2730 Combination Ripper Quick Reference Guide

Machine Preparation Checklist

- Verify all tire pressures are correct.
- Adjust Fore-Aft level using turnbuckle (A) as necessary.
- Rephase cylinders by raising machine for 30 seconds and release SCV lever – do NOT leave SCV in continuous.
- Verify main frame is level side-to-side.
 Lower machine until points are 25 mm (1 in.) off ground.
 Measure from bottom edge of frame to axle spindle.
 Measurements should be within 7 mm (0.25 in.).
- Level Wings Folding machines Stand behind machine and survey across gang tubes for level.
 Level Front Wings – Use shims (B) as required.
 Level Rear Wings – Adjust turnbuckles (C).

System Depth Setting Procedure

There are four independent systems on the 2730 Combination Ripper (rippers, front disks, closing disks and finishing attachment). Each system requires its own setting in order to achieve desired

field finish. Follow procedure to set each system.

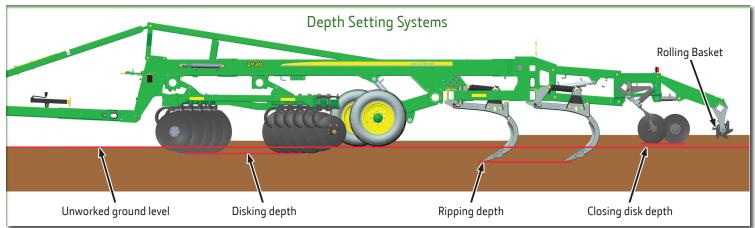
Use soil probe to determine soil compaction depth and choose ripper setting 25.4 to 50.8 mm (1 to 2 in.) below the compacted layer. Front disk depth can be adjusted to achieve desired residue sizing and incorporation. Closing disk depth adjustments allow the operator to customize the finished soil profile.











System Depth Setting Procedure (cont)

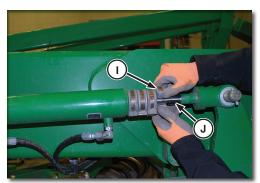
- Select appropriate ripper shank setting (Shallow, Middle, or Deep) and determine desired ripper point depth. Using the chart, determine the amount of Depth Control Rod Exposed (E) when rippers are at the desired depth. Adjust Single Point Depth Control (D) to set the exposed rod to desired amount. (previous photo).
- 2. Set rippers to desired depth. Find corresponding exposed rod length on depth control cylinder (E). Exposed rod length is then used to find desired front disk and closing disk settings.



Example: Example: With ripper shank in middle setting and 318 mm (12.50 in.) desired ripper point depth, depth control rod exposed would be 133 mm (5.25 in.). (See bold value shown on chart.)

Set Front Disk Depth

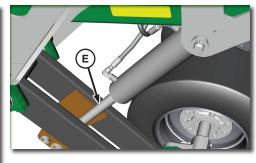
3. Determine the desired front disk depth. Use the Front Disk Depth Chart to determine the amount of cylinder stops (I) required to install on the two disk gang depth cylinders. This is done by finding the value at the intersection of the rod exposed on main frame depth control rods (E) and the desired front disk depth. Install correct thickness of cylinder stops to each disk gang cylinder rod (J).

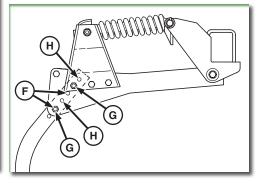


Example: With 165 mm (6.5 in.) depth control rod exposed and 127 mm (5.00 in.) desired front disk depth, cylinder stops required would be 64 mm (2.50 in.). (See bold values on chart.)

NOTE: In typical conditions the values in green will provide optimal machine performance. While attainable, the values in yellow may negatively affect machine performance and reliability.

Desired Ripper Point Depth (in.)										
(E) Main Fra Depth Cont Rod Exposed	rol	(F) Shallow Ripper Setting	(G) Middle Ripper Setting	(H) Deep Ripper Setting						
4.25		13.0	14.5	16.0						
4.50		12.5	14 <mark>.</mark> 0	15.5						
4.75		12.0	13 <mark>.</mark> 5	15.0						
5.00		11.5	13.0	14.5						
5.25		< 11.0	12.5	14.0						
5.50		10.5	12.0	13.5						
5.75		10.0	11.5	13.0						
6.00		9.5	11.0	12.5						
6.25		9.0	10.5	12.0						
6.50		8.5	10.0	11.5						
6.75		8.0	9.5	11.0						
7.00		7.5	9.0	10.5						
7.25		7.0	8.5	10.0						
7.50		6.5	8.0	9.5						





(E) Main Fra	me		Desired Front Disk Depth (in.)										
Depth Control Rod Exposed (in.)				0.00	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	
4.25		T	→	12.75	11.75	10.50	9.25	8.00	7.25	6.00	5.00	4.00	
4.50		Ť		12.25	11.00	10.00	8.75	7.75	6.50	5.50	4.25	3.50	
4.75		L	→	11.75	10.50	9.25	8.00	7.25	6.00	5.00	4.00	2.75	
5.00		Y	→	11.00	10.00	8.75	7.75	6.50	5.50	4.25	3.50	2.50	
5.25				10.50	9.25	8.00	7.25	6.00	5.00	4.00	2.75	1.75	
5.50		N	→	10.00	8.75	7.75	6.50	5.50	4.25	3.50	2.50	0.00	
5.75		E R	\rightarrow	9.25	8.00	7.25	6.00	5.00	4.00	2.75	1.75	N/A	
6.00		S	\rightarrow	8.75	7.75	6.50	5.50	4.25	3.50	2.50	0.00	N/A	
6.25		O P	→	8.00	7.25	6.00	5.00	4.00	2.75	1.75	N/A	N/A	
6.50		S		7.75	6.50	5.50	4.25	3.50	2.50	0.00	N/A	N/A	
6.75		Ë	→	7.25	6.00	5.00	4.00	2.75	1.75	N/A	N/A	N/A	
7.00		ן ע	→	6.50	5.50	4.25	3.50	2.50	0.00	N/A	N/A	N/A	
7.25] k	→	6.00	5.00	4.00	2.75	1.75	N/A	N/A	N/A	N/A	
7.50		E D	-	5.50	4.25	3.50	2.50	0.00	N/A	N/A	N/A	N/A	

Set Closing Disk Depth

3. Determine the desired closing disk depth. Use the Closing Disk Depth Chart to determine the thickness of cylinder stops (K) required on each closing disk cylinder. Find the total stop thickness required in the chart at the intersection of the exposed main frame depth control rod (E) and the desired closing disk depth.

NOTE: Closing disk adjustments should originally be made with finishing attachments raised to determine if the mounding is adequate to place enough loosened soil back over the ripper trench.



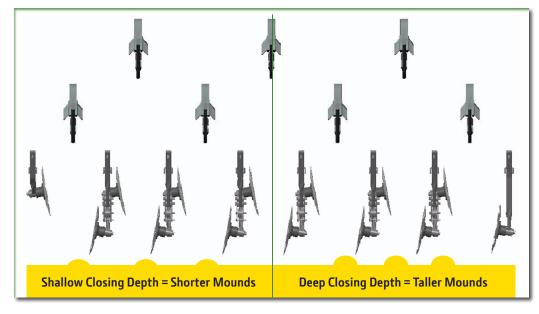
Closing disk depths reference unworked ground level. Actual operating depth is deeper due to worked soil at the rear of the machine.

Example: Example: With 165 mm (6.5 in.) depth control rod exposed and 13 mm (0.50 in) desired front disk depth, cylinder stops required would be 38 mm (1.50 in.). (See bold values on chart.)

NOTE: In typical conditions the values in green will provide optimal machine performance. While attainable, the values in yellow may negatively affect machine performance and reliability. In conditions with lighter and more mellow soils, shallower settings may yield better machine performance.

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(E) Main Fram				Desired Closing Disk Depth (in.)											
Depth Control Rod Exposed (in.)					-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	2.50		
4.25			T	→	3.75	3.50	3.50	3.25	3.25	3.00	3.00	2.75	2.50		
4.50			Ť	→	3.50	3.50	3.25	3.25	3.00	3.00	2.75	2.50	2.50		
4.75			L	\rightarrow	3.50	3.25	3.00	3.00	2.75	2.75	2.50	2.25	2.25		
5.00			C Y	\rightarrow	3.25	3.00	3.00	2.75	2.50	2.50	2.25	2.25	2.00		
5.25				→	3.00	3.00	2.75	2.50	2.50	2.25	2.25	2.00	1.75		
5.50			N D	\rightarrow	2.75	2.75	2.50	2.50	2.25	2.00	2.00	1.75	1.75		
5.75			D E R	→	2.50	2.50	2.25	2.25	2.00	2.00	1.75	1.50	1.50		
6.00			S	\rightarrow	2.50	2.25	2.25	2.00	2.00	1.75	1.50	1.50	1.25		
6.25	\		10	\rightarrow	2.25	2.00	2.00	1.75	1.75	1.50	1.25	1.25	1.00		
6.50	V		P S R		2.00	2.00	1.75	1.50	1.50	1.25	1.25	1.00	1.00		
6.75			E	→	2.00	1.75	1.50	1.50	1.25	1.25	1.00	0.75	0.00		
7.00			Q Ų	\rightarrow	1.75	1.50	1.50	1.25	1.00	1.00	0.75	0.00	N/A		
7.25			l R	\rightarrow	1.50	1.25	1.25	1.00	1.00	0.75	0.00	N/A	N/A		
7.50			E D	→	1.25	1.25	1.00	1.00	0.00	0.00	N/A	N/A	N/A		

Adjusting depth of all mounds. Increasing depth will result in larger mounding.

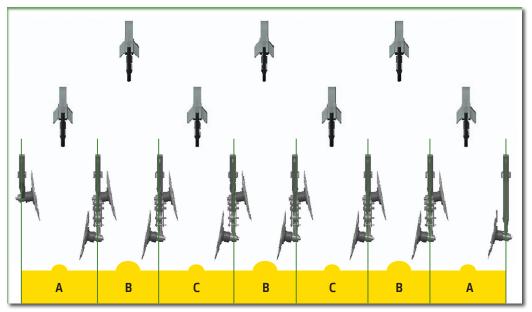


Set Closing Disk Depth (cont)

Adjusting side-to-side distance will affect amount of soil in mounds. To maintain a level soil profile, closing disk assemblies may need to be adjusted to achieve your desired soil finish.

Set Rolling Basket Down-Pressure

- 4. Adjust down-pressure to initial setting by rotating knob (L) Once set, lock knob in position with collar (M).
 - Make a trial pass in field. If rolling basket operation is not satisfactory, adjust hydraulic pressure as needed.
- Down-pressure applied: Adjust pressure applied using the manual adjustment and gauge at machine front.
 Apply only enough pressure to chop and size material to desired finish.
- Down-pressure applied with height control:
 Apply appropriate amount of down pressure with cylinder stops installed to decrease operating depth.
 This can help minimize plugging while still allow some sizing of clods in wet or sticky soils.
- Float: Allows light fluffing and moderate leveling of the soil profile, and may help reduce plugging when operating across moderately wet soil conditions.
- Fully raised: Allows continued operation in harsh, muddy soil conditions, or if a more pronounced mounding pattern is desired.



Adjusting side to side distance will affect amount of soil in mounds.



IMPORTANT: DO NOT use more downpressure than necessary or excessive wear and damage to machine could result.

Too much down-pressure can lift rear of machine, causing it to become unlevel and result in undesired field finish.

