

#### **OWNER'S INSTALLATION MANUAL**





WARNING
INJURY HAZARD



CAUTION/WARNING

PINCH POINT

- •Read and follow all safety warnings and instructions before operating this equipment.
- Failure to observe the following instructions could result in serious injury or death
- ■Use caution when installing Ground Force System. Components can create pinch points & electrical hazards.
- •The original design of the product must not be modified or altered without approval from manufacturer.

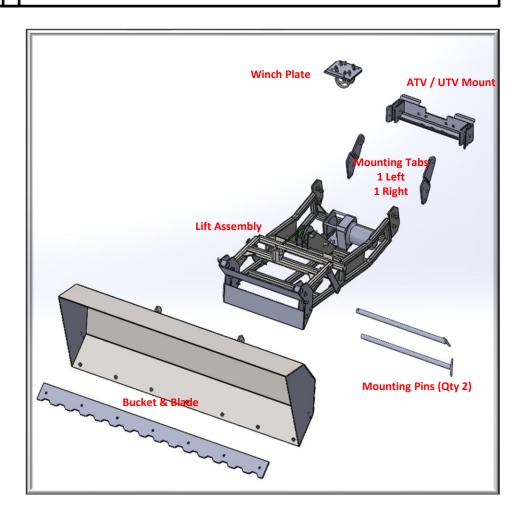


READ THIS MANUAL CAREFULLY BEFORE USING THE PRODUCT

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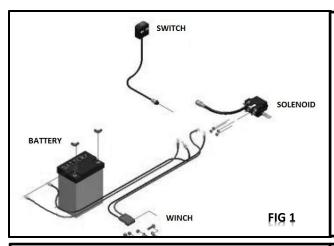
### **ASSEMBLY PIECES FOR UNIT**

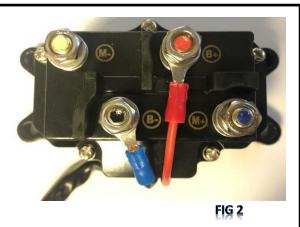
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# WINCH WIRING INSTRUCTION

- 1. Find a location on your machine where the solenoid can be mounted and will not be damaged, but allow access to the 4 terminals on top for wiring to the winch & battery.
- 2) Mount solenoid to your machine using hardware supplied Drill holes in proper location for fitment of solenoid.
- 3) When solenoid is mounted, use the 2 wires Fig 3 to connect battery to correct terminals on solenoid. Connect RED wire to terminal on solenoid labeled B+ or Battery +. & black wire to terminal labeled B- or Battery- Fig 2
- 4) Run the wires from solenoid to battery, making sure wires are clear from moving/hot parts which may cause damage to wires.
- 5) Connect **RED** wire to positive terminal on battery and black wire to negative terminal on the battery. Using zip-ties, secure wires in place and loop up extra wire.
- 6) Locate the 2 wires with quick disconnects on one (Fig 4 & 5). Connect ring connector side of Red wire to the solenoid terminal marked M+ or Motor+. Connect ring connector side of BLACK wire to the solenoid terminal marked M- or Motor- (Fig 6)
- 7) Run 2 quick disconnect wires up to front of machine where they can connect to corresponding quick disconnects from wires on GF system winch. Make sure wires are clear from moving/hot parts and secure to vehicle. It is important there is enough slack in wires to allow the lift assembly to move up & down without pulling on wires.

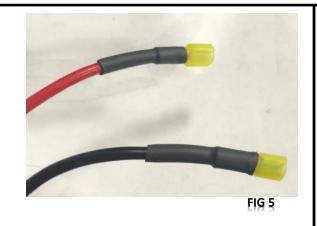


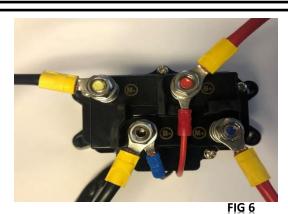












# WINCH WIRING INSTRUCTION Continued

- 8) Locate the winch switch (Fig 7)
- 9) Locate the bag of hardware to mount switch to the handle of the ATV/UTV. (Fig 8)
- 10) Connect mounting bracket to switch utilizing the Phillips head screws and corresponding washers (Fig 9)
- 11) Use the shorter socket head screw with corresponding washer and lock-washer to connect straight piece to mounting bracket . (Fig 10)
- 12) Use remaining two longer socket head screws to connect the switch to vehicles handlebar using the two curved brackets. (Fig 11 & 12)
- 13) Run wiring down handlebar through steering column and to location of solenoid for the Ground Force System and connect the quick plug.

NOTE: Make sure the wires are connected to the correct terminals on the solenoid. Connecting the battery to the wrong terminals on the solenoid could lead to damage of the system.





Fig 8





Fig 10



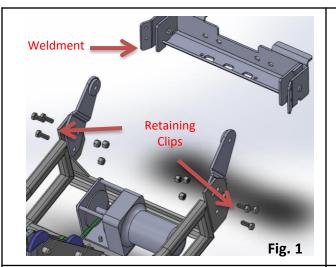
Fig 11

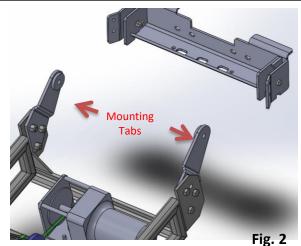


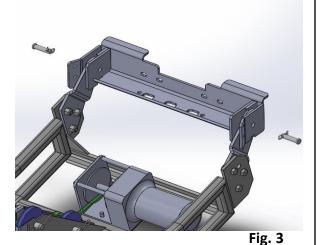
Fig 12

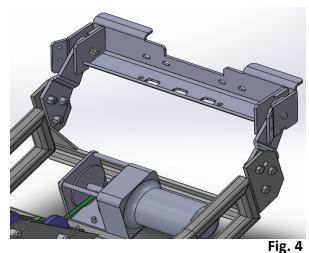
# ATV/UTV MOUNT ASSEMBLY

- 1) Install ATV/UTV mount weldment to your vehicle per manufacturers installation instructions. (Fig. 1)
- **2)** Fasten mounting tabs to GF frame using bolts & nuts provided. (Fig. 2)
- **3)** Position mounting tabs in the weldment as shown. (Fig. 3)
- **4)** Align mounting tab & weldment holes.
- 5) Slide retaining clips through holes & secure in place by snapping clip over the weldment. (Fig. 4)

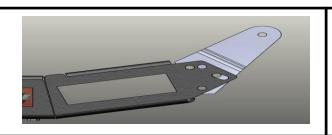


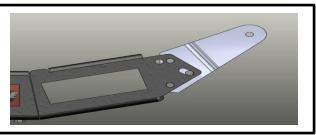






Note: Remember that the mounting tab position can be changed between 2 positions. This can affect ground clearance & maximum lift angle.

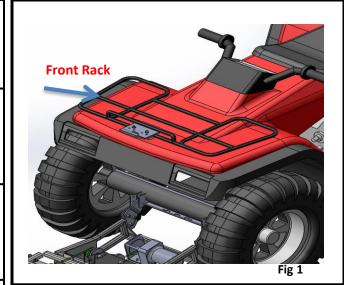


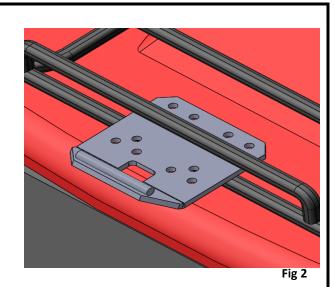


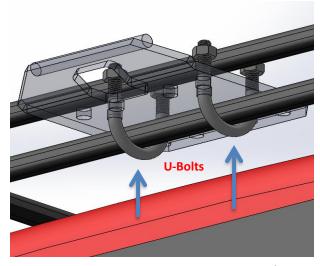
## BUMPER/FRONT RACK SQUARE MOUNT PLATE INSTALLATION

- **1)** Locate front rack on vehicle to square mount plate.
- **2)** Center plate on top of bar that goes across front of rack.
- **3)** Identify which U-Bolts will fit size of front rack.
- **4)** Slide the U-Bolts through square mount plate from bottom, capturing bar on front of rack.

**5)** Thread nuts over U-Bolts & tighten until plate is tight to front rack.







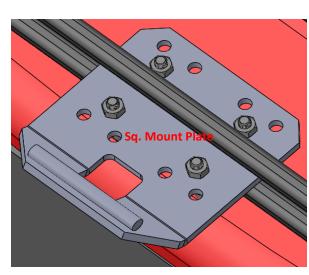


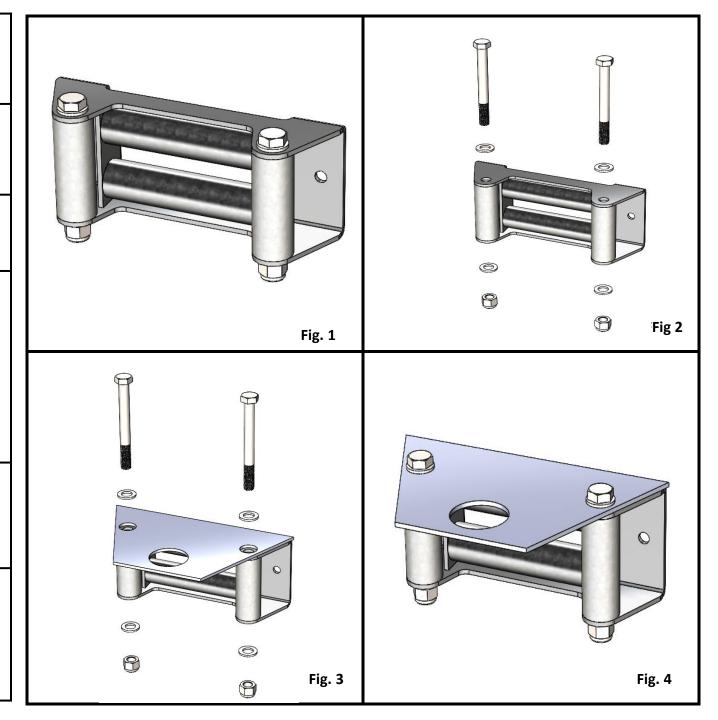
Fig 3

Fig 4

### ROLLER FAIRLEAD MOUNT PLATE INSTALLATION

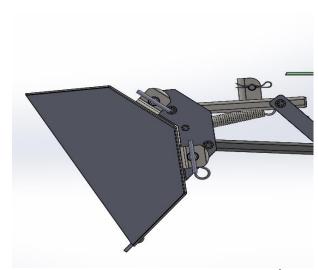
Optional – Used for Polaris machines and others as required

- Locate roller fairlead either currently on vehicle or included with the system. (Fig. 1)
- **2)** Remove two vertical bolts and washers keeping vertical rollers in place. (Fig. 2)
- 3) Place roller fairlead winch plate directly on top of fairlead frame. Line up 2 smaller holes on winch plate with holes for vertical rollers, making sure the large hole is out in front of fairlead. Do not put previously removed bolts back in. (See Fig. 3)
- 4) Replace the 2 bolts that were previously removed with the 2 slightly longer bolts provided with the mounting plate.
- 5) Tighten new vertical bolts enough so winch plate is sturdy, but not too much that vertical rollers are unable to roll freely. (Fig. 4)



#### **CABLE CONNECTION**

- 1) Follow ATV/UTV Mount Instructions to install GFS lift frame.
- 2) Lower the lift frame to the ground, set the parking brake, and turn the vehicle off. (Fig. 1)
- 3) Let out five feet of the ATV/UTV's winch cable and place it on top of the ATV/UTV.
- 4) Remove the pulleys' clevis pins. (Fig. 2)
- 5) Guide the ATV's winch cable through the lift frame as shown in BLUE. (Fig. 3)
- 6) Make sure the cable is between the pulleys and cable retainers. (Fig. 3)
- 7) Attach the ATV/UTV's winch cable to the supplied winch plate. (Fig. 4)
- 8) Let out two feet of the lift frame's winch cable.
- 9) Guide the lift frame's winch cable through the lift frame as shown in GREEN. (Fig. 3)
- 10) Make sure the cable is between the pulleys and pulley brackets. (Fig. 3)
- 11) Use the winch controls to move the attachment and verify it was installed properly.





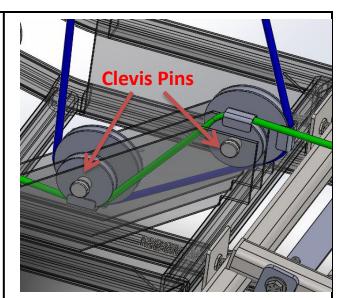
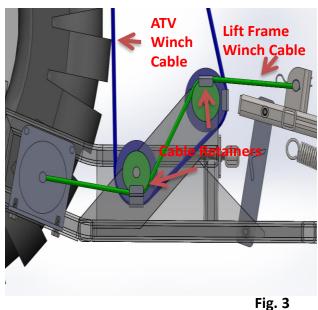


Fig. 2



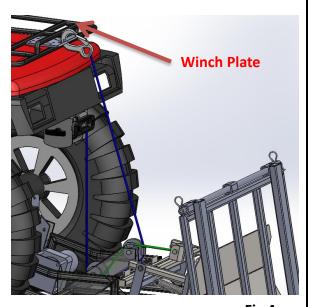
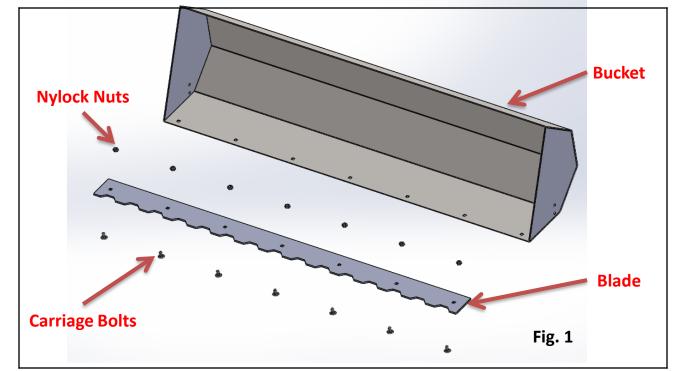
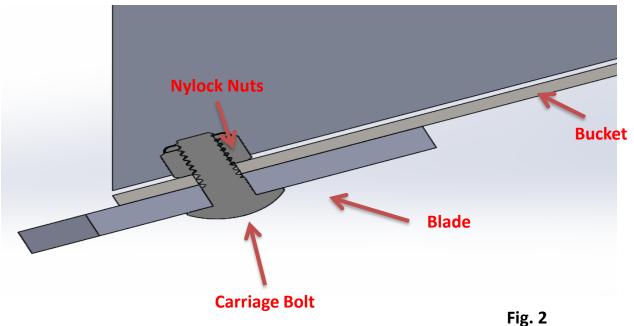


Fig 4

# **Bucket BLADE INSTALLATION**

- 1) Remove bucket, blade and hardware from the packaging. (Fig. 1)
- 2) Position blade underneath bucket. (Fig. 2)
- **3)** Line up holes and slide a carriage bolt from underneath up through the blade and bucket.
- **4)** Tighten a nyloc nut over the bolt to fasten it in place.
- **5)** Repeat steps 3-4 for the remaining holes.
- **6)** To switch the blade to either it's flat or serrated edge, unscrew all the nuts and bolts.
- **7)** Remove the blade, rotate it so the desired edge is out. Repeat steps 2-5.

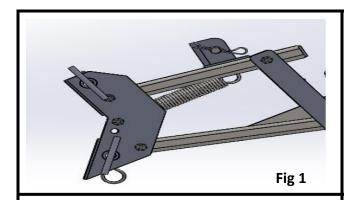


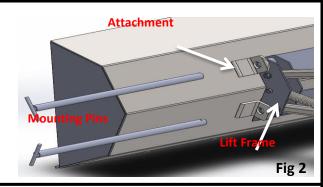


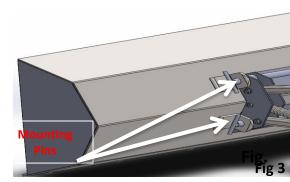
#### **ATTACHMENT MOUNT**

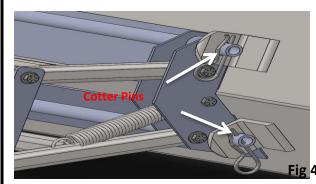
1) On a flat surface, use winch controls to lower lift frame to ground. (Fig.1)

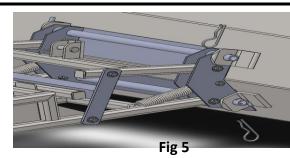
- **2)** Set the vehicle's parking brake and turn off engine.
- **3)** Align holes of attachment and lift frame. (Fig. 2)
- 4) Slide mounting pins through attachment and lift frame holes. (Fig. 3)
- 5) Slide cotter pins through mounting pins to secure in place. (Fig. 4)
- 6) To switch attachments, undo steps 4 and 5 and move attachment. (Fig 5). Repeat steps 1-5 to change up attachments. (Fig 6 & 7)

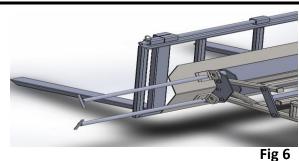


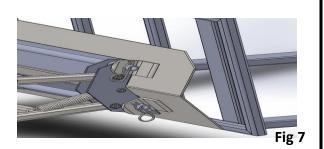












Note: Use winch controls to move the attachment and verify it was installed properly!

Quick and easy to attach and detach attachments!

#### **ADJUSTABLE STOP**

#### Your almost finished!

- 1) To adjust the stop, set the attachment to the desired "UPPER" position.
- **2)** Loosen the retaining plates away from the frame.

**3)** Slide the stop flush against the linkage. (Fig. 3)

**4)** Tighten the retaining plates against the frame. (Fig. 3)

**5)** If necessary, repeat steps 2-5 to make adjustments





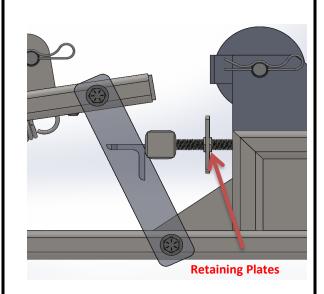


Fig. 2

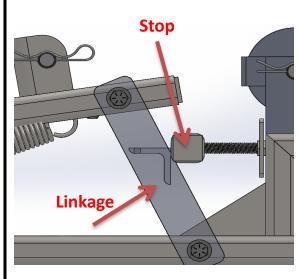
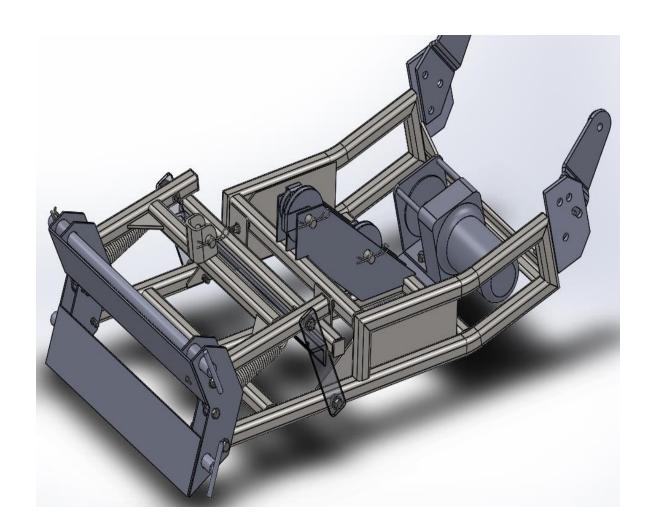


Fig. 3

**Note:** The adjustable stop controls the attachment's range of motion.

### **MAINTENANCE**

- All pivot points and pulley rollers need to be lubricated often.
- Winch rope needs to be replaced when it start to fray.
- Pulleys/sheaves need to be replaced when they show looseness or excessive wear.
- Oil or grease attachment pins often.
- Have an extra cable on hand in case the current one breaks.







#### **CONTACT INFORMATION**

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Hudson, WI 54016

# SUSPENSION PUCK INSTALLATION

- 1) Safely raise ATV so spring around shock is completely uncompressed.
- **2)** Spread puck apart so it can slip over inside shaft of shock.
- **3)** Starting at bottom, slip a puck (shown in **GREEN**) around shaft. (Fig.1)
- **4)** Slide previously installed puck to make room for another puck. (**Fig. 1**)
- **5)** Repeat steps 2-4 for remaining pucks on both shocks.
- **6)** Safely lower the ATV to compress shock.
- **7)** Verify suspension is locking how it should.
- **8)** Make adjustments as needed.

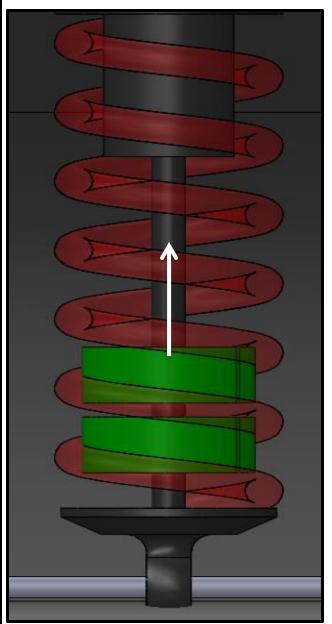


Fig. 1

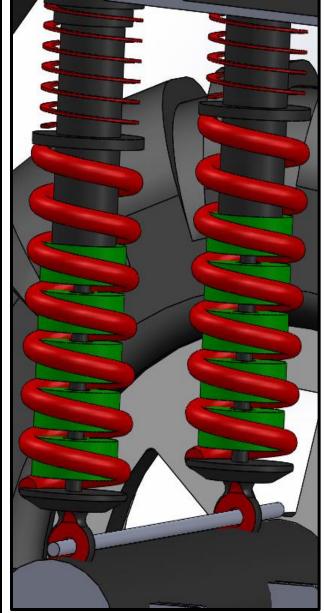


Fig. 2

### **SUSPENSION LIMITER** INSTALLATION

- 1) Safely raise ATV/UTV using a jack or other device so spring around shock is completely decompressed.
- 2) Remove suspension limiters from box. Remove pin keeping chain in place& bolt which prevents suspension limiter from extending. This is so 2 pieces can come apart. (Fig. 1 shows all parts once step 2 is completed)
- 3) Adjust height of suspension limiter to allow 2 forks to fit in 2 outermost coils of vehicle's spring. Fig. 5 shows example where forks are in outermost coils. If forks are not in outermost coils of spring, suspension can still compress on either side of limiter.
- 4) When at desired height, insert bolt into holes through both pieces of suspension limiter and tighten (See Fig. 4). Depending on angle and spacing of your vehicle's springs, the forks on suspension limiter might have to be bent for a better fit.
- **5)** Once suspension limiter fits correctly on vehicle, use cotter pin to attach chain to limiter using one of holes. Make sure plates on chain are on inside so they rest on spring. (Fig. 6)Do not bend end of cotter pin to keep it in place until you have completed step 8.
- **6)** While holding suspension limiter in place on vehicle's spring, wrap chain around spring. (See Fig. 5)
- 7) Based on location of bulb on rubber latch (unstretched) relative to metal slot, adjust location of where chain is anchored so rubber latch needs to stretch approximately ½" to sit in slot. (See Fig. 7 and 8)
- 8) Make adjustments as needed. When correct length is determined, bend out ends of cotter pin to keep it in place.









Fig. 1



Fig. 2



Fig. 3



Fig. 5



Fig. 6



Fig. 7

NOTE: Rubber latch may loosen over time due to stress relaxation. If this happens, simply tighten by moving anchor hole with cotter pin.

Fig. 8