

Product: TRACK LOADER

Model: 953C TRACK LOADER 2ZN

Configuration: 953C Track-Type Loader Hydrostatic Drive 2ZN01750-UP (MACHINE) POWERED BY 3116 Engine

## **Disassembly and Assembly**

### **446 and 446B Backhoe Loaders, Lexion 450 Combine, 3114 and 3116 Engines, IT18F Integrated Toolcarrier, D6M Track-Type Tractor and 928F, 950F and 950G Wheel Loaders**

Media Number -SEN3611-18

Publication Date -01/05/2009

Date Updated -27/05/2009

i01935828

## **Cylinder Head - Remove**

SMCS - 1100-011

### **Removal Procedure**

#### **Start By:**

- a. Remove the fuel filter base. Refer to Disassembly and Assembly, "Fuel Filter Base - Remove and Install".
- b. Remove the governor. Refer to Disassembly and Assembly, "Governor - Remove".
- c. Remove the fuel control linkage. Refer to Disassembly and Assembly, "Fuel Injection Control Linkage - Remove".
- d. Remove the unit injectors. Refer to Disassembly and Assembly, "Unit Injector - Remove".
- e. Remove the water temperature regulator housing. Refer to Disassembly and Assembly, "Water Temperature Regulator Housing - Remove and Install".
- f. Remove the inlet manifold. Refer to Disassembly and Assembly, "Inlet Manifold - Remove".
- g. Remove the exhaust manifold. Refer to Disassembly and Assembly, "Exhaust Manifold - Remove and Install".

---

#### **NOTICE**

**Keep all parts clean from contaminants.**

**Contaminants may cause rapid wear and shortened component life.**

---

---

## NOTICE

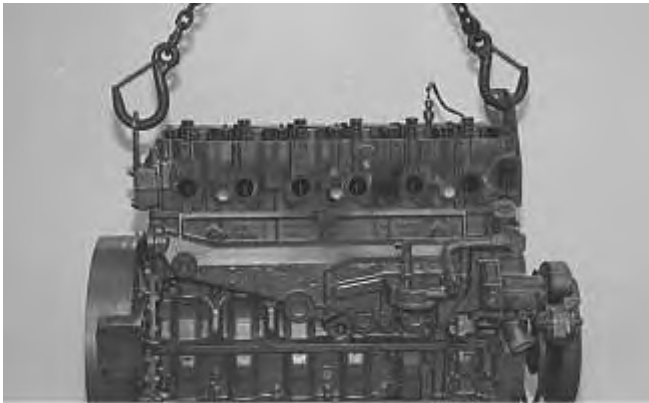
**Care must be taken to ensure that fluids are contained during performance of inspection, maintenance, testing, adjusting, and repair of the product. Be prepared to collect the fluid with suitable containers before opening any compartment or disassembling any component containing fluids.**

**Refer to Special Publication, NENG2500, "Dealer Service Tool Catalog" for tools and supplies suitable to collect and contain fluids on Cat products.**

**Dispose of all fluids according to local regulations and mandates.**

---

**Note:** For information on the reusability of the cylinder head, refer to Guideline For Reusable Parts And Salvage Operations, SEBF8218, "Specifications for Cylinder Head Assemblies 3114, 3116, and 3126 Engines" and Guideline For Reusable Parts And Salvage Operations, SEBF8162, "Procedure to Measure and Salvage Cylinder Head Assemblies and Related Components".



---

Illustration 1

g01007597

Typical example

1. Attach a suitable lifting device to the cylinder head.
-

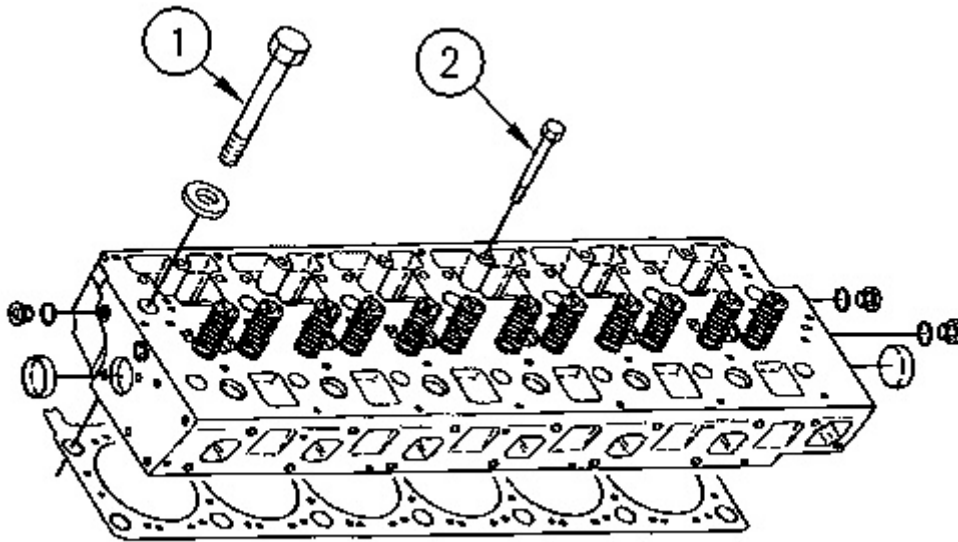


Illustration 2

g00654709

2. Remove bolts (1) and (2) that hold the cylinder head to the cylinder block. Carefully remove the cylinder head from the cylinder block. The cylinder head for the 3116 engine weighs approximately 85 kg (187 lb).

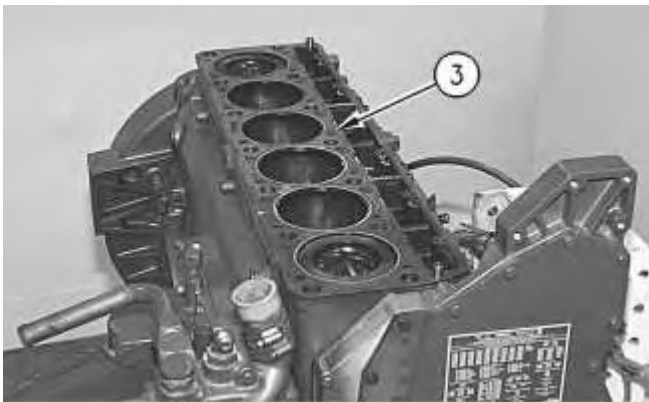


Illustration 3

g00611342

3. Remove cylinder head gasket (3).

Product: TRACK LOADER

Model: 953C TRACK LOADER 2ZN

Configuration: 953C Track-Type Loader Hydrostatic Drive 2ZN01750-UP (MACHINE) POWERED BY 3116 Engine

## Disassembly and Assembly

**446 and 446B Backhoe Loaders, Lexion 450 Combine, 3114 and 3116 Engines, IT18F Integrated Toolcarrier, D6M Track-Type Tractor and 928F, 950F and 950G Wheel Loaders**

Media Number -SEN3611-18

Publication Date -01/05/2009

Date Updated -27/05/2009

i04147334

## Cylinder Head - Install

SMCS - 1100-012

### Installation Procedure

Table 1

Required Tools			
Tool	Part Number	Part Description	Qty
A	6V-4876	Lubricant	1

---

### NOTICE

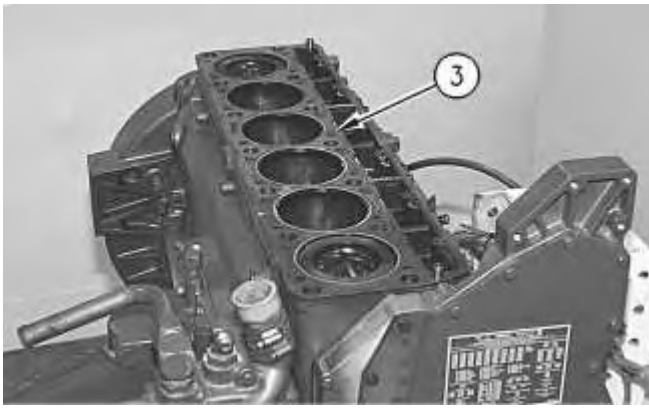
**Keep all parts clean from contaminants.**

**Contaminants may cause rapid wear and shortened component life.**

---

**Note:** For information on the reusability of the cylinder head, refer to Guideline For Reusable Parts And Salvage Operations, SEBF8218, "Specifications for Cylinder Head Assemblies 3114, 3116, and 3126 Engines" and Guideline For Reusable Parts And Salvage Operations, SEBF8162, "Procedure to Measure and Salvage Cylinder Head Assemblies and Related Components".

1. Thoroughly clean the mating surfaces of the cylinder head and the cylinder block.
-



---

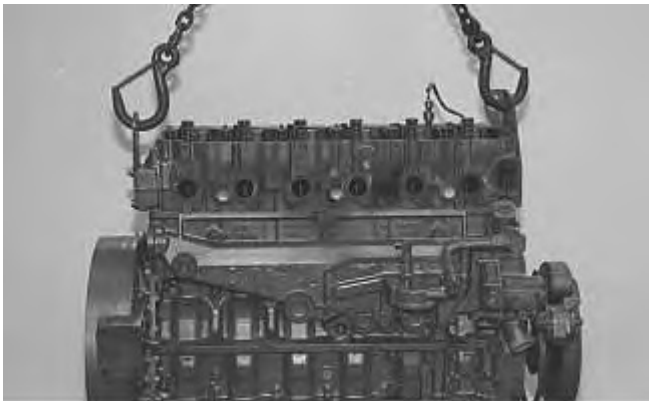
Illustration 1

g00611342

Typical example

2. Install a new cylinder head gasket (3) .

**Note:** For information on the cylinder head gasket for 3116 engines, refer to Special Instruction, SEHS9395, "3116 Cylinder Head Gasket Usage".



---

Illustration 2

g01007597

Typical example

**Note:** To avoid damage to the cylinder head gasket, use guide bolts of an appropriate size to install the cylinder head.

3. Attach a suitable lifting device to the cylinder head. Position the cylinder head assembly onto the dowels in the cylinder block. Lower the cylinder head onto the cylinder block.
-

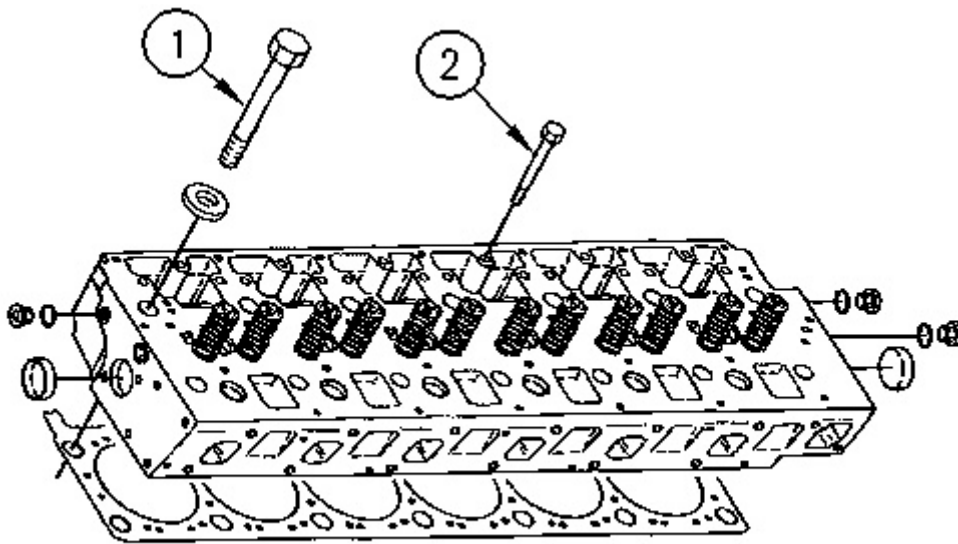


Illustration 3

g00654709

4. Inspect the condition of cylinder head bolts (1) and (2) . For information on the reusability of the bolts, refer to Guideline For Reusable Parts And Salvage Operations, SEBF8301, "Inspection and Reuse of Critical Fasteners Used in All Engines". Replace cylinder head bolts (1) and (2) , if necessary.
5. Lubricate cylinder head bolts (1) and (2) and both sides of the washers with Tooling (A) . Install cylinder head bolts (1) and (2) . Follow Step 6 for the correct tightening procedure.

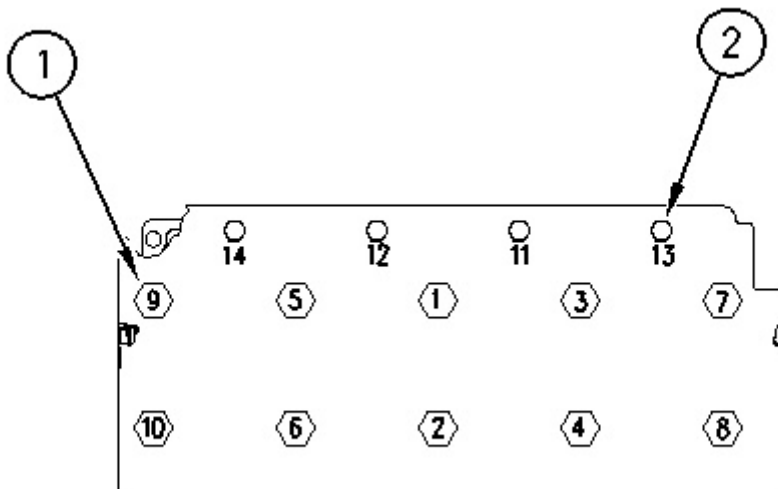
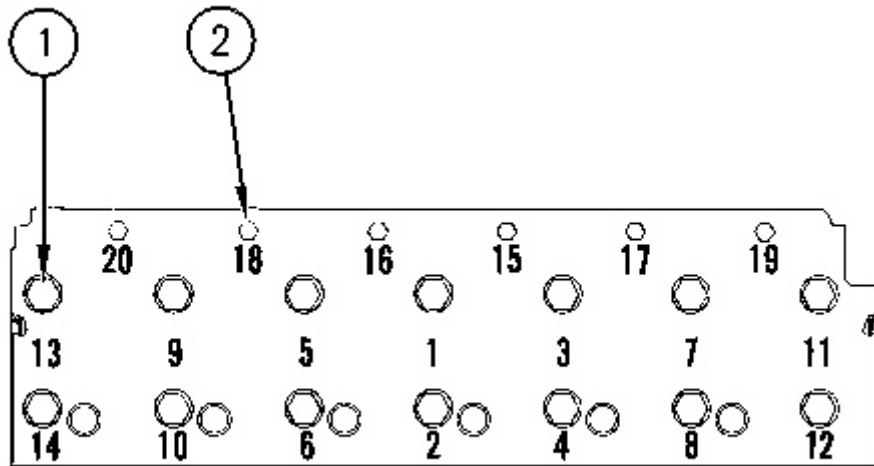


Illustration 4

g00641677



---

Illustration 5

g00611358

6. Tighten the cylinder head bolts according to the following procedure:
7. Tighten bolts (1) through bolt (14) in a numerical sequence to a torque of  $300 \pm 15$  N·m ( $221 \pm 11$  lb ft).
8. Loosen bolts (1) through bolt (14) to a torque of 0 N·m.
9. Tighten bolts (1) through bolt (14) again in a numerical sequence to a torque of  $130 \pm 15$  N·m ( $96 \pm 11$  lb ft).
10. Retighten bolts (1) through bolt (14) again in a numerical sequence to a torque of  $130 \pm 15$  N·m ( $96 \pm 11$  lb ft).
11. Turn bolts (1) through bolt (14) by numerical sequence an additional  $90^\circ$  ( $1/4$  turn).
12. Tighten bolt (15) through bolt (20) in a numerical sequence to a torque of  $55 \pm 7$  N·m ( $41 \pm 5$  lb ft).

**End By:**

- a. Install the exhaust manifold. Refer to Disassembly and Assembly, "Exhaust Manifold - Remove and Install".
  - b. Install the inlet manifold. Refer to Disassembly and Assembly, "Inlet Manifold - Install".
  - c. Install the water temperature regulator housing. Refer to Disassembly and Assembly, "Water Temperature Regulator Housing- Remove and Install".
  - d. Install the unit injectors. Refer to Disassembly and Assembly, "Unit Injector - Install".
  - e. Install the fuel control linkage. Refer to Disassembly and Assembly, "Fuel Injection Control Linkage - Install".
  - f. Install the governor. Refer to Disassembly and Assembly, "Governor - Install".
  - g. Install the fuel filter base. Refer to Disassembly and Assembly, "Fuel Filter Base - Remove and Install".
-

Thank you so much for reading.  
Please click the “Buy Now!”  
button below to download the  
complete manual.



After you pay.

You can download the most  
perfect and complete manual in  
the world immediately.

Our support email:

[ebooklibonline@outlook.com](mailto:ebooklibonline@outlook.com)