1927 Hudson Super-Six Car Number 750,000 up

Mechanical Specifications And Information Part I

1927 Hudson Super-Six Car Number 750,000 up

> Electrical Data And Circuit Diagrams Part II

1927 Hudson Super-Six Car Number 750,000 up

Mechanical Specifications And Information Part I

# Mechanical Specifications for Hudson Super Six Model 1927. Car Serial Nos. 750,001 to -----; (Revised March 1927.)

## **Engine**

Make	Hudson	Piston Displacement	288
Model	Super Six	Suspension	4 Point
No. of Cylinders	6	Type of Head	F
Cylinder Arrangement	Vertical	Cylinder Head	Detachable
Bore	31/2	Cylinders Cast	En Bloc
Stroke	5"	Crankcase	Separate
Rated H. P.	29.4	Upper half	Aluminum
Firing Order	1-5-3-6-2-4	Lower Half	Pressed Steel
	Can	<u>nshaft Drive</u>	
Type of drive	Chain	No. of Links	63
Make	Morse	Pitch	1/2"
Туре	No. 28	Adjustment	Adjust. Eccentric
Width of chain	1-5/8"	Sprocket Material	Cast Iron
Camshaft Sprocket	42 teeth		
	Cams	<u>haft Bearings</u>	
Number of bearings	4		
No. 1 (Frt.) diameter	2-19/32"	No. 3 diameter	2-5/16"
"" length	1-5/8"	"" length	1-1/16"
No. 2 diameter	2-11/32"	No. 4 diameter	1-1/2"
"" length	1-1/16"	"" length	1-3/4"
	Va	lve Timing	
Inlet opens " closes	7 degrees after TDC 42 degrees "BDC	Exhaust opens 55 degree " closes 8 degre	es before BDC es after TDC

## Valves

		Inlet Valve	<u>Exhaust Valve</u>
Head Material		Tungsten steel	Silicon Steel
Head diameter (outside)		1-31/32"	1-31/32"
" " (opening)	) 1-13/16"	1-3/4"	
Stem length		5-29/32"	6-15/16"
" diameter		.371	.371
" type of end		Grooved	Grooved
Tappet (type)		Roller	Roller
" clearance		.004006"	.006008"
Valve lift		9/32"	19/64"
" stem guides		Removable	Removable
Spring pressure		96 lbs.	75 lbs.
	Crank	case and Crankshaft	
No. of main bearings	4	Crankpin Diameter	21/4"
No. 1 (Front) Diameter	2-1/4"	Main Bearing. Material	Bronze and Babied
" Length	2-3/8"	" " end play	.008012
No. 2 Diameter	2-9/32"	" " clearance	.0015002
" Length	1-7/8"	End thrust on	Rear center bearing
No. 3 Diameter	2-5/16"	Sprocket	21 teeth
" Length	2-1/8"	Material	Steel
No. 4 Diameter	2-11/32"		
" Length	3-1/8"		
	<u>C</u>	onnecting Rod	
Material	D F Steel	I ower end bearing clearan	p = 0.015 - 0.02
Weight	$3_{-1/2}$ lbs	Lower end bearing clearait	2" 2"
I enoth C to C	11 325	Clearance (endwise)	$2^{-}$ 006 - 010
Lower end bearing	11.525	Type	Separate
Diameter	2.25"	Material	Bronze & Babied
		Piston	
		1 10001	
Туре	Slotted Skirt		
Material	Aluminum alloy	Distance between bosses	1-3/8"
Weight	16 ounces	Skirt clearance	.0045
Length	4-1/16"	Depth of grooves	.164

## **Piston Rings**

Lower groove

Not drilled

Material	Cast iron	No. of rings above pin	3
No. per piston	3	Type of joint	Miter
Width	1/8"	Gap clearance	.006008
No. of compression rings	2		

2-1/4"

Pin center to top

No. of oil control rings 1

## **Piston Pin**

TypeFloatingDiameter1.0937Length2-11/16"

Type Oil Pump Type Stroke of pump-plunger idling """" high speed Capacity - oil reservoir only """ and troughs Mesh of screen Oil recommended

Carburetor - make "size Fuel feed - type Make of vacuum tank Air Cleaner - Type Gasoline tank capacity Method of heating mixture

Muffler make - Hudson

Make Current source Spark control type Firing order Timing Breaker point gap Ignition coil - make Spark plug - Make ""- Type ""- Size ""- Gap

Bushing.	Outside	diameter	1.283
"	Inside	دد	1.0937
"	Length		1-1/8"

## **Lubricating System**

Circulating Splash Plunger Min. 3/16" Max. 5/16" 7 Quarts 9 " 50 Medium heavy - use low cold test in winter

### Fuel System

Marvel B-10-661 1-1/4 Vacuum tank Stewart A. C. 18-3/4 gallons Hot spot

#### Exhaust System

Exhaust pipe diameter - 2-1/4"

#### **Ignition System**

Auto-Lite Corporation Battery and Generator Semiautomatic 1-5-3-6-2-4 10 degrees before D. C. fully advanced .020 Auto-Lite Corp. - CE-4001 A. C. Titan Short Metric 18 MM .025 - .028

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

## **Starter Motor**

Make - Auto-Lite CorporationMUA-4002Drive typeManual - sliding gearNo. of teeth on flywheel118Width of tooth face3/4"Pinion Meshes fromFront of flywheelNote: Any other information must be obtained from the Manufacturer.

#### Generator

Make - A	Auto-Lit	e Corporatio	on GAB-4001
Normal o	charging	rate - hot	13 amperes
"		" - cold	17 ``
NT-4 A		:	

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

#### **Battery**

Make	Prest-O-Lite	Terminal grounded Negative	
Туре	6-15-J.F.K.H.	Length - overall	10-1/4"
Voltage	6	Width - "	7-3/8"
No. of plates	15	Height of box	8" (Incl handle 9-1/4")
Amp. Hours capacity	120	" over terminal	8-1/4"

### **Lighting System**

Head, side and tail lamps - Make	John Brown Lamp Co.	
" " Reflector - Make		
" and Side Lamp type	Bullet	
Headlamp lens - Make	Spreadlight	
" " diameter	9"	
" " Dimmer method	Resistance	
Dash and tail lights connected	Separate	
Ammeter - Make	National Gauge and Equip. Co.	
Lighting switch - Make	Auto-Lite Corporation	

### Lamp Bulb Specifications

	Make	<u>Mazda No.</u>	<u>CP</u>	<u>Contact</u>	<u>Voltage</u>
Headlight	Mazda	1129	21	Single	6-8
Side	"	63	3	"	6-8
Tail	"	63	3	"	6-8
Dash	"	63	3	"	6-8
Stop	"	87	15	"	6-8
Dome	"	63	3	"	6-8

### <u>Horn</u>

E. A. Horn

Motor Type

Ser. 945 Sheet #4

### <u>Chassis</u>

Wheelbase Lubricating System Overall length with bumper Location of Serial Number 127-3/8" Oil cup - wick 15' 8" Frame rear cross member R.H. end

#### **Transmission**

Make	Hudson
Location	Unit
Speeds	3 fwd, 1 rev
Gear Ratio - Low	3.04 to 1
Gear Ratio - Second	1.81 to 1
Gear Ratio - High	1 to 1
Gear Ratio - Reverse	3.69 to 1
Type of lubricant	
Oil capacity (approx.)	
Pilot bearing in crankshaf	ť

Pocket bearing Reverse Idler Main Shaft - front ""- rear Countershaft - front Countershaft - rear "- Rotates Light transmission oil 1-1/2 quarts New Departure No. 1204 Bronze Bushing Hyatt No. 16820 New Departure 1308 Hyatt No. 16684 Hyatt No. 16506 Hyatt No. 16506

#### <u>Clutch</u>

Make	Hudson	Facing Material	Cork inserts
Туре	Single disk in oil	Throwout bearing	Nice No. 0210
No. of Cork inserts	132	Throwout	5/32"
Lubrication	1/4 pint	Clearance at floor board	3/4"
(Mixture 1/8 pint n	notor oil and 1/8 pint kerc	osene)	

#### **Universals**

- Make	Spicer	Rear - Make	Spicer
- Type	Metal	" - Type	Metal

#### **Type of Drive**

Propulsion through Rear springs.

### **Rear Axle**

Make	Hudson	No. of teeth in pinion	11
Туре	Semi-floating	""""gear	49
Gear ratio	4-5/11 to 1	-	
Type of drive	Spiral bevel	Pinion	Adjustable
Min. road clearance	8-1/4"	Pinion bearing	Adjustable
Clearance for jack	10-1/4"	Oil capacity (approx.)	2-1/2 quarts
Differential - Make	Hudson	Type of lubricant	Differential Oil
Pinon bearing	Front	Timken 3196 and 3120	
	Rear	Timken 439T and 432	
Differential bearing	Right	" 377 and 3720	
	Left	" 377 and 3720	

Front

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## Front Axle

Make Hudson Toe in - None, or not over 1/8" Section type Castor Angle 1 degrees. backward Ι 8-1/4" End - Type Rev. Elliot Min. Road Clearance Clearance for jack 8-3/4" King pin thrust bearing Special Thrust King pin transverse inclination 6-1/2 degrees. " Spindle ٢٢ 2-1/2 degrees.

## **Standard Brakes**

Type of standard brake

Bendix 4-Wheel brakes

#### Service Brake

Location	Front & Rear Wheels	Lining length per wheel	3 pieces 38-7/32"
Make	Bendix	Width of lining	2"
Туре	Internal	Thickness of lining	3/16"
Total braking area	305-3/4 square inches	Clearance of lining	.010
Drum diameter	Front and Rear 14"	Method of Application	Foot pedal

## Hand Brake

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

#### **Wheels**

Туре	Wood-Steel Felloe
Make	Motor Wheel Corp.
Front wheel inner bearing	Timken No. 415 and 412A
" " outer "	" " 315 and 312

### <u>Rims</u>

Type Make Diameter Width

Split

Firestone

19" 4-1/2"

Tires

Size	31 x 6 - Balloon Straight Side
Make	Goodyear and U.S.
Number of plies	4
ແ ແົແ	6 on rear of Brougham, 5-Pass. Sedan (Custom) and 7-Pass. Sedan
Recommended pressure	Front 35 lbs., Rear 38 lbs.

Make Туре Ratio Steering wheel turns Turning diameter Lubricant

Gemmer Worm and roller disc 18 to 1 2-1/2 (full swing left to right) Right 41', Left 39' Heavy Bodied Gear Oil

2-1/4"

## <u>Springs</u>

## **Front Spring**

## **Rear Spring**

Туре	Semi-Elliptic	Туре	Semi-elliptic
Length	39"	Length	57-11/16"
Width	2-1/4"	Width	2-1/4"
No. of leaves	10	No. of leaves (for Phaeton,	
Material	Spring Steel	Coach, Brougham, 5 and 7	
Front Bushing	11/16" diameter	Pass. Sedans	15
Rear Bushing	11/16" diameter	Material	Vanadium Steel
Bushing material	Phosphor Bronze	Front Bushing	3/4" diameter
Spring Lubrication	Motor Oil	Rear Bushing	11/16" diameter
Shackles - Type	Adjustable	Bushing Material	Phosphor Bronze
		Frame	
Make	Hudson	Depth	7"
Material	Steel	Thickness	3/16"

Width of Flange

Material

Ser. 945 Sheet #7 Steel

### 1927 Hudson Super-Six Car Serial #750,001 to -----Gear Ratios and rules for comparing

TO OBTAIN MOTOR RPM FOR ANY DESIRED SPEED IN MILES PER HOUR: Note: The following rule #1 is good only for a gear ratio of 4-5/11 to 1 and with a wheel diameter of 31 inches.

<u>Rule #1:</u> MPH Multiplied by 48 = Motor RPM (approximately) Example: What is the RPM at 40 miles per hour? Answer: 40 multiplied by 48 = 1920 RPM (approx.) Rule #2: MPH multiplied by 44 = Motor RPM (approx.)

TO OBTAIN SPEED IN MILES PER HOUR FOR ANY DESIRED MOTOR RPM: Note: The following rule \$3 is good only for a gear ratio of 4-5/11 to 1 and with a wheel diameter of 31 inches.

<u>Rule #3:</u> RPM divided by 48 - Speed in miles per hour (approx.) Example: What is the speed at 2400 RPM? Answer: 2400 divided by 48 = 50 MPH (approx.)

Note: The following rule #4 is good only for a gear ration of 4-1/12 to 1 and with a wheel diameter of 31 inches.

<u>Rule #4:</u> RPM divided by 44 = Speed in miles per hour (approx.)

#### **GEAR RATIO**

To obtain the number of revolutions of the motor required for one revolution of the rear wheel, multiply the transmission ration by the rear axle ratio.

Example: 3.04 (low gear ratio) x 4.45 (rear axle ratio) - 13.528 revolutions of the motor to one revolution of the rear wheel.

The following list shows the various motor to wheel rations worked out as above for Super-Six cars:

			Trans. Ratio	Rear Axle Ratio	Motor Revs.	Wheel Revs.
With tr	anemieei	ion in Low	3.04	1.45	13 528	1
۷۷ ILII LI ۵ ٬٬	ansiinssi ،،	" Second	J.04	4.45	13.320	1
		Second	1.81	4.45	8.05	1
دد	دد	" High	1.	4.45	4.45	1
دد	دد	" Reverse	3.69	4.45	16.420	1

	Phaeton	Coach	Brougham	Std 5-Pass. Sedan	Custom 5-Pass. Sedan	7-Pass. Sedan
W/S Cleaner - Make	No.	Trico	Trico	Trico	Trico	Trico
W/S Cleaner - Type	-	Vacuum	Vacuum	Vacuum	Vacuum	Vacuum
Trunk Rack	No	Yes	Yes	No	No	No
Cowl Ventilator	- All Mod	els				
Engine Heat Indicator	- Boyce M	lotometer (All ]	Models)			
Gasoline gage location	- Instrume	ent board (All N	Models)			
Gasoline gage type	- King-Se	eley Hydrostate	c (All Models)			
Wheels - Type	- Wood (A	All Models)				
Sun Visor	No	Yes	Yes	Yes	Yes	Yes
Radiator Shutters	- (All Moo	dels)				
Rear Traffic Signal	- (All Moo	lels)				
Comb. Tail/Stop Light	- John Bro	own Lamp Com	npany (All Mode	ls)		
Cowl Lights	- (All Moo	lels)				
Rear Vision Mirror	No	Yes	Yes	Yes	Yes	Yes
Transmission Lock	- (All Mod	lels)				
Speedometer - Make	- Stewart-Warner (All Models)					
Spare Rim	- One (All Models)					
Horn - Make	- E. A. (All Models)					
Headlamps - Make	- John Bro	- John Brown Lamp Company (All Models)				
Tire Carrier - Make	- Hudson	(All Models)				

## 1927 Hudson Super-Six Standard Equipment Car Serial No. 750,001 to -----

Ser. 945 Sheet #9

# Hudson Super-Six Body Details Car Serial No. 750,001 to -----(Rev. March 1927)

	Phaeton	Coach	Brougham	Std 5-Pass. Sedan	Custom 5-Pass. Sedan	7-Pass. Sedan
Model -	1927					
Wheelbase	- 127-3/8"	(All Models)				
Weight		3505	3660	3620	3755	3870
No. of Doors	4	2	4	4	4	4
No. of Passengers	7	5	4	5	5	7
Seat Arrangement	Std	Folding Type	Std.	Std.	Std.	Std.
Gear Ratio	<b>-</b> 4 <b>-</b> 5/11 (A	All Models)				
Make of Body	Biddle & Smart	Briggs	Biddle & Smart	Briggs	Biddle & Smart	Biddle & Smart
Frame Work Material	Wood	Steel	Wood	Steel	Wood	Wood
Body Panel Material	Alum.	Steel	Alum.	Steel	Alum.	Alum.
Wheels - Type	- Wood (A	All Models)				
Tire Size	- 31 x 6 (A	All Models)				
Tire type - Front	- 4 ply (Al	l Models)				
Tire type - Rear	4 ply	4 ply	4 ply	4 ply	6 ply	6 ply
Smoking Set	No	No	Yes	No	Yes	Yes

Ser: 945 Sheet #10 1927 Hudson Super-Six Car Number 750,000 up

> Electrical Data And Circuit Diagrams Part II

## 1927 HUDSON SUPER-SIX AUTO-LITE GENERATING, STARTING AND LIGHTING SYSTEM AUTO-LITE IGNITION

- **BATTERY: Prest-O-Lite, Type 6-15-JFK**, 6 volt. Starting capacity is 120 amperes for 20 minutes. Lighting capacity is 5 amperes for 20 hours. The negative terminal is grounded.
- IGNITION: Coil Model CE-4001. Distributor Model
- **IGA4011**. Breaker contacts are set to separate when new at .020-.024 inch; after 800 to 1000 miles operating contacts should be checked and set, if necessary, at .018-. 020 inch. Resurface contacts with a fine, flat jeweler's file or on a medium hard oilstone.
- **Oiling:** Put 6 or 8 drops of light engine oil in the oiler on the side of the distributor housing every two weeks or each 500 miles if the car is driven more than 500 miles in two weeks. Put one drop of oil in the breaker arm pivot pin every week or each 250 miles. Place a small bit of vaseline on the face of the breaker cam under the fiber bumper every 5000 miles.
- **Timing**: Breaker contacts begin to separate when piston No. 1 on compression stroke reaches a position when the flywheel marking "A" is opposite the mark on the flywheel case. The manual advance lever must be in the fully advanced position.
- Firing Order: The firing order is 1-5-3-6-2-4.
- **Spark Plugs**: Spark plugs are Metric standard. Gaps are .025 inch.
- STARTER: Model MUA4001 (R.H. Drive), Model MUA4002 (L.H. Drive). Starter is connected to the engine through a sliding gear shift built in the starting switch. Pressing down on the starting pedal meshes the gears and closes the starting switch. When the pedal is released a spring reverses these operations. Starter brush tension should be 1<sup>3</sup>/<sub>4</sub>-2<sup>1</sup>/<sub>4</sub> pounds each. Starter cranks the engine at 110 R.P.M. taking 250 amperes at 5.5 volts.

Star	ter	Dat	ta
Model	M	J <b>A-</b> 4	1001

Torque	R.P.M.	Volts	Amps
0 lb. ft	4200	6	50
2 "	1500	5.3	130
4 "	1000	5.0	200
6 "	600	4.6	275
8 "	450	4.2	340
12.7 "	Lock	3.6	480
	Model MU	A-4002	
Torque	R.P.M.	Volts	Amps
0 lb. ft	4200	6	50
2 "	1500	5.3	130
4"	1000	5.0	200
6"	600	4.6	275
8"	450	4.2	340
22"	Lock	3.5	500
~			

**Oiling:** -Starter has oilless graphite-bronze bearings. They require no attention.

**GENERATOR:** - Model GAB4001. The direction of rotation is counter-clockwise, looking at the commutator end. Generator current regulation is by the third brush system. To adjust charging rate, remove commutator cover band and shift the third brush mounting plate by tapping on the mounting lug with a screwdriver. Shift the third brush in counter-clockwise direction to increase the charging rate and in the opposite direction to decrease the charging rate. The mounting plate is held in any desired position by the friction between the mounting lug and the generator end plate. Maximum charging rate of 17.5 amperes is reached at 1300 R.P.M. of the generator.

#### **Generator Data** Cold Test (72\*F) Hot Test (206° F)

Amps	Volts	R.P.M.	Amps	Volts	R.P.M.
4	6.8	630	4	6.8	750
10	7.4	780	10	7.6	1000
14	7.8	950	13	8.0	1400
17	8.0	1300	11	7.8	2000
13	7.8	1950			

Motoring freely at 355-390 R.P.M. generator draws 4.7-5.2 amperes at 6 volts. Shunt field current is 6.1-6.8 amperes at 6 volts. Tested separately each coil draws 24.4-27.2 amperes at 6 volts. Generator brush tension should be 1.0-1.5 pounds. Generator GAB-4008 has a  $7\frac{1}{2}$  ampere field fuse mounted on top of generator just. forward of commutator end head. It also carries a circuit breaker mounted on top. of the generator just forward of the field fuse. (Further data on relay is given under RELAY.)

- **Oiling:** Put 4 or 5 drops of light engine oil in each of the generator bearing oilers every two weeks or each 500 miles if the car is driven more than 500 miles in two weeks.
- RELAY: On generator GAB-4001 no relay is used. The generator is connected to the battery through the ignition switch. With engine stopped and ignition switch on battery discharges through generator windings. On generator GAB-4008 relay model CB-4014 is used. Relay closes at 545-620 generator R.P.M. at 7.9 volts. Charging current at closing of contacts not over 5 amperes. Contacts separate .025-.035 inch. Air gap is .010-.030 inch with points closed.
- LIGHTING: Clum Switch Model XA-314, superseded by XA-319. Head and stop lamps are each 6-8 volt, 21 cp. S.C. Dash and tail lamps are connected in series. They are each 3-4 volt, 2 cp. D.C. and S.C.

FUSES: - Lighting fuse mounted on switch is 20 amperes.

1927 (Early) Hudson NOTE: This wiring used until about March 1, 1927



## 1927 (Late) HUDSON SUPER-SIX AUTO-LITE GENERATING, STARTING AND LIGHTING SYSTEM AUTO-LITE IGNITION

- **BATTERY: Prest-O-Lite, Type 6-15-JFK**, 6 volt. Starting capacity is 120 amperes for 20 minutes. Lighting capacity is 5 amperes for 20 hours. The negative terminal is grounded.
- **IGNITION: Coil Model CE-4001. Distributor Model** IGA-4023 and IGA-4024. Breaker contacts separate .020-.024 inch when new. After 1000 miles operation contact gap should be set at .018-.020 inch. Resurface contacts whenever necessary a fine flat contact file or on a medium hard oilstone. Distributor is semi-automatic. Manual advance is 25° (engine). 400 Automatic advance begins at R.P.M. (engine). Maximum automatic advance is 50° (engine) at 3200 R.P.M. Breaker arm spring tension is 18-20 ounces. Distributor is fitted with an Electro-lock. When

distributor is removed for servicing, the Electro-lock must be removed with the distributor.

- **Oiling:** Put 6 or 8 drops of light engine oil in the oiler on the side of the distributor housing every two weeks or each 500 miles if the car is driven more than 500 miles in two weeks. Put one drop of oil in the breaker arm pivot every week or each 250 miles. Place a small bit of vaseline on the face of the breaker cam under the fiber bumper every 5000 miles.
- **Timing:** Breaker contacts begin to separate when the piston entering power stroke reaches a position 1<sup>1</sup>/<sub>4</sub> inches (on the flywheel) before top dead center with the spark control lever in the fully advanced position. To set timing, crank engine until piston No. 1 reaches this position. The flywheel mark will then be opposite the indicator visible through crankcase opening.

Firing Order: - The firing order is 1-5-3-6-2-4.

- Spark Plugs: Spark plugs are Metric standard. Gaps are .025 inch.
- **STARTER:** Model MUA-4001 (R.H. Drive). Model MUA-4002 (L.H. Drive). Starter is connected to the engine through a sliding gear shift built in the starting switch. Pressing down on the starting pedal meshes the gears and closes the starting switch. When the pedal is released a spring reverses these operations. Starter brush tension should be 1<sup>3</sup>/<sub>4</sub>-2<sup>1</sup>/<sub>4</sub> pounds each. Starter cranks the engine at 110 R.P.M. taking 250 amperes at 5.5 volts.

#### Starter Data Model MUA-4001

Torque	R.P.M.	Volts	Amps
0 lb. ft	4200	6	50
2 "	1500	5.3	130
4 "	1000	5.0	200
6 "	600	4.6	275
8 "	450	4.2	340
12.7 "	Lock	3.6	480

**Oiling**: - Starter has oilless graphite-bronze bearings. They. require no attention.

Starter Data Model MUA-4002

Torque	R.P.M.	Volts	Amps
0 lb. ft.	4200	6	50
2 "	1500	5.3	130
4 ''	1000	5.0	200
6"	600	4.6	275
8 "	450	4.2	340
22 "	Lock	3.5	500

**GENERATOR:** - Model GAB-4008. The direction of rotation is counter-clockwise, looking at the commutator end. Generator current regulation is by the third brush system. To adjust charging rate, remove commutator cover band and shift the third brush mounting plate by tapping on the mounting lug with a screwdriver. Shift the third brush in a counter-clockwise direction to increase the charging rate. The mounting plate is held in any desired position by the friction between the mounting lug and the generator endplate. Maximum charging rate of 17.5 amperes 13 reached at 1300 R.P.M. of the generator.

#### **Generator Data**

Cold Test (72° F)			Hot Test (206° F)		
Amps	Volts	R.P.M.	Amps	Volts	R.P.M.
4	6.8	630	4	6.8	750
10	7.4	780	10	7.6	1000
14	7.8	950	13	8.0	1400
17	8.0	1300	11	7.8	2000
13	7.8	1950			

Motoring freely at 355-390 R.P.M. generator draws 4.7-5.2 amperes at 6 volts. Shunt field current is 6.1-6.8 amperes at 6 volts. Tested separately each coil draws 24.4-27.2 amperes at 6 volts. Generator brush tension should be 1.0-1.5 pounds.

- **Oiling:** Put 4 or 5 drops of light engine oil in each of the generator bearing oilers every two weeks or each 500 miles if the car is driven more than 500 miles in two weeks.
- **RELAY: Model CB4014.** Relay is mounted on the generator. Relay contacts close at 545-625 R.P.M. when the generator voltage reaches 7-7.5 volts and open with a discharge current of 0-2.5 amperes. Charging current must not exceed 5 amperes at closing of contacts. Contacts separate .025-035 inch. Air gap is .010-.030 inch with contacts closed.
- LIGHTING: Clum Switch Model 10643. Auto-Lite No. XA-319. Head lamps are 6-8 volt, 21 cp. double filament using second 21 cp. instead of dimming. Stop lamp is 6-8 volt, 21 cp. S.C. Side, dash and tail lamps are each 6-8 volt, 3 cp. S.C.
- **FUSES:** Generator field fuse is 7.5 amperes. Lighting fuse on switch is 20 amperes.

(Continued from preceding page)

- **Oiling:** Put 4 or 5 drops of light engine oil in each of the generator bearing oilers every two weeks or each 500 miles if the car is driven more than 500 miles in two weeks.
- **RELAY: Model CB4014.** Relay is mounted on the generator. Relay contacts close at 545-625 R.P.M. when the generator voltage reaches 7-7.5 volts and open with a discharge current of 0-2.5 amperes. Charging current must not exceed 5 amperes at closing of contacts. Contacts separate .025-035 inch. Air gap is .010-.030 inch with contacts closed.
- LIGHTING: Clum Switch Model 10643. Auto-Lite No. XA-319. Head lamps are 6-8 volt, 21 cp. double filament using second 21 cp. instead of dimming. Stop lamp is 6-8 volt, 21 cp. S.C. Side, dash and tail lamps are each 6-8 volt, 3 cp. S.C.

FUSES: - Generator field fuse is 7.5 amperes. Lighting fuse on switch is 20 amperes.

