1989 Models

Machine Model	Engine Model	Ignition Type Alternator Output	Spark Plug		Plug Gap Inches	CDI Box Identification Number
			NGK	Champion		
Star, Star Trak	EC25PS-06	CDI-100 Watt	BR8ES	RN-3C	.025	CU6204
Sprint (ES)	EC34-2PM-02	CDI-120 Watt	BR9ES	RN-2C	.025	CU6409
Indy Sport	EC34-2PM-03	CDI-120 Watt	BR9ES	RN-2C	.025	CU6409
Indy Trail (All)	EC50PM-01/02/03	CDI-120 Watt	BR9ES	RN-2C	.025	CU6410
Indy 400 (All)	EC40PL-02	CDI-120 Watt	BR9ES	RN-2C	.025	CU6408
Indy 500 (All)	EC50PL-01/02	CDI-120 Watt	BR9ES	RN-2C	.025	CU6408
Indy 650	EC65PL-01	CDI-120 Watt	BR9ES	RN-2C	.025	CU1559
Long Trak (RLR)	EC44-2PM-4100	CDI-120 Watt	BR9ES	RN-2C	.025	CU6405

Engine Model	Running Ignition Timing at 3000 RPM					
	MM BTDC	Inches BTDC	Degrees BTDC	Acceptable Variances		
				MM	Inches	Degrees
EC25PS-06	4.19	.165	27.5±3	3.35-5.12	.132-.202	20.5° @ 6000
EC34-2PM-02	3.41	.134	25.5±2	2.90-3.94	.114-.160	15.5° @ 7000
EC34-2PM-03	3.41	.134	25.5±2	2.90-3.94	.114-.160	15.5° @ 7000
EC50PM-01/02	3.26	.128	24.0±2	2.75-3.53	.108-.150	16° @ 6500
EC50PM-03	5.03	.198	30.0±2	4.40-5.69	.173-.224	22° @ 6500
EC40PL-02	5.19	.204	30.5±2	4.55-5.85	.179-.230	15° @ 7500
EC50PL-01/02	5.19	.204	30.5±2	4.55-5.85	.179-.230	15° @ 7500
EC65PL-01	4.10	.162	27.0±1	3.81-4.40	.150-.173	20° @ 7500
EC44-2PM-4100	3.76	.148	26.5±2	3.23-4.29	.127-.169	14.5° @ 6500

⚠ All above engines require a minimum of 88 (R+M)/2 octane fuel. If fuels of a lesser octane number are used or engines are subjected to frequent overheated situations, the timing must be adjusted to the low side of the accepted variance.

R.F.I. spark plug cap resistance: 3,700 to 6,300 ohms.

1990 Models

Machine Model	Engine Model	Ignition Type Alternator Output	Spark Plug		Plug Gap Inches	CDI Box Identification Number
			NGK	Champion		
Star, Star Trak	EC25PS-06	CDI-150 Watt	BR8ES	RN-3C	.025	CU2167
Sprint (ES)	EC34-2PM-02	CDI-150 Watt	BR9ES	RN-2C	.025	CU6409
Indy Sport	EC34-2PM-03	CDI-150 Watt	BR9ES	RN-2C	.025	CU6409
Indy Trail (All)	EC50PM-01/02/03	CDI-200 Watt	BR9ES	RN-2C	.025	CU6413
Indy 400	EC40PL-02	CDI-200 Watt	BR8ES	RN-3C	.025	CU6412
Indy 500 (All) Incl. WideTrak	EC50PL-01/02/03	CDI-200 Watt	BR8ES	RN-3C	.025	CU6412
Indy 650 RXL	EC65PL-01 -03	CDI-120 Watt -180 Watt	BR9ES	RN-2C	.025	CU1559 CU2178

Engine Model	Running Ignition Timing at 3000 RPM					
	MM BTDC	Inches BTDC	Degrees BTDC	Acceptable Variances		
				MM	Inches	Degrees
EC25PS-06	4.19	.165	27.5±3	3.35-5.12	.132-.202	20.5° @ 6000
EC34-2PM-02	3.41	.134	25.5±2	2.90-3.94	.114-.160	15.5° @ 7000
EC34-2PM-03	3.41	.134	25.5±2	2.90-3.94	.114-.160	15.5° @ 7000
EC50PM-01/02	3.26	.128	24.0±2	2.75-3.53	.108-.150	16° @ 6500
EC50PM-03	4.71	.185	29.0±2	4.10-5.35	.162-.210	21° @ 6500
EC40PL-02	5.36	.210	31.0±2	4.71-6.04	.185-.238	15° @ 7500
EC50PL-01/02	5.36	.210	31.0±2	4.71-6.04	.185-.238	15° @ 7500
EC50PL-03	5.36	.210	31.0±2	4.71-6.04	.185-.238	15.5° @ 7000
EC65PL-01	4.10	.162	27.0±1	3.81-4.40	.150-.173	20° @ 7500
EC65PL-03	5.02	.198	30.0±1	1.65-2.06	.065-.081	18° @ 7500

1991 Models

Machine Model	Engine Model	Ignition Type Alternator Output	Spark Plug		Plug Gap MM/Inches	CDI Box Identification Number
			NGK	Champion		
StarLite	EC25PS-07	CDI-150 Watt	BR8ES	RN-3C	0.7/028	CU6204
Indy Lite	EC34-2PM-03	CDI-150 Watt	BR8ES	RN-2C	0.7/028	CU6409
Indy Sport/GT	EC44-3PM-01	CDI-200 Watt	BR8ES	RN-2C	0.7/028	CU6416
Indy Trail (All)	EC50PM-01/02/03	CDI-200 Watt	BR8ES	RN-2C	0.7/028	CU6413
Indy 400	EC40PL-02 EC40PL-04	CDI-200 Watt	BR8ES	RN-3C	0.7/028	CU6412 CU6415
Indy 500 (All) Incl. WideTrak	EC50PL-01/02/03 EC50PL-04/05/06	CDI-200 Watt	BR8ES	RN-3C	0.7/028	CU6412 CU6415
Indy 650/RXL	EC65PL-02/03	CDI-180 Watt	BR9ES	RN-2C	0.7/028	CU2178

Engine Model	Running Ignition Timing at 3000 RPM					
	MM BTDC	Inches BTDC	Degrees BTDC	Acceptable Variances		
				MM	Inches	Degrees
EC25PS-07	4.19	.165	27.5±3	3.35-5.12	.132-.202	20.5° @ 6000
EC34-2PM-03	3.41	.134	25.5±2	2.90-3.94	.114-.155	16° @ 7000
EC44-3PM-01	3.26	.128	24.0±2	2.75-3.811	.108-.150	16° @ 6500
EC50PM-01/02	3.26	.128	24.0±2	2.75-3.811	.108-.150	16° @ 6500
EC50PM-03	4.71	.185	29.0±2	4.10-5.35	.162-.210	21° @ 6500
EC40PL-02 _-04	5.36 3.93	.210 .155	31.0±2 26.5±2	4.71-6.04 3.40-4.55	.185-.238 .133-.179	16° @ 7500
EC50PL-01/02 -04/05	5.36 3.96	.210 .155	31.0±2 26.5±2	4.71-6.04 3.40-4.55	.185-.238 .133-.179	16° @ 7500
EC50PL-06	3.96	.155	26.5±2	3.40-4.55	.133-.179	16° @ 7500
EC65PL-02/03	3.26	.128	24.0±1	3.00-3.53	.118-.139	18° @ 7500