

# PARTS & SERVICE NEWS

REF NO.	AA02126A
DATE	May 15, 2002

*This Parts & Service News supersedes AA02126 dated May 6, 2002, which should be discarded.*

**SUBJECT:** IMPROVE WELD DESIGN OF AFTERCOOLER

**PURPOSE:** To exchange current spot-welded aftercooler with an improved stitch weld design aftercooler.

**APPLICATION:** PC600LC-6 Hydraulic Excavator Serial Number 10098 thru 10152  
TD25G Crawler Dozer Serial Number P072259  
WA500-3L Wheel Loader Serial Number A70589 thru A70832

**FAILURE CODE:** A6L2HB

## DESCRIPTION:

### 1. Introduction

The spot-weld type aftercoolers have been known to fail at the welds and the aftercooler core falls into the cooler housing. An improved stitch-weld cooler has been introduced to resolve this problem. This Parts & Service News shows the procedure that should be taken along with the Cummins N14 engine shop manual #3810456-01.

### 2. Parts List

Part Number	Description
1307 528 H2	CORE
1307 289 H1	O-RING (TUBE TO ELBOW)
1307 544 H1	GROMMET SEAL
1307 527 H1	GASKET (CORE PLATE)
1307 529 H1	SEAL (CORE TO HOUSING)
1307 543 H1	O-RING (CORE TUBE TO ELBOW)

### 3. Procedure

- Drain the engine coolant
- Remove the pre-cleaner and exhaust stack. (WA500)
- Remove the hood (WA500) (other machines as required)
- Remove the aftercooler feed and return tubes
- Remove the aftercooler
- Clean all sealing surfaces
- Install the new aftercooler
- Attach the aftercooler feed and return lines
- Install the hood
- Install the pre-cleaner and exhaust stack
- Refill the cooling system with original coolant
- Run and check engine for leaks



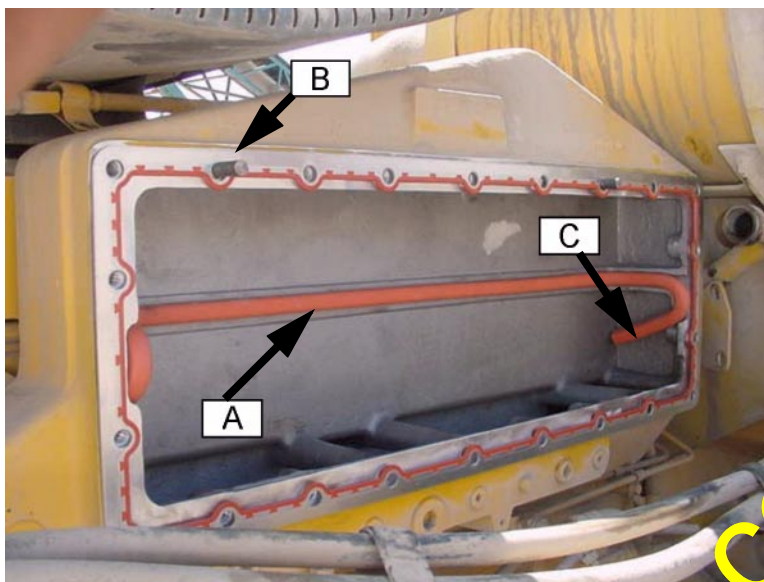
The pre-cleaner and exhaust stack have been removed. A lifting device has been attached to the hood. (WA500-3L)

Note: (WA500-3L)

- Before lifting the hood remember to disconnect the rear light harness and the coolant level sensor harness at the rear of the hood.
- Two air-conditioning line clamps need to be removed on the right side of the hood.
- Two 19 mm head screws secure the hood to the bulk head
- The radiator grill and some sheet baffling will need to be removed to clear the radiator.

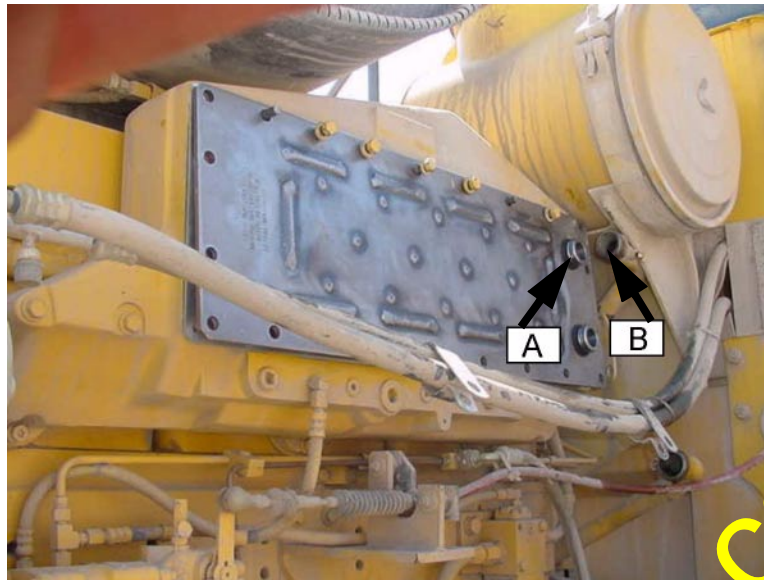


Before removing the aftercooler cut two 3/8 in. screws with 1 in. of shank exposed as shown by the arrows above. These screws will serve as guides when removing and installing the aftercooler. Clean the aftercooler housing surface where the new aftercooler will be installed.



Install seal 1307 529 H1 into the aftercooler housing (shown by arrow A). This seal must be installed dry; do not use grease to install this seal. This seal should be trimmed so that about 1 in. hangs into the aftercooler area (shown by arrow C - illustration shown untrimmed). Install the aftercooler plate seal 1307 527 H1 (shown by arrows B). 3/8 in. modified screws are used as guide pins to hold the gasket in place.

<https://hespareparts.com/>



Install the aftercooler using the guide pins to support the weight of the assembly. The O-Rings that are used to seal the elbows from the aftercooler to the elbow (Arrow A) and the elbow to the transfer tube (Arrow B) should be lubed with Lithium grease. Lithium grease will allow the parts to slide over each other without damaging the O-Rings.

Finish assembling the aftercooler and supply lines. Tighten housing bolts to 40 ft. lbs. Reinstall the hood, connect all harnesses and clamps, install the exhaust stack and pre-cleaner, refill the engine coolant with the same coolant as removed earlier and run the machine. Check the tubing and aftercooler plate area for leaks. Paint the aftercooler Komatsu yellow to prevent corrosion and return the machine to service.

<https://hespartsparts.com/>