

# PARTS & SERVICE NEWS

REF NO.	AA01139
DATE	July 2, 2001

**SUBJECT:** MODIFYING HYDRAULIC TANK COMPONENTS FOR REDUCTION OF OIL CONTAMINATION

**PURPOSE:** To introduce modification procedures for the hydraulic tank to improve oil cleanliness and prevent premature pump failures.

**APPLICATION:** Komatsu Wheel Loaders:  
 WA800-2L: A20001 thru A20019;  
 WA800-2LC: A20020 thru A20028;  
 WA900-1L: A20001 thru A20007;  
 WA900-1LC: A20008 thru A20021, A20023 and A20024

**FAILURE CODE:** 6000BK

**DESCRIPTION:** This bulletin provides detailed instructions on lengthening the filler neck on the hydraulic tank and relocating hydraulic tank breathers.

Some wheel loaders have experienced problems with hydraulic system components due to contaminated oil. The origin of the contamination comes from a buildup of dirt and debris on top of the hydraulic tank. The buildup of dirt impairs the functionality of the breathers and contaminants are let into the system during hydraulic tank service. A factory approved rework has been developed to help eliminate this problem. Refer to the table below for a list of all parts that will be needed to perform the rework procedures.

Part Number	Description	Quantity
427-60-A5120	Tube Assembly	1
427-60-A5120	Plate	1
427-60-A5130	Block	1
424-60-15211	Breather Assembly	3
01010-81016	Bolt	2
01643-31032	Washer	2
WA3045	Adapter	6
HA1139	Hose	3
VC7673	Clamp	2
01571-01218	Seat	2
01010-81220	Bolt	2
01643-51232	Washer	2

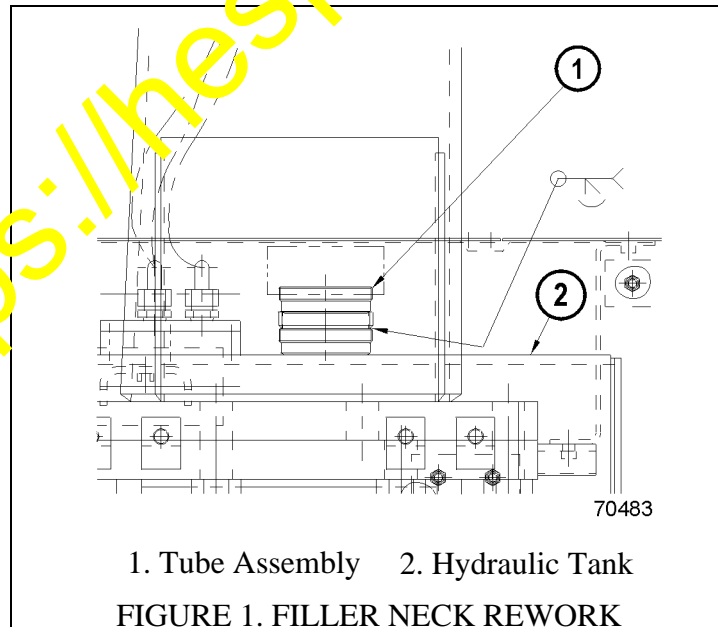
## CAUTION

*Rework of the hydraulic tank may help eliminate problems with contamination, however, normal precautions must be taken during operation and maintenance of the wheel loader. Dirt and debris should always be kept from building up on integral components of the wheel loader. Always wipe surrounding areas clean when opening part of a closed system such as the hydraulic tank. Failure to keep certain components clean during operation and maintenance may result in serious damage to the machine. Refer to the appropriate Operation & Maintenance and Shop Manuals for proper procedures during operation and maintenance of the machine.*

## REWORK PROCEDURE

### REWORK OF FILLER NECK

1. Park the machine on a hard, level surface. Lower the boom and bucket to the ground and turn the key switch "OFF". Cycle the boom and the bucket controls to relieve any residual hydraulic pressure left in the circuit. Move the safety lock lever to the "LOCK" position to shut out the hydraulics.
2. Apply the parking brake and chock the wheels.
3. Move the safety bar into position between the front and rear frames to prevent articulation.
4. Thoroughly clean the hydraulic tank and the area around the filler neck.
5. Remove the fill cap and the strainer from the hydraulic tank.



6. Center tube assembly (1, Figure 1) over the filler neck. Weld the tube to the filler neck as shown in Figure 1.

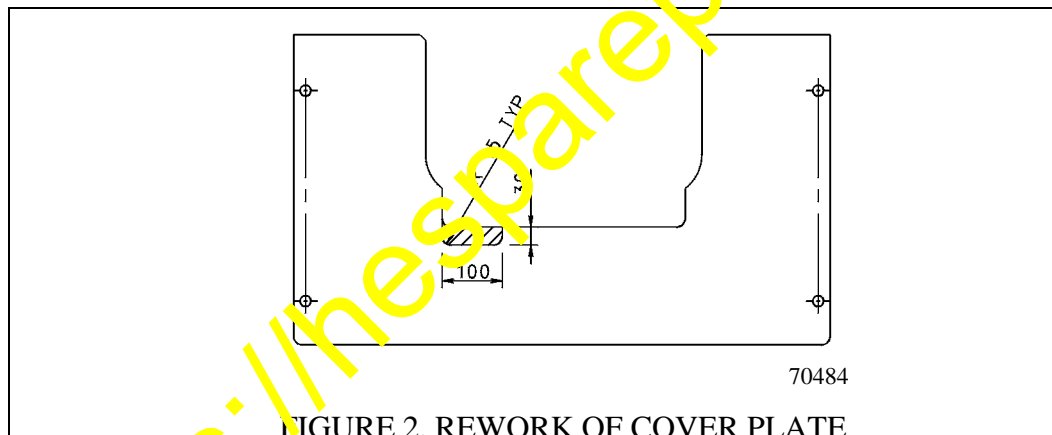

**CAUTION**

*Use care when welding at the hydraulic tank. Do not allow weld splatter or any other foreign matter to enter the hydraulic tank. Serious damage to hydraulic components may result.*

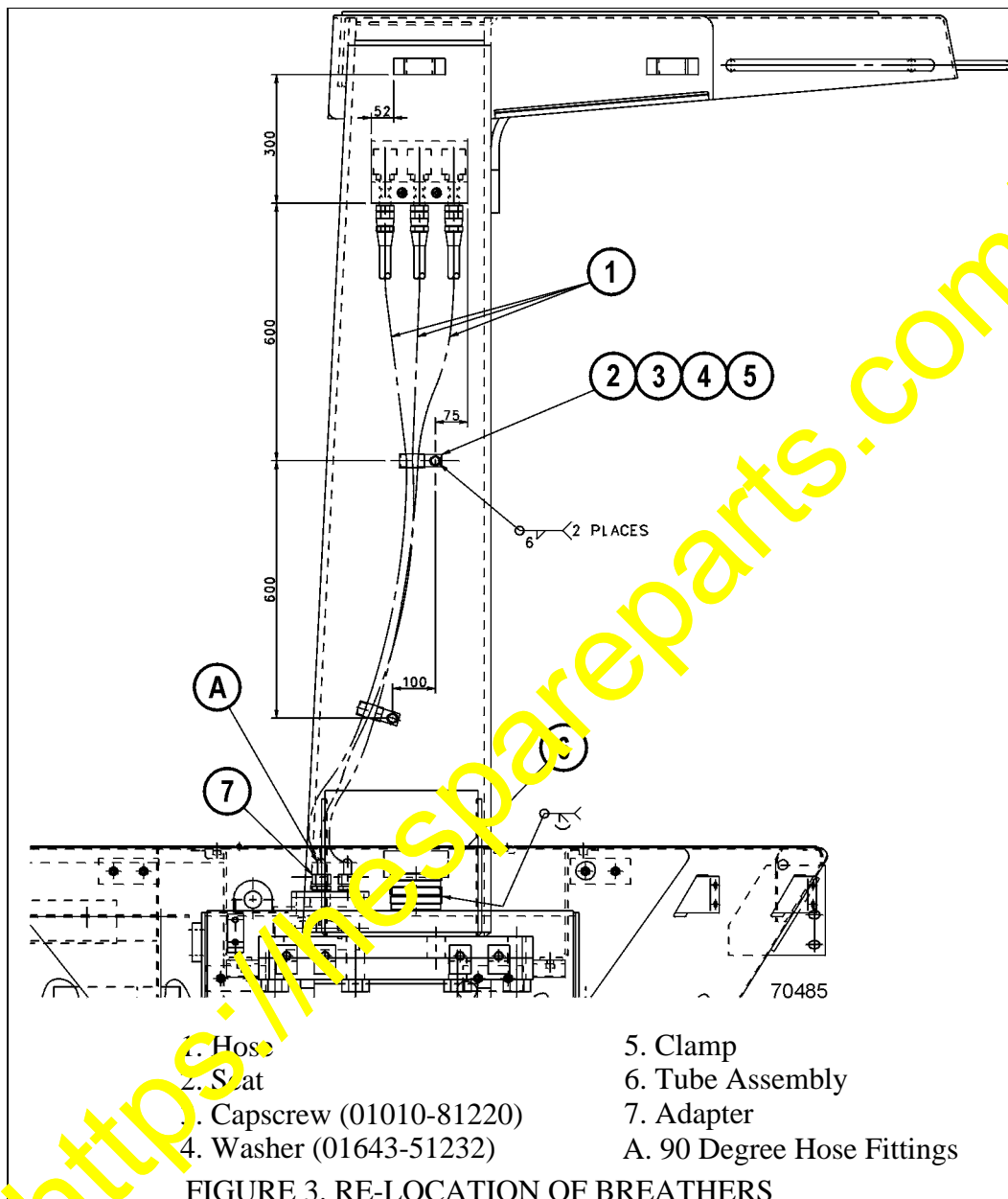
7. After welding, allow the welded components to cool to ambient temperature. Install the strainer and the fill cap to the hydraulic tank. Check the condition of the fill cap seal before installation and replace the seal as necessary. Ensure that all components are clean before installation.

### RELOCATING HYDRAULIC TANK BREATHERS

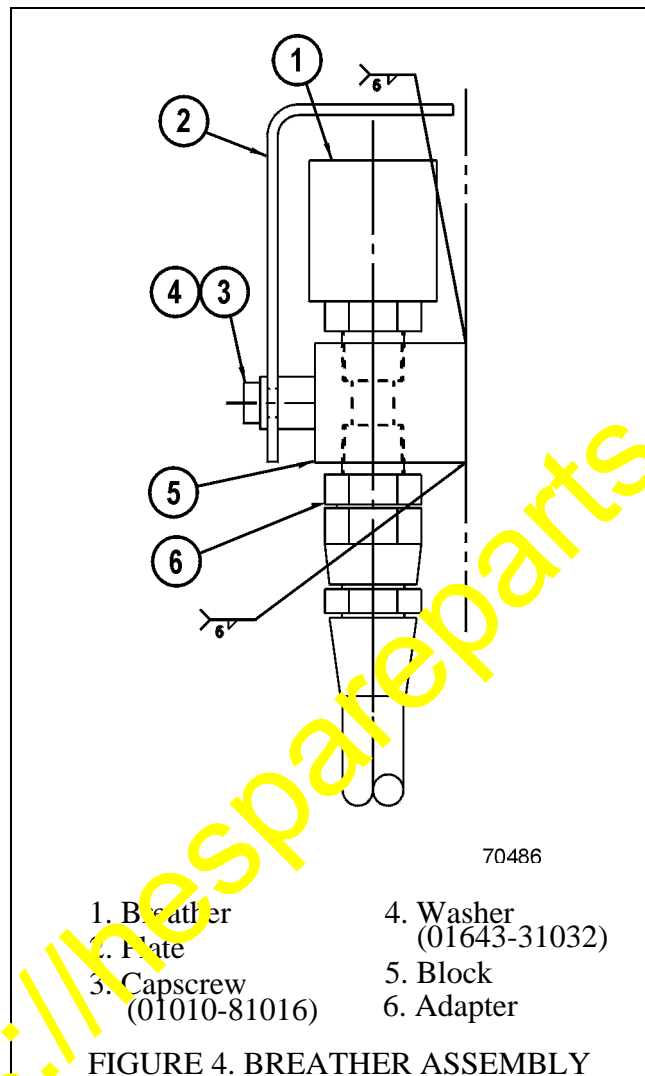
1. Clean all debris and dirt from the top of the hydraulic tank.
2. Remove the cover plate from the ROPS mounting on the right hand deck.



3. Rework the cover plate as shown in Figure 2. The hatched area of the plate must be removed.



4. Remove the three breathers from the hydraulic tank and discard the breathers. Install three adapters (7, Figure 3) in place of the breathers.
5. Route three hoses (1) through the opening in the ROPS compartment. Connect the 90 degree fittings on the hoses to the newly installed adapters (7) on the hydraulic tank.
6. Locate the mounting positions of two seats (2) and block (5, Figure 4). Weld the components in the proper positions to the specifications noted in each illustration.



7. After the components have cooled, assemble breather (1, Figure 4), block (5), and adapter (6). Repeat this step for each breather.
8. Connect hose (1, Figure 3) to adapter (6, Figure 4). Repeat this step for each hose.
9. Adjust the length and routing of the hoses as necessary. Secure the hoses with two clamps (5, Figure 3). Secure a clamp to each seat (2) using capscrews (01010-81220) and washers (01643-51232).
10. Install the cover plate to the ROPS structure. Adjust the hoses and/or the plate as necessary to avoid chafing and sharp bends.
11. Install plate (2, Figure 4) over the breather assembly using two capscrews (01010-81016) and two washers (01643-31032).