INCREMENTAL CHANGE

Release Notification Date: 09/22/2022

## SPM 70-48-18 REPLACEMENT OF KELOX STUDS

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#### <u>HIGHLIGHTS</u>

#### HIGHLIGHT REFERENCE DESCRIPTION OF CHANGE

sk70-48-18-350-291 Technical Change: Added part numbers J1131P04, J1131P07, 5031T71P03, and 5031T71P08 throughout the procedure. Also, changed Vendor name from ALCOA to HOWMET in the Table 1. Part and Tool Information.

TASK 70-48-18-350-029

1. <u>General.</u>

The following procedure must be used to replace Kelox studs which are damaged or loose.

2. <u>Equipment.</u>

Subtask 70-48-18-350-291

A. Refer to Table 1 for Part and Tool Information and Table 2 for Kelox Studs and Sizes, required to replace studs.

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	Vendor Name	Part Identification Number	Installation Tool Type	Tool Vendor Number
3012T34P01	HOWMET	878CW-6SG-10	Setting Tool	324-6
			Flush Tool	325-6
3020T29P01	HOWMET	KLSS-10376-4-1	Setting Tool	323-4
			Flush Tool	325-4
	SHUR-LOK CORP	SL9302-4P01	Installation Tool	M256-4
3020T29P02	HOWMET	KLSS-10376-4-2	Setting Tool	323-4
			Flush Tool	325-4
	SHUR-LOK CORP	SL9302-4P02	Installation Tool	M256-4
3020T29P07	HOWMET	KLSS-10376-3-7	Setting Tool	323-3

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					Flush	n Tool	325-3
	SHUR-LOK COR	P	SL9302-3P	07	Insta	allation Tool	M256-3
3020T29P08	HOWMET		KLSS-1037	6-3-8	Setting Tool		323-3
					Flush Tool		325-3
	SHUR-LOK COR	P	SL9302-3P08		Installation Tool		M256-3
3020T29P09	HOWMET		KLSS-10376-3-9		Setting Tool		323-3
					Flush	n Tool	325-3
	SHUR-LOK COR	P	SL9302-3P	09	Insta	allation Tool	M256-3
4031T42P06	HOWMET		KLSS10153-4-6		Setting Tool		323-4
					Flush Tool		325-4
	SHUR-LOK CORP		SL9312-4P06		Installation Tool		M256-4
5031T71P03	HOWMET		KLSS10154-4-3		Setting Tool		323-4
					Flush Tool		325-4
	SHUR-LOK CORP		SL9314-4P03		Installation Tool		M256-4
5031T71P08	HOWMET		KLSS10154-4-8		Setting Tool		323-4
					Flush Tool		325-4
	SHUR-LOK COR	P	SL9314-4P08		Insta	allation Tool	M256-4
J1130P03	HOWMET		KLSS10152	-3-3	Sett	ing Tool	323-3
					Flush Tool		325-3
	SHUR-LOK COR	P	SL9301-3P	03	Installation Tool		M256-3
J1130P05	HOWMET		KLSS10152	-3-5	Setting Tool		323-3
					Flush Tool		325-3
	SHUR-LOK CORP		SL9301-3P	05	Installation Tool		M256-3
J1131P04	HOWMET		KLSS-1015	1-3-4	Sett	ing Tool	323-4
					Flush Tool		325-4
	SHUR-LOK CORP		SL9303-4P04		Installation Tool		M256-4
J1131P05	HOWMET		KLSS-10151-3-5		Setting Tool		323-4
					Flush Tool		325-4
	SHUR-LOK COR	P	SL9303-4P	05	Installation Tool		M256-4
J1131P07	HOWMET		KLSS-1015	1-3-7	Setting Tool		323-4
					Flush Tool		325-4
	SHUR-LOK CORP		SL9303-4P07		Installation Tool		M256-4
J1172P05	HOWMET		KLSS-10155-6-5		Setting Tool		323-6
					Flush Tool		325-6
	SHUR-LOK CORP HOWMET		SL9308-6P05		Installation Tool		M256-5
J1172P07			KLSS-1015	5-6-7	Setting Tool Flush Tool		323-6
SHUR-LOK COR							325-6
		P SL9308-6P		107 In		allation Tool	M256-5
		Table 2	2. Kelox	Studs and	Size	S	
GE Stud Part Number		STUD END	D THREAD	NUT END THR (UNJF-3A)	EAD	DRILL DIAMETER (inches)	DRILL DEPTH (inches)
3012T34P01		0.500-20 UNJF-3A		0.3750-24 UNJF-3A		0.404	0.234
3020T29P01		0.3125-18 UNJC-3A		0.2500-28 UNJF-3A		0.250	0.145
3020T29P02		0.3125-18 UNJC-3A		0.2500-28 UNJF-3A		0.250	0.145
3020T29P07		0.2500-28 UNJF-3A		0.1900-32 UNJF-3A		0.190	0.127
3020T29P08		0.2500-20 UNJC-3A		0.1900-32 UNJF-3A		0.190	0.127
3020T29P09		0.2500-20 UNJC-3A		0.1900-32 UNJF-3A		0.190	0.127
4031T42P06		0.3125-24 UNJF-3A		0.2500-28 UNJF-3A		0.250	0.145
5031T71P03		0.3125-2	24 UNJF-3A	0.2500-28		0.250	0.145

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## COMMERCIAL ENGINE STANDARD PRACTICES MANUAL GEK9250 - Rev 111, 04/01/2022 IC 70-48-18-015 SPM 70-48-18 REPLACEMENT OF KELOX STUDS

		UNJF-3A		
5031T71P08	0.3125-24 UNJF-3A	0.2500-28 UNJF-3A	0.250	0.145
J1130P03	0.2500-28 UNJF-3A	0.1900-32 UNJF-3A	0.190	0.127
J1130P05	0.2500-28 UNJF-3A	0.1900-32 UNJF-3A	0.190	0.127
J1131P04	0.3125-24 UNJF-3A	0.2500-28 UNJF-3A	0.250	0.145
J1131P05	0.3125-24 UNJF-3A	0.250-28 UNJF-3A	0.250	0.145
J1131P07	0.3125-24 UNJF-3A	0.2500-28 UNJF-3A	0.250	0.145
J1172P05	0.4375-20 UNJF-3A	0.375-24 UNJF-3A	0.375	0.203
J1172P07	0.4375-20 UNJF-3A	0.375-24 UNJF-3A	0.375	0.203

NOTE: ALL DIMENSIONS ARE IN INCHES.

NOTE: BOTH FLUSH AND SETTING TOOLS ARE USED TO INSTALL THE KELOX STUD. USE FLUSH TOOL WHEN DRIVING INTO HARD MATERIALS.

3. <u>Materials.</u>

Subtask 70-48-18-350-292

Consumable Product	No.
Zinc chromate primer	C03-001
Chromated conversion coating	C03-081 , C03-082 , C03-084 , or C03-092

#### 4. <u>Procedure</u>.

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Subtask 70-48-18-350-293

- Remove the defective stud. Refer to Figure 1 and as follows:
- (1) Cut off the flush of stud with surface of the part.
- (2) Remove defective part and drill out top of the stud. Refer to Table 2 for drill diameter and depth. Use second drill bit of approximately half the diameter of the first to finish drill through. The hardened ring will act as a drill bushing to guide drill.
- (3) Use a sharp pointed tool, remove the key ring.
- (4) Use the screw extractor to remove stud.
- Install the stud. Refer to Figure 2 and as follows:
  - (1) The threaded hole must be clear and not damaged. Up to one full thread can be missing.
  - (2) Refinish the threaded hole with chromated conversion coating. Refer to TASK
  - 70-43-07-380-007 (70-43-07, Chemical Touch-Up Surface Refinishing Process for Aluminum). (3) Coat the external threads with zinc chromate primer C03-001 .
  - (4) Install the replacement stud before primer dries.
  - (5) Screw assembly into tapped hole until keys contact first thread of stud.
  - (6) Drive key ring to or slightly below the surface.

### \* \* \* FOR ALL



REMOVAL

5038723-00

Figure 1 Removal of Stud

\* \* \* FOR ALL



INSTALLATION

5038724-00

Figure 2 Installation of Kelox Stud

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