

1972 Dodge 6 Tune-Up

TUNE-UP

ENGINE IDENTIFICATION

Engine Identification Number is stamped on block below number 1 spark plug. First three numerals designate engine cubic inch displacement.

Application	Numerals
198"	198
225"	225

MODEL IDENTIFICATION

VEHICLE IDENTIFICATION NUMBER

Number is located on left front door lock pillar.

A13AAOU100001

- First & Second Digits - Model Code.
- Third Digit - Body Type.
- Fourth Digit - Gross Vehicle Weight.
- Fifth Digit - Engine Type.
- Sixth Digit - Model Year.
- Seventh Digit - Plant.
- Remaining Digits - Sequence Built Number

TUNE-UP NOTES

► **IDLE SPEED ADJUSTMENT CAUTION** - Procedures and specifications for idle speed adjustment must be followed exactly as outlined. See "Hot (Slow) Idle RPM" under Tune-Up.

NOTE - For other items affecting Tune-Up, see CARBURETION Section or EMISSION CONTROL Section.

NOTE - Due to changes and corrections, always refer to Engine Tune-Up Decal in engine compartment before attempting tune-up. In the event of a conflict between specifications given in this manual and decal specifications, decal specifications prevail.

COMPRESSION PRESSURE

With engine warm, spark plugs removed, and throttle wide open, compression pressure should be as specified. Maximum variation between cylinders should not exceed 25 psi.

Application	Minimum PSI
All	100

VALVE TAPPET CLEARANCE

Adjust valve tappet clearance by turning self-locking rocker arm screws.

Intake (Hot).....	.012"
Exhaust (Hot).....	.024"

VALVE ARRANGEMENT

E-I-E-I-E-I-E-I-E (Front to rear.)

SPARK PLUGS

Gap.....	035"
Torque.....	30 Ft. lbs.

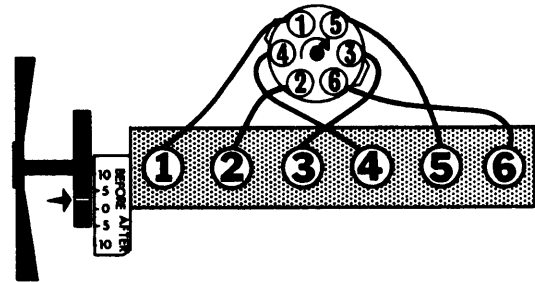
Spark Plug Type

Application	Champion No.
All	N-11Y

DISTRIBUTOR

Point Gap017-.023"
Cam Angle.....	41-46°
Breaker Arm Spring Tension	17-20 ozs.
Condenser Capacity25-.285 mfd.
Electronic Ignition Air Gap	⓪.008"

⓪ - No go .010".



2D0A001

FIRING ORDER & TIMING MARKS

IGNITION TIMING

Adjust timing with hot (slow) idle speed set, engine running at normal operating temperature, distributor vacuum advance line disconnected and plugged, and transmission in Neutral.

Application	⓪Timing
198"	
W/Dist. No. 3438509 or 3438524	2.5° BTDC
All Others	TDC
225"	TDC

⓪ - At hot (slow) idle, tolerance ±2.5°.

HOT (SLOW) IDLE RPM

With engine running at normal operating temperature, timing checked, air cleaner installed, air conditioning off, and transmission in Neutral, connect tachometer and insert probe of exhaust gas analyzer a minimum of two feet into tail pipe. Warm up and calibrate analyzer according to manufacturer's instructions and clamp hose between distributor vacuum con-

TUNE-UP (Cont.)

trol valve (if equipped) and intake manifold. Adjust idle mixture screw $\frac{1}{16}$ turn richer (out) and wait ten seconds before reading meter and, if necessary, adjust again until meter shows a definite increase in richness. Adjust idle mixture screw $\frac{1}{16}$ turn at a time to obtain 14.0 to 14.4 air/fuel ratio, adjusting idle speed screw, if necessary, to maintain specified RPM. Remove clamp from distributor vacuum valve hose. If engine speed changes materially, check and set valve. See *Distributor Vacuum Control Valve Adjustment*.

Idle Speed (RPM)

Application	RPM
Holley Carburetors	
Without A.I.R.	750
With A.I.R.	650
Carter Carburetors	700

COLD (FAST) IDLE RPM

With engine at normal operating temperature, transmission in Neutral or Park, choke open, slow idle, timing, and Distributor Vacuum Control Valve checked, open throttle slightly and position fast idle speed adjusting screw on second highest step of fast idle cam. Start engine without touching throttle and wait for engine speed to stabilize. Adjust screw to obtain specified RPM. If more than one adjustment is necessary, move fast idle speed adjusting screw from fast idle cam and return to normal position, then position screw on second highest step of cam before making each subsequent adjustment.

Fast Idle Speed (RPM)

Application	Man. Trans.	Auto. Trans.
Holley Carburetors		
Without A.I.R.	2000	1900
With A.I.R.	2200	2000
Carter Carburetors	2000	1800

AUTOMATIC CHOKE SETTING

Nonadjustable. Check for free movement on pivot by moving choke rod up and down. If unit binds, install new one.

DISTRIBUTOR VACUUM CONTROL VALVE ADJUSTMENT

Move dashpot so that stem does not contact throttle. Connect tachometer, vacuum gauge (0-30 in. Hg), and remove distributor vacuum tube at distributor and clamp tube closed. Set timing and hot (slow) idle to specifications. Reconnect vacuum tube and run engine at 2000 RPM for five seconds in Neutral. When throttle is released distributor vacuum should increase to over 16 in. Hg for a minimum of one second and fall below six in. Hg within three seconds. Remove vacuum control cover and turn adjusting screw for adjustment. Readjust dashpot. See *Dashpot Adjustment*. Recheck valve performance. If distributor vacuum does not fall below six in. Hg within four seconds after throttle is released, readjust or replace dashpot.

DASHPOT ADJUSTMENT

With hot (slow) idle speed set to specifications, position throttle lever so that tab on lever is just touching dashpot stem but not depressing it. The engine speed on "B" models should be 2300 RPM and on all others 2500 RPM. To adjust, screw dashpot in or out as required.

FUEL PUMP PRESSURE & VOLUME

Pressure (At Idle)	
Standard	3.5-5 psi
Optional (Electric)	4-4.75 psi
Volume	
Standard	1 qt. in 1 min.
Optional (Electric)	①

① - Not available.

MANIFOLD HEAT CONTROL VALVE

Check valve for freedom of movement and lubricate with suitable solvent (Part No. 3419129) every 4,000 miles.

EMISSION CONTROL

See appropriate article in *EMISSION CONTROL* Section.

IGNITION

DISTRIBUTOR

Chrysler Part No.

Application	Man. Trans.	Auto. Trans.
Breaker Point Ignition		
198" W/O NOx	3438509	3438509
198" W/NOx	3438524	3438524
225" W/O NOx	3656252	3656257
225" W/NOx	3656260	3656266
Electronic Ignition		
225"	3755037	3755042

Other Data & Specifications - See *Tune-Up and Chrysler Distributors in ELECTRICAL* Section.

IGNITION COIL

Application	Chrysler Part No.
All	2444242
Resistance	Ohms @ 70-80°F
Primary	1.65-1.79
Secondary	9,400-11,700
Ballast Resistor	
Breaker Point Ignition	5-.6
Electronic Ignition	
Coil Side	5-.6
Control Unit Side	4.75-5.75

1972 Dodge 6 Tune-Up

CARBURETION

CARBURETORS

Carter BBS Series 1-Bbl.

Carter Part No.

Application	Man. Trans.	Auto. Trans.
225"	6219S	6218S

Holley No. 1920 1-Bbl.

Holley Part No.

Application	Man. Trans.	Auto. Trans.
225"		
W/Air Pump (Cal.)	R-6401A	R-6402A
W/O Air Pump (Fed.)	R-6371A	R-6372A

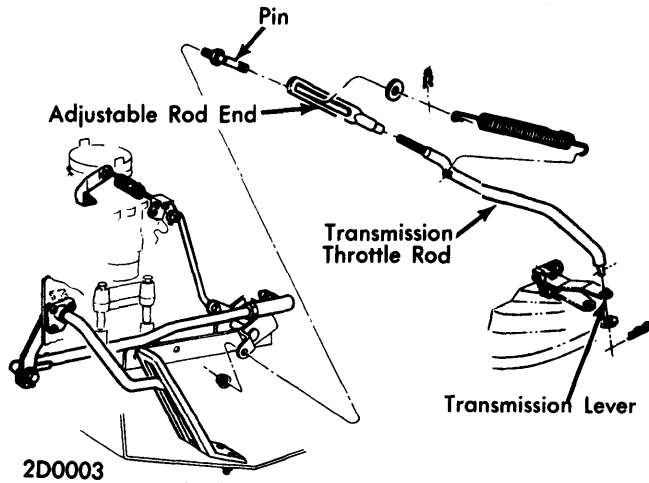
Other Data & Specifications — See *Tune-Up and Carter or Holley Carburetors in CARBURETION Section.*

transmission throttle lever forward against its stop while adjustment is being made. Loosen slotted link lock bolt and pull forward on slotted adjuster link so that it contacts carburetor lever pin and all backlash is removed. Tighten bolt and release transmission rod. Move slotted adjuster link to the full rearward position and allow it to return slowly, making sure that it returns to the full forward position. Connect choke or remove block.

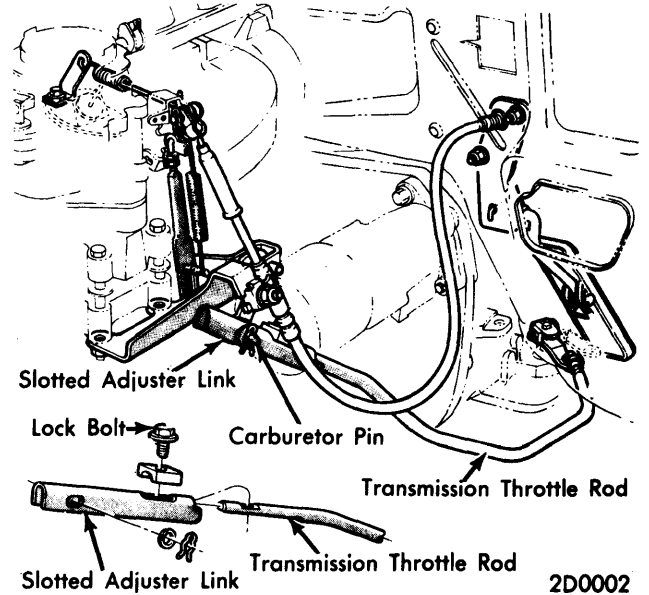
Auto. Trans. "B" Models — Adjust hot (slow) idle speed to specifications. With linkage clean and properly lubricated, block choke in full open position and release fast idle cam. Remove return spring from carburetor pin and tab on throttle rod. Remove clip, washer and slotted throttle rod end from carburetor pin and rotate threaded rod end so that rear edge of slot contacts the carburetor pin when transmission throttle lever is held forward against its stop. Reassemble and check transmission linkage freedom by moving throttle rod rearward and allowing it to return slowly, making sure it returns to the full forward position. Remove block from choke and road test vehicle. If transmission does not downshift, lengthen throttle rod one turn and repeat road test.

ACCELERATOR AND DOWNSHIFT LINKAGE ADJUSTMENT

Auto. Trans. (Exc. "B" Models) — With linkage properly lubricated, disconnect choke or block choke valve in full open position and release fast idle cam. Have an assistant hold



2D0003
ACCELERATOR AND DOWNSHIFT LINKAGE ADJUSTMENT "B" MODELS



2D0002
ACCELERATOR AND DOWNSHIFT LINKAGE ADJUSTMENT (EXC. "B" MODELS)

ELECTRICAL

BATTERY

12 Volt — Negative Ground.

Application	Capacity (Amps)
Standard	
"D", "P", "W" Models	46
"B" Models	48
Optional All	59, 70

STARTER

Application	Chrysler Part No.
All	2875560

Other Data & Specifications — See *Chrysler Starters in ELECTRICAL Section.*

ELECTRICAL (Cont.)

ALTERNATOR

Application	Amps.	Chrysler Part No.
Std.	50.....	3438806
Opt.		
W/Single Belt.....	60.....	3438807
W/Double Belt.....	60.....	3621861

Other Data & Specifications – See *Chrysler Alternators* in *ELECTRICAL* Section.

ALTERNATOR REGULATOR

Application	Chrysler Part No.
All	3438150

Other Data & Specifications – See *Chrysler Alternator Regulators* in *ELECTRICAL* Section.

ENGINE

INTAKE MANIFOLD TIGHTENING

Intake to exhaust manifold bolts are tightened to 20 ft. lbs.
Manifold to cylinder head stud nuts are tightened to 10 ft. lbs.

BELT ADJUSTMENT

Tension (Lbs.) Using Strand Tension Gauge

Application	New Belt	①Used Belt
All	120 Lbs.....	70 Lbs.

① – Any Belt operated for 15 minutes or longer.

COOLING CAPACITIES

Application	①Quantity
"B" Models.....	②13 qts.
D100,D200,W100,W200 (Includes Heater)	13 qts.
D300,W300 (Includes Heater)	③14 qts.
"P" Models (Includes Heater)	14 qts.

① – On All Models (Exc. D300, W300, and "P" Models) add 1 quart if equipped with Air Conditioning or Increased Cooling.

② – Add 1 quart if equipped with heater.

③ – On W300, add 1 quart if equipped with automatic transmission.

CAPACITIES (EXCEPT COOLING)

Application	Quantity
Crankcase	①5 qts.
Automatic Transmission	
All (Exc. "B" Models)	19 pts.
"B" Models.....	18.5 pts.
Manual Transmissions	②
Front & Rear Axles & Transfer Case	②
Four Wheel Drive Knuckle Ends	②
Fuel Tank	
"D","B","W" Models	25 gals.
"P" Models.....	15.25 gals.

① – Add 1 quart with filter change.

② – Fill to bottom of filler plug hole.

FILTERS & CLEANERS

Filter or Cleaner	Service Interval (Miles)
Oil Filter.....	Replace 8,000
Air Cleaner	
Oil Bath	①Clean 12,000
Paper Element.....	②Clean 8,000
Crankcase Inlet Air Cleaner.....	①Clean 12,000
Fuel Vapor Storage Canister Filter	Replace 12,000
Fuel Filter	
Paper Element.....	Replace 10,000
Disposable Canister	
All (Exc. "W" Models).....	Replace 24,000
"W" Models	Replace 20,000
Distributor Wick	
All (Exc. "B" Models)	①Oil 12,000
"B" Models.....	①Oil 18,000

① – Use SAE 30.

② – Replace at 24,000 miles.