

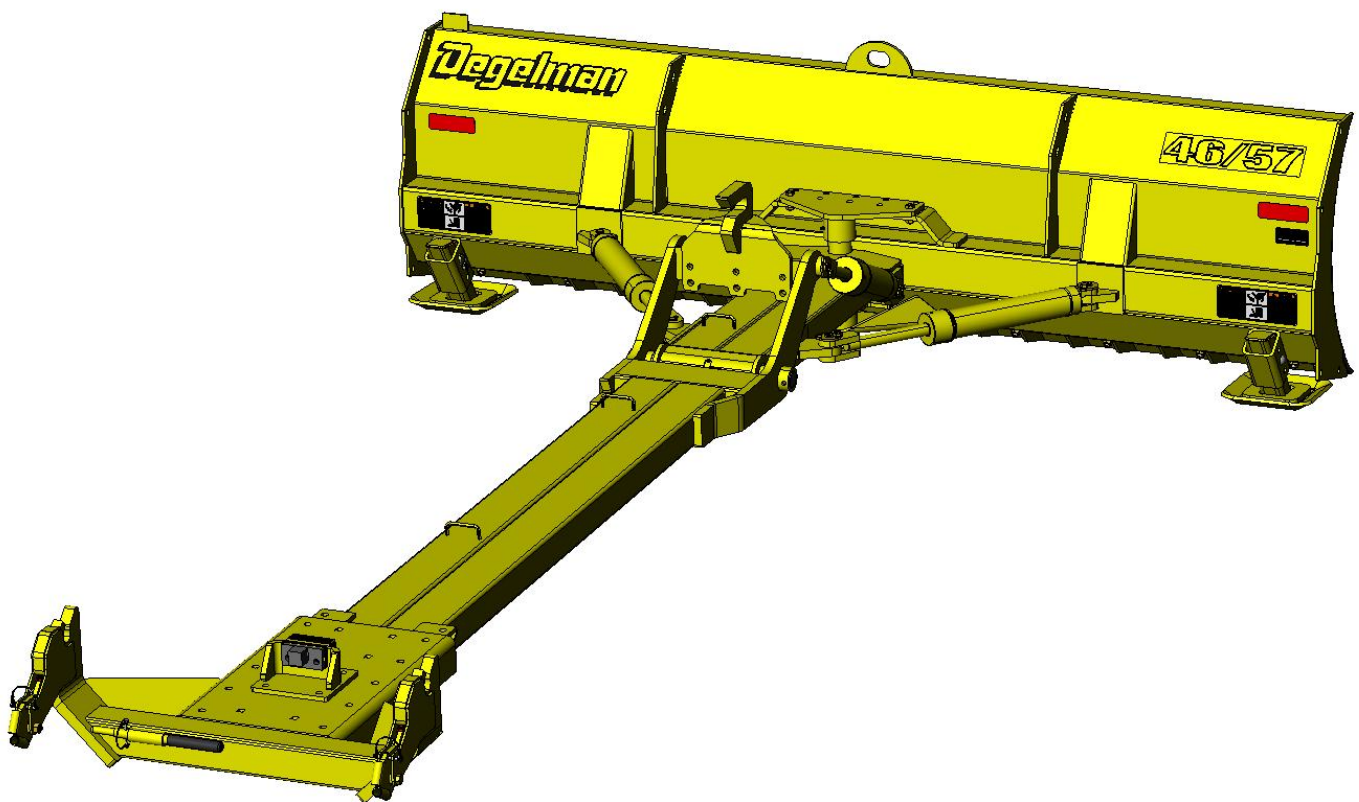


# John Deere 7220-7520 Series

9/10/04

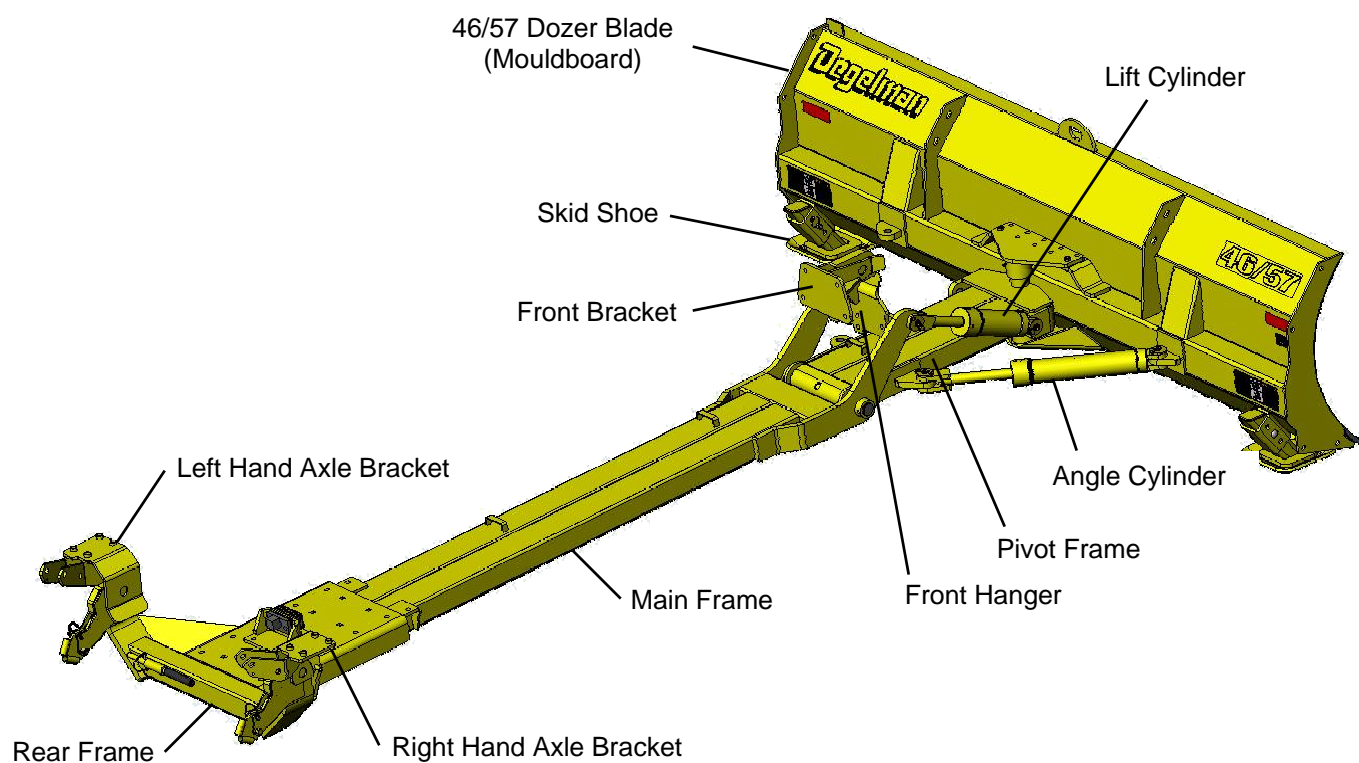
**46/57** Block  
**dozer blades**

Manual #143208



272 Industrial Drive, Box 830  
Regina, Sask. Canada S4P 3B1  
306 543-4447 543-2140 fx  
1-800-667-3545  
degelman@degelman.com

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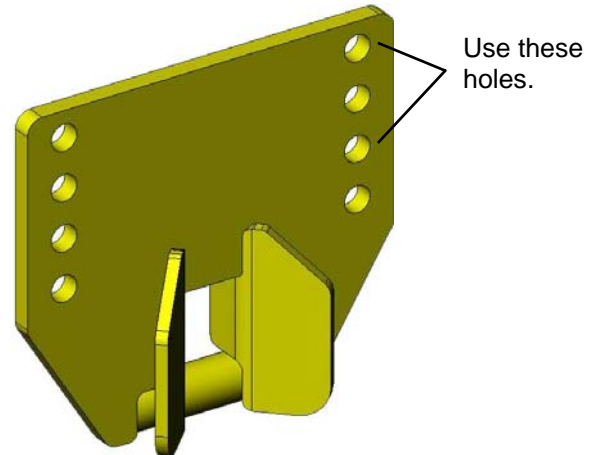
**PARTS MAY NOT BE EXACTLY AS SHOWN**

**Assembly Instructions:**

Remove tractor front weight bracket.



Install Degelman front bracket 779336.



Place front hanger 779910 behind main frame bolt bar and use top holes.

Front Bracket to Tractor Hardware:

4 – 118143 – Bolt, Hex M20 x 2.5 x 60mm P8.8 PL

4 – 118551 – Washer, Lock M20 PL

Pivot Pin 778065

Pin Hardware:

1 – 118082 – Bolt, Hex 1/2 x 3-1/2 UNC Gr.5 PL

1 – 118504 – Washer, Lock 1/2 PL

1 – 118405 – Nut, Hex 1/2 UNC Gr.5 PL

Main frame 779790



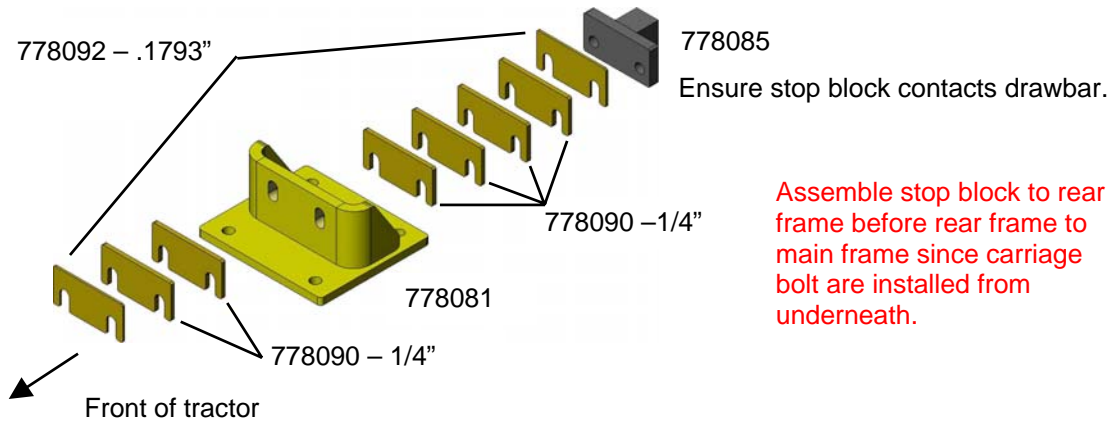
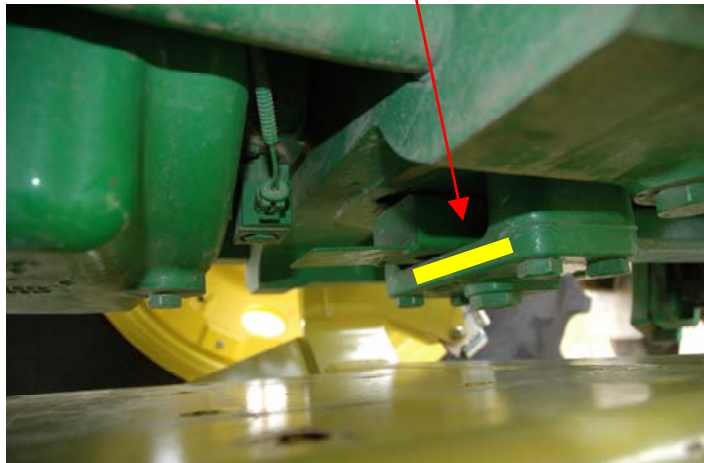
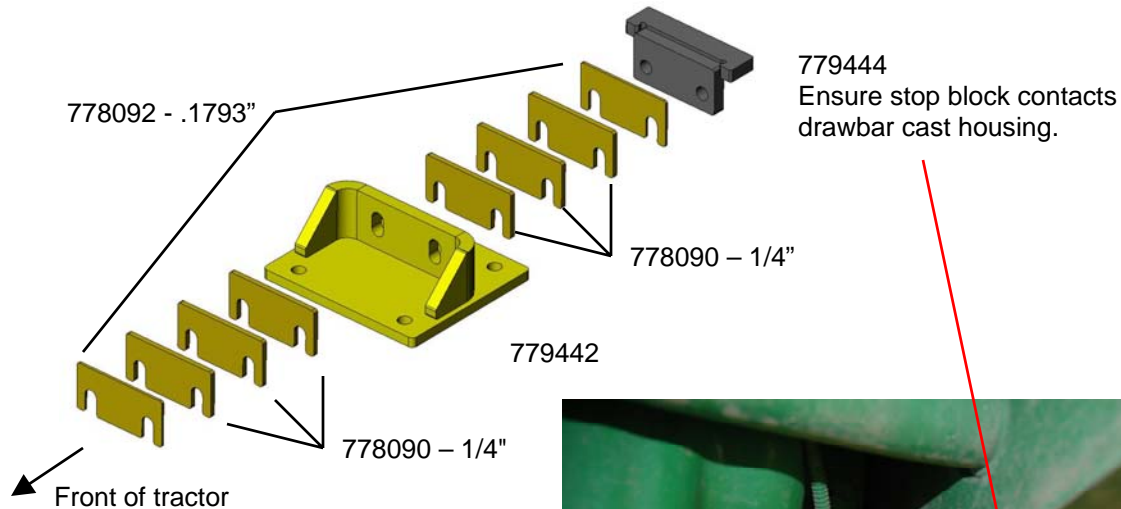
Front Hanger to Main Frame Hardware:

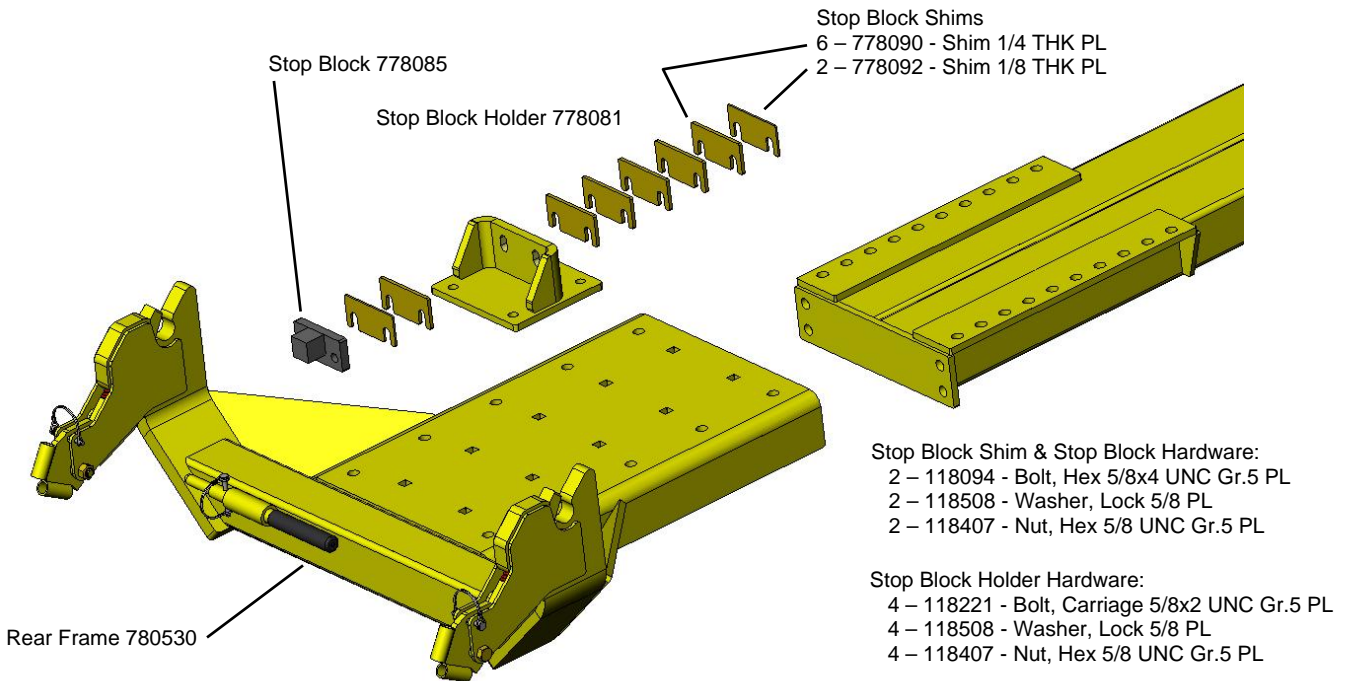
3 – 118743 – Bolt, Hex 3/4 x 2-1/4 UNC Gr.5 PL

3 – 118509 – Washer, Lock 3/4 PL

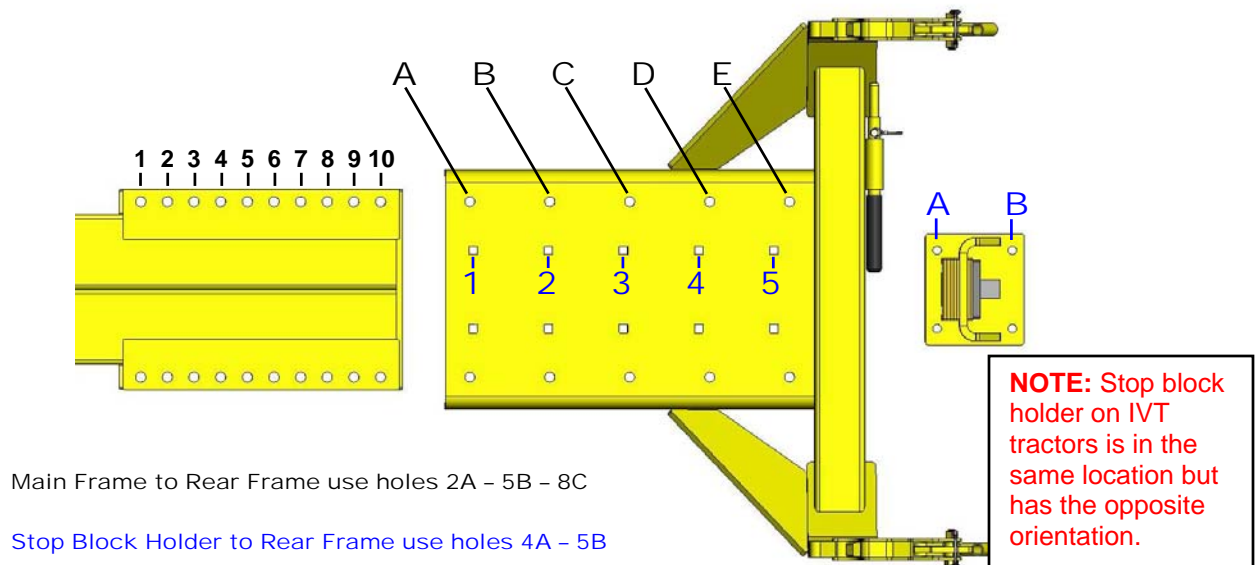
3 – 118410 Nut, Hex 3/4 UNC Gr.5 PL

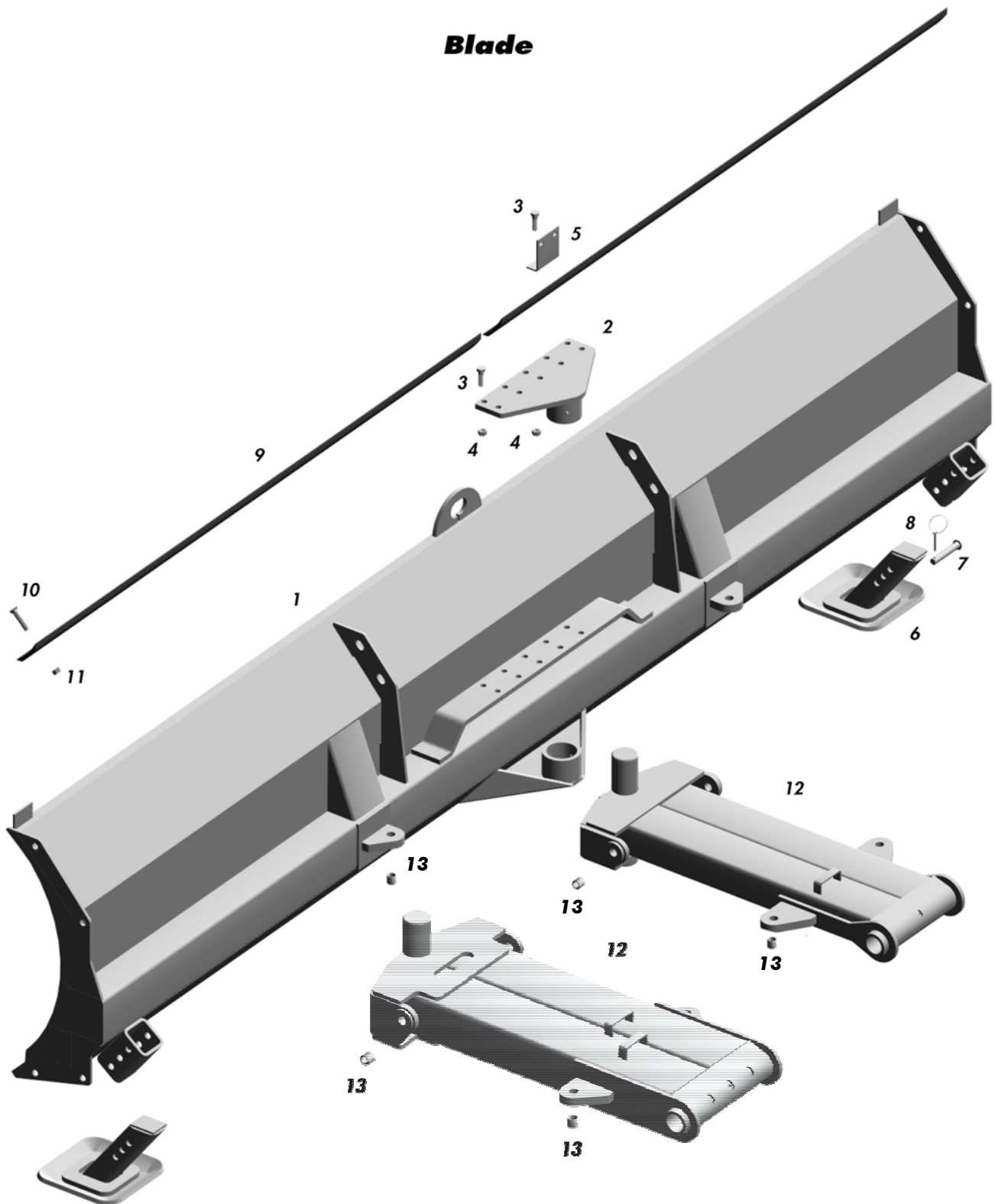
Ensure 3/8 to 5/8" gap, the front hook & hanger are for vertical loads only!

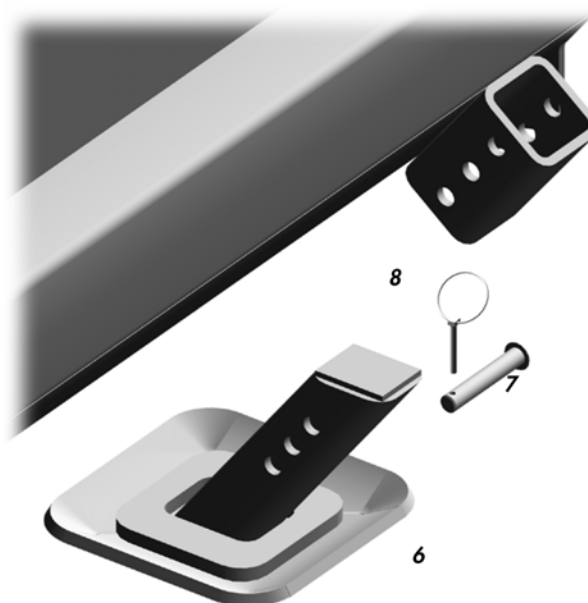
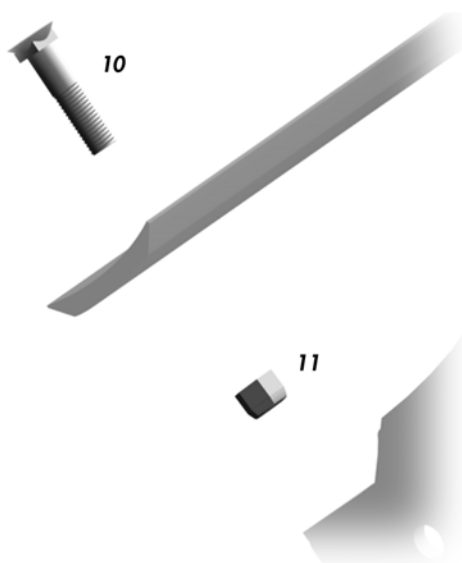
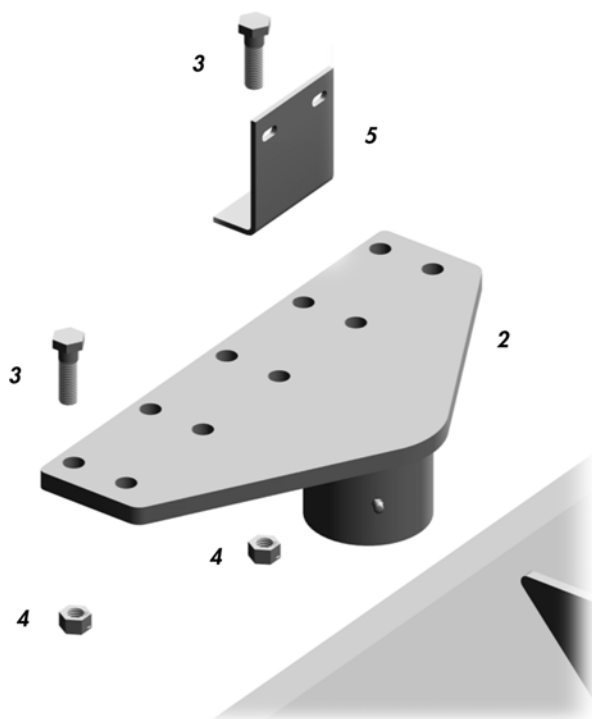
**Stop block & shim layout – STANDARD TRANSMISSION****Stop block & shim layout - IVT**



**EXACT ARRANGEMENT OF SHIMS MAY VARY**







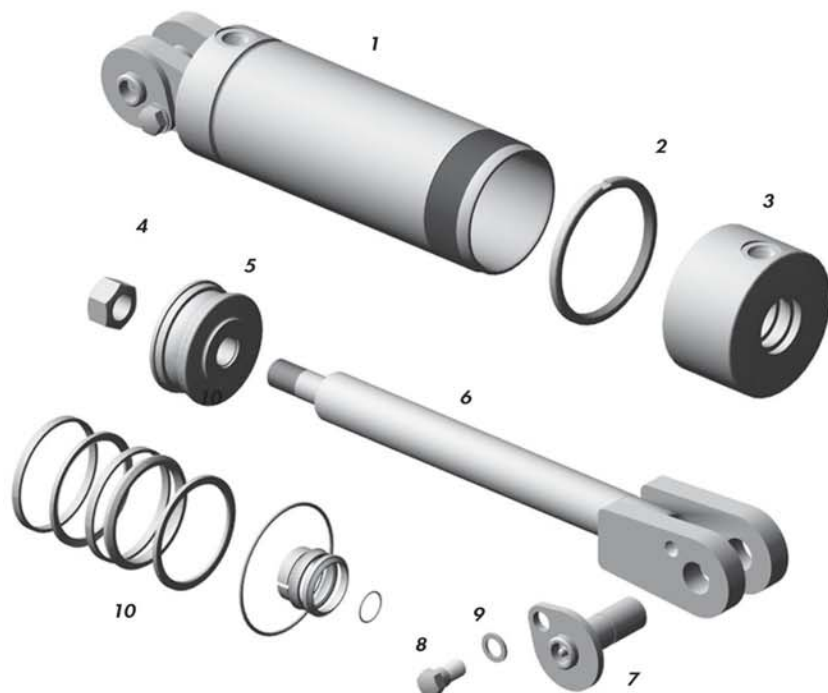
			Qty
1	778024	14ft 46/57 Dlock blade	1
	778003	12ft	1
	778002	10ft	1
	778001	9ft	1
2	778051	Angling cap	1
3	118795	Bolt 5/8 x 2 1/4 Gr8	10
4	118447	Lock nut 5/8 GrC	10
5	778127	Relief valve brkt	1
6	806001	Depth shoe	2
7	115402	Pin 3/4 x 4 1/8	2
8	118901	Lynch pin 3/16 x 1 1/2	2
9	116207	Cutting edge 7ft	2
	116206	6ft	2
	116210	10ft	1
	116209	9ft	1
10	118204	Plow bolt 5/8 x 2 1/4	as
11	118448	Lock nut 5/8 unitorg	required
12	778056	4600 Pivot frame	1
or	778058	5700 Pivot frame	1
13	117087	Wear Bushing 1	6

## Hydraulics

122731, 3 1/2 x 8 x 1 1/2 Lift cylinder

1	121687	Barrel	1
2	122658	Lock ring	1
3	122656	Open cap	1
4	118441	Lock nut 7/8 unf unitq	1
5	122663	Piston	1
6	122083	Rod & clevis	1
7	118930	Clevis pin	2
8	118796	Shld bolt 1/2 x 1 1/8	2
9	118924	Flat washer .591	2
10	122522	Seal kit	

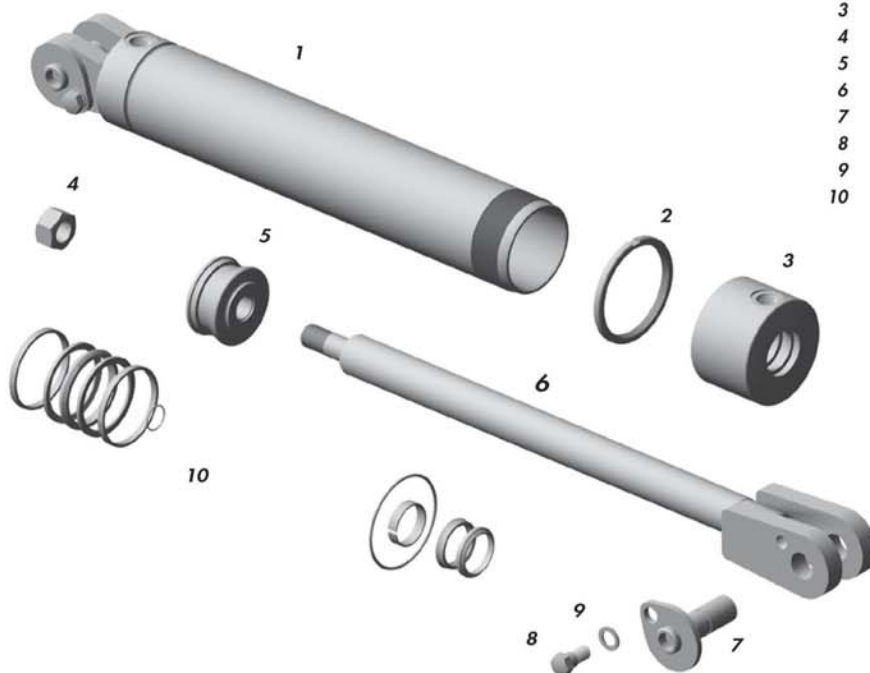
780040 Lift hydraulic kit

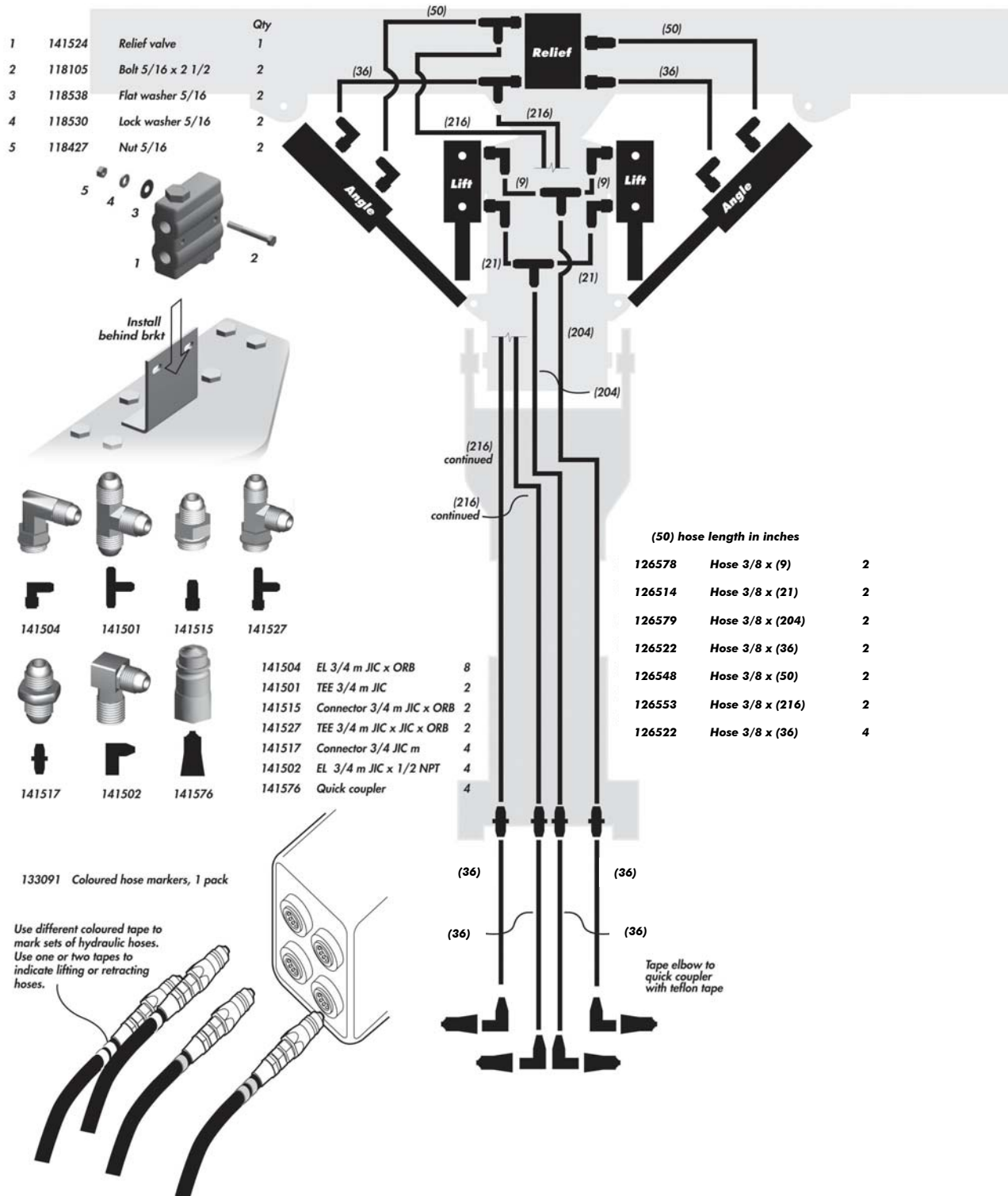


122729, 3 x 16 x 1 1/2 Angle cylinder

1	121671	Barrel	1
2	122558	Lock ring	1
3	122556	Open cap	1
4	118441	Lock nut 7/8 unf unitq	1
5	122563	Piston	1
6	122099	Rod & clevis	1
7	118930	Clevis pin	2
8	118796	Shld bolt 1/2 x 1 1/8	2
9	118924	Flat washer .591	2
10	122523	Seal kit	

778040 Angle hydraulic kit

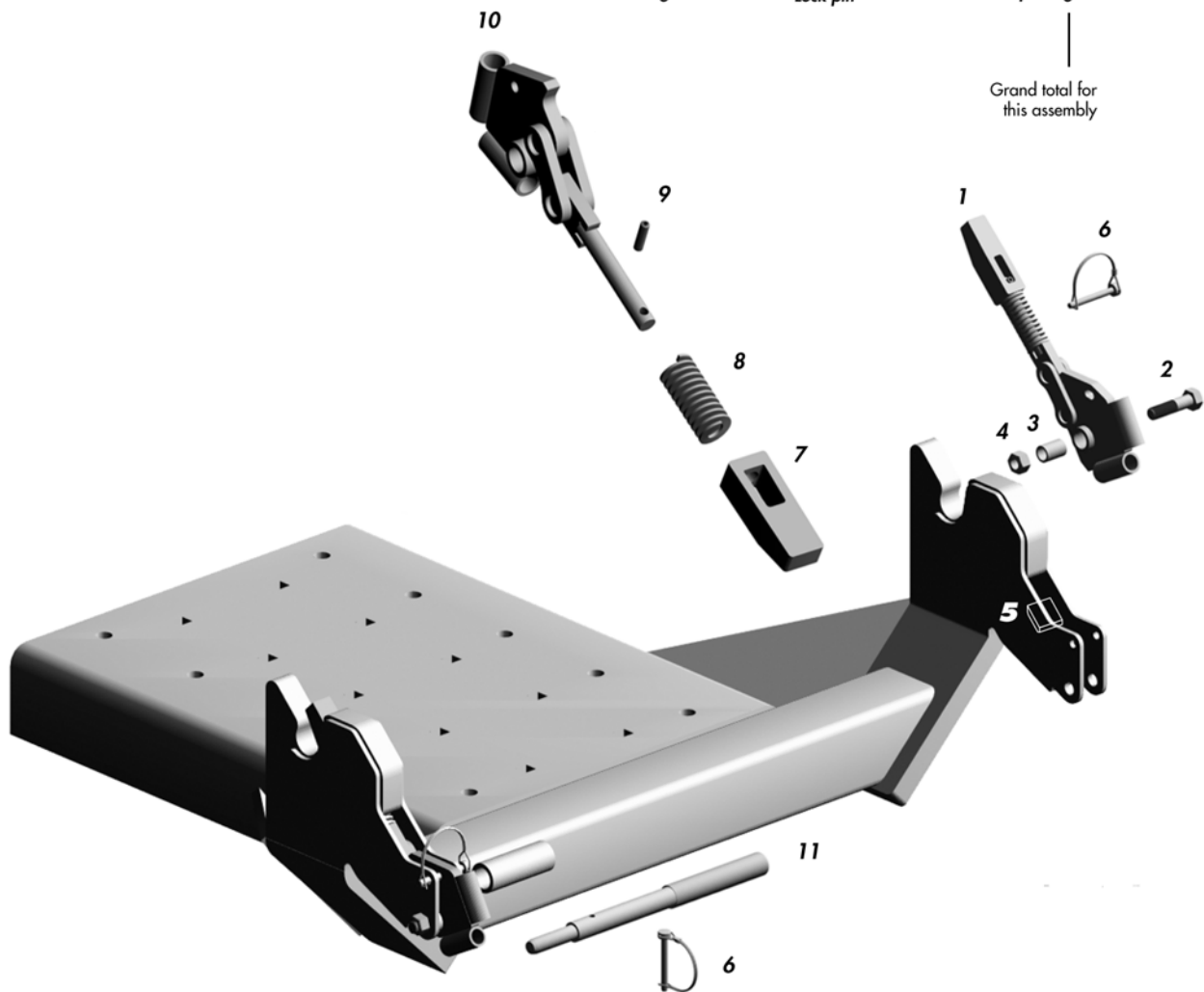




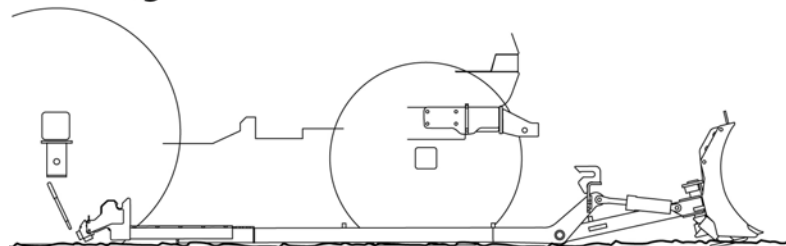
**Rear frame 780530**

			Qty
1	780152	Dlock linkage	2
2	118028	Bolt 5/8 x 2 1/2	2
3	780795	DL bushing	2
4	118448	Lock nut 5/8	2
5	780794	UHMW plastic block	2
6	243500	Lock pin	2
DL linkage includes..			
7	780157	Wedge	1
8	143116	Compression spring	1
9	118913	Roll pin	1
10	780153	DL linkage plate/bush	1
11	780150	DL handle	1
6		Lock pin	1
			3

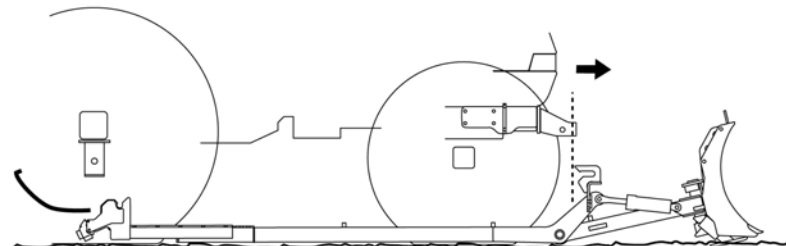
Grand total for  
this assembly



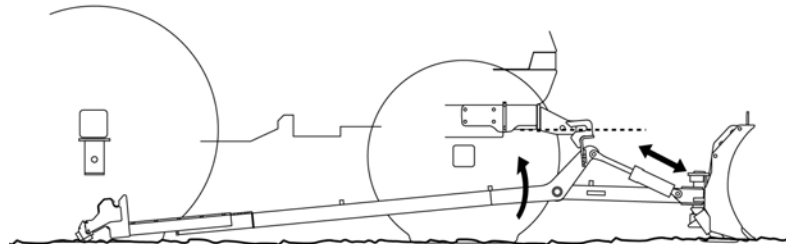
## Mounting



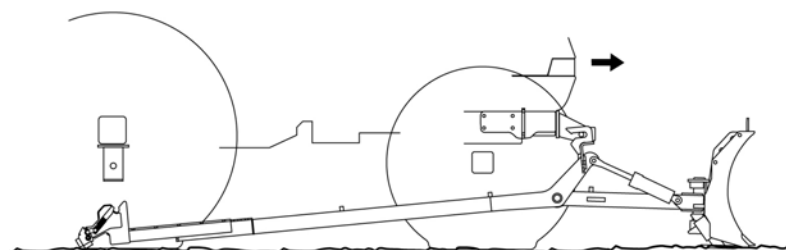
Line tractor up over the rear/main frames. Make sure Dlock is open, clip pin is put back on and handle is stored.



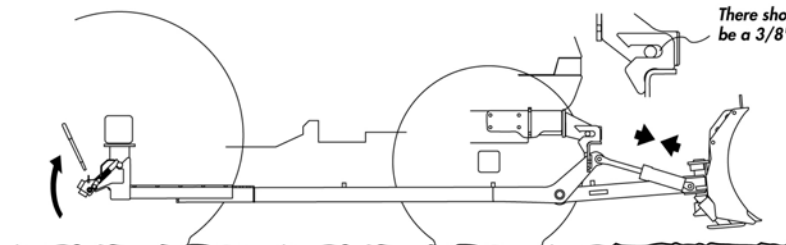
Drive forward so that the front bracket pin is just behind the front hanger's hook. It should be lined up so you can drive into the front hanger when it is raised up. Hook up the hydraulics.



Raise the front hanger by extending the lift cylinders so the pin and hook are level.

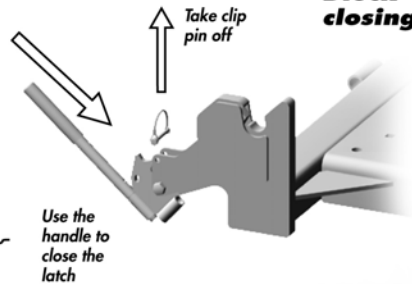


Drive forward until the pin is in the front hanger.

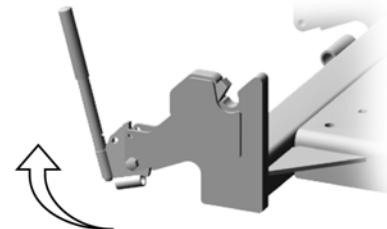


Now close the lift cylinders. This will raise up the rear frame. Take off clip, close the Dlock, attach clip then store the handle.

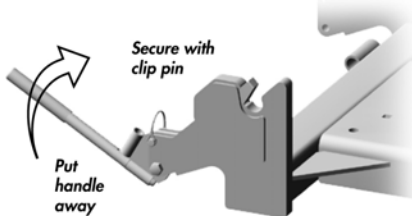
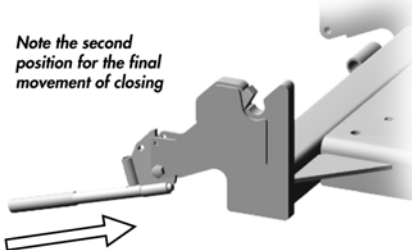
## Dlock closing



Use the handle to close the latch



Note the second position for the final movement of closing



Secure with clip pin

Put handle away



**Make sure Dlock is closed properly**

To disengage:

- 1- RAISE THE BLADE
- 2- Open the Dlock
- 3- Extend lift cylinder to lower rear frame
- 4- Lower main frame to ground
- 5- Back out to clear front hanger
- 6- Unhook hydraulics



**WARNING**  
It is vital to raise the blade before opening Dlock. If you don't the rear frame will fall.

## Operation, maintenance

### Before using for the first time

- Lube all points
- Torque all hardware to correct setting
- Check hardware torque & hydraulics after the first 2 hrs & again after 10 hrs

### Before using each time

- Check:
- If all points lubricated
  - All components attached securely
  - Condition of cutting edge
  - Depth shoe wear
  - Hydraulics;
    - Tractor's oil reservoir
    - Condition of hoses, lines & fittings

### Bleeding hyd

Bleed hydraulics of air. Cycle the hydraulics several times and hold the cylinders at full extent for several seconds.

### Rear end weights & Tire inflation

If needed, balance out your tractor by ballasting the rear end. You may need to raise the tire pressure in the front wheels. Consult your tractor's manual.

### Floataion mode

Here are some of the things you can do with your hyd system in float position;

- Skim the top of pavement
- Run on the skid shoes
- Back drag

### Cold weather

Cycle the cylinders several times to warm up system.

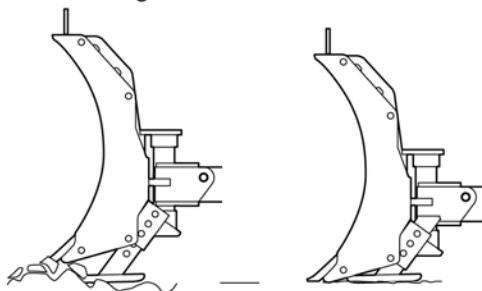
### Depth shoes

Soft uneven ground

- Depth shoe low
- Blade high

Hard even ground

- Depth shoe high
- Blade low



## TORQUE



**all hardware**

## TORQUE SETTINGS

Imperial Size	Grade	
	5	8
1/4	9	12 ft lb
5/16	18	25
3/8	30	45
7/16	50	70
1/2	75	110
9/16	10	155
5/8	155	215
3/4	270	385
7/8	435	620
1	660	930

Metric Size	SAE	
	8.8	10.9
3	0.4	1.3 ft lb
4	2.2	3.3
5	4	7
6	7	11
8	18	26
10	37	52
12	66	92
15	66	228
20	321	450
24	553	774

### Hyd. fitting Size

3/4	75 ft lb
7/8	90

**Record your serial number & blade width**

**9, 10, 12 or 14ft**



**All hardware;  
Hex head, Plated ,  
Gr.5 UNC (imperial)  
or P10.9 (metric)**

**Hoses;**

**3/8, ends c/w**

**3/4 JIC female swivel**

**Unless stated otherwise**

**Metric thread specs**

M	Thread pitch
14	2
16	2
20	2.5
22	2.5
24	3
27	3
30	3.5

## Lubrication

Lube all points and mechanisms after every 8 hr of use. Lube both sides

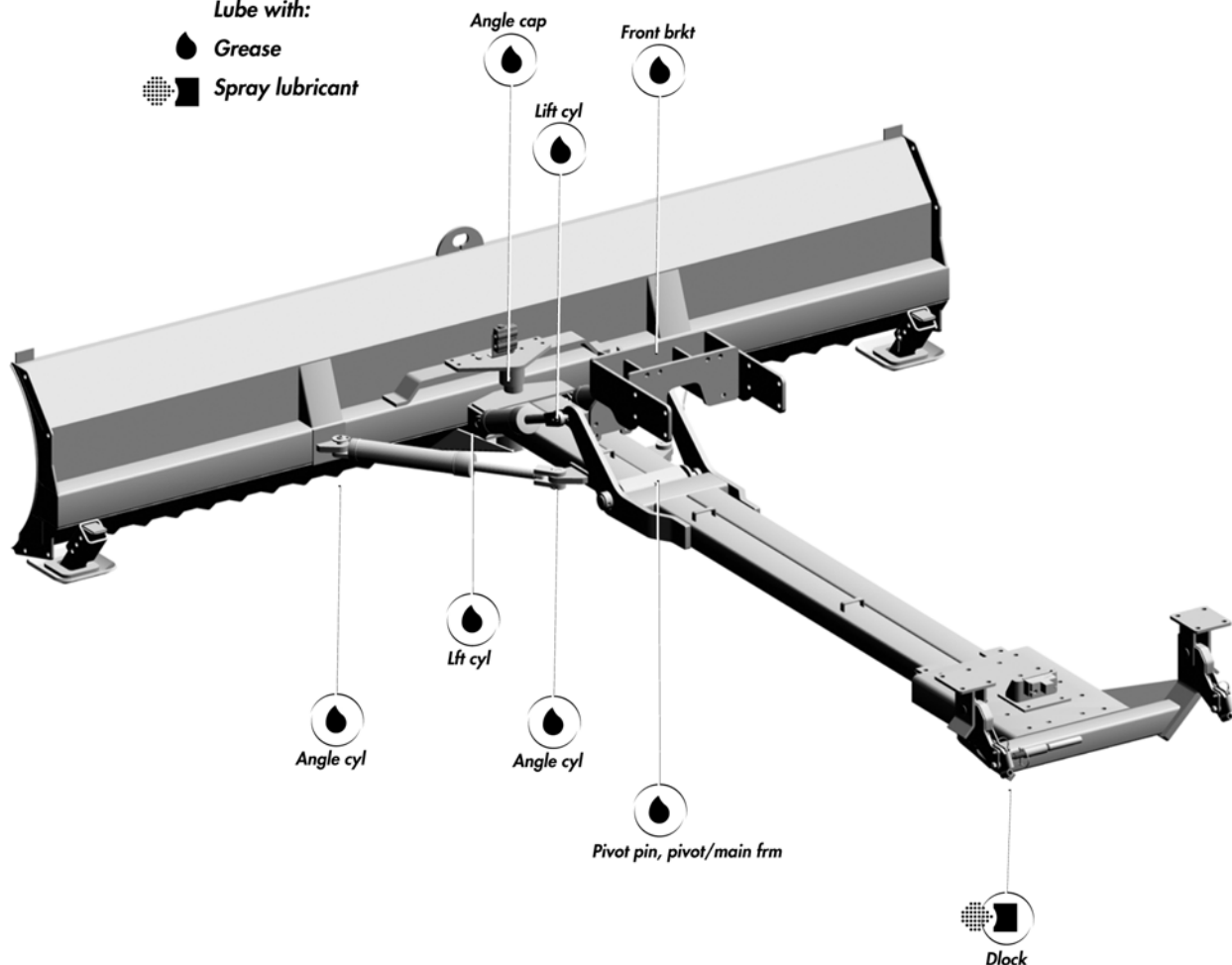
Lube with:



Grease



Spray lubricant

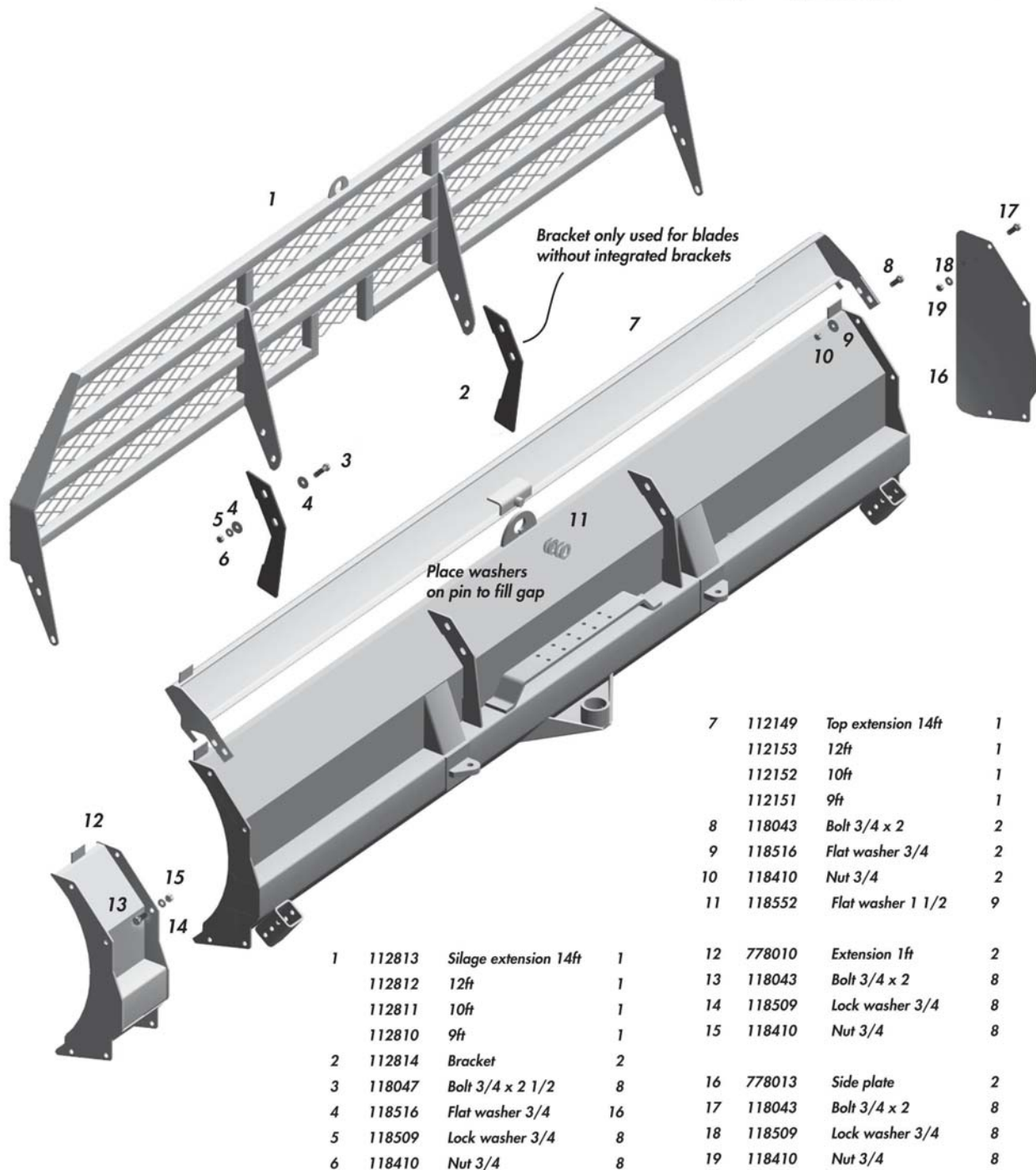


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## Options

### Decals & reflectors

142386	Warning decal, Falling Blade	2
142008	Degelman logo 25 3/4 lg	2
142280	Red reflector 6 3/8	2
142279	Amber reflector 3 1/4 lg	1
142904	46/57 blade decal	1



**KILLED, INJURED OR  
SAFE?****YOUR CHOICE**

You are responsible for your own safety. If you are not familiar with basic agricultural & industrial safety, you must get training. Owners of equipment must by law give operating instructions to other operators such as family members or a hired hand.

Making any design changes to equipment could cause a hazard and damage your machine.  
Wear proper safety equipment.

Have handy;

- First aid kit
- Fire extinguisher

Before working on machine:

- Turn tractor off
- Set controls in neutral
- Remove ignition key
- Clean all reflectors and lights

**HYDRAULIC**

Keep all parts clean. Replace worn or damaged parts. Don't try any makeshift repairs. Before operating check that everything is tight and not broken.

Wear gloves and eye protection when searching for leaks. Use a piece of wood or cardboard but not your hand. High pressure oil will penetrate your skin. If that happens you risk serious injury.

**BLADE**

Lower blade to the ground when not in use. Keep clear of blade when tractor is running. Keep hands & feet away from under blade. Turn engine off when hooking up hydraulics and engaging DLOCK during mounting or dismounting.

**TRANSPORTING**

Lift blade up then hold with safety chain. Make sure SMV sign & reflectors are clean. Use your hazard lights.

**WARRANTY**

Degelman Industries warrants this product to the original owner for a period of one (1) year parts and labour and two (2) years parts from the date of purchase. All matters related to the warranty of our products must be handled through the authorized selling dealer.

Warranty does not cover normal wear of the machine components or damages caused by lack of maintenance or misuse, and is subject to the following provisions.

**REPLACEMENT PARTS:**

Will be warranted for a period of ninety (90) days.

**WARRANTY ON MACHINES USED FOR CUSTOM WORK, RENTALS OR INDUSTRIAL USE:**

Will be warranted as stated above, with the exception that it will be for a period of ninety (90) days only.

**TIRES:**

Will be adjusted for warranty by tire manufacturer.

**LABOUR:**

Any labour subject to warranty must be authorized by a Degelman representative before work is started. Warranty labour allowance and rates will be handled according to established warranty service policy.

**GOVERNMENT LEGISLATION:**

Warranty terms and conditions are subject to Provincial or State legislation.

**MODIFICATIONS:**

Warranty will be void if any component is altered or modified, unless written authorization is granted by Degelman Industries Limited.

**WARRANTY ON ATTACHED EQUIPMENT:**

No responsibility will be assumed for whatever damages may occur to persons, tractors or property.



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