

## COMMON SPECIFICATIONS FOR ALL TWIN CYLINDER ENGINE MODELS

1. Spark Plug Gap: .030" All Models

2. Crankshaft End Play: .002" -.008" All Models

Basic Model Series	Idle Speed RPM	Armature Air Gap		Valve Clearance		Valve Guide Reject Gage	Torque Specifications		
		Breaker Points	Magnetron	Intake *	Exhaust *		Flywheel Ft. Lbs.	Cylinder Head In. Lbs.	Connecting Rod In. Lbs.
400400 SB	1200 1400 **	—	.008" .012"	.004" .006"	.007" .009"	19151	150	160	190
400700 SB	1200 1400 **	—	.008" .012"	.004" .006"	.007" .009"	19151	150	160	190
401400 AB	1200 1400 **	.010" .014"	.008" .012"	.004" .006"	.007" .009"	19151	150	160	190
401700 AB	1200 1400 **	.010" .014"	.008" .012"	.004" .006"	.007" .009"	19151	150	160	190
402400 SB	1200 1400 **	—	.008" .012"	.004" .006"	.007" .009"	19151	150	160	190
402700 SB	1200 1400 **	—	.008" .012"	.004" .006"	.007" .009"	19151	150	160	190
421400 AB	1200 1400 **	.010" .014"	.008" .012"	.004" .006"	.007" .009"	19151	150	160	190
421700 AB	1200 1400 **	.010" .014"	.008" .012"	.004" .006"	.007" .009"	19151	150	160	190
422400 SB	1200 1400 **	—	.008" .012"	.004" .006"	.007" .009"	19151	150	160	190
422700 SB	1200 1400 **	—	.008" .012"	.004" .006"	.007" .009"	19151	150	160	190

\* With Valve Springs Installed. Without Valve Springs Installed, Intake .006"-.008", Exhaust .009"-.011"

\*\* Governed Idle RPM for Adjustment Procedure, See Section 5 of the Workshop Repair Manual

Miscellaneous Torque Specifications	Cylinder Resizing									
Governor Lever Lock Nut: 100 In. Lbs., All Models Spark Plugs: 200 In. Lbs., All Models Starter Mounting Bolts: 160 In. Lbs., All Electric Start models	Resize if .003" or more wear. Resize if out of round .0025" or more for Aluminum Bore, .0015" or more for Sleeve Bore. Resize .010", .020", .030" over Standard Bore.									
AB - Aluminum Bore SB - Sleeve Bore	<b>Piston Ring Reject Sizes</b>									
	<table border="1"> <thead> <tr> <th></th> <th style="text-align: center;">Comp. Rings</th> <th style="text-align: center;">Oil Ring</th> </tr> </thead> <tbody> <tr> <td>Aluminum Bore</td> <td style="text-align: center;">.035"</td> <td style="text-align: center;">.045"</td> </tr> <tr> <td>Sleeve Bore</td> <td style="text-align: center;">.030"</td> <td style="text-align: center;">.035"</td> </tr> </tbody> </table>		Comp. Rings	Oil Ring	Aluminum Bore	.035"	.045"	Sleeve Bore	.030"	.035"
	Comp. Rings	Oil Ring								
Aluminum Bore	.035"	.045"								
Sleeve Bore	.030"	.035"								

Torque Specifications (Cont'd.)						Crankshaft Reject Sizes			Main Bearing Reject Gage
Basic Model Series	Crankcase Cover	Crankcase Cover Steel	Crankcase Cover Aluminum	Base	Sump	Mag. Journal	Crank-pins	P.T.O. Journal	
400400 SB	225 in.lbs. (18 ft.lbs.)	–	–	325 in.lbs. (27 ft.lbs.)	–	1.376"	1.622"	1.376"	19219
400700 SB	–	250 in.lbs. (20 ft.lbs.)	–	–	225 in.lbs. (18 ft.lbs.)	1.376"	1.622"	1.376"	19219
401400 AB	225 in.lbs. (18 ft.lbs.)	–	–	325 in.lbs. (27 ft.lbs.)	–	1.376"	1.622"	1.376"	19219
401700 AB	–	250 in.lbs. (20 ft.lbs.)	–	–	225 in.lbs. (18 ft.lbs.)	1.376"	1.622"	1.376"	19219
402400 SB	225 in.lbs. (18 ft.lbs.)	–	–	325 in.lbs. (27 ft.lbs.)	–	1.376"	1.622"	1.376"	19219
402700 SB	–	250 in.lbs. (20 ft.lbs.)	325	–	225 in.lbs. (18 ft.lbs.)	1.376"	1.622"	1.376"	19219
421400 AB	225 in.lbs. (18 ft.lbs.)	–	–	325 in.lbs. (27 ft.lbs.)	–	1.376"	1.622"	1.376"	19219
421700 AB	–	–	325	–	225 in.lbs. (18 ft.lbs.)	1.376"	1.622"	1.376"	19219
422400 SB	225 in.lbs. (18 ft.lbs.)	–	–	325 in.lbs. (27 ft.lbs.)	–	1.376"	1.622"	1.376"	19219
422700 SB	–	–	325	–	225 in.lbs. (18 ft.lbs.)	1.376"	1.622"	1.376"	19219

**Metric Equivalents**

Torque						Dimensions			
In. Lbs.	Kgcm	Nm	Ft. Lbs.	Kgm	Nm	Inches	mm	Inches	mm
100	1.15	11.3	18	2.5	24.4	0.0015	0.04	0.012	0.3
160	1.84	19.07	20	2.8	27.1	0.002	0.05	0.014	0.36
190	2.19	21.47	27	3.7	36.6	0.0025	0.06	0.02	0.51
200	2.3	22.6	150	20.8	203.4	0.003	0.08	0.03	0.76
225	2.59	25.42				0.004	0.1	0.035	0.89
250	2.88	28.24				0.006	0.15	0.045	1.14
325	3.74	36.72				0.007	0.18	1.376	34.95
						0.008	0.2	1.622	41.2
						0.009	0.23	3.4375	88.31
						0.011	0.28		