

ATV Plow Tube System

RevC 9/16/2020

Manual Conventions

This manual uses the following symbols to help differentiate between different kinds of information. The safety symbol is used with a key word to alert you to potential hazards in operating and owning a plow.

Follow all safety messages to avoid or reduce the risk of serious injury or death.

DANGER

DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

To help you make informed decisions regarding safety, we have included instructions and information on labels. This information is provided with the intent to help avoid potential hazards that may harm you or others. It is, in no way, possible for us to inform you of every hazard you may come across with this product.

CAUTION

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

NOTE

If you have questions regarding your plow, we can help. Please call our help line at 1-877-346-2050.

Safety Rules

WARNING

- Read this manual thoroughly before operating your plow. Failure to follow instructions could result in serious injury or death.
- Do not exceed 5 mph, even with blade raised.
- Make sure that all nuts and bolts are tightened per installation instructions.
- Never operate this Open Trail product with missing or damaged parts.
- Drive slowly over bumpy and rough terrain, driving fast could cause damage to winch (if applicable) or plow.
- Never raise the plow above point of contact as it could cause damage to machine or winch (if applicable).
- Always perform regular inspections and maintenance on plow tubes and hardware before use.
- Operate with extreme caution on slopes, steep grades, and rough terrain.
- Be aware of any possible hidden objects under the snow.
- Do not ram the blade into the pile.

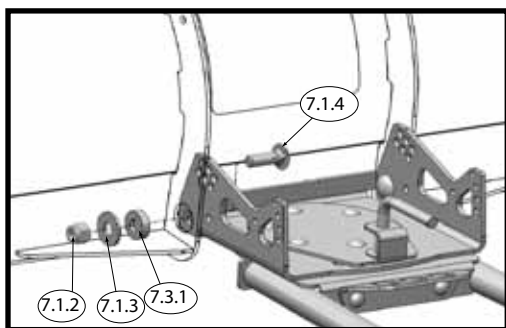
CAUTION

- Take care when installing PLOW SPRINGS as they will be under tension.
- Use care when lifting components into place.

DANGER

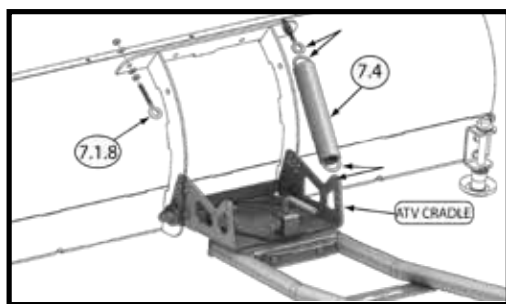
Never stand or ride on the plow.

Installation Instructions



“Figure 1” Pivot Bolt Assembly

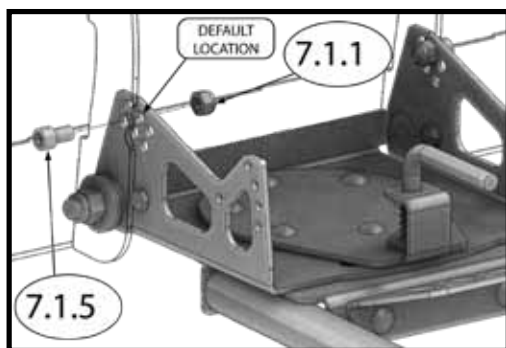
1. To secure the blade to the tube system, place the pitch bushing (Item 7.3.1) into the hole in the blade gusset. Secure the tube system and the blade together with the Items 7.1.4 carriage bolt, 7.1.3 washer and 7.1.2 lock nut, as shown in Figure 1. Repeat on other side.



“Figure 2” Spring Assembly

2. Insert the plow springs (Item 7.4) into the top smaller rear holes in the ATV cradle, as shown in Figure 2. Place the eyebolts (Item 7.1.8) onto the end of the plow springs and secure the eyebolts onto the plow blade gusset, as shown in Figure 2. Leave spring tension loose as you will decide tension in Step 5.
3. Assemble on machine and decide desired pitch of blade. (Blade pitch controls the angle of which the blade contacts the ground.) Each hole is 5 degrees of blade pitch adjustment.

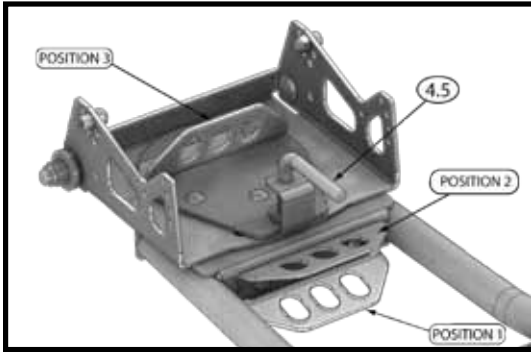
Note: Figure 3 shows the default position. Recommended for proper blade level.



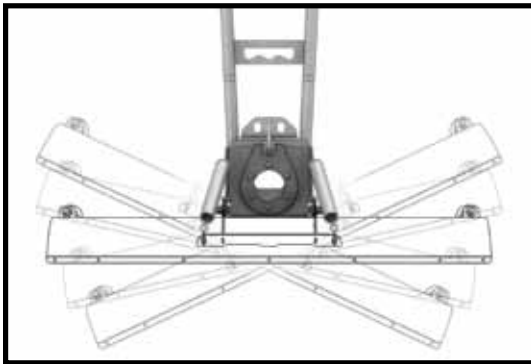
“Figure 3” Pitch Adjustment Bolt
(Spring not shown for clarity.)

4. With springs installed pitch blade under tension and install Items 7.1.5 socket head cap screw and 7.1.1 lock nut into desired pitch position hole.
5. Tighten nuts down on eye bolt until desired spring tension is reached.

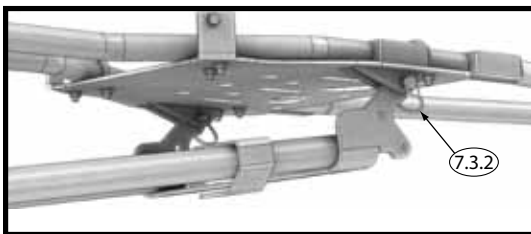
Note: For each 1/4" that the nut is tightened it will add 12 lbs of spring



“Figure 4” Lift Hook Attachment Positions



“Figure 5” Blade Rotation Angle



“Figure 6” Tube System Attachment

tension.

6. Install lift hook bracket. The tube system has 3 positions for the lift hook bracket. Choose best position for desired lift height and cable/rope angle.

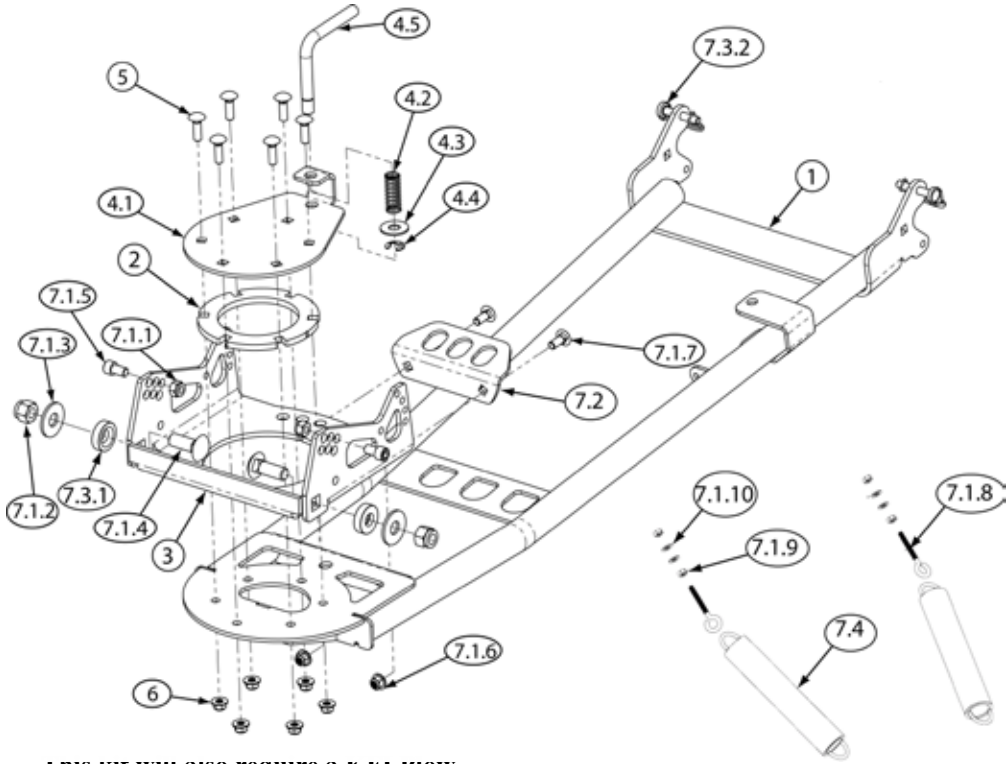
Position 1 is the default position allowing more clearance between winch and bracket

Position 2 uses the same bolt holes, but in this case the bracket is flipped over.

Position 3 is used for machines where the cable is at a severe angle, such as upper mounted winches.

7. The tube system has five positions of rotation for your blade (Figure 5). Each adjustment is at 12.5 degree increments. In order to make each adjustment you will need to pull on the Pull Pin (Figure 4, Item 4.5) and rotate your blade left or right until you reach the desired angle.

8. To attach the tube system to any of our mounts, position the tube system with blade installed under your ATV. Raise tube attach points to the mount and line up the holes on mount plate with the holes in the tube system. Insert Safety Pin (Item 7.3.2) through holes and secure on other side with clips as shown in Figure 6.



THIS KIT WILL ALSO REQUIRE A KIT FROM Blade kit, a vehicle specific Plow Mount and Winch for lifting the system.

Part# 105000 Parts List

ITEM	PART#	DESCRIPTION	QTY.
1	105019	LIFT ARM WELDMENT	1
2	105018	PIVOT BUSHING RING	1
3	105016	ATV CRADLE	1
4	105139	LIFT LOCK LATCH ASSEMBLY	1
4.1	105025	LIFT LOCK PLATE	1
4.2	P800267	COMPRESSION SPRING	1
4.3	P8900007	9/16" FLAT WASHER, SAE	1
4.4	P800268	EXTERNAL RETAINING RING	1
4.5	105026	PULL PIN	1
5	P890000	3/8"-16 X 1 1/4" CARRIAGE BOLT	6
6	P890015	3/8"-16 HEX FLANGE LOCK NUT	6
7	105150	KIT - ATV PUSH TUBE PARTS	1
7.1	HK-176	TUBE HARDWARE KIT	1
7.1.1	HNN-Z-044-14	7/16"-14 NYLOCK NUT	2
7.1.2	HNN-Z-063-11	5/8"-11 NYLOCK NUT	2
7.1.3	FW-USS-Z-063	5/8" USS FLAT WASHER	2
7.1.4	CB-5Z-063-11-175	5/8"-11 X 1 3/4" CARRIAGE BOLT	2
7.1.5	SHS-Z-044-14-075	7/16"-14 X 3/4" HEX S.H.C. SCREW	2

ITEM	PART#	DESCRIPTION	QTY.
7.1.6	HNFN-5Z-038-16	3/8"-16 HEX FLANGE LOCK NUT	2
7.1.7	CB-5Z-038-16-100	3/8"-16 X 1" CARRIAGE BOLT	2
7.1.8	P800249	5/16"-18 X 9/16" X 3 3/8" EYEBOLT	2
7.1.9	HN-5Z-031-18	5/16"-18 HEX NUT	4
7.1.10	FW-SAE-Z-031	5/16" FLAT WASHER, SAE	4
7.2	105138	LIFT HOOK BRACKET	1
7.3	105209	KIT - ATV BUSHING/PIN	1
7.3.1	105214	PITCH BUSHING	2
7.3.2	P800250	SAFETY PIN	2
7.4	P800304	PLOW SPRINGS	2



2 Year Limited Warranty

Kappers Fabricating, Inc. (KFI) warrants to the original purchaser that the product is free from defects in materials and workmanship for a period of two (2) years from the original date of purchase. We will repair or replace, at our discretion, parts found to be defective due to materials or workmanship. This warranty is subject to the following limitations and exclusions:

Commercial Use: The warranty period for any product used for commercial or rental is limited to ninety (90) days from the date of original purchase.

Limitations: This warranty applies only to products which have been properly assembled, adjusted, and operated in accordance with the instructions contained within this manual. This warranty does not apply to any product of Kappers Fabricating, Inc. that has been subject to alteration, misuse, abuse, improper assembly or installation, or shipping damage.

Exclusions: Excluded from this warranty are normal wear, normal adjustments, and normal maintenance.

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Some states do not allow the exclusion of implied warranties or the exclusion or limitation of liability for incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights. You may also have other rights that vary from state to state.

In the event you have a claim under this warranty, contact KFI's Technical Service and KFI will troubleshoot any issue via phone or e-mail. If the problem is not corrected by this method, KFI will, at its option, authorize evaluation, repair or replacement of the defective part or component at a KFI Service Center. KFI will provide you with a case number for warranty service. Please keep it for future reference. Repairs or replacements without prior authorization, or at an unauthorized repair facility, will not be covered by this warranty.

All transportation charges, damage, or loss incurred during transportation of parts submitted for replacement or repair under this warranty shall be borne by the purchaser. Should you have any questions concerning this warranty, please contact us toll-free at 1-877-346-2050. The model number, serial number (If applicable), date of purchase, and the name of the authorized KFI dealer from whom you purchased the product will be needed before any warranty claim can be processed.

For warranty inquiries outside the U.S.A. and Canada, contact your local dealer/distributor.

For countries not covered by a local dealer/distributor, please contact us at www.kfiproducts.com.

Product Registration

Please register your product with Kappers Fabricating, Inc. (KFI) within fifteen (15) days of purchase to assist us in handling any warranty issues that may arise by filling out this Registration card and submitting it with a copy of your sales receipt from one of KFI's official resellers. Failure to complete and return this Registration card does not diminish your warranty rights.

Please refer to the above section for complete terms of this warranty.

WARRANTY IS NON-TRANSFERABLE

Please Print Clearly

Model # _____

Name _____

Street Address _____

City _____ State _____ Zip Code _____

Phone _____ Fax _____ Email _____

Date of Purchase _____ Authorized KFI Dealer Name _____

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Kappers Fabricating, Inc.
Warranty Registration Department
1015 Industrial Drive, PO Box 32
Spring Valley, MN 55975, U.S.A.



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1015 Industrial Dr.
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