

Introduction

Foreword

This repair manual is valid for the following rotary harvesting unit model:

480FI

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.

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.

KM00321,00004E8 -19-05AUG11-1/1

Version Date

01 August 2011

KM00321,00004E7 -19-04AUG11-1/1

Contents

Section 05—Safety

Group 05—Safety Measures

Section 10—General Information

Group 00—Identification View and Description

Group 05—Lubricants, Gear Oil and Coolant

Group 10—Torques

Group 15—Capacities

Group 20—Specifications

Section 40—Electrical System

Group 05—General

Section 50—Power Train

Group 05—Gear Box

Group 10—Friction Clutches

Group 15—Transmission - Feed Drums

Group 20—Transmission - Inner Gathering Drums

Group 25—Transmission - Outer Gathering Drums

Group 30—U-Jointed Shaft

Section 70—Hydraulic System

Group 05—Hydraulic System

Section 80—Miscellaneous

Group 05—Outer Folding Sections

Section 100—Feed System

Group 05—Inner Gathering Drums

Group 10—Outer Gathering Drums

Group 15—Rotors

Group 20—Feed Drums

Section 212—Diagnosing Malfunctions

Group 05—Troubleshooting

Section 99—Special Tools

Group 05—Special Tools (Dealer-Fabricated)

Group 10—Special Tools (Available as Spare Parts)

Original Instructions. 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.

COPYRIGHT © 2011

All rights reserved.

Section 05 Safety

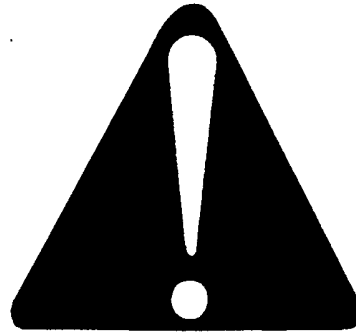
Contents

	Page
Group 05—Safety Measures	
Recognize Safety Information	05-05-1
"Important" Information	05-05-1
"Note" - Information	05-05-1
Prevent Machine Runaway.....	05-05-1
Prepare for Emergencies.....	05-05-1
Avoid High-Pressure Fluids	05-05-2
Remove Paint Before Welding or Heating	05-05-2
Avoid Heating Near Pressurized Fluid Lines	05-05-2
Work In Ventilated Area.....	05-05-3
Wear Protective Clothing	05-05-3
Practice Safe Maintenance.....	05-05-4
Park Machine Safely.....	05-05-4
Use Proper Lifting Equipment.....	05-05-5
Construct Dealer-Made Tools Safely.....	05-05-5
Support Machine Properly	05-05-5
Work in Clean Area	05-05-6
Illuminate Work Area Safely	05-05-6
Service Machines Safely	05-05-6
Use Proper Tools	05-05-7
Parking and Leaving the Forage Harvester	05-05-7
Replace Safety Signs	05-05-7
Dispose of Waste Properly	05-05-8
Live With Safety.....	05-05-8
Safety Measures on Electronic Control Units	05-05-8

Recognize Safety Information

This is a 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 —UN—07DEC88

DX,ALERT -19-29SEP98-1/1

"Important" Information

Information marked as IMPORTANT points out problems that may lead to machine damage. By following the directions given, these problems can be avoided.

LX,CRA05 002885 -19-09APR92-1/1

"Note" - Information

When marked with NOTE the information given is more detailed or contains restrictions to directions given

previously. On the other hand useful information may be given belonging to certain instruction without being directly connected to them.

LX,CRA05 002886 -19-12NOV01-1/1

Prevent Machine Runaway

Avoid possible injury or death from machinery runaway.

Do not start engine by shorting across starter terminals. With normal circuitry bypassed, machine will start even if

hydrostatic ground speed control lever is not in neutral position.

Start engine only from operator's seat, with transmission in neutral or park.

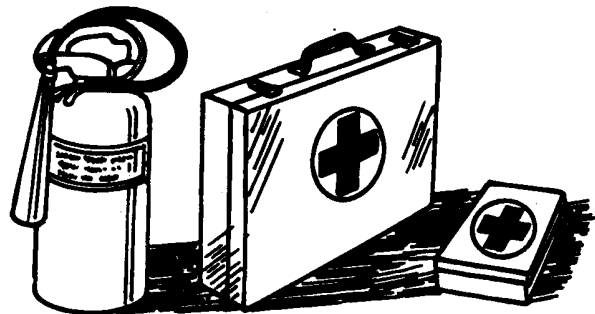
ZX08798,0000003 -19-12NOV01-1/1

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.



TS291 —UN—23AUG88

DX,FIRE2 -19-03MAR93-1/1

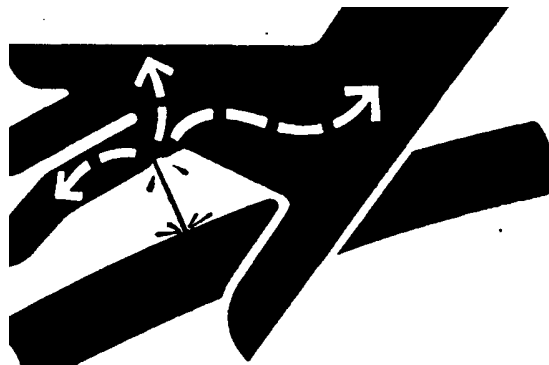
Avoid High-Pressure Fluids

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.



X9811 —UN—23AUG88

KM00321,00004E9 -19-05AUG11-1/1

Remove Paint Before Welding or Heating

Avoid potentially toxic fumes and dust.

Hazardous fumes can be generated when paint is heated by welding, soldering, or using a torch.

Remove paint before heating:

- Remove paint a minimum of 100 mm (4 in.) from area to be affected by heating. If paint cannot be removed, wear an approved respirator before heating or welding.
- If you sand or grind paint, avoid breathing the dust. Wear an approved respirator.
- If you use solvent or paint stripper, remove stripper with soap and water before welding. Remove solvent or paint stripper containers and other flammable material from area. Allow fumes to disperse at least 15 minutes before welding or heating.

Do not use a chlorinated solvent in areas where welding will take place.



TS220 —UN—23AUG88

Do all work in an area that is well ventilated to carry toxic fumes and dust away.

Dispose of paint and solvent properly.

DX,PAINT -19-24JUL02-1/1

Avoid Heating Near Pressurized Fluid Lines

Flammable spray can be generated by heating near pressurized fluid lines, resulting in severe burns to yourself and bystanders. Do not heat by welding, soldering, or using a torch near pressurized fluid lines or other flammable materials. Pressurized lines can accidentally burst when heat goes beyond the immediate flame area.



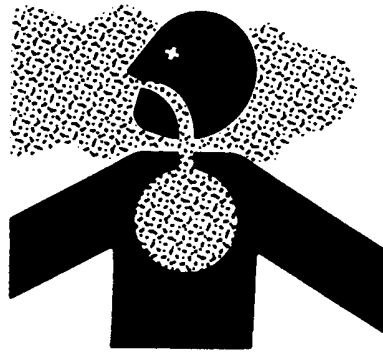
TS953 —UN—15MAY90

DX,TORCH -19-10DEC04-1/1

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.



TS220—UN—23AUG88

DX,AIR -19-17FEB99-1/1

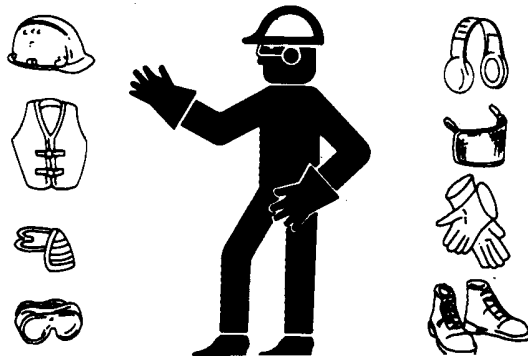
Wear Protective Clothing

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.



TS206—UN—23AUG88

DX,WEAR -19-10SEP90-1/1

Practice Safe Maintenance

Understand service procedure before doing work. Keep area clean and dry.

Never lubricate, service, or adjust machine while it is moving. Keep hands, feet, and clothing from power-driven parts. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground. Stop the engine. Remove the key. Allow machine to cool.

Securely support any machine elements that must be raised for service work.

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.

On self-propelled equipment, disconnect battery ground cable (-) before making adjustments on electrical systems or welding on machine.

On towed implements, disconnect wiring harnesses from tractor before servicing electrical system components or welding on machine.



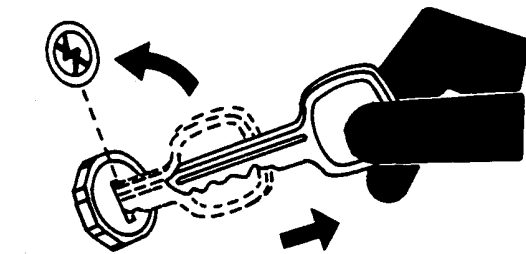
TS218 —UN—23AUG88

DX,SERV -19-17FEB99-1/1

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.



KM1001039

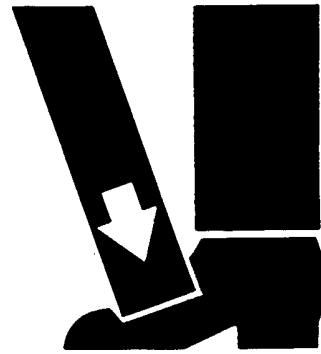
KM1001039 —UN—20NOV09

KM00321,00004EA -19-05AUG11-1/1

Use Proper Lifting Equipment

Lifting heavy components incorrectly can cause severe injury or machine damage.

Follow recommended procedure for removal and installation of components in the manual.



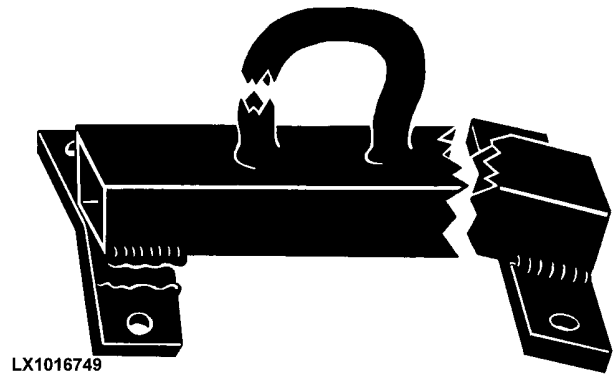
TS226 —UN—23AUG88

DX,LIFT -19-04JUN90-1/1

Construct Dealer-Made Tools Safely

Faulty or broken tools can result in serious injury. When constructing tools, use proper, quality materials, and good workmanship.

Do not weld tools unless you have the proper equipment and experience to perform the job.



LX1016749

LX1016749 —UN—01JUL97

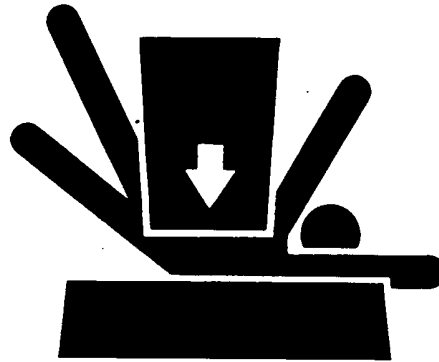
DX,SAFE,TOOLS -19-10OCT97-1/1

Support Machine Properly

Always lower the attachment or implement to the ground before you work on the machine. If the work requires that the machine or attachment be lifted, provide secure support for them. If left in a raised position, hydraulically supported devices can settle or leak down.

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.

When implements or attachments are used with a machine, always follow safety precautions listed in the implement or attachment operator's manual.



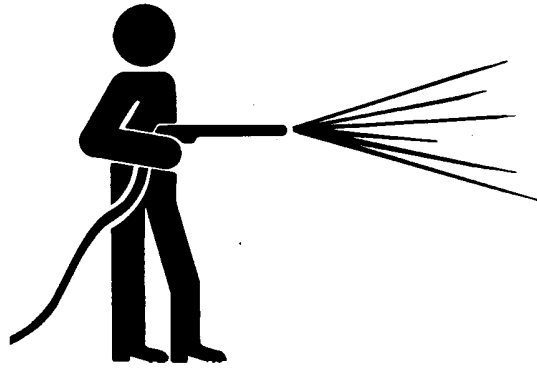
TS229 —UN—23AUG88

DX,LOWER -19-24FEB00-1/1

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.

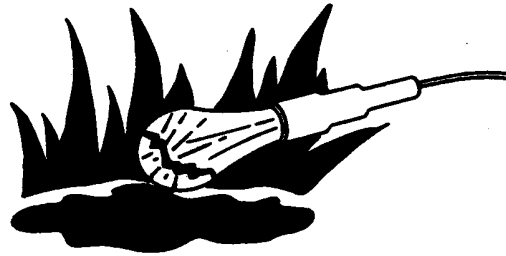


T6642EJ —UN—18OCT88

DX,CLEAN -19-04JUN90-1/1

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.



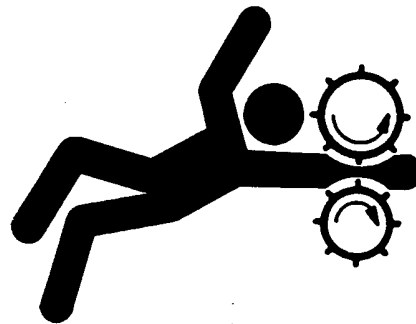
TS223 —UN—23AUG88

DX,LIGHT -19-04JUN90-1/1

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.



TS228 —UN—23AUG88

DX,LOOSE -19-04JUN90-1/1

Use Proper Tools

Use tools appropriate to the work. Makeshift tools and procedures can create safety hazards.

Use power tools only to loosen threaded parts and fasteners.

For loosening and tightening hardware, use the correct size tools. DO NOT use U.S. measurement tools on metric fasteners. Avoid bodily injury caused by slipping wrenches.

Use only service parts meeting New Holland specifications.



TS779 —UN—08NOV89

KM00321,0000502 -19-12AUG11-1/1

Parking and Leaving the Forage Harvester

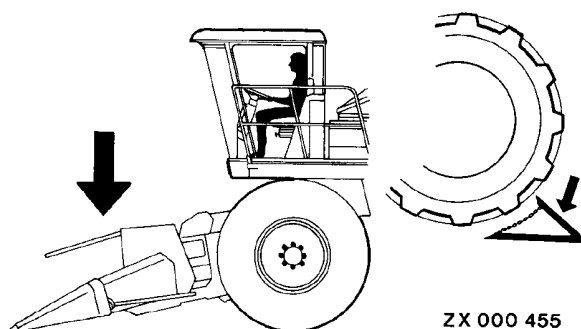
Lower harvesting unit to the ground.

Before leaving the forage harvester, disengage main clutch and shut off engine. Move gear shift lever to neutral, apply parking brake, remove key and lock the operator's cab. Position chock blocks.

NOTE: Use only chock blocks provided with the machine.

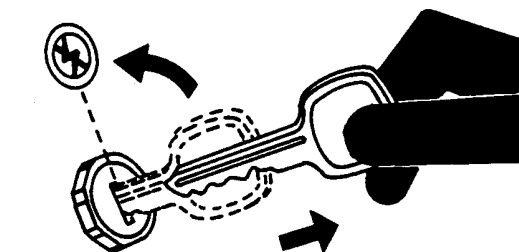
Never leave forage harvester unattended as long as engine is running.

Never leave the operator's cab when driving.



ZX 000 455

ZX000455 —UN—03APR95



KM1001039

KM1001039 —UN—20NOV09

KM00321,0000498 -19-22JUL11-1/1

Replace Safety Signs

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



TS201 —UN—23AUG88

DX,SIGNS1 -19-04JUN90-1/1

Dispose of Waste Properly

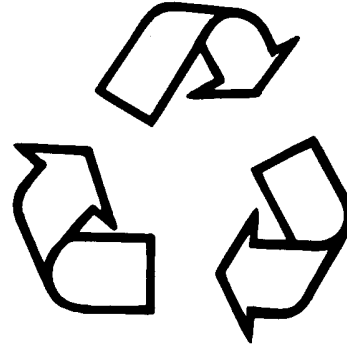
Improperly disposing of waste can threaten the environment and ecology. Potentially harmful waste used with New Holland equipment include such items as oil, fuel, coolant, brake fluid, filters, and batteries.

Use leakproof containers when draining fluids. Do not use food or beverage containers that may mislead someone into drinking from them.

Do not pour waste onto the ground, down a drain, or into any water source.

Air conditioning refrigerants escaping into the air can damage the Earth's atmosphere. Government regulations may require a certified air conditioning service center to recover and recycle used air conditioning refrigerants.

Inquire on the proper way to recycle or dispose of waste from your local environmental or recycling center, or from your New Holland dealer.



TS1133 —UN—26NOV90

KM00321,00004EB -19-05AUG11-1/1

Live With Safety

Before returning machine to customer, make sure machine is functioning properly, especially the safety systems. Install all guards and shields.



TS231 —19—07OCT88

DX,LIVE -19-25SEP92-1/1

Safety Measures on Electronic Control Units

⚠ CAUTION: Before installing test equipment on forage harvester, always shut off the engine and turn the key switch "OFF".

⚠ CAUTION: When testing is performed with the engine running, there is a risk of injury from rotating parts.

IMPORTANT: To protect electronic circuits, disconnect the battery and alternator before performing any welding on the forage harvester.

KM00113,00000A3 -19-07JAN10-1/1

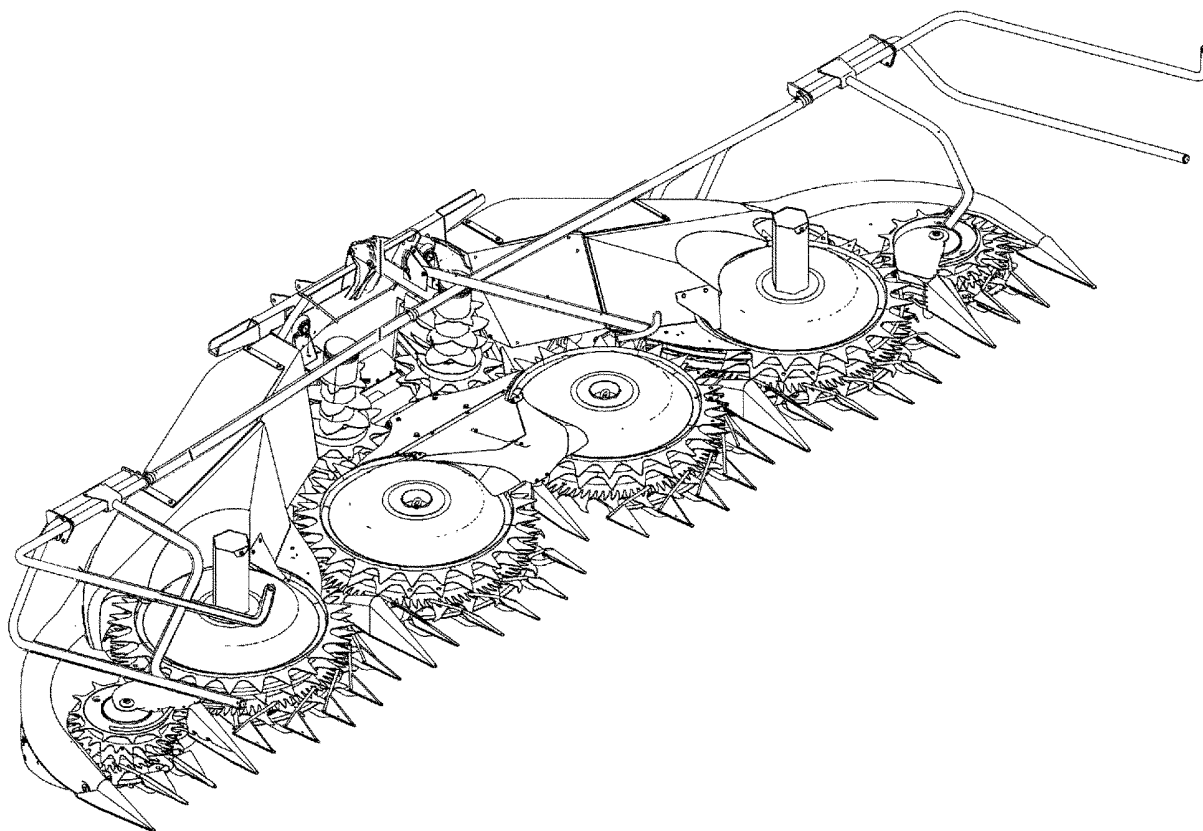
Section 10 General Information

Contents

	Page
Group 00—Identification View and Description	
Identification View, 480FI Rotary	
Harvesting Unit	10-00-1
Serial Number Plate, 480FI Rotary	
Harvesting Unit	10-00-2
Assembly Designations	10-00-3
Hanging Points	10-00-3
Group 05—Lubricants, Gear Oil and Coolant	
Grease	10-05-1
Transmission Oil	10-05-1
Low-Viscosity Grease for Gears	10-05-2
Coolant for Main Drive Friction	
Clutch	10-05-2
Alternative and Synthetic	
Lubricants	10-05-2
Mixing Lubricants	10-05-2
Lubricant Storage	10-05-3
Group 10—Torques	
Unified Inch Bolt and Screw Torque	
Values	10-10-1
Metric Bolt and Screw Torque	
Values	10-10-2
Hydraulic System Inch Fitting	
Torque Values	10-10-3
Hydraulic System Metric Fitting	
Torque Values	10-10-4
Group 15—Capacities	
480FI Rotary Harvesting Unit -	
Transmissions, Capacities	10-15-1
Group 20—Specifications	
480FI Rotary Harvesting Unit	10-20-1

Group 00
Identification View and Description

Identification View, 480FI Rotary Harvesting Unit



KM1001540

KM1001540 —UN—27APR11

KM00321,00004EC -19-08AUG11-1/1

Serial Number Plate, 480FI Rotary Harvesting Unit

The serial number plate is located on the left side of the frame.

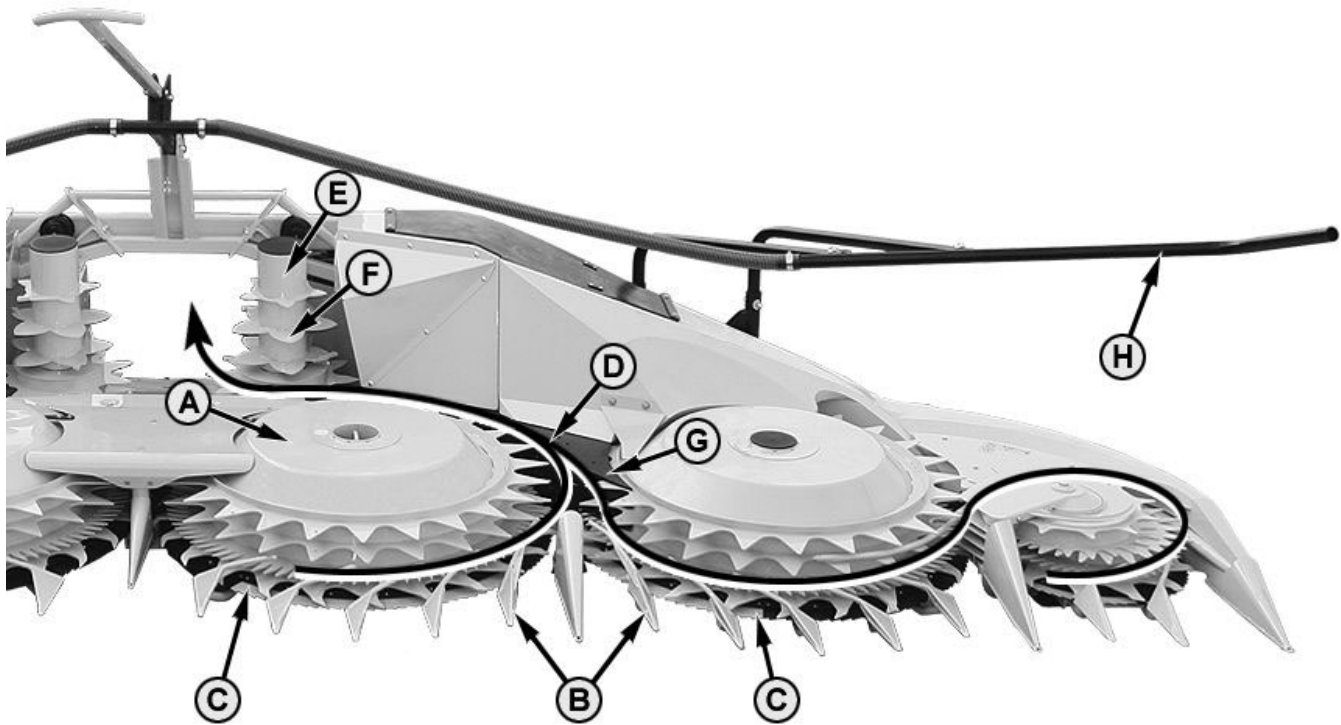
A—Product Identification Number



KM1001785 —UN—08AUG11

KM00321,00004ED -19-08AUG11-1/1

Assembly Designations



KM1000813

A—Gathering Drum
B—Dividers

C—Rotating Blade
D—Lengthwise Direction of Crop
E—Feed Drum
F—Feed Teeth

G—Guides and Scrapers
H—Feed Bar

KM00321,000042C -19-27APR11-1/1

KM1000813 —UN—20MAR09

Hanging Points

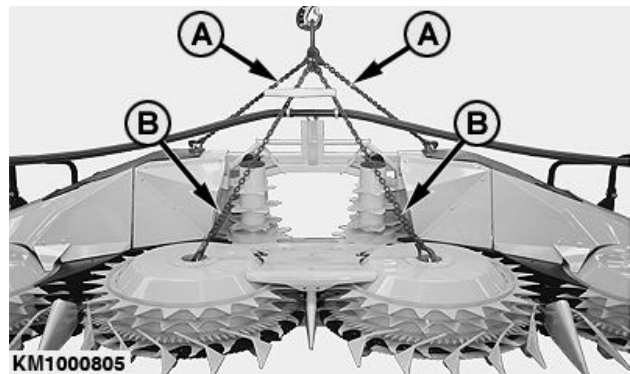
CAUTION: When loading the harvesting unit with a crane, always use the hanging points. This will prevent the machine from toppling over.

Make sure to use chains or slings that meet the weight requirements of the harvesting unit (see "Specifications" Section).

When loading in this way, you must pay extreme attention and use additional securing chains if necessary.

IMPORTANT: Ringbolts in gathering drums must always be screwed all the way in.

When loading the harvesting unit with a crane, chains or slings with the relevant length must be used as shown on illustration.



KM1000805

A—1600 mm (5 ft 2.99 in.)

B—1540 mm (5 ft 0.62 in.)

KM1000805 —UN—16MAR09

KM00321,000012D -19-16MAR09-1/1

**Thanks very much for your reading,
Want to get more information,
Please click here, Then get the complete
manual**

JustClickHere 

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**