

MECHANICAL SPECIFICATIONS

DOVER

Commercial Super Six

Car Serial No. 10,001 to _____

ENGINE

Make	Hudson	Piston displacement	160.38
Model	Essex Super Six	Suspension	4 Point
No. of cylinders	6	Type of head	L
Cylinder arrangement	Vertical	Cylinder head	Detachable
Bore	2-3/4"	Cylinders in block	6
Stroke	4-1/2"	Crankcase	Integral
Rated H. P.	18.15	Material	Cast
Firing order	1-5-3-6-2-4	Lower half	Pressed steel

CAMSHAFT DRIVE

Type of drive	Chain	No. of links	57
Make	Morse	Pitch	1/2"
Type	No. 28	Adjustment	Adjustable eccentric
Width	1- 1/4"	Sprocket material	Cast Iron
Camshaft sprocket	38 Teeth		

CAMSHAFT BEARINGS

Number of bearings	3	No. 2 diameter	1-31/32"
No. I front - diameter	2"	No. 2 length	1-1/16"
No. I length	1-1/16"	No. 3 diameter	1- 1/2
		No. 3 length	15/16"

VALVES

	Inlet	Exhaust
Head material	Silicon steel	Silicon steel
Head diameter (outside)	1-3/8"	1-3/8"
Head diameter (opening)	1- 1/4"	1- 1/4"
Stem length	5-1/32"	5-1/32"
Stem diameter	5/16"	5/16"
Stem type of end	Grooved	Grooved
Tappet-type	Roller	Roller
Tappet clearance	.003"-.005"	.005" -.007"
Valve lift	5/16"	21/64"
Valve stem guides	Removable	Removable
Spring pressure	50 tbs.	50 tbs.

CRANKCASE AND CRANKSHAFT

No. of main hearings	3	Crank pin diameter	1-13/16"
No. 1 (front) - diameter	2-11/32"	Main bearing material	Bronze & babbitt
No. 1 length	1-5/8"	Main bearing clearance	.001" - .0015"
No. 2 diameter	2 -3/8"	Main bearing end play	.006 " - .012
No. 2 length	1-3/4"	End thrust on	Center bearing
No. 3 diameter	2-13/32"	Sprocket	19 teeth
No. 3 length	1-3/4"	Material	Steel

CONNECTING ROD

Material	D, F, Steel	Lower end bearing clear	.0011,
Weight	1-1/2 lbs.	Clearance (endwise)	006"- .010"
Length C. to C.	8-3/16"	Type	Spun
Lower end bearing - Dia.	1- 13/16"	Material	Babbitt

PISTON

Type	Slotted Skirt	Distance between bosses	1-1/8"
Material	Aluminum Alloy	Clearance - skirt	.002"
Weight	8 ounces	Depth of grooves	.156"
Length	3-1/16"	Lower groove	Drilled radially
Pin center to top	1-11/16"	Number of holes	8
		Diameter of holes	3/32"

PISTON RINGS

Material	Cast Iron	No. of oil rings	2
No. per piston	3 (above pin)	Type of joint	Mitre
Width	1/8"	Gap clearance	.006"- .008"
No. of comp. rings	1	Make	Piston Ring Co.

PISTON PIN

Type	Floating	Bushing - outside diameter	15/16"
Diameter	3/4"	Bushing - inside diameter	3/4"
Length	2-3/32"	Bushing - length	15/16"

LUBRICATION SYSTEM

Type	Circulating splash
Oil pump type	Plunger
Stroke of pump	Not adjustable
Capacity - Oil reservoir only	5 quarts
Capacity - Oil reservoir and troughs	6 quarts
Mesh of screen	50
Oil recommended	Medium heavy - use low cold test in winter

COOLING SYSTEM

Type	Thermo. syphon
Radiator - make	Harrison
Core - type	Ribbon cellular
Radiator - shutter	Pressed steel - Horizontal

COOLING SYSTEM - Continued

Radiator shutter - make	Hudson
Shutter control - type	Manual
Capacity of cooling system	4-3/4 gallons
Radiator hose, upper, diameter	2-1/4"
Radiator hose upper, length	5-1/2"
Radiator hose, lower, diameter	2-1/4"
Radiator hose, lower, length	15-3/16"
Fan belt	"V" type
Fan - make	Hudson
Fan bearing type	Plain

FUEL SYSTEM

Carburetor-make	Marvel
Carburetor-size	1-1/8"
Method of heating mixture	Marvel Heat Control
Make of vacuum tank	Stewart
Gasoline tank capacity	11-1/2 gallons
Fuel feed - type	Vacuum tank

EXHAUST

Muffler - make - Hudson	Exhaust pipe diameter 1-3/4"
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IGNITION SYSTEM

Make	Auto-Lite Corporation
Current source	Battery and generator
Spark control type	Full automatic
Firing order	1-5-3-6-2-4
Timing	D, C. (fully retarded)
Breaker point gap	.018 -.020"
Ignition coil - make	Auto-Lite Corporation
Spark plug-make	A. C.
Spark plug-type	G-10
Spark plug - size	Metric - 18 m/m, .5 m/m thread
Spark plug - gap	.025-.028

Note: Any other information must be obtained from the manufacturer

STARTER MOTOR

Make	Auto-Lite Corporation
Drive - type	Bendix
No. of teeth on flywheel	100
Width of tooth face	3/8"
Pinion meshes from	Rear of flywheel

Note: Any other information must be obtained from the manufacturer

GENERATOR

Make	Auto-Lite Corporations
Normal Charging Rate - hot	10 Amps.
Normal Charging Rate - cold	11.5 Amps.

Note: Any other information must be obtained from the manufacturer.

BATTERY

Make	Exide	Terminal grounded	Negative
Type	3-XI-33-1-G	Length - overall	9"
Voltage	6	Width - overall	7"
No. of Plates	13	Height of box	7-7/8"
Where mounted	Under driver's seat	Height over terminals	9"

LIGHTING SYSTEM

Head and tail lamps - make	John Brown Lamp Company
Head lamp reflector - make	John Brown lamp Company
Head lamp - type	Bullet
Side lamp - type	Bullet
Head lamp lens - type	Parabeam
Head lamp lens - diameter	8"
Head lamp dimmer method	Separate filament
Dash and tail lights connected	Separately
Ammeter - make	National Gauge & Equipment Co.
Dash light - make	National Gauge & Equipment Co.
Lighting switch control	On steering wheel

LAMP BULB SPECIFICATIONS

	<u>Make</u>	<u>Mazda No.</u>	<u>C.P.</u>	<u>Base</u>	<u>Voltage</u>
Head	Mazda	1110	21-21	D. C.	6-8
Side	Mazda	63	3	S. C.	6-8
Tail	Mazda	63	3	S. C.	6.8
Dash	Mazda	63	3	S. C.	6-8
Stop	Mazda	87	12	S. C.	6-8
Dome	Mazda	63	3	S. C.	6-8

HORN

E. A, Horn	Motor type
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CHASSIS

Wheelbase	110-1/2"
Lubricating system	Alemite
Location of serial number	Rear cross member

TRANSMISSION

Make	Hudson	Pocket bearing	Bronze bushing
Location	Unit	Reverse idler	Bronze bushing
Speeds	3 forward, 1 rev.	Main shaft - front	N. D. No. 1207
Gear ratio - low	3.244 to 1	Main shaft - rear	Hyatt No. N. C. '106
Gear ratio - second	1.961 to 1	Countershaft	Stationary
Gear ratio - high	I to I	Pilot bearing in crankshaft	N. D. No, 1202
Gear ratio - reverse	4.170 to 1	Oil capacity (approx.)	1 quart
Type of lubricant	Heavy motor oil		

CLUTCH

Make	Hudson	Throwout bearing	Annular & thrust
Type	Single disc oil	Throwout	5/32"
Facing material	Cork inserts	Clearance at F/B	3/4"
No. of cork inserts	72		

LUBRICATION - 1/2 pint light motor oil.

UNIVERSALS

Front	Make Spicer	Type Metal	Make Rear	Type Spicer Metal
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TYPE OF DRIVE

Propulsion through rear springs.

REAR AXLE

Make	Hudson	Wheel bearing	Timken 415TV and 412A
Type	Semi-floating	Pinion bearing - front	Timken 2691V and 2620
Gear ratio	5 6/10	Pinion bearing - rear	Timken 3188 and 120
Type of drive	Spiral bevel	Differential bearing - right	Timken 336 and 3320
Min. road clear.	8"	Differential bearing - left	Timken 336 and 3320
Clear. for jack	10-1/4"	No. of teeth in pinion	10 or 11
Differential - make	Hudson	No. of teeth in gear	56
Pillion	Adjustable	Oil capacity (approx.)	1-1/2 quarts
Pinion bearing	Adjustable		

FRONT AXLE

Make	Hudson	Toe in - none, or not over 1/8"	
Section - type	I beam	Castor angle	0
End - type	Rev. Elliott	Min. road clearance	8"
King pin thrust bearing	Ball bearing	Clearance for jack	11" on spring
King pin transverse inclination	7 degrees	Spindle transverse inclination	1 degree

STANDARD BRAKES

Type	Bendix 4-wheel brakes
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SERVICE BRAKES

Location	Front and Rear wheels	Lining length per wheel, 2 pieces	24-1/2
Make	Bendix	Width of lining	1-1/2"
Type	Internal	Thickness of lining	5/32"
Total braking area	147 sq. inches	Clearance of lining	.010"
Drum diameter	11"	Method of application	Foot pedal

HAND BRAKE

The hand lever operates the front and rear wheel brakes independently of the foot pedal, and should be used for parking, especially when car is standing on an incline.

WHEELS

Type	Wood steel felloe
Make	Motor Wheel Corporation
Front wheel inner bearing	Timken No. 2554 and 2520
Front wheel outer bearing	Timken No. 2382 and 2320

RIMS

Type	Split	Diameter	20"
Make	Jaxon	Width	4"

TIRES

Size	30 x 5 Front - 30 x 5.50 Rear; balloon, straight side
Make	Goodyear
Number of plies	4 Front - 6 Rear
Recommended pressure	Front 35 lbs; Rear 40 lbs.

STEERING GEAR

Make	Gemmer
Type	Worm and shaft
Ratio	15 to 1
Steering wheel turns	2-1/2" (full swing left to right)
Turning radius	20 feet
Lubricant	Steam cylinder oil

SPRINGSFront Spring

Type	Semi-elliptic
Length	36"
Width	2"
No of leaves	8
Material	Chrome - Vanadium
Front bushing	5/8" diameter
Rear bushing	5/8" diameter
Bushing material	Phosphor bronze
Spring lubricant	Motor oil P

Rear Spring

Type	Semi-elliptic
Length	54-7~
Width	
No, of leaves	12
Material	Chrome - Vanadium
Front bushing	5/8" diameter
Rear bushing	5/8" diameter
Bushing material	Phosphor bronze
Shackle - Type	Adjustable

FRAME

Make	Hudson	Thickness	5/32"
Material	Steel	Width of flange	1-7/8"
Depth	7		

JULY, 1929

Dover Super Six-Standard Equipment

Car Serial No. 10,001 to _____

	<i>Panel</i>	<i>Express</i>	<i>Express Canopy</i>	<i>Screen Canopy</i>	<i>Chassis</i>	<i>Cab</i>
Windshield cleaner - make	Trico Mfg Co.	Trico Mfg. Co.	Trico Mfg. Co.	Trico Mfg. Co.	Trico Mfg. Co.	Trico Mfg. Co.
Windshield cleaner -type	Vacuum	Vacuum	Vacuum	Vacuurn	Vacuum	Vacuum
Rear View Mirror	Yes	Yes	Yes	Yes	Yes	Yes
Cowl ventilator	Yes	Yes	Yes	Yes	Yes	Yes
Engine heat indicator	On instrument board			ALL MODELS		
Gasoline and oil level gauge location	Instrument board			ALL MODELS		
Gasoline and oil level gauge - type	Electric			ALL MODELS		
Wheels - type	Wood wheels			ALL MODELS		
Sun visor	Yes	Yes	Yes	Yes	No	Yes
Radiator shutters	Yes			ALL MODELS		
Rear traffic signal	Yes			ALL MODELS		
Comb. tail and stop light - make	John Brown Lamp Co.			ALL MODELS		
Speedometer - make	Stewart-Warner			ALL MODELS		
Ignition electrolock				ALL MODELS		
Spare rim	One			ALL MODELS		
Horn - make	E. A.			ALL MODELS		
Headlamps - make	Parabeam - John Brown Lamp Co.			ALL MODELS		
Tire carrier - make	Hudson			ALL MODELS		
Storage battery - make	"Exide"			ALL MODELS		
Bumpers - front				ALL MODELS		

JULY, 1929

Dover Super Six-Standard Equipment

Car Serial No. 10,001 to _____

	<i>Panel</i>	<i>Express Express</i>	<i>Screen Canopy</i>	<i>Canopy</i>	<i>Chassis</i>	<i>Cab</i>
Model	1929	1929	1929	1929	1929	1929
Wheelbase	110-1/2	110-1/2	110-1/2	110-1/2	110-1/2	110-1/2
Weight	2910				1930	
No. of doors	4	2	2	2	None	2
Gear Ratios	5 6/10 to 1				ALL MODELS	
Make of Body	Biddle & Smart				ALL MODELS	
Windshield-- Type	One Piece Swing Type				ALL MODELS	
Windshield-Make	Motor Products				ALL MODELS	
Wheels-Type	Wood					
Tires - Size	30x5 Front - 30x5.50 Rear				ALL MODELS	

BODY DIMENSIONS

	<i>Overall Length</i>	<i>Overall Width</i>	<i>Overall Height</i>	<i>Inside Body Lgth.</i>	<i>Inside Body Ht.</i>	<i>Inside Body Width at Platform</i>	<i>Inside Body Wdth. Above Flare Bds.</i>
Panel	175 $\frac{1}{4}$	63 $\frac{1}{2}$	77 $\frac{3}{8}$	79 $\frac{5}{16}$	50	43	50 $\frac{1}{4}$
Express	170 $\frac{1}{8}$	63 $\frac{1}{2}$	72 $\frac{3}{16}$	71	18 $\frac{1}{2}$	42 $\frac{1}{2}$	50
Express-Canopy	170 $\frac{1}{8}$	63 $\frac{1}{2}$	79 $\frac{11}{16}$	71	50 $\frac{1}{2}$	42 $\frac{1}{2}$	49 $\frac{1}{4}$
Screen Canopy	170 $\frac{1}{8}$	63 $\frac{1}{2}$	79 $\frac{11}{16}$	71	50 $\frac{1}{2}$	42 $\frac{1}{2}$	49 $\frac{1}{4}$