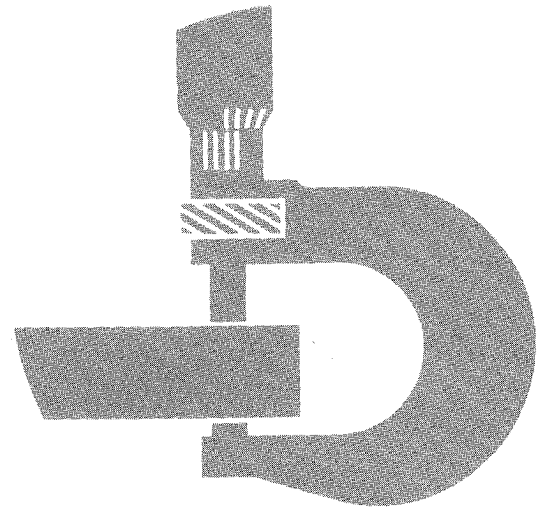


**John Deere
762A
Scraper**



TECHNICAL MANUAL

762A SCRAPER
Technical Manual
TM-1225 (Jul-84)

SECTION AND GROUP CONTENTS OF THIS MANUAL

SECTION I - GENERAL INFORMATION

- Group I - Contents and Index
- Group II - Introduction and Safety Information
- Group III - General Specifications
- Group IV - Predelivery, Delivery, and After-Sale Services
- Group V - Fuels and Lubricants

SECTION 1 - WHEELS

- Group 0110 - Powered Wheels and Fastenings
- Group 0120 - Non-Powered Wheels and Fastenings
- Group 0199 - Specifications and Special Tools

SECTION 2 - AXLES AND SUSPENSION SYSTEMS

- Group 0201 - Drive Axle Housing and Support
- Group 0210 - Differential or Bevel Drive
- Group 0225 - Input Drive Shafts and U-Joints
- Group 0230 - Non-Powered Wheel Axles
- Group 0250 - Axle Shaft, Bearings and Reduction Gears
- Group 0260 - Hydraulic System
- Group 0299 - Specifications and Special Tools

SECTION 3 - TRANSMISSION

- Group 0325 - Input Drive Shafts and U-Joints
- Group 0341 - Housings and Covers
- Group 0342 - Mounting Parts
- Group 0350 - Gears, Shafts, Bearings and Power Shift Clutch
- Group 0360 - Hydraulic System
- Group 0399 - Specifications and Special Tools

SECTION 4 - ENGINE

- Group 0400 - Removal and Installation
- Group 0401 - Crankshaft and Main Bearings
- Group 0402 - Camshaft and Valve Actuating Means
- Group 0403 - Connecting Rods and Pistons
- Group 0404 - Cylinder Block
- Group 0407 - Oiling System
- Group 0408 - Ventilating System
- Group 0409 - Cylinder Head and Valves
- Group 0410 - Exhaust Manifold
- Group 0413 - Fuel Injection System
- Group 0414 - Intake Manifold
- Group 0416 - Turbocharger
- Group 0417 - Water Pump
- Group 0418 - Thermostats, Housings, and Water Piping
- Group 0419 - Oil Cooler
- Group 0420 - Fuel Filter
- Group 0422 - Starting Motor and Fastenings
- Group 0429 - Fan Drive
- Group 0433 - Flywheel, Housing and Fastenings
- Group 0499 - Specifications and Special Tools

SECTION 5 - ENGINE AUXILIARY SYSTEMS

- Group 0505 - Cold Weather Starting Aids
- Group 0510 - Cooling Systems, Radiator, Fan Shroud and Fan
- Group 0515 - Speed Controls
- Group 0520 - Intake System
- Group 0530 - External Exhaust System
- Group 0540 - Mounting Frame
- Group 0560 - External Fuel Supply Systems

SECTION 6 - TORQUE CONVERTER

- Group 0641 - Housing and Cover
- Group 0651 - Turbine, Gears and Shaft
- Group 0660 - Hydraulic System
- Group 0699 - Specifications and Special Tools

Copyright © 1984
DEERE & COMPANY
Moline, Illinois
All Rights Reserved
Previous Editions
Copyright © 1982 Deere & Company
Copyright © 1980 Deere & Company

SECTION AND GROUP CONTENTS OF THIS MANUAL—Continued

SECTION 9 - STEERING SYSTEM

- Group 0920 - Power Steering
- Group 0960 - Hydraulic System
- Group 0999 - Specifications and Special Tools

SECTION 10 - SERVICE BRAKES

- Group 1011 - Active Elements
- Group 1015 - Controls Linkage
- Group 1060 - Hydraulic System
- Group 1099 - Specifications and Special Tools

SECTION 11 - PARKING-EMERGENCY BRAKES

- Group 1111 - Active Elements
- Group 1115 - Controls Linkage
- Group 1199 - Specifications and Special Tools

SECTION 13 - MISCELLANEOUS VEHICLE

- Group 1370 - Lubrication Systems

SECTION 16 - ELECTRICAL SYSTEM

- Group 1671 - Batteries, Support and Cables
- Group 1672 - Alternator, Regulator and Charging System Wiring
- Group 1673 - Lighting System
- Group 1674 - Wiring Harness and Switches
- Group 1675 - System Controls
- Group 1676 - Instruments and Indicators
- Group 1699 - Specifications and Special Tools

SECTION 17 - FRAME, CHASSIS OR SUPPORTING STRUCTURE

- Group 1740 - Frame Installation
- Group 1799 - Specifications and Special Tools

SECTION 18 - OPERATOR'S STATION

- Group 1810 - Operator Enclosure
- Group 1821 - Seat and Seat Belt
- Group 1830 - Heating and Air Conditioning
- Group 1899 - Specifications and Special Tools

SECTION 19 - SHEET METAL AND STYLING

- Group 1910 - Hood or Engine Enclosure
- Group 1921 - Grille and Grille Housing
- Group 1927 - Fenders

SECTION 20 - SAFETY, CONVENIENCE AND MISCELLANEOUS

- Group 2002 - Mirror
- Group 2004 - Horn and Warning Devices
- Group 2006 - Cigar Lighter

SECTION 21 - MAIN HYDRAULIC SYSTEM

- Group 2160 - Hydraulic System
- Group 2199 - Specifications and Special Tools

SECTION 35 - SCRAPER AND HAULAGE DEVICE

- Group 3501 - Blades or Cutting Edges
- Group 3540 - Frames
- Group 3560 - Hydraulic System
- Group 3599 - Specifications and Special Tools

SECTION 36 - CONVEYOR AND ELEVATING DEVICE

- Group 3612 - Conveyor or Mast
- Group 3640 - Frames
- Group 3650 - Gearbox
- Group 3660 - Hydraulic System
- Group 3699 - Specifications and Special Tools

SECTION 90 - SYSTEM TESTING

- Group 9005 - General Information - Seven Basic Steps of Testing and Diagnosis
- Group 9010 - Engine
- Group 9015 - Electrical
- Group 9020 - Power Train
- Group 9025 - Hydraulic System (Flow Meter)
- Group 9031 - Heating and Air Conditioning
- Group 9035 - Specifications and Special Tools

The specifications and design information contained in this manual were correct at the time it was printed. It is John Deere's policy to continually improve and update our machines. Therefore, the specifications and design information are subject to change without notice. Whenever applicable, specifications and design information are in accordance with SAE and ICED standards.

ALPHABETICAL INDEX

A	C
Air conditioning system testing	Canopy
Component location	C1 check valve
Diagnosis and testing	C1 clutch pads
General information	Camshaft
Operational test	Case, differential
Safety precautions	Central lubrication system
System service	Center adjusting idler
Accumulator, brake	Chain, elevator
After sale inspection	Charging system wiring
Air cleaner	Cigar lighter
Air conditioning system	Circuit board, elevator
Air filter element	Circuit breakers
Air filter restriction indicator	Circuit, elevator control
Alarm, reverse warning	Clutch coil and housing
Alternator	Coil and housing, clutch
Auxiliary bowl lower solenoid valve and check valve assembly	Cold weather starting aids
Axle bearings	Command potentiometer
Axle filter restriction indicator	Compressor
Axle housing, drive	Compressor hub and drive plate assembly
Axle shaft	Compressor, leak testing
Axles, non-powered wheel	Compressor oil
	Compressor pulley and bearing
B	Compressor relief valve
Batteries	Compressor shaft seal
Bearings, axle	Condenser
Bearings, main	Connecting rods
Belt, seat	Controller, transmission
Bevel drive	Control circuit, transmission
Blades and cutting edges	Controls linkage, parking - emergency brakes
Blower motor assembly	Coolant conditioner
Bowl and ejector gate switches	Coolant filter
Bowl control valve	Cooler, oil
Bowl lift cylinder	Cover, differential
Brake accumulator	Conveyor
Brake hydraulic system	Conveyor and elevating device
Brakes, parking-emergency	Conveyor and elevating device, hydraulic system
Brake pedal	Crankshaft
Brakes, scraper hydraulic	Cutting edges and blades
Brakes, service	Cylinder block
Brakes, tractor	Cylinder, bowl lift
Brake valve	Cylinder head and valves
	Cylinder, ejector gate
	Cylinder, sliding floor
	Cylinders, steering

Continued on next page

D

Damper, drive 0433-3
Drive, fan 0429-1
Damper, vibration 0401-8
Delivery service I-IV-18
Differential 0210-1
Differential case 0210-2
Differential cover 0210-2
Differential housing with lock 0210-4
Differential lock check valve 0260-5
Differential lock orifice 0260-5
Differential lock pump 0260-4
Differential lock suction filter 0260-6
Differential lock valve 0260-1
Dimensions I-III-3
Diodes 1676-8
Drive axle housing 0201-3
Drive, input 0225-1
Drop train gears 0350-52

E

Ejector gate cylinder 3560-12
Electrical systems 1671-3
Electrical system testing 9015-1
 Charging circuit 9015-14
 Complete electrical schematic 9015-51
 Component location 9015-59
 Diagnosing malfunctions 9015-4
 Electrical block diagram 9015-3
 Electrical wiring diagram 9015-54
 Elevator and bowl circuits 9015-31
 Gauges and indicators circuit 9015-19
 General information 9015-1
 Lighting circuit 9015-17
 Miscellaneous accessories 9015-28
 Precautions 9015-8
 Starting circuit 9015-11
 Testing and adjustments 9015-10
 Transmission control circuit 9015-40
 Visual inspection 9015-9
Electrically operated gauges and indicators . . 1676-4
Elevator chain 3612-3
Elevator circuit board 1675-1
Elevator control circuit 1675-1
Elevator motor 3660-37
Elevator switch 1675-1

Engine 0400-1
Engine coolant heater 0505-4
Engine coolant temperature gauge 1676-4
Engine enclosure 1910-3
Engine front mount isolators 0540-2
Engine oil pressure gauge 1676-4
Engine oiling system 0407-1
Engine oils I-V-2
Engine rear mount isolators 0540-1
Engine shut-off cable 0515-3
Engine system testing 9010-1
 Component location 9010-23
 Diagnosing malfunctions 9010-7
 General information 9010-2
 Introduction 9010-1
 Testing and adjustment 9010-10
 Visual inspection 9010-5
Evaporator 1830-21
Exhaust manifold 0410-1
Expansion valve 1830-23
External exhaust system 0530-1

F

Fan 0510-3
Fan drive 0429-1
Fan drive support 0429-3
Fan shroud 0510-1
Feedback potentiometer 1675-2
Fenders 1927-1
Filter, differential lock suction 0260-6
Filter, fuel 0420-1
Filter relief valve 0360-22
Flywheel 0433-1
Follow-up steering cylinders 0960-18
Frames 3640-1
Frame installation 1740-3
Fuel filter 0420-1
Fuel gauge 1676-4
Fuel injection nozzles 0413-9
Fuel injection pump 0413-5
Fuel injection system 0413-1
Fuel line 0560-5
Fuel supply pump 0560-3
Fuel tank 0560-1
Fuel transfer pump 0413-1
Fuses 1674-4

G

Gauge, fuel 1676-4
 Gauge, engine coolant temperature 1676-4
 Gauge, engine oil pressure 1676-4
 Gauge, hydrostatic charge pressure 1676-2
 Gauge, transmission lube pressure 1676-2
 Gauge, transmission oil pressure 1676-2
 Gear selector switch 1675-5
 Gears, reduction 0250-1
 Gear, shafts, bearings and power shift
 clutch 0350-1
 Gearbox 3650-1
 General specifications I-III-1
 Greases I-V-2
 Grille 1921-1
 Grille housing 1921-1
 Grille screen 1921-1

H

Heating system 1830-1
 Heating system 9031-1
 General information 9031-1
 Diagnosis and testing 9031-1
 High and low refrigerant pressure
 switches 1830-26
 Hood 1910-3
 Horn 2004-1
 Hour meter 1676-7
 Housings and covers 0341-1
 Housing, grille 1921-1
 Hydraulic brakes, scraper 1011-5
 Hydraulic filter restriction indicator 1676-7
 Hydraulic fitting installation and
 service recommendations 2160-51
 Hydraulic pump (without pump serial
 number plate) 2160-13
 Hydraulic pump (with pump serial
 number plate) 2160-28
 Hydraulic reservoir 2160-62
 Hydraulic system, axle and suspension
 system 0260-1
 Hydraulic system, brake 1060-1
 Hydraulic system, conveyor and elevating
 device 3612-1
 Hydraulic system, main 2160-1
 Hydraulic system, steering system 0960-1
 Hydraulic system testing:
 Axle hydraulic system 9025-35
 Component location 9025-109
 Diagnosing malfunctions 9025-54
 General information 9025-3

Hydraulic schematic 9025-107
 Main hydraulic system 9025-4
 Special procedures 9025-64
 Testing and adjustment 9025-76
 Transmission hydraulic system 9025-39
 Visual inspection 9025-53
 Hydrostatic charge pressure gauge 1676-2

I

Idler assembly, idler 3612-7
 Idler, center adjusting 3612-13
 Idler, lower assembly 3612-10
 Indicator, air filter restriction 1676-3
 Indicator, axle filter restriction 1676-7
 Indicator, hydraulic filter restriction 1676-7
 Indicator, low/high beam 1676-6
 Indicator, parking brake 1676-6
 Indicator, stop engine warning 1676-7
 Indicator, transmission filter restriction 1676-7
 Input drive 0225-1
 Input drive shaft and U-joints 0325-3
 Input shaft and C-1 clutch pack 0350-5
 Instruments and indicators 1676-1
 Intake manifold 0414-1

K

Key switch 1674-2

L

Leak testing compressor 1830-16
 Lighting system 1673-1
 Lighter, cigar 2006-1
 Links, steering 0920-3
 Low/high beam indicator 1676-6
 Low pressure warning switch 1060-5
 Lower idler assembly 3612-10
 Lubrication I-V-1
 Lubrication relief valve 0360-17
 Lubrication systems 1370-3

M

Main bearings 0401-1
 Main hydraulic oil filter 2160-59
 Main hydraulic system 2160-1
 Magnetic pick up 1675-6
 Manifold 3660-56

Manifold, exhaust 0410-1
Manifold, intake 0414-1
Mast 3612-3
Mechanical sensing gauges and
indicators 1676-1
Meter, hour 1676-7
Mirror 2002-3
Motor assembly, blower 1830-27
Motor, elevator 3660-37
Motor, starting 0422-1
Mounting parts 0342-1

N

Noise attenuator tube 2160-64
Nozzle holder and nozzle 0505-3
Nozzles, fuel injection 0413-9

O

Oil compressor 1830-14
Oil cooler 0419-1
Oil filter assembly 0360-20
Oil filter, main hydraulic 2160-59
Oils, engine I-V-2
Oiling system, engine 0407-1
Orifice, differential lock 0260-5
Orifice, steering circuit restrictor 0960-26
Output shaft 0350-48

P

Parking brake indicator 1676-6
Parking - emergency brakes 1111-1
Pedal, brake 1015-1
Pins and tapered sleeves 1740-9
Pistons 0403-1
Planetary pack 0350-14
Potentiometer 1675-1
Potentiometer, feedback 1675-2
Power steering 0920-3
Power train
Component location 9020-3
Diagnosing malfunctions 9020-28
Power flow 9020-13
Testing and adjustments 9020-32
Precleaner 0520-3
Predelivery service I-IV-1
Pressure control valve 2160-56
Pulley and bearing, compressor 1830-12
Pump, differential lock 0260-4

Pump drive and support assembly 2160-54
Pump, hydraulic (without pump serial
number plate) 2160-13
Pump, hydraulic (with pump serial
number plate) 2160-28
Pump, steering metering 0960-5
Pump, tandem hydraulic 2160-3
Pump, water 0417-1
Pump, fuel injection 0413-5
Pump, fuel transfer 0413-1

R

Radiator 0510-1
Receiver - dryer 1830-20
Reduction gear shaft 0350-12
Reduction gears 0250-1
Regulator 1672-1
Relays 1674-5
Reservoir, hydraulic 2160-62
Resistors 1674-5
Reverse warning alarm 2004-1

S

Safety I-II-3
Scraper brake adjustment 9020-32
Scraper hydraulic brakes 1011-5
Scraper systems checkout procedure 9005-5
Screen, grille 1921-1
Seat 1821-2
Seat belt 1821-3
Service brakes 1011-3
Shaft, axle 0250-1
Shaft seal, compressor 1830-8
Shaft, spiral bevel pinion 0210-15
Sliding floor cylinder 3560-12
Solenoids 1675-7
Specifications, general I-III-1
Speed control linkage 0515-1
Speedometer 1676-6
Special tools
Air conditioning system 1899-3
Alternator, regulator and charging
system wiring 1699-7
Batteries, support and cables 1699-6
Crankshaft and main bearings 0499-28
Camshaft and valve actuating means 0499-29
Connecting rods and pistons 0499-31
Conveyor and elevating device
hydraulic system 3699-12
Conveyor or mast 3699-11

Special tools—Continued

Cylinder block	0499-32
Cylinder head and valves	0499-34
Drive axle housing and support	0299-11
Electrical system testing	9035-16
Engine removal and installation	0499-25
Engine system testing	9035-3
Frame installation	1799-1
Frames	3599-6
Fuel injection system	0499-36
Gears, shafts, bearings and power shift clutch	0399-24
Heating and air conditioning system	9035-28
Housings and covers	0399-23
Hydraulic system	0399-29, 2199-12, 3599-7
Hydraulic system, axle and suspension systems	0299-10
Hydraulic system, service brakes	1099-6
Hydraulic system, steering	0999-9
Hydraulic system testing (flow meter)	9035-24
Instruments and indicators	1699-8
Operator enclosure	1899-2
Starting motor and fastenings	0499-40
Torque converter housing and cover	0699-6
Turbine, gears and shaft	0699-7
Turbocharger	0499-38
Water pump	0499-39
Wheels, powered	0199-2

Specifications and torque values

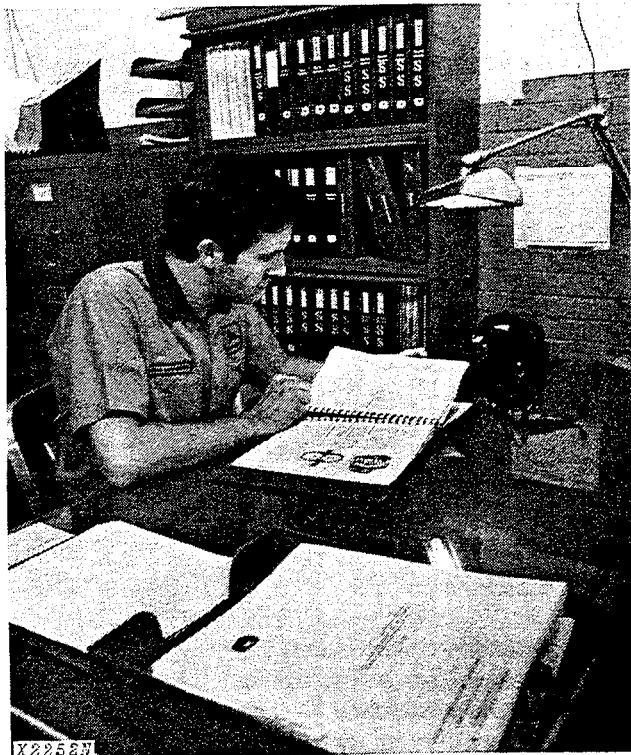
Air conditioning system	1899-1
Alternator, regulator, and charging system wiring	1699-2
Axle shafts, bearings, reduction gears	0299-8
Batteries, supports and cables	1699-1
Blades and cutting edges	3599-1
Camshaft and valve actuating means	0499-3
Connecting rods and pistons	0499-5
Conveyor or mast	3699-1
Crankshaft and main bearings	0499-2
Cutting edges and blades	3599-1
Cylinder head and valves	0499-12
Cylinder block	0499-8
Differential or bevel drive	0299-1
Drive axle housing	0299-1
Electrical system testing	9035-7
Engine break-in	0499-1
Engine system testing	9035-1
Exhaust manifold	0499-14
Fan drive	0499-24
Flywheel housings and fastenings	0499-24
Frames	3599-1

Specifications and torque values—Continued

Fuel injection system	0499-15
Frame installation	1799-1
Gearbox	3699-3
Gears, shafts, bearings and power shift clutch	0399-5
Heating and air conditioning system	9035-27
Housings and covers	0399-2
Hydraulic system	0399-16, 3599-3
Hydraulic pump and stroke control valve (without pump serial number plate)	2199-3
Hydraulic pump and stroke control valve (with pump serial number plate)	2199-6
Hydraulic system, axle and suspension system	0299-9
Hydraulic system, conveyor and elevating device	3699-7
Hydraulic system, service brakes	1099-2
Hydraulic system, steering	0999-2
Hydraulic system testing (flow meter)	9035-18
Input drive shaft	0399-1
Input drive shafts and U-joints	0299-5
Input shaft assembly	0399-5
Intake manifold	0499-17
Lighting system	1699-4
Main hydraulic oil filter	2199-11
Mounting parts	0399-4
Non-powered wheel axles	0299-6
Oil cooler	0499-21
Oiling system	0499-10
Parking - emergency brakes	1199-1
Planetary pack	0399-6
Power steering	0999-1
Pressure control valve	2199-10
Pump drive and support assembly	2199-9
Reduction gear shaft	0399-6
Service brakes	1099-1
Starting motor and fastenings	0499-22
System controls	1699-8
Tandem hydraulic pump	2199-1
Thermostats, housings and water piping	0499-20
Torque converter housing and cover	0699-1
Turbine, gears and shafts	0699-2
Turbocharger	0499-18
U-joints	0399-1
Water pump	0499-19
Wiring harness and switches	1699-5
Wheels, non-powered	0199-1
Wheels, powered	0199-1
Spiral bevel pinion shaft	0210-15
Start aid switch	1674-2

Start switch	1674-2	Transmission filter restriction indicator	1676-7
Starting aid line	0505-3	Transmission hold and downshift switches	1675-8
Starting motor	0422-1	Transmission lube pressure gauge	1676-2
Steering circuit restrictor orifice	0960-26	Transmission oil cooler	0360-25
Steering column	0960-1	Transmission oil pressure gauge	1676-2
Steering cylinders	0960-21	Transmission oil pump	0360-20
Steering cylinders, follow-up	0960-18	Turbine, gears and shaft	0651-1
Steering links	0920-3	Turbocharger	0416-1
Steering metering pump	0960-5	Turn indicators	1676-6
Steering, power	0920-3		
Steering valve	0960-9	U	
Stop engine warning indicator	1676-7	U-joints	0325-3
Storage	I-IV-1	Upper idler assembly	3612-7
Stroke control valve (without pump serial number plate)	2160-24	V	
Stroke control valve (with pump serial number plate)	2160-42	Valve, bowl control	3560-1
Suction screen	0360-18	Valve, brake	1060-9
Switch, elevator	1675-1	Valve, compressor relief	1830-25
Switch, gear selector	1675-5	Valve, differential lock	0260-1
Switch, key	1674-2	Valve, differential lock check	0260-5
Switch, low pressure warning	1060-5	Valve, expansion	1830-23
Switch, start	1674-2	Valve, filter relief	0360-22
Switch, start aid	1674-2	Valve, lubrication relief	0360-17
Switch, windshield wiper	1674-2	Valve, pressure control	2160-56
Switches, bowl and ejector gate	1674-2	Valve, steering	0960-9
Switches, high and low refrigerant pressure	1830-26	Valve, stroke control (without pump serial number plate)	2160-33
Switch, temperature control	1830-24	Valve, stroke control (with pump serial number plate)	2160-42
Switches, transmission hold and downshift	1675-8	Valve, torque converter clutch modulating	0360-14
System controls	1675-1	Valve, transmission control	0360-1
		Ventilating system	0408-1
T		Vibration damper	0401-8
Tachometer	1676-5	Voltmeter	1676-5
Tandem hydraulic pump	2160-3		
Temperature control switch	1830-24	W	
Thermostats	0418-1	Warning device	2004-1
Tire	0110-4, 0120-2	Water pump	0417-1
Torque converter	0641-1	Windshield wiper switch	1674-2
Torque converter clutch modulating valve	0360-14	Wheel axles, non-powered	0230-1
Torque converter housing and cover	0641-1	Wheels, non-powered	0120-1
Tractor brakes	1011-3	Wheels, powered	0110-3
Transmission control valves	0360-1	Windshield wiper	1810-3
Transmission control circuit	1675-4	Wiper, windshield	1810-3
Transmission controller	1675-4	Wiring harness and switches	1674-1

Group II INTRODUCTION AND SAFETY INFORMATION INTRODUCTION



Use FOS Manuals for Reference

X2252N



Use Technical Manuals for Actual Service

X2253N

This technical manual is part of a twin concept of service:

The two kinds of manuals work as a team to give you both the general background and technical details of shop service.

•FOS Manuals—for reference

Fundamentals of Service (FOS) Manuals cover basic theory of operation, *fundamentals* of trouble shooting, *general* maintenance, and *basic* types of failures and their causes. FOS Manuals are for training new personnel and for reference by experienced service technicians.



When a service technician should refer to a FOS Manual for more information, a FOS symbol like the one at the left is used in the technical manual.

•Technical Manuals—for actual service

Technical Manuals are concise service guides for *specific* machines. Technical manuals are on-the-job guides containing only the vital information needed by an experienced service technician.

This technical manual was written for you—an experienced service technician. Keep it in a permanent binder in the shop where it is handy. Read it when you need to know correct service procedures or specifications.


Some features of this manual:

- Inside front cover - "Table of Contents".
- Section I - Contents, safety information, general specifications, general services and fuels and lubricants.
- Sections 1 through 42 - Removal, repair, testing (components removed), installation, and adjustment.
- Section 90 - Detailed explanation of system operation, diagnosis, visual inspection, testing, and adjustments.
- Specifications are listed and illustrated at the end of each section.

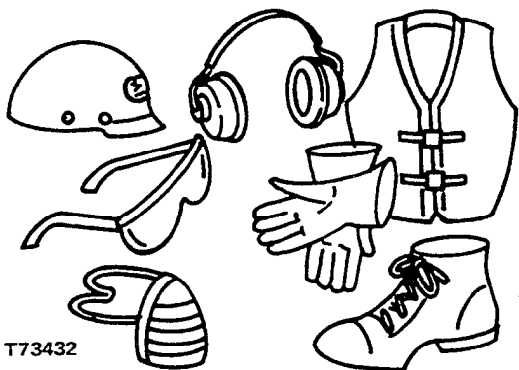
MAINTENANCE WITHOUT ACCIDENT WORK SAFELY



T27999N

 This safety symbol is used for important safety messages. When you see this symbol, follow the safety message to avoid personal injury.

EVERY EMPLOYER HAS A SAFETY PROGRAM. KNOW WHAT IT IS!



T73432

See your shop supervisor for specific instructions on a job, and the safety equipment you may need, such as:

- Hard hat
- Safety shoes
- Safety goggles
- Heavy gloves
- Reflector vest
- Hearing protectors
- Respirator

RIGHT

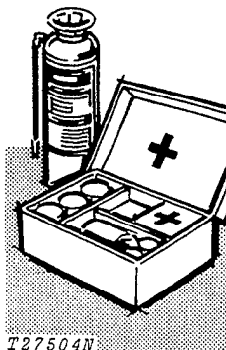


WRONG

T27502N

BE ALERT!

Plan ahead — work safely — know how to use a first aid kit and a fire extinguisher — and where to get assistance.



T27504N

Maintenance Area

Make sure the maintenance area has enough ventilation.

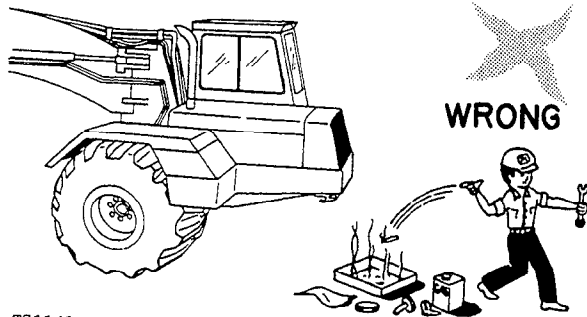
Keep the maintenance area **CLEAN AND DRY**. Oily and wet floors are slippery. Greasy rags are a fire hazard. When you work with electrical equipment, wet spots are dangerous.

Keep starting aids in a cool, well-ventilated place, out of reach of unauthorized personnel.

MAINTENANCE WITHOUT ACCIDENT

AVOID FIRE HAZARDS

Fuel Is Dangerous!



T71141

Do not smoke while you fill the fuel tank.

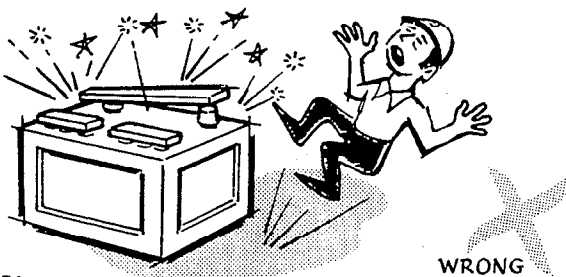
Do not smoke while you work with material that will start on fire easily.

Stop the engine before you fill the fuel tank.

Do not use gasoline or diesel fuel for cleaning parts. Use solvents that will not start on fire.

Battery Gas Is Highly Flammable!

When you charge a battery, be sure there is enough ventilation.



T27506N

Do not put metal objects across terminals to check the battery charge.

Keep sparks and flames away from batteries.

Do not smoke near battery.

Flame Is Not a Flashlight!

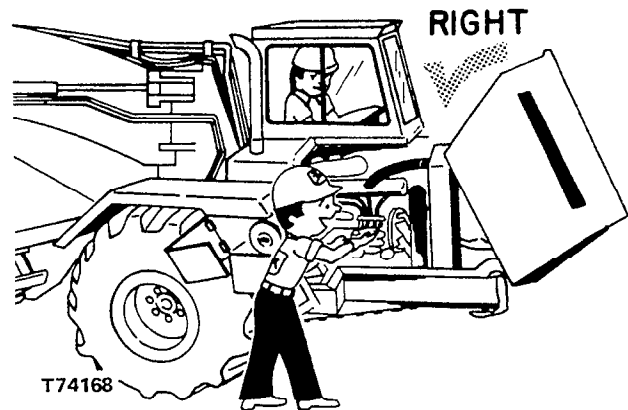
DO NOT USE OPEN FLAME AROUND THE MACHINE.

KNOW WHERE A FIRE EXTINGUISHER IS AND HOW TO USE IT.

UNDER ALL MAINTENANCE CONDITIONS—

Do not work on the equipment unless you are approved to do so. Then be sure you know the correct procedure.

Do not work on equipment while it is being operated.



T74168

When the engine is running, do not work on equipment unless the procedure is approved.

If you must work on the machine with the engine running, ALWAYS USE TWO service technicians. One must be at the controls. The other must be within sight of the operator.

Keep hands away from moving parts.

Put a support under all raised equipment.

Do not work under a raised bowl.

Lower the bowl to the ground.

If the machine is on a slope, use blocks to hold it in place.

Do not lift heavy parts by yourself. Use a hoist.

TAKE CARE! WATCH OUT FOR OTHER PEOPLE IN THE AREA.

When you drill, grind, or hammer metal, wear safety glasses.

BE CAREFUL DURING SERVICE AND REPAIR



T71143

T71143

Keep ALL equipment free of dirt and oil.

Clean oil, grease, mud, ice or snow from the operator's station, steps and hand rail.

When you get a machine ready for storage, remember that inhibitor changes easily into gas and is dangerous. After you add the inhibitor, seal and tape openings. When you are not using the inhibitor, keep the can tightly closed.

Do not remove the radiator cap unless the engine is cool. First, loosen the cap slowly to the stop. Then release all pressure in the cooling system before you remove the cap.

Check the exhaust system regularly for leaks.

Release hydraulic pressure before you work on the hydraulic system:

- Lower the bowl to the ground.
- Stop the engine.
- Move the steering wheel until the bowl does not move.

When you check hydraulic pressure, be sure to use the correct test gauge.

Before you work on the fuel system, close the fuel shutoff valve.

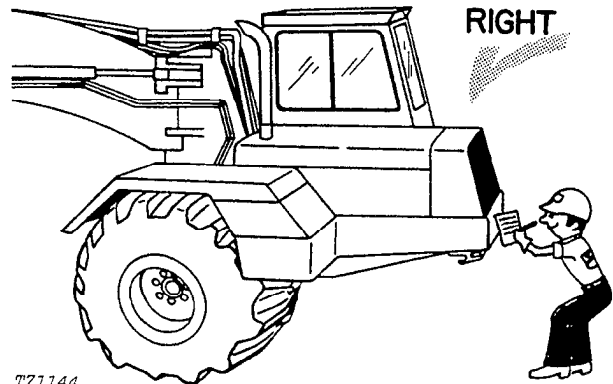
Before you work on the electrical system, or make major repairs, disconnect the battery ground strap.

KNOW EQUIPMENT IS READY!

All parts should be in good condition and fastened in place.

CHECK IT OUT!

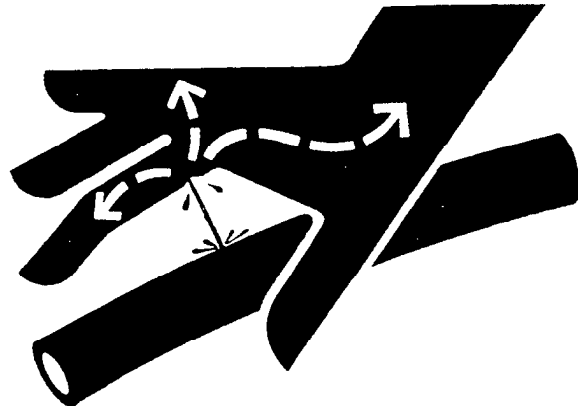
- ROLL-OVER PROTECTIVE STRUCTURE
- SEAT BELT, ETC.



T71144

T71144

Carefully inspect all systems for leaks.



X9811

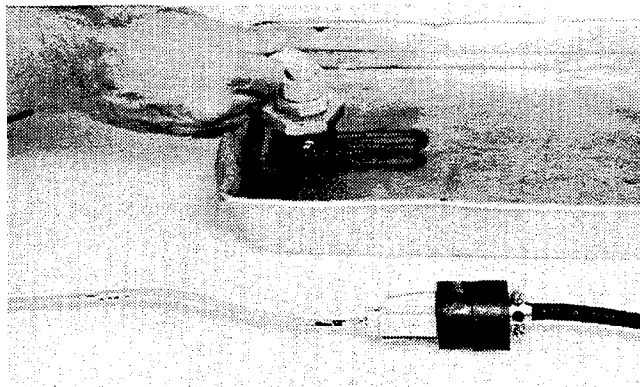
Escaping fluid under pressure can penetrate the skin causing serious injury. Relieve pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure. Keep hands and body away from pinholes and nozzles which eject fluids under high pressure. Use a piece of cardboard or paper to search for leaks. Do not use your hand.

If ANY fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this type injury or gangrene may result.

Avoid possible injury or death from machinery runaway.

Do not start engine by shorting across starter terminals. Machine will start in gear and will move if normal circuitry is bypassed.

NEVER start engine while standing on ground. Start engine only from operator's seat, with transmission in neutral, direction selector lever in neutral, and park brake applied.

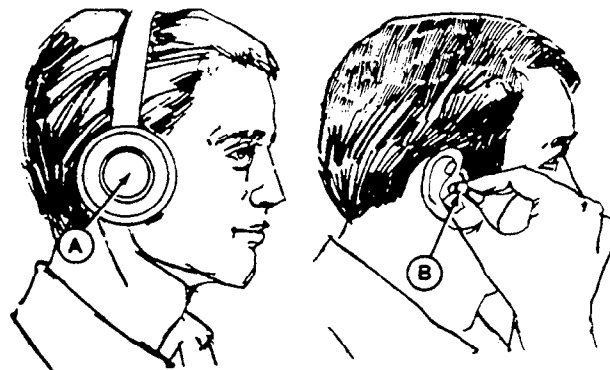


T87098

Test coolant heater in liquid only.

Use a heavy-duty grounded cord to connect coolant heater to electrical power.

Do not plug into electrical power unless heating element is immersed in coolant. Sheath could burst and result in personal injury.



X7662

Prolonged exposure to loud noise can cause impairment or loss of hearing. Wear a suitable hearing protective device such as earmuffs (A) or earplugs (B) to protect against objectionable or uncomfortable loud noise.

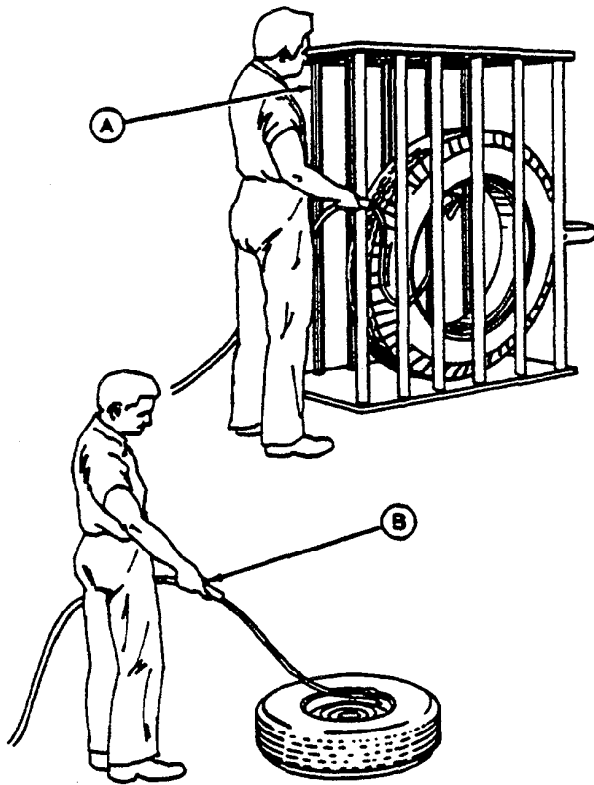
If your machine is equipped with a starting fluid starting aid, remember starting fluid is highly flammable. DO NOT incinerate or puncture a starting fluid container. DO NOT store a starting fluid container in a high-temperature area.



T84925

If your machine has a roll-over protective structure, USE A SEAT BELT.

If your machine does not have a roll-over protective structure, DO NOT USE A SEAT BELT.



Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion which may result in serious injury or death. Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job. Have it done by your John Deere dealer or a qualified tire repair service.

Detailed tire mounting instructions, including necessary safety precautions, are contained in John Deere Fundamentals of Service (FOS) Manual 55, Tires and Tracks, available through your John Deere dealer. Such information is also available from the Rubber Manufacturers Association and from tire manufacturers.

- A—Use a Safety Cage if Available.
- B—DO NOT Stand Over Tire. Use a Clip-On Chuck and Extension Hose.

TS0123

Group III

GENERAL SPECIFICATIONS

(Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with ICED and SAE Standards. Except where otherwise noted, these specifications are based on a unit equipped with 23.5-25, 16 ply rating tires, ROPS canopy, full fuel tank, 175 lb. (80 kg) operator, and all standard equipment.)

Capacity (SAE heaped):
 Volume 11 cu. yd. (8.4 m³)
 Total weight of payload
 2500 lb./yd.³ (1483 kg/m³) 27,500 lb. (12 474 kg)

Power (@ 2100 engine rpm): **SAE** **DIN**
 Gross 190 hp (141.7 kW)
 Net 175 hp (130.5 kW) 177.5 PS

Net engine flywheel power is for an engine equipped with fan, air cleaner, water pump, lubricating oil pump, fuel pump, alternator, and muffler. Gross engine power is without fan. Flywheel power ratings are under SAE standard conditions of 500 ft. altitude and 85°F temperature and DIN 70 020 standard conditions of 760 mm Hg barometer (sea level) and 20°C temperature. Engine maintains rated horsepower up to 7500 feet (2286 m) altitude.

Engine: John Deere turbocharged and intercooled diesel, 6-cylinder, 4-stroke cycle
 Bore and stroke 4.56x4.75 in. (116x121 mm)
 Piston displacement 466 cu. in. (7.6 L)
 Compression ratio 15.5 to 1
 Maximum torque @
 1300 rpm 570 lb-ft (773 N·m) (78.8 kg-m)
 NACC or AMA (U.S. Tax) horsepower 49.9
 Main bearings 7
 Lubrication Pressure system w/full-flow filter
 Cooling Pressurized w/thermostat and controlled bypass
 Fan Suction
 Aspirated air cleaner w/safety element and restriction indicator Dry
 Electrical system 24 volt w/alternator
 Batteries (two 12 volt) Reserve capacity: 180 minutes

Torque Converter:
 Two-phase single stage with 2.30 to 1 multiplication ratio, free-wheeling stator lockup clutch and automatic control.

Transmission:
 Planetary Power-Shift, 6 forward, 1 reverse speeds. Microprocessor controlled, fully automatic shift with modulation.

Gear pump 24 gpm (1.5 L/s) @ 2100 rpm for transmission lubrication, torque converter charge and transmission shift actuation.

Differential Lock Foot-operated, hydraulically actuated

Drive Axle .. Differential drive; overall ratio 28.94 to 1; planetary final drives with 4.7 gpm (0.30 L/s) @ 2100 engine rpm for axle lubrication and differential lock actuation.

Brakes: Hydraulic, power actuated. An accumulator provides several brake applications after engine is stopped.

Tractor Wet-disk between differential and planetaries. No adjustment needed.
 Scraper... Expanding shoe, self-adjusting in wheels.
 Parking Manually controlled, mechanical, on axle input shaft.

Power Steering: Position-responsive
 Articulated frame hydraulically actuated by dual cylinders.
 Turning circle
 (180 deg. turn) 30 ft. (9.14 m)
 Articulation 180 deg.
Tractor Oscillation (total) 27 deg.

Hydraulic System:
 Main tractor system: Closed-center
 System pressure 2350 psi (16 203 kPa) (165.2 kg/cm²)
 Operates steering, brakes, and all scraper functions except elevator drive.
 Main pump... Variable displacement, constant pressure; delivers 34.6 gpm (2.18 L/s) @ 2100 engine rpm.
 Main charge pump delivers 13 gpm (0.82 L/s) @ 2100 engine rpm.
 Elevator system... Engine-driven, 4.26 cu. in. (69.8 cm³) variable displacement, reversible hydrostatic pump delivers 36.6 gpm (2.31 L/s) @ 2100 engine rpm.
 System pressure 5000 psi (34 475 kPa) (351 kg/cm²)

Filtration All systems are protected by replaceable filters.
 Main hydraulic system 10 micron filters
 Elevator system 10 micron filters
 Transmission 10 micron filters
 Engine 25 micron filters
 Differential 10 micron filters

Hydraulic Cylinders: Bore Stroke
 Lift (2) 4.5 in. (114 mm) 18 in. (457 mm)
 Sliding floor
 (1) 5.25 in. (133 mm) 30.1 in. (765 mm)
 Ejector gate
 (2) 2.5 in. (64 mm) 34.8 in. (884 mm)
 Steering (2) 3.5 in. (89 mm) 25.89 in. (658 mm)
 Piston rods Ground, heat-treated, chrome plated, polished
 Lift and steering cylinders 2 in. (51 mm)
 Sliding floor cylinder 2.25 in. (57 mm)
 Ejector gate cylinders 1.50 in. (38 mm)

Elevator: Reversible, hydrostatic-drive with triple gear reduction
 Number of flights 18
 Spacing of flights 12.44 in. (316 mm)
 Width of flights 5 ft. 6.9 in. (1.7 m)
 Speed (variable) 50 to 236 fpm (15-72 m/min)
 Length (top to bottom) 9 ft. 6 in. (2.9 m)

Bowl: Heavy gauge steel with reinforcing and box construction. Sliding floor rides on heat-treated replaceable rails. Cutting edge retracts with sliding floor. Independent axles are vertically adjustable.

Cutting Edge: 7 ft. 6 in. (2.29 m) wide; 3 sections, reversible and replaceable, high-carbon steel. Each section is adjustable vertically 2 in. (51 mm).
 Center section 0.75x10x54 in. (19x254x1372 mm)
 End sections 0.75x10x18 in. (19x254x457 mm)

Tires:
 23.5-25, steel-cord radials
 23.5-25, 16 ply rating, E2
 23.5-25, 20 ply rating, E2

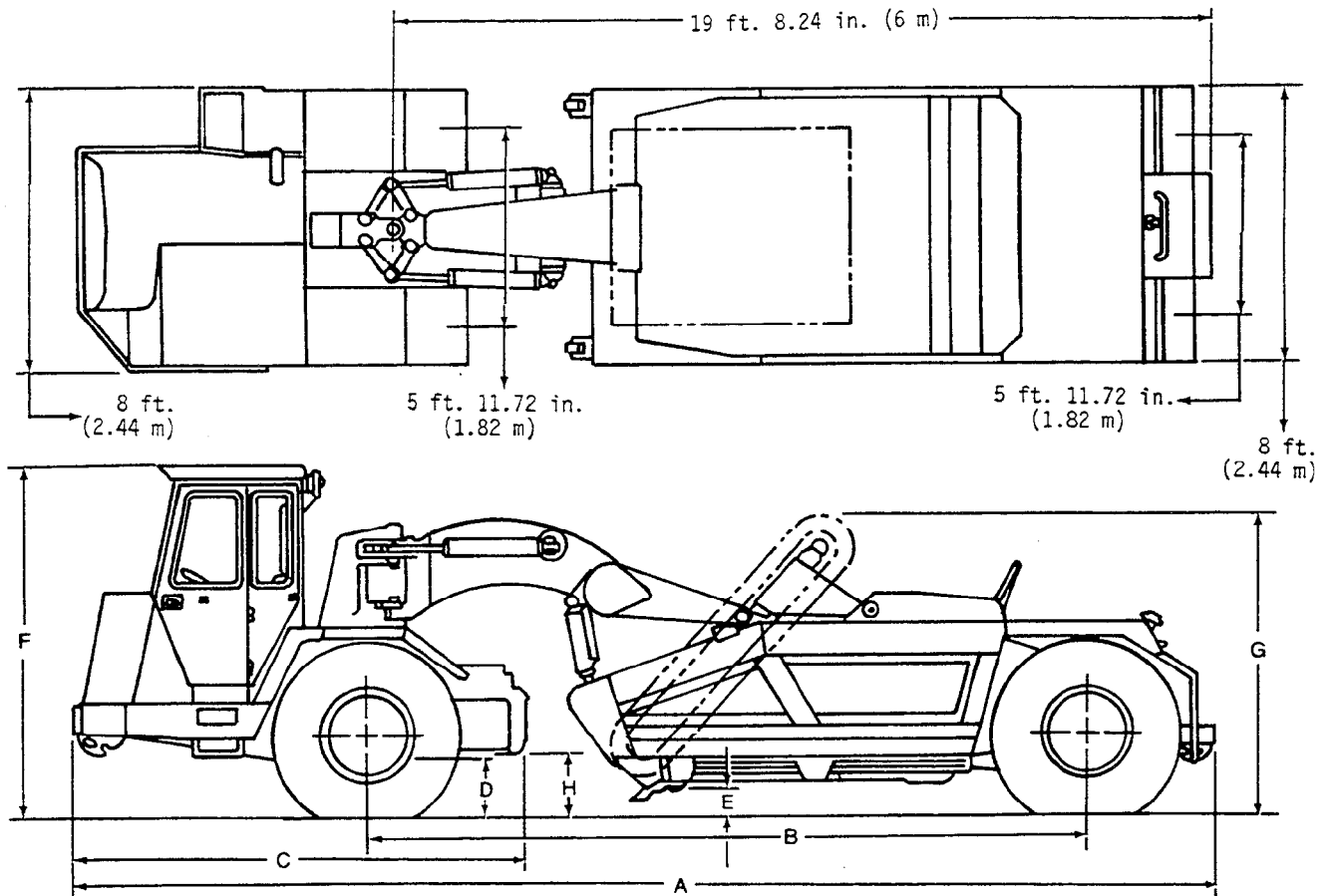
Capacities:	U.S.	Imp.	Liters
Cooling system	9 gal.	7.5 gal.	34.1
Fuel tank	72 gal.	60.0 gal.	272.5
Engine lubrication w/filter	19 qt.	15.8 qt.	18.0
Transmission w/filter . . .	13 gal.	10.8 gal.	49.0
Differential case w/filter and hoses	23 qt.	19.1 qt.	21.8
Hyd. system w/hyd. filter and elevator filter	12 gal.	10.0 gal.	45.4
Elevator gearcase	13 qt.	10.8 qt.	12.6

Additional Standard Equipment:
 Cigar lighter Elevator charge pressure
 Deluxe suspension seat Hitch, steering and rear
 Cold weather starting aid frame central lube
 Fenders (tractor and systems
 scraper) Horn
 Gauges: Horizontal muffler
 Voltmeter Indicator warning lights:
 Engine oil pressure Brake pressure
 Engine water temperature Hydraulic filter
 Fuel Parking brake light
 Hour meter and buzzer
 Hydrostatic charge Transmission filter
 pressure Lights (head and work)
 Speedometer Reverse warning alarm
 Tachometer ROPS canopy and seat
 Transmission lube belt
 pressure Windshield w/wiper
 Transmission oil Turn signals and 4-way
 pressure flasher
 Transmission oil Vandal protection
 temperature

Weight Distribution:	lb.	kg
Empty: Drive axle	22,790	10 337
Scraper axle	12,710	5 765
Total	35,500	16 102
Loaded: Drive axle	32,083	14 553
Scraper axle	30,917	14 024
Total	63,000	28 577

Special Equipment:
 Air conditioner
 Cab panels
 Fender extensions and mud flaps for scraper wheels
 Heater
 Teeth for cutting edge
 Extended side cutters
 Ejector gate spill screen

762A SCRAPER DIMENSIONS



T74954

	BOWL AT GROUND LEVEL	BOWL UP	BOWL LEVEL
A	32 ft. 9.5 in. (10 m)	32 ft. 2.5 in. (9.81 m)	32 ft. 5.4 in. (9.9 m)
B	21 ft. 0.25 in. (6.40 m)	20 ft. 4.1 in. (6.20 m)	20 ft. 7 in. (6.25 m)
C	12 ft. 11.5 in. (3.95 m)	13 ft. (3.96 m)	12 ft. 11.9 in. (3.96 m)
D (axle clearance)	18.5 in. (470 mm)	18.5 in. (470 mm)	18.5 in. (470 mm)
E	—	17.25 in. (438 mm) w/o teeth 15.50 in. (394 mm) w/teeth	12 in. (305 mm) w/o teeth 10 in. (254 mm) w/teeth
F	9 ft. 10 in. (3 m)	9 ft. 4 in. (2.84 m)	9 ft. 6.4 in. (2.90 m)
G	8 ft. 7 in. (2.62 m)	9 ft. 6 in. (2.89 m)	9 ft. 2 in. (2.79 m)
H (trans. clearance)	17.12 in. (435 mm)	21.9 in. (556 mm)	20 in. (508 mm)




CUSTOMARY HARDWARE TORQUE

Check all cap screws and nuts, which can be easily reached, to be sure they are tight. If hardware is loose, tighten it to torque shown on chart below unless a special torque is specified.

NOTE: Torques shown are for dry (no lubrication on threads) hardware.

NOTE: Torque wrench tolerance is ± 10 percent of specified torque.

Customary Hardware

Cap Screw Size-Inches	 Grade B		 Grade D		 Grade F	
	lb-ft.	(N-m)	lb-ft.	(N-m)	lb-ft.	(N-m)
1/4	----	----	10	(14)	14	(19)
5/16	----	----	20	(27)	30	(41)
3/8	----	----	35	(47)	50	(68)
7/16	35	(47)	55	(75)	80	(108)
1/2	55	(75)	85	(115)	120	(163)
9/16	75	(102)	130	(176)	175	(237)
5/8	105	(142)	170	(230)	240	(325)
3/4	185	(251)	300	(407)	425	(576)
7/8	160	(217)	445	(603)	685	(929)
1	250	(339)	670	(908)	1030	(1396)
1-1/8	330	(447)	910	(1234)	1460	(1979)
1-1/4	480	(651)	1250	(1695)	2060	(2793)

T88884

METRIC HARDWARE TORQUE SPECIFICATIONS

NOTE: Torques shown are for hardware with SAE 30W oil on threads.

NOTE: Torque wrench tolerance is ± 10 percent of specified torque.

Metric Standard Thread

Thread	8.8		10.9		12.9	
	N·m	(lb-ft)	N·m	(lb-ft)	N·m	(lb-ft)
M5	5.9	(4.4)	7.9	(5.8)	9.8	(7.2)
M6	9.8	(7.2)	13.8	(10.2)	16.7	(12.3)
M8	24.6	(18.1)	34.4	(25.4)	40.2	(29.6)
M10	48.1	(35.5)	67.8	(50.0)	81.5	(60.1)
M12	84.4	(62.2)	118.0	(87.0)	142.0	(105.0)
M14	133.0	(98.0)	187.0	(138.0)	226.0	(167.0)
M16	206.0	(152.0)	290.0	(214.0)	348.0	(257.0)
M18	285.0	(210.0)	398.0	(294.0)	476.0	(351.0)
M20	402.0	(296.0)	570.0	(420.0)	677.0	(499.0)
M22	540.0	(398.0)	765.0	(564.0)	914.0	(674.0)
M24	697.0	(514.0)	980.0	(723.0)	1180.0	(870.0)

Metric Fine Thread

Thread	8.8		10.9		12.9	
	N·m	(lb-ft)	N·m	(lb-ft)	N·m	(lb-ft)
M8 x 1	26.5	(19.5)	37.3	(27.5)	44.2	(32.6)
M10 x 1	47.1	(34.7)	68.8	(50.7)	81.5	(60.1)
M12 x 1.5	88.4	(65.2)	123.0	(91.0)	147.0	(108.0)
M14 x 1.5	147.0	(108.0)	206.0	(152.0)	246.0	(181.0)
M16 x 1.5	221.0	(163.0)	309.0	(228.0)	373.0	(275.0)
M18 x 1.5	319.0	(235.0)	451.0	(333.0)	540.0	(398.0)
M20 x 1.5	451.0	(333.0)	628.0	(463.0)	755.0	(557.0)
M22 x 1.5	559.0	(442.0)	845.0	(623.0)	1030.0	(760.0)
M24 x 2	765.0	(564.0)	1080.0	(796.0)	1275.0	(940.0)
M26 x 2	1130.0	(833.0)	1570.0	(1158.0)	1915.0	(1412.0)

T5859AD

TUBE AND HOSE FITTING, 37° FLARE AND 30° CONE SEAT CONNECTOR SERVICE RECOMMENDATIONS

1. Inspect the flare and the flare seat. They must be free of dirt and defects. If repeated leaks occur, inspect for defects with a magnifying glass. If burrs and raised nicks on the connector body cannot be removed with a slip stone, replace the connector.

2. Defects in the tube flare cannot be repaired. Replace the tube. Overtightening a defective flared fitting will not stop leaks.

3. As a field repair, a ductile truncated cone shaped washer can be used between the tube flare and connector body. These washers are soft enough to fill defects in the seat and flare. They will also seal the connection. Ductile washers are available from industrial supply houses.

4. Align the tube with the fitting before attempting to start the nut. Failure to do so can cause a deformed flare and subsequent leaks. Install hoses without twists. A twisted hose attempts to straighten out when pressure is applied. This exerts a torque on the connection, eventually causing failure.

5. Lubricate the connection with hydraulic fluid, petroleum jelly or soap. Tighten the swivel nut by hand until it is snug.

6. Mark a line across the nut and connector body. This line will serve as a visual indicator as to whether the nut has been tightened and by how much.

7. Using two wrenches, one on the connector body and a torque wrench on the nut, tighten the nut to the torque value as shown in the chart. In the case of a hose, it may be necessary to use three wrenches to prevent twisting.

TUBE AND HOSE FITTING, 37° FLARE AND 30° CONE SEAT CONNECTOR TORQUE

Thread Size	N·m	Torque ¹ (lb-ft)	New ²	Used ³
			Number of Flats	Number of Flats
3/8-24 UNF	8	(8)	2-1/2	1
7/16-20 UNF	12	(9)	2-1/2	1
1/2-20 UNF	16	(12)	2-1/2	1
9/16-18 UNF	24	(18)	2	1
3/4-16 UNF	46	(34)	2	1
7/8-14 UNF	62	(46)	1-1/2	1
1-1/16-12 UN	102	(75)	1	3/4
1-3/16-12 UN	122	(90)	1	3/4
1-5/16-12 UN	142	(105)	3/4	3/4
1-5/8-12 UN	190	(140)	3/4	3/4
1-7/8-12 UN	217	(160)	1/2	1/2

1. Tolerance of \pm 10%.

2. To be used if a torque wrench cannot be used. After tightening fitting by hand, put a mark across the fittings, then tighten fitting the number of flats shown.

3. Flare connection seal by deforming or squeezing the tube between the nut and the connector. More deformation is possible with new parts than with old. Therefore, if a torque wrench is not used for re-assembly, the values in this column must be used to prevent damage.

TS859AE

O-RING BOSS FITTING SERVICE RECOMMENDATIONS

1. Inspect boss O-ring seat. It must be free of dirt and defects. If repeated leaks occur, inspect for defects with a magnifying glass. Some raised defects can be removed with a slip stone.

Occasionally a lower durometer O-ring will seal against a rough seat. If neither of these solutions work, the component must be replaced.

2. Put hydraulic oil, petroleum jelly or soap on the O-ring. Put a thimble over the threads to protect O-ring from nicks. Slide O-ring over the thimble and into the turned down section of fitting.

For angle fittings, loosen special nut and push special washer against threads so O-ring can be installed into the turned down section of fitting.

3. Turn fitting into the boss by hand until special washer or washer face (straight fitting) contacts boss face and O-ring is squeezed into its seat.

4. To position angle fittings, turn the fitting counter-clockwise a maximum of one turn.

5. Tighten straight fittings to the torque value shown in chart. For angle fittings, tighten the special nut to valve shown in the chart while holding body of fitting with a wrench.

STRAIGHT FITTING OR SPECIAL NUT TORQUE (1)

Thread Size	Torque ¹		Number Of Flats ²
	N·m	(lb-ft)	
3/8-24 UNF	8	(6)	2
7/16-20 UNF	12	(9)	2
1/2-20 UNF	16	(12)	2
9/16-18 UNF	24	(18)	2
3/4-16 UNF	46	(34)	2
7/8-14 UNF	62	(46)	1-1/2
1-1/16-12 UNF	102	(75)	1
1-3/16-12 UNF	122	(90)	1
1-5/16-12 UNF	142	(105)	3/4
1-5/8-12 UNF	190	(140)	3/4
1-7/8-12 UNF	217	(160)	1/2

1. Tolerance \pm 10%.

2. To be used if a torque wrench cannot be used. After tightening fitting by hand, put a mark on nut and boss; then tighten special nut or straight fitting the number of flats shown.

TS859AG

SAE FOUR BOLT FLANGE FITTING SERVICE RECOMMENDATIONS

1. Inspect the sealing surfaces for nicks or scratches, roughness or out-of-flat condition. Scratches cause leaks. Roughness causes seal wear. Out-of-flat causes seal extrusion. If these defects cannot be polished out, replace the component.

2. Install the correct O-ring (and backup washer if required) into the groove using petroleum jelly to hold it in place.

3. For split flange; loosely assemble split flange halves, being sure that the split is centrally located and perpendicular to the port. Hand tighten cap screws to hold parts in place. Do not pinch O-ring.

4. For single piece flange; put hydraulic line in the center of the flange and install four cap screws. With the flange centrally located on the port, hand tighten cap screws to hold it in place. Do not pinch O-ring.

5. For both single piece flange and split flange, be sure the components are properly positioned and cap screws are hand tight. Tighten one cap screw, then tighten the diagonally opposite cap screw. Tighten the two remaining cap screws. Tighten all cap screws within the specified limits shown in the chart.

DO NOT use air wrenches. DO NOT tighten one cap screw fully before tightening the others. DO NOT over-tighten.

SAE FOUR BOLT FLANGE FITTING TORQUE

Nominal Flange Size	Cap Screw Size ¹	Torque ²			
		N·m		(lb-ft)	
		Min.	Max.	Min.	Max.
1/2	5/16 - 18 UNC	20	31	(15)	(23)
3/4	3/8 - 16 UNC	28	54	(21)	(40)
1	3/8 - 16 UNC	37	54	(27)	(40)
1-1/4	7/16 - 14 UNC	47	85	(35)	(63)
1-1/2	1/2 - 13 UNC	62	131	(46)	(97)
2	1/2 - 13 UNC	73	131	(54)	(97)
2-1/2	1/2 - 13 UNC	107	131	(79)	(97)
3	5/8 - 11 UNC	158	264	(117)	(195)
3-1/2	5/8 - 11 UNC	158	264	(117)	(195)
4	5/8 - 11 UNC	158	264	(117)	(195)
5	5/8 - 11 UNC	158	264	(117)	(195)

1. SAE Grade 5 or better cap screws with plated hardware.

2. Tolerance ± 10%. The torques given are enough for the given size connection with the recommended working pressure. Torques can be increased to the maximum shown for each cap screw size if desired. Increasing cap screw torque beyond this maximum will result in flange and cap screw bending and connection failures.

TS859AF

O-RING FACE SEAL FITTING SERVICE RECOMMENDATIONS

1. Inspect the sealing surfaces for nicks or scratches, roughness, or out-of-flat condition. Scratches cause leaks. Roughness causes seal wear. Out-of-flat causes seal extrusion. If these defects cannot be polished out, replace the component.

2. Lubricate O-ring and male threads with petroleum jelly.

For O-ring face seal fittings, push O-ring into groove.

For O-ring boss fittings, put a thimble over the threads to protect O-ring from nicks. Slide O-ring over the thimble and into the turned down section of fitting.

For angle fittings, loosen special nut and push special washer against threads so O-ring can be installed into the turned down section of fitting.

3. Install fitting and hand tighten until snug. To position angle fittings, turn fitting counterclockwise a maximum of one turn.

4. Tighten fitting for nut to the torque value shown in chart. Use one wrench to hold connector body and another wrench to tighten nut. When tightening a fitting on a hose, it may be necessary to use three wrenches to prevent twisting hose; one on the connector body, one on the nut, and one on the body of the hose fitting.

O-RING FACE SEAL FITTING TORQUE (1)

Nominal Tube mm	O.D. in.	Dash Size	Thread Size in.	O-Ring Face Seal End Swivel Nut Torque		Bulkhead Nut Torque		O-Ring Boss End Straight Fitting or Jam Nut Torque		
				N·m	lb-ft	N·m	lb-ft	Thread Size in.	N·m	lb-ft
4.76	0.188	-3	— — —	—	—	—	—	3/8-24	8	8
6.35	0.250	-4	9/16-18	16	12	5.0	3.5	7/16-20	12	9
7.94	0.312	-5	— — —	—	—	—	—	1/2-20	16	12
9.52	0.375	-6	11/16-16	24	18	9.0	6.5	9/16-18	24	18
12.70	0.500	-8	13/16-16	50	37	17.0	12.5	3/4-16	46	34
15.88	0.625	-10	1-14	69	51	17.0	12.5	7/8-14	62	46
19.05	0.750	-12	1-3/16-12	102	75	17.0	12.5	1-1/16-12	102	75
22.22	0.875	-14	1-3/16-12	102	75	17.0	12.5	1-3/16-12	122	90
25.40	1.000	-16	1-7/16-12	142	105	17.0	12.5	1-5/16-12	142	105
31.75	1.250	-20	1-11/16-12	190	140	17.0	12.5	1-5/8-12	190	140
38.10	1.500	-24	2-12	217	160	17.0	12.5	1-7/8-12	217	160

1. Tolerance: ± 15-20%.

T5859AH

Complete manual From
aservicemanualpdf.com

**Thank you very much
for your reading.**

Please Click Here

**Then Get More
Information.**