

## Fitting Instructions

Issue	Date	Changes
1	04/07/2024	Technical service bulletin created.
2	20/05/2025	Tool list updated and drilling template added.



### Safety Warning

These Fitting Instructions are for informational purposes only. Shelbourne Reynolds makes no representation or warranty, express or implied, regarding the information provided herein. Under no circumstances will Shelbourne Reynolds have any liability to you for any loss or damage resulting from the use of these instructions or reliance on any information provided. It is extremely dangerous to carry out any work on a machine while it is under power. Never remove or reattach any parts unless the machine is fully turned off and disengaged.

Please read all safety instructions contained in your operators manual and observe all safety signs attached to the Stripper header. Your use of these instructions is solely at your own risk.

Please use proper safety equipment at all times



*Refer to the Operators Manuals, MAN-01020 and MAN-01021, for further details on operating, adjusting, maintaining and lubricating HAVS drive.*

*These instructions are worded if the kit was being installed while the header is mounted on a combine, to have the stripping rotor set in the fastest position and implement the safe stop procedure.*

*If not the pulley drive and actuator may need rotating and cycling to assist.*

### Recommended Tools List

#### Sockets And Wrenches (+ attachments)

8mm, 10mm,  
13mm, 15mm,  
17mm, 19mm,  
24mm, 30mm.  
Adjustable Wrench

#### Taps

6mm tap, 8mm tap  
10mm x 1.5 tap,  
16mm tap, 20mm tap.

#### Tools/Equipment

Drill  
7mm drill bit  
14.5 - 15mm drill bit  
Block of wood  
Large mallet  
2 Medium pry bars  
Large pry bar  
3mm Allen key  
Pin punch  
Grinder (cutting disc)  
Pop rivet gun

#### Consumables

Tie wraps  
Anti-Seize / Copper slip  
Threadlocker  
Molybdenum grease (black)

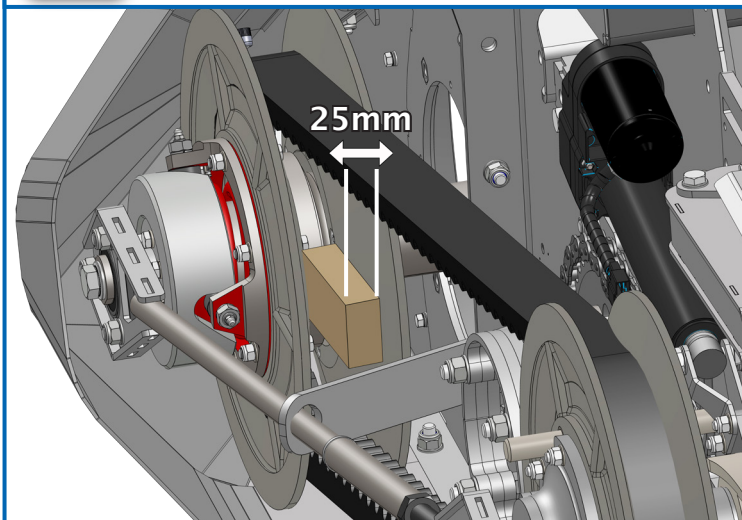
Reference  
KIT-19107 for  
2014 to 2018  
machines.  
Scan QR for  
Instructions.



1. Run the machine until rotor pulley is fully open, rotor speed at maximum.



**Stop the machine and implement the safe stop.**

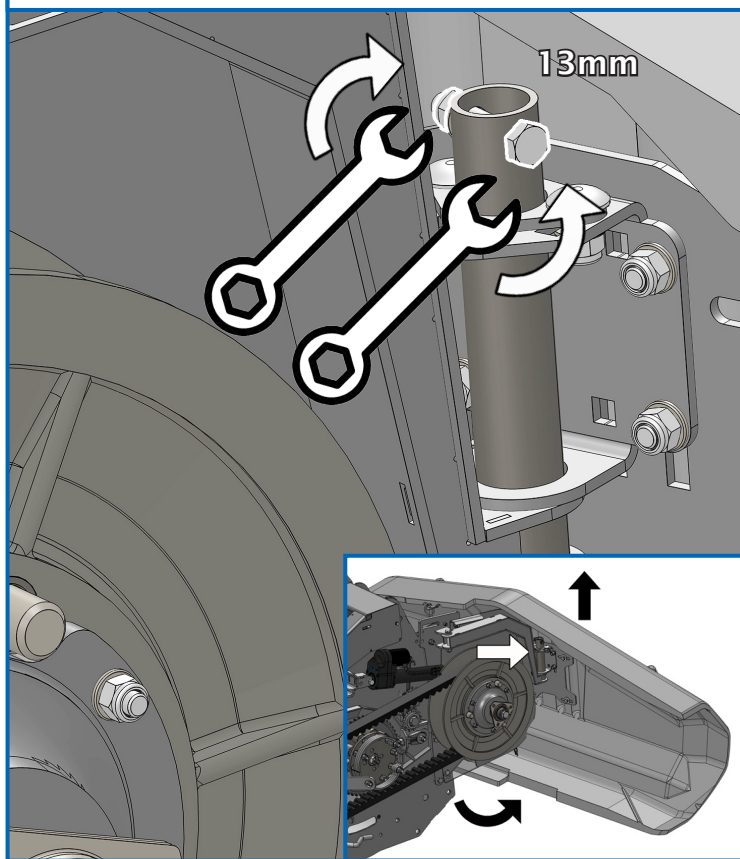


Open the drive guard and wedge front pulley's open.

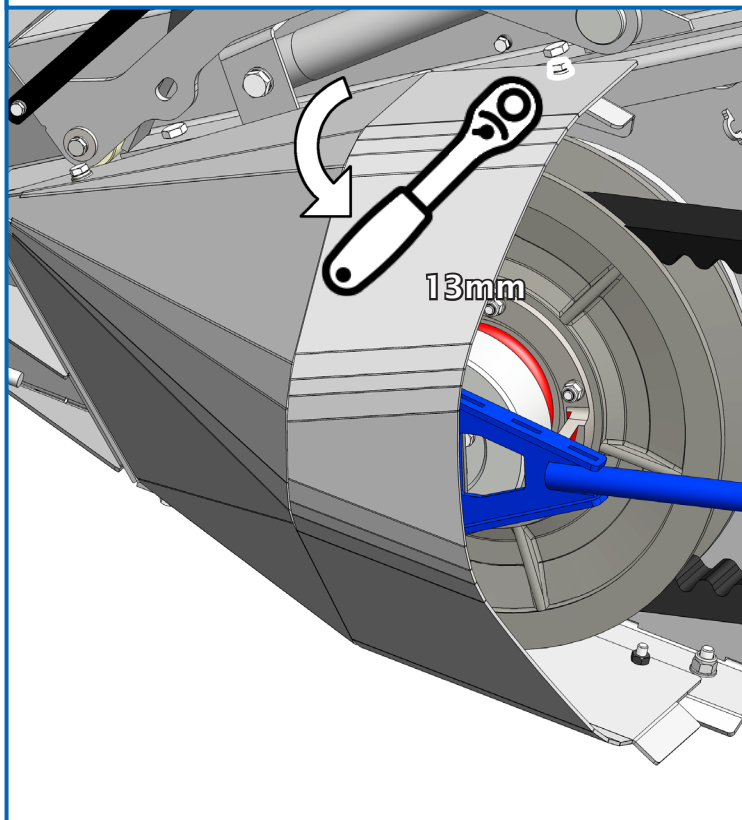


**DO NOT** put hands between pulley sheaves.

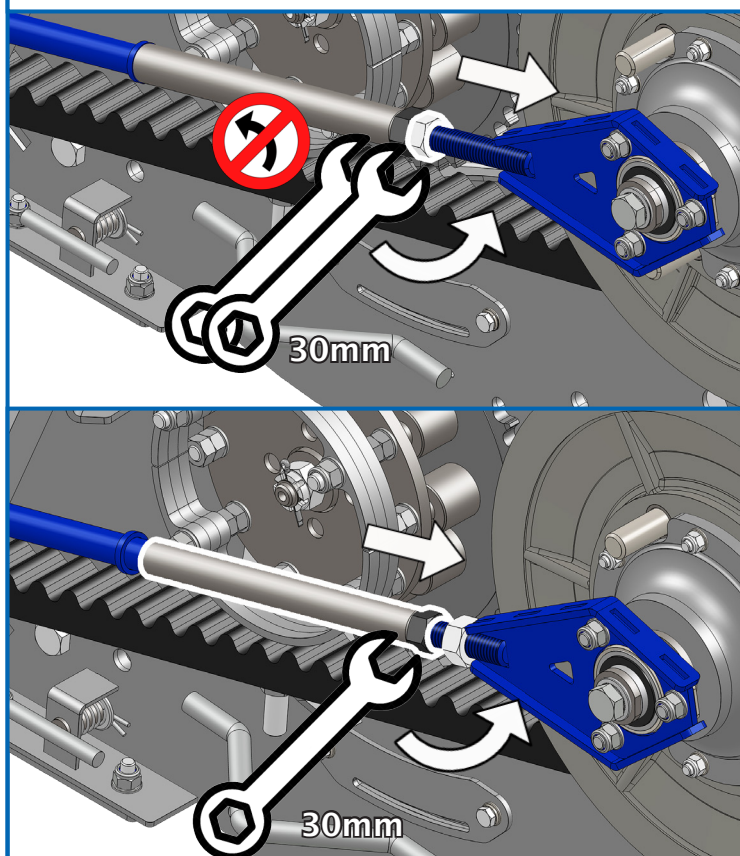
2. Remove the guard.



3. Remove front steel nose cone, by removing the four bolts.

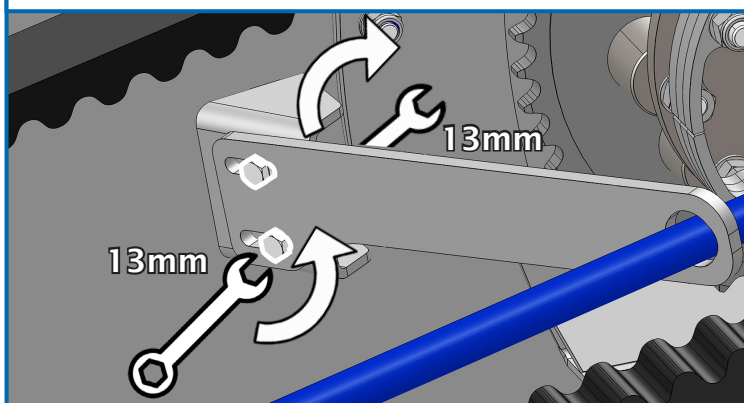


4. Loosen the tie rod.

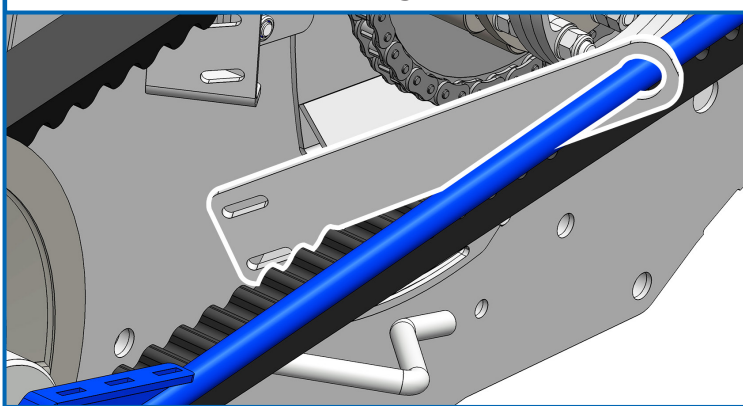




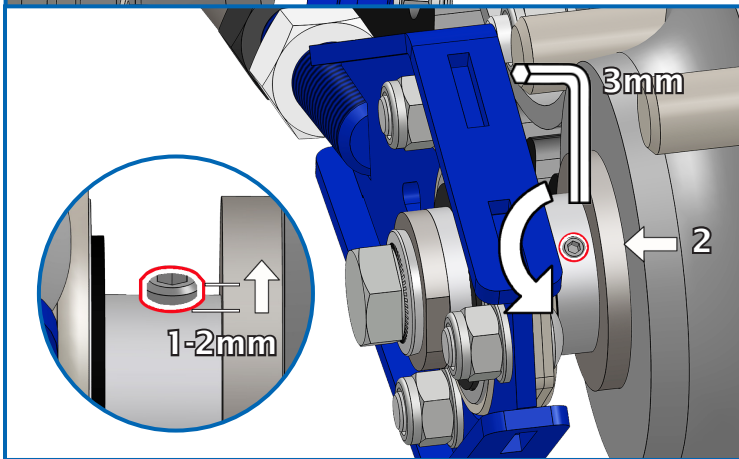
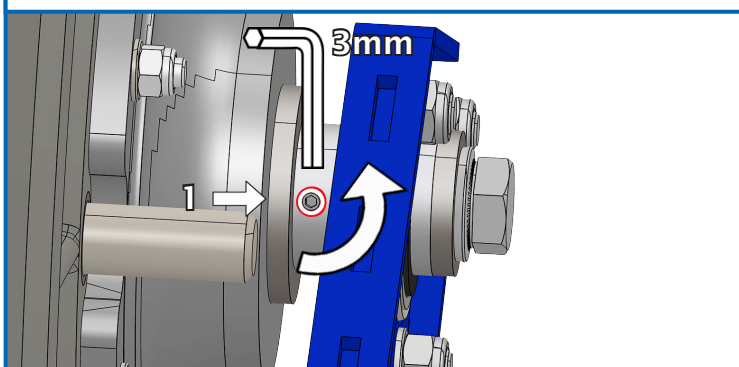
## 5. Remove the tie rod support fasteners.



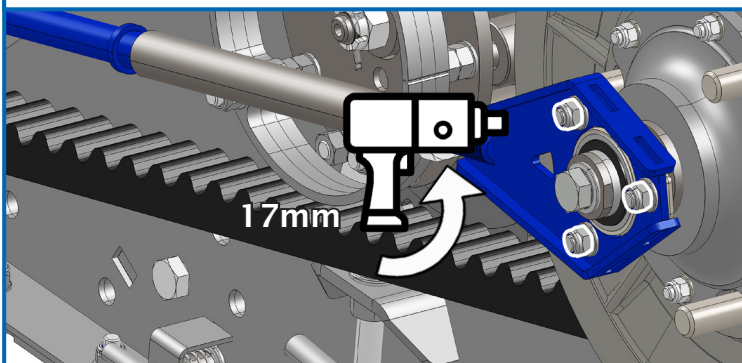
Let support bracket hang down from tie rod.



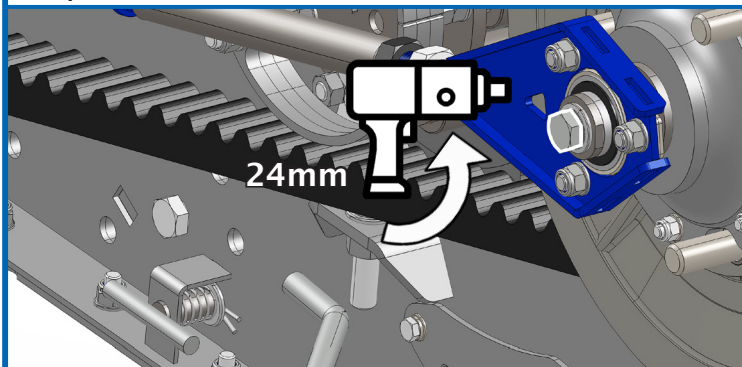
## 6. Loosen tie rod bearing grub screws (x2) on both front and rear pulleys.



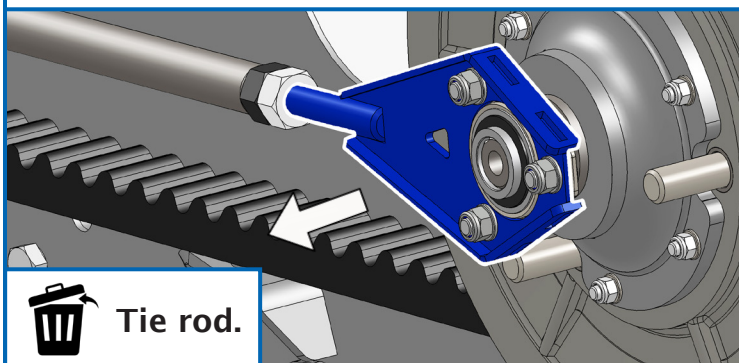
## 7. Loosen tie rod bearing fasteners on both front and rear pulleys.



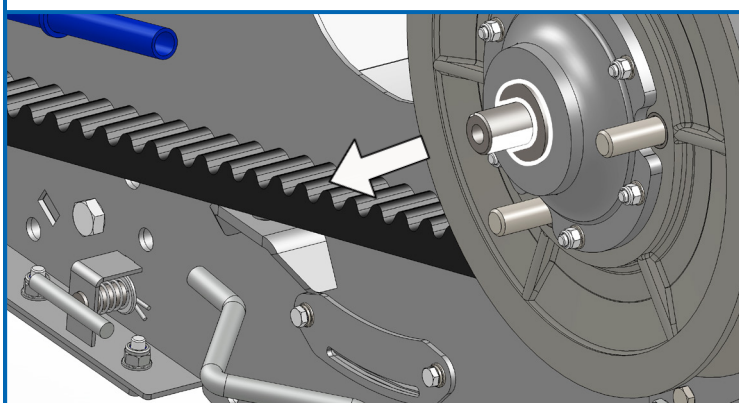
Remove central fasteners on the rear pulley only.



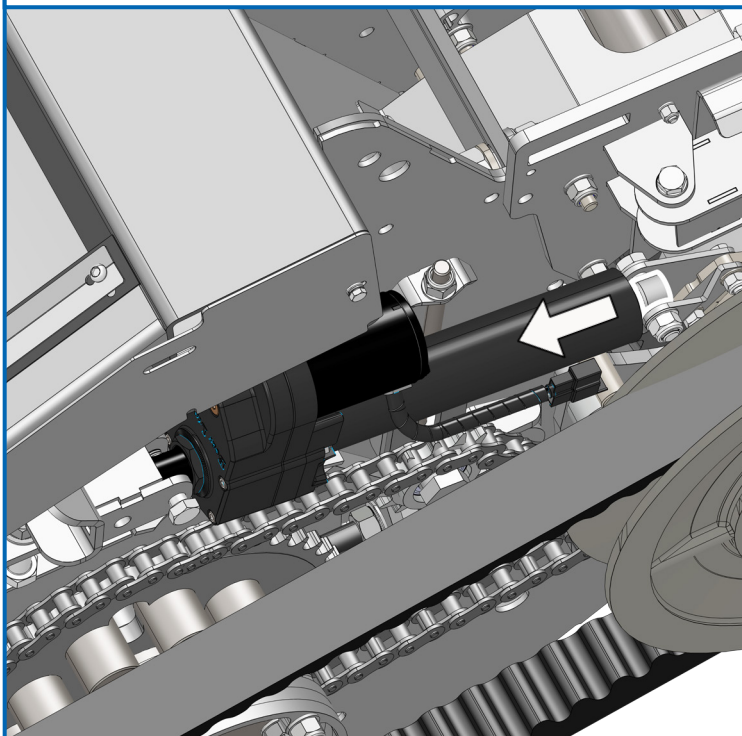
## 8. Remove the tie rod from front and rear pulleys.



Remove the washer from rear pulley only.

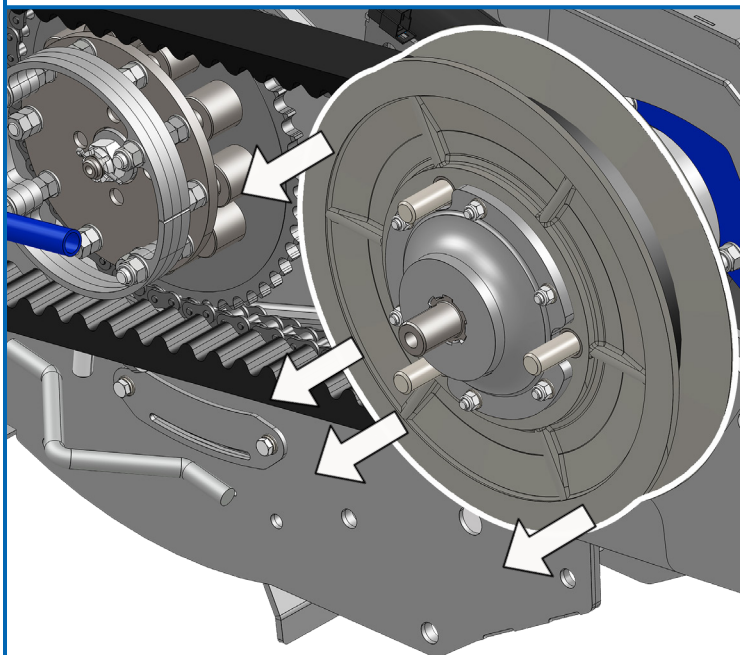


9. Electrically close the actuator fully.



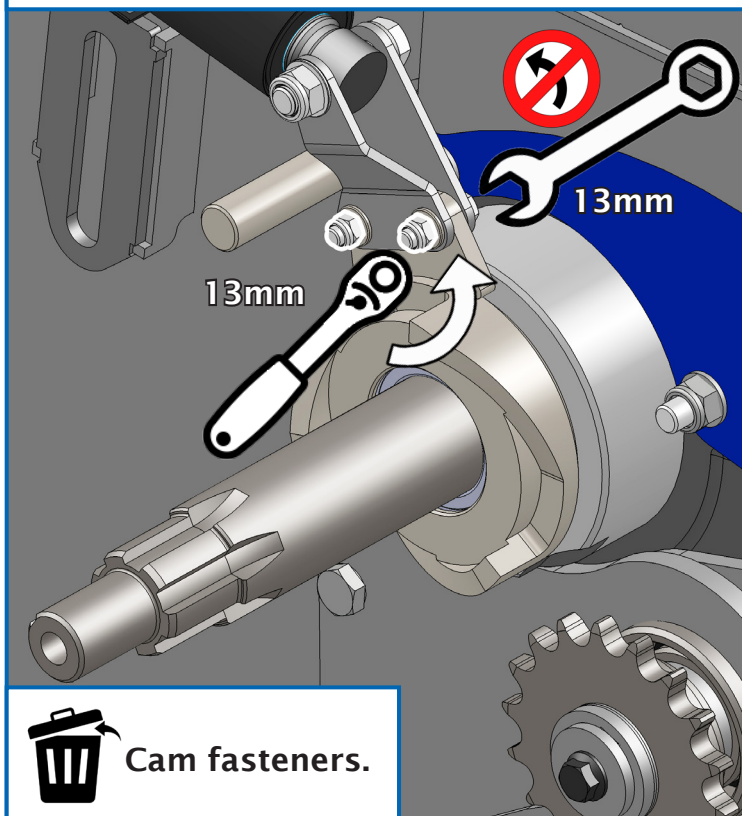
**DO NOT** run the header up.

10. Remove rear pulley assembly.



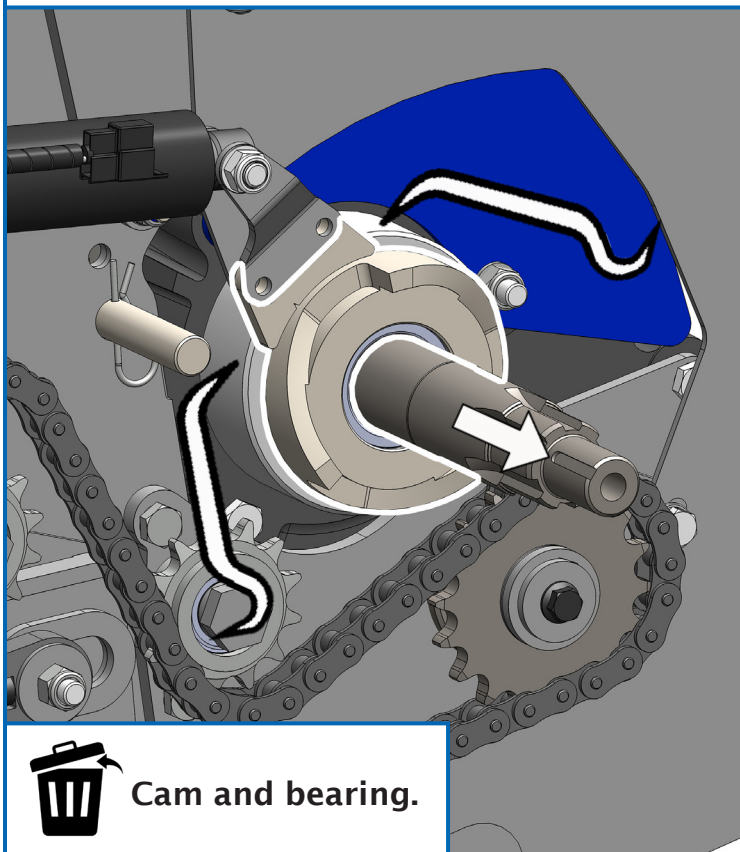
Take care when removing the pulleys from the shafts, as they weigh 40KG (88lbs).

11. Remove the cam brackets to cam fasteners.



Cam fasteners.

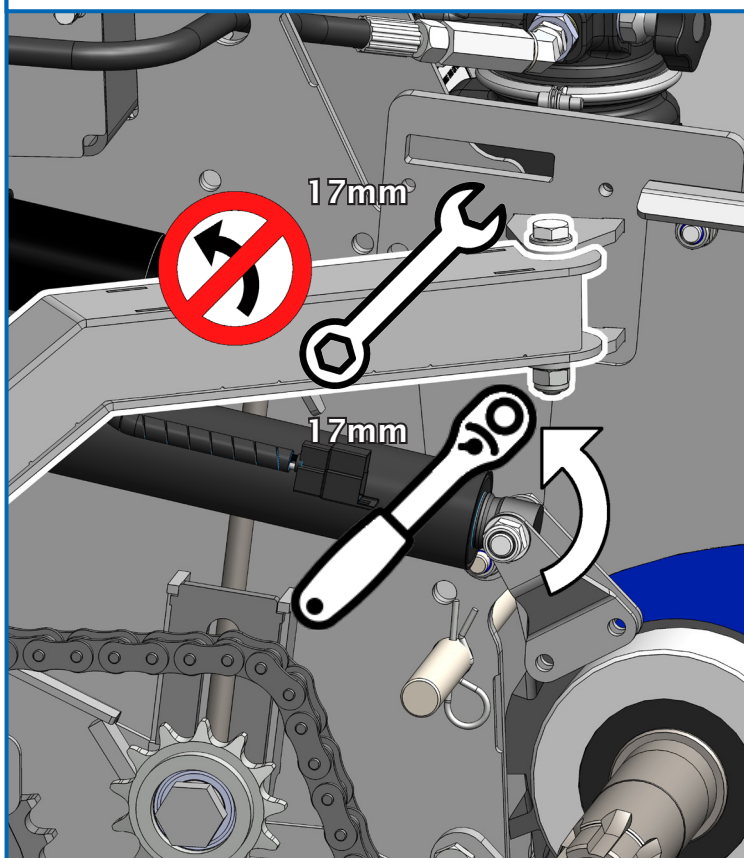
12. Pry off the cam and bearing.



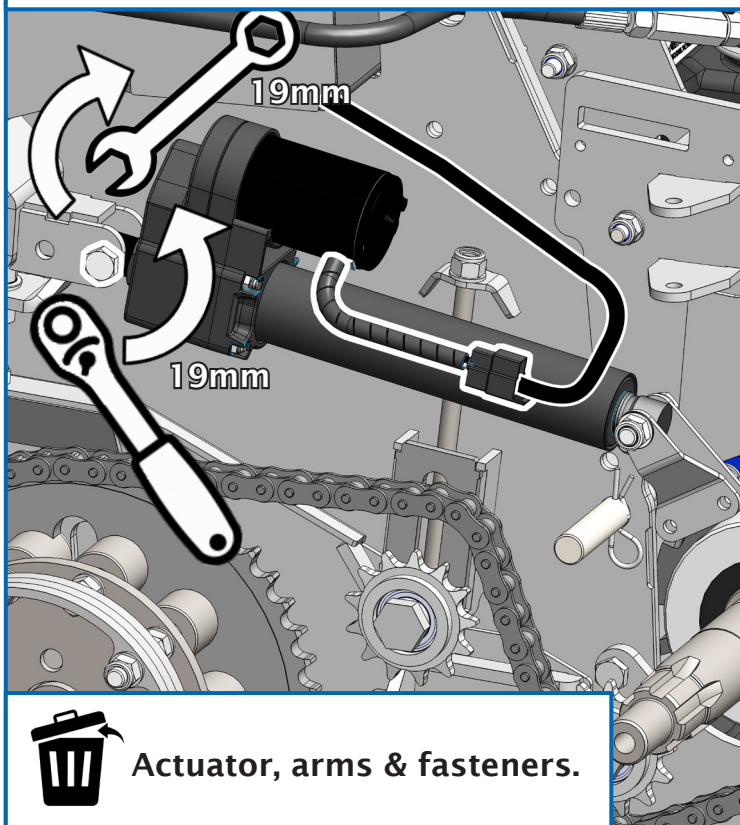
Cam and bearing.



## 13. Remove guard pivot arm.

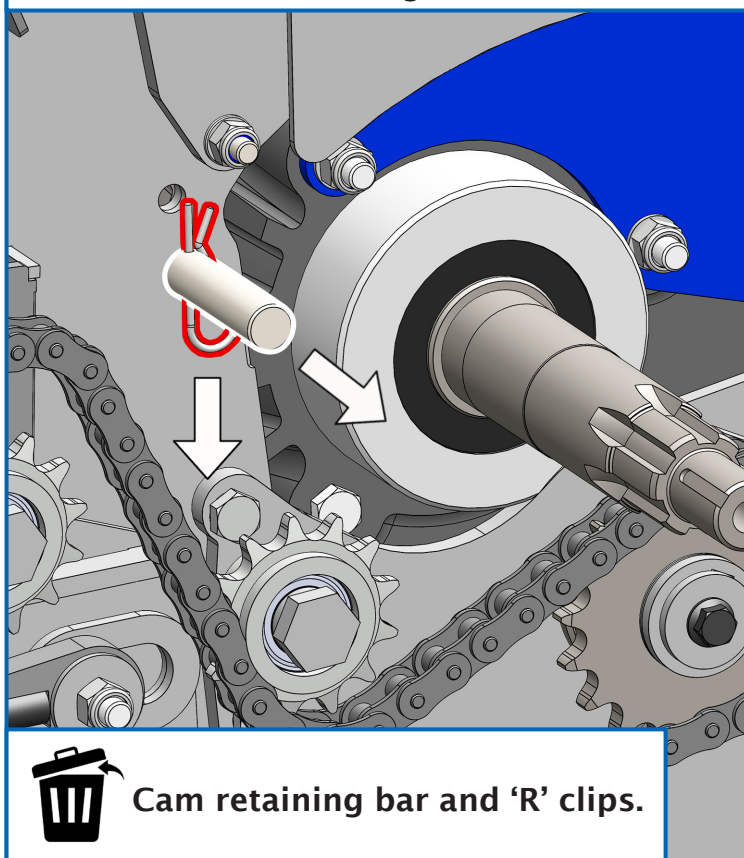


## 14. Disconnect power wire along with rear fastener to remove actuator from machine.



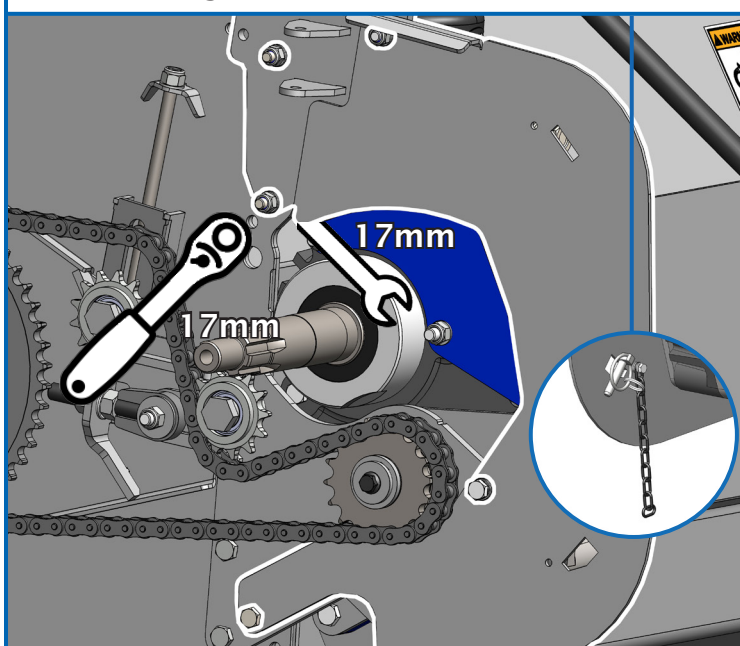
Actuator, arms &amp; fasteners.

## 15. Remove cam retaining bar.



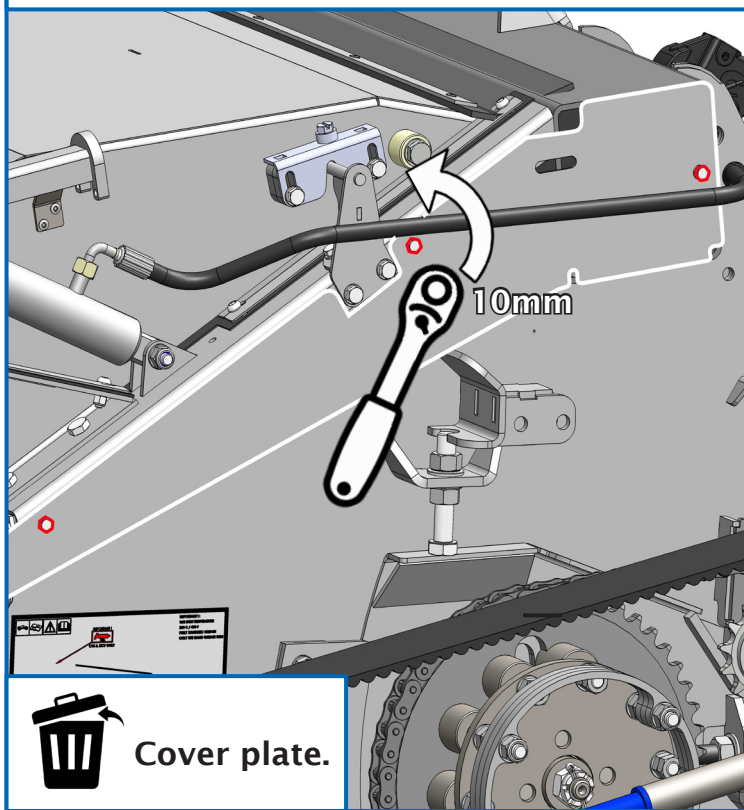
Cam retaining bar and 'R' clips.

## 16. Remove guard mounting plate and pivot guard by removing the 5 fasteners. Remove the snap rings, chains &amp; fasteners.

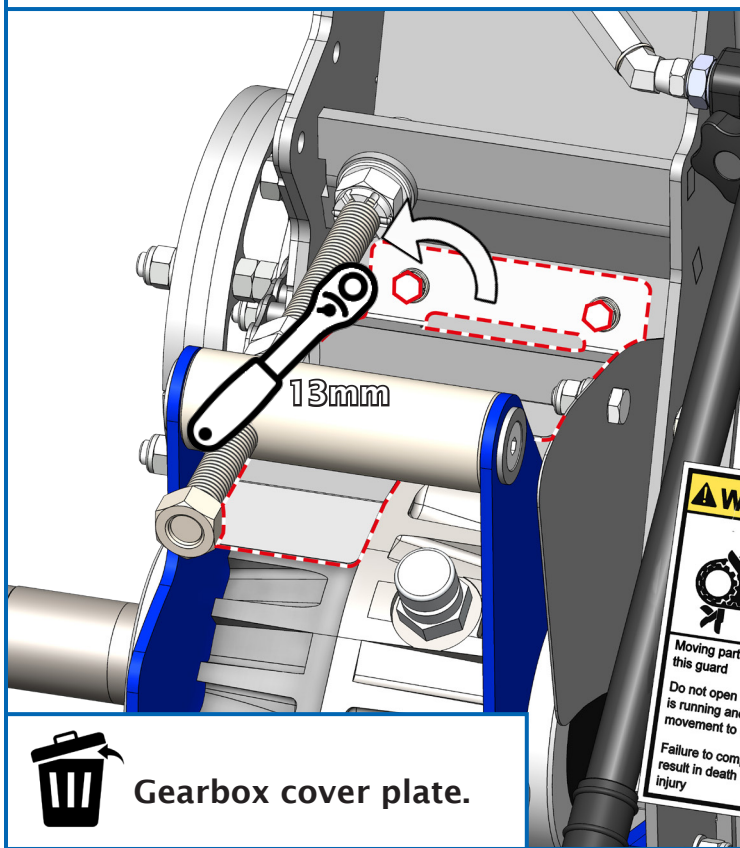


Guard mounting plate and pivot guard.

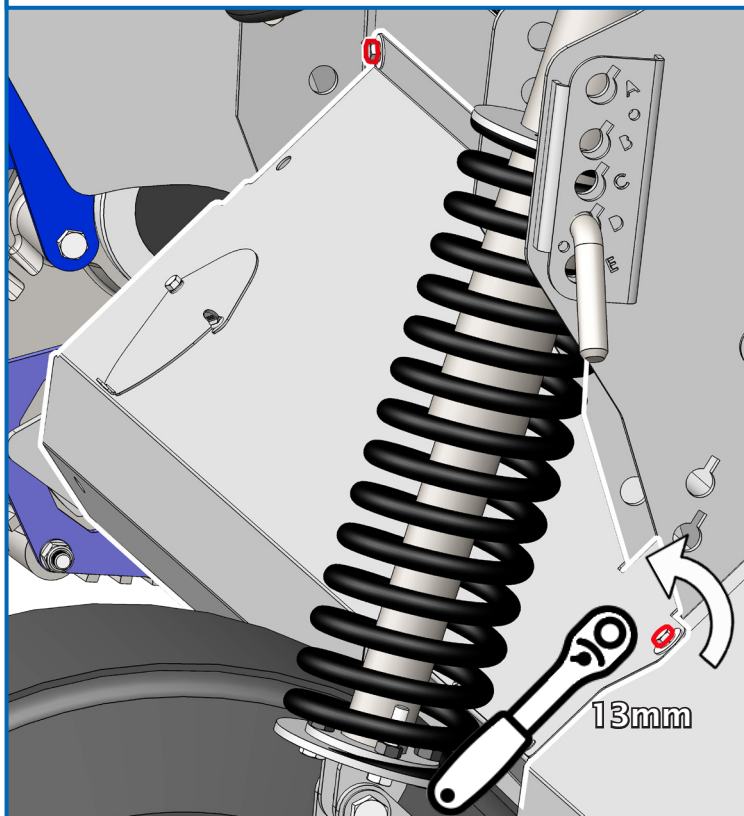
17. Remove top beam cover plate by the 3x bolts.



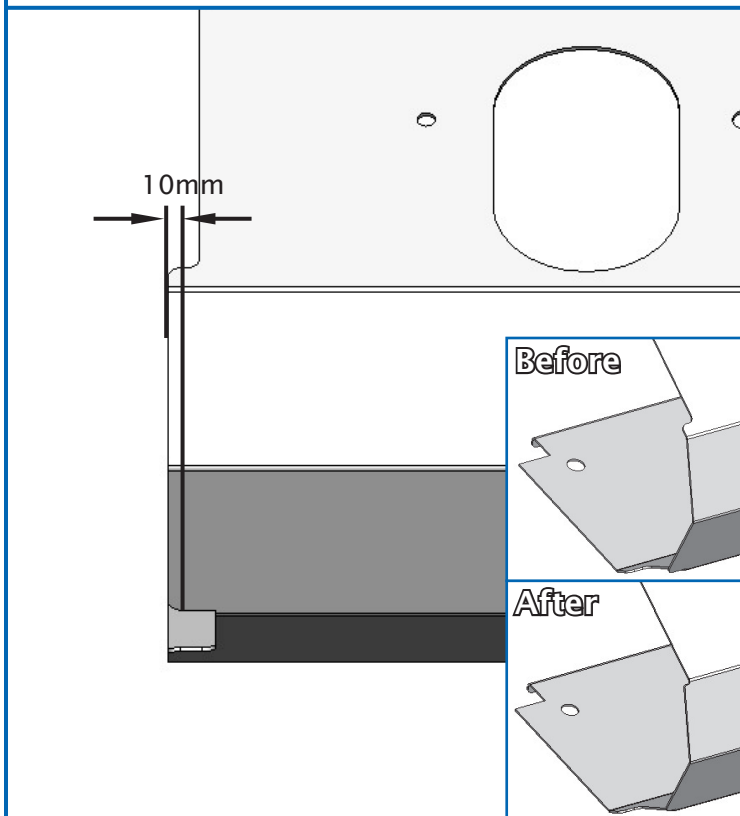
18. Remove gearbox cover by the 2x bolts.



19. Remove L/H PTO guard by the 5x M8 bolts.

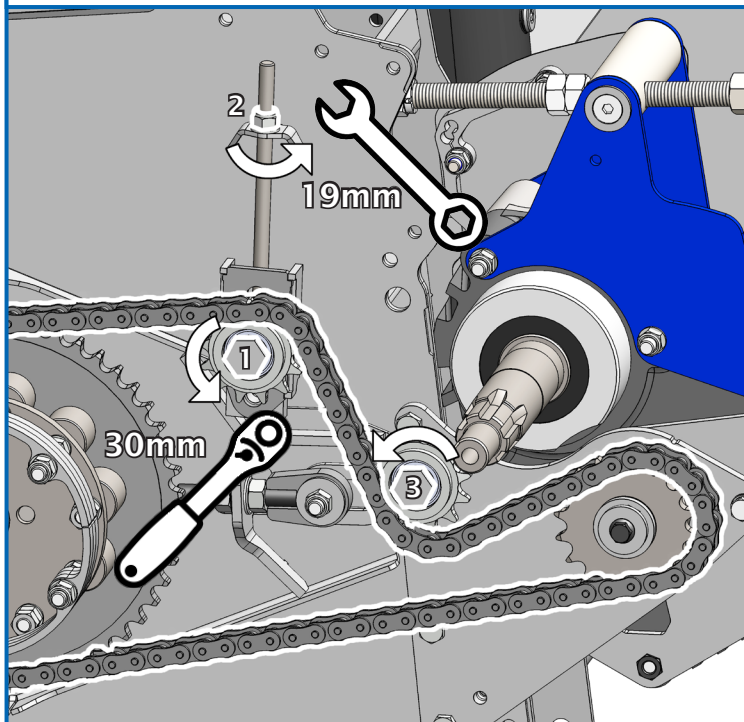


20. The rear drive shaft guard cover needs a section cutting off, as shown below.



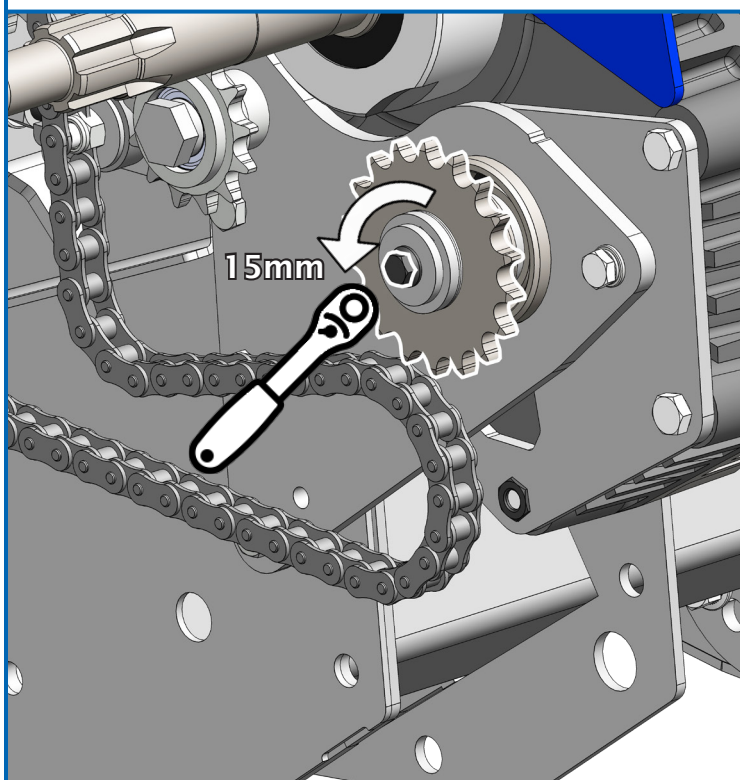


21. Loosen auger idle spindle (1), Slacken adjuster rod (2) and remove chain idler (3).

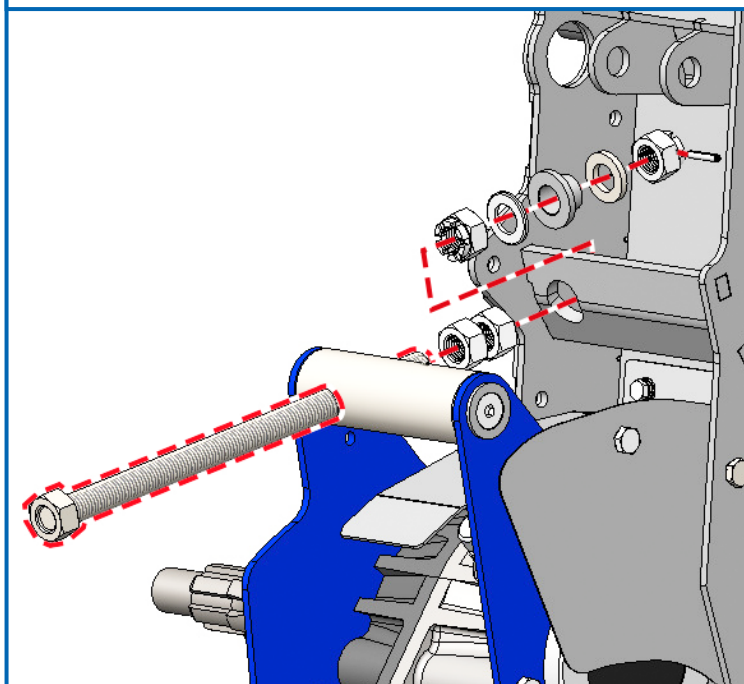


Remove chain off drive sprocket and let it hang.

22. Loosen fastener and slide off sprocket, washer and spacers. (Make a note of spacer order).

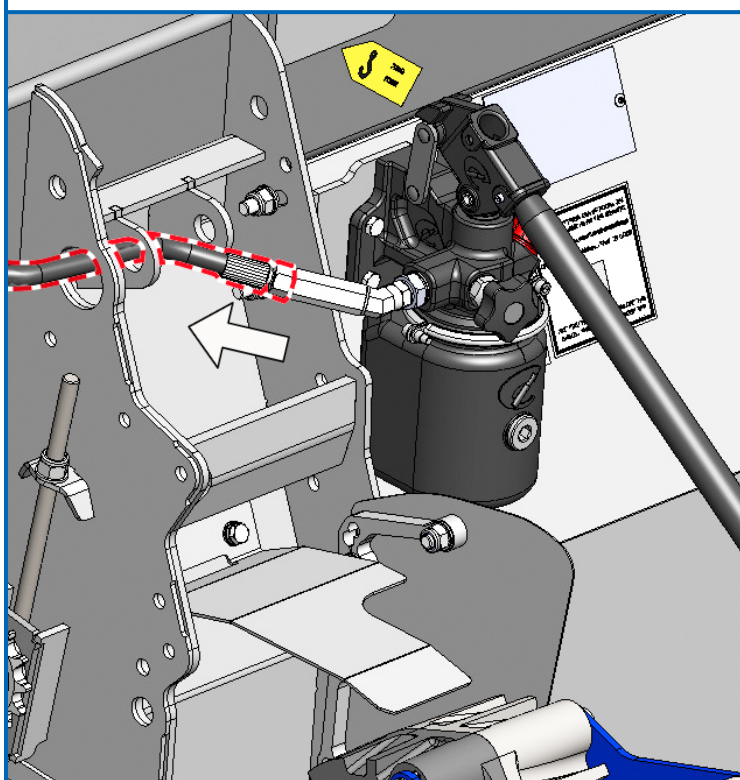


23. Remove gearbox adjuster rod along with its associated fasteners.

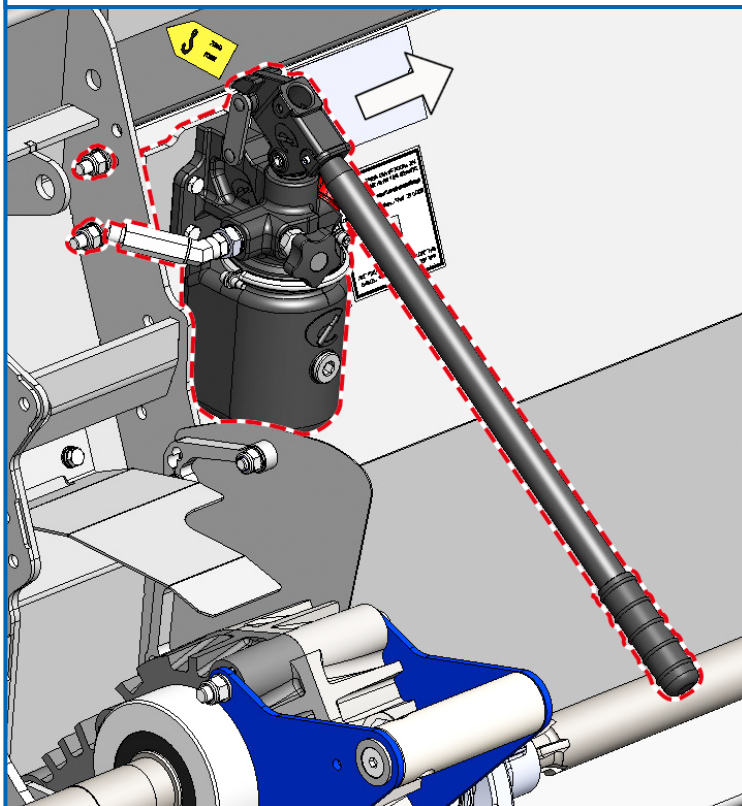


Gearbox adjuster rod & fasteners.

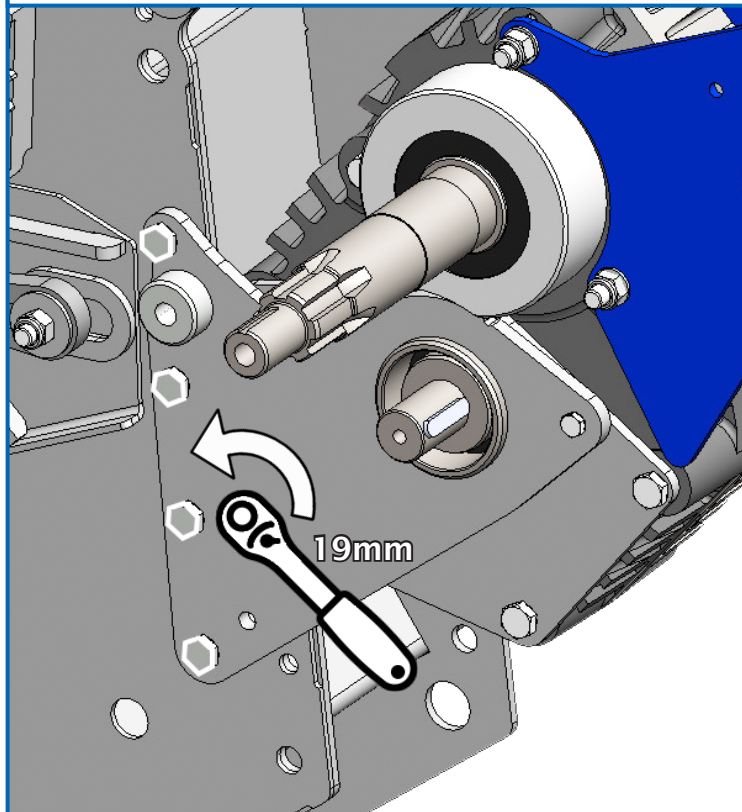
24. Ensure hydraulic pump is depressurised and then un-couple the hose from the handpump.



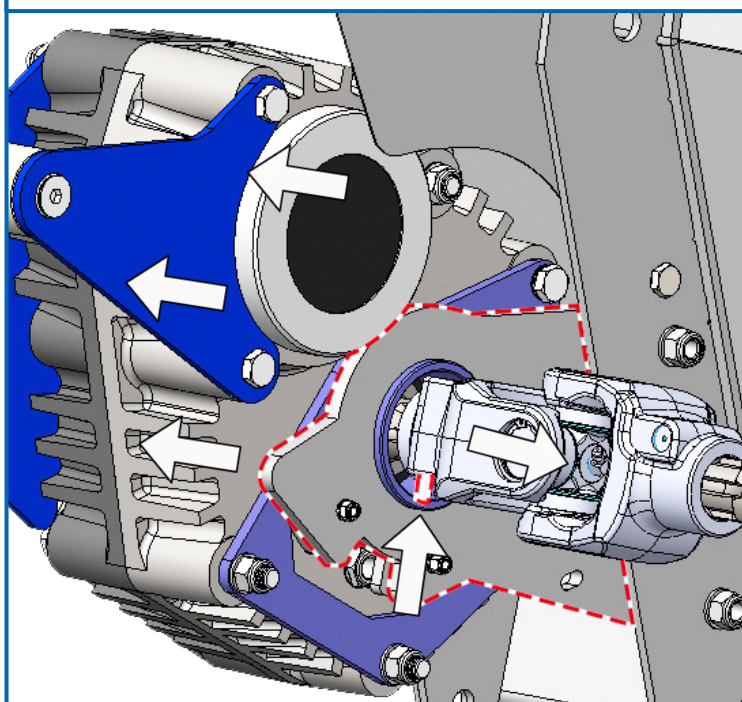
25. Remove handpump and bracket together from the mainframe.



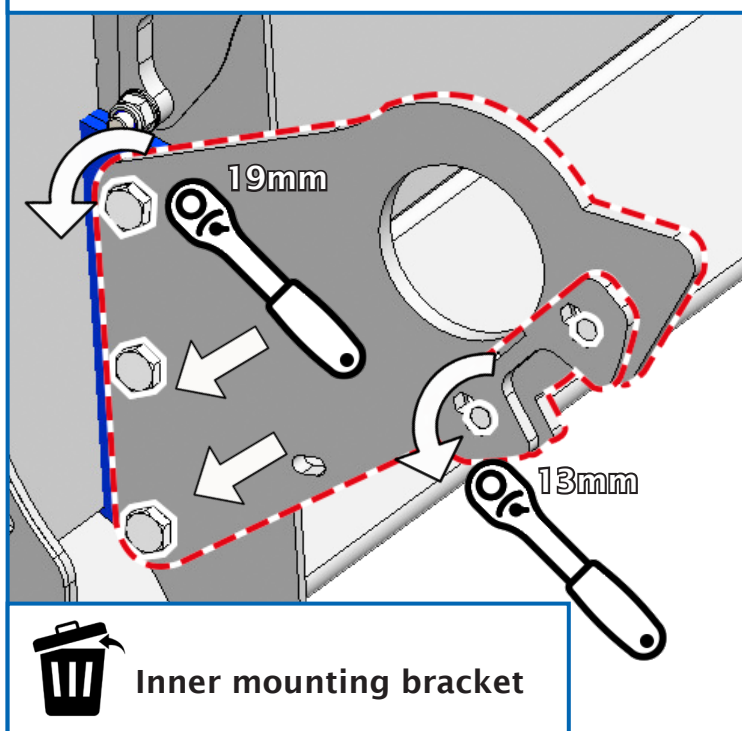
26. Support the weight of the gearbox assembly and remove the 4x fasteners.



27. To release the gearbox out of the mounting bracket push the button on the PTO yoke on the bracket side. Once the PTO has been disconnected, slide gearbox assembly out of inner mounting bracket.



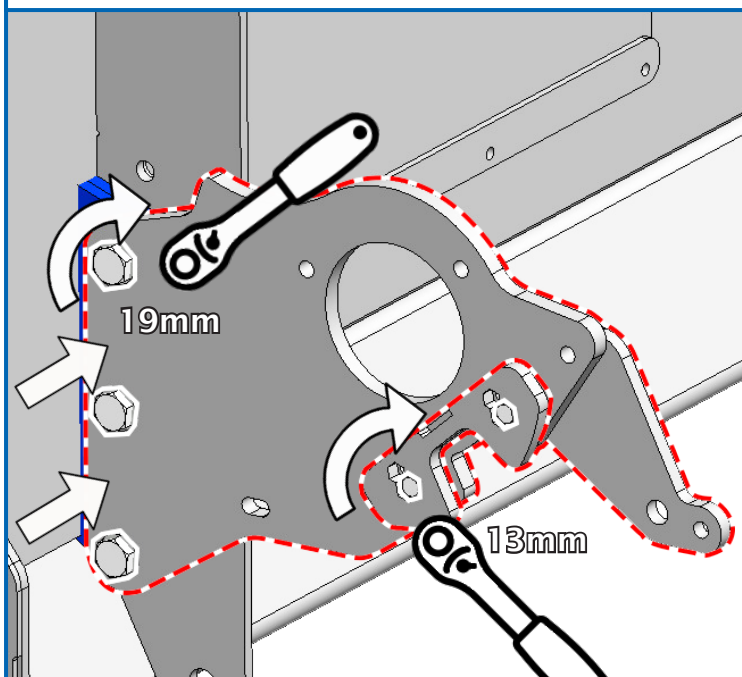
28. Remove oil level viewer plate from inner mounting bracket and remove inner mounting bracket from machine, but not the two spacers/shims.



Inner mounting bracket

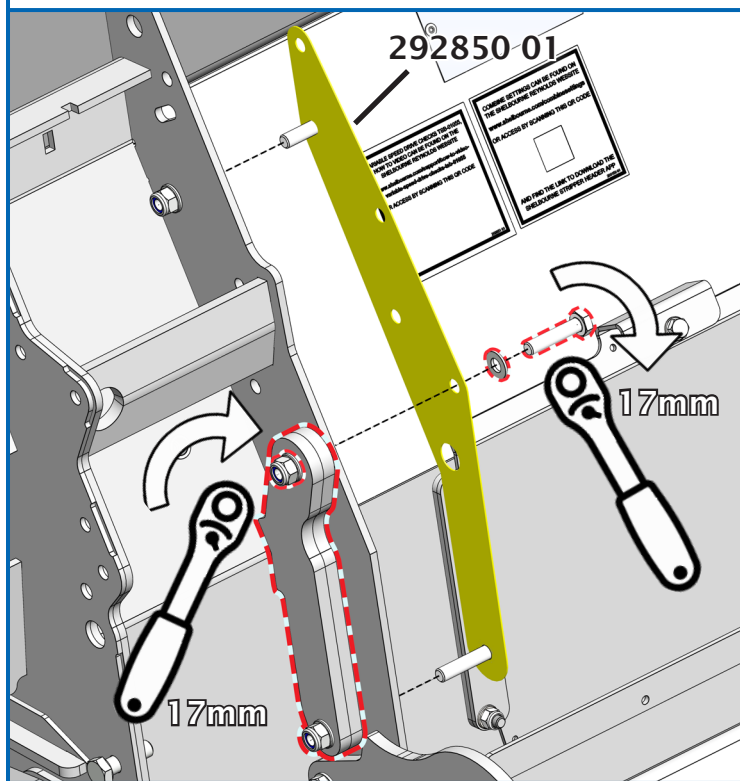


29. Attach new inner mounting bracket. Attach the oil level viewer plate back onto the inner mounting bracket.

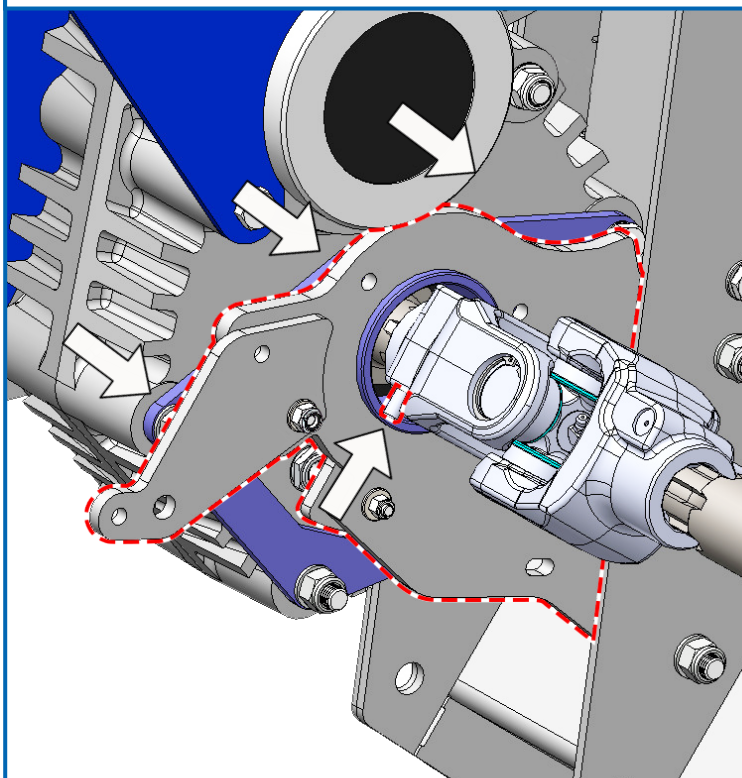


2014-2018 machines will need additional kit, KIT-19107.

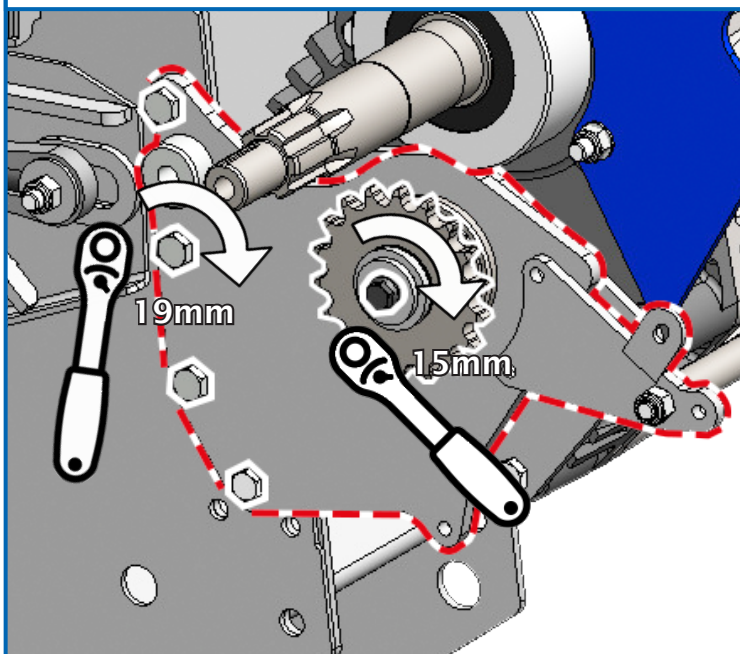
30. Fit the stop plates. On pre 2022 machines holes may need to be drilled for 10mm bolts, use template 292850 01.



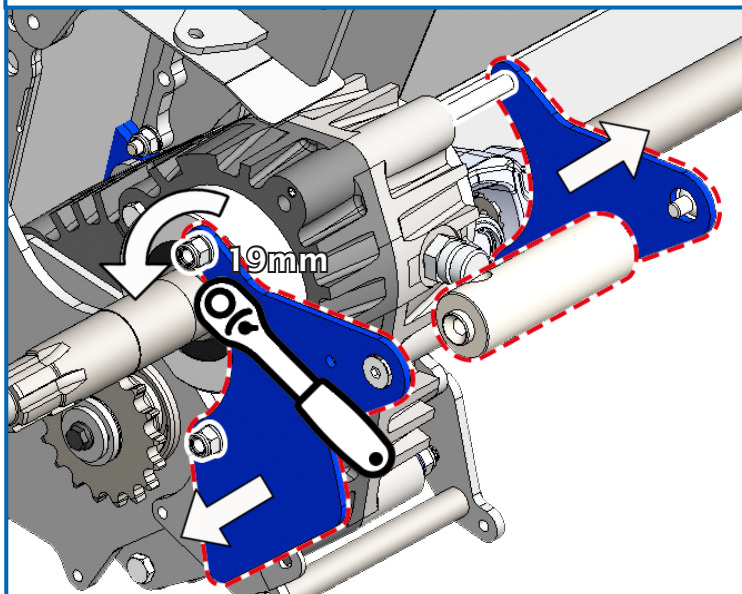
31. Re-fit gearbox onto the inner mounting bracket and attach the PTO yoke to the bottom gearbox shaft.



32. With the weight of the gearbox supported, fit the new outer gearbox mounting bracket with tie bar between the two plates. If needed grind gearbox casing to allow for movement of tie bar. Re-attach the auger drive sprocket with the same shims taken off.

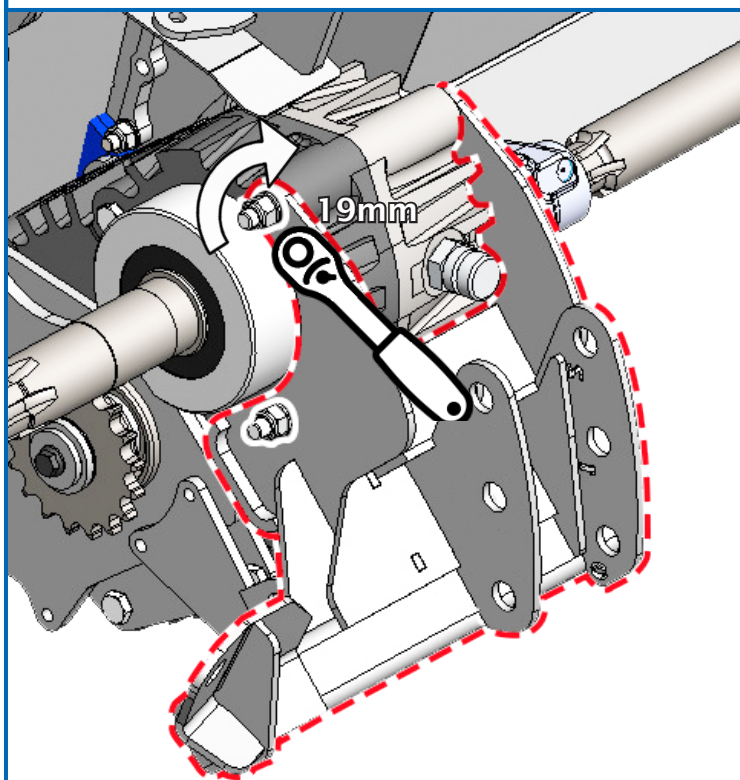


33. With the gearbox now attached, remove the two gearbox adjuster plates, with the adjuster bar, (two long bolts that go right through the gearbox).

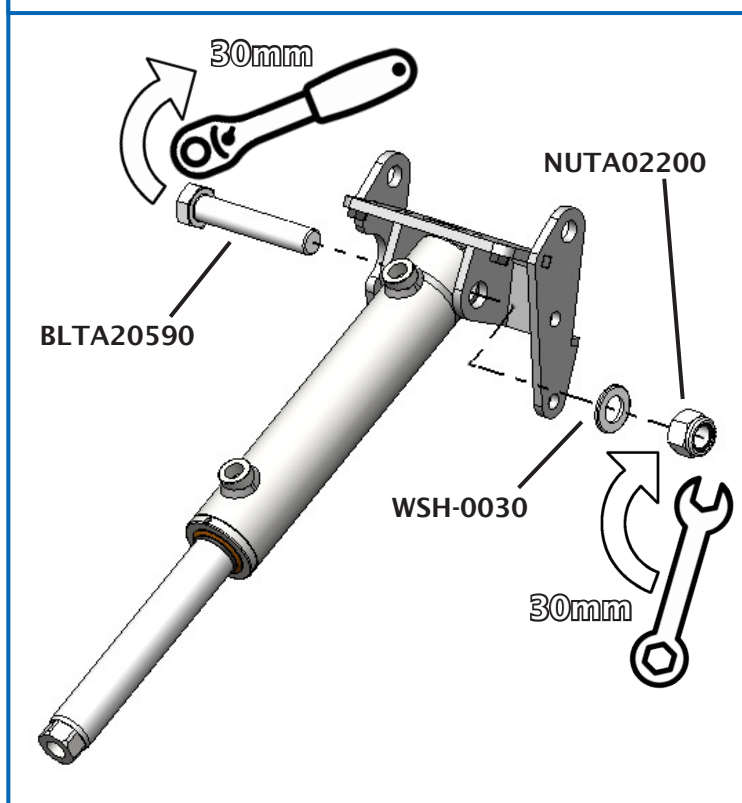


Adjuster bar and plates

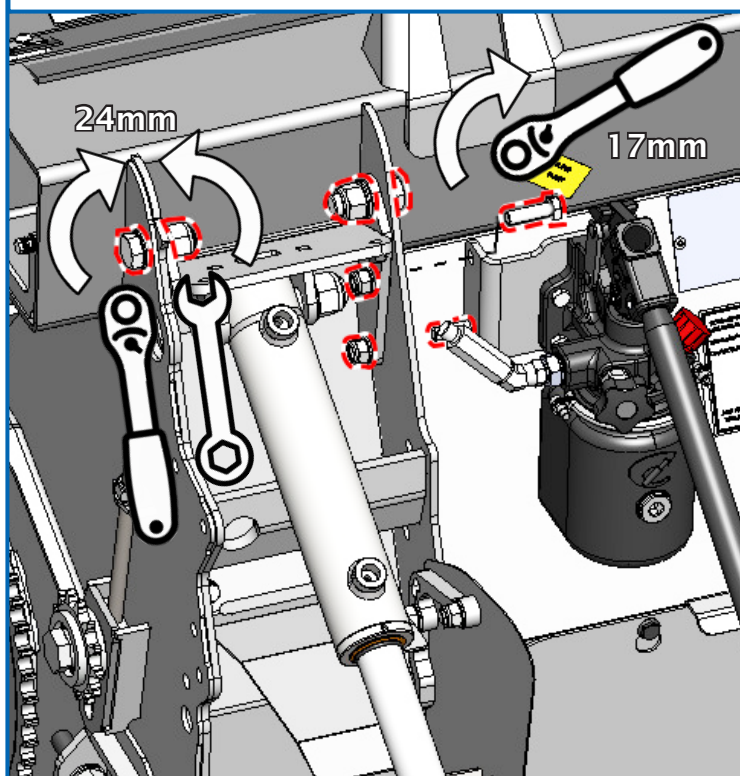
34. Fit new pivot bracket to the gearbox



35. Attach the hydraulic ram to the ram mounting bracket.

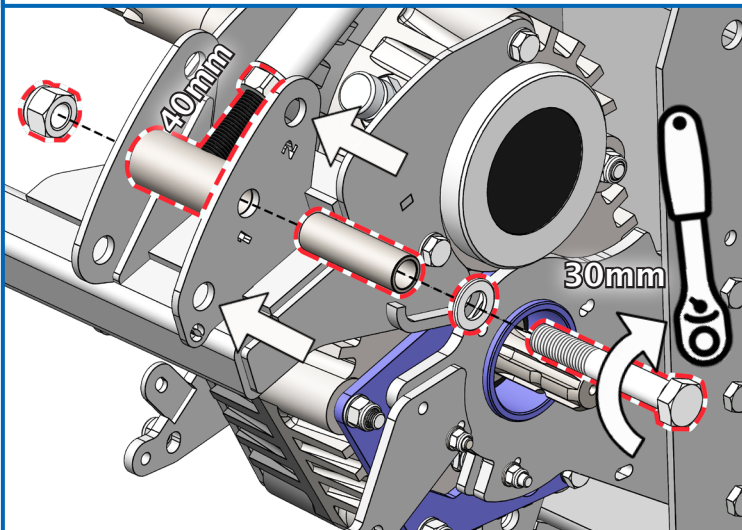


36. Fit the ram mounting bracket and ram together to the mainframe. Along with the hand pump.



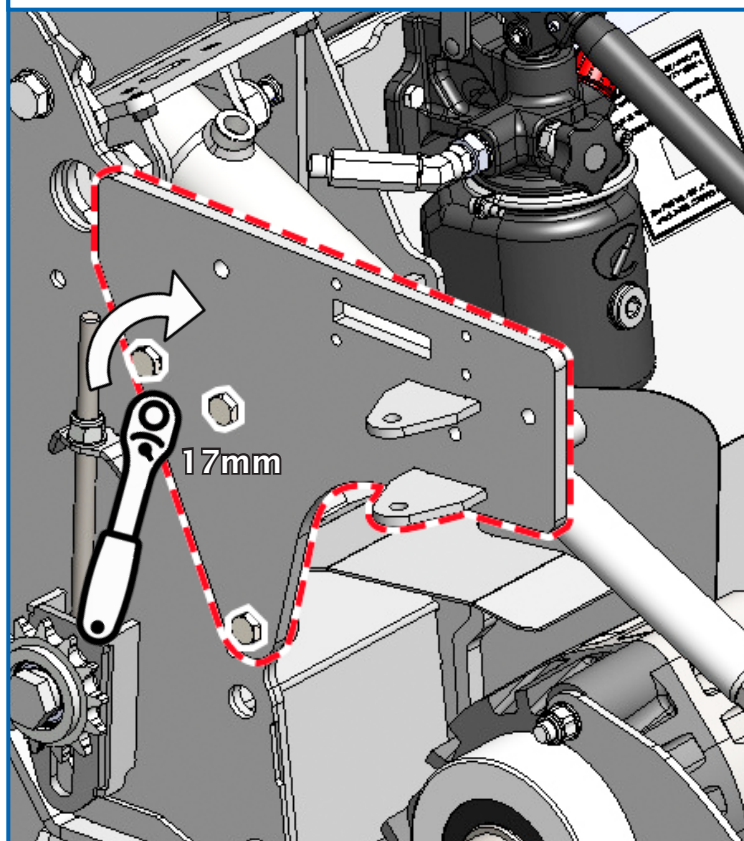


37. To fit the threaded bar to the hydraulic ram, screw the rod into the ram to give 40mm between the locking half nut and the mounting tube, this will be a good starting point to set a new belt.

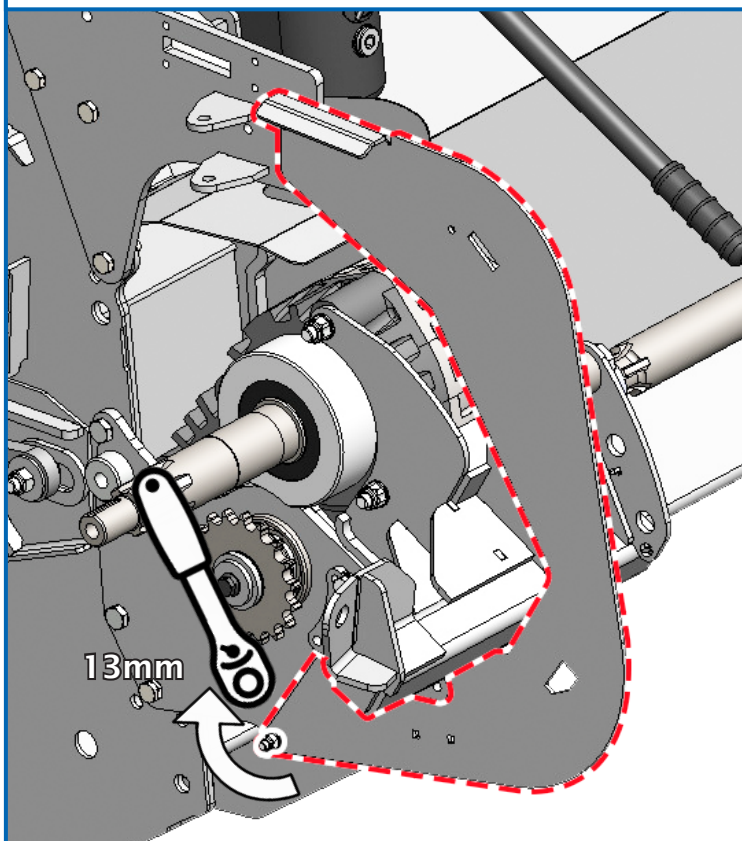


The hole used to attach the ram is dependent on the speed range required. See page 20 for pulley and gearbox positions and speed ranges.

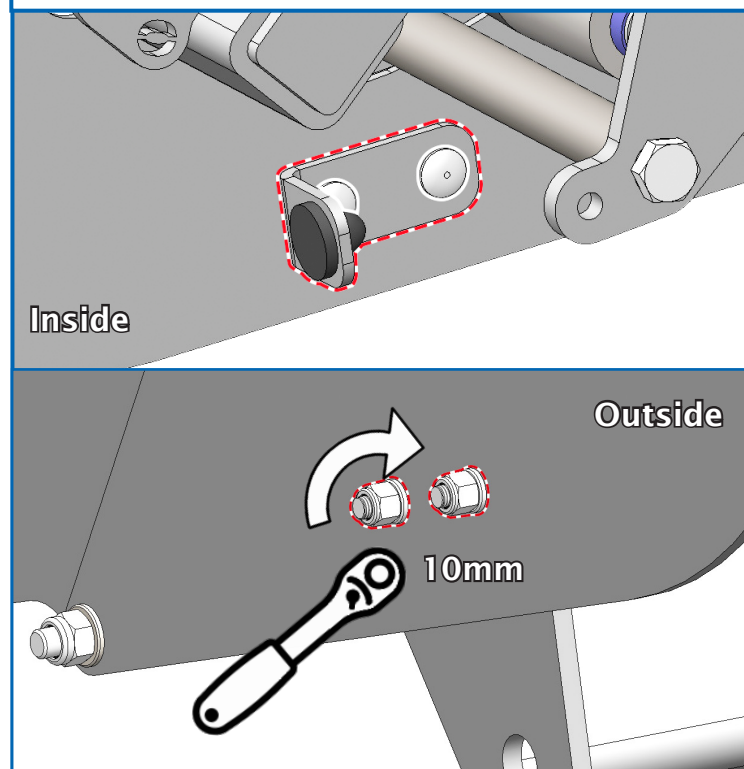
38. Fit the guard pivot weld assembly.



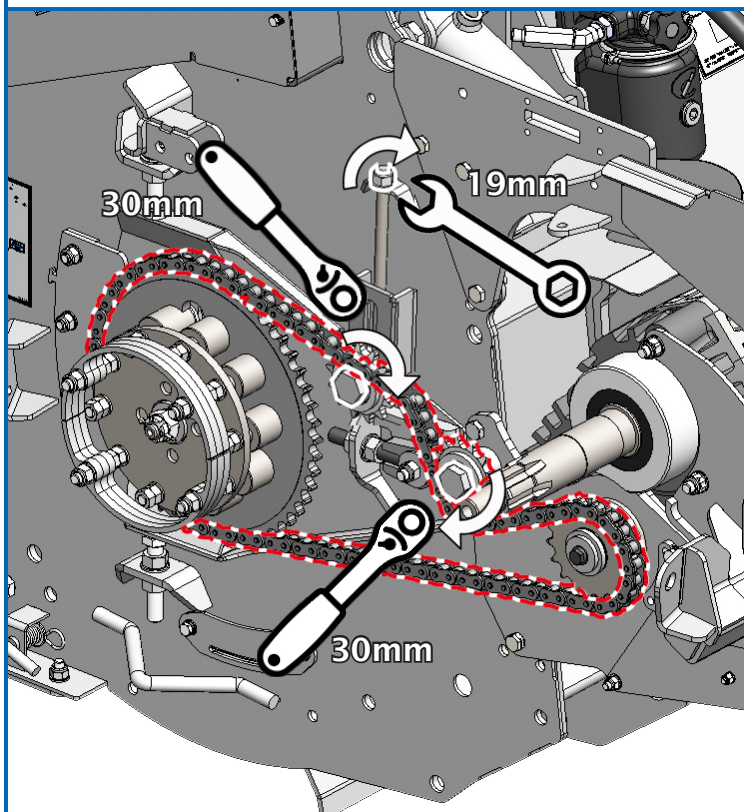
39. Fit the guard mounting plate.



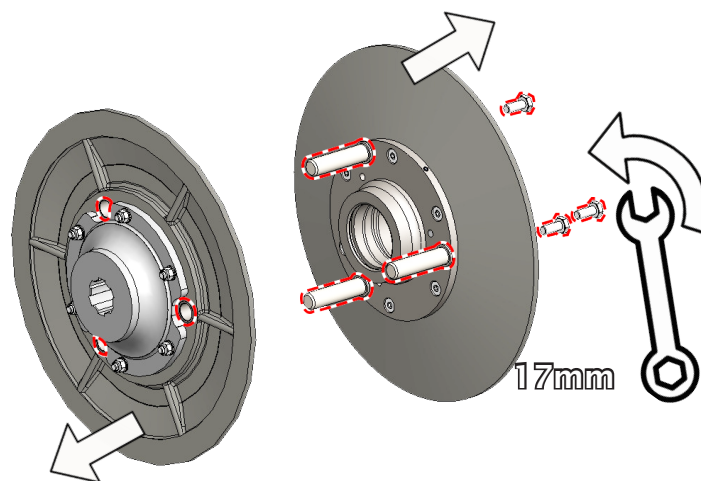
40. Fit the the gearbox guard bump stop, using the M6 nuts on the outside of the guard mounting plate.



41. Fit the idle sprocket and chain to the auger drive and tension chain.

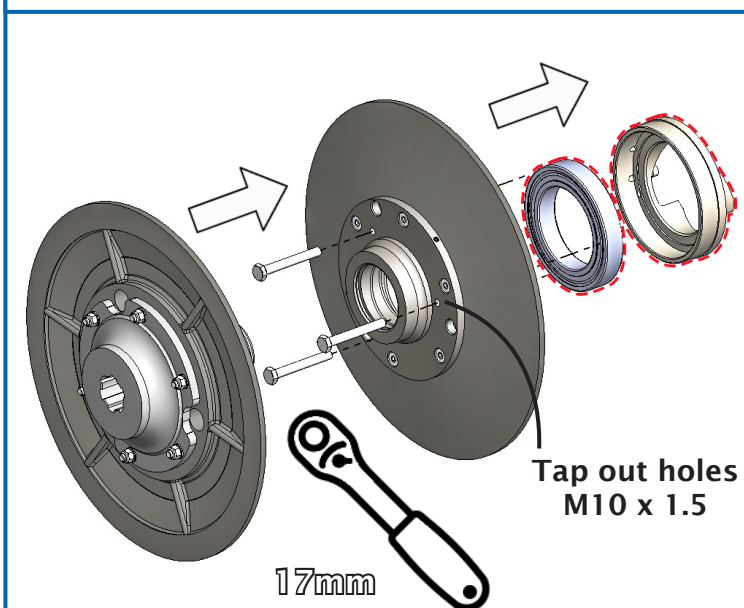


42. Split the pulley's in half and knock out the three pin bushes from one half and the three pins from the other half and discard.



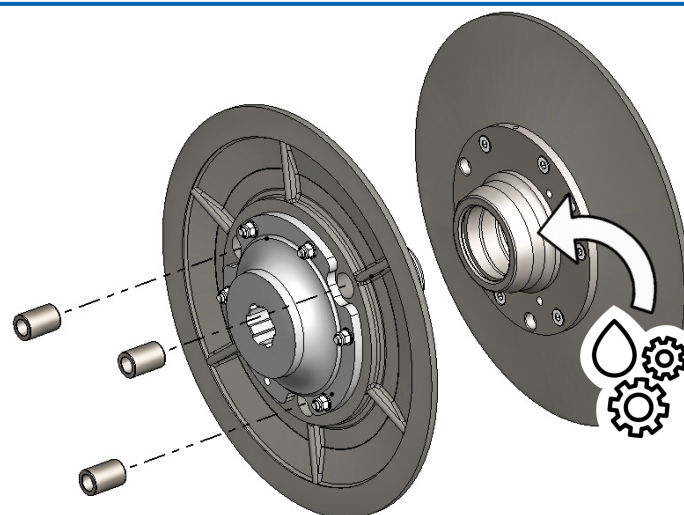
Pins and pin bushes

43. Use three M10x 80mm set screws to jack the bearing and cam away from the pulley hub and discard both.



Cam and cam bearing

44. Knock in the three spacer tubes in the pulley to replace the bushes and slide the two pulley halves back together with application of grease to the hubs beforehand.



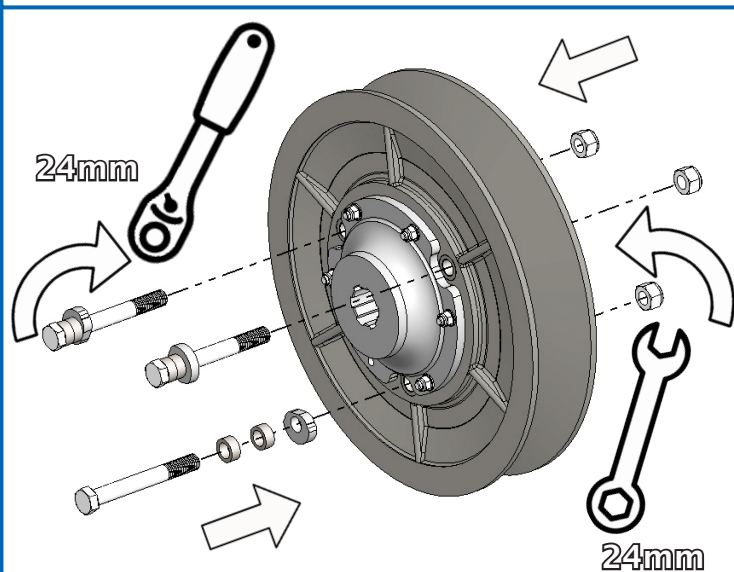
Bushes



Molybdenum grease  
(black grease).

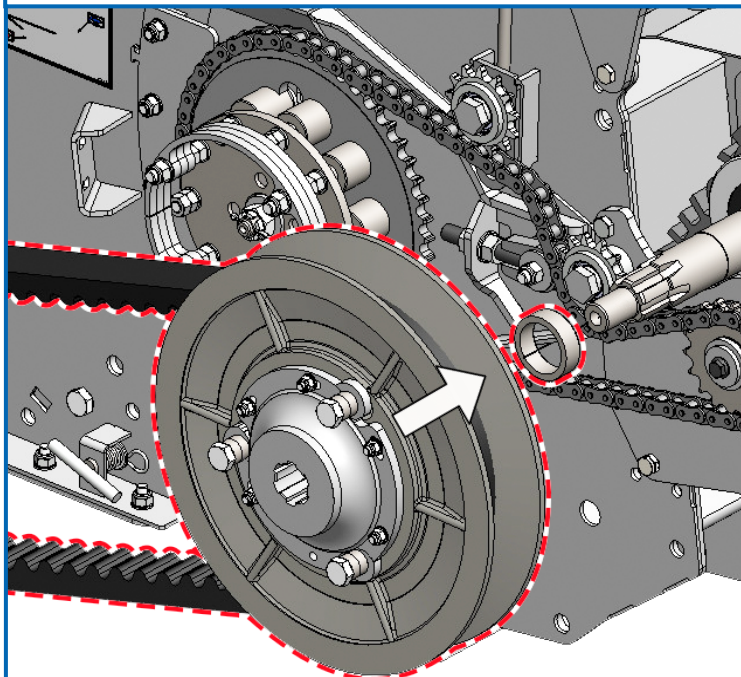


45. Fasten the pulley halves with the bolts, special shaped washers and spacers.

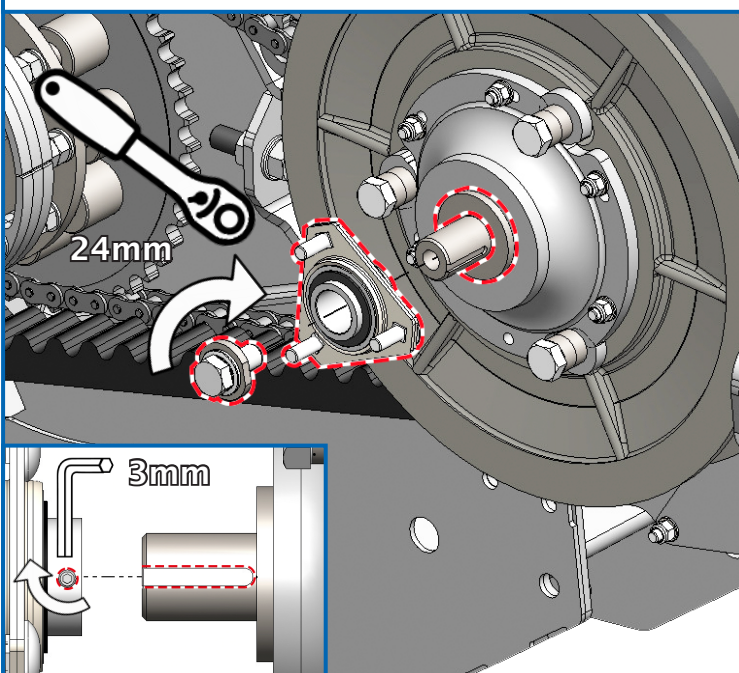


The number of spacers used between the pulley halves correlates with the hole used on the gearbox mounting bracket to the hydraulic ram. See page 20.

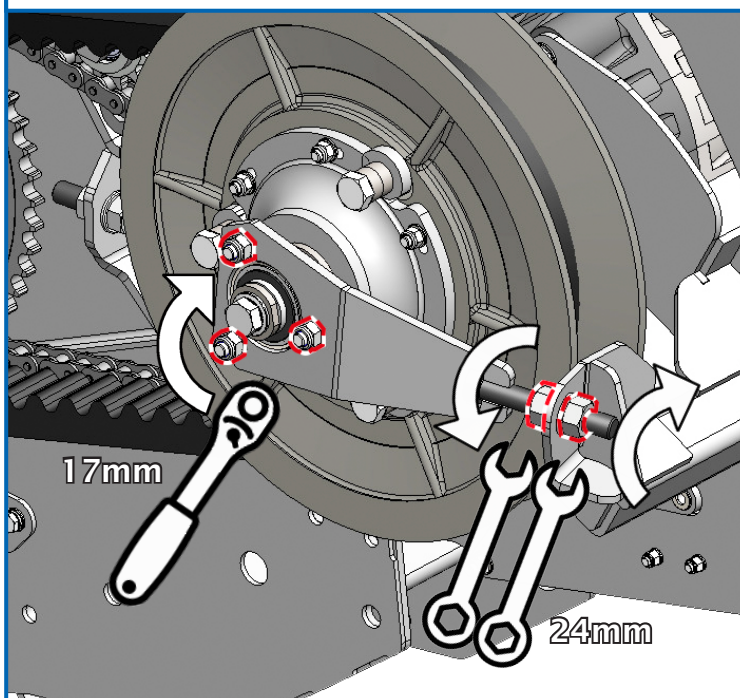
46. Fit spacer ring and rear pulley back onto gearbox with the belt.



47. Put the washer up to the pulley and attach a new tie rod bearing to the shaft, being sure to line one of the grub screws with the keyway in the shaft (2022 and on only). Attach the centre fastener and screw tight the two grub screws.

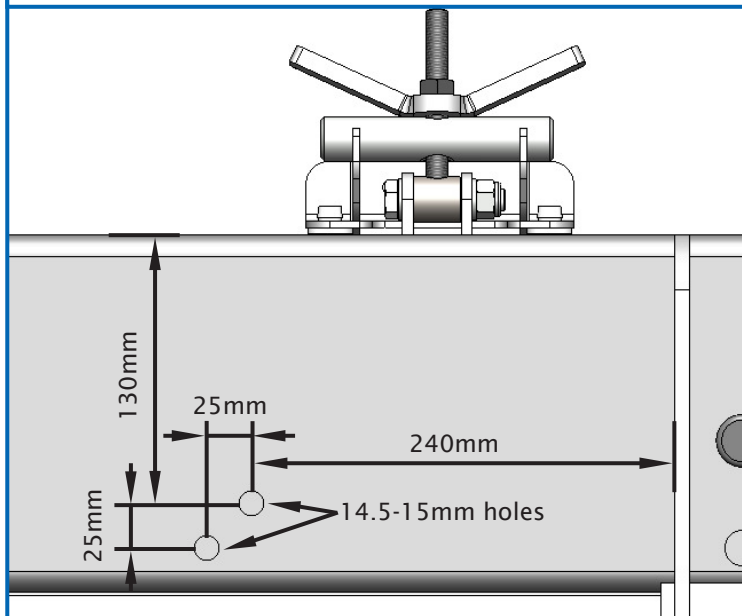


48. Attach the tie rod to the bearing also through the gearbox bracket, and fasten the three nuts tight. Tighten the two lock nuts on the tie rod to the gearbox bracket so to hold the pulley shaft in its natural position.



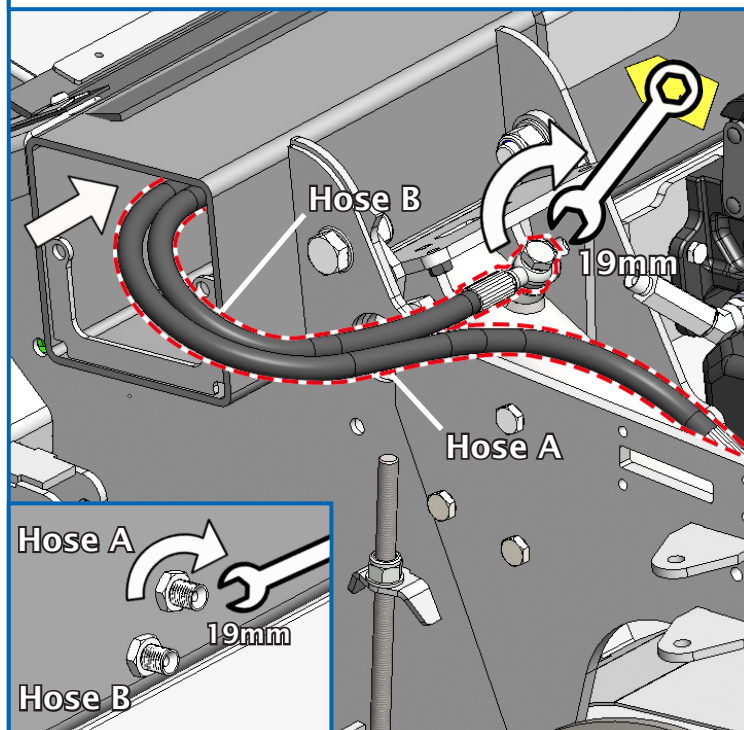


49. Drill two 14.5-15mm holes in the top beam to the left hand side of the back angles nearest the feeder house, to allow hydraulic fittings to pull through.

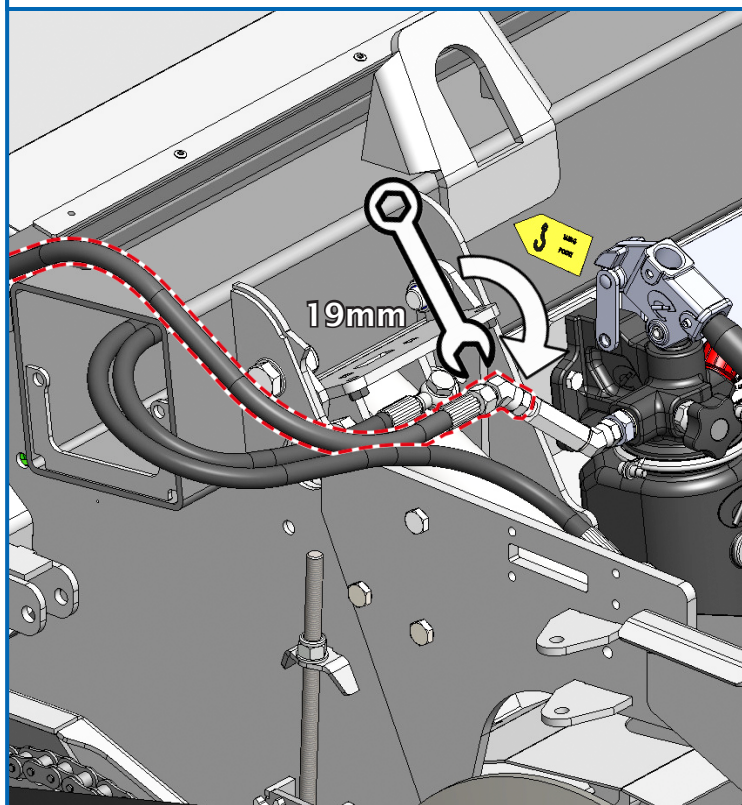


Care needed not to damage wires and hoses already inside top beam.

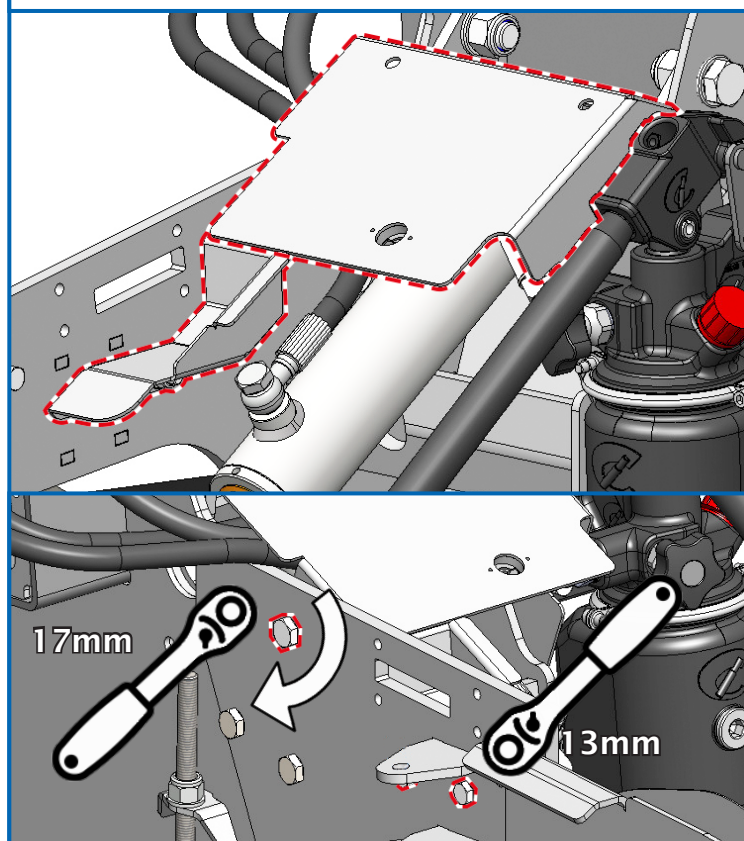
50. Feed the two hoses through the top beam of the header and attach the 90° bulkhead fittings to the top beam through the holes just made.



51. Fit the hose back to the hand pump with extra elbow fitting.

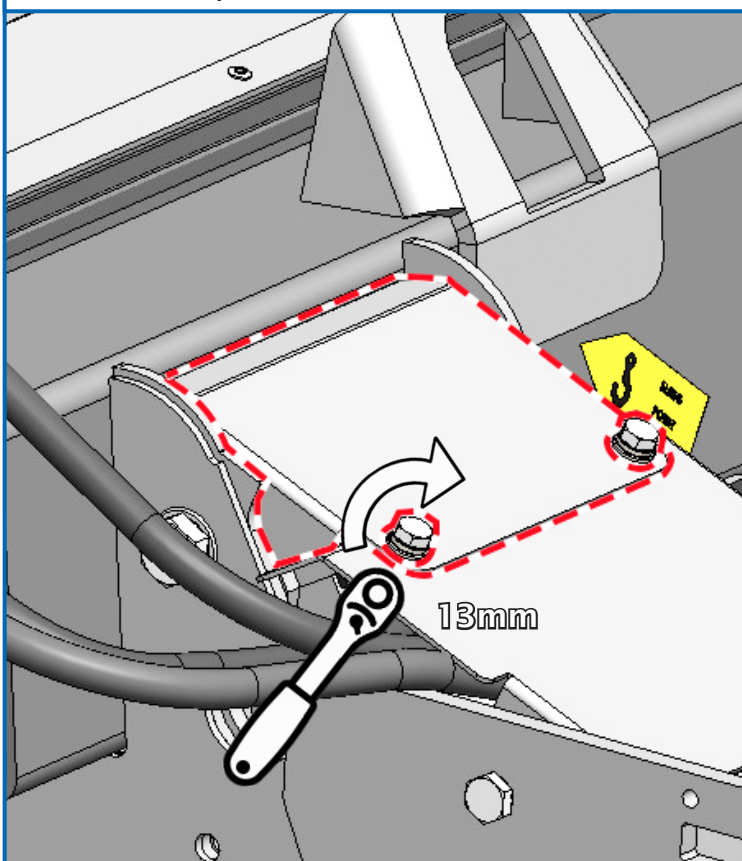


52. Fit the cover guards shown.

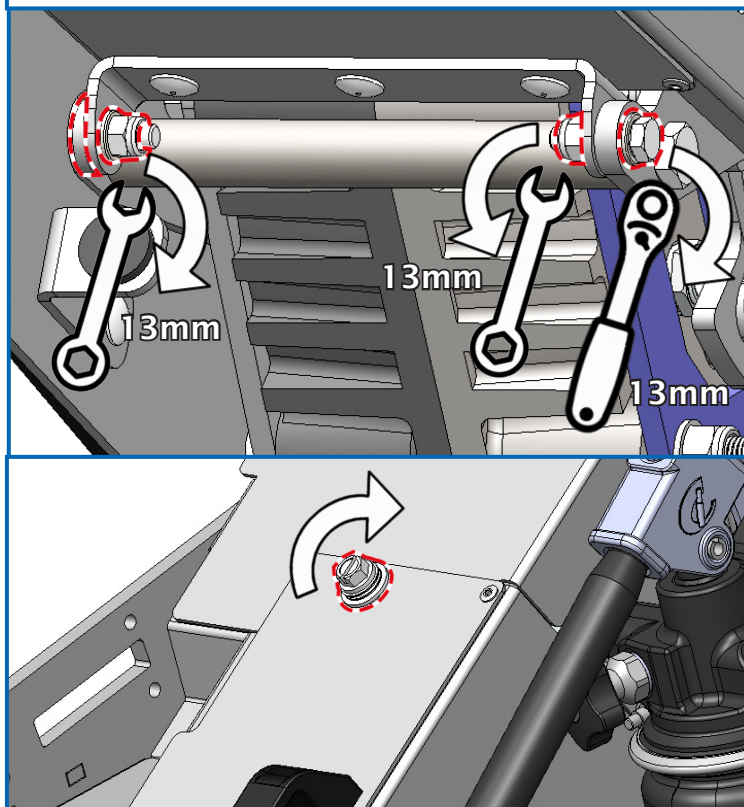




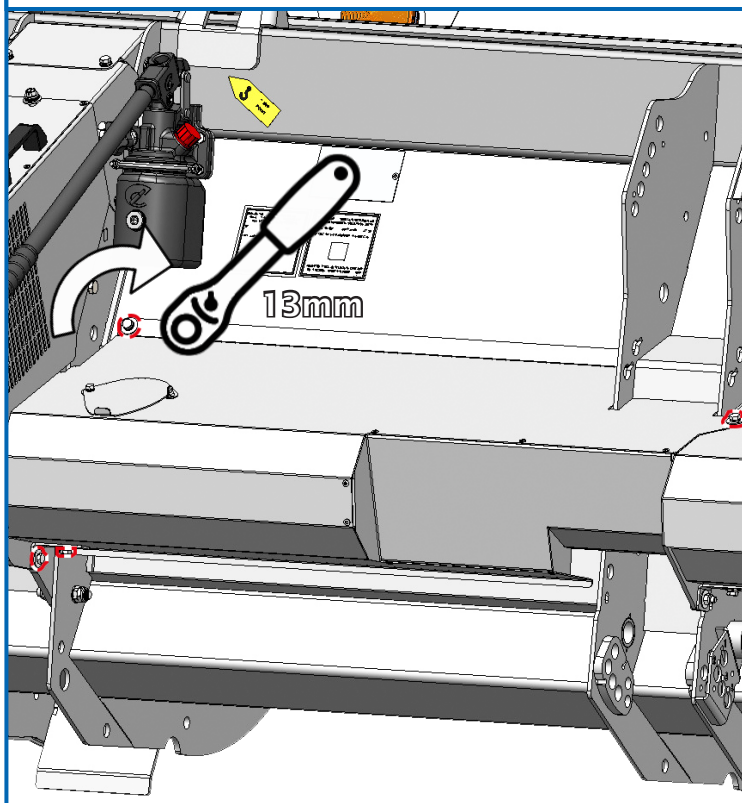
53. Fit the top cover



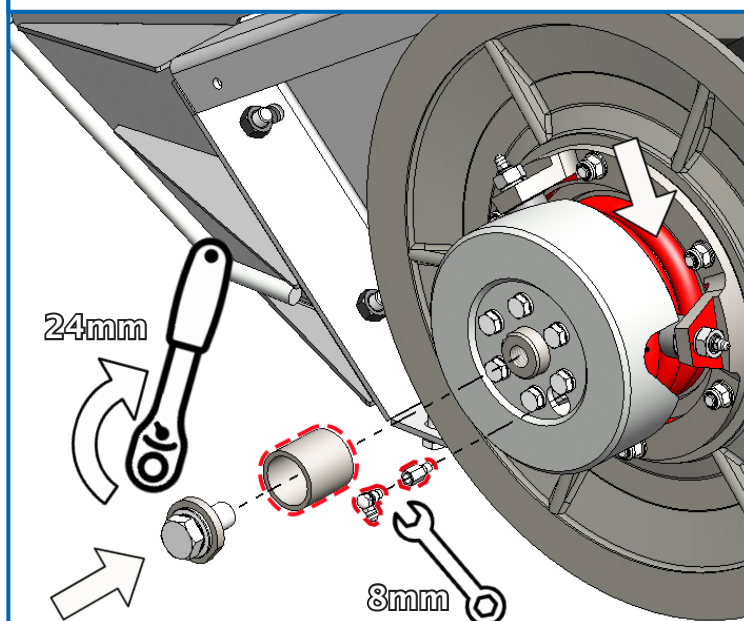
54. Fit the guard to the machine. See page 21 for guard assembly instructions.



55. Refit the drive shaft guard removed in step 19.

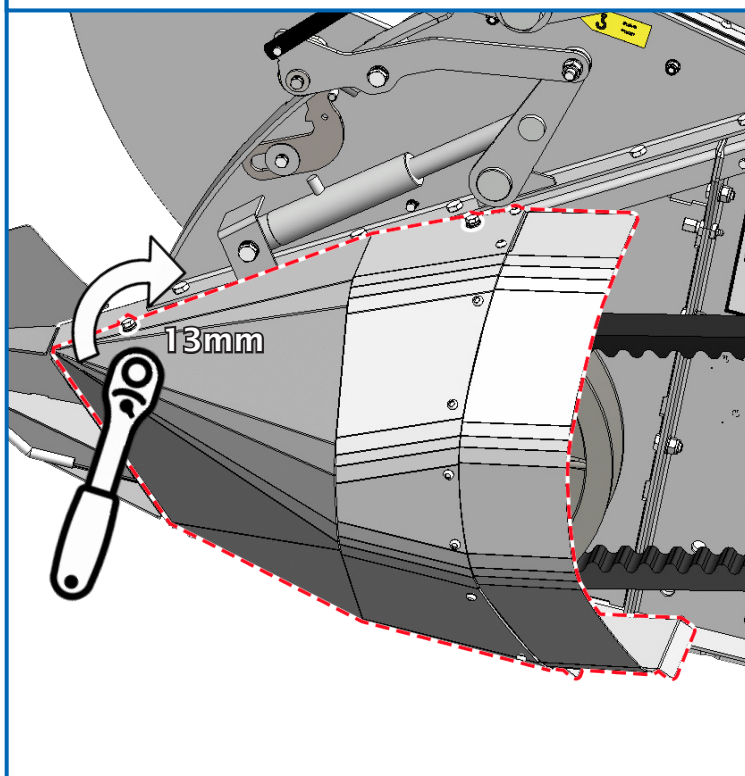


56. Add the bearing spacer on the rotor drive shaft and swap the pulley grease nipple/zerk for the new one.

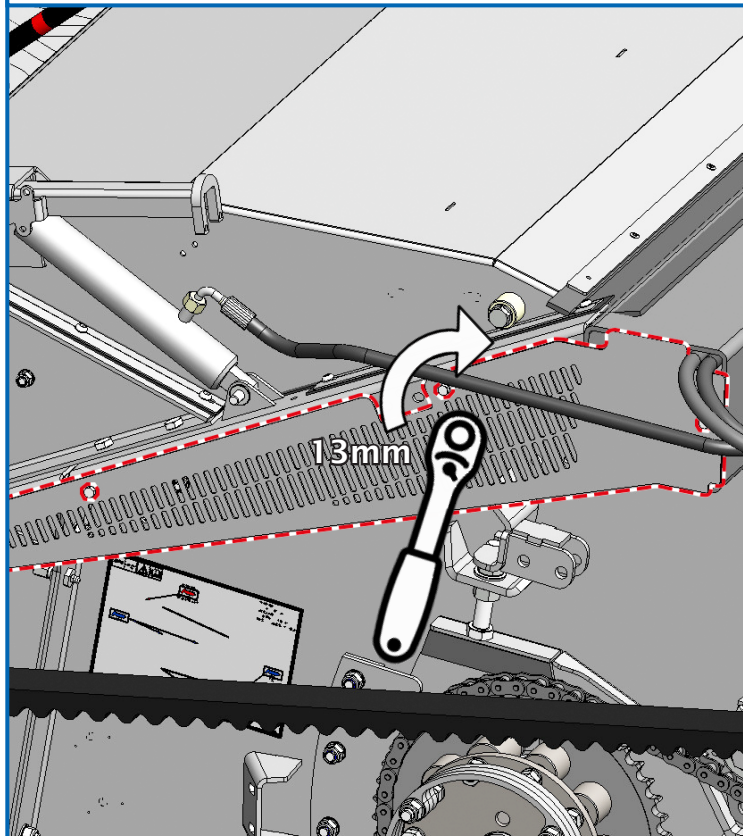


Grease nipple/zerk

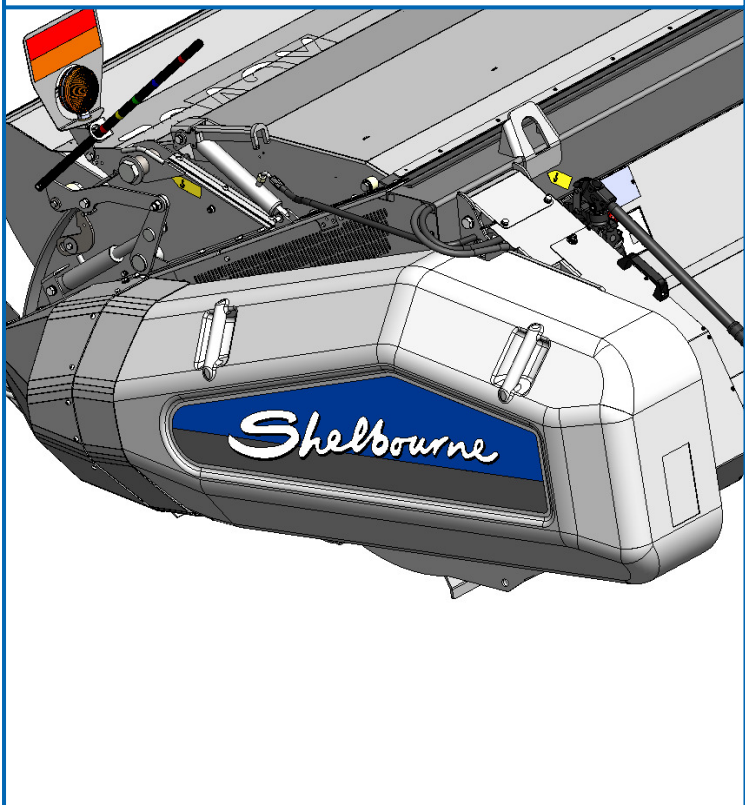
57. Fit new extended nose cone. See page 21 to see how to fit the nose cone adaptor and nose cone fit together.



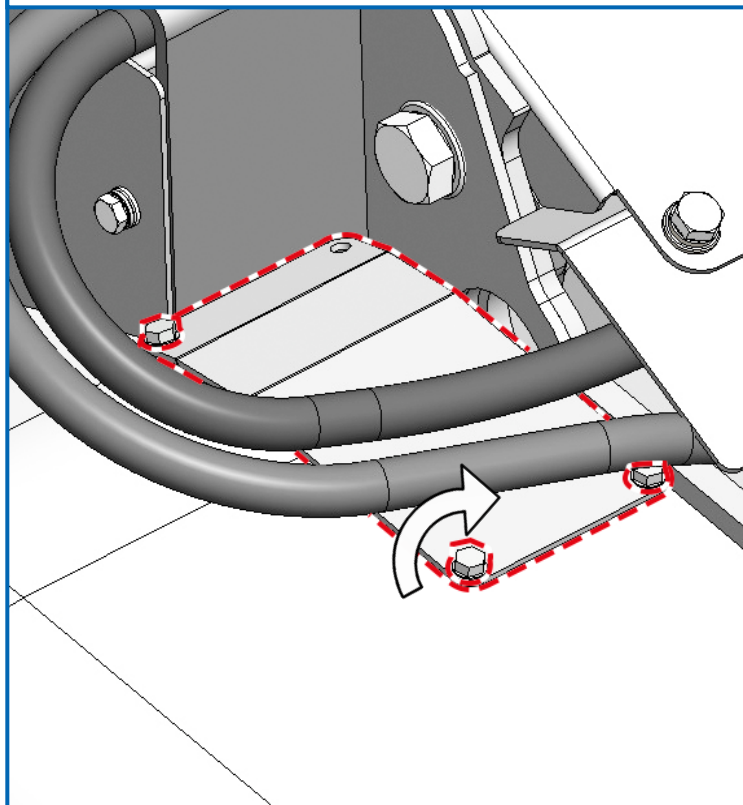
58. Fit vented side plate to machine.



59. Re-fit guard pivot arm to machine along with the plastic guard.

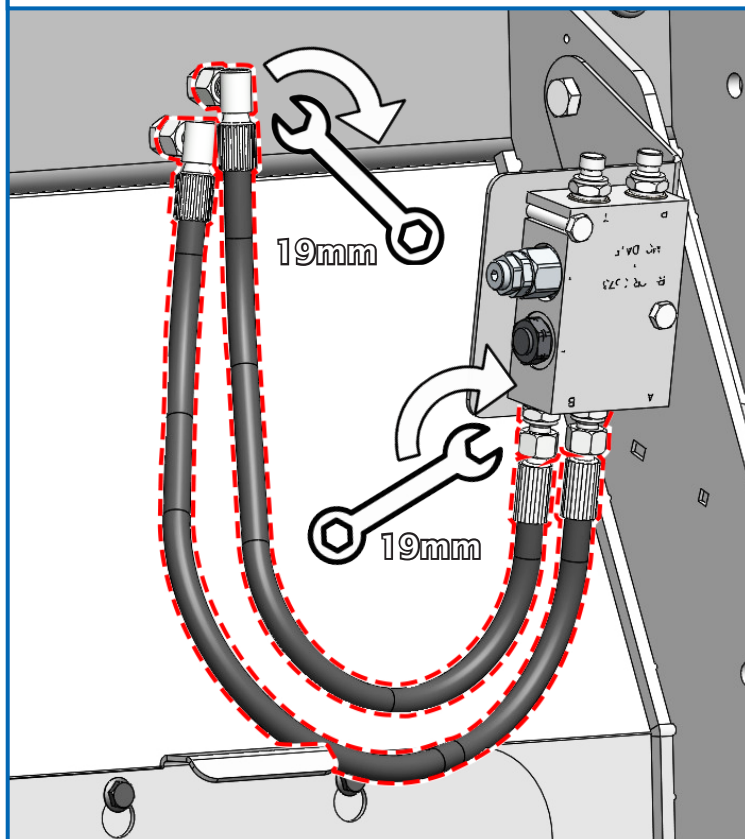


60. Fit blanking plate to plastic guard with self-tapping screws.

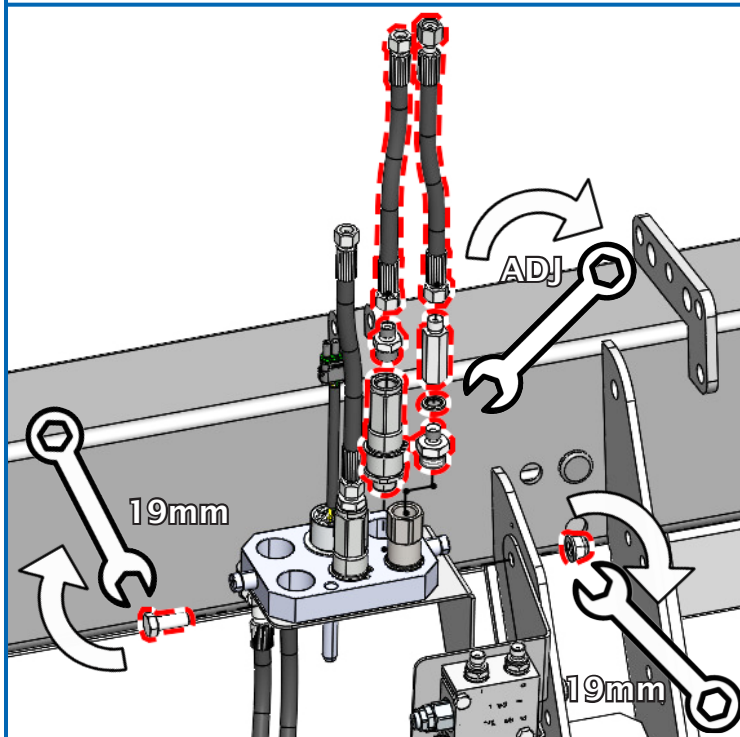




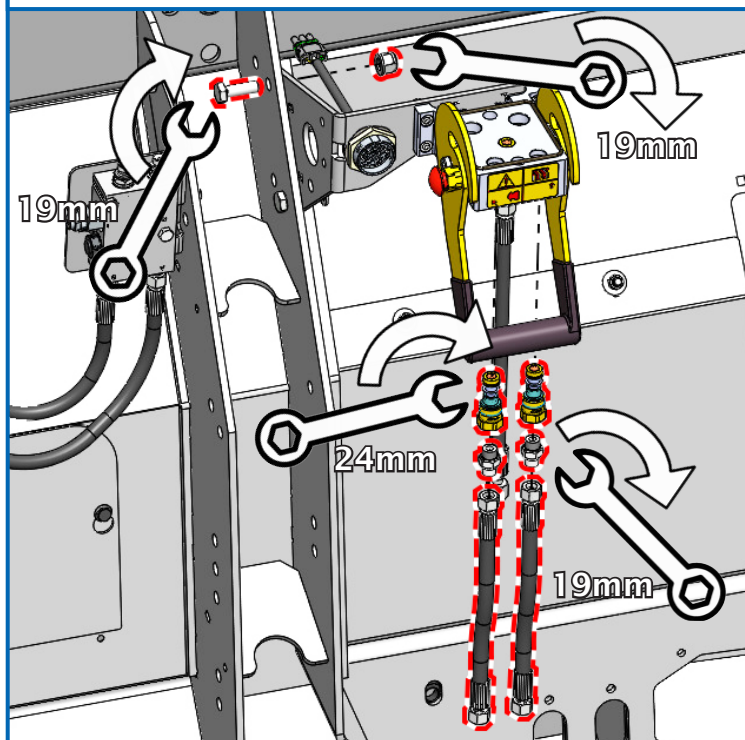
61. Couple up other end of hydraulic hoses.



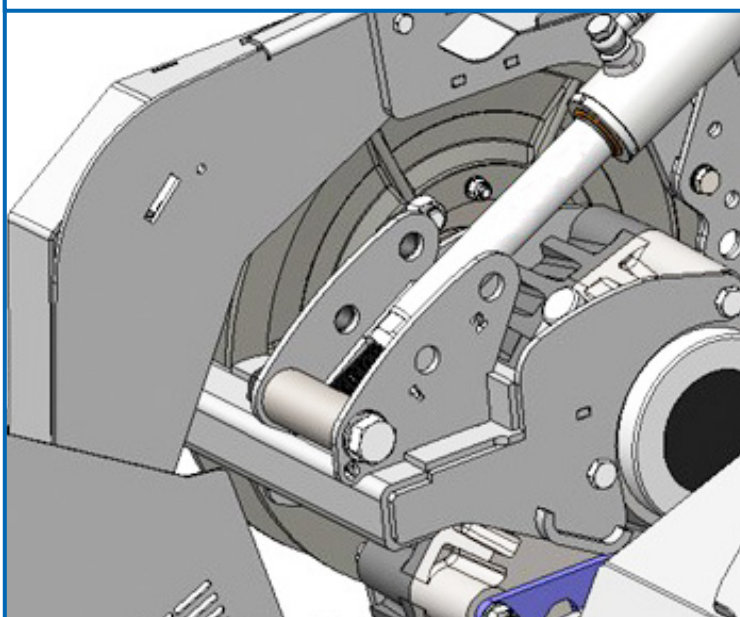
62. Fit multicoupler (John Deere), hoses, fittings and mounting plate, see page 30 for hose positions. Use an adjustable wrench for hydraulic fittings and hoses.



63. Fit multicoupler (CNH), hoses, fittings and mounting plate, see page 28 for hose positions. Use an adjustable wrench for hydraulic fittings and hoses.

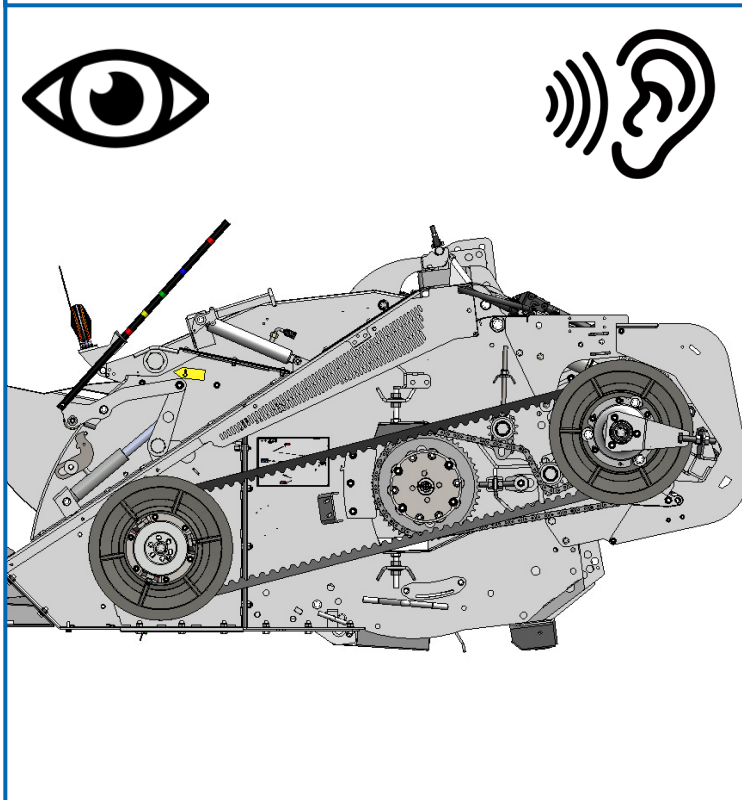


64. Remove wedge from the front pulley. Run the machine slowly and power the hydraulic ram to max speed (ram fully extended) - **Stop the machine.**

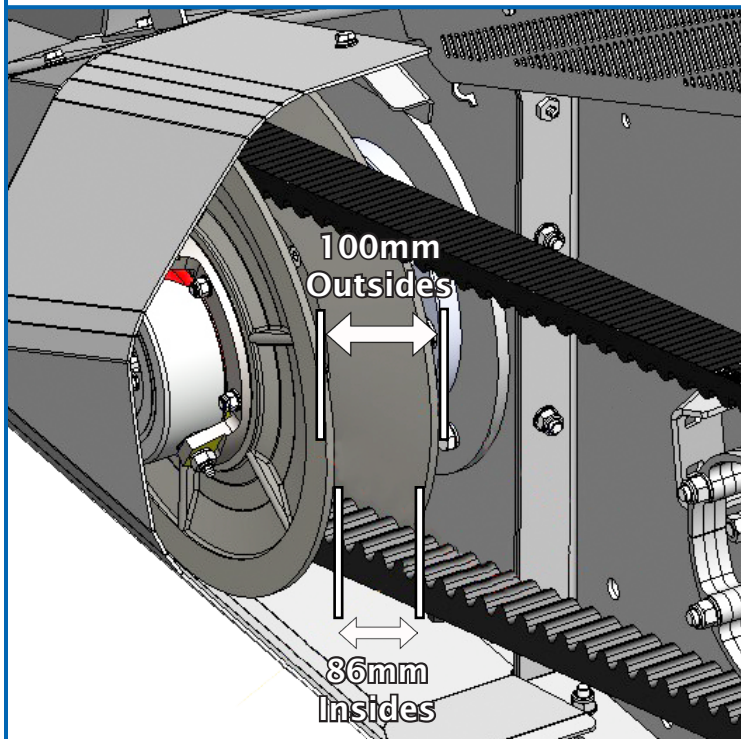


**STOP** the machine, and implement the safe stop procedure.

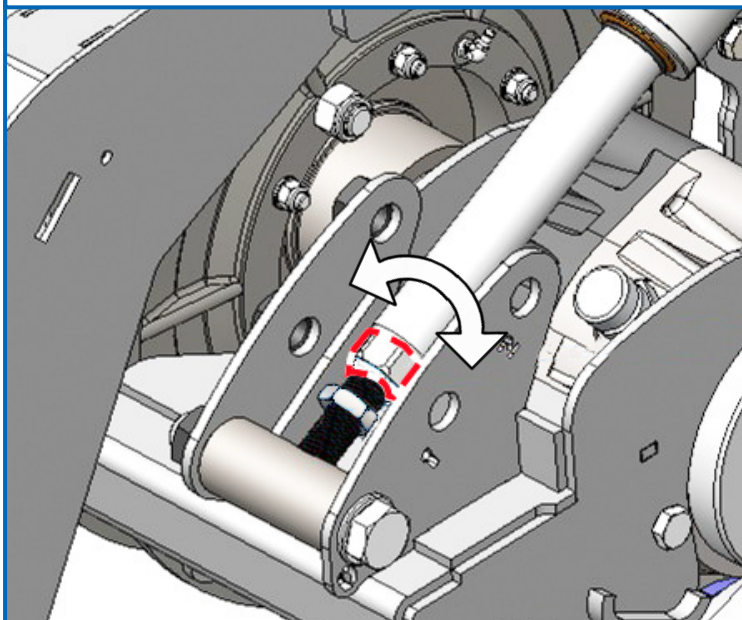
65. Check the drive parts and inspect for leaks in hydraulic lines or clashes of parts



66. Measure the distance to the outside of the pulley sheaves. Should measure 98-100mm (3 15/16") outside, or 84-86mm (3 3/8") inside the pulley sheaves.



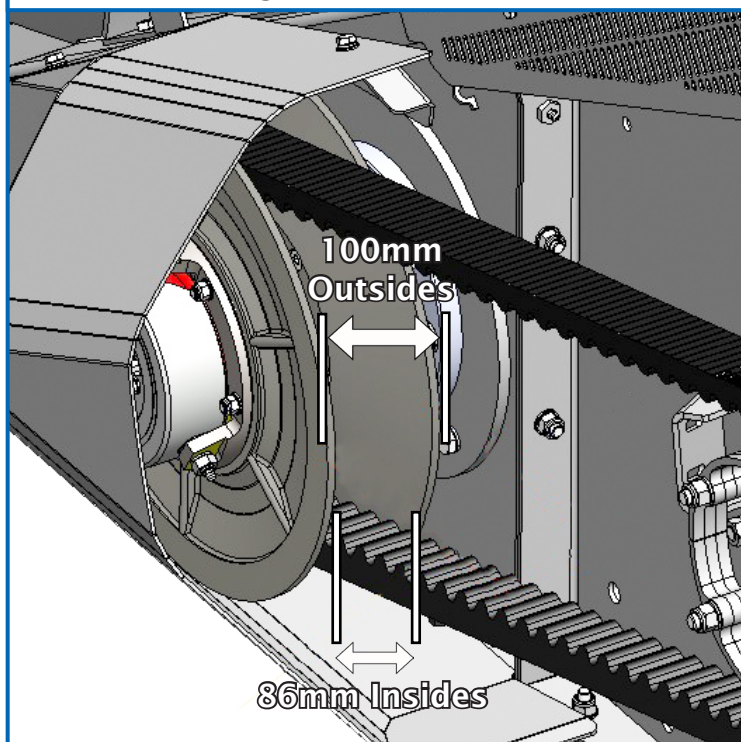
67. If wrong, adjust the belt centres by turning the ram rod.



If front pulley gap > 98-100mm - shorten the thread length of the adjuster

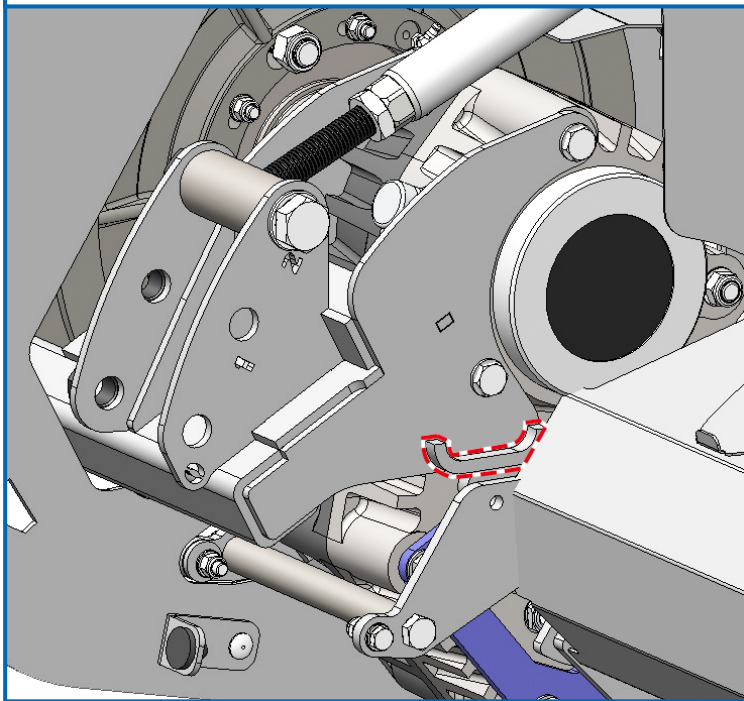
If front pulley gap < 98-100mm - Lengthen the thread length of the adjuster

68. Close the guard and then run the machine slowly, stop machine and implement safe stop procedure. Then check front pulley measurement again.

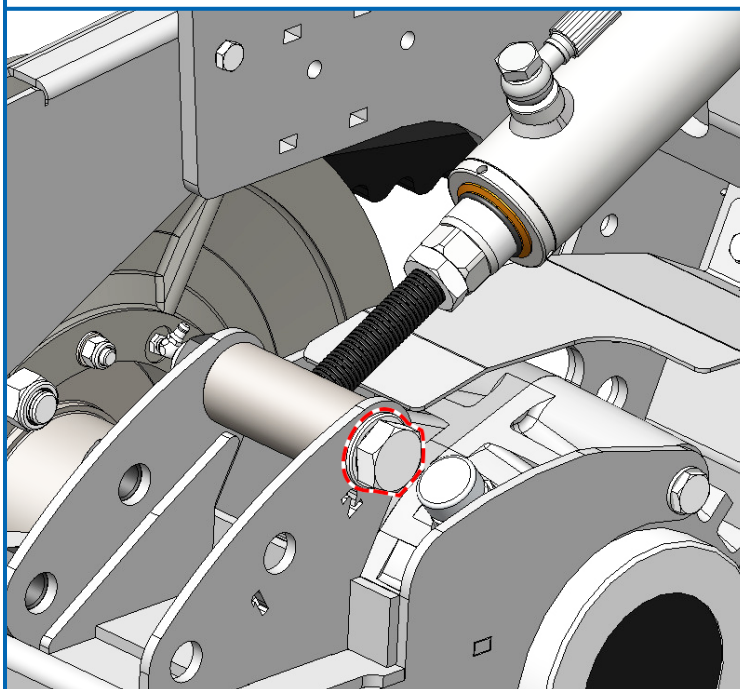




69. If the gearbox hits its pivot stop before the desired pulley setting is reached, follow step 70. If satisfied with the belt setting then lock at the threaded adjuster by tightening the lock nut and continue to step 73.

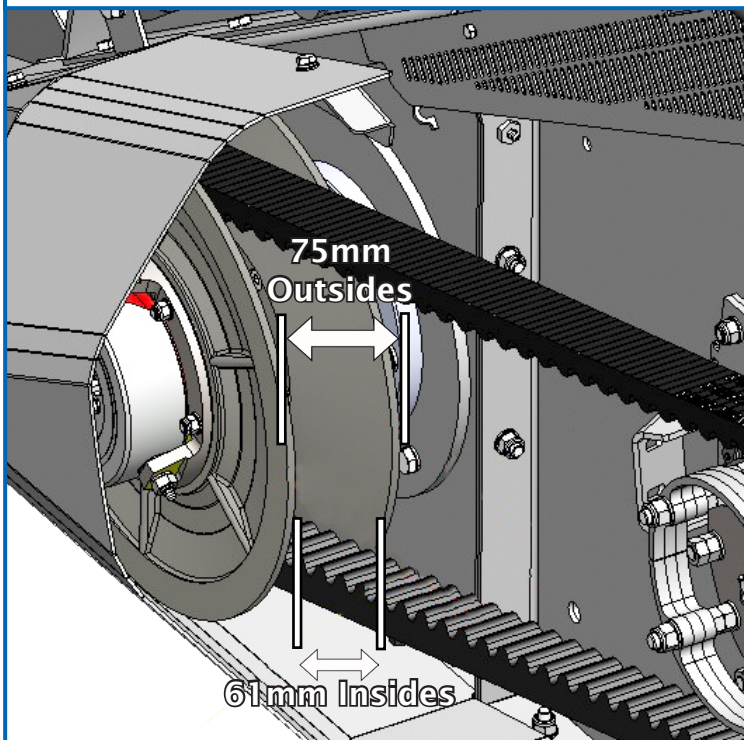


70. Repeat all previous steps with the rotor speed set to minimum (ram fully closed).

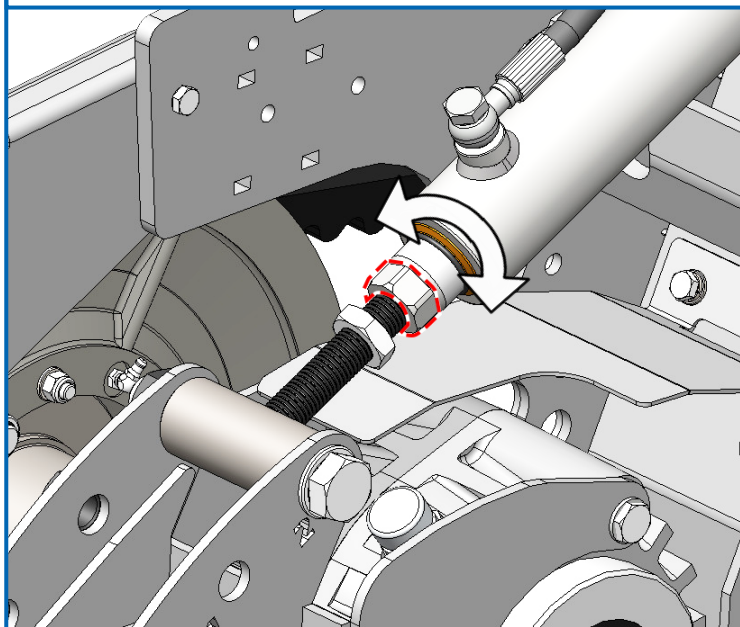


**STOP the machine, and implement the safe stop procedure.**

71. The measurement between the outsides of the pulley sheaves should be 73-75mm (2 15/16") on the outsides or 59-61mm (2 3/4") on the inside.



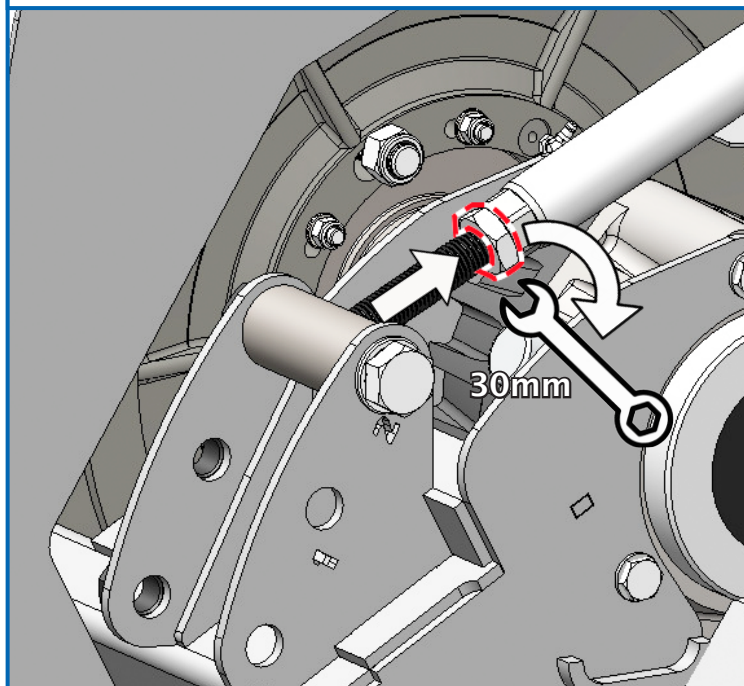
72. If wrong, adjust the belt by turning the ram rod.



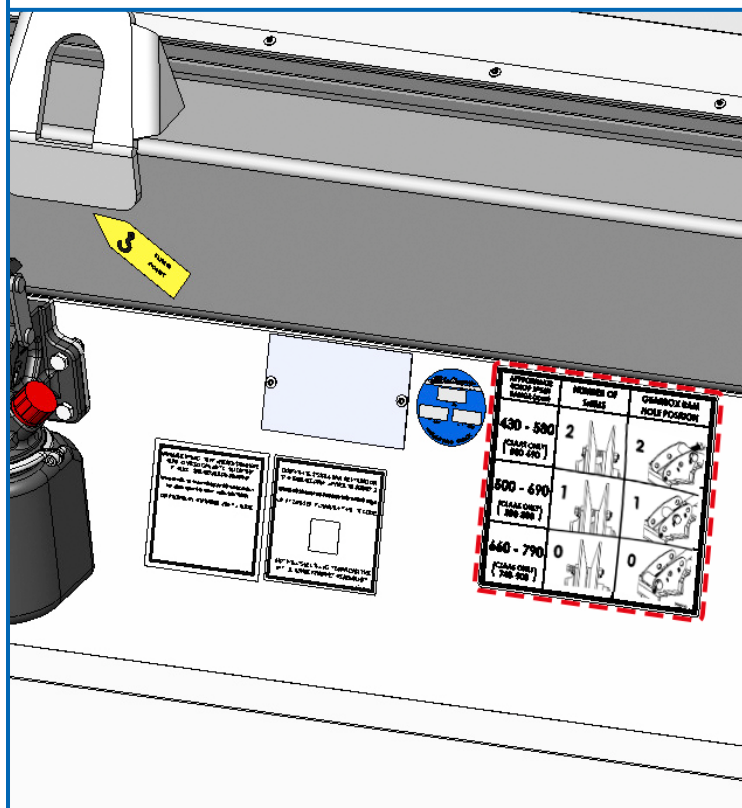
If front pulley gap > 73-75mm – shorten the thread length of the adjuster

If front pulley gap < 73-75mm – Lengthen the thread length of the adjuster

73. Close guard and run the machine slowly, stop machine and implement safe stop procedure. Then check front pulley measurement again. When correct lock off the threaded adjuster by tightening the locknut.



74. Fix the speed decal to the back of the machine.



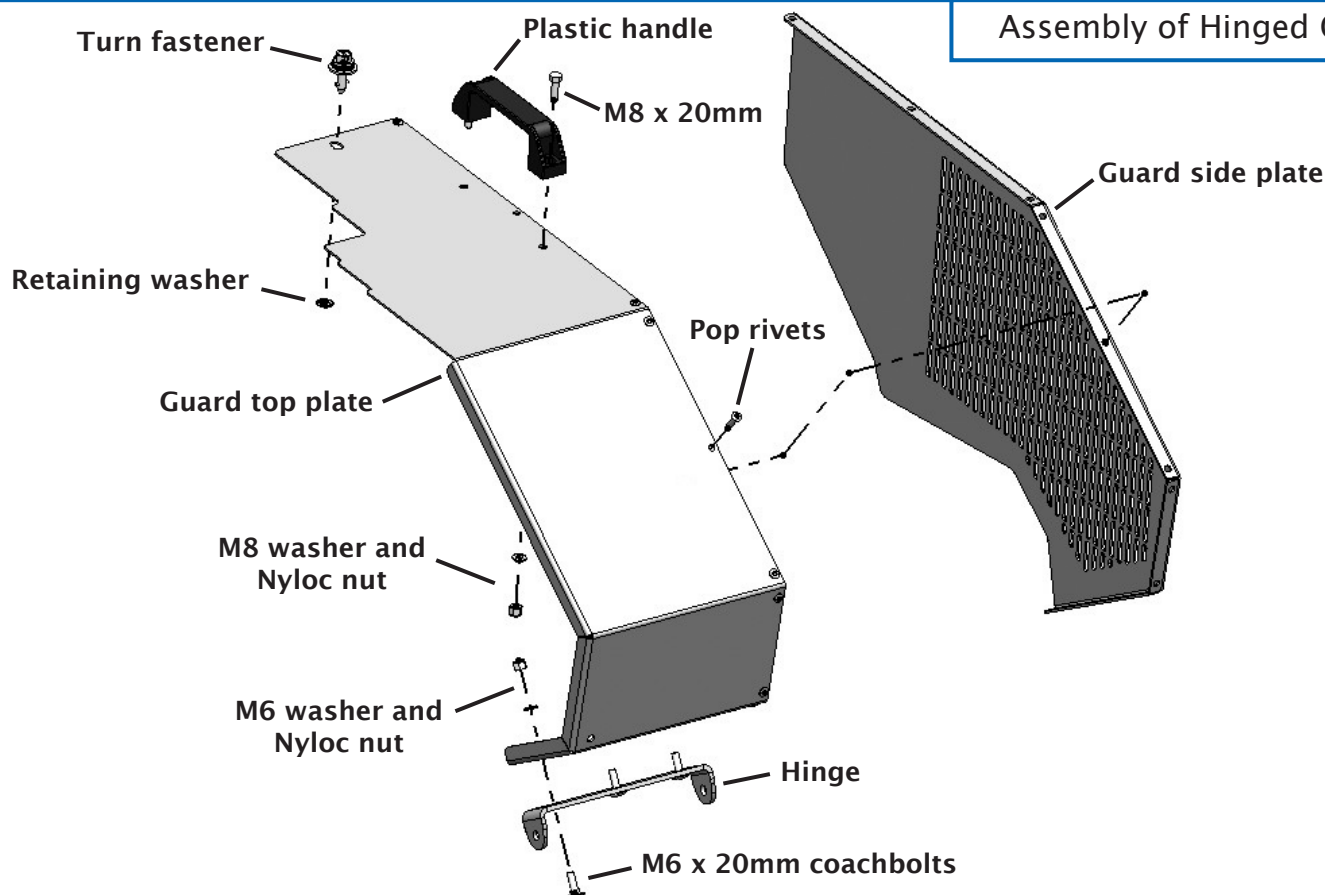
Speed range decal.

Use this as a guide for the speed ranges you are looking to achieve.

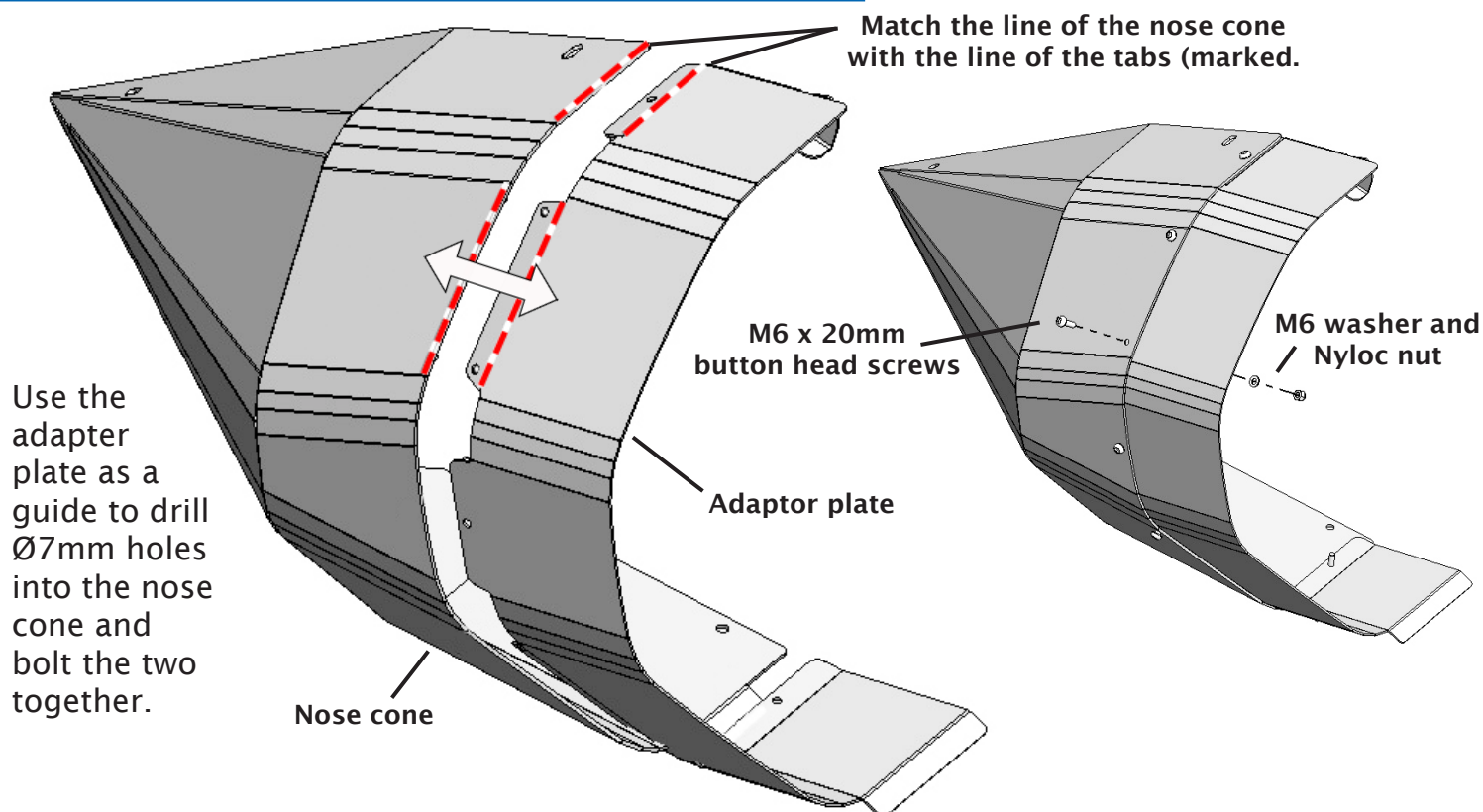
APPROXIMATE ROTOR SPEED RANGE (rpm)	NUMBER OF SPACERS	GEARBOX RAM HOLE POSITION
<b>430 - 580</b> (CLAAS ONLY) (500-690)	<b>2</b> 	<b>2</b> 
<b>500 - 690</b> (CLAAS ONLY) (580-800)	<b>1</b> 	<b>1</b> 
<b>660 - 790</b> (CLAAS ONLY) (740-900)	<b>0</b> 	<b>0</b> 



## Assembly of Hinged Guard



## Fitting the nose cone and nose cone adaptor together.



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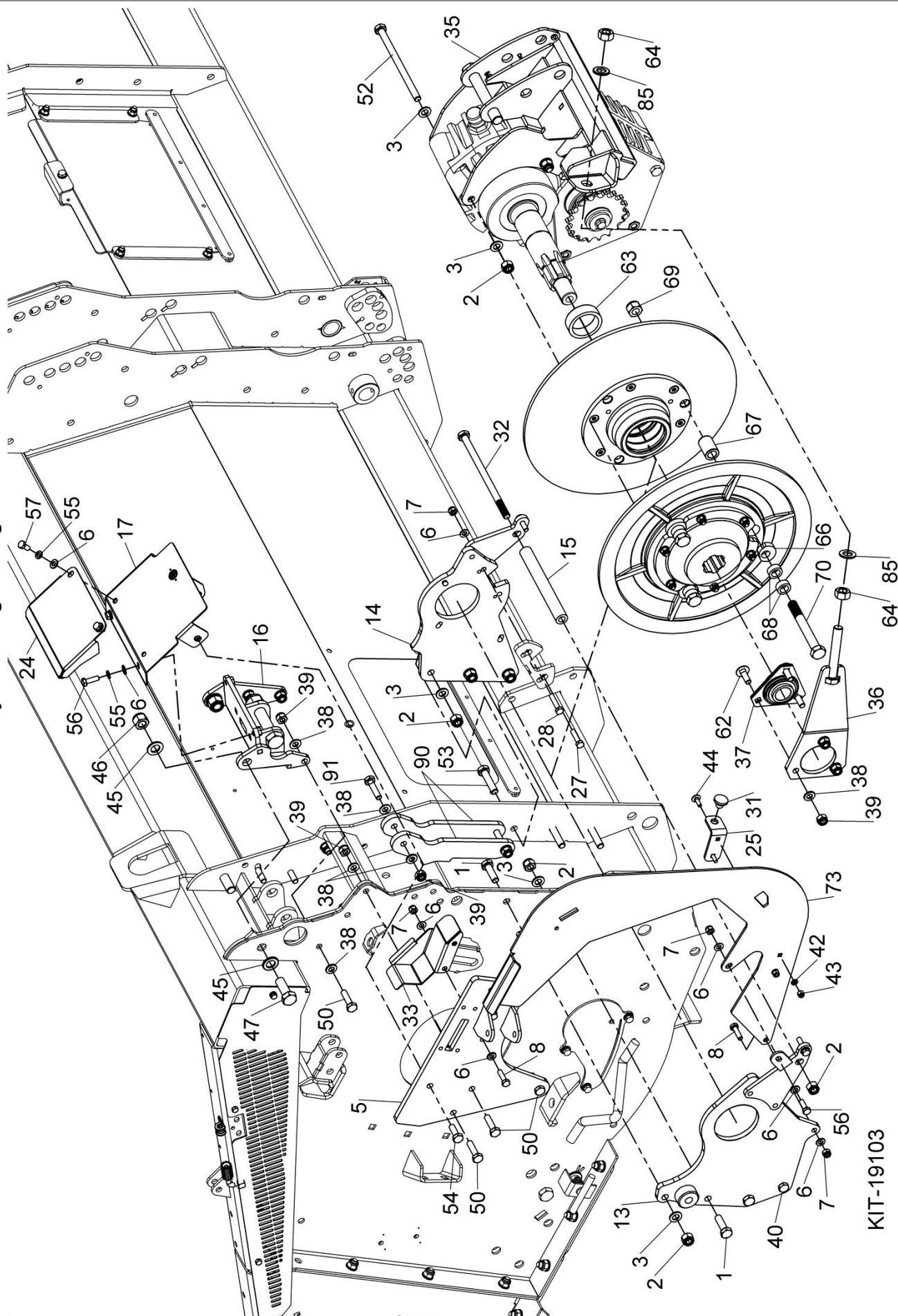
ASSY NUMBER: KIT-19103			ASSY DESCRIPTION: HYDRAULIC VS DRIVE CONVERSION KIT (XCV)				
ITEM	PART NO	DESCRIPTION	QTY	ITEM	PART NO	DESCRIPTION	QTY
1	HSS-0250	SETSCREW (M12x30)	3	37	BRG-0240	SUPPORT	1
2	NUT-0269	NUT (M12 NYLOC)	9	38	WSH-0015	WASHER (M10 PLAIN)	20
3	WSH-0018	WASHER (M12 PLAIN)	12	39	NUT-0265	NUT (M10 NYLOC)	14
4	293315 01	PIVOTING GB NOSE CONE ADAPTOR	1	40	HSS-0198	SETSCREW (M10x35)	1
5	293285 01	GUARD PIVOT W/A	1	41	POP-0006	POP RIVET	10
6	WSH-0012	WASHER (M8 PLAIN)	21	42	WSH-0009	WASHER (M6 PLAIN)	17
7	NUT-0263	NUT (M8 NYLOC)	12	43	NUT-0260	NUT (M6 NYLOC)	16
8	HSS-0150	SETSCREW (M8x30)	5	44	BLTF06143	COACHBOLT (M6x20)	5
9	293314 01	FILL IN PLATE	1	45	WSH-0024	WASHER (M16 PLAIN)	4
10	293303 01	VENTED TOP SIDE PANEL	1	46	NUT-0271	NUT (M16 NYLOC)	2
11	RAM-0037	DOUBLE ACTING CYLINDER	1	47	HSS-0317	SETSCREW (M16x45)	2
12	293530 01	THREADED ADJ W/A (2025 & ON)	1	48	NUT-0210	NUT (M20 NYLOC)	2
OR	293234 01	THREADED ADJ W/A (2024 ONLY)	1	49	BLTA20590	BOLT (M20x110)	1
13	293290 01	GEARBOX PIVOT PLATE W/A	1	50	HSS-0202	SETSCREW (M10x40)	6
14	293293 01	GEARBOX PIVOT PLATE W/A	1	51	SCW-5180	SELF TAP SCREW	3
15	293294 01	TIE BAR W/A	1	52	BLTA12810	BOLT (M12x190)	2
16	293296 01	RAM MTG BRKT W/A	1	53	HSS-0265	SETSCREW (M12x55)	3
17	293301 01	TOP RAM GUARD W/A	1	54	HSS-0194	SETSCREW (M10x30)	2
18	293297 01	HINGED GUARD TOP PLATE	1	55	WSH-0058	WASHER (M8 SPRING)	4
19	293298 01	HINGED GUARD SIDE PLATE	1	56	HSS-0145	SETSCREW (M8x25)	3
20	293312 01	HINGE	1	57	HSS-0135	SETSCREW (M8x16)	2
21	LTC-0017	¼ TURN FASTENER (9.5mm SHANK)	1	58	HSS-0086	SETSCREW (M8x20)	4
OR	LTC-0010	¼ TURN FASTENER (7.5mm SHANK)	1	59	WSH-0056	WASHER (M6 SPRING)	1
22	LTC-0016	RETAINING WASHER (DIA 18.5mm)	1	60	HSS-0088	SETSCREW (M6x25)	1
OR	LTC-0012	RETAINING WASHER (DIA 14.5mm)	1	61	SCW-4960	BUTT HD SCREW (M6x20)	7
23	HND-0000	BLACK PLASTIC HANDLE	1	62	BLT-3750	COACHBOLT (M10x30)	3
24	293313 01	COVER PLATE	1	63	292586 01	SPACER	1
25	293302 01	GUARD STOP PLATE	1	64	NUT-0180	NUT (M16 PLAIN)	2
26	HASAA0303	45° ELBOW FITTING	1	65	HFAW50003	¼" BANJO BOLT	2
27	HSS-0152	SETSCREW (M8x35)	2	66	293119 01	VS SPOCKET WASHER	3
28	HSS-0153	SETSCREW (M8x40)	1	67	293116 01	BUSH	3
29	WSH-0030	WASHER (M20 PLAIN)	2	68	293120 01	PULLEY SPACER	6
30	BLTA20654	BOLT (M20x130)	1	69	NUT-0875	M16 NUT (M16 TYPE T)	3
31	RUB-0330	RUBBER GROMMET	1	70	BLT-2334	BOLT (M16x130)	3
32	BLTA12860	BOLT (M12x220)	1	71	HATAA0303	BULKHEAD ELBOW (90° 1/4")	2
33	293318 01	COVER PLATE	1	72	HVB-29015	IN-LINE DUAL PO CHECK VALVE	1
34	190119 10	WASHER (25 O/D x 9 I/D x 4)	1	73	293287 01	GUARD MOUNTING PLATE	1
35	293532 01	GEARBOX PIVOT BRKT (2025 & ON)	1	74	NUT-0385	NUT (M20 HALF)	1
OR	293277 01	G BOX PIVOT BRKT W/A (2024)	1	75	NIP-00605	GREASE NIPPLE (90 DEG)	1
36	293274 01	TIE ROD W/A	1	76	197368 01	SPACER	1



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ASSY NUMBER: KIT-19103				ASSY DESCRIPTION: HYDRAULIC VS DRIVE CONVERSION KIT (XCV)			
ITEM	PART NO	DESCRIPTION	QTY	ITEM	PART NO	DESCRIPTION	QTY
77	LUB-0057	M6 GREASE NIPPLE EXTENSION	1				
78	293448 01	VALVE BRACKET	1				
79	HSS-0238	SETSCREW (M12x30)	2				
80	NUT-0270	NYLOC NUT (M12)	2				
81	HSSA08350	SETSCREW (M8x55)	2				
82	HHCC06505	HYD HOSE ASSY	1				
83	HHCC06005	HYD HOSE ASSY	1				
84	293494 01	VS SPEED SELECTION STICKER	1				
85	WSHA30161	LOCK WASHER (M16)	2				
86	WSHA30201	LOCK WASHER (M20) (2024 ONLY)	1				
87	HMA-0052	HYD ADAPTOR M/M (3/4" / 3/4")	3				
88	HAPAA0302	HYD RESTRICTOR (0.8mm 3/4" / 3/4")	1				
89	WSH-1005	DOWTY WASHER (3/4")	4				
90	292665 01	STOP PLATE	2				
91	BLTA10290	BOLT (M10x45)	2				
92	292013 01	TRANSFER -KEEP HANDS CLEAR	1	98	HHLC48605	MACHINE SPECIFIC 42' MACHINE HYD HOSE ASSY (4.8m)	1
93	198837 01	TRANSFER -WARNING MOVING PARTS	1	99	HHLC50605	HYD HOSE ASSY (5.0m)	1
94	800215 01	TRANSFER - CRUSH, DANGER	1	OR	HHLC39605	36' MACHINE HYD HOSE ASSY (3.9m)	1
95	193392 01	TRANSFER - STOP ENGINE	2	98	HHLC41605	HYD HOSE ASSY (4.1m)	1
96	293533 01	SPACER TUBE (2025 & ON)	1	99	HHLC33605	32' MACHINE HYD HOSE ASSY (3.3m)	1
97	292850 01	DRILLING TEMPLATE	1	99	HHLC35605	HYD HOSE ASSY (3.5m)	1
						COMBINE SPECIFIC CNH HYDRAULIC COUPLING HYDRAULIC ADAPTER HYD HOSE ASSY	2 2 2
						JOHN DEERE S SERIES HYDRAULIC COUPLING HYDRAULIC FITTING RESTRICTOR WASHER (1/4" DOWTY) HYD HOSE ASSY	2 2 1 1 2

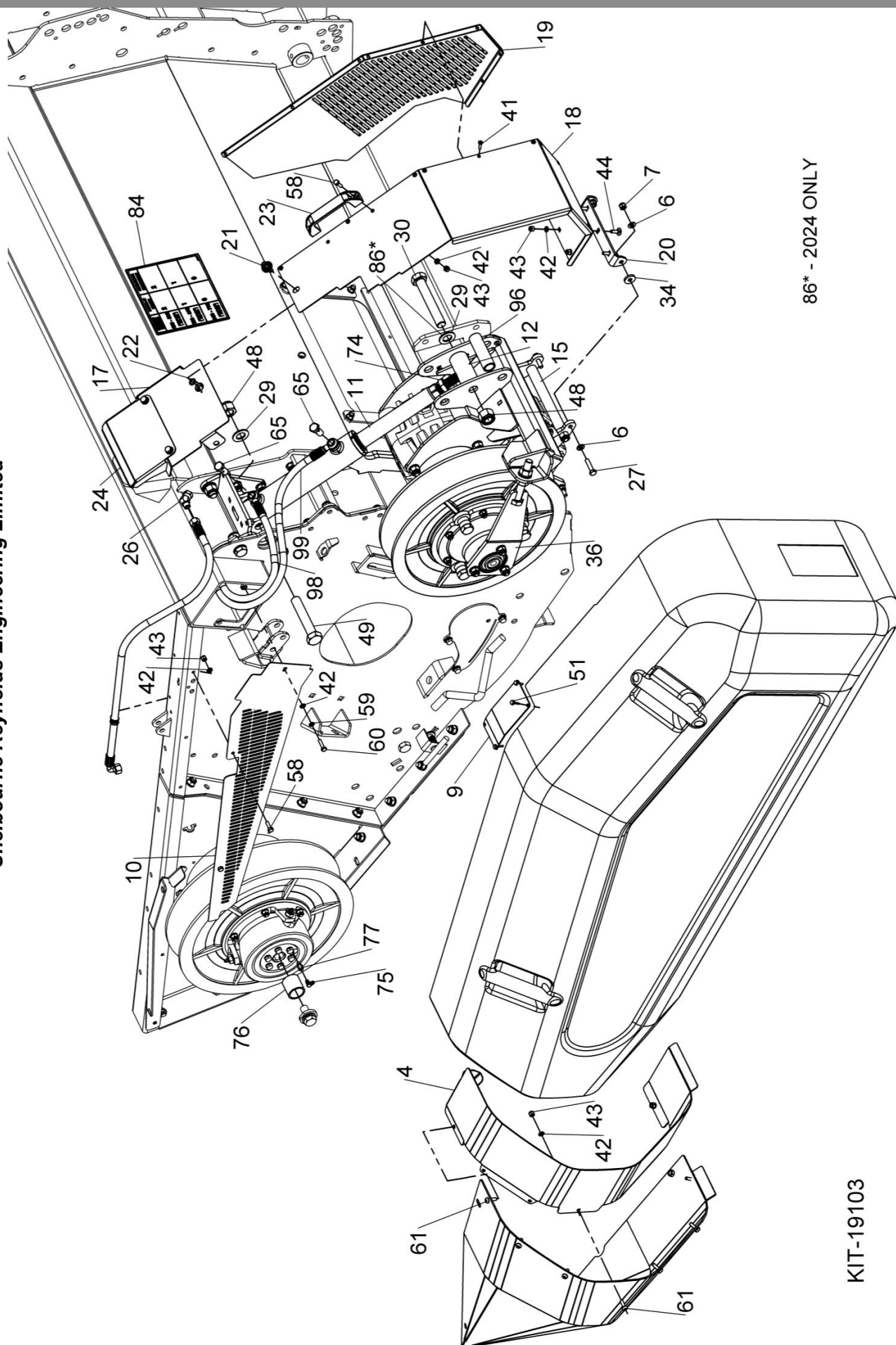
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KIT-19103

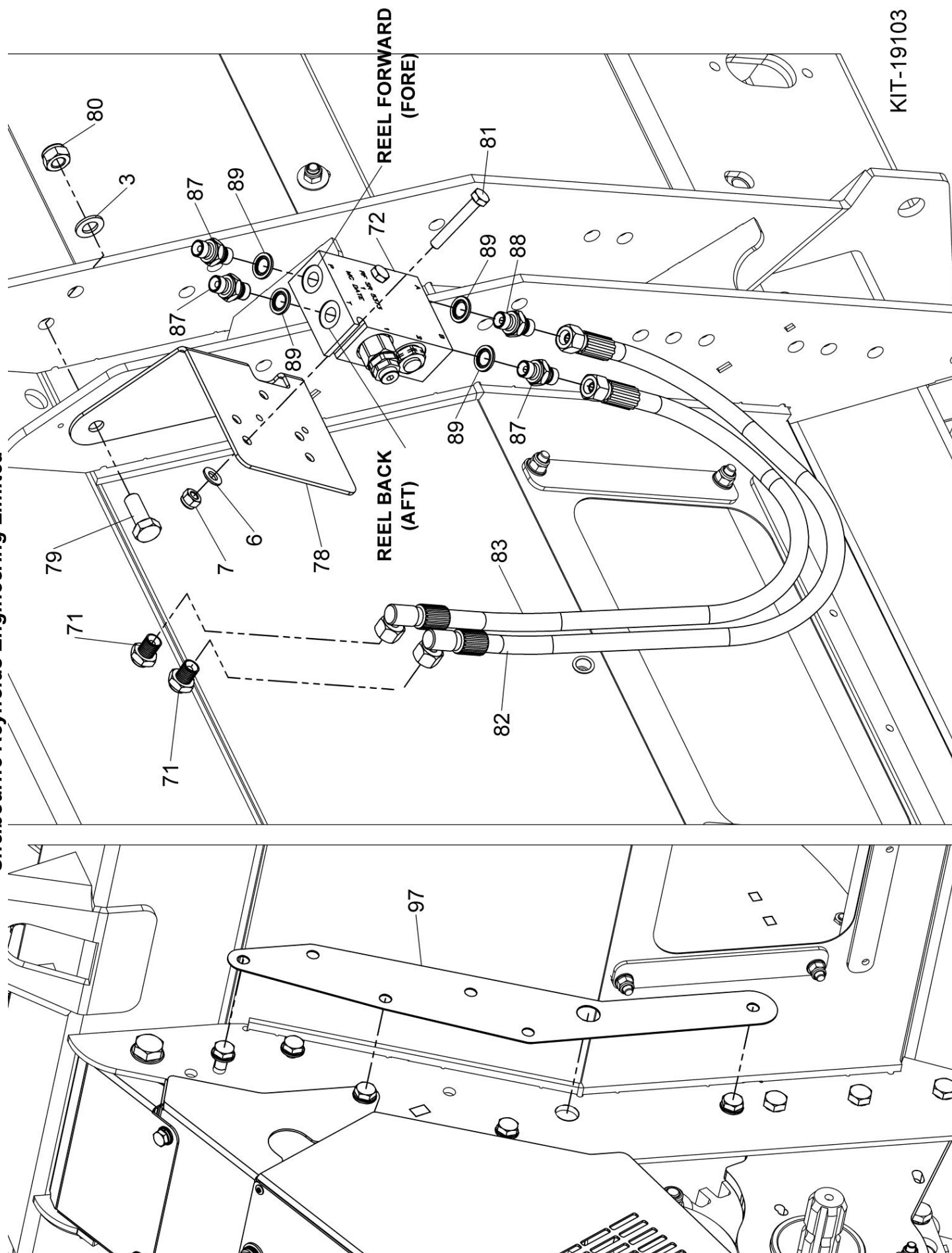


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86\* - 2024 ONLY

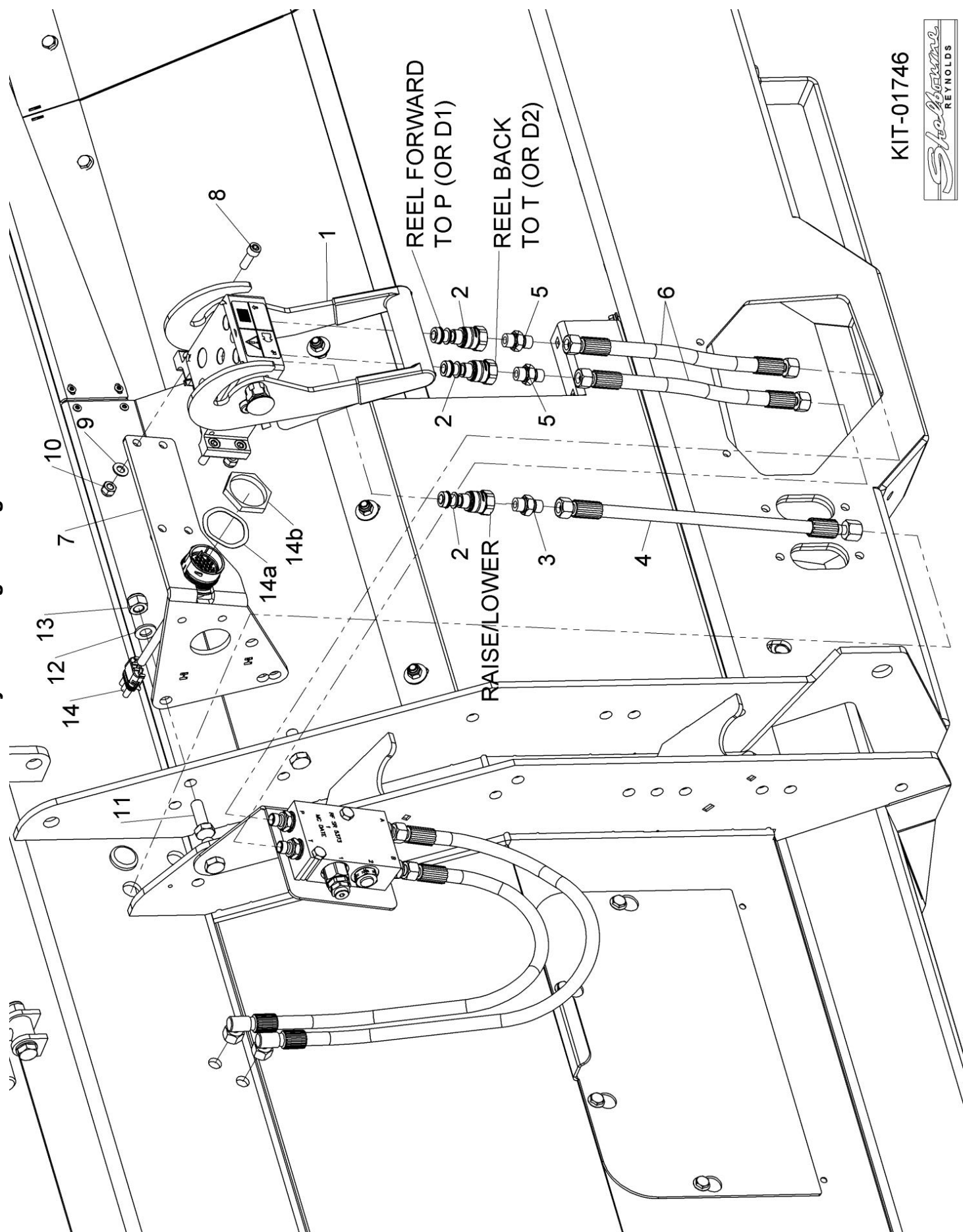
KIT-19103





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SSY NUMBER: KIT-01746				ASSY DESCRIPTION: CNH HYD MULTICOUPLER KIT (PIVOT G BOX V/S)		
ITEM	PART NO	DESCRIPTION	QTY	ITEM	PART NO	DESCRIPTION
1	HQR-95010X	FASTER MULTI COUPLER	1			
1a	HQR-95040	SPARE RED BUTTON KIT				
2	HQR-15025	FEM COUPLING INSERT	3			
3	HAPAK0425	HYD RESTRICTOR 9/16 UNF x 1/4 0.8	1			
4	HHAC07910	HYDRAULIC HOSE ASSY	1			
5	HAAIA2103	HYD ADAPT 9/16 UNF x 1/4 BSP M/M	2			
6	HHAC07905	HYDRAULIC HOSE ASSY	2			
7	199711 01	MULTICOUPLER MTG PLT	1			
8	SCW-0136	HT CAP HEAD SCREW (M8x25)	4			
9	WSH-0012	PLAIN WASHER (M8)	4			
10	NUT-0263	NYLOC NUT (M8)	4			
11	HSS-0241	SETSCREW (M12x35)	1			
12	WSH-0018	PLAIN WASHER (M12)	1			
13	NUT-0269	NYLOC NUT (M12)	1			
14	197040 01	LIGHT PLUG (IF LIGHTS FITTED)				
14a	ECN-09060	SPARE LOCK WASHER				
14b	ECN-09050	SPARE PANEL NUT				





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ASSY NUMBER: KIT-01747				ASSY DESCRIPTION: JOHN DEERE HYD KIT (PIVOTING GEARBOX VS)			
ITEM	PART NO	DESCRIPTION	QTY	ITEM	PART NO	DESCRIPTION	QTY
1	HQR-93000X	JD MULTICOUPLER PLATE	1				
2	HQR-13027	COUPLER (LARGE)	1				
3	CLP-00230	SNAP RING	1				
4	HMA-0114	HYD ADAPT 7/8 UNF x 1/4 BSP M/M	1				
5	WSH-1005	DOWTY WASHER 1/4 BSP	1				
6	HVB-93000	FLOW CONTROL RESTRICTOR	1				
7	HHAC10010	HYD HOSE	1				
8	197146 01	JD LOOM & PLUG (RIGID HEADER)	1				
9	CIR-0450	EXT CIRCLIP 45mm	2				
10	HQR-13026A	COUPLER (SMALL) c/w CIRCLIP	2				
11	HAAAK0327	HYD ADAPT 3/4 UNF x 1/4 BSP M/M	2				
12	HHAC12005	HYD HOSE	2				
13	197766 01	PARKING BRACKET	1				
14	HSS-0238	SET SCREW M12x30	2				
15	WSH-0018	PLAIN WASHER M12	2				
16	NUT-0269	NYLOC NUT M12	2				

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