

# Electrical

**IMPORTANT.** The negative earth (ground) return system incorporates an alternator, which will be seriously damaged if polarity is reversed, or the engine run with either of the battery cables disconnected. If it is at any time essential to run the engine with the charging circuit incomplete, disconnect both cables from the alternator and "short" the terminals with a bridge piece.

If at any time a high speed battery charger is used, or if electric welding equipment is used on the car, remove both leads from the alternator, and reconnect when charging or welding is completed. When replacing any leads, take great care that polarity is correct.

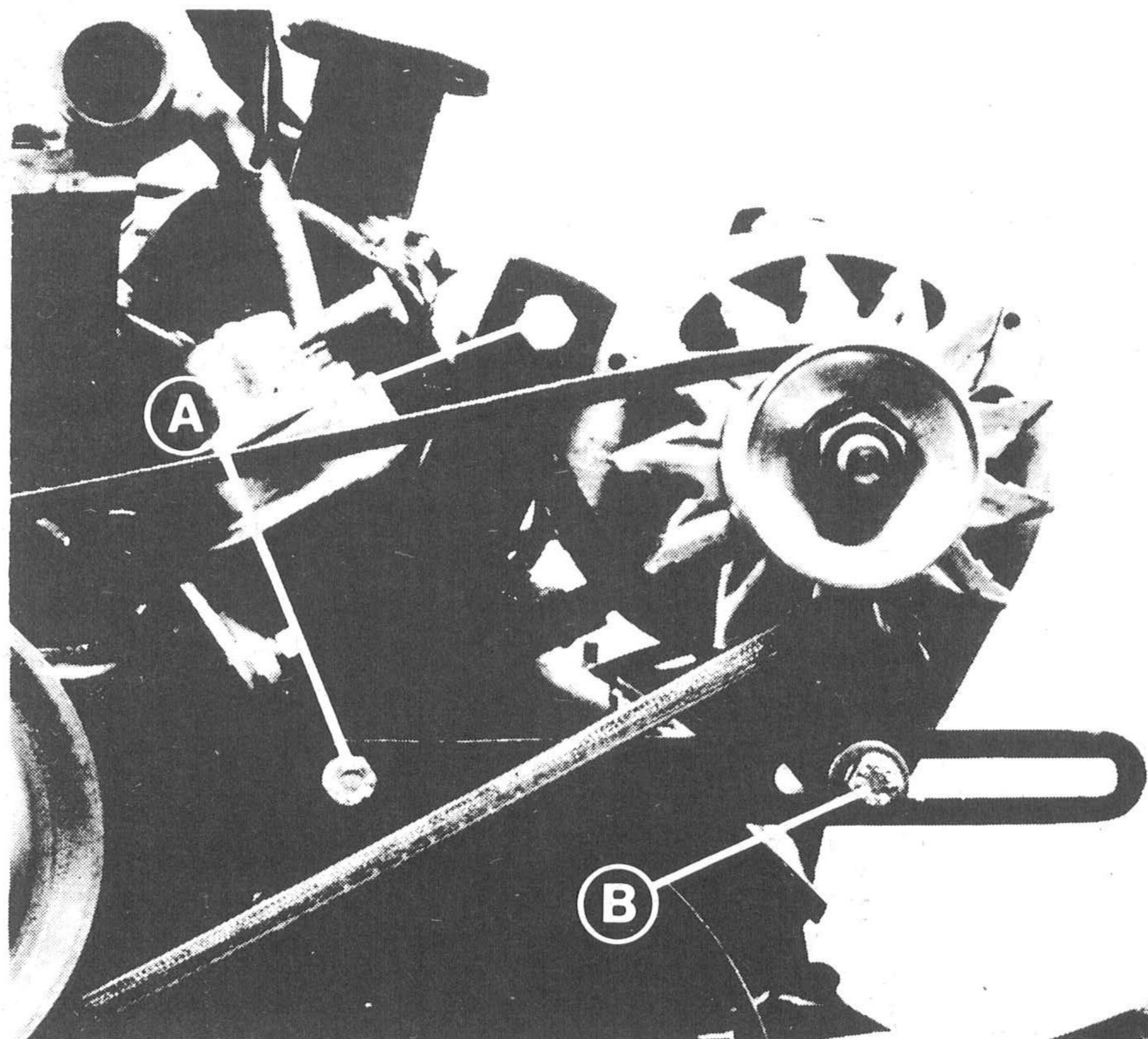


Fig 40

**Alternator.** The alternator has a separate belt drive, which should be tensioned to permit a deflection of  $\frac{1}{2}$ -inch (12 mm) at mid-point under hand pressure. Too tight a belt can damage alternator bearings. To adjust the belt, slacken off the mounting bolts 'A' (Fig 40) and adjuster bolt 'B', move the alternator until tension is correct and retighten the bolts. The end cover and ventilating slots must be kept clean, and terminals greased lightly with petroleum jelly or battery grease.

**Starter.** As the starting current is heavy, see that the cables are in good order, and that connections are clean, with a smear of petroleum jelly or battery grease, and tight, so that perfect contact is made. When greasing or retightening the terminals, it is good practice to temporarily disconnect the negative (—) cable from the battery, replacing it as soon as the work is completed.

**Battery.** The battery is mounted in a well in the front compartment under spare wheel. Always keep the exterior of the battery clean and dry. Wipe off surplus water when topping-up with absorbent paper tissue. If electrolyte is spilt, wipe off with a rag moistened with dilute ammonia solution. See that battery connections are tight and free from corrosion. Grease with petroleum jelly or battery grease.

Examine the electrolyte level in the cells frequently, topping up with purified (distilled) water only to a level at least  $\frac{1}{8}$ -inch (3 mm) above the tops of the plates. Never add acid unless contents of the cells have been spilt.

Never allow a battery to remain in a discharged or partly discharged state, which will ruin it. The voltmeter on the instrument panel acts as a battery condition indicator. For more precise testing, reading the specific gravity of the contents of each cell with a hydrometer