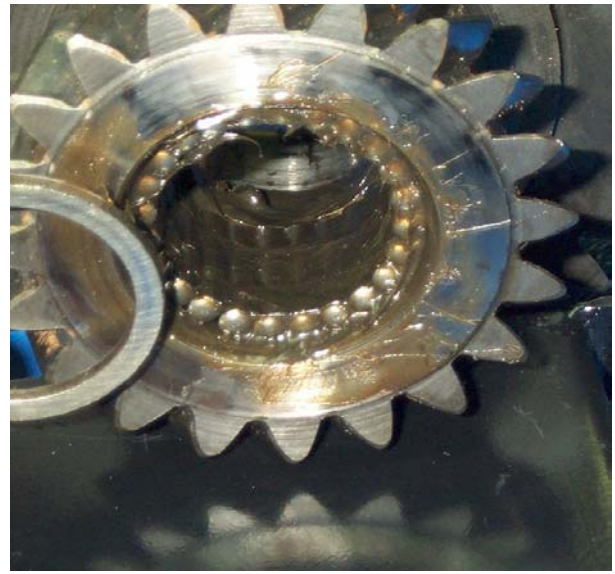


STEP 8

After insuring the idler gear has been cleaned, reinstall the thick spacer in the center of the bore of the idler gear. Using Vaseline, coat the entire bore on each side of the thick spacer so that you can reinstall all 48 needle bearings. Install the needle bearings, one side at a time, using Vaseline to keep them in place. When both sides are complete, install the two thin spacers, one on each side, using more Vaseline to hold them in place. Using more Vaseline, install the two flat thrust washers inside the case. Make sure the thrust washer notches line up with the notch on each side of the case. Now slide the idler gear down into the housing, letting it sit on the bottom of the housing until a later step. Make sure that your needle bearings, two thin spacers and two flat washers stay in place.





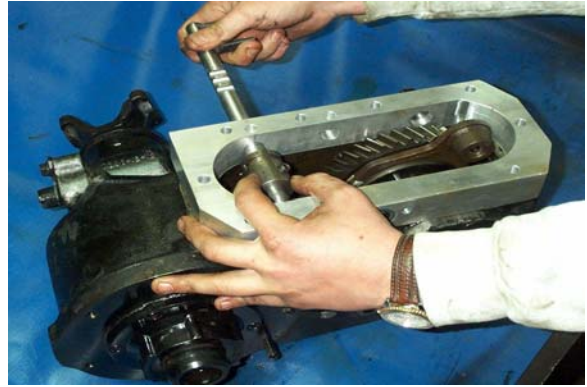
STEP 9

Place the aluminum shifter plate on the inspection cover opening, insuring that the square corner of the plate is on the backside closest to the rear output shaft. At this time, use a bead of RTV sealer to seal the aluminum spacer to the housing. To temporarily hold the spacer in place, use two of the 5/16" x 2-1/4" bolts to keep the spacer from moving while the shift rails are being installed.



STEP 10

Take the new rear output shift rail and install it into the shifter plate in the sealed bore closest to the rear output shaft. Install shift rail, threads first, in from the rear of the case. As the shift rail is installed, install the new rear output shift fork, set collar facing the front of the case and slide the shift rail through the shift fork and line up set screw indentation. Using one of your original set screws, install into rear output shift fork, making sure that set screw sits in the notch in the shift rail.



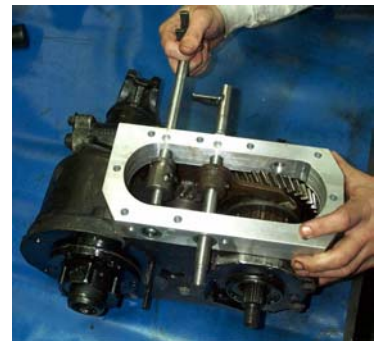
STEP 11

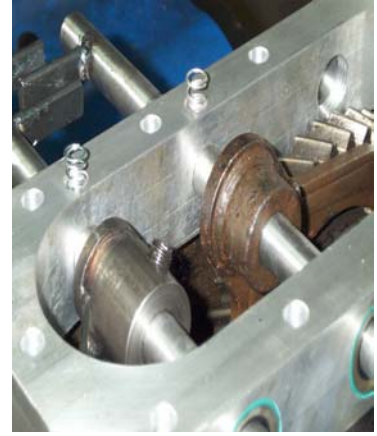
Before installing the other shift rail, pick up the idler gear from the bottom of the case and reinstall the idler gear shaft from the back of the housing. Be sure the thrust washers, two thin spacers and needle bearings have all stayed in place. Tap shaft all the way through, making sure that the notch on the shaft lines up the retainer bolt hole on the back of the case. Reinstall retainer and bolt at this time.



STEP 12

Remove the original shift pads on your original fork and replace with the two new ones supplied. Install front output shift rail, in the same manner as the rear, using your original shift fork. Be sure setscrew collar is facing the front of the case. Line up setscrew collar with the notch on the shifter shaft and reinstall the setscrew. Be sure it sits in the notch on the shifter shaft. Install the two ball bearings in the bores directly above the shift rails. Make sure each ball falls into one of the three notches on each shift rail. Next, install the four detent springs on the top of each ball bearing.





STEP 13

Now, using the original inspection cover, it is time to seal up the case. Make sure there is not any trash or metal shavings in the case. Remove the two bolts temporarily holding the shifter plate to the case. Apply a layer of RTV sealer to the top of the shifter plate. Make sure the detent springs stay in place. Reinstall the inspection cover plate using the 5/16" x 2-1/4" bolts and lock washers (supplied).



STEP 14

Remove plug in the inspection plate cover. Install the new brass nipple in its place; this is your new vent hose connection.

STEP 15

Remove the old vent hose tube from the rear bearing retainer. Using the supplied 7/16 drill bit, drill out the vent tube hole and tap using the 1/4" NPT tap drill set supplied. After tapping the hole, install your old inspection cover plug using Teflon tape.