



40 Rotary Tiller



JOHN DEERE

TECHNICAL MANUAL

40
Rotary Tiller

TM1232 (01NOV79) English

John Deere Horicon Works
TM1232 (01NOV79)

LITHO IN U.S.A.
ENGLISH

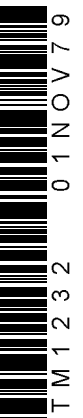


TABLE OF CONTENTS

	Page		Page
INTRODUCTION	2	REPLACING TINES AND DRIVE COMPONENTS	9
DESCRIPTION	2	Replacing Tines	9
SPECIFICATIONS	3	Replacing Shear Bolts	9
Tiller Specifications	3	Replacing Drive Chains	9
Tractor Requirements	3	Replacing Drive Shaft Bearings	11
SERIAL NUMBERS	3	Replacing Tine Shaft Rotor Bearings	12
Tiller Serial Number	3	Replacing Tine Shaft Rotor	12
Gear Case Serial Number	3	SERVICING GEAR CASE	13
TORQUE CHARTS	4	Removing Gear Case	13
Bolt Torque Chart	4	Disassembling Gear Case	15
Set Screw Seating Torque Chart	4	Inspecting Gear Case Parts	17
LUBRICATION	5	Assembling Gear Case	18
Gear Case	5	Installing Gear Case	20
Grease Fittings	5	Lubricating Gear Case and Powershaft	22
Chain Case	5	SERVICING POWERSHAFT	23
Hinge or Pivot Points	5	Removing Powershaft from Tiller	23
ADJUSTMENTS	6	Disassembling Powershaft	23
Leveling Tiller Side-to-Side	6	Inspecting Powershaft Parts	26
Leveling Tiller Front-to-Rear	6	Assembling Powershaft	27
Adjusting Sway Chains	7	Installing Powershaft	29
Adjusting Drive Chain Tensioners	7	Lubricating Powershaft	29
DIAGNOSING MALFUNCTIONS	8		

OOA

INTRODUCTION

This technical manual contains service and maintenance information for the John Deere 40 Rotary Tiller.

Basic service information pertaining to removal, disassembly, inspection and repair is given in detail. Emphasis is placed on diagnosing malfunctions for quick reference in determining the cause of machine failure.

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

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

DESCRIPTION

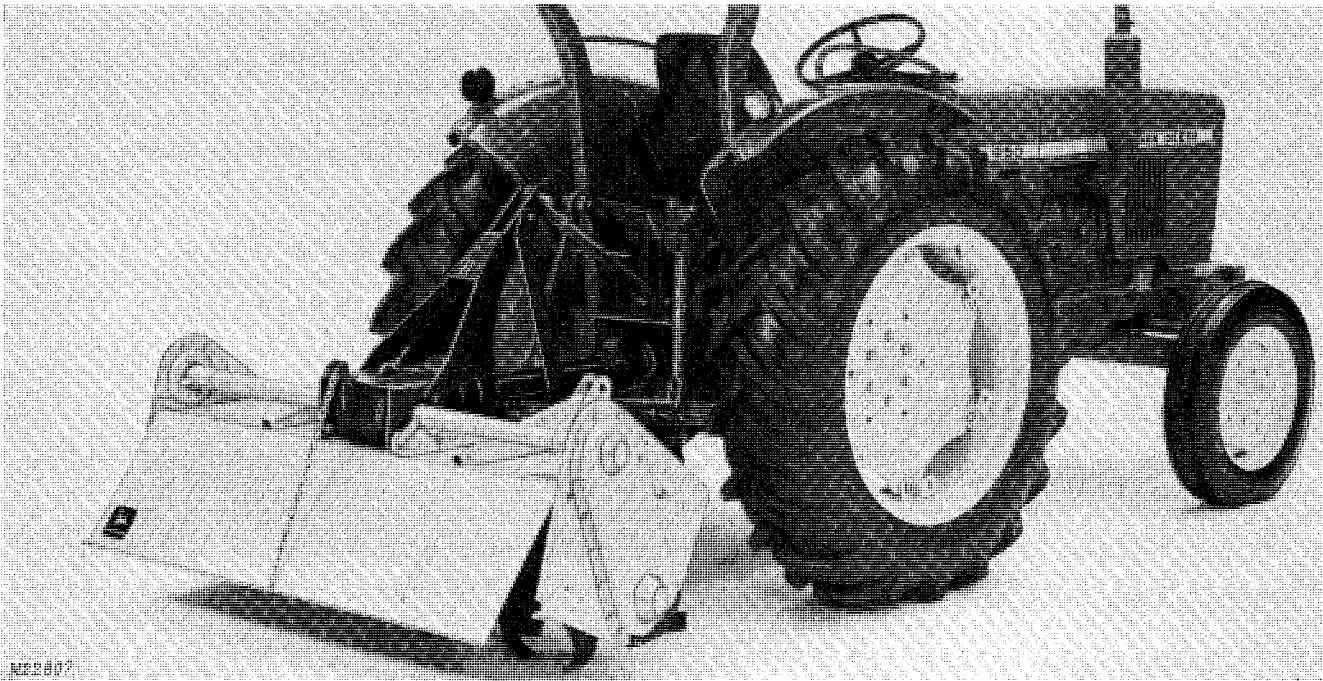


Fig. 1-John Deere 40 Rotary Tiller

The John Deere 40 Rotary Tiller, Fig. 1, is a heavy-duty rear-mounted integral rotary tiller designed for use with 850 and 950 Tractors.

The tiller is mounted on the tractor 3-point hitch.

The tractor 540 rpm rear PTO shaft drives the tiller powershaft which attaches to the gear case. A pinion and bevel gear is connected to a one-piece drive shaft inside the gear case. A sprocket and chain on each end of the drive shaft transmit power to the rotor tine shaft.

SPECIFICATIONS

Tiller Specifications

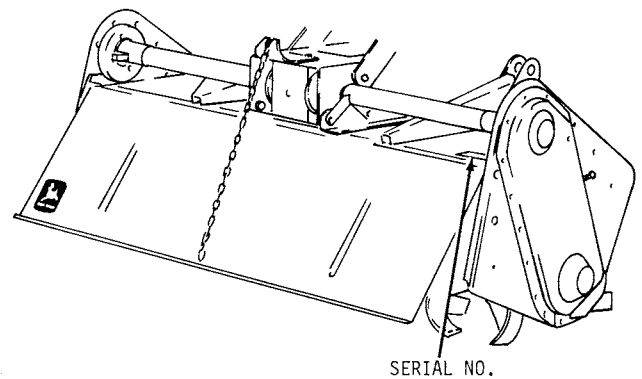
Width of Cut	60 in. (1.52 m)
Rotor Diameter	16 in. (406 mm)
Gear Case	Curtis Model 412
Tines	Hi-Carbon Heat-Treated
Drive	U-joint PTO shaft (with shear protection) to gear case and dual final chain reduction.
Rotor rpm	225 rpm
Rotor Tip Speed	942 ft/min (287.12 m/min)
Height of Lift	24 in. (610 mm)
Depth of Till	8 in. (20.32 mm)
Approximate Weight	480 lbs. (218.2 kg)

Tractor Requirements

Horsepower	27 maximum
Hitch	3-point hitch-Category 1
Rear PTO Speed	540 rpm
Ballast	None Required

SERIAL NUMBERS

Tiller Serial Number

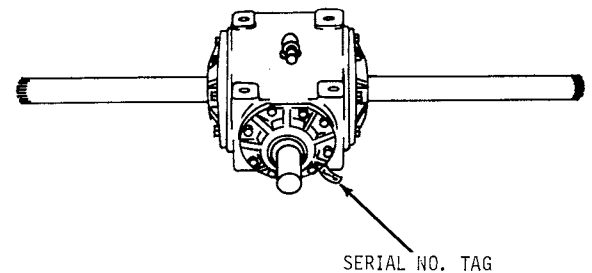


M26251

Fig. 2-Tiller Serial Number

The tiller serial number is located on top of the housing, Fig. 2.

Gear Case Serial Number



M26253

Fig. 3-Gear Case Serial Number

The gear case serial number is located on a tag attached to the gear case, Fig. 3.

TORQUE CHARTS**Bolt Torque Chart**

**AVERAGE TIGHTENING TORQUE FOR BOLTS
(BASED ON 85% OF YIELD)**

BOLT SIZE	A17B			A17D			A17F		
	lb-in	lb-ft	N·m	lb-in	lb-ft	N·m	lb-in	lb-ft	N·m
1/4	72	6	8	120	10	13.5	168	14	19
5/16	156	13	17.6	240	20	27	360	30	40.7
3/8	276	23	31.2	420	35	47.5	600	50	67.8
7/16	420	35	47.5	660	55	74.6	960	80	108.5
1/2	660	55	74.6	1020	85	115.2	1440	120	162.7
9/16	900	75	101.7	1560	130	176.3	2100	175	237.3
5/8	1260	105	142.4	2040	170	230.5	2880	240	325.4
3/4	2220	185	250.8	3600	300	406.7	5100	425	576.2
7/8	1920	160	216.9	5340	445	603.3	8220	685	928.7
1	3000	250	339	8040	670	908.4	12360	1030	1396.5
1-1/8	3960	330	447.4	10920	910	1233.8	17520	1460	1979.5
1-1/4	5760	480	650.8	15000	1250	1694.8	24720	2060	2793

B grade bolts larger than 3/4 are sometimes formed hot rather than cold, which accounts for the lower mean tightening torque.

Set Screw Seating Torque Chart		
Screw Size	Seating Torque	
	Inch-Pounds	Newton Meters (N·m)
#5	9	1.0
#6	9	1.0
#8	20	2.3
#10	33	3.7
1/4	87	9.8
5/16	165	18.6
3/8	290	32.8
7/16	430	48.6
1/2	620	70.1
9/16	620	70.1
5/8	1225	138.4
3/4	2125	240.1

Thank you so much for reading.
Please click the “Buy Now!”
button below to download the
complete manual.



After you pay.

You can download the most
perfect and complete manual in
the world immediately.

Our support email:

ebooklibonline@outlook.com