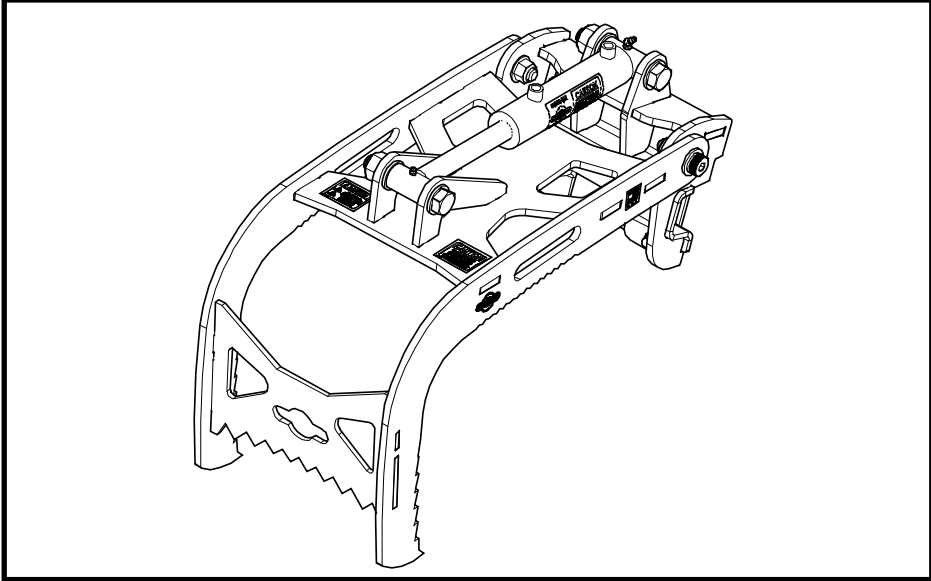




**ROCK BUCKET GRAPPLE ATTACHMENT, MODULAR
P/N: 1RBKT-GP20**



A General purpose front-end loader Grapple attachment for use with the Artillian Rock Bucket. Allows for gripping and holding of rocks, branches, and other debris in the bucket. Can be installed as a single grapple or paired with a second grapple for added versatility.

Quickly installs on Artillian Rock Bucket with (4) nuts and bolts. An Artillian Hydraulic Diverter Kit or tractor 3rd function required.

Approximate Installation Time
Experienced Dealer Technician – 15 Minutes
Average Dealer Technician – 15 Minutes
Do-It-Yourself – 20 Minutes


Approximate Product Specifications
Weight: 66 lbs.
Capacity: 2000 lbs. (including accessories)
Warning: DO NOT pull or push with the grapple lid. Doing so will damage the system and void warranty.

Register your new product quickly online at Artillian.com/product-registration/



Artillian encourages all customers to register their Artillian products. However, failure to do so will not diminish right to warranty. Curtis Industries does not sell or share your information with anyone else.

Download a digital copy of your installation instructions online at Artillian.com/literature/



Artillian strives to continuously improve our products, technical documentation, etc. Therefore, the installation manual for this product may have been updated after your product was packaged. The latest revision of the installation manual can always be found at the website above.

The contents of this envelope are the property of the owner. Leave with the owner when installation is complete.

KIT INSTALLATION

Grapple Mounting Locations:

The Rock Bucket has mounting holes for the Grapple attachment in several locations:

- Single center-mounted Grapple.
 - Two Grapples close together.
 - Two Grapples spread apart (John Deere only).
- * Note: The location of the Skid Steer Quick Attach mounting points prevent the Grapples from being mounted further apart.

Attaching Grapple to Rock Bucket

Tools Required

3/4" hex wrenches and socket(s)
with 6"+ long 3/8" drive extension

1. Place the Grapple Attachment around the front of the upper frame tube in the desired location.
 2. Place the mounting plate behind the rock bucket and secure the Grapple with (4) 1/2" bolts through the plate and into the flanged nuts on the inside of the grapple.
- *Torque the nuts to 90 Ft-lbs (122 N-m).

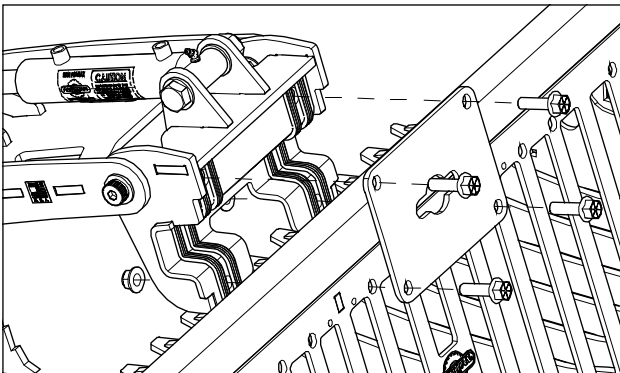
Hardware Used

	<u>Qty</u>
1/2-13 x 1-3/4" Flanged Hex Bolt	4
1/2-13 Flanged Lock Nut	4

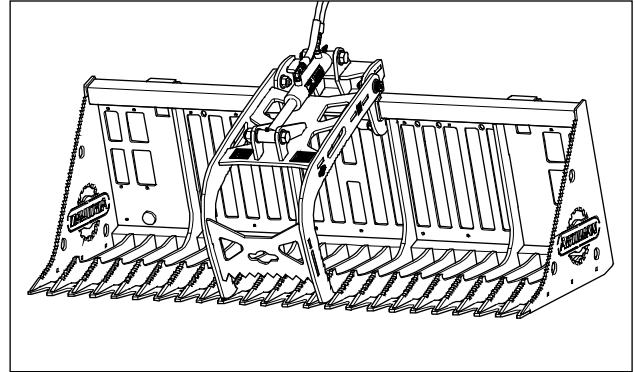
Hydraulic Hose Installation

Note: An Artillian Hydraulic Diverter Kit (sold separately) or a tractor 3rd function must be installed on tractor prior to installation to allow for grapple functionality.

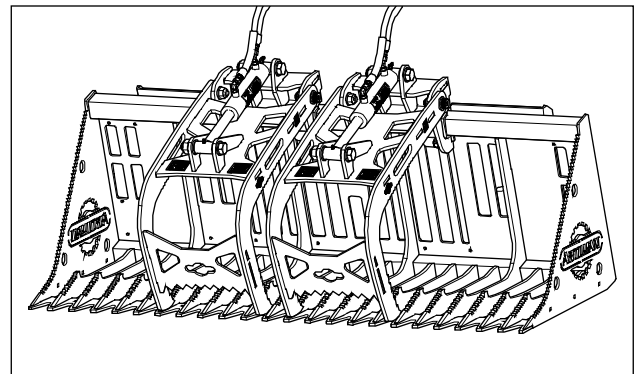
1. Remove the plugs from the cylinder ports.
2. Remove the 90° elbow fitting from one of the hoses and install it into the port near the rod end of the cylinder, as shown. Rotate until almost finger tight, then tighten the jam nut until snug.
3. Reattach the hose to the elbow fitting, maintaining the orientation of the hose. Leave hose fitting loose.
4. Repeat for the other hose with the 45° elbow fitting.
5. Plug hoses into quick disconnect (QD) fittings on diverter kit or 3rd function. Ensure hose fitting orientation results in easy connection of QD fittings.
6. Tighten all fittings, run loader through range of motion, and check for leaks.



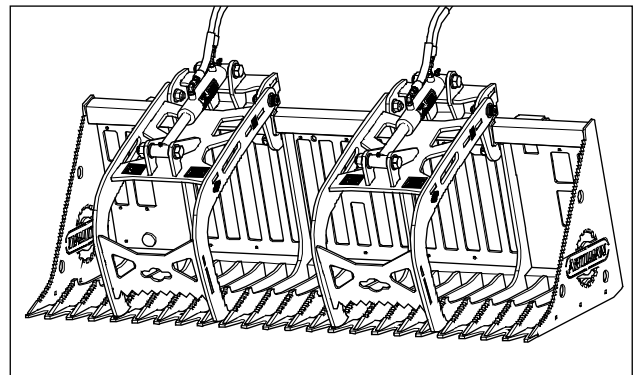
Attaching Grapple to Rock Bucket



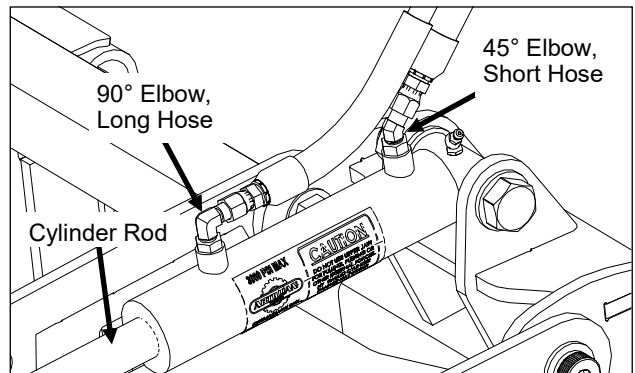
Single Grapple (JDQA shown)



Two Grapples close together (Skid Steer shown)



Two Grapples spread apart (John Deere only)



Grapple Hydraulic Hoses

IMPORTANT NOTES & MAINTENANCE

Using the Grapple with “True” 3rd Function Kits

Artillian **Hydraulic Diverter Kits** divert the fluid from the loader’s dump/curl circuit to the grapple open/close circuit. Therefore, the operator is able to meter the hydraulic fluid flow to the grapple by restricting the movement of the loader joystick.

However, with most “True” 3rd function kits, the electrical switch acts as an On/Off switch to the fluid flow in either direction. Therefore, the grapple cylinder will immediately see full fluid flow and pressure from the tractor when the switch is depressed. On larger tractors with high pressure and flow, this results in rapid opening and closing of the jaws, which may result in premature damage to the grapple, due to the difficulty in controlling the jaw movement.

When using 3rd function hydraulic kits not supplied by Artillian, we recommend incorporating a hydraulic flow control needle valve into the circuit. This flow control valve should be placed between the tractor 3rd function hydraulics and the grapple splitter manifold. It should have female ¼” NPT fittings and flow control in both directions. The flow should then be metered until controlled opening and closing of the grapple jaws is possible.

Maintenance

Hydraulic Hoses

After a short amount of use of the Grapple Module, check all hydraulic fittings for leaks. If necessary, tighten slightly further. Check hoses occasionally for signs of abrasion, binding, or other damage.

Hinge Hardware

The hinge hardware requires no maintenance aside from being maintained at 160 ft-lbs of torque. This is necessary for the life of the special composite bearing as well as the hardware itself. Verify torque remains at 160 ft-lbs after the first hour or two of use.

Cylinder Mounting Hardware

The cylinder mounting hardware requires regular greasing of the fore and aft mounting points using a grease gun. At original assembly, these points are greased with long life synthetic grease. We recommend keeping these joints lubricated at approximately every one to four hours of use, depending on harshness of environment.

The cylinder mounting hardware should only be tightened until it remains securely in place. It should not bear upon the cylinder cross tube mounts. The front cylinder mount is assembled with a removable thread-locking adhesive for extra security. The cylinder hardware should not need to be changed unless it becomes necessary to change the hydraulic cylinder.

Important Notes

Once installation is complete, start your tractor and carefully actuate the Grapple and your loader through all ranges of movement. Check for leaks and tighten any loose connections. Be sure the hoses from the hydraulic cylinder do not bind, kink, or become stretched at any point. If this situation appears, adjust hose routing as needed or contact Artillian.

Do not use the grapple jaw for digging or pushing/pulling foreign objects outside of the rock bucket. Hydraulic cylinder damage may occur, voiding your warranty.

Hydraulic performance (clamping speed and power) depends on the output of your tractor. A tractor with higher flow rates and system pressure will yield higher grapple performance than a tractor with lower flow rates and system pressure.

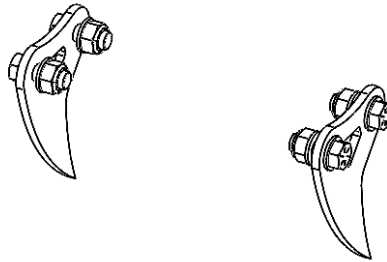
Maximum hydraulic pressure is 3000 PSI.

When disconnecting your grapple/rock bucket from your loader, remember to disconnect the hydraulic lines!

Thank you for choosing Artillian!

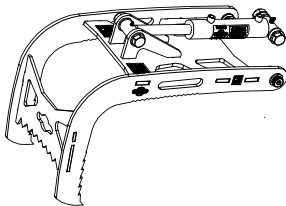
ACCESSORIES

GRAPPLE FANG KIT
P/N: GRP-GP20-FNG

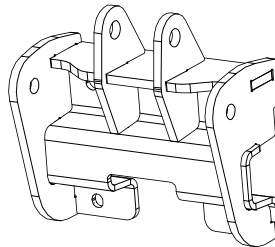


SERVICE PARTS

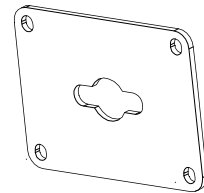
GRAPPLE UPPER SUBASSEMBLY
P/N: GRP-GP20-GRUS



GRAPPLE MOUNT BRACKET
P/N: 8SV-WA-00639



GRAPPLE MOUNT PLATE
P/N: 8SV-SM-02724

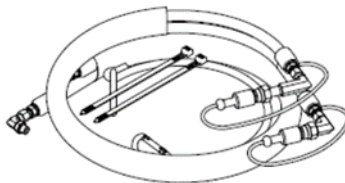


GRAPPLE HINGE SERVICE PACK
P/N: GRP-GP20-GRSP



QTY: 2

HYDRAULIC HOSE ASSEMBLY,
GRAPPLE CYLINDER
P/N: HHA-GRP-CYL-FEL



GRAPPLE HYDRAULIC CYLINDER
P/N: 8SV-HYA-00001

