

2,500/3,500 LB. POLARIS WINCH KIT (ATV)



POLARIS
The Way Out.®

KIT PN 2875879 (2,500)

2876494 (3,500)

Application

2005 - 2008 Full Sized Sportsman Models

Before you begin, read these instructions and check to be sure all parts and tools are accounted for. Please retain these installation instructions for future reference and parts ordering information.

This kit includes:

Qty.	Part Description	Part Number
1	Winch Sub Assembly includes:	
	Winch, Mtg Brackets	-----
	Roller Fairlead	-----
	Electrical Cables	2875996
	Hook Asm.	2875998
	Pulling Cable or Rope	-----
	*See page 5 of these instructions for additional replacement parts	
4	5/16-18 x 1 1/4" Self-tapping Hex Head Flange Bolts	7517208
2	1/4-20 x 1.00" Hex Head Bolts	7512247
2	1/4" Flat Washers	7555859
2	1/4-20 Locking Hex Nuts	7542122
1	Handlebar Switch Assembly w/bracket (2,500)	2876657
2	1/4-20 x 1 1/2" Socket head Capscrew-Willwood Brake (Black)	
2	M6 x 40 mm Socket head Capscrew -Hayes Brake (Silver)	7510005
2	Spacer, .38" O.D. x .26" I.D. x .35" L.	5334334
1	6 mm x 18 mm Battery Bolt	
1	Contactor, 12v with Rubber Contactor Cover	2875995
4	Cable Ties	7080138
1	Winching Guide	9920704
1	Handlebar Switch with Remote Socket	
1	Corded Remote (3,500 only)	
1	Instructions	9921531

You will need to supply:

Standard Socket Set	Razor Blade
10 mm Socket	Phillips Screwdriver
T-27 or T-30 Torx Tool	3/16" Allen Wrench
T-25 Torx	5 mm Allen Wrench
Standard Open End/Box End Wrench Set	

IMPORTANT: Your Polaris winch kit is exclusively designed for your Polaris ATV. Please read these installation instructions and your operator's manual thoroughly before beginning.

IMPORTANT: If your winch came with a synthetic rope (blue) factory installed, it must be replaced with Polaris PN 2875791 (synthetic rope).

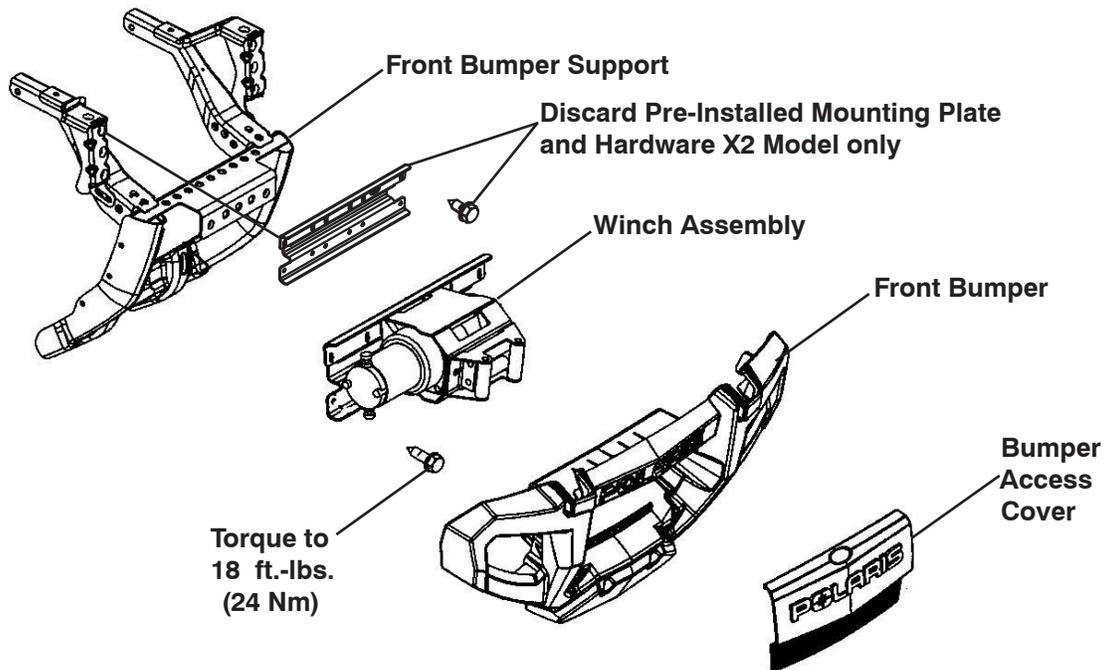
NOTE: Installation of this or any other accessory item is easier if the vehicle is clean and free of debris.

Approximate Installation Time: 35 minutes

INSTALLATION PREPARATION

1. Remove the seat.
2. Using a 10 mm wrench, disconnect the positive (red) wire from the battery.
3. Disconnect the left-hand and right-hand headlight plugs. These are located just behind the headlights.
4. Remove the bumper access cover by snapping out the bottom tabs, then lifting up.
5. Remove the four bolts holding the front bumper, and remove the bumper.
6. Remove the three phillips head screws securing the upper headlight pod. Loosen the top of the pod.
7. Remove the front cargo box. This can be accomplished by removing the four 5/16" self tapping bolts in the bottom of the box and the eight torx T-25 head fasteners in the front fenders.
8. Remove the front bulkhead access cover. This cover is located just below the headlight pod.
9. Remove the two bolts holding the splash shield (under the right-hand front cab), and remove the P-clip securing the winch wire connector to the splash shield. Refer to diagram at right.
10. **Certain X2 Models Only:** Remove the pre-installed winch mounting plate located on the front bumper support and discard.

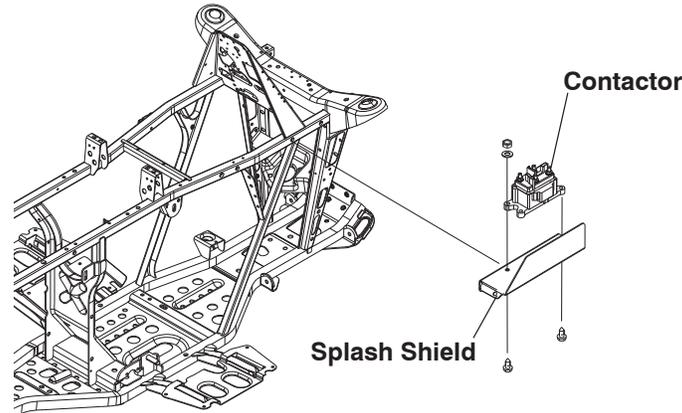
WINCH INSTALLATION



11. Fasten the winch assembly to the front bumper support using four 5/16" x 1/4" self-tapping bolts. Torque to 18 ft.-lbs. (24 Nm).
12. Route the yellow and blue wires up the front bulkhead and over to the right side splash guard location (contactor mount). Make certain that the wires will not interfere with the cargo box after it is reinstalled.

CONTACTOR INSTALLATION

13. Mount the contactor to the top side of the splash shield, using two 1/4-20 x 1.0" bolts, two washers, and two 1/4-20 nuts. Place the nut and washer on the **top side** of the shield. Assemble so the green and black wire lead is toward the center of the vehicle

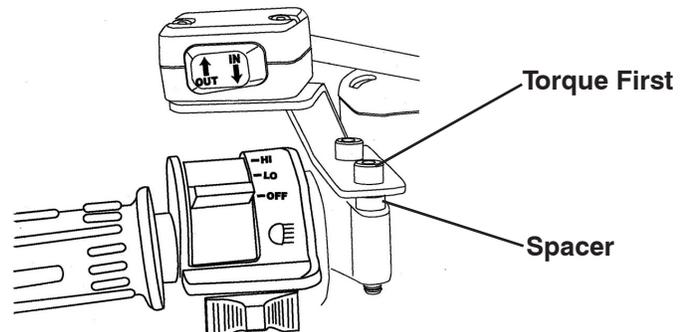


14. Feed the red, black, yellow and blue wires through the flap on the side of the **rubber contactor cover**.
15. Using a 10 mm socket, fasten the wires to the corresponding contactor terminal and tighten (terminals are color-coded).
16. Slide the rubber cover over the contactor.

SWITCH INSTALLATION

NOTE: There are two different master cylinders used on the Sportsman models. The Willwood has a plastic brake lever and uses the standard capscrews (black). The Hayes has a metal brake lever and uses the metric capscrews (silver). The installation procedure the switch is the same for both.

NOTE: If your kit has a handlebar switch with remote socket and remote, the switch mounting bracket must be installed to the handlebars separately from the switch.

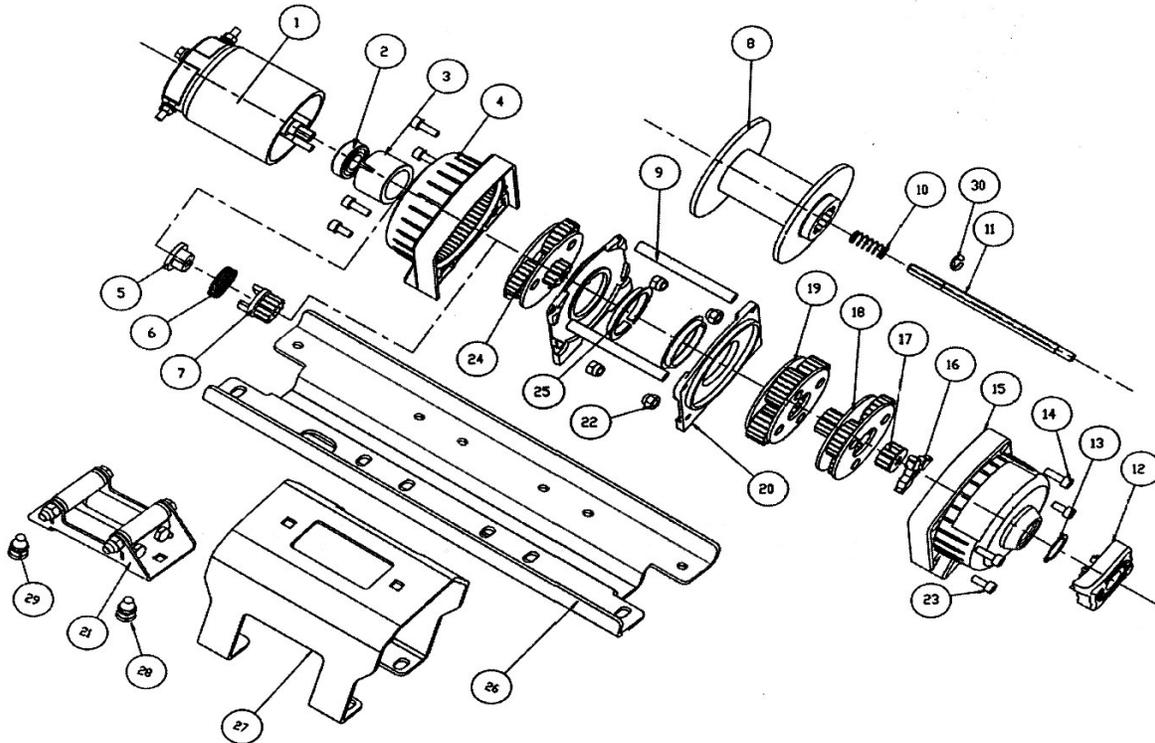


17. Using a T-27 or T-30 torx remove the two screws from the master cylinder clamp and discard.
18. Using a 3/16" Allen wrench (Willwood) or a 5 mm Allen wrench (Hayes), fasten the switch bracket to the master cylinder as illustrated using either the two black 1/4'-20 x 11/2" socket head capscrew (Willwood) or the two silver M6 x 40 mm socket head capscews. The screws should be lightly and evenly tightened to 25 in.-lbs. Torque the rear bolt first as indicated.
19. Route the switch wires down the handlebars and through the upper headlight pod to the bulkhead. (just below the pod). Secure the switch wires to the handlebars with cable ties.
20. Locate the main wire harness just below the pod. Find the orange/white wire connector and cut a slit in the end of the connector shrink wrap.
21. Connect the red wire from the switch to the orange/white wire from the main harness.
22. Route the green and black wire from the switch to the contactor location and plug into the corresponding lead.
23. Plug the green and black wires into the green and black wire lead on the contactor.

INSTALLATION COMPLETION

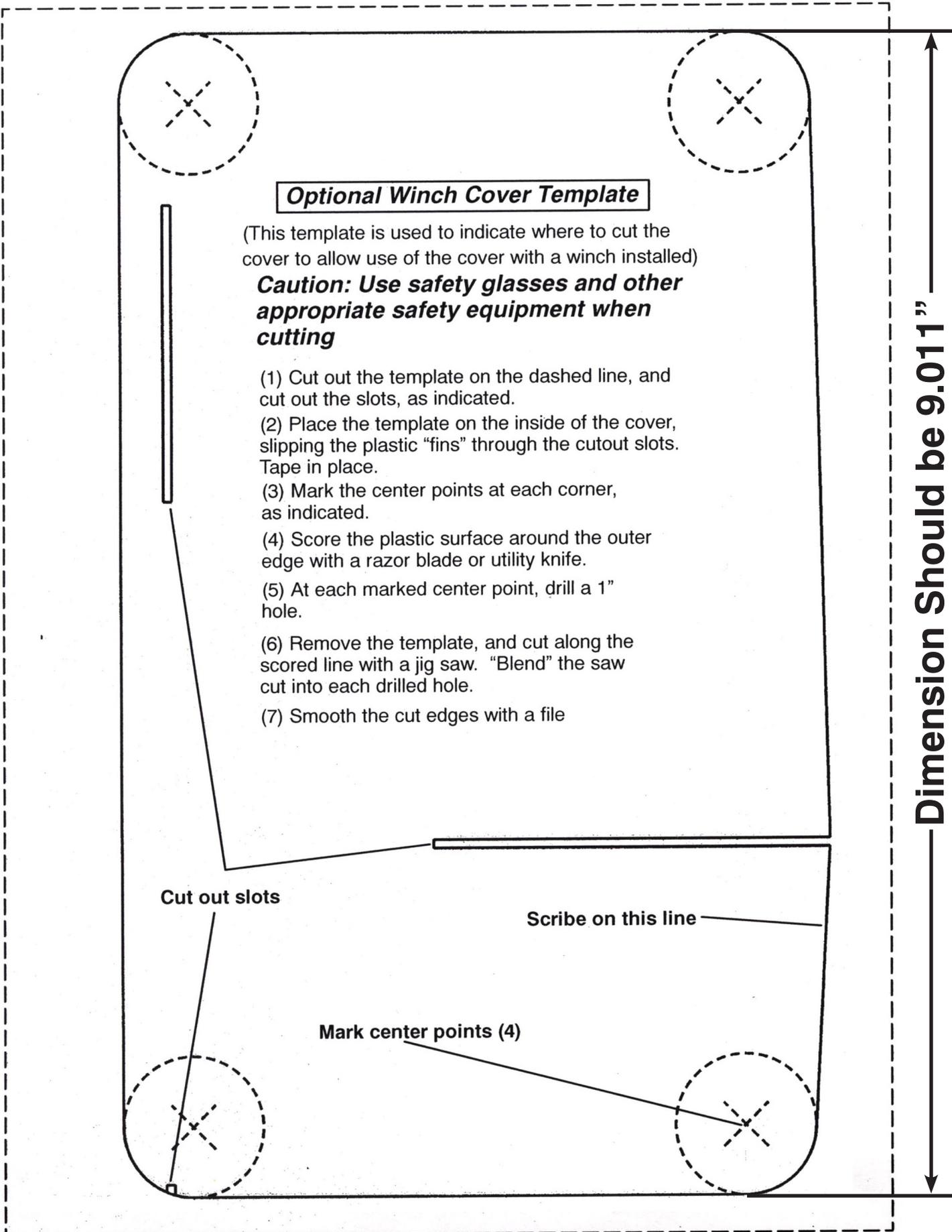
24. Locate the positive winch wire lead (near the battery) and remove the yellow shrink wrap. Using the longer battery bolt provided in the kit, connect both the positive battery cable and the positive winch wire lead to the battery.
25. Test the winch for operation. Turn the winch clutch to "ENGAGE". Winch in any slack cable as outlined in the winching guide.
26. Reassemble the splash shield/contactors to the frame.
27. Reassemble the upper headlight pod.
28. Reassemble the bulkhead cover and main access cover.
29. Reassemble the front bumper and attach the headlight wires.
30. Reinstall the front storage box.
31. Reinstall the seat.

POLARIS WINCH REPLACEMENT PARTS



Ref.	Qty/winch	2500lb	PN	3500lb	PN
1	1	ASM-MOTOR,2500LB	2876774	ASM-MOTOR,3500LB	2876805
2	1	BEARING-WINCH MOTOR	2876775	same as 2500	
3	1	BUSHING-WINCH MOTOR	2876776	same as 2500	
4	1	CASTING-WINCH,MOTOR END,2500	2876777	CASTING-WINCH,MOTOR END,3500	2876806
5	1	COUPLING-BRAKE,MOTOR	2876778	same as 2500	
6	1	LINING-BRAKE	2876779	same as 2500	
7	1	COUPLING-BRAKE,GEAR,2500	2876780	same as 2500	
8	1	SPOOL	2876781	same as 2500	
9	3	ROD-CONNECTING	2876782	same as 2500	
10	1	SPRING-FREESPOOL	2876783	same as 2500	
11	1	SHAFT-HEX	2876784	same as 2500	
12	1	KNOB-FREESPOOL	2876785	same as 2500	
13	1	CLIP-SPRING	2876786	same as 2500	
14	6	BOLT-LONG	2876787	same as 2500	
15	1	CASTING-WINCH,FS END,2500	2876788	CASTING-WINCH,FS END,3500	2876807
16	1	SLIDER-FREESPOOL	2876789	same as 2500	
17	1	GEAR-BULL,2500	2876790	GEAR-BULL,3500	287608
18	1	GEARSET-PLANETARY 3,2500	2876791	GEARSET-PLANETARY 3,3500	287609
19	1	GEARSET-PLANETARY 2,2500	2876792	GEARSET-PLANETARY 2,3500	287610
20	2	BRACKET-SUPPORT	2876793	same as 2500	
21	1	FAIRLEAD-ROLLER	2876794	same as 2500	
22	2	NUT-NYLOCK	2876795	same as 2500	
23	2	BOLT-SHORT	2876796	same as 2500	
24	1	GEARSET-PLANETARY 1,2500	2876797	GEARSET-PLANETARY 1,3500	2876811
25	2	BUSHING-SPOOL	2876798	same as 2500	
26	1	PLATE-WINCH MOUNT	2876799	same as 2500	
27	1	BRACKET-CLAMSHELL	2876800	same as 2500	
28	2	BOLT-CARRIAGE	2876801	same as 2500	
29	2	NUT-NYLOCK	2876802	same as 2500	
30	1	CLIP-RETAINER	2876803	same as 2500	
	1	ASM-WINCH,BASIC,2500	2876804	ASM-WINCH,BASIC,3500	2876812

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The diagram shows a rectangular template for a winch cover. It features a dashed outer boundary and a solid inner boundary. At each of the four corners, there is a dashed circle with an 'X' inside, representing a hole for a winch. On the left side, there is a vertical slot. On the bottom side, there is a horizontal slot. A vertical dimension line on the right side indicates a height of 9.011 inches. The text 'Dimension Should be 9.011"' is written vertically along this line. The title 'Optional Winch Cover Template' is enclosed in a box at the top center. Below the title, there is a paragraph of text, a caution statement, and a numbered list of seven steps. Labels with leader lines point to specific features: 'Cut out slots' points to the vertical slot on the left; 'Scribe on this line' points to the solid inner boundary; and 'Mark center points (4)' points to the center points of the four corner holes.

Optional Winch Cover Template

(This template is used to indicate where to cut the cover to allow use of the cover with a winch installed)

Caution: Use safety glasses and other appropriate safety equipment when cutting

- (1) Cut out the template on the dashed line, and cut out the slots, as indicated.
- (2) Place the template on the inside of the cover, slipping the plastic "fins" through the cutout slots. Tape in place.
- (3) Mark the center points at each corner, as indicated.
- (4) Score the plastic surface around the outer edge with a razor blade or utility knife.
- (5) At each marked center point, drill a 1" hole.
- (6) Remove the template, and cut along the scored line with a jig saw. "Blend" the saw cut into each drilled hole.
- (7) Smooth the cut edges with a file

Cut out slots

Scribe on this line

Mark center points (4)

Dimension Should be 9.011"