

# **TEXTRON** Lycoming

**Williamsport Plant**  
Textron Lycoming/Subsidiary of Textron Inc.  
652 Oliver Street  
Williamsport, PA 17701 U.S.A.

# SERVICE INSTRUCTION

DATE: May 24, 1988

Service Instruction No. 1301A  
(Supersedes Service Instruction No. 1301)  
Engineering Aspects are  
FAA Approved

SUBJECT: Identification of Primer and Fuel Injector Lines

MODELS AFFECTED: All Textron Lycoming Piston Aircraft Engines.

TIME OF COMPLIANCE: Any time fuel injector, primer or fuel manifold lines are assembled or replaced.

The various fuel lines used on Textron Lycoming engines are similar in appearance, and, in some instances, can be distinguished only by measuring the inside diameter of the tubing. Care must be exercised when repairing or replacing fuel lines since engine operation can be adversely affected if the improper lines are installed or if a fuel line is bent beyond the limits shown in Figure 1. Before replacing a fuel line, refer to Chart I for fuel line part numbers, application and dimensions. Fuel line inside diameters can be measured with drill rod of the appropriate size. Refer to Chart II for a fuel line part number history.

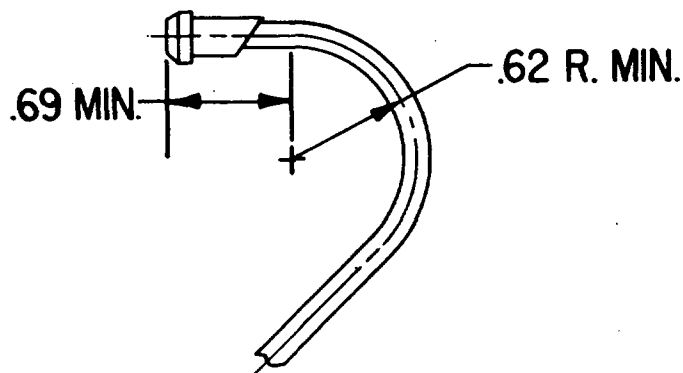


Figure 1. Fuel Line Showing Minimum Dimensions for Bending

CHART I. FUEL LINE IDENTIFICATION				
Fuel Line P/N Prefix	Identification Marking	Use on Engine	Engine Model Application	Inside Diameter of Tubing
61581	red paint	primer line	All models	.0605/.0775
61581-A	red paint	injector line	IO-540-B & -E	.0605/.0775
73842	white paint	injector line	IO-360-B1A	.058/.060
76356*	no marking	injector line	IO-720-A1A	.0865/.0995
76357*	no marking	injector line	IO-720-A1A	.0865/.0995
76358*	no marking	injector line	IO-720-A1A	.0865/.0995
76359*	no marking	injector line	IO-720-A1A	.0865/.0995
76360*	no marking	injector line	IO-720-A1A	.0865/.0995
76361*	no marking	injector line	IO-720-A1A	.0865/.0995
76362*	no marking	injector line	IO-720-A1A	.0865/.0995
LW-12098	no marking	primer/injector line	All models	.0865/.0995
LW-13995	yellow paint	injector line	IO-540-B & -E	.0585/.0715
LW-16948	green paint	injector line	IO-360-B1A	.065/.069

\* Special Riley installation.

CHART II. FUEL LINE REPLACEMENTS AND SUPERSEDURES		
Original P/N	Replaced By **	Superseded By *
61581-1	LW-12098-1-153	LW-12098-0-160
61581-2	LW-12098-1-116	LW-12098-0-120
61581-3	LW-12098-0-100	-----
61581-4	LW-12098-1-160	LW-12098-0-160
61581-5	LW-12098-1-146	LW-12098-0-150
61581-7	LW-12098-1-183	LW-12098-0-190
61581-9	LW-12098-1-170	LW-12098-0-170
61581-10	LW-12098-0-050	-----
61581-12	LW-12098-1-284	LW-12098-0-280
61581-14	LW-12098-2-194	LW-12098-0-200
61581-15	LW-12098-2-200	LW-12098-0-200
61581-16	LW-12098-2-224	LW-12098-0-230
61581-17A*	LW-12098-1-224	LW-12098-0-230
61581-18	LW-12098-0-100	-----
61581-19	LW-12098-0-160	-----
61581-20A*	LW-13995-0-284	-----
61581-21A*	LW-13995-0-271	-----
61581-23A*	LW-13995-0-224	-----
61581-24A*	LW-13995-0-202	-----
61581-25	LW-12098-1-261	LW-12098-0-260
61581-26	LW-12098-0-134	LW-12098-0-140
61581-27	LW-12098-2-230	LW-12098-0-230
61581-28	LW-12098-1-200	LW-12098-0-200

CHART II. FUEL LINE REPLACEMENTS AND SUPERSEDURES (Continued)		
Original P/N	Replaced By **	Superseded By *
61581-29	LW-12098-2-210	LW-12098-0-210
61581-32	LW-12098-1-320	LW-12098-0-320
61581-35	LW-12098-4-124	LW-12098-0-130
61581-40	LW-12098-0-130	-----
61581-41	LW-12098-0-160	-----
61581-42	LW-12098-0-092	LW-12098-0-100
73224	LW-12098-2-200	LW-12098-0-200
73226	LW-12098-1-160	LW-12098-0-160
73237	LW-12098-1-180	LW-12098-0-180
73796	LW-12098-1-134	LW-12098-0-140
73842	LW-16948	-----
73963	LW-12098-1-200	LW-12098-0-200
73964	LW-12098-1-170	LW-12098-0-170
74413	LW-12098-1-230	LW-12098-0-230
74647	LW-12098-1-210	LW-12098-0-210
74648	LW-12098-2-180	LW-12098-0-180
74649	LW-12098-2-276	LW-12098-0-280
74650	LW-12098-3-260	LW-12098-0-260
74831	LW-12098-1-240	LW-12098-0-240
74850	LW-12098-4-320	LW-12098-0-320
74851	LW-12098-4-390	LW-12098-0-390
74853	LW-12098-3-334	LW-12098-0-340
75091	LW-12098-3-320	LW-12098-0-320
75092	LW-12098-4-390	LW-12098-0-390
75093	LW-12098-2-256	LW-12098-0-260
75094	LW-12098-3-334	LW-12098-0-340
75469	LW-12098-0-100	-----
75828	LW-12098-3-252	LW-12098-0-260
75829	LW-12098-3-412	LW-12098-0-412
75830	LW-12098-1-174	LW-12098-0-180
75831	LW-12098-3-350	LW-12098-0-350
75832	LW-12098-1-092	LW-12098-0-100
76356	LW-12098-3-310	76356
76357	LW-12098-3-340	76357
76358	LW-12098-3-312	76358
76359	LW-12098-3-294	76359
76360	LW-12098-4-390	76360
76361	LW-12098-4-386	76361
76362	LW-12098-4-476	76362
LW-10419	LW-12098-4-412	LW-12098-0-412
LW-10420	LW-12098-4-350	LW-12098-0-350
LW-11961	LW-12098-2-210	LW-12098-0-210
	LW-12098-1-100	LW-12098-0-100
	LW-12098-2-100	LW-12098-0-100
	LW-12098-0-116	LW-12098-0-120
	LW-12098-0-124	LW-12098-0-130
	LW-12098-2-134	LW-12098-0-140
	LW-12098-0-153	LW-12098-0-160

**CHART II. FUEL LINE REPLACEMENTS AND SUPERSEDURES (Continued)**

Original P/N	Replaced By **	Superseded By ★
	LW-12098-3-160	LW-12098-0-160
	LW-12098-2-170	LW-12098-0-170
	LW-12098-0-183	LW-12098-0-190
	LW-12098-2-190	LW-12098-0-190
	LW-12098-2-216	LW-12098-0-220
	LW-12098-2-226	LW-12098-0-230
	LW-12098-2-240	LW-12098-0-240
	LW-12098-3-240	LW-12098-0-240
	LW-12098-0-256	LW-12098-0-260
	LW-12098-2-264	LW-12098-0-270
	LW-12098-0-274	LW-12098-0-270
	LW-12098-0-276	LW-12098-0-280
	LW-12098-2-284	LW-12098-0-280
	LW-12098-0-296	LW-12098-0-300
	LW-12098-2-296	LW-12098-0-300
	LW-12098-3-296	LW-12098-0-300
	LW-12098-4-310	LW-12098-0-310
	LW-12098-0-334	LW-12098-0-340
	LW-12098-3-336	LW-12098-0-340

\* The "A" suffix on the part number indicates these fuel lines are used as injector lines on IO-540-B and -E series engines.

\*\* Replacement made to simplify the part numbering of fuel lines and permit easier identification.

★ To standardize fuel line part numbers for inventory purposes by removing the P/N 71811 sleeves from the fuel line assembly. When ordering fuel lines, you must order separately the same quantity of P/N LW-12598 fuel line sleeves as is installed on the line that you are replacing.

NOTE: Example: LW-xxxxx-4<sup>①</sup>-412<sup>②</sup>

① The single digit in the middle of the part number as listed in the "Replaced By" column indicates the number of sleeves previously on the fuel line.

② The last three digits of the fuel line part number indicate length. (412 = 41<sup>2</sup>/<sub>8</sub> inches).

NOTE: Revision "A" changes text and lists supersedures.

16437, 18460, 18470, 18470-A, 21253, 22713, 22713-A — These numbers for Textron Lycoming reference only.