

LIFTMASTER



Front loader "LIFTMASTER"

GM – F – CX-L – C-MAX – CX – MC – MTX

To keep pace with the demands of an increasingly dynamic global market, McCormick has strategically decided to produce a comprehensive range of front-end loaders complete with attachments.

The expertise acquired over more than a century of activity has enabled McCormick to develop a range of loaders named "LiftMaster" designed to suit the GM, F, CX-L, C-MAX, CX, MC, MTX tractor series.

The new front loaders will be mainly used in agriculture for loading, transporting and handling farming products, but will also cater for a variety of industrial applications, thanks to the wide range of attachments available (buckets, forks, etc.)

The "LiftMaster" front loaders feature a heavy-duty construction and offer unequalled versatility.

The unique quick-attach/detach system allows fast mounting and dismounting of the loader from the tractor. The loader mounting position with respect to the tractor's centre of gravity and the monocoque construction of the arms, designed to make the loader frame ultra lightweight and rugged, increase the loading capacity of the front axle while improving the tractor stability and safety.

These features make the "LiftMaster" a modern instrument that will maximise the productivity of McCormick tractors.

The name says it all!

An excellent heritage

The McCormick brand is a true classic in the manufacture of agricultural machinery and equipment. From the world's first ever, practical reaper in 1831 through the long and distinguished line of tractors that followed, the McCormick badge epitomised quality, craftsmanship and innovative design. Now the name that pioneered a transformation in agricultural efficiency for more than a century and a half is reborn.





Lift Master front loader, at the service of your tractor

High efficiency of “LiftMaster”

The “LiftMaster” front loader has been designed to fully integrate with the features and dimensions of the McCormick tractors. The range of “LiftMaster” loaders designed to suit the various McCormick tractors comprises the following models:



The No Levelling ECO (10 – 15 - 20 – 30 – 40 series) and No Levelling TOP (10 – 15 - 20 – 30 – 40) versions come without self-levelling system for 45 to 150 HP tractors.



The Techno Levelling COMPACT (ECO 830 series), Techno Levelling ECO (10 – 15 - 20 – 30 – 40 series) and Techno Levelling TOP (10 – 15 - 20 – 30 – 40 - 50 series) versions are equipped with mechanical self-levelling system for 30 to 200 HP tractors.

The Eco and Top models differ from each other for the loader design and for the lifting cylinders which allow different load capacities (see the Technical Features table).

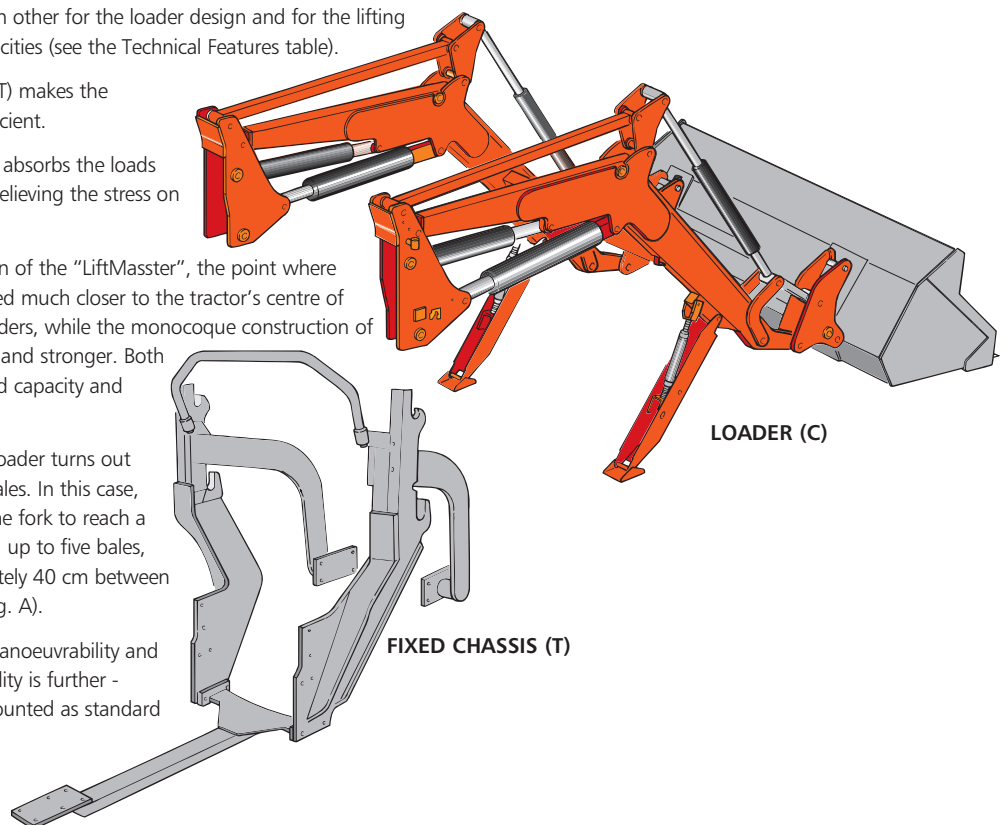
The unique quick-attach/detach system (T) makes the tractor/loader combination extremely efficient.

This system is a sort of hinge area which absorbs the loads generated at the radiator support, thus relieving the stress on the front axle.

Furthermore, thanks to the unique design of the “LiftMaster”, the point where the loader hinges into the frame is located much closer to the tractor’s centre of gravity than in competitive front-end loaders, while the monocoque construction of the arms makes the loader frame lighter and stronger. Both features result in increased front axle load capacity and enhanced tractor stability and safety.

When fitted with fork, the “LiftMaster” loader turns out particularly efficient for handling large bales. In this case, the special design of the loader allows the fork to reach a maximum height of four meters stacking up to five bales, while ensuring a clearance of approximately 40 cm between the pile of bales and the tractor hood (fig. A).

These design features ensure excellent manoeuvrability and all-round visibility in any condition. Visibility is further improved by the clear sliding sunroof mounted as standard on McCormick tractor cabs (fig. B).



tMaster" front loaders

- For improved manoeuvrability the loader is equipped with a level indicator (A) which informs the operator of the position of the attachment over the ground.



The Hydro Levelling ECO (20 – 30 – 40 series) and Hydro Levelling TOP (20 – 30 – 40 – 50 series) versions feature a hydraulic self-levelling system for 60 to 200 HP tractors.

Fig. A

Fig. B



JOYSTICK monolever: control for simple use

The loader is controlled via a monolever joystick located in comfortable and ergonomic position on the driver's right.

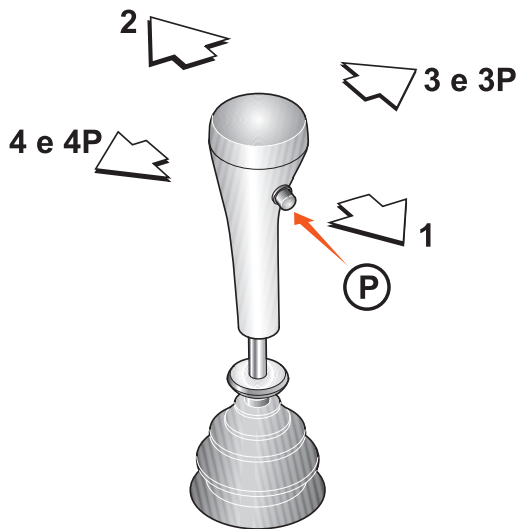
The joystick lever gives the driver total control of the six main functions for operation of the loader and attachments:

Joystick pos. 1: Loader lowering

Joystick pos. 2: Loader raising

Joystick pos. 3: Bucket rollback

Joystick pos. 4 : Bucket dumping



By pressing the electrohydraulic control (pushbutton P) integrated into the joystick lever, the following hydraulic attachments, connected to the electrovalve located on the front of the loader, can be operated:

grab for large wrapped round bales;

hydraulic fork for large wrapped round bales

hydraulic manure fork with grapple.

The pushbutton P, therefore, allows switching from the bucket rollback and dumping positions 3 and 4 to the additional hydraulic functions (positions 3P and 4P) for activating the hydraulically-operated attachments.

The joystick is also equipped with a sliding ring which locks and releases the lever for increased safety.

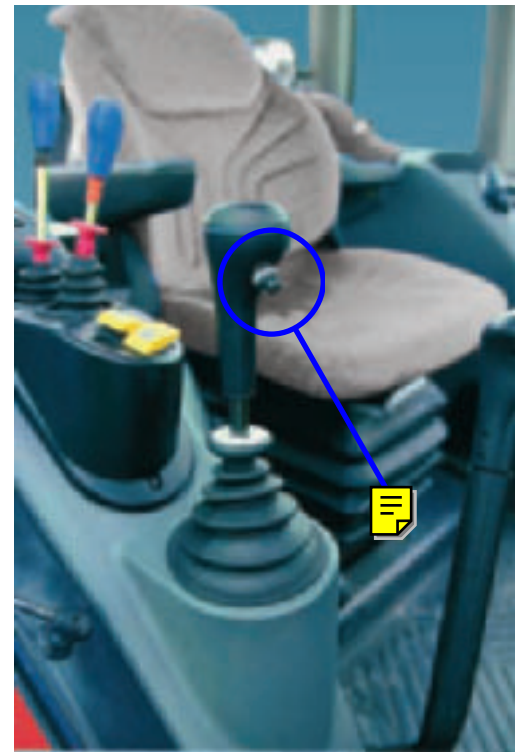


Fig. A





Fig. B



Fig. C

Versatile hydraulics

The hydraulic system of the front-end loader features two dedicated auxiliary valves controlled by the joystick lever.

The electrohydraulic control (pushbutton P) integrated into the joystick lever (fig. A page 10) controls an electrovalve located on the front of the loader. The electrovalve is equipped with hydraulic intakes which supply the cylinders of the attachments that are provided with additional hydraulic functions (fig. B).

When the loader is removed from the tractor, the rear quick-couplers can be used for other jobs and operated with the same joystick lever thus increasing the tractor versatility.

The hydraulic lines which enable the tractor to operate the loader cylinders are connected by way of a Flash quick-release multi-coupling system to be used for dismantling the loader from the tractor (fig. C).

The hydraulic lift cylinders can be optionally integrated with two nitrogen-filled shock absorbers designed to minimise recoils for improved driving performance on uneven ground (fig. B).



Quick-attach/detach system for easy mounting and dismounting



Fig. A



Fig. B



Fig. C

The loader is fully integrated into the tractor frame thanks to a unique patented quick-attach and detach system which makes for fast mounting and dismounting of the loader and attachment.

In a matter of minutes the system enables the loader to be removed from the tractor and parked. To remove the attachment from the tractor, lower the loader with the attachment to the ground and extract the parking stands by unscrewing the relevant pins (fig. B).

Release the locking device by turning the lever L located on either side of the loader (fig. C).

Disengage the Flash multi-coupler to disconnect simultaneously all hydraulic lines from the tractor (see fig. C page 11). Finally back the tractor slowly. Now the tractor is ready for further use (fig. A).

The loader mounting operations are equally simple and fast.



Fig. E



Fig. D

Coupling and uncoupling of attachment

The uncoupling of the attachment from the loader is easy to perform; just lower the attachment to the ground and stop the tractor engine.

Disengage the pins which secure the attachment to the loader by turning the lever in anti-clockwise direction (fig. D).

Restart the engine, lower the loader until it disengages from the fixed U-shaped hooks located on the attachment and back the tractor (fig. E).

All attachments feature a "EURO HITCH" coupling hook that is designed to be compatible also with attachments not supplied by McCornick (fig. F).

Coupling of the attachment is equally simple and fast.

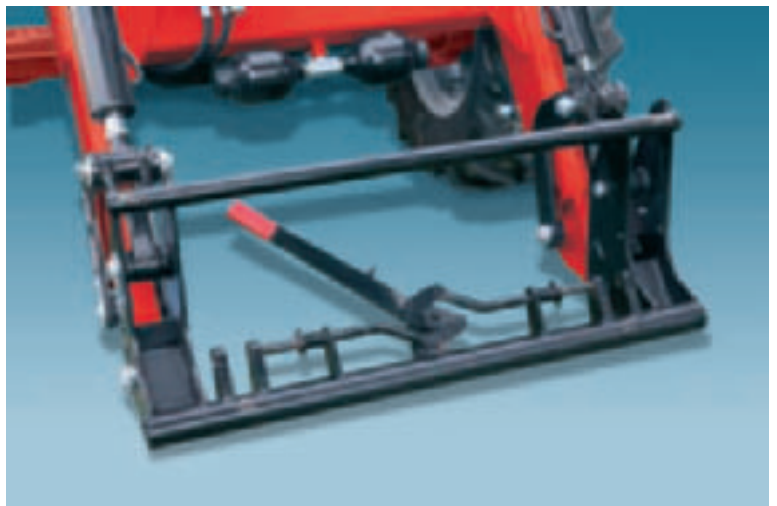
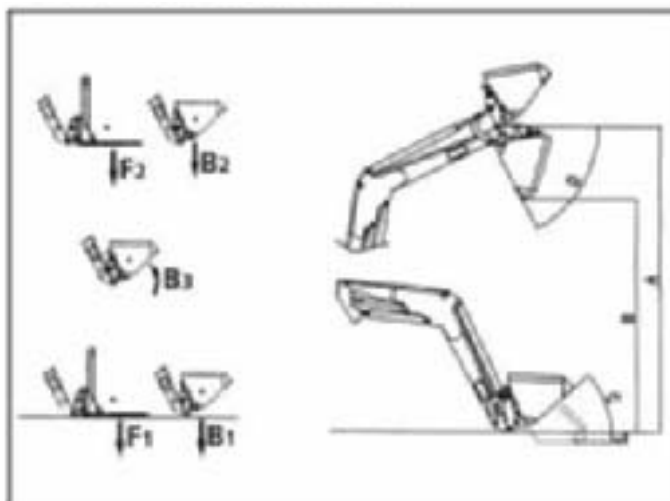


Fig. F

Technical features of "LiftMaster" front loaders

- a) Loader without self-levelling system (NO LEVELLING).
- b) Loader with mechanical self-levelling system (TECHNO LEVELLING).
- c) Loader with hydraulic self-levelling system (HYDRO LEVELLING).
- d) Frame from forecarriage to rear axle shafts.
- e) Hydraulics specially designed to suit the tractor features.
- f) Two pairs of double-acting hydraulic cylinders to control respectively raising/lowering of loader and operation of attachment.
- g) Adjustable support feet.
- h) Innovative quick-attach/detach system for easy mounting/dismounting of loader from tractor.
- i) EURO HITCH coupling hook for quick coupling/uncoupling of attachment.
- j) Level indicator indicating the position of the attachment over the ground.
- k) Flash quick-coupling system for loader/tractor hydraulics.
- l) Third hydraulic line to activate the attachment hydraulic functions.
- m) Control via joystick monolever.
- n) Shock absorbers for lifting cylinders.

LIFTING CAPACITY DIAGRAM



McCormick GM



McCormick CX-L



McCormick C-MAX

TECHNICAL FEATURES

MODEL	ECO NO LEVELLING						TOP NO LEVELLING						
	Type of tractor	F C-MAX 60	CX-L	C-MAX	CX	MC 95 105	MC 115 120 / 135	F C-MAX 60	CX-L	C-MAX	CX	MC 95 105	MC 115 120 / 135
Series	10	15	20	30	30	40	10	15	20	30	30	40	
Engine power CV	45-85	45-85	60-100	70-120	70-120	100-150	45-85	45-85	60-100	70-120	70-120	100-150	
LIFT CAPACITY AT 180 BAR													
*with bucket on ground B1 kg	900	900	1300	1500	1500	1700	1200	1200	1450	1600	1600	2200	
*with bucket at max. height B2 kg	800	800	1170	1350	1350	1530	1050	1050	1360	1530	1530	1950	
*with fork on ground F1 kg	900	900	1300	1500	1500	1700	1200	1200	1450	1600	1600	2200	
*with fork at max. height F2 kg	800	800	1170	1350	1350	1530	1050	1050	1360	1530	1530	1950	
breakaway capacity front of bucket B3 kg	1500	1500	1500	1500	1500	1500	1400	1400	2000	2000	2000	2000	
MAX LIFT HEIGHT													
at bucket pivot A mm	3200	3300	3800	3870	3870	4100	3200	3300	3800	3870	3870	4100	
with bucket dumped B mm	2260	2360	2940	3010	3010	3200	2260	2360	2940	3010	3010	3200	
OPERATING TIME													
raising time to full height	7"	7"	7"	7"	7"	9"	9"	9"	9"	9"	9"	9"	
bucket dumping	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	
WORKING ANGLES													
bucket rollback on ground C	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	
bucket dumping on ground D	90°	90°	90°	90°	90°	90°	55	90°	90°	90°	90°	90°	
DIGGING DEPTH													
E mm	150	150	150	150	150	150	150	150	150	150	150	150	
WEIGHTS													
without attachment and tractor couplers	370	380	440	473	473	500	450	452	560	620	620	650	

* The lift capacity includes the weight of the attachment (bucket, fork)

TECHNICAL FEATURES

MODELLO Type of tractor	ECO TECHNO LEVELLING						TOP TECHNO LEVELLING						
	F C-MAX 60	CX-L	C-MAX	CX	MC 95 105	MC 115 120 / 135	F C-MAX 60	CX-L	C-MAX	CX	MC 95 105	MC 115 120 / 135	MTX
Series	10	15	20	30	30	40	10	15	20	30	30	40	50
Engine power CV	45-85	45-85	60-100	70-120	70-120	100-150	45-85	45-85	60-100	70-120	70-120	100-150	115-200
LIFT CAPACITY AT 180 BAR													
*with bucket on ground B1 kg	1000	1000	1400	1600	1600	1800	1300	1300	1700	1900	1900	2600	2600
*with bucket at max. height B2 kg	900	900	1300	1500	1500	1700	1200	1200	1600	1800	1800	2300	2300
*with fork on ground F1 kg	1000	1000	1400	1600	1600	1800	1300	1300	1700	1900	1900	2600	2600
*with fork at max. height F2 kg	900	900	1300	1500	1500	1700	1200	1200	1600	1800	1800	2300	2300
breakaway capacity front of bucket B3 kg	1500	1500	1500	1500	1500	1500	1400	1400	2000	2000	2000	2000	2000
MAX LIFT HEIGHT													
at bucket pivot A mm	3200	3300	3800	3870	3870	4100	3200	3300	3800	3870	3870	4100	4400
with bucket dumped B mm	2260	2360	2940	3010	3010	3200	2260	2360	2940	3010	3010	3200	3500
OPERATING TIME													
raising time to full height	7"	7"	7"	7"	7"	9"	9"	9"	9"	9"	9"	9"	9"
bucket dumping a	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"	5"
WORKING ANGLES													
bucket rollback on ground C	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°	45°
bucket dumping on ground D	90°	90°	90°	90°	90°	90°	55	90°	90°	90°	90°	90°	90°
DIGGING DEPTH													
E mm	150	150	150	150	150	150	150	150	150	150	150	150	150
WEIGHTS													
without attachment and tractor couplers	433	443	500	533	533	560	500	502	620	680	680	705	735

* The lift capacity includes the weight of the attachment (bucket, fork)



McCormick CX

McCormick MC

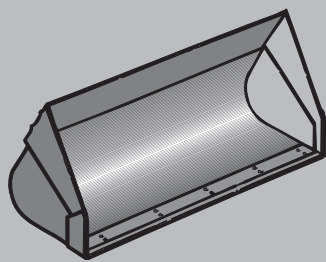
McCormick MTX

TECHNICAL FEATURES

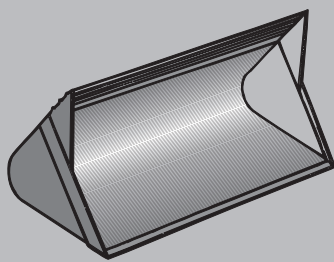
MODEL Type of tractor	ECO HYDRO LEVELLING				TOP HYDRO LEVELLING					COMPACT TECHNO LEVELLING
	C-MAX	CX	MC 95 105	MC 115 120 / 135	C-MAX	CX	MC 95 105	MC 115 120 / 135	MTX	GM
Series	20	30	30	40	20	30	30	40	50	830
Engine power CV	60-100	70-120	70-120	100-150	60-100	70-120	70-120	100-150	115-200	30-50
LIFT CAPACITY AT 180 BAR										
*with bucket on ground B1 kg	1400	1600	1600	1800	1700	1900	1900	2600	2600	988
*with bucket at max. height B2 kg	1300	1500	1500	1700	1600	1800	1800	2300	2300	750
*with fork on ground F1 kg	1400	1600	1600	1800	1700	1900	1900	2600	2600	988
*with fork at max. height F2 kg	1300	1500	1500	1800	1600	1800	1800	2300	2300	432
breakaway capacity front of bucket B3 kg	1500	1500	1500	1500	2000	2000	2000	2000	2000	-
MAX LIFT HEIGHT										
at bucket pivot A mm	3800	3870	3870	4100	3800	3870	3870	4100	4400	2240
with bucket dumped B mm	2940	3010	3010	3200	2940	3010	3010	3200	3500	1660
OPERATING TIME										
raising time to full height	7"	7"	7"	9"	9"	9"	9"	9"	9"	9"
bucket dumping	5"	5"	5"	5"	3"	3"	3"	3"	3"	6"
WORKING ANGLES										
bucket rollback on ground C	45°	45°	45°	45°	45°	45°	45°	45°	45°	36°
bucket dumping on ground D	55°	55°	55°	55°	55°	55°	55°	55°	55°	82°
DIGGING DEPTH										
E mm	150	150	150	150	150	150	150	150	150	150
WEIGHTS										
without attachment and tractor couplers	500	533	533	560	610	670	670	695	725	190

* The lift capacity includes the weight of the attachment (bucket, fork)

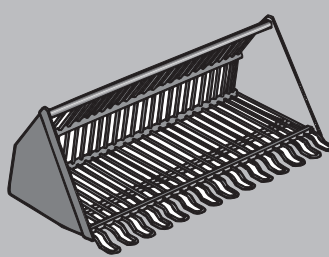
ATTACHMENTS FOR EVERY NEED



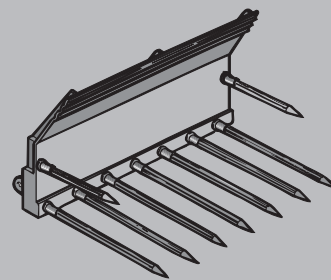
EARTH BUCKET



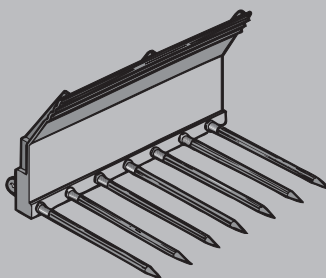
GRAIN BUCKET



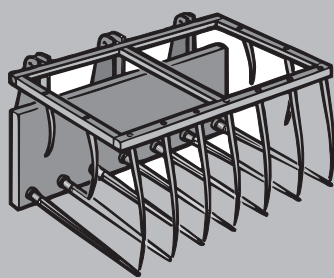
SUGAR BEET BUCKET



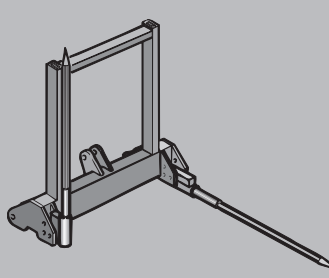
STONE BUCKET



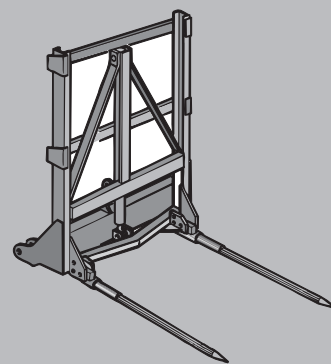
MANURE FORK



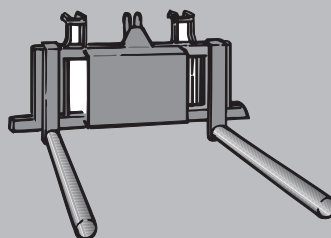
MANURE FORK WITH GRAPPLE



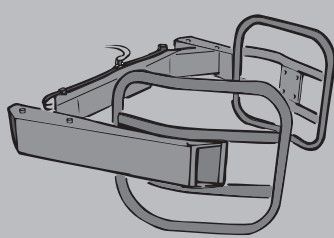
FORK FOR ROUND BALES



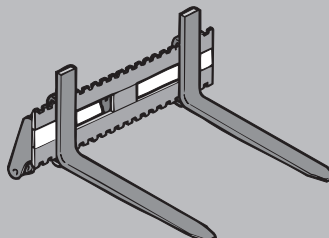
FORK FOR SQUARE BALES



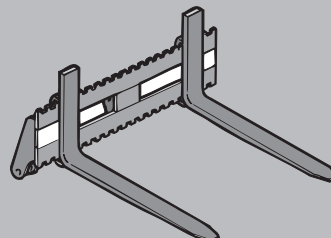
FORK FOR WRAPPED ROUND BALES



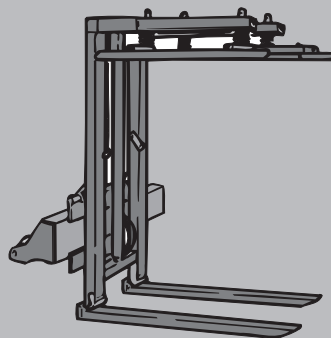
GRAB FOR WRAPPED ROUND BALES



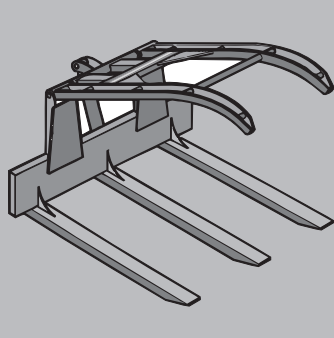
ADJUSTABLE PALLET FORK TO FEM STANDARDS



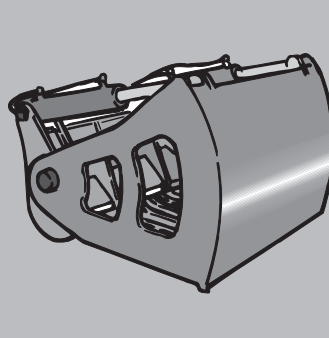
ADJUSTABLE PALLET FORK WITH SIDE SHIFT TO FEM STANDARDS



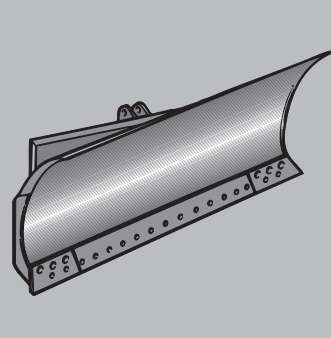
ADJUSTABLE PALLET FORK WITH SIDE SHIFT AND GRIPPING



LOG FORK WITH HYDRAULIC GRIPPING



SILAGE FORK



MECHANICAL ANGLE BLADE

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