Issue: 010-180827

Ultrascale Reference Manual

Complete Sets And Wheel Data

Contents

The information contained in this reference manual is to help modellers cross reference The Driving, Bogie and Tender wheels used in each complete set of wheels produced by Ultrascale.

This information were applicable includes Wheel diameter, Number of spokes, Crank throw, and wheel design. This manual also includes a complete list of all the Driving, Bogie and Tender wheels currently produced by Ultrascale.

For current availability of any item listed please visit our web site or contact us.

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Abbreviations used in manual:

C.O.S. - Crank on spoke, C.B.S. - Crank between spoke, O.S.F. - Outside frame, c/t - Crank throw

Please note:

The wheels specified for the complete sets are the most common used for that prototype. However, the wheel specification may vary depending on the variant being modeled.

Complete sets - G. W. R.

0-6-0T 57XX 4'71/2" GWR 14 spoke 10" c/t c.b.s. 0-6-0T 1854/2721 4'71/2" GWR 16 spoke 10" c/t c.b.s. 0-6-0 & Tender 'Dean Goods' 16 spoke 5'2" **GWR** 10" c/t c.b.s. 4'11/2" **GWR** 12 spoketender 0-6-0 & Tender 'Collett Goods' 5'2" **GWR** 16 spoke 10" c/t c.b.s. 4' 11/2" GWR 12 spoketender 2-6-2T 44XX 3'2" 10 spoke bogie GWR 4'11/2" **GWR** 10 spoke 12" c/t C.O.S. 3'2" **GWR** 10 spoke bogie 2-6-2T 45XX/55XX 3'2" **GWR** 10 spoke bogie 4'71/2" **GWR** 14 spoke 12" c/t c.b.s. 3'2" **GWR** 10 spoke bogie 2-6-2T 61XX/51XX 3'2" 10 spoke **GWR** bogie 5'8" 18 spoke 15" c/t **GWR** c.b.s. 3'8" **GWR** 10 spoke bogie 4-4-0 & Tender 'Bulldog' 3'8" 10 spoke bogie **GWR** 5'8" **GWR** 18 spoke o.s.f. 4'11/2" GWR 12 spoketender 4-4-0 & Tender 'Duke' 10 spoke bogie 3'8" **GWR** 5'8" **GWR** 18 spoke o.s.f. 4'11/2" GWR 12 spoketender 4-4-0 & Tender 'Dukedog'

10 spoke bogie

12 spoketender

18 spoke

3'8"

5'8"

4'11/2"

GWR

GWR

GWR

o.s.f.

Complete sets - G. W. R. Continued.

2-6-0 & Tender 'Aberdare'

2'8" GWR 10 spokebogie 4'71/2" GWR 14 spoke o.s.f. 4'11/2" GWR 12 spoketender

2-6-0 & Tender 'Mogul'

3'2" GWR 10 spoke bogie 5'8" GWR 18 spoke 15" c/t c.o.s. 4'11/2" GWR 12 spoke tender

4-6-0 & Tender 'Manor'

3'0" GWR 10 spoke bogie 5'8" GWR 18 spoke 15" c/t c.o.s. 4'11/2" GWR 12 spoke tender

4-6-0 & Tender 'Grange'

3'0" GWR 10 spoke bogie 5'8" GWR 18 spoke 15" c/t c.o.s. 4'11/2" GWR 12 spoketender

4-6-0 & Tender 'Hall'

3'0" GWR 10 spoke bogie 6'0" GWR 20 spoke 15" c/t c.b.s. 4'11/2" GWR 12 spoke tender

4-6-0 & Tender 'Castle' (Old) / 'Star'

3'2" GWR 10 spoke bogie 6'8" GWR 22 spoke 13" c/t c.o.s. 4'11/2" GWR 12 spoke tender

4-6-0 & Tender 'Castle' (New) 5013 onwards

3'2" GWR 10 spoke bogie 6'8" GWR 22 spoke 13" c/t c.b.s. 4'11/2" GWR 12 spoke tender

2-8-0 & Tender 28XX

3'2" GWR 10 spoke bogie 4'71/2" GWR 14 spoke 15" c/t c.o.s. 4'11/2" GWR 12 spoke tender

2-8-0 & Tender 47XX

3'2" GWR 10 spoke bogie 5'8" GWR 18 spoke 15" c/t c.o.s. 4'11/2" GWR 12 spoke tender

Complete sets - G. W. R. Continued.

| 2-4-0&7 | <u> Tender 3</u> | <u> 232 Class</u> | | |
|----------------------|------------------|-----------------------|---------|--------|
| 4'11/2" | GWR | 12 spoke | tender | |
| 6'81/2" | GWR | 22 spoke | 12" c/t | c.b.s. |
| 4'11/2" | GWR | 12 spoke | tender | |
| | | • | | |
| | <u> Fender '</u> | <u>City'/'Atbara'</u> | | |
| 3'8" | GWR | 10 spoke bogie | | |
| 6'81/2" | GWR | 22 spoke | o.s.f. | |
| 4' 11/2" | GWR | 12 spoke | tender | |
| 0-4-2T 1 | 4XX | | | |
| 5'2" | GWR | 16 spoke | 10" c/t | c.b.s. |
| 3'8" | GWR | 10 spoke | bogie | |
| 4-6-0& | Tender 'S | Saint' | | |
| 3'2" | GWR | 10 spoke | bogie | |
| 6' 8" | GWR | 22 spoke | 15" c/t | C.O.S. |
| 4' 11/2" | | 12 spoke | tender | 0.0.5. |
| 7 11/2 | OWIX | 12 300110 | CONCE | |
| 4-4-0& | Tender ' | County' | | |
| 3'2" | GWR | 10 spoke | bogie | |
| 6' 8" | GWR | 22 spoke | 15" c/t | C.O.S. |
| 4'11/2" | GWR | 12 spoke | tender | |
| 4-4-2T '(| County' | | | |
| 3'2" | GWR | 10 spoke | bogie | |
| 6' 8" | GWR | 22 spoke | 15" c/t | C.O.S. |
| 3'8" | GWR | 10 spoke | bogie | |
| 2-8-0T4 | 2XX/520 | 15 | | |
| 3'2" | GWR | 10 spokebogie | | |
| 4'71/2" | | 14 spoke | 15" c/t | C.O.S. |
| | | | | |
| <u>2-8-2T 7</u> | | | | |
| 3'2" | GWR | 10 spoke bogie | | |
| 4'71/2" | GWR | 14 spoke | 15" c/t | C.O.S. |
| 3'8" | GWR | 10 spokebogie | | |
| 2-4-0 & ⁻ | Tender " | Stella' | | |
| 3'8" | GWR | 10 spoke bogie | | |
| 5'2" | GWR | 16 spoke | o.s.f. | |
| 4' 11/2" | GWR | 12 spoke | tender | |
| 0-6-2T 5 | 6XX | | | |
| 4'71/2" | | 14 spoke | 10" c/t | c.b.s. |
| 3'8" | GWR | 10 spoke | bogie | 0.0.3. |
| 0 0 | OVVIX | 10 spoke | bogie | |

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Complete sets - G. W. R. Continued.

4-6-0 & Tender 'Hawksworth County'

| 3'0" | GWR | 10 spoke | bogie |
|---------|-----|----------|----------------|
| 6'3" | GWR | 21 spoke | 15" c/t c.b.s. |
| 4'11/2" | GWR | 12 spoke | tender |

Complete sets - L. M. S.

| 0-6-0T3 | F 'Jinty' | | | | |
|-------------------|---------------|-----------------------|-----------------|--------|----------|
| 4'7" | LMS | 15 spoke | 11" c/t | C.O.S. | FOWLER |
| _ | | | | | |
| | ender 4F | | | | _ |
| 5'3" | LMS | 16 spoke | 11" c/t | C.O.S. | FOWLER |
| 4' 3" | LMS | 12 spoke | | tender | FOWLER |
| 2_6_0 & T | ender 'C | rah' | | | |
| 3'61/2" | LMS | 10 spoke bogie | | | FOWLER |
| 5'6" | LMS | 17 spoke | 13" c/t | C.O.S. | FOWLER |
| 4'3" | LMS | 12 spoketender | 10 0/1 | 0.0.5. | FOWLER |
| 4 0 | LIVIO | 12 Spoke terraer | | | TOVVELIX |
| 2-6-2TS | <u>tanier</u> | | | | |
| 3'31/2" | LMS | 10 spoke | bogie | | STANIER |
| 5'3" | LMS/BR | 16 spoke | 13" c/t | c.b.s. | STANIER |
| 3'31/2" | LMS | 10 spoke | bogie | | STANIER |
| | _ | | | | |
| <u>2-6-4TF</u> | • | | | | |
| 3'31/2" | LMS | 10 spoke bogie | | _ | FOWLER |
| 5'9" | LMS | 18 spoke | 13" c/t | c.b.s. | FOWLER |
| 3'31/2" | LMS | 10 spoke bogie | | | FOWLER |
| 2-6-4TS | tanier | | | | |
| 3'31/2" | LMS | 10 spoke | bogie | | STANIER |
| 5'9" | LMS/BR | • | 13" c/t | c.b.s. | STANIER |
| 3'31/2" | LMS | 10 spoke | bogie | 0.0.0. | STANIER |
| 0 0 1.72 | 20 | i o opono | 20g.c | | 017 |
| 4-6-0 & T | ender 'B | lack 5' | | | |
| 3'31/2" | LMS | 10 spoke | bogie | | STANIER |
| 6'0" | LMS | 19 spoke | 14" c/t | c.b.s. | STANIER |
| 4'3" | LMS | 12 spoke | tender | | STANIER |
| _ | | | | | |
| | | <u>rincess Royal'</u> | | | |
| 3'0" | LMS/BR | • | bogie | | 0=41== |
| 6'6" | | 20 spoke | 14" c/t | c.b.s. | STANIER |
| 3'9" | LMS | 11 spoke | bogie | | STANIER |
| 4'3" | LMS | 12 spoke | tender | | STANIER |
| 1 _6_2 & ∓ | ander 'T | urbomotive' | | | |
| 3'0" | LMS/BR | <u>'</u> | bogie | | |
| 6'9" | | 21 spoke | 14" c/t | c.b.s. | STANIER |
| 3'9" | LMS | 11 spoke | | U.D.S. | STANIER |
| 3 9 4'3" | LMS | 12 spoke | bogie tender | | STANIER |
| + 3 | LIVIO | 12 SHUKE | ıcıiuei | | STAINER |

Complete sets - L. M. S. Continued.

| <u>4-6-2&</u> | <u> Tender</u> | <u>''Duchess'</u> | | | |
|-------------------|----------------|-------------------|---------|--------|---------|
| 3'0" | LMS/E | BR 9 spoke | bogie | | |
| 6'9" | LMS | 21 spoke | 14" c/t | c.b.s. | STANIER |
| 3'9" | LMS | 11 spoke | bogie | | STANIER |
| 4'3" | LMS | 12 spoke | tender | | STANIER |
| | | | | | |
| <u>2-8-0&</u> | <u> Tender</u> | <u>8F</u> | | | |
| 3'31/2" | LMS | 10 spoke | bogie | | STANIER |
| 4'81/2" | LMS | 15 spoke | 14" c/t | c.b.s. | STANIER |
| 4'3" | LMS | 12 spoke | tender | | STANIER |
| | | | | | |

Complete sets - L. N. E. R.

| 0-6-0TJ | 72 | | | |
|-----------------|------------------|------------------|---------|--------|
| 4'11/4" | | 12 spoke | 10" c/t | C.O.S. |
| | | | | |
| <u>0-6-2T N</u> | <u>12</u> | | | |
| 5'8" | LNER | 18 spoke | 11" c/t | c.b.s. |
| 3'8" | LNER | 10 spoke | bogie | |
| | | | | |
| | <u> Fender B</u> | | | |
| 3'2" | LNER | 12 spoke bogie | | |
| 6'8" | LNER | 20 spoke 13" c/t | c.b.s. | |
| 3'9" | LNER | Disc tender | | |
| | | _ | | |
| | <u> Fender A</u> | | | |
| 3'2" | LNER | 10 spoke bogie | | |
| 6'8" | LNER | 20 spoke 13" c/t | c.b.s. | |
| 3'8" | LNER | 10 spoke bogie | | |
| 4'2" | LNER | Disc | tender | |
| | | | | |
| | <u> Fender A</u> | | | |
| 3'2" | LNER | 10 spoke bogie | | |
| 6'8" | LNER | 20 spoke 13" c/t | c.b.s. | |
| 3'8" | LNER | 10 spoke bogie | | |
| 4'2" | LNER | 12 spoke tender | | |
| | | | | |
| | <u> Fender A</u> | | | |
| 3'2" | LNER | 10 spoke bogie | | |
| 6'8" | LNER | 20 spoke 13" c/t | c.b.s. | |
| 3'8" | LNER | 10 spoke bogie | | |
| 4'2" | LNER | Disc | tender | |

Complete sets - S. R.

| <u>4-4-0 & </u> | <u>Tender</u> | <u> 19</u> | |
|---------------------|---------------|------------|--|
| 21.7" | CD. | 10 anaka | |

| 3'7" | SR | 10 spoke | bogie/tender |
|------|----|----------|--------------|
| 6'7" | SR | 22 spoke | 9"c/t c.o.s. |
| 3'7" | SR | 10 spoke | bogie/tender |

4-4-0 & Tender 'Schools'

| 3' 1" | SR | 10 spoke bogie | |
|-------|----|------------------|--------|
| 6'7" | SR | 22 spoke 13" c/t | c.b.s. |
| 4'0" | SR | Disc | tender |

4-6-0 & Tender 'Lord Nelson'

| 3' 1" | SR | 10 spoke | bogie | |
|-------|----|----------|----------|--------|
| 6'7" | SR | 22 spoke | 13" c/t | c.b.s. |
| 3'7" | SR | 10 spoke | bogie/te | ender |

4-6-0 & Tender 'King Arthur'

| 3'7" | SR | 10 spoke | bogie/tender |
|------|----|----------|----------------|
| 6'7" | SR | 22 spoke | 14" c/t c.b.s. |
| 3'7" | SR | 10 spoke | bogie/tender |

0-4-4T M7

| 5'7" | SR | 18 spoke 9" c/t | C.O.S. | |
|------|----|-------------------------|--------|--|
| 3'7" | SR | 10 spoke bogie / tender | | |

Complete sets - B. R.

| <u>0-6-0 Diesel Shunter 08/09</u> | | | | | | | |
|-----------------------------------|-------------------------|--------|----------|--------|-----------|---------|--|
| | 4'6" | BR | 14 spoke | | o.s.f | | |
| | 0-6-0 Diesel Shunter 03 | | | | | | |
| | 3'7" | BR | 12 spoke | 10" c | c/t c.o.s | i. | |
| | 0-6-0 Diesel Shunter 14 | | | | | | |
| | 4'0" | BR | 12 spoke | 10"c | t c.o.s | | |
| | 2-6-2T 82000 | | | | | | |
| | 3'0" | LMS/BR | 9 spoke | bogi | е | | |
| | 5'3" | LMS/BR | 16 spoke | 13" c/ | t c.b.s. | STANIER | |
| | 3'0" | LMS/BR | 9 spoke | bogi | е | | |
| 2-6-0 & Tender 76000 | | | | | | | |
| | 3'0" | | 9 spoke | bogi | | | |
| | | | 16 spoke | 13"c/ | t c.b.s. | _ | |
| | 3' 31/2" | LMS | 10 spoke | bogi | е | STANIER | |
| 2-6-0 & Tender 77000 | | | | | | | |
| | 3'0" | LMS/BR | 9 spoke | bogi | е | | |
| | 5'3" | LMS/BR | 16 spoke | 13" c/ | t c.b.s. | STANIER | |
| | 3' 31/2" | LMS | 10 spoke | bogi | е | STANIER | |
| | | | | | | | |

Driving wheels

| 3'0" | | 10 spoke | 9" c/t | C.O.S. | |
|---------|--------|------------|---------|--------|---------------|
| 3'03/8" | L&Y | 0-4-0 Disc | 9" c/t | | Pug. |
| 3'7" | BR | 12 spoke | 10" c/t | C.O.S. | |
| 4'0" | BR | 12 spoke | 10"c/t | C.O.S. | |
| 4'11/2" | GWR | 10 spoke | 12" c/t | C.O.S. | |
| 4'11/4" | LNER | 12 spoke | 10" c/t | C.O.S. | |
| 4'6" | BR | 14 spoke | | o.s.f. | |
| 4'7" | LMS | 15 spoke | 11" c/t | C.O.S. | FOWLER |
| 4'71/2" | GWR | 14 spoke | 10" c/t | c.b.s. | |
| 4'71/2" | GWR | 14 spoke | 12" c/t | c.b.s. | |
| 4'71/2" | GWR | 14 spoke | 15" c/t | C.O.S. | |
| 4'71/2" | GWR | 14 spoke | | o.s.f. | |
| 4'71/2" | GWR | 16 spoke | 10" c/t | c.b.s. | |
| 4'81/2" | LMS | 15 spoke | 14" c/t | c.b.s. | STANIER |
| 5'2" | GWR | 16 spoke | 10" c/t | c.b.s. | |
| 5'2" | GWR | 16 spoke | | o.s.f. | |
| 5'3" | LMS | 16 spoke | 11" c/t | C.O.S. | FOWLER |
| 5'3" | LMS/BR | 16 spoke | 13" c/t | c.b.s. | STANIER |
| 5'6" | LMS | 17 spoke | 13" c/t | C.O.S. | FOWLER |
| 5'7" | SR | 18 spoke | 9" c/t | C.O.S. | |
| 5'8" | LNER | 18 spoke | 11" c/t | c.b.s. | |
| 5'8" | GWR | 18 spoke | 15" c/t | c.b.s. | |
| 5'8" | GWR | 18 spoke | 15" c/t | C.O.S. | |
| 5'8" | GWR | 18 spoke | | o.s.f. | |
| 5'9" | LMS | 18 spoke | 13" c/t | c.b.s. | FOWLER |
| 5'9" | LMS/BR | 18 spoke | 13" c/t | c.b.s. | STANIER |
| 6'0" | LMS | 19 spoke | 14" c/t | c.b.s. | STANIER |
| 6'0" | GWR | 20 spoke | 15" c/t | c.b.s. | |
| 6'3" | GWR | 21 spoke | 15" c/t | c.b.s. | |
| 6'6" | LMS | 20 spoke | 14" c/t | c.b.s. | STANIER |
| 6'7" | SR | 22 spoke | 14" c/t | c.b.s. | |
| 6'7" | SR | 22 spoke | 9" c/t | C.O.S. | |
| 6'7" | SR | 22 spoke | 13" c/t | c.b.s. | |
| 6'8" | GWR | 22 spoke | 13" c/t | C.O.S. | |
| 6'8" | GWR | 22 spoke | 13" c/t | c.b.s. | |
| 6'8" | GWR | 22 spoke | 15" c/t | C.O.S. | |
| 6'8" | LNER | 20 spoke | 13" c/t | c.b.s. | |
| 6'81/2" | GWR | 22 spoke | 12" c/t | c.b.s. | |
| 6'81/2" | GWR | 22 spoke | 0/(| o.s.f. | |
| 6'9" | LMS | 21 spoke | 14" c/t | c.b.s. | STANIER |
| 5 5 | | opoo | | 5.2.5. | O |

Bogie & Tender wheels

| 2' 8" | GWR | Mansell | bogie | |
|----------|--------|----------|----------|---------|
| 2' 8" | GWR | 10 spoke | bogie | |
| 3' 0" | LMS/BR | 9 spoke | bogie | |
| 3' 0" | GWR | 10 spoke | bogie | |
| 3' 1" | SR | Disc | bogie | BULLIED |
| 3'1" | SR | 10 spoke | bogie | |
| 3' 2" | LNER | 12 spoke | bogie | |
| 3' 2" | GWR | 10 spoke | bogie | |
| 3' 2" | LNER | 10 spoke | bogie | |
| 3' 31/2" | LMS | 10 spoke | bogie | STANIER |
| 3'31/2" | LMS | 10 spoke | bogie | FOWLER |
| 3'61/2" | LMS | 10 spoke | bogie | FOWLER |
| 3'7" | SR | 10 spoke | bogie/te | ender |
| 3'7" | SR | Disc | tender | |
| 3'8" | GWR | 10 spoke | bogie | |
| 3'8" | LNER | 10 spoke | bogie | |
| 3'9" | LMS | 11 spoke | bogie | STANIER |
| 3'9" | LNER | Disc | tender | |
| 4'0" | SR | Disc | tender | |
| 4'11/2" | GWR | 12 spoke | tender | |
| 4'2" | LNER | 12 spoke | tender | |
| 4'2" | LNER | Disc | tender | |
| 4'3" | LMS | 12 spoke | tender | STANIER |
| 4'3" | LMS | 12 spoke | tender | FOWLER |