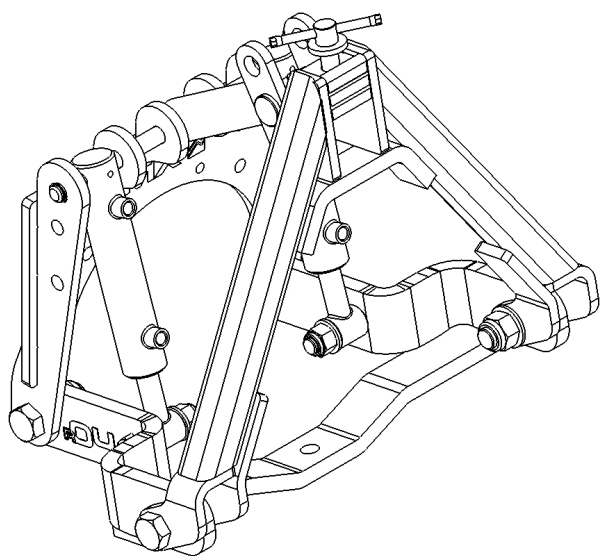




RAISE YOUR EXPECTATIONS



FRONT LINKAGE

MX R04N

User Manual

Read carefully before using

Dear user,

We thank you for placing your trust in us and hope that you will find your MX front linkage satisfactory in every way.

The demonstration of the equipment to be delivered should include:

By taking a few minutes to read this manual, you will be able to obtain the best results from your MX front linkage, extend its service life and ensure safe operation.

The front linkage user manual before you is an important document, so please retain it in order to be able to refer to it if required. Make it available to any other users and hand it over to any new owner should your MX front linkage be sold on.

The illustrations and technical data shown in this document might not exactly match your front linkage; the operating requirements will nevertheless remain the same.

You can access the original manuals in English on the www.m-x.eu website:
Click on the English version of the site, then "Documentation/User manuals".

MX is a trademark of M-extend France SAS, SIREN 639 200 260, RCS Rennes, 19 Rue de Rennes, BP 83 221 - 35 690 Acigné, France.

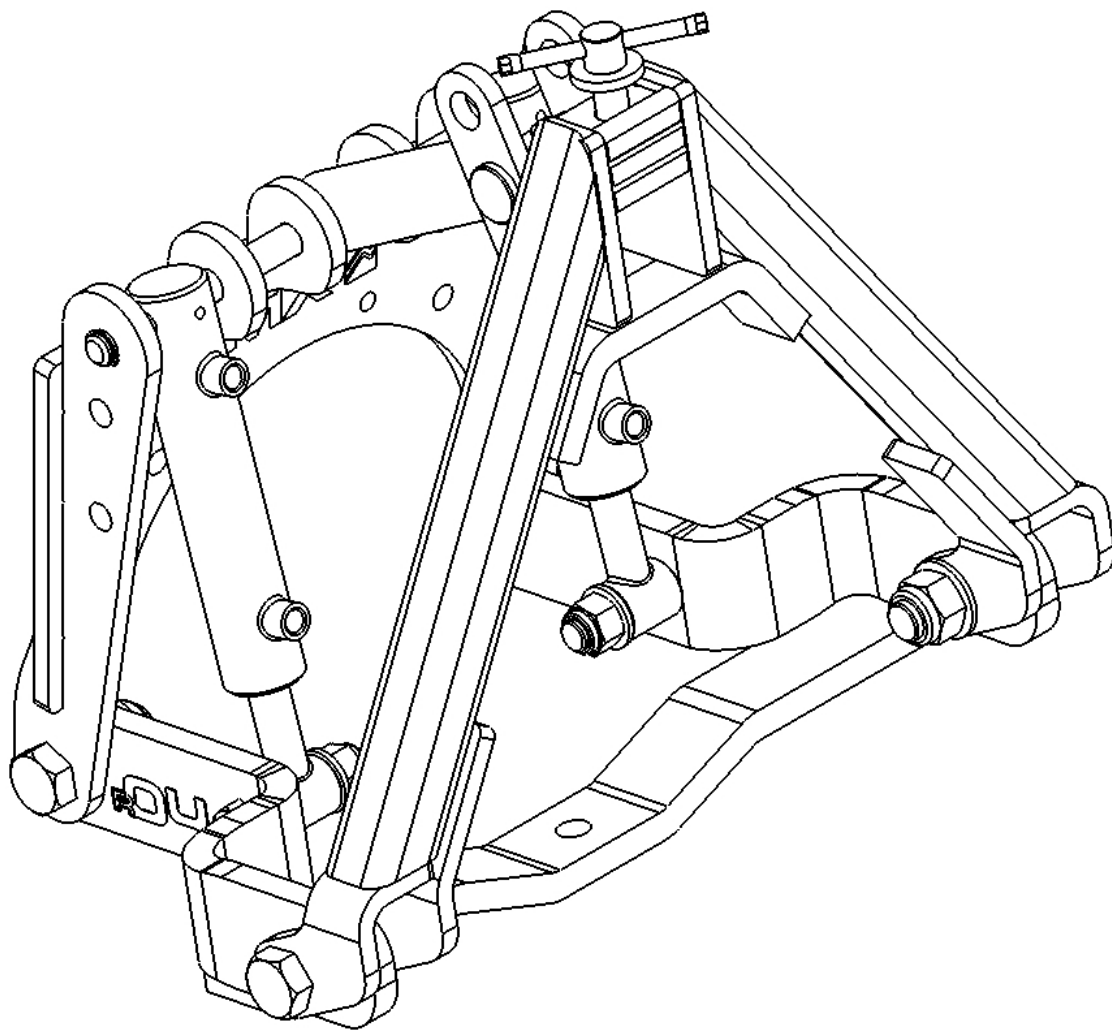
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**The user must read and understand this manual
before first use.**



Familiarise yourself with:

- *Safety rules and operating requirements.*
- *Hitching and unhitching the implement.*
- *Full use of the controls.*

1. Safety rules

1.1 Safety rules

- The tractor – front linkage combination must only be operated by trained and experienced personnel.
- When the tractor is fitted with a front linkage and a front loader, the user is required to unhitch the loader before using the MX front linkage (please refer to the loader user manual for the unhitching procedure).
- CAUTION: before any use of the front loader, check that the MX front linkage is locked hydraulically, and that the linkage arms are folded or retracted. (see "Setting the front linkage to transport position" section).
- Only operate the front linkage from the driver's seat or by using the MX factory-supplied external controls. Remain in charge of the controls until all movements stop.
- The controls for operating the front linkage must be of the "spring return" type with the exception of the floating position, which may be maintained using a notching system.
- Do not leave the driver's seat without inhibiting all control movements.
- You must ensure that nobody is in the operating area when the front linkage/implement are in use.
- The transport or lifting of persons by use of the front linkage is prohibited.
- Before moving with a front implement fitted, check and ensure that the tractor-front implement assembly is stable by fitting a counterweight at the rear of the tractor. This should ensure that 20% of the gross weight (tractor-front implement) remains on the rear axle of the tractor for optimum safety while travelling and working.
- The maximum front axle loading specified by the tractor manufacturer must not be exceeded.
- The front tyres' maximum safe load, as advised by the manufacturer, must not be exceeded.
- Check tyre pressures regularly.
- An implement hitched to the front linkage must be capable of being lifted through the full travel of the linkage. Any excess load impeding this travel is strictly forbidden.
- Before any operation, the user must ensure that the front linkage is in proper working order and can be used in complete safety.
- When travelling on the road with a front implement, the front linkage must always be in the raised position and it is essential to comply with road regulations (dimensions, signage on the implement, etc.)
- When driving on the road without a front implement, the front linkage must always be in the transport position (see chapter "Setting the front linkage to the transport position")
- When the tractor is stopped, whether for a short or prolonged period, the engine must be switched off and the linkage lowered.
- The tractor must never be towed using an anchoring point on the front linkage.
- Check periodically to ensure that the safety pins and bolts are in place. Do not replace them with any other items such as nails, wire, etc.
- Any fault tracing (diagnostic) work and/or removal of parts may only be undertaken by a skilled technician, who will start by ensuring that the work can be carried out in complete safety for both him/herself and his/her surroundings.
- PPE (Personal Protective Equipment) must be worn (please refer to the "PPE table").
- Seat belts must be worn by the driver and passengers.
- Before each use, the operator must check that the loader is correctly hitched and that the implement is correctly locked (test by pressing hard to the ground).
- Only control the loader from the driver's seat. Keep controlling until movements stop.
- The loader controls must be locked when travelling by road (refer to the controls user manual).

- When approaching a junction, release the controls then raise the loader to at least 2 m above the ground to avoid endangering other road users. After passing the junction, return the loader to its initial position and lock the controls again.
- When driving on the road, do not mask the tractor's side lights and signalling lights.
- Do not leave the cab without stopping all control movements (control lever locked).
- Never leave the tractor with the loader lifted. After using the loader, park the tractor with the loader lowered to the ground.
- All persons must be kept away from the area in which the loader is moving while it is in operation. When lifting operations require the presence of a person near to the load, the MX loader must be fitted with a safety device (see the "SAFETY WHILE LIFTING AND DUMPING" chapter).
- Before use, the operator should be sure that the loader-tractor unit and the implement-loader unit are compatible. They should refer to the MX price list in effect with their dealer.
- The operator must use an implement designed and recommended by MX for the work to be carried out.
- **Carrying or lifting persons using the loader is forbidden.**
- Ensure tractor stability by using a suitable counterweight (see the "COUNTERWEIGHT" chapter).
- Restrict all movements with the load lifted, as the tractor may become unbalanced.
- The maximum front axle loading specified by the tractor manufacturer must not be exceeded.
- In order to limit stresses on the front axle and steering ram, and to limit tyre wear, move forwards or backwards when steering.
- The maximum loading on the front tyres specified by the tyre manufacturer must not be exceeded.
- Check tyre pressures regularly.
- Check periodically to ensure that the safety pins and bolts are in place. Do not replace them with any other items, such as: nails, wire, etc.
- For full use of the MX loader, the tractor must be fitted with a structure to protect against falling objects. If this is not the case, there are limits on the use of the MX loader (see the "LOADER USE LIMITS" section). CAUTION: the protective fitting must be in active position while working. If the tractor is fitted with a roll cage only, the loader must be equipped with a parallelogram.
- Watch out for overhead electricity and telephone lines, guttering, framework, etc. when moving with the loader in raised position.
- In compliance with standard EN 12525 + A2 2010, the controls for operating the loader and implements must be of the "sustained action" type, except for the floating position for lifting, which can be held in place by a notching system.
- Any fault diagnosis and/or removal of parts must be carried out by a professional who shall start by guaranteeing that the work will be carried out safely for him and his environment, notably in the case of work on a lifted loader.
- For all operations on the machine, pay attention to the risks of crushing or pinching, especially with moving parts.
- For all interventions at height on the machine, use stable and secured means. Stop the tractor engine if the loader is hitched to the tractor.
- Keep the tractor-loader clean to avoid the risk of fire. Ensure that airborne particles (straw, grass, wood shavings, etc.) do not accumulate in areas which reach high temperatures. Inspect and clean areas where various materials can accumulate, especially around the engine and the exhaust area.

1.1.1 Caution!

- MX products are designed to be used at the maximum hydraulic pressure indicated by the manufacturer for the tractor's specifications. Use of excess pressure will result in additional strain and will therefore invalidate the MX equipment warranty.
- Never make any changes to the hose connections.
- Any instance of MX front linkage being fitted which ignores the recommendations in the MX price list in force on the date of purchase will void the MX warranty on the entire MX supply.
- Any modification to any part of the MX supply (rams, arms, linkage frame, etc.) or use of a component installed on the MX front linkage which has not originated from MX will void the MX warranty and its liability on the entire MX supply.
- Use only genuine MX spare parts. Do not modify your MX front linkage yourself or have it modified by anyone else, without applying for written authorisation from MX in advance. Failure to comply with these rules may make your MX front linkage hazardous. In the event of damage or injury, MX shall not be held responsible in any way.
- Warranty cover will cease immediately in the event of a failure to observe the standards and instructions for use and maintenance of the MX front linkage as stipulated in the user manual.

2. OPERATING REQUIREMENTS

Hitching an implement of dimensions smaller than dimension H will overload the third link bar, causing damage to it.

Hitching an implement with dimensions in excess of dimension H may cause damage to the front of the tractor (bonnet, grille, etc.) when lifting.

2.1 Front overhang and use on the ground.

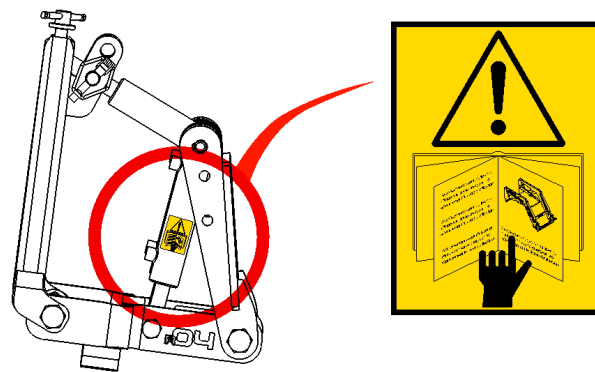
The implement must be hitched as close as possible to the attachment points on the front linkage. In fact, the longitudinal overhang generates considerable stresses on the front linkage (leverage effect). The more compact the implement fixing, the less strain there will be on the equipment. Using a compact implement also improves lifting performance.

This category of linkage is not designed for working the ground. You are strongly advised not to fit soil engaging implements, so as to safeguard the structure of the machine.

 **CAUTION: The operating conditions for implement hitching and use on the ground must be strictly complied with. Any deviation from the conditions risks causing serious damage for which MX cannot be held liable.**

3. Safety stickers

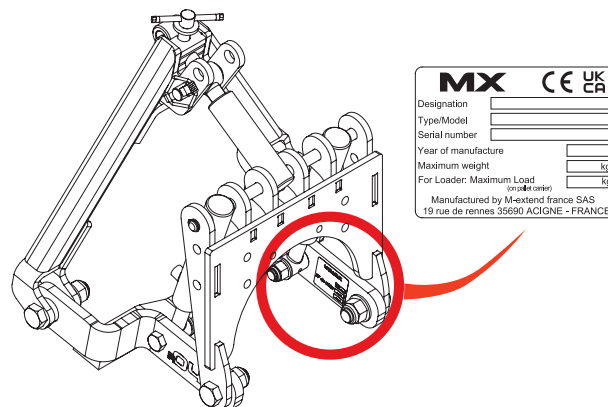
A safety sticker is affixed to the front linkage. Ensure that it remains clean and legible; replace it if damaged.



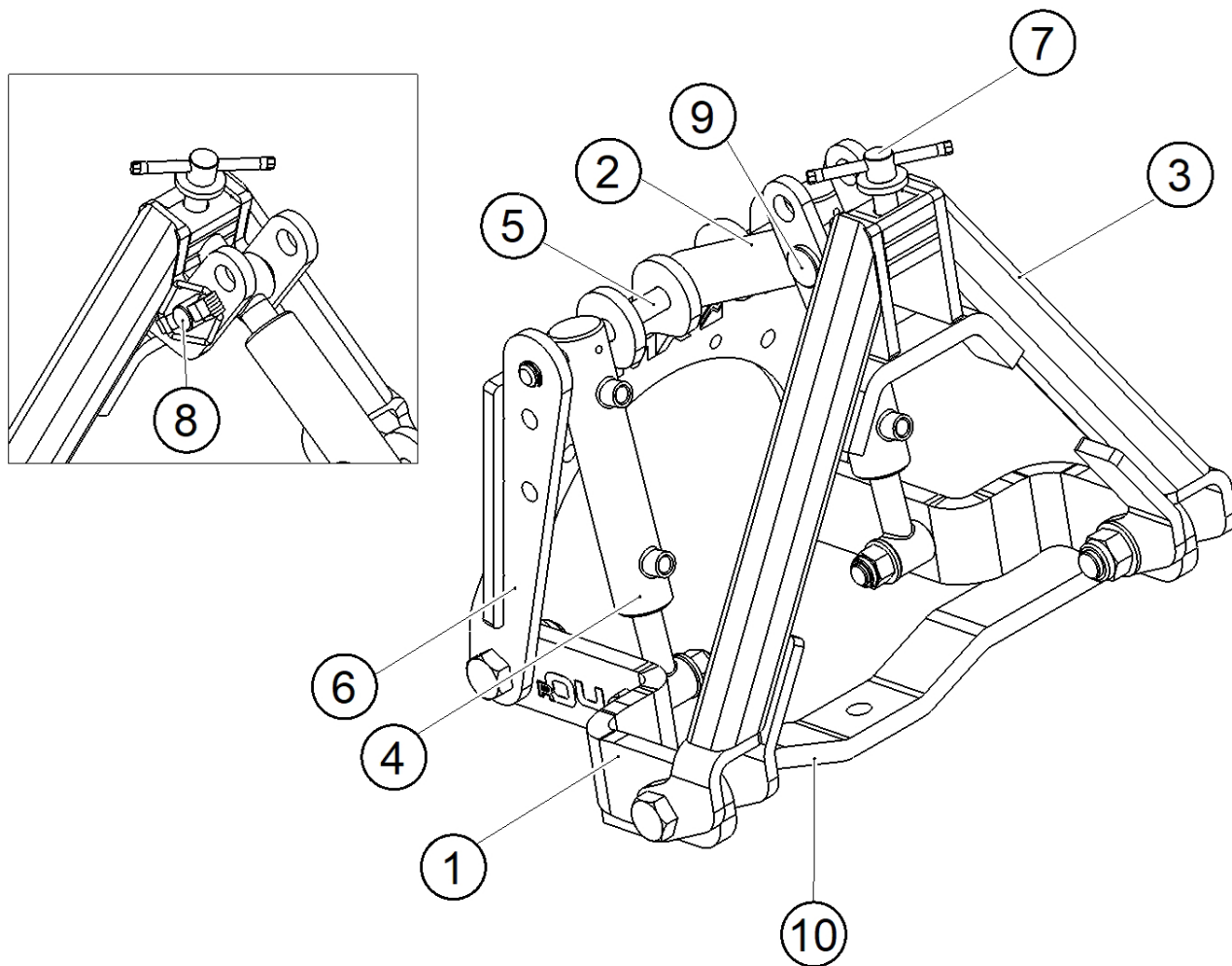
4. Identification plate

The identification plate is located on the right-hand side of the front linkage frame.

The serial number and front linkage model shown on this plate must be quoted in any request for information, parts or technical assistance.



5. DESCRIPTION



- 1: Linkage frame arm
- 2: 3rd link
- 3: Triangle
- 4: Ram
- 5: Ram pin

- 6: Frame
- 7: Locking pin
- 8: Safety clip
- 9: Shoulder pin
- 10: Linkage frame cross-beam

6. HITCHING/UNHITCHING THE TRIANGLE

6.1 Implement hitching.

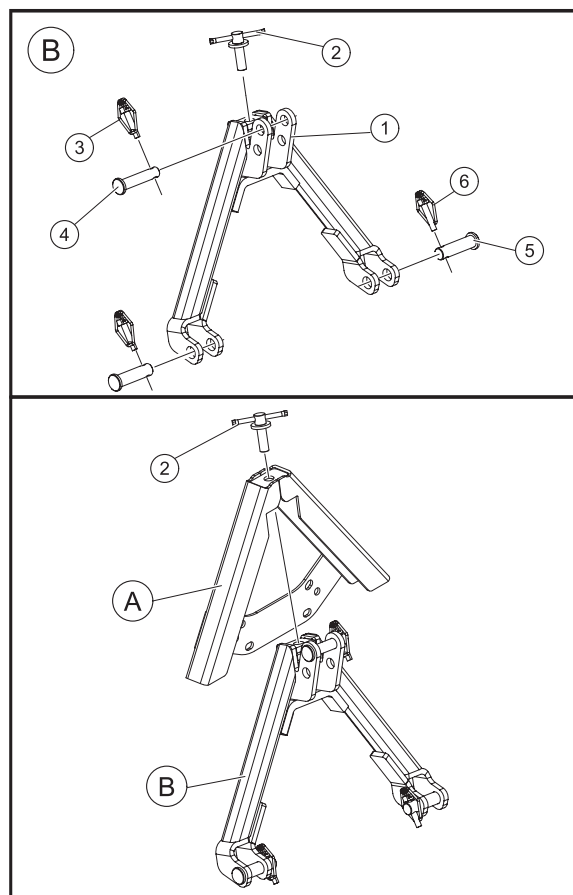
The front linkages are designed to receive implements which comply with the hitch dimensions specified in ISO 730-1 standards for category 1N.

The spacing of the implement's hitch points must be 436 mm (dimension A, centre of the coupling ball, cat. 1N standard) with a linkage pin of 22 mm diameter ($\varnothing D$).

The height of the implement brace must be 360 mm (dimension H).

6.1.1 To hitch an implement:

- Attachment of the female A triangle onto implements – each implement will have its own female triangle.
- Fit the male triangle reference B into the female triangle reference A.
- Retighten the pin reference 2 in the triangles; this acts as a lock.



- Adjust the third link bar if necessary.



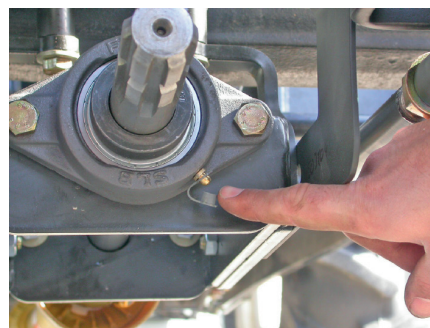
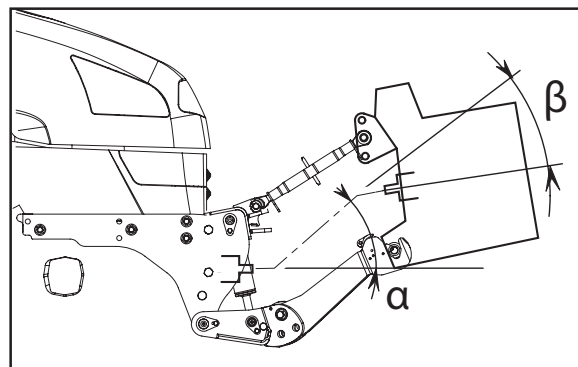
6.1.2 Unhitching the implement.

- Unscrew the pin reference 2 which acts as to lock the triangles.
- Remove the male triangle from the female triangle (A) of the implement.
- Screw the pin reference 2 back into the male triangle (B).

7. FRONT PTO WITH TRANSMISSION SHAFT *

7.1 Safety rules and recommendations regarding the power take-off

- Never start the engine with the power take-off engaged.
- Before hitching the implement, check that the direction of rotation of the implement is compatible with the front power take-off.
- Check that the speed and power of the implement are compatible with the power take-off. If they are not, the implement must not be hitched and connected.
- Check the length of the drive shaft between the implement and the front power take-off, and adjust if necessary.
- The drive shaft universal joint must be fitted with a suitable guard (compliant with the ISO 5673-1 standard).
- Never lift or lower the front linkage with the power take-off under load.
- Check angles α and β of the implement/power take-off universal joint. Adjust the 3rd link bar to make these angles approximately equal in terms of working position. The maximum values for angles α and β will vary according to the type of universal joint used (please refer to the universal joint manufacturer's user manual).
- Any maintenance on the implement must be carried out with the engine shut down, the implement completely at rest and hydraulically locked.
- Every time the power take-off is used, grease the sliding section of the shaft and the universal joint spiders beforehand.
- Never modify the electrical connections.
- Observe the maintenance instructions (please refer to the "Maintenance" section).
- The safety instructions in this manual are not to be construed as a replacement for safety regulations, insurance requirements or national and local legislation. Ensure your machine is fitted with the correct equipment as required by local laws and regulations.



⚠ CAUTION: This operation must be carried out by the driver, who must leave the driving position and ensure all controls are disabled during work on the front linkage.

CAUTION: The tractor engine must be turned off.

- Hitch the implement (refer to the section "Hitching/unhitching the triangle").
- Connect the transmission shaft to the front power take-off.
- Restart the tractor and start the front power take-off (refer to the tractor's user instructions).

NOTE: * Depending on equipment

⚠ CAUTION: Mandatory pre-work checks.
Check that the tractor/implement/transmission shaft are properly connected along the full lifting stroke before engaging the power take-off.



8. AUXILIARY HYDRAULIC LINE *

Enables the supply to a hydraulic unit in front of the linkage.

- Connect the hydraulic hoses of the implement to the 3/8" female couplings. To facilitate connection, release the pressure from the hydraulic circuit.
- Operate the hydraulic line using the tractor or the MX control valves. (refer to the "Control" section).

NOTE: * Depending on configuration

9. CONTROLS

Using the factory-fitted control valve on the tractor. Refer to the user manual for the tractor.

10. Maintenance

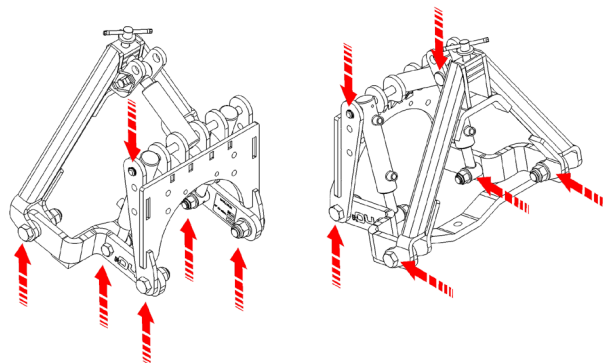
⚠ Drain the tractor's hydraulic circuit regularly and change the filters in accordance with the manufacturer's recommendation.

Contaminated oil ceases to lubricate, causing wear to all the hydraulic components (pumps, control valves, rams). Even clear oil may be spent.

Check the bolts for tightness after 10 and 50 hours of use, then every 100 hours, maintaining the recommended tightening torque.

Check before and after each use for any hydraulic leaks, and verify that the pins and locking pins are all present.

The linkage frame is fitted with wear bushes. If there is excessive play (approx. 2 mm), replace them with new genuine MX bushes.



10.1.1 Front power take-off:

After the first 50 hours and then every 500 tractor operating hours (or once a year):

- Drain the oil and replace the filter with a new genuine MX one (see filter removal procedure below).
- Next, refill the housing with oil up to the level shown opposite. We recommend oil type STOU (Super Tractor Oil Universal) 10W30 or 10W40 or equivalent.

NOTE: check power take-off housing oil level regularly and top up as necessary.

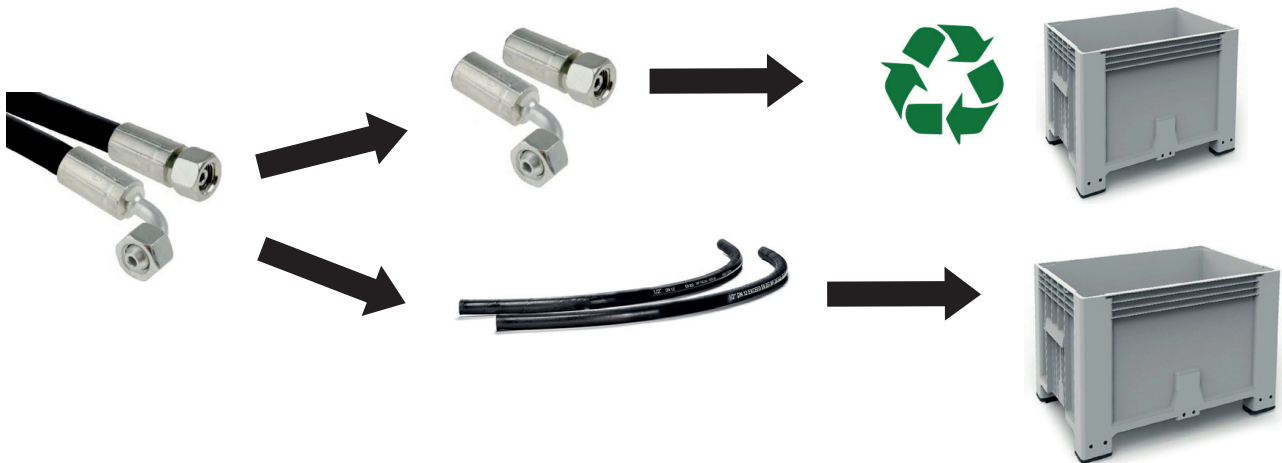
11. Recycling MX products

Hydraulic system

- At the end of their service life, MX products must be drained of hydraulic oil by an authorised service technician.
- The hydraulic hoses must be removed before the equipment can be recycled.
- All MX product owners are obliged to comply with these environmentally-friendly precautions if they decide to dismantle their end-of-life products themselves.

Disposal of hazardous waste (oils and hoses)

- Hydraulic oils must be stored in the containers or drums provided for this purpose and be sent to approved disposal facilities.
- For hydraulic hoses, the steel connectors can be separated from the rubber hoses.
- The steel end caps will be recycled as scrap by approved facilities.
- The rubber hoses will be placed in watertight containers and sent for processing by approved facilities.



High-tech MX product components and electrical and electronic equipment:

- Waste electrical and electronic equipment (WEEE) present in MX products will be removed and then disposed of via approved channels for recovery.



Recycling of decontaminated MX products

- Decontaminated MX products will be sent to approved iron and metal recycling channels.

12. Technical specifications

NOTE: * Average data. They are variable depending on the tractor characteristics.

NOTE: ** Option available depending on tractor - front hitch compatibility.

DECLARATION OF CONFORMITY



The manufacturer:

M-extend France SAS

Registered office: 19, Rue de Rennes, 35690 Acigné (France).

Registered with the RCS of Rennes under number 639 200 260.

Hereby declares that the material :

Front loader T408evo or T408+evo or T410evo or T410+evo or T412evo or T412+evo or T414evo or T417evo or T418evo or TX420evo or TX425evo or TX430evo

or

Front loader U503 or U504 or U505 or U506 or U506+ or U507 or U508 or U508+ or U509 or U510 or U510+ or U511 or U512 or U512+ or U514 or U514+

or

Front loader A104 or A106 or A110 or F303 or F304

or

Front loader C1 or C1s or C2u or C2 or C2+ or C3u or C3 or C3+ or C4 or C4+

or

Loader implement BMS or BRDS or BQU or BF + GF or CGU or TR or TRu or BMSC or CGC or TRC or BT or BR or BC or BF or BMSU or BRU or BFU or CL or BRC or BFC or LC or CG or BP or SG or BB or PCS or LS or PG

or

Implement for telescopic handler loader BMSA or CGA or BTA or TR or BCA or BCDA

or

Feeding bucket BD or GDT

or

Manubal L40 or L400 or L400HD or L500 or L6000 or C30 or C40 or U40 or V40 or V60 or V500 or W500 or V400HD or V5000HD or V7000HD

or

Front linkage R04 or R05 or R06 or R08 or R09 or R10 or R12 or R16 or R20 or R28 or R38 or R53

or

Weight M250 or M400 or MM600 or MM900 or MM1200 or MM1500 or MM400AD or MBX or MXS 250 or MXS 400 or MXS 600 or BOX 100L or BOX 150L or MBX XS

or

Multibumper

serial number:

please write in the box above the serial number given on the equipment's nameplate.

included in the list of serial numbers 000001001 to 999999365,

is in conformity with the Machinery Directive 2006/42/EC

and with the Supply of Machinery (Safety) Regulations 2008.

M-extend France SAS, 19 rue de Rennes at Acigné (35690), is authorised to prepare the technical file.

Acigné, 2 September 2025.

B. Gauchenot
CEO



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