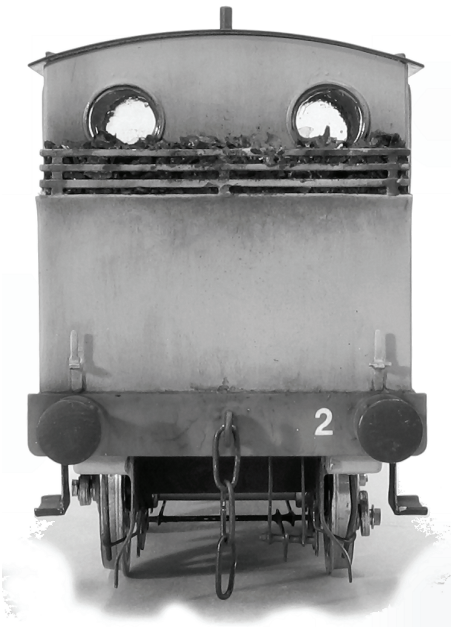
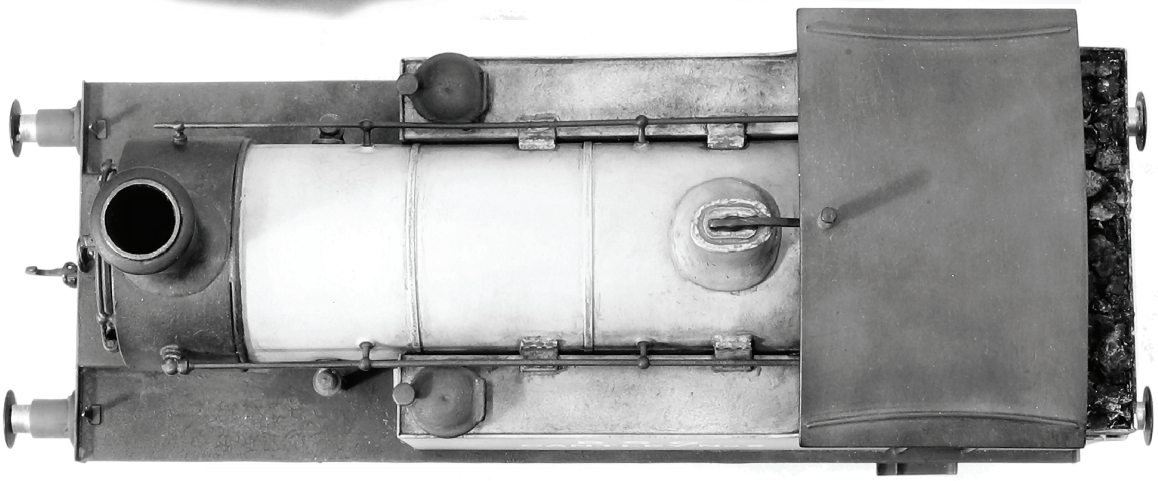
North Eastern Railway Class H2, LNER Class J79
British Sugar Corporation Cantley Sugar Beet Factory No 2

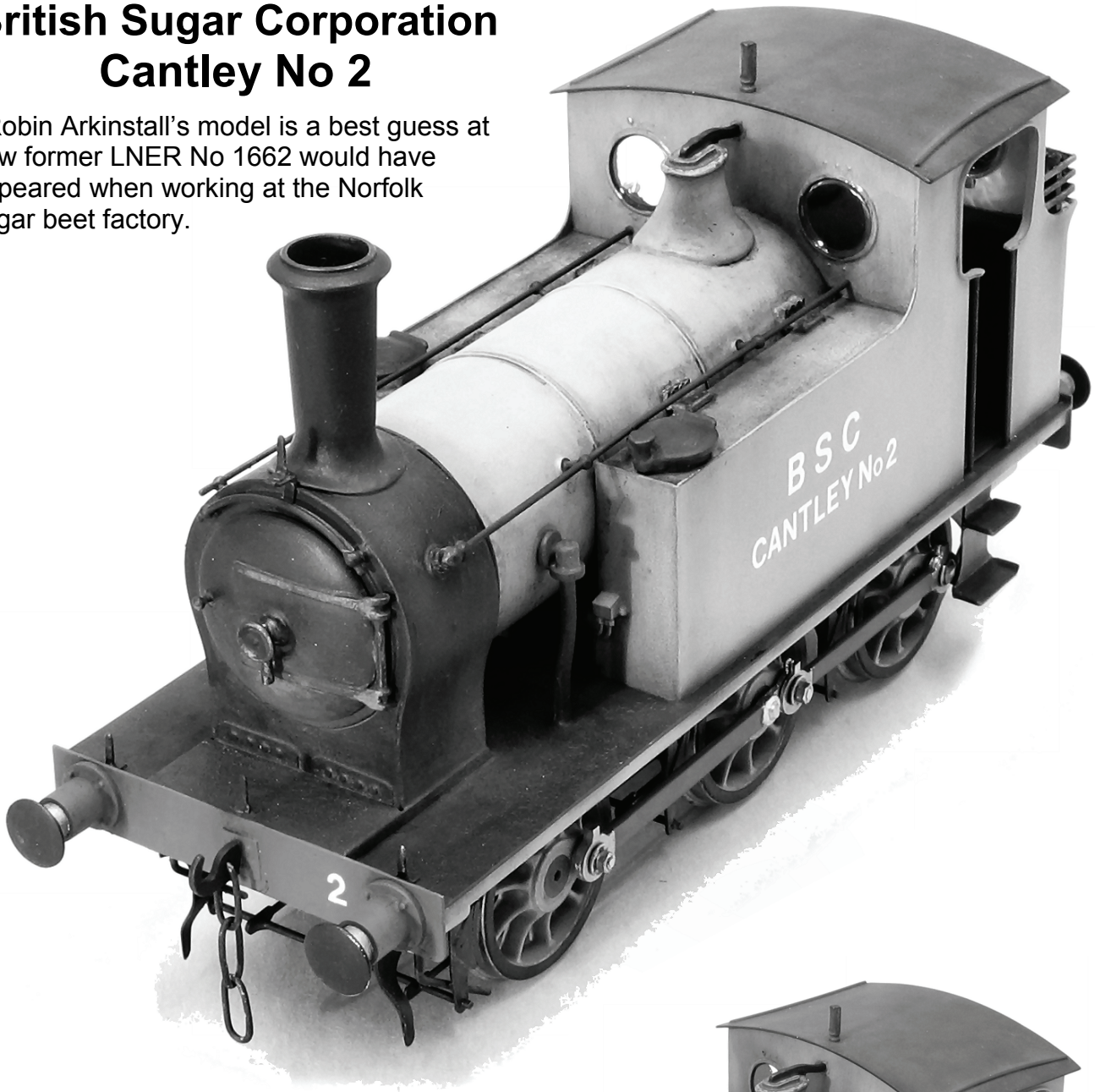


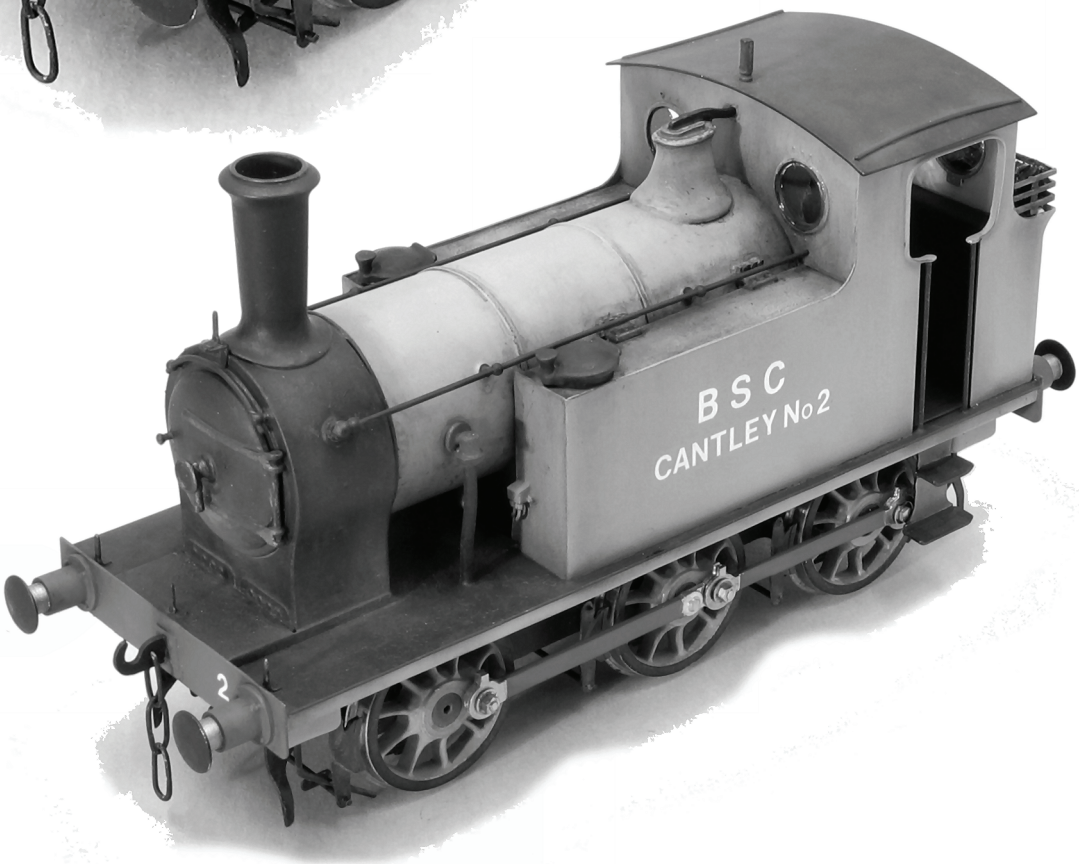


I have tried to reproduce these photographs as close to scale size as I can so that you can use them as a reference for positioning of parts during construction.

British Sugar Corporation Cantley No 2

Robin Arkinstall's model is a best guess at how former LNER No 1662 would have appeared when working at the Norfolk sugar beet factory.





History and Livery

The North Eastern Railways Class H2 consisted of three locomotives, No 407 & 1787 built in 1897 and No 1662 added in 1907. They were used extensively for shunting works yards etc and No 1662 was for many years branded ‘Gateshead Works’.

No 407 & 1787 were fitted with Westinghouse air brake and this enabled them to take over the passenger and goods working of the 5 mile long Cawood, Wistow & Selby Light Railway when the NER acquired that line in 1901. They also had spells of passenger working, hauling three flat roofed four-wheelers (the entire coaching stock of the North Sunderland Railway) between Chathill and Seahouses on the Northumberland coast. This was a duty which the NER and the LNER undertook to help their tiny independent neighbour when the only locomotive it possessed was out of action.

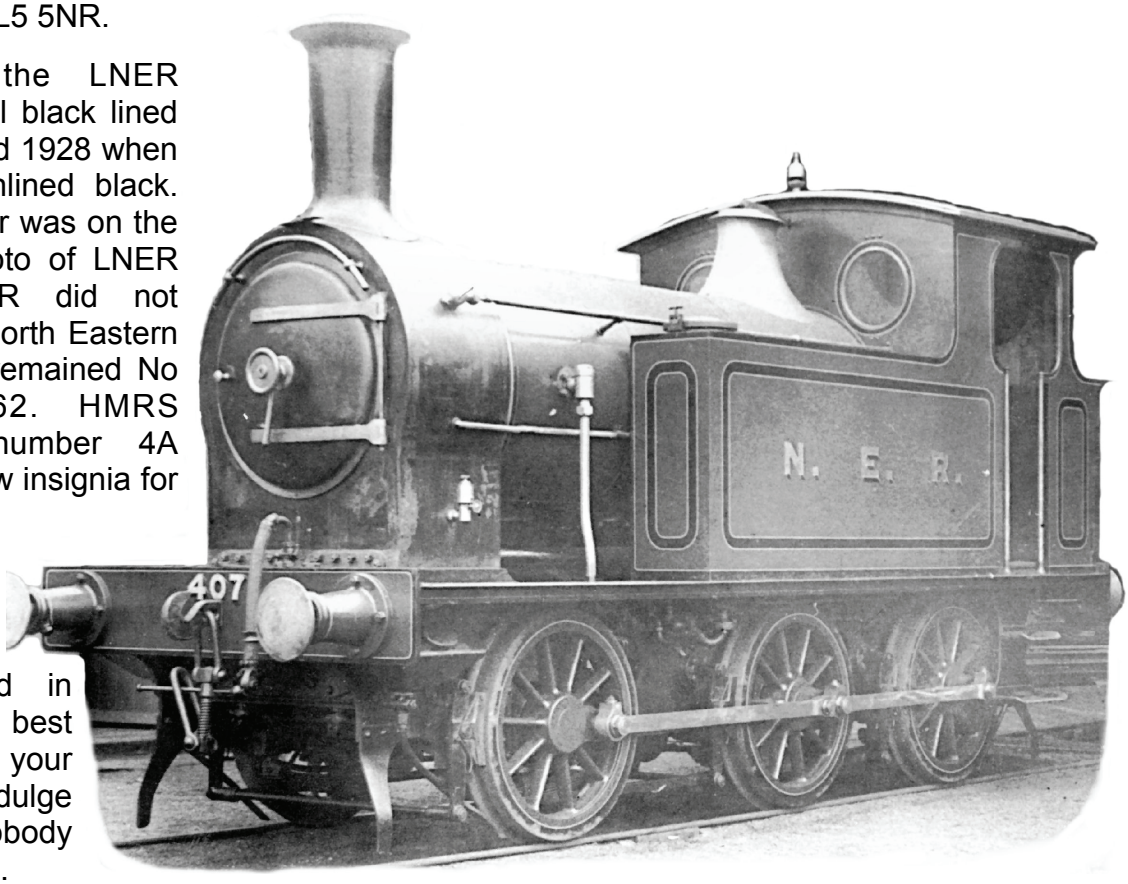
The three locos passed into LNER ownership becoming class J79 and continued there varied duties until 1936 when the LNER decided to place them for sale. In August 1936 No 1787 went to the Bowes Railway and became their No5 and worked at Wardley Colliery until 1946. No 407 was sold in June 1937 to the Whitwood Chemical Co. of Castleford who named it Jean. In 1942 it went to Briggs’ Savile Colliery and finished its working life with the NCB at Middleton Broom Colliery Leeds being scrapped in early 1954. The last loco, No 1662 went much further afield, being purchased in August 1937 by the British Sugar Beet Corporation for use at their Cantley Factory near Norwich. It was scrapped in 1957.

The standard NER livery for tank locos until 1904 was black for top surfaces of footplate, steps, tank tops etc & smokebox. Boiler, tank sides, cab etc, Saxony green with black edges lined white. Tank sides, ends and bunkers were panelled by a 2” black band with a $^{3}/_{16}$“ white line on each side. Buffer beams vermilion with buffers and beams edged black and lined white. Cab roof colour is a bit unsure but was probably grey when first painted but was very soon dirty black. Cab interior cream with dirty wood floor. The prototype photo of No 407 is in this livery.

From 1904 the NER changed tank loco livery to overall black with fine red lining and lettered NER but locos would only be repainted when they entered works for general repair.

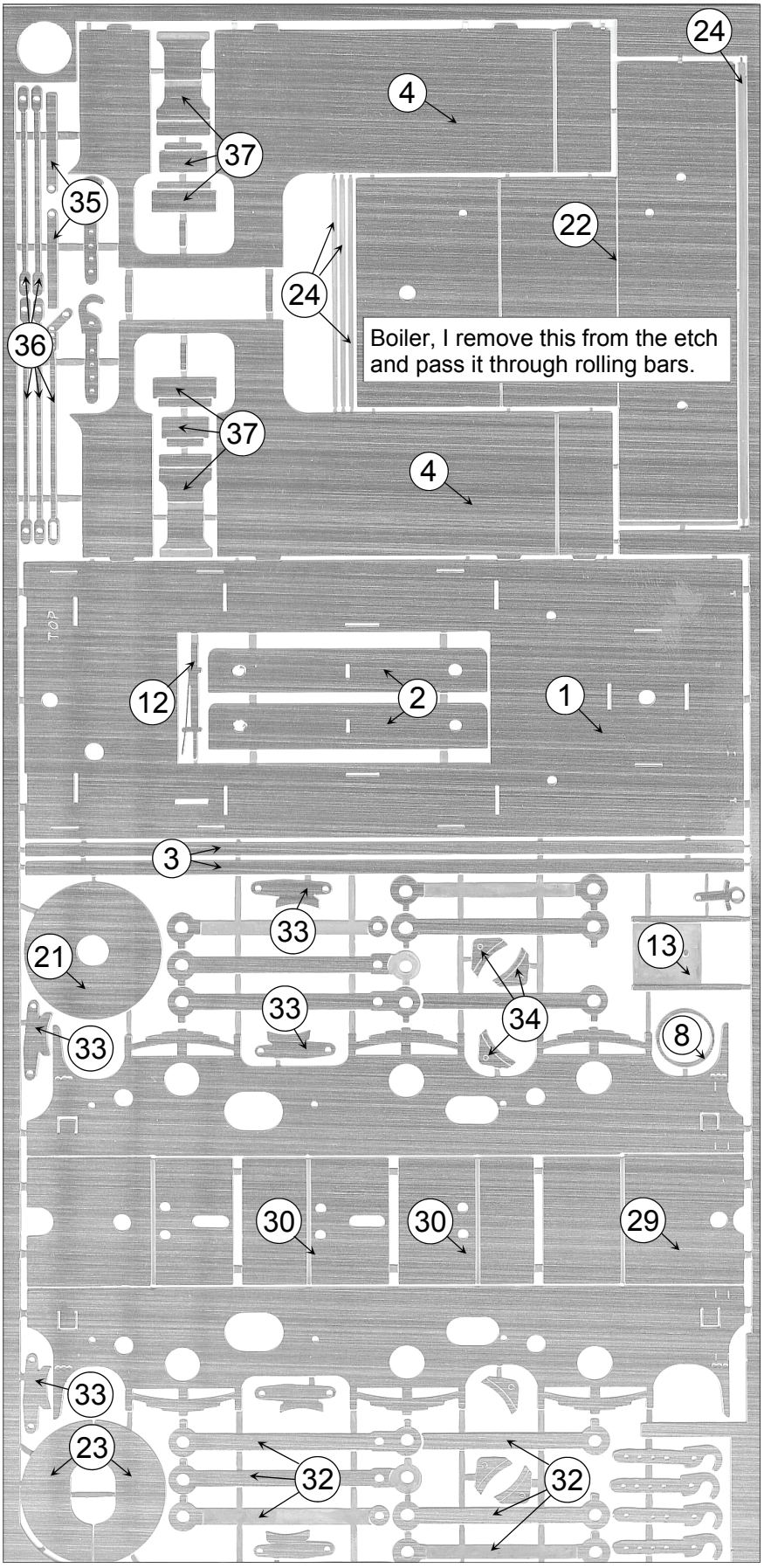
HMRS transfers, sheet number 18 contains NER loco & coach insignia. Details and an order form can be obtained from HMRS Transfers, Brian Webb (volunteer sales officer), 8 Gilpin Green, Harpenden, Herts, AL5 5NR.

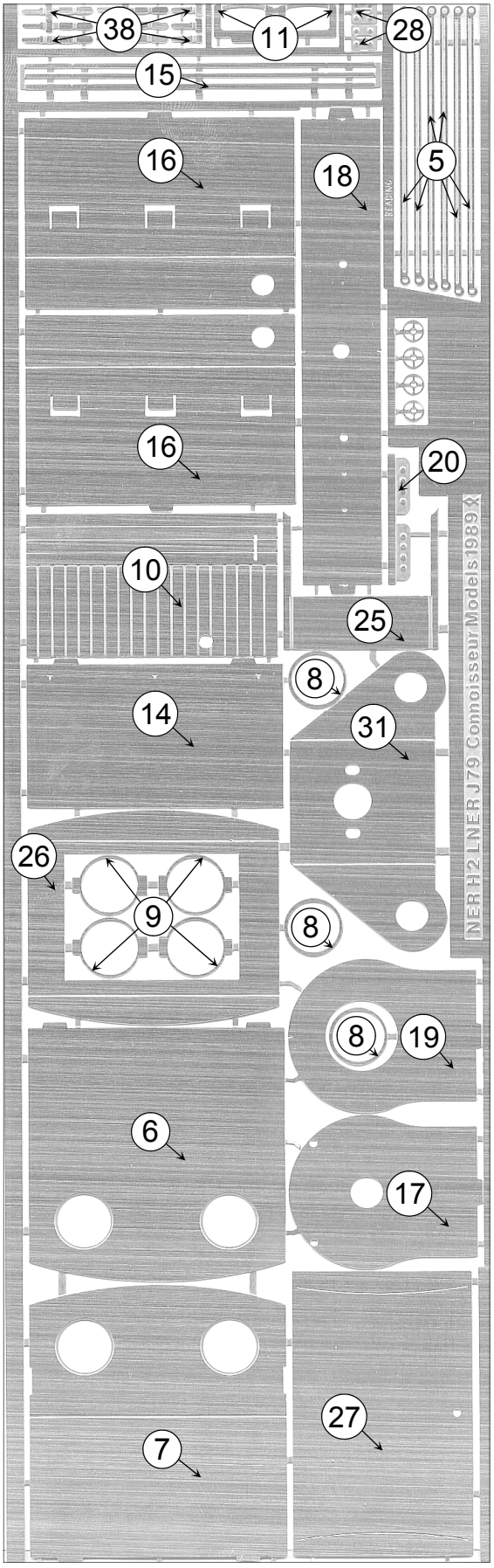
After grouping the LNER continued the overall black lined red livery until around 1928 when they changed to unlined black. Lettering and number was on the side tanks (see photo of LNER model). The LNER did not renumber most ex North Eastern locos so the locos remained No 407,1787 & 1662. HMRS transfers, sheet number 4A contains LNER yellow insignia for black locomotives.



I am unaware of positive colour information about the liveries carried in industrial use. The best bet is to use your imagination and indulge your creativity. Nobody can tell you its wrong.

LNER Class J79 Parts Identification





Cast Parts

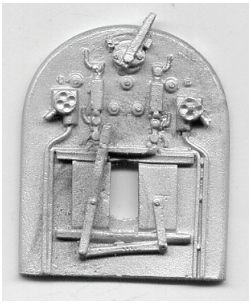
When I made the three centrifugal moulds (one 2 X spin small parts, one 1 X spin small parts, one 1 X spin large parts) to produce a full set of castings for the J79 kit I took a bakers dozen approach to the number of sub masters I placed in each mould. So you should find extra castings to guard against accidents and mishaps but the quantities listed are the minimum required for the loco.

Parts Identification and check list

2 X 10” length 0.45mm hard brass wire for wiper pickups. 2 X 10” length 0.7mm brass wire. 2 X 10” length 0.9mm brass wire. 1 X 6” length 22 swg soft tinned wire (rainstrips). 3 X turns 24 swg soft tinned wire (lubricator pipework). 1” X 2.4mm brass rod for axle compensation. 1” X 1.8mm copper rod for coupling rod joint pin.

Printed Circuit Board Strips
For Use With Wire Wiper Pickups

1 X Smokebox
Spacer



1 X Cab
Backhead

1 X Backhead
Backing Plate

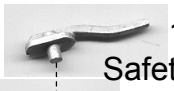
6 X Turned
Axle Bearings

1” X 2.4mm
Brass Rod

1” X 1.8mm
Brass Rod

1 X
Handbrake
Handle

1 X Cab
Handbrake
Column



1 X
Safety Valve
Lever

1 X
Safety Valve
Body

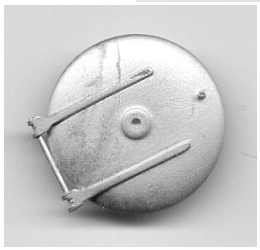
1 X Chimney

Split Pins X 8
For handrail
supports

6BA Brass Screws X 2
6BA Brass Nuts X 2

Brass Links For 3 Link
Couplings X 6

2 X
Clack Pipes

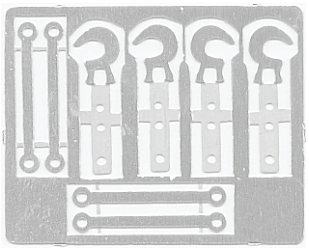


1 X
Smokebox Door

2 X Buffer
Beam Air
Brake Pipes

1 X
Cab Located
Westing-
house Air
Brake Pump

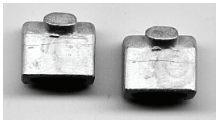
1 X Screw
Coupling Etch



2 X Tank
Fillers

4 X Parallel
Buffers

4 X Alternative
Tapered Buffers



4 X
Sandboxes

3 X
Track Pins

Electrical Wire
For Pickups.
1 X 15” Black
1 X 15” Red

1 X Smokebox
Locking
Handwheel

1 X Alternative
Smokebox
Locking Handles

1 X Organ Pipe &
Alternative Bell
Shaped Whistle

2 X Tank Front
Two Pipe Lubricators

2 X Alternative
Smokebox Lubricators

1 X Smokebox
Blower Valve

1 X Cab (used by the loco
crew) Oil Bottle & Bucket

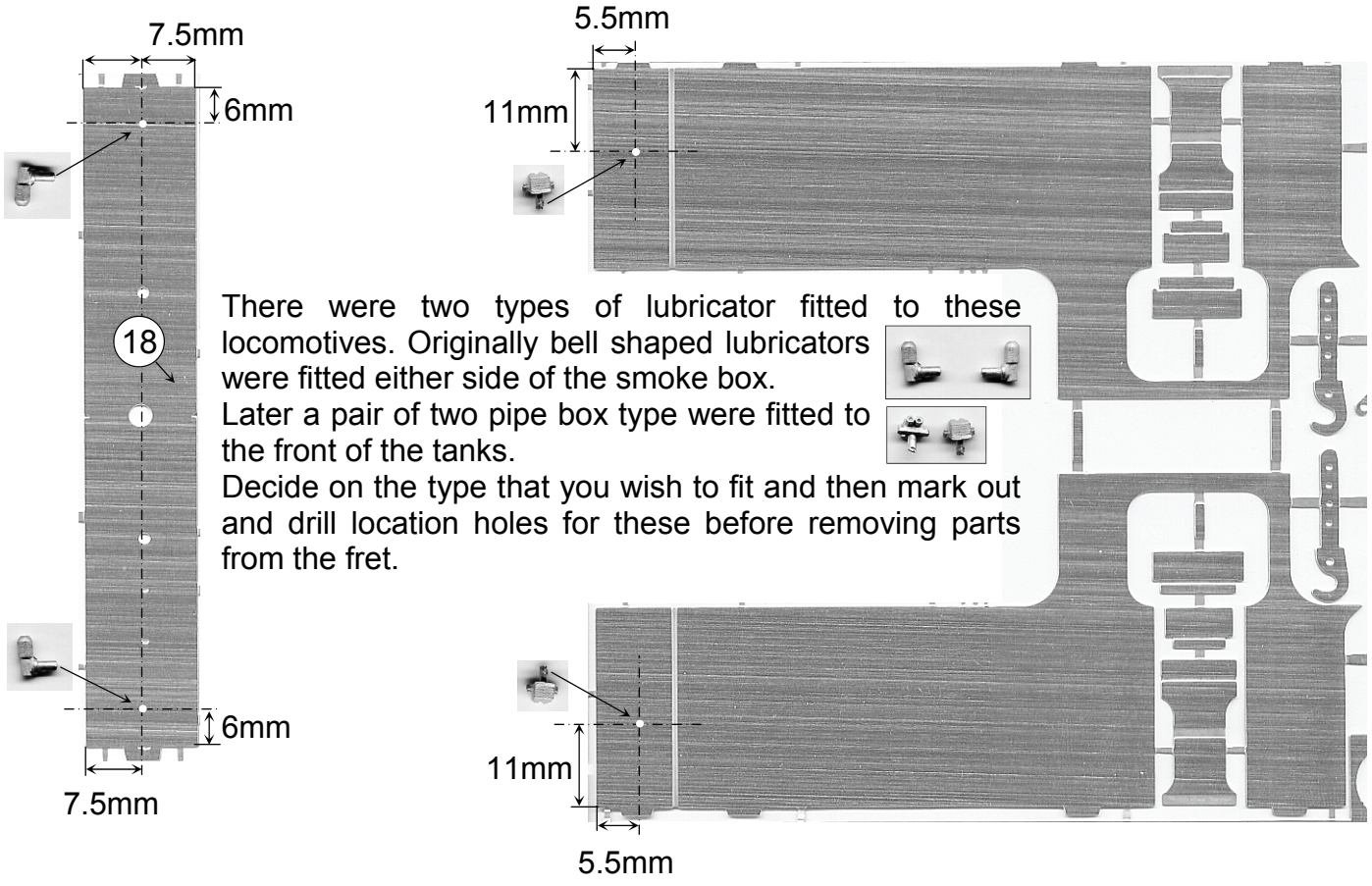
4 X Tank Top - Boiler
Securing Brackets

2 X Cab Gauges
(Steam Pressure etc)

2 X Coupling
Centres

The J79 kit was originally produced in 1989. At the end of 2009 the casting moulds were completely worn out and the instruction sheet masters were falling to pieces. Since 1989 standards of sophistication expected from a kit have risen and so the opportunity was taken to improve the selection of castings provided by including in the new moulds suitable castings from kits developed after 1989 and I have also made a few new masters. Also my good friend Robin Arkinstall wanted to build one and offered to photograph construction so that new digital instructions were possible.

I think that the improved castings and instructions have refreshed the standard of the finished model that can be built from the kit but some new castings don't exactly match the original etchings. A little extra work is required by the modeller to accommodate them and this is detailed below. I would suggest doing this as you remove the parts from the main fret.



There were two types of lubricator fitted to these locomotives. Originally bell shaped lubricators were fitted either side of the smoke box.
Later a pair of two pipe box type were fitted to the front of the tanks.
Decide on the type that you wish to fit and then mark out and drill location holes for these before removing parts from the fret.

Two locomotives, No 407 & No 1787 were fitted with Westinghouse brake for working passenger trains on various light railway branch lines. This consisted of brake pipes fitted to buffer beams and a air pump located in the cab.

Drill slightly generous holes in the cab front to correspond with the pegs on the cast pump. I would recommend gluing the pump (use Araldite) into place after the cab interior has been painted.

The pump was located in the left hand corner of the cab looking towards the chimney. The steam exhaust pipe ran along the boiler in the gap behind the left hand tank and then emerged to run to a hole in the smoke box wrapper. There are two half etched holes on the wrapper marking the position where the pipe turned 90° to enter the smokebox and one of these needs drilling out. There are two marks as the pipe was positioned differently on each loco.