

# THE *A1* STEAM LOCOMOTIVE TRUST

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## PRESS INFORMATION - PRESS INFORMATION - PRESS INFORMATION

PR99/02

Friday 30 April 1999

## FIRST WHEELS ON AXLES OF NEW STEAM LOCOMOTIVE

### *Rape seed oil from Tesco's put to a novel use*

The A1 Steam Locomotive Trust, the registered charity that is building the first new mainline steam locomotive in Britain for almost 40 years, is making novel use of rape seed oil from Tesco's. The oil, more usually found in the average kitchen, is being used by the Trust's contractor, Ian Riley of Riley & Son (Electromech) Ltd of Bury to enable *Tornado's* six 6ft 8in driving wheels, four 3ft 2in front bogie wheels and two 3ft 8in Cartazzi (trailing) wheels to be pressed onto their axles.

Today, railway wheels are fitted to their axles by heating the wheels so that they expand and then shrink-fitting them to their axles. Due to the roller bearings having to be fitted to *Tornado's* axles before the wheels, the Trust has reverted to the traditional method of pressing on the wheels to avoid the hot wheel damaging the bearing. Tests conducted on behalf of the Trust have shown that an initial interference of 0.00025 per inch of diameter, a taper on the axle of 1 in 500 and lubrication courtesy of rape seed oil from Tesco's should see the required 10 to 12 tons per inch diameter of pressing force.

David Elliott, technical director of The A1 Steam Locomotive Trust, added: "The building of *Tornado* has meant the rediscovery of old skills and new applications for the latest technology but this is the first time since the project was launched in 1990 that the contents of the average kitchen have been used in the construction of *Tornado*. When it comes to the force needed to press these large wheels onto their axles, I suppose 'every little helps'."

The Cartazzi wheels have already been fitted to their axle, with the bogie wheels due to be completed by early May and the driving wheels by the end of June.

### **Dedicated Covenants**

The Trust's Dedicated Covenant scheme continues to be highly successful, with existing Covenantors having already funded most of the items so far made available. The latest batch of motion components are:

- **Upper slide bars:** an additional covenant of £8.33 per month, or a donation of £500, is needed for each of three of these vital motion components.
- **Union links:** an additional covenant of £5 per month, or a donation of £300, is needed to fund each of three of these motion parts.
- **Outside eccentric rod:** an additional covenant of £10 per month, or a donation of £600 is needed for the purchase each of two of these very visible parts of the locomotive.
- **Right hand reversing arm:** an additional covenant of £5 per month, or a donation of £300 is needed to complete this part.

more follows...

**New Prospectus Published**

The Trust has just published the latest edition (version 12) of its Prospectus which provides detailed information on The A1 Steam Locomotive Trust and its project to build the new Peppercorn class A1 60163 *Tornado*. This fully illustrated document, produced for potential individual covenantors and industrial sponsors, is now available from the A1 Trust's hotline on 01325 4 60163.

***Tornado* on TV**

The project to build *Tornado* will feature on BBC2's *One Foot in the Past* programme on the future of steam due to be shown on the evening of Saturday 22 May 1999. The programme will show *Tornado* under construction at Darlington Locomotive Works and features a number of the Trust's volunteers.

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