

# John Deere 500 Round Baler



## TECHNICAL MANUAL John Deere 500 Round Baler

TM1140 (01FEB76) English

**TM1140 (01FEB76)**

LITHO IN U.S.A.  
ENGLISH



# 500 ROUND BALER

## TECHNICAL MANUAL

### TM-1140 (Feb-76)

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*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.*

*SI (International System) Units of Measure Metric equivalents have been included, where applicable, throughout this technical manual.*

*New and revised information is identified by vertical lines in the margin of the pages.*

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## INTRODUCTION



Use FOS Manuals for Reference

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 failure and their causes. FOS Manuals are for training new people and for reference by experienced 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 TM to identify the reference.

### •Technical Manuals—for actual service

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



Use Technical Manuals for Actual Service

Some features of this technical manual:

- *Table of contents* at front of manual
- *Exploded views* showing parts relationship
- *Photos* showing service techniques
- *Specifications* grouped for easy reference

This technical manual was planned and written for you—a service technician. Keep it in a permanent binder in the shop where it is handy. Refer to it whenever in doubt about 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.


### SI (INTERNATIONAL SYSTEM) UNITS OF MEASURE

Metric equivalents have been included, where applicable, throughout this technical manual.

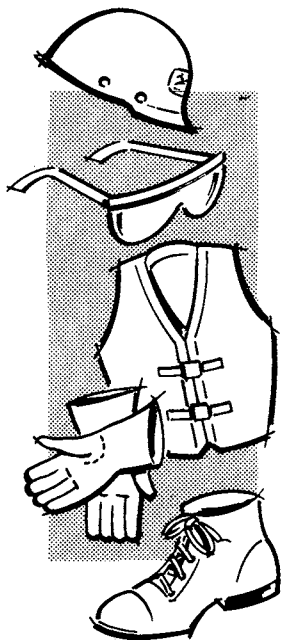
## MAINTENANCE WITHOUT ACCIDENTS WORK SAFELY



T27999N

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

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



T27501N

Consult your shop supervisor for specific instructions on a job, and the safety equipment required.

For instance, you may need: Hard hat, safety shoes, safety goggles, heavy gloves, reflector vests, ear protectors, respirators.



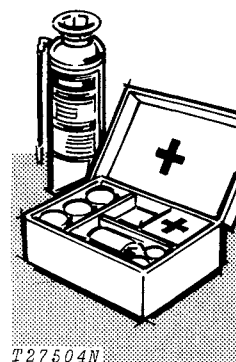
T27502N

### ALWAYS AVOID

Loose clothing or any accessory—flopping cuffs, dangling neckties and scarves, or rings and wrist watches—that can catch in moving parts and put you out of work.

### BE ALERT!

Plan ahead—work safely—avoid accidental damage and injury. If a careless moment does cause an accident or fire, react quickly with the tools and skills at hand—know how to use a first aid kit and a fire extinguisher—and where to get aid and assistance. In an emergency, split-second action is the key to safety.



T27504N

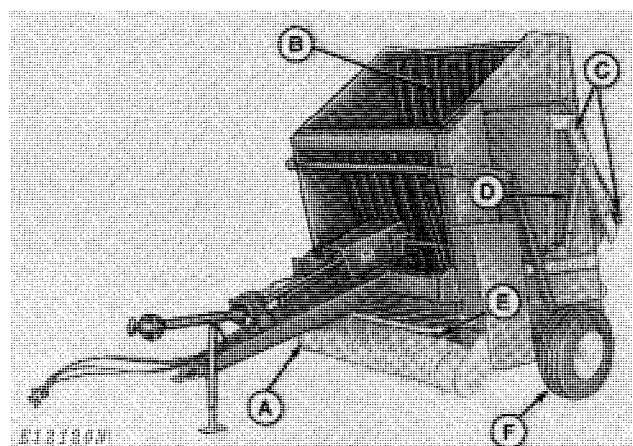
## Section 10 GENERAL

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## Group 5 DESCRIPTION

### GENERAL



A—Pickup                      C—Rear Gate                      E—Lower Belt  
B—Upper Belts                D—Hydraulic                      F—Wheels  
   Cylinder

Fig. 1-500 Round Baler

The 500 Round Baler is a large size baler for handling loose hay and corn stover. It will produce high-density bales 5 ft. 3 in. (1.6 m) wide by 6 ft. (1.83 m) in diameter weighing approximately 1500 lbs. (680 kg).

The basic components of the round baler include the main frame and wheels (F), pickup (A), upper (B) and lower (E) forming belts, rear gate and mechanism (C), and bale wrapping mechanism.

Operating power for the round baler is provided from a 540 rpm tractor power take-off (PTO).

Two hydraulic cylinders operating in series from the tractor hydraulic system are used to raise and lower the rear gate of the baler. A double acting hydraulic cylinder is used to operate the bale wrapping mechanism.

### Tractor Requirements

The baler is set for use on tractors with two sets of hydraulic outlets; one for the two hoses which control the rear gate and one for the two hoses to wrap the bale.

A selector control valve, with the shift mechanism, allows the use of the baler hydraulics on tractors with only one hydraulic outlet. The selector control valve is available as an attachment.

The tractor must have a 540 rpm PTO with a minimum of 60 horsepower (45 Kw) to obtain the maximum capacity from the baler.

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