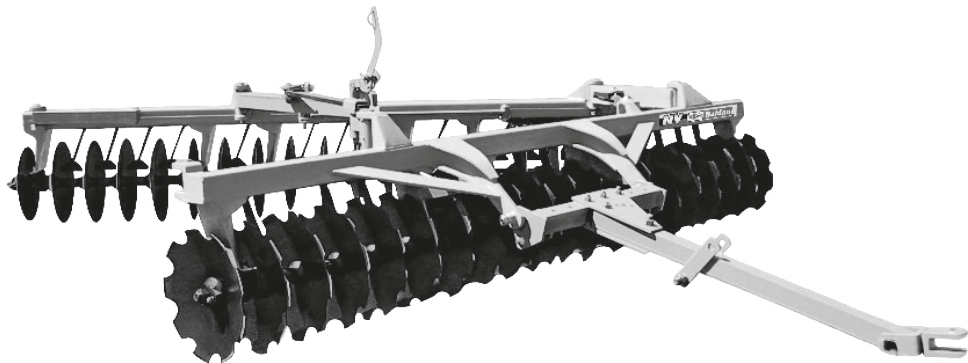


Instruction Manual



NV

Drag Type Leveling
Disc Harrow

NVP

Drag Type Leveling
Disc Harrow



BALDAN

INTRODUCTION

We thank you for the preference and congratulate your excellent choice in acquiring an implement of outstanding quality, manufactured in accordance with the advanced technology of **BALDAN IMPLEMENTOS AGRÍCOLAS S/A**.

This manual will assist you, in proceeds necessities, since when you bought until the operational proceeds application, security and maintenance.

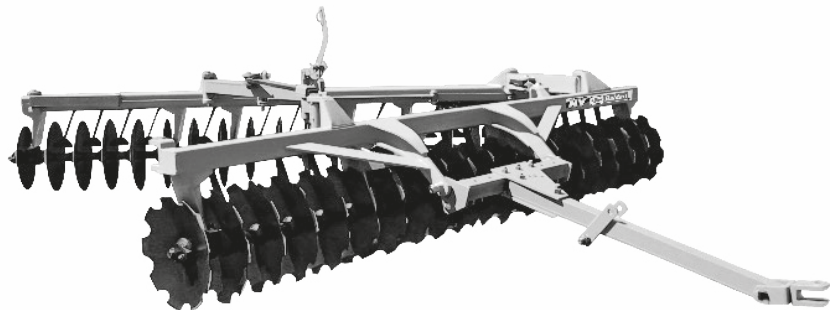
The **BALDAN** guarantees that deliver this implement to the dealer, working properly, and in perfect conditions.

The dealers it's under the responsibility to keep the protection and conservation while keep the implement in your stock, and than, to assembly, tighten, lubrication and overhaul.

On time of the technical deliver, the dealer must to have conducted the user customer about the manutentation, safety, and your obligations in a possible technical assistance, the obligation to see the warranty terms and read the instruction manual. Any solicitation of warranty, please contact our Baldan technical service, by your Baldan dealer that you bought our implement. Reaffirm the necessity to read carefully of warranty certificate and note all of items from this manual, therefore you will increase the working life of your equipment.



Instruction Manual



NV

Drag Type Leveling
Disc Harrow

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BALDAN IMPLEMENTOS AGRÍCOLAS S/A.
CNPJ: 52.311.347/0009-06
Insc. Est.: 441.016.953.110



Scan the QR Code on the
identification plate of your
device and access this
Instruction Manual online.

> BALDAN

INDEX

01. Safety standards	5
02. Components	10
03. Technical specifications - NV	11
04. Technical specifications - NVP.....	12
05. Assembly	13
<i>Union of rear and front frames.....</i>	<i>16</i>
<i>Assembling the adjustment set for the opening of the leveling disc harrow 28 and 32 discs.....</i>	<i>16</i>
<i>Assembling the adjustment set for the opening of the leveling disc harrow 36, 42, 44, 48 and 52 discs.....</i>	<i>17</i>
<i>Assembling the coupling header</i>	<i>18</i>
<i>Coupling of tires</i>	<i>19</i>
<i>Assembling the lifting bar</i>	<i>19</i>
<i>Assembling the transport header.....</i>	<i>20</i>
<i>Couple the disc harrow for transport</i>	<i>20</i>
06. Couple the disc harrow for transport.....	21
<i>Coupling the disc harrow to the drawbar</i>	<i>22</i>
07. Adjustment and operations	23
<i>Adjusting the disc harrow opening.....</i>	<i>23</i>
<i>Side displacement of the disc harrow</i>	<i>24</i>
<i>Disc crossing regulator.....</i>	<i>25</i>
<i>Operations</i>	<i>25</i>
08. Operacções	26

09. Lubrication	27
<i>Lubrication of roller bearings and grease</i>	<i>27</i>
<i>Table of greases and equivalents</i>	<i>27</i>
<i>Bearings adjustments.....</i>	<i>28</i>
10. Cleaning.....	28
11. Lubrication points	29
12. Approximate produccion	31
<i>Table of approximate production.....</i>	<i>32</i>
13. Identification	34

01. SAFETY STANDARDS



THE SAFETY ALERT SYMBOL IDENTIFIES IMPORTANT MESSAGE ON THE MESSAGE ON THE ENGINE, WHEN YOU SEE THIS SYMBOL, BE ALERT TO THE POSSIBILITY OF DEATH OR PERSONAL INJURY. FOLLOW THE INSTRUCTIONS IN THE SAFETY MESSAGE.



WARNING

- Read this instruction manual carefully to know the recommended safety rules.



WARNING

- Only start the tractor operations, when are you properly accommodated and with the seat belt fastened.



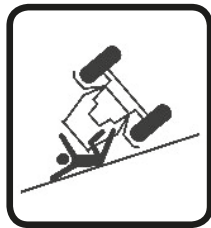
WARNING

- Never carry people over the tractor or equipment.



WARNING

- There are risks of serious injury by tipping when working on slopes.
- Never use excessive speed.



01. SAFETY STANDARDS



WARNING

• Do not work with the tractor if the front bee without enough weight to the rear equipment. There is tendency to lift, add weights at front or front wheels.



WARNING

- Before any equipment maintenance, make sure that is properly stopped
- Avoid getting hit



WARNING

- Never weld the wheel mounted with tire, the heat may cause air pressure increase and provoke the explosion of the tire.
- When filling the tire, stand at the side of the tire, never in front of it.
- When filling the tire, always use a containment device (filling cage).



WARNING

- Do not perform adjustments while NV/NVP is running.
- When performing any service on NV/NVP, switch off the tractor first. Use appropriate tools.



THE SAFETY ALERT SYMBOL IDENTIFIES IMPORTANT MESSAGE ON THE MESSAGE ON THE ENGINE, WHEN YOU SEE THIS SYMBOL, BE ALERT TO THE POSSIBILITY OF DEATH OR PERSONAL INJURY. FOLLOW THE INSTRUCTIONS IN THE SAFETY MESSAGE.



BALDAN

Instruction Manual

NV/NVP - 6

01. SAFETY STANDARDS



WARNING

- The hydraulic oil operates pressurized and can cause serious injuries, in case of leakage. Periodically verify the condition of the hoses. If there are any signs of leakage, replace them immediately.
- Before connecting or disconnecting hydraulic hoses, release the pressure from the system, activating the control when the tractor is turned off.



WARNING

- Keep away from the active seeder elements (discs), they are sharp and can cause accidents.
- Whenever performing any work on the discs, wear safety gloves on your hands.



WARNING

- Dispose residues inappropriately affects the environment and the ecology since you will be polluting rivers, canals or the soil.
- Inform yourself about the proper way of recycling or disposing residues.









PROTECT THE ENVIRONMENT!











ALCOHOLIC BEVERAGE OR SOME MEDICATIONS MAY CAUSE LOSS OF REFLEXES AND CHANGE THE OPERATOR'S PHYSICAL CONDITIONS. FOR THIS REASON, NEVER OPERATE THIS EQUIPMENT UNDER ANY OF THESE SUBSTANCES.



THE MISMANAGEMENT OF THIS EQUIPMENT CAN RESULT IN SERIOUS OR FATAL ACCIDENTS. BEFORE PLACING THE EQUIPMENT IN OPERATION, CAREFULLY READ THE INSTRUCTIONS IN THIS HANDBOOK. MAKE SURE THAT THE PERSON RESPONSIBLE FOR THE OPERATION IS INSTRUCTED ON THE PROPER AND SAFE HANDLING, IF HE HAS READ AND UNDERSTOOD THE HANDBOOK OF THIS PRODUCT.

- 01-  When operating the equipment, do not allow people to stay very close or on it.
- 02-  In making any assembling and disassembling service in the discs, always use safety gloves.
- 03-  Before connecting or disconnecting hydraulic hoses, relieve the system pressure by moving the command with the tractor off.
- 04-  Periodically check the conservation status of the hoses. If there is evidence of leaks, immediately replace them because the oil works under high pressure and can cause serious injury.
- 05-  Do not wear loose clothing as they can become entangled in moving parts.
- 06-  When turning the tractor engine on, be properly seated on the operator's seat and aware of the correct and safe management of both tractor and implement. Always put the selector lever in neutral, turn off the power take-off command and place the hydraulic commands in the neutral position.
- 07-  Do not run the engine in indoor environments without adequate ventilation, as the exhaust fumes are harmful to health.
- 08-  When maneuvering the tractor to the implement hitch, make sure that there is plenty of room and that there is nobody very close, always do the maneuvers in low gear and be prepared to brake in emergency situations.

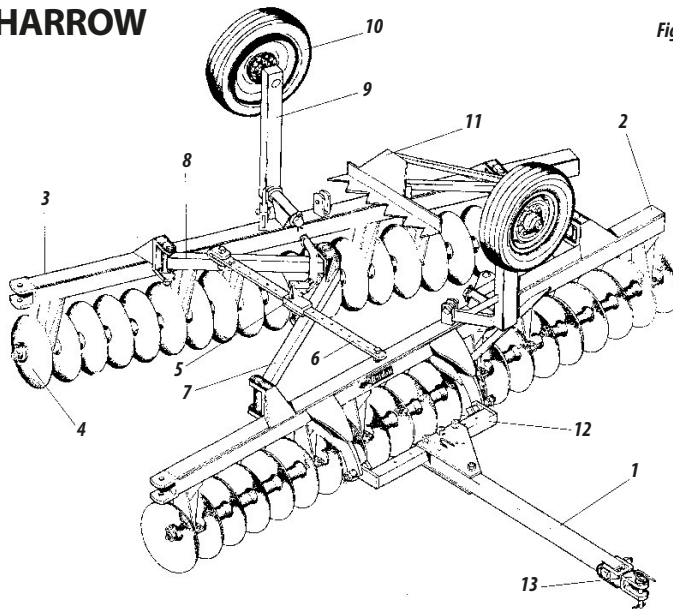
- 09-  Do not make adjustments with the implement in operation.
- 10-  When working on slopes, proceed with caution when trying to maintain the necessary stability. In case of unbalance, reduce the throttle and turn the wheels of the tractor to the side of the slope.
- 11-  Always drive the tractor at speeds compatible with safety, especially when working on uneven ground or slopes. Keep the tractor always engaged.
- 12-  When driving on roads, keep the tractor brake pedals interconnected and use safety signs.
- 13-  Do not operate the tractor if the front is light. If there is a tendency to rise, add weights on the front or front wheels.
- 14-  Leaving the tractor, put the shifter in neutral and apply the parking brake.
- 15-  Alcoholic beverages and some medications can cause loss of reflexes and change the physical conditions of the operator. Therefore, never operate this equipment, under the influence of these substances.
- 16-  Read or explain all the procedures above to the operator who cannot read.

DRAG TYPE OFFSET LEVELING DISC HARROW NV / NVP

Figure 1

02. COMPONENTS

- 01 - Coupling header
- 02 - Front frame
- 03 - Rear frame
- 04 - Discs
- 05 - Work handle
- 06 - Adjustment lock
- 07 - Front stabilizing bar
- 08 - Rear stabilizing bar
- 09 - Wheel support (NVP)
- 10 - Wheel (NVP)
- 11 - Disc lifting bar (NVP)
- 12 - Crossbar
- 13 - Hook



03. TECHNICAL SPECIFICATIONS - NV

Table 1

Model	No. of Discs	Spacing between discs (mm)	Diameter of discs (ø)	Shaft diameter (ø)	Working width (mm)	Working Depth (mm)	Approximate Weight (Kg)		Tractor Power (HP)
							20"	22"	
NV	28	175	20" - 22"	1.1/4"	2350	50 - 150	750	786	73 - 79
NV	32	175	20" - 22"	1.1/4"	2700	50 - 150	839	880	83 - 89
NV	36	175	20" - 22"	1.1/4"	3000	50 - 150	1027	1076	93 - 100
NV	40	175	20" - 22"	1.1/4"	3420	50 - 150	1105	1157	104 - 112
NV	42	175	20" - 22"	1.1/4"	3600	50 - 150	1167	1221	109 - 118
NV	44	175	20" - 22"	1.1/4"	3760	50 - 150	1220	1277	114 - 123
NV	48	175	20" - 22"	1.1/4"	4100	50 - 150	1330	1392	124 - 134
NV	52	175	20" - 22"	1.1/4"	4450	50 - 150	1417	1484	135 - 145
NV	28	200	20" - 22"	1.1/4"	2700	50 - 150	818	858	79 - 84
NV	32	200	20" - 22"	1.1/4"	3100	50 - 150	948	989	89 - 96
NV	36	200	20" - 22"	1.1/4"	3500	50 - 150	1112	1161	100 - 108
NV	40	200	20" - 22"	1.1/4"	3900	50 - 150	1192	1240	112 - 120
NV	42	200	20" - 22"	1.1/4"	4100	50 - 150	1263	1317	117 - 126
NV	44	200	20" - 22"	1.1/4"	4300	50 - 150	1281	1338	123 - 132
NV	48	200	20" - 22"	1.1/4"	4700	50 - 150	1475	1475	134 - 144
NV	52	200	20" - 22"	1.1/4"	5100	50 - 150	1528	1595	145 - 156

The Baldan reserves the right to change the specifications of this product without prior notice.

The technical specifications are approximate and valid in normal working conditions.

04. TECHNICAL SPECIFICATIONS - NVP

Table 2

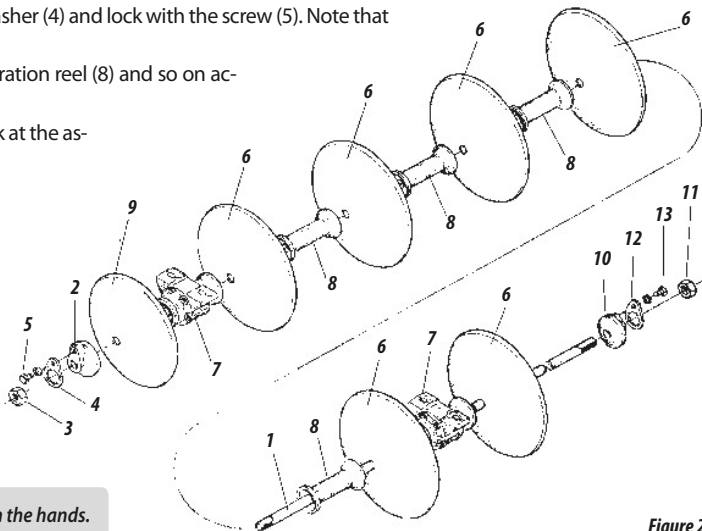
Model	No. of Discs	Spacing between discs (mm)	Diameter of discs (ø)	Shaft diameter (ø)	Working width (mm)	Working Depth (mm)	Approximate Weight (Kg)		Tractor Power (HP)	Ground wheel
							20"	22"		
NVP	28	175	20" - 22"	1.1/4"	2350	50 - 150	984	1000	73 - 79	Simplex
NVP	32	175	20" - 22"	1.1/4"	2700	50 - 150	1084	1125	83 - 89	Simplex
NVP	36	175	20" - 22"	1.1/4"	3000	50 - 150	1243	1292	93 - 100	Simplex
NVP	40	175	20" - 22"	1.1/4"	3420	50 - 150	1368	1420	104 - 112	Simplex
NVP	42	175	20" - 22"	1.1/4"	3600	50 - 150	1409	1463	109 - 118	Simplex
NVP	44	175	20" - 22"	1.1/4"	3760	50 - 150	1440	1497	114 - 123	Simplex
NVP	48	175	20" - 22"	1.1/4"	4100	50 - 150	1520	1582	124 - 134	Simplex
NVP	52	175	20" - 22"	1.1/4"	4450	50 - 150	1684	1751	135 - 145	Simplex
NVP	28	200	20" - 22"	1.1/4"	2700	50 - 150	1028	1064	79 - 84	Simplex
NVP	32	200	20" - 22"	1.1/4"	3100	50 - 150	1188	1229	89 - 96	Simplex
NVP	36	200	20" - 22"	1.1/4"	3500	50 - 150	1327	1376	100 - 108	Simplex
NVP	40	200	20" - 22"	1.1/4"	3900	50 - 150	1450	1498	112 - 120	Simplex
NVP	42	200	20" - 22"	1.1/4"	4100	50 - 150	1503	1557	117 - 126	Simplex
NVP	44	200	20" - 22"	1.1/4"	4300	50 - 150	1526	1583	123 - 132	Simplex
NVP	48	200	20" - 22"	1.1/4"	4700	50 - 150	1645	1708	134 - 144	Simplex
NVP	52	200	20" - 22"	1.1/4"	5100	50 - 150	1777	1848	145 - 156	Simplex

The Baldan reserves the right to change the specifications of this product without prior notice.

The technical specifications are approximate and valid in normal working conditions.

05. ASSEMBLY

- 01** - Check the parts with the parts list that is inside the packing box.
 - 02** - Place the shaft (1), Figure 2, the thrust washer (2), the nut (3), the lock washer (4) and lock with the screw (5). Note that the tip of the shaft is facing with the nut.
 - 03** - Place the shaft (1), one disc (6), one bearing (7), another disc (6), a separation reel (8) and so on according to figure (2).
 - 04** - In the rear section, place a disc of smaller diameter (9) at the end "A", look at the assembly of Figure 3.
 - 05** - When assembling the disc harrow of 36 discs, assemble the separation reels "B", Figure 3, towards the inner side of the disc harrow.
 - 06** - When the set is complete with all discs and separation reels, put the other thrust washer of the disc (10), nut (11), fastening a little with the key and tighten the washer (11) through impacts.
 - 07** - Then, wedge all the discs and tighten the nut (11) through impact.
 - 08** - When you achieve maximum fastening, adjust the latch (12), with washer (10), always tightening the nut to match the hole, fix them through the screw (13).
 - 09** - Before beginning assembly, place protective gloves on hands.
-
- The diagram illustrates the initial assembly steps for a mechanical component. It shows a central shaft (1) with various parts being attached. A thrust washer (2) is placed against the shaft, followed by a nut (3) and a lock washer (4). A screw (5) is used to secure the assembly. Discs (6) are shown being mounted onto the shaft, with bearings (7) positioned between them. A separation reel (8) is also indicated as part of the assembly sequence. A smaller diameter disc (9) is shown at the end of the shaft assembly.



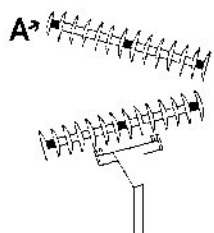
ATTENTION

Before beginning assembly, place protective gloves on the hands.

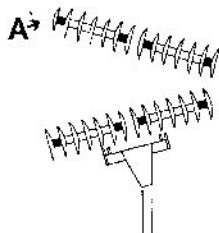
Figure 2

10 - A Figure 3 mostra a montagem das seções de discos para cada modelo de grade.

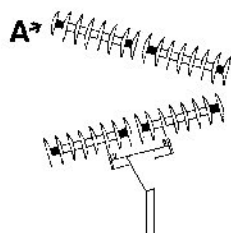
Figures 3



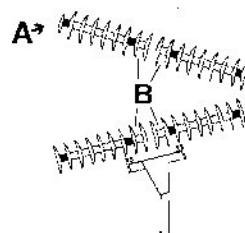
28 discs - 175 mm spacing



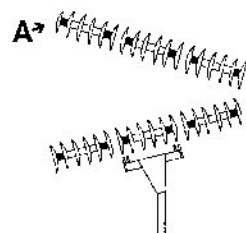
28 discs - 200 mm spacing



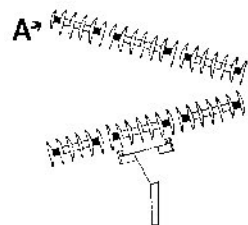
32 discs - 175 and 200 mm spacing



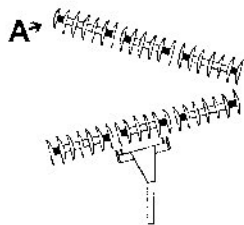
36 discs - 175 mm spacing



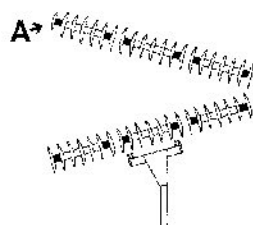
36 discs - 200 mm spacing



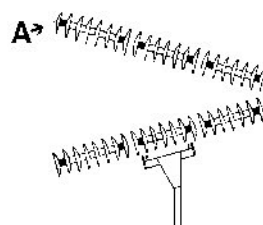
40 discs - 175 mm spacing



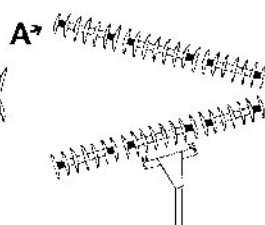
40 discs - 200 mm spacing



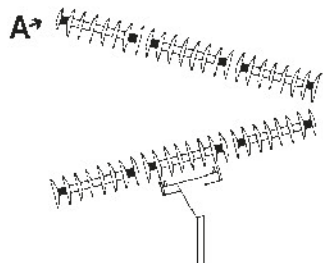
42 discs - 175 and 200 mm spacing



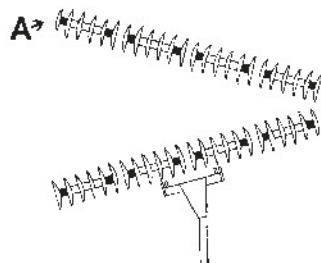
44 discs - 175 mm spacing



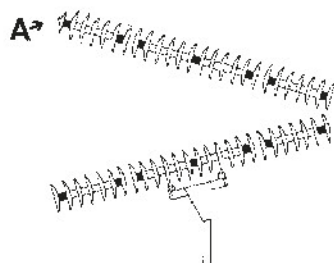
44 discs - 200 mm spacing



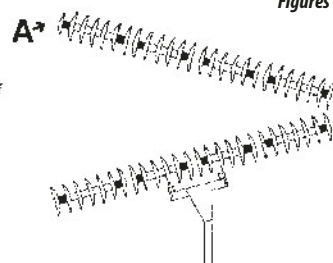
40 discs - 175 mm spacing



40 discs - 200 mm spacing



42 discs - 175 mm spacing



52 discs - 175 and 200 mm spacing

LEGEND

■ = BEARING

□ = SEPARATION REEL

⌋ = DISC

- Note that fixation support must face the disc concavity as Figure 4.

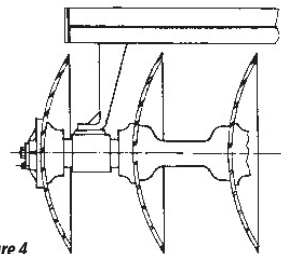


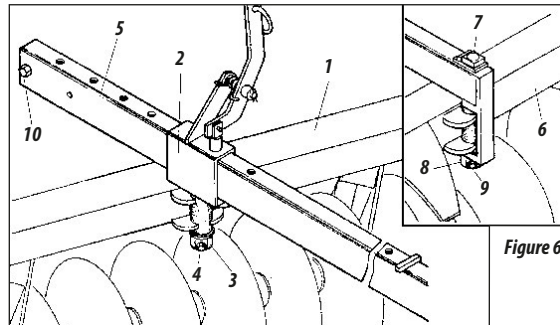
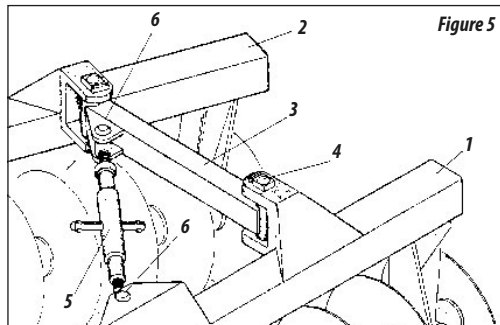
Figure 4

UNION OF REAR AND FRONT FRAMES

01 - Couple the front frame (1), figure 5, to the rear frame (2) through the coupling bar (3) with the pin (4). Place the regulator (5), between the front section (1) and the coupling bar (3), with the pins (6).

ASSEMBLING THE ADJUSTMENT SET FOR THE OPENING OF THE LEVELING DISC HARROW 28 AND 32 DISCS

01 - Place on the rear frame (1), figure 6, the locking handle (2), the nut (3), locking with the screw (4). Pass the adjusting locking ruler (5) inside the locking handle, coupling the front section (6) through the screw (7), nut (8) and lock with screw (9). Place the locking screw (10) on the tip of the latch (5).



ASSEMBLING THE ADJUSTMENT SET FOR THE OPENING OF THE LEVELING DISC HARROW 36, 42, 44, 48 AND 52 DISCS

- 01 - Place in the front frame (1), figure 7, the front stabilizer bar (2) through the coupling pin (3), washer (4) and cotter pin (5).
- 02 - Place in rear frame (6), the rear stabilizer bar (7) through the coupling pin (8).
- 03 - Couple the front (2) and rear (7) stabilizer bar through the coupling pin (9).
- 04 - Place the lock handle (10) in the front stabilizer bar, adjusting locking ruler (11), inside the lock handle body, linking it to the rear stabilizer bar through the lock screw (12).

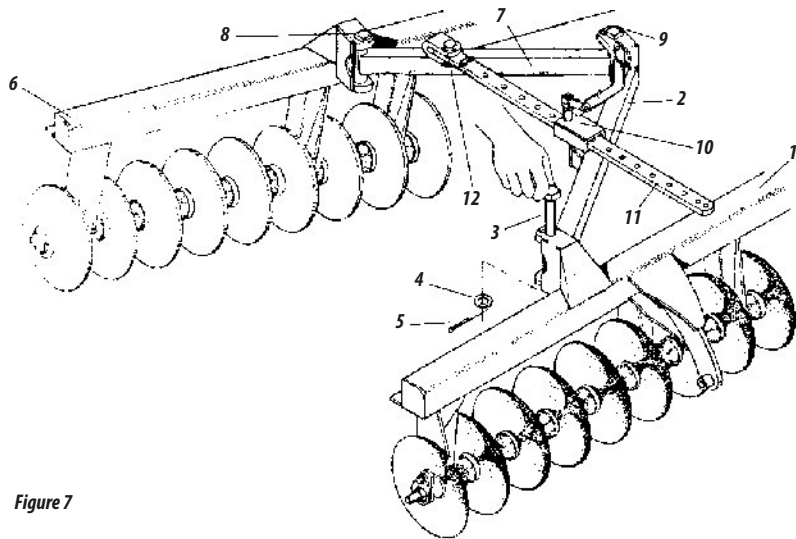


Figure 7

ASSEMBLING THE COUPLING HEADER

- 01 - Place the cross bar (2), figure 8 in the front frame (1) using screws (3), nut (4) and cotter pin (5).
- 02 - Place the coupling header (6), between the upper and lower plates (7), fixing it through the screw (8) and pin with handle (9).

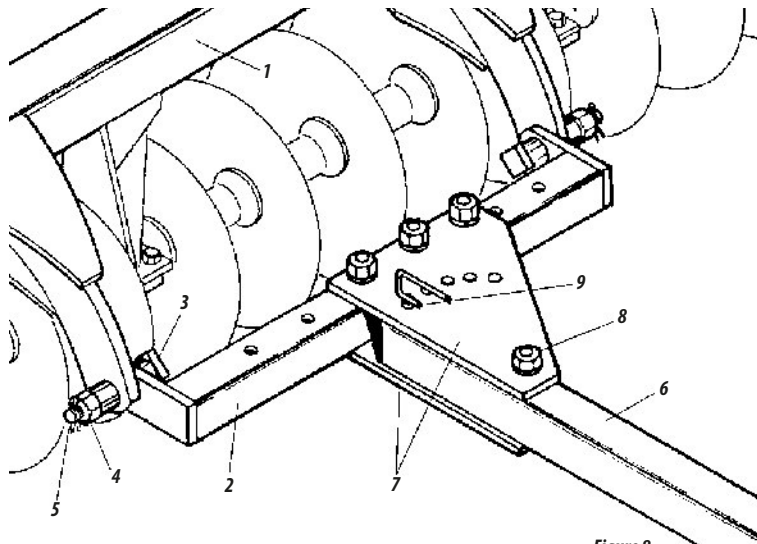
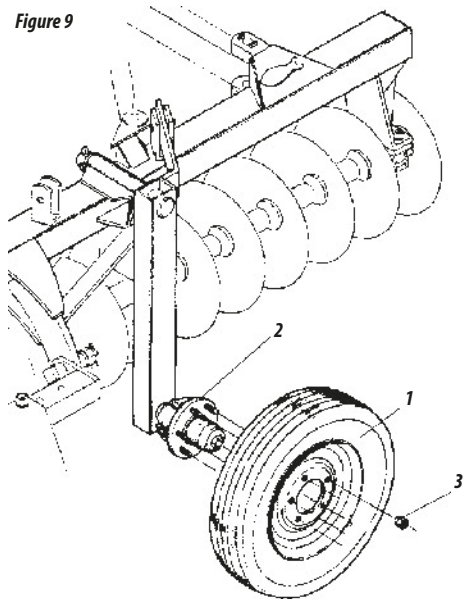


Figure 8

Figure 9



COUPLING OF TIRES

- 01 - Fix the complete wheel (1) figure 9 in the hub (2) through the nuts (3)

ASSEMBLING THE LIFTING BAR

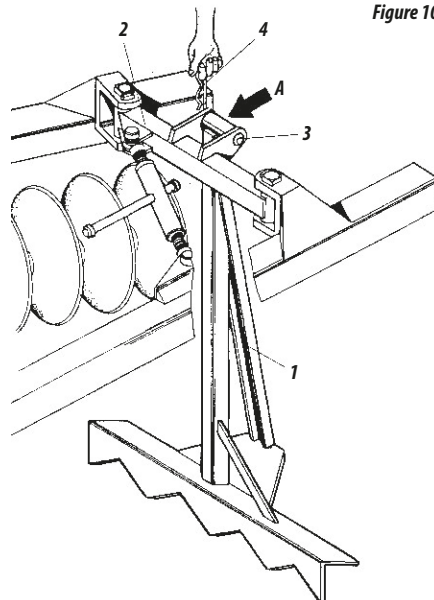
- 01 - Fix the lifting bar (1), figure 10, the union bar (2) through the pin (3), locking it with the lock (4).



NOTE

When assembling the bar (2), verify the correct assembly position, so that it does not get inverted. Support bracket "A" should be in the external side of the disc harrow.

Figure 10



ASSEMBLING THE TRANSPORT HEADER

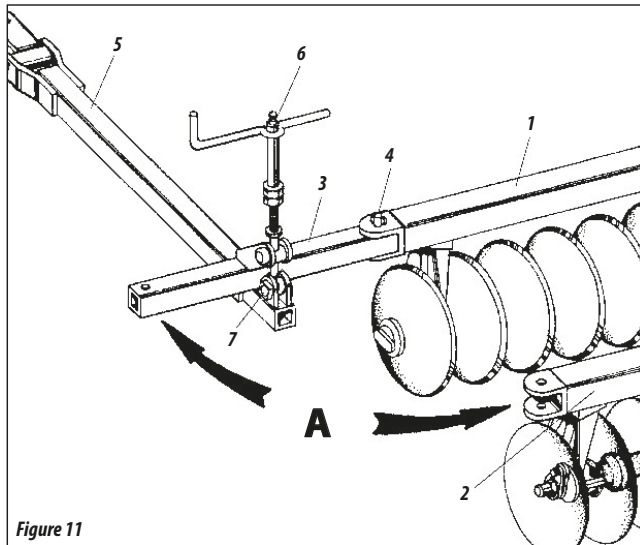


Figure 11

- 01 - Attach the rear (1) and front frame (2), Figure 1, the cross bar (3) with the pin (4).
- 02 - Place the transport header (5), the cross bar (3) and the handle (6). Lock the handle in the header (5) with the pin (7).
- 03 - 22 - This header should be removed when operating with the machine.

COUPLE THE DISC HARROW FOR TRANSPORT

- 01 - Fix the wipers (1), figure 12 in the front and rear frames (2) with the screws (3).



NOTE

Note that in the wipers should not be assembled where the shoes are

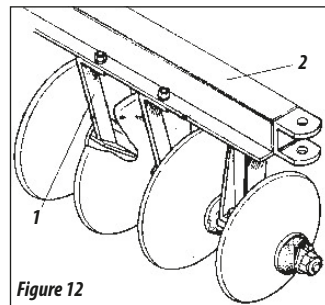
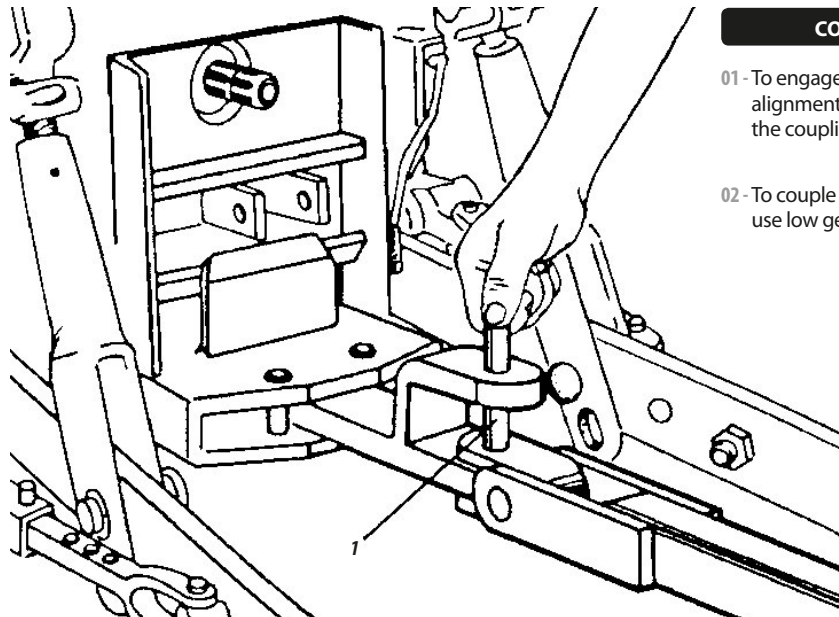


Figure 12



COUPLING THE DISC HARROW TO THE DRAWBAR

- 01 - To engage the disc harrow on the tractor drawbar, you must observe its alignment. Adjust the exact height of the disc harrow coupling and use the coupling pin "L" (1), figure 14.
- 02 - To couple the disc harrow, find a safe and easily accessible place, always use low gear with low throttle.

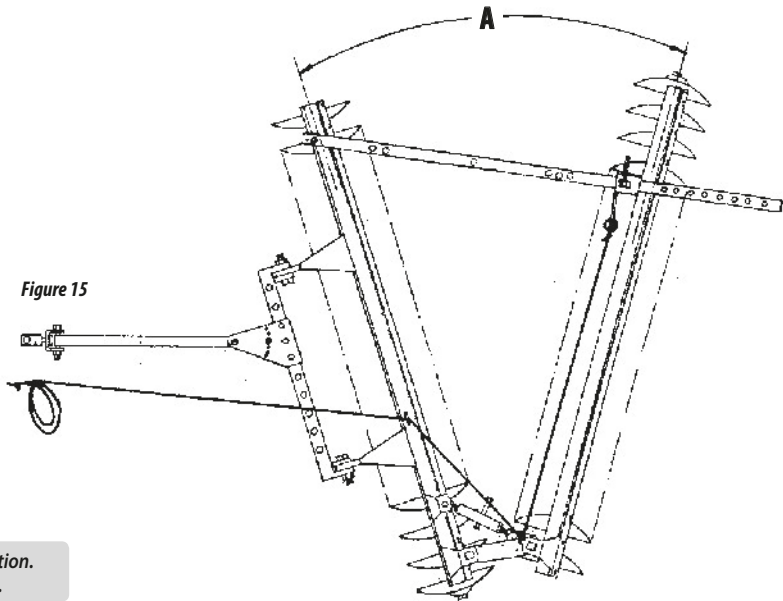
Figure 14

07. ADJUSTMENT AND OPERATIONS

ADJUSTING THE DISC HARROW OPENING

- 01 - To obtain optimum penetration of the discs, the disc harrow opening varies according to the type of soil.
- 02 - In soils of greater difficulty of penetration, increase the disc harrow opening.
- 03 - In loose and lighter soils, you should reduce the disc harrow opening.
- 04 - To open or close, pull the rope that goes up the tractor driver, releasing the opening adjustment set. If you want to open the disc harrow, move the tractor forward, if you want to close the disc harrow, move the tractor backward.
- 05 - For transportation, completely close the disc harrow.

Figure 15



IMPORTANT

*Increasing the angle "A" - higher penetration.
Reducing the angle "A" - less penetration.*

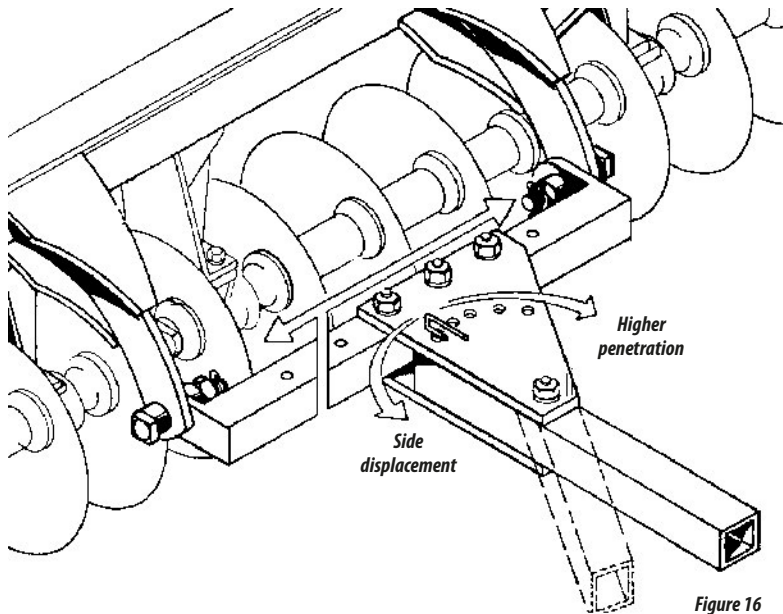


Figure 16

SIDE DISPLACEMENT OF THE DISC HARROW

- 01 - This side displacement should be done when the disc harrow is not giving a perfect finishing, that is, leaving tractor trail. The disc harrow should work centralized with the tractor traction line. To do this, move the upper and lower header plates to the right or to the left, as shown in figure 16.
- 02 - The coupling header operates in the center hole of the top and bottom plates for intermediate soils; displacing the other holes, changes the angle of the front section.

DISC CROSSING REGULATOR

- 01 - Through the disc crossing regulator, you can obtain a shift in the rear disc section in relation to the front discs twice the spacing without the aid of tools with great ease, rapidity and at the work place, because the adjustment becomes precise and of fine adjustment.
- 02 - Used to eliminate possible furrows in the soil during the harrowing, without changing the disc harrow performance and without harming its technical characteristics.
- 03 - Increasing the course of the disc crossing regulator and the rear disc section, it dislocates to the left, reducing it, the rear section moves to the right of the disc harrow.

OPERATIONS

- 01 - Before starting operations with the disc harrow, revise it completely, retighten all the screws, nuts, shafts and especially the disc sections.

<i>Work position</i>	<i>F</i>
<i>Minimal</i>	450 mm
<i>Normal</i>	610 mm
<i>Maximal</i>	680 mm

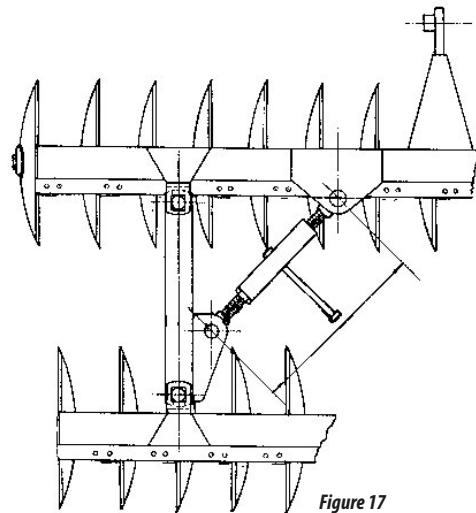


Figure 17

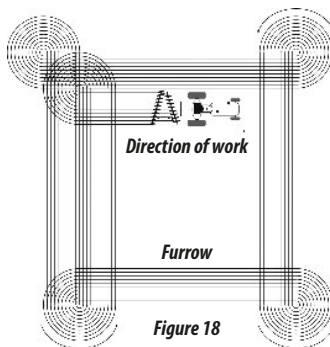
08. OPERACÕES

- 01 - Before starting operations with the disc harrow, revise it completely, retighten all bolts, nuts, hose terminals, axes and especially disc sections.

HOW TO START HARROWING

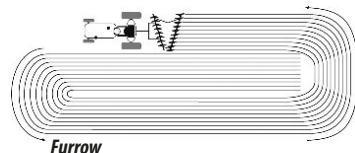
- 01 - To start harrowing, you should follow the terraces or contour lines, starting operation so that the terrace is on the left side of the tractor driver.
- 02 - 03 - Do not turn it to the right, see figure 18. The harrowed soil must always be at the left side of the tractor driver.
- 03 - 04 - The figure below shows some operation systems.

TO HARROW TOWARDS THE OUTSIDE



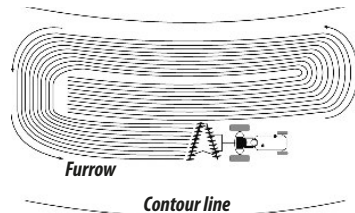
TO HARROW TOWARDS THE INSIDE

- 01 - In this way, we obtain greater perfection. When you start working in the headboards, you should start another plot.



PLOTS WITH CONTOUR LINES

- 01 - In soils with contour lines, it is usual to start two plots at a time, having the care to start working with the contour line of the left side of the tractor driver. When you reach the middle of the contour line, you should start another plot to save fuel.



09. LUBRICATION

- 01 - Lubrication is essential for optimal performance and durability of moving parts of your disc harrow.
- 02 - Before start working, carefully lubricate all grease fittings, always observing re-lubrication intervals, making sure about the quality of the lubricant, as its efficiency and purity, avoiding the use products contaminated by water, dirt, etc.

LUBRICATION OF ROLLER BEARINGS AND GREASE

- 01 - Clean the grease fitting with a clean and lint-free cloth and replace damaged ones.
- 02 - 04 - The amount of grease in each bearing is 150 grams.
- 03 - 05 - The roller bearings should be re-lubricated every 12 hours, using the grease specified in the table below.
- 04 - The oil change should be done every 1200 working hours. Use SAE 90.mineral oil.

TABLE OF GREASES AND EQUIVALENTS

<i>Fabricante</i>	<i>Tipo de graxa recomendada</i>
<i>Petrobrás</i>	<i>Lubrax GMA 2</i>
<i>Atlantic</i>	<i>Litholine MP 2</i>
<i>Ipiranga</i>	<i>Super Grasa Ipiranga Ipiranga Super Grasa 2 Ipiflex 2</i>
<i>Castrol</i>	<i>LM 2</i>
<i>Mobil</i>	<i>Mobilgrease MP 77</i>
<i>Texaco</i>	<i>Marfak 2 Agrotex 2</i>
<i>Shell</i>	<i>Retinax A Alvania EP 2</i>
<i>Esso</i>	<i>Multipurpose grease H</i>
<i>Bardahl</i>	<i>Maxlub APG 2 EP</i>

Table 3



IMPORTANT

If there are manufacturers and /or equivalent brands which are not listed in the table, refer to the manufacturer's technical manual.



- When the roller bearings show clearances, adjust them as follows:
- 01 - Remove the washer (1) Figure 19.
 - 02 - Loosen the screws (2) and remove the cover (3).
 - 03 - Remove 1 or 2 gaskets item 4 from the bearing cover. Replace the cover and retighten it.
 - 04 - If the clearance persists, you can face the cover item 3, to increase the adjustment, and then assemble the bearing using as many gaskets as required.
 - 05 - The bearing must rotate freely, i.e. without axial or radial clearances.

10. CLEANING

- 01 - When the disc harrow remains inactive for an extended period, make a general cleaning, make sure the cover is not worn out. If so, apply a general coat, protective oil and lubricate the disc harrow completely. Check the discs, apply a coat of paint on them and protective oil

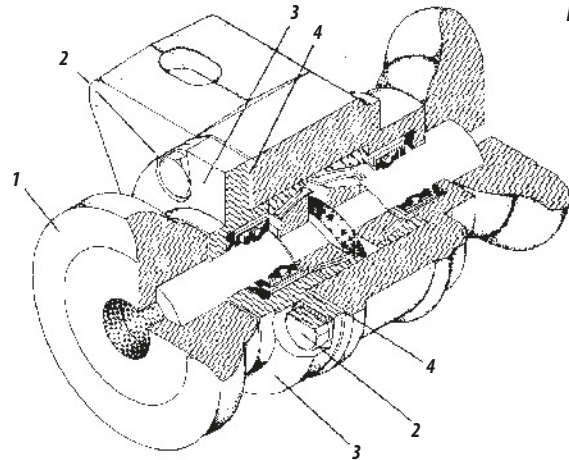


Figure 19



NOTE

Do not assemble the bearing without the gasket.

11. LUBRICATION POINTS

Table 4

Item	Part description	Number of grease fittings								Oil exchange	Lubrication in grease	Retighten	Replace	Check	Maintenance intervals
		NV / NVP 28	NV / NVP 32	NV / NVP 36	NV / NVP 40	NV / NVP 42	NV / NVP 44	NV / NVP 48	NV / NVP 52						
1	Bearings	6	8	8	12	12	12	12	14		X				12 hours
2	Piston articulation pins	2	2	2	2	2	2	2	2		X				
3	Union bars of frames	2	2	2	2	2	2	2	2		X				
4	Piston rod	1	1	1	1	1	1	1	1		X				60 hours
5	Union of stabilizer bars	-	-	1	1	1	1	1	1		X				
6	Rear stabilizing bar	-	-	1	1	1	1	1	1		X				
7	Piston coupling	1	1	1	1	1	1	1	1		X				
8	Rear stabilizing bar	-	-	-	1	1	1	1	1		X				
9	Wheel articulation shaft	2	2	2	2	2	2	2	2		X				
10	Wheels hub	2	2	2	2	2	2	2	2		X				
11	Disc crossing regulator	2	2	2	2	2	2	2	2		X				
12	Lock handle	1	1								X				
13	Hydraulic system													X	120 hours
14	Bearing oil													X	
15	Nuts, screws and pins											X			1200 hours
16	Bearings									X					
17	Roll bearings												X		1500 hours
18	Seals												X		
19	Discs												X		Whenever necessary
20	Tires												X		

Figure 20

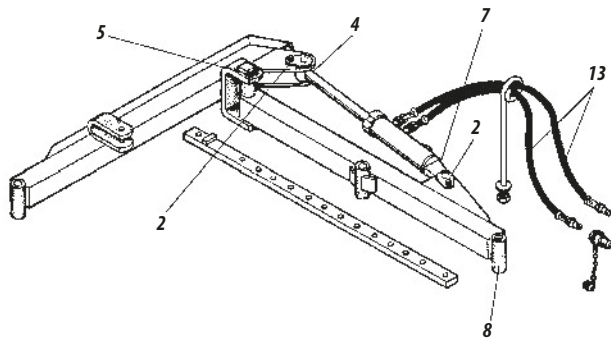
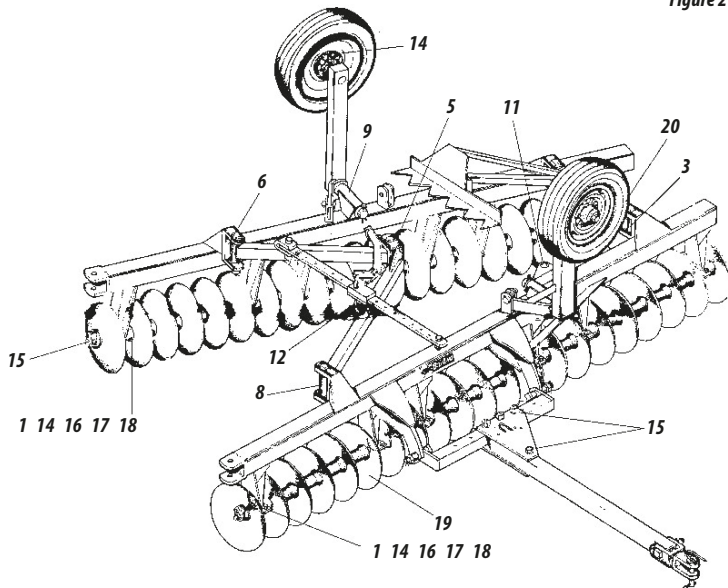


Figure 21



ATTENTION

After the first day of work with the implement, tighten all screws and nuts.

12. APPROXIMATE PRODUCTION

01 - To calculate the approximate hourly production of the hydraulic disc harrow, use the following formula:

$$A = \frac{L \times V \times F}{X}$$

WHERE:

- A = Area to be worked
- L = Working width of the disc harrow (in meters)
- V = Average Tractor Speed (meters / hour)
- F = Production factor
- X = Hectare value - 10,000 m²

• **Example:** Using a 42-disc plow, how many Hectare it will produce in an hour of work at an average speed of 7km / h?

- **A** = ?
- **L** = 3,60m
- **V** = 7.000m/h
- **F** = 0.90
- **X** = 10.000 m²

$$A = \frac{3,60 \times 7.000 \times 0,9}{10.000}$$

$$A = 2,26 \text{ Ha/h}$$

TABLE OF APPROXIMATE PRODUCTION

Model	Spacing (mm)	Cutting length (m)	Average speed (m/h)	Production factor	Approximate production
					Hectares
NV/NVP - 28	175	2,35	7000	0,90	1,48
NV/NVP - 32	175	2,70	7000	0,90	1,70
NV/NVP - 36	175	3,00	7000	0,90	1,89
NV/NVP - 40	175	3,42	7000	0,90	2,15
NV/NVP - 42	175	3,60	7000	0,90	2,26
NV/NVP - 44	175	3,76	7000	0,90	2,36
NV/NVP - 48	175	4,10	7000	0,90	2,58
NV/NVP - 52	175	4,45	7000	0,90	2,80
NV/NVP - 28	200	2,70	7000	0,90	1,70
NV/NVP - 32	200	3,10	7000	0,90	1,95
NV/NVP - 36	200	3,50	7000	0,90	2,20
NV/NVP - 40	200	3,90	7000	0,90	2,45
NV/NVP - 42	200	4,10	7000	0,90	2,58
NV/NVP - 44	200	4,30	7000	0,90	2,70
NV/NVP - 48	200	4,70	7000	0,90	2,96
NV/NVP - 52	200	5,10	7000	0,90	3,21

Table 5

- 01 - The formula to calculate the appropriate production refers to the calculation of the area to be worked by the disc harrow.
- 02 - If you want to know how long it will take to work an area of known value, simply divide the value of this area by the hourly production of the disc harrow.
- 03 - **Example:** How long (x) it will take for a 42-disc NV disc harrow with 175mm spacing to produce 35 hectares at an average speed of 7km / h?

- Area value: 35 hectares
- Hourly production of the 42-disc plow: 2,26 Ha/h

Therefore: $\frac{35 \text{ ha}}{2,26 \text{ ha/h}} = \mathbf{15.4 \text{ hours}}$

- 04 - The hourly production can vary by factors that alter the pace of work, for example: humidity and soil hardness, land slope and inadequate adjustments. These factors are different from those in Table 5, which shows field work in soils under normal conditions.

13. IDENTIFICATION

01 - In order to refer parts catalogues or apply technical support from Baldan, always indicate model (1), serial number (2), manufacture date (3) located on the identification tag.

ALWAYS REQUIRE BALDAN ORIGINAL PARTS

 BALDAN BALDAN IMPLEMENTOS AGRÍCOLAS S/A. AV. BALDAN, 1500 NOVA MATÃO CEP 15.993-900 MATÃO-SP BRASIL FONE: (16) 3221-8600 CNPJ: 52.311.347/0009-06 CREA/SP 0170877		
01 — Modelo / Model	03 — Data / Date	
02 — N° de Série / Serial Number	Tipo / Type	
Capacidade / Load Capacity	Peso / Weight	



PUBLICATIONS

Code: 6055020141-3
CPT: NV18612



WARNING

The drawings in this instructions manual are for illustrative purposes only. To enable a better overview and detailed instructions, on some drawings in this manual, safety devices (covers, shields, etc..) were removed. Never operate the agricultural wagon without these devices.



CONTACT

*If you have questions, never operate the NV/NVP see the post sale.
Phone: 0800-152577
e-mail: posvenda@baldan.com.br*

PRODUCT IDENTIFICATION

- Do the identification below to always have the properly informations about your equipment life time.

Owner: _____

Dealer: _____

Farm: _____

City: _____ Country: _____

Model: _____

Warranty certified number: _____

Serial number: _____

Purchase date: / /

NOTE:

[illegible]

Invoice. Nr:

CERTIFICATE OF WARRANTY

- 01 - **BALDAN IMPLEMENTOS AGRÍCOLAS S/A**, guarantee the normal operation of the product for a 6 (six) months period dated from the dealers's bill of sale to the first final customer.
- 02 - During this period, **Baldan** compromise itself to repair the material or manufacturing defects, but the labour, the freight and other expenses are the dealer's responsibility.
- 03 - At the guarantee period, all the request and replacement of any defective part must be made to the dealer of the region, which will send the defective part for analysis at **Baldan**.
- 04 - When this procedure won't be possible and the dealer couldn't have the ability to solve the problem, the dealer can ask for **Baldan's Technical Assistance** using the specific form delivered to them.
- 05 - After the analysis of the items replaced by **Baldan Technical Assistance** and if we conclude that it wasn't a guarantee problem, then the dealer will be the responsible for all costs related to the replacement; as well as material expenses, travel including accommodation and meals, also the accessories, lubricant used or any other expenses after having called the Technical Assistance. And, withal, the company Baldan is authorized to issue the billing in name of the respective reseller.
- 06 - Any repair made to the product which is in warranty period by the dealer, will only be authorized by Baldan after budget previous presentation describing pieces and labour to be accomplished.
- 07 - It is out of this term the product which has repairs or modifications not made by dealers from Baldan's network, as well as pieces applications or not authentic components to the product by the user.
- 08 - This certificate of guarantee will become invalid when notice that the damage or defect is the result of incorrect use of the product, of instructions non-observance or operator's inexperience.

- 09 - It's stipulated that this guarantee don't cover tires, polyethylene deposits, universal joints, hydraulic components, etc, wich equipments are guarantee by their manufacturers.
- 10 - The material or manufacture defects, object of this certificate of guarantee, will not be, by any hypotesis, reason for cancellation of the contract of sale, or indemnity of any kind.
- 11 - For a warranty solicitation to the distributor, you have to proceed in the following manner:
- 12 - Send the technical informe detailed telling the problem (technical assistance request form to the client), you can find it send us an email to **aftersales@baldan.com.br** or acessing our website.
- 13 - If it's possible send films and photos from the requested spare parts.
- 14 - To point at the form: serial number, manufacture year, etc, that is, all information asked at the form. The damage spare parts should be available for analysis of the the after sales department in a future visit (in case of requested).
- 15 - **Baldan** keeps the right of changing and or improve the technical characteristics of its products, without notice and without the obligation of act like this way with its previously manufactured products.

INSPECTION AND DELIVERY CERTIFICATE

- **SERVICE BEFORE THE DELIVERY:** This equipment was very carefully prepared by the dealer's organization, inspected in all its parts in agreement with the manufacture's prescription.
- **DELIVERY SERVICE:** The user was informed about the current guarantee terms and instructed about maintenance care and utilization.
- I confirm that I was informed about the current guarantee terms and instructed about the correct utilization and maintenance of this product.

Product: _____ *Serial number:* _____

Date: _____ *Bill of sale:* _____ *Store:* _____

City: _____ *State:* _____ *Zip code:* _____

Owner: _____ *Phone:* _____

Adress: _____ *Number:* _____

City: _____ *State:* _____

E-mail: _____ *Date of sale:* _____

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Date: _____ *Bill of sale:* _____ *Store:* _____

City: _____ *State:* _____ *Zip code:* _____

Owner: _____ *Phone:* _____

Adress: _____ *Number:* _____

City: _____ *State:* _____

E-mail: _____ *Date of sale:* _____

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Product: _____ *Serial number:* _____

Date: _____ *Bill of sale:* _____ *Store:* _____

City: _____ *State:* _____ *Zip code:* _____

Owner: _____ *Phone:* _____

Adress: _____ *Number:* _____

City: _____ *State:* _____

E-mail: _____ *Date of sale:* _____

3ª Page - Manufacturer

Please send this filled copy to Baldan, until 15 days after the purchase.

Signature / Store's stamp _____



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export@baldan.com.br

+55 16 3221 6500
baldan.com.br