



LORD Products for General Aviation

LORD

Maintenance of Bonded Sandwich Mountings and Assemblies

For type certificated aircraft, you must use the FAA approved component maintenance manual.

1. GENERAL COMMENTS

Bonded sandwich assemblies are natural rubber or specially blended synthetic compounds bonded to two plates. The normal installation requires four assemblies, each consisting of two sandwich mountings and one spacer. Satisfactory performance requires that the spacer be designed to the correct length to precompress each mounting to guarantee proper positioning of the mountings. When properly installed, these mountings provide excellent isolation of engine vibration, resulting in smoother, quieter flight. Always order replacement mountings by the mounting assembly number to ensure the correct spacer.

2. VISUAL INSPECTION OF INSTALLED MOUNTINGS

At each annual inspection and at FAA-required inspections of the aircraft's engines, all mounting assemblies should be visually inspected in their installed state while supporting the engine weight. The correct visual inspection procedure is as follows:

- Inspect all bonded sandwich mountings for metal-to-rubber bond separations, flex cracks, rubber deterioration due to exposure to fluids, and mechanical damage such as cuts in the rubber surface.
- Visually inspect all bonded steel parts for cracks and excessive nicks, scratches or gouges.
- Inspect all nut locking wires for looseness and tighten as necessary.
- When applicable, measure all drift indicators in each mounting assembly for excessive deflection.
- Whenever any of the conditions detailed above in steps a, b and d are found, remove the mounting assembly from the engine, disassemble, inspect and repair it as described in the maintenance manual.

CAUTION: WHENEVER THE AIRCRAFT'S ENGINES ARE CLEANED DURING A NORMAL INSPECTION, COVER EACH MOUNTING ASSEMBLY TO PROTECT IT FROM CONTAMINATION BY CLEANING FLUIDS OR SOLVENTS. THIS ALSO APPLIES TO ENGINE LUBRICANTS. SHOULD ANY SUCH MATERIALS ACCIDENTALLY GET ON A MOUNTING ASSEMBLY, WIPE IT OFF THOROUGHLY AS SOON AS POSSIBLE WITH A CLEAN, DRY RAG.

3. DISASSEMBLY

To remove mounting assemblies from the installation, it is necessary to remove the engine weight from the mountings, by the use of a chain hoist or equivalent, and disconnect

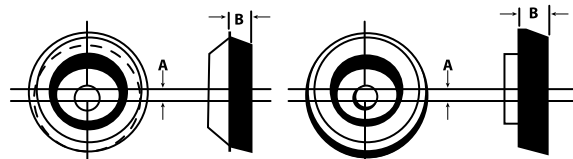
the nuts and bolts which hold the mountings in place. In general, removal of one mounting at a time can usually be accomplished, if necessary, without removing the engine weight from the mountings.

4. CLEANING AND INSPECTION

- Wipe oil and dirt from bonded mountings, but do not dip in cleaning solvents.
- Steel bolts and spacers should be inspected for cracks or damaged threads. Examine spacers for crushing of ends, caused by excessive tightening torque on bolt. Replace if either condition is apparent.
- Examine bonded rubber mounting for oil swelling, bond or rubber separation and shear or compression set. Bond separation, oil swelling or flex cracks in the surface of the rubber are cause for rejection. The effects of shear and compression set are determined by measuring the dimensions shown on the sketch. Reject parts which have an eccentricity greater than dimension "A" or an overall thickness less than dimension "B".

Mounting Series Number	Eccentricity Max. "A"	Thickness Min. "B"
J-1552	0.05	0.29
J-2245	0.06	0.45
J-3049	0.07	0.71
J-6113	0.05*	0.39
J-7401	0.06	0.75
J-7530	0.06*	0.75
J-7649	0.06*	0.75
J-7763	0.08	1.02
J-8381	0.06	0.75
J-9555	0.06*	0.75
J-9612	0.08	1.22
J-10533	0.10*	0.80
J-10776	0.10*	1.01
J-12165	0.20	1.00
J-12397	0.20	0.86
J-12454	0.20	1.30
J-12799	0.20	1.28
J-13051	0.23	1.40
J-15199	0.40	1.60
J-7763-34 (BTR-II)	0.14	1.02
J-9612-30 (BTR-II)	0.14	1.20
J-9612-32 (BTR-II)	0.12	1.20

*From original position (see installation drawing)



LORD PRODUCTS FOR YOUR AIRCRAFT APPLICATION

MODEL	LORD PART NO.	NO. PER A/C	SPECIAL INFORMATION
AEROMACCHI			
AL-60CS/F5	J-9613-9/-24	2	Engine Mount
AVIAT			
S-1, S-1S, S-2A	J-7401-2	8	Aviat provides the spacer
BELLANCA			
17-30A	J-12453-1/-2	2	S/N 30847 & up
17-31, 17-31A, 17-31TC	J-9868-5	4	Engine Mount
7ECA, 7GCAA, 7GCBC, 7KCAB	J-6230-1	4	Bellanca provides the spacer
8GCBC, 8GCBC-CS, 8GCBC-FP	J-6230-1	4	Bellanca provides the spacer
8KCAB, 8KCAB-CS, 8KCAB-FP, 8KCAB-180	J-6230-1	4	Bellanca provides the spacer
BRITTON-NORMAN – UNITED KINGDOM			
BN-2A-26	J-7402-20	8	Engine Mount
BN-2A Mk. 3	J-7402-20	12	Engine Mount
CESSNA			
150, 150A, B, C, D, E, F	SE-1051-3	1	Shimmy Damper
150G, H, J, K, L, M	SE-1051-2	1	Shimmy Damper
F150G, H, J, K, L, M	SE-1051-2	1	Shimmy Damper
A150K, L, M	SE-1051-2	1	Shimmy Damper
FA150K, L	SE-1051-2	1	Shimmy Damper
FRA150L, M	SE-1051-2	1	Shimmy Damper
152 (1978-1985)	SE-1051-2	1	Shimmy Damper
F152 (1978-1984)	SE-1051-2	1	Shimmy Damper
A152 (1978-1985)	SE-1051-2	1	Shimmy Damper
152	J-7402-1	4	S/N 15279406-85594
A152	J-7402-1	4	S/N 15279406-85594
172, 172 A, B, C, D, E, F, G, H, I, K, L, M, N, P, Q, R, S	SE-1051-2	1	Shimmy Damper
F172D, E, F, G, H, K, L, M, N, P	SE-1051-2	1	Shimmy Damper
FR172E, F, G, H, J (REIMS ROCKET), K	SE-1051-2	1	Shimmy Damper
172I-P	J-9613-49	4	Engine Mount
172Q	J-9613-49 J-9613-72	2 2	S/N 17275869 & up
172RG	J-9613-49 J-9613-72	2 2	Engine Mount
P172D	SE-1051-2	1	Shimmy Damper
R172E	J-9613-42	4	S/N R172-0302 to -0335
R172K	J-9613-42	1	S/N R1722000 & up
R172K	SE-1051-2	1	Shimmy Damper
175, 175A, B, C	SE-1051-2	1	Shimmy Damper

For reference only – oem aircraft manual is governing document

MODEL	LORD PART NO.	NO. PER A/C	SPECIAL INFORMATION
177A, 177B	J-9613-49	4	Engine Mount
177RG	J-9613-59	4	Engine Mount
180	J-3804-14 J-3804-15	2 2	S/N 30002-32150
180, 180A-G, 180H	J-6545-1	4	S/N 32151-32661
182, 182A-P	J-6545-1	4	Engine Mount
182B, C, D	SE-1051-2	1	Shimmy Damper
182K, L, M, N, P, Q, R, S, T, T182T	SE-1068-5	1	Shimmy Damper
T182, TR182	J-9613-12	4	Engine Mount
185, 185A-E	J-6545-1	4	Engine Mount
188A, 188B	J-15198-1 J-15198-2	2 2	S/N 18802349 & up
T188	J-6545-6 J-15198-1	2 2	S/N T1883297T & up
205,205A	J-6545-1	1	Engine Mount
206H	SE-1069-3	1	Shimmy Damper
P206, P206A-E	J-12453-1 J-12453-2	2 2	Engine Mount
P206B-E	SE-1069-3	1	Shimmy Damper
TP206A-E	J-12453-1 J-12453-2	2 2	Engine Mount
TU206A-F	J-12453-1 J-12453-2	2 2	Engine Mount
TU206B-H	SE-1069-3	1	Shimmy Damper
U206B-G	SE-1069-3	1	Shimmy Damper
207, 207A	SE-1069-3	1	Shimmy Damper
207, 207A, 207A II	J-12453-1 J-12453-2	2 2	Engine Mount
T207, T207A	SE-1069-3	1	Shimmy Damper
208	LM600-9 (Sand) LM600-20 (Spacer)	6 3	Engine Mount
C208, C208A, C208B	SE-10790-7	1	Shimmy Damper
210, 210A-C, 210C	J-6545-1	4	Engine Mount
210D-L	J-12453-1 J-12453-2	2 2	Engine Mount
210G, H, I, J, K, L, M, N, R	SE-1069-3	1	Shimmy Damper
P210N, R	SE-1069-3	1	Shimmy Damper
T210K, L, M, N	SE-1069-3	1	Shimmy Damper
T210M,N	J-12453-1/-2/ (MOD)	2/1/1	Engine Mount
T210F-L, T210J-L	J-12453-1 J-12453-2	2 2	Engine Mount
310J-Q	J-12390-1	8	Non-turbo-charged models only
310R, T310P,Q,R	J-9613-58	8	Engine Mount
320, 320A-C	J-7764-4	8	Engine Mount
320D-F	J-9613-31 or -58	8	Engine Mount
335	J-9613-58	8	Engine Mount
336	J-7764-10	8	Engine Mount
337, 337A-H	J-9613-31	8	Engine Mount
T337B-G, T337G	J-9613-31	8	Engine Mount

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MODEL	LORD PART NO.	NO. PER A/C	SPECIAL INFORMATION
P337H	J-9613-31	8	Engine Mount
340, 340A	J-9613-58	8	Engine Mount
401, 401A, B	J-9613-58	8	Engine Mount
402, 402A, 402B, 402C	J-9613-58	8	Engine Mount
404	J-9613-54	8	Engine Mount
414, 414A	J-9613-58	8	Engine Mount
421, A, B, C	J-9613-54	8	Engine Mount
425	LM-600-9(Sand) LM-600-20 (Spacer)	12 6	Engine Mount
441	LM-600-9(Sand) LM-600-12 (Spacer) 200PE1210-45	12 4 2	Engine Mount
500 / 501	LM-420-SA5 LM-420-SA6	4 2	Engine Mount
550, 551	LM-420-SA30 LM-420-SA31 LM-420-SA23	2 2 2	Engine Mount
CIRRUS			
SR20	J-9613-58	4 4 4 4	1005 to 1422 1423 to 1541 1542 to 1877, 1879 to 2064 2065 & subs
SR22 & 22T (4 point)	J-9613-54 J-9613-91	4 4	0002 to 0529 0530 & 0820
SR22 & 22T (6 point)	J-9613-76 J-9613-93 J-9613-76 J-9613-93 J-9613-94	6 6 6 6 6	0002 to 0820 081 to 3711 22-3712 & subs 22T-0001 & subs
SR22 & 22T	J-11968-10	6	Landing Gear Shock Disk
COMMANDER AIRCRAFT CORP. (includes Twin Commander)			
111, 112, 112B, 112T, 112TCA	J-9613-40/-53	2	Engine Mount
CONTINENTAL			
TSIO-550-B	J-7764-31 J-9613-76	2 2	Engine Mount
DASSAULT BERQUET – FRANCE			
Falcon 50	LM-833-SA9/ -SA20-3	4/2	Engine Mount
Falcon 50	LM-833-SA21/ -SA22	2/1	Center Engine Isolator
Falcon 50, 900	LM-833-SA10	2	Center Engine
Falcon 50, 900, 900EX	LM-833-SA13	2	Engine 2 Isolator
EMBRAER – BRAZIL			
EMB-135, -145	LM-223-SA5-2 Front LM-223-SA8 Rear	4 4	Engine Mount
EMB-810	J-9613-58	8	Engine Mount
EMB-820	J-9613-12	8	Engine Mount
GAF – AUSTRALIA			
N 22B, N24A	LM-206-SA8-1	6	Engine Mount
GULFSTREAM (formerly Israel Aircraft Corporation)			
1125, G100, G150	LM-833-SA20-6 LM-833-SA18-3	2 2	Engine Mount
GULFSTREAM AMERICAN CORP.			
AA-1C, AA-5, AA-5A	J-7402-24	4	Engine Mount

MODEL	LORD PART NO.	NO. PER A/C	SPECIAL INFORMATION
AA-5B	J-9613-49 J-9613-59	4 4	S/N 1 to 338 S/N 339 and up
AA-1	J-6113-5	8	Engine Mount
AA-1A, -1B	J-6113-5	8	Engine Mount
AG-5B	J-9613-59	4	Engine Mount
GA7	J-9613-49	8	Engine Mount
HAWKER (formerly Mitsubishi)			
35-33, 35-A33, 35-C33A, E33C, F33, F33A, F33C, G33, 35, A35, B35, C35, D35, E35, F35, G35, H35, J35, K35, M35, N35, P35, S35, V35, V35A, V35B, 36, A36, A36TC, B36TC	SE-1076-1	1	Shimmy Damper
58, 58P, 58TC, G58, 95-55, 95-A55, 95-B55, 95-C55, 95-C55A, D55, D55A, E55	SE-1076-1	1	Shimmy Damper
MU-2B-20	LM-821-SA40 LM-821-SA41 LM-821-118	4 2 2	S/N 224 & up
MU-2B-25, -26	LM-821-SA47 LM-821-SA48 LM-821-118	4 2 2	S/N 280 & up
MU-2B-60	LM-821-SA47 LM-821-SA48 LM-821-118	4 2 2	Engine Mount
MU-300, MU-300-10	LM-420-SA15 or -SA42 LM 420-SA16 or -SA43	4 2	-SA42 and -SA43 are preferred spares
HELIO AIRCRAFT			
H-250	J-9613-12	4	Engine Mount
KELOWNA FLIGHTCRAFT (formerly General Dynamics, Convair)			
580, 340, 440	LM-207-SA1 LM-207-SA2	4 2	Engine Mount
LAKE AIRCRAFT			
C-2	J-7402-1	4	Engine Mount
LA-4-200, LA-4A	J-7402-6	4	Engine Mount
LANCAIR			
IO-550N	J-9613-76 J-9613-75	3 1	Engine Mount
94001-01	J-9613-54	4	Engine Mount
TSIO-550-E	J-7764-31 J-9613-76	2 2	Engine Mount
LEARJET			
23, 24, 25	LM-308-SA4/-19 /-33	2	Engine Mount
24D, 24E	LM-308-SA4/-19 /-33	2	Engine Mount
24F, 25D, 25F, 28, 29	LM-308-SA4/-19 /-33	2	Engine Mount
35, 35A, 36, 36A	LM-833-SA4/-5	2/4	Engine Mount
M7 (formerly Fairchild & Swearingen)			
SA-226AT	LM-600-SA9 LM-421-SA12 J-7401-25	4 2 2	Engine Mount
SA-227AC	LM-600-SA9 LM-421-SA12 J-7401-25	4 2 2	Engine Mount

MODEL	LORD PART NO.	NO. PER A/C	SPECIAL INFORMATION
SA227-AC	LM 600-SA9	4	Engine Mount
	LM 600-SA17	2	
	J-7401-25	2	
MAULE			
M-5-210C, M-4-210, C/S/T	J-7764-10	4	Engine Mount
M-5-235C	J-7764-20	4	Engine Mount
MOONEY			
M20, M20E, F, G, H, K, L, M, R	J-11968-10	11	Landing Gear
M20B	J-7402-1	4	S/N 101 to 260
M20C	J-7402-1	4	S/N 101 to 470
M20D	J-7402-1	4	471 to 21-1180
M20E	J-9613-12	4	S/N 471 to 21-1180
M20E	J-7402-16	4	S/N 101 to 460
M20F (1966-77)	J-9613-12	4	S/N 670001 to 22-1438
M20G (1968-70)	J-7402-1	4	Engine Mount
M20J (1976-up)	J-9613-40	4	S/N 24-0001 & up
M20K (1979-85)	J-9613-75	1	1 Con TSIO-360- GB3 or MB1
	J-9613-76	3	
M20K (1986-up)	J-9613-75	1	Engine Mount
	J-9613-76	3	
NEW ZEALAND AEROSPACE – NEW ZEALAND			
FU24-954, FU24A-954	J-9613-9	2	Engine Mount
	J-9613-24	2	
PARTENAVIA – ITALY			
P-68	J-9613-40	4	Engine Mount
PIPER			
PA-23-250	J-3804-20	8	S/N 27-1to27- 2504
PA-23-250	J-3804-20	4	Engine Mount
PA-23-250T	J-9613-12	8	Engine Mount
PA-24-250	J-3804-20	4	Engine Mount
PA-24-250	J-3804-41	4	with McCauley prop STC- SA00773CH
PA-24-260	J-3804-20	4	S/N 24-3364 to 24-4803
PA-24-400	J-9613-9	2	Engine Mount
	J-9613-24	2	
PA-25-235	J-3804-20	4	Engine Mount
PA-25-250	J-3804-20	4	Engine Mount
PA-25-260	J-3804-20	4	Engine Mount
PA-28-140	J-7402-16	4	S/N 20002-24999
PA-28-140	J-9613-40	2	S/N 25000-25641
	J-9613-53	2	
PA-28-140	J-9613-40	2	S/N 7225001 & up
	J-9613-53	2	
PA-28-140, B, C, D, E, Cruiser	SE-1508-2	1	Shimmy Damper
PA-28-150	J-7402-16	4	S/N 20002-24999
PA-28-150	J-7402-24	4	S/N 1479 to 1760
PA-28-150	J-7402-16	4	S/N 1761-4377
PA-28-150, B, C	SE-1508-2	1	Shimmy Damper
PA-28-151	SE-1508-2	1	Shimmy Damper

MODEL	LORD PART NO.	NO. PER A/C	SPECIAL INFORMATION
PA-28-151	J-9613-40	2	Engine Mount
	J-9613-53	2	
PA-28-160	J-7402-16	4	S/N 1-507
PA-28-160	J-7402-16	4	S/N 28-508 to 28-1478
PA-28-160	J-7402-24	4	S/N 28-1479 to 28-3299
PA-28-160, B, C	SE-1508-2	1	Shimmy Damper
PA-28-161	J-9613-40	2	Engine Mount
	J-9613-53	2	
PA-28-161	SE-1508-2	1	Shimmy Damper
PA-28-161 Warrior II	SE-1508-2	1	Shimmy Damper
PA-28-161 Warrior III	SE-1508-2	1	Shimmy Damper
PA-28-180	J-7402-24	4	S/N 28-330 to 4377
PA-28-180	J-7402-24	4	S/N 28-4378 to 5149
PA-28-180	J-7402-16	4	S/N 1761-4377
PA-28-180, B, C, D, E, F, G	SE-1508-2	1	Shimmy Damper
PA-28-180 Challenger	SE-1508-2	1	Shimmy Damper
PA-28-180 Archer	SE-1508-2	1	Shimmy Damper
PA-28-181	J-9613-40	4	Engine Mount
PA-28-181	SE-1508-2	1	Shimmy Damper
PA-28-181 Ar- cher II	SE-1508-2	1	Shimmy Damper
PA-28-181, Archer III	SE-1508-2	1	Shimmy Damper
PA-28-181 Ar- cher LX	SE-1508-2	1	Shimmy Damper
PA-28-236	J-9613-12	4	Engine Mount
PA-28R-180	J-9613-40	4	S/N 30001 & up
PA-28R-200	J-9613-40	4	S/N 35001 & up
PA-28R-201	J-9613-40	4	S/N 28R-7737002 & up
PA-28R-201T	J-9613-58	4	Engine Mount
PA-28S-160	J-7402-16	4	Engine Mount
PA-30	J-9613-19	8	Engine Mount
PA-31	J-9613-12	8	Engine Mount
PA-31-300	J-9613-30	8	S/N 31228-31511
PA31-310	J-9613-12	8	Engine Mount
PA-31-325	J-9613-12	8	Engine Mount
PA-31-350	J-9613-29	8	Engine Mount
PA-31T	LM-423-SA1	6	Engine Mount
PA-31T-1,-500	LM-423-SA1	6	Engine Mount
PA-31T-620,	LM-423-SA1	4	Engine Mount
PA-31T-2	LM-423-SA1	6	Engine Mount
PA-32-260	J-7402-20	4	S/N 1-569
PA-32-260	J-3804-27	4	S/N 570 & up
PA-32-300	J-3804-27	4	S/N 40001- 7240055
PA-32-300	J-3804 -40	4	S/N 7240056 & up
PA-32-301	J-9613-19	2	Engine Mount
	J-9613-12	2	

MODEL	LORD PART NO.	NO. PER A/C	SPECIAL INFORMATION
PA-32-301 Saratoga	SE-1508-2	1	Shimmy Damper
PA-32-301T Saratoga	SE-1508-2	1	Shimmy Damper
PA-32-301XTC	SE-1508-2	1	Shimmy Damper
PA-32-301FT 6X	SE-1508-2	1	Shimmy Damper
PA-32R-300	J-3804-31	4	S/N 32R768140
PA-32R-300	J-3804-40	4	S/N 32R7680141 & up
PA-32R-301	J-9613-19 J-9613-12	2 2	Engine Mount
PA-32RT-300	J-3804-40	4	S/N 32RT7885001 & up
PA-32RT-300T	J-3804-37 (bottom) J-3804-39 (top)	2 2	Engine Mount
PA-34-200	J-9613-40	8	Engine Mount
PA-38-112	J-7402-16	4	Engine Mount
PA-39	J-9613-19	8	Engine Mount
PA-44-180T	J-9613-40	8	Engine Mount
PA-46-310P	J-9613-55	4	Engine Mount
PA-46-350P	J-9613-55	8	S/N 4622001 & up
RILEY TURBOSTREAM CORP.			
Dove Convers.	J-9613-9	8	Executive 400
SIAI MARCHETTI – ITALY			
S-208	J-3804-20	4	Engine Mount
SF-260, M, W	J-3804-20	4	Engine Mount
SOCATA – FRANCE			
235C,E	J-9613-40	4	Engine Mount
TEXTRON AVIATION (formerly Beechcraft)			
E18S, H18S	J-5384-1 J-5385-1	2/4	Engine Mount
19A, BI9, M19A	J-7402-16	4	Engine Mount
A23, A23A	J-10778-4	4	Engine Mount
C-23	J-7402-16	4	Engine Mount
24, A24, A24R, B24R, C24R	J-10778-14 J-10778-16	2 2	Engine Mount
C33A	J-10520-1	4	Engine Mount
E33, F33	J-7518-2	4	Engine Mount
E33A, E33C, F33A, F33C, G33	J-10520-1	4	Engine Mount
35, A35, B35	J-2245-1	8	Engine Mount
H35, J35, K35, M35, N35, P35	J-7518-2	4	Engine Mount
S35, T35, V35, V35A, V35B	J-10520-1	4	Engine Mount
36, A36	J-10520-1	4	Engine Mount
A36TC, B36TC	J-10520-1	4	Engine Mount
V35A-TC	J-10520-1	4	Engine Mount
B50, C50	J-3804-10	8	Engine Mount
55, A55, B55, B55A	J-9613-5	8	Engine Mount
C55 (1967), D55, D55A, E55, E55A	J-10778-16	8	S/N TE1-TE-849
56TC / A56TC	J-9613-9	1	Engine Mount
58	J-10778-16	8	Engine Mount

MODEL	LORD PART NO.	NO. PER A/C	SPECIAL INFORMATION
58P	J-12453-12	8	Engine Mount
58TC	J-12453-12	8	Engine Mount
60, A60, B60	J-9613-9	8	Engine Mount
65, A65, 70	J-6545-1	8	Engine Mount
76TC, 76	J-9613-49 J-9613-50	2 2	Engine Mount
77	J-7402-1	4	Engine Mount
80, A80, B80	J-6545-1	8	Engine Mount
C90, C90A, E90, F90	LM-427-SA7	6	Engine Mount
95,95A,95B, D95A, E95	J-7402-1	8	Engine Mount
A100	LM-427-SA7	6	Engine Mount
B100	LM-821-SA49 LM-821-SA50	4 2	Engine Mount