AMBIS Mainframes

MF1 for GWR/TVR Hudswell Clark 0-4-0ST "S" class

This is a basic etching designed to fit with the K's kit of that locomotive, using new mainframes, cylinder block and brake parts. The frames overall width is such that this will be useable in EM and P4 only.

We would recommend using High Level sliding bearings on the front axle and a High Level 1:108 gearbox.

A drawing of this engine can be found in Model Railways May 1972 Page 508/509 by Colin Binnie.

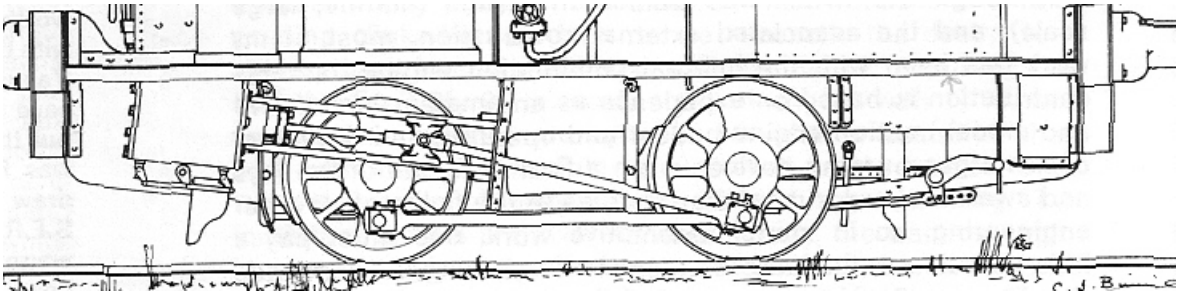
The original locomotive was a standard design by Hudswell Clark, but was rebuilt in 1895 by the Taff Vale Railway at its Cardiff works.

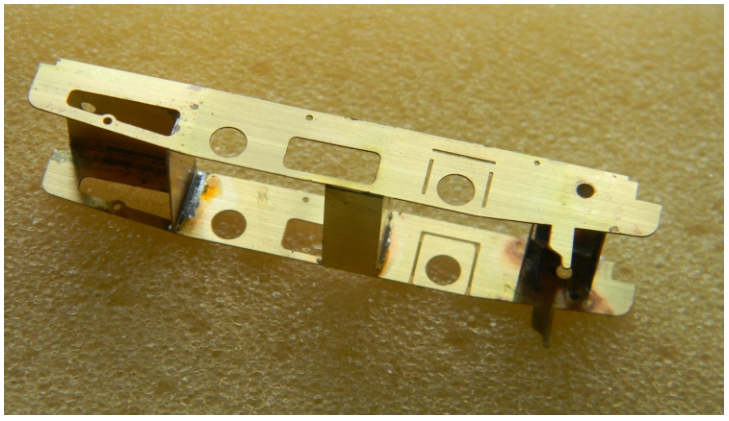
There are 13 parts to this product:

1. A fold up pair of mainframes. Two mounting holes are provided at front and rear in line with the K's kit. A cut out centre piece strenghtens the mainframes and provides the second mounting point for a compensation beam for the front axle. A standard bearing size hole will need to be removed to allow a sliding axlebox to be fitted - we suggest using the High Level Model's version.
2. Two cylinder wrappers that fold up to be bolted onto the mainframes.
3. Two front cylinder covers that once fixed to the front of the cylinder wrappers will need to be trimmed at the top to clear the footplate casting.
4. Two cylinder drain cocks which fix into the holes in each cylinder wrapper. These are handed, the cylinder drain cocks point rearwards on the locomotive.
5. Two rear guard irons that fix behind the mainframes abuting the mainframe spacer. These and the front guard irons will need to be bent outwards to suit the track guage being used. The rear guard irons are folded over and the plate forms a firebox outline behind the guard irons which are located behind the mainframe.
6. Two brake lever arms to be laminated that fix to a beam (not supplied) that fits beneath the cab/firebox. As the handrake is to the left side (facing forwards) this arm should be attached outside the brake rodding on the left side only.
7. Two brake rods that attach to the the beam and go behind the rear driving wheels to the brake blocks.

The cab footsteps and balance weights for the drving wheels are not provided It is assumed the slide bars, crossheads, connecting rods and coupling rods for the kit are used. We assume new plastic brake blocks are fitted - mounting holes are provided in the mainframes. Bolts to fix the body and the cylinders to the mainframes are not supplied.

The driving wheels used should be between 2 ft 9 inches and 2 ft 11 inches diameter, 10 spoke pin between spokes, both versions are available from Alan Gibson Models.





The "test etch" of the mainframes with the "knock out" spacer fitted.

MF2 for MR Johnson 0-4-0ST 1500-1517

This is supplied to fit the K's kit for this locomotive, although more recent evidence indicates the wheelbase for this series of locomotives was 7 feet not 7 ft 6 inches as produced in the kit.

The class were originally 1322 which became the 1500 class numbered 1500-1517 in 1907. An extended version the 1143A class (later 1518 class)used the 7 ft 6 inch wheelbase and were numbered 1518-1527 in 1907.

The K's kit has most affinity to the 1500 class is is why the mainframe etching includes new replacement coupling rods. However the footplate casting includes small splashers which are to the wider distance.

Prototype reference Summerson Midland Railway Locomotives Volume 3 page 117/8.

The mainframes overall width in the etching is such that this will be useable in EM and P4 only.

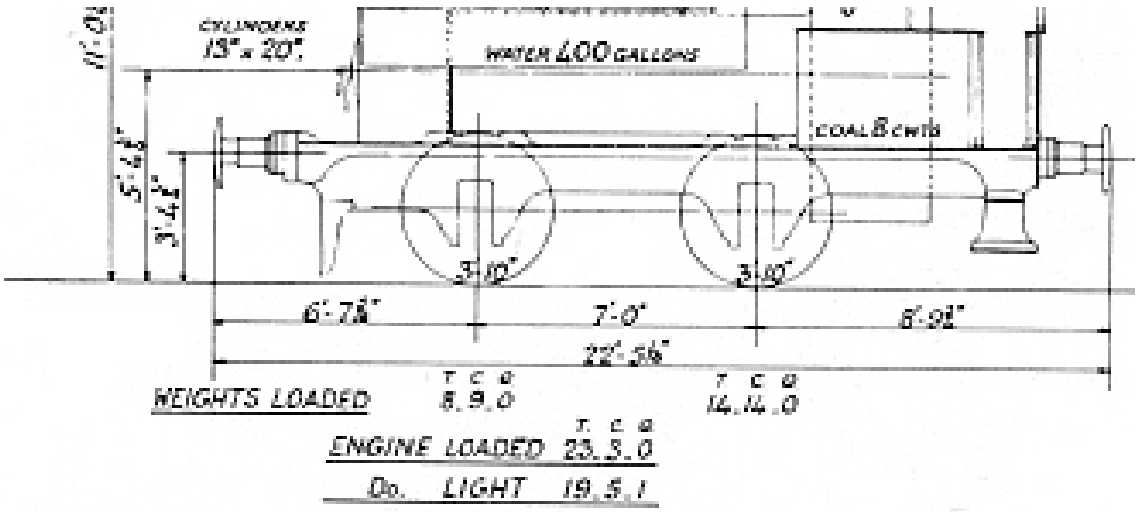
We would recommend using High Level sliding bearings on the front axle and a High Level 1:108 gearbox.

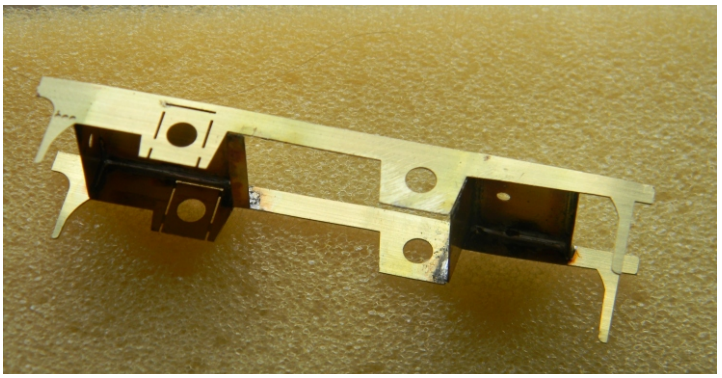
There are 6 parts to this product:

1. A fold up pair of mainframes. One rear mounting holes are provided in line with the K's kit footplate. A standard bearing size hole will need to be removed to allow a sliding axlebox to be fitted - we suggest using the High Level Model's version. Mounting points for a compensating beam are part of the frame spacers.
2. A single piece firebox outline to fit behind the mainframes.
3. Two two piece coupling rods. Sweat the two layers together using the coupling pin holes for alignment.

Bolts to fix the body to the chassis are not supplied. We assume the brake cylinder and brake block casting in the kit will be used.

The driving wheels used should be between 3 ft 9 inches 12 spoke pin in line with spokes is available from Alan Gibson Models. The balance weights fitted to front and rear axle are not supplied. Originally the first locomotives were fitted with square section spoke wheels, though in many cases these were replaced (ref. Summerson)





The "test etch" of the mainframe.

The prominent bolts above the front guard irons are wrong and the centre section of the frames needs strengthening.