

# STUDEBAKER Eight 1955

COMMANDER & PRESIDENT



## A. E. A. TUNE-UP SYSTEM



# Standards of Adjustment

## Automotive Electric Association

ISSUED JUNE 1955

FORM NO. SB-69

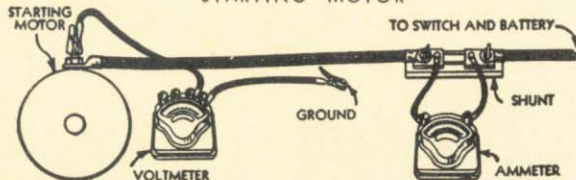
### BATTERY AND CABLES

WILLARD Type HDW-1-100 Capacity - 100 Amp. Hour  
(20 hr. rate)  
Positive terminal grounded

### CABLES - PACKARD - (President)

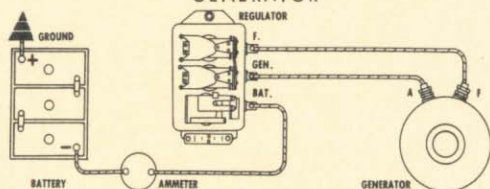
Battery to Ground Cable - Length 14"; Part No. 5L-14 or 5U-14.  
Battery to Switch Cable - Length 12"; Part No. 1L-12 or 1U-12.  
(Commander)  
Battery to Ground Cable - Length - 23"; Part No. 1L-23 or 1U-23.  
Battery to Switch Cable - Length 19"; Part No. 1L-19 or 1U-19.

### STARTING MOTOR



DELCO-REMY No. 1107115 (Standard Transmission)  
No. 1107116 (Automatic Transmission)  
Bendix Drive - DELCO-REMY No. 1922266; BENDIX No. A-3281  
FREE RUNNING SPEED - 5500 R.P.M. 70 Amps. 5.65 Volts  
LOCK TORQUE (Stalled) - 11 ft. lbs. 550 Amps. 3.25 Volts

### GENERATOR



DELCO-REMY No. 1102778  
Brush Spring Tension - 28 oz.  
Cold Output:  
45 Amps. 8.0 Volts at approximately 2450 R.P.M. of Generator  
Rotation - Clockwise (viewing drive end)

### GENERATOR REGULATOR

DELCO-REMY No. 1118950

	Cut-Out Relay	Current Regulator	Voltage Regulator
Air Gap	.020"	.075"	.075"
Point Opening	.020"		
Adjusting Specs	5.9-6.7 Volts*	42-47 Amps.*	6.9-7.4 Volts*

\* At 125° F. regulator ambient temperature.

### COMPRESSION

VALVE CLEARANCE - Engine Cold - Intake - .025" - .027"  
Exhaust - .025" - .027"  
Engine Hot - Intake - .023" - .025"  
Exhaust - .023" - .025"

VALVE TIMING - Inlet valves open 19° before top dead center (Commander),  
open 11° before top dead center (President).  
TAPPET LASH for timing: .030" (Cold)

### SPARK PLUGS

CHAMPION Type H-11 Gap .035" Size 14mm.  
Use Round Wire Gauge

### IGNITION COIL

DELCO-REMY No. 1115392 Servicing Coil No. 1115380  
Mounting Bracket No. 1909326

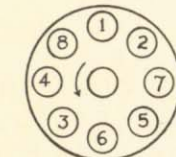
### HIGH TENSION CABLES

Ignition Cable Set - PACKARD No. 448-F

### DISTRIBUTOR

DELCO-REMY No. 1110839

Firing Order - 1-8-4-3-6-5-7-2  
Breaker Contact Gap  
.013" at 28° - 34° Cam Angle  
Breaker Contact Set Part No. 1918148  
Breaker Arm Spring Tension - 19 - 23 oz.  
Condenser - Part No. 1869704  
Capacity - .18 - .23 Mfd.s.  
Automatic Advance - Start .5° - 2.5° at  
350 R.P.M.; Intermediate 2° - 4° at  
400 R.P.M.; Maximum 15° - 17° at 1450 R.P.M.



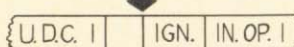
(Distributor degrees at distributor R.P.M. Tolerance 2° less)

Vacuum Control - No. 1116058 4" - 6" hg. to start plunger travel;  
7° - 9° distributor advance at 10" - 11.5" hg.

### IGNITION TIMING

#### USE TIMING LIGHT -

Breaker points to open 8° before  
top dead center (Commander);  
4° before top dead center  
(President). Timing mark on  
vibration damper.



### FUEL PUMP

AC Type 9647 Series CC  
Capacity - 1 pint or over in 45 seconds  
Pressure - 4 lbs. minimum; 5 lbs. maximum

### CARBURETOR

STROMBERG - WW 380334, 380401 (For Commander with Auto. Trans.)  
Fuel Level - 5/8" below top surface of float chamber (without gasket)  
at 3-1/2 to 5 lbs. pressure (380334); at 4 lbs. pressure (380401).  
Float Level - 3/16" from top of main body to top of float without gasket,  
as measured at center of float.  
Fixed Jets - Main Metering Jet (380334) Part No. 386272 .050"  
(380401) Part No. 386272 .048"  
Power By-Pass Jet Part No. P-24674 #60  
Fast Idle Setting - With button of slow idle adjusting screw resting on high  
step of fast idle cam and light closing pressure applied to choke valve,  
the choke valve should be open sufficiently to insert .135" - .105" drill  
gauge between choke valve and wall of air horn.  
Wide Open Kick Setting - Apply light closing pressure to choke valve and  
then open throttle to wide open position with throttle lever stop resting  
against throttle body stop. In this position the choke valve opening  
should be sufficient to insert .265" - .203" drill gauge between choke  
valve and wall of air horn.  
Automatic Choke Setting - Set "A" mark on thermostat cover to line up  
with raised projection on housing.

CARTER - 22195, SA, 23305 (Standard Trans. or Overdrive)  
22145, SA (President with Automatic Transmission)  
Float Level - Vertical distance between top of float and machined  
surface of casting must be 3/16" for both primary and secondary floats.  
Fixed Jets - Metering Rod, Standard  
(22195, SA, 22145, SA) Part No. 75-1141  
(23305) Part No. 75-1154  
Primary Metering Rod Jet Part No. 120-159  
Secondary Metering Jet Part No. 120-196

### CARBURETOR - Continued

Pump Adjustment - Install pump connector link in outer hole of pump arm  
with ends extending outward toward countershaft arm. Back out throttle  
lever set screw until throttle valves seat in bores of carburetor. Hold  
straight edge across top of dust cover boss at pump arm. Flat on top of  
pump arm should be parallel to straight edge.  
Metering Rod Adjustment - Back out throttle lever set screw to allow throttle  
valves to seat in bores of carburetor and loosen metering rod arm clamp  
screw. With metering rods in place, press down on vacuumer link until  
metering rods bottom in carburetor body casting. Holding rods in down-  
ward position and throttle valves seated revolve metering rod arm until  
finger on arm contacts lip of vacuumer link.  
Fast Idle Adjustment - Loosen choke lever clamp screw on choke shaft.  
Insert .020" feeler gauge between lip of fast idle cam and boss of linkage  
casting. Hold choke valve tightly closed and take slack out of linkage  
by pressing choke lever toward closed position. Hold in place and  
tighten clamp screw. With choke valve tightly closed, tighten fast  
idle adjusting screw until there is .024" opening between throttle valve  
and bore of carburetor, side opposite idle ports.  
Unloader Adjustment - With throttle wide open there should be 1/8"  
clearance between lower edge of choke valve and inner wall of air horn.  
Idle Engine Speed - 1/2 to 1-1/2 turns open. Do not idle engine below  
550 R.P.M.

### COOLING SYSTEM

Capacity - 17-1/4 Quarts without heater (U.S. Measure)  
14.4 Quarts without heater (Imperial Measure)  
Thermostat - In water outlet. Opens at 157° - 162° F.

### WINDSHIELD WIPER

Windshield Wiper - TRICO -  
Blade (Both sides) RB-11  
Wiper Arm (Both sides) AL-150  
Linkage (Both sides) H-87820-1

### ADDITIONAL SPECIFICATIONS

Gauges - STEWART-WARNER  
Temperature Gauge - Dash Unit No. 442427  
Motor Unit No. 362-K  
Oil Pressure Gauge - Dash Unit No. 444469  
Gasoline Gauge - Dash Unit No. 441159  
Tank Unit No. 383-N or 383-B  
Ammeter - No. 440274  
Speedometer - STEWART-WARNER No. 565-CV (Commander)  
No. 565-CX (President)  
Crankcase Capacity - 6 Quarts (U.S. Measure), 5 Quarts (Imperial Measure)  
Recommended Tire Pressure -  
Cold - 26 lbs. front; 22 lbs. rear  
Station Wagon - 26 lbs. front; 24 lbs. rear  
Ignition Lock - HURD  
Key Series HH000 - HH999  
Key Blank No. 68-165  
Ignition Lock No. 68-226  
Serial Number - On left front door hinge post.  
Commander - 8380601 and up (South Bend)  
8841201 and up (Los Angeles)  
8957601 and up (Canada)  
President - 7150001 and up (South Bend)  
7805001 and up (Los Angeles)  
7900001 and up (Canada)  
Engine Number - On upper left front of cylinder block.  
Commander - V-312701 and up (South Bend)  
VL-101 and up (Los Angeles)  
VC-5701 and up (Canada)  
President - P-101 and up (South Bend)  
PL-101 and up (Los Angeles)  
PC-101 and up (Canada)