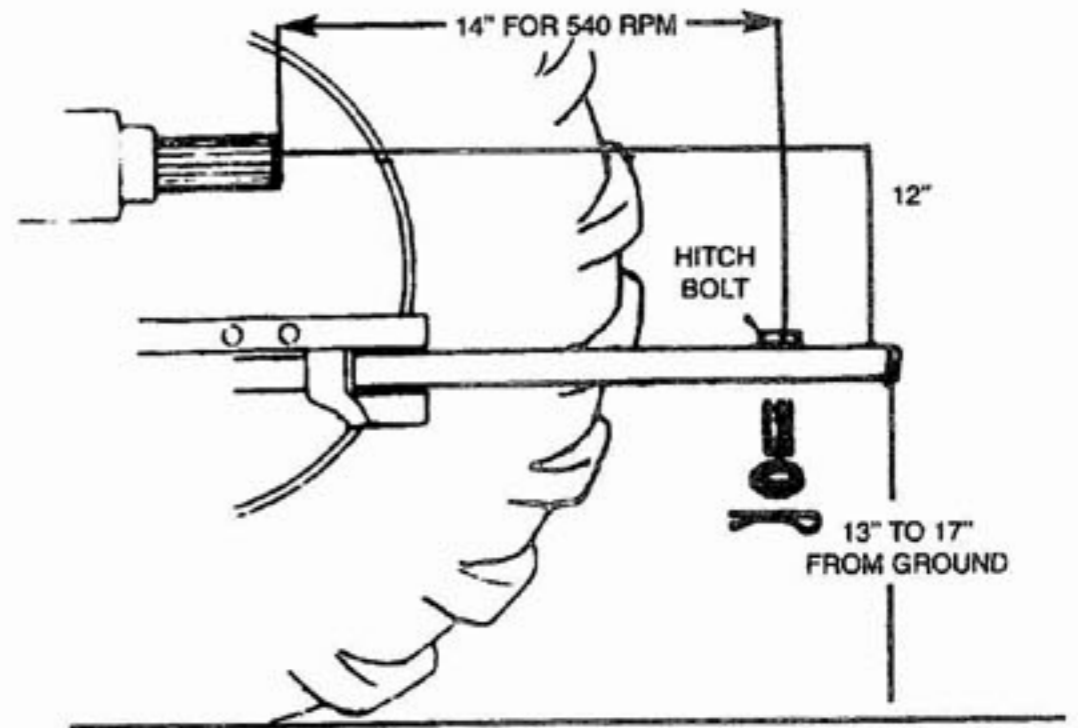


# OPERATION

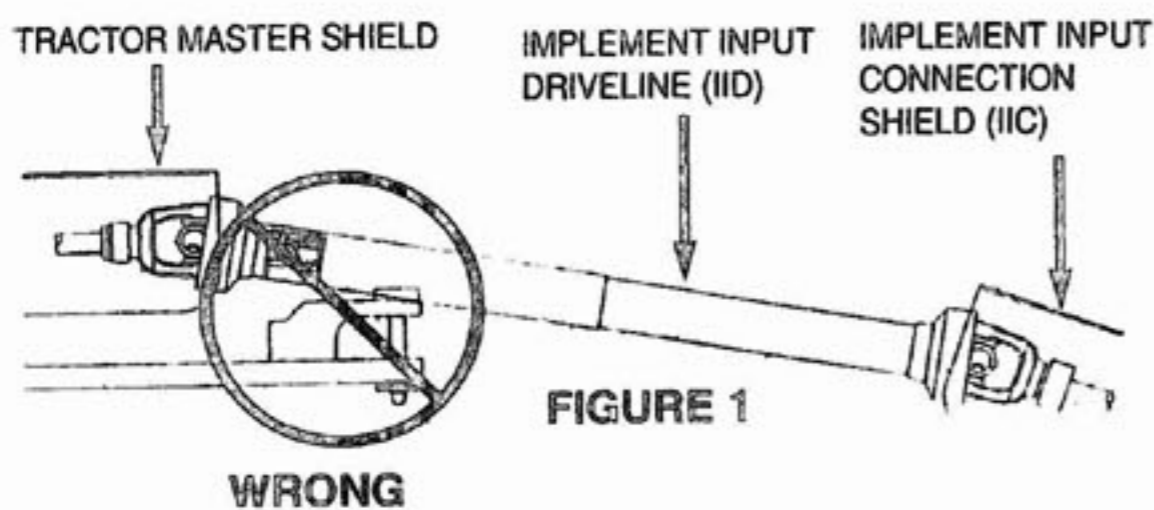
1. Check for proper assembly and adjustment and make sure that all bolts are tightened. Securely retighten after a few hours of operation, as bolts can loosen up on new machinery. Check wheel bolts upon delivery and periodically thereafter. Wheel bolts should be tightened at 85-95 ft./lbs. of torque.
2. Check the tires and inflate to the recommended pressure (10:00 x 22.5 tires to 40-60 pounds, 16.5 x 16.1 tires to 35-40 pounds).
3. Adjust the tractor hitch and attach the spreader to the tractor as described in the following sections.
4. Attach the speed control/beater engage and disengage rope to a convenient point on the tractor.
5. Lubricate the machine completely and check the oil level of gearbox.
5. Before operation, run machine slowly to make sure that the spreader is operating and lubricated properly.

## TRACTOR HITCH

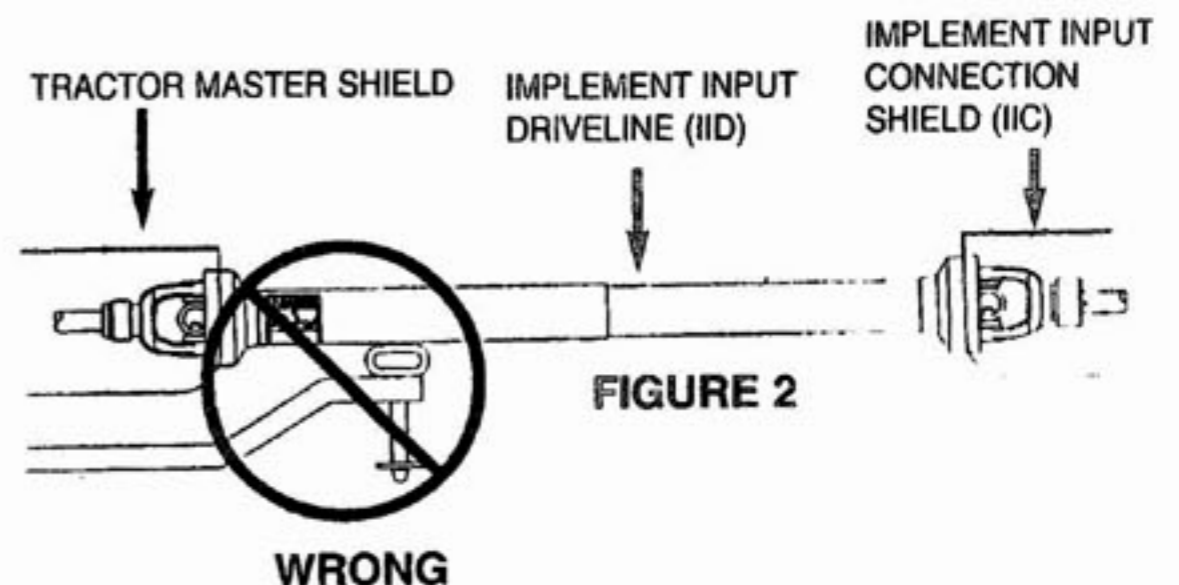
The hitch of the spreader is designed for a standardized tractor hitch. Adjust the drawbar so that it is 13 to 17 inches above the ground. Extend or shorten it so that the horizontal distance from the end of the tractor power takeoff shaft to the center of the hitch pin hole is 14 inches, as shown in drawing. Use an adapter plate, if necessary, to secure the proper distance. An improperly located hitch point may cause damage to the universal joints of the power takeoff. Secure the drawbar so that the hitch pin hole is directly below the power drive line.



*If this implement is attached to a tractor with a clevis hitch (hammer-strap) style drawbar, the hammer-strap must be removed to prevent damage to the IID guarding and the IID telescoping members. [See Figure 1]*



*If this implement is attached to a tractor with an offset in the drawbar, be certain it is in the down position to prevent damage to the IID guarding and the IID telescoping members. [See Figure 2]*



## ATTACHING TO THE TRACTOR

1. Fasten the spreader hitch to the drawbar with a **hitch pin that cannot bounce out**. Use 1" diameter hitch pin to pull spreader.
2. Remove the weight from the jack (jack is not to be used when spreader is loaded). Remove jack from pipe mount and place on convenient storage mount located on top of left hitch channel. This allows protection of jack from tractor tires during turns.
3. Slide spring loaded locking collar on PTO yoke rearward, and slide it onto the tractor PTO shaft. Release spring loaded collar. Be sure the pins fall into the groove of the tractor PTO shaft and collar snaps forward into locking position. **CAUTION:** Do not use a steel hammer to aid in joining PTO parts.

Be certain to disconnect all sources of power before servicing. Keep pant cuffs and other loose clothing away from all chain and gear drives as well as the other moving parts. Keep off the equipment when in use, and keep all safety shields in place. Do not attempt to clean, grease or lubricate while the machine is running. Never allow riders in or on the machine.

## LOADING

In freezing weather, make certain that hydraulic tail gate (if equipped with one) is not frozen to the sides or on the floor of the spreader. Make sure the apron chain is not frozen to the spreader floor or any lumps of manure are frozen to the floor.

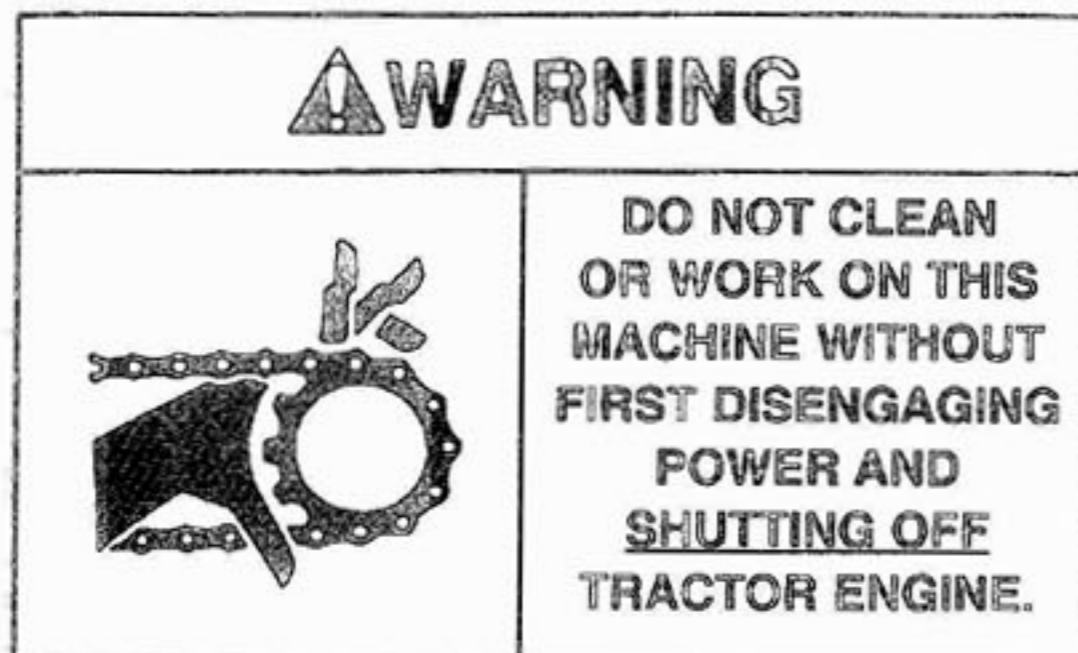
Begin loading the spreader at the front end and work toward the rear until loading is completed. Loading this way permits the material to be spread uniformly. Loading front to rear is particularly important when the spreader is loaded by a mechanical loader because this type of load requires ~~more~~ more power to spread than other loads.

When hauling extremely heavy material with a large portion of dirt, it may be necessary to reduce the load size to prevent excessive shear bolt breakage. Never dump material onto the beater. Do not use extra sideboards. Do not overload spreader. Overloading decreases spreading effectiveness. Do not load more than 15 inches above the beater.

## SPREADING

**NOTE:** Two speed apron drive and beater engage/disengage mechanisms are contained in a single gearbox at rear of spreader. This gearbox is controlled by one rope leading to the tractor.

1. When ready to unload, before engaging PTO, make sure that the gearbox is in the "low" position, with the shifter dog all the way to the "low" side of the indicator slot.
2. Raise the hydraulic endgate (if so equipped).
3. Engage the PTO slowly.
4. The apron speed may be increased from 4-1/2 fpm to 8-1/2 fpm (at 540 RPM) by pulling once on the control rope until the shifter dog stops and locks into the "high speed" position. The beater will continue to operate in this position.
5. When the spreader is almost empty, the bed can be cleaned out by again, pulling once on the control rope until the shifter dog locks into the "clean-out/beater disengage" position. The beater will stop, and the apron will continue to run in the "high" speed position, thus saving unloading time.



6. When spreader is empty, SHUT OFF PTO. With the PTO off, pull the control rope once again, and release it. The shifter will return to the "low" position, ready to begin unloading the next load. **DO NOT SHIFT FROM CLEAN OUT TO LOW POSITION WITH THE PTO RUNNING.**
7. Do not operate the spreader with a PTO speed greater than 540 RPM unless the necessary sprocket change has been made.

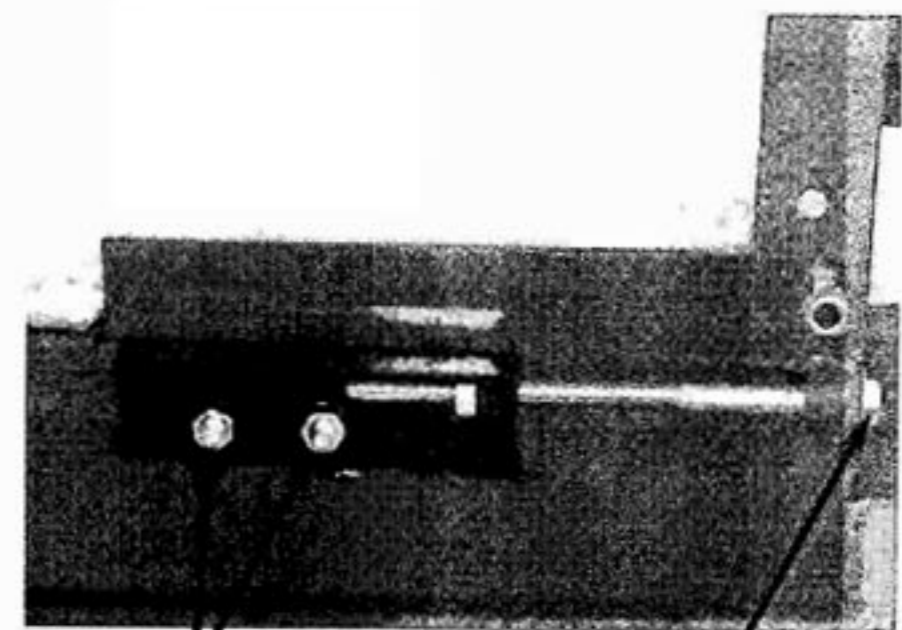
## ADJUSTMENTS

**FAILURE TO FOLLOW THE RECOMMENDED ADJUSTMENTS WILL VOID WARRANTY**

### APRON

1. Adjust the apron by loosening the mounting bolts on the chain slides on the outside of the frame. Mounting bolts shown in the drawing.
2. Tighten the adjusting bolts until the apron has no sag between the rear drive sprockets and chain slides under spreader.

**NOTE:** Tighten the adjusting bolts (on each front corner) equally on each side so that the apron slats run parallel with the ends of the bed. The apron will be damaged if the machine is operated with one end of the apron slats running ahead of the opposite end. Do not tighten the apron chains excessively.



**MOUNTING BOLTS**

**ADJUSTING BOLT**



### DRIVE CHAIN

To adjust front drive chain, slightly loosen bolts holding pillow block bearing at rear of front jack shaft. Loosen jam nut on tightener rod. Turn adjusting nut (located at the right hand front side of spreader) clockwise. There should be 1/2" deflection at the center of the drive chain. Over tightening or too loose of a chain will result in excessive wear on the bearing, chain and sprockets. Retighten bolts holding bearing. Recheck chain for tension. Retighten jam nut.

BEARING

TIGHTENER BOLT

Shields Removed For Clarity

### ADJUSTING WHEEL HUBS

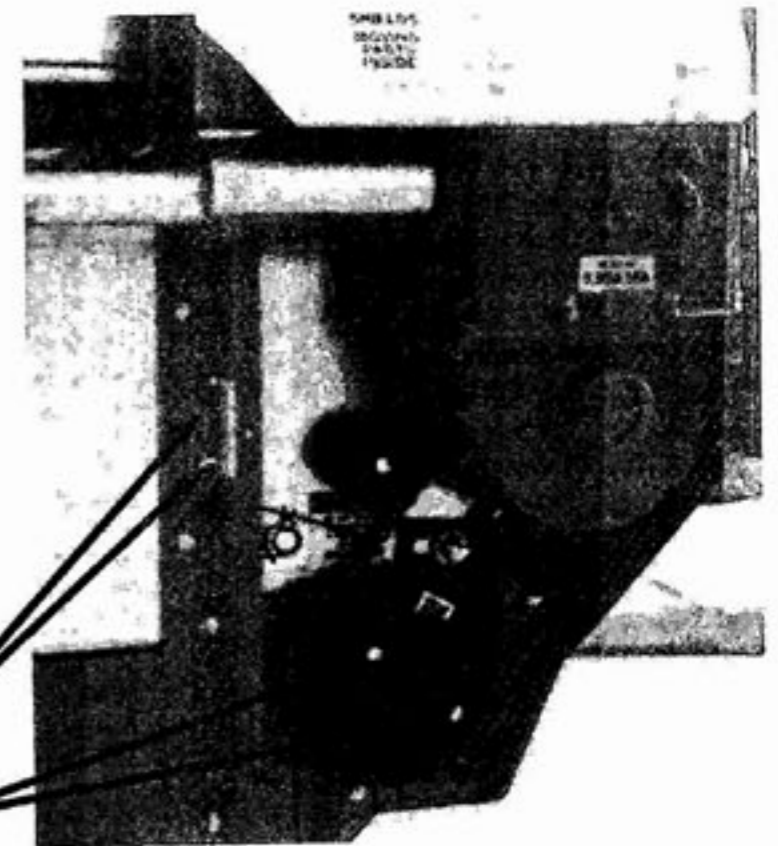
To adjust wheel hubs, tighten the castellated nut on the spindle to the point where there is no end-play and a slight drag on the bearings. Replace the cotter key with a new one of the correct size.

### APRON WORM DRIVE CHAIN

The main apron drive chain is kept tight with a nylon roller type adjustable tightener. Periodically check tension on chain. Chain is properly adjusted when there is 1/8" deflection in center of chain. Also check tightener for wear and replace when necessary.

### SHEAR BOLTS (Apron Drive)

The main apron is protected by two shear bolts located on the drive sprocket on the main conveyor drive shaft at the rear of the spreader. Two spare shear bolts are provided. Shearing of the bolts is normally due to the apron being frozen fast to the floor or the slats catching on manure that is frozen to the floor. In some cases, the bolt will shear due to the spreader being overloaded. Always determine the cause of the failure and eliminate the cause before installing new shear bolts.



REPLACEMENT SHEAR BOLTS

SHEAR BOLTS

Shields Removed for Clarity



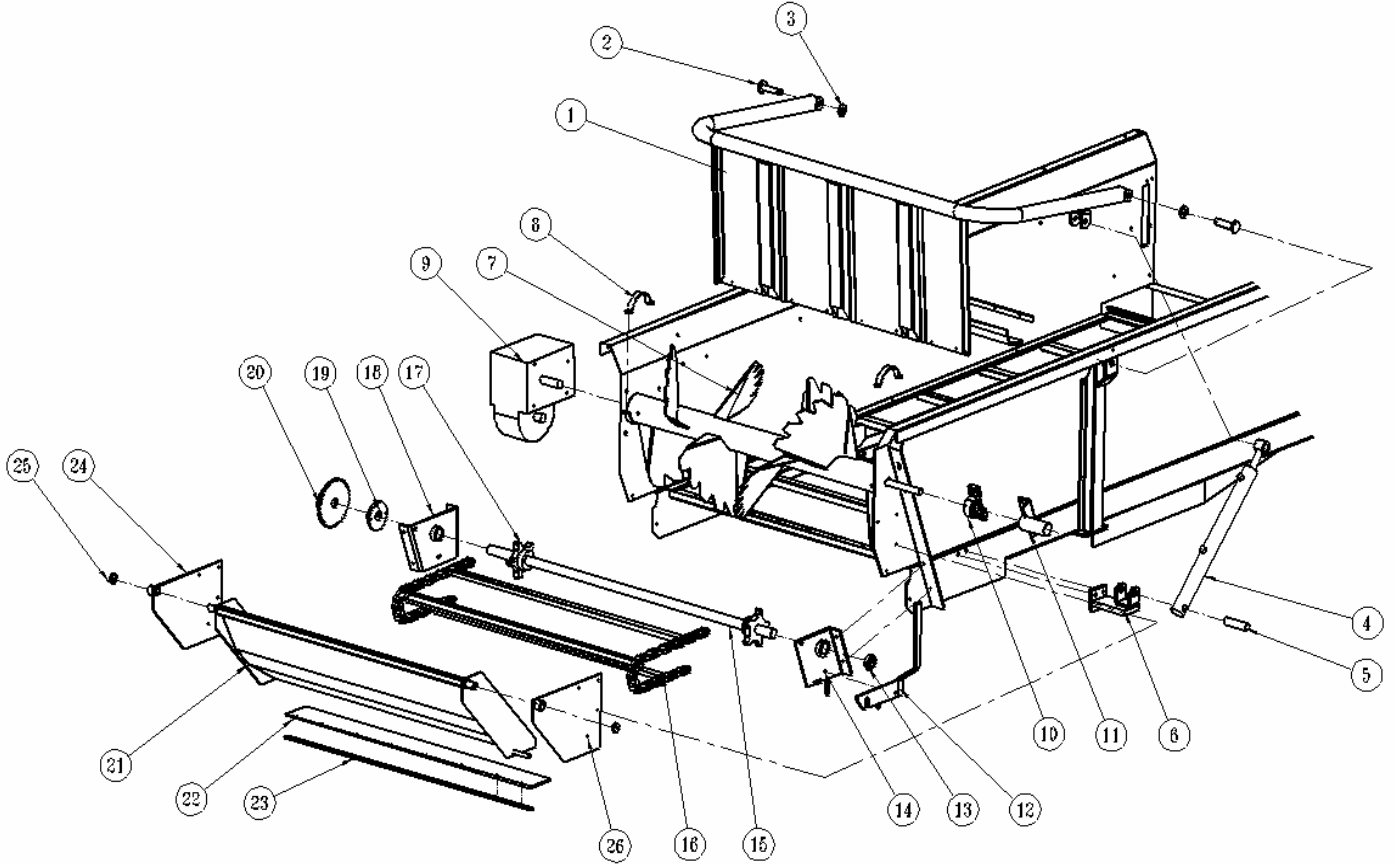
### SHEAR BOLTS (Main Drive)

The beater and apron drive are protected by one shear bolt located on the front end of the side drive shaft (left side of spreader). Two spare shear bolts are provided. Shearing of the bolts is normally due to foreign objects in the manure or starting the spreader PTO too quickly with high tractor RPM's.

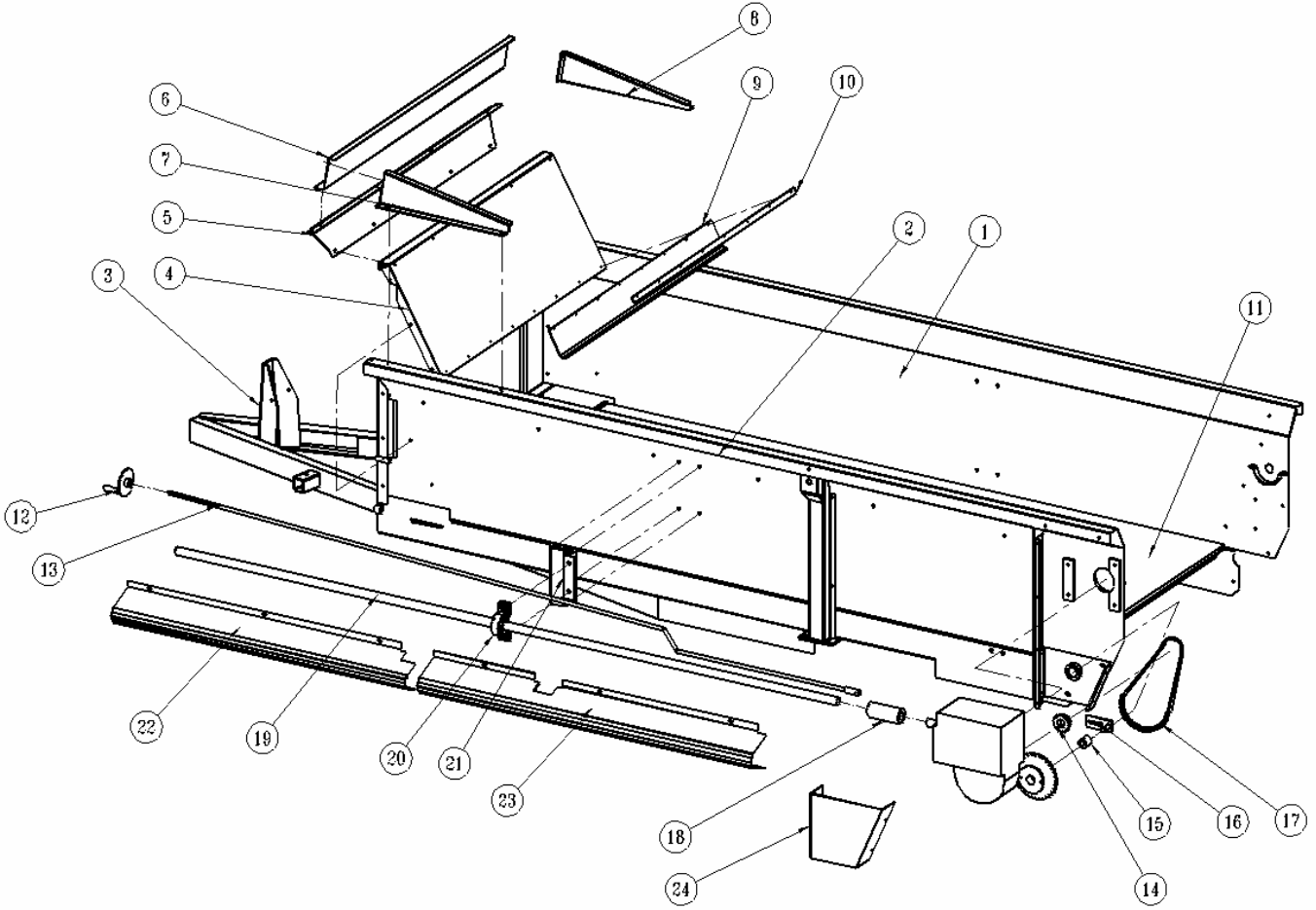
SHEAR BOLT

SPARE SHEAR BOLTS

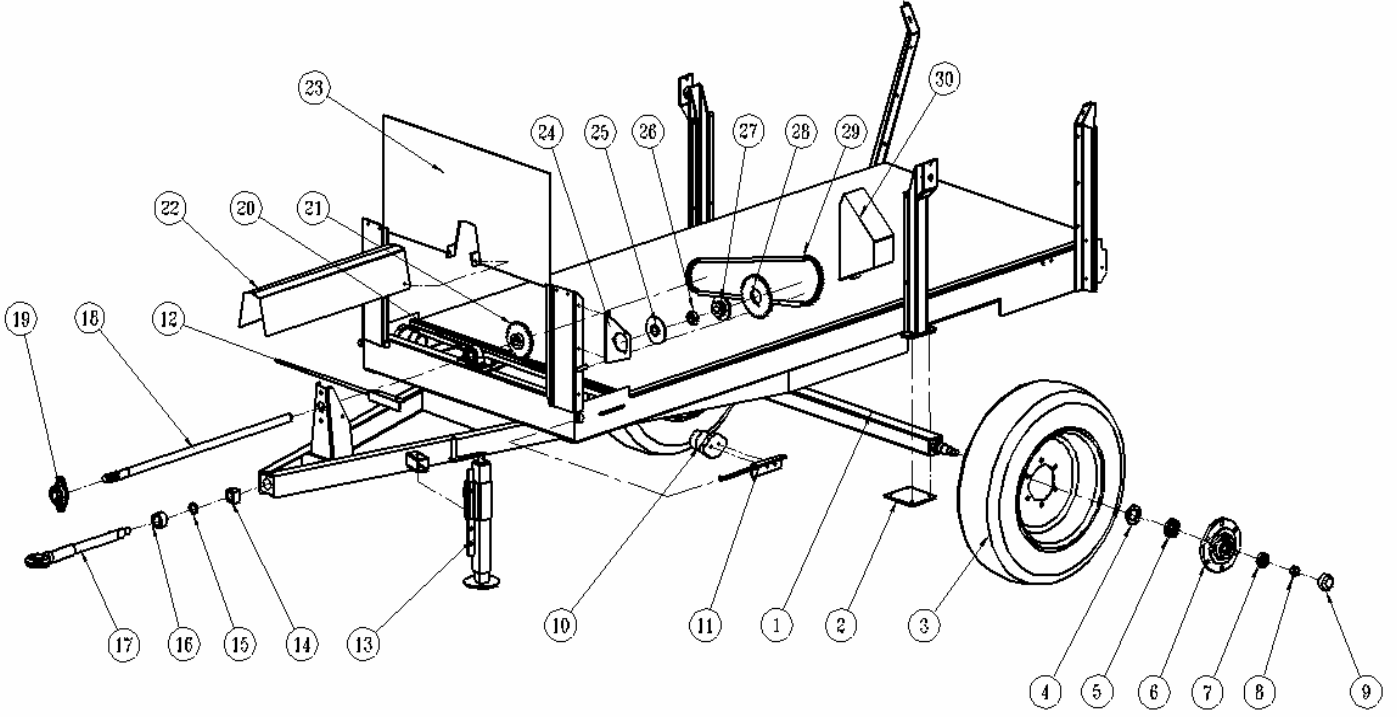
Shields Removed for Clarity



| No | Referans / Reference | Adet / Qty | TÜRKÇE                        | ENGLISH                            |
|----|----------------------|------------|-------------------------------|------------------------------------|
|    |                      |            | Parça Adı                     | Description                        |
| 1  | 52.10.00.00.000      | 1          | Arka Kapak Komple             | Door Complete                      |
| 2  | 52.00.00.00.015      | 2          | Arka Kapak Bağlantı Pimi      | Door Connection Pin                |
| 3  | 52.00.00.00.016      | 2          | Arka Kapak Bağlantı Pulu      | Door Connection Washer             |
| 4  | 52.00.00.00.012      | 1          | Arka Kapak Kaldırma Pistonu   | Door Piston                        |
| 5  | 52.00.00.00.035      | 1          | Piston Pimi                   | Piston Pin                         |
| 6  | 52.12.00.00.000      | 1          | Piston Bağlantısı Komple      | Piston Connection Complete         |
| 7  | 52.15.00.00.000      | 1          | Arka Merdane                  | Beater                             |
| 8  | 52.00.00.00.001      | 2          | Merdane Kelepçesi             | Beater Clip                        |
| 9  | CMR 689.006.10       | 1          | Sanzıman                      | Gearbox                            |
| 10 | 100R.UCP 206         | 1          | UCP 206 Yatak                 | Hub Bearing UCP206                 |
| 11 | 52.04.00.00.000      | 1          | Arka Merdane Sabitleme        | Beater Fixture                     |
| 12 | 52.20.03.00.000      | 1          | Kitleme Kolu                  | Lock Lever                         |
| 13 | 52.00.00.00.023      | 1          | Sağ Zincir Mili Burcu         | Right Chain Shaft Bush             |
| 14 | 52.07.00.00.000      | 1          | Zincir Mili Bağlantı Sacı Sağ | Chain Shaft Connection Plate Right |
| 15 | 52.00.00.00.026      | 1          | Arka Zincir Mili              | Chain Shaft Complete               |
| 16 | 52.14.00.00.000      | 1          | Zincir Komple                 | Chain Complete                     |
| 17 | 52.19.00.00.000      | 2          | Özel Zincir Dişli             | Chain Sprocket                     |
| 18 | 52.08.00.00.000      | 1          | Zincir Mili Bağlantı Sacı Sol | Chain Shaft Connection Plate Left  |
| 19 | 52.00.00.00.022      | 1          | Dişli Göbeği                  | Gear Hub                           |
| 20 | 52.13.00.00.000      | 1          | Z32 3/4" Zincir Dişli Komple  | Sprocket Z32 3/4" Complete         |
| 21 | 52.20.02.00.000      | 1          | Merdane Arka Kapak Komple     | Beater Door Complete               |
| 22 | 52.20.00.00.001      | 1          | Merdane Arka Kapak Kaucuk     | Beater Door Rubber                 |
| 23 | 52.20.00.00.002      | 1          | Merdane Arka Kapak Silmesi    | Beater Door Plate                  |
| 24 | 52.20.01.00.000L     | 1          | Bağlantı Sacı Sol             | Connection Plate Left              |
| 25 | 52.20.00.00.003      | 2          | Sıkma Burcu                   | Tightening Bush                    |
| 26 | 52.20.01.00.000R     | 1          | Bağlantı Sacı Sağ             | Connection Plate Right             |



| No | Referans / Reference | Adet / Qty | TÜRKÇE                    | ENGLISH                        |
|----|----------------------|------------|---------------------------|--------------------------------|
|    |                      |            | Parça Adı                 | Description                    |
| 1  | 52.05.00.00.000      | 1          | Sag Yan Duvar Komple      | Right Side Wall Complete       |
| 2  | 52.06.00.00.000      | 1          | Sol Yan Duvar Komple      | Left Side Wall Complete        |
| 3  | 52.01.00.00.000      | 1          | Sase Komple               | Chassis Complete               |
| 4  | 52.00.00.00.004      | 1          | Ön İç Sac                 | Front Inner Plate              |
| 5  | 52.00.00.00.008      | 1          | Ust Ara Sac               | Upper Mid Plate                |
| 6  | 52.00.00.00.007      | 1          | Ust Sac                   | Upper Plate                    |
| 7  | 52.00.00.00.009R     | 1          | Ust Sac Kose Destek Sag   | Upper Plate Side Support Right |
| 8  | 52.00.00.00.009L     | 1          | Ust Sac Kose Destek Sol   | Upper Plate Side Support Left  |
| 9  | 52.00.00.00.005      | 1          | Ön İç Sac Kaucugu         | Front Inner Plate Rubber       |
| 10 | 52.00.00.00.006      | 1          | Ön İç Sac Silmesi         | Front Inner Plate Strip        |
| 11 | 52.16.00.00.000      | 1          | Plywood Komple            | Plywood Complete               |
| 12 | 52.22.01.00.000      | 1          | Sanziman Gergi Saci       | Adjustment Plate               |
| 13 | 52.22.02.00.000      | 1          | Sanziman Gergi Kolu       | Adjustment Lever               |
| 14 | 52.00.00.00.027      | 1          | Z12 3/4" Zincir Dişli     | Sprocket Z12 3/4"              |
| 15 | 52.00.00.00.037      | 1          | Gergi Polyamidi           | Tightener Polyamid             |
| 16 | 52.09.00.00.000      | 1          | Sanziman Zincir Gergisi   | Chain Tightener for Gearbox    |
| 17 | GRBT 01              | 1          | 3/4 Zincir Sanziman       | Chain 3/4"                     |
| 18 | 52.00.00.00.028      | 1          | Sanziman Kaplini          | Gearbox Coupling               |
| 19 | 52.00.00.00.002      | 1          | Yan Aktarma Mili          | Side Transmission Shaft        |
| 20 | 100R.UCP 207         | 1          | UCP 207 Yatak             | Bearing UCP 207                |
| 21 | 52.18.00.00.000      | 1          | Yataklama Saci            | Guard Plate                    |
| 22 | 52.00.00.00.014      | 1          | Yan Aktarma Muhafaza Kısa | Side Guard Short               |
| 23 | 52.00.00.00.013      | 1          | Yan Aktarma Muhafaza Uzun | Side Guard Long                |
| 24 | 52.00.00.00.038      | 1          | Z32 Zincir Disli Muhafaza | Sprocket Z32 Guard             |



| No | Referans / Reference | Adet / Qty | TÜRKÇE                      | ENGLISH               |
|----|----------------------|------------|-----------------------------|-----------------------|
|    |                      |            | Parca Adı                   | Description           |
| 1  | 52.01.01.00.000      | 1          | Teker Profili Komple        | Axle Complete         |
| 2  | 52.01.00.00.018      | 2          | Teker Profili Bağlantı Sacı | Axle Connection Part  |
| 3  | 100L.900x16          | 2          | 900x16 Lastik               | Tyre 900X16           |
| 4  | 100KC.85x50x10       | 2          | Keçe 85 x 50 x 10           | Seal 85 x 50x 10      |
| 5  | 100R.30208           | 2          | 30208 Rulman                | Bearing 30208         |
| 6  | 52.00.00.00.030      | 2          | Teker Poyrası               | Wheel Hub             |
| 7  | 100R.30206           | 2          | 30206 Rulman                | Bearing 30206         |
| 8  | 100S.R7/8 Z:9 Somun  | 2          | R 7/8" Z:9 Somun            | Nut R7/8" Z:9         |
| 9  | 52.00.00.00.031      | 2          | Poyra Kapagi                | Wheel Hub Cover       |
| 10 | 52.21.00.00.000      | 2          | Gergi Poyrası               | Tightener Hub         |
| 11 | 52.03.00.00.000L     | 1          | Gergi Sacı Sol              | Tightener Plate Left  |
| 12 | 52.23.00.00.000      | 1          | Yatak Gergi Grubu           | Guide Tightener       |
| 13 | 52.24.00.00.000      | 1          | Kriko                       | Standjack             |
| 14 | 52.17.00.00.002      | 1          | Kare Burc                   | Square bush           |
| 15 | 52.17.00.00.004      | 1          | Ceki pulu                   | Hitch Washer          |
| 16 | 52.17.00.00.003      | 1          | Ceki Burcu                  | Hitch Bush            |
| 17 | 52.17.00.00.001      | 1          | Ceki Mili                   | Hitch Pipe            |
| 18 | 52.00.00.00.036      | 1          | Giriş Mili                  | Input Shaft           |
| 19 | 100R.UCFL 207        | 1          | UCFL 207 Rulman             | Bearing UCFL 207      |
| 20 | 100R.UCP 207         | 1          | UCP 207 Rulman              | Bearing UCP 207       |
| 21 | 52.00.00.00.017      | 1          | Z25 3/4" Zincir Dişli       | Sprocket Z25 3/4"     |
| 22 | 52.00.00.00.010      | 1          | Saft Mili Muhafaza Sacı     | Guard Plate           |
| 23 | 52.00.00.00.011      | 1          | Ön Sac                      | Front Plate           |
| 24 | 52.00.00.00.025      | 1          | Ön Yataklama Sacı           | Front Guide Plate     |
| 25 | 100R.SBPF 207        | 1          | SBPF 207 Rulman             | Bearing SBPF 207      |
| 26 | 52.00.00.00.024      | 1          | Yan Aktarma Mili Burcu      | Side pipe bush        |
| 27 | 52.00.00.00.021      | 1          | Z31 Dişli Göbeği            | Hub for Z31 gear      |
| 28 | 52.00.00.00.020      | 1          | Z30 3/4" Zincir Dişli       | Sprocket Z30 3/4"     |
| 29 | GRBT 02              | 1          | 3/4 Zincir Giriş mili       | Chain Input Pipe 3/4" |
| 30 | 52.02.00.00.000      | 1          | Zincir Dişli Muhafaza Grubu | Sprocket Guide        |