

LUCAS

Austin (1968-73)
 Capri (1970-73)
 Cortina (1970)
 Cricket (1971-72)
 Jaguar (1970-73)
 MG (1968-73)
 Rover (1970-73)
 Sunbeam (1968-70)
 Triumph (1968-73)

DESCRIPTION

4TR REGULATOR

Regulator unit provides highly stabilized output control and operates satisfactorily at high temperatures, due to use of silicon semi-conductor devices. There are no moving parts; unit does not require any maintenance except the molded cover should be kept clean. Regulator is not repairable. Regulator is used on 11AC alternator applications.

INTEGRAL REGULATOR

Regulator is used in "ACR" type alternators and is an integral unit. Regulator is not adjustable or repairable. If testing shows improper regulator functions, it must be replaced.

APPLICATION

| Model | Lucas Model No. (Part No.) |
|----------------------------|----------------------------|
| Austin America (1968-71) | RB 340 (....) |
| Austin Marina (1973) | Integral |
| Capri 4 Cyl. (1970-73) | ⊙4TR (D1RY-10316-B) |
| Cortina (1970) | Integral |
| Cricket (1971-72) | Integral |
| Jaguar (1969-73) | |
| All 6 Cyl. (1969-73) | 4TR (37423) |
| 12 Cyl. | |
| XKE W/O AC (1971) | 4TR (37423) |
| XJ12 (1973) | 11TR (....) |
| MG (1968-73) | |
| MGB & MGB GT | |
| 1968-71 | 4TR (37527) |
| 1972-73 | Integral |
| Rover (1967-73) | |
| 2000 TC & SC | |
| 1967-69 | (37423) |
| 1970 | ⊙4TR (37517) |
| 1971 | 4TR (37548A) |
| 3500S | |
| 1970 | 4TR (37548) |
| 1971 | 4TR (37548A) |
| Land Rover | |
| 1971 | ⊙ |
| 1972 | (37565) |
| 1973 | (....) |
| Sunbeam (1968-70) | |
| 1968-69 | 4TR (37527) |
| 1970 | (37344) |
| Triumph (1968-73) | |
| Stag (1971-73) | 4TR (37423) |
| All Other Models (1968-73) | Integral |

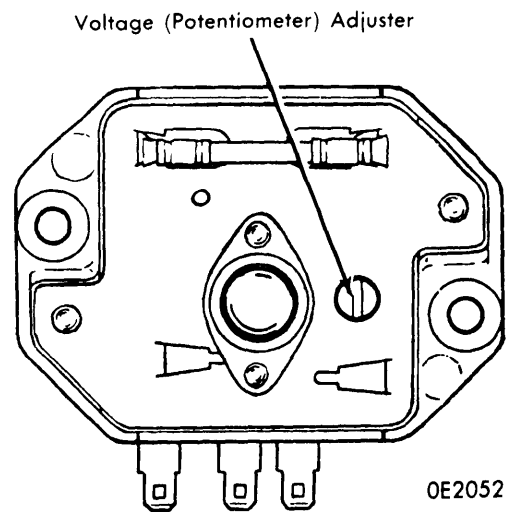
- ⊙ — Part number D1RY-10316-B is a Ford part number.
 ⊙ — Optional part number is 37290.
 ⊙ — 4 Cyl. gas engines use part number 37290F. 4 Cyl. diesel engines use part number 37570A. 6 Cyl. gas engines use part number 37517E.

TESTING

Battery must be in a fully-charged condition in order to ensure accurate checking or adjustment of regulating voltage.

4TR REGULATOR

Run alternator at charging speed for eight minutes. Connect a voltmeter across terminals of the battery. Turn on parking and tail lights, start engine, and slowly increase engine speed until alternator is running at approximately 3000 RPM (1500 engine RPM). Voltage reading should be 13.9-14.3 volts at normal ambient temperature.



REAR VIEW OF 4TR REGULATOR

INTEGRAL REGULATOR

Connect a voltmeter between main terminals of battery. Install a 0-60 amp ammeter in series with alternator main output cable, at its connection with starter solenoid. Start engine and run alternator at 5000 RPM until ammeter shows an output not exceeding 7.5 amps. Voltage reading should be 14.1-14.5 volts. If reading obtained is unstable or outside specified limits, the voltage regulator is faulty and must be replaced.

ADJUSTMENT

4TR REGULATOR

Remove the control unit mounting screws. Invert unit and chip away the sealing compound which conceals the voltage (potentiometer) adjuster. Check that voltmeter is still connected across battery terminals. Start engine and run alternator at 3000 RPM (1500 engine RPM), turn voltage adjuster on regulator clockwise to increase voltage setting or counterclockwise to decrease setting. A small movement of the adjuster will make appreciable difference in voltage. Recheck setting by stopping engine, then restarting and running at check speed.