

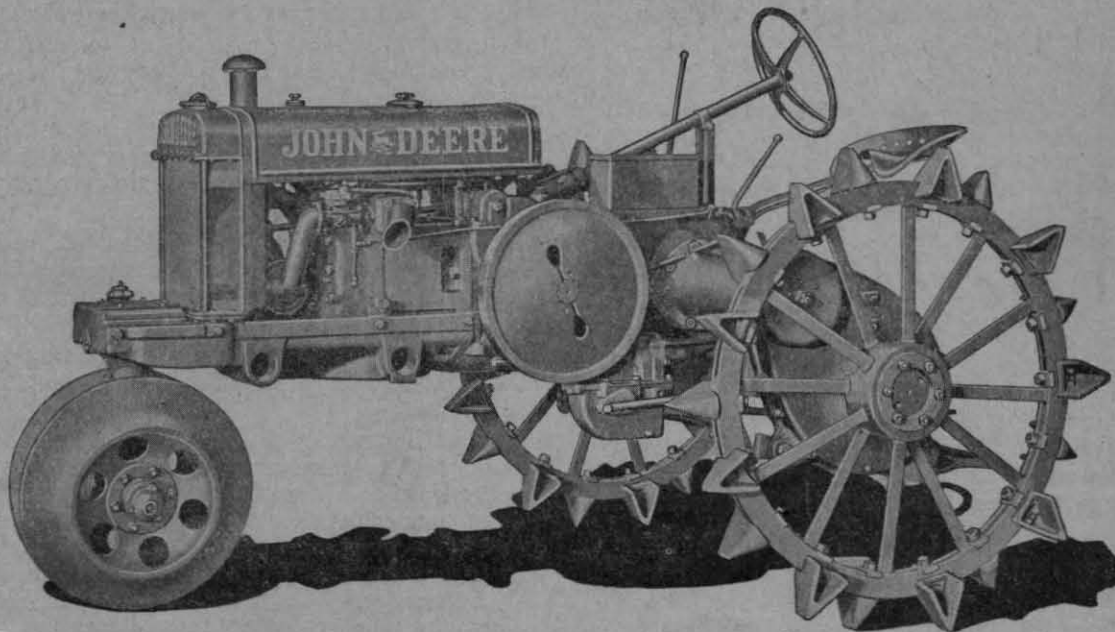
**READ AND FOLLOW THESE DIRECTIONS CAREFULLY AND
KEEP THEM FOR FUTURE REFERENCE**

INSTRUCTIONS and PARTS LIST

for

JOHN DEERE GENERAL PURPOSE WIDE TREAD TRACTOR

This Instruction Book and Parts List applies to the tractor with which it was sent. When ordering repairs for prior tractors be sure to consult Dealers' Illustrated Repair Book.



**READ THIS BOOK CAREFULLY BEFORE STARTING TRACTOR.
KEEP IT FOR REFERENCE.**

This tractor is designed and built for farm work. Simplicity and the accessibility of all parts make it possible for the operator to make his own adjustments without the aid of an expert. Read and study these instructions carefully, and keep for future reference. Give the machine daily attention, and make sure that all parts are kept tight and properly oiled. This attention and care will result in continuous and satisfactory service, and reduce wear and breakage to a minimum. Good oil and proper care mean reduction of your maintenance expense.

JOHN DEERE TRACTOR COMPANY
WATERLOO, IOWA, U. S. A.

Before Starting Tractor, Examine for any Damage Caused by Shipping or Unloading.

Seat. Assemble seat on tractor. Short leaf must be outside.

Lugs. Bolt on rear wheel lugs as shown in cut on cover.

Use lock washers on all bolts. Tighten bolts thoroughly after first half day's use.

Spark Plugs and Priming Cups. Spark plugs and priming cups are packed in tool box. Check spark plug points to .020 inch before screwing in cylinder.

Screw priming cups in cylinder.

Oil. Put 1-1/2 gallons good tractor-engine oil in crank case through filler pipe on rear of governor case. Summer, medium tractor oil; winter, medium auto oil.

Put 2 gallons of medium-weight transmission oil (not grease) in transmission case through filler hole in rear cover or until oil shows at plug on right side of case at back. Put 2 quarts medium transmission oil (not grease) in each rear chain housing or to level of upper plug. Use funnel furnished. Thin with kerosene in cold weather.

Fill the Zerk oil gun, with engine or transmission oil. Fill oilers at front fan bearing—2 on front wheels, 2 on steering drag link, 1 on steering gear housing and 1 at top of front steering spindle, until oil shows at bearings.

Remove cover on top of front pedestal and put in two quarts of medium weight transmission oil.

The use of CLEAN, high-quality oil and grease will make the tractor run better, last longer, and will prevent delays.

Air Cleaner. Soak air cleaner filter in engine oil for five minutes to be sure filter material is thoroughly saturated. Drain off surplus oil and replace filter.

Fuel. Before filling fuel tanks, shut off carburetor by turning the 3-way cock lever forward.

Fill kerosene at rear cap 15 gallons; gasoline at small cap 1-1/2 gallons. Water and dirt in fuel are sure to cause trouble. (Always strain fuel.) Be sure that vent hole in gasoline tank cap is open.

Water. Fill radiator with CLEAN water. Soft water is best—9 gallons.

Tractor Operation

To Start Engine. (1) Close water valve, set gearshift lever in neutral and pull clutch lever back.

(2) Set speed control and spark levers vertical.

(3) Close 3-way cock. Lever forward.

(4) Drain kerosene from carburetor.

(5) Set 3-way cock on gasoline, lever down.

(6) Turn (clockwise) both LOAD needle "G" and IDLE needle "A" lightly against seat to close. Open LOAD needle "G" one turn and IDLE needle "A" two turns.

(7) Impulse is automatic.

(8) Open priming cocks. Prime with fresh gasoline.

(9) Turn flywheel over to front (anti-clockwise).

Running Engine. (1) When engine starts, oil indicator RED HEAD must rise. Close priming cocks.

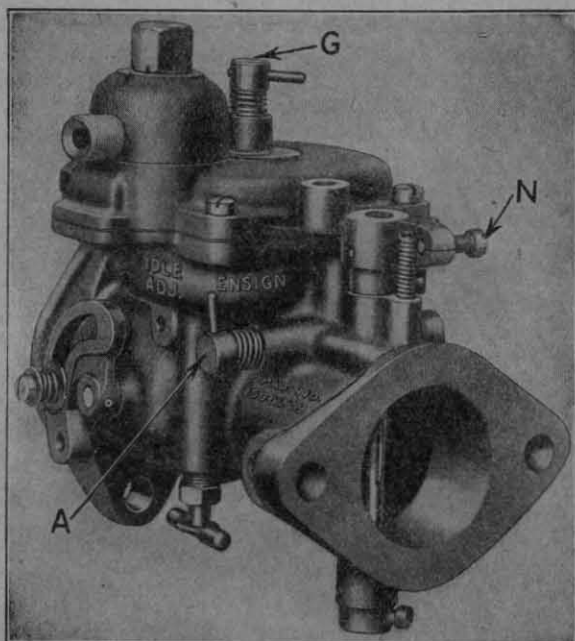
(2) Set spark lever right hand clear back to retarded position when idling or to warm up engine. Set clear ahead to advanced position when pulling load.

(3) When top of radiator feels hot turn 3-way cock lever toward rear on kerosene. Radiator should always be hot. Cover radiator if necessary in cool weather.

(4) Start engine on gasoline. Warm up engine thoroughly under load. Set 3-way cock to use fuel desired.

(5) With tractor pulling load, close LOAD needle "G" to point where engine loses power or backfires; then unscrew needle slowly until required power is developed. In warm weather, this should leave needle "G" open approximately 1/2 to 3/4 turn, using gasoline, and from 3/4 to 1-1/4 turns, using kerosene. More opening may be required for starting, for cold weather or for very heavy load. Keep LOAD needle "G" closed as far as possible for best fuel economy.

After adjusting LOAD needle "G", retard spark lever (clear back) and push throttle lever clear forward. The IDLE needle "A" is an air adjustment and by turning the needle in, produces a richer mixture and turning it out—a leaner mixture. Adjust IDLE needle "A" until engine runs evenly. In warm weather, this varies from 1-3/4 to 2 turns on gasoline to 1 or 1-1/2 turns on kerosene. This setting may vary on individual tractors, and, when made, let the IDLE adjustment alone.



If when load is released, governor closes throttle clear shut, causing uneven running (governor opening and closing) screw the throttle stop screw "N" in against stop spring until idling is satisfactory. With spark lever clear back and throttle lever nearly back against stop, engine should idle at 350-400 revolutions per minute.

(6) Engine speed is regulated by speed control lever (left hand).

To increase speed push lever forward. The engine develops its rated horse power at 950 R. P. M. NEVER OVERLOAD THE TRACTOR. RUN AT PART LOAD FIRST TWENTY HOURS.

Starting Tractor

(1) With engine running, stop pulley by pulling clutch lever back. This insures clutch being disengaged and applies pulley brake. Do not shift gears until pulley stops.

(2) The gear shift lever operates as follows:

Neutral, lever center; reverse, lever forward and to left—slot marked "Rev." High speed forward, lever back and to left—slot marked

"High". Intermediate speed forward, lever back and to right—slot marked "Int." Low speed forward, lever forward and to right—slot marked "Low".

(3) If gears do not shift freely, move clutch lever forward until pulley turns slowly. This allows gear teeth to line up for shifting. Shift gears carefully. Clashing them causes unnecessary wear and breakage.

(4) When gears are shifted, push clutch lever forward slowly until tractor starts; then shove clear ahead until it locks in place. The clutch is self-locking. See "Adjustment of Clutch" for further information.

(5) After backing into belt, set and latch brake, throw clutch out, turn pulley backward by pulling on belt to relieve bind in gear shift, shift gears to neutral.

Stopping Tractor. Disengage clutch by pulling clutch lever clear back. Always place gear shift lever in neutral after disengaging clutch, and engage clutch if tractor is idling. This reduces wear on clutch facings. This is important.

Stopping the Engine. (1) In stopping engine after running on kerosene, turn lever of 3-way cock forward, shutting off fuel. Engine will stop when fuel is used from carburetor. Pull spark lever and speed control lever back to run slowly. Pull speed control lever clear back to stop.

(2) If engine has been stopped on kerosene it can be started while still hot by priming with gasoline. If engine is cold, kerosene must be drained from carburetor and gasoline turned on before starting. Prime with fresh gasoline—high test in cold weather.

Care of Tractor

Before making adjustments on tractor, disconnect spark plug wires to prevent accidental starting of engine.

Keep your engine and tractor clean, well lubricated and adjusted properly. Before changing magneto or timing gears, be sure to read and understand instructions on timing. Mark parts so they can be put back in original position if removed.

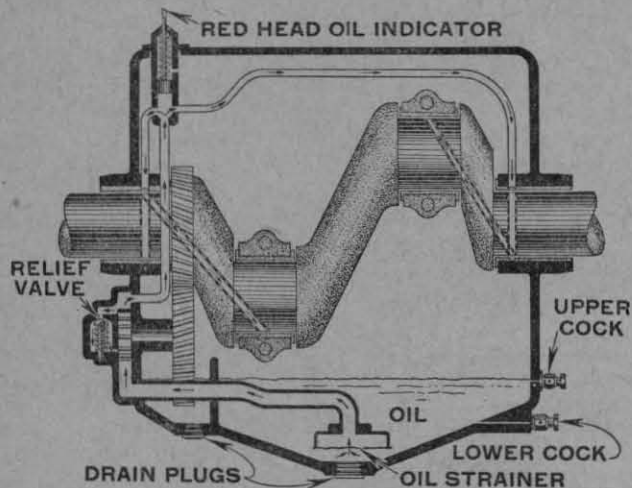
Keep all bolts and nuts tight.

Examine spark plugs occasionally, and keep them clean, with gap properly adjusted. In removing spark plugs, be careful not to break insulation.

Always use CLEAN oil, grease, and water.

Oiling System. When engine starts, oil indicator RED HEAD must rise to insure lubrication. If it does not, check supply of oil in crank case and see that oil indicator works freely. Examine pressure relief valve in pump cover; see that it is clean and works freely; see that oil pipe joints are not leaking. Indicator must be up when engine is running. Keep indicator clean and free from dirt and oil. If with oil in crank case indicator does not rise pump oil indicator rod up and down to relieve air lock.

If engine uses over 1 gallon of oil in 10 hours operation, examine the connecting rods and ad-



just if necessary. If it continues to use more than 1 gallon of oil, remove one or two washers from under the relief valve spring in pump cover below flywheel main bearing. To use more oil, add one or two washers. Pressure is set to use 1/2 to 1 gallon of oil in 10 hours, depending upon load.

Drain oil to center cock in right hand side of tractor every 10 hours, and fill to where oil runs out of upper cock (about one gallon). Drain out and wash crank case with gasoline or kerosene every 60 hours' operation.

If gasket between pump and pump cover is renewed, new gasket must not be thicker than the old one (.015 inch) or pump will not maintain pressure.

Keep oil in transmission case up to oil level plug on side of case. In cold weather, mix at least one quart kerosene with oil in transmission so that oil will carry up.

Keep oil in chain housings up to upper plug. Thin with kerosene in cold weather.

Keep oil in power-lift housing up to level of oil test plug on side of case.

Note: When additional oil is required for power lift order C1635 from your dealer.

Remove pipe plug on side of cylinder block and tappet inspection case cover. Drain and flush valve chamber once each season. Refill with 1 1/2 pts. consisting of three parts oil and one part kerosene.

Fuel System. If fuel does not flow readily, clean fuel screens at tank and carburetor screen at lower end of fuel line by removing fuel line nut and cap.

Should it be necessary to replace either the float assembly or the float valve assembly, the following must be observed;

Be sure the cork float, when in its upper position holding valve on the seat, projects 1/4 inch below the flange of the float chamber cover all the way around. To set the cork float, bend the lever.

To stop pre-ignition, turn water feed lever (at left of case) to the left. Feed only enough water to stop most of the pre-ignition. Turn water off when engine is stopped.

Air Cleaner. Before each day's work remove filter and rinse in gasoline or kerosene to remove dirt; then dip in new or used crank case oil. Drain off surplus oil and replace. Also remove dust cap and clean out auxiliary cleaner.

When the tractor is operated during dry dusty conditions, the filter collar and auxiliary cleaner should be cleaned every five hours, or oftener if necessary. Do not remove filter or auxiliary cleaner cap while engine is running.

Cooling System. Screen on top of radiator tubes prevents foreign matter from clogging tubes. Keep this screen clean.

Always use clean water, preferably soft water, and keep level above radiator tubes. Do not put water into empty cooling system when engine is hot.

If engine overheats, examine air passages in radiator core; remove all chaff, dirt, etc., and

straighten bent fins. Adjust tappets for proper clearance; adjust carburetor to secure lean mixture. Check magneto and valve timing, renew oil in crank case and test compression for leaky valves.

Keep radiator partly covered in cold weather to keep water hot, and save fuel. In freezing weather, drain all water from cooling system.

Ignition and Magneto. Magneto is properly aligned and timed when tractor leaves the factory. If it has been removed or timing changed, it may be re-timed as follows:

(1) Secure the magneto to engine, aligned with driving shaft member.

(2) Turn engine in direction it runs to end of compression stroke on left hand cylinder with the mark on the flywheel (L. H. IMPULSE) in line with mark on spline shaft cover.

(3) Loosen cap screws on timing plate clamp ring. This allows magneto to turn independent of engine.

(4) Turn magneto by moving drive collar same direction as flywheel runs until impulse trip gives spark on left hand cylinder spark plug wire.

(5) Wire from rear terminal to left spark plug. Wire from forward terminal to right spark plug.

(6) Tighten (3) cap screws on timing plate clamp ring.

(7) Check impulse trip by turning flywheel back 1/2 turn, and, when moved forward slowly, impulse should trip or click as mark on flywheel (L. H. IMPULSE) is in line with mark on spline shaft cover, if not, loosen cap screws on timing plate clamp ring, and if trip is early, turn magneto opposite direction engine runs; if trip is late, turn magneto same direction as engine runs.

Clutch. Clutch is properly adjusted when three adjusting nuts are drawn up to exactly the same tension, with clutch engaged, the clutch operating with a snap requiring some pressure to lock.

To tighten clutch, set clutch lever in engaged position, tighten each nut one slot to right; replace cotter. Repeat if necessary.

To replace clutch facings, remove nuts on adjusting bolts and remove outer adjusting disk. Remove cap screw on end of crankshaft and loosen clamp screws on driving disk. The driving disk can then be loosened by snapping clutch lever back and forth, then pulling it off splines. In re-

placing outer disk, be sure facing is in place. Adjust all three nuts to uniform tension with clutch engaged—this is important.

Pulley Brake. To adjust pulley brake, turn set screw until brake holds pulley from turning when clutch lever is held clear back.

Differential Brakes. To adjust foot pedal, loosen clamp screw on end of pedal and raise or lower one notch on shaft. Brake shaft stop need not be changed unless pedals set too high.

Steering Gear. (1) To take up lost motion in steering gear vertical shaft, loosen lock nut on adjusting screw on top of steering gear case and adjust. Do not adjust too tight and be sure to tighten lock nut. Take up end play in worm by tightening outer column nut tight, then back off 1/8 turn. Take out back lash between worm and gear by removing worm housing shims.

(2) Take out end play in drag link by adjusting screw plugs (in each end) up tight, then back up to first cotter key hole and replace cotter.

(3) Take out back lash between steering gear in Front Pedestal by removing top cover and cap on front. Turn notched adjusting segment clockwise until gears are tight, then back off one notch. Back lash should all be out but gears should not be tight enough to bind. Lock the adjustment at this point by inserting cap in front so that the extended portion fits in a notch of the adjusting segment. Turn steering wheel from one extreme to other several times to see that gears are free.

(4) Adjust bearings on steering spindle by screwing clamp nut on top down tight; then back up one slot, lock the adjustment at this point.

(5) **Front Wheel Bearings.** Relieve the bearings of all load by raising wheels from the ground.

Having removed the hub cap and cotter key, take up adjusting nut tight; then back off the adjusting nut one-third to one half turn, wheel should rotate freely, but without end play. Lock the adjustment at this point.

Valves: Loss of power is frequently due to poor compression caused by leaky valves. Turn engine over against compression to test for valve leaks. To grind valves, remove radiator and cylinder head. Remove valves and grind to an even seat, refacing valves and seat if rough or pitted. After grinding, test valves for leaks by filling ports with gasoline. A tight valve will hold gasoline even when rotated.

Timing Valves. (1) Remove inspection case cover on top of cylinder and turn flywheel until all tappets are free 1/4 turn of flywheel before left hand exhaust valve opens. Adjust tappets by adjusting screws until clearance is .030 inch. Be sure lock nuts are tight.

(2) Turn flywheel in direction engine runs until exhaust or left hand valve on left hand cylinder just starts to open.

(3) Mark on flywheel "L. H. Exh. Open." should be in line with or within 1 inch of mark on spline shaft cover. Use mark on cover in line with flywheel rim.

Note: Left hand side of tractor means left hand when operator is on seat looking forward.

(4) If not within one inch, remove governor case and left-hand cam shaft bearing.

(5) Mesh cam shaft gear with crankshaft gear so left hand Exhaust Valve just starts to open when flywheel mark is in line with arrow.

(6) Reassemble parts removed and retime magneto as per magneto instructions.

Bearings. To adjust connecting rod bearings remove cap and brass laminated shims. Pull one .003 inch layer off each, laminated shim. Tighten bolts and try rod. It should fit snugly, but not tight enough to bind. Repeat if necessary. Bearing caps and brass backed bearings are marked and must be put back in their proper place. Laminated shims must be between steel shims. Nuts must be tight and cotters replaced.

To adjust main bearings, remove flywheel (by loosening bolts and prying off) and end cover on left main bearing. Remove clutch fork bearing and belt pulley. See instructions on replacing clutch facings. Loosen both main bearing caps, slip out the brass laminated shim and proceed as for connecting rod bearings.

Fan. Examine fan friction facings once each season.

Fan spring should not be compressed to less than 1 inch in length, fan should not slip easily when engine is standing still. It should require at least a 12 pound pull at outer end of fan blade to slip it.

Lubricating Chart

The use of high-quality oil and grease will make your engine run better, last longer and will prevent delays.

Every 10 Hours

Crank Case—Drain crank case oil at center cock and fill to upper cock.	} Summer—Medium Tractor Oil. Winter—Medium Auto Oil.
Front Fan Bearing (1) Fill oiler until oil starts out	
Front Steering Spindle (top) (1) Fill oiler until oil starts out	} Use Transmission or Engine Oil in oil gun
Drag Link (2) Fill oiler until oil starts out	
Front Wheels (2) Fill oiler until oil starts out	
Steering Gear Housing (1) Fill oiler until oil starts out	

Every 60 Hours

Drain crank case and oil pump gear sump. Wash crank case with kerosene. Fill to upper cock with high-grade oil.

Left Spline Shaft Bearing—On continuous belt work only. Remove cap.—Pack with cup grease.

Brake Shaft—(2) Fill oiler until oil starts out—Use Transmission or Engine Oil in oil gun.

Every 200 Hours

Drain Transmission case, chain housings (2) and front steering gear housing. Wash with kerosene. Refill as per instructions below:

Transmission—Fill to oil level plug	} Medium weight transmission oil. Thin with kerosene in cold weather.
Chain Housings—Fill to upper plug	
Front Steering Gear Housing—Fill until gears dips in oil	

Important. Continuous tractor service with few repairs results from proper lubrication. Use good grade of engine oil, and use it regularly. Oil is cheaper than repairs.

INSTRUCTIONS FOR ORDERING PARTS

1. Always give serial number of tractor.
2. Give number and name of part ordered. If in doubt, send sketch or return broken parts, charges prepaid.
3. Order parts from regular John Deere dealer.
4. State how parts are to be shipped—freight, express or parcel post.

Number	Description	Number	Description
Transmission Case		Cam Shaft	
AC-166	Gasket—complete—rear cover	AC-80	Bearing—cam shaft—R. H., with cup
AC-255	Case—transmission—main	AC-81	Bearing—cam shaft—L. H., with cup
C-719	Stud—differential quill to case	AC-276	Gear—cam shaft—complete with governor drive gear
C-783	Stud—cylinder to case (long)	AC-564	Shaft—cam
C-826	Stud—cylinder to case (short)	C-305	Clamp ring—cam gear
C-826	Stud—front end to case	C-528	Cap screw—cam gear 3/8"x 1-1/2" drilled head
C-960	Cover—front	C-759	Gasket—cam shaft bearing, L. H.
C-961	Cover—rear	C-784	Spring—cam shaft thrust
C-1001	Gasket—complete—front cover	D-1164	Key—cam gear to shaft
C-1019	Stud—control quadrant to case	JD-7203	Cone with rollers—cam shaft bearing—Timken No. 09074
C-1038	Washer—cover cap screw	JD-7250	Cup—cam shaft bearing—Timken No. 09194
C-1244	Cover—power shaft opening	JD-7303	Timken bearing—complete—cam shaft
C-1245	Gasket—power shaft housing cover to case	Cam Follower	
D-625	Pipe plug—transmission filler and oil drain	C-37R	Guide—cam follower
D-625	Pipe plug—crank case drain	C-420	Adjusting screw—cam follower
K-2471	Plug—oil sump drain and transmission oil level	C-624	Cam follower
294-R	Stud—steering gear housing to case	Cylinder—Valves—Manifold	
Engine		AC-251	Manifold—intake and exhaust with exhaust elbow studs
AC-125	Flywheel with bolts and dowel pin	AC-257	Cylinder—complete with studs and valve guides
AC-161	Main bearing housing with cap, L. H.	C-246R	Guide—valve
AC-162	Main bearing housing with cap, R. H.	C-248R	Exhaust elbow
C-35-R	Cover—L. H. main bearing	C-524	Priming cup
C-138	Collar—flywheel spacing	C-882	Cap screw—front end to cylinder—drilled head
C-491	Shim—main bearing—steel	C-992	Spring—valve
C-520	Shim—main bearing—laminated	C-1002	Gasket—valve cover
C-602	Gasket—L. H. main bearing cover	C-1003	Gasket—cylinder to case
C-618	Adjusting screw—L. H. main bearing	C-1006	Gasket—manifold to cylinder
C-673	Gasket—L. H. main bearing—housing to case	C-1009	Cover—valve
C-981	Bolt—flywheel	C-1012	Valve—intake and exhaust
C-1100	Bushing—main bearing—half	C-1174	Stud—manifold to cylinder
D-174	Adjusting screw—R. H. main bearing	C-1600	Spark plug
D-186	Dowel pin—flywheel—1/4"x 1/2"	C-1604	Cap—valve spring
D-626	Felt R. H. main bearing	C-1605	Lock washer—valve stem—half
D-1080	Screw—flywheel locating	C-1606	Washer—valve spring centering
Pistons—Connecting Rod—Crankshaft		K-2198	Stud—for cylinder head
AC-177	Crankshaft with gear	K-2525	Plug—valve case drain—cylinder
AC-193	Connecting rod—complete	294-R	Stud—exhaust elbow to manifold
AC-194	Connecting rod and cap with piston pin bushing	321-R	Gasket—carburetor to manifold
AD-102	Bolt with nut and cotter—connecting rod	Cylinder Head	
C-150	Gear—crankshaft	C-250R	Cylinder head
C-245-R	Piston	C-251R	Water inlet pipe—cylinder head
C-921	Pin—piston	C-1005	Gasket—head to cylinder
C-958	Shim—connecting rod—steel	Governor	
C-968	Shim—connecting rod—laminated	AC-201	Weight—governor
C-1014	Ring—piston (3 used per piston)	AC-276	Gear—governor drive with cam shaft gear
C-1015	Ring—piston—oil drain (1 used per piston)	AC-283	Sleeve—governor shaft
C-1099	Bushing—piston pin	AC-344	Case—governor
C-1101	Bushing—connecting rod—half		
D-186	Dowel pin—crankshaft 1/4"x 1/2"		
D-334	Set screw—piston pin		
D-342	Key—gear to crankshaft		

Number	Description	Number	Description
C-308	Gear—fan drive bevel	D-417	Elbow—solder bushing 5/16"
C-311R	Housing R. H. governor bearing	D-458	Packing nut—discharge pipe
C-609	Gasket—governor case to main case	D-815R	Body—oil indicator
C-902	Pin—governor weight to gear	D-818	Bushing—discharge pipe to indicator body
C-903	Pin—governor weight to spring		
C-908	Shaft—inside governor lever		Fuel System
C-950	Lever—governor inside	AC-102	Gasoline strainer—complete
C-998	Thrust bearing—complete	AC-116	Fuel tank—complete
C-1193	Shaft—governor	AC-183	Bracket—fuel tank—front and rear
C-1195	Gear—governor	AC-204	Gasoline pipe—complete
C-1196	Snap ring—L. H. governor bearing	AC-205	Fuel strainer—complete
C-1197	Felt washer—R. H. governor bearing	AC-389	Fuel pipe—complete
C-1200	Nut—slotted—governor and fan shaft	AD-78	Filler cap—complete—kerosene
C-1201	Lock nut—fan drive bevel gear	AD-320	3-way cock
C-1202	Lock washer—fan drive bevel gear	D-19R	Cap—gas filler
C-1209	Elbow—oil filler	D-126	Baffle—filler cap
C-1364	Spring—governor weight	D-288	Gasket—fuel tank filler cap
D-167	Plug—oil filler elbow	D-319R	Cap—kerosene filler
D-297	Gasket—governor bearings—thick	D-362	Clamp bar—filler cap
D-403	Key—fan drive bevel gear	D-468	Cushion—fuel tank bracket
JD-7203	Cone includes roller—R. H. governor bearing—Timken No. 09074		Hood
JD-7209	Cone includes roller—L. H. governor bearing—Timken No. 15118	AC-491	Hood—complete
JD-7250	Cup—R. H. governor bearing—Timken No. 09194	C-941	Clamp—hood
JD-7259	Cup—L. H. governor bearing—Timken No. 15250	C-980	Bolt—hood to bracket (special head)
JD-7303	Timken bearing—complete—R. H. governor		Cooling System
JD-7309	Timken bearing—complete—L. H. governor	AC-463	Upper water pipe, C-380R, with bearing cup pin
	Lubricating System—Oil Pump	AC-494	Radiator—complete
AC-445	Strainer—complete	AD-641	Filler cap—complete—radiator
C-168R	Gear—oil pump drive	C-256R	Top tank—radiator
C-169R	Body—oil pump	C-257R	Radiator side
C-366	Pipe—oil strainer	C-259R	Lower connection—radiator
C-401	Pin—oil pump cover	C-332R	Bottom tank—radiator
C-604	Gasket—oil pump body to case	C-589	Gasket—upper and lower connections to radiator
C-725	Oil pump drive shaft and gear	C-616	Hose—radiator
C-726	Oil pump idler shaft and gear	C-617	Hose clamp
C-1115	Screen—strainer	C-1004	Gasket—radiator top and bottom
C-1490	Gasket—strainer flange	C-1023	Screen over radiator tubes
D-29R	Cover—oil pump gear	C-1106	Core—radiator
D-162	Relief valve—oil pump cover	C-1522	Strap and fan shroud—radiator
D-180	Nut—relief valve	D-305	Gasket—lower—water pipe—cylinder to radiator
D-302	Gasket—oil pump cover—1/64" thick	D-473	Gasket—radiator cap
D-379	Spring—relief valve	D-1567R	Cap—radiator filler
D-453	Washer—relief valve—pressure	D-1568	Baffle—radiator filler cap
D-456	Elbow—discharge pipe 3/8"	D-1569	Clamp bail—filler cap
D-465	Gasket—relief valve nut	E-2142	Plug—water drain
D-793	Body—oil level test cock		Fan
D-794	Plug—oil level test cock	AC-49	Spider and blades—complete
E-2207	Key—drive gear to shaft	C-308	Gear—fan drive bevel
	Oil Indicator and Piping	C-310R	Housing—rear fan bearing
AC-431	Oil pipe to governor case	C-381R	Cover—front fan bearing
AC-431	Oil pipe to R. H. main bearing	C-1207	Bevel pinion—on fan shaft
AD-44	Oil pipe to L. H. main bearing	C-1469	Felt retainer—fan shaft—in water pipe
AD-290	Piston with rod—oil indicator	C-1525	Shaft—fan
C-629	Oil pipe—pump discharge to indicator	C-1526	Spacer—front fan bearing
C-972	Oil jet—governor case	C-1527	Gasket—front fan bearing cover
C-1468	Tee—oil indicator body	C-1528	Pin—front fan bearing
D-310	Gasket—indicator body	C-1529	Spring—front fan bearing
D-380	Spring—oil indicator	C-1530	Dust shield—front fan bearing
D-392	Body—solder bushing 5/16"	D-297	Gasket—rear fan housing—thick
		D-378	Spring—fan friction

LIST OF REPAIR PARTS

Number	Description	Number	Description
D-396	Disk—fan drive	C-228	Gear—sliding power shaft drive
D-399	Facing—fan friction	C-422	Key—spline shaft gear
D-400	Key—fan disk	C-490	Cover—spline shaft—left
D-403	Key—bevel pinion	C-535	Hexagon nut—spline shaft
D-684	Felt washer—fan shaft—in water pipe	C-591	Gasket—left spline shaft cover
D-825	Felt washer—front fan bearing cover	C-658	Oil collar—spline shaft
D-826	Felt retainer—front fan bearing cover	C-660	Shaft—spline
JD-7203	Cone includes rollers—fan shaft bearing—Timken No. 09074	C-666	Snap ring—spline shaft bearing
JD-7250	Cup rear fan shaft bearing—Timken No. 09194	D-136	Washer—spline shaft nut
JD-7251	Cup—front fan bearing—Timken No. 09224	D-490	Washer—spline shaft nut R. H.
JD-7303	Timken bearing—fan shaft—rear	JD-7214	Cone—includes rollers—spline shaft bearing L. H. Timken No. 3193
JD-7759	Oil fitting—front fan bearing 1/8" Bassick No. Z-35-A	JD-7225	Cone—includes rollers—spline shaft bearing, R. H. Timken No. 447
27R	Washer—fan shaft—front	JD-7260	Cup—spline shaft bearing, L. H.—Timken No. 3120
Pulley and Clutch		JD-7274	Cup—spline shaft bearing, R. H.—Timken No. 432
AC-130	Pulley with cone, bushing and gear	JD-7314	Timken bearing—complete—spline shaft, L. H.
AC-229	Disk—clutch driving with bolts	JD-7325	Timken bearing—complete—spline shaft, R. H.
AC-237	Shaft and lever—clutch throw-out	Gear Shift	
AC-446	Brake with lining—pulley	AC-71	Fork—shift—low and reverse—complete
C-9R	Cone—clutch	AC-72	Fork—shift—high and intermediate—complete
C-74R	Dog—clutch	AC-210	Gear—idler with bushing—power shaft
C-116	Gear—pulley	C-27-R	Gate—gear shift
C-142R	Disk—clutch adjusting	C-98-R	Arm—on gear shift lever
C-171R	Fork—clutch	C-139	Shift fork—power shaft sliding gear
C-172R	Bearing—clutch fork	C-443	Lever—gear shift
C-184R	Cover—pulley and spline gear	C-457	Yoke—shift fork
C-404	Pin—clutch cone drive	C-549	Spring—gear shift lever
C-434	Toggle—clutch dog	C-657	Lever—power shifting
C-511	Dust shield—clutch	C-686	Shaft—shifting fork
C-545	Pin—pulley brake to clutch fork bearing	C-1060	Washer—leather—gear shift lever
C-603	Gasket—clutch fork shaft bearing	C-1098	Bushing—power shaft idler gear
C-614	Facing—clutch friction	C-1246	Washer—power shifting lever
C-643	Bolt—clutch operating	D-342	Key—arm to lever
C-667	Snap ring—gear retainer	D-678	Adjusting screw—shift shaft
C-717	Gasket—pulley and spline gear cover	D-789	Nipple—stop pin
C-732	Welsh plug—clutch fork bearing	K-2573	Washer—gear shift lever
DC-834	Cap screw—dust shield—drilled head	1146R	Spring—stop pin
D-100R	Collar, clutch	2323R	Pin—stop
D-141	Washer—drive disk to crankshaft	Reverse Shaft	
D-178	Cap screw pivot—clutch fork	AC-73	Reverse gear with bushing
D-202	Bolt—clutch drive disk	AC-458	Shaft—reverse
D-279	Key—belt pulley gear	C-496	Washer—reverse gear spacing
D-355	Pin—clutch dog to pulley	C-619	Welsh plug—reverse shaft
D-359	Snap ring—bearing retainer	C-1098	Bushing—reverse gear
D-377	Spring—clutch release	C-1519	Spacer—reverse shaft
D-385	Lining—pulley brake	C-1520	Washer—reverse gear spacing
D-552	Bushing—pulley	Differential	
D-651	Washer—pulley bearing	AC-149	Gears—high and low with spider
D-917	Retainer—felt washer	AC-150	Gear—intermediate with spider
D-918	Felt washer—pulley bearing	AC-349	Quill—differential shaft, R. H.
JD-7494	Outer race—Hyatt bearing—Hyatt No. OR-212	AC-350	Quill—differential shaft—L. H. with snap ring
JD-7544	Roller assembly—Hyatt bearing—Hyatt No. RA-212	C-386-R	Sprocket—differential shaft
JD-7594	Inner race—Hyatt bearing—Hyatt No. IR-212	C-462	Washer—differential sprocket bearing
JD-7644	Hyatt bearing—complete—pulley (same as AD-1)	C-535	Hexagon nut—differential shaft
Spline Shaft		C-578	Bolt—differential quill to housing
AC-79	Gear—spline shaft	C-594	Gasket—quill to housing
AC-176	Quill—spline shaft, C-149R, complete with bearing cup, R. H.	C-672	Gasket—quill, L. H.
C-85	Pinion—low and reverse—sliding		
C-207	Pinion—high and intermediate—sliding		

Number	Description	Number	Description
C-692	Snap ring—outside—differential bearing	C-1372	Pin—brake latch
C-718	Gasket—quill, R. H.	C-1378	Latch—brake
C-719	Stud—differential quill to case	C-1394	Bracket—trip pedal
C-786	Case—differential—pilot side	D-635	Felt retainer—brake hub
C-787	Case—differential—recess side	D-636	Felt washer—brake hub
C-788	Spider—differential pinion	K-2573	Washer—brake cam
C-789	Pinion—differential		
C-790	Gear—bevel side		Controls
C-791	Bolt—differential flange	AC-226	Speed change lever and trunnion
C-1375	Shaft—differential	AC-520	Quadrant—control
C-1504	Dowel pin	C-261R	Arm—governor speed control
D-136	Washer—differential shaft	C-440	Clip—clutch operating rod
D-359	Snap ring—inside—differential bearing	C-447	Lever—clutch operating
D-651	Shim washer—differential bearing	C-900	Lever—water feed
JD-7674	Ball bearing—differential shaft—outside	C-904	Throttle rod
JD-7691	Ball bearing—differential shaft—inside	C-906	Crank—speed control
1304 R	Nut—differential flange bolt	C-908	Shaft—governor control lever
		C-912	Bushing—taper-control quadrant stud
	Final Drive and Rear Wheels	C-916	Sleeve—speed change spring
AC-397	Housing with studs—rear axle, R. H.	C-924	Rod—spark control
AC-398	Housing with studs—rear axle, L. H.	C-925	Rod—speed control
AC-454	Nut—rear axle clamp	C-927	Rod—clutch operating
AC-559	Drive chain, 44 links	C-954	Bracket—speed control crank
C-24R	Collar—rear axle	C-955	Clip—water feed lever—front
C-97	Shaft—rear axle	C-956	Clip—water feed lever—rear
C-367R	Spade lug	C-957	Clip—control rod tube
C-399R	Sprocket—rear axle	C-994	Spring—governor speed change
C-413	Bolt—rear wheel to axle	C-1018	Tube—control rod
C-484	Clamp—quill bolt	C-1019	Stud—control quadrant to case
C-493	Dust collar—rear axle	C-1091	Bolt—governor control fork
C-559	Felt retainer—rear axle	C-1595	Bolt—clutch operating lever
C-561	Felt washer—inside—rear axle	D-87-R	Lever—spark and speed control
C-562	Snap ring—rear axle bearing	D-157	End—carburetor spark and speed control rod
C-1250	Cover—rear axle housing, R. H. and L. H.	D-393R	Yoke—clutch operating rod
C-1251	Gasket—rear axle housing cover	D-407	Pin—clutch rod yoke
C-1453	Cover—rear axle nut	E-2057	Washer on throttle rod
C-1454	Gasket—rear axle nut cover	K-2172	Spring—control lever friction
C-1494	Stud—rear axle housing, $\frac{5}{8}$ " x $2\frac{1}{8}$ "		Water Feed
C-1513	Bolt—spade lug	AC-274	Water feed pipe
C-1514	Lug washer	C-299	Body—water feed valve
C-1547	Drive wheel—complete—R. H. and L. H.	C-663	Check—water valve
C-1593	Stud—rear axle housing $\frac{1}{2}$ " x $2\frac{5}{8}$ "	C-975	Elbow—water feed pipe to cylinder
E-2142	Plug—oil filler	C-1181	Water valve nozzle
JD-7242	Cone—includes roller—rear axle bearing—Timken No. 3982	D-410	Packing nut—needle valve
JD-7292	Cup—rear axle bearing—Timken No. 3920	D-449	Packing nut—water feed
JD-7342	Timken bearing—complete—rear axle	D-451	Needle valve—water feed
		E-2149	Nut—solder bushing—water feed pipe
		E-2150	Gland—water feed pipe
	Brakes		Steering Gear
AC-197	Brake band—complete with lining	AC-332	Housing—steering gear
AC-208	Brake drum with hub	AC-333	Housing—steering worm
C-327	Brake cam—R. H.	AC-427	Steering shaft with steering worm
C-328	Brake cam—L. H.	AC-428	Wheel—steering worm
C-360R	Brake pedal—complete—right and left	C-112R	Collar—steering column
C-423	Anchor pin—brake	C-276R	Adjusting nut—steering worm
C-494	Washer—felt retainer—brake	C-323R	Arm—steering—rear
C-596	Gasket—brake cam	C-678	Wheel—steering
C-656	Stop—brake lever	C-934	Support—steering column
C-1087	Lining—brake band	C-977	Adjusting screw—steering gear vertical shaft
C-1224	Spring—brake band		
C-1224	Spring—brake lever		
C-1248	Guard—brake drum, R. H.		
C-1249	Guard—brake drum, L. H.		

Number	Description	Number	Description
C-985	Nut—steering wheel	JD-7226	Cone with rollers—front steering spindle—upper bearing—Timken No. 342
C-989	Tube—steering gear vertical shaft	JD-7242	Cone with rollers—front wheel spindle—lower bearing—Timken No. 3982
C-1020	Tube—steering shaft	JD-7266	Cup—front wheel bearing—outside—Timken No. 2720
C-1021	Bushing—steering column—upper	JD-7270	Cup—front wheel bearing—inside—Timken No. 3320
C-1059	Thrust washer—steering worm wheel	JD-7270	Cup—front steering spindle—upper bearing—Timken No. 3320
C-1102	Bushing—steering gear vertical shaft	JD-7292	Cup—front steering spindle—lower bearing—Timken No. 3920
C-1104	Nut—steering gear vertical shaft	JD-7316	Timken bearing—complete—front wheel—outside
C-1215	Spring—oil seal—lower steering gear vertical shaft	JD-7324	Timken bearing—complete—front wheel—inside
C-1220	Dowel pin—steering gear housing	JD-7326	Timken bearing—complete—front steering spindle—upper
C-1231	Gasket—steering worm housing—thick	JD-7342	Timken bearing—complete—front steering spindle—lower
C-1234	Shaft—steering gear	JD-7759	Oil fitting—front wheels and steering spindle, 1/8", Bussick No. Z-35-A
C-1242	Gasket—steering vertical housing—thin	684R	Washer—lower spindle—felt retainer
D-342	Key—steering column shaft		
D-743	Washer—oil seal—lower steering gear vertical shaft		Drawbar and Seat
D-825	Felt washer—lower—steering gear vertical shaft	AC-282	Seat spring and leaf
JD-7203	Cone—with rollers—steering worm—front bearing—Timken No. 09074	AC-351	Foot rest with bracket
JD-7209	Cone—with rollers—steering worm bearing—rear—Timken No. 15118	C-1213	Spacer drawbar
JD-7250	Cup—steering worm bearing—front—Timken No. 09194	C-1214	Cap screw—drawbar
JD-7259	Cup—steering worm bearing—rear—Timken No. 15250	C-1376	Drawbar
JD-7303	Bearing—complete—steering worm—front	D-867	Seat
JD-7309	Bearing—complete—steering worm—rear	D-897	Stud—seat spring clamp
	Front Wheels—Pedestal—Steering Parts	D-901	Cap screw—seat spring
AC-119	Hub cap with oil fitting		Magneto
AC-346	Spindle and knuckle—front wheel	AC-432	Magneto, with advance stop
AC-352	Dust cover—drag link—front	AC-561	Wire—R. H. spark plug
AC-408	Front pedestal with steering arm bushings	AC-562	Wire—L. H. spark plug
AC-429	Drag link—complete	C-363	Flange—magneto drive
AC-513	Hub, C-391R—front wheel with races	C-417	Collar—magneto drive
AD-452	Nut—front wheel bearing	C-424	Plate—magneto timing
C-324R	Arm—steering—front	C-471	Clamp ring—magneto timing plate
C-325R	Gear—spindle	C-1016	Bracket—magneto
C-326R	Gear—steering arm	C-1203	Arm—magneto control
C-331R	Felt retainer—lower—pedestal	C-1204	Stop—magneto advance
C-334R	Front wheel—disk type	C-1300	Safety nipple—spark plug wire
C-336R	Sleeve—steering spindle	C-1600	Spark plug
C-337R	Eccentric—steering spindle	C-1603	Bracket—spark plug wire
C-338R	Lock plate—steering spindle eccentric	D-316	Washer—magneto bracket
C-677	Gasket—front wheel hub cap	D-369	Wood clamp—spark plug wire
C-838	Bearing—ball stud—drag link	D-403	Key—magneto drive flange
C-840	Screw plug—drag link		Carburetor
C-1275	Front end support	AC-174	Carburetor—complete
C-1288	Pin—steering spindle sleeve	C-1117	Spring—throttle stop
C-1373	Shaft—steering arm	C-1118	Disk—throttle
C-1381	Washer—steering arm shaft spindle	C-1119	Gasket—strainer cage
C-1382	Cover—pedestal	C-1120	Screw—float lever
C-1388	Felt washer—lower pedestal	C-1121	Washer—float lever screw
C-1390	Washer—cork—steering spindle—lower	C-1122	Float—cork
C-1391	Gasket—pedestal cover	C-1123	Float—lever
C-1392	Gasket—pedestal lower felt retainer	C-1125	Pivot—float lever
C-1455	Bushing—steering arm—upper	C-1126	Screen—strainer cage
C-1456	Bushing—steering arm—lower	C-1127	Nut—strainer cage
C-1521	Welsh plug—steering arm shaft		
D-635	Felt retainer—front wheel and steering spindle		
D-636	Felt washer—front wheel		
D-1034	Gasket—Eccentric lock plate		
JD-7216	Cone with rollers—front wheel bearing—outside—Timken No. 2785		
JD-7224	Cone with rollers—front wheel bearing—inside—Timken No. 3383		

The Manufacturer's Interest in Your Tractor

The value of your tractor investment depends upon, first, the amount of continuous service it gives you; second, the cost of operation and upkeep. The best-built tractor may prove to be a poor investment if proper care and precautions are not used in operating it. In the John Deere, we use the best quality of materials made up in accordance with the best-known engineering design. We employ highly-skilled mechanics, so that the finished tractor will be a machine capable of doing the hard, steady work for which it is built. We furnish carefully-written, detailed instructions on how to care for and operate the tractor, and then must depend upon its owner to follow them carefully if he is to get the full value from his investment.

IMPORTANCE OF KNOWING YOUR TRACTOR

Study the manual of instructions sent with your tractor—this is vitally important. Go over your tractor as you read your instruction book—become familiar with every part, its operation, care and adjustment. A little attention daily in keeping the working parts in good condition will prevent small troubles from becoming serious and costly.

Do not hesitate to employ the same type of skilled help for tractor repair work that you would employ for your automobile. Proper care will pay big dividends in better and longer service and low repair bills.

IMPORTANCE OF GOOD LUBRICATION

There are many oil manufacturers in the country who make hundreds of brands of oil. No one brand is always obtainable by all tractor owners. It is, therefore, impractical to recommend brands of oil for each locality. The selection of oil must be left largely to the judgment of the owner. A number of oil companies employ experienced lubricating engineers, who determine, by actual test, the most effective oil to use in every make of tractor. Recommendations made from the results of these tests are widely advertised. Reliable companies making such recommendations assume responsibility for the performance of their oil in your tractor. There are some irresponsible concerns who make a practice of meeting responsible competition with "just as good" an oil at a much lower price. The use of such oils is hazardous and may result in serious damage to the tractor before the quality can be determined. Oils should be bought on a basis of quality and on the reputation of the manufacturer.

Good High-Grade Oil Doubles the Life of Your Tractor