LAPORAN *ON THE JOB TRAINING*
DI GMF AEROASIA - HANGAR TANGERANG
05 MEI 2025 – 25 JULI 2025

Disusun oleh:

CANDRA RIYAN ANDONO

NIT. 30422006

PROGRAM STUDI DIPLOMA 3 TEKNIK PESAWAT UDARA

POLITEKNIK PENERBANGAN SURABAYA

2025

LAPORAN *ON THE JOB TRAINING*
DI GMF AEROASIA - HANGAR TANGERANG
05 MEI 2025 – 25 JULI 2025

Disusun oleh:

CANDRA RIYAN ANDONO

NIT. 30422006

PROGRAM STUDI DIPLOMA 3 TEKNIK PESAWAT UDARA
POLITEKNIK PENERBANGAN SURABAYA
2025

LEMBAR PERSETUJUAN

LAPORAN *ON THE JOB TRAINING* (OJT)
DI GMF AEROASIA – HANGGAR TANGERANG

Oleh:
CANDRA RIYAN ANDONO
NIT.30422006

Laporan *On the Job Training* (OJT) ini telah diterima diterima dan disetujui sebagai salah satu syarat penilaian *On the Job Training* (OJT).

Disetujui oleh:

Pembimbing Lapangan	Dosen Pembimbing
TAUFIQ HIDAYAT	TEGUH IMAM SUHARTO, ST.MT.
AMEL NO. 6648	NIP. 199109132015031003

Mengetahui,
Manager of Supervisor

ASEP KOSASIH
AMEL NO. 5883

LEMBAR PENGESAHAN

Laporan *On the Job Training* telah dilakukan pengujian didepan Tim Penguji pada tanggal 23 Juli 2025 dan dinyatakan memenuhi syarat sebagai salah satu komponen penilaian *On the Job Training*.

Tim Penguji

Dosen Pembimbing	Supervisi
TEGUH IMAM SUHARTO, ST.MT.	MAHARDEKA DHIAS MARDANI
NIP. 199109132015031003	AMEL NO. 15354

Ketua Program Studi
D III Teknik Pesawat Udara

NYARIS PAMBUDIYATNO, SiT, M.MTR
NIP. 19820525 200502 1001

KATA PENGANTAR

Alhamdulillah, segala puji dan syukur kami panjatkan kepada Allah SWT atas rahmat dan karunia-Nya, sehingga kami dapat menyelesaikan laporan kegiatan *On the Job Training* (OJT) ini dengan baik.

Kegiatan OJT ini kami laksanakan di GMF AeroAsia – Hangar Tangerang, mulai dari tanggal 5 Mei 2025 hingga 25 Juli 2025. Selama kurang lebih tiga bulan, kami mendapatkan banyak pengalaman baru, pembelajaran langsung di lapangan, serta kesempatan untuk menerapkan ilmu yang telah kami pelajari di dunia perkuliahan ke dunia kerja yang sesungguhnya. Laporan ini menjadi bentuk dokumentasi sekaligus refleksi dari proses belajar kami selama menjalani OJT.

Kami sangat berterima kasih kepada semua pihak yang telah membantu dan mendampingi kami selama proses ini. Secara khusus, ucapan terima kasih kami sampaikan kepada:

1. Bapak Ahmad Bahraawi, SE., MT, selaku Direktur Politeknik Penerbangan Surabaya.
2. Bapak Andi Fahrurrozi, selaku CEO GMF AeroAsia.
3. Bapak Bobi Gumelar Raspati, selaku Direktur Base Management.
4. Bapak Dias M dan bapak Rialdi P, selaku staf AMTO dan LCU GMF AeroAsia.
5. Bapak Asep dan bapak Bayu, selaku Manager Line 14 GMF AeroAsia.
6. Bapak Nyaris Pambudiyatno, SiT., M.MTr., selaku Ketua Program Studi Teknik Pesawat Udara Politeknik Penerbangan Surabaya.
7. Bapak Teguh Imam Suharto, ST., MT., selaku Dosen Pembimbing Laporan OJT.
8. Orang tua yang telah memberikan bantuan dan dukungan kepada penulis sehingga dapat melaksanakan kegiatan dan menyelesaikan laporan OJT.
9. Bapak Taufiq H dan bapak Haidar H, Selaku Pembimbing Lapangan
10. Seluruh Engineer dan Mechanic Line 14 GMF AeroAsia.

Kami menyadari bahwa laporan ini belum sempurna, sehingga kami terbuka terhadap saran dan masukan yang membangun. Semoga laporan ini dapat memberikan gambaran yang jelas mengenai kegiatan OJT serta bermanfaat bagi para pembaca.

Tangerang, 25 Juli 2025

Candra Riyan Andono

DAFTAR ISI

Halaman

DAFTAR GAMBAR

Halaman

DAFTAR TABEL

DAFTAR LAMPIRAN

DAFTAR SINGKATAN

Singkatan	Kepanjangan	Keterangan
OJT	On the Job Training	Program pelatihan kerja langsung di industri
GMF	Garuda Maintenance Facility	Perusahaan MRO tempat OJT dilaksanakan
MRO	Maintenance, Repair and Overhaul	Layanan pemeliharaan, perbaikan, dan overhaul pesawat
AMM	Aircraft Maintenance Manual	Manual pemeliharaan resmi pesawat
TSM	Trouble Shooting Manual	Panduan pemecahan masalah teknis
MPD	Maintenance Planning Data	Data perencanaan perawatan pesawat
ECAM	Electronic Centralized Aircraft Monitor	Sistem pemantauan kondisi pesawat secara elektronik
BMC	Bleed Monitoring Computer	Komputer pemantauan sistem bleed air
OPV	Overpressure Valve	Katup pengaman tekanan berlebih dalam sistem pneumatic
PRV	Pressure Regulating Valve	Katup pengatur tekanan udara
HP	High Pressure	Tekanan tinggi pada kompresor mesin
IP	Intermediate Pressure	Tekanan menengah pada kompresor mesin
APU	Auxiliary Power Unit	Unit tenaga bantu pada pesawat
FADEC	Full Authority Digital Engine Control	Sistem kendali digital mesin pesawat
SDAC	System Data Acquisition Concentrator	Sistem akuisisi data terpusat
CFDS	Centralized Fault Display System	Sistem tampilan kesalahan terpusat
TAT	Turn Around Time	Waktu penyelesaian suatu proses perawatan
KAN	Komite Akreditasi Nasional	Lembaga akreditasi nasional Indonesia
CMM	Component Maintenance Manual	Manual pemeliharaan untuk komponen
LRU	Line Replaceable Unit	Unit yang dapat diganti langsung di lapangan

NDT	Non-Destructive Testing	Pengujian tanpa merusak komponen
BITE TEST	Built-In Test Equipment Test	Pengujian otomatis internal perangkat
PLB	Pusat Logistik Berikat	Gudang logistik berikat untuk barang MRO

BAB I
PENDAHULUAN

1.1 Latar Belakang

Politenik Penerbangan Surabaya merupakan salah satu lembaga pendidikan tinggi vokasi dibawah naungan **Badan Pengembangan Sumber Daya Manusia Perhubungan (BPSDMP)** Kementerian Perhubungan Republik Indonesia. Sebagai institusi yang berfokus pada pengembangan sumber daya manusia di sektor transportasai udara, Politeknik Penerbangan Surabaya menyelenggarakan program pendidikan vokasi untuk mencetak tenaga kerja yang profesional dan siap pakai sesuai standar industri penerbangan nasional maupun internasional.

Salah satu program studi yang ada di Politeknik Penerbangan Surabaya adalah Program Studi Teknik Pesawat Udara. Dalam program studi ini, taruna/i dibekali dengan pemahaman tentang sistem pesawat udara, baik secara teori maupun praktik. Sistem pembelajaran secara praktik merupakan komponen penting dalam menunjang keahlian teknis. Sebagai bagian kurikulum, kegiatan *On the Job Training* (OJT) menjadi fase penting dalam memberi pengalaman nyata di lingkungan kerja industri penerbangan.

Pelaksanaan *On the Job Training* (OJT) ini berlandaskan pada Peraturan Kepala Pengembangan SDM Perhubungan Nomor PK.09/BOSDMP-2016 tentang *Kurikulum Program Pendidikan dan Pelatihan Pembentukan di Bidang Penerbangan*, yang menyatakan bahwa setiap peserta didik wajib menjalani *On the Job Training* (OJT) sebagai bagian integral dari proses pendidikan. Kegiatan ini juga merupakan implementasi dari salah satu aspek *Tridarma Perguruan Tinggi* yakni pendidikan, yang ditujukan untuk memperkuat keterkaitan antara pembelajaran akademik dan praktik profesional di lapangan.

Dalam pelaksanaannya, *On the Job Training* (OJT) yang dilakukan oleh taruna Program Studi Teknik Pesawat Udara Politeknik Penerbangan Surabaya bertempatkan di GMF AeroAsia, pada unit kerja yang menangani *maintenance* pesawat udara. Lingkungan kerja tersebut memberikan pengalaman langsung dalam proses *maintenance* dan inspeksi pesawat udara secara nyata, dengan standar dan prosedur yang berlaku di industri penerbangan sipil.

Setelah menyalesaikan kegiatan *On the Job Training* (OJT), setiap taruna diwajibkan menyusun Laporan *On the Job Training* sebagai bentuk dokumentasi dan pertanggung jawaban akademik. Laporan ini ditulis berdasarkan pengalaman langsung selama mengikuti *On the Job Training* (OJT), serta menggambarkan secara sistematis kegiatan yang telah dilakukan dalam lingkup kerja industry penerbangan.

1.2 Maksud dan Tujuan

1.2.1 Maksud

Maksud daru pelaksanaan kegiatan *On the Job Training* (OJT) adalah untuk memberikan kesempatan kepada taryna Program Studi Teknik Pesawat Udara Politeknik Penerbanga Surabaya dalam menerapkan pengetahuan dan keterampilan yang telah dipelajari selama masa perkuliahan ke dalam dunia kerja yang sesungguhnya. Melalui keterlibatan langsung di lingkungan industri, taruna dapat memahami alur kerja, standar operasional, serta budaya kerja yang berlaku dalam kegiatan pemeliharaan pesawat udara secara professional.

1.2.2 Tujuan

1.2.2.1 Tujuan Umum

a. Memberikan kesempatan kepada taruna untuk memperoleh pengalaman nyata di lingkungan industru sebagai bentuk pengembangan wawasan dan ilmu pengetahuan yang telah diperoleh selama proses pendidikan.
b. Menjadikan pelaksanaan *On the Job Training* (OJT), sebagai ilmu pengetahuan yang memungkinkan taruna melakukan evaluasi diri melalui perbandingan antara kopetensi individu dengan tuntutan dunia kerja yang sesungguhnya.

1.2.2.2 Tujuan Khusus

a. Memberikan pengalaman langsung kepadda taruna dalam menjalankan pekerjaan teknis di lokasi *On the Job Training* (OJT) secara nyata.
b. Mendorong taruna untuk menerapkan kopetensi dan keterampilan yang telah dipelajari selama menempuh pendidikan di program studi.
c. Menumbuhkan disiplin, rasa tanggung jawab, dan etos kerja dalam melaksanakan tugas-tugas yang diberikan di tempat *On the Job Training* (OJT).

d. Memperluas wawasan taruna mengenai dunia kerja sebagai calon tenaga profesional di bidang penerbangan.
e. Memberikan pemahaman kepada taruna tentang struktur organisai, sistem manajemen, dan budaya kerja di industri *maintenance* pesawat udara.

BAB II
PROFIL LOKASI OJT

2.1 Sejarah Singkat

PT Garuda Maintenance Facility AeroAsia, atau dikenal dengan nama GMF AeroAsia, adalah Perusahaan penyedia jasa *Maintenance, Repair, and Overhaul* (MRO) pesawat udara yang berlokasi di kawasan Bandara Internasional Soekarno-Hatta, Tangerang, Banten. Perusahaan ini berawal dari Direktorat Teknik Garuda Indonesia, yang bertanggung jawab atas pemeliharaan armada pesawat milik Garuda Indonesiasejak tahun 1949. Seiring dengan bertambahnya kebutuhan industri penerbangan nasional dan internasional, Garuda Indonesia memutuskan untuk memisahkan unit teknisnya menjadi entitas bisnis tersendiri.

Pada tahun 2002, Direktorat Teknis resmi berubah menjadi PT GMF AeroAsia sebagai perusahaan independen yang sepenuhnya fokus pada layanan MRO. Transformasi ini memungkinkan GMF untuk mengembangkan layanan pemeliharaan pesawat. tidak hanya bagi Garuda Indonesia, tetapi juga bagi maskapai lain di dalam maupun luar negeri. Dalam perjalanannya GMF AeroAsia mendapatkan berbagai sertifikasi internasional yang memperkuat posisi kompetitifnya di pasar global, seperti FAA dari United State, EASA dari *Europe*, serta berbagai otoritas penerbangan Asia dan Timur Tengah.

Saat ini, GMF AeroAsia merupakan salah satu perusahaan MRO terbesar di Asia Tenggara, dengan layanan yang mencakup line maintenance, base *maintenance, engine* dan *component maintenance*, serta *engineering service*. GMF AeroAsia juga memiliki sejumlah hanggar besar untuk *mantenance* pesawat *narroy-body* dan *wide-boddy, engine shope, component shop*, dan fasilitas pelatihan teknis untuk mendukung pengembangan sumber daya manusia.

Dengan visi menjadi perusahaan MRO kelas dunia, GMF AeroAsia terus berinovsi dan mengembangkan kapabilitasnya baik di sisi teknologi, sumber daya manusia, maupun system manajemen mutu. Untuk menunjang kegiatan operasional dan memastikan efisiensi layanan, GMF AeroAsia memiliki struktur organisaasi yang terintegrasi dengan berbagai divisi teknis dan pendukung.

2.2 Data Umum

2.2.1 Visi dan Misi

Visi PT.GMF AeroAsia

Most Valuable MRO Company.

Misi PT.GMF AeroAsia

Integrated and Reliable Maintenance Solution as Contribution to the Nation.

AKHLAK: **A**manah
Kompeten
Harmonis
Loyal
Adaptif
Kolaboratif

2.2.1 Fasilitas

PT. GMF AeroAsia berada di lingkungan Bandara Internasional Soekarno-Hatta mempunyai area seluas lebih dari 1,15 juta m^2, dengan bangunan seluas sekitar 480.000-692.000 m^2 diantaranya:

1. **Hanggar**

a. Hanggar 1
Memiliki luas 22.000m^2 dilengkapi *docking platform* khusus untuk *heavy maintenance 2-line wide-body* seperti pesawat Boeing 747.

Gambar 2. 1 Hanggar 1
(source: https://shorturl.at/Ry4MT)

b. Hangar 2
Memiliki luas 23.000m^2 dirancang khusus untuk inspeksi minor hingga *A-Check*, dengan *2-line wide-body* dan *6-line narrow-body*.

Gambar 2. 2 Hanggar 2
(source: https://shorturl.at/U71ej)

c. Hanggar 3
Memiliki luas 23.000m^2 dirancang khusus untuk pesawat Airbus A330 dan dapat menampung *3-line* Airbus A330 dilengkapi dengan *docking* untuk *heavy maintenance*.

Gambar 2. 3 Hanggar 3
(source: https://shorturl.at/Ry4MT)

d. Hanggar 4
Merupakan hanggar terluas dengan luas 66.940m^2 yang menjadi hanggar *narrow-body* terbesar didunia, mampu menampung hingga 15 pesawat *narrow-body* dan satu *painting shop*.

Gambar 2. 4 Hanggar 4
(source: https://shorturl.at/Ry4MT)

2. *Workshop* dan *Shop*

a. *Engine* & APU *shop* dan *Engine Test Cell* (*up to 100.00 lbs Thrust*):
Mendukung *overhoul* dan pengujian *engine* seperti CFM56, PW100, GTCP series. Tersertifikasi oleh DGCA, FAA, dan EASA.

Gambar 2. 5 Engine Test Cell
(source: https://short-link.me/17tSm)

Overhaul	✈	✈	✈						
HSI					✈				
On Wing	✈	✈	✈	✈	✈	✈	✈	✈	✈
	CFM 56-3	CFM 56-7	CFM 56-5	CF34	PW100	GE90	LEAP-1A	LEAP-1B	Trent700

Gambar 2. 6 Current Engine Capabilities
(source: https://short-link.me/17tSm)

b. *Landing Gear Shop*

Memiliki area seluas 4.500m^2 menyediakan layanan *overhaul landing gear* dengan setifikasi FAA/EASA.

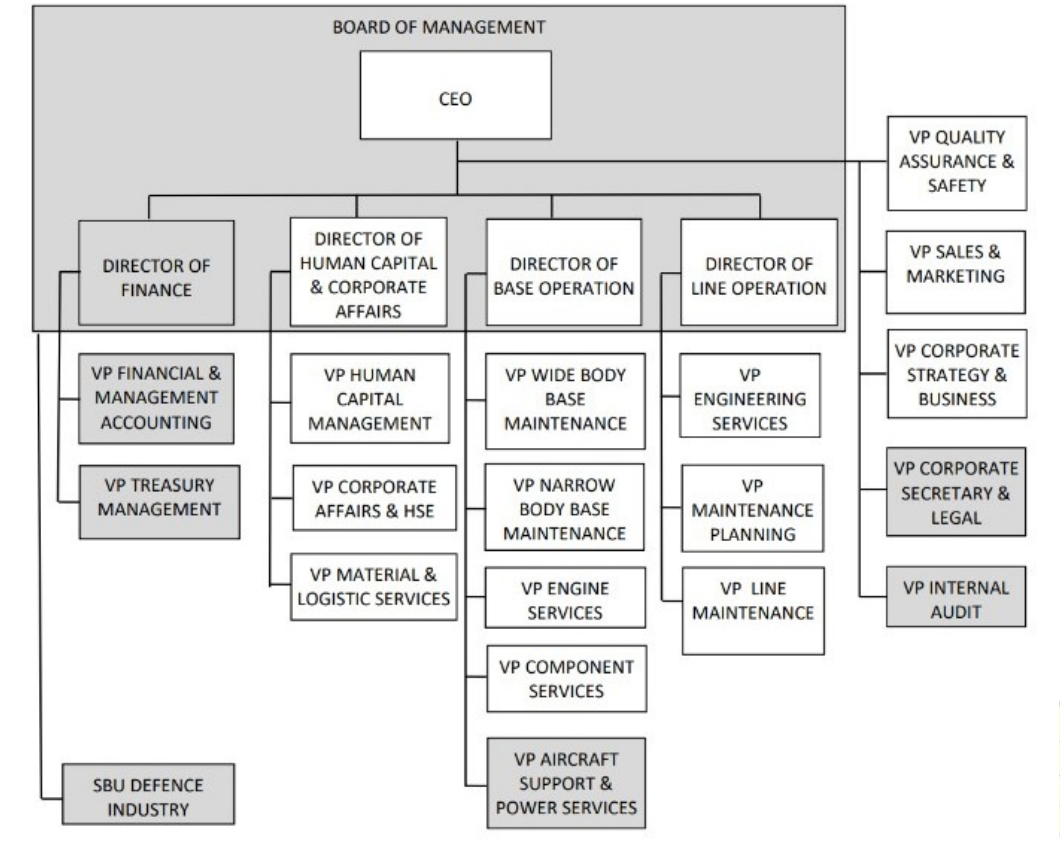
Gambar 2. 7 Landing Gear Shop
(source: https://short-link.me/17tSm)

c. Component Shop

Menyediakan *Integrated Component Service* (ICS) dan *Single Component Service* termasuk *component management* dan *componenet maintenance* berbagai tipe pesawat seperti B737, B747, B777, A320, A330, CJR1000. Tersertifikasi oleh DGCA, FAA, EASA serta akredasi KAN untuk laboratorium pengujian dan kalibrasi.

Gambar 2. 8 Component Shop
(source: https://short-link.me/17tSC)

2.2.2 Struktur Organisasi



Gambar 2. 9 Struktur Organisasi PT. GMF AeroAsia

1. **VP *Director of Human Capital & Corporate Affairs***

   Bertanggung jawab dalam mengelola dan mengembangkan sumber daya manusia, membangun budaya perusahaan, menyelenggarakan pelatihan, mengelola pengetahuan, memastikan efektivitas urusan umum, serta mengawasi fasilitas perawatan, layanan kerja, dan pengadaan material non-pesawat.

2. **VP *Director of Line Operation***

   Memiliki tanggung jawab kepada CEO (*accountable manager*) untuk menjamin pengelolaan operasi lini, mencakup *Line Maintenance*, *Outstation*, *Cabin Maintenance Services*, perencanaan serta pengendalian produksi pesawat, jasa material, pengadaan pesawat, layanan teknik, dan dukungan operasional di bawah koordinasi Direktur Line.

3. **VP *Director of Base Operation***

   Bertanggung jawab kepada CEO untuk memastikan seluruh layanan operasi dasar dikelola dengan baik, meliputi *maintenance*, komponen, peralatan

pendukung, *cabin* & interior, pusat logistik berikat, serta operasional lain, di bawah koordinasi Direktur Operasi Dasar.

4. **VP *Base Maintenance***

   Mengelola aktivitas perawatan pesawat mulai dari perawatan rutin menengah hingga *overhaul*, termasuk perbaikan struktur dan sistem, baik untuk perawatan ringan maupun perawatan besar serta kegiatan modifikasi.

5. **VP *Components Maintenance***

   Memiliki tugas dan kewenangan untuk melaksanakan perawatan dan perbaikan komponen pesawat agar tetap dalam kondisi layak pakai.

6. **VP *Engineering Service***

   Bertugas dalam rekayasa pemeliharaan pesawat terbang, meliputi standar *maintenance*, program modifikasi, pengendalian keandalan, pengelolaan dokumentasi teknik, dan layanan tenaga ahli.

7. **VP *Engine Maintenance***

   Bertanggung jawab atas pengelolaan perawatan mesin pesawat dengan metode yang memastikan kualitas, efisiensi biaya, dan pencapaian target TAT. Unit ini menjamin ketersediaan sumber daya yang dibutuhkan untuk memenuhi standar perawatan dan kualitas sesuai persyaratan DGCA Indonesia.

8. **VP *Furnishing and Upholstery***

   Bertanggung jawab terhadap keselamatan khusus dan performa operasional di bidang *Aircraft Furnishing and Upholstery*, termasuk pengelolaan identifikasi bahaya, analisis risiko, tindakan mitigasi, penilaian dampak perubahan operasional, dan pelaksanaan program keselamatan serta promosi keselamatan.

9. **VP *Logistics and Bonded Services***

   Memastikan manajemen layanan logistik dan berikat berjalan efektif serta memberikan kontribusi positif melalui kegiatan pelayaran, ekspor-impor, layanan *customs clearance*, pengelolaan *Bonded Logistic Center* (PLB), serta manajemen gudang dan distribusi.

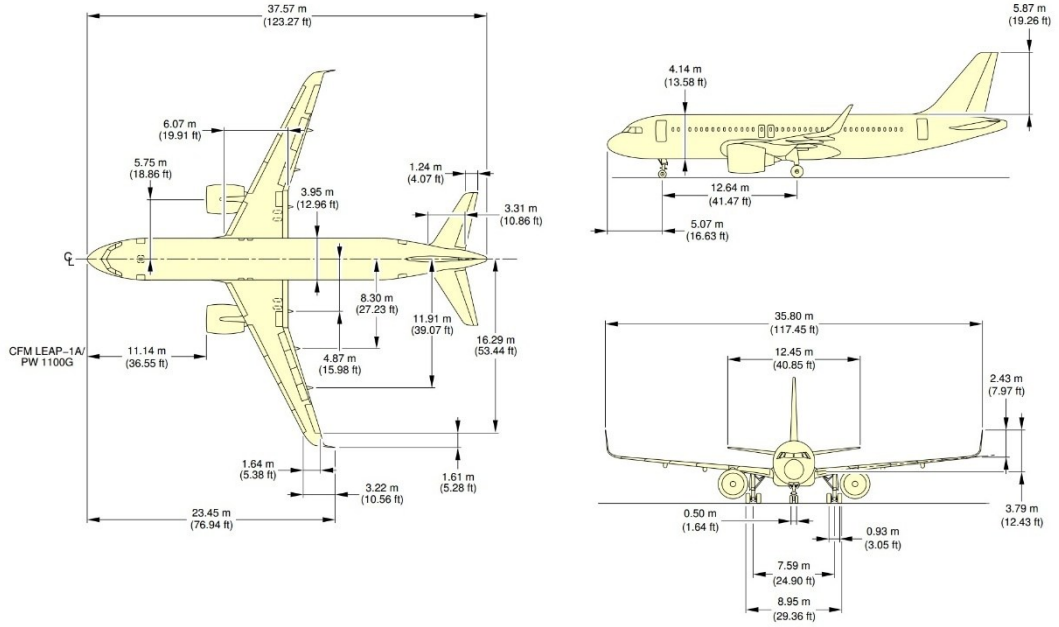
BAB III
TINJAUAN TEORI

3.1 Airbus A320

Gambar 3. 1 Logo Airbus A320

Airbus A320-200 merupakan salah satu varian dari keluarga A320, yang didesain sebagai pesawat penumpang dengan konfigurasi *engine single-eisle*. Pesawat ini biasa digunakan untuk penerbangan dengan jarak pendek hingga menengah dan dikenal sebagai pesawat *narrow-body* terlaris di dunia. Airbus A320-200 umumnya menggunakan dua jenis *engine*, yaitu CFM56-5 dari CFM *International* atau IAE V2500 dari *International Aero Engines*, dengan rentan *Thursh* antara 111-120 kN (22.000 - 27.000 lbf). Pesawat ini di desain untuk mengangkut 150 penumpang, dengan jangkauan maksimal hingga 4.800 – 5.700 km (2.600 – 3.000 nm).

Airbus A320-200 merupakan pesawat komersial pertama yang mengadopsi *system fly by wire*, yaitu teknologi kendali pesawat yang menggantikan sistem mekasis konvensional dengan sinyal elektronik yang diproses oleh komputer untuk menggerakan *flight control surface*. Selain itu, Airbus A320-200 juga dilengkapi dengan *glass cockpit*, yaitu *instrument* digital multifungsi yang dapat menampilkan informasi penerbangan secara terintegrasi. Untuk mendukung *monitoring* secara *real-time*, Airbus A320-200 menggunakan sistem ECAM (*Electronic Centralized Aircraft Monitoring*) yang menampilkan data pesawat, memberikan peringatan dan menampilkan prosedur penanganan *failure* secara langsung, sehingga membantu pilot dalam menggambil keputusan dengan cepat dan akurat selama penerbangan.



Gambar 3. 2 Airbus A320-200 Dimension

Aircraft Dimensions		
Parameter	Metric	Imperial
Overall Lenght	37,57 m	123 ft 3 in
Height	11,76 m	38 ft 7 in
Fuselage Diameter	3,95 m	13 ft
Maximum Cabin Width	3,70 m	12 ft 1 in
Cabin Lenght	27,51 m	90 ft 3 in
Wingspan (geometric)	34,10 m	111 ft 10 in
Wing Area (reference)	122,6 m²	1.320 ft²
Wing Sweep (25% chord)	25°	25°
Wheelbase	12,64 m	41 ft 5 in
Wheel Track	7,59 m	24 ft 11 in
Weight and Payload		
Parameter	Metric	Imperial
Maximum Ramp Weight	73,9 (77,4) tonnes	162.9 (170.6) x 1.000 lbs

Maximum Takeoff Weight	73,5 (77) tonnes	162 (169.8) x 1.000 lbs
Maximum Landing Weight	64,5 (66) tonnes	142.2 (145.5) x 1.000 lbs
Maximum Zero Fuel Weight	62 (62,5) tonnes	134.5 (137.8) x 1.000 lbs
Maximum Fuel Capacity	23.860 (29.840) liter	6.300 (7.885) US gal
Typical Operating Weight Empty	42,4 tonnes	93.5 x 1.000 lbs
Typical Volumetric Payload	16,6 tonnes	36.59 x 1.000 lbs

Tabel 3. 1 Airbus A320-200 Dimension

3.2 *System Maintenance* Airbus A320-200

Gambar 3. 3 Maintenance Airbus A320

Pesawat udara merupakan alat transportasi paling kompleks, yang memerlukan sistem pemeliharaan (*maintenance*) yang terencana dan berstandar tinggi demi menjamin kelaikudaraan dan keselamatan operasional. Pada pesawat Airbus A320-200, sistem *maintenance* yang diterapkan umumnya menggunakan metode *preventive maintenance*, yaitu pemeliharaan yang dilakukan secara berkala dan terjadwal sebelum terjadinya kerusakan. Jenis pemeliharaan ini mencakup inspeksi, perbaikan, dan penggantian komponen untuk menjada agar pesawat tetap dalam keadaan *airworthty*.

Dalam industri penerbangan, setiap perusahaa yang melakukan pemeliharaan pesawat wajib memiliki sertifikat dari otoritas penerbangan, sebagai bukti bahwa prosedur dan standar pemeliharaan terhadap *airframe, engine, propulsion*, serta

komponen lainnya telah terpenuhi dan sesuai dengan regulasi. Di Indonesia, hal ini merujuk pada standar dari Kementrian Perhubungan.

Secara umum, sistem pemeliharaan pesawat dibagi menjadi dua kategori utama, yiatu *line maintenance* dan *base maintenance*.

a. *Line maintenance* adalah *maintenance* ringan yang dilakukan secara rutin di bandara sebelum keberangkatan pesawat. Proses ini dilakukan dalam waktu singkat. Dan meliputi pemeriksaan secara *visual, walk around*, dan *refuelling*.
b. *Base maintenance* merupakan *maintenance* yang lebih kompleks dan mendalam, yang hanya dapat dilakukan di hanggar. *Base maintenance* mencakup *inspeksi structure*, penggantian komponen besar, dan *overhaul*, biasanya setelah akumulasi *flight hours* atau siklus penerbangan (*flight cycle*).

Airbus A320-200 menggunakan sistem pemeliharaan (*maintenance*) yang terjadwal berdasarkan *flight hours* atau waktu kalender. Salah satu contoh adalah A-Check, yang dilakukan setiap ±500 jam terbang (*flight hours*), dan termasuk dalam kategori *line maintenance*. Sedangkan C-Check, yang merupakan bagian dari *base maintenance*, dilakukan setiap ±3 tahun.

Dengan pendekatan sistematik dalam melaksanakan *maintenanace*, pesawat dapat terus beroperasi dengan tingkat keselamatan yang optimal, sesuai dengan standar industri penerbangan internasional.

3.3 Program *Maintenance* Airbus A320-200

Program *maintenance* pada Airbus A320-200 disusun berdasarkan dokumen resmi *Manitenance Planning Data* (MPD) yang mengatur tahapan inspeksi berkala untuk menjamin keselamatan, keandalan dan kelayakudaraan suatu pesawat udara. Program *maintenance* ini terdiri dari beberapa level inspeksi yang dilakukan secara bertahap sesuai waktu, siklus penerbangan, atau jam penerbangan pesawat (*flight hours*). Tahapan *maintenance* tersebut terdiri dari empat tahap, yaitu:

3.3.1 A-Check

A-Check merupakan inspeksi ringan yang dilakukan secara rutin, biasanya setiap 500-800 jam (*flight hours*) atau sekitar 1-2 bulan sekali, tergantung program dari operator pesawat tersebut. *Maintenance* ini meliputi pemeriksaan pada system *avionic, fluid lever, leaking*, dan fungsi-fungsi *system* lainnya. *A-Check* bisa

diakukan dalam waktu singkat, bahkan dapat dilakukan dalam semalam (*overnight maintenance*).

3.3.2 B-Check

B-Check adalah inspeksi *intermediate* yang lebih menyeluruh dibanding *A-Check*. Namun, saat ini banyak operator yang menggabung ke dalam *interval A-Check* yang diperluas (*due to cost optimization*). *Maintenance B-Check* dilakukan setiap 6-8 bulan sekali dengan estimasi pengerjaan 150-180 jam kerja.

3.3.3 C-Check

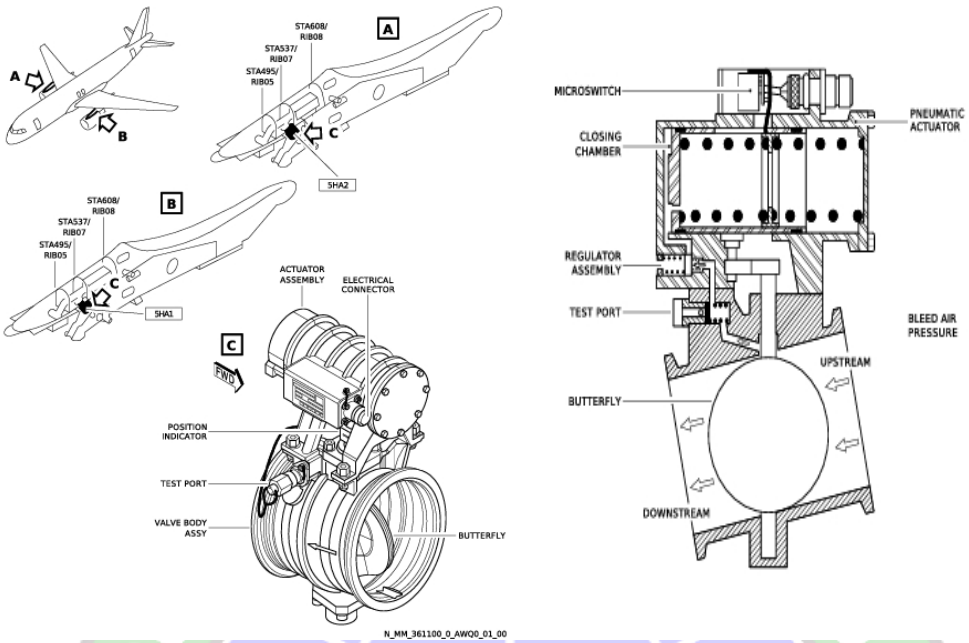
C-Check merupakan inspeksi mendalam yang dilakukan setiap 18-24 bulan atau sekitar ±6.000 siklus penerbangan. Pada tahapan ini, pesawat harus berada di hanggar dan tidak beroperasi selaama beberapa hari. *Maintenance C-Check* mencakup pemeriksaan *structure, hydraulic system, flight control*, dan *avionic system*. Inspeksi pada area yang tersembunyi untuk mendeteksi apakah terdapat *crack* dan *corrosion*.

3.3.4 D-Check / 12-*Year Maintenance Check*

D-Check merupakan bentuk inspeksi secara menyeluruh, yang dilakukan ± 12 tahun. Seluruh *structure* pesawat diperiksa secara detail, termasuk *interior* cabin, *landing gear overhaul*, dan inspeksi menyeluruh terhadap *corrosion*. Proses ini sering disebut dengan *Heavy Maintenance* dan dapat memakan waktu beberapa minggu.

3.4 *Overpressure Valve* (OPV)

Overpressure Valve (OPV) merupakan salah satu komponen penting dalam sistem *pneumatic* pesawat Airbus A320-200 yang berfungsi untuk melindungi saluran udara (*ducting*) dan komponen *downstream* dari tekanan berlebih (*overpressure*). *Valve* ini memiliki desain tipe *butterfly* dengan diameter 4 inci, dan seluruh mekanismenya bekerja secara *pneumatic* tanpa memerlukan kontrol elektronik atau kendali dari *cockpit*. Dalam kondisi normal, OPV berada pada posisi terbuka (*open*) karena gaya pegas menjaga *valve* tetap dalam keadaan terbuka agar aliran udara berlangsung lancar.



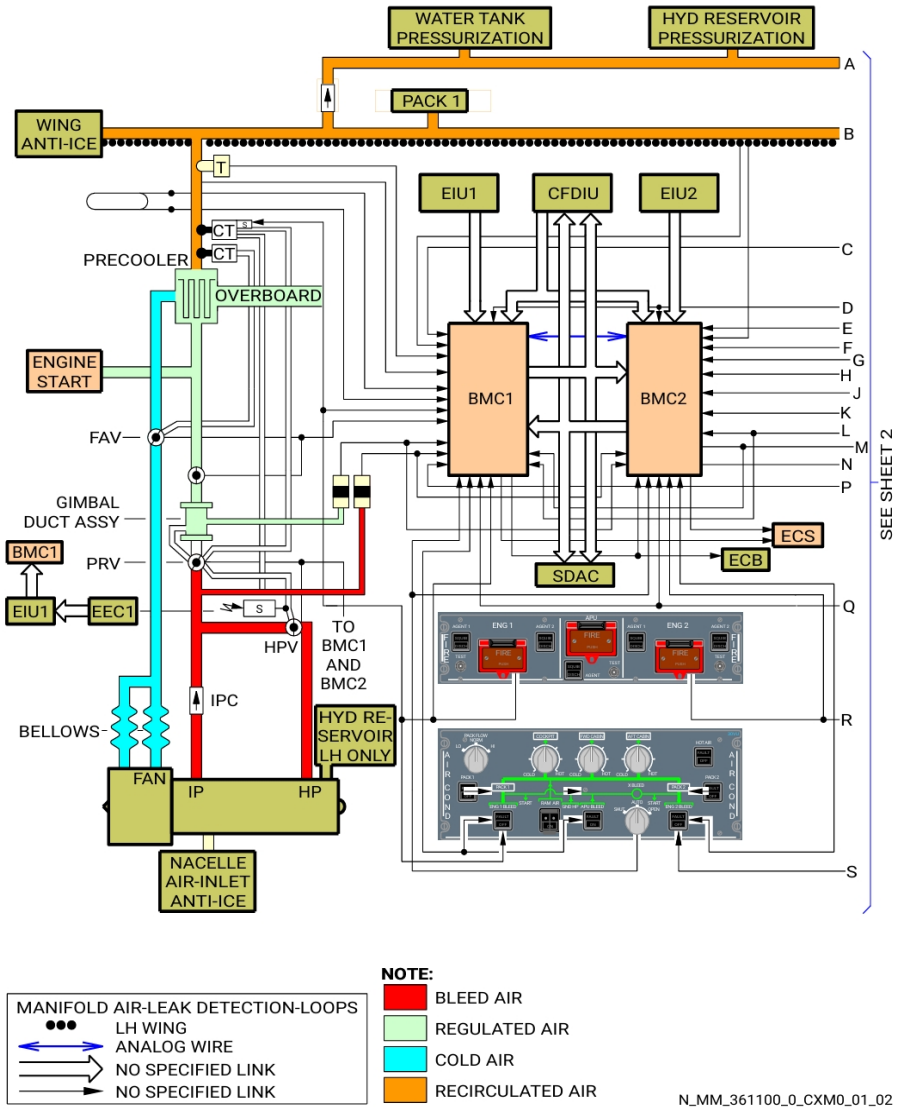
Gambar 3. 4 Overpressure Valve

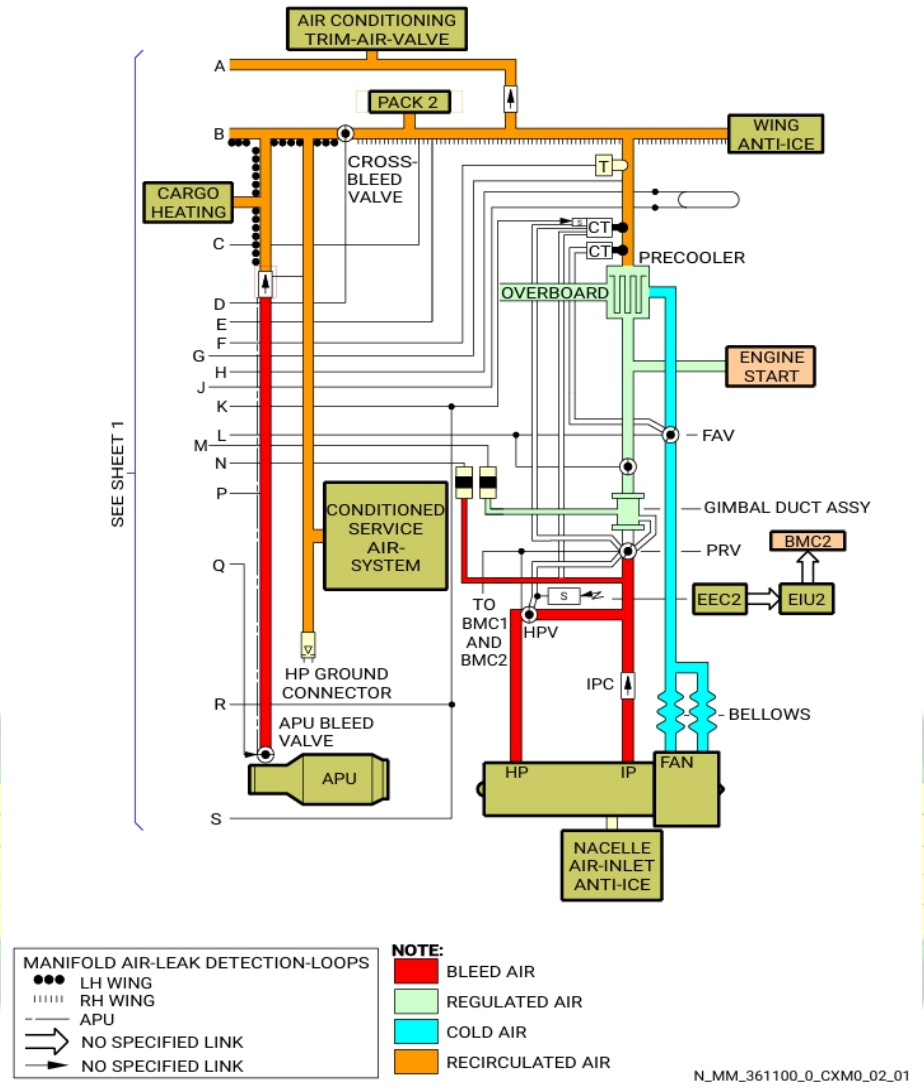
Ketika tekanan di saluran hulu (*upstream*) meningkat dan mencapai batas tertentu, tekanan udara pada piston OPV akan mengalahkan gaya pegas sehingga *valve* mulai menutup. Proses penutupan ini berfungsi untuk mengurangi aliran udara dan menurunkan tekanan di saluran hilir (*downstream*), sehingga mencegah terjadinya *overpressure* yang dapat merusak sistem. Batas tekanan yang memicu penutupan OPV berbeda-beda tergantung tipe dan *part number valve* tersebut. Misalnya, untuk OPV dengan *part number* 6740B05XXXX, *valve* mulai menutup pada tekanan 81 hingga 85 psig, sepenuhnya menutup pada tekanan lebih dari 85 psig, dan kembali terbuka jika tekanan turun di bawah 50 psig. Sementara itu, tipe lain seperti 6740E01XXXX dan 6740F01XXXX memiliki batas tekanan buka kembali yang sedikit berbeda sesuai desain dan fungsinya dalam sistem.

Selain itu, OPV dilengkapi dengan fitur keselamatan berupa *test port* yang memungkinkan dilakukan uji fungsi secara o*n site* (langsung di tempat tanpa harus melepas komponen), serta *microswitch* yang memberikan sinyal saat *valve* dalam posisi terbuka penuh. Dengan mekanisme kerja otomatis dan tanpa kendali langsung dari *cockpit*, OPV menjadi salah satu perangkat pelindung pasif yang sangat penting untuk menjaga keandalan sistem *pneumatic* pesawat selama operasi.

3.5 *Bleed Monitoring Computer* (BMC).

Bleed Air Monitoring Computer (BMC) adalah komponen elektronik penting dalam sistem *bleed air* pesawat Airbus A320-200 yang berfungsi untuk memantau dan mendeteksi parameter utama sistem *pneumatic* selama operasi. Terdapat dua unit BMC yang bekerja secara simultan untuk memastikan keandalan sistem. BMC memproses sinyal dari berbagai sensor dan perangkat *monitoring*, termasuk *microswitch* pada *valve* (seperti PRV, HP *bleed valve*, *crossbleed valve*, dan APU *bleed valve*), sensor tekanan pada saluran *downstream* HP *bleed valve* dan PRV, serta sensor suhu pada *outlet precooler*. BMC juga memantau adanya *overheat* di area *pylon*, *wing*, dan *fuselage*.





Gambar 3. 5 Pneumatic System

Dalam operasinya, BMC mendeteksi kondisi *abnormal*, seperti *overpressure*, *low pressure*, *overtemperature, low temperature,* maupun *overheat*, kemudian mengirimkan data ke ECAM (*Electronic Centralized Aircraft Monitor*) melalui SDAC (*System Data Acquisition Concentrator*). Informasi ini ditampilkan pada sistem *page* ECAM dalam bentuk tekanan, suhu, dan posisi *valve*, sehingga *crew cockpit* dapat mengambil langkah yang diperlukan. Jika terdeteksi adanya *failure* atau kondisi *abnormal*, BMC memicu peringatan melalui sinyal ENG (1, 2) *BLEED FAULT* di panel *overhead*, menyalakan *MASTER CAUT light*, serta mengeluarkan *chime* sebagai alarm peringatan.

Selain memberikan peringatan kepada *crew*, BMC juga mengendalikan fungsi-fungsi tertentu, seperti menutup PRV secara otomatis saat terjadi peringatan, saat *engine start*, atau ketika APU *bleed* digunakan. BMC mengatur mode otomatis *crossbleed valve* dan membuka APU *bleed valve* bila diperlukan. Data kegagalan sistem yang terekam oleh BMC dikirim ke *Centralized Fault Display System* (CFDS) untuk mendukung aktivitas *maintenance*, sehingga teknisi dapat mengidentifikasi *Line Replaceable Unit* (LRU) yang perlu diganti. Dengan fungsi-fungsi tersebut, BMC berperan penting dalam menjaga keselamatan, efisiensi, dan keandalan sistem *bleed air* pesawat.

BAB IV
PELAKSANAAN OJT

4.1 Lingkup Pelaksanaan OJT

Pelaksaan OJT dilaksanakan menyesuaikan dengan kegiatan yang sedang berjalan di GMF AeroAsia sebagai berikut:

4.2 Waktu dan Tempat

On the Job Training (OJT) dilaksanakan dengan data sebagai berikut:

Peserta : Taruna Politeknik Penerbangan Surabaya.
Jumlah : 3 (tiga) orang.
Waktu : 05 Mei 2025 sampai dengan 25 Juli 2025
Tempat : PT. GMF AeroAsia

4.3 Jadwal Kegiatan

Pelaksanaan *On the Job Training (OJT)* taruna Program Studi D3 Teknik Pesawat Udara Angkatan 8 secara intensif dimulai sejak tanggal 05 Mei 2025 sampai dengan 25 Juli 2025 di Hanggar 4 GMF AeroAsia.

Pada table 4.1 menunjukkan jadwal kegiatan selama pelaksanaan *On the Job Training (OJT)*. Adapun waktu pelaksaannya dimulai pukul 07.30 – 15.00 WIB yang dilakukan setiap hari Senin – Jum'at dan libur untuk hari Sabtu dan Minggu.

Tabel 4. 1 Jadwal Kegiatan OJT

No	Jam	Kegiatan
1.	07.30	Briefing Pagi
2.	07.40 – 08.00	Prepared Jobcard
3.	08.00 – 12.00	Waktu Kerja
4.	12.00 – 13.00	Ishoma
5.	13.00 – 14.50	Waktu Kerja
6.	14.50 – 15.00	Briefing Pulang

4.4 Permasalahan

Dalam pelaksanaan *On the Job Training (OJT)*, taruna secara aktif dilibatkan dalam kegiatan inspeksi dan *maintenance* pesawat Airbus A320-200. Selama kegiatan tersebut, peserta OJT menghadapi berbagai kondisi yang akan dijadikan sebagai bahan studi kasus dalam penyusunan laporan. Studi kasus yang diangkat

berdasarkan aktivitas yang dilakukan merupakan bentuk dokumentasi kegiatan OJT di GMF AeroAsia – Hanggar Tangerang. Secara umum, selama mengikuti kegiatan OJT di GMF AeroAsia – Hanggar Tangerang, peserta mempelajari tahapan-tahapan penting dalam proses *maintenance* pesawat udara. Adapun tahapan tersebut sebagai berikut:

4.4.1 Identifikasi Masalah

Tahap awal dalam pelaksanaan *maintenance* atau *servicing* pesawat udara dimulai dengan proses identifikasi masalah atau *troubleshooting*. Pada tahap ini, teknisi bertugas untuk menganalisis dan menentukan lokasi serta sumber permasalahan sebelum melanjutkan ke langkah *servicing* berikutnya.

4.4.2 Inspection

Seiring penggunaan pesawat, umur pakai setiap komponen akan mengalami penurunan. Oleh karena itu, salah satu tujuan utama dari inspeksi pesawat adalah untuk memastikan kondisi pesawat tetap laik terbang dengan melakukan *servicing* atau penggantian komponen yang diperlukan. Seluruh kegiatan inspeksi dilakukan sesuai dengan *task card* dan mengacu pada *Aircraft Maintenance Manual* (AMM) Airbus A320.

4.4.3 Repair/Servicing

Servicing merupakan kegiatan yang dilakukan untuk memperbaiki atau mengganti komponen pesawat yang ditemukan rusak. Biasanya, *servicing* ini melibatkan penggantian komponen agar pesawat tetap memenuhi standar keselamatan dan kelayakan terbang.

4.4.4 Functional Test

Setelah proses *servicing* atau penggantian komponen selesai dilakukan, tahap berikutnya adalah uji fungsional. Pada tahap ini, teknisi memeriksa dan mengamati performa serta fungsi komponen yang telah diperbaiki atau diganti, guna memastikan operasionalnya sesuai standar.

4.4.5 Return to Service

Return to Service merupakan tahap akhir dalam proses *maintenance*, di mana setelah seluruh *maintenance* dan uji fungsional - *including ground run* - dinyatakan berhasil dan memenuhi syarat, pesawat dikembalikan ke status laik operasi dan siap untuk digunakan kembali.

Kelima tahapan tersebut telah diimplementasikan secara langsung oleh peserta selama pelaksanaan OJT. Selanjutnya, akan dipaparkan studi kasus yang mencerminkan tahapan tersebut beserta kegiatan *servicing* yang telah dilaksanakan:

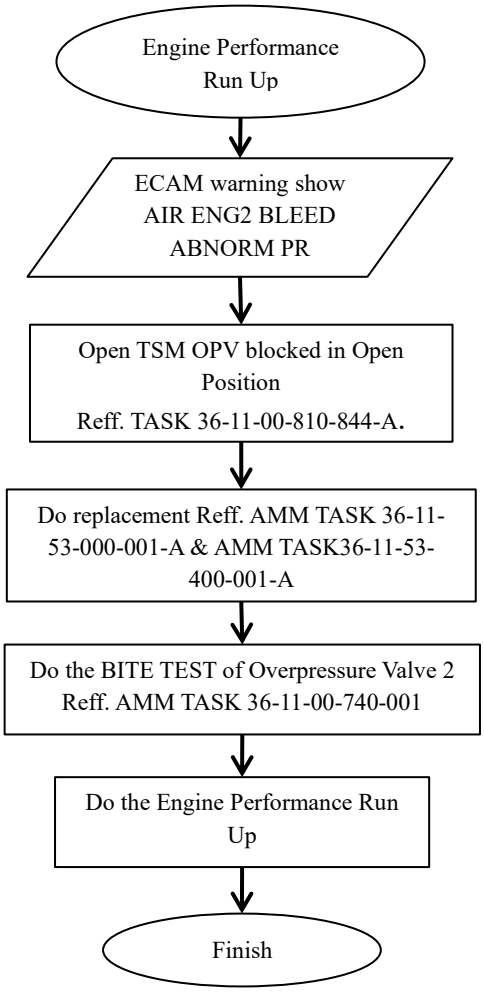
a. *Failure of Overpressure Valve.*
b. *Failure of Bleed Monitoring Computer.*

4.5 Penyelesaian Masalah

Dari berbagai *troubleshooting* yang dijumpai selama pelaksanaan *On the Job Training*, diperlukan sejumlah tindakan penanganan untuk menyelesaikan permasalahan tersebut sebagaimana dijelaskan berikut ini:

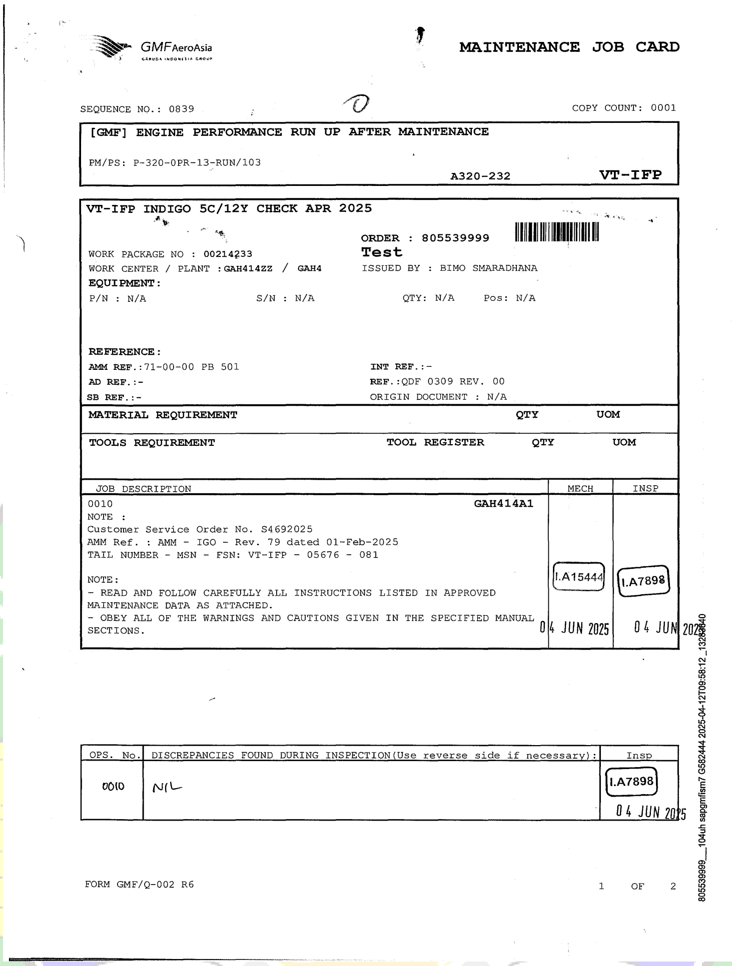
4.5.1 Troubleshooting Failure of Overpressure Valve

Pesawat Airbus A320 dengan registrasi VT – IFP harus dilakukan perbaikan dengan alur bagan 4. 1 karena terjadi permasalahan *Failure of Overpressure Valve*.



Gambar 4. 1 Flowchart Troubleshooting Overpressure Valve #2

4.5.1.1 *Inspection*



GMF AeroAsia
GARUDA INDONESIA GROUP

MAINTENANCE JOB CARD

SEQUENCE NO.: 0839 | COPY COUNT: 0001

[GMF] ENGINE PERFORMANCE RUN UP AFTER MAINTENANCE
PM/PS: P-320-0PR-13-RUN/103
A320-232 | VT-IFP

VT-IFP INDIGO 5C/12Y CHECK APR 2025
ORDER : 805539999
Test
WORK PACKAGE NO : 00214233
WORK CENTER / PLANT :GAH414ZZ / GAH4
ISSUED BY : BIMO SMARADHANA
EQUIPMENT:
P/N : N/A   S/N : N/A   QTY: N/A   Pos: N/A

REFERENCE:
AMM REF.:71-00-00 PB 501   INT REF.:-
AD REF.:-   REF.:QDF 0309 REV. 00
SB REF.:-   ORIGIN DOCUMENT : N/A

MATERIAL REQUIREMENT		QTY	UOM
TOOLS REQUIREMENT	TOOL REGISTER	QTY	UOM

JOB DESCRIPTION	MECH	INSP
0010 GAH414A1 NOTE : Customer Service Order No. S4692025 AMM Ref. : AMM - IGO - Rev. 79 dated 01-Feb-2025 TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081 NOTE: - READ AND FOLLOW CAREFULLY ALL INSTRUCTIONS LISTED IN APPROVED MAINTENANCE DATA AS ATTACHED. - OBEY ALL OF THE WARNINGS AND CAUTIONS GIVEN IN THE SPECIFIED MANUAL SECTIONS.	I.A15444 04 JUN 2025	I.A7898 04 JUN 2025

OPS. No.	DISCREPANCIES FOUND DURING INSPECTION(Use reverse side if necessary):	Insp
0010	NIL	I.A7898 04 JUN 2025

FORM GMF/Q-002 R6   1 OF 2

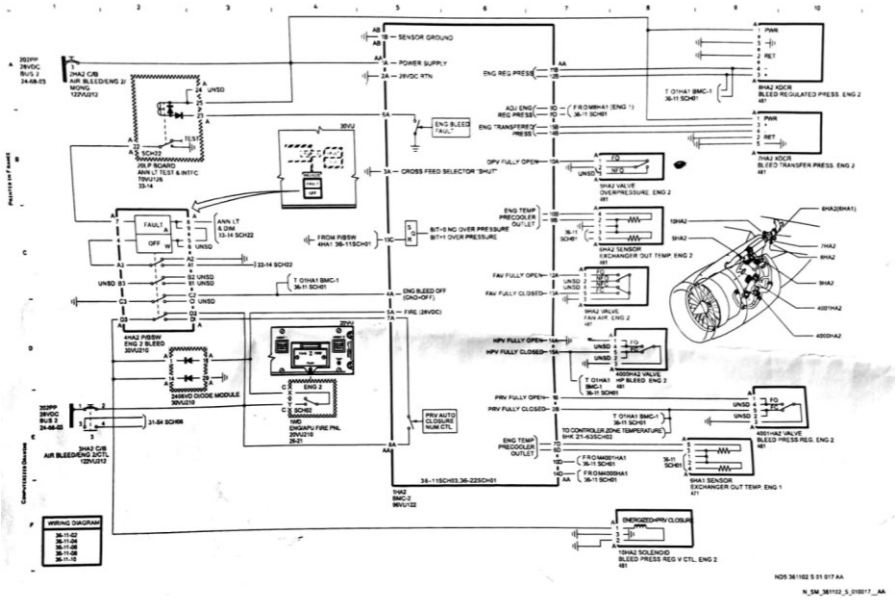
805539999__104uh sapgmfism7 G582444 2025-04-12T09:58:12_13280040

Gambar 4. 2 *Job Card Run Up*

Troubleshooting Overpressure Valve #2 terjadi ketika dalam tahap *Run Up* yang mana pada ECAM muncul *alert AIR ENG2 BLEED ABNORM PR. Troubleshoot* ini terjadi pada pesawat Airbus A320 dengan *aircraft registration* VT-IFP yang menunjukkan *AIR ENG2 BLEED ABNORM PR* yang ditunjukkan pada gambar 4. 3.

Gambar 4. 3 AIR ENG2 BLEED ABNORM PR

4.5.1.2 Rectification



Gambar 4. 4 Schematic Diagram Engine Bleed Air Supply System

Untuk mengetahui penyebabkan terjadinya *fault AIR ENG2 BLEED ABNORM PR*, maka *engineer* melakukan pengecekan *continuity* antara *output* BMC#2 hingga *input* OPV#2. Dari pengecekan *continuity* dinyatakan bahwa *wiring* antara *output* BMC#2 dan *input* OPV#2 dalam kondisi baik. Berdasarkan dari pengecekan tersebut *engineer* menyatakan bahwa kemungkinan terjadinya *fault* adalah kerusakan pada OPV#2.

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOCTYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	TSM	01-May-2025	80	36-11-00-810-844-A - Engine 2 - OPV Blocked in Open Position
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:29:26					

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

TASK 36-11-00-810-844-A
Engine 2 - OPV Blocked in Open Position

1. Possible Causes:

- VALVE-OVERPRESSURE, ENG 2 (5HA2)
- BMC-2 (1HA2)
- XDCR-BLEED REGULATED PRESS, ENG 2 (8HA2)
- wiring between pin AA/10 of BMC-2 (1HA2) and pin A/1 of the OPV (5HA2)
- sense line 4
- wiring between BMC-1 (1HA1) and the regulated pressure sensor (8HA2)
- wiring between BMC-2 (1HA2) and the regulated pressure sensor (8HA2)
- bonding

2. Job Set-up Information

Gambar 4. 5 Troubleshooting manual Overpressure Valve #2

Berdasarkan TSM (*Troubleshooting manual*) Ref. TSM *TASK* 36-11-00-810-844-A menunjukkan beberapa penyebab dari adanya *AIR ENG2 BLEED ABNORM PR* diantaranya adalah *VALVE-OVERPRESSURE, ENG* 2. Hal ini diperkuat oleh adanya hasil tes yang menunjukkan *massage* (OVPRESS-V 5HA2).

Gambar 4. 6 AIR ENG 2 BLEED ABNORM PR massage OVPRESS-V 5HA2

4.5.1.3 Repair

Setelah mengetahui pasti penyebab *trouble* selanjutnya *engineer* dan mekanik melakukan *replacement Overpressure Valve* #2 berdasarkan *reference* AMM *Removal TASK* 36-11-53-000-001-A dan AMM *Installation TASK* 36-11-53-400-001-A. Sesuai dengan TSM langkah selanjutnya yaitu melakukan *replacement* OPV #2. Sebelum melakukan AMM removal *TASK* 36-11-53-000-001-A dibutuhkan *tools* yaitu *ACCESS PLATFORM* 1M (3 FT), *CAP-BLANKING, COVER-PROTECTION* dan *WARNING NOTICE(S).*

Untuk melakukan *remove* OPV#2 perlu diperhatikan *Job Set-Up* sebagai berikut:

a. Energize the aircraft electrical circuit

Ref. AMM TASK 24-41-00-861-002 or SUBTASK 36-11-53-941-050-A

b. *Safety Precaution*:

- *Make sure that the engine shutdown occurred five minutes or more before you do this procedure.*
- *On the AIR COND panel 30VU:*
  - *Make sure that the ENG (2) BLEED pushbutton switch is released (the OFF legend is on).*

- *Make sure that the APU BLEED pushbutton switch is released (the ON legend is off).*
- *Put a WARNING NOTICE(S) to tell persons not to operate the pneumatic system.*

- *On the ENG panel 115VU:*
  - *Put a WARNING NOTICE(S) to tell persons not to start the engine (2).*
- *On the HP ground connector:*
  - *Put a WARNING NOTICE(S) to tell persons not to pressurize the pneumatic system.*
- *On the ENG section of the maintenance panel 50VU:*
  - *Make sure that the ON legend of the ENG/FADEC GND PWR (2) pushbutton switch is off,*
  - *Put a WARNING NOTICE(S) to tell persons not to energize the FADEC (2).*

c. Get Access

- *Open the cowl Ref. AMM TASK 71-13-00-010-010:*
  - *FOR 1000EM2 (ENGINE-2) 447AL, 448AR*
- *Put the ACCESS PLATFORM 1M(3 FT) in position below the engine.*

d. Deactivate the Thrust Reverser Hydraulic Control Unit

WARNING: MAKE SURE THAT THE THRUST REVERSER HYDRAULIC CONTROL UNIT (HCU) IS DE ACTIVATED BEFORE YOU DO WORK ON OR AROUND THE THRUST REVERSER. IF TH E HCU IS NOT DEACTIVATED, THERE IS A RISK OF UNWANTED THRUST REVERSER OPERATION WHICH CAN CAUSE INJURY TO PERSONS AND/OR DAMAGE TO EQUIP MENT.

- *Deactivate the thrust reverser Hydraulic Control Unit (HCU) Ref. AMM TASK 78-30-00-040-012.*

e. Open the thrust reverser Ref. AMM TASK 78-32-00-010-010

- *FOR 1000EM2 (ENGINE-2) 461AL, 462AR*

CAUTION: SOME PRESSURE CAN STAY IN THE DUCTING. THE PRESSURE WILL DECREASE WHEN YOU RELEA SE THE CLAMPS.

Setelah semua *Job Set-Up* dilakukan, langkah selanjutnya adalah *removal* OPV dengan prosedur sebagai berikut:

a. Removal of the Overpressure Valve

WARNING: DO NOT TOUCH THE UNIT UNTIL IT IS SUFFICIENTLY COOL TO PREVENT BURNS WH EN YOU DO THE MAINTENANCE TASK(S).

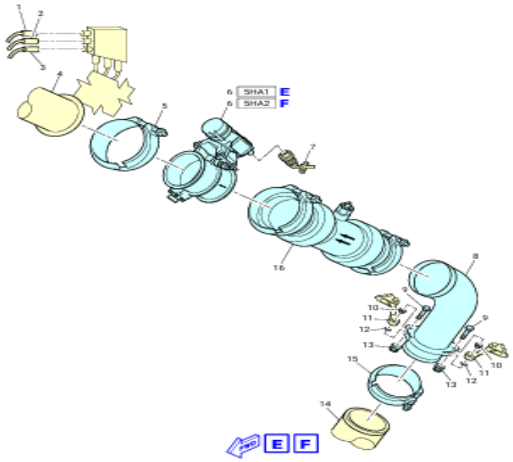


Figure 36-11-53-991-00100-00-B (SHEET 3/3) - Overpressure Valve
** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250

Gambar 4. 7 Overpressure Valve

CAUTION: MAKE SURE THAT THE ELECTRICAL CONNECTORS ARE CLEAN BEFORE YOU DISCONNECT OR CONNECT THEM. CONTAMINATION ON THE ELECTRICAL CONNECTORS CAN CAUSE DAMAGE TO EQUIPMENT.

1. *Disconnect the electrical connectors (1), (2), (3) and (7).*
2. *Put the CAP - BLANKING on each disconnected electrical connector and receptacle.*
3. *Remove the nuts (13), washers (12), bolts (9) and bushings (10) from the links (10).*
4. *Disengage the links (11) from the duct (8).*
5. *Remove the clamp (15) from the duct (8).*
6. *Remove the duct assembly (16) Ref. AMM TASK 36-11-49-000-014.*
7. *Remove the duct (8).*
8. *Hold the valve (6) and remove the clamp (5).*
9. *Remove the valve (6).*
10. *Put the COVER-PROTECTION on the valve (6) and the ducts (4), (8) and (16).*

Setelah melakukan removal maka selanjutnya adalah melakukan *Installation Overpressure Valve* #2 berdasarkan AMM TASK 36-11-53-400-001-A dengan melakukan *Job Set-Up* sebagai berikut:

a. Aircraft Maintenance Configuration

- *Make sure that the aircraft electrical circuits are energized Ref. AMM TASK 24-41-00-861-002 or Ref. AMM TASK 24-41-00-861-002*

- *Make sure that the engine shutdown occurred five minutes or more before you do this procedure.*
- *In the cockpit, on AIR COND panel 30VU:*
  - *Make sure that the ENG 1(2) BLEED pushbutton switch is released (the OFF legend is on).*
  - *Make sure that the APU BLEED pushbutton switch is released (the ON legend is off).*
  - *Make sure that the WARNING NOTICE(S) is(are) in position to tell persons not to operate the pneumatic system.*
- *In the cockpit, on ENG panel 115VU:*
  - *Make sure that the WARNING NOTICE(S) is(are) in position to tell persons not to start the engine (2).*
- *On the HP ground connector:*
  - *Make sure that the WARNING NOTICE(S) is(are) in position to tell persons not to pressurize the pneumatic system.*
- *On the ENG section of maintenance panel 50VU:*
  - *Make sure that the ON legend of the ENG/FADEC GND PWR 1(2) pushbutton switch is off.*
  - *Make sure that the WARNING NOTICE(S) is(are) in position to tell persons not to energize FADEC (2).*
- *Make sure that an ACCESS PLATFORM 1M(3 FT) is in position below the engine (2).*

b. Get Access

- *Make sure that the fan cowls are open Ref. AMM TASK 71-13-00-010-010*
  - *FOR 1000EM2 (ENGINE-2) 447AL, 448AR*
- *Make sure that the thrust reverser halves are open Ref. AMM TASK 78-32-00-010-010:*
  - *FOR 1000EM2 (ENGINE-2) 461AL, 462AR*
- *Make sure that the thrust reverser Hydraulic Control Unit (HCU) is deactivated Ref. AMM TASK 78-30-00-040-012.*

Setelah semua Job Set-Up dilakukan, langkah selanjutnya adalah install OPV dengan prosedur sebagai berikut:

c. Installation of the Overpressure Valve

WARNING: **DO NOT TOUCH THE UNIT UNTIL IT IS SUFFICIENTLY COOL TO PREVENT BURNS WHEN YOU DO THE MAINTENANCE TASK(S).**

1. *Clean the component interfaces and the adjacent area.*
2. *Do an inspection of the component interfaces and the adjacent area.*
3. *Remove the COVER - PROTECTION from the valve (6) and the ducts (4), (8) and (16).*
4. *Install the valve (6) on the pneumatic line (4) (put the control mechanism to the rear):*
   - *The arrow that shows the direction of the airflow on the valve (6) must points up.*

CAUTION: **MAKE SURE THAT THE SCREWS OF THE ATTACHMENT CLAMPS ON THE OVERPRESSURE VALVE ARE IN THE CORRECT POSITION.**
IF NOT, THE SCREWS CAN CAUSE DAMAGE TO THE FIREWALL OF THE THRUST REVERSER COWL.

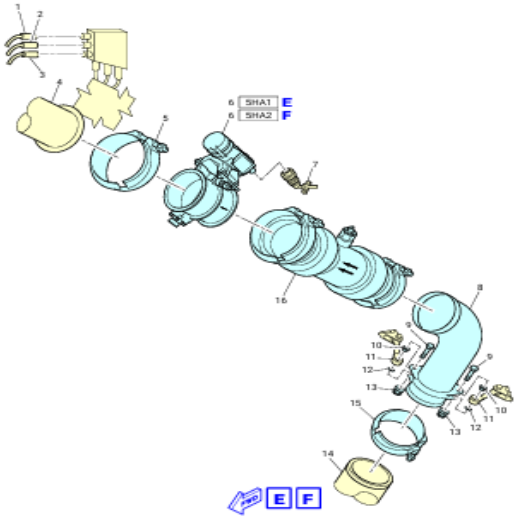


Figure 36-11-53-991-00100-00-B (SHEET 3/3) - Overpressure Valve
**** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250**

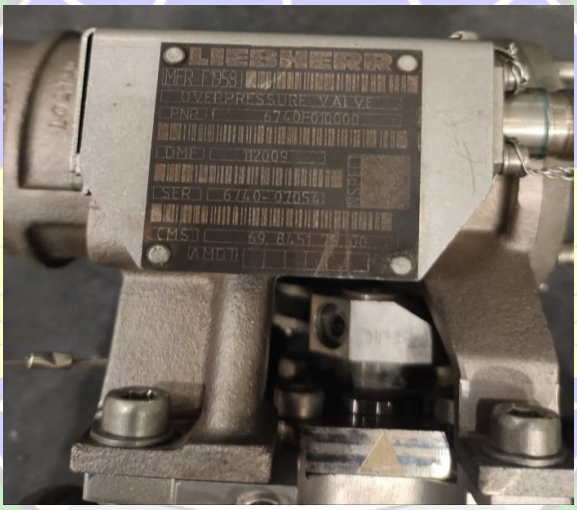
Gambar 4. 8 Overpressure Valve

5. *Install the clamp (5) but do not tighten it fully.*
6. *Put the duct (8) in its correct installation position.*
7. *Install the duct assembly (16) Ref. AMM TASK 36-11-49-400-014.*
8. *Install the clamp (15).*

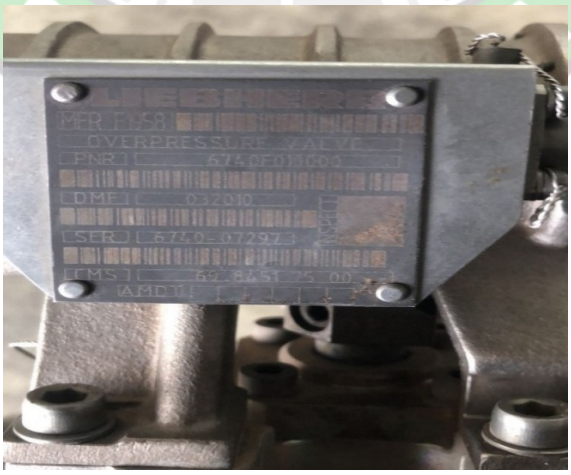
9. *Attach the links (11) to the duct (8) with the bushings (10), bolts (9), washers (12) and nuts (1 3) and tighten the nuts (13) with your hand.*
10. *Adjust the links (11) until there is no force on the ducts (4), (8) and (16) and the links (11).*
11. *TORQUE the clamps (5) and (15) to between 75 and 85 lbf.in (0.85 and 0.96 m.daN) Ref. AMM TASK 70-23-11-911-013.*
12. *Tighten the nuts (13).*
13. *Remove the CAP - BLANKING from each electrical connector and receptacle.*

CAUTION: **MAKE SURE THAT THE ELECTRICAL CONNECTORS ARE CLEAN BEFORE YOU DISCONNECT OR CONNECT THEM. CONTAMINATION ON THE ELECTRICAL CONNECTORS CAN CAUSE DAMAGE TO EQUIPMENT.**

14. *Connect the electrical connectors (1), (2), (3) and (7).*



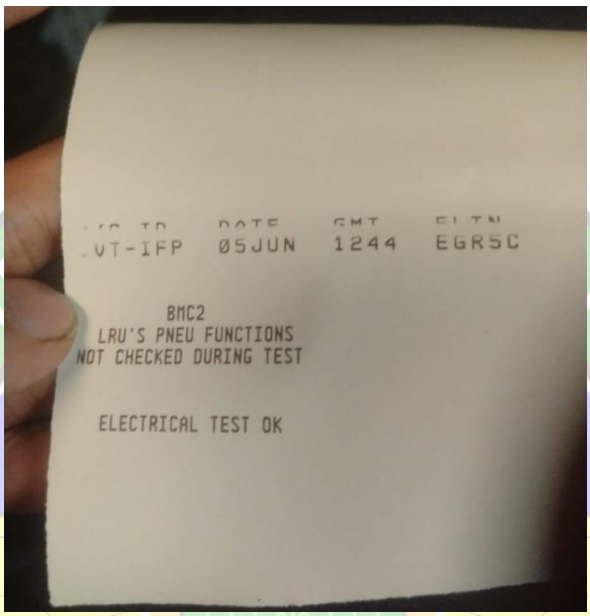
Gambar 4. 9 Overpressure Valve OFF



Gambar 4. 10 Overpressure Valve ON

4.5.1.4 *Functional Test*

Setelah melewati tahap *replacement Overpressure Valve*#2 maka selanjutnya akan dilakukan *BITE TEST of* Overpressure Valve #2 dengan Ref. AMM *TASK* 36-11-00-740-001. Hasil *BITE TEST of* Overpressure Valve #2 menunjukkan "*ELECTRICAL TEST OK*".



Gambar 4. 11 Result of Functional Test Overpressure Valve

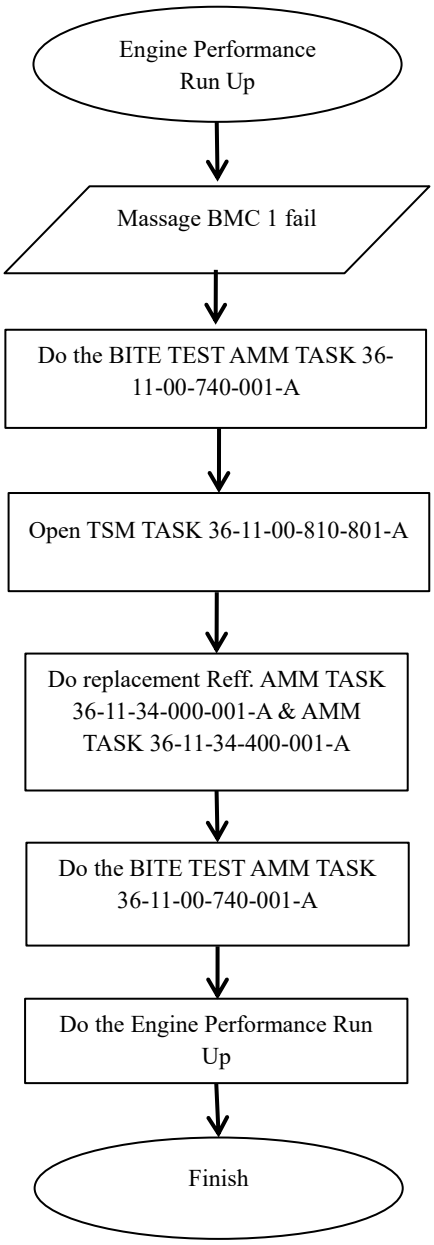
Setelah melakukan *BITE TEST*, *crew* akan melakukan prosedur *Engine Ground Run* untuk memastikan kembali bahwa *Overpressure Valve* #2 dalam keadaan baik dan tidak muncul kembali indikasi *fault*.

4.5.1.5 *Return to Service*

Setelah semua prosedur dilakukan dan komponen berfungsi kembali secara normal dan *troubleshoot* dapat dinyatakan selesai.

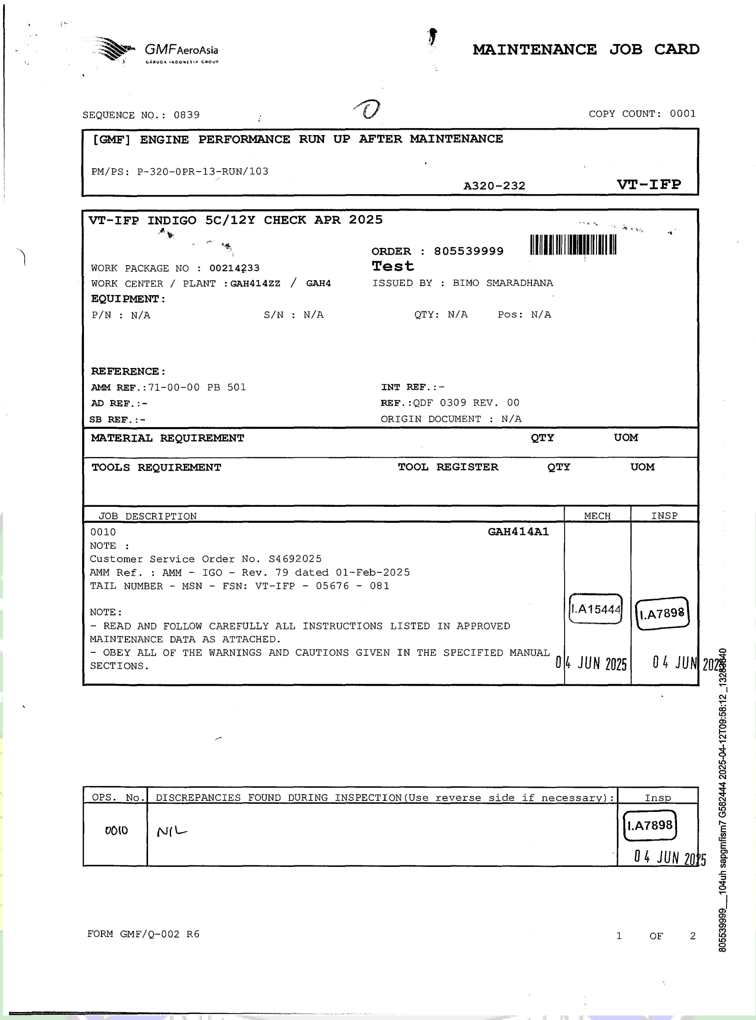
4.5.2 Troubleshooting Failure of Bleed Monitoring Computer

Pesawat Airbus A320 dengan registrasi VT – IFP harus dilakukan perbaikan dengan alur bagan 4. 11 karena terjadi permasalahan *Failure of Bleed Monitoring Computer*.



Gambar 4. 12 Flowchart Bleed Monitoring Computer 1

4.5.2.1 Inspection



GMF AeroAsia

MAINTENANCE JOB CARD

SEQUENCE NO.: 0839 — COPY COUNT: 0001

[GMF] ENGINE PERFORMANCE RUN UP AFTER MAINTENANCE

PM/PS: P-320-OPR-13-RUN/103 — A320-232 — VT-IFP

VT-IFP INDIGO 5C/12Y CHECK APR 2025

ORDER : 805539999
Test
WORK PACKAGE NO : 00214233
WORK CENTER / PLANT : GAH414ZZ / GAH4 — ISSUED BY : BIMO SMARADHANA
EQUIPMENT:
P/N : N/A — S/N : N/A — QTY: N/A — Pos: N/A

REFERENCE:
AMM REF.:71-00-00 PB 501 — INT REF.:-
AD REF.:- — REF.:QDF 0309 REV. 00
SB REF.:- — ORIGIN DOCUMENT : N/A

MATERIAL REQUIREMENT		QTY	UOM
TOOLS REQUIREMENT	**TOOL REGISTER**	**QTY**	**UOM**

JOB DESCRIPTION	MECH	INSP
0010 GAH414A1 NOTE : Customer Service Order No. S4692025 AMM Ref. : AMM - IGO - Rev. 79 dated 01-Feb-2025 TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081 NOTE: - READ AND FOLLOW CAREFULLY ALL INSTRUCTIONS LISTED IN APPROVED MAINTENANCE DATA AS ATTACHED. - OBEY ALL OF THE WARNINGS AND CAUTIONS GIVEN IN THE SPECIFIED MANUAL SECTIONS.	I.A15444 04 JUN 2025	I.A7898 04 JUN 2025

OPS. No.	DISCREPANCIES FOUND DURING INSPECTION(Use reverse side if necessary):	Insp
0010	NIL	I.A7898 04 JUN 2025

FORM GMF/Q-002 R6 — 1 OF 2

Gambar 4. 13 Job Card Run Up

Troubleshooting Bleed Monitoring Computer #1 terjadi ketika dalam tahap *Run Up* yang mana pada ECAM muncul *alert* BMC1. *Troubleshoot* ini terjadi pada pesawat Airbus A320 dengan *aircraft registration* VT-IFP.

4.5.2.2 *Rectification*

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOCTYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	TSM	01-May-2025	80	36-11-00-810-801-A - Loss of the BMC1
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:40:00					

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

TASK 36-11-00-810-801-A
Loss of the BMC1

1. Possible Causes:

- BMC-1 (1HA1)

2. Job Set-up Information

A. Referenced Information

REFERENCE	DESIGNATION
Ref. AMM 36-11-00-740-001	BITE Test of the Bleed Monitoring Computer (BMC) 1 (2)
Ref. AMM 36-11-34-000-001	Removal of the BMC
Ref. AMM 36-11-34-400-001	Installation of the BMC

3. Fault Confirmation

SUBTASK 36-11-00-710-082-A
A. Test
(1) Do the BITE test of the BMC1 Ref. AMM 36-11-00-740-001.

Gambar 4. 14 Troubleshooting manual Bleed Monitoring Computer

Maintenance yang dilakukan sesuai dengan TSM (*Troubleshooting manual*) Ref. TSM *TASK* 36-11-00-810-801-A. Sesuai dengan *reference information* untuk mengkonfirmasi penyebab munculnya *fault,* maka *engineer* melakukan *BITE TEST* Ref. AMM *TASK* 36-11-00-740-001, yang menunjukkan BMC1 *FAULT* ditunjukkan pada gambar 4. 15.

Gambar 4. 15 Massage BMC 1 fail

4.5.2.3 Repair

Setelah mengetahui pasti penyebab *trouble* selanjutnya *engineer* dan mekanik melakukan *replacement* BMC #1 berdasarkan *reference* AMM *Removal TASK* 36-11-34-000-001-A dan AMM *Installation TASK* 36-11-34-400-001-A. Sesuai dengan TSM langkah selanjutnya yaitu melakukan *replacement* BMC #1. Sebelum melakukan AMM *removal TASK* 36-11-34-000-001-A dibutuhkan *tools* yaitu *ACCESS PLATFORM* 2M (6 FT), *CAP-BLANKING*, dan *SAFETY CLIP-CIRCUIT BREAKER*.

Untuk melakukan *remove* BMC#1 perlu diperhatikan *Job Set-Up* sebagai berikut:

a. Energize the ground service network Ref. AMM TASK 24-42-00-861-001.

b. Get Access

- *Put the ACCESS PLATFORM 2M (6 FT) in position at the access door 811.*
- *Open the access door 811.*

c. Open, safety and tag the circuit breaker(s) that follow(s). Use the SAFETY CLIP - CIRCUIT BREAKER as necessary.

PANEL	DESIGNATION	FIN	LOCATION
FOR FIN 1HA1(BMC-1)			

**** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751**

49VU	AIR BLEED/ENG 1/CTL	3HA1	D12
49VU	AIR BLEED/ENG 1/MONG	2HA1	D11

Gambar 4. 16 Circuit Breaker BMC 1

Setelah semua *Job Set-Up* dilakukan, langkah selanjutnya adalah *removal* BMC#1 dengan prosedur sebagai berikut:

a. Removal Bleed Monitoring Computer 1

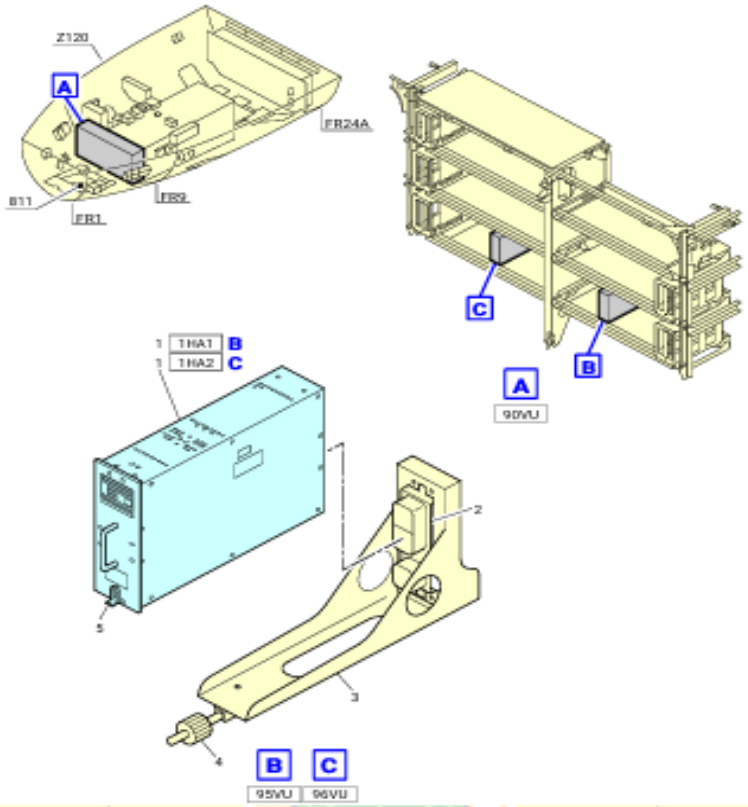
1. Loosen the nut (4).

2. Lower the nut (4).

3. Pull the BMC (1) on its rack (3) to disconnect the electrical connectors (2).

4. Remove the BMC (1) from its rack (3).

5. Put CAP - BLANKING on the disconnected electrical connectors.



Gambar 4. 17 Removal BMC #1

Setelah melakukan *removal* maka selanjutnya adalah melakukan *Installation Bleed Monitoring Computer* #1 berdasarkan AMM *TASK* 36-11-34-400-001-A dengan melakukan *Job Set-Up* sebagai berikut:

a. Aircraft Maintenance Configuration

- *Make sure that the ground service network is energized Ref. AMM TASK 24-42-00-861-001*

b. Get Access

- *Make sure that the ACCESS PLATFORM 2M (6 FT) is in position at the access door 811.*
- *Make sure that the access door 811 is open.*

c. Make sure that the circuit breaker(s) that follow(s) is (are) open, safetied and tagged. Use the SAFETY CLIP - CIRCUIT BREAKER as necessary.

PANEL	DESIGNATION	FIN	LOCATION
FOR FIN 1HA1(BMC-1)			

**** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751**

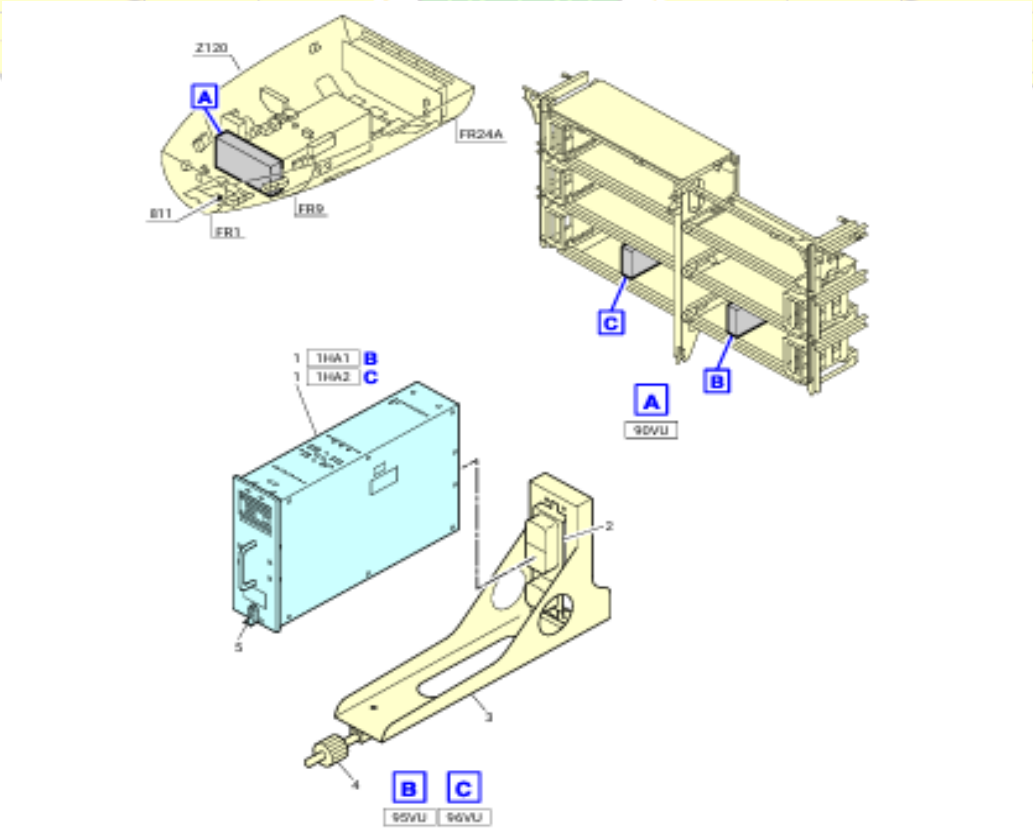
49VU	AIR BLEED/ENG 1/CTL	3HA1	D12
49VU	AIR BLEED/ENG 1/MONG	2HA1	D11

Gambar 4. 18 Circuit Breaker BMC 1

Setelah semua *Job Set-Up* dilakukan, langkah selanjutnya adalah *install* BMC dengan prosedur sebagai berikut:

a. Installation of the BMC #1

1. *Clean the component interface and/or the adjacent area.*
2. *Remove the CAP - BLANKING from each electrical connector and receptacle.*
3. *Make sure that all the electrical connections are clean and in the correct condition.*
4. *Install the BMC (1) on its rack (3).*
5. *Push the BMC (1) on its rack (3) to connect the electrical connectors (2).*
6. *Engage the nut (4) on the lug (5) and tighten.*



Gambar 4. 19 Installation BMC 1

b. Remove the SAFETY CLIP - CIRCUIT BREAKER and the tag(s) and close this (these) circuit breaker(s).

PANEL	DESIGNATION	FIN	LOCATION
FOR FIN 1HA1(BMC-1)			

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

49VU	AIR BLEED/ENG 1/CTL	3HA1	D12
49VU	AIR BLEED/ENG 1/MONG	2HA1	D11

Gambar 4. 20 Circuit Breaker BMC 1

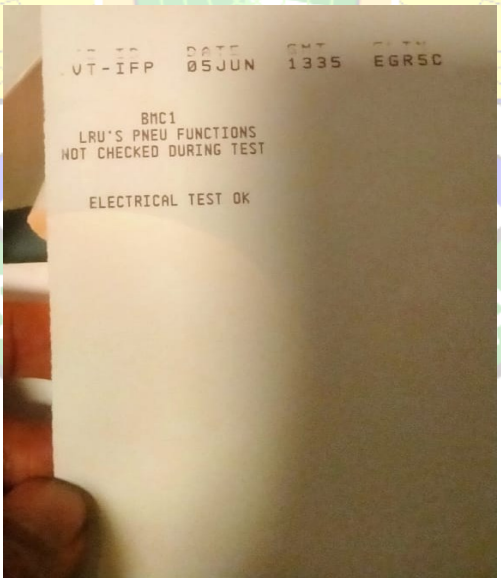
c. Close Access

- *Make sure that the work area is clean and clear of tools and other items.*
- *Close the access door 811.*
- *Remove the access platform(s).*

d. De-energize the ground service network Ref. AMM TASK 24-42-00-862-001.

4.5.2.4 Functional Test

Setelah mengganti BMC 1, lakukan *BITE TEST* sesuai dengan AMM *TASK* 36-11-00-740-001-A dapat dilihat pada gambar bahwa hasil dari *BITE TEST* adalah "*ELECTRICAL TEST OK*".



Gambar 4. 21 Result BITE TEST of BMC 1

Setelah melakukan *BITE TEST*, *crew* akan melakukan prosedur *Engine Ground Run* untuk memastikan kembali bahwa *Bleed Monitoring Computer* #1 dalam keadaan baik dan tidak muncul kembali indikasi *fault*.

4.5.2.5 Return to Service

Setelah semua prosedur sudah dilakukan dan komponen berfungsi sebagaimana mestinya secara normal maka trouble ini bisa dinyatakan selesai.

BAB V
PENUTUP

5.1 Kesimpulan

5.1.1 Kesimpulan Permasalahan OJT

Selama pelaksanaan *On the Job Training* (OJT) di GMF AeroAsia, peserta terlibat langsung dalam kegiatan perawatan dan inspeksi pesawat Airbus A320-200. Permasalahan yang muncul antara lain *failure* pada *Overpressure Valve* (OPV) dan *Bleed Monitoring Computer* (BMC). Permasalahan tersebut berhasil diidentifikasi melalui prosedur *troubleshooting*, diperbaiki melalui penggantian komponen, serta dikonfirmasi penyelesaiannya dengan uji fungsi (*functional test*).

5.1.2 Kesimpulan terhadap pelaksanaan OJT

Pelaksanaan OJT memberikan pengalaman langsung kepada peserta dalam menerapkan teori dan keterampilan di lingkungan kerja nyata. Peserta memperoleh pemahaman mendalam tentang prosedur *maintenance*, standar keselamatan, serta budaya kerja di industri penerbangan. Seluruh tahapan perawatan, mulai dari identifikasi masalah, inspeksi, perbaikan, uji fungsi, hingga *return to service* telah dilakukan sesuai standar dan prosedur yang berlaku.

5.2 Saran

5.2.1 Saran terhadap permasalahan OJT

Diharapkan setiap pelaksanaan *troubleshooting* dapat dilengkapi dokumentasi yang lebih rinci untuk mempermudah analisis lanjutan. Selain itu, penting bagi peserta OJT untuk terus meningkatkan ketelitian dalam setiap tahap inspeksi guna meminimalisir risiko kesalahan pada identifikasi permasalahan komponen.

5.2.2 Saran terhadap pelaksanaan OJT

Pelaksanaan OJT sebaiknya dilengkapi dengan sesi evaluasi rutin di akhir setiap minggu untuk meninjau capaian, kendala, dan pembelajaran yang diperoleh. Hal ini dapat memperkuat pemahaman peserta terhadap proses *maintenance* serta meningkatkan efektivitas program OJT secara keseluruhan.

5.3 Manfaat OJT

Pelaksanaan OJT memberikan manfaat yang signifikan bagi peserta, di antaranya meningkatkan keterampilan teknis dan praktis, memperluas wawasan terkait sistem *maintenance* pesawat, serta menumbuhkan sikap profesional, disiplin, dan tanggung jawab. Selain itu, OJT menjadi bekal penting dalam mempersiapkan diri memasuki dunia kerja sebagai calon tenaga profesional di bidang penerbangan.

DAFTAR PUSTAKA

Buku Pedoman On The Job Training, (2020, April). Politeknik Penerbangan Surabaya

Airbus World. (2024). A318/A319/A320/A321 Aircraft Maintenance Manual. Chapter 36 Pneumatic.

GMF AeroAsia. Sejarah Perusahaan https://www.gmf-aeroasia.co.id/sejarah

LAMPIRAN

Lampiran 1 Job Card Engine Run Up

GMF AeroAsia
GARUDA INDONESIA GROUP

MAINTENANCE JOB CARD

SEQUENCE NO.: 0839 COPY COUNT: 0001

[GMF] ENGINE PERFORMANCE RUN UP AFTER MAINTENANCE

PM/PS: P-320-0PR-13-RUN/103

A320-232 **VT-IFP**

VT-IFP INDIGO 5C/12Y CHECK APR 2025

ORDER : 805539999
Test

WORK PACKAGE NO : 00214233
WORK CENTER / PLANT : GAH414ZZ / GAH4 ISSUED BY : BIMO SMARADHANA

EQUIPMENT:

P/N : N/A S/N : N/A QTY: N/A Pos: N/A

REFERENCE:

AMM REF.:71-00-00 PB 501 INT REF.:-
AD REF.:- REF.:QDF 0309 REV. 00
SB REF.:- ORIGIN DOCUMENT : N/A

MATERIAL REQUIREMENT	QTY	UOM

TOOLS REQUIREMENT	TOOL REGISTER	QTY	UOM

JOB DESCRIPTION	MECH	INSP
0010 GAH414A1 NOTE : Customer Service Order No. S4692025 AMM Ref. : AMM - IGO - Rev. 79 dated 01-Feb-2025 TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081 NOTE: - READ AND FOLLOW CAREFULLY ALL INSTRUCTIONS LISTED IN APPROVED MAINTENANCE DATA AS ATTACHED. - OBEY ALL OF THE WARNINGS AND CAUTIONS GIVEN IN THE SPECIFIED MANUAL SECTIONS.	I.A15444 04 JUN 2025	I.A7898 04 JUN 2025

OPS. No.	DISCREPANCIES FOUND DURING INSPECTION(Use reverse side if necessary):	Insp
0010	NIL	I.A7898 04 JUN 2025

FORM GMF/Q-002 R6 1 OF 2

GMF AeroAsia
GARUDA INDONESIA GROUP

MAINTENANCE JOB CARD

SEQUENCE NO.: 0839 COPY COUNT: 0001

[GMF] ENGINE PERFORMANCE RUN UP AFTER MAINTENANCE

PM/PS: P-320-0PR-13-RUN/103

A320-232 **VT-IFP**

JOB DESCRIPTION	MECH	INSP
0020 **GAH414A1** "Perform Engine Performance Run-Up after maintenance Refer to AMM 71-00-00/501 - Test No.3 : Idle Leak Check, TASK 71-00-00-710-012-B - Test No. 6: Electronic Engine Control (EEC) System Idle Test, TASK 71-00-00-710-022-B - Test No.13 : Pretested Replacement Engine Test, TASK 71-00-00-700-011-B "	I.A7898 04 JUN 2025	I.A5875 04 JUN 2025
0030 **GAH414A1** PUT THE AIRCRAFT BACK TO SERVICEABLE CONDITION AND/OR BACK TO ITS INITIAL CONFIGURATION AS PER AMM. EXAMINE THE WORK AREA TO MAKE SURE IT'S CLEAR FROM ANY UNWANTED OBJECT SUCH AS MATERIALS, TOOLS, AND OTHER FOD.	I.A15444 04 JUN 2025	I.A7898 04 JUN 2025

OPS. No.	DISCREPANCIES FOUND DURING INSPECTION(Use reverse side if necessary):	Insp
0020.	- ENG 1 VIB N1 1,5 UNIT AT 75 % N1 : 8015602064. - ENG 2 VIB N1 2,5 UNIT AT 85 % N1 : 8015602065. - DURINGEGR FOUND BMC #1 FAULT : 8055635553	I.A7898 04 JUN 2025

CARD CLEARANCE	Accomplishment date	Supervisor Sign
	04 JUN 2025	

FORM GMF/Q-002 R6 2 OF 2

AIRBUS	JOB CARD PACKAGE TITLE: **VT-IFP EGR**	IGO - Tail Number - MSN - FSN VT-IFP - 05676 - 081

MPD	Reference	Title	DocType
NONE	71-00-00-710-012-B	Test No.3 : Idle Leak Check	AMM
NONE	71-00-00-710-022-B	Test No. 6: Electronic Engine Control (EEC) System Idle Test	AMM
NONE	71-00-00-700-011-B	Test No.13 : Pretested Replacement Engine Test	AMM

Job Cards Package is made of: 3 job cards.

INTENTIONALLY LEFT BLANK

	MECH.	INSP.
	I.A15444 04 JUN 2025	I.A7898 04 JUN 2025

**** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

TASK 71-00-00-710-012-B
Test No.3 : Idle Leak Check

WARNING: **DO NOT DO AN ENGINE RUN-UP AT A POWER ABOVE IDLE WITH THE THRUST REVERSER COWLS AND THE FAN COWL DOORS OPEN.**
BEFORE YOU DO AN ENGINE RUN-UP AT IDLE WITH THE FAN COWL DOORS OPEN, MAKE SURE THAT THE COWL DOORS ARE SAFETIED BY ALL HOLD-OPEN RODS.
IF YOU DO NOT OBEY THESE INSTRUCTIONS, INJURY TO PERSONS AND/OR DAMAGE TO EQUIPMENT CAN OCCUR.

1. Reason for the Job

Use the idle leak check to do an inspection of the fuel and oil systems for leaks or for a functional check of 7th stage bleed valves 7B, 7C and/or 10th stage bleed valve/solenoid after replacement.

NOTE: In order to do functional check of 7A bleed valve, high power run is required.

2. Job Set-up Information

A. Consumable Materials

REFERENCE	DESIGNATION
V01-410	Isopropyl Alcohol, Reagent grade
V02-099	lint free cloth
V06-030	non-aqueous developer

B. Work Zones and Access Panels

ZONE/ACCESS	ZONE DESCRIPTION
400	POWER PLANT, NACELLES AND PYLONS
FOR 1000EM1(ENGINE-1)	
437AL, 438AR, 451AL, 452AR	
FOR 1000EM2(ENGINE-2)	
447AL, 448AR, 461AL, 462AR	

C. Referenced Information

REFERENCE	DESIGNATION
Ref. 24-41-00-861-002-A	Energize the Aircraft Electrical Circuits from the External Power
Ref. 24-41-00-861-002-A01	Energize the Aircraft Electrical Circuits from the APU
Ref. 24-41-00-861-002-A02	Energize the Aircraft Electrical Circuits from Engine 1(2)
Ref. 24-41-00-862-002-A	De-energize the Aircraft Electrical Circuits Supplied from the External Power
Ref. 24-41-00-862-002-A01	De-energize the Aircraft Electrical Circuits Supplied from the APU
Ref. 24-41-00-862-002-A02	De-energize the Aircraft Electrical Circuits Supplied from the Engine 1(2)
Ref. 31-60-00-860-001-A	EIS Start Procedure
Ref. 31-60-00-860-002-A	EIS Stop Procedure
Ref. 71-00-00-700-013-A	Procedure to Dry Out the High Pressure Turbine (HPT) after Oil Contamination
Ref. 71-00-00-710-018-A	Discontinued Start, Restart and Shutdown Procedures
Ref. 71-00-00-710-022-B	Test No. 6: Electronic Engine Control (EEC) System Idle Test
Ref. 71-00-00-710-043-A	Normal Engine Automatic-Start Procedure
Ref. 71-00-00-710-047-A	Normal Engine Manual-Start Procedure
Ref. 71-00-00-860-010-B	Engine Operation Limits, Guidelines and Special Procedures
Ref. 71-00-00-860-011-C	Table of Idle Indications

	MECH.	INSP.

REFERENCE	DESIGNATION
Ref. 71-00-00-860-011-C01	Table of Idle Indications
Ref. 71-13-00-010-010-A	Opening of the Fan Cowls 437AL(447AL),438AR(448AR)
Ref. 71-13-00-410-010-A	Closing of the Fan Cowls 437AL(447AL),438AR(448AR)
Ref. 72-50-00-200-010-A	Inspection of the Turbine Exhaust Case
Ref. 78-30-00-040-012-A	Deactivation of the Thrust Reverser Hydraulic Control Unit (HCU) for Ground Maintenance
Ref. 78-30-00-440-012-A	Re-activation of the Thrust Reverser Hydraulic Control Unit (HCU) after Ground Maintenance
Ref. 78-32-00-010-010-A	Opening of the Thrust Reverser Halves
Ref. 78-32-00-410-010-A	Closing of the Thrust Reverser Halves

I.A15444 — 04 JUN 2025 | I.A7898 — 04 JUN 2025

3. Job Set-up

SUBTASK 71-00-00-010-152-A

A. Open the fan cowl doors: Ref. AMM TASK 71-13-00-010-010

WARNING: **BEFORE YOU START THE ENGINES FOR THE IDLE LEAK TEST, MAKE SURE THAT ALL HOLD-OPEN RODS ARE SERVICEABLE AND CORRECTLY LOCKED ON EACH ENGINE. IF ONE HOLD-OPEN ROD IS UNSERVICEABLE, CLOSE AND LATCH THE FAN COWL DOORS CORRECTLY. ONE MISSING OR INCORRECTLY LOCKED HOLD-OPEN ROD CAN CAUSE FAN COWL CLOSURE. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.**

(1) FOR 1000EM1 (ENGINE-1)
437AL, 438AR

(2) FOR 1000EM2 (ENGINE-2)
447AL, 448AR

I.A15444 — 04 JUN 2025 | I.A7898 — 04 JUN 2025

SUBTASK 71-00-00-040-090-A

WARNING: **MAKE SURE THAT THE THRUST REVERSER HYDRAULIC CONTROL UNIT (HCU) IS DEACTIVATED BEFORE YOU DO WORK ON OR AROUND THE THRUST REVERSER. IF THE HCU IS NOT DEACTIVATED, THERE IS A RISK OF UNWANTED THRUST REVERSER OPERATION WHICH CAN CAUSE INJURY TO PERSONS AND/OR DAMAGE TO EQUIPMENT.**

B. Deactivate the Thrust Reverser

NOTE: Access to the thrust reverser area is only required if external parts in the core compartment have been disturbed during maintenance.

(1) Deactivate the thrust reverser hydraulic control unit (HCU) Ref. AMM TASK 78-30-00-040-012.

I.A15444 — 04 JUN 2025 | I.A7898 — 04 JUN 2025

SUBTASK 71-00-00-010-153-A

C. Open the thrust reverser halves Ref. AMM TASK 78-32-00-010-010:

(1) FOR 1000EM1 (ENGINE-1)
451AL, 452AR

(2) FOR 1000EM2 (ENGINE-2)
461AL, 462AR

I.A15444 — 04 JUN 2025 | I.A7898 — 04 JUN 2025

SUBTASK 71-00-00-110-061-A

D. Prepare the Oil and Fuel Tubes

(1) Clean thoroughly areas where maintenance has been done. Use a clean lint free cloth (Material Ref. V02-099) made moist with Isopropyl Alcohol, Reagent grade (Material Ref. V01-410) and dry with a lint free cloth.

(2) Apply non-aqueous developer (Material Ref. V06-030) to the fuel and oil tubes at the locations where they were disconnected and reconnected.

I.A15444 — 04 JUN 2025 | I.A7898 — 04 JUN 2025

SUBTASK 71-00-00-861-086-A

E. Energize the aircraft electrical circuits Ref. AMM TASK 24-41-00-861-002.

SUBTASK 71-00-00-860-139-A

I.A15444 — 04 JUN 2025 | I.A7898 — 04 JUN 2025

F. Do the EIS start procedure (upper ECAM display unit only) Ref. AMM TASK 31-60-00-860-001.

I.A15444 04 JUN 2025 — I.A7898 04 JUN 2025

4. Procedure

SUBTASK 71-00-00-710-183-A

A. Do this test:

NOTE: For safety it is recommend that you do the test with all the fan cowl doors and thrust reverser halves closed (but this is not mandatory).

NOTE: For general information, refer to engine operation limits, guidelines and special procedures Ref. AMM TASK 71-00-00-860-010.

NOTE: If you must do a check of the Electronic Engine Control (EEC), you can do the test, EEC system idle test at this time Ref. AMM TASK 71-00-00-710-022.

(1) Start the engine with the normal engine automatic start procedure Ref. AMM TASK 71-00-00-710-043 or the normal engine manual start procedure Ref. AMM TASK 71-00-00-710-047.

(2) Operate the engine at MIN IDLE for at least five minutes.

(3) Make sure that the indications of operation are in the limits of operation, with reference to Ref. AMM TASK 71-00-00-860-011 if required:

- Make sure that you obey the precautions that are given for persons to operate an engine safely. Injury can result if you do not obey these precautions.

I.A7898 04 JUN 2025 — I.A5875 04 JUN 2025

SUBTASK 71-00-00-710-184-A

B. Do a shutdown with the Discontinued Start and Shutdown Procedure Ref. AMM TASK 71-00-00-710-018.

SUBTASK 71-00-00-210-082-A

C. Do an inspection of the engine for leaks

I.A7898 04 JUN 2025 — I.A5875 04 JUN 2025

NOTE: Pay special attention to where maintenance has been done and where non-aqueous developer (Material Ref. V06-030) has been applied to oil or fuel tubes at there disconnect points.

(1) Use a suitable light source to examine the affected areas.

(2) If no leaks are apparent where non-aqueous developer (Material Ref. V06-030) was applied, remove it with a lint free cloth (Material Ref. V02-099) made moist with Isopropyl Alcohol, Reagent grade (Material Ref. V01-410).

SUBTASK 71-00-00-210-091-A

D. Do an inspection of the turbine exhaust case for oil.

(1) Visually inspect the turbine exhaust case for oil that came out of the No.4 bearing weep tube port Ref. AMM TASK 72-50-00-200-010.

(2) If there is oil, do the procedure to dry out the high pressure turbine after oil contamination Ref. AMM TASK 71-00-00-700-013.

I.A7898 04 JUN 2025 — I.A5875 04 JUN 2025

5. Close-up

SUBTASK 71-00-00-410-142-A

A. Close Access

(1) Make sure that the work area is clean and clear of tools and other items.

(2) If the thrust reverser halves have been opened:

(a) Close the thrust reverser halves Ref. AMM TASK 78-32-00-410-010:

(b) FOR 1000EM1 (ENGINE-1)
451AL, 452AR.

(c) FOR 1000EM2 (ENGINE-2)

I.A5875

I.A15444 04 JUN 2025 — I.A7898 04 JUN 2025

461AL, 462AR.

SUBTASK 71-00-00-440-087-A

B. Activate the thrust reverser HCU Ref. AMM TASK 78-30-00-440-012.

SUBTASK 71-00-00-410-143-A

C. Close the fan cowls Ref. AMM TASK 71-13-00-410-010:

(1) If you opened the fan cowl doors, close them:

(a) FOR 1000EM1 (ENGINE-1), 1000EM1 (ENGINE-1)
437AL, 438AR.

(b) FOR 1000EM2 (ENGINE-2), 1000EM2 (ENGINE-2)
447AL, 448AR.

SUBTASK 71-00-00-860-140-A

D. Do the EIS stop procedure: Ref. AMM TASK 31-60-00-860-002.

SUBTASK 71-00-00-862-080-A

E. De-energize the aircraft electrical circuits Ref. AMM TASK 24-41-00-862-002.

*** END OF CARD ***

MECH	INSP.
I.A15444	I.A7898
04 JUN 2025	04 JUN 2025
I.A15444	I.A7898
04 JUN 2025	04 JUN 2025
I.A15444	I.A7898
04 JUN 2025	04 JUN 2025
I.A15444	I.A7898
04 JUN 2025	04 JUN 2025
I.A15444	I.A7898
04 JUN 2025	04 JUN 2025

Lampiran 2 TSM Overpressure Valve #2

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOCTYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	TSM	01-May-2025	80	36-11-00-810-844-A - Engine 2 - OPV Blocked in Open Position
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:29:26					

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

TASK 36-11-00-810-844-A
Engine 2 - OPV Blocked in Open Position

1. Possible Causes:

- VALVE-OVERPRESSURE, ENG 2 (5HA2)
- BMC-2 (1HA2)
- XDCR-BLEED REGULATED PRESS, ENG 2 (8HA2)
- wiring between pin AA/10 of BMC-2 (1HA2) and pin A/1 of the OPV (5HA2)
- sense line 4
- wiring between BMC-1 (1HA1) and the regulated pressure sensor (8HA2)
- wiring between BMC-2 (1HA2) and the regulated pressure sensor (8HA2)
- bonding

2. Job Set-up Information

A. Referenced Information

REFERENCE	DESIGNATION
Ref. 36-11-00-810-954-A	Drift of the Engine 2 Bleed Regulated Pressure Transducer
Ref. AMM 20-28-00-912-802	Electrical Bonding - General Maintenance Procedure
Ref. AMM 36-11-00-710-002	Operational Test to Read the CLASS III FAULTS
Ref. AMM 36-11-00-720-011	Functional Test of the Sense Line Connected between the Bleed Regulated Pressure-Transducer and the Duct Assy with the Bleed Test Set P/N 99127B03
Ref. ASM 36-11-02	
Ref. AMM 36-11-16-000-001	Removal of the Bleed Regulated Pressure-Transducer
Ref. AMM 36-11-16-400-001	Installation of the Bleed Regulated Pressure-Transducer
Ref. AMM 36-11-16-720-001	Functional Test of the Bleed Regulated Pressure-Transducer with the Bleed Test Set
Ref. AMM 36-11-34-000-001	Removal of the BMC
Ref. AMM 36-11-34-400-001	Installation of the BMC
***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***	
Ref. AMM 36-11-49-000-018	Removal of the Pneumatic Sense Lines in the Pylon
***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***	
Ref. AMM 36-11-49-400-018	Installation of the Pneumatic Sense Lines in the Pylon
***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***	
Ref. AMM 36-11-53-000-001	Removal of the Overpressure Valve
Ref. AMM 36-11-53-400-001	Installation of the Overpressure Valve
Ref. AMM 36-11-53-720-807	Functional Test of the Overpressure Valve (OPV) With Bleed Test Set Part Number (P/N) 98L36103002000
Ref. Fig. Flow Chart of Engine 2 - OPV Blocked in Open Position	

1 If there is a leak, replace sense line 4 Ref. AMM 36-11-49-000-018 and Ref. AMM 36-11-49-400-018.

2 If there is no leak, go to the next step.

3 Do a visual inspection of the pins of BMC-2 (1HA2) and the rack Ref. ASM 36-11-02:

a If there is no damage and the fault continues, replace the BMC-2 (1HA2) Ref. AMM 36-11-34-000-001 and Ref. AMM 36-11-34-400-001.

(b) If there is a fault during the functional test, go to the next step.

(5) Remove BMC-1 (1HA1) and BMC-2 (1HA2) Ref. AMM 36-11-34-000-001.

(6) Do a continuity check of the wiring between BMC-1 (1HA1) and the regulated pressure sensor (8HA2) Ref. ASM 36-11-02:

(a) If there is no continuity:
- Repair the wiring between BMC-1 (1HA1) and the regulated pressure sensor (8HA2) Ref. ASM 36-11-02.
- Install initial BMC-1 (1HA1) and BMC-2 (1HA2) again Ref. AMM 36-11-34-400-001.

(b) If there is continuity and the fault continues, go to the next step.

(7) Do a continuity check of the wiring between BMC-2 (1HA2) and the regulated pressure sensor (8HA2) Ref. ASM 36-11-02:

(a) If there is no continuity:
- Repair the wiring between BMC-2 (1HA2) and the regulated pressure sensor (8HA2) Ref. ASM 36-11-02.
- Install initial BMC-1 (1HA1) and BMC-2 (1HA2) again Ref. AMM 36-11-34-400-001.

(b) If there is continuity and the fault continues, go to the next step.

(8) Install initial BMC-1 (1HA1) and BMC-2 (1HA2) again Ref. AMM 36-11-34-400-001.

(9) With the regulated pressure sensor (8HA2) connected, do the bonding check of the regulated pressure sensor (8HA2) Ref. AMM 20-28-00-912-802:

NOTE: The bonding lets you prevent the EMI that can change the signal.

(a) If the bonding of the regulated pressure sensor (8HA2) is not correct, repair the bonding.

(b) If the bonding of the regulated pressure sensor (8HA2) is correct and the fault continues, replace the XDCR-BLEED REGULATED PRESS, ENG 2 (8HA2) Ref. AMM 36-11-16-000-001 and Ref. AMM 36-11-16-400-001.

(10) If the fault continues, do a visual inspection of the pins of BMC-2 (1HA2) and the rack Ref. ASM 36-11-02:

(a) If there is no damage and the fault continues, replace the BMC-2 (1HA2) Ref. AMM 36-11-34-000-001 and Ref. AMM 36-11-34-400-001.

ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751

SUBTASK 36-11-00-810-092-A
DELETED

SUBTASK 36-11-00-710-133-A

B. If the fault occurs again during the subsequent flight, do these steps:

- Find at which step the last troubleshooting procedure stopped.
- Start the troubleshooting procedure from that step.

Lampiran 3 AMM Removal Overpressure Valve #2

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOC TYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	AMM	01-May-2025	80	36-11-53-000-001-A - Removal of the Overpressure Valve
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:34:39					

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

TASK 36-11-53-000-001-A
Removal of the Overpressure Valve
FIN: 5HA1 5HA2

WARNING: **MAKE SURE THAT THE PNEUMATIC SYSTEM IS DEPRESSURIZED BEFORE YOU START WORK. PRESSURIZED AIR CAN CAUSE INJURY TO PERSONNEL.**

WARNING: **BE CAREFUL WHEN YOU DO WORK ON THE ENGINE PARTS AFTER ENGINE SHUTDOWN. USE APPLICABLE THERMAL GLOVES. THE ENGINE PARTS AND THE ENGINE OIL CAN STAY HOT FOR ONE HOUR AFTER SHUTDOWN AND CAN BURN YOU.**

1. Reason for the Job
Self explanatory

2. Job Set-up Information

A. Fixtures, Tools, Test and Support Equipment

REFERENCE	QTY	DESIGNATION
No specific	AR	ACCESS PLATFORM 1M(3 FT)
No specific	AR	CAP - BLANKING
No specific	AR	COVER - PROTECTION
No specific	AR	WARNING NOTICE(S)

B. Work Zones and Access Panels

ZONE/ACCESS	ZONE DESCRIPTION
471	PYLON LEADING EDGE
481	PYLON LEADING EDGE
FOR 1000EM1(ENGINE-1)	
437AL, 438AR, 451AL, 452AR	
FOR 1000EM2(ENGINE-2)	
447AL, 448AR, 461AL, 462AR	

C. Referenced Information

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOC TYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	AMM	01-May-2025	80	36-11-53-000-001-A - Removal of the Overpressure Valve
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:34:39					

REFERENCE	DESIGNATION
Ref. 24-41-00-861-002-A	Energize the Aircraft Electrical Circuits from the External Power
Ref. 24-41-00-861-002-A01	Energize the Aircraft Electrical Circuits from the APU

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

Ref. 36-11-49-000-014-A	Removal of the Duct Assy

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-100, 153-200, 238-238, 242-250***

Ref. 49-00-00-860-006-A	APU Shutdown by External Power
Ref. 49-00-00-860-006-A01	APU Shutdown by Batteries

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

Ref. 71-13-00-010-010-A	Opening of the Fan Cowls 437AL(447AL),438AR(448AR)

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

Ref. 78-30-00-040-012-A	Deactivation of the Thrust Reverser Hydraulic Control Unit (HCU) for Ground Maintenance

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

Ref. 78-32-00-010-010-A	Opening of the Thrust Reverser Halves

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

Ref. Fig. Overpressure Valve

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

3. Job Set-up

SUBTASK 36-11-53-861-051-A

A. Energize the aircraft electrical circuits
Ref. AMM TASK 24-41-00-861-002 or Ref. AMM TASK 24-41-00-861-002.

SUBTASK 36-11-53-941-050-A

B. Safety Precautions

(1) Make sure that the engine shutdown occurred five minutes or more before you do this procedure.

(2) On the AIR COND panel 30VU:
- make sure that the ENG 1(2) BLEED pushbutton switch is released (the OFF legend is on),
- make sure that the APU BLEED pushbutton switch is released (the ON legend is off),
- put a WARNING NOTICE(S) to tell persons not to operate the pneumatic system.

(3) On the ENG panel 115VU:
- put a WARNING NOTICE(S) to tell persons not to start the engine 1(2).

(4) On the HP ground connector:
- Put a WARNING NOTICE(S) to tell persons not to pressurize the pneumatic system.

(5) On the ENG section of the maintenance panel 50VU:

- make sure that the ON legend of the ENG/FADEC GND PWR 1(2) pushbutton switch is off,
- put a WARNING NOTICE(S) to tell persons not to energize the FADEC 1(2).

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

SUBTASK 36-11-53-010-050-B

C. Get Access

(1) Open the fan cowls Ref. AMM TASK 71-13-00-010-010:

(a) FOR 1000EM1 (ENGINE-1)
437AL, 438AR

(b) FOR 1000EM2 (ENGINE-2)
447AL, 448AR

(2) Put the ACCESS PLATFORM 1M(3 FT) in position below the engine.

SUBTASK 36-11-53-040-051-B

D. Deactivate the Thrust Reverser Hydraulic Control Unit

WARNING: **MAKE SURE THAT THE THRUST REVERSER HYDRAULIC CONTROL UNIT (HCU) IS DE ACTIVATED BEFORE YOU DO WORK ON OR AROUND THE THRUST REVERSER. IF TH E HCU IS NOT DEACTIVATED, THERE IS A RISK OF UNWANTED THRUST REVERSER OPERATION WHICH CAN CAUSE INJURY TO PERSONS AND/OR DAMAGE TO EQUIP MENT.**

(1) Deactivate the thrust reverser Hydraulic Control Unit (HCU) Ref. AMM TASK 78-30-00-040-012.

SUBTASK 36-11-53-010-053-B

E. Open the thrust reverser halves Ref. AMM TASK 78-32-00-010-010:

(1) FOR 1000EM1 (ENGINE-1)
451AL, 452AR

(2) FOR 1000EM2 (ENGINE-2)
461AL, 462AR

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

CAUTION: **SOME PRESSURE CAN STAY IN THE DUCTING. THE PRESSURE WILL DECREASE WHEN YOU RELEA SE THE CLAMPS.**

4. Procedure

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

Ref. Fig. Overpressure Valve

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

SUBTASK 36-11-53-020-054-B

A. Removal of the Overpressure Valve

WARNING: **DO NOT TOUCH THE UNIT UNTIL IT IS SUFFICIENTLY COOL TO PREVENT BURNS WH EN YOU DO THE MAINTENANCE TASK(S).**

(1) If you use the APU to energize the aircraft electrical circuits, stop the APU:

- For GTCP 36-300 APU Ref. AMM TASK 49-00-00-860-004
- For APS 3200 APU Ref. AMM TASK 49-00-00-860-006
- For 131-9(A) APU Ref. AMM TASK 49-00-00-860-009.

(2) In the cockpit, on the SD "BLEED" page:

(a) Make sure that the pressure and the temperature of the bleed-air duct system are in a mbient conditions.

CAUTION: MAKE SURE THAT THE ELECTRICAL CONNECTORS ARE CLEAN BEFORE YOU DISCONNECT OR CONNECT THEM. CONTAMINATION ON THE ELECTRICAL CONNECTORS CAN CAUSE DAMAGE TO EQUIPMENT.

(3) Disconnect the electrical connectors (1), (2), (3) and (7).

(4) Put the CAP - BLANKING on each disconnected electrical connector and receptacle.

(5) Remove the nuts (13), washers (12), bolts (9) and bushings (10) from the links (10).

(6) Disengage the links (11) from the duct (8).

(7) Remove the clamp (15) from the duct (8).

(8) Remove the duct assembly (16) Ref. AMM TASK 36-11-49-000-014.

(9) Remove the duct (8).

(10) Hold the valve (6) and remove the clamp (5).

(11) Remove the valve (6).

(12) Put the COVER - PROTECTION on the valve (6) and the ducts (4), (8) and (16).

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOC TYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	AMM	01-May-2025	80	36-11-53-000-001-A - Removal of the Overpressure Valve
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:34:39					

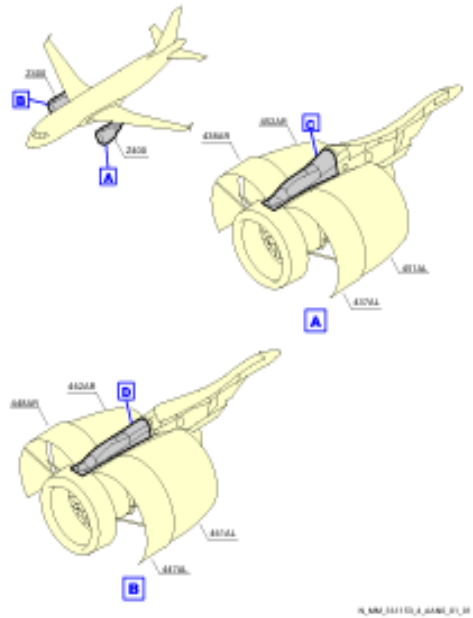


Figure 36-11-53-991-00100-00-B (SHEET 1/3) - Overpressure Valve
**** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250**

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOCTYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	AMM	01-May-2025	80	36-11-53-000-001-A - Removal of the Overpressure Valve
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:34:39					

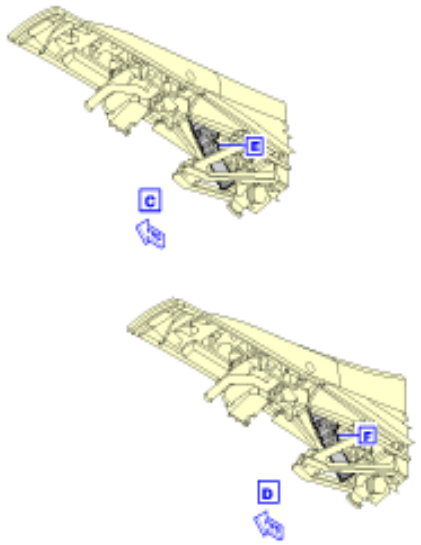


Figure 36-11-53-991-00100-00-B (SHEET 2/3) - Overpressure Valve
** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOC TYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	AMM	01-May-2025	80	36-11-53-000-001-A - Removal of the Overpressure Valve
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:34:39					

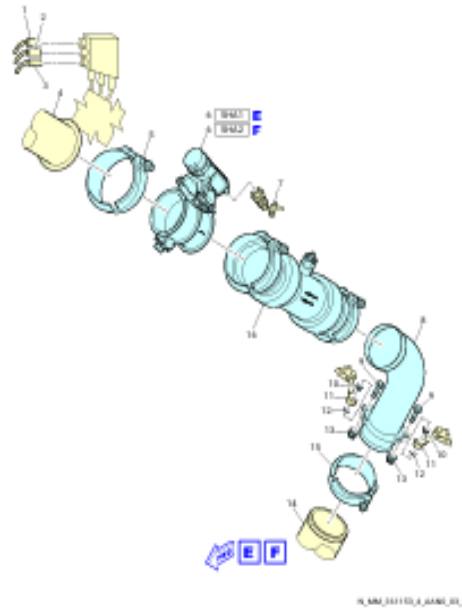


Figure 36-11-53-991-00100-00-B (SHEET 3/3) - Overpressure Valve
** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250

Lampiran 4 AMM Installation Overpressure Valve #2

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOC TYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	AMM	01-May-2025	80	36-11-53-400-001-A - Installation of the Overpressure Valve
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:35:31					

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

TASK 36-11-53-400-001-A
Installation of the Overpressure Valve
FIN: 5HA1 5HA2

WARNING: **BE CAREFUL WHEN YOU USE CONSUMABLE MATERIALS. OBEY THE MATERIAL MANUFACTURER'S INSTRUCTIONS AND YOUR LOCAL REGULATIONS.**

WARNING: **MAKE SURE THAT THE PNEUMATIC SYSTEM IS DEPRESSURIZED BEFORE YOU START WORK. PRESSURIZED AIR CAN CAUSE INJURY TO PERSONNEL.**

1. Reason for the Job
Self explanatory

2. Job Set-up Information

A. Fixtures, Tools, Test and Support Equipment

REFERENCE	QTY	DESIGNATION
No specific	AR	ACCESS PLATFORM 1M(3 FT)
No specific	AR	CAP - BLANKING

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

No specific	AR	COVER - PROTECTION

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

No specific	AR	WARNING NOTICE(S)
No specific		Torque wrench: range **to between 75 and 85 lbf.in (0.85 and 0.96 m.daN)**

B. Consumable Materials

REFERENCE	DESIGNATION
14QEB1	Wire-Locking Dia: 0.6 mm Nickel Alloy -
No specific	Foil - aluminum

C. Work Zones and Access Panels

ZONE/ACCESS	ZONE DESCRIPTION
471	PYLON LEADING EDGE
481	PYLON LEADING EDGE
FOR 1000EM1(ENGINE-1)	
437AL, 438AR, 451AL, 452AR	
FOR 1000EM2(ENGINE-2)	
447AL, 448AR, 461AL, 462AR	

D. Referenced Information

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOC TYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	AMM	01-May-2025	80	36-11-53-400-001-A - Installation of the Overpressure Valve
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:35:31					

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOC TYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	AMM	01-May-2025	80	36-11-53-400-001-A - Installation of the Overpressure Valve
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:35:31					

REFERENCE	DESIGNATION
Ref. 24-41-00-861-002-A	Energize the Aircraft Electrical Circuits from the External Power
Ref. 24-41-00-861-002-A01	Energize the Aircraft Electrical Circuits from the APU
Ref. 24-41-00-862-002-A	De-energize the Aircraft Electrical Circuits Supplied from the External Power
Ref. 24-41-00-862-002-A01	De-energize the Aircraft Electrical Circuits Supplied from the APU
Ref. 36-11-00-710-001-A	Operational Test to read the CURRENT STATUS of the Engine Bleed Air System
Ref. 36-11-00-740-001-A	BITE Test of the Bleed Monitoring Computer (BMC) 1 (2)

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

Ref. 36-11-49-400-014-A	Installation of the Duct Assy

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

Ref. 36-12-00-860-001-A	Pressurization of the Bleed System with the APU
Ref. 36-12-00-860-002-A	Pressurization of the Bleed System through the HP Ground Connector

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-100, 153-200, 238-238, 242-250***

Ref. 49-00-00-860-006-A	APU Shutdown by External Power
Ref. 49-00-00-860-006-A01	APU Shutdown by Batteries

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

Ref. 70-23-05-230-010-A	Local Application of Fluorescent Penetrant Inspection
Ref. 70-23-11-911-013-A	General Torque Tightening Techniques

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

Ref. 71-13-00-010-010-A	Opening of the Fan Cowls 437AL(447AL),438AR(448AR)

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

Ref. 71-13-00-410-010-A	Closing of the Fan Cowls 437AL(447AL),438AR(448AR)

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

Ref. 78-30-00-040-012-A	Deactivation of the Thrust Reverser Hydraulic Control Unit (HCU) for Ground Maintenance

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

Ref. 78-30-00-440-012-A	Re-activation of the Thrust Reverser Hydraulic Control Unit (HCU) after Ground Maintenance

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

Ref. 78-32-00-010-010-A	Opening of the Thrust Reverser Halves

REFERENCE	DESIGNATION
Ref. 78-32-00-410-010-A	Closing of the Thrust Reverser Halves

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

Ref. Fig. Overpressure Valve

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

3. Job Set-up

SUBTASK 36-11-53-860-050-A

A. Aircraft Maintenance Configuration

(1) Make sure that the aircraft electrical circuits are energized Ref. AMM TASK 24-41-00-861-002 or Ref. AMM TASK 24-41-00-861-002.

(2) Make sure that the engine shutdown occurred five minutes or more before you do this procedure.

(3) In the cockpit, on AIR COND panel 30VU:

(a) Make sure that the ENG 1(2) BLEED pushbutton switch is released (the OFF legend is on).

(b) Make sure that the APU BLEED pushbutton switch is released (the ON legend is off).

(c) Make sure that the WARNING NOTICE(S) is(are) in position to tell persons not to operate the pneumatic system.

(4) In the cockpit, on ENG panel 115VU:

- Make sure that the WARNING NOTICE(S) is(are) in position to tell persons not to start the engine 1(2).

(5) On the HP ground connector:

- Make sure that the WARNING NOTICE(S) is(are) in position to tell persons not to pressurize the pneumatic system.

(6) On the ENG section of maintenance panel 50VU:

(a) Make sure that the ON legend of the ENG/FADEC GND PWR 1(2) pushbutton switch is off.

(b) Make sure that the WARNING NOTICE(S) is(are) in position to tell persons not to energize FADEC 1(2).

(7) Make sure that an ACCESS PLATFORM 1M(3 FT) is in position below the engine 1(2).

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

SUBTASK 36-11-53-010-054-B

B. Get Access

(1) Make sure that the fan cowls are open Ref. AMM TASK 71-13-00-010-010:

(a) FOR 1000EM1 (ENGINE-1)
437AL, 438AR

(b) FOR 1000EM2 (ENGINE-2)
447AL, 448AR

(2) Make sure that the thrust reverser halves are open Ref. AMM TASK 78-32-00-010-010:

(a) FOR 1000EM1 (ENGINE-1)
451AL, 452AR

(b) FOR 1000EM2 (ENGINE-2)
461AL, 462AR

SUBTASK 36-11-53-040-052-B

C. Make sure that the thrust reverser Hydraulic Control Unit (HCU) is deactivated Ref. AMM TASK 78-30-00-040-012.

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

4. Procedure

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

Ref. Fig. Overpressure Valve

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

SUBTASK 36-11-53-420-050-B

A. Installation of the Overpressure Valve

WARNING: DO NOT TOUCH THE UNIT UNTIL IT IS SUFFICIENTLY COOL TO PREVENT BURNS WHEN YOU DO THE MAINTENANCE TASK(S).

(1) If you use the APU to energize the aircraft electrical circuits, stop the APU:
- For GTCP 36-300 APU Ref. AMM TASK 49-00-00-860-004
- For APS 3200 APU Ref. AMM TASK 49-00-00-860-006
- For 131-9(A) APU Ref. AMM TASK 49-00-00-860-009.

(2) In the cockpit, on the SD "BLEED" page:

(a) Make sure that the pressure and the temperature of the bleed-air duct system are in ambient conditions.

(3) Clean the component interfaces and the adjacent area.

(4) Do an inspection of the component interfaces and the adjacent area.

(5) Remove the COVER - PROTECTION from the valve (6) and the ducts (4), (8) and (16).

(6) Install the valve (6) on the pneumatic line (4) (put the control mechanism to the rear):

(a) The arrow that shows the direction of the airflow on the valve (6) must points up.

CAUTION: MAKE SURE THAT THE SCREWS OF THE ATTACHMENT CLAMPS ON THE OVERPRESSURE VALVE ARE IN THE CORRECT POSITION. IF NOT, THE SCREWS CAN CAUSE DAMAGE TO THE FIREWALL OF THE THRUST REVERSER COWL.

(7) Install the clamp (5) but do not tighten it fully.

(8) Put the duct (8) in its correct installation position.

(9) Install the duct assembly (16) Ref. AMM TASK 36-11-49-400-014.

(10) Install the clamp (15).

(11) Attach the links (11) to the duct (8) with the bushings (10), bolts (9), washers (12) and nuts (13) and tighten the nuts (13) with your hand.

(12) Adjust the links (11) until there is no force on the ducts (4), (8) and (16) and the links (11).

(13) TORQUE the clamps (5) and (15) **to between 75 and 85 lbf.in (0.85 and 0.96 m.daN)** Ref. AMM TASK 70-23-11-911-013.

(14) Tighten the nuts (13).

(15) Remove the CAP - BLANKING from each electrical connector and receptacle.

CAUTION: MAKE SURE THAT THE ELECTRICAL CONNECTORS ARE CLEAN BEFORE YOU DISCONNECT OR CONNECT THEM. CONTAMINATION ON THE ELECTRICAL CONNECTORS CAN CAUSE DAMAGE TO EQUIPMENT.

(16) Connect the electrical connectors (1), (2), (3) and (7).

SUBTASK 36-11-53-480-052-B

B. Preparation for the leak test

(1) There are two possible procedures to find the location of a pneumatic joint air-leak:

(a) You can apply dry developer Ref. AMM TASK 70-23-05-230-010 around the pneumatic joints.

NOTE: Apply dry developer only on the connections of the removed pneumatic components. Do not apply dry developer on all the pneumatic components.

(b) You can install Foil - aluminum around the pneumatic joint locations. Do the steps that follow to install foil, aluminum on the pneumatic joint locations:

1 Wind the foil around the joint one time.

2 Twist the seam of the foil wrap tight.

3 Make the foil wrap as tight as possible on the tube but do not cause damage to the wrap.

4 Attach the foil wrap with Wire-Locking Dia: 0.6 mm Nickel Alloy - (Material Ref. 14QEB1) on the two sides of the pneumatic joint.

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

SUBTASK 36-11-53-710-050-A

C. Do this Test

(1) Do the BITE test of BMC 1(2) Ref. AMM TASK 36-11-00-740-001.

(2) Do the operational test to do a check of the CURRENT STATUS of the engine /APU bleed/air system Ref. AMM TASK 36-11-00-710-001 and make sure that BIT 11 of LABEL 067 (066) is at 0.

(3) Do the leak test: pressurize the bleed system with one of these sources: aire sources:

(a) The APU Ref. AMM TASK 36-12-00-860-001 or

(b) The HP ground connector Ref. AMM TASK 36-12-00-860-002.

(4) Make sure that there are no leaks at the joints between the overpressure valve, the sensor lines and the ducts on the related engine.

NOTE: There is a leak when the foil installed on the duct breaks or when it is too hot. There is a leak when the air removes the dry developer from the joint.

(5) Remove the materials used to do the leak test.

5. Close-up

***** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250***

SUBTASK 36-11-53-410-053-B

A. Close Access

(1) Make sure that the work area is clean and clear of tools and other items.

(2) Close the thrust reverser halves Ref. AMM TASK 78-32-00-410-010:

(a) FOR 1000EM1 (ENGINE-1)

451AL, 452AR

(b) FOR 1000EM2 (ENGINE-2)
461AL, 462AR

SUBTASK 36-11-53-440-051-B

B. Activate the thrust reverser HCU Ref. AMM TASK 78-30-00-440-012.

SUBTASK 36-11-53-410-050-B

C. Close Access

(1) Close the fan cowls Ref. AMM TASK 71-13-00-410-010:

(a) FOR 1000EM1 (ENGINE-1)
437AL, 438AR

(b) FOR 1000EM2 (ENGINE-2)
447AL, 448AR

(2) Remove the WARNING NOTICE(S).

(3) Remove the access platform(s).

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

SUBTASK 36-11-53-862-051-A

D. De-energize the aircraft electrical circuits
Ref. AMM TASK 24-41-00-862-002 or Ref. AMM TASK 24-41-00-862-002.

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOC TYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	AMM	01-May-2025	80	36-11-53-400-001-A - Installation of the Overpressure Valve
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:35:31					

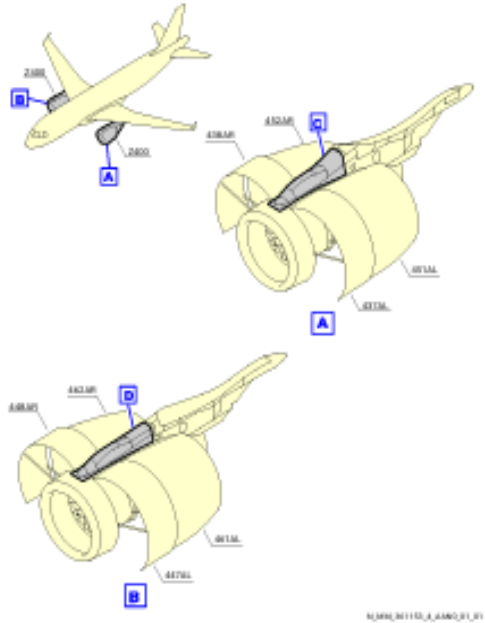


Figure 36-11-53-991-00100-00-B (SHEET 1/3) - Overpressure Valve
** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOC TYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	AMM	01-May-2025	80	36-11-53-400-001-A - Installation of the Overpressure Valve
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:35:31					

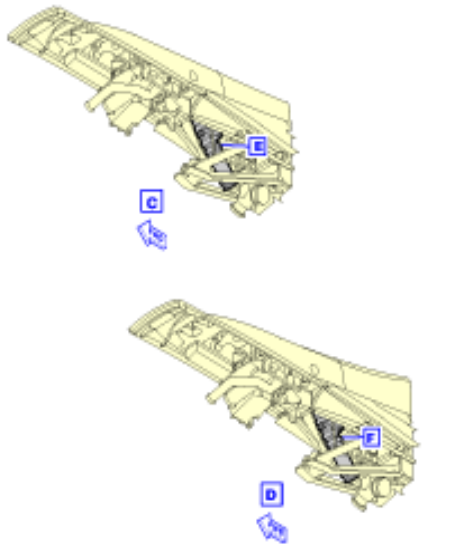


Figure 36-11-53-991-00100-00-B (SHEET 2/3) - Overpressure Valve
** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOC TYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	AMM	01-May-2025	80	36-11-53-400-001-A - Installation of the Overpressure Valve
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:35:31					

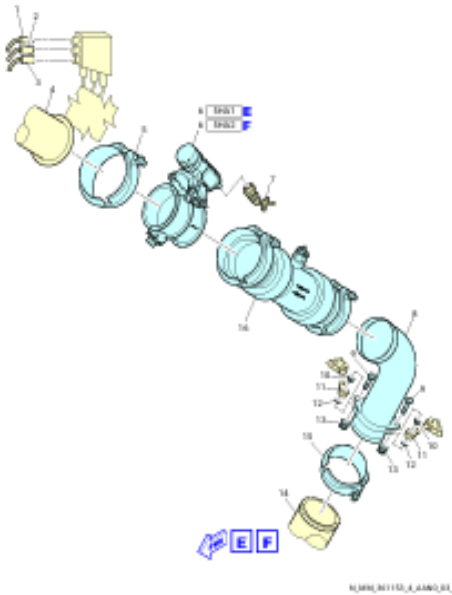


Figure 36-11-53-991-00100-00-B (SHEET 3/3) - Overpressure Valve
** ON A/C FSN 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-150, 233-233, 238-238, 242-250

Lampiran 5 TSM Bleed Monitoring Computer

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOCTYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	TSM	01-May-2025	80	36-11-00-810-801-A - Loss of the BMC1
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:40:00					

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

TASK 36-11-00-810-801-A
Loss of the BMC1

1. Possible Causes:

- BMC-1 (1HA1)

2. Job Set-up Information

A. Referenced Information

REFERENCE	DESIGNATION
Ref. AMM 36-11-00-740-001	BITE Test of the Bleed Monitoring Computer (BMC) 1 (2)
Ref. AMM 36-11-34-000-001	Removal of the BMC
Ref. AMM 36-11-34-400-001	Installation of the BMC

3. Fault Confirmation

SUBTASK 36-11-00-710-082-A

A. Test

(1) Do the BITE test of the BMC1 Ref. AMM 36-11-00-740-001.

4. Fault Isolation

SUBTASK 36-11-00-810-067-A

A. If the test gives the "BMC1" and "BMC1 OR SOLENOID 10HA1 CKT" maintenance messages:

- Replace BMC-1 (1HA1) Ref. AMM 36-11-34-000-001 and Ref. AMM 36-11-34-400-001.

SUBTASK 36-11-00-710-083-A

B. Do the test given in the paragraph Fault Confirmation.

Lampiran 6 AMM Removal Bleed Monitoring Computer

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOCTYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	AMM	01-May-2025	80	36-11-34-000-001-A - Removal of the BMC
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:42:34					

***** ON A/C FSN ALL***

TASK 36-11-34-000-001-A
Removal of the BMC
FIN: 1HA1 1HA2

1. Reason for the Job

NOTE: The procedure is the same for the BMC 1HA1 and 1HA2.

2. Job Set-up Information

A. Fixtures, Tools, Test and Support Equipment

REFERENCE	QTY	DESIGNATION
No specific	AR	ACCESS PLATFORM 2M (6 FT)
No specific	AR	CAP - BLANKING
No specific	AR	SAFETY CLIP - CIRCUIT BREAKER

***** ON A/C FSN ALL***

B. Work Zones and Access Panels

ZONE/ACCESS	ZONE DESCRIPTION
121	AVIONICS COMPARTMENT
122	AVIONICS COMPARTMENT
811	

C. Referenced Information

REFERENCE	DESIGNATION
***** ON A/C FSN ALL***	
Ref. 24-42-00-861-001-A	Energize the Ground Service Network from the External Power
Ref. Fig. Bleed Monitoring Computer (BMC)	

3. Job Set-up

SUBTASK 36-11-34-861-050-A
A. Energize the ground service network Ref. AMM TASK 24-42-00-861-001.

***** ON A/C FSN ALL***

SUBTASK 36-11-34-010-050-A
D. Get Access
(1) Put the ACCESS PLATFORM 2M (6 FT) in position at the access door 811.
(2) Open the access door 811.

SUBTASK 36-11-34-865-050-A
E. Open, safety and tag the circuit breaker(s) that follow(s). Use the SAFETY CLIP - CIRCUIT BREAKER as necessary.

PANEL	DESIGNATION	FIN	LOCATION
FOR FIN 1HA1(BMC-1)			

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751**

49VU	AIR BLEED/ENG 1/CTL	3HA1	D12
49VU	AIR BLEED/ENG 1/MONG	2HA1	D11

***** ON A/C FSN ALL**

FOR FIN 1HA2(BMC-2)			

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751**

122VU	AIR BLEED/ENG 2/CTL	3HA2	Z23
122VU	AIR BLEED/ENG 2/MONG	2HA2	Z22

***** ON A/C FSN ALL**

4. Procedure

Ref. Fig. Bleed Monitoring Computer (BMC)

SUBTASK 36-11-34-020-051-A

A. Removal of the BMC

(1) Loosen the nut (4).

(2) Lower the nut (4).

(3) Pull the BMC (1) on its rack (3) to disconnect the electrical connectors (2).

(4) Remove the BMC (1) from its rack (3).

(5) Put CAP - BLANKING on the disconnected electrical connectors.

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOCTYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	AMM	01-May-2025	80	36-11-34-000-001-A - Removal of the BMC
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:42:34					

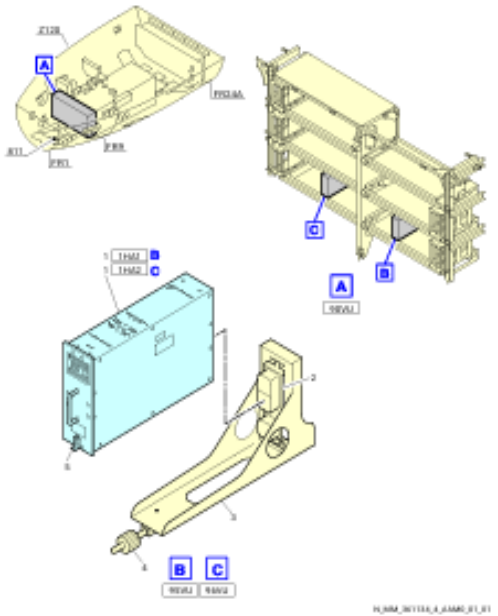


Figure 36-11-34-991-00100-00-A (SHEET 1) - Bleed Monitoring Computer (BMC)
**** ON A/C FSN ALL**

Lampiran 7 AMM Installation Bleed Monitoring Computer

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOCTYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	AMM	01-May-2025	80	36-11-34-400-001-A - Installation of the BMC
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:43:08					

***ON A/C FSN ALL**

TASK 36-11-34-400-001-A
Installation of the BMC
FIN: 1HA1 1HA2

1. Reason for the Job
Self explanatory

2. Job Set-up Information

A. Fixtures, Tools, Test and Support Equipment

REFERENCE	QTY	DESIGNATION
No specific	AR	ACCESS PLATFORM 2M (6 FT)
No specific	AR	CAP - BLANKING
No specific	AR	SAFETY CLIP - CIRCUIT BREAKER

***ON A/C FSN ALL**

B. Work Zones and Access Panels

ZONE/ACCESS	ZONE DESCRIPTION
121	AVIONICS COMPARTMENT
122	AVIONICS COMPARTMENT
811	

C. Referenced Information

REFERENCE	DESIGNATION
***ON A/C FSN ALL**	
Ref. 24-42-00-861-001-A	Energize the Ground Service Network from the External Power
Ref. 24-42-00-862-001-A	De-energize the Ground Service Network Supplied from the External Power
***ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751**	
Ref. 36-11-00-740-001-A	BITE Test of the Bleed Monitoring Computer (BMC) 1 (2)
***ON A/C FSN ALL**	
Ref. Fig. Bleed Monitoring Computer (BMC)	

3. Job Set-up

SUBTASK 36-11-34-860-051-A
A. Aircraft Maintenance Configuration
(1) Make sure that the ground service network is energized Ref. AMM TASK 24-42-00-861-001.

***ON A/C FSN ALL**

SUBTASK 36-11-34-010-051-A
C. Get Access
(1) Make sure that the ACCESS PLATFORM 2M (6 FT) is in position at the access door 811.
(2) Make sure that the access door 811 is open.

SUBTASK 36-11-34-865-051-A

D. Make sure that the circuit breaker(s) that follow(s) is (are) open, safetied and tagged. Use the SAFETY CLIP - CIRCUIT BREAKER as necessary.

PANEL	DESIGNATION	FIN	LOCATION
FOR FIN 1HA1(BMC-1)			

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

49VU	AIR BLEED/ENG 1/CTL	3HA1	D12
49VU	AIR BLEED/ENG 1/MONG	2HA1	D11

***** ON A/C FSN ALL***

FOR FIN 1HA2(BMC-2)

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

122VU	AIR BLEED/ENG 2/CTL	3HA2	Z23
122VU	AIR BLEED/ENG 2/MONG	2HA2	Z22

*****ON A/C FSN ALL***

4. Procedure

Ref. Fig. Bleed Monitoring Computer (BMC)

SUBTASK 36-11-34-420-050-A

A. Installation of the BMC

(1) Clean the component interface and/or the adjacent area.

(2) Remove the CAP - BLANKING from each electrical connector and receptacle.

(3) Make sure that all the electrical connections are clean and in the correct condition.

(4) Install the BMC (1) on its rack (3).

(5) Push the BMC (1) on its rack (3) to connect the electrical connectors (2).

(6) Engage the nut (4) on the lug (5) and tighten.

SUBTASK 36-11-34-865-052-A

B. Remove the SAFETY CLIP - CIRCUIT BREAKER and the tag(s) and close this (these) circuit breaker(s):

PANEL	DESIGNATION	FIN	LOCATION
FOR FIN 1HA1(BMC-1)			

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

49VU	AIR BLEED/ENG 1/CTL	3HA1	D12
49VU	AIR BLEED/ENG 1/MONG	2HA1	D11

***** ON A/C FSN ALL***

FOR FIN 1HA2(BMC-2)

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

122VU	AIR BLEED/ENG 2/CTL	3HA2	Z23
122VU	AIR BLEED/ENG 2/MONG	2HA2	Z22

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

SUBTASK 36-11-34-710-050-A

D. Do the BITE test of the BMC 1 (BMC 2) Ref. AMM TASK 36-11-00-740-001.

*****ON A/C FSN ALL***

5. Close-up

SUBTASK 36-11-34-410-050-A

A. Close Access

(1) Make sure that the work area is clean and clear of tools and other items.

(2) Close the access door 811.

(3) Remove the access platform(s).

SUBTASK 36-11-34-862-050-A

B. De-energize the ground service network Ref. AMM TASK 24-42-00-862-001.

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOCTYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	AMM	01-May-2025	80	36-11-34-400-001-A - Installation of the BMC
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:43:08					

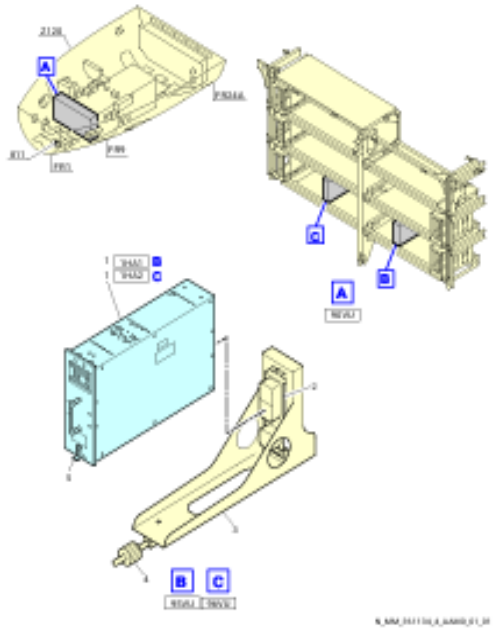


Figure 36-11-34-991-00100-00-A (SHEET 1) - Bleed Monitoring Computer (BMC)
**** ON A/C FSN ALL**

Lampiran 8 AMM BITE TEST Bleed Monitoring Computer

AIRBUS

CUSTOMIZATION	AIRCRAFT TYPES	DOC TYPES	REVISION DATE	REVISION NUMBER	TITLE
IGO	A318 A319 A321 A320	AMM	01-May-2025	80	36-11-00-740-001-A - BITE Test of the Bleed Monitoring Computer (BMC) 1 (2)
TAIL NUMBER - MSN - FSN: VT-IFP - 05676 - 081					
Print date: 2025-06-20 03:44:55					

***** ON A/C FSN 001-004, 073-074, 076-079, 081-084, 087-087, 091-091, 093-094, 096-200, 233-233, 238-238, 242-250, 702-703, 751-751***

TASK 36-11-00-740-001-A
BITE Test of the Bleed Monitoring Computer (BMC) 1 (2)

1. Reason for the Job
Self explanatory

2. Job Set-up Information

A. Work Zones and Access Panels

ZONE/ACCESS	ZONE DESCRIPTION
210	CKPT,FWD COMPT BHD TO FLT COMPT BULKHEAD

B. Referenced Information

REFERENCE	DESIGNATION
Ref. 24-41-00-861-002-A	Energize the Aircraft Electrical Circuits from the External Power
Ref. 24-41-00-861-002-A01	Energize the Aircraft Electrical Circuits from the APU
Ref. 24-41-00-862-002-A	De-energize the Aircraft Electrical Circuits Supplied from the External Power
Ref. 24-41-00-862-002-A01	De-energize the Aircraft Electrical Circuits Supplied from the APU
Ref. 31-32-00-860-011-A	Procedure to Get Access to the SYSTEM REPORT/TEST/PNEU Page

3. Job Set-up

SUBTASK 36-11-00-861-072-A
A. Energization of the Aircraft Electrical Circuits
(1) Energize the aircraft electrical circuits
Ref. AMM TASK 24-41-00-861-002 or Ref. AMM TASK 24-41-00-861-002.

SUBTASK 36-11-00-865-075-A
B. Make sure that this (these) circuit breaker(s) is (are) closed:

PANEL	DESIGNATION	FIN	LOCATION
49VU	AIR BLEED/X FEED/VALVE/BAT	2HV	D13
49VU	AIR BLEED/ENG 1/CTL	3HA1	D12
49VU	AIR BLEED/ENG 1/MONG	2HA1	D11
122VU	AIR BLEED/ENG 2/CTL	3HA2	Z23
122VU	AIR BLEED/ENG 2/MONG	2HA2	Z22
122VU	AIR BLEED/X FEED VALVE/NORM	1HV	Z20

SUBTASK 36-11-00-860-062-A
C. Aircraft Maintenance Configuration
(1) On the AIR COND panel:
- make sure that the ENG 1(2) bleed pushbutton switches are pushed (OFF legends are off),

- make sure that the crossbleed selector switch is at AUTO,
- make sure that the APU BLEED pushbutton switch is released (ON legend is off).

(2) Adjust the brightness of the MCDU screen.

(3) On one MCDU, get the SYSTEM REPORT/TEST PNEU menu page Ref. AMM TASK 31-32-00-860-011.

4. Procedure

SUBTASK 36-11-00-710-056-B

A. Bite test of the BMC 1(2)

ACTION	RESULT
1.On the MCDU:	
- push the line key adjacent to the applicable BMC indication.	The applicable BMC page comes into view.
2.On the MCDU:	
- push the line key adjacent to the TEST indication.	- the BMC TEST, LRU's PNEU FUNCTION NOT CHECKED DURING TEST indication comes into view, - the ELECTRICAL TEST IN PROGRESS indication comes into view during some seconds. - the TEST RESULT page must comes into view with the ELECTRICAL TEST OK indication.

5. Close-up

SUBTASK 36-11-00-862-064-A

A. Put the aircraft back to its initial configuration.

(1) On the MCDU:

(a) Push the line select key adjacent to the RETURN indication until the MAINTENANCE MENU 1/2 page comes into view.

(b) Fully decrease the brightness of the MCDU screen (display off).

(2) De-energize the aircraft electrical circuits
Ref. AMM TASK 24-41-00-862-002 or Ref. AMM TASK 24-41-00-862-002.