

service bulletin

M86-11 Rev. 1
Supersedes M86-11Technical Portions Are
FAA Approved

1 October 1986

SUBJECT: CONNECTING ROD PRODUCT IMPROVEMENT**COMPLIANCE:** At Next Engine Overhaul, Top Overhaul, or Anytime Cylinders are Removed For Any Reason

AFFECTED: 1. NEW ENGINES		S/N	
IO-360C		350035	Thru 350075
	D	351332	Thru 351358
	DB	351350	Thru 351363
	G	352646	Thru 352799
	GB	352777	Thru 352887
	H	353318	Thru 353351
	K	355258	Thru 356561
	KB	356003	Thru 356561
TSIO-360C		300482	Thru 300599
	CB	300571	Thru 300667
	E	303850	Thru 311546
	EB	307391	Thru 311612
	F	305039	Thru 310469
	FB	305737	Thru 310732
	G	309000	Thru 309002
	GB	309004	Thru 309433
	H	308000	Thru 308062
	HB	308063	Thru 308127
	JB	313002	Thru 313018
LTSIO-360E		304850	Thru 306360
	EB	306382	Thru 312567
2. TCM-REBUILT		S/N	
IO-360A		20114	Thru 20128
	C	60330	Thru 60525
	CB	236501	And 236502
	D	62709	Thru 62829
	DB	239601	Thru 239609
	G	224720	Thru 224858
	GB	236601	Thru 236606
	H	226502	Thru 226508
	J	238701	Thru 238704
	K	230327	Thru 230350
	KB	235802	Thru 235818

TSIO-360A	197057	Thru	197087
AB	237601	Thru	237609
C	224359	Thru	230717
CB	236001	Thru	236023
DB	238401		
E	225002	Thru	225086
EB	234551	Thru	234638
F	232751	Thru	232766
FB	237301	Thru	237352
GB	237401	Thru	237407
H	233251	Thru	233253
HB	239952	Thru	239956
LTSIO-360E	225501	Thru	225596
EB	233751	Thru	233834

**3. ANY 360 SERIES ENGINE REGARDLESS OF SERIAL NUMBER
THAT HAS HAD A ROD(S) CHANGED IN THE FIELD.**

4. RODS IN PARTS INVENTORY

A potential problem of over stressed connecting rods associated with excessive cylinder pressure which can be caused by lean take-off fuel flows, advanced magneto timing, pre-ignition, overspeed, detonation, overboost, hydrostatic lock, or sudden propeller stoppage may eventually cause connecting rod breakage and resultant engine failure.

We recommend that at any time access is gained to the connecting rods during cylinder removal, the beam section dimension of the connecting rods with forging number 626119 be measured as per illustration Figure 1, and also as found in Overhaul Manual X30030A. Any connecting rod below .625 dimension should be replaced with a new product improvement connecting rod with additional margin of safety, P/N 646321 or P/N 646320, depending on the model affected. In addition, it is recommended that published operating and maintenance procedures be strictly followed to prevent the causes of excessive cylinder pressure as noted in the preceeding paragraph.

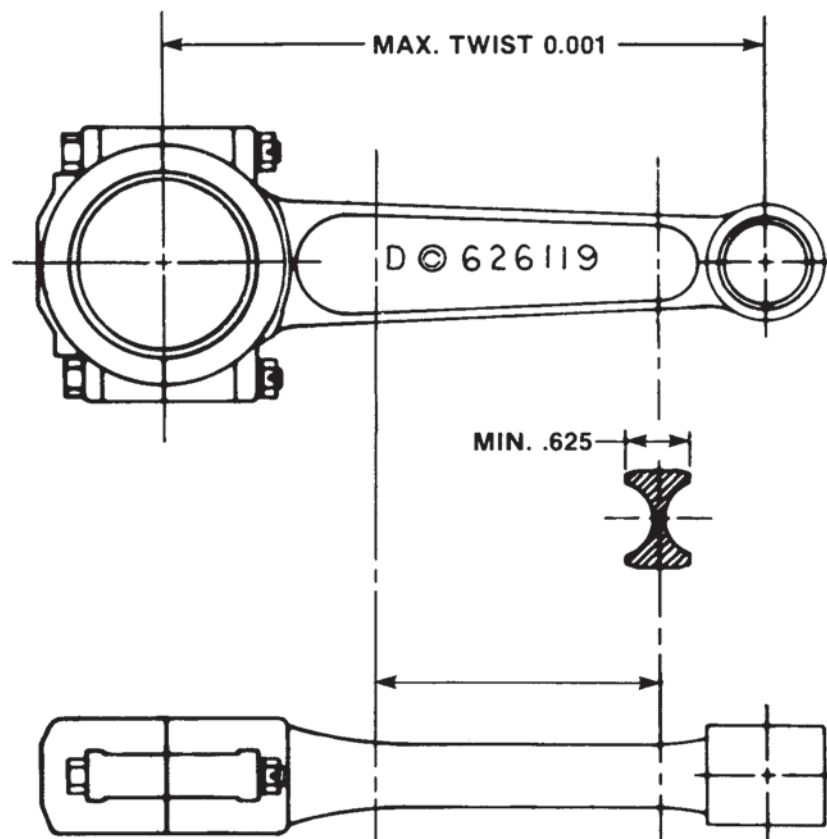
A larger number of over stressed connecting rods have been those identified with a forged C on the beam section. These rods were manufactured between June 1976 and September 1981. Particular attention should be paid to these rods.

All rods in parts inventory should be inspected per the above two paragraphs.

A special exchange price is offered in CIB 86-2 dated 18 April, 1986. Connecting rods are sold in pairs due to weight consideration of not more than 1/2 oz. difference in opposite bays. Therefore, the opposite bay connecting rod will also require replacement.

If connecting rod replacement is required, new connecting rod bearings of the appropriate part number and new cotter pins P/N 639292 should be installed. Component inspection and reassembly should be in accordance with Overhaul Manual Form X30030A.

Make appropriate engine log book notations as to the method of compliance.



NOTE: THIS INSPECTION PERTAINS TO THE 626119 FORGING ONLY

FIGURE 1. CONNECTING ROD.