

Engine LLP

User guidance

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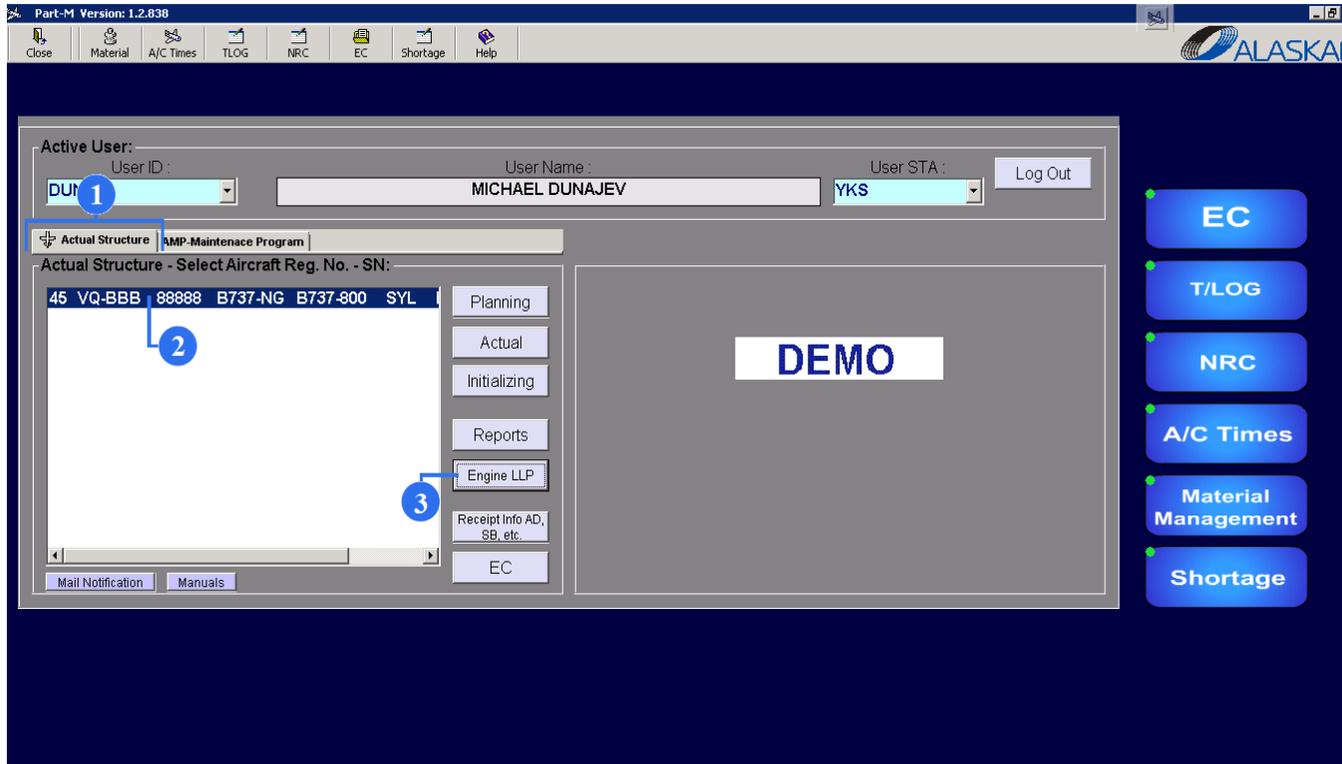
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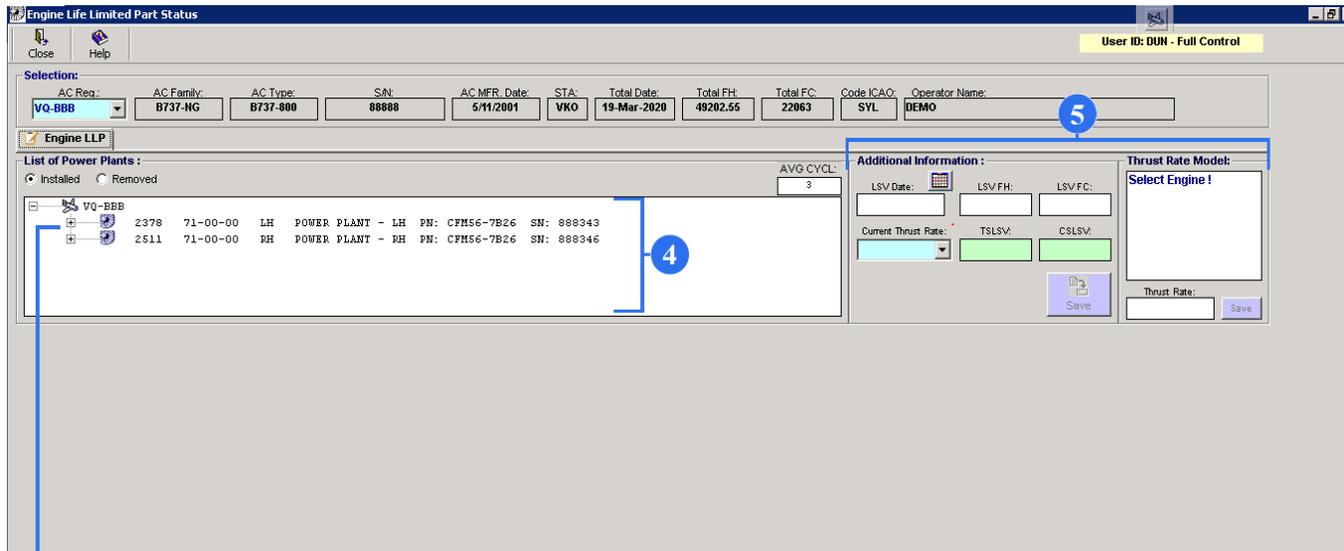
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1. LLP Overview



To open Engine LLP sub-module in the initial screen of the PART M module do these steps

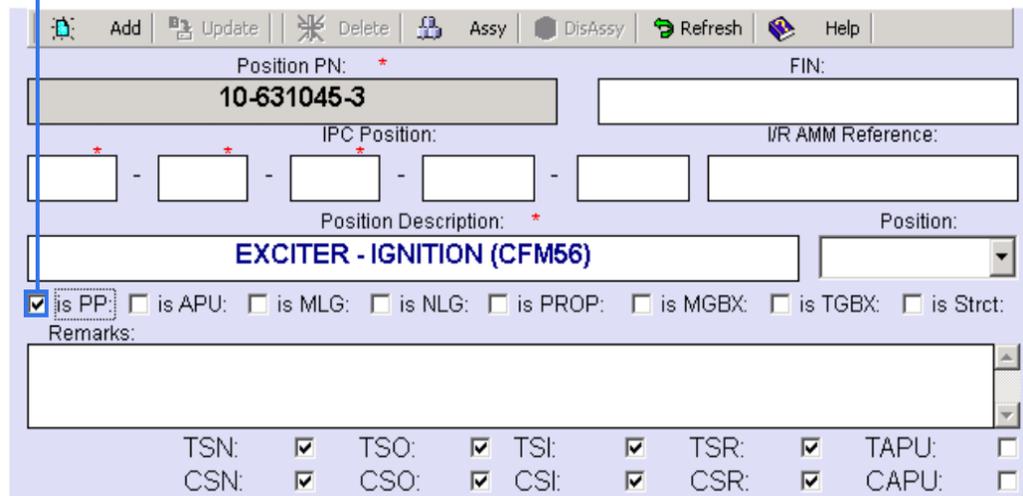
1. Click on Actual Structure tab.
2. Select Aircraft Registration.
3. Push Engine LLP button.



4. After Starting LLP Screen will show Initialized Power Plants for selected Aircraft.

NOTE: IPC Position in AMP must have check box “is PP” – checked! This is a trigger for system to Power Plant’s IPC Position definition.

5. The “Additional Information” Editor (3) and “Thrust Rate Models” (4) Editor will show as well.



Engine Life Limited Part Status

User ID: DUN - Full Control

Selection: AC Req: VQ-BBB, AC Family: B737-NG, AC Type: B737-800, SN: 88888, AC MFR. Date: 5/11/2001, STA: VKO, Total Date: 19-Mar-2020, Total FH: 49202.55, Total FC: 22063, Code ICAO: SVL, Operator Name: DEMO

Engine LLP

List of Power Plants:

- 2378 71-00-00 LH POWER PLANT - LH PN: CFH56-7B26 SN: 888343
 - Install Date: 2016-12-01 AC FH: 38675.36 AC FC: 19563
 - TSI: 10527.19 FH; TSN: 47980.19 FH; TSO: 28078.19 FH; TSR: 10527.19 FH;
 - CSI: 2500 FC; CSN: 21371 FC; CSO: 8878 FC; CSR: 2500 FC;
- 2511 71-00-00 POWER PLANT - RH PN: CFH56-7B26 SN: 888346

Additional Information:

LSV Date: 28-Nov-2016, LSV FH: 37453, LSV FC: 18871

Current Thrust Rate: -7B26, TSLSV: 10527.19, CSLSV: 2500

Thrust Rate Model: -7B22, -7B24, -7B26/3, -7B26, -7B27

Positions:

Sub-Asy: VQ-BBB

Power-Plant PN: CFH56-7B26 SN: 888343

LLP Status List:

ID	Module_No	Description	PN	Serial_Number	-7B22 Limit	-7B24 Limit	-7B26 Limit
320	221	SHAFT ASSY - FAN	335-006-414-0	DB688409		30000	30000
321	213	DISK - FAN ASSY (LLP-ENG)	340-000-420-0	DE164954		30000	30000
322	312	SHAFT - FRONT HPC ROTOR	1386M56P03	GMNQLFP6		20000	20000
323	313	SPOOL - HPC ROTOR STG 1 & 2	1558M31G04	GMNQLAP4		20000	20000
324	314	DISK - HPC STAGE 3	1590M56P01	XAEL8790		20000	20000
325	315	SPOOL - HPC ROTOR STAGE 4-9	1588M89G03	GMNQL7PT		20000	20000
326	316	SEAL - CDP ROTATING REAR AIR	1523M35P01	GFF5E1N0		20000	16800
327	521	SHAFT - HPT ROTOR FRONT	1873M73P01	XAEH2545		20000	17600
328	522	SEAL - ROTATING AIR HPT FRONT	1795M36P02	TMT6Y045		20000	17600
329	525	DISK - HPT ROTOR	1498M43P06	GMN0GH9P		20000	20000
330	526	SHAFT - HPT REAR	1864M90P04	TMT7F516		20000	20000
331	542	DISK - LPT STG 1	336-001-804-0	DB688689		25000	25000
332	543	DISK - LPT STG 2	336-001-909-0	BB552007		25000	25000
333	544	DISK - LPT STG 3	336-002-006-0	BB549032		25000	25000
334	545	DISK - LPT STG 4	336-002-105-0	DB688574		25000	25000
335	546	SUPPORT - LPT ROTOR CONICAL	338-077-502-0	BB522587		25000	25000
336	561	FRAME - LPT REAR	340-166-206-0	LA083600		25000	25000
337	541	CASE - LPT	338-117-404-0	DB675067		NA	NA
338	211	SPOOL - BOOSTER (LLP-ENG)	340-000-815-0	DB083478		23600	23600
339	551	SHAFT - LPT	340-074-722-0	LA084983		25000	25000

6. Select Power Plant to click on it.

NOTE: If Thrust Model for Selected PN was not found (first run for instance) message will appear on screen.

7. After Power Plant selection Actual Components (lower parts) and LLP Status List will appear on screen.

2. Create Thrust Model and fill LLP List

1. At First Run user has to create Thrust Rate Model for selected Power Plant PN using editor and then save additional information using editor.

CAUTION: “Current Thrust Rate” is mandatory field – user has to select one of it from Thrust Rate Model.

2. To Fill LLP List with PN and SN user has to select required Component from actual Power Plant structure.

3. Push transfer button with one tick. To transfer all components to Status List push transfer button with double tick.

Engine Life Limited Part Status

User ID: DUN - Full Control

Selection: AC Req: VO-BBB, AC Family: B737-HG, AC Type: B737-800, S/N: 88888, AC MFR. Date: 5/1/2001, STA: VKO, Total Date: 19-Mar-2020, Total FH: 49202.55, Total FC: 22063, Code ICAO: SVL, Operator Name: DEMO

Engine LLP

List of Power Plants:

- 2378 71-00-00 LH POWER PLANT - LH PN: CFM56-7B26 SN: 888343
Install Date: 2016-12-01 AC FH: 38675.36 AC FC: 19563
TSI: 10527.19 FH; TSN: 47980.19 FH; TSO: 28078.19 FH; TSR: 10527.19 FH;
CSI: 2500 FC; CSN: 21371 FC; CSO: 8878 FC; CSR: 2500 FC;
- 2511 71-00-00 RH POWER PLANT - RH PN: CFM56-7B26 SN: 888346

Additional Information:

LSV Date: 28-Nov-2016, LSV FH: 37453, LSV FC: 10871
Current Thrust Rate: -7B26, TSLSV: 10527.19, CSLSV: 2500

Thrust Rate Model: -7B22, -7B24, -7B26/3, -7B26, -7B27

LLP Status List:

ID	7B24 Limit	-7B26 Limit	-7B26/3 Limit	-7B27 Limit	-7B22 Total	-7B24 Total	-7B26 Total	-7B26/3 Total	-7B27 Total	Part Total	-7B22 Remains	-7B24 Remains	-7B26 Remains
320	30000	30000		30000	0	20988	0	20988	0	20988	9012	9012	
321	30000	30000		30000	0	8875	0	8875	0	8875	21125	21125	
322	20000	20000		20000	0	8875	0	8875	0	8875	11125	11125	
323	20000	20000		20000	0	8875	0	8875	0	8875	11125	11125	
324	20000	20000		20000	0	8875	0	8875	0	8875	11125	11125	
325	20000	20000		20000	0	8875	0	8875	0	8875	11125	11125	
326	20000	18600		18600	0	8875	0	8875	0	8875	10457	9725	
327	20000	17600		17600	0	8875	0	8875	0	8875	9915	8725	
328	20000	17600		17600	0	8875	0	8875	0	8875	9915	8725	
329	20000	20000		20000	0	8875	0	8875	0	8875	11125	11125	
330	20000	20000		20000	0	8875	0	8875	0	8875	11125	11125	
331	25000	25000		25000	0	21373	0	21373	0	21373	3627	3627	
332	25000	25000		25000	0	21373	0	21373	0	21373	3627	3627	
333	25000	25000		25000	0	21373	0	21373	0	21373	3627	3627	
334	25000	25000		25000	0	21373	0	21373	0	21373	3627	3627	
335	25000	25000		25000	0	21373	0	21373	0	21373	3627	3627	
336	25000	25000		25000	0	21373	0	21373	0	21373	3627	3627	
337	NA	NA		NA	0	21373	0	21373	0	21373	NA	NA	
338	23600	23600		23600	0	21373	0	21373	0	21373	2227	2227	
339	25000	25000		25000	0	21373	0	21373	0	21373	3627	3627	
1076					0	20988	0	20988	0	20988	NA	NA	NA

4. Use button with arrow to extend or retract LLP Status List.

5. The LLP List will reflect next component information on screen:

- Part Total (orange column) – Total FC from Maintenance Plan (variable value).
- Total FC on the Current Thrust Rate (yellow column) – this is a calculated field. For Instance: [Total 7B26] = [Part Total]– [Total 7B24/22] – [Total 7B27/B1]
- Remains FC – calculated field base on formula from Power Plant Shop Manual.

Engine Life Limited Part Status

User ID: DUN - Full Control

Selection: AC Req: VQ-BBB AC Family: B737-MG AC Type: B737-800 S/N: 88888 AC MFR Date: 5/11/2001 STA: VKO Total Date: 19-Mar-2020 Total FH: 48202.55 Total FC: 22063 Code ICAO: SYL Operator Name: DEMO

Engine LLP

List of Power Plants: Installed Removed AVG CYCL: 3

Additional Information: LSV Date: 28-Nov-2016 LSV FH: 37453 LSV FC: 18871 Thrust Rate Model: -7B22, -7B24, -7B26/3, -7B26, -7B27. Current Thrust Rate: -7B26 TSLSV: 10527.19 CSLSV: 2500. Thrust Rate: -7B26

LLP Status List:

ID	Module_No	Description	PN	Serial Number	-7B22 Limit	-7B24 Limit	B26 Limit	-7B26/3 Limit	-7B27 Limit	-7B22 Total	-7B24 Total	-7B26
336	561	FRAME - LPT REAR	340-166-206-0	LA083600		25000	25000		25000	0	21373	
339	551	SHAFT - LPT	340-074-722-0	LA084983	25000	25000	25000		25000	0	21373	
335	546	SUPPORT - LPT ROTOR CONICAL	338-077-502-0	BB522587	25000	25000	25000		25000	0	21373	
334	545	DISK - LPT STG 4	336-002-105-0	DB688574	25000	25000	25000		25000	0	21373	
333	544	DISK - LPT STG 3	336-002-006-0	BB549032	25000	25000	25000		25000	0	21373	
332	543	DISK - LPT STG 2	336-001-909-0	BB552007	25000	25000	25000		25000	0	21373	
331	542	DISK - LPT STG 1	336-001-804-0	DB688689	25000	25000	25000		25000	0	21373	
337	541	CASE - LPT	338-117-404-0	DB675067	NA	NA	NA		NA	0	21373	
330	526	SHAFT - HPT REAR	1864M90P04	TM77F516	20000	20000	20000		20000	0	8875	
329	525	DISK - HPT ROTOR	1498M43P06	GMNDGH9P	20000	20000	20000		20000	0	8875	
328	522	SEAL - ROTATING AIR HPT FRONT	1795M38P02	TM76Y045	20000	17600	17600		17600	0	8875	
327	521	SHAFT - HPT ROTOR FRONT	1873M73P01	XABH2545	20000	17600	17600		17600	0	8875	
326	316	SEAL - CDP ROTATING REAR AIR	1523M35P01	GFF5E1N0	20000	18600	18600		18600	0	8875	
325	315	SPOOL - HPC ROTOR STAGE 4-9	1588M89G03	GMNOL7PT	20000	20000	20000		20000	0	8875	
324	314	DISK - HPC STAGE 3	1590M59P01	XAEL8790	20000	20000	20000		20000	0	8875	
323	313	SPOOL - HPC ROTOR STG 1 & 2	1558M31G04	GMNOLAP4	20000	20000	20000		20000	0	8875	
322	312	SHAFT - FRONT HPC ROTOR	1386M56P03	GMNOLFP6	20000	20000	20000		20000	0	8875	
320	221	SHAFT ASSY - FAN	335-006-414-0	DB688409	30000	30000	30000		30000	0	20988	
321	213	DISK - FAN ASSY (LLP-ENG)	340-000-420-0	DE164954	30000	30000	30000		30000	0	8875	
338	211	SPOOL - BOOSTER (LLP-ENG)	340-000-815-0	DB063478	23600	23600		23600		0	21373	
1176		DETECTOR FIR - ENGINE LH CORF	912862	DUMMY 5070 VQ-RIZ					0	0	20988	

6. At First Run user has to fill required field such us: [Model No]

7. And LLP Limits for each PN's Thrust Rate base on information from Power Plant Shop Manual. To do that, click on required cell then yellow field will appear, type data on that field and then press "Enter" key on keyboard. "Enter" key is trigger for system - data must be saved.

Engine Life Limited Part Status User ID: DUN - Full Control

Close Help

Selection:
 AC Req: **VQ-BBB** AC Family: **B737-NG** AC Type: **B737-800** SN: **88888** AC MFR. Date: **5/11/2001** STA: **VKO** Total Date: **19-Mar-2020** Total FH: **49202.55** Total FC: **22063** Code ICAO: **SVL** Operator Name: **DEMO**

Engine LLP

List of Power Plants:
 Installed Removed AVG CYCL: **3**

Additional Information:
 LSV Date: **28-Nov-2016** LSVFH: **37453** LSVFC: **18871**
 Current Thrust Rate: **-7B26** TSLSV: **10527.19** CSLSV: **2500**

Thrust Rate Model:
 -7B22
 -7B24
 -7B26/3
-7B26
 -7B27

Save Save

LLP Status List: Excel

SN Filter:

ID	-7B26 Total	-7B26/3 Total	-7B27 Total	Part Total	-7B22 Remains	-7B24 Remains	-7B26 Remains	-7B26/3 Remains	-7B27 Remains	Remarks	Calc_Due_Date	-/- d.
336	21373		0	21373		3627	3627		3627		8/8/2023	1209 DY
339	21373		0	21373		3627	3627		3627		8/8/2023	1209 DY
335	21373		0	21373		3627	3627		3627		8/8/2023	1209 DY
334	21373		0	21373		3627	3627		3627		8/8/2023	1209 DY
333	21373		0	21373		3627	3627		3627		8/8/2023	1209 DY
332	21373		0	21373		3627	3627		3627		8/8/2023	1209 DY
331	21373		0	21373		3627	3627		3627		8/8/2023	1209 DY
337	21373		0	21373		NA	NA		NA			
330	8875		0	8875		11125	11125		11125		6/11/2030	3708 DY
329	8875		0	8875		11125	11125		11125		6/11/2030	3708 DY
328	8875		0	8875		9915	8725		8725		4/2/2028	2908 DY
327	8875		0	8875		9915	8725		8725		4/2/2028	2908 DY
326	8875		0	8875		10457	9725		9725		3/1/2029	3241 DY
325	8875		0	8875		11125	11125		11125		6/11/2030	3708 DY
324	8875		0	8875		11125	11125		11125		6/11/2030	3708 DY
323	8875		0	8875		11125	11125		11125		6/11/2030	3708 DY
322	8875		0	8875		11125	11125		11125		6/11/2030	3708 DY
320	20988		0	20988		9012	9012		9012		7/7/2028	3004 DY
321	8875		0	8875		21125	21125		21125		7/27/2039	7041 DY
338	21373		0	21373		NA	2227		2227		4/28/2022	742 DY
1078	20988	0	0	20988	NA	NA	NA	NA	NA			

Base on Remains Value and Aircraft's Average Value (item 8) system will calculate Due Date (item 9).

10. To Print LLP Status Report push "Excel" button. System will generate report in "Excel" format.