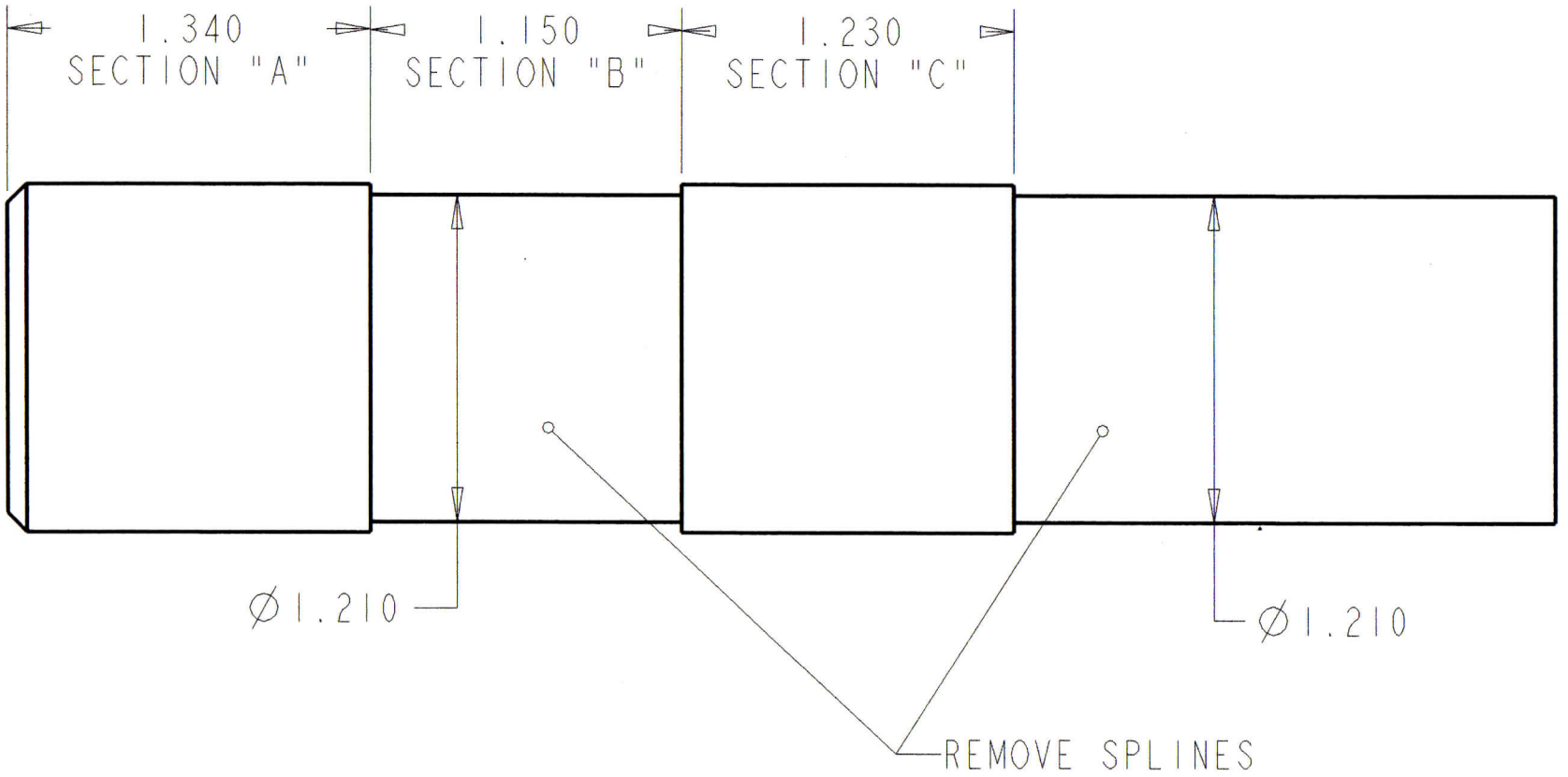


The purpose of this modifcation is to allow the passenger side axleshaft to be removed if the axleshaft splines develope a twist from excessive torque. The locker collar can't slide along the splines of the shaft if there is a twist, therefore the locker collar and carrier can become machincally bound and it is nearly impossible to remove the axleshaft without cutting the axle housing open and cutting the axleshaft. The drawing above shows which splined sections to eliminate. Here is what is happening with each section.

Section A- This section engages the carrier, the 1.34" dimension is conservative and the actual spline engagement can be seen by viewing the wear pattern on the splines of the axleshaft, which is about 1.25".

Section B- This section never seens any action whether the differential is locked or unlocked. It is the area we will use to help remove the axleshaft if a twist develops. The locker collar is a hair under the 1.15" in length. Therefore the shaft can be pulled out about 1.25" then section B will be inside the locker collar. Since the splines from section B have been removed the axle shaft can be rotated until the splines from section A line up with the locker collar splines and then the axleshaft can be fully removed.

Section C- This splined section engages the locker collar when the differential is locked or unlocked. When locked there is full spline engagement. When unlocked the locker collar slides right and a little off section C so there is about 2/3 of spline engagement. This is fine because the locker collar is transmitting zero torque when in the unlocked state.

View the actual photos for more clarification.

Kenny Tucker