ORIGINAL INSTRUCTIONS

OPERATOR'S MANUAL

DuraDisc™ 107M
DuraDisc™ 108M
DuraDisc™ 109M

Disc Mower

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5 - WORKING OPERATIONS

GENERAL INFORMATION

Before operating check

Before you operate the machine for the first time, perform the following items:

1. Read the operator's manual completely and carefully.
2. Check that the machine is assembled correctly and is undamaged. Make sure that no parts are tied up in the shipping position on the inside of the machine.
3. Make sure that the Power Take-Off (PTO) on the tractor is the correct size and speed specification, and that the tractor is capable of maintaining the specified **540 RPM** with no load on the machine. Too high of a PTO speed can be dangerous; too low of a PTO speed will cause a reduction in cutting capacity and crop flow as well as an increase in load on the power-transferring elements.
4. Check the length of the primary PTO shaft. PTO shafts that are too short or too long can cause considerable damage to the tractor and the disc mower. Make sure that the safety shields do not get jammed or damaged in any operating position. Make sure that the safety chains are securely attached and do not get tight or damaged in any position.
5. Make sure that the hydraulic hose is connected to the tractor with sufficient slack to account for various adjustments to the three-point hitch, as well as a raised or lowered cutterbar.
6. Lubricate the machine as described in the "Maintenance chart" (**6-9**).

This machine was tested at the factory to ensure proper operation. However, perform the following actions with the rear tractor window open and without hearing protection to check the operation of the machine.

1. Start the tractor.
2. Lower the cutterbar to the operating position.
3. Make sure that the cutterbar curtains are lowered to the operating position.
4. Engage the tractor PTO at a low speed.
5. If there are no unusual scratching or knocking sounds, increase the PTO speed slowly, up to the rated speed of **540 RPM**.
6. At the rated speed, check for any unusual or noticeable vibrations.

   NOTICE: *If you are in doubt whether the machine is operating correctly, disengage the PTO and stop the tractor immediately.*
7. Disengage the PTO and turn off the tractor.
8. Turn the rotating parts on the machine manually to make sure that all parts can turn freely.
9. Visually check the machine for any problems. Check for scratched off or burnt paint.

If you wish to test the machine for an extended period of time, close the rear window or use hearing protection.

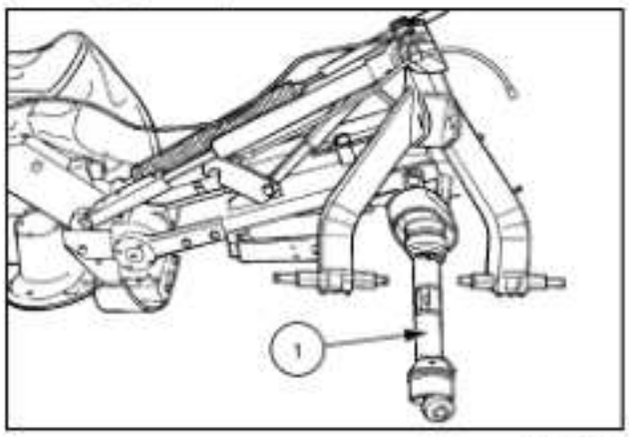
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Every 20 hours

Grease points (20 hours)

***NOTE:** Use **AMBRA GR-9 MULTI-PURPOSE GREASE** for the following grease points.*

Grease the telescoping sections **(1)** of the Power Take-Off (PTO) shaft.



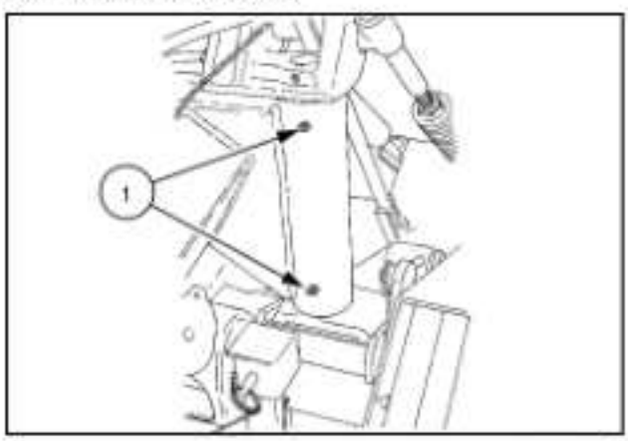
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Every 40 hours

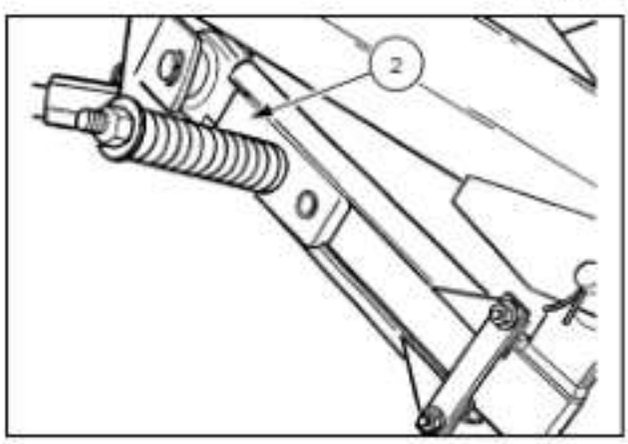
Grease points (40 hours)

***NOTE:** Use **AMBRA GR-9 MULTI-PURPOSE GREASE** for the following grease points.*

Grease the main frame pivot bushings **(1)**.



Grease the breakaway pawl **(2)**.



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8 - SPECIFICATIONS

General specifications

Cutterbar

	DuraDisc™ 107M	DuraDisc™ 108M	DuraDisc™ 109M
Cutting width	**2040 mm (80 in)**	**2400 mm (94 in)**	**2800 mm (110 in)**
Cutting height	**32 – 89 mm (1.25 – 3.5 in)**	**32 – 89 mm (1.25 – 3.5 in)**	**32 – 89 mm (1.25 – 3.5 in)**
Cutterbar tilt angle	**0 – -10°**	**0 – -10°**	**0 – -10°**
Cutterbar operating range	**+18 – -32°**	**+18 – -30°**	**+18 – -28°**
Breakaway angle	**19°**	**30.5°**	**30.5°**
Type	Modular	Modular	Modular
Number of discs	5	6	7
Knives per disc	2	2	2
Disc cutting diameter	**500 mm (19.7 in)**	**500 mm (19.7 in)**	**500 mm (19.7 in)**
Disc speed	**3000 RPM**	**3000 RPM**	**3000 RPM**

Driveline

	DuraDisc™ 107M	DuraDisc™ 108M	DuraDisc™ 109M
Power Take Off (PTO) horsepower requirement - (minimum)	**33 kW (45 Hp)**	**40 kW (55 Hp)**	**44 kW (60 Hp)**
Input speed	**540 RPM**	**540 RPM**	**540 RPM**
Driveline protection	Belt drive to cutterbar, overrunning clutch on PTO shaft	Belt drive to cutterbar, overrunning clutch on PTO shaft	Belt drive to cutterbar, overrunning clutch on PTO shaft
Belt tension	Spring-loaded tensioner with adjustment gauge	Spring-loaded tensioner with adjustment gauge	Spring-loaded tensioner with adjustment gauge

Hydraulics and hitch

	DuraDisc™ 107M	DuraDisc™ 108M	DuraDisc™ 109M
Hydraulic circuits required	One remote	One remote	One remote
Minimum relief pressure required	**104 bar (1500 psi)**	**104 bar (1500 psi)**	**104 bar (1500 psi)**
Hitch	Category I	Category II	Category II

Dimensions and weight

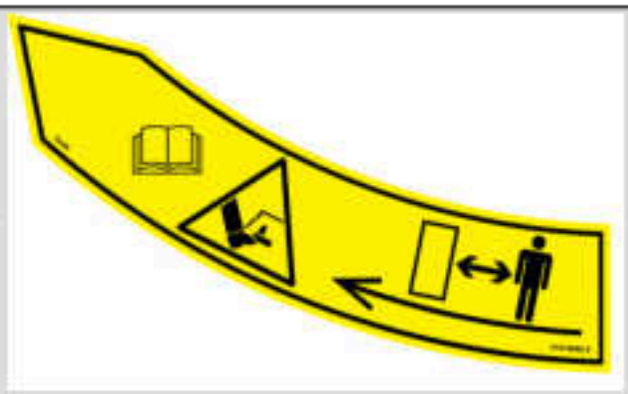
	DuraDisc™ 107M	DuraDisc™ 108M	DuraDisc™ 109M
Overall width	**3524 mm (138.75 in)**	**4070 mm (160.25 in)**	**4616 mm (181.75 in)**
Overall length	**1283 mm (50.5 in)**	**1283 mm (50.5 in)**	**1283 mm (50.5 in)**
Height, transport position*	**2489 mm (98 in)**	**3035 mm (119.5 in)**	**3581 mm (141 in)**
Hitch	**546 kg (1200 lb)**	**639 kg (1405 lb)**	**698 kg (1535 lb)**

NOTE: ** Transport height is based on hitch pins being **609 mm (24 in)** above the ground on model DuraDisc™ 107M and **457 mm (18 in)** above the ground on models DuraDisc™ 108M and DuraDisc™ 109M as specified earlier in this manual.*

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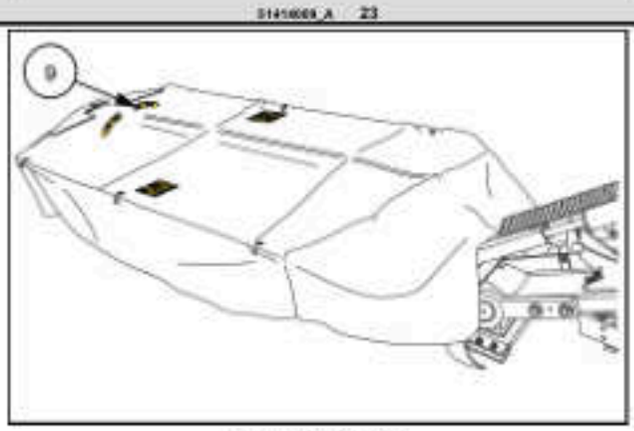
WARNING
KNIFE-TIP PATH – CUTTING HAZARD! STAND CLEAR
While the equipment is in operation, stand clear of the knife path.
Failure to comply could result in death or serious injury.

Quantity: 1
51414009



51414009_A 23

(9) Located on the top of the cutterbar curtain, toward the rear on the right-hand side.



NHL18HT0601 9AA 24

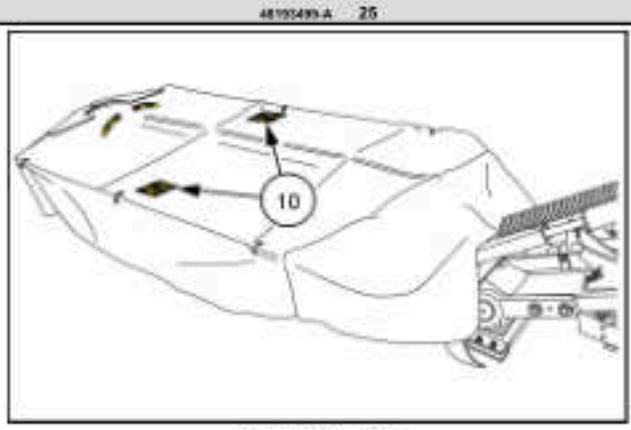
WARNING
FLYING OBJECTS HAZARD!
Keep all skirts and shields in place.
Set machine to clear obstructions and stones.
Machine can throw stones and debris toward operator or bystanders.
Stay clear when machine is running.
Failure to comply could result in death or serious injury.

Quantity: 2
48193499



48193499-A 25

(10) Located on the front section and the rear section of the cutterbar curtain.



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Safety signs

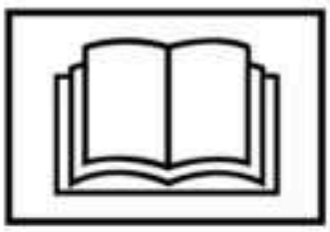
The following safety signs are on your machine as a guide for your safety and for the safety of those working with you. Walk around the machine and note the content and the location of all safety signs before you operate your machine.

Keep all safety signs clean and legible. Clean safety signs with a soft cloth, water, and gentle detergent.

NOTICE: *Do not use solvent, gasoline, or other harsh chemicals. Solvents, gasoline, and other harsh chemicals may damage or remove safety signs.*

Replace all safety signs that are damaged, missing, painted over, or illegible. If a safety sign is on a part you or your dealer replaces, make sure that you or your dealer install the safety sign on the new part. See your dealer for replacement safety signs.

Safety signs that display the "Read operator's manual" symbol direct you to the operator's manual for further information regarding maintenance, adjustments, or procedures for particular areas of the machine. When a safety sign displays this symbol, consult the appropriate page of the operator's manual.



Safety signs that display the "Read service manual" symbol direct you to the service manual. If you doubt your ability to perform service operations, contact your dealer.



ISO two panel pictorial symbol safety signs are defined as follows:

- The first panel **(1)** indicates the nature of the hazard.
- The second panel **(2)** indicates the appropriate avoidance of the hazard.
- Background color is YELLOW. Prohibition symbols such as STOP, if used, are RED.



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