



## Lubecore Technical Announcement

### Heavy Duty Banjo Fitting

Lubecore is pleased to announce the new 20.329 Heavy Duty Banjo Fitting. This fitting was designed to be installed at bucket pin locations as shown in Figure 1, and can be used in other similar locations.



*Figure 1: Fitting Location*

An installed set of heavy-duty banjos on a Takeuchi Mini-Excavator is shown in Figure 2. Note the brackets included in the installed oriented along the side links which allow a tidy install with p-clamps holding the secondary lining. Heavy-duty banjos eliminate protection rings from an install. No need to grind, weld or paint! This is a significant time saver, making installations more profitable.



*Figure 2: Installed Heavy-duty Banjos*

In order for these banjo fittings to withstand the harsh conditions present at the bucket end of excavation equipment the fitting is designed to have a shear boss that fits into the pilot hole at the bucket grease point. The shear boss is smaller than other construction banjo fittings available on the market to fit smaller excavators like the Takeuchi TB series. Current market offerings have bosses with 20mm diameters, where this new 20.329 features a 16mm diameter. Lubecore designed the 1/8 BSP threads of this banjo fitting to be long enough to reach the grease point interface threads without the need to use additional adapter fittings between the banjo fitting and the recessed grease point. The grease line interface features 1/8 BSPT threads. The wrench flats are designed to work with a 5/8 or 16mm wrench.

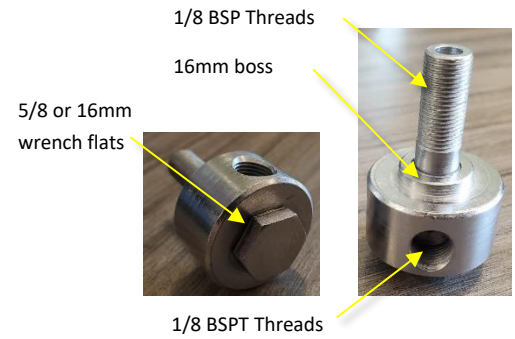


Figure 3: Banjo Fitting (20.239)

Line routing brackets (Figure 2) have also been designed to simplify line routing at the H link side arm. The bracket part number is 40.143 and is shown in Figure 4. The large hole in the bracket interfaces with the banjo, and the small hole features an M6X1 thread for securing a p-clamp.



Figure 4: 40.143 Bracket

## Size

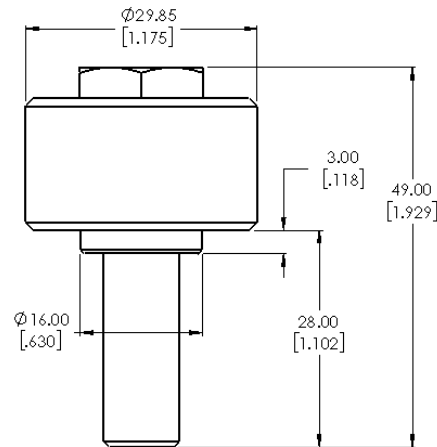


Figure 5: 20.239 Envelope

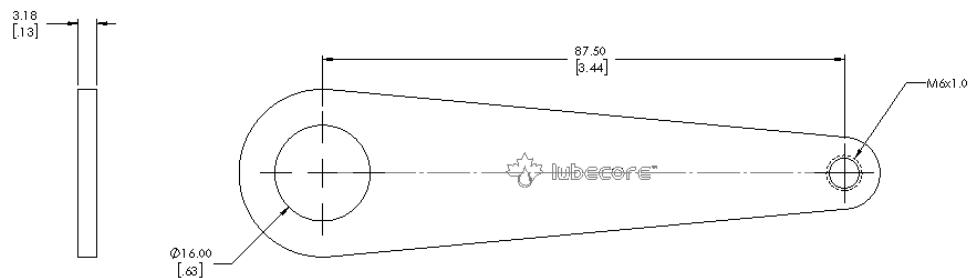


Figure 6: 40.143 Bracket Envelope

## Pressure Rating

The 20.329 fitting was subject to burst pressure testing. It held pressure without leaking until the Korilla mainline used in the test burst at 4500 psi (310 bar). The fitting pressure rating is suitable for automatic greasing systems.

## Handling Precautions

There are two o-rings within the banjo assembly. If the fitting is pulled apart it must be put back together gently. Pushing the male pin with o-rings into the female outer body aggressively could damage the o-rings. The male pin with o-rings should be rolled into the female body as it's progressively pushed into the assembly. O-rings should also be installed wetted with grease. Although there is no reason to pull the banjo apart, it must be put back together carefully when a curious user pulls the fitting apart.

## Part Numbers

Table 1 provides a list of part numbers for this banjo fitting.

*Table 1: Part Numbers*

<b>P/N</b>	<b>Description</b>
20.329	Banjo, Heavy Duty
40.143	3.5 Fitting Bracket With 16 mm End