



ICOM JTG-II PROPANE OPTIMIZATION PROGRAM (POP) INSTALLATION MANUAL

EMERGENCY VEHICLES



P13X4-9223-AA

Revision: A - Dated 2/13/13

Replaces: None

PROPANE OPTIMIZATION PROGRAM OVERVIEW

SYSTEM DESCRIPTION

THE ICOM PROPANE OPTIMIZATION PROGRAM (POP) FOR EMERGENCY VEHICLES OPTIMIZES THE USE OF PROPANE, BUT ALSO GIVES THE DRIVER THE OPTION TO MANUALLY SWITCH THE VEHICLE OVER TO GASOLINE AS THE PRIMARY FUEL IF NEEDED. WHEN THE VEHICLE IS USING PROPANE AS THE PRIMARY FUEL, THE VEHICLE WILL ONLY SWITCH OVER TO GASOLINE WHEN THE PROPANE HAS BEEN EXHAUSTED. ONCE THE PROPANE FUEL HAS BEEN REPLENISHED, THE VEHICLE WILL AUTOMATICALLY SWITCH BACK TO PROPANE AS THE PRIMARY FUEL.

HARDWARE CONTENTS

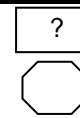
P13X4-4105-AA - PROPANE OPTIMIZATION KIT - EMERGENCY VEHICLES	
COMPONENT	QTY
A - ROCKER SWITCH	1
B - 16 GA. GREEN/BLACK WIRE W/SPADE CONNECTOR	2
C - 1/4" CORRUGATE	1
D - CUT-OUT TEMPLATE FOR PADDLE SWITCH	1
E - ROCKER SWITCH BRACKET	1
F - BRACKET SCREWS	2

TOOLS REQUIRED

- WIRE CUTTERS
- WIRE STRIPPERS
- SOLDER IRON
- ROSIN CORE SOLDER
- ELECTRICAL TAPE
- CORDLESS DRILL
- CUTTING TOOL



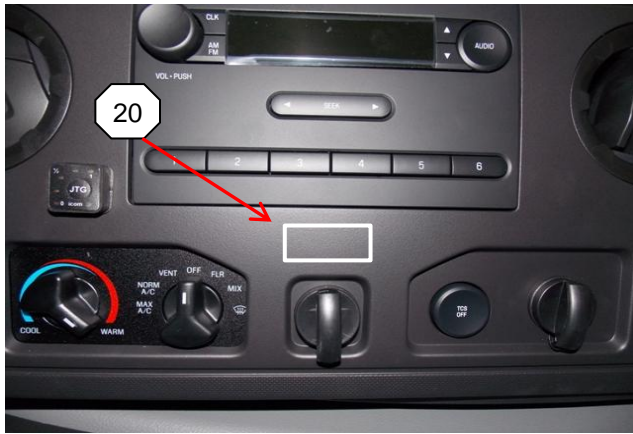
INSPECTION
TORQUE
CRITICAL PROCESS



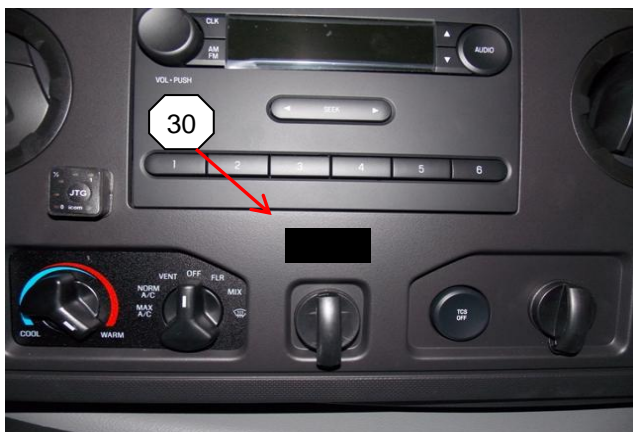
ITEM NUMBER
OPERATION



**10) DETERMINE LOCATION ON INSTRUMENT PANEL TO INSTALL THE
ROCKER SWITCH (FOR LIMITED LOCATIONS, USE THE PROVIDED BRACKET)**

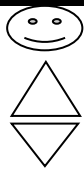


**20) USING THE PROVIDED TEMPLATE (D), MARK THE CUT-OUT OPENING
ONTO THE INSTRUMENT PANEL**



30) CUT AND REMOVE THE MARKED AREA

ITEM	PART NUMBER	QTY	DESCRIPTION	TORQUE	TOOLS
D		1	CUT-OUT TEMPLATE FOR SWITCH		CUTTING TOOL
E		1	BRACKET - ROCKER SWITCH		PHILLIPS SCREW DRIVER
F		2	SCREW - ROCKER SWITCH BRACKET		
PROCESS NAME					REV
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INSPECTION

TORQUE

CRITICAL PROCESS



ITEM NUMBER

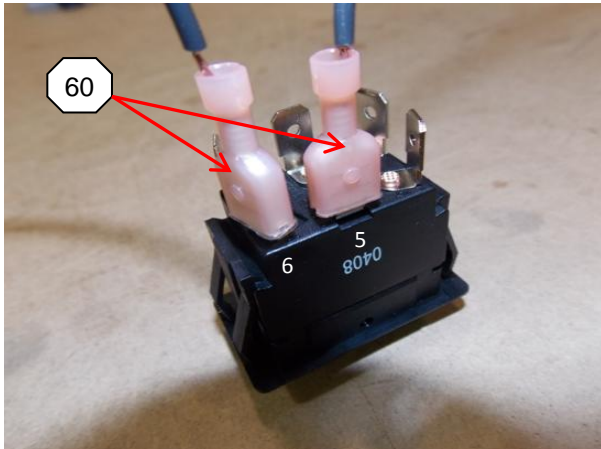


OPERATION



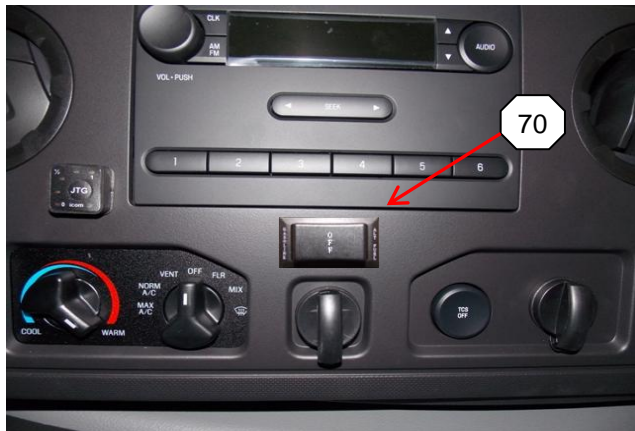
40) OBTAIN THE ROCKER SWITCH (A) FROM KIT; POSITION THE SPADE TERMINALS ON THE BACKSIDE OF THE SWITCH 'UP' AS SHOWN; LOCATE THE NUMBERS 5 & 6 EMBOSSED NEXT TO THE SPADE TERMINALS

50) OBTAIN THE (2) 16 GA. GREEN/BLACK WIRES WITH ATTACHED SPADE CONNECTORS (B) FROM THE KIT



60) ALIGN AND SEAT THE SPADE CONNECTORS ON THE GREEN/BLACK WIRES ONTO THE SPADE TERMINALS NUMBERED 5 & 6 ON THE SWITCH AS SHOWN

70) INSERT THE WIRES ON THE SWITCH INTO THE CUT-OUT OPENING ON THE INSTRUMENT PANEL OR BRACKET; ALIGN AND FULLY SEAT THE ROCKER SWITCH INTO THE CUT-OUT AS SHOWN



ITEM	PART NUMBER	QTY	DESCRIPTION	TORQUE	TOOLS
A		1	ROCKER SWITCH		
B		2	16 GA. GREEN/BLACK WIRE W/SPADE CONN.		
				PROCESS NAME	
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TORQUE
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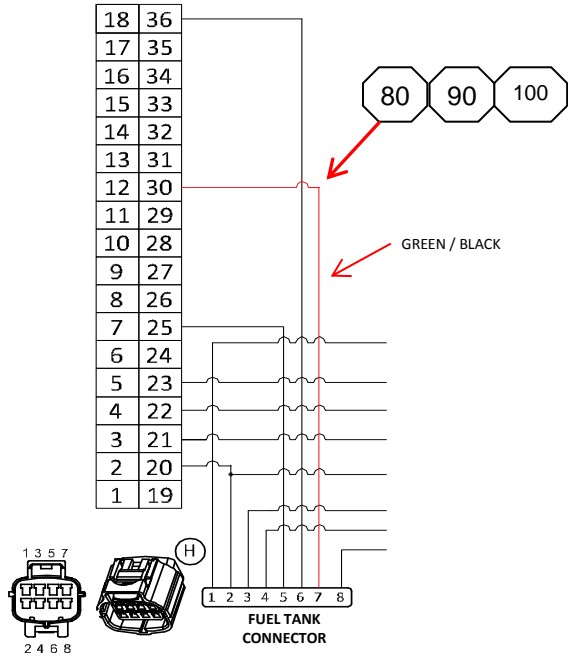


ITEM NUMBER



OPERATION

MAIN ICU MODULE CONNECTOR



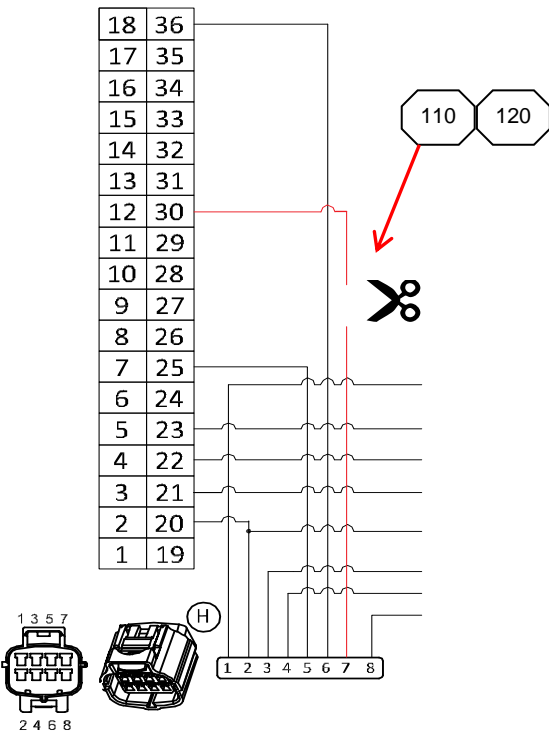
80) LOCATE THE ICOM JTG-II MAIN ICU MODULE (PART NUMBER 70304506 OR 70306506)

90) ROUTE THE WIRES ON THE BACK SIDE OF THE ROCKER SWITCH TO THE ICOM WIRE HARNESS GOING INTO THE MAIN ICU MODULE

100) OPEN THE CORRUGATE ON THE ICOM WIRE HARNESS; LOCATE THE GREEN/BLACK WIRE COMING FROM THE FUEL TANK CONNECTOR (PIN #7) GOING INTO THE MAIN ICU MODULE CONNECTOR (POSITION #30)

110) USING A PAIR OF WIRE CUTTERS, CUT THE GREEN/BLACK WIRE AT THE DESIRED LOCATION

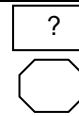
120) USING WIRE STRIPPERS, CAREFULLY REMOVE APPROXIMATELY 3/8" OF WIRE INSULATION FROM EACH END OF THE CUT GREEN/BLACK WIRE



ITEM	PART NUMBER	QTY	DESCRIPTION	TORQUE	TOOLS
					WIRE CUTTERS
					WIRE STRIPPERS
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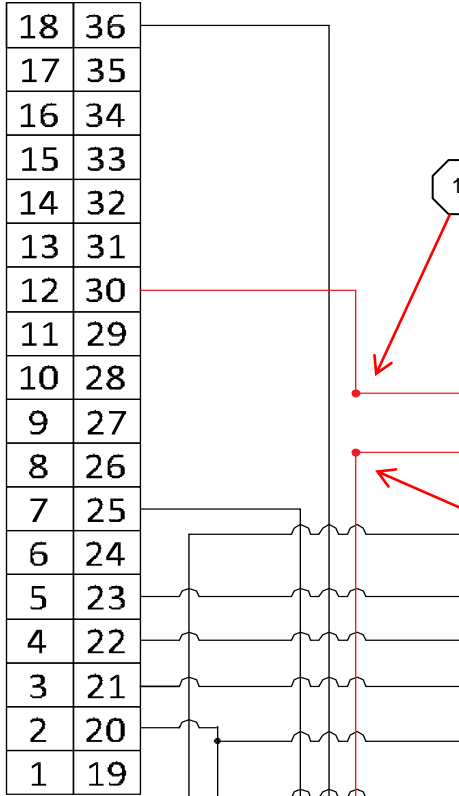
INSPECTION
TORQUE
CRITICAL PROCESS



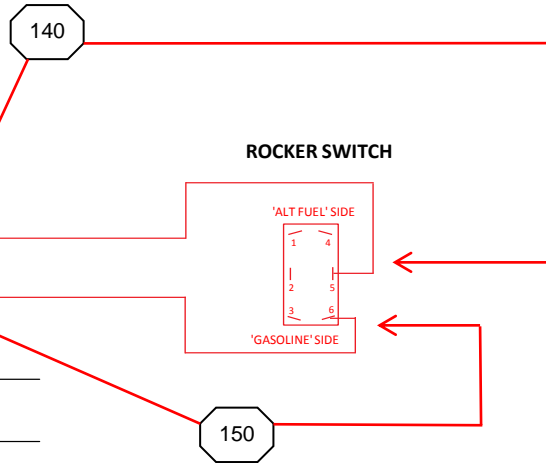
ITEM NUMBER
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130) USING WIRE STRIPPERS, CAREFULLY REMOVE APPROXIMATELY 3/8" OF WIRE INSULATION FROM EACH END OF THE WIRES ATTACHED TO THE ROCKER SWITCH

MAIN ICU MODULE CONNECTOR

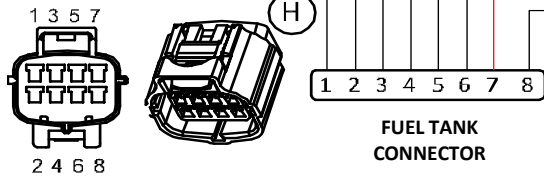


140) ATTACH THE WIRE COMING FROM SPADE TERMINAL #5 ON THE ROCKER SWITCH TO THE CUT GREEN/BLACK WIRE GOING TO PIN #30 IN THE MAIN ICU MODULE; SOLDER CONNECTION AND SEAL WITH ELECTRICAL TAPE



150) ATTACH THE WIRE COMING FROM SPADE TERMINAL #6 ON THE ROCKER SWITCH TO THE CUT GREEN/BLACK WIRE GOING TO PIN #7 ON THE FUEL TANK CONNECTOR; SOLDER CONNECTION AND SEAL WITH ELECTRICAL TAPE

160) INSTALL 1/4" CORRUGATE (C) ONTO WIRES COMING FROM SWITCH IF WIRES NEED TO BE PROTECTED



ITEM	PART NUMBER	QTY	DESCRIPTION	TORQUE	TOOLS
					WIRE STRIPPERS
					SOLDER IRON
					ROSIN CORE SOLDER
					ELECTRICAL TAPE
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170) ONCE THE INSTALLATION IS COMPLETE, POSITION THE ROCKER SWITCH TO THE 'ALT FUEL' POSITION; START VEHICLE; IF THE ORANGE LIGHT ON THE COMMUTATOR FLASHES, LET THE VEHICLE PURGE (ORANGE LIGHT FLASHES**) UNTIL THE ORANGE LIGHT STAYS ON STEADY (**VEHICLE IS RUNNING ON PROPANE**)**

FUEL LEVEL INDICATORS



LPG SYSTEM ON/OFF BUTTON

180

LPG SYSTEM ON/OFF INDICATOR

COMMUTATOR

180) IF THE ORANGE LIGHT DOES NOT START FLASHING AFTER THE VEHICLE IS STARTED, WITH THE VEHICLE RUNNING, PUSH THE LPG SYSTEM ON/OFF BUTTON ON THE COMMUTATOR **ONCE TO INITIATE THE PURGE CYCLE (**THERE WILL BE A SHORT DELAY BEFORE THE ORANGE INDICATOR LIGHT BEGINS TO FLASH**) LET THE VEHICLE PURGE (**ORANGE LIGHT FLASHES**) UNTIL THE ORANGE LIGHT STAYS ON STEADY (**VEHICLE IS RUNNING ON PROPANE**)**

LEAVE THE ROCKER SWITCH POSITIONED TO 'ALT FUEL' TO ALLOW THE VEHICLE TO USE PROPANE AS THE PRIMARY FUEL

POSITION THE ROCKER SWITCH TO 'GASOLINE' TO ALLOW THE VEHICLE TO USE GASOLINE AS THE PRIMARY FUEL

NOTE - IF THE ROCKER SWITCH IS POSITIONED TO 'OFF', THE VEHICLE WILL ONLY USE GASOLINE AS THE PRIMARY FUEL

ITEM	PART NUMBER	QTY	DESCRIPTION	TORQUE	TOOLS
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REVISIONS

OPERATION NUMBER	REVISION LEVEL	DESCRIPTION OF CHANGE	DATE	APPROVED BY
	A	INITIAL RELEASE	2/13/2013	M. STEPPEY

Author: Marc Steppey
Title: Technical Manager

Approval:
Title:

Date: 2/13/2013

Initials