

A.E.A.

Tune-Up System Chart

1937 Hudson Eight

Models 74, 75, 76, 77




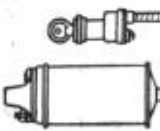
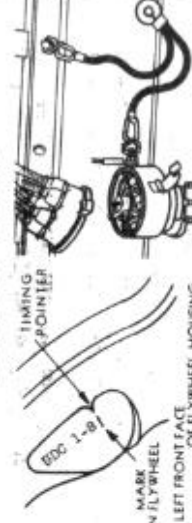
**HUDSON Eight 1937**  
Model 74, 75, 76, 77  
Serial No. (see reverse side) \*

**A. E. A.**  
TUNE-UP SYSTEM

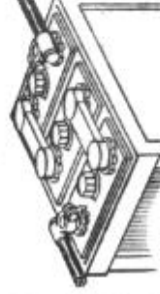
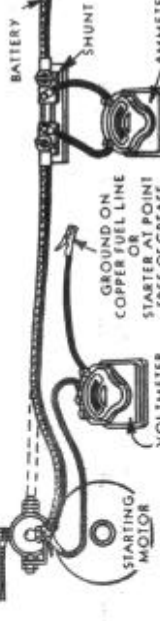
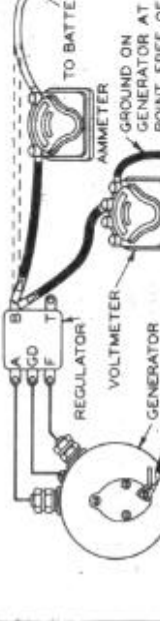
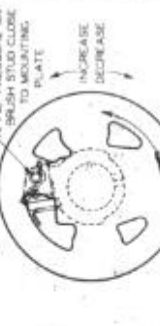
**Standards of Adjustment**  
Automotive Electric Association

Issued September 1937  
Form No. HU-18


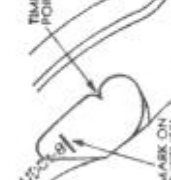
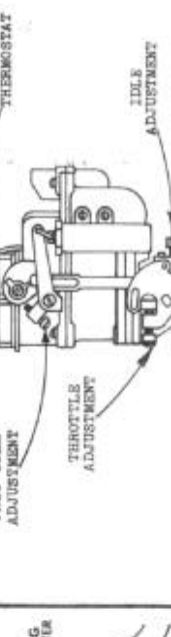
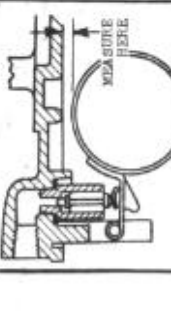

**IGNITION**

<p><b>SPARK PLUGS</b></p>  <p>USE FEELER GAUGE</p>	<p><b>DISTRIBUTOR</b></p> 	<p><b>Breaker-Arm Spring</b></p> 	<p><b>COIL</b></p> 	<p><b>IGNITION TIMING</b></p> 
<p>Size 14mm. Gap .025" Original Equipment Champion Type J-8 For Cooler or Hotter Type Consult Champion Operating Range Chart *</p>	<p>Auto-Lite No. IGP-4008A Firing Order 1-6-2-5 8-3-7-4</p>	<p>Breaker Contact Gap - .017" Cam Angle - 27.5° Condenser - Part No. IG-2871 Capacity -.25 Mfd. Rotation - Clockwise (viewed from top of distributor) Adjustment - Loosen hold down arm clamp screw. Automatic Advance - Full Automatic - 17.5° at 1700 R.P.M. (Maximum advance in distributor degrees at distributor R.P.M.)</p>	<p>Auto-Lite No. CE-4625 Servicing Coil No. CE-3224S Mounting Bracket No. IG-1796S</p>	<p>Use Timing Lamp - Breaker Contacts to open for No. 1 cylinder at upper dead center for standard fuel. 3/4" maximum ahead of upper dead center for Ethyl Fuel.</p>

**STARTING & LIGHTING**

<p><b>BATTERY</b></p> 	<p><b>STARTING MOTOR</b></p> 	<p><b>GENERATOR</b></p> 	<p><b>Third Brush Adjustment</b></p> 
<p>NATIONAL - Type HT-19 Capacity - 108 Amp. Hour (20 hr. rate) Location - On left hand side at front of engine compartment. Ground: Positive terminal grounded.</p>	<p>AUTO-LITE No. MAB-4075 Drive - Bendix. Part No. EBA-5 Free Running Speed - (without Bendix) 4200 Min. R.P.M. 55 Max. Amps. 5.5 Volts Lock Torque (Stalled) (without switch) 22.5 Ft. Lbs. 775 Amps. 4.0 Volts Control - Solenoid Starting Switch No. SS-4001</p>	<p>AUTO-LITE No. GCJ-4803A Rotation - Clockwise (viewing drive end) Regulation - Third Brush and Vibrating Voltage Regulator Maximum Output Safe Setting: Cold - 24 to 26 Amps. 6.0 Volts Regulator No. VRD-4003A, VRD-4003B Cut-Out Relay - (Combined with regulator) B Brush Spring Tension - 53 oz. (Maximum)</p>	<p>APPROXIMATE POSITION OF THIRD BRUSH TO MOUNTING PLATE INCREASE DECREASE COMMUTATOR END</p>

**VALVES**

<p><b>CLEARANCE</b></p>  <p>USE NEW FEELER STOCK FOR EACH JOB</p>	<p><b>TIMING</b></p> 	<p><b>CARBURETION</b></p> 	<p><b>FUEL LEVEL</b></p> 	<p><b>COOLING SYSTEM</b></p> 
<p>Engine Hot Intake - .006" Exhaust - .008" With engine oil and coolant at normal operating temperatures *</p>	<p>Intake Valves Open at 10° 40' before top dead center. Tappet Lash for timing: .010" Hot.</p>	<p>CARTER - Model 344S, 377S 4* TYPE - Dual Downdraft Idle Adjustment - 1/4 to 3/4 turns open. To idle at 6 M.P.H. 3* To make richer, turn screw OUT. Fixed Jets - Metering Rod - Standard (Part No. 75-192) Metering Rod - 1 size lean (Part No. 75-198) Seasonal Adjustment - Set to longest stroke for cold weather driving, center hole for moderate weather, short stroke for hot weather.</p>	<p>Float Level - 15/64" below edge of casting with needle seated. Remove cork gasket.</p>	<p>Capacity - 20 Qts. (U.S. Meas.) Radiator Flow - 25.4 Gals. per Min. (U.S.) Thermostat - In cyl. head outlet. 5* Temperature Gauge - King-Seeley - Dash Unit No. 6190. 9* Motor Unit No. 5700. Crankcase - Capacity 7 Qts. (refill U.S.) Fuel Feed - Mechanical Pump AC (Type AK) No. 1528289 6* Air Cleaner - AC Oil-Wetted (with silencer) No. 1528150. 7* Gasoline Gauge - King-Seeley Dash Unit No. 6190 10* Tank Unit No. 5835 Speedometer - Stewart-Harner 11* Vacuum-Operated Devices: Windshield Wiper - Trico Service Motor (closed) No. 58-25</p>



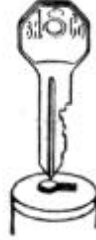
# ADDITIONAL DATA



**This information applies to the items of equipment on reverse side, which are marked as follows:**

- \* Consult A.E.A. SERVICE MANUAL for more complete information.
- \*\* **Serial Number** - On plate on right hand front door hinge pillar. (122" wheelbase) 741C1 and up Detroit, 740101 and up Canada. (122" wheelbase) 76101 and up Detroit, 78101 and up Canada. (122" wheelbase) 78101 and up Detroit, 78101 and up Canada. (125" wheelbase) 77101 and up Detroit, 77101 and up Canada.
- Engine Number** - Stamped on top of cylinder block left hand side. No. 18000 and up.
- 3 \* Carburetor Fast Idle Adjustment** - Hold choker valve tightly closed and adjust fast idle arm screw to give .015" opening between edge of throttle valve and bore of carburetor side opposite port.
- 4 \* Carburetor** - Carter Model 377S used after car serial No. 743172 (Model 74). After car serial No. 761997 (Model 75). After car serial No. 786833 (Model 76). After car serial No. 772376 (Model 77).
- 5 \* Thermostat** - Opens at 150° F.
- 6 \* Fuel Pump** - Using AC Fuel Pump Analyzer No. 1521551. CAPACITY - 1 pint or over in 45 seconds. PRESSURE - 4-1/2 Lbs. Maximum.
- 7 \* Air Cleaner** - Cars without Electric Gear Shift, AC No. 1529161.
- 8 \* Voltage Regulator** - Before test checks: Circuit breaker air gap between core and armature with points open .034" to .036"; contact point gap .015" mid-Voltage regulator armature air gap with points just breaking .060" to .062"; point gap with armature against stop pin .010" to .020". Test meter connections: Disconnect the wire from the "B" terminal on the regulator and connect test ammeter in series between the terminal and the wire removed from the terminal. Connect the test voltmeter across the regulator "B" and "GP" terminals or if there is no "GP" terminal to the regulator base. Before test: Run the engine before taking any test readings at a speed equivalent to 30 M.P.H. for several minutes until the voltage remains constant and the charging rate has dropped back from its peak. Have regulator cover on the unit while balancing voltage and taking test readings. Test figures: Circuit breaker closes at 6.4 to 7.0 volts; opens at .5 to 3.0 amperes discharge. Voltage regulator operates at 7.7 to 8.2 volts.
- 9 \* Temperature Gauge** - No. 6196 used on first production has black dial. No. 6570 used on later production has brown dial.
- 10 \* Gasoline Gauge** - No. 6190 used on first production has black dial. No. 6570 used on later production has brown dial.
- 11 \* Speedometer** - Stewart-Warner No. 629-AP Early 1937 Speedometer Inner Core with Over-All Length No. 64207 - 61-3/4" Early No. 64207 - 55-3/4" Late

## IGNITION LOCK



<b>Briggs &amp; Stratton</b>	
KEY SERIES	HE01 - H1100
KEY BLANK PART NO.	42755
LOCK PART NO.	50184

## RECOMMENDED SERVICE TOOLS

- Timing Lamp
- Vacuum Gauge
- Compression Gauge
- Low Range Voltmeter
- Carter Carburetor Tools
- AC Fuel Pump Analyzer No. 1521551
- Feeler Stock

**NOTE:** The SERIAL NUMBERS on this chart apply to cars manufactured in the United States unless otherwise indicated.