

**V5008
Kubota RTV
72" Snow Blade**

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

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

These instructions are only valid for attachment to RTV-X900, RTV-X1100C, RTV-X1120, RTV-XG850, and RTV-X1140 utility vehicles.

Note: Front Heavy Duty Springs (V5218) or Heavy Duty Spring Damper Assembly (V5219) are required for RTV-X900, RTV-X1120, and RTV-XG850. Heavy duty springs come standard on RTV-X1140 model. For RTV-XG850, installation of K7591-97900 grill guard kit is required.

Approximate Installation Time: 1-2 hours



▲ 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.

ADDED WEIGHT NOTICE
Curtis Cabs, blades and general accessories add additional weight to the base vehicle. All Curtis accessory weights are listed in product brochures. Deduct the accessory's total weight from the vehicle's rated capacity and never exceed the vehicle's rated capacity including driver and passenger.

California Health and Safety Proposition 65 Warning: This product may contain chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

SAFETY INFORMATION:

⚠ 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. Never operate the vehicle outside of its rated weight capacity.

⚠ WARNING: Exposure to Carbon Monoxide can cause illness, serious injury or death. Never operate vehicle if suspicious of Carbon Monoxide. Inspect exhaust system for leaks monthly. Leaks can result from loose connections, corrosion, cracks or other damage to the exhaust manifold. If leaks are found, repair or replace exhaust system. Do not use vehicle until repair or replacement is complete.

WARNING: Serious injury or death:

- Never stand or ride on the plow assembly.
- ⚠** • Never operate the plow near pets or other people.
- Never leave the vehicle running unattended with plow attached.
- Never plow or carry plow at high speeds.
- Never clean or perform maintenance with plow raised.
- Never clean or service with plow in tripped condition.
- Never dislodge an obstruction with any part of the body.

HELPFUL REMINDERS:

- A. Check carton contents prior to beginning installation.
- B. Work in an organized area large enough to fit vehicle and plow.
- C. Have the required tools ready to speed up the installation time.
- D. Have a helper available to help move heavy parts and assemblies.

MAINTENANCE NOTES:

- Check and tighten all fasteners in the plow assembly and vehicle mount 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 3/8" Drive Ratchet
Wire Cutters and Crimpers
Pliers

Electric or Cordless Hand Drill and Drill Bits
File or Burr Removal Device

1. PRELIMINARY:

(for all models)

- 1.1 Remove and discard the two M12 bolts holding brush guard or front bumper to the front suspension cross member. The two bolts will not be reused with the snow blade mounting frame installed. See Fig 1.1.
- 1.2 Open the vehicle hood.
- 1.3 Run an M12 x 1.25 tap thru all six 6 mounting holes in the brush guard or front bumper and the rear mounting surface to clean powder coat from holes and prevent mounting bolt from stripping. Make sure tapped holes are clean and free of paint.
- 1.4 For the RTV-XG850, remove factory grill guard if applicable. Install K7591-97900 Grill Guard Kit. Factory grill guard can be stored and re-installed when snow blade is no longer in use. Certain RTV-XG850 accessories are not compatible with the K7591-97900 grill guard.

2. MOUNTING FRAME:

(for all models)

- 2.1 Position the mounting frame so that the four holes in the front plate and the two holes in the rear bracket line up with the corresponding threaded holes in the brush guard and front skid plate of the vehicle.
- 2.2 Install four M12 x 1.25 x 35mm bolts (A) and 12mm lock washers (B) through the holes in the brush guard and two M12 x 1.25 x 35mm bolts (C) and two 12mm lock washers (D) through the holes in the rear bracket of the mounting frame, threaded into the holes in the front cross angle and front skid plate of the vehicle. Check for fit up and if need be shim rear mounting plate with shims provided. Tighten the M12 bolts (A & C) to 92 ft.-lbs.

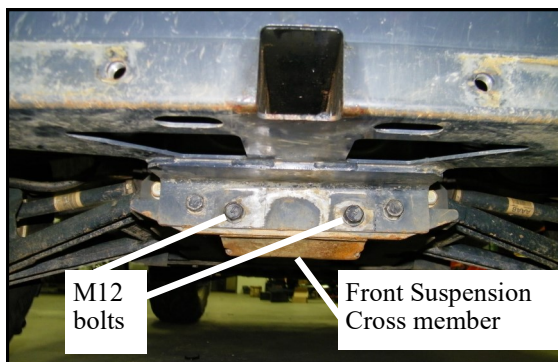


Fig 1.1 Mounting Hitch Front Mounting Plate

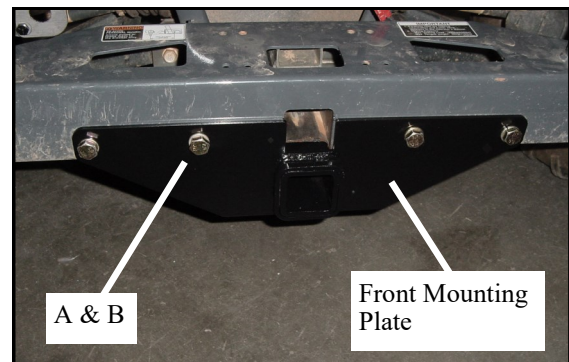
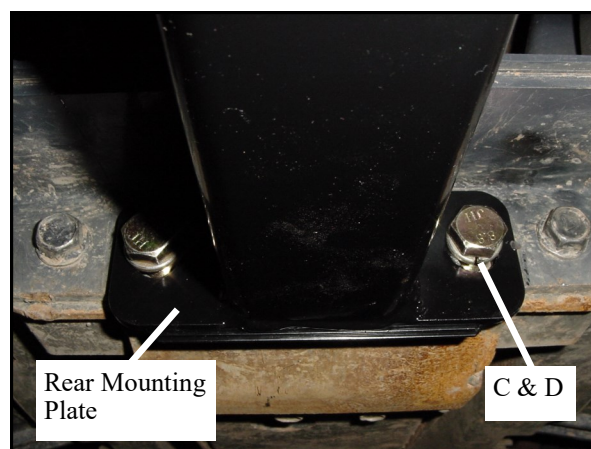


Fig 2.1 Mounting Hitch Front Mounting Plate



Mounting Hitch Rear Mounting Plate

3. CONTROL SWITCH & WIRING:

(for all models except RTV-XG850)

(for RTV-XG850, see steps 3.1a-3.3a on the next page)

- 3.1 See photo 1 and 2 for the approximate location for mounting the power relay. Per photo 1, locate the driver's side black, plastic, molded side panel. To expose the area shown in photo 2, remove the side panel. This will entail removing two (2) thumb screws on the driver's side of the unit. Using a #10 x 3/4" long self-drilling, self-tapping pan head screw, fasten the power relay and the ring terminal end of the 16 ga. black ground wire to the metal surface shown in photo 2. **IMPORTANT NOTE:** The 16 ga. black ground wire must have good electrical contact with the vehicle chassis.
- 3.2 Route the ring terminal ends of the red and black 12 ga. wires in the rear wiring harness to the vehicle battery. Attach the ring terminal end of the red 12 ga. wire (with fuse holder assembly) to the positive (+) terminal of the battery. Attach the black 12 ga. wire to the negative (-) terminal of the battery.
- 3.3 Route the male bullet terminal end of the 18 ga. blue wire to the vehicle wiring harness located under the seat and outside of the driver's side frame rail and connect it to the first of the three open female bullet terminal ends in the vehicle wiring harness.



Photo 1 Left side view of RTV-X900

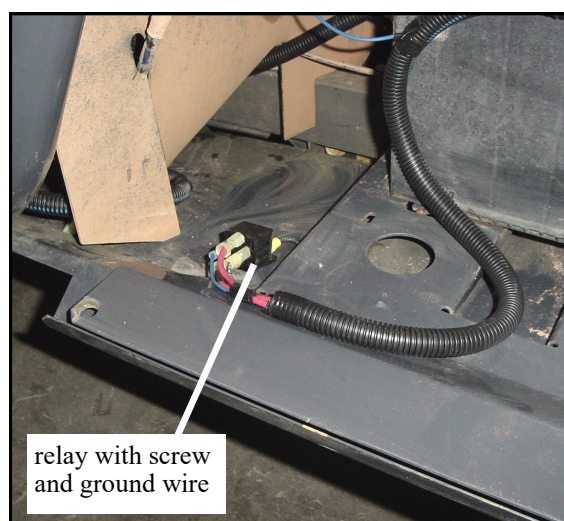
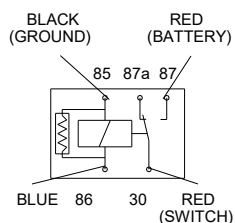


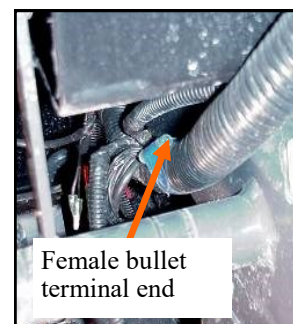
Photo 2 Left side view of RTV-X900 with molded side panel removed



Step 3.1



Step 3.2



Step 3.3

RTV-XG850 Wiring:

- 3.1a Remove under seat storage compartment and panel to access fuse compartment. If equipped with accessory wiring harness, fasten power relay and ring terminal at end of 16 ga. black ground wire using one of the existing bolts. If not equipped with accessory fuse box, drill 1/4" hole and fasten using bolt (not included in kit). Ensure that ground wire makes good contact with metal surface (photo 3).
- 3.2a Route BLACK 12 ga. ring terminal end to ground point on frame (photo 4). Attach ring terminal. Terminal diameter may need to be enlarged slightly. Route RED 12 ga. ring terminal end to starter solenoid under driver's seat (photo 5). Attach ring terminal to front post with respect to vehicle orientation.
- 3.3a Locate female bullet terminal at end of white/green wire located to the left of the starter solenoid (photo 6). Attach male bullet terminal of 18 ga. blue wire.



photo 3



photo 4



photo 5

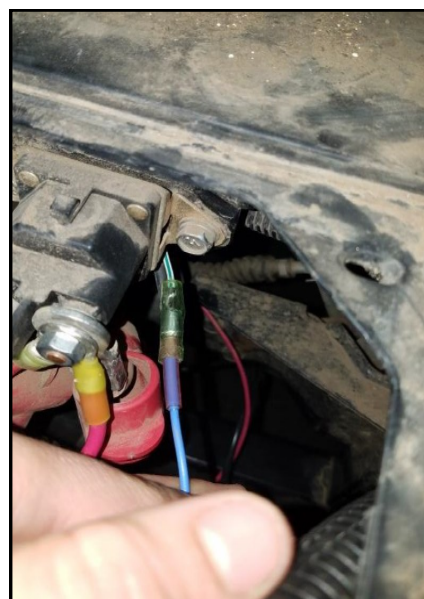
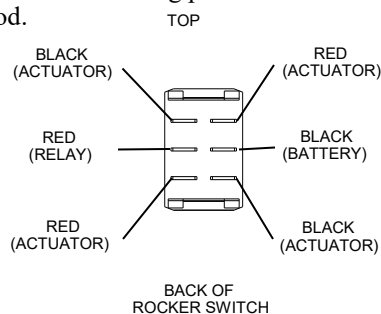


photo 6

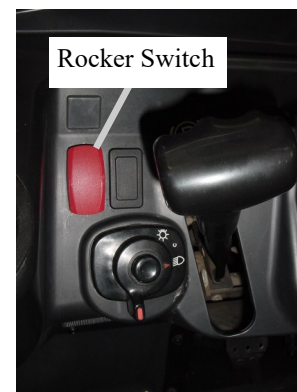
3. CONTROL SWITCH & WIRING (cont'd.):

(for all models)

- 3.4 From the area in front of the battery, route the free end of the rear wiring harness under the vehicle, following the path of the vehicle hydraulic hoses under the driver's side between the skid plate and the floor of the cab, into the front compartment under the hood, and to the area under the driver's side end of the dash.
- 3.5 Install the 3-position rocker switch into the rectangular hole in the dash. **IMPORTANT NOTE:** When installing wires to the terminals of the 3-position rocker switch, the wire positions are given viewing the switch from the terminal side.
- 3.6 Push the female disconnect on the free end of the red wire in the rear wiring harness onto the middle left terminal of the rocker switch. Push the female disconnect on the free end of the black wire in the rear wiring harness onto the middle right terminal of the rocker switch. Push the female disconnect on the free end of one of the red wires in the front wiring harness onto the bottom left terminal and the second red wire onto the top right terminal of the rocker switch. Push the female disconnect on the free end of one of the black wires in the front wiring harness onto the bottom right terminal and the second black wire onto the top left terminal of the rocker switch.
- 3.7 Route the dual connector end of the front wiring harness through the vehicle front compartment and through the center of the grill.
- 3.8 Check the routing of both the front and rear wiring harnesses to be sure they are away from heat sources and moving parts. Secure harnesses in place using cable ties. Close the vehicle hood.



Step 3.6

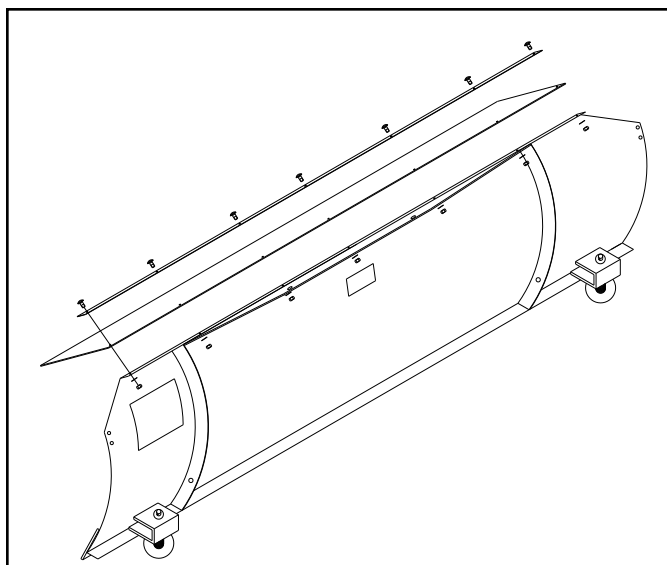


Step 3.5

4. SNOW DEFLECTOR:

(for all models)

- 4.1 Place the rubber snow deflector onto the top edge of the plow moldboard with the mounting holes lined up with the holes in the moldboard. Place the steel strap on top of the deflector and attach using seven 5/16-18 x 1-1/4" carriage bolts, 5/16" flat washers, and 5/16-18 lock nuts. Tighten the 5/16" lock nuts enough to securely hold the snow deflector assembly in place, but do not crush the rubber in the area around the bolt holes.



STEP 4.1

5. Trip-Frame to Moldboard Assembly

(for all models)

- 5.1 Per fig 5.1, locate the steel moldboard, trip frame, two 1/2-13 x 2-1/2" bolts, and two 1/2-13 Nylock locknuts. 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 a 1/2-13 x 2-1/2" bolt as shown. Install a 1/2-13 Nylock nut on the back side of the bolt. Repeat installation of hardware for the right side, orienting the bolt head to face away from the center of the moldboard. Tighten the Nylock nuts until all thread slack is removed from the assembly while allowing the trip frame to rotate freely.

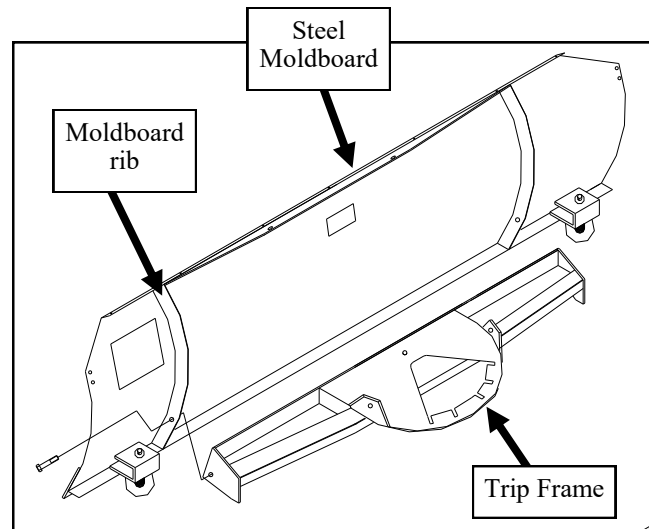


Fig. 5.1—Trip-Frame to Moldboard Assembly

6. Trip Spring Installation

(for all models)

- 6.1 Per figure 6.1, locate the two trip springs, two eye bolts, two 3/8-16 Nylock hex nuts, and two 3/8" washers.
- 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 eye bolt 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 Nylock hex nut on the eyebolt. Repeat above for the second trip spring.
- 6.3 Set the spring tension by tightening the Nylock nut until a sheet of paper can slide between two coils on the spring. Be sure to set tension evenly in both springs.



Fig. 6.1—Trip Springs and Hardware

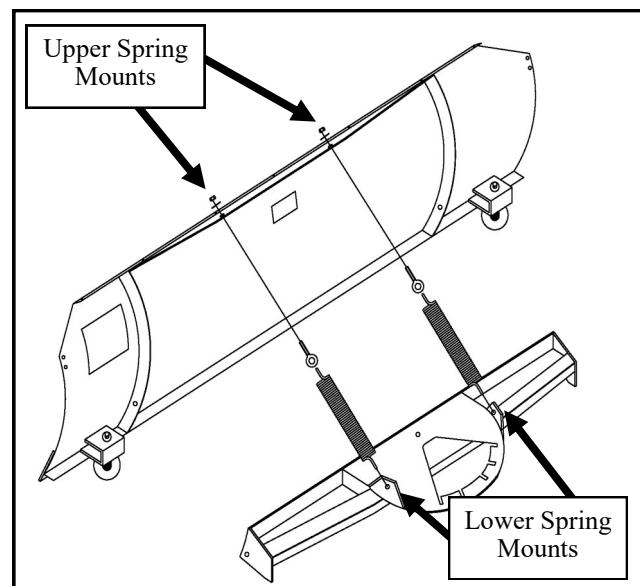


Fig. 6.2—Trip Spring Installation

7. A-Frame Installation

(for all models)

- 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 one 1/2" washer. 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 Apply grease to the under side of the angle latch bracket in the area where it will contact the trip frame. Position the angle latch bracket with the spacers down and with the four holes lined up with the corresponding holes in the top of the A-Frame. Fasten the bracket using four 1/2-13 x 1-1/2" hex head bolts. Make sure the A-Frame pivots in both directions.

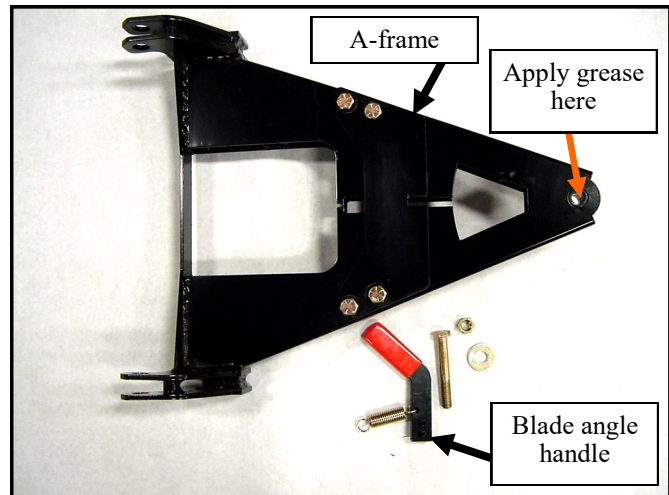


Fig. 7.1—A-Frame and Hardware

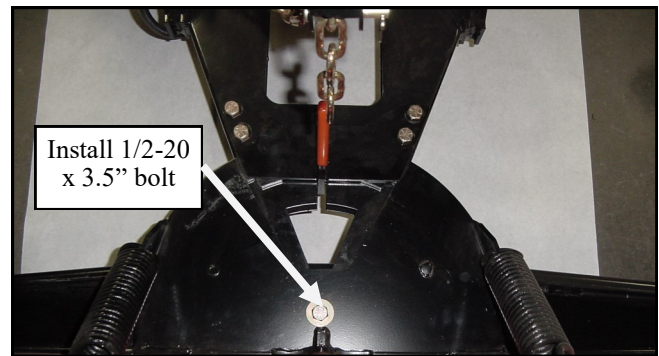


Fig. 7.2—A-Frame and Trip Frame

- 7.4 Install the blade angle handle. For easiest installation, be certain A-frame is oriented as in fig 7.4, 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.7.4
- 7.5 Per figs. 7.4 and 7.5, slide blade angle handle and spring into blade angle slot, being certain to capture lower A-frame plate between the angle handle roll pins.
- 7.6 Per fig 7.6, with a pair of pliers stretch the handle spring away from moldboard and engage the spring hook into the retaining slot of the upper A-frame plate.
- 7.7 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.

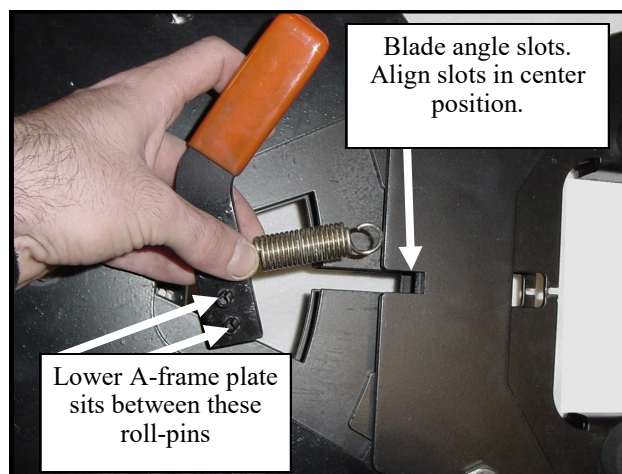


Fig. 7.4—Blade angle handle oriented correctly

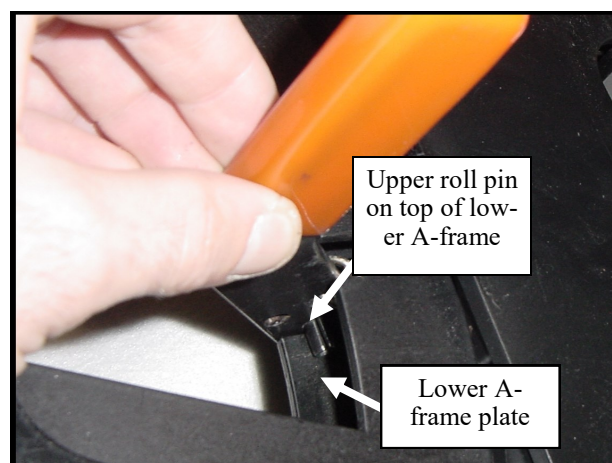


Fig. 7.5—Blade angle handle

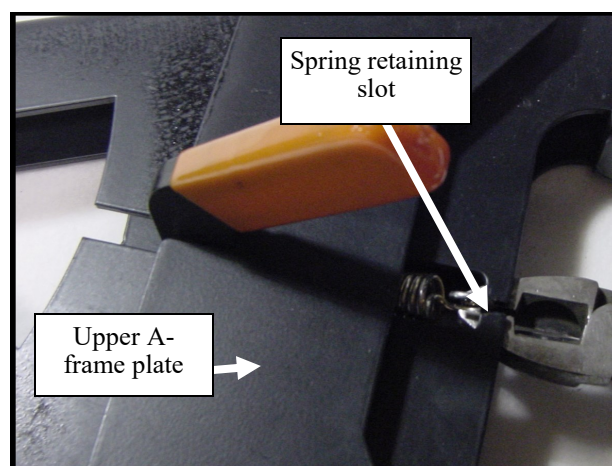


Fig. 7.6—Blade angle handle installed

8. Chain/Winch Shackle Installation

(for all models)

- 8.1 Locate the Lift Chain Shackle per figure 8.1
- 8.2 Per Fig 8.2, slide Lift Chain through shackle then insert the clevis pin on the lift chain shackle into the lifting hole on the trip frame. Slip cotter pin into hole on clevis pin and bend back to lock in place.



Fig. 8.1—Lift Chain Shackle

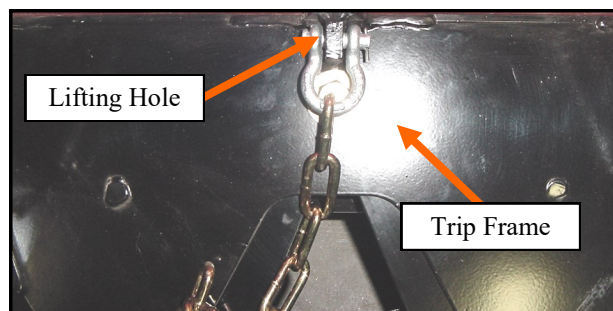


Fig. 8.2—Shackle installed on Trip Frame

9. Blade Marker Installation

(for all models)

- 9.1 Per fig. 9.1, locate the blade marker kit.
- 9.2 Per fig 9.2, 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 Nylock hex nuts supplied in the blade marker kit. Use a 5/16" washer under the Nylock hex nuts. Repeat step 9.2 to install the blade marker on the opposite side of the moldboard.



Fig. 9.1—Blade Marker Kit

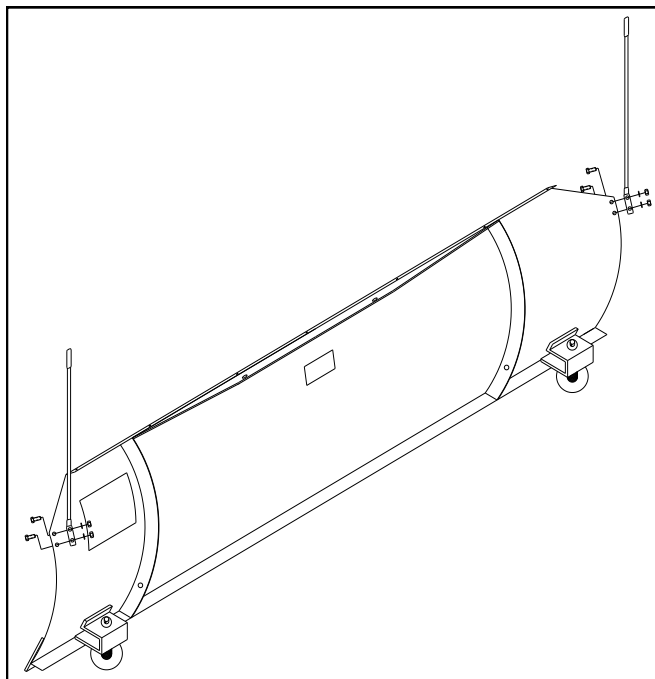


Fig. 9.2—Blade Marker Installation

10. Attach Lift Arm to Lift Frame

(for all models)

- 10.1 Apply grease to the pivot holes of the Lift Arm, Actuator, and the Upper Lift Frame. Place the rod end of the Actuator between the vertical plates of the Lift Frame, line up lower hole in lift frame with rod hole in actuator. Place 1/2" x 2-1/2" clevis pin in place to hold. Place the back end of the Lift Arm between the vertical plates of the Lift Frame, line up upper hole in lift frame with back hole in lift arm. Place 1/2" x 2-1/2" clevis pin in place to hold. Place the stationary end of the Actuator between the plates of the Lift Arm as shown, line up holes and place 1/2" x 2" clevis pin in place to hold. Then insert cotter pins in all 3 clevis pins to lock in place (fig 10.1).

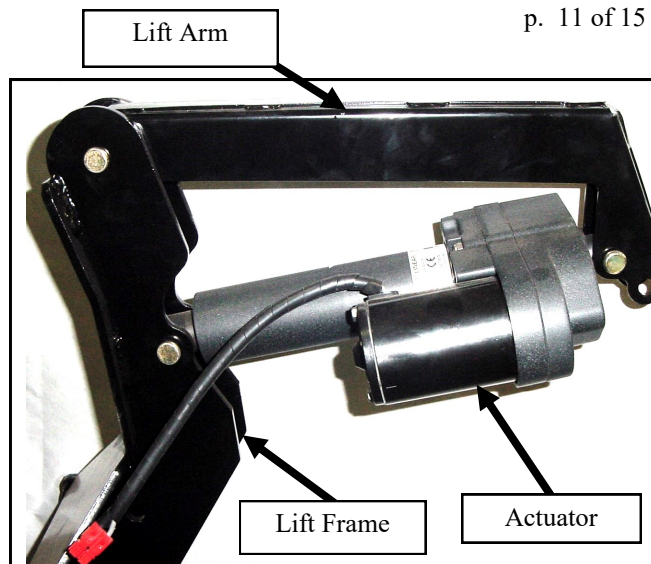


Fig. 10.1 Lift Frame and Lift Arm

11. Install Lift Frame Into Receiver

(for all models)

- 11.1 Apply grease to the stem of the lift frame and the inside of the receiver. Move the lift frame to the receiver of your vehicle so that the stem on the lift frame is lined up with the female end tube of the receiver hitch. Push the lift frame into the receiver hitch until the holes align making sure the lift frame clears the bumper and grill of your vehicle. See Figure 11.1. Install pin thru hole on receiver and lift frame stem and secure. See Fig 11.2

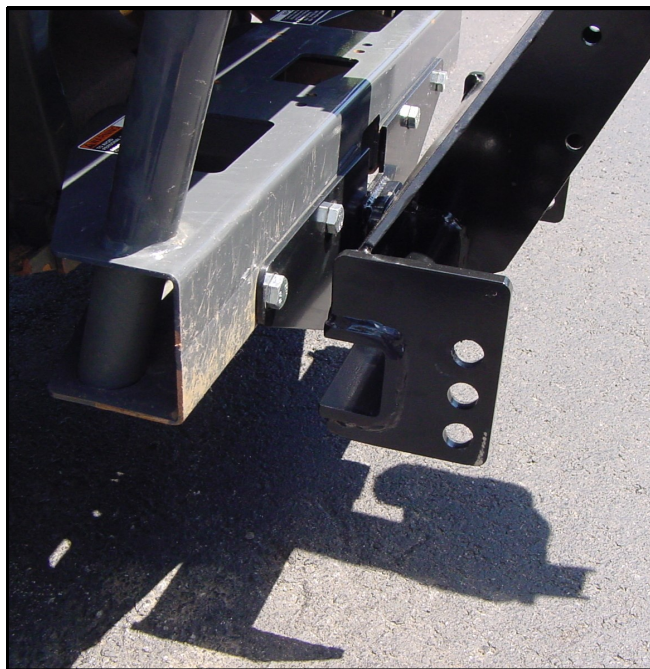


Fig. 11.1—Lift Frame and Receiver Setup



Fig. 11.2—Lift Frame and Receiver Pin

12. Attach Jack Leg in Upper Stored Position

(for all models)

- 12.1 Install the Rear Jack Leg in the stored position. Place the two pins on the rear jack leg into the two holes on the driver's side lift frame vertical plates. Insert cotter pins to hold in place. See Figs. 12.1a and 12.1b.

13. Jack Leg in Lower Storing Position

(for all models)

- 13.1 Per figure 13.1, place the Rear Jack Leg slot over the back strap on the A-frame, then place Rear Jack Leg in the lower holes of the Lift Frame. Insert the Jack Leg Pins into the lower holes of the Lift Frame. Place with foot in the down position. Per Figure 12.1b, insert pins to lock in place. This position is to be used when storing the plow.

CAUTION:

! Never operate plow with rear jack leg in the low storage position.



Fig. 12.1a—Jack Leg Stowed

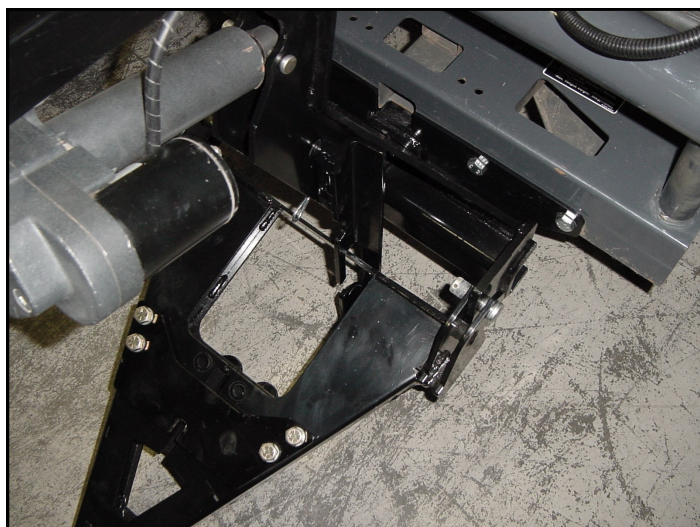


Fig. 13.1—Jack Leg in use



Fig. 12.1b— Jack Leg Pins

14. Attach A-Frame to Lift Frame

(for all models)

- 14.1 Apply grease to the pivot holes in the rear of the A-Frame and the lower Lift Frame.
- 14.2 Place the Rear Outer Tabs of the A-Frame on both sides of the Lower Outer tabs on the Lift Frame. Insert 3/4" x 2" long clevis pins into holes. Do not pin in place until final alignment with vehicle. Per Figures 14.1 and 14.2
- 14.3 Align A-Frame with proper hole on Lift frame so that A-Frame is level. Attach lift chain to lift arm so that a slight amount of slack is left in the chain. Per Fig 14.3

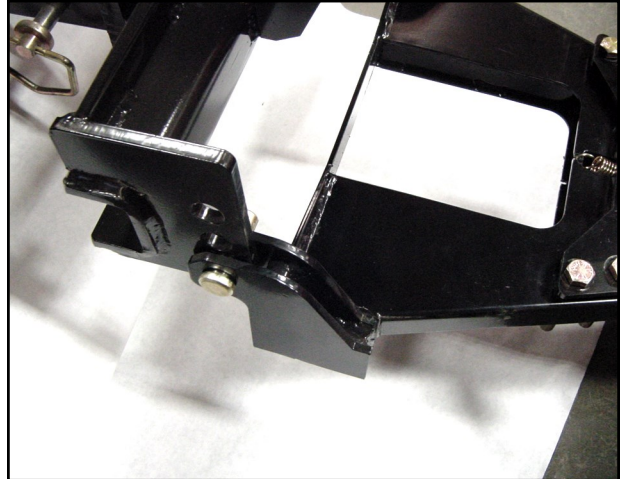


Fig. 14.1 A-Frame and Lift Frame Mounting Tabs

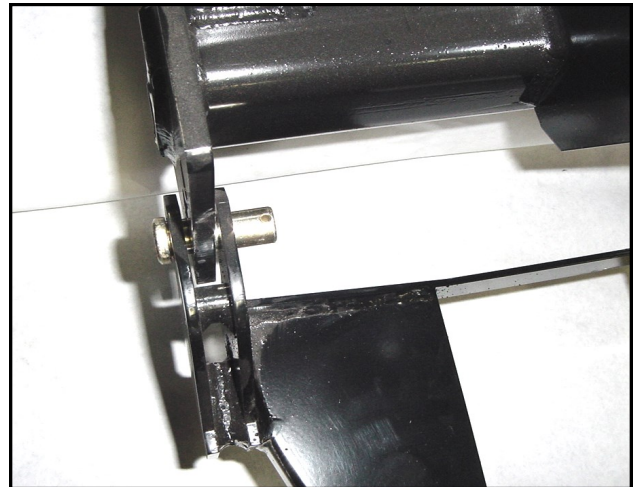
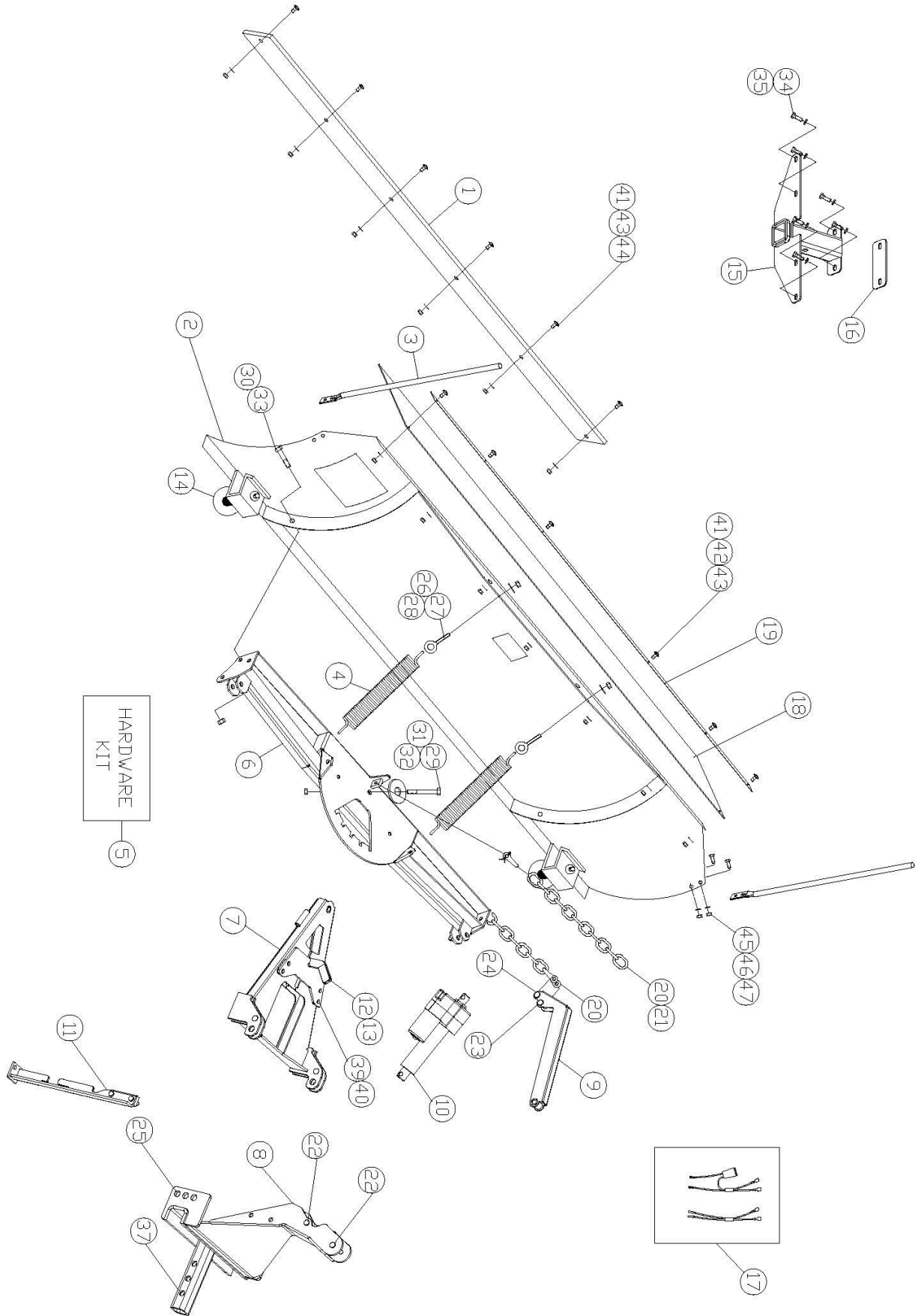


Fig. 14.2 A-Frame and Lift Frame Mounting Tabs



Fig. 14.3 Final Plow Configuration

V5008 Kubota RTV 72" Snow Blade Service Parts Diagram



V5008 Kubota RTV 72" Snow Blade Service Parts List

Part	Description	Kubota Part Number		Part Number	Qty.
1	Cutting Edge	70000-01088		UTV-CE	1
2	Steel Moldboard	70000-01092		KAF25-039P7	1
3	Blade Marker Kit (sold as pair)	70000-01011		1TBP37-B	1
4	Trip Spring (sold separately)	70000-01096		KAF25-039SP	1
5	Hardware Kit	77700-05221		KX9HWK-UTP	1
6	Trip Frame	70000-01093		KAF25-039P8	1
7	A-Frame	77700-05222		1TBP29LD	1
8	Lift Frame	77700-05223		1TBP38LD	1
9	Lift Arm	77700-05224		1TBP40LD	1
10	Actuator	77700-05225		ACT-02	1
11	Jack Leg	77700-05226		1TBP106LD7	1
12	Angle Latch Bracket	70000-01090		SM-KAF19A	1
13	Angle Latch Handle with hardware	70000-01185		KAF25-039P15	1
14	Skid Shoe Assembly (one unit, not a pair)	70000-01095		UTV-SHOE	1
15	Mounting Receiver	77700-05227		1TBP173	1
16	Receiver Shim Kit	77700-05228		1TBP174	1
17	Wiring Harness	77700-05292		KX9-UTPWH	1
18	Snow Deflector 72" UTP	70000-01012		2874784-1	1
19	Snow Deflector Strip UTP	70000-01013		2874784-2	1
20	26" 4/0 Chain	70000-01186		V4208-18	1
21	5/16" 3/4 Ton Anchor Shackle	70000-01187		V4208-19	1
22	1/2" x 2 1/2" Clevis Pin w/Cotter pin	O.L.	N.S.S.	1TBP137	2
23	1/2" x 2" Clevis Pin w/Cotter pin	O.L.	N.S.S.	1CP109	1
24	3/8" x 2" Clevis Pin w/Cotter pin	O.L.	N.S.S.	1CP110	1
25	3/4" x 2" Clevis Pin w/Cotter pin	O.L.	N.S.S.	1CP111	2
26	3/8" x 2 1/2" Eye Bolt	O.L.	N.S.S.	79-01-0001	2
27	3/8" Flat washer	O.L.	N.S.S.	71-00-0037	2
28	3/8-16 Nylon Insert Locknut	O.L.	N.S.S.	72-01-0027	2
29	1/2"-20 x 3 1/2" Hex head Bolt Gr.8	O.L.	N.S.S.	70-00-0110	1
30	1/2"-13 X 2 1/2" Hex head Bolt Gr 5	O.L.	N.S.S.	70-00-0111	2
31	1/2" Flat washer USS	O.L.	N.S.S.	71-00-0038	1
32	1/2"-20 Grade "C" locknut	O.L.	N.S.S.	72-02-0026	1
33	1/2" -13 Nylon Locknut	O.L.	N.S.S.	72-21-0001	2
34	M12x1.25 x 35 Long Hex Head Cap Screw Class 8.8	O.L.	N.S.S.	70-00-0115	6
35	M12 Lockwasher	O.L.	N.S.S.	71-15-0041	6
37	5/8 x 5-3/4 lg Hitch Pin w/lynch Pin	O.L.	N.S.S.	1SM1P2	1
38	1/8" Cotter Pin Hair Pin x 2.56 long	O.L.	N.S.S.	79-12-0010	2
39	1/2"-13 x 1 1/2" Hex head Bolt Gr.8	O.L.	N.S.S.	70-00-0112	4
40	1/2" lockwasher	O.L.	N.S.S.	71-15-0036	4
41	5/16-18 x 1 1/4" Carriage Head bolt	O.L.	N.S.S.	70-69-0002	15
42	5/16" Flat Washer USS	O.L.	N.S.S.	71-01-0003	7
43	5/16" -18 Nylon Locknut	O.L.	N.S.S.	72-01-0002	15
44	5/16" Flat Washer Fender	O.L.	N.S.S.	71-02-0007	8
45	5/16"-18 x 1" long hex head bolt	O.L.	N.S.S.	70-00-0007	4
46	5/16"-18 locknut	O.L.	N.S.S.	71-01-0002	4
47	5/16" Flatwasher	O.L.	N.S.S.	71-00-0035	4
	O.L. = obtain locally				
	N.S.S. = not sold separately				