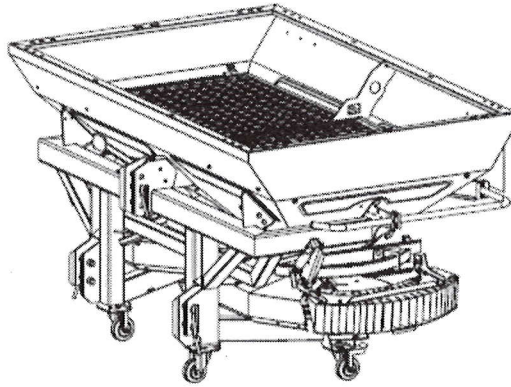
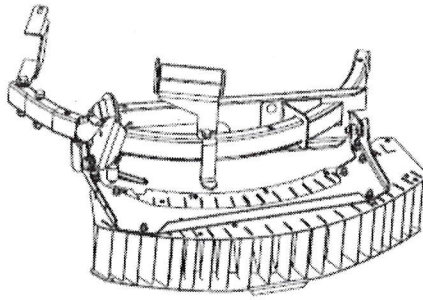




**CGA SERIES
LIMITER FOR SPREADER RIGHT AND LEFT**



➤ **USER MANUEL**

➤ **LIMITER ASSEMBLY**

DÖNDER TARIM MAKİNALARI SAN. TİC. LTD. ŞTİ.

BODRUM YOLU ÜZERİ YENİDOĞAN BELDESİ

SÖKE/AYDIN/TÜRKİYE

TEL:0 256 521 02 24

FAX:0 256 521 01 09

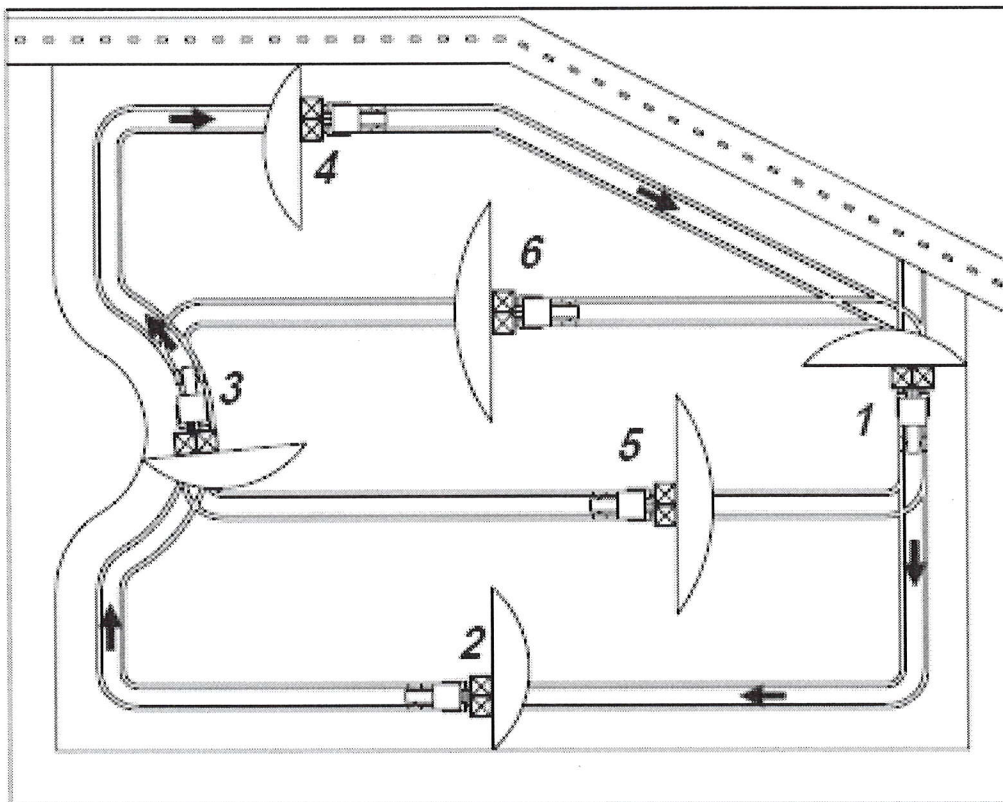
www.dondertarim.com.tr

info@dondertarim.com.tr

Fertilization on the Cropland Border

For the most efficient fertilization, first of all the surrounding of the cropland shall be fertilized and then the inner parts shall be fertilized. When fertilizing the cropland, the order of 1, 2, 3, 4, 5, 6 shall be followed as shown in the figure below.

When fertilizing the cropland surrounding, the limiter mounted on the machine enables the prevention of fertilizing out of the cropland. The limiter prevents the mineral fertilizer to harm the environment and enables the most efficient use of the fertilizer. The limiter can be mounted on the right or left side of the machine. It would be sufficient to use the limiter on just one side.



Adjusting the limiter

There is a table on the machine for the limiter adjustment. The adjustment can be made by selecting the distance between the center point of the machine and the cropland borderline through this table. For adjusting the limiter according to the limiter table, let's make a sample study by following the steps below.

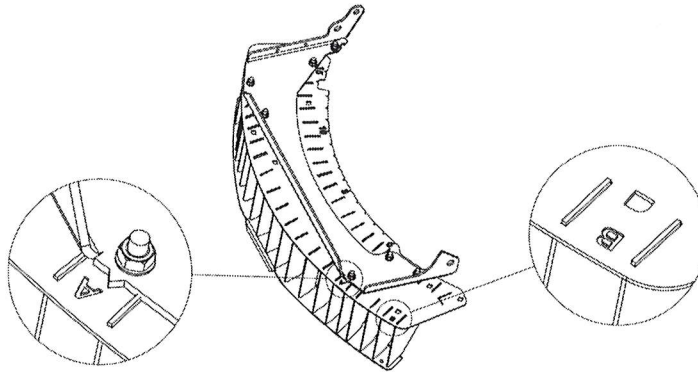
1. Specify the disc type on your machine. The machine is equipped with any of 3 types of disks which is indicated on the disk. These are DT 10-16, DT 18-24 and DT 24-36. Use the column on the table corresponding to your disc type. Assume that the machine is equipped with DT 18-24 disc. We will use the DT 18-24 column on the table. You can take a look at the table below.
2. If the distance between the tractor center line and the cropland border is shorter than 10,5, then the column A on the table shall be used and the limiter shall be adjusted to the operating position indicated as A.
In the event that the distance is longer than 11 m, then the column B shall be used and the limiter shall be adjusted to the operating position indicated as B.
3. Measure the distance between the tractor centerline and the cropland borderline. It's the row just below the one indicating the disc type. We want the distance between the cropland borderline and the tractor centerline as 9 m consequently we will use the column indicated as 9.
4. Determine the type of the fertilizer. The fertilizers are grouped on the left side of the table. Select the group according to the fertilizer type. The fertilizer group includes 3 options. Which are;
 1. Option : Enables that the fertilizer is applied over the cropland borderline or 1 m. away from the borderline.
 2. Option: Use when you want the fertilizer to be applied within the cropland borders.
 3. Option : Use when you want the fertilizer to be applied at least 1 m. inside from the cropland borderline. Shall be opted especially when there is a river or water pond nearby the cropland.

Let's use the 2nd option in urea fertilizer. And we can apply the fertilizer just inside the cropland borderline.

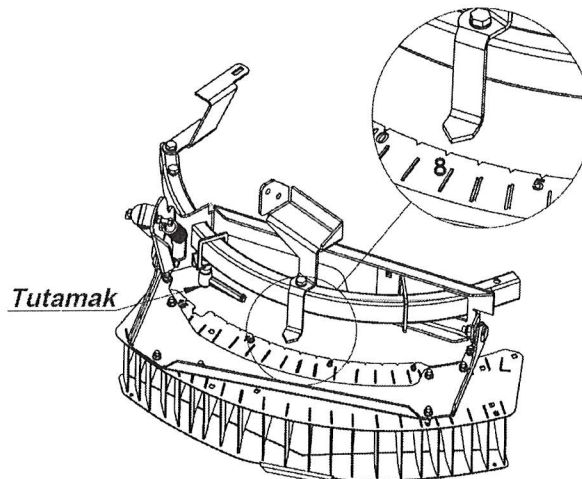
5. Find the number 8 on the intersection point of the column (9m) that we have selected indicating the cropland borderline and the tractor centerline with the 2nd option on the urea fertilizer. This value shall be the operating position over the limiter.

DÖNDER		DT 10-16				DT 18-24				DT 24-36					
		5	6	7,5	8	9	10	10,5	12	12	13,5	14	15	16	18
KAS CAN AN		12	10	8	7	8	6	4	2	2	1	0	0	0	0
NPK		15	13	12	10	13	12	11	10	11	10	9	8	7	5
DAP		15	13	15	14	15	14	14	12	12	12	12	11	10	8
MAP		5	7	4	4	4	3	3	2	2	1	0	-	-	-
UREA		13	11	9	8	8	7	6	6	6	6	5	-	-	-
P		15	13	11	10	11	10	9	8	8	8	7	7	6	-
K		9	7	4	3	3	3	3	0	0	0	0	0	0	0
PK		12	11	9	8	7	5	4	3	3	2	1	0	0	0
MgO		15	14	12	11	10	8	7	6	6	5	5	4	4	3
DÖNDER		A								B					

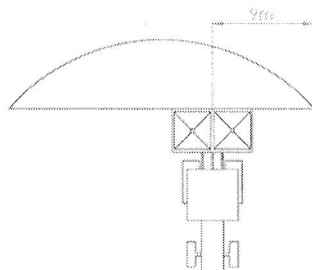
6. Since the distance between the cropland borderline and the tractor centerline is shorter than 10,5 m, tighten the bolts over the limiter at the operating position A.



7. Loosen the handle over the limiter and move the limiter freely on the profile. Take the arrow on the limiter to position 8 and fix by the handle.



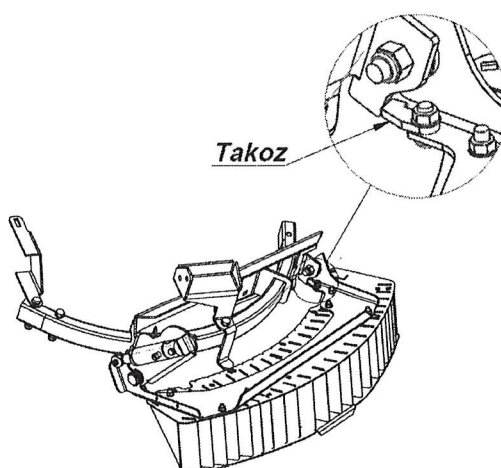
When you complete these steps, the urea fertilizer can be applied through 9 m distance from the tractor centerline on the side that the limiter is mounted.



The area on which the limiter is operating is applied more fertilizer when compared to the other side. The operating side shall be adjusted in a way to apply less fertilizer in comparison with the other side.

Operating the Limiter in Late Fertilizing

For late fertilizing, keep the limiter at half height to perform a easier fertilizing. For keeping the limiter at half level, loosen the support block on the limiter by a No 13 wrench and tighten the supporting block at half level.



Hydraulic Inlet of the Limiter

The limiter can move upside and down by being connected to the hydraulic installation of the tractor. The limiter can be connected to the hydraulic installation of the tractor in two different ways.

1. Check-valve connection: In this installation, as can be seen on the picture, two hydraulic inlets and two hydraulic outlets should be allocated for the limiter. Such type of connection is advantageous in cabinet tractors.

A changes the upwards-downwards speed of the limiter.

The oil inlet indicated with B enables the upwards-downwards movement of the limiter.

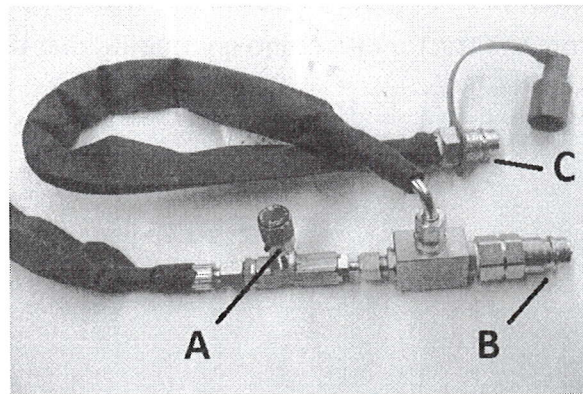
The oil inlet indicated with C controls the oil intake-outtake to/from the limiter.

When oil is fed through intake C, the oil can pass through intake B.

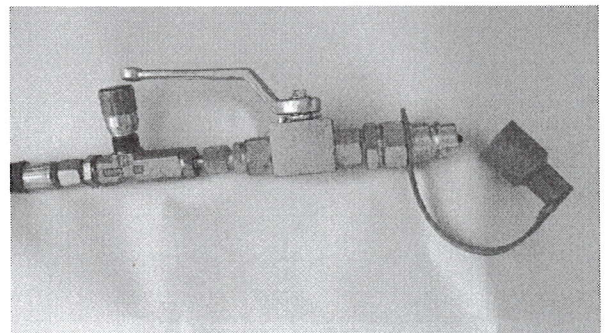
When oil is sucked from intake C, oil cannot pass through intake B.

If the limiter should be lifted up and kept in this position for a long period of time; primarily oil should be fed into intake C and then to intake B. The limiter moves up and the oil in intake C should be taken back. Thus the limiter can be fixed.

For taking the limiter down, first feed oil to intake C and take the oil in intake B back. The limiter descends.



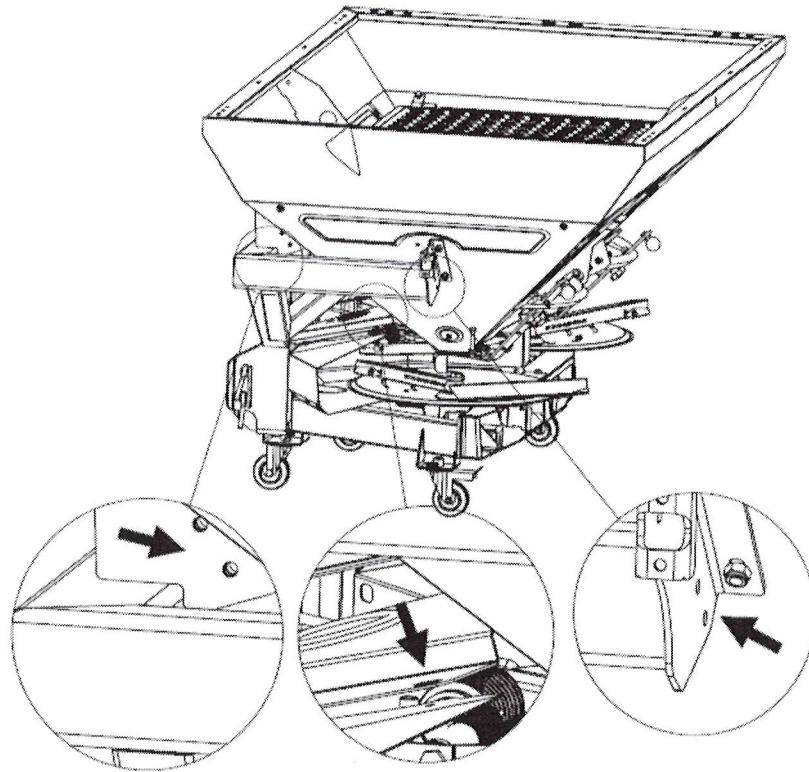
2. Valve connection. In this assembly, the limiter is controlled via single oil intake. Oil is being fed into the limiter when the valve is open. The valve should be turned off for fixing the limiter on desired position.



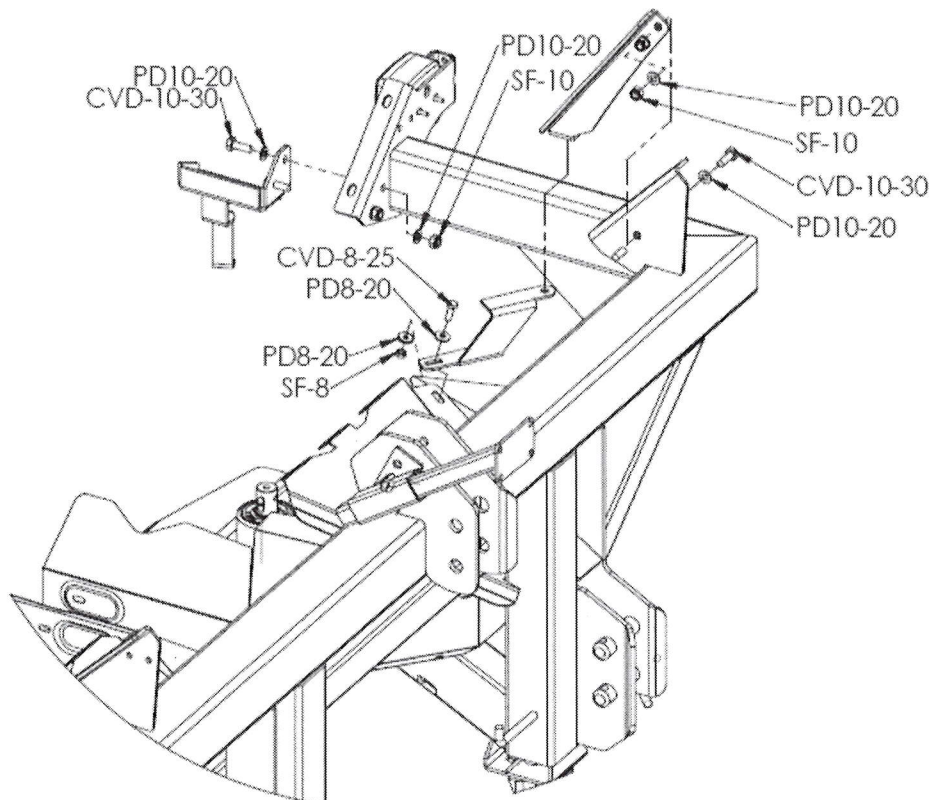
Limiter Mounting

The limiter may be provided disassembled packed with the purchased machine. You can assemble the limiter by following the instructions below.

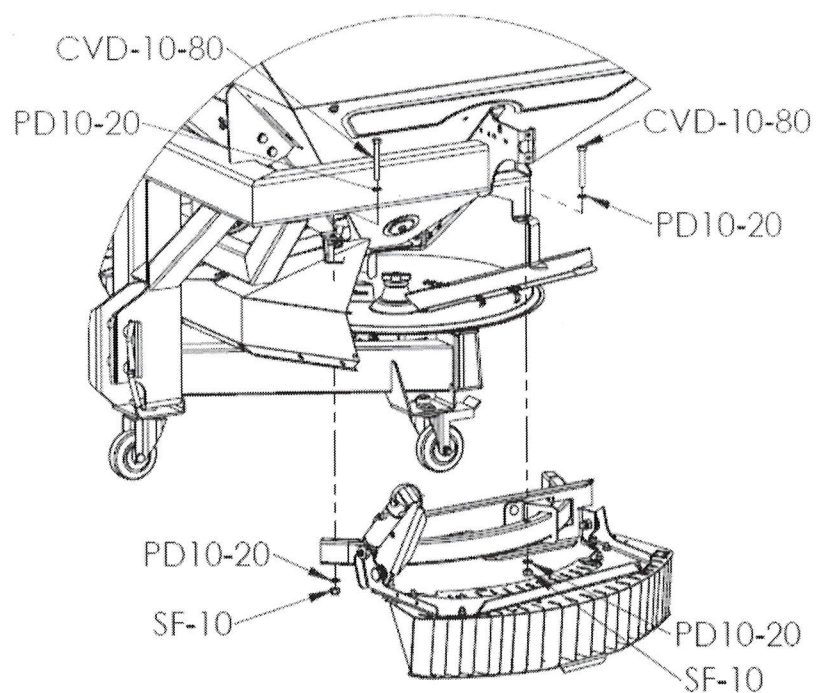
1. You can mount the limiter by using only the holes indicated with arrows on your machine.



2. Mount the parts shown in the image on your machine.



3. Mount the 50X30 limiter profile through the previously mounted parts on your machine as shown in the below picture.



Part code	Description	Quantity
CVD-10-30	M10X30 BOLT	4
CVD-10-80	M10X80 BOLT	2
CVD-8-25	M8X25 BOLT	1
PD 10-20	M10 WASHER	12
PD 8-20	M8 WASHER	2
SF-10	M10 FIBERED NUT	6

Dönder



January 2017

LIMITER ASSEMBLE

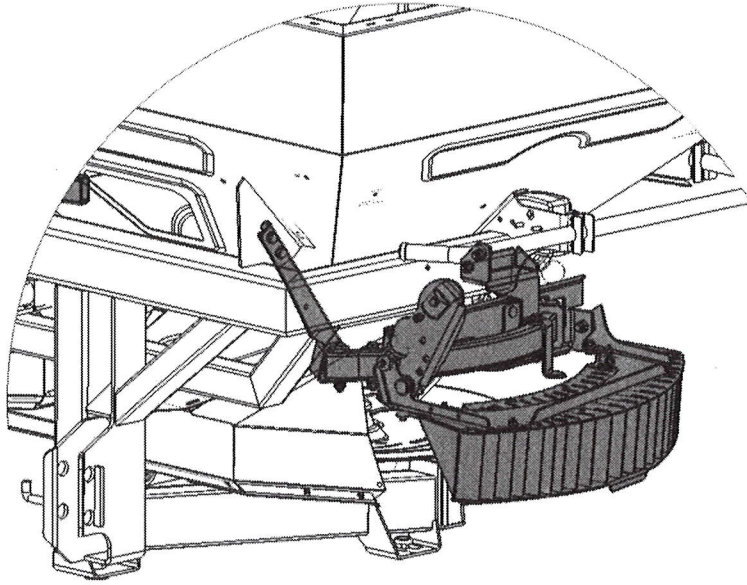
Dönder



CGSA

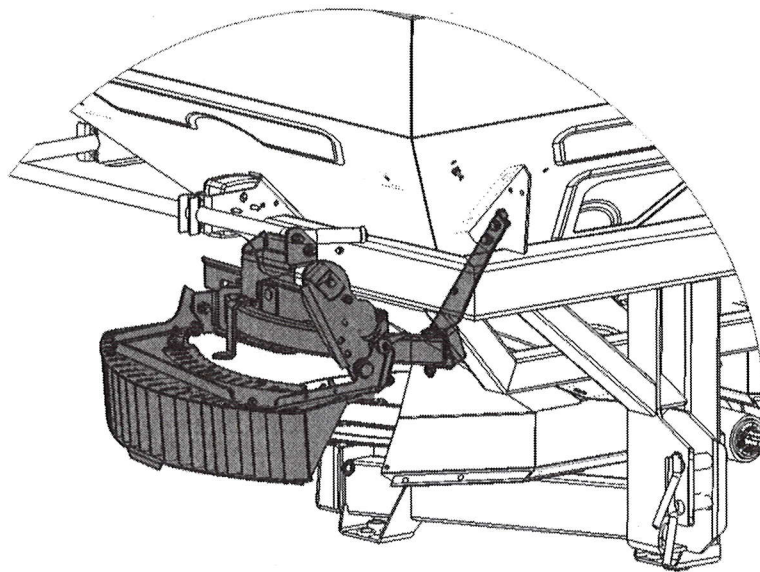
LIMITER LEFT

LIMITER RIGHT



SOL SINIRLANDIRICI

(LEFT LIMITER)

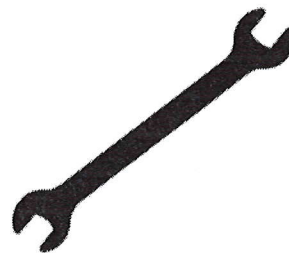
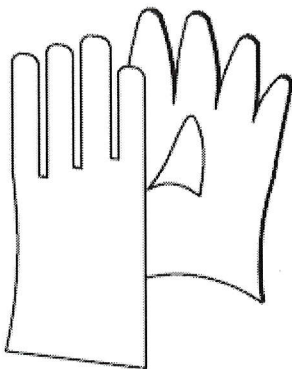


SAĞ SINIRLANDIRICI

(RIGHT LIMITER)



- This instruction consist only DONDER brand CGSA model spreaders left/right Limiter.
- The installation process is recommend from a master workman that you trusted.
- Use only the specified fixing tools that given on the Instructions.
- Please use glove during the assemble.



Limiter can be delivery mounted or demounted on the spreader.

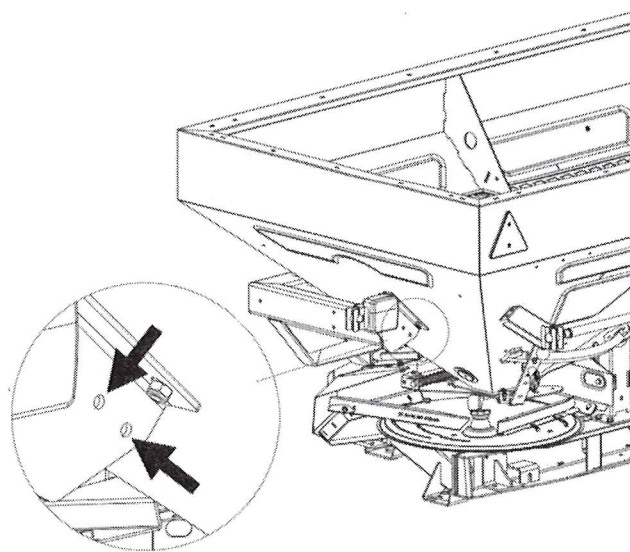
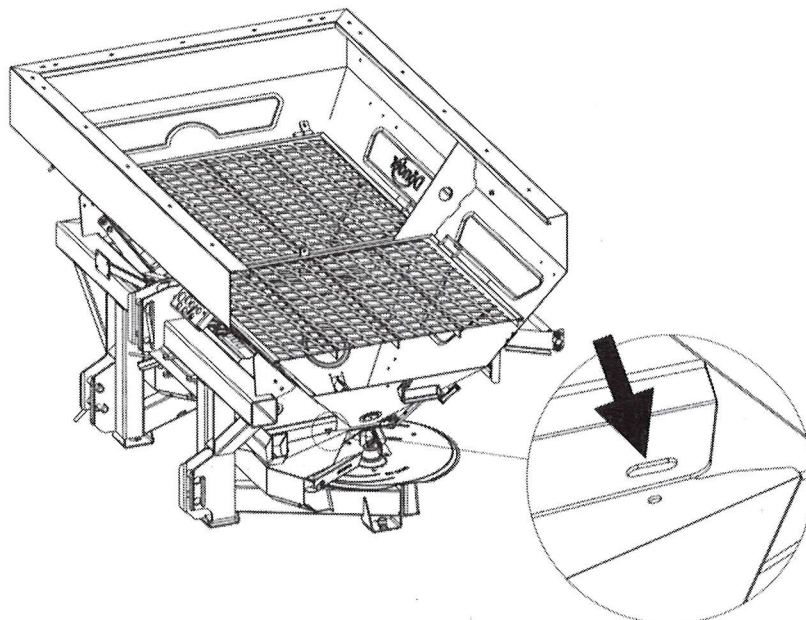
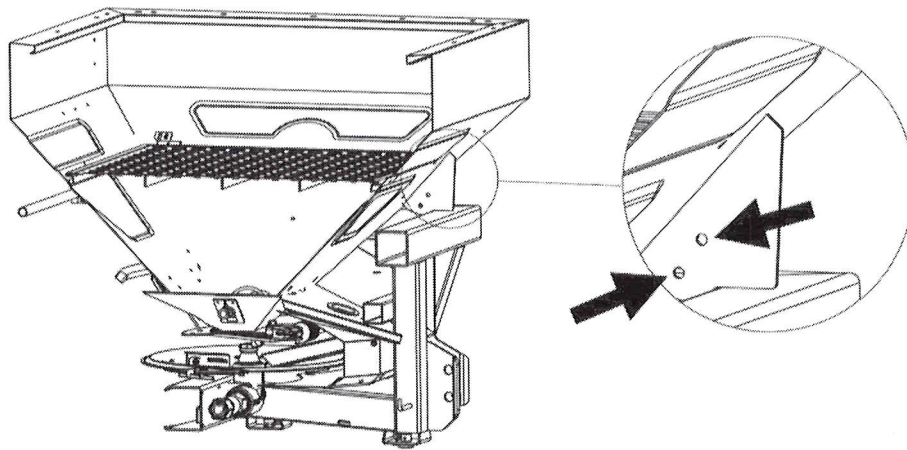
You can mount a limiter on the spreader, that you bought before with following instructions.

1. Please mount the Limiter only to the holes that shown below with arrows.

Dönder

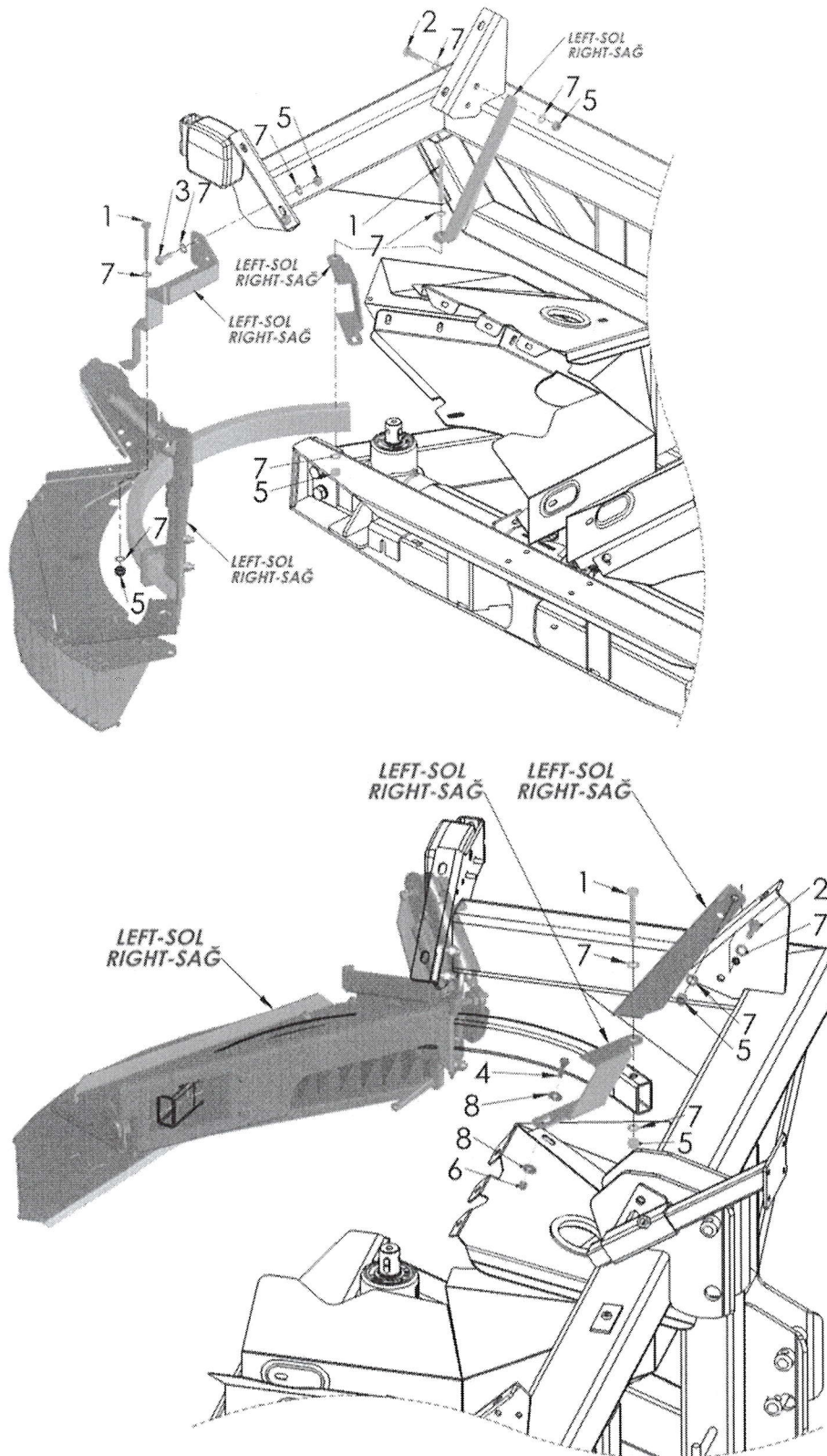


January 2017





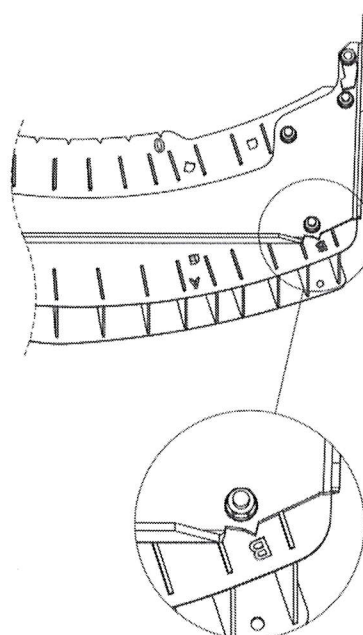
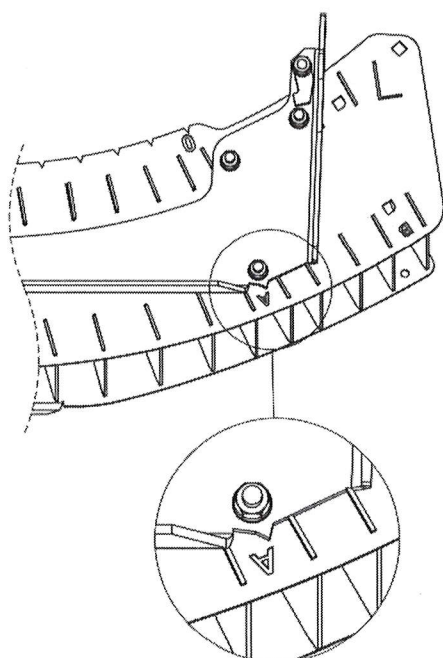
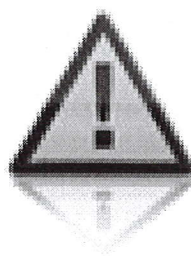
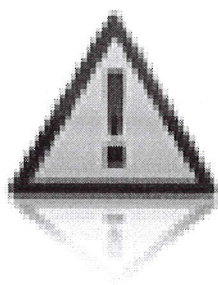
2. Assemble the parts, shown on the Picture. Use tools 13 and 17.






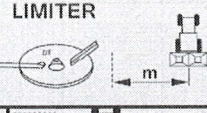
Part number	Description	Unit
1	M10X80 BOLT	2
2	M10X30 BOLT	2
3	M10X35 BOLT	2
4	M8X25 BOLT	1
5	M10 FIBER NUT	6
6	M8 FIBER NUT	1
7	M10 WASHER	12
8	M8 WASHER	2

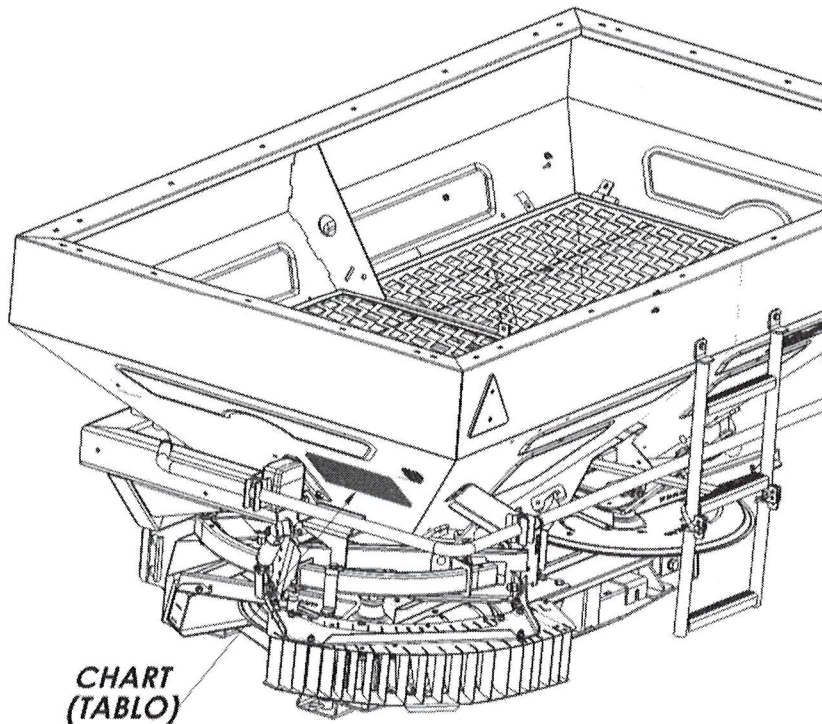
3. Please be careful to the A-B position on the Limiter.





4. Please glue the sticker coming with the Limiter, on the spreader that shown below .

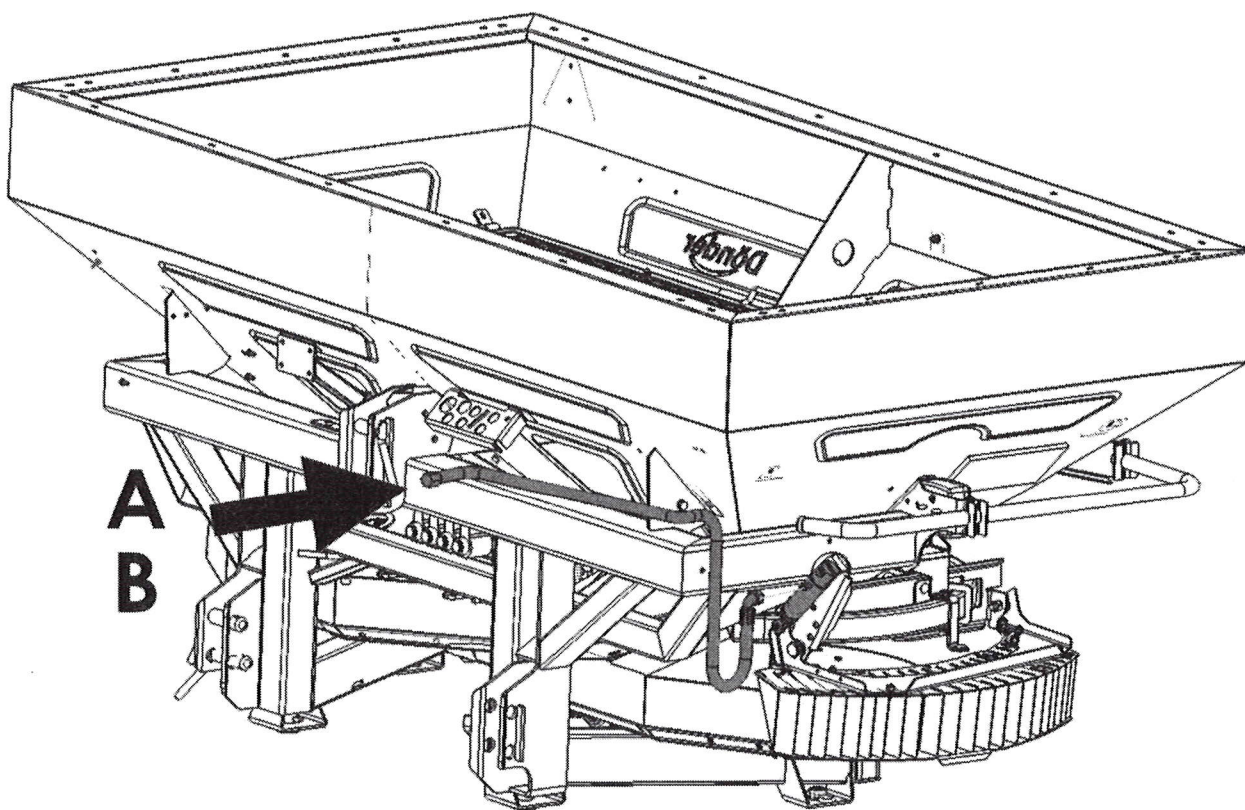
 		DT 10-16				DT 18-24				DT 24-36					
		5	6	7,5	8	9	10	10,5	12	12	13,5	14	15	16	18
KAS CAN AN		12	10	8	7	8	6	4	2	2	1	0	0	0	0
NPK		15	13	12	10	13	12	11	10	11	10	9	8	7	5
DAP		15	13	15	14	15	14	14	12	12	12	12	11	10	8
MAP		15	13	15	14	15	14	14	12	12	12	12	11	10	8
UREA		5	7	4	4	4	3	3	2	2	1	0	-	-	-
		13	11	9	8	8	7	6	6	6	6	5	-	-	-
		15	13	11	10	11	10	9	8	8	8	7	7	6	-
P		9	7	4	3	3	3	3	0	0	0	0	0	0	0
K		12	11	9	8	7	5	4	3	3	2	1	0	0	0
PK		15	14	12	11	10	8	7	6	6	5	5	4	4	3
MgO		15	14	12	11	10	8	7	6	6	5	5	4	4	3
DÖNDER		A								B					

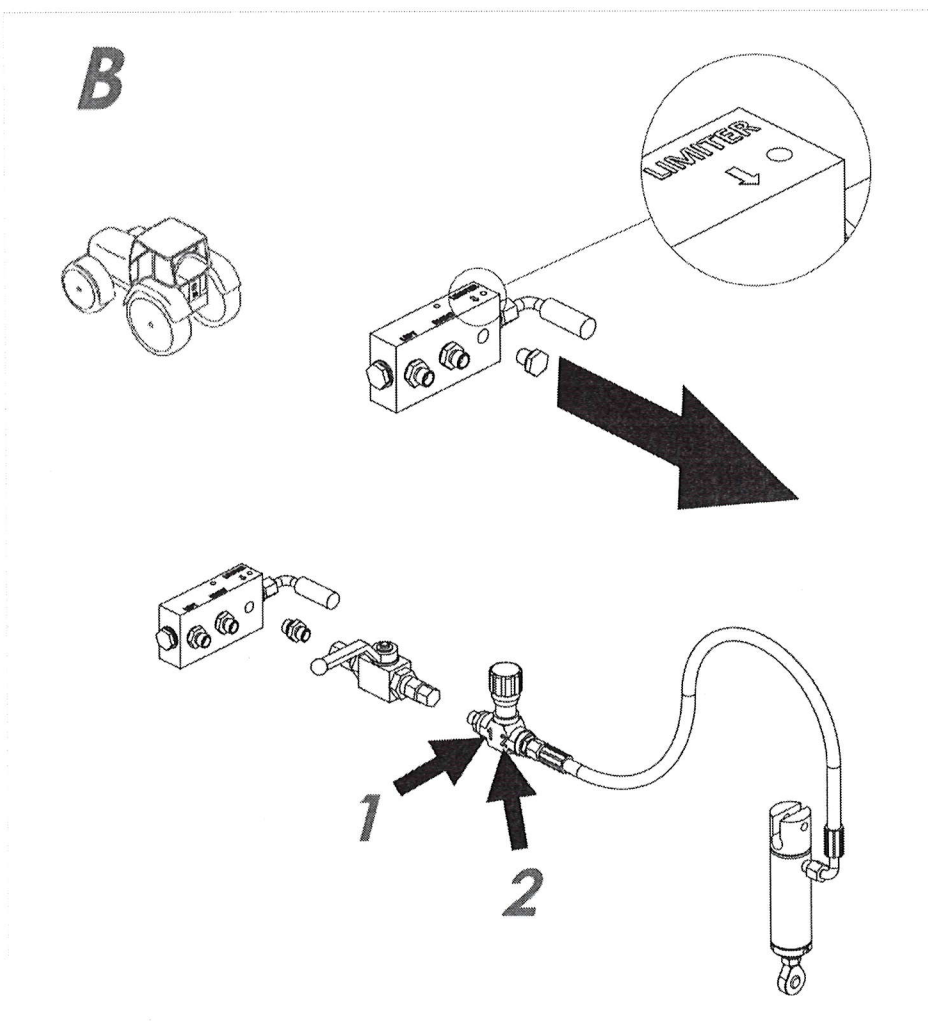
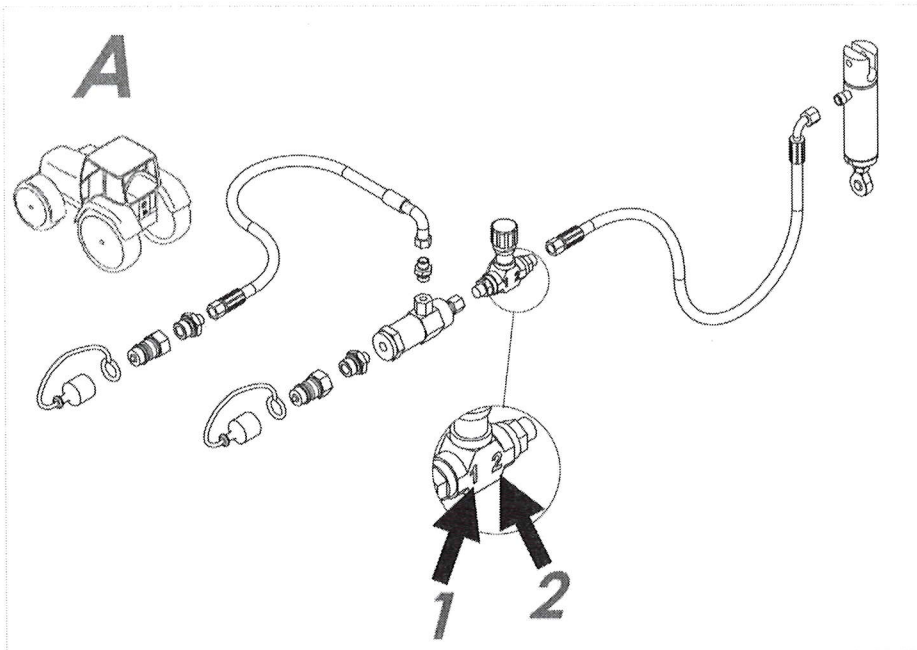




5. Do you have for Limiter 2 hydraulic oil output on the tractor, use as shown position (A) for assemble. In this connection are used a check valve for to control of the Limiter hydraulic oil input and output.

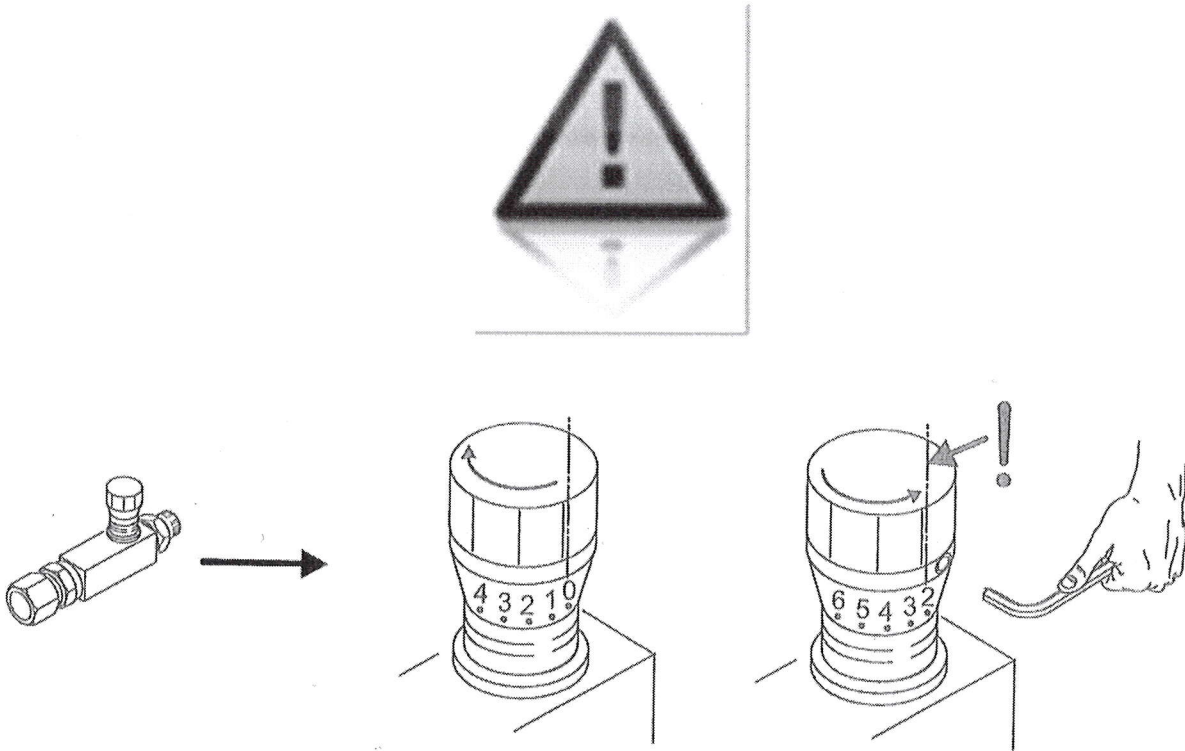
Do you have only one Limiter oil output on the Tractor, you must use as shown position (B). By this assemble the check valve function is doing from the valve.







6. The piston speed adjustment from the Limiter moving downward and upper are adjusting from the flowing control valves as shown on the drawing. The setscrew bolt can be fix with 2 aliyen wrench to the require adjusment.



SATIŞ SONRASI HİZMETLERİ, SERVİS VE YEDEK PARÇA

DÖNDER TARIM MAKİNALARI SAN. TİC. LTD. ŞTİ.

BODRUM YOLU ÜZERİ YENİDOĞAN BELDESİ

SÖKE/AYDIN/TÜRKİYE

TEL:0 256 521 02 24

FAX:0 256 521 01 09

www.dondertarim.com.tr

info@dondertarim.com.tr

