

Inputs		
Ball Position		
In		
EMPTY	0	
UNKNOWN	1	
RIGHT	2	
WRONG	3	
H1		
EMPTY	0	
UNKNOWN	1	
RIGHT	2	
WRONG	3	
H2		
EMPTY	0	
UNKNOWN	1	
RIGHT	2	
WRONG	3	
Sh		
EMPTY	0	
UNKNOWN	1	
RIGHT	2	
WRONG	3	
ShBIn		
UNPRESSED	0	
PRESSED	1	

Outputs		
Intake		
OFF	0	
INWARD	1	
OUTWARD	2	
Magazine		
OFF	0	
FORWARD	1	
Rear Ball Gate		
OPEN	0	
CLOSED	1	
Front Ball Gate		
OPEN	0	
CLOSED	1	
Shooter		
OFF	0	
SPIT	1	
SHOOT	2	

Output States					
Label	Shooter	Front Gate	Rear Gate	Magazine	Intake
READ COLOR	0	*	*	0	0
INTAKE B1	0	0	0	0	1
ADVANCE B1	0	1	0	1	1
STORE B2	0	1	1	0	0
STORE B1	0	1	1	0	1
REJECT B1	1	0	0	1	*
SHOOT	2	0	0	1	0
REJECT B2	*	*	*	0	2
ADVANCE	*	*	*	1	0

State Transitions									
		Next State							
		READ COLOR	INTAKE B1	ADVANCE B1	STORE B2	STORE B1	REJECT B1	SHOOT	REJECT B2
Current State	READ COLOR	00320 00330 03020 03030							
	INTAKE B1	00010							
	ADVANCE B1	02000							
	STORE B2	02201							
	STORE B1	02001							
	REJECT B1	00310 03010							
	SHOOT	00000							
	REJECT B2	00200							
	ADVANCE	00310							

