



U.S. Department
of Transportation
**Federal Aviation
Administration**

Small Airplane Directorate
Kansas City Manufacturing Inspection
District Office (MIDO)
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January 10, 2011

Project No. PQ3732CE

Mr. Dana Yarnell
Quality Manager
McFarlane Aviation, Inc.
696 E. 1700 Road
Baldwin City, KS 66006

FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

In accordance with the provisions of Title 14, Code of Federal Regulations (14 CFR), Part 21, Certification Procedures for Products and Parts, subpart K, the FAA has found that the design data, based on Test and Computation submitted by McFarlane Aviation, Inc., with your letter dated July 19, 2010 meet the airworthiness requirements of the regulations applicable to the products on which the parts are to be installed. Additionally, the FAA has determined that McFarlane Aviation, Inc., has established the fabrication inspection system required by § 21.303(h) at 696 E. 1700 Road Baldwin City, KS 66006. Accordingly, Parts Manufacturer Approval (PMA) is hereby granted for production of the replacement parts listed in the enclosed Supplement No.50.

You are reminded that the provisions of 14 CFR, Parts 21 and 45, noted in our PMA Letter of Approval dated September 3, 1993, also applies to the enclosed PMA Listing-Supplement No.50.

The enclosed supplement should be retained with the original PMA letter as evidence of approval to produce the parts concerned.

Sincerely,

Edward J. Mehrhoff,
Aviation Safety Inspector
Kansas City, Manufacturing Inspection
District Office

Enclosure

FEDERAL AVIATION ADMINISTRATION – PARTS MANUFACTURER APPROVAL

McFarlane Aviation Inc.
696 E 1700 Road
Baldwin City, KS 66006

PMA No: PQ3732CE
Supplement No.50
Date: January 10, 2011

<u>Part Name</u>	<u>Part Number</u>	<u>Approved Replacement For Part NO.</u>	<u>Approval Basis and Approved Design Data</u>	<u>MAKE Eligibility:</u>	<u>MODEL Eligibility:</u>
CONTROL, Propeller	MC0311031-1	0311031-1	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	190 s/n all.
CONTROL, Propeller	MC0311031-2	0311031-2	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	195 (LC-126A,B,C) s/n all; 195A s/n all; 195B s/n all.
CONTROL, Throttle	MC0411091-30	0411091-30	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	175 s/n 55704 thru 56238.
CONTROL, Throttle	MC0411091-4	0411091-4	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	190 s/n all; 195 (LC- 126A,B,C) s/n all; 195A s/n all; 195B s/n all.
CONTROL, Throttle	MC0411091-7	0411091-7	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	120 s/n 8003 thru 15075; 140 s/n 8001 thru 15075.
CONTROL, Throttle	MC1213228-2	1213228-2	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	210 s/n all; 210A s/n all.

CONTROL, Throttle	MC1213228-3	1213228-3	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	185 s/n all.
CONTROL, Mixture	MC1213229-1	1213229-1	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	210 s/n all; 210A s/n all.
CONTROL, Mixture	MC1213229-2	1213229-2	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	185 s/n all.
CONTROL, Propeller	MC345-085-3	345-085-3, 9862056-2	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	180K s/n all.
CONTROL, Propeller	MC345-085-4	345-085-4	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	177B s/n 17702540 thru 17702752; 177RG s/n 177RG1052 thru 177RG1366; F177RG s/n F177RG0161 thru F177RG0177.
CONTROL, Propeller	MC345-085-5	345-085-5, 9862067-6	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	FR182 s/n FR18200001 thru FR18200045; R182 s/n R18200001 thru R18201313.
CONTROL, Propeller	MC345-085-6	345-085-6, 9862067-7	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	TR182 s/n R18200584 thru R18201313.
CONTROL, Propeller	MC345-085-7	345-085-7, 9862067-8	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	A185F (1974-1985) s/n 18503154 thru 18504448.

CONTROL, Propeller	MC345-085-8	345-085-8, 9862067-10	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	FR182 s/n FR18200046 thru FR18200070; R182 s/n R18201314 thru R18202041; T182 s/n all; TR182 s/n R18201314 thru R18202041.
CONTROL, Propeller	MC345-085-9	345-085-9, 565-580-004, 9862067-11	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	172RG s/n all.
CONTROL, Throttle	MC565-549-013	565-549-013	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	177B s/n 17702540 thru 17702752.
CONTROL, Mixture	MC9862066-3	9862066-3	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	A185F (1974-1985) s/n 18503154 thru 18504448.
CONTROL, Mixture	MC9862066-6	9862066-6, S2213-1	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	FR172J s/n FR17200531 thru FR17200590, FR172K s/n all; R172K s/n all.
CONTROL, Propeller	MC9862067-3	9862067-3	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	182Q s/n all; 182R s/n all; F182Q s/n all.
CONTROL, Throttle	MC9863053-10	9863053-10	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	FR172K s/n FR17200591 thru FR17200630; R172K s/n R1722000 thru R1722929.
CONTROL, Throttle	MC9863053-17	9863053-17	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	A185F (1974-1985) s/n 18503154 thru 18503683.

CONTROL, Throttle	MC9863055-10	9863055-10	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	FR172K s/n FR17200631 thru FR17200675; R172K s/n R1722930 thru R1723454.
CONTROL, Throttle	MC9863055-9	9863055-9	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	180K s/n 18053001 thru 18053203; 182Q s/n 18266591 thru 18267715; 182R s/n all; F182Q s/n F18200095 thru F18200169.
CONTROL, Throttle	MC9863056-1	252-085-2, 9863056-1	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	F152 s/n F15201529 thru F15201980.
CONTROL, Throttle	MC9863056-2	9863056-2	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	TU206G s/n U20604650 thru U20607020; U206G s/n U20604650 thru U20607020.
CONTROL, Throttle	MC9863056-3	9863056-3	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	172P s/n all; 172Q s/n all.
CONTROL, Throttle	MC9863056-5	9863056-5	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	A185F (1974-1985) s/n 18503684 thru 18504448.
CONTROL, Throttle	MC9863056-7	9863056-7	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	T182 s/n all; TR182 s/n all.
CONTROL, Throttle	MC9863056-8	252-085-8, 565-549-004, 9863056-8	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	172RG s/n all.

CONTROL, Throttle	MCC299505-0101	C299505-0101	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	P206D s/n all; P206E s/n all; TU206C s/n all; TU206D s/n all; TU206E s/n all; TU206F (1972-1973) s/n all; TU206F (1974-1976) s/n all.
CONTROL, Throttle	MCC299505-0202S	C299505-0202S	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	FA150L (1971) s/n all; FA150L (with FKA150-2311 and FKA150-2316) (1972-1974) s/n all; FA150M (with FKA150-2311 and FKA150-2316) s/n all; FA1500262 thru FA0311; FRA150L s/n all; FRA150M s/n all; FRA1500262 thru FRA0311.
CONTROL, Throttle	MCC299505-0203S	C299505-0203, C299505-0203S, S1222-21	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	F172H (1967-1969) s/n F172-0560 thru F172-0654; F172H (1970) s/n all; F172K s/n all; F172L s/n all; F172M (1973-1974) s/n F17200905 thru F17201034.
CONTROL, Throttle	MCC299505-0204S	C299505-0204, C299505-0204S, S1222-22	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	FR172F s/n all; FR172G s/n all; FR172H s/n all; FR172J s/n all.
CONTROL, Throttle	MCC299505-0401	C299505-0401, C299505-0401	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	177RG s/n 177RG0001 thru 177RG1051; F177RG s/n F177RG0001 thru F177RG0160.
CONTROL Propeller	MCC299506-0101	C299506-0101	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	T210K s/n all; T210L s/n all.
CONTROL Propeller	MCC299506-0105	9862051-4, C299506-0105, S1223-I, S1223-II	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	FP172 s/n all; P172D s/n all.

CONTROL, Propeller	MCC299506B0104	C299506-0104, C299506B0104, S1223-15	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	FR172F s/n all; FR172G s/n all; FR172H s/n all; FR172J s/n all; FR172K s/n all (R172K s/n R1722000 thru R1722880 & FR172K s/n FR17200591 thru fr17200620 must have been modified as per Cessna Service Letter 78-51.); R172K s/n all (R172K s/n R1722000 thru R1722880 & FR172K s/n FR17200591 thru fr17200620 must have been modified as per Cessna Service Letter 78-51.)
CONTROL, Mixture	MCC299507-0101	C299507-0101	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	210H s/n all; 210J s/n all; T210H s/n all; T210J s/n all.
CONTROL, Mixture	MCC299507-0102	C299507-0102	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	177RG s/n 177RG0001 thru 177RG1051; F177RG s/n F177RG0001 thru F177RG0160.
CONTROL, Mixture	MCC299507-0401	C299507-0401	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	A185E (1970-1972) s/n 18502008 thru 18502025; A185E (1970-1972) s/n 18502028 thru 18502090; A185F (1973) s/n all; A185F (1974-1985) s/n 18502311 thru 18503153.
CONTROL, Throttle	MCC299508-0301	C299508-0301	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	A188B (1976-1983) s/n 18802746 thru 18803973; A188B (w/ large hopper) (1976-1983) s/n 18802746T thru 18803973T.

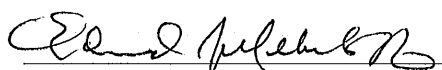
CONTROL, Propeller	MCC299508-0302	C299508-0302	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	A188B (1976-1983) s/n 18802746 thru 18803973; A188B (w/ large hopper) (1976-1983) s/n 18802746T thru 18803973T.
CONTROL, Throttle	MCC299508-0303	C299508-0303	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	T188C s/n all.
CONTROL, Propeller	MCC299508-0304	C299508-0304	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	T188C s/n all.
CONTROL, Mixture	MCC299508-0402	C299508-0402	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	T188C s/n all.
CONTROL, Throttle	MCC299513-0101	C299513-0101	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	210R s/n all; P210R s/n all; T210R s/n all.
CONTROL, Mixture	MCS1220-12A	S1220-12A	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	207 s/n all; T207 s/n all.
CONTROL, Mixture	MCS1220-3	S1220-3	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	TP206A s/n all; TP206B s/n all; TU206A s/n all; TU206B s/n all.
CONTROL, Mixture	MCS1220-4	S1220-4	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	185A s/n all; 185B s/n all; 185C s/n all; 185D s/n all; 185E s/n all; A185E (1966- 1969) s/n 185-0968 thru 185-1300.

CONTROL, Throttle	MCS1222-10A	S1222-10A	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	P206 s/n all; P206A s/n all; P206B s/n all; TP206A s/n all; TP206B s/n all; TU206A s/n all; TU206B s/n all; U206 s/n all; U206A s/n all; U206B s/n all; 210E s/n all; 210F s/n all; 210G s/n all; T210F s/n all; T210G s/n all.
CONTROL, Throttle	MCS1222-4	S1222-4	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	FP172 s/n all; P172D s/n all; 175A s/n all; 175B s/n all; 175C s/n all.
CONTROL, Propeller	MCS1223-16	S1223-16	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	207 s/n all; T207 s/n all.
CONTROL, Propeller	MCS1223-17	S1223-17	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	FR172E s/n all; 210- 5 (205) s/n all; 210- 5A (205A) s/n all; 206 s/n all; 210 s/n all; 210A s/n all; 210B s/n all; 210C s/n all; 210D s/n all.
CONTROL, Propeller	MCS1223-4	S1223-4	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	180F s/n all; P206 s/n all.
CONTROL, Propeller	MCS1223-5	S1223-5	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	180H s/n 18051446 thru 18051875; 185 s/n all; 185A s/n all; 185B s/n all; 185C s/n all; 185D s/n all; 185E s/n all; A185E (1966-1969) s/n 185- 0968 thru 185-1300.
CONTROL, Throttle	MCS1294-1	S1294-1	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	185A s/n all; 185B s/n all; 185C s/n all; 185D s/n all; 185E s/n all; A185E (1966- 1969) s/n 185-0968 thru 185-1300.

CONTROL, Throttle	MCS1391-18	S1391-18	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	188 s/n all; 188A s/n all.
CONTROL, Propeller	MCS1391-19	S1391-19	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	188 s/n all; 188A s/n all; A188 s/n all; A188A s/n all.
CONTROL, Throttle	MCS1391-20	MCS1391-20	Test and Computation per 14 CFR § 21.303. <u>Drawing:</u> 1186, <u>Rev:</u> BE, <u>Date:</u> 06-14-2010 or later FAA approved revisions.	Cessna	A188 s/n all; A188A s/n all.

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

NOTE: Provide minor design changes in a manner as determined by the ACO. Handle Major design changes to drawings and specifications in the same manner as that for an Original FAA-PMA. The FAA approved ICA for the above parts with their designs. These ICA may refer to those of the respective parts from the holders of type certificates. Otherwise, provide supplemental ICA for differences in the replacement parts. Make referral statements or supplemental ICA readily available per 14 CFR 21.50.


for Michael M. Alberts
Manager, Kansas City
Manufacturing Inspection District Office

January 10, 2011

Date: