



Service bulletin

C
226
EXPORT
6

THE BRITISH MOTOR CORPORATION (AUSTRALIA) PTY. LIMITED

FOR THE ATTENTION OF SERVICE & PARTS MANAGERS.

AUTOMATIC TRANSMISSION

CARS

The following comparison will be helpful in comparing the improvements in the B6 engine as fitted to the new Automatic of Wolseley 24/80 and Austin Freeway.

The Serial number prefix of the power unit used on the Automatic Transmission will be 24Y/A/H commencing at number 1001, i.e. 24Y/A/H1001.

WOLSELEY

	AUTOMATIC GEARBOX	MANUAL GEARBOX
Compression Ratio	8.2 to 1	7.7 to 1
Cubic Capacity	2433 c.c.	2433 c.c.
Developed B.H.P.	82 BHP @ 4300 RPM	80 BHP @ 4350 RPM
R.A.C. Rating	21.6 H.P.	21.6 H.P.
Rear Axle Ratio	3.91 to 1	3.91 to 1
Maximum Torque	129lb.ft. @ 1750 RPM	123lb.ft. @ 1650 RPM
B.M.E.P.	131 P.S.I. @ 1750 RPM	125 P.S.I. @ 1650 RPM

24/80

AUSTIN

FREEWAY

An altered distributor, having an advance curve to suit the higher compression ratio has been fitted to the Automatic range, details of which are given below:-

DISTRIBUTOR R.P.M.	ADVANCE
1650	11° to 13°
650	6° to 8°
200 to 300	NIL

S

Vacuum advance commences at 4" mercury. Maximum advance is at 15" mercury, giving 7° advance.

Page 1 of 3

18.2.63

IDLING.

Set to 5⁰ B.T.D.C. (Dynamic) at 450 R.P.M. Idling is set at 450 R.P.M. to reduce creep.

TORQUE CONVERTER.

To take full advantage of the Borg-Warner '35' Automatic Transmission and 'B6' power unit, it was decided to use the larger three-element 11 in. torque converter giving a smooth progression torque multiplication to equivalent gear ratio of 2:1. To achieve maximum efficiency and to provide for further development the impellor and turbine blades are kept to a close tolerance during manufacture thus reducing converter slip to a minimum however, there may be a tendency to give slight 'creep' when in the 'D', 'L' or 'R' range and it is important that idling speed adjustments be maintained correct to specification i.e. 450 r.p.m.

The following information will assist when checking the Automatic Transmission.

FLUID LEVEL.

The car must be on a level surface. Select 'P' and allow engine to idle for two minutes. Remove dipstick, wipe with non-fluffy rag or paper, insert and withdraw immediately. The markings on the dipstick are calibrated for the transmission at normal temperature thus, if the transmission is cold, the correct level will be 5/16" below the 'full' mark. At running temperature the level should be at the full mark. DO NOT OVERFILL.

Oil changes are not envisaged, however, if the sump is removed for attention to front band adjustment, the transmission should be filled with one of the following transmission fluids:-

Ampol Type F
Golden Fleece Type 33
Caltex Texamatic 4571A
Castrol TQF
Shell Type 35
Neptune Type 35

IDLING SPEED.

To be set to 450 r.p.m. with the transmission in 'D', hand brake **MUST** be applied. Starter inhibitor switch should only operate in 'P' and 'N'. Reverse light, where fitted, should only operate in 'R'. Check that, in 'P' the selector lever is trapped by the gate.

Stall speed should be 1500-1800 r.p.m. with 'L' or 'R' selected. (Do not stall for longer than 10 seconds or the transmission will overheat).

<u>RATIO CHANGES AND ROAD SPEEDS.</u>	<u>CHANGE</u>	<u>M.P.H.</u>
Light throttle change up	1-2	8-12
	2-3	13-18
Full throttle change up (at the detent)	1-2	24-28
	2-3	38-45
Full throttle change up (plus kick-down)	1-2	28-35
	2-3	48-55

When 'L' is selected at say 40 m.p.h. there will be an automatic downshift from 3-2. With the throttle closed, low gear engages before coming to rest. However, low can be engaged at 15 m.p.h. approximately by depressing the accelerator to the kick-down position.

Engine braking is available in all gears with the exception of automatic low (D1).

OIL PRESSURE.

With the selector lever in 'N' position a line pressure of 55/60 lb. sq. in., should be obtained at 500 r.p.m. and this reading should increase by 15/40 lb. sq. in., at 1000 r.p.m.

SERVICE.

Accurate road-testing and correct diagnosis on this type of transmission is essential and will prevent unnecessary dismantling of units. The procedure outlined in the Service Training notes will assist until the release of the Workshop Manual Supplement in the near future.

It is emphasized that all units can be rectified in the field with normal repair facilities and skill. You have been advised that a few assemblies are located at key points throughout the Commonwealth but these units will only be supplied after reference to the Service Department of your State Distributor or Factory Depot.

All displaced Automatic Transmission material **MUST** be returned to the Distributor or B.M.C. State office, who will forward it to the Factory for investigation as necessary. It is absolutely essential that the serial number of the transmission is quoted in every case together with all vehicle details and full description of the fault must be described on the label.



N. Prescott
Service Manager.