



One BOB-CAT Lane, P.O. Box 469
Johnson Creek, WI 53038 U.S.A.
(920) 699 2000
Fax: (920) 699 6836

Service Bulletin

Date: January 27, 2017

Bulletin No: JC-17-02

Product Type: ZTS Stand-On Aerator

Customer Issue: Transaxle on either side fails to drive machine

Cause: The silicone seal inside the transaxle could fail. Failure of this seal allows unfiltered oil to enter the charge pump, resulting in eventual failure of the transaxle.

Action Required: Stop using the machine immediately to avoid damage to the transaxle and install oil line re-routing kit **970571** per instructions. Schiller Grounds Care will be sending you an initial supply of 970571 kits for you to distribute to your dealers. If more kits are needed, please contact Customer Service.

Products Involved: Model 554930

This is a mandatory fix for all units sold.

For transaxles that fail after the kit is installed, the vendor will review and determine if the failure was associated to the case pressure.

Warranty: You may claim up to 2 hours of labor and a \$25.00 administrative fee can be applied for units covered under this bulletin. Please file warranty using Service Bulletin Number JC-17-02 with one unit per claim.

If you have any questions, please contact our Customer Service Department at 920-699-2000.

This bulletin is relevant to the departments checked below. Please circulate as appropriate.

SERVICE

WARRANTY

SALES

PARTS

I.S.-KIT, TRANSAXLE COOLING, STAND-ON AERATOR (970571)

4174473 REV A

INTRODUCTION: This kit reroutes standing aerator transaxle cooling oil flow to reduce case pressure and charge pump vacuum in the transaxle cases. This provides increased seal life and greatly reduces the possibility of leaks internal to the transaxle charge pump inlet passage which can let unfiltered, contaminated oil into the charge pump. Contaminated oil will score on the charge pump and piston pump and motor running surfaces and lead to loss of drive especially under load.

TOOLS REQUIRED:

1-3/8" wrench or large pliers
Small oil filter wrench
Oil pan
3/8 socket and ratchet handle
3/8, 7/16, 9/16, 11/16, 7/8, and 1-1/16 wrenches
Pliers for hose clamps
Razor knife

SUPPLIES NEEDED:

Teflon based pipe thread compound (not pipe tape)
6/8 qts 20W50 or 15W50 motor oil
(note: this oil can be difficult to locate)
Rags

INSTALLATION INSTRUCTIONS:

NOTE: THIS CAN BE DONE ON THE FLOOR BUT IF A LIFT IS AVAILABLE IT IS EASIER IF THE MACHINE IS LIFTED.

1. Remove the front cover for access. **Figure 1**
2. Place the oil pan under the filter adaptor of one of the transaxles. Remove the hose from the fitting on the adaptor. Oil will start to drain. Remove and discard the fitting and adaptor. **Figure 2**
3. Oil the gasket on one of the supplied filters **3**. Install the filter on the transaxle and tighten $\frac{3}{4}$ to 1 turn after the filter gasket contacts the transaxle. Repeat for other side.
4. Install the black plastic filter guards **4 & 5** over the filters with three 1/4-20 x 3/4 screws **11**. NOTE: The filter guards are RH and LH. You can only install them one way.
5. Remove and discard the plugs on the top of the transaxle cases. **Figure 3**



FIGURE 1

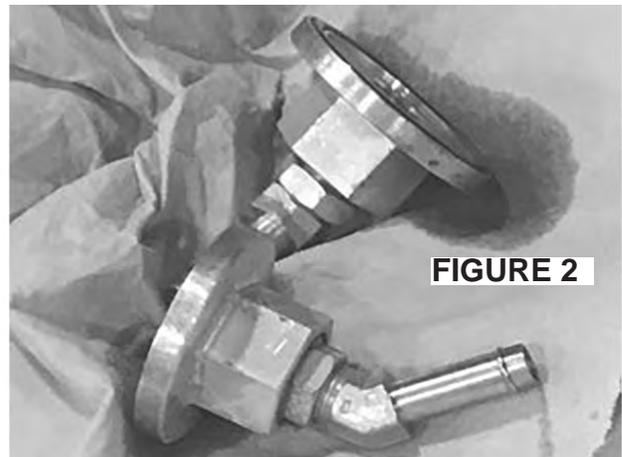


FIGURE 2

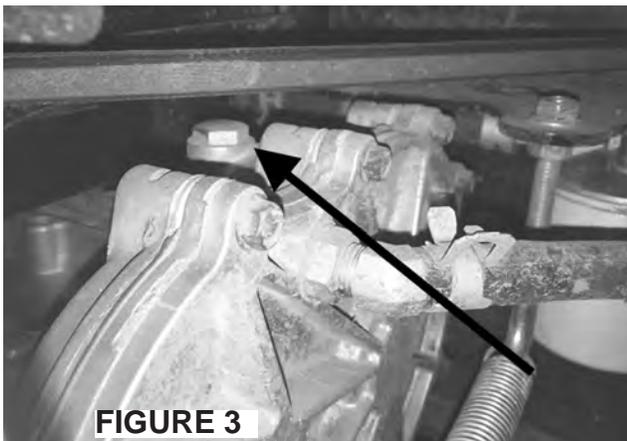
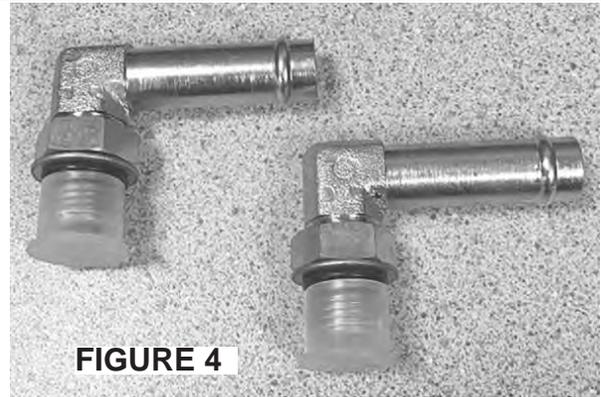
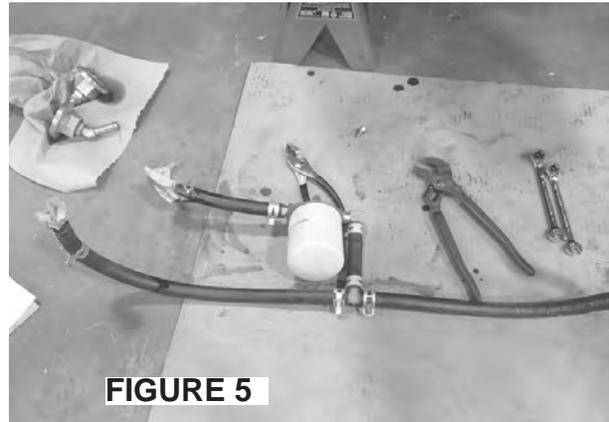


FIGURE 3

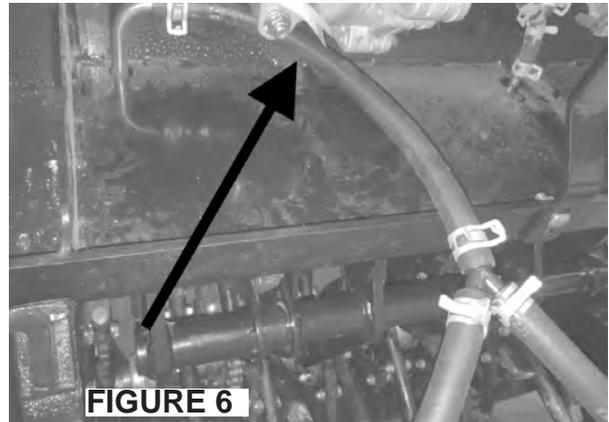
6. Install the hose O-ring boss fittings **2** in the plug holes. Turn the adaptors until the O-ring bottoms and the fittings are pointed to the outer rear of the machine on each side. **DON'T** tighten the jam nut yet. **Figure 4**



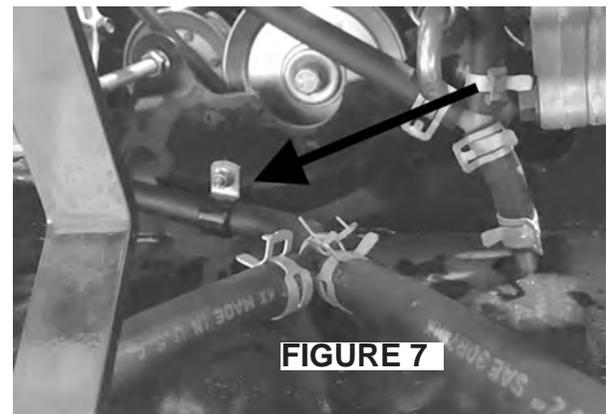
7. Remove the bolts securing the oil filter assembly between, and to the rear of the transaxles. Move the clamp back on the hose connection at the steel tube next to the filter. Pull the hose off the tube. Remove and discard the hose and filter assembly. **Figure 5**



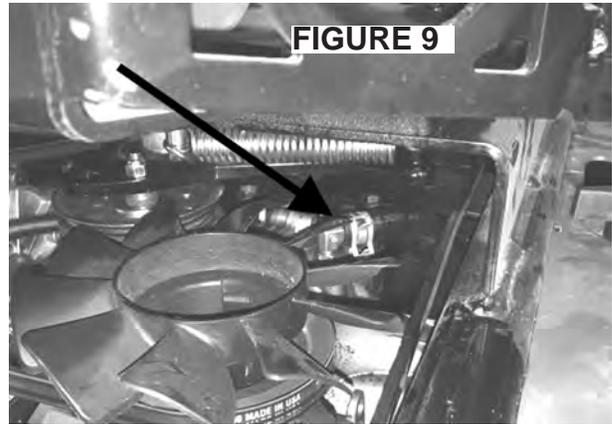
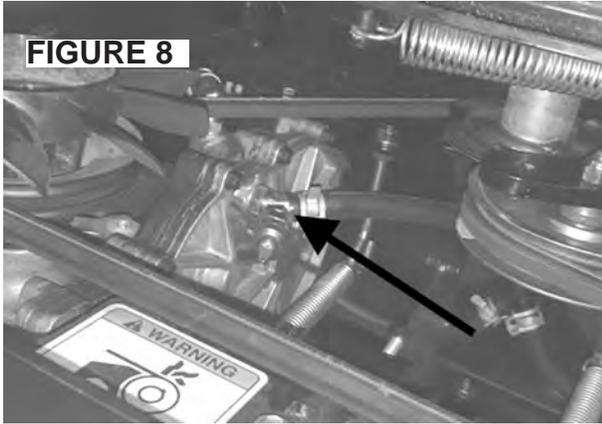
8. Install the short hose of the supplied "Y" hose assembly **8** onto the tube. **Figure 6**



9. Secure hose with the supplied clamp **14** and 1/4 X 3/4 bolt **13** and nut **12** to the rear mounting hole for the original filter. **Figure 7**

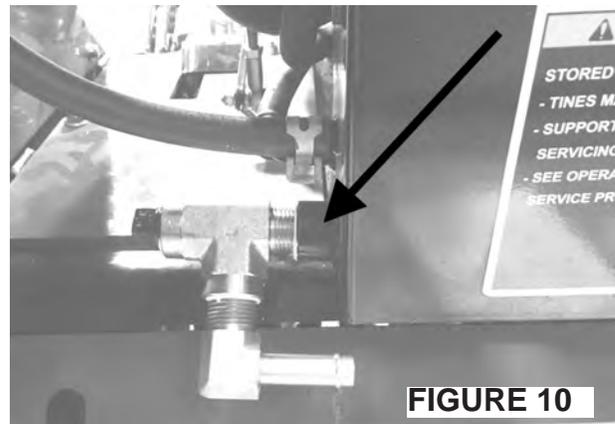


10. Route the 20" hoses from the "Y" hose assembly 8 to the fittings installed in the transaxles in Step 6. Adjust the fittings so the hoses don't interfere with the control linkage or rub excessively on the frame. Tighten the jam nuts on fittings. **Figure 8 & 9**



11. Reinstall the front cover.
12. Remove the rear pad assembly for access to the reservoir oil drain.

13. Put the oil pan under the reservoir oil drain. Remove the plug and drain the remaining oil from the reservoir. Apply teflon based pipe compound to the male end of the service tee 7. Install the tee into the drain fitting on the reservoir. When it is just about tight, apply Teflon based pipe compound so the threads of the pipe hose adaptor 1 and install it into the bottom of the service tee. Rotate the service tee as shown in **Figure 10**. Apply pipe joint compound to the drain plug removed earlier and install it in the open end of the service tee. Rotate the service tee so the rear tine cover can be easily installed/removed. **Figure 10**



14. Cut the hose from the reservoir to the steel tube on the right side to about 3" remains on the reservoir. Remove the remainder of the hose from the formed tube. Take the clamp from the tube end and install it onto the 3" section of hose. Put the supplied plug 6 in the hose and slide the clamp over it to secure it. **Figure 11**

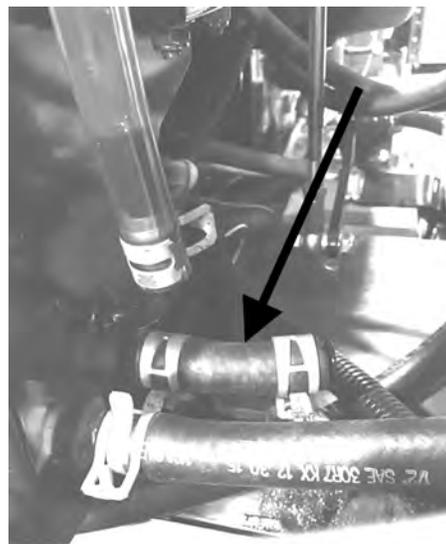
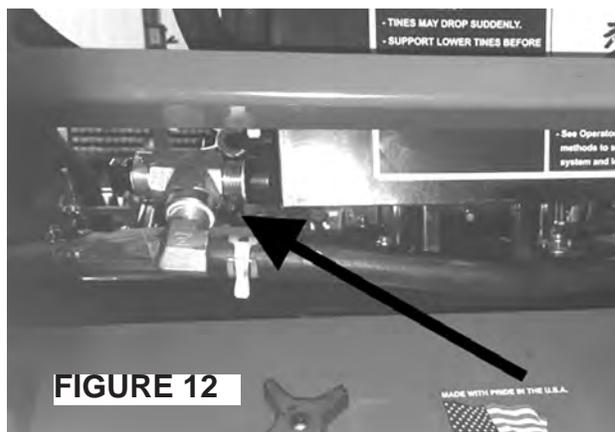
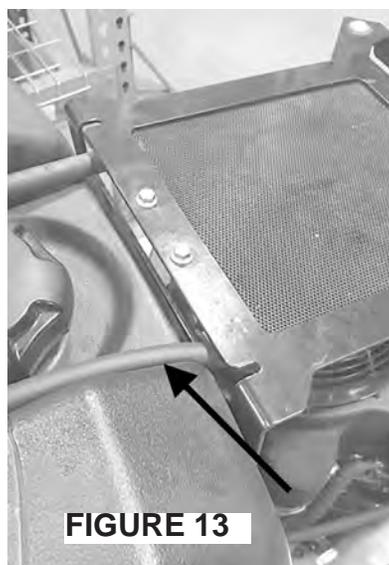


FIGURE 11

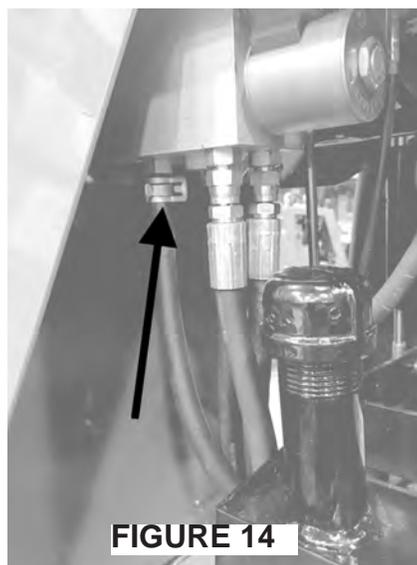
15. Install the 1/2" hose assembly 9 onto the formed tube. Connect the 1/2" hose to the adaptor. **Figure 12**



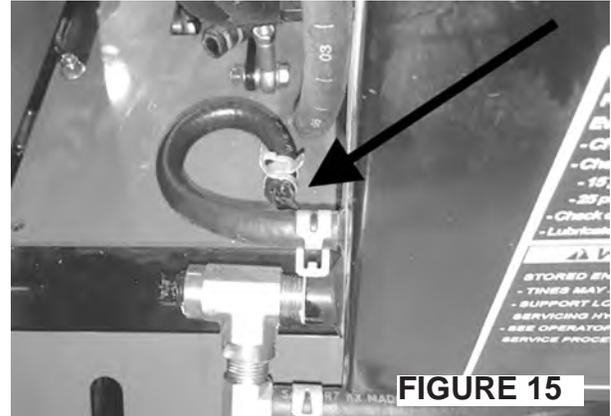
16. Remove and discard the hose between the reservoir and the oil cooler. **Figure 13**



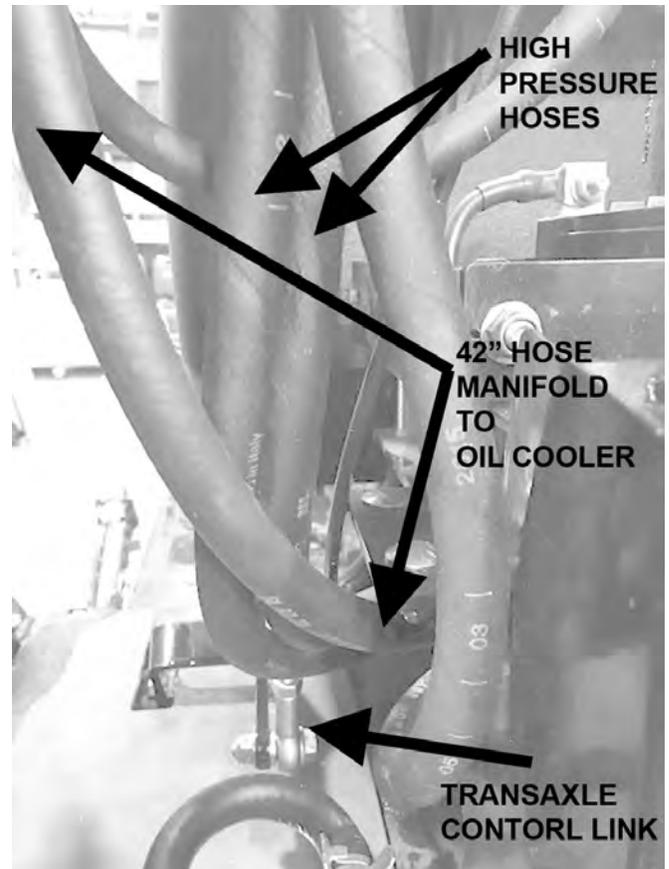
17. Remove the clamped hose from the fitting on the manifold. **Figure 14**



18. Cut this hose to 12". Discard the cut off. Move the clamp onto the 12" remainder and loop it and connect it to the open fitting on the left side of the reservoir. **Figure 15**



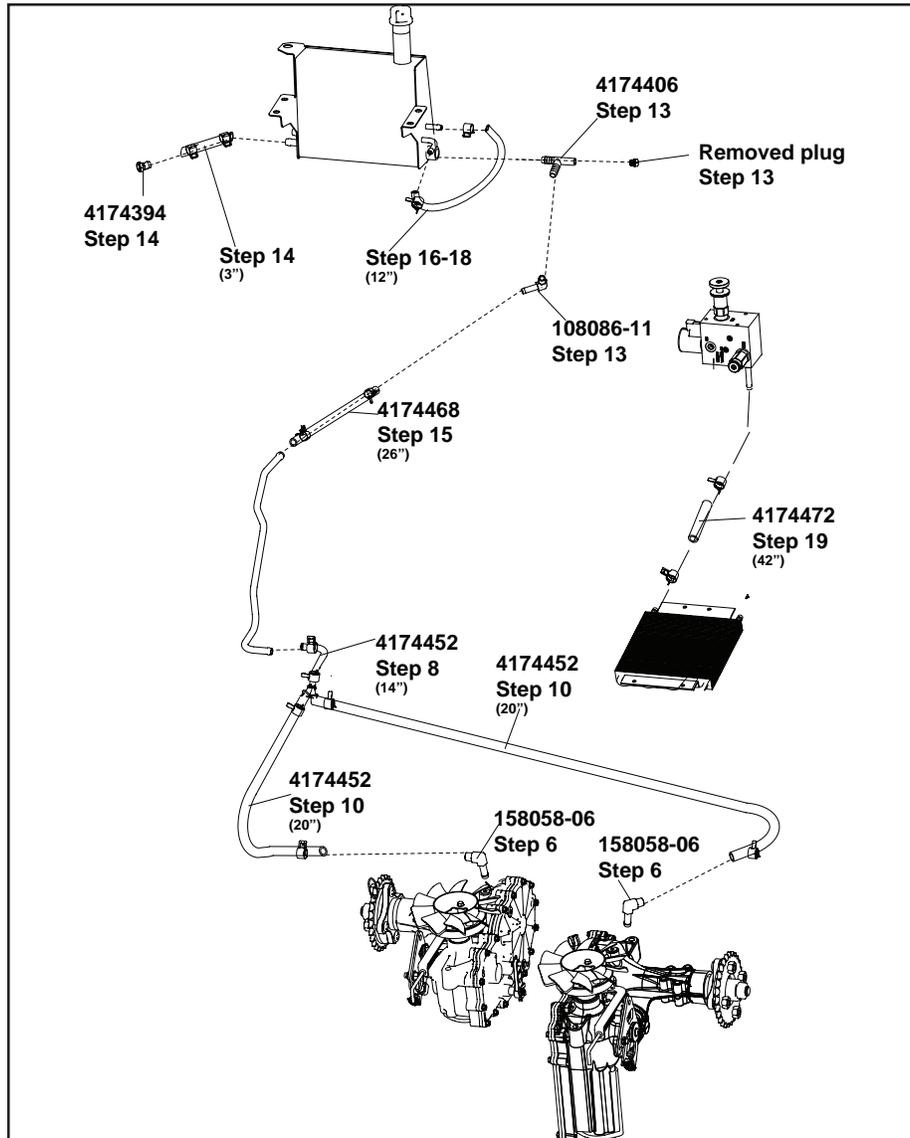
19. Install the supplied 42" 3/8 hose assembly **10** from the fitting on the manifold to the open fitting on the oil cooler. Route the hose behind and over the high pressure hoses, under the battery tray and then up to the cooler. Check to be sure the transaxle control link and damper will not rub on the hose. Slide the clamps over the fittings to secure. **Figure 16**



20. Fill the reservoir with 20W50 or 15W50 oil (2-3 qts.) With the controls in neutral, start the machine. the lift pump will fill the transaxles. As the oil level in the reservoir lowers, keep adding oil to the full mark until the oil level stabilizes. It will take about 6-1/2 quarts total. Re-install the filler cap.

21. Re-install the knee pad. Drive the machine around in forward and reverse. Check the oil level. top off if necessary to the full cold line.

22. Discard the used oil appropriately..



SERVICE PARTS LIST

| ITEM | PART NO. | DESCRIPTION | QTY |
|------|------------|----------------------------|-----|
| 1 | 108086-11 | FTG-BARB 90-1/2 X 1/2 MNPT | 1 |
| 2 | 158058-06 | FTG -06 MORB X 1/2 HOSE 90 | 2 |
| 3 | 4142045-06 | FILTER-TRANSAXLE | 2 |
| 4 | 4163771-01 | GUARD-FILTER, LH | 1 |
| 5 | 4163772-01 | GUARD-FILTER, RH | 1 |
| 6 | 4174394 | PLUG-HOSE 1/2 | 1 |
| 7 | 4174406 | TEE-1/2 NPT SERVICE | 1 |
| 8 | 4174452 | ASSY-HOSE Y | 1 |
| 9 | 4174468 | ASSY-HOSE 1/2 X26 W CLPS | 1 |
| 10 | 4174472 | ASSY-HOSE 3/8 W CLPS | 1 |
| 11 | 64197-002 | BLT-TDFM 1/4-20X3/4 | 6 |
| 12 | 64268-01 | NUT-FL NYLON LOCK 1/4-20 | 1 |
| 13 | 64262-002 | BLT-FLG HD 1/4-20 X 3/4 | 1 |
| 14 | 48228-2A | CLAMP | 1 |