

SERVICE MANUAL

TRACTORS

C50, C60

C70, C80

C90, C100

7-70900

1. Trim along dashed line.
2. Slide into pocket on Binder Spine.

TYPE 1-4

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TYPE 1-4

# C50, C60, C70, C80, C90 and C100 Tractors

## Service Manual Don 7-70900

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Reprinted



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# Section 1001

1001

SAFETY, GENERAL INFORMATION  
AND TORQUE SPECIFICATIONS


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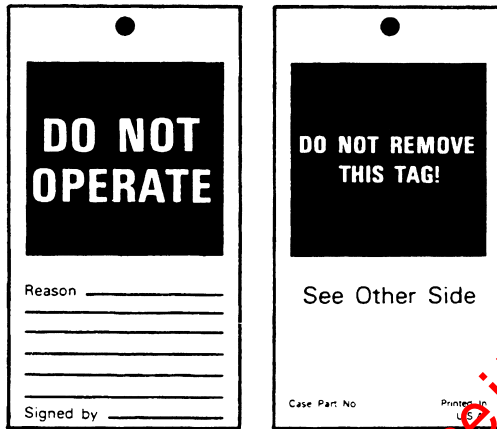
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# SAFETY


 **This symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED. The message that follows the symbol contains important information about safety. Carefully read the message. Make sure you fully understand the causes of possible injury or death.**


To prevent injury always follow the Warning, Caution and Danger notes in this section and throughout the manual.


Put the warning tag shown below on the key for the key switch when servicing or repairing the machine. One warning tag is supplied with each machine. Additional tags Part Number 331-4614 are available from your service parts supplier.





 **WARNING: Before starting engine, study Operator's Manual safety messages. Read all safety signs on machine. Clear the area of other persons. Learn and practice safe use of controls before operating.**  
**It is your responsibility to understand and follow manufacturers instructions on machine operation, service, and to observe pertinent laws and regulations. Operator's and Service Manuals may be obtained from you J.I. Case dealer.**


 **WARNING: If you wear clothing that is too loose or do not use the correct safety equipment for your job, you can be injured. Always wear clothing that will not catch on objects. Extra safety equipment that can be required includes hard hat, safety shoes, ear protection, eye or face protection, heavy gloves and reflector clothing.**


 **WARNING: Read the operators manual to familiarize yourself with the correct control functions.**

 **WARNING: When working in the area of the fan belt with the engine running, avoid loose clothing if possible, and use extreme caution.**

 **WARNING: Operate the machine and equipment controls from the seat position only. Any other method could result in serious injury.**

 **WARNING: When doing checks and tests on the equipment hydraulics, follow the procedures as they are written. DO NOT change the procedure.**

 **WARNING: This is one a man machine, no riders allowed.**

 **WARNING: When putting the hydraulic cylinders on this machine through the necessary cycles to check operation or to remove air from a circuit, make sure all people are out of the way.**



**WARNING:** Use insulated gloves or mittens when working with hot parts.



**CAUTION:** Lower all attachments to the ground or use stands to safely support the attachments before you do any maintenance or service.



**CAUTION:** Pin sized and smaller streams of hydraulic oil under pressure can penetrate the skin and result in serious infection. If hydraulic oil under pressure does penetrate the skin, seek medical treatment immediately. Maintain all hoses and tubes in good condition. Make sure all connections are tight. Make a replacement of any tube or hose that is damaged or thought to be damaged. **DO NOT** use your hand to check for leaks, use a piece of cardboard or wood.



**CAUTION:** When removing hardened pins such as a pivot pin, or a hardened shaft, use a soft head (brass or bronze) hammer or use a driver made from brass or bronze and a steel head hammer.



**CAUTION:** When using a hammer to remove and install pivot pins or separate parts using compressed air or using a grinder, wear eye protection that completely encloses the eyes (approved goggles or other approved eye protectors).



**CAUTION:** Use suitable floor (service) jacks or chain hoist to raise wheels or tracks off the floor. Always block machine in place with suitable safety stands.



**CAUTION:** When servicing or repairing the machine. Keep the shop floor and operator's compartment and steps free of oil, water, grease, tools, etc. Use oil absorbing material and or shop cloths as required. Use safe practices at all times.



**CAUTION:** Some components of this machine are very heavy. Use suitable lifting equipment or additional help as instructed in this Service Manual.



**DANGER:** Engine exhaust fumes can cause death. If it is necessary to start the engine in a closed place, remove the exhaust fumes from the area with an exhaust pipe extension. Open the doors and get outside air into the area.



**DANGER:** When the battery electrolyte is frozen, the battery can explode if (1), you try to charge the battery, or (2), you try to jump start and run the engine. To prevent that battery electrolyte from freezing, try to keep the battery at full charge. If you do not follow these instructions, you or others in the area can be injured.



**DANGER:** Batteries contain acid and explosive gas. Explosions can result from sparks, flames or wrong cable connections. To connect the jumper cables correctly to the battery of this machine see the Operator's Manual. Failure to follow these instructions can cause serious injury or death.

## GENERAL INFORMATION

### Cleaning

Clean all metal parts except bearings, in mineral spirits or by steam cleaning. Do not use caustic soda for steam cleaning. After cleaning dry and put oil on all parts. Clean oil passages with compressed air. Clean bearings in kerosene, dry the bearings completely and put oil on the bearings.

### Inspection

Check all parts when the parts are disassembled. Replace all parts that have wear or damage. Small scoring or grooves can be removed with a hone or crocus cloth. Complete visual inspection for indications of wear, pitting and the replacement of parts necessary will prevent early failures.

### Bearings

Check bearings for easy action. If bearings have a loose fit or rough action replace the bearing. Wash bearings with a good solvent or kerosene and permit to air dry. **DO NOT DRY BEARINGS WITH COMPRESSED AIR.**

### Needle Bearings

Before you press needle bearings in a bore always remove any metal protrusions in the bore or edge of the bore. Before you press bearings into position put petroleum jelly on the inside and outside diameter of the bearings.

### Gears

Check all gears for wear and damage. Replace gears that have wear or damage.

### Oil Seals, O-Rings And Gaskets

Always install new oil seals, o-rings and gaskets. Put petroleum jelly on seals and o-rings.

### Shafts

Check all shafts that have wear or damage. Check the bearing and oil seal surfaces of the shafts for damage.

### Service Parts

Always install genuine Case service parts, when ordering refer to the Parts Catalog for the correct part number of the genuine Case replacement items. Failures due to the use of other than genuine Case replacement parts are not covered by warranty.

### Lubrication

Only use the oils and lubricants specified in the Operators or Service Manual. Failures due to the use of non specified oils and lubricants are not covered by warranty.



## STANDARD TORQUE DATA FOR NUTS AND BOLTS

**NOTE:** A "click type" torque wrench is recommended for the bolt torques listed below.

**Chart 1 (Plain Nuts/Bolts)**

BOLT SIZE (mm)	TYPE 8.8				TYPE 10.9			
	MIN		MAX		MIN		MAX	
	lb ft	Nm	lb ft	Nm	lb ft	Nm	lb ft	Nm
M4	3.0	4.0	3.4	4.5	4.3	5.8	4.8	6.5
M5	4.8	6.5	5.5	7.5	7.0	9.5	7.8	10.5
M6	8.2	11.0	9.2	12.5	11.8	16.0	13.3	18.0
M8	20.0	27.0	22.5	31.0	28.7	39.0	32.3	44.0
M10	40.0	54.0	45.0	61.0	56.0	77.0	64.0	87.0
M12	69.0	94.0	78.0	106.0	100.0	134.0	116.0	151.0
M14	110.0	150.0	125.0	170.0	160.0	215.0	180.0	240.0
M16	175.0	235.0	190.0	260.0	245.0	335.0	275.0	375.0
M20	345.0	470.0	390.0	530.0	480.0	650.0	540.0	730.0
M22	475.0	640.0	530.0	720.0	655.0	890.0	735.0	1000.0
M24	600.0	810.0	675.0	915.0	830.0	1125.0	930.0	1265.0
M30	1190.0	1615.0	1340.0	1815.0	1645.0	2235.0	1855.0	2515.0
M36	2080.0	2825.0	2340.0	3175.0	2875.0	3900.0	3235.0	4390.0

**Chart 2 (Phosphate Coated Nuts/Bolts)**

BOLT SIZE (mm)	TYPE 8.8				TYPE 10.9			
	MIN		MAX		MIN		MAX	
	lb ft	Nm	lb ft	Nm	lb ft	Nm	lb ft	Nm
M4	2.3	3.0	2.6	3.4	3.2	4.4	3.6	4.9
M5	3.6	4.9	4.1	5.6	5.2	7.1	5.9	8.0
M6	6.2	8.3	6.9	9.4	8.9	12.0	10.0	13.5
M8	15.0	20.3	16.9	23.3	21.5	29.2	24.2	32.8
M10	30.0	41.0	34.0	46.0	42.0	58.0	48.0	65.0
M12	52.0	71.0	59.0	80.0	75.0	101.0	83.0	113.0
M14	83.0	113.0	94.0	126.0	120.0	161.0	135.0	180.0
M16	131.0	176.0	143.0	195.0	185.0	251.0	205.0	280.0
M20	259.0	353.0	293.0	400.0	360.0	490.0	405.0	550.0
M22	355.0	480.0	400.0	540.0	490.0	665.0	550.0	750.0
M24	450.0	608.0	506.0	686.0	625.0	845.0	700.0	950.0
M30	893.0	1211.0	1005.0	1361.0	1235.0	1675.0	1390.0	1885.0
M36	1560.0	2119.0	1755.0	2381.0	2156.0	2925.0	2425.0	3295.0

Chart 3 (Zinc or Cadmium Plated Nuts/Bolts)

BOLT SIZE (mm)	TYPE 8.8				TYPE 10.9			
	MIN		MAX		MIN		MAX	
	lb ft	Nm	lb ft	Nm	lb ft	Nm	lb ft	Nm
M4	2.6	3.5	2.9	3.9	3.7	5.0	4.1	5.6
M5	4.1	5.6	4.6	6.3	5.9	8.0	6.6	9.0
M6	7.0	9.5	7.8	10.6	10.0	13.6	11.3	15.3
M8	17.0	23.1	19.1	25.9	24.4	33.1	27.4	37.2
M10	34.0	46.0	38.3	52.0	48.0	65.0	54.0	74.0
M12	59.0	80.0	66.0	90.0	85.0	114.0	94.0	128.0
M14	94.0	128.0	106.0	145.0	136.0	183.0	153.0	205.0
M16	149.0	200.0	161.0	220.0	208.0	285.0	235.0	320.0
M20	293.0	400.0	330.0	450.0	408.0	555.0	460.0	620.0
M22	400.0	545.0	450.0	615.0	555.0	755.0	625.0	850.0
M24	510.0	690.0	575.0	780.0	705.0	955.0	790.0	1075.0
M30	1010.0	1375.0	1140.0	1545.0	1400.0	1900.0	1580.0	2140.0
M36	1770.0	2400.0	1990.0	2700.0	2445.0	3315.0	2750.0	3730.0

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# Section 1002

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## GENERAL SPECIFICATIONS AND TORQUES

C50, C60, C70, C80, C90  
and C100 Tractors

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## GENERAL SPECIFICATIONS

### Capacities

#### TRANSMISSION/HYDRAULIC (HY-TRAN PLUS ®) OIL CAPACITY

2WD Tractors .....	34 Litres	9.0 US gal
MFD Tractors .....	36.5 Litres	9.6 US gal

### Steering Specifications

#### TRACK ADJUSTMENT

Toe-in .....	0 to 5 mm	0 to 0.20 inch
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### Transmission Specifications

#### CLUTCH

##### C50/60/70 Tractors

Maximum Clutch Plate Thickness .....	10.4 mm	0.41 inch
Clutch Plate Diameter .....	305 mm	12 inch
Number of Friction Plate Pads .....		5 each side

##### C80/90/100 Tractors

Maximum Clutch Plate Thickness .....	10.4 mm	0.41 inch
Clutch Plate Diameter .....	310 mm	12.20 inch
Number of Friction Plate Pads .....		7 each side

Pressure Plate and Friction Plate Spline Lubricant ..... MOLYKOTE D321R or equivalent

#### SPEED TRANSMISSION

Speed Transmission Rear Synchronizer End Play .....	0.05 to 0.30 mm	0.002 to 0.012 inch
Speed Transmission Front Synchronizer End Play .....	0.05 to 0.30 mm	0.002 to 0.012 inch

#### RANGE TRANSMISSION

Pinion Bearing End Play (Maximum) .....	0.076 mm	0.003 inch
Synchronizer Running Clearance .....	0.4 to 0.6 mm	0.016 to 0.024 inch
Selector Fork Running Clearance		
Standard Transmission .....	0.45 mm	0.018 inch
Forward/Reverse Transmission .....	0.05 mm	0.002 inch

#### REAR AXLE

Planetary Gear/Planetary Gear Carrier Shimming ..... refer to Section 6012

#### DIFFERENTIAL

Differential Lock Selector Ring Clearance (Engaged Position) ...	0.025 to 0.90 mm	0.001 to 0.035 inch
Ring Gear to Pinion Backlash .....	0.152 to 0.304 mm	0.006 to 0.012 inch
Ring Gear to Differential Housing Run-out .....	0 to 0.102 mm	0 to 0.004 inch
Differential Bearing Rolling Pull .....	2.0 to 6.5 kg	4.5 to 14.5 lb

#### PTO CLUTCH

##### Standard Clutch

Number of Friction Plates .....	5
Number of Steel Separator Plates (2 between each Friction Plate) .....	8

##### Heavy Duty Clutch

Number of Friction Plates .....	6
Number of Steel Separator Plates .....	5

# Hydraulic Specifications

## HYDRAULIC PUMP

	C50/60	C70/80/90/100
Hydraulic pump - Standard capacity	N/A	59 L/min (15.6 US gpm)
Hydraulic pump - High capacity	62 L/min (16.4 US gpm)	540/750 PTO - 66 L/min (17.4 US gpm) 540/1000 PTO - 68 L/min (18.0 US gpm)
Flow to Remotes - Standard capacity hydraulic pump	N/A	48 L/min (12.7 US gpm)
Flow to Remotes - High capacity hydraulic pump	49 L/min (12.9 US gpm)	540/750 PTO - 55 L/min (14.2 US gpm) 540/1000 PTO - 57 L/min (15.0 US gpm)
Pump gear (No. of teeth) - Standard capacity hydraulic pump	540/750 PTO - 19 teeth 540/1000 PTO - 23 teeth	
Pump gear (No. of teeth) - High capacity hydraulic pump	N/A	540/750 PTO TYPE - 17 teeth 540/1000 PTO TYPE - 20 teeth
Pump mounting plate thickness - Standard capacity hydraulic pump	5.31 to 5.48 mm (0.209 to 0.213 inch)	
Pump mounting plate thickness - High capacity hydraulic pump	7.86 to 7.98 mm (0.309 to 0.314 inch)	

Steering Relief Valve Pressure.....	141 to 148 bar	2050 to 2150 psi
Pilot Relief Valve Pressure.....	172 bar	2494 psi
Priority Flow Divider (Flow at all engine speeds).....	10.5 to 12 L/min	2.8 to 3.2 US gpm
Auxiliary Remote Detent Kick-out Pressure.....	144.7 to 172.3 bar	2100 to 2500 psi
Steering Relief Valve Pressure.....	141 to 148 bar	2050 to 2150 psi
Forward/Reverse Regulator Pressure.....	22 bar	320 psi
Powershift Regulator Pressure.....	22 bar	320 psi
MFD Regulator Pressure.....	22 bar	320 psi
PTO Pressure.....	15 to 17 bar	220 to 250 psi
Steering Regulator Return Flow.....	10.5 to 12 L/min	2.8 to 3.2 US gpm
Oil Cooler Flow.....	10.5 to 12 L/min	2.8 to 3.2 US gpm
Hydraulic Oil Type.....	Case Hy-Tran® Plus	
Hydraulic Oil Test Temperature.....	49° C	120° F

### FLOW DIVIDER SPRING

Free Length..... 60.23 mm 2.37 inch

### PTO PRESSURE REGULATOR VALVE SPRING

Free Length..... 45.44 mm 1.79 inch

### OIL COOLER/LUBRICATION SYSTEM BYPASS VALVE SPRING

Free Length..... 48.00 mm 1.88 inch

### PTO CONTROL SPOOL ASSEMBLY

#### Heavy Duty Spring

Free Length..... 37.77 mm 1.49 inch

#### Light Duty Spring

Free Length..... 46.99 mm 1.85 inch

#### Return Spring

Free Length..... 70.61 mm 2.78 inch

### UNLOADING VALVE SPRING

Free Length..... 39.88 mm 1.57 inch

FLOW CONTROL VALVE SPRING		
Free Length.....	43.18 mm	1.70 inch
CHECK VALVE SPRING		
Free Length.....	11.68 mm	0.46 inch
ACTION (DROP RESPONSE) VALVE SPRING		
Free Length.....	43.31 mm	1.70 inch
DRAFT CONTROL VALVE		
Draft Valve Spring		
Free Length.....	80.62 mm	3.17 inch
Drop Valve Poppet Spring		
Free Length.....	38.74 mm	1.52 inch
Drop Valve Spool Spring		
Free Length.....	23.37 mm	0.92 inch

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## SPECIAL TORQUES

### Steering

Steering Wheel Retaining Nut .....	45 to 51 Nm	33 to 37 lb ft
Steering Hand Pump Retaining Bolts .....	45 to 51 Nm	33 to 37 lb ft
Steering Hand Pump End Cover Retaining Bolts .....	25 to 35 Nm	19 to 26 lb ft
Steering Cylinder Clevis (with Loctite 270).....	110 to 135 Nm	80 to 100 lb ft
Steering Cylinder Clevis Pin Retaining Bolt.....	27 to 31 Nm	20 to 23 lb ft
Lower Bearing Carrier Retaining Bolts .....	110 to 122 Nm	80 to 90 lb ft
Steering Relief Valve Plug .....	40 to 60 Nm	30 to 44 lb ft
Front Weight Bracket Retaining Bolts.....	481 to 542 Nm	355 to 400 lb ft
Steering Arm Clamp Bolt.....	108 to 122 Nm	80 to 90 lb ft
Front Wheel Nuts.....	refer to Operators Manual for correct wheel rim size	
Wheel Bearing Nut .....	refer to Operators Manual for tightening procedure	
Tie Rod		
Lock Nut .....	34 to 40 Nm	25 to 30 lb ft
Lock Bolt .....	81 to 88 Nm	60 to 65 lb ft
Tie Rod Tube Lock Nut.....	235 to 250 Nm	173 to 184 lb ft

### Transmission

Flywheel Retaining Bolts .....	105 Nm	77 lb ft
Engine to Speed Transmission Mounting Bolts .....	101 to 114 Nm	75 to 84 lb ft
Speed to Range Transmission Retaining Bolts		
5/8 inch Bolts (With Loctite 271) .....	230 Nm	170 lb ft
1/2 inch Bolts (With Loctite 271) .....	110 Nm	81 lb ft
Main Shaft Retaining Bolts .....	42 to 47 Nm	31 to 34 lb ft
Selector Fork to Selector Rail Lock Bolt .....	89 to 100 Nm	65 to 74 lb ft
Selector Fork to Selector Rail Lock Nut.....	53 to 59 Nm	39 to 43 lb ft
PTO Bearing Retainer Bolts (with Loctite 271).....	42 to 47 Nm	31 to 34 lb ft
Clutch Release Bearing Carrier Retaining Bolts (with Loctite 271) .....	42 to 47 Nm	31 to 34 lb ft
Pinion Shaft Retaining Bolts .....	45 to 50 Nm	33 to 37 lb ft
Planet Carrier Retaining Bolt .....	290 to 330 Nm	220 to 250 lb ft
Rear Axle Mounting Bolt.....	270 to 305 Nm	200 to 225 lb ft
Rear Wheel Nuts		
Flange Axle .....	280 to 340 Nm	206 to 250 lb ft
Bar Axle.....	210 to 270 Nm	155 to 200 lb ft
PTO Clutch Access Cover .....	117 to 133 Nm	86 to 98 lb ft
PTO Shaft Cover Retaining Bolts.....	45 to 50 Nm	33 to 37 lb ft
Top Link Sensing Bracket Cap Screws.....	285 to 312 Nm	210 to 230 lb ft
PTO Clutch Access Cover Retaining Bolts.....	117 to 133 Nm	86 to 98 lb ft
PTO Housing		
3/8 inch Retaining Bolts .....	45 to 50 Nm	33 to 37 lb ft
1/2 inch Retaining Bolts .....	136 to 152 Nm	100 to 112 lb ft

### Hydraulics

Multi Control Valve Retaining Bolts .....	45 to 50 Nm	33 to 37 lb ft
Hydraulic Filter Retaining Bolt .....	16 to 21 Nm	12 to 16 lb ft
Hydraulic Pump Retaining Bolts .....	24 to 28 Nm	18 to 21 lb ft
Hydraulic Pump Drive Gear Locknut .....	61 to 68 Nm	45 to 50 lb ft
Hydraulic Pump End Plate		
Retaining Bolt.....	27 to 31 Nm	20 to 23 lb ft
Cap Screw.....	24 to 27 Nm	18 to 20 lb ft
Unloading and Flow Control Valve Retaining Bolts .....	44.7 to 50 Nm	33 to 37 lb ft
Top Link Bracket Retaining Screws .....	285 to 312 Nm	210 to 230 lb ft
Lift Arm Retaining Bolt .....	133 to 149 Nm	98 to 110 lb ft

# Section 1005

## SPECIAL TOOLS

C50, C60, C70, C80, C90  
and C100 Tractors

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## SPECIAL TOOLS

### TOOL APPLICATION

### TOOL PART NUMBER

#### ENGINE

Gauge, piston height, valve depth and cylinder liner protrusion.....	PD.41D
Seal Installer, Crankshaft Rear Oil Seal.....	PD.145D
Timing Cover Aligning Tool.....	PD.162B
Engine Turn Over Tool .....	PD.165B
Seal Installer, Timing Cover Seal (main tool) .....	PD.170
Pressure Plate (use with PD.170) .....	PD.170-1
Sleeve (use with PD.170).....	PD.170-2
Fastener Plate (use with PD.170) .....	PD.170-3
Adaptor (use with PD.170) .....	PD.170-4
Crankshaft Locking Pin .....	PD.241

#### FUEL

Timing Pin (Lucas Fuel Injection Pumps only) .....	PD.246
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#### ELECTRICAL

Multimeter .....	CAS1559
Signal Generator/Counter .....	CAS2109
Harness Repair Kit .....	AJI1400004
European only	
Harness Repair Kit .....	CAS31000

#### STEERING

Seal Installer, Danfoss Steering Hand Pump Seal.....	CAS2552
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#### TRANSMISSION

Alignment Tools, Engine Clutch.....	CAS1918 and CAS1919
Tractor Splitting Stands	
European	
Tractor Splitting Kit .....	CAS30009
North American	
Tractor Splitting Stand (Front) .....	CAS10852
Tractor Splitting Stand (Rear).....	CAS10853
Hydraulic Jacks .....	CAS10855A
Seal Expander/Protector Set, Speed Transmission Mainshaft .....	CAS2366
Seal Compressor, Speed Transmission Mainshaft .....	CAS2367
Alignment Tool, Powershift Clutch.....	CAS1921A

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Sleeve Installer, Sprag Clutch .....	CAS1920
Seal Expander/Protector, Input Shaft .....	CAS2519-1
Spacer Ring .....	CAS2519-2
Seal Compressor, Input Shaft .....	CAS2520
Synchronizer Gauge .....	CAS2364
Shift Rail Gauge .....	CAS2365
Snap Ring Pliers .....	CAS2194

## HYDRAULICS

Flowmeter .....	OEM1238
Tube (available through Case Parts).....	539835R2
Cap, 9/16-18 JIC (available through Case Parts) .....	218-754
Cap, 3/4-16 JIC (available through Case Parts) .....	218-755
Male Coupler, Quick Disconnect (available through Case Parts) .....	1272399C2
Hydraulic Test Kit (available through Case Parts).....	1094059-R92
Drop Response Valve Adjusting Wrench .....	CAS1923
Unloader Valve Seat Wrench .....	CAS1922
Oil Pump, Stop Valve and Pressure Gauge .....	CAS1913

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## SPECIAL TOOLS

CAS30009 SPLITTING STAND

## SPECIAL TORQUES

Engine to Speed Transmission Mounting Bolts .....101 to 114 Nm

75 to 84 lb ft

## ENGINE

**NOTE:** For Engine Service and Overhaul procedures, refer to your Engine Service Manual.

### Removal and Installation

**NOTE:** For Installation follow the Removal procedure in reverse order.

Before removing the engine it will be necessary to carry out the following:

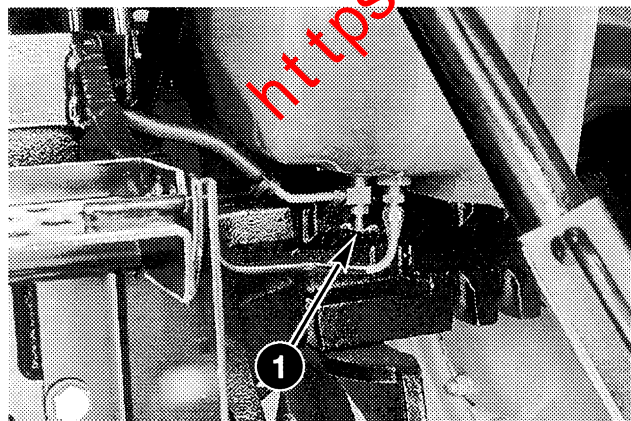
- Park the tractor on hard level ground and apply the parking brake.
- Lower the rear three point hitch.
- Stop the engine and remove the key.
- Put blocks in front of and behind the rear wheels.
- Put wooden blocks between the front axle bolster and front axle.
- Remove the front tractor weights (if equipped).
- Remove the Hood and Side Panels.
- Remove the Exhaust.
- For MFD Tractors, remove the MFD Drive Shaft and Cover.

#### STEP 1

Disconnect the battery, negative (-) terminal first.

**NOTE:** For Installation, connect and tighten the positive (+) terminal first.

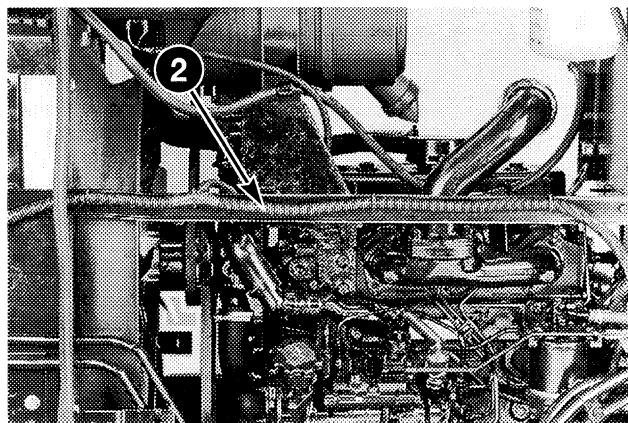
#### STEP 2



DP97E358

Close fuel supply tap (1) on the fuel tank.

#### STEP 3



DP97G112

Disconnect the horn and headlamps. Release harness (2) from the rail. Remove the rail between the radiator and battery tray.

**NOTE:** Follow STEP 4 to STEP 10 and STEP 17 to STEP 24 for removing the engine from C50/60 Tractors.

**NOTE:** Follow STEP 11 to STEP 16 and STEP 17 to STEP 24 for removing the engine from C70/80/90/100 Tractors.

# Section 2001

2001

## ENGINE REMOVAL AND INSTALLATION

C50, C60, C70, C80, C90  
and C100 Tractors

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