Do It Yourself Hummer H3 Front Differential Bushing Kit

This kit is to be installed by a professional. Be sure to read and understand all steps before starting installation.

Step 1:
Chock the rear wheels, lift and support the vehicle. Remove front tires, skid plates and CV shafts from the vehicle.

Step 2:
Detach the front drive shaft from the front differential. It is a good idea to tape the U-joint so the caps do not fall off.

Step 3:
Detach the breather line from the top of the differential.

Step 4:
Remove the three bolts holding the differential to the vehicle. Remove the crossmember bolt first, then remove the two bolts holding the side brackets to the frame of the vehicle. Remove the differential from the vehicle.
Crossmember bolt

Step 5:
Unbolt brackets from either end of differential. There are four bolt holding each bracket on.

Step 6:
Remove the crossmember from the vehicle. There are two bolts on either side of the crossmember that must be unbolted.

Step 7:
Remove old bushings from crossmember and brackets. The old bushings can be burned and/or pressed out. Be sure to remove both the inner metal sleeves and outer metal sleeves from both the brackets and crossmember. The outer metal sleeve can be pressed out easily if it is cut lengthwise with a sawzall. Be careful not to cut into the crossmember or brackets.

Step 8:
Discard bracket bushings.

Step 9:
Keep the Inner Metal sleeve from the crossmember and clean it up on a wire wheel.

Step 10:
Using a die grinder, remove any high points in the welds on the crossmember. The objective is to have a flat surface for the bushing to rest on, but not remove too much material so the bushing will no longer fit. Remove any rust as well.
Step 11:
Check the crossmember where it bolts to the frame. This is a very common spot for the crossmember to crack. Re-weld the cracks if there are any.

Step 12:
Press in the new small plastic bushings into the brackets. They can be tapped in with a rubber mallet. Then press in the new metal sleeves into the plastic. They can also be tapped in with a rubber mallet or pressed in with a press. Be careful to press the bushings and sleeves in straight. Pressing them in at an angle will distort the bushings.
Step 13:
Press the large bushing assembly into the crossmember. The plastic half with the radius in the flange goes on the top of the crossmember. The other plastic half is machined out to fit the factory bottom washer. Press this half in from the bottom of the crossmember. Now press the metal sleeve that was cleaned up in Step 9 into the crossmember from the top.

Note: If the metal sleeve is not flush with bushing, shorten the metal sleeve on a grinding wheel so it is flush.

Step 14:
Reinstall brackets onto the differential

Step 15:
Reinstall the crossmember in the vehicle using factory bolts and washers but discard the long factory 12mm differential crossmember bolt.

Step 16:
Reinstall the differential and brackets in the vehicle. Hand tighten the bolts that go through the brackets into the frame.

Step 17:
Position differential so all three differential bolts line up correctly with the frame and crossmember.

Step 18:
Using the factory lower concave washer, new small 12mm washer, and new 12mm bolt, hand tighten the crossmember bolt into the differential.

Step 19:
Torque all bolts and reinstall skid plate.