AMBIS Engineering

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, coupling and connecting rods 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 the Taff Vale Railway rebuilt theirs in 1895 at their Cardiff works.

There are 15 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 - these 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. New coupling rods and connecting rods are supplied. Laminate the rods to provide strength and rigidty.

8. 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 and crossheads from 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.



This is the test etch (in brass), of the mainframes with the "knock out" spacer fitted.



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Mail order and some shows

Obtainable from 80 Westgate Street, Shouldham, KINGS LYNN, Norfolk, PE33 0BH

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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 longer spacing. We supply replacement splashers to re-align the splashers with the driving wheels.

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

Note:

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. with the integral frame spacer fixed at an angle the firebox outline and be bent up and fixed to the spacer, behind the frames.
- 3. Two two piece coupling rods. Sweat the two layers together using the coupling pin holes for alignment.
- 4. New splashers are supplied. These are in two parts, a fold up fascia and the top cover, which needs to be bent to shape and fixed to the top edge of the fascia. Four are supplied to fit in any order and with suitable spacing to fit your wheels. The rear pair go beneath the "coal bunker" cab sides. You may not feel it is necessary to remove all existing cast splashers to correct the wheelbase difference, but where wheels clearences in the splashers are too small this may be necessary.

Bolts to fix the body to the chassis to the superstructure are not supplied.

We assume the brake cylinder and brake block casting in the kit will be used. The driving wheels used should be 3 ft 9 inches 12 spoke pin in line with spokes is available from Alan Gibson Workshop. 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" with brass "L" section added to the frames and the shaped "firebox" fixed to the angled rear frame splasher.



The prominent bolts above the front guard irons are wrong and the centre section of the frames needs strengthening - as illustrated by the "L" shapes added.

These errors have been corrected in the nickle-silver etch version of these frames. This includes a removable "strengthener" section "X" on the etching.



The revised etching now produced in nickle-silver. The part marked "R" is for stability/strengthening during construction and should be removed afterwards. A pair of guard irons have been added separately for attaching to the mainframes after the bolt heads have been pressed out using your preferred rivetting tool. The two holes in the chassis cross members are for locating a rocking beam when required and the axlebox is marked out for removal for sliding or sprung axleboxes. The added strengtheners shown on the test etching are now fold over strips between axle centres on the fold up chassis.

Revised notes 2022.

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