MARITIME HELICOPTERS

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BELL 412 SERIES

MINIMUM EQUIPMENT LIST

LOG OF REVISIONS

REV.NO.	DATE	PAGE NUMBERS	INITIALS
Original	12/01/2015	All Pages Original Issue	SDS

Approved Effective 02 December 2015
AAL-03 FSDO, Benjamin N. Herning, POI

Digitally signed by Benjamin N. Herning
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TABLE OF CONTENTS

Approved Effective 02 December 2015
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Date: 2015.12.02 12:15:42 -09'00'

Control Page

Developed from FAA MMEL 212, 412, 412CF, 412EP Rev. 8 10/27/14

SYSTEM	PAGE	REV NO.	MHI MEL
Cover Page	i	Original	12/01/2015
Log of Revisions	ii	Original	12/01/2015
Table of Contents	iii	Original	12/01/2015
Control Page	iv	Original	12/01/2015
Definitions	v	Original	12/01/2015
	vi	Original	12/01/2015
	vii	Original	12/01/2015
	viii	Original	12/01/2015
Preamble	ix	Original	12/01/2015
21	21-1	Original	12/01/2015
22	22-1	Original	12/01/2015
23	23-1	Original	12/01/2015
	23-2	Original	12/01/2015
24	24-1	Original	12/01/2015
25	25-1	Original	12/01/2015
	25-2	Original	12/01/2015
26	26-1	Original	12/01/2015
28	28-1	Original	12/01/2015
	28-2	Original	12/01/2015
30	30-1	Original	12/01/2015
31	31-1	Original	12/01/2015
	31-2	Original	12/01/2015
32	32-1	Original	12/01/2015
33	33-1	Original	12/01/2015
	33-2	Original	12/01/2015
	33-3	Original	12/01/2015
34	34-1	Original	12/01/2015
	34-2	Original	12/01/2015
	34-3	Original	12/01/2015
	34-4	Original	12/01/2015
	34-5	Original	12/01/2015
	34-6	Original	12/01/2015
35	35-1	Original	12/01/2015
45	45-1	Original	12/01/2015
52	52-1	Original	12/01/2015
63	63-1	Original	12/01/2015
	63-2	Original	12-01/2015
	63-3	Original	12/01/2015
67	67-1	Original	12/01/2015
73	73-1	Original	12/01/2015
77	77-1	Original	12/01/2015
79	79-1	Original	12/01/2015

Approved Effective 02 December 2015
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Definitions

1. System Definitions.

2. Not Required

3. ATA System Page. The ATA system page is divided into four (4) columns and contains: item and repair category; number installed; number required for dispatch; and remarks or exceptions. Standard ATA categories are used. Items are numbered sequentially.

   A. Item. This column depicts the equipment, system, component, or function listed in the "Item" column.

   B. Repair Category. See definition #24.

   C. Number Installed. This column depicts the number (quantity) of instrument and equipment items normally installed in the aircraft. This number represents the aircraft configuration considered in developing this MEL. Should the number be a variable (e.g., fleet configuration differences, cockpit lighting items, cabin lighting items, cargo restraint components) a number is not required and the "-" symbol is used.

   D. Number Required for Dispatch. This column depicts the minimum number (quantity) of instrument and equipment items required for operation provided the conditions specified in the "Remarks or Exceptions" column are met. Where the MEL shows a variable number required for dispatch, the MEL must reflect the actual number required for dispatch or an alternate means of configuration control approved by the Administrator.

   E. Remarks or Exceptions. This column may include a statement(s) either prohibiting or permitting operation with a specific number of instrument and equipment items inoperative, provisos (conditions and limitations) for such operation, and appropriate notes.

   F. Provisos. Provisos are indicated by a number or a lower case letter in "Remarks or Exceptions". Provisos are conditions or limitations that must be complied with for operation with the listed instrument or equipment item inoperative.

   G. Notes. Notes provide additional information for crewmember or maintenance consideration. Notes are used to identify applicable material, which is intended to assist with compliance, but do not relieve the aircraft operator of the responsibility for compliance with all applicable requirements. Additional notes may be amended, deleted, or added to the MEL by the aircraft operator, as appropriate. Notes are not a part of the provisos.

   H. Vertical Bar (change bar). A vertical bar indicates a change, addition, or deletion in the adjacent text for the current revision of that page only. All change bars applicable to the previous revision of the MEL are removed prior to the release of the next revision.

4. Rotorcraft Flight Manual (RFM). The FAA-approved RFM is the document approved by the responsible FAA Aircraft Certification Office (ACO) during type certification. The approved flight manual for the specific aircraft is listed on the applicable Type Certificate Data Sheet (TCDS). The approved flight manual is the source document for operational limitations and performance parameters for an aircraft. The term "approved flight manual" can apply to either an AFM or an RFM. The FAA requires an approved flight manual for aircraft type certification.

5. Not Used.

6. Code of Federal Regulations (CFR) and Federal Aviation Regulations (FAR). CFR, the current term, and FAR both refer to the applicable portions of the Federal Aviation Act and Code of Federal Regulations.

7. Considered Inoperative. The phrase, “Considered Inoperative”, as used in the provisos, means that an instrument and equipment item must be treated for dispatch, taxi and flight purposes as though it were inoperative. The item will not be used or operated until the original deferred item is repaired. Additional actions include: documenting the item on the dispatch release (if applicable), placarding, and complying with all remarks, exceptions, and related MEL provisions, including any (M) and (O) procedures and observing the repair category.

8. Continuing Authorization – Single Extension. An aircraft operator who has the authorization to use an FAA approved MEL may also have the authority to use a continuing authorization to approve a single (one-time) extension to the repair interval for category B or C items in accordance with Operations Specification D095. Continuing Authorization – Single Extension is not authorized for repair category A and D items.

9. Dash (-). Indicates a variable number (quantity) of the instrument and equipment items may be installed or required for dispatch. This is common when a fleet MEL is used since aircraft of the same make and model may have differing numbers of specific instrument and/or equipment items installed.

10. Day of Discovery. This is the calendar-day an equipment/instrument malfunction was recorded in the aircraft maintenance record/logbook. This day is excluded from the calendar-days or flight-days specified in the MEL for the repair interval of an inoperative instrument and/or equipment item. This provision is applicable to all MEL items; i.e., categories A, B, C, and D.

11. Deactivated and/or Secured. When the MEL refers to an instrument and/or equipment item as deactivated and/or secured, the specified component must be put into an acceptable condition for safe flight. An acceptable method of deactivating and/or securing will be established by the aircraft operator.

12. Deleted. "Deleted" in the remarks column after a sequence item indicates that the item was previously listed but is now required to be operative if installed in the aircraft.

13. Not required.

14. Excess Items. Excess items are those instrument and equipment items that have been installed that are redundant to the requirements of the 14 CFR.

15. Flight Day. A flight-day is a 24-hour period (from midnight to midnight) either universal coordinated time (UTC) or local time, as established by Maritime Helicopters, during which at least one flight is initiated for the affected aircraft.

16. Not required.

17. Icing Conditions. An atmospheric environment that may cause ice to form on the aircraft (structural) or in the engine(s) (induction).

18. Inoperative. A system and/or component malfunction to the extent that it does not accomplish its intended purpose and/or is not consistently functioning normally within its approved operating limit(s) and/or tolerance(s).

19. Inoperative Components of an Inoperative System. Inoperative instrument and equipment items, which are components of a system that is inoperative, are usually considered components directly associated with and having no other function than to support that system (warning/caution systems associated with the inoperative system must be operative unless relief is specifically authorized per the MEL).

20. Is Not Used. The phrase “Is Not Used” in the provisos, remarks or exceptions for an MEL instrument or equipment item may specify that another item in the MEL “is not used”. In such cases, crewmembers must not activate, actuate, or otherwise utilize that item under normal operations. It is not necessary for aircraft operators to accomplish the (M) procedure(s) associated with the item. However, (O) operational requirements must be complied with, and an additional placard must be affixed, to the extent practical, adjacent to the control or indicator for the item that is not used. This informs crewmembers that an instrument or equipment item is not to be used under normal operations.

21. Nonessential Equipment and Furnishings (NEF). NEFs are those items installed on the aircraft as part of the original type certification (TC), STC, engineering order, or other form of alteration that have no effect on the safe operation of flight and would not be required by the applicable certification rules or operational rules. They are those items that, if inoperative, damaged, or missing, have no effect on the aircraft's ability to be operated safely under all operational conditions. NEF items are not instrument and equipment items already identified in the MEL or CDL of the applicable aircraft. They do not include instrument and equipment items that are functionally required to meet the certification rule or for compliance with any operational rule.

22. Operative. An operative system and/or component will accomplish its intended purpose and is consistently functioning normally within its design operating limit(s) and tolerance(s). When an MEL item specifies that an item of equipment must be operative, it does not mean that it's operational status must be verified; it's to be considered operative unless reported or known to be malfunctioning. When an MEL item specifies that an item of equipment must be verified operative, it means that it must be checked and confirmed operative at the interval(s) specified for that MMEL item. When an MEL item specifies that an item of equipment must be verified but no interval is specified, verification is required only at the time of deferral.

23. Placarding. Each inoperative instrument or equipment item must be placarded to inform and remind the crewmembers and maintenance personnel of the item condition. To the extent practical, placards should be located adjacent to the control or indicator for the item affected; however, unless otherwise specified (i.e. AFM), placard wording and location will be determined by the aircraft operator.

24. Repair Category. All users of an MEL approved under parts 91K, 121, 125, 129, 135, and 142 must effect repairs of inoperative instrument and equipment items, deferred in accordance with the MEL, at or prior to the repair times established by the following letter designators. Part 91 MEL users (D095/D195 LOAs) are not required to comply with the repair categories, but will comply with any provisos defining a repair interval (flights, flight legs, cycles, hours, etc):

    A. Repair Category A. This category item must be repaired within the time interval specified in the "Remarks or Exceptions" column of the aircraft operator's approved MEL. For time intervals specified in "calendar days" or "flight days", the day the malfunction was recorded in the aircraft maintenance record/logbook is excluded. For all other time intervals (i.e., flights, flight legs, cycles, hors, etc.), repair tracking begins at the point when the malfunction is deferred in accordance with the operator's approved MEL.

    B. Repair Category B. This category item must be repaired within 3 consecutive calendar-days (72 hours) excluding the day the malfunction was recorded in the aircraft maintenance record/logbook. For example, if it were recorded at 10 a.m. on January 26th, the 3-day interval would begin at midnight the 26th and end at midnight the 29th.

    C. Repair Category C. This category item must be repaired within 10 consecutive calendar-days (240 hours) excluding the day the malfunction was recorded in the aircraft maintenance record/logbook. For example, if it were recorded at 10 a.m. on January 26th, the 10-day interval would begin at midnight the 26th and end at midnight February 5th.

    D. Repair Category D. This category item must be repaired within 120 consecutive calendar-days (2880 hours) excluding the day the malfunction was recorded in the aircraft maintenance record/logbook.

25. Takeoff. Takeoff is the act of beginning a flight in which an aircraft is accelerated from a state of rest to that of flight. For the purposes of MEL relief, this translates to the point at which the pilot physically begins to apply power to initiate the takeoff from the runway or takeoff surface.

26. Not Used.

27. Visible Moisture. An atmospheric environment containing water, in any form, that can be seen in natural or artificial light; for example, clouds, fog, rain, sleet, hail, or snow.

28. Visual Flight Rules (VFR). VFR is as defined in 14 CFR Part 91. This precludes a pilot from filing an Instrument Flight Rules (IFR) flight plan.

29. Visual Meteorological Conditions (VMC). VMC means the atmospheric environment is such that would allow a flight to proceed under the visual flight rules applicable to the flight. This does not preclude operating under Instrument Flight Rules.

30. (M). This symbol indicates a requirement for a specific maintenance procedure which must be accomplished prior to operation with the listed item inoperative. Normally, these procedures are accomplished by maintenance personnel; however, other personnel may be qualified and authorized to perform certain functions. Procedures requiring specialized knowledge or skill, or requiring the use of tools or test equipment, should be accomplished by maintenance personnel. The satisfactory accomplishment of all maintenance procedures, regardless of who performs them, is the responsibility of the aircraft operator. Appropriate procedures are required to be produced as part of the aircraft operator's manual or MEL.

31. (O). This symbol indicates a requirement for a specific operations procedure which must be accomplished in planning for and/or operating with the listed item inoperative. Normally, these procedures are accomplished by the flightcrew; however, other personnel may be qualified and authorized to perform certain functions. The satisfactory accomplishment of all procedures, regardless of who performs them, is the responsibility of the aircraft operator. Appropriate procedures are required to be produced as a part of the aircraft operator's manual or MEL.

32. Electronic Fault Alerting System. New generation aircraft display system fault indications to the flight crew by use of computerized display systems. Aircraft manufacturers incorporate individual design philosophies when determining the data that is represented. The following are customized definitions (specific to each manufacturer) to help determine the level of messages affecting the aircraft's dispatch status.

A. NO CUSTOMIZED DEFINITIONS OF FAULT ALERTING ARE APPLICABLE TO THE BELL MODEL 412 SERIES AIRCRAFT.

PREAMBLE
(Effective 6/14/89)

The following is applicable for authorized certificate holders operating under Title 14 Code of Federal Regulations (14 CFR) Parts 121, 125, 129, 135: 14 CFR require that all equipment installed on an aircraft in compliance with the Airworthiness Standards and the Operating Rules must be operative. However, the Rules also permit the publication of a Minimum Equipment List (MEL) where compliance with certain equipment requirements is not necessary in the interests of safety under all operating conditions. Experience has shown that with the various levels of redundancy designed into aircraft, operation of every system or installed component may not be necessary when the remaining operative equipment can provide an acceptable level of safety.

A Master Minimum Equipment List (MMEL) is developed by the FAA, with participation by the aviation industry, to improve aircraft utilization and thereby provide more convenient and economic air transportation for the public. The FAA approved MMEL includes those items of equipment related to airworthiness and operating regulations and other items of equipment which the Administrator finds may be inoperative and yet maintain an acceptable level of safety by appropriate conditions and limitations; it does not contain obviously required items such as wings, flaps, and rudders. The MMEL is the basis for development of individual operator MELs which take into consideration the operator's particular aircraft equipment configuration and operational conditions. Operator MELs, for administrative control, may include items not contained in the MMEL; however, relief for administrative control items must be approved by the Administrator. An operator's MEL may differ in format from the MMEL, but cannot be less restrictive than the MMEL. The individual operator's MEL, when approved and authorized, permits operation of the aircraft with inoperative equipment. Equipment not required by the operation being conducted and equipment in excess of 14 CFR requirements are included in the MEL with appropriate conditions and limitations. The MEL must not deviate from the Aircraft Flight Manual Limitations, Emergency Procedures or with Airworthiness Directives. It is important to remember that all equipment related to the airworthiness and the operating regulations of the aircraft not listed on the MMEL must be operative.

Suitable conditions and limitations in the form of placards, maintenance procedures, crew operating procedures and other restrictions as necessary are specified in the MEL to ensure that an acceptable level of safety is maintained.

The MEL is intended to permit operation with inoperative items of equipment for a period of time until repairs can be accomplished. It is important that repairs be accomplished at the earliest opportunity. In order to maintain an acceptable level of safety and reliability the MMEL establishes limitations on the duration of and conditions for operation with inoperative equipment.

The MEL provides for release of the aircraft for flight with inoperative equipment. When an item of equipment is discovered to be inoperative, it is reported by making an entry in the Aircraft Maintenance Record/Logbook as prescribed by 14 CFR. The item is then either repaired or may be deferred per the MEL or other approved means acceptable to the Administrator prior to further operation. MEL conditions and limitations, do not relieve the operator from determining that the aircraft is in condition for safe operation with items of equipment inoperative. When these requirements are met, an Airworthiness Release, Aircraft Maintenance Record/Logbook entry, or other approved documentation is issued as prescribed by 14 CFR. Such documentation is required prior to operation with any item of equipment inoperative.

Operators are responsible for exercising the necessary operational control to ensure that an acceptable level of safety is maintained. When operating with multiple inoperative items, the interrelationships between those items and the effect on aircraft operation and crew workload will be considered. Operators are to establish a controlled and sound repair program including the parts, personnel, facilities, procedures and schedules to ensure timely repair.

WHEN USING THE MEL, COMPLIANCE WITH THE STATED INTENT OF THE PREAMBLE, DEFINITIONS, AND THE CONDITIONS AND LIMITATIONS SPECIFIED IN THE MEL IS REQUIRED.

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS

21. AIR CONDITIONING						
2121-01	Pilots Vent Blower	**C**	**1**	**0**	May be inoperative provided Heated Windshield (Item 3040-02) is installed and operative, OR Other approved windshield defogging system is installed and operative.	
2121-02	Co-Pilot Vent Blower	**C**	**1**	**0**	May be inoperative provided Heated Windshield (Item 3040-02) is installed and operative, OR Other approved windshield defogging system is installed and operative.	
2121-03	Instrument Fans (412EP 37002 thru 37999, or STC SR09600RC incorporated)	**C**	**-**	**0**	**(Not Installed on Maritime aircraft)**	
2121-04	Instrument Fans (412EP with EFIS Kit 412-705-009)	**C**	**-**	**0**	**(Not Installed on Maritime aircraft)**	
2121-05	Display Unit (DU) Fans (412EP 37002 thru 37999, or STC SR09600RC incorporated)	**C**	**-**	**0**	**(Not Installed on Maritime aircraft)**	
2121-06	Avionics Fan (412EP 37002 thru 37999, or STC SR09600RC incorporated)	**C**	**-**	**0**	**(Not Installed on Maritime aircraft)**	
2121-07	AHRS Fan (Compartment Fan) (412EP 36248 thru 36999)	**C**	**-**	**0**	**(Not Installed on Maritime aircraft)**	
2140-01	Bleed Air Heater	**C**	**1**	**0**	May be inoperative above +5°C (41°F), outside air temperature provided Pilot's Cockpit Vent Blower (Item 2121-01) is operative.	
2150-01	Bleed Air Cooling System (212)	**C**	**-**	**0**	**(Not Installed on Maritime aircraft)**	
2150-02	Freon Cooling System	**C**	**-**	**0**	**(Not Installed on Maritime aircraft)**	

JASC SYSTEM & TITLE		1. REPAIR CATEGORY				
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED			
				3. NUMBER REQUIRED FOR DISPATCH		
					4. REMARKS & EXCEPTIONS	
22. AUTO FLIGHT						
2210-01	Automatic Flight Control System (AFCS) (412EP 36087 thru 36999, and 412EP 37002 thru 37999)	**C**	**-**	**0**	**(Not Installed on Maritime aircraft)**	
2210-02	4-Axis Collective/Yaw Trim (412EP 36087 thru 36999, and 412EP 37002 thru 37999)	**C**	**-**	**0**	**(Not Installed on Maritime aircraft)**	

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS

23. COMMUNICATIONS						
2300-01	Communications Systems (FM)	**D**	**1**	**0**	May be inoperative, damaged or missing. (M)(O) Turn off affected radio and place MEL sticker on unit.	
2310-01 (PL-106)	High Frequency (HF) Communications Systems	**0**	**-**	**0**	**(Not Installed on Maritime aircraft)**	
2311-01 (PL-95)	Communications Systems (UHF)	**0**	**-**	**0**	**(Not Installed on Maritime aircraft)**	
2312-01 (PL-95 r2)	Communications Systems (VHF)	**B**	**2**	**1**	One VHF Comm may be inoperative for VFR operations except; **a)** Extended over water operations **b)** Operations are not predicated on the affected radio. **c)** It is not powered by the Emergency AC Bus, Emergency DC Bus, Battery Bus, Battery Direct Bus, or the DC Transfer Bus, And **d)** It is not required for emergency procedures	
1)	VHF Communication Control Panels					
	a) Frequency Transfer Light	**C**	**-**	**0**	**(Not Installed on Maritime aircraft)**	
	b) Frequency Transfer Switch	**C**	**-**	**0**		
	c) Frequency Selector Knob	**C**	**-**	**1**		
	d) Frequency Indication	**C**	**-**	**1**		
2340-01	Crew Inter Communication System (ICS) <u>without</u> "**EMERG COM**" function	**B**	**-**	**0**	**(Not Installed on Maritime aircraft)**	
2340-02	Crew Inter Communication System (ICS) <u>with</u> "**EMERG COM**" function	**B**	**2**	**1**	Co-Pilots station ICS may be inoperative for single pilot VFR & IFR operations.	

JASC CODE & ITEM NO.	COMPONENT DESCRIPTION	1. REPAIR CATEGORY	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS & EXCEPTIONS
23. COMMUNICATIONS					
2340-03	Cabin Public Address System 1)Passenger Configuration (Including Pre-recorded Passenger Announcement System)	**B**	**-**	**-**	**(Not Installed on Maritime aircraft)**
	2) Cargo Configuration	**D**	**1**	**0**	**(Not Installed on Maritime aircraft)**
2370-01 **(PL-29)**	Cockpit Voice Recorder (CVR) (Aircraft *Without* a Flight Data Recorder installed in the aircraft.) **NOTE:** See item 3130-01 for aircraft equipped with both CVR and FDR. (412, 412CF, 412EP 36087 thru 36999)	**A**	**1**	**0**	May be inoperative provided repairs are made within three flight days
*******	Independent Power Source	**C**	**-**	**0**	**(Not Installed on Maritime aircraft)**
2370-02 *******	Cockpit Voice Recorder (CVR) (For an operator other than an air carrier or commercial operator certificate) (412, 412CF, 412EP 36087 thru 36999 and 37002 thru 37999)	**A**	**-**	**0**	**(Not Installed on Maritime aircraft)**
*******	Independent Power Source	**C**	**-**	**0**	**(Not Installed on Maritime aircraft)**

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS

24. ELECTRICAL POWER						
2422-01	Inverter 212 (30504 thru 30553)	**B**	**-**	**0**	**(Not Installed on Maritime aircraft)**	
	212 (30554 thru 31311, and 35001 thru 35108)	**B**	**-**	**0**	**(Not Installed on Maritime aircraft)**	
	412EP (36087 thru 36999, and 37002 thru 37999)	**B**	**-**	**0**	**(Not Installed on Maritime aircraft)**	
2435-01	Starter/Generator	**B**	**2**	**1**	The Generator function of one Starter/Generator, may be inoperative for day VMC provided: a) All Inverters (Item 2422-01) are operative, and b) Starter/Generator check for security of mounting and burned or arced connections in the area. **(M)** A maintenance technician will ensure no evidence of damage, electrical short, or hazards exist, and ensure starter mode is operational by temporarily activating starter button.	

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS

25. EQUIPMENT/FURNISHINGS						
2500-01 (PL-116)	NEF Items	**-**	**-**	**0**	**Refer to Maritime Helicopters Inc. NEF program for details**	
2510-01	Crew member Shoulder Harness	**B**	**2**	**1**	Must be operative if seat is occupied.	
2520-01	Passenger seats	**D**	**-**	**0**	One or more may be inoperative provided; each occupied seat. **a)** Affected seat(s) does not block access to emergency exits, and **b)** Affected seat(s) must be blocked and placarded. **(M)(O)** The seat will be blocked with tape and placarded “DO NOT OCCUPY” **NOTE:** Left seat (Co-Pilots seat) is considered a passenger seat for single pilot operations	
2520-02	Emergency Medical Service (EMS) Equipment	**C**	**-**	**0**	**(Not Installed on Maritime aircraft)**	
2550-01	Cargo Suspension System	**D**	**1**	**0**	May be inoperable, damaged, or missing. (M) Ensure cargo arming switch is in the OFF Position. Install orange dot on suspension system circuit breaker. No Class B loads allowed	
2550-02	Hoist System	**D**	**1**	**0**	May be inoperable, damaged, or missing. (M) Remove Hoist from aircraft	

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS

25. EQUIPMENT/FURNISHINGS						
2562-01 (PL-120)	Emergency Locator Transmitter (ELT)					
***	Survival Type ELT	**D**	**-**	**0**	**(Not Installed on Maritime aircraft)**	
	Fixed ELT	**A**	**1**	**0**	May be inoperative provided; **a)** System is deactivated, and **b)** Repairs are made within 90 days. **(M)** Remove ELT and placard “ELT not installed” in plain view of flight crew.	
		A	**1**	**0**	May be missing provided repairs are made within 90 days.	
		D	**-**	**0**	**(Not Installed on Maritime aircraft)**	
		D	**-**	**0**	**(Not Installed on Maritime aircraft)**	
2562-02 ***	Automatically Deployable Emergency Locator Transmitter	**D**	**-**	**0**	**(Not Installed on Maritime aircraft)**	

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS
26. FIRE PROTECTION					
2611-01	Cargo/Baggage Smoke Detector System	**C**	**1**	**0**	May be inoperative if compartment is empty

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS

28. FUEL						
2841-01	Fuel Quantity Indicator(s)	**B**	**1**	**0**	May be inoperative provided: **a)** Approved alternate preflight gauging method is used to determine total fuel quantity, and **b)** Fuel flow indicating system is operative or flight manual charts are used. **(O)** Pilot shall verify the fuel quantity is full during every refueling and aircraft shall not be operated in excess of two flight hours without topping off.	
2842-01	Fuel Quantity Sensor(s)	**B**	**2**	**1**	May be inoperative provided: **a)** Approved alternate preflight gauging method is used to determine total fuel quantity, and **b)** Fuel flow indicating system is operative or flight manual charts are used. **(O)** Pilot shall verify the fuel quantity is full during every refueling and aircraft shall not be operated in excess of two flight hours without topping off.	

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS

30. ICE AND RAIN PROTECTION						
3030-01	Heated Pitot Tube	**B**	**2**	**0**	May be inoperative for VFR.	
3030-03	Static Port Heater	**C**	**4**	**0**	May be inoperative for VFR	
3040-01	Windshield Wipers	**C**	**2**	**0**	May be inoperative for VFR provided operations are not conducted in precipitation.	
3040-02	Heated Windshield	**C**	**2**	**0**	May be inoperative provided: **a)** Blower Fan is operative, and **b)** Defogging vents are not obstructed.	

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS
31. INSTRUMENTS					
3120-01	Clock displaying Hours, Minutes and Seconds with sweep second pointer or Digital presentation (212, 412, 412CF, 412EP 36087 thru 36999)	**C**	**2**	**1**	Operative clock must be located on the instrument panel in a position that makes it plainly visible to and usable by any pilot at the pilots station
		C	**-**	**0**	**(Not Installed on Maritime Aircraft)**
	412EP (37002 thru 37999 or STC SR09600RC incorporated)	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**
3120-02	Elapsed Timer 212, 412, 412CF, 412EP 36087 thru 36999	**C**	**1**	**0**	May be inoperative provided the clock,(item 3120-01) or an alternate time source is operative.
	412EP 37002 thru 37999 or STC SR09600RC incorporated	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**
3120-03 ***	Hour meter (212, 412, 412CF, 412EP 36087 thru 36999)	**C**	**1**	**0**	May be inoperative provided: **(O)** An alternate means is utilized for recording time in service, and **(O)** All flight time with hour meter inoperative will be recorded and entered in the aircraft logbook, and **(M)** Adjustments to maintenance time will be recorded in the logbook when the hour meter is repaired.
3130-01 (PL-87)	Flight Data Recorder (FDR) System	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)** **I**

JASC SYSTEM & TITLE		1. REPAIR CATEGORY				
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED			
				3. NUMBER REQUIRED FOR DISPATCH		
					4. REMARKS & EXCEPTIONS	
31. INSTRUMENTS						
3130-02 (PL-87)	FDR installed for an operator other than a holder of an air carrier or commercial operator certificate	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**	
3160-01	Display Units (DU) (412EP 37002 thru 37999 or STC SR09600RC incorporated	**A**	**-**	**0**	**(Not Installed on Maritime Aircraft)**	
3160-02	Aircraft Data Interface Unit (ADIU) Channel (412EP 37002 thru 37999 or STC SR09600RC incorporated	**A**	**-**	**0**	**(Not Installed on Maritime Aircraft)**	

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS & EXCEPTIONS
32. LANDINIG GEAR					
3212-01	Emergency Flotation System	**C**	**1**	**0**	Unless necessary for take-off or landing, for overwater flight, a) Aircraft must remain within power-off gliding distance to a suitable forced landing area, OR b) For multi-engine operations, aircraft must be operated at a weight, that if the critical engine fails, that will allow it to climb at least 50 feet a minute to an altitude of 1,000 above the surface.

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS

33. LIGHTS						
3300-01 (PL-127)	NVG Compatible Lighting System	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**	
3310-01 (PL-77)	Cockpit/Flight Deck/Flight Compartment and Instrument Lighting System	**B**	**1**	**0**	Individual lights may be inoperative provided: a) Remaining Lighting System lights are sufficient to clearly illuminate all required instruments, controls, and other devices for which they are provided, b) Remaining Lighting System lights are positioned so that direct rays are shielded from flight crewmembers eyes, and c) Lighting configuration and intensity is acceptable to the flight crew. Note 1: Individual button/switch lights and/or annunciations/indications are excluded from this relief. Note 2: Unaided operation (without NVGs) may be permitted with inoperative NVG supplemental lights; cracked or missing filters.	
3320-01	Cabin Lighting System	**C**	**1**	**0**	May be inoperative provided: **a)** For day operations OR **b)** Inoperative lights do not exceed fifty percent of total installed	

JASC CODE & ITEM NO.	COMPONENT DESCRIPTION	1. REPAIR CATEGORY	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS & EXCEPTIONS	
33. LIGHTS						
3320-02	Passenger Notice System "Fasten Seatbelt and No Smoking Sign" (212, 412, 412CF, 412EP 36087 thru 36999)	**B**	**1**	**0**	May be inoperative provided: **a**) Passengers are not carried OR **b)** Alternate procedure to notify passengers **(O)** During the passenger safety briefing the passengers will be briefed that the seatbelts will be on for the duration of the flight and the PIC will let them know when they may remove the seatbelts after landing. Smoking is prohibited at all times.	
3340-01	Position Light System	**C**	**1**	**0**	May be inoperative for day.	
3340-02	Anti-collision light System	**C**	**1**	**0**	May be inoperative for day.	
3340-03	Strobe Light System	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**	
3340-04	Landing Light System	**C**	**1**	**0**	May be inoperative for day operation OR If Search Light (Item 3340-05) is operational.	
3340-05	Search Light	**C**	**1**	**0**	May be inoperative for day operation OR If Landing Light (Item 3340-04) is operational.	**I**
3340-06	External Utility (STEP) Lights	**C**	**2**	**0**	May be inoperative for day OR Alternate lighting (flashlight) is available	
3340-07	Supplemental Lighting System	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**	
3350-01 ***	Cabin Emergency Lighting	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**	

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS
33. LIGHTS					
3350-02	Helicopter Emergency Egress Lighting System (HEELS)	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS

34. NAVIGATION						
3412-01	OAT/Free Air Temperature Indicator (212, 412, 412CF, 412EP 36087 thru 36999)	**C**	**1**	**0**	One may be inoperative provided approved alternate onboard OAT source is installed and operative.	
3412-02	OAT Display System (412EP 37002 thru 37999 or STC SR09600RC incorporated)	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**	
3413-01	Vertical Speed Indicator	**B**	**2**	**0**	Copilots may be inoperative for single pilot VFR, provided two pilots are not required by 14 CFR.	
3414-01	Airspeed Indicator	**B**	**2**	**1**	Copilots may be inoperative for single pilot VFR, provided two pilots are not required by 14 CFR.	
3414-02	Standby Airspeed Indicator (412EP 37002 thru 37699, or STC SR09600RC incorporated)	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**	
3416-01	Sensitive Altimeter Adjustable for Barometric Pressure (212, 412, 412CF, 412EP 36087 thru 36999)	**B**	**2**	**1**	Copilots may be inoperative for single pilot VFR, provided two pilots are not required by 14 CFR.	
3416-02	Standby Altimeter (412EP 37002 thru 37999 or STC09600RC incorporated)	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**	
3417-01	Air Data Computer (412EP 37002 thru 37999 or STC SR09600RC incorporated)	**B**	**-**	**0**	**(Not Installed on Maritime Aircraft)**	
3431-01	Navigation System (LOC)	**C**	**1**	**0**	May be inoperative provided navigation is not predicated on its use.	
3424-02	Gyroscopic Bank and Pitch Indicator	**B**	**2**	**1**	Copilots may be inoperative for single pilot Part 91 VFR operations.	

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS

34. NAVIGATION (Cont'd)						
3421-01	Standby Attitude Indicator (212, 412, 412CF, 412EP 36087 thru 36999)	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**	
		B	**1**	**0**	May be inoperative provided: a) Operations are conducted in Day VMC only, and Operations are not conducted into known or forecast over-the-top conditions.	
	(412EP 37002 thru 37999, or STC SR09600RC incorporated)	**B**	**-**	**0**	**(Not Installed on Maritime Aircraft)**	
3421-02	Alternate Source of Static Pressure for Altimeter, Air Speed and Vertical Speed (212,412, 412CF, 412EP 36087 thru 36999)	**B**	**1**	**0**	May be inoperative for VFR.	
3421-03	Attitude Heading Reference System (AHRS) Channel (412EP 37002 thru 37999, or STC SR09600RC incorporated	**B**	**-**	**0**	**(Not Installed on Maritime Aircraft)**	
3422-01	Gyroscopic Direction Indicator. (212, 412, 412CF, 412EP 36087 thru 36999)	**B**	**2**	**1**	Copilots may be inoperative for single pilot VFR, provided two pilots are not required by 14 CFR.	
3423-01	Magnetic Direction Indicator. (212, 412, 412CF, 412EP 36087 thru 36999)	**B**	**2**	**1**	Copilots may be inoperative for single pilot VFR, provided two pilots are not required by 14 CFR.	
3423-03	Standby Compass	**C**	**2**	**0**	May be inoperative for VFR provided direction indication is displayed for each pilot, and magnetic slaving is operational.	

JASC CODE & ITEM NO.	COMPONENT DESCRIPTION	1. REPAIR CATEGORY	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS & EXCEPTIONS	
34. NAVIGATION (Cont'd)						
3424-01	Slip-Skid Indicator 212, 412, 412CF, 412EP 37002 thru 37999, or STC SR09600RC incorporated	**B**	**2**	**1**	Copilots may be inoperative for single pilot VFR, provided two pilots are not required by 14 CFR.	
	412EP 37002 thru 37999, or STC SR09600RC incorporated	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**	
3424-02	Gyroscopic Bank and Pitch Indicator	**B**	**2**	**1**	Copilots may be inoperative for single pilot VFR, provided two pilots are not required by 14 CFR.	
3424-03	Gyroscopic Rate-of-Turn Indicator (212, 412, 412CF, 412EP 36087 thru 36999)	**B**	**2**	**0**	Aircraft is restricted to Day VFR flight only.	
3431-01	Navigation System (ILS)	**C**	**2**	**0**	May be inoperative provided navigation is not predicated on its use.	
3434-01	Marker Beacon	**C**	**1**	**0**	May be inoperative provided approach is not predicated on its use.	
3442-01	Weather Radar System	**D**	**1**	**0**	IFR operations may only be conducted within the State of Alaska.	
3444-01	Radar Altimeter	**D**	**1**	**0**	One or more may be inoperative provided: a) Pilot is aware of potential degraded AP performance on ILS GS or LPV vertical, b) Category A operation is not performed, c) VFR Night operation is not performed with NVG, and d) Operating requirements do not require its use.	

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS
34. NAVIGATION (Cont'd)					
3444-02 (PL-54)	Helicopter Terrain Awareness and Warning System (HTAWS) (EGPWS)	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**
3445-01 * (PL-32)**	Traffic Alert and Collision Avoidance System (TCAS I)	**B**	**-**	**0**	**(Not Installed on Maritime Aircraft)**
3445-02 * (PL-32)**	Traffic Alert and Collision Avoidance System (TCAS II)	**B**	**-**	**0**	**(Not Installed on Maritime Aircraft)**
3446-01 ***	Thunderstorm Detection System	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**
3451-01	DME	**D**	**2**	**0**	May be inoperative provided approach is not predicated on its use.

34. NAVIGATION (Cont'd)						
3452-01 **(PL-76**	ATC Transponders & Automatic Reporting Systems	**B**	**1**	**0**	May be inoperative provided: a) Operations do not require its use, and b) Prior to flight, approval is obtained from ATC facilities having jurisdiction over the planned route of flight.	
		D	**-**	**0**	**(Not Installed on Maritime Aircraft)**	
***	1) Elementary and Enhanced Downlink Aircraft Reportable Parameters not required by 14 CFR.	**A**	**-**	**0**	**(Not Installed on Maritime Aircraft)**	
		C	**0**	**0**	**(Not Installed on Maritime Aircraft)**	
***	2) ADS-B Squitter Transmission	**D**	**0**	**0**	**(Not Installed on Maritime Aircraft)**	
3452-02	Automatic Dependent Surveillance Broadcast (ADS-B) System	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**.	
3454-01	Navigation Systems (VOR)	**C**	**2**	**0**	May be inoperative provided approach is not predicated on its use.	
3457-01	Navigations Systems (Long Range) (GPS) (212, 412, 412CF, 412EP 36087 thru 36999	**C**	**2**	**0**	May be inoperative provided approach is not predicated on its use. Class II navigation not authorized.	
3460-01	Flight Director (412 EP 36087 thru 36999, and 37002 thru 37999)	C	-	0	**(Not Installed on Maritime Aircraft)**.	

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS

34. NAVIGATION (Cont'd)						
3461-01 *** (PL-98)	Flight Management System (FMS)	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**.	
3461-02 ******* **(PL-98)**	Navigation Management System (NMS)	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**.	

AIRCRAFT: **BELL 412 SERIES**	REV: ORIGINAL DATE: 12/01/2015	PAGE NO. 35-1

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS
35. OXYGEN					
3510-01 ***	Oxygen System and Masks (Crew and Passengers)	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**.

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS

45. CENTRAL MAINTENANCE SYSTEM						
4500-01 ***	Health and Usage Monitoring System (HUMS) (Non credit system) (212, 412CF, 412EP 36087 thru 36999 and 37002 thru 37002.	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**.	
4500-02 ***	Aircraft/Engine Monitoring System (212, 412, 412CF, 412EP 36087 thru 36999)	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**.	

JASC CODE & ITEM NO.	COMPONENT DESCRIPTION	1. REPAIR CATEGORY	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS & EXCEPTIONS	
52. DOORS						
5260-01 ***	Retractable Passenger Steps (Powered) (412, 412EP 36087 thru 36999, and 37002 thru 37999	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**.	
5270-01	Door Caution System	**C**	**1**	**0**	May be inoperative provided it is determined through visual check that doors are closed and latched prior to flight.	

JASC CODE & ITEM NO.	COMPONENT DESCRIPTION	1. REPAIR CATEGORY	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS & EXCEPTIONS	
63. MAIN ROTOR DRIVE						
6320-01	Transmission Oil Temperature Indicating System (212, 412, 412CF, 412EP 36087 thru 36999)	**B**	**1**	**0**	May be inoperative provided: a) Transmission Oil Temperature Warning Light System (Item 6320-03) is operative, b) Transmission Oil Pressure Indicating System (Item 6320-02) is operative, and c) Aircraft shall not depart airport where repairs or replacements can be made.	
	(412EP 37002 thru 37999, or STC SR09600RC incorporated)	**B**	**-**	**0**	**(Not Installed on Maritime Aircraft)**.	
6320-02	Transmission Oil Pressure Indicating System (212, 412, 412CF, 412EP 36087 thru 36999)	**B**	**1**	**0**	May be inoperative provided: a) Transmission Oil Pressure Warning Light System (Item 6320-05) is operative. b) Transmission Oil Temperature Indicating System (Item 6320-01) is operative, and c) Aircraft shall not depart airport where repairs or replacements can be made.	
6320-03	Transmission Oil Temperature Warning Light System (212, 412, 412CF, 412EP 36087 thru 36999)	**B**	**1**	**0**	May be inoperative provided: a) Transmission Oil Temperature Indicating System (Item 6320-01 is operative, b) Transmission Oil Pressure Warning Light System (Item 6320-05) is operative, and c) Aircraft shall not depart airport where repairs or replacements can be made.	
6320-04	Transmission Oil Temperature Warning System (412EP 37002 thru 37999, or STC SR09600RC incorporated)	**B**	**-**	**0**	**(Not Installed on Maritime Aircraft)**.	

JASC CODE & ITEM NO.	COMPONENT DESCRIPTION	1. REPAIR CATEGORY	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS & EXCEPTIONS
63 MAIN ROTOR DRIVE (Cont'd)					
6320-05	Transmission Oil Pressure Warning Light System (212, 412, 412CF, 412EP 36087 thru 36999)	**B**	**1**	**0**	May be inoperative provided: a) Transmission Oil Pressure Indicating System (Item 6320-02) is operative, b) Transmission Oil Temperature Warning Light System (Item 6320-03) is operative, and c) Aircraft shall not depart airport where repairs or replacements can be made.
6321-01	Rotor Brake System	**C**	**1**	**0**	May be inoperative provided: a) It is determined by visual inspection that pucks are fully retracted, and b) System is deactivated and secured **(M)** Mechanic will release pressure from the rotor brake system, then ensure the pucks are full retracted, and cap the rotor brake pressure line. Install orange dot on rotor brake handle.
6321-02	Rotor Brake Warning Lights (212, 412, 412CF,412EP 37002 thru 37999, or STC SR09600RC incorporated)	**C**	**1**	**0**	May be inoperative if Rotor Brake System (Item 6321-01) is deactivated and secured.
6321-03	Rotor Brake Warnings (412EP 37002 thru 37999, or STC SR09600RC incorporated)	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**.

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS
63. MAIN ROTOR DRIVE (Cont'd)					
6340-01	Mast Torque System (412EP 37002 thru 37999, or STC SR09600RC incorporated)	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**.

JASC CODE & ITEM NO.	COMPONENT DESCRIPTION	1. REPAIR CATEGORY	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS & EXCEPTIONS	
67. ROTORS FLIGHT CONTROL						
6700-01	Force Trim System	**C**	**1**	**0**	May be inoperative for VFR.	
6710-01	Cyclic Stick Centering Indicator (412, 412CF, 412EP 36087 thru 36999, and 37002 thru 37999	**B**	**2**	**0**	Refer to RFM for limitations	

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS

73. ENGINE FUEL AND CONTROL						
7321-01	Engine Fuel Control (Automatic Mode) (212, 412, 412CF, 412EP 36087 thru 36999)	**B**	**2**	**1**	One may be inoperative provided: a) For non-passenger carrying operations, and b) Aircraft shall not depart airport where repairs or replacements can be made. **(O)** Match engine torque within 4% by manual control of affected engine's throttle.	
7331-01 ***	Fuel Flow Indicator System	**D**	**-**	**0**	**(Not Installed on Maritime Aircraft)**.	

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS
77. ENGINE INDICATING					
7700-01	Engine Out Warning System (212, 412, 412CF, 412EP 36087 thru 36999)	**B**	**2**	**1**	One may be inoperative provided: a) Alternate procedures are established and utilized for engine failure identification, and b) Aircraft shall not depart airport where repairs or replacements can be made. **(O)** Crewmember will identify failed engine by reference to N1, N2, ITT and torque. Crew member will monitor affected engine N1 and N2 RPM indicators.
7712-1	Dual Torque Pressure Indicator (212, 412)	**B**	**2**	1	One may be inoperative provided the operative indicator is at the station of the pilot manipulating the flight controls. **(O)** For single pilot operations the Torque pressure indicator must be operational on the right side of the aircraft.
7712-02	Triple Torque Indicator (412EP 36087 thru 36999)	**C**	**-**	**0**	**(Not Installed on Maritime Aircraft)**.
7714-01	Tachometer, Triple Indicating (212, 412, 412CF, 412EP 36087 thru 36999)	**C**	**2**	**1**	On may be inoperative provided the indicator is at the station of the pilot manipulating the flight controls. **(O)** For single pilot operations the Triple Tach must be operational on the right side of the aircraft.

JASC SYSTEM & TITLE		1. REPAIR CATEGORY			
JASC CODE & ITEM NO.	COMPONENT DESCRIPTION		2. NUMBER INSTALLED		
				3. NUMBER REQUIRED FOR DISPATCH	
					4. REMARKS & EXCEPTIONS
79. ENGINE OIL					
7931-01	Engine Oil Pressure Indication (212, 412, 412CF, 412EP 36087 thru 36999)	**C**	**1**	**0**	May be inoperative provided: a) Engine Oil Pressure Warning System is operative. b) Engine Oil Temperature Indicating System is operative, and c) Aircraft shall not depart airport where repairs or replacements can be mad.
7931-02	Engine Oil Pressure Indication (412EP 37002 thru 37999, or STC SR09600RC incorporated)	C	-	0	**(Not Installed on Maritime Aircraft)**.