

A75, A100 AND A200 PORTABLE TANK-MOUNTED AIR COMPRESSORS



JOHN DEERE

OPERATORS MANUAL

A75, A100 AND A200 PORTABLE
TANK-MOUNTED AIR
COMPRESSORS

OMTY4576 D8 English

JOHN DEERE LAWN & GROUNDS CARE
DIVISION
OMTY4576 D8

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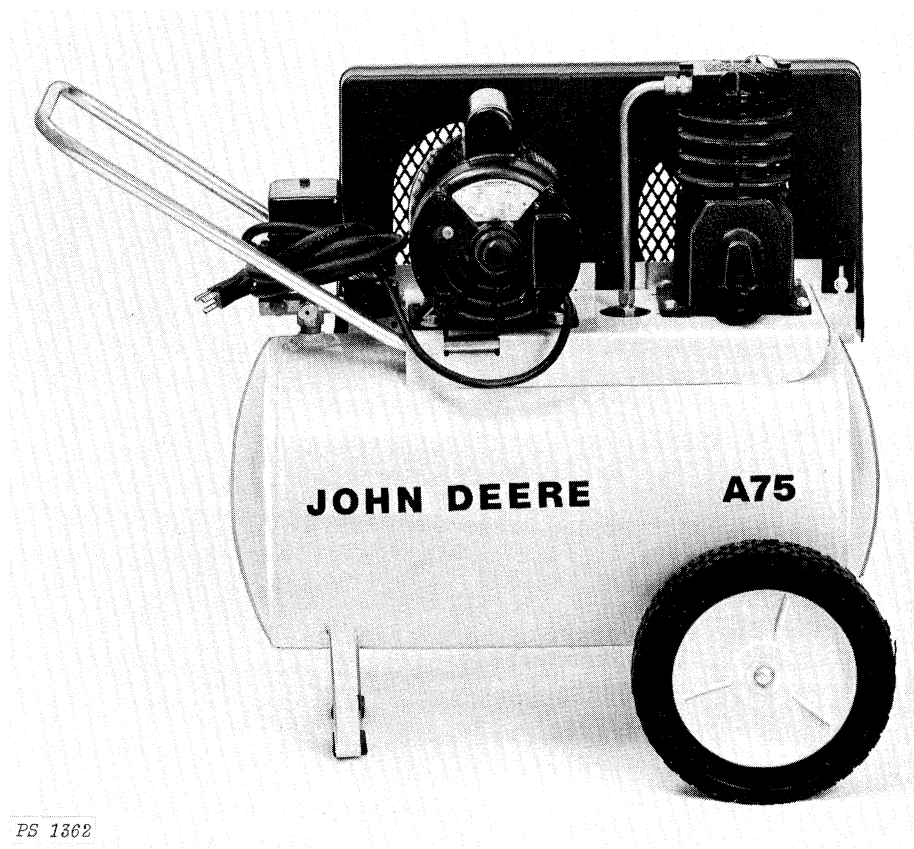
To The Purchaser

This portable tank-mounted compressor was designed and manufactured to give years of dependable service. To keep it operating efficiently read and follow instructions in this publication. This information includes safety, operation, and service.



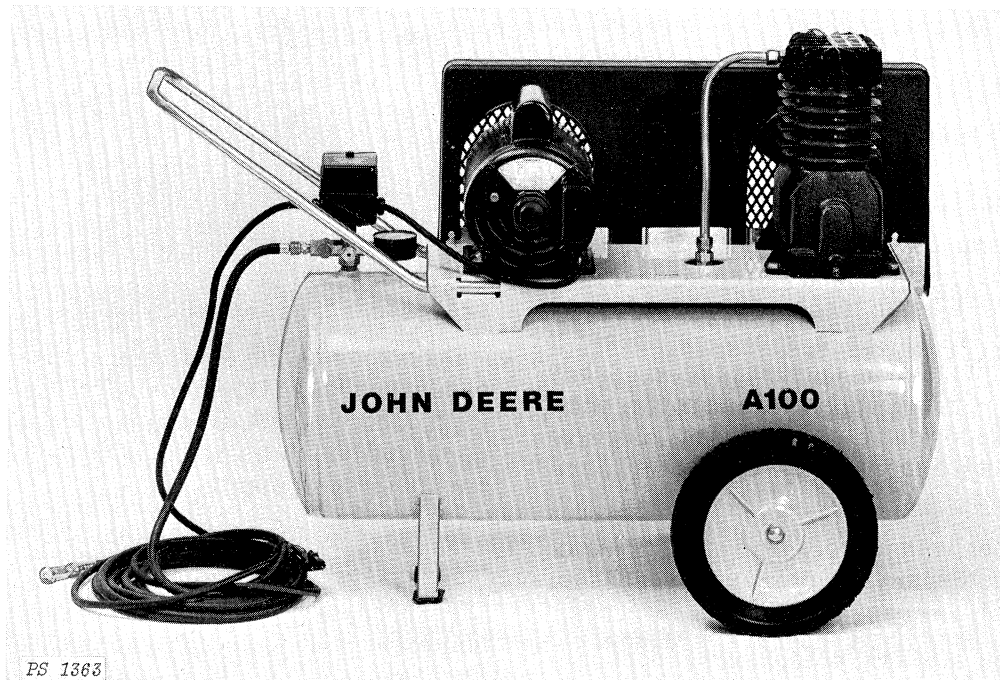
This safety symbol identifies important safety messages in this manual. When you see this symbol be alert to the possibility of personal injury and carefully read the message that follows.

Because John Deere sells its products world-wide, U.S. units of measure are shown with their respective metric equivalents throughout this operator's manual. These equivalents are the SI (International System) Units of Measure.



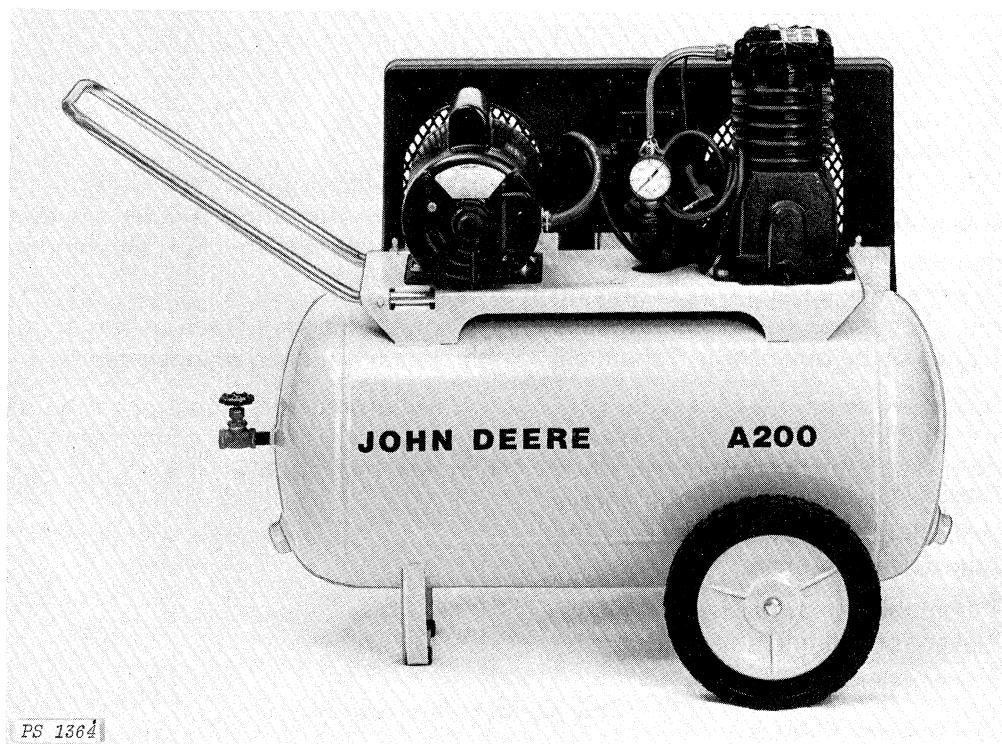
PS 1362

John Deere Model A-75 Portable, Tank-Mounted Compressor



PS 1363

John Deere Model A-100 Portable, Tank-Mounted Compressor



PS 1364

John Deere Model A-200 Portable, Tank-Mounted Compressor

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Safety



Your John Deere Portable Tank-Mounted Compressor has been designed to be as safe as possible. Like all mechanical power-operated equipment it can be a source of hazard if improperly maintained or carelessly used. Safety begins with you. Keep your compressor in good operating condition and use it wisely. Observe the following precautions when using your compressor.

Do not tamper with factory-set relief valves or attempt to adjust factory-set pressure switches on overload controls.

Make sure all auxiliary equipment and attachments are rated to operate safely at the compressor's *maximum* air pressure (psi).

Make sure all wiring and power cords are sized to the current requirements. Treat all electrical circuits with respect.

Do not run a compressor in a tightly enclosed space or where circulating air cannot cool the motor or compressor unit.

Handle paints and other spray liquids carefully. Follow the manufacturer's directions for mixing and spraying. Be especially careful when spraying with Agricultural Chemicals. (Read the Special Precautions on page 9 before using a chemical spray.)

Wear protective clothing when spraying. Wear a cap, goggles and a respirator or face mask, when spraying paint. When using agricultural sprays wear the protective clothing recommended by the manufacturer of the spray chemical.

Don't spray flammable mixtures near a heater or open flame. Never spray flammable mixtures on

or into any operating equipment such as motors or engines, or into any electrical switches or controls connected to live circuits.

Do not place the compressor on untested or insecure scaffolds. Do not move the compressor unit while it is plugged in and running. Keep long power cords and supply hoses out of the way — where you cannot trip over them.

Watch out for people and animals who may wander into the spray path or area.

Be prepared for emergencies. Have a fire extinguisher and first aid kit handy. Know how to use them.

Obey all local fire prevention building code and occupational health and safety regulations.

Disconnect the compressor from the power supply and release all tank and supply line pressures before working on the compressor or air system components.

Do not touch the compressor during or immediately after operation. While operating the compressor becomes very hot; touching it could cause a severe burn.

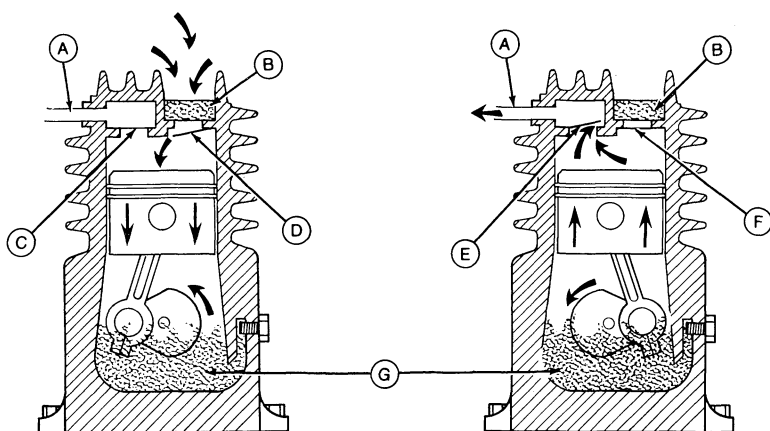
Protect the eyes when using compressed air to blow away dust, dirt or loose debris.

Set the pressure regulator to the required pressure before using the compressor to inflate tires, air bags, boats or toys.



Operation

HOW THE COMPRESSOR WORKS



- A - Pressure Line
- B - Filter
- C - Outlet Valve Closed
- D - Intake Reed Open
- E - Outlet Valve Open
- F - Intake Reed Closed
- G - Oil

TY3064

Piston Air Compressor Operation

The John Deere Portable, Tank-Mounted Compressors (Models — A-75, A-100 and A-200) are electric motor powered piston-type air compressors. In a piston-type compressor, a piston, actuated by a crankshaft, moves up and down inside a cylinder. On the downstroke, air is drawn into the compression chamber through a one-way valve. On the upstroke, as the air is squeezed by the rising piston, a second one-way valve is forced open and the air is forced into a pressure tank. As more and more air is forced into the tank, the pressure inside the tank rises.

Piston-type compressors can develop very high pressures. The pressure vessel (air receiver or tank), into which a piston-type compressor discharges air, must be protected from overload by a relief (safety) valve, pressure switch, or both.

With a piston-type compressor, working air is drawn from the supply in the pressure tank. Although working air is not available until the compressor has raised tank pressure above that required at the outlet, the compressor can pump

more air into the tank than most applications will require. Because the tank pressure is usually greater than needed, tank air is fed to the outlet through a pressure regulator and a pressure switch is used to prevent the compressor from operating continuously.

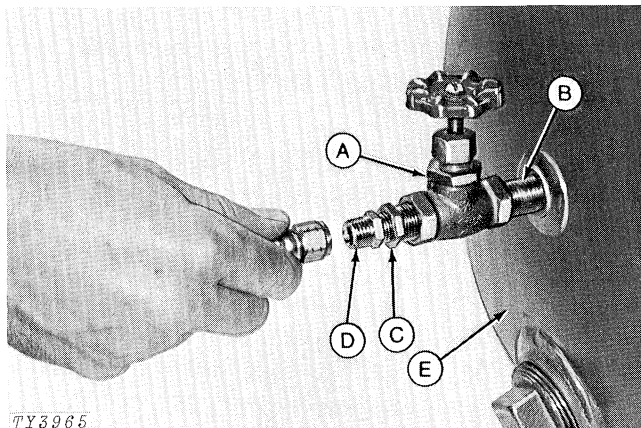
The pressure switch starts the compressor when tank pressure drops below the rated "ON" pressure and stops it when tank pressure reaches the "OFF" limit (see "Specifications", page 16 for your model compressor). At all times, the compressor supplies more than enough air for most compressed air requirements. The rated pressure and delivery in cubic feet-per-minute (CFM) for the several compressor models covered by this manual are given in the Specifications section of this manual.

CAUTION: The tank is protected by a relief valve. Pressure in excess of rated tank capacity will actuate the relief valve, (see "Specifications"). The relief valve is factory-set for safe operation. Do not change the relief valve setting.

ASSEMBLY

Except for pre-operational lubrication and a brief break-in period, (see page 6), the John Deere Portable Air Compressor is ready for operation as received. To prepare the compressor for use, attach the handle, install a pressure regulator (if required) and connect the air hose to the delivery port.

To attach the handle: slip the open end of the handle into the motor end of the air receiver mounting plate. Clamp in place by tightening the handle set screw.



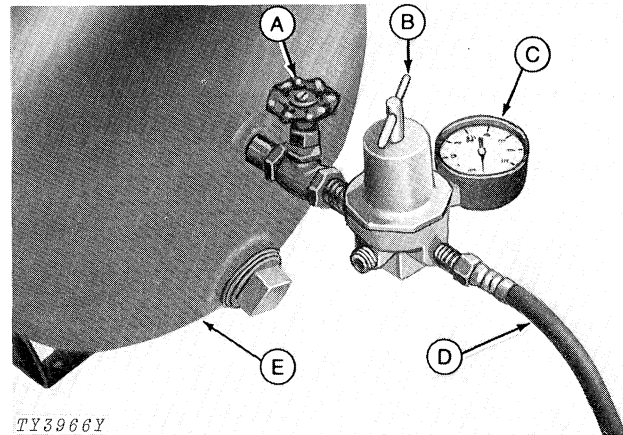
A - Shut-off Valve
B - Nipple
C - Bushing

D - Adapter
E - A200 Tank

The air hose shipped with the sprayer is fitted with a 1/4-inch swivel coupling at each end. Attach one hose coupling to the outlet fitting on the compressor or pressure regulator. Additional hose lengths may be coupled into the delivery line but pressure at the outlet will drop proportionately. Using more than 4 lengths (60 feet [18.3 m]) of hose is not recommended. (See your John Deere dealer for extra hose and fittings.)

OPTIONAL ATTACHMENT

Pressure Regulator



A - Shut-Off Valve
B - Pressure Adjusting Screw

C - Pressure Regulator
D - Supply Line
E - Air Tank

The compressor will not perform satisfactorily without a pressure regulator. The pressure regulator should be installed in the delivery line at the compressor outlet.

NOTE: On the A-75 and A-100 compressors, the regulator should be installed at the outlet port of the factory-mounted shut-off valve. On the A-200 compressor the regulator should be mounted on the outlet side of the 3/8-inch globe valve furnished with the compressor.

POWER REQUIREMENTS

The A-75 compressor is wired for 115-volt, 60 Hz, alternating current. The service requirement is 15-Amps.

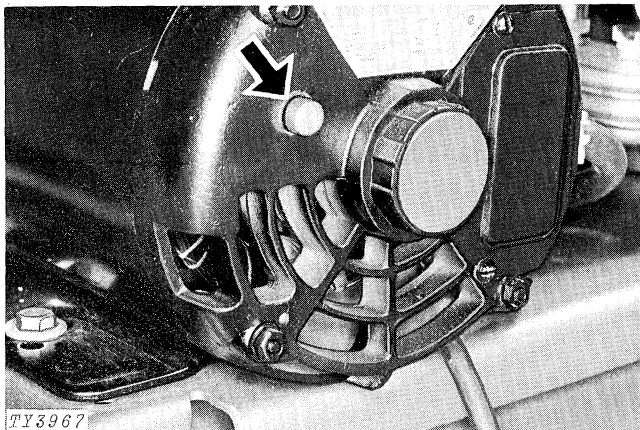
The A-100 compressor is dual-wired for 115/230-volt, 60 Hz, alternating current. It is shipped from the factory for 115-volt operation. If it is to be changed to 230-volt operation, see your John Deere dealer or a competent electrician. The service requirement is 20-Amps.

The A-200 compressor is dual-wired for 115/230-volt, 60 Hz, alternating current. It is shipped from the factory for 230-volt operation. If it is to be changed to 115-volt operation, see your John Deere dealer or a competent electrician. The service requirement is 30-Amps.

The minimum service requirement is spelled out in the Specifications (page 16). As a precaution against electrical shock the unit is equipped with a three-wire grounding plug and power cord. The supply wiring should meet all local electrical codes and the compressor should be connected only to a properly grounded outlet protected by a suitable fuse or circuit breaker.

Service voltage should be checked carefully. Low voltage will affect the efficiency of the compressor. Low voltage may be suspected when:

1. The motor overheats and does not come up to full power or speed.
2. Fuses blow or circuit breakers open when the compressor is plugged in.
3. Lights dim when the compressor is plugged in and remain dim while the unit is operating.

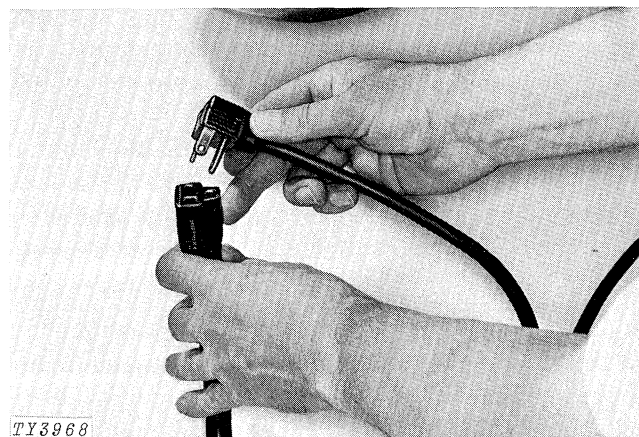


Red Reset Button

All John Deere Portable, Tank-Mounted Compressors are equipped with a thermal overload protector. The overload protector will shut off power to the motor if the motor overheats for any reason. To reset the protector, allow the motor to cool, then press the red reset button.

IMPORTANT: The thermal overload protector acts only when the motor is overheated. Frequent thermal overload shut down indicates repeated or continuous overheating caused by mechanical or electrical problems. (See "Trouble Shooting," page 11.)

EXTENSION CORDS



3-Wire Grounded Extension Cords.

For safe operation, use 3-wire grounded extension cords.

To avoid excessive drop in operating voltage, extension cords should be kept as short as possible. If one or more extension cords must be used the cord wire sizes should be as follows:

- Less than 25 feet (7.6 m) — 12 gauge wire.
- 25 to 50 feet (7.6 m to 15.2 m) — 10 gauge wire.
- Over 50 feet (15.2 m) — 7 gauge wire.

STARTING AND STOPPING

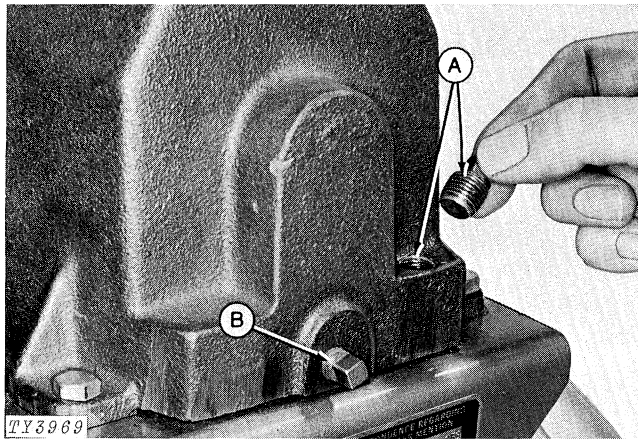
The compressor is not equipped with a switch in the line cord or at the motor. The unit will start when plugged in to a live outlet and run until tank pressure actuates the pressure switch. If the unit is to be connected to an outlet controlled by a remote switch, the service capacity of the switch wiring should be checked carefully.

During operation the motor and compressor will run intermittently. Whenever tank pressure drops below the "ON" limit the motor will start. It will shut down when the pressure switch senses the "OFF" limit.



CAUTION: The pressure switch should not be adjusted or tampered with. If, during operation, the tank pressure rises to where the safety valve opens, the pressure switch should be examined, and if necessary, replaced.

PRE-OPERATIONAL LUBRICATION AND BREAK-IN



A - Fill Plug and Hole

B - Drain Plug

Before the unit is connected to a power source, the compressor must be lubricated and, for best performance, the compressor must be broken-in carefully.

To lubricate the compressor: Make sure the compressor is standing on a level surface. Remove the fill plug (A) at the compressor base. Add 10W-30 detergent motor oil until the cavity is full. Replace and tighten the fill plug.

IMPORTANT: Do not operate the compressor until the crankcase oil supply has been checked. Starting the compressor with inadequate oil in the crankcase could cause serious damage to the compressor components.

When the unit is started the *first* time, it should be permitted to run for 15 to 30 minutes with the shut-off valve open. The break-in run will lubricate the pistons and bearings and permit the flapper valves to seat properly. A similar lubrication and break-in run is required when worn or damaged pistons or valves are replaced.

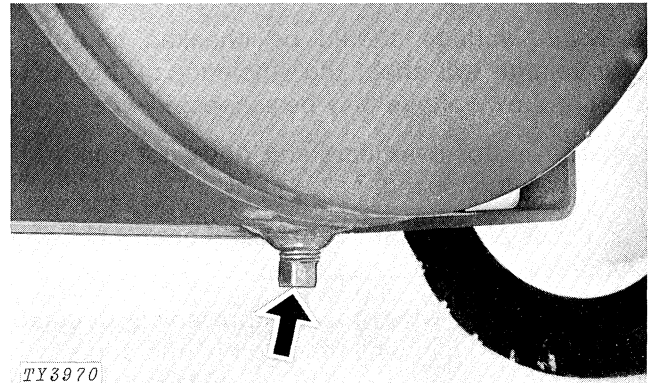


CAUTION: During operation the compressor unit will become very hot. Normal operating temperature at the compressor head may exceed 450°F (232°C). The unit is air cooled and should not be covered or made to operate in a closely confined space.

Draining Supply Tank Moisture

When the unit is shut down for any length of time (8 hours or more) supply tank pressure should be vented and the tank drained of any accumulated moisture.

Models A-75 and A-100

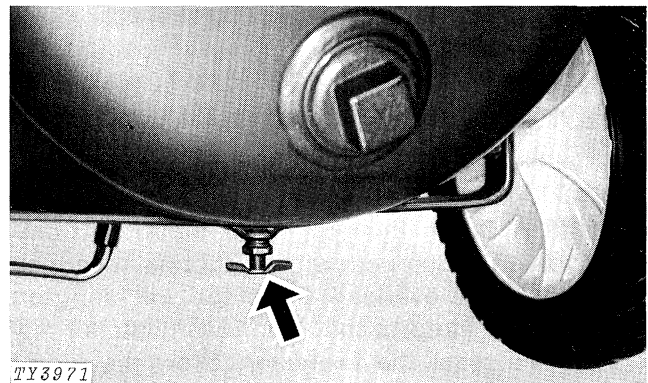


Drain Plug

To drain the tank:

Relieve all tank pressure. Close supply line valve and remove drain plug on underside of tank. Run compressor briefly (1 to 2 minutes).

Model A-200



Drain Cock

To drain the tank:

Relieve all tank pressure. Close supply line globe valve and open drain cock on underside of tank. Run compressor briefly (1 to 2 minutes).

NOTE: Be sure drain plug or drain cock is tightly closed before starting compressor for normal operation.

USING THE COMPRESSOR

General Information

Fitted with properly maintained and prepared delivery attachments, a John Deere portable air compressor can be used for almost any application where compressed air at less than 70 to 100 psi (4.8 to 6.9 bar) (5 to 7 kg/cm²) pressure is required.

The maximum working pressure is given in the specifications, page 16. Actual pressures will vary with working conditions. Pressure is affected by the length of the supply line, the type of material and the flow rate setting at the gun or tool used. Nozzle pressure may be expected to drop to below pressure-switch minimum during operation.



Using the Compressor, Spray-Painting

Any John Deere Compressor can be used with any paint spray gun requiring 5.5 cfm (3.0 cm³/s) or less air at 45 psi (3.0 bar) (3 kg/cm²) pressure. The unit will provide sufficient air for spraying from either a gun with canister or a pressurized supply tank. A non-bleeder type gun is recommended for use with tank-type compressors.

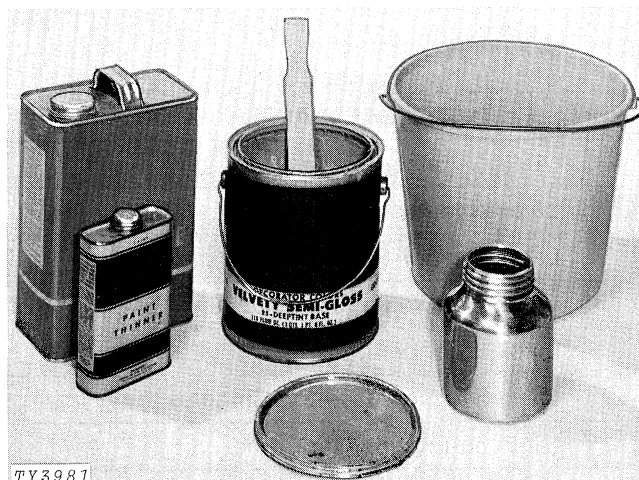
Spray Painting

When applying paints, enamels, lacquers, etc., it is important that the paint liquid be thinned to the proper consistency. In general, paint prepared for use with a John Deere Portable Compressor should be thinned to the consistency required for all high pressure equipment. Ordinary exterior latex paint, for example, should be thinned by addition of 15 to 20% water (by volume) to prepare it for spraying at pressure above 40 psi (2.3 bar) (2 kg/cm²).



CAUTION: The pressure regulator should never be set above 50 psi (3.4 bar) (3.4 kg/cm²) when spray painting from a gun canister.

Paint Thinning



Thin Paint Before Spraying

The Paint Thinning Chart on page 8 will indicate the approximate percentage (by volume) of thinner to be added when common paint materials are prepared for use with a 40 psi (2.3 bar) (2 kg/cm²) pressure regulator setting.

NOTE: The Operator's Manual for the spray gun being used should be read carefully before preparing the paint or gun for use.

Spray Painting Tips and Suggestions

1. Prepare the work carefully. Clean the work surface; mix the paint thoroughly; set up the gun properly (See the Operator's Manual for the spray gun you are using). Make sure all tools, supplies and equipment are in good order. Cover anything that may be damaged by overspray or blowing paint.

2. Work safely. Don't trust untested ladders or scaffolding. Make sure interior working areas are well ventilated. Wear a respirator if working indoors or in heavy spray. Don't spray near open flame or an exposed heater. Don't carry the sprayer while painting. Observe all the safety suggestions given throughout this manual.

3. Work efficiently. Read the Operator's Manual for the spray gun you are using; follow the painting procedures suggested. Use materials according to the manufacturer's suggestions. Don't paint in cold, damp or excessively hot weather. Allow sufficient time for clean-up at the end of each day's painting operation.

4. Clean-up thoroughly. Use the proper solvents. Clean the gun as directed by the Operator's Manual for the gun you are using. Wipe overspray or stray droplets off the supply hoses and compressor. Cover all open containers. Take down and store all ladders.

PAINT THINNING CHART

MATERIAL & APPLICATION	THINNER		GUN	
	TYPE*	%	TYPE*	NOZZLE*
Latex-Interior Flat	W	5-10	PRESS	EXT
Latex-Interior Semi-Gloss Enamel	W	5-10	PRESS	EXT
Latex-Concrete Floor Enamel	W	10-15	PRESS	EXT
Latex-Exterior	W	15-20	PRESS	EXT
Latex-Stucco, Masonry, Shingles	W	15-20	PRESS	EXT
Oil Base-Interior Flat Primer	T-P	0	PRESS	INT
Oil Base-Interior Flat Finish	O	5-10	PRESS	INT
Oil Base-Interior Semi-Gloss Enamel	O	5-10	ANY	ANY
Oil Base-Exterior Primer	T	10-15	PRESS	INT
Oil Base-Exterior Finish	T	5-10	PRESS	INT
Oil Base-Exterior Trim	T	5-10	PRESS	INT
Enamel-Undercoat (Interior-New Wood)	T	5-10	PRESS	INT
Enamel-Color Fast (Interior, Exterior)	T-P	5-10	ANY	ANY
Enamel-Epoxy (Wood, Metal)	L	10-15	PRESS	EXT
Epoxy-Concrete Floor	L	10-15	PRESS	EXT
Epoxy-Swimming Pool	L	10-15	PRESS	EXT
Stain-Interior-Furniture	P	0	ANY	EXT
Stain-Exterior (Shingle)	T	0	ANY	ANY
Stain-Redwood Finish-Exterior	P	0	ANY	ANY
Varnish-Interior-Exterior	T	HEAT	ANY	INT
Sealer, Clear (Floors, Woodwork)	T-P	0	ANY	EXT
Wall Paper Coating-Plastic	P	0	PRESS	INT
Auto Enamel-Red Chromate Primer	P	5-10	ANY	EXT
Auto Enamel-Finish	P	10-15	ANY	EXT
Anti-Rust Primer (Galvanized Metal)	T	10-15	PRESS	INT
Aluminum Paint (Exteriors, Radiators)	T-P	0	ANY	ANY
Barn and Fence Paint	T	0	PRESS	ANY
Shellac (Floors, Furniture, Woodwork)	A	**	EXT	ANY

*Code: W-Water; T-Turpentine; P-Paint Thinner; O-Odorless Thinner; L-Lacquer Thinner; A-Alcohol; PRESS-Pressure Feed Only; EXT-Exterior Mix Nozzle; INT-Interior Mix Nozzle

**See John Deere Manual "HOW TO SPRAY PAINT"

Spraying Fertilizers or Pesticides



All John Deere Portable Compressors may be used to spray liquid fertilizers or pesticides. Solutions or mixtures containing suspended solids should be thinned or strained before spraying.

CAUTION: Some agricultural chemicals are intended to be lethal to certain forms of life. Although many agricultural chemicals may have little or no effect on a normally healthy human being, some are dangerous in the extreme. It is wise to treat all fertilizers and pesticides with great caution. Observe the following special precautions when using chemical solutions or sprays.

Don't take chances. Check container labels or manufacturer's information for specific precautions which may need to be observed.

Do not work on supply tanks, hoses or nozzles while the compressor is running or the system is pressurized. Shut down the compressor and bleed all pressure before disconnecting spray system components.

Avoid all direct contact with sprays, solutions, dusts, powders or residues. Wear protective clothing (rubber aprons, gloves, goggles, respirator, masks, etc.) whenever possible.

Have an emergency soap and water supply available. If a chemical solution is spilled on the skin or in the eyes, it must be flushed away immediately.

Never touch sprayer components with the lips or mouth. If chemical solutions are accidentally swallowed, the instructions on the manufacturer's label must be followed carefully.

Wash your hands and face before eating or smoking.

If you suspect you have been exposed to a chemical solution that may be injurious, seek medical attention immediately. Delay may have serious consequences.

After working with chemical solutions or contaminated equipment, take a shower and change to clean clothing. Wash contaminated clothing before reuse.

IMPORTANT: Many chemical sprays are highly corrosive. Careless use of corrosive sprays can damage your gun or other spray apparatus. Spray residue left in an improperly cleaned gun may foul the nozzle, tubes and passages beyond repair. Always clean the gun thoroughly after every use.

NOTE: All traces of chemical sprays may be extremely difficult to remove; never use the same gun to spray both herbicides and fertilizers.

Using the compressor as an air pump



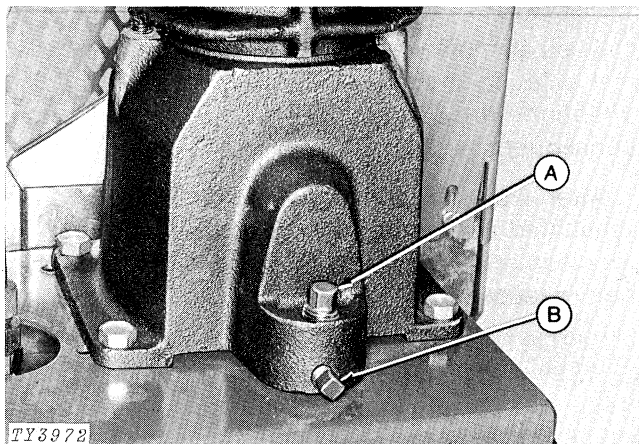
Using the sprayer — inflating tires

When the supply hose is properly equipped the compressor may be used as a source of compressed air for inflating tires, plastic toys, etc., or for blowing away dust or dirt. See your John Deere dealer for air chuck and dusting nozzle adapters and fittings.

CAUTION: The compressor will build pressure to 70 psi (4.8 bar) (5 kg/cm²) or more; do not over inflate tires, air bags, boats or toys.

CAUTION: Protect the eyes when using compressed air to blow away dust, dirt, or loose debris.

LUBRICATION



A - Fill Plug

B - Drain Plug

Everyday: Check crankcase oil level before each day's operation. Remove fill plug (A), refill as required with SAE 10W-30 Detergent-type motor oil, and replace plug.

After every 100 hours of operation: Remove crankcase drain plug (B), drain oil, replace plug and refill crankcase with SAE 10W-30 Detergent-type motor oil.

STORAGE

To store the compressor, start the unit and blow all dust, or dirt from the filter and motor fan with the air hose. Drain the pressure tank (see instructions on page 6). Disconnect and coil the power cord and hoses. Remove, clean and reinstall the filter (See the instructions for removing the filter on page 12). Cover the unit and protect it from excessive moisture or dust.



Trouble Shooting

Trouble	Probable Cause	Suggested Remedy
Sprayer won't start	No current at receptacle	Check service at fuse box or circuit breaker
	Broken wires on power cord or bad connections at motor	Disconnect power cord and check cord and connections at motor
	Motor burned out	Repair or replace motor
Compressor starts - lights dim - motor runs slow and overheats	Low voltage	Have current and service wiring checked. (See Power requirements, page 4.)
Compressor runs - motor labors - no air at spray gun nozzle	Plugged air supply hose	Check supply hose - repair or replace hose
	Faulty spray gun	Check spray gun (see Operator's manual for spray gun)
Compressor runs - motor OK - little or no air at spray gun	Leaking air supply hose or fittings	Check supply hose and fittings - repair or replace.
Compressor runs - motor labors - little or no air at compressor outlet	Plugged filter	Replace filter
	Jammed inlet or outlet flapper valve	Replace flapper valve
	Leaking flapper valves (new valves not seating)	Remove hose and run for break in
	Leaking flapper valves (old valves worn or damaged)	Replace valve reeds
Compressor excessively noisy - air pressure down	Pulleys misaligned	Realign pulleys
	Worn or damaged crankshaft bearings	Replace bearings
	Scored or worn piston	Replace piston



Service

Your compressor may require service or replacement of parts after long usage or if parts are damaged. Generally, repair or replacement of parts can be done without special tools. Refer to the following instructions.

If further information or service is required, see your John Deere dealer.

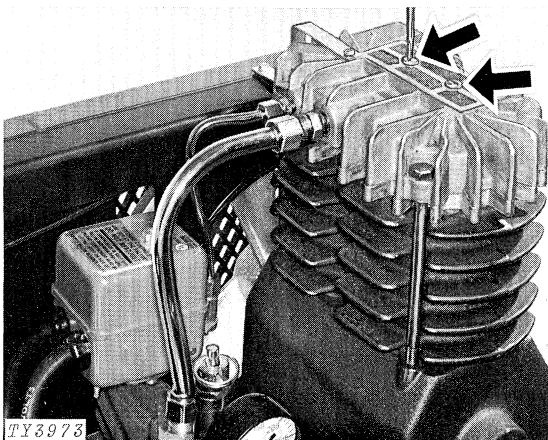
CAUTION: Disconnect compressor from electrical outlet and relieve all tank pressure before service or disassembly of any part of the compressor.

INTAKE AIR FILTER

A dirty intake air filter will reduce compressor efficiency; the air filter must be kept clean to permit air to flow into the compressor unit. Air filters which have become dirty, oily or crusted with overspray should be replaced. The air filter should be cleaned only when a replacement filter is unavailable.

NOTE: Do not operate the compressor with the filter removed.

Removal – Cleaning – Replacement



Filter Retainer Screws

1. Remove screws.
2. Lift off filter retainer and remove filter. Discard oily, dirty, caked or crusted filters.

3. Blow loose dirt or dust from filter and wash it in detergent solution or soap and water. Shake to remove excess water; reshape and dry thoroughly before replacing.



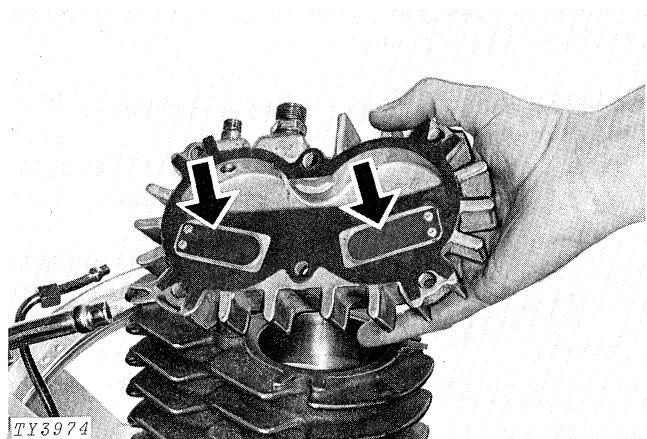
CAUTION: Never clean filter with a flammable solvent.

FLAPPER VALVES

The flapper valves at the inlet and outlets to the compression chamber are not repairable. If leaking because of damage or wear, the valve reeds must be replaced.

NOTE: Replace both reeds if leakage is suspected at either port. Do not bend or shape new reeds before or after installation. After new reeds have been installed, allow sprayer to run for 15 minutes before connecting delivery hose. (See Break-In, page 6.)

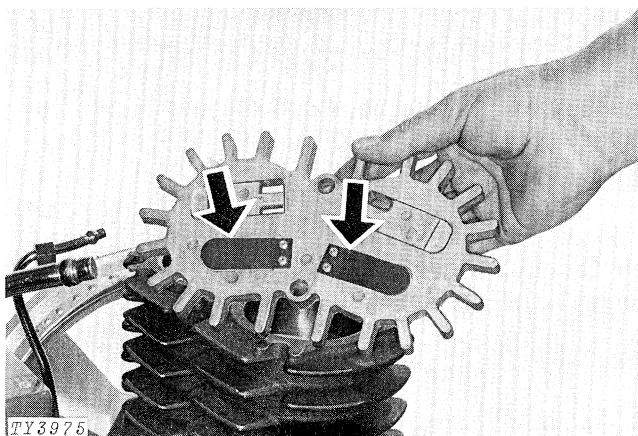
Inlet Valve – Removal and Replacement



Inlet Flapper Valve Reeds.

1. Remove long machine screws securing cylinder head to crankcase assembly. Remove cylinder head.
2. Remove screws securing flapper valve reed to cylinder head. Discard reed and replace with new reed. Reinstall cylinder head assembly.

Outlet Valve – Removal and Replacement



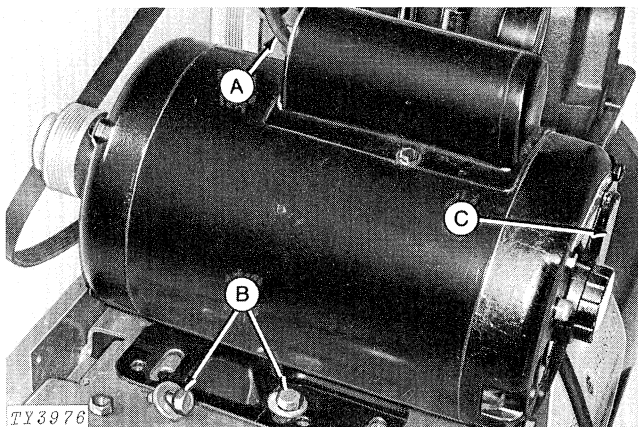
Outlet Flapper Valve Reeds.

1. Remove screws securing cylinder head to crankcase assembly. Remove head and head gasket. Examine gasket. Replace if torn or ruptured.

2. Remove screws securing outlet flapper valve reed to valve plate. Replace with new reed. Reinstall head gasket and head.

MOTOR

Motor Removal



A - Pressure Switch Cable
B - Mounting Screws

C - Connection Cover Plate

To remove motor: Disconnect pressure switch cable (A) at motor. Remove four screws (B) and release and remove drive belt. Remove motor.

Removal and Replacement of Power Cord:

It is not necessary to remove motor to replace power cord. Disconnect power cord, release screws securing plate (C) at rear of motor. Remove plate and release screw and clip attachments at power cord terminal. Reattach as required.

Motor Service:

See your John Deere dealer for repair or service for the motor assembly.

Reinstallation

To reinstall motor: Position motor, reinstall drive belt and secure motor with four screws and nuts. Reconnect pressure switch cable.

(See below: Drive Belt & Belt Alignment and Tension).

DRIVE BELT

A V-belt is used to drive the fan on the A-75 Compressor. A Poly-V belt is used to drive the fan on the A-100 and A-200 compressors.

Belt Removal.

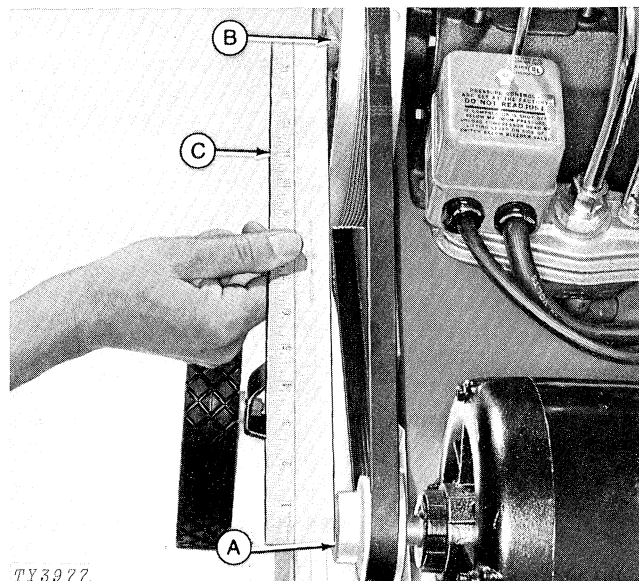
Remove bolts securing motor to air receiver. Remove belt.

Belt Reinstallation

Position motor, install belt on drive pulley (A) and fan pulley (B). Secure motor to air receiver.

Belt Alignment and Tension

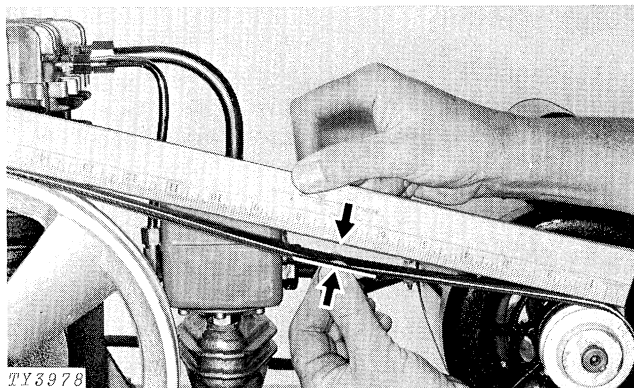
To prevent excessive wear on both motor and compressor bearings, drive pulley (A) and fan pulley (B) must be correctly aligned and belt tension properly adjusted.



A - Drive Pulley
B - Fan Pulley

C - Straightedge

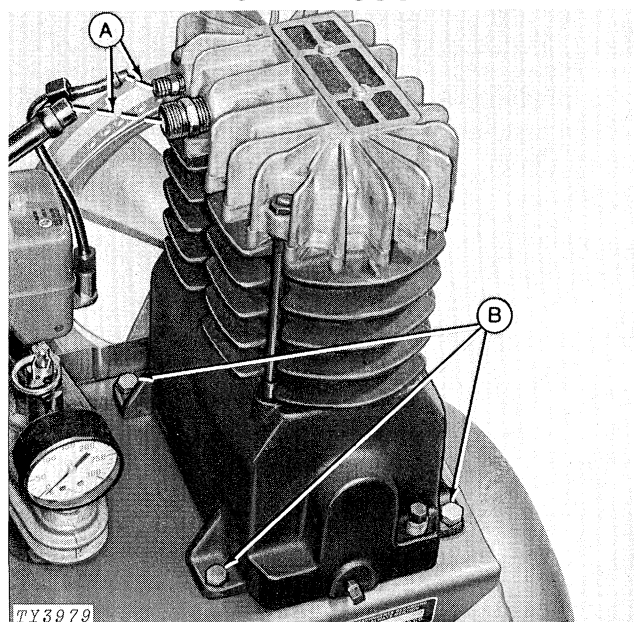
To align pulleys: Lay a straightedge (C) across pulley faces at hubs. Position or relocate either pulleys or assemblies to which they are attached so that straightedge (C) touches rims at two points on each pulley.



Deflection at Midpoint

To adjust belt tension: Release bolts securing motor. Shift motor until a slight pressure on belt midway between pulleys will cause a deflection of 1/2 to 1 inch (12.7 to 25.4 mm). Check belt alignment. Retighten bolts securing motor.

COMPRESSOR



A - Pressure Side Connections

B - Mounting Bolts

Removal

CAUTION: Release all tank pressure before doing any work on any lines or fittings.

Release pressure side connections (A). Remove four bolts (B) securing compressor. Release drive belt and remove compressor.

Disassembly, Inspection, Repair

For removal and replacement of the air filter and flapper valve reeds, see page 12.

For other service to the compressor, see your John Deere dealer.

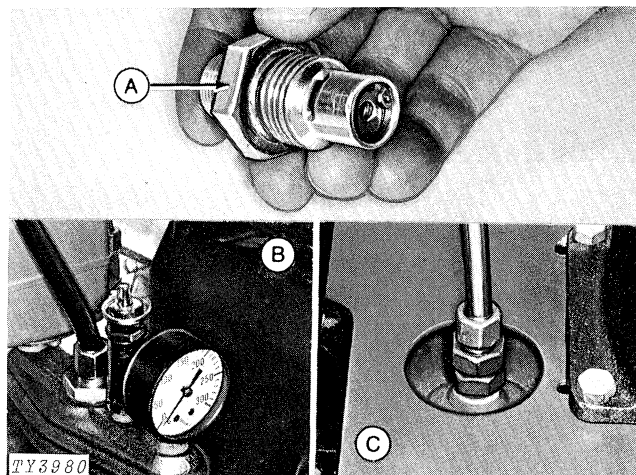
Reinstallation.

Engage drive belt and position compressor on air receiver assembly. Install but do not tighten mounting bolts (B). Align belt and adjust for tension (see page 13). Tighten mounting bolts (B). Connect pressure side connections (A).

AIR RECEIVER

Accumulated moisture should be drained from the tank at the end of each day's operation. Information on the draining procedures is included in the operation section (see page 6).

Check Valve Removal, Repair, Replacement



A - Check Valve
B - A-200

C - A-75 and A-100

CAUTION: Release all tank pressure before doing any work on any lines or fittings.

The check valve (A) in the pressure line between the compressor head and the air receiver opens when the compressor is operating and closes when the compressor stops. Dirt in the seat of the check valve could cause leakage. If leakage at the check valve is suspected, the valve should be removed and disassembled.

Check Valve Removal, Repair, Replacement – Continued

1. Release the compression nuts securing the pressure line to the check valve assembly and compression head.

2. Remove the check valve from the air receiver assembly.

3. Use two wrenches and separate the two halves of the check valve. Depress the check plunger and inspect the O-ring. (If damaged or torn, replace the entire valve assembly.) Blow out and wipe off the seat surface beneath the O-ring. Reassemble the check valve. Tighten to 125 inch-pounds (14 Nm) (1.4 kgm) torque.

4. Reinstall the check valve, pressure line and compression fittings at the valve and compressor head.



Specifications

ITEM	A-75	A-100	A-200
Motor			
Shaft Output HP	3/4 (559.3W)	1 (746 W)	2 (1492 W)
RPM	3450	3450	3450
Line Service Required			
– Voltage	115v/60Hz	115v/60Hz	230v/60Hz
– Fuse or Circuit Breaker	15 amp	20 amp	30 amp
Motor Wiring	115v- Single Phase	115v- Single Phase	230v- Single Phase
Power Cord		3-Wire Grounding Plug	
Bearings	Oil-Sealed	Oil-Sealed	Oil-Sealed
Motor Rated for Continuous Operation at	104°F (40°C)	122°F (50°C)	122°F (50°C)
COMPRESSOR			
Type	VS-Single Cylinder Portable V-Belt	VT-Twin Cylinder Portable Poly-V Belt	VT-Twin Cylinder Portable Poly-V Belt
Drive			
Tank	12 Gal. (45.4L) Horizontal	15 Gal. (56.8 L) Horizontal	20 Gal. (75.7 L) Horizontal (ASME)
Rated Delivery - 40 psi (2.7 bar) (2.8 kg/cm ²)	3.2 CFM (0.002 m ³ /s)	5.6 CFM (0.003 m ³ /s)	7.2 CFM (0.003 m ³ /s)
- 90 psi (6.1 bar) (6.3 kg/cm ²)	2.6 CFM (0.001 m ³ /s)	4.5 CFM (0.002 m ³ /s)	5.9 CFM (0.003 m ³ /s)
Pressure Switch (Factory Set)			
Pressure Switch ON	80 psi (5.4 bar) (5.6 kg/cm ²)	70 psi (4.8 bar) (4.9 kg/cm ²)	105 psi (7.1 bar) (7.4 kg/cm ²)
Pressure Switch OFF	100 psi (6.8 bar) (7 kg/cm ²)	100 psi (6.8 bar) (7 kg/cm ²)	125 psi (8.5 bar) (8.8 kg/cm ²)
Relief Valve (Factory Set)	110 psi (7.5 bar) (7.7 kg/cm ²)	110 psi (7.5 bar) (7.7 kg/cm ²)	163 psi (11.1 bar) (11.5 kg/cm ²)
DIMENSIONS			
Wheel Mounted Unit — w/o Handle			
Length	25 in. (635 mm)	32 in. (813 mm)	30 in. (762 mm)
Width	16 in. (406.4 mm)	18 in. (457 mm)	18 in. (457 mm)
Height	26 in. (660.4 mm)	28 in. (711 mm)	30 in. (762 mm)
Weight	96 lbs. (43.5 kg)	163 lbs. (74 kg)	178 lbs. (80.7 kg)

(Specifications and design subject to change without notice.)

SERIAL NUMBER

The model and serial number of the compressor is located on a plate attached to the support plate welded to the tank. The model and serial number of the motor is stamped on a plate attached to the motor.

When ordering replacement parts, refer to the model and serial numbers given on the serial number plates. By doing so, you will assist your

John Deere dealer to give you prompt, efficient service. For your convenience, a space is provided below for recording this information.

MODEL _____

SERIAL NO. _____

DATE PURCHASED _____

(To be filled in by purchaser)

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To order these publications fill out this form and the payment information and mail it to the address above. Make checks payable to Deere & Co. Service Publications. Please allow three weeks for delivery. No COD orders, please. Do not send cash or stamps. To place credit card orders, call **1-800-522-7448**. If you want manuals or catalogs for equipment not shown on this list, provide the model number, serial number, and name of the product.

John Deere Distribution Service Center
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Title	Order No.	Qty.	Price Each
Parts Catalog A33, A75, A100, A200 Sprayers and Air Compressors	PC-1438		\$
Operator's Manual A75, A100, A200 Air Compressors	OM-TY4576		
Technical Manual A33, A75, A100, A200 Sprayers and Air Compressors	TM-1103		

NOTE: If you want manuals or catalogs for equipment not shown on this list, list the model number, serial number and name of the equipment below.

FMO Manual - Tractors	FMO-101B		\$
FMO Manual - Tillage	FMO-111B		
FMO Manual - Planting	FMO-121B		
FMO Manual - Crop Chemicals	FMO-131B		
FMO Manual - Hay & Forage Harvesting	FMO-141B		
FMO Manual - Combine Harvesting	FMO-151B		
FMO Manual - Preventive Maintenance	FMO-161B		
FMO Manual - Machinery Management	FMO-171B		
FMO Manual - Machine Safety	FMO-181B		
FMO Set of 9 Manuals above	FMO-394 Set		
FOS Manual - Hydraulics	FOS-10B		
FOS Manual - Electrical Systems	FOS-20B		
FOS Manual - Engines	FOS-30B		
FOS Manual - Power Trains	FOS-40B		
FOUR FOS MANUALS (above)	FOS-90 Set		
FOS Manual - Shop Tools	FOS-51B		
FOS Manual - Welding	FOS-52B		
FOS Manual - Belts and Chains	FOS-53B		
FOS Manual - Bearings and Seals	FOS-54B		
FOS Manual - Tires and Tracks	FOS-55B		
FOS Manual - Mowing and Spraying Equipment	FOS-56B		
FOS Manual - Air Conditioning	FOS-57B		
FOS Manual - Fuels, Lubricants and Coolants	FOS-58B		
FOS Manual - Fiber Glass	FOS-59B		
FOS Manual - Fasteners	FOS-60B		
SET OF TEN FOS MANUALS FOS-51B, 52B, 53B, 54B, 55B, 56B, 57B, 58B, 59B and 60B	FOS-70 Set		
SET OF ALL FOURTEEN FOS MANUALS	FOS-180 Set		

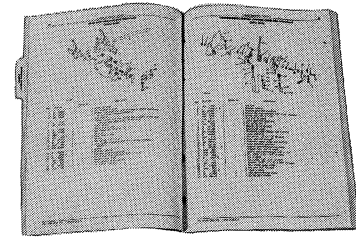
Illinois State Residents add 5% for ROT.

Check or money order in U.S. dollars enclosed Total
(Do not send cash or stamps)

**For current prices of John Deere
Service Literature, please call
1-800-522-7448**

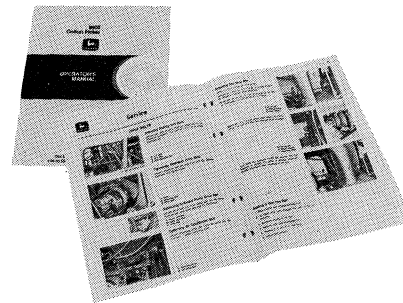
SP-239 Litho in U.S.A. OCT-77

PARTS CATALOG



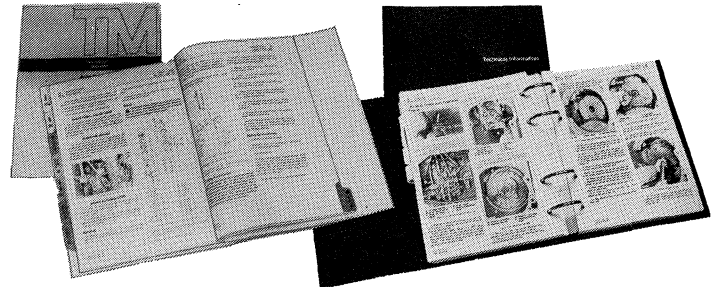
A parts catalog containing exploded view illustrations and lists of all parts is useful when purchasing service parts. Helps identify the correct parts. Useful in assembling and disassembling.

OPERATOR'S MANUAL



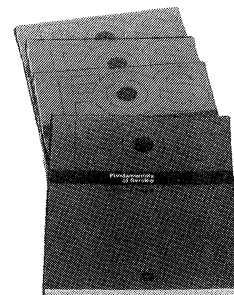
An extra copy of the operator's manual may be important if the copy furnished with your machine is misplaced.

TECHNICAL MANUAL



The technical manual is a service guide for your machine. Included in the manual are specifications, diagnosis and adjustments, illustrations of special assembly and disassembly procedures, hydraulic oil flows, and wiring diagrams.

FMO AND FOS MANUALS



These are basic manuals covering most all types and makes of agricultural machinery. FMO manuals tell you how to *operate* machines; FOS manuals tell you how to *service* machines. Each manual starts with basic theory and is fully illustrated with colorful diagrams and photographs. Both the "whys" and "hows" of adjustments and repairs are covered in this reference library.

Service to keep you on the job

We, at your John Deere dealer's, pride ourselves in having what it takes to help keep you on the job...

John Deere Parts.

We help minimize downtime by putting the right parts in your hands in a hurry. That's why we maintain a large and varied inventory—to stay a jump ahead of your needs.



The right tools.

Precision tools and testing equipment enable our Service Department to locate and correct troubles quickly... to save you time and money.



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School is never out for John Deere service technicians. Training schools are held regularly to be sure our personnel know your equipment and how to maintain it. Result? Experience you can count on!



Prompt service.

Our goal is to provide prompt, efficient care when you want it and where you want it. We can make repairs at your place or at ours, depending on the circumstances. See us. Depend on us.

John Deere Service Superiority: We'll be around when you need us

