

GPA Group plc

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CHAPTER 79 - OIL

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79 21 XA --	(01=L,02=R) oil filter bypass problem was encountered by the flight crew which is not covered by the fault code diagrams.	SSM 79-00-00, SSM 79-21-00, SSM 79-35-01
79 31 XA --	(01=L,02=R) oil indicator problem was encountered by the flight crew which is not covered by the fault code diagrams.	SSM 79-31-01, SSM 79-32-01, SSM 79-34-01
79 31 XB --	(01=L,02=R) oil quantity/temperature problem was encountered by the flight crew which is not covered by the fault code diagrams.	SSM 79-31-01, SSM 79-34-01
79 32 XA --	(01=L,02=R) oil pressure problem was encountered by the flight crew which is not covered by the fault code diagrams.	SSM 79-32-01
79 21 06 --	EICAS msg: (01=L,02=R) OIL FILTER displayed. Oil pressure and vibration were normal. Engine was not shut down.	FIM 79-21-00/101, Fig. 103, Block 1
79 21 07 --	EICAS msg: (01=L,02=R) OIL FILTER displayed. Oil pressure was normal. Vibration was high (see log book for recorded value of vibration). Engine was shut down.	FIM 79-21-00/101, Fig. 103, Block 1
79 21 08 --	EICAS msg: (01=L,02=R) OIL FILTER displayed. Engine oil pressure was low, _____ psi. Vibration was high (see log book for recorded value vibration). Engine was shut down.	FIM 79-21-00/101, Fig. 104, Block 1
79 21 09 --	EICAS msg: (01=L,02=R) OIL FILTER displayed. Oil pressure was low, _____ psi, vibration normal. Engine was shut down.	FIM 79-21-00/101, Fig. 104, Block 1

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
79 31 01 --	(01=L,02=R) Engine oil qty display intermittent. Pressure and temperature normal.	FIM 79-31-00/101, Fig. 103, Block 1
79 31 02 --	(01=L,02=R) Engine oil qty display zero. Pressure and temperature normal.	FIM 79-31-00/101, Fig. 103, Block 1
79 31 03 --	(01=L,02=R) Engine oil consumption excessive, ___ pts/hr. Oil temp and pressure normal. Vibration level increased to ___ and eng was shut down.	Replace the engine (AMM 71-00-02/401).
79 31 04 --	(01=L,02=R) Engine oil consumption excessive, ___ pts/hr. Oil temp and pressure normal. Vibration level increased to ____. Engine was not shut down.	Replace the engine (AMM 71-00-02/401).
79 31 05 --	(01=L,02=R) Engine oil consumption excessive, ___ pts/hr. Oil temp, pressure and vibration normal.	FIM 79-31-00/101, Fig. 104, Block 1
79 31 06 --	(01=L,02=R) Engine oil qty zero. Oil pressure (low, fluctuating) ___ PSI. Engine was shut down.	FIM 79-31-00/101, Fig. 104, Block 1
79 31 07 --	(01=L,02=R) Engine oil quantity indication low or falling.	FIM 79-31-00/101, Fig. 103A, Block 1
79 31 08 --	(01=L,02=R) Engine oil quantity indication high or rising.	FIM 79-31-00/101, Fig. 103B, Block 1
79 32 01 --	(01=L,02=R) Engine oil pressure display intermittent. Temp & qty normal.	FIM 79-32-00/101, Fig. 103, Block 1
79 32 02 --	(01=L,02=R) Engine oil pressure display blank. Temp & qty normal.	FIM 79-32-00/101, Fig. 103, Block 1

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
79 32 03 --	EICAS msg: (01=L,02=R) ENG OIL PRESS displayed and eng oil pressure light on. Oil pressure was normal.	FIM 79-32-00/101, Fig. 104, Block 1
79 32 05 --	(01=L,02=R) Engine oil pressure fluctuates.	FIM 79-32-00/101, Fig. 105, Block 12
79 32 06 --	(01=L,02=R) Engine oil pressure in amber band, ____ PSI. Vibration increased to ____ PSI on (N1, N2, N3). Engine was shut down.	FIM 79-32-00/101, Fig. 105, Block 1
79 32 07 --	(01=L,02=R) Engine oil pressure in amber band, ____ PSI. Vibration did not increase.	FIM 79-32-00/101, Fig. 105, Block 1
79 32 08 --	(01=L,02=R) Engine oil pressure below 18 PSI. EICAS msg: (L,R) ENG OIL PRESS displayed. Engine was shut down.	FIM 79-32-00/101, Fig. 106, Block 1
79 32 09 --	(01=L,02=R) Engine oil pressure zero. EICAS msg: (L,R) ENG OIL PRESS displayed. Engine was shut down.	FIM 79-32-00/101, Fig. 106, Block 1
79 32 11 --	(01=L,02=R) Engine oil pressure reads ____ PSI with engine shut down.	FIM 79-32-00/101, Fig. 103, Block 1
79 33 01 --	(01=L,02=R) ENG OIL PRESS light did not come on with the engine shut down.	Replace the L(R) low oil pressure warning switch S10130 (AMM 79-33-01). If the problem continues, examine and repair the circuit between switch connector D1300, pin 2, and left EICAS computer M10181 connector D319A, pin H3 (D319D, pin K10) and right EICAS computer M10182 connector D321A, pin H3 (D321D, pin K10) (WDM 79-33-11).
79 34 01 --	(01=L,02=R) Engine oil temp display intermittent. Pressure & qty normal.	FIM 79-34-00/101, Fig. 103, Block 1

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
79 34 02 --	(01=L,02=R) Engine oil temp display blank. Pressure & qty normal.	FIM 79-34-00/101, Fig. 103, Block 1
79 34 03 --	(01=L,02=R) Engine oil temp high, ____ °C. Oil pressure normal. Vibration level increased and eng was shut down.	FIM 79-34-00/101, Fig. 104, Block 1
79 34 04 --	(01=L,02=R) Engine oil temp high, ____ °C. Oil pressure normal. Vibration level did not increase. Engine was shut down.	FIM 79-34-00/101, Fig. 105, Block 1
79 34 05 --	(01=L,02=R) Engine oil temp high, ____ °C. Oil pressure normal. Vibration level did not increase.	FIM 79-34-00/101, Fig. 105, Block 1
79 34 06 --	(01=L,02=R) Engine oil temp too high/low. Temp reads L ____°, R ____°.	FIM 79-34-00/101, Fig. 105, Block 1
79 34 07 --	(01=L,02=R) Engine oil temperature differs between L and R EICAS computers, L reads _____, R reads _____°.	FIM 79-34-00/101, Fig. 103, Block 1

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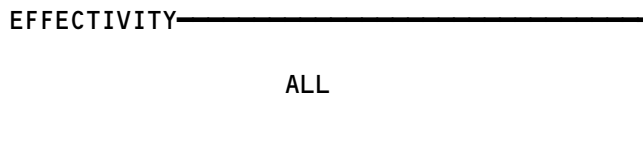
R01

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ENGINE OIL STORAGE

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
FILLER - OIL TANK GRAVITY	--	2	414AR,424AR	79-11-03
TANK ENGINE OIL	--	2	414AR,424AR	79-11-01

Engine Oil Storage - Component Index
Figure 101

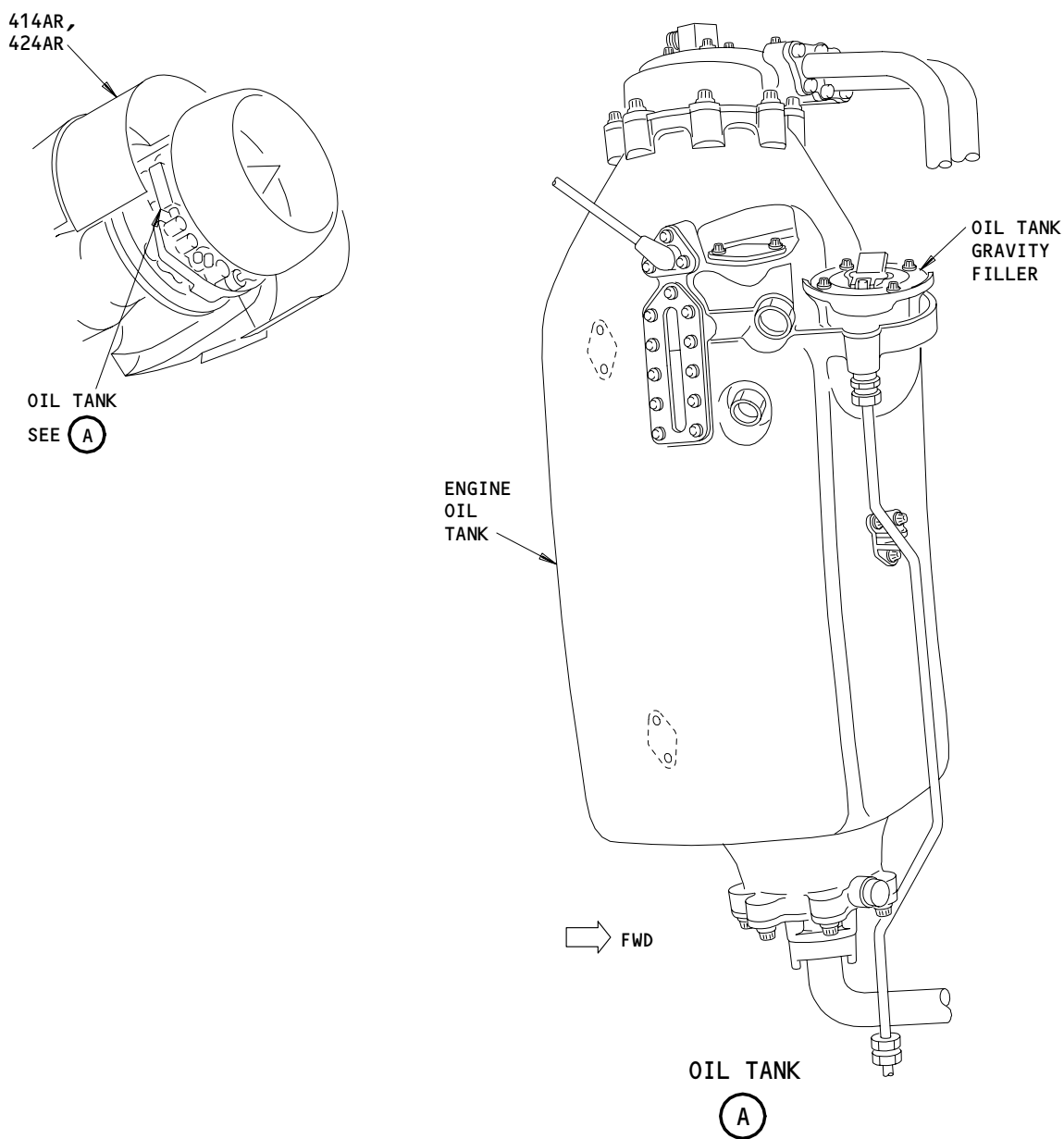


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Engine Oil Storage - Component Location
Figure 102

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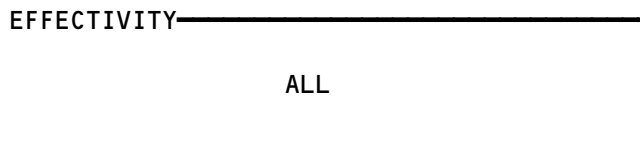
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A44927

ENGINE OIL DISTRIBUTION SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
COOLER - FUEL FILTER HOUSING AND FUEL-COOLED OIL DETECTOR - MAGNETIC CHIP	--	2	414AR,424AR, AFT OF OIL TANK	79-21-01
ELEMENT - PRESSURE OIL FILTER	--	12	413AL,423AL,414AR,424AR, MAIN GEARBOX	79-21-03
ELEMENT - SCAVENGE OIL FILTER	--	2	414AR,424AR, MAIN GEARBOX FRONT SIDE	79-21-07
PUMP - PRESSURE AND SCAVENGE OIL	--	2	414AR,424AR, MAIN GEARBOX FRONT SIDE	79-21-08
SWITCH - (FIM 79-35-00/101) PRESSURE OIL DIFFERENTIAL PRESSURE, S10131 SCAVENGE OIL DIFFERENTIAL PRESSURE, S10132	--	2	414AR,424AR, MAIN GEARBOX FRONT SIDE	79-21-06
VALVE - OIL COOLER BYPASS	--	2	414AR,424AR, AFT OF OIL TANK	79-21-09

Engine Oil Distribution System - Component Index
Figure 101

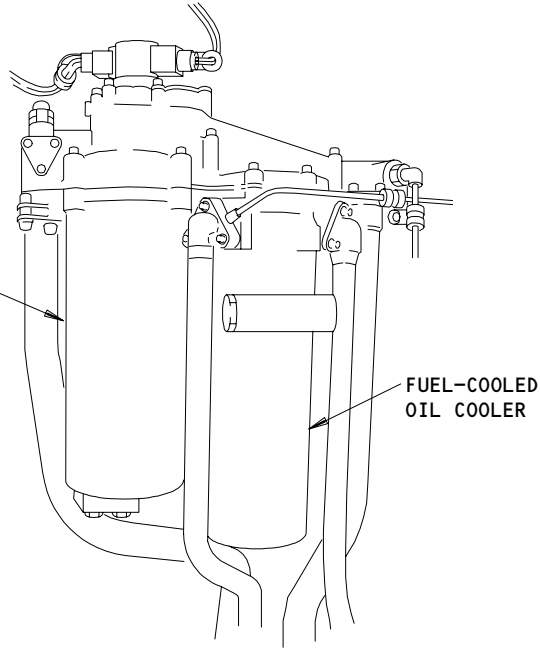
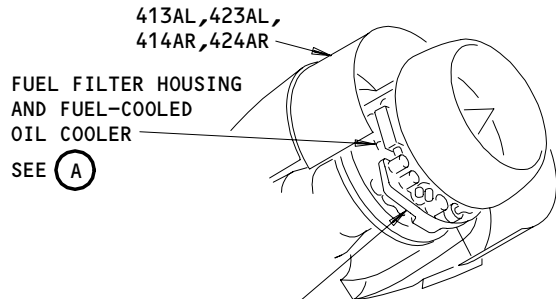


79-21-00

R01

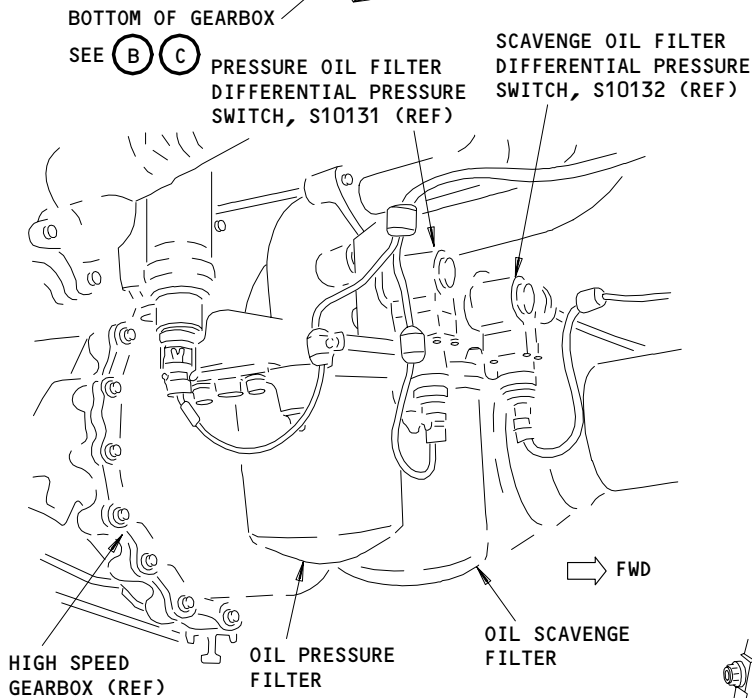
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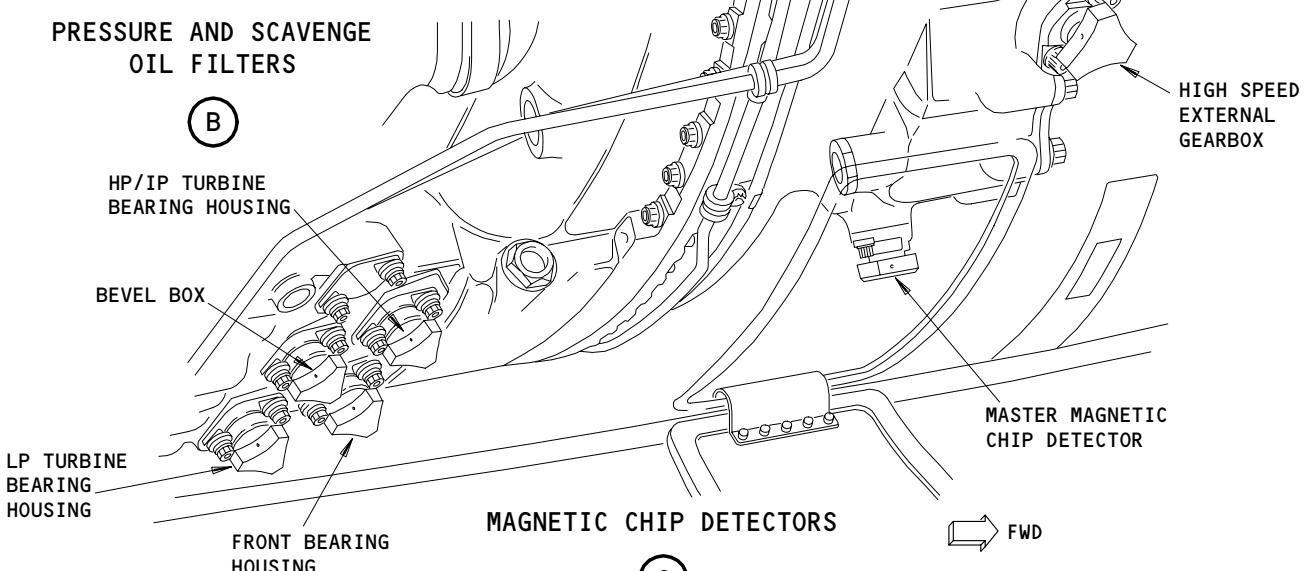
FUEL FILTER HOUSING
AND FUEL-COOLED OIL COOLER

(A)



PRESSURE AND SCAVENGE
OIL FILTERS

(B)



Engine Oil Distribution System - Component Location
Figure 102

(C)

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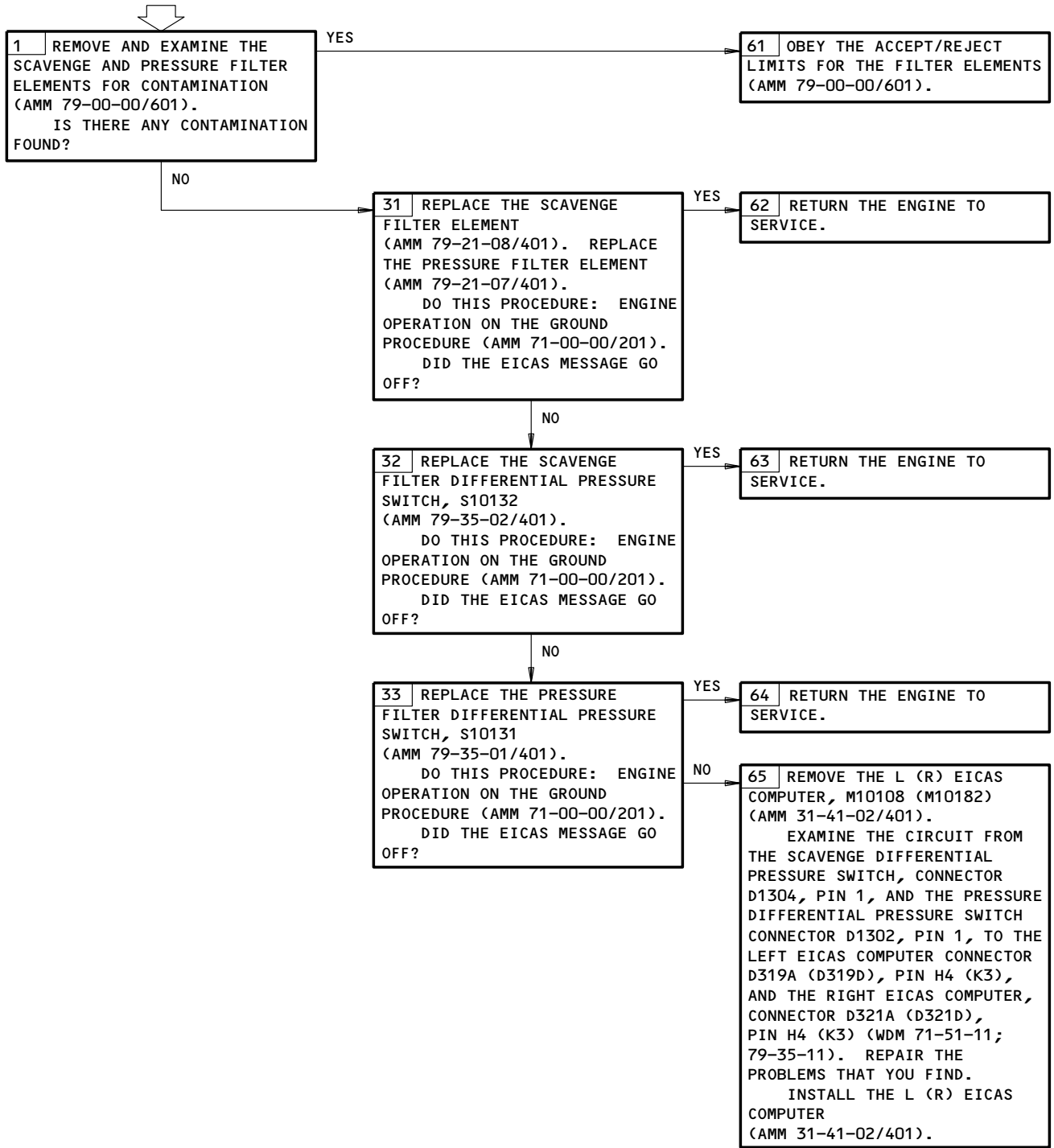
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238252

**EICAS "(L, R) OIL
FILTER" MESSAGE
DISPLAYED**

PREREQUISITES
NONE



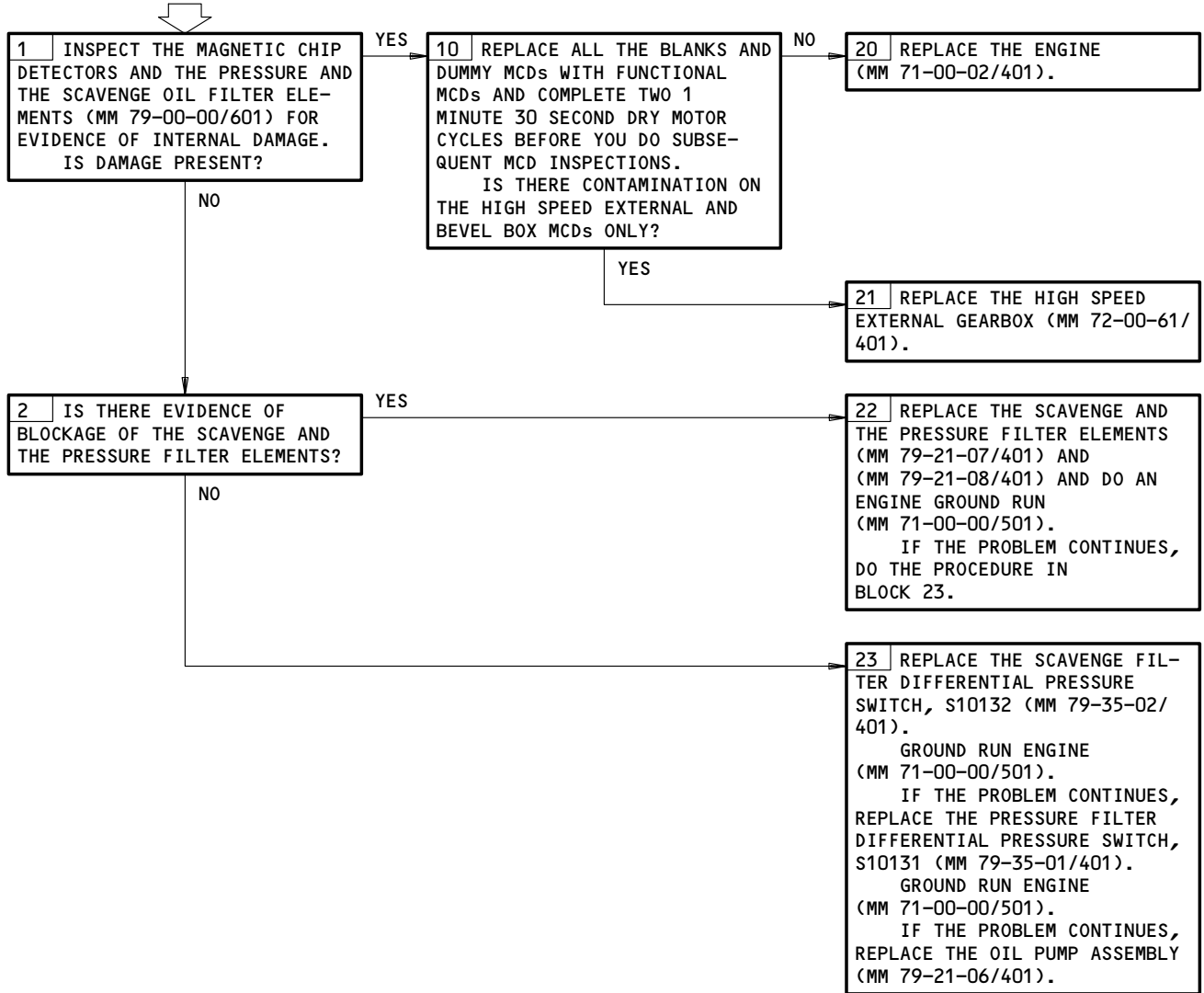
EICAS (L, R) OIL FILTER Message Displayed
Figure 103

EFFECTIVITY ————
ALL

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EICAS MESSAGE
"(L,R) OIL FILTER"
DISPLAYED - OIL
PRESSURE LOW

PREREQUISITES
NONE



EICAS Message (L,R) OIL FILTER Displayed - Oil Pressure Low
Figure 104

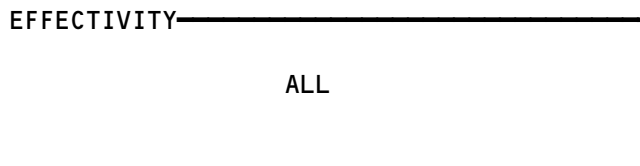
EFFECTIVITY	ALL
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OIL QUANTITY INDICATING SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
COMPUTERS - (31-41-00/101) EICAS L, M10181 EICAS R, M10182 TRANSMITTER - OIL QUANTITY, TS5019	--	2	414AR,424AR	79-31-01

Oil Quantity Indicating System - Component Index
Figure 101

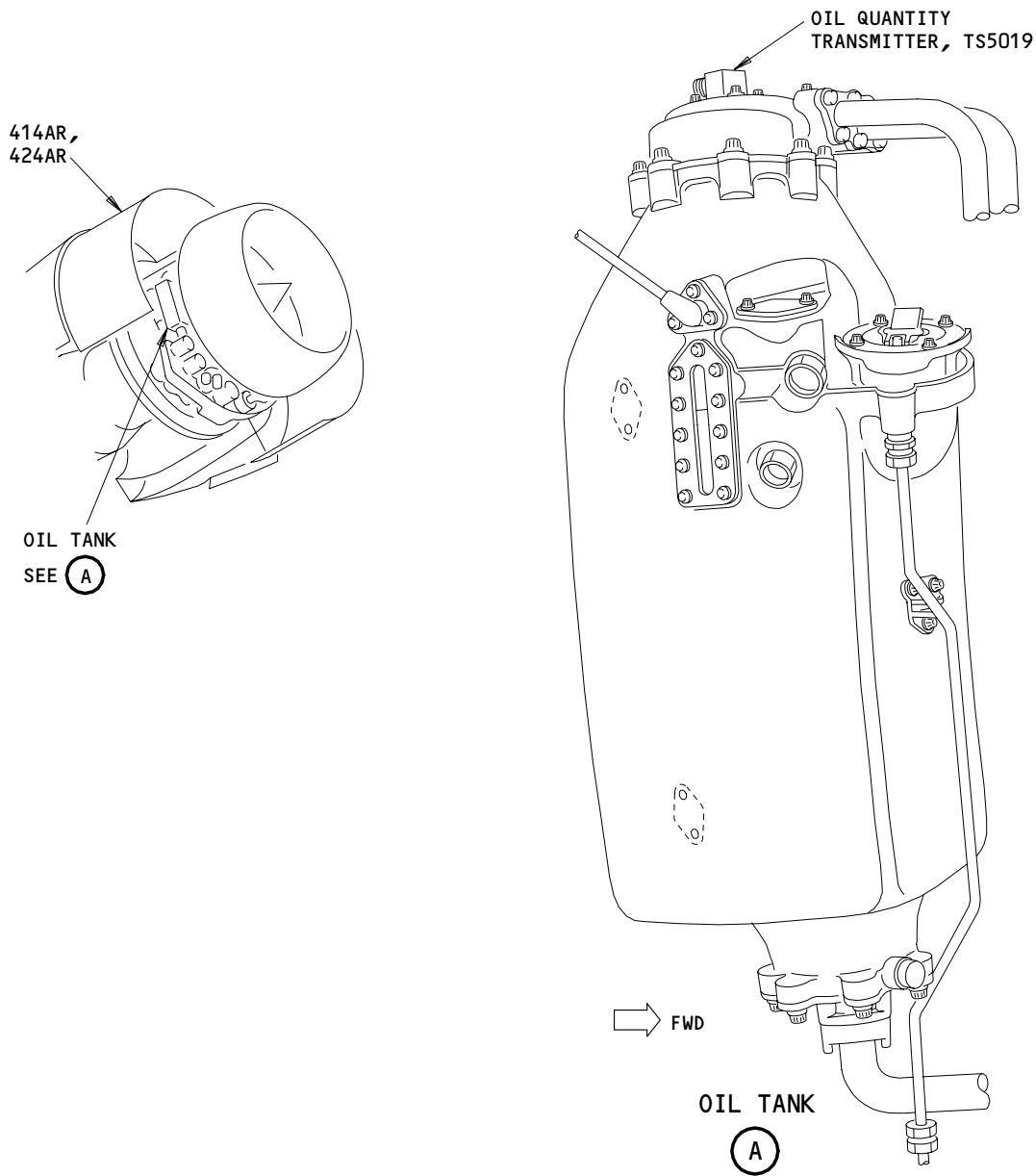


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Oil Quantity Indicating System - Component Location
Figure 102

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OIL QUANTITY INDICATING SYSTEM

1. General

A. The Oil Consumption

CAUTION: MAKE SURE THE CALCULATED OIL CONSUMPTION IS NOT MORE THAN THE OIL AVAILABLE IN THE ENGINE FOR THE SUBSEQUENT FLIGHT. THIS WILL MAKE SURE THE ENGINE CAN COMPLETE THE FLIGHT WITH SUFFICIENT OIL.

- (1) When the oil consumption is compared to the oil consumption limit, the operation time of the engine must be sufficiently large to calculate the oil consumption correctly.
- (2) The oil consumption for the engine must be calculated after the engine has completed more than one flight. This can be done as follows:
 - (a) Monitor the oil consumption to identify an increase in oil consumption from the usual conditions.
 - (b) Calculate the average of the high oil consumption during the last 25 hours.
 - (c) Calculate the average of the high oil consumption during the last 2 flight cycles if this is more time than the last 25 hours.
- (3) If a large amount of oil is necessary to make the oil quantity correct, do the fault isolation procedure for the high oil consumption (Fig. 104).

NOTE: An engine vibration increase can occur at the same time as the oil quantity decreases. If this occurs, it is possible that oil has gone into an engine component that turns. The engine must be removed to make an inspection.

- (4) The temporary operation of an engine with a high oil consumption is permitted, but must be approved by the operators' Airworthiness Authority. The temporary operation must agree with the items that follow:
 - (a) A stable oil consumption.
 - (b) No other engine indications that are unsatisfactory.
 - (c) Make sure the calculated oil consumption is not more than the oil available in the engine for the subsequent flight.
- (5) If the symptoms that follow occur at engine shutdown, they are not causes for engine removal:
 - Blue smoke from the exhaust
 - Oil wetness on the L.P. Turbine blades
 - Oil puddles in the tailcone areaThese are usually symptoms of the escape of small amounts of oil from the HP/IP turbine bearing chamber when the sealing air pressure decreases at engine shutdown.

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- (6) The RB211-535E4 series engines can show symptoms of high oil consumption over short sectors where the proportion of low power operation is higher. This is caused by leakage from the HP/IP turbine bearing chamber at low power. If troubleshooting (Fig. 104) confirms that the engine shows this symptom, the engine can stay in service with oil consumption up to 4.0 U.S. Pints (3.4 Imperial Pints, 1.9 Liter), for stage lengths up to 2 hours. During continual operation to the increased limit, close examination of the quantity of oil put in over the next 25 flight hours is necessary. This is to make sure any deterioration is identified. More troubleshooting is necessary only if the oil consumption increases again.

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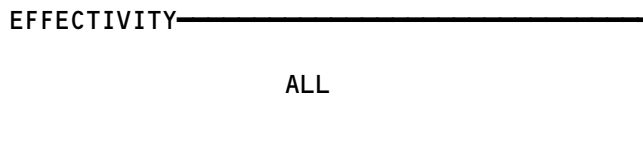
OIL QUANTITY
INDICATION ZERO/
INTERMITTENT

PREREQUISITES NONE



- | |
|---|
| <p>1 <input type="checkbox"/> REPLACE THE OIL QUANTITY TRANSMITTER (MM 79-31-01/401).
IF THE PROBLEM CONTINUES, REMOVE THE L (R) EICAS COMPUTER, M10181 (M10182)(MM 31-41-02/401).
EXAMINE AND REPAIR THE CIRCUITS THAT FOLLOW:</p> <ul style="list-style-type: none">• FOR THE LEFT ENGINE,<ul style="list-style-type: none">- BETWEEN THE OIL QUANTITY TRANSMITTER, TS5019, CONNECTOR D1308, PIN 1, AND THE L (R) EICAS, CONNECTOR D319F (D321F), PIN G10, BETWEEN D1308, PIN 2, AND D319B (D321B), PIN J8, AND BETWEEN D1308, PIN 3, AND THE E4-2 SHELF GROUND GD2202-DC.• FOR THE RIGHT ENGINE,<ul style="list-style-type: none">- BETWEEN THE OIL QUANTITY TRANSMITTER, TS5019, CONNECTOR D1308, PIN 1, AND THE L (R) EICAS, CONNECTOR D319E (D321E), PIN E4, BETWEEN D1308, PIN 2, AND D319E (D321E), PIN G13, AND BETWEEN D1308, PIN 3, AND THE E4-2 SHELF GROUND GD2205-DC. <p>INSTALL THE L (R) EICAS COMPUTER.</p> |
|---|

Oil Quantity Indication Zero/Intermittent
Figure 103



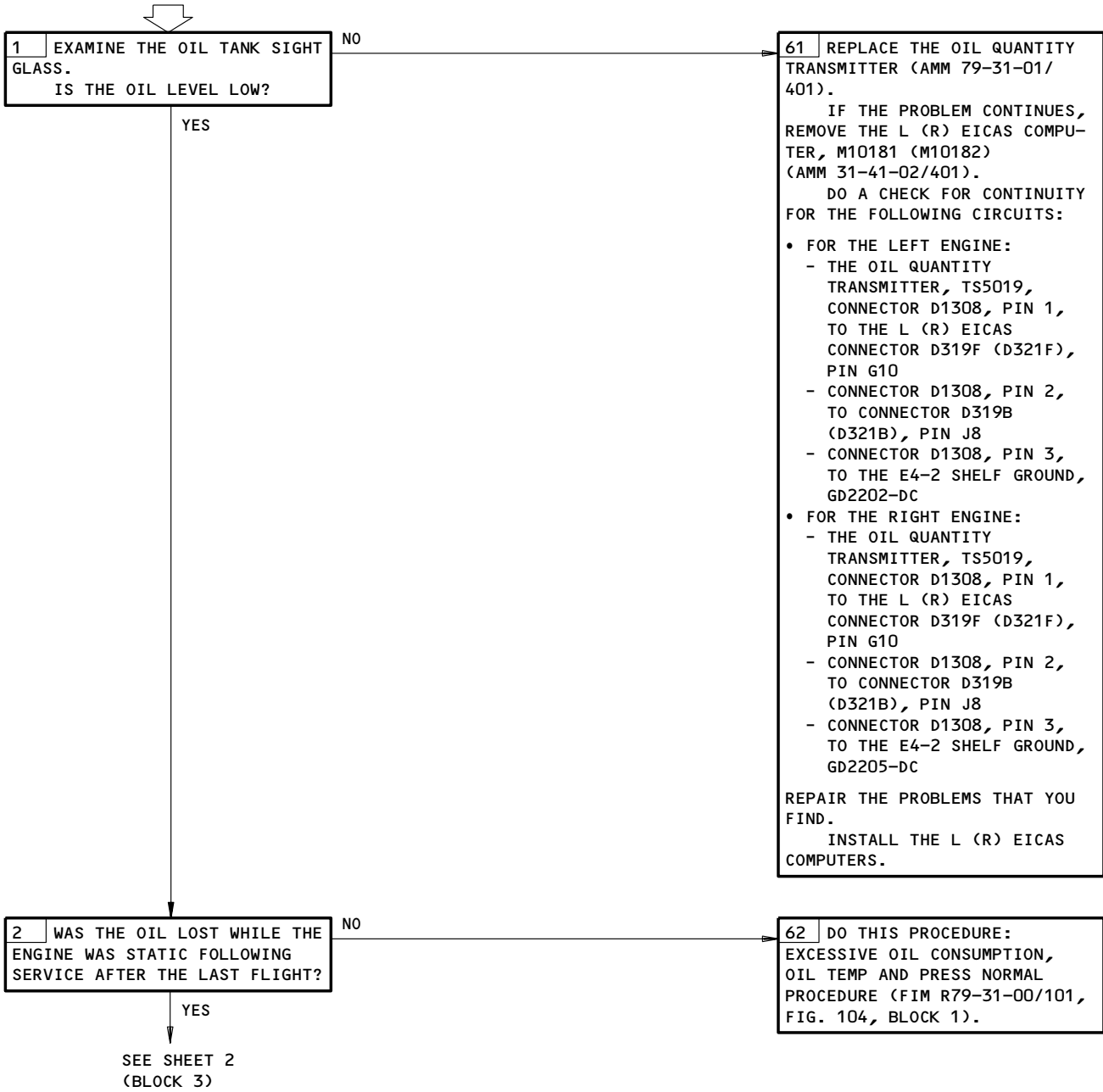
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OIL QUANTITY
INDICATION LOW OR
FALLING

PREREQUISITES
NONE

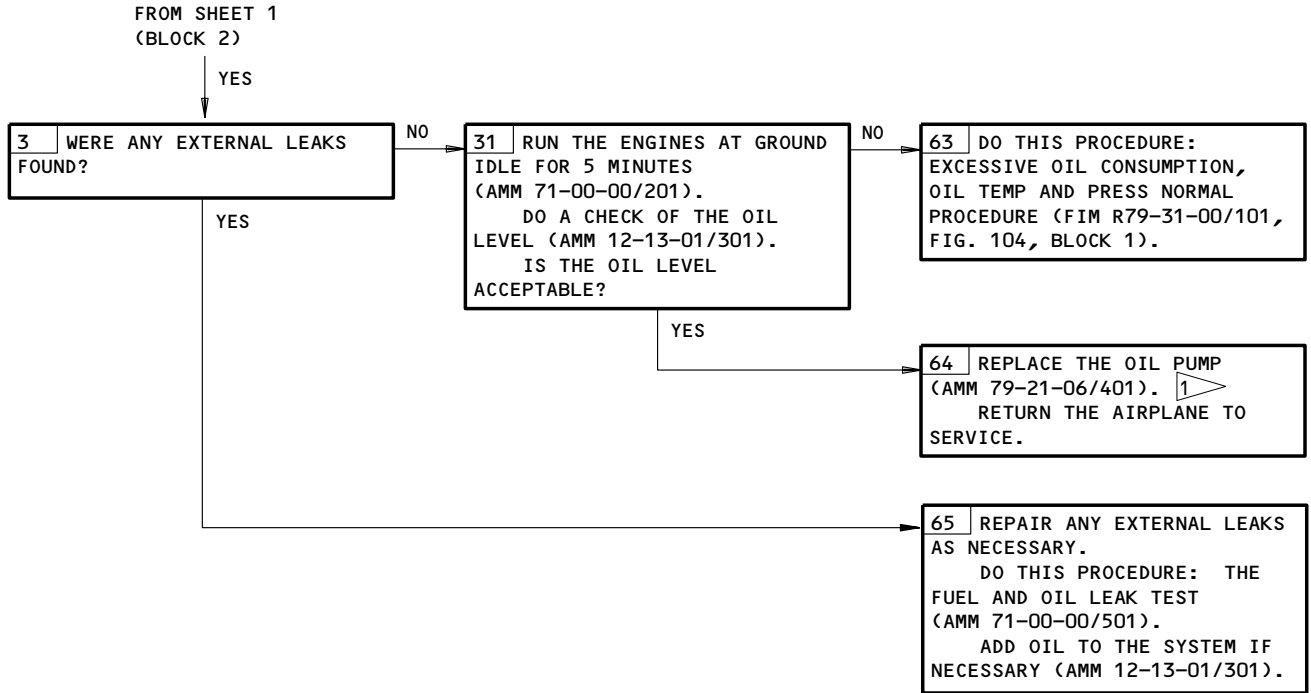


Oil Quantity Indication Low or Falling
Figure 103A (Sheet 1)

EFFECTIVITY

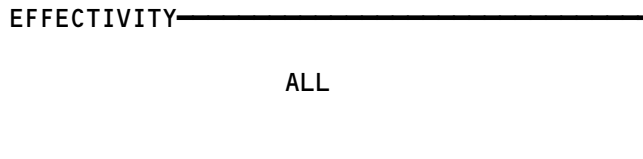
ALL

79-31-00



1 STATIC DRAIN DOWN FROM THE OIL TANK IS USUALLY ASSOCIATED WITH A FAULTY OIL PUMP CARBON SEAL

Oil Quantity Indication Low or Falling
Figure 103A (Sheet 2)



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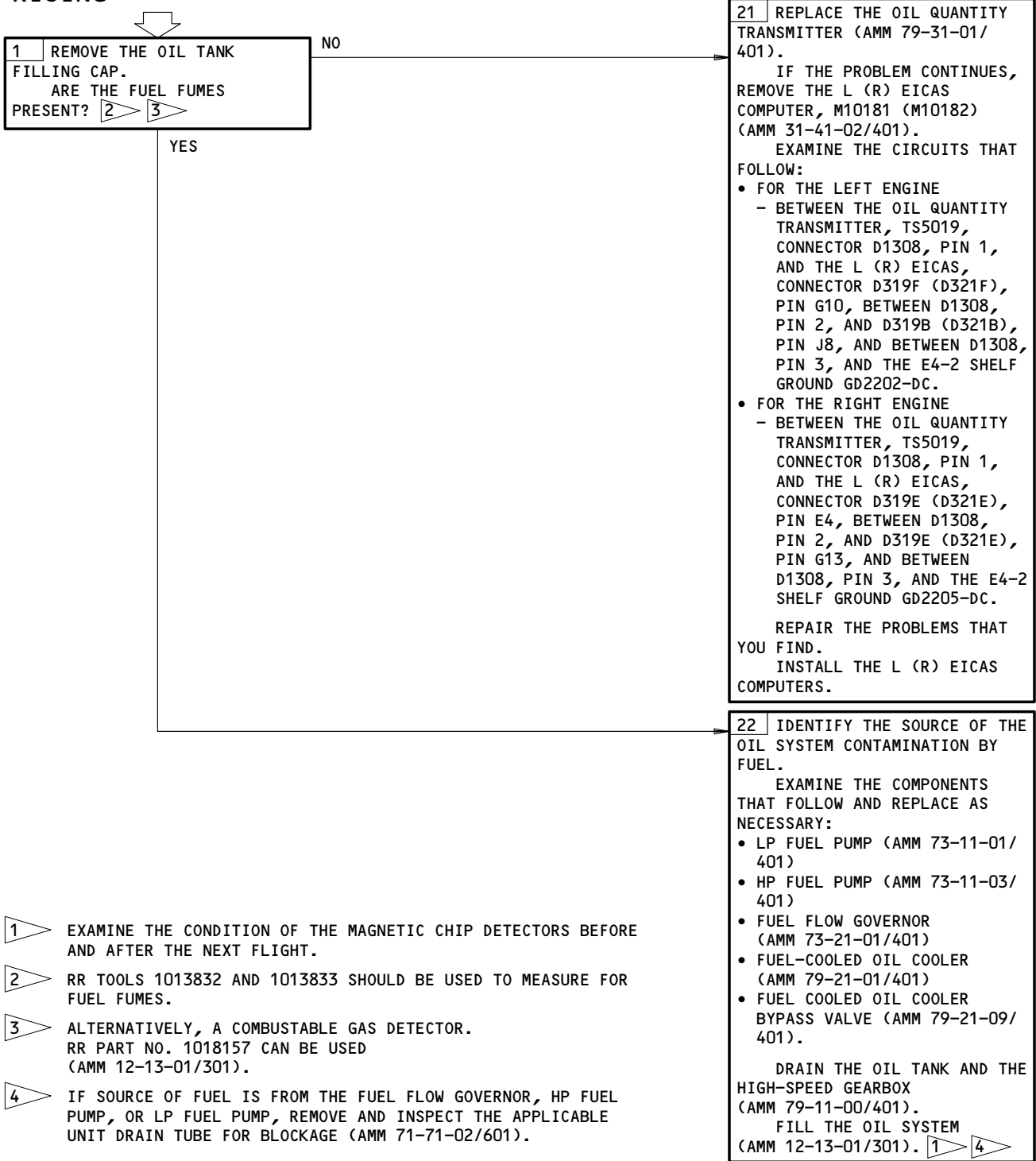
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**OIL QUANTITY
INDICATION HIGH OR
RISING**

PREREQUISITES
NONE



- 1** EXAMINE THE CONDITION OF THE MAGNETIC CHIP DETECTORS BEFORE AND AFTER THE NEXT FLIGHT.
- 2** RR TOOLS 1013832 AND 1013833 SHOULD BE USED TO MEASURE FOR FUEL FUMES.
- 3** ALTERNATIVELY, A COMBUSTABLE GAS DETECTOR. RR PART NO. 1018157 CAN BE USED (AMM 12-13-01/301).
- 4** IF SOURCE OF FUEL IS FROM THE FUEL FLOW GOVERNOR, HP FUEL PUMP, OR LP FUEL PUMP, REMOVE AND INSPECT THE APPLICABLE UNIT DRAIN TUBE FOR BLOCKAGE (AMM 71-71-02/601).

Oil Quantity Indication High or Rising
Figure 103B

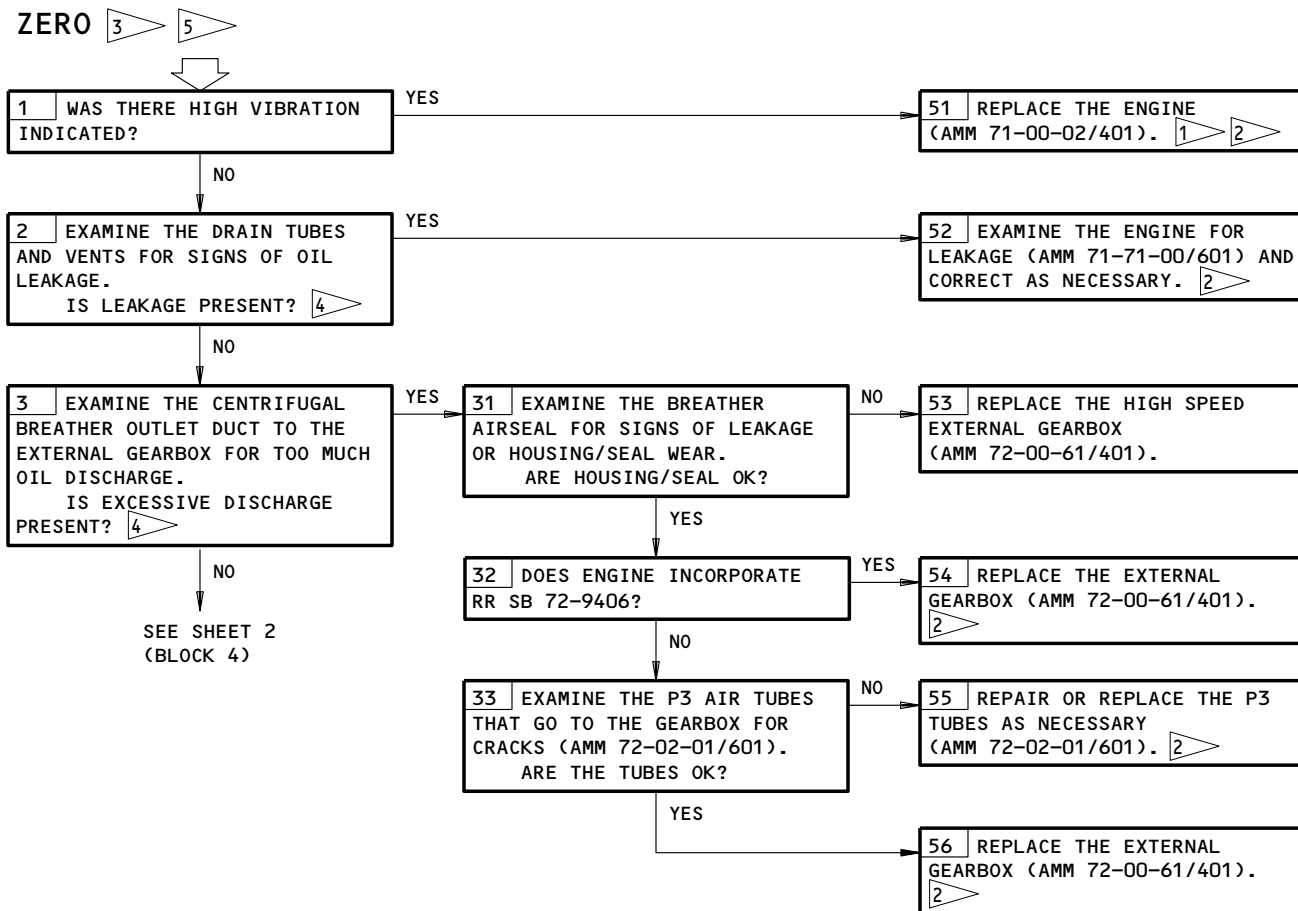
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EXCESSIVE OIL CONSUMPTION OR OIL QUANTITY READS ZERO

PREREQUISITES
NONE



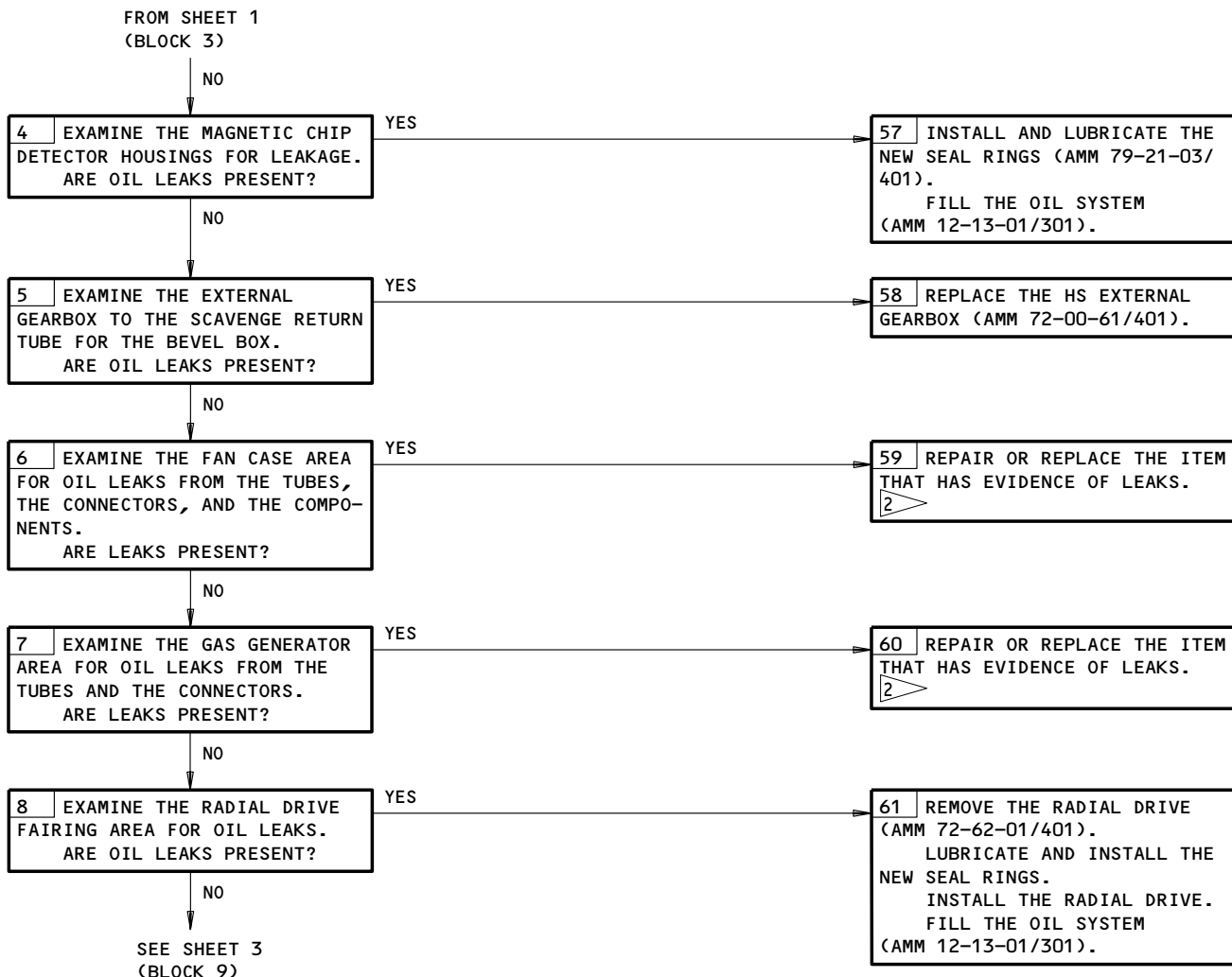
- 1 AN INCREASE IN THE LEVEL OF INDICATED VIBRATION ACCOMPANYING LOSS OF OIL CONTENT CAN INDICATE OF A SUDDEN INGRESS OF OIL INTO THE HP AND LP COMPRESSOR DRUM. THE ENGINE MUST BE REJECTED FOR FURTHER INVESTIGATION.
- 2 DO THIS PROCEDURE: EICAS AUTO EVENT MESSAGE VERIFICATION/ERASE PROCEDURE (FIM 71-05-00/101, FIG. 111).
- 3 BEFORE YOU EXAMINE THE CAUSE OF THE EXCESSIVE OIL CONSUMPTION CONDITION, REFER TO THE GENERAL PARAGRAPH 1.
- 4 IT MAY BE NECESSARY TO OPERATE THE ENGINE AT DIFFERENT POWER SETTINGS TO DETERMINE IF THERE IS A LEAKAGE PROBLEM.
- 5 IF OIL LOSS OCCURED DURING AN EXTENDED TAXI PERIOD OF LOW POWER OPERATION AND OIL CONSUMPTION WAS STABLE BEFORE OIL LOSS, YOU CAN GO TO SHEET 5, BLOCK 40.

Excessive Oil Consumption or Oil Quantity Reads Zero
Figure 104 (Sheet 1)

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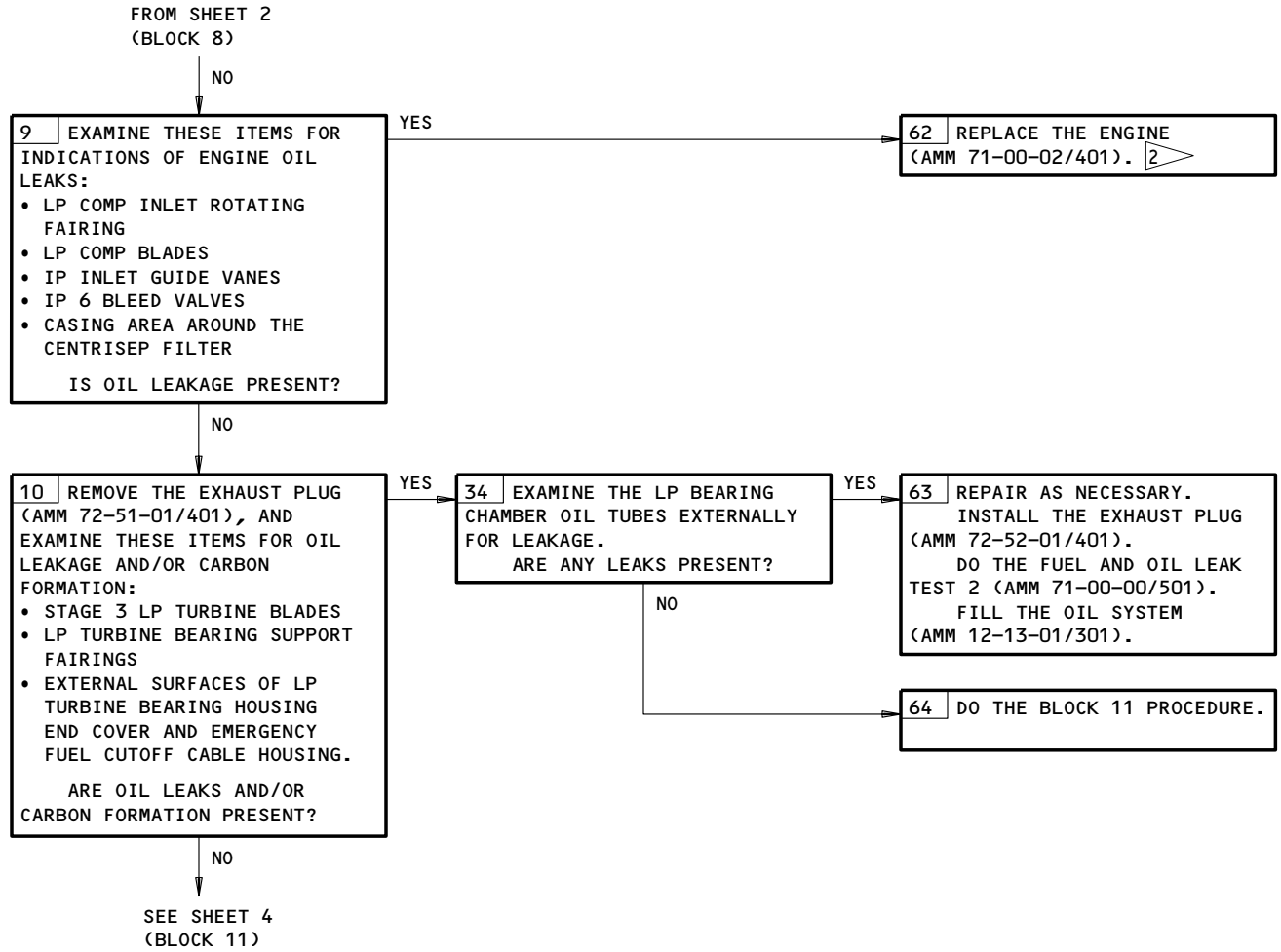
79-31-00



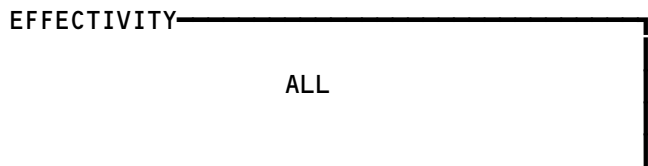
Excessive Oil Consumption or Oil Quantity Reads Zero
Figure 104 (Sheet 2)

EFFECTIVITY	ALL
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79-31-00

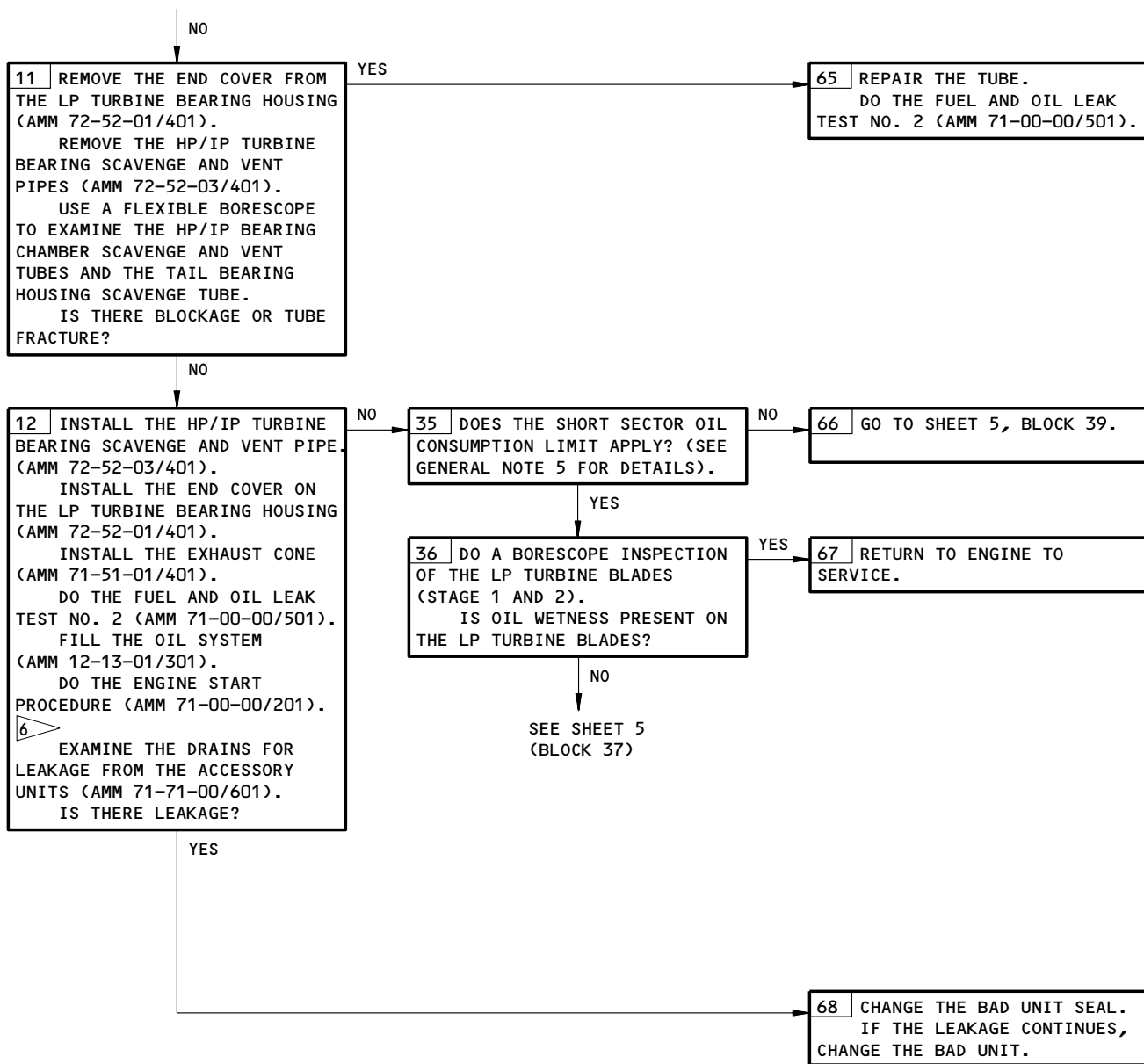


Excessive Oil Consumption or Oil Quantity Reads Zero
Figure 104 (Sheet 3)



79-31-00

FROM SHEET 3
(BLOCK 10)



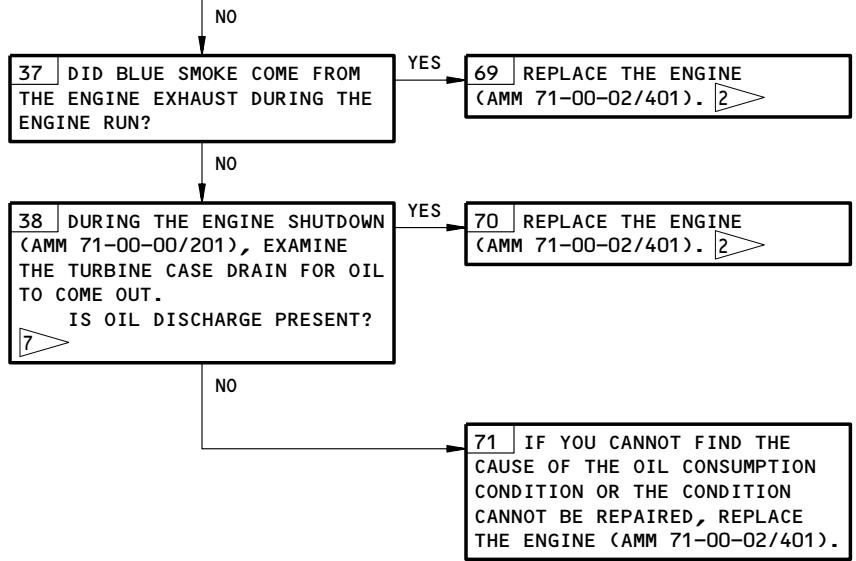
6 WHILE YOU OPERATE THE ENGINE, CHANGE THE ENGINE SPEED FREQUENTLY AND INCLUDE A HIGH-POWER CONDITION.

Excessive Oil Consumption or Oil Quantity Reads Zero
Figure 104 (Sheet 4)

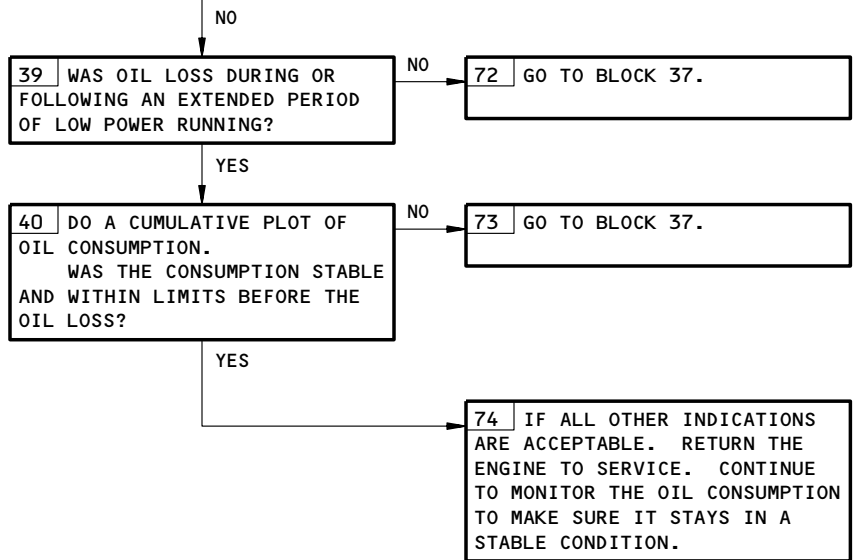
EFFECTIVITY —————
ALL

79-31-00

FROM SHEET 4
(BLOCK 36)



FROM SHEET 4
(BLOCK 66)



7 BLUE SMOKE FROM THE ENGINE EXHAUST AFTER A SHUTDOWN IS NOT CAUSE FOR ENGINE REMOVAL. BLUE SMOKE IS A RESULT OF SMALL AMOUNTS OF OIL THAT COMES OUT OF THE HP/IP TURBINE BEARING CHAMBER WHEN THE SEALING AIR PRESSURE DECREASES ON SHUTDOWN.

Excessive Oil Consumption or Oil Quantity Reads Zero
Figure 104 (Sheet 5)

EFFECTIVITY	ALL
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EFFECTIVITY

ALL

79-32-00

R00

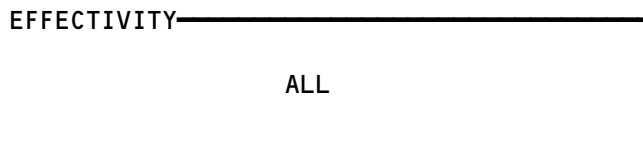
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OIL PRESSURE INDICATING SYSTEM

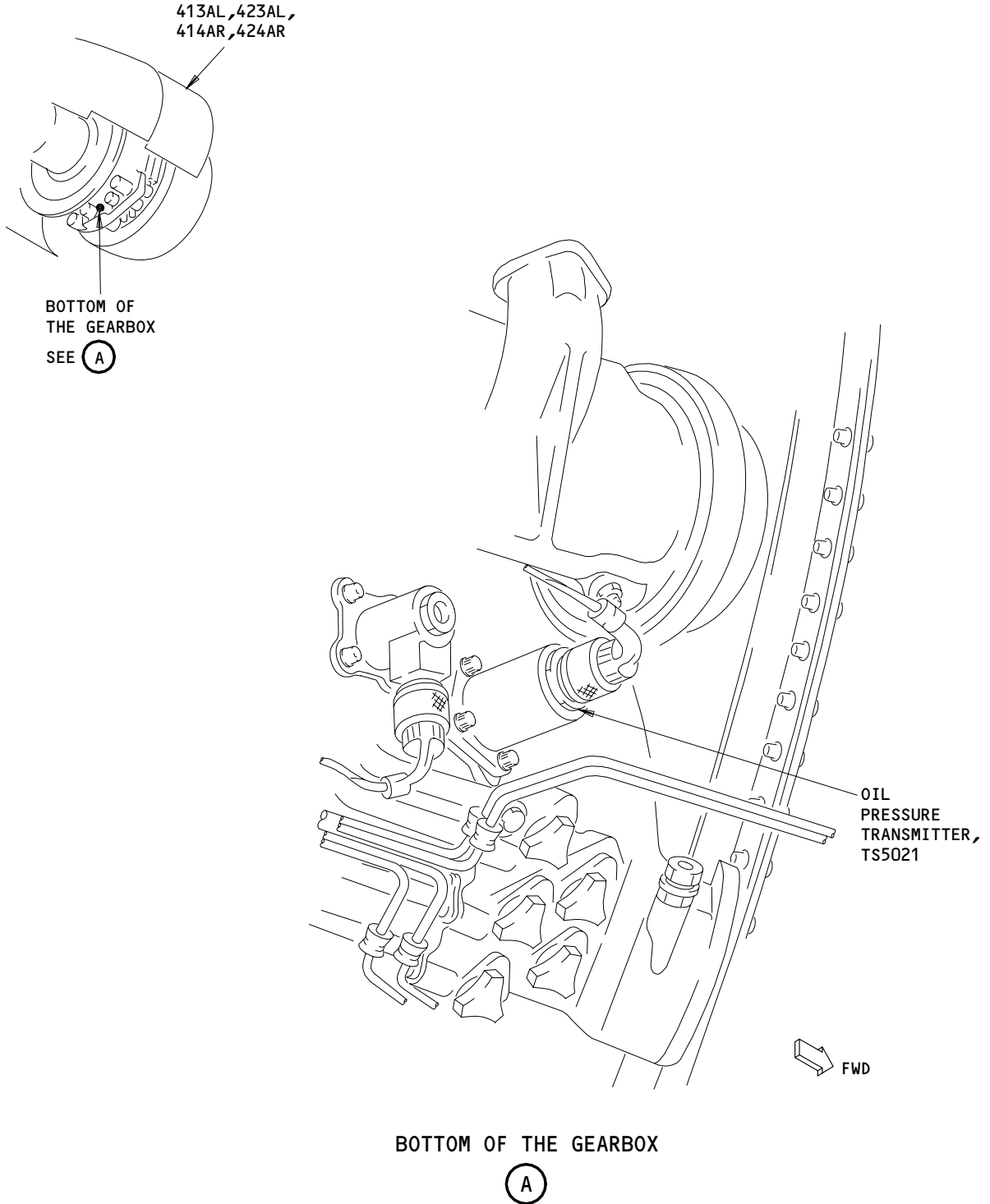
COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
CIRCUIT BREAKERS - LEFT ENGINE OIL PRESS, C1498 RIGHT ENGINE OIL PRESS, C1499 COMPUTERS - (31-41-00/101) EICAS L, M10181 EICAS R, M10182	--	1	FLT COMPT, P11 11K9	*
		1	11K35	*
TRANSMITTER - OIL PRESSURE, TS5021	--	2	413AL,423AL,414AR,424AR	79-32-01

* SEE THE WDM EQUIPMENT LIST

Oil Pressure Indicating System - Component Index
Figure 101



79-32-00



Oil Pressure Indicating System - Component Location
Figure 102

EFFECTIVITY	
	ALL

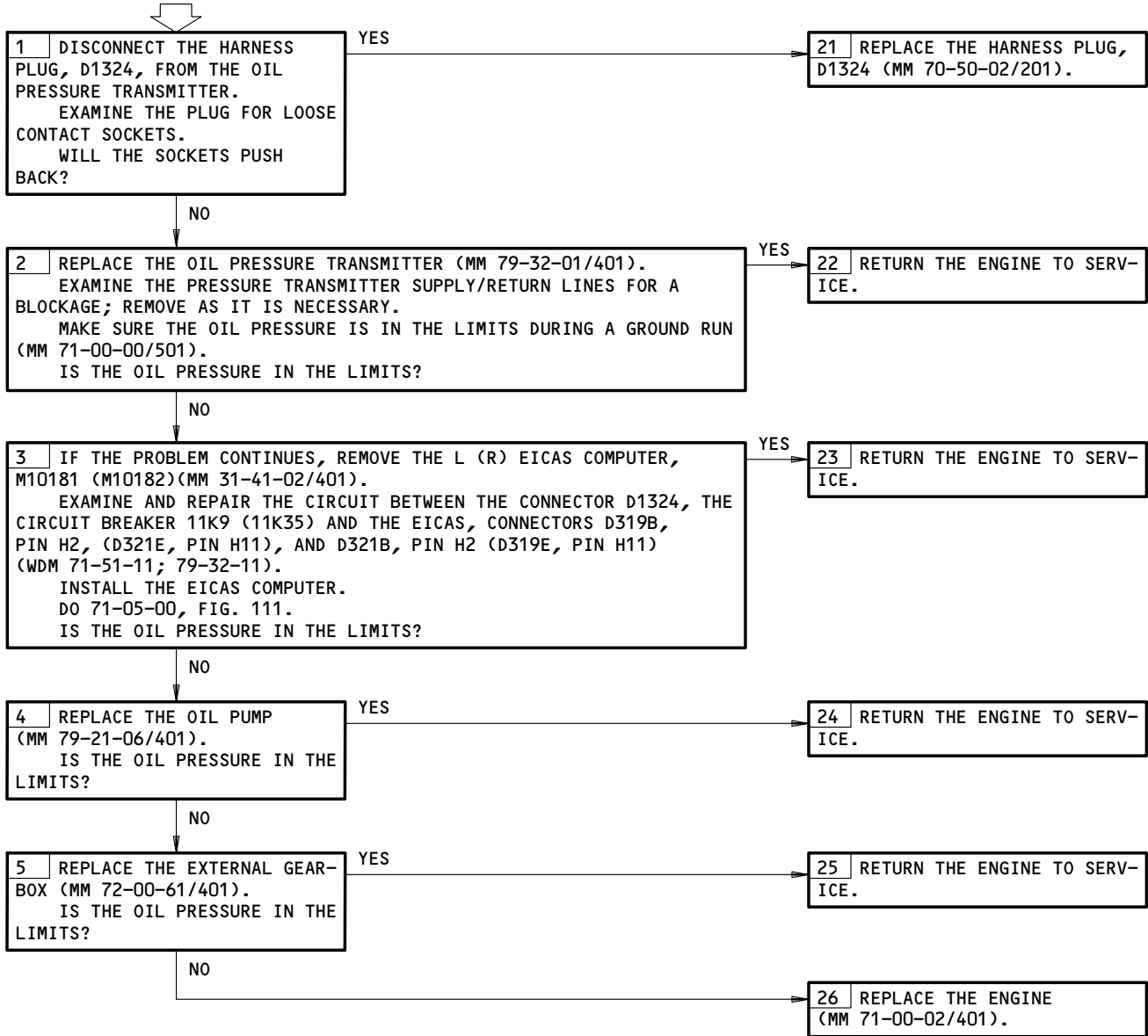
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PREREQUISITES
 MAKE SURE THESE CIRCUIT BREAKERS ARE OPEN AND ATTACH DO-NOT-CLOSE TAGS:
 11K9,11K35

OIL PRESSURE INDICATION PROBLEMS



Oil Pressure Indication Problems
Figure 103

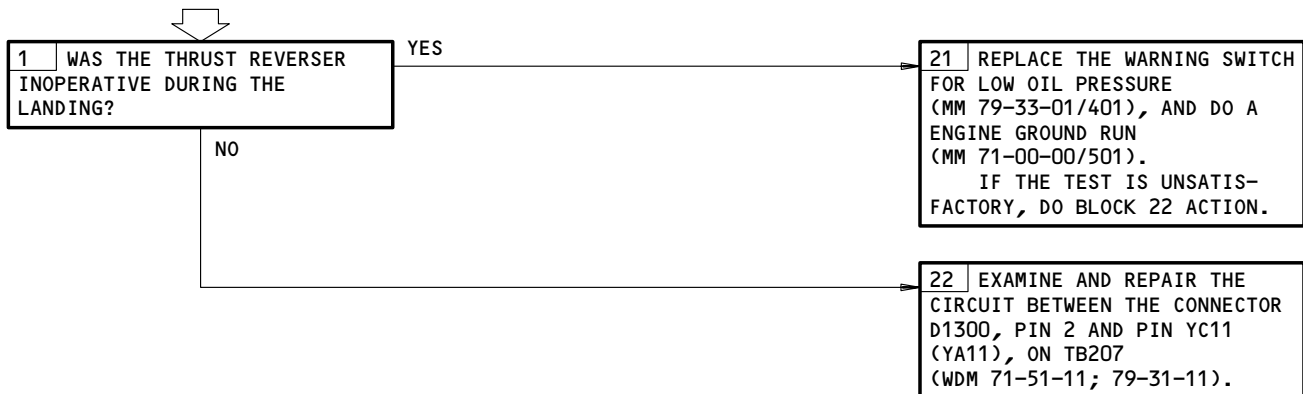
EFFECTIVITY

ALL

79-32-00

EICAS "(L,R) ENG OIL PRESS" MESSAGE DISPLAYED. "ENG OIL PRESS" LIGHT ON, OIL PRESS INDICATION NORMAL

PREREQUISITES
MAKE SURE THESE CIRCUIT BREAKERS ARE OPEN AND ATTACH DO-NOT-CLOSE TAGS:
11K9,11K35



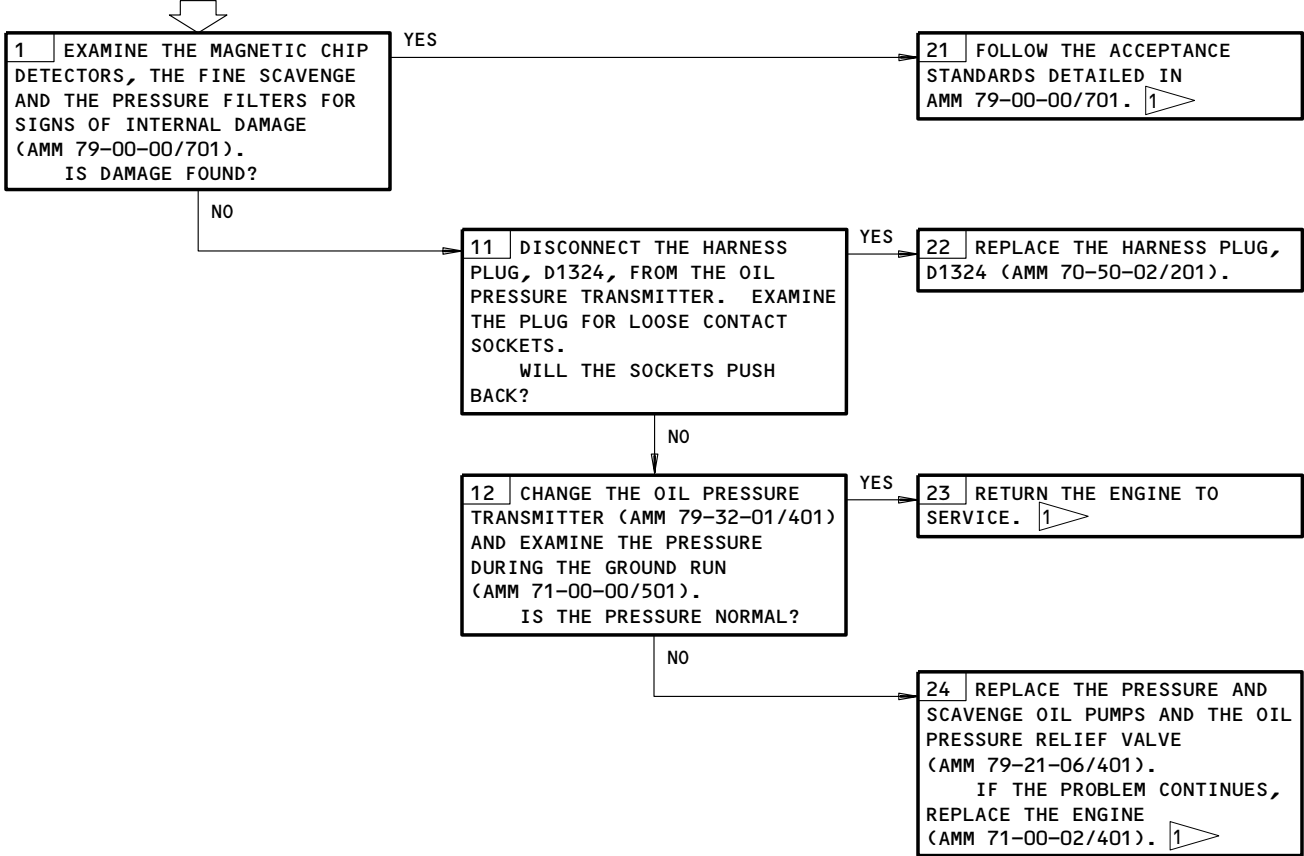
EICAS (L,R) ENG OIL PRESS Message Displayed, ENG OIL PRESS Light On,
Oil Press Indication Normal
Figure 104

EFFECTIVITY	ALL
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79-32-00

**LOW OIL PRESS
INDICATION (AMBER
RANGE)**

PREREQUISITES
MAKE SURE THESE CIRCUIT BREAKERS ARE OPEN AND ATTACH
DO-NOT-CLOSE TAGS:
11K9,11K35



1 DO THIS PROCEDURE: EICAS AUTO EVENT MESSAGE VERIFICATION/ERASE PROCEDURE (FIM 71-05-00, FIG. 111).

Low Oil Press Indication (Amber Range)
Figure 105

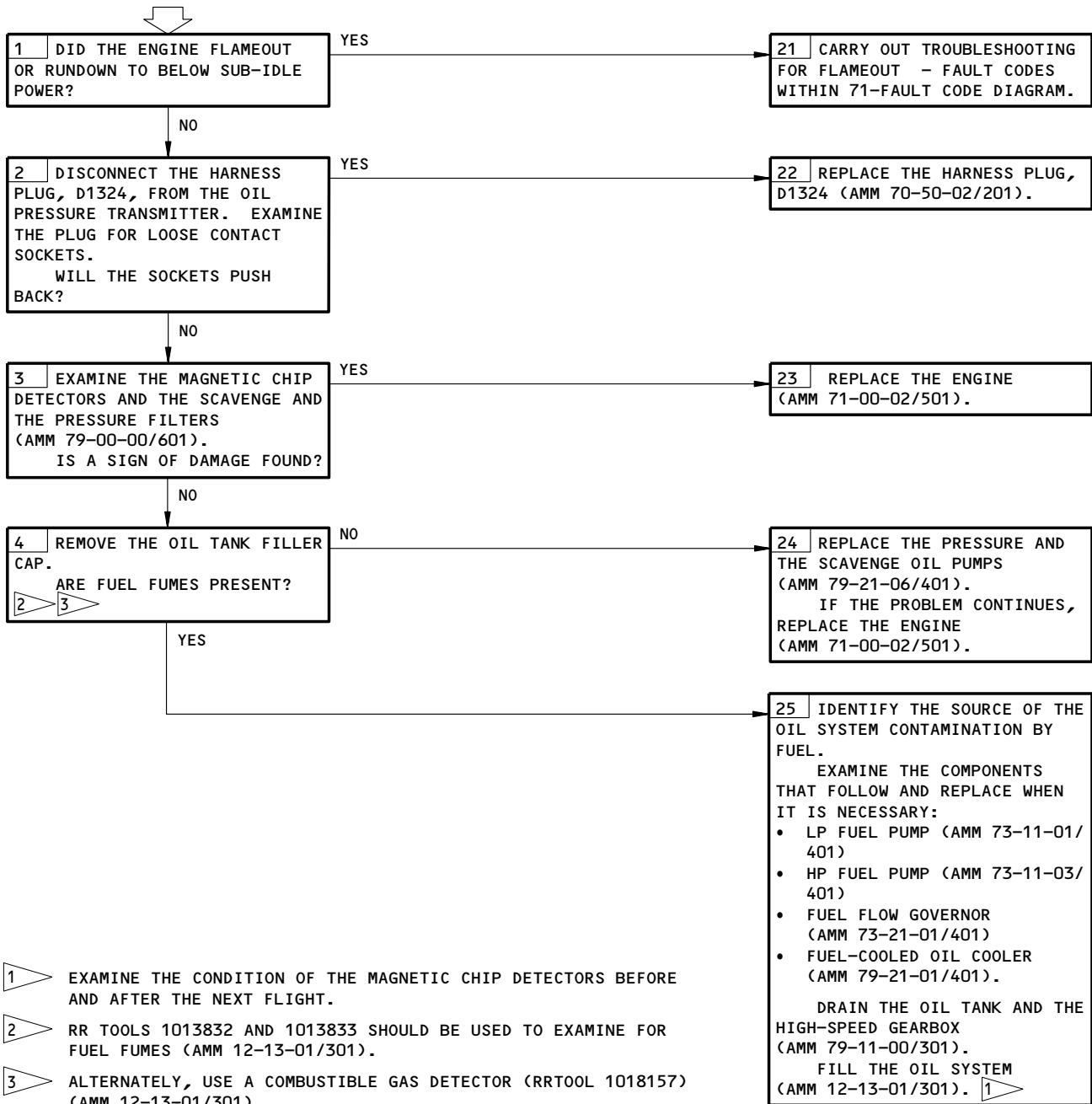
EFFECTIVITY	ALL
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79-32-00

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EICAS "(L,R) ENG OIL PRESS" MESSAGE DISPLAYED, "ENG OIL PRESS" LIGHT ON, OIL PRESSURE LOW

PREREQUISITES
MAKE SURE THESE CIRCUIT BREAKERS ARE OPEN AND ATTACH DO-NOT-CLOSE TAGS:
11K9,11K35



- 1 EXAMINE THE CONDITION OF THE MAGNETIC CHIP DETECTORS BEFORE AND AFTER THE NEXT FLIGHT.
- 2 RR TOOLS 1013832 AND 1013833 SHOULD BE USED TO EXAMINE FOR FUEL FUMES (AMM 12-13-01/301).
- 3 ALTERNATELY, USE A COMBUSTIBLE GAS DETECTOR (RRTOOL 1018157) (AMM 12-13-01/301).

EICAS (L,R) ENG OIL PRESS Message Displayed,
ENG OIL PRESS Light On, Oil Pressure Low
Figure 106

EFFECTIVITY ————
ALL

79-32-00

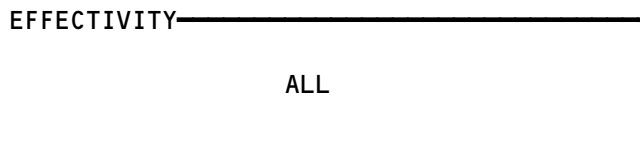
70760

LOW OIL PRESSURE WARNING SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
COMPUTERS - (31-41-00/101) EICAS L, M10181 EICAS R, M10182				
LIGHT - L OIL PRESS, L474	--	1	FLT COMPT, P1-3, CAPTAIN MAIN INSTR PANEL	*
LIGHT - R OIL PRESS, L475	--	1	FLT COMPT, P1-3, CAPTAIN MAIN INSTR PANEL	*
SWITCH - LOW OIL PRESSURE WARNING, S10130	--	2	413AL, 423AL, 414AR, 424AR	79-33-01

*SEE THE WDM EQUIPMENT LIST

Low Oil Pressure Warning System - Component Index
Figure 101

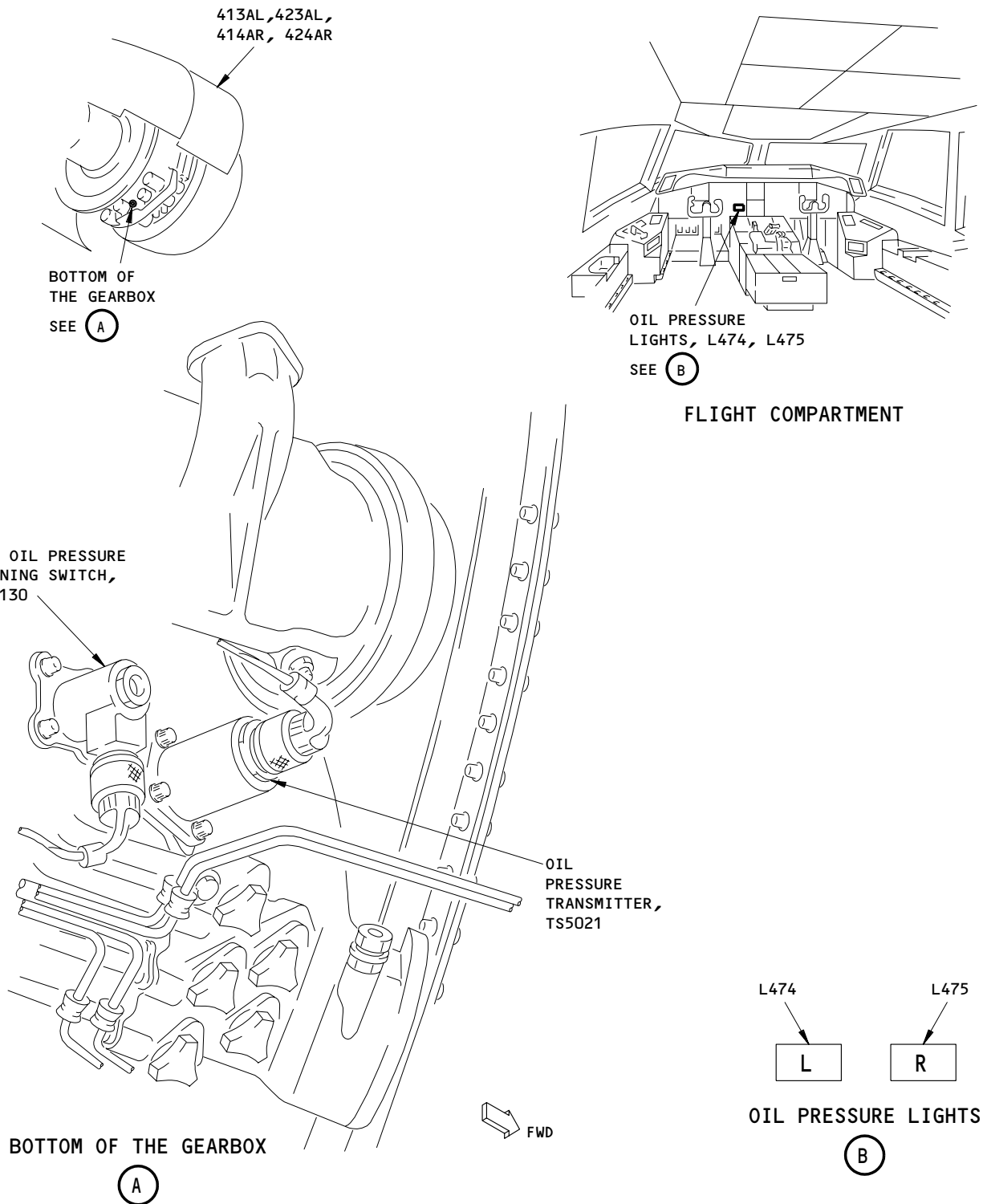


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Low Oil Pressure Warning System - Component Location
Figure 102

EFFECTIVITY	
	ALL

79-33-00

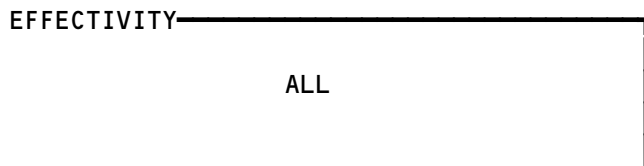
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OIL TEMPERATURE INDICATION SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
COMPUTERS - (31-41-00/101) EICAS L, M10181 EICAS R, M10182 BULB - OIL TEMPERATURE, TS5020	--	2	413AL, 423AL, 414AR, 424AR	79-34-01

Oil Temperature Indication System - Component Index
 Figure 101



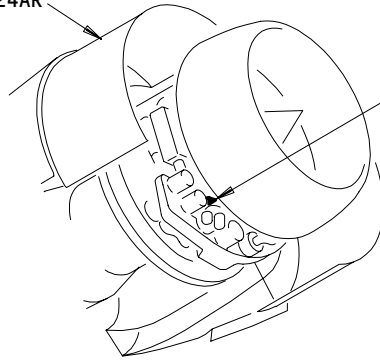
79-34-00

R01

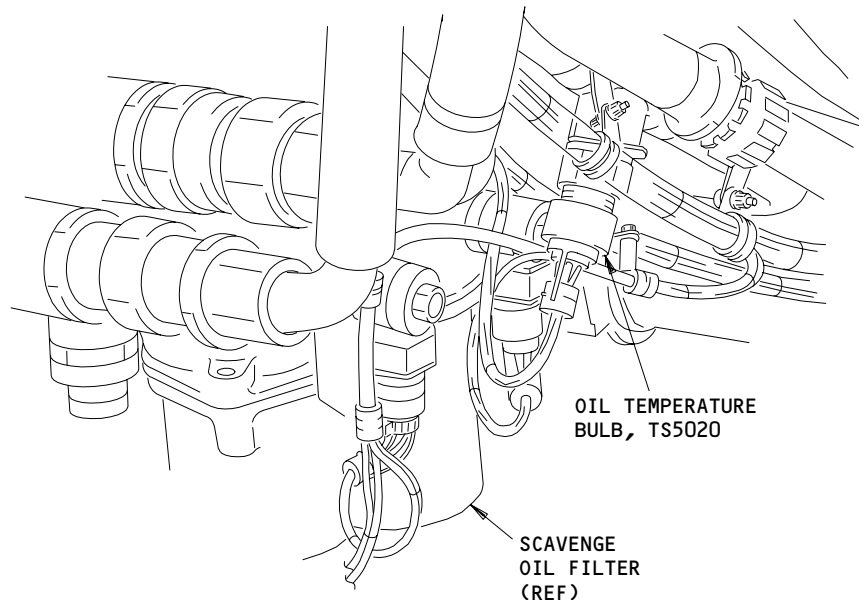
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A47444

413AL,423AL,
 414AR,424AR



PRESSURE AND SCAVENGE
 OIL FILTER HOUSING
 SEE (A)



OIL TEMPERATURE
 BULB, TS5020

SCAVENGE
 OIL FILTER
 (REF)

PRESSURE AND SCAVENGE
 OIL FILTER HOUSING

(A)

Oil Temperature Indication System - Component Location
 Figure 102

EFFECTIVITY	
	ALL

79-34-00

R01

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A44958

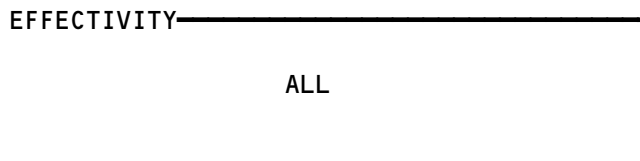
OIL TEMPERATURE
INDICATION PROBLEM

PREREQUISITES
NONE



1 REPLACE THE OIL TEMPERATURE BULB (MM 79-34-01/401) AND THE GROUND RUN FOR THE ENGINE (MM 71-00-00/501).
IF THE PROBLEM CONTINUES, REMOVE THE L (R) EICAS COMPUTER, M10181 (M10182)(MM 31-41-02/401).
EXAMINE AND REPAIR THE CIRCUIT BETWEEN THE CONNECTOR D1322 AND THE EICAS, CONNECTORS D319A, PIN H11 AND H10 (D321D, PIN H9 AND H10), AND D321A, PIN H11 AND H10 (D319D, PIN H9 AND H10)(WDM 71-51-11; 79-34-11).
INSTALL THE EICAS COMPUTER.
DO THE PROCEDURE IN 71-05-00, FIG. 111.

Oil Temperature Indication Problem
Figure 103



79-34-00

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**OIL TEMP HIGH WITH
A VIBRATION INCREASE**

PREREQUISITES
NONE

1 EXAMINE THE MAGNETIC CHIP DETECTORS, THE SCAVENGE AND THE PRESSURE FILTERS FOR SIGNS OF ENGINE INTERNAL DAMAGE (MM 79-00-00/601).
IS DAMAGE FOUND?

YES

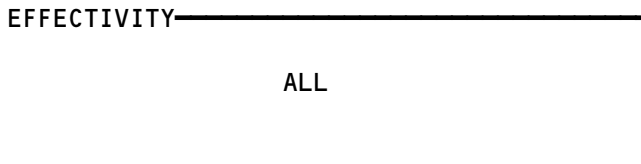
21 FOLLOW THE ACCEPTANCE STANDARDS DETAILED IN MM 79-00-00/601. 1

NO

22 RETURN THE ENGINE TO SERVICE AND MONITOR THE ENGINE OPERATION FOR ORIGINAL PROBLEMS. 1

1 DO THE PROCEDURE IN 71-05-00, FIG. 111

Oil Temp High with Vibration Increase
Figure 104



79-34-00

OIL TEMP IS HIGH

PREREQUISITES
NONE

1 DISCONNECT THE OIL TEMPERATURE BULB ELECTRICAL CONNECTOR D1322.
DID YOU FIND ANY DAMAGE OR CONTAMINATION?

YES

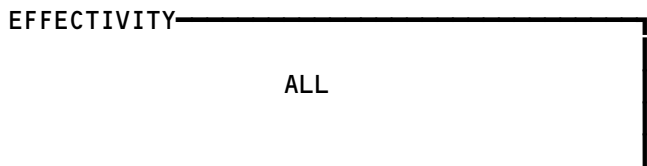
21 REPAIR THE CONNECTOR OR REPLACE THE OIL TEMPERATURE BULB AS NECESSARY (MM 79-34-00/401).
IF THE PROBLEM CONTINUES, DO BLOCK 22. 1

NO

22 CONNECT THE CONNECTOR D1322.
REPLACE THE OIL BYPASS VALVE (MM 79-21-09/401).
2
IF THE PROBLEM CONTINUES, REPLACE THE OIL TEMPERATURE BULB (MM 79-34-01/401).
IF THE PROBLEM CONTINUES, REPLACE THE FUEL-FILTER-HOUSING-AND-FUEL-COOLED-OIL-COOLER-(FCOC)(MM 79-21-01/401).
IF THE PROBLEM CONTINUES, REMOVE THE L (R) EICAS COMPUTER, M10181 (M10182) (MM 31-41-02/401).
EXAMINE AND REPAIR THE CIRCUIT BETWEEN CONNECTOR D1322 AND THE EICAS, CONNECTORS D321D AND D319D, PINS H9 AND H10 (D319A AND D321A, PINS H10 AND H11) (WDM 71-51-11; 79-34-11).
INSTALL THE EICAS COMPUTER.
IF THE PROBLEM CONTINUES, REPLACE THE ENGINE (MM 71-00-02/501). 1

- 1 DO THE PROCEDURE IN 71-05-00, FIG. 111.
- 2 ENGINES WITHOUT RR SB 79-9387

Oil Temp is High
Figure 105



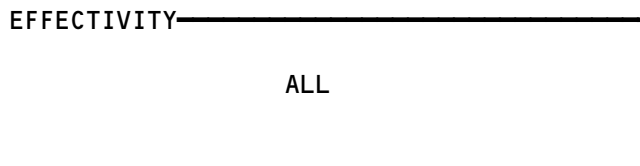
79-34-00

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OIL FILTER BYPASS WARNING SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
COMPUTERS - (31-41-00/101) EICAS L, M10181 EICAS R, M10182				
SWITCH - PRESSURE OIL FILTER DIFFERENTIAL PRESSURE, S10131	--	2	413AL,423AL,414AR,424AR	79-35-01
SWITCH - SCAVENGE OIL FILTER DIFFERENTIAL PRESSURE, S10132	--	2	413AL,423AL,414AR,424AR	79-35-02

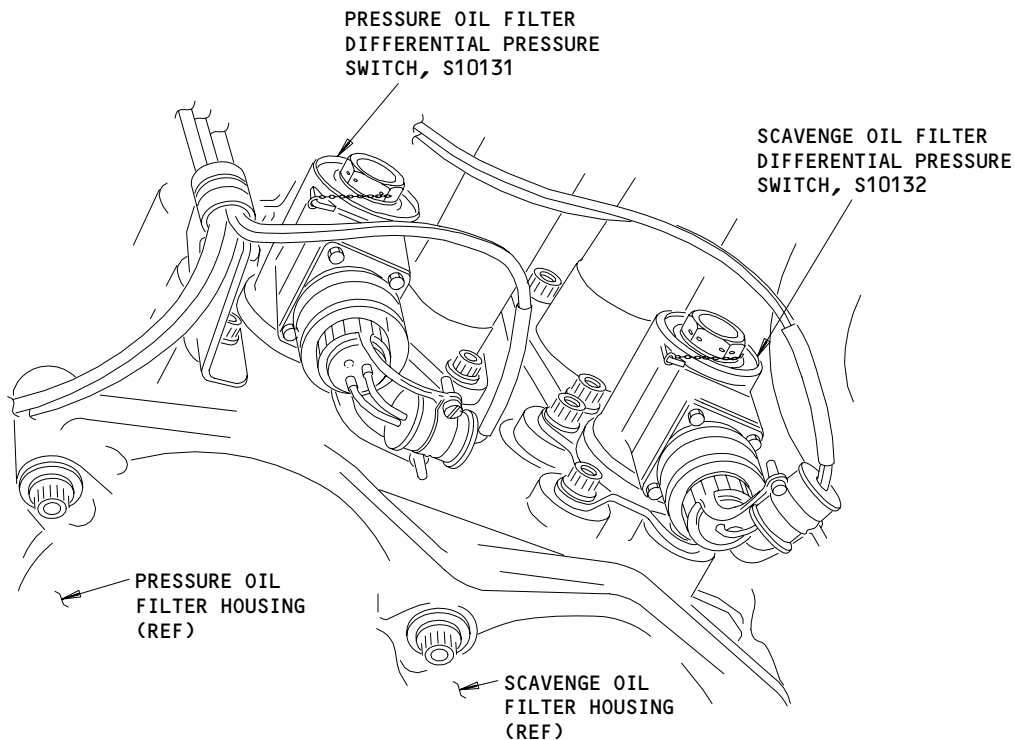
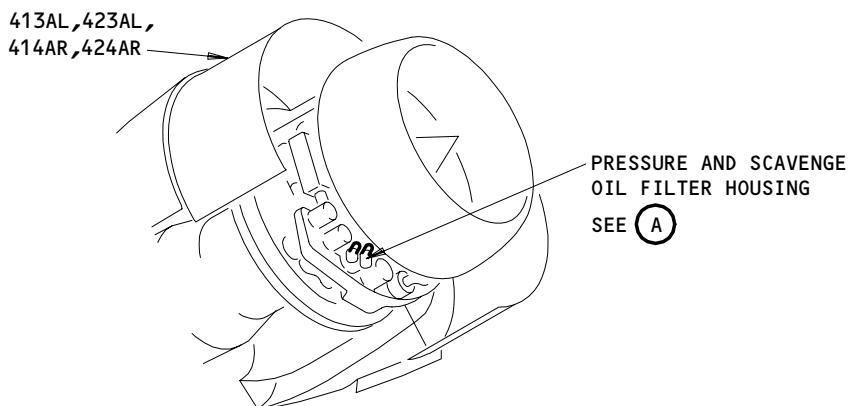
Oil Filter Bypass Warning System - Component Index
Figure 101



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PRESSURE AND SCAVENGE
OIL FILTER HOUSING

(A)

Oil Filter Bypass Warning System - Component Location
Figure 102

EFFECTIVITY	
	ALL

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