DCX131 Disc Mower-Conditioner

Repair Manual

86630601

CASE IH

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

COMPLETE CONTENTS

SECTION 00 - GENERAL INFORMATION

Chapter 1 - General Information

CONTENTS

Section	Description	Page
	Special Tools	2
	Recommended Lubrication Chart	4
	Torque Specifications	5

SECTION 31 - IMPLEMENT POWER TAKE OFF (PTO)

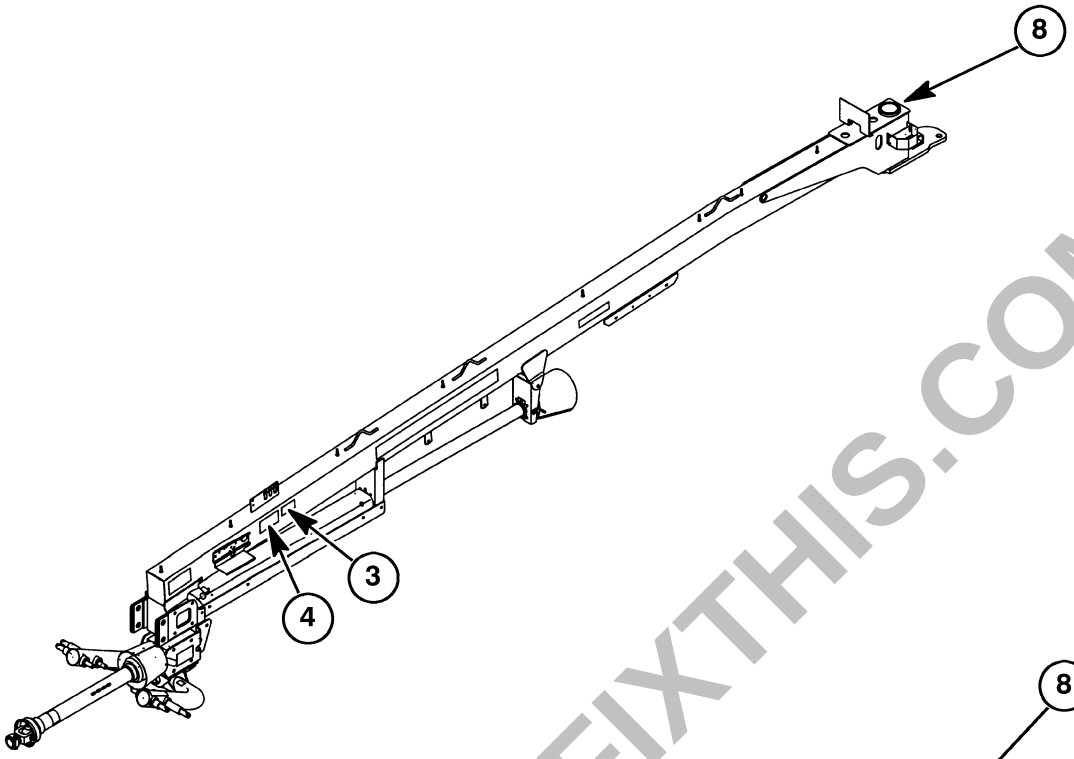
Chapter 1 - Drive Lines (Standard Tongue)

CONTENTS

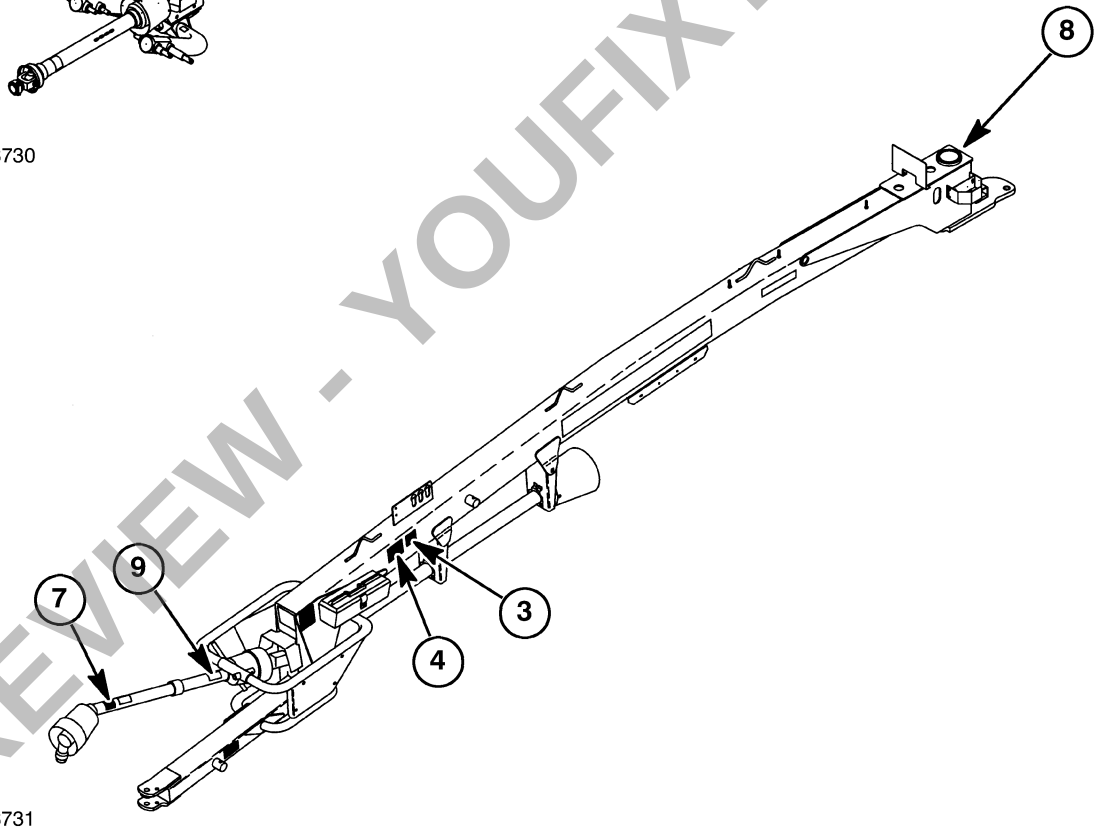
Section	Description	Page
	Standard Tongue	2
	Introduction	2
	Auto-lok Slide Lock	4
	Auto-lok Slide Lock - Disassembly	4
	Drive Shaft Removal and Installation	6
	Tongue Jackshaft - Disassembly	16
	Tongue Jackshaft - Assembly	18

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



19988730



19988731

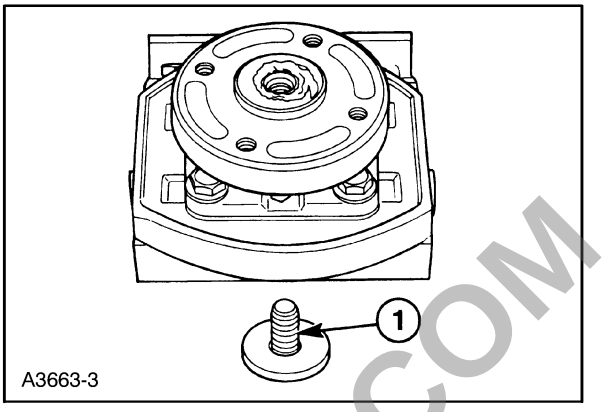
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

DISC MODULE - DISASSEMBLY

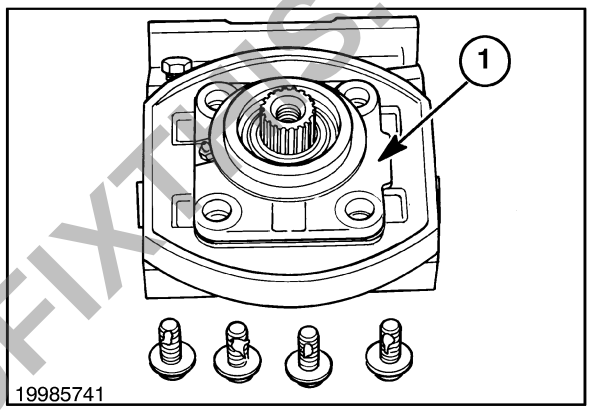
1. Remove the disc hub by removing the center retaining bolt, 1. It will be easier to remove the disc hub if the bolt is loosened prior to removing the module from the cutter bar. Clean off any material buildup on top of the module and the top cap assembly.

NOTE: *Removing the disc hub will expose the upper bearing in the top cap assembly. Cover this area with a cloth, or use special tool to prevent contamination from entering the bearing.*



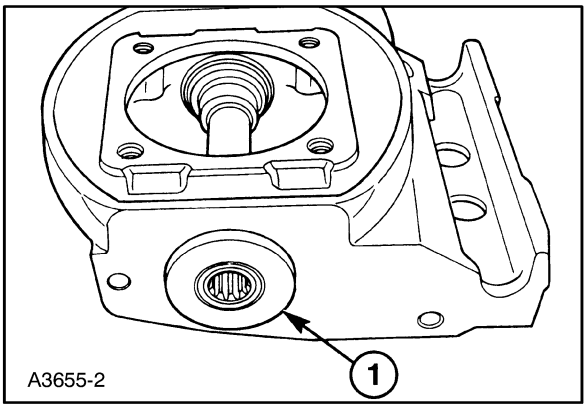
60

2. Remove the four retaining bolts and pry the top cap assembly, 1, off the lower module.



61

3. Pry the seals, 1, from each side of the lower module, using caution not to damage the shaft surface.



62

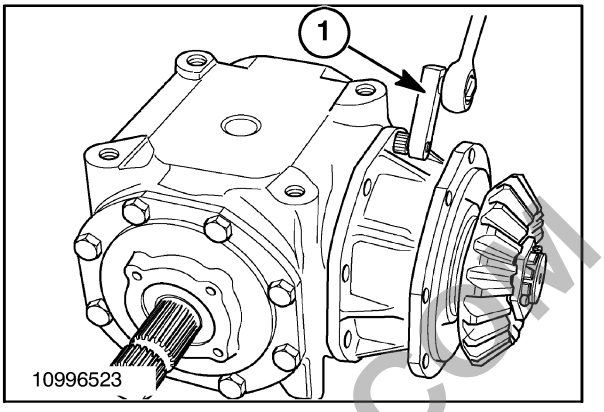
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Backlash Adjustment

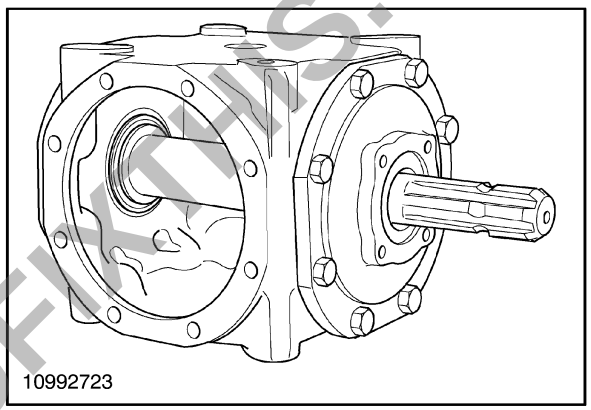
If the backlash reading is greater than the required measurement;

1. Remove the eight M10x22 hex bolts to attach the neck to the upper gear box.
2. Remove the neck assembly from the upper gearbox.



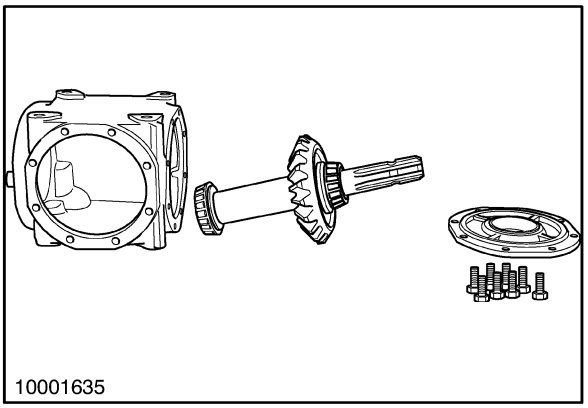
65

3. Remove the eight M10x22 cap screws securing the cover to the housing.



66

4. Remove the cover from the housing.
5. Remove the shaft and gear assembly from the housing.



67

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SECTION 00 - GENERAL INFORMATION

Chapter 1 - General Information

CONTENTS

Section	Description	Page
	Special Tools	2
	Recommended Lubrication Chart	4
	Torque Specifications	5

PREVIEW - YOUFIXTHIS.COM

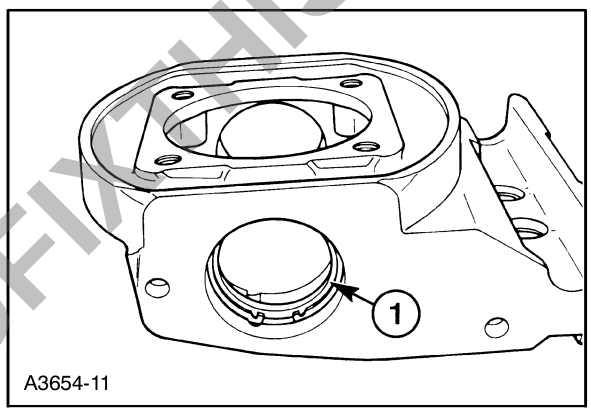
Download full manual at youfixthis.com

The backlash of the assembled disc module is controlled by precision machining of the disc module and top cap housings, the use of precision forged gears, and the use of low tolerance bearings, which are manufactured to provide a specific “stack height,” or combined thickness. The backlash in the gear set should be 0.13 - 0.28 mm (0.005″ - 0.011″) after the module has been assembled.

If the back lash is found to be incorrect after module repair with new parts, recheck the module for correct assembly of all components.

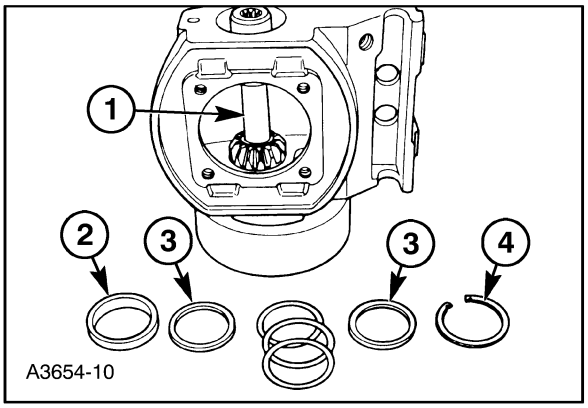
NOTE: *Each bearing for the pinion shaft is manufactured for a specific “stack height”. Do not mix old and new bearing components or substitute with “jobber” bearings.*

1. Install a snap ring, 1, on the pinion side of module casting. Slide the bearing cup for the pinion side bearing into the housing bore against snap ring. Note that the direction of rotation desired will affect which side of housing you start on. For example, install snap ring on right side of housing for clockwise rotation, and on the left side of housing for counter-clockwise rotation.



66

2. Support the module housing approximately 1/2″ above the work surface on blocks, a large piece of pipe as shown, or in an open vise. Position the snap ring and bearing cup down. Slide the assembled lower module shaft, 1, into housing, making sure pinion side is down against snap ring to orient properly for desired direction of rotation.
3. Install the bearing cup, 2, for the upper bearing cone into the housing. Place the two spacer washers, 3, on top of the bearing cup, and install the snap ring, 4, into the groove in the housing.



67

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SPECIAL TOOLS

Tool Number	Description/Use
Section 31	
610R	Snap ring remover
Local Manufacture	Neck lock nut removal
Local Manufacture	Holding tool for neck housing
Local Manufacture	Neck rolling torque measurement

SPECIFICATIONS

MODEL DCX131

	Standard Tongue	Swivel Hitch Tongue
Overall Width		
Transport position	4000 mm (13′3″)	4000 mm (13′3″)
Field position	5791 mm (19′0″)	6274 mm (20′7″)
Overall Length		
Transport position	7925 mm (26′0″)	8484 mm (27′10″)
Field position	6375 mm (20′11″)	6934 mm (22′9″)
Height		
Transport position	2032 mm (6′8″)	2032 mm (6′8″)
Field position	1676 mm (5′6″)	1676 mm (5′6″)
Ground Clearance	457 mm (18″)	457 mm (18″)
Wheel Tread Width	3772 mm (148.5″)	3772 mm (148.5″)
Weight	2557 kg (5600 lbs.)	2694 kg (5900 lbs.)

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

6

Part #80772110C

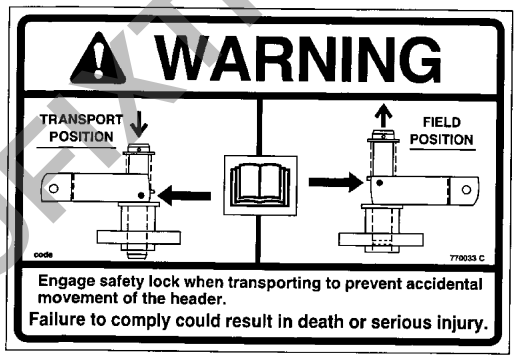
WARNING: While the equipment is in operation, stand clear of the knife path.

7

Part #849471

DANGER: Rotating driveline can cause death.

8



Part #770033C

WARNING: Ensure that the tongue safety lock is engaged to prevent accidental movement.

PREVIEW YOUFIXTHIS.COM

Download full manual at youfixthis.com

SECTION 31 - IMPLEMENT POWER TAKE OFF (PTO)

Chapter 2 - Drive Lines (Swivel Hitch Tongue)

CONTENTS

Section	Description	Page
	3-Point/Drawbar Swivel Hitch Driveline	2
	Introduction	2
	Slide Lock	3
	Disassembly	3
	Assembly	4
	Drive Shaft Removal	6
	Standard Driveline Guards	9
	U-joints: Swivel Hitch Units	10
	Tongue Jackshaft	15

SECTION 31 - IMPLEMENT POWER TAKE OFF (PTO)

Chapter 3 - Slip Clutch

CONTENTS

Section	Description	Page
	Introduction	2
	Slip Clutch - Run-In	2
	Slip Clutch - Wear Inspection	3
	Slip Clutch - Removal	3
	Slip Clutch - Disassembly	4
	Slip Clutch - Inspection	5
	Slip Clutch - Reassembly	5

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SECTION 31 - IMPLEMENT POWER TAKE OFF (PTO)

Chapter 2 - Drive Lines (Swivel Hitch Tongue)

CONTENTS

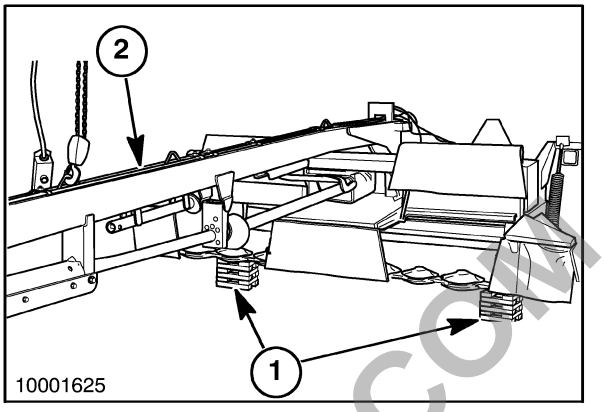
Section	Description	Page
	3-Point/Drawbar Swivel Hitch Driveline	2
	Introduction	2
	Slide Lock	3
	Disassembly	3
	Assembly	4
	Drive Shaft Removal	6
	Standard Driveline Guards	9
	U-joints: Swivel Hitch Units	10
	Tongue Jackshaft	15

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Swivel Hitch Gearbox - Removal

Lower the header onto two blocks, 1, under the #2 and #9 disc. Using a lifting device, lift up on the tongue, 2, enough to support the tongue and remove the weight from the jack stand. Remove the jack stand and place it in its storage position.

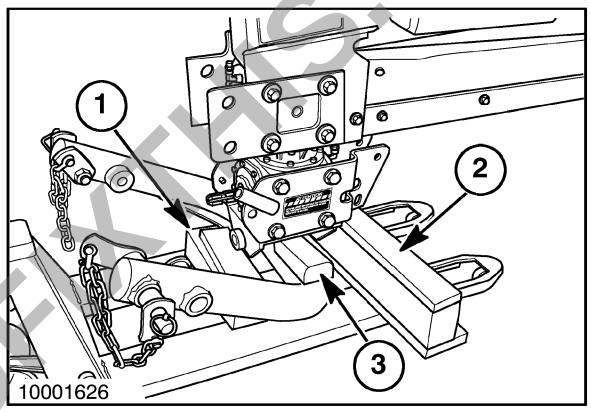


6

Remove the primary PTO, shield, and support. Position a pallet mover or other suitable lifting device under the swivel hitch. Support the hitch by installing blocking at the front, 1, and rear, 2, of the trunnion assembly. Place a wooden block, 3, on the top of the hitch frame assembly and under the trunnion assembly. Secure these two blocks with wire around the hitch frame.

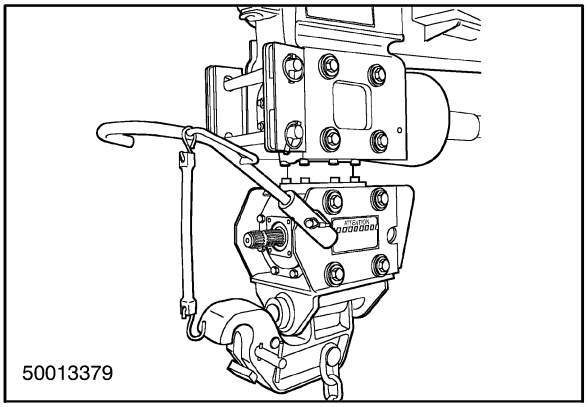
⚠ CAUTION ⚠

Failure to properly block and support the hitch and trunnion assemblies can result in them becoming unstable and falling off lifting or supporting devices.



7

The 3-point swivel hitch is shown in Figure 7 and the drawbar swivel hitch is shown in Figure 8.



8

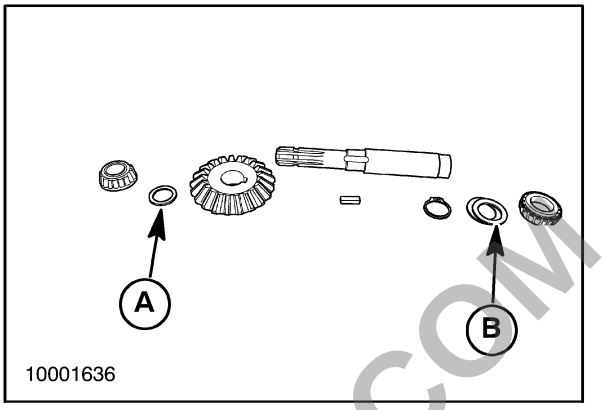
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

7. Move the shims from B, between the inner bearing and the snap ring, to, A, between the outer bearing and gear.
8. Assemble the shaft as described earlier in this section.
9. Install the shaft and gear assembly in the housing.

NOTE: *Do not apply RTV silicone sealant or Loctite® 270 to the gearbox at this time.*

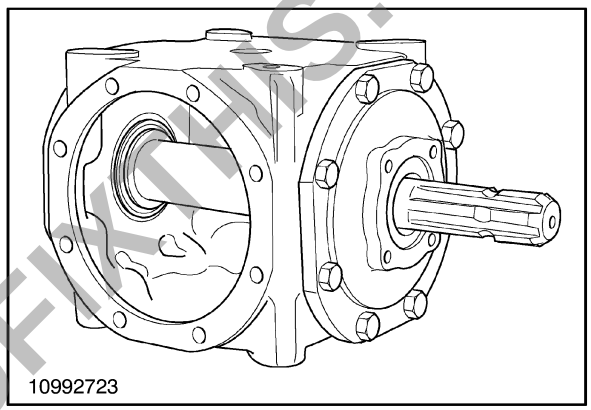
10. Install the cover on the housing.



108

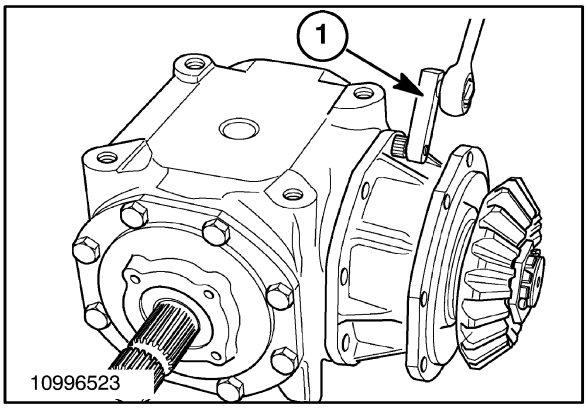
11. Install the eight M10x22 cap screws securing the cover to the housing. Torque the bolts to 78 N·m (58 ft.-lbs.).

NOTE: *Do not apply RTV silicone sealant or Loctite® 270 to the gearbox at this time.*



109

12. Install the neck assembly on the lower gearbox.
13. Install the eight M10x22 hex bolts to attach the neck to the lower gear box. Torque the bolts to 78 N·m (58 ft.-lbs.) using special tool, 1.
14. Check for the proper backlash reading at the input shaft as described earlier in this section.



110

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

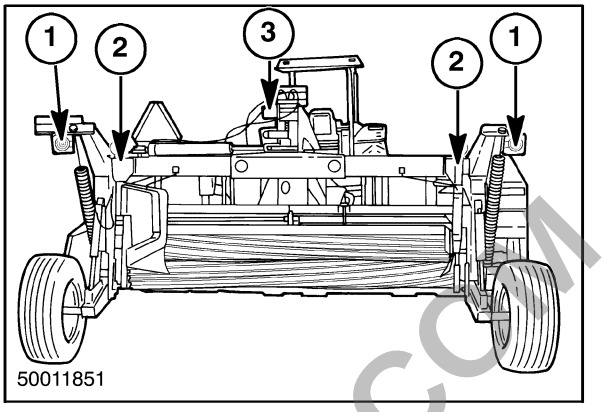
TRAILING LIGHTS

The trailing lights as shown should be used when towing the mower-conditioner on a public road.

The trailing lights consist of two amber flashing lights, 1, attached to the trailframe spring towers, red tail/brake lights, 2, attached to the inside trailframe locations, and a lighting control box, 3, positioned on the tongue that controls the signals from the tractor to the mower-conditioner.

This lighting system is intended to improve the machine visibility on public roads and warn operators of other vehicles of your actions. This machine is equipped with a lighting system which conforms to ASAE S279.10.

NOTE: *Left and right are determined by standing behind the unit, looking in the direction of travel.*

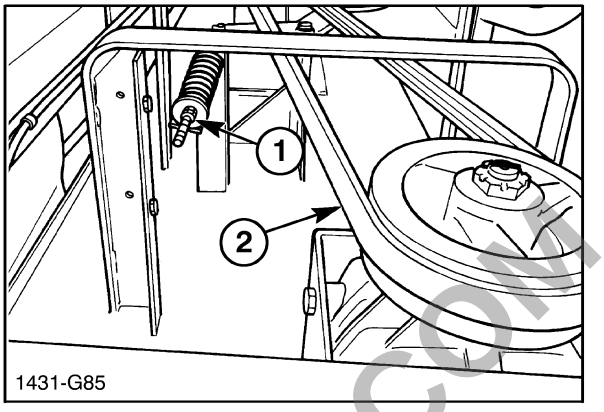


3

PREVIEW - YOUFIXTHIS.COM

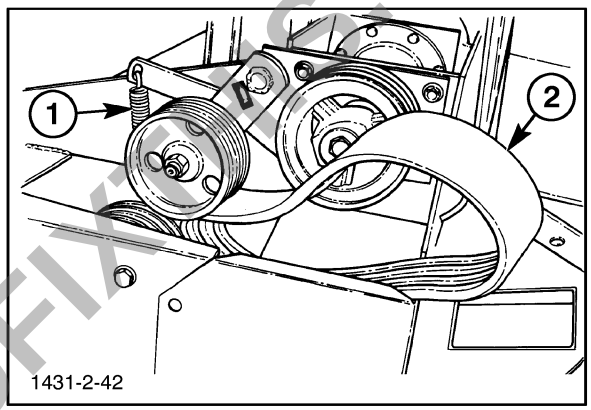
Download full manual at youfixthis.com

3. Remove the tension on the belt by loosening the jam nut and adjusting nut, 1, on the spring tension rod until the belt, 2, can be removed from the gearbox sheave.



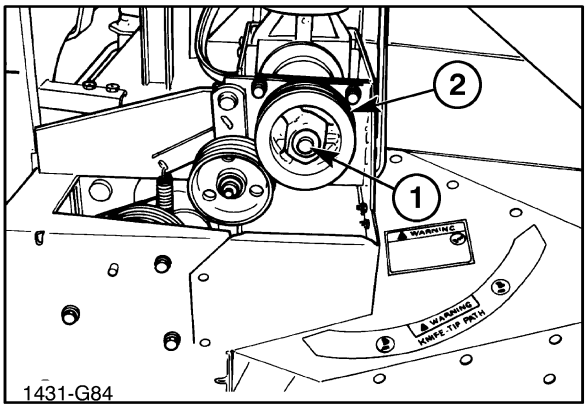
3

4. Loosen the spring, 1, for the conditioner drive belt, 2, by loosening the jam nut and adjusting nut; remove the drive belt from the sheaves.



4

5. Block the cutter bar using wood blocking between the discs, or a bar through the right end tower. Remove drive pulley retaining bolt, 1, and pull the drive pulley, 2, off the conditioner drive shaft.

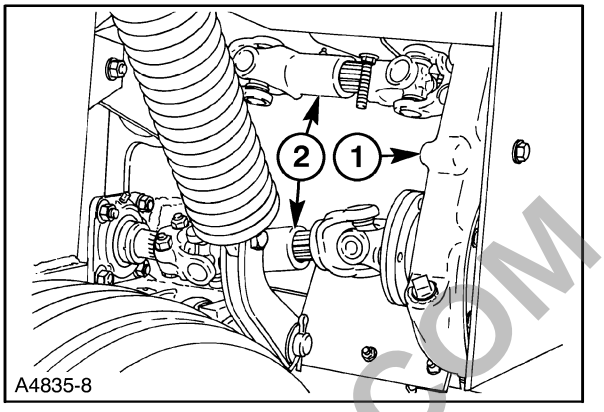


5

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

The conditioner drive gearbox, 1, drives the conditioner rolls through two telescoping U-joint drive shafts, 2. The bottom drive shaft is equipped with a slotted flange to provide for the roll timing adjustment.



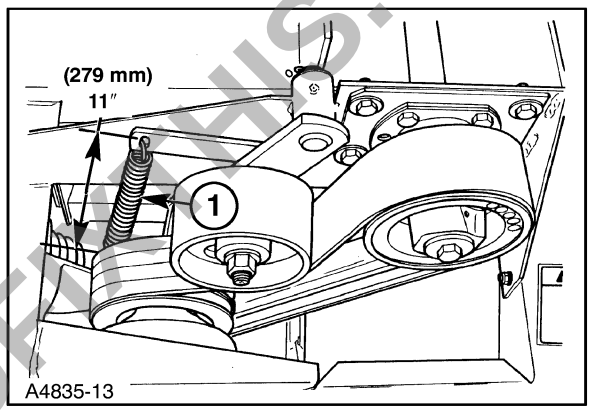
3

CONDITIONER BELT ADJUSTMENT

The conditioner belt must be properly tensioned at all times to prevent excessive slipping. A loose belt may cause conditioner rolls to wrap.

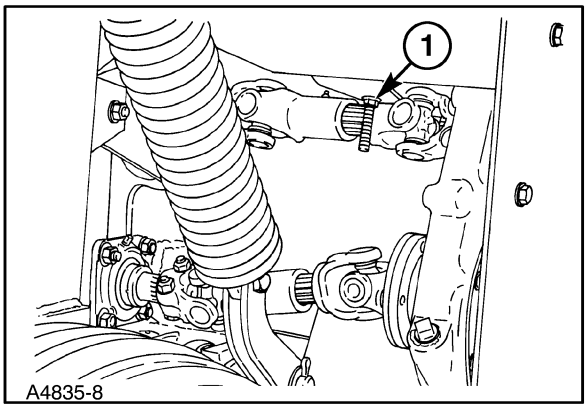
Check the belt tension each day for the first few days of service with a new belt. Check the belt tension weekly thereafter.

The conditioner belt is tensioned by a spring. The belt is properly tensioned when the spring, 1, is tightened to a length of 279 mm (11″) from inside hook to inside hook.



4

Loosen nuts, 1, and tighten the inner nut to stretch the spring to the correct length; tighten the jam nut to secure.



5

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 17 of 310 pages

The full manual includes:

- All 310 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Case IH DCX131 Repair Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual