

garford

providing advanced technology for progressive farming



SPARE PARTS MANUAL ROBOCROP INROW WEEDER

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Revised :- February 2016 (Version 1)

IMPORTANT :- PLEASE REFER TO MACHINE SERIAL NUMBER & PARTS BOOK DATE/VERSION WHEN ENQUIRING INTO SPARE PARTS.

THANK YOU FOR PURCHASING A garford PRODUCT.

**THIS BOOK CONTAINS THE FULL WORKING DRAWINGS OF THE MACHINE
WITH EVERY PART AND ASSOCIATED NUMBER LISTED. THIS QUICKLY
AND EASILY ALLOWS ANY PART OF THE MACHINE TO BE PIN POINTED IF
IT REQUIRES MAINTENANCE OR REPAIR.**

**FOR ANY OTHER ENQUIRIES OR QUESTIONS PLEASE D NOT HESITATE TO
CONTACT US.**

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England**



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CONTROL SYSTEM PARTS SECTION

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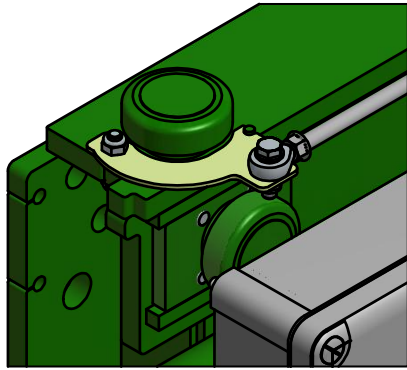
CULTIVATING PARTS SECTION

BIO WEEDER PARTS SECTION

SIDE SHIFT PARTS SECTION

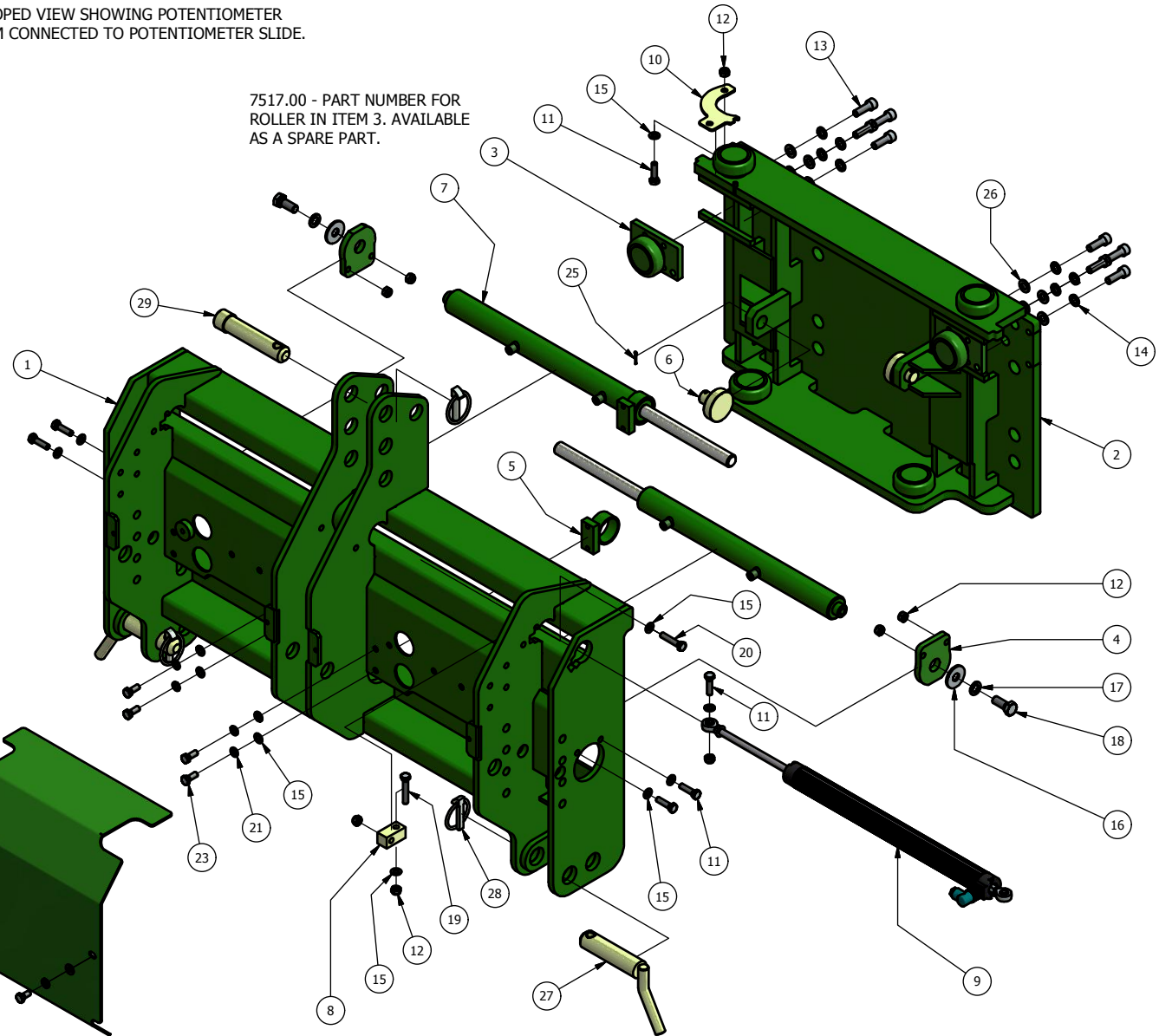
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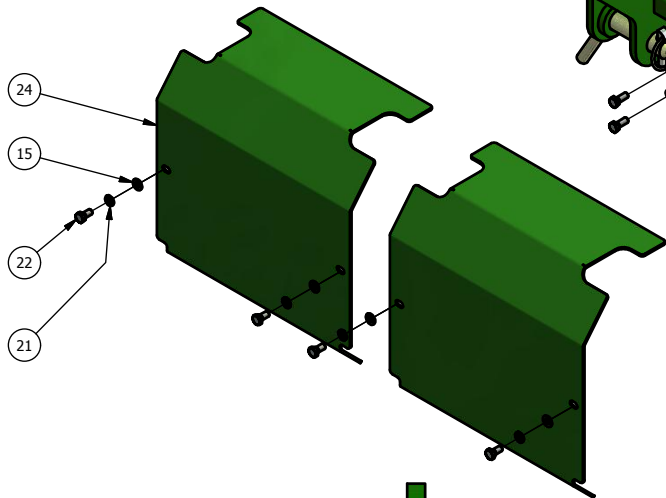


CROPED VIEW SHOWING POTENTIOMETER
RAM CONNECTED TO POTENTIOMETER SLIDE.

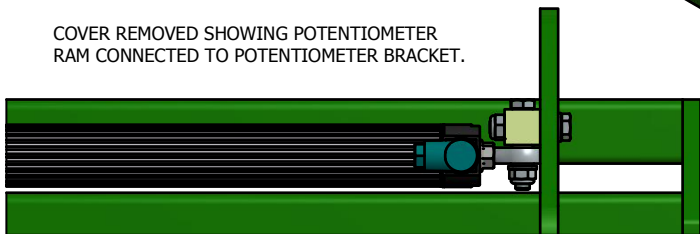
7517.00 - PART NUMBER FOR
ROLLER IN ITEM 3. AVAILABLE
AS A SPARE PART.



1



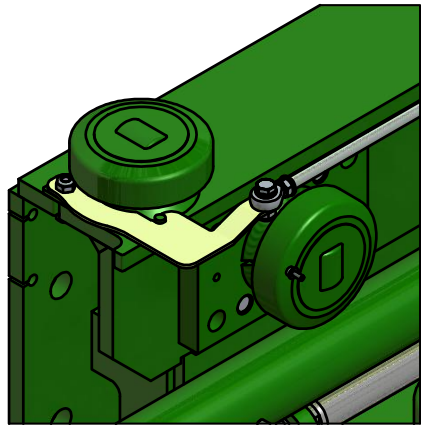
COVER REMOVED SHOWING POTENTIOMETER
RAM CONNECTED TO POTENTIOMETER BRACKET.



WITH EXCEPTION TO HYDRAULIC RAMS, RAM SUPPORTS &
BUFFERS, PARTS ARE INTERCHANGEABLE WITH THE
ROBO SIDESHIFT ASSEMBLY.

ROBOCROP STANDARD DUTY SIDESHIFT ASSEMBLY
“FREESHIFTING”

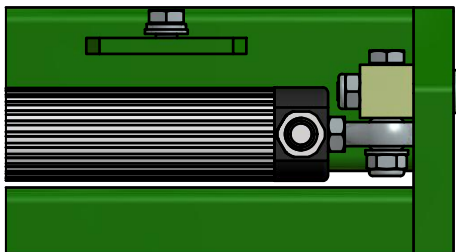
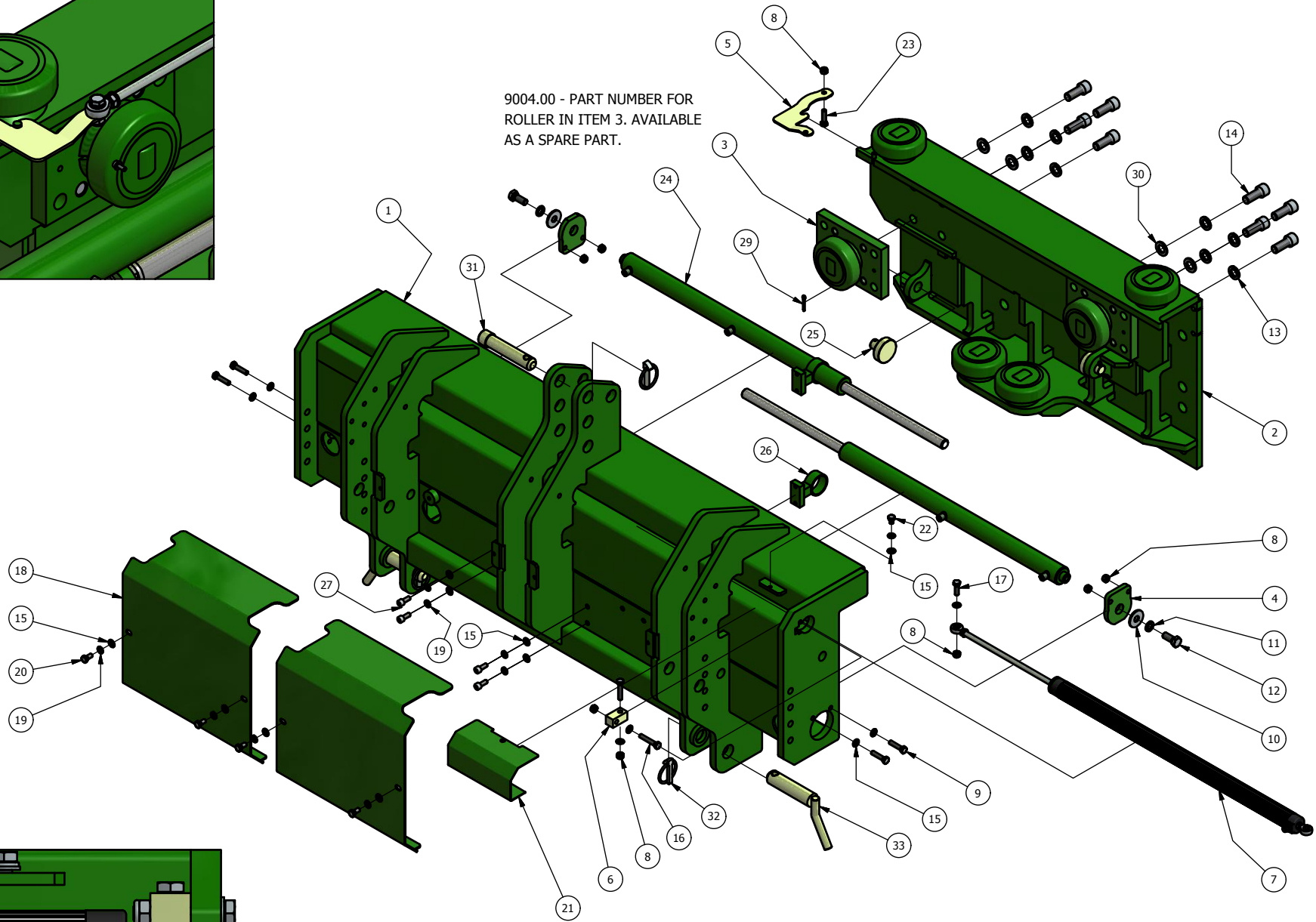
| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|----------|------------------------------------|----------|----------|
| 1 | SIDE SHIFT FRAME | 8605 | 1 |
| 2 | SIDE SHIFT ROLLING FRAME | 8606 | 1 |
| 3 | ROLLER & PLATE | 7430 | 2 |
| 4 | RAM END PLATE | 8464 | 2 |
| 5 | RAM CENTERING SUPPORT | 8816 | 2 |
| 6 | SIDE SHIFT CENTERING RAM BUFFER | 8734 | 2 |
| 7 | HYDRAULIC RAM | 8733 | 2 |
| | HYDRAULIC SEAL KIT - 9345 | | |
| 8 | POTENTIOMETER CYLINDER END BRACKET | 8461 | 1 |
| 9 | POTENTIOMETER RAM | 7732 | 1 |
| 10 | POTENTIOMETER ARM BRACKET | 8608 | 1 |
| 11 | M8x25 BOLT BZP | 1041 | 6 |
| 12 | M8 NYLOC NUT BZP | 1042 | 8 |
| 13 | SOCKET CAP SCREW M10x30 BZP | 6370 | 8 |
| 14 | M10 SPRING WASHER BZP | 1170 | 8 |
| 15 | M8 FLAT WASHER BZP | 1157 | 16 |
| 16 | LARGE OD FLAT WASHER 12x37x3 BZP | | 2 |
| 17 | M12 SPRING WASHER BZP | 1115 | 4 |
| 18 | M12x30 BOLT BZP | 1161 | 2 |
| 19 | M8x45 BOLT BZP | 8825 | 1 |
| 20 | M8x40 BOLT BZP | 5834 | 1 |
| 21 | M8 SPRING WASHER BZP | 1154 | 8 |
| 22 | M8x16 BOLT BZP | 1156 | 4 |
| 23 | M8x20 BOLT BZP | 5738 | 4 |
| 24 | SIDE SHIFT GUARD | 8460 | 2 |
| 25 | SPLIT PIN | | 2 |
| 26 | M10 FLAT WASHER BZP | 1186 | 8 |
| 27 | LOWER LINK PIN | 6409 | 2 |
| 28 | LINCH PIN | 5604 | 3 |
| 29 | TOP LINK PIN | 5442 | 1 |



CROPED VIEW SHOWING POTENTIOMETER
RAM CONNECTED TO POTENTIOMETER SLIDE.

9004.00 - PART NUMBER FOR
ROLLER IN ITEM 3. AVAILABLE
AS A SPARE PART.

3



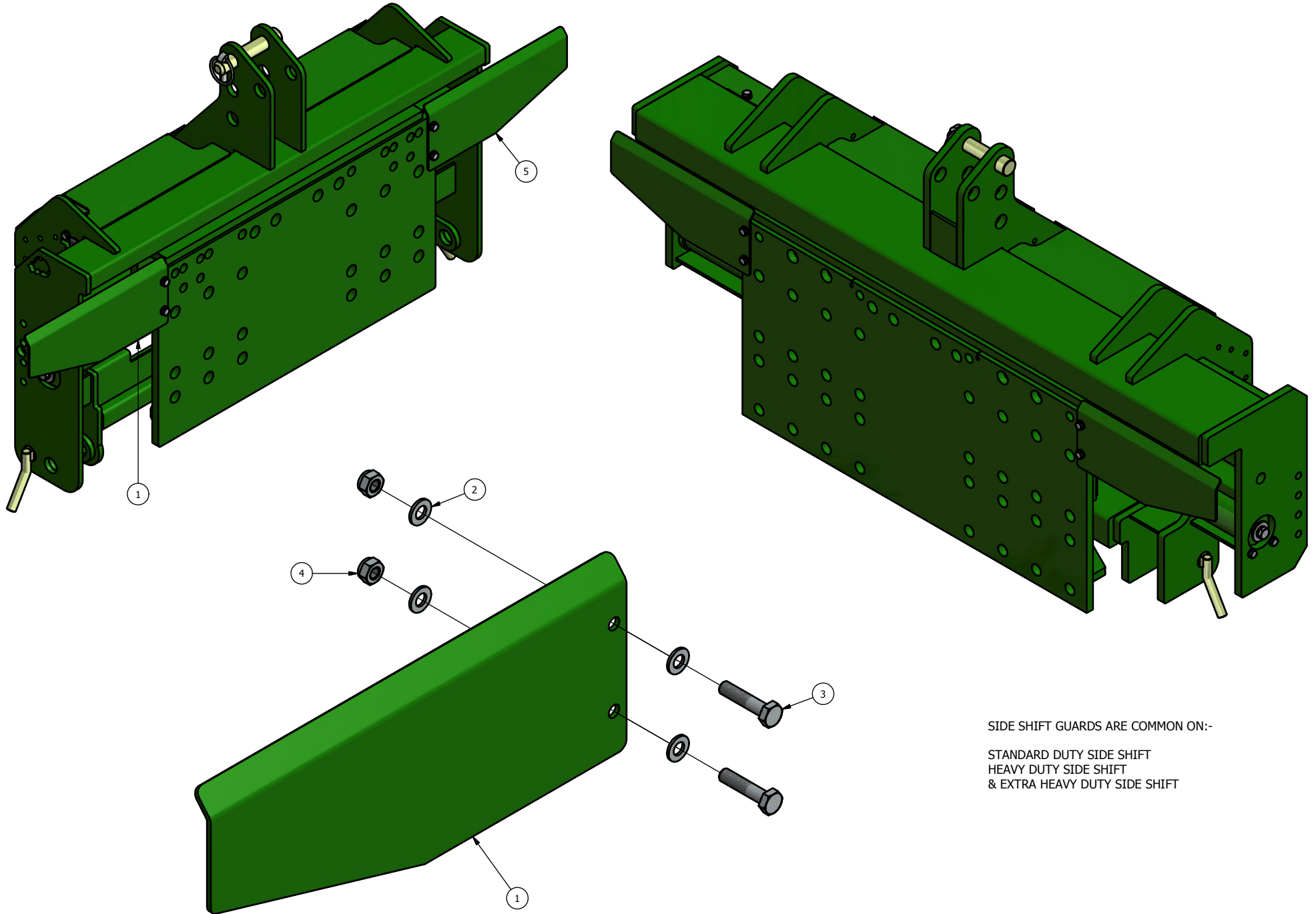
COVER REMOVED SHOWING POTENTIOMETER
RAM CONNECTED TO POTENTIOMETER BRACKET.

WITH EXCEPTION TO HYDRAULIC RAMS, RAM SUPPORTS &
BUFFERS, PARTS ARE INTERCHANGEABLE WITH THE
ROBO HEAVY DUTY SIDESHIFT.

ROBOCROP HEAVY DUTY SIDESHIFT ASSEMBLY
“FREESHIFTING”

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|------------------------------------|-----------------|-----------------|
| 1 | H/D SIDE SHIFT FRAME | 9001 | 1 |
| 2 | H/D SIDE SHIFT ROLLING FRAME | 9002 | 1 |
| 3 | ROLLER & PLATE | 9003 | 2 |
| 4 | RAM END PLATE | 8464 | 2 |
| 5 | POTENTIOMETER ARM BRACKET | 9006 | 1 |
| 6 | POTENTIOMETER CYLINDER END BRACKET | 8461 | 1 |
| 7 | POTENTIOMETER RAM | 8227 | 1 |
| 8 | M8 NYLOC NUT BZP | 1042 | 8 |
| 9 | M8x35 BOLT BZP | 7463 | 4 |
| 10 | LARGE OD WASHER 12x37x3 BZP | | 2 |
| 11 | M12 SPRING WASHER BZP | 1115 | 2 |
| 12 | M12x30 BOLT BZP | 1161 | 2 |
| 13 | M16 SPRING WASHER BZP | 1119 | 8 |
| 14 | SOCKET CAP SCREW M16x40 BZP | 9067 | 8 |
| 15 | M8 FLAT WASHER BZP | 1157 | 16 |
| 16 | M8x45 BOLT BZP | 8825 | 1 |
| 17 | M8x25 BOLT BZP | 1041 | 1 |
| 18 | SIDE SHIFT GAURD | 9005 | 2 |
| 19 | M8 SPRING WASHER BZP | 1154 | 9 |
| 20 | M8x16 BOLT BZP | 1156 | 4 |
| 21 | POTENTIOMETER COVER | 9007 | 1 |
| 22 | M8x10 BOLT BZP | | 1 |
| 23 | M8x30 BOLT BZP | 1153 | 1 |
| 24 | HYDRAULIC RAM | 9200 | 2 |
| 25 | SIDE SHIFT CENTERING RAM BUFFER | 8734 | 2 |
| 26 | RAM CENTERING SUPPORT | 9201 | 2 |
| 27 | SOCKET CAP SCREW M8x20 BZP | 6866 | 4 |
| 28 | M8x40 BOLT BZP | 5834 | 1 |
| 29 | SPLIT PIN | | 2 |
| 30 | M16 FLAT WASHER BZP | 7878 | 8 |
| 31 | TOP LINK PIN | 5442 | 1 |
| 32 | LINCH PIN | 5604 | 3 |
| 33 | LOWER LINK PIN | 6409 | 2 |

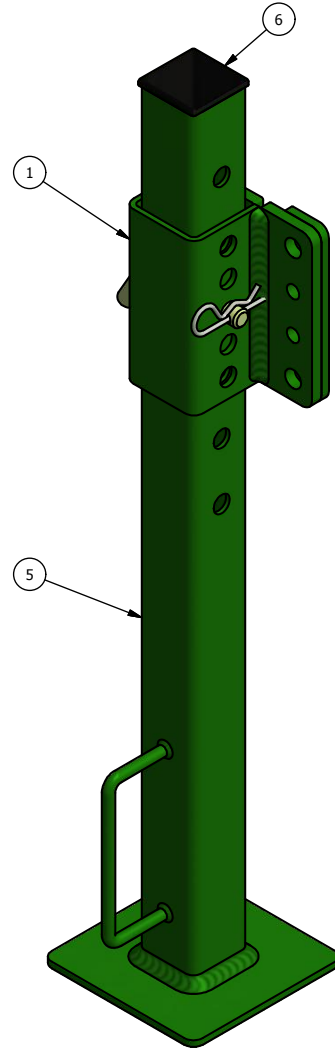
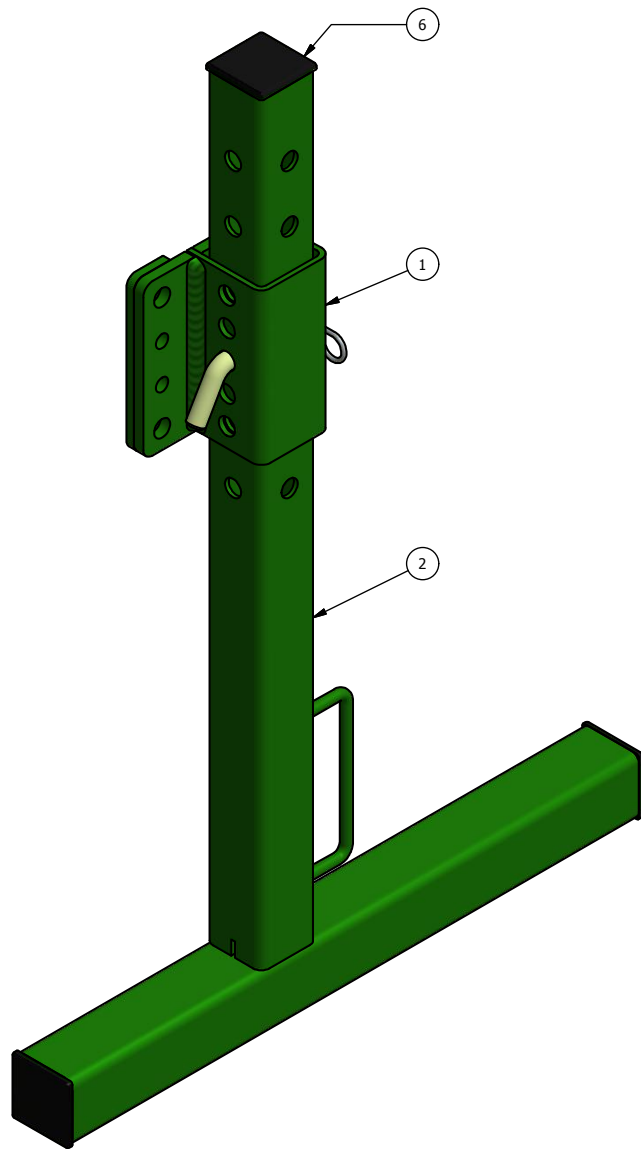
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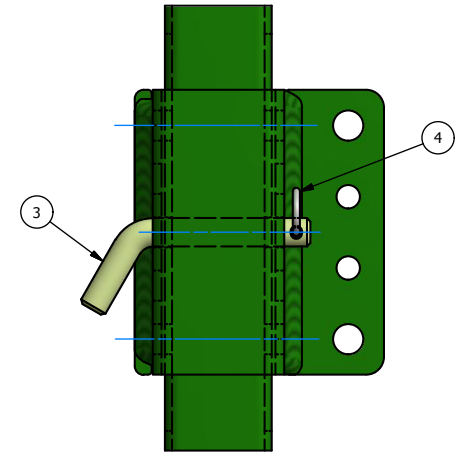
SIDE SHIFT GUARDS ARE COMMON ON:-
STANDARD DUTY SIDE SHIFT
HEAVY DUTY SIDE SHIFT
& EXTRA HEAVY DUTY SIDE SHIFT

ROBOCROP SIDE SHIFT GUARDS

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|-------------------------|-----------------|-----------------|
| 1 | LH GUARD | 9854 | 1 |
| 2 | M8 WASHER BZP | 1157 | 8 |
| 3 | M8x35 BOLT BZP | 7463 | 4 |
| 4 | M8 NYLOC NUT BZP | 1042 | 4 |
| 5 | RH GUARD | 9853 | 1 |

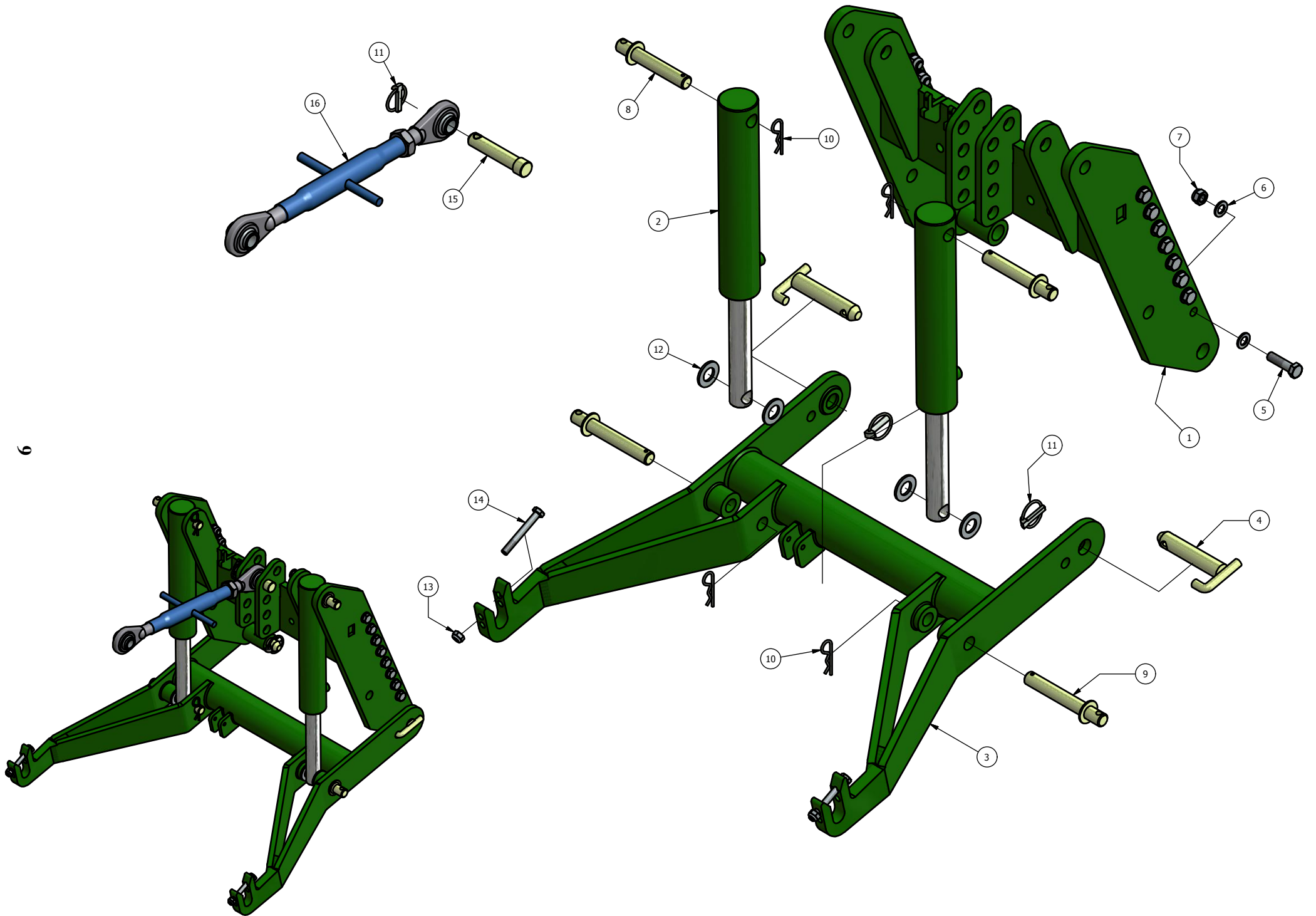


CROPPED SIDE VIEW OF MOUNTING BRACKET.



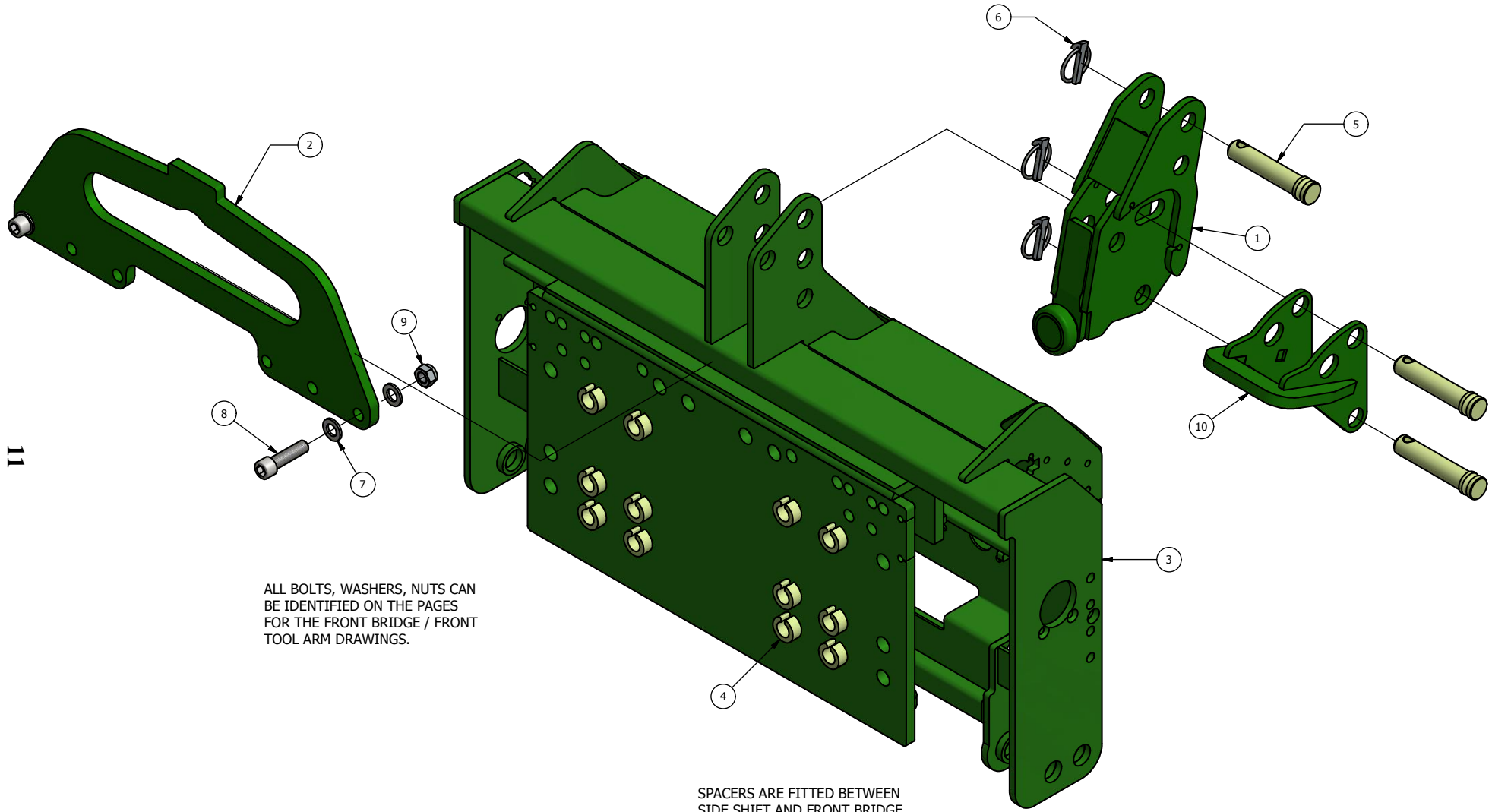
ROBOCROP SIDE SHIFT / MACHINE STANDS

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|---|-----------------|-----------------|
| 1 | MOUNTING BRACKET | 9251 | 1 |
| 2 | 'T' LEG STAND | 9253 | 1 |
| 3 | PIN | 9265 | 1 |
| 4 | R-CLIP | 1067 | 1 |
| 5 | STAND | 9252 | 1 |
| 6 | CAP | 7583 | |
| | (CAP QTY DEPENDENT ON STAND STYLE) | | |



ROBOCROP FRONT LIFT ASSEMBLY

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|---|-----------------|-----------------|
| 1 | MAIN FRAME | 5941 | 1 |
| 2 | HYDRAULIC RAM SEAL KIT PART No. - 6105 | 5985 | 2 |
| 3 | LIFT ARMS | 5942 | 1 |
| 4 | PIVOT PIN | 5946 | 2 |
| 5 | M16x60 BOLT BZP | 1176 | 16 |
| 6 | M16 FLAT WASHER BZP | 7878 | 32 |
| 7 | M16 NYLOC NUT BZP | 1030 | 16 |
| 8 | HYDRAULIC RAM PIN | 8140 | 2 |
| 9 | HYDRAULIC RAM PIN | 8139 | 2 |
| 10 | R-CLIP 4mm | 1067 | 4 |
| 11 | RETAINING PIN | 5604 | 3 |
| 12 | M26 FLAT WASHER BZP | | 4 |
| 13 | M12 NYLOC NUT BZP | 1017 | 2 |
| 14 | M12x90 BOLT BZP | 1178 | 2 |
| 15 | TOP LINK PIN | 5442 | 1 |
| 16 | TOP LINK | 6784 | 1 |



ALL BOLTS, WASHERS, NUTS CAN BE IDENTIFIED ON THE PAGES FOR THE FRONT BRIDGE / FRONT TOOL ARM DRAWINGS.

SPACERS ARE FITTED BETWEEN SIDE SHIFT AND FRONT BRIDGE.

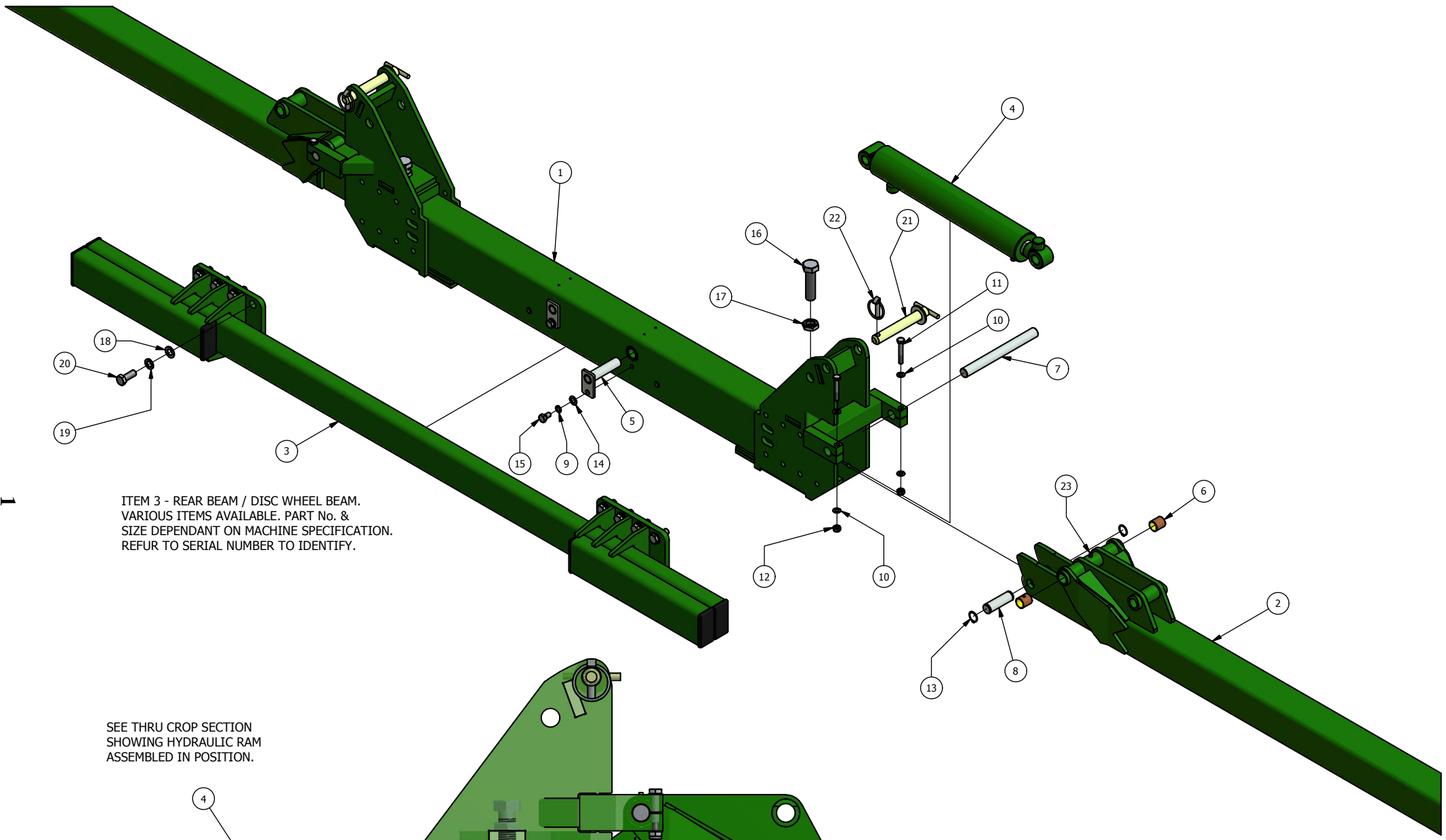
ROBOCROP SELF CENTERING SIDE SHIFT CRANK

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|-----------------------------|-----------------|-----------------|
| 1 | CENTERING ROLLER CRANK | 9462 | 1 |
| 2 | CENTERING PLATE | 9461 | 1 |
| 3 | SIDE SHIFT | 8605 8606 | 1 |
| 4 | SPACER | 9463 | 12 |
| 5 | TOP LINK PIN | 5442 | 3 |
| 6 | LINCH PIN | 5604 | 3 |
| 7 | M16 WASHER BZP | | 4 |
| 8 | M16x60 SOCKET CAP SCREW BZP | | 2 |
| 9 | M16 NYLOC NUT BZP | | 2 |
| 10 | TRANSPORT LOCK | 10943 | 1 |

FOLDING FRAMES & TOOL ARMS SECTION

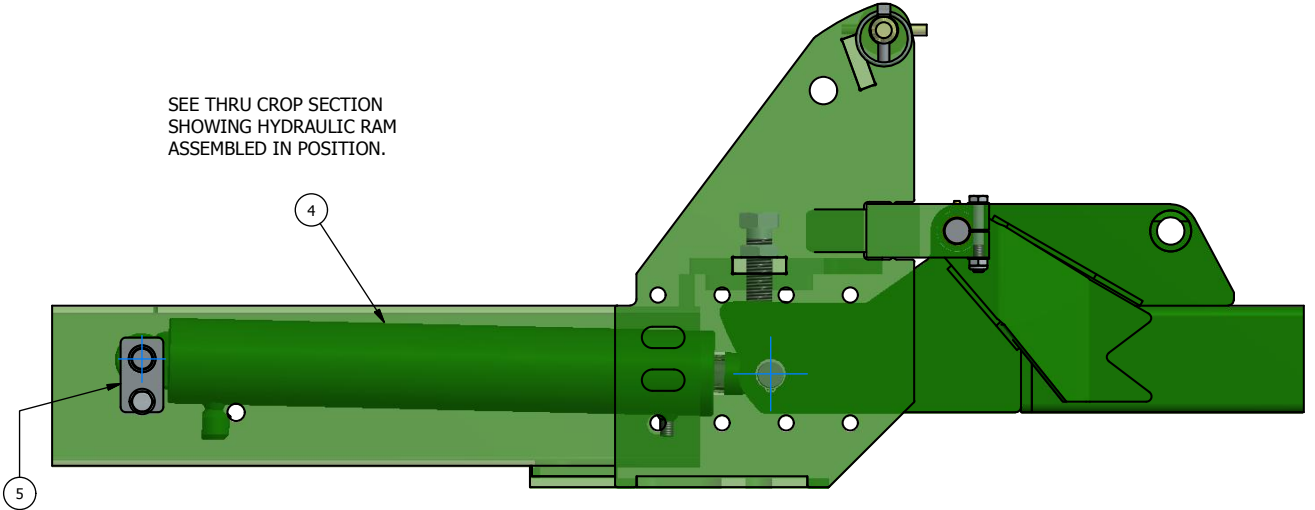
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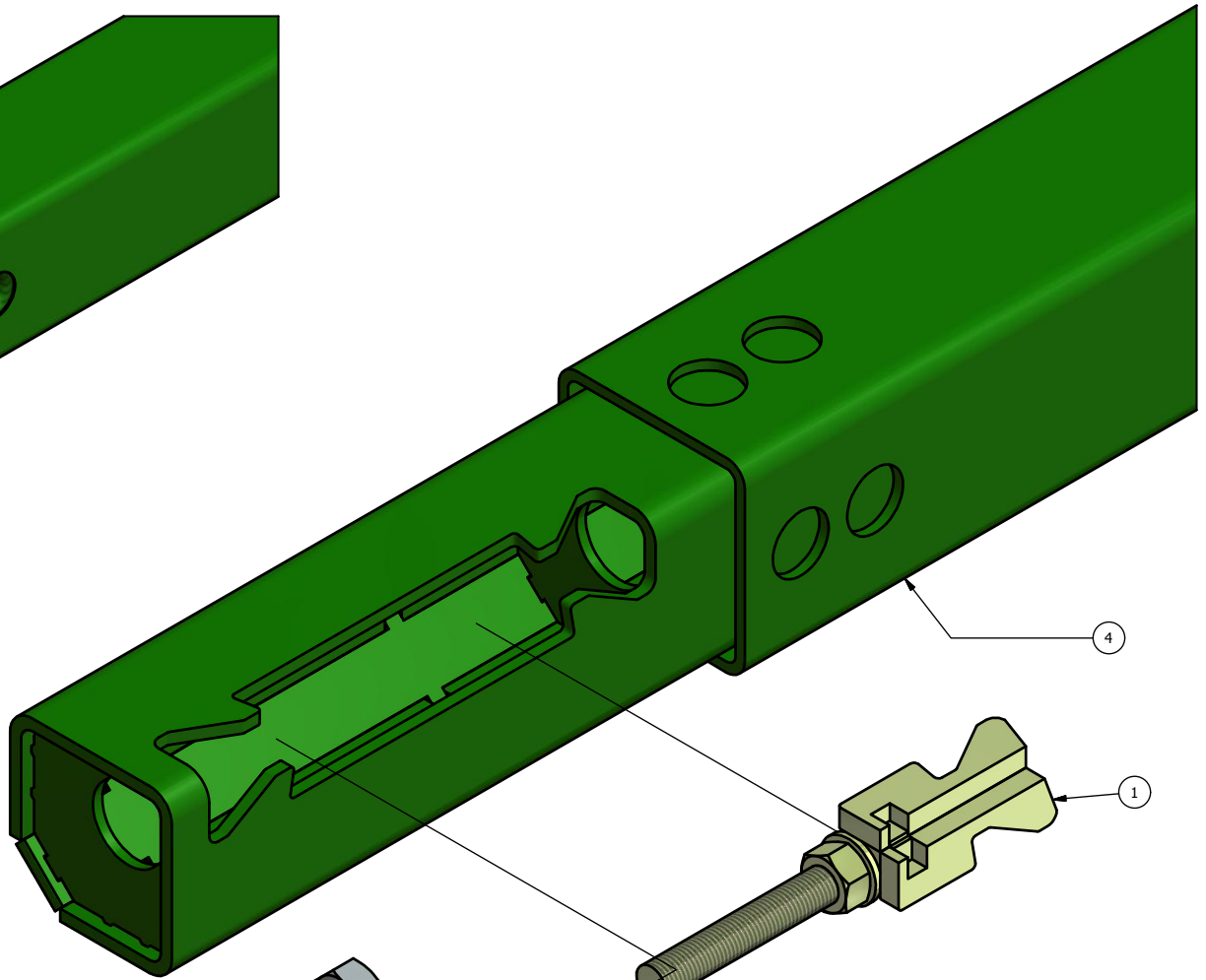
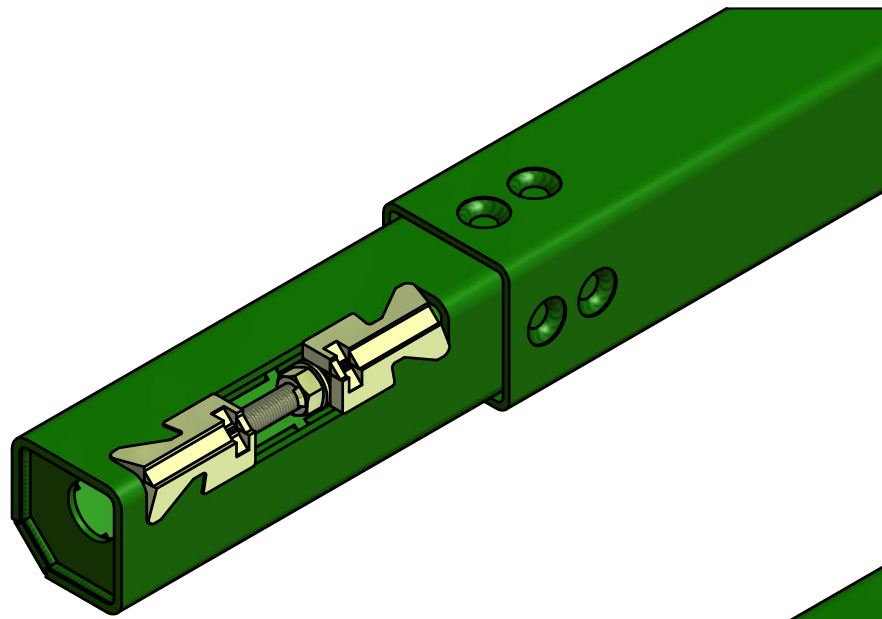
ITEM 3 - REAR BEAM / DISC WHEEL BEAM.
 VARIOUS ITEMS AVAILABLE. PART No. &
 SIZE DEPENDANT ON MACHINE SPECIFICATION.
 REFER TO SERIAL NUMBER TO IDENTIFY.

SEE THRU CROP SECTION
 SHOWING HYDRAULIC RAM
 ASSEMBLED IN POSITION.

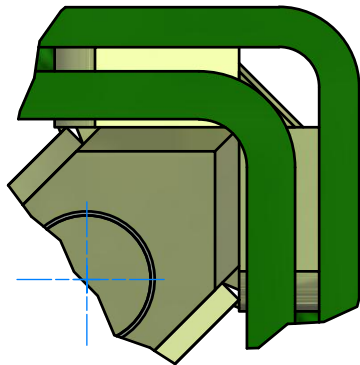
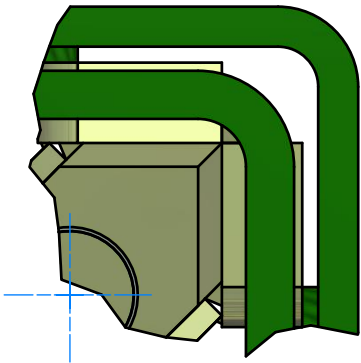


ROBOCROP 6M FOLDING FRAME

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|-----------------------------|-----------------|-----------------|
| 1 | 6M CENTRE SECTION | 8577 | 1 |
| 2 | 6M FOLDING FRAME WING | 8578 | 2 |
| 3 | REAR BEAM / DISC WHEEL BEAM | | 1 |
| 4 | HYDRAULIC RAM | 8579 | 2 |
| 5 | RAM RETAINING PIN | 7417 | 2 |
| 6 | BUSH | 7446 | 4 |
| 7 | FOLDING PIVOT PIN | 7395 | 2 |
| 8 | RAM PIN | 8582 | 2 |
| 9 | M12 SPRING WASHER BZP | 1115 | 2 |
| 10 | M10 FLAT THIN WASHER BZP | 7876 | 8 |
| 11 | M10x65 BOLT BZP | 7459 | 4 |
| 12 | M10 NYLOC NUT BZP | 1024 | 4 |
| 13 | 25MM EXTERNAL CIRCLIP | 7453 | 4 |
| 14 | M12 THIN WASHER BZP | 7877 | 2 |
| 15 | M12x25 BOLT BZP | 1111 | 2 |
| 16 | M24x90 SET SCREW BZP | 8835 | 2 |
| 17 | M24 NUT BZP | 8207 | 2 |
| 18 | M16 FLAT WASHER BZP | 7878 | 16 |
| 19 | M16 SPRING WASHER BZP | 1119 | 16 |
| 20 | M16x40 BOLT BZP | | 16 |
| 21 | TRANSPORT SAFETY PIN | 8526 | 2 |
| 22 | LINCH PIN | 5604 | 2 |
| 23 | GREASE NIPPLE ¼" UNF | | 2 |



3

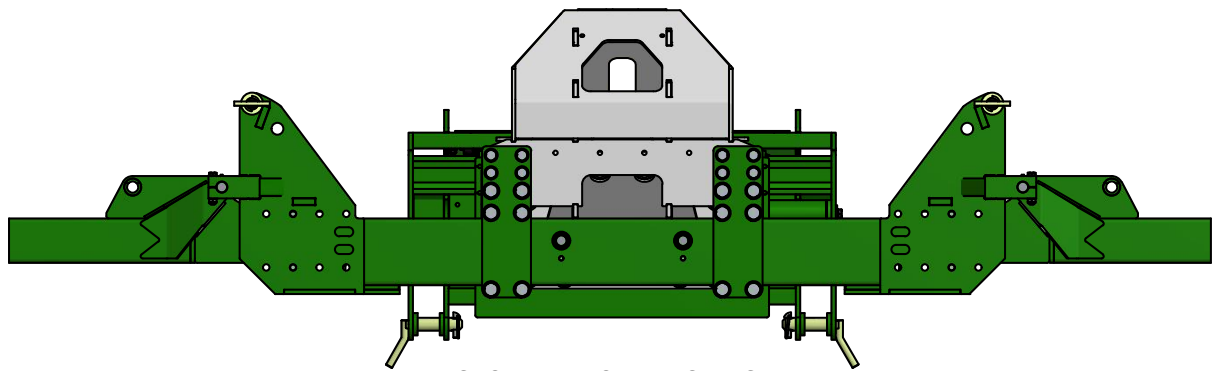
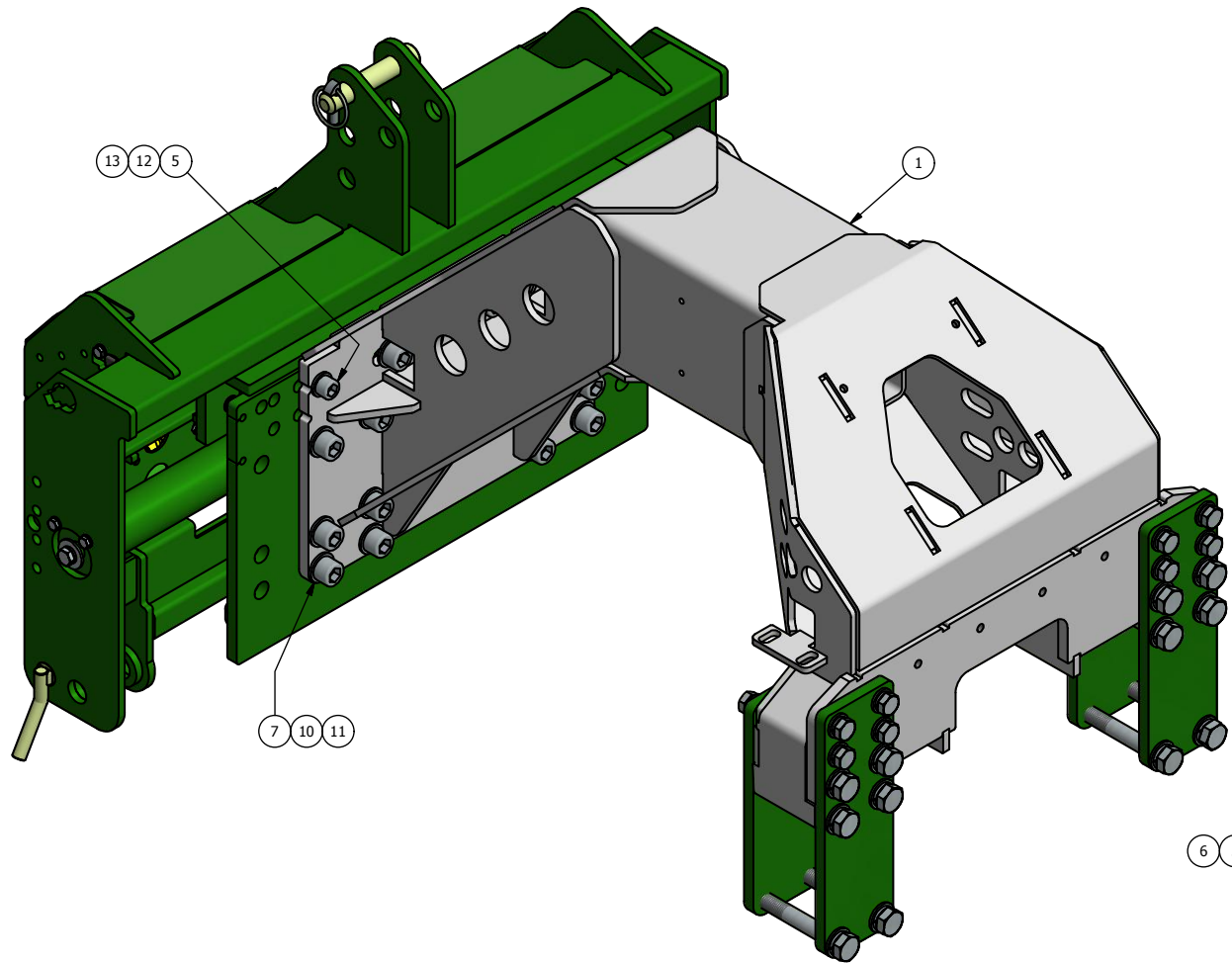


CROPPED END VIEWS SHOWING THE
EXTENSION WEDGE BEFORE BEING
TIGHTENED AND AFTER TIGHTENING
INTO PLACE.

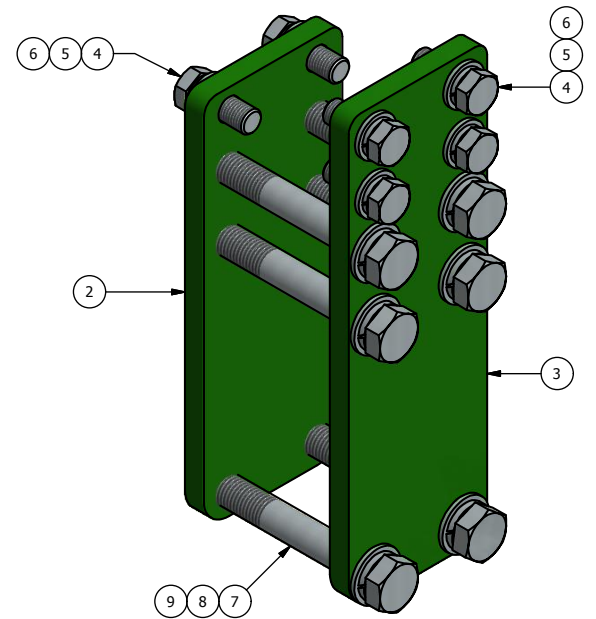
ROBOCROP PLUG IN FRAME EXTENSIONS

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|--------------------------------|-----------------|-----------------|
| 1 | PLUG IN EXTENSION WEDGE | 9048 | 1 |
| 2 | PLUG IN FRAME WEDGE | 9049 | 1 |
| 3 | M16 NUT BZP | 1015 | 1 |
| 4 | PLUG IN FRAME EXTENSION | 9047 | 1 |

5

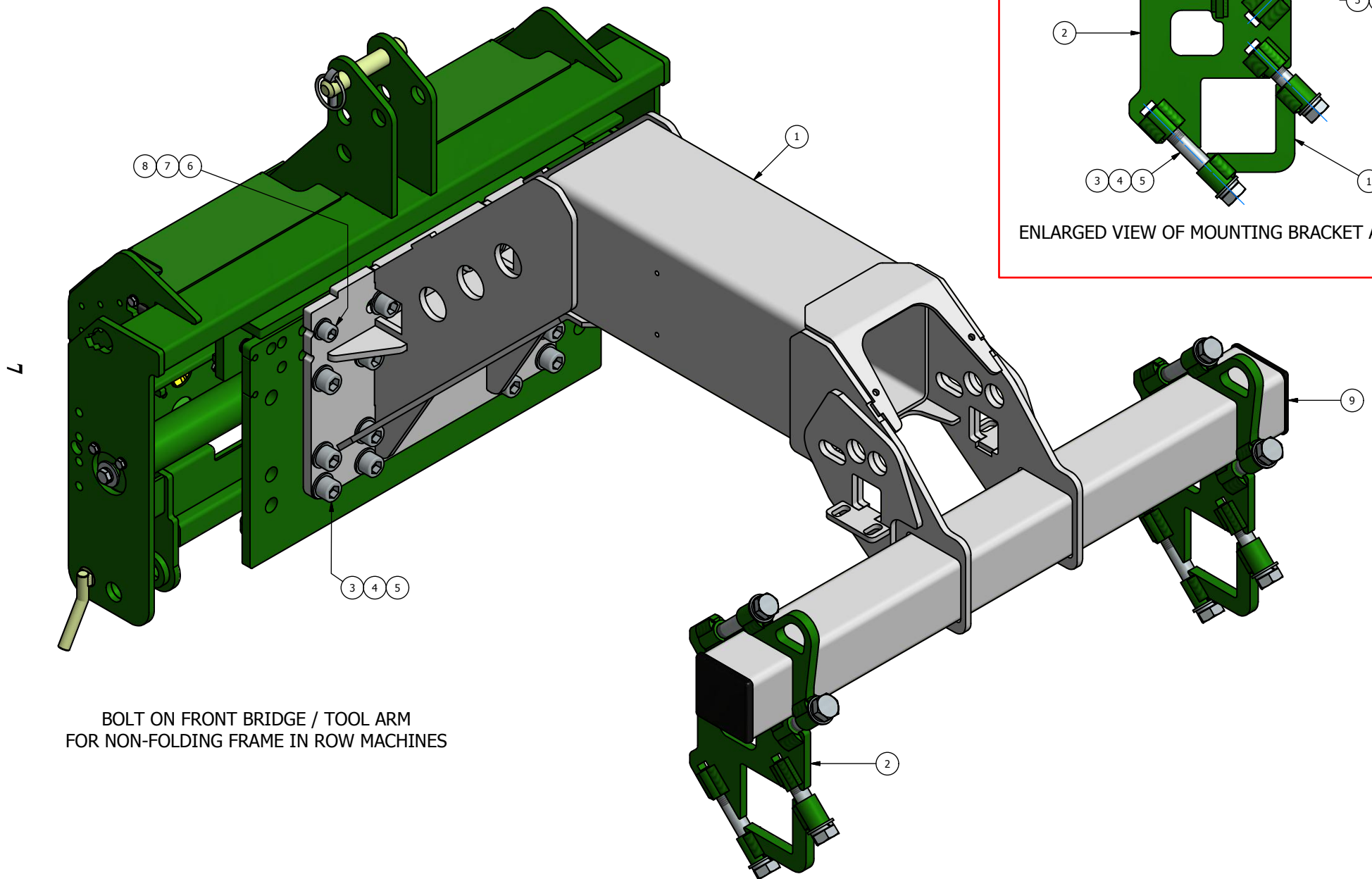


CROP VIEW OF BRACKETS IN PLACE ON FOLDING FRAME.



ROBOCROP FRONT BRIDGE FOR 6M FOLDING FRAME

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|---|-----------------|-----------------|
| 1 | FRONT PICK UP / CENTRE BRIDGE (VARIOUS LENGTHS) | | |
| | 900MM | 10351 | |
| | 1100MM | 10119 | |
| | 1250MM | 10165 | |
| | 1450MM | 10164 | |
| 2 | FRONT PICK UP BRIDGE TO 6M FRAME PLATE REAR | 10159 | 1 |
| 3 | FRONT PICK UP BRIDGE TO 6M FRAME PLATE FRONT | 10158 | 1 |
| 4 | M16 SPRING WASER BZP | | 16 |
| 5 | M16 WASHER BZP | | 12 |
| 6 | M16x40 BOLT BZP | | 12 |
| 7 | M20 WASHER BZP | | 44 |
| 8 | M20 SPRING WASHERS BZP | | 12 |
| 9 | M20x140 BOLT BZP | | 12 |
| 10 | M20 NYLOC NUT BZP | | 16 |
| 11 | M20x60 SOCKET HEAD CAP SCREW BZP | | 16 |
| 12 | M16x60 SOCKET HEAD CAP SCREW BZP | | 2 |
| 13 | M16 NYLOC NUT BZP | | 2 |



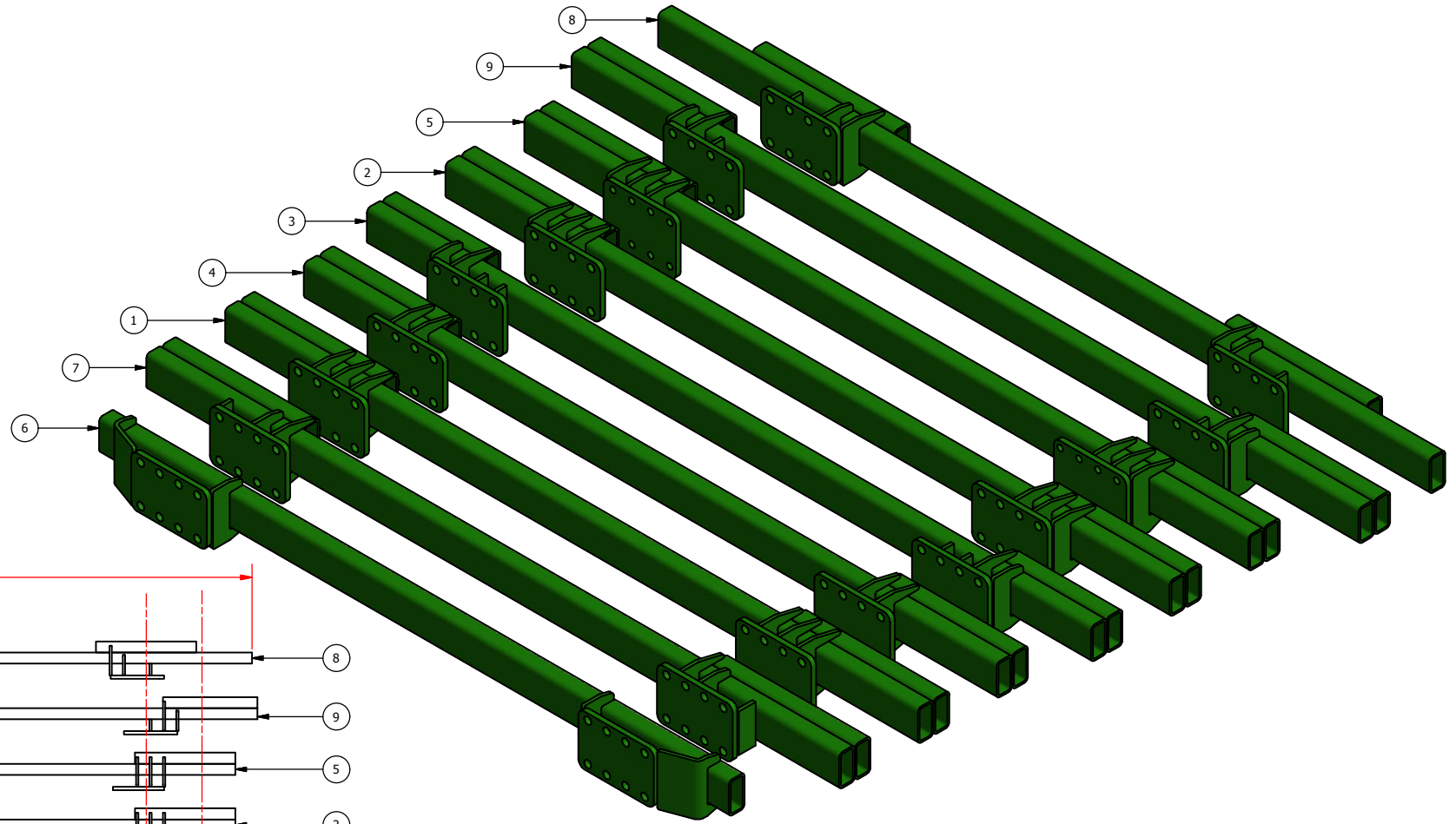
ENLARGED VIEW OF MOUNTING BRACKET ASSEMBLY

ROBOCROP FIXED FRONT BRIDGE / TOOL ARM

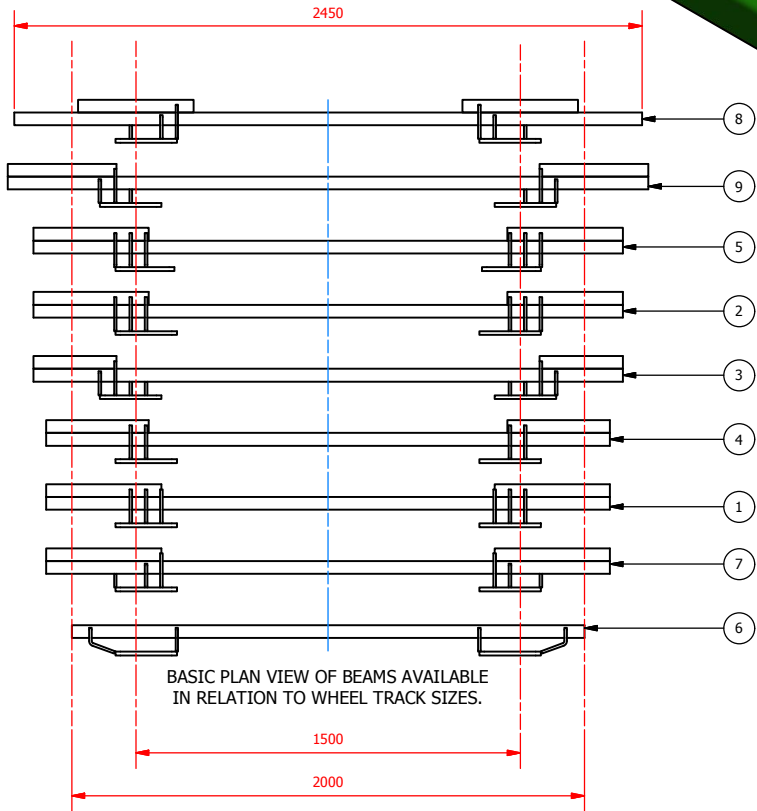
| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|--|-----------------|-----------------|
| 1 | FRONT PICK UP BRIDGE / TOOL ARM 1100 LONG | 10005 | |
| | 1300 LONG | 10163 | |
| 2 | FRONT BRIDGE / PICK UP BRACKETS | 10007 | 2 |
| 3 | M20 WASHER BZP | | 12 |
| 4 | M20 NYLOC NUT BZP | | 12 |
| 5 | M20x60 SOCKET HEAD CAP SCREW BZP | | 12 |
| 6 | M16 WASHER BZP | | 2 |
| 7 | M16 NYLOC NUT BZP | | 2 |
| 8 | M16x60 SOCKET HEAD CAP SCREW BZP | | 2 |
| 9 | END CAP | 6455 | 2 |

MOUNTING BRACKETS

| | | | |
|---|---|-------|---|
| 1 | FRONT PICK UP CENTRE BRIDGE BRACKET CLAMP | 10008 | 1 |
| 2 | FRONT PICK UP CENTRE BRIDGE BRACKET | 10007 | 1 |
| 3 | M20 WASHER BZP | | 4 |
| 4 | M20 SPRING WASHER BZP | | 4 |
| 5 | M20x150 BOLT BZP | | 2 |
| 6 | M20x110 BOLT BZP | | 2 |
| 7 | FRONT PICK UP CENTRE BRIDGE BRACKET CLAMP WITH SLING POINT | 10140 | 1 |



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DRAWING FOR GUIDENCE, BEAMS ARE SPECIFIC TO MACHINES. ALWAYS REFUR TO SERIAL NUMBER FOR IDENTIFICATION PURPOSES.

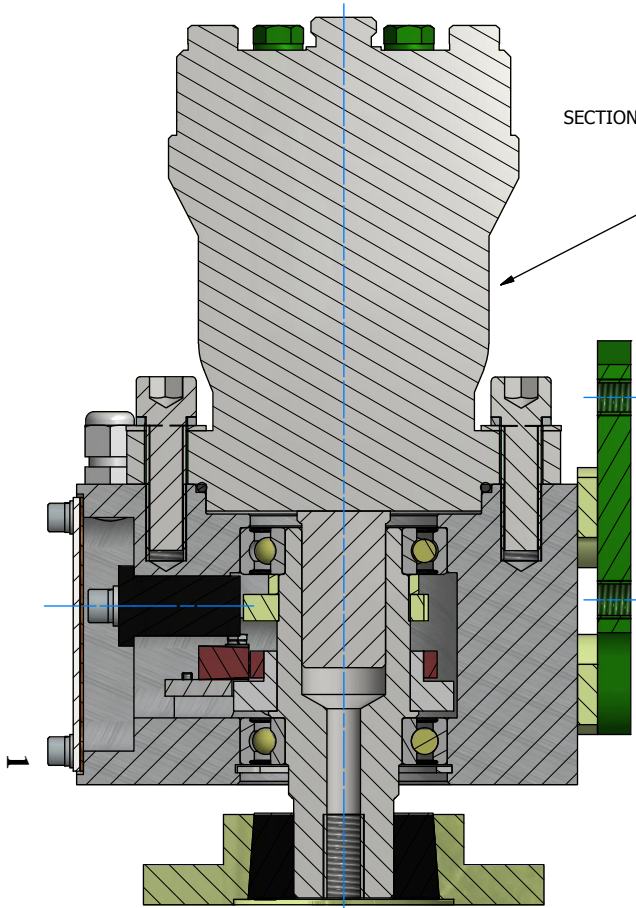
ROBOCROP DISK STEER FRAME BEAMS

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|--------------------|-----------------|-----------------|
| 1 | 2200 LONG FRAME | 9340 | |
| 2 | 2300 LONG FRAME | 9341 | |
| 3 | 2300 LONG FRAME | 9346 | |
| 4 | 2200 LONG FRAME | 9366 | |
| 5 | 2300 LONG FRAME | 9328 | |
| 6 | 2000 LONG FRAME | 9542 | |
| 7 | 2200 LONG FRAME | 9712 | |
| 8 | 2450 LONG FRAME | 9829 | |
| 9 | 2500 LONG FRAME | 10348 | |

CONTROL SYSTEM PARTS SECTION

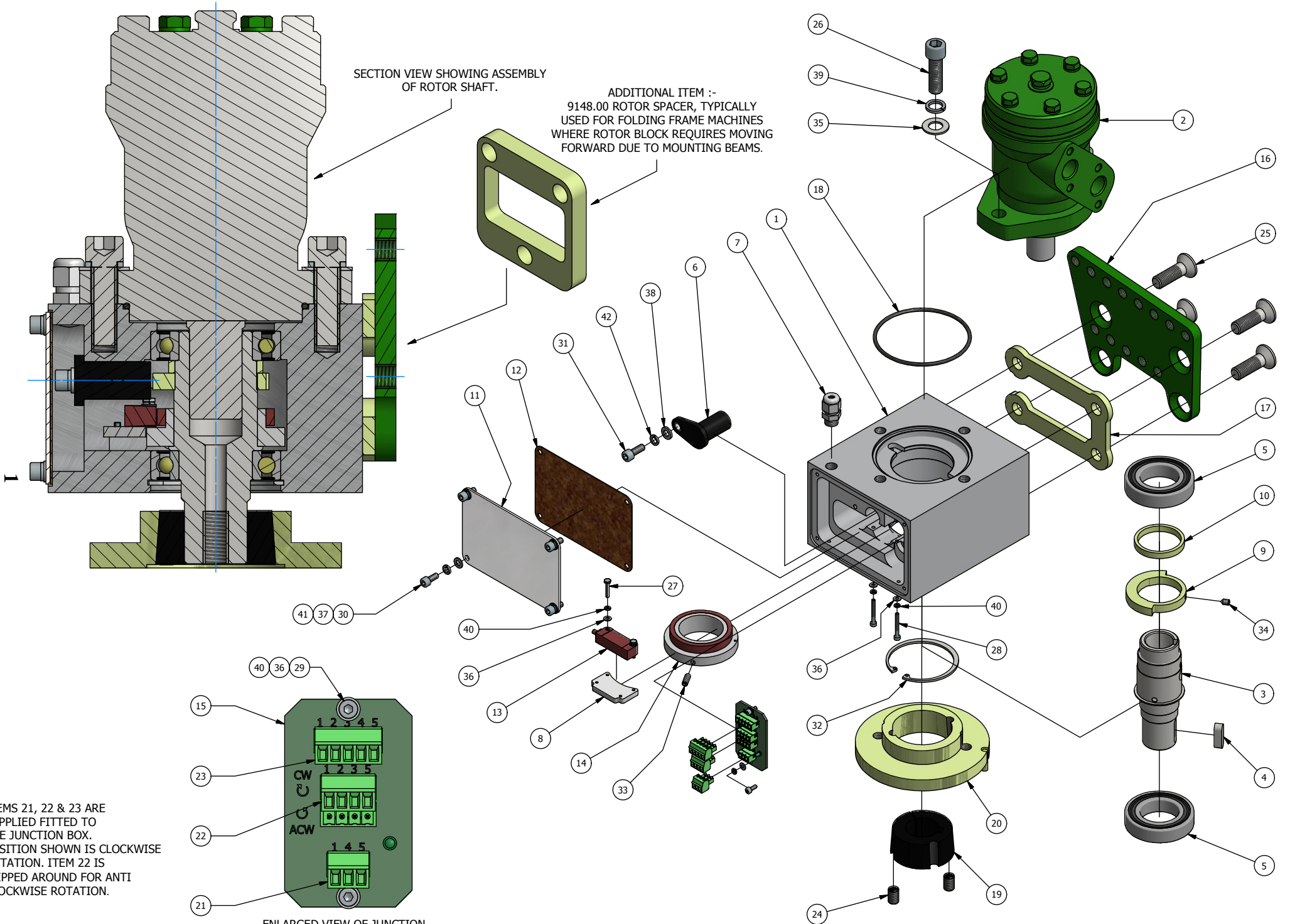
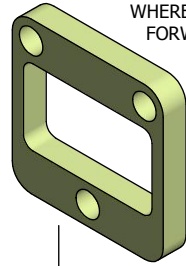
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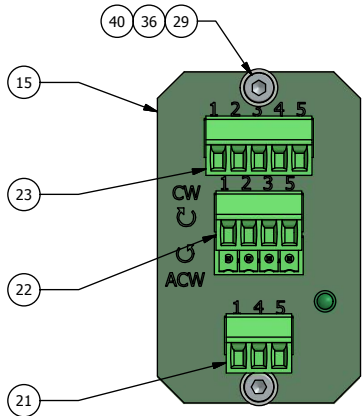


SECTION VIEW SHOWING ASSEMBLY OF ROTOR SHAFT.

ADDITIONAL ITEM :-
9148.00 ROTOR SPACER, TYPICALLY USED FOR FOLDING FRAME MACHINES WHERE ROTOR BLOCK REQUIRES MOVING FORWARD DUE TO MOUNTING BEAMS.



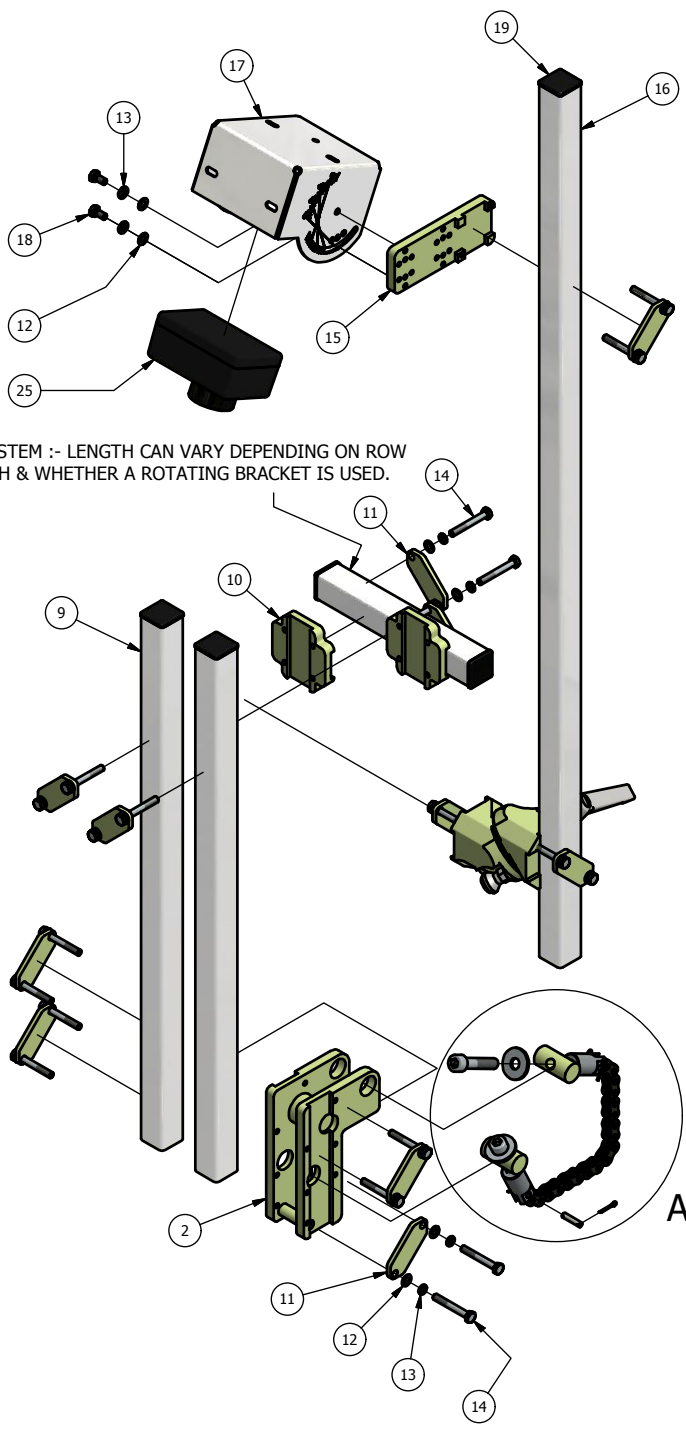
ITEMS 21, 22 & 23 ARE SUPPLIED FITTED TO THE JUNCTION BOX. POSITION SHOWN IS CLOCKWISE ROTATION. ITEM 22 IS FLIPPED AROUND FOR ANTI CLOCKWISE ROTATION.



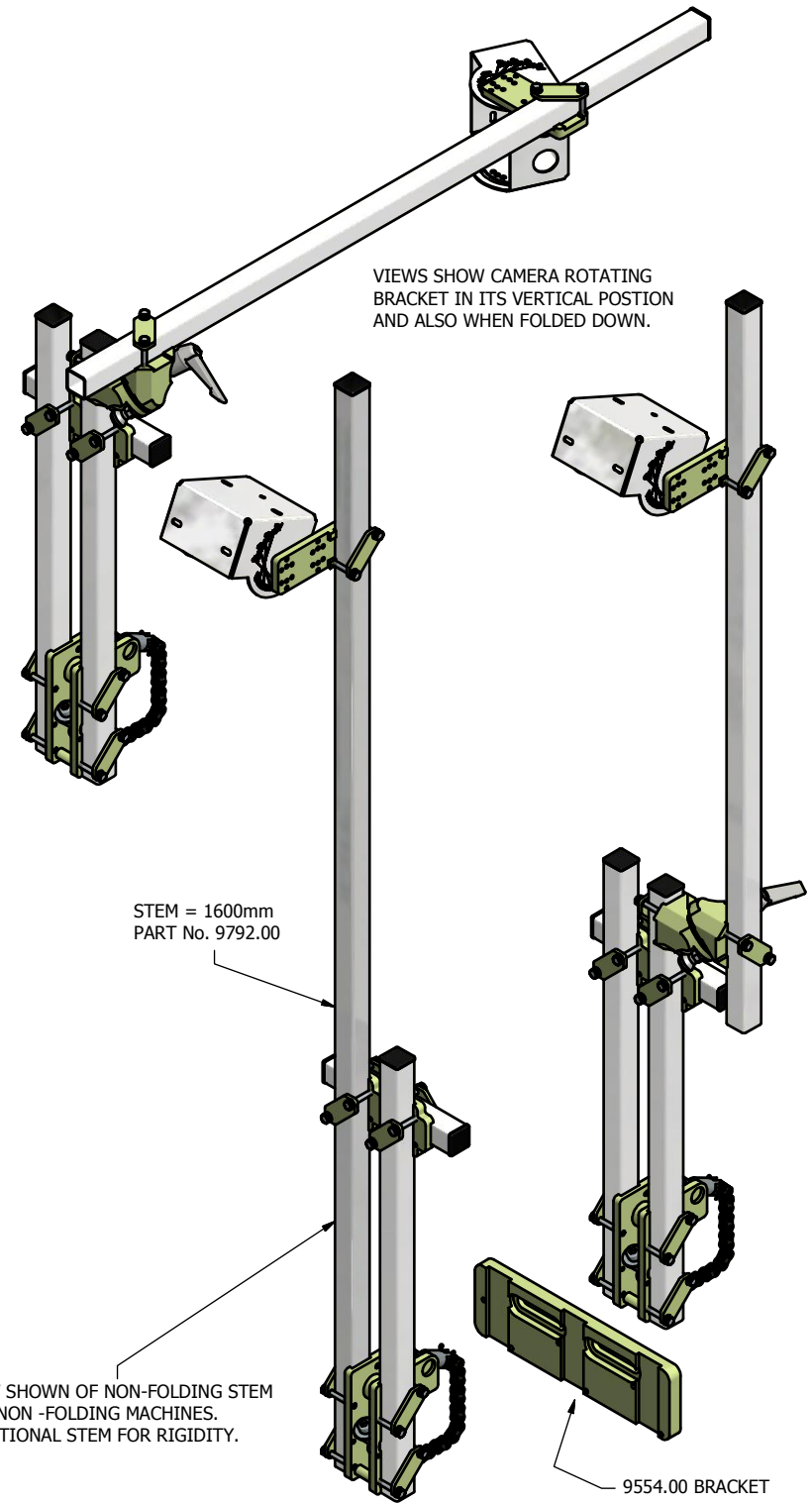
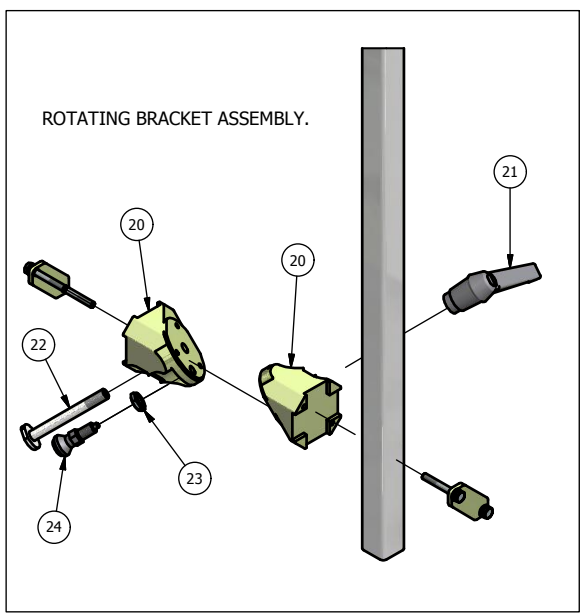
ENLARGED VIEW OF JUNCTION ROTATION BOARD.

ROBOCROP ROTOR DRIVE ASSEMBLY

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|----------|--|----------|----------|
| 1 | ROTOR BLOCK | 9800 | 1 |
| 2 | HYDRAULIC MOTOR | 8418 | 1 |
| 3 | ROTOR SHAFT | 9801 | 1 |
| 4 | KEY (8x7x20 LONG) | 8821 | 1 |
| 5 | SEALED BEARING 6007-2RS1 | | 2 |
| 6 | GEAR TOOTH SENSOR | 8311 | 1 |
| 7 | CABLE GLAND | 8631 | 1 |
| 8 | MAGNET RING SENSOR MOUNT | 9802 | 1 |
| 9 | GEAR TOOTH | 9803 | 1 |
| 10 | ASSEMBLY SPACER | 9804 | 1 |
| 11 | ROTOR BLOCK COVER | 9805 | 1 |
| 12 | CORK SEAL | 9806 | 1 |
| 13 | MAGNET RING SENSOR | 9807 | 1 |
| 14 | MAGNET RING | 9808 | 1 |
| 15 | CAN ROTOR JUNCTION BOARD | 9809 | 1 |
| 16 | ROTOR MOUNTING PLATE | 9810 | 1 |
| 17 | SPACER | 9811 | 1 |
| 18 | O-RING | 9812 | 1 |
| 19 | TAPER LOCK BUSH | 5337 | 1 |
| 20 | ROTOR DRIVE COUPLING | 8494 | 1 |
| 21 | 3 PIN PLUG (FITTED TO BOARD) | | 1 |
| 22 | 4 PIN PLUG (FITTED TO BOARD) | | 1 |
| 23 | 5 PIN PLUG (FITTED TO BOARD) | | 1 |
| 24 | SOCKET SET SCREW, OVAL POINT 3/8"-16 x 5/8" (SUPPLIED WITH TAPER LOCK BUSH) | | 2 |
| 25 | C'SUNK ALLEN HEAD SCREW M12x40 BZP | | 4 |
| 26 | M12x40 SOCKET CAP SCREW BZP | | 2 |
| 27 | M3x16 BOLT BZP | | 2 |
| 28 | M3x25 SOCKET CAP SCREW BZP | | 2 |
| 29 | M3x8 SOCKET CAP SCREW BZP | | 2 |
| 30 | M5x12 SOCKET CAP SCREW BZP | | 4 |
| 31 | M6x16 SOCKET CP SCREW BZP | | 1 |
| 32 | 62MM INTERNAL CIRCLIP | | 1 |
| 33 | M5x16 SOCKET SET SCREW BZP | | 1 |
| 34 | M5x8 SOCKET SET SCREW BZP | | 1 |
| 35 | M12 THIN WASHER BZP | | 2 |
| 36 | M3 FLAT WASHER BZP | | 6 |
| 37 | M5 FLAT WASHER BZP | | 4 |
| 38 | M6 FLAT WASHER BZP | | 1 |
| 39 | M12 SPRING WASHER BZP | | 2 |
| 40 | M3 SPRING WASHER BZP | | 6 |
| 41 | M5 SPRING WASHER BZP | | 4 |
| 42 | M6 SPRING WASHER BZP | | 1 |



CROSS STEM :- LENGTH CAN VARY DEPENDING ON ROW WIDTH & WHETHER A ROTATING BRACKET IS USED.

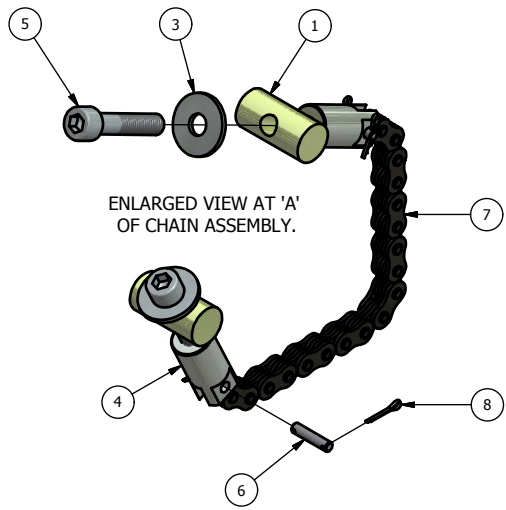


VIEWS SHOW CAMERA ROTATING BRACKET IN ITS VERTICAL POSITION AND ALSO WHEN FOLDED DOWN.

STEM = 1600mm
PART No. 9792.00

VIEW SHOWN OF NON-FOLDING STEM FOR NON-FOLDING MACHINES. ADDITIONAL STEM FOR RIGIDITY.

9554.00 BRACKET



ENLARGED VIEW AT 'A' OF CHAIN ASSEMBLY.

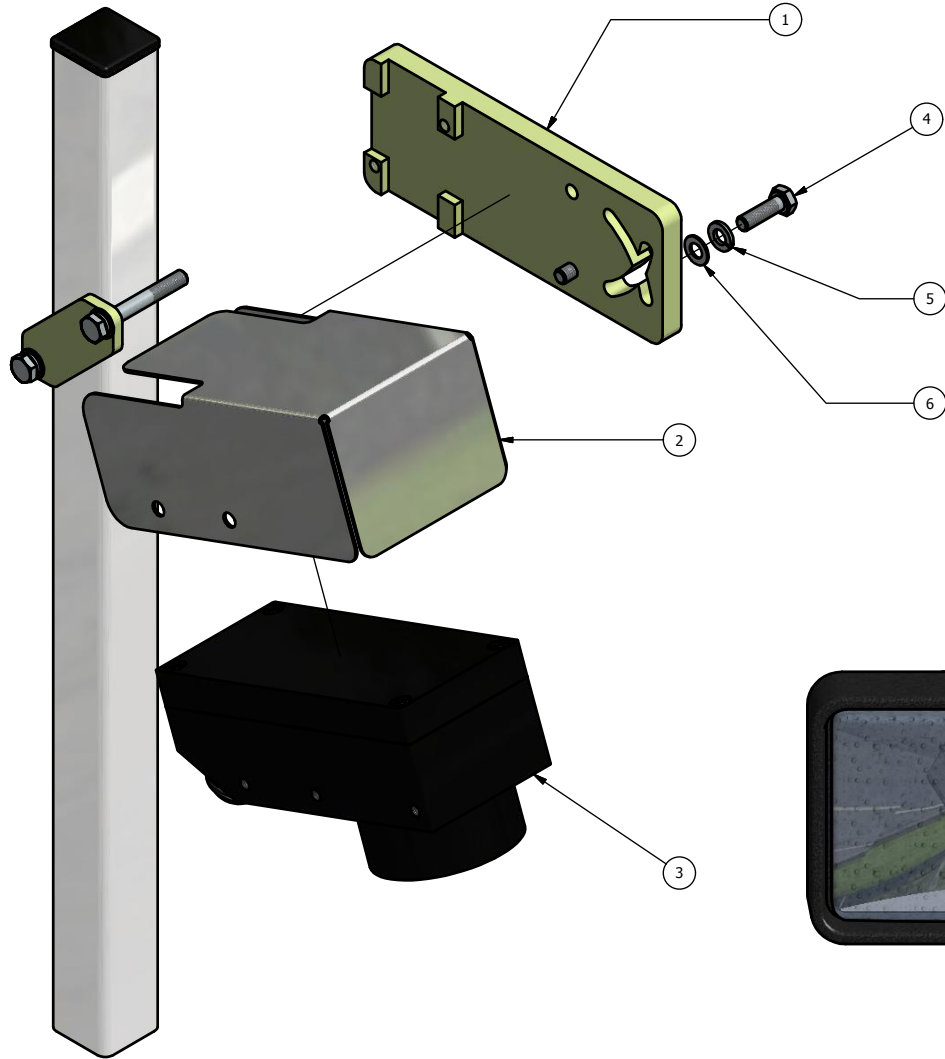
ROBOCROP CAMERA BRACKET ASSEMBLY

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|---|-----------------|-----------------|
| 1 | CHAIN BOLT PIVOT | 9351 | 1 |
| 2 | CLAMP BRACKET | 9400 | 1 |
| 3 | LARGE DIA WASHER, 10x30x2.5 BZP | | 2 |
| 4 | CHAIN ANCHOR | 9435 | 2 |
| 5 | SOCKET CAP SCREW, M10x50 BZP | | 2 |
| 6 | CHAIN PIN | 9437 | 2 |
| 7 | CHAIN (AVAILABLE IN VARIOUS LENGTHS) | 9436 | 1 |
| 8 | SPLIT PIN | | 4 |
| 9 | CAMERA HIGHT STEM 600mm | 9404 | 1 |
| 10 | CAMERA FRAME BRACKET | 9401 | 2 |
| 11 | CAMERA FRAME CLAMP | 9402 | 11 |
| 12 | M6 FLAT THIN WASHER BZP | 5978 | 24 |
| 13 | M6 SPRING WASHER BZP | 5979 | 24 |
| 14 | M6x45 BOLT BZP | 5664 | 22 |
| 15 | CAMERA FRAME BRACKET | 10011 | 1 |
| 16 | CAMERA HIGHT STEM 1000mm | 9434 | 1 |
| 17 | CAMERA BOX - ALUMINIUM | 10877 | 1 |
| 18 | BOLT M6x12 BZP | | 2 |
| 19 | END CAP | 8839 | 5 |
| 20 | ROTATING CAMERA BRACKET | 9355 | 2 |
| 21 | HANDLE | 9438 | 1 |
| 22 | ROTATING BRACKET PIN | 9419 | 1 |
| 23 | M10 HALF NUT BZP | | 1 |
| 24 | LOCKING PIN | 9439 | 1 |
| 25 | ROBO VIS SYS CAMERA, NARROW ANGLE (FIREWIRE) | 8983 | 1 |

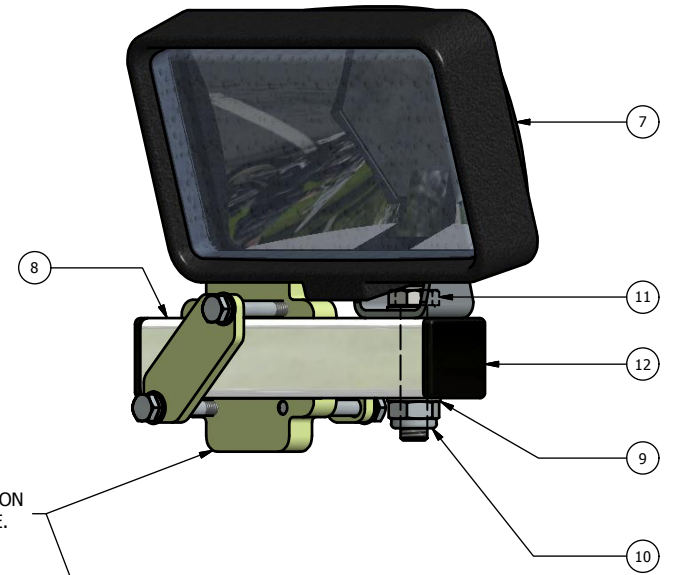
**QUANTITY SHOWN IS PER CAMERA BRACKET ASSEMBLY.
TOTAL QUANTITY IS DEPENDENT ON MACHINE
SPECIFICATION.**

ADDITIONAL CAMERA ITEMS.

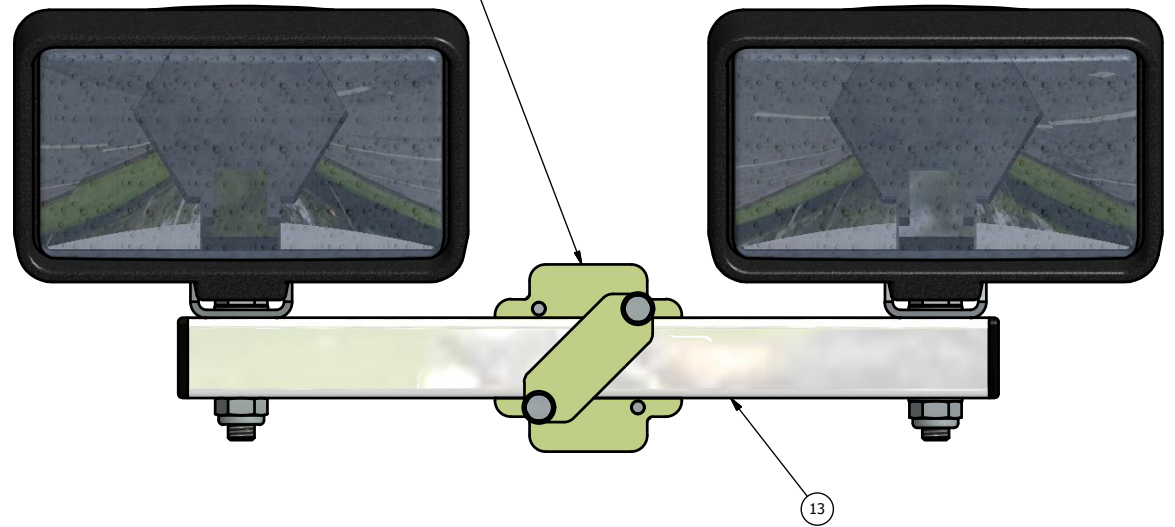
FOR THT CAMERA.



NIGHT OPERATING LIGHTS.



BRACKET PARTS SHOWN ON
CAMERA BRACKET PAGE.

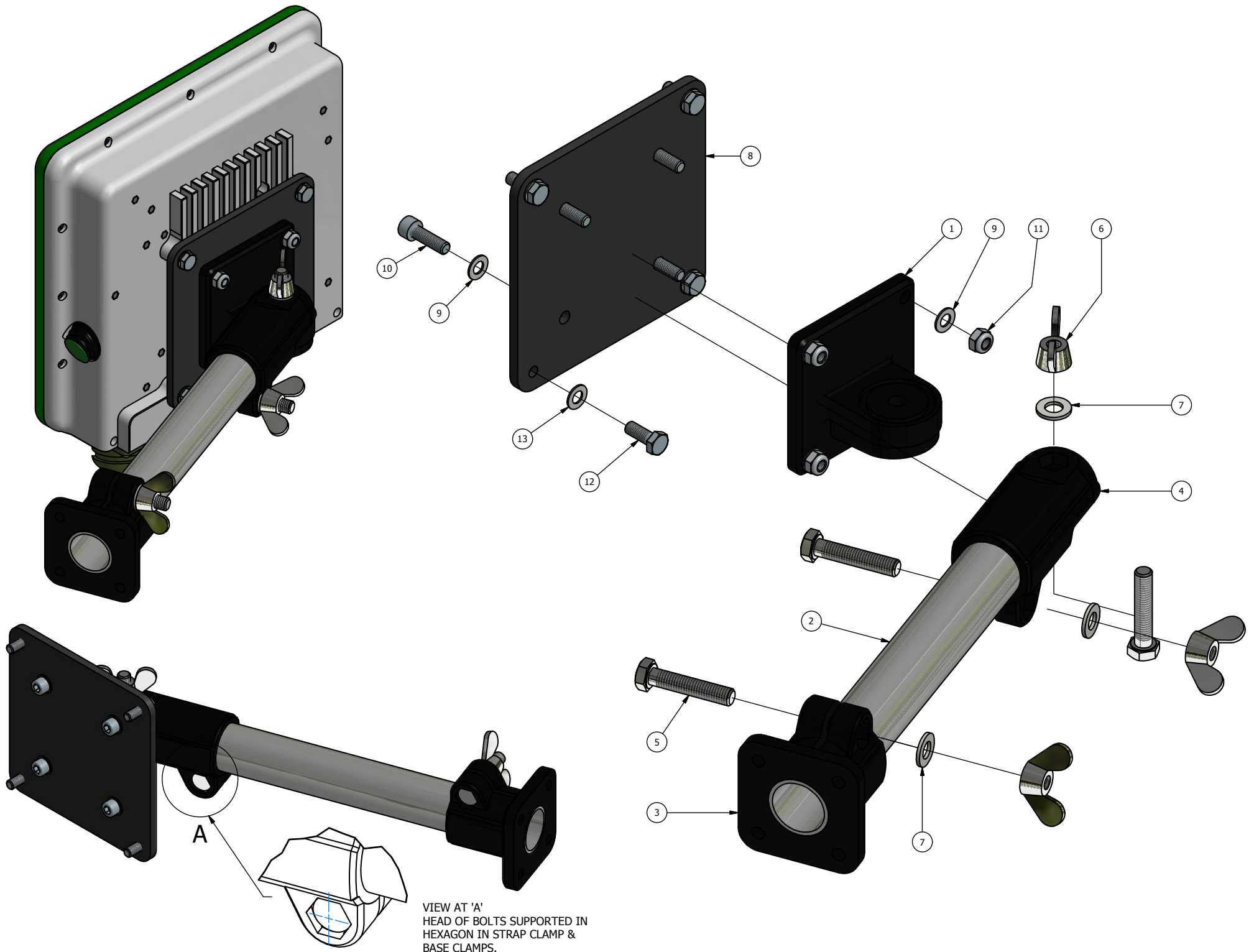


ROBOCROP CAMERA BRACKET ASSEMBLY – ADDITIONAL ITEMS
THT CAMERA – NIGHT OPERATING LIGHTS

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|---------------------------|-----------------|-----------------|
| 1 | CAMERA FRAME BRACKET | 10349 | 1 |
| 2 | CAMERA SHADE | 10350 | 1 |
| 3 | ROBO VIS SYS CAMERA - THT | 10160 | 1 |
| 4 | M6x20 BOLT BZP | | 2 |
| 5 | M6 SPRING WASHER BZP | 5979 | 2 |
| 6 | M6 FLAT THIN WASHER BZP | 5978 | 2 |
| 7 | LIGHT | 10708 | 1 |
| | TWO USED IF USING ITEM 13 | | |
| 8 | MAST | 10709 | 1 |
| 9 | M10 THIN WASHER BZP | | 2 |
| 10 | M10 NYLOC NUT BZP | | 1 |
| 11 | M10x50 BOLT BZP | | 1 |
| 12 | END CAP | 8839 | 2 |
| 13 | MAST | 10710 | 1 |

**QUANTITY SHOWN IS PER CAMERA BRACKET ASSEMBLY.
TOTAL QUANTITY IS DEPENDENT ON MACHINE
SPECIFICATION.**

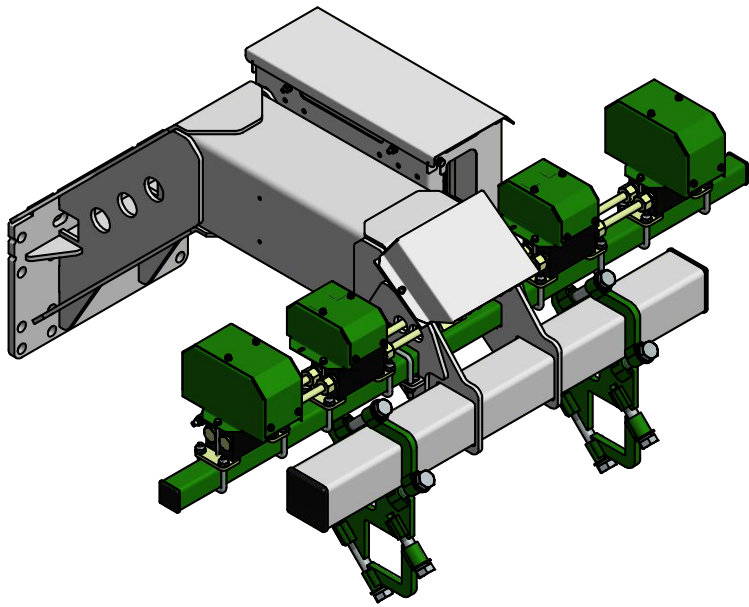
7



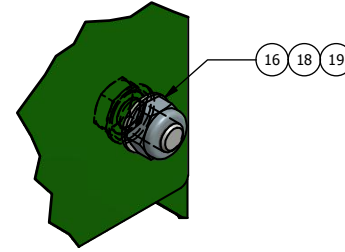
VIEW AT 'A'
HEAD OF BOLTS SUPPORTED IN
HEXAGON IN STRAP CLAMP &
BASE CLAMPS.

ROBOCROP EPIC CONSOLE MOUNT ASSEMBLY

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|----------------------------|-----------------|-----------------|
| 1 | CONSOLE STRAP CLAMP | 10573 | 1 |
| 2 | STAINLESS TUBE | 10576 | 1 |
| 3 | BASE CLAMP | 10577 | 1 |
| 4 | STRAP CLAMP | 10607 | 1 |
| 5 | M8x40 BOLT BZP | | 3 |
| 6 | M8 WING NUT BZP | | 3 |
| 7 | M8 FLAT WASHER BZP | | 3 |
| 8 | ANTI-VIBRATION MOUNT | 11148 | 1 |
| 9 | M6 THIN WASHER BZP | | 8 |
| 10 | M6x20 SOCKET CAP SCREW BZP | | 4 |
| 11 | M6 NYLOC NUT BZP | | 4 |
| 12 | M5x16 BOLT BZP | | 4 |
| 13 | M5 THIN WASHER BZP | | 4 |

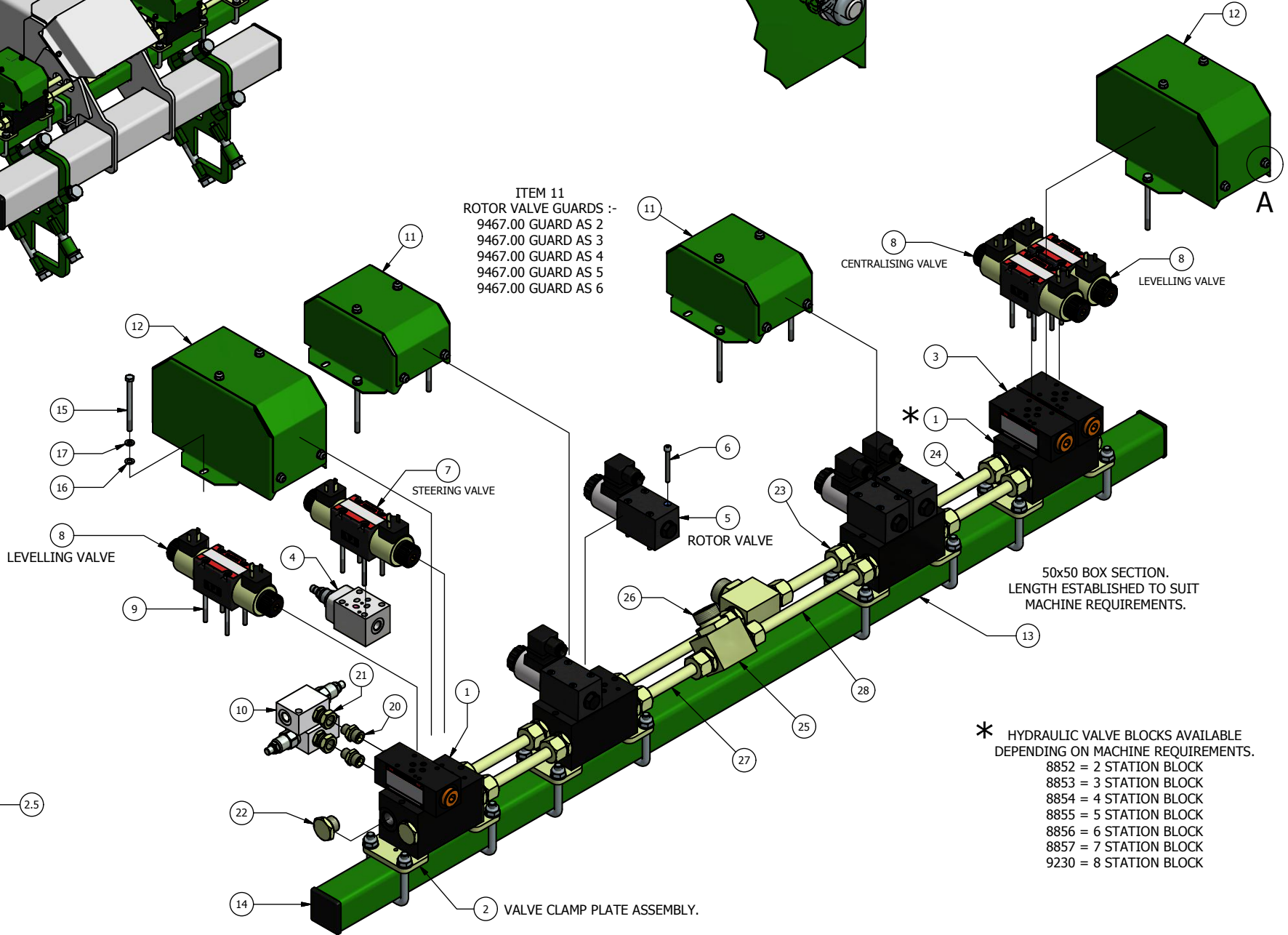


ENLARGED VIEW AT 'A'
DETAIL ON BOLTS FOR ALL GUARDS,
BOLT HEAD INSIDE GUARD.

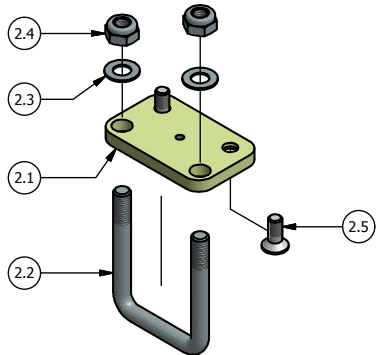


ITEM 11
ROTOR VALVE GUARDS :-
9467.00 GUARD AS 2
9467.00 GUARD AS 3
9467.00 GUARD AS 4
9467.00 GUARD AS 5
9467.00 GUARD AS 6

6



ITEM 2
VALVE CLAMP PLATE ASSEMBLY.

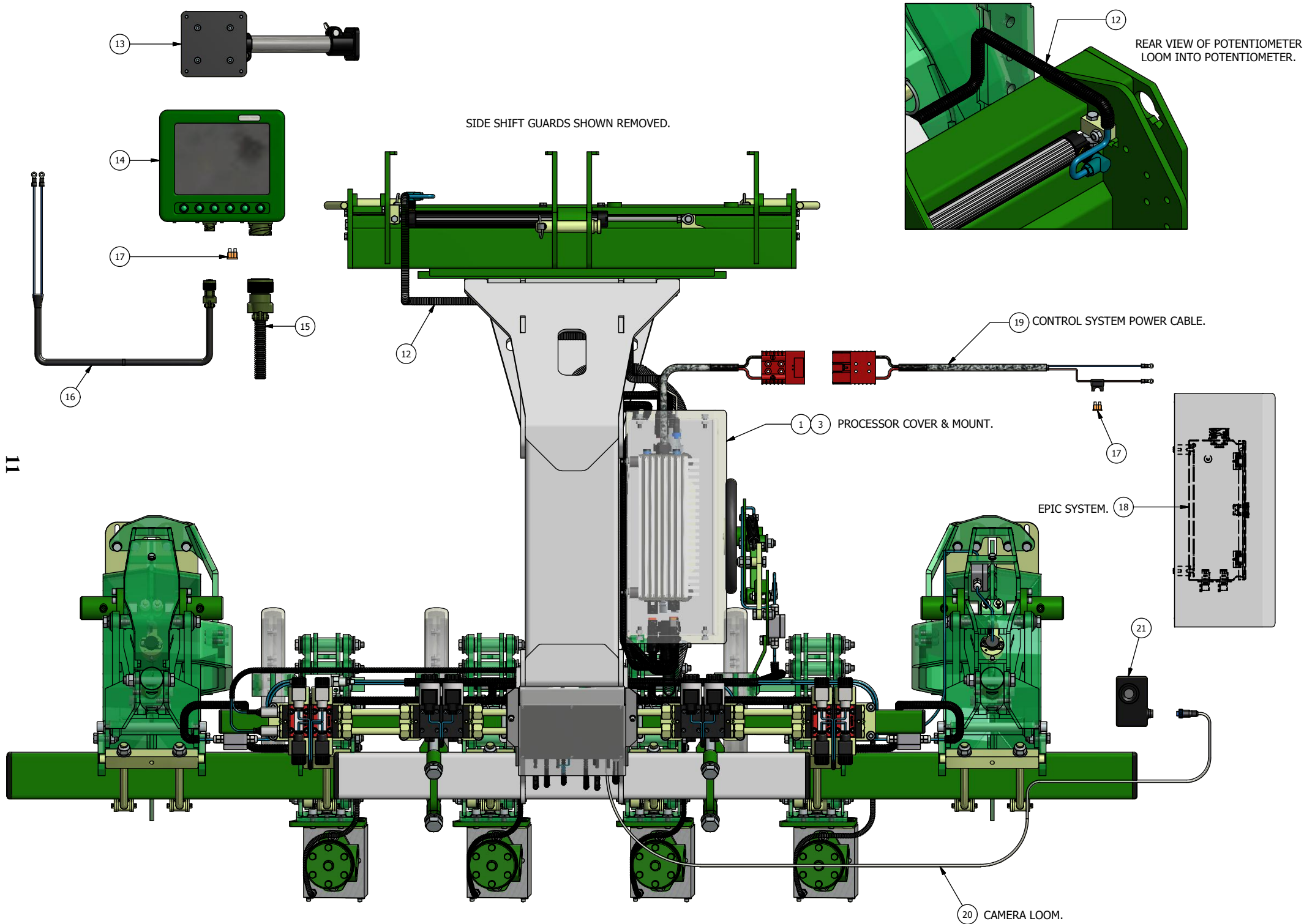


* HYDRAULIC VALVE BLOCKS AVAILABLE
DEPENDING ON MACHINE REQUIREMENTS.
8852 = 2 STATION BLOCK
8853 = 3 STATION BLOCK
8854 = 4 STATION BLOCK
8855 = 5 STATION BLOCK
8856 = 6 STATION BLOCK
8857 = 7 STATION BLOCK
9230 = 8 STATION BLOCK

ROBOCROP STEERING, LEVELLING, CENTRALISING VALVES & GUARDS

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|---|-----------------|-----------------|
| 1 | HYDRAULIC VALVE BLOCKS (SEE DRAWING) (QUANTITY DEPENDENT ON MACHINE) | | |
| 2 | CLAMP ASSEMBLY (QUANTITY DEPENDENT ON MACHINE) | | |
| | 2.1 CLAMP PLATE | 9033 | |
| | 2.2 U-BOLT, M10 FOR 50x50 BOX, BZP | 8672 | |
| | 2.3 M10 THIN WASHER BZP | | |
| | 2.4 M10 NYLOC NUT BZP | | |
| | 2.5 M8x20 C'SUNK ALLEN HEAD SCREW BZP | | |
| 3 | HYDRAULIC CHECK VALVE | 8863 | 3 |
| 4 | PRESSURE REDUCING VALVE | 9727 | 1 |
| 5 | ROTOR VALVE (QUANTITY DEPENDENT ON MACHINE) | 8587 | |
| 6 | M5x50 SOCKET CAP SCREW BZP | | 16 |
| 7 | HYDRAULIC VALVE | 8858 | 1 |
| 8 | HYDRAULIC VALVE | 8860 | 3 |
| 9 | M5x90 SOCKET HEAD CAP SCREW BZP | | 16 |
| 10 | HYDRAULIC FLOW VALVE | 8959 | 2 |
| 11 | VALVE GUARD (SEE DRAWING) | | |
| 12 | VALVE GUARD | 9056 guard as 2 | 2 |
| 13 | VALVE BEAM, 50x50 BOX (SEE DRAWING) | | |
| 14 | END CAP | 7501 | 2 |
| 15 | M6x80 BOLT BZP | | 8 |
| 16 | M6 THIN WASHER BZP | | 56 |
| 17 | M6 SPRING WASHER BZP | | 8 |
| 18 | M6x12 BOLT BZP | | 24 |
| 19 | M6 NYLOC NUT BZP | | 24 |
| 20 | HYDRAULIC ADAPTOR, 3/8 – 1/4 M/M | 5619 | 2 |
| 21 | HYDRAULIC ADAPTOR, 1/4 – 1/4 M/F | 7617 | 2 |
| 22 | HYDRAULIC PLUG | 7936 | 4 |
| 23 | HYDRAULIC ADAPTOR | 9343 | 16 |
| 24 | HYDRAULIC PIPE (CUT TO SIZE) | | 4 |
| 25 | HYDRAULIC TEE BLOCK | 10352 | 2 |
| 26 | HYDRAULIC ADAPTOR, 1 – 3/4 M/M | 5523 | 2 |
| 27 | HYDRAULIC PIPE (CUT TO SIZE) | | 2 |
| 28 | HYDRAULIC PIPE (CUT TO SIZE) | | 2 |

QUANTITIES ABOVE ARE A GUIDE, AS NUMBER OF ROWS, MACHINE SPECIFICATION WILL DICTATE OVERALL QUANTITY REQUIRED.



FRONT VIEW OF CAN JUNCTION BOX SYSTEM.

10596.00 - 12 WAY VALVE LOOM.
(TO RIGHT HAND VALVE BLOCKS)

8

7 10595.00 - CAN & POWER 4 WAY LOOM.
WIRED INTO CAN ROTOR JUNCTION BOX.

9 10597.00 - 8 WAY VALVE LOOM.
(TO LEFT HAND VALVE BLOCKS)

22 10594.00 - 31 WAY SENSOR LOOM.

REAR VIEW OF CAN JUNCTION BOX SYSTEM.

CONTROL SYSTEM POWER CABLE. 19

10598.00 - AUX. POTENTIOMETER LOOM. 12

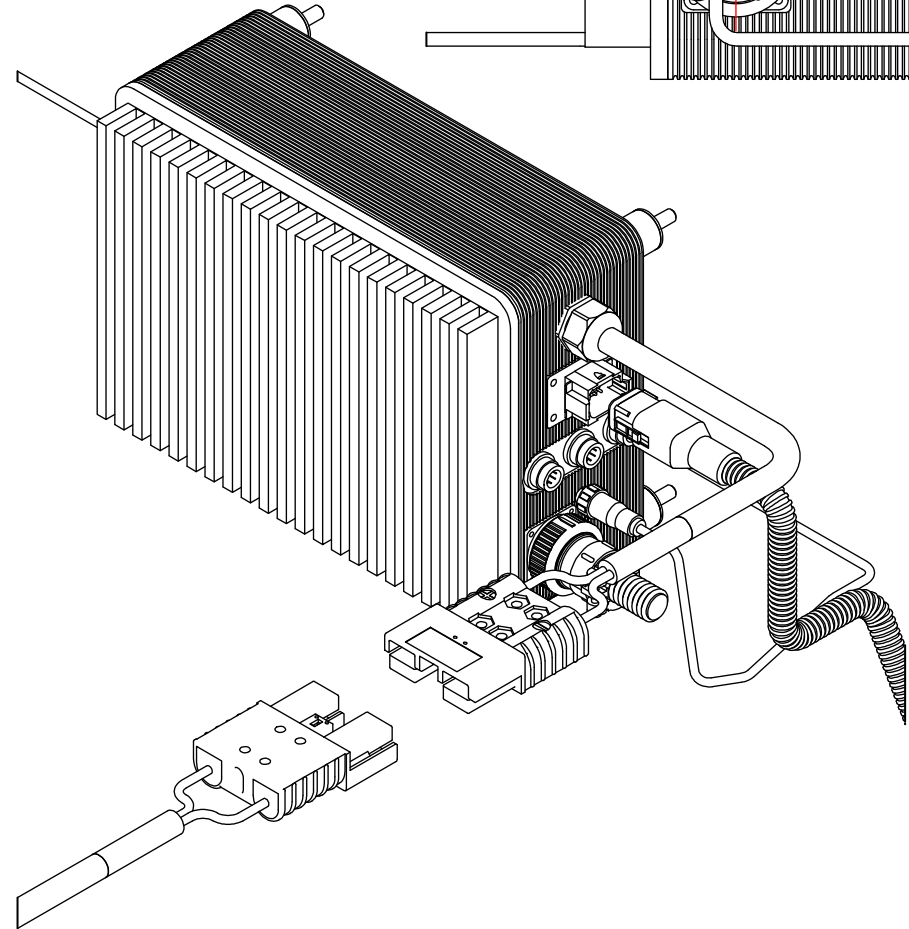
10581.00 - CAMERA LOOM. 20

9384.00 - CONSOLE TO CAN JUNCTION BOX LOOM. 15

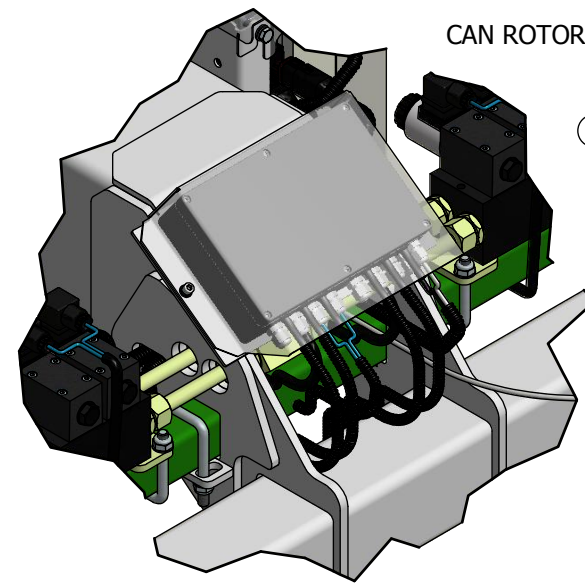
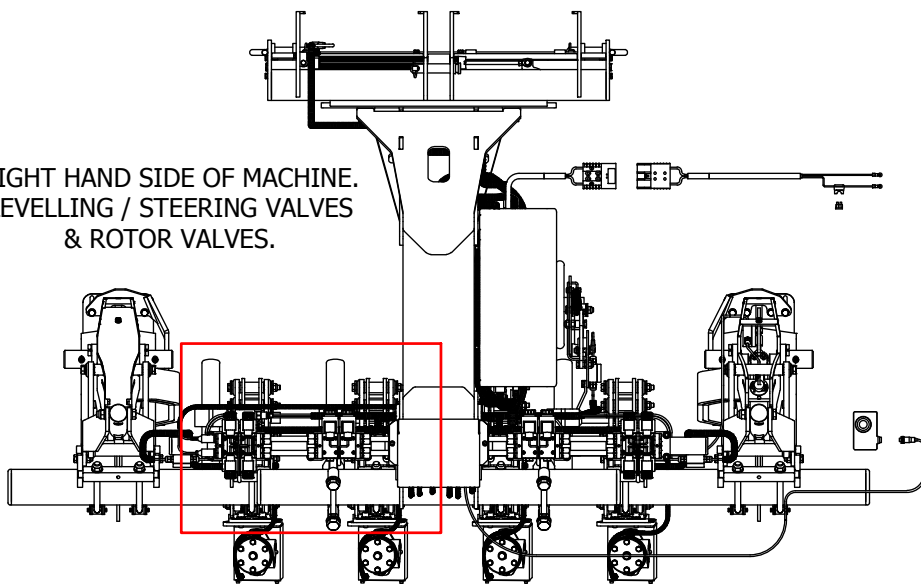
12

CAN JUNCTION BOX SYSTEM. 2

HOSES / CABLES ARE ROUTED THROUGH THE FRONT BRIDGE (WHITE ARM). THE 31 WAY LOOM ALSO HAS A SPLITTER JUNCTION.

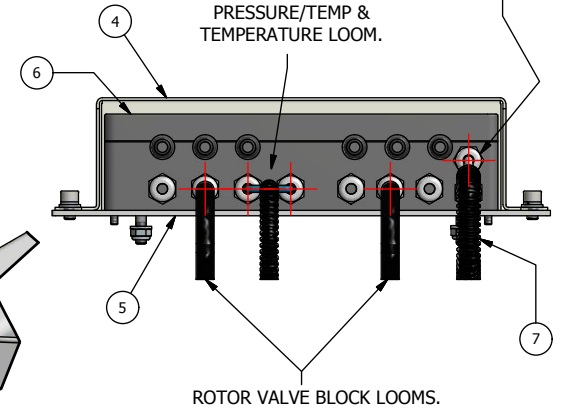


RIGHT HAND SIDE OF MACHINE.
LEVELLING / STEERING VALVES
& ROTOR VALVES.



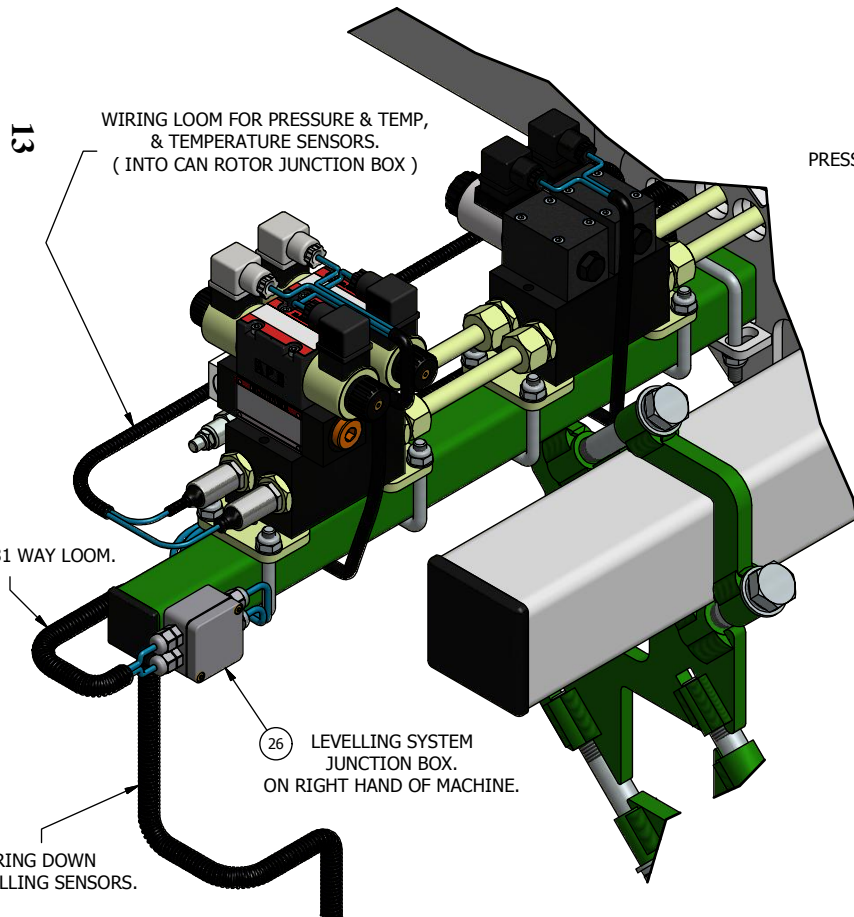
CAN ROTOR JUNCTION BOX.

CABLE GLANDS.



13

WIRING LOOM FOR PRESSURE & TEMP,
& TEMPERATURE SENSORS.
(INTO CAN ROTOR JUNCTION BOX)



LEVELLING VALVE.

STEERING VALVE.

8

PRESSURE & TEMPERATURE.

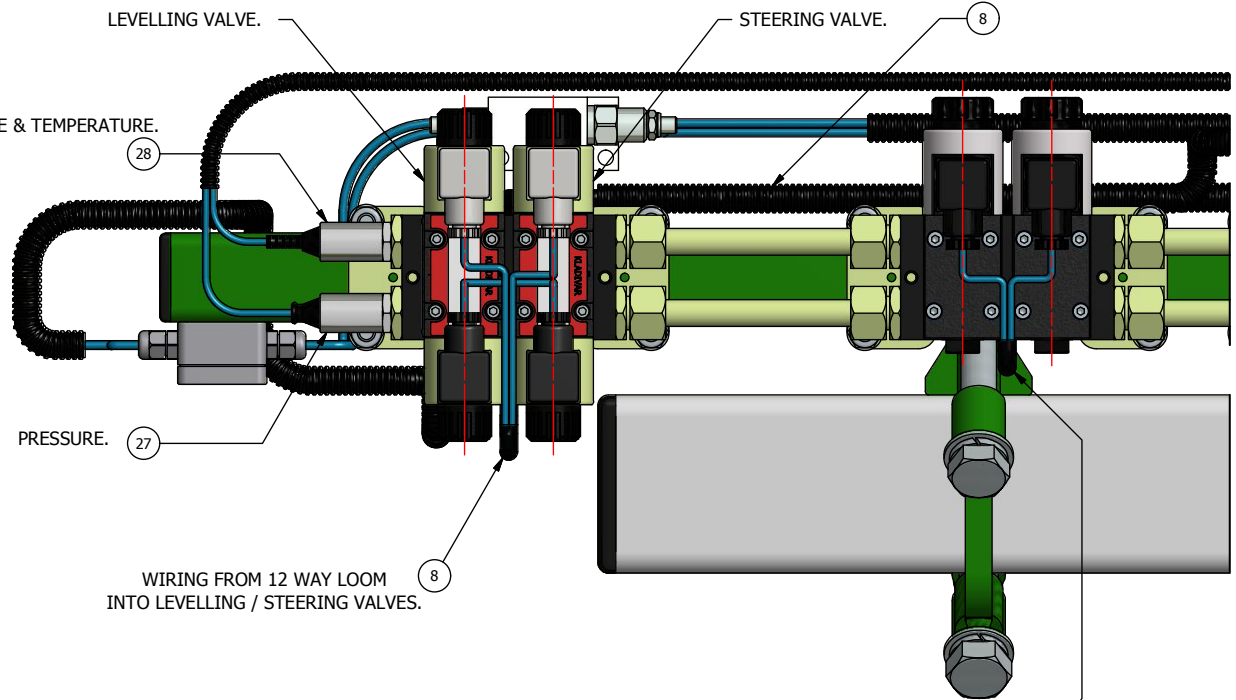
28

PRESSURE.

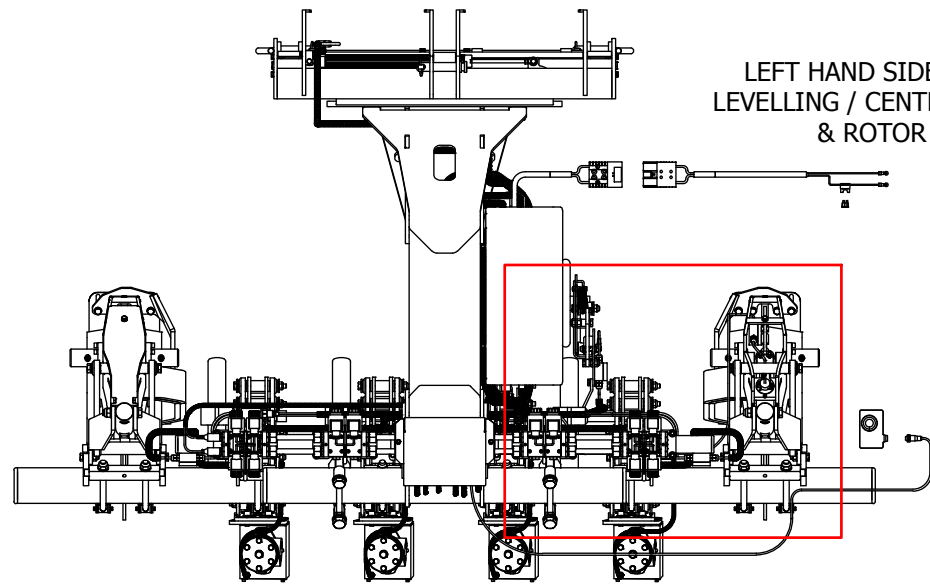
27

WIRING FROM 12 WAY LOOM
INTO LEVELLING / STEERING VALVES.

8



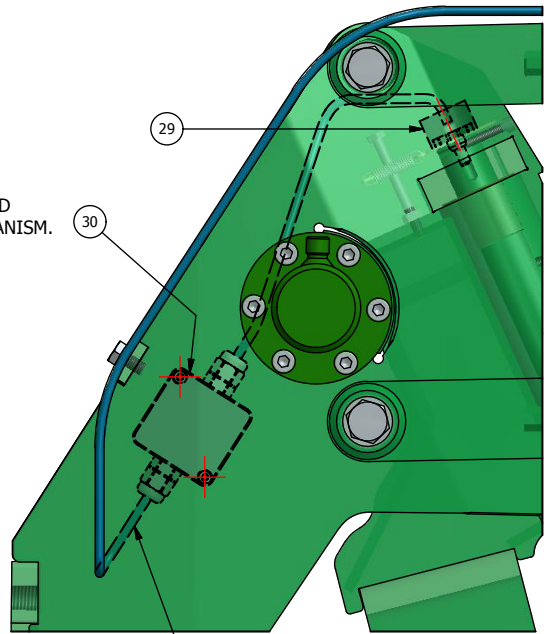
RIGHT HAND ROTOR VALVE BLOCK LOOM
WIRED INTO CAN JUNCTION BOX AS SHOWN ABOVE.



LEFT HAND SIDE OF MACHINE.
LEVELLING / CENTRALISING VALVES
& ROTOR VALVES.

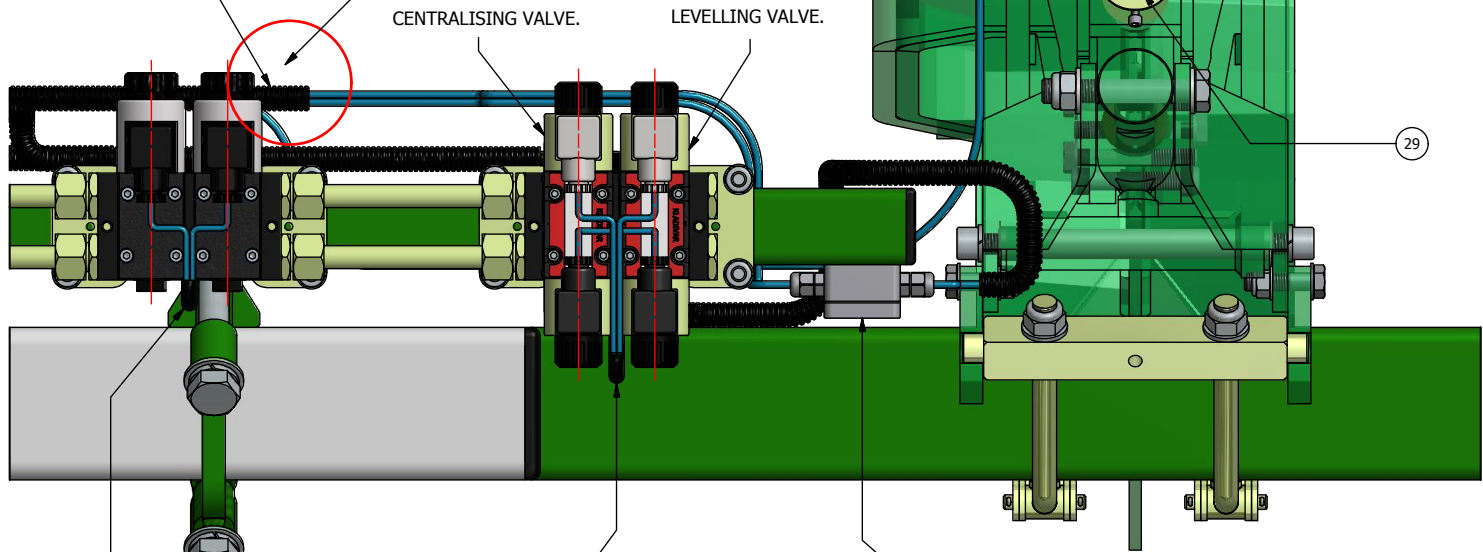
14

31 WAY SENSOR LOOM. (22)
LEVELLING SYSTEM & DISK STEER
LOOMS, WIRED INTO 31 WAY SENSOR LOOM.
(WHICH HAS A SPLITTER JUNCTION INSIDE FRONT BRIDGE.)



JUNCTION BOX FITTED
INSIDE DISK STEER MECHANISM.

DISK STEER STEERING POTENTIOMETER LOOM.



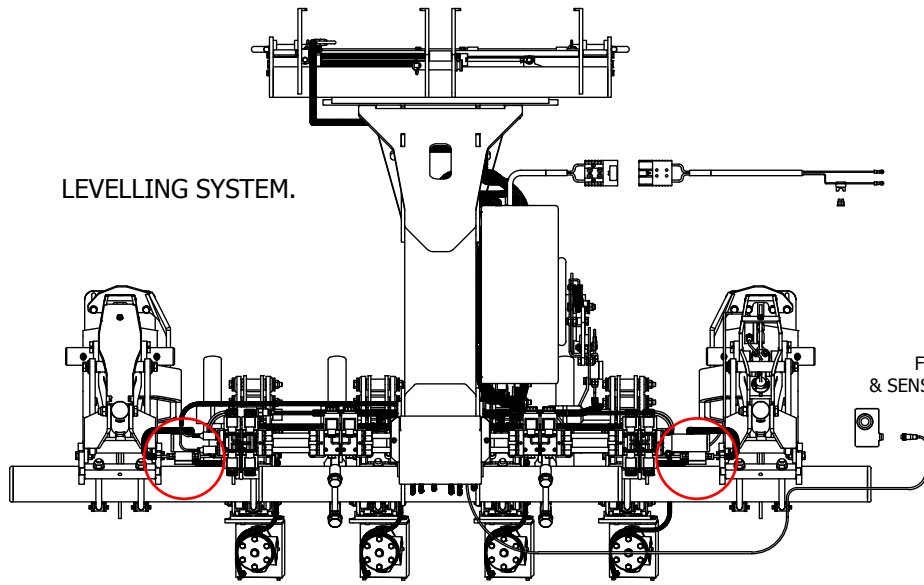
CENTRALISING VALVE. LEVELLING VALVE.

LEFT HAND ROTOR VALVE BLOCK LOOM.
WIRED INTO CAN JUNCTION BOX.

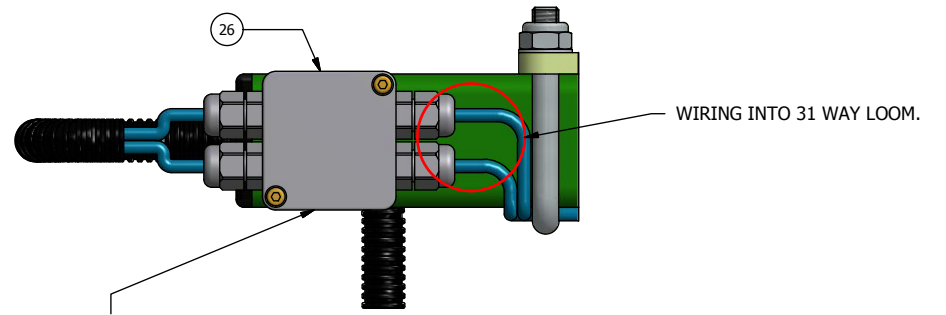
WIRING FROM 8 WAY LOOM INTO
LEVELLING & CENTRALISING VALVES.

LEVELLING SYSTEM
JUNCTION BOX.
ON LEFT HAND OF MACHINE.

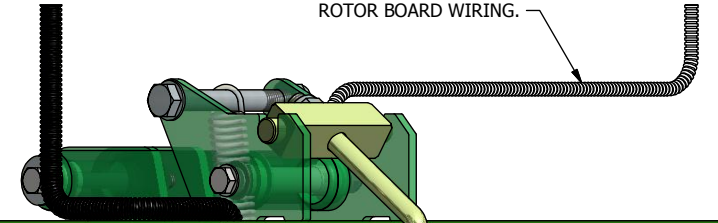
LEVELLING SYSTEM.



LEVELLING SYSTEM JUNCTION BOXES
FITTED TO EACH SIDE OF VALVE TOOL BAR,
& SENSORS ARE FITTED TO THE OUTER WHEEL UNITS.

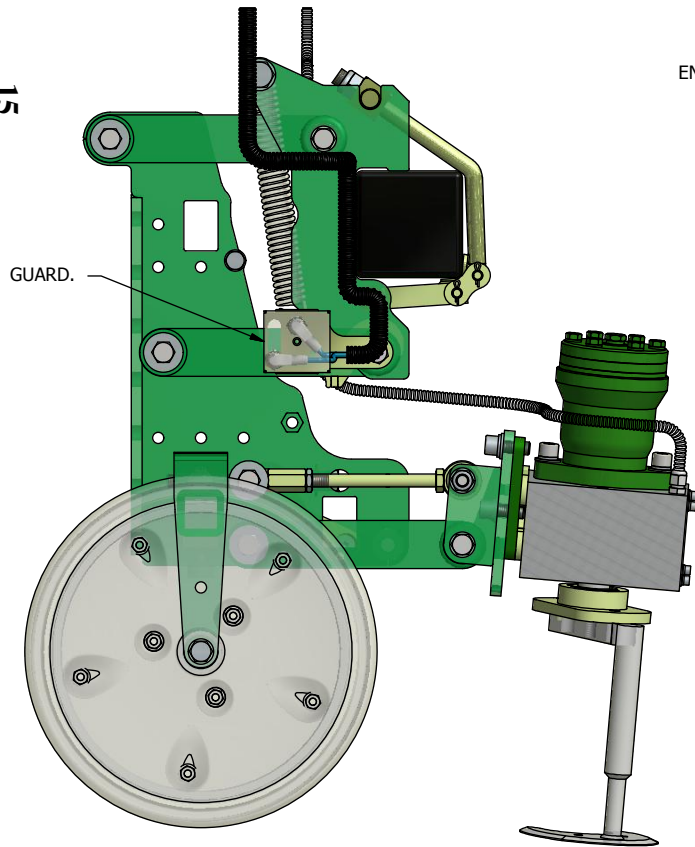


WIRING INTO 31 WAY LOOM.



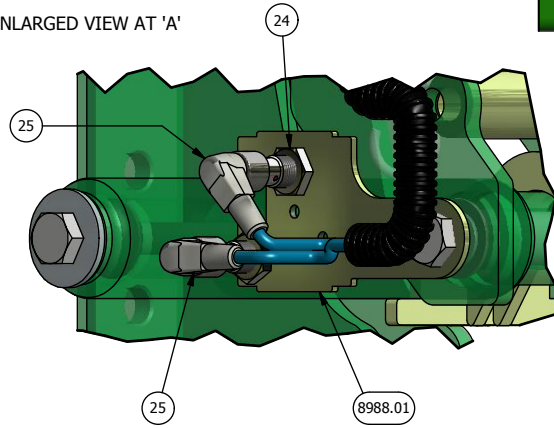
ROTOR BOARD WIRING.

15



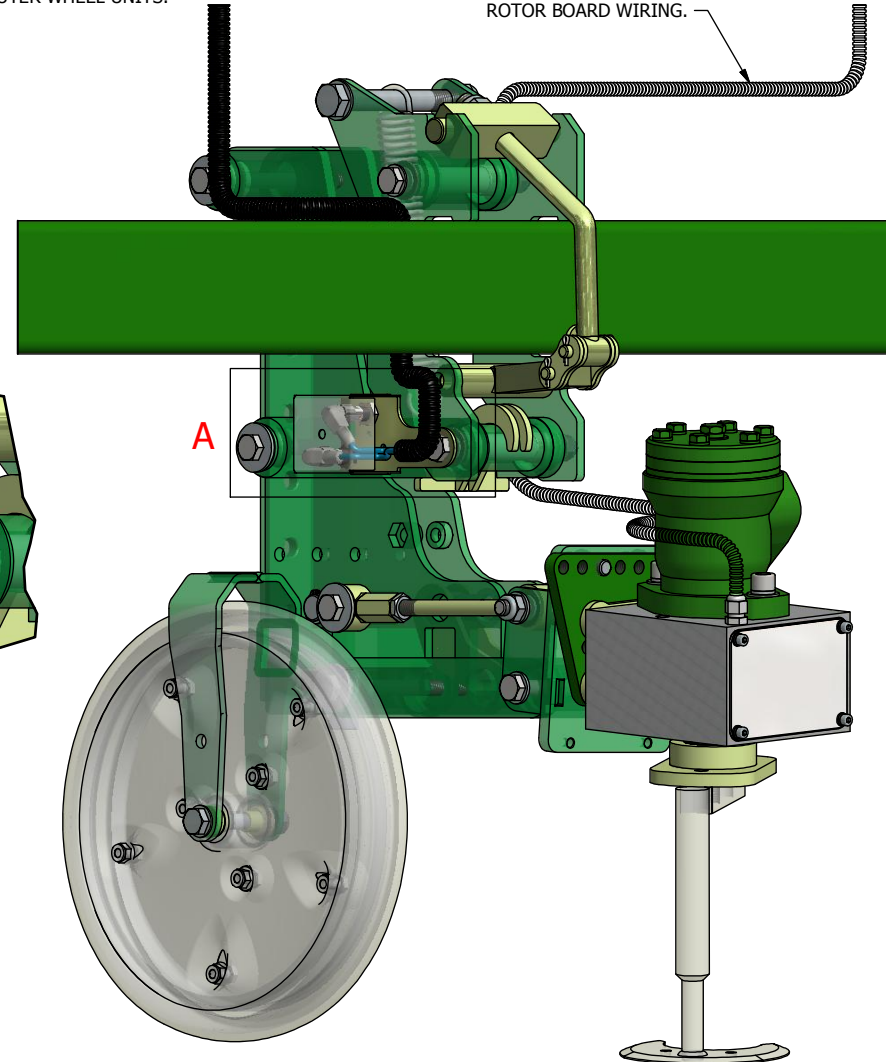
GUARD.

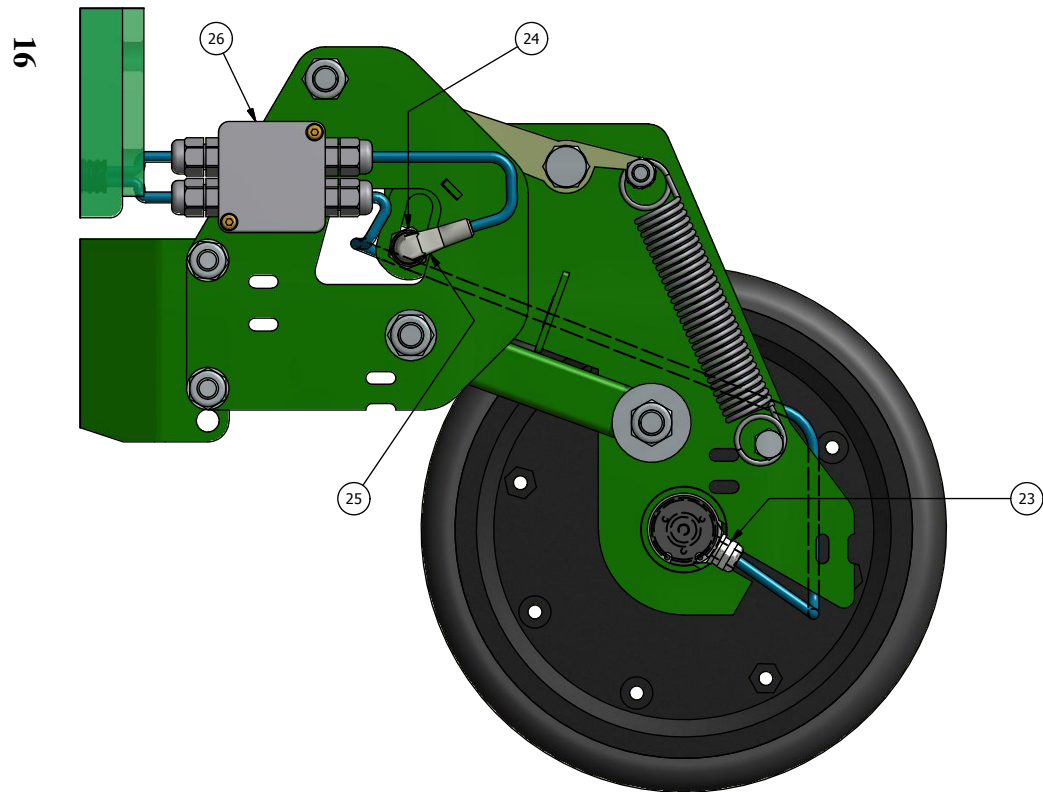
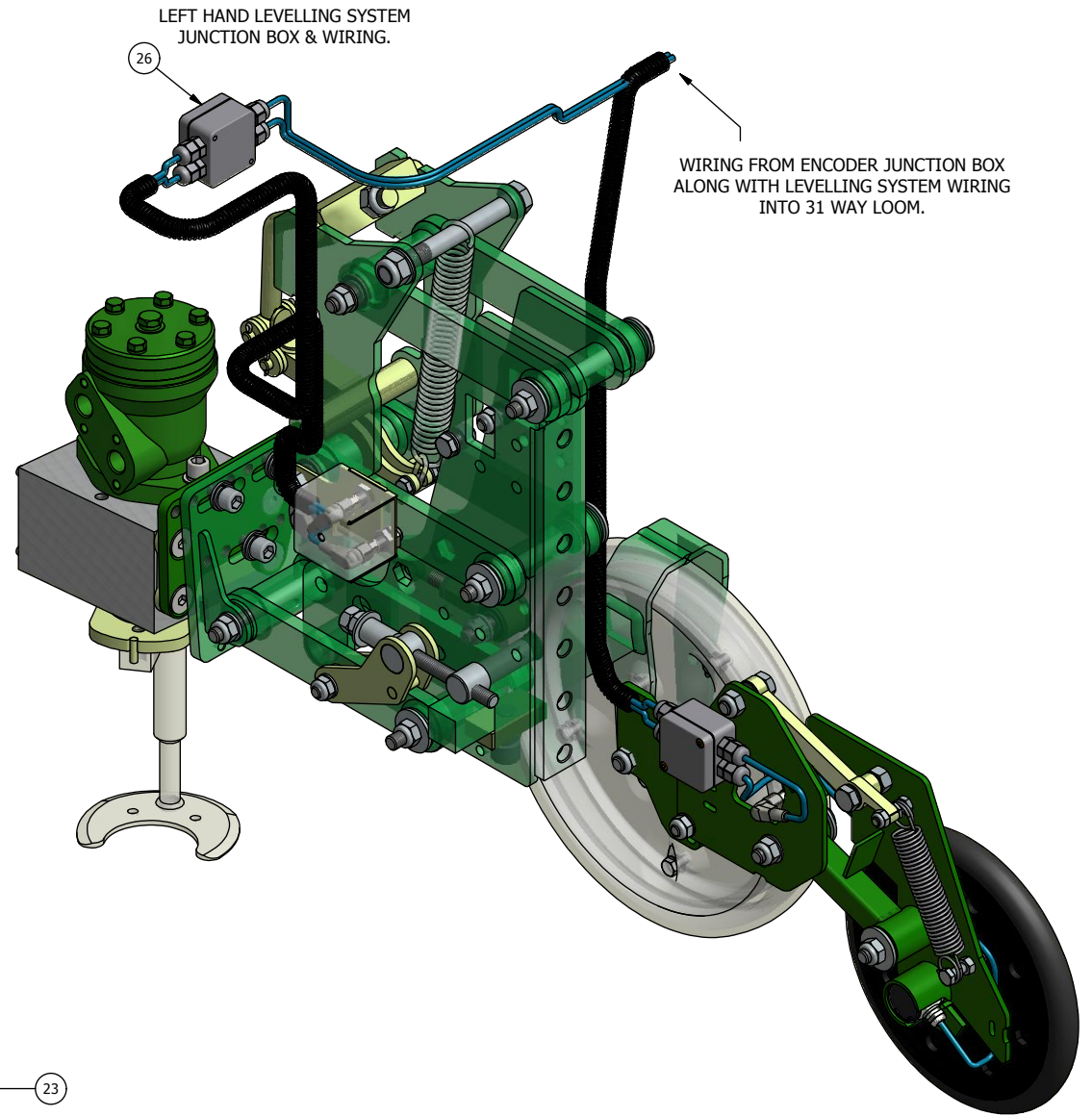
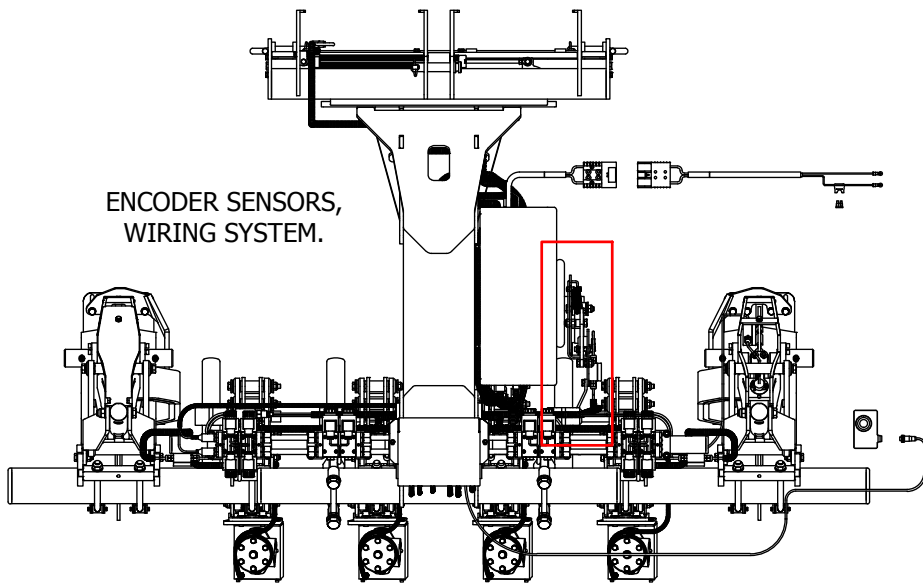
ENLARGED VIEW AT 'A'

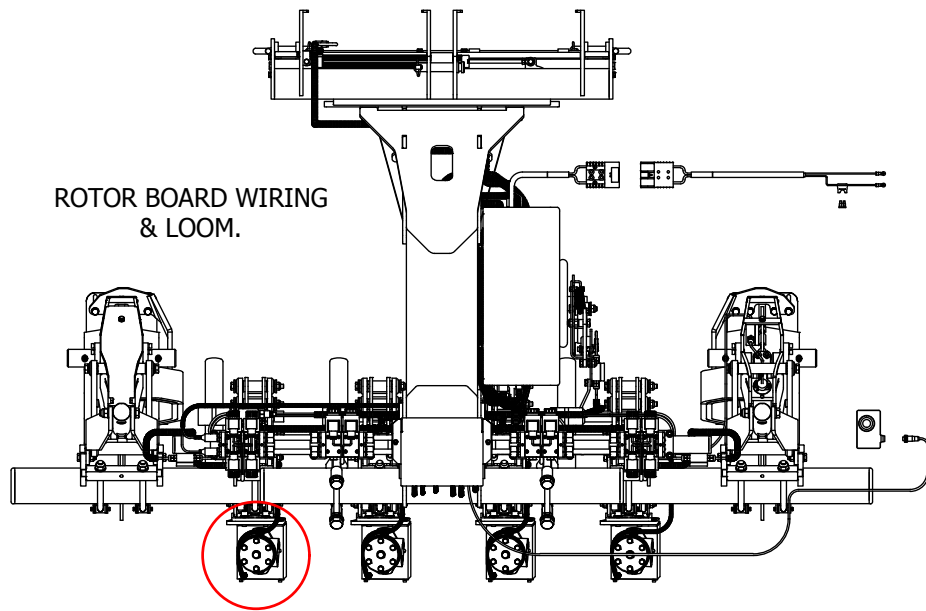


LEVEL SENSOR BRACKET.

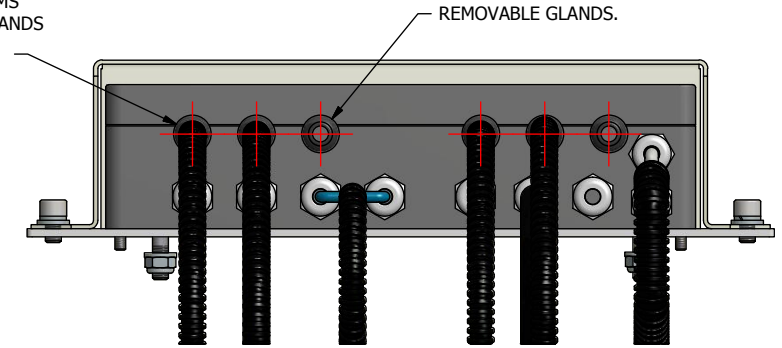
A



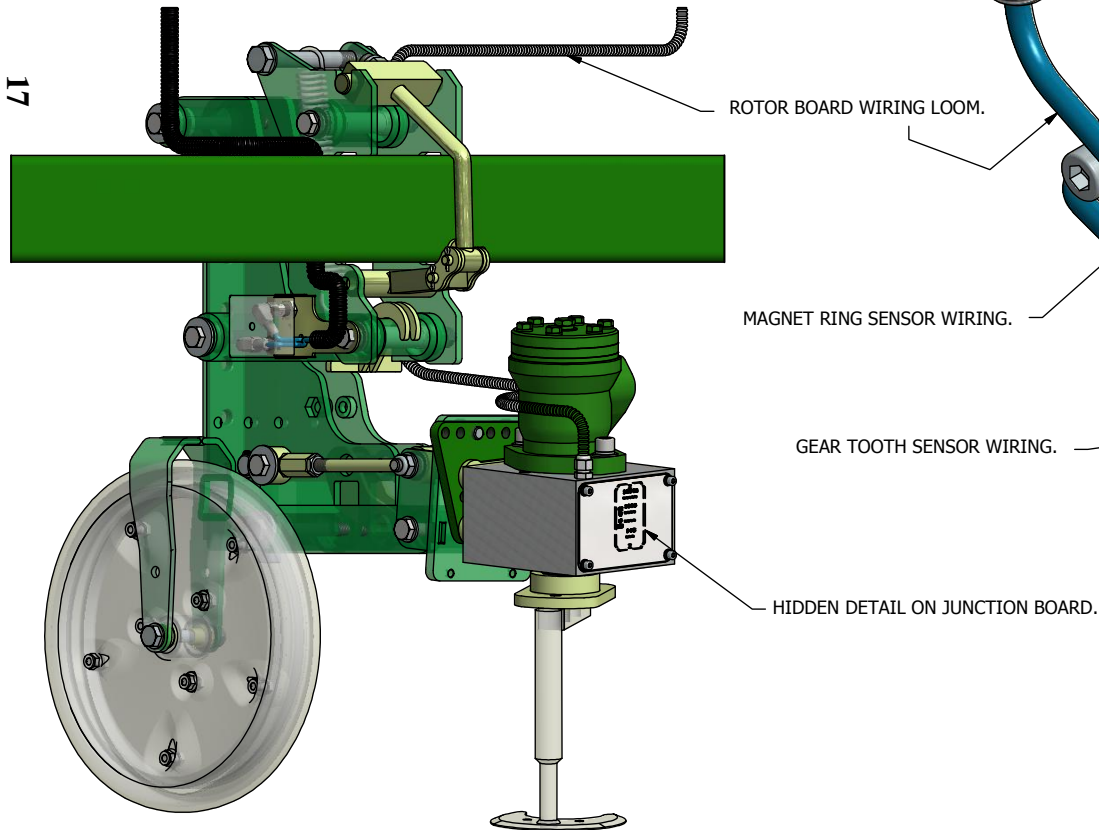




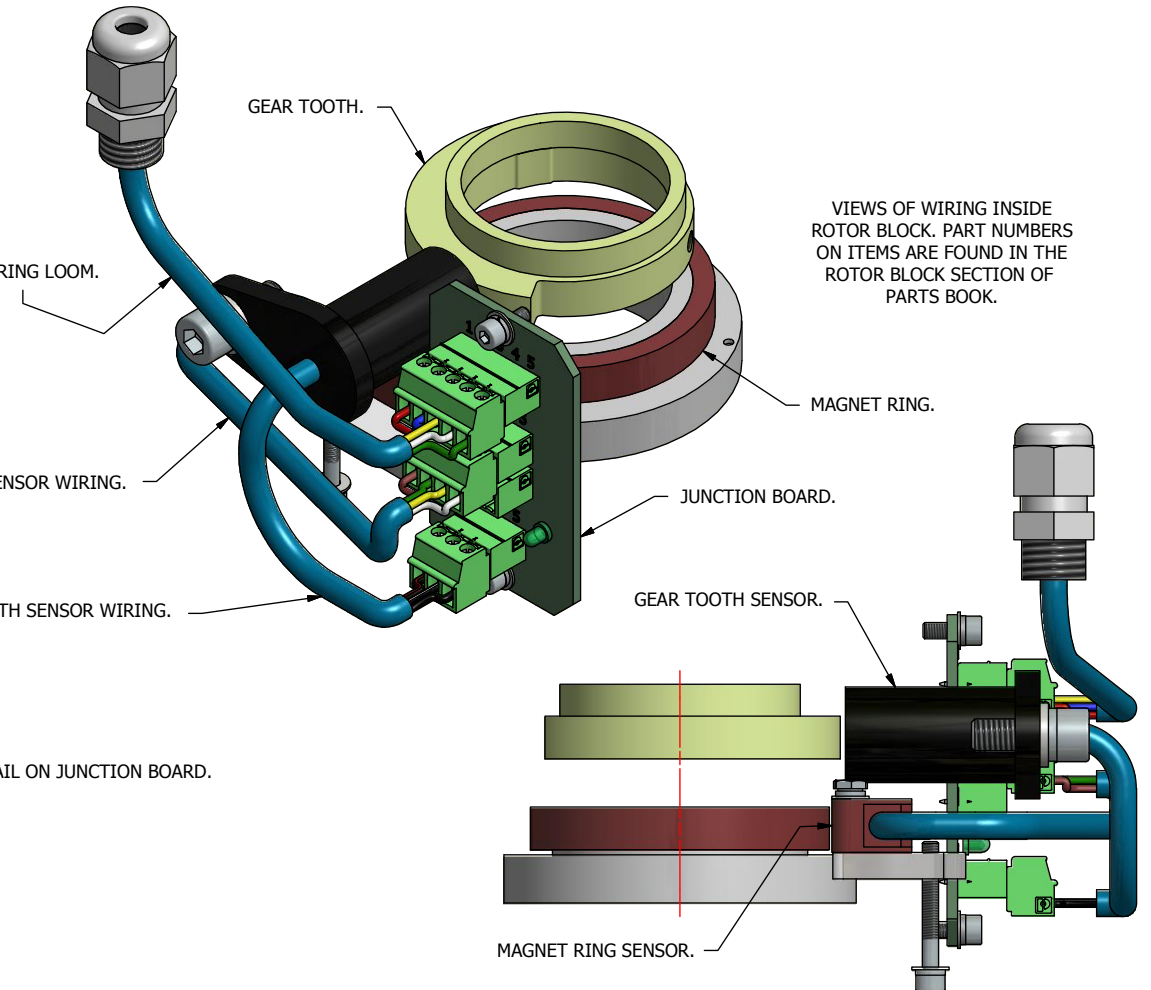
ROTOR BOARD WIRING LOOMS
DIRECTLY INTO REMOVABLE GLANDS
ON CAN ROTOR BOX.



17



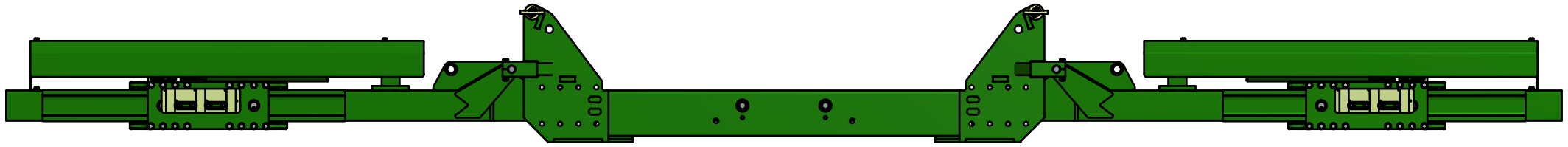
GEAR TOOTH.



ROBOCROP IN ROW CONTROL SYSTEM

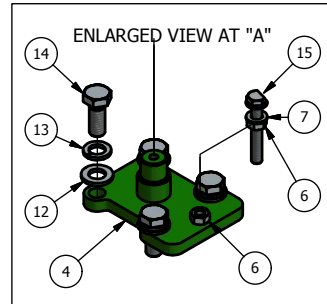
| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|---|-----------------|-----------------|
| 1 | INROW CENTRAL PROCESSOR (CANBUS) MOUNT | 10034 | 1 |
| 2 | ROBO VIS SYS INROW CENTRAL PROCESSOR UNIT CAMBUS | 10033 | 1 |
| 3 | INROW CENTRAL PROCESSOR (CANBUS) MOUNT COVER | 10035 | 1 |
| 4 | INROW PROCESSOR JUNCTION BOX COVER | 10128 | 1 |
| 5 | INROW PROCESSOR JUNCTION BOX MOUNT | 10127 | 1 |
| 6 | ROBO VIS SYS CAN JUNCTION BOX | 10599 | 1 |
| 7 | ROBO VIS SYS INROW mk2, 4 WAY CAN & POWER LOOM | 10595 | 1 |
| 8 | ROBO VIS SYS INROW mk2, 12 WAY VALVE LOOM | 10596 | 1 |
| 9 | ROBO VIS SYS INROW mk2, 8 WAY VALVE LOOM | 10597 | 1 |
| 10 | RH ROTOR VALVE LOOM | | 1 |
| 11 | LH ROTOR VALVE LOOM | | 1 |
| 12 | ROBO VIS SYS INROW MK2 AUX POT LOOM | 10598 | 1 |
| 13 | ROBO VIS SYS CONSOLE MOUNT | | 1 |
| 14 | ROBO VIS SYS EPIC CONSOLE | 11119 | 1 |
| 15 | ROBO VIS SYS INROW CONSOLE CABLE | | 1 |
| 16 | ROBO VIS SYS POWER LEAD | | 1 |
| 17 | FUSE SPADE TYPE 20A | 7798 | 2 |
| 18 | ROBO VIS SYS EPIC CONTROL SYSTEM | 11137 | 1 |
| 19 | CONTROL SYSTEM POWER CABLE | 10948 | 1 |
| 20 | ROBO VIS SYS INROW mk2 CAMERA CABLE PLUG TO PLUG | 10581 | |
| 21 | ROBO VIS SYS CAMERA INROW WIDE ANGLE LENS | 9709 | |
| 22 | ROBO VIS SYS INROW mk2 31 WAY PLUG SENSOR LOOM | 10594 | 1 |
| 23 | INROW ENCODER (FITTED TO ENCODER WHEEL) | 9347 | |
| 24 | PROXIMITY SENSOR NPN PLUGGED (FITTED INTO LEVELLING SYSTEM & ENCODER WHEELS) | 10121 | |
| 25 | PROXIMITY CABLE WITH 90° PLUG 5M (FITTED INTO LEVELLING SYSTEM & ENCODER WHEELS) | 10122 | |
| 26 | JUNCTION BOXES | | |
| 27 | ROBO VIS SYS INROW PRESSURE SENSOR | 10587 | 1 |
| 28 | ROBO VIS SYS INROW PRESSURE & TEMPERATURE SENSOR | 10586 | 1 |
| 29 | POTENTIOMETER ROTARY FOR DISK STEER | 8674 | |
| 30 | JUNCTION BOX (INSIDE DISK STEER MECHANISM) | | 1 |

NUMBER OF CAMERAS AND CAMERA LOOMS ARE MACHINE SPECIFIC

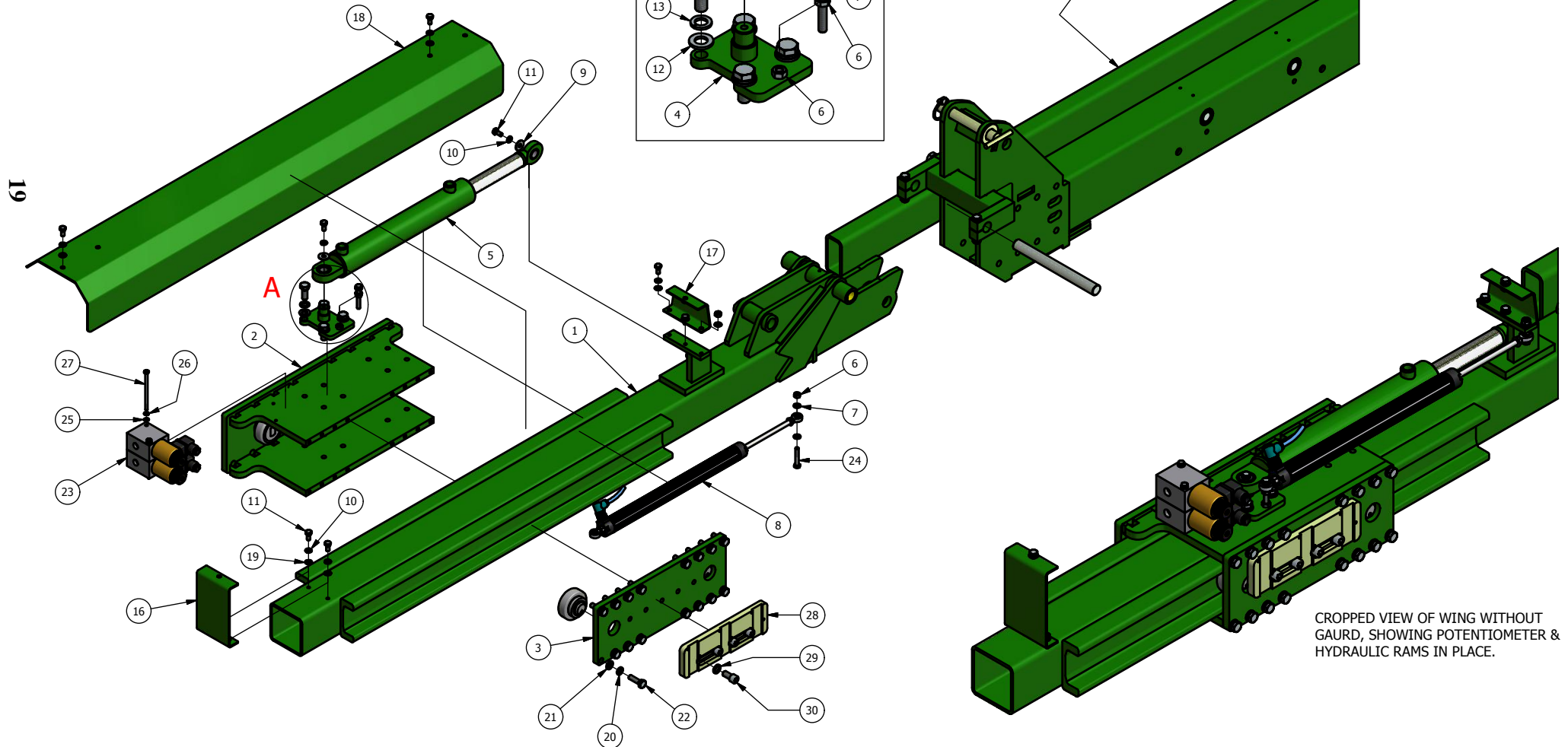


EXPLODED VIEW OF RIGHT HAND WING SHOWN BELOW.
 THE SAME PARTS ARE APPLICABLE TO THE LEFT HAND WING,
 THE ONLY DIFFERENCE IS THE WING PART NUMBER. SEE PARTS LIST.

NOTE : SYSTEMS MAY ALSO BE MACHINE SPECIFIC. ALWAYS REFER TO
 MACHINE SERIAL NUMBER



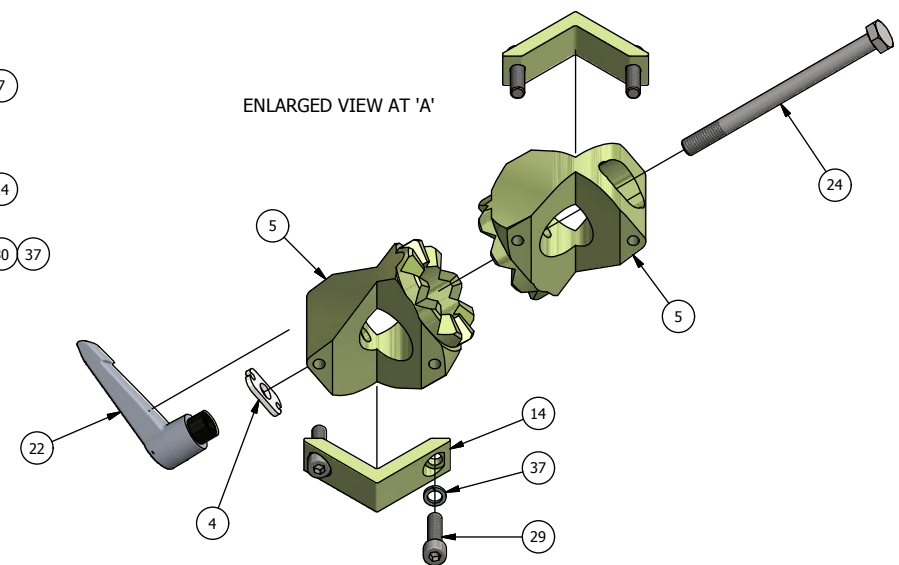
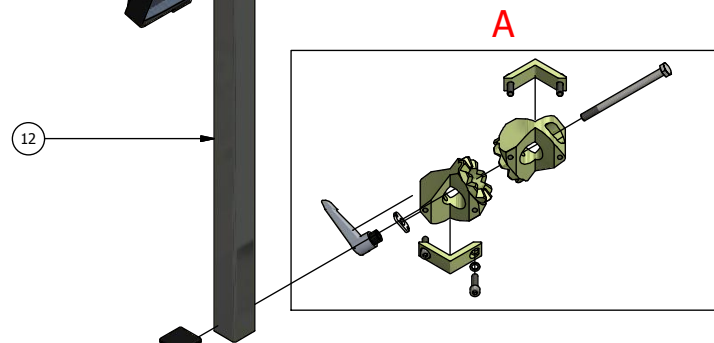
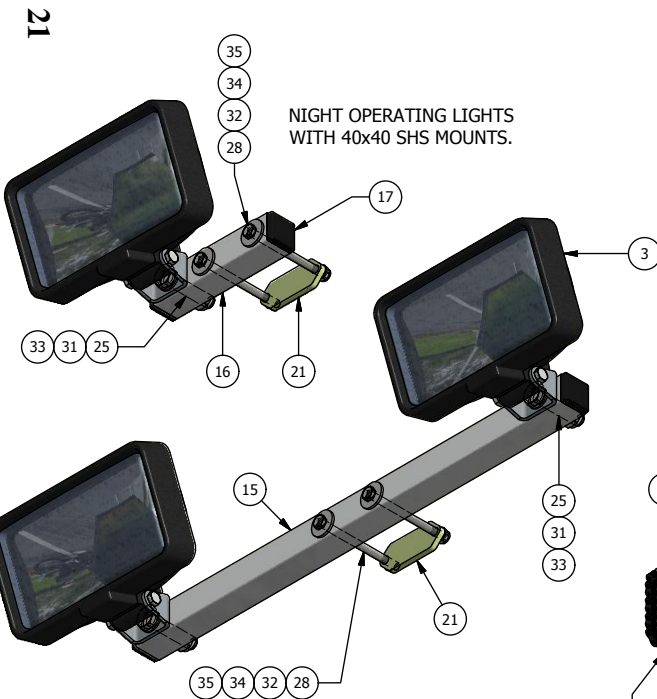
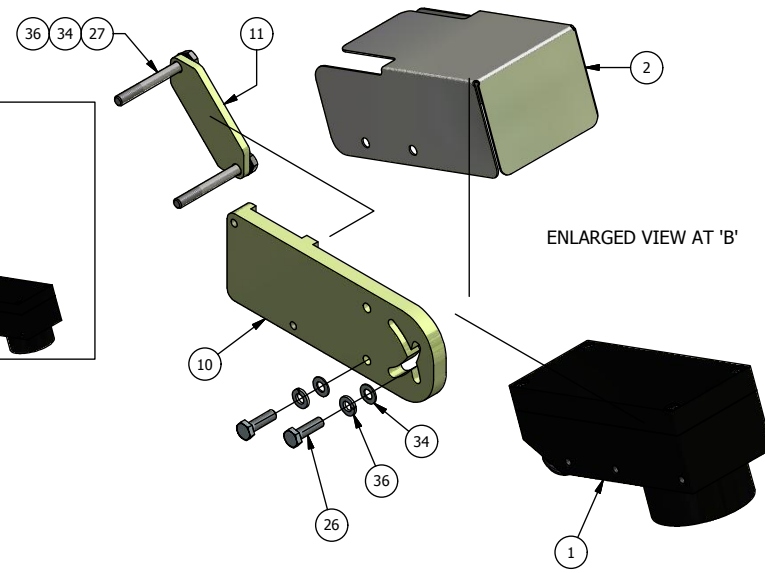
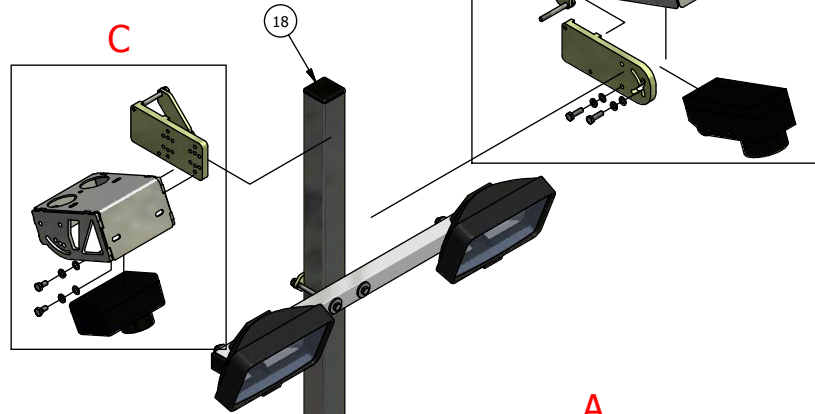
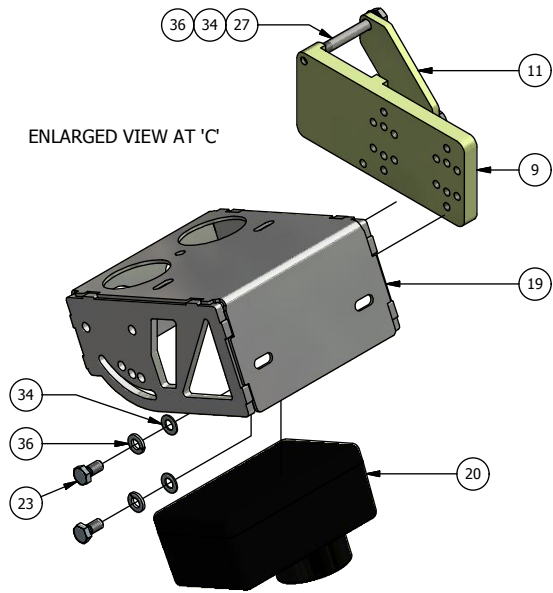
REFER TO DRAWINGS AND PARTS LIST
 FOR ITEMS SPECIFIC TO THE 6M FOLDING FRAME.



CROPPED VIEW OF WING WITHOUT
 GAURD, SHOWING POTENTIOMETER &
 HYDRAULIC RAMS IN PLACE.

ROBOCROP SIDESHIFT WING ASSEMBLY

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|-------------------------------------|-----------------|-----------------|
| 1 | RH FOLDING FRAME WING | 9053 | 1 |
| | LH FOLDING FRAME WING (NOT SHOWN) | 9054 | 1 |
| 2 | SIDE SHIFT SADDLE (WITH ROLLERS) | 8469 | 2 |
| 3 | SADDLE PLATE (WITH ROLLERS) | 8470 | 2 |
| 4 | SADDLE RAM MOUNT | 8471 | 2 |
| 5 | HYDRAULIC RAM | 8235 | 2 |
| | SEAL KIT PART No. - 5846 | | |
| 6 | M8 NUT BZP | 1185 | 8 |
| 7 | M8 FLAT WASHER BZP | 1157 | 10 |
| 8 | POTENTIOMETER RAM | 7733 | 2 |
| 9 | LARGE OD FLAT WASHER 8x24x2 BZP | | 4 |
| 10 | M8 SPRING WASHER BZP | 1154 | 16 |
| 11 | M8x16 BOLT BZP | 1156 | 16 |
| 12 | M12 FLAT WASHER BZP | 1114 | 8 |
| 13 | M12 SPRING WASHER BZP | 1115 | 8 |
| 14 | M12x30 BOLT BZP | 1161 | 8 |
| 15 | M8x55 BOLT BZP | 5832 | 2 |
| 16 | GUARD SUPPORT | 9228 | 2 |
| 17 | GUARD SUPPORT | 9229 | 2 |
| 18 | WING GUARD | 9227 | 2 |
| 19 | M8 FLAT THIN WASHER BZP | | 12 |
| 20 | M10 SPRING WASHER BZP | 1170 | 32 |
| 21 | M10 FLAT WASHER BZP | 1186 | 32 |
| 22 | M10x35 BOLT BZP | 7466 | 32 |
| 23 | 2 WAY HYDRAULIC POPPET VALVE | 8993 | 4 |
| 24 | M8x45 BOLT BZP | 8825 | 2 |
| 25 | M6 FLAT THIN WASHER BZP | 5978 | 4 |
| 26 | M6 SPRING WASHER BZP | 5979 | 4 |
| 27 | M6x60 BOLT BZP | 8822 | 4 |
| 28 | CAMERA STEM BRACKET | 9554 | 2 |
| 29 | M12 SPRING WASHER BZP | | 8 |
| 30 | M12x25 SOCKET HEAD CAP SCREW BZP | | 8 |



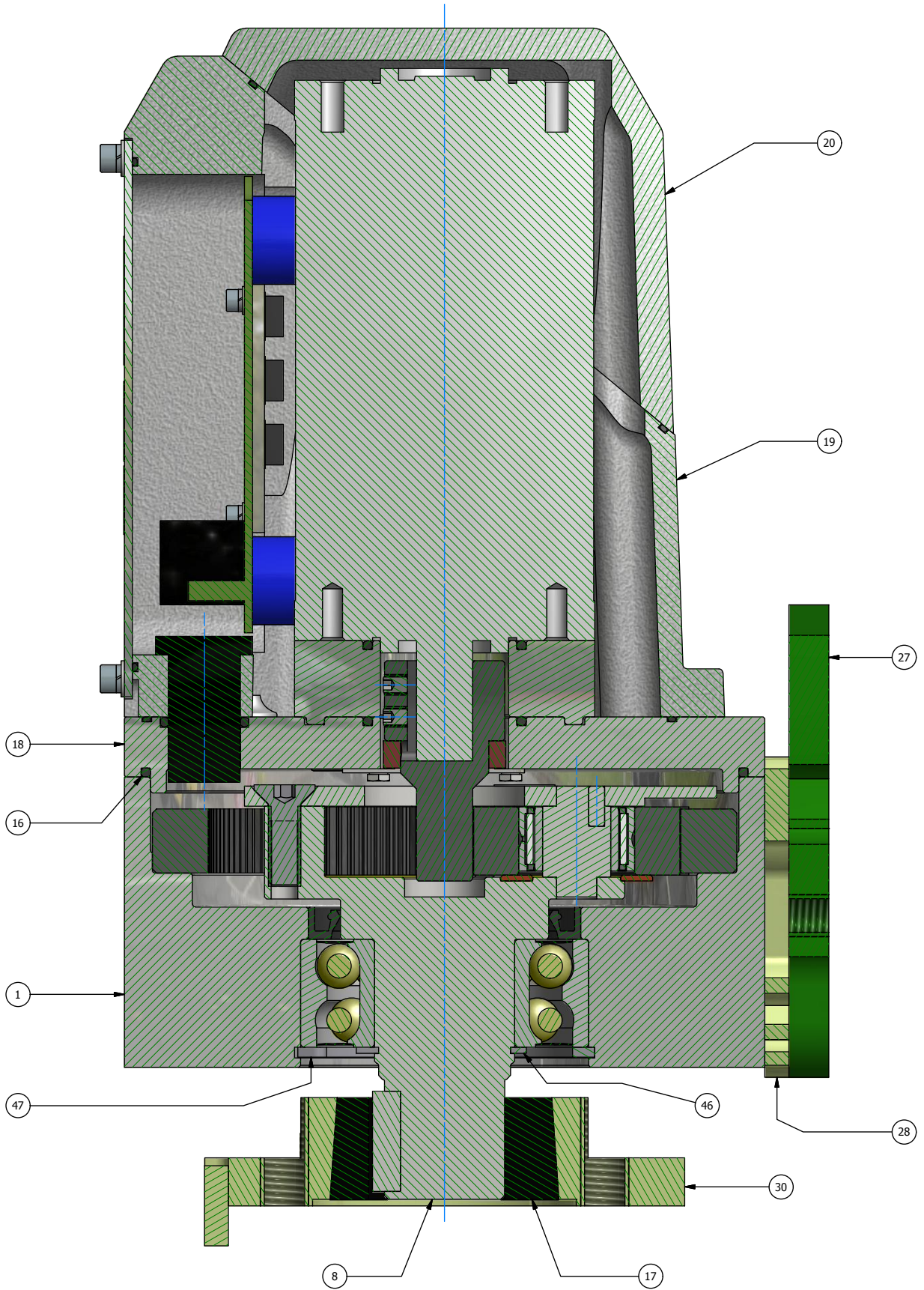
CHAIN ASSEMBLY ITEMS CAN BE SEEN ON PREVIOUS PAGES OF CAMERA BRACKET ASSEMBLIES.

ROBOCROP CAMERA BRACKET ASSEMBLY – ADDITIONAL ITEMS
40x40 SHS MAST / STEM FITTINGS

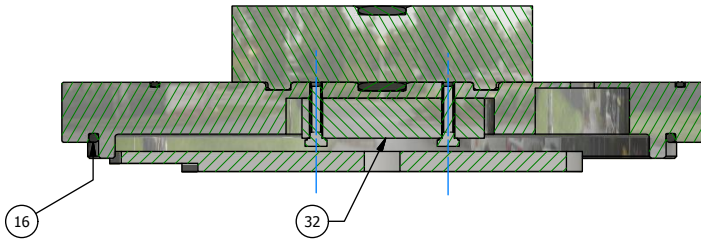
| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|--|-----------------|-----------------|
| 1 | THT CAMERA | 10160 | 1 |
| 2 | CAMERA SHADE | 10350 | 1 |
| 3 | LIGHT (TWO USED IF USING ITEM 15) | 10708 | 1 |
| 4 | CAMERA FOLD ANTI WEAR PLATE | 10868 | 1 |
| 5 | CAMERA MAST FOLD BRACKET | 10870 | 2 |
| 6 | CAMERA MAST TO MAIN FRAME CLAMP | 10874 | 1 |
| 7 | CAMERA MAST 40mm TO 90° LH & RH TYPE | 10875 | 1 |
| 8 | CAMERA MAST CROSS BAR | 10876.L200 | 1 |
| 9 | CAMERA FRAME BRACKET | 10878 | 1 |
| 10 | CAMERA FRAME BRACKET | 10879 | 1 |
| 11 | CLAMP PLATE | 10880 | 1 |
| 12 | CAMERA MAST STEM | 10934.L1000 | 1 |
| 13 | CAMERA MAST STEM | 10934.L500 | 1 |
| 14 | CAMERA MAST CORNER CLAMP | 10937 | 5 |
| 15 | CAMERA 2 LIGHT CROSS BAR | 11033 | 1 |
| 16 | CAMERA 1 LIGHT CROSS BAR | 11034 | 1 |
| 17 | END CAP | 7499 | 2 |
| 18 | END CAP | 7584 | 4 |
| 19 | CAMERA BOX (CAMERA BOX SPECIFIC FOR 40x40 CAMERA MASTS) | 10877 | 1 |
| 20 | ROBO VIS SYS CAMERA, NARROW ANGLE (FIRE WIRE) | 8983 | 1 |
| 21 | CLAMP PLATE | 9402 | 1 |
| 22 | INDEXING HANDLE | 9438 | 1 |
| 23 | M6x12 BOLT BZP | | 2 |
| 24 | M10x130 BOLT BZP | | 1 |
| 25 | M10x45 BOLT BZP (LIGHT DICTATES QTY) | | |
| 26 | M6x20 BOLT BZP | | 2 |
| 27 | M6x55 BOLT BZP | | 2 |
| 28 | M6x80 BOLT BZP | | 2 |
| 29 | M8x30 SOCKET CAP SCREW BZP | | 4 |
| 30 | M8x35 SOCKET CAP SCREW BZP | | 6 |
| 31 | M10 NYLOC NUT BZP (LIGHT DICTATES QTY) | | |
| 32 | M6 NYLOC NUT BZP | | 2 |
| 33 | M10 THIN WASHER BZP (LIGHT DICTATES QTY) | | |
| 34 | M6 THIN WASHER BZP | | 4 |
| 35 | M7 LARGE O/D WASHER BZP | | 2 |
| 36 | M6 SPRING WASHER BZP | | 4 |
| 37 | M8 SPRING WASHER BZP | | 10 |

**QUANTITY SHOWN IS PER CAMERA BRACKET ASSEMBLY.
TOTAL QUANTITY IS DEPENDENT ON MACHINE
SPECIFICATION.
SOME ITEMS MAY ALSO BE FOUND ON PREVIOUS PAGES.**

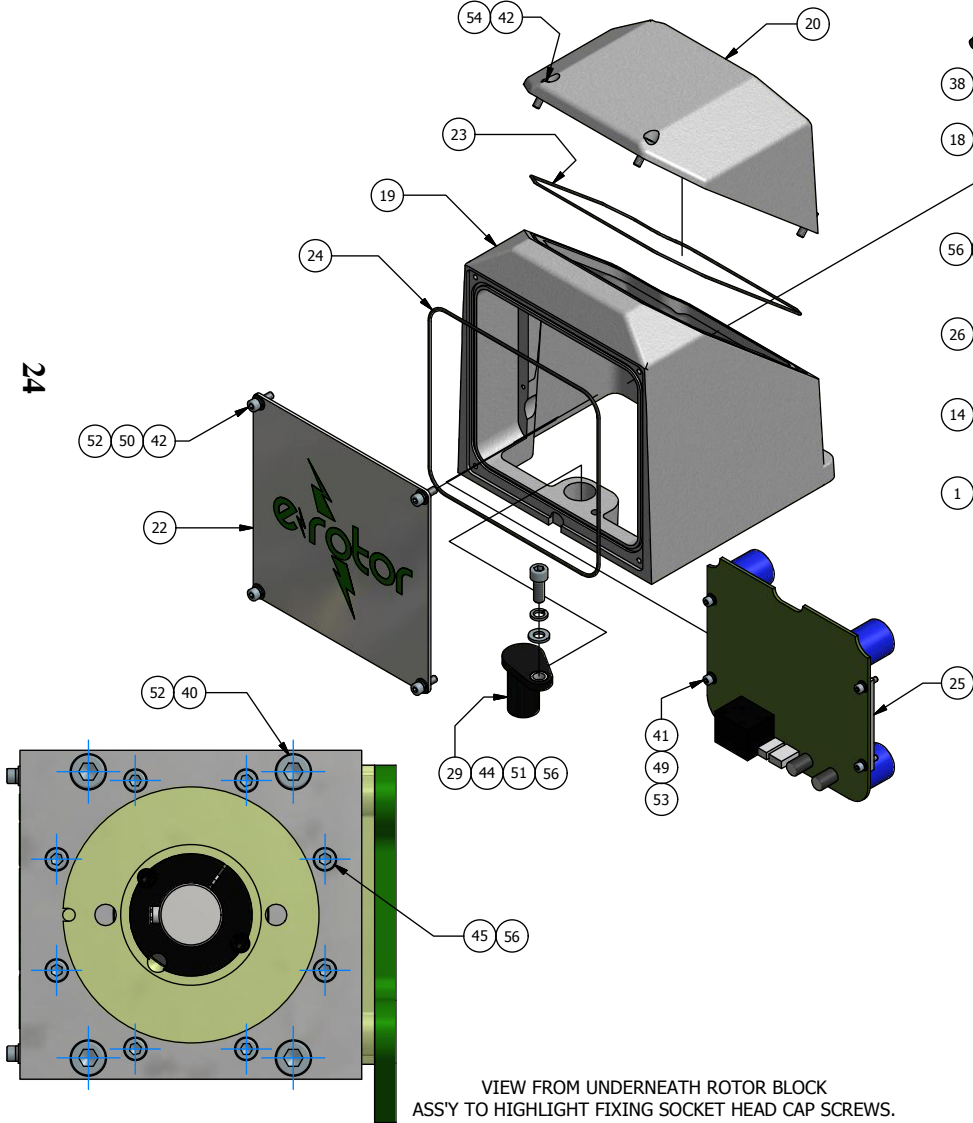
BASIC SECTION THRU ROTOR
BLOCK & MOTOR ASSEMBLY.



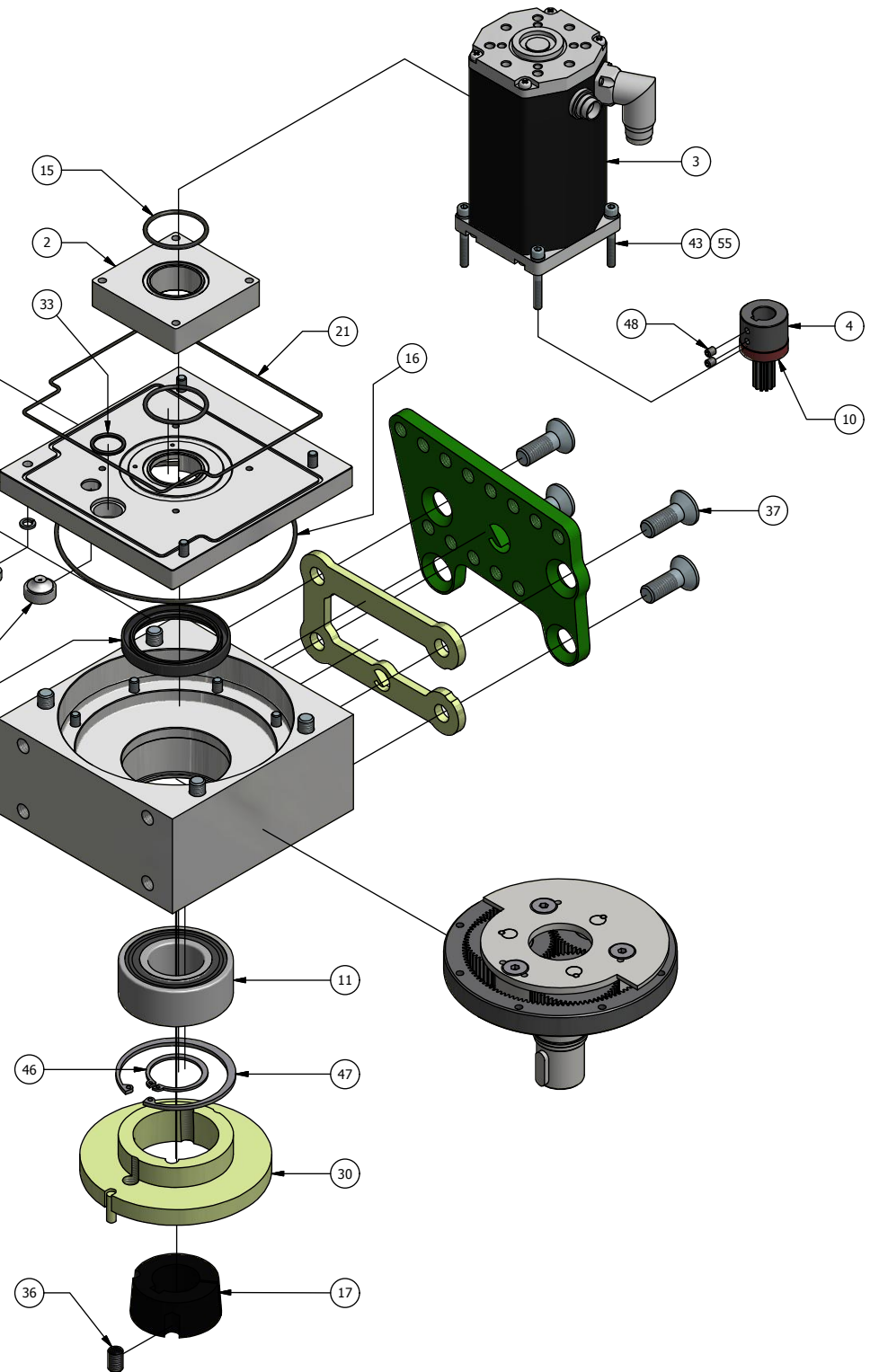
SECTION THRU MAGNET RING SENSOR
 SHOWING THAT BOLTS NEED TO BE
 REDUCED IN LENGTH TO CLEAR PARTS IN ASSEMBLY.
 NO WASHERS OR SPRING WASHERS REQUIRED EITHER.



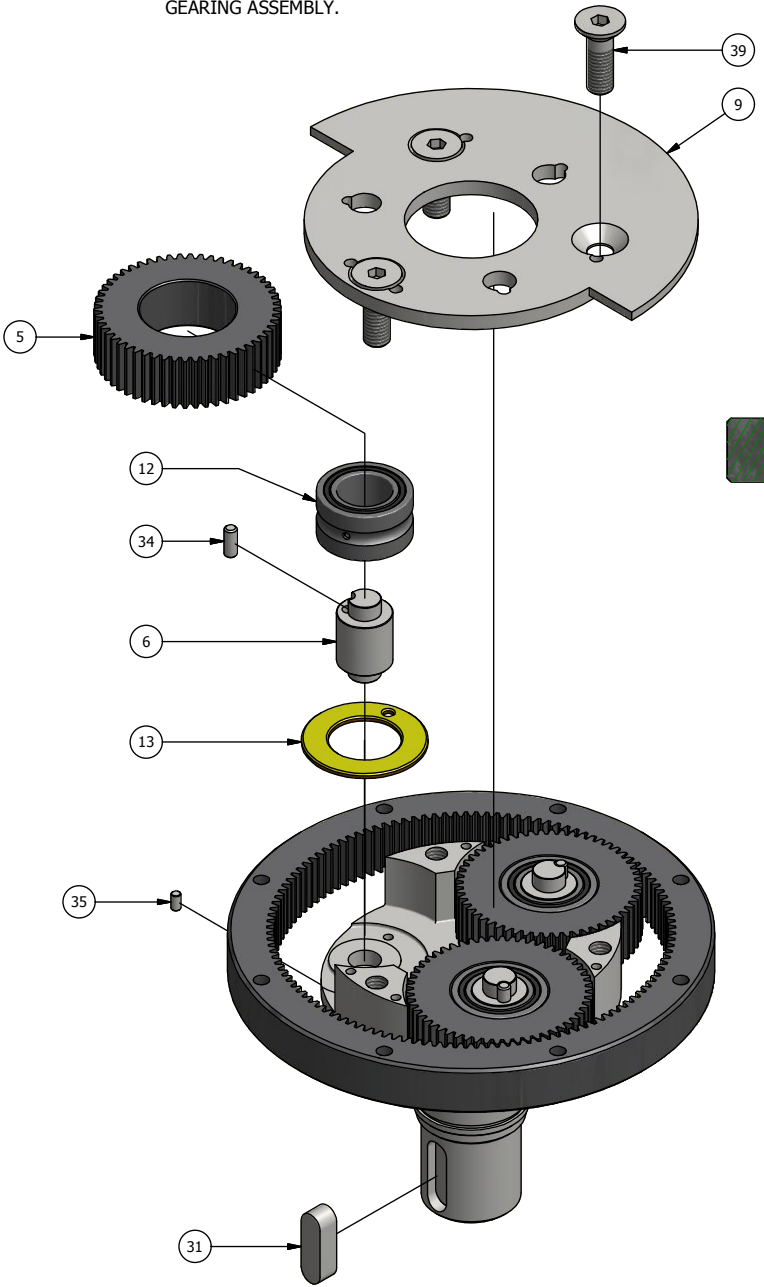
24



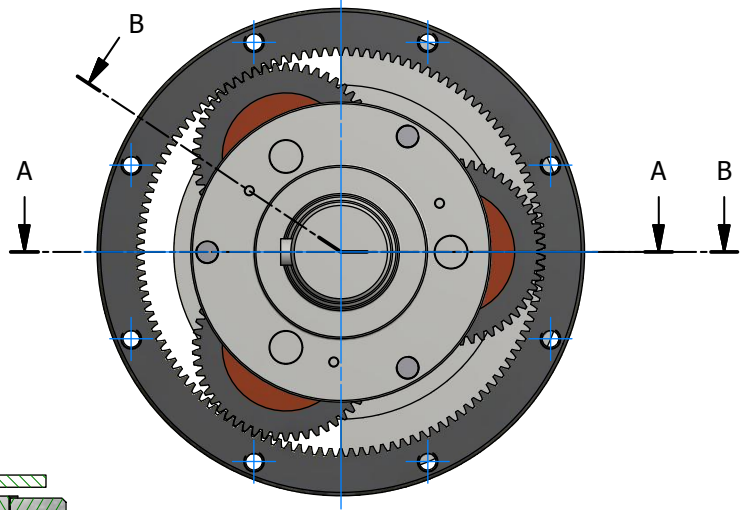
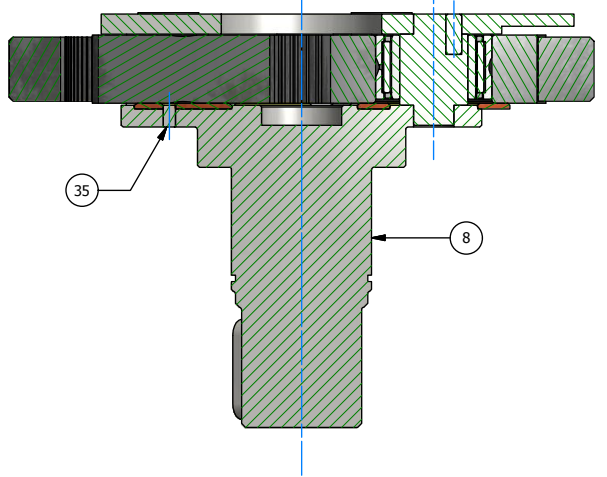
VIEW FROM UNDERNEATH ROTOR BLOCK
 ASSY TO HIGHLIGHT FIXING SOCKET HEAD CAP SCREWS.



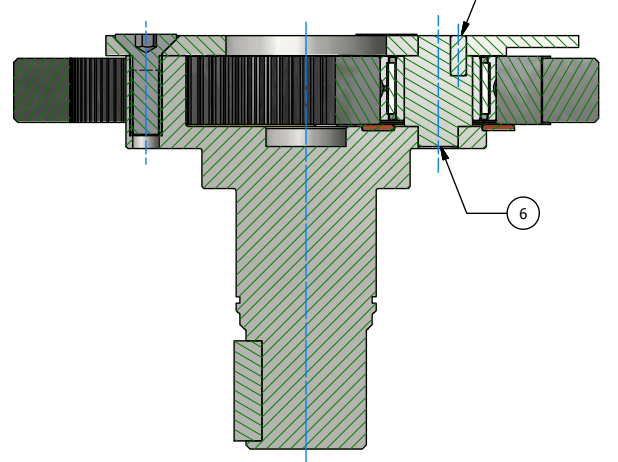
ROTOR BLOCK SHAFT & GEARING ASSEMBLY.



SECTION ON B-B TO HIGHLIGHT THRUST WASHER PIN.



SECTION ON A-A TO HIGHLIGHT STUB SHAFT PIN.



ROBOCROP E-ROTOR DRIVE ASSEMBLY

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|----------|---|----------|----------|
| 1 | ROTOR BLOCK | 10725 | 1 |
| 2 | ROTOR BLOCK SPACER | 10727 | 1 |
| 3 | MOTOR WITH KEY WAY SHAFT | 10731 | 1 |
| 4 | ROTOR BLOCK PINION GEAR | 10732 | 1 |
| 5 | ROTOR BLOCK SPUR GEAR | 10733 | 3 |
| 6 | PLANETARY GEAR SHAFT | 10734 | 3 |
| 7 | ROTOR BLOCK RING GEAR | 10735 | 1 |
| 8 | ROTOR SHAFT | 10736 | 1 |
| 9 | ROTOR SHAFT TOP PLATE | 10737 | 1 |
| 10 | MAGNET SENSOR RING | 10738 | 1 |
| 11 | SEALED BEARING | 10739 | 1 |
| 12 | NEEDLE ROLLER BEARING | 10740 | 3 |
| 13 | THRUST WASHER | 10741 | 3 |
| 14 | SHAFT SEAL | 10748 | 1 |
| 15 | O-RING | 10749 | 2 |
| 16 | O-RING | 10750 | 1 |
| 17 | TAPER LOCK BUSH | 1078 | 1 |
| 18 | E-ROTOR BLOCK GEAR BOX TOP | 10925 | 1 |
| 19 | E-ROTOR MOTOR CIRCUIT HOUSING | 10926 | 1 |
| 20 | E-ROTOR MOTOR TOP COVER | 10927 | 1 |
| 21 | O-RING | 10928 | 1 |
| 22 | CIRCUIT BOARD COVER | 10929 | 1 |
| 23 | O-RING | 10930 | 1 |
| 24 | O-RING | 10933 | 1 |
| 25 | E-ROTOR CAN BOARD | 10940 | 1 |
| 26 | SEALING GROMMET | 10941 | 1 |
| 27 | E-ROTOR MOUNT PLATE | 10944 | 1 |
| 28 | E-ROTOR SPACER | 10945 | 1 |
| 29 | GEAR TOOTH SENSOR | 8311 | 1 |
| 30 | ROTOR DRIVE COUPLING | 8484 | 1 |
| 31 | KEY | 8821 | 1 |
| 32 | MAGNET RING SENSOR | 9807 | 1 |
| 33 | O-RING | | 1 |
| 34 | STUB SHAFT PIN | 10968 | 3 |
| 35 | THRUST WASHER PIN | 10967 | 3 |
| 36 | SOCKET SET SCREW, OVAL POINT 3/8" BSW x 5/8" (SUPPLIED WITH TAPER LOCK BUSH) | | 2 |
| 37 | M12x35 C/SUNK ALLEN BOLT BZP | | 4 |
| 38 | M3x13 BOLT BZP (CUT DOWN FROM 16mm) | | 2 |
| 39 | M8x25 C/SUNK ALLEN BOLT BZP | | 3 |
| 40 | M10x70 SOCKET HEAD CAP SCREW BZP | | 4 |
| 41 | M3x12 SOCKET HEAD CAP SCREW BZP | | 4 |
| 42 | M4x12 SOCKET HEAD CAP SCREW BZP | | 8 |

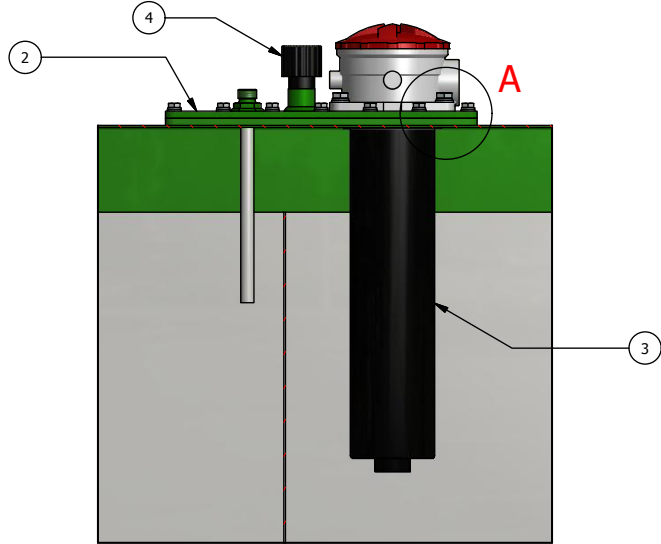
| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|---------------------------------|-----------------|-----------------|
| 43 | M5x40 SOCKET HEAD CAP SCREW BZP | | 4 |
| 44 | M6x16 SOCKET HEAD CAP SCREW BZP | | 5 |
| 45 | M6x50 SOCKET HEAD CAP SCREW BZP | | 8 |
| 46 | EXTERNAL CIRCLIP – 35mm | | 1 |
| 47 | INTERNAL CIRCLIP – 72mm | | 1 |
| 48 | M5x6 SOCKET SET SCREW | | 2 |
| 49 | M3 WASHER BZP | | 4 |
| 50 | M4 WASHER BZP | | 4 |
| 51 | M6 WASHER BZP | | 1 |
| 52 | M10 SPRING WASHER BZP | | 4 |
| 53 | M3 SPRING WASHER BZP | | 4 |
| 54 | M4 SPRING WASHER BZP | | 8 |
| 55 | M5 SPRING WASHER BZP | | 4 |
| 56 | M6 SPRING WASHER BZP | | 13 |

POWER PACK PARTS SECTION

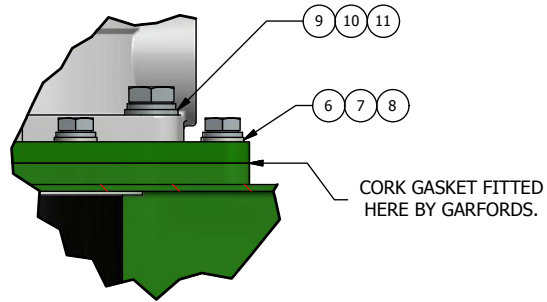
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| ROBOCROP IN ROW POWER PACK ASSEMBLY | 1-2 |
| ROBOCROP IN ROW POWER PACK HYDRAULIC ITEMS | 3-4 |
| ROBOCROP IN ROW REAR COOLER ASSEMBLY | 5-6 |
| ROBOCROP IN ROW ELECTRIC ALTERNATOR ASSEMBLY | 7-8 |
| ROBOCROP IN ROW ELECTRIC POWER PACK ASSEMBLY | 9-10 |

SECTION THRU TANK SHOWING FILTER, LID & BREATHER.

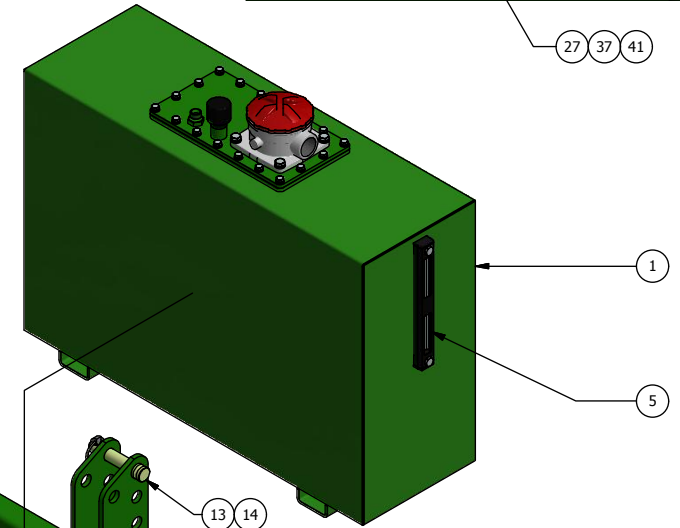
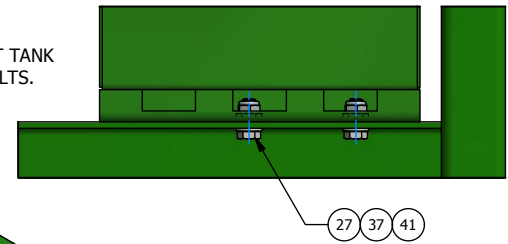


ENLARGED VIEW AT 'A'

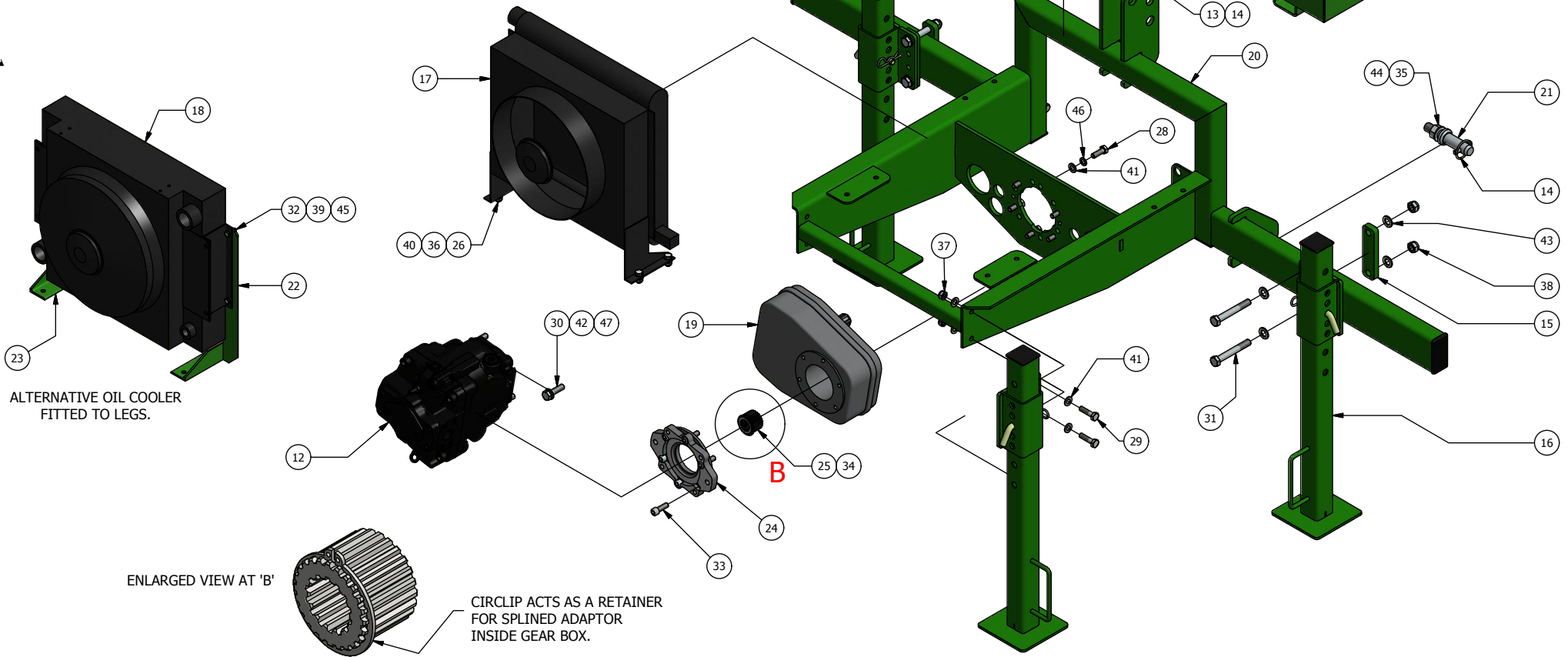


CORK GASKET FITTED HERE BY GARFORDS.

CROPPED SIDE VIEW AT TANK SHOWING FIXING BOLTS.

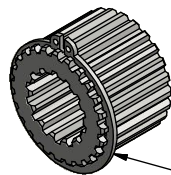


I



ALTERNATIVE OIL COOLER FITTED TO LEGS.

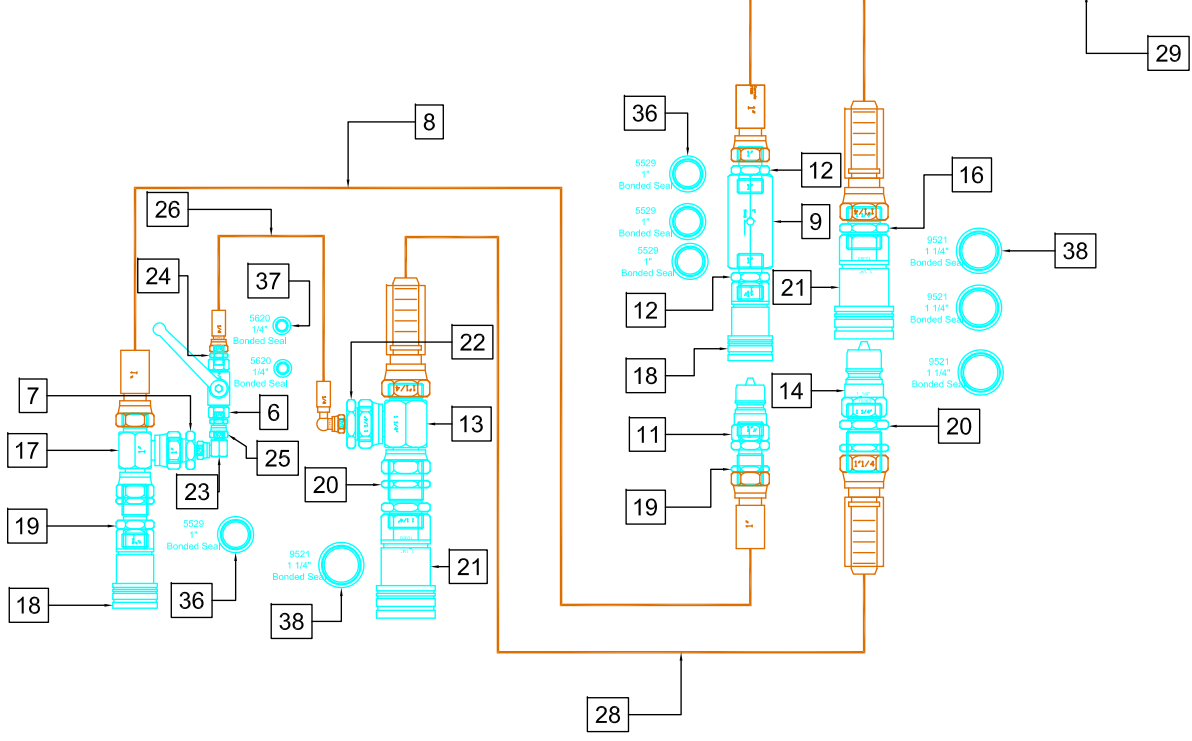
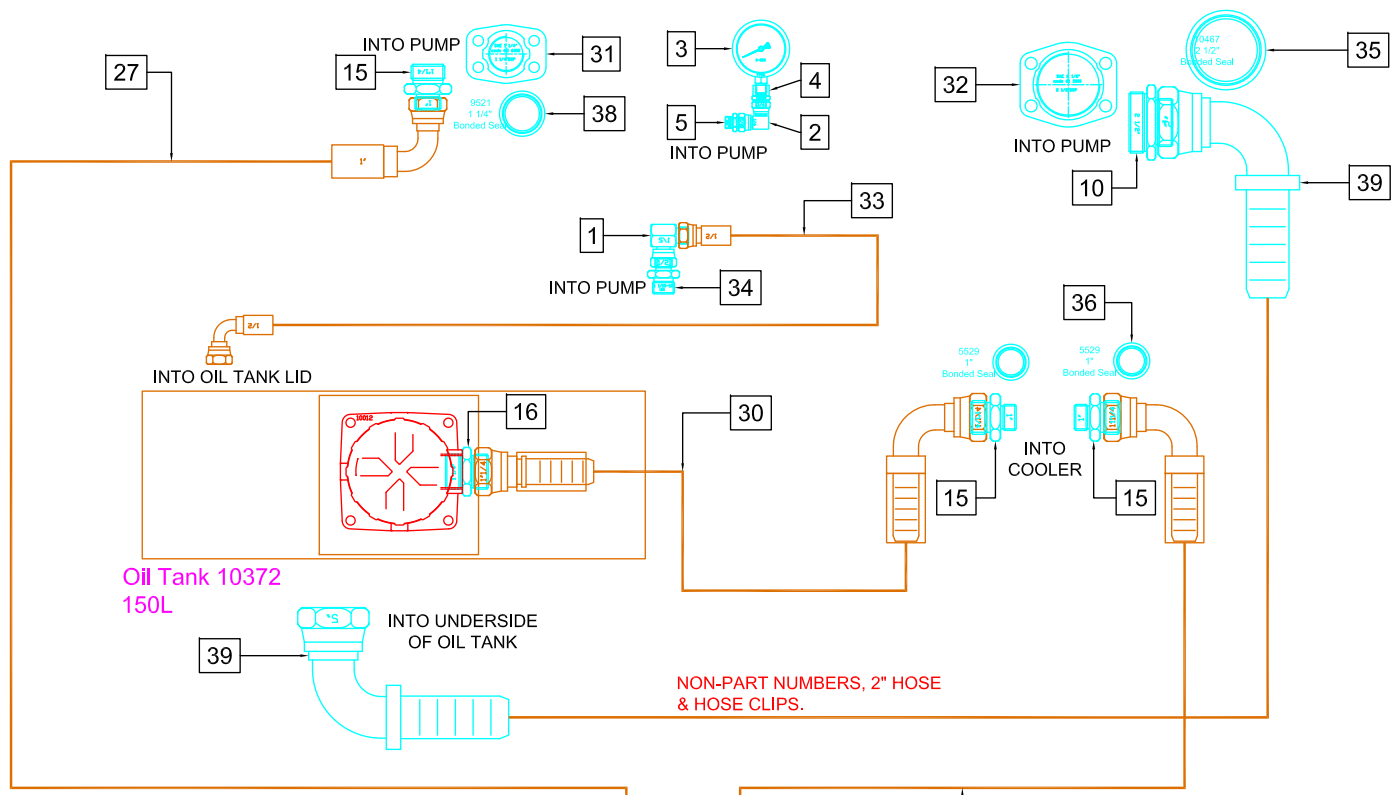
ENLARGED VIEW AT 'B'



CIRCLIP ACTS AS A RETAINER FOR SPLINED ADAPTOR INSIDE GEAR BOX.

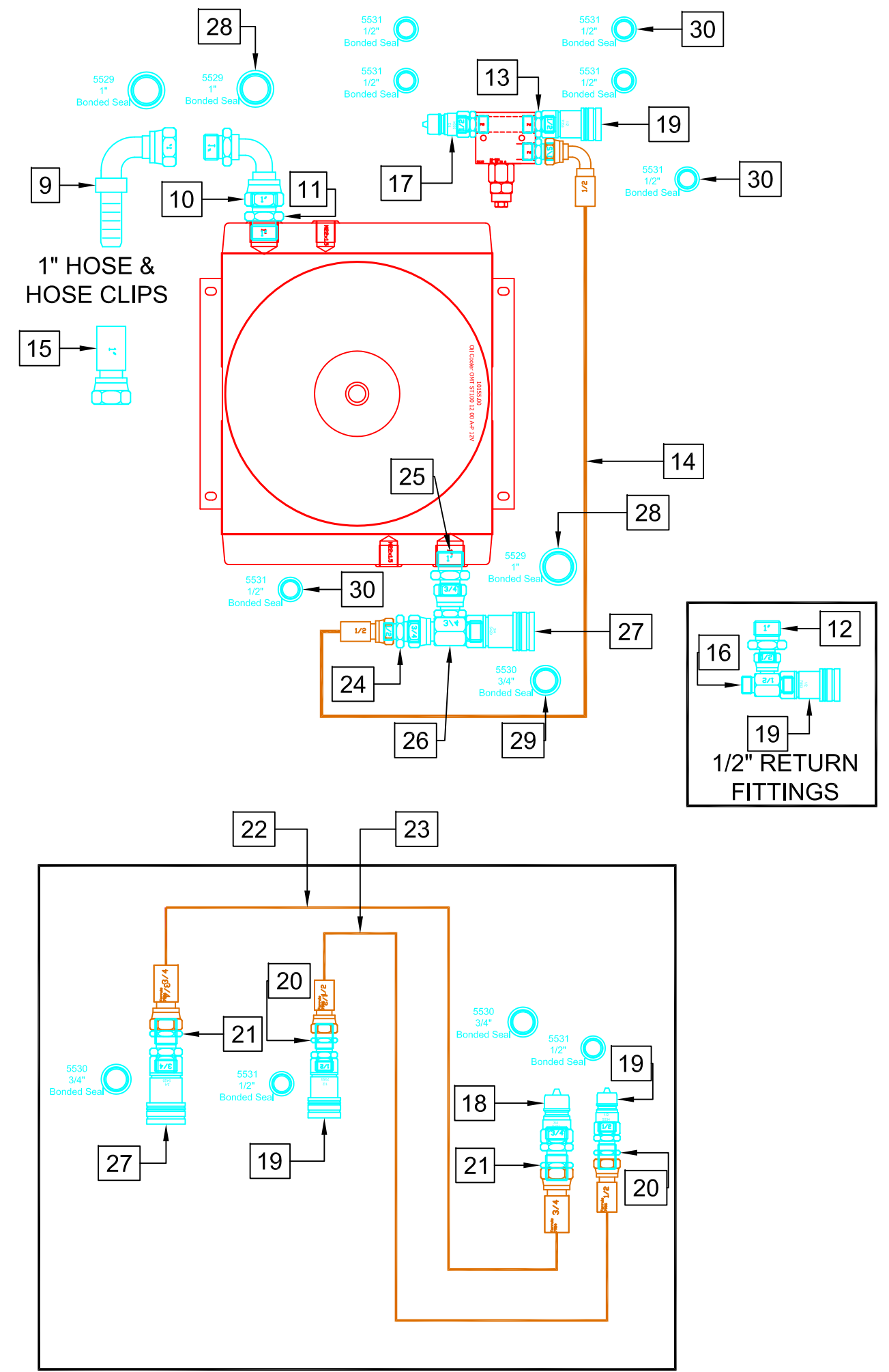
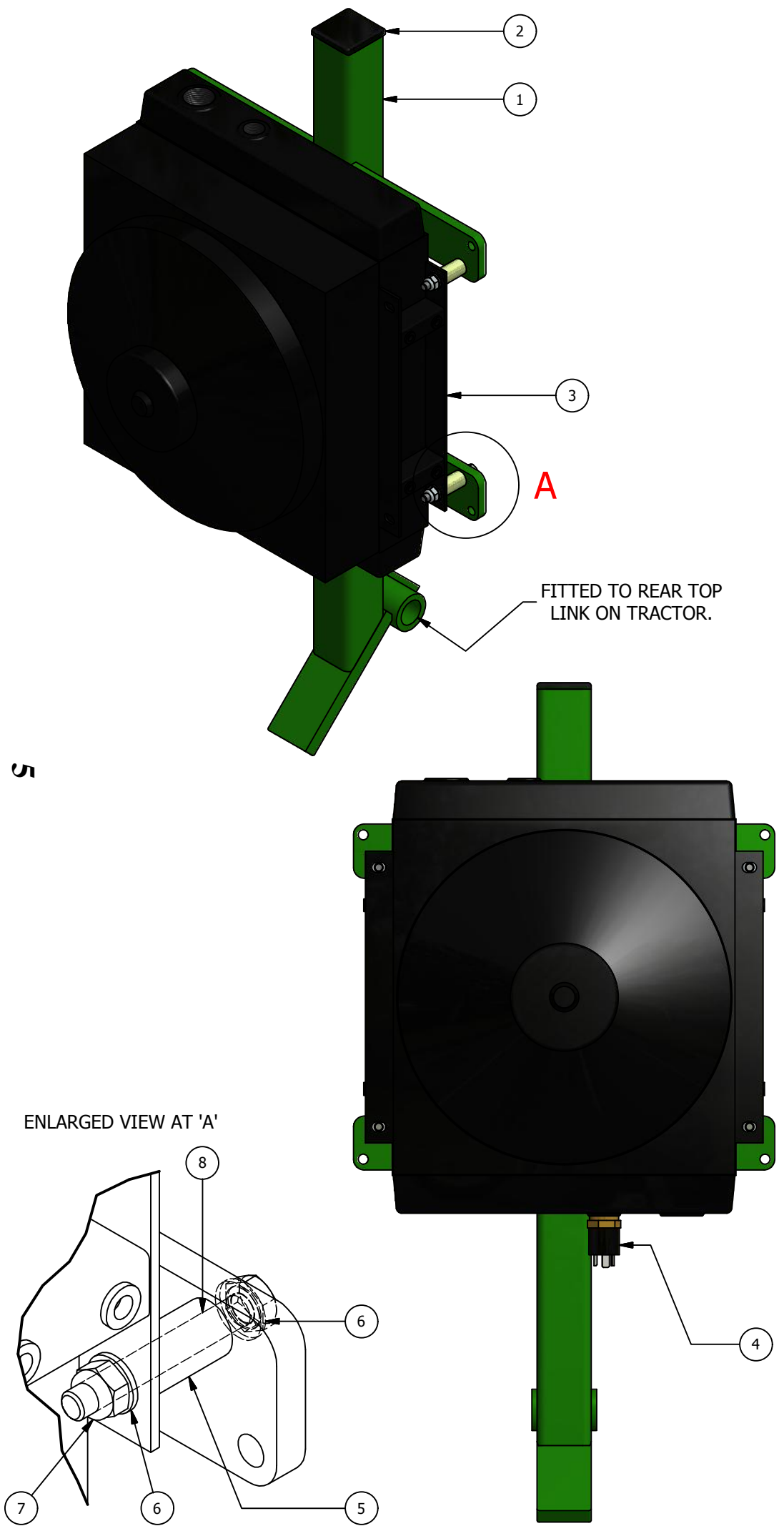
ROBOCROP IN ROW POWER PACK ASSEMBLY

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|--|-----------------|-----------------|
| 1 | OIL TANK | 10372 | 1 |
| 2 | OIL TANK LID | 10373 | 1 |
| 3 | FILTER | 10012 | 1 |
| 4 | BREATHER | 10015 | 1 |
| 5 | OIL SIGHT & TEMPERATURE LEVEL | 10014 | 1 |
| 6 | M8 WASHER BZP | | 18 |
| 7 | M8 SPRING WASHER BZP | | 18 |
| 8 | M8x20 BOLT BZP | | 18 |
| 9 | M10 WASHER BZP | | 4 |
| 10 | M10 SPRING WASHER BZP | | 4 |
| 11 | M10x25 BOLT BZP | | 4 |
| 12 | PUMP | 10375 | 1 |
| 13 | TOP LINK PIN | 5442 | 1 |
| 14 | LINCH PIN | 5604 | 3 |
| 15 | CLAMP PLATE | 7405 | 2 |
| 16 | STAND ASSEMBLY (IN PREVIOUS SECTION OF BOOK) | | 3 |
| 17 | OIL COOLER | 9295 | 1 |
| 18 | OIL COOLER | 9295 | 1 |
| 19 | GEAR BOX | 9448 | 1 |
| 20 | POWER PACK FRAME | 9528 | 1 |
| 21 | CAT2 MOUNTING PIN | 9529 | 2 |
| 22 | OIL COOLER BRACKET | 9568 | 1 |
| 23 | OIL COOLER BRACKET | 9569 | 1 |
| 24 | ADAPTOR PLATE | 9748 | 1 |
| 25 | SPLINED ADAPTOR | 9750 | 1 |
| 26 | M10x25 BOLT BZP | | 4 |
| 27 | M12x30 BOLT BZP | | 4 |
| 28 | M12x35 BOLT BZP | | 6 |
| 29 | M12x45 BOLT BZP | | 2 |
| 30 | M14x50 BOLT BZP | | 4 |
| 31 | M16x110 BOLT BZP | | 4 |
| 32 | M8x25 BOLT BZP | | 4 |
| 33 | M12x35 SOCKET HEAD CAP SCREW BZP | | 6 |
| 34 | 50mm EXTERNAL CIRCLIP | | 1 |
| 35 | M22 NUT BZP | | 2 |
| 36 | M10 NYLOC NUT BZP | | 4 |
| 37 | M12 NYLOC NUT BZP | | 6 |
| 38 | M16 NYLOC NUT BZP | | 4 |
| 39 | M8 NYLOC NUT BZP | | 4 |
| 40 | M10 WASHER BZP | | 8 |
| 41 | M12 WASHER BZP | | 18 |
| 42 | M14 WASHER BZP | | 4 |
| 43 | M16 WASHER BZP | | 8 |
| 44 | M22 WASHER BZP | | 2 |
| 45 | M8 WASHER BZP | | 8 |
| 46 | M12 SPRING WASHER BZP | | 6 |
| 47 | M14 SPRING WASHER BZP | | 4 |



ROBOCROP IN ROW POWER PACK HYDRAULIC ITEMS

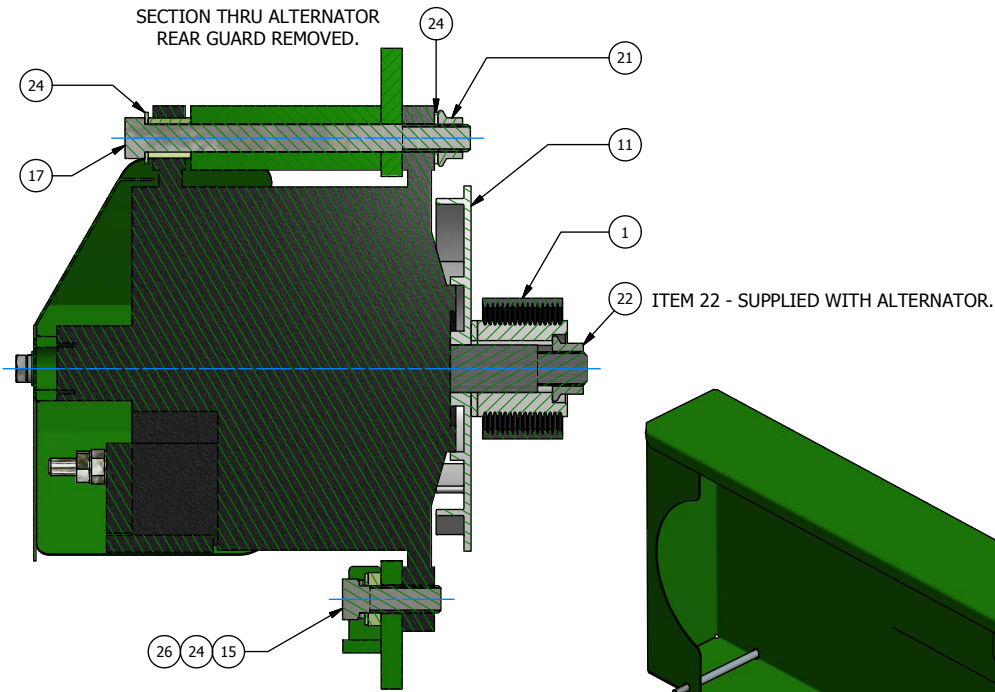
| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|----------|----------------------------|----------|----------|
| 1 | HYDRAULIC FITTING | 8518 | 1 |
| 2 | HYDRAULIC FITTING | 7939 | 1 |
| 3 | PRESSURE GAUGE | 7735 | 1 |
| 4 | PRESSURE GAUGE ADAPTOR | 7618 | 1 |
| 5 | HYDRAULIC FITTING | 8913 | 1 |
| 6 | 2 WAY BALL VALVE | 7424 | 1 |
| 7 | HYDRAULIC FITTING | 9444 | 1 |
| 8 | HISE ASSEMBLY | 9363 | 1 |
| 9 | INLINE CHECK VALVE | 9446 | 1 |
| 10 | HYDRAULIC FITTING | 10381 | 1 |
| 11 | QUICK RELEASE | 7947 | 1 |
| 12 | HYDRAULIC FITTING | 5400 | 2 |
| 13 | HYDRAULIC FITTING – TEE | 10024 | 1 |
| 14 | QUICK RELEASE | 10382 | 1 |
| 15 | HYDRAULIC FITTING | 6770 | 3 |
| 16 | HYDRAULIC FITTING | 7925 | 2 |
| 17 | HYDRAULIC FITTING – TEE | 7944 | 1 |
| 18 | QUICK RELEASE | 7945 | 2 |
| 19 | BULKHEAD | 9443 | 2 |
| 20 | BULKHEAD | 10385 | 2 |
| 21 | QUICK RELEASE | 10383 | 2 |
| 22 | HYDRAULIC FITTING | 10384 | 1 |
| 23 | HYDRAULIC FITTING | 6720 | 1 |
| 24 | HYDRAULIC FITTING | 7422 | 1 |
| 25 | HYDRAULIC FITTING – SWIVEL | 7617 | 1 |
| 26 | HOSE ASSEMBLY | 10043 | 1 |
| 27 | HOSE ASSEMBLY | 10386 | 1 |
| 28 | HOSE ASSEMBLY | 10388 | 1 |
| 29 | HOSE ASSEMBLY | 10387 | 1 |
| 30 | HOSE ASSEMBLY | 10081 | 1 |
| 31 | FLANGE | 10391 | 1 |
| 32 | FLANGE | 10392 | 1 |
| 33 | HOSE ASSEMBLY | 6739 | 1 |
| 34 | HYDRAULIC FITTING | 10402 | 1 |
| 35 | BONDED SEAL | 10467 | 1 |
| 36 | BONDED SEAL | 5529 | 6 |
| 37 | BONDED SEAL | 5620 | 2 |
| 38 | BONDED SEAL | 9521 | 5 |
| 39 | HYDRAULIC FITTING | 9440 | 2 |



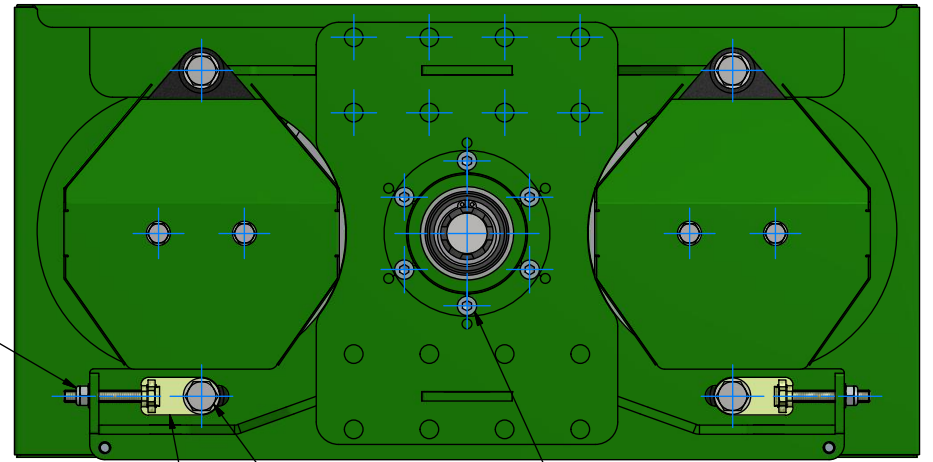
ROBOCROP IN ROW REAR COOLER ASSEMBLY

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|------------------------------|-----------------|-----------------|
| 1 | COOLER MOUNT | 10154 | 1 |
| 2 | END CAP | 7501 | 1 |
| 3 | OIL COOLER | 10155 | 1 |
| 4 | THERMO SWITCH | 10156 | 1 |
| 5 | PROCESSOR STAND OFF / SPACER | 10634 | 4 |
| 6 | M8 WASHER BZP | | 8 |
| 7 | M8 NYLOC NUT BZP | | 4 |
| 8 | M8x60 BOLT BZP | | 4 |
| 9 | HYDRAULIC FITTING | 6733 | 1 |
| 10 | HYDRAULIC FITTING | 5401 | 1 |
| 11 | HYDRAULIC FITTING | 5400 | 1 |
| 12 | HYDRAULIC FITTING | 5405 | 1 |
| 13 | HYDRAULIC FITTING | 5412 | 3 |
| 14 | HOSE ASSEMBLY | 10063 | 1 |
| 15 | HYDRAULIC FITTING | 5388 | 1 |
| 16 | HYDRAULIC FITTING – TEE | 8571 | 1 |
| 17 | QUICK RELEASE | 5534 | 2 |
| 18 | QUICK RELEASE | 5421 | 1 |
| 19 | QUICK RELEASE | 7053 | 3 |
| 20 | HYDRAULIC FITTING – BULKHEAD | 7492 | 2 |
| 21 | HYDRAULIC FITTING - BULKHEAD | 5411 | 2 |
| 22 | HOSE ASSEMBLY | 8916 | 1 |
| 23 | HOSE ASSEMBLY | 8915 | 1 |
| 24 | HYDRAULIC FITTING | 5413 | 1 |
| 25 | HYDRAULIC FITTING | 5523 | 1 |
| 26 | HYDRAULIC FITTING – TEE | 7871 | 1 |
| 27 | QUICK RELEASE | 5420 | 2 |
| 28 | BONDED SEAL | 5529 | 3 |
| 29 | BONDED SEAL | 5530 | 3 |
| 30 | BONDED SEAL | 5531 | 8 |

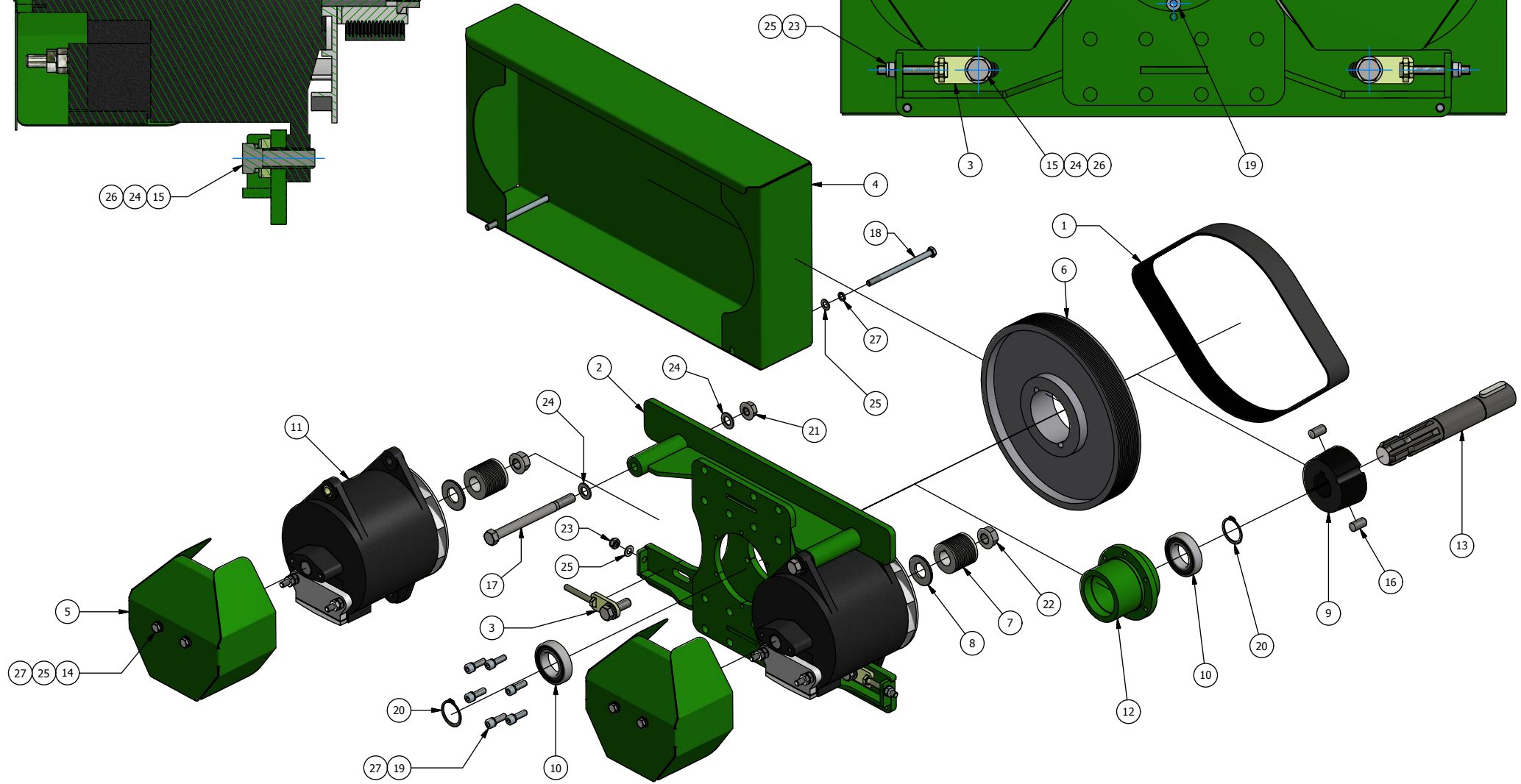
SECTION THRU ALTERNATOR
REAR GUARD REMOVED.



MOUNTING HOLES FOR FITTING TO TRAILING
BEAM - DETAILS SHOWN ON POWER PACK DRAWING.



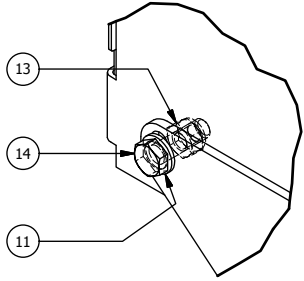
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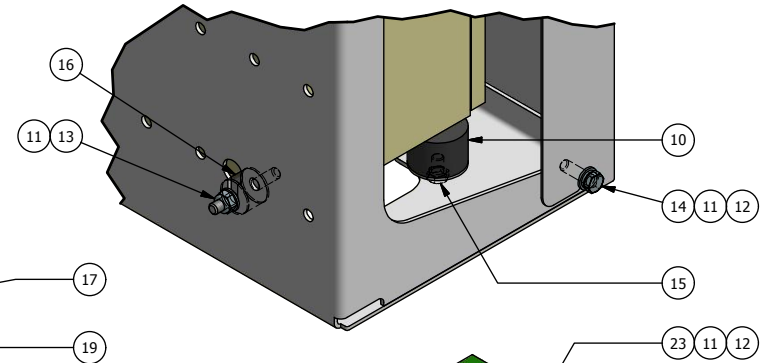
ROBOCROP IN ROW ELECTRIC ALTERNATOR ASSEMBLY

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|---------------------------------------|-----------------|-----------------|
| 1 | V-BELT | 10967 | 1 |
| 2 | ALTERNATOR MOUNT | 10969 | 1 |
| 3 | ALTERNATOR TENSIONER | 10972 | 2 |
| 4 | ALTERNATOR GUARD | 10973 | 1 |
| 5 | ALTERNATOR GUARD | 10974 | 2 |
| 6 | PULLEY | 10981 | 1 |
| 7 | PULLEY | 10982 | 2 |
| 8 | ALTERNATOR SPACING WASHER | 10995 | 2 |
| 9 | TAPER LOCK BUSH, WITH SET SCREWS | 1142 | 1 |
| 10 | SEALED BEARING | | 2 |
| 11 | ALTERNATOR | 9273 | 2 |
| 12 | BEARING HOUSING | 9302 | 1 |
| 13 | SPLINED SHAFT | 9305 | 1 |
| 14 | HEX CAP SCREW 5/16"x18UNC x 1" BZP | | 4 |
| 15 | HEX CAP SCREW 1/12"x13UNC x 1.5" BZP | | 2 |
| 16 | SET SCREWS SUPPLIED WITH TAPER LOCK | | 2 |
| 17 | HEX BOLT 1/2"x13UNC x 6" BZP | | 2 |
| 18 | HEX BOLT M8x120 BZP | | 2 |
| 19 | SOCKET CAP SCREW M8x25 BZP | | 6 |
| 20 | EXTERNAL CIRCLIP 35 SHAFT DIA | | 2 |
| 21 | HEX FLANGE NUT 1/2"x13UNC BZP | | 2 |
| 22 | FLANGED NUT, SUPPLIED WITH ALTERNATOR | | 2 |
| 23 | M8 NYLOC NUT BZP | | 2 |
| 24 | M12 THIN WASHER BZP | | 6 |
| 25 | M8 THIN WASHER BZP | | 8 |
| 26 | M12 SPRING WASHER BZP | | 2 |
| 27 | M8 SPRING WASHER BZP | | 12 |

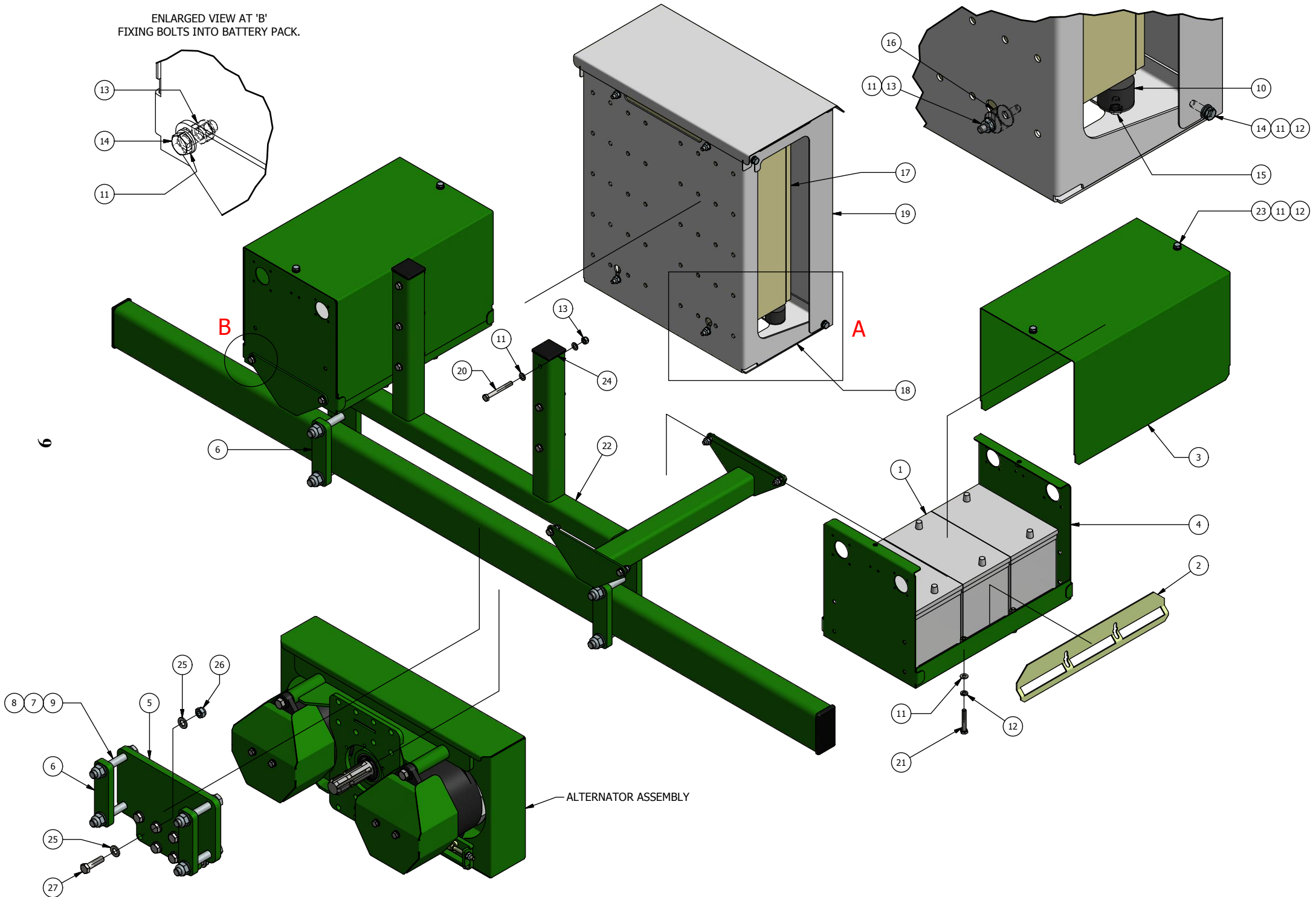
ENLARGED VIEW AT 'B'
FIXING BOLTS INTO BATTERY PACK.



ENLARGED VIEW AT 'A'



6



ALTERNATOR ASSEMBLY

ROBOCROP IN ROW ELECTRIC POWER PACK ASSEMBLY

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|---------------------------|-----------------|-----------------|
| 1 | BATTERY | 9315 | 6 |
| 2 | BATTERY CLAMP | 9316 | 4 |
| 3 | BATTERY BOX COVER | 9317 | 2 |
| 4 | BATTERY BOX | 9314 | 2 |
| 5 | ALTERNATOR FIXING PLATE | 10975 | 1 |
| 6 | CLAMP PLATE | 7405 | 4 |
| 7 | M16 FLAT WASHER BZP | | 16 |
| 8 | M16 NYLOC NUT BZP | | 8 |
| 9 | M16x110 BOLT BZP | | 8 |
| 10 | RUBBER ISOLATOR | 10139 | 2 |
| 11 | M8 FLAT WASHER BZP | | 50 |
| 12 | M8 SPRING WASHER BZP | | 18 |
| 13 | M8 NYLOC NUT BZP | | 18 |
| 14 | M8x25 SET SCREW BZP | | 12 |
| 15 | M8x12 SET SCREW BZP | | 2 |
| 16 | RUBBER ISOLATOR | 10032 | 2 |
| 17 | ELECTRIC BOX | 10976 | 1 |
| 18 | CONTROL PROCESSOR MOUNT | 10978 | 1 |
| 19 | CONTROL PROCESSOR COVER | 10979 | 1 |
| 20 | M8x70 BOLT BZP | | 6 |
| 21 | M8x50 BOLT BZP | | 8 |
| 22 | BATTERY & PROCESSOR MOUNT | 10980 | 1 |
| 23 | M8x20 BOLT BZP | | 4 |
| 24 | END CAP | 7501 | 2 |
| 25 | M12 FLAT WASHER BZP | | 16 |
| 26 | M12 NYLOC NUT BZP | | 8 |
| 27 | M12x45 BOLT BZP | | 8 |

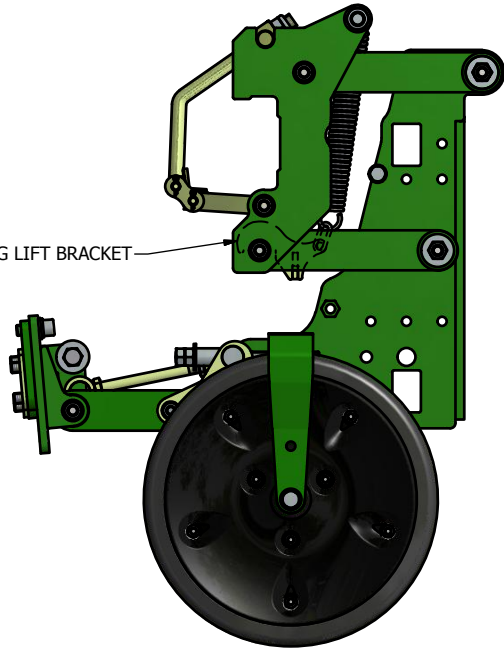
ADJUSTABLE WHEEL UNIT PARTS SECTION

CONTENTS

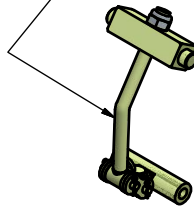
| | PAGE |
|---|--------------|
| ROBOCROP IN ROW SUPPORT WHEEL ASSEMBLY | 1-2 |
| ROBOCROP IN ROW WHEEL LEGS 50MM & 100MM | 3-4 |
| ROBOCROP IN ROW BALANCE SUPPORT ARM | 5-6 |
| ROBOCROP DISK STEER UNIT – EXPLODED DRAWINGS | 7-8 |
| ROBOCROP DISK STEER ASSEMBLY | 9-10 |
| ROBOCROP DISK STEER WHEEL ASSEMBLY | 11-12 |
| ROBOCROP DISK STEER MECHANISM | 13-14 |
| ROBOCROP ADJSUTABLE DEPTH IN ROW WHEEL LEG | 15-16 |
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| ROBOCROP HEAVY DUTY ADJSUATBLE WHEEL LEG | 19-20 |
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| ROBOCROP ENCODER WHEEL ASEMBLY | 23-24 |
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| ROBOCROP DISK STEER FRAME MOUNT BRACKET | 27-28 |
| ROBOCROP WHEEL ASSEMBLY FRAME CLAMPS | 29-30 |
| ROBOCROP 360 – ENCODER WHEEL ASSEMBLY | 31-33 |

LONG REACH SUPPORT WHEEL FOR FOLDING FRAME MACHINES.

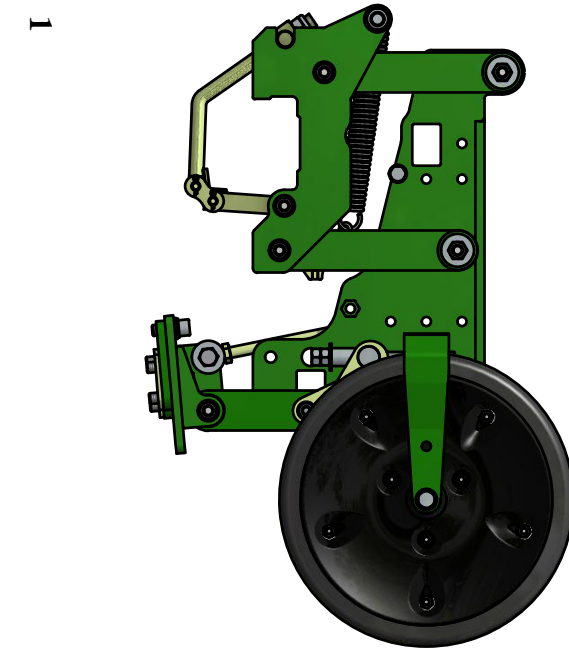
SPRING LIFT BRACKET



FRAME CLAMP AVAILABLE FOR 100x50 FRAME BOX SECTION.

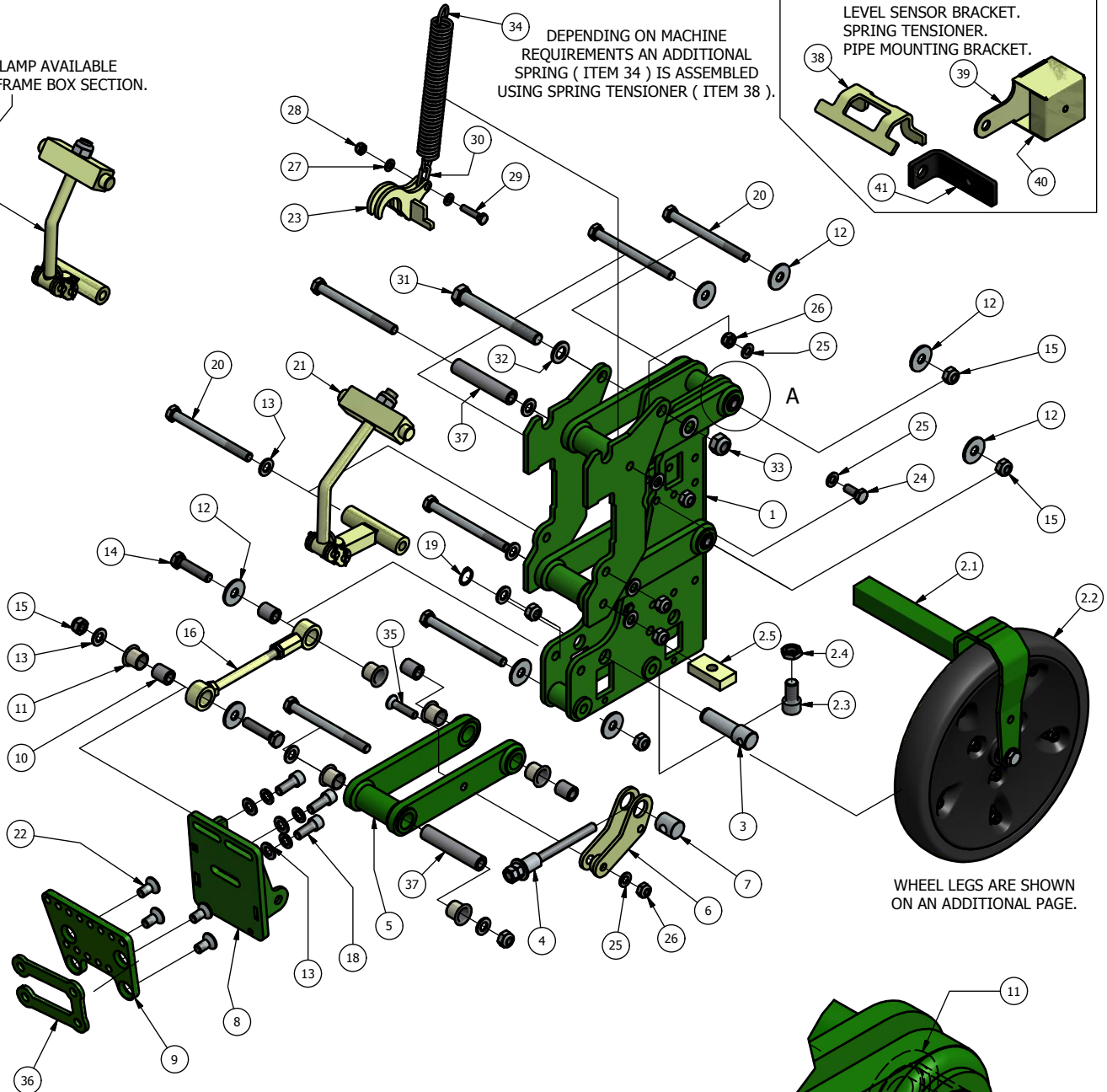
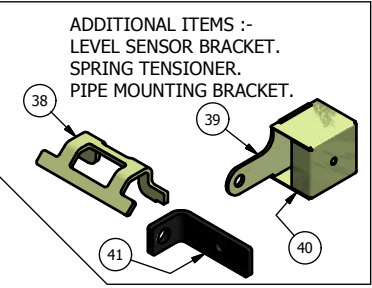


ITEMS 9, 22 & 36 WILL ALSO BE FOUND ON THE ROTOR BLOCK ASSEMBLY.



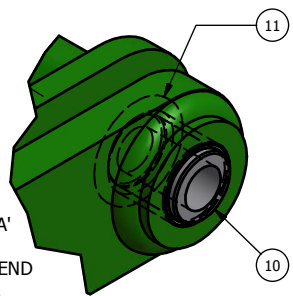
SHORT REACH SUPPORT WHEEL FOR NON-FOLDING FRAME MACHINES.

DEPENDENT ON MACHINE REQUIREMENTS AN ADDITIONAL SPRING (ITEM 34) IS ASSEMBLED USING SPRING TENSIONER (ITEM 38).



WHEEL LEGS ARE SHOWN ON AN ADDITIONAL PAGE.

ENLARGED VIEW AT 'A' LINK BUSHES. TYPICAL FOR THE OPEN END ON PARALLEL LINKS.

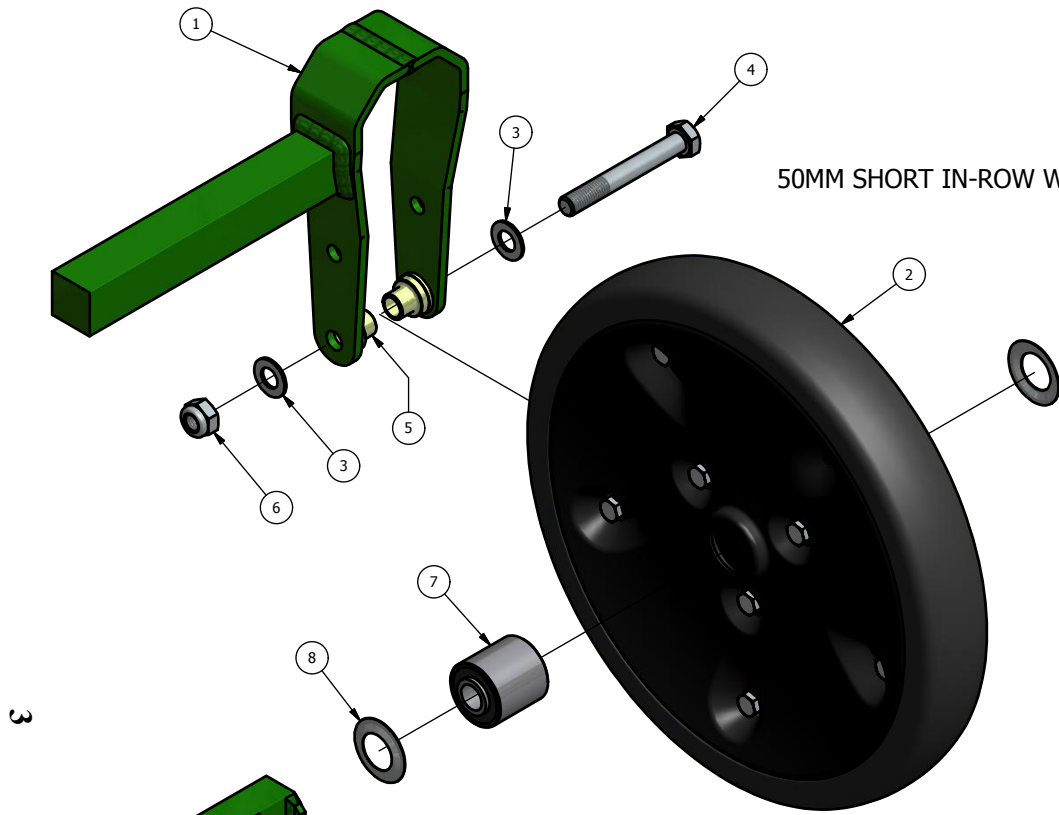


ROBOCROP IN ROW SUPPORT WHEEL ASSEMBLY

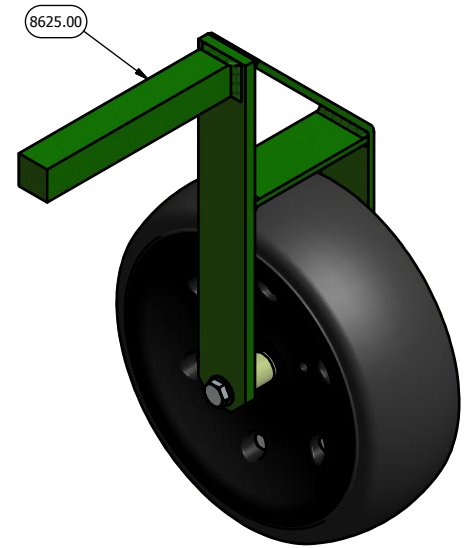
| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-------------------------------|------------------------------------|---------------|----------|
| 1 | SUPPORT WHEEL UNIT | 8614 | 1 |
| ITEMS 2.1 TO 2.5 AS FOLLOWS:- | | | |
| 2.1 | WHEEL LEG | 8623 | 1 |
| 2.2 | 65MM WHEEL | 7599 | 1 |
| 2.3 | SOCKET CAP SCREW M16x30 BZP | | 1 |
| 2.4 | M16 HEX. HALF NUT BZP | | 1 |
| 2.5 | SUPPORT WHEEL CLAMP PLATE | 8622 | 1 |
| 3 | ADJUSTMENT RETAINING PIN | 8616 | 1 |
| 4 | DEPTH ADJUSTMENT BOLT | 8618 | 1 |
| 5 | PARALLEL LINK | 9147 | 1 |
| 6 | DEPTH CONTROL LINK | 8615 | 1 |
| 7 | DEPTH ADJUSTMENT BUSH | 8617 | 1 |
| 8 | LINKAGE MOUNTING PLATE | 8619 | 1 |
| 9 | ROTOR MOUNTING PLATE | 9810 | 1 |
| 10 | PARALLEL LINK BUSH | 8184 | 6 |
| 11 | BUSH | 8185 | 6 |
| 12 | LARGE OD WASHER 12x37x3 BZP | | 8 |
| 13 | M12 FLAT WASHER BZP | | 13 |
| 14 | M12x55 BOLT BZP | | 2 |
| 15 | M12 NYLOC NUT BZP | | 9 |
| 16 | ADJUSTABLE PARALLEL LINK | 8725 | 1 |
| 17 | M12 SPRING WASHER BZP | | 3 |
| 18 | SOCKET CAP SCREW M12x30 BZP | | 3 |
| 19 | 20MM EXTERNAL CIRCLIP | | 1 |
| 20 | M12x40 BOLT BZP | | 7 |
| 21 | FRAME CLAMP | 7537 | 1 |
| 22 | C'SUNK ALLEN HEAD SCREW M12x25 BZP | | 4 |
| 23 | SPRING LIFT BRACKET | 8544 | 1 |
| 24 | M10x25 BOLT BZP | | 2 |
| 25 | M10 FLAT WASHER BZP | | 5 |
| 26 | M10 NYLOC NUT BZP | | 3 |
| 27 | M8 FLAT WASHER BZP | | 2 |
| 28 | M8 NYLOC NUT BZP | | 1 |
| 29 | M8x35 BOLT BZP | | 1 |
| 30 | CHAIN LINK | | 1 |
| 31 | M16x140 BOLT BZP | | 1 |
| 32 | M16 FLAT WASHER BZP | | 2 |
| 33 | M16 NYLOC NUT BZP | | 1 |
| 34 | TENSION SPRING | 5536 | 1 |
| 35 | C'SUNK ALLEN HEAD SCREW M10x45 BZP | | 1 |
| 36 | SPACER | 9811 | 1 |
| 37 | BUSH SHAFT | 8183 | 3 |
| 38 | SPRING TENSIONER | 9716 | 1 |
| 39 | LEVEL SENSOR BRACKET | 8988 | 2 |
| 40 | LEVEL SENSOR GUARD | 8989 | 2 |
| 41 | PIPE MOUNTING BRACKET | 9331 OR 10711 | 1 |

(107711.00 IS USED WITH BALANCE SUPPORT ARM – APPLICATION SPECIFIC)

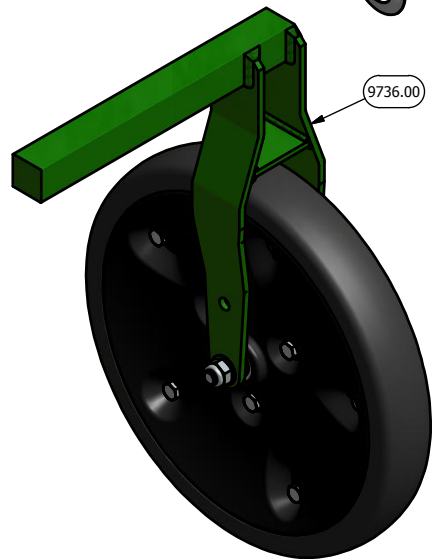
ITEMS 39 & 40 QTY IS PER MACHINE



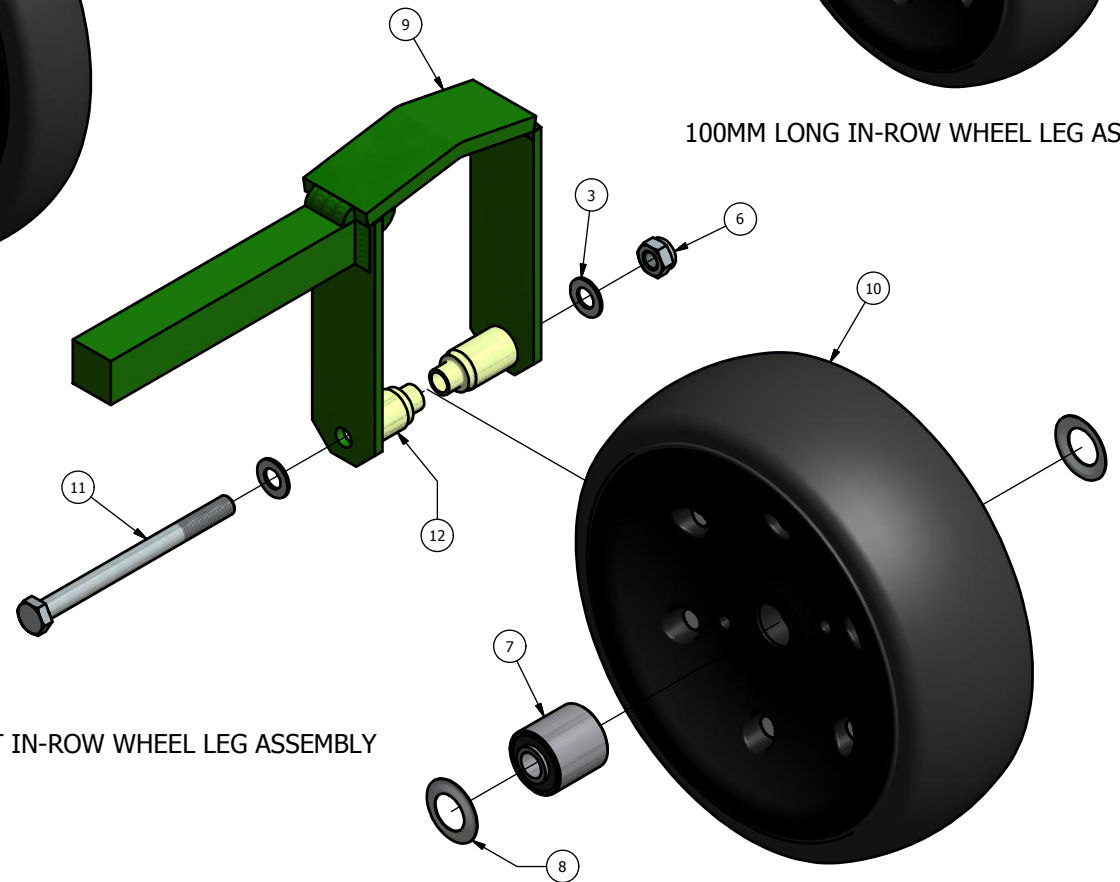
50MM SHORT IN-ROW WHEEL LEG ASSEMBLY



100MM LONG IN-ROW WHEEL LEG ASSEMBLY



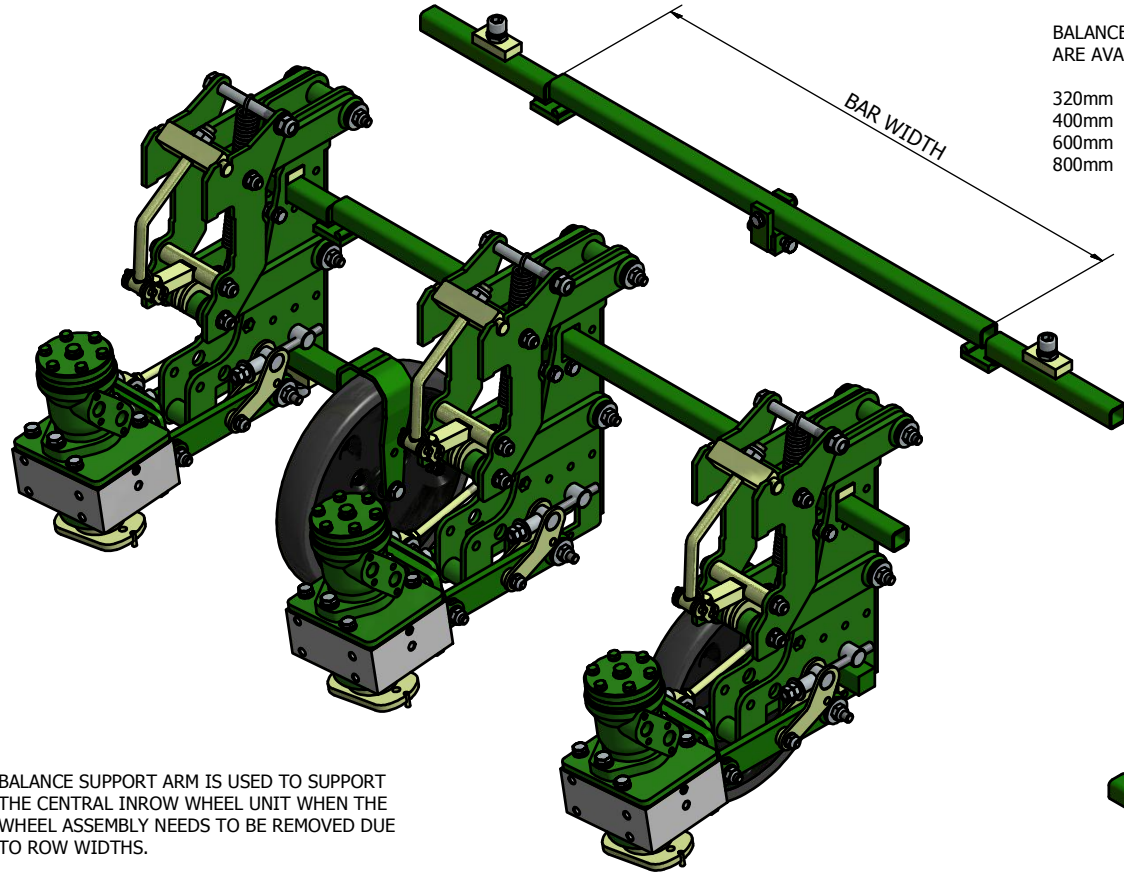
50MM LONG IN-ROW WHEEL LEG ASSEMBLY



100MM SHORT IN-ROW WHEEL LEG ASSEMBLY

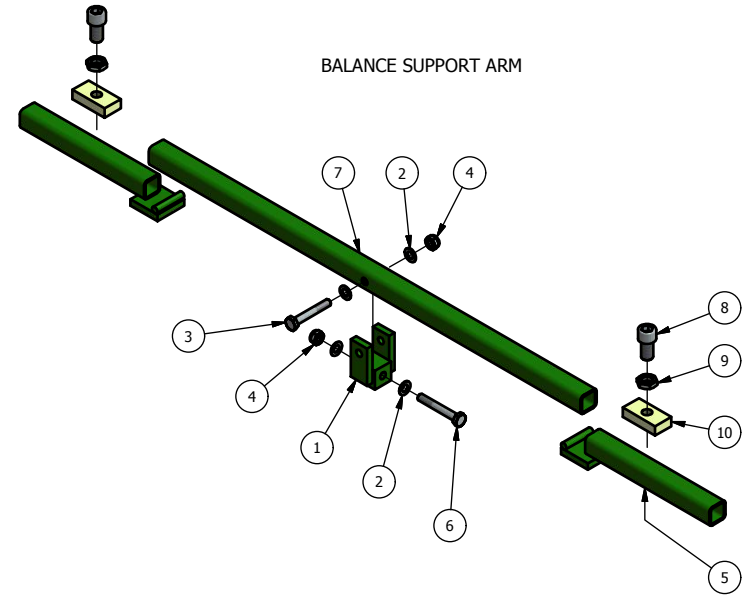
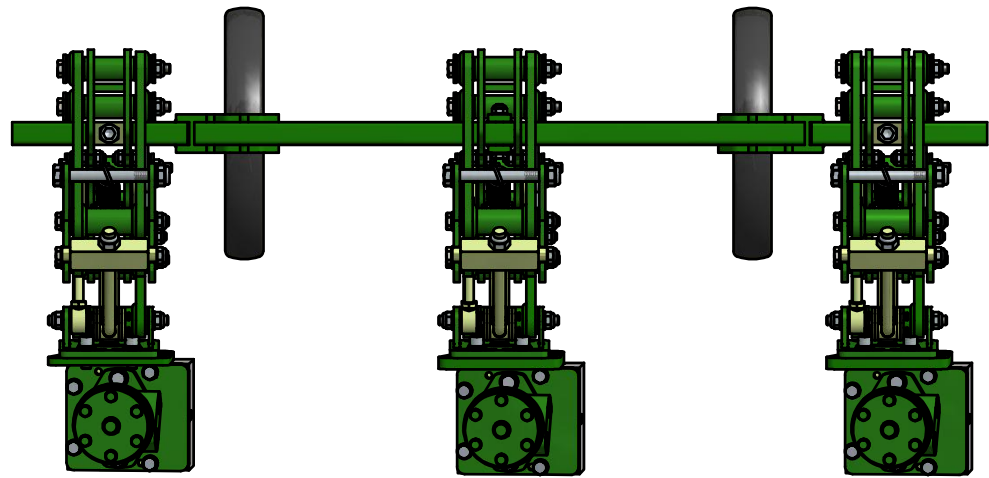
ROBOCROP IN ROW WHEEL LEGS 50MM & 100MM

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|-----------------------|-----------------|-----------------|
| 1 | 50MM SHORT LEG ASS'Y | 9735 | 1 |
| 2 | 50MM WHEEL | 9708 | 1 |
| 3 | M12 THIN WASHER BZP | 7877 | 2 |
| 4 | M12x90 BOLT BZP | 1178 | 1 |
| 5 | WHEEL SPACER | 9733 | 2 |
| 6 | M12 NYLOC NUT | 1017 | 1 |
| 7 | WHEEL BEARING | 9511 | 1 |
| 8 | BEARING SHIELDS | 9776 | 2 |
| 9 | 100MM SHORT LEG ASS'Y | 8699 | 1 |
| 10 | 100MM WHEEL | 9731 | 1 |
| 11 | M12x150 BOLT BZP | 6395 | 1 |
| 12 | WHEEL SPACER | 9749 | 2 |



BALANCE SUPPORT ARM BAR WIDTHS
ARE AVAILABLE IN THE FOLLOWING LENGTHS :-
320mm
400mm
600mm
800mm

BALANCE SUPPORT ARM IS USED TO SUPPORT THE CENTRAL INROW WHEEL UNIT WHEN THE WHEEL ASSEMBLY NEEDS TO BE REMOVED DUE TO ROW WIDTHS.



BALANCE SUPPORT ARM

ROBOCROP IN ROW BALANCE SUPPORT ARM

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|--------------------------------------|-----------------|-----------------|
| 1 | BALANCE SUPPORT PIVOT | 8666 | 1 |
| 2 | M10 THIN WASHER BZP | 7876 | 4 |
| 3 | M10x70 BOLT BZP | 7459 | 1 |
| 4 | M10 NYLOC NUT BZP | 1024 | 2 |
| 5 | BALANCE BAR SUPPORT | 8665 | 2 |
| 6 | M10x70 BOLT BZP | 7459 | 1 |
| 7 | BALANCE SUPPORT ARM (SPECIFY LENGTH) | 8664 | 1 |
| 8 | SOCKET CAP SCREW M16x30 BZP | 8886 | 2 |
| 9 | M16 HEX. HALF NUT BZP | 6865 | 2 |
| 10 | SUPPORT WHEEL CLAMP PLATE | 8622 | 2 |

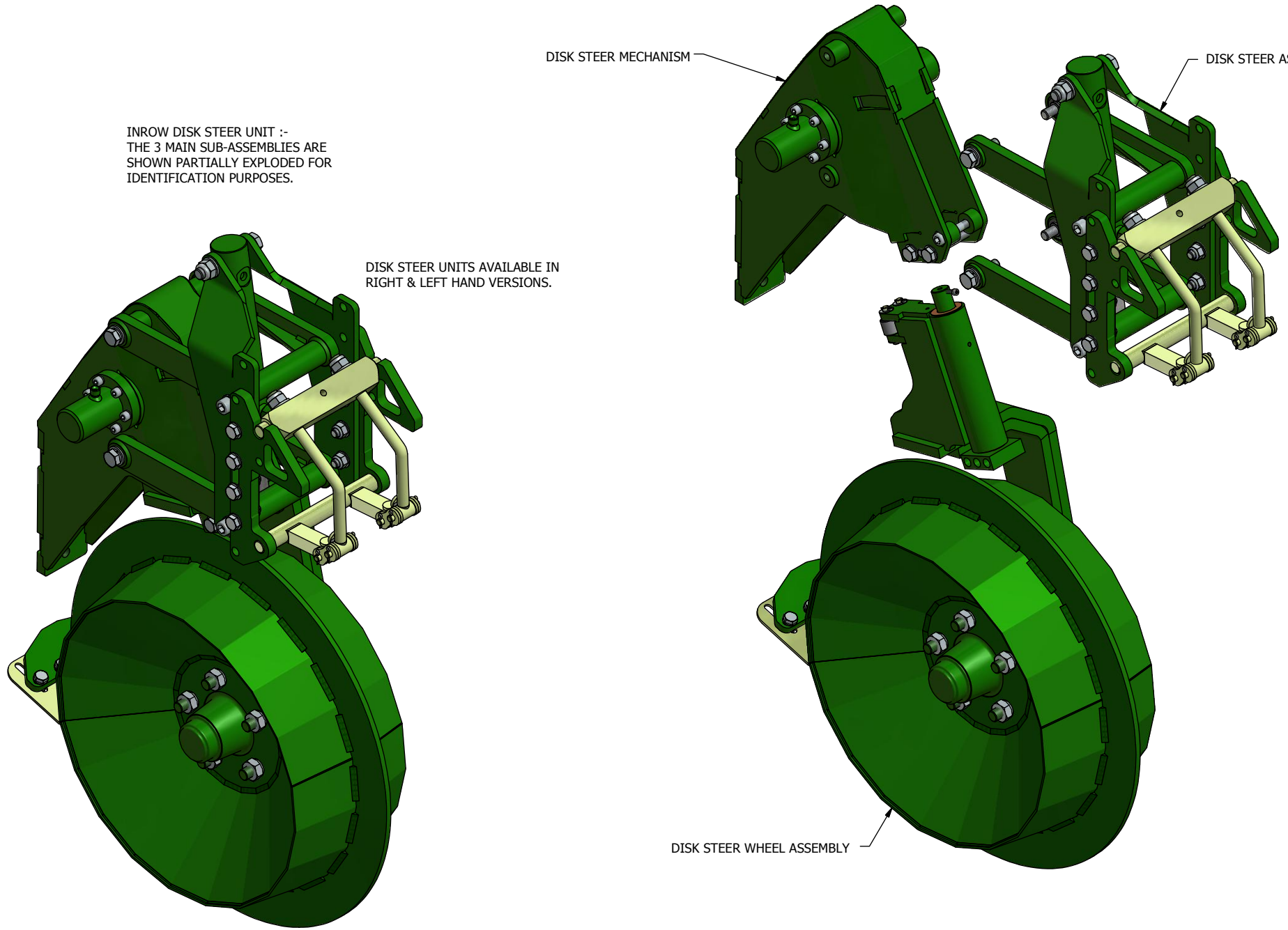
INROW DISK STEER UNIT :-
THE 3 MAIN SUB-ASSEMBLIES ARE
SHOWN PARTIALLY EXPLODED FOR
IDENTIFICATION PURPOSES.

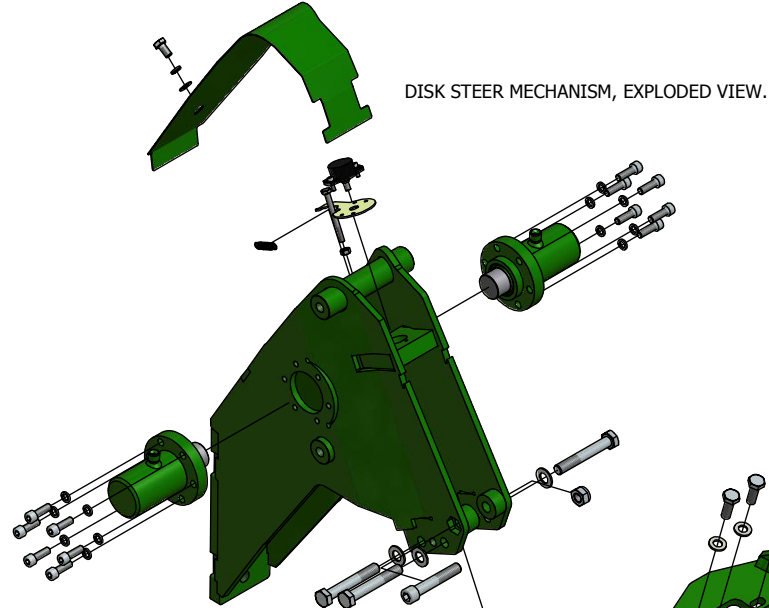
DISK STEER UNITS AVAILABLE IN
RIGHT & LEFT HAND VERSIONS.

DISK STEER MECHANISM

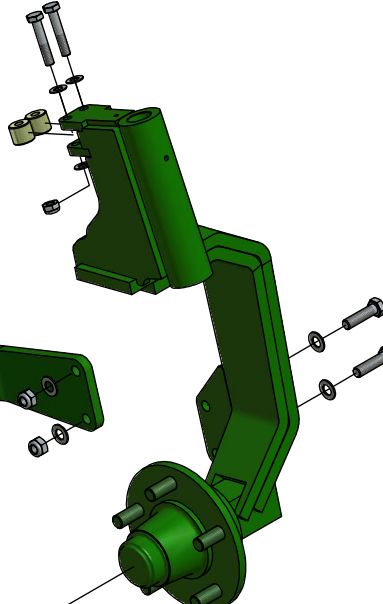
DISK STEER ASSEMBLY

DISK STEER WHEEL ASSEMBLY

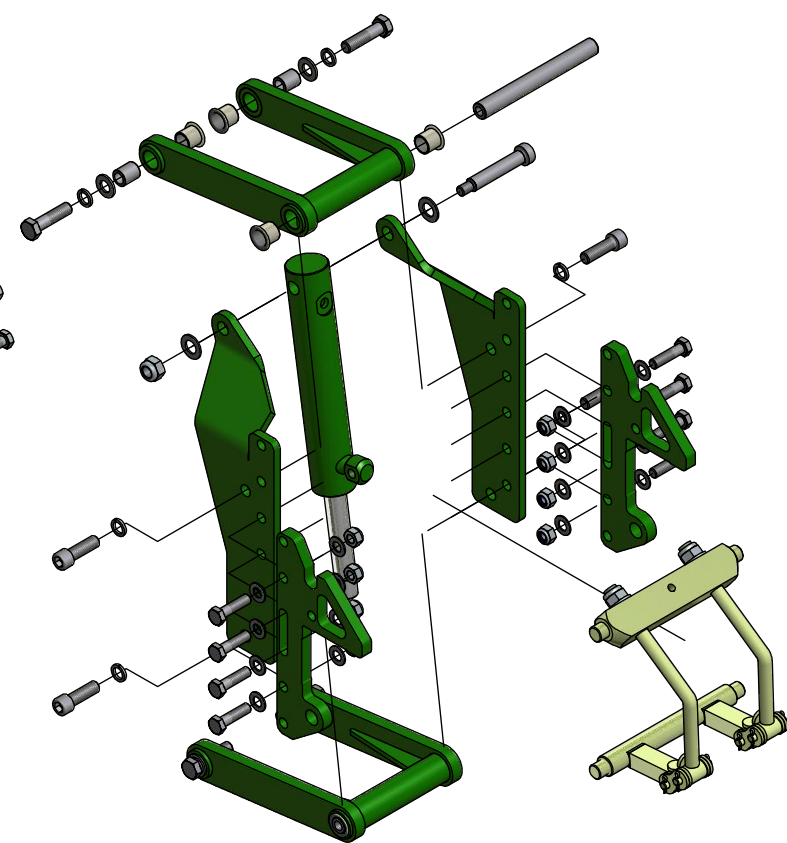




DISK STEER MECHANISM, EXPLODED VIEW.

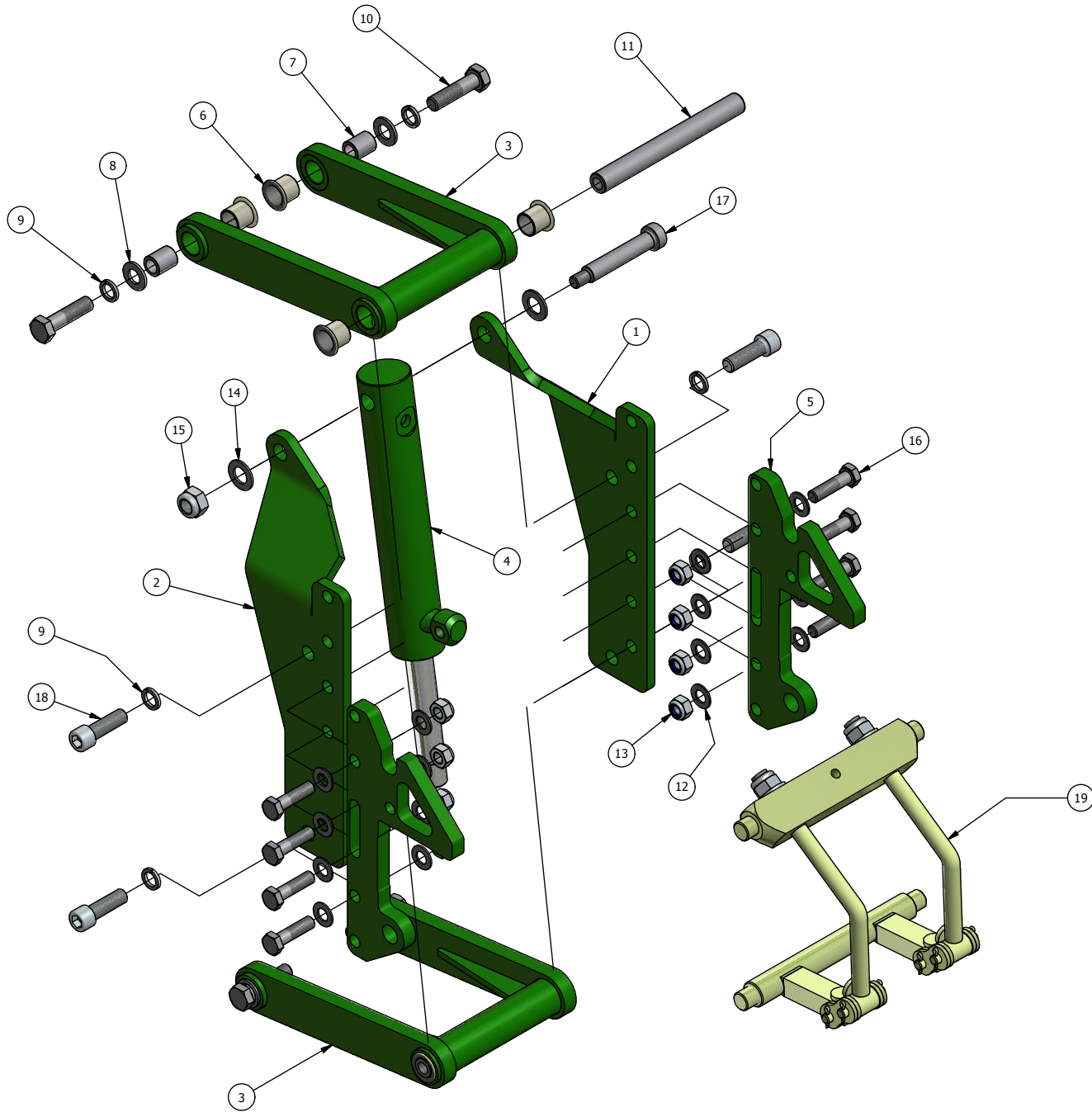


DISK STEER WHEEL ASSEMBLY, EXPLODED VIEW.

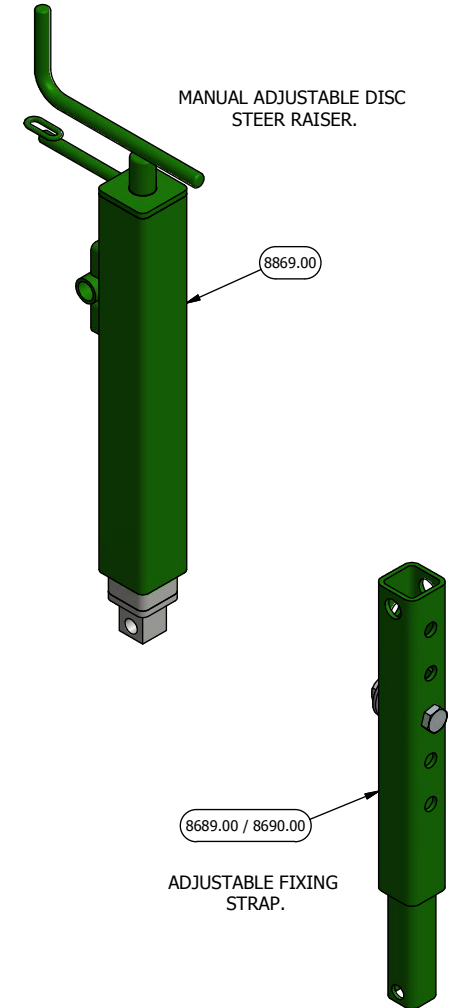


DISK STEER ASSEMBLY, EXPLODED VIEW.

6

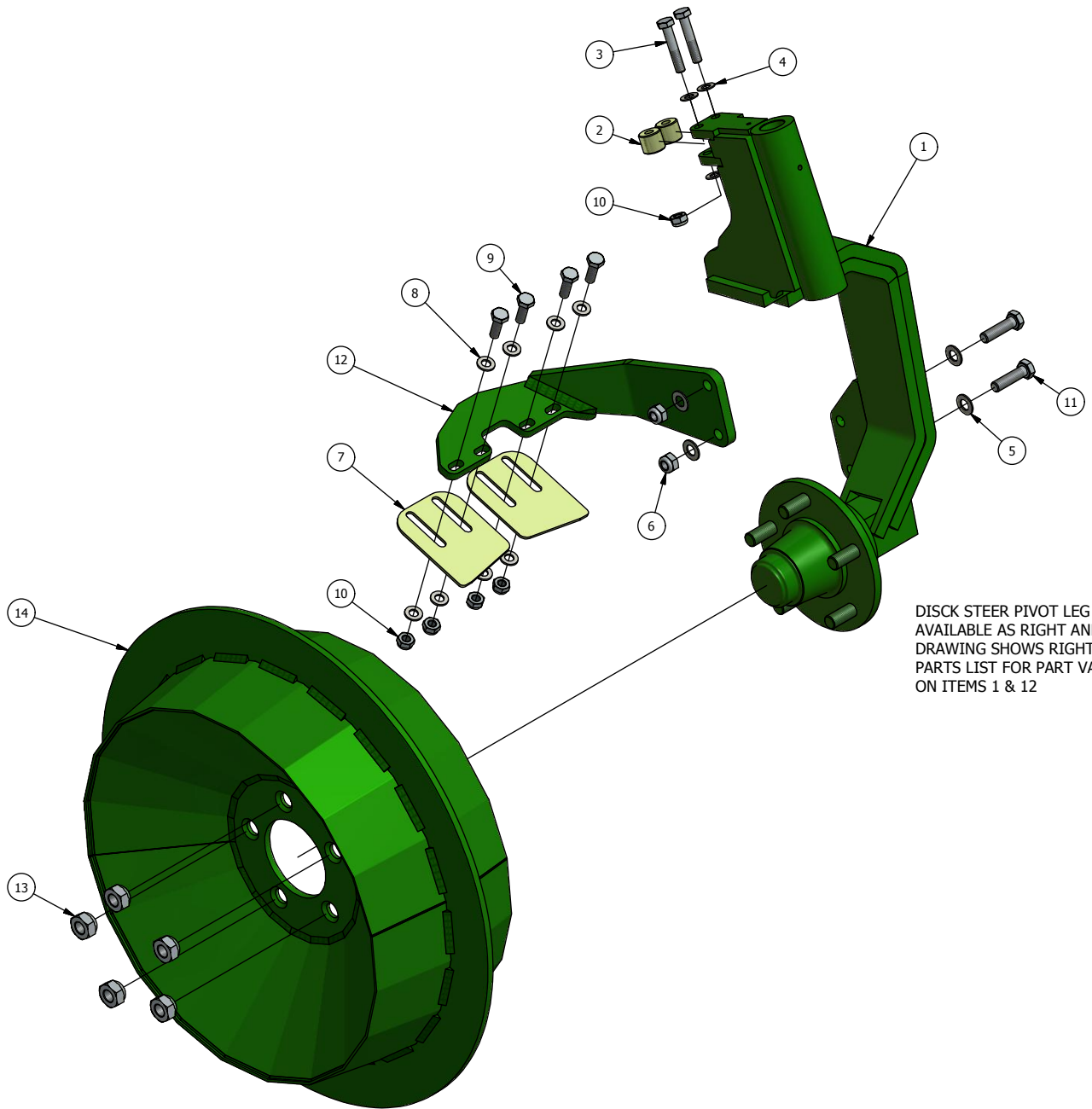


ALTERNATIVE ITEMS - RAM CAN BE REPLACED WITH MANUAL ADJUSTABLE DISC STEER RAISER ASSEMBLY OR ADJUSTABLE FIXING STRAP. USES, DEPENDENT ON APPLICATIONS.



ROBOCROP DISK STEER ASSEMBLY

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|---------------------------------------|-----------------|-----------------|
| 1 | LH STEER BRACKET | 8589 | 1 |
| 2 | RH STEER BRACKET | 8590 | 1 |
| 3 | PARALLEL STEER LINK | 8591 | 2 |
| 4 | HYDRAULIC ACTUATOR | 8596 | 1 |
| | SEAL KIT PART No. - 9042 | | |
| 5 | STEER MOUNT BRACKET | 10808 | 2 |
| 6 | BUSH | 8185 | 8 |
| 7 | STEER BUSH | 8598 | 4 |
| 8 | M14 FLAT WASHER BZP | 8994 | 4 |
| 9 | M14 SPRING WASHER BZP | 8604 | 8 |
| 10 | M14x55 BOLT BZP | 8603 | 4 |
| 11 | STEER BUSH SHAFT | 8597 | 2 |
| 12 | M12 THIN WASHER BZP | 7877 | 16 |
| 13 | M12 NYLOC NUT BZP | 1017 | 8 |
| 14 | M16 THIN WASHER BZP | | 2 |
| 15 | M16 NYLOC NUT BZP | 1030 | 1 |
| 16 | M12x45 BOLT BZP | 1016 | 8 |
| 17 | M16x80 SHOULDER SCREW, M12 THREAD BZP | | 1 |
| 18 | SOCKET CAP SCREW M14x45 BZP | | 4 |
| 19 | FRAME MOUNT BRACKET | | 1 |

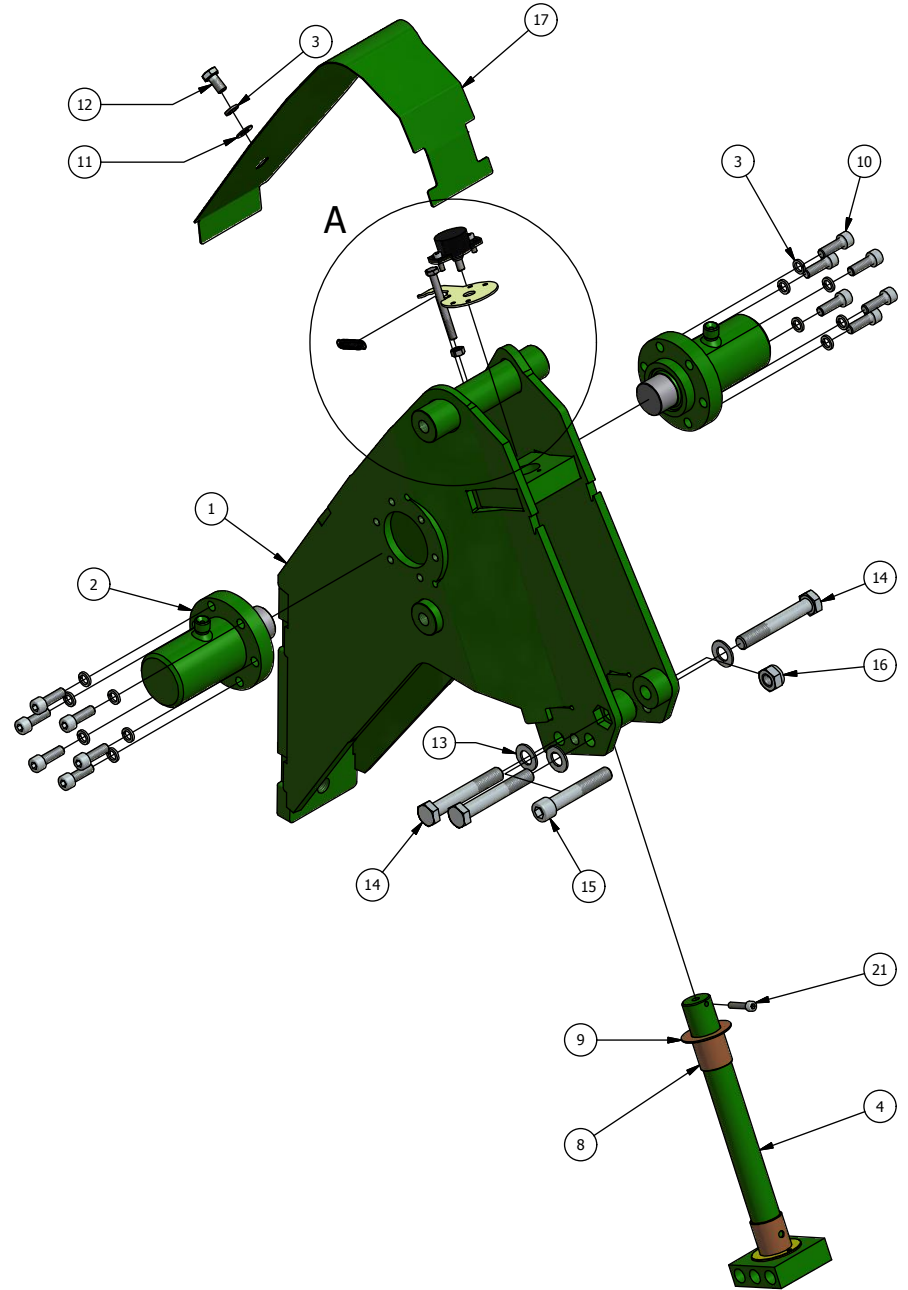
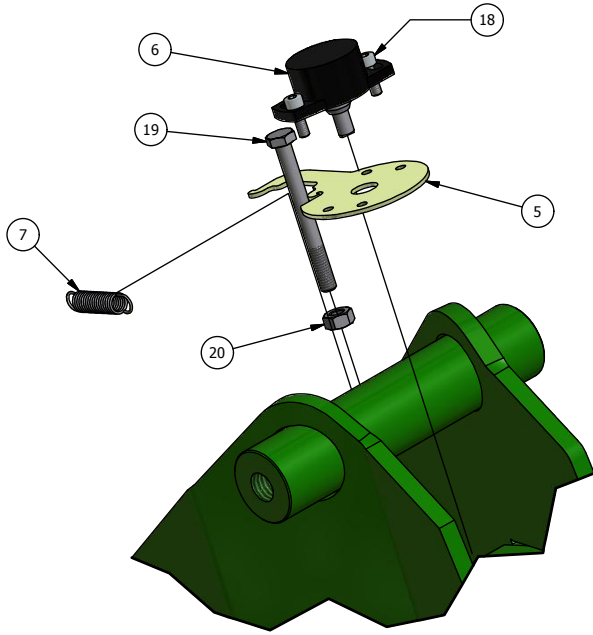


DISCK STEER PIVOT LEG ASSEMBLY
AVAILABLE AS RIGHT AND LEFT HAND.
DRAWING SHOWS RIGHT HAND, SEE
PARTS LIST FOR PART VARIATIONS
ON ITEMS 1 & 12

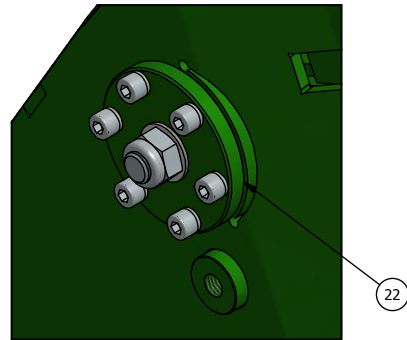
ROBOCROP DISK STEER WHEEL ASSEMBLY

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|-------------------------------|-----------------|-----------------|
| 1 | PIVOT LEG ASSEMBLY RIGHT HAND | 9417 | 1 |
| | PIVOT LEG ASSEMBLY LEFT HAND | 9416 | 1 |
| 2 | RAM ROLLER | 8688 | 2 |
| 3 | M10x55 BOLT BZP | | 2 |
| 4 | M10 THIN WASHER BZP | 7876 | 4 |
| 5 | M12 THIN WASHER BZP | 7877 | 4 |
| 6 | M12 NYLOC NUT BZP | 1017 | 2 |
| 7 | WHEEL SCRAPER | 9377 | 2 |
| 8 | M10 FLAT WASHER BZP | 1186 | 8 |
| 9 | M10x30 BOLT BZP | 5668 | 4 |
| 10 | M10 NYLOC NUT BZP | 1024 | 6 |
| 11 | M12x45 BOLT BZP | 1016 | 2 |
| 12 | SCRAPER ARM RIGHT HAND | 9420 | 1 |
| | SCRAPER ARM LEFT HAND | 9421 | 1 |
| 13 | M16 CAPTIVE WHEEL NUT | 9422 | 5 |
| 14 | DISK STEER WHEEL | 9415 | 1 |

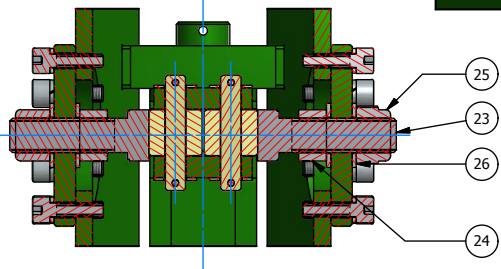
ENLARGED VIEW AT 'A'



NON STEER DISK WHEEL ITEMS.
ITEM 2 HYDRAULIC RAMS ARE REPLACED
WITH LOCKING PLATES.



SECTION THRU FIXED DIRECTION
LOCKING PLATES.



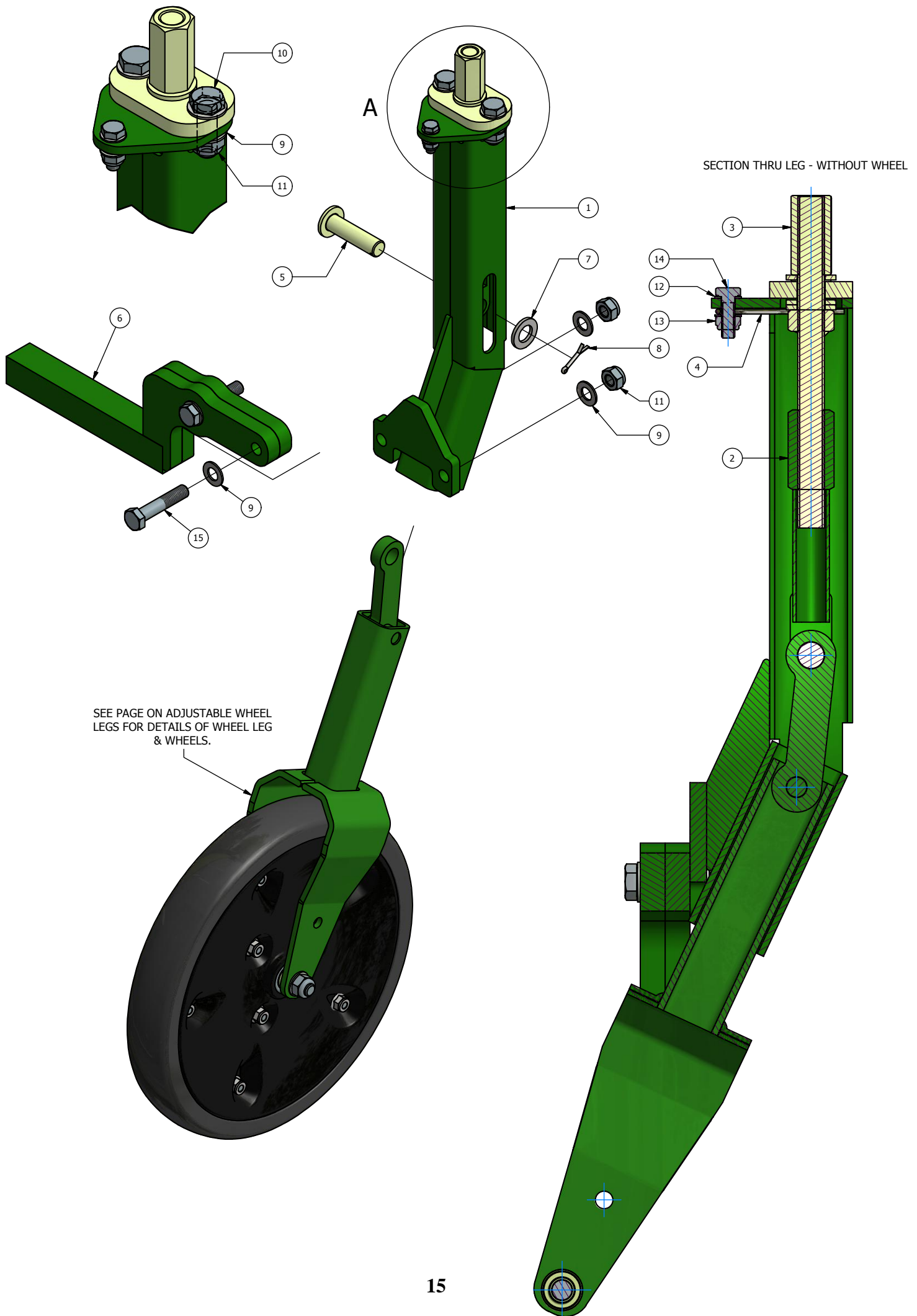
ROBOCROP DISK STEER MECHANISM

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|----------|------------------------------|----------|----------|
| 1 | DISK STEER WHEEL FRAME | 9722 | 1 |
| 2 | HYDRAULIC STEERING ACTUATOR | 8668 | 2 |
| | SEAL KIT PART No. - 9378 | | |
| 3 | M8 SPRING WASHER BZP | 1154 | 13 |
| 4 | PIVOT PIN | 8594 | 1 |
| 5 | POTENTIOMETER MOUNTING PLATE | 8675 | 1 |
| 6 | ROTARY POTENTIOMETER | 8674 | 1 |
| 7 | TENSION SPRING | 8676 | 1 |
| 8 | BUSH | 7446 | 2 |
| 9 | THRUST WASER | 8626 | 2 |
| 10 | SOCKET CAP SCREW M8x25 BZP | 6707 | 12 |
| 11 | M8 THIN WASHER BZP | 1157 | 1 |
| 12 | M8x15 BOLT BZP | 1156 | 1 |
| 13 | M12 THIN WASHER | 7877 | 3 |
| 14 | M12x80 BOLT BZP | 6371 | 3 |
| 15 | SOCKET CAP SCREW M12x70 BZP | 8827 | 1 |
| 16 | M12 NYLOC NUT BZP | 1017 | 1 |
| 17 | STEERING GUARD | 9723 | 1 |
| 18 | M4x12 SOCKET CAP SCREW BZP | | 2 |
| 19 | M6x60 BOLT BZP | 8822 | 1 |
| 20 | M6 NUT BZP | 7712 | 1 |
| 21 | SOCKET CAP SCREW M5x25 BZP | 5705 | 1 |

ADDITIONAL ITEMS REQUIRED FOR NON-STEER APPLICATIONS

| | | | |
|----|----------------------------|-------|---|
| 22 | FIXED DIRECTION LOCK PLATE | 10963 | 2 |
| 23 | M16x55 BOLT BZP | | 2 |
| 24 | M16 NUT BZP | | 2 |
| 25 | M16 NYLOC NUT BZP | | 2 |
| 26 | M16 WASHER BZP | | 4 |

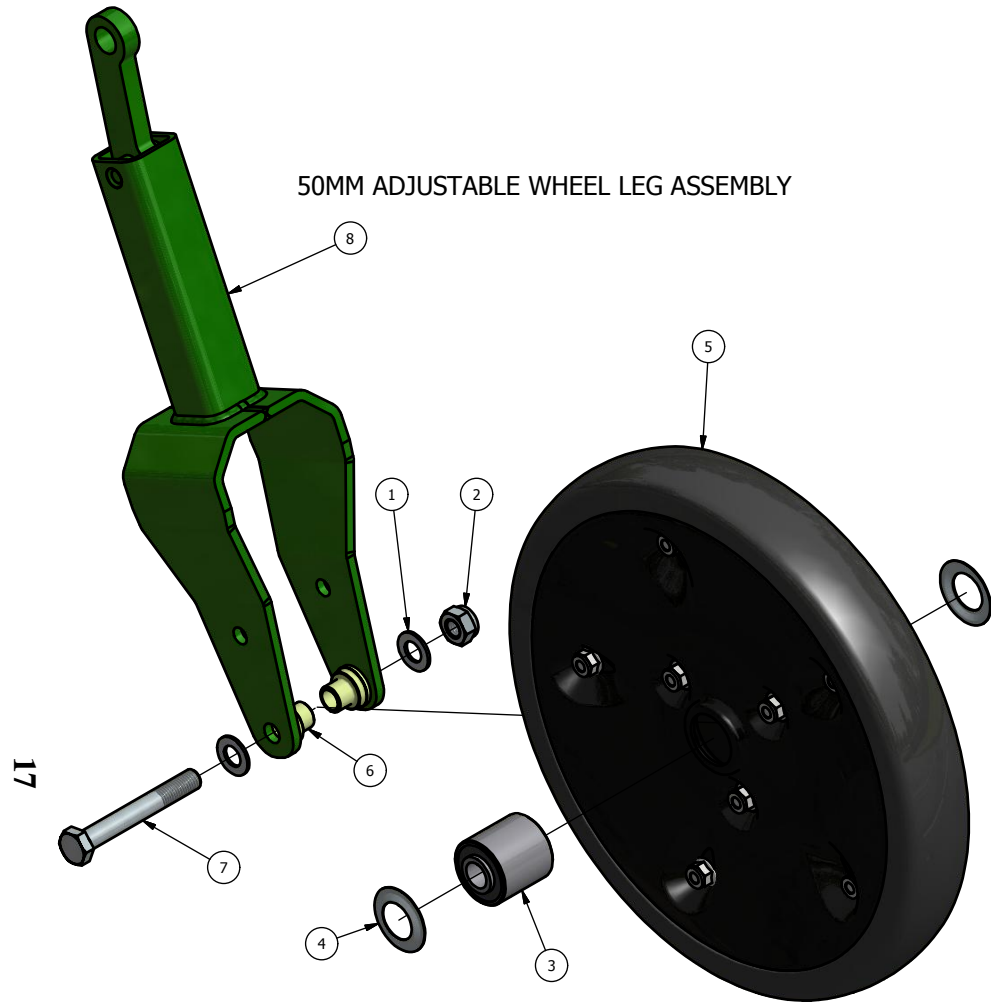
ENLARGED VIEW AT 'A'



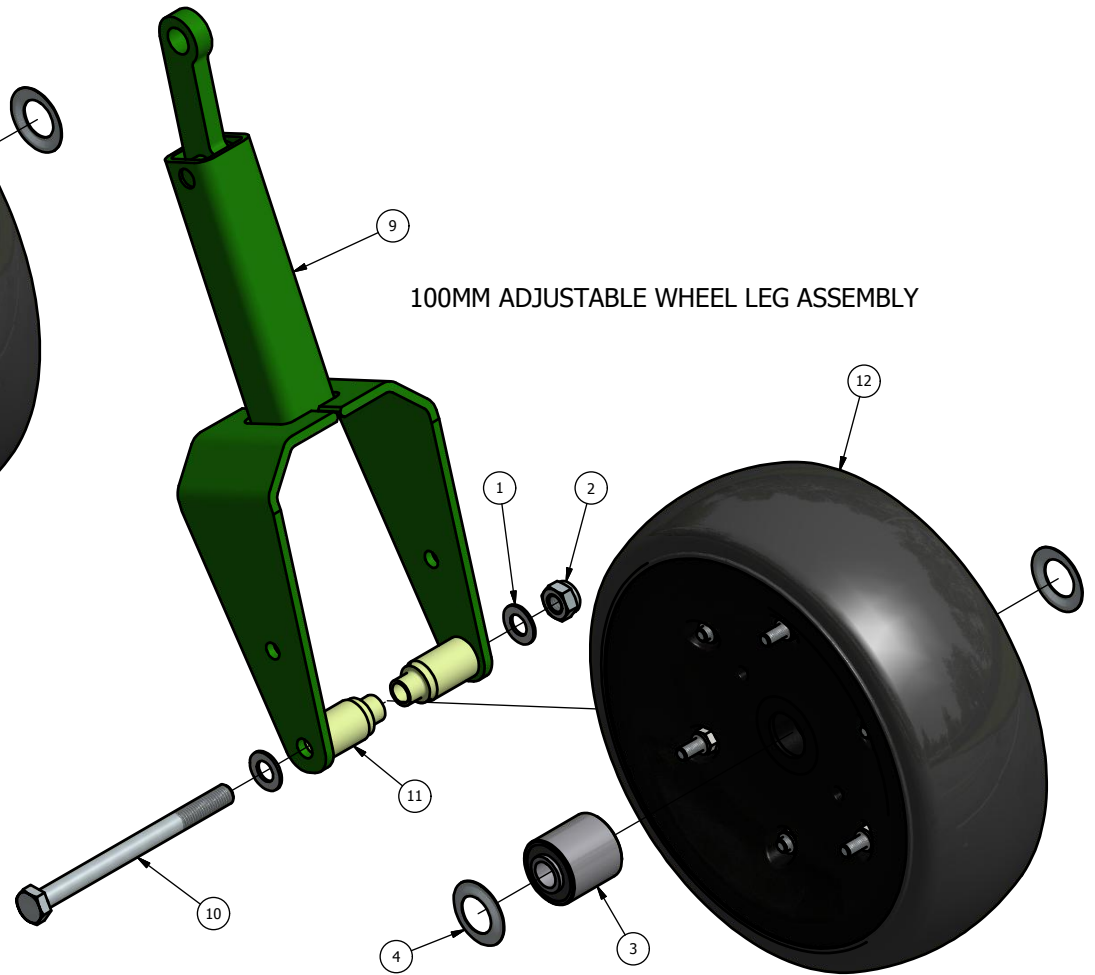
ROBOCROP ADJUSTABLE DEPTH INROW WHEEL LEG

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|--------------------------|-----------------|-----------------|
| 1 | WHEEL LEG | 9543 | 1 |
| 2 | WHEEL ADJSUTER NUT | 9024 | 1 |
| 3 | WHEEL ADJUSTER SCREW | 9023 | 1 |
| 4 | ANTIROTATION SPRING | 9029 | 1 |
| 5 | PIN | 9545 | 1 |
| 6 | WHEEL LEG BRACKET | 9544 | 1 |
| 7 | M16 FLAT WASHER BZP | | 1 |
| 8 | SPLIT PIN | | 1 |
| 9 | M12 THIN FLAT WASHER BZP | 7877 | 8 |
| 10 | M12x35 BOLT BZP | | 2 |
| 11 | M12 NYLOC NUT BZP | 1017 | 4 |
| 12 | M8 FLAT THIN WASHER BZP | | 2 |
| 13 | M8 NYLOC NUT BZP | | 1 |
| 14 | M8x25 BOLT BZP | | 1 |
| 15 | M12x60 BOLT BZP | | 2 |

50MM ADJUSTABLE WHEEL LEG ASSEMBLY

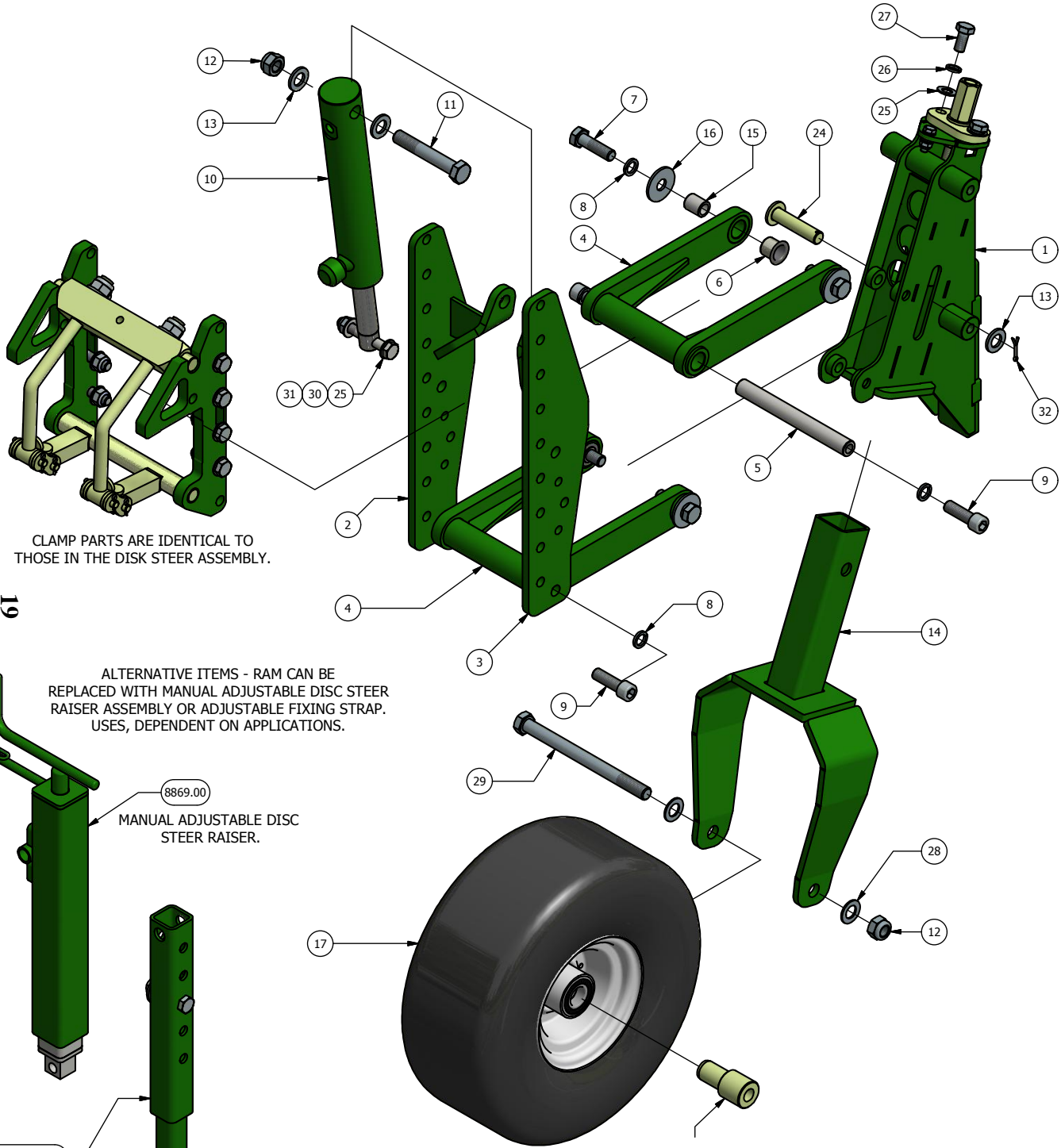


100MM ADJUSTABLE WHEEL LEG ASSEMBLY



ROBOCROP ADJUSTABLE WHEEL LEGS 50MM & 100MM

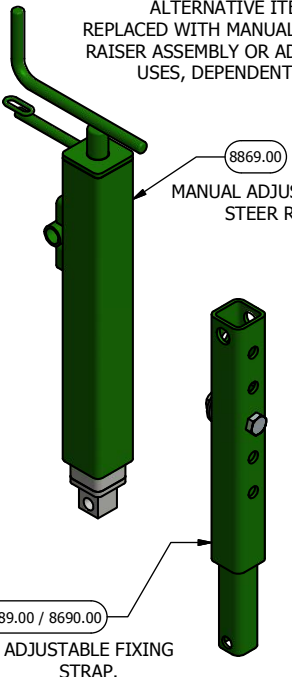
| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|-----------------------|-----------------|-----------------|
| 1 | M12 THIN WASHER BZP | 7877 | 2 |
| 2 | M12 NYLOC NUT | 1017 | 1 |
| 3 | WHEEL BEARING | 9511 | 1 |
| 4 | BEARING SHIELDS | 9776 | 2 |
| 5 | 50MM WHEEL | 9708 | 1 |
| 6 | WHEEL SPACER | 9733 | 2 |
| 7 | M12x90 BOLT BZP | 1178 | 1 |
| 8 | 50MM WHEEL LEG ASS'Y | 9732 | 1 |
| 9 | 100MM WHEEL LEG ASS'Y | 9734 | 1 |
| 10 | M12x150 BOLT BZP | 6395 | 1 |
| 11 | WHEEL SPACER | 9749 | 2 |
| 12 | 100MM WHEEL | 9731 | 1 |



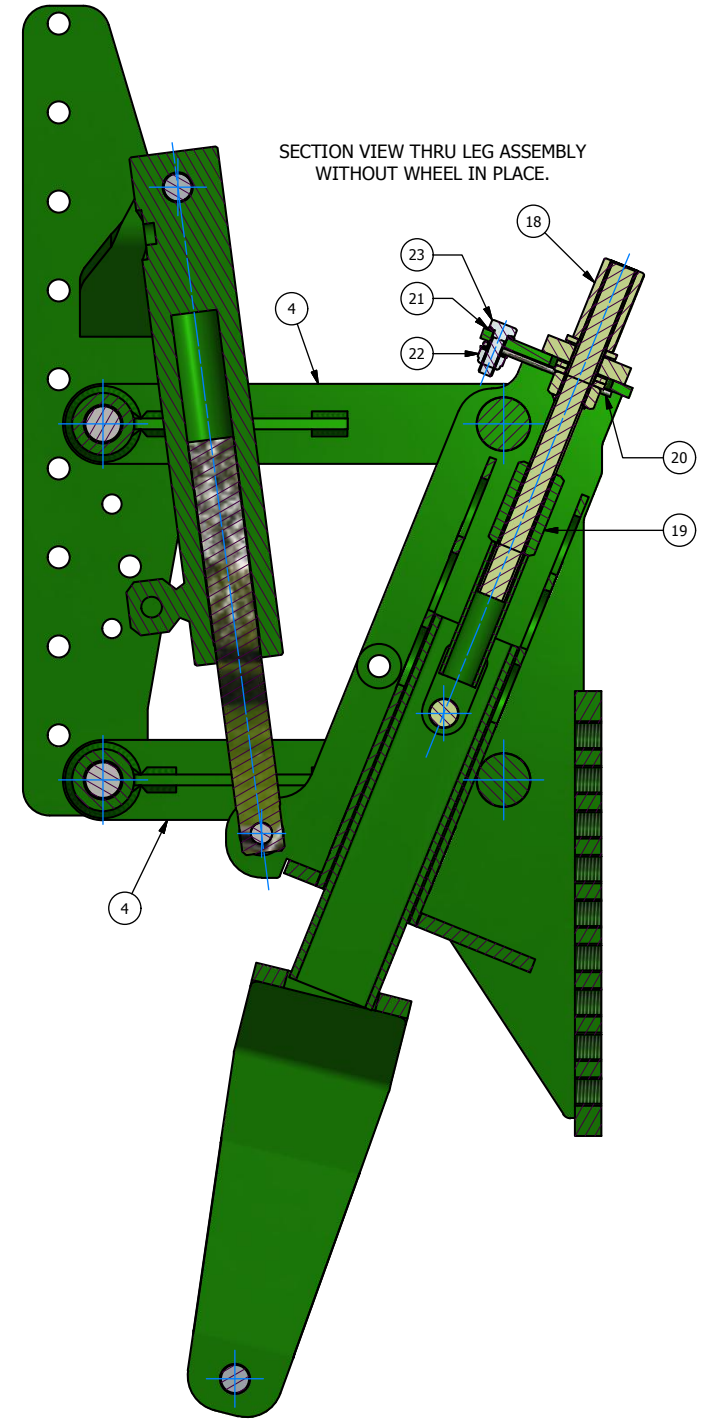
CLAMP PARTS ARE IDENTICAL TO THOSE IN THE DISK STEER ASSEMBLY.

19

ALTERNATIVE ITEMS - RAM CAN BE REPLACED WITH MANUAL ADJUSTABLE DISC STEER RAISER ASSEMBLY OR ADJUSTABLE FIXING STRAP. USES, DEPENDENT ON APPLICATIONS.

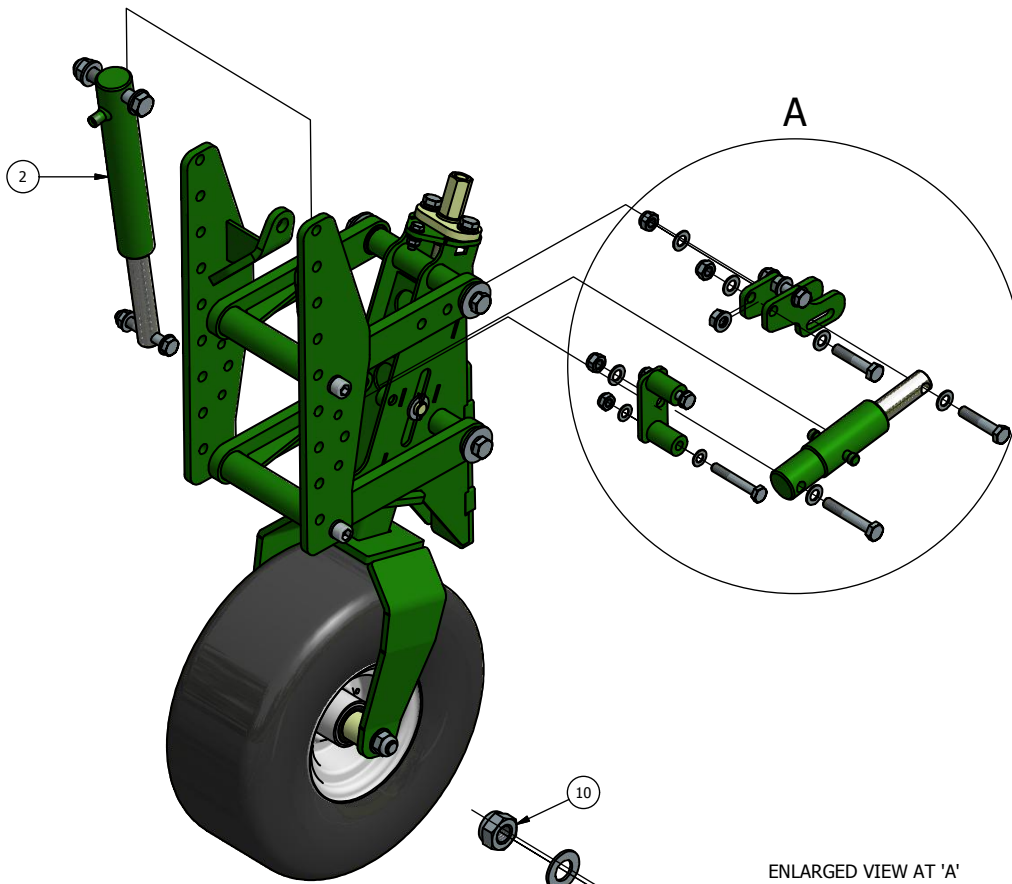
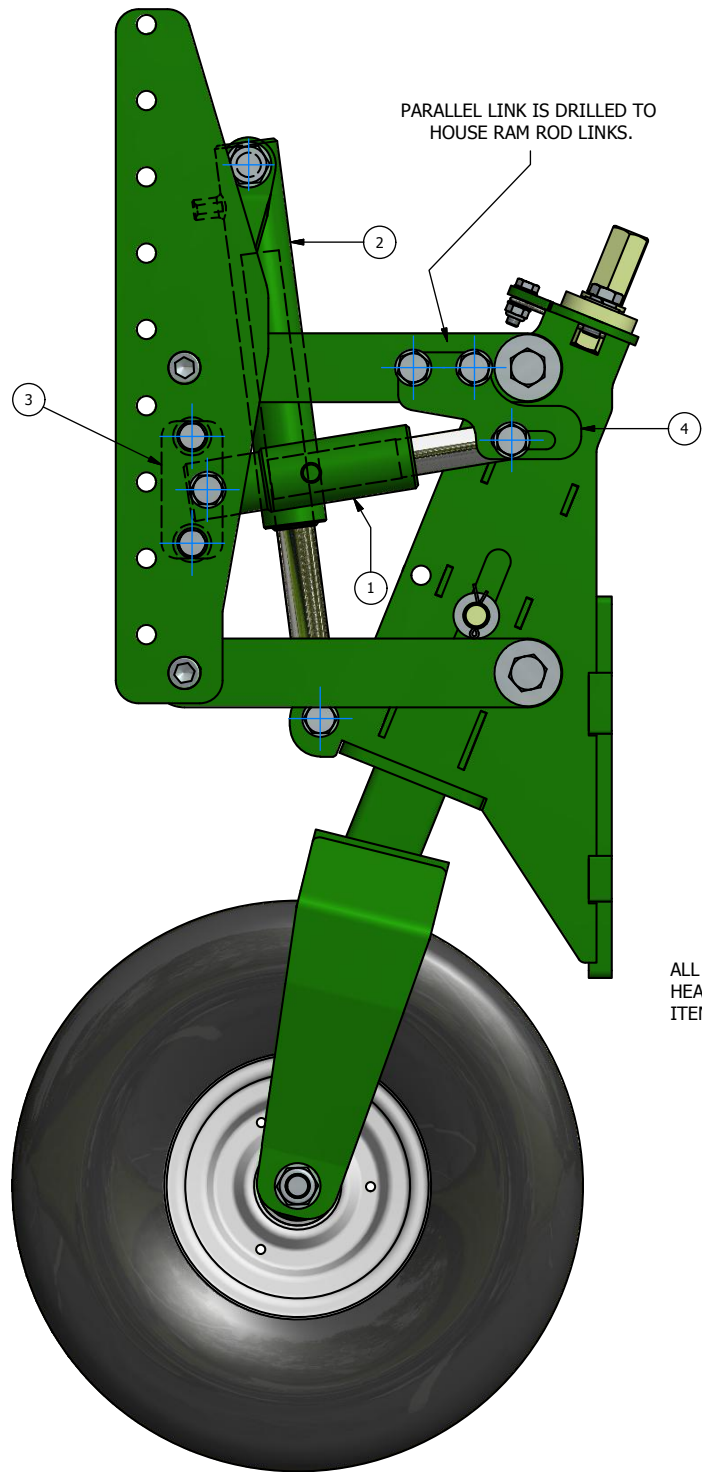


9592.00 AXLE BUSH SUPPLIED AS PART OF THE WHEEL ASSEMBLY.

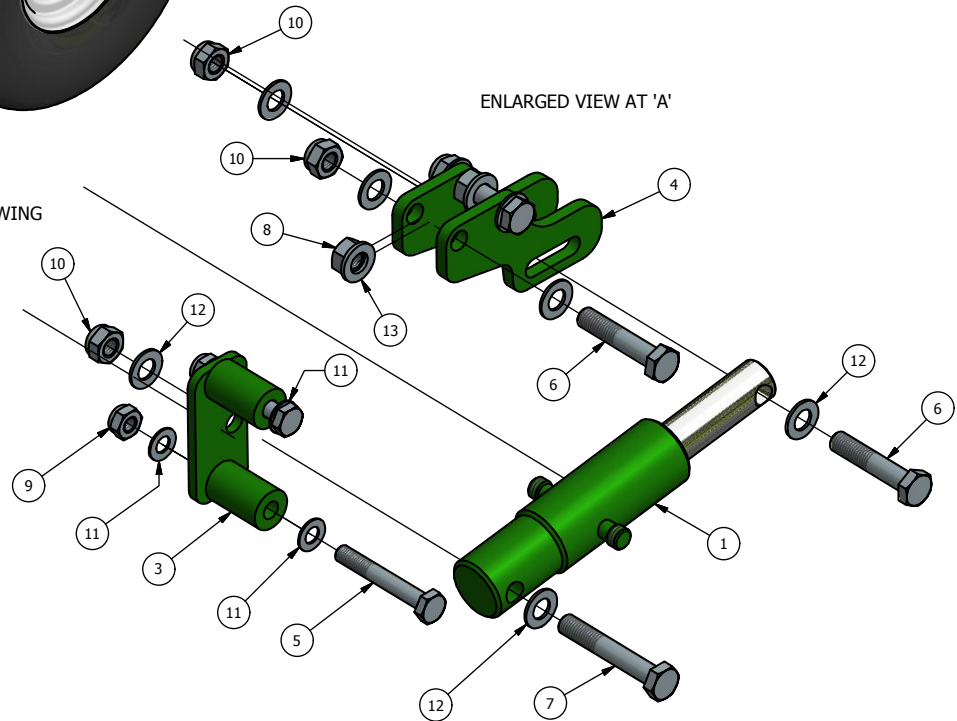


ROBOCROP HEAVY DUTY ADJUSTABLE WHEEL LEG

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|---------------------------------|-----------------|-----------------|
| 1 | HEAVY DUTY WHEEL FRAME | 9570 | 1 |
| 2 | L/H ADJUSTABLE MOUNTING BRACKET | 9710 | 1 |
| 3 | R/H ADJUSTABLE MOUNTING BRACKET | 9711 | 1 |
| 4 | PARALLEL STEER LINK | 8591 | 2 |
| 5 | STEER BUSH SHAFT | 8597 | 2 |
| 6 | BUSH | 8185 | 8 |
| 7 | M14x55 BOLT BZP | 8603 | 4 |
| 8 | M14 SPRING WASHER BZP | 8604 | 8 |
| 9 | M14x45 SOCKET CAP SCREW BZP | | 4 |
| 10 | HYDRAULIC RAM | 8596 | 1 |
| | SEAL KIT PART No. - 9042 | | |
| 11 | M16x100 BOLT BZP | 5667 | 1 |
| 12 | M16 NYLOC NUT BZP | 1030 | 2 |
| 13 | M1 FLAT WASHER BZP | 7878 | 3 |
| 14 | WHEEL LEG | 9571 | 1 |
| 15 | STEER BUSH | 8598 | 4 |
| 16 | M14 LARGE OD WASHER BZP | | 4 |
| 17 | WHEEL ASSEMBLY | 9591 – 9592 as | 1 |
| 18 | WHEEL ADJSUTER SCREW | 9023 | 1 |
| 19 | WHEEL ADJUSTER NUT | 9024 | 1 |
| 20 | ANTIROTATION SPRING | 9029 | 1 |
| 21 | M8 THIN WASHER BZP | | 2 |
| 22 | M8 NYLOC NUT BZP | | 1 |
| 23 | M8x25 BOLT BZP | | 1 |
| 24 | PIN | 9572 | 1 |
| 25 | M12 THIN WASHER BZP | 7877 | 4 |
| 26 | M12 SPRING WASHER BZP | | 2 |
| 27 | M12x25 BOLT BZP | | 2 |
| 28 | M16 THIN WASHER BZP | | 2 |
| 29 | M16x200 BOLT BZP | | 1 |
| 30 | M12 NYLOC NUT BZP | 1017 | 1 |
| 31 | M12x80 BOLT BZP | | 1 |
| 32 | SPLIT PIN | | 1 |



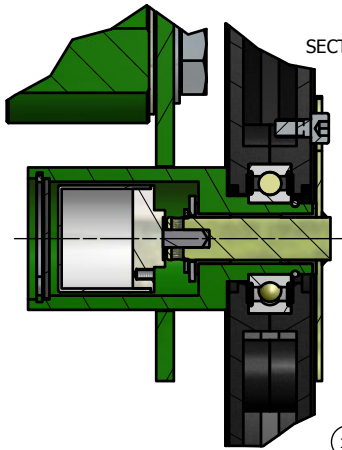
ALL PARTS ARE IDENTICAL TO THAT OF THE HEAVY DUTY WHEEL LEG, WITH THE FOLLOWING ITEMS SHOWN.



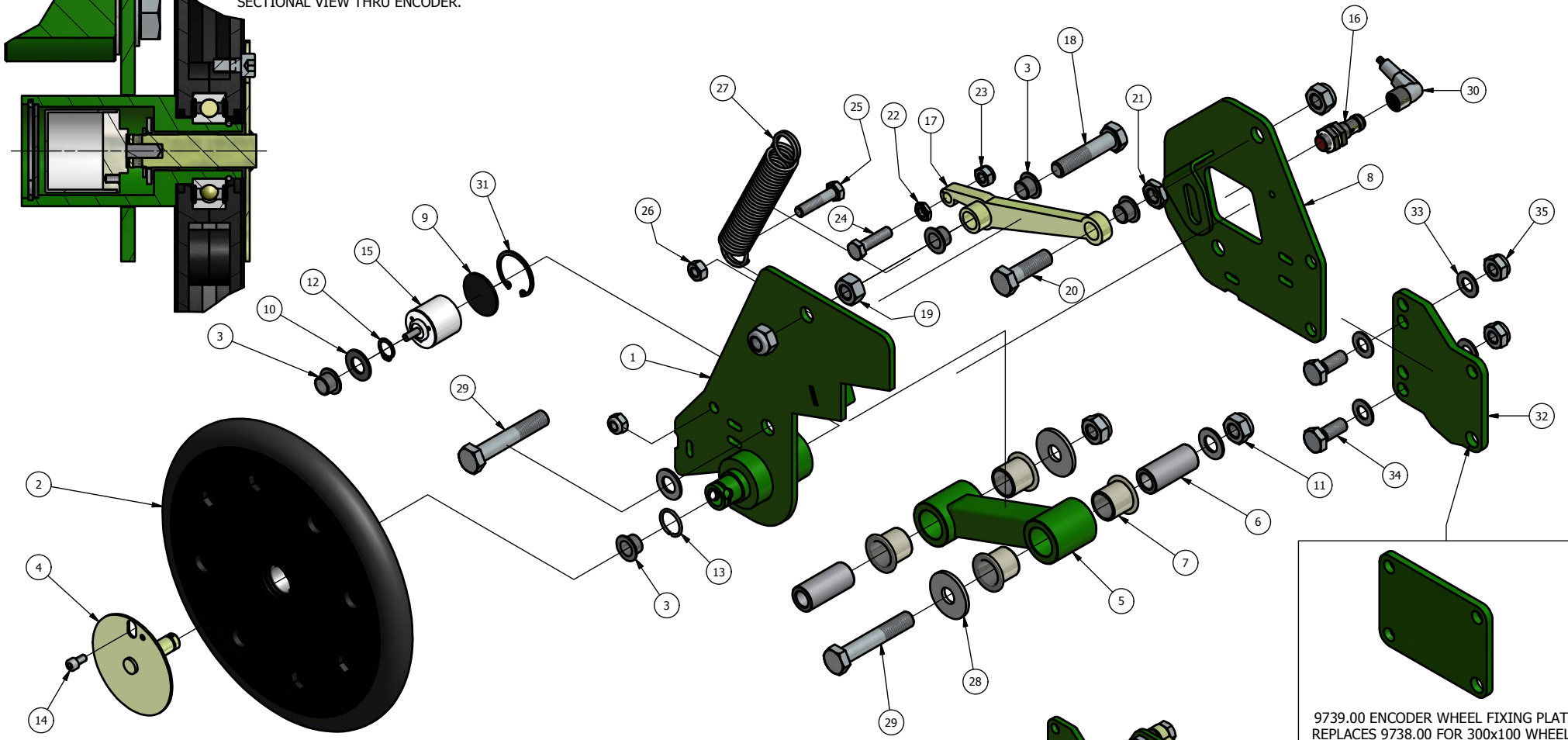
ROBOCROP HEAVY DUTY ADJUSTABLE WHEEL LEG
WITH RETRACTING RAM

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|---|-----------------|-----------------|
| 1 | HYDRAULIC RAM SEAL KIT PART No. - 9666 | 7330 | 1 |
| 2 | HYDRAULIC RAM | 9596 | 1 |
| 3 | RAM BRACKET | 9713 | 1 |
| 4 | RAM – ROD LINK | 9714 | 1 |
| 5 | M10x70 BOLT BZP | | 2 |
| 6 | M12x60 BOLT BZP | | 3 |
| 7 | M12x75 BOLT BZP | | 1 |
| 8 | M12 NUT BZP | | 2 |
| 9 | M10 NYLOC NUT BZP | | 2 |
| 10 | M12 NYLOC NUT BZP | 1017 | 4 |
| 11 | M10 THIN WASHER BZP | | 4 |
| 12 | M12 THIN WASHER BZP | 7877 | 7 |
| 13 | M12 FLAT WASHER BZP | | 2 |

SECTIONAL VIEW THRU ENCODER.

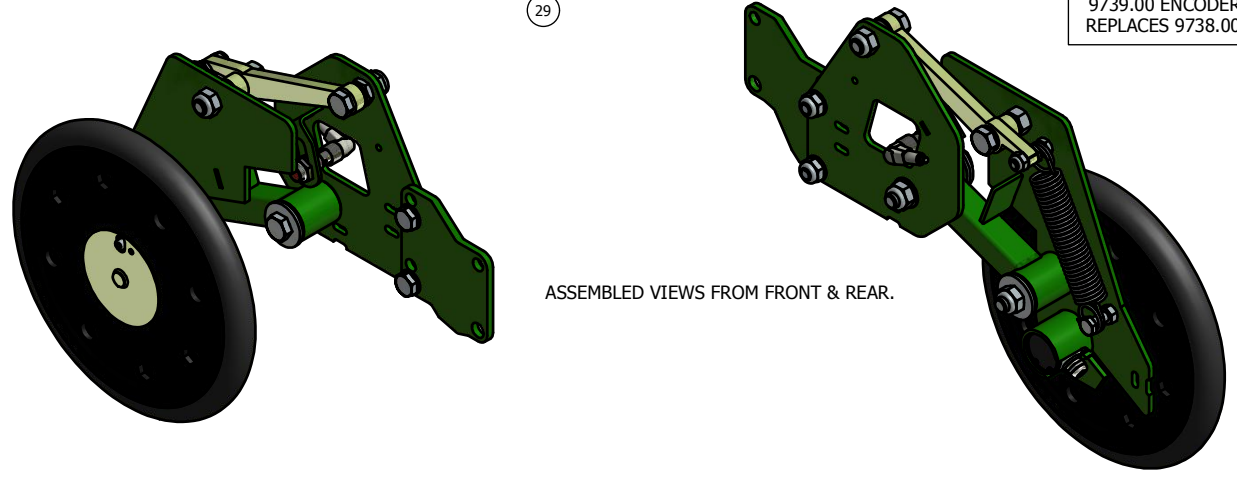


23



9739.00 ENCODER WHEEL FIXING PLATE,
REPLACES 9738.00 FOR 300x100 WHEELS.

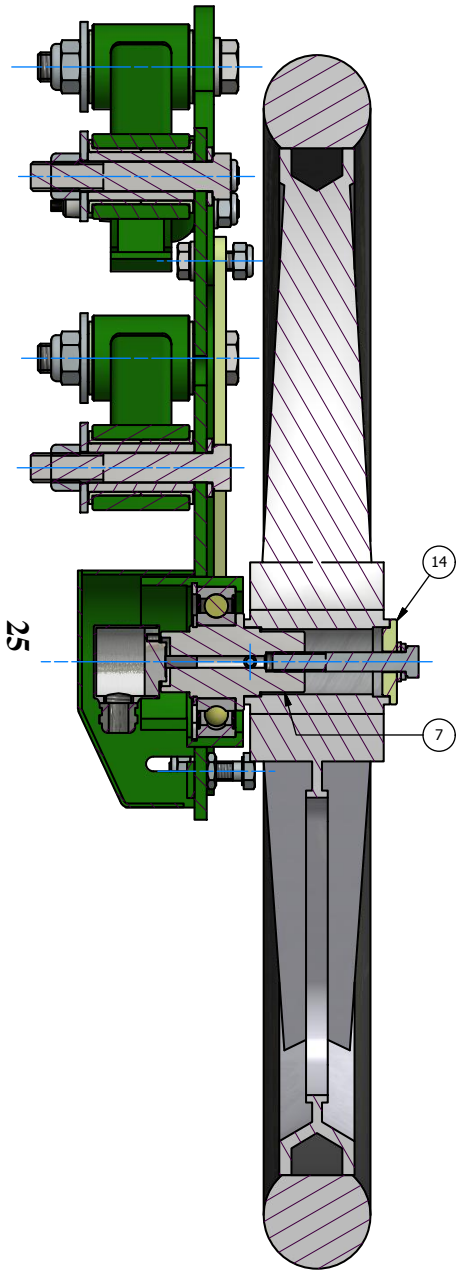
ASSEMBLED VIEWS FROM FRONT & REAR.



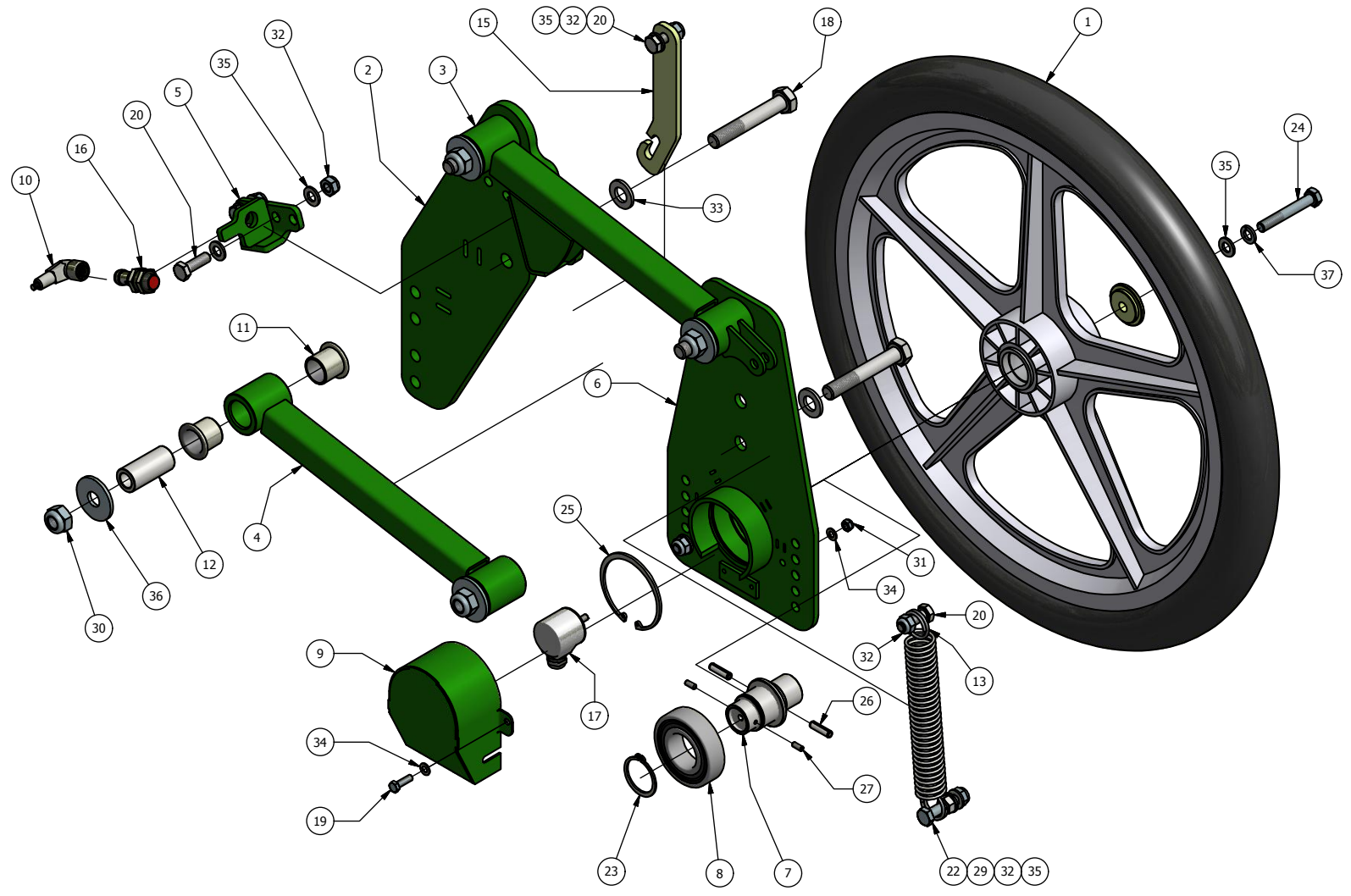
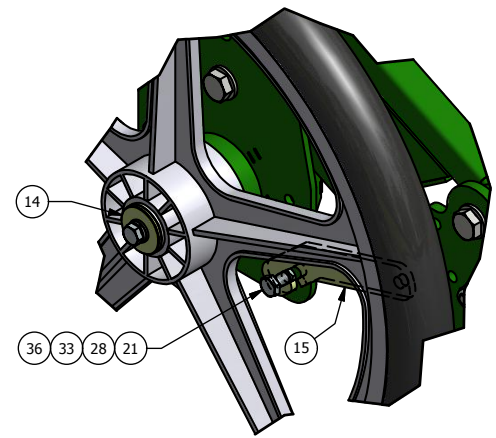
ROBOCROP ENCODER WHEEL ASSEMBLY

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|------------------------------------|-----------------|-----------------|
| 1 | ENCODER WHEEL MOUNT / AXEL BRACKET | 9385 | 1 |
| 2 | ENCODER WHEEL WITH BEARING | 9034 | 1 |
| 3 | BUSH | 9036 | 5 |
| 4 | ENCODER WHEEL DRIVE | 9039 | 1 |
| 5 | PARALLEL LINK | 8645 | 1 |
| 6 | PARALLEL LINK AXEL | 8646 | 2 |
| 7 | BUSH | 8185 | 4 |
| 8 | PARALLEL LINK MOUNT | 9737 | 1 |
| 9 | ENCODER WHEEL CAP | 9043 | 1 |
| 10 | M12 THIN WASHER BZP | 7877 | 3 |
| 11 | M12 NYLOC NUT BZP | 1017 | 4 |
| 12 | 13MM EXTERNAL CIRCLIP | | 1 |
| 13 | SNAP RING | | 1 |
| 14 | M5x10 SOCKET CAP SCREW BZP | 8682 | 1 |
| 15 | ENCODER | 9347 | 1 |
| 16 | NPN PROXIMITY SENSOR | 10121 | 1 |
| 17 | PARALLEL LINK | 9397 | 1 |
| 18 | M12x55 BOLT BZP | 6696 | 1 |
| 19 | M12 NUT BZP | 1019 | 1 |
| 20 | M12x40 BOLT BZP | 1159 | 1 |
| 21 | M12 HALF NUT BZP | 5833 | 1 |
| 22 | M8 HALF NUT BZP | | 1 |
| 23 | M8 NYLOC NUT BZP | 1042 | 2 |
| 24 | M8x30 BOLT BZP | 1153 | 1 |
| 25 | M8x35 BOLT BZP | 7463 | 1 |
| 26 | M8 NUT BZP | 1185 | 1 |
| 27 | DOUBLE LOOP TENSION SPRING | 6595 | 1 |
| 28 | LARGE OD FLAT WASHER 12x37x3 BZP | | 2 |
| 29 | M12x70 BOLT BZP | 5666 | 2 |
| 30 | PROXIMITY CABLE WITH 90° PLUG 5M | 10122 | 1 |
| 31 | 34MM INTERNAL CIRCLIP | 9097 | 1 |
| 32 | ENCODER WHEEL FIXING PLATE | 9738 | 1 |
| 33 | M10 THIN WASHER BZP | 7876 | 4 |
| 34 | M10x25 BOLT BZP | 1120 | 2 |
| 35 | M10 NYLOC NUT BZP | 1024 | 2 |

SECTION THRU WHEEL SHAFT.

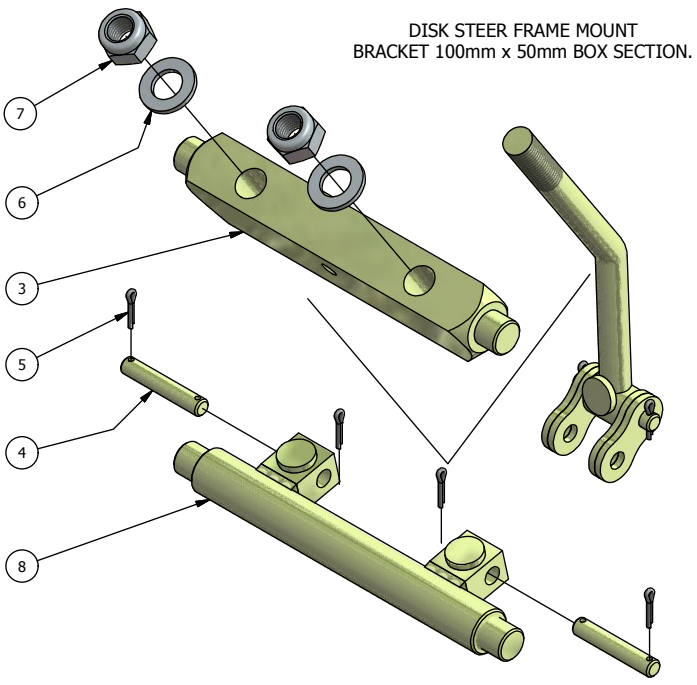


REAR VIEW SHOWING LOCK UP CATCH IN PLACE - LOCKED POSITION

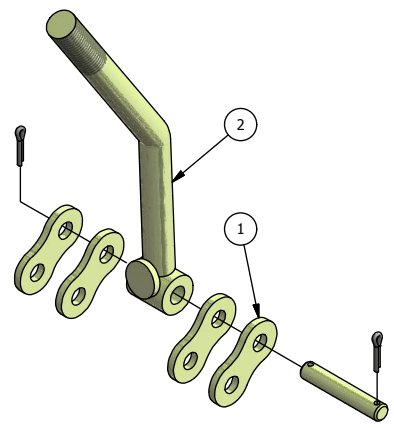


ROBOCROP LARGE ENCODER WHEEL ASSEMBLY

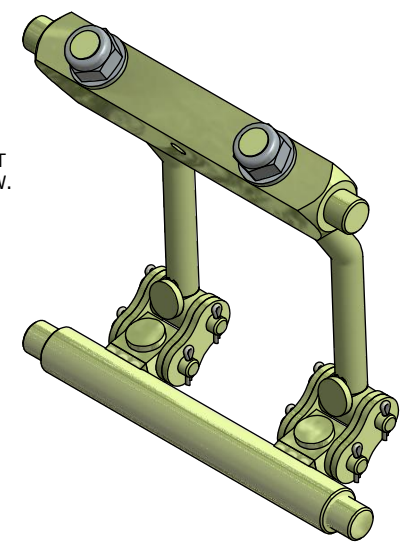
| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|----------------------------------|-----------------|-----------------|
| 1 | ENCODER WHEEL | 8647 | 1 |
| 2 | MOUNT BRACKET FOR ENCODER WHEEL | 9991 | 1 |
| 3 | UPPER PARALLEL LINK | 9857 | 1 |
| 4 | LOWER PARALLEL LINK | 9858 | 1 |
| 5 | LIFT SENSOR BRACKET | 9856 | 1 |
| 6 | BEARING HOUSING | 9859 | 1 |
| 7 | ENCODER WHEEL SHAFT | 9860 | 1 |
| 8 | SEALED BEARING 6206-2RS1 | | 1 |
| 9 | ENCODER WHEEL GUARD | 9862 | 1 |
| 10 | PROXIMITY CABLE WITH 90° PLUG 5M | 10122 | 1 |
| 11 | BUSH | 8185 | 8 |
| 12 | AXLE FOR PARALLEL LINKS | 8646 | 4 |
| 13 | SPRING | 6595 | 1 |
| 14 | ENCODER WHEEL CAP | 9861 | 1 |
| 15 | LOCK UP CATCH | 9864 | 1 |
| 16 | NPN PROXIMITY SENSOR | 10121 | 1 |
| 17 | ENCODER | 9347 | 1 |
| 18 | M12x75 BOLT BZP | | 4 |
| 19 | M5x16 BOLT BZP | | 2 |
| 20 | M8x25 BOLT BZP | | 4 |
| 21 | M8x30 BOLT BZP | | 1 |
| 22 | M8x40 BOLT BZP | | 1 |
| 23 | 30MM EXTERNAL CIRCLIP | | 1 |
| 24 | M8x55 BOLT | | 1 |
| 25 | 62MM INTERNAL CIRCLIP | | 1 |
| 26 | 5MM SPRING PIN | | 2 |
| 27 | M4x10 SET SCREW BZP | | 2 |
| 28 | M8 HALF NUT BZP | | 1 |
| 29 | M8 NUT BZP | | 1 |
| 30 | M12 NYLOC NUT BZP | | 4 |
| 31 | M5 NYLOC NUT BZP | | 2 |
| 32 | M8 NYLOC NUT BZP | | 6 |
| 33 | M12 WASHER BZP | | 4 |
| 34 | M5 WASHER BZP | | 4 |
| 35 | M8 WASHER BZP | | 9 |
| 36 | M12x37ODx3 LARGE OD WASHER BZP | | 4 |
| 37 | M8 SPRING WASHER BZP | | 1 |



DISK STEER FRAME MOUNT
BRACKET 100mm x 50mm BOX SECTION.

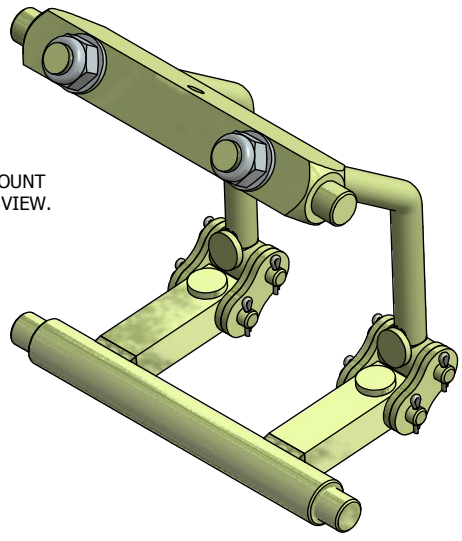


DISK STEER FRAME MOUNT
BRACKET, ASSEMBLED VIEW.

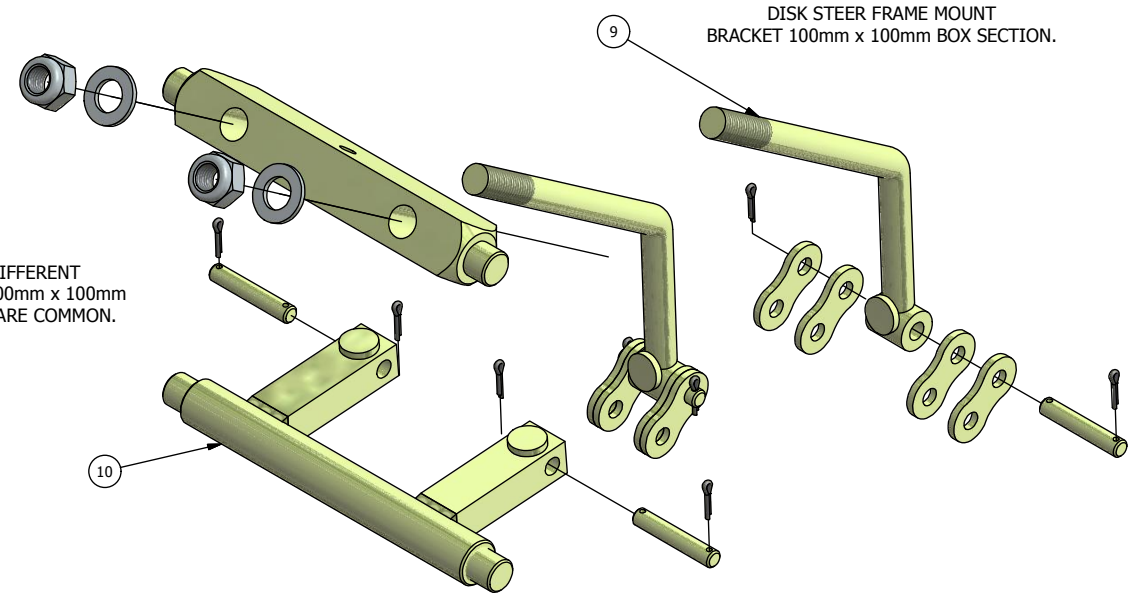


27

DISK STEER FRAME MOUNT
BRACKET, ASSEMBLED VIEW.



ITEMS 9 & 10 ARE THE DIFFERENT
PARTS REQUIRED FOR 100mm x 100mm
BOX. ALL OTHER PARTS ARE COMMON.



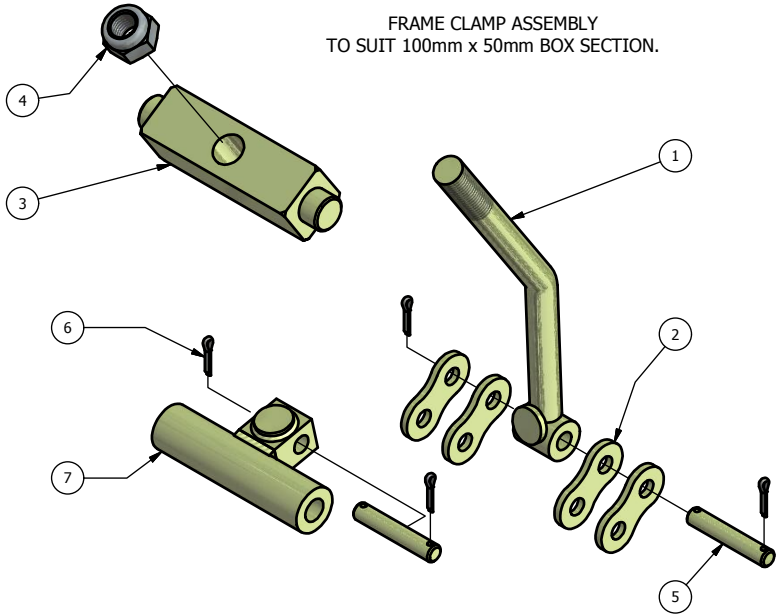
DISK STEER FRAME MOUNT
BRACKET 100mm x 100mm BOX SECTION.

10

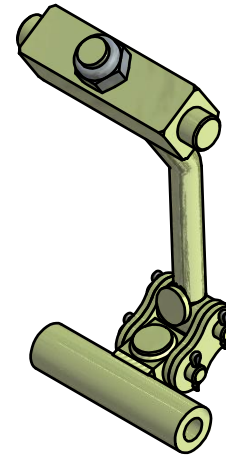
ROBOCROP DISK STEER FRAME MOUNT BRACKET

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|----------------------------|-----------------|-----------------|
| 1 | CHAIN LINK PLATE | 7725 | 8 |
| 2 | CLAMP BOLT (100x50 BOX) | 7538 | 2 |
| 3 | BOLT SWIVEL | 10834 | 1 |
| 4 | LINK PIN | 7726 | 4 |
| 5 | LINK SPLIT PIN | 7727 | 8 |
| 6 | M16 THIN WASHER BZP | 1035 | 2 |
| 7 | M16 NYLOC NUT BZP | 1030 | 2 |
| 8 | CLAMP LINK (100x50 BOX) | 8600 | 1 |
| 9 | CLAMP BOLT (100x100 BOX) | 7536 | 2 |
| 10 | CLAMP LINK (100x100 BOX) | 8601 | 1 |

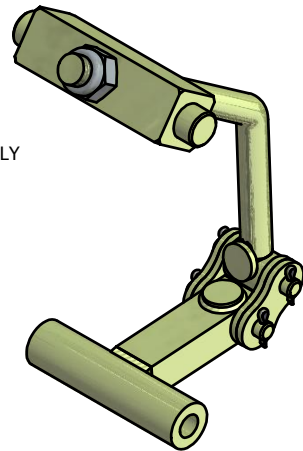
FRAME CLAMP ASSEMBLY
TO SUIT 100mm x 50mm BOX SECTION.



FRAME CLAMP ASSEMBLY
ASSEMBLED VIEW.

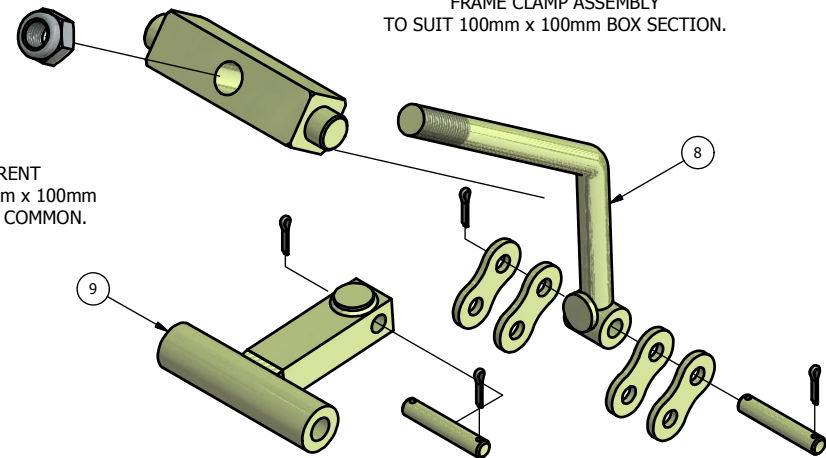


FRAME CLAMP ASSEMBLY
ASSEMBLED VIEW.



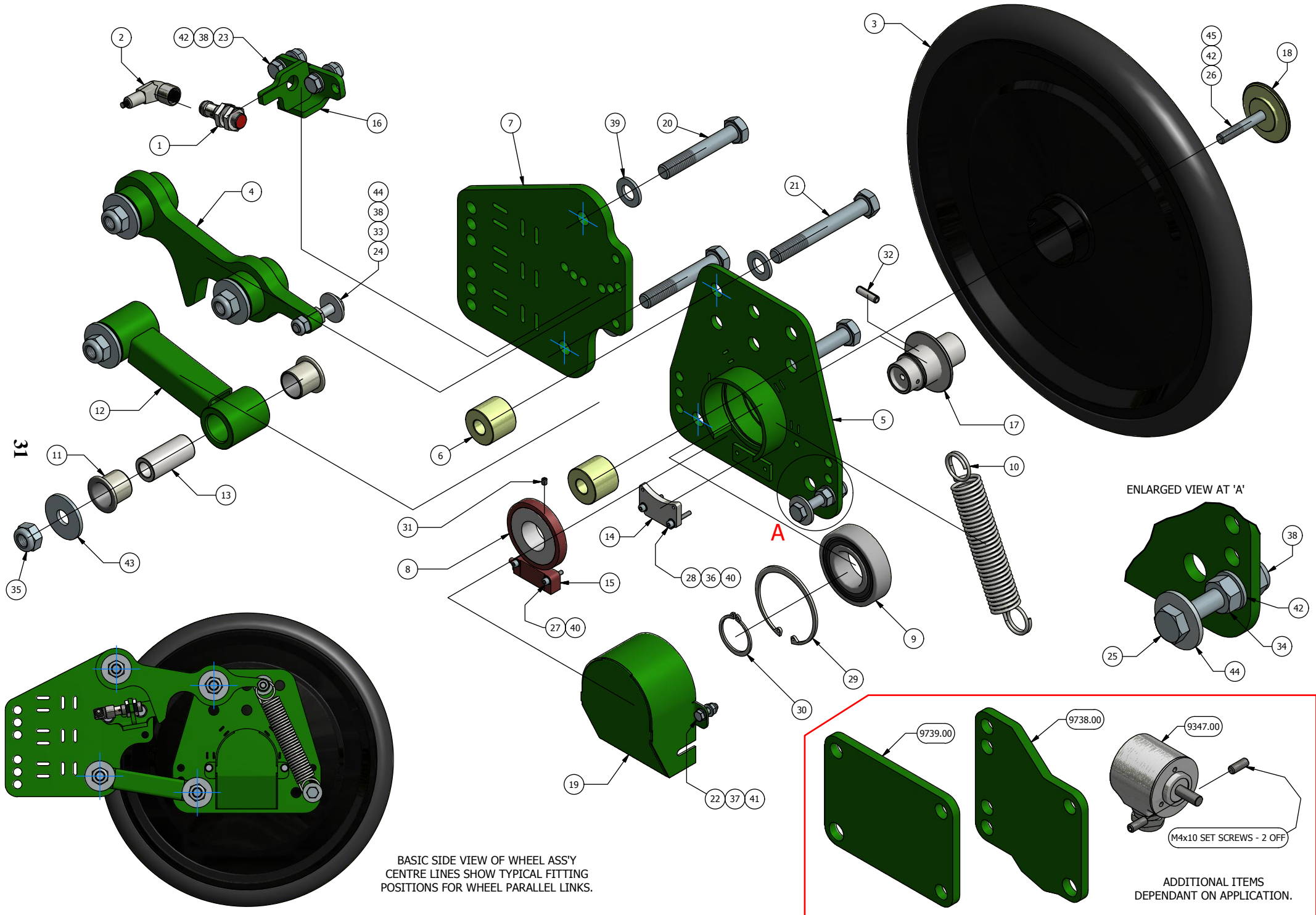
FRAME CLAMP ASSEMBLY
TO SUIT 100mm x 100mm BOX SECTION.

ITEMS 8 & 9 ARE THE DIFFERENT
PARTS REQUIRED FOR 100mm x 100mm
BOX. ALL OTHER PARTS ARE COMMON.



ROBOCROP WHEEL ASSEMBLY FRAME CLAMPS

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|--------------------------|-----------------|-----------------|
| 1 | CLAMP BOLT (100x50 BOX) | 7538 | 1 |
| 2 | CHAIN LINK PLATE | 7725 | 4 |
| 3 | BOLT SWIVEL | 7540 | 1 |
| 4 | M16 NYLOC NUT BZP | 1030 | 1 |
| 5 | LINK PIN | 7726 | 2 |
| 6 | LINK SPLIT PIN | 7727 | 4 |
| 7 | CLAMP LINK (100x50 BOX) | 7539 | 1 |
| 8 | CLAMP BOLT (100x100 BOX) | 7536 | 1 |
| 9 | CLAMP LINK (100x100 BOX) | 7537 | 1 |



BASIC SIDE VIEW OF WHEEL ASSY
CENTRE LINES SHOW TYPICAL FITTING
POSITIONS FOR WHEEL PARALLEL LINKS.

ENLARGED VIEW AT 'A'

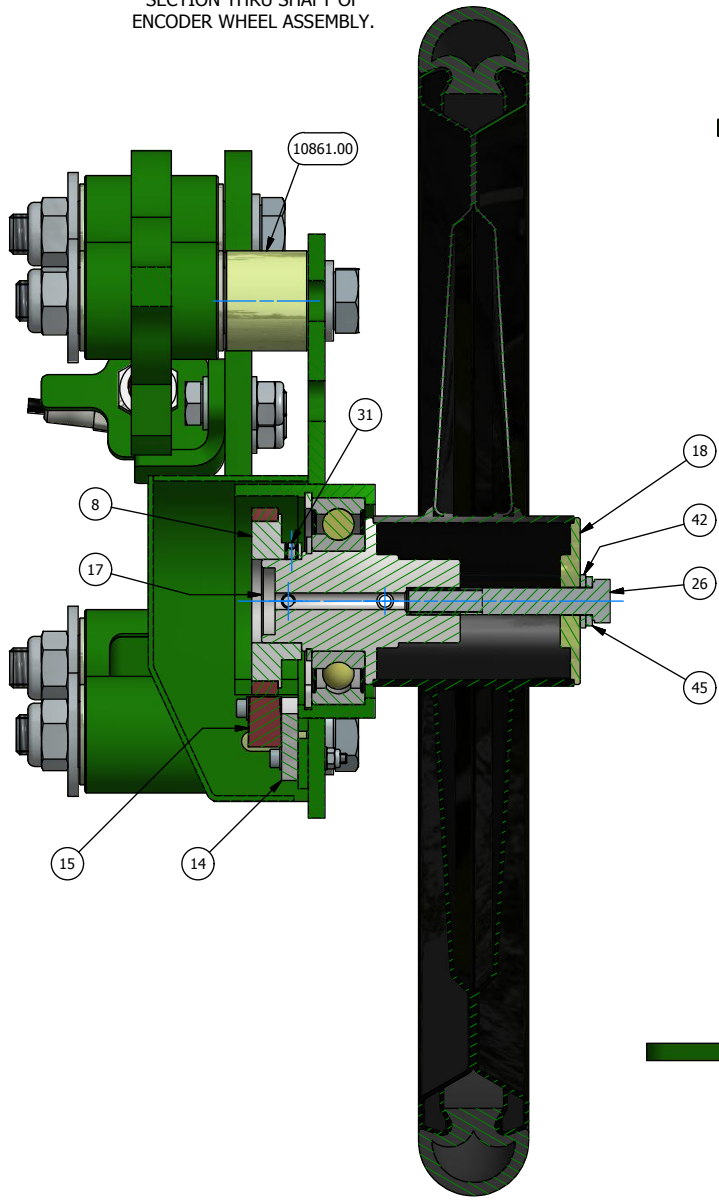
ADDITIONAL ITEMS
DEPENDANT ON APPLICATION.

31

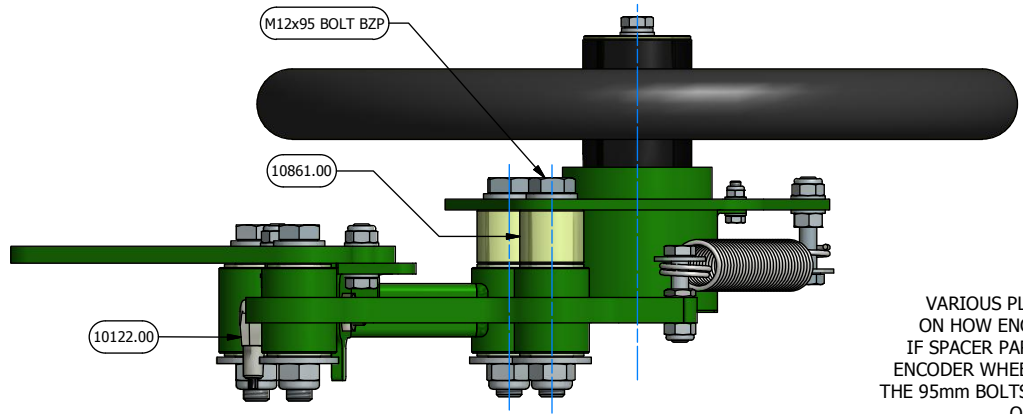
A

9739.00 9738.00 9347.00
M4x10 SET SCREWS - 2 OFF

SECTION THRU SHAFT OF
ENCODER WHEEL ASSEMBLY.



32

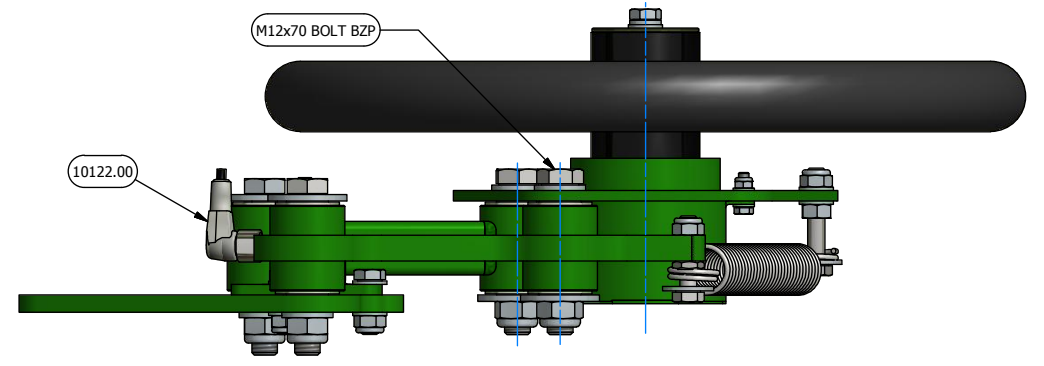


M12x95 BOLT BZP

10861.00

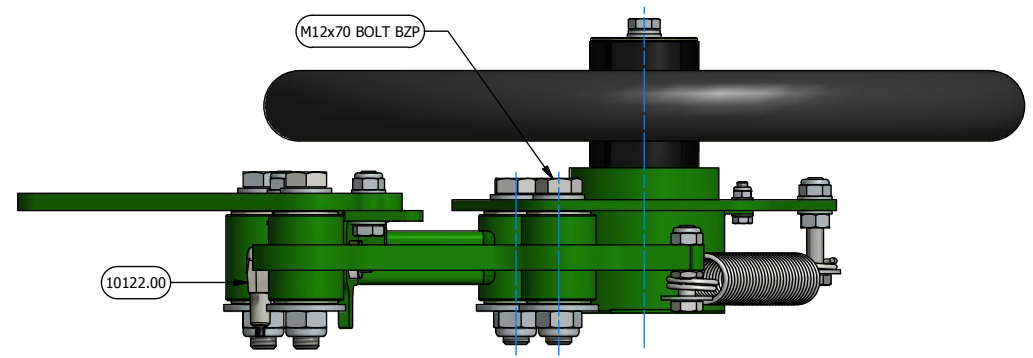
10122.00

VARIOUS PLAN VIEWS - DEPENDANT
ON HOW ENCODER WHEEL IS FITTED.
IF SPACER PART 10861.00 IS NOT USED,
ENCODER WHEEL IS FITTED AS PER BELOW.
THE 95mm BOLTS ARE REPLACED WITH BOLTS
OF 70mm LONG.
PROXIMITY SENSOR PLUG CAN ALSO BE FITTED
EITHER SIDE OF MOUNTING PLATE.



M12x70 BOLT BZP

10122.00



M12x70 BOLT BZP

10122.00

ROBOCROP 360 - ENCODER WHEEL ASSEMBLY

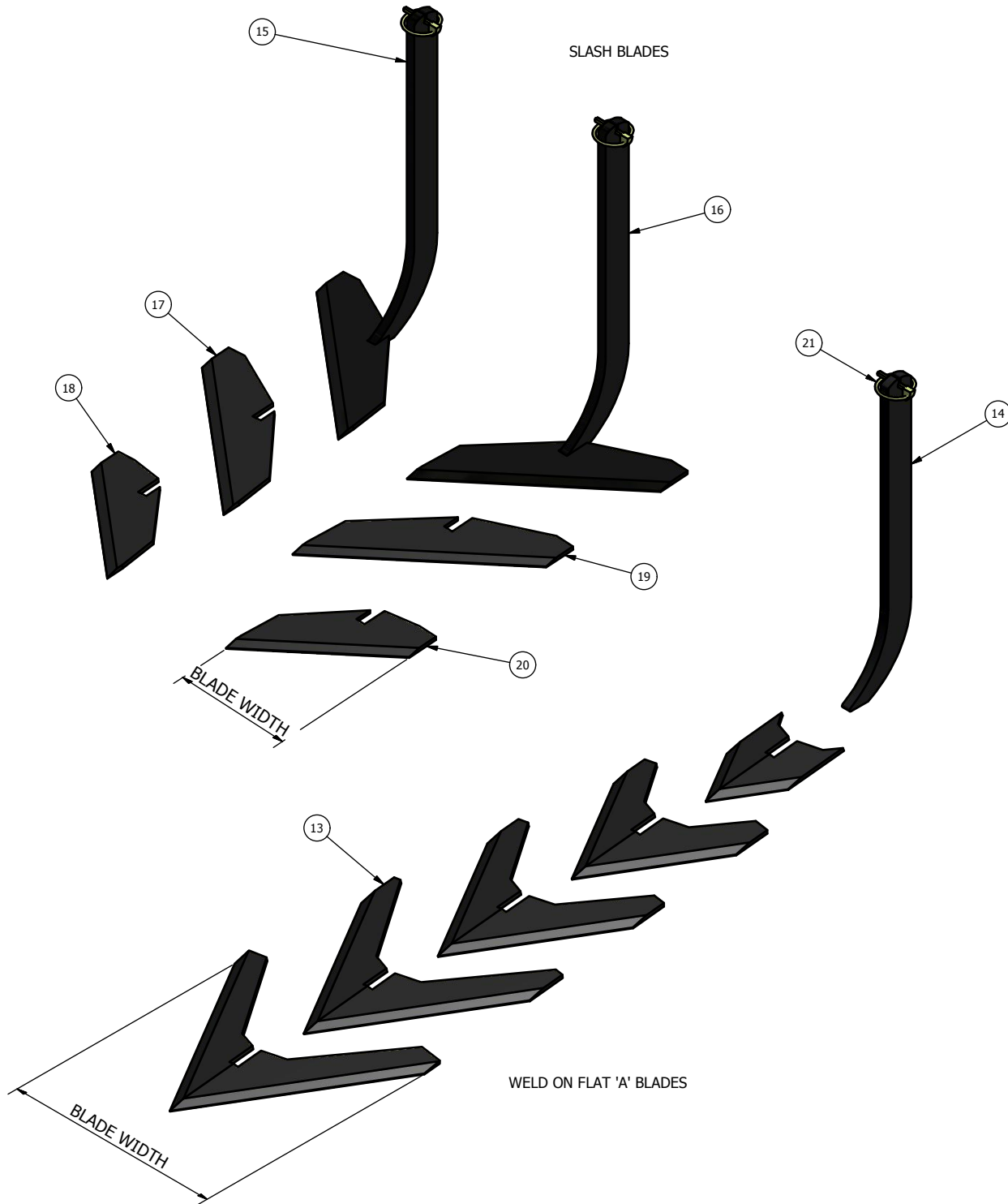
| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|------------------------------------|-----------------|-----------------|
| 1 | NPN PROXIMITY SENSOR, CW NUTS | 10121 | 1 |
| 2 | PROXIMITY SENSOR PLUG, CW 5M CABLE | 10122 | 1 |
| 3 | ENCODER WHEEL, 360 DIA | 10846 | 1 |
| 4 | PARALLEL LINK | 10847 | 1 |
| 5 | BEARING HOUSING BRACKET | 10849 | 1 |
| 6 | SPACER | 10861 | 2 |
| 7 | MOUNTING BRACKET | 10848 | 1 |
| 8 | MAGNET RING | 10964 | 1 |
| 9 | SEALED BEARING | | 1 |
| 10 | TENSION SPRING | 6595 | 1 |
| 11 | STEEL BUSH | 8185 | 8 |
| 12 | PARALLEL LINK | 8645 | 1 |
| 13 | AXEL FOR PARALLEL LINKS | 8646 | 2 |
| 14 | MAGNET RING SENSOR MOUNT | 9802 | 1 |
| 15 | MAGNET RING SENSOR | 9807 | 1 |
| 16 | LIFT SENSOR BRACKET | 9856 | 1 |
| 17 | SHAFT FOR ENCODER WHEEL | 9860 | 1 |
| 18 | ENCODER WHEEL CAP | 9861 | 1 |
| 19 | ENCODER WHEEL GUARD | 9862 | 1 |
| 20 | M12x75 BOLT BZP | | 2 |
| 21 | M12x95 BOLT BZP | | 2 |
| 22 | M5x16 BOLT BZP | | 2 |
| 23 | M8x25 BOLT BZP | | 2 |
| 24 | M8x40 BOLT BZP | | 1 |
| 25 | M8x45 BOLT BZP | | 1 |
| 26 | M8x55 BOLT BZP | | 1 |
| 27 | M3x16 SOCKET HEAD CAP SCREW BZP | | 2 |
| 28 | M3x20 SOCKET HEAD CAP SCREW BZP | | 2 |
| 29 | INTERNAL CIRCLIP – 62mm | | 1 |
| 30 | EXTERNAL CIRCLIP – 30mm | | 1 |
| 31 | M4x5 SET SCREW | | 1 |
| 32 | 5x20 SPRING PIN | | 1 |
| 33 | M8 HALF NUT BZP | | 1 |
| 34 | M8 NUT BZP | | 1 |
| 35 | M12 NYLOC NUT BZP | | 4 |
| 36 | M3 NYLOC NUT BZP | | 2 |
| 37 | M5 NYLOC NUT BZP | | 2 |
| 38 | M8 NYLOC NUT BZP | | 4 |
| 39 | M12 WASHER BZP | | 4 |
| 40 | M3 WASHER BZP | | 6 |
| 41 | M5 WASHER BZP | | 4 |
| 42 | M8 WASHER BZP | | 7 |
| 43 | M12 LARGE O-D WASHER BZP | | 4 |
| 44 | M8 LARGE O-D WASHER BZP | | 2 |
| 45 | M8 SPRING WASHER BZP | | 1 |

CULTIVATING PARTS SECTION

CONTENTS

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| ROBOCROP IN ROW TINE FRAME ASSEMBLY | 9-10 |
| ROBOCROP CROP PROTECTION SHIELDS | 11-12 |
| ROBOCROP IN ROW DISC SIZES & DISC LEGS | 13-14 |

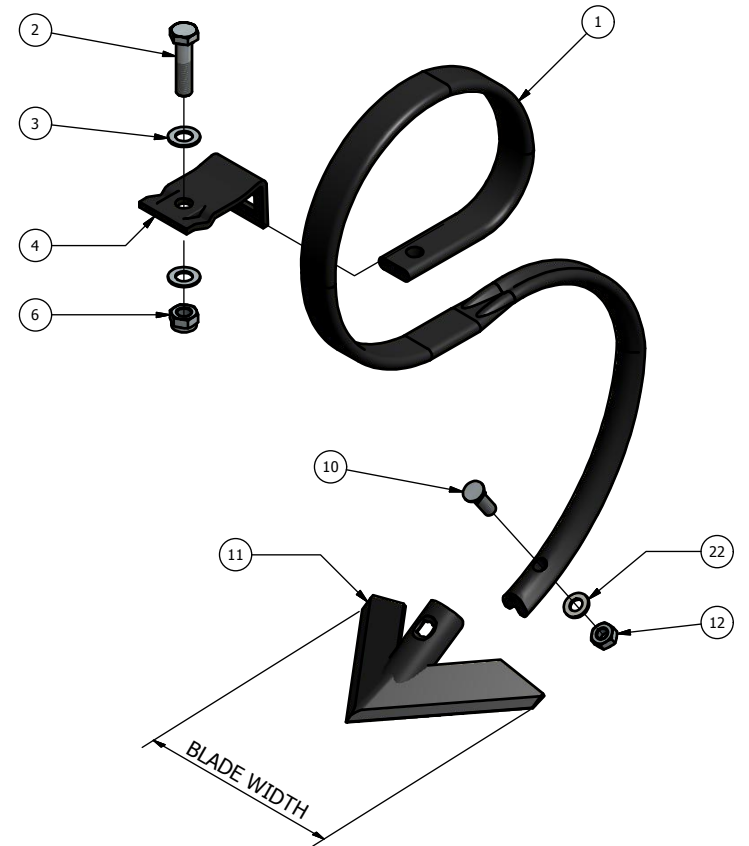
SLASH BLADES



ADJUSTABLE SPRING TINE ASSEMBLY



SPRING TINE & 'A' SHARE ASSEMBLY

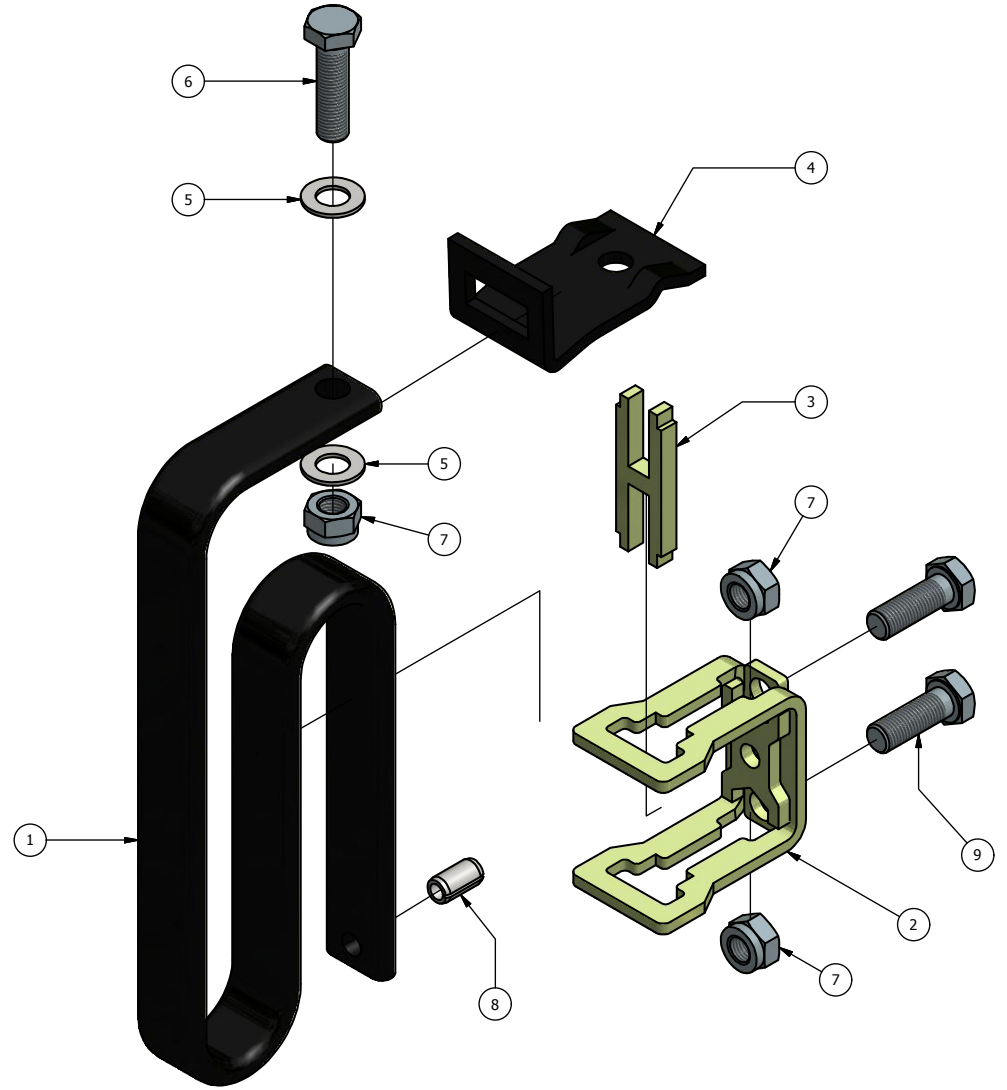
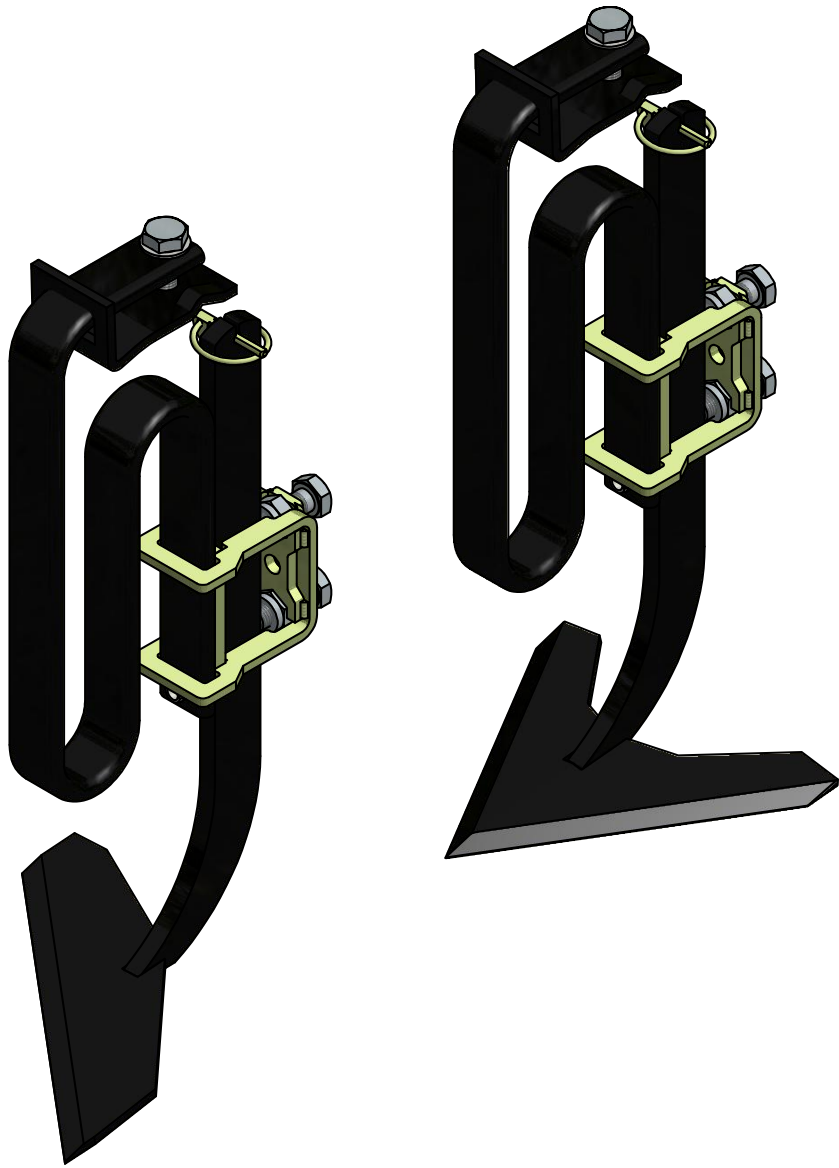


**ROBOCROP SPRING TINES, 'A' BLADES, SLASH BLADES
& WELD ON BLADES**

QUANTITY NOT SHOWN AS LIST IS FOR REFERENCE PURPOSES ONLY

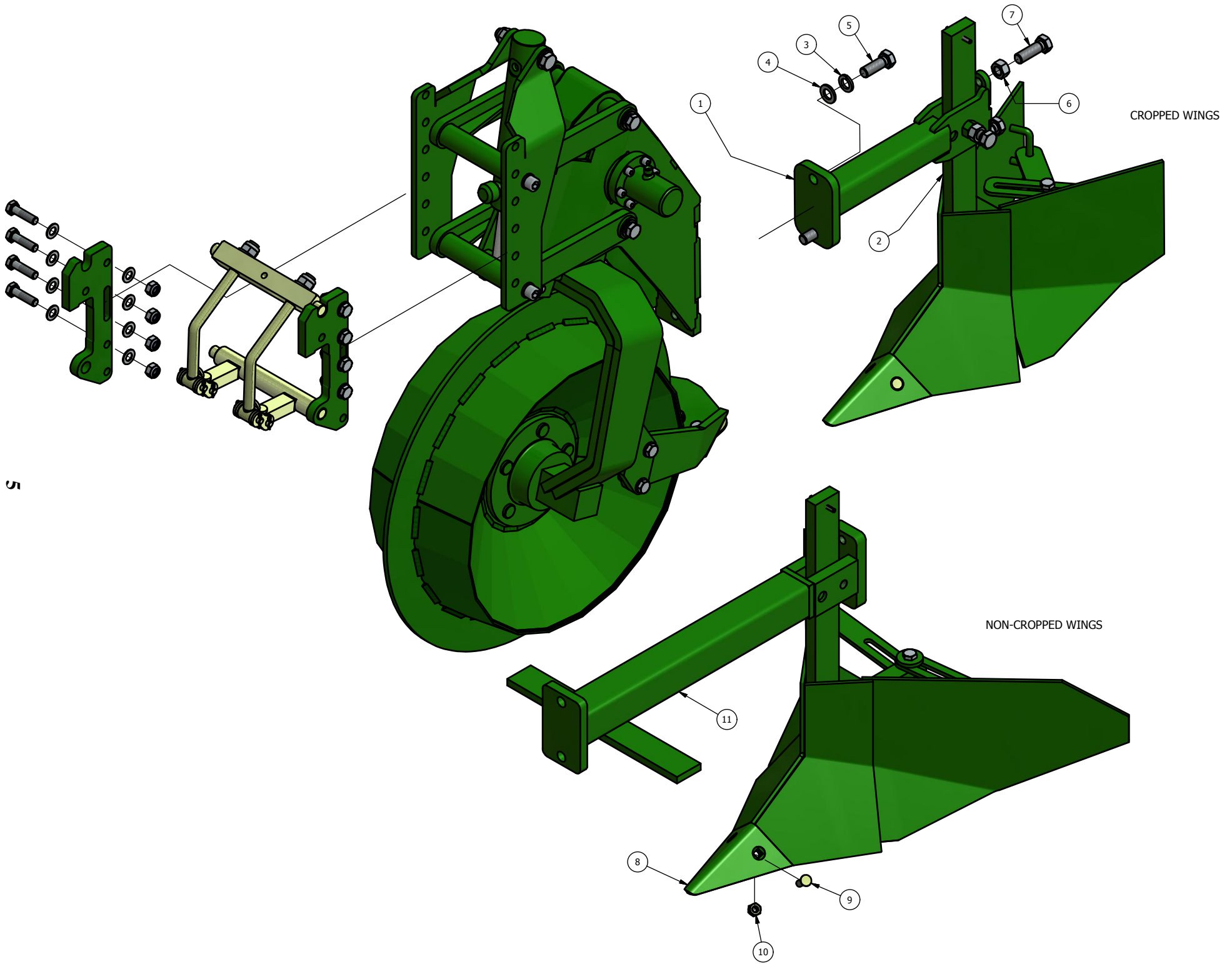
| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|----------|------------------------------------|----------|----------|
| 1 | SPRING TINE | 5989 | |
| 2 | M12x50 FINE THREAD BOLT BZP | 7709 | |
| 3 | M12 THIN WASHER BZP | 7877 | |
| 4 | SPRING TINE CLAMP | 5992 | |
| 5 | ADJUSTABLE SPRING TINE CLAMP | 7515 | |
| 6 | M12 FINE THREAD NYLOC NUT BZP | 7487 | |
| 7 | ADJUSTABLE SPRING TINE | 7412 | |
| 8 | M12x40 FINE THREAD BOLT BZP | 8368 | |
| 9 | ADJUSTABLE SPRING TINE NUT BLOCK | 8365 | |
| 10 | M10 SHARE BOLT | 7812 | |
| 11 | BOLT ON 'A' SHARES | | |
| | 100MM WIDE BLADE | 6094 | |
| | 125MM WIDE BLADE | 6871 | |
| | 150MM WIDE BLADE | 7813 | |
| | 180MM WIDE BLADE | 5990 | |
| | 200MM WIDE BLADE | 7814 | |
| | 250MM WIDE BLADE | 7815 | |
| 12 | M10 HEX. NUT BZP | 1150 | |
| 13 | WELD ON FLAT 'A' SHARES | | |
| | 100MM WIDE BLADE | 7648 | |
| | 120MM WIDE BLADE | 7905 | |
| | 160MM WIDE BLADE | 7619 | |
| | 180MM WIDE BLADE | 7768 | |
| | 200MM WIDE BLADE | 7741 | |
| | 220MM WIDE BLADE | 7767 | |
| | 250MM WIDE BLADE | 7551 | |
| 14 | BLADE LEG | 7552 | |
| 15 | COMPLETE R/H SLASH BLADE LEG 180MM | 7750 | |
| | COMPLETE R/H SLASH BLADE LEG 130MM | 8093 | |
| 16 | COMPLETE L/H SLASH BLADE LEG 180MM | 7749 | |
| | COMPLETE L/H SLASH BLADE LEG 130MM | 8094 | |
| 17 | WELD ON 180MM R/H SLASH BLADE | 7745 | |
| 18 | WELD ON 130MM R/H SLASH BLADE | 8091 | |
| 19 | WELD ON 180MM L/H SLASH BLADE | 7744 | |
| 20 | WELD ON 130MM L/H SLASH BLADE | 8092 | |
| 21 | RETAINING PIN | 10557 | |
| 22 | M10 FLAT WASHER BZP | | |

3



ROBOCROP COMPACT SPRING TINE ASSEMBLY

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|-----------------------------|-----------------|-----------------|
| 1 | COMPACT SPRING TINE | 9777 | 1 |
| 2 | TINE CLAMP | 10094 | 1 |
| 3 | TINE CLAMP ROCKER BASE | 10095 | 1 |
| 4 | S-TINE CLAMP | 5992 | 1 |
| 5 | M12 THIN WASHER BZP | | 2 |
| 6 | M12x45 FINE THREAD BOLT BZP | | 1 |
| 7 | M12x1.5 NYLOC NUT BZP | | 3 |
| 8 | SPRING PIN | | 1 |
| 9 | M12x35 FINE THREAD BOLT BZP | | 2 |

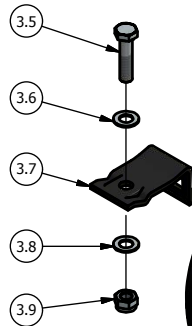
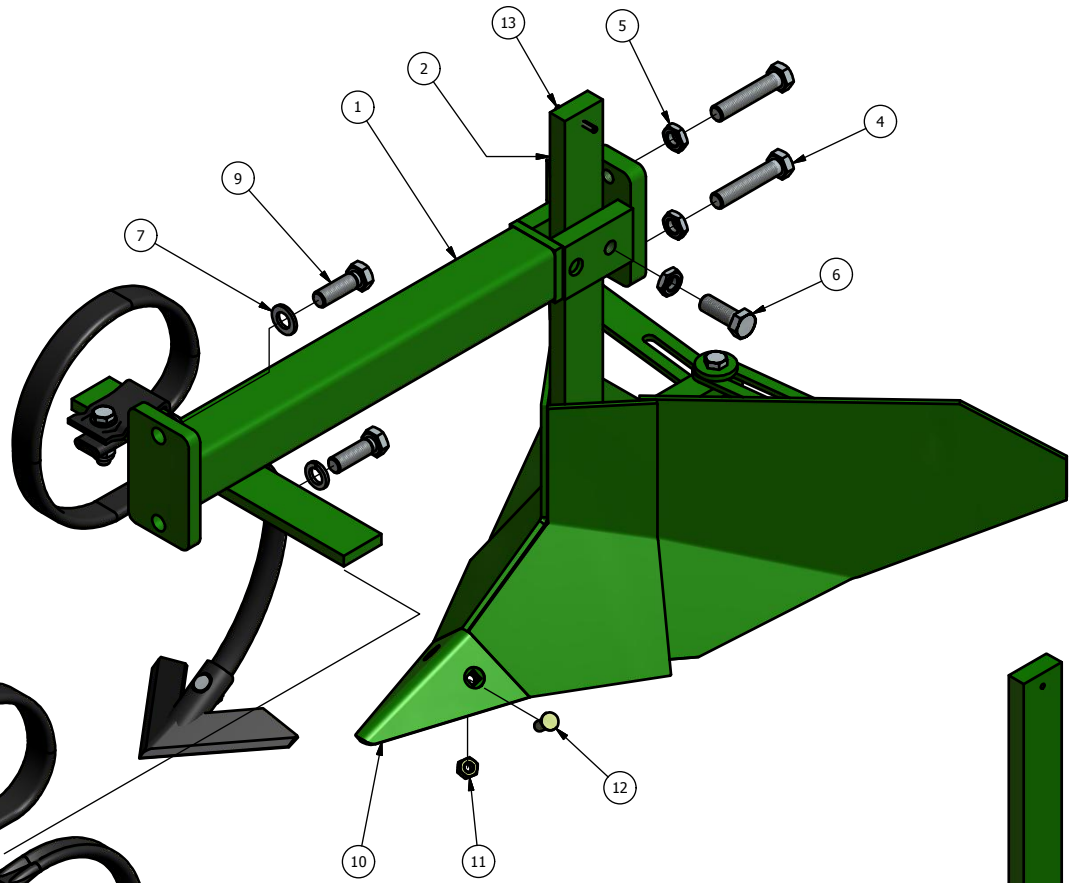
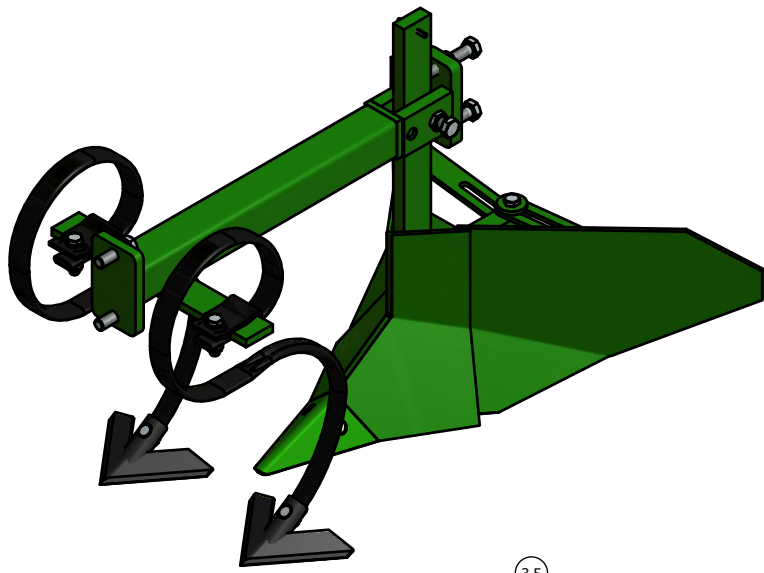


CROPPED WINGS

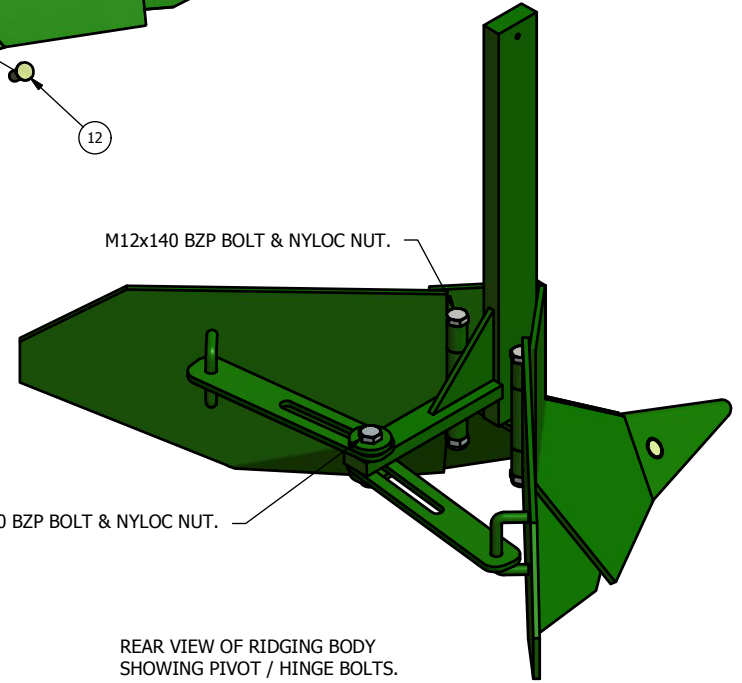
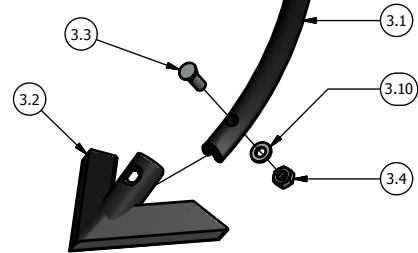
NON-CROPPED WINGS

ROBOCROP RIDGING UNIT OPTIONS

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|------------------------------------|-----------------|-----------------|
| 1 | RIDGING BODY FRAME | 9373 | 1 |
| 2 | RIDGING BODY (CROPPED WINGS) | 9374 | 1 |
| | RIDGING BODY (NON-CROPPED WINGS) | 7467 | |
| 3 | M16 SPRING WASHER BZP | 1119 | 2 |
| 4 | M16 FLAT WASHER BZP | 7878 | 2 |
| 5 | M16x45 BOLT BZP | 5664 | 2 |
| 6 | M16 NUT BZP | 1015 | 3 |
| 7 | M16x50 BOLT BZP | 9126 | 3 |
| 8 | RIDGING BODY POINT | 7670 | 1 |
| 9 | M10x25 SHARE BOLT | 7812 | 2 |
| 10 | M10 HEX NUT | 1150 | 2 |
| 11 | RIDGING BODY FRAME | 7351 | 1 |



7
SPRING TINE AND A-SHARE ASSEMBLY



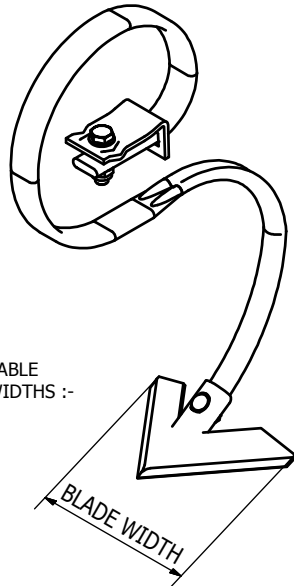
M12x140 BZP BOLT & NYLOC NUT.

M12x50 BZP BOLT & NYLOC NUT.

REAR VIEW OF RIDGING BODY
SHOWING PIVOT / HINGE BOLTS.

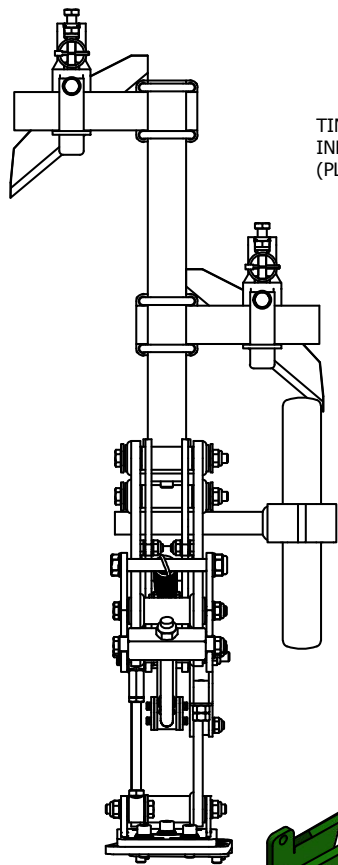
A-SHARES ARE AVAILABLE
IN VARIOUS BLADE WIDTHS :-

| | |
|---------|-------|
| 6094.00 | 100mm |
| 6871.00 | 125mm |
| 7813.00 | 150mm |
| 5990.00 | 180mm |
| 7814.00 | 200mm |
| 7815.00 | 250mm |

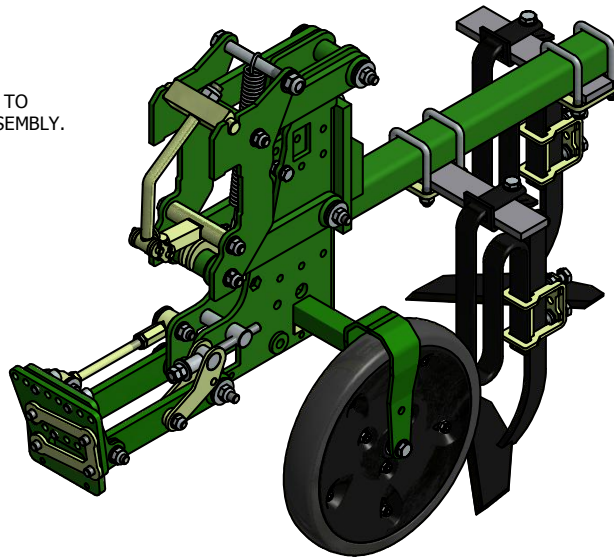


ROBOCROP SPRING TINE “A” SHARES
& RIDGING UNIT

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|--|--|-----------------|-----------------|
| 1 | RI DGING BODY FRAME | 7351 | 1 |
| 2 | RIDGING BODY | 7467 | 1 |
| ITEMS 3.1 TO 3.9 AS FOLLOWS :- | | | |
| QUANTITIES ARE APPLICABLE TO ONE SPRING TINE ASSEMBLY | | | |
| 3.1 | SPRING TINE | 5989 | 1 |
| 3.2 | A-SHARE (SEE DRAWING FOR PART NUMBERS) | | 1 |
| 3.3 | M10 SHARE BOLT | 7812 | 1 |
| 3.4 | M10 HEX . NUT BZP | 1150 | 1 |
| 3.5 | M12x50 FINE THREAD BOLT BZP | 7709 | 1 |
| 3.6 | M12 THIN WASHER BZP | 7877 | 1 |
| 3.7 | SPRING TINE CLAMP | 5992 | 1 |
| 3.8 | M12 THIN WASHER BZP | 7877 | 1 |
| 3.9 | M12 FINE THREAD NYLOC NUT BZP | 7487 | 1 |
| 3.19 | M10 FLAT WASHER | | 1 |
| 4 | M16x80 BOLT BZP | 8995 | 2 |
| 5 | M16 HEX. HALF NUT BZP | 6865 | 3 |
| 6 | M16x45 BOLT BZP | 5664 | 1 |
| 7 | M16 FLAT WASHER BZP | 7878 | 2 |
| 8 | M16 SPRING WASHER BZP | 1119 | 2 |
| 9 | M16x50 BOLT BZP | 9126 | 2 |
| 10 | RIDGING BODY POINT | 7670 | 1 |
| 11 | M10 HEX. NUT | 1150 | 2 |
| 12 | M10x25 SHARE BOLT | 7812 | 2 |
| 13 | 5MM ROLL PIN | | 1 |

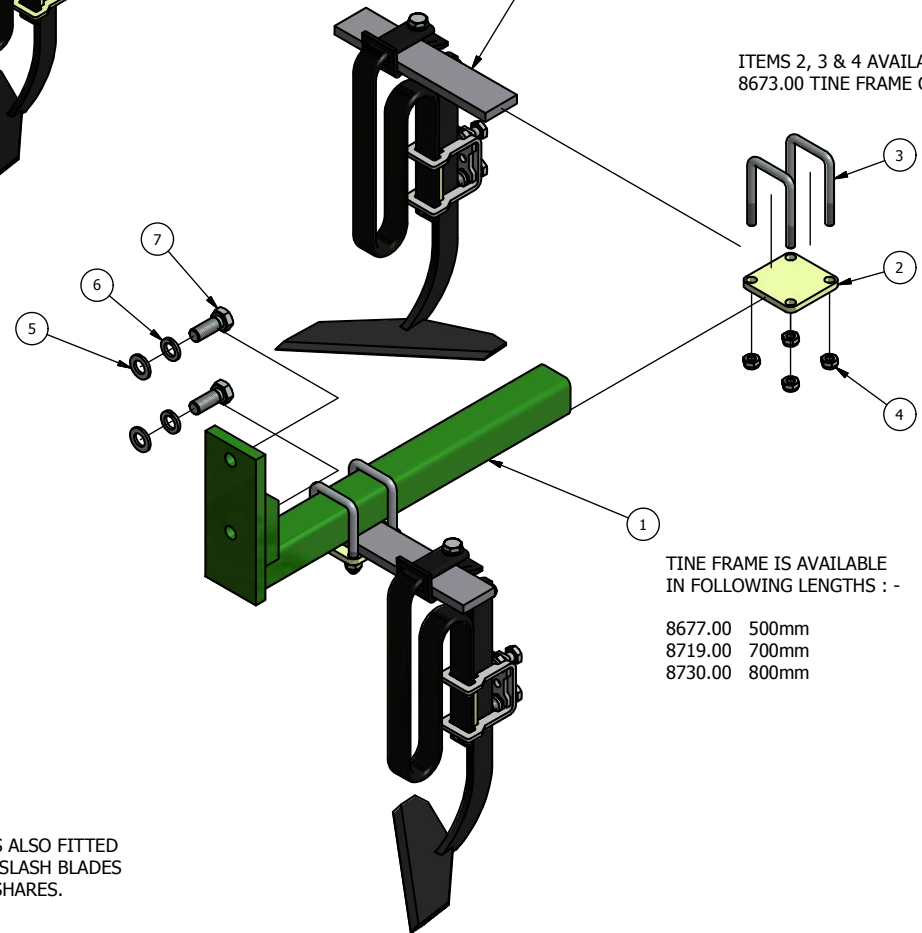


TINE FRAME SHOWN FITTED TO INROW SUPPORT WHEEL ASSEMBLY. (PLAN VIEW ALSO SHOWN).



TINE WINGS ARE MANUFACTURED FOR SPECIFIC ROW WIDTHS. REFER TO GARFORD FARM MACHINERY LTD WITH MACHINE SERIAL NUMBER.

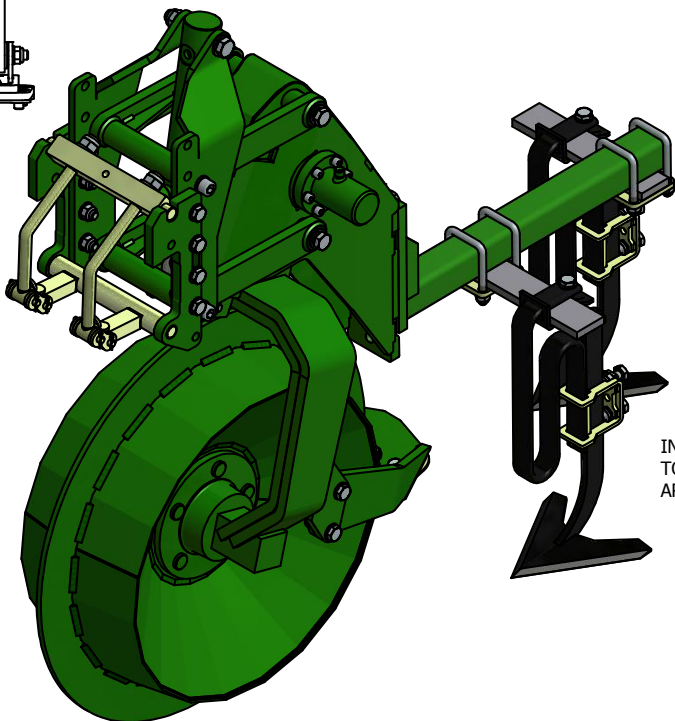
ITEMS 2, 3 & 4 AVAILABLE AS 8673.00 TINE FRAME CLAMP.



TINE FRAME IS AVAILABLE IN FOLLOWING LENGTHS : -

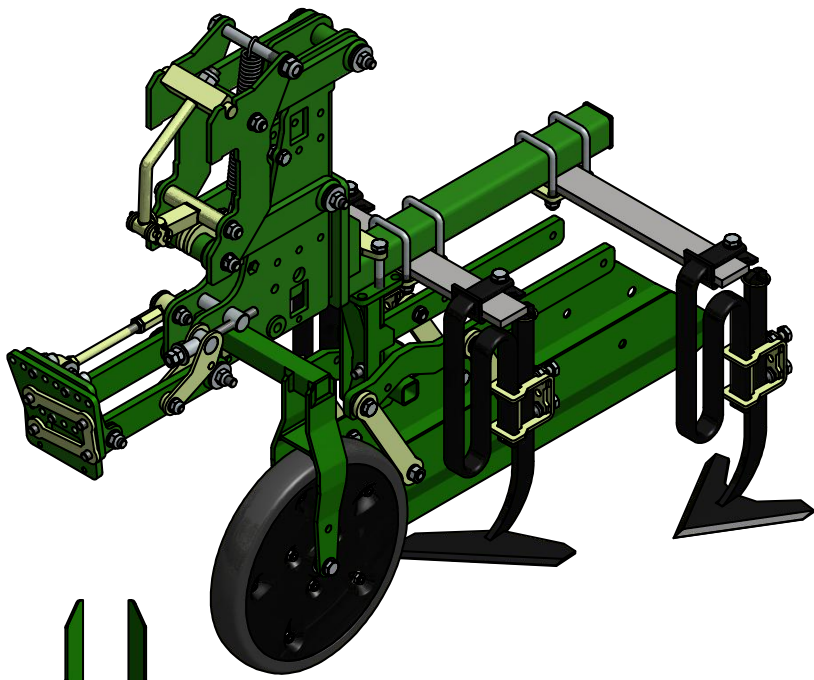
| | |
|---------|-------|
| 8677.00 | 500mm |
| 8719.00 | 700mm |
| 8730.00 | 800mm |

INROW TINE FRAME IS ALSO FITTED TO DISK STEER UNIT. SLASH BLADES ARE REPLACED BY A-SHARES.

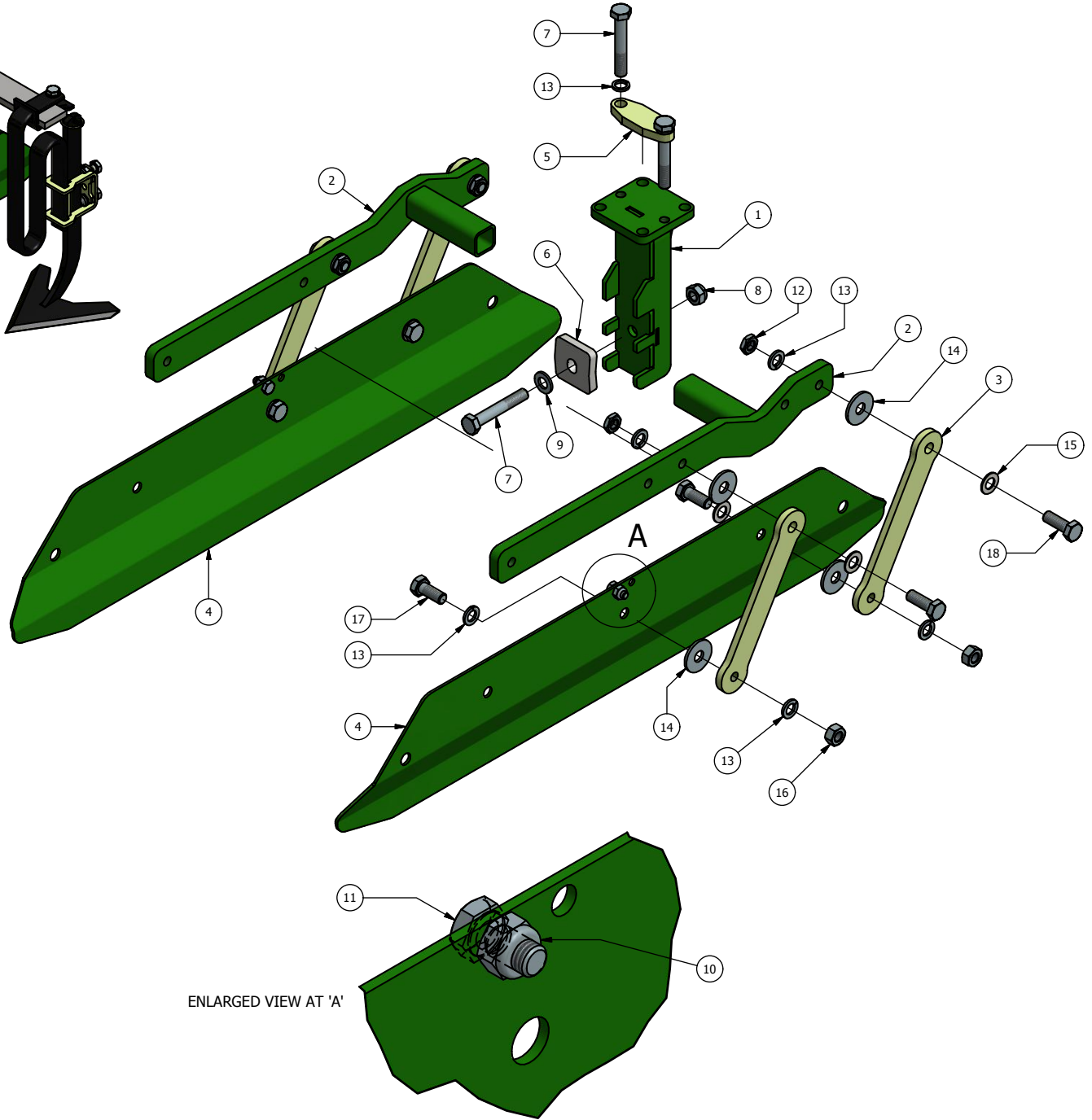
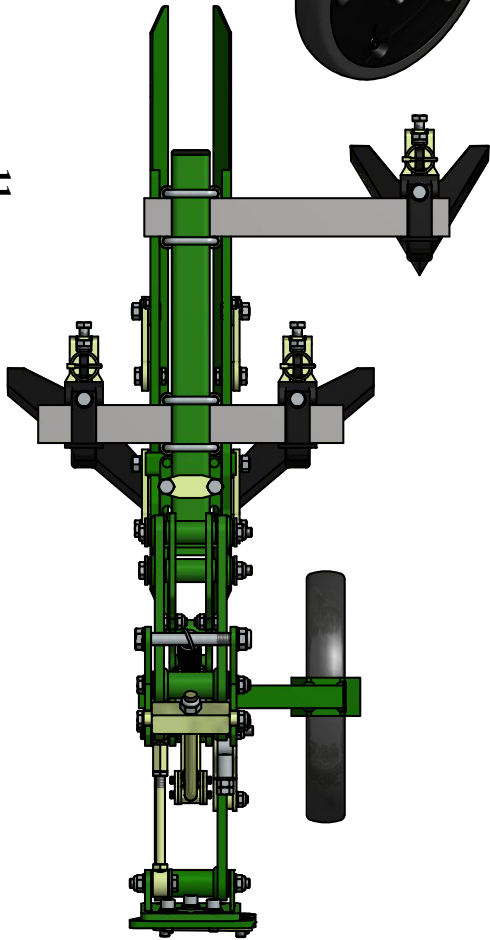


ROBOCROP IN ROW TINE FRAME ASSEMBLY

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|--|-----------------|-----------------|
| 1 | TINE FRAME (SEE DRAWING FOR PART NUMBERS) | | 1 |
| 2 | FRAME CLAMP PLATE | 8673 | 2 |
| 3 | U-BOLT 50x50xM10 | 8672 | 4 |
| 4 | M10 NYLOC NUT BZP | 1024 | 8 |
| 5 | M16 FLAT WASHER BZP | 7878 | 2 |
| 6 | M16 SPRING WASHER BZP | 1119 | 2 |
| 7 | M16x40 BOLT BZP | 5837 | 2 |



11

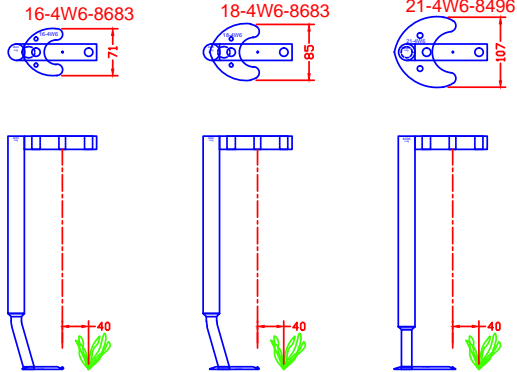


ENLARGED VIEW AT 'A'

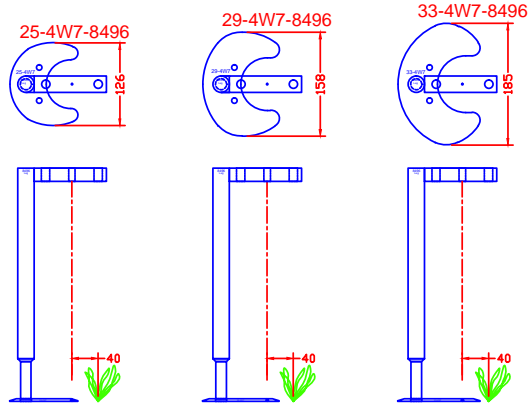
ROBOCROP CROP PROTECTION SHIELDS

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|-------------------------------------|-----------------|-----------------|
| 1 | IN ROW SIDE SHIELD MOUNTING BRACKET | 10229 | 1 |
| 2 | SIDE SHIELD MOUNTING ARM | 10228 | 2 |
| 3 | PARALLEL LINK | 5930 | 4 |
| 4 | SIDE SHIELD | 9721 | 2 |
| 5 | SIDE SHIELD MOUNTING CLAMP PLATE | 10231 | 1 |
| 6 | SIDE SHIELD ARM CLAMP PLATE | 10230 | 1 |
| 7 | M12x75 BOLT BZP | | 3 |
| 8 | M12 NYLOC NUT BZP | | 1 |
| 9 | M12 FLAT WASHER BZP | | 1 |
| 10 | M8 NYLOC NUT BZP | 1042 | 2 |
| 11 | M8x16 BOLT BZP | 1156 | 2 |
| 12 | M12 HALF NUT BZP | 5833 | 4 |
| 13 | M12 SPRING WASHER BZP | 1115 | 12 |
| 14 | LARGE OD FLAT WASHER 12x37x3 BZP | 9068 | 8 |
| 15 | M12 THIN WASHER BZP | 7877 | 6 |
| 16 | M12 HEX NUT BZP | | 4 |
| 17 | M12x30 BOLT BZP | 1161 | 4 |
| 18 | M12x35 BOLT BZP | 1014 | 4 |

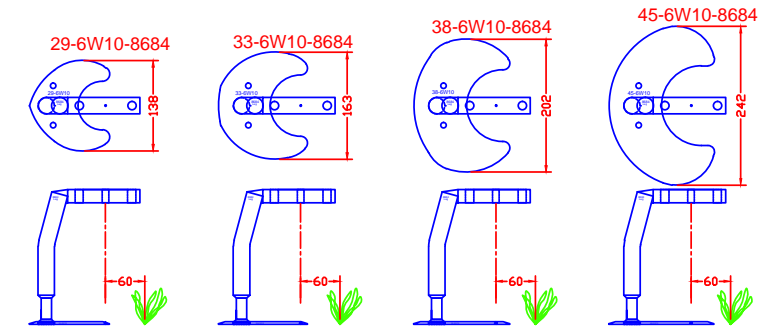
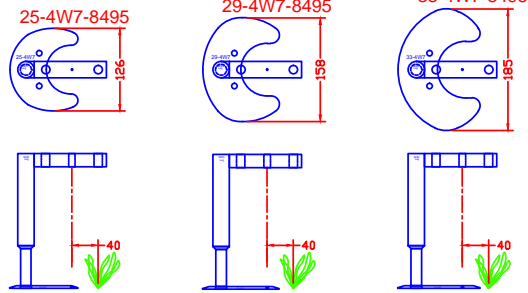
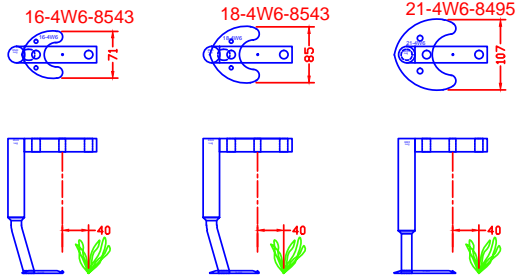
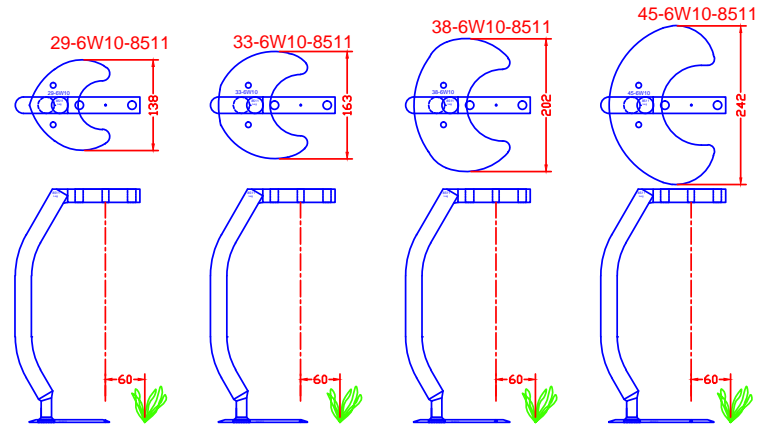
Plant Zone 6cm



Plant Zone 7cm



Plant Zone 10cm



ROBOCROP IN ROW DISC SIZES & DISC LEGS

THE CHART ON OPPOSITE PAGE SHOWS AVAILABLE RANGE FOR GIVEN PLANT ZONES.

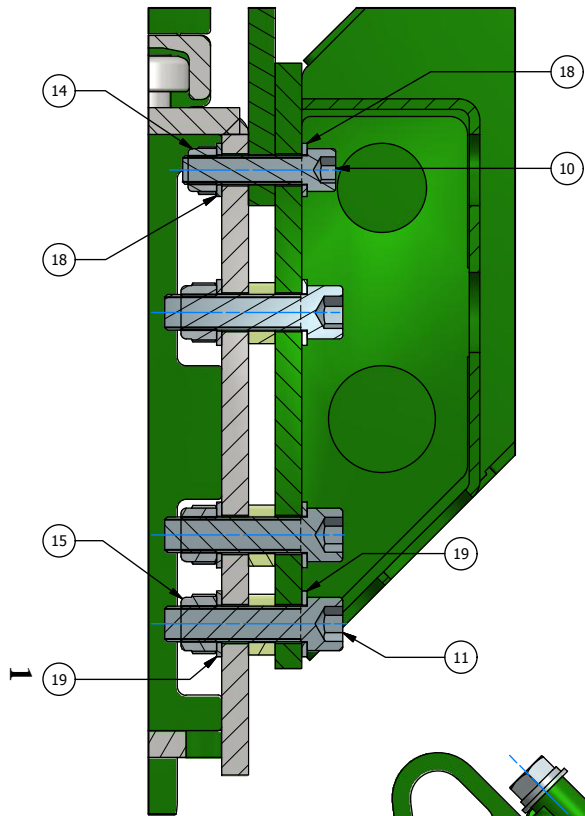


BIO-WEEDER PARTS SECTION

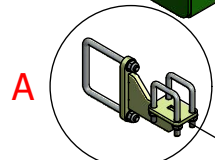
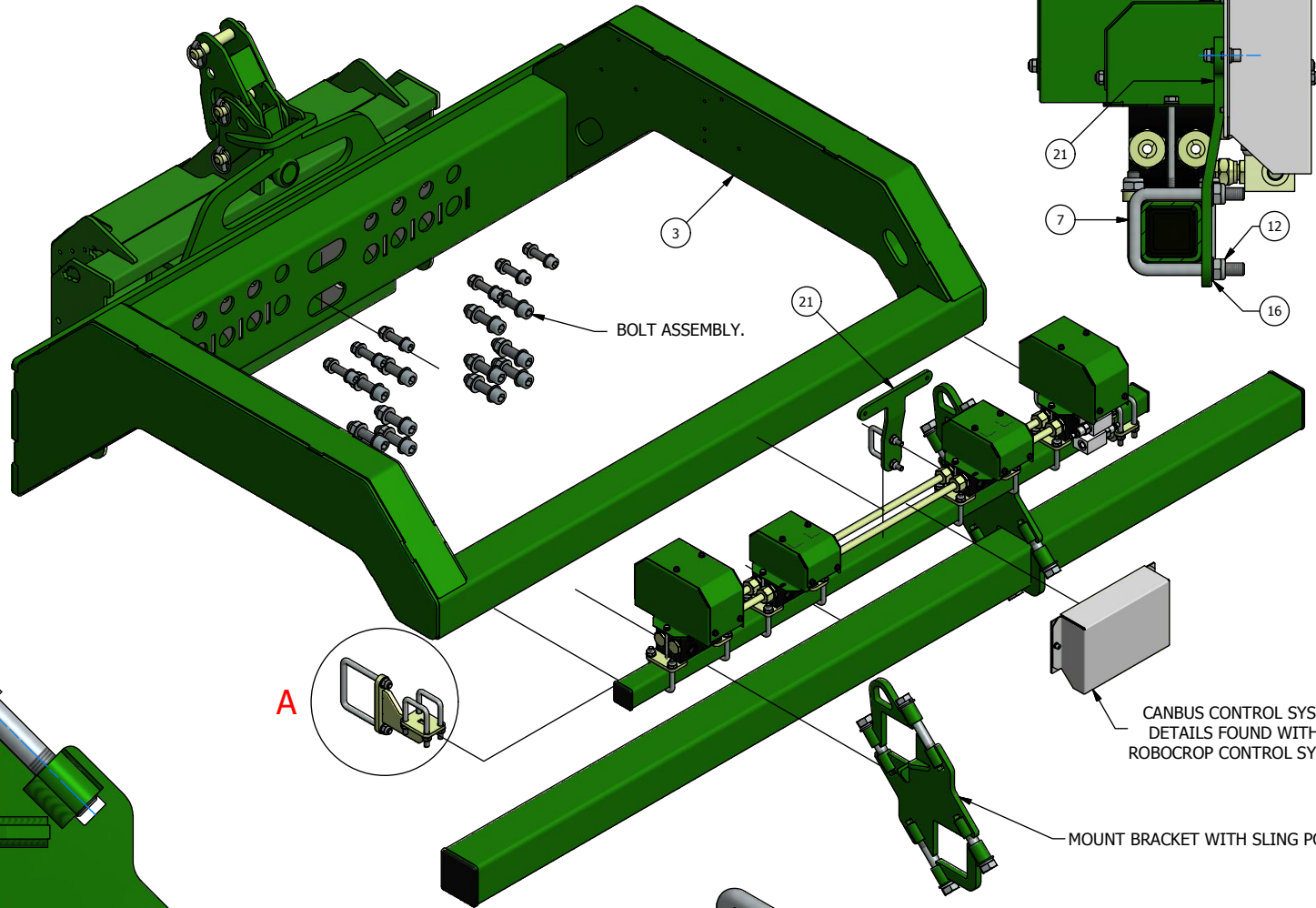
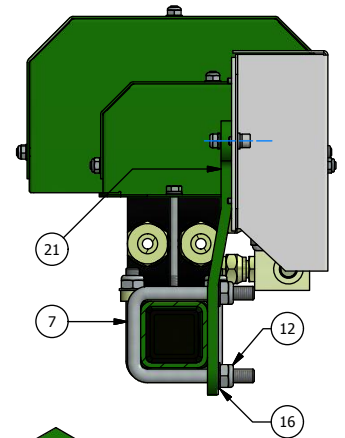
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| ROBOCROP IN ROW BIO-WEEDER SPECIFIC ITEMS | PAGE 1-2 |
|--|---------------------|

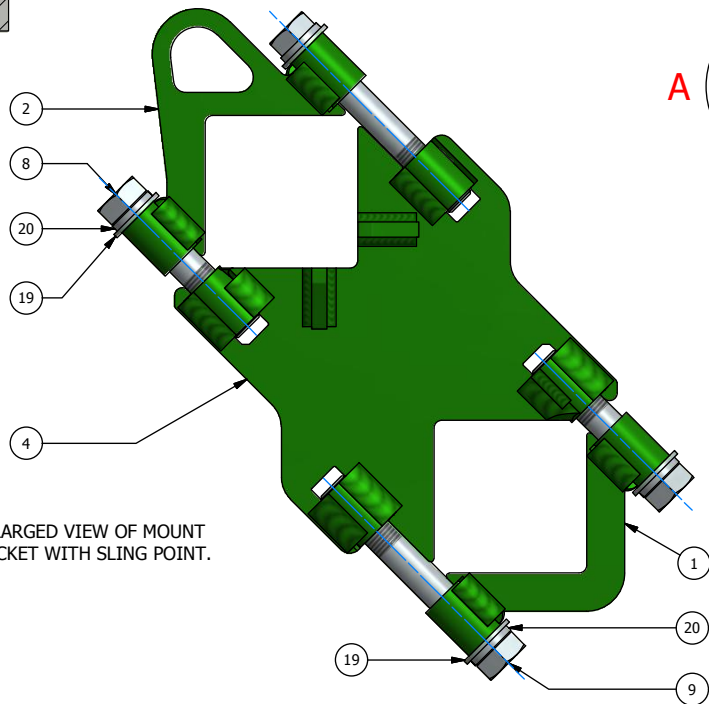
CROP SECTION VIEW THRU
FRAME & SIDE SHIFT OF
BOLTS IN PLACE.



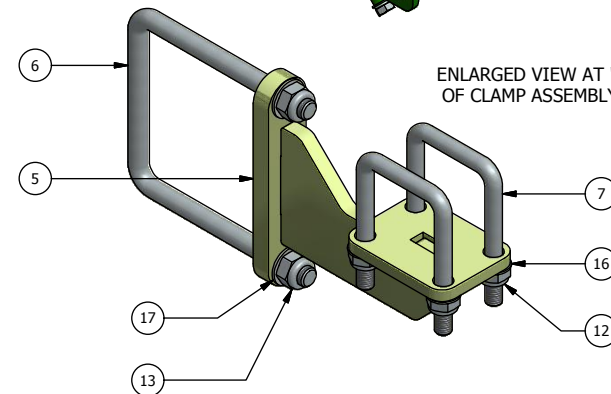
SIDE SECTION SHOWING
CAMBUS MOUNT BRACKET.



ENLARGED VIEW OF MOUNT
BRACKET WITH SLING POINT.



ENLARGED VIEW AT 'A'
OF CLAMP ASSEMBLY.



ROBOCROP IN ROW BIO WEEDER SPECIFIC PARTS

| ITEM No. | DESCRIPTION | PART No. | QUANTITY |
|-----------------|--------------------------------|--------------------|-----------------|
| 1 | V-CLAMP | 10008 | 2 |
| 2 | V-CLAMP WITH SLING POINT | 10140 | 2 |
| 3 | BIO WEEDER BRIDGE | SD-11070 HD- 10938 | 1 |
| 4 | BRIDGE TO MAIN FRAME BRACKET | 10939 | 2 |
| 5 | BIO WEEDER MOUNT TO MAIN FRAME | 11062 | 2 |
| 6 | U-BOLT 100x1000xM12 | | 2 |
| 7 | U-BOLT 50x50xM10 | | 4 |
| 8 | M20x110 BOLT BZP | | 4 |
| 9 | M20x150 BOLT BZP | | 4 |
| 10 | SOCKET CAP SCREW M16x70 BZP | | 6 |
| 11 | SOCKET CAP SCREW M20x80 BZP | | 12 |
| 12 | M10 NYLOC NUT BZP | | 8 |
| 13 | M12 NYLOC NUT BZP | | 4 |
| 14 | M16 NYLOC NUT BZP | | 6 |
| 15 | M20 NYLOC NUT BZP | | 12 |
| 16 | M10 THIN WASHER BZP | | 8 |
| 17 | M12 THIN WASHER BZP | | 4 |
| 18 | M16 WASHER BZP | | 12 |
| 19 | M20 WASHER BZP | | 32 |
| 20 | M20 SPRING WASHER BZP | | 8 |
| 21 | CANBUS MOUNT BRACKET | 11078 | 1 |