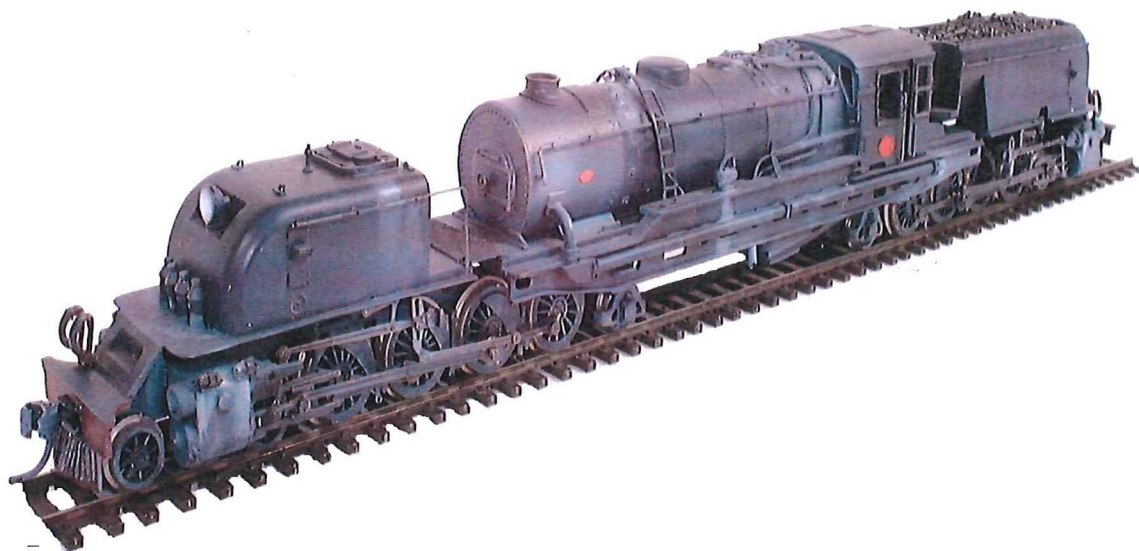




S.A.R. GMA/M GARRATT  
4-8-2+2-8-4



Kit Reference  
**E222**  
(HOM Scale)

DJH Engineering Ltd  
Project House, Consett Business Park, Villa Real, Consett  
Co. Durham DH8 6BP England  
Tel: +44 (0) 1207 500050 Fax: +44 (0) 1207 599757  
Email: [sales@djhmodelloco.co.uk](mailto:sales@djhmodelloco.co.uk) Web: [www.djhmodelloco.co.uk](http://www.djhmodelloco.co.uk)



## HELPFUL HINTS FOR INEXPERIENCED MODELLERS

By TONY WRIGHT (Professional Model-maker)

DJH Engineering Ltd – Model Loco kits are among the best on the market with regard to accuracy of components and ease of construction. By choosing a suitable kit from their range with regard to your own experience, no great problems should be encountered with its construction if a few simple rules are followed.

First check all components against the list provided in the instructions. It is wise to leave any smaller castings and pieces in the polythene wrapping until they are required. In the event of any bits being missing or damaged, complete and return the parts form in the kit, stating parts and numbers.

### Tools

A few simple tools are a pre-requisite for making any metal loco kits. Our suggested list contains:-  
Fine files – flat, round (mousetail), half round, square etc. These are usually described as Swiss files and a set will stand you in good stead. However, they clog easily and for heavier work warding files are more suitable, again in a range of different types.

Small pliers – flat, snipe-nosed and round if possible, a good set of tinsnips, small craft knife and fibreglass propelling pencil brush are also useful. A range of small drills, mini-drill (if possible), pin chuck and a set of small taper broaches are also most useful, along with fine tweezers and a range of fine emery papers. A small engineers square will aid getting components together straight and parallel.

Larger tools might include a small vice, piercing saw, razor saw, and junior hacksaw.

As with all tools, buy the best you can afford, adding to the set as experience and finance permits. The model press should provide you with a list of suitable suppliers.

Before beginning, identify the actual locomotive of the class you plan to model. To this end, collect a number of good photographs and, if possible, an accurate 4mm drawing. Railway pictorial volumes usually can supply a selection of different prototype pictures. Remember, throughout a loco's life there were often substantial alterations to its appearance. Most of the kits in the Grandspot range provide a selection of different bits and pieces for many of the components. By reference to a photograph, choosing the appropriate piece is made easier. Good drawings can usually be sourced via the model press.

It is always wiser to make the chassis before the body and for actually fixing the kits together there are two possibilities – glue or solder, the latter usually favoured by the more experienced for it is by far the better way.

Before each method is contemplated, mating components must be cleaned of any flash (odd bits left on castings after removal from the moulds) by using files and fibreglass brush. By employing a 'dry run', the true fitting of parts can be checked, it being occasionally necessary to file an edge to fit a slot etc.

The best glue for general construction is 5 minute epoxy – several manufacturers produce this twin tube system. Any parts must be held together whilst being fixed but the bond is durable and strong when cured. Smaller parts can be fixed with superglue, any excess adhesive being cleaned off later.