

PARTS & SERVICE NEWS

REF NO. AA03114

DATE April 28, 2004

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- SUBJECT:** INTRODUCTION OF IMPROVEMENT IN ACCELERATION TIME AT HIGH ALTITUDES (above 1524m (5000 ft))
- PURPOSE:** To introduce the improvement of acceleration time at high altitudes
- APPLICATION:** WA450-5L Wheel Loader Serial Number A36001 to A36155, Engine S/N up to 311645
 WA450AD-5 Wheel Loader, Engine S/N up to 311562
 WA470-5 Wheel Loader, Engine S/N up to 311662
 WA470HH-5 Wheel Loader, Engine S/N up to 311507
 WA480-5 Wheel Loader, Engine S/N up to 311574
 WA480-5L Wheel Loader Serial Number A37001 to A37045, Engine S/N up to 311653
 WA480AD-5 Wheel Loader, Engine S/N up to 311565
 WA480HH-5 Wheel Loader, Engine S/N up to 311626
- FAILURE CODE:** A010NG
- DESCRIPTION:** The acceleration performances of the engines on the above Wheel Loaders at high altitudes have been improved. Therefore, they are affected by this **Parts & Service News**. Applicable for wheel Loaders working at high altitudes up to a maximum of 2300m. (7560 ft)

MACHINE PREPARATION

1. Park the machine on a flat level surface; lower the work equipment to the ground. Shut off the engine and cycle the controls to remove any residual hydraulic pressure from the work equipment circuits. Turn the parking brakes switch on and block the tires.
2. Remove the key from the ignition switch until the repairs are complete. Place a tag on the steering controls advising: "This machine is being repaired. It should not be started or moved for any reason until the tag is removed by the person doing the repairs."



WARNING! Observe all safety and precautionary standards as dictated by the environment and work conditions under which the equipment will be inspected, reworked and repaired. Consult the "Shop Manual" and "Operator's and Maintenance Manual" and your "Komatsu district service manager" with any/all questions regarding safety.

Remark

These instructions are intended to supplement the service data contained in the appropriate "Shop Manual". Always refer to that manual for Removal, Installation, Disassembly and Reassembly instructions when not contained in this document.

PARTS LIST

No.	Part No.	Part Name	Purpose of part	Qty	Remarks
1	6156-81-8150 (6156-81-8110)	Turbo Ass'y (Turbo Ass'y)	Replacement	1 (1)	A/R change (0.9 ← 1.25)
2	6156-11-5480	Plate		1	
3	6138-13-4250	Gasket		1	
4	01252-61035	Bolt		6	
5	6212-15-5831	Gasket		1	Consumable part when replacing
6	6221-51-8160	Gasket		1	Consumable part when replacing
7	6151-51-8721	Gasket		1	Consumable part when replacing
8	6150-11-5751	Gasket		1	Consumable part when replacing
9	7872-20-5127	Disc			Controller rewrite disc for the engine
10	421-06-32410	Wiring Connector		1	For WA450-5/WA470-5
11	421-06-32420	Wiring Connector		1	For WA480-5

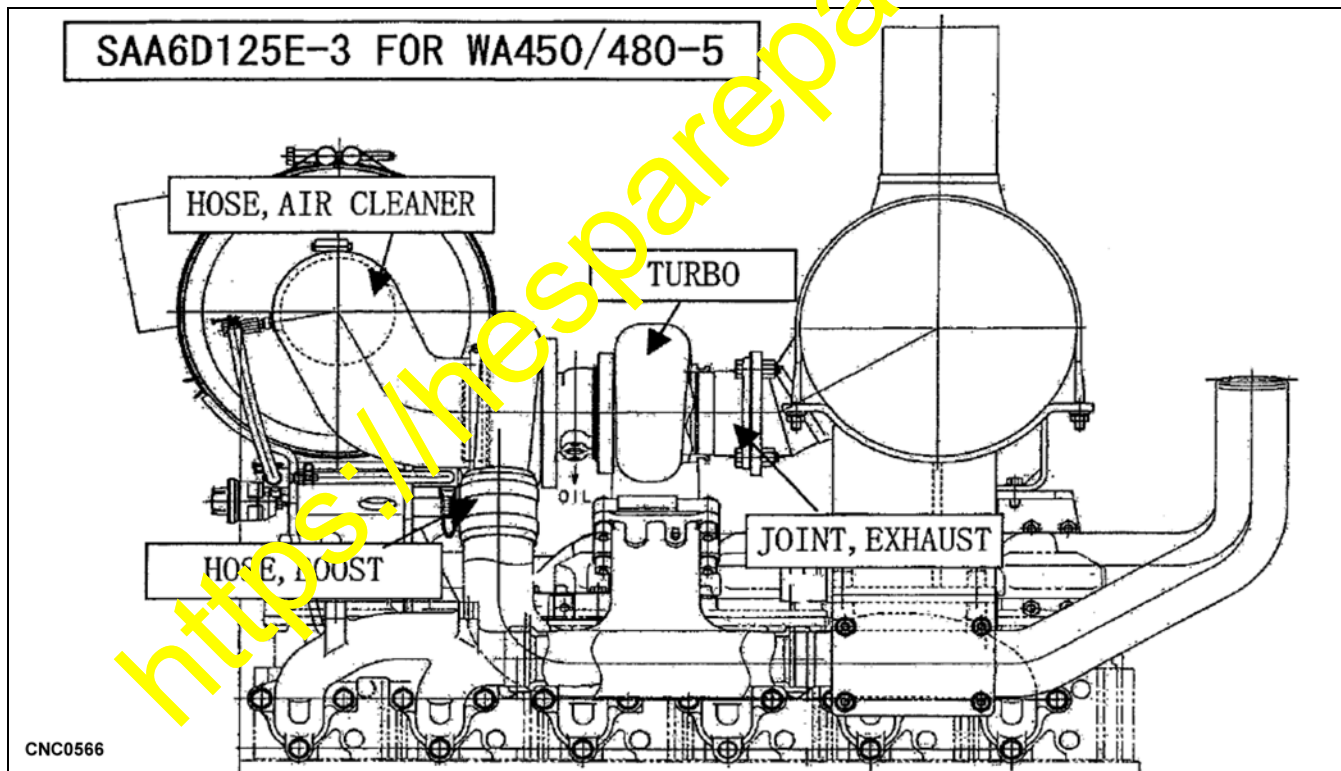
WA450 and WA480 Parts Matrix

	WA450-5L A36000 to A36155 261 Hp	WA450-5L A36156 and UP 261 Hp	WA480-5L A37000 to A37045 271 Hp	WA480-5L A37046 and UP 271 Hp
Controller	7872-20-5104	7872-20-5105	7872-20-5104	7872-20-5105
Turbo	6156-81-8110	6156-81-8150	6156-81-8110	6156-81-8150
Wiring Harness Connector (CN-L90)	421-06-32321	421-06-32410	421-06-32330	421-06-32420
Monitor panel SW	2	2	3	3

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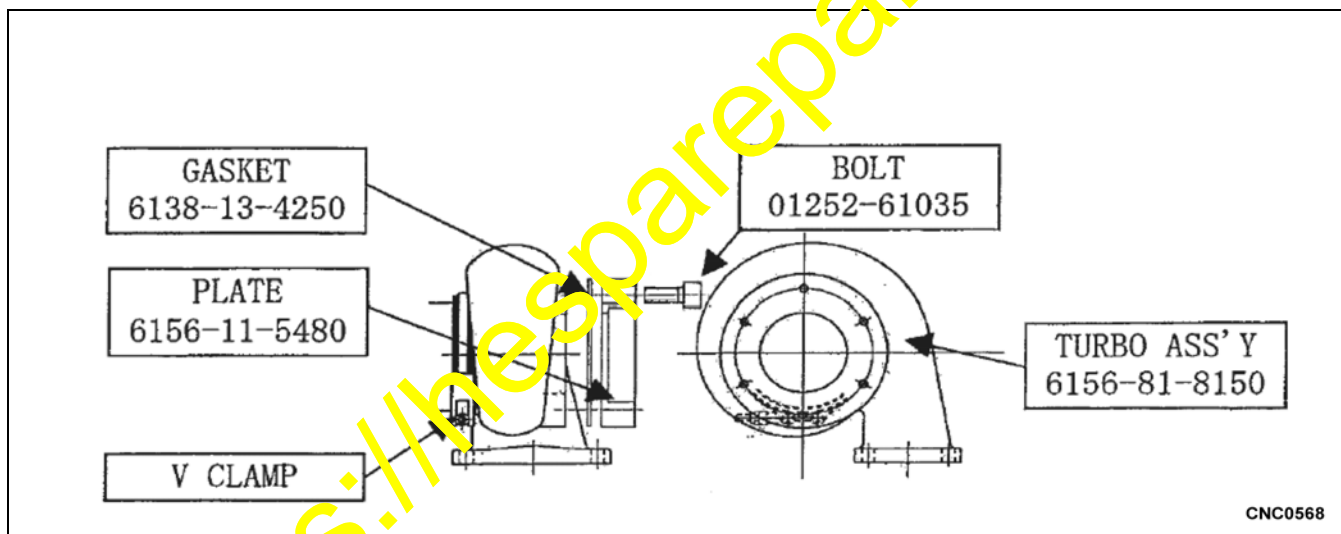
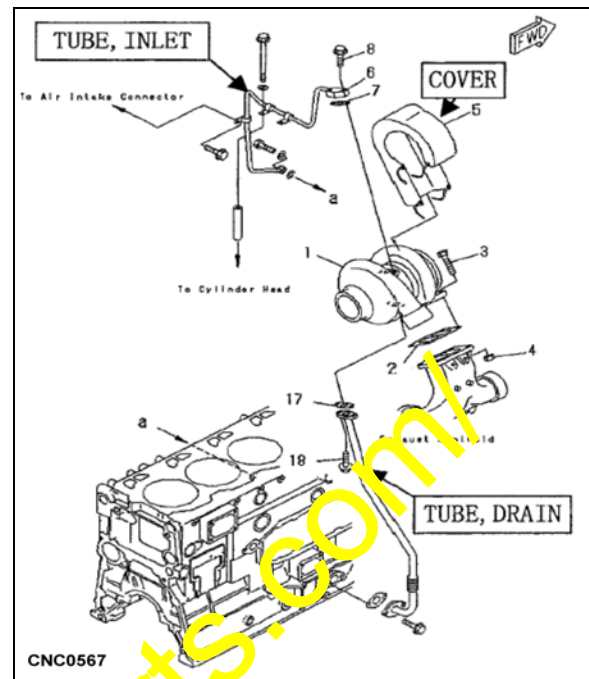
- ★ Turbocharger (A/R 0.9 ← A/R 1.25)
- ★ Engine Controller
- ★ Connector - (Wire harness for the vehicle body)
- ★ Changing the engine nameplate

1. In order to intake a sufficient amount of air at the high altitude, the turbocharger is changed.
2. The engine controller is changed in conjunction with the turbocharger update.
3. In order to select the correct program, which improved the acceleration at the high altitude, the connector is changed.
4. The turbocharger and the engine controller are changed. For this reason, the engine nameplate contents are changed.

REPLACEMENT PROCEDURES FOR THE TURBOCHARGER

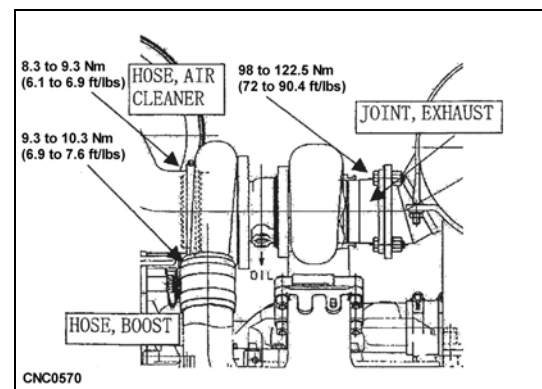
★ **Disassembly**

- Remove the cover
- Remove the bolts that hold the oil supply and drain tubes in place
- Remove the air filter ducting and turbocharger ducting including the exhaust joint
- Loosen the turbocharger installation bolts and remove the turbocharger

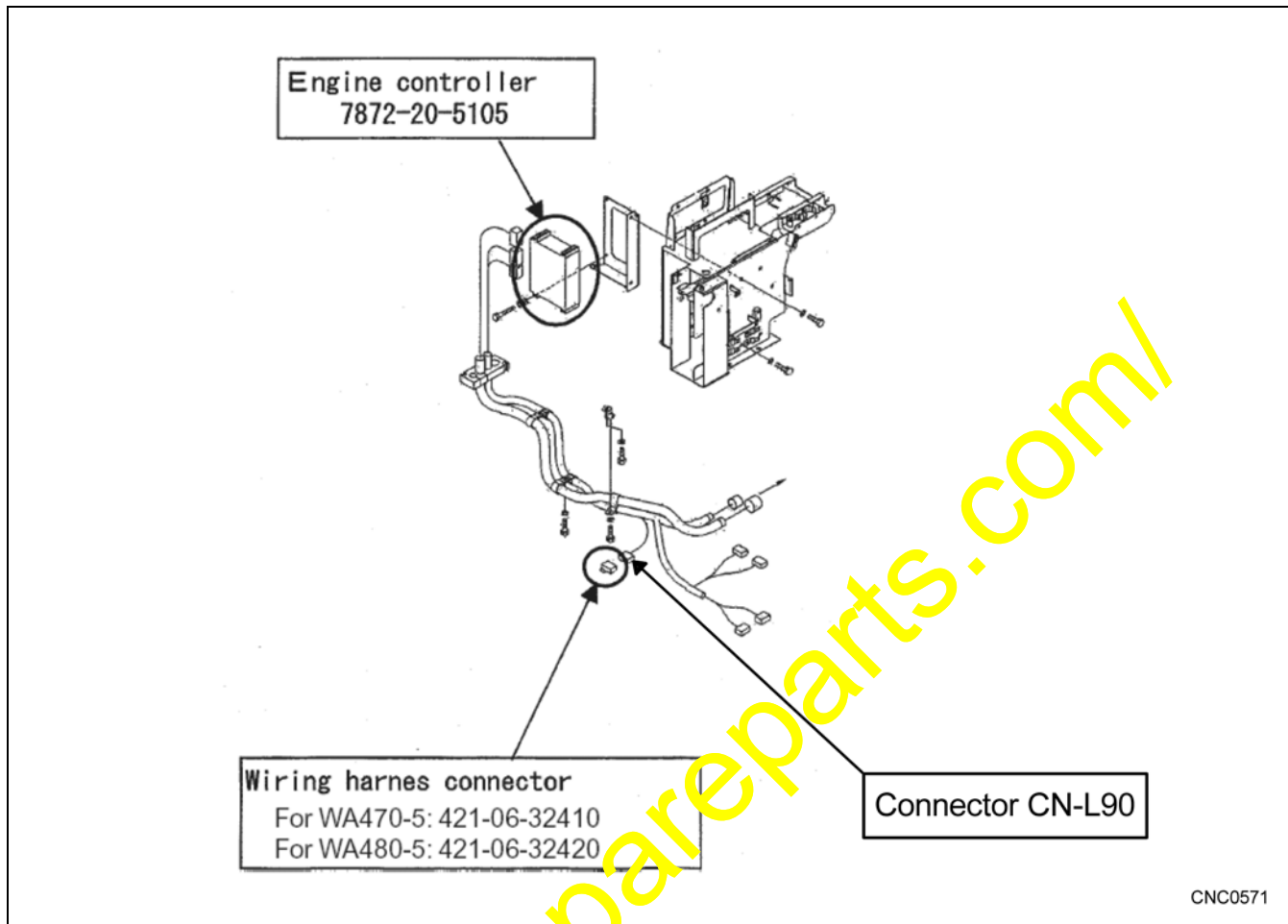


★ **Assembly**

- Before connecting ducts inspect turbocharger inlet and outlet for any debris.
- Connect the exhaust joint to the muffler and tighten the bolts
- Connect the air filter ducting and tighten the clamps
- Connect the turbocharger outlet duct and tighten the clamps
- Install cover



INSTALLING AND PROGRAMING THE ENGINE CONTROLLER



★ Disassembly and Assembly

- The engine controller is installed on the bottom surface of the right side counsel beside the operators seat
- Remove the cover at the right side of the counsel
- Remove the engine controller
- Update controller with the rewrite disc
- Install updated controller
- Install the cover on the side of the conical

★ Changing the Connector

- The connector is installed on the vehicle harness. (see illustration above)
- Remove the connector
- Install the new connector (CN-L90)

RELABLING THE ENGINE NAME PLATE

After the turbocharger and the engine controller are changed, the engine nameplate must also be changed. Delete the old code in “Engine Code” on the engine nameplate and write in the new code.

	Old code		New code
WA 450-5	2C03	⇒	2C10
WA 470-5	2C03	⇒	2C10
WA 480-5	2C04	⇒	2C11

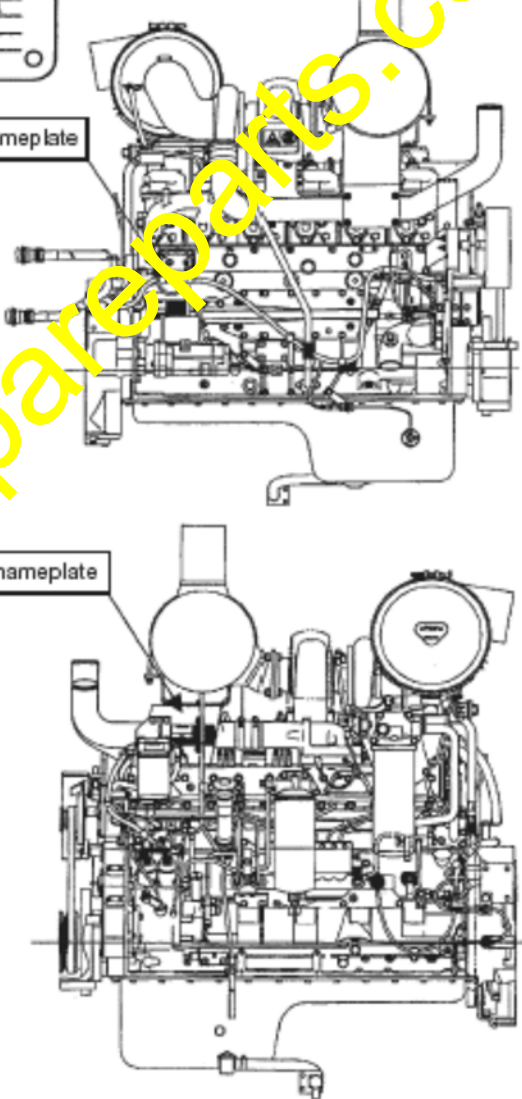
IMPORTANT ENGINE INFORMATION
 This engine conforms to U.S. EPA and California Regulations for large non-road compression ignition engines. This engine is certified to operate on diesel fuel.
WARNING In any new repair and warranty is voided if fuel rate, RPM or altitudes exceed published maximum values for this model and application.

Engine Model	DIN	
EPH Code, Family	Displacement	Liters
Green Approval No.		
Gross rated HP/kW	at	rpm
Firing Order	Low Idle RPM	RPM
	Fuel rate at rated HP/kW	mg/st
	Valve lash cold/warm	in./mm
Therm-IDC	date of manufacture	Ex. D.
Engine Code		

HONDA Honda Ltd. Made in Japan PT:A

Formal nameplate

Auxiliary nameplate



CNC0572