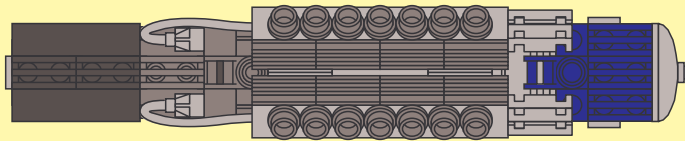
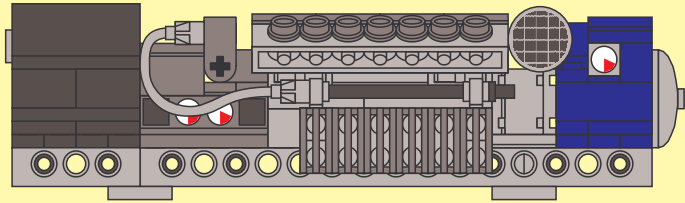


HEATON LOCOMOTIVE WORKS



PRIME MOVER



A design for modelling using LEGO® bricks from the Heaton Locomotive Works.

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At the Heaton Locomotive Works we were disappointed by the visual inefficiency of the prime mover supplied by LEGO for their EMD F7A Santa Fe Super Chief, set #10020. So a prime mover oozing with bhp (Brick Horse Power) was developed to maximise the use of space within the F7A and the common F7B derivative. Following successful testing it has since been fitted to an MPI MP36PH-C3 Rail Runner a larger twin-engined version is planned for six-axle locomotives such as the EMD FP45.

This design is based on images found in specification sheets for the 3500 family of CATERPILLAR® locomotive engine / generator packages found at www.cat.com.

The prime mover is shown at 21 studs in length and is appropriate for longer engine compartments such as the F7B, whilst a version at 17 studs can be created by shortening Section A by four studs (1 x 4 technical bricks and black jumper plates) and removing Section B completely.

We trust that you will find our prime mover a pleasing addition to any locomotive.

Play Well

Chris van Lottum

Chief Engineer, Heaton Locomotive Works

October 2006

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A

3794	Plate, Modified 1 x 2 with 1 Stud	Black	4
3794	Plate, Modified 1 x 2 with 1 Stud	Blue	3
3022	Plate 2 x 2	Light Grey	2
3701	Technic, Brick 1 x 4 with Holes	Light Grey	2
3703	Technic, Brick 1 x 16 with Holes	Light Grey	2
4459	Technic, Pin WITH Friction	Black	8
3068b	Tile 2 x 2 with Groove	Light Grey	1

B

3622	Brick 1 x 3	Black	1
3002	Brick 2 x 3	Black	2
4070	Brick, Modified 1 x 1 with Headlight	Black	1
6191	Brick, Modified 1 x 4 x 1 1/3 Curved Top	Black	1
6081	Brick, Modified 2 x 4 x 1 1/3 Curved Top	Black	1
3710	Plate 1 x 4	Black	3
3021	Plate 2 x 3	Black	2
3020	Plate 2 x 4	Black	1
3070bp07	Tile, Decorated 1 x 1 with Gauge Pattern	Light Grey	1
2412b	Tile, Modified 1 x 2 Grill with Groove	Black	2

C

30414	Brick, Modified 1 x 4 with Studs on Side	Dark Grey	2
30165	Brick, Modified 2 x 2 Curved with Studs	Dark Grey	1
3020	Plate 2 x 4	Dark Grey	1
3794	Plate, Modified 1 x 2 with 1 Stud	Dark Grey	1
4519	Technic, Axle 3	Black	1
6536	Technic, Axle Joiner Perpendicular	Dark Grey	3
4274	Technic, Pin 1/2	Light Grey	2
3069b	Tile 1 x 2 with Groove	Dark Grey	1
2431px17	Tile, Decorated 1 x 4 with Dash Pattern	Dark Grey	2
2412b	Tile, Modified 1 x 2 Grill with Groove	Dark Grey	1

D

3004	Brick 1 x 2	Light Grey	1
3003	Brick 2 x 2	Light Grey	1
30414	Brick, Modified 1 x 4 with Studs on Side	Light Grey	2
3021	Plate 2 x 3	Light Grey	3
3020	Plate 2 x 4	Light Grey	1

E

4095	Bar 6.6L with Stop Ring	Black	2
73590c02a	Hose, Flexible 8.5L with Tabbed Ends	Light Grey	2
3022	Plate 2 x 2	Light Grey	2
2420	Plate 2 x 2 Corner	Light Grey	4
4081b	Plate, Modified 1 x 1 with Clip Light	Light Grey	4
2412b	Tile, Modified 1 x 2 Grill with Groove	Dark Grey	12

F

3937c01	Hinge Brick 1 x 2 Complete Assembly	Light Grey	4
4073	Plate, Round 1 x 1	Dark Grey	14
3702	Technic, Brick 1 x 8 with Holes	Light Grey	2
2412b	Tile, Modified 1 x 2 Grill with Groove	Dark Grey	8

G

3941	Brick, Round 2 x 2	Light Grey	1
4032	Plate, Round 2 x 2 with Axle Hole	Light Grey	1
3749	Technic, Axle Pin WITHOUT Friction	Blue	1
4150	Tile, Round 2 x 2	Light Grey	1

H

3024	Plate 1 x 1	Blue	1
4032	Plate, Round 2 x 2 with Axle Hole	Light Grey	4
4519	Technic, Axle 3	Light Grey	1
6536	Technic, Axle Joiner Perpendicular	Blue	1
4150ps4	Tile, Round 2 x 2 with Vent Pattern	Light Grey	2

I

3622	Brick 1 x 3	Blue	3
4070	Brick, Modified 1 x 1 with Headlight	Blue	2
3623	Plate 1 x 3	Blue	2
3021	Plate 2 x 3	Blue	2
6541	Technic, Brick 1 x 1 with Hole	Blue	2
3070bp07	Tile, Decorated 1 x 1 with Gauge Pattern	Light Grey	2
2412b	Tile, Modified 1 x 2 Grill with Groove	Blue	3

J

578	Bar 4L Lightsaber Blade	Light Grey	1
43898	Radar Dish 3 x 3	Light Grey	1
4274	Technic, Pin 1/2	Blue	1

