

TUNE-UP

TR7

ENGINE IDENTIFICATION

Engine number is stamped on the cylinder head.

Engine Code

Application	Code
All Models	CK

COMPRESSION PRESSURE

Check compression with engine at normal operating temperature, spark plugs removed and throttle wide open. Crank engine at least 4 "puffs" per cylinder. Lowest pressure should be at least 85% that of highest cylinder.

VALVE CLEARANCE

1) Disconnect battery and remove camshaft cover. Loosen camshaft bearing cap nuts and retighten to 10-14 ft. lbs. (1.4-1.9 mkg). Rotate engine. Check and record clearance between cam heel and tappet. Maximum clearance is present when cam is in vertical position.

2) If clearance is not within specifications, remove camshaft and individually lift out each tappet and adjusting shim.

3) Using a micrometer, measure thickness of adjusting shim removed. Add to this the measured valve clearance and subtract the specified clearance from the total. This will offer you the thickness of adjusting shim necessary to bring the clearance within specifications.

4) Install tappets and add shims as needed. Install camshaft and tighten bearing caps. Recheck valve clearance, and, when correct, replace camshaft cover.

Valve Clearance Specifications ①

Application	Intake In. (mm)	Exhaust In. (mm)
All Models008 (.20)	.018 (.50)

① - Engine cold.

VALVE ARRANGEMENT

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

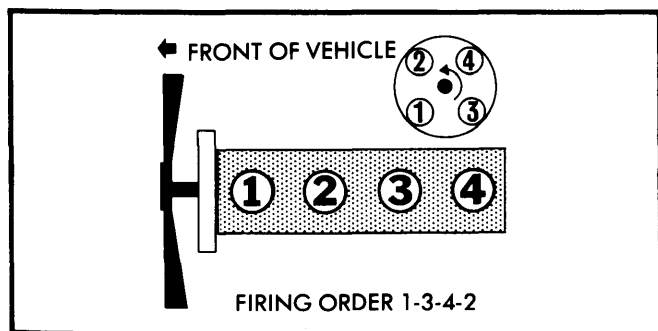


Fig. 1 Firing Order and Distributor Rotation

SPARK PLUGS

Application	Gap In. (mm)	Torque Ft. Lbs. (N·m)
All Models025 (.64)	20 (27)

Spark Plug Type

Application	Champion No.
All Models	N12Y

HIGH TENSION WIRE RESISTANCE

Carefully remove high tension wires from spark plugs and distributor cap. Using an ohmmeter, check high tension wire resistance while gently twisting wires. If resistance is not to specifications, or fluctuates from infinity to any value, replace high tension wire(s).

Resistance (Ohms) Per Wire

Application	Ohms
All Models	25,000-30,000

DISTRIBUTOR

All models are equipped with Opus Electronic Ignition System and the only adjustment required is adjusting the Pick-Up Module air gap.

CAUTION - DO NOT insert feeler gauge into pick-up air gap when the ignition circuit is energized.

Air Gap ①.010-.017" (.25-.43 mm)

① - Measured between timing rotor and pick-up module.

IGNITION TIMING

Check or adjust engine timing with engine idling at normal operating temperature. If correction is needed, rotate distributor.

Ignition Timing Specifications

Application	RPM	Timing
All Models	800	2° ATDC

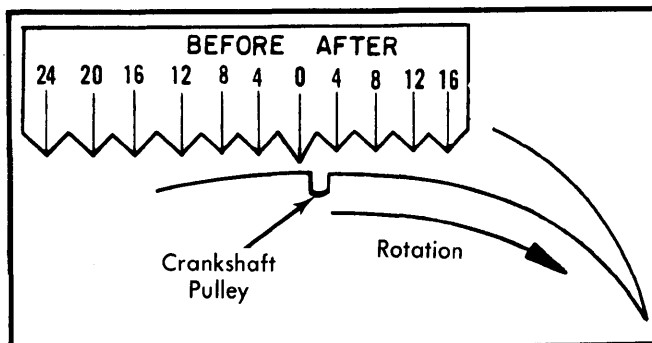


Fig. 2 Ignition Timing Mark Location

1981 Triumph 4 TuneUp

TUNE-UP (Cont.)

IDLE SPEED & MIXTURE

NOTE — The following adjustments must be performed with air filter in good condition, ignition timing and valve clearance adjusted to specifications and engine at normal operating temperature.

Use a 7/32" Allen wrench to turn air screw clockwise to lower idle speed or counterclockwise to increase idle speed. Screw is located on air plenum chamber.

NOTE — Mixture adjustment is not a normal tune-up procedure. Mixture should not be adjusted unless vehicle fails emission testing or air flow meter is replaced. If adjustment is necessary, use Feedback Monitor Tool (60973066).

Idle Speed & CO Level

Application	Idle RPM	CO%
All Models	700-900	①

① — Use special tester (No. 60973066).

FUEL PUMP PRESSURE

Pressure	36 psi (2.5 kg/cm ²)
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EXHAUST EMISSION SYSTEMS

See EXHAUST EMISSION SYSTEMS section.

GENERAL SERVICING

IGNITION

DISTRIBUTOR

All models are equipped with Lucas Opus Electronic Ignition System.

IGNITION COIL

Resistance Specifications (Ohms @ 68°F)

Application	Primary	Secondary
All Models	1.3-1.5

FUEL SYSTEMS

FUEL INJECTION

Fuel injected models are equipped with Bosch Air Flow Controlled (AFC) electronic fuel injection with oxygen sensor.

ELECTRICAL

BATTERY

Application	Amp. Hr. Capacity
All Models	50

Battery Location — In engine compartment, on firewall.

STARTER

Lucas..... Overrunning Clutch

Starter Specifications

Application	Volts	Amps	Test RPM
All Models	12	40	6000

ALTERNATOR

Application	Rated Amp. Output
All Models	65

ALTERNATOR REGULATOR

Lucas — Non-Adjustable, integral with alternator, with an operating voltage of 13.6-14.4 volts.

BELT ADJUSTMENT

Application	①Deflection
Fan Belt75-1.0" (19-25 mm)
Air Pump Belt25-.50" (6-13 mm)

① — Deflection is with pressure applied midway on longest belt run.

FILTERS

Filter	Service Interval (Miles)
Oil Filter	Replace every 7500
Air Filter	Replace every 36,000
Fuel Filter	Replace ever 36,000

CAPACITIES

Application	Quantity
Crankcase (Includes Filter)	4.8 qts.
Cooling System (Includes Heater)	7.8 qts.
Man. Trans. (SAE 75)	3.3 pts.
Rear Axle (SAE 75)	2.4 pts.
Fuel Tank	14.4 gals.