

# DOMINATE THE DIRT



**GROUND  
HOG MAX**  
ATV/UTV DISC PLOW

*\* NOTE: This manual covers the GroundHog MAX ATV/UTV Disc Plow and the GroundHog MAX ATV/UTV Disc Plow with Hitch Kit.*



**This manual provides information essential to the safe operation of this machine. Read, understand, and follow all safety and operation instructions contained within before operating the equipment.**

## TO THE OWNER:

Congratulations on your purchase of a GroundHog MAX ATV / UTV Disc Plow. It is important that you read this manual before operating your equipment. The information contained within this manual will give you the knowledge necessary to operate your attachment efficiently and safely. Be sure to keep this manual readily available for future reference, and ensure that all operators read this manual carefully in order to become acquainted with all of the adjustment and operating procedures before attempting to operate the equipment. Replacement manuals can be obtained from your authorized GroundHog MAX dealer. If you have any other questions or concerns, please visit the the GroundHog MAX website at [www.groundhogmax.com](http://www.groundhogmax.com).

The equipment you have purchased has been carefully engineered and manufactured to provide dependable and satisfactory use. Like all mechanical products, your disc plow requires cleaning and upkeep. Lubricate the unit as specified. Observe all safety information in this manual and safety decals on the equipment.

Use only genuine GroundHog MAX ATV / UTV Disc Plow service parts. Aftermarket parts will void the warranty and may not meet the standards required for safe and satisfactory operation. Record the model number of your equipment in the spaces provided at the end of the Warranty section.

Provide this information to your dealer to obtain correct repair parts.

The owner must complete the Warranty Registration located at the end of the Warranty section of this manual. Mail the registration to: CH MAX Registration, 1 Bad Boy Blvd, Batesville, AR 72501.



This Safety-Alert Symbol indicates a hazard and means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**

**DANGER**

Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.



**WARNING**

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed.



**CAUTION**

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury.

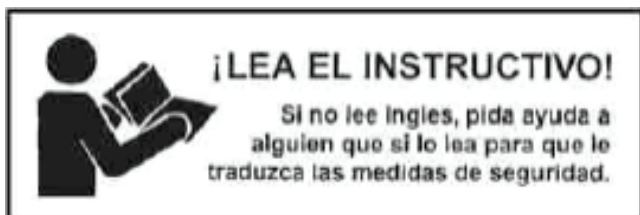
**IMPORTANT**

Indicates that failure to observe can cause damage to equipment.

**NOTE**

Indicates helpful information.

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# SPECIFICATIONS

Working Width - 21"

Shipping Weight - GroundHog MAX (with Hitch Kit) - 69lbs

Shipping Weight - GroundHog MAX (without Hitch Kit) - 46lbs

(2) Outside 8" High Strength 1060 Grade Notched Disc Blades

(2) Middle 9" High Strength 1060 Grade Notched Disc Blades

(2) Inside 10" High Strength 1060 Grade Notched Disc Blades

$\frac{3}{4}$ " Round, Stress Proof

High-Speed (Double Sealed, Deep Groove) Ball Bearing (Bolted on to Disc with Anti-Slide Bolts)

Heavy 2" Steel Tube Adjustable Frame

1. This fully assembled product weighs 46 lbs. and is made with high intensity heavy 10 gauge wall steel.
2. Each disc has its own easy to replace, high-speed, double-sealed, deeply grooved ball bearings with a trash guard.
3. The discs have anti-slide bolts and nuts for easy replacement of bearings.
4. Graduated notched discs sizes are 8", 9", or 10" but all bearings are the same size. This assembly was the most aggressive setup for cutting virgin ground.
5. Discs are mounted on a  $\frac{3}{4}$ " steel axle.
6. Between each of the disc blades the axle itself is encased in a glove-fit 1-inch steel pipe. This creates a closed system that does not require greasing.
7. There are no ratchets to mess with and no tires to dry rot and go flat.
8. Adjustable height control, in 1" increments on the T-Head allows you to use it on machines with either low or high ground clearance.
9. A 2" square hitch receiver is required. It can be purchased with a hitch kit included in the box (for Honda and Polaris mostly), or it can be purchased without a hitch kit included at a lower cost. You would then buy an aftermarket hitch kit for your specific machine.
10. Comes with a 90-day manufacturer's warranty.
11. The plow is basically maintenance free. After use, wipe off and spray down with WD-40 or similar product.
12. Works with 2-wheel or 4-wheel drive. Works on lower CC "air cooled only" machines. You are plowing 4-7 mph so a smaller CC machine stays cool. The strain on the machine is far less than with a pull behind plow.
13. Works with independent rear suspension or straight axle setups.
14. Direct, belt, or chain drive machines can work.
15. When new, the disc blades may not turn freely. After some use they will spin properly, but they do not free spin like a bike wheel.
16. If you want to keep your ball hitch while using the Groundhog receiver tube, buy a Reese-type hitch in 1  $\frac{1}{4}$ " to slide in the tractor pin. It is a loose fit but as long as it has weight applied it will not rattle and works fine.

## GENERAL INFORMATION

The purpose of this manual is to assist you in operating and maintaining your GroundHog MAX ATV / UTV Disc Plow. Read it carefully. It furnishes information and instructions to help you achieve years of dependable performance.

These instructions are compiled from field testing and engineering data. Some information may be general in nature, due to unknown and varying operating conditions. However, through experience and these instructions, you should be able to develop procedures to your particular situation.

The illustrations and data used in this manual were current at the time of printing. However, due to possible inline production changes, your machine may vary slightly in detail. We reserve the right to redesign and change the machines as necessary without notification.

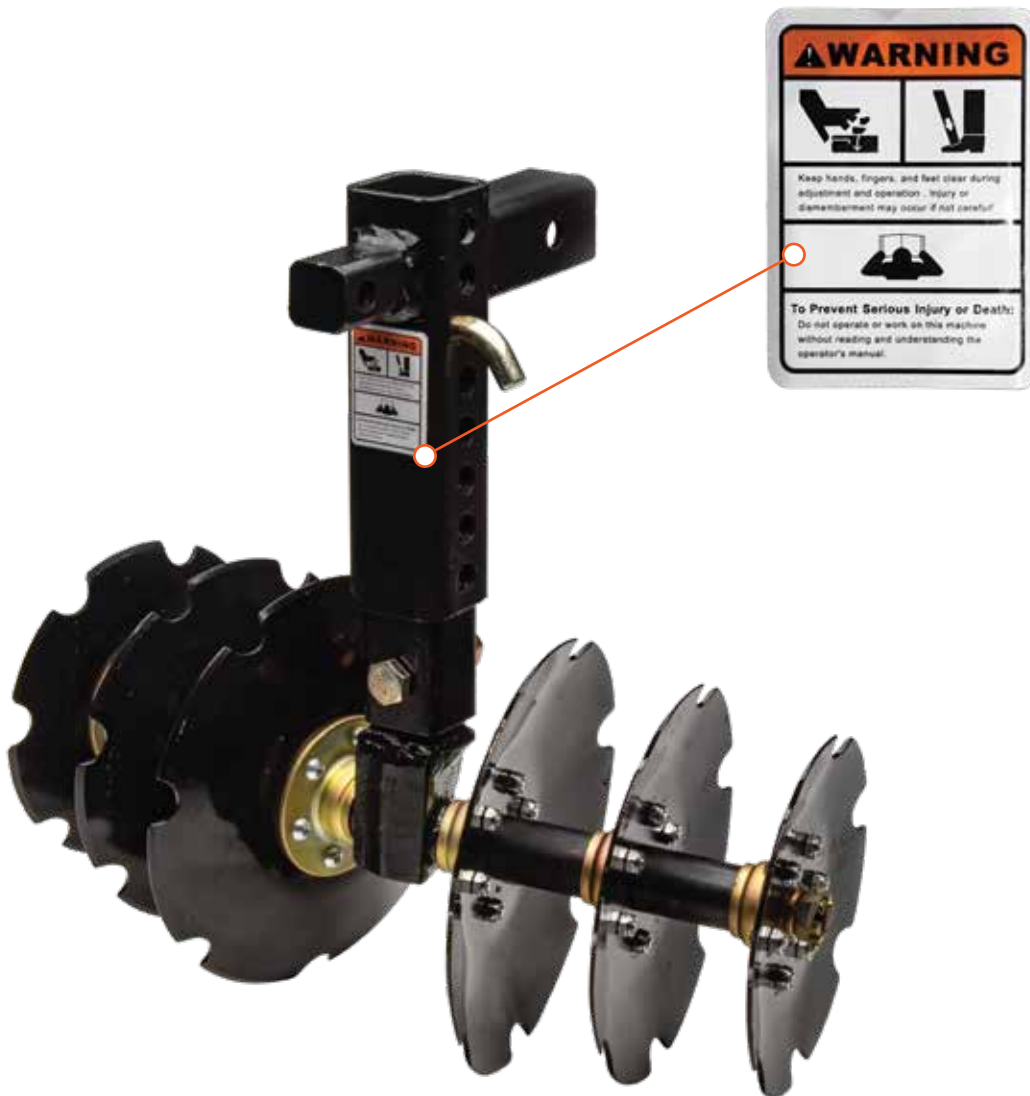
Throughout this manual, references are made to right and left direction. These are determined by standing behind the ATV / UTV facing the direction of forward travel.

# SAFETY & INSTRUCTIONAL DECALS



**FAILURE TO FOLLOW THESE INSTRUCTIONS COULD  
RESULT IN SERIOUS INJURY OR DEATH**

**!!! Replace Decals Immediately If Damaged !!!**



# SAFETY



Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be thwarted by an operator's carelessness. In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, judgment, and proper training of personnel involved in the operation, transport, maintenance and storage of equipment. It has been said, "The best safety device is an informed, careful operator." We ask you to be that kind of operator.

## TRAINING

Safety instructions are important! Read all attachment manuals and follow all safety rules and safety decal information. Failure to follow instructions can result in serious injury or death.

- If you do not understand any part of this manual and need assistance, call us at **1-877-522-3364**
- Operators must be instructed in and be capable of the safe operation of the equipment, its attachments, and all controls. Do not allow anyone to operate this equipment without proper instructions.
- Never allow children or untrained persons to operate equipment.

## PREPARATION

- Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.
- Make sure attachment is properly secured, adjusted, and in good operating condition.

## TRANSPORTATION

- Always comply with all state and local laws governing highway safety and lighting and marking requirements.
- Never allow riders on power unit or attachment.
- Do not operate or transport on steep slopes.
- Use extreme care and reduce ground speed on slopes and rough terrain.
- Do not operate or transport equipment while under the influence of alcohol or drugs. Consult your doctor about operating this machine while taking prescription medications.

## OPERATION

- Never put any body part underneath the equipment (lowered to the ground or raised), or between moving parts unless it is properly blocked and secured with the engine of the machine turned off.
- Always comply with all state and local laws governing highway safety, lighting, and marking requirements.
- Operate only in daylight or good artificial light.
- Keep bystanders away from equipment.
- Keep hands, feet, hair, and clothing away from equipment while engine is running. Stay clear of all moving parts.
- Never allow riders on power unit or attachment.
- Always sit in power unit seat when operating controls or starting engine. Securely fasten seat belt, place transmission in neutral, engage brake, and ensure all other controls are disengaged before starting power unit engine.
- Look down and to the rear and make sure area is clear before operating in reverse.
- Use extreme care when working close to fences, ditches, other obstructions, or on hillsides.
- Do not operate or transport on steep slopes.
- Do not stop, start, or change directions suddenly on slopes. Always operate down slopes and never across the face.
- Use extreme care and reduce ground speed on slopes and rough terrain.
- Keep alert and watch the front as well as the rear when operating.



## SAFETY (cont'd)



- Stop power unit and equipment immediately upon striking an obstruction. Turn off engine, remove key, inspect, and repair any damage before resuming operation.
- Before leaving operator's seat engage brake, stop engine, and remove key.

## MAINTENANCE

- Always wear relatively tight and belted clothing to avoid getting caught in moving parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head; and respirator or filter mask where appropriate.
- Never put any body part underneath the equipment (lowered to the ground or raised), or between moving parts unless it is properly blocked and secured with the engine of the machine turned off.
- Make sure attachment is properly secured, adjusted, and in good operating condition.
- Never perform service or maintenance with engine running.
- Keep all persons away from operator control area while performing adjustments, service, or maintenance.
- Tighten all bolts and nuts before each use on both your power source (ATV/UTV) and the GroundHog MAX.
- Verify that the GroundHog MAX is properly attached to the power source before the next use.



- Verify that the GroundHog MAX ATV / UTV Disc Plow is in safe condition before putting the unit into service:
  - 1) Visually check the castle-nut on each end of the axle assembly for tightness.
  - 2) Visually check discs (some side-to-side play on discs is normal).
  - 3) Make sure the axle keeper pin is in place properly.
  - 4) Make sure the 5/8-bolt and nut is tight on the up and down adjustment tube.
  - 5) Make sure tractor pins are secured in place.

## STORAGE

- Store in a safe dry area.
- Block equipment securely for storage.
- Keep children and bystanders away from storage area.

## GROUNDHOG MAX ATV/UTV DISC PLOW PARTS (Including Hitch Kit)

| NO. | Part NO.    | Description                          | Qty | FOB EA  | FOB Total |
|-----|-------------|--------------------------------------|-----|---------|-----------|
| 1   | 088-9079-00 | Hair Pin                             | 2   | N/A     | N/A       |
| 2   | 088-9078-00 | Castle Nut M18 1.5 3/4"              | 2   | \$1.30  | \$2.60    |
| 3   | 088-9080-00 | Lock Washer 3/4"                     | 2   | N/A     | N/A       |
| 3A  | 088-9081-00 | Flast Washer 18                      | 2   | N/A     | N/A       |
| 4   | 088-9066-00 | 3" Outer Spacer                      | 4   | \$6.76  | \$27.04   |
| 5   | 069-9056-00 | Assembled 8" Notched Blade w/Bearing | 2   | \$19.99 | \$39.98   |
| 5A  | 088-9059-00 | Assembled 9" Notched Blade w/Bearing | 2   | \$21.99 | \$43.98   |
| 5B  | 088-0960-00 | Assembled 10" Notched Blad w/Bearing | 2   | \$22.99 | \$45.98   |
| 6   | 088-9056-00 | * Bearing                            | 6   | \$6.00  | \$36.00   |
| 6A  | 088-9032-00 | Bearing Protector                    | 6   | \$3.99  | \$23.94   |
| 6B  | 088-9053-00 | Screw Rod M8 15MM                    | 36  | \$0.99  | \$35.64   |
| 6C  | 088-9054-00 | Nut                                  | 36  | \$1.00  | \$36.00   |
| 7   | 080-9055-00 | Axle Assembly                        | 1   | \$43.63 | \$43.63   |
| 8   | 088-9065-00 | M16 80 Hex Bolt 5/8"                 | 1   | \$1.96  | \$1.96    |
| 9   | 088-9071-00 | M16 Lock Washer Bolt 5/8"            | 5   | N/A     | N/A       |
| 10  | 088-9071-00 | M16 Hex Head Nut                     | 5   | N/A     | N/A       |
| 11  | 088-9062-00 | 10 1/2" Adjustment Tube              | 1   | \$18.99 | \$18.99   |
| 12  | 088-9057-88 | Male Hitch (T-Head)                  | 1   | \$35.15 | \$35.15   |
| 13  | 088-9074-00 | Tractor Pin                          | 2   | N/A     | N/A       |
| 14  | 088-9075-00 | Cotter Pin                           | 2   | N/A     | N/A       |
| 15  | 088-9073-10 | M18 130 Hex Head Bolt 3/4"           | 1   | N/A     | N/A       |
| 16  | 088-9074-10 | M16 190 Hex Head Bolt 5/8"           | 4   | N/A     | N/A       |
| 17  | 088-9063-00 | 5-inch Receiver Tube                 | 1   | \$13.30 | \$13.30   |
| 18  | 088-9067-00 | Tongue Strap                         | 4   | \$3.25  | \$3.25    |
| 20  | 088-9096-00 | 1/4" Flat Spacer                     | 1   | \$1.10  | \$1.10    |
| 21  | 088-9070-00 | 1/2" Flat Spacer                     | 1   | \$1.96  | \$1.96    |
| 22  | 088-9068-00 | Spacer Block                         | 1   | \$5.99  | \$5.99    |
| 23  | 088-9074-20 | M18 Lock Washer 3/4"                 | 1   | N/A     | N/A       |
| 24  | 088-9074-30 | M18 Hex Nut 3/4"                     | 1   | N/A     | N/A       |
| 25  | 088-9061-00 | 21" Receiver Tube                    | 1   | \$39.99 | \$39.99   |
| 25A | 088-9064-00 | 9" Extension Tube                    | 1   | \$14.99 | \$14.99   |
| 28  | 088-9071-00 | M16 105 Hex Bolt 5/8"                | 2   | N/A     | N/A       |

**NOTE** - If purchasing bearings locally use series **Z9504** or **204RR6**

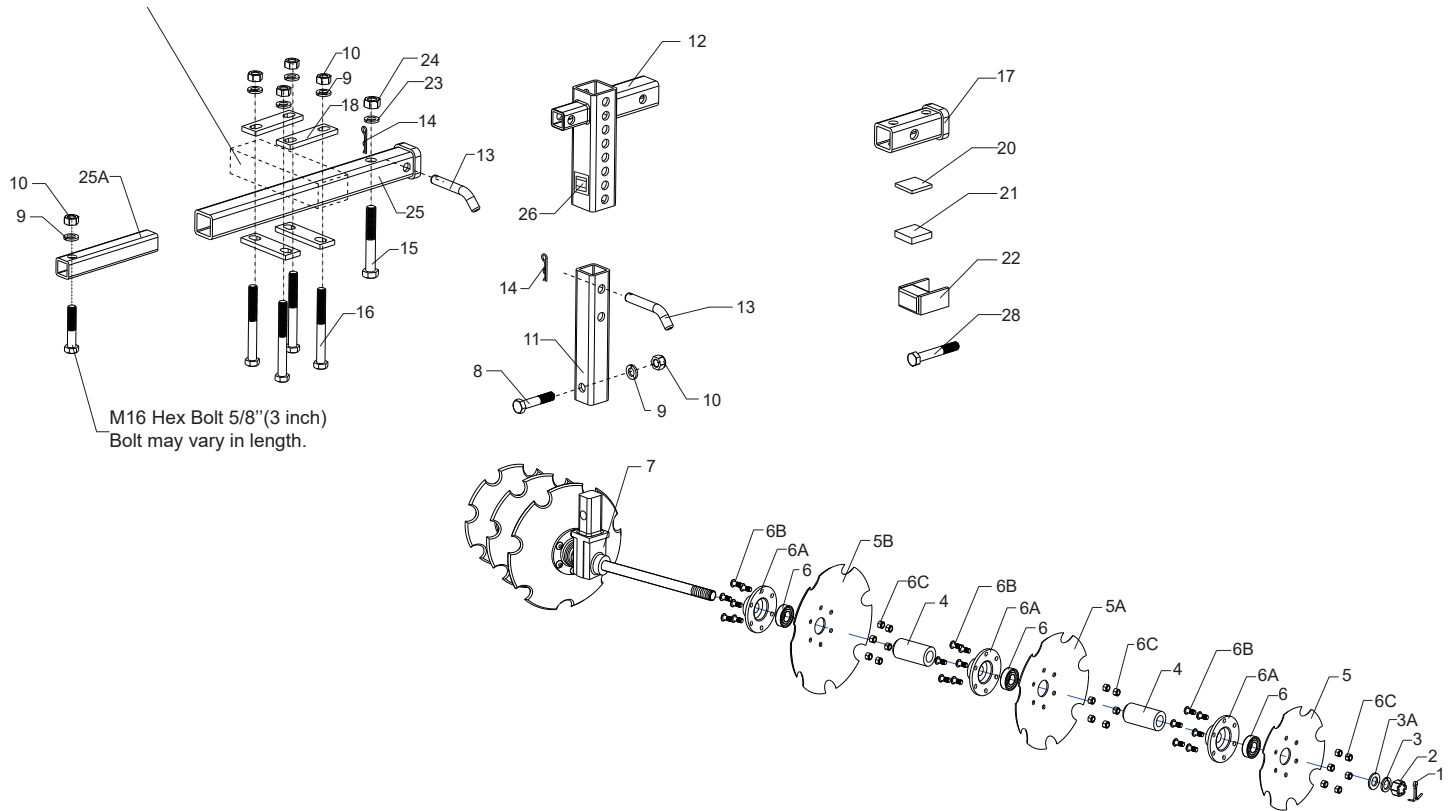
# PLOW & RECEIVER KIT ASSEMBLY SCHEMATIC

**NOTE** -The following drawing is shown for demonstration purposes. The 8", 9", and 10" blades and bearing assemblies can be purchased as complete units. See parts list on page 6 for part numbers.

**NOTE** -Loose "play" is intentional where part #11 slides into part #7. This allow "float" on uneven terrain. Axle assembly is pre assembled at factory.

Also, Part 6D in the following drawing has been replaced by part 6B.

This dotted line indicates an "Existing Cross Member" on an ATV.  
Its size and shape may vary. The space between it and part 25 will vary.  
Use parts 17, 20, 21, 22 FOR SPACERS as needed.

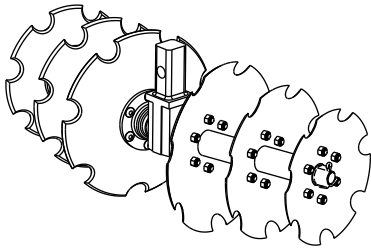


Parts on sketch above shows the complete Groundhog Max Plow including Hitch Kit. Some parts may not be used on some installs.

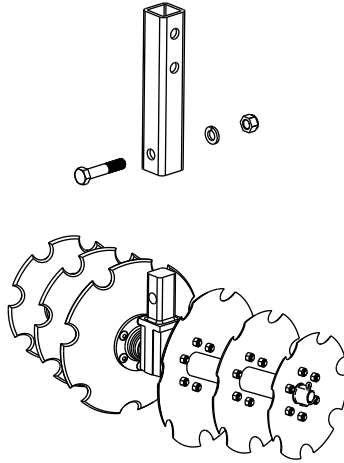
**Figure 5**

# ASSEMBLY

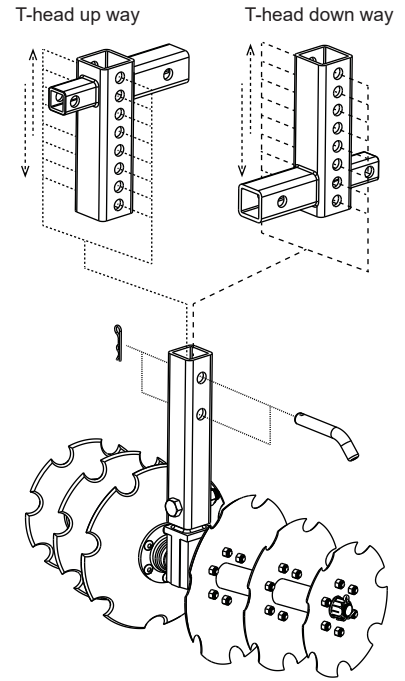
**Figure 1** is completed (assemble at factory)



**Figure 1**



**Figure 2**



**Figure 3**

• Slide part (H) onto axle assembly (I). Insert 5/8" bolt (J) through part (H) and axle assembly (I). Add 5/8" lock washer (K) and 5/8- inch nut (L) and tighten.

**NOTE** -Where H slides onto I (axle assembly) the "play" here is intentional. This allows "float" for uneven terrain.

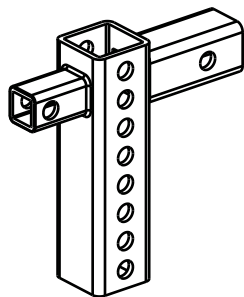
• Slide male T assembly (M, Fig. 3) onto height adjustment bar (H) as in Figure 3. Insert tractor pin (O) and secure with a cotter pin (N).

• The next section will show different ways to use these parts to make your GroundHog MAX ATV/UTV Disc Plow compatible with your vehicle.

## MULTI-USE PARTS

The following parts can be used in different ways to make your GroundHog MAX ATV/UTV Disc Plow compatible with your vehicle:

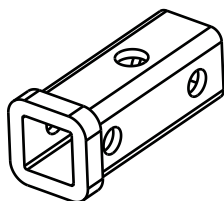
### MALE T CONNECTOR - Figure 6



- A) One side of the T-head fits into a standard 2" receiver.
- B) The other side of the T-head fits into the 21" and 5" receiver tubes included with the GroundHog MAX ATV/UTV Disc Plow with Hitch Kit.

**NOTE** - The Male T connector can also be turned upside down. This allows the up and down (height adjustment) to be more flexible. One way gives more length for height adjustment for large ATVs/UTVs with higher ground clearance. The other way minimizes the height for ATVs or UTVs with less ground clearance.

### 5" RECEIVER TUBE - Figure 7



- A) It can be used as a 5" receiver tube on some ATVs and other power sources if braced or welded.
- B) In a few installations it can be used as a spacer.
- C) Only comes with the Hitch Kit Version.

### TONGUE STRAPS (4 INCLUDED) - Figure 8



- A) These can be used to secure the 21" receiver tube onto the vehicle.
- B) They can be used as braces.
- C) They can be used as spacers.
- D) This part only comes with the Hitch Kit Version.

# BEARING REPLACEMENT, MAINTENANCE, & STORAGE

## BEARING REPLACEMENT

**NOTE** - Replacement bearing (Part 6) will fit all sizes of disc blades (8-9-10") respectively. The bearing will work installed either way.

**NOTE** - If necessary, use a rubber hammer to knock off the disc blades. Lubricating axle and bearings will help them slide on/off easier.

- 1) Determine which side you need to replace a bearing on. Be sure to take note as to how the axle assembly is put together before you take it apart. Pay attention to the way the spacer is placed.
- 2) Remove the keeper pin and remove the castle nut.
- 3) Slide the blades and spacers off until you get to the disc blade or bearing that needs to be replaced.
- 4) Once the bad disc blade is off carefully loosen and remove the anti-slide bolts and nuts from the bearing, and disc. This allows you to remove the bad bearing.
- 5) Put the new bearing in place on the disc blade and align it.
- 6) Re-install the 6 (six) anti-slide nuts and bolts through all but do not tighten for now. Slide the disc blade back onto the axle and gradually tighten nuts in a diagonal sequence until all are completely tightened. This step and its procedure are very important. Tightening bolts improperly can cause bearing to not seat correctly to disc.
- 7) Slide the disc blades/spacers back on in their proper order. (10-inch inside, 9-inch middle, 8-inch outside).  
**Note:** The small inside spacer for the 10-inch blade is welded in place and cannot be removed.
- 8) Re-install the castle nut and tighten down completely then back it off one-half turn or so (whatever the minimum is to be able to reinsert the keeper pin).
- 9) Re-insert the keeper pin. Bend this pin out properly so that it stays in place.  
**Note:** disc blade assembly.
- 10) Disc blades (parts 5, 5A, 5B) can be purchased separately, fully assembled.

## STORAGE

To store the GroundHog MAX ATV/UTV Disc Plow: Remove the plow from your ATV, visually inspect the plow, tighten and lubricate if necessary, and place in a safe storage area. Proper storage will prevent disc and bearings from rusting and degrading.

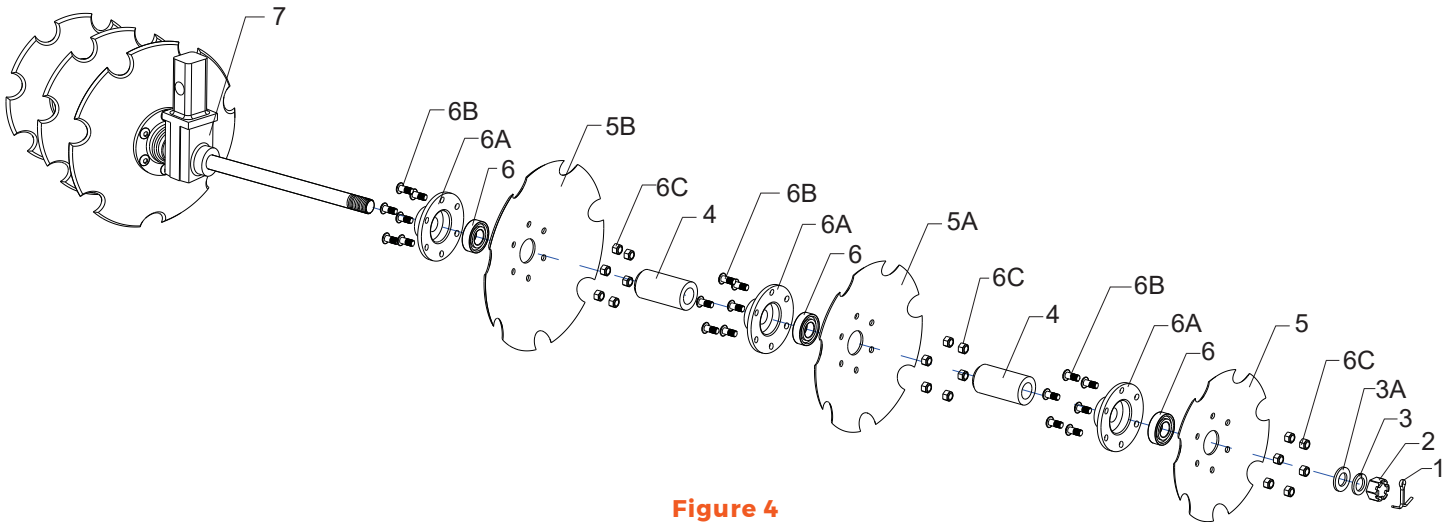


Figure 4

## FAQ (Frequently Asked Questions)

- 1) Can I use reverse when plowing?**

**A)** Yes, but it won't plow as well going forward. Reverse gives you the maneuverability to plow in tight places like pulpwood roads, firebreaks, and between pine rows. Only use reverse if necessary, as it puts more stress on your hitch.
- 2) Does it work on hard and/or rough ground?**

**A)** Yes. If your terrain is "difficult" the plow will work. It just takes more passes. The plow works well on hard, dry, rocky, grassy or any combination terrain. For best results plow in a combination of oblong circles, figure eights, and straight rows back and forth.
- 3) Does the plow work in wet bottomland?**

**A)** Yes. The plow will not bog down like a typical pull behind plow. The ATV controls the plowing depth. Remember the old saying, "Too wet to plow"? Certain soil types may clog the discs when wet. However, if your vehicle can go through it the plow can plow it. See troubleshooting page 23 picture C1 for DIY fix.
- 4) Can I use the plow if my ATV has a strong factory or after-market 2" receiver?**

**A)** Yes. The plow is all you need.
- 5) Can I use the plow if my ATV/UTV only has a factory utility hole or just has a lightweight 1 1/4" factory receiver?**

**A)** Yes. Many make and model ATVs and UTVs can use our receiver hitch kit. There are also receivers that can be ordered specific to vehicles year/make/model. See our website for links to buy.
- 6) How well is the product made?**

**A)** The product is made with high intensity heavy gauge steel. Each disc has its own high-speed double-sealed, deep groove bearings. The discs are installed with anti-slide bolts and nuts for easy replacement of bearings if necessary. All bearings are the same size. Discs are mounted on a 3/4" axle. This axle is then encased in a 1" steel pipe. This creates a closed system that does not require greasing. The GroundHog MAX ATV/UTV Disc Plow does not have ratchets. There are no tires to go flat and dry rot. It is practically maintenance free.
- 7) Is the product just for food plots?**

**A)** No. In addition to food plots the plow is used for landscaping, preparing and maintaining fire breaks and weed control, grooming horse arenas and dirt tracks. If you need to till the ground the plow will do it. In many cases it can be used to replace a tractor, especially for smaller jobs.
- 8) Can I leave the plow on my ATV/UTV while driving to my food plot site?**

**A)** Yes, in most instances. We call this feature "transport mode." However, every ATV/UTV is a little different. Here are some general guidelines: On some vehicles you simply flip the plow upside down and secure it in position with the tractor pin. On some vehicles flip the plow upside down, and adjust the plow head up or down until it clears the back of the vehicle by removing and replacing the tractor pin. Then simply secure it in position with the tractor pin. On a few machines you may not be able to use transport position due to the design of the rear-end.
- 9) Does the receiver hitch assembly have to be perfectly level and centered?**

**A)** No. However, get as close to level and centered as possible.
- 10) If I use the receiver hitch assembly can I still use my trailer ball and leave the receiver on permanently?**

**A)** Yes. Aftermarket Reese-type ball adapters are available.
- 11) Will the plow work on my 2x4 ATV?**

**A)** The plow will work on most 2x4 ATVs, but you cannot plow as aggressively due to traction loss. Many plow in 2x4 for easier steering.
- 12) Will the GroundHog MAX work on both independent rear suspension and straight axle ATVs?**

**A)** Yes. We have tested it on both.
- 13) How do I use the up/down adjustment tube to adjust the weight on the plow?**

**A)** The adjustment holes are in 1" increments. A good rule of thumb is, if you back your ATV up on a 4" x 4" block (to get your rear wheels up), let the plow come down and touch the ground. Then pull the plow upwards one hole and put your tractor pin in. Back off the 4" x 4" block and plow. You do not have to be too aggressive because a lot of the cutting is in the turns. That's why we recommend looping circles and figure eights if you can.
- 14) What are the average GroundHog MAX plowing speeds?**

**A)** According to the FOOD-PLOT lay-out and its size and shape, GroundHog MAX plowing speeds range from 3-10 mph. These are twice as fast as a Pull-Behind type plow. Unlike a pull behind plow, you never have to go to the trouble of adding/strapping on more weight or worrying about the plow tipping over. Pull behinds also put a lot of stress on your machine and it may overheat.
- 15) How long does it take to plow a plot?**

**A)** Time will be determined by the size of the plot and how hard the ground is (roots, rocks, grass systems, wet/dry, and ground clutter). The tougher the conditions, the more passes you have to make (virgin ground verses already been plowed etc). Plow in looping circles and figure eights because a lot of the cut is in turning and maneuverability. Keep in mind that the gap between the middle discs will go away if you plow in this manner. Plowing straight also works if you determine you are not using enough weight, adjust the T-head down a hole.
- 16) Why is the plow not wider?**

**A)** Our tests found this was the optimal size/disc design to cut the ground with heavy grasses, roots, rocks, sticks, and such. It needed to fit between the 2 rear tires for "direct down pressure". This size setup does not overly affect steering/strain on your machine. Being able to use more weight and having less steel on the ground is what makes it cut and handle so well. With its size your plowing speeds are much faster than with a wider pull-behind type.

# GENERAL HITCH INFORMATION - TABLE OF CONTENTS

Tech Support & Replacement Parts // **877.522.3364**

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# GENERAL HITCH INFORMATION

## PLOW WITH HITCH KIT INCLUDED

**NOTE** - This is normally a bolt on assembly.

• Converts your existing 3/4" utility hole or your square weak 1 1/4" receiver over to a strong square receiver hitch. This is mostly for Honda and Polaris work/ranch type machines.

## IMPORTANT - INSTALLATION NOTES FOR GROUNDHOG MAX HITCH KIT

The concepts/instructions/pictures of how you can install the GroundHog MAX hitch kit (**OPTION #3**) for a Honda and Polaris...many times can be used on other machines.

If your frame design is similar to Honda/Polaris (bottom of frame being fairly flat or having some existing "cross members") you may be able to use the GroundHog MAX kit. The concept of attaching a bolt through the frame or using strong hose/pipe clamps to attach to the frame can sometimes be utilized as the front anchor point. Your main anchor point is the existing 3/4" utility hole in the back or weak 1 1/4" receiver. Well placed tack welds, u-bolts, or square u-bolts can be used also.

**EXAMPLE** - Many Bombardier/Can AM usually have a strong flat "channel type" for a frame.

**NOTE** - Keep in mind that normally our long receiver hitch tube can be drilled/notched etc. to make an installation work without making the tube too weak to use. Use common sense and/or call us. Our kit is heavy duty using a 1/2" wall tube. This makes our collared tube very strong.

**NOTE** - Customers are using this hitch and plow on 1990's machines and even other power sources. Our Groundhog MAX hitch kit is considered a universal "type" of hitch kit because it fits many machines...but it is NOT a universal hitch kit for ALL the hundreds of different frames out there.

## IMPORTANT - Be Advised on Aftermarket Hitch Receivers

Many customers buy a NO KIT VERSION of the plow and then buy an aftermarket hitch that is specific for their year, make, model, and manufacturer of machine. Polaris and Honda owners most times prefer to use our kit (this kit fits some others units also).

2014-2019 Honda's - Rancher and Foreman owners both should NOT buy our Groundhog MAX Kit version of the plow. They should buy the NO KIT version and then buy an aftermarket hitch by Strong Made (RH119). See link below.

<http://strongmade.com/rh119---rear-receiver-hitch-for-honda-foreman-14-17-and-rancher-14-16.html>

**IMPORTANT** - 2015 & NEWER POLARIS RANGERS If you do use the plow be careful of your hitch... plow less aggressively by up/down adjustment settings ( in 1" increments). Set your tractor pin so you do not use too much weight. Remember on any side-by-side like a Ranger, you have "double" the weight of a 700 lbs. ATV.

All this weight is not required for the plow to work.

We recommend a DIY brace below to be sure.



**CAUTION** - 2015 & Newer POLARIS RANGERS If you do use the plow be careful of your hitch and plow less aggressively by up/down adjustment settings ( in 1" increments). Set your tractor pin so you do not use too much weight. On any side-by-side like a Ranger, you have "double" the weight of a 700 lbs. ATV. All this weight is not required for the plow to work.

### P6 Ranger DIY Brace

# INSTALLATION TIPS - WITH KIT

## GroundHog Max Hitch Kit - Anchoring / Bracing

If you're using the Groundhog MAX Hitch kit, remember this... The main anchor point... and load of the hitch system is (at the back) where your factory 3/4" utility hole is used, or where the 1 1/4" factory hitch assembly is used.

The secondary anchor point can be anywhere along the 20 inches of the receiver tube; if needed, you can use 25A extension tube for more length. This anchoring is towards the front, along the bottom of the frame. NOTE: this extension tube (25A) can be turned horizontal if you need to run a strap through it. The secondary anchor point primary purpose is to keep the receiver tube level and to prevent left to right movement.

**NOTE** - Some ATVs have an unusual hole pattern/frame. In these cases, the hole is not centered, but 2 holes will be side-by-side and off centered. A couple of strong, well placed screw-type hose/pipe clamps can be used. Place them under the receiver tube and up over the frame, then secure. This will hold our receiver tube tightly to the frame. Also, tack welds are sometimes used to secure our receiver tube to the frame.

**CAUTION** - for the Option using our kit (even though this hitch setup is attached in two places and distributes the up pressure on 20+ inches of your frame) still start plowing ONLY using part of your weight.

## General Tips for Installing the GroundHog Max with Hitch Kit

Normally a bolt on assembly for most Hondas, Polaris, and some other machines too. NOTE; On some models you may need to buy and use hose clamps/pipe clamps to attach our long hitch tube to the bottom of your frame.

The Groundhog hitch receiver system is strong, as it runs under the machine and is attached in 2 places. So when you are running over roots, rocks, sticks, etc. you are pushing up on 20-inches of the machine's frame. The plow's T-head can be turned upside down or right side up.

Remember, your primary hookup is at the back, either utilizing the existing utility hole as the main anchor point or the 1 1/4" assembly being the main anchor point. Your secondary hookup on the front of the receiver tube only holds the tube level and keeps it from going L/R so it does not require much to secure it in place.

If you buy the plow with the kit, there is hardware included in the box. The main piece of the kit is (part 25) a 20-inch long, 1/4" wall thick, collared receiver tube. The kit includes various other hardware including bolts/nuts/washers, tongue straps, spacers. Also included in the kit is a 9" long extension tube (25A) that slides in the long receiver tube (part 25) to make it longer to allow you to extend to a hole or cross member if needed.

There is an additional 5" long receiver tube (Figure 5 or part 17). Be careful if you use this receiver because it can only be properly used as a hitch receiver if it is DIY braced. Any bracing needs to offset some of the up pressure the plow puts on the machines hitch setup.

**REMEMBER** - In some cases, you may need to purchase some strong hose/pipe clamps and/or strong nylon straps/tie wraps. These can be used to cinch the receiver tube up to the bottom of your frame/skid-plate. They may or may not be needed for your application. See pictures P4, 5, & 6.

# HOW TO ATTACH / OPERATE / ADJUSTMENT / MAINTENANCE

## ATTACHMENT

1) Find a level spot and carefully back your rear tires up on 4" ramps (or a 4" alternative, like a piece of 4x4 wood that spans the 2 rear tires). Be advised that if you use a taller ramp it makes it harder to determine a proper depth setting for the plow. If ramps are not available or impractical, it is acceptable to back the rear tires onto a sturdy surface that elevates them by 4 inches. A section of 4x4 wood is a good example of an improvised lift. Be sure to follow all safety steps in order to prevent injury. It may be easier to leave a 4x4 block at your food plot). DO NOT just lift up the machine's rear end to install. This does not work and will only stretch out your suspension.

2) Attach once the machine is on the blocks/ramp, turn your machine off, put it in park and lock the parking brake, and chock the wheels. Slide your fully assembled plow (T-head) into your ATV receiver and lock it in with the first tractor pin. Now pull the second tractor pin out of the T-head to set the up/down adjustment. To start, allow the disc assembly to touch the ground from its position on the 4" blocks, slide the disc assembly back up two holes, and re-install your second tractor pin. This will allow the discs to touch the ground and be weighted enough to plow once the machine is backed off the blocks. These adjustment holes are in 1" increments, and only one tractor pin is needed in the T-head for locking the up/down adjustment in place. Remember this important adjustment note: The T-head can be turned right side up for machines with higher ground clearance or upside down for machines with lower ground clearance.



On all machines ONLY use part of your weight. A lot of the "cut" is in turns and maneuverability. NOTE: On any unit always start out less aggressive. If your model's 2" hitch has a factory split on its side, you need to re-enforce it.

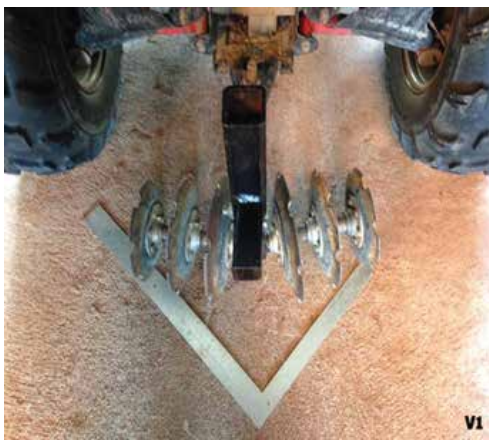


Remember, when handling the GroundHog MAX ATV / UTV Disc Plow always be extremely careful. There are sharp edges and moving parts. Failure to use caution may result in serious injury.

## OPERATION - MUST READ

1) Make sure the plow is facing in the proper direction before using. The plow has a slight arrowhead shape. The point should point backwards going away from the machine. See picture V1 & V2 below.

2) Make sure you start off less aggressively. Do not use too much weight because a lot of the cut is in turns and maneuverability. Normally you can find an adjustment hole that allows enough weight of the plow for it to work but run your machine in 2-wheel drive.



V1



V2

# HOW TO ATTACH / OPERATE / ADJUSTMENT / MAINTENANCE (Cont'd)

## ADJUSTMENT

1) The combined weight of the ATV (700 lb plus) and your weight (200 lbs.) is now putting direct downward force on the plow, allowing it to work. Remember a side-by-side/UTV's weight is 1200-1500 lbs. (double that of an ATV). Be CAUTIOUS to only use part of your weight.

2) Long-term Adjustment: after some experimentation, you will determine which hole works best for your particular setup. Normally the next time you use the plow you can use the same hole adjustment setting unless some conditions have changed. Another adjustment option some customers prefer is to set the adjustment hole to plow very light in the beginning then back up on the ramps again and let it down another hole. Using either of these approaches will "gradually" plow your plot down about 3-4" deep. The height adjustment needed will vary according to your year, make, model, tires, etc. and may take a few tries to properly adjust. Start-off less aggressively and adjust as needed.

3) Left/Right Movement: As you are adjusting, you may notice a lot of left to right "play" in the plow where the axle assembly goes into the up/down adjustment tube. This is intentional and allows the plow to float and adjust to uneven ground.

4) Plowing Production and Conditions: The time required to plow a spot will be determined by how hard the ground is (roots, rocks, grass systems, wet/dry, and ground clutter) The tougher the conditions the more passes you have to make. Plow in looping circles and figure eights to maximize your cut, and the gap between the middle discs will go away if you plow in this manner. However, plowing straight will also work. If you determine you are not using enough weight you can adjust the T-head down a hole.

5) The optimal plowing speed is approximately 5mph. Plowing forward in oblong circles and figure eights is much faster and more productive. You do not have to waste time stopping and shifting. Be sure to slow down when making turns with the plow engaged.

## MAINTENANCE



Owner should check and tighten (if necessary) all hardware after the first half-hour of operation. The break in stage of the plow can cause minimal loosening of hardware. Retighten hardware as necessary.

After the first use, be sure to check the disc blades for side-to-side movement. Some side-to-side movement is normal. If there is excessive movement tighten the castle nut and re-pin. Discs sometimes do not spin properly until after approx. 5 minutes of use. Keep in mind that discs will not free spin like a bike wheel. You should continue to check this after each use to get the longest life out of your GroundHog MAX ATV / UTV Disc Plow. Discs do not need to be sharpened, oiled, or greased. Lightly spray down the complete unit with WD-40...if stored for any length of time.

The plow will penetrate to approximately 4" deep. Based on soil conditions, it may take several passes to achieve this depth. The plow can be adjusted to a shallow depth setting to cover seeds.

Using Reverse: The plow can be backed up with the plow engaged (only if necessary), but it does put more pressure on your hitch. It does not plow well this way (since the discs would face the wrong direction). Use; reverse only when necessary for maneuverability. Note: Sometimes in certain soils, soft dirt, and if elevation is present reverse is not very useable. If you have to use reverse the plow will track with your vehicle

Transport Mode: Due to how the rear of some machines are laid out (racks, mufflers, frame etc.) transport mode does not work on all machine hitches. In this case, another easy option is to strap the Groundhog MAX to the front or back rack for transportation.

Storage: Remove the plow from your ATV, visually inspect the plow, tighten and lubricate if necessary. Place in a safe storage area. Proper storage will prevent disc and bearings from rusting and locking up.

# GENERAL INFORMATION - WITHOUT HITCH KIT

## PLOW WITHOUT HITCH KIT

### Option #1 - Plug & Plow

- Fits units with existing strong square 2" hitch receiver.

### Option #2 - Purchasing a Strong Aftermarket Receiver

- Fits any ATV (year 2,000 and newer) with the purchase of a strong square 2" receiver (order year, make, model specific).

**NOTE** - These aftermarket hitch kits you can buy are engineered to re-enforce and convert your existing hitch setup into a strong square 2" receiver. These aftermarket hitch kits are bolt on assemblies.

**NOTE** - 1999 and older see **Option #3, #4, or #5**. Call us if you have any questions at **877-522-3364**.

## AFTERMARKET HITCHES AND LINKS TO FIND THEM - FOR OPTION #2

These aftermarket hitches are year/make/model specific and normally go back to about year 2000. They convert your ATV/UTV's existing utility hole or receiver hitch (many have a weak 1 1/4") to a strong, forward braced, 2" square receiver. Once this hitch is installed your ATV/UTV becomes "Plug and Plow" ready! BEWARE: The "cheap" 2" receivers that are attached to the utility hole with one bolt, or the "cheap" 2" receiver that slides into the weak 1 1/4" receiver DO NOT WORK very well if used alone and will bend. To work at all they must be reinforced to make them stronger and offset the up-pressure of the plow. See our website for a listing of links to buy.

Polaris and Honda owners most times prefer to use our kit but they still have the same option to buy these aftermarket hitches for their unit.

**CAUTION** - 2014 & Newer Hondas: Rancher and Foreman owners both should NOT buy our Groundhog MAX Kit version of the plow. They should buy the NO KIT version and then buy an aftermarket hitch by Strong Made (RH119). See link below.

<http://strongmade.com/rh119---rear-receiver-hitch-for-honda-foreman-14-17---and-rancher-14-16.html>

## INSTALL TIPS - WITH HITCH KIT INCLUDED

**Option #3 - Bolt On/Clamp On Assembly** - The Groundhog MAX with Hitch Kit converts your existing ¾" utility hole or weak 1 ¼" square receiver over to a strong 2" receiver (primarily Honda and Polaris applications). It can also fit some other units with the same installation concept.

**NOTE** - Our Groundhog MAX hitch kit is considered a universal "type" of hitch kit because it fits many machines, but it is NOT a universal hitch kit for ALL the hundreds of different frames out there.

**NOTE** - The clamps and straps are not provided in the Groundhog hitch KIT, but this hardware can be an easy fix for your hookup. Always install your spacers and washers where needed. It is always much stronger to tighten metal to metal to secure. The receiver tube does not have to be perfectly level nor does it have to be perfectly straight to plow. The Groundhog MAX collared receiver tube is made out of ¼" steel. It has plenty of integrity and strength to be drilled/notched/altered etc. and still do the job.

### HOSE/PIPE CLAMPS

- They should be approx. 1/2" wide
- These are like you would put on a cars heater hose and screw down to tighten.
- Can be put together for longer lengths.
- Can come wider as well. They also come in stainless steel for strength.

### GENERAL NOTES ON STRAP TIES/NYLON STRAPS

- Should be at least 1/2" wide, but just basic standard issue versions have been used with success
- They can be put together for longer lengths.
- They can come wider as well.
- They also come in industrial strength.

See website for YouTube link for GroundHog MAX hitch installation.

### Option #4 - Take it to a fabrication shop or a good welder.

Pre - year 2000 machines and others. (normally for \$35 to \$50 they can fix you up) NOTE: BE SURE TO ADVISE them that the plow has "up Pressure" not tongue weight).

**IMPORTANT** - IF YOU DECIDE TO DO EITHER OPTION #3 OR #4 SEE A OR B BELOW FOR YOUR HARDWARE options.

A) You can buy and use a Collared 2" square receiver in 6" long and 12" long versions.

B) You could take our GroundHog MAX kit to the Fabrication shop (if you did already purchase the kit and the bolt on application will not work for your unit). In most cases, they can utilize the kit's hardware/hitches for attaching it.

**Option #5 - DIY** - Pre-year 2000 machines and most others.

**NOTE** - BE SURE TO take into consideration that the plow has "up Pressure," not tongue weight.

# HOW TO ATTACH GROUNDHOG MAX - WITH KIT - FOR HONDAS

## IMPORTANT

**2014-2019 Hondas** - Rancher and Foreman owners both should NOT buy our Groundhog MAX Kit version of the plow. They should buy the NO KIT version and then buy an aftermarket hitch by Strong Made (RH119). See link below.

<http://strongmade.com/rh119---rear-receiver-hitch-for-honda-foreman-14-17-and-rancher-14-16.html>

The Groundhog MAX receiver kit will be attached in 2 places. Look at the link below to make your determination. SEE pictures and drawings H1 2 3 4 for most work/ranch related Hondas

[www.groundhogmax.com/groundhog-max/hitch-options](http://www.groundhogmax.com/groundhog-max/hitch-options)

**INSTALL NOTE** - These hose/pipe clamps and tie wraps/straps discussed may be an easy way to attach BOTH older and newer Hondas. Not included in box.

Honda has (2) MAIN types of frames. The Groundhog Max KIT will work on MOST. There are a few exceptions that may require and extra steps.

Honda's main anchor point on (BOTH OLDER THAN 2007 AND NEWER THAN 2008 FRAMES) is always the  $\frac{3}{4}$ " utility hole in the (rear)... the receiver tube bolts to the machine by utilizing your  $\frac{3}{4}$ " existing utility hole with a  $\frac{3}{4}$ " bolt/nut.

See diagram H 1 below;

### OLDER THAN 2007 TYPE FRAMES MAIN ANCHOR POINT

FOLLOW STEP #1 - See H1 2 3 below.

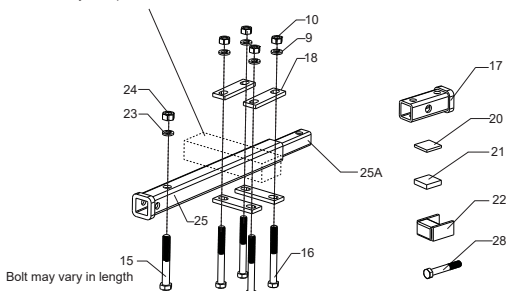
STEP #1 To Assemble Honda's rear main anchor point, install the 21" collared receiver tube (Part 25) underneath the factory utility hole assembly. Secure it to the ATV by placing a  $\frac{3}{4}$ " bolt (part 15) through (part 25) and the factory utility hole. Place lock washer (part 23) and nut (part 24) onto bolt (part 15) tighten loosely, filling any voids with washers/spacers as needed.

### OLDER THAN 2007 TYPE FRAMES YOUR SECONDARY ANCHOR POINT SEE PICTURE H1, 2, & 3

STEP #2 HONDA secondary receiver tube attachment point can be anywhere along the 20 inches of the receiver tube. If needed, use 25A extension tube for more length. This is towards the front, along the bottom of the frame on many Hondas and on some others it is ATTACHED/SANDWICHED with a bolting assembly to the existing standard rectangle or round shaped cross member on the HONDA. Hardware provided.

**NOTE** - On the GroundHog MAX hitch kit the primary purpose for the secondary attachment point is to keep the receiver tube level and prevent left/right movement. It does not take too much to hold it. To install, place the (1)  $\frac{1}{2}$ " spacer (part 22) or  $\frac{1}{4}$ " spacer (can be used under the  $\frac{1}{2}$ " winged spacer block on top of the 21" receiver tube (part 25) at the point where the ATV has a left to right cross brace. To make part 25 as level as possible fill any voids with other spacers (parts 20, 21) or washers if needed. In some cases, where voids are large you may use the 5" receiver tube (part 17) as a spacer. All parts may not be used.

This dotted line indicates an "Existing ATV Cross Member". Its size and shape may vary. The space between it and part 25 will vary. Use parts 17, 20, 21, 22 FOR SPACERS as needed.



H1



H2



H3

## HOW TO ATTACH GROUNDHOG MAX - WITH KIT - FOR HONDAS (Cont'd)



**H4**

### **NEWER THAN 2008 TYPE FRAMES**

HONDA's REAR main anchor point is the same as older Hondas. FOLLOW STEP #1 above.

### **NEWER THAN 2008 TYPE FRAMES**

HONDA's secondary anchor point with a wider (5-6" concave type) cross member. You can attach anywhere along the 20 inches of the receiver tube. If needed, use 25A extension tube for more length. This is towards the front along the bottom of the frame. Due to this frame being different, hose/pipe clamps may need to be used. (not provided)

Hose/pipe clamps used should be approx.-1/2" wide, (2) 18-20" long clamps for Honda. You can put 2 short ones together to make a long one. There are several ways customers traverse the cross member.

1) Go straight up and over or Crisscross the clamps as you go up and over the cross member. Install one clamp on each side of the receiver tube.

2) In some cases, strap through the 9" extension tube part 25a. Part 25a can turn sideways so the 5/8" hole is horizontal to the ground. You can run the clamp through the hole and go up and over the cross member.

3) In some cases, you can use 2 of the tongue straps that are provided on the bottom of the receiver tube. Run your hose clamps/straps through these on each side of the tube and go up and over the wider cross member.

**NOTE** - In picture H4 above, the hitch receiver tube goes all the way under the existing wide cross-member.

**NOTE** - THE Groundhog MAX KIT FITS SOME older (pre-2000) HONDA year/make/models... Having an existing workable cross member is the key.



# HOW TO ATTACH GROUNDHOG MAX WITH KIT - FOR POLARIS

**INSTALL NOTE** - These hose/pipe clamps and tie wraps/straps discussed may be an easy way to attach BOTH older and newer Polaris (secondary anchor points). Hose/pipe clamps should be approx - 1/2" wide, (2 ) 8-10" long clamps for Polaris (in most cases). They would go around the receiver tube and over the frame/skid plate and cinch up to the frame's bottom.

ALL POLARIS- the main anchor point is in the (rear) of the receiver tube and attaches to the machine either;

- A) By utilizing a 3/4" bolt through the 3/4" utility hole (OLDER TYPE FRAMES older than 2008)
- B) Assembling under the 1 1/4" weak factory square hitch assembly (FOR NEWER TYPE FRAMES 2009 and newer).
- C) With extra steps, most Magnums, some Explorers, and some Chain drives can work. Call tech support.

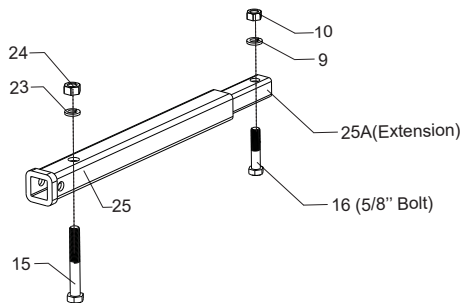
**NOTE** - On the Groundhog MAX hitch kit, the primary purpose for the secondary attachment point is to keep the receiver tube level and prevent left/right movement. It does not take too much to hold it. Attachment can be anywhere along the 20 inches of the receiver tube. If needed, use 25A extension tube for more length. This is towards the front, along the bottom of the frame. This is a very strong assembly since it attaches in 2 places. It distributes the up pressure on 20 inches of your frame. The receiver tube does affect ground clearance but is a bolt-on attachment that can be removed. The installation instructions above cover most Honda, Polaris, and even some other machines, but not all.

Polaris has (2) types of frames. The Groundhog Max KIT will work on MOST.

- 1) OLDER than 2006 has just a 3/4" "utility hole in the rear.
- 2) NEWER THAN 2007 has a weak 1 1/4" square receiver. See P3, 4, & 5.

**NOTE** - Polaris Rangers - See picture P6 on page 13.

**NOTE** - The receiver will be attached in 2 places. See diagram P1 and pictures P2 below. THIS IS A POLARIS HOOK-UP WITH THIS "OLDER TYPE FRAME" (has a 3/4" utility hole only).



P1



P2



P3



P4



P5

# HOW TO ATTACH GROUNDHOG MAX WITH KIT - FOR POLARIS (Cont'd)

## OLDER MODEL POLARIS

### STEPS IF YOUR POLARIS' "REAR MAIN ANCHOR POINT" HAS A 3/4" UTILITY HOLE (where a ball hitch goes).

This is an "older model" polaris frame (2006 and older). See diagram P1 and picture P2 on page 21.

**STEP 1** - Install the 21" collared receiver tube (Part 25) underneath the factory utility hole assembly. Secure it to the ATV by placing a 3/4" bolt (part 15) through part 25 the collared end and the factory utility hole. Now put the nut/washer on loosely at this point.

**STEP 2** - Place lock washer (part 23) and nut (part 24) onto bolt (part 15). Tighten loosely filling any voids with washers/spacers as needed. See diagram P1 & pic P2. The secondary anchor point can be anywhere along the 20 inches of the receiver tube. If, needed, use 25A extension tube for more length. This is towards the front, along the bottom of the frame. Note: reference pictures P4, and P5 for another possible option with clamps for the older units also.

**STEP 3** - Slide the 9" extension tube (part 25-a) into receiver tube (Part 25). Place 5/8" bolt (part 28) medium length or (part 8) short length depending upon space through the tube and frame (utilizing the existing hole in the middle of the frame of your ATV. Install the bolt going upwards through the frame and add a washer on top of the frame for strength if possible. If you need to drill a hole in our tube you can do so. You can drop down and use a smaller bolt or drill even a 7/16" hole through the tube and/or frame if you need to for the attachment.

**STEP 4** - Fill any voids with a washer/spacer between extension tube and the frame. The, gradually tighten all nuts securely on both ends.

## NEWER MODEL POLARIS - 2007 & NEWER

If your polaris has an existing 1 1/4" square receiver, this is a "newer model type" different polaris frame. See picture (p3, p4, and p5 on page 21) for Polaris that have a weak factory 1 1/4" square receiver hitch assembly in back (not a utility hole). Remember try to keep the tube as close to the rear of the unit as possible without interfering with anything.

**IMPORTANT** - See website for GroundHog MAX hitch install YouTube link.

**STEP 1** - POLARIS REAR MAIN ANCHOR POINT Install (2) long 5/8" bolts (part 16) up through the bottom tongue strap (part 18) and the existing triangular chain keeper slots 1 1/4" Polaris factory receiver hitch. Put another tongue strap (part 18) on top of the assembly. Only tighten loosely at this point. Remember to keep the end of the GrounHog MAX receiver tube as close to the end of the factory 1 1/4" receiver as possible.

**STEP 2** - Secondary anchor point can be anywhere along the 20" of the receiver tube. If needed, use 25A extension tube for more length. This is towards the front, along the bottom of the frame. On these newer Polaris frames, you may attach the receiver tube several different ways according to the way your frames hole pattern is designed. See picture P4 and P5 below

A) Attach the receiver tube with a bolt through an existing hole in the center of the frame

B) Cinch the tube up to the frame with strong hose/pipe clamps (not included in the kit) in one place or possibly many times there are two sets of two holes (total of 4 holes).

**NOTE** - Some machines have an unusual hole pattern/frame where the hole is not centered. In many of these cases you will find two holes side-by-side and off center. A couple of strong, well-placed screw-type hose/pipe clamps can be used. Place them under the receiver tube and over the frame, then secure. This will work well to hold our receiver tube tightly to the frame. Also, tack welds can be used to accomplish this. THIS APPROACH may be used on some Hondas and other machines too. Some customers additionally secure with strong nylon tie wraps/straps to do this. If you need to drill a hole in our tube you can do so. You can drop down and use a smaller bolt or drill even a 7/16" through the tube and/or frame if you need to for the attachment.

**STEP 3** - Gradually tighten all nuts/clamps/straps securely on both 21" receiver tube (part 25) into 9" extension tube assembly (part 25-a).

**NEXT** - Place the Groundhog Max plow T-head (part 12) into the 21" receiver tube (part 25) and secure with provided tractor pin (part 13) and cotter key (part 14). T-head can be turned upside down also if needed.

# TROUBLESHOOTING

**PLOW NOT WORKING AS YOU EXPECTED** -Remember this is an ATV not a tractor, adjust expectations accordingly..

1) **The direction of the plow.** The arrow shape created by the plow should be pointing away from the machines. This is a frequent issue and sometimes why the hitch bends.

2) **The hitch has bent backwards at an angle.** This can be caused by the plow being installed backwards, trying to use too much weight, weak hitch setup, DIY error, or some combination of these. In order for the plow to engage the ground properly, it needs to set up vertically at a 90-degree angle (or as close as possible) and as close to the back of the machine as possible.

3) **Installation Error** Attempted to install the plow by manually picking up the rear of the machine rather than utilizing 4" blocks. This only stretches out the suspension and prevents the machine's weight from being used properly

4) **Ground conditions.** This is only an ATV and not a tractor and does have some limitations. The harder the dry/wet ground is with roots, rocks, grass, sticks, ground-clutter etc. the more passes you may have to make. Plow in looping circles and figure eights as well a straight to increase performance. Plowing speeds should range from 5-7mph according to how your food-plot is laid out.

5) **Check weight distribution.** Do not use too much weight. You are working to find the "sweet spot" in adjustment, which allows enough weight on the plow to work while still allowing you to pull in 2-wheel drive. Using the proper weight is accomplished by the adjustment of the up/down tube the T-Head slides. This is vital to the working of your Groundhog MAX plow.

## AVOID THESE MISTAKES

1) Using a weak low quality 2" receiver converter that only uses 1 bolt through the utility hole. It is prone to twisting and will likely bend your hitch. Or using a 1 1/4" inch to 2" converter that just sits on top of the 1 1/4" inch, as it will often bend after little use. To make the 1 1/4" hitch work, see Polaris section of this manual (pictures P 3, 4 ,5)

Both would need to be reinforced/braced/welded to offset the plows up pressure.

2) Having an additional person sit on the machine. No extra weight is needed to work.

3) Never reading/looking at the website, manual, or guidelines

4) Improper DIY installs/hook-ups

**REMEMBER** - The hook up to your machines Hitch is critical. There are very few potential issues with the actual plow but some issues with attaching it to some machines. Proper attachment to your machine is the key.

## IF THE PLOW CLOGS IN WET CONDITIONS (DIY Fix)



When it's wet to plow with your Groundhog Max, your discs may begin clogging up and turning into "dirt wheels." You can try waiting until the ground dries out more, but that may be a while. If the soil is very dark and rich, it may also contain a good amount of clay that can pack in around the discs in certain conditions. To make the Groundhog Max usable in these conditions, consider using a disk scraping system to keep it cleaned out. See attached self-explanatory picture of the fix that will keep your plow running like a champ. It consists of just a 19" long piece of 5/8" threaded steel rod, 14 nuts to thread onto the rod, and 4 pieces of heavy gage fencing wire that "loops" the axle.

**NOTE** - In most cases this is not needed.

**C1**

# WARRANTY

GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories warrants this product to be free from defect in material and workmanship. Except as otherwise set forth below, the duration of this Warranty shall be for NINETY (90) DAYS COMMENCING ON THE DATE OF DELIVERY OF THE PRODUCT TO THE ORIGINAL PURCHASER.

Under no circumstances will this warranty apply in the event that the product, in good faith opinion of GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories, has been subjected to improper operation, improper maintenance, misuse, or an accident. This warranty does not apply in the event that the product has been materially modified or repaired by someone other than GroundHog ATV/UTV Disc Plow or Bad Dawg Accessories. The Warranty does not cover normal wear or tear, or normal maintenance items. This warranty also does not cover repairs made with parts other than those obtained through GroundHog ATV/UTV Disc Plow or Bad Dawg Accessories

This Warranty is extended solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third party, this Warranty does not transfer to the third party purchaser in any way. There are no third party beneficiaries of this Warranty.

GroundHog ATV/UTV Disc Plow or Bad Dawg Accessories makes no warranty, express or implied, with respect on any parts or accessories not manufactured ATV/UTV Disc Plow and Bad Dawg Accessories Warranties for these items, if any, are provided separately by their respective manufacturers. GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories obligation under this Warranty is limited to, at GroundHog ATV/UTV Disc Plow or Bad Dawg Accessories option, the repair or replacement, free of charge, of the product if GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories, in its sole discretion, deems it to be defective or in noncompliance with this Warranty. Such parts shall be provided by the selling dealer to the user during regular working hours.

If requested, the product must be returned to GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories with proof of purchase within thirty (30) days after such defect or noncompliance is discovered or should have been discovered, routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid. GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories shall complete such repair or replacement within a reasonable time after GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories receives the product.

THERE ARE NO OTHER REMEDIES UNDER THIS WARRANTY. THE REMEDY OF REPAIR OR REPLACEMENT IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY.

GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories shall not be liable for any incident or consequential losses, damages or expenses, arising directly or indirectly from the product, whether such claim is based upon breach of contract, breach of warranty, negligence, strict liability in tort or any other legal theory. GroundHog ATV/UTV Disc Plow or Bad Dawg Accessories obligation under this warranty, to the extent allowed by law, is in lieu of all warranties, implied or expressed for a particular purpose and any liability for incidental and consequential damages with respect to the sale or use of the items warranted. Such incidental and consequential damages shall include but not be limited to: transportation charges other than normal freight charges; loss of crops or any other loss of income; rental of substitute equipment, expenses due to loss, damage, detention or delay in the delivery of equipment or parts resulting from acts beyond the control of GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories.

This Warranty is subject to any existing conditions of supply that may directly affect GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories ability to obtain materials or manufacture replacement parts.

This warranty is subject to the warranty registration being submitted. For warranty services, contact GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories 1-800-566-1691 or 1-877-522-3364

# WARRANTY FOR PARTS

GroundHog MAX by GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories warrants its parts to be free from defect in material and workmanship for a period of ninety (90) days from the date of delivery of the part(s) to the original purchaser.

Replacement or repair parts installed in the equipment covered by warranty are warranted for ninety (90) days from date of purchase of such part or to the expiration of the applicable new equipment warranty period, whichever occurs later.

Under no circumstances will this warranty apply in the event that the parts, in good faith opinion of GroundHog MAX by GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories, has been subjected to improper operation, improper maintenance, misuse, or an accident. This warranty does not apply in the event that the product has been materially modified or repaired by someone other than GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories. The Warranty does not cover normal wear or tear, or normal maintenance items. This warranty also does not cover repairs made with parts other than those obtained through GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories.

This Warranty is extended solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third party, this Warranty does not transfer to a third party purchaser in any way. There are no third party beneficiaries of this Warranty.

Our obligation under this Warranty is limited to, at GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories option, the repair or replacement, free of charge, of the product if GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories, in its sole discretion, deems it to be defective or in noncompliance with this Warranty. The selling dealer shall provide such parts to the user during regular working hours. If requested, the product must be returned to GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories with proof of purchase within thirty (30) days after such defect or noncompliance is discovered or should have been discovered, routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid.

GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories shall complete such repair or replacement within a reasonable time after GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories receives the product. THERE ARE NO OTHER REMEDIES UNDER THIS WARRANTY. THE REMEDY OF REPAIR OR REPLACEMENT IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE OF THIS WARRANTY.

GroundHog MAX ATV / UTV Disc Plow and Bad Dawg Accessories shall not be liable for any incidental or consequential losses, damages or expenses, arising directly or indirectly from the product, whether such claim is based upon breach of contract, breach of warranty, negligence, strict liability in tort or any other legal theory. Without limiting the generality of the foregoing, GroundHog MAX ATV/UTV Disc Plow and Bad Dawg Accessories specifically disclaims any damages relating to (i) lost profits, business, revenues or goodwill; (ii) loss of crops; (iii) loss because of delay in harvesting; (iv) any expense or loss incurred for labor, supplies, substitute machinery or rental; or (v) any other type of damage to property or economic loss.

This Warranty is subject to any existing conditions of supply that may directly affect GroundHog MAX ATV / UTV Disc Plow and Bad Dawg Accessories ability to obtain materials or manufacture replacement parts.

This warranty is subject to the warranty registration being submitted. For warranty services, contact

## Owner Registration:

Name \_\_\_\_\_ Address \_\_\_\_\_

Dealer Name \_\_\_\_\_ City/State/Zip Code \_\_\_\_\_

Date of Purchase \_\_\_\_\_ Model Number \_\_\_\_\_

# **GROUND HOG** **MAX** **ATV/UTV DISC PLOW**

Tech Support & Replacement Parts // **877.522.3364**

1 Bad Boy Blvd. // Batesville, Arkansas 72501

**90 DAY MANUFACTURERS WARRANTY**

**GroundHogMax.com**