

DETERMINATOR™

FOR 1

(Ford 10 cut system)

The FOR 1 **DETERMINATOR™** set works on all Ford products using the 10 cut system. When used properly you will be able to generate a key for a vehicle in just a few moments.

There are two **Determinators** in the FOR 1 **DETERMINATOR™**. One side of each is stamped **123456**, used on your basic 10 cut with door spaces 1-6. The other side is stamped **45678** used on the Nissan Quest, Mercury Villager, and some Escorts.

One of the **Determinators** is stamped with an "A" and the other is stamped with a "B". The "A" **DETERMINATOR™** will trap tumblers with depths of 2, 3, 4, and 5. The "B" traps tumblers with depths of 4 and 5. Cut all "A" cuts to a 2 ½ depth, and cut all "B" cuts to a 4 ½ depth.

THE TOOL

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

The **DETERMINATOR™** has numbers stamped on both sides 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.



The FOR 1 Determinator™ uses the regular release tool.

STEPS

NOTE: On spaces 5 and 6 make your cuts as follows: 1=1, A=2, and B=4 then impression down. Spaces 1-4 can be cut using ½ cuts. This is necessary to be sure you have the correct depths in spaces 5 and 6 when you start the process for making the cuts for the ignition.

A. FOR DOORS WITH SPACES 1-6 Read the side stamped with the numbers 123456

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 "A" tool fully into the door lock.
3. Slowly pull the tool out of the lock with a slight left and right motion.
4. Take note of the space number of each tumbler that gets trapped.
5. Record an "A" for every space that trapped a tumbler. Any space that passed, record a "1".
6. Insert the "B" tool. Slowly pull it out, taking note of each space number that gets trapped.
7. Record a "B" for any space that was trapped. Any space that passed leave as a "1" or an "A".
8. Cut all "A" spaces to a 2 ½ depth. Cut all "B" spaces to a 4 ½ depth. "1" spaces will be a 1 depth.
9. Insert your key into the lock and turn. You may want to use your impressing pliers for a little more torque. Use your locksmithing judgement on how far to turn the key.
10. Look for impression marks. Any "A" cut that marked you will cut to a 3 depth. Any "B" cut that marked you will cut to a 5 depth. "A" cuts that did not mark make a 2 depth, and "B" cuts that did not mark make a 4 depth.
11. You will now have an operable key for the door lock. Now you can finish the ignition by using tryout keys or progression.

NOTE: If the door lock is worn, tumblers in the spaces closest to the face of the lock (4,5,6) may not read correctly. If you decode these spaces as "A"s and the lock does not turn, look for impression marks and lower these spaces as necessary.

B. FOR DOORS WITH SPACES 4-8, NISSAN QUEST/MERCURY VILLAGER

Read the side stamped with the numbers 45678

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 "A" tool fully into the door lock.
 3. Slowly pull the tool out of the lock with a slight left and right motion.
 4. Take note of the space number of each tumbler that gets trapped.
 5. Record an "A" for every space that trapped a tumbler. Any space that passed, record a "1".
 6. Insert the "B" tool. Slowly pull it out, taking note of each space number that gets trapped.
 7. Record a "B" for any space that was trapped. Any space that passed leave as a "1" or an "A".
 8. Cut all "A" spaces to a 2 ½ depth. Cut all "B" spaces to a 4 ½ depth. "1" spaces will be a 1 depth.
 9. Insert your key into the lock and turn. You may want to use your impressing pliers for a little more torque. Use your locksmithing judgement on how far to turn the key.
 10. Look for impression marks. Any "A" cut that marked you will cut to a 3 depth. Any "B" cut that marked you will cut to a 5 depth. "A" cuts that did not mark make a 2 depth, and "B" cuts that did not mark make a 4 depth.
- At this point you can progress space 10 from the glove box, then progress space 9 from the ignition. Or you can use CHART 1 below to progress spaces 9 and 10.

C. FOR DOORS WITH SPACES 4-8, 1993 -1996 ESCORT/TRACER

Read the side stamped with the numbers 45678

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 "A" tool fully into the door lock.
 3. Slowly pull the tool out of the lock with a slight left and right motion.
 4. Take note of the space number of each tumbler that gets trapped.
 5. Record an "A" for every space that trapped a tumbler. Any space that passed, record a "1".
 6. Insert the "B" tool. Slowly pull it out, taking note of each space number that gets trapped.
 7. Record a "B" for any space that was trapped. Any space that passed leave as a "1" or an "A".
 8. Cut all "A" spaces to a 2 ½ depth. Cut all "B" spaces to a 4 ½ depth. "1" spaces will be a 1 depth.
 9. Insert your key into the lock and turn. You may want to use your impressing pliers for a little more torque. Use your locksmithing judgement on how far to turn the key.
 10. Look for impression marks. Any "A" cut that marked you will cut to a 3 depth, and any "A" cuts that did not mark make a 2 depth. Leave your "B" cuts as 4 ½.
- If space 8 is a 1, 2, or 3 depth use CHART 1 to progress spaces 9 and 10.
 If space 8 is a "B" use CHART 2 to progress spaces 9 and 10.

CHART 1

If space 8 is 1			If space 8 is 2			If space 8 is 3			If space 8 is 4			If space 8 is 5		
11	21	31	11	21	31	11	21	31	21	31	42	31	42	53
12	22	32	12	22	32	12	22	42	22	32	53	32	43	
13	24		13	24	42	13	32	53	23	33		33	44	
23			23	44	43	23	33		24	43		34	54	
33			33			24	43		34	44		35		
34			34			34	44		35	54		45		
35			35			35	54		45			55		
			45			45			55					
						55								

CHART 2

If space 8 is a "B"

21	31	42
22	32	53
23	33	
24	43	
34	44	
35	54	
45		
55		

D. FOR DOORS WITH SPACES 4-9 1991 AND 1992 ESCORT/TRACER

Read the side stamped with the numbers 45678

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 "A" tool fully into the door lock.
3. Slowly pull the tool out with a slight left and right motion.
4. Take note of the space number of each tumbler that gets trapped.
5. Record an "A" for every space that trapped a tumbler. Any space that passed, record a "1".
6. Insert the "B" tool. Slowly pull it out, taking note of each space number that gets trapped.
7. Record a "B" for any space that was trapped. Any space that passed leave as a "1" or an "A".
8. Cut all "A" spaces to a 2 ½ depth. Cut all "B" spaces to a 4 ½ depth. "1" spaces will be a 1 depth.
9. You will need to progress space 9 as you continue.
10. Insert your key into the lock and turn. You may want to use your impressing pliers for a little more torque. Use your locksmithing judgement on how far to turn the key. If the key does not turn lower space 9 and try again. Continue to lower space 9 until you feel the lock begin to turn.
11. Look for impression marks. Any "A" cut that marked you will cut to a 3 depth, any "A" cut that did not mark make a 2 depth. Leave your "B" cuts at 4 ½.
12. If the key turns the lock and space 9 is a 4 depth, cut space 9 as a 5 depth and try the key. If the lock turns with a 5 in space 9 cut a new key with space 9 as a 4 ½. If the lock does not turn with space 9 cut to a 5, then leave it cut as a 4 depth.
13. You can now progress space 10 from the ignition.

FRAMON CUTTING INFORMATION

DETERMINATOR	CUTS START	CUT TO CUT	DEPTHS				
FOR 1 (FORD 10 CUT) (tip stop)	.217	.092	1=.352	2=.326	3=.300	4=.274	5=.248
			1½=.339	2½=.313	3½=.287	4½=.261	

HPC CARD - X56

FORD 10 CUT PROGRESSION CHARTS

Locate the chart for the bittings found for spaces 5 and 6. Cut the known depths for spaces 5 and 6. Starting at the top of column 1 cut the biting on the same side of the key. Try the key, if it does not work proceed down the column and cut the next biting on the same side of the key. When you get to the end of the column, cut spaces 5 and 6 on the other side of the key and start down the next column. Continue until you get a working key. Remember to recut spaces 5 and 6 each time you start a new column.

Spaces 5 & 6 are 1,1

1	2	3	4	5	6	7	8	9	10	11	12	13
3112	2231	3311	2421	2123	2323	2334	2224	3232	2244	2134	3422	3243
3213	2242	3431	2432	3124	2424	2354	3324	3342	2345	2235		
3234	2343	3532	3433	3135	2435	3353	3344					
3245	2453	3534	3543	3335	3445	3454						

Space 5 & 6 are 1,2

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
4211	1131	1322	1313	1124	2431	2311	2213	4231	1234	2422	4213	2342	3224	3312	1242	4323	1135
4321	3331	1324	1343	3134	2433	3421	2243	4431	1245	3432	4233	2344	3334	3423	3242	4424	1335
4422	4332	1354	2353	3235	3533	3531	3244	4442	4245	3453	4353	2455	3354	3435	3343		
4532	4433	2454	2355	4335	4534	3542	4344								3544		
4543	4445	4454	3455	4355													

Space 5 & 6 are 1,3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1113	1212	2123	1121	4311	1224	2231	2421	1243	3124	3422	3131	2242	4221	4322	2135	2432	3113	3431	2424	3243	2234
1134	4212	2323	1342	5321	1235	4331	4421	1353	3324	3532	3232	3342	4223	5323	2245	3433	4423	5431	3534	3353	
1334	5312	2343	1345	5332	2335	4432	4531	2354	3344	4533	4242	4343	4234	5424	2455	3543					
5334	5422	2453	4345	5433	3355	4542	5532	3454	3445	4535	5353	4354	4434								
5534	5442	4453	5355	5435	4455	4544															
5545	5543	5454																			

Space 5 & 6 are 2,1

1	2	3	4	5	6	7	8	9	10	11	12	13	14
2223	1124	1242	2312	2422	3131	3242	3313	3421	2331	3134	1324	1135	3224
2243	1234	1343	2342	3432	3233	3343	3423	3531	2433	3235	3334	1335	
2353	1245	1354	2344	3542	3244	3453	3435	3533					
2355	2445	2454	3354	3544	3345								
3455													

Spaces 5 & 6 are 2,2

1	2	3	4	5	6	7	8	9	10	11	12	13	14
1123	1231	3113	4311	4221	1224	1342	1323	3211	4212	3433	3243	4224	4313
1134	1243	3124	4331	4421	1334	3342	3424	3431	4232	3543	3454		
1235	1353	3135	4432	4531	3335	4443	3534	3532	4235				
1345	3353	3245	4542	4533	3445								
3355	4354	4345	4544	4553									

FORD 10 CUT PROGRESSION CHARTS

Spaces 5 & 6 are 2,3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1124	1311	4211	1213	2312	3121	3212	3421	1242	2134	2423	4431	3123	4321	3531	1324	1245
1135	2331	5311	1234	4312	3231	4213	3432	1343	2235	3533	4442	3224	4532	3542	2454	2345
1335	2353	5421	1354	5322	5331	5313	5432	3453	2435	3544	5542	4244	4534	4543		
4335	4353	5531	3354	5423	5342	5324	5434	3455	3535							
4435	4355	5533	4454	5443	5344	5544	5535									
4445	5455	5553														

Spaces 5 & 6 are 2,4

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2135	2122	2321	3133	3311	3131	3113	2121	2211	4421	5321	2231	4231	4212	5312	3221	3122	5431
3235	2132	2431	3243	3313	3331	3124	2123	2213	4423	5323	2354	4242	4223	5332	4531	5422	5532
3435	2334	3532	3353	3433	3342	3424	2245	2453	4533	5433	3454	4245	4324	5343	4542	5442	
3545	5334	3534	4354	3543	3345	5454	2445	4453	4535	5543							
5545	5435	5534	4455	4544	3545												

Spaces 5 & 6 are 3,1

1	2	3	4	5	6	7	8	9	10	11	12	13	14
1311	1122	1213	3121	2112	2242	1134	1342	1243	2432	2135	3212	2423	1334
2421	2124	1224	3231	2123	3342	1235	2343	1353	3532	2335	3243		
3422	2324	2234	3431	2245	3344	1345	3353	2453					
3424	2354	2434	3433	3355	3445								
3454	2455	3534	3543										

Space 5 & 6 are 3,2

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
3112	1312	2131	4211	1242	1223	3311	4321	1124	2313	2134	1331	1234	4223	3442
3213	4312	2431	4231	1343	1324	3421	4431	1135	3343	2334	1335	1245		
3234	4323	3531	4242	2353	1354	4423	4532	2235	3453	4335	2435			
3434	4353	3533	4245	3354	2454	4543	4534	2345						
3544	4355	3535	4445	4454	3455									

Space 5 & 6 are 3,3

1	2	3	4	5	6	7	8	9	10	11	12	13	14
1211	2113	1131	4311	4221	4212	1322	1224	1313	1243	1342	4331	2245	2424
2221	2124	1134	5321	4421	5312	4322	1235	4313	1353	1345			
2421	2135	1334	5431	4531	5332	5422	2335	5323	2453				
2433	4235	2354	5442	4542	5532	5433	4535	5424					
2445	5335	5354											

Space 5 & 6 are 3,4

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2122	2311	3121	2131	3112	3211	2212	3321	5311	2313	3213	3132	2435	3244	4342
2224	2331	3231	2133	3123	3312	2422	5421	5313	4424	4243	3442			
2335	5331	3431	2353	3134	5322	3533	5531	5324						
2345	5432	4532	2454	4335	5423									
5355	5453	5542												

FORD 10 CUT PROGRESSION CHARTS

Space 5 & 6 are 3,5

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
3122	3311	3221	3212	3113	3124	3131	4211	3322	3133	4321	3223	3342	4242	3135
3232	3421	4231	4312	3313	3324	3331	4213	4323	4233	4431	3243	3344		
3234	3531	4332	4422	3423	4334	3432	4224	4353	4244					
3445	3542	5342	4442	5424	4534	5532	4235							
4545	3553	5543	4454	5435										

Space 5 & 6 are 4,2

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1211	2311	1121	1231	1112	1213	2122	1123	1321	1332	2113	1134	1132	1323	1224	2331	2322	4212
3211	3321	3121	3231	2212	1233	2124	2133	2421	3323	3123	1235	3132	1334	1244	2432		
4311	4421	4221	3431	3312	1353	2135	3134	2445	3532	3353	2335	3235	1345	2354			
4331	4531	4243	3435	4313	2453	2245	3334	4455	3543	4453							
4342	4533	4344	3545	4424	3454	3345	3534										
4542	4535																
4544																	

Space 5 & 6 are 4,3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
2211	1311	1221	1122	2112	2121	1212	1113	2231	1331	2312	2131	2213	3131	1232	3122	2123	1223	1324	4422	3242
4211	3311	3221	1133	3113	2321	3212	1124	2431	1335	2353	2134	3313	3133	1234	3223	2233	1343	3324		
5311	4321	4231	1245	4213	3421	4312	3124	2442	2345	2454	2434	4323	3135	2244	3423	2235	1354			
5421	5331	4431	3245	5313	3531	5322	4224	3553	3445			4435								
5531	5432	4532	4345	5423	3542	5342	5324													
5542	5434	4554		5533																
5544																				

Space 5 & 6 are 4,4

1	2	3	4	5	6	7	8	9	10	11	12
2221	2113	3331	5312	2421	5321	2242	2324	3235	5323	2453	3353
2322	2124	5332	5422	2423	5431	2245	2354				
3532	2135	5442	5424	3534							
5532	2335										
5553	2445										

Space 5 & 6 are 4,5

1	2	3	4	5	6	7	8	9	10	11	12	13	14
3211	3112	3312	3123	3121	3231	3132	3213	3321	3242	3323	3431	3332	3233
4311	4212	4313	4223	4221	4232	3134	3224	3422	3442	3335			
4421	4322	4324	4243	4331	4342	3244	4234	3424					
4531	4423	5334	4245	4432	5353	3354							

FORD 10 CUT PROGRESSION CHARTS

Space 5 & 6 are 5,3

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1211	1121	2311	1112	1221	1231	1213	2113	1123	2131	3112	1312	2122	1132	2221	2124	3231	3213	1224	1242	1323	3132	1134	1235	2135
3211	3121	3321	2212	1321	2331	1233	2313	3123	2133	3312	1332	2322	2232	2223	2324	4232	4313	2234	1244	1353	3134	1334	1345	
4311	4322	4421	4212	2421	4331	2243	2423	3224	3233	3422	2342	3323	2432	4223	2344	4432	4423	2335	2245					
5321	5323	4531	5312	3431	4342	4243	2443	3244	3235	3424	3442	4324	3532	4234	2355									
5422	5353	4542	5332	5431	5442	4445	2445	3354	4245															
5424	5455	4553	5334	5532																				
5534																								

Space 5 & 6 are 5,4

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
2211	2121	2112	4211	2321	2231	3122	3131	2312	2132	3113	2123	2233	2213	2422	2323	3124	2134	2343	2224	4242	2424	3234	2334	2244	2235
3311	3221	3212	5311	2431	3232	3133	4231	3322	2332	4213	3223	3243	3313	2442	2433	4224	3435	2345	3324						
4321	3421	4312	5421	3432	4332	4233	4431	4422	3342	5313	3423	3245	4323	2454	2435	4244									
5331	3531	5322	5432	3434	4343	4235	4532	4424	3453	5324	5423	3355													
5531	3542	5342	5443	4435	4543	5335																			
5542	3544	5354																							

Spaces 5 & 6 are 5,5

1	2	3	4
3331	4442	3235	3454
3532	4553	3435	
3543			
3545			