OCTOBER, 1963

Shop Tips FROM FORD

VOL. 1, NO. 1

Technical parts and service information published by Ford Division to assist servicemen in Service Stations, Independent Garages and Fleets.

Yours For Better Service!

As part of a continuing effort to make the servicing of Ford cars and trucks easier and more profitable for you, we are pleased to offer you this first issue of a new Ford technical service publication . . . "Shop Tips."

"Shop Tips" will be available to you monthly, free of charge, from your Ford dealer. It will contain information on running changes in the 1964 models, as well as service information on prior model Fords, that should prove to be of considerable help to you in servicing Ford products.

The technical information in "Shop Tips" is designed to keep you abreast of new developments and factory-recommended procedures. This should enable you to give your Ford customers the quick and efficient service that means added profits for you.

Because the new 1964 models have been introduced and will begin coming into your place of business in increasing numbers, this first issue of "Shop Tips" contains quick reference specifications on 1964 model Ford-built cars (Ford, Fairlane, Falcon, Thunderbird, Econoline) and light-duty trucks.

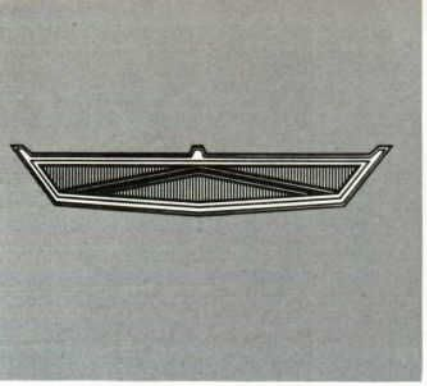
Be sure to file this and future bulletins for ready reference. If you have any suggestions for additional information that you would like to see included in this publication, please write to: Ford Division of Ford Motor Company, Parts and Service Promotion and Training Dept., P. O. Box 658, Dearborn, Michigan.

From your Ford dealer

IN THIS ISSUE

FIRST ISSUE!

Features Quick Reference Specifications for 1964 Ford-Built Cars & Light Trucks Plus Other Helpful Ford Service Information



1 1964 FORD SPECIFICATIONS

IDENTIFICATION

The car warranty number and other important identifying information is stamped on the warranty plate which is attached to the rear face of the left front door inner panel.

The official vehicle Identification Number for title and registration purposes is stamped on a tab under the hood on the dash panel near the hood right hinge.

GENERAL DIMENSIONS

Wheelbase	119	inches	
Tread:			
Front	61	inches	
Rear	60	inches	
Over-all Length	209.9	inches	
Over-all Width	79.9	inches	
Over-all Height			
All Models exc. Convert. & Station Wagon	55.5	inches	
Convertible	54.6	inches	
Station Wagon	56.9	inches	

APPROXIMATE REFILL CAPACITIES

	U.S. Measure	Imperial Measure
Fuel Tank:		
Car	20 gallons	16½ gallons
Station Wagon	21 gallons	17½ gallons
Cooling System:*		
223 CID Six	16 quarts	12½ quarts
289 CID V-8	14½ quarts	12 quarts
352 & 390 CID V-8	20½ quarts	17 quarts
Engine Crankcase:†		
223 CID Six	5 quarts	4½ quarts
289 CID V-8	5 quarts	4½ quarts
352 and 390 CID V-8	6 quarts	4 quarts
Transmission:		
Manual	3½ pints	3 pints
Overdrive:		
223 CID 6 cyl. & 289 CID V-8	3½ pints	3 pints
352 & 390 CID V-8	4½ pints	3¾ pints
Cruise-O-Matic:		
223 CID 6 cyl.	8½ quarts	7 quarts
289 CID V-8	10½ quarts	8½ quarts
352 & 390 CID V-8	11 quarts	9 quarts
Rear Axle	5 pints	4 pints

*Includes 1 quart for car equipped with heater.
†Includes 1 quart required with oil filter replacement.

ENGINES

	223 CID Six	289 CID V-8	352 CID V-8	390 CID V-8
Bore (Inches)	3.62	4.00	4.00	4.05
Stroke (Inches)	3.60	2.87	3.50	3.78
Taxable Horsepower	31.54	51.20	51.20	52.49
Brake Horsepower	138 @ 4200 rpm	195 @ 4400 rpm	250 @ 4400 rpm	300 @ 4600 rpm
Torque (Foot-Pounds)	203 @ 2200 rpm	282 @ 2400 rpm	352 @ 2600 rpm	427 @ 2800 rpm
Fuel Requirement	Economy Regular	Regular	Regular	Premium
Compression Ratio	8.5 to 1	9.0 to 1	9.3 to 1	10.1 to 1
Firing Order	1-5-3-6-2-4	1-5-4-2-6-3-7-8	1-5-4-2-6-3-7-8	1-5-4-2-6-3-7-8
Replacement Spark Plugs: FoMoCo Part Number	B7A-12405-A (Autolite BTF6)	B8A-12405-A (Autolite BF42)	B8A-12405-A (Autolite BF42)	B8A-12405-A (Autolite BF42)
Spark Gap Width	0.032-0.036 in.	0.032-0.036 in.	0.032-0.036 in.	0.032-0.036 in.
Distributor Point Gap	0.024-0.026 in.	0.014-0.016 in.	0.014-0.016 in.	0.014-0.016 in.

BATTERY (12 VOLTS)

	Ampere Hours	Plates
Standard:		
223 CID 6 cyl.	55	66
289 CID 8 cyl.	55	54
352 & 390 CID 8 cyl.		
Std. Transmission	55	66
Auto. Transmission	65	78
Heavy Duty:		
223 CID 6 cyl.	65 or 70	78 66
289 CID 8 cyl.	65	66
352 & 390 CID 8 cyl.		
Std. Transmission	65	78
Auto. Transmission	70	66

LIGHTS (12 VOLTS)

	Wattage or Candlepower	Lamp Number
Headlights: (Inner)	50-37½ watts	4002
(Outer)	37½ watts	4001
Parking and Front Turn Indicator	32-4 cp	1157A
Stop, Tail and Rear Turn Indicator	32-4 cp	1157
Back-Up	21 cp	1141
License Plate	4 cp	1155
Spotlight	30 watts	4405
Courtesy Light (Door Mounted)	15 cp	1003
Courtesy Light (Convertible)	4 cp	1155
Dome	15 cp	1003
Parking Brake Indicator	2 cp	257
Radio Dial	1.9 cp	1891
All instrument panel bulbs unless otherwise indicated	2 cp	1895

1964 Ford Specifications (Continued)

FUSES AND CIRCUIT BREAKERS

	Location	Protective Device Number
Radio	Fuse Panel	SFE-7.5
Clock	Fuse Panel	1AG-2
Turn Indicator and Back-up Lights	Fuse Panel	SFE-14
Heater Fan	Fuse Panel on Light Switch	SFE-14
Parking, Rear and Dome Lights	Fuse Panel on Light Switch	3FE-7.5
Ford Air Conditioner	Cartridge on Power Feed Wire	3AG-15
SelectAire Conditioner	Instrument Panel Left Side	20 Amp. C.B.
Overdrive	Clip on Overdrive Relay	3AG-15
Spotlight	Cartridge on Power Feed Wire	SFE-7.5
Windshield Washer Pump	Fuse Panel	SFE-7.5
Cigar Lighter	Fuse Panel	SFE-14

	Location	Protective Device Number
Headlight	Integral with Headlight Switch	
Electric Window Circuit	On Starting Motor Relay	20 Amp. C.B.
Electric Window Motor	Integral with Motor	
Tailgate Window Motor	Left Rear Quarter Panel	13.5 Amp. C.B.
Electric Wiper Motor:	Instrument Panel, Left of Steering Column	
Single Speed Motor		5 Amp. C.B.
2-Speed Motor		12 Amp. C.B.
Electric Seat Circuit	On Starting Motor Relay	20 Amp. C.B.
Convertible Top Motor	On Starting Motor Relay	20 Amp. C.B.

IGNITION TIMING

	Degrees† BTDC
223 CID Six* —Std. Trans.	4
Auto. Trans.	10
289 CID V-8 —Std. Trans.	6
Auto. Trans.	10
352 CID V-8*—Std. Trans.	6
Auto. Trans.	10
390 CID V-8*—Std. Trans.	4
Auto. Trans.	6

*Ignition timing requirements may vary depending upon locality, fuel, and operating conditions. For best economy and performance, the timing may be advanced to a point just short of audible detonation under load but not to exceed 5° over normal setting.

†Do not retard the initial advance beyond 2° BTDC for sub-standard fuels.

TIRE PRESSURES

	P.S.I. (Cold) Front	Rear
Passenger Car	24	24
Station Wagon	24	28

For considerable high-speed driving or heavy loads, add 4-6 pounds to the recommended cold pressure.

LUBRICANT SPECIFICATIONS

ENGINE CRANKCASE OILS

oil viscosity

Use of SAE 10W-30 oil will provide the proper viscosity for all normal ranges of outside temperatures. For operation at sustained outside temperatures below —10° F. a 5W-20 oil should be used.

oil quality

Use only oils which have been tested and certified by the maker as satisfying automobile manufacturers specifications for Engine Operating Sequence Tests for Service M.S. Ford Motor Company specification covering these tests is M2C27.

If engine oils are used which do not meet these requirements, it will be necessary to change oil at more frequent intervals than the recommended interval of every 6,000 miles or every 6 months, whichever comes first.

If you find it necessary to use an "MS" oil which is not certified by the marketer as having passed the Engine Operating Sequence Tests, the addition of Rotunda Oil Conditioner (R107-A) to the oil will satisfy the requirements.

Use of the right oil filter is also essential to good engine life and operation. For 6-month/6,000-mile filter change intervals, filters must meet Ford Specification ES-C0AE-6714-A.

ITEM	FORD PART NUMBER	PART NAME	FORD SPECIFICATION	ALTERNATE LUBRICANT
Brake Master Cylinder	R-103-A	Rotunda Heavy Duty Brake Fluid	M-3833-D	Alternate fluid must meet SAE J70B specification for 70R3 type extra heavy duty brake fluid.
Front Suspension Ball Joints and Steering Linkage	C1AZ-19590-B	FoMoCo Ball Joint Grease	M-1C47-A	Substitute must meet Ford Specification.
Front Wheel Bearings	C2AZ-19585-A	FoMoCo Wheel Bearing Grease	M-1C48	Substitute must meet Ford Specification.
Rear Axle	C1AZ-19580-E	FoMoCo Hypoid Gear Lubricant	M-2C50-B	Substitute must meet Ford Specification.
Steering Gear Housing (Manual or Power)	C3AZ-19578-A	FoMoCo Special Steering Gear Lubricant	ESW-M-1C87-A	A good lithium base grease #1 grade may be used to "add to" factory fill.
Exhaust Control Valve	COAA-19A501-A	FoMoCo Solvent and Penetrating Fluid		Reputable solvent and penetrating fluid.
Power Steering Pump Reservoir and Convertible Top Reservoir	R106-A	Rotunda Automatic Transmission Fluid	M-2C33-D	Automatic transmission fluid marked "Type A, Suffix A".
Transmission (Automatic)	R106-A	Rotunda Automatic Transmission Fluid	M-2C33-D	Only one quart of automatic transmission fluid marked "TYPE A, SUFFIX A" may be used to "add to" fill.
Transmission (Manual Shift)	R-139-A	Rotunda Manual Transmission Lubricant	M-568-D	Reputable SAE 80 grade mild extreme pressure type lubricant can be used to "add to" factory fill.
Universal Joints	C1AZ-19586-B	FoMoCo Universal Joint Lubricant	M-1C57	Substitute must meet Ford Specification.

2 1964 FAIRLANE SPECIFICATIONS

IDENTIFICATION

The car warranty number and other important identifying information is stamped on the warranty plate which is attached to the rear face of the left front door inner panel.

The official Vehicle Identification Number for title and registration purposes is stamped on a tab at the right side of the dash panel near the hood hinge.

GENERAL DIMENSIONS

Wheelbase	115.5 inches
Tread:	
Front	57 inches
Rear	56 inches
Over-all Length:	
All models except Station Wagon	197.6 inches
Station Wagon	201.8 inches
Over-all Width	72.2 inches

APPROXIMATE REFILL CAPACITIES

	U.S. Measure	Imperial Measure
Fuel Tank	16 gallons	13½ gallons
Cooling System*		
Six	9½ quarts	8 quarts
V-8	14½ quarts	12 quarts
Engine Crankcase:†		
Six	4½ quarts	3¾ quarts
260 and 289 CID V-8	5 quarts	4 quarts
Transmission:		
3-Speed Manual		
6-cyl.	2½ pints	2 pints
8-cyl.	3½ pints	3 pints
4-Speed Manual or Overdrive	3½ pints	3 pints
Automatic Transmissions:		
Fordomatic 200 CID Six & 260 CID V-8	7½ quarts	6 quarts
Cruise-O-Matic 289 CID V-8	8½ quarts	7 quarts
Rear Axle	4½ pints	3¾ pints

*Includes 1 quart required for car heater.

†Includes 1 quart required with oil filter replacement.

ENGINES

	170 CID Six	200 CID Six	260 CID V-8	289 2-V CID V-8
Bore (Inches)	3.50	3.68	3.80	4.00
Stroke (Inches)	2.94	3.13	2.87	2.87
Taxable Horsepower	29.4	32.5	46.2	51.2
Brake Horsepower	101 @ 4400 rpm	116 @ 4000 rpm	164 @ 4400 rpm	195 @ 4400 rpm
Torque (Foot-Pounds)	156 @ 2400 rpm	175 @ 2400 rpm	253 @ 2200 rpm	282 @ 2400 rpm
Fuel Requirement	Econ. Regular	Econ. Regular	Regular	Regular
Compression Ratio	8.7 to 1	8.7 to 1	8.7 to 1	8.7 to 1
Firing Order	1-5-3-6-2-4	1-5-3-6-2-4	1-5-4-2-6-3-7-8	1-5-4-2-6-3-7-8
Replacement Spark Plugs:				
FoMoCo Part Number	B7A-12405-B (Autolite BF-82)	B7A-12405-B (Autolite BF-82)	B8A-12405-A (Autolite BF-42)	B8A-12405-A (Autolite BF-42)
Spark Gap Width	0.032-0.036 inch	0.032-0.036 inch	0.032-0.036 inch	0.032-0.036 inch
Distributor Point Gap	0.024-0.026 inch	0.024-0.026 inch	0.014-0.016 inch	0.014-0.016 inch
Ignition Timing†				
Std. Transmission	6°*	—	6°	6°
Auto. Transmission	—	12°*	10°	10°

*Ignition timing requirements may vary depending upon locality, fuel, and operating conditions. For best economy and performance, the timing may be advanced to a point just short of audible detonation under load but not to exceed 5° over normal setting.

†Do not retard the initial advance beyond 2° BTDC for sub-standard fuels.

FUSES AND CIRCUIT BREAKERS

Circuit	Location	Protective Device Number
Radio	Fuse Panel on Lights Switch	SFE-7.5
Clock	Cartridge in Power Feed Wire	1AG-2 or AGA-2
Turn Indicator and Back-Up Lights	Fuse Panel on Lights Switch	SFE-14
Heater Fan	Fuse Panel on Lights Switch	SFE-14
Instrument Panel	Fuse Panel on Lights Switch	1AG-2 or AGA-2
Headlight	Integral with Headlight Switch	
Taillight, Parking, License, and Dome Lights	Fuse Panel on Lights Switch	3AG-15 or AGC-15
Ford Air Conditioner	Cartridge on Power Feed Wire	3AG-15 or AGC-15
SelectAire Conditioner	Instrument Panel Left Side	20 Amp. C.B.
Overdrive	Clip on Overdrive Relay	3AG-15 or AGC-15
Spotlight	Cartridge on Power Feed Wire	SFE-7.5
Windshield Wiper:		
Single Speed	Instrument Panel Left Side	5 Amp. C.B.
2-Speed	Instrument Panel Left Side	12 Amp. C.B.
Cigar Lighter	On Back of Cigar Lighter Socket	C.B.

1964 Fairlane Specifications (continued)

BATTERY (12 VOLTS)

	Ampere Hours	Plates
Standard:		
170 & 200 CID 6 cyl.	40	54
260 & 289 CID 8 cyl.	55	54
Heavy Duty		
170 & 200 CID 6 cyl.	55	54
260 & 289 CID 8 cyl.	65	66

TIRE PRESSURES

	P.S.I. (Cold) Front	Rear
Passenger Car	24	24
Station Wagon	24	28

For considerable high-speed driving or heavy loads, add 4 pounds to the recommended cold pressure.

LIGHTS (12 VOLTS)

	Wattage or Candlepower	Lamp Number
Headlights:		
(Inner)	50-37½ watts	4002
(Outer)	37½ watts	4001
Parking and Front Turn Indicator	32-4 cp	1157
Stop, Tail, and Rear Turn Indicator	32-4 cp	1157
Back-Up	32 cp	1156
License Plate	4 cp	1155
Spotlight	30 watts	4405
Dome	15 cp	1003
Radio Dial	1.9 cp	1891
All instrument panel bulbs unless otherwise indicated	2 cp	1895

LUBRICANT SPECIFICATIONS

engine crankcase oils

oil viscosity

Use of SAE 10W-30 oil will provide the proper viscosity for all normal ranges of outside temperatures. For operation at sustained outside temperatures below —10°F. a 5W-20 oil should be used.

oil quality

Use only oils which have been tested and certified by the maker as satisfying automobile manufacturers specifications for Engine Operating Sequence Tests for Service M.S. Ford Motor Company specification covering these tests is M2C27.

If engine oils are used which do not meet these requirements, it will be necessary to change oil at more frequent intervals than the recommended interval of every 6,000 miles or every 6 months, whichever comes first.

If you find it necessary to use an "MS" oil which is not certified by the marketer as having passed the Engine Operating Sequence Tests, the addition of Rotunda Oil Conditioner R107-A to the oil will satisfy the requirements.

Use of the right oil filter is also essential to good engine life and operation. For 6-month/6,000-mile filter change intervals, filters must meet Ford Specification ES-C0AE-6714-A.

ITEM	FORD PART NUMBER	PART NAME	FORD SPECIFICATION	ALTERNATE LUBRICANT
Brake Master Cylinder	R103-A	Rotunda Heavy Duty Brake Fluid	M-3833-D	Alternate fluid must meet SAE J70B specifications for 70R3 type extra heavy-duty brake fluid.
Front Suspension Ball Joints and Steering Linkage	C1AZ-19590-B	FoMoCo Ball Joint Grease	M-1C47-A	Substitute must meet Ford Specification.
Front Wheel Bearings	C2AZ-19585-A	FoMoCo Wheel Bearing Grease	M-1C48	Substitute must meet Ford Specification.
Rear Axle	C2AZ-19580-A*	FoMoCo Hypoid Gear Lubricant	M-2C28-B	Substitute must meet Ford Specification.
Steering Gear Housing (Manual or Power)	C3AZ-19578-A	FoMoCo Special Steering Gear Lubricant	ESW-M-1C87-A	A good lithium base grease No. 1 grade may be used to "add to" factory fill.
Power Steering Pump Reservoir	R106-A	Rotunda Automatic Transmission Fluid	M2C33-D	Automatic Transmission fluid "TYPE A, SUFFIX A."
Transmission (Automatic)	R106-A	Rotunda Automatic Transmission Fluid	M2C33-D	Only one quart of Automatic transmission fluid marked "TYPE A, SUFFIX A" may be used to "add to" factory fill.
Transmission (Manual Shift)	R139-A	Rotunda Manual Transmission Lubricant	M-568-D	Reputable SAE 80 grade mild extreme pressure type lubricant can be used to "add to" factory fill.
Universal Joints	C1AZ-19586-B	FoMoCo Universal Joint Lubricant	M-1C57	Substitute must meet Ford Specification.

*SAE 90 grade lubricants are recommended for all temperatures above —25° F. For temperatures below —25° F., the same type of lubricant, but of SAE 80 grade (Ford Part No. C2AZ-19580-B), should be used.

3 1964 FALCON SPECIFICATIONS

IDENTIFICATION

The car warranty number and other important identification information is stamped on the warranty plate, which is attached to the rear face of the left front door. The official serial number for registration purposes is stamped on the body in the engine compartment.

GENERAL DIMENSIONS

Wheelbase	109.5 inches
Tread—Front—6-cyl.	55 inches
—8-cyl.	55.6 inches
Rear	56 inches
Overall Length—	
Sedan and Convertible	181.7 inches
Station Wagon, Sedan Delivery, and Ranchero	190.9 inches
Overall Width	71.6 inches

APPROXIMATE REFILL CAPACITIES

	U. S. Measure	Imperial Measure
Fuel Tank		
6-cyl. (except Ranchero and Sedan Delivery)	14 gallons	11½ gallons
8-cyl. (and 6-cyl. Ranchero and Sedan Delivery)	20 gallons	16½ gallons
Engine Cooling System		
6-cyl.*	9½ quarts	8¼ quarts
8-cyl.*	14½ quarts	12 quarts
Engine Crankcase		
6-cyl.†	4½ quarts	3¾ quarts
8-cyl.†	5 quarts	4¼ quarts

*Includes 1 quart for heater.
†Includes 1 quart required for filter replacement.

	U.S. Measure	Imperial Measure
Transmission		
3-speed Manual—6-cyl.	2½ pints	2 pints
—8-cyl.	3½ pints	3 pints
4-speed Manual—6-cyl.	4½ pints	3¾ pints
—8-cyl.	3½ pints	3 pints
Fordomatic	7½ quarts	6¼ quarts
Rear Axle		
6-cyl.	2½ pints	2 pints
8-cyl.	4½ pints	3¾ pints

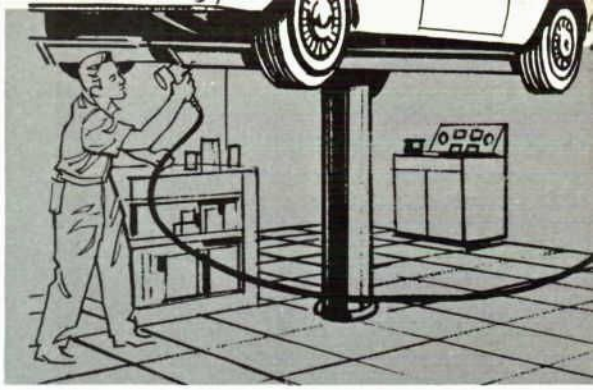
ENGINES

	144 CID Six	170 CID Six	200 CID Six	260 CID V-8
Bore (Inches)	3.50	3.50	3.68	3.80
Stroke (Inches)	2.50	2.94	3.13	2.87
Taxable Horsepower	29.4	29.4	32.5	46.2
Brake Horsepower	85 @ 4200 rpm	101 @ 4400 rpm	116 @ 4000 rpm	164 @ 4400 rpm
Torque (Foot-Pounds)	134 @ 2000 rpm	156 @ 2400 rpm	175 @ 2400 rpm	258 @ 2200 rpm
Fuel Requirement	Economy Regular	Economy Regular	Economy Regular	Regular
Compression Ratio	8.7 to 1	8.7 to 1	8.7 to 1	8.7 to 1
Firing Order	1-5-3-6-2-4	1-5-3-6-2-4	1-5-3-6-2-4	1-5-4-2-6-3-7-8
Replacement Spark Plugs: FoMoCo Part Number	B7A-12405-B (Autolite BF-82)	B7A-12405-B (Autolite BF-82)	B7A-12405-B (Autolite BF-82)	B8A-12405-A (Autolite BF-42)
Spark Gap Width	0.032-0.036 inch	0.032-0.036 inch	0.032-0.036 inch	0.032-0.036 inch
Distributor Point Gap	0.024-0.026 inch	0.024-0.026 inch	0.024-0.026 inch	0.014-0.016 inch
Ignition Timing†				
Std. Transmission	8°*	6°*	—	6°
Auto. Transmission	12°*	—	12°*	10°

*Ignition timing requirements may vary depending upon locality, fuel, and operating conditions. For best economy and performance, the timing may be advanced to a point just short of audible detonation under load but not to exceed 5° over normal setting.
†Do not retard the initial advance beyond 2° BTDC for sub-standard fuels.

FUSES AND CIRCUIT BREAKERS

Circuit	Location	Protective Device Number
Radio	Fuse Panel on Lights Switch	SFE-7.5
Instrument Lights	Fuse Panel on Lights Switch	1AG-2 or AGA-2
Turn Indicator and Back-Up Lights	Fuse Panel on Lights Switch	SFE-14
Heater Fan	Fuse Panel on Lights Switch	SFE-14
Lights Parking, Tail, Rear License, and Dome	Fuse Panel on Lights Switch	3AG-15 or AGC-15
Air Conditioner	Cartridge in Power Feed Wire	3AG-15
Spotlight	Cartridge in Power Feed Wire	SFE-7.5
Cigar Lighter	On Back of Cigar Lighter Socket	C.B.
Headlight	Integral with Headlight Switch	
Windshield Wiper Motor —Single Speed	Edge of Instrument Panel—Left of Steering Column	5 amp. C.B.
2-Speed	Same as Above	12 amp. C.B.
Electric Tailgate Window	On Starter Relay	20 amp. C.B.
Convertible Top	On Starter Relay	20 amp. C.B.



1964 Falcon Specifications (continued)

BATTERY (12 VOLTS)

	Ampere Hours	Plates
Standard:		
All 6 cyl. Engines	40	54
All 8 cyl. Engines	55	54
Heavy Duty:		
All 6 cyl. Engines	55	54
All 8 cyl. Engines	65	66

TIRE PRESSURES

	P.S.I. (Cold) Front	Rear
Sedan and Convertible	24	24
Station Wagon, Ranchero and Sedan Delivery	24	28†

For considerable high-speed driving or heavy loads, add 4 pounds to the recommended cold pressure.

†30 for 6-cylinder Ranchero or Sedan Delivery.

LIGHTS (12 VOLTS)

	Wattage or Candlepower	Lamp Number
Headlights	50-40 watts	6012
Parking and Front Turn Indicator	32-4 cp	1157A
Stop, Tail, and Rear Turn Indicator	32-4 cp	1157
Spotlight	30 watt	4405
Back-Up	32 cp	1156
Rear License Plate	4 cp	1155
Dome Lamp	15 cp	1003
Courtesy Light (Convertible)	6 cp	631
Radio Dial	2 cp	1891
All instrument panel bulbs, unless otherwise indicated	2 cp	1895

LUBRICANT SPECIFICATIONS

engine crankcase oils

oil viscosity

Use of SAE 10W-30 oil will provide the proper viscosity for all normal ranges of outside temperatures. For operation at sustained outside temperatures below —10° F. a 5W-20 oil should be used.

oil quality

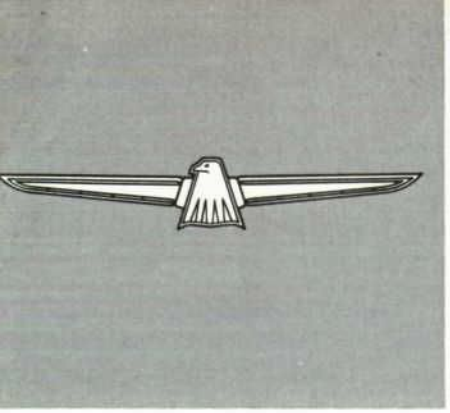
Use only oils which have been tested and certified by the maker as satisfying automobile manufacturers specifications for Engine Operating Sequence Tests for Service M.S. Ford Motor Company specification covering these tests is M2C27.

If engine oils are used which do not meet these requirements, it will be necessary to change oil at more frequent intervals than the recommended interval of every 6,000 miles or every 6 months, whichever comes first. Rotunda Oil Conditioner (R107-A) can be added to crankcase oils that do not meet the Ford specification. This will upgrade the oil to meet the engine operating sequence test requirements.

Use of the right oil filter is also essential to good engine life and operation. For 6 month/6,000 mile filter change intervals, filters must meet Ford Specification ES-C0AE-6714-A.

ITEM	FORD PART NUMBER	PART NAME	FORD SPECIFICATION	ALTERNATE LUBRICANT
Brake Master Cylinder	R103-A	Rotunda Heavy Duty Brake Fluid	M-3833-D	Alternate fluid must meet SAE J70B specification for 70R3 type extra heavy duty brake fluid.
Front Suspension Ball Joints	C1AZ-19590-B	FoMoCo Ball Joint Grease	M-1C47-A	Substitute must meet Ford Specification.
Front Wheel Bearings	C2AZ-19585-A	FoMoCo Wheel Bearing Grease	M-1C48	Substitute must meet Ford Specification.
Rear Axle	C2AZ-19580-A*	FoMoCo Hypoid Gear Lubricant	M-2C28-B	Substitute must meet Ford Specification.
Steering Gear Housing (Manual or Power)	C3AZ-19578-A	FoMoCo Special Steering Gear Lubricant	ESW-M-1C87-A	A good lithium base grease No. 1 grade may be used to "add to" factory fill.
Exhaust Control Valve	C0AA-19A501-A	FoMoCo Solvent and Penetrating Fluid		Reputable solvent and penetrating fluid.
Steering—Power (Pump Reservoir)	R106-A	Rotunda Automatic Transmission Fluid	M2C33-D	Automatic Transmission fluid "TYPE A, SUFFIX A."
Convertible Top Reservoir	R106-A	Rotunda Automatic Transmission Fluid	M2C33-D	Automatic Transmission fluid "TYPE A, SUFFIX A."
Transmission (Automatic)	R106-A	Rotunda Automatic Transmission Fluid	M2C33-D	Only one quart of automatic transmission fluid marked "TYPE A, SUFFIX A" may be used to "add to" factory fill.
Transmission (Manual Shift)	R139-A	Rotunda Manual Transmission Lubricant	M-568-D	Reputable SAE 80 grade mild extreme pressure type lubricant can be used to "add to" factory fill.
Universal Joints	C1AZ-19586-B	FoMoCo Universal Joint Lubricant	M-1C57	Substitute must meet Ford Specification.

*SAE 90 grade lubricants are recommended for all temperatures above —25° F. For temperatures below —25° F., the same type of lubricant, but of SAE 80 grade, should be used.



4 1964 THUNDERBIRD SPECIFICATIONS

IDENTIFICATION

The warranty number and other important identifying information is stamped on the warranty plate which is attached to the rear face of the left door inner panel. The official Vehicle Identification Number for title and registration purposes is stamped on a tab at the right side of the dash panel near the hood hinge.

DIMENSIONS

Wheelbase	113 inches	Over-all Width	77 inches
Tread—Front	61 inches	Over-all Height	
Rear	60 inches	Hardtop	52.5 inches
Over-all Length	205.4 inches	Hardtop—Landau	52.6 inches
		Convertible	53.6 inches

APPROXIMATE REFILL CAPACITIES

	U.S. Measure	Imperial Measure		U.S. Measure	Imperial Measure
Fuel Tank	22 gallons	18¼ gallons	Engine Crankcase	6 quarts†	5 quarts†
Cooling System	20 quarts*	16½ quarts*	Cruise-O-Matic Transmission	10 quarts	8¼ quarts
			Rear Axle	5 pints	4 pints

*Includes one quart for heater.

†Includes one quart with filter replacement.

ENGINE

Piston Displacement (Cubic Inches)	390
Bore (Inches)	4.05
Stroke (Inches)	3.78
Taxable (SAE) Horsepower	52.49
Brake Horsepower	300 @ 4600 rpm
Torque (Foot-Pounds)	427 @ 2800 rpm
Compression Ratio	10.5 to 1
Fuel Requirement	Premium
Firing Order	1-5-4-2-6-3-7-8
Replacement Spark Plugs	FoMoCo Part No. B8A-12405-A (Autolite BF-42)
Spark Gap Width	0.032-0.036 inches
Distributor Point Gap	
Conventional system	0.014-0.016
Transistorized system	0.019-0.021
Ignition Timing	6°

Ignition timing requirements may vary depending upon locality, fuel, and operating conditions. For best economy and performance, the timing may be advanced to a point just short of audible detonation under load but not to exceed 5° over normal setting. Do not retard the initial advance beyond 2° BTDC for substandard fuels.

FUSES AND CIRCUIT BREAKERS

Circuit	Location	Protective Device Number
Headlights	Fuse Panel on R.H. Cowl	12 amp. C.B.
Back-Up Lights	"	7.5 amp. C.B.
Heater and Air Conditioner	"	20 amp. C.B.
Windshield Washer	"	SFE-7.5
Turn Indicator Lights	"	SFE-15
Radio	"	SFE-7.5
Clock	"	1AG-2 or AGA-2
Cigarette Lighter (Circuit)	"	3AG-15 or AGC-15
Stop	"	SFE-15
Instrument Panel Light	"	SFE-6
Taillight, Parking, and License	Fuse Panel on R.H. Cowl	12 amp. C.B.
Dome and Courtesy	"	SFE-14
Automatic Speed Control	"	SFE-4
Electric Window Circuit	"	20 amp. C.B.
Electric Seat	"	20 amp. C.B.
Seat Belt Warning	"	SFE-4
Cigarette Lighter (Socket)	Back of Socket	CB (Reset)
Electric Window Motor	Integral with Motor	
Spotlight	Cartridge in Power Feed Wire	SFE-7.5

1964 Thunderbird Specifications (continued)

LIGHTS (12 VOLTS)

	Lamp Wattage or Candlepower	Lamp Number
Headlight—(Inner)	37.5 watts	4001
(Outer)	50-37.5 watts	4002
Parking and Front Turn Indicator	4-32 cp	1157A
Stop, Tail, and Rear Turn Indicator	4-32 cp	1157
Back-Up	32 cp	1076
Pillar Light	15 cp	1003
Courtesy Light (door mounted)	15 cp	1004
Map	6 cp	631
License Plate	4 cp	1155
Speedometer and Odometer	2 cp	1895
Interior Turn Indicator	2 cp	1895G*
Fender Mount Turn Indicator	1 cp	53
Clock	3 cp	1816
Spotlight	30 watt	4405
Luggage Compartment	6 cp	631
High Beam Indicator	2 cp	1895
Oil Pressure Gauge	3 cp	1816
Charge Gauge	3 cp	1816
Fuel and Temperature Gauge	3 cp	1816
Ignition Key Switch	1.5 cp	1445
Windshield Wiper Control	2 cp	1895
Heater Control Panel	2 cp	1895
Parking Brake Signal	2 cp	1895
Radio Dial—AM	1.9 cp	1891
—AM-FM	.75 cp	1892
Cruise-O-Matic Selector Dial	1.5 cp	1445

*(Minnesota and Wisconsin only)

BATTERY (12 VOLTS)

	Ampere Hours	Plates
Standard	65	78
Heavy Duty	80	78

TIRE PRESSURES

	P.S.I. (Cold) Front	Rear
8.15 x 15	24	24

For considerable high-speed driving, or when heavy loads are carried, add 4 pounds to the recommended cold pressure.

LUBRICANT SPECIFICATIONS

engine crankcase oils

oil viscosity

Use of SAE 10W-30 oil will provide the proper viscosity for all normal ranges of outside temperatures. For operation at sustained outside temperatures below —10°F. a 5W-20 oil should be used.

oil quality

Use only oils which have been tested and certified by the maker as satisfying automobile manufacturers specifications for Engine Operating Sequence Tests for Service M.S. Ford Motor Company specification covering these tests is M2C27.

If engine oils are used which do not meet these requirements, it will be necessary to change oil at more frequent intervals than the recommended interval of 6,000 miles or every 6 months, whichever comes first.

If you find it necessary to use an "MS" oil which is not certified by the marketer as having passed the Engine Operating Sequence Tests, the addition of Rotunda Oil Conditioner (R107-A) to the oil will satisfy the requirements.

Use of the right oil filter is also essential to good engine life and operation. For 6-month/6,000-mile filter change intervals, filters must meet Ford Specification ES-C0AE-6714-A.

ITEM	FORD PART NUMBER	PART NAME	FORD SPECIFICATION	ALTERNATE LUBRICANT
Brake Master Cylinder	Rotunda R103-A	Rotunda Heavy-Duty Brake Fluid	M-3833-D	Alternate Fluid must meet SAE J70B specification for 70R3 type extra-heavy duty brake fluid.
Front Suspension Ball Joints	Ford C1AZ-19590-B	FoMoCo Ball Joint Grease	M-1C47-A	Substitute must meet Ford Specification.
Front Wheel Bearings	Ford C2AZ-19585-A	FoMoCo Wheel Bearing Grease	M-1C48	Substitute must meet Ford Specification.
Rear Axle	Ford C1AZ-19580-E	FoMoCo Hypoid Gear Lubricant	M-2C50-B	Substitute must meet Ford Specification.
Steering—Power (Pump Reservoir)	Rotunda R-106-A	Rotunda Automatic Transmission Fluid	M2C33-D	Automatic Transmission Fluid marked "TYPE A, SUFFIX A".
Transmission (Automatic)	Rotunda R-106-A	Rotunda Automatic Transmission Fluid	M2C33-D	Only one quart of Automatic transmission fluid marked "TYPE A, SUFFIX A" may be used to "add to" the transmission factory fill.
Universal Joints	Ford C1AZ-19586-B	FoMoCo Universal Joint Lubricant	M1C57	Substitute must meet Ford Specification.

1964 ECONOLINE
FALCON CLUB WAGONS
SPECIFICATIONS

IDENTIFICATION

The vehicle warranty number and other important identifying information is stamped on the warranty plate which is attached to the rear face of the left front door inner panel. The official Vehicle Identification Number for title and registration purposes is stamped on the body.

GENERAL DIMENSIONS

Wheelbase	90 inches
Tread:	
Front	60 inches
Rear	60.24 inches
Over-all Length	168.23 inches
Over-all Width	
Pickup	75.00 inches
Van or Bus	75.76 inches

APPROXIMATE REFILL CAPACITIES

	U.S. Measure	Imperial Measure
Fuel Tank	14 gallons	11½ gallons
Cooling System	10½ quarts*	8¾ quarts*
Engine Crankcase	4½† quarts	3¾† quarts
Transmission:		
3-Speed Manual	3 pints	2½ pints
4-Speed Manual	4½ pints	3¾ pints
Cruise-O-Matic	7½ quarts	6¼ quarts
Rear Axle	2½ pints‡	2 pints‡

*includes 1.5 quarts for heater.
†includes 1 quart extra required for filter replacement.
‡heavy duty vehicle 4¼ pints (U.S.).

ENGINES

Bore (Inches)	
144 CID	3.50
170 CID	3.50
Stroke (Inches)	
144 CID	2.50
170 CID	2.94
Taxable SAE Horsepower	
144 CID	29.4
170 CID	29.4
Maximum Brake Horsepower	
144 CID	85 @ 4200 rpm
170 CID	101 @ 4400 rpm
Maximum Gross Torque (Foot-Pounds)	
144 CID	134 @ 2200 rpm
170 CID	152 @ 1800-2000 rpm
Compression Ratio	8.4:1
Cylinder Firing Order	1-5-3-6-2-4
Idle Speed	550-575 rpm
Fuel Requirement	Regular
Replacement Spark Plugs	FoMoCo Part No. B7A-12405-B (Autolite BF-82)
Spark Gap Width	0.032-0.036 inch
Distributor Point	
Gap Width	0.024-0.026 inches
Ignition Timing	
144 CID—Std. Trans.	4°
170 CID—Std. Trans.	4°
170 CID—Auto Trans.	10°

Ignition timing requirements may vary depending upon locality, fuel, and operating conditions. For best economy and performance, the timing may be advanced to a point just short of audible detonation under load but not to exceed 5° over normal setting. Do not retard the initial advance beyond 2° BTDC for sub-standard fuels.

BATTERY (12-VOLT)

Standard:	Ampere Hours	Plates
Van & Bus	55	54
Pickup	40	54
Heavy Duty:		
Van & Bus	65	66
Pickup	55	54

LOAD CAPACITIES

Maximum Payload Capacity

Wagon & Bus (with second and third seats)	1400 pounds
Van	1600 pounds
Pickup	1650 pounds
Van, Bus or Pickup (Heavy Duty)	2000 pounds
Maximum Gross Vehicle Weight	4350 pounds
Heavy Duty	4850 pounds

Load Volume Capacity

Wagon & Bus—204 cubic feet (without rear compartment seats)
Van—204 cubic feet
Pickup—73 cubic feet

1964 Econoline Specifications (continued)

FUSES AND CIRCUIT BREAKERS

Circuit	Location	Protective Device Number
Turn Indicator	Fuse Panel on Lights Switch	SFE-14
Radio (Manual)	Fuse Panel on Lights Switch	SFE-7.5
Parking, Rear and Dome Lamps	Fuse Panel on Lights Switch	3AG-15
Heater Fan	Fuse Panel on Lights Switch	SFE-14
Spot Lamp	Cartridge in Feed Wire	SFE-7.5
Headlamps	Fuse Panel on Lights Switch	Circuit Breaker
Instrument Panel Lamp Rheostat	Cartridge in Feed Wire	1 AG-1 or AGA-1
Windshield Wiper Motor	Integral with Switch	Circuit Breaker
Cigar Lighter	Back of Lighter Socket	Reset Disc

LIGHTS (12 VOLTS)

	Lamp Wattage or Candle Power	Lamp Number
Headlight	50-40 watts	6012
Parking and Front Turn Indicator	4-32 cp	1157
Stop, Tail, and Rear Turn Indicator	4-32 cp	1157
Rear License Plate	4 cp	1155
Interior	15 cp	1003
Speedometer and Odometer	2 cp	1895
High Beam Indicator	1.5 cp	1445
Oil Pressure Indicator	2 cp	1895
Generator Indicator	2 cp	1895
Radio Dial	2 cp	1895
Turn Signal	2 cp	1895
Spotlight	30 watt	4405

TIRE PRESSURES

Size	P.S.I. (Cold) Front	Rear
6.50 x 13—4PR PT*	28	28
7.00 x 13—6PR PT*	30	30
7.00 x 13—8PR TT†	35	45
7.00 x 14—4PR PT*	28	28
7.00 x 14—6PR PT*	30	30
7.00 x 14—8PR TT†	35	35

*Passenger Type †Truck Type

LUBRICANT SPECIFICATIONS

engine crankcase oils

oil viscosity

Use of SAE 10W-30 oil will provide the proper viscosity for all normal ranges of outside temperatures. For operation at sustained outside temperatures below —10° F. a 5W-20 oil should be used.

oil quality

Use only oils which have been tested and certified by the maker as satisfying automobile manufacturers specifications for Engine Operating Sequence Tests for Service M.S. Ford Motor Company specification covering these tests is M2C27.

If engine oils are used which do not meet these requirements, it will be necessary to change oil at more frequent intervals than the recommended interval of every 6,000 miles or every 6 months, whichever comes first.

If you find it necessary to use an "MS" oil which is not certified by the marketer as having passed the Engine Operation Sequence Tests, the addition of Rotunda Oil Conditioner (R107-A) to the oil will satisfy the requirements.

Use of the right oil filter is also essential to good engine life and operation. For 6 month/6,000 mile filter change intervals, filters must meet Ford Specification ES-C0AE-6714-A.

ITEM	FORD PART NUMBER	PART NAME	FORD SPECIFICATION	ALTERNATE LUBRICANT
Brake Master Cylinder	Rotunda R103-A	Rotunda Heavy Duty Brake Fluid	M-3833-D	Alternate fluid must meet SAE J70B spec. for 70R3 type extra heavy duty fluid.
Front Suspension and Steering Linkage	Ford C1AZ-19590-B	FoMoCo Ball Joint Grease	M-1C47-A	Substitute must meet Ford Specification.
Front Wheel Bearings	Ford C2AZ-19585-A	FoMoCo Wheel Bearing Grease	M-1C48	Substitute must meet Ford Specification.
Rear Axle	Ford C2 AZ-19580-A*	FoMoCo Hypoid Gear Lubricant	M-2C28-B	Substitute must meet Ford Specification.
Steering Gear Housing	Ford C3AZ-19578-A	FoMoCo Special Steering Gear Grease	ESW-M-1C87-A	A good lithium base grease No. 1 grade may be used to "add to" factory fill.
Transmission (Automatic)	Rotunda R106-A	Rotunda Automatic Transmission Fluid	M-2C33-D	Only one quart of Automatic Transmission fluid marked Type A, Suffix A may be used to "add to" factory fill.
Transmission (Manual Shift)	Rotunda R139-A	Rotunda Manual Transmission Lubricant	M-568-D	Reputable SAE 80 grade mild extreme pressure type lubricant can be used to "add to" factory fill.
Universal Joints	Ford C1AZ-19586-B	FoMoCo Universal Joint Lubricant	M1C57	Substitute must meet Ford Specification.
Front Axle, Spindle Bolts, Clutch and Brake Pedal Pivots, Gearshift Linkage	—	Engine Oil—SAE 10W	—	—
Acceleration, Brake, Transmission, and Clutch Linkage Pivots	—	Engine Oil—SAE 10W	—	—

*SAE 90 grade lubricants are recommended for all temperatures above —25° F. For temperatures below —25° F., the same type of lubricant, but of SAE 80 grade (Ford Part No. C2AZ-19580-B), should be used.

6 1964 TRUCK SPECIFICATIONS

ENGINES

ENGINE	144 CID Six	223 CID Six	262 CID Six	292 CID V-8
Bore (Inches)	3.500	3.625	3.719	3.750
Stroke (Inches)	2.50	3.60	4.03	3.30
Taxable (SAE) Horsepower	29.4	31.50	33.18	45.00
Brake Horsepower (bhp at rpm)	85 at 4200	135 at 4000	152 at 4000	160 at 4000
Maximum Gross Torque (Foot-Pound at rpm)	134 at 2000	200 at 1800-2400	237 at 1800	270 at 1800-2000
Compression Ratio	8.7:1	8.1:1	8.0:1	8.0:1
Compression Pressure (psi at Cranking Speed)	150-190	130-170	130-170	130-170
Idle Speed (rpm at Neutral)				
Std. Trans.	500-550	500-550	500-550	500-550
Auto. Trans.		475-525		475-525
Oil Pressure—Hot (psi at 2000 rpm)	35-55	35-55	35-55	35-55
Cylinder Firing Order	1-5-3-6-2-4	1-5-3-6-2-4	1-5-3-6-2-4	1-5-4-8-6-3-7-2
Replacement Spark Plugs				
Ford Part Number	B7A-12405-B (Autolite BF82)	B7A-12405-A (Autolite BTF-6)	B9T-12405-A (Autolite BTF-31)	B7A-12405-A (Autolite BTF-6)
Spark Gap Width	0.035	0.030	0.030	0.030
Distributor Point Gap	0.024-0.026	0.024-0.026	0.024-0.026	0.014-0.016
Ignition Timing				
Std. Trans.	4°	4°	2°	6°
Auto. Trans.		4°		6°

Ignition timing requirements may vary depending upon locality, fuel, and operating conditions. For best economy and performance, the timing may be advanced to a point just short of audible detonation under load but not to exceed 5° over normal setting. Do not retard the initial advance beyond 2° for sub-standard fuels.

REAR AXLE LUBRICANT CAPACITIES

Rear Axle Model	Truck Model	Approximate Capacity (Pints)
Ford 3300	F-100, P-100	4½
Spicer 44	F-100	4½
Spicer 2414 (Front Axle)	4-Wheel Drive (F-100, F-250)	3½*
Spicer 60	F-250, P-350	6
Spicer 70	F-350, P-350	5
Timken C-100-N	P-500	15
Timken D-100-N	P-500	15
Eaton 1350 (2-Speed)	P-500	13

*Add ½ pint for each steering knuckle.

FUEL TANK CAPACITIES

Tank Type	Truck Model	Approximate Capacity	
		U.S. Gallons	Imperial Gallons
Standard	F-Series (cab models)	18	15
	P-Series and F-100, F-250, F-350 Series (cowl models)	17	14
Optional (Mounted Outside of Frame)	P-400 and P-500 P-350	30	25

TRANSMISSION REFILL CAPACITIES

ENGINE CRANKCASE REFILL CAPACITIES

Transmission Type and Make	Approximate Capacity (Pints)		Engine	Approximate Capacity* (Quarts)	
	U.S. Measure	Imperial Measure		U.S. Measure	Imperial Measure
3-Speed (Ford)	3½	2¾	144 Six	3½	3
3-Speed with Overdrive (Warner)	3¼	2½			
3-Speed Medium-Duty (Warner)	3½	2¾	223 Six	5	4
3-Speed Heavy-Duty (Warner)	5½	4½			
4-Speed (Warner)	8	6½	262 Six	5	4
HD Cruise-O-Matic—					
6-cyl.	20	16½			
8-cyl.	22	18¼	292 V-8	5	4
4-Wheel Drive Transfer Case	4½	3¾			

*Add 1 quart with filter change.

ENGINE COOLING SYSTEM REFILL CAPACITIES

Engine	Truck Model	Approximate Capacity* (Quarts)	
		U.S. Measure	Imperial Measure
144 Six	P-100	9	7½
223 Six	F-100, F-250	13½	11¼
	P-100, P-350, P-400, P-500	18½	15½
262 Six	F-100, F-250	20	16½
292 V-8	F-100, F-250, F-350 (with single rear wheels)	16½	13¾
	F-350 (with dual rear wheels)	22	18¼
	P-350	22	18¼
	P-400, P-500	23	19

*Add 1 quart for trucks equipped with heater.

Series 100 through 350 and P Series

WHEEL NUT TORQUE

Model	Wheel Type	Bolt Size	Wheel Nut Torque* (Foot-Pounds)
F-100, P-100, F-250, P-350	Disc	½-20	65-90
F-350, P-400	Disc	⅝-18	175-200†
P-500	Disc	¾-16	400-500

*Torque specifications are for clean, dry bolt threads.
†125-140 on 17.5 x 5.25 rim used on single wheels.

FRONT WHEEL ALIGNMENT

Truck Model	Front Axle Capacity (Pounds)	Caster* (Degrees)	Camber† (Degrees)	Toe-In (Inches)	King Pin Inclination (Degrees)
F-100, F-250 and P-100 (except 4-Wheel Drive)	2600	3	1	1/16	4
F-100, F-250 (4-Wheel Drive Only)	3000	3¼	1½	1/16	7½
F-350, P-350	3800	4	1	1/16	4
P-400	3800	3	1	1/16	4
P-500 (137-inch wheelbase)	4700	3	1	1/16	4
P-500 (154-inch wheelbase)	4700	3½	1	1/16	4

*Maximum caster variation between wheels—½°
†Maximum camber variation between wheels—¼°

TIRES

Tire Size and Ply Rating	Rim Type	Revolutions Per Mile (New Tires)	Load Capacity (Pounds)	Pressure (Psi)
6.50-16 6PR (PT)	5K 6L	732	1215	42
6.50-16 6PR (TT)	5K 6L	700	1420	45
6.70-15 4PR (PT)	5½ K 5K	772	1115	30
6.70-15 6PR (PT)	5½ K	772	1215	36
7.00-16 6PR (PT)	6L	691	1395	42
7.00-16 6PR (TT)	6L	669	1580	45
7.10-15 4PR (PT)	5½ K	760	1195	30
7.10-15 6PR (PT)	5½ K	760	1300	36
7-17.5 6PR (TT)	5.25	704	1520	45
8-17.5 6PR (TT)	5.25	676	1735	45
8-17.5 8PR (TT)	5.25	676	2060	60
8-19.5 8PR (TT)	5.25	609	2440	65
8-22.5 8PR (TT)	6	558	2740	65

BATTERY (12 volts)

	Ampere Hours	Plates
Standard:		
F-100 thru F-350 All Engines		
Std. Transmission	55	66
Auto. Transmission	70	66
P-100 thru P-500 All Engines	55	66
Heavy Duty		
F-100 thru F-350 All Engines	70	66
P-100 thru P-500 All Engines	70	78

FUSES AND CIRCUIT BREAKERS

Circuit	Protective Device	Location
Headlights	Circuit Breaker	Integral with Headlight Switch
Other Lights (Instruments, Dome, Parking and Rear)	2 amp.	Fuse Panel
Turn Signals	SFE-14 Fuse	Fuse Panel
Radio	SFE-7.5 Fuse	Fuse Panel
Heater Blower	SFE-14 Fuse	Fuse Panel
Electric Windshield Wiper	Circuit Breaker	Integral with Switch
Spotlight	SFE-7.5 Fuse	Cartridge in Feed Wire
Cigarette Lighter	Circuit Breaker	Back of Lighter Socket
Overdrive	3AG-15 or AGC-15	Open Clips on O/D Relay
Two-Speed Axle	20 Amp. C.B.	Instrument Panel

BULBS

Description	Candle Power or Wattage	Trade Number
EXTERIOR LIGHTS		
Headlights Single—High/Low Beam	50/40 W	6012
Front Turn Signal/Parking	32/4 C.P.	1157
Front Parking Only	4 C.P.	1155
Independent Turn Signal, Front & Rear	32 C.P.	1156
Rear Turn Signal & Stop/Tail	32/4 C.P.	1157
Rear License Light Only	4 C.P.	1155
Marker	4 C.P.	1155
Spotlight	30 W	4435
INTERIOR LIGHTS		
Instrument Panel Indicators Hi-Beam	1½ C.P.	1445
Oil Pressure	1 C.P.	53
Generator	2 C.P.	1895
Turn Signal	2 C.P.	1895
Tachometer	2 C.P.	1895
Instrument Cluster Illumination	2 C.P.	1895
Cigarette Lighter Socket	1.5 C.P.	1445
Heater Control	2 C.P.	1895
Radio Dial	2 C.P.	1895
INTERIOR ILLUMINATION		
Dome Light	15 C.P.	1003

7

EXCESSIVE BRAKE PEDAL TRAVEL—All Car Lines with Self Adjusting Brakes

Excessive brake pedal travel on passenger vehicles with self-adjusting brakes has been found to be the result of one or more of the brake adjuster screw assemblies seizing and failing to operate. To alleviate excess pedal travel caused by this condition, the following corrective procedure is suggested:

1. Remove all four brake drums.
2. Disconnect the adjusting lever from the secondary shoe and remove the adjuster screw and nut assembly.

NOTE: As the adjusting screw and nut assemblies are right- and left-handed, and interchanging the assemblies from one side of the vehicle to the other will cause the brake shoes to retract rather than expand upon action of the adjuster lever, each assembly should be cleaned and lubricated completely before proceeding to the next assembly.

3. Disassemble and clean the adjuster screw and nut assembly.
4. Apply a thin uniform coating of HD Moly Grease—Grade 2 (Ford Part No. C1AZ-19590-B) to the threads of the adjuster screw and reassemble the adjuster screw and nut.
5. Install the adjuster screw and nut assembly to the brake shoes and connect the adjuster lever.
6. Repeat steps 3 thru 5 for each remaining assembly.
7. Install all drums and adjust brakes.
8. Check brake operation.

NOTE: Either new or used adjuster screw and nut assemblies should always be lubricated before installation.

8

AUTOMATIC CHOKE CONNECTOR HOSE INSTALLATION—1963 & 1964 All Eight-Cylinder Engines

A rubber hose connects the choke inlet tube to the air cleaner to provide filtered air to the automatic choke. The hose connection is located on the underside of the air cleaner and can be easily overlooked when the air cleaner is removed and/or installed. Failure to connect the hose to the air cleaner will result in unfiltered air entering the choke system. A potentially dangerous condition could also be encountered on the Galaxie, Mercury and Thunderbird 390 4 Venturi engines when the connector hose is not connected at the air cleaner. This may result in the end of the hose becoming wedged under the secondary throttle lever and prevent full closing of the throttle plates, on deceleration.

9

HOT STARTING AND HOT IDLE IMPROVEMENTS—1963 Ford & Fairlane—8 Cylinder (221/260)

To improve hard hot starting and rough hot idle of the 221/260 engines, revised carburetor bowl vents have been incorporated in the 2V Ford carburetor air horn. This has been done to limit the excess fuel vapors in the carburetor bowl from entering the air cleaner during hot idle and soak periods. The excess fuel vapors will cause hard hot restarts and poor idle.

The change was effective with carburetors built December 14, 1962. Check either the carburetor identification tag or visually inspect the vent tubes. The internal diameter of the new vent tubes is smaller.

The new air horn (Ford Part No. C3OZ-9524-B) incorporating these vent tube restrictors can be installed on all 1963 and past models with 221 and 260 CID engines.

10

STARTER SOLENOID DAMAGE DURING TUNE-UP—All Car Lines

Starter solenoid burnout in the ignition bypass circuit will occur if the "I" terminal of the solenoid or the positive terminal of the coil is grounded during cranking. This condition cannot occur by itself and must be attributed to an incorrect underhood procedure.

The ignition bypass circuit connects the battery to the coil through the solenoid plunger and the "I" terminal. See the Schematic in Figure #1. The bypass conductor is of heavy material and is not damaged in normal use, but in a short circuit such as described, burnout is very rapid. Many of the solenoids that have been examined for failures, have been found to be burned out in this manner.

The underhood shortcut of using a jumper between the "S" terminal of the starter solenoid and the hot battery post to "bump" the engine over, has been used for many years and is an acceptable practice. This is not to be confused with the above condition. It is grounding the "I" terminal of the solenoid or the positive terminal of the coil to prevent the engine from running that is not acceptable. The recommended procedure, when working on the engine but not to have it run, is to remove the coil tower lead from the coil or distributor cap prior to turning it over.

11

HOT ENGINE IDLE STALL—1963 Ford Single Venturi Carburetor—144, 170, 223, 262 Engines

Investigation has shown an occasional hot engine idle stall due to an over-rich fuel-air mixture. This condition can be corrected by adjusting the float assembly to a one inch dry fuel setting.

When readjusting to this dry fuel setting, remove the fuel inlet seat and replace the fiber seat gasket with a rubber coated aluminum seat gasket, (Ford Part No. C3AZ-9569-B). The use of the coated aluminum gasket will in effect shim up the fuel inlet seat, minimizing float tab correction.

If excessive float tab corrections are made while attempting to set the float level, it is possible to exert excessive side thrust on the fuel inlet needle which will prevent proper seating of the needle to the seat.

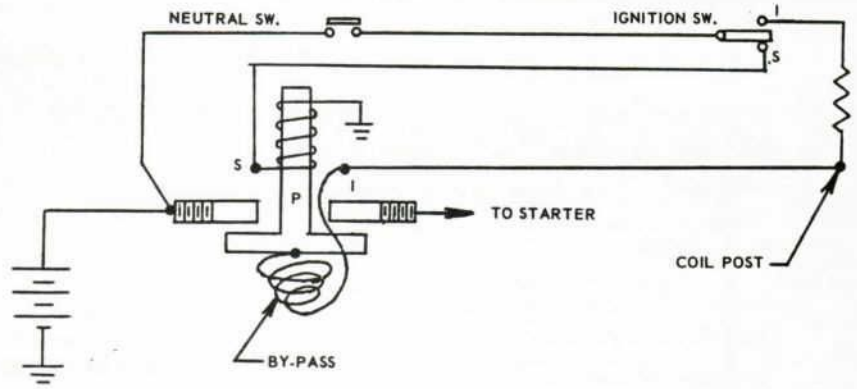


Figure 1

12

INOPERATIVE FRONT LAMPS— 1963 Falcon

A short circuit may occur in the headlamp, parking lamp, or turn signals on early 1963 Falcons in the main wiring harness that crosses the radiator support. It is caused by improper harness retention which results in the harness chafing on the screws that mount the hood auxiliary catch striker plate. (Figure #1, View B) This chafing wears through the insulation and results in a short circuit.

The above problem was corrected in production on January 23, 1963, with the use of the new radiator support. The service correction is to properly install the harness retaining straps as shown in Figure #1, View A. The straps can be removed quickly by tapping them through the radiator support from the front with a small hammer. They can easily be installed by pushing them back into the support with a 5/16 socket. If any of the straps are damaged during repositioning, use Ford Part No. 372363-S for replacement.

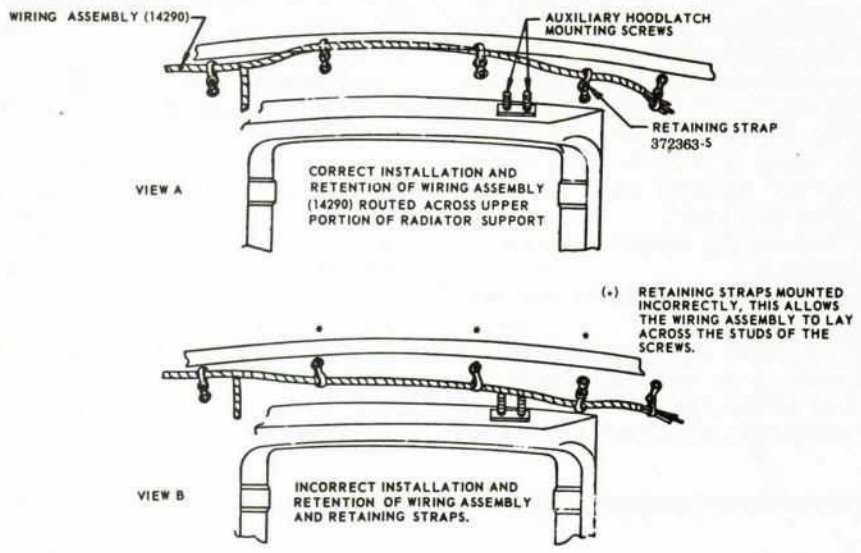


Figure 1

13

FRONT SUSPENSION ALIGNMENT— 1962-1963 Fairlane

To correct complaints of tire wear and/or steering and handling problems on 1962-1963 Fairlanes, an intensive field and laboratory investigation has been made. This investigation has resulted in revisions to the front suspension alignment specifications on all Fairlanes built during and after May, 1963.

When you encounter front end alignment problems on 1962-1963 Fairlanes, the front suspension should be set to the new specifications, with particular attention to the setting procedures noted below:

Revised Alignment Specifications:

Caster	0 degrees
Camber	
normal	0 degrees
driving on crowned roads	¼" positive left side
Toe-In	3/16"-5/16"

Setting Procedure Notes:

1. Lower Arm Inner Pivot Bolt Torque

Some movement of the lower arm inner pivot can occur if the pivot bolt torque is not to specifications. Before making wheel alignment, be certain that the lower arm assembly is forced outward (away from the center line of the vehicle). This can be accomplished by loosening the bolt, and using a pry bar with full weight of the vehicle on the suspension. The bolt should be torqued to 100-120 ft. lbs. while prying the arm outward.

2. System Friction

Before checking front end alignment, be certain the vehicle is jounced sufficiently to allow it to settle to a normal position. Otherwise, static friction in suspension components will keep the vehicle from assuming normal ride height, resulting in false alignment readings.

3. Upper Arm Inner Shaft Retaining Bolts

Upper arm inner shaft movement can occur if the retaining bolts are not fully tightened to the 115-135 ft. lbs. specification. Any looseness of the upper arm inner shaft may permit the shaft to move back to the previous setting under vehicle operation.

14

DISPOSABLE (SPIN-ON) ONE PIECE TYPE OIL FILTER—F-100-250 Trucks with 223-292 CID Engines

To facilitate servicing, the subject oil filter (same as passenger car) became effective in production approximately March 15, 1963 on F-100-250 trucks equipped with 223-292 CID engines.

Service Kit B7A-6882-A can be used when desired for adapting the spin-on filter to previous model F-100-250 trucks with 223-292 CID engines which are equipped for cartridge type filters.

Following is the procedure for installing this kit:

1. Remove existing filter assembly and component parts.
2. Clean cylinder block filter recess.
3. Install new gasket EAA-6838-A.
4. Install adapter ECG-66891-A. Make sure anti-drain back holes are in the up position.
5. Install insert B7A-6890-A and torque to 50-60 ft. lbs.
6. Apply light oil to oil filter seal. Hand tighten until gasket contacts adapter face. Then tighten 1/2 turn more. Start engine and check for leaks.

15

TURN SIGNAL LEVER LOOSE— All Car Lines

When customer complaints of turn signal lever looseness are encountered, the following procedure is recommended:

Remove the turn signal lever and add a small portion of Loctite Sealant (Ford Part No. C3AZ-19554-A) to the threaded end of the lever and reinstall the lever.

NOTE: Approximately six (6) hours drying time is required for the sealer to harden.

This procedure became effective in production on October 1, 1962, for all vehicles except Thunderbird and on May 1, 1963, for Thunderbird.

16

TWO-SPEED WIPER MOTOR JAMMED IN PARK—1963 Falcon, Fairlane, Ranchero

Whenever a jammed in park condition is encountered with two-speed wipers on the above vehicles, check the windshield washer coordinator switch or the three way disconnect plug for the correct wiring. After the wiper motor is corrected, the washer switch and multiple plug should be inspected as follows:

1. Remove the washer pump retaining screws.
2. Remove the two hoses from rear of pump.
3. Tilt pedal of washer pump down and away from view until terminal-block of washer pump is clearly visible. The color code of the wires is molded on the black plastic terminal block.
4. Compare the wire installation at switch terminals with the code on the terminal block (see Figure 1 below.) If the wires are improperly located at the pump assembly switch, replace the assembly.
5. Disconnect the black, three-way multiple connector plug from the main wiper harness.
6. With the male terminal of the multiple connector to the left, the color code of the wires should be from the left: two yellow wires on the extreme right, two blue wires in the center and either a white or a green wire on the near left.
7. If it is determined that the wires are improperly located in the multiple plug, replace the washer pump and switch assembly.

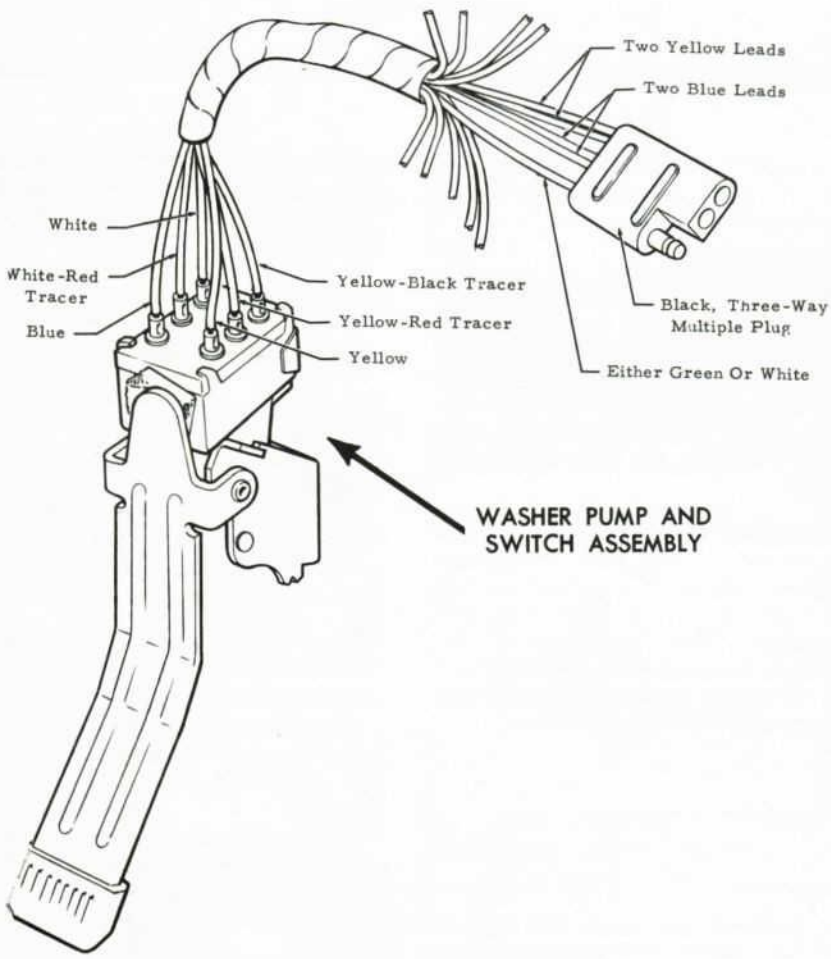


Figure 1

17

STOPLAMP SWITCH TERMINAL CORROSION—All 1963 Car Lines

On complaints of erratic stoplamp operation, which is traced to a corrosion problem at the switch terminals, the following corrective measures should be followed:

1. Disconnect the two (2) female wire connectors from the stoplamp switch.
2. Remove the corrosion from both terminals of the switch and wires.
3. Using any Brand Name of B Petrolatum (Vaseline) of the non-carbolated type (available at any drugstore) apply it to the female wire connectors until they are filled.
4. Reconnect the wires to the stoplamp switch.

It is recommended the above correction be followed also when replacing a stoplamp switch.

18

HARD OPERATING KEY CYLINDERS—1963 All Models

Should complaints of high key efforts be received on the subject vehicles, the lock cylinders should be well lubricated with a clear lock lubricant, part number B4A-19587-A.

NOTE: No substitutes such as graphited lubricants should be used in key cylinders. No windshield de-icer solutions or direct heat should be applied to the lock cylinders as these tend to dry out the lubricants.

Also, when a door key cylinder is being replaced, care should be taken to insure that the retaining clip is installed properly into the retainer slot provided in the cylinder case.

19

TIRE AIR PRESSURE—1963 Falcon Sedans, Hardtops and Convertibles

In the event of customer complaint of harsh ride of the subject vehicles, tire pressures front and rear may be reduced to 24 p.s.i. instead of the presently recommended 27 p.s.i. If the customer prefers economy to smoothness of ride, an increase in air pressure (over the 24 p.s.i.) may be recommended.

20

DRAG LINK BALL STUD DUST SEAL—1961-63 F-100-250 Trucks (Including 4 x 4)

When the subject trucks are operated under severe conditions where excessive foreign matter may enter the front ball joint causing premature wear, it is recommended that Ball Stud Dust Seal, B7C-3332A, be installed to correct the condition.