in the drop center well at the bottom of the wheel. Then, insert the tire iron between the bead and the edge of the wheel rim and pry out the wheel.
6. Inspect the tire and wheel before mounting the tire. Remove all dirt and old tire mounting compound. Use emery cloth or fine steel wool to clean the rim. Check the rim for dents and other uneven spots. Inspect the wheel for loose rivets.
7. Apply tire mounting compound to both tire beads, and then with the outside of the wheel down, pry the beads over the wheel rim with two tire irons. **Do not use a hammer or mallet to force the beads over the rim.** A mounting machine can also be used to mount the tire on the wheel.
8. Use a mounting band to force the beads against the rim flanges

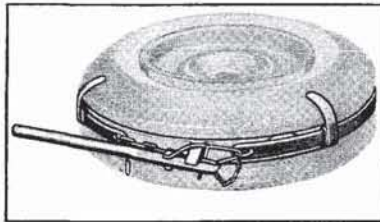


FIG. 2—Tubeless Tire Mounting
Band—Typical—(60C-2802)

to create the initial seal. See figure 2. If a mounting band is not available, tie a tourniquet of heavy cord around the circumference of the tire, and tighten the cord with a tire iron.

9. Give the tire a few quick bursts of air to seat the beads properly, and then inflate the tire to 40 pounds pressure. Check to see that the bead positioning ribs (outer rings near the side walls) are evenly visible just above the rim flanges all the way around the tire. If the ribs are not even, deflate the tire completely, and then inflate it again.

CAUTION: Exceeding 40 psi on initial inflation to seat the tire beads may damage "hung-up" beads. Also, the explosive force resulting from a broken bead may result in serious injury to persons nearby.

10. When the ribs are properly positioned, deflate the tire to the recommended pressure. Remove the tire mounting band. Check for air leakage.

TUBELESS TIRE VALVE REPLACEMENT

1. Remove the tire from the wheel.
2. Remove the valve.
3. Inspect the valve hole in the rim for burrs and sharp edges. File or rasp the edges of the hole smooth before installing a new tire valve.
4. Coat the new valve with mounting compound, and position the valve. Use a rubber hammer or a valve replacing tool to seat the valve firmly against the inside of the rim. **The valve must be installed straight.**
5. Mount the tire on the wheel, and check the new valve for air leakage.

2 HUBS, BEARINGS, AND OIL SEALS OR GREASE RETAINERS

FRONT WHEEL BEARING ADJUSTMENT

The front wheel bearings should be adjusted if the wheel is loose on the spindle or if the wheel does not rotate freely. The following procedure

will bring the end play to specification.

1. Raise the car until the wheel and tire clear the floor.
2. Pry off the wheel cover and remove the grease cap (Fig. 3) from the hub.

3. Wipe the excess grease from the end of the spindle, and remove the adjusting nut cotter pin and nut lock.

4. While rotating the wheel, hub, and drum assembly, torque the ad-

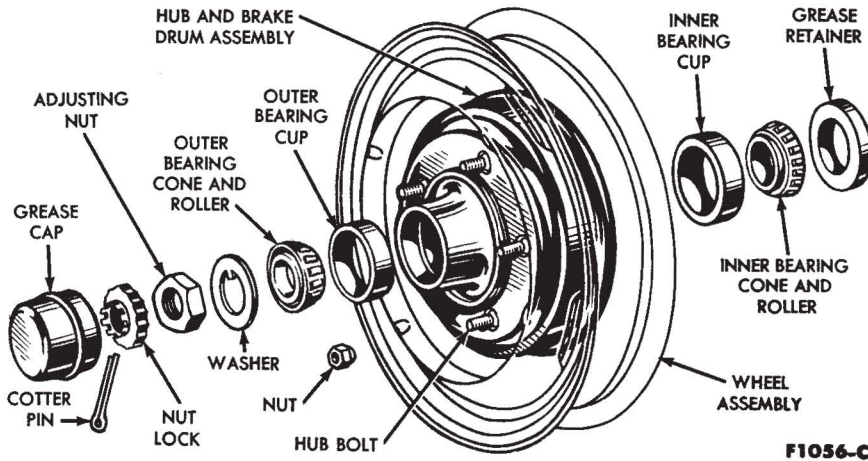


FIG. 3—Front Hub, Bearings, and Grease Retainer

justing nut to 12-15 ft-lbs to seat the bearings (Fig. 4).

5. Locate the nut lock on the adjusting nut so that the castellations on the lock are aligned with the cotter pin hole in the spindle.

6. Using a 1½-inch box wrench, back off both the adjusting nut and nut lock together 2 castellations.

7. Install a new cotter pin, and bend the ends of the cotter pin around the castellated flange of the nut lock.

8. Check the front wheel rotation. If the wheel rotates properly, install the grease cap and the hub cap or wheel cover. If the wheel still rotates roughly or noisily, clean or replace the bearings and cups.

FRONT WHEEL BEARING REPACKING OR REPLACEMENT

If bearing adjustment will not eliminate looseness or rough and noisy operation, the hub and bearings should be cleaned, inspected, and repacked. If the bearing cups or the cone and roller assemblies are worn or damaged, they should be replaced.

1. Back off the brake shoe adjusting screw so that the shoes do not contact the brake drum. Remove the hub cap or wheel cover.

2. Remove the grease cap from the hub, remove the cotter pin, nut lock, adjusting nut, and flat washer from the spindle, then remove the outer bearing cone and roller assembly (Fig. 3).

3. Pull the wheel, hub, and drum assembly off the wheel spindle.

4. Remove the grease retainer and the inner bearing cone and roller assembly from the hub.

5. With a drift, remove the bearing cup(s) if damaged.

6. If a new grease retainer is of the leather type, soak it in light engine oil for at least 30 minutes before installation. Thoroughly clean the spindle and the inside of the hub.

7. If the inner and/or outer bearing cup(s) were removed, install the replacement cup(s) in the hub with the tool shown in Fig. 5. **Be sure to seat the cups properly in the hub.**

8. Pack the inside of the hub with wheel bearing grease. Fill the hub

until the grease is flush with the inside diameter of both bearing cups.

9. Pack the bearing cone and roller assemblies with wheel bearing grease. (See Section 12 for grease specification.) A bearing packer is desirable for this operation. If a packer is not available, work as much lubricant as possible between the rollers and cages. Lubricate the cone surfaces with grease.

10. Place the inner bearing cone and roller assembly in the inner cup, and install the new grease retainer with the reverse end of the tool shown in Fig. 5. **Be sure that the retainer is properly seated.**

11. Install the wheel, hub, and drum assembly on the wheel spindle. **Keep the hub centered on the spindle to prevent damage to the grease retainer.**

12. Install the outer bearing cone and roller assembly and the flat washer on the spindle, then install the adjusting nut (Fig. 3).

13. Adjust the wheel bearings, and install a new cotter pin. **Bend the ends of the cotter pin away from the end of the spindle and around the castellated flange of the nut lock. This will prevent interference with the radio static collector in the grease cap.** Install the grease cap.

14. Adjust the brake shoes as outlined in Section 2, and install the hub cap or wheel cover.

FRONT HUB AND DRUM ASSEMBLY REPLACEMENT

When the hub and drum assembly is replaced, new bearings, cups, and oil seal must be installed in the new assembly. The new grease retainer should be soaked in light engine oil at least 30 minutes before installation.

cover, and back off the brake shoes from the drum.

2. Remove the wheel and tire assembly from the hub and drum assembly.

3. Remove the old hub and drum assembly from the wheel spindle as outlined in steps 2 and 3 of the foregoing procedure.

4. Clean the new hub and drum assembly. Install new inner and outer bearing cups in the new hub with the tool shown in Fig. 5. **Be sure to seat the cups properly in the hub.**



FIG. 4—Front Wheel Bearing Adjustment

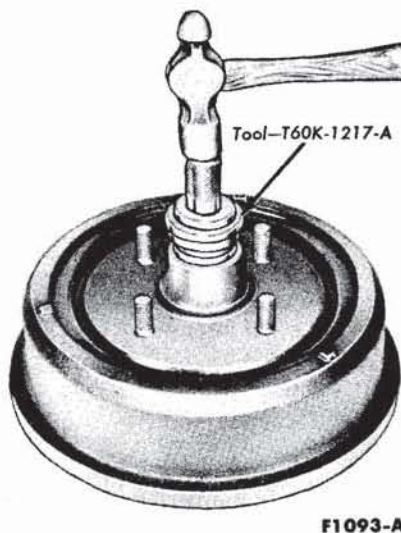


FIG. 5—Front Wheel Bearing Cup Installation

5. Grease and install the new parts as outlined in steps 8 through 10 of the foregoing procedure.

6. Install the new hub and drum assembly to the wheel spindle. **Keep the hub centered on the spindle to prevent damage to the grease retainer.**

7. Install the remaining parts as outlined in steps 12 and 13 of the foregoing procedure.

8. Position the wheel and tire assembly on the new hub and drum assembly. Install the wheel hub nuts and tighten them alternately in order to draw the wheel evenly against the hub and drum.

9. Adjust the brake shoes and install the hub cap or wheel cover.

TROUBLE SHOOTING

Tire Wear

Several symptoms which appear to be caused by wheel and tire troubles are also common to suspension and steering troubles. For this reason, be sure that the wheels, hubs, bearings, or tires are causing the trouble before adjusting, repairing, or replacing any of these parts.

Much abnormal tire wear is caused by poor driving habits and abnormal road conditions as well as by defective or poorly adjusted parts. High-speed driving, fast acceleration and braking, sharp turns at excessive speeds, and similar types of driving will cause tires to wear more rapidly than normal. High temperatures, rough or abrasive road surfaces, steep

hills and grades, and tire over-loading are also important factors in damaging tires and reducing tire life.

Worn or Damaged Front Wheel Bearings

When the front wheel bearings are excessively worn or damaged, check the bearing cups for proper installation before removing them for replacement. If a cup is improperly seated in the hub, inspect the hub for burrs, rough spots, or other irregular surfaces that would prevent seating the cup properly.

Bearing damage is often caused by lack of lubrication or improper adjustment. When installing bearing cups or cones and rollers, make sure that the specified lubricant is properly used. Adjust the bearings after installation, and make sure that a cotter pin is installed.

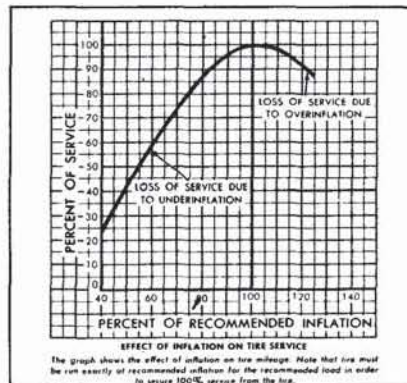


FIG. 6—Tire Mileage vs. Inflation—(8L-2810)

Tire Pressure

Figure 6 shows the relationship of tire mileage to inflation and indicates the importance of proper inflation for maximum tire life expectancy. Pressure of all tires, including the spare, should be checked frequently. Inflate (only when cool) to the recommended tire pressure. Proper inflation in terms of tread contact is illustrated in figure 7.

Underinflation increases the percentage of deflection of the tire and causes the tread in the shoulder area to wipe and scuff on the road. Added strain is placed on the cord body of the tire, thus increasing the chances for bruising and cord damage.

Excessive heat caused by underinflation will result in ply separation and possible tread separation as well. Abnormal flexing of the tire due to overload and under-inflation may

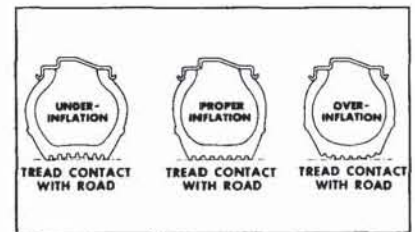


FIG. 7—Tread Contact—(60C-2805)

cause flex breaks in the sidewall or shoulder regions of the tire. The tire becomes hot when it flexes beyond normal; the action being much the same as bending a piece of wire back and forth a few times beyond normal, thus heating and breaking the wire. When a tire flexes beyond normal it becomes heated, weakening and breaking the cords. The chafed appearance of the cords around the inside of the tire indicates occurrence of a flex break.

Overinflation reduces deflection causing the tire to ride on its crown. It reduces tire life in the following ways:

1. Rapid center tread wear.
2. Tendency toward impact breaks.
3. Excessive strain on tire rim and beads.
4. Abnormal tire growth, tread cracking and separation.
5. Reduced traction and resistance to skidding.

Overinflation stretches the cord body of the tire to a point where it cannot absorb normal road shocks, resulting in cord breaks. Blow-outs may result from injuries of this nature.

To prevent failures due to improper inflation, make sure of the following:

1. Tires are inflated to the recommended pressure.
2. Valve cores are checked periodically and defective valve cores are replaced with new ones.
3. Valve caps are screwed on finger-tight.
4. If air pressures show a decided drop, check for slow leaks and repair immediately.
5. It is normal for tires to "build up" air pressure after being run, particularly in hot weather. Do not reduce or "bleed" this pressure. "Bleeding" of tires causes a dangerous increase in running temperature and upon cooling, the tires will be underinflated.

Irregular Tire Wear

Tires do not wear equally in the different wheel positions on the car even when the front end adjustments are within specifications. The average tire wear varies in different wheel positions and regular tire rotation will equalize wear. This adds to tire mileage and increased car performance.

An unbalanced condition of the front wheel assembly or improper alignment does not have to be visible to the eye before its effects begin to damage tires or mechanical parts of the car. Some types of mechanical irregularities and unbalance in wheels may be diagnosed by examining tread wear. A single spot or a series of cuppings around the circumference of the tire may be caused by mechanical irregularities such as underinflation or an unbalanced wheel.

Excessive toe-in or toe-out of front wheels will cause a small feather edge of rubber on the tread design. This condition can be corrected by toe-in adjustment of the wheels.

Mechanical irregularities, such as worn or loose bearings, worn bushings, bent parts, loose steering connections or incorrect camber and caster adjustments will cause excessive and irregular tire wear. Excessive camber causes slippage between the

center and side sections of the tire and is the most common cause of side wear.

Maximum tire life and service can be obtained only when recommended air pressures are maintained, wheel balance and alignment are correct, mechanical parts of the front wheel and front suspension are within specifications, brakes are properly adjusted, and the tires rotated at regular intervals.

To prolong tire life and equalize wear on all tires, rotate the tires around the car by changing wheel positions (without demounting tires) every 12,000 miles. Several methods of tire rotation have been published, the method illustrated in figure 8, however, is preferred.

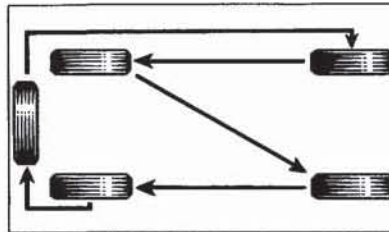


FIG. 8—Tire Cross-Switching Diagram—(60C-2806)

TROUBLE SHOOTING

Accurate diagnosis of the cause of trouble which shows up in the form of tire wear will probably involve inspection of the front suspension and the steering system. For this reason, trouble shooting data regarding wheels and tires is covered in the Trouble Shooting Charts in Sections 3 and 5, Front Suspension and Steering, respectively.

The information in this Section dealing with Tire Pressure, Irregular Tire Wear, and Wheel Balancing is also pertinent to the diagnosing and servicing of tire problems.

SPECIFICATIONS

NOTE: All specifications are given in inches, unless otherwise noted.

Wheels:

Type	Steel Disc, Drop Center Rim
Size:	
Diameter	13
Rim Width	4.5
Mounting Provisions	4 Stud Bolts
Bolt Circle Diameter	4.5

Tires:

Type	Low Pressure, Tubeless
Ply Rating (Standard)	4
Inflation Pressure (P.S.I.)	Front Rear
Passenger Car	24 24
Station Wagon (No Load)	22 26
Station Wagon (With Load)	22 30
Size	6.00x13, 6.50x13

TORQUE VALUES

Wheel Nuts	55-85 lbs. ft.
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SPECIAL TOOLS

TOOL NO.	DESCRIPTION
1175-AE	Remover—Grease Retainer
1217-AA	Replacer—Front Hub Bearings and Grease Seal

SECTION 2

BRAKE SYSTEM

Part 1 of 2

HYDRAULIC BRAKES

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2. Brake Adjustments 2-3
3. Master Cylinder Hydraulic Line
and Brake Pedal Repair..... 2-4
4. Brake Drum and Brake Assembly
Repair 2-6

1 TROUBLE SHOOTING

PRELIMINARY CHECKS

Always perform the following preliminary checks before attempting to

check the causes of the trouble symptoms listed in Table 1.

Check the fluid level in the master cylinder reservoir. If necessary, add

enough heavy-duty brake fluid to bring the level to within $\frac{3}{8}$ inch of the top of the reservoir.

Push the brake pedal down as far

TABLE 1—Brake Trouble Symptoms and Possible Causes

Possible Causes of Trouble Symptoms	Trouble Symptoms											
	One Brake Drags	All Brakes Drag	Hard Pedal	Spongy Pedal	Car Pulls to One Side	One Wheel Locks	Brakes Chatter	Excessive Pedal Travel	Pedal Gradually Goes to Floor	Brakes Uneven	Low Pedal Reserve	Noisy or Grabbing Brakes
Pedal Improperly Adjusted		x										
Damaged Linkage			x					x				
Brake Line Restricted	x	x	x		x							
Leaks or Insufficient Fluid				x				x	x			x
Improper Tire Pressure					x					x		
Improperly Adjusted or Worn Wheel Bearing	x				x							
Distorted or Improperly Adjusted Brake Shoe	x	x	x			x		x			x	x
Faulty Retracting Spring	x				x							
Drum out of Round	x				x		x					
Linings Glazed or Worn			x		x		x	x			x	x
Oil or Grease on Lining					x	x	x			x		x
Loose Carrier Plate						x	x					
Loose Lining							x					
Scored Drum										x		x
Dirt on Drum-Lining Surface												x
Faulty Brake Cylinder	x				x	x						x
Dirty Brake Fluid	x	x								x		x
Faulty Master Cylinder		x							x			x
Air in Hydraulic System	x			x								x

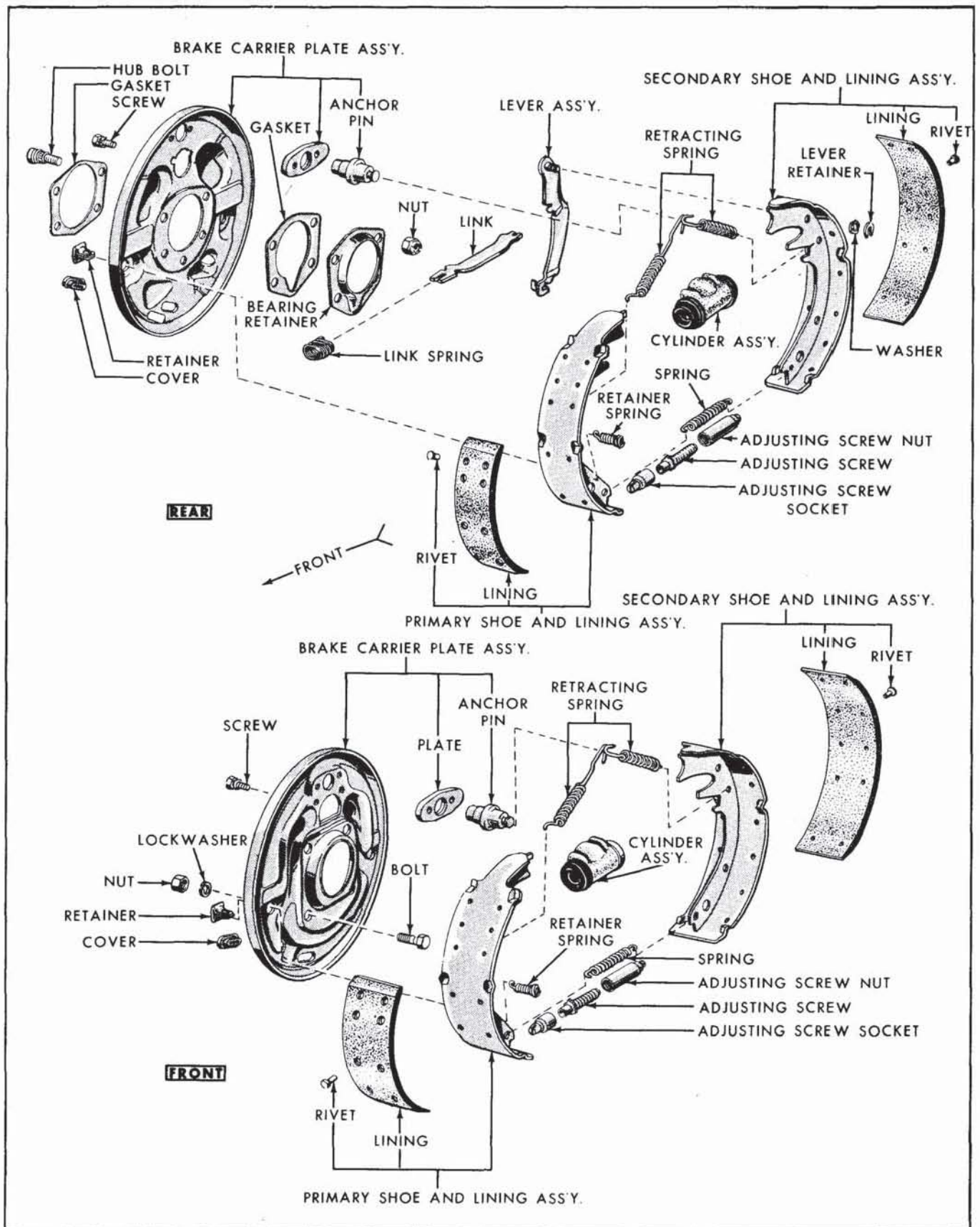


FIG. 1—Front and Rear Brakes—Disassembled—(60C-2009)