

# Aisin A343E 4 Speed

Wire Colors		Software Selectable		Mercury3 TCU Layout						Software Selectable			Wire Colors			
		Sim leds	Priority2	Priority1							Priority1	Priority2	Sim leds	M71-P1	M70-P1	
<b>M70-P1</b>	<b>M71-P1</b>				<b>P1 - 12 Way Input</b>											
Yellow/Red	Yellow/Red		Low Range	Oil Temp 3.5K	Water Temp 2K	7	1	Air Temp 10K	Oil Temp 10K	Low Range		Yellow/Black	Yellow/Black			
Yellow/Green	Yellow/Green			Shifter Switch	Lambda	8	2	TPS	TPS			Yellow	Yellow			
Red	Red				.+5 Volt Out	9	3	MAP				N/C	N/C			
Orange	Orange				.+12 Volt Ign	10	4	GND				Black	Black			
Blue	Blue			Speed	TDC Sensor	11	5	Cam2 Sensor				N/C	N/C			
Blue	Green			RPM	Crank Sensor	12	6	Cam1 Sensor				N/C	N/C			
					<b>P2 - 10 Way Output</b>											
	<b>M72-P2 / M68-P2</b>				P2 12 Volt	6	1	P1 12 Volt	SHIFT1			<b>P1</b>	Red/White			
	Red/Yellow	P2		SHIFT2	P4 12 Volt	7	2	P3 12 Volt				<b>P3</b>	Red/Orange			
	Red/Green	P4			P6 12 Volt	8	3	P5 12 Volt	Line Pres			<b>P5</b>	Red/Blue			
	Red/Black	P6		Lockup Pres	Electronic Relay	9	4	Relay Out				<b>Relay</b>	Blue/Red			
	N/C	E Rel			.+12 Volt In	10	5	.+12 Volt In					Red			
	Red				<b>P3 - 8 Way Output</b>											
	<b>M73-P3</b>				N6 Ground	5	1	N5 Ground	Lockup LED			<b>N5</b>	Black/Purple			
	Black/Red	N6		Tiptronic LED	N4 Ground	6	2	N3 Ground	Low Range LED			<b>N3</b>	Black/Orange			
	Black/Brown	N4		Retard	N2 Ground	7	3	N1 Ground	2nd Start LED			<b>N1</b>	Black/White			
	Black/Yellow	N2		Overdrive LED	RPM Out	8	4	GPN1 Ground	GP1			<b>GP1</b>	Blue/Orange			
	Green	RPM			<b>P4 - 6 Way In/Output</b>											
	<b>M74-P4</b>				Fuel Sensor	4	1	GPN2 Ground	GP2			<b>GP2</b>	Blue/White			
	Brown			4 Map Switch	POT	5	2	Altitude	Second Start	Down Switch		<b>N8</b>	Purple			
	Green/Yellow	N7	Up Switch	Overdrive	.+5 Volt Out	6	3	GND					Black			
	Red				<b>P5 - 4 Way Output</b>											
	<b>M75-P5</b>				N8 Ground	3	1	N7 Ground	Starter Lockout				Blue/Grey			
	Blue/Red				P8 12 Volt	4	2	P7 12 Volt				<b>P7</b>	Red/Blue			
	Red/Black	P8		Reverse Lights	<b>Comms - 6 Way USB/Firm</b>											
	<b>USB</b>				Programmer 2	4	1	Programmer 1					N/C			
	N/C				Receive	5	2	Transmit					Green			
	Yellow				.+5 Volt Out	6	3	GND					Blue			
	Red															

Firmware Program

**Mercury2 TCU Intermediate Lexus A343E Ver 3.3B**

Firmware Class Intermediate

2 GP output available

3.5K and 10K oil temperature sensor selections are allowed. Note that the Low Range input will move with this selection. Should no sensor be selected then the Low Range switch will be on P1-Pin1 10K input.

When overdrive or second start is selected then the tiptronic buttons will be disabled and there functions changed to these functions.

Low range, Overdrive and Second Start could be used with different map selections without connections to the tranny or buttons.

Shifter	Gear allowed	Engine Break
P	1	
R	1	
N	1	
D	1,2,3,4	3,4
2	1,2,3	2,3
1	1,2	1,2