

Revisions to this document are noted by a stripe in the left-hand margin

#2001, Rev. A
April, 2006
Product Code(s): 66 and 65
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SUBJECT: Filter Cover Bolt Hole Repair Kit

MODELS AFFECTED: All 3000 and 4000 Series Product Families Transmission Models

Introduction:

To facilitate the repair of the filter cover bolt threads in the main case a Filter Cover Bolt Hole Repair Kit, J-42385-AT has been released. The kit can be used for thread repair with any 3000 and 4000 Product Families model. The kit allows the threads to be repaired in or out of chassis. The kit utilizes a solid, thin-walled, self-locking steel bushing insert to repair the filter cover bolt threads in the main housing of the transmission. The thread inserts repair the filter cover bolt threads to their original thread specification of an M10 x 1.5.

The Filter Cover Bolt Hole Repair Kit J-42385-AT contains:

- Template J-42385-230 (Main Filter)
- Template J-42385-234 (Lube Filter)
- Two (2) Alignment Pins J-42385-308
- M10 Step Drill J-42385-231
- Tap J-42385-232
- 60 Inserts J-42385-514, the kit contains six (6) packets of ten (10) M10 x 1.5 x 24.5
- Insert Driver J-42385-233
- Tap Wrench 510260
- Six (6) M10 Retaining Bolts 206158
- Driver Oil J-42385-110

The kit contains 60 inserts and 1 bottle of oil. Additional inserts and oil can be purchased through SPX Kent-Moore.

SPX Corporation (Kent-Moore Service Solutions)
28635 Mound Road
Warren, MI 48092
Phone: 1-800-328-6657
FAX: 1-800-578-7375
www.toolsfortrucks.com

Thread Repair Criteria:

Prior to beginning the field modification procedure, the filter cover bolt holes must be inspected to assure the M10 Step Drill (J-42385-231) can properly prepare the hole for thread cutting with the Tap J-42385-232. If any of the filter cover bolt holes are found oversized the transmission main housing must be replaced.



NOTE: The Allison factory installed steel inserts use the same hole and thread size as the Thread Repair Kit inserts; however, the M10 Step Drill J-42385-231 must be used to counter-sink the hole before the Thread Repair Kit inserts are installed.

Field Modification Procedures:

The attached SPX Kent-Moore instruction sheet must be used to facilitate the repair of the filter cover bolt threads in the main case.

Allison Transmission, Inc.
Indianapolis, IN 46206-0894



KENT-MOORE

J42385-AT

Thread Repair Kit Allison Transmission

Step 1
Remove control module from the transmission. Refer to appropriate service manual for correct removal procedure.

Step 2
Determine correct drill fixture for hole pattern to be repaired (i.e. "Main J-42385-230" or "Lube J-42385-234"). Locate FRONT of fixture to front of transmission.

Step 3
Align the fixture using two alignment pins. Secure the plate with three attachment bolts.

Step 4
Use the step drill bit J-42385-231 with an electric drill to drill out the damaged thread. Collar on drill must contact the guide. Clean out ALL chips or foreign material.

Step 5
Use Tap J-42385-232 and Tap Wrench 510260 to thread new hole. Tap must bottom to ensure thread depth. Clean out ALL chips or foreign material. Retap if necessary.

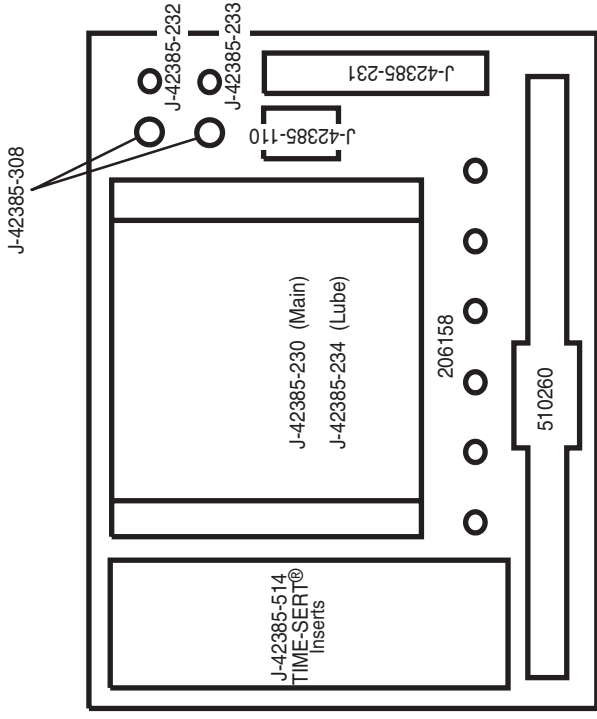
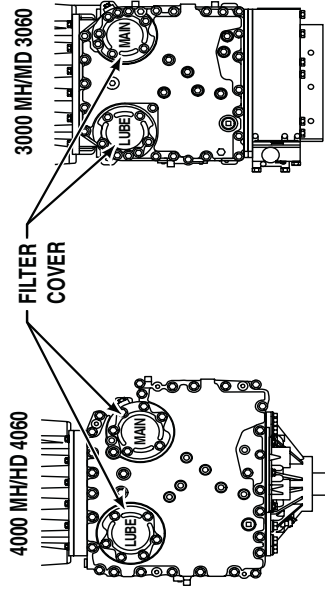
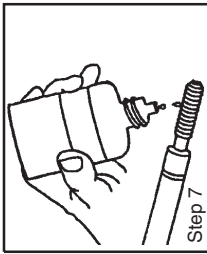
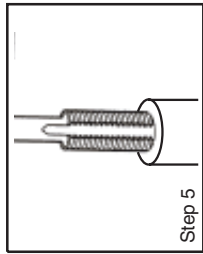
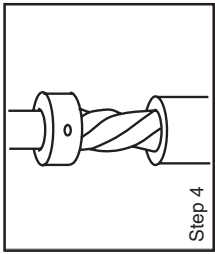
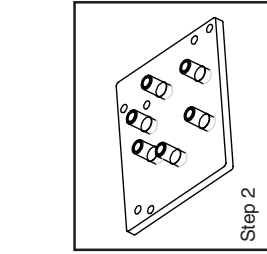
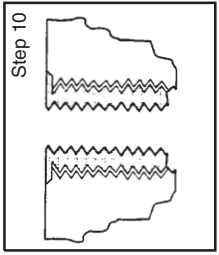
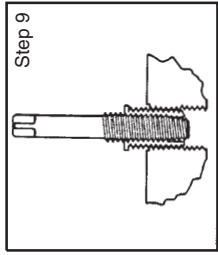
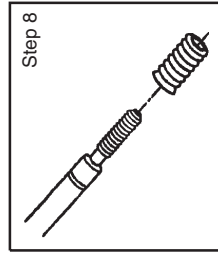
Step 6
Remove fixture. Verify holes are free of chips or debris.

Step 7
Lubricate the threads of the driver tool with J-42385-110 driver oil.

Step 8
Install the insert onto the Driver Tool J-42385-233. Do not allow oil or foreign material to contact the outside of the insert.

Step 9
Install the insert into the hole until it is seated in the counterbore. Continue to rotate the driver through the insert. The driver will tighten up before screwing completely through the insert. This is normal because the bottom threads of the insert are being formed and mechanically locked into the hole. Lightly bottom the driver in the hole to ensure complete threading and insert lock-in. Remove the driver, and the repair is complete.

Step 10
Inspect the insert for correct installation. It must be flush or below the base surface.



Kit Contains	Part Number	Qty.
Driver Oil	J-42385-110	1 bottle
Drill Fixture- Main	J-42385-230	1
Step Drill Bit	J-42385-231	1
Tap	J-42385-232	1
Driver	J-42385-233	1
Drill Fixture- Lube	J-42385-234	1
Alignment Pin	J-42385-308	2
Thread Inserts (bag of 10)	J-42385-514	6
Tap Wrench	510260	1
Attachment Bolts	206158	6

IMPORTANT

- Cutting fluid, such as WD40 or GM P/N 1052864, is recommended for all drilling and tapping operations.
- Driver oil J-42385-110 must be used on the insert driver.
- After each cutting operation, clean out metal chips using compressed air.
- Do not allow metal chips to enter the transmission. Cover and clean components as necessary.