DETROIT PUBLIC LIBRARY
AUTOMOTIVE HISTORY COLLECTION

MVMA

~~AUTOMOBILES~~

Automobile Manufacturers Association

Consolidated Specification Questionnaire

For 1951 Models

Mechanical Details

Make of Car FORD 6 Model 1HA

Name of Maker FORD MOTOR COMPANY Address DEARBORN, MICH.

Date October 4, 1950
Revised: Nov. 17, 1950

NOTE: (1) Subject to Correction: It is understood that the following data are subject to correction in the case of cars not in production at the time this compilation was requested.

(2) Only standard equipment included in Factory Delivered price should be included in this questionnaire.

ENGINE

No. of cylinders 6
Valve arrangement 6-L Head
Bore 3.3 Stroke 4.4
Cylinder head, cast iron or aluminum Cast Iron
Cylinder sleeve, Yes ... No No
Piston displacement 225.9
Taxable horsepower 26.1

Horsepower rating—

To be based on actual performance corrected to 60°F. at sea level (barometric pressure 29.92 inches of mercury) with standard fuel. (Octane No. of fuel 75)

—With Bare Engine—

Maximum brake hp. 95* at 3600 R.P.M.

—With Standard Accessories—*

Maximum brake hp. ... at ... R.P.M.

*Those standard accessories needed for normal operation including fan, generator, starter, air cleaner, muffler, manifolds, fuel and water pumps.

Maximum torque—
With bare engine, lb. ft. 185* at 1500 R.P.M.
With standard accessories,* lb. ft. ... at ... R.P.M.

Compression Ratio—
Standard 6.8:1 Optional ...

Standard compression pressure —*pounds*—
At cranking speed 90-110
At what R.P.M. 120

PISTONS and RINGS

Piston

Make ...
Material Alum, Alloy, Steel Strut
Features—~~cylindrical, flat-top, oval, tin-plated, aluminum~~ ~~cadmium plated, auto-thermic, Lo-Ex~~ *etc.* Auto-thermic, Tin Plate, Oval
Weight—*ounces—without rings, pin or bushing* 16.1
Length 3.75
Clearance—
Top *land* .021 to .026
Skirt, *top* .0011/.0022 *bottom* .0006/.0012

PISTONS and RINGS (cont'd)

Piston ring groove depth—
Oil .1924 Compression .1874
No. of oil rings used per piston 2
Width of oil rings .1855/.1865
Width of oil ring gap .010/.019
No. of compression rings used per piston 2
Width of compression rings .0930/.0935
Width of compression ring gap .010/.017
Maximum wall thickness of oil rings .150
Maximum wall thickness of compression rings .165 Upper-.150 Lower
Are ring expanders used, Yes ... No No

RODS and PINS

Wristpin—
Material Seamless Alloy Steel Tubing
Length 2.895/2.915 Diameter .8501/.8504
Locked in rod, piston or floating Full Floating
Clearance in piston .0001 to .0003**
Clearance in rod .0001 to .0005

Connecting rod—
Length—*center to center* 8.248/8.252
Material High Carbon, Manganese Steel
Weight—*ounces* ...

Crankpin journal—
Diameter 2.2980/2.2988 Length 1.398/1.402

Lower bearing—
Material Special Alloy, Steel Back
Clearance .0004 to .0027
End play .002 to .008
Ship—*solid, laminated or none* None
Spun or separate Separate

Rods and pistons removed from above or below Above

CRANKSHAFT

Material Cast Alloy Steel
Weight—*stripped* 86
Vibration dampener used—*yes or no* Yes
Type Rubber or Fluid

* Includes generator, starter air cleaner, manifolds, fuel and water pumps, but not fan or muffler.

** Selective Fit

1951

MODEL SPECIFICATIONS

Revised: Nov. 17, 1950

Make of Car FORD 6 Model 1HA Date Oct. 4, 1950

STARTING MOTOR

Make Own Model 1HA
Normal engine cranking speed 130-170 @ 70° F
Brush spring tension 3-3½ lb.
Lock test—
Amperage draw 550
Volts 3.75
Torque in pounds feet 15
No load test—
Amperage draw 45-60
Volts 5.8 R.P.M. 3000-6000
Type of drive—*Bendix* [redacted]
Starting device—*Solenoid,* [redacted] *etc.*
Starter operation—check items required to start engine
1. Turn on ignition Past "On" Position
2. Depress starter pedal
3. Depress accelerator pedal
4. Depress clutch pedal
5. Operate button on dash
6. Pull out throttle
Starting motor pinion meshes front or rear Rear
No. of teeth in flywheel 114
Face width of flywheel teeth 3/8
Gear ratio between starter armature and flywheel 12.7:1

GENERATOR

Make Own Model 0HA
Type—*third brush, shunt, etc.* Shunt
Brush spring tension 26-34 oz.
Current regulator, voltage regulator or current and voltage control unit Voltage & Current
Maximum controlled charging rate
Temperature 98° F
Amperes 35
Voltage 7.1
R.P.M. 1700
Cutout relay—
Voltage at closing 6.0-6.6 Hot
Amperes to open, reverse current 8 Max.
Air gap .009-.013 Closed
Voltage regulator—
Volts 7.2 - 7.6
Temperature Normal Operating in Ambient 70°-80°F
Air gap .033-.036 Closed
Current regulator—
Amperes 34-38
Temperature Normal Operating in Ambient 70°-80°F
Air gap .033-.036
Car speed for maximum charging rate 19.2
Ammeter or charge indicator make Own

LAMPS

Lighting switch make
Are tail and dash lights in series No
Headlights—
Make Own & Others
Location—*in fender, in catwalk, or radiator shell* In Fender
Parking or fender light make Own
Tail and stop light make Own
Horn—
Type—*vibrator or motor* Air Elect. No. used 2
Make
Amperage draw of each 11

CLUTCH

Make
Drive type—
Direct to flywheel face Direct
Through fluid flywheel
Semi-centrifugal Yes
Power operated unit—make None
Vibration insulation or neutralizer—*fabric, rubber blocks or springs* Springs
No. of clutch driving discs One
No. of clutch driven discs One
Clutch facing—
Material—*woven* [redacted] Woven Asbestos
Inside diameter 6.0 in.
Outside diameter 9.5 in.
Thickness .125 in.
No. required 2

TRANSMISSION

Transmission—
Make Ford Model
No. of forward speeds 3
Manual shift—*yes, no* Yes
Automatic or auxiliary shifting mechanism—*yes* X *no* Extra Cost
If yes, Make
Type—centrifugal, vacuum, electric or hydraulic *See Footnote
Automatic overdrive—
Make Extra Cost
Oil capacity—*pints* 4.25
Oil grade recommended—*S.A.E. viscosity*
Summer SAE 80 Winter SAE 80
Gear ratio in high—*standard 5-passenger*
4-door sedan 3.73:1 (Overall) W/Std. Trans.
Transmission ratio—
In overdrive .700 In second 1.614
In third 1.000 In fourth
In low 2.779 In reverse 3.635

* Torque Converter with Hydraulically controlled planetary gear train.

1951

MODEL SPECIFICATIONS

Make of Car FORD 6 Model 1HA Date Revised: Nov. 17, 1950 Oct. 4, 1950

STEERING

Steering gear—
- Type: Worm & Roller
- Make: Own Model: 8A
- Ratio: 17.7:1

Lubricant recommended: SAE 140 Mild EP
Steering wheel diameter: 18
Drag link longitudinal or transverse: Transverse
Tie rod—one or two: 2
Is intermediate steering arm used: Yes, Idler Arm
Number of turns of steering wheel for full left to right swing of wheels: 4 1/4
Car turning radius—*feet—right, left or both*: 20 1/2
Caster—*degrees*: + 1/2° to -1°
Camber—*degrees or inches*: 0° to + 1°
Toe-in—*inches*: 1/16 to 1/8
Crosswise inclination of kingpin—*degrees*: 5 1/4°

Front axle—
- Make: Model:
- Section type—*I-beams, tubular or none*:
- End type—*Elliott or reverse Elliott*:

Minimum road clearance—*tires inflated*: 8.6*

BRAKES

Foot brakes—
- Make:
- Type of mechanism, *hydraulic or mechanical*: Hydraulic

If vacuum booster is standard, state make:
Brake lining moulded, semi-moulded or woven—
- Primary shoe: Moulded
- Secondary shoe: Moulded

Drum—
- Material: C.I. Diameter: 10"

Lining—
- Length per wheel: 21.64

BRAKES (cont'd)

Width: 1.75 Rear, 2.25 Front Thickness: .187
Clearance—*toe*: .010 *heel*: .010
Total foot braking area: 173.12 sq. in.
Percent braking power on rear wheels: 38%
Hand lever operates on—*transmission, separate rear brakes, rear service brakes or all four service brakes*: Rear Service
Hand brake, if separate from service brake—
- Internal or external
- Drum diameter
- Lining—
  - Length per drum
  - Width Thickness
- Clearance

FRAME and OTHER GENERAL DATA

Frame—
- Depth—*maximum*: 4.0 in.
- Thickness—*maximum*: .09 in.
- Flange width—*maximum*: 3.75 Box

Wheelbase: 114 in.
Tread—
- Front: 56.0
- Rear: 56.0

Weight of standard 5-passenger, four-door sedan—
- Shipping
- Curb

Price of standard 5-passenger, 4-door sedan
First serial number, this series
Serial number location

Overall length of car—
- With bumpers and bumper guards: 196.8

Overall width of car: 72.9
Overall height, road to roof with no load: 64.7

* Taken at Clutch Housing