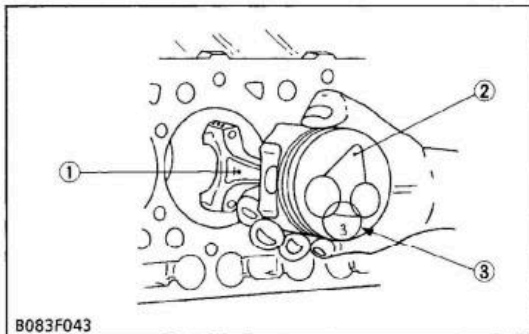


WSM

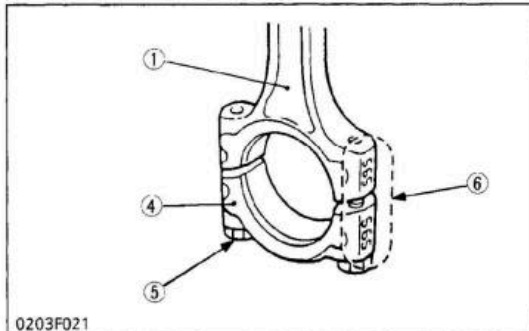
WORKSHOP MANUAL
TRACTOR

F1900 F1900E

Kubota



B083F043



0203F021

- (1) Connecting Rod
 (2) Piston
 (3) Number
 (4) Connecting Rod Cap
 (5) Connecting Rod Screw
 (6) Alignment Mark

Piston and Connecting Rod

1. Unscrew the connecting rod screws (5), and remove the connecting rod cap (4).
2. Turn the crankshaft to bring the piston to top dead center.
3. Push the connecting rod from the bottom of the cylinder block with a hummer grip, and pull out the piston (2) and connecting rod (1).

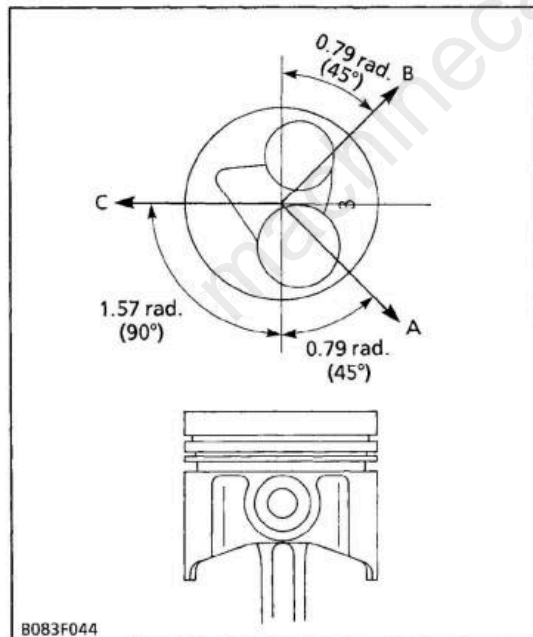
■ IMPORTANT

- Do not change the combination of cylinder and piston.

(When reassembling)

- Before inserting the piston into the cylinder, apply enough engine oil to the inside surface of the cylinder.
- Apply engine oil to the crank pin bearings and connecting rod screws.
- Be sure to install the piston and connecting rod into the cylinder so that the number (3) on the piston head opposite side of the injection pump.
- Align the alignment marks (6) on the connecting rod (1) and connecting rod cap (4).
- When inserting the piston into the cylinder, face the mark on the connecting rod to the injection pump.

Tightening torque	Connecting rod screw	26.5 to 30.4 N·m 2.7 to 3.1 kgf·m

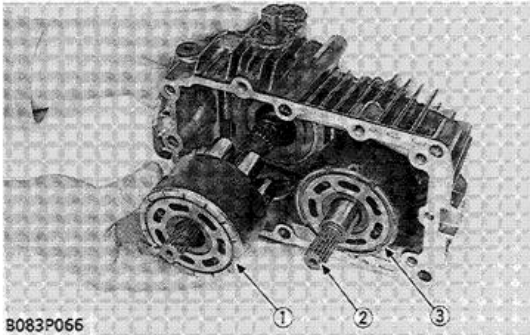


B083F044

■ IMPORTANT

- When inserting the piston into the cylinder, place the gap (A) of the top compression ring on the opposite side of the combustion chamber, and stagger the gaps (B), (C) of the second compression ring and oil ring as shown in the figure.
- Carefully insert the piston using a piston ring compressor (Code No. 07909 - 32111).

- [A] Top Compression Ring Gap
 [B] Second Compression Ring Gap
 [C] Oil Ring Gap



B083P066

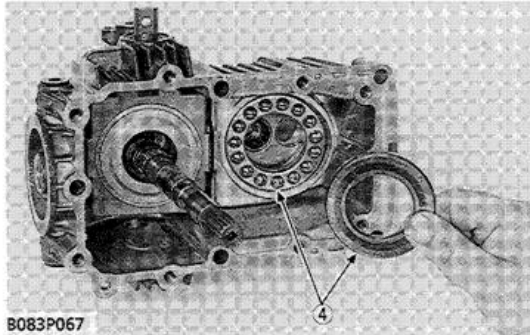
Cylinder Block Assembly and Thrust Ball Bearing

1. Lay the housing on its side.
2. Slide out the cylinder block assembly (pump) (1).
3. Slide out the cylinder block assembly (motor) (3) with the motor shaft (2).
4. Remove the thrust ball bearing (4).

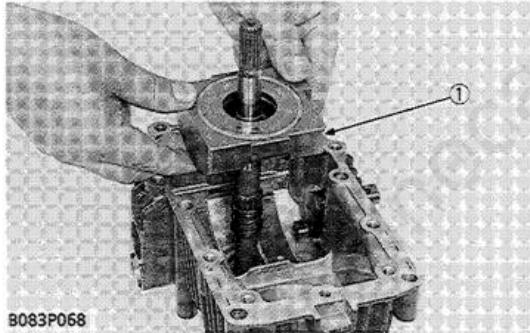
■ NOTE

- Take care not to damage the surface of the cylinder blocks.

- | | |
|------------------------------------|-------------------------------------|
| (1) Cylinder Block Assembly (Pump) | (3) Cylinder Block Assembly (Motor) |
| (2) Motor Shaft | (4) Thrust Ball Bearing |



B083P067

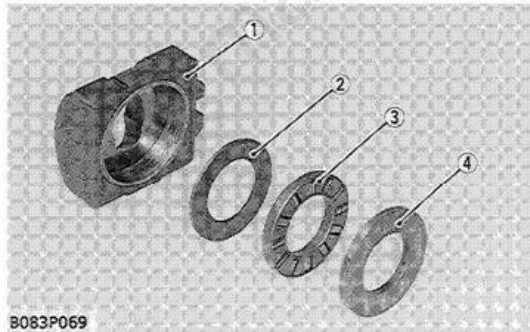


B083P068

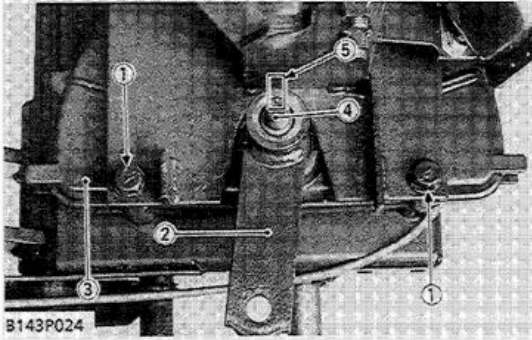
Swashplate

1. Remove the swashplate (1) from the housing.
2. Remove the thrust plate (4), thrust roller bearing (3) and thrust washer (2) from the swashplate.

- | | |
|-------------------|---------------------------|
| (1) Swashplate | (3) Thrust Roller Bearing |
| (2) Thrust Washer | (4) Thrust Plate |



B083P069



Bracket, Pitman Arm and Steering Gear Case

1. Unscrew the drag link mounting nut, and remove the front drag link from the pitman arm (2).
2. Unscrew the pitman arm mounting nut, and remove the pitman arm (2) from the sector shaft.
3. Unscrew the steering gear case mounting screws, and separate the steering gear case (3) and bracket from the frame.

(When reassembling)

- When installing the pitman arm (2), be sure to align the alignment marks (5) on the pitman arm (2) and sector shaft (4).

Tightening torque	Pitman arm mounting nut	73.5 to 103.0 N·m 7.5 to 10.5 kgf·m
	Steering gear case mounting screw	39.2 to 53.9 N·m 4.0 to 5.5 kgf·m
	Front drag link mounting nut	73.5 to 103.0 N·m 7.5 to 10.5 kgf·m

- | | |
|---------------------------------------|------------------------|
| (1) Steering Gear Case Mounting Screw | (3) Steering Gear Case |
| (2) Pitman Arm | (4) Sector Shaft |
| | (5) Alignment Mark |

- (7) If the engine must be running to do same work, make sure the area is well ventilated. Never run the engine in a closed area. The exhaust gas contains poisonous carbon monoxide.
- (8) Do not touch the rotating or hot parts while the engine is running.
- (9) Fuel is extremely flammable and explosive under certain conditions. Do not smoke or allow flames or sparks in your working area.
- (10) To avoid sparks from an accidental short circuit, always disconnect the battery's ground cable first and connect it last.
- (11) Sulfuric acid in battery electrolyte is poisonous. It is strong enough to burn skin, clothing and cause blindness if splashed into eyes. Keep electrolyte away from eyes, hands and clothing. If you spill electrolyte on yourself, flush with water, and get medical attention immediately.
- (12) Battery gas can explode. Keep sparks and open flame away from the top of battery, especially when charging the battery.
- (13) Never remove the radiator cap while the engine is running, or immediately after stopping. Otherwise, hot water will spout out from radiator. Wait for more than ten minutes to cool the radiator, before removing the cap.
- (14) Escaping fluid (fuel or hydraulic oil) under pressure can penetrate the skin causing serious injury. Relieve pressure before disconnecting hydraulic or fuel lines. Tighten all connections before applying pressure.
- (15) Do not start the engine by shorting across starter terminals.
- (16) Unauthorized modifications to the machine may impair the function and / or safety and affect machine life.
- (17) Do not alter or remove any part of machine safety system.
- (18) Keep a first aid kit and fire extinguisher handy at all times.

SAFETY OPERATION

[BEFORE OPERATION]

- (1) Read the "OPERATOR'S MANUAL" carefully. Be thoroughly familiar with the controls and the proper use of the equipment.
- (2) Do not wear loose, bulky clothing when operating the machine. Do wear safety shoes and eye protection.
- (3) Do not operate the machine while under the influence of alcohol, medication, or other substances or while fatigued.
- (4) Never allow children or inadequately trained persons to operate the machine. Keep everyone, especially children and pets, away from the area of operation.
- (5) Thoroughly inspect the area where the machine is to be used. Remove all sticks, stones, bottles, cans, wires, etc.
- (6) Remove all debris (string, wire or cords) which might wrap around blade shafts.
- (7) Keep all shields and safety devices in place. If a shield, safety device or decal is missing, defective or damaged, repair or replace it before operating.
- (8) Use only implements, attachments and accessories approved by KUBOTA.
- (9) Fuel is very flammable. Handle fuel carefully.
 - Use a properly and approved safety container.
 - Refuel the machine outdoors.
 - Shut off engine and allow it to cool before refueling.
 - Do not refuel the machine while smoking or when near open flame or sparks.
 - Do not overflow fuel while filling fuel tank.
 - Install the fuel tank cap securely, and clean up any spilled fuel before starting the engine.

Full Version Available

Kubota F1900E Front Mower Workshop Manual

This is a short preview. The complete manual contains all chapters, wiring diagrams, torque specifications and full service procedures.

VIEW THE FULL MANUAL

<https://machinecatalogic.com/kubota-f1900e-front-mower-workshop-manual/>