Lubecore Technical Announcement

New Barbed Hose Fittings for Korilla Lining

Lubecore International is pleased to introduce the next generation 20.236 barbed 5mm hose fitting. The benefit of the existing 20.236 fitting was the ability to install it into Korilla lining by hand. However, it did not have the same burst pressure rating as 6mm hose fittings such as the 20.223, 20.224 or 20.225. The goal of the product update was to provide a hand-insertable 5mm barbed fitting that possesses the same burst pressure rating as current 6mm hose fittings.

Through performance testing it was determined that current 6mm fitting assemblies provide a burst pressure of 4000 to 4100 psi whereas the original 20.236 fitting provided burst pressures in the 3000 to 3500psi range.



Figure 1 Next Generation 20.236 5mm Barbed Korilla Hose Fittina

Test results show that the new 20.236 design provides burst pressures of 4000 to 4400 psi. In order to achieve these burst pressures, the hose clamp size was reduced from 9.5mm to 8.7mm. The pressure rating of the fitting was only tested with Lubecore Korilla lining. If an alternative lining is used the pressure ratings may not be as tested.

Due to the success of this design change it is Lubecore's intention following the introduction of this product with the following product updates and introductions:

- 1. 6mm Korilla line fitting barb design updates to match this hand insertable fitting design.
- 2. Eliminate the need for the Korilla line fitting insertion tool.
- 3. Introduce 45° and 90° Korilla line fittings in the 5mm lining size to allow for 5mm fittings to be more easily used on progressive systems.
- 4. Replace the 9.5mm hose clamp with 8.7mm hose clamps when all 4mm ID Korilla line barbed fittings features the same barb design.
 - a. Note that the same crimping tool is used for both the 9.5mm and 8.7mm clamps

New part numbers and what they substitute are listed below:

New Part #	Description	Substitutes Part #
20.236	Stud Straight 5mm for 8.6 OD to 4 ID Hose	20.236
20.239	Clamp 8.7mm for 8.6 OD x 4 ID Hose SS	20.232 *

^{*} The 20.232 clamp will be available for use with 20.223, 20.224, and 20.225 parts until they are updated to match this new design. The 20.232 must be used with the current 6mm barbed Korilla fittings as the 8.7mm 20.239 will not fit over the hose after a 6mm barbed fitting is installed.

Note that the size of the 20.232 and 20.239 clamps is marked on them to allow for easy identification as shown in Figure 2. Also note that the 20.239 has a close fit with the Korilla lining whereas the 20.239 has a looser fit. The difference between the fit of a 20.232 and the 20.239 with this fitting is shown in Figure 3. If a 20.232 is used to clamp the new single barbed 20.236 in place the burst pressure of the system will lower than the published test results.



Figure 2: Left to Right: 20.232, 20.239



Figure 3: Left to Right: Improper Loose Fit of 20.232, Proper Close Fit of 20.239

It is also important to keep the clamp off the barbed portion of the fitting to ensure that the lining is clamped onto the stem between the barb and the shoulder on this fitting. This allows the barb to properly engage with the lining and provide the holding force needed to generate the high burst pressure. The location of the 20.239 clamp in the assembly should be near the end of the hose as shown in Figure 4.





Figure 4: Location of clamp relative to the end of the Korilla lining.