

## Error in the MGBGTV8 manual rotation of the distributor - erratum

Jim Livingstone has spotted a mistake in the MGBGTV8 Supplement AKD8486 to the MGB Workshop Manual and highlights where they are.

There are several instances in the MGBGTV8 Supplement AKD8468 where the **direction of rotation of the distributor is incorrectly stated as anti-clockwise**. As it is obviously too late to issue an erratum to a 50 year old publication the purpose of this note is to alert members of the MG Car Club and in particular those in the V8 Register to this error.

As far as ignition timing is concerned the consequences of the error are not serious as most will perform this operation dynamically using a strobe lamp and feedback from the flash on the timing marks will quickly identify the effect of rotating the distributor body. For initial static setup the backlash in the rotor

shaft needs to be taken up against the direction of rotation - i.e. anti-clockwise.

Potentially more serious are the implications for those who **prime their oil system** using an electric drill and extension shaft. The drill needs to be set to **rotate clockwise to pump oil** in the normal direct of circulation. For those wishing to correct their MGBGTV8 Supplement the affected pages are: 14, 102 and 103 and highlighted copies are added at the end of this note. Note if you have early "Issue 1" pages in your V8 Supplement, the page numbers in later copies of "Issue 1" are different – see below.

For members wishing a more detailed **explanation of the rotation of the distributor** a supplementary article has been prepared and will be issued separately via the link below:  
[MGBGTV8 distributor, explanation of the direction of rotation](#)

There is also another note **explaining how to adjust the ignition timing**:

[MGBGTV8 distributor, explanation of ignition timing adjustment](#)

### ENGINE TUNING DATA

ENGINE	
Type .. .. .	V8
Capacity .. .. .	215.54 in <sup>3</sup> (3532 cm <sup>3</sup> )
Compression ratio .. .. .	8.26 : 1
Firing order .. .. .	1, 8, 4, 3, 6, 5, 7, 2
Cranking pressure .. .. .	155 lb/in <sup>2</sup> (109 kgf/cm <sup>2</sup> ) at 200 rev/min
Idling speed .. .. .	800 to 850 rev/min
Fast idle speed .. .. .	1400 to 1500 rev/min at commencement of enrichment
Ignition timing:	
**Stroboscopic at 1000 rev/min † ±	8° B.T.D.C.
Advance check at 2000 rev/min † ±	26° to 30° B.T.D.C. **
Timing marks .. .. .	Pointer on timing case and degree markings on crankshaft pulley
Valve clearance .. .. .	Not adjustable
**Exhaust gas CO content .. .. .	2% maximum**

### DISTRIBUTOR

Make/type .. .. .	Lucas 35D8
Rotation of rotor .. .. .	<b>Anti-clockwise</b>
Dwell angle .. .. .	26° to 28°
Contact breaker gap .. .. .	0.014 to 0.016 in (0.35 to 0.40 mm)
Condenser capacity .. .. .	0.18 to 0.24 microfarad
Serial number .. .. .	41394

#### Centrifugal advance:

Decelerating check†‡ .. .. .	33° to 37° at 4900 rev/min
	28° to 32° at 3600 rev/min
	24° to 28° at 2600 rev/min
	19° to 23° at 2000 rev/min
	14° to 18° at 1600 rev/min
	9° to 13° at 1200 rev/min
No advance below‡ .. .. .	600 rev/min

#### Vacuum advance

Maximum .. .. .	16° at 17 inHg (432 mmHg)
Starts .. .. .	5 inHg (127 mmHg)

### SPARK PLUGS

Make/type .. .. .	Champion L92Y
Gap .. .. .	0.035 in (0.90 mm)

### IGNITION COIL

Make/type .. .. .	Lucas 16C6 with ballast resistor
**Primary resistance at 20° C (68° F) .. .. .	1.2 to 1.4 ohms**
Consumption-ignition on at 2000 rev/min .. .. .	1A

### CARBURETTER

Make/type .. .. .	SU HIF6
Specification .. .. .	AUD 613 L/R
Piston spring .. .. .	Yellow
Jet size .. .. .	0.100 in (2.54 mm)
Needle .. .. .	BBU

† Vacuum disconnected

‡ Crankshaft degrees and rev/min

### ELECTRICAL

#### \*\* DISTRIBUTOR

—Remove and refit 86.35.20

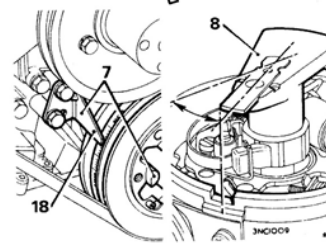
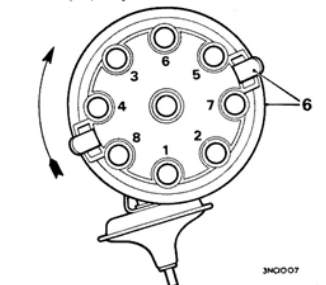
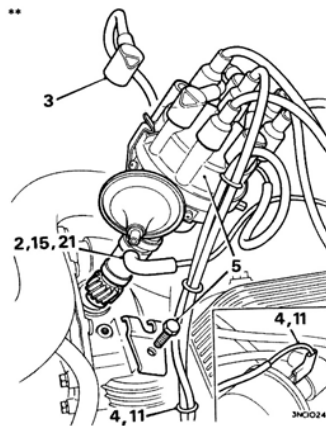
#### Removing

1. Disconnect the battery earth lead.
2. Pull off the vacuum pipe.
3. Pull all the plug leads and the high tension lead from the distributor cap.
4. Pull the low tension lead from the ignition coil, and separate this lead from the high tension lead.
5. Remove the distributor clamp bolt and pull the complete distributor assembly with its cap from the timing cover.

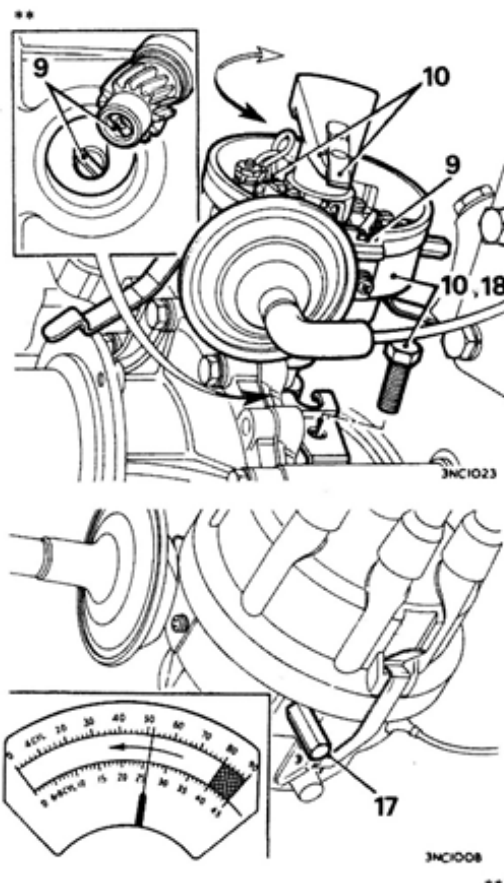
#### Refitting

6. Remove the cap from the new distributor, and push in the sparking plug and high tension leads in the sequence shown.
7. Turn the engine using a bar placed between the notches on the crankshaft pulley until number one cylinder (on left-hand bank) is firing and align the pointer and the 6° B.T.D.C. mark on the pulley.
8. Align the rotor arm and the notch in the side of the distributor body; this position allows for the 30° of **anti-clockwise** movement through which the rotor arm will turn as the skew gears engage while the distributor is being fitted.
9. Rotate the on pump spindle to align its slot and the dog on the end of the distributor spindle and fit the distributor into the timing cover with the notch in the distributor facing the left-hand wing valve. If the distributor fails to sit down on its base, rotate the crankshaft slightly until it drops down and re-align the front pulley onto the 6° B.T.D.C. mark.
10. Turn the distributor body until the contact points are about to break, check that the rotor arm is pointing towards number one plug lead and refit the distributor body clamp. Check the static timing by the lamp and battery method before starting the engine.

continued



11. Pass the low tension lead through the clips on the high tension lead, and connect it to the terminal on the ignition coil.
12. Refit the distributor cap.
13. Reconnect the battery.
14. Connect up electronic equipment according to the manufacturer's instructions to set the dwell angle and ignition timing.
15. Plug the end of the disconnected vacuum pipe to prevent an air leak into the inlet manifold.
16. Start the engine and set the idling speed to 1000 rev/min.
17. Check the dwell angle, and adjust if necessary to the figure given in 'DATA', by turning the hexagon headed screw on the distributor body clockwise to reduce or anti-clockwise to increase the dwell. Should this be too low initially adjust it to above the correct setting and then reduce it until the correct setting is re-obtained. If the meter being used does not have an eight cylinder scale, select the four cylinder scale and halve the readings obtained.
18. Slacken the distributor securing clamp bolt, and turn the distributor body clockwise to retard or anti-clockwise to advance the ignition timing until the stroboscopic light synchronizes the timing pointer and the timing mark on the crankshaft pulley to the figure given in 'DATA'. Tighten the clamp bolt and re-check the timing.
19. Readjust to the normal idling speed as given in 'DATA' then stop the engine.
20. Remove the electronic equipment.
21. Unplug the vacuum pipe and reconnect it to the distributor.



#### DATA

##### Distributor:

Make/type .. .. .	Lucas 35D8
Rotation of rotor .. .. .	Anti-clockwise
Dwell angle .. .. .	26° to 28°
Contact breaker gap .. .. .	0.014 to 0.016 in (0.35 to 0.40 mm)
Condenser capacity .. .. .	0.18 to 0.24 microfarad
Serial number .. .. .	41394
Ignition timing (stroboscopic) .. .. .	8° B.T.D.C. at 1,000 rev/min
Engine idling speed .. .. .	800 to 850 rev/min**

