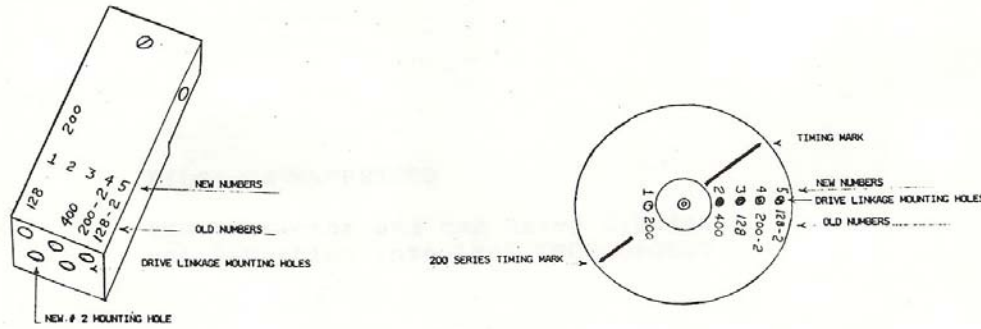


## SETTING THE TOP PUSHERS FOR DIFFERENT TRAYS

IMPORTANT: The rod connector block and #3 “take-away” pusher (beneath the middle of the machine) positions are pre-set at the factory and *should not be moved*. Different trays are shown by adjusting the drive linkage to different holes in the rod connector block and drive/timing wheel. The #1 and #2 pushers must then be adjusted to properly index the tray *after* the drive linkage settings have been completed. [refer to chart and diagram].



Rod connector block

Drive/timing wheel

\* Red timing marking points up when seed manifold is in seed exhaust position

TRAY	ROD	WHEEL
50 square & Vented (R)	5	4
72 square (R)	5	4
98 square (R)	5	5
105/105 PNG	5/4	4/3
128 square (R)	1	3
128 square (double row)	5	5
128 rib	5	3
128 rib (double row)	5	4
144	2	3
144 (double row)	5	5
162 (R)	1	3
162 (double row)	3	5
200 square	1	1*
200-2 (double row)	5	4
200 BC STAR	4	5
216	5	1*
216 (double row)		
243 PNG™ California	5	2
288 X CE & X CE deep	4	1*
Octagon CE	5	1*
Deep	5	1*
Star	4	1*
T		
288 (double row)	3	4
324 PNG™	3	1*
324 PNG™ California	1	2
338	5	1*
384	5	1*
392	2	2
406 Blackmore w/ center rib	4	2
432 PNG™	1	2
432 N PNG™	2	2
432 Deep PNG™	1 or 5	1*
512 XCE, Deep CE	1	2
Octagonal CE	1	2
T	1	2
648 deep	5	2
800	1	2

(R) = riser kit required prior to 06 model year

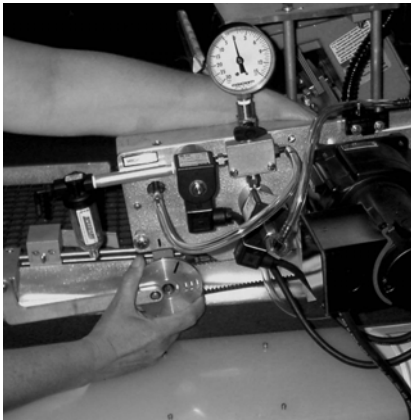
Left rail low

324 PNG CA - Left rail low, support plate almost flush with bottom of that rail, 390-20 drop tube assembly

Procedure:

1) Slide the rod connector block so the drive linkage may be connected to it. At this point, decide which tray to sow. Refer to the chart and make any necessary setting changes. After connecting the linkage to the drive/timing wheel, again refer to the chart before placing the other end in the appropriate hole in the rod connector block. The take-away or #3 pusher ONLY is now properly set to index the tray. The #2 pusher must be set by moving it along the rod, see the steps below.

2) Stop the seeder in the *seed exhaust position*. When using a plug tray that requires the 2,3,4, or 5 setting on the drive/timing wheel, the black timing arrows (one located on wheel, the other directly above the wheel) should be aligned or nearly so. If they are not, rotate the wheel until the marks are in line, making sure that the manifold position does not change [see picture below]. When using the 1 (200) setting on the wheel, the black timing marks should be opposite (i.e. the black mark on the wheel should be pointing down) when the manifold is in the seed exhaust position. If unable to realign the timing marks, refer to clutch adjustment section. In the proper sequence, the tray advances and then the seeds are dropped. If the timing marks are not properly aligned, the tray will advance at the wrong time or be moving when the seed is dropped. That results in broadcast sowing and poor seed placement, or seed will be blown off the tips before the tray is in position.



Adjusting timing mark alignment on drive/timing wheel with right hand while holding motor cam wheel with left hand

3) Insert the tray into the machine until it is beneath the #3 pusher then pull it back so that the arms engage the plug cell wall. With the machine in the seed exhaust position and the #3 pusher arms against the cell wall, the cells in the tray should be centered beneath the drop tube (manifold in exhaust position). If they are not, check the settings on the drive/timing wheel, rod connector block and your timing mark alignment. Test-run the machine using only the #3 take-away pusher to check tray positioning beneath the drop tube.

4) Once the take-away pusher (#3) is properly indexing the tray, set the second (#2) pusher so that it is pushing on a cell wall just as is the #3. Ideally, it should be in the row just behind that row which will next be pushed beneath the drop tube. Cycle the machine to make sure that the pusher arms will not contact the drop tube when indexing the tray, and that both pusher are pushing on the cell wall at the same time.

5) After the #3 and #2 pushers are set, position the #1 pusher. Run the machine to the seed exhaust position. Insert the tray so that the #2 pusher engages the *first row* of the tray. Test-run the machine to make sure the tray is properly indexed. The tray should be picked up by the #2 pusher in proper sequence with the #1 pusher. If they are not properly sequenced, the first pusher may move the tray a row and a half before it is picked up by the second pusher.

Refer to the chart when changing plug trays for any necessary drive/timing wheel or rod connector block settings. Once made, those settings will properly position the #3 pusher. The #2 pusher must be coordinated with the #3. Return to steps 3 through 5 to re-position pushers #1 and #2.