

## Lagondaforum: BT-H Magneto CE6

### BT-H Magneto CE6

*Written by Radman at Sep 15, 2015 5:48 pm*

I have a CE6 Form D2R magneto for sale. It has been stored for 50 years plus but appears in remarkably good order when stripped and produces a fat spark when flicked. Some photos at [www.cmengines.co.uk](http://www.cmengines.co.uk) -  
Thought it was good for LG45 but not sure now...offers invited...

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### Re: BT-H Magneto CE6

*Written by Colin M34 at Sep 16, 2015 9:55 am*

The BTH CE6 magneto is a very nice unit, often fitted to the Meadows engine in an M45.

However most LG45s used a pair of Scintilla vertex units in tandem. These are mounted on the nearside of the engine. So this CE6 unit would suit an M45 or Invicta, assuming it is a 3/4 engine speed unit not a 2/3 one used on a Three Litre.

Colin

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### Re: BT-H Magneto CE6

*Written by Rich5ltr at Sep 16, 2015 11:30 am*

Going off at a tangent, how does a magneto running at 3/4 or 2/3 engine speed provide the spark at the right time? Or, doesn't the magneto control the timing?

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### Re: BT-H Magneto CE6

*Written by davidbracey at Sep 16, 2015 2:40 pm*

Good question Rich. I had always assumed that it was down to the worm gear on the end of the magneto shaft and that you would simply use a different gear. No?

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### Re: BT-H Magneto CE6

*Written by bill at Sep 17, 2015 7:04 pm*

I think you will find that the 3/4 speed is achieved by the gearing inside the magneto - hence a 3 litre 3/4 engine speed magneto being of the "hens teeth" variety and value - the last one I saw was £2500 I think !

With the greatest of respect Colin I think that the 3 litre engine magneto is 3/4 engine speed not 2/3 - at least it was on my 3 litre and every other 3 litre I came across ! The 3 litre used a "Scintilla MN6 -3/4" I think ?

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### Re: BT-H Magneto CE6

*Written by alecrb at Sep 18, 2015 2:55 am*

My reprint of a Scintilla manual notes that the magnetos deliver two sparks per rev, so a six cylinder magneto has to be driven at 1.5 times engine speed. It also notes that for engines working on a two stroke cycle, twice as many sparks per revolution have to be delivered. They therefore made magnetos marked MN4 1/2, GN4 1/2, MN6 3/4, and GN6 3/4 with 4 sparks per rev, so they can be driven at the same engine speed as the conventional magnetos on four stroke engines. I suppose you could run one of these special magnetos on a four stroke - you would adding a spark just as the exhaust stroke was finishing, which I don't think would do any harm.

The gearing inside the magneto is to match the magneto speed to the distributing rotor, so it would be 2:1 on a four cylinder and 3:1 on a six. I'm getting this information from the manual - I don't have a PN6 to look at as my car has a more modern Fairbanks-Morse.

Alec

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### Re: BT-H Magneto CE6

*Written by alecrb at Sep 18, 2015 7:18 am*

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It just occurred to me that the engine designer might have chosen to use the two-stroke type magneto (MN6 3/4) and run it at half the speed that a MN6 would need. I checked the club's Vintage Lagonda Handbook, and it does state that the 3 litres did use the MN6 3/4 magnetos and that they run at 3/4 engine speed.

Alec

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### Re: BT-H Magneto CE6

*Written by Rich5ltr at Sep 18, 2015 12:38 pm*

Thanks for the explanations about speeds, it is all starting to make sense to me now! 😊

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