

DETERMINATOR™

SAT 2

The SAT 2 **DETERMINATOR™** set works on all Saturn products using the Saturn 10 cut system with B96 or P1110 key blank. When used properly you will be able to generate a key for a vehicle in just a few moments.

There are three tools in the SAT 2 **DETERMINATOR™** set.

The tool stamped **2** will trap tumblers with a depth of 2, 3, or 4.

The tool stamped **3** will trap tumblers with a depth of 3 or 4.

The tool stamped **4** will trap tumblers with a depth of 4.

THE TOOL

The **DETERMINATOR™** is a decoding tool and a tumbler release tool.

The **DETERMINATOR™** has numbers stamped on the side of the blade. These numbers correspond to the tumbler space locations. When the tool is inserted into the lock, the number closest to the face of the lock indicates the space which is being determined.

When the **DETERMINATOR™** traps a tumbler you will use the spring steel release tool to raise the tumbler and withdraw the **DETERMINATOR™** to the next tumbler location. Slide the release tool along the slot in the side of the tool, sloped end first. You will feel it raise the tumbler, slowly pull the **DETERMINATOR™** out a little to the next space and remove the release tool.

Decode spaces 5-10 from the door.

The door lock is bidirectional!. Tumblers are loaded from the top and bottom.



The SAT 2 Determinator™ uses the regular release tool.

NOTE: The 'mill' on the SAT 2 is wider than the release tool. You may have to "rock" the handle end up and down while releasing a trapped tumbler.

STEPS

1. Degrease the passenger door lock with a quick drying spray and run a key blank in and out a few times.
2. Insert the **DETERMINATOR™** marked **2** fully into the door lock.
3. Slowly pull the **DETERMINATOR™** out of the lock.
4. When the **DETERMINATOR™** traps a tumbler, take note of the space, record a **2** on your chart.
5. Use the release tool and proceed to the next space.
6. Decode the other side of the lock in the same way.
7. Record only the **2** cuts. When you are done with both sides of the lock and have all your **2** spaces, THEN all other spaces will be **1** cuts.
8. Insert the **DETERMINATOR™** marked **3** fully into the door lock.
9. Slowly pull the **DETERMINATOR™** out of the lock.
10. When the **DETERMINATOR™** traps a tumbler, note the space and record a **3** in that space.
11. Use the release tool and proceed to the next space.
12. Decode the other side of the lock in the same way.
13. Insert the **DETERMINATOR™** marked **4** fully into the door lock.
14. Slowly pull the **DETERMINATOR™** out of the lock.
15. When the **DETERMINATOR™** traps a tumbler, note the space and record a **4** in that space.
16. Use the release tool and proceed to the next space.
17. Decode the other side of the lock in the same way. When you are done with both sides of the lock you will have all your cuts for the door.

Use one of the following charts to make an operable ignition key.

NOTE: SOME 2001 AND UP SATURNS USE SPACES 1-9 IN THE IGNITION. IF YOU USE THE FOLLOWING 3 SPACE PROGRESSION AND CAN NOT GET AN OPERABLE IGNITION KEY YOU WILL NEED TO TRY THE 4 SPACE ½ CUT PROGRESSION.

Rules:

MACS is 2

Space 1 is not used. Ignition contains spaces 2-10

A is a 1 ½ depth

B is a 3 ½ depth

3 SPACE ½ CUT PROGRESSION CHART

1 st Key	2 nd Key	3 rd Key
A A A	A B A	B A A
A A B	B B A	B A B
A B B		
B B B		

NOTE: Cut both sides of the key when trying in the ignition!

Once you get a ½ cut key to turn in the ignition, adjust your cuts in spaces 2, 3, and 4 as necessary to the correct depths. Do this by adjusting 1 cut at a time to its shallow depth leaving the other cuts the same.

Example: if your half cut key is A B B in spaces 2 - 4

Cut a key with 1 B B in spaces 2 - 4, if the key turns then space 2 is a 1 depth, if the key does not turn then cut space 2 as a 2 depth, the key should turn.

Cut a key with space 2 at the correct depth as determined above, cut space 3 as a 3 depth and leave space 4 as a B cut, try the key, if it turns then space 3 is a 3, if it does not turn then cut space 3 as a 4, the key should turn.

Cut a key with spaces 2 and 3 at the correct depth as determined above, cut space 4 as a 3 depth, try the key, if it turns you are done, if it does not turn then cut space 4 as a 4 depth, the key should turn.

3 SPACE EXACT CUT PROGRESSION CHART

Key 1	Key 2	Key 3	Key 4	Key 5	Key 6	Key 7	Key 8
1 1 1	1 2 1	2 1 1	3 1 1	2 2 1	1 3 1	2 3 1	3 2 1
1 1 2	1 2 2	2 1 2	3 1 2	2 2 2	1 3 2	3 3 1	4 2 1
1 1 3	1 3 2	2 1 3	3 1 3	3 2 2	2 3 2	4 3 1	4 2 2
1 2 3	1 3 3	2 2 3	3 2 3	3 3 2	2 4 2	4 3 2	
1 2 4	2 3 3	2 2 4	4 2 3	3 3 3	3 4 2		
1 3 4	2 4 3	3 2 4	4 2 4	4 3 3	4 4 2		
2 3 4	3 4 3	3 3 4					
2 4 4	4 4 3	4 3 4					
3 4 4							
4 4 4							

NOTE: Cut both sides of the key when trying in the ignition!

USE THE 4 SPACE ½ CUT PROGRESSION CHART FOR SOME 2001 AND UP MODELS WITH SPACES 1-9 IN THE IGNITION.

4 SPACE HALF-CUT PROGRESSION CHART

1st side	2nd side	3rd side	4th side	5th side	6th side
Spaces 1-4	Spaces 1-4	Spaces 1-4	Spaces 1-4	Spaces 1-4	Spaces 1-4
A A A A	A A B A	A B A A	3 A A A	3 A B A	3 B A A
A A A B	A B B A	A B A B	3 A A B	3 B B A	
A A B B	A B B B	3 B A B			
3 A B B					
3 B B B					

Tumblers are all on one side of the lock.

FRAMON CUTTING INFORMATION

DETERMINATOR	CUTS START	CUT TO CUT	DEPTHS			
SAT 2	.216	.092	1=.315	2=.290	3=.265	4=.240
(tip stop)			1½=.303	2½=.278	3½=.253	

HPC CARD - CF215