



Kelly

Kelly Prickle Chain Module Assembly & Parts Manual

Revision C - May 2016

Module Number:



Kelly Engineering
PO Box 100
Booleroo Centre
South Australia 5482
P +61 8 8667 2253
F +61 8 8667 2250
W kellyengineering.com.au

Thank you for choosing a Kelly Engineering product

We trust the following manual will be clear and easy to follow, however feel free to contact our company for customer support (details below).

Should you have any problems or wish to suggest any improvements or modifications to help improve our products please contact us.

We welcome feedback.

Parts can be purchased when required through your local dealer, or by contacting either Kelly Engineering in Australia or Hood & Company Inc. in the USA.

Kelly Engineering

Phone: + 61 8 8667 2253
Fax: + 61 8 8667 2250
Email: sales@kellyengineering.com.au
Website (Australia): www.kellyengineering.com.au
Website (US): www.kellyharrows.com

Hood & Company Inc. Springfield MO

Phone: 417 865 2100
Fax: 417 865 2105
Email: hoodco@hoodco.com

United States

Kelly Engineering

526 1st Street

PO Box 161

New Glarus WI 53574

Phone: 608 527 2386

Mobile: 316 304 6178

Email: waynerosenbaum@kellyharrows.com

Website: www.kellyharrows.com

Contents

	Page no
Section 1: Set Up	4
Section 2: Parts and Assembly	6
Section 3: Survey	

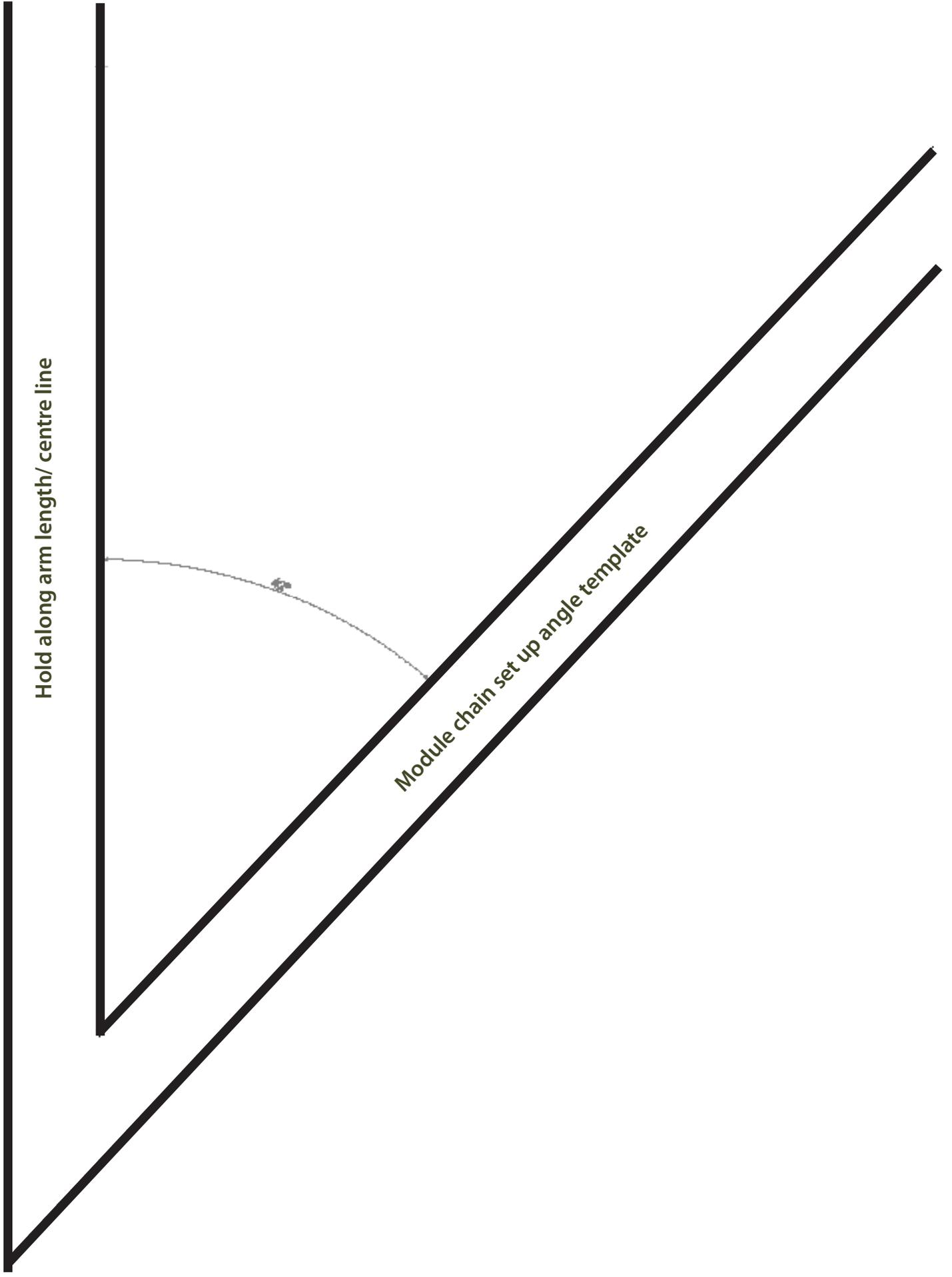
Tools Required

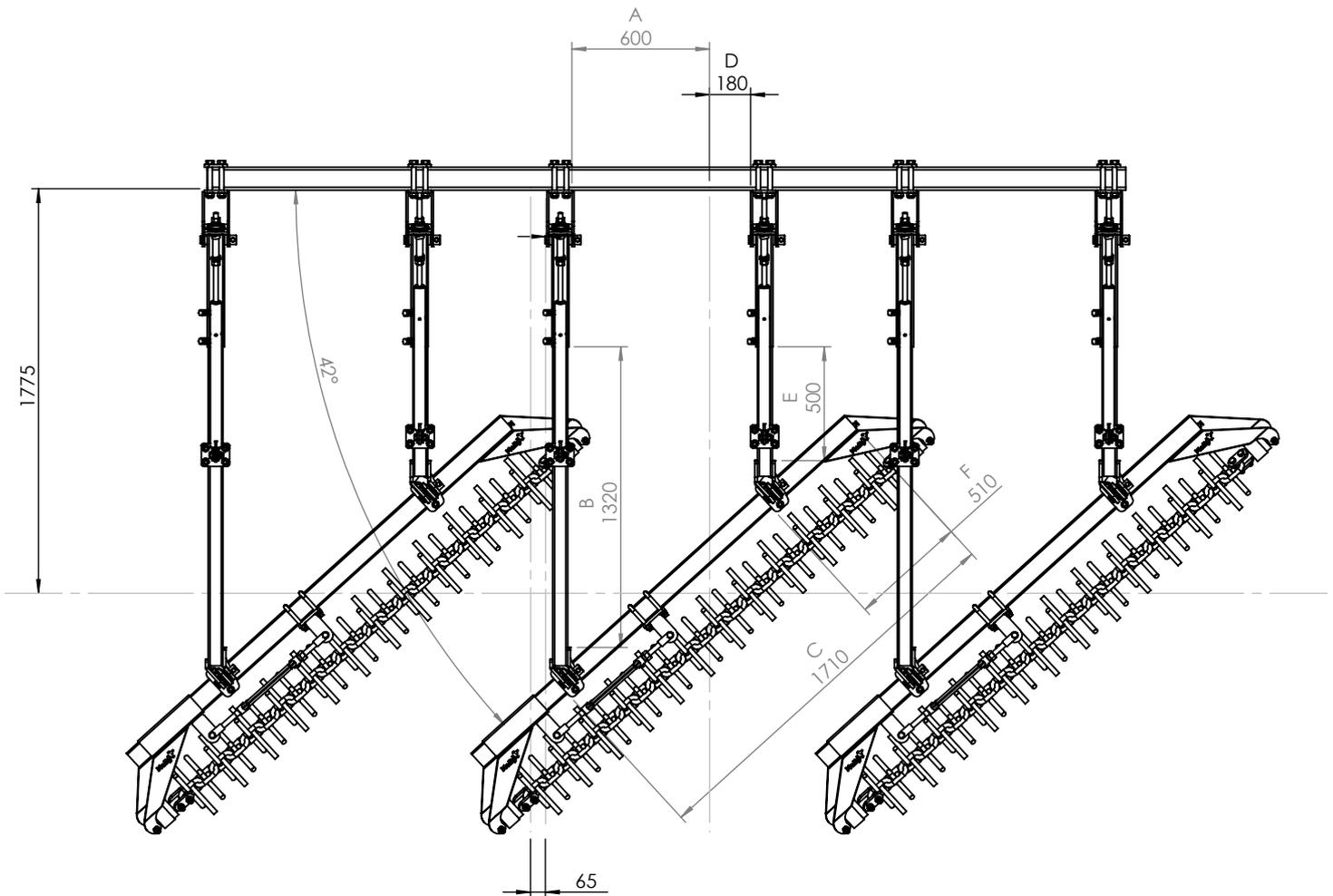
12mm Socket
18mm Socket
24mm Socket

Pry Bar - For aligning pins

Section 1

Set Up





Measurements (mm)						
A	200	300	400	500	600	700
B	1170	1305	1440	1575	1710	1845
C	960	1050	1140	1230	1320	1410
D	80	180	280	380		
E	645	510	375	240		
F	590	500	410	320		

We recommend you start at the middle of your machine and work outwards from the centreline, This ensures that the working width of the modules is achieved.

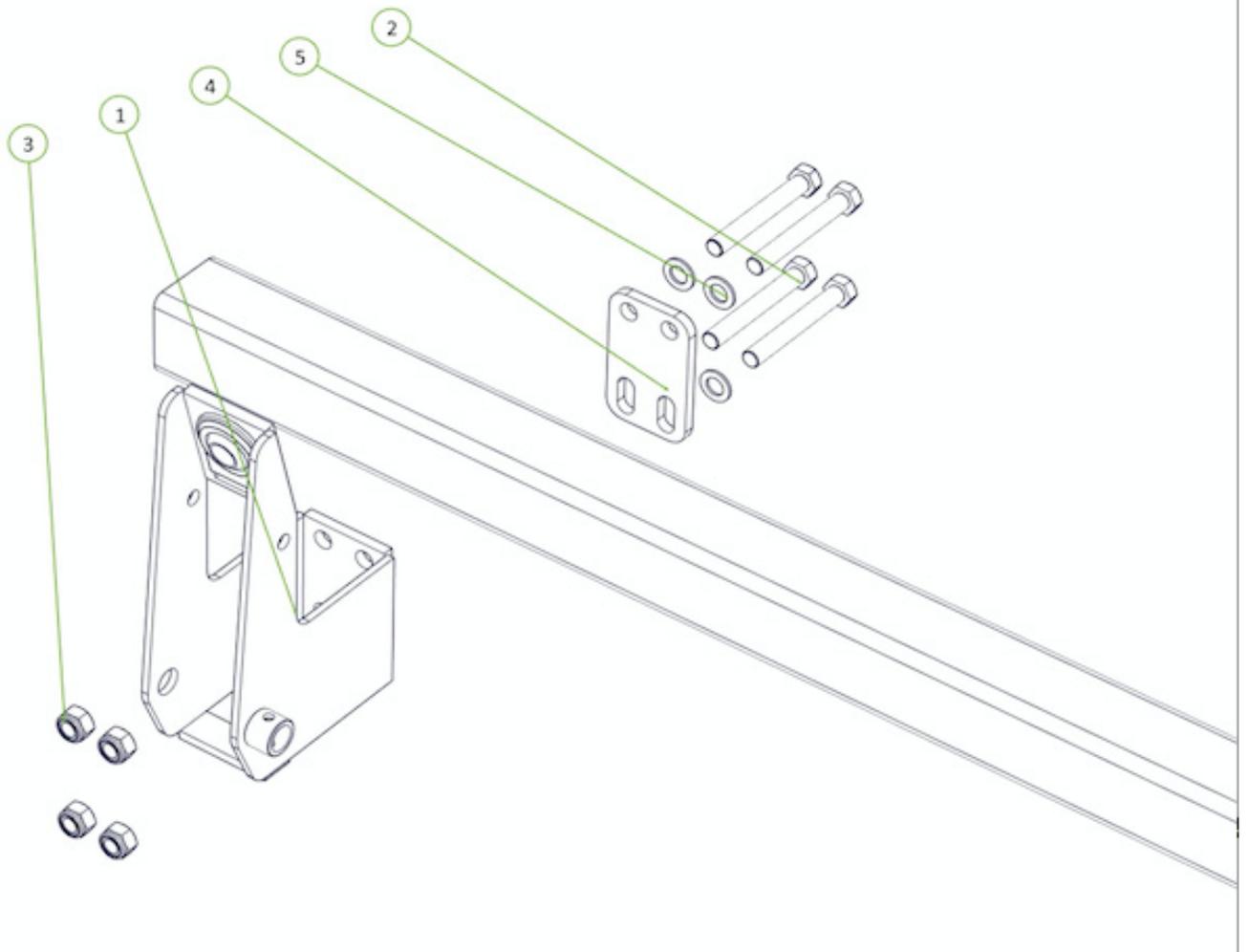
NOTE

- Before starting mark these points on cultivator framework and ground
- Measurements are a guide only as mounts may need to be shifted to fit around tyres ect.
- If even number of modules are purchased work the centreline out from the middle two modules where they cross over
- If odd numbers are purchased mark as image above

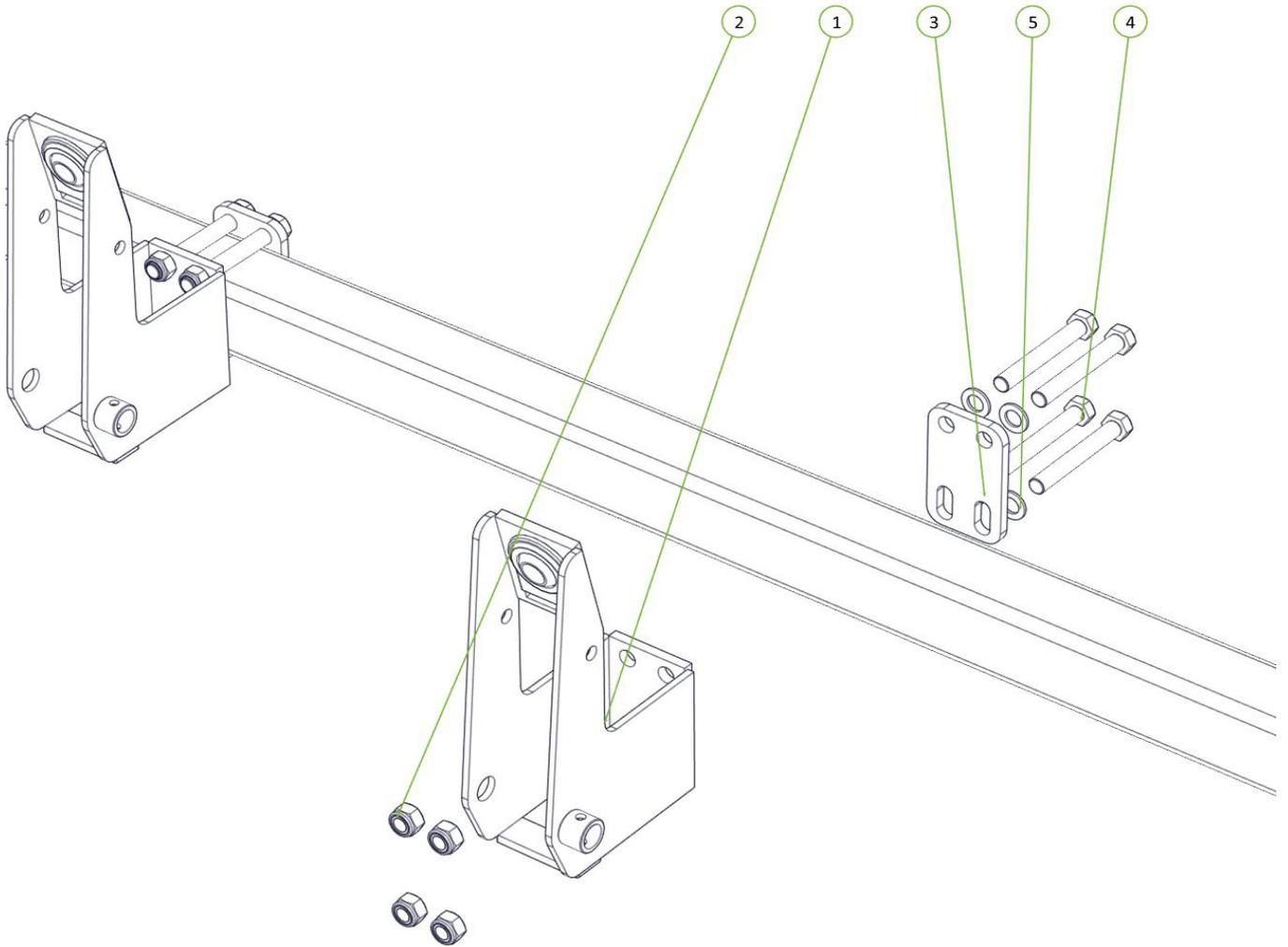
Section 2

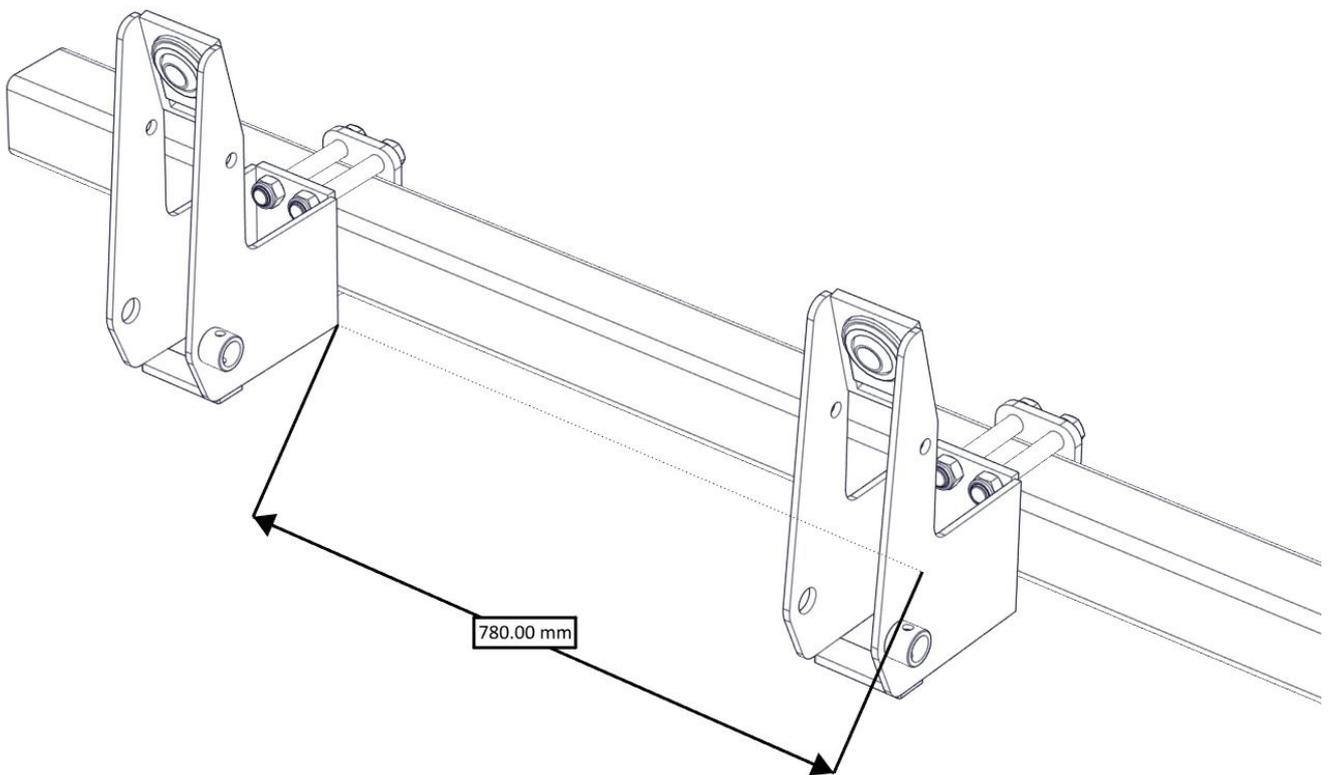
Parts & Assembly

Item No.	Description	Qty	Number
1	Module Mount Arm	1	1110-01
2	M20 x 150 grade 8.8 ZP Bolt	4	0211-20##
3	Nyloc Nut M20	4	0221-NYL## (Nyloc Nut Metric)
4	Module Mt Bolt Plate	1	1100-05
5	Washer Flat M20	4	0231-F



Item No.	Description	Qty	Number
1	Module Mount Arm	1	1110-01
2	Nyloc Nut M20	4	0221-NYL## (Nyloc Nut Metric)
3	Module Mt Bolt Plate	1	1100-05
4	M20 x 150 grade 8.8 ZP Bolt	4	0211-20##
5	Washer Flat M20	4	0231-F





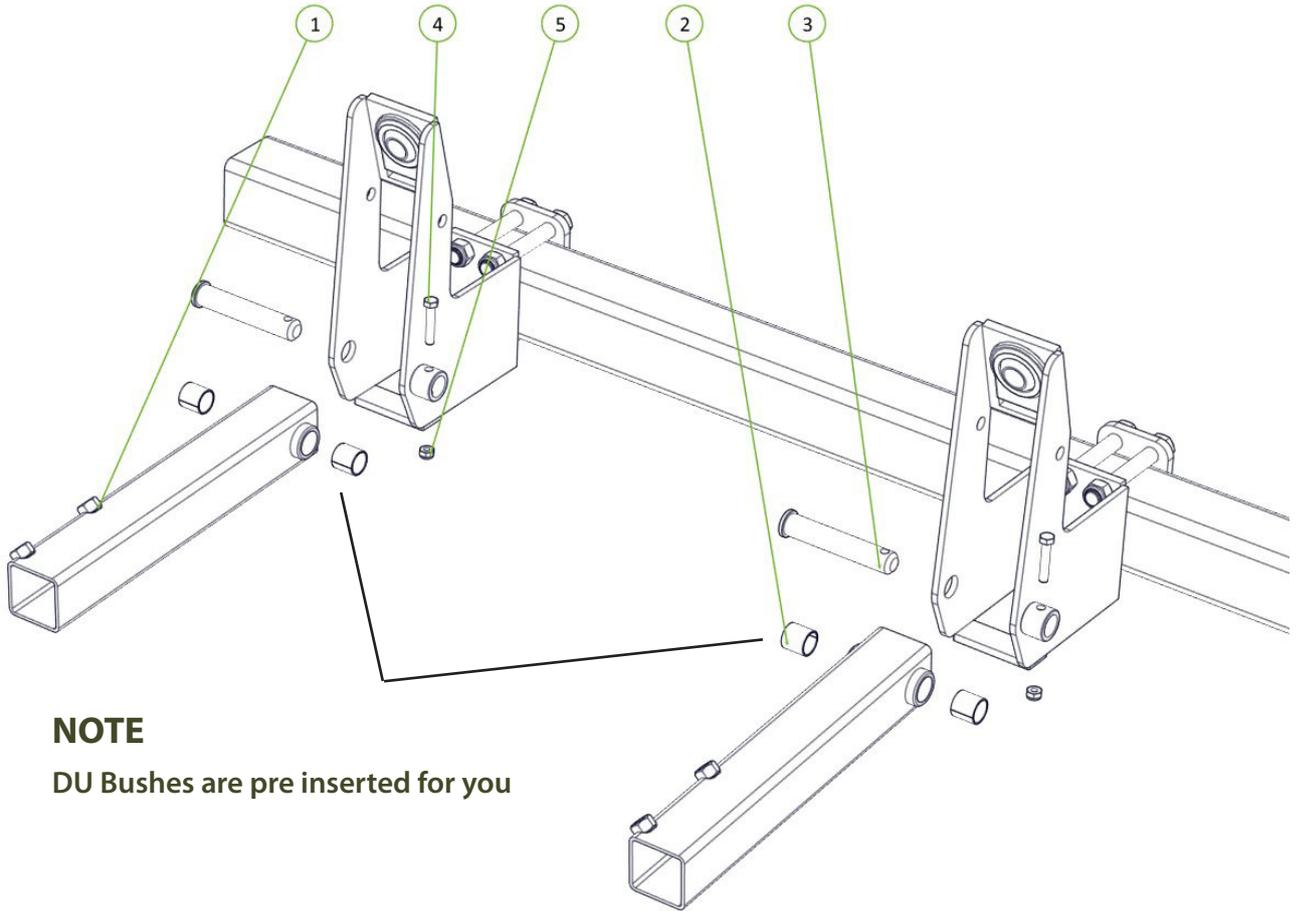
NOTE

- The measurement is a guide only.
- Please see page 6 for table guide.

- ONLY LOOSELY ATTACH

**Dont do up fasteners, to allow
manuvourability during set up.**

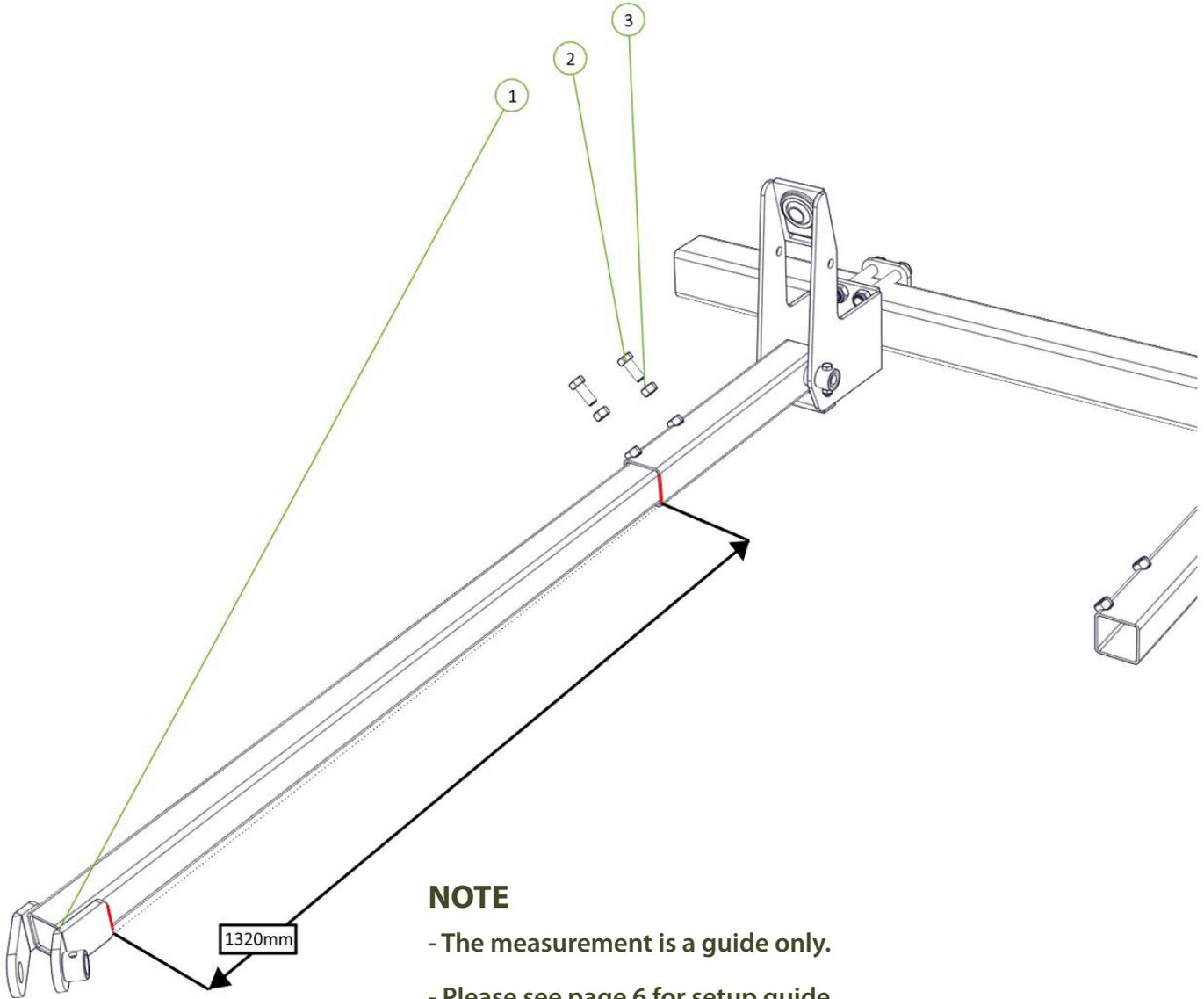
Item No.	Description	Qty	Number
1	Module Pivot Arm	2	1110-02
2	MB ID 28mm x 30mm DU Bush	4	0113-MB 2830DU
3	Module Arm Pivot Pin	2	1101-13
4	M10 x 55 grade 8.8 ZP Bolt	2	0211-10##
5	Nyloc Nut M10	10	0221-NYL10



NOTE

DU Bushes are pre inserted for you

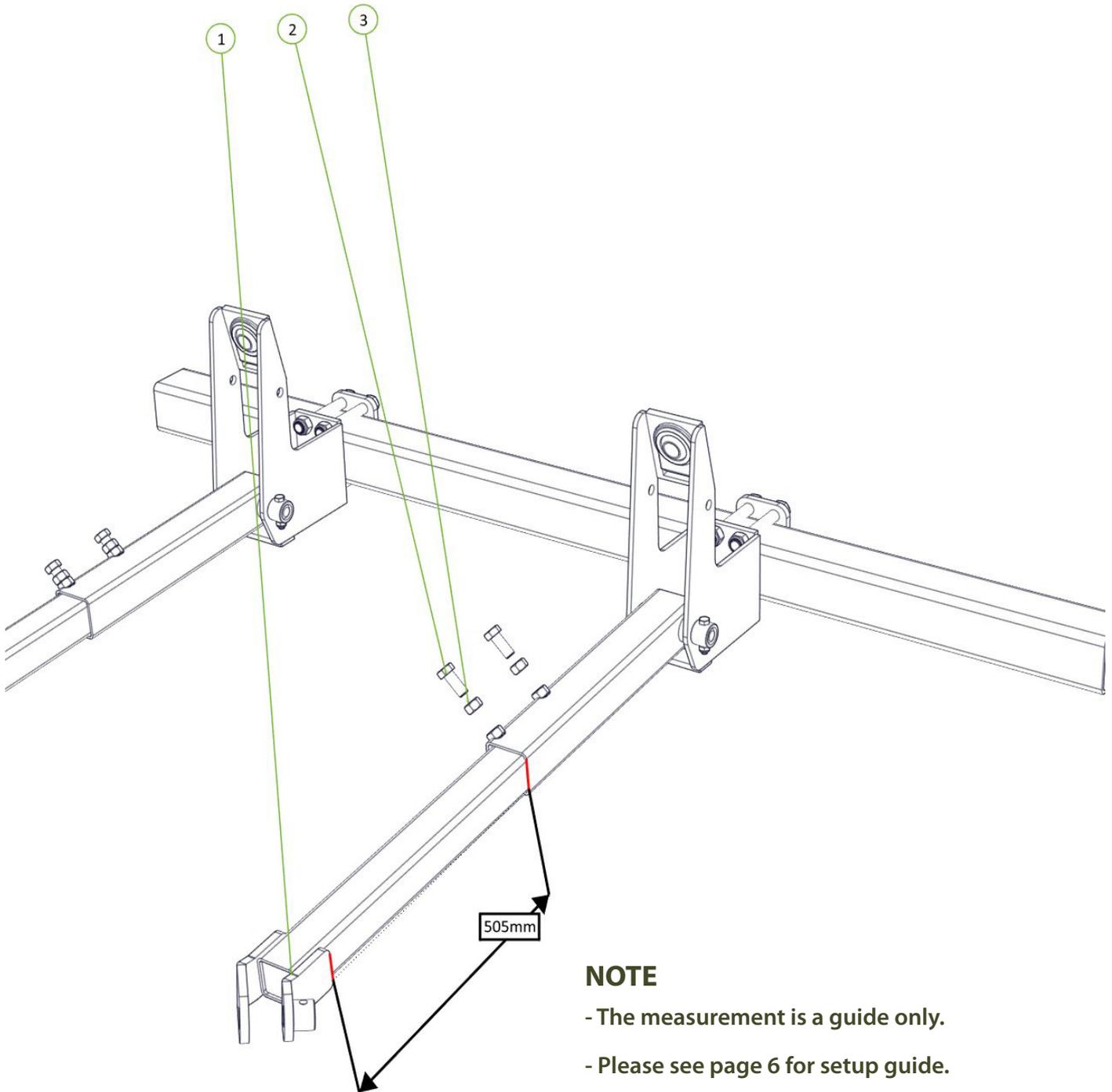
Item No.	Description	Qty	Number
1	Long Adjusting Arm	1	1110-03
2	M16 x 40 grade 8.8 zp Bolt	2	0211-1655 SET
3	M16 Plain Nut Galv	2	0221-16



NOTE

- The measurement is a guide only.
- Please see page 6 for setup guide.
- Lock nuts to be tightened once assy complete

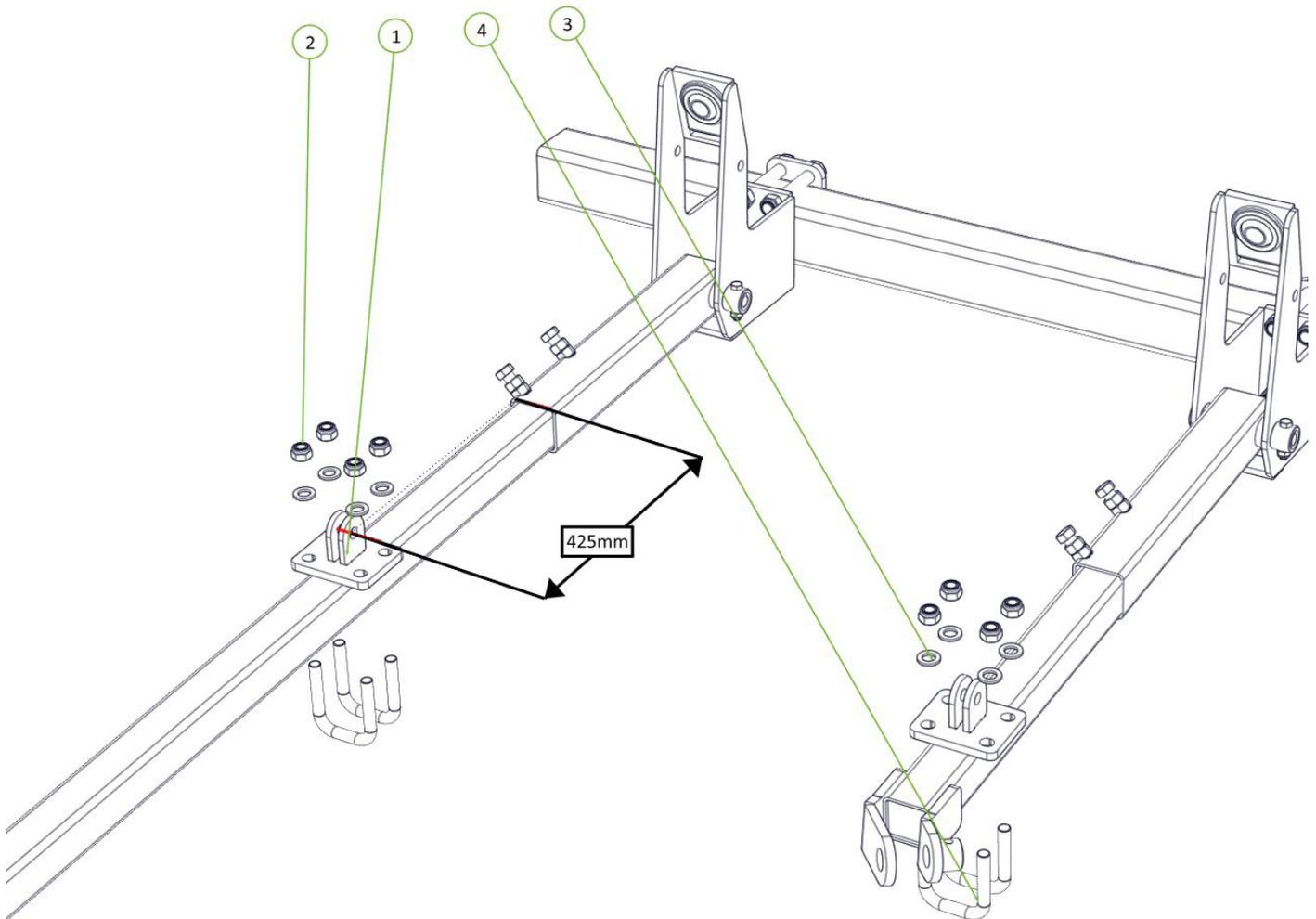
Item No.	Description	Qty	Number
1	Short Adjusting Arm	1	1110-04
2	M16 x 40 grade 8.8 zp Bolt	2	0211-1655 SET
3	M16 Plain Nut Galv	2	0221-16



NOTE

- The measurement is a guide only.
- Please see page 6 for setup guide.
- Lock nuts to be tightened once assy complete

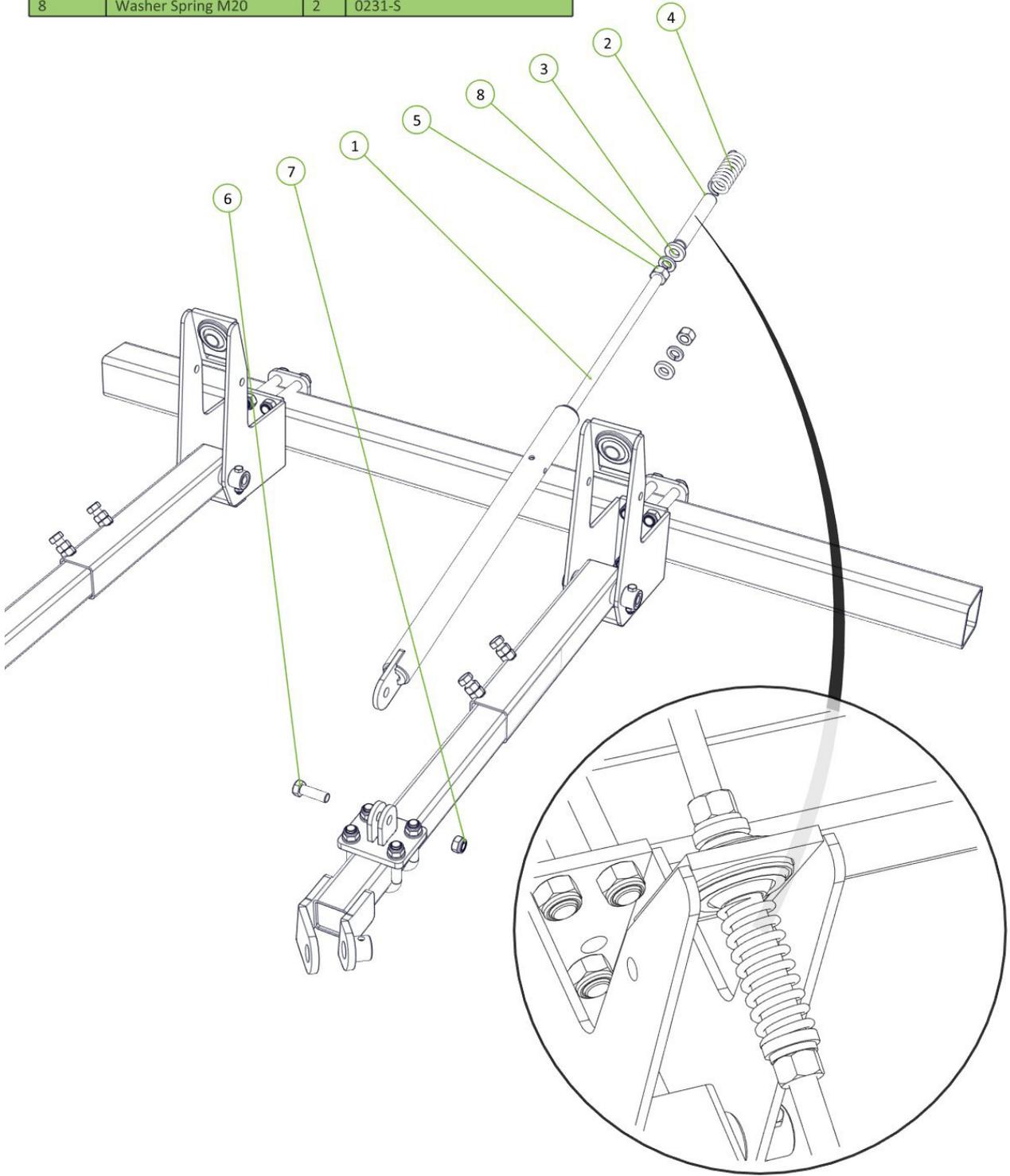
Item No.	Description	Qty	Number
1	Module Height Adjust Mount	2	1110-05
2	Nyloc Nut M16	8	0221-NYL## (Nyloc Nut Metric)
3	Washer Flat M16	8	0231-F
4	U Bolt M16 x 100 Deep x 70 Wide	4	0271-1610070



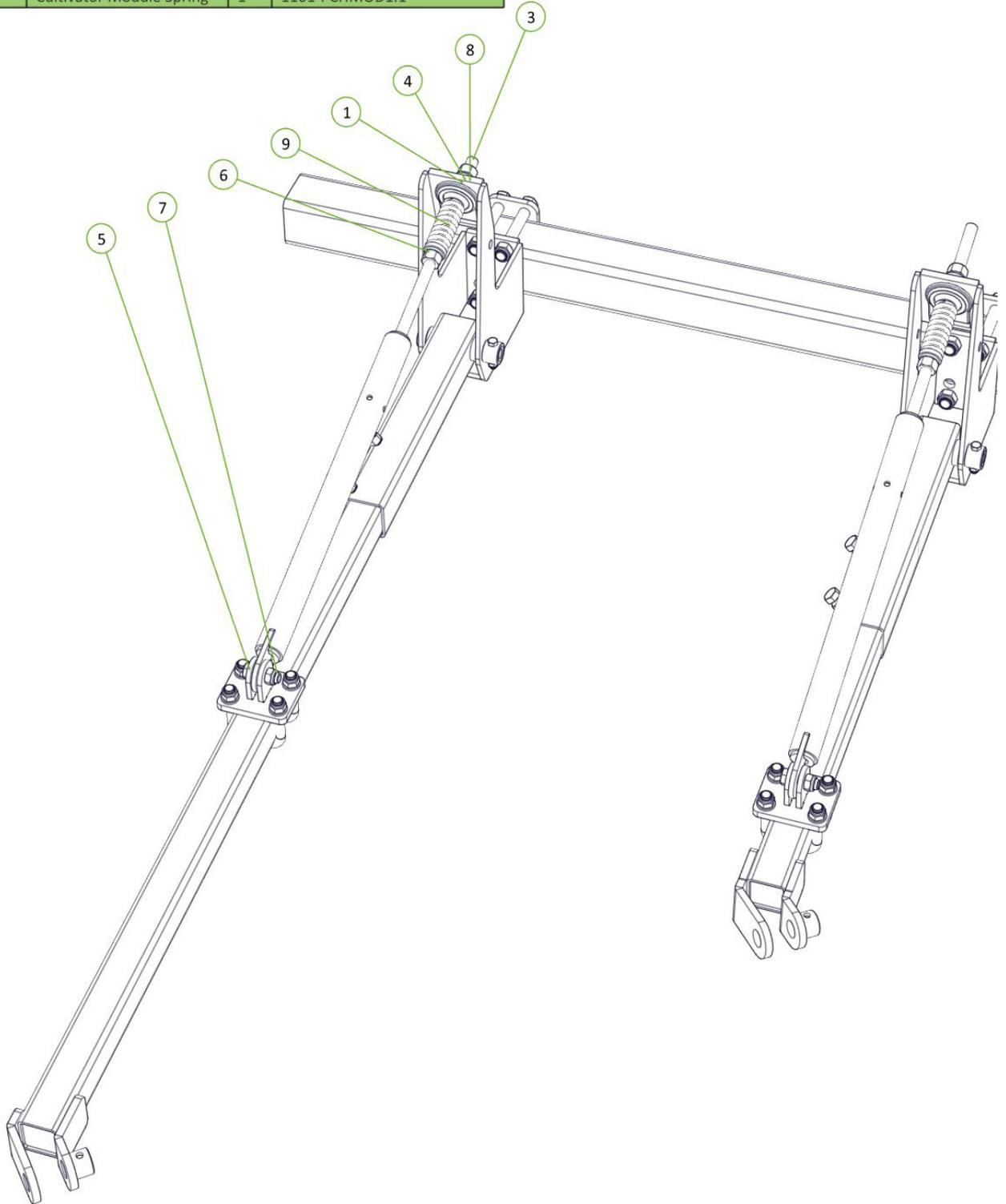
NOTE

- Set position according to height settings at page 6 and centralise tie rods adjustment range.
- U-Bolts should be tightened

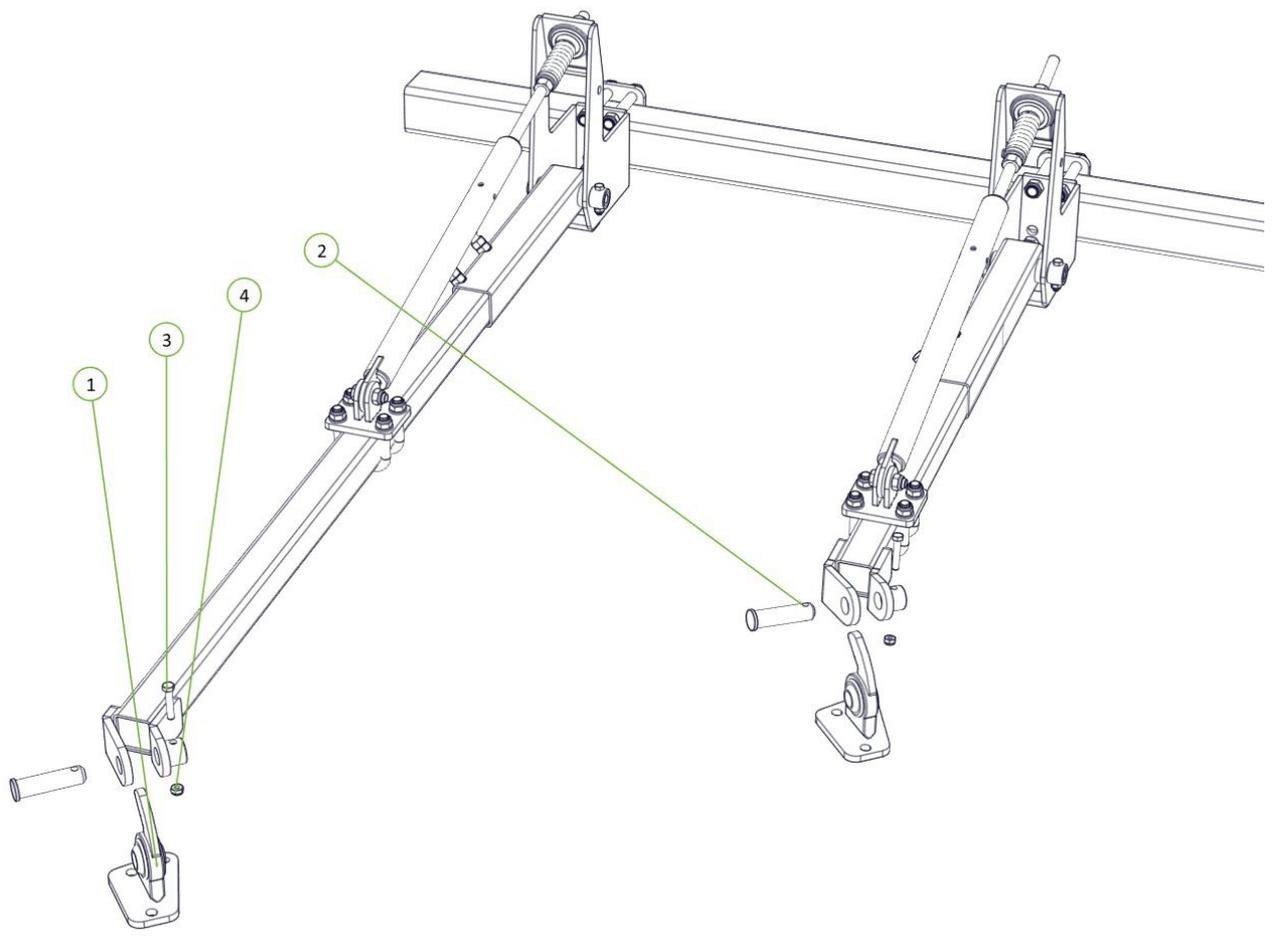
Item No.	Description	Qty	Number
1	Tie Rod Arm	1	1110-13
2	Module Height Adjust Pipe	1	1110-07
3	Height Adjust Washer	2	1100-18
4	Cultivator Module Spring	1	1101-PCHMOD1.1
5	M20 Plain Nut Galv	2	0221-20
6	M16 x 50 grade 8.8 zp Bolt	1	0211-1655 SET
7	Nyloc Nut M16	1	0221-NYL## (Nyloc Nut Metric)
8	Washer Spring M20	2	0231-5

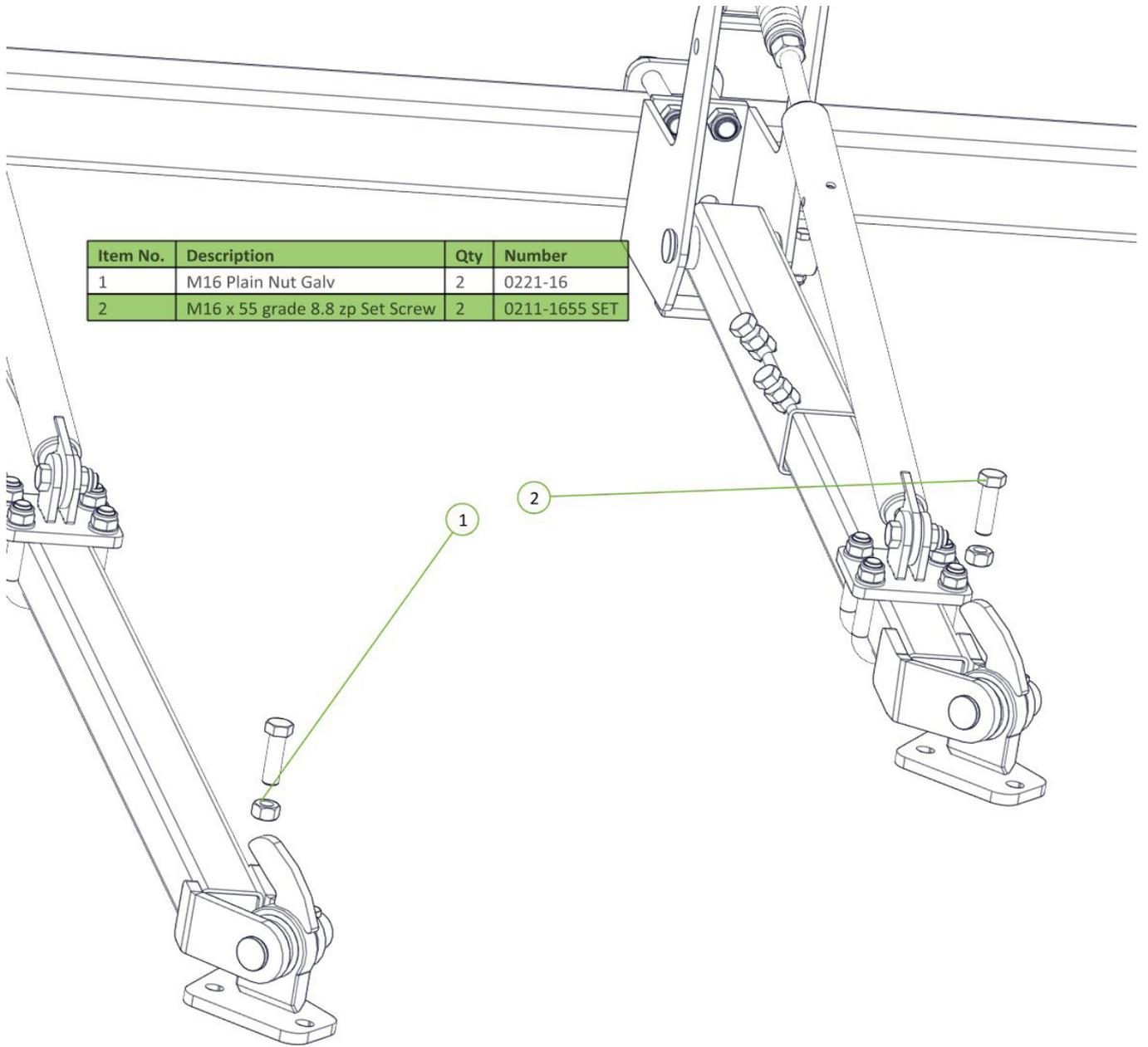


Item No.	Description	Qty	Number
1	Height Adjust Washer	2	1100-18
3	Tie Rod Arm	1	1110-13
4	Module Height Adjust Pipe	1	1110-07
5	M16 x 50 grade 8.8 zp Bolt	1	0211-1655 SET
6	M20 Plain Nut Galv	2	0221-20
7	Nyloc Nut M16	1	0221-NYL## (Nyloc Nut Metric)
8	Washer Spring M20	2	0231-S
9	Cultivator Module Spring	1	1101-PCHMOD1.1



Item No.	Description	Qty	Number
1	Module Bow Pivot	2	1110-08
2	Module Bow Pivot Pin	2	1101-14
3	M10 x 55 grade 8.8 ZP Bolt	2	0211-10##
4	Nyloc Nut M10	2	0221-NYL## (Nyloc Nut Metric)

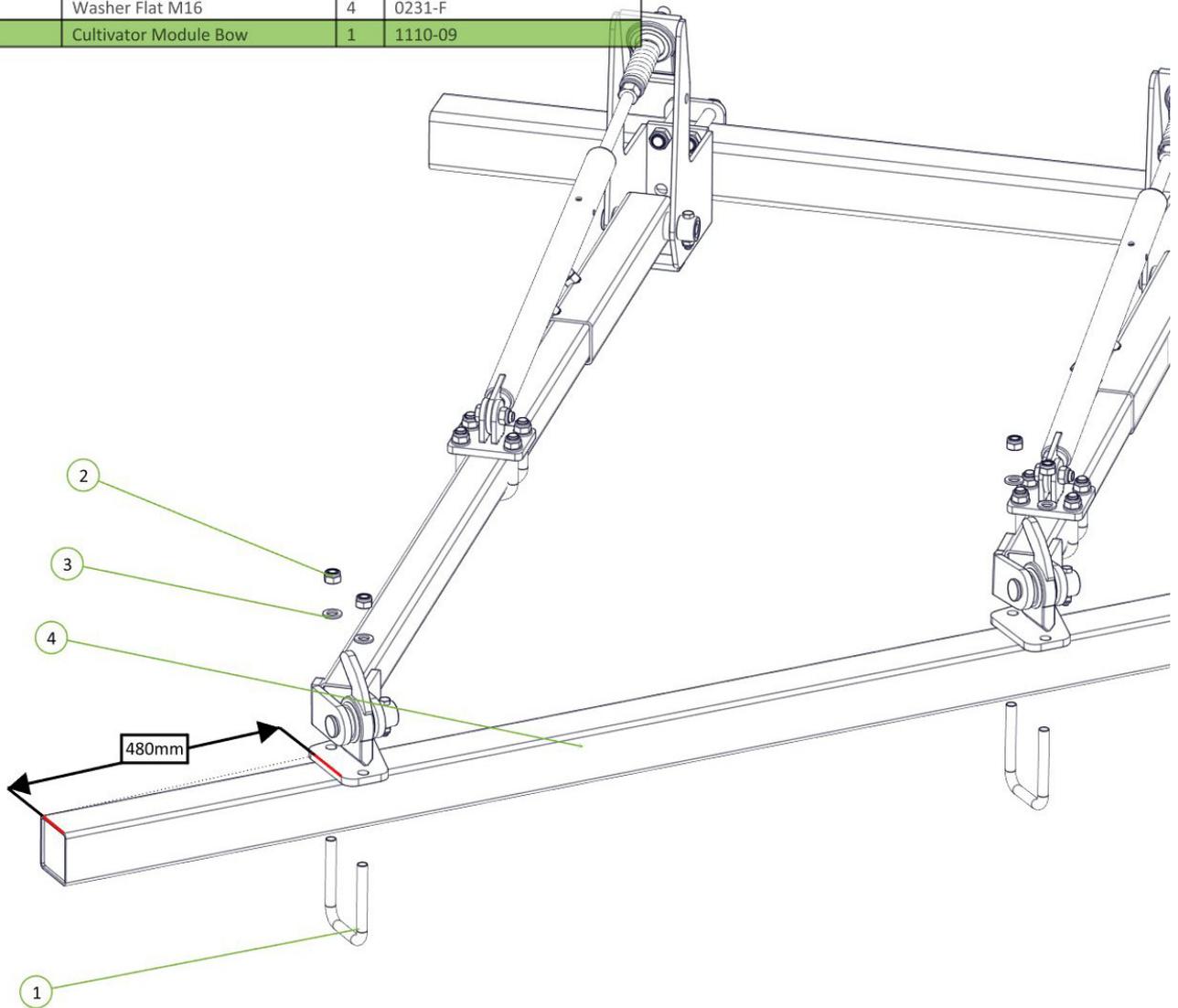




NOTE

- These set screws are to keep the modules level. Set both height adjusters and locks with lock nut.

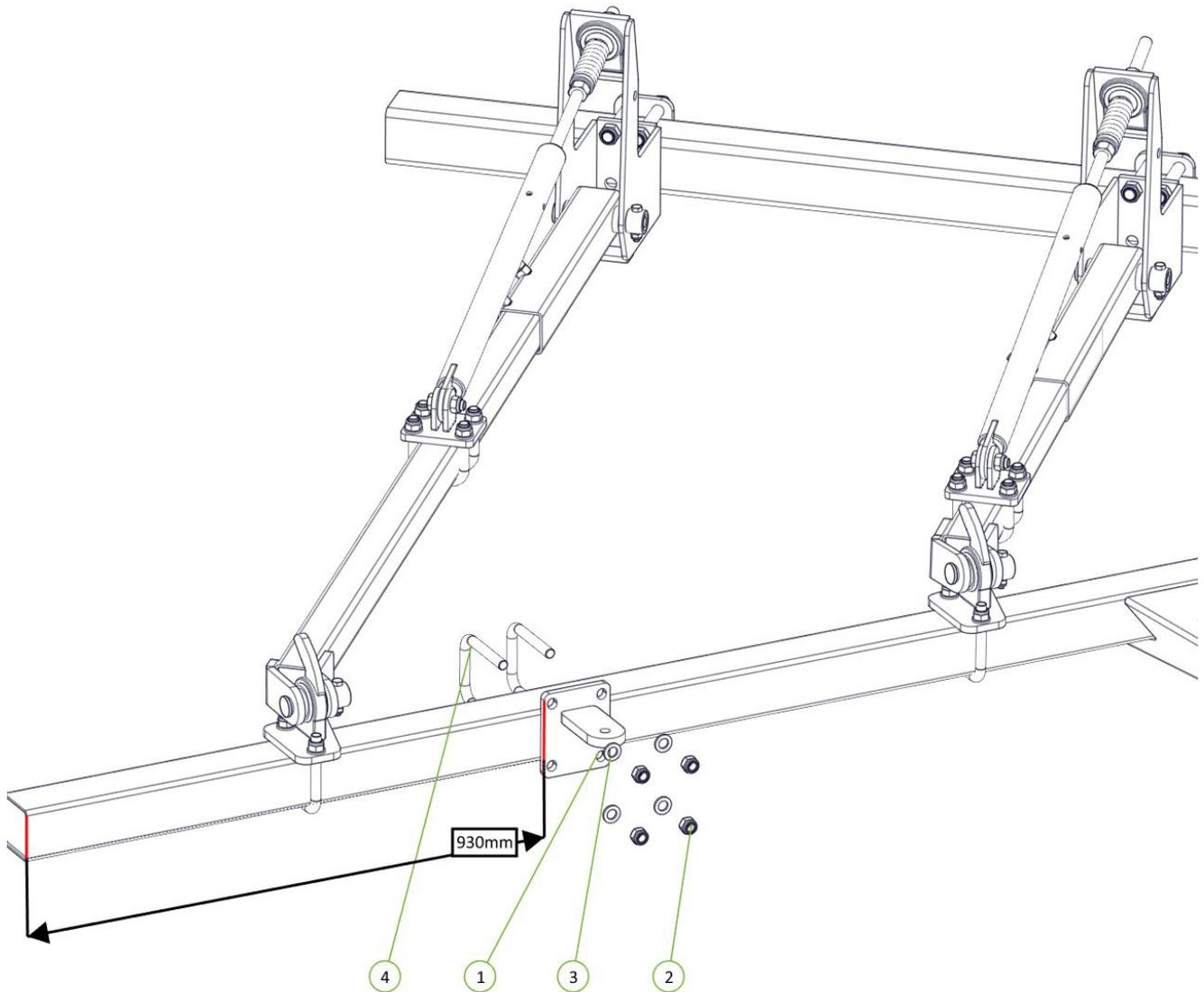
Item No.	Description	Qty	Number
1	U Bolt M16 x 130 Deep x 95 Wide	2	0271-1613095
2	Nyloc Nut M16	4	0221-NYL## (Nyloc Nut Metric)
3	Washer Flat M16	4	0231-F
4	Cultivator Module Bow	1	1110-09



NOTE

- The measurement is a guide only.
- Please see page 6 for setup guide.
- A drum or 400mm block may help with bow positioning.
- To set up correct angle see page 5 for template.

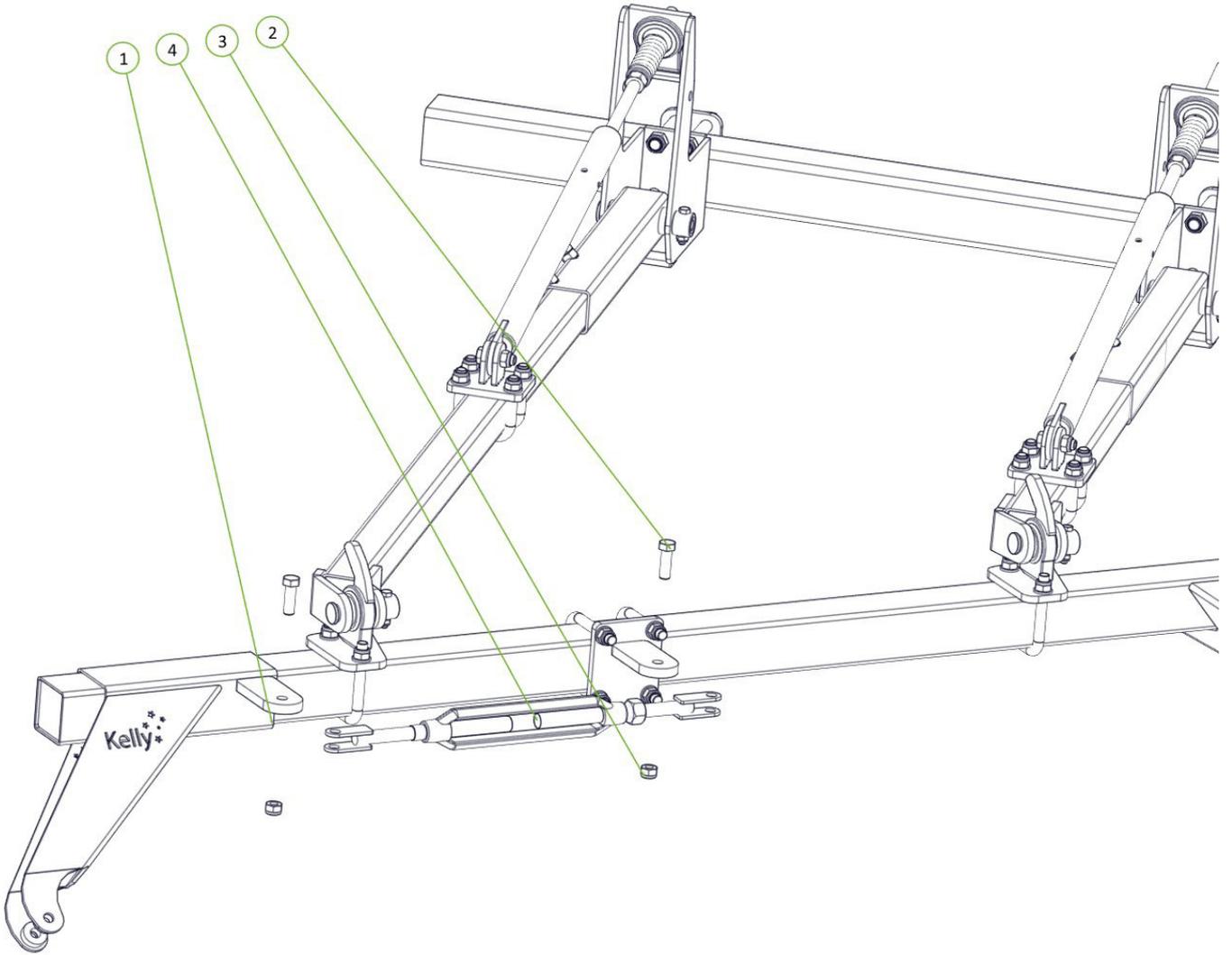
Item No.	Description	Qty	Number
1	Module Tension Mount	1	1110-11
2	Nyloc Nut M16	4	0221-NYL## (Nyloc Nut Metric)
3	Washer Flat M16	4	0231-F
4	U Bolt M16 x 130 Deep x 95 Wide	2	0271-1613095



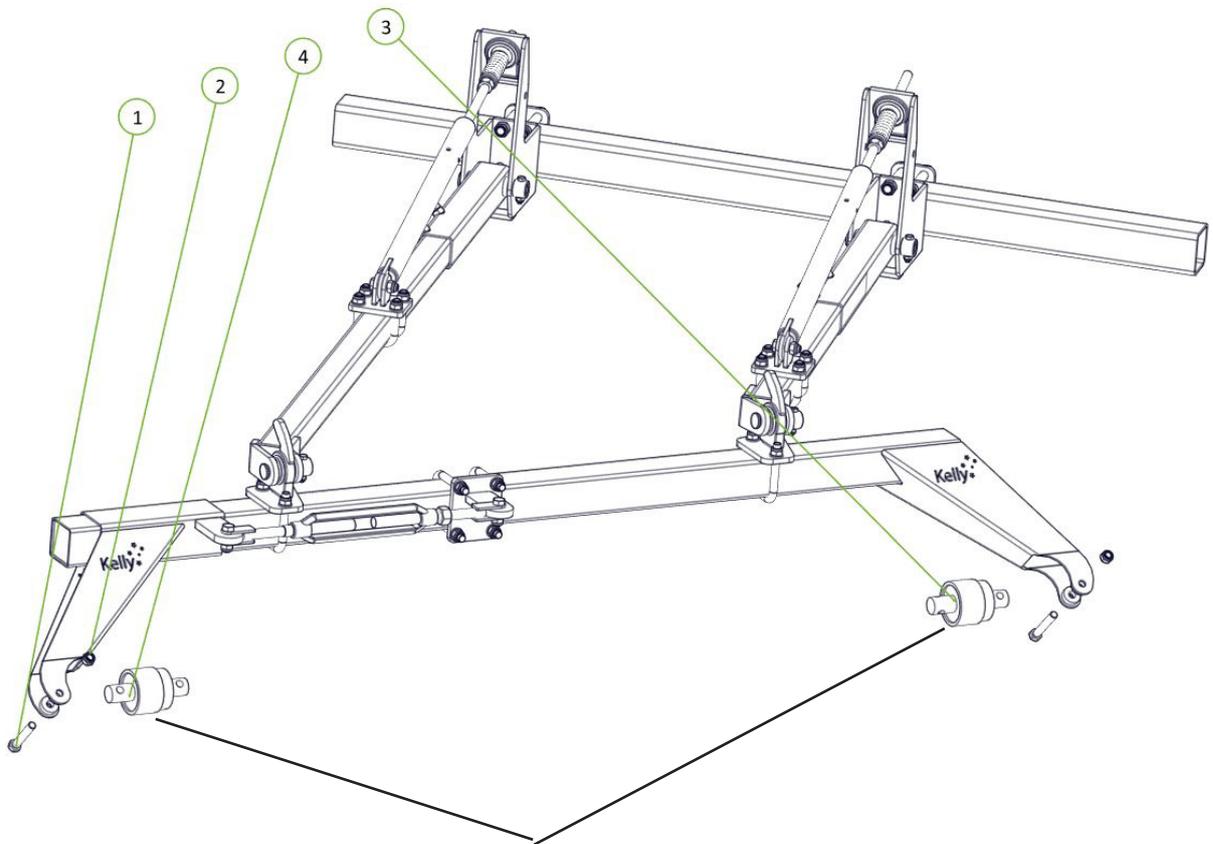
NOTE

- This can be adjusted to maximise range in turnbuckle, according to chain length and stretch over time

Item No.	Description	Qty	Number
1	Cultivator Module Slide	1	1110-10
2	M16 x 50 grade 8.8 zp Bolt	2	0211-1655 SET
3	Nyloc Nut M16	2	0221-NYL## (Nyloc Nut Metric)
4	Module Tension Adjustor	1	1110-12

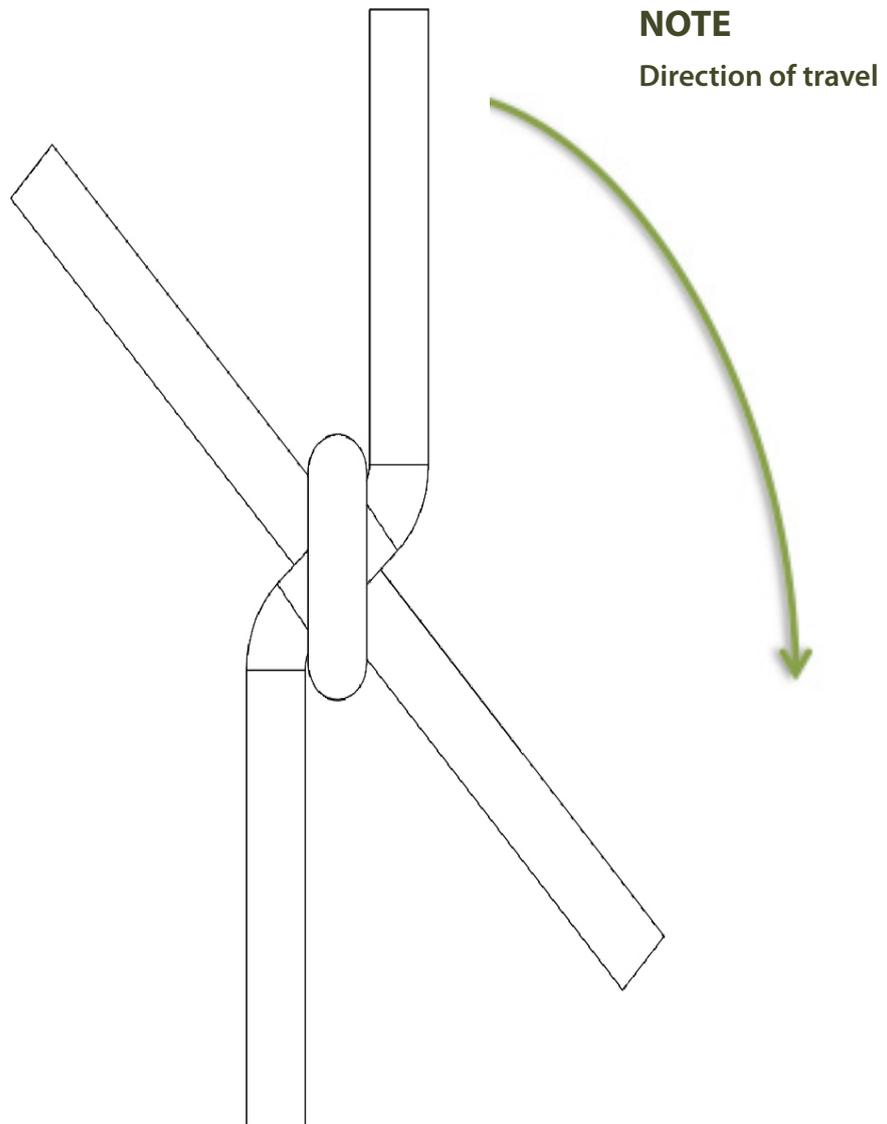


Item No.	Description	Qty	Number
1	M16 x 100 grade 8.8 zp Bolt	2	0211-1655 SET
2	Nyloc Nut M16	2	0221-NYL## (Nyloc Nut Metric)
3	38mm Shaft Swivel Unit	1	0802-PCHB45
4	38mm Shaft Swivel Unit	1	0802-PCHB45



NOTE

Please ensure the seal on the swivel bearings are facing to the rear of the machine

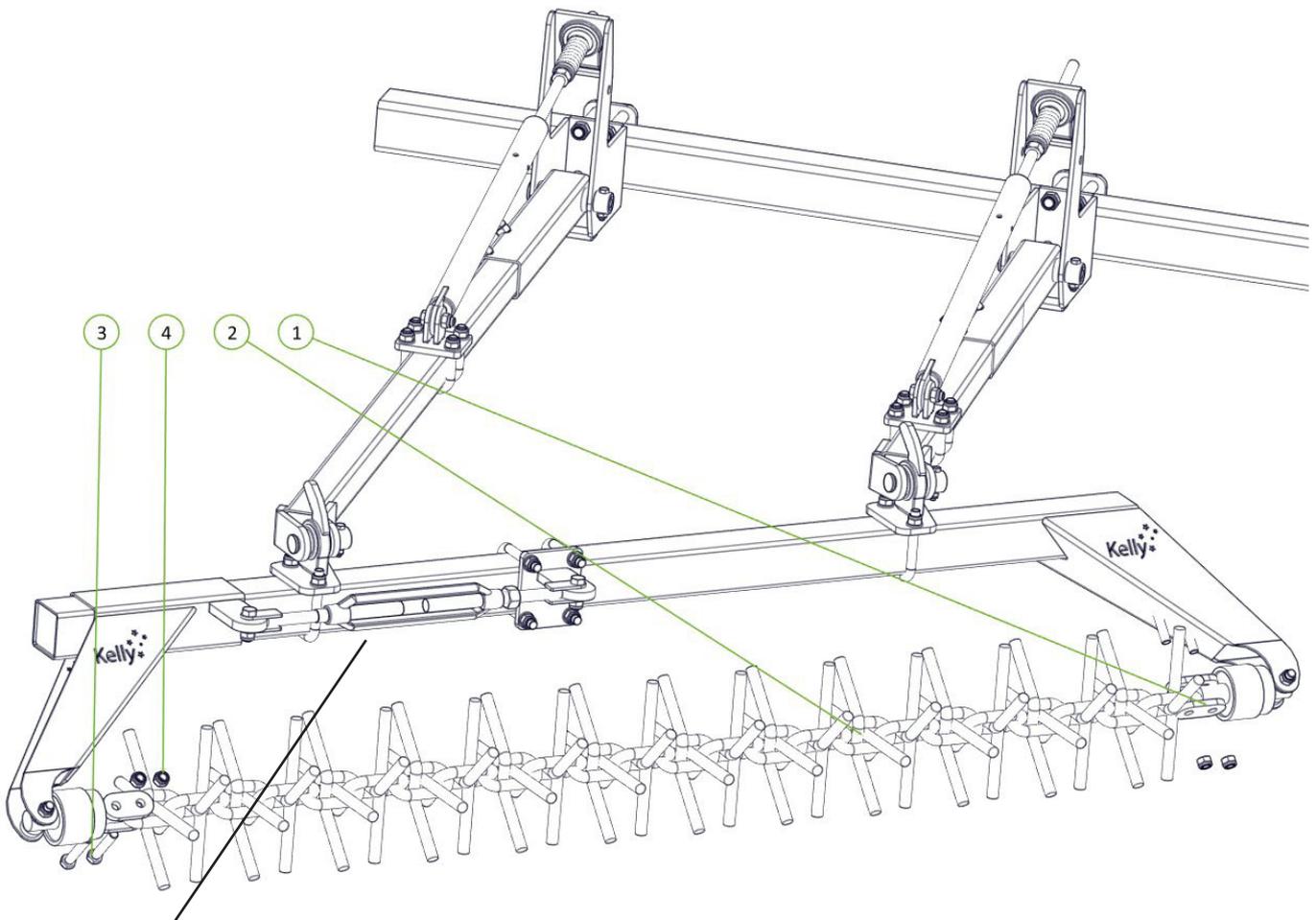


NOTE
Direction of travel

NOTE

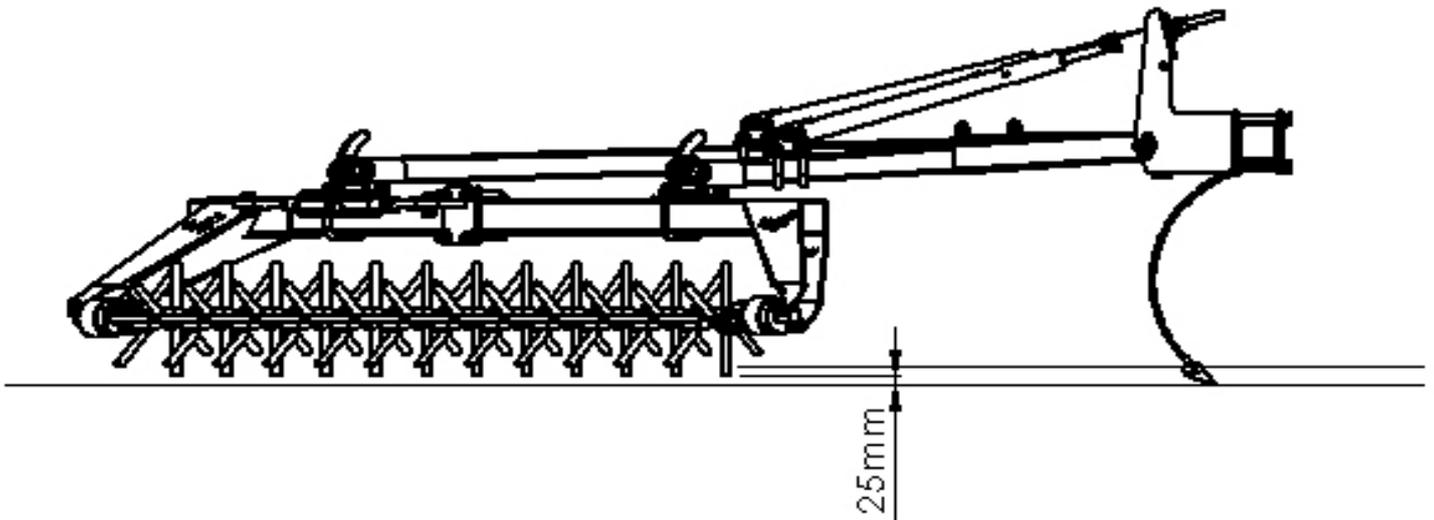
- Please ensure chain is put on the correct way, if put on the opposite way the chain has the ability to catch stubble and straw.

Item No.	Description	Qty	Number
1	Prickle Chain Tie Plate	4	0800-82.1
2	Cultivator Module 20mm Prickle Chain (24 Link)	24	0803-PCHCM
3	M16 x 90 grade 8.8 zp Bolt	4	0211-1655 SET
4	Nyloc Nut M16	4	0221-NYL## (Nyloc Nut Metric)



NOTE

- To tension the screw, turn the buckle out and lock with nut.
- For prickle chain tension ensure chain is tight and links are firmly together, if too loose chain will wear prematurely.
- For correct working height have the seeder bar tines resting on hard ground
- Please note the spring is not for down pressure it relies on weight of module. If lighter tillage is required please set chain higher, If the modules are set too low there is a risk of damage to the tie rod arms.
- As chain wears, if tension adjustment runs out; links become stretched or work. You may need to cut a link out to regain tension.



Factory Settings

Height Set Up

NOTE

- For lighter tillage applications, such as canola or vetch (at risk of burring seed to deep) adjust modules up accordingly.

Section 3

Survey

Kelly Engineering Feedback Survey

This form can be completed & return to Kelly Engineering, by post, fax or email

Kelly Engineering

PO Box 100, Booleroo Centre, SA 5482 Australia

Phone: + 61 8 8667 2253

Fax: + 61 8 8667 2250

Email: office@kellyengineering.com.au

Hood & Company Inc Springfield MO

Phone: 417 865 2100

Fax: 417 865 2105

Email: hoodco@hoodco.com

Owner Details

Name: _____

Address: _____

Contact Number: _____

Email Address: _____

Purchase details

Place of purchase: _____

Date of purchase: _____

Model Purchased: _____

Batch number: _____

Occupation

Farmer Customer Operator Other _____

What brought Kelly Engineering products to your attention ?

Field Day Friend/neighbor Referral source _____

Local Dealer Demonstration Website _____

Family Magazine/ Newspaper _____

On a scale of 1 to 10 (10 being the highest) how likely are you to recommend us to friends and family? 1 2 3 4 5 6 7 8 9 10

If you scored 8 or below then what must we do to become a 10 in your eyes?

If you scored 9 or above then please tell us why you gave us this score?

On a scale of 1 to 10 (10 being the highest) how easy were the instructions to follow?

1 2 3 4 5 6 7 8 9 10

Please explain why you gave us this score

On a scale of 1 to 10 (10 being the highest) how easy where the modules to assemble?

1 2 3 4 5 6 7 8 9 10

Please explain why you gave us this score

Please feel free to expand on any points or make any comments.

Thank you for choosing a Kelly Engineering product

We hope this manual proved to be clear and easy to follow, however feel free to contact our company for customer support.

Parts can be purchased when required through your local dealer, or by contacting either Kelly Engineering in Australia or in the US, Hood & Company Inc.

Kelly Engineering

Phone: + 61 8 8667 2253

Fax: + 61 8 8667 2250

Email: office@kellyengineering.com.au

Website (Australia): www.kellyengineering.com.au

Website (US): www.kellyharrows.com

Hood & Company Inc Springfield MO

Phone: 417 865 2100

Fax: 417 865 2105

Email: hoodco@hoodco.com