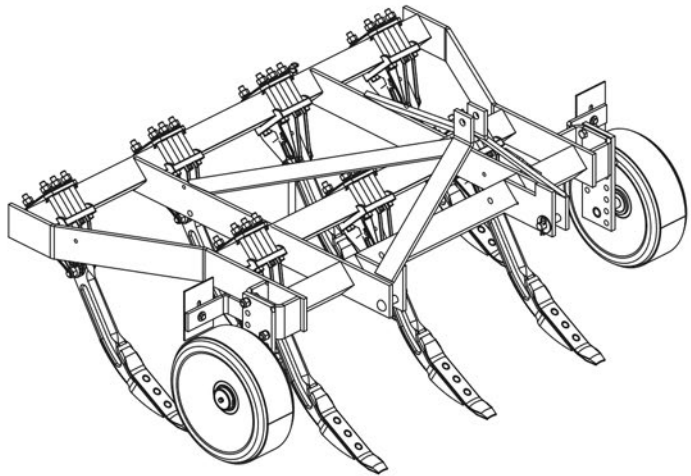


INSTRUCTION MANUAL



Mounted Chisel Plough
ASTH

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



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01 - SAFETY RULES

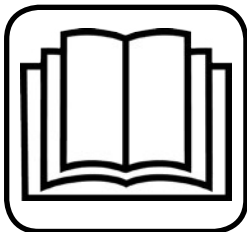


THIS ALERT SYMBOL INDICATES IMPORTANT SAFETY NOTES. WHENEVER YOU FIND IT IN THIS MANUAL, READ THE MESSAGE WITH ATTENTION TO AVOID ANY ACCIDENT.



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 fasted.



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.*



WARNING

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



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.*



ALCOHOL AND DRUGS MAY GENERATE LOSS OF REFLEX AND CHANGING OF OPERATOR FISICAL CONDITIONS. SO DO NOT WORK WITH THIS EQUIPMENT, IN USE OF THIS SUBSTANCE.



The mismanagement of this equipment can result in serious or fatal accidents. Before placing equipment in operation, carefully read the instructions in this manual. Make sure that the person responsible for the operation is instructed on the proper handling, insurance if you have read and understood the instruction manual for this product.

- 01-  When operating with the implement, do not allow people to stay very close to or on the implement.
- 02-  In making any service mounting and dismounting the disks use gloves in their hands.
- 03-  Before connecting or disconnecting hydraulic hoses, relieve the system pressure triggering the command with the tractor off.
- 04-  Periodically check the state of conservation of hoses. If there is evidence of oil leaks immediately replace the hose, because the oil works under high pressure and can cause serious injury.
- 05-  Do not use loose clothing as they can curl up on the equipment.
- 06-  By placing the tractor engine in operation, is properly seated in the operator's complete knowledge and aware of the correct and safe handling of both the tractor and the implement. Always put the shifter in neutral, turn off the command from the power supply and place the commands in the hydraulic neutral position.
- 07-  Do not run engine indoors without adequate ventilation, because the exhaust fumes are harmful to health.
- 08-  When maneuvering the tractor to the implement hitch, make sure that you have the space needed and that there are people very close, always do the maneuvers in low gear and be prepared to brake in an emergency.

- 09- **⚠ Do not make adjustments to the implement at work.**
- 10- **⚠ By working inclined terrain, be careful trying to keep the necessary stability. In case of early imbalance reduces the acceleration, turn the wheels of the tractor to the side of the slope of the terrain.**
- 11- **⚠ Always operate the tractor at speeds compatible with security, especially when working in rough terrain or slopes, always keep the tractor hooked.**
- 12- **⚠ When driving the tractor on the roads, keep the brake pedals connected and use safety signs.**
- 13- **⚠ Do not operate the tractor if the front is light. If there is a tendency to lift, add weights on the front or the front wheels.**
- 14- **⚠ When leaving the tractor put the shifter in neutral and apply the parking brake. Never leave the implement hitched to the tractor in the raised position of the hydraulic system.**
- 15- **⚠ Alcoholic beverages and some medications can cause loss of reflexes and change the operator's physical conditions. 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.**

MOUNTED CHISEL PLOUGH - ASTH

02 - COMPONENTS

- 01 - Main Frame
- 02 - Complete Depth Wheel
- 03 - Wheel scraper
- 04 - Hold support
- 05 - Shanks
- 06 - Reversible Tip
- 07 - Fix support of shanks
- 08 - Sticker

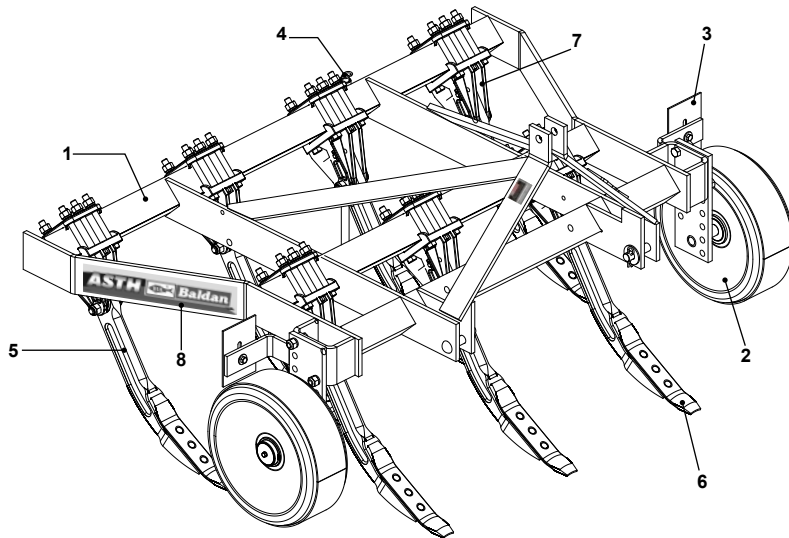


Figure 1

03 - DIMENSIONS (MM)

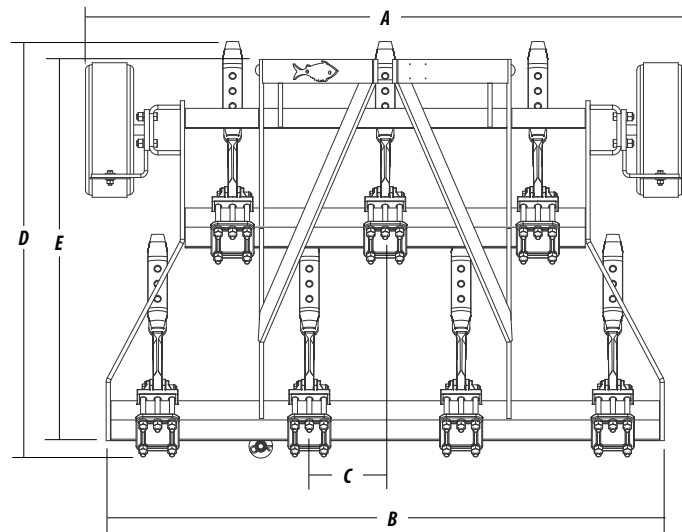
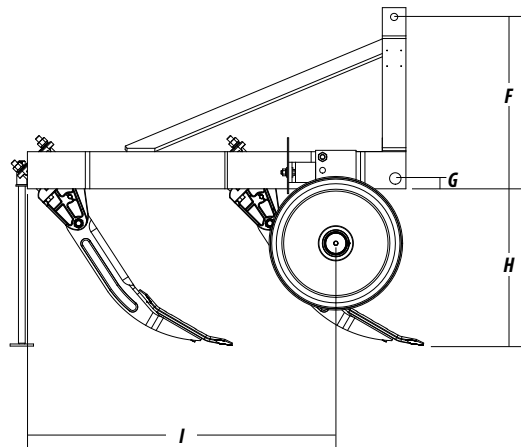


Figure 2

DIMENTIONS - ASTH

| <i>Model</i> | <i>Nr of Shanks</i> | <i>A</i> | <i>B</i> | <i>C Maximum</i> | <i>D</i> | <i>E</i> | <i>F</i> | <i>G</i> | <i>H</i> | <i>I</i> |
|---------------------|---------------------|----------|----------|----------------------|----------|----------|----------|----------|----------|----------|
| <i>ASTH 3 x 3</i> | 3 | 881 | 835 | 310 | 1560 | 1440 | 680 | 40 | 570 | 1100 |
| <i>ASTH 5 x 3</i> | 3 | 881 | 1640 | 710 | 1560 | 1440 | 680 | 40 | 570 | 1100 |
| <i>ASTH 5 x 5</i> | 5 | 881 | 1640 | 350 | 1560 | 1440 | 680 | 40 | 570 | 1100 |
| <i>ASTH 7 x 5</i> | 5 | 1855 | 1790 | 390 | 1560 | 1440 | 680 | 40 | 570 | 1100 |
| <i>ASTH 7 x 7</i> | 7 | 1855 | 1790 | 260 | 1560 | 1440 | 680 | 40 | 570 | 1100 |
| <i>ASTH 9 x 5</i> | 5 | 2410 | 2350 | 530 | 1560 | 1440 | 680 | 40 | 570 | 1100 |
| <i>ASTH 9 x 7</i> | 7 | 2410 | 2350 | 350 | 1560 | 1440 | 680 | 40 | 570 | 1100 |
| <i>ASTH 9 x 9</i> | 9 | 2410 | 2350 | 265 | 1560 | 1440 | 680 | 40 | 570 | 1100 |
| <i>ASTH 11 x 9</i> | 9 | 2860 | 2850 | 325 | 1560 | 1440 | 680 | 40 | 570 | 1100 |
| <i>ASTH 11 x 11</i> | 11 | 2860 | 2850 | 260 | 1560 | 1440 | 680 | 40 | 570 | 1100 |

Table 1

04 - TECHNICAL SPECIFICATIONS

| Model | Nr of Shanks | Tip Size (mm) | Shanks Spacing (mm) | Shelf width (mm) | Depth (mm) | Approx. weight (Kg) | Approx. power to work | |
|--------------|--------------|---------------|---------------------|------------------|------------|---------------------|-----------------------|-----------|
| | | | | | | | Surface (Hp) | Deep (mm) |
| ASTH 3 x 3 | 3 | 75 x 450 | 310 | 620 | 450 | 330 | 40 a 45 | 55 a 65 |
| ASTH 5 x 3 | 3 | 75 x 450 | 620 | 1240 | 450 | 358 | 40 a 45 | 55 a 65 |
| ASTH 5 x 5 | 5 | 75 x 450 | 310 | 1240 | 450 | 425 | 55 a 60 | 70 a 80 |
| ASTH 7 x 5 | 5 | 75 x 450 | 310 | 1240 | 450 | 479 | 55 a 60 | 70 a 80 |
| ASTH 7 x 7 | 7 | 75 x 450 | 260 | 1560 | 450 | 591 | 70 a 80 | 90 a 105 |
| ASTH 9 x 5 | 5 | 75 x 450 | 520 | 2080 | 450 | 513 | 55 a 60 | 70 a 80 |
| ASTH 9 x 7 | 7 | 75 x 450 | 310 | 1860 | 450 | 579 | 70 a 80 | 90 a 105 |
| ASTH 9 x 9 | 9 | 75 x 450 | 260 | 2080 | 450 | 645 | 90 a 105 | 115 a 130 |
| ASTH 11 x 9 | 9 | 75 x 450 | 310 | 2480 | 450 | 680 | 90 a 105 | 115 a 130 |
| ASTH 11 x 11 | 11 | 75 x 450 | 260 | 2600 | 450 | 745 | 110 a 120 | 140 a 150 |

Baldan reserves the right to modify any technical specifications without prior notice.
The technical specifications it's approximate and informed by regular conditions of work.

Table 2

05 - ASSEMBLY

01 - The subsoiler assembly is done complete into the factory. Follow, showing the hastes orderfor each subsoiler model.

ASTH 3 x 3 Shanks

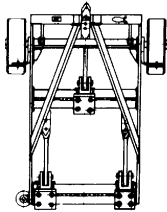


Figure 3

ASTH 5 x 3 Shanks

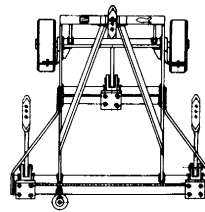
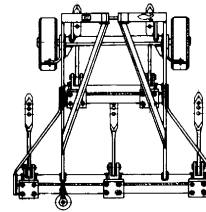


Figure 4

ASTH 5 x 5 Shanks



ASTH 7 x 5 Shanks

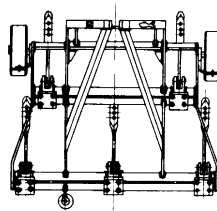


Figure 5

ASTH 7 x 7 Shanks

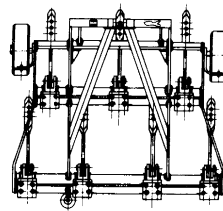
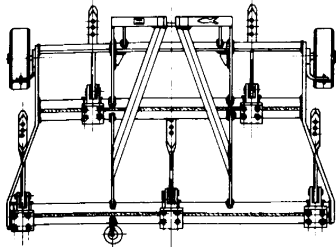
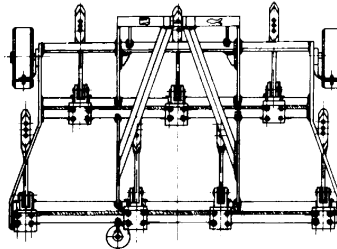


Figure 6

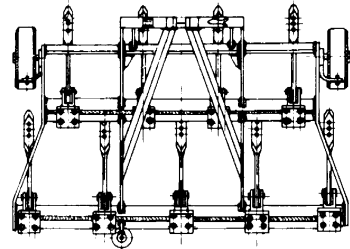
ASTH 9 x 5 Shanks



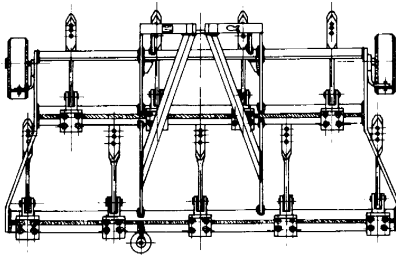
ASTH 9 x 7 Shanks



ASTH 9 x 9 Shanks



ASTH 11 x 9 Shanks



ASTH 11 x 11 Shanks

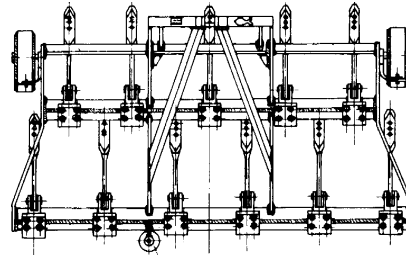


Figure 7

06 - SUBSOILER HITCH

- Before to hitch the subsoiler at the tractor, make sure if the same it's read to work, as follow:

01 - Take oof the traction bar.

02 - Make sure if the tractor has the front weights kit.

03 - Ballast the wheels as the tractor specifications.

04 - Hitch the lower left arm of tractor with the clamp pin as item 1 figure 8, at "A" support of subsoiler.

05 - Hitch the 3° point of tractor at the "B" support of subsoiler.

06 - Finally with the help of regulator handle of high "D" hitch the right lower arm of tractor at the "C" support of subsoiler as shown the figure 8. Turn the handle supporte and the counter pin.

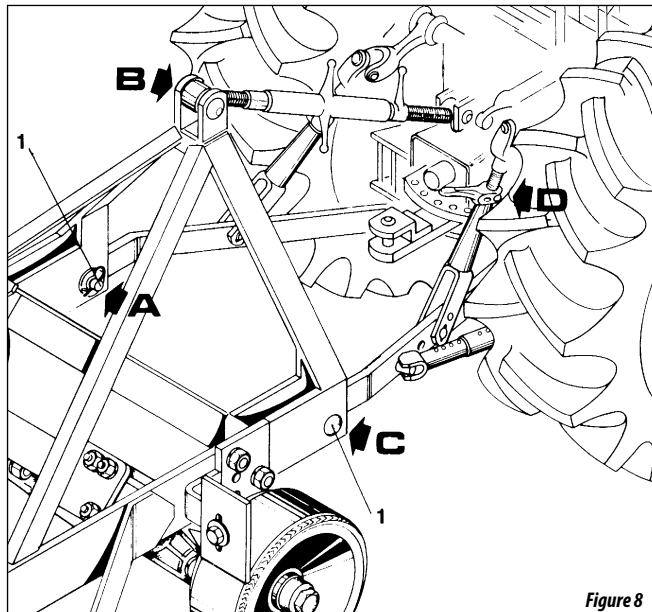


Figure 8

SUBSOILER CENTRALIZATION

- To centralize the subsoiler related the longitudinal axle of tractor, proceed as follow:
- 07 - Align the upper hitch of subsoiler with the 3^o point of tractor; make sure if the distance "D" of lower arms from hydraulic are equal related the tractor tires as figure 9. The lower arms should be level with each other.

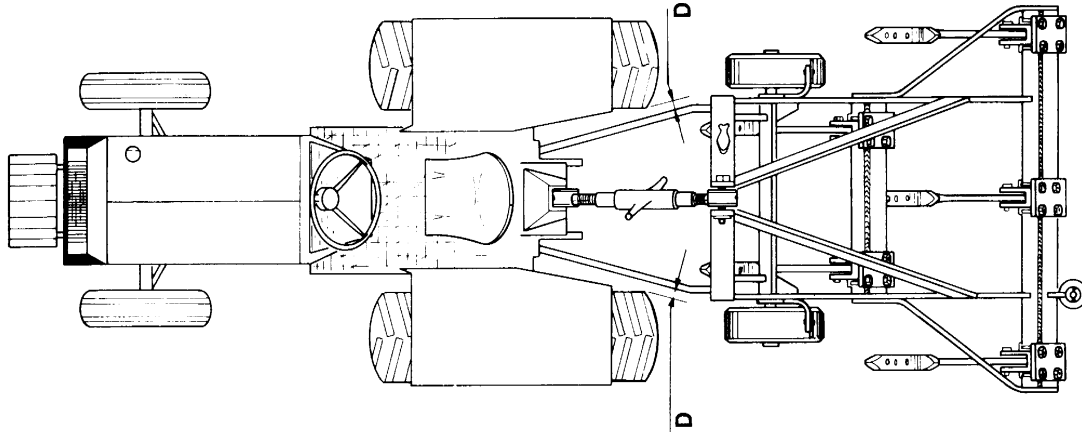


Figure 9

SUBSOILER LEVELING

- To leveling the subsoiler proceed as follow:

08 - The tractor must be in the flatness place; after that leveling the subsoiler on transversal way (width) through the handle of lower right arm from hydraulic hitch. Make sure the mesures "H" that must be equal as Figure 10.

09 - The longitudinal leveling (lenght) it's done through the arm of 3° point. Make sure that the shanks should be parallels to the soil as Figure 10.

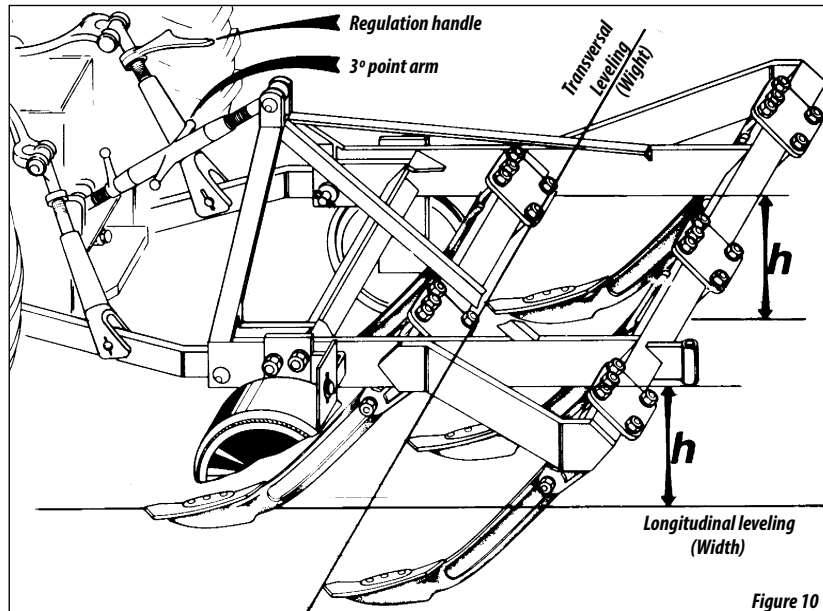


Figure 10

07 - ADJUSTMENTS AND OPERATIONS

DEEP REGULATION

- 01 - The subsoiler depth it's regulated through the wheels item 1 Figure 11, that limited the penetration of all shanks by uniform way.
- 02 - For this regulation, loose the nuts item 2 and displace the wheel till the measure desired. Retight the nuts.
- 03 - Also regulate the scrapers item 3, loosening the nuts item 4 and replace that till stay with a looseness of 10 to 20 mm from wheel.

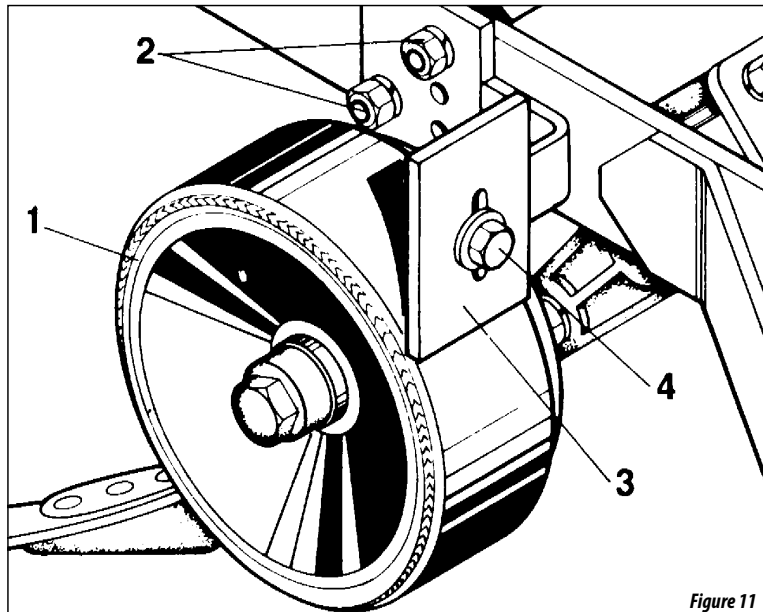


Figure 11

REGULATION OF SPACING BETWEEN THE SHANKS

- 04 - The spacing between shanks must be regulated when the number of shanks changes (7 to 5 shanks, for example) or according to soil that will be worked.
- 05 - To regulate the spacing, loose the nuts item 1, Figure 12 and slide the shank item 2 till the desired measure. Retighten the nuts item 1.

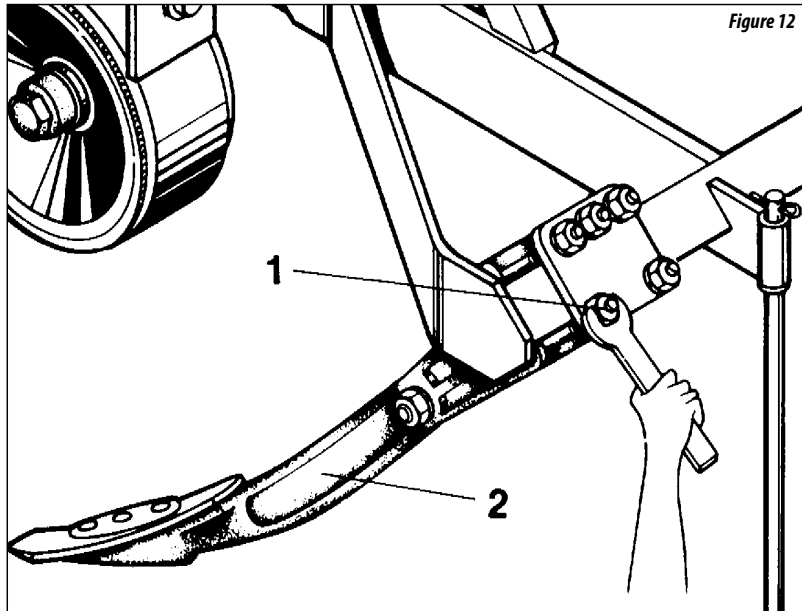
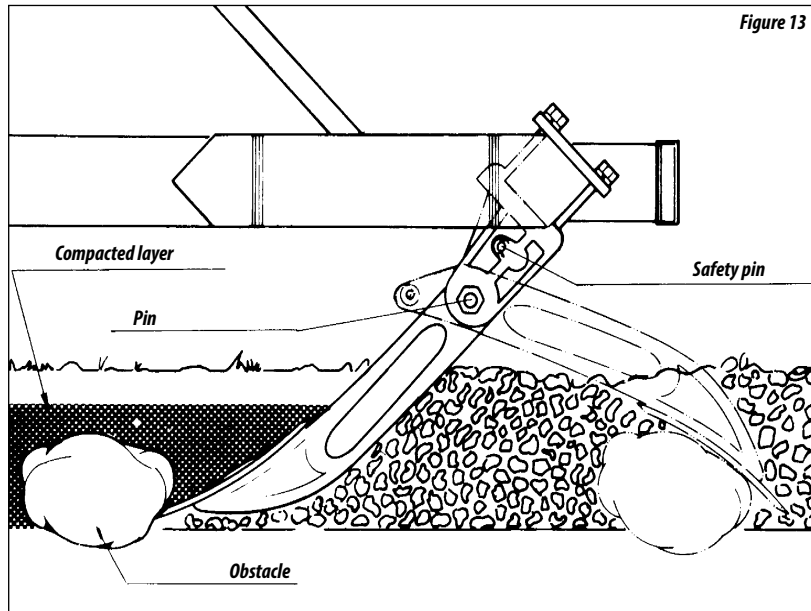


Figure 12

OPERATIONS

- 06 - Subsoiling should be done on relatively dry land, in order to break up the compacted soil, commonly known as the hardcover, or simply walking plow compacted layer.
- 07 - Checking the depth of the compacted soil (see detail in Figure 13) then adjust the working depth of the shanks.
- 08 - The shanks are secured with a bolt controlled strength and a safety pin (Fuse). In operation, if the shank find a big obstacle and very resistant, the pin broken and the shank rotates over the bolt as shown in Figure 13, avoiding further damage to the set and own tractor.
- 09 - Select a gear that allows the tractor to keep a certain reserve of power, ensuring against unforeseen efforts.
- 10 - The working speed varies according the soil, we recommend an average of 4.5 to 5 km / hour.



08 - MAINTENANCE

- 01 - Check daily the conditions and tightening of bolts, nuts and pins of the subsoiler.
- 02 - The nozzles are reversible. Always check the damage and make the reversal, if necessary to not miss the action of breaking the compacted soil.
- 03 - Check if anyone pin broke.

LUBRICATION

- 04 - Lubrication is essential for good performance and durability of the rolling part of the subsoil.
- 05 - Lubricate the depth wheel each 100 hours of work as follows:
- 06 - Remove the cap figure 14 item 1;
- 07 - Clean the old grease.
- 08 - Place new grease in the cap.
- 09 - Replace the cap on the wheel.

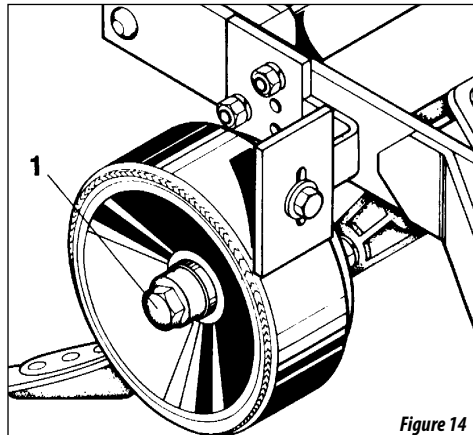


Figure 14

09 - CLEANING

- 01 - When assembling or disassembling any portion of the subsoil use methods and properly tools.
- 02 - When the subsoil is staying for a longer inative period, make a general clean, check if the paint doesn't wear off. If this happened, give an over-all coat, protective and lubricating oil to pass completely the subsoil. Check the nozzles, giving a fresh coat of paint on them pass protective oil.

10-IDENTIFICATION

- To consult the spare part catalogue or ask a technical assistance from Baldan, always indicate the model (1), serial number (2) and manufacture date (3), that you will find in the identification tag.

ALWAYS ASK FOR ORIGINAL BALDAN SPARE PARTS

BIA Baldan
BALDAN IMPLEMENTOS AGRÍCOLAS S/A.
AV. BALDAN, 1500 | CEP 15.993-000 | MATÃO-SP | BRASIL
FONE: (0xx16) 3221-6500 | FAX: (0xx16) 3382-6500
e-mail: sac@baldan.com.br | Home Page: www.baldan.com.br
CNPJ: 52.311.347/0009-06 | INSCR. EST.: 441.016.953.110

| | |
|------------------|-----------|
| 1 Modelo | |
| 2 Nº de Série | 3 Data |



MARKETING
Edition of
Catalogs and Manuals

Code: 6055010479-5
Revision: 03
CPT: ASTH19312



WARNING

The draws contained in this instruction manual are merely illustrative.



CONTACT

*In case of doubt **do not** operate the equipment, please contact our **After-sales Service**.
Phone: 0800-152577
e-mail: export@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: _____ / _____ / _____

Invoice. Nr: _____



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6 0 5 5 0 1 0 4 7 9 5



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