

Application Guideline

Document #: AG 17-001

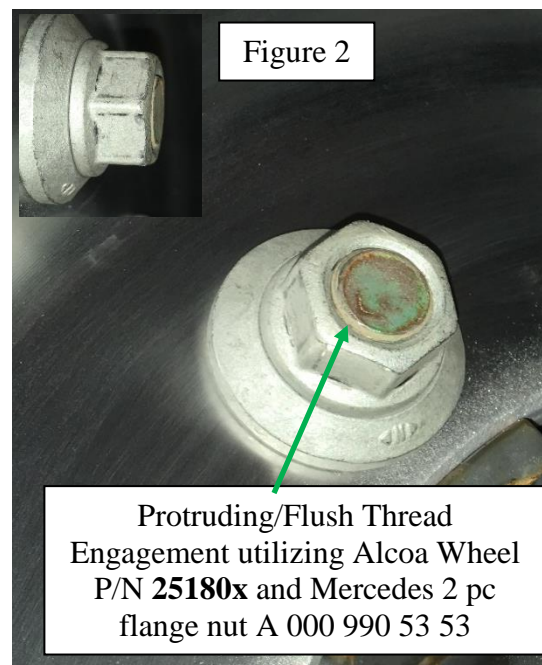
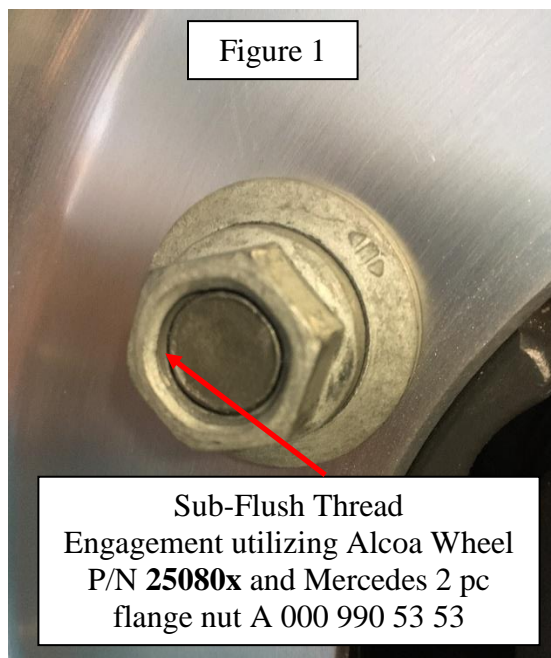
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Sprinter 3500 Dual Wheel

Application Guideline for Alcoa Wheel PN **25180x** Inner Dual Wheel Application on Mercedes Benz Sprinter 3500 Dual Wheel Chassis including Freightliner Sprinter 3500

Alcoa Wheel P/N **25180x** 16x5.5 forged aluminum dual wheel for the Sprinter 3500 chassis will replace Alcoa Wheel P/N **25080x** in August 2017. This application guideline covers the proper use of the **25180x** wheel on the Sprinter 3500 dual wheel chassis.

In 2016, Mercedes Benz released a new 2-pc flange nut (Mercedes Benz P/N A 000 990 53 53) which is taller and has a larger washer diameter than the previous 2-pc flange nut (Mercedes Benz P/N A 000 401 18 72) used for model years 2007-2015. Due to the change in height of the 2-pc flange nut, Alcoa P/N **25080x** cannot be used in both the inner and outer dual position due to sub-flush thread engagement (Figure 1) as noted in Alcoa TSB 16-001. To address this condition Arconic has developed P/N **25180x** which can be used in both the outer rear dual position and inner rear dual position (Figure 2) as well as the steer position. It is recommended that 2-pc flange nuts are at least flush with the end of the stud.



Photos credit from Arconic Wheel and Transportation Products fitment study

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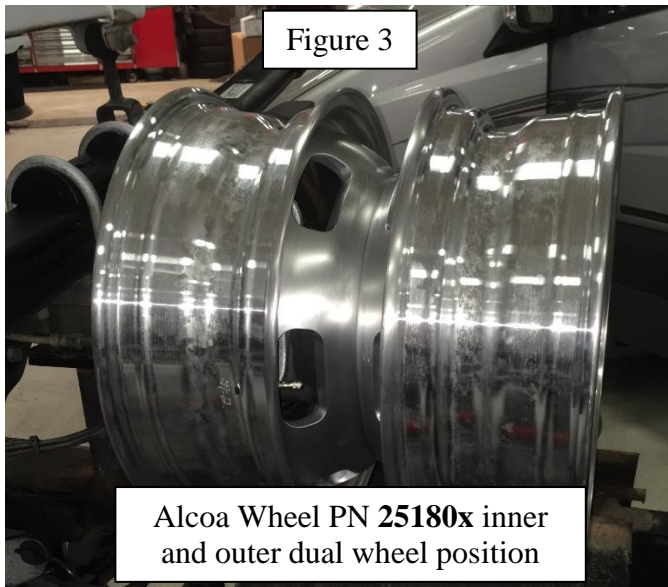


Figure 3

Alcoa Wheel PN **25180x** inner and outer dual wheel position



Figure 4

Alcoa Wheel PN **25180x** outer dual wheel with cap and nut covers

Photos credit from Arconic Wheel and Transportation Products fitment study

The rear wheel setup when using Alcoa Wheel P/N **25180x** in both the inner and outer dual position in conjunction with Mercedes Benz 2-pc flange nut P/N A000 990 53 53 is shown in Figure 3. This setup should provide both proper stud engagement and pilot engagement when used on the original equipment hub and studs.

Hub and nut covers are available for use with Alcoa Wheel P/N **25180x** (kit numbers are shown below):

- 1) P/N 021135 (2 front wheel hub covers P/N 021000 and 12 nut covers P/N 000135)
- 2) P/N 022135 (2 rear wheel hub covers P/N 022000 and 12 nut covers P/N 000135) (Figure 4)

If replacement of wheel end parts is necessary, replacing them with OEM parts is recommended. **Always verify that adequate stud and pilot engagement is maintained.** For additional mounting instructions please see the Service Manual for Alcoa Wheels.

If you have any questions please call Alcoa Wheels Tech Services at (800)-242-9898 option 1.