





# 890A EXCAVATOR TECHNICAL MANUAL TM-1263 (JUN-86)

## SECTION AND GROUP CONTENTS

### SECTION I—GENERAL INFORMATION

- Group I—Introduction and Safety Information
- Group II—General Specifications
- Group III—Cap Screw Torque Values
- Group IV—Lubrication

### SECTION 01—TRACKS

- Group 0130—Track Systems

### SECTION 02—AXLES AND SUSPENSION SYSTEMS

- Group 0250—Axle Shafts, Bearings and Reduction Gears
- Group 0260—Hydraulic Systems

### SECTION 04—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

### SECTION 04—ENGINE—Continued

- Group 0413—Fuel Injection System
- Group 0414—Intake Manifold
- Group 0416—Turbocharger
- Group 0417—Water Pump
- Group 0418—Thermostats, Housing 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

### SECTION 05—ENGINE AUXILIARY SYSTEMS

- Group 0505—Cold Weather Starting Aids
- Group 0510—Cooling Systems
- Group 0515—Speed Controls
- Group 0520—Intake System
- Group 0560—External Fuel Supply Systems

### SECTION 16—ELECTRICAL SYSTEMS

- Group 1671—Batteries, Support, and Cables
- Group 1672—Alternator, Regulator and Charging System Wiring
- Group 1674—Wiring Harness and Switches
- Group 1676—Instruments and Indicators

*All information, illustrations and specifications contained in this technical manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice. Whenever applicable, specifications and design information are in accordance with SAE and ICED standards.*

Copyright© 1986  
DEERE & COMPANY  
Moline, Illinois  
All Rights Reserved  
A JOHN DEERE ILLUSTRATION  
Previous Edition  
Copyright© 1982 Deere & Company

T28;1263 09 130686

## **SECTION AND GROUP CONTENTS—CONTINUED**

### **SECTION 17—FRAME, CHASSIS, OR SUPPORTING STRUCTURE**

Group 1740—Frame Installation  
Group 1749—Chassis Weights

### **SECTION 18—OPERATOR'S STATION**

Group 1810—Operator Enclosure  
Group 1830—Heating and Air Conditioning

### **SECTION 19—SHEET METAL AND STYLING**

Group 1927—Fenders

### **SECTION 33—EXCAVATOR**

Group 3302—Buckets  
Group 3340—Frames  
Group 3360—Hydraulic System

### **SECTION 43—SWING, ROTATION OR PIVOTING SYSTEM**

Group 4311—Brakes  
Group 4350—Mechanical Drive Elements  
Group 3260—Hydraulic System

### **SECTION 90—SYSTEM TESTING**

Group 9005—General Information—Seven Basic  
Steps of Diagnosis and Testing  
Group 9010—Engine  
Group 9015—Electrical System  
Group 9025—Hydraulic System  
Group 9030—Miscellaneous Components  
Group 9031—Heating and Air Conditioning

### **SECTION 99—SPECIAL TOOLS**

# INTRODUCTION AND SAFETY INFORMATION

## INTRODUCTION

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

### FOS Manuals - for reference

### Technical Manuals - for actual service

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

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

*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.



30A/T85958, T281 1101 130582

## FEATURES OF THIS TECHNICAL MANUAL

- John Deere ILLUSTRATION format emphasizing detailed pictures and fewer words in easy-to-use modules.
- Removal and installation groups preceding some repair groups.
- A section of system diagnostic testing.
- Table of contents of all sections at the front of the manual and a listing of all groups and headings at the front of each section.
- Special tools and specifications listed at the front of each group they are used in.
- Special tools illustrated in numerical order at end of manual.
- Alphabetical listing of all major components, specifications, and special tools.
- Safety rules, general specifications, and lubrication specifications.

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

Using the technical manual as a guide will reduce error and costly delay. It will also assure you the best in finished service work.



30A/T85959 T281 1115 130582



Thank you very much  
for your reading.  
Please click here  
to get more information.