TUBE STYLE SHIFTER INSTRUCTION MANUAL

Please read instructions thoroughly before attempting installation of the Neil and Parks Tube Style Shifter

Tools Needed

- Electric or Air Drill at least ⅜” chuck
- Marker or some other marking device
- 13/64” drill bit
- 1/8” Allen Wrench
- 3/8” Wrench
- Wrench to remove and reinstall the nuts holding your Third member in.
- Wrench to remove your trans pan bolts.
- Wrenches to change your existing trans arm to ours as yours WILL NOT WORK!!
- Razor knife or tube cutter to trim air hose length
- Small Crescent wrench to install air fittings
- File, or grinder of some sort to modify rooster comb

Parts List

Qty 1 - Shifter assembly
Qty 1 - Shifter cable
Qty 1 - Shift arm with quick release ball joint
Qty 1 - Pan bracket with quick release cable bracket
Qty 1 - Shifter support bracket
Qty 1 - Air Button with fittings and hose

Instructions

1. Drain trans oil and remove old shift arm. Remove the park assembly, as this shifter is NOT large and brutal enough to operate park. Remove the rooster comb, and sand to points down slightly so there is less shift spring action. The object here is to make it relatively easy to shift from one gear to another. Depending on your shift spring anchor point, it may be necessary to bend the shift spring bracket slightly as well, and/or stretch the spring slightly to obtain easy shifting. There are many aftermarket parts available now so the ramps of the rooster comb may need to be flattened as well. When you have the trans shifting by hand easily, but positively so there is no slop when in each gear, proceed to step two.

2. Reassemble your transmission completely; making sure you did NOT reinstall the park mechanism. Then install the pan bracket. The pan bracket is designed to go behind the shift arm, using the rear and center bolts on the driver's side of the transmission pan rail. The quick release cable bracket should be bolted underneath the pan bracket at all times with the locking arm towards the rear of the vehicle; flange aimed forward. Make sure that the shift arm clears all obstructions throughout the entire shift pattern, such as shields, band adjustment bolt, etc., with the quick disconnect cable ball bolted into the arm. The ball should be on the outside of the shift arm.

3. When looking at the Thirdmember from the front, remove the nuts holding the Thirdmember to the rear end housing at the 12 and 1 o'clock positions. Slide the two lower holes in the shifter assembly bracket over these two studs, with the handle pointed to the rear, and reinstall the two nuts you just removed. Depending on which Thirdmember you have, it may be necessary to put a washer or two under the shifter to fill up the counterbore on the Thirdmember so that the shifter sits flat. This bracket clears all thirdmembers we have found, but if it doesn't clear a rib, or casting feature, you will have to clearance it.

4. Bolt the shifter support bracket onto the shifter assembly. The end of the bracket with the single hole bolts to the shifter; the end with the two holes bolts to the Thirdmember casting. There are no holes in the Thirdmember to attach this bracket to at this time. Now is when you get out the 13/64 drill bit and drill the two holes through the thirdmember in the most appropriate place to bolt the support bracket to.

5. Adjusting the cable. Chances are that all the gears will come into adjustment at once, but if they don't there are two gears you need to adjust for that take priority over all others.

Those two are LO and HI. What you want is the trans to pop into the next gear just before the shifter runs into the end of the shift slot for that gear. Adjust the cable by screwing on or off the quick release ball joint at the transmission end. This should be plenty of adjustment. If you run into issues, please call me. Don't assume anything.

6. Neutral safety switch. Use the terminals farthest from one another on the switch. Do not use the center terminal. This switch needs to be wired in line from the dead side of your starter switch to the little terminal on the starter solenoid. It came pre-adjusted and the car should only start when the shifter is in the PARK position. I know we removed park, but the shifter should still shift to park, but the car will roll in park now as we removed the park mechanism in the transmission.

7. The Air button. This is for easy shifting from LO to HI only. Mount the button where the driver wants it, typically in the steering wheel operated by a thumb. The part of the switch with the hex is the air inlet (from air supply), and the outlet (to the air cylinder), is on the side, pointing 90 degrees from the button. Operating pressure for this pneumatic system is anywhere from 100 to 200 PSI. You can use C02, Nitrogen, or compressed air, as a pressure source, whatever is easier for you.

   We use the push-to-connect style fittings, as they are 100% trouble free and easy to work with provided you do two things. #1 is cut the tubing end square, and #2 make sure the tubing is seated completely in the fitting. Use Teflon tape, Teflon pipe sealant, or red loctite on the pipe threads.

   Run the tubing so that there are no kinks or binds under all conditions (full left steer, full right steer, accelerating and decelerating). At this point you should be completely finished.

   The main bracket has two holes, both of which we use on our own cars. The hole in the center we typically use for the kill switch, and the one on the left for a fuel shutoff cable. Feel free to use these holes as you wish. If you have any questions or need further assistance, please call. Don't forget to refill the transmission oil!!

If you have any questions please call 785-422-8722.