

Gunite Hub Installation

Gunite has released a series of new part numbers for the Gunite-Lite brake drum product line. These new part numbers are for use with aluminum hubs only.

These new part numbers are being added to avoid the potential for piloting problems when the Gunite-Lite brake drums with standard 1" mounting holes are used with aluminum hubs. Unlike traditional cast iron hubs, the drum pilot surface of an aluminum hub is susceptible to damage if the drum is not properly seated during the installation process. The photographs below illustrate the potential problems which could occur because of improper installation. The Gunite new part numbers have smaller (.91") mounting holes which will aid in centering the brake drum during the installation procedure, helping to avoid problems associated with the aluminum hub drum pilot.



Figure 1
Drum cocked and not seated properly on the drum pilot of the hub.

The brake drum, shown above in figure 1, is not properly seated on the drum pilot of the aluminum hub. If the brake drum is improperly installed as shown, and allowed to rest on the wheel pilot and not the drum pilot, the drum will shave the drum pilot when the wheel assembly is torqued down. If the brake drum is cocked during installation and not allowed to seat flat against the hub flange, the brake lining may drag against the drum causing drum failure.



Figure 2
Correctly installed drum properly positioned on the drum pilot of the hub.

When the brake drum is installed properly, as shown in figure 2, the drum is seated up on the drum pilot of the hub and rests flat against the hub flange.

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Figure 3 *Shaved drum pilot.*

The drum pilot on the hub shown in figure 3 has been damaged as a result of the drum not being properly installed on the drum pilot and being allowed to rest on the wheel pilot instead. If the drum is installed in this manner, the drum will be cocked and will damage or shave away the surface of the drum pilot when the wheels are installed.



Figure 4 *Undamaged drum pilot.*

The drum pilot on the hub shown in figure 4 has not been damaged because the drum was properly seated on the drum pilot and was not allowed to rest on the wheel pilot. This allowed the wheels to be properly mounted on the wheel pilot and the assembly to be tightened without damage to the drum pilot.



Figure 5 *Gunitite-Lite drum with 1" mounting holes should not be used on an aluminum hub.*

Gunitite-Lite brake drums with 1" mounting holes should not be used with aluminum hubs because the larger holes can allow the drum to be improperly positioned during installation. This potential misalignment could result in the drum resting on the wheel pilot instead of the drum pilot as shown in figure 5. Gunitite-Lite brake drums with 1" mounting holes are to be used with steel or ductile iron hubs only.

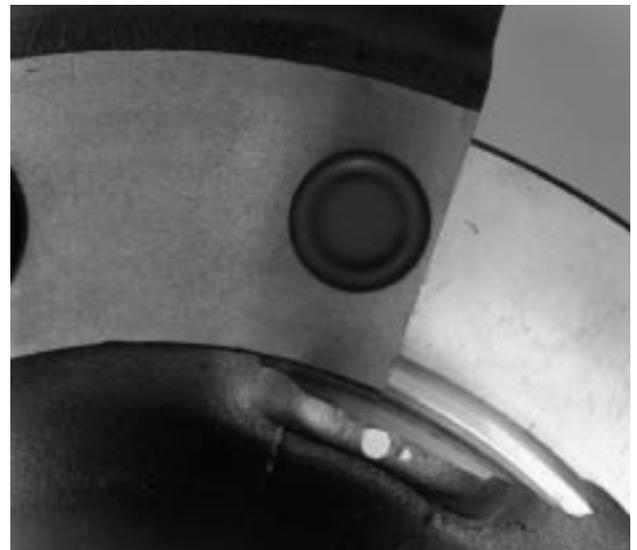


Figure 6 *Gunitite-Lite drum with .91" mounting hole for use with aluminum hub.*

The new Gunitite-Lite brake drums are manufactured with .91" mounting holes to help center the drum and keep it off of the wheel pilot during installation. Because of the smaller mounting hole, the new Gunitite-Lite brake drums provide better alignment with the drum pilot resulting in less chance of the drum being cocked during wheel installation and less potential for damage to the drum pilot on the aluminum hub.

WARNING: Gunitite-Lite brake drums with .91" mounting holes are for use with aluminum hubs only. These brake drums should NOT be used with steel or ductile iron hubs. Use of the Gunitite-Lite brake drum with the .91" hole on a steel or ductile iron hub may cause interference between the mounting hole and the wheel bolt during installation.