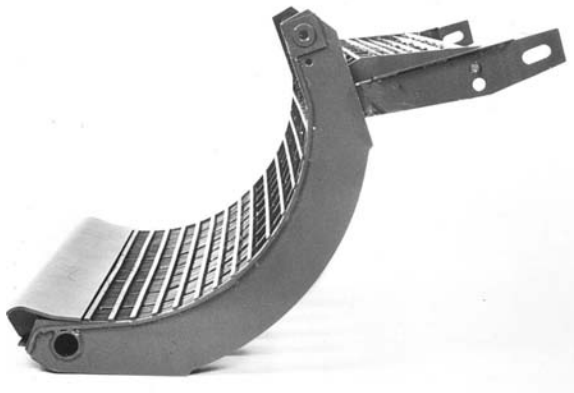


Maximizer and 50 Series Concave



Strict manufacturing processes maintain the correct radius of the concave within a tolerance of 5/64-in. This radius and tolerance is established in relation to the concave bars and not the sidebars.

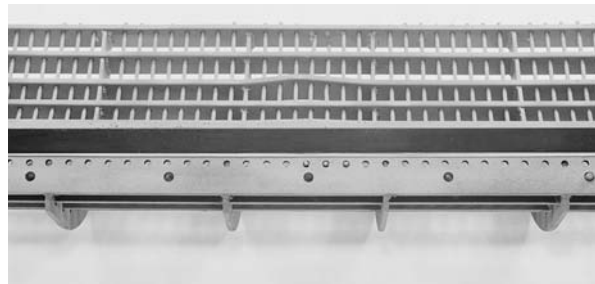
The design of the concave sidebars matches the radius of the curvature of the top surface of the concave crossbars. This provides better and easier gauging of the concave-to-cylinder clearance, by eliminating the possibility of the concave bars being below the sidebars.

For conditions where threshing is very difficult, concave filler strips can be added to enhance threshing. When installing strips, use as few as possible to avoid reducing the separating efficiency of the concave to the point of overloading the straw walker with free grain that will increase crop loss.



Concave wear can be detected three ways:

- Rounding of the concave bar
- Wear of concave bar height
- Wear in the center portion of the concave



As the concave bar becomes rounded from its original square edge, aggressive threshing is reduced, particularly in small grains.

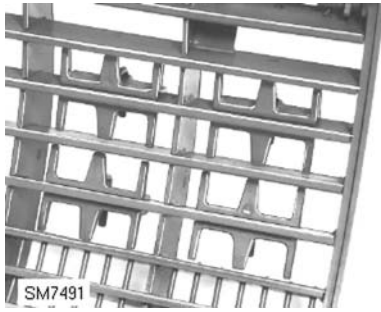
The height of the concave bar can be reduced by 1/4-in. before the concave rods will be exposed. The concave can be checked for wear by placing a straight edge across the concave and determining the difference in the high and low points. If the difference is more than 1/8-in., the concave should be replaced for maximum performance. This guideline is especially critical when harvesting small grains.

Material fed to the threshing system should be uniformly spread over the full width of the machine, to prevent the center section of the concave from having more wear.

New rasp bars and/or concave will provide:

- Complete threshing
- Aggressive feeding
- Maximum combine capacity
- Smooth feeding
- Minimal separating losses
- Less power required
- Excellent grain sample
- Reduced cylinder and concave plugging
- Reduced cylinder speed

Concave Inserts



The concave inserts are standard equipment for corn combines, and give the Maximizer and 50 Series Combines more versatility in different crop conditions, to deliver top threshing and separating performance.

Concave inserts may be required when harvesting high-moisture (above 20 percent) or hard-to-thresh corn. They can also be used with the spike-tooth concave.

The concave inserts prevent cobs, with unthreshed kernels, from passing through the open area at the rear of the short wire concave, to ensure complete threshing.

Cylinder filler plates are also recommended when harvesting corn.

Material Handling STS and Walker Combine

The elevator chains, paddles, and augers of the material handling systems constantly convey material, resulting in wear. The chains should be checked for stretch, and adjusted or replaced as required. The rubber paddles can develop rounded corners and edges, resulting in grain leakage. As the auger flight wears, a razor edge will develop on the flight and result in a smaller diameter auger. Worn material handling components result in:

- Reduced system capacity
- Plugging
- Reduced harvesting capacity
- Reduced ground speed
- Grain damage
- Increased power requirements

The most common reason for excessive elevator chain wear is too much tension. A chain that has too much tension will get tighter as the chain conveys material and could cause shaft and bearing failures.