



# **Extreme Duty Grapple (Rock, Skeleton, Scrap & Tine)**

## **Operation and Maintenance Manual**

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## ABOUT THIS MANUAL

This manual contains information about the usage and maintenance required for the equipment. This document must be available for review by the operator before using the attachment to ensure proper safety, maintenance, and usage.

## HAZARD NOTICES USED IN THIS MANUAL

The following hazard notices are used in this document:

**NOTE** - Notes are used to indicate important information. This information may be repeated in other areas of the manual.

**CAUTION** - Cautions are used to indicate a potentially hazardous situation which, if not avoided, may result in damage to the equipment or other property.

**WARNING** - Warnings are used to indicate a potentially hazardous situation which, if not avoided, could result in serious injury or death.

**DANGER** - Danger is used to indicate a potentially hazardous situation which, if not avoided, will result in serious injury or death.

### Terminology

**Carrier Machine:** The Grapple can be attached to many different pieces of equipment; therefore the term "carrier machine" will be used. A carrier machine is any equipment, tractor, or skid steer providing power to the attachment.

## SAFETY

### Safety Notices

Before operating or conducting maintenance on this equipment, it is important to wear proper protection. Recommended safety equipment when operating and maintaining this equipment includes earplugs, eye protection, and a hard hat.

**NOTE:** Additional safety equipment may be required depending on the operating environment and worksite conditions.

Only qualified and trained personnel should operate, maintain, and service this attachment. It is recommended that this equipment be inspected regularly for leaks, cracks, or other conditions that may impair proper usage of the equipment. Verify that all repairs have been completed and inspected prior to using the attachment under load.

It is the responsibility of the user to follow all local, state, and federal safety regulations. Improper use of this equipment may result in personal injury, property damage, and/or damage to the equipment.

### Modifications to Equipment

Any modifications made to this equipment may void any warranty and relieve the manufacturer of liability of any resulting injury or damage.

## ABOUT THE GRAPPLE

The Grapple attachments are intended for use in materials handling. The primary use of the Grapple attachment includes land clearing, landscaping, demolition, construction, and grounds maintenance. Use of this equipment in any other manner is considered to be contrary to the intended use of the attachment.

### Attaching the Grapple to the Carrier Machine

**NOTE:** Before attempting to attach the Grapple to the carrier machine, verify that all hydraulic couplings are compatible.

**WARNING** - Improper attachment to the carrier machine may cause personal injury.

**CAUTION** - All hydraulic connections must be clean and free of debris before making any connection.

1. Place the Grapple attachment on a level surface.
2. Position and align the carrier machine to the rear of the attachment, within proximity of the front of carrier machine.
3. Insert and connect the carrier machine into the attachment.
4. Connect the hydraulic lines from the attachment to the carrier machine.
5. Close latches (or other locking mechanism) to secure the attachment to the carrier machine.
6. Using the carrier machine, raise the attachment and move the attachment to ensure hydraulic lines are clear of air and operate properly.

**CAUTION** - Hydraulics should operate in an even and smooth manner. Hydraulic movement that is not even and smooth may indicate that air is in the hydraulic lines.

7. Lower the attachment to ground level.
8. Inspect that the attachment is mounted properly and securely. If the attachment does not meet this requirement, follow the instructions to remove the Grapple and re-attach using the instructions above.

### Removing the Grapple from the Carrier Machine

**WARNING** - Improper disconnection may result person injury or damage to the attachment and carrier machine.

**CAUTION** - All hydraulic connections must be clean and free of debris before disconnection.

1. Using the carrier machine, lower the attachment to the ground.
2. To prevent contamination, remove any dirt and debris from the couplings. Disconnect the hydraulic connection between the attachment and the carrier machine.

**NOTE:** Hydraulic connections must be disconnected before disengaging latches to prevent damage to the carrier machine or the attachment.

3. Disengage the carrier machine latches (or other locking mechanism) from the attachment.
4. Move the carrier machine from the attachment.

# OPERATION AND MAINTENANCE

## Equipment Inspection

It is recommended to inspect the equipment for damage and wear before use. Use the following list as a guideline during equipment inspection.

- Check all hardware connections to the carrier machine for damage or fatigue such as cracks or other structural flaws.
- Check that all latches or locks are closed.
- Check that all hydraulic fittings are tight and free of leaks
- Check that all hydraulic lines are free of leaks, holes, or cracks.

**WARNING** - Do not use hands to check for hydraulic leaks. Keep body parts away from leaking hydraulic lines and couplings that are under pressure.

- Check that the tires on the carrier machine are in good condition and have proper load ratings.

**NOTE:** Replace any damaged hardware, hoses, and fitting before using the equipment.

## Usage Guidelines

Before each use do the following:

- Perform daily maintenance as indicated in the Daily Maintenance Schedule.
- Inspect the attachment by performing a walk around
- Use the Grapple for materials handling only.

**DANGER** - Keep all body parts away from the grapple when in use. The upper tines may open or close unexpectedly causing serious bodily injury or death.

Inspect the grapple daily before use. It is also recommended to inspect the grapple after extreme use or damage. Use the following inspection checklist as a guideline.

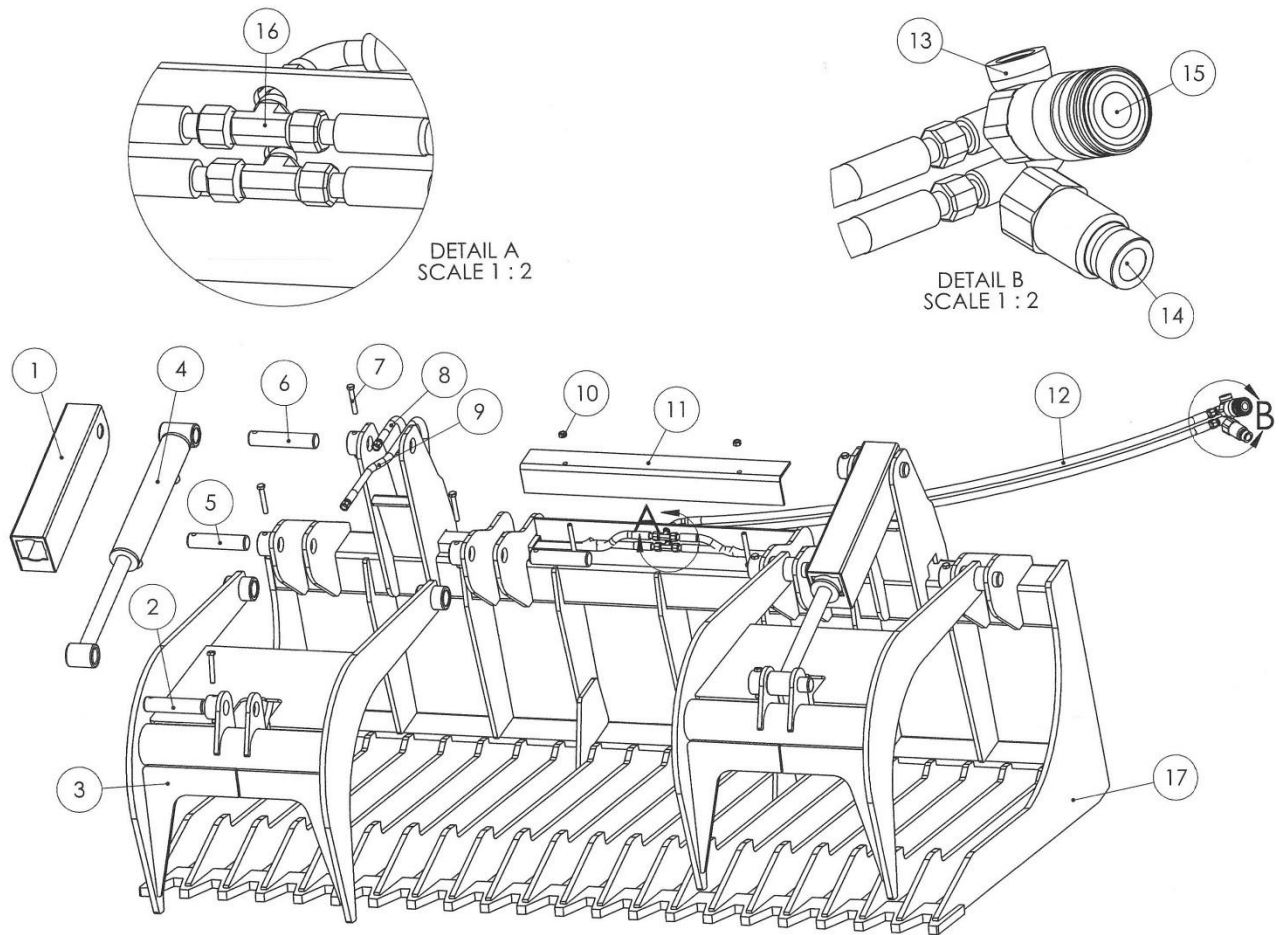
## Inspection Checklist

Are all safety notices and warning decals in proper locations and visible?

- ☐ Are there any visible hydraulic leaks?
- ☐ Are any cracks visible in grapple structure?
- ☐ Are the tines worn or bent?
- ☐ Have all grease fittings (zerk fittings) have been greased?
- ☐ Are the bolts holding pins secure and tight?
- ☐ Has the carrier machine been properly inspected for hydraulic leaks and proper tire inflation?
- ☐ Has the carrier machine been properly maintained?

# ROCK GRAPPLE – EXTREME DUTY

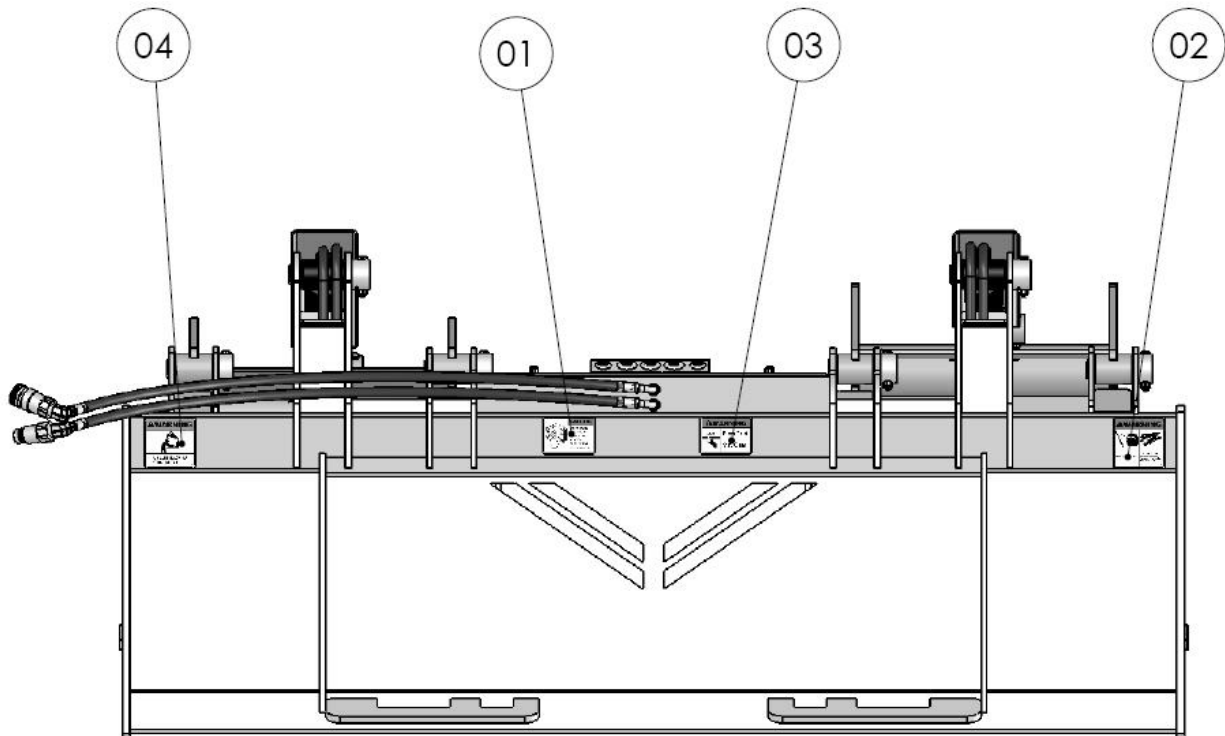
## Rock Grapple Parts Diagram



## Rock Grapple Parts List

Item No.	Part Number	Description	Qty.
1	23-0100	Cover for Hydraulic cylinder 4-1/4"W x 4-1/2"H x 16"L	2
2	23-0101	Pin 1-1/4" Dia. X 5-1/4" Long W/ 3/8" Hole	6
3	23-0102	GB Tine Assembly	2
4	LF2010-125	Hydraulic Cylinder 2" x 10" x 1-1/4" Rod	2
5	23-0101	Pin 1-1/4" Dia. X 5-1/4" Long W/ 3/8" Hole	4
6	23-0103	Pin 1-1/4" Dia. X 6" Long W/ 3/8" Hole	2
7		3/8 HHCS 3/8" -- 16 x 2 1/2"	8
8	23-0104	(60" & 66") #6 JIC Female, 1/4" NPT Male OAL 30-1/4"	2
8	23-0105	(72", 78" & 84") #6 JIC Female, 1/4" NPT Male OAL 36-1/4"	2
9	23-0106	(60" & 66") #6 JIC Female, 1/4" NPT Male OAL 39-3/4"	2
9	23-0107	(72", 78" & 84") #6 JIC Female, 1/4" NPT Male OAL 45-5/8"	2
10		3/8" Stover Lock Nut 3/8"-- 16	10
11	23-0108	(60" & 66") Hose Cover W/Step OAL 12"	1
11	23-0109	(72", 78" & 84") OAL 23-3/4"	1
12	23-0110	(60", 66", 72", 78", & 84") #6 JIC Female, 90' Elbow OAL 75"	2
13	6-8-CTX-S	(60", 66", 72", 78", & 84") #6 JIC Male, 1/2 NPT Female 90' Elbow	2
14	FEM-502-8FP	Flat Face Male Quick Coupler 1/2" Female NPT	1
15	FEM- 501-8FP	Flat Face Female Quick Coupler 1/2" Female NPT	1
16	6 WJ TX-S	Bulkhead Branch Tee #6 JIC W/Nut 3/8" Male JIC	2
17	24-0112	66" RGB Main Frame	1
17	24-0113	72" RGB Main Frame	1
17	24-0115	84" RGB Main Frame	1

## Rock Grapple Warning Decal Placement



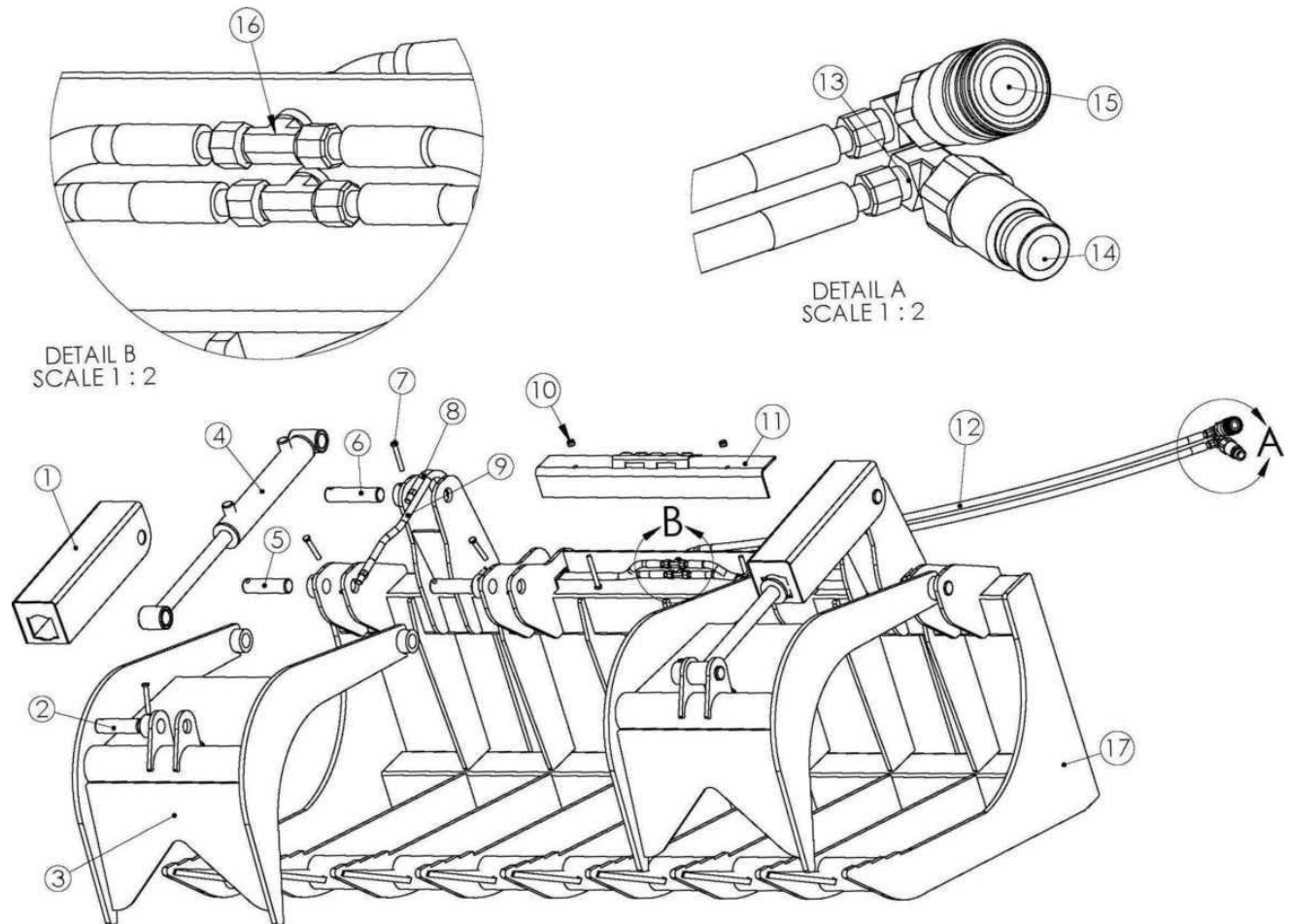
## Rock Grapple – Rear View

#	Part Name	Description	Size	Part No.	Qty.
01	GB Warning Decal	Warning Before Operating Read Manual	2-1/2"H x 3-1/2"L	LF-01	1
02	GB Warning Decal	Warning Wear Eye Protection; Relieve Hydraulic Pressure	3-1/2"H x 3-1/2"L	LF-02	1
03	GB Warning Decal	Warning Pinch Point Stay Clear	2-1/2"H x 3-1/2"L	LF-03	1
04	GB Warning Decal	Warning Crush Hazard Stay Clear	3-1/2"H x 3-1/2"L	LF-04	1

Warning Decal 01	Warning Decal 02	Warning Decal 03	Warning Decal 04
<p><b>WARNING</b> Before operating attachment, read and understand attachment operators manual and all safety signs. LF-01</p>	<p><b>WARNING</b> Wear eye protection Do not use hands to find hydraulic leaks. Relieve pressure before disconnecting lines. LF-02</p>	<p><b>WARNING</b> Pinch Point Stay Clear LF-03</p>	<p><b>WARNING</b> CRUSH HAZARD STAY CLEAR LF-04</p>

# SKELETON GRAPPLE – EXTREME DUTY

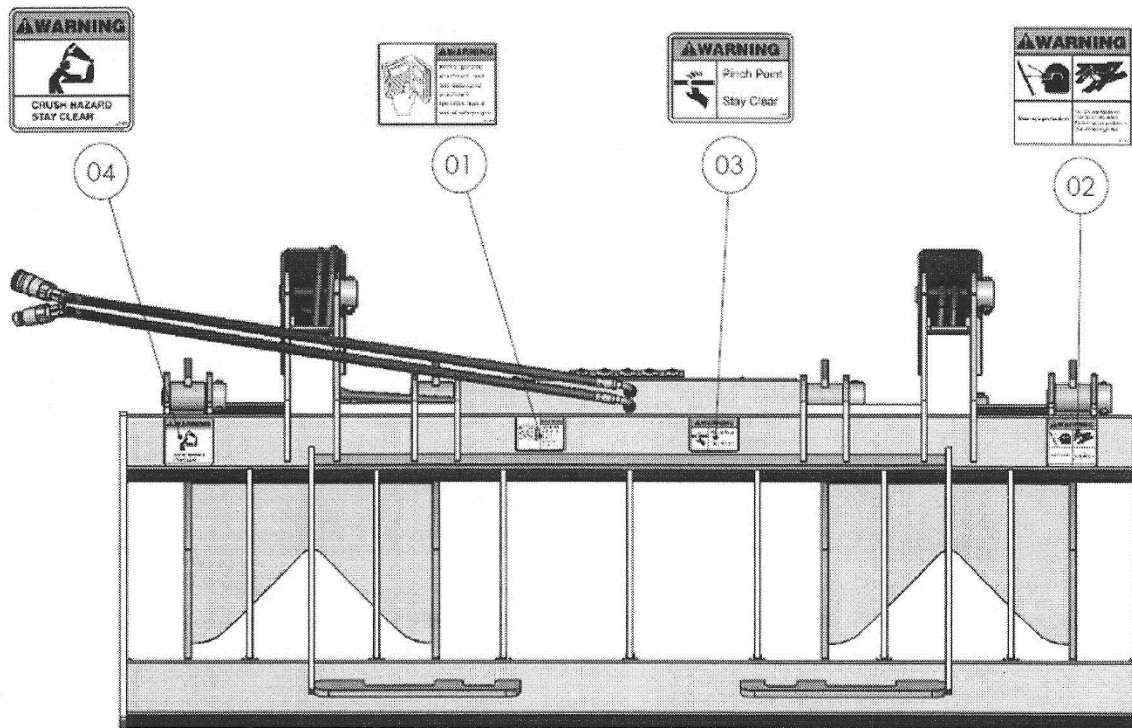
## Skeleton Grapple Parts Diagram



## Skeleton Grapple Parts List

Item No.	Part Number	Description	Qty.
1	22-0100	Cover for Hydraulic cylinder 4-1/4" W x 4-1/2" H x 16" L	2
2	22-0101	Pin 1-1/4" Diameter x 5-1/4" Long Pin W/ 3/8" Hole	6
3	22-0102	RG Tine Assembly 18" Wide	2
4	LF2010-125	Hydraulic Cylinder 2" x 10" x 1-1/4" Rod	2
5	22-0101	Pin 1-1/4" Diameter x 5-1/4" Long Pin W/ 3/8" hole	4
6	22-0103	Pin 1-1/4" x 6" Long Pin W/ 3/8" Hole	2
7		3/8 HHCS 3/8" -- 16 x 2-1/2"	8
8	22-0104	(60" & 66") #6 JIC Female, 1/4" NPT Male OAL 30-1/4"	2
8	22-0105	(72", 78" & 84") #6 JIC Female, 1/4" NPT Male OAL 36-1/4"	2
9	22-0106	(60" & 66") #6 JIC Female, 1/4" NPT Male OAL 39-3/4"	2
9	22-0107	(72", 78" & 84") #6 JIC Female, 1/4" NPT Male OAL 45-5/8"	2
10		3/8" Stover Lock Nut 3/8"-- 16	10
11	22-0108	(60" & 66") Hose Cover W/Step OAL 12"	1
11	22-0109	(72", 78" & 84") Hose Cover W/ Step OAL 23-3/4"	1
12	22-0110	(60", 66", 72", 78", & 84") #6 JIC Female, # 6 JIC 90° Elbow OAL 75"	2
13	6-8-CTX-S	(60", 66", 72", 78", & 84") #6 JIC Male 1/2" NPT Female 90° Elbow 1/2" pipe X 3/8" JIC	2
14	FEM- 502-8FP	Flat-face Male Quick Coupler 1/2" Female	1
15	FEM- 501-8FP	Flat-face Female Quick Coupler 1/2" Female	1
16	6 WJ TX-S	Bulkhead Branch Tee #6 JIC W/Nut 3/8" Male JIC	2
17	22-0111	60" RG Main Frame	1
17	22-0112	66" RG Main Frame	1
17	22-0113	72" RG Main Frame	1
17	22-0114	78" RG Main Frame	1
17	22-0115	84" RG Main Frame	1

## Skeleton Grapple Warning Decal Placement



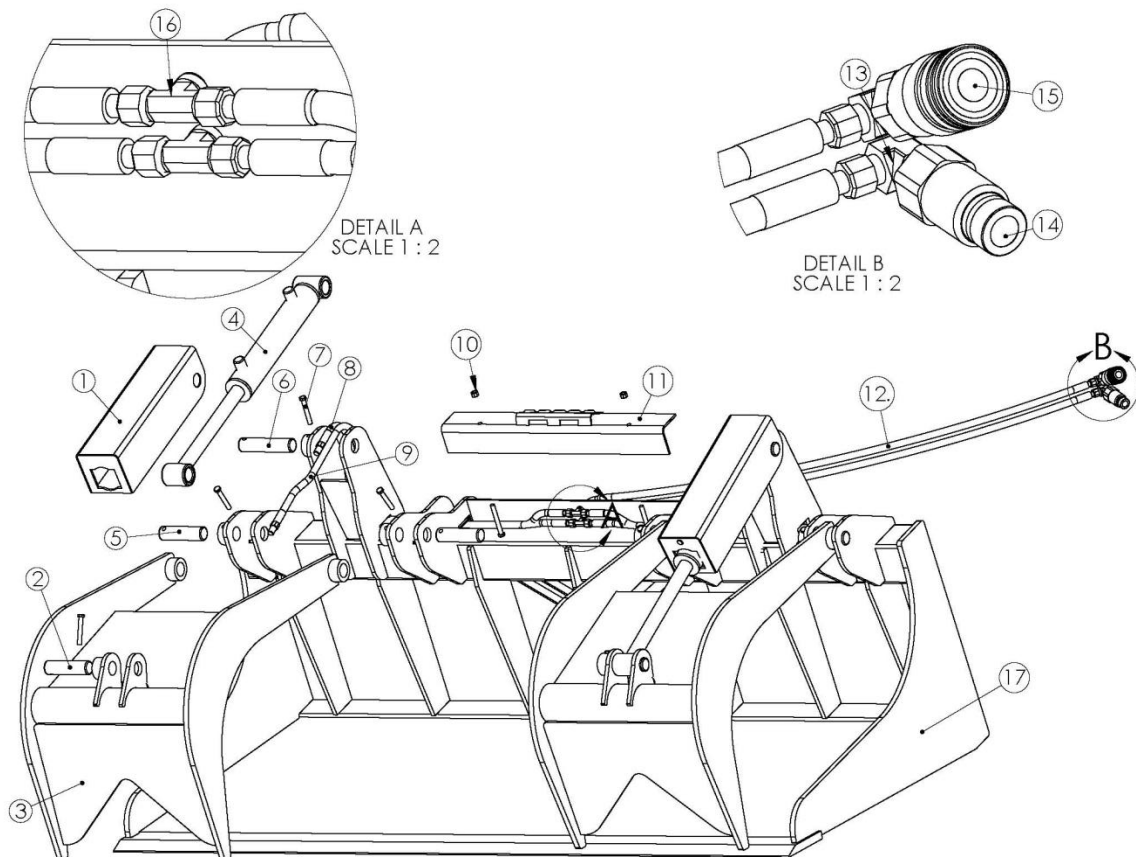
Skeleton Grapple - Rear View

Item No.	Part Number	Description	Qty.
01	RG-01	Warning Before Operating Read Manual 2-1/2"H x 3-1/2"L	1
02	RG-02	Warning Wear Eye Protection; Relieve Hydraulic Pressure 3-1/2"H x 3-1/2"L	1
03	RG-03	Warning Pinch Point Stay Clear 2-1/2"H x 3-1/2"L	1
04	RG-04	Warning Crush Hazard Stay Clear 3-1/2"H x 3-1/2"L	1

Warning Decal 01	Warning Decal 02	Warning Decal 03	Warning Decal 04

# SCRAP GRAPPLE – EXTREME DUTY

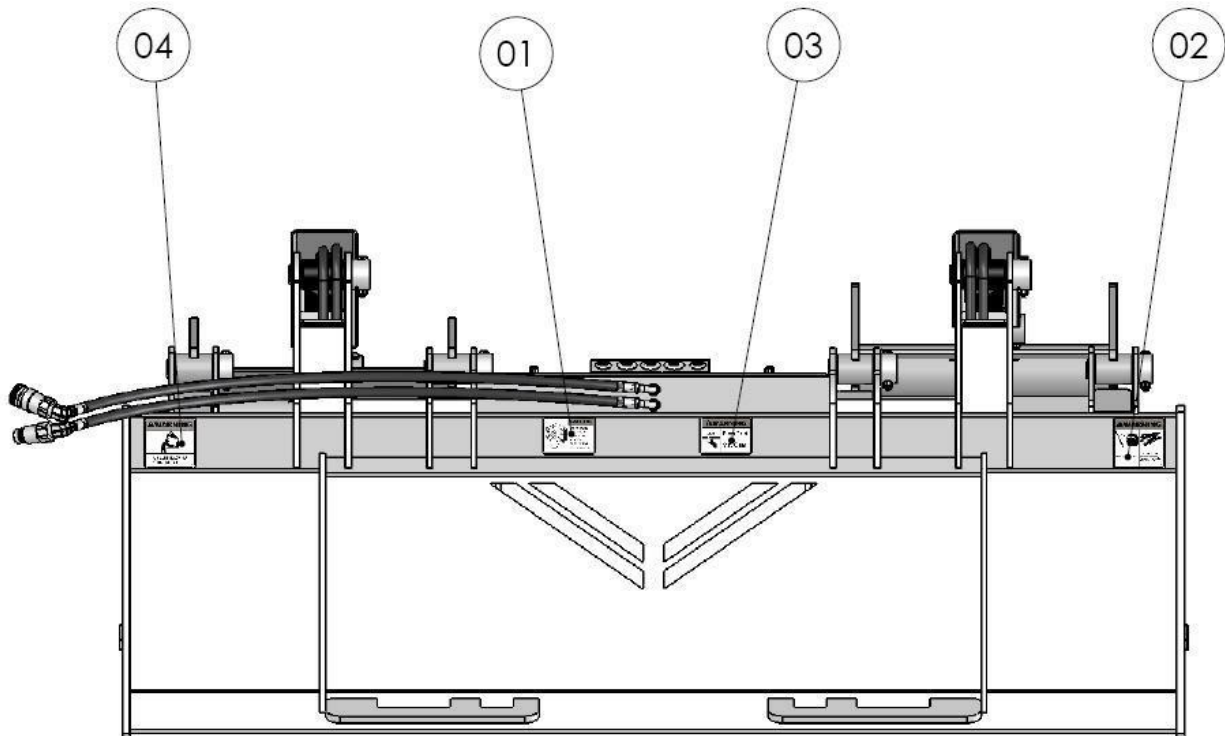
## Scrap Grapple Parts Diagram



## Scrap Grapple Parts List

Item No.	Part Number	Description	Qty.
1	23-0100	Cover for Hydraulic cylinder 4-1/4"W x 4-1/2"H x 16"L	2
2	23-0101	Pin 1-1/4" Dia. X 5-1/4" Long W/ 3/8" Hole	6
3	23-0102	GB Tine Assembly	2
4	LF2010-125	Hydraulic Cylinder 2" x 10" x 1-1/4" Rod	2
5	23-0101	Pin 1-1/4" Dia. X 5-1/4" Long W/ 3/8" Hole	4
6	23-0103	Pin 1-1/4" Dia. X 6" Long W/ 3/8" Hole	2
7		3/8 HHCS 3/8" -- 16 x 2 1/2"	8
8	23-0104	(60" & 66") #6 JIC Female, 1/4" NPT Male OAL 30-1/4"	2
8	23-0105	(72", 78" & 84") #6 JIC Female, 1/4" NPT Male OAL 36-1/4"	2
9	23-0106	(60" & 66") #6 JIC Female, 1/4" NPT Male OAL 39-3/4"	2
9	23-0107	(72", 78" & 84") #6 JIC Female, 1/4" NPT Male OAL 45-5/8"	2
10		3/8" Stover Lock Nut 3/8"-- 16	10
11	23-0108	(60" & 66") Hose Cover W/Step OAL 12"	1
11	23-0109	(72", 78" & 84") OAL 23-3/4"	1
12	23-0110	(60", 66", 72", 78", & 84") #6 JIC Female, 90' Elbow OAL 75"	2
13	6-8-CTX-S	(60", 66", 72", 78", & 84") #6 JIC Male, 1/2 NPT Female 90' Elbow	2
14	FEM- 502-8FP	Flat Face Male Quick Coupler 1/2" Female NPT	1
15	FEM- 501-8FP	Flat Face Female Quick Coupler 1/2" Female NPT	1
16	6 WJ TX-S	Bulkhead Branch Tee #6 JIC W/Nut 3/8" Male JIC	2
17	23-0111	60" GB Main Frame	1
17	23-0112	66" GB Main Frame	1
17	23-0113	72" GB Main Frame	1
17	23-0114	78" GB Main Frame	1
17	23-0115	84" GB Main Frame	1

## Scrap Grapple Warning Decal Placement



## Scrap Grapple – Rear View

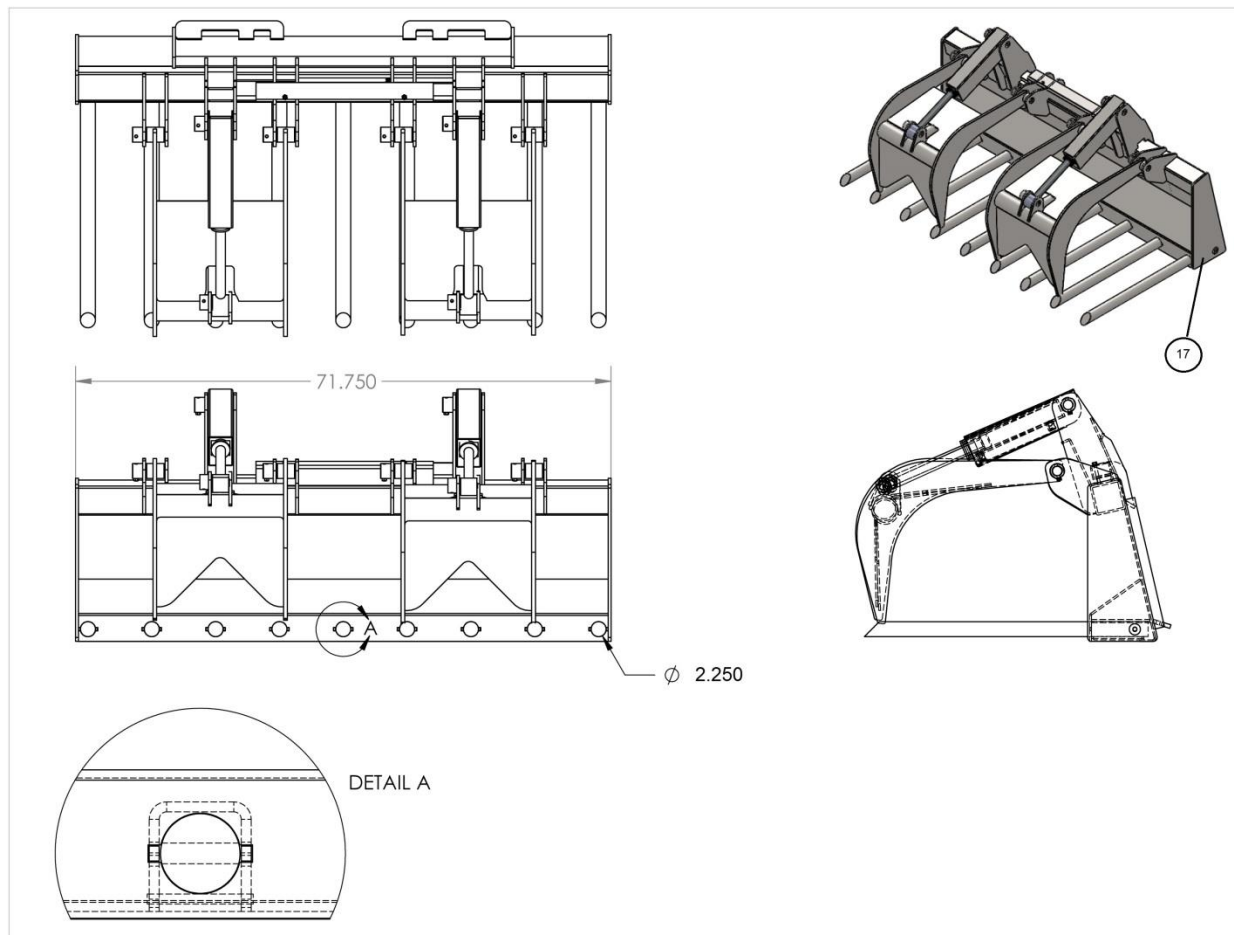
#	Part Name	Description	Size	Part No.	Qty.
01	GB Warning Decal	Warning Before Operating Read Manual	2-1/2"H x 3-1/2"L	LF-01	1
02	GB Warning Decal	Warning Wear Eye Protection; Relieve Hydraulic Pressure	3-1/2"H x 3-1/2"L	LF-02	1
03	GB Warning Decal	Warning Pinch Point Stay Clear	2-1/2"H x 3-1/2"L	LF-03	1
04	GB Warning Decal	Warning Crush Hazard Stay Clear	3-1/2"H x 3-1/2"L	LF-04	1

Warning Decal 01	Warning Decal 02	Warning Decal 03	Warning Decal 04
<p><b>WARNING</b> Before operating attachment, read and understand attachment operators manual and all safety signs. LF-01</p>	<p><b>WARNING</b> Wear eye protection Do not use hands to find hydraulic leaks. Relieve pressure before disconnecting lines. LF-02</p>	<p><b>WARNING</b> Pinch Point Stay Clear LF-03</p>	<p><b>WARNING</b> CRUSH HAZARD STAY CLEAR LF-04</p>

# TINE GRAPPLE – EXTREME DUTY

## Tine Grapple Parts Diagram

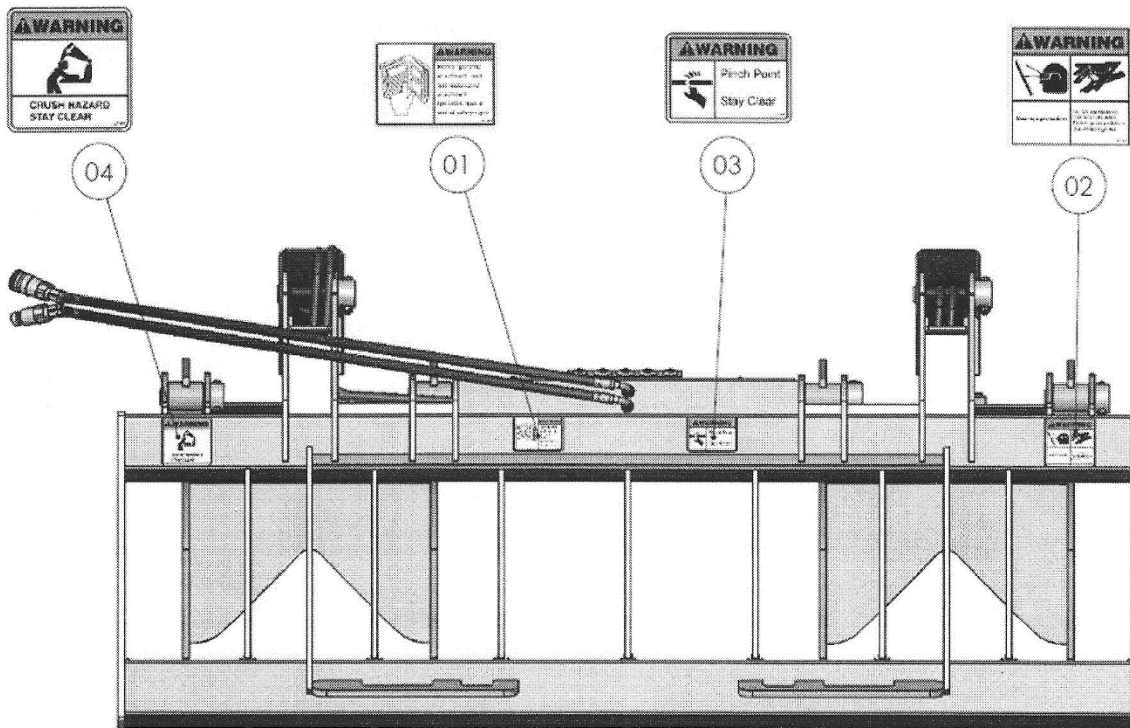
Refer to Skeleton Grapple (page 8) for numbered parts diagram.



## Tine Grapple Parts List

Item No.	Part Number	Description	Qty.
1	22-0100	Cover for Hydraulic cylinder 4-1/4" W x 4-1/2" H x 16" L	2
2	22-0101	Pin 1-1/4" Diameter x 5-1/4" Long Pin W/ 3/8" Hole	6
3	22-0102	RG Tine Assembly 18" Wide	2
4	LF2010-125	Hydraulic Cylinder 2" x 10" x 1-1/4" Rod	2
5	22-0101	Pin 1-1/4" Diameter x 5-1/4" Long Pin W/ 3/8" hole	4
6	22-0103	Pin 1-1/4" x 6" Long Pin W/ 3/8" Hole	2
7		3/8 HHCS 3/8" -- 16 x 2-1/2"	8
8	22-0104	(60" & 66") #6 JIC Female, 1/4" NPT Male OAL 30-1/4"	2
8	22-0105	(72", 78" & 84") #6 JIC Female, 1/4" NPT Male OAL 36-1/4"	2
9	22-0106	(60" & 66") #6 JIC Female, 1/4" NPT Male OAL 39-3/4"	2
9	22-0107	(72", 78" & 84") #6 JIC Female, 1/4" NPT Male OAL 45-5/8"	2
10		3/8" Stover Lock Nut 3/8"-- 16	10
11	22-0108	(60" & 66") Hose Cover W/Step OAL 12"	1
11	22-0109	(72", 78" & 84") Hose Cover W/ Step OAL 23-3/4"	1
12	22-0110	(60", 66", 72", 78", & 84") #6 JIC Female, # 6 JIC 90° Elbow OAL 75"	2
13	6-8-CTX-S	(60", 66", 72", 78", & 84") #6 JIC Male 1/2" NPT Female 90° Elbow 1/2" pipe X 3/8" JIC	2
14	FEM- 502-8FP	Flat-face Male Quick Coupler 1/2" Female	1
15	FEM- 501-8FP	Flat-face Female Quick Coupler 1/2" Female	1
16	6 WJ TX-S	Bulkhead Branch Tee #6 JIC W/Nut 3/8" Male JIC	2
17		72" Tine Grapple Main Frame	1

## Tine Grapple Warning Decal Placement



Item No.	Part Number	Description	Qty.
01	TG-01	Warning Before Operating Read Manual 2-1/2"H x 3-1/2"L	1
02	TG-02	Warning Wear Eye Protection; Relieve Hydraulic Pressure 3-1/2"H x 3-1/2"L	1
03	TG-03	Warning Pinch Point Stay Clear 2-1/2"H x 3-1/2"L	1
04	TG-04	Warning Crush Hazard Stay Clear 3-1/2"H x 3-1/2"L	1

Warning Decal 01	Warning Decal 02	Warning Decal 03	Warning Decal 04

# SKID PRO ATTACHMENT WARRANTY

**Attachments covered under this 12 Month Warranty include:**

**Buckets: 4N1, Concrete, Low Profile, Mega Snow, Snow & Litter, Stump & Rock; Grapples: Bucket, Skeleton, Scrap, Tine & Extra Heavy-Duty Rock Bucket; HD3 Brush Mower; Log Splitter; Pallet Fork Grapple; Hydraulic Pallet Forks; Snow Pusher; Telescopic Boom; Tree Puller; Bale Squeeze; Silt Fence Plow; Over the Tire Tracks; Trencher; Pick Up Broom; U-Blade; Trencher; Vibratory Roller;**

Skid Pro warrants above attachments for twelve months from date of shipment, to the original owner. Warranty covers products to be free from defects in material and workmanship when properly set up and operated in accordance with Skid Pro's recommendations.

## **WARRANTY CLAIM PROCEDURE**

All warranty claims must be submitted within the manufacturer's limited warranty period. Pictures and/or a video of the failing component(s) are required to properly document all potential warranty claims. To submit a warranty claim, contact your Skid Pro Product Guru or complete a [Warranty Claim Form](#) on our website and send it along with supporting pictures/video to [sales@skidpro.com](mailto:sales@skidpro.com). Upon receipt, the warranty claim information will be reviewed and once determined to be a valid claim, a return authorization number will be issued for the return of the defective part(s) if applicable and replacement part(s) will be shipped. If it is determined the defective parts are to be returned and they are not received by Skid Pro within 30 days of receiving the replacement parts, the Buyer will be charged for the cost of the replacement parts plus any shipping charges. Tampering with the failed part (i.e. disassembling a motor or cylinder) will void the warranty.

## **EXCLUSIONS OF WARRANTY**

Skid Pro's requirement for any issue with respect to attachments shall be limited to repairing or replacing the defective part, as this is a parts-only warranty and does not include any labor to replace or install the part or downtime from resulting issue. Skid Pro has full technical support & assistance to assure customer replaces the part properly for optimal performance on attachment.

This warranty shall not apply to any attachment's wear items, or attachments that have been repaired or altered outside the Skid Pro factory in any way, or that has been subject to misuse, negligence or accident beyond Skid Pro's recommended use and/or machine rated capacity.

This warranty is exclusive and in lieu of all other warranties and conditions. Skid Pro disclaims all other warranties and conditions, express or implied, including any implied warranties or conditions of merchantability or fitness for a particular purpose. In no event shall Skid Pro be liable for any special, incidental, indirect or consequential damage, whatsoever, including, but not limited to, loss or interruption of business, lost profits, or loss of machine use, whether based on contract, warranty, tort, negligence, strict liability, statute or otherwise, even if Skid Pro has been advised of the possibility of such damages.

No agent, employee, or representative of Skid Pro has any authority to bind said company to any affirmation, representation, or warranty concerning its machinery and/or attachments except as specifically set forth herein. Any disagreement or dispute of warranty policy or customer expectations of product, soundness, functionality, or performance would take place in Douglas County, Alexandria, MN, where Skid Pro operates.



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