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## Axle Length Measurement Instructions

## Make a Set Up Axle:

The best way to measure your car for axle length is to use a set up axle. There are several ways to do this. You can cut and sleeve a stock axle or any old axle that has the proper splines on it. A friction saw works well to cut the axle in half. You can use a piece of angle iron to sleeve the axle. Cut it so that it is about 6" shorter than the straight across flange-to-flange dimension. Use some hose clamps to hold the cut ends of the axle in the angle iron. You can now adjust the length of the axle.

#### **Measurement:**

There are two positions that should be checked for proper axle length. One, the most important, is at full droop. The other is at the straight across position.

## Set Up:

Install the CV joints on the set up axle. It is easier if you leave the boots off. It is even better if the CV joints do not have any grease in them. You need to be able to see where the CV center is in its lateral travel.

## **Full Droop Measurement:**

<u>With the CV center, centered in its lateral travel</u>, adjust the length of the axle so that the CV joints will just bolt up to the flanges. You do not want the CV joint to extend to the point where the CV joints run out of their lateral travel. This will break the CV cages.

#### **Straight Across Measurement:**

Check to see that the axle is not so log that the ends of the axle contact the insides of the CV flanges when the axle is pushed to the end of its lateral travel in both directions. If the axle length is set accurately during the full droop measurement, the axle length will most likely OK here.

## **Check The Other Side:**

It is important to check the axle length on the other side. Many times, the lengths are different from side to side.

## **Ordering:**

The most accurate way to call out the axle length is from clip to clip. Remove the axle from the car. Measure from clip to clip or from outside of star to outside of star. Add <sup>1</sup>/<sub>4</sub>" to this measurement. This is your clip-to-clip length on the new axles. Axle lengths in our catalog are over all lengths. Add the following amounts to get over all lengths. Some out board hub assemblies require half dome or full dome ends.

To get over all length for axles with flat ends: Add 5/16" for VW 33 tooth axles. Add 5/16" for Porsche 930 axles. Add 5/16" for Porsche 934 axles.

Axles with  $\frac{1}{2}$  dome ends, add  $\frac{5}{16}$ " for each dome end. Axles with full dome ends, add  $\frac{1}{2}$ " for each dome end.