

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

Skill Number CO-OP15GN107

Full Name: Rahmat Lanza Bardot

No.ID: _____

Validation Date: 31 12 2025

School: SMK 1 SGS

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%.	✓			

Tasks	Completed			Observation / Hints
	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	Check			Observation / Hints
	Yes	No	N/A	
Identification				
1. Accessing Information	✓			
2. Castellated Nut	✓			
3. Circlip	✓			
4. Clevis Pin	✓			
5. Flat washer	✓			
6. Spring washer	✓			
7. Star washer	✓			
8. Self-tapping screw	✓			
9. Stud	✓			
10. Wing nut	✓			
11. Woodruff key	✓			
12. Lockwire	✓			
13. Thread Lubricant & other Adhesives	✓			

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

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.	✓			

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 PPE related to the job	✓			
Follows relevant Workplace Safety Guidelines (LOTO, 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	✓			

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Perform etiquette/manner after completing the job	✓			
Perform etiquette/manner when closing the communication.	✓			

General Comments

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

Student: Rahmat Zamri Barito 31/12/25
Name Date Signature

Assessor: Shawna TS 31/12/25
Name Date Signature

Supervisor: _____
Name Date Signature

Data Recorded: _____
Name Date Signature

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

Skill Number CO-OP15GN107

Full Name: Patwardhan Zanz Patricia F

No ID: S11KEN 1 S95

Validation Date: 31/12/25

School: S11KEN 1 S95

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-lapping 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	
Reporting				
Perform close the job by ensuring all systems or conditions is in the standard condition	✓			<ul style="list-style-type: none"> Find the improper condition. Communicate the finding to the customer/assessor.
Ensure all systems or conditions, are in standard condition.	✓			

Tasks	Completed			Observation / Hints
	Yes	No	N/A	
Reporting				
All relevant documentation completed correctly and approved by customer (if required).	✓			<ul style="list-style-type: none"> 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)	✓		<ul style="list-style-type: none"> Comply with safety regulation that applied on the workplace
State and follow Safety Precautions	✓		<ul style="list-style-type: none"> 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.	✓		<ul style="list-style-type: none"> 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	✓		<ol style="list-style-type: none"> Waste is minimized, waste material including sludge, solids and other wastes are sorted and stored in bins for recycling or disposal Packaging of goods received is sorted and reused or disposed of by recycling Materials that can be reused are cleaned and stored Waste and scrap is removed following workplace procedures All fluids are disposed of in accordance with enterprise policies and procedures

Tasks	Completed		Observation / Hints
	Yes	No	
Perform etiquette/manner after completing the job	✓		
Perform etiquette/manner when closing the communication.			<ul style="list-style-type: none"> Perform smile & greetings. Ask permission to leave or end the interaction.

General Comments

RESULT:

COMPETENT

NOT YET COMPETENT

(please check (X))

Student:

Rohmat Zorzi Rardo

31/12/25

Signature

Assessor:

Shawan

31/12/25

Signature

Supervisor:

Name

Date

Signature

Data Recorded:

Name

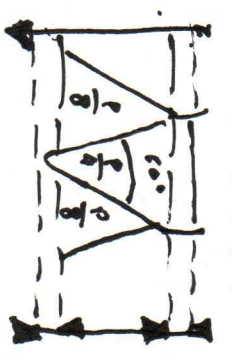
Date

Signature

Whitworth

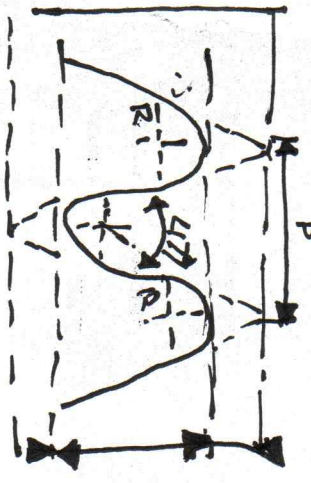


Unified Thread

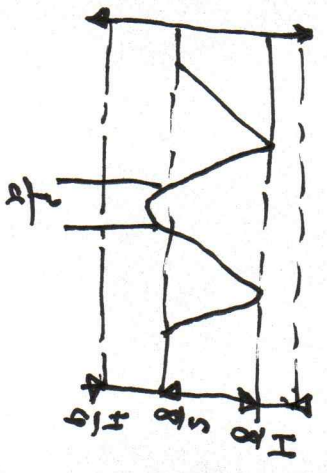


~~Unified Thread~~

BH33h



ISO Metric Thread



ANALISIS LINGKUNGAN KESELAMATAN KERJA / JOB SAFETY ENVIRONMENT ANALYSIS

Pekerjaan / Task	DA Gear Pump	Nomor JSEA / JSEA Number	Halaman / Page	1	Dari / Of	2
Tanggal Pembuatan JSEA / Date of JSEA	31/12/25	Departemen / Dept	Tempat Kerja / Work Location	Workshop TAB		
Disusun Oleh / Compiled By	Bardo	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

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

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"/> Panas / Thermal
	<input type="checkbox"/> Hidraulik / Hydraulic	<input type="checkbox"/> Mekanis / Mechanical	<input checked="" type="checkbox"/> Kacamata / Safety Glass	<input type="checkbox"/> Perlindungan Kejutahan / Fall Protection
APD yang diperlukan / Required PPE	<input checked="" type="checkbox"/> Helm / Safety Helm	<input type="checkbox"/> Pelindung Muka / Face shield	<input type="checkbox"/> Perlindungan Pernafasan / Respiratory Protection	<input type="checkbox"/> Lain-Lain / Other
	<input checked="" type="checkbox"/> Sarung Tangan / Hand Gloves	<input type="checkbox"/> Pelindung Telinga / Hearing Protection		
	<input checked="" type="checkbox"/> Sepatu / Safety Shoes			

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 terpelelet, terpelelet/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	Prepare APD	Tersandung meja	1.1 Perhatikan Meja agar tidak menghalangi 1.2 Gunakan APD lengkap
2	Walk around inspection	Tersandung meja terpelelet	2.1 Fokus saat bekerja 2.2 Gunakan Safety Shoes 2.3 Gunakan APD lengkap 2.4 bersihkan menggunakan white towel
3	Prepare tools	Terjepit taci toolbox toolbox menabrak benda lain taci terlindas toolbox	3.1 Perhatikan area pegangan yg aman 3.2 Gunakan Safety Shoes 3.3 JANGAN BERGURU 3.4 Gunakan Safety Shoes
4	Demg Disassembly Gear pump	Tergores komponen Jari terjepit komponen kaki tertimpa tool	4.1 hindari area tajam 4.2 Hindari titik sejut 4.3 pegang dgn benar 4.4 Fokus saat bekerja
5	Inspect the Fastener	Tergores fastener fastener terjatuh	5.1 hindari area yang tajam 5.2 Fokus saat inspeksi 5.3 pegang fastener dengan benar 5.4 Hati-hati saat inspeksi

6N8298 OIL PUMP GROUP
 Serial No. 43N1173-Up and Engine Serial No.
 52K1-Up
 Part of 1M7037 Oil Pump Group shown on Page
 49B

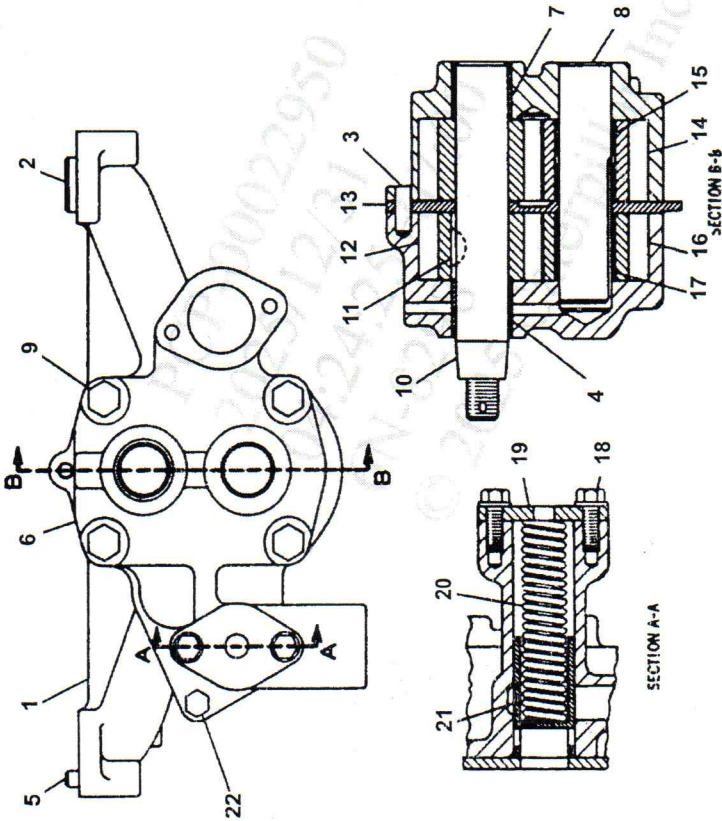


Image #	Callout #	Part Number	Part Name	Quantity
1	12	6N-8312	Gear	1
(scavenge pump drive - 9 teeth)				
1	13	6N-8303	Spacer	1
1	14	6N-8308	Gear Assem.	1
(oil pump idler - 9 teeth)				
(Includes)				
1	15	3H-2512	Bearing	2
RRP				
1	16	6N-8301	Gear Assem.	1
(scavenge pump idler - 9 teeth)				
(Includes)				
1	17	4M-9920	Bearing	1
RRP				
1	18	0L-1351	Bolt	2
		5M-2894	Washer	2
1	19	8M-5434	Flange Assem.	1
1	20	2S-2760	Spring	1
RRP				
1	21	2S-2781	Plunger	1
1	22	0T-0573	Bolt	1