

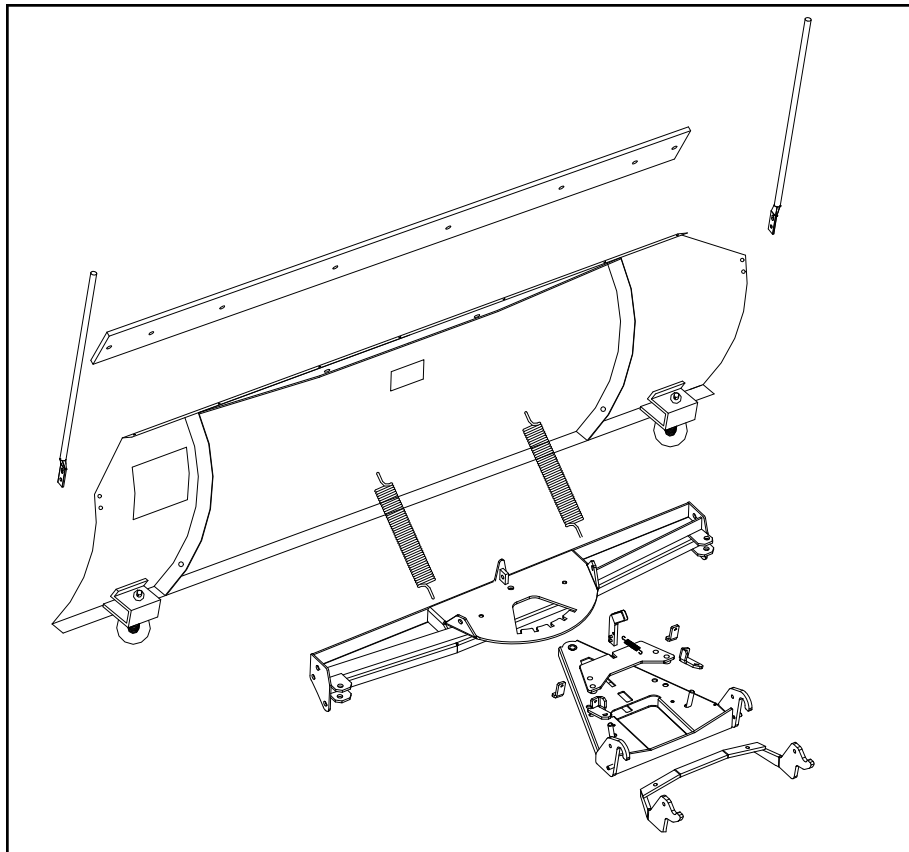


Kawasaki Mule 4000 UTV Plow Kit with Vehicle Mount Kit (1KAWM4SP)

The contents of this envelope are the property of the owner.
Be sure to leave with the owner when installation is complete.

APPROXIMATE INSTALLATION TIME: 3 to 4 HOURS

IMPORTANT: Please read the installation instructions thoroughly before beginning. Installation of any item is easier if the vehicle is clean and free of debris.



⚠ WARNING

Do not attempt to install or operate this plow until you read and understand all warnings and instructions in this manual or on the plow. Failure to read all warnings and instructions could lead to serious injury or death.

⚠ WARNING

Cabs, blades, and general accessories add additional weight to the base vehicle. Deduct the accessory's total weight from the vehicle's rated capacity including driver and passenger.

OPERATIONAL NOTES:

NEVER...

- **Operate the plow near pets or other people**
- **Leave the vehicle running and unattended with plow attached**
- **Plow or carry plow at high speeds**
- **Clean or perform maintenance with plow raised**
- **Clean or service with plow in tripped condition**
- **Dislodge an obstruction with any part of body**

ALWAYS...

- **Familiarize yourself with the area to be plowed**
- **Verify that the plow is attached securely**
- **Travel at reduced speed with plow attached**
- **Regularly inspect and maintain all components**

HELPFUL REMINDERS:

- A. Leave all fasteners loose until instructed to tighten them.
- B. Read and understand all instructions before beginning.
- C. Check carton contents prior to beginning installation.
- D. Work in an organized area large enough to fit vehicle and plow.
- E. Have the required tools ready to speed up the installation time.
- F. Have a helper available to help move heavy parts and assemblies.

MAINTENANCE NOTES:

- **Check and tighten all fasteners in the plow assembly and vehicle mounting after initial use and every 5 hours of use thereafter.**
- **After every 10 hours of use, lubricate all pivot bolts, pins, snap lock latches, and any other moving parts in the plow assembly with all-season grease.**

TOOLS REQUIRED:

Set of standard and metric sockets
Set of standard and metric open end wrenches
One Phillips Head Screwdriver
One 3/8" Drive Ratchet
Wire Cutters, strippers and Crimpers

Hack Saw
Drill
5/16" drill bit
Vice-Grips

1. Plow Mount Installation

1.1 **If not equipped with optional brush guard, proceed to next step**, otherwise loosen the vehicle brush guard lower mounts (A) and remove the nuts and bolts at the lower portion of the guard (B) (see figure 1.1). Remove the nuts from the top mounts and loosen the bolts so that the brush guard can be removed, ref. figure 1.2. Remove the four Phillips head bolts that hold on the plastic bumper cover. Save all hardware for reinstallation later.

1.2 Per fig. 1.2, locate the four bolts that fasten the bumper to the frame of the vehicle. Loosen the 2 upper support bolts, if not already loosened when removing the brush guard. Remove the 2 lower bumper support bolts. Save the nuts, but the bolts can be discarded as they will be replaced with longer bolts.

1.3 Per fig. 1.3, cut a slot in the bottom of the plastic bumper cover.

1.4 Per fig. 1.4, rotate bottom of bumper away from frame of vehicle. Slide bumper support bracket behind the bumper cross brace and under vehicle frame cross member. Attach to vehicle frame cross member with six 3/8" x 1" bolts, washers and lock nuts.

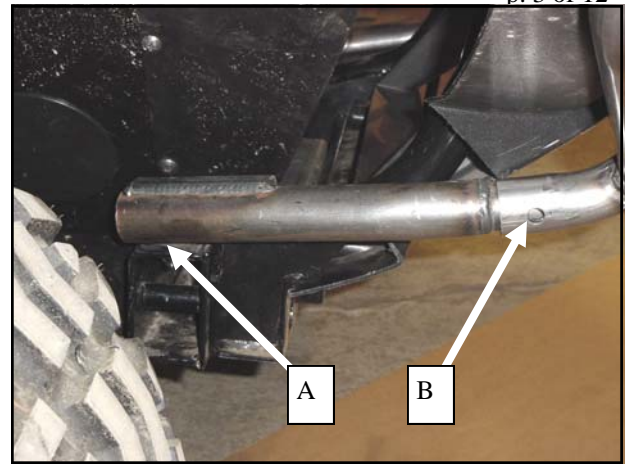


Fig. 1.1—Remove optional Brush Guard

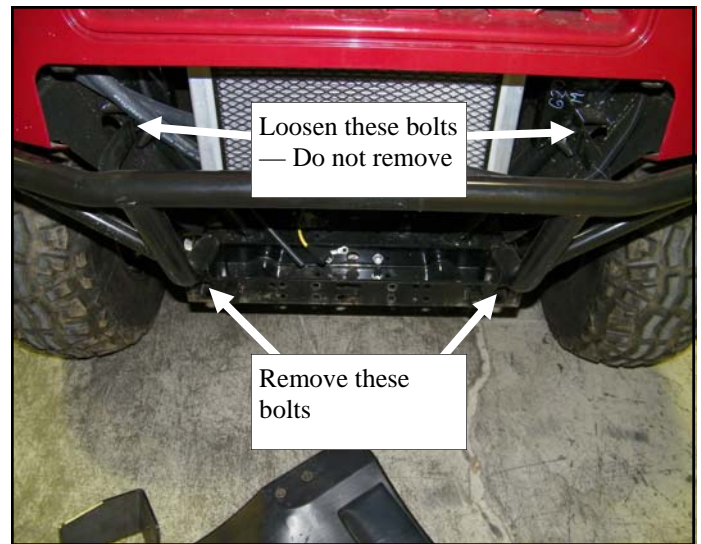


Fig. 1.2—Loosen Bumper

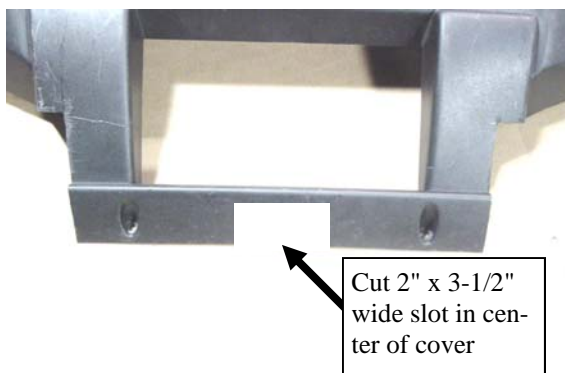


Fig. 1.3—Cut Bumper Cover

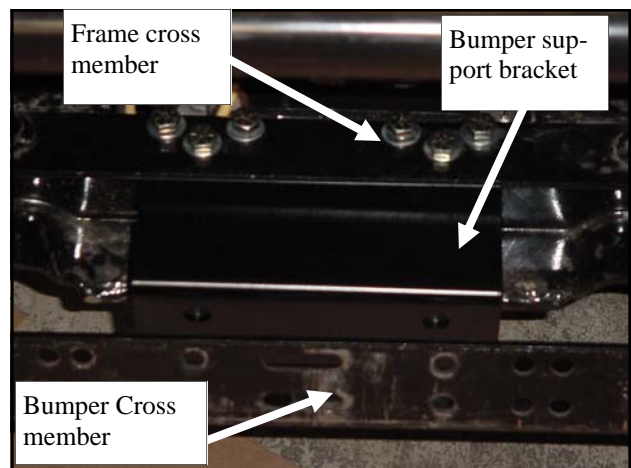


Fig. 1.4 — Bumper support bracket

1.5 **If not equipped with optional brush guard, proceed to next step**, otherwise reinstall it, with the plastic bumper cover resting inside. **Tighten the brush guard lower mounts ("A" figure 1.1) now, as they are very difficult to access after plow mount installation. Torque to 33 ft lbs.** Leave the rest of the brush guard bolts loose and do not install any of the bumper cover bolts. See figure 1.5.

1.6 Per figure 1.6 and 1.6.1, rotate the bumper back into the installed position. Orient the plow mount as shown, with the receiver facing forward. Lift the plow mount up from the bottom so that it captures the front cross member of the bumper and the rear of the frame cross member. **Note: The brush guard and plastic bumper cover are not shown in these pictures for clarity.**

1.7 Per figure 1.7, align four holes in bumper, 4 holes in plow mount, and four holes in bumper support bracket. Install four 3/8" bolts and washers through mount, bumper, and bumper bracket. Install the supplied M12 x 90 mm bolts and washers through the lower bumper mounts and attach with flanged nuts removed in step 1.2. Tighten the upper bumper bolts to 33 ft lbs.. **Note: The optional brush guard and plastic bumper cover are not shown in this picture for clarity.**



Fig. 1.5 — Brush guard installation.



Fig. 1.6—Mount Installation

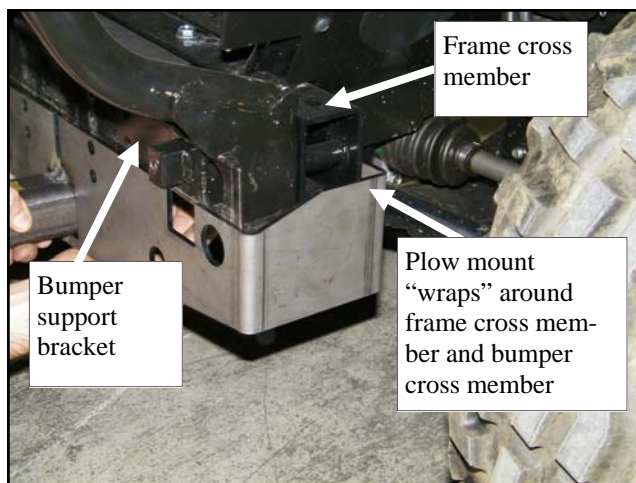


Fig. 1.6.1—Mount Detail

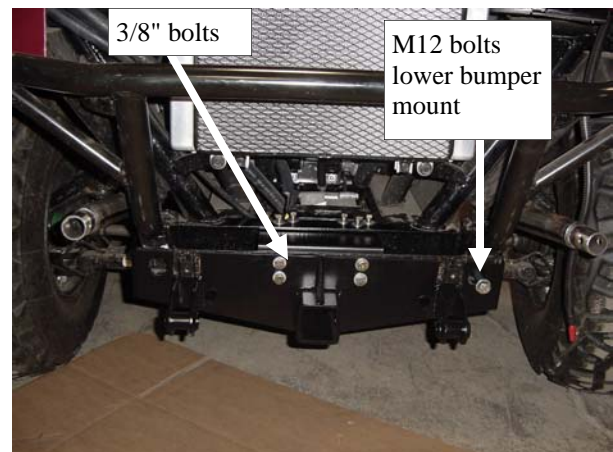


Fig. 1.7—Mount Installation

1.8 Tighten all bumper, brush guard, and plow mount bolts at this time. Also install the plastic bumper cover bolts removed in Step 1.2 and tighten them. Tighten 3/8" bolts to 33 ft lbs., M12 bolts to 59 ft Lbs., 10 mm bolts to 33 ft Lbs.

2. Lift Arm Mount Assembly installation

2.1 Per figure 2.1, attach the lift arm to the top of the actuator with a 1/2" X 2-1/4" bolt, 2 washers and a nylon lock nut. Tighten only enough to keep bolt from rattling back and forth.

2.2 Per figure 2.2, attach the bottom of the lift arm and the actuator to the lift arm mount with 1/2" x 4" bolts, washers (2 per bolt), and nuts. Bolts should be tight enough not to rattle, do not overtighten.

2.3 Per figure 2.3 and 2.3.1, install the lift arm mount assembly to the plow mount with 5/8" dia. quick pin.



Fig. 1.8—Plow Mount Installed.

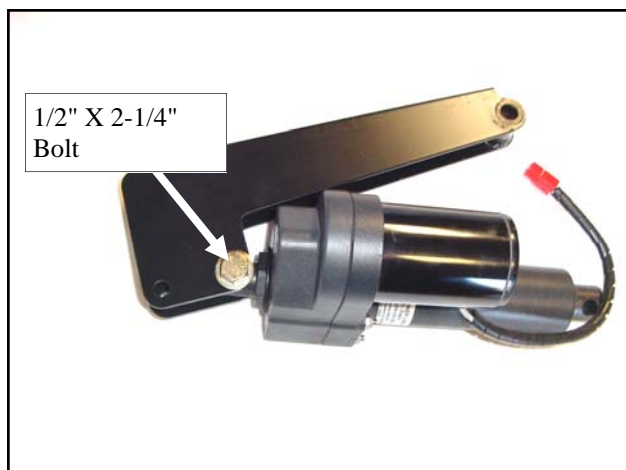


Fig. 2.1—Lift arm mount assembly

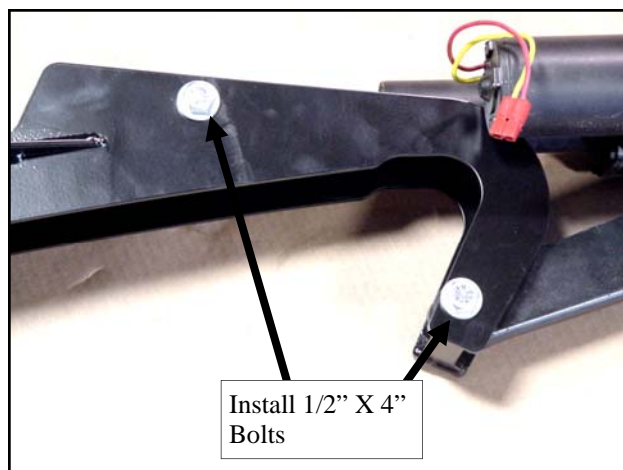


Fig. 2.2 — Actuator & lift arm assembly

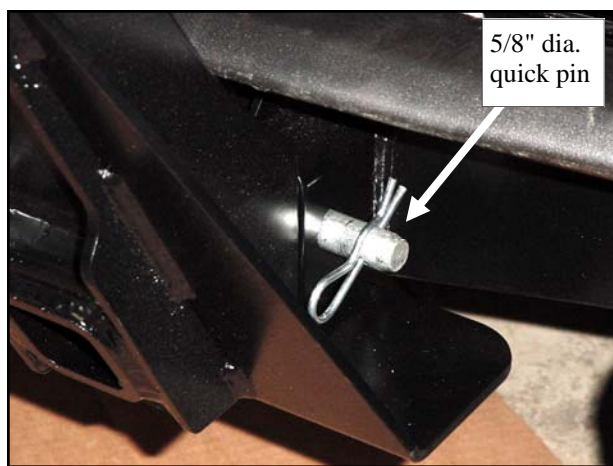


Fig. 2.3 — Lift arm mount assembly installation



Fig. 2.3.1 — Lift arm mount assembly installation

3. Wiring

- 3.1 Install the connector provided in the wiring kit on to the ends of the red and black 12 gauge wire provided. Install the wire in split loom and connect to actuator. Remove driver's side cup holder from fender and route wires up into cavity between storage compartment and fender. Route down to under dash area. *NOTE: Be sure to leave enough slack in front of the bumper to allow the wires to travel up at least 4" when the cylinder is extended.* **CAUTION: Be sure the wire is positioned such that it can not be pinched or rubbed by any suspension or steering components. Wire tie the wires as necessary.**
- 3.2 Per figure 3.2, position the supplied switch bracket against the top of the driver's side fender. Drill two 5/16" holes using the holes in the switch bracket as a guide. Mount with supplied 1/4-20 hardware.
- 3.3 Feed the wires from step 3.1 through the rectangular hole in the switch bracket, trim to length and install female push on terminals. Connect to male terminals on the switch as shown in figure 3.3.
- 3.3 Use the remaining wire and loom to run from the switch location to the battery. Wire tie as necessary. Trim the red wire from the switch to length and install to fuse holder with the supplied butt-connector. Install one of the supplied ring terminals of the fuse holder on to the positive battery terminal. Trim the black wire to length and install remaining ring connector. Attach to the negative battery terminal.

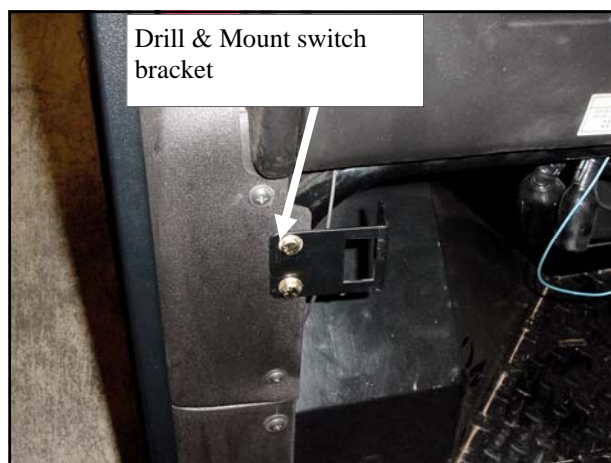


Fig. 3.2 — Switch bracket Installation.

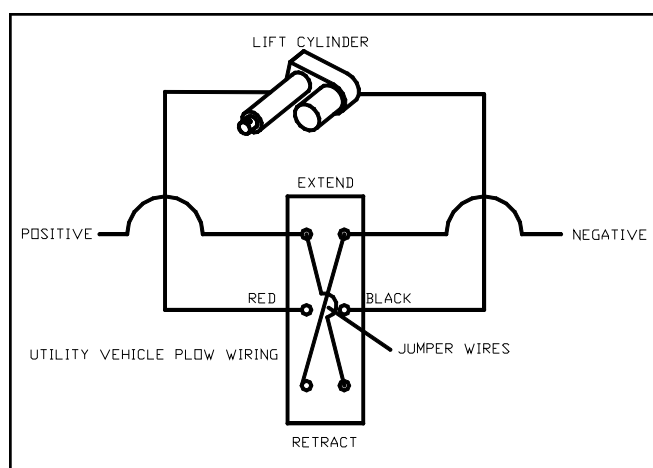


Fig. 3.3 — Switch wiring.

4. Blade Marker Installation

- 4.1 Per fig. 4.1, locate the blade marker kit.
- 4.2 Per fig 4.2, find the blade marker mounting holes on upper portion of the moldboard. Align the holes on the blade marker with the holes on the upper corner of the moldboard. Install two 5/16" hex head bolts and two nylon lock nuts supplied in the blade marker kit. Use a 5/16" washer under the head of the bolt. Repeat for opposite side.



Fig. 4.1—Blade Marker Kit

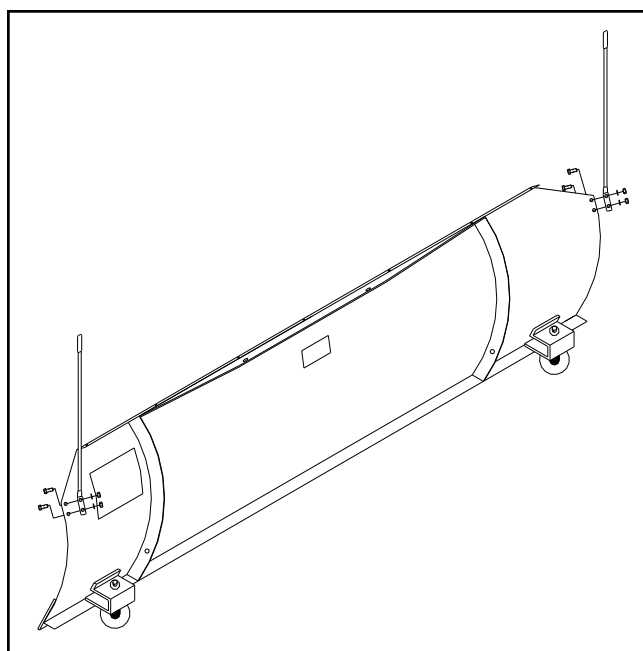


Fig. 4.2—Blade Marker Installation

5. Trip-frame to Moldboard Assembly

5.1 Per fig 5.1, locate the steel moldboard, trip frame, two 1/2" x 2-1/4" bolts, four 1/2" flat washers, and two 1/2" nylon lock nuts. Apply all-season grease to the mating surfaces on the trip frame and moldboard rib. As shown, line up the mounting hole in the trip frame with the mounting hole on the moldboard rib (near the bottom). Install into the mounting holes two 1/2"-13 x 2-1/4" bolts and washers as shown. Install 1/2" washers and nylon lock nuts on the back side of the bolts. Tighten the pivot hardware only until all clearance at the bolt and nut ends are removed. These must not be tightened fully, so that the installed snow blade is free to pivot on the trip frame. Check the trip frame for ability to move by hand without heavy force.

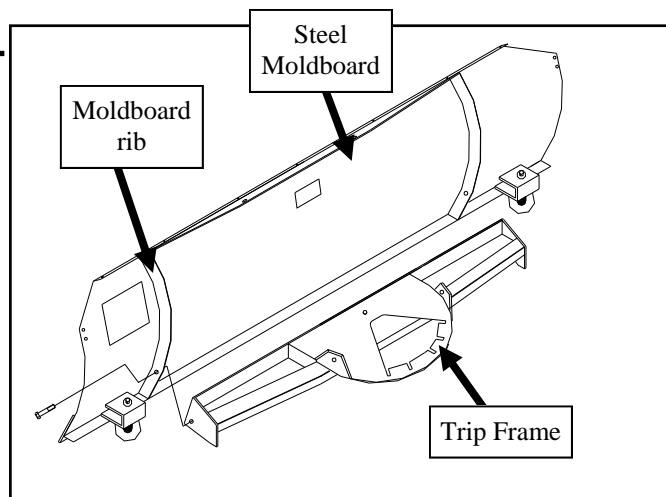


Fig. 5.1—Trip-Frame to Moldboard Assembly

6. Trip Spring Installation

6.1 Per figure 6.1, locate the two trip springs, two eyelet bolts, two 3/8" hex nuts, two 3/8" nylon lock nuts, and four 3/8" washers. Install a 3/8" hex nut followed by a 3/8" washer onto each eyebolt. Thread the nut approximately 3/4 of the way down the length of the eyebolt and allow the washer to rest on top of the nut.

6.2 *Note: Trip frame is shown an exaggerated distance away from moldboard to clarify trip spring placement.* Per Fig 6.2, hook one end of the trip spring through the lower trip spring mount. Hook the eyebolt on the other end of the spring and insert the threaded section up through the hole in the upper spring mount. Install a 3/8" washer, then a 3/8" nylon lock nut on the eyebolt. Repeat for the second trip spring.

6.3 Set the spring tension by tightening the nylon lock nut until a sheet of paper can slide between two coils on the spring. Be sure to set tension evenly in both springs. Tighten the previously installed 3/8" hex nut on the eyebolt against the bottom of the upper spring mount to lock the eyebolt into position.



Fig. 6.1—Trip Springs and Hardware

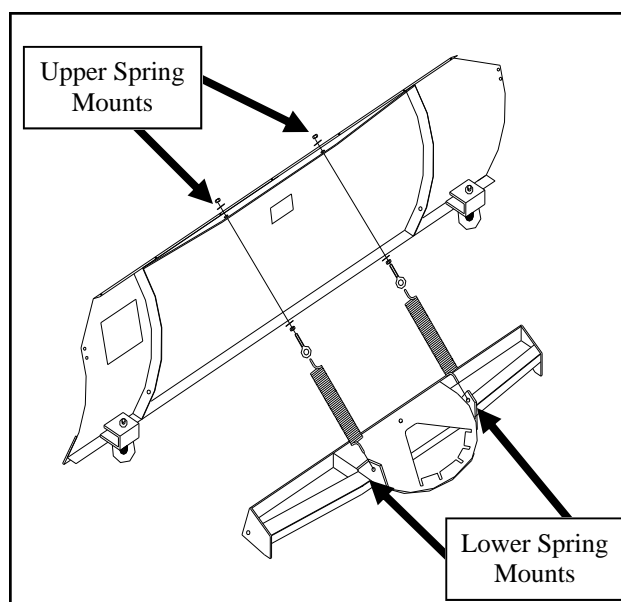


Fig. 6.2—Trip Spring Installation

7. A-Frame Installation

7.1 Per fig 7.1, locate the A-frame, blade angle handle, handle spring, one 1/2-20 x 3.5" hex head bolt, one 1/2-20 conical locking hex nut, and two 1/2" washers. Apply all-season grease to the top and bottom surface of the A-frame around and in the 1/2" bolt hole. Grease should extend about an inch away from the center of the hole.

7.2 Per fig. 7.2, slide the A-Frame into the trip frame pocket, aligning the 1/2" bolt holes on both assemblies. Install the 1/2-20 x 3.5" hex head bolt with a 1/2" washer under the head of the bolt and under the lock nut. Tighten until all slack is removed from the bolt while the A-frame is allowed to rotate freely in the trip frame pocket.

7.3 Install the blade angle handle. For easiest installation, be certain A-frame is oriented as in fig 7.3, with the trip frame blade angle slot aligned with the A-frame angle slot in the center position. Orient the blade angle handle so that the spring and handle point away from the moldboard, per fig.7.3

7.4 Per figs. 7.3 and 7.4, slide blade angle handle and spring into blade angle slot, being certain to capture lower A-frame plate between the angle handle roll pins.

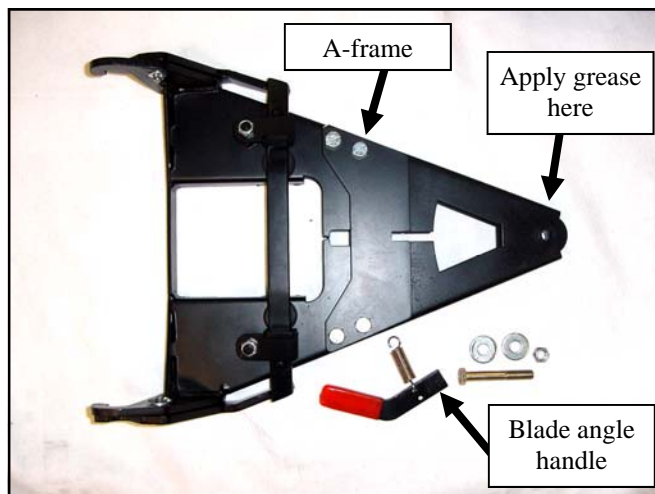


Fig. 7.1—A-Frame and Hardware



Fig. 7.2—Install A-Frame into Trip Frame Pocket

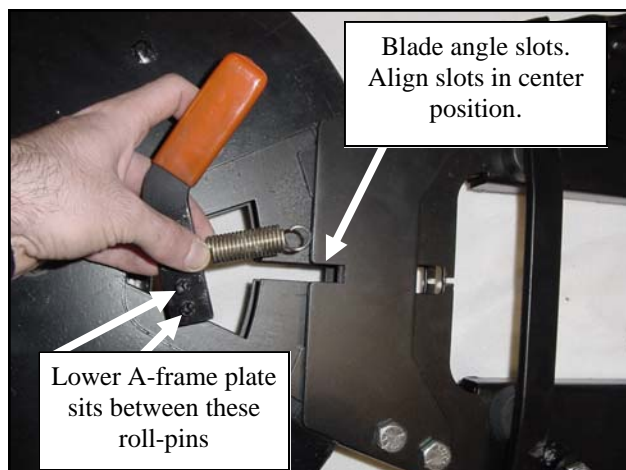


Fig. 7.3—Blade angle handle oriented correctly

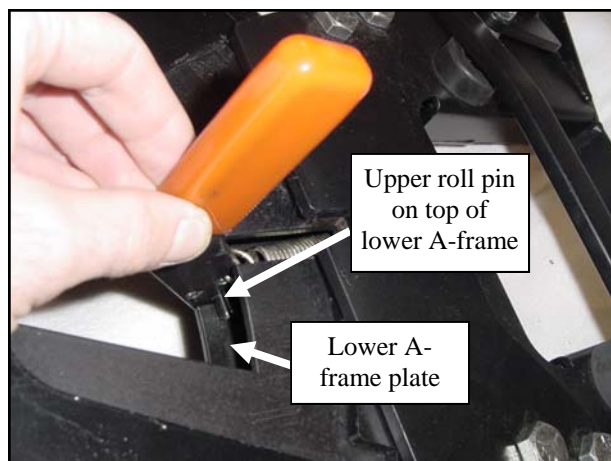


Fig. 7.4—Blade angle handle

7. A-Frame Installation (continued)

- 7.5 Per fig 7.5, with a pair of vice-grips stretch the handle spring away from moldboard and engage the spring hook into the retaining slot of the lower A-frame plate.
- 7.6 To rotate blade to any of the four possible angled positions, pull the handle towards the moldboard (away from the front of the vehicle) until the handle clears the uppermost blade angle slot. Rotate the plow into the desired position and release the handle. Be certain the blade angle handle is re-engaged in the uppermost slot. Wiggle the moldboard to test engagement of the handle.

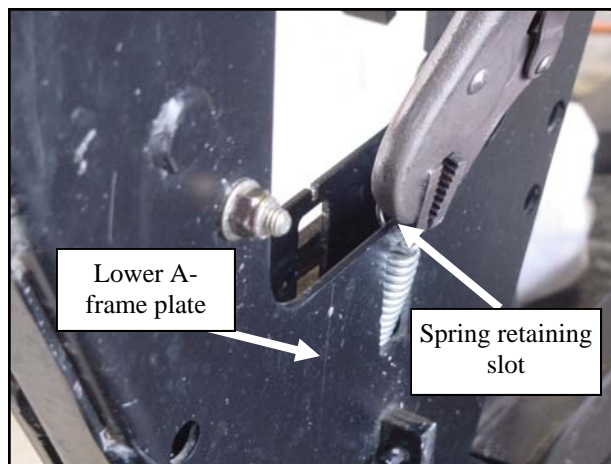


Fig. 7.5—Blade angle handle installed

8. Lift Chain and Shackle Installation

- 8.1 Per figure 8.1, insert the shackle through one end of the lift chain. Insert the clevis pin on the shackle into the lifting hole on the trip frame. Close the shackle by threading the clevis pin into the threads on the opposite side of the shackle. Tighten with an adjustable wrench or pliers.

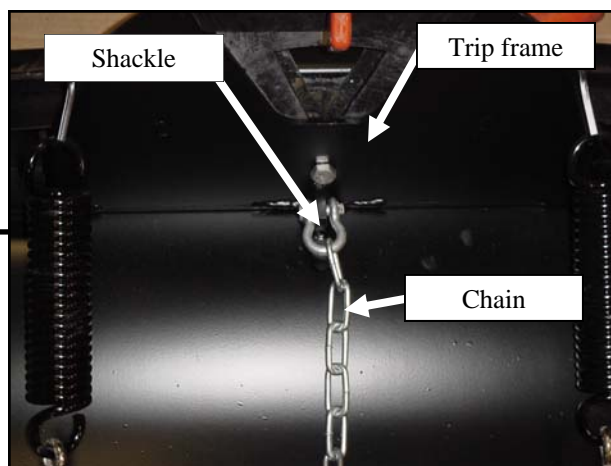


Fig. 8.1—Chain - Shackle Installation

9. Operation of Quick-Attach Handle

- 9.1 The A-frame handle serves two purposes when operated: a) it provides a comfortable grip area to lift the plow into position for mounting, and b) it rotates the lower mount hook into the open position. Per figure 9.1, rotate the secondary locking tabs up and in as shown.
- 9.2 Per figure 9.2, place your hand on the A-frame handle as shown. Push the A-frame handle towards the ground, compressing the rubber spacers. This will remove pressure from the lock down tabs and allow them to rotate freely. Rotate the lockdown tabs toward the center of the A-frame.

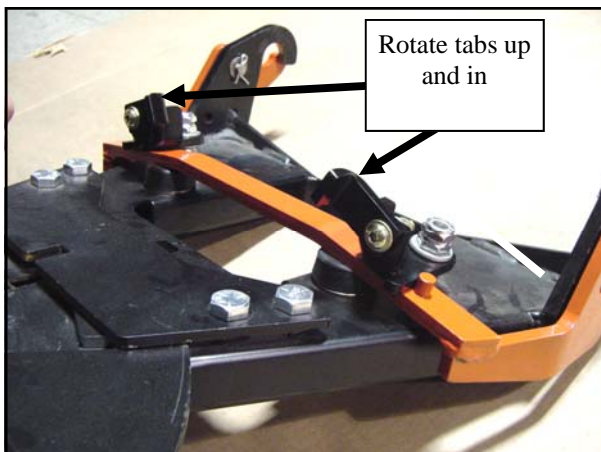


Fig. 9.1—A-Frame secondary locking tabs

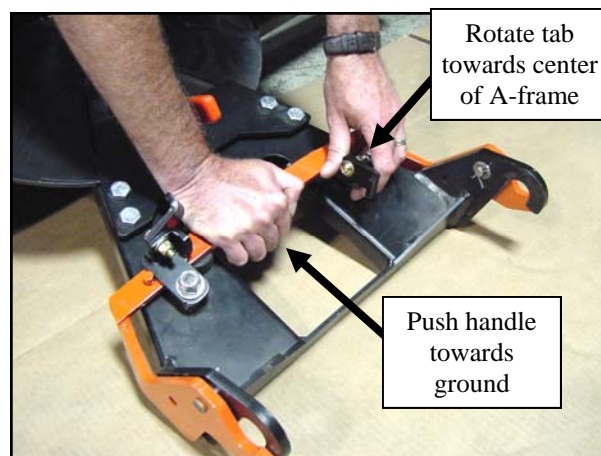


Fig. 9.2 — A-Frame Handle Operation

9. Operation of Quick-Attach Handle (cont.)

9.3 Per figure 9.3, lift the handle until the lower mount hooks are fully opened. The plow can easily be moved into position with the A-frame handle fully opened.

9.4 Per figure 9.4, lift the plow with the A-frame handle and engage the upper mount hooks on the mount bar of the vehicle. Push the A-frame handle towards the ground to close the lower hooks. Apply slight downward pressure to the handle and rotate the lockdown tabs into the closed position (away from center of A-Frame), and lower the secondary latches as shown in figure 9.4.1.

CAUTION! - LOCK-DOWN TABS MUST BE FULLY CLOSED TO ENSURE SAFE OPERATION OF PLOW. ALWAYS CHECK TO MAKE CERTAIN LOCKDOWN TABS ARE FULLY ENGAGED IN THE “CLOSED” POSITION. FAILURE TO PROPERLY ENGAGE LOCK DOWN TABS CAN DAMAGE PLOW AND RESULT IN SERIOUS INJURY.

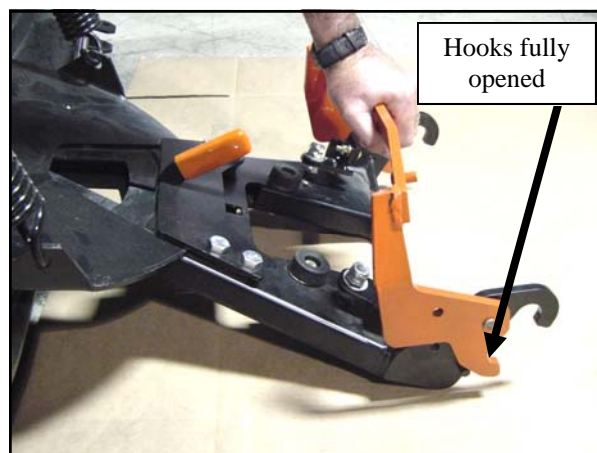


Fig. 9.3 — A-Frame Handle Fully Opened

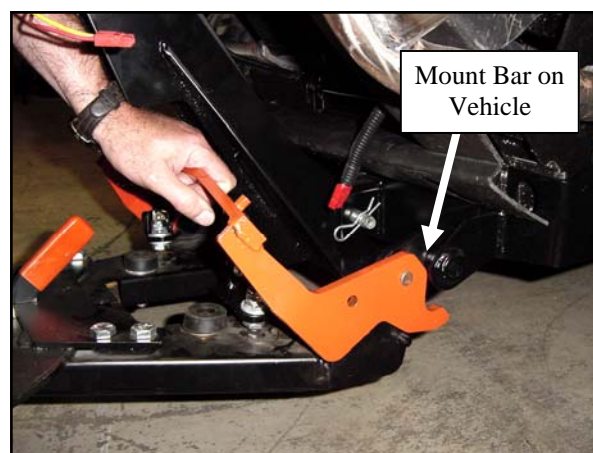


Fig. 9.4 — Install plow to mount

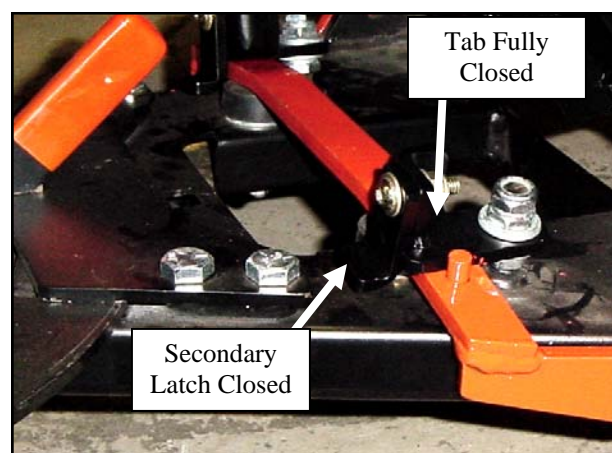
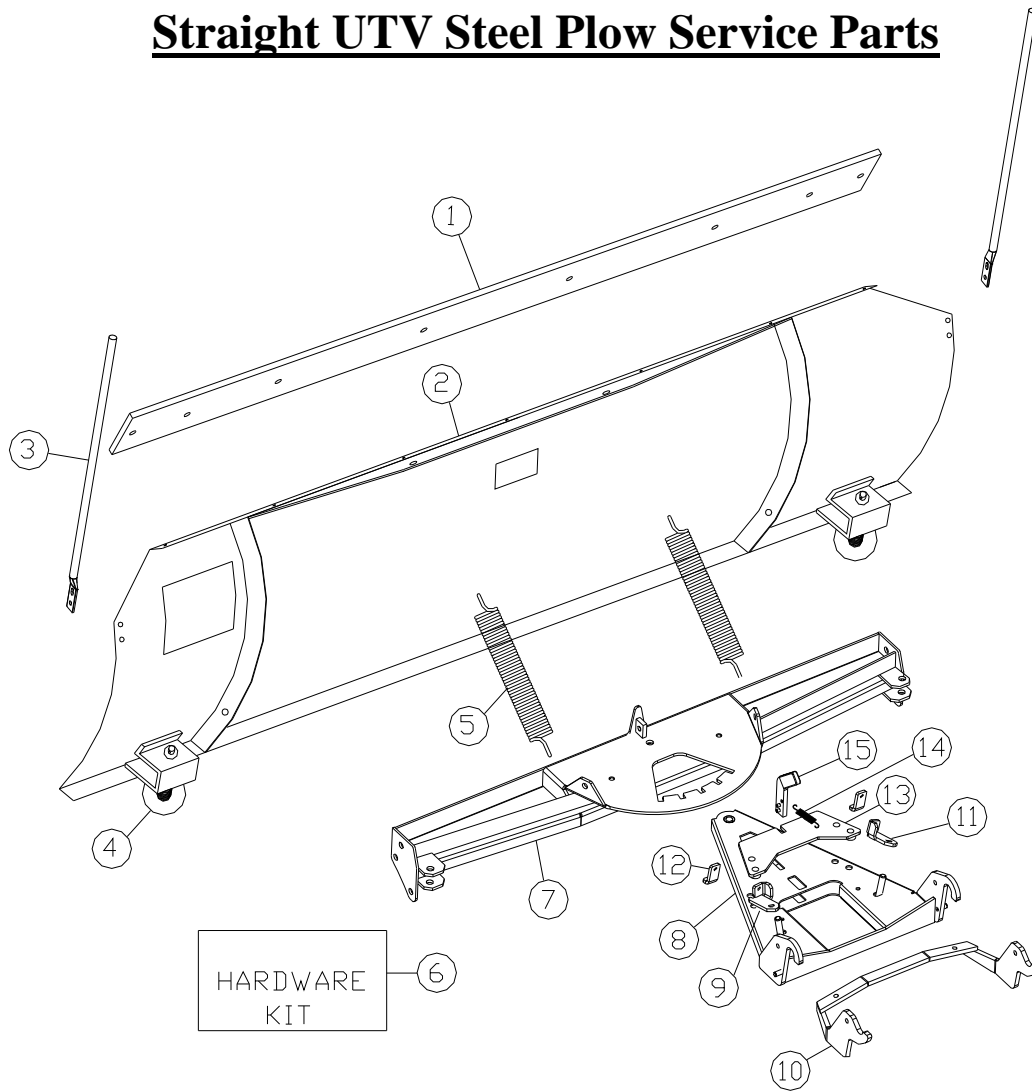


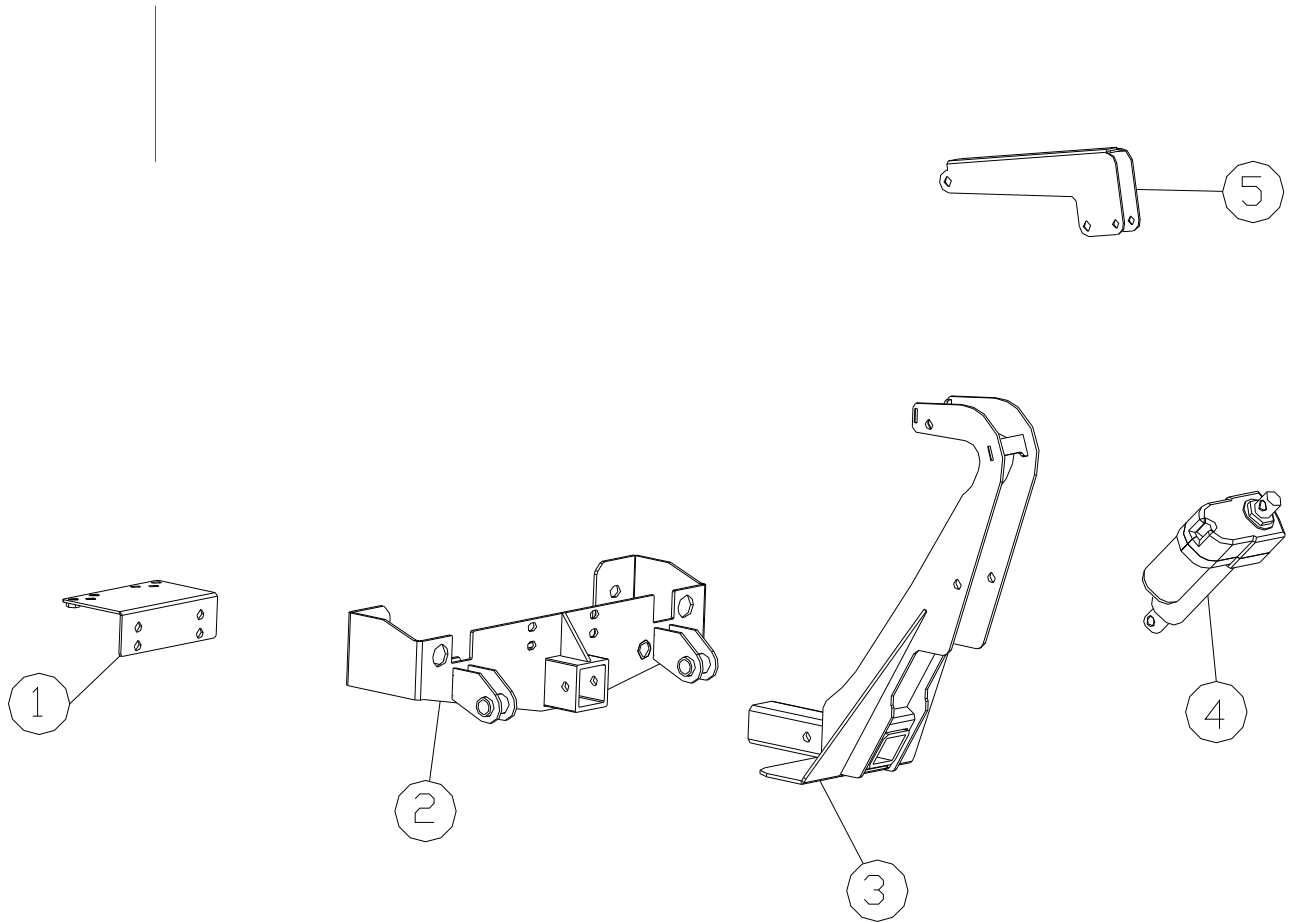
Fig. 9.4.1—Tab Shown Fully Closed

Straight UTV Steel Plow Service Parts



PART	DESCRIPTION	PART NUMBER	QUANTITY
1	Cutting Edge (Steel)	KAF25-039E	1
2	Steel Moldboard Assembly	8SV-USMB-B5	1
3	Blade Marker Kit (sold as a pair, not separately)	1TBP37	1
4	Skid Shoe (sold separately, not as a pair)	KAF25-039S	2
5	Trip Spring (sold separately, not as a pair)	KAF25-039SP	2
6	Hardware Kit	KM4P-HWK	1
7	Trip Frame	8SV-UTPTF-B5	1
8	A-Frame Body	8SV-AFB-B5	1
9	A-Frame Lock Down Tab (Left)	8SV-AFLDT1L-B5	1
10	A-Frame Handle	8SV-AFHN-O3	1
11	A-Frame Lock Down Tab (Right)	8SV-AFLDT1R-B5	1
12	Secondary Latch	8SV-AFLDT2-B5	2
13	Angle Latch Bracket	8SV-KAF19A-B5	1
14	Angle Latch Spring	KAF25-039P6	1
15	Angle Latch Handle	8SV-KAF10-B5	1

Plow Mount Service Parts



PART	DESCRIPTION	PART NUMBER	QUANTITY
1	Bumper Support Bracket	8SV-KM4PLBM-B5	1
2	Plow Mount	8SV-KM4PMA-B5	1
3	Lift arm mount	8SV-KM4PLAM-B5	1
4	Actuator	KAF25-039P1	1
5	Lift arm	8SV-UTPLA17-B5	1