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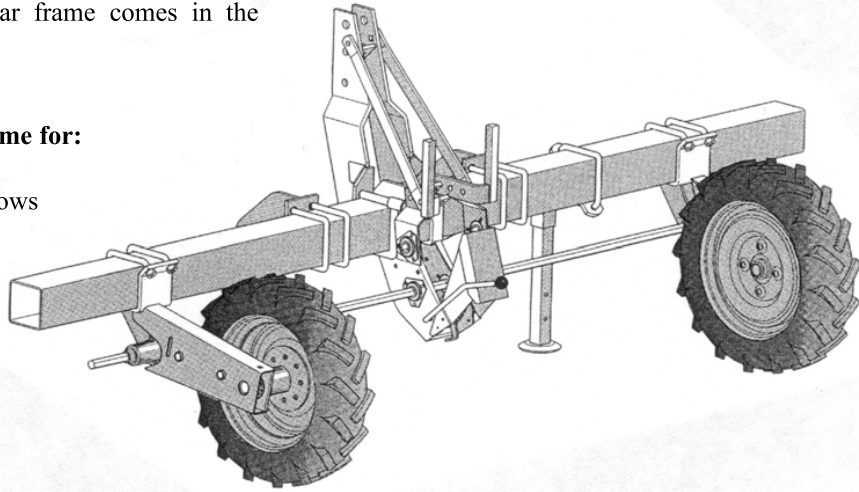
FRAME

5" X 5" Mounted Toolbar

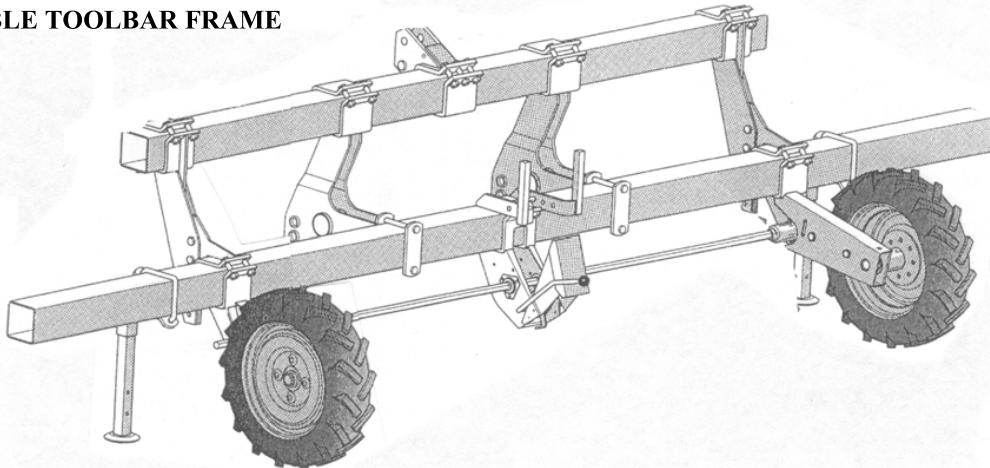
The 5x5 mounted rigid toolbar frame comes in the following configurations:

SINGLE RIGID Toolbar Frame for:

- 1-row
- 2 and 4-row 30"-40" rows
- 6-row 22"-30" rows
- 8-row 22" row



DOUBLE TOOLBAR FRAME

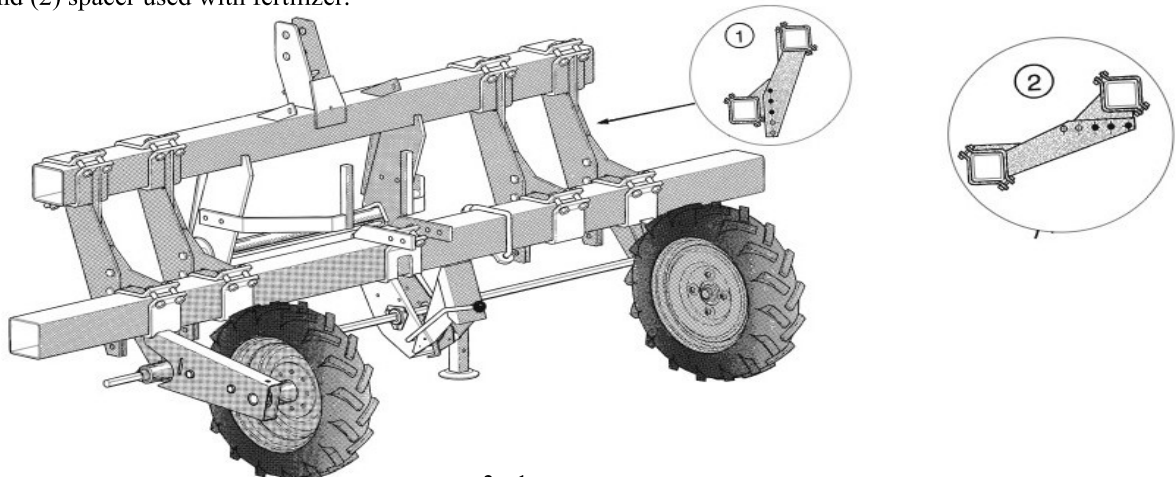


ADVANCED FRAME rigid toolbar for:

This frame is used when a unit needs to be placed in the center of the main toolbar. This toolbar gives you the option of a 1, 3, 5, or 9-row planter.

The photo shows spacers

- (1) Used without fertilizer
- And (2) spacer used with fertilizer.



FRAME

5" X 5" Mounted Toolbar

TOOLBAR

The standard 5"x5" toolbar comes in these sizes:

8' 2" – 11' 6" – 13' 2" – 14' 9" - 5mm thickness

20' – reinforced 5mm thickness

14' 9" – 20' – 23' – 25' – 6mm thickness

TOOLBAR STAND

One or two toolbar stands are located on the front of the main frame. Position the stands so that they are not directly behind the tire of the tractor. Planters with front mounted drive wheels do not require toolbar stands.

FIXED DRIVE WHEEL

The fixed drive wheel block is mounted on the 5"x5" toolbar frame with (2) 16mm 'V' bolts and (4) 16mm locking nuts.

Tire size = 5.90" x15"

PSI. = 36

The tire pressure should be checked and regularly maintained. There is a right and left mounting for the wheel blocks. To determine the right and left hand side of the planter, stand behind the planter and face it. The back of the planter is the side that is not hooked up to the tractor.



DANGER Rim and tire servicing can be dangerous. Explosive separation of a tire and rim parts can cause serious injury or death!



Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job. Only properly trained and equipped people should do this job. Maintain the correct tire pressure. Do not inflate the tires above the recommended pressure.

When inflating tires, use a slip-on air chuck and extension hose long enough to allow you to stand to one side, and not in front of, or over, the tire assembly. Use a safety cage to enclose the tire and assembly when inflating.

Inspect tires and wheels daily. Do not operate with low pressure, cuts, bubbles, damaged rims or missing lug bolts and nuts.

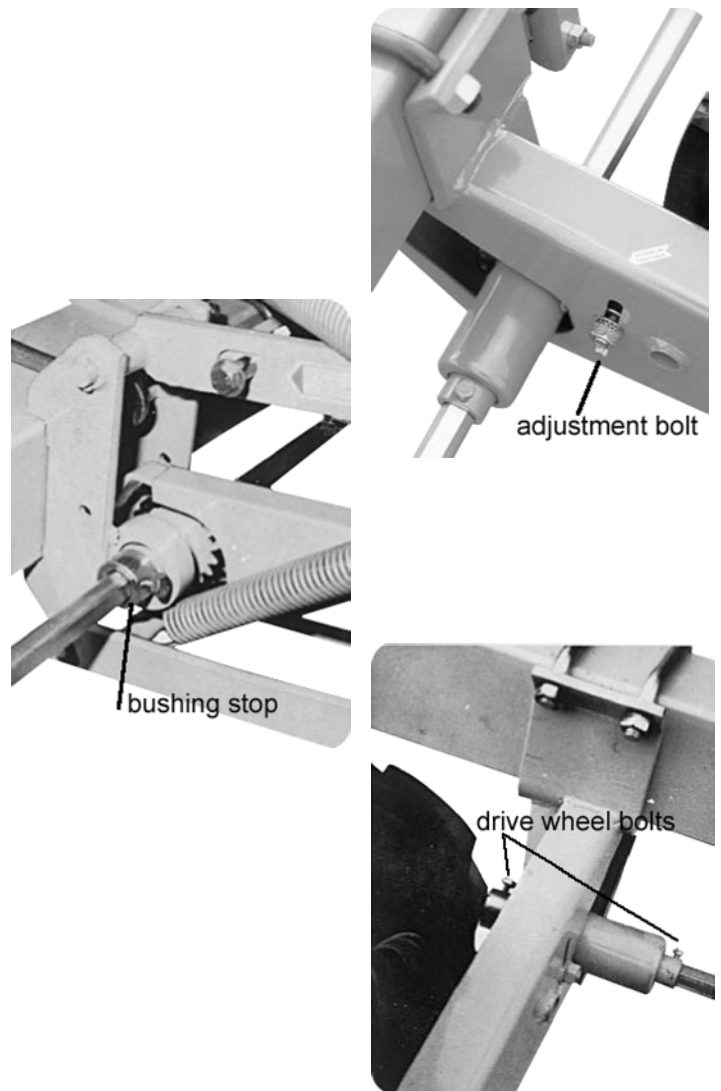


Important: Check that the chains for the drive wheel blocks are tight. If not, tighten **adjustment bolt** in an "up" position.

Also, check that the **bushing stops** of the upper hex shaft and the **bolts of the drive wheel** blocks are tight. The bolts or the drive wheel blocks secure the lower hex shaft.

HEX SHAFT, COUPLERS, BUSHING STOPS

The drive wheels drive the hex shaft; the hex shaft then turns the transmission that drives the planter units. It is important to visually check the hex shaft each season to make sure it is straight. Couplers can be used to extend a shaft. The bushing stops prevent the hex shaft from working or moving from side to side, while in operation.



FRAME

5" X 5" Mounted Toolbar

ADJUSTABLE DRIVE WHEEL

The adjustable drive wheel block is mounted on the 5"x5" toolbar frame with a counter clamp. The adjustable drive wheel block allows you to adjust the level of the toolbar and adjust the height for variances in the seed bed.

Either a screw-type or a newer spring-loaded adjustment regulates the wheel block. They are both interchangeable within the wheel block.

The screw-type adjustment is rigid, while the spring-loaded adjustment acts as a 'shock absorber' and allows for a flex up and down of the wheel to ride the contours of the land.

The spring-loaded adjustment can also be made rigid by tightening the nylon locknut clockwise on top of the housing. This will compress the spring inside the housing and minimize any upward or downward travel of the wheel block.

ADJUSTING THE DRIVE WHEEL

To lower the drive wheel, turn the hand wheel counterclockwise.

To raise the drive wheel turn the hand wheel clockwise.

There is a right and left mounting for the wheel blocks which is determined by standing behind the planter as it would be hooked up to the tractor.

Tire size = 5.90" x 15" and
PSI = 36

The tire pressure should be checked and regularly maintained.



DANGER Rim and tire servicing can be dangerous. Explosive separation of a tire and rim parts can cause serious injury or death!



Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job. Only properly trained and equipped people should do this job. Maintain the correct tire pressure. Do not inflate the tires above the recommended pressure.

SINGLE TOOLBAR HITCH

The single toolbar hitch consists of two lower hitch brackets (right and left) and one main heavy-duty center mast with tie brace and straps. The lower mounting brackets are delivered with a Cat. II pin. A Cat. I pin or a bushing for a Cat. III pin is also available. If necessary, the lower mounting brackets of the standard hitch can be mounted as a counter clamp of the planting unit.

DOUBLE TOOLBAR HITCH & SPACER

The planter hitch of the double toolbar consists of two lower hitch brackets (right and left) and one upper mounting bracket. The double toolbar hitch is delivered with a Cat. II hitch pin. This bracket can also be positioned to fit a Cat. III 3-point or quick hitch. The double toolbar hitch is generally used with two spacers for extra support.

ADVANCED HITCH

The advanced hitch allows for the placement of a unit in the center of the main toolbar. This feature gives you the option for an odd number of units on the main frame. Included in the advanced hitch are mounting brackets for placement of the gearbox in an advanced position. The hitch bar (4365.a) is semi-automatic.

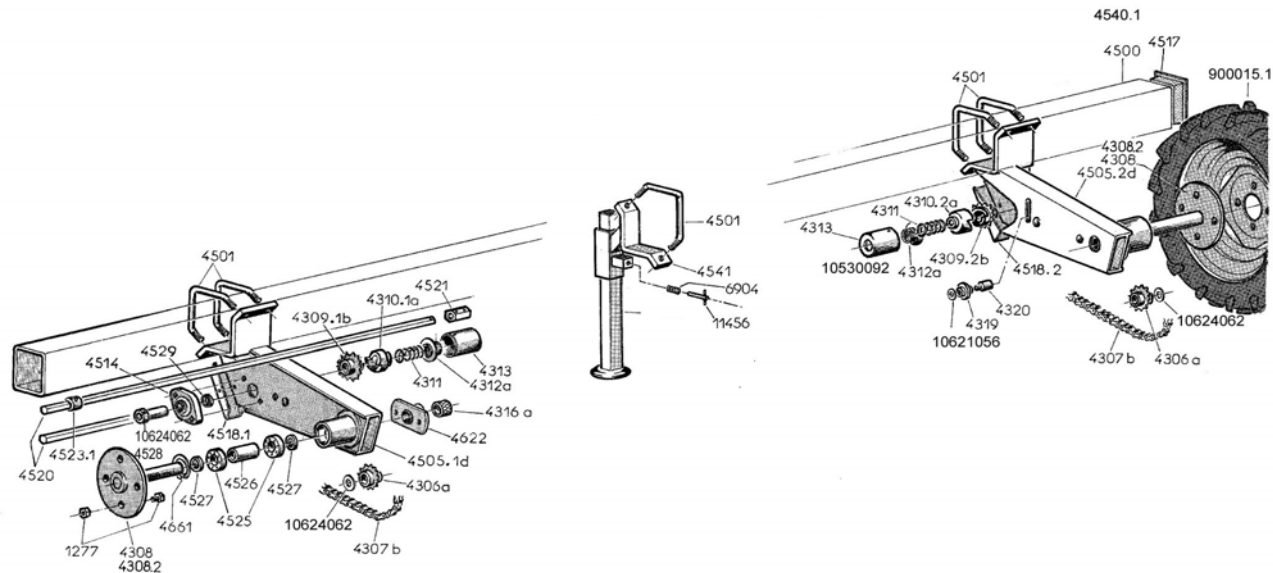


CAUTION Make sure that the tractor, when placed in front of the planter, does not interfere with the lock bar of the hitch. This could result in the unlocking of the hitch.

FRAME

5" x 5" Mounted Frame

**TOOLBAR STAND
HEX SHAFT, COUPLERS, BUSHING STOP
FIXED DRIVE WHEEL**



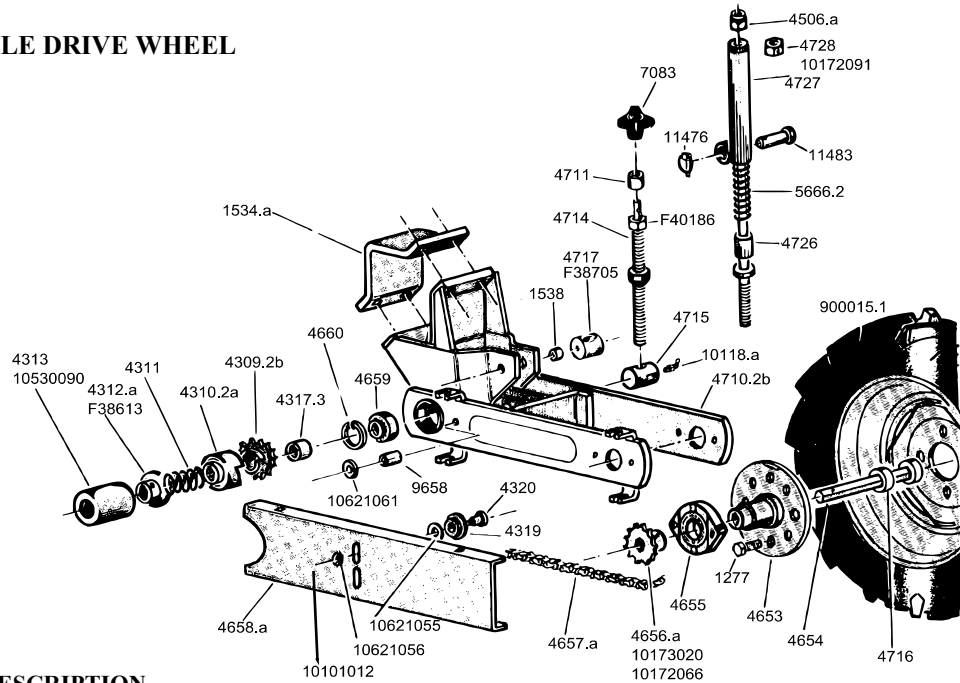
PART	DESCRIPTION
1277	Lug nut and bolt (14mm x 30mm)
4306.a	Sprocket Drive Wheel, 13 Tooth, 1 3/8" Bore Uses
4307.b	Chain Drive Wheel, 13N, 52 Links
4308	Hub Spindle Drive Wheel
4309.1b	Sprocket Slip clutch, LH, 13 Tooth
4309.2b	Sprocket Slip clutch, RH, 13 Tooth
4310.1a	Claw Slip clutch, LH
4310.2a	Claw Slip clutch, RH
4311	Spring Slip clutch
4312.a	Bushing Stop for Spring Clutch, uses 8x12 Bolt
4313	Housing Slip clutch, uses 6x10 Phillips Head
4319	Chain Tightening Idler
4320	Pin for Chain Tightener w/ 12mm nut
4501	V bolt, 16mm
4505.1d	Wheel housing, left hand
4505.2d	Wheel housing, right hand
4514	Pillow Block Complete w/Bearing
4514.1	Bearing Only (GAY 30NPPB)
4514.2	Pillow Block Only
4316.a	Sleeve, 35 id x44 od x35
4518.1	Front Guard Left Drive Wheel
4518.2	Front Guard Right Drive Wheel
4520	Hexagon Drive Shaft , specify length
4521	Coupler , uses 6 x 40 roll pin
4523	Bushing Stop , 1", uses 10 x 15 bolt
4523.1	Bushing Stop, with cross bolt
4525	Bearing 60072RS

PART No.	DESCRIPTION
4526	Bushing, inside 36 id x42 od x83 long
4527	Bushing, outside 36 id x42 od x7 long
4528	Clutch Sleeve
4529	Filler Bushing 30 id x35 od x14.25 long
4540.1	Toolbar stand only
4541	Bracket for toolbar stand
4622	Pillow block, Special Wheel
4661	Snap ring, Internal
6904	Spring (R145)
11456	Locking pin
640838	Toolbar stand complete
900015.1	Wheel w/rim & 5.90x15 tire, complete
10101012	Locking Washer, 12 x 20 Ext. Tooth
10172093	Roll Pin, 6 x 40
10172094	Roll Pin, 6 x 45
10502012	Bolt, 10 x 15
10530090	Screw, phillips, 6 x 10
10621031	Washer 13 x 24 x 1.5
10621056	Washer 13 x 30 x 6
10624062	Washer 36 x 58 x 1.5
AW51812	Rim Only 5.90x15
F38613	Bolt, 8 x 12
G170106152	Tire Only, 5.90 x 15
GTR-415	Stem Only

FRAME

5" x 5" Mounted Frame

ADJUSTABLE DRIVE WHEEL



DESCRIPTION

1277	Lug Nuts & Bolts (14mm x 30mm)
1534.a	Counter Clamp, 120mm
1538	Spacer bushing, 12 id x18 od x10mm long
4309.1b	Slipclutch Sprocket, LH, 13 Tooth (w/ 4310.1a)
4309.2b	Slipclutch Sprocket, RH, 13 Tooth (w/ 4310.2a)
4310.1a	Claw Slipclutch, LH (C12A on casting)
4310.2a	Claw Slipclutch, RH (C12B on casting)
4311	Spring Slipclutch
4312.a	Bushing & Spring Clutch (uses 8x12 bolt)
4313	Housing Slipclutch, uses 6x10 Phillips Head
4317.3	Hex Spacer, 33mm
4319	Chain Tightening Idler
4320	Pin for Chain Tightener, w/ 12mm nut
4467.d	Slipclutch Assembly complete (w/ 4309.2b & 4310.2a)
4467.g	Slipclutch Assembly complete (w/ 4309.1b & 4310.1a)
4506.a	20mm Nylon Locknut
4653	Hub Drive Wheel, 8 Hole
4654	Spindle, Hex shaped, for Collar
4655	Pillow Block Complete w/Bearing
4655.1	Bearing Only (S207NPPB)
4655.2	Pillow Block only (01LCTE 07 mark on cast housing)
4656.a	Rear sprocket, 13T, hex bore, takes 8x40 roll pin
4657.a	Chain, 13N (66 links w/ conn link)
4658.a	Drive chain shield
4659	Bearing (205KRR2 ref. #)
4660	Internal Snapping, 52mm
4710.1b	Support frame, w/clutch to the right (since 1994)
4710.2b	Support frame, w/clutch to the left (since 1994)

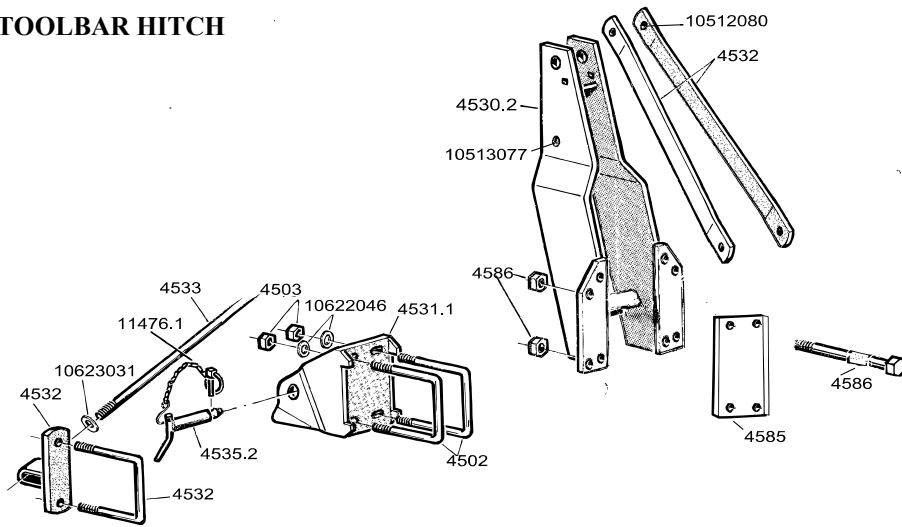
DESCRIPTION

4711	Spacer bushing, 20x 30x 25
4714	Threaded rod (standard adj)
4715	Threaded pivot pin
4716	Spacer for spindle (8mm hex bore)
4717	Pivot pin (takes 12x25 bolt)
4726	Threaded shaft on spring loaded adj)
4727	Housing for spring and shaft
4728	Hex nut, 20mm, w/ 6mm hole
5666.2	Spring
7083	Depth Control Handwheel
9658	Bushing (7mm ID, 25mm long)
10118.a	Grease Zerk, 6mm, 45 degree
11476	Lynch Pin, 9mm Dia.
11483	Pin, 19mm Dia.
900015.1	Tire and Rim Assembly (5.90x15)
AW51812	Rim Only
G17010615	Tire Only
F38613	Bolt, 8x12
F38705	Bolt, 12x25
F39210	Bolt, 12x50
F40186	Hex Nut, 20mm
10101012	External Tooth Locking Washer, 12x20
10172066	Roll Pin, 5x35
10172091	Roll Pin, 6x30
10173020	Roll Pin, 8x40
10530090	Phillips Head Screw, 6x10
10621055	Washer, 13x30x5
10621056	Washer, 13x30x6
10621061	Washer, 13x40x4

FRAME

5" x 5" Mounted Frame

SINGLE TOOLBAR HITCH



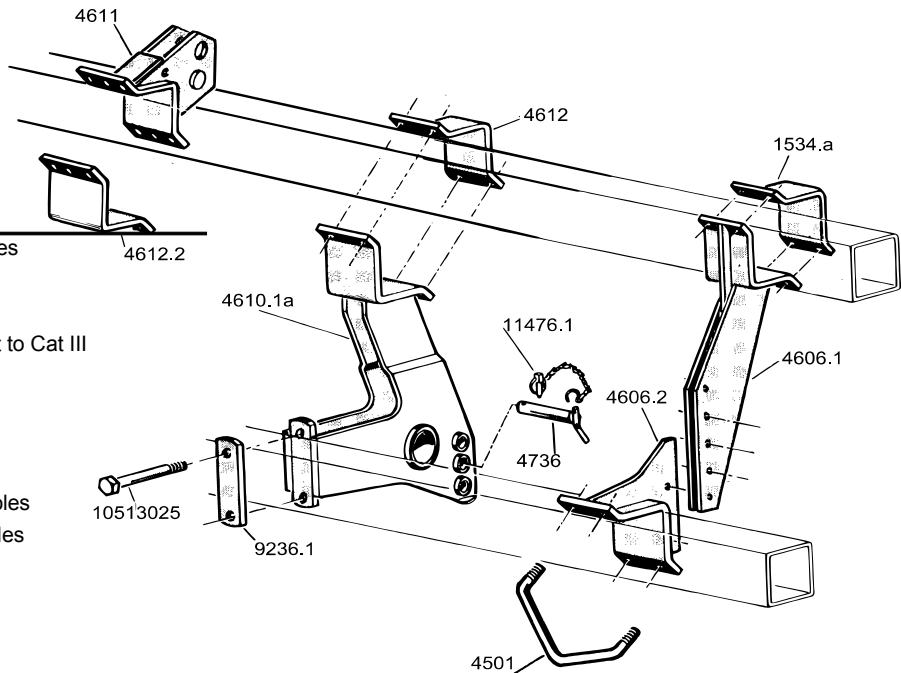
PART No. DESCRIPTION

4502	U Bolt, 16mm
4503	Locking Nut, 16mm
4530.2	Heavy-duty Mast
4531.1	Lower 3 Pt. Bracket, Left
4531.2	Lower 3 Pt. Bracket, Right
4532	Straps, 3 Pt. Hitch
4533	Tie Brace 3 Pt. Hitch
4534.1	Lefthand Brace Holder
4534.2	Righthand Brace Holder
4535.1	Hitch Pin, Cat. 1

PART No. DESCRIPTION

4535.2	Hitch Pin, Cat. 2
4536	Bushing for Cat. 3
4585	Reinforced Hitch Plate
4586	Bolt, 20x180mm
4587	Bushing, 20 id x30 od x60mm long
11476	Lynch Pin
11476.1	Lynch Pin w/ Chain
10512080	Bolt, 14 x 45mm
10513077	Bolt, 20 x 100mm
10623031	Washer, 21 x 40 x 4mm
10622046	Washer, 17 x 30 x 4mm

DOUBLE TOOLBAR HITCH



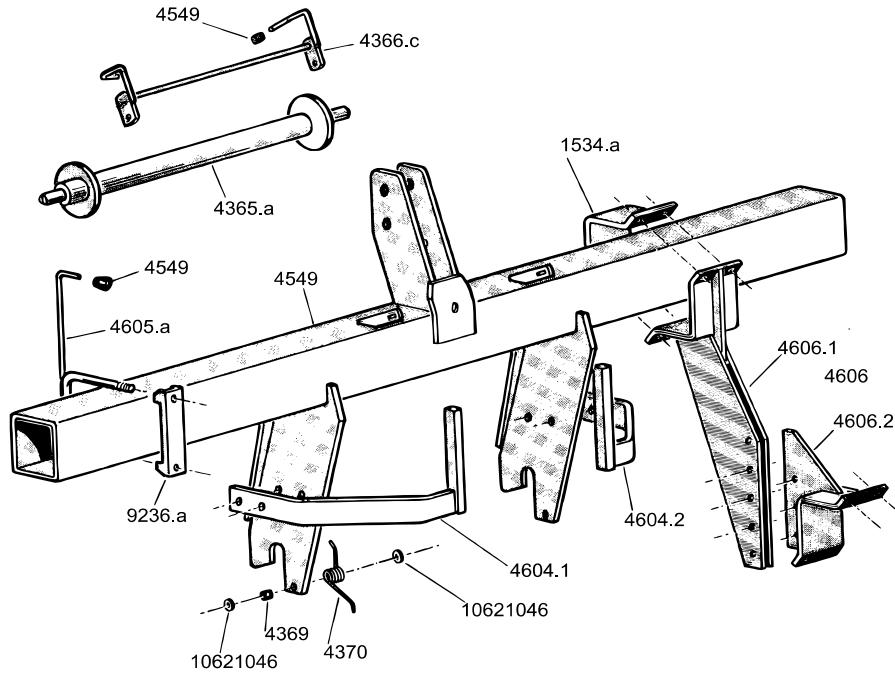
PART No. DESCRIPTION

1534.A	Counter Clamp 120mm w/4 holes
4501	V Bolt 16mm, 5x5 Bar
4503	Lock Nut, 16mm
4536	Bushing for Hitch Pin to convert to Cat III
4606.1	Toolbar Spacer, upper
4606.2	Toolbar Spacer, lower
4610.1B	Hitch/ Spacer bracket
4611	Upper 3-Point Hitch Bracket
4612	Counter Clamp 140 mm w/ 4 holes
4612.2	Counter Clamp 140mm w/ 6 holes
4736	Hitch Pin, CAT II
9236.1	Clamp Facing
11476.1	Lynch Pin w/ chain
11476	Lynch Pin
10513025	Bolt, 16x170

FRAME

5" x 5" Mounted Frame

ADVANCED TOOLBAR HITCH



PART No. DESCRIPTION

PART No.	DESCRIPTION
1534.a	Counter Clamp, 120mm, 4 Holes
4365.a	Hitch Bar, Semi-Automatic Hitch (A12)
4366.c	Locking Rod for Hitch Bar
4369	Sleeve Locking Rod
4370	Locking Spring
4549	Plastic Cap
4603.a	Upper Bar Advanced Hitch, 2.20m
4603.1a	Upper Bar Advanced Hitch, 2.60m
4604.1	Support Bracket Turbofan Left
4604.2	Support Bracket Turbofan Right
4605.a	Cable Guide Advanced Hitch
4606	Complete Toolbar Spacer
4606.1	Toolbar Spacer, Upper
4606.2	Toolbar Spacer, Lower
9236.a	Counter Clamp Facing
10621046	Washer, 13x27x2