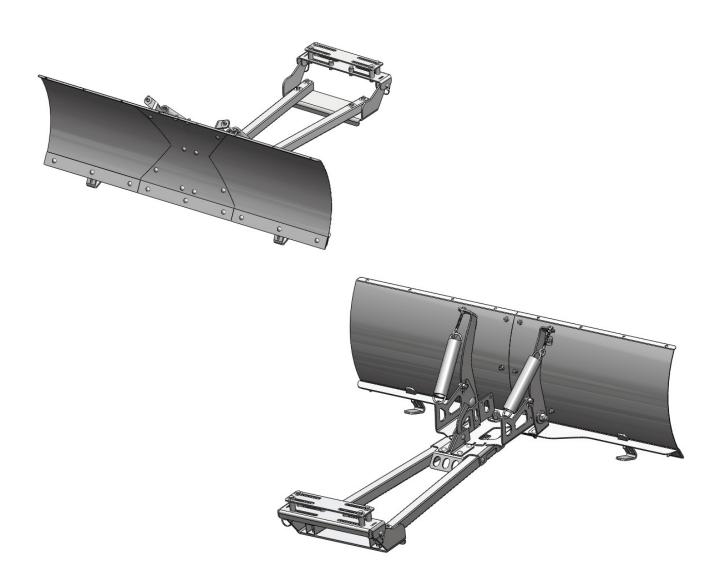


X-FACTOR[™]

PLOW-IN-A-BOX Patent Pending

ASSEMBLY / OWNER'S MANUAL

Part No: 10-0520



PLOW ACCESSORIES

Kolpin offers many accessories that can make your plow even more versatile. Contact your local dealer or visit www.kolpin.com to find out more about all the available Kolpin accessories.

KOLPIN WINCHES

Winches are a great method to lift your plow, as well as providing additional use such as vehicle recovery. Check out the heavy-duty winch options available from Kolpin:

#85025 2500 Series Winch (Steel) rated for 2,500 lbs

#85026 2500 Series Winch (Synthetic Rope) Rated for 2,500 lbs #85035 3500 Series Winch (Synthetic Rope) Rated for 3,500 lbs

#85045 4500 Series Winch (Steel) Rated for 4,500 lbs

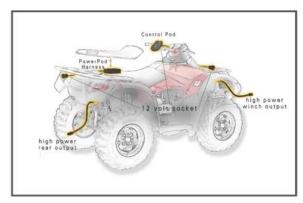


- Fully sealed to keep out the elements
- Great for vehicle recovery and/or plow lifting
- Automatic brake and sealed contactor for smooth, reliable performance
- Rope-Wire/Synthetic with 50' x 3/16" diameter
- UTV/ATV model specific winch mounts required
- Limited Lifetime Warrenty

KOLPIN POWERPOD PRO

Control your winch, plow, lights and more all at once! The Kolpin PowerPod Pro was designed to connect and control up to 5 12v accessories with a simple 'plug & play' system. The interface control pod manages all electrical accessories from one central location, so no need for multiple switches and toggles all over your machine. For use on ATV's and UTV's.





#94510 Kolpin PowerPod Pro

ADDITIONAL PLOW ACCESSORIES

Double-Sided Wear Bars - Plow Markers - Manual Lift - LED Lighting

Visit www.kolpin.com for a full listing of accessories for your ATV or UTV.

OPERATING INSTRUCTIONS

Congratulations! You've just purchased one of the industry's top plow systems. The X-FACTOR™ Plow System works great for all types of plowing. With proper care and maintenance, your plow system will last for many years!

The X-FACTOR™ Plow system is easily assembled and attaches to your ATV using a patented, unique Forward Mount™ system. It is designed to fit most models with 200cc or larger engines. The blade pivot 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 patented 52" (132 cm) Blade Assembly allows for quality snow moving capacity and snow roll-over characteristics. Additionally, this system will handle light to medium-duty summer landscape work.

NOTICE

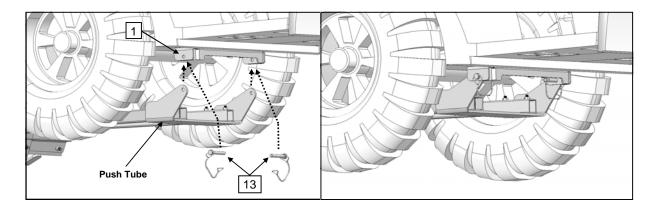
The X-FACTOR Complete Plow System includes these components:

- 52" (132 cm) X-FACTOR Blade and Blade Hinge Pivot Assembly
- Forward Mount™ Push Tube
- Universal Forward Mount™ System

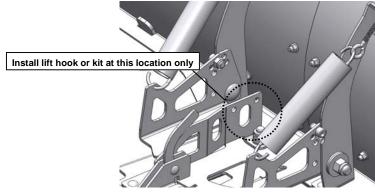
Plow operation requires an additional component for operation: Winch Kit, Electric Lift or Manual Lift *

*These components may be specific to your vehicle.

PUSH TUBE ENGAGEMENT: Place push tube under the ATV as shown and insert into the left and right channels of the assembled Forward Mount Weldment, Item #1. Fasten the push tube to the mount with supplied lock pins, Item #13.



ATTACH LIFTING HOOK OR ELECTRIC LIFT: Attach the lifting hook from a winch or manual lift kit to the push tube as shown. If using an electric lift kit, install the electric lift at the hole locations shown.



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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.
- 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 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.
- 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. See Page 9 for more information.
- 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.

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.

⚠ WARNING

To avoid personal injury or damage to your vehicle:

Do not exceed 5 mph (8 kph) with the blade installed

Be aware that vehicle ground clearance is reduced with plow system installed

Keep yourself, other people and pets away from the blade and moving parts during operation

Before adjusting blade angle or disconnecting the plow system, stop the ATV engine and set the parking brake

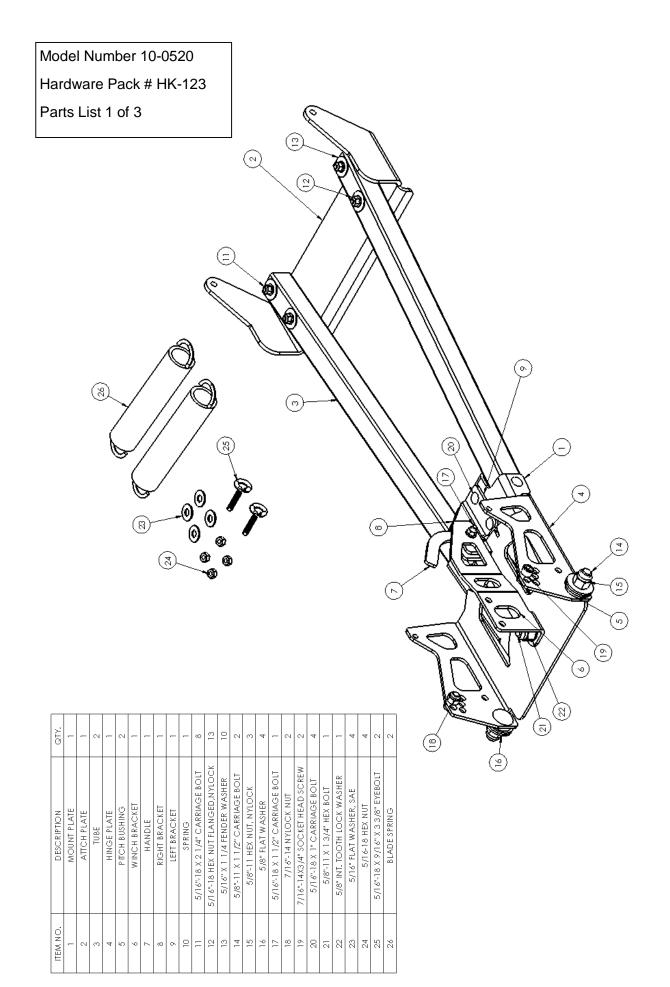
Remove your plow system before trail riding

MARNING

To avoid personal injury or damage to your vehicle:

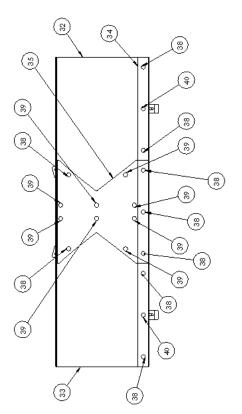
Do not install forward mount system over plastic guard components, which can compress over time and loosen the installation, resulting in poor product performance and/or damage to the ATV.

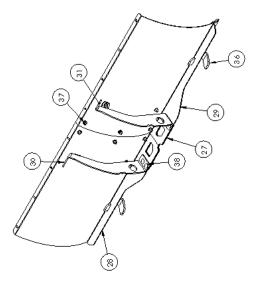
Do not allow forward mount system to interfere with ATV operational items such as brake lines, coolant hoses, control cables, steering or any other function.



PARTS ORDERING INFORMATION:
Replacement fasteners are common-type and can be purchased locally. Use minimum Grade 5 galvanized fasteners.

Model Number 10-0520
Hardware Pack # HK-125
Parts List 2 of 3





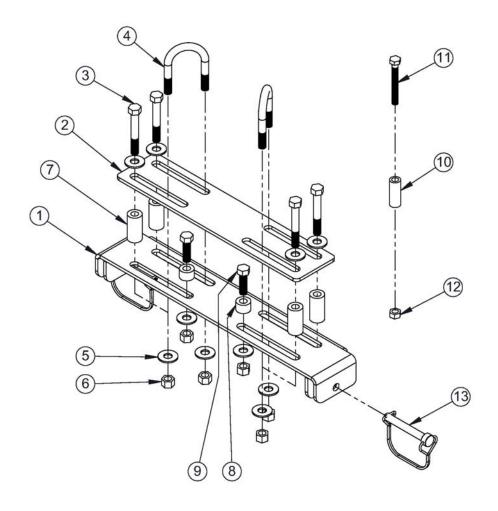
QIY.	_	_	_	_	_	-	_	3	_	2	23	13	Φ	2	
DESCRIPTION	ANGLE SUPPORT BRACKET - CENTER	ANGLE SUPPORT BRACKET - LEFT	ANGLE SUPPORT BRACKET - RIGHT	RIB WELDMENT - LEFT	RIB WELDMENT - RIGHT	BLADE - LEFT HALF	BLADE - RIGHT HALF	WEAR BAR	BLADE X PLATE - CENTER	SKID SHOE	5/16" HEX FLANGE NUT, NYLOCK	5/16"-18 X 1" CARRIAGE BOLT	5/16"-18 X 3/4" CARRIAGE BOLT	5/16"-18 X 1 1/4" CARRIAGE BOLT	
ITEM NO.	27	28	29	8	31	32	33	34	35	98	37	38	39	40	

PARTS ORDERING INFORMATION:
Replacement fasteners are common-type and can be purchased locally. Use minimum Grade 5 galvanized fasteners.

Model Number 10-0520

Hardware Pack # HK-124

Parts List 3 of 3



ITEM NO.	DESCRIPTION	QTY.
1	FORWARD MOUNT WELDMENT	1
2	BACK PLATE	1
3	3/8"-16 X 2 1/2" HEX BOLT	4
4	3/8"-16 X 1 1/2" X 2 1/2" U-BOLT	2
5	3/8" FLAT WASHER	10
6	3/8"-16 HEX NUT, NYLOCK	6
7	SPACER	4
8	SPACER	2
9	3/8"-16 X 1 1/4" HEX BOLT	2
10	SPACER	1
11	5/16"-18 X 2 1/2" HEX BOLT	1
12	5/16"-18 HEX NUT, NYLOCK	1
13	3/8" X 2 1/2" LOCK PIN	2

PARTS ORDERING INFORMATION:

Replacement fasteners are common-type and can be purchased locally. Use minimum Grade 5 galvanized fasteners.

BEFORE YOU BEGIN:

- 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.
- All directions referring to right and left are when the rider is sitting on the machine

TOOLS REQUIRED:

- Basic Hand Wrench and Socket Set
- Torque Wrench
- Plastic Cutting Tool

INSTALLATION NOTES:

NOTICE

For ease of assembly, loosely install all fasteners.

Torque all fasteners to specification after all remaining blade components have been assembled.

NOTICE

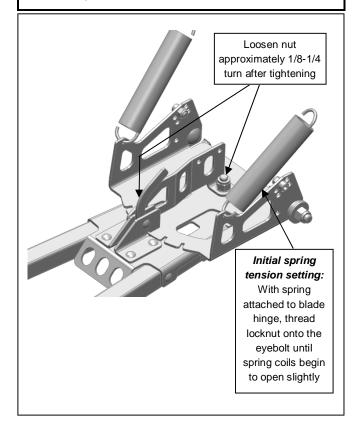
Refer to Installation Steps A, B, C or D of the Forward Mount installation manual, depending on your application.

NOTICE

Depending on application, some trimming of plastic guards or panels may be required to install the Forward Mount.

NOTICE

Blade hinge parts must pivot - See Illustration and notes



STEP 1 - ASSEMBLE THE PLOW BLADE:

 Assemble the left and right blades, Items #32 and #33, to the 'X' Plate, Item #35 as shown in Illustration
 Fasten with carriage bolts, Item #39 and locknuts, Item #37. Do not torque the fasteners at this time.

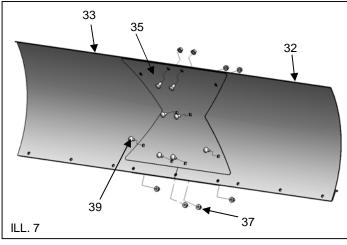
NOTE

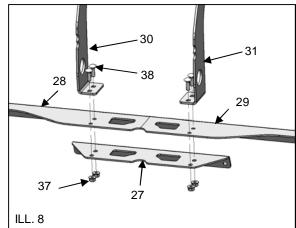
Pay Attention to bolt lengths when assembling

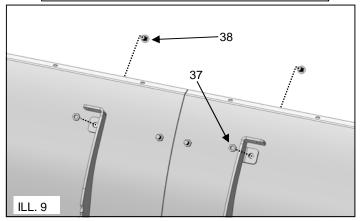
2. Assemble blade angles, Items #27, #28 and #29, to the left and right support ribs, Items #30 and #31, using fasteners, Item #38 and #37, as shown in Illustration 8 to create the plow frame. Do not torque the fasteners at this time.

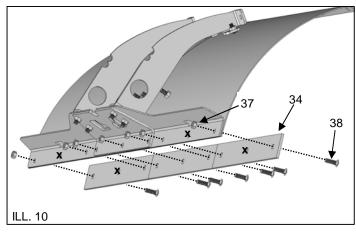
3. Attach the assembled plow frame upper supports to the blade using fasteners, Items #38 and #37. See Illustration 9. Do not torque the fasteners at this time.

4. Assemble the blade, plow frame bottom support and Wear Bars, Item #34 (x3) using fasteners, Items #38 and #37 as shown in Illustration 10. Do not torque the fasteners at this time.









5. Attach Skid Shoes, Item #36 (x2) to each end of the plow frame using fasteners, Items #40 and #37 as shown in Illustration 11. Do not torque the fasteners at this time.

NOTICE

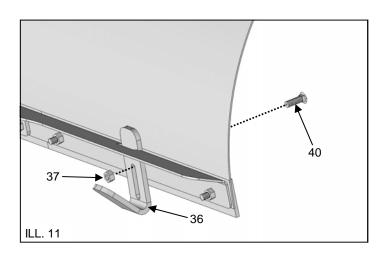
Initial setting of skid height depends on the terrain. Set the skids even with the wear bar cutting edge for level surfaces such as concrete or asphalt. For irregular surfaces, lower the skids to raise the wear bar cutting edge.

6. Torque all plow blade fasteners to specification.



FASTENER TORQUE:

17ft. lbs. (23 Nm)

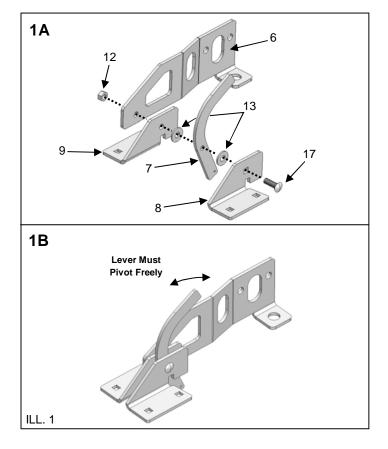


STEP 2 - ASSEMBLE THE BLADE PIVOT AND PUSH TUBE:

 Assemble the Lever, Item #7, washers, Item #13, Lever Brackets, Items #7 and #8 and Winch Bracket, Item #6 as shown in Illustration 1. Fasten with carriage bolt, Item #17 and locknut. Item #12. See NO-TICE.



1B - Tighten outside nut, Item #12, then back out 1/4-1/2 turn to allow lever, Item #7 to pivot freely



2. Assemble bolt, Item #21, and Hinge Bracket, Item #4 onto Mount Plate, Item #1, as shown in Illustration 2.

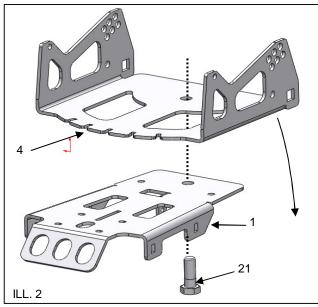
NOTE

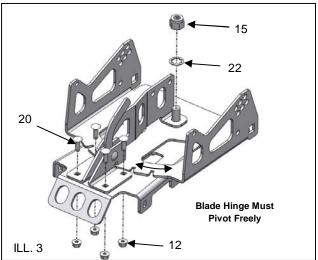
Light Grease such as wheel bearing grease may be used between plates to prolong life of moving parts

- Place the assembled lever and brackets, onto the mount plate and hinge plate as shown in Illustration
 Install Washer, Item 22 and fasten with locknut, Item #15 See NOTICE.
- 4. Fasten the lever brackets to the mount plate with carriage bolts, Item #20 and locknuts, Item #12. Do not tighten fasteners at this time.

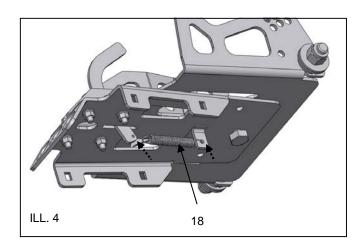
NOTICE

Item #21 - Tighten lock nut, then back out 1/4-1/2 turn to allow hinge plate, Item #4 to pivot freely

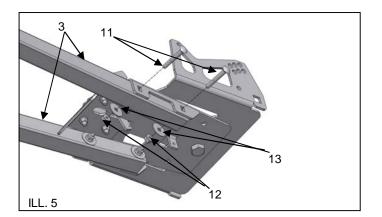




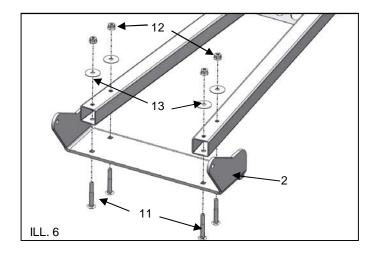
5. Install the Lever Spring, Item #18. See Illustration 4.



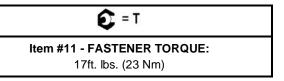
2. Install the left and right Tubes, Item #3 onto the assembled mount plate. Fasten with Carriage Bolts, Item #1, Washers, Item #13 and Locknuts, Item #12. Do not tighten fasteners at this time.



Install the attaching plate, Item #2 on the push tubes.
 Fasten with Carriage Bolts, Item #11, Washers, Item #13 and Locknuts, Item #12.



4. Tighten all fasteners to specification.



STEP 3 - ATTACH PLOW BLADE TO THE PUSH TUBE:

 Place the assembled push tube onto plow frame of the assembled blade. Place bushings, Item #5 into the plow frame supports as shown in Illustration 12. Place 2 washers, Item #16 over the holes and fasten the push tube to the blade assembly using carriage bolts, Item #14 and locknuts, Item #15. See Illustration 12. Torque fasteners to specification.



Item #14 - FASTENER TORQUE:

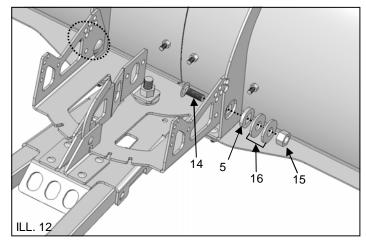
50ft. lbs. (67.7 Nm)

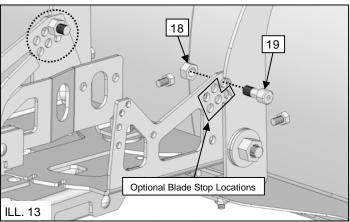
2. Install the blade stops, Item #19. Fasten with nuts, Item #18. See Illustration 13. Do not torque the fasteners at this time.



BLADE TILT / STOP ADJUSMENT: Perform with plow system mounted and in the down position.

Blade position should be vertical for best performance

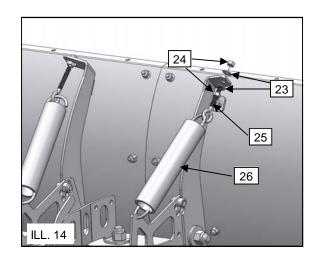




 Assemble blade springs, Item #26, and eyebolts, Item #25 between the blade assembly and spring brackets as shown in Illustration 13. Fasten and adjust tension with washers, Item #23 and nuts, Item #24.

NOTICE

INITIAL BLADE SPRING TENSION: Refer to Installation Notes on Page 8



STEP 4 - INSTALL FORWARD MOUNT TO ATV:

 Install the Forward Mount Kit CYC6043 onto your ATV, following the assembly instructions contained with the kit.

TOOLS REQUIRED:

- Basic Hand Wrench and Socket Set
- Torque Wrench
- Plastic Cutting Tool

BEFORE YOU BEGIN:

- 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.
- All directions referring to right and left are when the rider is sitting on the machine

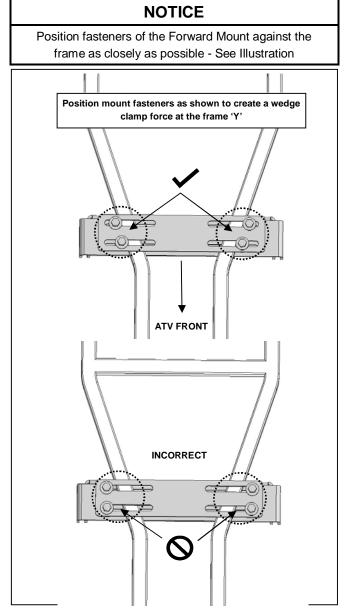
NOTICE

Depending on application, some trimming of plastic guards or panels may be required to install the Forward Mount.

NOTICE

Refer to Version A, B, C or D for Forward Mount installation, depending on your application.

INSTALLATION NOTES:



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OPTION A - GENERIC MOUNT INSTALLATION FOR ROUND TUBE FRAME ATVs

1. Position the Back Plate, Item #2, on top of the Forward Mount Weldment, Item #1, as shown in Illustration 10.

NOTICE

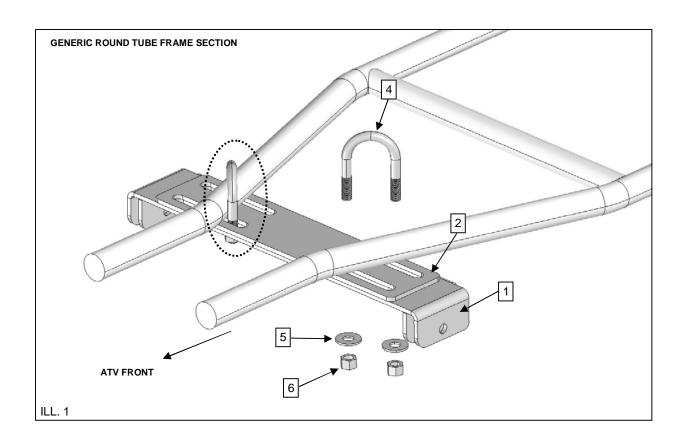
Depending on application, some trimming of plastic guards or panels may be required.

- 2. Position the forward mount weldment and back plate under the frame tubes at the "Y" location as shown in Illustration 1.
- 3. Fasten the mount and back plate using U-bolts, washers and locknuts, Items #4, #5 and #6. Do not torque fasteners at this time.
- 4. Position the mount and fasteners at a point on the frame that allows the push tube to be attached, but will not interfere with operation of the ATV.
- 5. Once the mount position has been determined, position U-bolts to the frame tube walls as close as possible and torque to specification.

© = T

FASTENER TORQUE:

30 ft. lbs. (41 Nm)



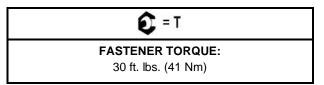
OPTION B - GENERIC MOUNT INSTALLATION FOR SQUARE TUBE FRAME ATVS

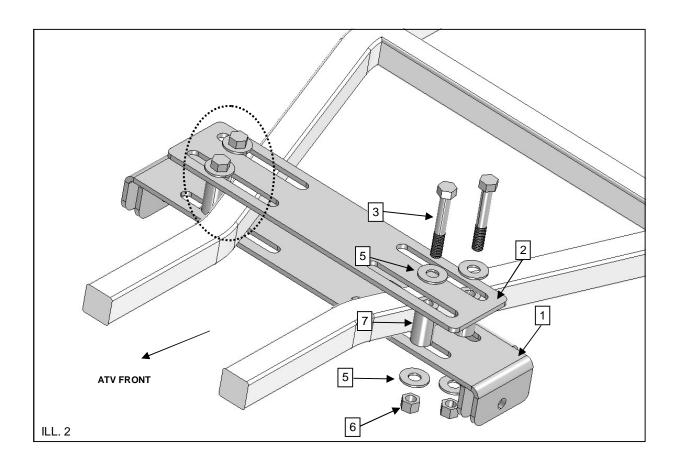
1. Position the Back Plate, Item #2, on top of the frame tubes at the "Y" location as shown in Illustration 11.

NOTICE

Depending on application, some trimming of plastic guards or panels may be required.

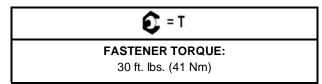
- 2. Position the Forward Mount Weldment, Item #1, under the frame tubes at the "Y" location as shown in Illustration 11.
- 3. Position the Back Plate, Item #2, on top of the frame tubes at the "Y" location as shown in Illustration 12.
- 4. Place spacers, Item #7, between the mount and back plate. Loosely fasten the mount and back plate using bolts, washers and locknuts, Items #3, #5 and #6. *Do not torque fasteners at this time*.
- 5. Position the mount and fasteners at a point on the frame that allows the push tube to be attached, but will not interfere with operation of the ATV.
- 6. Once the mount position has been determined, push the spacers and fasteners to the frame tube walls as close as possible. Torque to specification. REFER TO INSTALLATION NOTES PAGE 5.

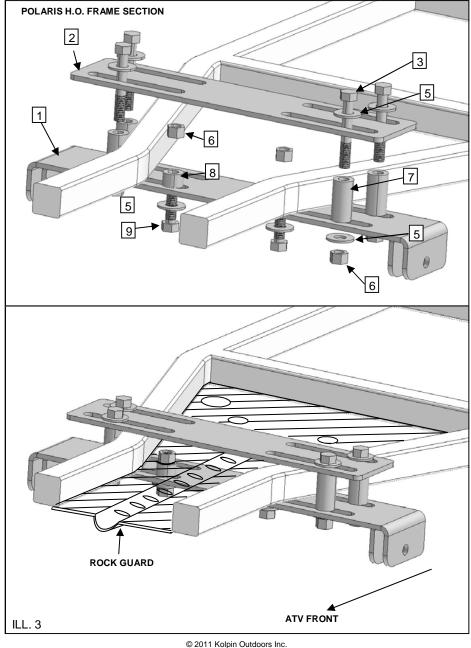




OPTION C - MOUNT INSTALLATION: POLARIS 400/500/800 H.O. ATVs

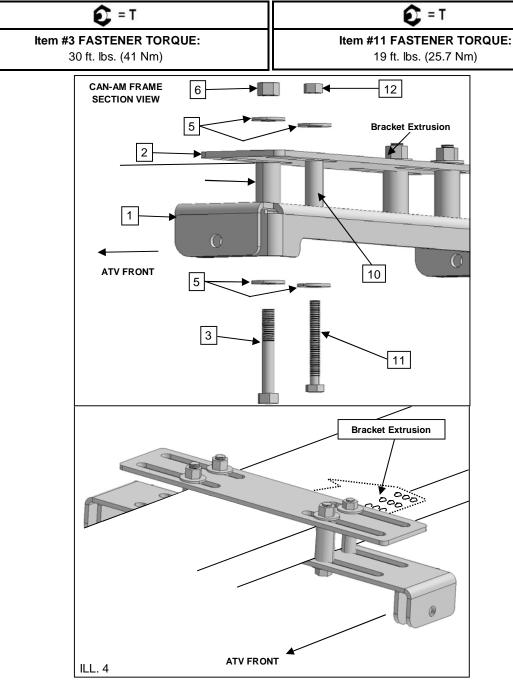
- 1. Position the Forward Mount Weldment, Item #1, under the frame tubes at the "Y" location as shown in Illustration 12.
- IMPORTANT: To keep the mount level and clear the built-in rock guard extrusion on Sportsman HO ATVs, add spacers, Item #8 to the forward channel of the mount. Loosely fasten the spacers between the mount and rock guard with bolts, washers and locknuts, Items #9, #5 and #6. Do not torque fasteners at this time. See Illustration 12.
- Position the Back Plate, Item #2, on top of the frame tubes at the "Y" location as shown in Illustration 12.
- Place spacers, Item #7, between the mount and back plate. Loosely fasten the mount and back plate using bolts, washers and locknuts, Items #3, #5 and #6. Do not torque fasteners at this time.
- Once the mount has been positioned, orientate fasteners, Item #3, to the frame tube walls as close as possible and torque to specification. REFER TO INSTALLATION NOTES - PAGE 5.





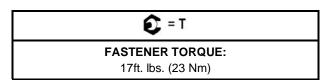
OPTION D - MOUNT INSTALLATION: CAN-AM ATVs

- 1. Position the Forward Mount Weldment, Item #1, under the frame tube behind the a-arms and under the brake cylinder bracket extrusion as shown in Illustration 13.
- 2. Position the Back Plate, Item #2, on top of the frame tube and brake cylinder bracket as shown in Illustration 13.
- 3. **IMPORTANT:** Insert spacer, Item #10 at the <u>left rear</u> mount channel and brake cylinder bracket extrusion. Loosely fasten the spacer, mount weldment and extrusion with the bolt, washers and locknut Items #11, #5 and #12. Do not torque fasteners at this time.
- 4. Place spacers, Item #7, between the remaining mount and back plate locations. Loosely fasten the mount and back plate using bolts, washers and locknuts, Items #3, #5 and #6. Do not torque fasteners at this time.
- 5. Once the final mount position has been determined, position fasteners to the frame tube walls as close as possible and torque to specification.



STEP 5 - ATTACH PLOW SYSTEM TO THE FORWARD MOUNT:

- 1. Refer to Operating Instructions, Page 3.
- 2. Once the plow system is attached to your ATV and the plow blade is on the ground, adjust the blade stops and blade spring tension as desired to achieve best performance. Refer to Illustrations 13 and 14.
- 3. Once the desired blade position is obtained, torque the blade stop fasteners to specification.





Kolpin – The Leader in All-Terrain Innovation, offers only the highest quality ATV Accessories and UTV Accessories. Kolpin ATV products and UTV products are designed for recreational ATV and UTV riders, hunters, outdoorsmen, and landowners just like you. Honest value and rugged dependability that helps you get the most out of your ATV or Side x Side vehicle.

Kolpin has the largest selection of ATV accessories and UTV accessories for Polaris, Yamaha, Honda, Can-Am, Kawasaki, Suzuki, John Deere and most other ATV models and UTV models. Whether you are looking for winches, plows, ATV storage, fuel packs, LED lights, Gun Boots, gear grips, UTV roofs, UTV windshields, rider accessories, or implements – Kolpin has you covered.

Our world starts where the road ends ... we welcome you to explore our world.

We invite you to visit www.kolpin.com to check out our full offering of accessories. Explore our world and you will not only find product information, but product videos, reviews, customer testimonials, helpful how-to articles, exclusive promotions and so much more.



Scan this code with your smart phone to experience the world of Kolpin for yourself

Follow Kolpin for exclusive deals, new product releases and more









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EMAIL. CUSTOMERSERVICE@KOLPIN.COM
WEB. WWW.KOLPIN.COM



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 1-800-841-2222 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.

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 grade 5 specification.

Kolpin Outdoors, Inc.

205 N. Depot Street, Fox Lake, WI 53933

Phone #: (877) 9KOLPIN or (920) 928-3118

www.kolpinpowersports.com

customerservice@kolpin.com