



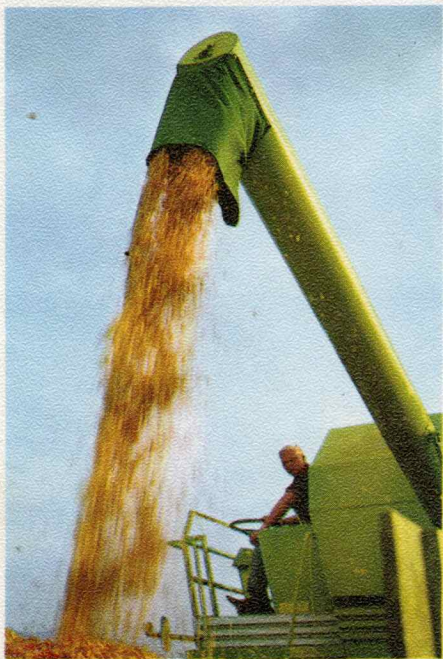
# Maize Harvesting with CLAAS Combine Harvesters



P.O. BOX 487 - P.O. BOX 573  
HAMILTON, CHRISTCHURCH



## The Maize Harvest



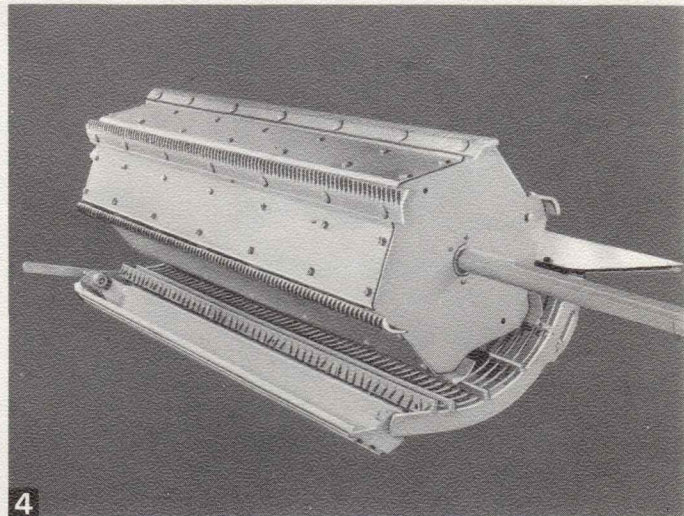
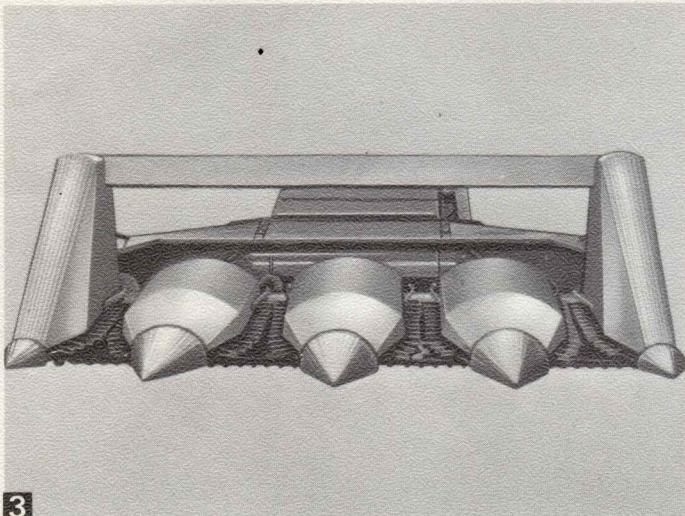
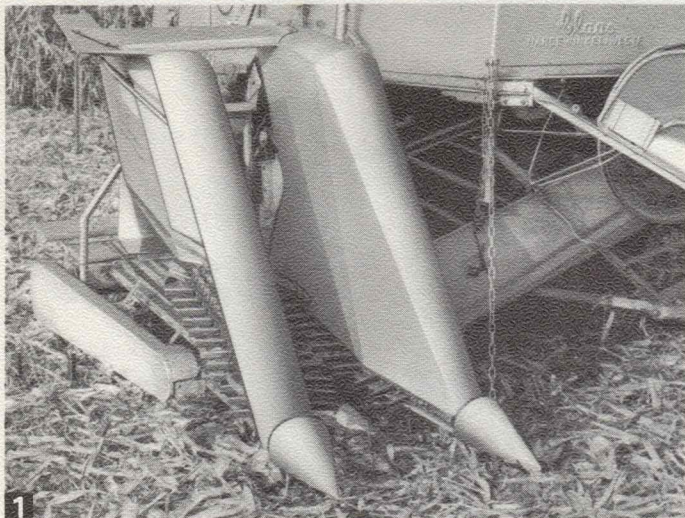
Until a very few years ago Maize could only be grown in warm climates but experiments both in breeding new strains of maize and also studying soil conditions have made it possible to grow maize in more Northern areas on a profitable and high-yield basis.

Recently the maize growing areas in colder climates have increased dramatically.

Adapting Combine Harvesters to deal with maize has made the harvesting of this crop easier and more economical.

CLAAS Combines in particular have proved themselves as true "All Purpose Threshers" in the maize field. Special equipment has been designed to fit all models; and existing machines can be converted, in the same way.

# CLAAS Maize Cutterbar



A special maize cutterbar replaces the standard type whilst threshing proceeds between a fully enclosed drum and a special peg-type concave. The maize cutterbar has been designed for an average distance between rows of 32½ ins. (82.5 cm) but since the transport chains are wider apart in front than at the rear it is possible to deal with maize sown in rows between 29 ins. (73 cm) and 37 ins. (93 cm). CLAAS Maize Cutterbars are available as follows:

**Single rows** for JUNIOR AUTOMATIC (Dia. 1), SUPER AUTOMATIC -S-, COLUMBUS and COMET,

**Two-rows** for EUROPA, COSMOS, CORSAR, MERCURY and CONSUL (Dia. 2),

**Three-rows** for MATADOR STANDARD, MATADOR GIANT, MERCATOR and SENATOR,

**Four-rows** for SENATOR (Dia. 3).

Frequently it is not possible to harvest maize until the very cold weather has set in, when rain and sleet have already affected the plants, which may be bent over or laid. It is here that the superiority of the CLAAS Maize Cutterbar proves itself particularly. Specially designed rotating dividers are capable of lifting crops in such condition perfectly and completely. Transport chains with special pegs provide a positive means of movement of the crop to the cutterbar where a scissor-type knife action which has been specially developed for dealing with maize ensures a clean cut. The main table auger of the Maize Cutterbar for self-propelled combine harvesters is fitted with knife sections which cut the long stems into shorter pieces which then travel easier through the Combine. The conveyor is fitted with bars set very closely together and they ensure a positive movement of the crop to the drum.

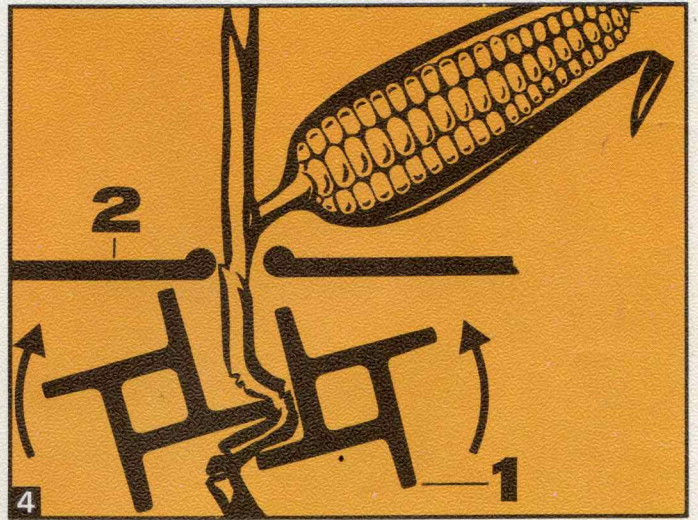
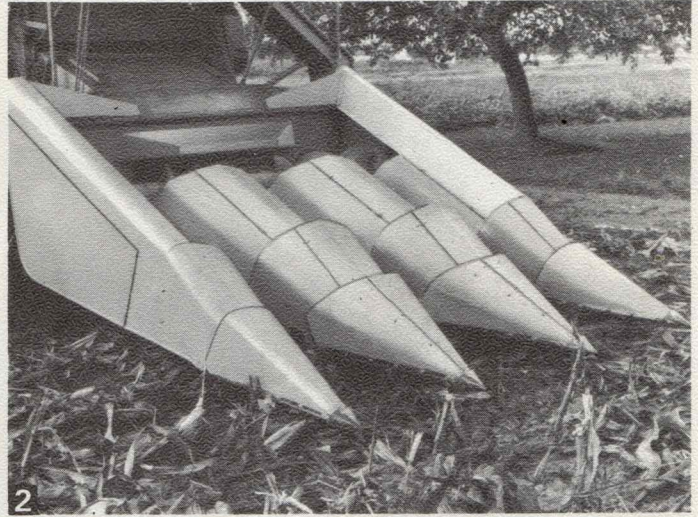
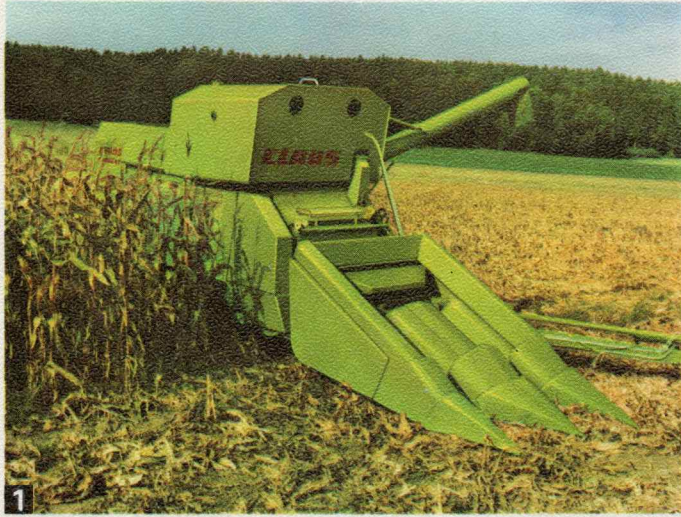
The initial cost of the maize cutterbar is particularly attractive and soon pays for itself even where the maize areas are none too large. If a chopper is furthermore fitted to the Combine to chop the stems into small parts that are then evenly distributed over an area equal to the width of the cutterbar the field is left ready for ploughing in one operation. For the maize harvest a totally enclosed drum and a special maize concave must be fitted (Dia. 4). The speed of the maize drum must be kept low ensuring gentle threshing. In addition the leaves and stems of the maize plant provide an additional cushion between drum and concave. According to the model of CLAAS combine used the concave is fitted with either 5 or 6 rasp bars and the wires are set wider apart than usual to allow the kernels to pass.

## CLAAS Maize Picker



This particular Maize Picker Unit was designed with large maize areas in mind or alternatively for the contractor. Here, only the cobs with their cover-leaves pass through the Combine which method promotes greater output per hour since it is possible to increase the forward speed of the Combine owing to the absence of much trash and stems. A further great advantage which merits mention is the fact that in the case of Maize Pickers less moisture is transmitted to the crop during the threshing process. The sturdy construction of CLAAS Maize Pickers is remarkable, whilst safety clutches guard them against damage from shock loads. Maintenance and Service are at a minimum.

# CLAAS Maize Picker



CLAAS Maize Pickers are available as follows:

**Two-rows** for MERCURY, CONSUL and GARANT (Dia. 1),

**Three-rows** for MATADOR STANDARD (Dia. 2), MATADOR GIANT, MERCATOR and SENATOR,

**Four-rows** for MATADOR GIANT, MERCATOR and SENATOR (Dia. 3).

The Maize Picker has been designed to reduce losses to an absolute minimum even where the crop is badly laid or the maize plants themselves bent over.

The leading sections are suspended and can thus adapt themselves to all contours of the ground. They penetrate between rows like wedges and safely and gently lift bent or laid plants. They

can be adjusted to deal satisfactorily with maize sown in rows from 28 ins. (70 cm) up to 33½ ins. (85 cm). The ideal distance between rows is 32½ ins. (82.5 cm).

The dividing sections are "stepped" which prevents the cobs falling back onto the field.

Transport chains move the stems positively towards the pulling rollers whose movement is adjusted to the Picker Plates and their co-ordinated action separates the cobs from the plant after which they are transported to the Main Table Auger. In the centre of the Main Table Auger are rubber paddles which help to lift the cobs towards the chain conveyor. Threshing takes place between a totally enclosed drum and

the Maize Concave fitted with 5 or 6 Rasp Bars according to the model of combine used. The concave wires are set wider apart than usual to allow the kernels to pass freely.

**Picker Process** (Dia. 4):

Every two pulling rollers running in opposite directions to one another pull the maize plant downward and the cobs are stripped from the stems on passing the Picker Plates. They are separated gently from the plant and not squashed in any way. The illustration shows how these Picker plates are bevelled upward and rounded. An antiwrapping device at each pulling roller ensures a continuous flow even where a considerable amount of weeds and trash is present in the field.



Combining maize with the Maize Cutterbar results in a field ready for ploughing provided a chopper has also been fitted. The chopped-up stems are thrust against a distributor panel and broadcast through the guide ribs.

The distributor panel itself is adjustable for height whilst the guide ribs can be individually adjusted as required. In this manner it is possible to broadcast the remains of the maize plants evenly over an area equal to the size of the cutterbar after they have been chopped into small pieces.

The CLAAS SENATOR, CLAAS MERCATOR and CLAAS CONSUL can be equipped with a driver's cabin giving complete all round vision. This cabin is particularly useful in the maize harvest after the bad weather has set in. The cabin is very roomy and the operator has a free view to all sides and can watch his cutterbar with ease.

#### Technical Data: CLAAS Maize Cutterbar

Model	No of Rows	Length (dismantled)	Width	Height (dismantled)
CLAAS SENATOR	3 or 4	12 ft. 4 ins.	9 ft. 10 ins./11 ft. 3 ins.	5 ft. 7 ins.
CLAAS MERCATOR	3	12 ft. 4 ins.	9 ft. 10 ins.	5 ft. 7 ins.
CLAAS MATADOR GIANT	3	12 ft. 4 ins.	9 ft. 10 ins.	5 ft. 7 ins.
CLAAS MATADOR STANDARD	3	12 ft. 4 ins.	9 ft. 10 ins.	5 ft. 7 ins.
CLAAS CONSUL	2	11 ft. 4 ins.	9 ft. 10 ins.	4 ft. 3 ins.
CLAAS MERCURY	2	11 ft. 4 ins.	9 ft. 10 ins.	4 ft. 3 ins.
CLAAS CORSAR	2	11 ft. 4 ins.	9 ft. 10 ins.	4 ft. 3 ins.
CLAAS COSMOS	2	11 ft. 4 ins.	8 ft. 0 ins.	4 ft. 3 ins.
CLAAS EUROPA	2	11 ft. 4 ins.	8 ft. 0 ins.	4 ft. 3 ins.
CLAAS COMET	1	11 ft. 4 ins.	7 ft. 1 in.	4 ft. 3 ins.
CLAAS COLUMBUS	1	11 ft. 4 ins.	7 ft. 1 in.	4 ft. 3 ins.
CLAAS SUPER AUTOMATIC -S-	1	10 ft. 8 ins.	3 ft. 11 ins.	4 ft. 10 ins.
CLAAS JUNIOR AUTOMATIC	1	10 ft. 8 ins.	3 ft. 11 ins.	4 ft. 10 ins.

#### Technical Data: CLAAS Maize Picker

Model	No of Rows	Length (dismantled)	Width	Height (dismantled)
CLAAS SENATOR	3 or 4	13 ft. 2 ins.	8 ft. 8 ins./11 ft. 7 ins.	6 ft. 2 ins.
CLAAS MERCATOR	3 or 4	13 ft. 2 ins.	8 ft. 8 ins./11 ft. 7 ins.	6 ft. 2 ins.
CLAAS MATADOR GIANT	3 or 4	13 ft. 2 ins.	8 ft. 8 ins./11 ft. 7 ins.	6 ft. 2 ins.
CLAAS MATADOR STANDARD	3	13 ft. 2 ins.	8 ft. 8 ins.	6 ft. 2 ins.
CLAAS CONSUL	2	12 ft. 8 ins.	8 ft. 0 ins.	4 ft. 10 ins.
CLAAS MERCURY	2	12 ft. 8 ins.	8 ft. 0 ins.	4 ft. 10 ins.
CLAAS GARANT	2	11 ft. 3 ins.	6 ft. 8 ins.	4 ft. 10 ins.

