

Scandinavian Airlines System

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CHAPTER 72 - ENGINE

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ENGINE

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
BLADES - 1ST-STAGE (FAN), LEFT ENG	1	38	LPC HUB	72-31-02
BLADES - 1ST-STAGE (FAN), RIGHT ENG	1	38	LPC HUB	72-31-02
CASE - FRONT FAN, LEFT ENG	3	1	413,414, FAN COWL PANELS	72-33-01
CASE - FRONT FAN, RIGHT ENG	3	1	423,424, FAN COWL PANELS	72-33-01
CONE - INLET, LEFT ENG	2	1	LPC HUB	72-31-01
CONE - INLET, RIGHT ENG	2	1	LPC HUB	72-31-01
COUPLING - STARTER DRIVE, LEFT ENG	6,8	1	415,416, THRUST REVERSER HALVES, MAIN GEARBOX, AFT FACE	72-61-09
COUPLING - STARTER DRIVE, RIGHT ENG	6,8	1	425,426, THRUST REVERSER HALVES, MAIN GEARBOX, AFT FACE	72-61-09
COVER - NO. 4 BEARING COMPARTMENT, LEFT ENG	9	1	419, TURBINE EXHAUST SLEEVE, TURBINE EXHAUST CASE, AFT FACE	72-54-04
COVER - NO. 4 BEARING COMPARTMENT, RIGHT ENG	9	1	429, TURBINE EXHAUST SLEEVE, TURBINE EXHAUST CASE, AFT FACE	72-54-04
FAIRING - FAN EXIT, LEFT ENG	2	1	LPC	72-31-03
FAIRING - FAN EXIT, RIGHT ENG	2	1	LPC	72-31-03
GEARBOX - ANGLE, LEFT ENG	5	1	415,416, THRUST REVERSER HALVES, INTERMEDIATE CASE	72-62-01
GEARBOX - ANGLE, RIGHT ENG	5	1	425,426, THRUST REVERSER HALVES, INTERMEDIATE CASE	72-62-01
GEARBOX - ANGLE, LEFT ENG	5	1	435,436, THRUST REVERSER HALVES, INTERMEDIATE CASE	72-62-01
GEARBOX - ANGLE, RIGHT ENG	5	1	445,446, THRUST REVERSER HALVES, INTERMEDIATE CASE	72-62-01
HOUSING - MAIN OIL FILTER, LEFT ENG	5	1	415,416, THRUST REVERSER HALVES, MAIN GEARBOX, FWD FACE	72-61-11
HOUSING - MAIN OIL FILTER, RIGHT ENG	5	1	425,426, THRUST REVERSER HALVES, MAIN GEARBOX, FWD FACE	72-61-11
SEAL - DEOILER DRIVE OIL, LEFT ENG	6,7	1	415, LEFT THRUST REVERSER HALF, MAIN GEARBOX, AFT FACE	72-61-02
SEAL - DEOILER DRIVE OIL, RIGHT ENG	6,7	1	425, LEFT THRUST REVERSER HALF, MAIN GEARBOX, AFT FACE	72-61-02
SEAL - EEC ALTERNATOR DRIVE OIL, LEFT ENG	6,7	1	415,416, THRUST REVERSER HALVES, MAIN GEARBOX, AFT FACE	72-61-05
SEAL - EEC ALTERNATOR DRIVE OIL, RIGHT ENG	6,7	1	425,426, THRUST REVERSER HALVES, MAIN GEARBOX, AFT FACE	72-61-05
SEAL - FUEL PUMP DRIVE OIL, LEFT ENG	6,7	1	416, RIGHT THRUST REVERSER HALF, MAIN GEARBOX, FWD FACE	72-61-06
SEAL - FUEL PUMP DRIVE OIL, RIGHT ENG	6,7	1	426, RIGHT THRUST REVERSER HALF, MAIN GEARBOX, FWD FACE	72-61-06
SEAL - HYDRAULIC PUMP DRIVE OIL, LEFT ENG	6,7	1	416, RIGHT THRUST REVERSER HALF, MAIN GEARBOX, AFT FACE	72-61-07
SEAL - HYDRAULIC PUMP DRIVE OIL, RIGHT ENG	6,7	1	426, RIGHT THRUST REVERSER HALF, MAIN GEARBOX, AFT FACE	72-61-07
SEAL - INTEGRATED DRIVE GENERATOR (IDG) DRIVE OIL, LEFT ENG	6,8	1	415,416, THRUST REVERSER HALVES, MAIN GEARBOX, AFT FACE	72-61-04
SEAL - INTEGRATED DRIVE GENERATOR (IDG) DRIVE OIL, RIGHT ENG	6,8	1	425,426, THRUST REVERSER HALVES, MAIN GEARBOX, AFT FACE	72-61-04
SEAL - STARTER DRIVE OIL, LEFT ENG	6,8	1	415,416, THRUST REVERSER HALVES, MAIN GEARBOX, AFT FACE	72-61-03
SEAL - STARTER DRIVE OIL, RIGHT ENG	6,8	1	425,426, THRUST REVERSER HALVES, MAIN GEARBOX, AFT FACE	72-61-03
SEGMENT - FAN EXIT LINER, LEFT ENG	4	8	415,416, THRUST REVERSER HALVES, INTERMEDIATE CASE	72-34-03
SEGMENT - FAN EXIT LINER, RIGHT ENG	4	8	425,426, THRUST REVERSER HALVES, INTERMEDIATE CASE	72-34-03
STATOR - 1ST-STAGE, LEFT ENG	2	1	LPC	72-31-04
STATOR - 1ST-STAGE, RIGHT ENG	2	1	LPC	72-31-04

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Figure 101

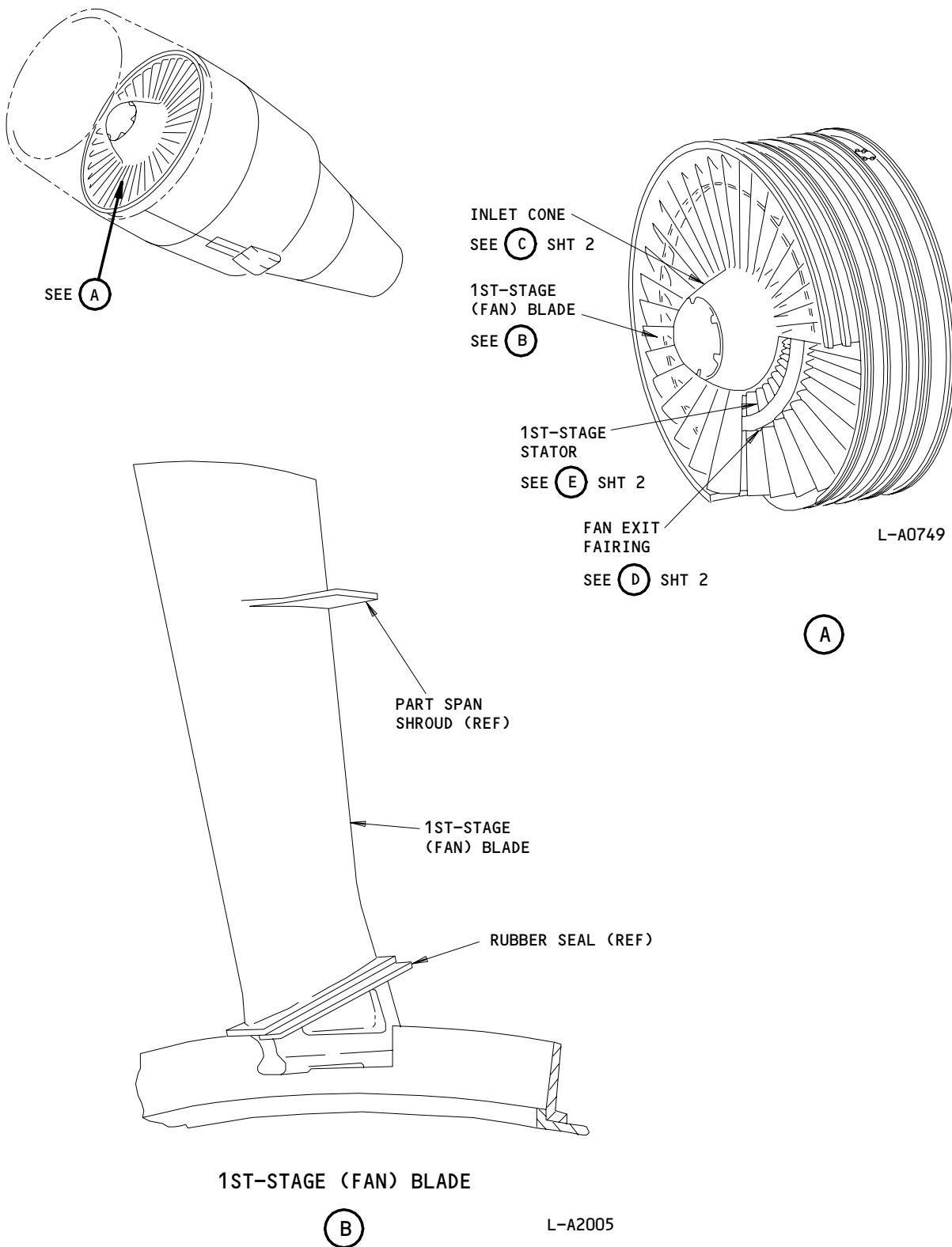
EFFECTIVITY

ALL

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NO1

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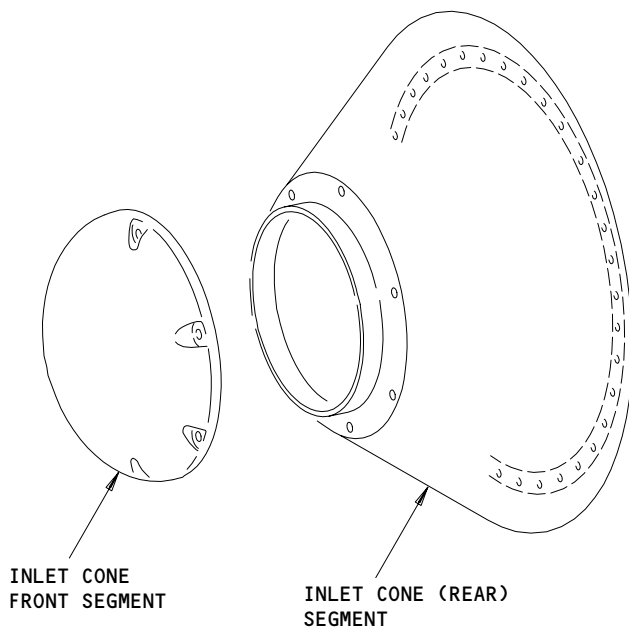
Component Location
Figure 102 (Sheet 1)

EFFECTIVITY	
	ALL

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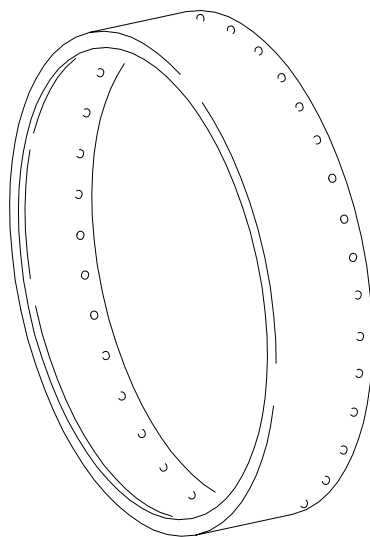
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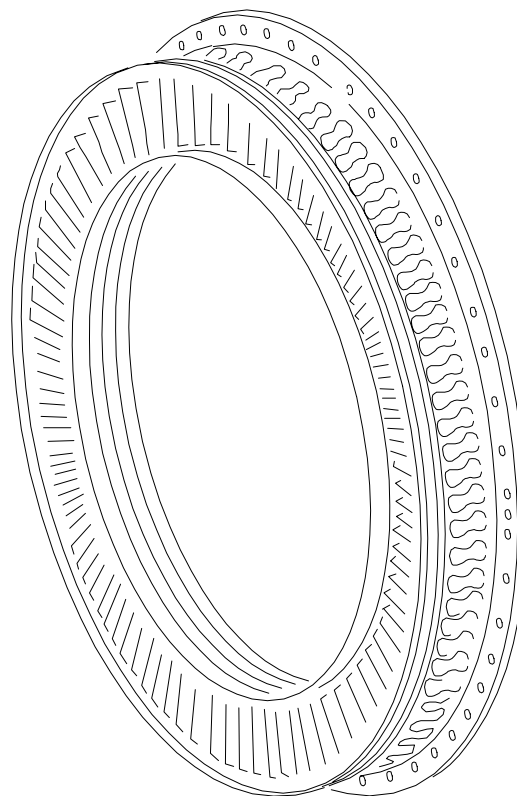
(C)

L-A0035



FAN EXIT FAIRING

(D)



1ST-STAGE STATOR

(E)

L-A0731
0887

Component Location (Details from Sht 1)
Figure 102 (Sheet 2)

EFFECTIVITY

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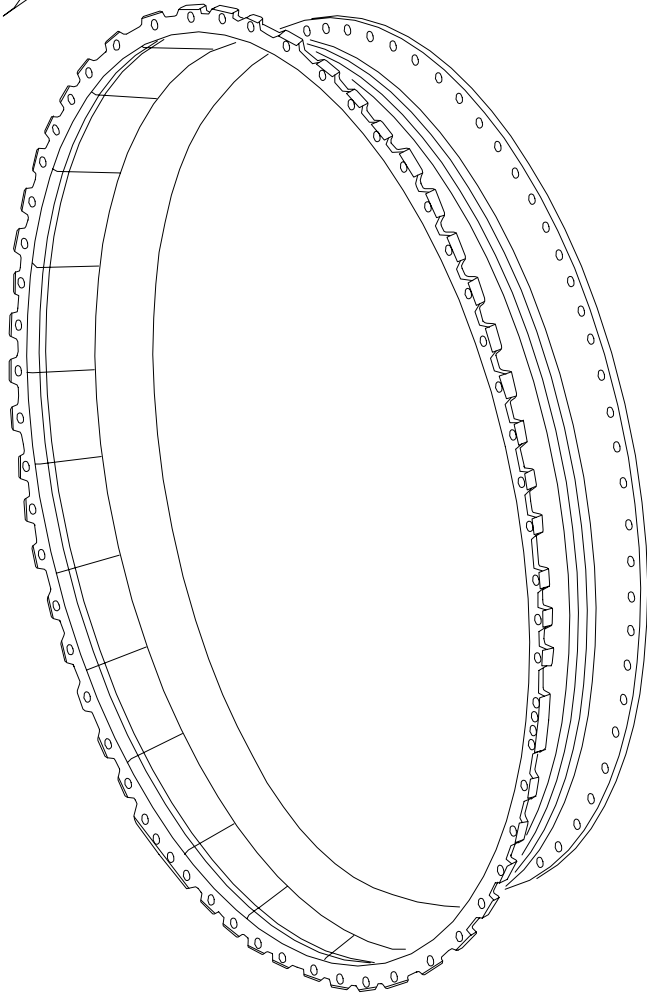
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LEFT FAN COWL PANEL
413 (LEFT ENG)
423 (RIGHT ENG)

RIGHT FAN COWL PANEL
414 (LEFT ENG)
424 (RIGHT ENG)

FRONT FAN CASE
SEE (F)



FRONT FAN CASE
(F)

Component Location
Figure 102 (Sheet 3)

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LEFT THRUST REVERSER HALF
415 (LEFT ENG)
425 (RIGHT ENG)

RIGHT THRUST REVERSER HALF
416 (LEFT ENG)
426 (RIGHT ENG)

INTERMEDIATE
CASE
SEE (G)

FAN EXIT LINER
SEGMENT NO. 8

FAN EXIT LINER
SEGMENT NO. 1

FAN EXIT LINER
SEGMENT NO. 7

INTERMEDIATE
CASE

NO. 3 BEARING
BUFFER AIR
COOLER (REF)

FWD ←

FAN EXIT LINER
SEGMENT NO. 6

FAN EXIT LINER
SEGMENT NO. 2

FAN EXIT LINER
SEGMENT NO. 5

FAN EXIT LINER
SEGMENT NO. 3

FAN EXIT LINER
SEGMENT NO. 4

INTERMEDIATE CASE

(G)

L-A2768

Component Location
Figure 102 (Sheet 4)

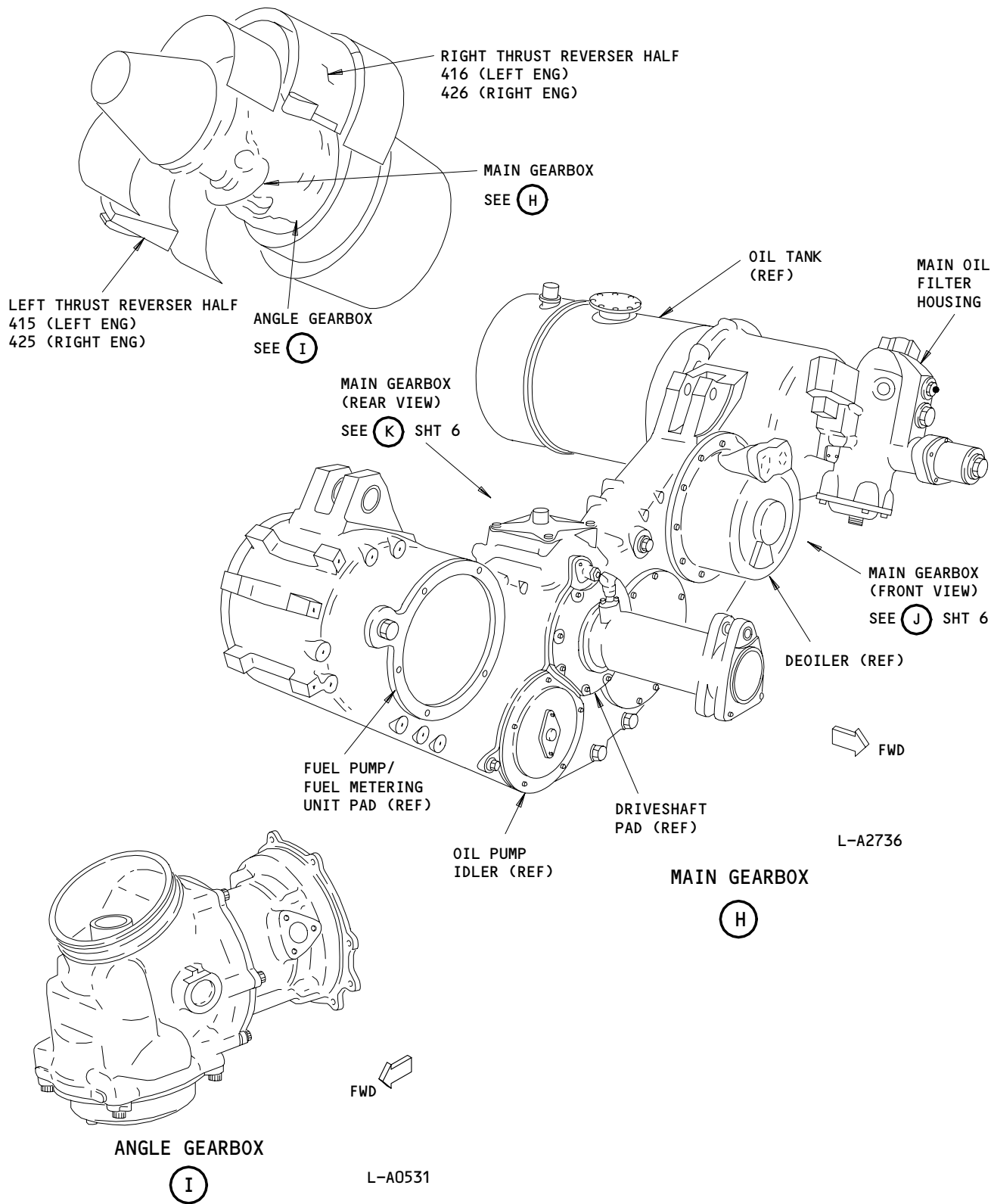
EFFECTIVITY

ALL

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N01

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Component Location
Figure 102 (Sheet 5)

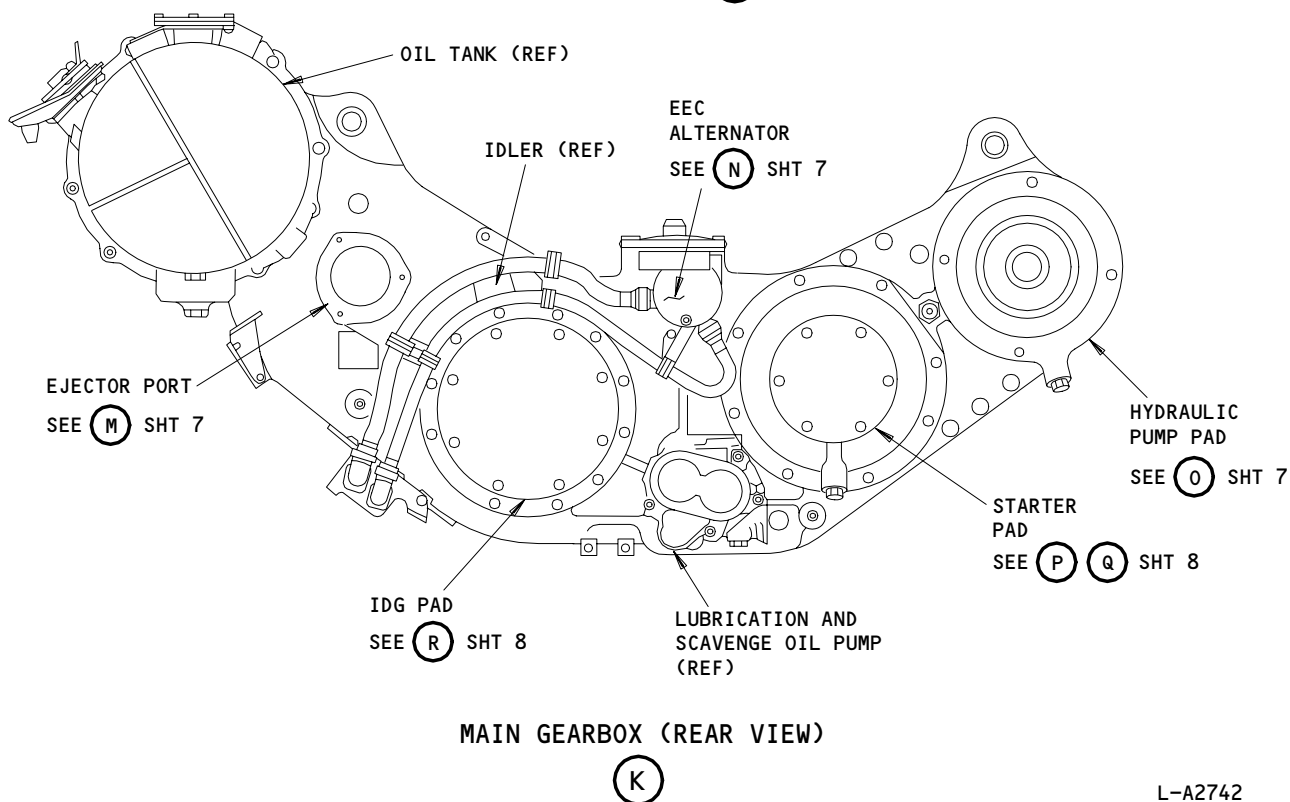
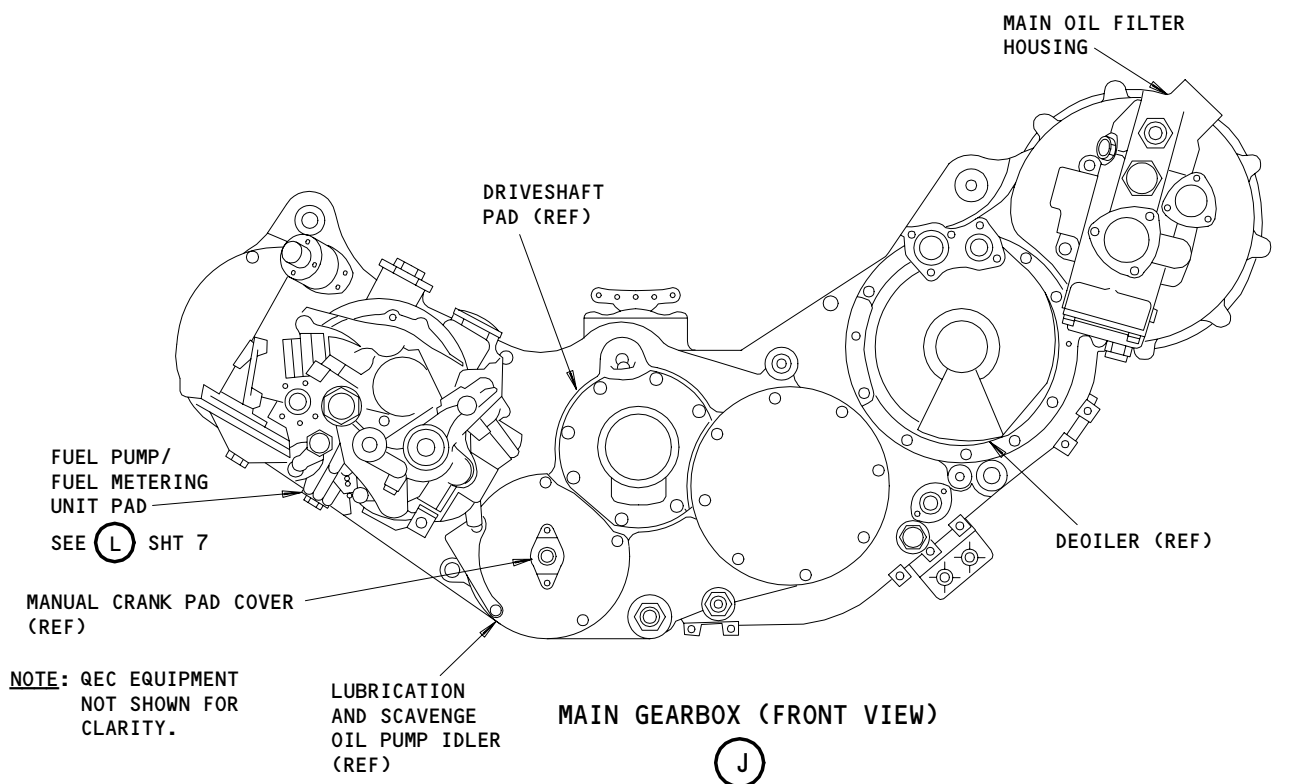
EFFECTIVITY

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L-A2742

Component Location (Details from Sht 5)
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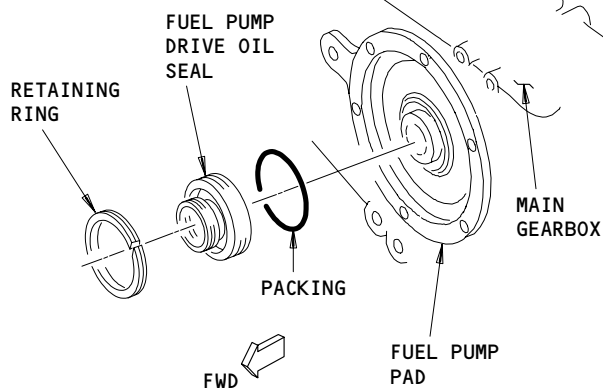
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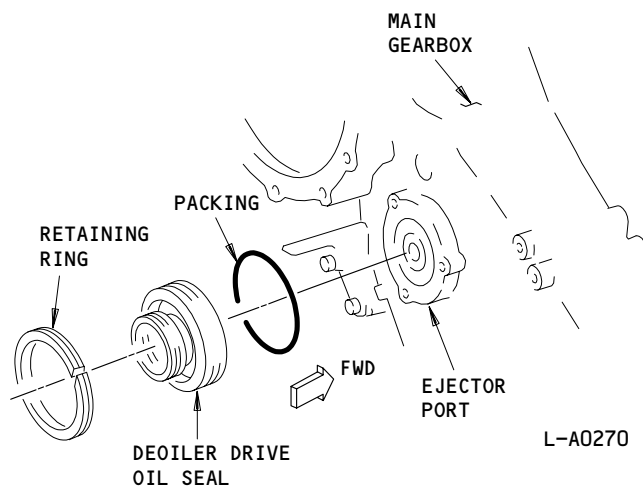
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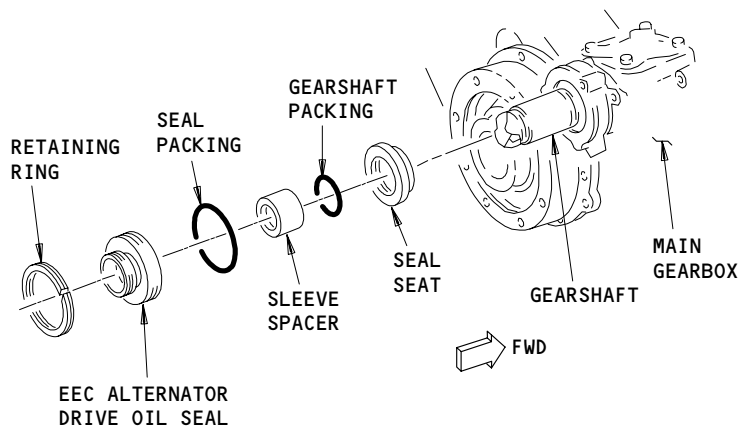
FUEL PUMP/FUEL METERING UNIT PAD

(L)



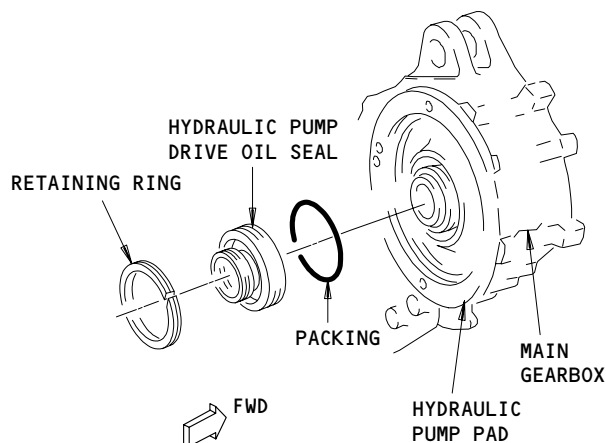
EJECTOR PORT

(M)



NOTE: EEC ALTERNATOR SHOWN REMOVED.

(N)



HYDRAULIC PUMP PAD

(O)

Component Location (Details from Sht 6)
Figure 102 (Sheet 7)

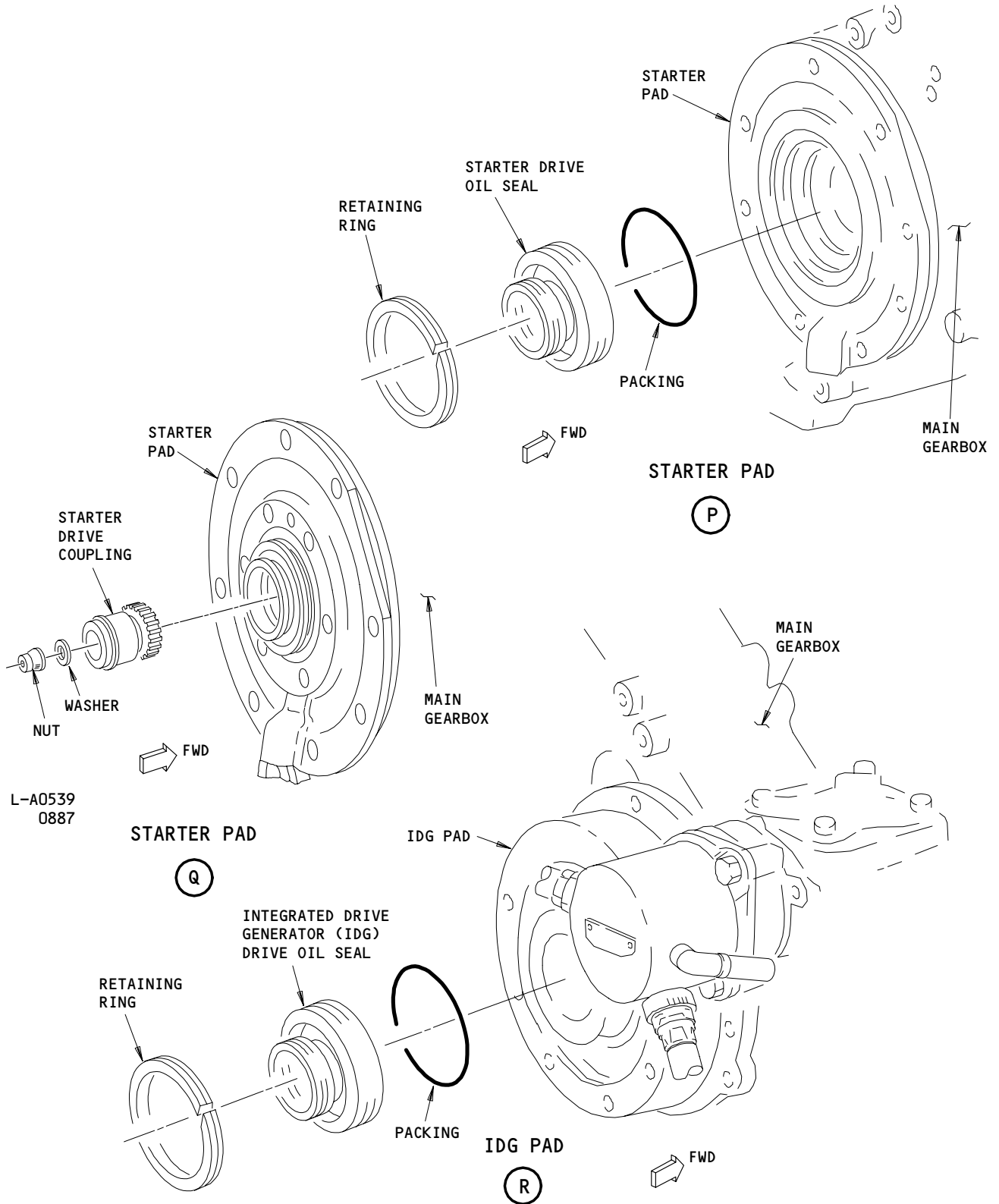
EFFECTIVITY

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Component Location (Details from Sht 6)
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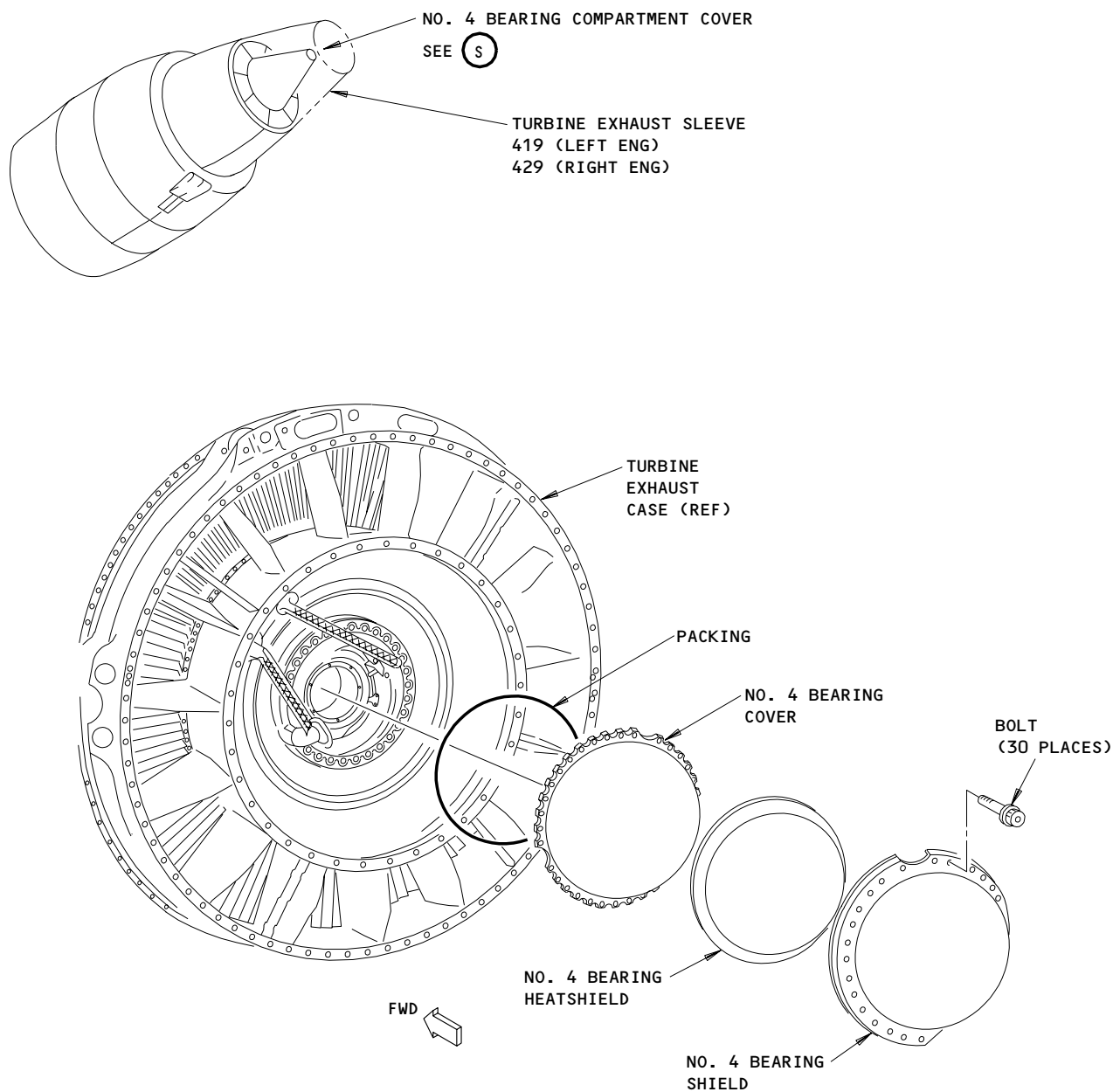
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NO. 4 BEARING COMPARTMENT COVER

(S)

L-A4493

Component Location
Figure 102 (Sheet 9)

EFFECTIVITY

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COMPRESSOR SECTION

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
BLADES - 1ST-STAGE FAN	1	40	LEFT ENGINE, 1ST-STAGE FAN	72-31-02
BLADES - 1ST-STAGE FAN	1	40	RIGHT ENGINE, 1ST-STAGE FAN	72-31-02
BLADES - 1.6-STAGE	2	108	LEFT ENGINE	72-31-05
BLADES - 1.6-STAGE	2	108	RIGHT ENGINE	72-31-05
CASE - FRONT FAN	2	1	416AR, LEFT ENGINE	72-33-01
CASE - FRONT FAN	2	1	426AR, RIGHT ENGINE	72-33-01
CASE AND VANE - FAN EXIT	3	1	415AL,416AR, LEFT ENGINE	72-33-02
CASE AND VANE - FAN EXIT	3	1	425AL,426AR, RIGHT ENGINE	72-33-02
CONE - INLET	1,2	1	LEFT ENGINE	72-31-01
CONE - INLET	1,2	1	RIGHT ENGINE	72-31-01
FAIRING - FAN EXIT	2	1	LEFT ENGINE	72-31-03
FAIRING - FAN EXIT	2	1	RIGHT ENGINE	72-31-03
LINER SEGMENTS - FAN EXIT (REAR INNER)	3	8	415AL,416AR, LEFT ENGINE	72-34-03
LINER SEGMENTS - FAN EXIT (REAR INNER)	3	8	425AL,426AR, RIGHT ENGINE	72-34-03
LINER SEGMENTS - FAN EXIT (REAR OUTER)	3	9	415AL,416AR, LEFT ENGINE	72-34-01
LINER SEGMENTS - FAN EXIT (REAR OUTER)	3	9	425AL,426AR, RIGHT ENGINE	72-34-01
STATOR - 1ST-STAGE	2	1	LEFT ENGINE	72-31-04
STATOR - 1ST-STAGE	2	1	RIGHT ENGINE	72-31-04
STRUT AND FAIRINGS - INTERMEDIATE CASE	3	8	415AL,416AR, LEFT ENGINE	72-34-05
STRUT AND FAIRINGS - INTERMEDIATE CASE	3	8	425AL,426AR, RIGHT ENGINE	72-34-05

Compressor Section - Component Index
Figure 101

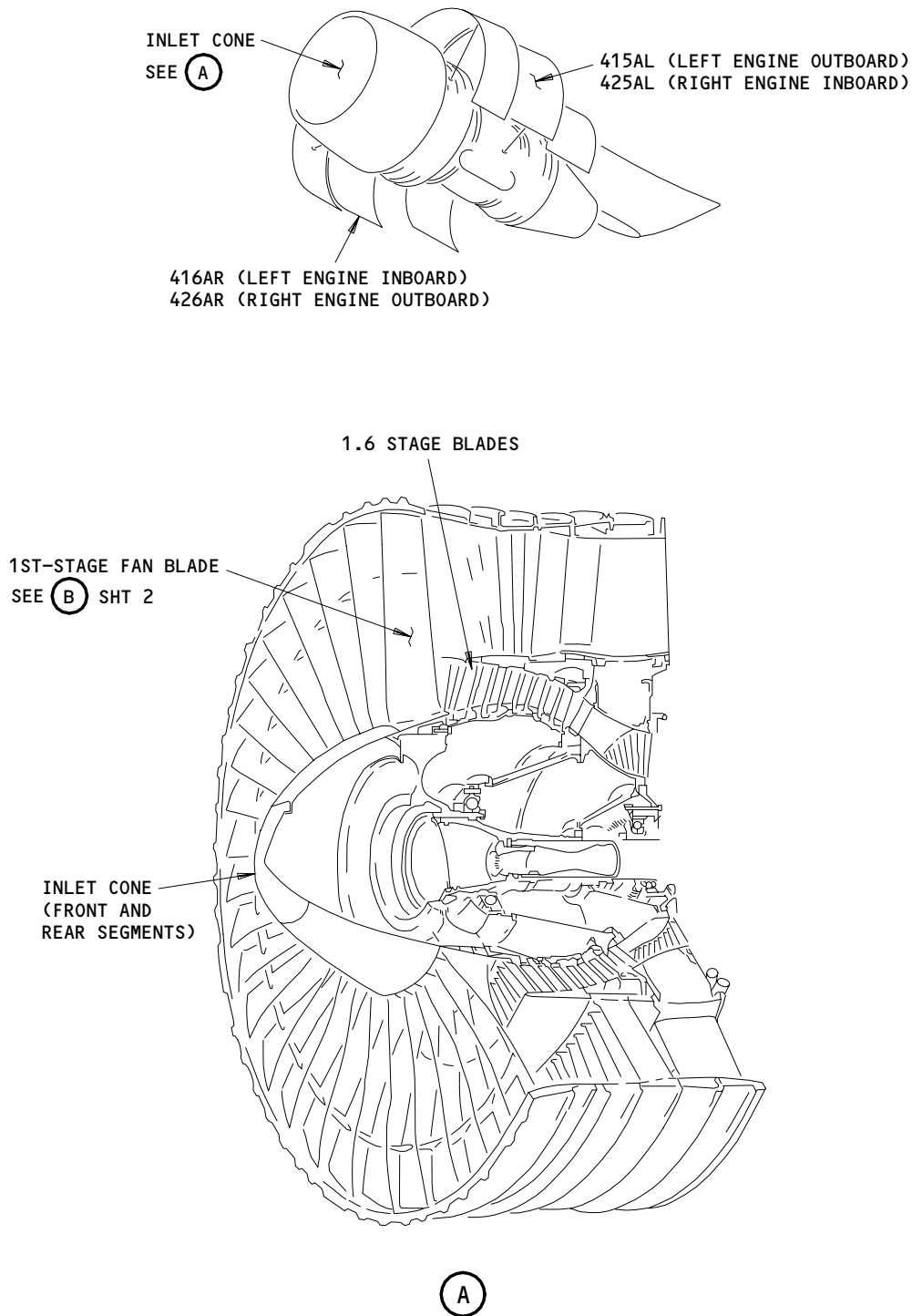
EFFECTIVITY

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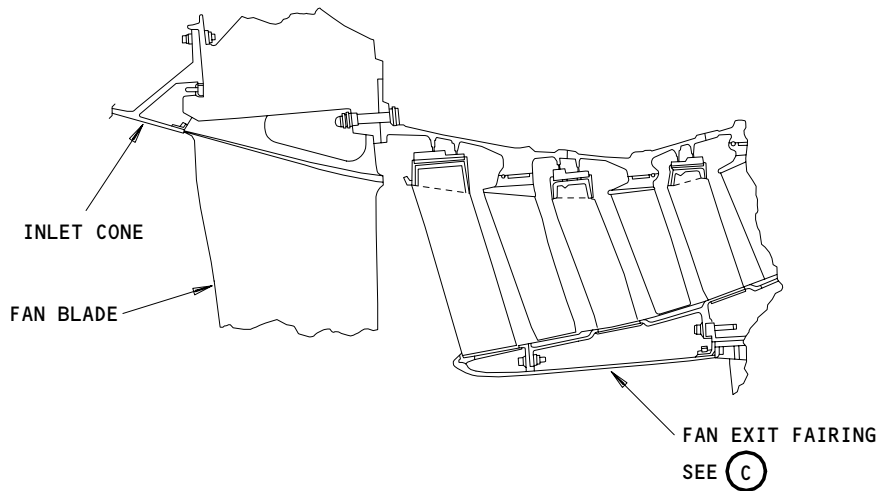
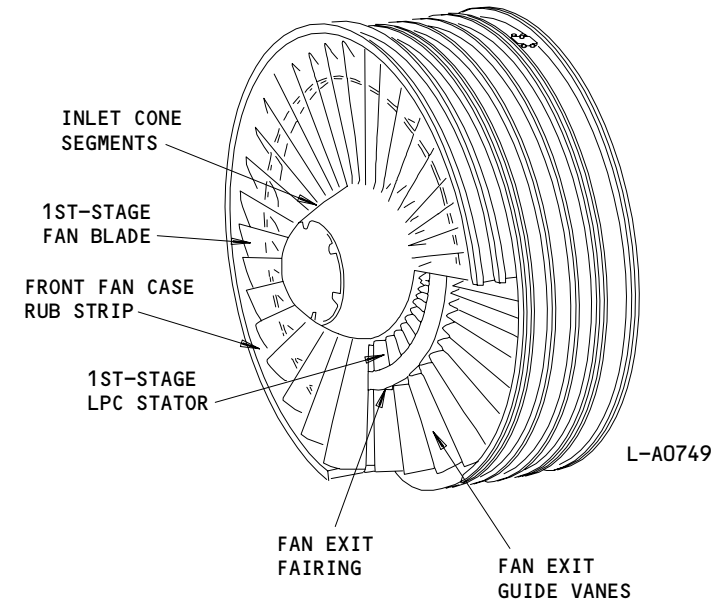
Compressor Section - Component Location
Figure 102 (Sheet 1)

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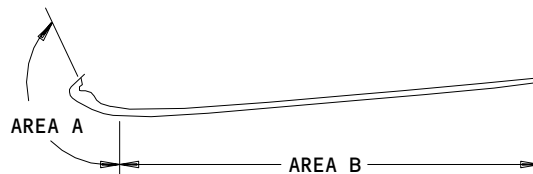
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(B) FROM SHT 1



(C)

Compressor Section - Component Location
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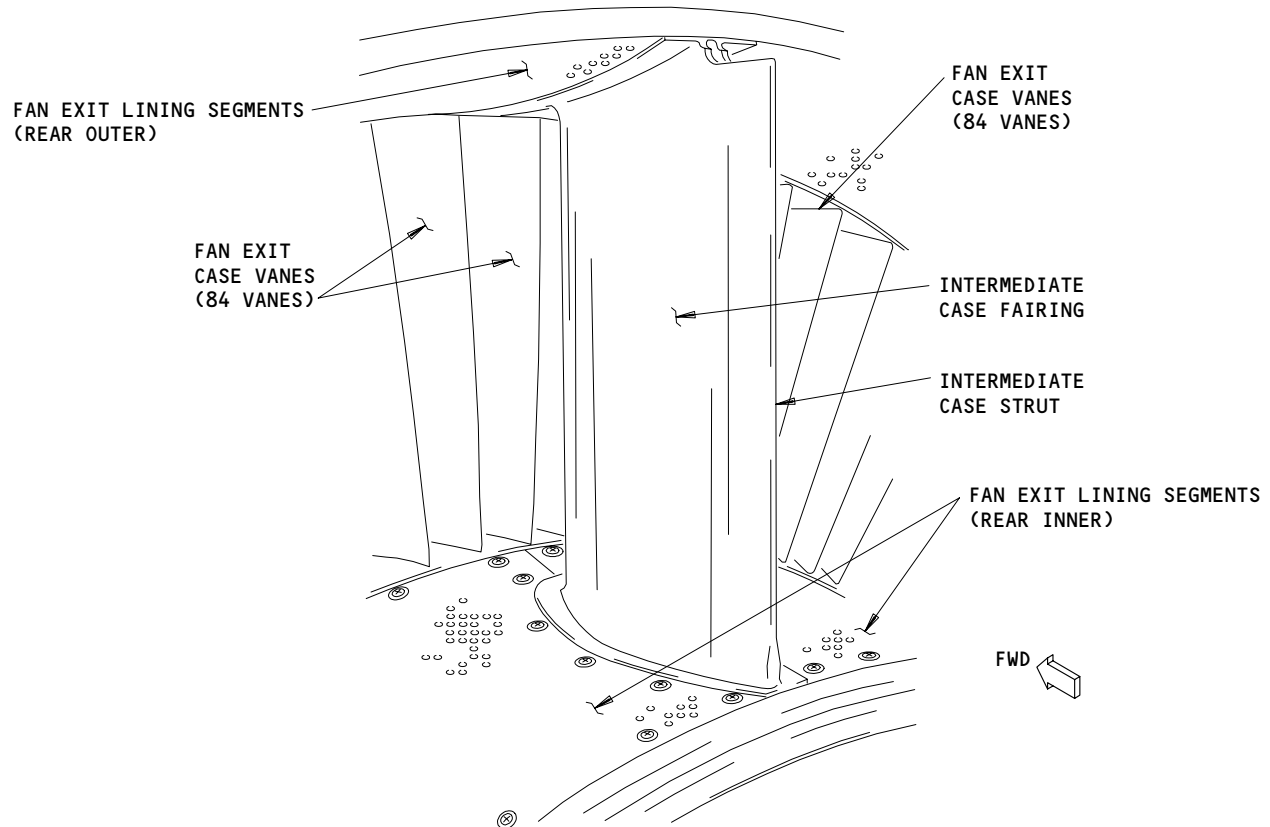
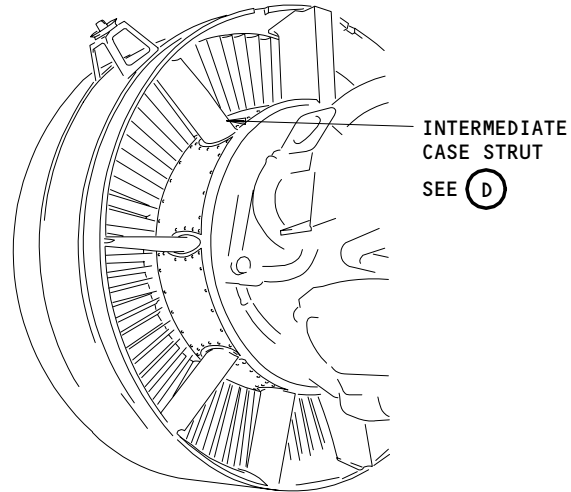
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INTERMEDIATE CASE STRUT

(D)

Compressor Section - Component Location
Figure 102 (Sheet 3)

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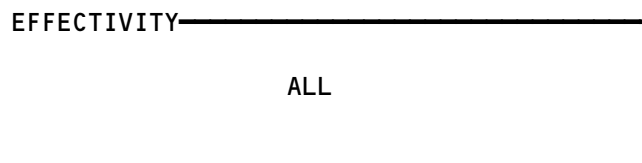
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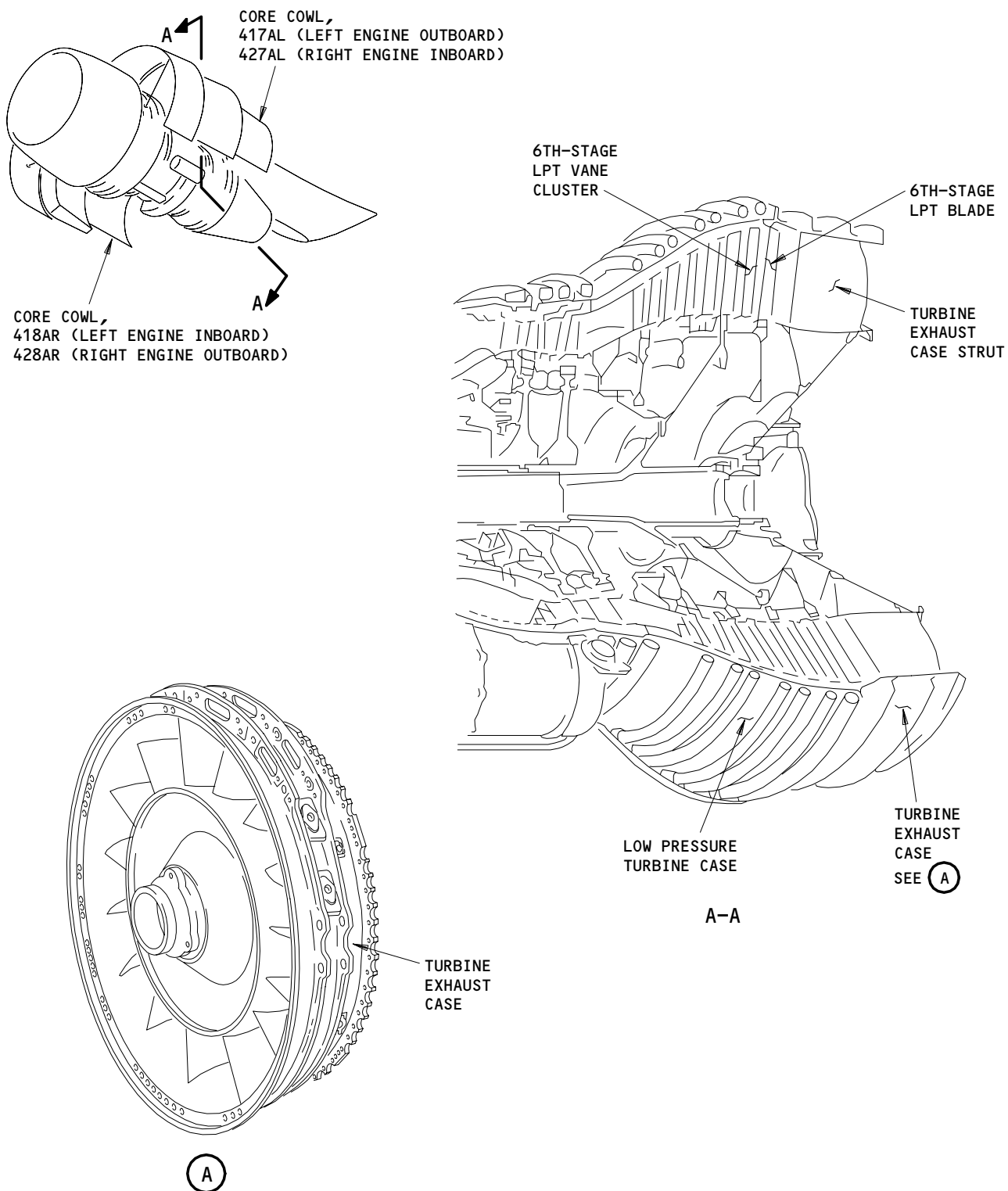
TURBINE SECTION

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
BLADES - 6TH-STAGE TURBINE		128	417AL,418AR, CORE COWL, LEFT ENGINE	72-53-01
BLADES - 7TH-STAGE TURBINE		128	427AL,428AR, CORE COWL, RIGHT ENGINE	72-53-01
VANE CLUSTERS - 6TH-STAGE TURBINE		36	417AL,418AR, CORE COWL, LEFT ENGINE	72-53-01
VANE CLUSTERS - 6TH-STAGE TURBINE		36	427AL,428AR, CORE COWL, RIGHT ENGINE	72-53-01

 Turbine Section - Component Index
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Turbine Section - Component Location
Figure 102

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ACCESSORY DRIVES

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
ASSEMBLY - EEC ALTERNATOR DRIVE GEARSHAFT AND BEARINGS	1	1	417AL,418AR, LEFT ENGINE MAIN GEARBOX	72-61-14
ASSEMBLY - EEC ALTERNATOR DRIVE GEARSHAFT AND BEARINGS	1	1	427AL,418AR, RIGHT ENGINE MAIN GEARBOX	72-61-14
COUPLING - STARTER DRIVE	1	1	418AR, LEFT ENGINE, MAIN GEARBOX	72-61-09
COUPLING - STARTER DRIVE	1	1	428AR, RIGHT ENGINE, MAIN GEARBOX	72-61-09
GEARBOX - ANGLE	2	1	415AL,416AR, LEFT ENGINE	72-62-01
GEARBOX - ANGLE	2	1	425AL,426AR, LEFT ENGINE	72-62-01
HOUSING - MAIN OIL FILTER	1,2	1	415AL, LEFT ENGINE	72-61-11
HOUSING - MAIN OIL FILTER	1,2	1	425AL, RIGHT ENGINE	72-61-11
SEAL - DEOILER DRIVE OIL	1	1	417AL, LEFT ENGINE, MAIN GEARBOX	72-61-02
SEAL - DEOILER DRIVE OIL	1	1	427AL, RIGHT ENGINE, MAIN GEARBOX	72-61-02
SEAL - EEC ALTERNATOR DRIVE OIL	1	1	417AL,418AR, LEFT ENGINE, MAIN GEARBOX	72-61-05
SEAL - EEC ALTERNATOR DRIVE OIL	1	1	427AL,428AR, RIGHT ENGINE, MAIN GEARBOX	72-61-05
SEAL - FUEL PUMP DRIVE OIL	1	1	416AR,418AR, LEFT ENGINE, MAIN GEARBOX	72-61-06
SEAL - FUEL PUMP DRIVE OIL	1	1	426AR,428AR, RIGHT ENGINE, MAIN GEARBOX	72-61-06
SEAL - HYDRAULIC PUMP REAR DRIVE OIL	1	1	418AR, LEFT ENGINE, MAIN GEARBOX	72-61-07
SEAL - HYDRAULIC PUMP REAR DRIVE OIL	1	1	428AR, RIGHT ENGINE, MAIN GEARBOX	72-61-07
SEAL - INTEGRATED DRIVE GENERATOR (IDG) DRIVE OIL	1	1	417AL,418AR, LEFT ENGINE, MAIN GEARBOX	72-61-04
SEAL - INTEGRATED DRIVE GENERATOR (IDG) DRIVE OIL	1	1	427AL,428AR, RIGHT ENGINE, MAIN GEARBOX	72-61-04
SEAL - STARTER DRIVE OIL	1	1	418AR, LEFT ENGINE, MAIN GEARBOX	72-61-03
SEAL - STARTER DRIVE OIL	1	1	428AR, RIGHT ENGINE, MAIN GEARBOX	72-61-03

Accessory Drives - Component Index
Figure 101

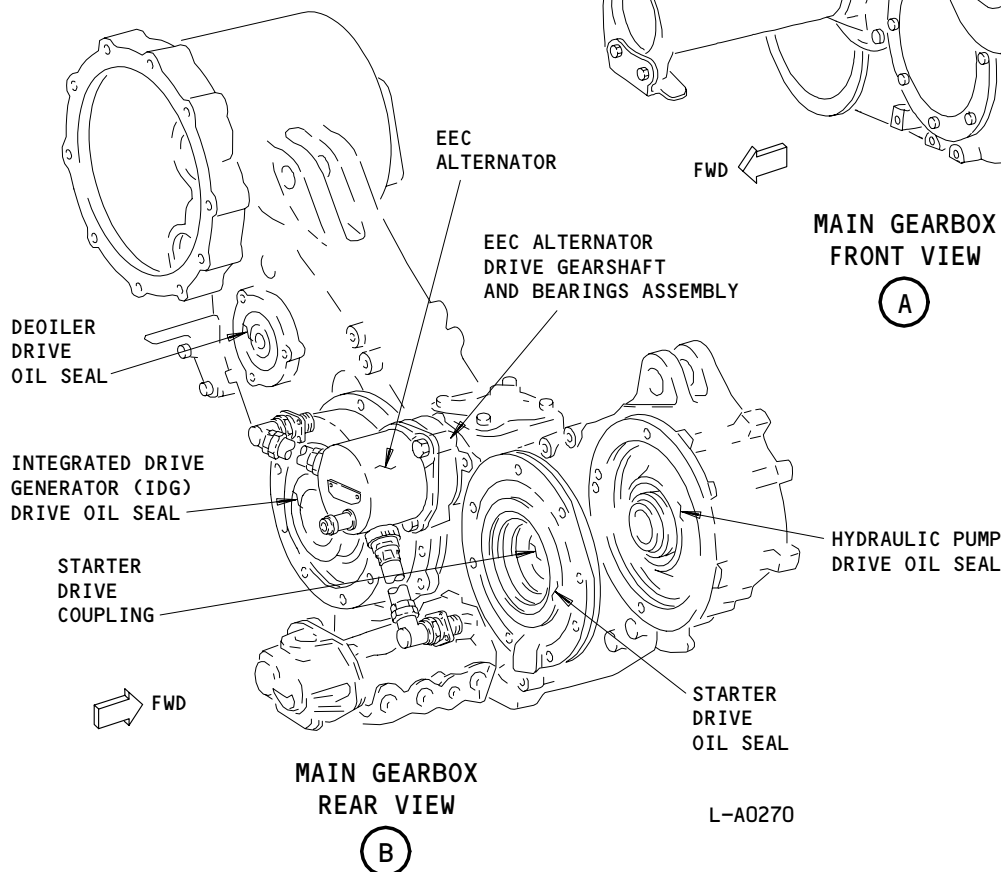
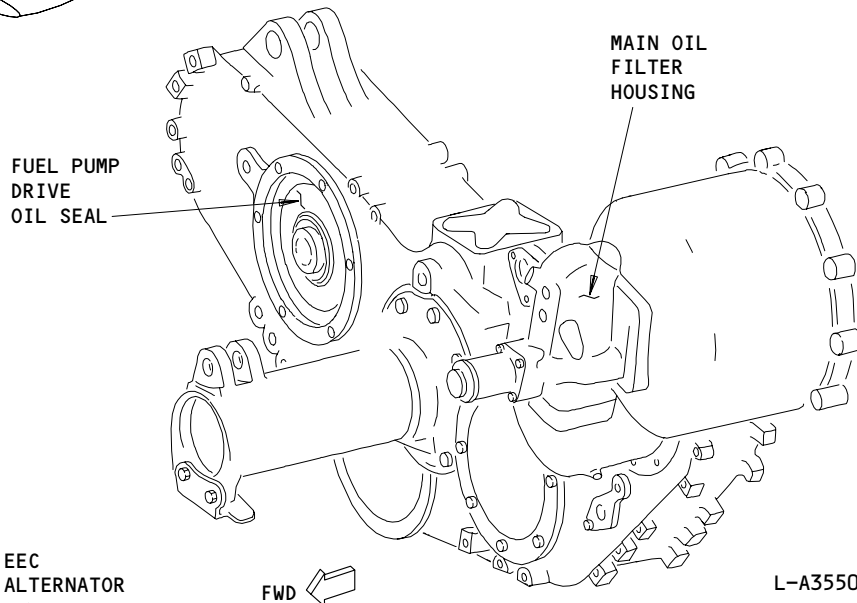
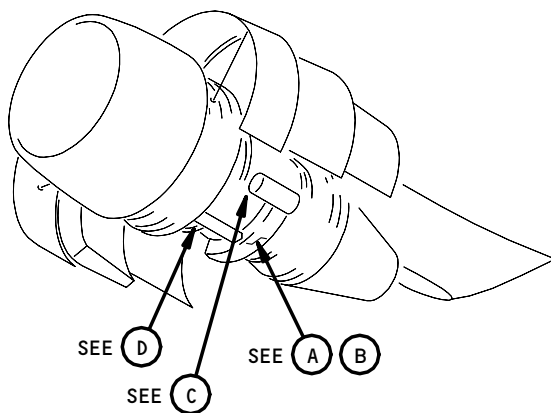
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Accessory Drives - Component Location
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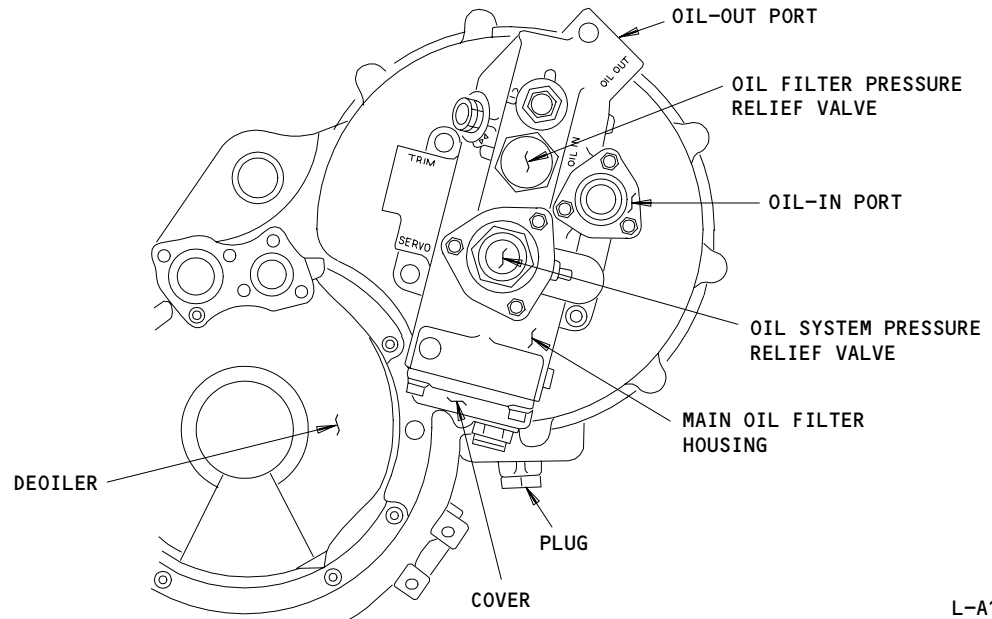
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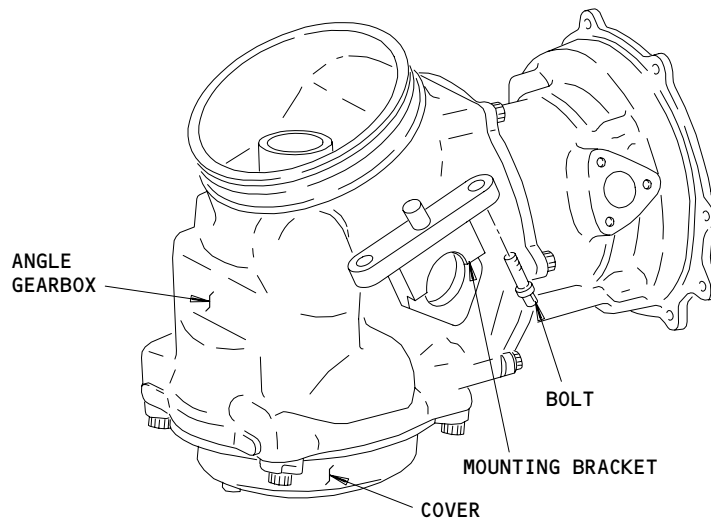
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L-A1885
0587

MAIN OIL FILTER HOUSING

(C)



ANGLE GEARBOX

(D)

Component Location
Figure 102 (Sheet 2)

EFFECTIVITY

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HIGH, LOW, OR
FLUCTUATING OIL
PRESSURE INDICATION,
ENGINE "OIL FILTER"
MESSAGE DISPLAYED
THEN DISAPPEARED
WITH THRUST
REDUCTION OR MESSAGE
DISAPPEARED ONLY
AFTER ENG SHUTDOWN

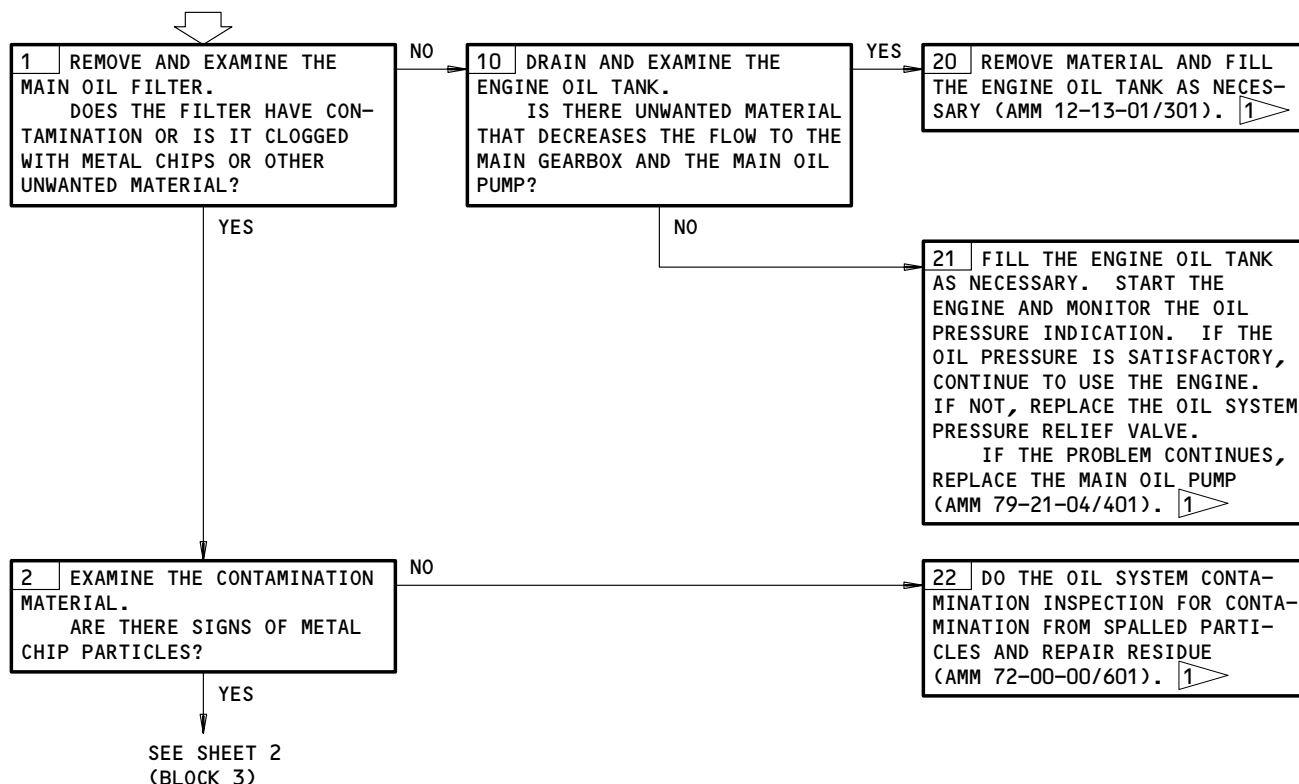
PREREQUISITES

MAKE SURE THIS SYSTEM WILL OPERATE:
EICAS (AMM 31-41-00/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11L9, 11L36

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)

CONSUMABLE MATERIALS:
B00192 SOLVENT - PWA P11-027



1 DO THE EICAS AUTO EVENT MESSAGE VERIFICATION/ERASE PROCEDURE (FIM 71-08-00/101).

High, Low, or Fluctuating Oil Pressure Indication, Engine OIL FILTER
Message Displayed then Disappeared with Thrust Reduction or Message
Disappeared Only After Eng Shutdown
Figure 103 (Sheet 1)

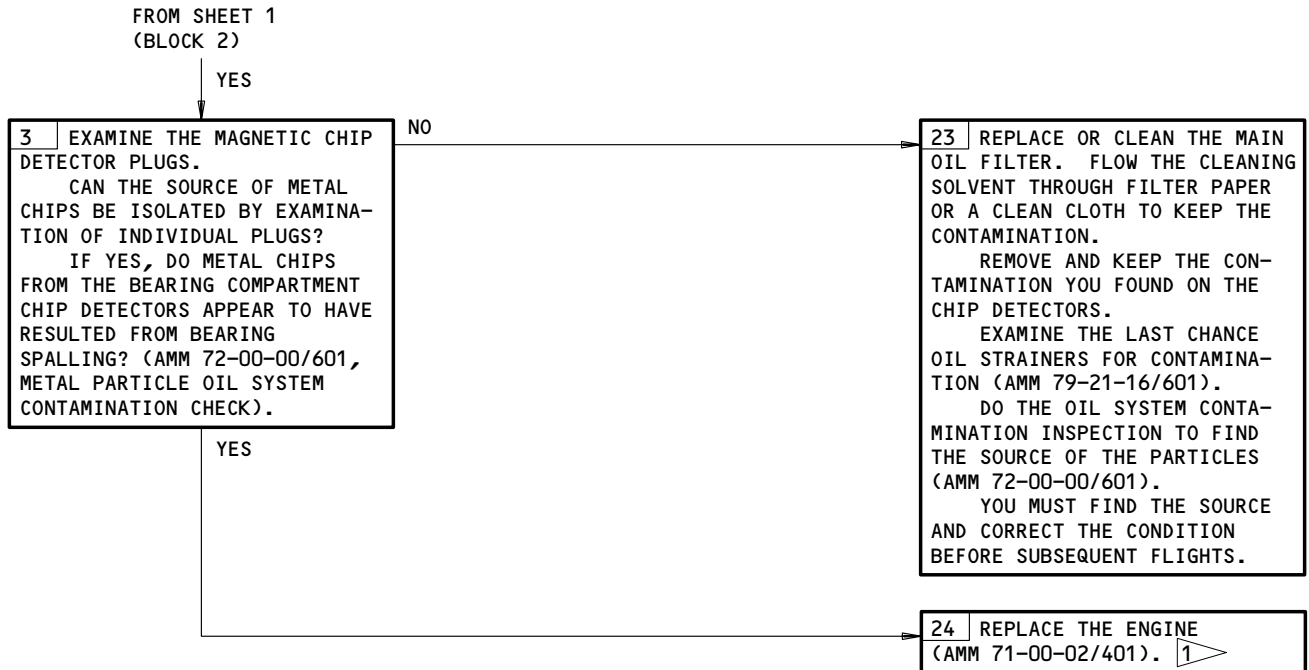
EFFECTIVITY

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High, Low, or Fluctuating Oil Pressure Indication, Engine OIL FILTER Message Displayed then Disappeared with Thrust Reduction or Message Disappeared Only After Eng Shutdown
Figure 103 (Sheet 2)

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OIL PRESSURE
INDICATION FOLLOWS
THRUST LEVER
MOVEMENT



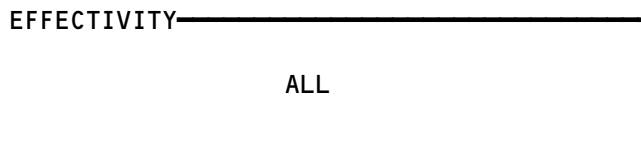
PREREQUISITES

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11L9,11L36

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)

1	REPLACE THE OIL SYSTEM PRESSURE RELIEF VALVE (AMM 79-21-07/401). DO THE EICAS AUTO EVENT MESSAGE VERIFICATION/ERASE PROCEDURE (FIM 71-08-00/101).
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Oil Pressure Indication Follows Thrust Lever Movement
Figure 104



72-60-00

N01

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