

TUNE-UP

ENGINE IDENTIFICATION

Engine is identified by the prefix of the engine identification number stamped on pad on left side of block between first two spark plugs on 350" engine, and stamped on tag attached to right head on 304" and 360" engines.

MODEL IDENTIFICATION

VEHICLE IDENTIFICATION NUMBER

Vehicle identification number is stamped on metal plate located on dash under hood. It is on left side of CJ5, CJ5A, CJ6, CJ6A, DJ5 and DJ6 models. It is located on right side of all other models. Number is decoded as follows:

8105A1410001

First & Second Digit - Chassis Code.

Third & Fourth Digit - Body Style.

Fifth Digit - Special Model Code.

Sixth Digit - Drivers Side Code.

Seventh Digit - Engine Code.

Remaining Digits - Sequence Build 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.

COMPRESSION PRESSURE

With spark plugs and air cleaner removed and throttle and choke valves wide open, crank engine through at least four compression strokes. Compression is considered satisfactory if lowest reading cylinder is within 75% of highest reading cylinder.

Application	PSI
304"	185
350"	175
360"	185

VALVE TAPPET CLEARANCE

Hydraulic LiftersZero Lash

VALVE ARRANGEMENT

304" & 360" - E-I-I-E-E-I-I-E (both banks, front to rear).

350" - E-I-E-I-I-E-I-E (both banks, front to rear).

SPARK PLUGS

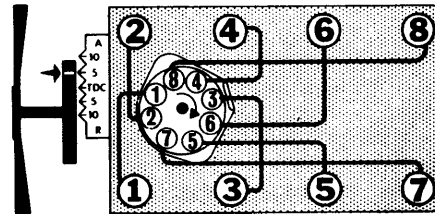
Gap	
304" & 360"035"
350"030"
Torque	
304" & 360"	25-30 ft. lbs.
350"	15 ft. lbs.

Spark Plug Type

Application	Champion No.
304" & 360"	N-12Y
350"	RBL-13Y

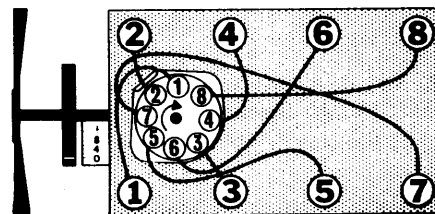
DISTRIBUTOR

Point Gap	
304" & 360"016"
350"016"
Cam Angle	
304" & 360"	29-31°
350"	28-32°
Breaker Arm Spring Tension	
304" & 360"	17-21 ozs.
350"	19-23 ozs.
Condenser Capacity	
304" & 360"18-.23 mfd.
350"18-.23 mfd.



1JE01

304" & 360" FIRING ORDER & TIMING MARKS



1JE02

350" FIRING ORDER & TIMING MARKS

IGNITION TIMING

Ignition timing is set with all accessories OFF, engine at normal operating temperature and idle, and distributor vacuum advance disconnected and plugged.

Application	Timing
304" & 360"	2.5° BTDC
350"	5° BTDC

1971 Jeep V8 Tune-Up

TUNE-UP (Cont.)

HOT (SLOW) IDLE RPM

Set idle with all accessories "OFF", engine at normal operating temperature, air cleaner removed and vacuum supply plugged.

Idle Speed RPM

Application	RPM
304" & 360"	
Man. Trans. (In Neutral).....	700-750
Auto. Trans. (In "D").....	600
350"	
Man. Trans. (In Neutral).....	650-700
Auto. Trans. (In Neutral).....	650-700

COLD (FAST) IDLE RPM

304" & 360" — With engine at operating temperature and fast idle screw against the index mark of fast idle cam, set to 1600 RPM.

350" — Fast idle will be correct when curb idle is correctly set. No separate adjustment is required.

AUTOMATIC CHOKE SETTING

304" — Set two notches rich.

350" — With choke valve closed, connecting rod end should fit in gauging notch on side of choke lever. Bend rod at offset to adjust, then connect rod in lower hole of lever.

360" — Man. Trans. set one notch rich. Auto. Trans. set two notches rich.

FUEL PUMP PRESSURE & VOLUME

Pressure (At 500 RPM)

304" & 360".....	5-6.5 psi
350".....	5.5-7 psi

Volume (At 600 RPM)

304" & 360".....	1 pt. in 30 seconds
350".....	1.2 pt. in 30 seconds

EMISSION CONTROL

See appropriate article in EMISSION CONTROL Section.

IGNITION

DISTRIBUTOR

Application	Delco-Remy No.
304".....	1112028
350".....	1111964
360".....	1111948

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

IGNITION COIL

Resistance	Ohms @ 75°F
Primary	
304".....	1.77-2.05
350".....	1.28-1.42
360".....	1.77-2.05
Secondary	
304".....	3,000-20,000
350".....	7,200-9,500
360".....	3,000-20,000
Ballast	
304" (Loom Wire).....	.85-1.85
350".....	1.80
360" (Loom Wire).....	.85-1.85

CARBURETION

CARBURETORS Ford 2100

Application	Carb. No.
304".....	IDA2
360" (Man. Trans.).....	IDM2
360" (Auto. Trans.).....	IRA2

Application	Rochester 2GV	Carb. No.
350".....		7041184

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

THROTTLE LINKAGE ADJUSTMENT

Adjust length of accelerator rod at threaded end so that carburetor throttle valve is fully open when accelerator pedal is fully depressed and returns to curb idle position when pedal is released.

DASHPOT ADJUSTMENT

304" & 360" Only — With throttle valve closed in curb idle position, fully depress dashpot plunger stem and adjust dashpot for clearance between end of plunger stem and throttle valve of 1/8".

ELECTRICAL

BATTERY

12 Volt - Negative Ground.

Application	Amp. Hr. Rating
Standard.....	60
Optional Heavy Duty.....	70

STARTER

Application	Make	Model No.
304"	Ford	C9FF-11001-A
350"	Delco-Remy	1108391
360"	Ford	DOFF-11001-B

Other Data & Specifications - See Ford and Delco-Remy Starters in ELECTRICAL Section.

ALTERNATOR

Application	Amps.	Motorola No.
304" & 360"	35	8AL2012F
350"	35	A12NW528

Other Data & Specifications - See Motorola Alternators in ELECTRICAL Section.

ALTERNATOR REGULATOR

Application	Motorola No.
304" & 360"	8RB2005
350"	R-2KI

Other Data & Specifications - See Motorola Alternator Regulators in ELECTRICAL Section.

ENGINE

INTAKE MANIFOLD TIGHTENING

Tighten intake manifold bolts to specifications.

Application	Torque (Ft. Lbs.)
304" & 360"	45-50
350"	50

BELT ADJUSTMENT

Tension (Lbs.) Using Strand Tension Gauge

Application	New Belt	Used Belt
Fan & Alternator		
304" & 360"	125-145	105-125
350"	110-120	70-80
A.I.R. Pump		
304" & 360"	125-145	105-125
350"	110-140	70-90

FILTERS & CLEANERS

Filter or Cleaner	Service Interval (Miles)
Air Filter.....	Clean 6,000
Oil Filter.....	Replace 2,000

CAPACITIES

Application	Quantity
Cooling System (Includes Heater)	
304"	14 qts.
350"	15 qts.
360"	13 qts.
Crankcase (Includes Filter)	
All	5 qts.
Transmissions	
3-Speed.....	2.5 pts.
4-Speed.....	6.5 pts.
Automatic.....	⓪ 19 pts.
Transfer Case.....	3.25 pts.
Differential	
Front (Except Gladiator)	2.5 pts.
Front (Gladiator)	3 pts.
Rear (Except Gladiator)	2.5 pts.
Rear (Gladiator)	3 pts.
Fuel Tank	
Jeep & Jeepster	16 gals.
Wagoneer	22 gals.
Gladiator	20 gals.
Auxiliary Tank (If Equipped).....	15 gals.

⓪ - This is total capacity, oil change uses 7.5 pts.