## WINNARD

## **BRAKING HISTORY** DISC BRAKES ON A 1958 DOUBLE DECKER BUS!

Thos. Winnard & Sons Ltd have been at the forefront of brake drum production since the 1930's but Winnard also manufactured one of the first heavy commercial brake discs fitted to passenger vehicle in the late 1950's.

The Midland "Red" Motor Services (BMMO & MROC) BMMO D9 was a prototype high capacity double decker bus with range of innovative features including:

- Disc brakes
- Independently sprung rubber suspension
- Fully integral half cab construction.

It is generally agreed that the D9 was one of BMMO's most successful designs, and the type was hugely popular with both staff and passengers. The advanced disc-brake system only failed due to excessive pad wear because of under developed technology—not because it didn't stop the bus! To put this into perspective, it wasn't until the 1990's before disc-braking systems began to appear on production buses and coaches, but Midland Red were there in the 1950's.

Winnard manufactured brake discs for this vehicle back in the early late 1950's and early 1960's. More recently we also produced a batch of discs to assist with restoration of a number of buses for the Transport Museum at Wythall, Worcestershire.

For further information on the Midland "Red" Motor Services BMMO D9 or the Wythall Transport Museum click on the following links:

www.midlandred.net

www.wythall.org.uk



BMMO D9 Brake disc & hub assembly



## WINNARD - THE ORIGINAL AFTER-MARKET SUPPLIER

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