

Header set-up for low yielding crops

The challenge that most grain growers will face this harvest will be to actually get what crop they have into the harvester!

All farmers are aware that no two seasons are the same so when it comes to header set up what worked last year may not work this season. There are however basic principles in header set up that should be followed in order to achieve maximum harvest performance.

The first adjustment to make this season is the table auger. Loosen the stripper bars at the back of the auger and pull them back out of the way. Adjust the auger to sit back into the trough as close as possible (augers work better in tubes than ovals!). Then bring the strippers back into position to suit the auger. This will ensure that those short barley crops don't bunch behind the auger and explode out from behind it! A second stripper bar can be added to help prevent the crop moving behind the auger.

Retractable fingers play a very important role in delivering the crop to the feeder drum. Fingers should be set so that they are fully extended when at the front of the auger and fully retracted when they reach the rear. The desired action is 'grab it, rake it, let it go'!

Auger flight extensions are often used with mixed performance. In short straw crops auger flight extensions rarely prevent the problem of crop bunching and exploding from behind the auger.

The feeder drum is responsible for retrieving the crop from the auger and retractable fingers and transporting it into the combine for threshing and separating. The feeder drum should be set forward as close to the auger as possible. This will ensure efficient crop retrieval and prevent a dead spot forming between the auger and the feeder drum. The retractable fingers will not be a problem if they are set correctly!

The optimum position for the operation of the front is a forward 10° tilt on the platform back.

The front should be levelled each season. This is best conducted on a level shed floor. Firstly, check that the air pressure is equal in the front tyres on the combine. Do this without the front attached. Secondly, attach the front and lift it up and down several times then at each end of the front measure its height above the floor. Lower the front onto the ground and make any necessary adjustment in the feeder house to level the front.

Flex-fronts need extra attention to ensure proper set up. The knife should be set flat so that it operates flat. The perception that flex-fronts should smile is a misnomer. To set a flex-front the series of large springs underneath the platform need to be adjusted individually (it is these springs that support the knife and assist the ground to lift it when necessary). This process is time consuming but necessary. Start one end and work your way along. Remember that the crop dividers at either end of the front also

have assisting springs, which require adjustment. The knife should be set so that it rests 30mm above the bottom of its travel when it is lifted by hand and dropped.

The purpose of the reel is to lay the crop over and present it heads first into the feeder house and consequently the threshing unit. The speed of the reel should be set to travel 5-7% quicker than the ground speed of the harvester. The height of the reel should be such that it clears the crop off the knife and lays it on the platform heads first – it is not the role of the reel to thresh the crop!

Finally, time spent setting the front and combine to match the crop conditions will be critical to ensure you reap as much grain as possible.