

# ATV HIGH RISE PLOW PUSH FRAME KIT

P/N 33-0000

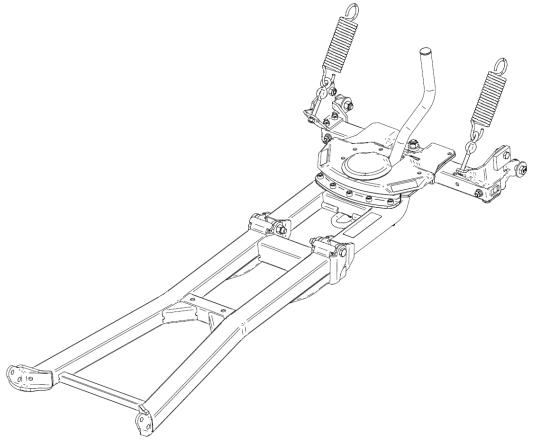
# **OWNER'S MANUAL**

**Application** 

MID-BODY ATV MOUNT NO. 15-XXXX, ALL MOUNT NO. 15-0050

# ATTENTION DEALER: CUSTOMER MUST RECEIVE A COPY OF THIS MANUAL AT THE TIME OF SALE.

Before you begin, please read these instructions and check to be sure all parts and tools are accounted for. These instructions will help you to become familiar with operation of the plow push frame. Instructions contain details required to install, service the contents of this kit, for adjustment and maintenance.



### OPERATING INSTRUCTIONS

Congratulations! You've just purchased one of the industry's top plow system component. The High Rise Plow Push Frame works great for all types of plowing. With proper care and maintenance, your plow push frame will last for many years!

The blade pivot gear design allows the operator to select multiple angled left-or-right positions, and also incorporates a spring-loaded 'trip' system that allows the blade to handle impacts with small obstructions. The double-pivot system allows the plow blade to be raised higher than conventional mid-body plow frames, thus increasing ground clearance 'terrain-ability'. Additionally, this plow frame will handle light to medium-duty summer landscape work.

### **NOTICE**

Plow operation requires additional components for operation: High Rise Blade or Cycle Country Blade, Winch Kit, Mid-Body ATV Plow Mount \*

\*These components may be specific to your vehicle.

Please read and understand all assembly instructions, notices and warnings before assembling and operating your plow system.

### Follow these guidelines to ensure satisfactory operation:

- Read this manual and your ATV operators manual before use.
- Periodically check for wear and tightness of all fasteners. Replace or re-torque fasteners as necessary.
- Before first use, set plow in the furthest right or left angled position to check for clearance between the plow and front tires.
- Operate with extreme caution on slopes and rough terrain. Be familiar with the area before you plow.
- Be aware of immovable objects that could be hidden in the area you are plowing.
- To avoid damage when pushing snow into a pile, reverse direction before raising the plow blade.
- Do not ram the plow blade into piles of snow. \*\*Slow down before hitting a pile.\*\*
- For best results, set the suspension preload of your ATV to the stiffest setting.
- To reduce steering effort and increase mobility, set the air pressure of your tires to the maximum pressure specification.
- The plow skids are adjustable. General skid setting is even with the plow wear bar bottom edge, higher settings reduce the chance of rocks and gravel from being collected.
- To increase traction during plow operation, operators can try: Securing weight to the ATV for additional tire downforce, reducing tire air pressure, or installing tire chains.
- The plow blade assembly is designed to 'trip' when it strikes an object or digs in too far. When pressure is released, the plow springs back into position. Spring tension can be increased by tightening the locknuts on the bottom of the eyebolts. For less spring tension, loosen the locknuts.
- Always wear appropriate protective clothing as recommended in ATV's operator's manual.
- Keep away from blade and moving parts during operation.

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### SAFETY INFORMATION

Our plow systems were designed with your safety in mind. Please read and understand all Cautions, Notices and Warnings in this manual before you begin. In order to protect you and your ATV, certain parts of the plow system and/or hardware are designed to fail when the equipment is over-stressed.

# **⚠** DANGER **⚠**

#### TO AVOID SERIOUS INJURY OR DEATH:

- DO NOT EXCEED 5 MPH (8 KM/H) WITH THE BLADE INSTALLED.
- 2. OPERATE WITH EXTREME CAUTION ON SLOPES, STEEP GRADES, AND ROUGH TERRAIN.
- 3. ALLOW NO RIDERS ON BLADE OR ATV WHILE MOVING OR STATIONARY.
- 4. KEEP BYSTANDERS AWAY FROM THE BLADE OR ATV WHILE MOVING OR STATIONARY.
- 5. WHEN PUSHING HEAVY MATERIAL, DIRECTION CONTROL MAY BECOME DIFFICULT.
- 6. BEFORE ADJUSTING BLADE: STOP ATV ENGINE; SET AND LOCK BRAKES; RAISE AND LOCK BLADE IN UP POSITION. DO NOT ATTEMPT TO RAISE BLADE BY HAND; USE THE LIFT MECHANISM ONLY.
- 7. LOWER BLADE TO DOWN POSITION WHEN BLADE AND ATV ARE NOT IN USE.
- 8. READ PUSH FRAME'S INSTRUCTION SHEETS AND ATV OWNER MANUAL.

### **BEFORE YOU BEGIN:**

- Your Kolpin accessory is exclusively designed for your vehicle.
- Please read and understand all instructions.
- Verify all parts and tools are accounted for.
- To ensure a satisfactory installation, follow all steps correctly and in the sequence described.
- Keep these instructions for future reference or for informational requests.
- To facilitate installation, make sure that your vehicle is clean and free of debris.
- All directions referring to right and left are when the rider is sitting on the machine

## **TOOLS REQUIRED:**

- 10mm wrench
- 13mm Wrench
- 13mm Socket
- 17mm wrench
- 17mm socket
- 19mm wrench
- 19mm socket
- Long nose pliers or spring puller or shoestring sized rope

### **APPROXIMATE ASSEMBLY TIME: 15 minutes**

Note: The High Rise Plow Push Frame kit comes mostly assembled from factory. Some assembly is required.

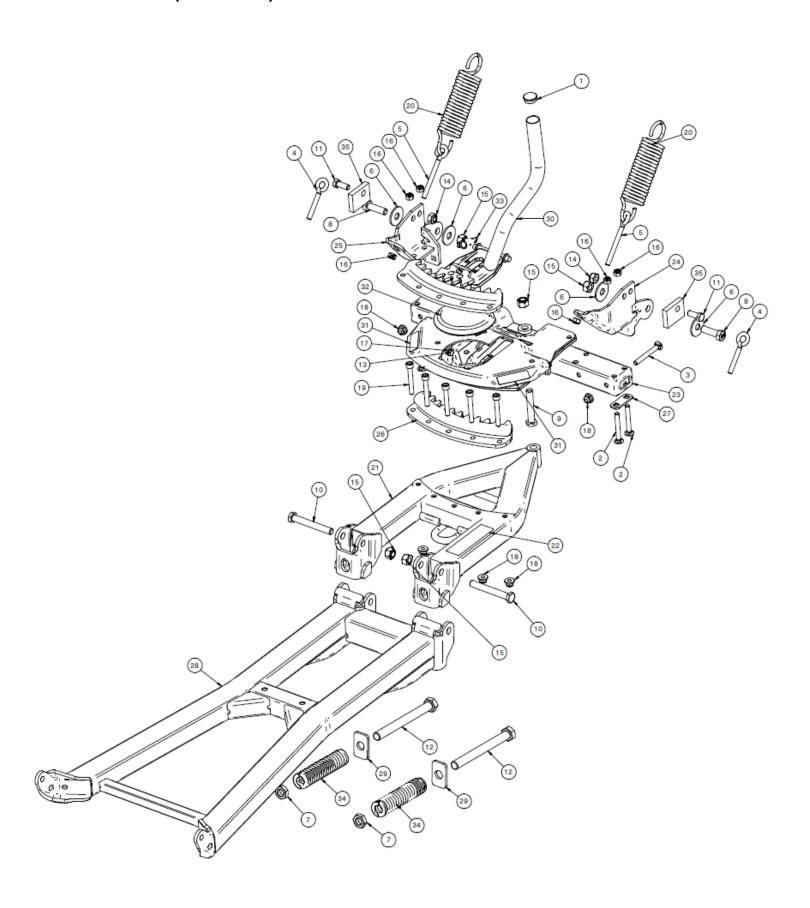
RE-TORQUE ALL BOLTS AND NUTS AFTER THE FIRST 30 MINUTES OF USE.

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# **Kit Contents:**

Item	Qty	Part Description	<b>Part Number</b>
1	1	Black plastic Cap for 1" OD x 0.065" wall tubing	-
2	4	Carriage Bolt, Zinc Plated, M8-1.25 x 60mm	-
3	2	Carriage Bolt, Zinc Plated, M8-1.25 x 70mm	-
4	2	Eye Bolt, Zinc Plated, Full Thread, M8-1.25 x Ø10 ID x 55mm	-
5	2	Eye Bolt, Zinc Plated, Full Thread, M8-1.25 x Ø10 ID x 80mm	-
6	4	Flat Washer, Zinc Plated, M12	-
7	2	Hex Jam Nut, Zinc Plated, M16-2.0	-
8	2	Hex Bolt, Zinc Plated, M12-1.75 x 40mm	-
9	1	Hex Bolt, Zinc Plated, M12-1.75 x 70mm	-
10	2	Hex Bolt, Zinc Plated, M12-1.75 x 90mm	-
11	2	Hex Bolt, Zinc Plated, M10-1.5 x 25mm	-
12	2	Hex Bolt, Zinc Plated, M16-2.0 x 160mm	-
13	1	Hex Bolt, Zinc Plated, M6-1.0 x 20mm	-
14	2	Hex Nylon Nut, Zinc Plated, M10-1.5	-
15	5	Hex Nylon Nut, Zinc Plated, M12-1.75	-
16	6	Hex Nylon Nut, Zinc Plated, M8-1.25	-
17	1	Lock Washer, Zinc Plated, M6	-
18	7	Hex Nylon Flange Nut, Zinc Plated, M8-1.25	-
19	5	Socket Head Cap Screw, Zinc Plated, M8-1.25 x 60mm	-
20	2	Trip Spring	PUR1409
21	1	Front Push Frame Welded Assembly	-
22	1	High Rise Decal	-
23	1	Pivot Assembly	-
24	1	Right Spring Plate Assembly	-
25	1	Left Spring Plate Assembly	-
26	1	Gear Lock Assembly	-
27	2	Tube Reinforcement Plate	-
28	1	Rear Push Frame Welded Assembly	-
29	2	Spring Washer	-
30	1	Lock Assembly	-
31	2	Kolpin Decal	-
32	1	Cover Cap	33-0560
33	1	Tension Spring	-
34	2	Double Pivot Spring	-
35	2	Stopper	-
36	1	Instruction Guide (not shown)	-

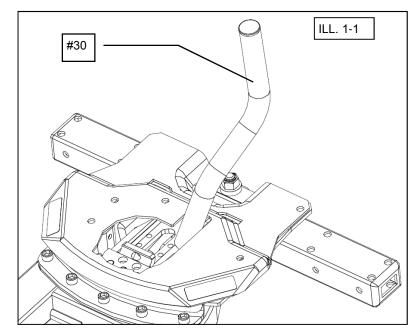
# **Kit Contents (continued):**

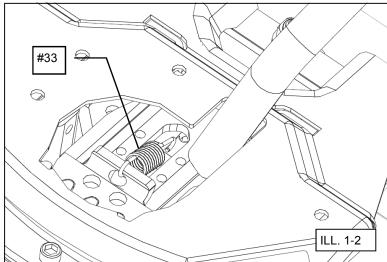


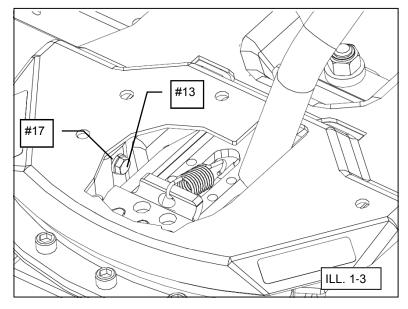
## **ASSEMBLY INSTRUCTIONS:**

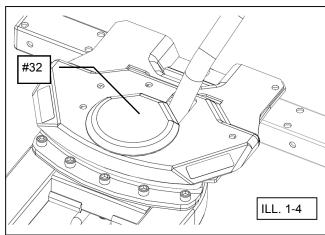
## LOCK HANDLE INSTALLATION:

- Position the handle assembly, item #30, into the pivot frame assembly. Lock handle assembly into place as shown in picture. (See illustration 1-1)
- 2. Attach the tension spring, item #33, into the holes in the handle assembly and pivot frame assembly as shown in picture. Using a rope or a spring puller to pull on the higher side allows for easy installation of spring. (See illustration 1-2)
- Install M6 hex bolt, item #13, and M6 lock washer, item #17, in the side plate hole as shown in picture. (See illustration 1-3)
- **4.** Secure the plastic cover cap, item #32, into place as shown in picture. (See illustration 1-4)



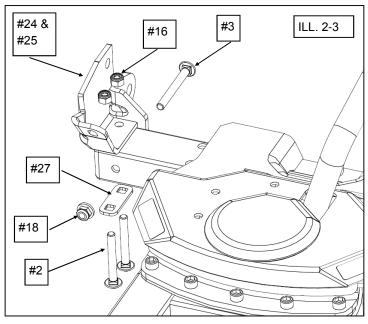




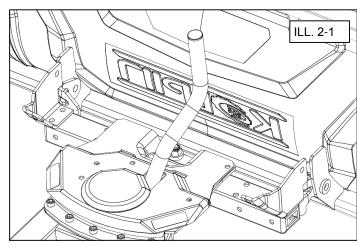


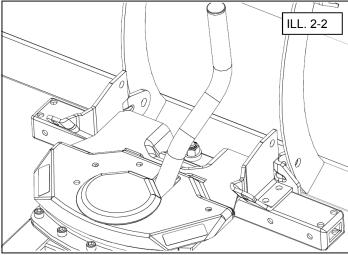
# PUSH FRAME INSTALLATION ONTO BLADE ASSEMBLY:

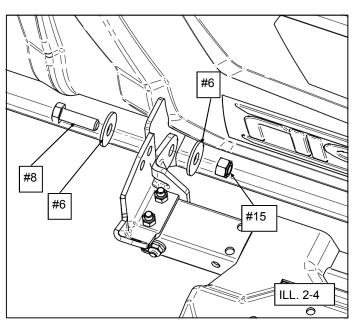
- 1. If you purchased the High Rise blade, use the widest position on pivot frame assembly. (See illustration 2-1)
- 2. If you purchased a Cycle Country blade, use the narrowest position on the pivot frame assembly. (See illustration 2-2)
- 3. Attach blade spring brackets, items #24 and #25, to top pivot using M8 carriage bolts, item #2, with M8 hex nuts, item #16, and tube reinforcement plates, item #27. Fasten to the side pivot using M8 carriage bolts, item #3, and M8 hex flange nuts, item #18, as shown in picture. (See illustration 2-3)



4. Attach the assembled push frame to blade. Insert M12 hex bolts, item #8, thru the M12 washers, item #6, and holes and fasten the push frame to the blade using M12 hex nuts, item #15. Bolt should be tight enough to not move, but the blade must rotate freely. (See illustration 2-4)





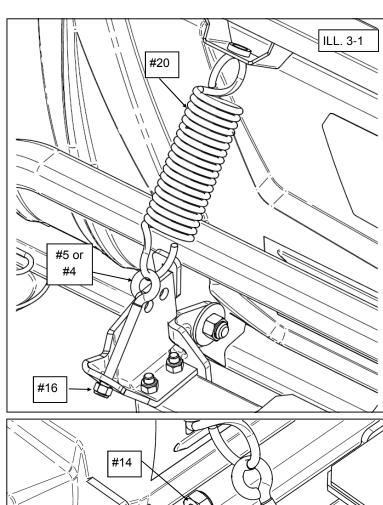


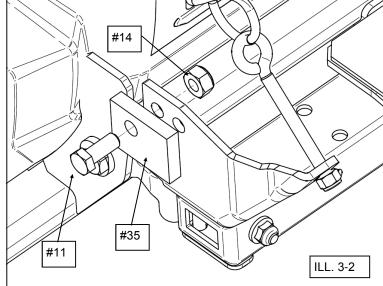
# PUSH FRAME INSTALLATION ONTO BLADE ASSEMBLY (continued):

5. Assemble blade trip springs, item #20, and eyebolts (item #5 for High Rise or item #4 for Cycle Country blade) between the blade assembly and the pivot spring brackets. Thread M8 hex nylon nuts, item #16, onto the eyebolts until 2-3 threads show thru the locking feature. (See illustration 3-1)

**6.** For the High Rise blade (widest), install the blade stoppers, item #35. Fasten with M10 hex bolt, item #11, and M10 hex nuts, item #14, as shown in picture. (See illustration 3-2)

NOTE: Do not tighten fasteners at this time.





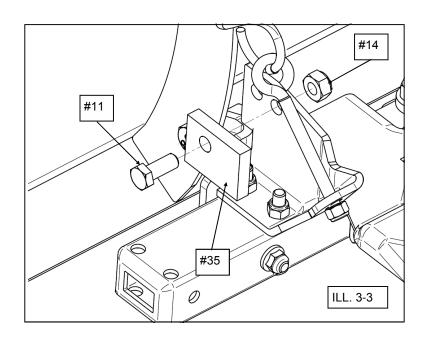
# **PUSH FRAME INSTALLATION ONTO BLADE ASSEMBLY** (continued):

7. For the Cycle Country blade (narrowest), install the blade stoppers, item #35. Fasten with M10 hex bolt, item #11, and M10 hex nuts, item #14, as shown in picture. (See illustration 3 -3)

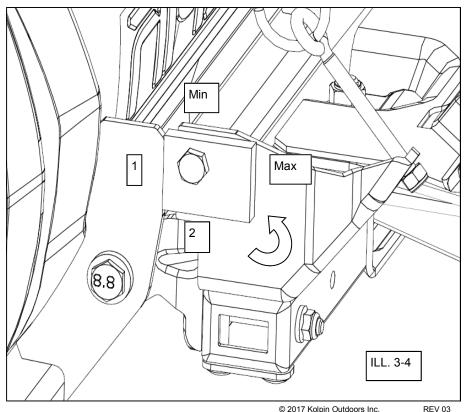
# **NOTE:** Do not tighten fasteners at this time.

8. Adjustment blocks should be installed in position 1 for the High Rise blade. Tighten fasteners once adjusted. (See illustration 3-4)

> \*Use position 2 or max position for the Cycle Country blades.



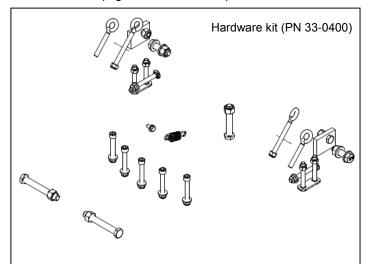
## **BLADE STOPPER ADJUSTMENT**

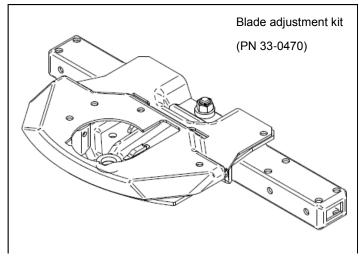


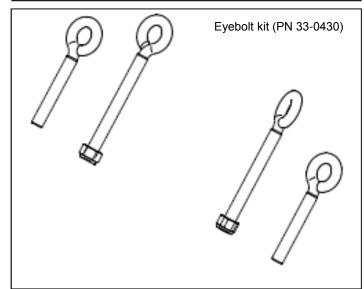
	SPARE KITS			Locking Plate	Locking Plate Blade adjust- Center Pivot	Center Pivot	Blade posi-	Side plate
		Hardware kit	Eyebolt kit	(Detent) kit	ment kit	kit	tion lever kit	assembly kit
Item	Description	P/N 33-0400	1400 P/N 33-0430	P/N 33-0450	P/N 33-0470 P/N 33-0500		P/N 33-0510	P/N 33-0550
1	Black plastic Cap for 1" OD $\times0.065$ wall tubing						1x	
2	Carriage Bolt, Zinc Plated, M8-1.25 x 60mm	4x						4x
3	Carriage Bolt, Zinc Plated, M8-1.25 x 70mm	2x						2x
	Eye Bolt, Zinc Plated, Full Thread, M8-1.25 $\times$							
4	Ø10 ID x 55mm	2x	2x					
	Eye Bolt, Zinc Plated, Full Thread, M8-1.25 x							
5	Ø10 ID x 80mm	2x	2x					
9	Flat Washer, Zinc Plated, M12	4x						
7	Hex Jam Nut, Zinc Plated, M16-2.0					2x		
8	Hex Bolt, Zinc Plated, M12-1.75 x 40mm	2x						
6	Hex Bolt, Zinc Plated, M12-1.75 x 70mm	1x			1x			
10	Hex Bolt, Zinc Plated, M12-1.75 x 90mm	2x						
11	Hex Bolt, Zinc Plated, M10-1.5 x 25mm	2x						
12	Hex Bolt, Zinc Plated, M16-2.0 x 160mm					2x		
13	Hex Bolt, Zinc Plated, M6-1.0 x 20mm	1x					1x	
14	Hex Nylon Nut, Zinc Plated, M10-1.5	2x						
15	Hex Nylon Nut, Zinc Plated, M12-1.75	5x			1x			
16	Hex Nylon Nut, Zinc Plated, M8-1.25	ex	2x					4x
17	Lock Washer, Zinc Plated, M6	1x					1x	
18	Hex Nylon Flange Nut, Zinc Plated, M8-1.25	χ		5X				2x
	Socket Head Cap Screw, Zinc Plated, M8-1.25 x							
19	60mm	5x		5x				
23	Pivot Assembly				1x			
24	Right Spring Plate Assembly							1x
25	Left Spring Plate Assembly							1x
26	Gear Lock Assembly			1x				
27	Tube Reinforcement Plate	2x						2x
29	Spring Washer					2x		
30	Lock Assembly						1x	
33	Tension Spring	1x					1x	
34	Double Pivot Spring					2x		
35	Stopper	2x						

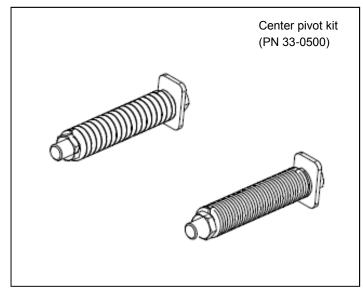
# **SPARE KITS:**

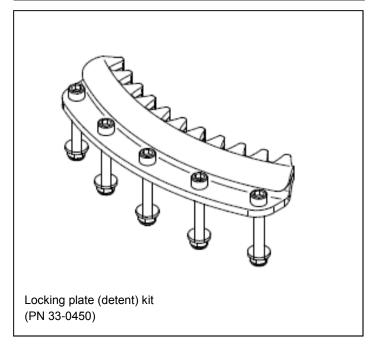
See the table on page 10 for a full description.

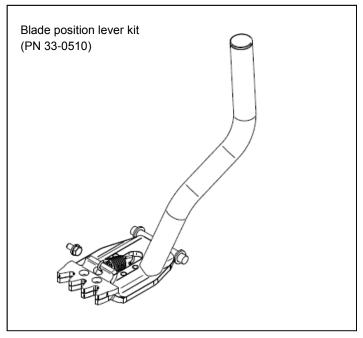




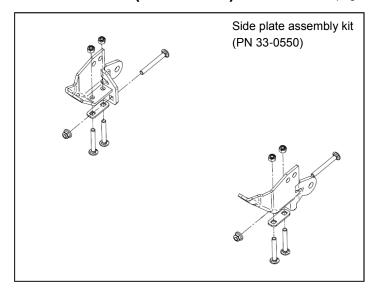


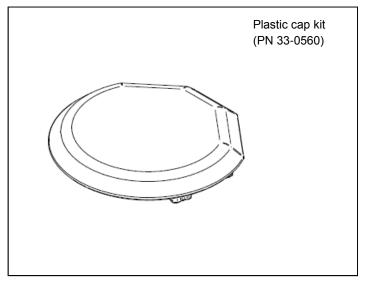






# **SPARE KITS (continued):** See the table on page 10 for a full description.

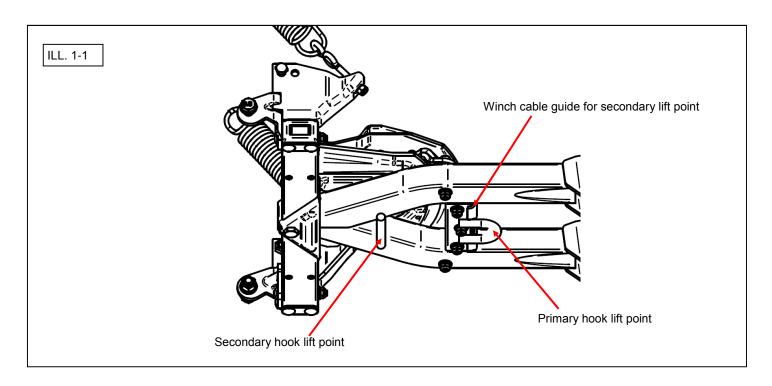




# **OPERATION:**

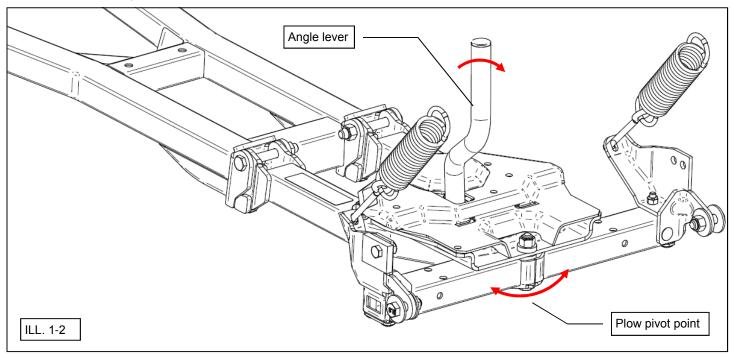
## WINCH CABLE PUSH FRAME LIFT POINT

1. The primary winch lift point for the High Rise push frame is the round hook loop as shown below. Depending on ATV, a secondary winch lift point may be better for winch cable routing. The secondary lift point is located on the underside of the push frame. The cable hook can be connected to the straight round bar. (See illustration 1-1)

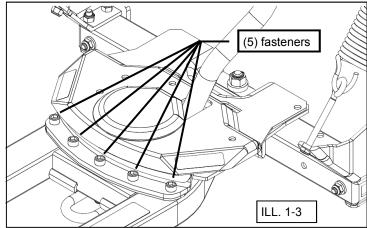


# **OPERATION** (continued)

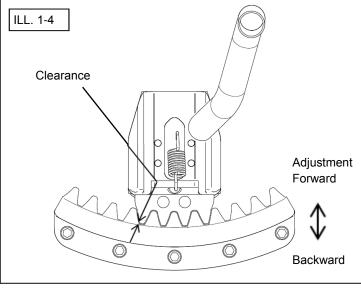
2. To adjust the angle of the plow so it pushes to the side, lift the plow up with the winch to clear the ground. Pull the angle lever toward the blade and pivot the plow to desired angle. Release the angle lever and the plow will lock itself in place at a predetermined angle on either side. (See illustration 1-2)



3. Be sure to frequently check that the (5) fasteners of the gear lock assembly are always tight to ensure good system function. (See illustration 1-3)

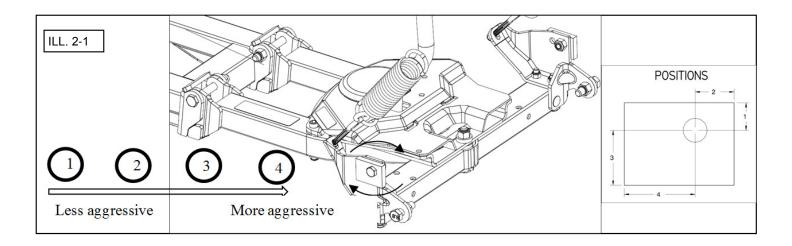


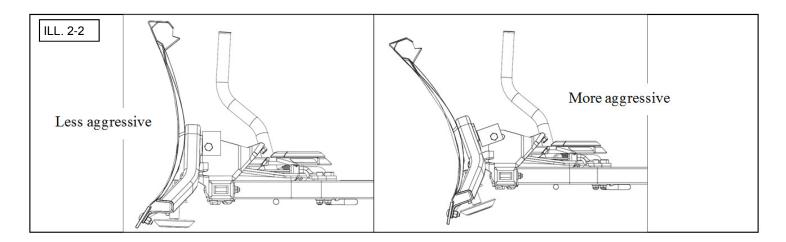
4. It is possible to adjust the clearance between the blade position lever and the blade position gear locking plate. Loosen the (5) bolts and move forward or backward the blade position gear locking plate. (See illustration 1-4)



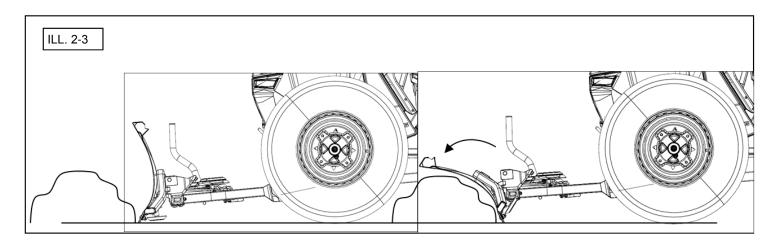
# **SCRAPING ANGLE ADJUSTMENT**

1. Turn adjustable plow stoppers to one of the four positions in order to make the plow more aggressive or less aggressive. Position 1 is the position with less material. (See illustrations 2-1 and 2-2)



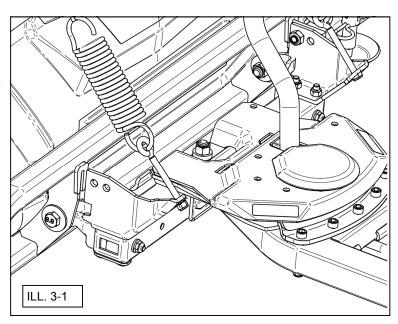


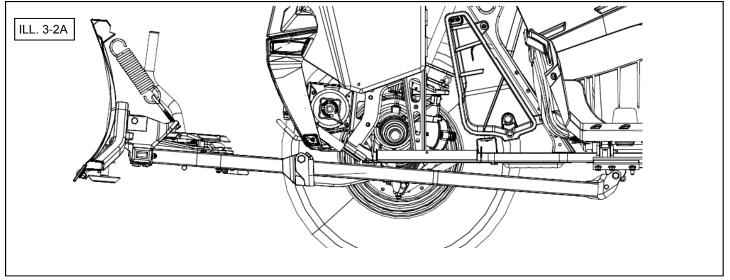
2. The plow is designed to trip forward when it hits a solid object. When the pressure on the plow is released, it will return to its original position by itself. (See illustration 2-3)

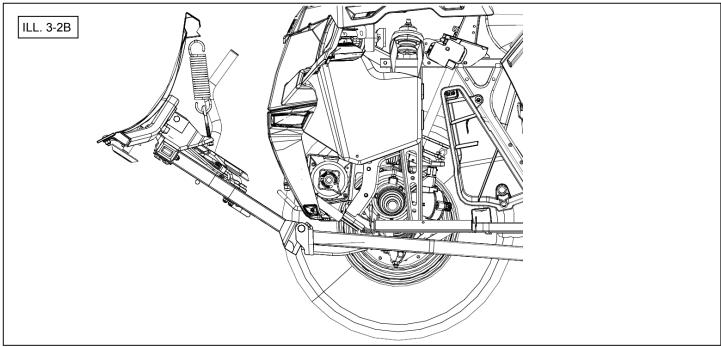


# PLOW TRIPPING FORCE ADJUSTMENT

- 1. The plow springs may be set stiffer by tightening the self-locking nuts located at the ends of the eye bolts. For less tension, loosen the nuts. (See illustration 3-1)
- 2. To reach plow blade maximum lift height, the double hinge pivot is designed to bend when the push frame comes in contact with the frame of the vehicle. (See illustrations 3-2A and 3-2B)

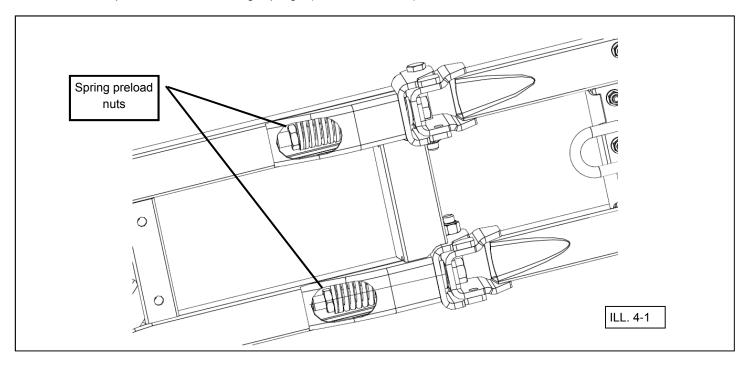






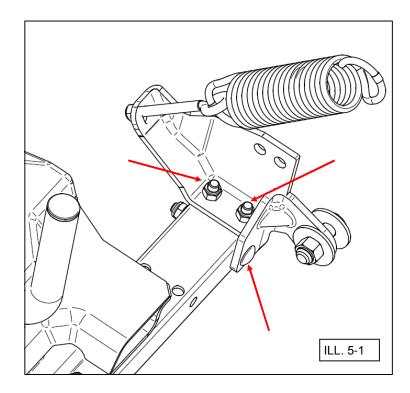
# **DOUBLE HINGE LIFT ADJUSTMENT**

1. A heavy ATV might need more tension on the spring in order to push more snow. To have more tension on the double hinge pivot, tighten the self-locking nuts of the double hinge spring. Plow maximum lift height will be decreased by tightening the nuts. OEM spring length adjustment if 114mm. If a lower rated pulling capacity winch is used on a smaller ATV, it may be necessary to decrease the preload of the double hinge springs. (See illustration 4-1)



# **MAINTENANCE**

 Be sure to frequently check that the fasteners of the blade spring brackets are always tight to ensure good system function. (See illustration 5-1)





# **One Year Limited Warranty**

For the period of one (1) year from the purchase date, Kolpin will replace for the original purchaser, free of charge, any part or parts found upon examination by Kolpin to be defective in material, workmanship, or both.

All transportation costs incurred submitting product to Kolpin for warranty consideration must be borne by the purchaser. If Kolpin determines that the product must be returned to the factory for credit, please call 1-877-956-5746 for a Return Merchandise Authorization (RMA) number and shipping instructions.

This warranty does not apply to parts that have been damaged by accident, alteration, abuse, improper maintenance, normal wear, or other causes beyond the manufacturer's control. In order to protect you and your ATV, certain parts of the plow system and/or hardware are designed to fail when the equipment is over-stressed. Parts that are lost due to loosening and improper maintenance are not covered under warranty. This warranty does not cover removal or reinstallation labor fees of the plow system and related components.

Peripheral products such as engines, electric motors, and actuators may carry an original manufacturer's warranty. Most hardware is general in nature and is easily obtained locally. Be sure to replace with minimum metric class 8.8 specification.

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