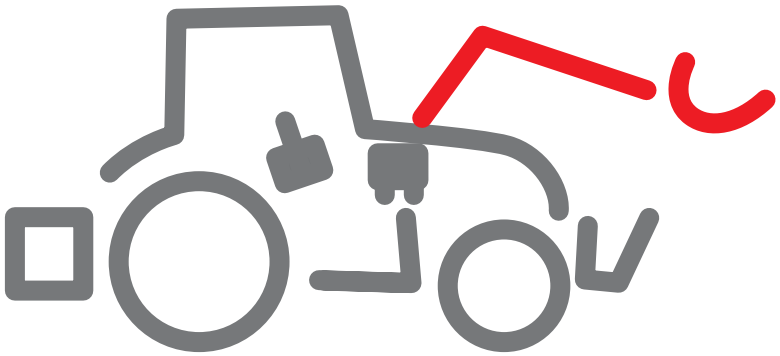


FITTING INSTRUCTIONS

en 374393 AD - 0426
Translation of the original manual

CONTENTS

1. Safety rules

DANGER: The loader is a complex machine that requires an official hand-over.

The demonstration of the equipment to be delivered should include:

— Safety rules.

— Hitching and unhitching the loader.

— Hitching and unhitching the work implements.

— Full use of the control levers.

> **IMPORTANT:** For the attention of the vendor. Please make sure that your customer has identified access to the user manual via the QR code on the loader.

The MX product is intended for professional users. However, if there is any likelihood of the MX product being operated by a non-professional user, the dealer is responsible for informing the user of their need to request a printed copy of the instruction manual (or user manual) from M-extend, including the basic safety information for starting up the machine or product and using it safely.

— Before use, the vendor and the installer must ensure that the loader-tractor unit and the implement-loader unit are compatible. They should refer to the current MX price list.

— PPE (Personal Protective Equipment) must be worn (protective equipment for both hands and feet).

— The fitting instructions supplied with the MX loader are intended for anyone responsible for assembling, installing, operating, adjusting, maintaining, troubleshooting, storing and transporting the MX loader and its implements.

— Installation and servicing of MX products must be performed by competent persons authorised by the dealer. These persons must have read the MX assembly documents and rules.

— The tractor should at the very least be fitted with a roll-over protective structure (ROPS), which should be in the active position when using the loader.

— MX products are designed to be used at the maximum hydraulic pressure indicated by the manufacturer in the tractor's specifications. Use of higher pressure will result in additional stress and will invalidate the MX equipment warranty.

— In compliance with standard EN 12525, the control levers for operating the loader and implements must be of the "sustained action" type, except for the floating position for lifting and/or dumping, which can be held in place by a notching system.

— Breaking lead seals will void any liability on the part of MX for all its equipment.

— Any assembly of the MX loader which ignores the recommendations of the MX price list in force at the purchase date cancels the MX guarantee for the whole supply.

— Any modification to any item supplied by MX (implements, loader, frame, etc.), or installation or use of a non-MX implement or component on the MX loader, will render the MX guarantee on all supplied items null and void.

— Any modification made to the MX loader and its implements or use thereof for purposes other than the handling of materials for which they were designed, in particular the transportation of people or any handling operations performed above people, are PROHIBITED.

— Only use spare parts and accessories that comply with MX's recommendations. Do not make any modifications to your MX loader or its accessories (mechanical, electrical, hydraulic or pneumatic specifications) yourself or have anyone else do so without seeking prior approval in writing from MX. Failure to comply with these rules may render your MX loader hazardous. In the event of damage or injury, MX may not be held liable in any way.

— Guarantee cover will cease immediately if the user fails to comply with the standards and instructions for use and maintenance of the MX loader, as set out in the "Fitting instructions" and the "User manual".

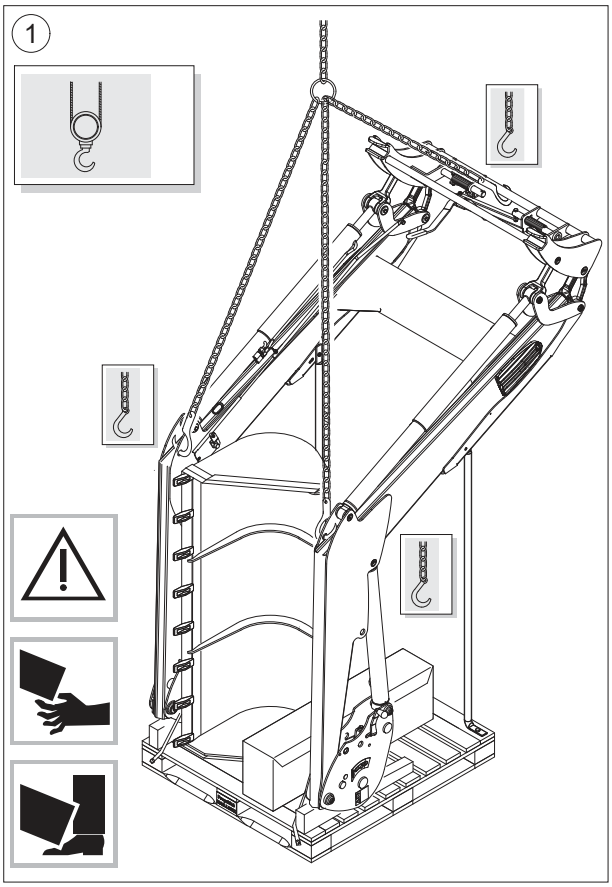
2. Handling

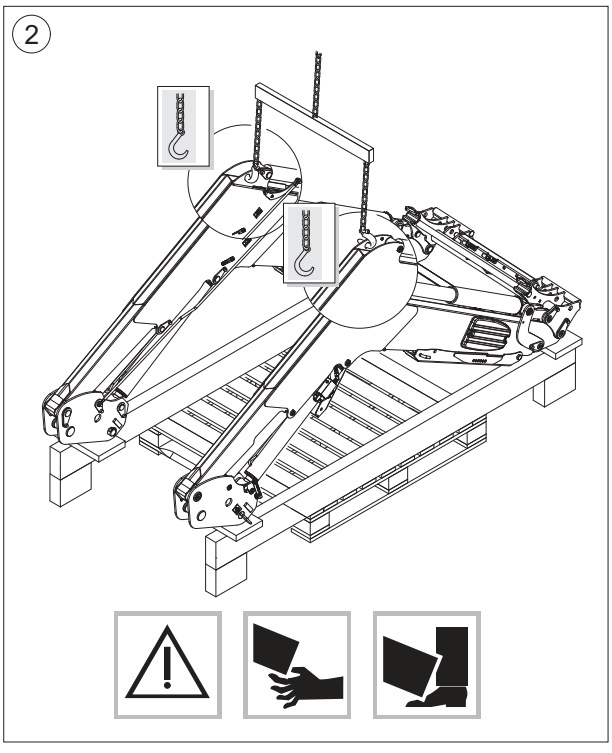
2.1. Loaders packaged on a pallet

CAUTION: Before slinging the loader to remove it from the pallet, refer to the unpacking instructions for the corresponding loader.

— (1) T400evo, A100

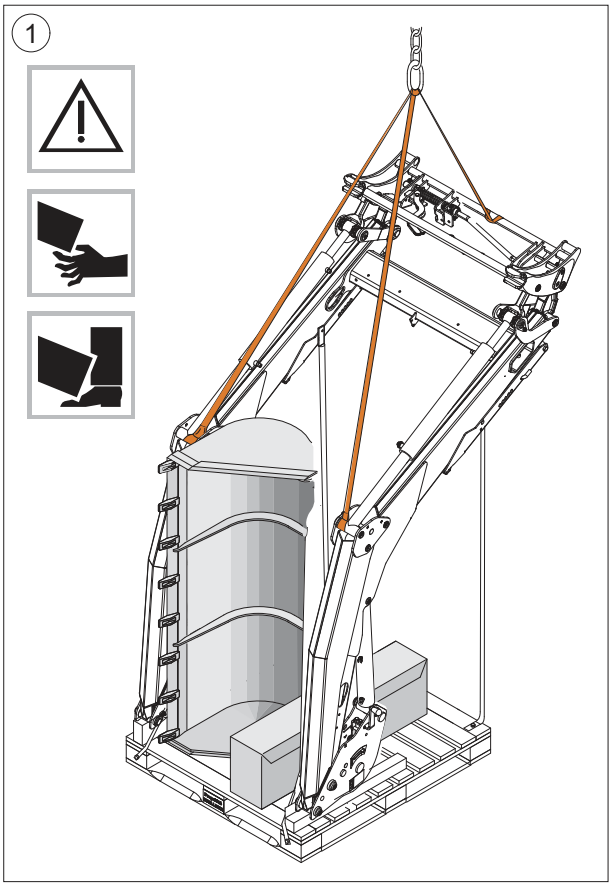
— (2) TX400, T400evo

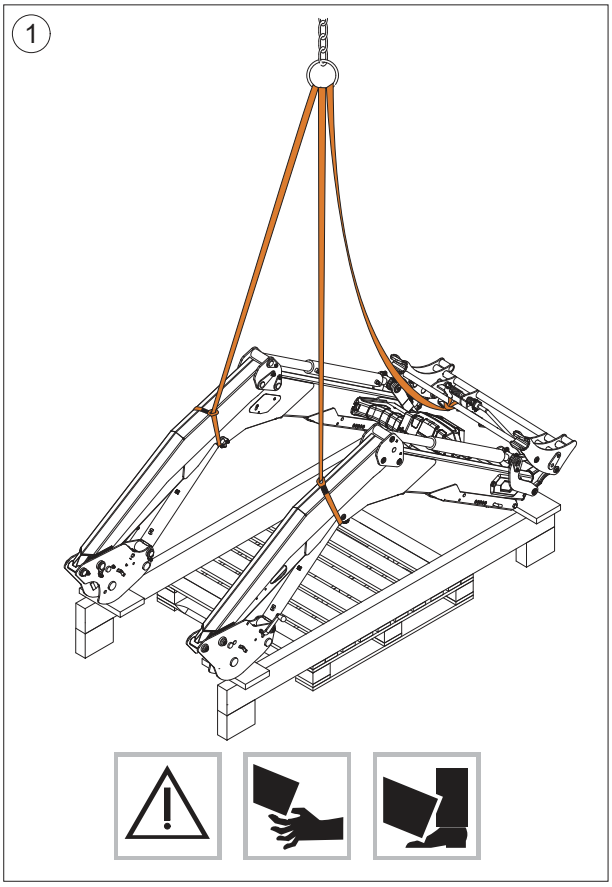




CAUTION: Before slinging the loader to remove it from the pallet, refer to the unpacking instructions for the corresponding loader.

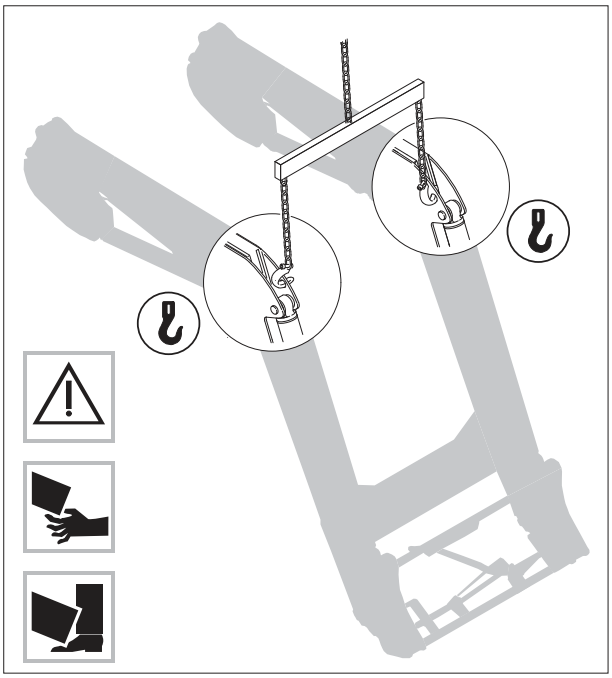
— (1) U500



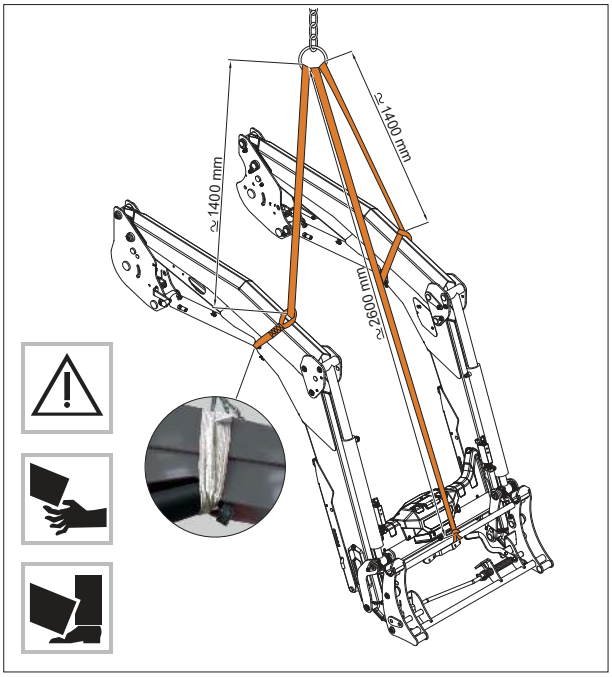


2.2. Handling the MX loader

Use anchorage points (except U500 series).



Handling U500 series loaders.



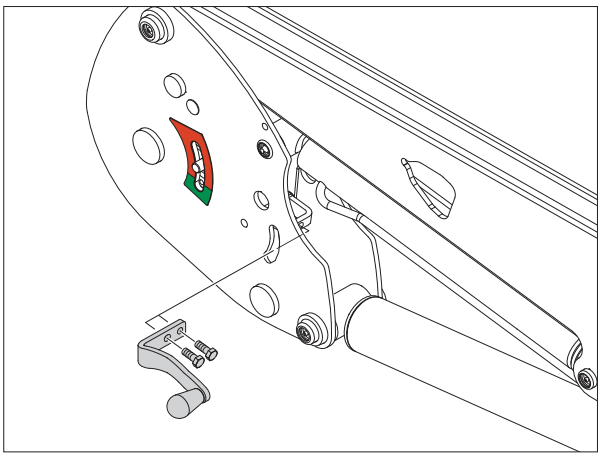
3. Loader preparation

3.1. T400evo, U500 and A100 series loaders

3.1.1. Standard release handle kit (T400evo and U500 series)

— Mount the left and right release handles.

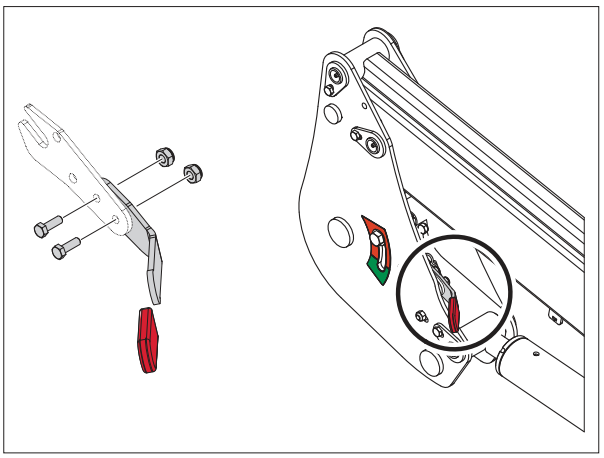
IMPORTANT: Ensure that the safety latches are in the hitching position (locking indicators in the red zone).



3.1.2. Standard release handle kit (A100 series)

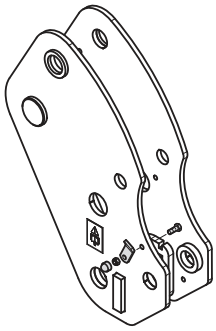
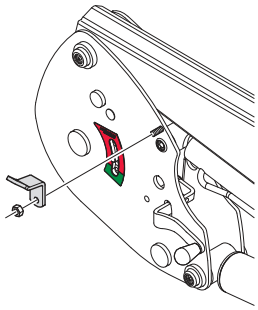
— Mount the left and right release handles.

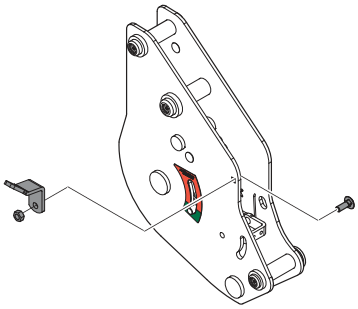
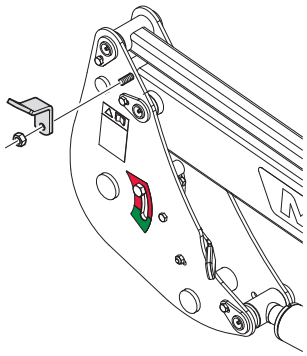
IMPORTANT: Ensure that the safety latches are in the hitching position (locking indicators in the red zone).

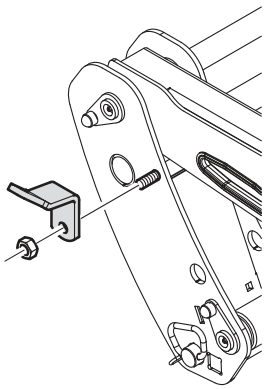
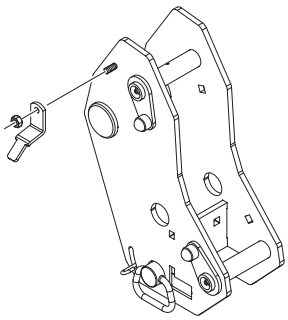


3.2. Assembly of the MACH housing support

Assembly of the MACH System housing support is carried out on the right-hand outer side of the loader half-frame.

TX400	T400evo
	

U500	A100
	

F300	C400
	

3.3. Hose guide assembly (T400evo, U500)

— Put the hoses down flat (1).

— Position the flange on the hoses, 200 mm from the boom (2).

— Place the housing over the hitch frame (3).

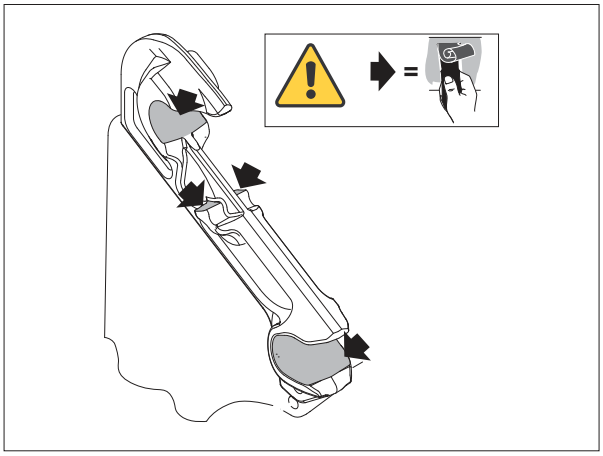
— Fit the flange pin in its location (4).

— Position the screw (5) on the boom and screw on the lock nut (6).

3.4. Bracket preparation

T400evo, U500 and A100 series loaders:

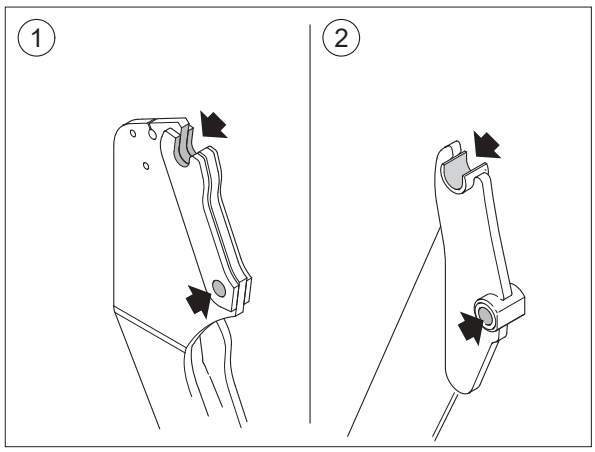
— Remove paint as shown opposite.



TX400, F300 and C400 series loaders:

— Operate the pins in their housings before the first attachment is made.

— Remove paint as shown opposite.

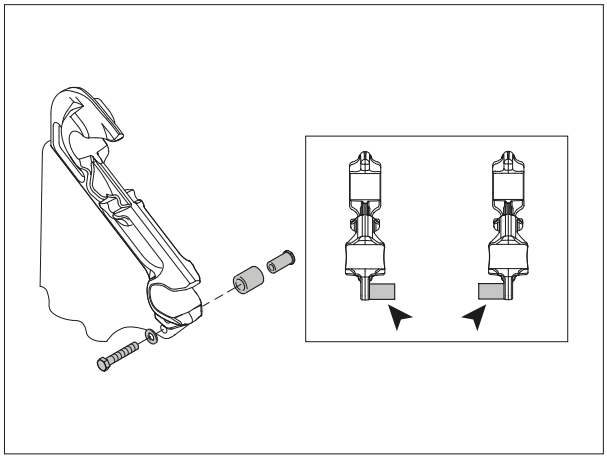


(1) TX400 / (2) F300, C400

3.5. Roller kit assembly (depending on the bracket model)

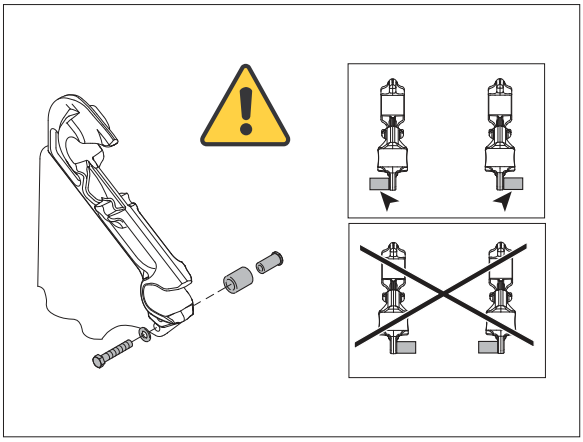
T400evo and U500 series loaders:

— Mount the rollers on the interior faces of the bracket arms (except specific cases as detailed in the bracket assembly instructions).



A100 series loaders:

— Mount the rollers on the outer faces of the bracket arms.



4. Loader hitching

WARNING: This operation must be carried out by the driver, who must leave the cab and not perform any manoeuvres while working on the loader.

4.1. Pre-hitching checks

Ensure that there is enough clearance between the front mudguards and the hitching half-frames to avoid any unwanted catching.

If there is insufficient clearance, adjust the front mudguards accordingly. (See bracket mounting instructions).

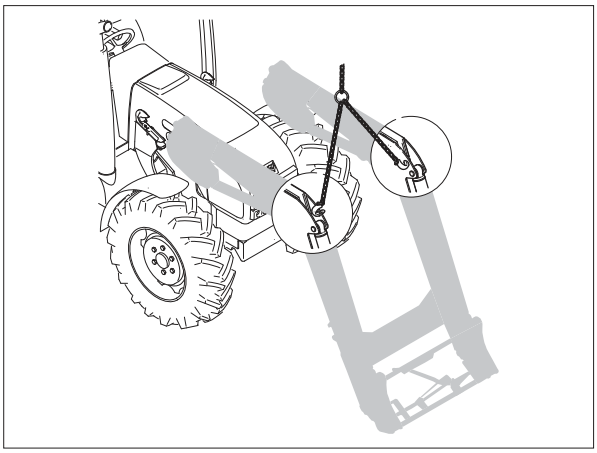
4.2. T400evo, U500 and A100 series loaders

4.2.1. Check on left/right frames

Check that the locking indicators on the left and right frames are in the red zone, and that there is nothing that may hamper the loader connection.

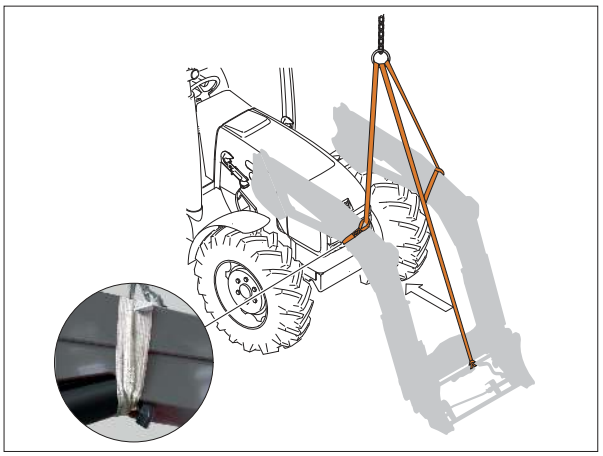
4.2.2. Loader hitching (except U500 series)

Attach the loader using lifting equipment (travelling gantry, crane) and guide the frames onto the bracket.



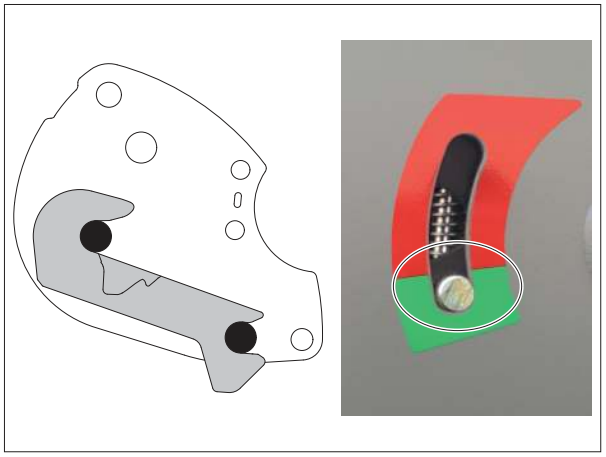
4.2.3. Loader hitching (U500 series)

Attach the loader using lifting equipment (travelling gantry, crane) and guide the frames onto the bracket.

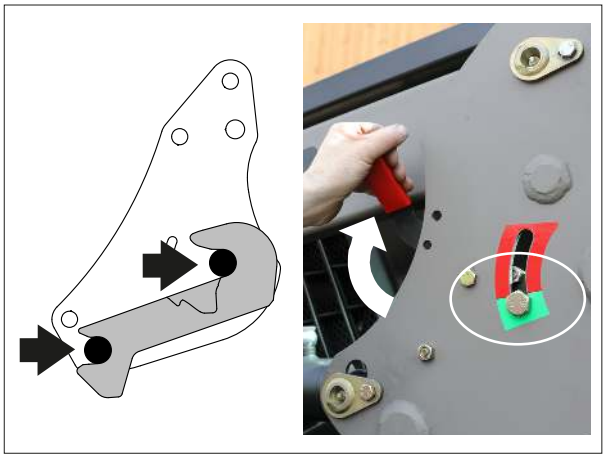


4.2.4. Locking and hitching the loader

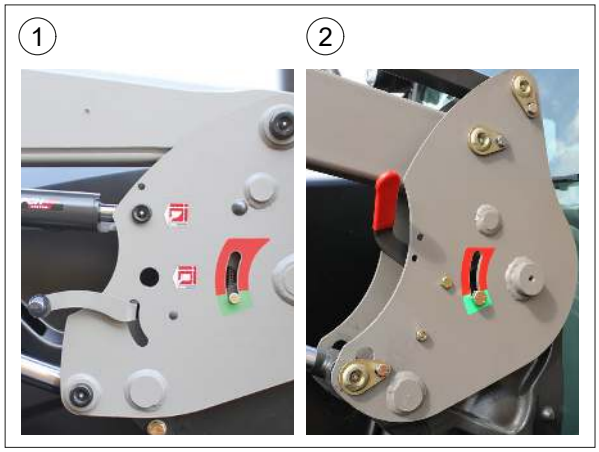
— T400evo and U500 series loaders: Ensure that the pins are engaged in the bracket heads. The indicators are in the green zone (automatic engagement of the safety latches).



— A100 series loaders: When the pins are engaged into the bracket heads, push the locking levers upwards. The indicators are in the green zone (manual engagement of the safety latches).



— When the loader is hitched, the unlocking levers should be in the position shown opposite.



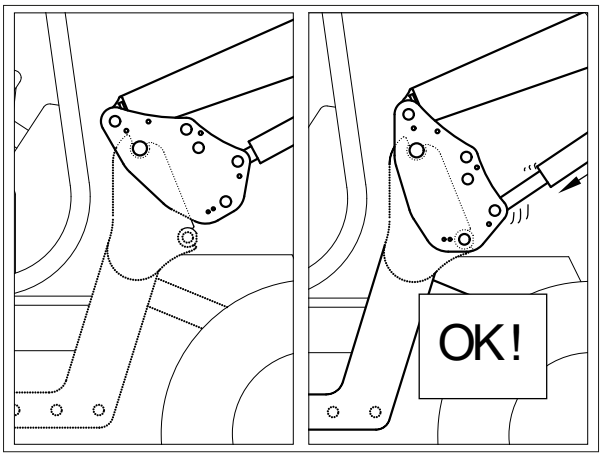
4.3. TX400, F300 and C400 series loaders

— Use a hoist for hitching. The lift rams must be fully retracted.

— Engage the half-frame rounds in the bracket yokes.

— Couple all the hydraulic functions together based on coupling colour, then open the valve (if fitted) of the loader's lifting hydraulic circuit.

— Operate the lift rams so that the locking pins can be engaged and the safety pins can be fitted.



4.4. Final check

Raise the front axle of the tractor and check, with maximum clearance (oscillation and maximum steering angle), that no part of the frame and loader can come into contact with the tyres, mudguards and supports, or any other part of the tractor.

5. Commissioning the loader - checklist

CAUTION: All loader test operations must be carried out by the operator from their cab. All persons must be kept away from the area in which the loader is being operated. When checking the loader controls, check that the control levers are in neutral.

NOTE: When these fitting instructions refer to a chapter, refer to the corresponding loader user manual.

CAUTION: For tractor maintenance operations, the tractor engine must be turned off; it is strongly recommended that you unhitch the loader. Unhitching is a simple, quick operation that provides the best guarantees of safety and efficiency for tractor maintenance.

After hitching the loader, carefully check all the functions before use. In the event of a malfunction, take the necessary corrective measures.

— Check that the loader is correctly hitched to the tractor. For more information, please refer to Loader Hitching.

— Check the stability of the loader-tractor unit. For more information, please refer to Counterweight.

— Check the condition of the fasteners. Replace, clean and re-tighten if necessary. For more information, please refer to Maintenance.

— Check there is no interference between the loader and the tractor. Make sure that the wheels do not touch the loader with steering at full lock. Adjust the spacing or limit the turning angle, if necessary.

— Check that the indicator rod is working correctly.

— Ensure that all maintenance operations are carried out correctly and in accordance with the maintenance schedule. For more information, please refer to Maintenance.

— Test all loader functions at both maximum load and low speed to check that the hydraulic circuit is properly sealed and that the hoses are correctly positioned. For more information, please refer to Maintenance.

— Bleed the air from the hydraulic system by pressurising the functions several times.

— Check the tractor oil level and top up, if necessary.

— Check that the implement is correctly hitched to the loader. For more information, please refer to Implement Hitching. Press the implement down on the ground (until the tractor's front wheels lift up) to check that it locks in place correctly. If the loader is fitted with the SPEED-LINK or FAST-LOCK option, alternate between "locked" and "released" several times. Check that the indicator rod is correctly adjusted. For more information, please refer to Level Indicator.

— Check the loader's mechanical condition (any cracks, warping, end stop matting, clearance, parking stands, etc.).

5.1. Static test procedure

Check the structural integrity of the front loader and its compliance with the technical specifications before use:

— Examine the loader's overall structure for cracks, faulty welds, or warping.

— Check the fasteners (bolts, nuts, rivets) to make sure they are properly tightened and show no signs of damage.

— Check the condition of the loader and pivot points for wear or excessive play. For more information, please refer to Maintenance.

— Check that the loader complies with the technical specifications. For more information, please refer to Technical Specifications.

— Check the rams and hydraulic components (hoses, connectors, etc.) for damage or wear.

5.2. Dynamic test procedure

DANGER: All loader tests must be carried out by the operator from the cab. All other persons must be kept away from the area in which the loader is being operated.

Test the loader's operational performance and safety under actual conditions of use:

— Hitch the loader with an implement to the tractor. For more information, please refer to Loader Hitching and Implement Hitching.

— Raise and lower the loader to various heights to check that everything is moving smoothly.

— Load the implement with the maximum authorised weight and check the loader's ability to lift and hold the load. For more information, please refer to Technical Specifications.

— Check the hydraulic rams and pipes for leaks.

— Check that the lifting/dumping safety system is working properly. For more information, please refer to Safety when lifting and dumping. (OPTION)

6. Implement hitching

WARNING: This operation must be carried out by the driver, who must leave the cab and not perform any manoeuvres while working on the loader.

After hitching an implement to the loader (See “Implement hitching” in the user manual), lower the implement to the ground and visually check lock position.

7. Tightening torque

IMPORTANT: All fasteners/screws needing to be retightened must be inspected, replaced if necessary, cleaned and reassembled on the locking compound (excluding brackets). Tighten the screws to the tightening torque recommended in the table below (Do not use an air gun to screw or tighten the screw/fasteners on the tractor).

Check the loader and implement tightness after 10 and 50 hours work, then every 100 hours or every time the tractor engine is drained. Contact your dealer if there is any loosening.

Tightening torque

Class of bolt	stud marking (ISO 898)	Thread											
		M5	M6	M7	M10	M12	M14	M16	M18	M20	M22	M24	M27
8.8	◯	5.2	9	21.6	43	73	117	180	259	363	495	625	915
10.9	□	7.6	13.2	31.8	63	108	172	264	369	517	704*	890	1304
12.9	△	8.9	15.4	37.2	73	126	201	309	432	605	824	1041	1526

For cast steel (Nm) ±15%

* Unless otherwise specified

7.1. Bracket maintenance specifics

DANGER:
To avoid any risk of serious or fatal accidents:

— Regularly check that the fasteners and screws are properly tightened; refer to the checking table below.

— All fasteners requiring retightening must be inspected and, if necessary, replaced.

— Impact wrenches must not be used to screw or tighten the fasteners used on the tractor or on the parts of our supplied product.

Bolted linkage	Inspection schedule			
	Indication on the tractor hour counter			Interval
	100 hrs or first tractor service from new*	600 hrs or second tractor service *	3000h	
Check that the fasteners between the tractor and our supplied product, and on our parts, are tightened to the recommended torque.	x	x		Then every 600 hrs
Check that bracket fasteners are tightened to the recommended torque.	x		x	Then every 3,000 hrs

*Whichever is the sooner.

part of **M-extend**

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