TUNE-UP

ENGINE IDENTIFICATION

VEHICLE IDENTIFICATION NUMBER CODE

Engine can be identified by the 8th digit of Vehicle Identification Number (VIN), located on top left corner of instrument panel.

VIN Engine Codes

Application	Code
4.1L (250") DFI	8
4.3L (260") 2-Bbl.	8
4.4L (267") 2-Bbl.	J
5.0L (305") 4-Bbl.	H
5.0L (305") EFI	7
5.0L (307") 4-Bbl.	Y
5.7L (350") EFI	8
6.0L (368") DFI	9

ENGINE IDENTIFICATION NUMBER CODE

Engine code numbers are located on a plate at left rear of the engine block on 4.1L engines, on a pad on the left front side of the engine below the cylinder head on 4.3L, 5.0L (307") and 6.0L engines or stamped into the front of the block, near right side of the water pump on 4.4L, 5.0L (305") and 5.7L engines.

TUNE-UP NOTES

NOTE — *In order to comply with emission standards, specifications shown on engine compartment emission control tune-up decal must be used in all instances.*

CAUTION — *Before making a compression test or cranking engine with a remote starting switch, disconnect ignition switch connector (pink wire) from H.E.I. system distributor.*

CAUTION — *Do not remove spark plug wires with engine running. High Energy Ignition secondary voltage is higher than standard ignition systems and may inflict harmful electrical shock.*

CAUTION — *Damage to H.E.I. electronic module and/or ignition coil may result if "TACH" terminal, in distributor cap connector, is directly grounded.*

ENGINE COMPRESSION

Compression Ratio	
4.1L (250")	8.5:1
4.3L (260")	8.0:1
4.4L (267")	8.3:1
5.0L (305") 4-Bbl.	8.6:1
5.0L (305") EFI	9.5:1
5.0L (307")	8.5:1
5.7L (350")	9.0:1
6.0L (368")	8.2:1

Recommended Fuel ..... Unleaded (87 AKI Minimum)
Compression Pressure (All) ..... 120-160 psi
Max. Variation Between Cylinders 30%

Test compression with engine warm, all spark plugs removed and throttle and choke valves wide open. Crank engine through at least four compression strokes.

NOTE — *If using a remote starting switch, disconnect the ignition switch connector (pink wire) from H.E.I. distributor.*

VALVE CLEARANCE

Hydraulic Lifters
4.4L, 5.0L (305") & 5.7L ..... 1 turn down from zero lash
All Others ..... Zero lash

VALVE ARRANGEMENT

4.1L (250"), 4.3L (260") & 5.0L (305")
I-E-I-E-E-I-E-I (Front to rear, both banks)
6.0L (368")
I-E-I-E-I-E-I-E (Front to rear, left bank)
E-I-E-I-E-I-E-I (Front to rear, right bank)
All Other Engines
E-I-I-E-E-I-I-E (Front to rear, both banks)

SPARK PLUGS

Application	Gap (In.)	Torque Ft. Lbs. (N·m)
4.1L (250")	.060	10 (16)
4.3L (260")	.080	25 (34)
4.4L (267")	.045	22 (30)
5.0L (305")	.045	22 (30)
5.0L (307")	.080	25 (34)
5.7L (350")	.045	22 (30)
6.0L (368")	.060	25 (30)

Spark Plug Type

Application	AC No.
4.1L (250")	R43NTS6
4.3L (260")	R46SX
4.4L (267")	R45TS
5.0L (305")	R45TS
5.0L (307")	R46SX
5.7L (350")	R45TS
6.0L (368")	R45NSX

HIGH TENSION WIRE RESISTANCE

Carefully remove ends of wire from spark plug and distributor. Using an ohmmeter, check resistance while gently twisting wire. If resistance is not to specification, or fluctuates from infinity to any value, replace cable.

Resistance (Ohms) Per Wire

Wire Length	Resistance
Under 24"	30,000 Max.
Over 24"	50,000 Max.

DISTRIBUTOR

All models are equipped with High Energy Ignition systems and no adjustments are required.

TUNE-UP (Cont.)

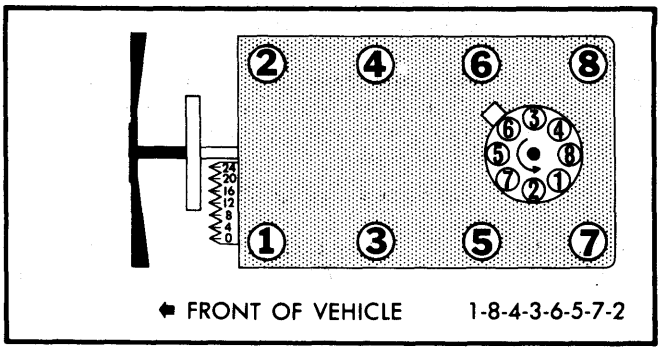

Fig. 1 4.1L (250") Firing Order & Timing Mark Identification

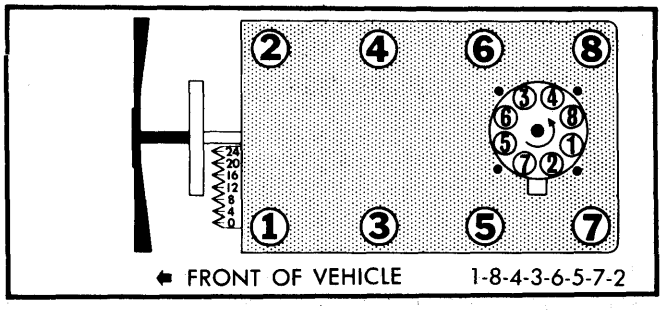

Fig. 2 4.3L (260") & 5.0L (307") Firing Order & Timing Mark Identification

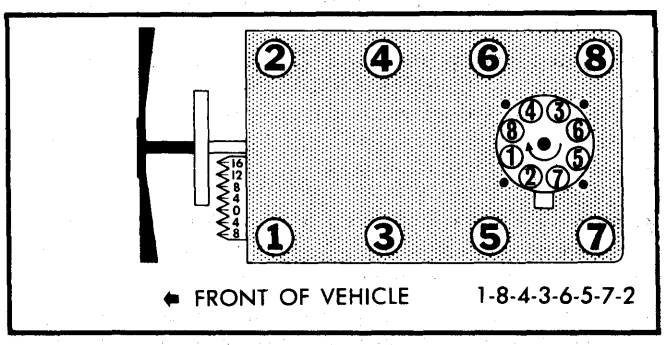

Fig. 3 4.4L (267"), 5.0L (305") & 5.7L (350") Firing Order & Timing Mark Identification

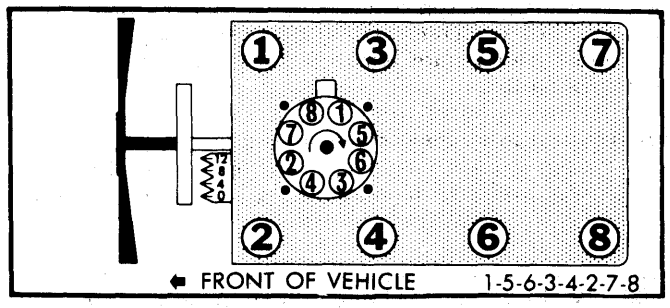

Fig. 4 6.0L (368") Firing Order & Timing Mark Identification

IGNITION TIMING

NOTE – *Some engines are equipped with a receptacle for a magnetic probe timing light, located 9.5° ATDC. Do not use this location for timing with a conventional light.*

Ignition timing procedures will vary with vehicle model and component application. Refer to Emissions Control Decal in engine compartment for correct adjustment procedures and proceed as follows:

To check ignition timing, connect a timing light to engine and disconnect 4-wire EST connector at distributor. With engine running at normal operating temperature, note engine timing.

Ignition Timing (Degrees BTDC@Idle)

Application	Man. Trans.	Auto. Trans.
4.1L (250")		10
4.3L (260")		①20
4.4L (267")		2
5.0L (305") 4-Bbl.	6	6
5.0L (305") EFI	②	②
5.0L (307")		①20
5.7L (350")		6
6.0L (368")		10

① – Set timing at 1100 RPM in Park.
② – Information not available from manufacturer.

HOT (SLOW) IDLE RPM

NOTE – *On most models, idle speed is controlled by the ECM and an Idle Speed Controller (ISC) motor. Other models use standard solenoids or a vacuum-operated Idle Load Compensator. Identify the idle speed system used on vehicle, and then follow appropriate adjustment procedures. For Cadillac models with 6.0L engine and DFI, use procedures for fuel-injected engines.*

CARBURETED ENGINES

Idle Speed (With Solenoid) – 1) Warm engine to normal operating temperature and adjust timing. With A/C off, adjust idle speed screw to idle speed specifications.

2) Disconnect compressor clutch wire and turn A/C on. Open throttle slightly to allow plunger to extend. Turn solenoid plunger to obtain correct solenoid RPM. Reconnect compressor clutch wire.

Idle Speed RPM

Application	Curb Idle	Solenoid Energized
4.4L (267")	500	600
5.0L (305") & 5.7L (350")		
Man. Trans.	700	800
Auto. Trans.	500	600

Idle Speed (With Idle Speed Control) – 1) Prior to making adjustments, check for an identification leter on ISC plunger. *See Fig. 5.* If no letter appears, remove plunger and measure length of plunger (*distance "A" in Fig. 5*). Record measurement. Install plunger into ISC and position so that distance measured from backside of plunger to ISC is less than distance "B" listed in *Idle Speed Control Plunger* chart.

TUNE-UP (Cont.)

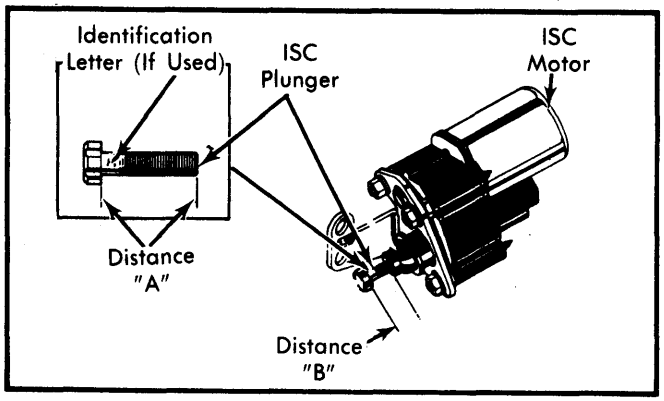

Fig. 5 Measuring Idle Speed Control Plunger

2) With transmission in "P", brakes set and wheels blocked, prepare vehicle for adjustments as per Emission Control Decal. Connect tachometer to engine. Connect dwell meter to Mixture Control Solenoid dwell lead. Set dwell meter to the 6 cylinder scale. Turn A/C off (if equipped), start engine and run until engine enters "Closed Loop" operation (dwell meter needle starts to vary). Stop engine.

NOTE – *DO NOT disconnect or connect ISC connector with ignition "ON" or damage to ECM may occur.*

3) Unplug ISC connector from motor. Retract plunger by applying 12 volts to terminal "C" of ISC motor and grounding terminal "D" of ISC motor. *See Fig. 6.* Do not leave the 12 volts connected to the ISC motor any longer than necessary to retract plunger.

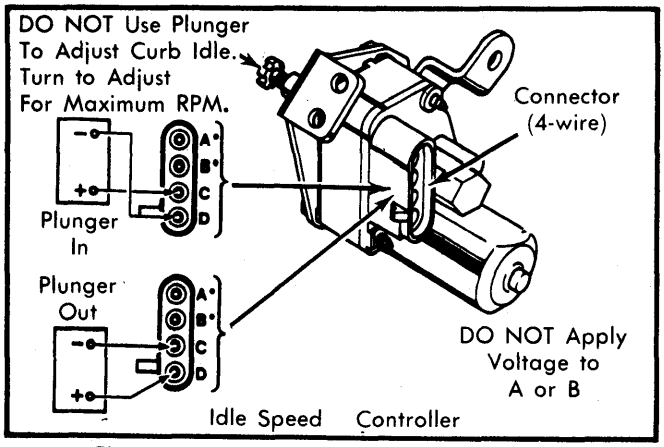

Fig. 6 Connecting a 12 Volt Source to Idle Speed Control Motor

CAUTION – *NEVER connect a voltage source across terminals "A" and "B" or internal throttle contact switch will be damaged.*

4) Start engine and run until dwell meter starts to vary (Closed Loop operation), then place transmission in "D". Adjust carburetor slow idle screw until Minimum Authority RPM is obtained. With idle adjusted, place transmission in "P".

5) Extend ISC plunger by applying 12 volts to terminal "D" and grounding terminal "C" of ISC motor connector. *See Fig. 6.* Adjust plunger to obtain Maximum Authority RPM. Recheck adjustment RPM by applying voltage to extend plunger (plunger will ratchet at full extension).

6) After adjustment, measure distance from back of plunger head to ISC motor (*distance "B" in Fig. 5*). Distance must not exceed distance listed in *Idle Speed Control Chart.*

Idle Speed Control Plunger

Identification Letter	Distance "A"	Distance "B"
None	9/16"	7/32"
None	41/64"	5/16"
X	47/64"	25/64"
A	49/64"	27/64"
Y	51/64"	15/32"
S	27/32"	1/2"
Z	7/8"	35/64"
G	29/32"	37/64"
E	1.0"	43/64"
L	1 3/32"	3/4"
J	1 3/16"	27/32"
N	1 7/64"	59/64"
T	1 11/32"	1.0"

7) Retract plunger and turn engine off. Disconnect all test equipment and wires. Make sure ignition is off, then reconnect ISC motor 4-terminal connector. Clear diagnostic trouble code by removing battery voltage to terminal "R" of ECM for about 10 seconds. This can be done by removing the ECM fuse from the fuse box.

Idle Speed (With Idle Load Compensator) – 1) With transmission in "P", brakes set and wheels blocked, prepare vehicle for adjustments as per Emission Control Decal. Remove air cleaner and plug vacuum hose to TVV. Disconnect and plug hoses to EGR, canister purge port and ILC.

2) Back out throttle stop screw 3 turns. With engine running and transmission selector in "D", adjust plunger to obtain 725 RPM. Hold jam nut on plunger to avoid damaging ILC.

3) Reconnect engine vacuum to ILC and observe idle speed. Idle speed should be 500 RPM. If correct, proceed to step **7)**. If not, stop engine and remove ILC. Plug vacuum hose to ILC.

4) Remove rubber cap and metal plug from ILC center tube. Install ILC on carburetor and re-attach throttle return spring and other related parts removed during disassembly. Reconnect hose to ILC.

5) Using a spare rubber cap with hole punched to accept a .090" Allen wrench, install cap on center outlet tube. Insert .090" Allen wrench through cap to engage adjusting screw inside tube.

6) Start engine and turn adjusting screw with wrench to obtain 500 RPM. Turn screw clockwise to decrease idle speed; counterclockwise to increase idle speed. One turn will change speed 75-100 MPH. Remove wrench and cap (with hole) from center outlet tube and install new rubber cap.

7) After adjustment (if necessary) of the ILC plunger, measure distance from the jam nut to tip of the plunger. *See Distance "B", Fig. 5.* Distance must NOT exceed 1".

TUNE-UP (Cont.)

8) Disconnect and plug vacuum hose to ILC. Connect a hand vacuum pump to ILC and apply enough vacuum to fully retract plunger. Adjust idle stop screw to obtain 500 RPM. Reconnect hoses and remove test equipment.

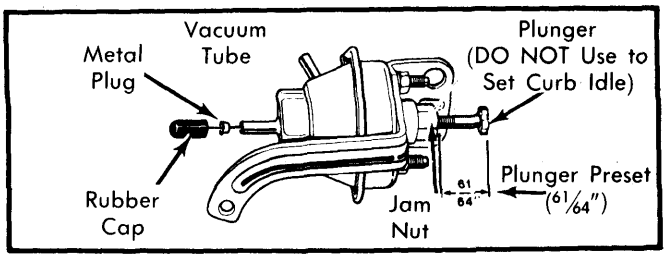

Fig. 7 Idle Load Compensator Adjustment

Idle Load Compensator Adjustment (RPM)

Application	Plunger Retracted	Plunger Extended
4.3L (260")	550	725
5.0L (307")	550	725

FUEL-INJECTED ENGINES

NOTE – *Idle speed is controlled by ECM. Idle speed adjustment is necessary only when ISC or throttle body has been replaced. The procedure involves removal and disassembly of the throttle body. For throttle body removal and disassembly, refer to General Motors Digital Fuel Injection in FUEL SYSTEMS Section.*

Idle Speed (4.1L Engine) – 1) Remove air cleaner, start engine and warm engine to normal operating temperature. Turn air conditioner off. Check and, if necessary, adjust engine timing. *See IGNITION TIMING in this article.*

2) Turn off all electrical accessories, place steering wheel in center position and transmission selector in "P". Turn engine off. Turn ignition switch to "ON" position. Retract ISC motor by pressing plunger in while holding throttle open.

3) When ISC motor fully retracts, disconnect ISC connector before releasing throttle. ISC plunger should not now be touching throttle lever. If contact is noted, turn ISC plunger in with pliers until plunger clears throttle lever. Connect tachometer to engine. Start engine.

4) Minimum air (idle) speed should be 450 RPM. Adjust throttle stop screw to obtain correct RPM, if necessary. Turn engine off. Turn ignition switch to "ON" position.

NOTE – *Throttle position sensor adjustment is preset at the factory and spot welds are used to prevent tampering. This adjustment is critical and must be accurately performed to assure proper vehicle performance.*

5) Using a digital voltmeter, connect positive lead to harness test point "A" (circuit No. 417 – Dark Blue wire). Connect negative lead to harness test point "B" (circuit No. 476X – Black wire.).

6) Retract ISC motor as described in steps **2)** and **3)**. Open throttle and let snap fully shut. Voltmeter should read between .45-.55 volts. If not, remove throttle body and drill out TPS spot welds.

7) Loosen retaining screws enough to permit rotation of TPS. Remount throttle body. Start engine and run at 450 RPM. Position TPS lever so that voltmeter reads .50 volts. Tighten retaining screws and recheck reading.

8) Turn engine off. Turn ignition switch to "ON" position. Disconnect idle speed control at fullest extension of nosepiece. This extension may be obtained by touching ISC connectors to ISC motor. Reconnect TPS.

9) Turn ISC motor nosepiece adjustment to obtain a reading of 1.06 volts at TPS test point. *See Fig. 8.* Disconnect all test equipment and reconnect all wiring. Turn ignition on for 10 seconds and observe ISC plunger movement. When ISC plunger is fully extended, turn ignition off.

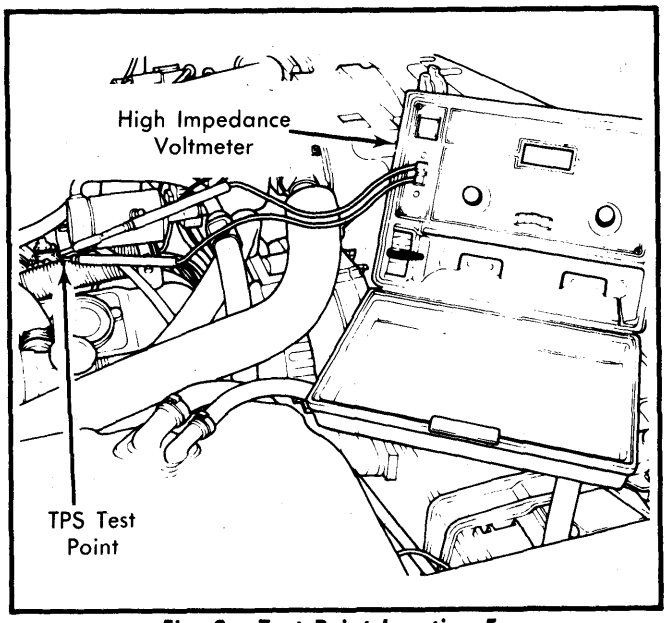

Fig. 8 Test Point Location For Throttle Position Sensor Adjustment

Idle Speed (5.0L & 5.7L Engines) – 1) Remove air cleaner and gaskets. Plug thermal vacuum port on rear of throttle body. Remove plug covering minimum air adjustment screw by making 2 hacksaw cuts as shown in *Fig. 9*. Using a small punch, knock out portion of casting cut by hacksaw. Hit in direction indicated by arrow 1 shown in *Fig. 9*. Knock out steel plug with small punch by hitting plug from direction indicated by arrow 2 in *Fig. 9*.

2) Block drive wheels and apply parking brake. Connect a tachometer. Disconnect idle air control (IAC) assemblies electrical connectors. Plug idle air passages of each throttle body with plugs (J-33047 or equivalent), making certain that plugs are fully seated and no air leaks exist.

CAUTION – *To prevent engine from running at high RPM, be sure ignition is "OFF" and transmission is in "N" before connecting IAC assemblies, or removing or installing idle air passage plugs. Failure to do this may result in vehicle movement.*

3) Start engine and warm to normal operating temperature. Place transmission in "D". Check that engine RPM decreases

TUNE-UP (Cont.)

below curb idle speed. If RPM does not decrease, check for vacuum leak. Remove cap from ported tube on rear of throttle body and connect water manometer. Adjust minimum air adjustment screw to obtain about 6" water on manometer. Remove manometer and install cap on ported tube.

4) Remove cap from ported tube on front of throttle body and connect manometer. Reading should again be about 6" water. If adjustment is required, locate idle balance screw on throttle linkage. See *Fig. 10*. If screw is welded, break weld and install new screw with thread sealing compound applied. Adjust screw to obtain about 6" water on manometer. Remove manometer and install cap on ported tube.

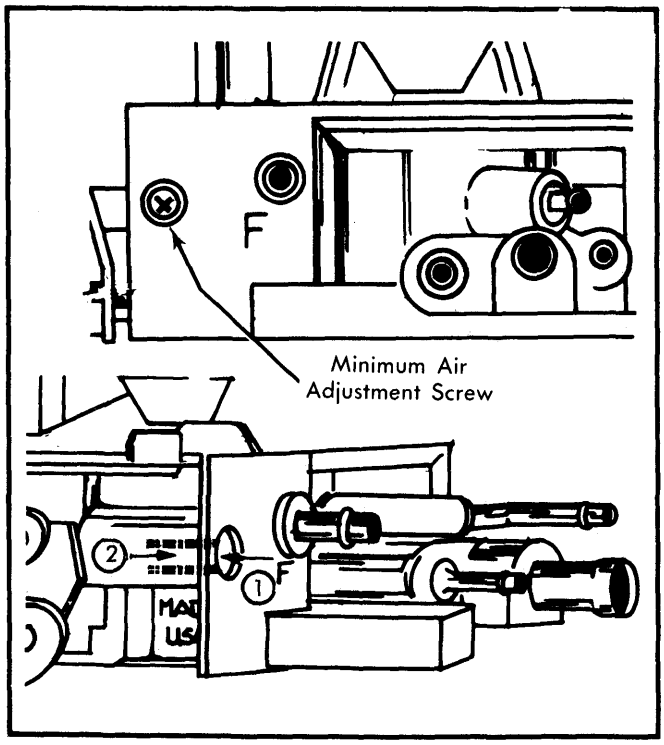

Fig. 9 Plug Removal for Minimum Air Adjustment Screw

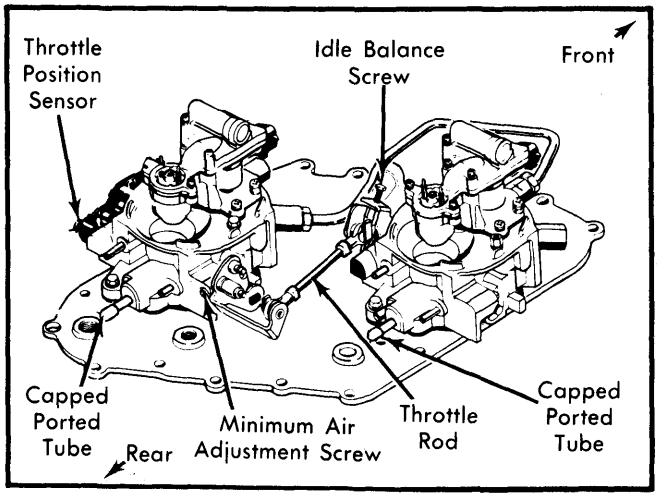

Fig. 10 Component Location for 5.0L & 5.7L Fuel Injection System

5) Adjust minimum air adjustment screw on rear unit to obtain 475 RPM. Turn ignition "OFF" and place transmission in "N". Remove idle air passage plugs and reconnect IAC assemblies. Start engine. Engine may run at high RPM but RPM will decrease when IAC assemblies close air passages. Stop engine when RPM decreases.

6) Check TPS voltage. If adjustment is necessary, remove EGR valve and heat shield from engine. Using three 6" jumper wires, connect TPS harness to TPS. With ignition "ON" and engine stopped, use a voltmeter to measure voltage between TPS terminals "A" and "B".

7) Loosen 2 TPS attaching screws and rotate throttle position sensor to obtain a voltage reading of .525 (± .075) volts. Tighten screws. Turn ignition "OFF", remove jumpers and reconnect TPS harness to TPS. Install EGR valve and heat shield to engine, using new gasket if necessary.

8) Install air cleaner gasket, connect vacuum line to throttle body and install air cleaner. Reset IAC motors by driving vehicle to 30 MPH or, if equipped with cruise control, disconnect speedometer cable at transducer, turn key to "ON" position and rotate cable to obtain 30 MPH.

IDLE MIXTURE

NOTE – *Idle mixture adjustment is not normally necessary and is not required on fuel injected models. Mixture should be adjusted only if vehicle fails testing or carburetor has been disassembled.*

MIXTURE SCREW PLUG REMOVAL

If plugs must be removed, perform following procedure.

1) Remove carburetor from engine, invert carburetor and drain fuel into suitable container. Place inverted carburetor on suitable holding fixture manifold side up.

2) Use hacksaw to make 2 small cuts below mixture plugs on bottom of throttle body. Use a flat punch or chisel to break out throttle body to gain access to plugs.

3) Use punch to drive out plug. If hardened plug shatters, remove loose pieces.

4) Repeat steps **2)** and **3)** to remove remaining plugs.

MIXTURE CONTROL ADJUSTMENT

1) Mixture control solenoid travel should be checked before adjustment. Stop engine and remove air cleaner. Insert thin metal scale in "D" shaped hole in air horn. Press down to determine travel of solenoid. Total movement should be 1/8".

NOTE – *If solenoid movement is not correct, see appropriate Rochester Carburetor article in FUEL SYSTEMS Section for adjustment procedures.*

2) To adjust idle air bleed valve, set parking brake and block rear wheels. Disconnect and plug hoses as directed on Emission Control Decal in engine compartment. Check ignition timing and adjust if necessary.

3) Connect dwell meter to lead wire from mixture control solenoid in carburetor, then set dwell meter to 6 cylinder scale. Start engine and run at idle until normal operating tem-

TUNE-UP (cont.)

perature is reached and a varying dwell is noted on dwell scale.

NOTE – *It is absolutely essential that engine is operated for sufficient length of time to ensure that engine coolant sensor, and oxygen sensor in exhaust, are at full operational temperature.*

4) Adjust curb idle speed, if necessary. With engine idling, observe dwell reading. If within, or varying between 10-50° range, no further adjustment is necessary. If dwell does not vary, or falls outside the 10-50° range, perform the following:

5) With engine off, cover primary and secondary bore inlets with a shop towel or tape. Align a number 35 drill on the rivet head holding air bleed valve cover. Drill only enough to remove rivet head, then drive rivet out with small punch. Remove and discard air bleed valve cover.

6) Restart engine and allow to idle, using a screwdriver that fully fits in valve. Slowly turn valve up or down until dwell reading varies and falls within the 25-35° range, attempting to be at or as close to 30° as possible.

CAUTION – *Perform this carefully. The idle air bleed valve is very sensitive in controlling air/fuel ratios and the valve should be turned only in ⅛ turn increments.*

7) If after performing this adjustment. the dwell reading does not vary and is not within the 25-35° range, it will be necessary to remove carburetor to gain access to plugs covering the idle mixture needles and adjust the idle mixture as follows:

8) Turn mixture screws in until lightly seated, then back screws out the specified number of turns.

Preliminary Idle Mixture Screw Adjustment

Application	Turns Out
4.3L (260")	1
4.4L (267")	1
5.0L (305")	1
5.0L (307")	1

① – 3 turn preset, make final adjustment on vehicle.

9) Reinstall carburetor (without air cleaner and gasket). Start engine, run until fully warm, and repeat Idle Air Bleed Adjustment until dwell reading is varying and within specified limits.

10) If unable to set to 25-35° dwell reading, turn mixture screws out 1 turn (if dwell is below 25°) or in 1 turn (if above 35°). Then reset idle air bleed valve to obtain correct dwell reading.

11) If necessary, reset curb idle speed and fast idle speed to specifications. Disconnect dwell meter and tachometer. Unplug and reconnect vacuum hoses, reinstall air cleaner and gasket.

COLD (FAST) IDLE RPM

CARBURETED ENGINES

With engine at normal operating temperature, disconnect and plug vacuum hose at EGR valve. Position cam follower on cam step and turn fast idle screw to obtain specified fast idle RPM.

NOTE – *Specified cam step is found on Emission Control Decal located in engine compartment.*

FUEL INJECTED ENGINES

Digital Fuel Injection – Fast idle on 4.1L and 6.0L V8 DFI engines is controlled by the Electronic Control Module through the Idle Speed Control (ICS) motor. Adjustment of the fast idle is not required during normal tune-up procedures.

Electronic Fuel Injection – Fast idle on 5.0L and 5.7L V8 EFI engines is controlled by the Electronic Control Module through the Idle Air Control (IAC) assembly. Adjustment of the fast idle is not required during normal tune-up procedures.

NOTE – *See Emission control Label for Fast Idle Speed specifications.*

AUTOMATIC CHOKE

All models are equipped with a riveted-on, indexed choke cover that is not adjustable.

FUEL PUMP

Make all tests at idle RPM. Pinch off fuel return line (if equipped). Connect pressure gauge to fuel line at carburetor and hold gauge at carburetor level.

Fuel Pump Specifications

Pressure (At Idle)	
4.1L & 6.0L DFI (Electric)	10.5 psi
All Other Engines	5.5-6.5 psi
Volume (At Idle)	
All Engines	One pint in 30 seconds

EXHAUST EMISSION SYSTEMS

See EXHAUST EMISSION SYSTEMS section.

GENERAL SERVICING

IGNITION

DISTRIBUTOR

Application	System
All Models	EST

IGNITION COIL

Coil Resistance (Ohms@75°F)

Application	Primary	Secondary
All Models	0.4-1.0	6000-30,000

Coil Output
At all engine speeds ..... 25-35 KV Minimum①

① – Replace if below 25 KV.

GENERAL SERVICING (Cont.)

CARBURETION/FUEL INJECTION

CARBURETORS

Application	Model
4.3L (260")	Rochester E2M①
4.4L (267")	Rochester E2ME
5.0L (305")	Rochester E4ME
5.0L (307")	Rochester E4MC

① — Check individual application for electric choke (E4ME) or hot air choke (E4MC).

FUEL INJECTION

Application	Type
4.1L (250") & 6.0L (368")	DFI
5.0L (305" & 5.7L (350")	EFI

ELECTRICAL

BATTERY

Standard			
4.1L (250"), 5.7L (350") & 6.0L (368")	465		115
4.3L (260") & 4.4L (267")	350		90
5.0L (305")			
Malibu & Monte Carlo	315		75
All Other Models	350		90
5.0L (307")			
Electra & Riviera	370		90
All Other Models	350		90
Optional			
5.0L (307")	550		135
All Other Models	465		115

STARTER

Delco-Remy solenoid actuated with overrunning clutch.

Starter Specifications

Application	Volts	Amps	Test RPM
4.1L (250"), 5.7L (350") & 6.0L (368")	9	65-95	7000-10,500
4.3L (260") & 5.0L (307")	9	45-70	7000-11,900
4.4L (267")	①	①	①
5.0L (305")	10.6	50-80	7500-11,400

① — Information not available from manufacturer.

ALTERNATOR

Application	Standard Amps	Optional Amps
4.1L (250") & 6.0L (368")	80	70, 100
4.3L (260")	55	63, 70
4.4L (267") & 5.0L (305")	37	55, 63, 70
5.0L (307")	55	60, 63, 70, 85
5.7L (350")	70	....

ALTERNATOR REGULATOR

Delco-Remy nonadjustable, integral with alternator.

Operating Voltage at 85°F)	13.8-14.8

COOLING CAPACITIES

Application	Quantity
4.1L (250")	11.8 qts.
4.3L (260")	
Cutlass	
With A/C	15.5 qts.
Without A/C	16.0 qts.
H.D. Cooling	16.5 qts.
88	
With A/C	16.2 qts.
Without A/C	16.5 qts.
H.D. Cooling	17.2 qts.
Optional	17.0 qts.
4.4L (267")	
Caprice & Impala	16.7 qts.
El Camino, Malibu & Monte Carlo	18.6 qts.
5.0L (305")	
Camaro & Firebird	15.0 qts.
Caprice & Impala	16.7 qts.
El Camino, Malibu & Monte Carlo	16.3 qts.
5.0L (307")	
Cutlass	
With A/C	15.5 qts.
Without A/C	15.0 qts.
Electra & LeSabre	
With A/C	16.2 qts.
Without A/C	15.4 qts.
H.D. Cooling	16.1 qts.
Riviera	
With A/C	16.4 qts.
H.D. Cooling	16.2 qts.
Toronado & 98	
Standard	16.2 qts.
Optional	16.0 qts.
88	
With A/C	15.2 qts.
Without A/C	15.5 qts.
H.D. Cooling	16.2 qts.
Optional	16.0 qts.
5.7L (350")	21.0 qts.
6.0L (368")	21.4 qts.

GENERAL SERVICING (Cont.)

REPLACEMENT INTERVALS

Component	Interval (Miles)
Oil Filter	15,000
Air Filter	30,000
Fuel Filter	30,000
PCV Valve	30,000
Spark Plugs	30,000

OIL & FUEL CAPACITIES

Application	Quantity
Crankcase (Including Filter)	
4.1L (250")	
DeVille & Fleetwood	4.0 qts.
Eldorado & Seville	5.0 qts.
All Other Engines	5.0 qts.
Fuel Tank	
Camaro & Firebird	16.0 gals.
Caprice, Electra, Impala & LeSabre	
Coupe & Sedan	25.0 gals.
Station Wagon	22.0 gals.
Corvette, Eldorado & Seville	20.3 gals.
Cutlass & Malibu	18.1 gals.
DeVille, Fleetwood, 88 & 98	25.0 gals.
El Camino	
Standard	17.7 gals.
Optional	22.0 gals.
Riviera & Toronado	21.0 gals.

TRANSMISSION & DIFFERENTIAL CAPACITIES

Application	Quantity
Auto. Trans. (Dexron II)	
THM 200C	8.0 pts.
THM 200-4R	7.0 pts.
THM 250C	7.0 pts.
THM 350C	6.0 pts.
THM 400	6.0 pts.
THM 700	10.0 pts.
Auto. Transaxle (Dexron II)	10.0 pts.
Man. Trans. (SAE 80W-90)	3.5 pts.
Final Drive (SAE 80W-90)	3.5 pts.
Rear Axles (SAE 80W-90)	3.5 pts.
7.5" Axle	3.5 pts.
8.5" Axle	4.3 pts.
8.75" Axle	5.4 pts.

BELT ADJUSTMENTS

Tension (Lbs.) Using Strand Tension Gauge

Application	New Belt	Used Belt
Air Pump	80	45
Alternator	145	70
A/C & Pwr. Str.	170	90
Cogged Belt	60 Min.	60 Min.