

Demonstrate Selecting and Using Caterpillar Service Literature

Skill Number CO-OP15GN109

Full Name: Carla Herson Fachaldin

No ID: _____

Validation Date: 16 September 2025

School: SMK N 1 SINGORA

PERFORMANCE TASK:

Given an Engine / Machine and service literatures. The Student must be able to perform task selecting and using Caterpillar service literature.

The student must be able to complete the following tasks:

- Select the correct service manual related to the job
- Find out some information about specification related to the job
- Find out some information about system operation related to the job
- Find out some information about disassembly & assembly related to the job
- Find out some information about testing & adjusting related to the job
- Select the correct part manual related to the job
- Find out correct part number using the component name index page
- Find out correct component name using the part number index page
- Explain some notification on the illustration page
- Order the part using Service Part Request form
- Return the part using Service Part Return form
- Perform close the job by ensuring all systems or conditions are in the standard condition
- Perform communication & etiquette manner

Safety and Contamination Control must be applied to this process. All literatures will be available.

Prerequisite	Yes	No	N/A	Hints
The Student must complete the knowledge assessment. Minimum passing grade 80%.				

Tasks	Completed			Observation / Hint
	Yes	No	N/A	
Preparation				
Prepare related literature	✓			
Prepare required equipment	✓			
Prepare related tools	✓			
Prepare Safety & Contamination Control equipment	✓			

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Perform etiquette/manner when starting the job				
Meet the customer / assessor	✓			
Perform etiquette/manner when opening the interaction.	✓			
Explain the purpose of Student's activity.	✓			
Ask permission to perform the job.	✓			

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Selecting and using correct service manual & part manual related to the job				
Select Service Manual & Part book	✓			
Find information from service manual & parts book	✓			
Demonstrate understanding of explanation in the service manual and illustration in the Parts Book by answering assessor questions	✓			
Documentation:				
Take picture if needed				

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Demonstrate ordering and returning the part using correct form				
Ordering part by requesting assessor	✓			
Returning part by requesting assessor	✓			
Documentation:				
Take picture if needed				

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Perform final inspection				
Ensuring all systems or conditions are in the standard condition	✓			

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Reporting				
All relevant documentation completed correctly, and approved by customer (if required).	✓			

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Safety				
Using APD related to the job				
Follows relevant workplace safety guidelines (tag out, safety equipment)	✓			
State and follow safety precautions	✓			
Service man completes job without accident due to incorrect procedure using hand tools.	✓			
Tasks completed without damage equipment and tools	✓			

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Contamination Control				
Environmental Practices & Housekeeping	✓			
Perform etiquette/manner after completing the job				
Perform etiquette/manner when closing the communication.				

General Comments

Three horizontal lines for general comments.

RESULT: COMPETENT NOT YET COMPETENT (please check (N))

Student: Fairi Hasan Fachrudin 16 Desember 2005
Name Date Signature

Assessor: Seliana IB 16 Desember
Name Date Signature

Supervisor: _____
Name Date Signature

Data Recorded: _____
Name Date Signature

Demonstrate Selecting and Using Caterpillar Service Literature

Skill Number CO-OP15GN109

Full Name: Felix Hosen Feliciano No ID: _____
 Validation Date: 16 December 2025 School: SAIN 1 Singapore

PERFORMANCE TASK:

Given an Engine / Machine and service literatures. The Student must be able to perform task selecting and using Caterpillar service literature.

The student must be able to complete the following tasks:

- Select the correct service manual related to the job
- Find out some information about specification related to the job
- Find out some information about system operation related to the job
- Find out some information about disassembly & assembly related to the job
- Find out some information about testing & adjusting related to the job
- Select the correct part manual related to the job
- Find out correct part number using the component name index page
- Find out correct component name using the part number index page
- Explain some notification on the illustration page
- Order the part using Service Part Return form
- Return the part using Service Part Return form
- Perform close the job by ensuring all systems or conditions are in the standard condition
- Perform communication & etiquette manner

Safety and Contamination Control must be applied to this process. All literatures will be available.


Prerequisite	Yes	No	N/A	Hints
The Student must complete the knowledge assessment. Minimum passing grade 80%.				Score Caterpillar Literature Course or subject.

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Preparation				
Prepare related literature	✓			Service Manual & F Manual related to an actual Service Parts Request Form Service Parts Return Form
Prepare required equipment	✓			Engine or Machine
Prepare related tools	✓			
Prepare Safety & Contamination Control equipment	✓			

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Perform etiquette/manner when starting the job	✓			
Meet the customer / assessor	✓			
Perform etiquette/manner when opening the interaction.	✓			• Perform smile & greasing • Introduce Student's identity
Explain the purpose of Student's activity.	✓			
Ask permission to perform the job.	✓			

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Selecting and using correct service manual & part manual related to the job	✓			Select the correct Service Manual & Part Book for a given Machine according to the following information: - Sales model - Serial number - Arrangement number
Select Service Manual & Part book	✓			This should be demonstrated by looking up various service information and components as instructed.
Find information from service manual & parts book	✓			Such as (for sample only): - Service Manual What should we do to remove water pump " or
Demonstrate understanding of explanation in the service manual and illustration in the Parts Book by answering assessor questions	✓			

ANALISIS LINGKUNGAN KESELAMATAN KERJA / JOB SAFETY ENVIRONMENT ANALYSIS

Pekerjaan / Task	PM 500	Nomor JSEA / JSEA Number	1	Halaman / Page	1	Dari / Of	
Tanggal Pembuatan JSEA / Date of JSEA	15/12/2025	Departemen / Dept	SMKN 1 GBS	Tempat Kerja / Work Location	Workshop TAB		
Disusun Oleh / Compiled By	Faiz	TTD / Sign		Review Oleh / Reviewed By		TTD / Sign	
		Atasan / Superior		TTD / Sign			

Apakah Anda sudah terlatih untuk melakukan pekerjaan ini? / Are you properly trained to complete these task? Ya / Yes Tidak / No

Apakah Anda perlu untuk memastikan bahwa pekerjaan selesai tanpa adanya kecelakaan kerja? / What do you need to ensure this job is completed incident free? Ya / Yes Tidak / No

Tools yang digunakan sudah sesuai dengan Manual

Siapa yang bertanggung jawab untuk menghentikan pekerjaan jika terjadi perubahan pekerjaan atau gangguan kondisi lingkungan kerja? / Who is responsible for Stop Work Authority if change job or workplace distraction could?

ABCD-1 (Technician Leader) / Mr. X (Customer)

Apakah Anda memerlukan peralatan LOTO? / Are you need LOTO Equipments? Ya / Yes Tidak / No

Apakah Anda mengetahui ERP/MERP dari pekerjaan yang sedang dilakukan? Ya / Yes Tidak / No *Jika tidak, silahkan tambahkan dalam urutan langkah tugas diawal*

Kondisi Lingkungan / Environmental Conditions	Cuaca / Weather	Cerah	Medan / Terrain	Rata
Pengendalian Sumber Bahaya / Hazardous Energy Control	<input type="checkbox"/> Listrik / Electrical	<input checked="" type="checkbox"/> Gravitasi (Benda jatuh, tertimpa) / Gravitation (Falling objects, struck down)	<input type="checkbox"/> Pneumatik / Pneumatic	
	<input type="checkbox"/> Hidraulik / Hydraulic	<input checked="" type="checkbox"/> Mekanis / Mechanical	<input type="checkbox"/> Panas / Thermal	
APD yang diperlukan / Required PPE	<input checked="" type="checkbox"/> Helm / Safety Helm	<input type="checkbox"/> Pelindung Muka / Face shield	<input checked="" type="checkbox"/> Kacamata / Safety Glass	
	<input checked="" type="checkbox"/> Sarung Tangan / Hand Gloves	<input type="checkbox"/> Pelindung Pemasangan / Respiratory Protection	<input type="checkbox"/> Perlindungan Kejatuhan / Fall Protection	
	<input checked="" type="checkbox"/> Sepatu / Safety Shoes	<input type="checkbox"/> Pelindung Telinga / Hearing Protection	<input type="checkbox"/> Lain-Lain / Other	

Hal yang perlu dipertimbangkan dalam mengidentifikasi bahaya / These to consider in identify hazards :

Bahaya Keselamatan : Kondisi tidak aman yang dapat menyebabkan injury atau kematian seperti terjepit, terpeleset/terjatuh, tertimpa dll.

Safety Hazard : unsafe conditions that can cause injury or even death, such as spill/falls, pinch point, struck by, etc.

Bahaya Fisik : Listrik, Api/ledakan, Kebisingan, Radiasi, Panas, Tekanan, Terjepit, Tersandung/Terjatuh, Tertimpa, Getaran.

Physical Hazards : Electrical, Fire/Explosion, Noise, Radiations, Thermal, Pressure, Pinch Point, Slips/Falls, Struck by, Vibration.

Bahaya Kimia : Terhirup, terkena kulit, injeksi, tertelan, terserap.

Chemical Hazards : Inhalation, skin contact, injection, ingestion, absorption.

Bahaya Biologi : Patogen yang ditularkan melalui darah, jamur, tanaman/serangga/hewan.

Biological Hazards : bloodbone pathogens, mold, Plant/Insect/Animals

Bahaya Ergonomi : Gerakan berulang-ulang, beban yang berlebihan, Postur Janggal, Durasi kerja, Desain area kerja.

Ergonomic Hazards : Repetitions, Forcefull extention, Awkward Posture, Duration, Work area desain.

Bahaya Organisasi : stres atau bahaya terkait dengan masalah tempat kerja yang menyebabkan efek jangka panjang atau pendek, beban kerja yang berat dan kekerasan ditempat kerja.

Organizational hazards : stressors or hazards associated with workplace issues that cause long or short term effects heavy workloads, stressful interactions and workplaces violence.

No	Urutan Dasar Langkah Tugas / Job Steps (* Maksimum 15 Langkah / Maximum 15 Steps)	Bahaya Yang Terkait / Potential Hazard(s)	Tindakan Perbaikan / Recommended Action
1	Walk Around Inspektion	1.1 Oli tercecer	1.1.1 lap menggunakan absorbent Pad
2	Prepare Tools	2.1 Terkena tool	2.1.1 Pegang tool dengan benar
		2.2 Tools kotor	2.1.2 Memakai safety shoes
		2.3 Tools berkarat	2.2.1 Berhenti dengan mesin
3	Doing Preventive Maintenance	3.1 Terjepit komponen	2.3.1 Ganti tools dengan yang baru
		3.2 Tersetrum baterai	3.1.1 Hindari kaki jepit
		3.3 Terseandung komponen	3.2.1 Pasukan tangan / rubber gloves kering
		3.4 Terbantur komponen	3.3.1 Perhatikan label
		3.5 Terhirup debu	3.3.2 Memakai safety shoes
		3.6 Terkena Fluka	3.4.1 Hindari bentuk bentur
		4.1 Terhirup debu	3.4.2 Memakai safety shoes & helmet
		4.2 Terpeleset Pivida coli	3.5.1 Memakai Masuer
4	House keeping		3.6.1 Memakai Safety glasses
			4.1.1 Memakai Masuer
			4.2.1 Berhenti dengan mesin / absorbent Pad

Validasi Faiz, 25/11/2025

1. Tuliskan identitas Service manual yang digunakan.....
2. Tuliskan No Bolt Adjuster untuk Foot Brake Control Group
3. Jelaskan fungsi Breather pada torque converter
4. Jelaskan fungsi Transmission and torque converter scavange.....
5. Jelaskan type filter pada transmission oil
6. Tuliskan Part No Spring pada primary fuel filter
7. Berapakah tekanan pada high idle, jelaskan apakah perlu adjustment
8. Berapakah berat Engine+torque divider pada unit D8N Tractor
9. Berapakah jumlah floating bearing pada TurboCharger 1052-016.....
10. Berapakah jumlah clutch pada transmission unit D8N Tractor
11. Berapakah Flow yang dihasilkan transmission pump jika menggunakan oli SAE 10W pada Temp 49°C kecepatan pompa 1800 rpm
12. Berapakah besar Ampere fuse untuk wiper motor pada Unit D8N 9TC1008
13. Tuliskan berat unit D8N 5TJ1005.....
14. Tuliskan apa yang terjadi saat EMS warning level 2 pada unit D8N 9TC1008
15. Pada service berapa jam kah harus didiambil SOS untuk Hydraulic oil unit D8N 5TJ1005
16. Tuliskan jenis dari Oli yang digunakan untuk : a. Engine, b. Hidrolik, c. Transmisi, d. Final Drive Pada temperatur kerja di Indonesia (iklim tropis) +/- 27⁰ C pada unit D8N 5TJ1005.....
17. Tuliskan kapasitas dari: a. Fuel Tank, b. Engine crankcase, c. powertrain oil, d Final drive di tiap sisi, pada unit D8N 5TJ1005.....
18. Tuliskan fluida yang digunakan untuk melapisi terminal battery, jelaskan fungsinya
19. Tuliskan Part NO Fillter Cutter.....
20. Tuliskan Langkah Track Adjust pada Unit D8N 5TJ1005.....

SERVICE PARTS REQUISITION 4.3

WORK ORDER NO.	A/C NO.	CUSTOMER SMKN 1 SINGOSARI	MODEL	SERIAL NO.	1	WARRANTY
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SEGMENT NO.

2	UNIT DOWN
3	SCHEDULED

DELIVER TO	DATE/TIME OF DELIVERY	CATERPILLAR PART ? YES NO.	INITIAL SUPPLY PSO REF. NO.
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CUSTOMER REPRESENTATIVE NAME	CUSTOMER REPRESENTATION SIGNATURE	TOTAL PARTS ESTIMATE
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PREPARED BY Fairiz Hasan Fachrudin	APPROVED BY	DATE/TIME APPROVED 15 December 2025
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ITEM	PART NUMBER	CHANGED TO	DESCRIPTION	QTY		APPROVAL	UNIT PRICE	EXTENDED PRICE	RECORD
				ESTI MATED	ACTUAL				
1	1R-0749		Filter Fuel	1	1				
2	9M-2341		Filter Screen	1	1				
3	1R-1808		Filter Engine oil	1	1				
4	3E-9804		Diesel Engine Oil	2	3				
5	132-8875		Filter element	1	1				
6	RT1584		Coolant additive	1	1				
7	250-0729		Filter oil	1	1				
8									
9									
10									
11									
12									
13									
14									
15									
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27									

* APPROVAL CODES
 C = CUSTOMER REQUEST O = APPROVED BY CUSTOMER
 I = FOUND BY INSPECTOR X = NOT APPROVED BY CUSTOMER
 R = FOUND DURING REPAIR

TOTAL C/F