

**FAA-PARTS MANUFACTURER APPROVAL (PMA) SUPPLEMENT**

Airmotive Engineering Corp.  
9503 Middlex  
San Antonio, Texas 78217

PMA No. PQ0003SW  
Supplement No. 29  
Revision No. 1  
Date **MAY 18 2004**  
ACO Project No. PM7507SC-A

PART NAME	PART NUMBER	APPROVED REPLACEMENT FOR PART NUMBER	APPROVAL BASIS AND DESIGN DATA	MAKE ELIGIBILITY	MODEL ELIGIBILITY
Cylinder Assembly	AEC631397	539492, 626820 631397, 632482 639272, 639274 642068, 642232 642230, 642594 642691, 642924 646267, 646821 646657, 652954 653447, 654649 654650, 654651 654652, 654653 654963, 655471	Test and Computations per 14CFR §21.303, Dwg. No. AEC631397, Rev. L, dated 6-20-03, or later FAA-approved revisions.	Continental	O-470-G, G-CI, K, K-CI, L, L-CI, M, M-CI, N, P, R, S, T, U IO-470-A, C, D, E, F, G, H, L, LO, M, N, P, R, S, T, U, V, VO LIO-470-A TSIO-470-B, C, D IO-520-A, B, BA, BB, C, CB, D, E, F, J, K, L, M, MB, N, NB TSIO-520-A, AF, B, BB, C, CE, D, DB, E, EB, G, H, J, JB, K, KB, L, LB, M, N, NB, P, R, T, U, UB, VB, WB IO-550-A, B, C, D, E, F, L IOF-550-B, C, D, E, F, L  See service instruction 99-8-1 for details of installation.
Bushing, Fuel Injector Boss	AEC65389	No equivalent TCM part.	Test and Computations per 14CFR §21.303, Dwg. No. AEC65389, Rev. D, dated 2-27-02, or later FAA-approved revisions.	Continental	O-470-G, G-CI, K, K-CI, L, L-CI, M, M-CI, N, P, R, S, T, U IO-470-A, C, D, E, F, G, H, L, LO, M, N, P, R, S, T, U, V, VO LIO-470-A TSIO-470-B, C, D IO-520-A, B, BA, BB, C, CB, D, E, F, J, K, L, M, MB, N, NB TSIO-520-A, AF, B, BB, C, CE, D, DB, E, EB, G, H, J, JB, K, KB, L, LB, M, N, NB, P, R, T, U, UB, VB, WB IO-550-A, B, C, D, E, F, L IOF-550-B, C, D, E, F, L
Insert, Intake Seat	AEC636697	636697, 654957	Test and Computations per 14CFR §21.303, Dwg. No. AEC636697, Rev. A, dated 6-26-98, or later FAA-approved revisions.	Continental	O-470-G, G-CI, K, K-CI, L, L-CI, M, M-CI, N, P, R, S, T, U IO-470-A, C, D, E, F, G, H, L, LO, M, N, P, R, S, T, U, V, VO LIO-470-A TSIO-470-B, C, D IO-520-A, B, BA, BB, C, CB, D, E, F, J, K, L, M, MB, N, NB TSIO-520-A, AF, B, BB, BE, C, CE, D, DB, E, EB, G, H, J, JB, K, KB, L, LB, M, N, NB, P, R, T, U, UB, VB, WB

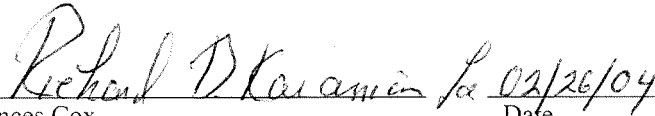
PART NAME	PART NUMBER	APPROVED REPLACEMENT FOR PART NUMBER	APPROVAL BASIS AND DESIGN DATA	MAKE ELIGIBILITY	MODEL ELIGIBILITY
					GTSIO-520-C, D, F, H, K, L, M, N IO-550-A, B, C, D, E, F, G, L, N, P, R IOF-550-B, C, D, E, F, G, L, N, P, R TSIO-550-A, B, C, E TSIOL-550-A, B, C
Insert, Seat, Intake Valve	AEC642318	642318	Test and Computations per 14CFR §21.303, Dwg. No. AEC642318, Rev. E, dated 2-4-99, or later FAA-approved revisions.	Continental	Same eligibility as AEC636697
7/16-14 x 7/16-20 Necked Stud	AEC646140	646140	Test and Computations per 14CFR §21.303, Dwg. No. AEC646140, Rev. E, dated 4-4-03, or later FAA-approved revisions.	Continental	IO-346-A, B O-470-A, B, B-CI, E, G, G-CI, H, J, K, K-CI, L, L-CI, M, M-CI, N, P, R, S, T, U IO-470-A, C, D, E, F, G, H, L, LO, M, N, P, R, S, T, U, V, VO LIO-470-A TSIO-470-B, C, D IO-520-A, B, BA, BB, C, CB, D, E, F, J, K, L, M, MB, N, NB, P LIO-520-P TSIO-520-A, AE, AF, B, BB, BE, C, CE, D, DB, E, EB, G, H, J, JB, K, KB, L, LB, M, N, NB, P, R, T, U, UB, VB, WB GTSIO-520-C, D, F, H, K, L, M, N LTSIO-520-AE IO-550-A, B, C, D, E, F, G, L, N, P, R TSIO-550-A, B, C, E TSIOL-550-A, B, C
Pin & Plug Assembly, Piston	AEC630046	630046 643846	Test and Computations per 14CFR §21.303, Dwg. No. AEC630046, Rev. C, dated 11-27-02, or later FAA-approved revisions.	Continental	IO-346-A, B IO-520-A, B, BA, BB, C, CB, D, E, F, J, K, L, M, MB, N, NB, P LIO-520-P TSIO-520-A, AE, AF, B, BB, BE, C, CE, D, DB, E, EB, G, H, J, JB, K, KB, L, LB, M, N, NB, P, R, T, U, UB, VB, WB GTSIO-520-C, D, F, H, K, L, M, N

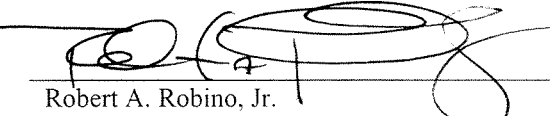
PART NAME	PART NUMBER	APPROVED REPLACEMENT FOR PART NUMBER	APPROVAL BASIS AND DESIGN DATA	MAKE ELIGIBILITY	MODEL ELIGIBILITY
					LTSIO-520-AE IO-550-A, B, C, D, E, F, G, L, N, P, R IOF-550-B, C, D, E, F, G, L, N, P, R
Piston 5.0 Dia., 7:1 comp. ratio	AEC646263	535133 646263 654744 654833	Test and Computations per 14CFR §21.303, Dwg. No. AEC646263, Rev. C, dated 5-21-03, or later FAA-approved revisions.	Continental	O-470-4, 13, 13A, K, K-CI, L, L-CI, R, S
Piston 5.0 Dia., 8:1 comp. ratio	AEC654721	537309 537883 539814 648028 654721 654829	Test and Computations per 14CFR §21.303, Dwg. No. AEC654721, Rev. F, dated 5-21-03, or later FAA-approved revisions.	Continental	O-470-B, B-CI, G, G-CI, H, M, M-CI, N, P IO-470-A, C, G, P, R, T LIO-470-A
Piston 5.0 Dia., 8.6:1 comp. ratio	AEC648029	627738 648029 654722 654832	Test and Computations per 14CFR §21.303, Dwg. No. AEC648029, Rev. H, dated 5-21-03, or later FAA-approved revisions.	Continental	O-470-T, U IO-470-D, E, F, H, L, LO, M, N, S, U, V, VO
Piston, 5.25 Dia.	AEC648044	632491 632585 641782 642761 646303 648033 648044 654724 654840	Test and Computations per 14CFR §21.303, Dwg. No. AEC648044, Rev. P, dated 8-15-03, or later FAA-approved revisions.	Continental	TSIO-520-A, AF, B, BB, BE, C, CE, D, DB, E, EB, G, H, J, JB, K, KB, L, LB, M, N, NB, P, R, T, U, UB, VB, WB GTSIO-520-C, D, F, H, K, L, M, N

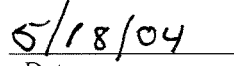
PART NAME	PART NUMBER	APPROVED REPLACEMENT FOR PART NUMBER	APPROVAL BASIS AND DESIGN DATA	MAKE ELIGIBILITY	MODEL ELIGIBILITY
Piston, 5.25 Dia.	AEC648045	631475 648045 654850	Test and Computations per 14CFR §21.303, Dwg. No. AEC648045, Rev. R, dated 9-25-03, or later FAA-approved revisions.	Continental	IO-520-A, B, BA, BB, C, CB, D, E, F, J, K, L, M, MB, N, NB, P LIO-520-P
Piston 5.0 Dia., 7.1:1 comp. ratio	AEC654729	534895 649044 654729 654862	Test and Computations per 14CFR §21.303, Dwg. No. AEC654729, Rev. F, dated 5-21-03, or later FAA-approved revisions.	Continental	E-165-2, 3, 4 E-185-1, 2, 3, 5, 8, 9, 10, 11 E-225-2, 4, 8, 9 O-470-7, 7A, 7B, A, E, J IO-470-J, K

-----End of Listing-----

NOTE: Minor design changes (reference 14 CFR part 21 § 21.93 and 21.95) must be submitted in a manner as determined by the ACO. Major design changes (reference 14 CFR part 21 § 21.93 and 21.97) to drawings and specifications are to be handled in the same manner as that for an original FAA-PMA.

  
 S. Frances Cox  
 Manager, Special Certification Office,  
 ASW-190  
 Date 02/26/04

  
 Robert A. Robino, Jr.  
 Manager, Manufacturing Inspection District Office,  
 SW-MIDO-43

  
 Date 5/18/04

This Supplement is an attachment to your FAA-PMA approval letter dated: March 31, 1983