CTS Rice Combine Repair Operation and Tests

For complete service information also see:

6076 Engine	. CTM42
Cam Lobe Motors	. CTM19
9400, 9500 and 9600	
Maximizer Combine—Repair	TM1401
9400, 9500 and 9600	
Operation and Test	TM1402
200 and 900 Series Cutting Platforms	
40 and 90 Series Corn Heads	
50 and 50A Series Row Crop Heads	TM1581

John Deere Harvester Works TM1543 (12MAY97)

LITHO IN U.S.A. ENGLISH CTS Rice Combine Repair, Operation and Test

TM1543 (12MAY97)



Introduction

FOREWORD

This manual is written for an experienced technician. Essential tools required in performing certain service work are identified in this manual and are recommended for use.

Live with safety: Read the safety messages in the introduction of this manual and the cautions presented throughout the text of the manual.



This is the safety-alert symbol. When you see this symbol on the machine or in this manual, be alert to the potential for personal injury.

Technical manuals are divided in two parts: repair and operation and tests. Repair sections tell how to repair the components. Operation and tests sections help you identify the majority of routine failures quickly.

Information is organized in groups for the various components requiring service instruction. At the beginning of each group are summary listings of all applicable essential tools, service equipment and tools, other materials needed to do the job, service parts kits, specifications, wear tolerances, and torque values.

Technical Manuals are concise guides for specific machines. They are on-the-job guides containing only the vital information needed for diagnosis, analysis, testing, and repair.

Fundamental service information is available from other sources covering basic theory of operation, fundamentals of troubleshooting, general maintenance, and basic type of failures and their causes.

> DX,CRRB1 -19-06MAY93

Thanks very much for your reading,

Want to get more information,

Please click here, Then get the complete

manual



NOTE:

If there is no response to click on the link above, please download the PDF document first, and then click on it.

Have any questions please write to me: admin@servicemanualperfect.com

Introduction

This technical manual covers information unique to the CTS Combine:

- · Hydraulic Stack Valve Repair
- Feederhouse Repair (Platform Drive, Tilt Cylinder)
- Operator Station Repair (Cab, Air Seat Suspension)
- Separator Repair (Beaters, Supply Augers, Cleaning Fan and Chaffer, Sieve Frame,
 - Tine Separator, Engine Gearcase and Module Drive)
- Straw Chopper, Straw Spreader, Chaff Spreader Drives and Upper Clean Grain Elevator Repair
- Grain Tank and Unloading System (Upper Clean Grain Elevator)
- Electrical Diagnostics and Tests

See TM1401; 9400, 9500 and 9600

Maximizer Combines - Repair - for information on the

See TM1581 for header repair, operation and test

following:

Engine		
Fuel and Air	Section 3	0
Electrical	Section 4	0
Power Train Repair	Section 50	0
Power Steering and Brakes		
Hydraulic Repair (Except Stack Valve Repair)		
Feederhouse		
Separator (Except for beaters, Supply Augers, Cleaning Fan and		
Chaffer and Sieve Frame, Straw Chopper, Straw Spreader and Chaff		
Spreader Drives	Section 12	0
Grain Tank Unloading System Repair		
Engine Gearcase		
Dial-A-Matic Header Height Control		
		-
See TM1402; 9400, 9500 and 9600		
Maximizer Combines - Operation and Test - for		
information on the following:		
a mornidation on the following.		
Engine Operation and Tests	Section 22	0
Fuel/Air Operation and Test		
Power Train Operation and Tests		
Four-Wheel Drive		
Service Brakes System Operation and Test		
Hydraulic Operation and Test		
Main Engine Gearcase Systems Operation and Test		
Dial-A-Matic System Operation and Tests		
Dial-A-ividile System Operation and Tests	Section 20	U

1543HX,INTR -19-07JUN95

information.

Introduction

TM1543 (12MAY97)

Contents

SECTION 10—GENERAL

Group 05—Safety

Group 10—Identification Number Location

Group 15—Specifications

SECTION 50—POWER TRAIN REPAIR

Group 20—Hydrostatic System

SECTION 70—HYDRAULIC REPAIR

Group 05—Hydraulic Valve Stack

SECTION 90—OPERATOR STATION REPAIR

Group 20—Cab

SECTION 110—COUNTER MASTER™ FEEDERHOUSE REPAIR

Group 05—Platform Driveshafts

Group 10-Tilt Cylinder

Group 15—Tilt Frame

Group 25—CONTOUR MASTER Feederhouse

SECTION 120—SEPARATOR REPAIR

Group 05—Beaters

Group 10—Shoe Supply Augers, Cleaning Fan and Chaffer and Sieve Frame

Group 15—Tine Separator Module

Group 20—Tine Separators

Group 25—Engine Gearcase to Module Drives

Group 30—Tine Separator Gearboxes

Group 35—Straw Chopper, Straw Spreader and Chaff Spreader

SECTION 130—GRAIN TANK AND UNLOADING SYSTEM REPAIR

Group 05—Upper Clean Grain Elevator

SECTION 240—ELECTRICAL DIAGNOSTICS AND TESTS

Group 5A—How to Use This Diagnostic Information

Group 5B—Warning Display Panel Diagnostics

All information, illustrations and specifications in this 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.

TM1543-19-12MAY97

COPYRIGHT© 1995
DEERE & COMPANY
Moline, Illinois
All rights reserved
A John Deere ILLUSTRUCTION® Manual
Previous Editions
Copyright 1993 Deere & Company

Group 5C—Low Shaft Speed Monitor Diagnostics

Group 5D—HarvesTrak Diagnostics

Group 5E—Lighting System Diagnostics

Group 5F—Combine Data Center Diagnostics

Group 5I—Bosch Engine Control Diagnostics—Type C

Group 5J—CONTOUR MASTER Diagnostics

Group 5K—CONTOUR MASTER Tilt Control
System Identification

Group 5L—CONTOUR MASTER Type A
Diagnostics

Group 5M—CONTOUR MASTER Type B
Diagnostics

Index

10

50

70

0

110

120

130

240

INDX

Contents

10

5(

/(

90

110

120

130

240

INDX

Section 10 GENERAL

Contents

	Page	
Group 05—Safety	10-05-1	
Group 10—Identification Number Location		
Combine Identification Number	10-10-1	
Engine Serial Number	10-10-1	
Hydrostatic Drive Unit Pump	10-10-1	
Hydrostatic Drive Unit Motor	10-10-1	
Cam Lobe 4-Wheel Drive Motor	10-10-2	
Group 15—Specifications	10-15-1	

10-1 TM1543 (12MAY97)

10

RECOGNIZE SAFETY INFORMATION

This is the safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.



T81389

DY ALERT

-19-03MAR93

UNDERSTAND SIGNAL WORDS

A signal word—DANGER, WARNING, or CAUTION—is used with the safety-alert symbol. DANGER identifies the most serious hazards.

DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.

A DANGER

▲ WARNING

ACAUTION

187

DX,SIGNAL

-19-03MAR93

HANDLE FLUIDS SAFELY—AVOID FIRES

When you work around fuel, do not smoke or work near heaters or other fire hazards.

Store flammable fluids away from fire hazards. Do not incinerate or puncture pressurized containers.

Make sure machine is clean of trash, grease, and debris.

Do not store oily rags; they can ignite and burn spontaneously.



DX,FLAME

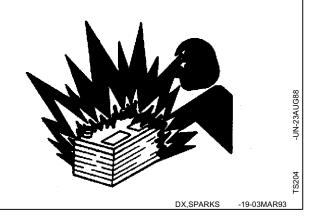
-19-04JUN9

PREVENT BATTERY EXPLOSIONS

Keep sparks, lighted matches, and open flame away from the top of battery. Battery gas can explode.

Never check battery charge by placing a metal object across the posts. Use a volt-meter or hydrometer.

Do not charge a frozen battery; it may explode. Warm battery to 16°C (60°F).

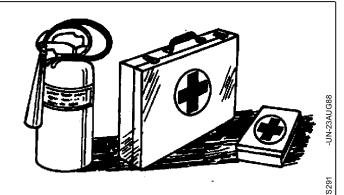


PREPARE FOR EMERGENCIES

Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.



4 A D O 3

DX,FIRE2

-19-03MAR93

PREVENT ACID BURNS

Sulfuric acid in battery electrolyte is poisonous. It is strong enough to burn skin, eat holes in clothing, and cause blindness if splashed into eyes.

Avoid the hazard by:

- 1. Filling batteries in a well-ventilated area.
- 2. Wearing eye protection and rubber gloves.
- 3. Avoiding breathing fumes when electrolyte is added.
- 4. Avoiding spilling or dripping electrolyte.
- 5. Use proper jump start procedure.

If you spill acid on yourself:

- 1. Flush your skin with water.
- 2. Apply baking soda or lime to help neutralize the acid.
- 3. Flush your eyes with water for 15—30 minutes. Get medical attention immediately.

If acid is swallowed:

- 1. Do not induce vomiting.
- 2. Drink large amounts of water or milk, but do not exceed 2 L (2 quarts).
- 3. Get medical attention immediately.



DX,POISON -19-21APR9

10-05-3

AVOID HIGH-PRESSURE FLUIDS

Escaping fluid under pressure can penetrate the skin causing serious injury.

Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. Protect hands and body from high pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source. Such information is available from Deere & Company Medical Department in Moline, Illinois, U.S.A.

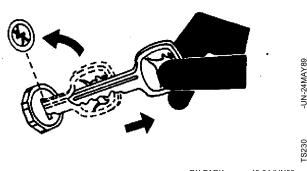


DX,FLUID -19-03MAR93

PARK MACHINE SAFELY

Before working on the machine:

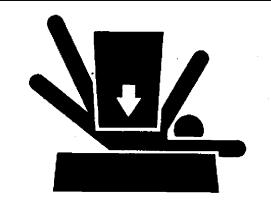
- Lower all equipment to the ground.
- · Stop the engine and remove the key.
- Disconnect the battery ground strap.
- Hang a "DO NOT OPERATE" tag in operator station.



SUPPORT MACHINE PROPERLY

Always lower the attachment or implement to the ground before you work on the machine. If you must work on a lifted machine or attachment, securely support the machine or attachment.

Do not support the machine on cinder blocks, hollow tiles, or props that may crumble under continuous load. Do not work under a machine that is supported solely by a jack. Follow recommended procedures in this manual.



DX,LOWER

-19-04JUN90

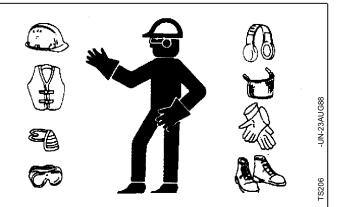
WEAR PROTECTIVE CLOTHING

Wear close fitting clothing and safety equipment appropriate to the job.

Prolonged exposure to loud noise can cause impairment or loss of hearing.

Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.

Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.



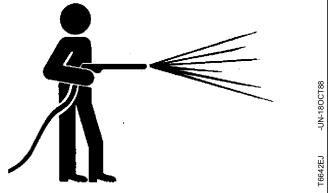
DX,WEAR

-19-10SEP90

WORK IN CLEAN AREA

Before starting a job:

- · Clean work area and machine.
- Make sure you have all necessary tools to do your job.
- · Have the right parts on hand.
- Read all instructions thoroughly; do not attempt shortcuts.



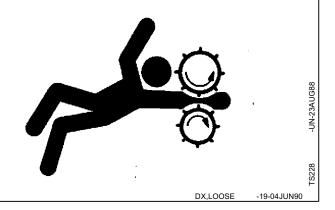
DX,CLEAN

-19-04JUN

SERVICE MACHINES SAFELY

Tie long hair behind your head. Do not wear a necktie, scarf, loose clothing, or necklace when you work near machine tools or moving parts. If these items were to get caught, severe injury could result.

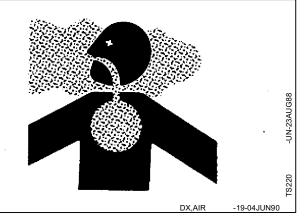
Remove rings and other jewelry to prevent electrical shorts and entanglement in moving parts.



WORK IN VENTILATED AREA

Engine exhaust fumes can cause sickness or death. If it is necessary to run an engine in an enclosed area, remove the exhaust fumes from the area with an exhaust pipe extension.

If you do not have an exhaust pipe extension, open the doors and get outside air into the area.



ILLUMINATE WORK AREA SAFELY

Illuminate your work area adequately but safely. Use a portable safety light for working inside or under the machine. Make sure the bulb is enclosed by a wire cage. The hot filament of an accidentally broken bulb can ignite spilled fuel or oil.

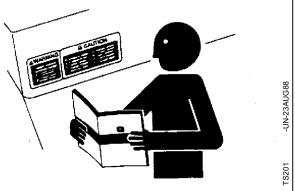


X,LIGHT

-19-04JUN90

REPLACE SAFETY SIGNS

Replace missing or damaged safety signs. See the machine operator's manual for correct safety sign placement.



DX,SIGNS1

-19-04JUN9