1940 Hudson

Hudson Six - Model 40
Hudson Six - Models 41, 43
Hudson Eight - Models 44, 47
ADDITIONAL DATA

This information applies to the items on reverse side, marked as follows:

* Consult A.E.A. SERVICE MANUAL for more complete information.
* Serial Number — On plate or on right hand front door hinge pillar. 40,101 and up (1.65).
* Wheelbase — 118".
* Engine Number — Stamped on top of cylinder block left hand side between No. 1 and No. 2 exhaust manifold flanges. Same as Serial Number.

3. Voltage Regulator — Test meter connections: Disconnect the wire from the "F" terminal on the regulator and connect the test meter across the terminals of the regulator where the wire is removed from the terminal. Connect the test voltmeter from the regulator "F" 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: (VDR-4108) Circuit breaker closes at 6.4 to 7.0 volts; opens at 1.5 to 4.5 amperes discharge. Voltage regulator operates at 7.85 to 7.88 volts at 70°F.

Test figures: (VDR-4106) Circuit breaker closes at 6.4 to 6.6 volts; opens at 1.0 to 4.0 amperes discharge. Voltage regulator operates at 7.88 to 7.89 volts at 70°F.

4. Fast Idle Adjustment — With fast idle can held in normal idle position, tighten throttle lever adjusting screw until it just seats against cam. Hold throttle lever closed and pull cam back until first (or lower) step on cam is against (not on) net screw.

5. Accelerating Pump — Set to longest stroke for cold weather, center holes for moderate weather, short stroke for hot weather.

Pump Adjustment — With throttle valve seated and connector link in place (short stroke: hole nearest counterflange), pump plunger should travel 3/32" from closed to wide open position. Adjustment should be made by bending throttle connector rod at lower angle. Pump travel can be measured by using universal pump stroke gauge T100-1176 by placing base of gauge on closed position of bowl cover so that projection portion of pump gauge rests on top surface of connector link at pump shaft. Hold gauge vertical. The difference between the number shown by index mark on gauge at wide open and closed positions, should be 12.

6. Metering Rod Adjustment — Correct setting of metering rod is important and must be made after pump adjustment. Insert gauge (tool No. T100-106) in place of metering rod, seating tapered end in metering rod jet. Hold gauge vertical to insure seating. With throttle valve seated, press down lightly on piston link directly over piston. There should be less than .005" clearance between metering rod pin and shoulder in notch of gauge. Gauge must not drag on pin. Adjustment can be made by bending lip on piston link so that it contacts pump arm. (Use tool T100-106.) Remove gauge and install metering rod and disk. Connect metering rod and spring.


8. Vacuum-Operated Devices — Windshield Wiper — Trico Distributor Control — Auto-Lite

Windshield Wiper — Trico — Service Motor SK-55 Linkage 78666-C L.H. Linkage 78666-C R.H.

Recommended Tire Pressure — Cold — 36 lbs. front — 30 lbs. rear

Battery Cables and Wiring — Battery to Ground Cable — Length 7"; Gauge No. 2

Battery to Switch Cable — Length 36"; Gauge No. 0.

NOTE: The SYMBOL "hg." used on this Chart designates "Inches Vacuum" (mercury). Proper tools and equipment are essential in order to perform accurate work and restore original performance.
ADDITIONAL DATA

This information applies to the items on reverse side, marked as follows:

* Consult A.E.A. SERVICE MANUAL for more complete information.
** Serial Number - On plate on right hand front door hinge pillar.
    41, 41A and up (Model 41) (U.S.)
    42, 42A and up (Model 42) (U.S.)

Wheelbase - 118" (Model 41) 126" (Model 42)
Engine Number - Stamped on top of cylinder block left hand side between No. 1 and No. 2 exhaust manifold flanges. Same as Serial Number.

3 * Voltage Regulator - Test meter connections: Disconnect the wire from the "b" terminal on the regulator and connect the test meter in series between the terminal and the wire removed from the terminal. Connect the test voltmeter from the regulator "g" terminal to the regulator case.

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:
- (VRC-4038) Circuit breaker closes at 6.4 to 7.0 volts; open at 4.8 to 5.6 amperes discharge. Voltage regulator operates at 7.0 to 7.6 volts at 70°F.
- (VRC-4002A) Circuit breaker closes at 6.4 to 6.9 volts; open at 4.8 to 5.9 amperes discharge. Voltage regulator operates at 7.25 to 7.65 volts at 70°F.

4 * Fast Idle Adjustment - Hold choke valve tightly closed and adjust fast idle arm screw to give 0.06" opening between edge of throttle valve and bore of carburetor side opposite port. Use gauge T109-44.

5 * Accelerating Pump - Set to longest stroke for cold weather driving, short stroke for hot weather.

Pump Adjustment - With pump connector link in long stroke (outer) holes in pump arm, and throttle adjustment screw backed out, pump plunger should travel 1/20" from closed to wide open position. Adjustment can be made by bending throttle connector rod at lower angle. (Use tool T109-74.) Pump travel can be measured by using gauge T109-75. Difference between reading at wide open and seated throttle should be 16. Projecting portion of indicator should be placed on top surface of lower connector link at pump shaft.

6 * Metering Rod Adjustment - Insert one metering rod gauge T109-32 in place of metering rods. Be sure gauge seats in metering rod jet after backing out throttle lever adjusting screw, so that throttle valve seat is installed. Install metering rod pin and pin spring in metering rod arm. Press lightly on vacuum piston line until piston rests in bottom of cylinder. There may be less than 0.006" clearance between metering rod pin and gauge. With throttle valve seated, bend pin on anti-ricochet arm until this clearance is obtained between metering rod gauge and metering rod pin. Remove gauge and metering rod pin, and install metering rods, discs, spring, pin and pinspring, and hook metering rod spring on metering rods.

7 * Climatic Control (Choke) - For average driving and climatic conditions, center index mark on coil housing should be in line with pointer.

8 * Manifold Heat Control - Thermostatically controlled. See that valve operates freely.

9 * Vacuum-Operated Devices - Windshield Wiper - Trico Distributor Control - Auto-Lite

Windshield Wiper - Trico Service Motor SK-50 Linkage 78002A C.L.H. Linkage 78002A R.H.

Recommended Tire Pressure - 28 lbs. front - 30 lbs. rear (cold)

Battery Cables and Wiring - Battery to Ground Cable - Length 7"; Gauge No. 2. Battery to Switch Cable - 36"; Gauge No. 0.

NOTE: The SYMBOL "Hz. used on this Chart designates "Inches Vacuum" (mercury). Proper tools and equipment are essential in order to perform accurate work and restore original performance.
A. E. A.
Tune-Up System

ADDITIONAL DATA

This information applies to the items on reverse side, marked as follows:

* Consult A.E.A. SERVICE MANUAL for more complete information.
** Serial Number - On plate on right hand front door hinge pillar.
   44, 113 and up (Model 44) (U.S.)
   44, 112 and up (Model 47) (U.S.)
   Wheelbase - 118" (Model 44). 120" (Model 47).
   Engine Number - Stamped on top of cylinder block between No. 1 and No. 2 exhaust manifold flanges. Same as Serial Number.

3 Voltage Regulator - Test meter connections: Disconnect the wire from the "B" terminal on the regulator and connect the test arm to the regulator in series between the terminal and the wire removed from the terminal. Connect the test voltmeter from the regulator "B" terminal to the regulator base.
Before test: Run the engine before taking any test readings at a speed equivalent to 36 K.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: (VRF-4006) Circuit breaker closes at 5.4 to 7.0 volts; opens at 6.3 to 7.5 amperes discharge. Voltage regulator operates at 7.5 to 7.65 volts at 70°F.
Test figures: (VRF-4001A) Circuit breaker closes at 5.4 to 8.5 volts; opens at 4.0 to 4.1 amperes (12 V). Voltage regulator operates at 7.25 to 7.85 volts at 70°F.

4 Fast Idle Adjustment - Hold choke valve tightly closed and adjust fast idle arm screw to give .075" opening between edges of throttle valve and bore of carburetor side opposite port. Use gauge 1039-34.

5 Accelerating Pump - Set to longest stroke for cold weather driving, short stroke for hot weather.

Pump Adjustment - With pump connector link in long stroke (outer hole in pump arm) and throttle adjustment screw backed out, pump plungers should travel .025" from closed to wide open position. Adjustment can be made by bending throttle connector rod at lower angle. Use tool TICO-75. Pump travel can be measured by using gauge 1106-1/2. Difference between reading at wide open and seated throttle should be 18. Projecting portion of indicator should be placed on top center of lower portion of connector link at pump shaft.

6 Metering Rod Adjustment - Insert one metering rod gauge 1109-110 in place of metering rods. Be sure gauge seats in metering rod jet after backing out throttle lever adjusting screw. Install metering rod pin and pin spring in metering rod arm. Press lightly on vacuum piston link until piston rests in bottom of cylinder. There may be less than .002" clearance between metering rod pin and gauge. With throttle valve seated, bend tip on anti-percolator arm until this clearance is obtained between metering rod gauge and metering rod pin. Remove gauge and metering rod pin, and install metering rods, discs, spring, pin and spring, and hook metering rod spring on metering rods.

7 Climatic Control (Choke) - For average driving and climatic conditions, center index mark on coil housing should be in line with pointer.

8 Vacuum Operated Devices - Windshield Wiper - Trico
Windsheild Wiper - Trico - Service Motor SK-68
Linkage 78826 - C L.H.
Linkage 78825 - C R.H.

Recommended Tire Pressure - Cold - 25 lbs. front - 30 lbs. rear
Battery Cables and Wiring - Battery to Ground Cable - Length 77"; Gauge No. 2.
Battery to Switch Cable - Length 52"; Gauge No. 0.

NOTE: Proper tools and equipment are essential in order to perform accurate work and restore original performance.
1941 Hudson

Hudson Six - Series 10, 18
Hudson Six - Series 11, 12
Hudson Eight - Series 14, 15, 17
IGNITION LOCK

KEY SERIES
H 100 - H 1100

KEY BLANK PART NO.
48756

LOOK PART NO.
50164

10 - Gasoline Gauge - King-Scoley
Dash Unit No. 63005
Tank Unit No. 7500

Speedometer - Stewart-Warner No. 697-9
Inner Core (Series 10) No. 92696 - 60-13/16" (Standard), 71-13/16" (Overdrive)
Inner Core (Series 16) No. 92900 - 87-13/16"

Windshield Wiper - Trico
Service Motor No. 832-103

Recommended Tire Pressure -
10" x 5.50" - Front and Rear - 32 lbs. cold, 35 lbs. hot
10" x 6.50" - Front - 26 lbs. cold, 29 lbs. hot
Rear - 30 lbs. cold, 33 lbs. hot

Battery Cables and Wiring - Battery to Ground Cable - Length 7"; Gauge No. 1; Battery to Switch Cable - Length 33"; Gauge No. 0.

10 - 11/4" Dual Downdraft
Carter - 5018

Idle Adjustment - 1-1/2 to 1-1/2" turn open. Idle at 7-1/2 to 7-1/2 M.P.H. To make richer, turn screw out.

Fast Idle Adjustment - With choke valve tightly closed and fast idle screw on upper step of fast idle cam. Adjust screw to give 1/4" opening between edge of throttle valve and bore of carburetor side plate opposite.

Fixed Jets - Metering Rod - E 5/8" (Engine with automatic choke) Part No. 57-677
Metering Rod - 1 Hole Lean Part No. 57-694
Metering Rod - 2 Holes Lean Part No. 57-675
Metering Rod Assembly - Part No. 140-648

Metering Rod Adjustment -
(1) Insert one metering rod gauge T 130-113 in place of metering rods. Be sure gauge seats in metering rod jet after backing out throttle lever adjusting screw, so that throttle valve seats.
(2) Insert metering rod pin and pin spring in metering rod arm.
(3) Press lightly on vacuum piston link until piston rests in bottom of cylinder. There may be less than .008" clearance between metering rod pin and gauge.
(4) With throttle valve seated, bend lip on anti-percator arm until this clearance is obtained between metering rod gauge and metering rod pin.
(5) With metering rod pin and pin spring, and install metering rod pin, and install metering rod pin.

Climatic Control Adjustment - For average driving and climatic conditions, center index mark on coil housing should be set one point rear.

NOTE: The SYMBOL "ng" used on this chart designates "inches Vacuum" (mercury) or "gauge." ORIGINAL EQUIPMENT service parts and accurate work to manufacturers' specifications with proper tools and equipment will restore original performance.
ADDITIONAL DATA
This information applies to the items on reverse side, marked as follows:
* Consult A.E.A. SERVICE MANUAL for more complete information.
* Serial Number - On plate on right hand front door hinge pillar.
  11,101 and up (Series 11) [U.S.]
  12,101 and up (Series 12) [U.S.]
  Wheelbase - 121"
  Engine Number - Stamped on top of cylinder block left hand side between No. 1 and No. 2 exhaust manifold flanges. Same as Serial Number.
  Ignition Timing - When Ethyl or premium gasoline, with an octane rating of 80 or higher, is used, or if in high altitudes, a more advanced setting may be used.
  Ignition timing under high altitudes, a slight "ping" should be noted at between 10 to 15 M.P.H. when accelerating with wide open throttle from 8 M.P.H.
  Voltage Regulator - Test meter connections: Disconnect the wire from the "E" terminal on the regulator and connect the test ammeter in series between the terminal and the wire removed from the terminal. Connect the test voltmeter from the regulator "E" terminal to the regulator base.
  Before test: Run the engine before taking any test readings at a speed equivalent to 50 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 figure: Circuit breaker closes at 6.4 to 7.0 volts; opens at 2.0 to 0.0 amperes discharge. Voltage regulator operates at 7.1 to 7.4 volts at 10"H
  Fast Idle Adjustment - With choke valve tightly closed and fast idle screw on upper step of fast idle cam, adjust screw to give .045" opening between edge of throttle valve and bore of carburetor side opposite port.
  Accelerating Pump - Set to longest stroke for cold weather, center hole for moderate weather, short stroke for hot weather.
  Pump Adjustment - With pump connector link in long stroke (outer) hole in pump arm, and throttle adjustment screw backed out, pump plunger should travel 9/32" from close to wide open position. Adjustment can be made by bending throttle connector rod at lower angle. (Use tool T19-75.) Pump travel can be measured by using gauge T100-114. Difference between reading at wide open and seated throttle should be 1/16". Projecting portion of indicator should be placed on top surface of lower portion of connector link at pump shaft.
  Metering Rod Adjustment - (1) Insert one metering rod gauge T100-113 in place of metering rod. Be sure gauge seats in metering rod jet after backing out throttle lever adjusting screw, so that throttle valves seat.
  (2) Install metering rod pin and pin spring in metering rod arm.
  (3) Press lightly on vacuum plunger link until plunger rests in bottom of cylinder. There may be less than .005" clearance between metering rod pin and gauge.
  (4) With throttle valve seated, bend lip on anti-percolator arm until this clearance is obtained (between metering rod gauge and metering rod pin).
  (5) Remove gauge and metering rod pin, and install metering rods, diaphragm, spring, pin and pin spring and hook metering rod spring on metering rods.
  Climatic Control Adjustment - For average driving and climatic conditions, center index mark on coil housing should be set one point lean.
  Thermostatically controlled. See that valve operates freely.
  Recommended Tire Pressure - Front - 26 lbs. cold - 30 lbs. hot
  Rear - 26 lbs. cold - 30 lbs. hot
  Battery Cables and Wiring - Battery to Ground Cable - Length 7'; Gauge No. 1.
  Battery to Switch Cable - Length 3'; Gauge No. 8.

NOTE: The SYMBOL "hg. used on this chart designates "Inches Vacuum" (mercury). Original equipment service parts and accurate work to manufacturers' specifications with proper tools and equipment will restore original performance.
A. E. A.
Tune-Up System

ADDITIONAL DATA

This information applies to the items on reverse side, marked as follows:

- Consult A.E.A. SERVICE MANUAL for more complete information.
- Serial Number — on plate on right hand front door hinge pillar.
  15,101 and up (Series 14) (B.S.).
  16,101 and up (Series 15) (B.S.).
  17,101 and up (Series 17) (B.S.).

- Wheelbase — 120" (Series 14 and 15).
  190" (Series 17).

- Engine Number — stamped on top of cylinder block between No. 1 and No. 2 exhaust manifold flanges. Same as Serial Number.

- Voltage Regulator — test meter connections: Disconnect the wire from the "B" terminal on the regulator and connect the test meter in series between the terminal and the wire removed from the terminal. Connect the test voltmeter from the regulator "B" terminal to the regulator base.
  Before test: Run the engine before taking voltage 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 voltage readings.
  Test procedure: Circuit breaker closes at 6.4 to 7.0 volts; opens at 6.0 to 6.6 amperes discharge. Voltage regulator operates at 7.1 to 7.4 volts at 1100 rpm.

- Fast Idle Adjustment — with choke valve tightly closed and fast idle cam, adjust screw to give .080" opening between edge of throttle valve and bore of carburetor side opposite port.

- Accelerating Pump — set to longest stroke for cold weather driving, center hole for moderate weather, short stroke for hot weather.

- Pump Adjustment — with pump connector link in long stroke (outer) hole in pump arm and throttle adjustment screws backed out, pump arm gauge should travel 3/8" from closed to wide open position. Adjustment can be made by bending throttle connector rod at lower angle. (Use tool TI05-76L.) Pump travel can be measured by using gauge TI06-1188. Difference between reading at wide open and seated throttle should be 18. Projecting portion of indicator should be placed on top surface of lower portion of connector link at pump shaft.

- Metering Rod Adjustment —
  1. Insert one metering rod gauge TI06-153 in place of metering rods. Be sure gauge seats in metering rod jet after backing out throttle lever adjusting screw, as that throttle valve seat.
  2. Install metering rod pin in metering rod arm.
  3. Fresh lightly on vacuum piston link until piston rests in bottom of cylinder. There may be less than .005" clearance between metering rod pin and gauge.
  4. With throttle valve seated, bend up on anti-perforator arm until this clearance is obtained (between metering rod gauge and metering rod pin).
  5. Remove gauge and metering rod pin, and install metering rods, discs, spring, pin and pin spring and hook metering rod spring on metering rod.

- Clamping Control Adjustment — For average driving and climatic conditions, center index mark on coil housing should be set one point lean.

- Manifold Heat Control — Valve operated by thermostatic spring. Make sure valve operates freely.

- Recommended Tire Pressure — Front — 28 lbs. cold — 29 lbs. hot
  Rear — 30 lbs. cold — 32 lbs. hot

- Battery Cables and Wiring — Battery to Ground Cable — Length 7": Gauge No. 1.
  Battery to Switch Cable — Length 36": Gauge No. 0.
1942 Hudson

Hudson Six - Series 20 Traveler & Deluxe
Hudson Six - Series 21 (Super), 22 (Commodore 6)
Hudson Eight - Series 24, 25, 27 (Commodore 8)
ADDITIONAL DATA

This information applies to the items on reverse side, marked as follows:

* Consult A.E.A. SERVICE MANUAL for more complete information.

** Serial Number — On plate on right hand front door hinge pillar.
   80-101 and up (U.S.).

Wheelbase — 116”.

Engine Number — Stamped on tap of cylinder block left hand side between No. 1 and No. 2 exhaust manifold flanges. Base on Serial Number.

3 * Ignition Timing — Use Ethyl or premium gasoline, with an octane rating of 80 or higher, used or in high altitudes a more advanced setting may be used. At proper timing under these conditions, a slight “ping” should be noted at between 10 to 15 M.P.H. when accelerating with wide open throttle from 6 M.P.H. However, timing should never be advanced so that pointer is more than 1 head of the “0” 0.5 mark on flywheel.

4 * Voltage Regulator — Test meter connections; Disconnect the wire from the “F” terminal on the regulator and connect the test meter in series between the terminal and the wire removed from the terminal. Connect the test voltmeter from the regulator “F” terminal to the regulator base. Before test; Run the engine before taking any test readings at a speed equivalent to 80 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 closed at 6.4 to 6.6 volts; opens at 4.0 to 6.0 amperes discharge. Voltage regulator operates at 7.1 to 7.4 volts at 110° F.

5 * Fast Idle Adjustment — With fast idle cam held in normal idle position, turn throttle lever adjusting screw until it just seats against cam. Hold throttle lever closed and pull ram back until first (or lower) step on cam is against (not on) set screw. There should be 8/16” clearance between inside wall of air horn and lower edge of choke valve. (Use Tool 7105-86.) Adjustment can be made by bending at offset portion of fast idle link. (Use Tool 7109-41.)

6 * Accelerating Pump — Set to largest stroke for cold weather, center hole for moderate weather, short stroke for hot weather.

Pump Adjustment — With throttle valve seated and connector link in place (short stroke: hole at center counter shaft), pump plunger should travel 3/16” from closed to wide open position. Pump travel can be measured by using universal pump stroke gauge T105-1175 by placing base of gauge on ridge of portion of bowl lower so that projecting portion of pump gauge rests on top surface of connector link at pump shaft. Hold gauge vertical. The difference between the number shown by index mark on gauge, at wide open and closed positions, should be 1/2.

7 * Metering Rod Adjustment — Correct setting of metering rod is important and must be made after pump adjustment. Insert gauge (Tool No. 7109-105) in place of metering rod, seating tapered and in metering rod seat. Hold gauge vertical to insure seating. With throttle valve seated, press down lightly on piston link directly over piston. There should be 1/16” clearance between metering rod pin and shoulder in notch or gauge. Gauge must not drag on pin. Adjustment can be made by bending lip on piston link so that it contacts pump arm. (Use Tool 7109-105.) Remove gauge and install metering rod and disk. Connect metering rod and spring.


9 * Windshield Wiper — Trico

Service Motor No. 8271-105 (closed)

Wiper Arm (Both Sides) — 70970 — 7-3/4”
Wiper Blade (Both Sides) — P-778 6-3/4”
Service Motor No. 8272-105 (open)

Wiper Arm (Both Sides) — 70970 — 1-1/8”
Wiper Blade (Both Sides) — P-778 6-3/4”

Recommended Tire Pressure —

16” x 6.00” — Front and Rear — 32 lbs. cold, 35 lbs. hot
16” x 6.00” — Front — 28 lbs. cold, 30 lbs. hot
Rear — 30 lbs. cold, 30 lbs. hot

Battery Cables and Wiring — Battery to ground cable — Length 7’; Gauge No. 1.
Battery to switch cable — Length 30”; Gauge No. 0.

NOTE: The SYMBOL “kg. used on this chart designates “Inches Vacuum” (mercury).

Original equipment service parts and accurate work to manufacturers’ specifications with proper tools and equipment will restore original performance.
ADDITIONAL DATA

This information applies to the items on reverse side, marked as follows:

* Consult A.E.A. SERVICE MANUAL for more complete information.
* * Serial Number—On plate on right hand front door hinge pillar.
  22T101 and up (Super) (U.S.),
  22T10 and up (Commodore) (U.S.),
Wheelbase—118".
Engine Number—Stamped on top of cylinder block left hand side between No. 1 and No. 2 exhaust manifold flanges. Same as Serial Number.

3 * Ignition Timing—When Ethyl or premium gasoline, with an octane rating of 80
  or higher is used, or in high altitudes, a more advanced setting may be used.
  At proper timing under these conditions, a slight "ping" should be noted at
  between 10 to 15 M.P.H. when accelerating with wide open throttle from 10
  M.P.H. However, timing should never be advanced so that pointer is more than
  1" ahead of the "UC I-6" mark on flywheel.

4 * Voltage Regulator—Test meter connections: Disconnect the wire from the "F"
  terminal on the regulator and connect the test meter in series between the terminal
  and the wire removed from the terminal. Connect the test voltmeter to the
  regulator "F" 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 6.6 volts; opens at 6.0
  to 6.2 volts at 110°F.

5 * Fast Idle Adjustment—With choke valve tightly closed a fast idle screw
  on upper step of fast idle cam, adjust screw to give .040" opening between
  edge of throttle valve and bore of carburetor side opposite port.

6 * Accelerating Pump—Set to longest stroke for cold weather, center hole for
  moderate weather, short stroke for hot weather.

Pump Adjustment—With pump connector long stroke (outer) hole in pump
arm, and throttle adjustment screw backed out, pump plunger should travel
.008" from closed to wide open position. Adjustment can be made by bending
throttle connector rod at lower angle. (Use tool 7109-76.) Pump travel
may be measured using gauge 7109-115. Difference between reading when wide
open and seated throttle should be 1/8. Projecting portion of indicator should
be placed on top surface of lower portion of connector link at pump shaft.

7 * Metering Rod Adjustment—
  (1) Insert one metering rod gauge 7109-115 in place of metering rods. Be
  sure gauge seats in metering rod jet after backing out throttle lever
  adjusting screw, so that throttle valves seat.
  (2) Install metering rod pin and spring in metering rod arm.
  (3) Press lightly on vacuum piston link until piston rests in bottom of cylin-
  der. There may be less than .005' clearance between metering rod
  pin and gauge.
  (4) With throttle valve seated, bend lip on anti-percolator arm until this
  clearance is obtained (between metering rod gauge and metering rod pin).
  (5) Remove gauge and metering rod pin, and install metering rods, discs,
  spring, pin and spring and hook metering rod spring on metering rods.

8 * Climatic Control (Choke)—For average driving and climatic conditions, set
  one point lead.

9 * Manifold Heat Control—Thermostatically controlled. See that valve operates
  freely.

10 * Windshield Wiper—Trico
  Service Motor No. 5EM-100 (Closed)
  Wiper Arm—(Both Sides) — 79007
  Wiper Blade—(Both Sides) — P-776
  Service Motor No. 5EM-108 (Convertible)
  Wiper Arm—(Both Sides) — 79007
  Wiper Blade—(Both Sides) — P-776

Recommended Tire Pressure—
  Front—30 lbs. cold—35 lbs. hot
  Rear—33 lbs. cold—38 lbs. hot

Battery Cables and Wiring—Battery to Ground Cable — Length 7"; Gauge No. 1.
  Battery to Switch Cable — Length 36"; Gauge No. 0.

NOTE: The SYMBOL "ng. used on this chart designates "Inchoc Vacuum (mercury)."
Original equipment service parts and accurate work to manufacturers' specifications
with proper tools and equipment will restore original performance.
A. E. A.
Tune-Up System

ADDITIONAL DATA

This information applies to the items on reverse side, marked as follows:

* * Consult A.E.A. SERVICE MANUAL for more complete information.
* * Serial Number—On plate on right hand front door hinge pillar:
  24,101 and up (Series 24). (U.S.);
  25,101 and up (Series 25). (U.S.);
  27,101 and up (Series 27). (U.S.).
Wheelbase—121" (Series 24 and 25).
  128" (Series 27).
Engine Number—Stamped on top of cylinder block between No. 1 and No. 2 exhaust manifold flanges, same as Serial Number.

3 * Ignition Timing—When using or premium gasoline, with an octane rating of 90 or higher is used, or in high altitudes, a more advanced setting may be used. At proper timing under these conditions, a slight "ring" should be noted at between 10 to 15 M.P.H. when accelerating with wide open throttle from 0 M.P.H. However, timing should never be advanced so that pointer 1.8 more than 3/4" ahead of "0°" mark on flywheel.

4 * Voltage Regulator—Test meter connections: Disconnect the wire from the "B" terminal on the regulator and connect the test ammeter in series between the terminal and the wire removed from the terminal. Connect the test voltmeter from the regulator "F" terminal to the regulator base.
Before test: Run the engine before taking any test readings at a speed equivalent to 0 M.P.H., for several minutes until the voltage drops and the charging rate has dropped back from its peak. Have regulator cover on the unit while taking voltage and current readings.

Test figures: Circuit breaker closes at 6.4 to 6.6 volts; opens at 4.0 to 6.0 amperes discharge. Voltage regulator operates at 7.1 to 7.4 volts at 110° F.

5 * Fast Idle Adjustment—With choker valve tightly closed and fast idle screw fully open, adjust screw to give 0.028" opening between edge of throttle valve and bore of carburetor side opposite part.

6 * Accelerating Pump—Set to longest stroke for cold weather driving, shorter stroke for warm weather.

Pump Adjustment—with pump connector link in long stroke on pump and throttle adjustment screw backed out, pump plunger should travel 3/8" from closed to wide open position. Adjustment can be made by bending throttle connector rod at lower angle. (Use tool T109-76.) Pump travel can be measured by using gauge T109-147. Difference between reading at wide open and closed throttle should be 0.2. Protruding portion of indicator should be approximately the same or lower on top surface of lower portion of connector link at pump shaft.

7 * Metering Rod Adjustment—

8 * Clutch Pedal Adjustment—

9 * Manifold Heat Control—Valve operated by thermostatic spring. Make sure valve is not sticking.

10 * Windshield Wiper—Tri-Matic

Recommended Tire Pressure—

Front — 26 lbs. cold — 28 lbs. hot
Rear — 30 lbs. cold — 32 lbs. hot

Battery Cables and Wiring—Battery to Ground Cable—Length 50"; Gauge No. 1.
Battery to Switch Cable—Length 30"; Gauge No. 0.

NOTE: Original equipment service parts and accurate work to manufacturers' specifications with proper tools and equipment will restore original performance.
1946 Hudson

Hudson Six - Series 51 (Super); 52 (Commodore)
Hudson Eight - Series 53 (Super); 54 (Commodore)
**ADDITIONAL DATA**

This information applies to the items on reverse side, marked as follows:

- **Consult A.E.A. SERVICe MANUAL** for complete information.

- **Serial Number** — On plate or right hand front door hinge pillar. 4101 and up (U.S.) Series 81; 6101 and up (U.S.) Series 81.

- **Wheelbase** — 101".

- **Engine Number** — Stamped on top of cylinder block left hand side between No. 1 and No. 6 exhaust manifold flange. Same as Serial Number.

- **Ignition Timing** — When ethyl or premium gasoline, with an octane rating of 80 or higher is used, or in high altitudes, a more advanced setting may be necessary. If proper timing under these conditions, a slight "ping" should be noted at 10 to 15 M.P.H. when accelerating with wide open throttle from 0 to 1 M.P.H. However, timing should never be advanced so as to point in less than 1 ahead of the "KICK OFF" mark on flywheel.

- **Voltage Regulator** — Test meter connections: Disconnect the wire from the "B" terminal on the regulator and connect the test meter in series between the terminal and the wire removed from the terminal. Connect the test voltmeter from the regulator to the regulator base.

  Before tests, run the engine before testing any test readings, if at 30 M.P.H. for several minutes until the voltage remains constant and the charging rate has dropped back from its peak. Have the regulator cover on the unit while balancing voltage and keeping test readings.

  Test Figure: Circuit breaker closed at 4.4 to 7.0 volts; open at 4.1 to 4.8 volts. Voltage regulator operates at 7.35 to 7.65 volts at 70° F.

- **Fast Idle Adjustment** — With choke valve tightly closed and fast idle screw on upper step of fast idle cam, adjust screw to give .005" opening between edge of throttle valve and bore of carburetor side opposite port.

- **Accelerating Pump** — Set to longest stroke for cold weather, center hole for moderate weather, short stroke for hot weather.

  **Pump Adjustment** — Run pump connector link long stroke (outer) hole in pump arm and throttle adjustment screw backed out. Pump throttle should travel 90° from closed to wide open position. Adjustment can be made by bending throttle connector arm lower angle. (Use tool T19-702.) Pump travel can be measured by using gauge T100-17/60. Difference between reading at wide open and closed throttle should be 20. Projecting portion of indicator should be placed on top surface of lower portion of connected link at pump shaft.

- **Metering Rod Adjustment** — Insert one metering rod gauge T100-112 in place of metering rods. Use gauge to check in metering rod set after backing out throttle lever adjusting screw, so that throttle valves seat. Install metering rod pin and pin spring in metering rod arm. Press lightly on vacuum piston link until pin is snug against lip of anti-percolator arm. There should be no clearance between metering rod pin and gauge with throttle valve seated. Bend lip on anti-percolator arm until this clearance is obtained between metering rod gauge and metering rod pin.

- **Anti-Percolator Adjustment** — Must be made after pump and metering rod adjustments. Do not disturb these adjustments. Back out throttle lever adjusting screw so that throttle valve seat in bores of carburetor. With throttle valves seated, bend lips on anti-percolator arm so that center of intake valve is flush with top of anti-percolator plug. Since there are two anti-percolators on this carburetor, care must be taken so that there is an even adjustment on both anti-percolator valves.

- **Climatic Control** — For average driving and climatic conditions set to lean.

- **Manifold Heat Control** — Thermostatically controlled. See that valve operates freely.

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**TUNE-UP CHART**

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**NOTE:** The SYMBOL "%" used on this chart designates "inches Vacuum" (mercury). Original equipment service parts and accurate work to manufacturer's specifications with proper tools and equipment will restore original performance.
ADDITIONAL DATA

Here is how to test the items on the reverse side:

**Consult A.E.A. SERVICE MANUAL for more complete information.**

**Serial Number** - On plate on right hand of door hinge pillar.
- Model 101 and up (Series 644-0.8.
- 101 and up (Series 644-0.8.

**Wheelbase** - 121".

**Engine Number** - Stamped on top of cylinder block between No. 1 and No. 2 exhaust manifold flanges. Also on Serial Number.

**3 Ignition Timing** - When_ethanol or premium gasoline, with an octane rating of 80 or higher is used, or in high altitude, a more advanced setting may be used. A proper timing for these conditions, a slight "two" should be noted at between 10 to 16 M.P.H. when accelerating with wide open throttle at 5 M.P.H. However, timing should never be advanced so that pointer is more than 3/4" ahead of "LO" mark on flywheel.

**4 Voltage Regulator** - Disconnect the wire from the "F" terminal on the regulator and connect the test meter to the terminal, the wire removed from the terminal. Connect the test voltmeter from the regulator to the regulator to the "F" terminal to the regulator. Before test: Run the engine before taking any test readings at speed equivalent to 30 M.P.H. for several minutes until the voltage remains constant and the charging rate has dropped back from peak. Now regulate cover on the unit while balancing voltage and taking test readings. Test figures: circuit breaker closed at 6.4 to 7.0 volts; open at 4.4 to 4.8 volts. Voltage regulator operates at 6.28 to 6.56 volts at 1000 R.P.M.

**5 Fast Idle Adjustment** - With choke valve tightly closed and fast idle screw on upper step of fast idle cam, adjust screw to give 0.003" opening between edge of throttle valve and bare of carburetor side opposite port.

**6 Accelerating Pump** - Set to largest stroke for cold weather driving, center hole for normal weather, short stroke for hot weather.

**Pump Adjustment** - With pump connecting link in long stroke (outer hole) in pump, and throttle adjustment screw backed out, pump plunger should travel 0.25" from closed to wide open position. Adjustment can be made by bending throttle connector rod at lower angle. (Use tool T101-76.) Pump travel can be measured by using gauge T101-78. Difference between results at wide open and closed throttle should be 0.25". Projecting portion of indicator should be placed on lower portion of connector link at pump shaft.

**7 Metering Rod Adjustment** - Insert the metering rod gauge T103-11D in place of metering rod. Be sure gauge seats in metering rod seat after backing out throttle lever adjusting screw, so that throttle valves seat. Install metering rod pins and spring in metering rod T103-11D. Fresh light oil vacuum piston. Link to pop on connector link. Connect link of anti-percolator arm. There should now be less than 0.005" clearance between metering rod pin and gauge with throttle valve seated. Bend pin on anti-percolator arm until this clearance is obtained. When metering rod gauge and metering rod pins, install metering rod, screw, spring, pin and spring, and hook metering rod spring on metering rod.

**Anti-Percolator Adjustment** - This adjustment must be made after pump and metering rod adjustments have been made. Do not disturb these adjustments. Back out throttle lever adjusting screw so that throttle valves seat is bore of carburetor. With throttle valves seated, bend 11/2 in anti-percolator arm so that center of indicator line is flush with top of anti-percolator plug. Since there are two anti-percolators on this carburetor, care must be taken so that there is an even adjustment on both anti-percolator values.

8 Climatic Control Adjustment - For average driving and climatic conditions, set idle speed 1400 R.P.M.

9 Manifold Heat Control - Valve operated by thermostatic spring. Make sure valve operates freely.

10 Recommended Tire Pressure -
- Front: 26 lbs. cold - 28 lbs. hot
- Rear: 30 lbs. cold - 33 lbs. hot

Windshield Wiper - Trico Service Motor 123 (1st Series)
- Wiper Arm (both sides) - 200 (closed bodies)
- Wiper Blade (both sides) - 776-9" (Convertible & Wagram)
- Lock (Both sides) - 76652-X (1st Series)
- (Both side) - 76652-1C (2nd Series)
- (Pass side) - 76652-1C (1st Series)
- (Pass side) - 76652-2C (2nd Series)

Battery Cables and Wiring - Battery to ground cable - Length 78"; Gauge No. 1. Battery to coil cable - Length 56"; Gauge No. 2.

NOTE: Original equipment service parts and accurate workmanship to manufacturers' specifications with proper tools and equipment will restore original performance.
1947 Hudson

Hudson Six - Series 71 (Super); 72 (Commodore)
Hudson Eight - Series 73 (Super); 74 (Commodore)
ADDITIONAL DATA

This information applies to the items on reverse side, marked as follows:

- Consult A.E.A. SERVICE MANUAL for more complete information.
- Serial Number - on plate on right hand front door hinge pillar. Series 21 - 171104 and up (U.S.) Series 22 - 172101 and up (U.S.)
- Wheelbase - 123" Engine Number - Stamped on top of cylinder block left hand side between No. 1 and No. 2 exhaust manifold flanges. Same as Serial Number.
- Ignition Timing - When Ethyl or premium gasoline, with an octane rating of 80 or higher is used, or in high altitudes, a more advanced setting may be used. At proper timing under these conditions, a slight "ping" should be noted at between 2000 and 4000 M.P.H. When accelerating with wide open throttle from 5 M.P.H., however, timing should never be advanced so that pointer is more than 1° ahead of the "O" mark on flywheel.
- Voltage Regulator - Test meter connection: Disconnect the wire from the "D" terminal on the regulator and connect the test ammeter in series between the terminal and the wire removed from the terminal. Connect the test voltmeter from the regulator "A" 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 from its peak. Make regulator cover on the unit while balancing voltage and taking test readings.
- Fast Idle Adjustment - With choke valve tightly closed and fast idle screw on upper step of fast idle cam, adjust screw to give .045" opening between edge of throttle valve and bore of carburetor, side opposite port.

NOTE: The symbol "hp" used on this chart designates "horses" horsepower. Original equipment service parts and accurate work to manufacturers' specifications with proper tools and equipment will restore original performance.
**HUDSON Eight 1947**

**Series 73 - Super**
**Series 74 - Commodore**

**Serial No. (see reverse side) U.S.**

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

**IGNITION**

**SPARK PLUGS**

**DISTRIBUTOR**

**USE ROUND GAGE**

**AUTO-LITE**

**No. IG-4008B**

**Firing Order**

1-6-2-5
8-3-7-4

**Original Equipment**

Champion Type J-9

**For Cooler or Hotter Type**

See manufacturer's chart.

**BREAKER GAP**

**Size 14mm.**
**Gap .032"**

**OEM Equipment**

**High Quality Spark Plug**

**Cam Contact Adjust.**

**Breaker Arm Spring**

**COIL**

**Auto-Lite**

**No. CR-4029**

**Servicing Coil**

**No. CR-992-A18**

**Mounting Bracket**

**No. IG-17905**

**IGNITION TIMING**

**Use Timing Light**

**Breaker contacts to open**

**for No. 1 cylinder at upper dead center,**

**when mark on flywheel is opposite pointer**

**on engine rear support plate.**

**SEE REVERSE SIDE**

**STARTING & LIGHTING**

**BATTERY**

**NATIONAL**

**Type HT-19**

**Capacity**

108 Amp. Hour

(20 hr. Rate)

**Location**

Left front side of engine compartment.

**Ground**

Positive terminal grounded.

**STARTING MOTOR**

**AUTO-LITE No. MAR-4100**

**Drive**

L.H. Inboard Bendix Part No. EBA-29

**Free Running Speed**

3900 Min. R.P.M. 60 Max. Amps. 5.6 Volts

**Lock Torque (Stalled)**

9.2 Max. Ft. Lbs. 508 Max. Amps. 20 Volts

**Control**

Solenoid Switch Part No. SE-4001

**GENERATOR**

**AUTO-LITE No. GEC-4801A**

**Maximum Output Safe Setting**

Cold - 30-45 Amps. 6.0 Volts

Regulator No. VRR-4001A (see reverse side) 4-

Cut-Out Relay (combined with regulator)

Brush Spring Tension - 36 - 48 oz. with new brushes

**ADDITIONAL SPECIFICATIONS**

**Cooling System**

**Capacity**

18 Qts. (U.S. Measure)

**Thermostatic radiator head outlet**

Open at 150° - 160° F. Fully open at 180° F.

**Temperature Gauge**

King-Seeley Dash Unit No. 41069

Motor Unit No. 41065

**Crankcase Capacity**

7 qts. (Sedan) (3211) (U.S.):

1 Oil Pressure Gauge - King-Seyley No. 41069

**Fuel Pump** - AC type 849 No. 1602054 Series AK

FUEL PUMP: Using AC Fuel Pump Analyzer No. PF44

CAPACITY - 1 pint or over in 1 minute

PREHEAT - 2-1/2 hrs. mts. - 4-1/2 hrs. max.

Air Cleaner - 4C Oil-Wetted

(with strainer) No. 1628161

**Gasoline Gauge**

King-Seyley Dash Unit No. 41069

Tank Unit No. 7550

**Speedometer**

Stewart-Warner No. E87-W

Inner Dome No. 9368W - 90 Standard

- 71 Overdrive

(Continued on reverse side)
**A.E.A. Tune-Up System**

**ADDITIONAL DATA**

This information applies to the items on reverse side, marked as follows:

- Consult A.E.A. SERVICE MANUAL for more complete information.
- Serial Number - On plate on right hand front door hinge pillar. Series 72 - 1-174101 and up (U.S.) Series 74 - 174101 and up (U.S.)
- Wheelbase - 121
- Engine Number - Stamped on top of cylinder block between No. 1 and No. 2 exhaust manifold flanges. Same as Serial Number.
- Ignition Timing - When using or premium gasoline, with an octane rating of 88 or higher is used, or in high altitudes, a more advanced setting may be used. At proper timing under these conditions, a slight "ping" should be noted at between 30 and 15 M.P.H. When accelerating with wide open throttle from 30 M.P.H. However, timing should never be advanced so that pointer is more than 3/4" ahead of "O" mark on flywheel.
- Voltage Regulator - Test meter connections: Disconnect the wire from the "B" terminal on the regulator and connect the test ammeter series between the terminal and the wire removed from the terminal. Connect the test voltmeter to the regulator "B" terminal to the regulator base.
- Before test: Run the engine before taking any test readings. Set 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 the peak. Nova regulator may be off the unit while balancing voltage and taking test readings.

**Anti-Percolator Adjustment**

- This adjustment must be made after pump and metering rod adjustments have been made. Do not disturb these adjustments.
- Back out throttle lever adjusting screw so that throttle valves seat in bore of carburetor. With throttle valves seatsd, bend anti-percolator arm so the center of indicator line is flush with top of anti-percolator plug. Since there are two anti-percolators on this carburetor, care must be taken so that there is an even adjustment on both anti-percolator valves.

**Unloader Adjustment**

- With throttle wide open distance between upper edge of choke valve and inner wall of air horn should be 1/4". Adjustment can be made by bending lip on fast idle connector link. If unloader is adjusted properly, with throttle wide open, move choke valve wide open and choke valve will be located in wide open position. Closing the throttle will release choke valve. Choke trip lever is notched out for this setting.

**Climatic Control Adjustment**

- For average driving and climatic conditions, set one point lean.

**Manifold Heat Control**

- Valve operated by thermostatic spring. Make sure valve operates freely.

**Windshield Wiper**

- Trico

**Battery Cables and Wiring**

- Front - 60 lbs. cold - 90 lbs. hot
- Rear - 60 lbs. cold - 35 lbs. hot
- Gauge No. 1: Battery to Switch Cable - Length 96; Gauge No. 0.

**NOTE:**

Original equipment service parts and accurate work to manufacturers' specifications with proper tools and equipment will restore original performance.