

Class 58 Diesel Locomotive



skyhook
GAMES STUDIO

1 Background.....	3
1.1 Loco.....	3
1.2 Design & Specification.....	4
2 Rolling Stock.....	5
2.1 Class 58 Trainload Coal.....	5
2.2 Class 58 Railfreight.....	5
2.3 HAA Wagons.....	6
2.4 PGA Wagons.....	7
3 Driving the Class 58.....	8
3.1 Cab Controls.....	8
4 Scenarios.....	10
4.1 An Introduction to the Class 58.....	10
4.2 Diverted Merry Go Round	10
4.3 New Daleks at Didcot.....	10
4.4 Overnight Stone to Hayes.....	10
4.5 Waterloo to Waterloo Rail Tour.....	10
5 About Skyhook Games.....	11

1 Background

1.1 Loco

In the late 1970s, British Rail predicted that there would soon be a large increase in mineral traffic which their recently rationalised fleet would not be able to cope with. At this time, the final locos of the Class 56 fleet were still in production, but had a had a troublesome entry into service. The British Rail Board agreed to end production of the Class 56 after the 135th locomotive had been completed, and then direct all future resources on a new machine. By 1978, the BR Design Office in Derby had carried out a feasibility study on the project, and designs for a new 'Standard Export Locomotive' were drawn up. This design was to become known as the Class 58, and as well as fulfilling a specific need in the UK, it was also hoped to have strong export potential.

The contract for production of the locomotives was won by British Rail Engineering Limited (BREL) in Doncaster, and in 1979 work started on a multi-million pound upgrade of their facility. To keep costs of both production and maintenance down, BREL moved away from the traditional manufacturing conventions used in the monocoque bodied Class 56s, in favour of an innovate modular construction. With the chassis frame providing all the load bearing strength, exchangeable modules could then be bolted on top – number 1 cab, radiator, turbocharger, electrical equipment and number 2 cab. Another departure from standard designs of the period was that there was no interior walkway between cabs, ie within the engine room. This lead to the body being narrower than the cabs, giving rise to them being given the nickname “bones”, and “egg timers”, by rail enthusiasts.

Deliveries of the locomotives began on 9th December 1982 when 58001 was rolled out of BREL. In total, 50 locomotives of the class were built, with 58050 rolling off the production line during January 1987.

From the outset, the class were intended to service MGR trains. Soon after their introduction however, the miner's strikes of 1984 meant that there was less coal traffic to haul. As a result, class 58s could be seen carrying out a variety of other duties including servicing other types of freight traffic, rail tours and loco rescues.

Originally delivered in Railfreight grey with a red solebar, the class soon gained the Trainload Coal Livery. Starting with 58050, all members were repainted in this livery and remained in it until the run up to privatisation.

By 2002 less than half the class were still in operation, with withdrawals happening at a steady rate. On Monday the 26th August 2002, the class hauled its last passenger train, with 58020 and 58024 providing traction.

In 2010, 58016 was purchased by the Class 58 Locomotive Group, and it's restoration is being carried out at Barrow Hill. Their aim is to promote their importance of this historic type of heavy freight locomotive, the last class of diesel built by British Rail.

1.2 References

Wikipedia: https://en.wikipedia.org/wiki/British_Rail_Class_58

Class 58 Locomotive group: <http://www.c58lg.co.uk/>

Modern locomotives Illustrated: Feb-March 2009

1.2 Design & Specification

Type and origin

Design Code:	58-0AA
Builder:	BREL Doncaster
Build Date:	1983 - 1987
Total Built:	50
TOPS Number range:	58001 - 58050

Specification

Configuration:	Co-Co
Length:	62 ft 9½ in (19.13m)
Width:	9 ft 1 in (2.77m)
Height:	12 ft 10 in (3.91 m)
Locomotive Weight:	130 tonnes

Wheel Base:	48 ft 9 in (14.85m)
Wheel Diameter:	3 ft 8 in (1.12m)
Fuel Capacity:	927 gal (4,214 litres)

Performance Figures

Power Type:	Diesel – electric
Engine:	Ruston Paxman 12RK3ACT
Engine Output:	2,460 kW (3,300 h.p.)
Maximum Tractive Effort:	275 kN (61,800 lb)
Maximum Speed:	80 m.p.h. (129 km/h)
Brake type:	Loco: Air
Brake force:	60 tonnes

2 Rolling Stock

2.1 Class 58 Trainload Coal



2.2 Class 58 Railfreight



2.3 HAA Wagons



2.4 PGA Wagons



3 Driving the Class 58

3.1 Cab Controls



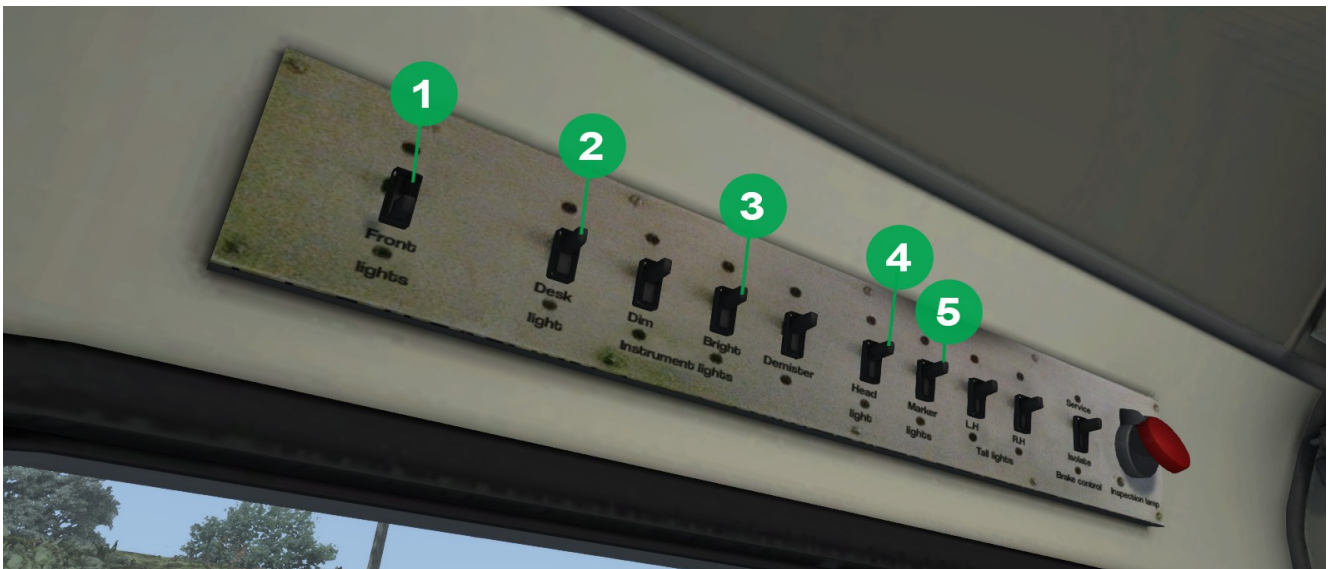
- 1 Reverser Lever
- 2 Power Lever
- 3 Sander
- 4 AWS reset
- 5 Slow Speed Selector



- 1 Duplex Gauge left - Main res.
- 1 Duplex Gauge right - Main res. pipe
- 2 Brake cylinders
- 3 Brake pipe and control res.
- 4 AWS Indicator
- 5 Speedometer
- 6 Slow Speed Speedometer
- 7 Ammeter



- | | |
|---|--|
| <ul style="list-style-type: none"> 1 Apply Handbrake 2 Handbrake Indicator 3 Release Handbrake 4 Slow Speed Switch 5 Engine Start 6 Engine Stop | <ul style="list-style-type: none"> 7 Wipers - Right 8 Wipers - Left 9 Emergency Brake 10 Horn 11 Train Brake 12 Locomotive Brake |
|---|--|



- | | |
|---|--|
| <ul style="list-style-type: none"> 1 Cab Light 2 Desk Light 3 Instrument Light | <ul style="list-style-type: none"> 4 Head Lights 5 Marker Lights |
|---|--|

4 Scenarios

4.1 An Introduction to the Class 58

Description: A short introduction to the Class 58 Locomotive and it's primary controls. (Located under the 'Academy>Tutorial>Great Western Mainline' menu)

Duration: Approx 12 Mins

Difficulty: Easy

4.2 Diverted Merry Go Round

Description: The “Merry Go Round” coal deliveries was the main duty for the Class 58 during it's time on the British Rail Network. Today's MGR delivery from Welbeck Colliery has been diverted from it's usual path due to engineering works north of Oxford.

Duration: Approx 40 Mins

Difficulty: Medium

4.3 New Daleks at Didcot

Description: Didcot Power Station have installed some new machines, nicknamed 'Daleks', for automatically opening the hopper doors to dispense the coal. This evening, we've been detailed to perform a dry run to test the new machines. This will involve using the Slow Speed Control.

Duration: Approx 40 Mins

Difficulty: Easy

4.4 Overnight Stone to Hayes

Description: With a heavy load of stone from Moreton, you will drive this Railfreight Class 58 Locomotive on an early morning run to the tarmac plant at Hayes. You start at Oxford Road Junction ion Reading.

Duration: Approx 40 Mins

Difficulty: Easy

4.5 Waterloo to Waterloo Rail Tour

Description: Because is was very rare to spot a Class 58 out on Rail Tour Duty, they proved to be very popular amongst enthusiasts. You will take this Winter Waterloo to Waterloo Rail Tour from Reading to Oxford. Don't expect a clear run, the snow is quite bad out there.

Duration: Approx 40 Mins

Difficulty: Medium

5 About Skyhook Games



Skyhook Games Studio is a creative production house based in Liverpool, UK. With over 40 years of games development experience, its founders have jointly worked across a wide range of titles and platforms from Playstation 1 – 4, Nintendo Wii and PC, to name but a few. Many of these titles were licensed products for major brands such as Jim Henson's, Disney and Sony.

They are now producing DLC for Dovetail Games and enjoying the challenge.