

1-40 1974 GMC Motor Home V8 Tune-Up

TUNE-UP

ENGINE IDENTIFICATION

Engine is identified by a code tape attached to engine oil filler tube directly above engine serial number.

Application	Code
455"	VT

MODEL IDENTIFICATION

A combination Vehicle Identification Number and Vehicle Rating Plate is used. Plate is located behind right front access door. Vehicle Identification Number is decoded as follows:

TZE034V100053

- First Digit** - Make (GMC Division).
- Second Digit** - Series Identification.
- Third Digit** - Engine Designation.
- Fourth & Fifth Digits** - Model Designation.
- Sixth Digit** - Year Of Manufacture.
- Seventh Digit** - Assembly 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 air cleaner removed and throttle and choke wide open, crank engine through at least four compression strokes. Minimum compression should not be less than 100 psi with a 30% maximum compression variation between all cylinders.

VALVE TAPPET CLEARANCE

Hydraulic Lifters 1 turn down from zero lash.

VALVE ARRANGEMENT

I-E-I-E-I-E-I (Both banks, front to rear.)

SPARK PLUGS

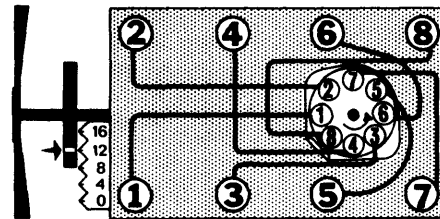
Gap040"
Torque..... 35 ft. lbs.

Spark Plug Type

Application	AC No.
455"	R45S

DISTRIBUTOR

Point Gap..... .016"
Cam Angle..... 30°
Breaker Arm Spring Tension 19-23 ozs.
Condenser Capacity 18-.23 mfd.



4GMA01

FIRING ORDER & TIMING MARKS

IGNITION TIMING

Ignition timing is checked or adjusted with engine at normal operating temperature, air cleaner removed and manifold vacuum line plugged, all vacuum lines at carburetor disconnected and fittings plugged, and transmission in "N" or "P". Adjust engine speed to 1100 RPM and then adjust timing to 8° BTDC. Adjust carburetor to correct idle RPM, reconnect all vacuum lines and install air cleaner.

Application	Timing
455"	8° BTDC

HOT (SLOW) IDLE RPM

Idle speed is checked or adjusted with engine at normal operating temperature, air cleaner removed and manifold vacuum line plugged, distributor vacuum line disconnected and plugged, choke open, air conditioning off, carburetor line from vapor canister disconnected and plugged, dwell and ignition timing properly adjusted and transmission in "D". Adjust carburetor idle speed screw to obtain an engine speed of 600 RPM.

Idle Speed RPM

Application	RPM
455"	600

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TUNE-UP (Cont.)

IDLE MIXTURE ADJUSTMENT

Idle mixture adjustment is checked or adjusted using an Exhaust Gas Analyzer. Hot (Slow) Idle RPM must be correctly adjusted before adjusting idle mixture. See *Hot (Slow) Idle RPM in this Section*. With engine at normal operating temperature, stop engine, remove idle mixture screw limiter caps and turn lightly into stop. Back screws out six full turns. Connect an analyzer to vehicle and calibrate meters. Start engine and adjust each mixture screw an equal number of turns to obtain a CO reading of .2% with engine at 600 RPM. Temporarily reinstall air cleaner and recheck CO reading. If reading exceeds .2%, readjust mixture screws. Install new idle limiter caps (red). Install air cleaner and reconnect all vacuum lines.

CO Level Specifications

Application	Level
455"2%

COLD (FAST) IDLE RPM

Fast idle RPM is checked or adjusted with engine at normal operating temperature, air cleaner removed and manifold vacuum line plugged, distributor vacuum line disconnected and plugged, choke open, air conditioning off, carburetor line from vapor canister disconnected and plugged, dwell and igni-

tion timing properly adjusted and transmission in "P". Position fast idle cam follower on low stop against shoulder of next higher step and adjust fast idle speed screw to obtain an engine speed of 1100 RPM.

Fast Idle Speed (RPM)

Application	RPM
455"	1100

CHOKE ADJUSTMENT

Position fast idle cam follower on highest step of fast idle cam. Loosen screws on cover and rotate choke assembly until choke valve closes and set index mark to specification.

Choke Adjustment Specifications

Application	Position
455"	One Notch Rich

FUEL PUMP PRESSURE & VOLUME

Pressure	5.5-6.5 psi
Volume (At Cranking Speed)	1 pint in 20-30 seconds

EMISSION CONTROL

See appropriate article in EMISSION CONTROL Section.

IGNITION

DISTRIBUTOR

Application	Delco Part No.
455"	1112082

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

IGNITION COIL

Application	Delco Part No.
455"	1115238
Resistance	Ohms @ 75°F
Primary	1.77-2.01
Secondary	3,000-20,000

CARBURETION

CARBURETORS

Rochester Model 4MC 4-Bbl.

Application	Carb. No.
455"	7043254

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

ACCELERATOR LINKAGE ADJUSTMENT

Accelerator control system is cable type. Loosen nuts "A" and "B" (see illustration) located on underside of toe panel. Adjust

cable until dimension "C" is $4\frac{1}{16}$ ". Tighten nut and torque to seven ft. lbs. Actuate linkage to ensure carburetor reaches full open position.

DOWNSHIFT SWITCH ADJUSTMENT

Check accelerator cable adjustment to ensure that full throttle is reached. Loosen switch mounting bolts (located under accelerator pedal) and attach a test light to upper terminal on switch. Turn ignition to run position and depress accelerator pedal to floor. Rotate downshift switch upward until test light comes on then rotate switch 10° further and tighten mounting bolts.

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ELECTRICAL

BATTERY

12 Volt – Negative Ground.

Application	Delco Part No.	Cranking Power Watts @ 0° F
455"	R91	3350

STARTER

Application	Delco Part No.
455"	1108518

Other Data & Specifications – See *Delco Starters in ELECTRICAL Section.*

ALTERNATOR

Application	Amps.	Delco Part No.
Standard	61	1102368
Optional	80	1101015

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

ALTERNATOR REGULATOR

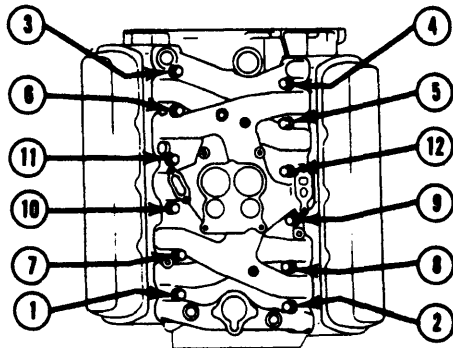
Delco – Nonadjustable, integral with alternator.

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

ENGINE

INTAKE MANIFOLD TIGHTENING

Tighten bolts initially to 15 ft. lbs. in sequence shown in illustration then retighten to 40 ft. lbs. in sequence shown in illustration.



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INTAKE MANIFOLD TIGHTENING SEQUENCE

BELT ADJUSTMENT

Tension (Lbs.) Using Strand Tension Gauge

Application	New Belt	Used Belt
All Belts	110-140	70

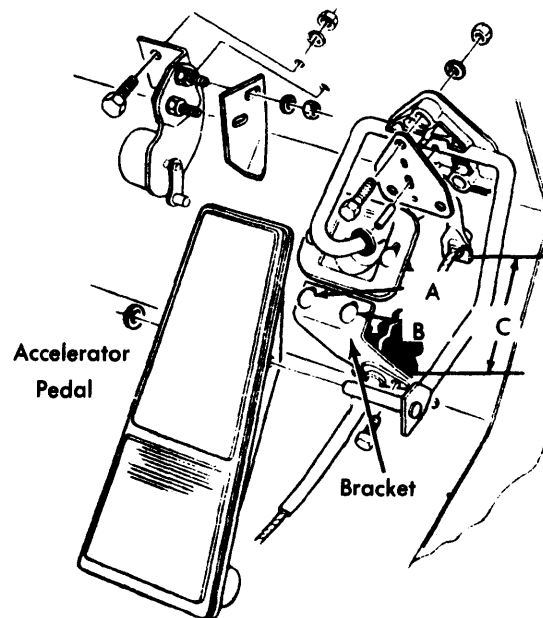
FILTERS & CLEANERS

Filter or Cleaner	Service Interval (Miles)
Oil Filter	Replace 6,000
Air Cleaner	Replace 12,000
PCV Valve	Replace 24,000
Auto. Trans. Filter	Replace 12,000
Fuel Filter	Replace 12,000
Distributor Cam Lubricator	Replace 24,000
Fuel Evap. Canister Filter	Replace 24,000

CAPACITIES

Application	Quantity
Crankcase	① 5 qts.
Automatic Transmission	
Drain & Refill	4 qts.
Total Capacity	10 qts.
Final Drive	4 pts.
Fuel Tank	2 tanks, 25 gals. ea.
LPG Tank	
Standard	44.5 lbs.
Optional	65 lbs.
Cooling System	21 qts.

① – Add one quart with filter change.



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ACCELERATOR LINKAGE ADJUSTMENT