POTENZA

Series 4 - 17 Rows

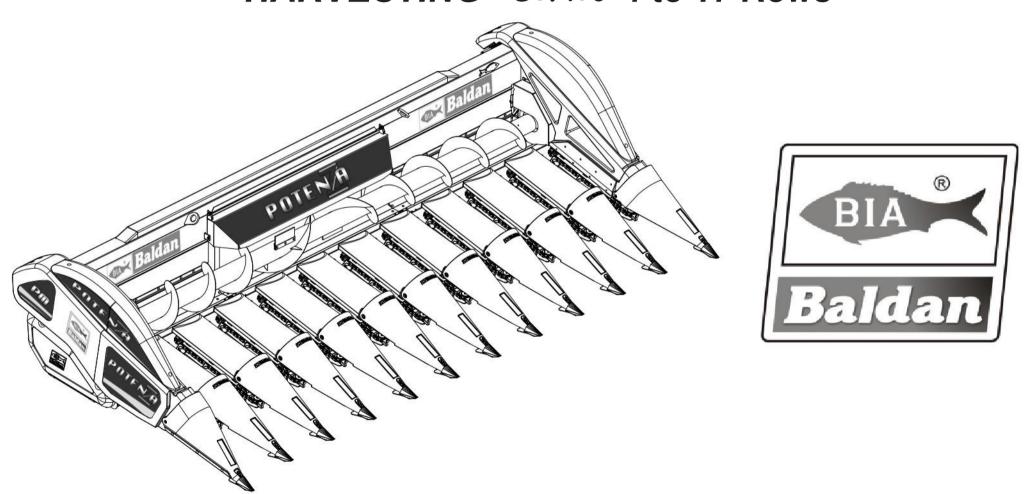


Instruction Manual





Instruction Manual POTENZA AGRICULTURAL PLATFORM FOR CORN HARVESTING - Series 4 to 17 Rows



Instruction Manual





INTRODUCTION

We thank you for your preference and wish to congratulate you on your excellent choice you just made, as you purchased a product manufactured with the BALDAN IMPLEMENTOS AGRÍCULAS S/A technology.

This manual will instruct you in the necessary procedures ranging from your purchase to operating procedures for utilization, safety, and maintenance of the equipment.

BALDAN guarantees the delivery of this implement to the reseller complete and in perfect operating conditions.

The dealer is held responsible for the storage and conservation during the period it is in his/her possession, and even for the assembly, retightening, lubrication, and overall revision.



The dealer must instruct the user-customer in the technical delivery on maintenance, safety, obligations on eventual technical support services, strict adherence to the warranty terms and reading the instruction manual.

Any request for warranty technical support service, must be made at the reseller where the implement was purchased.

We reiterate the necessity for careful reading of the warranty certificate and adherence to all the items in this manual, as that will increase the useful lifetime of your implement.



INDEX

1 – Safety Standards	5 to 10
2 - Components :	
- POTENZA Agricultural Platform for Corn Harvesting - Series 4 to 17 rows	
3 – Technical Specifications:	
- Technical specifications	12
- Row Spacing Tables	
4 – Platform Coupling:	
- Potenza coupling support	
- Potenza optional supports for coupling	
- Driveshaft coupling	
5 – Spaces:	
- New spacing intervals	
6 - Adjustments:	
- Adjusting the row harvesting speed	22 to 23
- Adjusting the speed of the screw conveyor	
- Adjusting the threaded conveyor	
- Adjusting the height of the cowl nozzles	
- Adjusting the movement of the skids	
- Adjusting the gearbox torque governor	_ -
- Upper side shield	
- Adjusting the sliding blades	
- Adjusting the chain guide	
- Replacing the nylon plate	
- Adjusting the cutting blades	
- Adjusting the chain tightness	
- Positioning the chain fins	
7 - Operating	
8 - Maintenance:	
- Lubrication	
- Grease and Equivalent table	
- Places for lubrication	
- Changing the threaded conveyor bearings	
- Gearbox	
- Oil Tank	
- Operating Maintenance	
9 - Cleaning:	
- Precautions	
- Overall Cleaning	
10 - Options	
- Front cowling options	
11 - Transport:	
- Potenza Modular Agricultural Trailer(CAP-M)	40
12 - Identification:	
- Product Identification	41





THIS SYMBOL INDICATES AN IMPORTANT SAFETY WARNING IN THIS MANUAL, WHENEVER THE READER FINDS IT, CAREFULLY READ THE FOLLOWING MESSAGE AND PAY ATTENTION REGARDING THE POSSIBILITY OF PERSONAL ACCIDENTS.



• Carefully read the instruction manual to know the recommended safety practices.

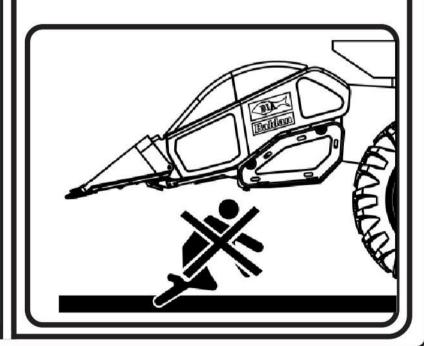


• Only perform maintenance on the Potenza platform after locking the hydraulic system of the harvester.



• Only begin operating the harvester, when properly Seated and wearing the seatbelt.







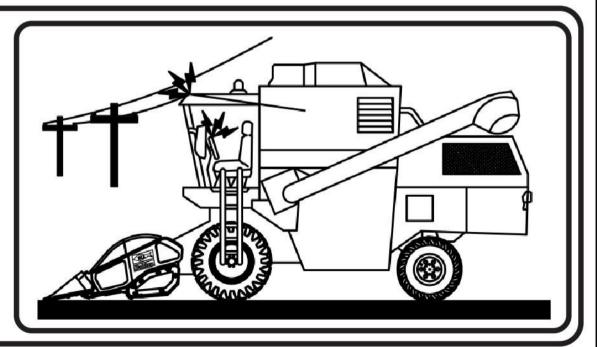
ATTENTION

• When the Potenza platform is operating, keep away from moving parts, especially those operating without any shielding protection.



ATTENTION

• Be careful when moving the Potenza platform Under electric power lines, low tree branches and other elevators obstructions in order to avoid serious injuries or even death.







ATTENTION ATTENTION



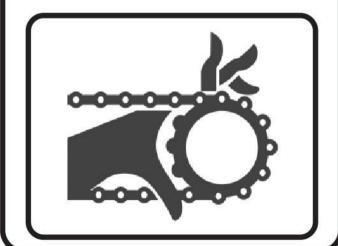
ATTENTION

- The hydraulic oil operates under pressure and can cause serious injuries, if there are leakages.
- Periodically verify the condition of the hoses. If there are any signs of leakage replace them immediately.
- Antes connecting or disconnecting the hydraulic hoses, release the pressure from the system, performing this when the tractor is turned off.

- Do not make blade adjustments on the platform when platform is moving
- Do not perform any maintenance jobs on the transmission and/or unclog the platform except after uncoupling the transmission from the platform and the harvester motor.
- After performing maintenance tasks, replace all protections over moving parts.

- There is a risk of possible lesions to the Potenza platform operator and spectators while operating.
- Do not stay near the screw conveyor when it is operating.



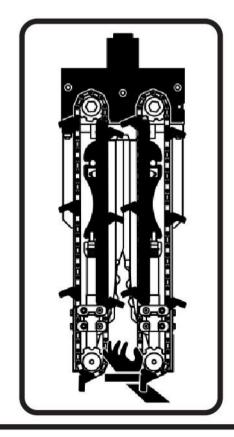






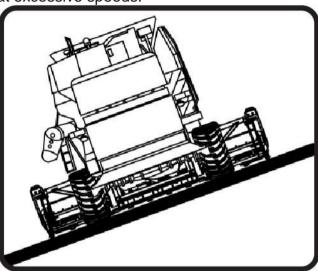
ATTENTION

• Keep your hands and feet away from harvesting rows, especially when they are in operation.



ENTION

- There are risks of serious lesions from toppling over while working on sloped terrain.
- Do not operate at excessive speeds.

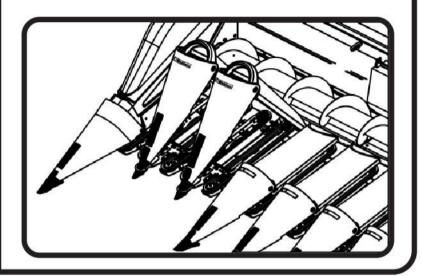


- There is a risk of possible lesions to the Potenza platform operator and spectators while operating.
- Do not stay near the transmission axles and rotating axles while they are operating.



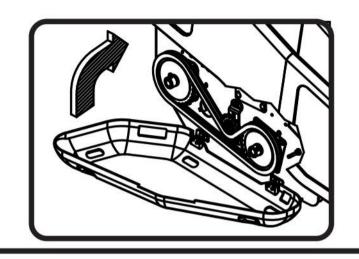


 Do not activate the screw conveyor when the nozzle are articulated by adjusting the chains.





Never operate the corn platform when the transmission protection is open to avoid damages to the operation of the platform



WARNING:



Incorrect handling of this equipment can result in serious or fatal accidents. Before starting to operate the equipment, carefully read the instructions contained in this manual. Certify that the person who is responsible for operating it has been instructed regarding safe and correct handling. Certify the operator has read and understood the instruction manual of this product.

- When operating the corn platform, do not let people stay very nearby or on it.
- 2 1 Wear gloves on the hands whenever performing any assembly or disassembly task.
- 3 1 Do not wear loose clothing, as they can get stuck in the corn platform.
 - When operating the harvester motor, the operator must be seated and completely conscious on correct handling of the harvester as well as the corn platform. Always engage the gear shift in neutral, uncouple the power take-off and place the hydraulic controls in the neutral position.
- Do not turn on the motor in a closed location or without adequate ventilation, as the exhaust gases are hazardous to the operator's health



Instruction Manual

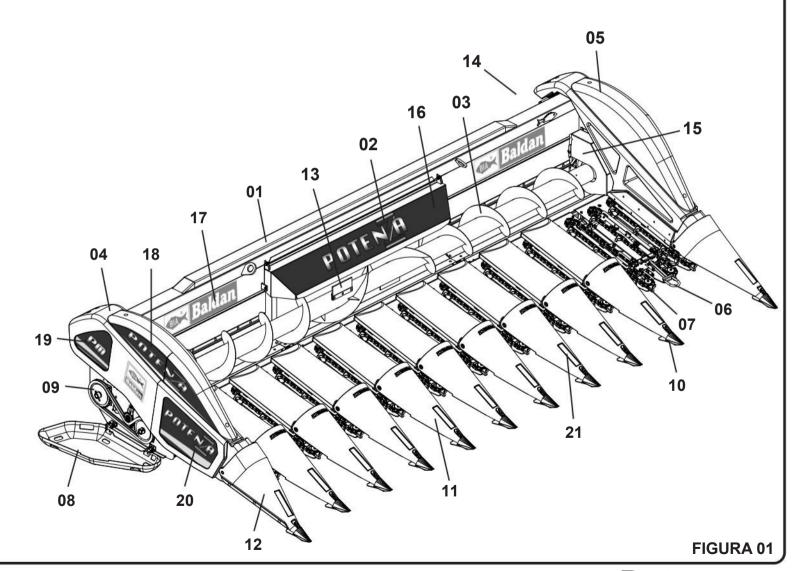
- When driving the harvester connected to the corn platform, make sure there is enough space and no people are nearby. Always operate in low gear and be prepared to brake whenever there is any emergency.
- 7 A Do not make adjustments on the corn platform when it is operating.
- When working on sloped terrains, proceed carefully, seeking to maintain the necessary stability. In case of it starting to become imbalanced, reduce acceleration and turn the wheels of the harvester towards the downhill slope of the terrain.
- Always drive the harvester at compatible speeds for safety purposes, especially when working on uphill or downhill sloped terrains. Keep the harvester always engaged.
- When driving the harvester on roads keep the brake pedals interconnected and use safety signals. 10 - 1
- When leaving the harvester, engage the gearshift in neutral and apply the parking brake. 11 - 1
- Do not allow people to touch the corn platform when it is being operated. 12 - 🖍
- Do not clean or unclog the corn platform when it is operating. 13 - 1
- After finishing performing maintenance on the corn platform, verify if no tools or parts have been left there. 14 - 🖍
- Before driving with the corn platform on roads, verify the signals and consult the official transport entity. 15 - 1
- 16 🕡 When uncoupling the corn platform, look for a safe and easy access area.
- When leaving the harvester, engage the gearshift in neutral and apply the parking brake. 17 - **A**
- Alcoholic beverages or some medications an make the operator's reflexes slower and change the physical condition. For this reason never operate this equipment, under the influence of these substances.
- Read or explain all these above procedure to an illiterate user 19 - 🔥

In case of any doubts, consults After-Sales service Telephone: 0800-152577 or e-mail: posvenda@baldan.com.br

POTENZA AGRICULTURAL PLATFORM FOR CORN HARVESTING - Series 4 to 17 Rows

02 = COMPONENTS

- 01 Frame
- 02 Deflector
- 03 Screw Conveyor
- 04 Side Shield
- 05 Upper Shield
- 06 Row Joint Support
- 07 Complete Row
- 08 Protective Cover
- 09 Transmission
- 10 Nozzle
- 11 Central Nozzle Cowl
- 12 Side Nozzle Cowl
- 13 Cleaner
- 14 Oil Tank
- 15 Transmission Shield
- 16 Potenza Deflector Label
- 17 Baldan Label
- 18 Potenza Horizontal Label
- 19 PM Label
- 20 Potenza Label
- 21 Reflective Label





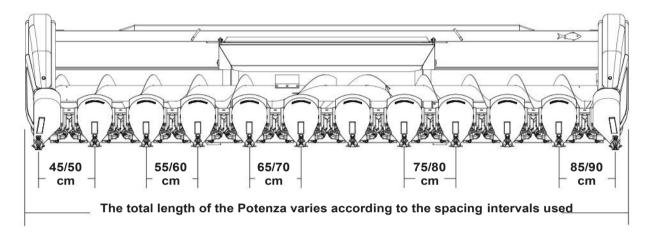


TISTI UCTION WAT

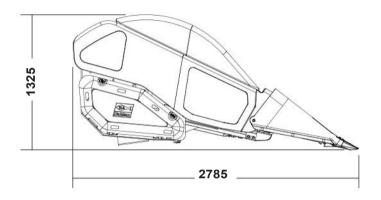
03 TECHNICAL SPECIFICATIONS



Vista Frontal da POTENZA



Vista Lateral da POTENZA



Baldan reserves the right to change or improve the technical characteristics of its products, without previous notice. The technical specifications are approximate and based on normal operating conditions.

ROW SPACING TABLES

Chassis width	# of Rows	Spacing [mm]	Wide Cowling [L]	Approx. Wgt. [kg]
	7	450	-	1720
	6	500 / 550		1583
3260 mm	5	650 / 700	-	1446
	4	750 / 800	L	1309
	4	850 / 900	•	1309

Chassis width	# of Rows	Spacing [mm]	Wide Cowling [L]	Approx. Wgt. [kg]
	8	450	-	1910
	7	500 / 540	-	1773
3710 mm	6	600 / 650		1636
	5	700	L	1499
	5	750 / 800	-	1499
	4	850 / 900	L	1362

POTENZA (TABLES 01)

Cowling width	# of Rows	Spacing [mm]	Wide Cowling [L]	Approx Wgt. [kg]
	9	450		2110
	8	500	-	1973
	7	540 / 600	-	1836
4160 mm	6	650	L	1700
	6	700 / 740	-	1700
	5	800 / 850	L	1563
	5	900	-	1563

TABLES 01

Chassis width	# of Rows	Spacing [mm]	Wide Cowling [L]	Approx. Wgt. [kg]	Chassis width	# of Rows	Spacing [mm]	Wide Cowling [L]	Approx. Wgt. [kg]	Chass	s # of Rows	Spacing [mm]	Wide Cowling [L]	Approx. Wgt. [kg]
4650 mm	10 9 8 7 6 6 5	450 500 560 / 600 650 / 700 750 800 900	- - - - - - - - -	2310 2173 1999 1890 1753 1753	5060 mm	11 10 9 8 8 7 7 6 6	450 500 550 600 650 700 750 850 900	- - - - - - - - - - - -	2510 2373 2236 2099 2099 1962 1962 1825	5510 m	12 11 10 9 8 8 7 6	450 500 550 600 650 700 800 / 850 900	- - - L - -	2800 2663 2526 2389 2252 2252 2115 1978
Chassis Width	# of Rows	Spacing [mm]	Wide Cowling [L]	Approx. Wgt. [kg]	Chassis width	# of Rows	Spacing [mm]	Wide Cowling [L]	Approx. Wgt. [kg]	Chass width	s # of Rows	Spacing [mm]	Wide Cowling [L]	Approx. Wgt. [kg]
5960 mm	13 12 11 10 9 8 7 7	450 500 550 600 650 750 850 900	- - - - L - -	3030 2878 2730 2574 2422 2270 2120 2121	6410 mm	14 13 12 11 10 9 9 8 8	450 495 540 595 650 700 743 800 850 900	- - - - L - L -	3246 3094 2942 2790 2638 2486 2486 2334 2334 2182	6860 m	15 14 13 12 n 11 10 9 9	450 490 530 580 640 700 750 800 850 900	- - - - - - - - - - - - - - - - -	3443 3290 3140 2990 2835 2683 2531 2531 2531 2380
Chassis Width	# of Rows	Spacing [mm]	Wide Cowling [L]	Approx. Wgt. [kg]	Chassis width	# of Rows	Spacing [mm]	Wide Cowling [L]	Approx. Wgt. [kg]				TABLE	ES 01
7310 mm	16 15 13 12 11 11 10 9 9	450 487 550 600 650 685 750 800 850 900	- - - - - - - - -		7760 mn	17 16 14 13 12 11 11 10 9	450 485 550 600 650 700 730 800 850 900	- - - - - - - - - -						

04

PLATFORM COUPLING



POTENZA COUPLING SUPPORT

- Couple the Potenza agricultural platform as follows:
- 1 Approach the harvester fitting in the coupling structure of the Potenza Platform coupling (1) and fit the upper part.
- 2 After lifting the Platform from the ground to reach the necessary height and then fasten the lower part according to the coupling latches that vary according to the harvester model.
- 3 Following that, assembly the transmission system (driveshaft) as stated in the instruction on page 16.
- 4 For uncoupling the Potenza agricultural platform perform the inverse process.



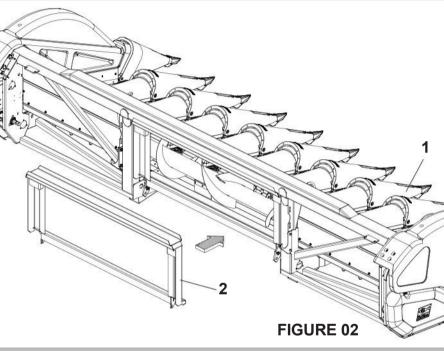
When coupling the Potenza, look for a safe and easily location.



IMPORTANT

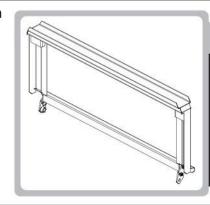
Before coupling the Potenza to the harvester, verify all coupling fastening points on the Potenza as they vary according to the harvester model.

POTENZA (FIGURES 02)



POTENZA OPTIONAL SUPPORTS FOR COUPLING

- The Potenza agricultural platform is equipped for several optional coupling supports to be used based on the harvester model and brand as show non pages 14 and 15.



MODEL:

SLC 7100 / 7200 / 7300 / 7500 / 7700 / 8700

JD 1165 / 1175 / 1185 Master

SLC JD 1450 / 1550 - Series

1500 STS 9650 / 9750

SLC 6100 / 6200 / 6300 / 6500

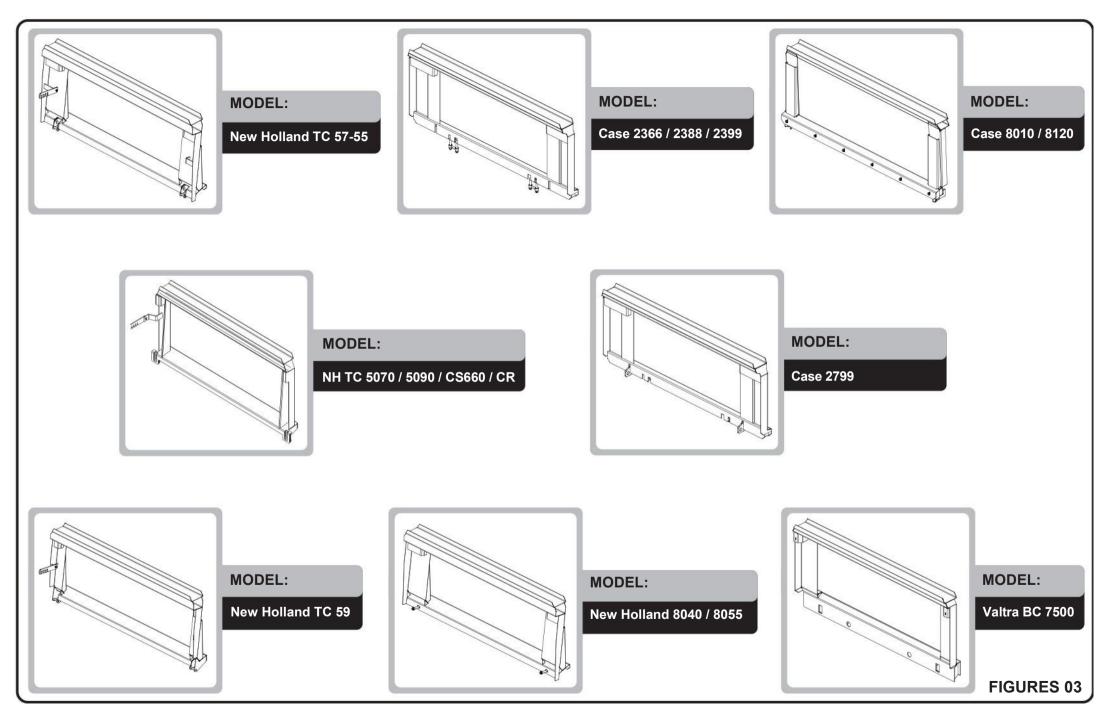
POTENZA (FIGURES 03)



MODEL:

MF 3640 / 5650 - Advance MF 32-34-38 (PLM 4000 - 5000) Valtra BC 4500 MF 3640 after 1999

FIGURES 03





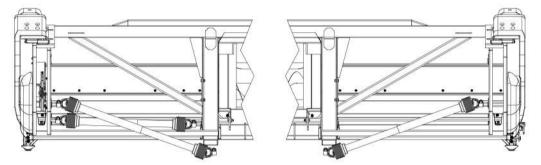
DRIVESHAFT COUPLING

POTENZA (FIGURES 04)

- After coupling the Potenza Agricultural Platform to the harvester, assemble the transmission (driveshaft) paying attention to its positioning that varies according to the model of your harvester. For correct coupling of the transmission system (driveshaft), verify the following instructions based on the model of your harvester.

"Potenza Rear View"

FIGURES 04



HARVESTER MODELS:

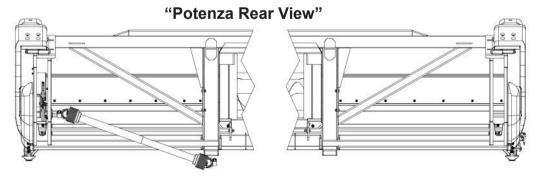
JOHN DEERE

TC 5070 / 5090

(For chassis starting at 5960 and after)

- The driveshaft will be coupled on two sides of the Potenza Agricultural Platform for the harvester models next to this. On the left side on the lower part coupling to the Platform itself, and the upper part, connected to the Harvester Platform. On the right side it will connect to the upper part of the Platform to the Harvester.

FIGURES 04



NEW HOLLAND 5070 / 5

HARVESTER MODELS:

MASSEY FERGUSON

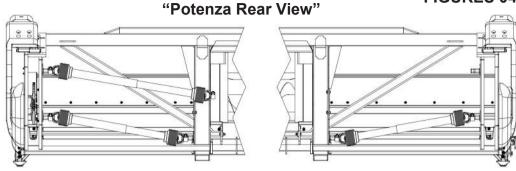
5070 / 5090

MF 3640 / 5650 Advanced

(For chassis from 4160 to 5510)

- The driveshaft will be coupled only to the left side of the Potenza Agricultural Platform on the lower side for the harvester model on the side; it will connect the Platform to the Harvester.

FIGURES 04



- The driveshaft will be coupled on two sides of the Potenza Agricultural Platform for the harvester models specified besides this. On the left side the upper part connecting the Platform to the Harvester, and on the lower part, connecting to the Platform itself. On the right side, the lower part will only connect the Platform itself.

HARVESTER MODELS:

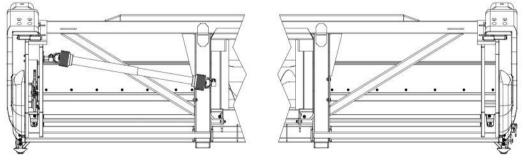
NEW HOLLAND

TC 59

(For chassis starting at 5960 and after)

FIGURES 04

"Potenza Rear View"



- The driveshaft will be coupled only to the left side of the Potenza Agricultural Platform on the upper part for the harvester model besides this; it will connect the Platform to the Harvester.

HARVESTER MODELS:

IDEAL

NEW HOLLAND TC 55 / TC 57 / TC 59 (Up to chassis 5510) 4040 / 8040 / 8055 MF 3640 / 5650 / 6845 / 6850 / 6855 **MASSEY FERGUSON**

9070 / 9075 / 9090 / 1170 / 1175

DRIVESHAFT COUPLING

POTENZA (FIGURES 04)

"Potenza Rear View"

- The driveshaft will be coupled to the two sides of the Potenza Agricultural Platform for the harvester models besides this. The left side and the right to the lower part connect the Platform to the Harvester.

MPORTANT

The right and left sides mentioned in these instructions were defined by looking at the Potenza Agricultural Platform from the back.

ATTENTION

Before beginning to couple the driveshafts, make sure the harvester is turned off. Do not couple it when the harvester is turned on.

When coupling a driveshaft, pay attention to the positioning, as it varies according to your harvester model.

Before coupling, look for an ideal location to facilitate this job.

HARVESTER MODELS:

FIGURES 04

JOHN DEERE	SLC 6100 / 6200 / 6300 / 6500 SLC 7100 / 7200 / 7300 / 7500 SLC 7700 / 8700 / 1185 Master JD 1165 / 1175 JD 1450 / 1550 Series 1500 STS 9570 / 9650 / 9750
CASE	2366 / 2388 / 2399 / 2688 / 2799 7010 / 7120 / 8010 / 8120
NEW HOLLAND	CS 660 / CR 9060
VALTRA	BC 4500 / 6500 / 7500
MASSEY FERGUSON	MF 32 / 34 / 38 MF 3640 / 5650 Advanced MF 9690 / 9790



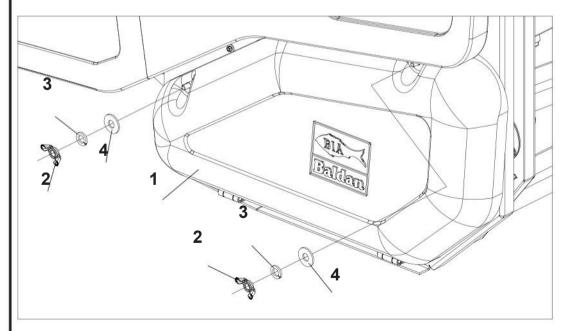
NEW SPACING INTERVALS

POTENZA (FIGURES 05)

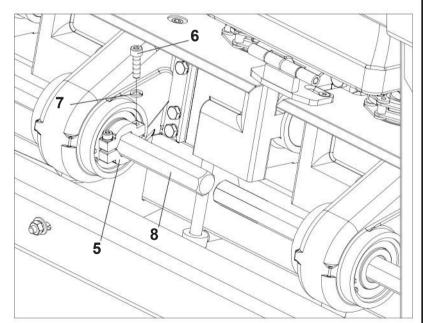
- Before purchasing the Potenza Agricultural Platform, we recommend carefully verifying the configurations, especially the number of rows and the space intervals to best meet your needs.
- Look at the tables on pages 12 and 13, the spacing options between harvesting rows are based on the width of the chassis corresponding to the purchased Platform model.
- We wish to remind you that depending on the new spacing being used in the Potenza Agricultural Platform, it will be necessary to change the front cowling (optional). According to the models on page 34. Modify the Platform spacing as follows:

1st Step: First, lift the Potenza Agricultural Platform on sawhorses that must be spread out along it, so it is stabilized along its entire length.

2nd Step: After that, open the transmission shield cover (1), removing the wingnuts (2), pressure washers (3) and flat washers (4).



3rd Step: Then, loosen the clamps (5), using the screws (6), lock washers (7), to release the axle (8).



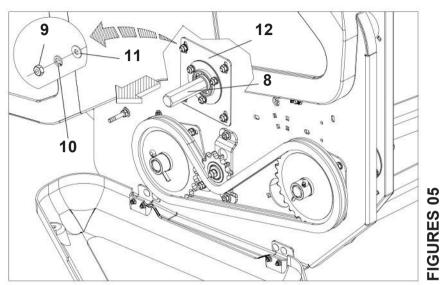
FIGURES 05



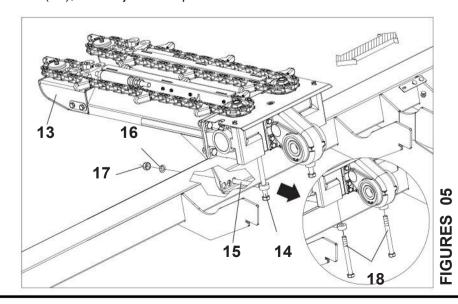
Before starting to change the spacing of the harvester rows, find an ideal location to facilitate this job.



4th Step: After, loosen the nuts without removing them, (9),lock washers (10) flat washers (11), leaving the housing (12) free. After that, remove the axle (8) completely.



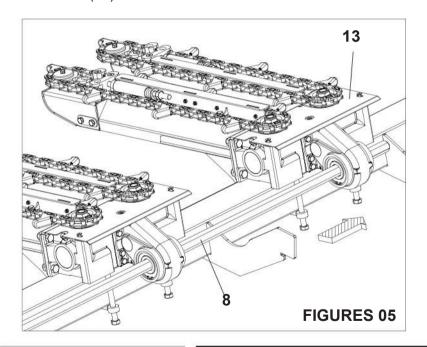
5th Step: Then, to adjust the harvester rows (13) to the new space intervals, loosen the screws (14) without removing them and the screw (15), through the lock washers (16) and nuts (17), and adjust the space intervals of the rows as desired.





When it is necessary to reduce the number of harvester rows and define new space intervals (13) or, remove them, loosen the screws (18) remove them and pull the harvester rows (13) forwards to uncouple them from the platform.

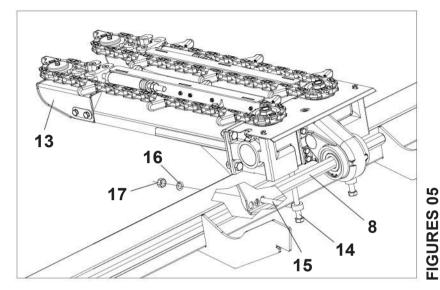
6th Step: After for adjusting the new space intervals, before fastening the harvester rows (13), replace the axle (8), inserting it through all the harvester rows (13).



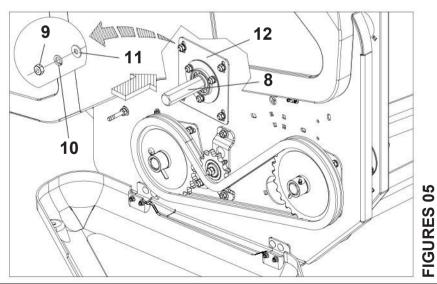


The next step, before fastening the rows (13) using the screws (14 and 15), perform a test on the axle (8) by turning it manually, to confirm if it turns freely or not.

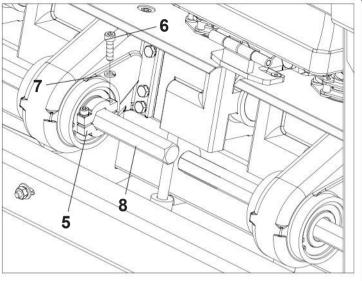
7th Step: After concluding the insertion of the axle (8), tighten the screws (14 and 15), lock washers (16) and nuts (17) for fastening the harvester rows (13).



8th Step: Then, tighten the nuts (9), lock washers (10) and flat washer (11), fastening the housing (12) again.

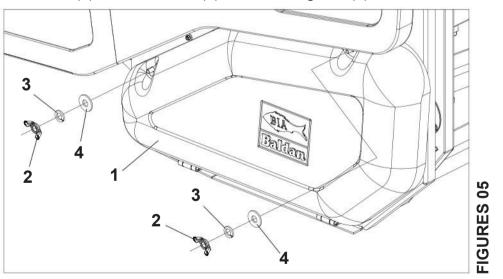


9th Step: Then, clamp the axle (8), tightening the clamps (5) using the screws (6) and lock washers (7).



FIGURES 05

10th Step: Conclude by closing the transmission shield cover (1), placing the smooth washers (4), lock washers (3) and the wingnuts (2).





If the purchased Potenza is a double axle, perform the procedures first on one side, and then repeat them on the other side of the platform.



06

ADJUSTMENTS:



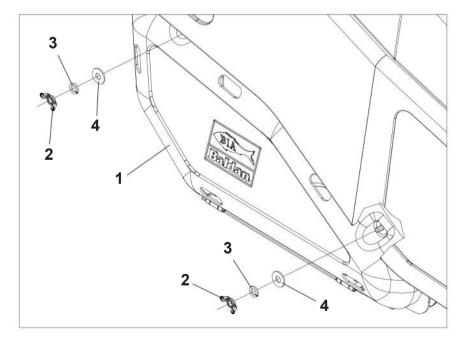
ADJUSTING THE ROW HARVESTING SPEED

- While the harvester is operating, the harvester speed must vary from 6 to 8 8 km/hr, and the rotation of the row chains must be adjusted so they avoid wasting the ears of corn. The rapid rotation of the chains can cause the corn stalks

to break, consequently causing the loss of ears of corn and the accumulation of straw. Thus, to adjust the chain rotation speed, proceed as follows:

- First, open the transmission shield cover (1), remove the wingnuts (2), lock washers (3) and flat washers (4), **as shown in Figure 06.**

FIGURE 06

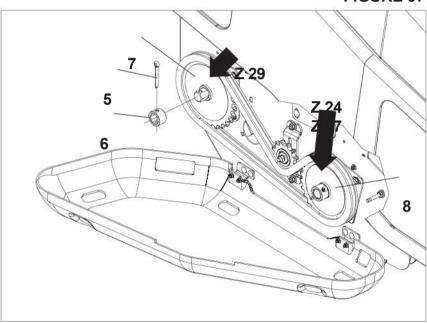


- Then, remove the cotter pins (5), bushing (6) and gears (7 and 8), Combining the speeds based on your needs,

POTENZA (FIGURES 06 / 07 / 08)

As shown in Figure 07.

FIGURE 07



- Verify the following formulas, reference values to achieve good results when harvesting..
- Ms1 = 6 km/h = $\frac{6000 \text{ m}}{3600 \text{ s}}$ = 1.667 m/s.
- Ms2 = 7 km/h = $\frac{7000 \text{ m}}{3600 \text{ s}}$ = 1.944 m/s.

- Ms3 = 8 km/h =
$$8000 \text{ m}$$
 = 2.222 m/s. 3600 s

WHEREAS:

Ms = Moving Speed

- Input Rotation Speed: 540 TABLE 02 RPM.

GEARS		TORPEDO	CHAIN	
DRIVE	DRIVEN	RPM	RPM	
Z 29	Z 27	1087	328	
Z 29	Z 24	1250	352	

- After deciding the combinations and concluding the assembly of the gears, verify the tightness of the transmission chain (9). We recommend leaving a little play of -1 cm in the center of i, as that play will make the chain

more durable, avoid heating of the transmission chain (9) due to the tension generated from its stretched tightness. Then to adjust the tightness of the transmission chain, proceed as follows:

- Loosen the nut (10), slide the stretcher (11) until the necessary tightness.

- After that, retighten the nut (10), as shown in Figure 08.

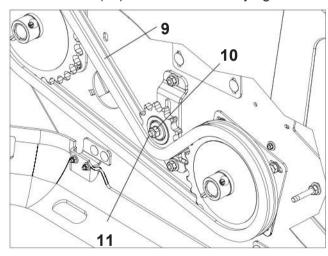


FIGURE 08



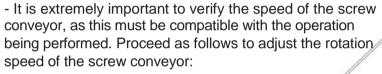
Never operate the Potenza agricultural platform when the transmission cover is open, thereby avoiding damaging its operation.



After concluding the chain tightness adjustment, close the transmission shield cover (1), fastening the flat washers (4), lock washers (3) and wingnuts (2).

ADJUTING THE SPEED OF THE **SCREW CONVEYOR**

POTENZA (FIGURE 09)



- Replace the drive gear (1) for one of the optional

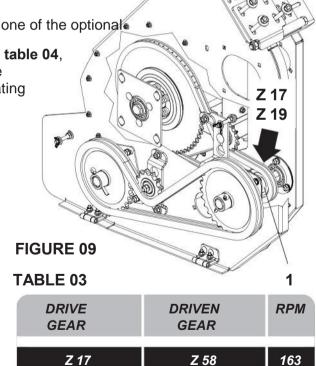
gears Z17 and Z19 as shown on table 04. verifying which one achieves the necessary speed for good operating performance.



Excessive speed of the screw conveyor can cause

the following:

- 1 Throw the ears of corn off the Potenza agricultural platform.
- 2 Move the ears of corn to the sides to the center of the platform unevenly.



Z 19

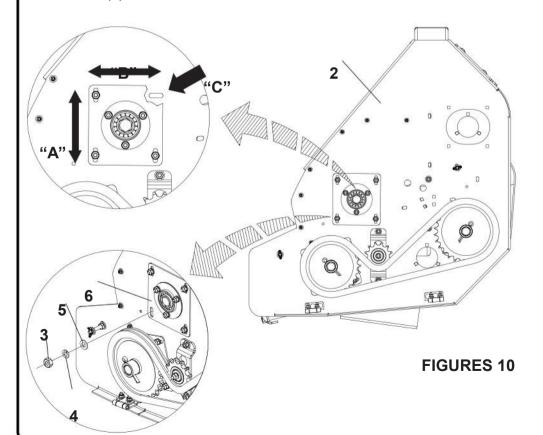


Z 58

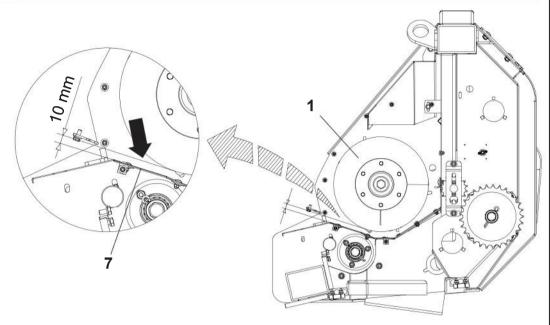


ADJUSTING THE THREADED CONVEYOR

- The Potenza Agricultural Platform is equipped with a threaded conveyor (1), that can be adjusted vertically (A) as well as horizontally (B), in the two housing points (C), on the sides of the chassis (2). Then to adjust the threaded conveyor
- (1), proceed as follows:
- First, remove the nuts (3), lock washers (4) and flat washers (5).
- Then, adjust the housing (6), abiding by a 10 mm height of the threaded conveyor (1) and the back plate (7) of the chassis (2).
- Conclude this adjustment by retightening the nuts (3), lock washers (4) and flat washers (5).



POTENZA (FIGURES 10)



FIGURES 10



ATTENTION

Before adjusting the threaded conveyor (1), certify that the harvester and the Potenza Agricultural Platform are turned off. Do not make any adjustments when they are turned on.



IMPORTANT

The threaded conductor (1), must remain at a 10 mm height away from the back plate (7) of the chassis (2).

ADJUSTING THE HEIGHT OF THE COWL NOZZLES

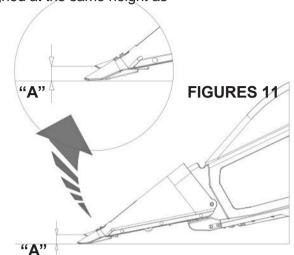
- The Potenza Agricultural Platform is shipped from the factory with the center and side nozzles adjusted and aligned at the same height as

shown in letter

"A". Depending on the type of soil, the harvester used, and the needs

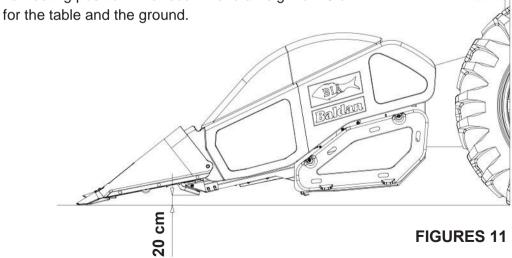
for operating, it is necessary to adjust the center and side nozzles.

- Proceed as follows to adjust the center and side nozzles:



- First turn off the harvester and the Potenza Agricultural Platform.

- Then place the Potenza Agricultural Platform in the harvesting position. We recommend a height of 20 cm.



POTENZA (FIGURES 11)

- After that, following the steps below for correct adjustment of the cowl nozzle height.

2nd Step

4th Step

1st Step: Lift the nozzles (1) of the center and side cowls.

2nd Step: Loosen the nut (2) and remove the screw (3).

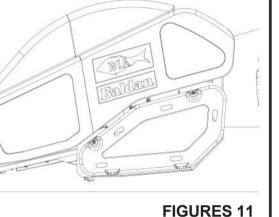
3rd Step: Lift the nozzle support (4).

4th Step: Place the screw (3) in the other hole and tighten the nut (2).

- Conclude this adjustment by lowing the center and side cowl nozzles.

1st Step

3rd Step



ATTENTION

Never operate the Potenza Agricultural Platform when the cowl nozzles are articulating..

Before lifting the nozzles (1) of the center and side cowls. make sure the harvester and the Potenza Agricultural Platform are

turned off. Do not adjust them when they are turned on.



FIGURES 13



BIA Instruction Manual

ADJUSTING THE MOVEMENT OF THE SKIDS

POTENZA (FIGURE 12)

- For harvesting corn when it is fallen (not upright), we recommend using the nozzles (1) on the cowling in the lowest position. In order to avoid damages or breaking the nozzles (1) when they touch the ground, check the skids (2) and see if they are properly aligned to the ground, if they are not, proceed in adjusting them as follows:
- First loosen the nut (3), lock washer (4) and flat washer (5).
- -Then align the skids (2) to the ground, moving them up or down according to the needs of the work.
- Conclude by retightening the nut (3), lock washer (4) and flat washer (5).

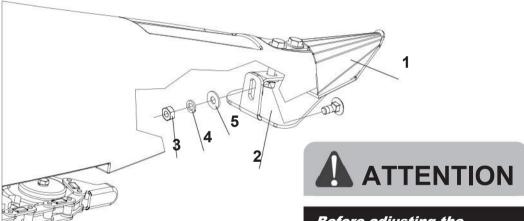




FIGURE 12

After concluding the adjustment the movement of the skids (2), repeat this procedure on all nozzles (1) of the

Before adjusting the movement of the skids (2), make sure the harvester and the Potenza Agricultural Platform are turned off. Do not adjust them when they are turned on.

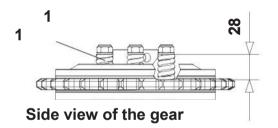
When the corn is not fallen down, do not harvest when the nozzles (1) are very low.

ADJUSTING THE GEAR TORQUE GOVERNOR

POTENZA (FIGURE 13)

- The torque governor (optional) is a safety system for the Potenza, protecting against damages to its transmission components. In order to prevent these damages, the torque system must be always well-adjusted.
- The torque governor is shipped from the factory adjusted, however we recommend performing a revision after the first few hours of harvesting.

- The torque governor adjustment (optional), is performed on springs that must exert a maximum pressure of 32 Kgf. Use a torque wrench for this adjustment, if you do not have one, we recommend using an alternative measure and adjusting the springs (1) in the torque governor to measure 28mm.



LEGEND

KGF = Kilogram Force.

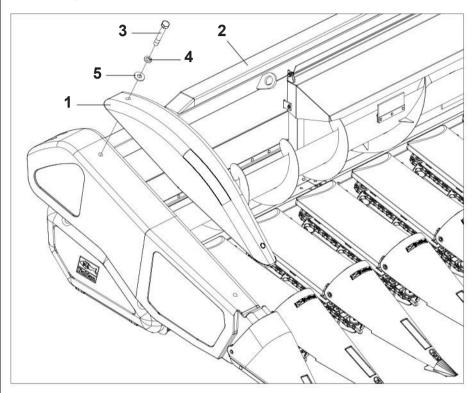


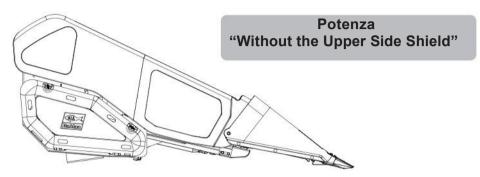
Before adjusting the side gear torque governor, make sure the Potenza Agricultural Platform is turned off. Do not adjust the blade if they are turned on. When working with the Potenza, pay attention to any noises coming from the gears when noticed, as that is a sign of clogging of the rows.

UPPER SIDE SHIELD POTENZA (FIGURES 14)

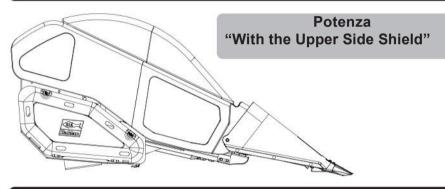
- We recommend removing the upper side shields for harvests where the corn is found lying down (1) da Potenza Agricultural Platform (2) to facilitate the harvest, minimizing losses. Proceed as follow to remove the upper side shields (1):

- First remove the screws (3), lock washers (4) and flat washers(5).
- Following that, remove the upper side shield (1).





For harvests where the corn is found lying down on the ground"



FIGURES 14

For harvests where the corn is found in normal conditions



Before removing the upper side shield (1), make sure the Potenza Agricultural Platform is turned off. Do not assemble or disassemble if they are turned



ATTENTION

For normal working conditions, where the crop is not lying down "tumbled", do not operate the Potenza Agricultural Platform without the upper side shields (1).



COMMENT

Whenever assembling or disassembling the upper side shield (1), perform this procedure on both sides of the Potenza Agricultural Platform. Do not operate with only one side assembled or disassembled.



BIA Instruction Manual

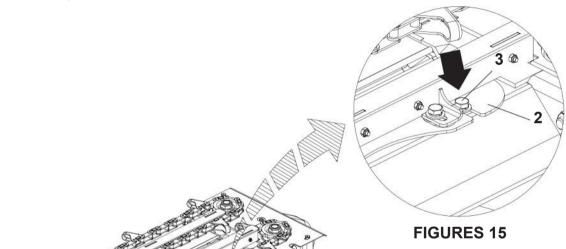
Potenza - 27



ADJUSTING THE SLIDING BLADES

POTENZA (FIGURES 15)

- The harvesting rows (1) are shipped from the factory with the rear and front opening of the sliding blades (2) adjusted. That adjustment must be performed approaching or moving away based on the size of the corn stalk and the ears of corn if they are small or large. Then adjust the opening or closing of the sliding blades (2), proceed as follows:
- Loosen the screws (3), adjust the opening or closing of the sliding blades (2).
- Then retighten the screws (3).



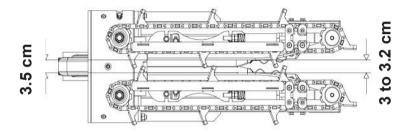
ATTENTION

After concluding the adjustment of th sliding blades (2), repeat this procedure on all the harvester rows (1).

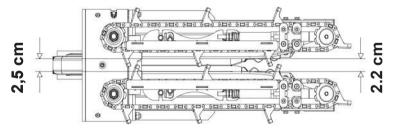
COMMENT

Before adjusting and opening or closing the sliding blades (2), make sure the harvester and the Potenza Agricultural Platform are turned off. Do not adjust them if they are turned on.

Adjusting the sliding blades for Corn



Adjusting the sliding blades for Pop corn



FIGURES 15

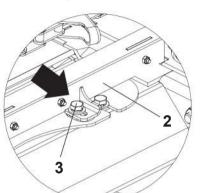


The front opening of the sliding blades (2) must always be the lower one with an opening of 0.5 cm on the average.

ADJUSTING THE CHAIN GUIDE

POTENZA (FIGURES 16)

- The harvester rows (1) are shipped from the factory with the chain guides correctly adjusted (2). However, when there is wear on the nylon chain guide plate (2), perform the adjustment of the chain guides (2). Proceed as follows to adjust the chain guides (2):
- Loosen the screws (3), adjust the chain guide (2) towards the center line of the harvester (2) until it touches the chain (4).
- Then retighten the screws (3).



REPLACING THE NYLON PLATE

POTENZA (FIGURES 17)

- When substantial wear is found on the nylon plates (1) of the chain guides (2), replace them immediately. Proceed as follows to replace the chain plates (1):
- First, remove the chains (3), loosen the nuts (4), remove the washer (5), spring (6) and cylinder (7).
- After that, loosen the nuts (8), screws (9) and remove the nylon plate (1) and replace it.
- Following that, assemble all the components again until the harvester row (10) is completely assembled.



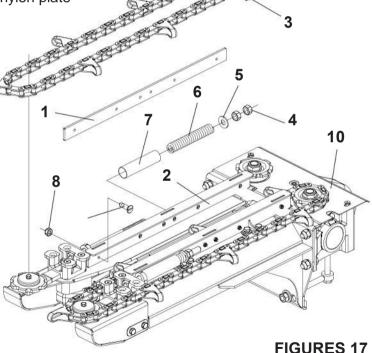
IMPORTANT

Whenever there is more wear on the nylon chain guide plate (1), replace them immediately.



COMMENT

After concluding the chain guide replacement (2), repeat that procedure on all the harvester rows (1).





Before adjusting the chain guides or replacing the nylon plates, make sure the harvester and the Potenza Agricultural Platform are turned off. Do not make adjustments when they are turned on.



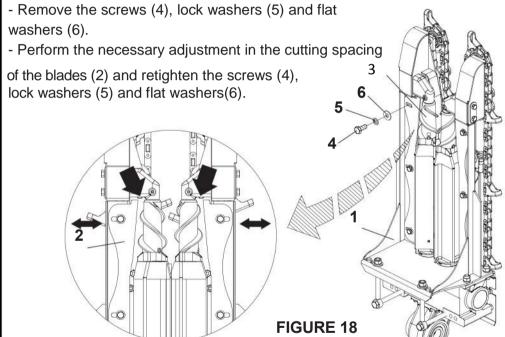
FIGURE 16

BIA Instruction Manual

ADJUSTING THE CUTTING BLADES

POTENZA (FIGURE 18)

- The harvesting rows (1) are equipped on their lower part with blades (2) which are shipped from the factory adjusted for their cutting space intervals But that adjustment of the blades can become modified, when working and there is clogging in the rollers (3). Then to adjust the cutting spacing of the blades (2), proceed as follows:





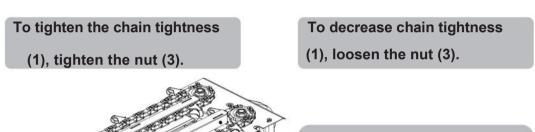
Before adjusting the cutting spacing of the blades (2), make sure the harvester and the Potenza Agricultural Platform are turned off. Do not perform these adjustments when they are turned on.

ADJUSTING THE CHAIN TIGHTNESS

POTENZA (FIGURE 19)

ATTENTION

- After operating for some time, the chains (1) on the harvester rows (2) undergo natural wear due to friction while working on the crop. Then in order to the chains (1) to continue performing a good job or even replaced, we recommend adjusting their tightness. We wish to remind you that the chains (1) are shipped from the factory adjusted, but it is necessary to periodically verify if they have undergone wear. Then to adjust the tightness of the chains (1), proceed as follows:



The correct tightness of the chain (1), is acquired by leaving a space of 1 to 1.2 cm between the washer (4) and the stretcher and the cylinder spring (5).

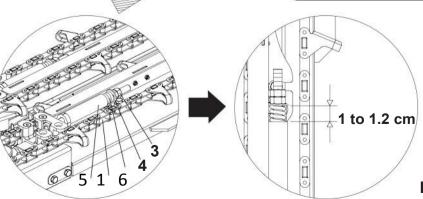


FIGURE 19



The tightness of the spring stretcher (6) of the chain must be from 120 to 130 kgf, the reference value used in a torque wrench.

LEGEND

KGF = Kilogram Force.

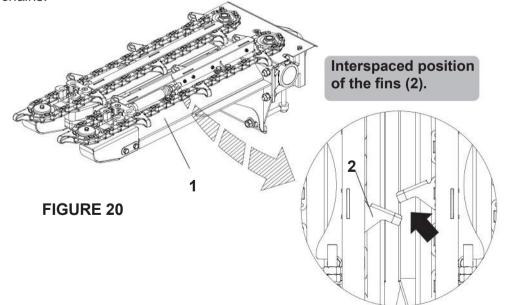


Verify the chain tightness after operating 30 hours.

POSITIONING OF THE CHAIN FINS

POTENZA (FIGURE 20)

- The chains (1) are shipped from the factory with the fins (2) mounted in an Interspaced respectively to each other so that during the harvest there is uniformity in harvesting the ears of corn and so there is no friction between the chains.



OPERATIONS



- 1 After the first day of work, perform an overall check on the Potenza Agricultural platform.
 - Verify the condition of the pins and latches and retighten all the screws and nuts when necessary.
- 2 Abide by the lubrication maintenance intervals.
- 3 Always verify the operation of the harvesting mechanisms and Also the adjustments as established in the beginning of the harvest.
- 4 Periodically observe the oil level in the oil tank. Whenever necessary change or fill it.
- Before starting to work, turn on the Potenza for a few minutes while rotating to verify if there are any strange noises. If there are any noises, do not operate it before detecting the reason and fixing it.
- 6 In case of any doubt, never operate or handle the Potenza agricultural platform, first consult with After-Sales. Telephone: 0800-152577 ou e- mail: tecnicoamigo@baldan.com.br

MAINTENANCE



- Lubrication is essential for good performance and long durability of the moving parts of the Potenza Agricultural Platform, contributing to savings in maintenance costs.

LUBRICATION

POTENZA

- Before beginning to operate it, carefully lubricate all grease fittings always abiding by the lubrication maintenance intervals. Verify the quality of the lubricant, as to efficiency and purity, avoiding the use products contaminated by



🚩 Instruction Manual

Potenza - 31



water, soil, and other agents.

GREASE AND EQUIVALENT TABLE

POTENZA (TABLE 04)

MANUFACTURER	RECOMMENDED TYPE OF GREASE
PETROBRÁS	LUBRAX GMA 2
ATLANTIC	LITHOLINE MP 2
IPIRANGA	SUPER GRAXA IPIRANGA
	IPÍRANGA SUPER GRAXA 2
	IPIFLEX 2
CASTROL	LM 2
MOBIL	MOBILGREASE MP 77
BARDAHL	MAXLUB APG
	MARFAK 2 EP
TEXACO	AGROTEX 2
SHELL	RETINAX A
	ALVANIA EP2
ESSO	MULTIPURPOSE GREASE H
	MULTIPURPOSE GREASE H LITHOLINE MP 2



If there are other equivalent lubricants and/or brands of grease that are not listed on this table, consult the technical manual from the manufacturer for specifications.

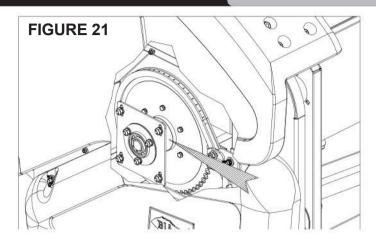
PLACES FOR LUBRICATION

POTENZA

- When lubricating the Potenza Agricultural Platform do not exceed the quantity of new grease. Add only the sufficient amount.

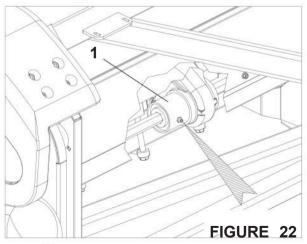
LUBRICATION EVERY 10 OPERATING HOURS

POTENZA (FIGURE 21)



LUBRICANTE EVERY 50 OPERATING HOURS

POTENZA (FIGURE 22)



Row Clutch

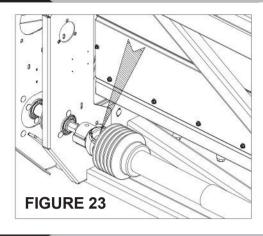


Lubricate the torque governors (1) every 50 hours. Add 4 to 7 grams of grease.

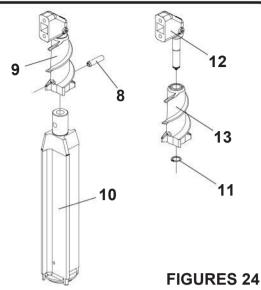
LUBRICATION EVERY8 OPERATING HOURS

POTENZA (FIGURE 23)

- Lubricate the cross-pieces with grease every 8 hours of operation.
- The telescopic axle must be lubricated weekly.



- Following that, disassemble the roller support (7), removing the elastic pin (8), separating the transmission base (9) roller (10).
- After that, disassemble the transmission base (9), removing the retention ring (11), separating the conveyor base (12) from the threaded conveyor (13).

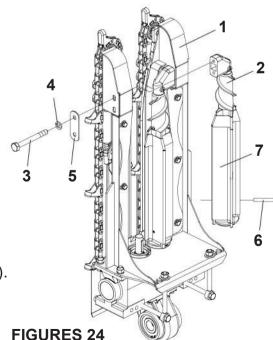


CHANGING THE THREADED CONVEYOR BEARINGS

- The Potenza Agricultural Platform is equipped with harvester rows (1) threaded conveyors (2) with permanently lubricated bearings. We recommend periodically verifying the condition of the bearings, making sure there is not play in them. If there is play, replace the bearing immediately to do this proceed as follows:

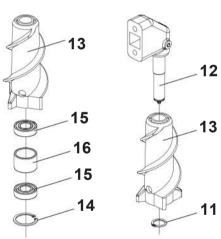
- Remove the screws (3), lock washers (4), plate (5), elastic pin (6) and remove the roller support (7).

POTENZA (FIGURES 24)



- Then, disassemble the threaded conveyor (13), removing the retention ring (14), the bearings (15) and the surface bushing (16). Replace the bearings (15) and assemble again.
- Following that, assemble the transmission base (9), coupling the conveyor base (12) to the threaded conveyor (13) latching the retention ring (11).

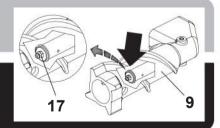
FIGURES 24





ATTENTION

After assembling the transmission base (9), lubricate it through the grease fittings (17).





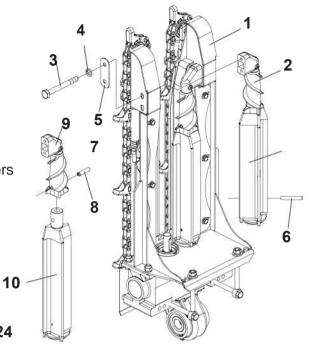
Instruction Manual

Potenza - 33



BIA Instruction Manual

- After assembling the roller support (7), couple the conveyor base (9) to the roller (10), latching the elastic pin (8).
- Conclude the assembly, coupling the roller support (7) the harvester row
- (1), latching the elastic pin
- (6) and the plate (5), lock washers
- (4) and screws (3).



POTENZA (FIGURE 25)

FIGURES 24

GEARBOX

- The gearbox (1) is equipped with permanent grease lubrication.
- We recommend verifying it periodically and preventively, checking for any leakage, water infiltration, or other abnormalities. In these cases, after resolving the problem, fill with grease or in extreme cases of contamination, substitute it.
- Remove the plug for filling or replacing the grease (2).

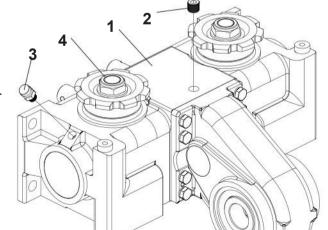


FIGURE 25

COMMENT

Periodically verify the tightness of nuts (4).

ATTENTION

Only use the following specified grease: TUTELA JOTA EPO.

The maximum level inside the gearbox (1) fits 2 kg of grease. The minimum level inside the gearbox (1) is 1.5 kg.

We recommend replacing approximately 100 grams of grease every 500 hours of operation and changing the grease every 5 years.

When verifying the grease level, be careful not to let impurities penetrate from the oil dipstick and thereby contaminating the grease.



For filling or replacing grease in the gearbox (1), it must be level to the level ground. Before replacing the grease, wash the inside of the gearbox(1) and remove all the old grease



When there is any leakage in the gearbox (1), verify if the breather plug (3) is not clogged. We recommend cleaning the breather plug periodically (3).

OIL TANK

- The Potenza Agricultural Platform is equipped with an oil tank (1) on both sides that by opening the valve (2), for lubricating the transmission chains using a dripping system, keeping the transmission system working in ideal operating conditions. To activate the oil tank dripping system (1), proceed as follows:
- Before starting to operate the Potenza Agricultural Platform, open the valve (2), from the oil tank (1). Then, turn on the harvester and rotate the transmission so that the oil dripping system lubricates the entire transmission.

- After, turn off the harvester and close the valve

FIGURES 26

(2) from the oil tank (1).



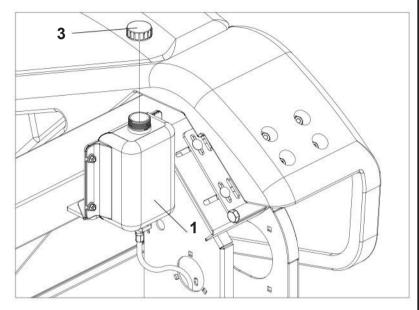
Periodically verify the oil tank oil level (1) by looking through the hole of the cap (3). When the level reaches a certain oil level mark, avoid filling above that oil mark level and specified difference.

- Open the cap (3) of the oil tank (1), verify the existing oil and when necessary

POTENZA (FIGURES 26)

fill or change when necessary.

- Conclude by replacing the cap (3) on the oil tank (1).



FIGURES 26



Before filling or changing the oil in the oil tank (1), make sure the harvester and the Potenza agricultural platform are turned off.



The oil tank capacity (1) is 3.30 liters. Use on the specified oil: Oil SAE 150.



🚩 Instruction Manual

Potenza - 35



OPERATING MAINTENANCE POTENZA (TABLE 05) **PROBLEMS PROBABLE CAUSES SOLUTIONS** The ears of corn are threshed in the The adjustment of the openings are adjusted incorrectly Adjust the pickup adjusters according to recommendations. pickup rollers. The operating position of the Potenza Agricultural Platform Try to operate the Potenza Agricultural Platform closer to the ground. is too high compared to the ground. The articulated dividers are too high compared to the Adjust the height according to recommendations. around. The ears of corn are being lost The chain speed of the pickup is too fast. from the crop. Decrease the operating speed. Try to operate moving according to the crop and ground conditions. If it is The forward speed of the harvester is too fast or too too fast, the ears of corn will fall before the pickup chains. If it is too slow, the slow. ears of corn will fall in front of the machine. Adjust the adjuster so that there is free passage of the corn stalks by the pickup The pickup controllers are adjusted incorrectly rollers The corn stalks are being picked up. The moving speed of the harvester is too fast compared Adjust the speed according to the crop conditions and if necessary, adjust the . speed of the pickup rollers according to recommendations. to the speed of the pickup rollers. The tips and/or pickup rollers are worn out. Replace them. The moving speed of the harvester is too high compared Adjust the speed according to the crop conditions and if necessary, adjust the to the speed of the pickup chains. speed of the pickup rollers. Revise if necessary, adjust the chain stretcher using the spring.. The pickup chains are loose. Check if they are worn out and verify the cleaning of the system. Clogging. Weeds are clogging the scraping rollers. Adjust the distance of the roller scrapers and verify if they are worn out. Verify the adjustment of the adjusters and certify if they are centralized as related The corn stalks are breaking in the pickup rollers to the scraper rollers and if they are the same distance from the center. or in the adjusters. Replace them. The pickup rollers are worn out. TABLE 05



PRECAUTIONS POTENZA

- 1 Verify the conditions of all pins and screws before starting to operate Potenza Agricultural Platform.
- 2 Retighten the screws and nuts every 12 hours of operation.
- 3 The moving speed must be carefully controlled based on the conditions of the terrain...
- 4 The Potenza Agricultural Platform is used in various applications and requires knowledge and carefulness while handling.
- 5 Only the local conditions can define the best method for operating the Potenza Agricultural Platform.
- 6 Employ adequate methods and tools for assembling and disassembling any part of the Potenza Agricultural Platform.
- 7 Always check if the parts show any wear. If necessary replace them and always demand original Baldan parts.

OVERALL CLEANING

POTENZA

- Due to the corrosive effect from weather conditions, we recommend performing periodic cleaning on the Potenza Agricultural Platform before storing it, in order to conserve it and increase the useful lifetime of your equipment. Proceed as follows to perform this:
- 1 First perform an overall cleaning, removing all the residues from the product inside or outside of the Potenza Agricultural Platform. After that, wash it completely.
- 2 Then, verify if the paint is worn off, if that happed, paint a coat over all those places.
- 3 Completely lubricate the Potenza Agricultural Platform and verify the moving parts to check for wear and play, adjust if necessary or replace the parts, preparing the Potenza Agricultural Platform for the next job.
- 4 After performing all the maintenance precautions, store your Potenza Agricultural Platform in a safe and appropriate stable location.
- 5 We recommend washing the Potenza Agricultural Platform at the beginning of each harvest.



ATTENTION

Do not use chemical detergents for washing the Potenza Agricultural Platform, as that can damage the paint finish. When washing the Potenza Agricultural Platform, do not spray it wirh a high pressure washer directly on the bearing, as that can damage the sealing.



10

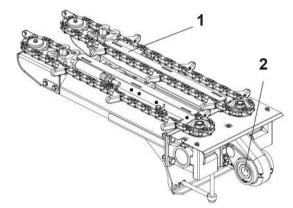
OPTIONS



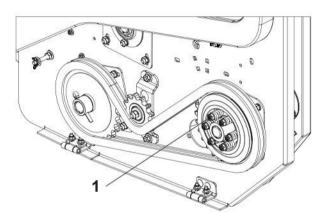
- The Potenza Agricultural Platform can be purchased from the factory prepared for 3 different configurations according to your operating necessities:

1) - Harvester row without torque governor, with sideways gears, with clutch, and driveshaft without clutch.

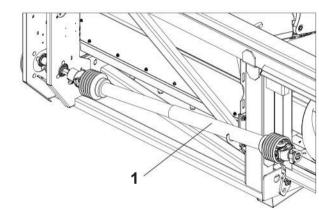
FIGURES 27



Harvester row (1) without Torque Governor (2)



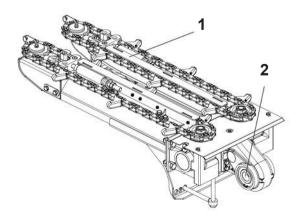
Sideways Gears (1) with Clutch



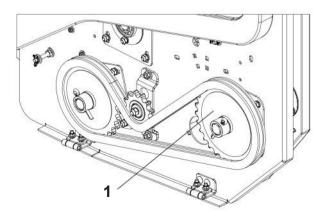
Driveshaft (1) without Clutch

2) - Harvester row without torque governor, with sideways gears, without clutch and driveshaft with clutch.

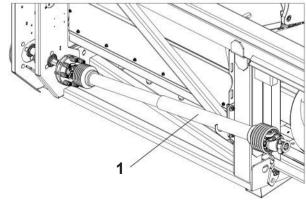
FIGURES 27



Harvester row (1) without Torque Governor (2)

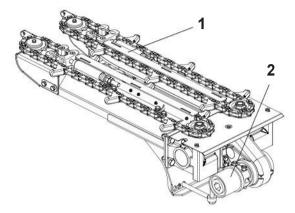


Sideways Gears (1) without Clutch

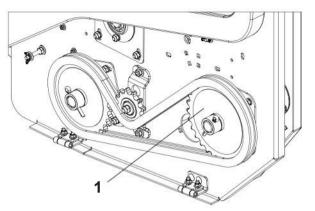


Driveshaft (1) with Clutch

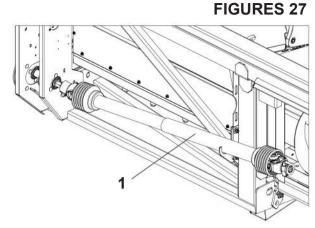
3) - Harvester row with torque governor, with sideways gears, without clutch and driveshaft without clutch.



Harvester row (1) with Torque Governor (2)



Sideways Gears (1) without Clutc



Driveshaft (1) without Clutch

FRONT COWL OPTIONS

- The Potenza Agricultural Platform may be equipped with optional front cowling that can be purchased for diverse space intervals according to the needs of your work..



For spacing intervals from 450 to 500



For spacing intervals from 550 to 600



For spacing intervals from 650 to 700



POTENZA (FIGURES 28)

For spacing intervals



Cowling

For spacing intervals from 750 to 800 from 850 to 900

FIGURES 28



11 _____ IDENTIFICATION ____



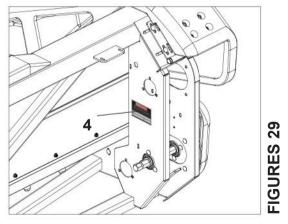
PRODUCT IDENTIFICATION

POTENZA (FIGURES 29)

1 – When consulting the parts catalog or requesting technical support services from Baldan, always indicate the model (1), serial number (2) and manufacturing date (3), that is found on the identification label (4) on the Potenza Agricultural Platform.

2 - ALWAYS DEMAND ORIGINAL BALDAN PARTS.





Add the identification data below in order to always have the correct information useful for transshipment.

Owner:			
	2		

Dodioi.	
	_

State:

Warranty Certifica	ate #:		

Model:			
IVIUUCI.			

Sprial #			
Sariai #'			

Purchase Date:	/ /	Invoice #	



Dealer:

Farm:

City:

In case of any doubts/questions, consult After Sales. Telephone: 0800-152577 / E-mail: posvenda@baldan.com.br



The drawing contained in this Instruction Manual are merely illustrative.



MARKETING

Catalog and
Manual Publishing

Code: 60550105376

Revision: 03 CPT: POTENZA08917

Notations:

BIA Instruction Manual

Notations:		



WARRANTY CERTIFICATE

BALDAN IMPLEMENTOS AGRÍCOLAS S/A, guarantees normal operation of the implement to the dealer for a period of 6 (six) months counted from the delivery date on the dealer's bill of sale to the first final consumer.

During this period BALDAN is committed to repair any defects in materials and/or manufacturing at its own responsibility, as labor, shipping, and other expenses are the responsibility of the dealer.

During the warranty period, the request and replacement of any defective parts will be done at the regional dealer, and thereafter ship the defective part to BALDAN for analysis.

When it is not possible to perform such procedure and the capacity for resolving the problem is exhausted by the dealer, the same shall request support from the BALDAN Technical Support Service, by filling out the specific form distributed to dealers.

After analysis of the replaced items by the BALDAN Technical Support Services is concluded and the replacement is not covered by the warranty, then it will be the responsibility of the dealer to pay all the related costs for the replacement; as well as expenses on materials, travel, including lodging and meals, accessories, lubricates used, and other expenses originating from the Technical Support Service call, thereby the BALDAN company is authorized to charge for the respective bill to the dealer's name.

Any repair done on the product within the validity date of the warranty period, will only be authorized by BALDAN by previous presentation of the quotation describing the parts and labor charges that will be performed.

It is excluded from this agreement, whenever the product undergoes official repairs or modifications from service centers that do not belong to the BALDAN dealer network, as well as the installation of aftermarket parts or components in the user's product.

This warranty will be nullified if the defect or damage is the result from improper usage that is noncompliant to the instructions or inexperience of the operator.

It is agreed to that this present warranty does not cover tires, polyethylene storage compartments, drive shafts, hydraulic components, etc. as the warranty coverage is from their own manufacturers.

Manufacturing or material defects, as stated in the purpose of this warranty agreement, does not constitute, under any hypothesis, a reason for purchase and sale contract termination, or the payment of indemnities of any nature.

BALDAN reserves the right to change and or perfect the technical characteristics of its products, and without any obligation to proceed in previously manufactured products.

INSPECTION AND DELIVERY CERTIFICATE

- **PRE-DELIVERY PROCEDURES:** this implement was carefully prepared by the sales organization all parts were inspected according to the manufacturer's directions.
- **DELIVERY SERVICE**: The user was informed as to the terms of the applicable warranty and instructed on its usage and maintenance procedures.
- I hereby confirm I have been informed on the terms of the applicable warranty and instructed on its usage and maintenance procedures of the implement.

Implement:	
Serial #:	
Date:	Invoice #:
Dealer:	City:
State:POSTAL	CODE:
Owner:	Phone:
Address:	Number:
City:	State:
E-mail:	· · · · · · · · · · · · · · · · · · ·
Sale date:	· · · · · · · · · · · · · · · · · · ·
Signature / Dealer Stamp	· · · · · · · · · · · · · · · · · · ·
1 st – Owner	





WARRANTY CERTIFICATE

- PRE-DELIVERY PROCEDURES: this implement was carefully prepared by the sales organization all parts were inspected according to the manufacturer's directions.
- DELIVERY SERVICE: The user was informed as to the terms of the applicable warranty and instructed on its usage and maintenance procedures.
- I hereby confirm I have been informed on the terms of the applicable warranty and instructed on its usage and maintenance procedures of the implement.

I Implement:	
Serial #:	
Date:	Invoice #:
Dealer:	City:
State:	POSTAL CODE:
Owner:	Phone:
Address:	Number:
City:	State:
E-mail:	
Sale date:	
Signature / Dealer Stamp	
2 nd - Owner	

INSPECTION AND DELIVERY CERTIFICATE

- PRE-DELIVERY PROCEDURES: this implement was carefully prepared by the sales organization all parts were inspected according to the manufacturer's directions.
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- I hereby confirm I have been informed on the terms of the applicable warranty and instructed on its usage and maintenance procedures of the implement.

Implement:			
Serial #:			
Date:	Invoice #: _		
Dealer:	City: _		
State:		POSTAL	CODE:
Owner:	Phone:		
Address:	Number:		
City:	State: _		
E-mail:			
Sale date:			
Signature / Dealer Stamp _			
3 rd - Manufacturer			
Please send this filled out in a maximu	m period of 15 da	ys to BALDAN.	

1.74.05.0059-5

AC MATÃO ECT/DR/SP

REPLY LETTER

NO STAMP IS NECESSARY FOR MAILING

THE STAMP WILL BE PAID BY:







BALDAN IMPLEMENTOS AGRÍCOLAS S/A.

Av. Baldan, 1500 | Nova Matão | POSTAL CODE: 15993-000 | Matão-SP | Brasil Phone: (0**16) 3221-6500 | Fax: (0**16) 3382-6500

Home Page: www.baldan.com.br | e-mail: sac@baldan.com.br Exportation: Phone: 55 16 3321-6500 | Fax: 55 16 3382-4212 | 3382-2480

e-mail: export@baldan.com.br









BALDAN IMPLEMENTOS AGRÍCOLAS S/A.

Av. Baldan, 1500 | Nova Matão | CEP: 15993-000 | Matão-SP | Brasil

Phone / Telefono: (16) 3221-6500 | Fax: (16) 3382-6500

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