Ultrascale Data Sheet

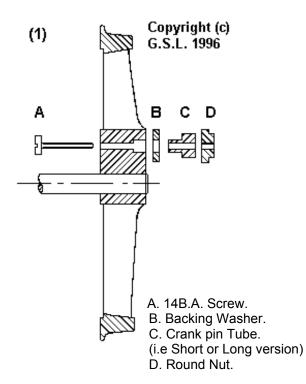
Issue: 001-081217

Crank pin usage and assembly

'ULTRASCALE' Crank pin Fixing Instructions

Use of crank pins.

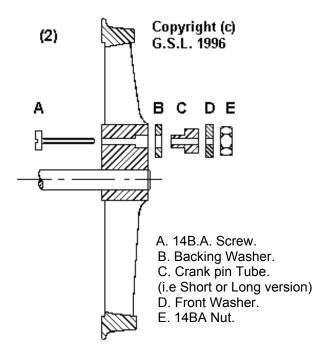
General arrangement to fit crank pins to 'ULTRASCALE' wheels



1. DRIVING & TRAILING

(G.W.R. type or equiv. with round nut)

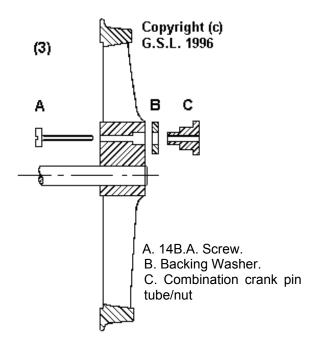
- 1.1 Fit backing washer over smaller diameter of crank pin tube up to shoulder
- 1.2 Fit projecting small diameter backing washer and crank pin tube assembly into crank pin hole in front face of driving wheel and push home.
- 1.3 Fit 14 BA screw from back of wheel turning fully home with screw driver. (screw will 'self tap')
- 1.4 Assemble coupling rod over large diameter of crank pin tube projecting from front face of wheel.
- 1.5 Screw nut on thread projecting from hole in crank pin tube. (see fig 1. To ensure this is fitted the correct way round). Tighten and then remove surplus thread from outer face with side cutters.



2. DRIVING & TRAILING

(L.M.S. type or equiv. with hexagon nut)

- 2.1 Follow steps 1.1 to 1.4 as previously detailed.
- 2.2 Place front washer over projecting thread.
- 2.3 Assemble 14 BA nut on projecting thread and tighten. Remove surplus thread with side cutters.



3. LEADING

- 3.1 Assemble coupling rod to middle diameter of combination crank pin tube/nut.
- 3.2 Fit backing washer to small diameter of 'crank pin tube/nut' up to shoulder.
- 3.3 Fit projecting small diameter of 'combination crank pin tube/nut' and backing washer assembly into crank pin hole in front face of wheel and push home.
- 3.4 Fit 14B.A. screw from back of wheel turning fully home with screwdriver and tighten.
- 3.5 Any surplus thread projecting from outer face of 'combination crank pin tube/nut' should be removed with side cutters.

4. NOTES

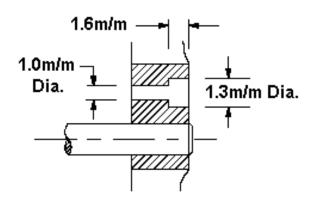
- 4.1 For use on locomotives with inside cylinders the trailing. i.e. short tube type should be used.
- 4.2 The proceeding assembly instructions describe the principle of assembly. However, if wheels have been first mounted on axles, then a slightly different sequence may be found beneficial.

5. AVAILABILITY OF CRANK PIN TYPES

Leading one type only Driving (Long) round and hexagon Trailing (Short) round and hexagon

6. MODIFICATION FOR OTHER MAKES OF WHEEL

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The sketch opposite shows diameters of holes to be drilled to accommodate Ultrascale crank pins.