

JOHNSON MOTORS, INC.**PASADENA, CALIFORNIA**ARIEL CYCLONE 650 cc. TWIN TECHNICAL DATA**A. CAM TIMING**

The Ariel 650 cc. Twin cam timing listed in the 1958 Dealers' School Manual, Page 16, does not apply to the new Cyclone. The timing should be as follows:

Valve timing taken with .020 tappet clearance. Reset tappets to .008 for running.

| | |
|----------------|-------------------|
| Intake Opens | 37° Before Top |
| Intake Closes | 58° After Bottom |
| Exhaust Opens | 63° Before Bottom |
| Exhaust Closes | 32° After Top |

B. CONNECTING ROD JOURNAL SIZE

The Ariel 650 cc. connecting rod journal size shown in the 1958 Dealers' School Manual, Page 26, does not apply to the Ariel Cyclone. The journal size has been increased to 1.686 on all 1958 Ariel 650 cc. twins. The timing side main bearing journal size has been retained at 1.373, but the main bearing is now of copper alloy material.

C. BRAKES

All Ariel central brake linings are ground, after installation on the shoes, to a very close tolerance to drum size. If the brake shoes are removed, and are to be used again, observe that one brake shoe has a color code mark. Install this shoe to match a corresponding color mark inside the brake plate.

To increase rear brake leverage, for sustained competition use, a simple modification is recommended. The flexible cable has a clevis pin at the bell crank, Part No. 5440-56. Drill a new 1/4 inch diameter hole 3/8 of an inch below the present hole, and lower the clevis to this new hole.

For competition purposes it is advisable to clean out all of the original wheel bearing grease and repack with a high melting point wheel bearing grease. The heat from severe braking and chain friction may melt the all-purpose grease and will saturate the brake lining. Once the lining is grease soaked it is advisable to install new lining.