



**INDUSTRIAL BUCKETS AND  
ATTACHMENTS MANUFACTURER**

**USER, INSTALLATION,  
AND MAINTENANCE GUIDE  
FOR THE EXCAVATOR QUICK COUPLER**



**THIS GUIDE MUST BE PROVIDED TO THE  
INSTALLER, USER, AND PERSON IN CHARGE  
OF EQUIPMENT MAINTENANCE.**

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## **WARNING**



**INCORRECT USE OF THE QUICK COUPLER AND ITS EQUIPMENT MAY RESULT IN SERIOUS OR FATAL INJURIES. BEFORE USING THE QUICK COUPLER AND ITS EQUIPMENT, ENSURE THAT EACH USER:**

- IS FULLY AWARE OF HOW TO SAFELY USE THE QUICK COUPLER AND ITS EQUIPMENT;**
- HAS READ AND FULLY UNDERSTOOD THE GUIDE(S) ON THE QUICK COUPLER AND ITS EQUIPMENT;**
- HAS READ AND UNDERSTOOD ALL LABELS DISPLAYED ON THE QUICK COUPLER;**
- HAS CHECKED THAT NO ONE IS STANDING NEAR THE MACHINE;**
- HAS FULLY LEARNED AND BECOME FAMILIAR WITH THE PROPER OPERATION OF THE QUICK COUPLER AND ITS EQUIPMENT IN A SAFE AND OPEN AREA BEFORE USING IT ON A CONSTRUCTION SITE.**

**IT IS UP TO YOU TO COMPLY WITH THE RULES AND INSTRUCTIONS OF ATELIER RF REGARDING THE USE AND MAINTENANCE OF THE QUICK COUPLER AND ITS EQUIPMENT.**



# TABLE OF CONTENTS

SAFETY .....	4
THE QUICK COUPLER .....	4
USING THE BUCKET OR OTHER EQUIPMENT MOUNTED TO THE QUICK COUPLER .....	5
USING THE BUCKET'S LIFTING HOOK .....	6
ATTACHING THE QUICK COUPLER TO THE EXCAVATOR .....	8
USE .....	10
COUPLING .....	10
UNCOUPLING.....	11
MANUAL MODE.....	12
HYDRAULIC MODE.....	13
HYDRAULIC SETTINGS .....	14
MAINTENANCE.....	15
DAILY INSPECTION.....	15
MONTHLY INSPECTION .....	16
YEARLY INSPECTION.....	17
GLOSSARY.....	18



# SAFETY



**REFER TO AND COMPLY WITH THE SAFETY INSTRUCTIONS SPECIFIED IN THE USER GUIDE OF YOUR MACHINE.**

## THE QUICK COUPLER

### FOR MANUAL OR HYDRAULIC QUICK COUPLING

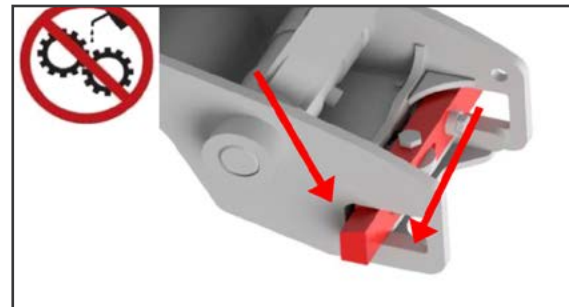
- No modifications, additions, or repairs shall be performed on the quick coupler without the permission of Atelier RF. Failure to comply with this rule may result in the warranty being voided and the malfunction of the quick coupler, which may result in serious or fatal injuries.



# USING THE BUCKET OR OTHER EQUIPMENT INSTALLED ON THE QUICK COUPLER

## FOR MANUAL OR HYDRAULIC QUICK COUPLING

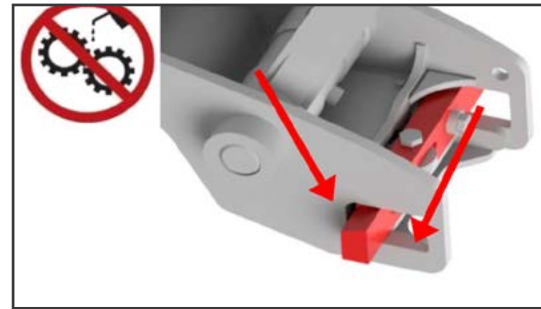
- Make sure that the wedge is free from any grease or oil. Clean with solvent as needed.
- Always follow safety precautions when using buckets and different equipment that can be coupled to the quick coupler.
- Never exceed the maximum lift capacity of your machine in the various positions. Refer to the operational manual of your machine for this capacity.
- Never leave the arm, bucket, or any other equipment in the raised position if the engine is turned off, idling, and/or if there is no operator.
- Never lift a load above or near a person. Always comply with the minimum distances of the machine's operating area.
- The warranty of safety is only valid with the use of RF or RF-approved products.
- Should a malfunction occur, immediately stop use, inspect, and contact a technical representative.



## USING THE BUCKET'S LIFTING HOOK

### FOR MANUAL OR HYDRAULIC QUICK COUPLING

- Make sure that the wedge is free from any grease or oil. Clean with solvent as needed.
- Always adopt a safe lifting position.
- Ensure that the load is properly balanced.



- Never exceed the maximum lift capacity of the lifting hook or your machine in the various positions. Refer to the operational manual of your machine for this capacity.
- Inspect your hook and its welds before proceeding with a lift.
- Visually inspect the attachments, attachment components (linkage pins, shackles, slings, etc.), and lift eye before use. Ensure that they are not damaged or worn. Any defective lifting attachment must be replaced at once.



- Never leave a load suspended from the bucket if the engine is off, idling, and/or if there is no operator.
- Never lift a load above or near a person.



- When using a bucket with a reversible coupler, never lift with the bucket in the inverted position.
- Always comply with the minimum distances of the machine's operating area. Always move the load slowly.
- The warranty of safety is only valid with the use of RF or RF-approved products.
- Should a malfunction occur, immediately stop use, inspect, and contact a technical representative.



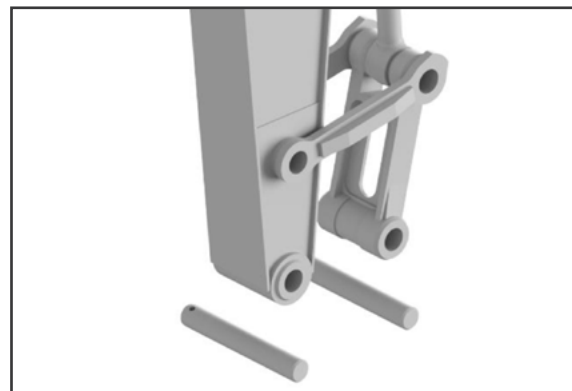
# ATTACHING THE QUICK COUPLER TO THE EXCAVATOR



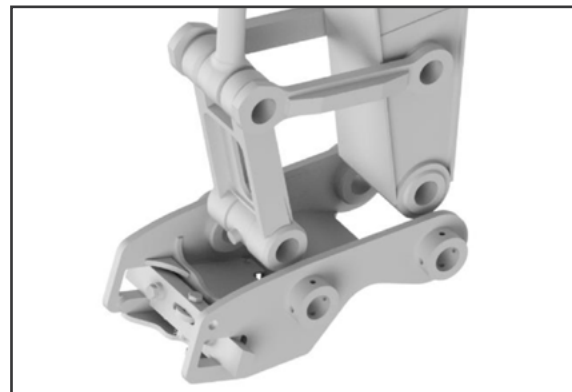
**NOTE: CLEANLINESS OF THE COMPONENTS AND SURROUNDINGS IS ESSENTIAL FOR PROPER INSTALLATION.**



1. Remove the linkage pins.

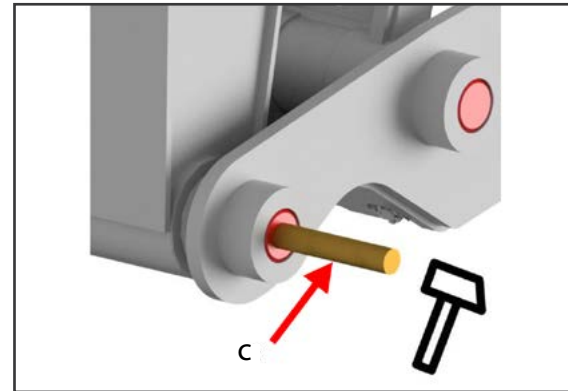
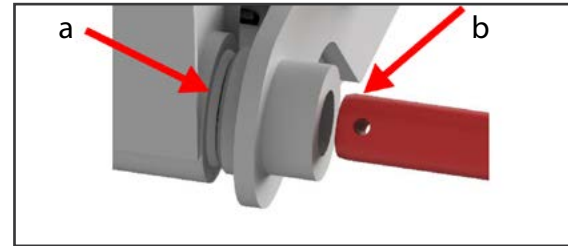


2. Position the quick coupler.

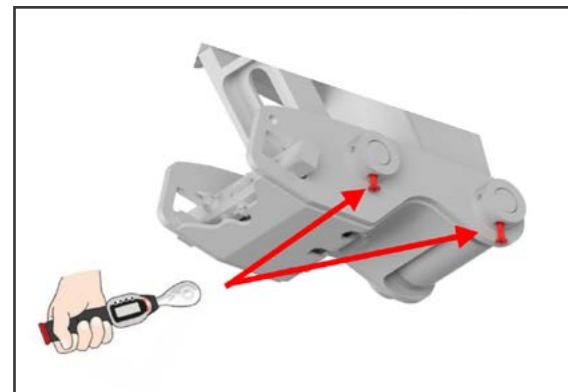




3. Add spacers as needed and seals (a).
4. Insert the pins with the hole end of the lock pins first, the bevel is more prominent (b).  
Always use a dowel with a hardness lower than the steel to be driven in (wood, aluminium, etc.) (c).
5. Clean the screw hole with solvent. There must be no grease, oil, or dirt. Dry the surface.



6. Apply a layer of LOCTITE 243 or an equivalent to the threads. Insert the screws or spring pins\*. Tighten the screws with the appropriate torque according to their diameter.  
M16 = 124 lb-ft (168 N·m)  
M20 = 243 lb-ft (329 N·m)



7. Make one full rotation of the quick coupler to verify it is working properly. Ensure that there is no obstruction between the machine's components and the quick coupler.



\* Option available upon request



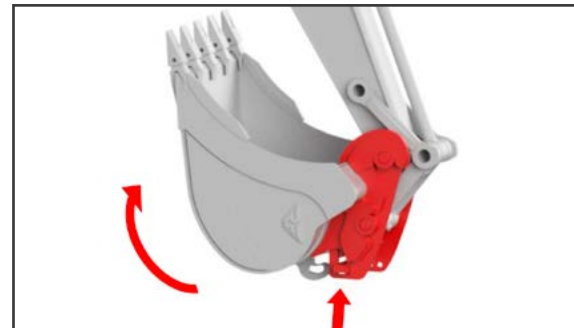
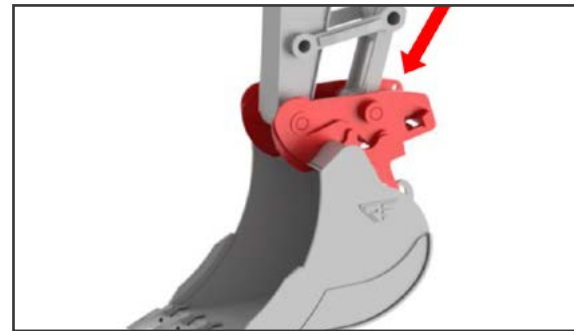
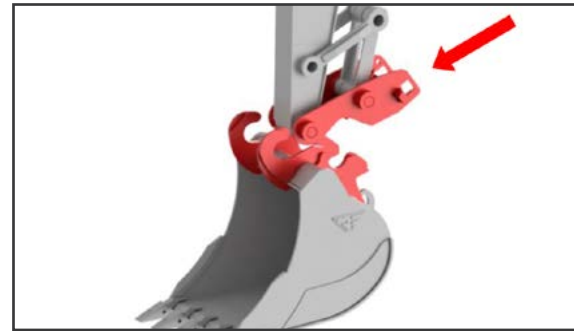
# USE



**WARNING: ENSURE THAT THERE IS NO ONE AROUND THE WORK AREA TO AVOID WORKPLACE ACCIDENT RISKS.**

## COUPLING

1. Disengage the wedge (hydraulic version).  
Loosen the wedge and push it back as far as possible (manual version).
2. Attach the quick coupler to the front hook of the equipment.
3. Lower the back of the quick coupler.
4. Fully close the bucket in the direction of the cabin.  
While maintaining pressure on the bucket's closing motion, activate the hydraulic system to lock it (hydraulic version).



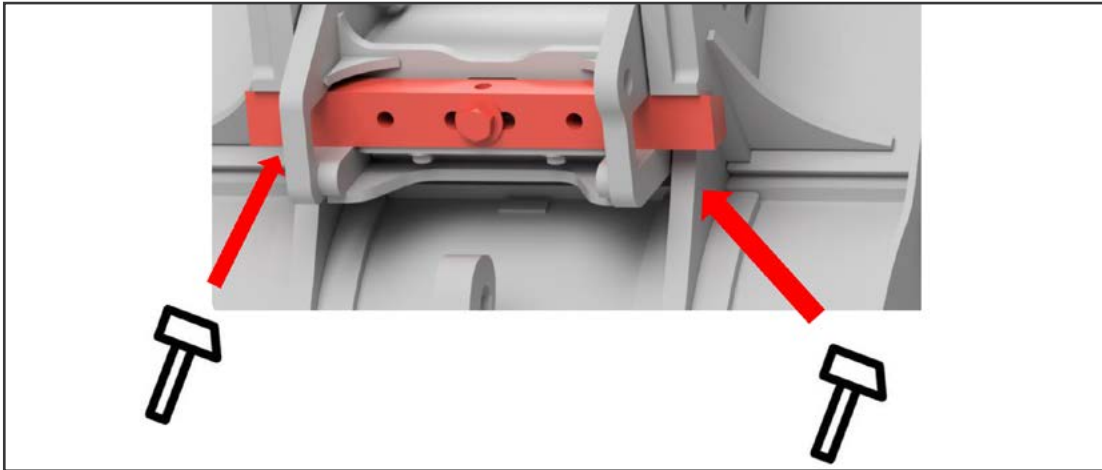
In manual mode, pre-tighten the wedge screw. Then, using a hammer, alternately hit the ends of the wedge to properly align it with the fasteners before tightening the screw with a torque wrench. Recommended torques are:

178 lb-ft (241.3 N·m) for a screw with a 1-inch diameter.

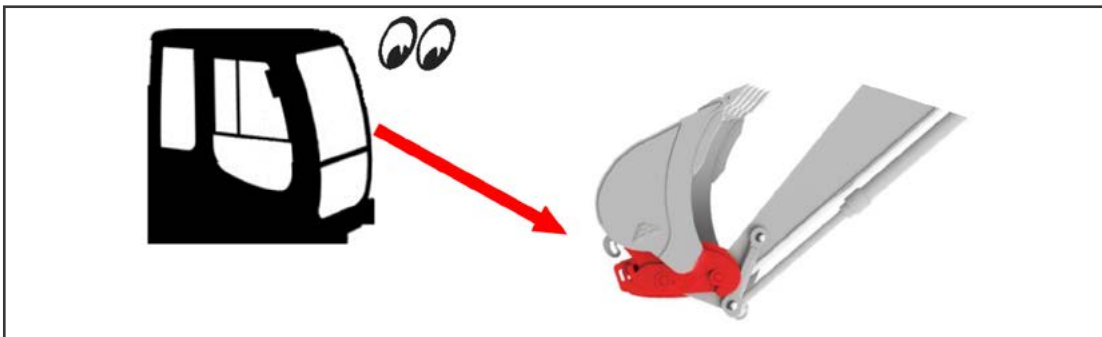
398 lb-ft (538.3 N·m) for a screw with a 1.25-inch diameter.

Check the torque after 10 minutes of use.

Apply additional torque as needed to tighten the wedge's lock screw.



5. Always visually check that the wedge is fully engaged.



## UNCOUPLING

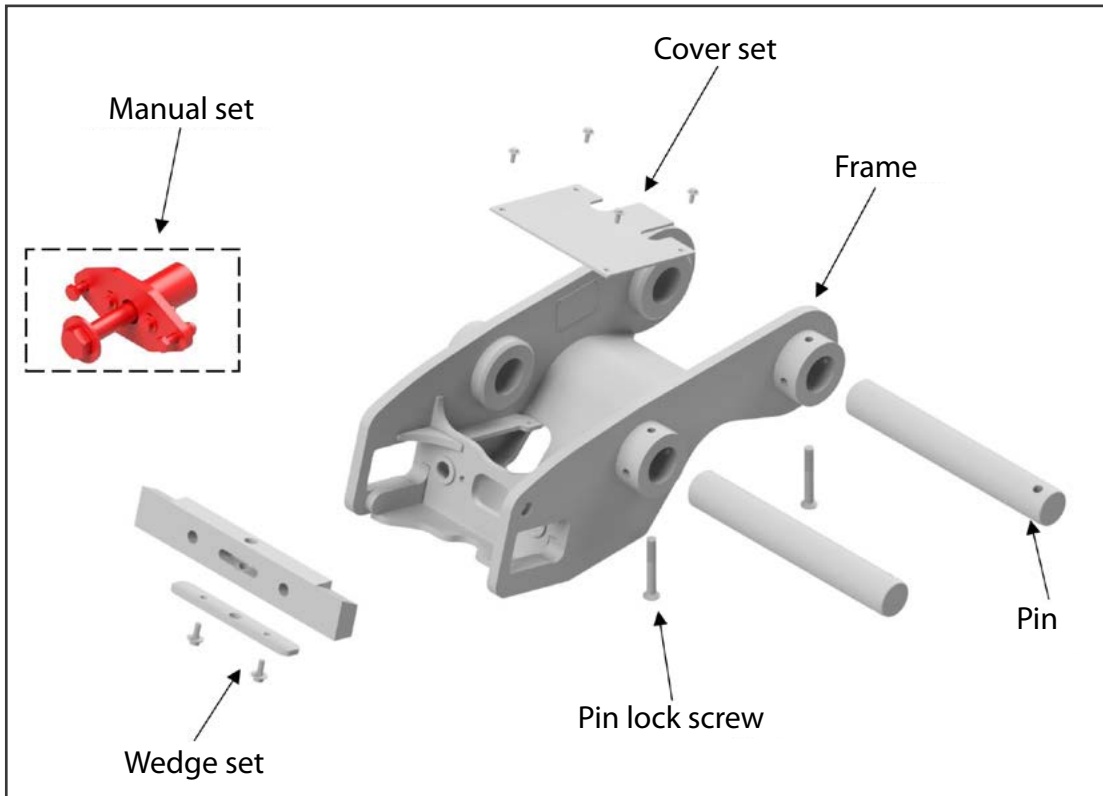
Perform the locking operation in reverse.

Note: It is important to completely close the bucket and maintain machine operation while activating the coupler's unlocking mechanism to facilitate the manoeuvre (in hydraulic mode).



# MANUAL MODE

The RF quick coupler may be used in manual or hydraulic mode. The following images show the components of the manual mode.



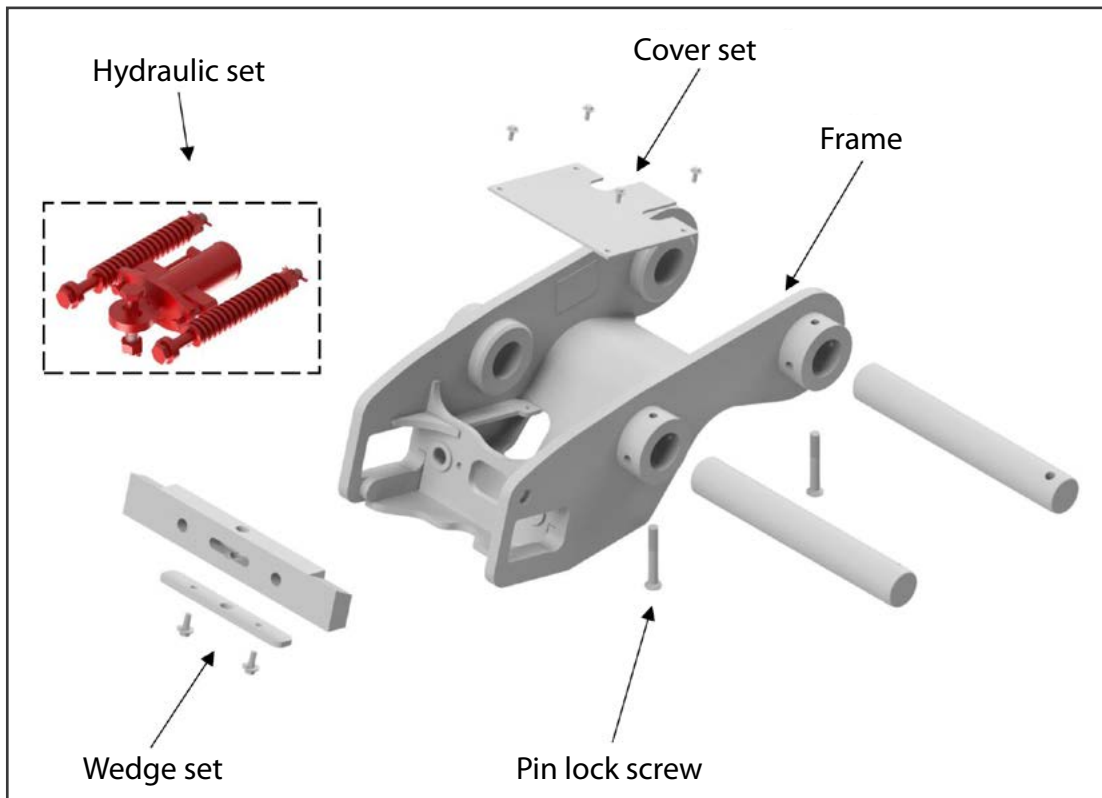
A manual quick coupler can be converted into a hydraulic version by simply changing a few parts. (\*Requires a hydraulic circuit on your excavator that is adapted for the use of a quick coupler.\*) For more information, contact your dealer or our parts and service department.

\* Not provided by RF.



# HYDRAULIC MODE

The RF quick coupler may be used in manual or hydraulic mode.  
The following images show the components of the hydraulic mode.



A control module for the hydraulic lock may be provided as needed.  
For more information, contact our parts and service department.



# HYDRAULIC SETTINGS



**IMPORTANT: THE MAXIMUM PRESSURE IS 3500 PSI, IF THIS CRITERIA IS NOT COMPLIED WITH, THE WARRANTY SHALL BE VOID.**

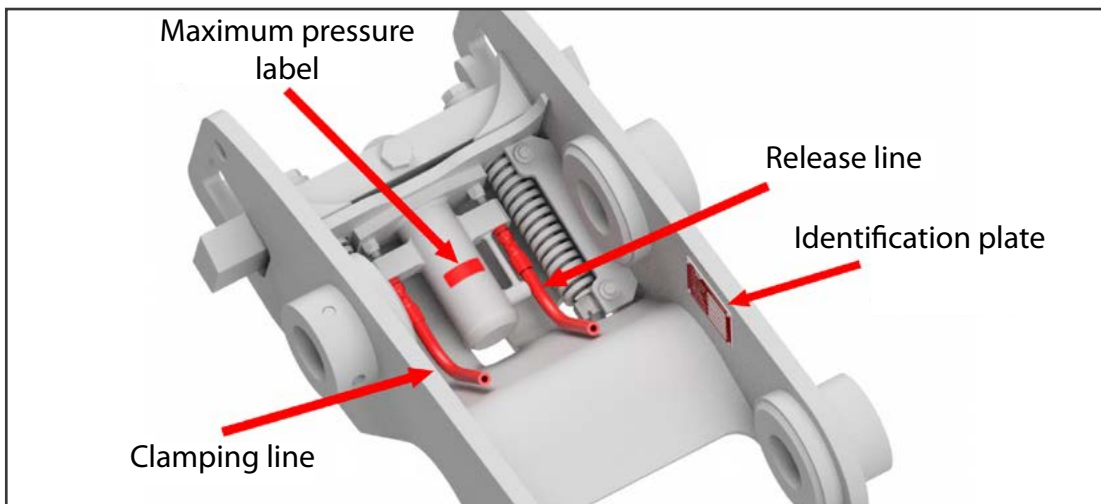
- Hydraulic input: #4 or #6 O-Ring Boss
- Maximum pressure in the hydraulic circuit: 3500 psi

It is recommended to use the 13-0001207 (24v) valve or 13-0001206 (12v) valve or an equivalent valve to comply with required pressures.

When installing a new quick coupler and during routine maintenance, it is important to check that the valve's clamp and release pressures correspond to the values indicated on the identification plate.

It is essential to maintain continuous pressure in the clamping mode on the hydraulic actuator at all times when the machine is in operation and even when it is idling.

If the machine cannot maintain a steady pressure of 400 psi when idling, it is essential that the pilot pressure of the excavator's system is connected to the clamping actuator of the wedge (locking supply line). Refer to the technical manual of the 13-0001207 (24v) valve or 13-0001206 (12v) valve for more information or contact our technical department.



# MAINTENANCE

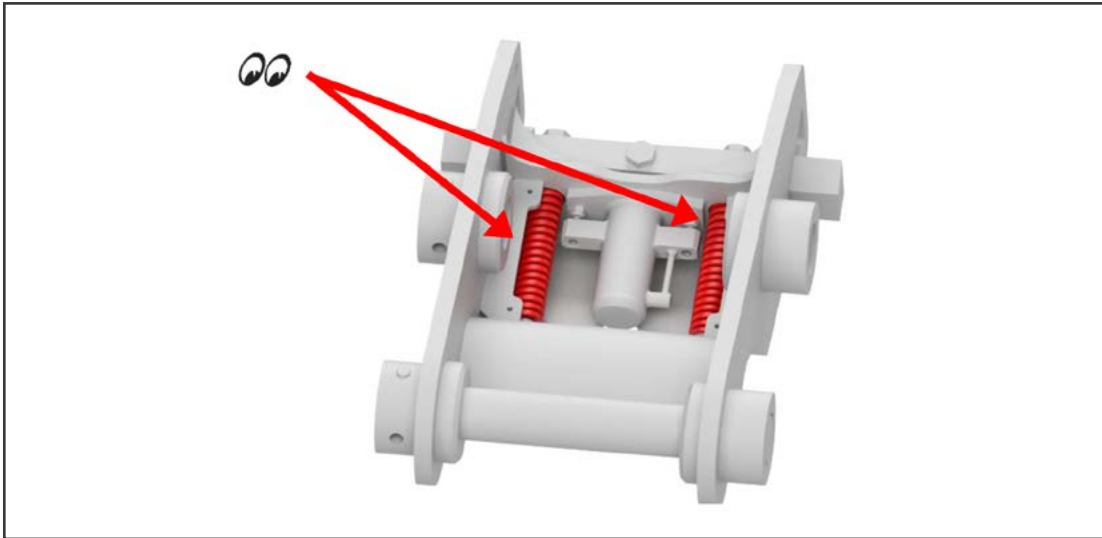
## DAILY INSPECTION

- Check for oil leaks (hydraulic version).  
Immediately stop use in the case of oil leaks.
  - Always ensure that the lock is free from grease or oil.  
Clean with solvent as needed.
  - Ensure that the coupler is working properly (clamping and release).
  - Check the condition of the screw and nut used to clamp the wedge (manual version).  
Change any worn or damaged parts.
  - Visually inspect the frame.
- If any of the previous defects occur, contact an RF representative.

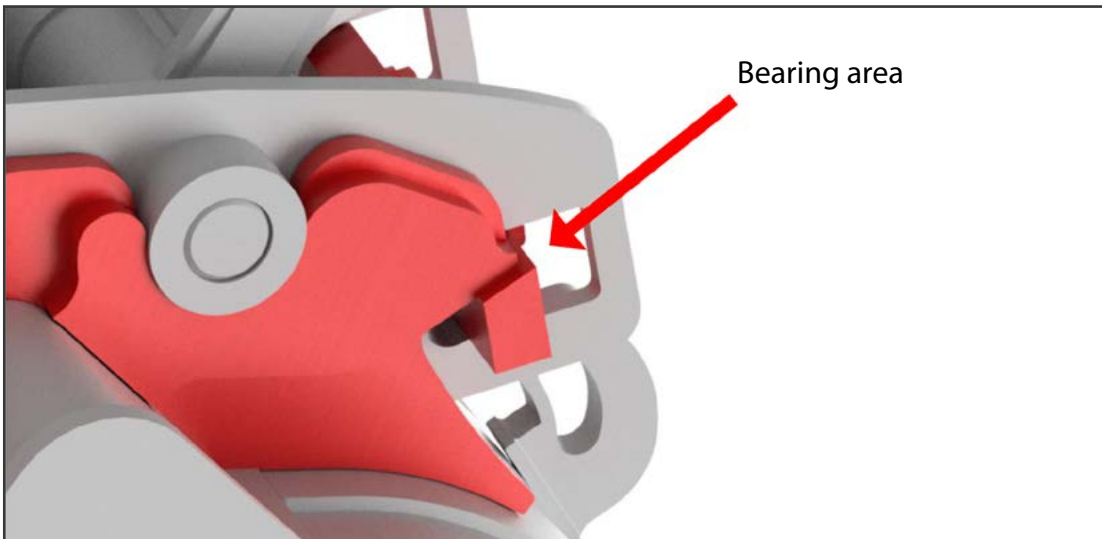


## MONTHLY INSPECTION

- Visually inspect the springs; they must always be under tension. If the springs have play, any apparent deformation, or are broken, stop use and contact an RF representative (hydraulic mode).



- Ensure there is adequate torque between your equipment and the wedge. There must be no play between the bearing area of your equipment and the wedge. If this is not the case, consider replacing the wedge or rebuilding the bearing of your fasteners.



If any of the previous defects occur, contact an RF representative.

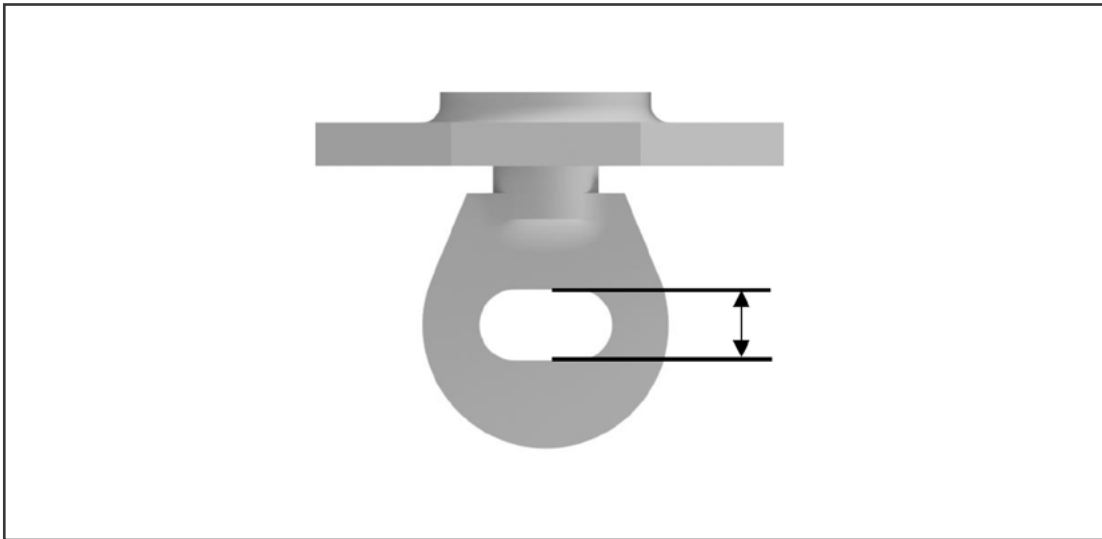




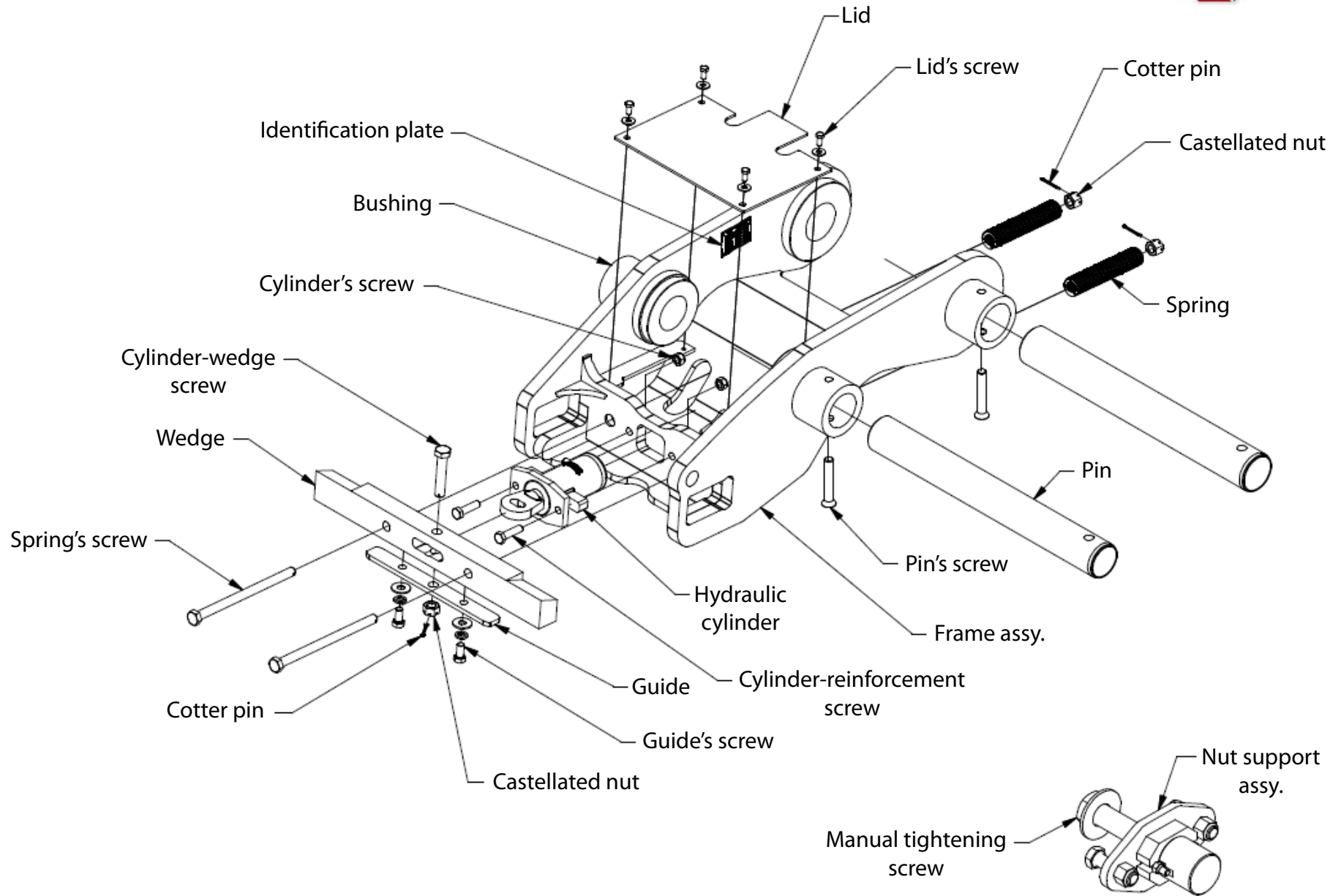
## YEARLY INSPECTION

- Perform a thorough inspection of the frame.  
Ensure that there is no apparent deformation or cracks.
- Inspect the cylinder's attachment and ensure that the slotted hole is not deformed.

If any of the previous defects occur, contact an RF representative.



# HYDRAULIC QUICK COUPLER FOR EXCAVATOR



ACTUAL PRODUCT MAY VARY FROM IMAGE SHOWN

**MANUAL CONVERSION KIT**