

Instruction Manual



ASTH

Hydraulic Tubular Chisel Plow

 **BALDAN**

■ Presentation

We appreciate the preference and would like to congratulate you for excellent choice you just made, since you have acquired a product manufactured with **BALDAN**



IMPLEMENTOS AGRÍCOLAS S/A technology.

This manual will guide you through the procedures required since its acquisition until operational procedures of usage, safety and maintenance.

BALDAN assures that it has delivered this implement for resale in full and in perfect conditions.

Resale was responsible for the custody and maintenance during the period in its possession, and also for the assembly, retightening, lubrication and overhaul.

During the technical delivery, dealer should guide the user regarding maintenance, safety, their obligations in eventual technical assistance, strict compliance with the warranty term and reading the instructions manual.

Any technical assistance request while in warranty must be made to the dealer from whom you have purchased it.

We reiterate the need for a careful read of the warranty certificate and compliance of all items from this manual, because by doing so you will increase the life of your device.

Instruction Manual



ASTH

Hydraulic Tubular Chisel Plow

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

BALDAN WARRANTY	07
GENERAL INFORMATION	08
<i>To the owner</i>	<i>08</i>
SAFETY RULES	09
<i>To the operator.....</i>	<i>09 - 11</i>
WARNINGS	12 - 13
COMPONENTS.....	14
<i>ASTH - Hydraulic Tubular Chisel Plow</i>	<i>14</i>
DIMENSIONS	15
<i>ASTH - Hydraulic Tubular Chisel Plow</i>	<i>15</i>
SPECIFICATIONS	16
<i>ASTH - Hydraulic Tubular Chisel Plow</i>	<i>16</i>
ASSEMBLY	17
<i>Rods assembly</i>	<i>17</i>
<i>Rods assembly - ASTH 3x3 rods</i>	<i>18</i>
<i>Rods assembly - ASTH 5x3 rods</i>	<i>18</i>
<i>Rods assembly - ASTH 5x5 rods</i>	<i>19</i>
<i>Rods assembly - ASTH 7x5 rods</i>	<i>19</i>
<i>Rods assembly - ASTH 7x7 rods</i>	<i>20</i>
<i>Rods assembly - ASTH 9x5 rods</i>	<i>20</i>
<i>Rods assembly - ASTH 9x7 rods</i>	<i>21</i>
<i>Rods assembly - ASTH 9x9 rods</i>	<i>21</i>
<i>Rods assembly - ASTH 11x9 rods</i>	<i>22</i>
<i>Rods assembly - ASTH 11x11 rods</i>	<i>22</i>
<i>Depth wheel assembly</i>	<i>23</i>
<i>Assembly the support bracket</i>	<i>24</i>
HITCH.....	25
<i>Hitch of the plow.....</i>	<i>25 - 26</i>
<i>Plow centering</i>	<i>27</i>
<i>Plow levelling</i>	<i>28</i>
ADJUSTMENTS	29
<i>Working depth adjustment</i>	<i>29</i>
<i>Adjustment of cleaner</i>	<i>29</i>
<i>Spacing adjustment between rods</i>	<i>30</i>
OPERATIONS.....	31
<i>Fuse pin</i>	<i>31</i>
<i>General recommendations</i>	<i>32</i>
<i>Subsoiling</i>	<i>33</i>
MAINTENANCE	34
<i>Lubrifcation</i>	<i>34</i>

▪ **Index**

<i>Table of greases and equivalents.....</i>	<i>34</i>
<i>Lubrication every 100 hours of work.....</i>	<i>35</i>
<i>Reversing or changing the nozzles.....</i>	<i>35</i>
<i>Cares.....</i>	<i>36</i>
<i>General cleaning.....</i>	<i>36 - 37</i>
<i>Conservation of plow.....</i>	<i>37 - 38</i>
IDENTIFICATION.....	39
<i>Identification plate</i>	<i>39</i>
<i>Product identification</i>	<i>40</i>
NOTES.....	41
CERTIFICATE.....	42
<i>Certificate de garantia.....</i>	<i>42 - 48</i>

▪ **Baldan Warranty**

BALDAN IMPLEMENTOS AGRÍCOLAS S/A ensures the dealer normal performance of the implement for a period of six (6) months as of the delivery date on the retail invoice to the first final consumer.

During this period, **BALDAN** undertakes to repair defects in material and/or of manufacture of its liability, including labor, freight and other expenses of the dealer's liability.

In the warranty period, request and replacement of eventual defective parts shall be made to the dealer of the area, who will submit the faulty piece for **BALDAN** analysis.

When this procedure is not possible and the resolving capacity of the dealer is exhausted, the dealer will request the support of **BALDAN** Technical Assistance through a specific form distributed to dealers.

After analyzing the replaced items by **BALDAN** Technical Assistance, and concluding that it is not a warranty, then the dealer will be responsible for the costs related to the replacement; as well as material expenses, travel including accommodation and meals, accessories, lubricant used and other expenses arising from the call out to Technical Assistance, and **BALDAN** company is authorized to carry the respective invoice in the name of the resale.

Any repair carried out in the product within the dealer warranty deadline will only be authorized by **BALDAN** upon previous budget presentation describing parts and workforce to be executed.

The product is excluded from this term if it is repaired or modified by representatives not belonging to the **BALDAN** dealer network, as well as the application of non-genuine parts or components to the user's product.

This warranty is void where it is found that the defect or damage is caused by improper use of the product, failure to follow instructions or inexperience of the operator.

It is agreed that this warranty does not cover tires, polyethylene tanks, cardan shafts, hydraulic components, etc., which are equipment guaranteed by their manufacturers.

Manufacturing and/or material defects, object of this warranty term, will not constitute, under any circumstances, grounds for termination of a purchase agreement, or for indemnification of any nature.

BALDAN reserves the right to change and/or perfect the technical characteristics of its products, without previous notice, and without obligation to proceed in the same way with the products previously manufactured.

▪ General Information

• To the owner

BALDAN IMPLEMENTOS AGRÍCOLAS S/A is not responsible for any damaged caused by accident due to usage, transportation, or in the improper or incorrect transportation of its implement, whether by negligence and/or inexperience of any person.

Only people with complete knowledge of the tractor and the implement should carry their transportation and operation.

BALDAN is not responsible for any damaged caused in unpredictable or unrelated situations to the normal use of the implement.

The incorrect handling of this equipment may result in severe or fatal accidents. Before starting the equipment, carefully read the instructions contained in this manual. Make sure that the person responsible for the operation is instructed as the correct and safe handling. Also make sure that the operator has read and understood the instructions manual of the product.

ATTENTION

NR-31 - SAFETY AND HEALTH AT WORK IN AGRICULTURE, LIVESTOCK FORESTRY, FOREST EXPLORATION AND AQUACULTURE.

The purpose of this Regulatory Standard is to establish the precepts to be observed in the organization and in the work environment, in a manner compatible with the planning and development of agriculture, livestock, forestry and aquaculture activities with the safety and health and environment work environment.

MR. OWNER OR OPERATOR OF THE EQUIPMENT.
Read and carefully comply with provisions of NR-31.

For more information, refer to the site and read in full NR-31.
<http://portal.mte.gov.br/legislacao/normas-regulamentadoras-1.htm>

▪ Safety Rules

- To the operator



THIS SYMBOL INDICATES IMPORTANT SAFETY WARNING. IN THIS MANUAL, WHENEVER YOU FIND IT, READ THE FOLLOWING MESSAGE CAREFULLY AND PAY ATTENTION TO THE POSSIBILITY OF PERSONAL ACCIDENTS.



ATTENTION



Carefully read the instructions manual to learn about the recommended safety practices.



ATTENTION



Only start to operate the tractor when you are properly seated and with the seat belt locked.



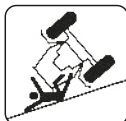
ATTENTION



Do not transport people or equipment on the tractor.



ATTENTION



There are risks of severe injuries due to tipping when working in sloped terrains. Do not over speed.



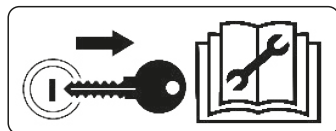
ATTENTION



Do not work with the tractor if the front has insufficient ballast to the rear equipment. Should there be a trend to lift, add weights or ballasts to the front or the front wheels.



ATTENTION



Remove the ignition key before performing any maintenance on the ASTH. Protect yourself from possible injury or death caused by an unforeseen ASTH start up. If the ASTH is not properly engaged, do not start the tractor.

▪ Safety Rules

! ATTENTION FOLLOW ALL RECOMMENDATIONS, WARNINGS AND SAFE PRACTICES RECOMMENDED IN THIS MANUAL, UNDERSTAND THE IMPORTANCE OF YOUR SAFETY. ACCIDENTS MAY LEAD TO DISABILITY OR INCLUDING DEATH. REMEMBER, ACCIDENTS CAN BE AVOIDED!

! ATTENTION



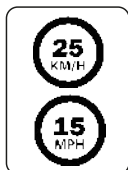
Do not make adjustments with the ASTH in operation. When doing any service on the ASTH, turn off the tractor first. Use appropriate tools.

! ATTENTION



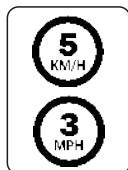
Before commencing work or transportation to ASTH, check for any nearby persons or obstruction.

! ATTENTION



When transporting the ASTH, do not exceed the speed of 25 km/h or 15 MPH, avoiding the risk of damage and accidents.

! ATTENTION



When working with ASTH, do not exceed the speed of 5 Km/h or 3 MPH, avoiding the risk of damage and accidents.

! ATTENTION



Always maintain places of access and work free of residues such as oil or grease to prevent accidents.

! ATTENTION



Before performing any maintenance in your equipment, make sure it is properly stopped. Avoid being run over.

! ATTENTION



Disposing of waste improperly affects the environment and the environment, as it will pollute rivers, canals or the soil. Inform yourself about the proper way of recycling or disposing residues. **PROTECT THE ENVIRONMENT!**

▪ **Safety Rules**

• PPE Equipment



ATTENTION

DO NOT WORK WITH THE ASTH WITHOUT WEARING PPE (SAFETY EQUIPMENT). IGNORING THIS WARNING MAY CAUSE DAMAGES TO HEALTH, SEVERE ACCIDENTS OR DEATH.

When performing certain procedures with the **ASTH**, wear the following Safety Equipment (PPE):



! IMPORTANT

Safety practice must be performed in all stages of working with the **ASTH**, thus avoiding accidents such as impact of objects, fall, noise, cuts and ergonomics, in other words, the person responsible for operating the **ASTH** is subject to internal and external bodily damage.





















OBSERVATION












All PPEs (Safety Equipment) should have certificate of authenticity.



▪ Warnings

-  When operating ASTH, do not allow people to stand too close to or on top of it.
-  When carrying out any assembly and disassembly service on the rods, wear protective gloves for your hands.
-  Do not wear clothes that are too loose, as they may become entangled in the ASTH.
-  When operating the tractor engine, be properly seated in the operator's seat and be aware of the full knowledge of the correct and safe handling of both the tractor and the ASTH. Always put the gear shift in neutral position, unplug the power take-off gear switch and place the hydraulic controls in neutral position.
-  Do not start the motor in a closed environment or with no proper ventilation since the exhaust gases are harmful to health.
-  When maneuvering the tractor into the ASTH hitch, make sure you have the necessary space and that no one is too close, always maneuver at idle and be prepared to brake in an emergency.
-  Do not make adjustments while ASTH is running.
-  When working on sloping terrain, proceed with care, always seeking to maintain the necessary stability. In case of unbalance start, reduce the acceleration, turn the wheels to the slope side of the terrain and never lift the plow.
-  Always drive the tractor at speeds compatible with safety, especially when working on rough terrain or on slopes, keep the tractor always engaged.
-  When driving the tractor in highways, keep the brake pedals interconnected.
-  Do not work with the tractor with light rear. If the rear has a tendency to lift, add more weights on the rear wheels.
-  When leaving the tractor, put the gear lever in neutral position and apply the parking brake. Never leave the ASTH on the tractor in the raised position of the hydraulic system.
-  Any and all maintenance on the ASTH must be done with the same stop and with the tractor off.
-  Periodically check all ASTH components before using it.
-  Depending on the equipment used and the working conditions in the field or in maintenance areas, precautions are necessary. Baldan has no direct control over precautions, so it is the owner's responsibility to put safety procedures in place while working with ASTH.
-  Check minimum tractor horsepower recommended for each ASTH model. Only use tractor with compatible power and ballast.
-  Do not travel on highways, especially at night. Use warning signs throughout the route.
-  If you need to travel with ASTH on highways, consult the traffic authorities.

▪ Warnings

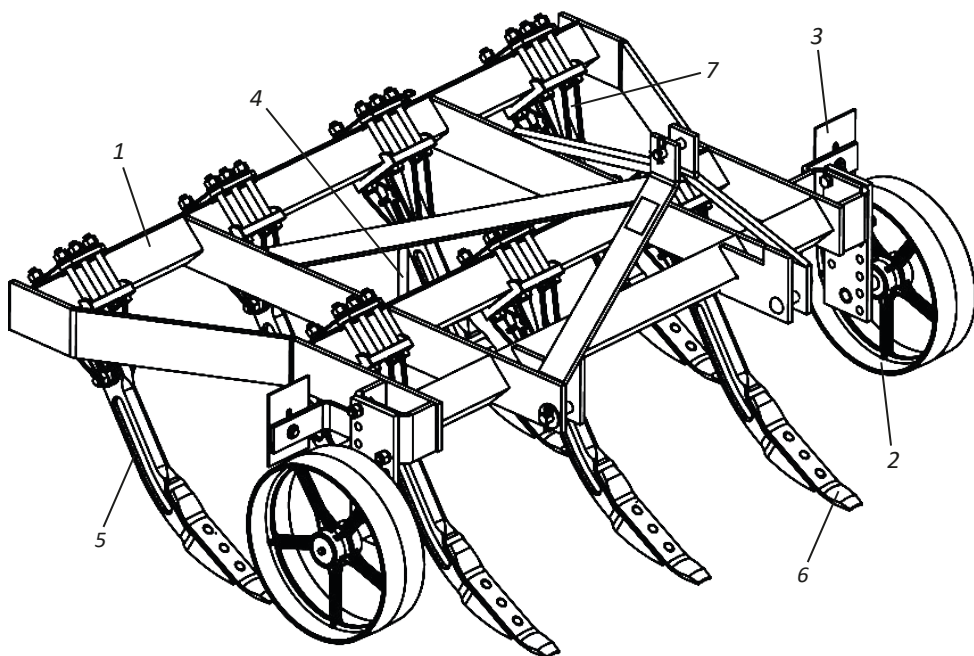
-  Do not allow the use of ASTH by people who have not been trained, that is, who do not know how to operate it correctly.
-  Do not transport or work with ASTH near obstacles, rivers or streams.
-  The transport of people in self-propelled machines and implements is prohibited.
-  Changes to ASTH's original features are not allowed, as they may alter safety, function and affect service life.
-  Carefully read all safety information contained in this manual and the ASTH.
-  Read or explain all procedures in this manual to the operator who cannot read.
-  Maintenance and especially inspection in ASTH risk zones must only be carried out by a trained or qualified worker, observing all safety guidelines. Before starting maintenance, disconnect all drive systems from ASTH.
-  Always check that the ASTH is in perfect working order. In case of any irregularity that may interfere with the functioning of the ASTH, provide the proper maintenance before any work or transport.
-  When transporting the ASTH, travel at speeds compatible with the terrain and never exceed 25 km/h, as this reduces maintenance and consequently increases the life of the ASTH.
-  Alcoholic beverage or some medications may cause loss of reflexes and change the operator's physical conditions. Therefore, never operate this ASTH under the influence of these substances.
-  Read or explain all the procedures of this manual to the operator who cannot read.

In case of doubts, refer to Post-Sales.
Telephone: 0800-152577 / E-mail: posvenda@baldan.com.br

▪ Components

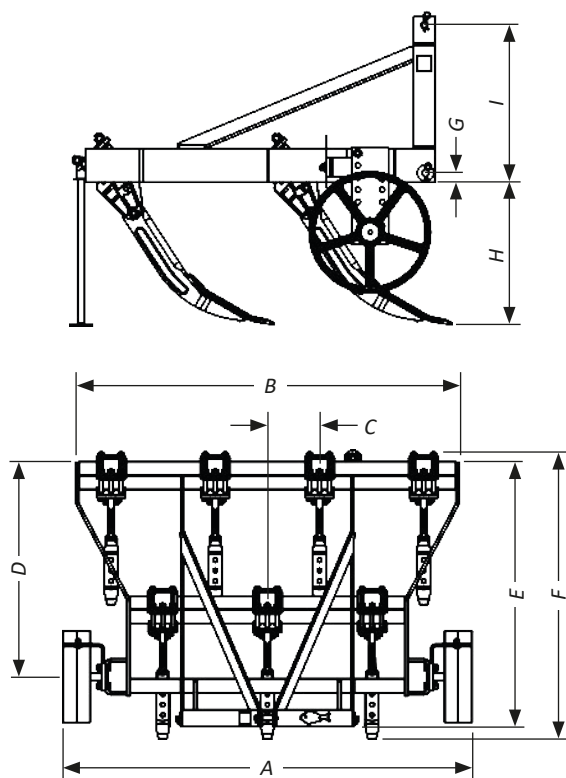
• ASTH - Hydraulic Tubular Chisel Plow

1. Frame
2. Depth wheel
3. Wheel cleaner
4. Support bracket
5. Rod
6. Reversible nozzle
7. Rod fixing bracket



▪ Dimensions

• ASTH - Hydraulic Tubular Chisel Plow



Model	Nr of Rods	Dimensions (mm)								
		A	B	C	D	E	F	G	H	I
ASTH 3/3	3	881	835	310	1100	1440	1560	40	570	680
ASTH 5/3	3	881	1640	710	1100	1440	1560	40	570	680
ASTH 5/5	5	881	1640	350	1100	1440	1560	40	570	680
ASTH 7/5	5	1855	1790	390	1100	1440	1560	40	570	680
ASTH 7/7	7	1855	1790	260	1100	1440	1560	40	570	680
ASTH 9/5	5	2410	2350	530	1100	1440	1560	40	570	680
ASTH 9/7	7	2410	2350	350	1100	1440	1560	40	570	680
ASTH 9/9	9	2410	2350	265	1100	1440	1560	40	570	680
ASTH 11/9	9	2860	2850	325	1100	1440	1560	40	570	680
ASTH 11/11	11	2860	2850	260	1100	1440	1560	40	570	680

▪ Specifications

• ASTH - Hydraulic Tubular Chisel Plow

Model	Nr of Rods	Spacing between rods (mm)	Useful width (mm)	Working width (mm)	Approximate weight (Kg)	Tractor power (HP)	
						Surface	Deep
ASTH 3/3	3	310	740	620	330	40 to 45	55 to 65
ASTH 5/3	3	620	1320	1240	358	40 to 45	55 to 65
ASTH 5/5	5	310	1320	1240	425	55 to 60	70 to 80
ASTH 7/5	5	390	1520	1240	479	55 to 66	70 to 80
ASTH 7/7	7	260	1860	1560	545	70 to 80	90 to 105
ASTH 9/5	5	520	2480	2080	513	55 to 60	70 to 80
ASTH 9/7	7	345	2100	1860	579	70 to 80	90 to 105
ASTH 9/9	9	260	2480	2080	645	90 to 105	115 to 130
ASTH 11/9	9	325	3040	2480	680	90 to 105	115 to 130
ASTH 11/11	11	260	3000	2600	745	110 to 120	140 to 150

Working depth (mm) 400

Baldan reserves the right to change and/or perfect the technical characteristics of its products, without previous notice, and without obligation to proceed in the same way with the products previously manufactured.

Technical specifications are approximate and informed under normal work conditions.

INTENDED USE OF THE ASTH

- The **ASTH** was developed to eliminate the compacted layers of the soil, caused by the transport of heavy machinery on the ground.
- The **ASTH** must be conducted and operated only by a properly instructed operator.

UNAUTHORIZED USE OF THE ASTH

- To avoid damage, serious accident or death, do not transport people over any part of the **ASTH**.
- Using the **ASTH** to hitch, tow or push other implements or accessories is not allowed.
- The **ASTH** must not be used by an inexperienced operator who is not familiar with all driving, command and operation techniques.

▪ Assembly

The **ASTH** leaves the factory disassembled. To assembly it, follow the instructions below:

⚠ The **ASTH** must be assembled by the resale, through trained and qualified personnel for this work.

⚠ Before assembling the **ASTH**, look for an ideal location where you can easily identify its parts and assembly.

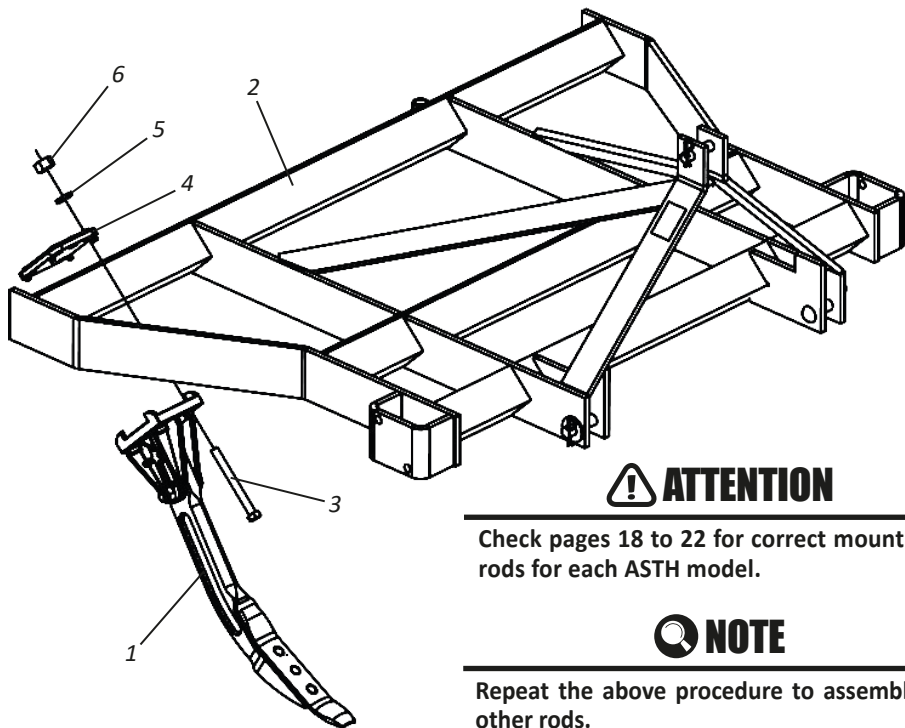
⚠ To assemble **ASTH**, place the chassis on 2 (two) trestles.

⚠ Use PPE (Safety Equipment).

• Rods assembly

To assemble the rod, proceed as follows:

01 - Attach the rod (1) to the frame (2) fixing the screws (3), clamp (4), lock washers (5) and nuts (6).



⚠ ATTENTION

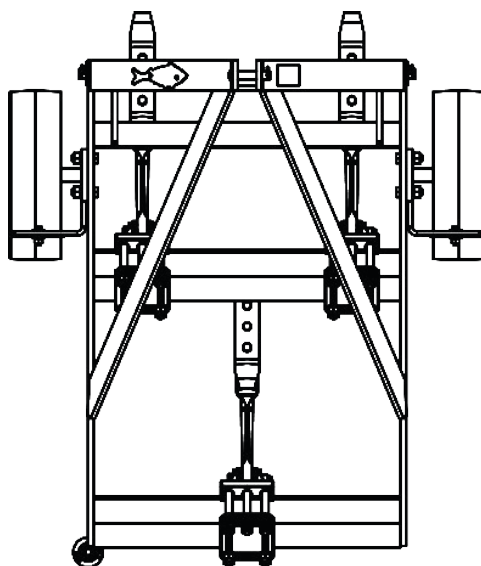
Check pages 18 to 22 for correct mounting of rods for each **ASTH** model.

🔍 NOTE

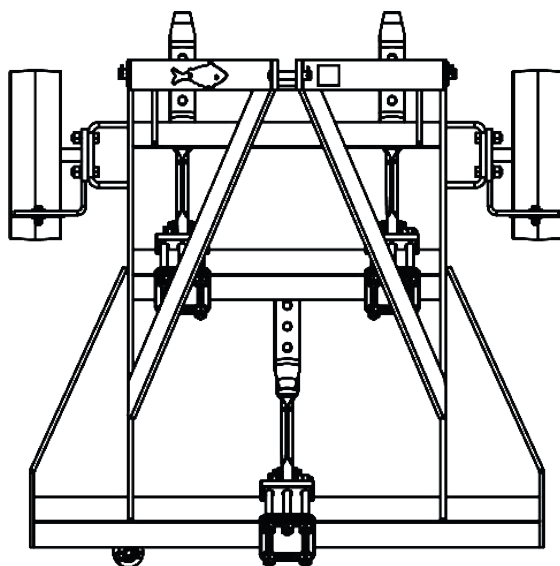
Repeat the above procedure to assemble the other rods.

▪ Assembly

- Rods assembly - ASTH 3x3 rods

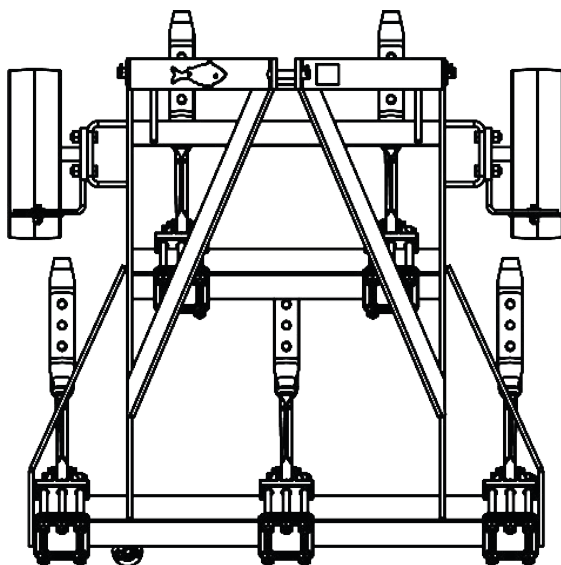


- Rods assembly - ASTH 5x3 rods

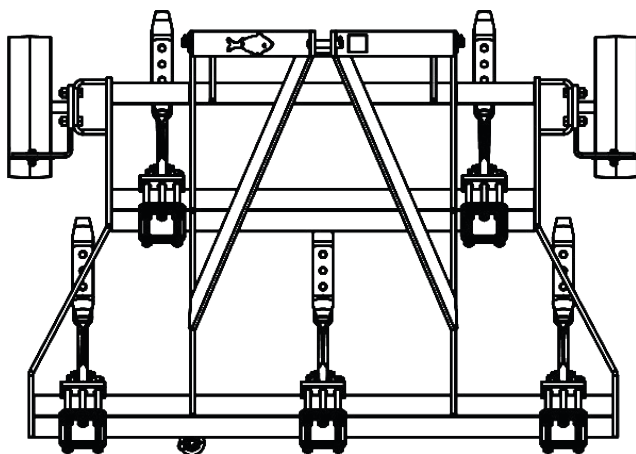


▪ Assembly

- Rods assembly - ASTH 5x5 rods

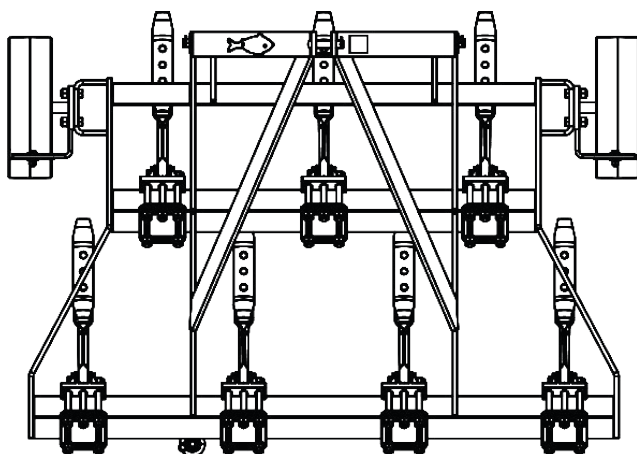


- Rods assembly - ASTH 7x5 rods

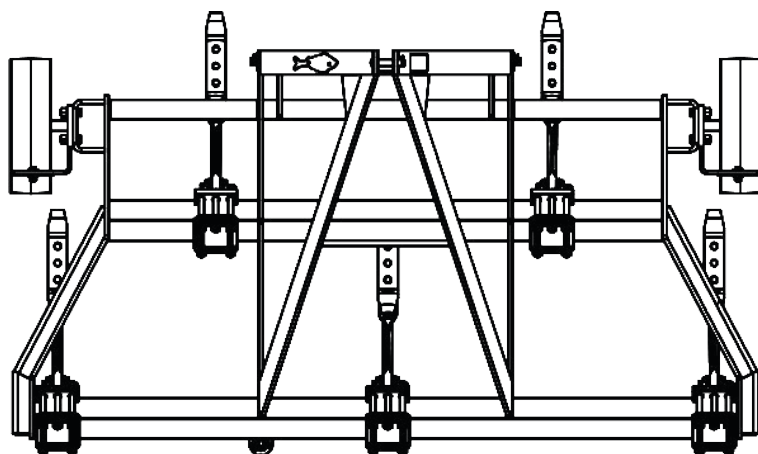


▪ Assembly

• Rods assembly - ASTH 7x7 rods

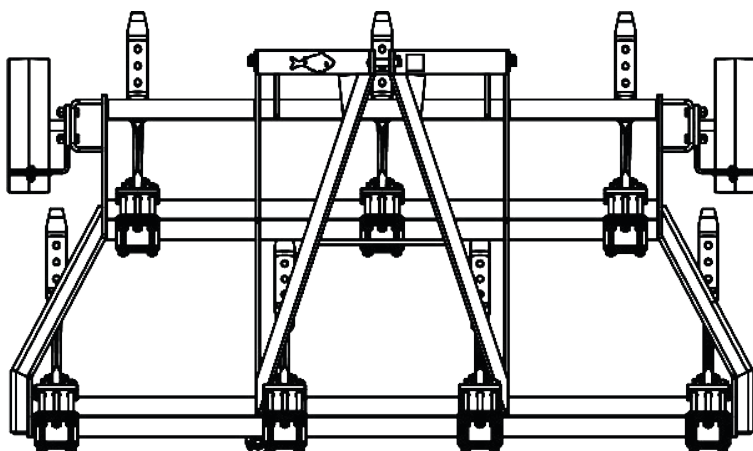


• Rods assembly - ASTH 9x5 rods

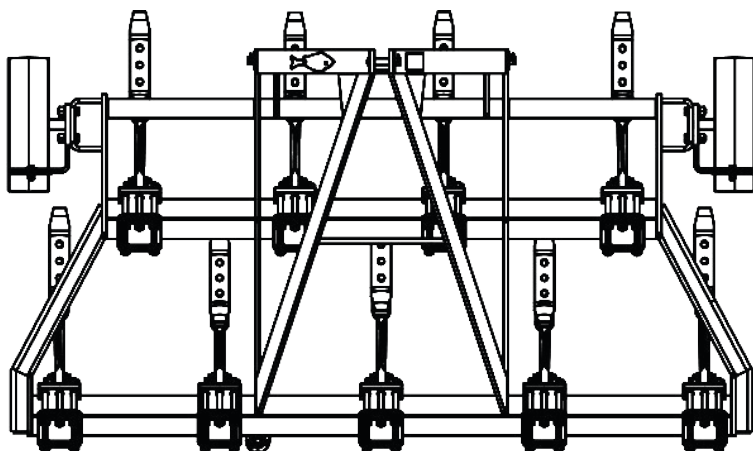


▪ Assembly

- Rods assembly - ASTH 9x7 rods

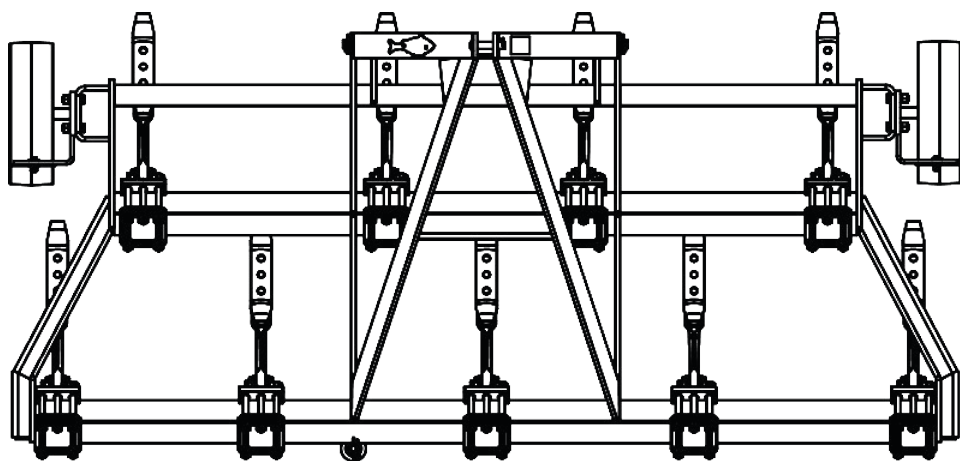


- Rods assembly - ASTH 9x9 rods

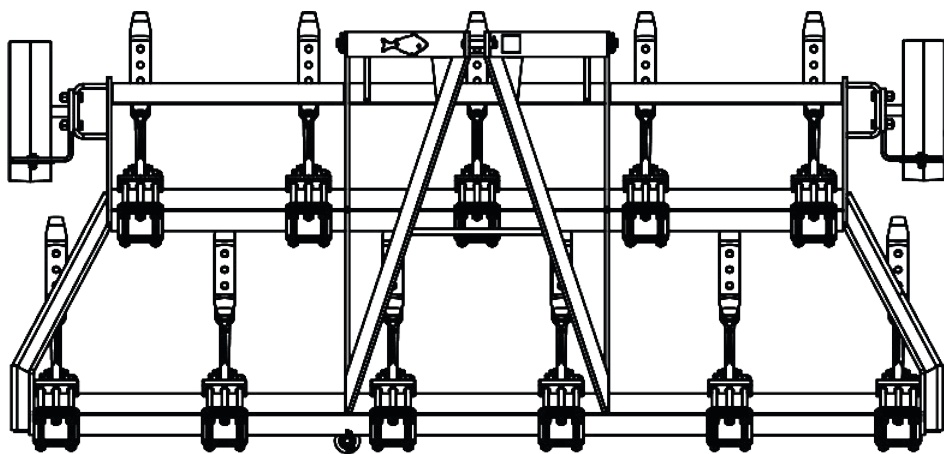


▪ Assembly

• Rods assembly - ASTH 11x9 rods



• Rods assembly - ASTH 11x11 rods

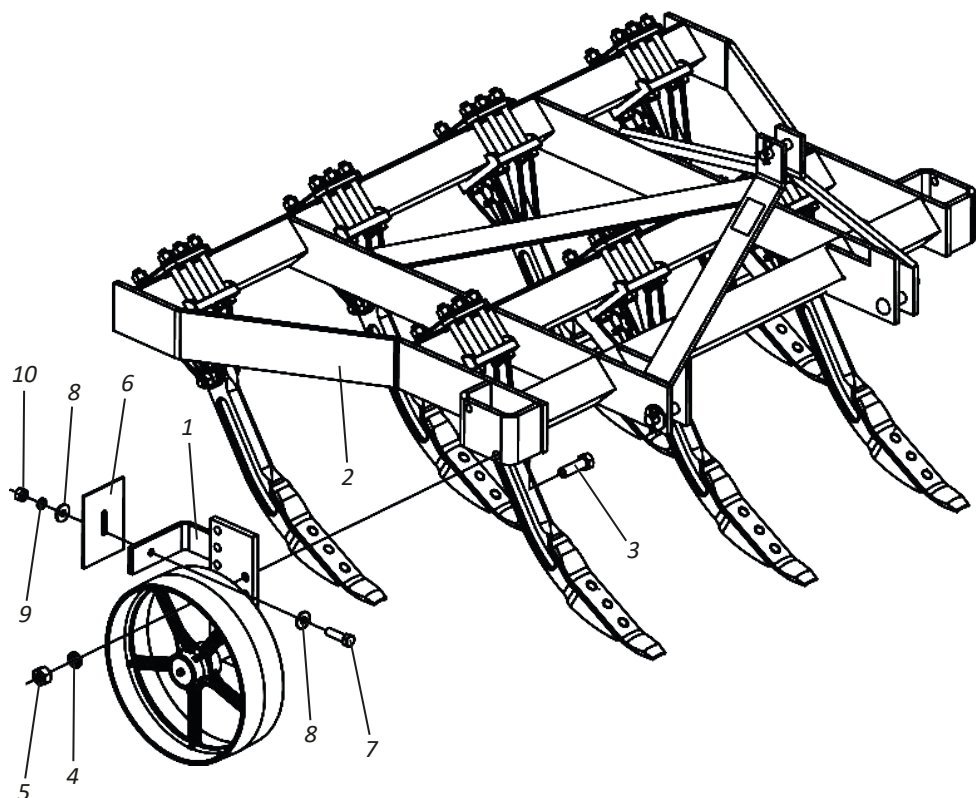


▪ Assembly

• Depth wheel assembly

To assembly the depth wheel, proceed as follows:

- 01** - Attach the depth wheel (1) to the frame (2) fixing it with screws (3), lock washers (4) and nuts (5).
- 02** - Then, fix the wiper (6) on the depth wheel (1) through the screws (7), flat washers (8), lock washers (9) and nuts (10).



NOTE

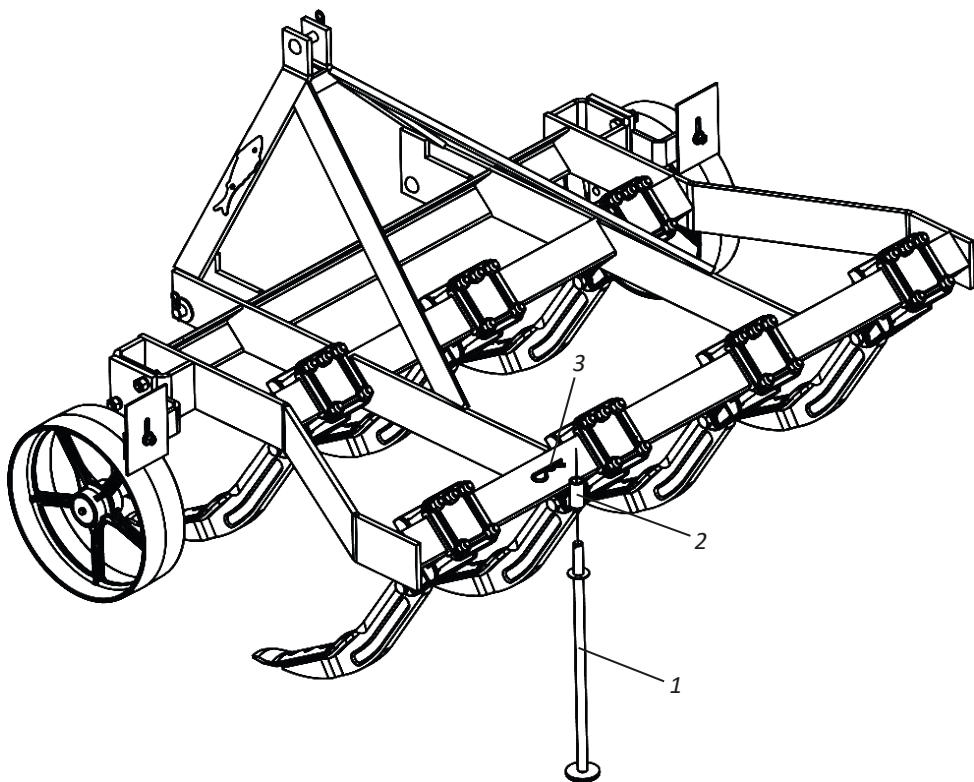
Repeat the above procedure to mount the other depth wheel.

▪ Assembly

• Assembly the support bracket

To assemble the support bracket, proceed as follows:

01 - Attach the support bracket (1) to the frame (2) fixing it through the latch (3).



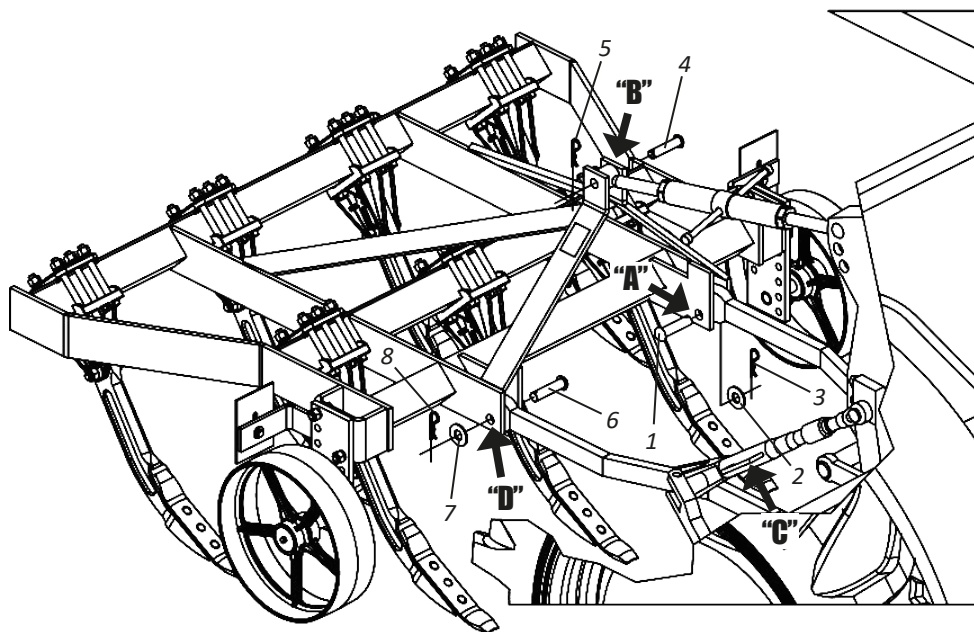
▪ Hitch

• Hitch of the plow - Part I

Before attaching the **ASTH** to the tractor's drawbar, check the general conditions of the tractor, especially regarding the proper functioning of the hydraulic system and if the tractor is equipped with a set of weights or ballasts in the front or on the front wheels so as not to lift the tractor .

Following the instructions above, proceed as follows:

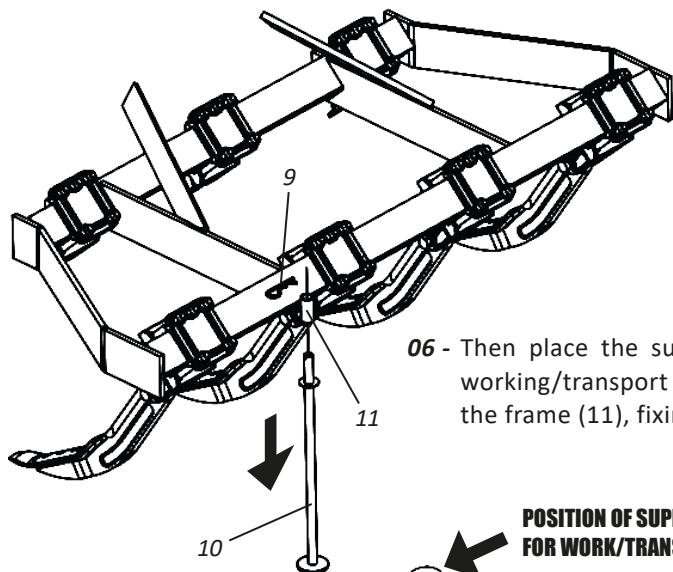
- 01** - Slowly approach the tractor to the **ASTH** in reverse, paying attention to the application of the brakes. Use the hydraulic position control lever when approaching the **ASTH**, leaving the lower left arm level with the **ASTH** hitch.
- 02** - Then, hitch the lower left arm of the tractor through the pin (1), flat washer (2) and lock (3) on the **ASTH** support "A".
- 03** - Then, hitch the 3rd point of the tractor on the **ASTH** support "B", fixing it through the pin (4) and lock (5).
- 04** - Then, with the help of the regulating lever "C", hitch the lower right arm of the tractor to the support "D" of the **ASTH**, fixing through the pin (6), flat washer (7) and lock (8).



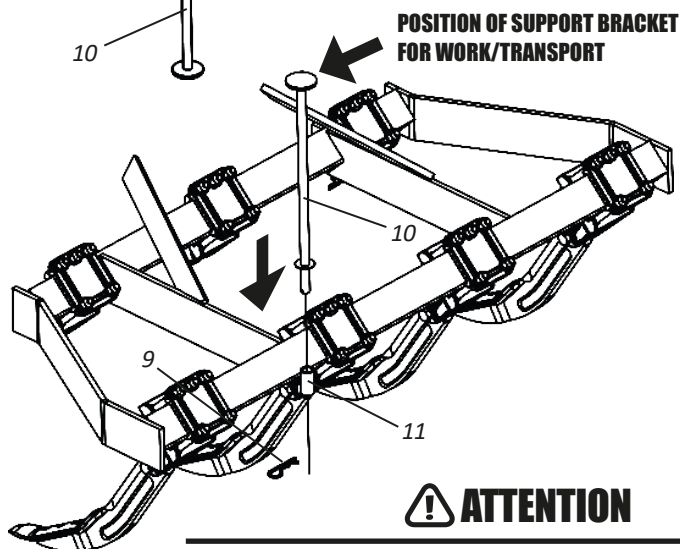
▪ Hitch

• Hitch of the plow - Part II

05 - After coupling the **ASTH** to the tractor, release the lock (9), remove the support bracket (10) from the frame (11).



06 - Then place the support bracket (10) in the working/transport position and attach it to the frame (11), fixing it through the lock (9).



ATTENTION

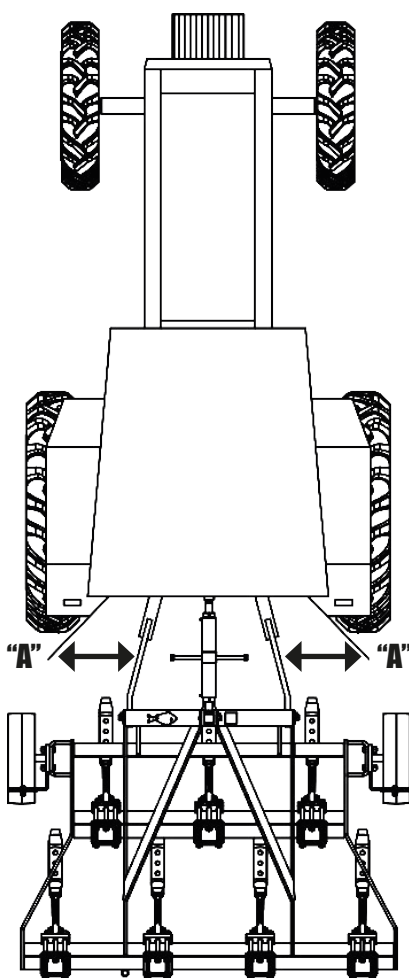
Do not work or transport the ASTH if the support bracket (10) is not fixed in the work/transport position. Ignoring this warning can cause damage or serious accidents.

▪ Hitch

• Plow centering

To center the **ASTH** relative to the longitudinal axis of the tractor, proceed as follows:

- 01 - Align the upper hitch of the planer with the 3rd point of the tractor, checking that the distances “A” of the lower hydraulic arms are equal in relation to the tractor tires. The lower arms should be level with each other.

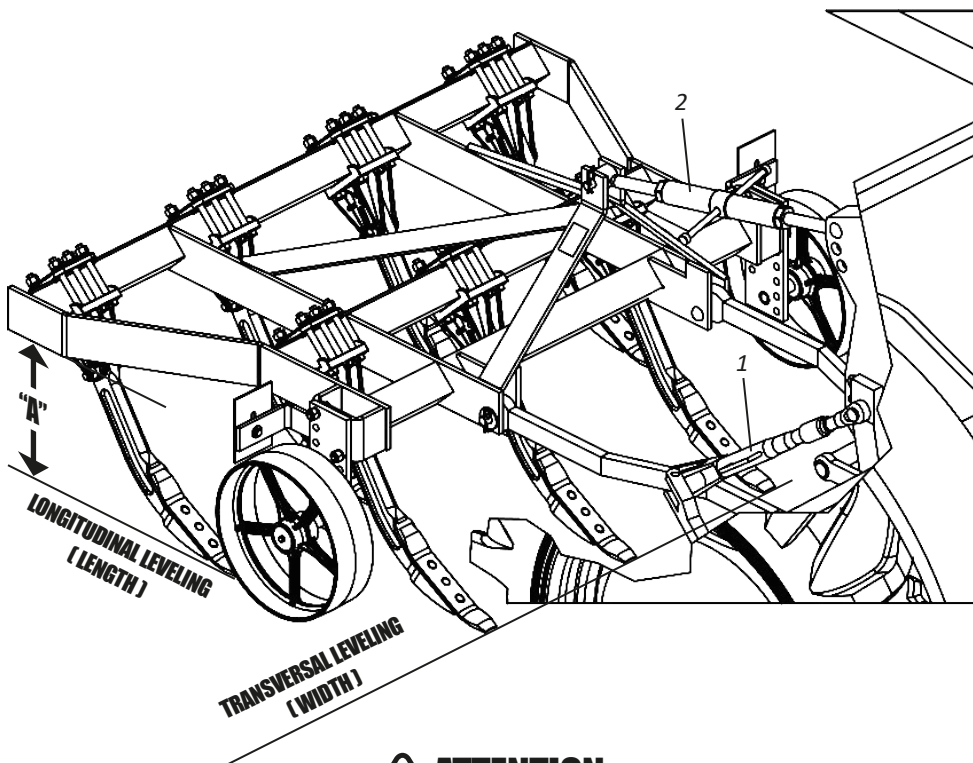


▪ Hitch

• Plow leveling

To level the **ASTH**, proceed as follows:

- 01** - First the tractor must be on level ground.
- 02** - Then level the **ASTH** crosswise (width) through the leveling crank (1) of the lower right arm of the hydraulic hitch. Note the “A” measurements, which must be the same.
- 03** - Then do the longitudinal (length) leveling. This leveling is done through the coupling of the 3rd point (2). The **ASTH** rods must be parallel to the ground, that is, they must all touch the same plane.



ATTENTION

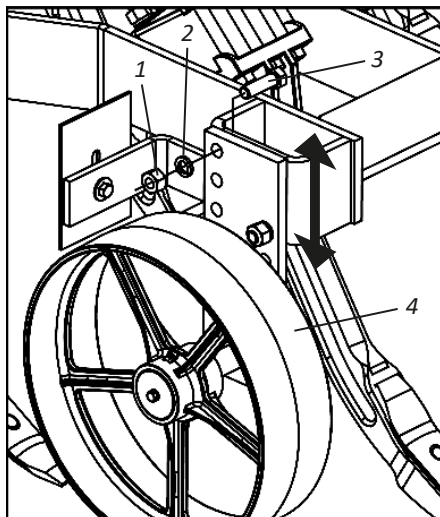
When lifting the **ASTH** to make maneuvers, check the tractor's instruction manual to make sure the necessary weight does not affect the stability and drivability of the tractor and plow. If the weight distribution is not correct, serious accidents can occur, even causing death. Baldan is not responsible for incorrect use of **ASTH**.

▪ **Adjustments**

• **Working depth adjustment**

To adjust the **ASTH** working depth, proceed as follows:

- 01** - Loosen nuts (1), lock washers (2) and remove screws (3).
- 02** - Then adjust the depth wheel (4) to the desired position.
- 03** - Then, replace the screws (3) fixing it through the lock washers (2) and nuts (3).



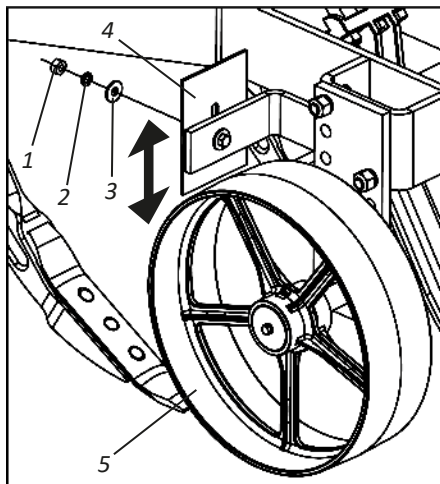
NOTE

Repeat the above procedure for the adjustment of the other depth wheel.

• **Adjustment of cleaner**

To adjust the depth wheel cleaner, proceed as follows:

- 01** - Loosen the nut (1), lock washer (2) and flat washer (3)
- 02** - Then move the cleaner (4) until there is a gap of 1 to 2 cm from the depth wheel (5).
- 03** - Then retighten the nut (1), lock washer (2) and flat washer (3).



NOTE

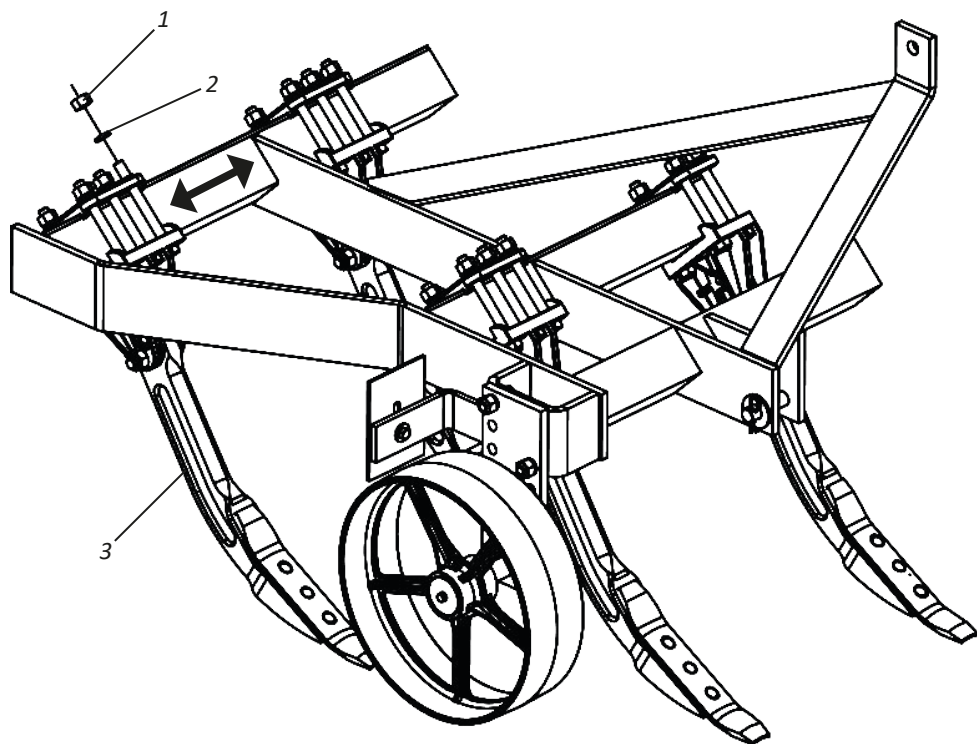
Repeat the above procedure for the adjustment of the other cleaner.

▪ Adjustments

• Spacing adjustment between rods

To adjust the spacing between rods, proceed as follows:

- 01** - Loosen nuts (1) and lock washers (2).
- 02** - Then move the rod (3) to the desired position.
- 03** - Then retighten the nuts (1) and lock washers (2).



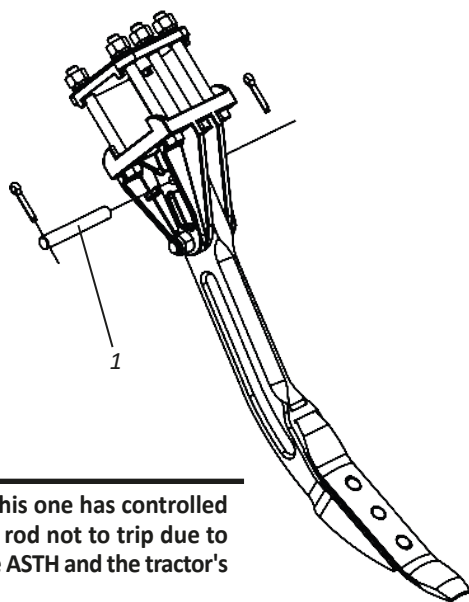
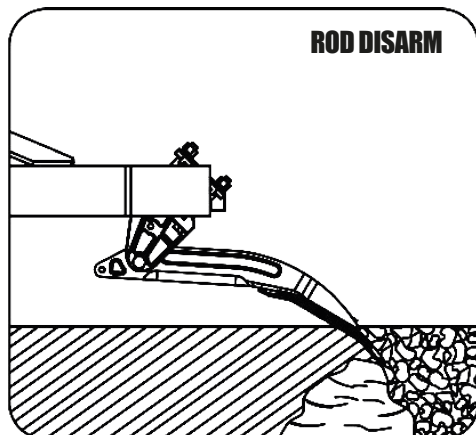
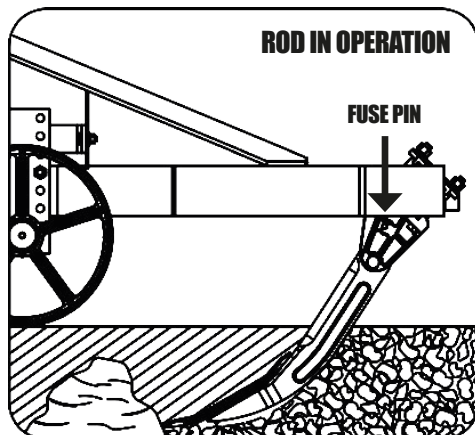
NOTE

The adjustment of spacing between rods must be done when changing the number of rods (example: ASTH from 7 to 5 rods) or depending on the type of soil to be worked.

■ Operations

• Fuse pin

For greater safety during work, the **ASTH** has a fuse pin (1) on its rods that breaks when impacts occur on obstacles (example: rocks, roots, etc.), thus preventing damage to the **ASTH** and the tractor's hydraulic system.



ATTENTION

Only use original factory fuse pin (1), as only this one has controlled hardness. Ignoring this warning will cause the rod not to trip due to the fuse pin not breaking, causing damage to the **ASTH** and the tractor's hydraulic system.

▪ Operations

• Operating recommendations

- 01** - Adjust the tractor according to the contents of the instruction manual, always using the front and rear weights to stabilize the plow.
- 02** - Coupling the tractor always at low speed and very carefully.
- 03** - When using **ASTH** it is important to check the hitch and cross-leveling system to make sure the rods will have the same penetration depth into the ground.
- 04** - After hitching and leveling, the next adjustments will be made directly in the field of work, analyzing the terrain in its texture, humidity and the types of operations to be done with the **ASTH**.
- 05** - On the tractor, choose a gear that allows you to maintain a certain power reserve, insuring yourself against unforeseen efforts.
- 06** - Respect the working and transport speeds specified on page 10. We do not advise exceeding speeds to maintain service efficiency and avoid possible damage to the **ASTH**.
- 07** - After the first day of work with **ASTH**, retighten all screws and nuts, check the condition of the pins and locks. Then, perform a general retightening of all screws and nuts every 10 hours of work.
- 08** - When performing any maintenance on the **ASTH**, lower it to the ground and stop the engine.
- 09** - The **ASTH** has several settings, however, only local conditions can determine the best setting.

If in doubt, never operate or handle the ASTH, see Post Sale.
Telephone: 0800-152577 / E-mail: posvenda@baldan.com.br

▪ Operations

• Subsoiling

The main function of **ASTH** is to prevent the compacted layers from causing soil erosion and thus increase the infiltration of water into the soil, facilitating the growth of roots that need moisture to develop.

Subsoiling should be done in relatively dry terrain to break up the compacted layer of soil, generally known as hard cover, plow foot or simply compacted layer.

Check the depth of the compacted layer of soil through a penetrometer or trench and proceed with the adjustment of the working depth of the rods.

According to the location of the compacted layer, the working depth of the rods is regulated, and should not subsoil to an unnecessary depth.

The rods are equipped with a fusible pin that breaks when impacting obstacles (example: rocks, roots, etc.), thus preventing damage to the **ASTH** and the tractor's hydraulic system (page 31).

When operating **ASTH**, choose a gear that allows the tractor to maintain a certain reserve of power, insuring itself against unforeseen stresses.


When performing manoeuvres, activate the hydraulic cylinder by fully lifting the **ASTH** to avoid great strain on it and overload mainly the traction components.

In hard-to-penetrate or compact terrain, the cutting depth of the rods can be minimal, making the operation unsatisfactory. In these cases we recommend the application of other more suitable Baldan products.

If in doubt, never operate or handle the **ASTH**, see Post Sale.
Telephone: 0800-152577 / E-mail: posvenda@baldan.com.br

▪ Maintenance

The **ASTH** has been developed to provide maximum performance over land conditions. Experience has shown that periodic maintenance of certain parts of the **ASTH** is the best way to help you avoid problems, so we suggest verification.

 **ATTENTION** Check nuts and bolts constantly, if necessary, retighten them. General plow retention maintenance should be done every 10 hours of work.


• Lubrification

Lubrication is indispensable for the good performance and durability of **ASTH** moving parts, contributing to the maintenance cost savings.

Before starting the operation, carefully lubricate all grease cups, always observing the lubrication intervals in the following pages. Make sure of the lubricant quality regarding its efficiency and purity, avoiding products contaminated by water, dust and other agents.

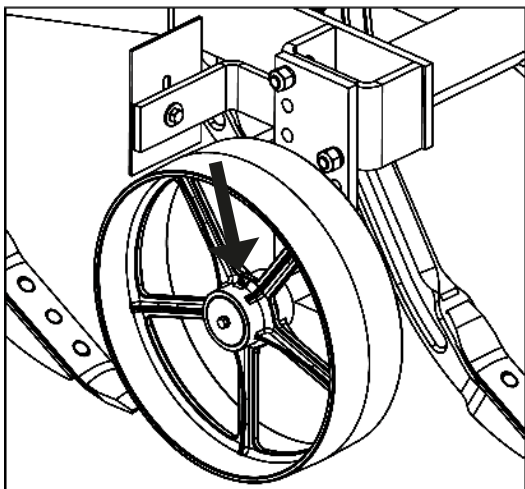
• Table of greases and equivalents

Manufacturer	Types of grease recommended
Petrobrás	Lubrax GMA-2
Atlantic	Litholine MP 2
Ipiranga	Ipiflex 2
Castrol	LM 2
Mobil	Grease MP
Texaco	Marfak 2
Shell	Alvania EP 2
Esso	Multi H
Bardahl	Maxlub APG-2EP
Valvoline	Palladium MP-2
Petronas	Tutela Jota MP 2 EP
	Tutela Alfa 2K
	Tutela KP 2K

 **ATTENTION** If there are equivalent manufacturers and/or brands that are not listed in the table, consult the manufacturer's technical manual.

▪ Maintenance

- Lubrication every 100 hours of work



ATTENTION

When lubricating ASTH, do not exceed the amount of new grease. Put an enough amount.

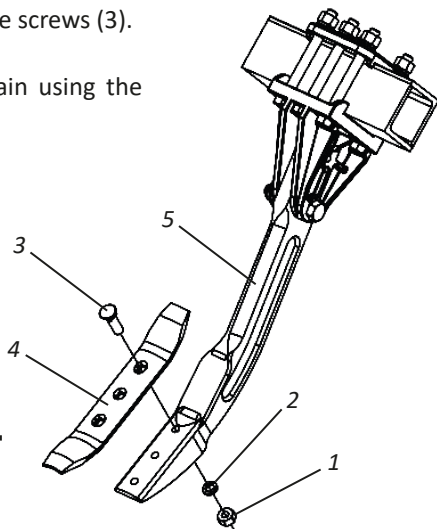
• Reversing or changing the nozzles

When verifying accentuated wear on the tips of the rods, making penetration difficult, reverse or change the tips, to do so, proceed as follows:

- 01** - Loosen nuts (1), lock washers (2) and remove screws (3).
- 02** - Then reverse or change the nozzle (4).
- 03** - Then, fix the nozzle (4) on the rod (5) again using the screws (3), lock washers (2) and nuts (1).

ATTENTION

Failure to reverse or change the nozzles (4) when wear is observed will impair the action of eliminating the compacted layers of the soil.



▪ Maintenance

• Cares

- 01** - Before each job, check the condition of all pins, screws, rods, support bracket and depth wheels. When necessary, retighten them.
- 02** - The tips of the rods are reversible. Always observe their wear and reverse whenever necessary so as not to lose the action of breaking the compacted layer of soil.
- 03** - Travel speed must be carefully controlled depending on terrain conditions.
- 04** - The **ASTH** is used in several applications, requiring knowledge and attention during handling.
- 05** - Only local conditions can determine the best method of operation of **ASTH**.
- 06** - When assembling or dismantling any part of the **ASTH**, employ appropriate methods and tools.
- 07** - Carefully observe the lubrication intervals at the various points of the **ASTH**. Respect the lubrication intervals.
- 08** - Always check if the parts have wears. If there is a need for replacement, always demand Baldan original parts.



IMPORTANT

Proper and periodic maintenance are necessary to ensure the long life of **ASTH**.

• General cleaning - Part I

- 01** - When storing the **ASTH**, make a general cleaning and wash it thoroughly with water only. Make sure the paint has not worn out, if it did, give a general coat, pass the protective oil and fully lubricate the **ASTH**. Do not use burned oil or other abrasive.
- 02** - Lubricate the **ASTH** fully. Check all moving parts of the **ASTH**, if they show wear or looseness, make the necessary adjustment or replacement of the parts, leaving the agricultural trailer ready for the next job.
- 03** - After all maintenance care, store the plow in a covered and dry place, properly supported.

Avoid: - Make sure the rods are in direct contact with the ground.

▪ Maintenance

• General cleaning - Part II

- 04** - Replace all decals, especially warning ones, that are damaged or missing. Make everyone aware of their importance and the dangers of accidents when instructions are not followed.
- 05** - After all maintenance care, store your **ASTH** on a flat surface, covered and dry, away from animals and children.
- 06** - We recommend washing the **ASTH** with water only at the start of work.



ATTENTION

Do not use chemical or abrasive products to wash the **ASTH**, this could damage the paint and the stickers on the **ASTH**.

• Conservation of plow - Part I

To prolong the life and appearance of the **ASTH** for longer, follow the instructions below:

- 01** - Wash and clean all **ASTH** components during and at the end of the work season.
- 02** - Use neutral products to clean the **ASTH**, following the safety and maintenance instructions provided by the manufacturer.
- 03** - Always carry out maintenance during the periods indicated in this manual.

• Conservation of plow - Part II

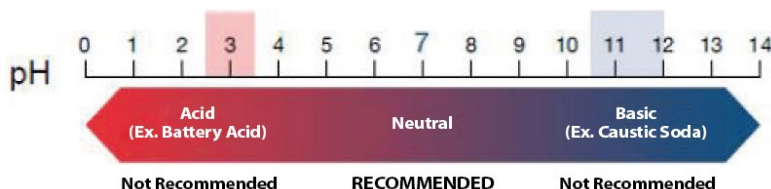
The practices and care below if adopted by the owner or operator make a difference to the conservation of the **ASTH**.

- 01** - Be careful when performing high-pressure washing; do not direct the water jet directly into the connectors and electrical components. Isolate all electrical components;
- 02** - Use only NEUTRAL detergent and water (pH equal to 7);
- 03** - Apply the product, following the manufacturer's instructions strictly, on the wet surface and in the correct sequence, respecting the time of application and washing;
- 04** - Stains and dirt not removed with the products should be removed with the aid of a sponge.
- 05** - Rinse the machine with clean water to remove any chemical residues.

■ Maintenance

• Conservation of plow - Part III

- 06 -** Do not use:
- Detergents with a basic active ingredient (pH less than 7) can damage/stain the painting of the plow.
 - **Detergents with acid active ingredient (pH less than 7), act as stripper/remover of zinc coating (the protection of parts against oxidation).**



- 07 -** Allow the machine to dry in the shade so that it does not accumulate water in its components. Very fast drying can cause stains on your paint.
- 08 -** After drying, lubricate all chains and greases according to the recommendations in the operator's manual.
- 09 -** Spray all the machine, especially the zinc parts, with protective oil, following the manufacturer's application guidelines. The protective also prevents dirt from adhering to the machine, facilitating subsequent washings.
- 10 -** Observe curing (absorption) time and application intervals as recommended by the manufacturer.

! ATTENTION | Do not use any other type of oil to protect the plow (used hydraulic oil, "burnt" oil, diesel oil, castor oil, kerosene, etc.).

! IMPORTANT | We recommend the following protective oils:

- Bardahl: Agro protective 200 or 300
- ITWChemical: Zoxol DW - Series 4000

🔍 OBSERVATION | Ignoring the conservation measures mentioned above may result in the loss of warranty for painted or zinc-coated components which may exhibit oxidation (rust).

▪ Identification

• Identification plate

To see the parts catalog or to request technical assistance from Baldan, always inform model (01), serial number (02) and date of manufacture (03), which is on your **ASTH** nameplate.



ATTENTION

The drawings in this Instruction Manual are merely illustrative.

CONTACT

In case of doubts, never operate or handle your equipment without referring to Post-Sales.

Telephone: 0800-152577

e-mail: posvenda@baldan.com.br

PUBLICATIONS

Code: 60550104795 | CPT: ASTH02122A



▪ Identification

• Product Identification

Please make the correct identification of the data below, to always have information about the service life of your equipment.

Owner: _____

Dealer: _____

Property: _____

City: _____

State: _____

Certificate of Warranty no.: _____

Implement: _____

Serial No: _____

Purchase Date: _____

Invoice: _____

■ Notes

This image shows a single page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, leaving small margins at the top and bottom. There are no vertical margin lines, and the page is completely blank except for the lines themselves.

BALDAN IMPLEMENTOS AGRÍCOLAS S/A ensures the dealer normal performance of the implement for a period of six (6) months as of the delivery date on the retail invoice to the first final consumer. During this period, **BALDAN** undertakes to repair defects in material and/or of manufacture of its liability, including labor, freight and other expenses of the dealer's liability.

In the warranty period, request and replacement of eventual defective parts shall be made to the dealer of the area, who will submit the faulty piece for **BALDAN** analysis. When this procedure is not possible and the resolving capacity of the dealer is exhausted, the dealer will request the support of **BALDAN Technical Assistance** through a specific form distributed to dealers. After analyzing the replaced items by Baldan Technical Assistance, and concluding that it is not a warranty, then the dealer will be responsible for the costs related to the replacement; as well as material expenses, travel including accommodation and meals, accessories, lubricant used and other expenses arising from the call out to Technical Assistance, and Baldan company is authorized to carry the respective invoice in the name of the resale. Any repair carried in the product within the dealer warranty deadline will only be authorized by **BALDAN** upon previous budget presentation describing parts and work to be performed.

The product is excluded from this term if it is repaired or modified by representatives not belonging to the **BALDAN** dealer network, as well as the application of non-genuine parts or components to the user's product. This warranty is void where it is found that the defect or damage is caused by improper use of the product, failure to follow instructions or inexperience of the operator.

It is agreed that this warranty does not cover tires, polyethylene tanks, cardan, hydraulic components, etc., which are equipment guaranteed by their manufacturers. Manufacturing and/or material defects, object of this warranty term, will not constitute, under any circumstances, grounds for termination of a purchase agreement, or for indemnification of any nature.

BALDAN reserves the right to change and/or perfect the technical characteristics of its products, without previous notice, and without obligation to proceed in the same way with the products previously manufactured.

▪ Inspection and Delivery Certificate

SERVICE BEFORE DELIVERY: This implement was carefully prepared by the sale organization, with all its parts inspected according to the manufacturing prescriptions.

DELIVERY SERVICE: The user was informed about the current warranty terms and instructed on the usage maintenance precautions.

I confirm that the user has been informed about the current warranty terms and instructed on the usage maintenance precautions.

Implement: _____ Serial Number: _____

Date: _____ Tax Number: _____

Dealer: _____

Telephone: _____ CEP: _____

City: _____ State: _____

Owner: _____

Telephone: _____

Address: _____ Number: _____

City: _____ State: _____

E-mail: _____

Sale date: _____

Signature / Dealer Stamp _____

1st copy - Owner

▪ Inspection and Delivery Certificate

SERVICE BEFORE DELIVERY: This implement was carefully prepared by the sale organization, with all its parts inspected according to the manufacturing prescriptions.

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Implement: _____ Serial Number: _____

Date: _____ Tax Number: _____

Dealer: _____

Telephone: _____ CEP: _____

City: _____ State: _____

Owner: _____

Telephone: _____

Address: _____ Number: _____

City: _____ State: _____

E-mail: _____

Sale date: _____

Signature / Dealer Stamp _____

2nd copy - Dealer

▪ Inspection and Delivery Certificate

SERVICE BEFORE DELIVERY: This implement was carefully prepared by the sale organization, with all its parts inspected according to the manufacturing prescriptions.

DELIVERY SERVICE: The user was informed about the current warranty terms and instructed on the usage maintenance precautions.

I confirm that the user has been informed about the current warranty terms and instructed on the usage maintenance precautions.

Implement: _____ Serial Number: _____

Date: _____ Tax Number: _____

Dealer: _____

Telephone: _____ CEP: _____

City: _____ State: _____

Owner: _____

Telephone: _____

Address: _____ Number: _____

City: _____ State: _____

E-mail: _____

Sale date: _____

Signature / Dealer Stamp _____

3rd copy - Manufacturer (Please send completed within 15 days).

1.74.05.0059-5

AC MATÃO
ECT/DR/SP

RESPONSE CARD

NO STAMPING IS REQUIRED

THE STAMP WILL BE PAID BY:



BALDAN IMPLEMENTOS AGRÍCOLAS S/A.

Av. Baldan, 1500 | Nova Matão | CEP: 15993-900 | Matão-SP | Brasil

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

www.baldan.com.br | email: sac@baldan.com.br

Export: Phone: +55 (16) 3221-6500 | Fax: +55 (16) 3382-4212 | 3382-2480

email: export@baldan.com.br



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