

SPECIFICATIONS

AXLE—Front

Type 3/4 floating—Tubular
 Axle End Type Reverse Elliot
 Trans. Inclination of King Pin None
 Trans. Inclination of Spindle 1 1/2 deg.
 Castor Angle 2 deg.
 Toe-in Nothing
 Inside Universal Joints Universal Products
 Outside Universal Joints
 Mechanics—special constant velocity
 Final Drive Inverted Hypoid
 Gear Ratio 4.076-1, 4.416-1, 4.818-1

AXLE—Rear

Type I Section

BRAKES—Foot

Type Internal Hydraulic
 Operate on 4 wheels
 Front Drum Diam. 12"
 Rear Drum Diam. 15"
 Division of Braking Effort
 60% front, 40% rear

BRAKES—Hand

Type Internal Mechanical
 Operate on Rear Wheels
 This system operates the serv. brake shoes
 in rear drums.

CLUTCH

Type Dry Disc
 Driven Discs 1
 Facings 2

COOLING

Type Centrifugal Pump
 Pump Drive Chain
 Radiator Type Tube
 Thermostat Dole
 Radiator Shutter Automatic

ENGINE

Make Lycoming
 Cylinders 8 in line en bloc
 Valve Arrangement I.
 Crankcase Separate
 Bore and Stroke 3 1/4 x 4 1/2
 Piston Displacement 298.6 cu. in.
 Tax HP 33.8
 Maximum Developed HP 125
 Compression Ratio 5.25-1
 Rotation of Engine Counter-clockwise
 Points of suspension 4
 Mixture Heated by Exhaust around riser
 Heat Control Manual
 Vibration Dampener Torsional—Lanchester
 Crankshaft Counterbalanced
 No. Main Bearings 5
 Main Bearing Diam. 2 3/8"
 Camshaft Drive Chain
 No. Camshaft Bearings 6
 Camshaft Bearing Diam. 2"
 Timing Chain Adjustment Automatic
 Connecting Rod Material Steel

Connecting Rod Length 9" center to center
 Connecting Rod Bearing Diam. 2 1/8"
 Piston Material Bohalite
 Piston Type Invar Strut
 Piston Rings 3 compression, 1 oil
 Piston Rings Location All Above Pin
 Valve Port. Diam.
 1-5/16 Exhaust, 1-7/16 Intake
 Valve Lift 11/32"
 Exhaust Valve Material Silicrome

FUEL SYSTEM

Tank Capacity 20 gallons
 Fuel Feed Pump
 Carburetor Schebler 1 1/4" Dual

FRAME

Channel Depth 7"
 Flange Width 3"
 Thickness 7/32"
 Cross Members 3 Straight, 2 Diagonals

IGNITION & ELECTRICAL

Make Delco Remy
 Generator Drive Chain
 Starter Drive Bendix
 Battery Make U. S. L.
 Battery Capacity 104 a. h. at 5 amp. dis.
 Battery Location Under Hood
 Spark Control Semi-automatic
 Automatic Advance 15 deg. engine
 Manual Advance 15 deg. Engine
 Firing Order 1-6-2-5-8-3-7-4
 Ignition Switch Delco Remy

LUBRICATION

Chassis Bijur
 Points Reached—
 Rear Springs 6 points
 Fan 2 points
 Water Pump 1 point
 Clutch 1 point
 Clutch and Brake Pedals 2 points
 Engine Gear Pump
 Capacity 8 quarts
 Pressure to—
 Main Bearings
 Camshaft Front Bearing
 Rod Bearings
 Timing Case

SPRINGS—Front

Type Double 1/4 elliptic
 Shackle Type Rubber
 Leaf Material Silico-Manganese

SPRINGS—Rear

Type Semi-elliptic
 Length 62"
 Shackles Metallic
 Leaf Material Silico-Manganese

STEERING GEAR

Type Worm and Roller
 Gear Ratio 20-1
 Turning Radius 23 ft.

TRANSMISSION

Location Unit—in front

Gear Shift

Std. in Transmission, 1 3
 reversed in lever * *
 * * * *
 * *
 R 2

Transmission Ratios—

Low 3.11-1
 Second 1.69-1
 High Direct
 Reverse 3.78-1

Note: All driving and front braking torque
 taken directly on the frame. Rear brak-
 ing torque taken by the springs.

GENERAL FEATURES

Height of Sedan 61"
 Height of Phaeton-Sedan 58"
 Head Room—Rear of Sedan 36" - 37"
 Wheelbase 137 1/2"
 Tread 58" front, 60" rear
 Wheels Wire
 Horns, 1 on each side, tuned to give beat note
 Instrument Board—

Left Inst. Group	{	Water Temp. Gauge
		Oil Pressure Gauge
		Speedometer
Left Con. Group	{	Left Windshield Wiper
		Spark Control
		Throttle
Center Group	{	Inst. Light Switch
		Gear Shift Lever
		Ignition Switch
Rt. Con. Group	{	Glove Compartment
		Rt. Windshield Wiper
		Starter
Rt. Inst. Group	{	Choke
		Carb. Heat Control
		Gasoline Gauge
		Oil Level Gauge
		Ammeter

All instruments are of the rotating dial type.
 Two Cowl Ventilators.

Two Windshield Wipers.

Emergency Brake Lever placed well forward
 in center.

Gear Shift Lever—sliding rod type through
 instr. board.

Hand crank in conventional position.

CORD crest on starting crank hole cover,
 glove compartment lid, and gasoline
 tank cover.

Front Seat adjustable fore and aft.

Steering column adjustable vertically.

Four Houdaille shock absorbers.

Torchieres in rear corners and dome light
 in all closed cars.

Courtesy light on running board of all models.

Tail light on left rear, stop and back up light
 on right rear.

Lights controlled by knurled knob in center
 of steering wheel.

Speedometer drive off differential shaft giv-
 ing proper recording with all gear ratios.

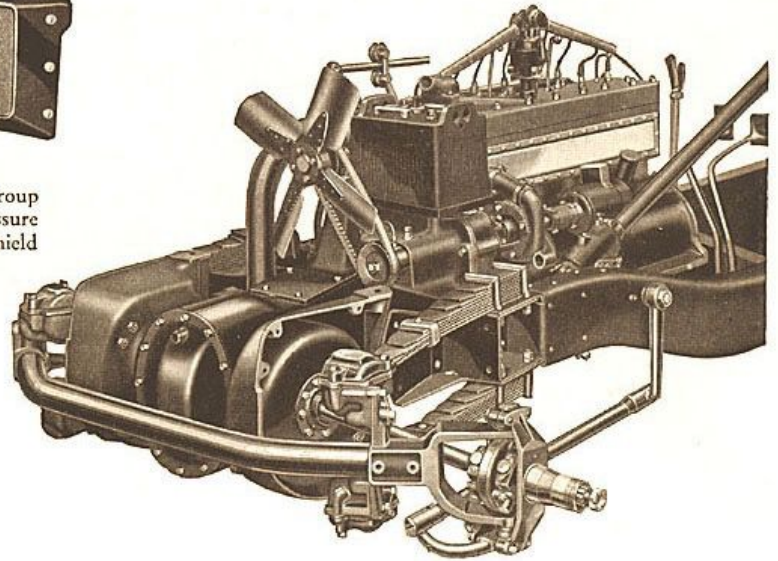
Front fenders approximately 80" in length.
 Hood 46" in length.

Tires 18 x 7.00 standard.

Unique and original theft-proof spare tire
 lock.

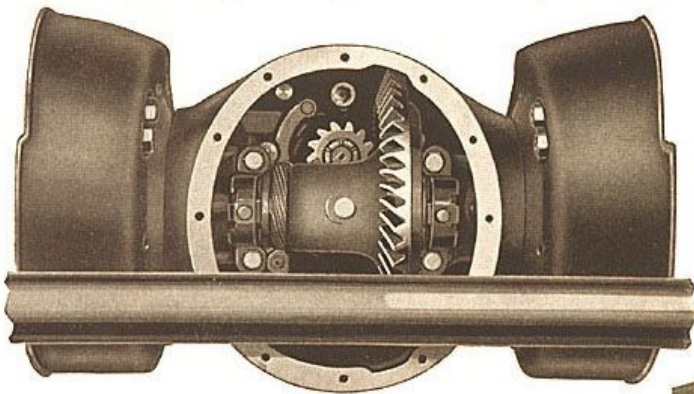


The metal instrument panel is in three divisions. The left group contains the speedometer, motor temperature indicator, oil pressure gauge, spark control, throttle, instrument lamp and left windshield wiper. In the center is a glove compartment and just below this is the ignition lock and the gear shift lever. The group on the right contains the starter, choke, manifold heat control, right windshield wiper, gasoline gauge, engine oil level gauge and ammeter. Background of the panel is in a rich crackle finish and instruments are of the approved aviation type, white figures on black background. Special attention has been given to arrangement of instruments for ease in operation.

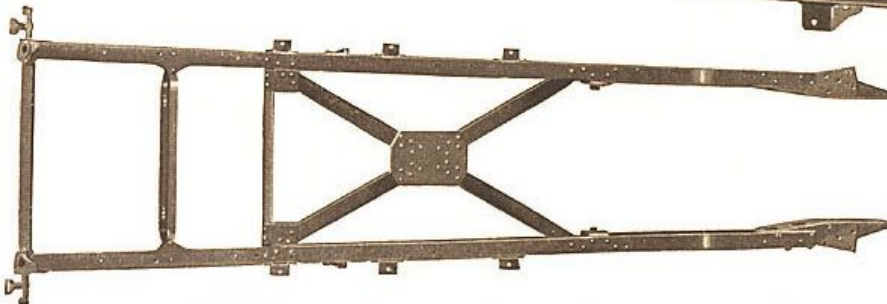
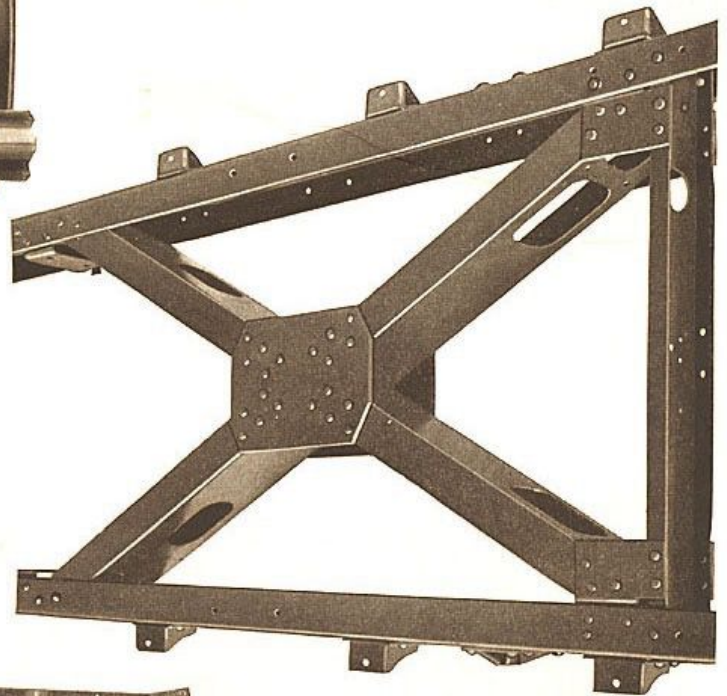


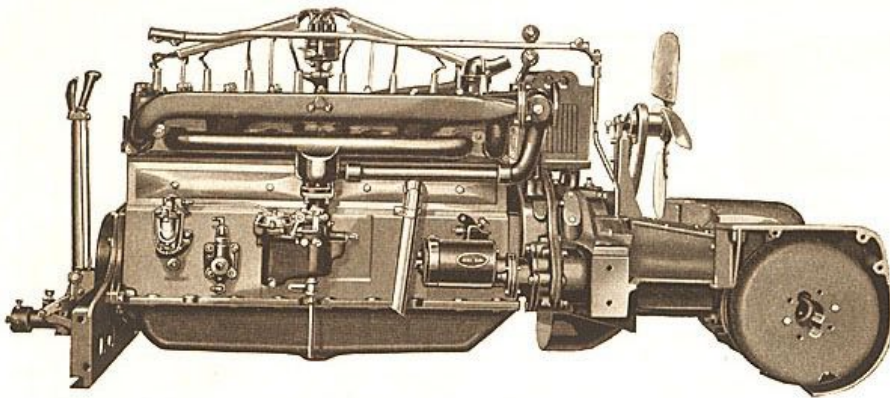
Three quarter view of the chassis of the Cord front-drive showing how direct power is applied to the wheels, the constant velocity universal joint in the spindle, double quarter elliptic springs, front axle, front wheel brake drums, easy accessible battery position, steering arrangement and bumper mountings.

Ring and pinion gears are hypoid, designed 30 percent stronger than for cars of similar weight. This assures an unusual margin of safety.

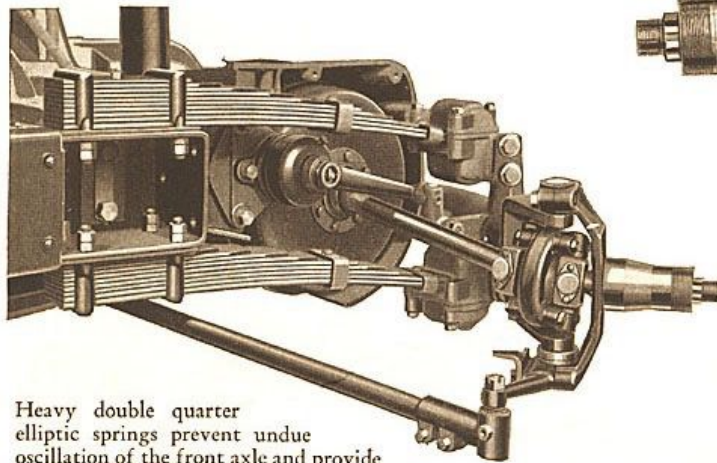


Bridge like construction of the chassis frame (right) giving the Cord front-drive the strongest frame under any passenger car built. The X-cross member is an innovation in chassis frame bracing and is possible through the absence of a drive shaft. Illustration below shows the straight side rails and rear cross-members. Side rail stock is 7/32 inches thick. No tramp, shimmy, nor wobble with a frame like this. Absence of frame "kick-up" at rear makes lower body possible and enables Cord designers to place rear seat on same level as front.

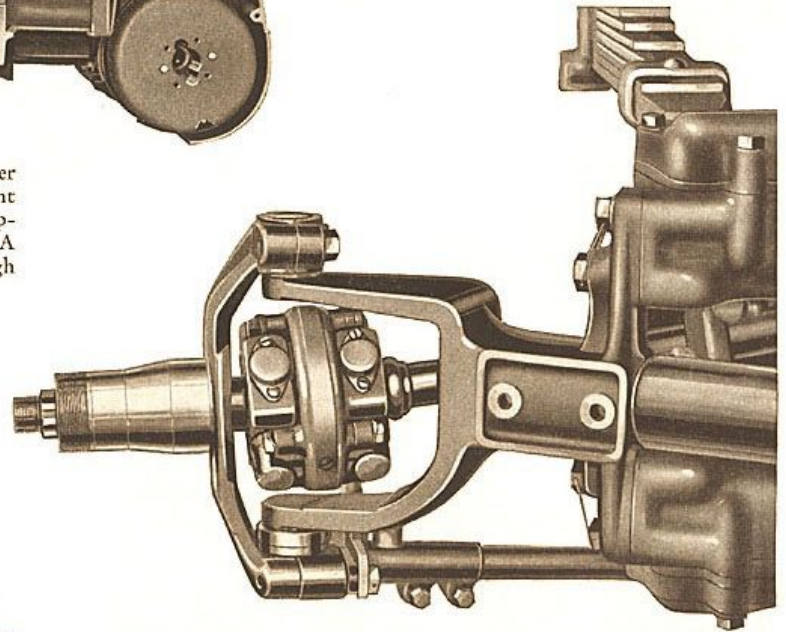




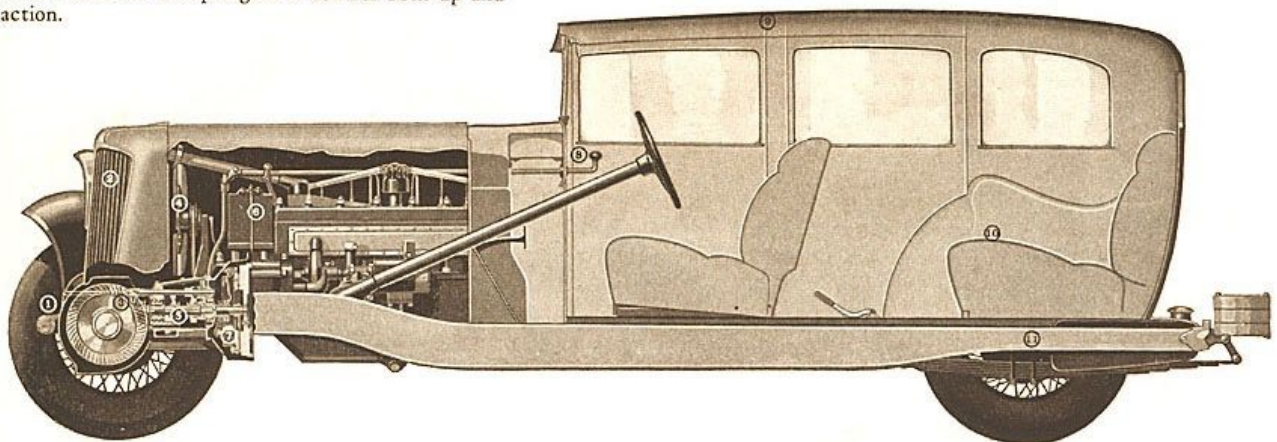
The Ford is the first production car with a unit power plant, engine, transmission, differential and front brakes being in one assembly. Thus the power is applied near its source, greatly increasing efficiency. A long drive shaft with its tendency to vibrate at high speeds is eliminated.



Heavy double quarter elliptic springs prevent undue oscillation of the front axle and provide the utmost ease and comfort in riding. This double type elliptic springing is a departure in passenger car design and provides a total of 91 inches in spring length for the front end of the chassis. Ends of the springs are mounted in rubber shackles. Hydraulic shock absorbers are mounted between the springs and control both up and down action.



The universal joints operate at wheel speed and not at motor speed as in rear-drive, or approximately five times slower, thus insuring longer life. The double universal joint gives constant velocity and permits the steering of the front wheels up to an angle of 42 degrees while power is being applied. This angle is sharper than the average rear-drive car can turn. Joints are provided with an oil reservoir making oiling necessary only about once every 8,000 to 10,000 miles.



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|--------------------------------|------------------------|-------------------------------|
| 1 Tubular Front Axle. | 5 Transmission. | 8 Gear-shift lever. |
| 2 Automatic Radiator Shutters. | 6 Battery. | 9 Greater head-room. |
| 3 Differential. | 7 Single Plate Clutch. | 10 Both seats on same level. |
| 4 Four-Blade Fan. | | 11 Straight frame—no kick-up. |