KOLPIN MANUAL LIFT KIT

P/N 15-0090

OWNER’S MANUAL

Application

ATV PUSH FRAME NO. 15-0070, 33-0070

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 manual quick lift. Instructions contain details required to install, service the contents of this kit, for adjustment and maintenance.
INTRODUCTION

Congratulations! You’ve just purchased one of the industry’s top plow system component. The Kolpin Manual Lift works great for all types of plowing. With proper care and maintenance, your plow lift kit will last for many years!

The Manual Lift is an under-body mounted manual lift for your Kolpin Plow. The Manual Lift features a long handle for quick and easy lifting. It attaches easily to the rear of the 15-0070 or 33-0070 push tubes.

NOTICE

Plow operation requires additional components for operation:
**Plow Blade, Storm Chaser ATV Push Frame Kit, Mid-Body ATV Plow Mount** *

*These components may be specific to your vehicle.

Please read and understand all adjustment/maintenance 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.
- The blade is raised by pulling back on the lift handle, or lowered by releasing the lift handle forward. The blade will lock into the ‘up’ position by pulling all the way back on the lift handle. Infinite height settings can be achieved by holding the lift handle at the desired position as you plow. For extended above-grade plowing, adjust the blade skids to the desired distance.
- This lift kit has a given range of movement, which is balanced between blade lift height and “float” (the amount the blade will move above and below grade). If you adjust the lift kit to achieve more blade lift, you will lose an equal amount of “float”. The manner and terrain on which you will plow with your ATV may dictate what sort of balance is right for you.
- When lowering plow, do not let go of lift handle until plow has reached the ground.
- 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.
- Keep these instructions for future reference.
- All directions referring to right and left are when the rider is sitting on the machine.
- Your Kolpin accessory is exclusively designed for your vehicle.
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:

1. 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.
9. WHILE IN OPERATION, KEEP LEG OUT OF PATH OF THE LIFT HANDLE.

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:

- Basic Metric Wrench Set
- Basic Metric Socket Set
- Long nose pliers or spring puller or shoe-string sized rope

NOTE:

Kit 15-0090 is used with 15-0070 or 33-0070 standard plow push tubes only.

APPROXIMATE ASSEMBLY TIME: 30 minutes

RE-TORQUE ALL BOLTS AND NUTS AFTER THE FIRST 30 MINUTES OF USE.
Model Number 15-0090
Parts List

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>QTY</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>ITEM NO.</th>
<th>QTY</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
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<tr>
<td>1</td>
<td>1</td>
<td>PUR130M</td>
<td>SPACER 8mm x 32mm x 5mm (5/16&quot; x 1.25&quot; x .2&quot;)</td>
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<td>1</td>
<td>PUR2250M</td>
<td>FLAT WASHER 10mm (3/8&quot;)</td>
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<tr>
<td>2</td>
<td>8</td>
<td>PUR1360</td>
<td>ROLLER BUSHING</td>
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<td>1</td>
<td>PUR272M</td>
<td>LOCK NUT NYLOCK M10X1.5 (3/8&quot;)</td>
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<td>2</td>
<td>PUR1272M</td>
<td>CENTER LOCK NUT M8X1.25 (5/16&quot;)</td>
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<td>1</td>
<td>PUR1400M</td>
<td>STAR WASHER 10mm (3/8&quot;)</td>
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<td>4</td>
<td>12</td>
<td>PUR1275M</td>
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<td>1</td>
<td>PUR1488</td>
<td>LINKAGE ROD ASSEMBLY</td>
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<td>2</td>
<td>PUR1189M</td>
<td>CAR BOLT M8X1.25 x 25mm (5/16&quot; x 1&quot;)</td>
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<td>LIFT STRAP</td>
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<td>6</td>
<td>1</td>
<td>PUR1191M</td>
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<td>CABLE GUIDE</td>
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<td>SLOTTED STOP</td>
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<td>LIFT HANDLE BOTTOM</td>
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<td>PUR1437</td>
<td>SPRING</td>
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<td>1</td>
<td>PUR1156M</td>
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<td>PUR1190M</td>
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<td>1</td>
<td>CYC2073</td>
<td>BRACKET MANUAL LIFT</td>
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<td>1</td>
<td>PUR1186M</td>
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<td>2</td>
<td>PUR1202M</td>
<td>CAR BOLT M8X1.25 x 20mm (5/16&quot; x 3/4&quot;)</td>
</tr>
</tbody>
</table>
**INSTALLATION NOTES:**
The steps for installation assume that you have already assembled the blade and push tube and have a mount installed on your ATV. If you have not assembled these components, please refer to your mount, blade and push tube assembly instructions. You may also assemble this kit by placing the push tube on a work bench. For ease of installation, standing the assembled blade and push tube vertically as shown is recommended.

**ASSEMBLY INSTRUCTIONS:**
1. Install the link channel (item #27) onto the lift bracket (item #29) as shown. Pay particular attention to the correct order of parts to be assembled. See illustration 1.
2. Torque nuts (item #4) and (item #3) to specification.

<table>
<thead>
<tr>
<th>8MM FASTENER TORQUE:</th>
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<tbody>
<tr>
<td>17 ft-lbs. (23 N-m)</td>
</tr>
</tbody>
</table>
ASSEMBLY INSTRUCTIONS (Continued):

3. Place the assembled lever bracket onto the rear cross-brace of the push tube as shown. Fasten with bolts (item #30) and nuts (item #4). Torque to specification. See illustration 2.

4. Place washer (item #13) onto the link channel as shown and install the link rod assembly (item #19). Fasten with bolt (item #5) and lock nut (item #3). See illustration 3.

5. Torque to specification.

6. Place spring (item #11) onto the lever assembly as shown. See illustration 4.
ASSEMBLY INSTRUCTIONS (Continued):

7. Assemble lever stop parts (items #9, #15, #16, #17, and #18) as shown. See illustration 5. 
   *Note, torque fastener after lever stop adjustment.*

8. Assemble the lower lift handle (item #25) to the push tube and link rod using (items #13, #12, #4 and #2) as shown. See illustration 6.

9. Torque fasteners to specification.

10. Attach the lift cable (item #26) to the link channel using (items #14, #13, #4 and #2) as shown. See illustration 7. 
   *Note, pay attention to part orientation.*

11. Torque fastener to specification.
ASSEMBLY INSTRUCTIONS (Continued):

12. Install pulley (item #8) onto the push tube lever bracket as shown. See illustration 8. \textit{Note, do not tighten fastener at this time.}\n
13. Insert lift cable (item #26) between the cable guide (item #7) and under the pulley as shown. See illustration 8.

14. Torque fasteners to specification.

\begin{tabular}{|c|c|}
\hline
\textbf{8MM FASTENER TORQUE:} & \\
\textbf{17 ft-lbs. (23 N-m)} & \\
\hline
\end{tabular}

15. Install upper lift handle (item #23) to the lower lift handle using tube clamp (item #10). Fasten together with (items, #14, #13 and #4). Hand-tighten locknut (item #4) sufficiently, using care not to over-tighten the tube clamp assembly. Place thread caps (item #24) over the exposed ends. See illustration 9. \textit{Note, for item 14, point the threaded ends away from the front of the machine to avoid bodywork damage.}
ASSEMBLY INSTRUCTIONS (Continued):

16. Install handle grip (item #21) as shown. See Illustration 10.

MANUAL LIFT / PUSH TUBE INSTALLATION AND ADJUSTMENTS:

17. Position the push tube assembly in front of the ATV. See illustration 11.

18. Drive or push ATV forward over the lift handle. Continue forward until the push tube attaching tabs are centered under the mounting tabs. Attach the push tube to the using the clevis pins and hair pins that came with the mount kit. See illustration 11.

19. Place the ATV front tires onto 1-1/2” (3.81cm) boards or other suitable material (Upon strap installation, this will allow the blade to ‘float’ up and down with changes in terrain). See illustration 12.
MANUAL LIFT / PUSH TUBE INSTALLATION
AND ADJUSTMENTS (Continued):

20. Push the lift handle into the forward position until it is approximately 1/2” (1.27 cm) from contacting the forward-most component of the ATV. See illustration 13.

21. Adjust the lever stop against the lower lift handle and torque the fastener to specification. See illustration 14. **Note, torque fastener after lever stop adjustment.**

<table>
<thead>
<tr>
<th>10MM FASTENER TORQUE:</th>
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<tbody>
<tr>
<td>30 ft. lbs. (41 Nm)</td>
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</tbody>
</table>

22. The lift strap must be secured to the ATV in a manner that allows it to support the push tube and blade weight, and also be as straight above the pulley as possible. Attaching the strap to a bumper or rack is recommended as shown. See illustration 15.

23. Assemble strap (item #20) through the cable loop, the ATV and back through the buckle, making sure the buckle is positioned at the top as shown. See illustration 15.

24. With the lift handle in full-forward, pull the strap tight, taking all slack out of the cable and strap.
FINAL ADJUSTMENTS:

**UP Lock Feature** - Lift the blade using the lift handle. The lever should lock into the ‘UP’ position just as the lever comes near the rear fender.

**If the lift handle contacts the rear fender or does not lock:**
- Shorten the link rod length (item # 19).

**If the lift handle locks too soon or travel is too short:**
- Lengthen the link rod length (item # 19).

*Note, for Link Rod, any adjustments requires strap (item #20) to be re-set.*

**Lift Handle Interference** - The upper lift handle is the correct length for most ATVs to avoid contact with the handlebars, however, check for possible interference by slowly pulling the lift handle back while turning the handlebar until the two components intersect at their closest point.

**If the lift handle is too close or contacts the handlebar:**
- Raise the handlebar height.
- The upper lift arm length (item #23) may be shortened. Remove the upper lift arm from the tube clamp, trim to the desired length and reinstall.

**Blade Lift Height** - Check the clearance between the bottom of the wear bar and the ground with the blade in the 'UP' position.

**If the blade lift height is less than 3” (7.62 cm):**
- Check the position of the lift handle in the ‘UP’ position. If there is excess clearance between the lift handle and the rear fender/rack of the ATV, the link rod may need to be lengthened. *Note, readjust the lift strap anytime the link rod is adjusted.*
- Adjust the front suspension coils springs to the stiffest setting (if equipped) to reduce front-end ‘sag’ when the blade is lifted.
- Install coil spring spacers (if required) to reduce front end ‘sag’ when the blade is lifted.
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.