



Advanced Wheelend Technologies

Service bulletin

Lube purge (vent) installation for drive axles

This operation is essential to provide proper lubrication to the spider bushings in most drive axles, where in most cases, the grease fitting is located on the extension tube between both bushings.

Take the following steps to install the lube purge system.

	Step 1; Select a spot at the top of the spider (or as close to it as possible) making sure the location of the purge tube does not interfere with moving parts of the brake foundation. Using a center punch make a mark 3/4" of an inch from the edge of the spider bracket at the chosen location of the elbow of the purge tube.
	Step 2; Using a 3/16" size drill, make a 5/8" deep hole on the spider at the punch mark. Then with a 11/32" size drill, oversize the hole you just made by 5/8" of an inch depth to allow threading the hole.
	Step 3a; Using a center punch make a mark 1/8" on the vertical wall of the seal cavity, above the edge of the bushing channel, in relation to the location of the first hole made. Using a 1/8" size drill, make a hole from the outside through the spider toward the purge tube hole until it reaches the bottom of the hole, to connect and establish a path for the lubricant. NOTE: the 11/32" drill may end up piercing the seal cavity, in this case no need to make the small hole.
	Step 3b; If step 3a seems impossible to perform or inadequate for the type of spider design, it is possible to drill through the bushing as long as it is at the outside edge of the bushing, and the holes connect.
	Step 4; Using a 1/8" NPT tap, make the necessary threads in the hole to receive the 90 degrees elbow. Once finished, clean all metal debris from the spider and the cam-bushings.
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	Step 5; Drill a 1/2" hole in the dust shield (back plate) to allow passage of the purge tube assembly.	
	Step 6; Install the purge tube assembly, making sure that it is well positioned and tight enough. We recommend the use of Teflon coating on the threads of all these components to prevent leaks and oxidation.	
		Step 7; Make sure you position the breather section of the purge tube in a safe spot, away from potential road hazards.
RESUME NORMAL ASSEMBLY PROCEDURE OF THE CAMSHAFT AND ALL OTHER COMPONENTS UNTIL FINISHED.		

Lubricant Purge Tube assembly



Part #	Ext. tube length	External connector	Breather relief pressure
LPT-110	1-1/2"	Straight	25 PSI
LPT-120	2-1/2"	Straight	25 PSI
LPT-210	1-1/2"	90 degrees	25 PSI
LPT-220	2-1/2"	90 degrees	25 PSI

An installation tool kit (part# BTDK-200) is available for this breather installation procedure.

When greasing the cam bushings with this purge system, you will notice that grease comes out of the breather's relief hole. This confirms that grease has reached the spider bushing and that the outer dust seal (inside the brake drum) is positively working. Failure to see old lubricant escape through the breather would suggest the seal has popped out and grease is contaminating the brakes.

For any questions regarding this service bulletin please use our toll free tech support line; **1 877 765 9629**