

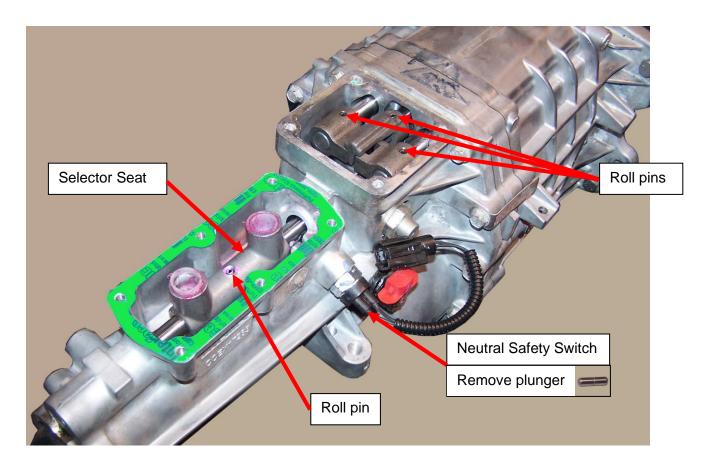
TKX Transmission Mid-Shift Kit Installation Instructions



TKX Mid-Shift Kit

STEP BY STEP PROCEDURE:

- 1) Drain transmission fluid into clean container for reuse. Reinstall drainplug.
- 2) Remove the (4) flat head screws from the silver colored cover plate on the extension housing where the new shifter will be mounted. Remove the cover plate and discard the (4) screws, cover plate, and green gasket.
- 3) Remove the 6 bolts that secure the stock shifter assembly to the transmission. Remove and discard the shifter assembly and (6) bolts. Save the green gasket for reuse.

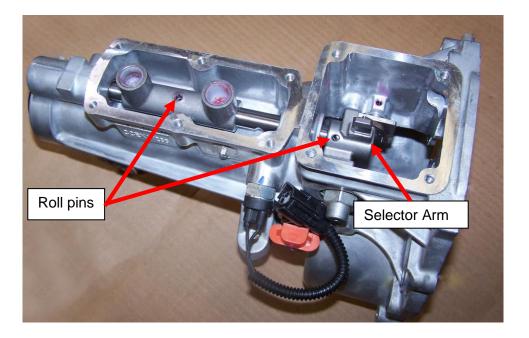


- 4) Completely drive out the (3) roll pins in the shifter selector area as shown by the red arrows above. The pins will be retrieved off the debris magnet when the extension housing is removed.
- 5) Drive the roll pin in the selector seat down 1/4" to retain centered position of shift rail during disassembly of extension housing.
- 6) Remove the neutral safety switch and use a magnet to remove interlock plunger from shift rail. Discard interlock plunger and reinstall the neutral safety switch to reseal hole.

NOTE: Neutral safety switch will NOT function when TKX has been converted to midshift operation. Pigtail wires can be cut off if desired since switch will not be used.

7) Remove the (11) bolts holding the extension housing to the main case, and gently pry it off the (2) dowel pins. Retain the steel gasket for reuse. The shift lugs will slide off the rails when the extension housing is removed. Discard all (3) shift lugs.

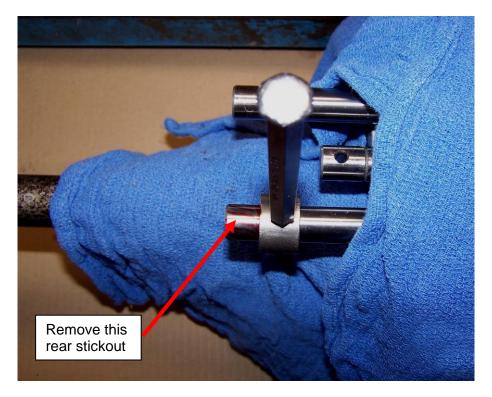
IMPORTANT: Recover the (3) rolls pins from rear cavity of extension housing that were removed in step 4.



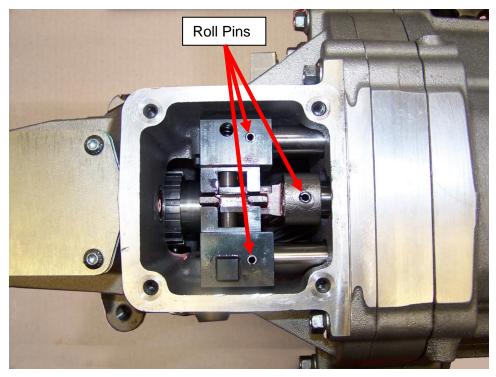
- 8) Finish driving out the roll pin from the selector seat. Discard roll pin.
- 9) Drive out the roll pin in selector arm and remove selector arm from the extension housing. Remove rail. Discard the selector seat, selector arm, rail, and roll pin. Extension housing is now ready for reassembly to case. Set aside.



10) The (2) outer shift rails must be shortened for the mid-shift installation. This can be done without dis-assembling the main case to remove the rails. To prevent any contamination from shavings when cutting the rails, carefully cover rear face of case and shafts with shop rags as shown on next page.



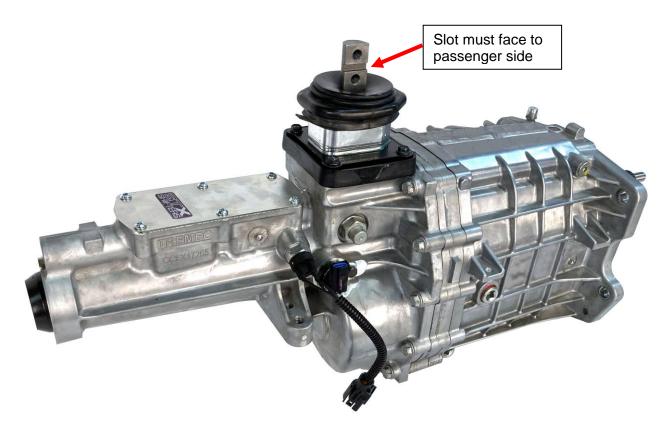
- 11) Install the provided guide collar on shift rail and insert a 3/16" dia punch to locate collar on shift rail. Because the shift rail is hardened steel, use a rotary air tool with cut-off wheel and cut off rear stickout of shift rail flush with rear face of the collar. Remove the punch and collar to deburr the cut shift rail end.
- 12) Repeat step 7 for the opposite side shift rail. Discard the guide collar.
- 13) CAREFULLY remove the shop rags to contain the shavings.
- 14) Reinstall extension housing with steel gasket onto (2) dowel pins in case. Before fully seating the extension housing, slide new shift lugs onto shift rails as shown. Install 3/4 shift lug on center rail first, followed by the outer 1/2 and 5/R lugs.



- 15) Reinstall (2) extension housing bolts finger tight to secure housing in place.
- 16) Reinstall original roll pins to secure the (3) shift lugs on rails as shown.
- 17) Reinstall remaining extension housing bolts and torque all bolts to 24-30 lb-ft. using an alternating cross pattern sequence.
- 18) Install the shifter assembly with (4) M6 x 1.0 screws provided with the slotted face of the stub lever oriented to the passenger side and torque screws to 6-11 lb-ft.

IMPORTANT: Slotted face of stub lever MUST be facing passenger side in order for the 5th to REV shift blockout feature to function.

- 19) Install the new rear shifter cover plate with the original green gasket using the (6) M6 x 1.0 screws provided and torque screws to 5-6 lb-ft.
- 20) Bolt on upper shift handle with 3/8"-24 x 1" bolts and lock washers (HWA-Pack L). Confirm shifter motion thru all gears. Remove shifter handle prior to reinstalling the TKX transmission.
- 21) At final assembly of upper shifter handle after the transmission has been installed, use medium strength thread lock compound and torque the upper shifter handle bolts to 25 lb-ft.



Completed Installation