

Demonstrate Selecting the Correct Fasteners and Locking Application for Maintenance and Repair of Heavy Equipment

Skill Number CO-OP15GN107

Full Name: Faz Haziq Fachrudin

No ID: _____

Validation Date: 14 November 2025School: SMKN 1 SINGAPORE**PERFORMANCE TASK:**

Given several fasteners and the necessary tools, as listed:

- Castellated nut
- Circlips
- Clevis Pin
- Flat Washer
- Spring Washer
- Star Washers
- Self-tapping screw
- Stud
- Wing nut
- Woodruff key
- Lockwire
- Bolt
- Nut
- Thread Lubricant and other Adhesives

The student must identify and explain their function. Student will be required to answer questions on their findings. The student will also be required to complete relevant workplace documentation and is to always observe the correct safety procedures.

Students are required to fill out this form, in the appropriate place, indicating that an inspection of components has occurred and their decision, after inspection is recorded

The student must be able to perform the following task:

- Demonstrate identify and explain the function of provided fasteners and necessary tools.
- Perform communication & etiquette manner

Safety and Contamination Control must be always applied to this process. Literature and measuring tools will be made available but will not be provided directly to the student.

Prerequisite	Yes	No	N/A	Hints
The student must complete the knowledge assessment. Minimum passing grade 80%.	✓			Score fastener course or subject.

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Preparation				
Prepare related literature	✓			Observe if the candidate is preparing Manufacturer's literature related to the task
Prepare required equipment	✓			
Prepare related tools	✓			Observe if the candidate is preparing related tools (e.g.: Thread Identification Kit, etc.)
Prepare Safety & Contamination Control equipment	✓			Observe if the candidate is preparing related Safety & CC Equipment (e.g.: PPE, Blue Towel, Plastic Wrap, etc.)

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 & greetings. • Introduce Student's identity
Explain the purpose of Student's activity.	✓			
Ask permission to perform the job.	✓			

Tasks	Check			Observation / Hints
	Yes	No	N/A	
Identification				
1. Accessing Information	✓			Observe if the candidate is accessing information relating task from manufacturer's literature
2. Castellated Nut	✓			Identify Name, Application and Part Number
3. Circlip	✓			Identify Name, Application and Part Number
4. Clevis Pin	✓			Identify Name, Application and Part Number
5. Flat washer	✓			Identify Name, Application and Part Number
6. Spring washer	✓			Identify Name, Application and Part Number
7. Star washer	✓			Identify Name, Application and Part Number
8. Self-tapping screw	✓			Identify Name, Application and Part Number
9. Stud	✓			Identify Name, Application and Part Number
10. Wing nut	✓			Identify Name, Application and Part Number
11. Woodruff key	✓			Identify Name, Application and Part Number
12. Lockwire	✓			Identify Name, Application and Part Number
13. Thread Lubricant & other Adhesives	✓			Explain the function, when and where it used.

Tasks	Complete			Observation / Hints
	Yes	No	N/A	
Thread Identification				
UNC	✓			Determine thread size
UNF	✓			Determine thread size
Whitworth	✓			Determine thread size
Metric	✓			Determine thread size
AF	✓			Determine thread size
BSW	✓			Determine thread size

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Perform close the job by ensuring all systems or conditions is in the standard condition				
Ensure all systems or conditions are in standard condition.				- Find the improper condition. - Communicate the finding to the customer/assessor.

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Reporting				
All relevant documentation completed correctly and approved by customer (if required).	✓			• Completing the Task List • Completing Measurement Form/Related Check Sheet, if required • Create Service Report (SIMS), if required • Create SPR, if required • Documenting the failed or damaged parts, if required • Provide Technical Analysis Report/Failure Analysis Report, if required.

Tasks	Completed		Observation / Hints
	Yes	No	
Safety			
Using PPE related to the job	✓		
Follows relevant Workplace Safety Guidelines (LOTO, Safety Equipment)	✓		Comply with safety regulation that applied on the workplace
State and follow Safety Precautions	✓		- Create Job Safety Analysis - Student must follow safety procedure refer to service manual or SIS related to job
Serviceman completes job without accident due to incorrect procedure using hand tools.	✓		- Correct working position - Correct hand tool related to the job
Tasks completed without damage equipment and tools	✓		

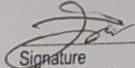
Tasks	Completed		Observation / Hints
	Yes	No	
Contamination Control			
Environmental Practices & Housekeeping	✓		1. Waste is minimized, waste material, including sludge; solids and other wastes are sorted and stored in bins for recycling or disposal 2. Packaging of goods received is sorted and reused or disposed of by recycling 3. Materials that can be reused are cleaned and stored 4. Waste and scrap is removed following workplace procedures 5. All fluids are disposed of in accordance with enterprise policies and procedures

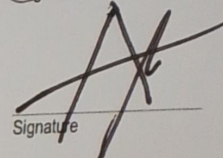
Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Perform etiquette/manner after completing the job				
Perform etiquette/manner when closing the communication.	✓			• Perform smile & greetings. • Ask permission to leave or end the interaction.

General Comments

Taru Complate

RESULT: COMPETENT ☒ NOT YET COMPETENT ☐ (please check (√))

Student: Fariz Hason Fachrudin 14 November 2025 
Name Date Signature

Assessor: Arsan Hardi W., S.Pd., Gr. 14 NOV 2025 
NIP. 19840822 202221 1 012
Name Date Signature

Supervisor: _____
Name Date Signature

Data Recorded: _____
Name Date Signature

ANALISIS LINGKUNGAN KESELAMATAN KERJA / JOB SAFETY ENVIRONMENT ANALYSIS

Teknik / Task	Remove Broken Bolt (P333)	Formulir JSEA JSEA Number	Author / Page	1	Date / OK	2
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Tanggal Pembuatan JSEA Date of JSEA	13 November 2015	Departemen Dept	Tempat Kerja Work Location	Workshop TAB
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Dibuat Oleh Completed By	Faz	TTD Sign		Revisi Oleh Reviewed By	SHE	TTD Sign	Atasan Superior	
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Apakah Anda sudah terlatih untuk melakukan pekerjaan ini? / Are you properly trained to complete these task? ☐ Ya / Yes ☐ Tidak / No

Apakah yang diperlukan untuk memastikan bahwa pekerjaan selesai tanpa adanya kecelakaan kerja? / What do you need to ensure this job is completed incident free?

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 occur?

ABCD-1 (Perbaikan / Repair) / M- 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	Medan / Terrain
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Pengendalian Sumber Bahaya / Hazardous Energy Control	☒ Listrik / Electrical	☒ Gravitasi (Benda jatuh, tertimpa) / Gravity (Falling objects, struck down)	☐ Pneumatik / Pneumatic
	☐ Hidraulik / Hydraulic	☐ Mekanis / Mechanical	☐ Panas / Thermal

APD yang diperlukan Required PPE	☒ Helm / Safety Helm	☐ Pelindung Muka / Face shield	☒ Kacamata / Safety Glass
	☒ Sarung Tangan / Hand Gloves	☐ Pelindung Pernafasan / Respiratory Protection	☐ Perlindungan Kejatuhan / Fall Protection
	☒ Sepatu / Safety Shoes	☐ Pelindung Telinga / Hearing Protection	☐ 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 terpeleset, terpeleset/terjatuh, tertimpa dll.

1 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.

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

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

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

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

4 Biological Hazards : bloodborne pathogens, mold, Plant/Insect/Animals

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

5 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.

6 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
A ERP/MERP			
1.	Saat pekerjaan terjadi gempa	terjatuh reruntuhan	1.1 Segera evakuasi menuju master point baru ditetapkan/ tempat terbuka 1.2 Melaporkan kejadian kepada atasan
2.	Saat pekerjaan ada teknisi yang pingsan	Cidera kepala, tangan tergores	2.1 Lakukan protokol P3K 2.2 Segera evakuasi korban menuju fasilitas kesehatan terdekat 2.3 Melaporkan kejadian kepada atasan
B Langkah Pekerjaan			
1.	Walk Around Inspection	1.1 Tersandung engine	1.1.1 Hindari bejalan di area sempit
		1.2 Terpeleset Pula	1.1.2 Memakai Safety Shoes
2.	Prepare Tools	2.1 Terkena tools	2.1.1 Bersihkan dengan White towel
		2.2 Tools terlepas dari tangan	2.1.1 Hindari tangan jepit tools
		2.3 Tools terkantongkan di	2.2.1 Pegang tools dengan benar
3.	Doing Remove Broken Bolt	3.1 Tools terlepas dari tangan	2.3.1 Bersihkan di dengan White towel
		3.2 Terpeleset listrik	3.1.1 Pegang tools dengan benar
		3.3 Drill bit terlepas dari drill	3.2.1 Pastikan tangan tidak basah /terkena cairan
		3.4 Jari terkena Batu	3.2.2 Bersihkan dengan lap/tisu
4.	Doing Install New Bolt	4.1 Tools terlepas dari tangan	3.3.1 Kembangkan drill bit dengan Chuck key
5.	House Keeping	5.1 Terkena debu saat menyapu	3.4.1 Pastikan Pegangan jari aman dari tali bender
		5.2 Oli terteler	4.1.1 Pegang tools dengan benar
			5.1.1 Memakai masker saat menyapu
			5.2.1 Bersihkan dengan Mop