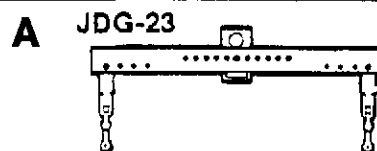
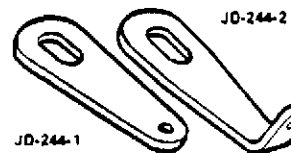


**REMOVAL AND INSTALLATION – 4-CYLINDER ENGINE****SPECIAL TOOLS**

A—JDG-23 Lifting bracket  
B—JD-244 Lifting eyes



**B** JD-244



Z103901

Z103901-Z122005AE-151180

**PREPARATIONS**

**IMPORTANT:** Lower the feeder conveyor to the ground to relieve pressure in hydraulic system.

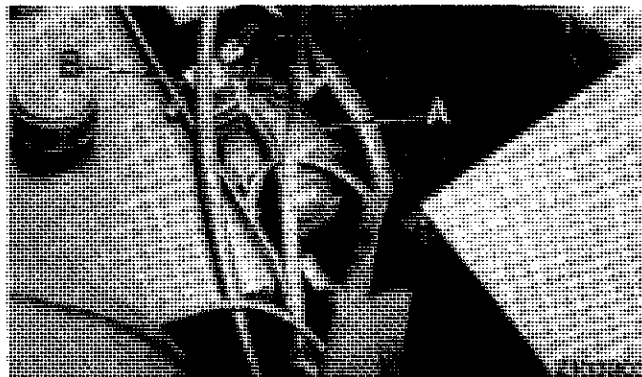
Disconnect ground (–) and positive (+) cables at the battery and remove battery.



Z103902-Z122005AE-001084

**ELECTRICAL CONNECTIONS – STARTING MOTOR**

Remove all cable connections at starting motor (A) and starting circuit relay (B).



Z103903-Z122005AE-001084

**ELECTRICAL CONNECTIONS – ALTERNATOR**

Remove both connections (A) at alternator.

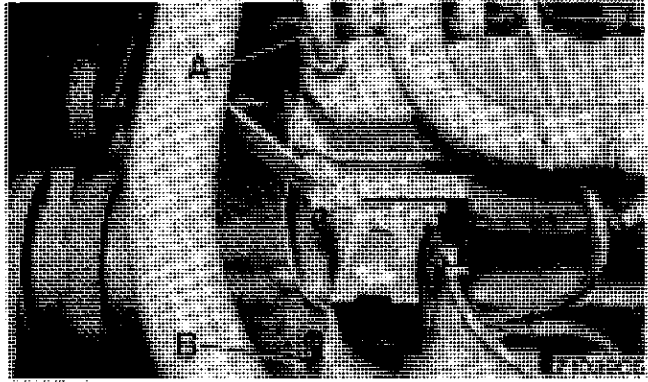


Z103904-Z122005AE-001084

### VARIOUS SENDING UNIT CONNECTIONS

Remove connectors at coolant temperature sending unit (A), at engine oil pressure sending unit (B) and at air intake sending unit.

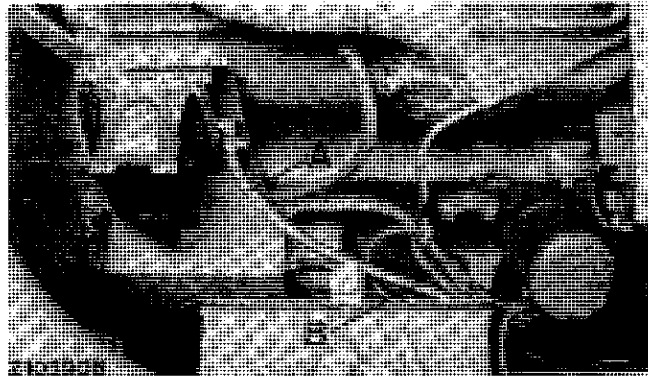
If installed, remove connector of cold weather starting aid.



Z103905-ZI22005AE-001084

### FUEL LINES

Disconnect fuel inlet line (A) and return line (B). On engines equipped with cold weather starting aid, disconnect return line at starting aid.



Z103906-ZI22005AE-001084

### SPEED CONTROL LINKAGE

Open wire seal at ball joint (A) and separate linkage (B) at fuel injection pump.

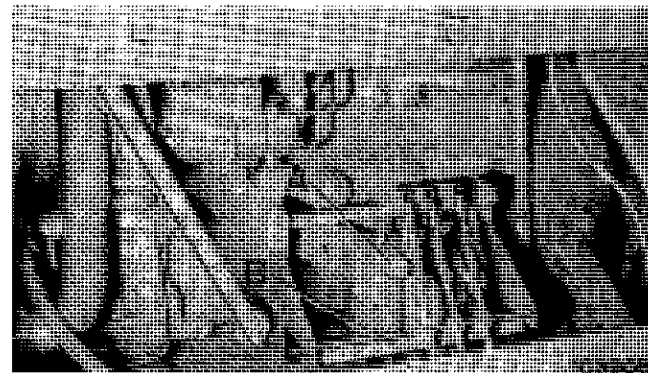


Z103907-ZI22005AE-011084

### HYDRAULIC CONTROL VALVE

Disconnect 3 or 4 Bowden cables at control valve (A) and bracket (B). Disconnect all hoses with the exception of the pressure line from the hydraulic pump and the return line to the hydraulic reservoir.

Seal all openings immediately with plastic plugs.

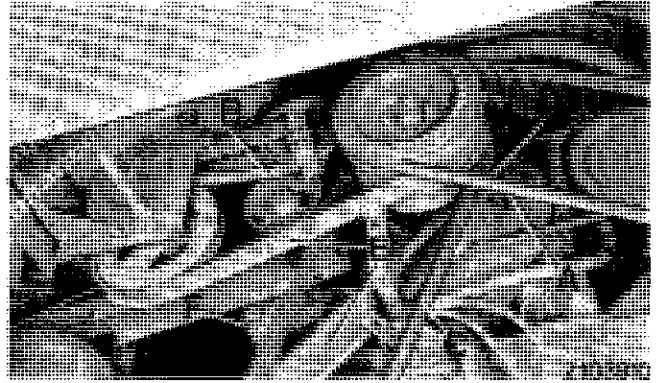


Z103908-ZI22005AE-001084

## DRIVE BELTS

Remove straw chopper V-belt (A), unloading auger drive belt (B), ground drive belt (C) and flat belt (D). Remove both belt guides (E).

Remove cotter pin of belt tensioner pulley bracket (F).

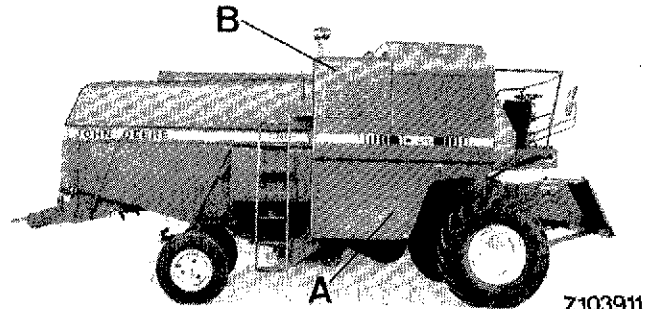


- A—Chopper V-belt
- B—Unloading auger drive belt
- C—Ground drive belt
- D—Flat belt
- E—Belt guide
- F—Pulley bracket

Z103910-Z122005AE-011084

## REMOVE GUARDS

Remove right-hand side panel (A) and right-hand engine cover (B).



Z103911-Z122005AE-011084

## SEPARATE ENGINE FROM COMBINE FRAME

**IMPORTANT:** Before removal mark position of engine on combine. Mark position on combine and engine mountings both laterally and longitudinally. These markings are essential for correct alignment when reinstalling engine.

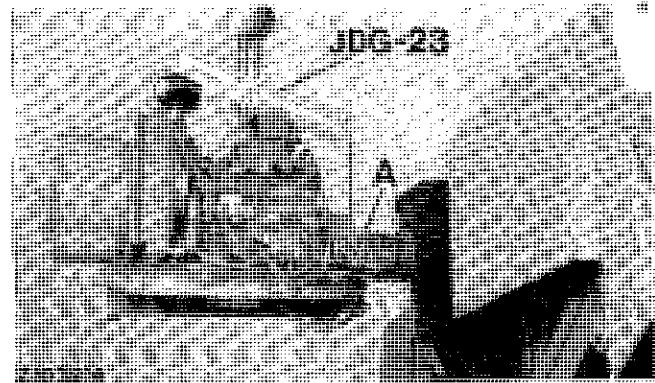
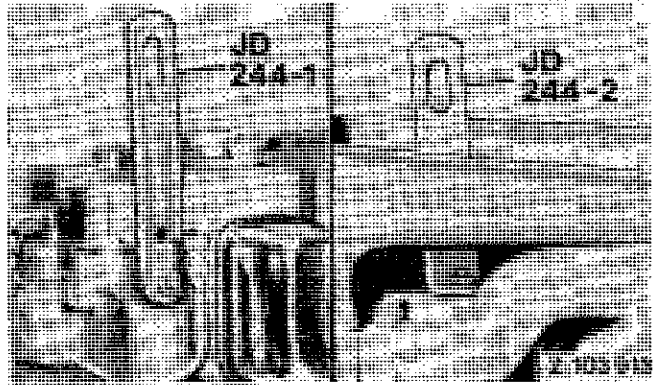
Remove four mounting bolts (A) of engine mounting on right and left-hand sides.



Z103912-Z122005AE-011084

## LIFTING ENGINE

Attach lifting eyes JD244-1 and JD244-2 to engine. Attach lifting bracket JDG-23 to lifting eyes. Lift engine with a hoist and slide to right out of combine. At the same time pull tension pulley on the left hand side from bracket (A).



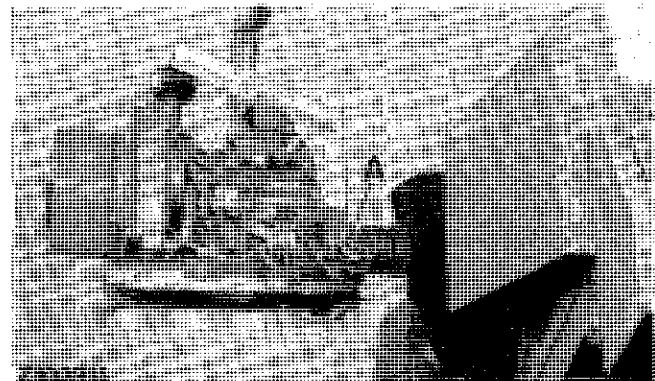
Z103913,Z103914-Z122005AE-011084

## ENGINE INSTALLATION

Install engine in reverse removal procedure. While installing engine, place tension pulley on bracket (A). After installing engine, check levels of engine oil and coolant. Align engine with markings carried out during engine removal.

After engine test run, check all attaching screws again for tightness. Check all drive belts (ground drive, hydraulic pump drive, separator drive and unloading auger drive) for correct adjustment, true running and tension.

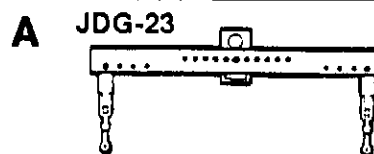
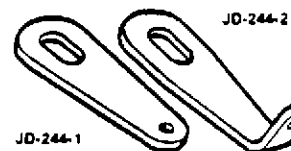
In the position "Fast Idle" the stop control lever of the fuel injection pump must slightly contact its stop; if not, readjust speed control linkage.



Z103915-Z122005AE-011084

**REMOVAL AND INSTALLATION – 6-CYLINDER ENGINE****SPECIAL TOOLS**

A-JDG-23 Lifting bracket  
B-JD-244 Lifting eyes

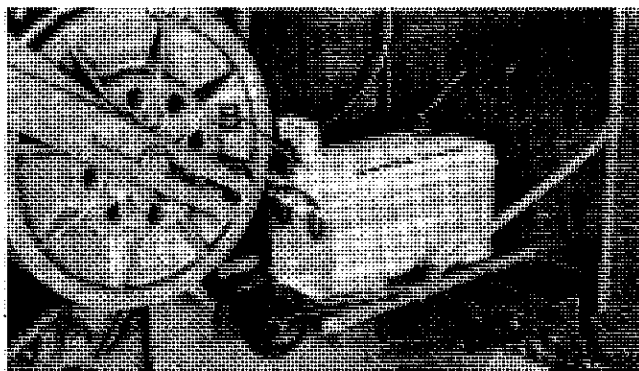
**B** JD-244**Z103901**

Z103901-Z122010AE-151188

**PREPARATIONS**

**IMPORTANT:** Lower the feeder conveyor to the ground to relieve pressure in hydraulic system.

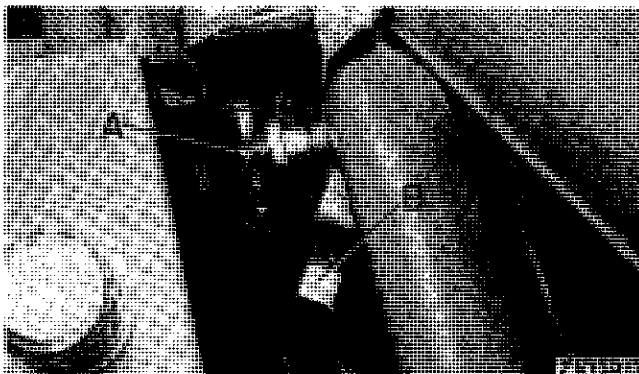
Disconnect ground (A) and positive (B) cables at the battery and remove battery.



Z103916-Z122010AE-001084

**ELECTRICAL CONNECTIONS – STARTING MOTOR**

Remove all cable connections at starting motor (A) and starting circuit relay (B).



Z103917-Z122010AE-001084

**ELECTRICAL CONNECTIONS – ALTERNATOR**

Remove both connections (A) at alternator.



Z103918-Z122010AE-001084



**Suggest:**

**If the above button click is invalid.**

**Please download this document**

**first, and then click the above link**

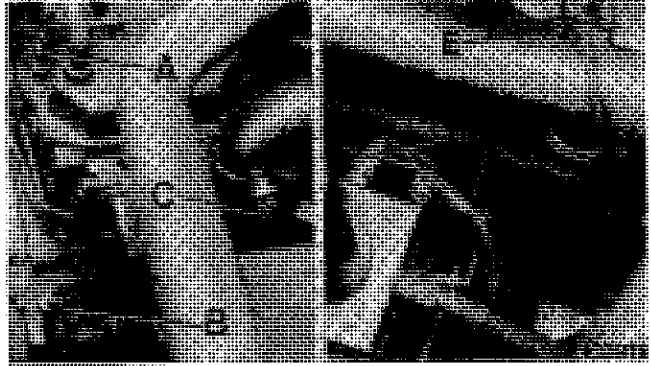
**to download the complete manual.**

**Thank you so much for reading**

### VARIOUS SENDING UNIT CONNECTIONS

Remove connectors of following sending units:

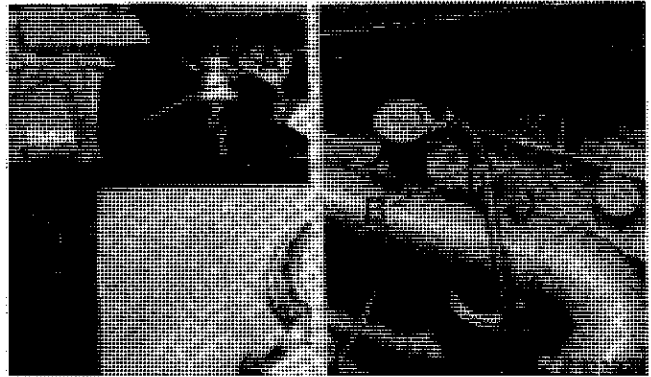
- A–Coolant temperature sending unit
- B–Engine oil pressure sending unit
- C–Air Intake sending unit
- E–Cold weather starting aid connector



Z103919-ZI22010AE-001084

### FUEL LINES

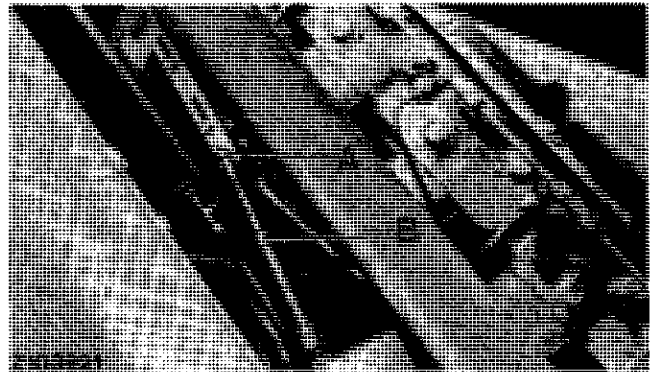
Disconnect fuel inlet line (A) and return hose (B) at cold weather starting aid, or directly at return line.



Z103920-ZI22010AE-001084

### SPEED CONTROL LINKAGE

Open wire seal at ball joint (A) and separate linkage (B) at fuel injection pump.

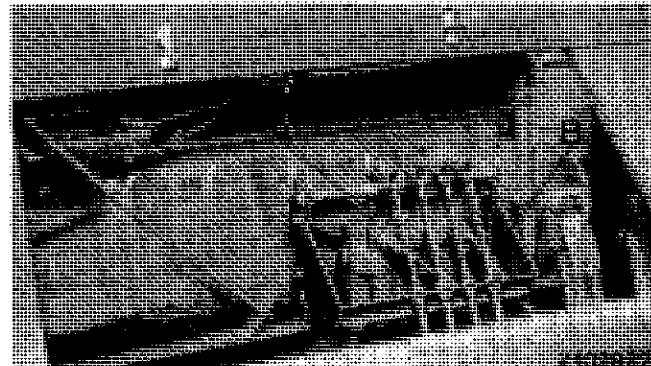


Z103921-ZI22010AE-011084

### HYDRAULIC CONTROL VALVE

Disconnect 3 or 4 Bowden cables at control valve (A) and bracket (B). Disconnect all hose connections with the exception of the pressure line from the hydraulic pump and the return line to hydraulic reservoir.

Seal all openings immediately with plastic plugs.



Z103922-ZI22010AE-001084