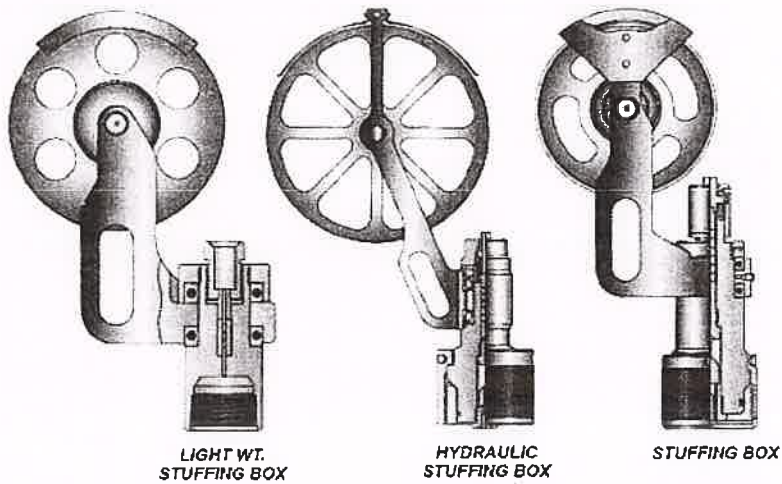




**B. SURFACE EQUIPMENT**

**1. Stuffing Box**



What is Stuffing Box

- Pressure control
- Equipment use to guide wireline go through into the well.

What is the purpose of stuffing Box

To make sure no pressure out while wireline go through well which seal by packing.

How to operate Stuffing Box

Properly connect hydraulic hose to injection point which come from control panel or by manual hand pump to pump the packing when necessary.

What is maintenance required for Stuffing Box

- Change and check the stuffing box packing, upper and lower gland.
- Greasing.

What is safety precaution required for Stuffing Box

Proper placement during install into skid to protect stake well.

James 2/11/24

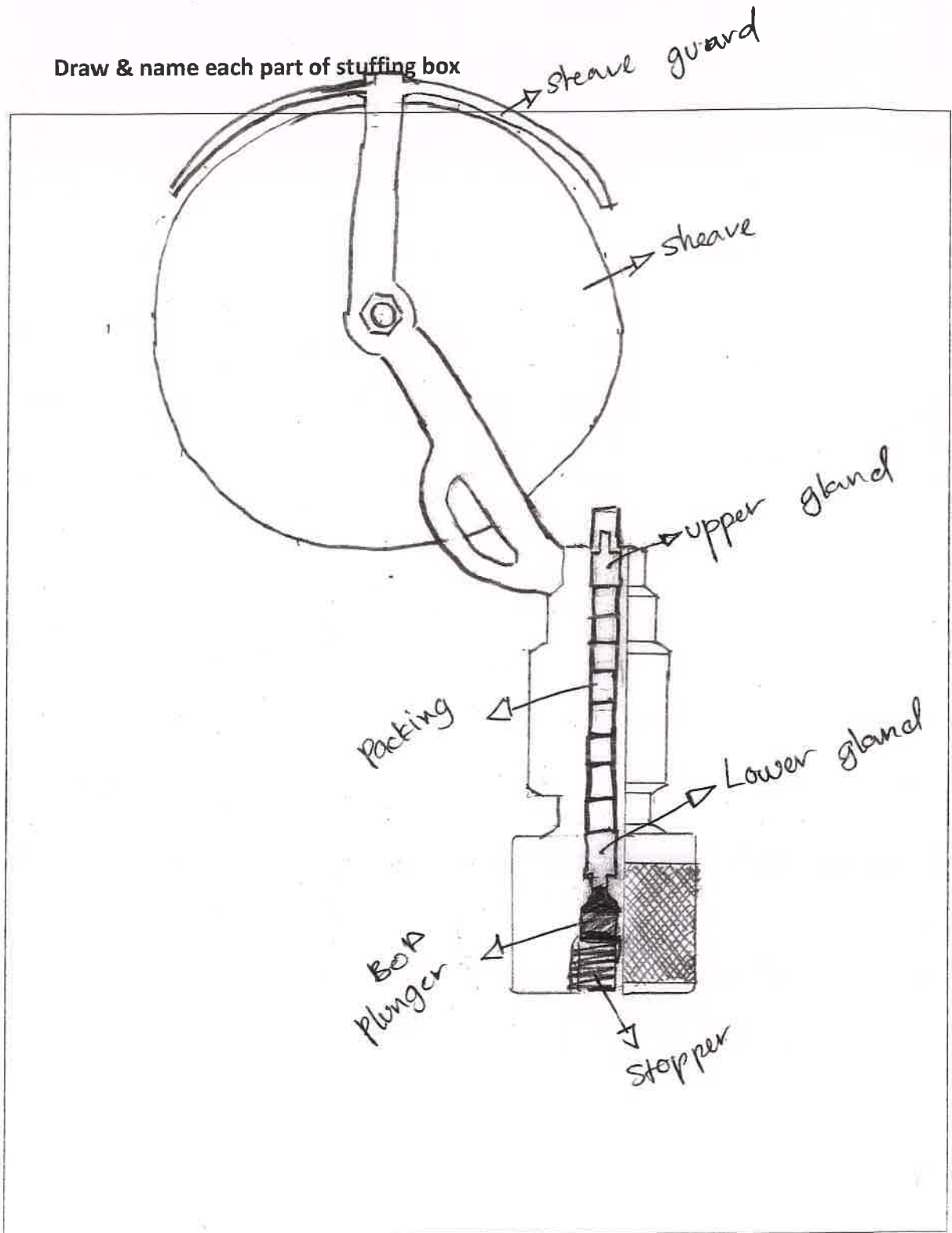




What is potential hazard during handling Stuffing Box

- Slip disk
- pinch point
- Back injury.

Draw & name each part of stuffing box



JAMES 21/11/24





2. Lubricator

What is Lubricator

is the high and low pressure pipe that has 'quick unions' connection.

What is the purpose of Lubricator

is to enable to install or remove wireline toolstring from a well under pressure.

How to operate Lubricator

make sure the O-ring is fit before tight between lubricator and just using hand tight / c-spanner.

What is maintenance required for Lubricator

- greasing
- painting.

What is safety precaution required for Lubricator

- Ensure all connection is clean
- Protect thread with thread protector.

What is potential hazard during handling Lubricator

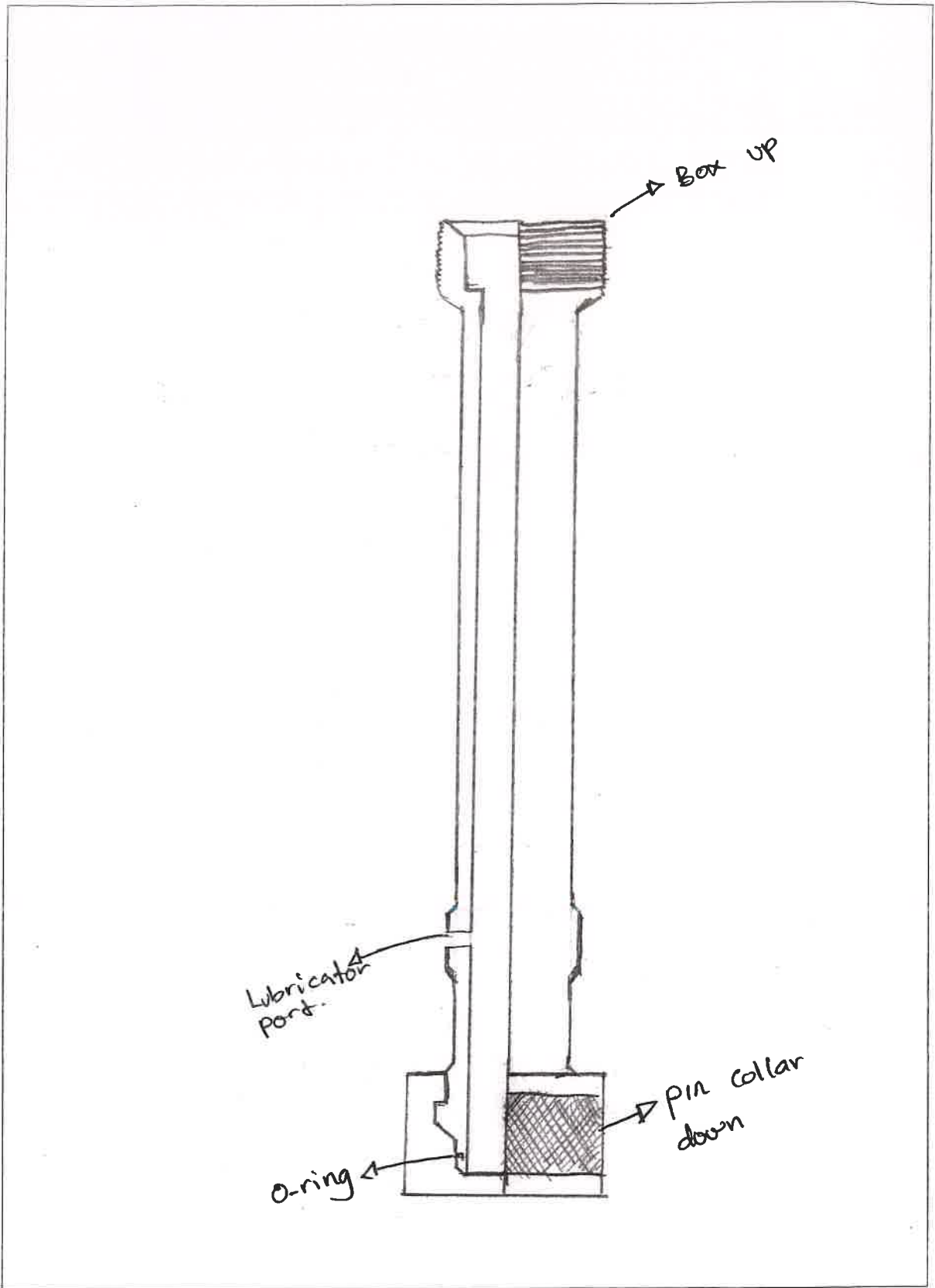
- pinch point.
- bad injury.
- slip disk.

James 21/11/24





**Draw & name each part of Lubricator**

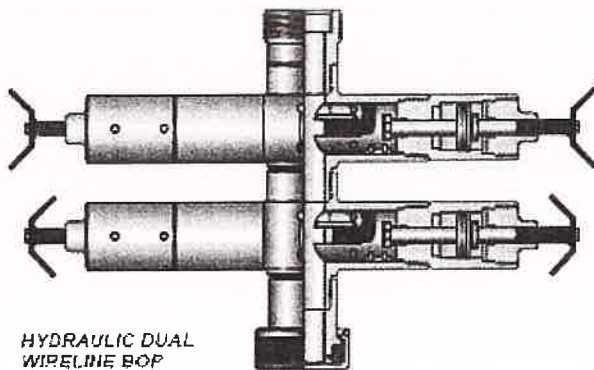


*James 21/11/24*

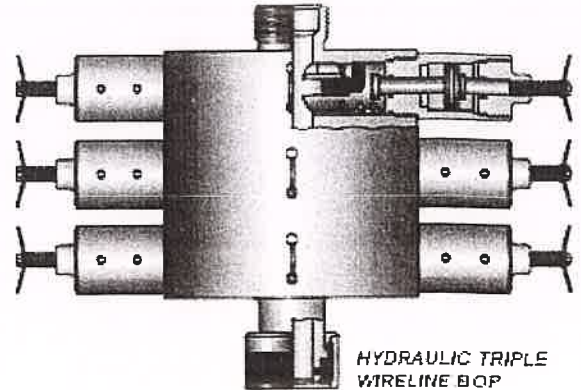




3. Blowout Preventer (BOP)



HYDRAULIC DUAL WIRELINE BOP



HYDRAULIC TRIPLE WIRELINE BOP

What is BOP

- Known as wireline valve that installed between the tree connection and lower lubricator section.
- One of the slickline PCE part of seal the pressure.

What is the purpose of BOP

- can isolated well pressure - without at the wire with BOP Ram.
- to assemble wire cutter above the BOP rams.

How to operate BOP

- operate by hydraulic pressure that connect from control capel to BOP rams.
- also can operate by manual with handle for close only.

What is maintenance required for BOP

- Function test the rams.
- function test the equalizing port
- hyd. test
- Greasing

What is safety precaution required for BOP

- hand finger injury.
- Bop hold pressure from one direction only.

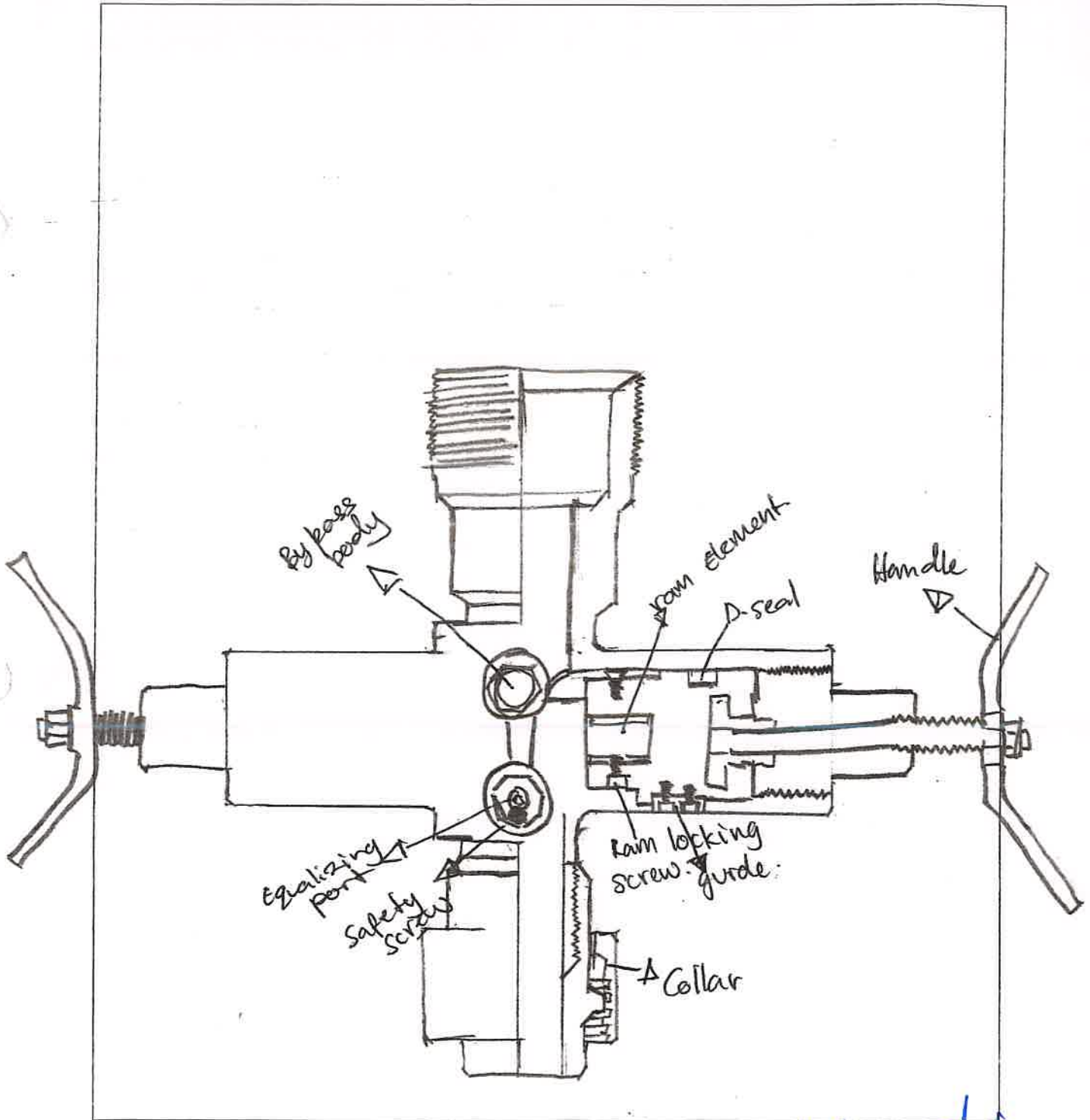
James 21/11/24 *[Signature]*



What is potential hazard during handling BOP

- Pinch point
- Slip Back injury / slip disk
- drop object.

Draw & name each part of BOP



James 21/11/24 [Signature]



#### 4. X-Mas Tree

What is x-mas tree

is a series of valve installed on the wellhead to control the flow of fluid from the well.

What is the purpose of x-mas tree

- for wireline job crew to do the job, put BOP and other tools upside the x-mas tree and x-mas tree also for the last safety valve for the reservoir.

How to operate x-mas tree

- make sure the swab valve, lower master valve and SSSV is closed and do with the light turn

What is maintenance required for x-mas tree

- greasing on tree cap
- make sure x-mas tree wheel on good condition.

What is safety precaution required for x-mas tree

- count the valve turn when closing
- never use the master valve to shut in flowing well except in an emergency.

What is potential hazard during handling x-mas tree

- miss turn of the gate valve
- finger injury

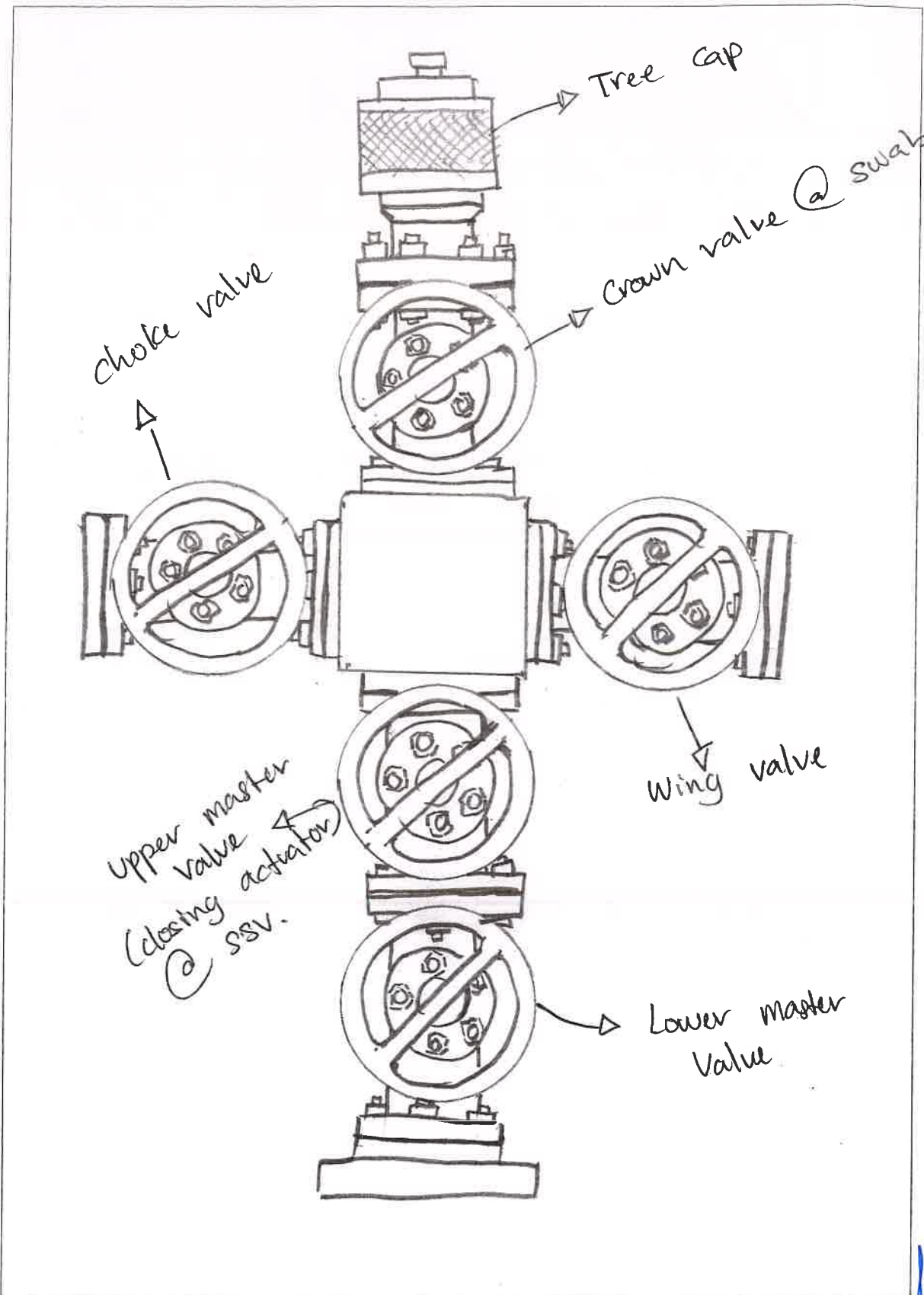
Draw & name each part of x-mas tree

JAMES 21/11/24 





Draw & name each part of x-mas tree



James 21/11/24





5. Wireline Reel Skid Unit (RSU) / Winch – Single Drum and Double Drum

What is RSU

That device that control slickline wire drum by power up and operate by hydraulic supply.

What is the purpose of RSU

to deliver and retrieve tool down hole by using slickline wire.

How to operate RSU

Take hydraulic supply from power pack and control by using lever, gear and AA valve.

What is maintenance required for RSU

- Check gear box condition (change when due)
- check valve condition, make sure no leak.
- Check brake-

What is safety precaution required for RSU

- put guard on rotating equipment
- anchor the unit during job.
- put whip check on hyd. hose.

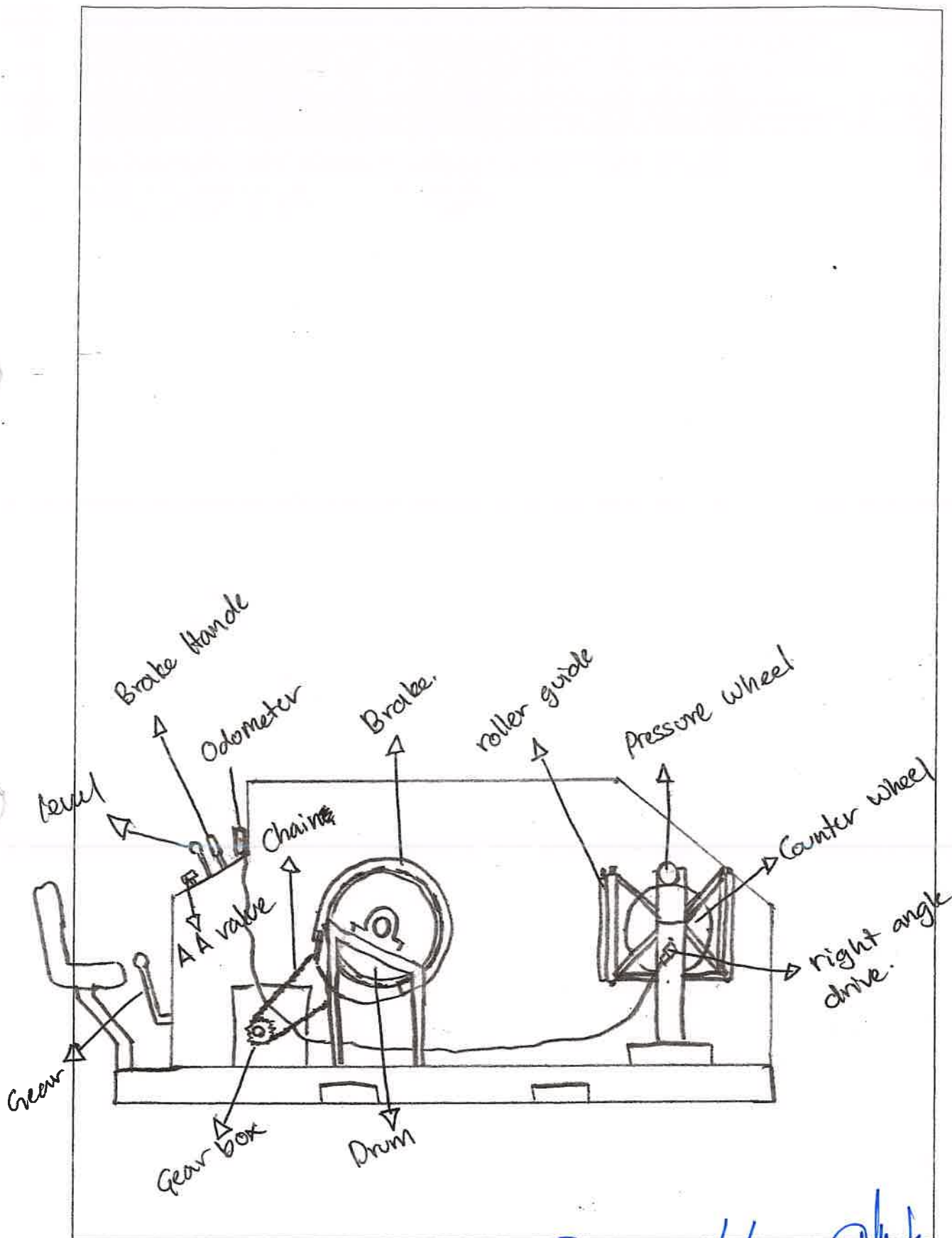
What is potential hazard during handling RSU

- hose burst.
- moving parts.
- pinch points.

James 21/11/24



Draw & name each part of RSU



JAMES 2/11/24 *[Signature]*





6. Odometer

What is Odometer

- Counter meter to count the depth.

What is the purpose of Odometer

- To measure depth that wire traveled by counter wheel.

How to operate Odometer

- Connecting odometer cable to counter wheel.

What is maintenance required for Odometer

- Servicing and cleaning.  
- greasing the odometer cable.

What is safety precaution required for Odometer

- Tighten the connection  
- use right ratio.  
- make sure the counting number is static.

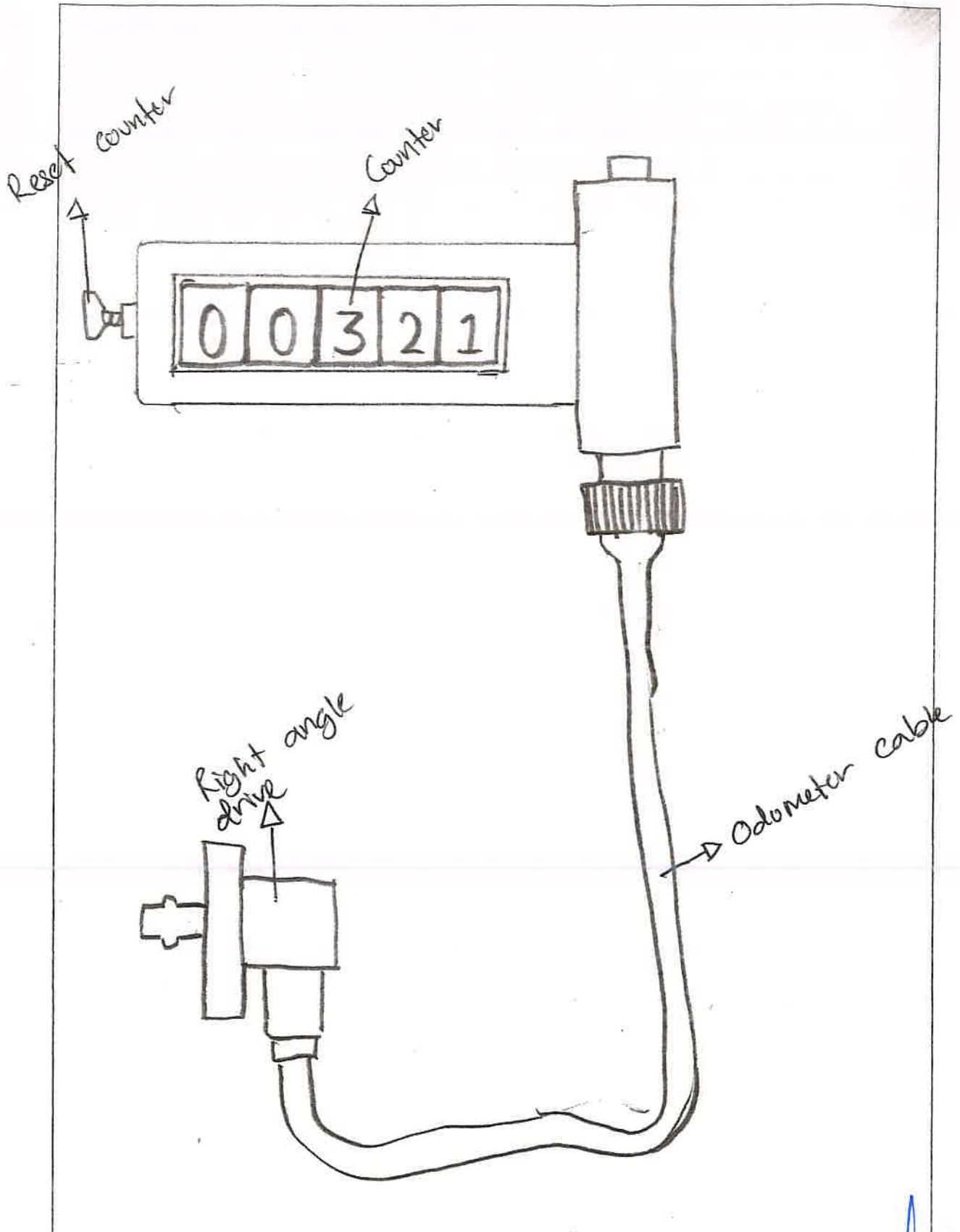
What is potential hazard during handling Odometer

- Hand injury  
- miss depth if odometer reading failed.

James 2/11/24



Draw & name each part of Odometer



*James 2/11/24*





7. Weight indicator (200 lbs and 4000 lbs)

What is Weight Indicator

To show the weight of the toolstring during performing job entry / Poot

What is the purpose of Weight Indicator

guide to operator if any obstruction inside the well

How to operate Weight Indicator

~~Connect~~ Connect Weight Indicator to hay pulley -  
- free the tool by slack wire, and reset the reading of the gauge -  
before RIK to get accurate weight reading.

What is maintenance required for Weight Indicator

- Check the gap at Weight Indicator
- Make sure fluid WD-15 is enough.
- Calibration date is valid.
- Function test.

What is safety precaution required for Weight Indicator

- Make sure the Calibration date is valid.
- Check the gap at load Cell
- Cover the weight indicator screen with bag.

What is potential hazard during handling Weight Indicator

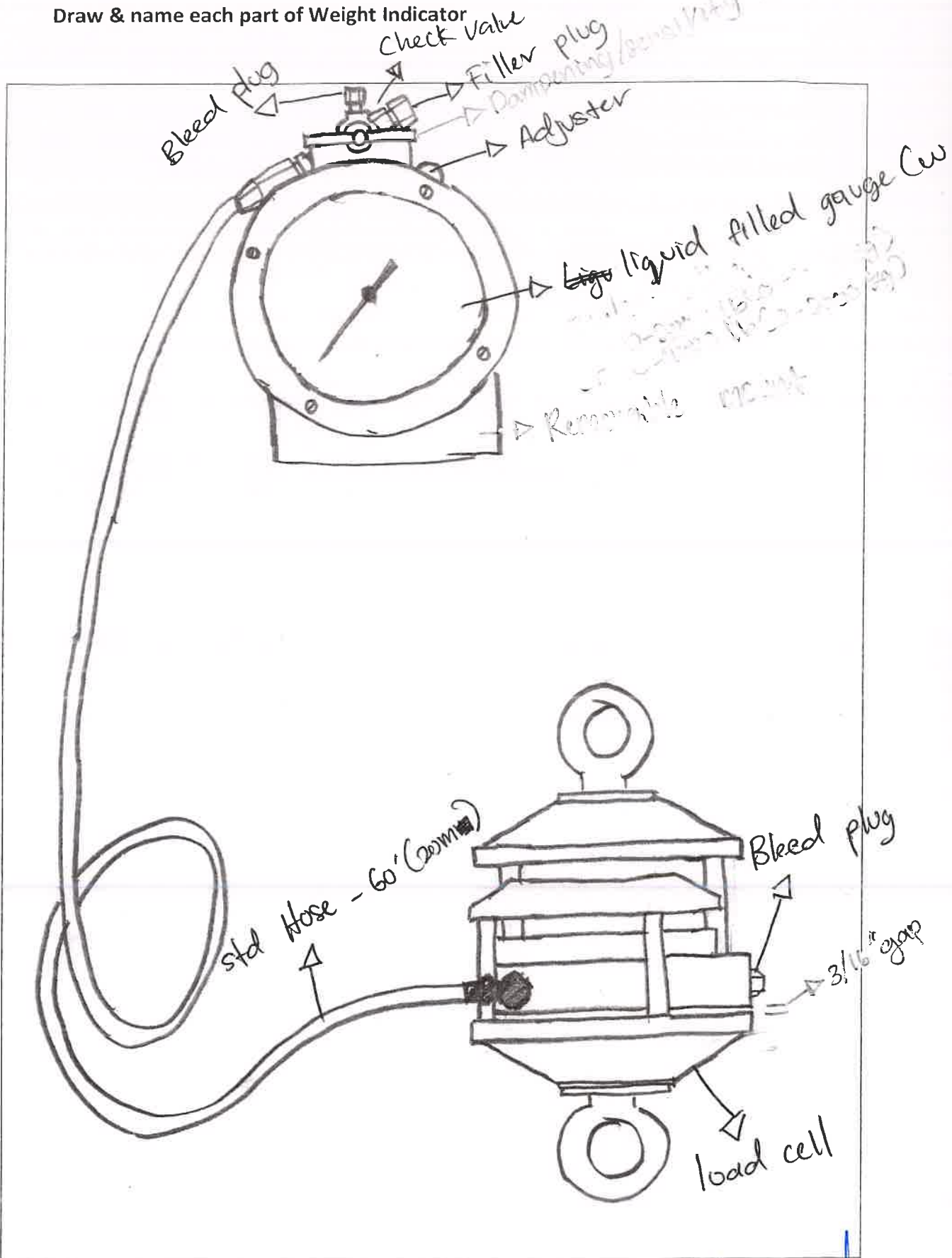
- hose burns
- manual handling.

James 2/11/24





Draw & name each part of Weight Indicator



*PAMS 2/11/24*





8. Spooling Device

What is Spooling Device

device that control of tension wire during spooling operation.

What is the purpose of Spooling Device

for spooling the wire from drum  
- For Spooling wire from Drum to Reel.  
- For spool wire from Drum to Reel to Drum.

How to operate Spooling Device

- Connect to power pack  
- Control the brake pressure to tension the wire.

What is maintenance required for Spooling Device

- Check gear oil  
- Check directional Valve  
- Check hydraulic regulator.

What is safety precaution required for Spooling Device

- Do not stand line of fire during wire tension.  
- Junction the ~~break~~ brake  
- anchor.

What is potential hazard during handling Spooling Device

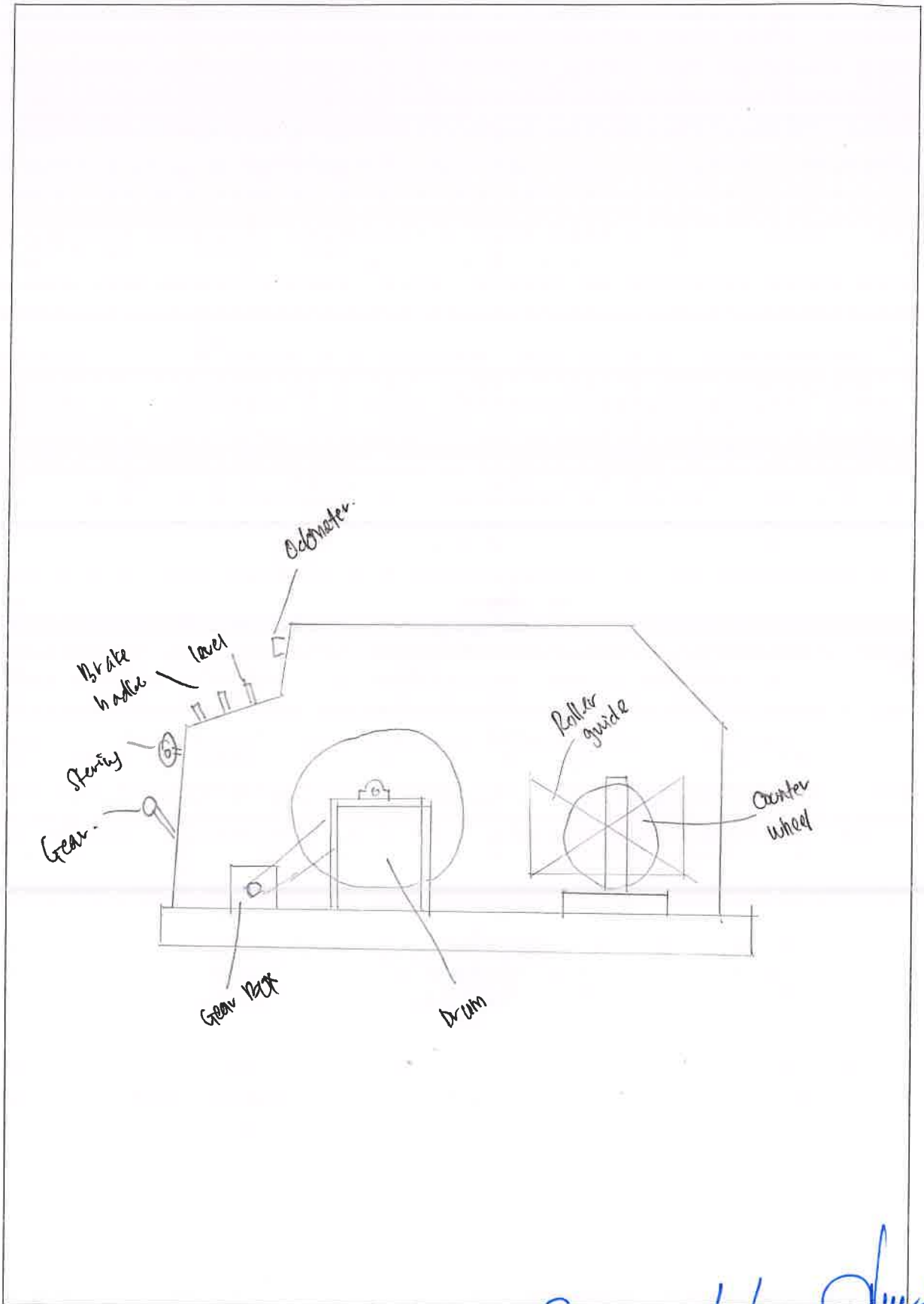
- hose burst  
- high tension wire.

James 21/11/24





**Draw & name each part of Spooling Device**



James 2/11/24 [Signature]





9. Control Panel

What is Control Panel

Is a device that contain gauge, air regulator and hydraulic to supply pressure. It provide high pressure by a low pressure air or gas input.

What is the purpose of Control Panel

- Used to supply the pressure to the control needed to keep safety valve in open position.

How to operate Control Panel

- Connect air supply and control air supply by air regulator.

What is maintenance required for Control Panel

- Check tubing connection  
- Check hydraulic level.  
- Check air regulator  
- Ensure gauge in good working and calibration.

What is safety precaution required for Control Panel

- Using proper PPE  
- Stay away from line of fire.  
- Secure hose connection.

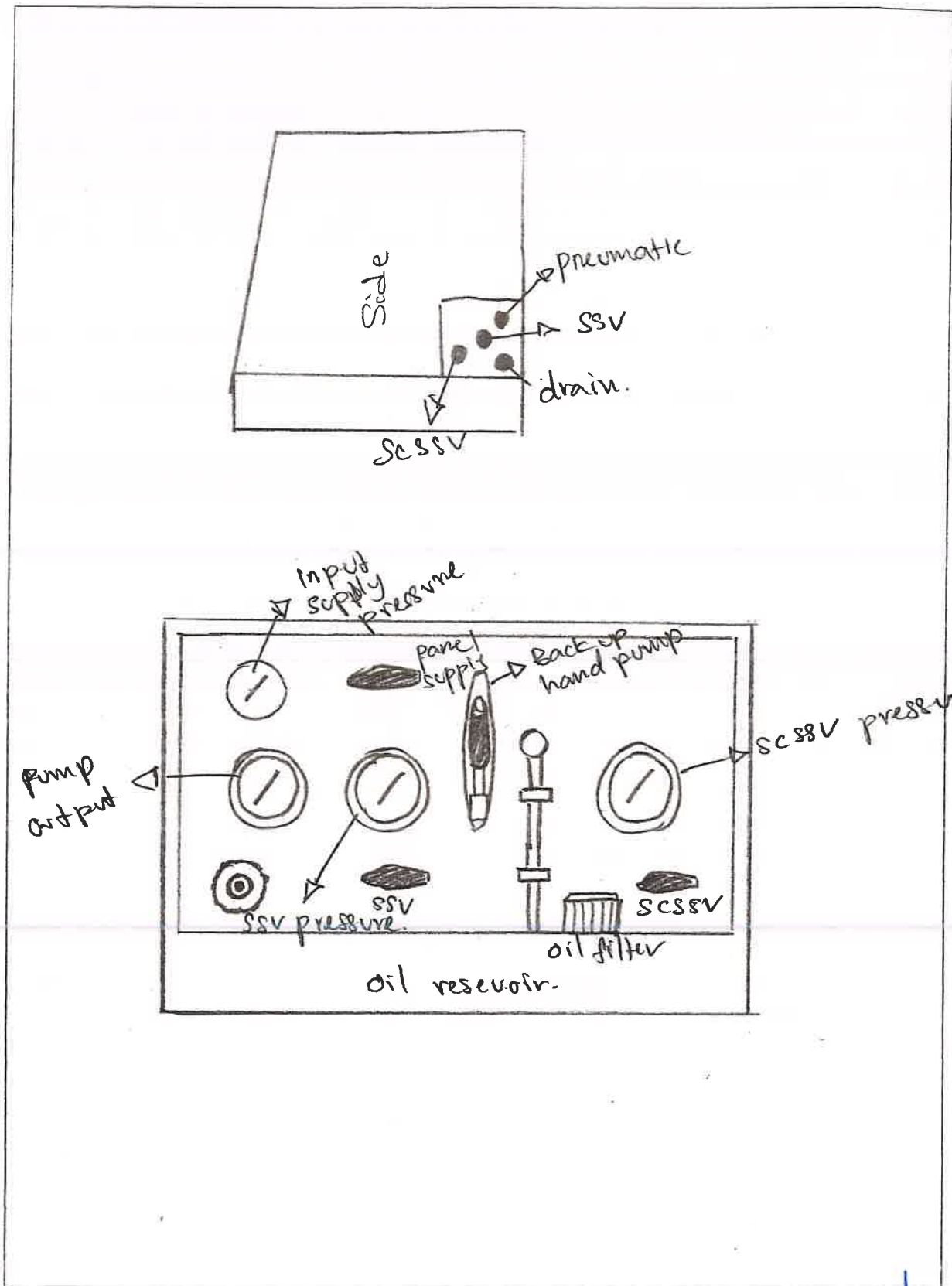
What is potential hazard during handling Control Panel

- Hose burst  
- Malfunction gauge  
- Tubing leaking.

James 2/11/24



Draw & name each part of Control Panel



JAMES 21/11/24 *[Signature]*





10. Huskel Drum

What is Huskel <sup>Pump</sup> Drum

Huskel pump to generate fluid pressure.

What is the purpose of Huskel Drum

Huskel pump is attached to test pump and use for supply pressure to perform pressure test.

How to operate Huskel Drum

Get air supply from Air compressor and controlled by air regulator.

What is maintenance required for Huskel Drum

- Dressing tool.
- Services ex208.
- function test.

What is safety precaution required for Huskel Drum

- Use full PPE
- line of fire
- ensure no water can inside.
- check for the hose and connection rating.

What is potential hazard during handling Huskel Drum

- Air hose burst.
- Trap pressure.
- line of fire.

JAMES 2/11/24



Handwritten text, possibly a title or header, located at the top of the page.

Handwritten text, possibly a paragraph or a list item, located in the upper middle section.

Handwritten text, possibly a paragraph or a list item, located in the middle section.

Handwritten text, possibly a paragraph or a list item, located in the lower middle section.

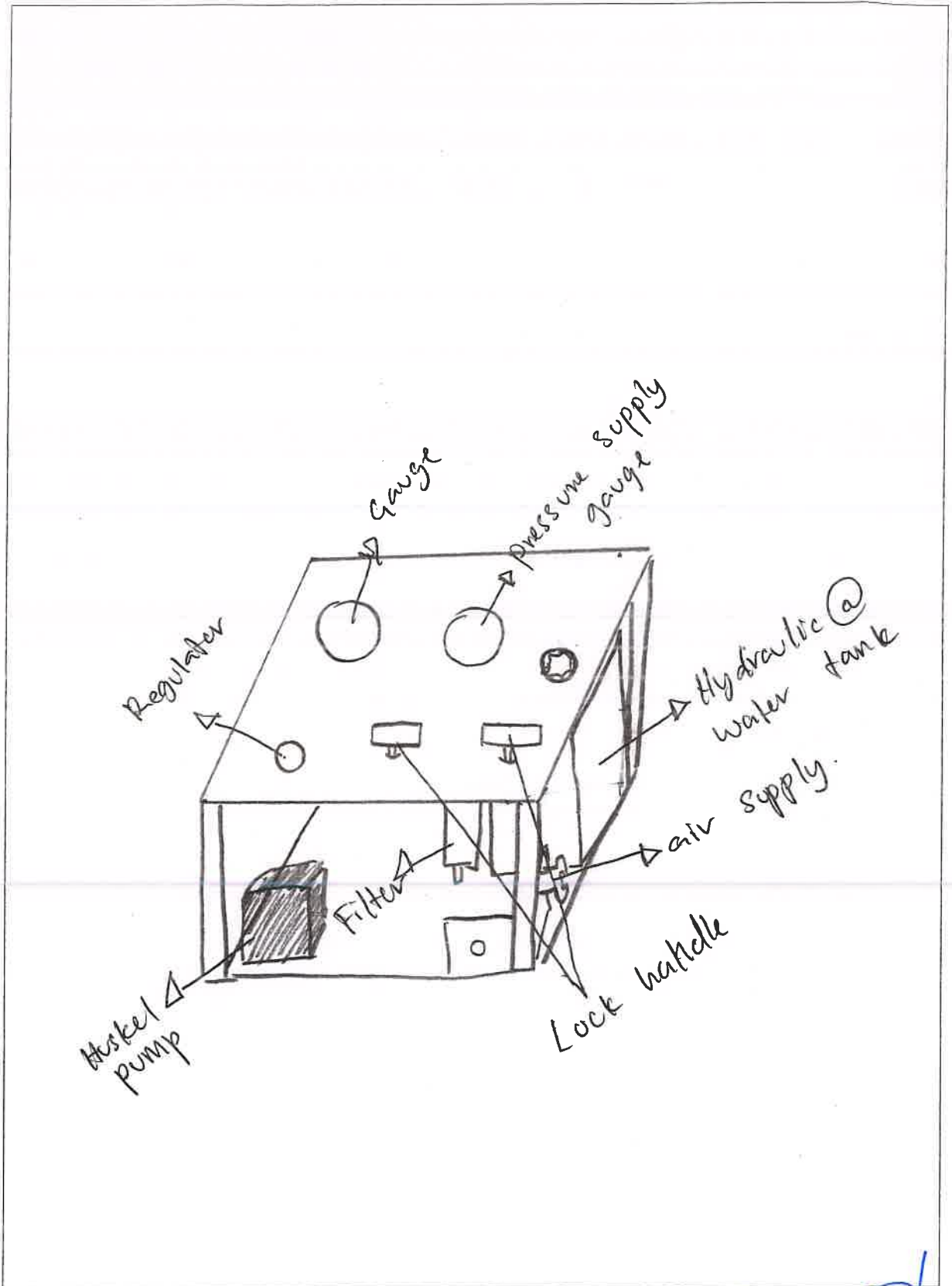
Handwritten text, possibly a paragraph or a list item, located in the lower section.

Handwritten text, possibly a paragraph or a list item, located near the bottom of the page.

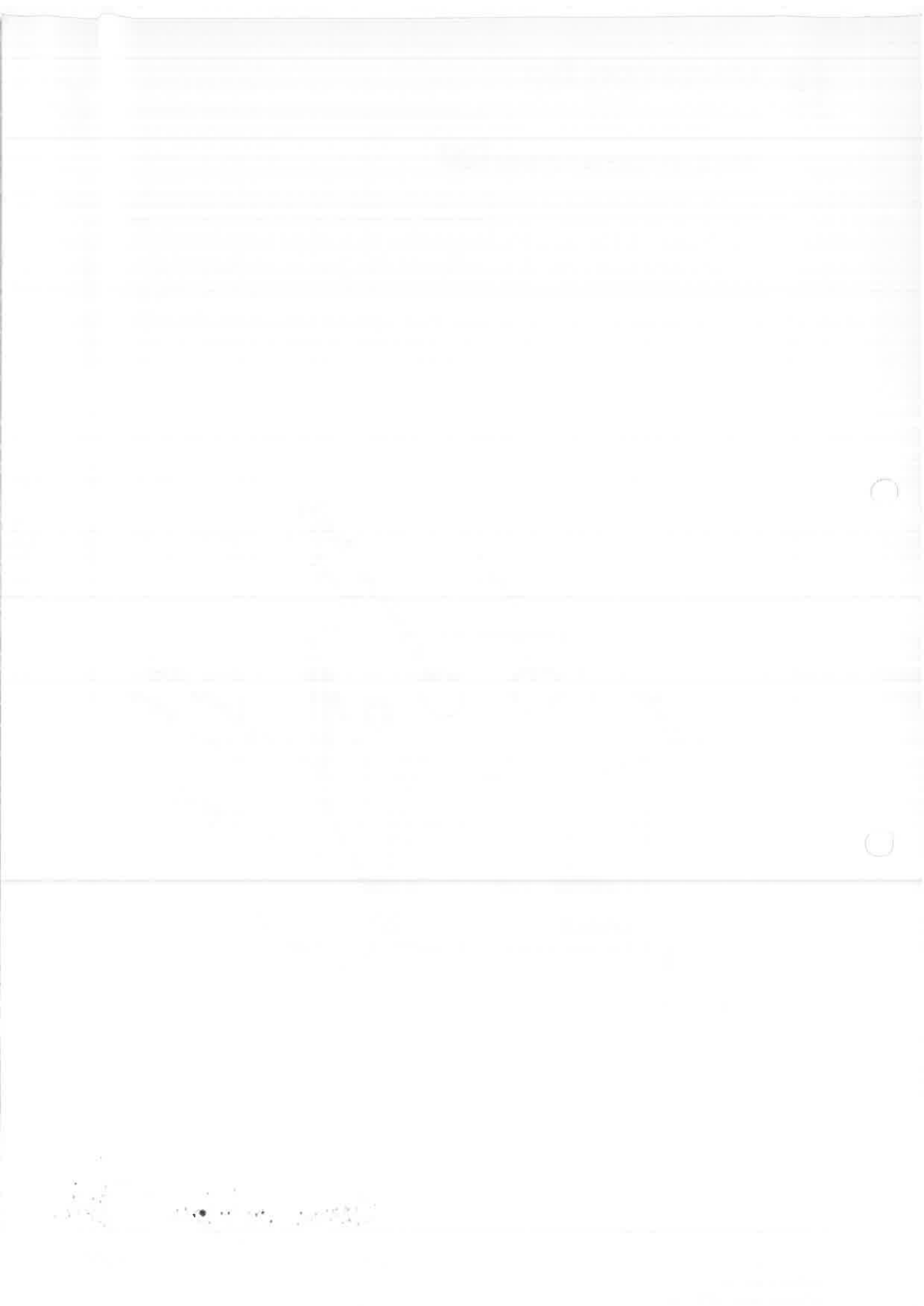
Handwritten text at the bottom left corner, possibly a signature or a date.



Draw & name each part of Huskel ~~Drum~~ <sup>Pump</sup>



James 21/11/24 *[Signature]*





11. Power Pack (Electrical & Diesel)

What is Power Pack

power pack is hydraulic supplies that contain engine to run hydraulic pump.

What is the purpose of Power Pack

To supply hydraulic to RSU for run hydraulic motor.

How to operate Power Pack

Firstly connect hydraulic hose to RSU, then connect air hose to power pack. Make sure before start power pack, check the engine oil, water, diesel and start the power pack.

What is maintenance required for Power Pack

- Change part of power pack such as engine oil, filter oil, ~~water~~ water cooler.
- Clean the flame trap when necessary.

What is safety precaution required for Power Pack

- Ensure before do a run of power pack there is no have anything stay near on rotating equipment.
- Ensure hyd. hose connected. If not connected, release the PRV.
- If ~~hyd.~~ hyd. hose connected to RSU make sure PRV gear in neutral position.

What is potential hazard during handling Power Pack

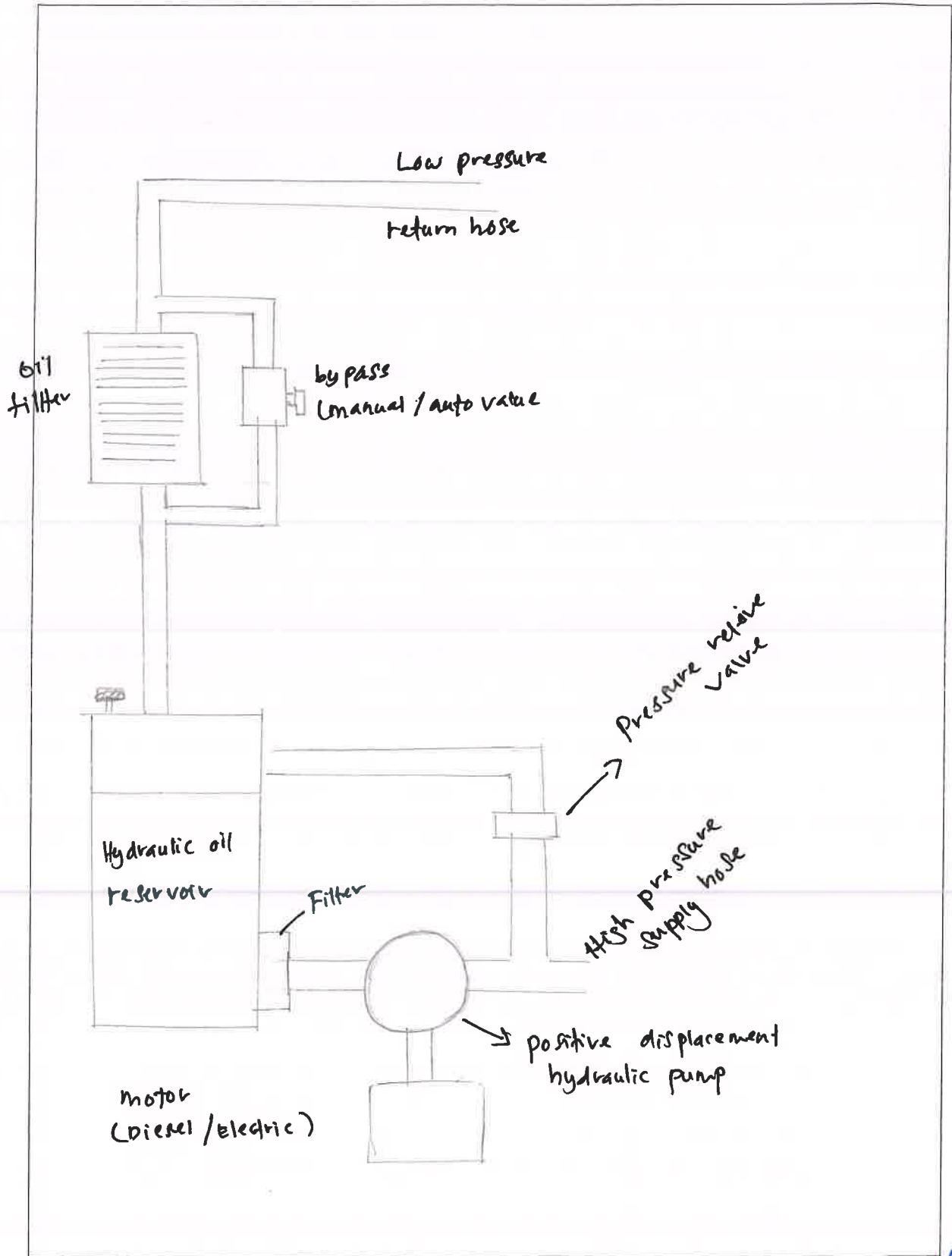
- High pressure on running hydraulic
- Hot radiator
- Hot engine running
- Noise.

James 21/11/24.





Draw & name each part of Power Pack



James 2/11/24





12. Air Compressor

What is Air Compressor

Air Com - is a surface equipment that use to storage air into Air tank (Air receiver tank)

What is the purpose of Air Compressor

- to storage air and use to start surface equipment that use air starter system.
- also use to supply air for control panel, test pump.

How to operate Air Compressor

check engine oil, water; diesel level, use spring starter, turn knob valve; hold handle down intake shut down valve.

What is maintenance required for Air Compressor

- Change engine oil
- change filter oil
- Change or topup water cooler.

What is safety precaution required for Air Compressor

- Wear ear plug
- Ensure engine in good condition.
- Ensure no unwanted thing near rotating part.
- Check for ESP function.

What is potential hazard during handling Air Compressor

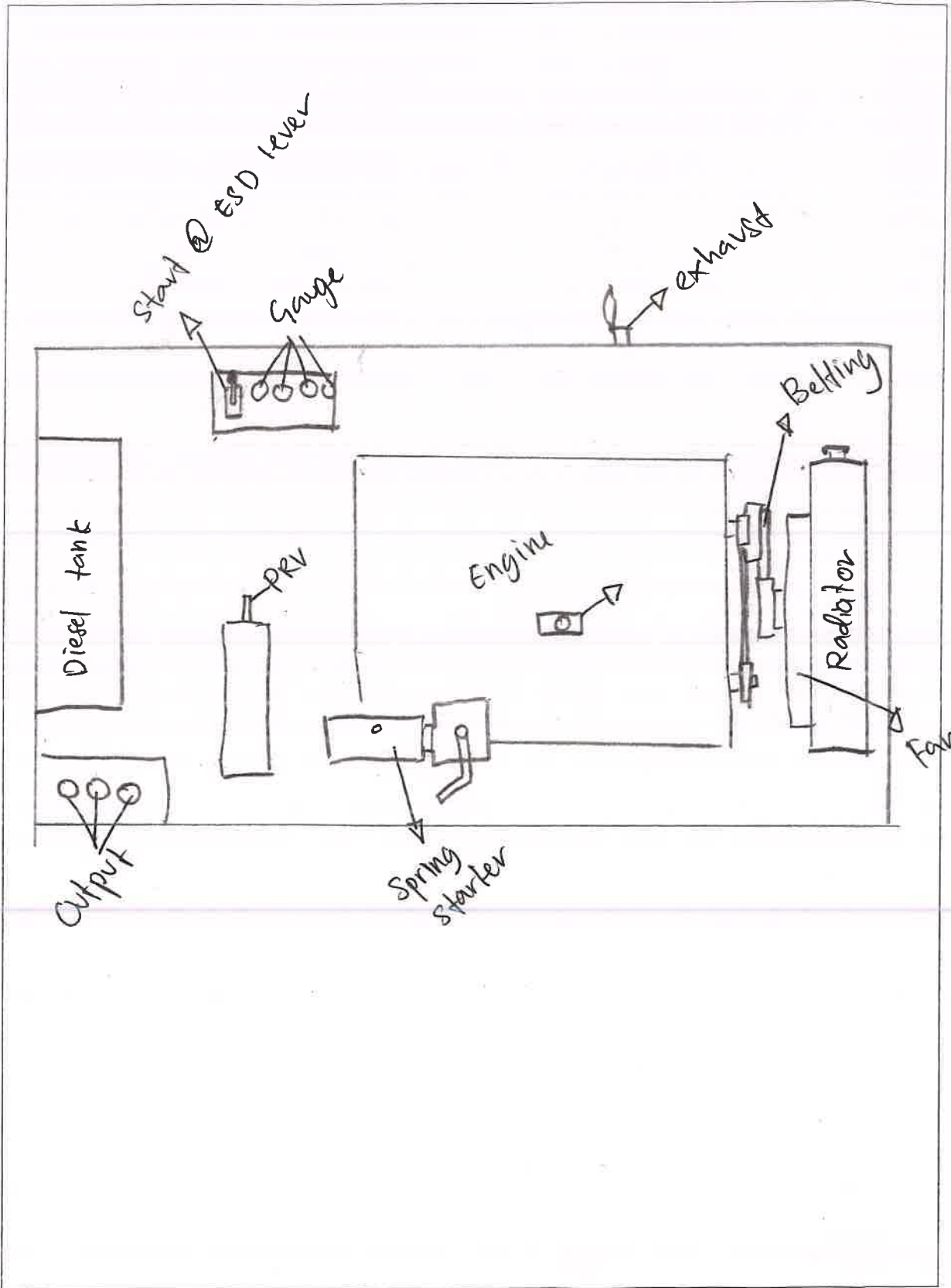
- Noise
- High pressure
- Hot surface
- Rotating part.
- Hose burst.

James 2/11/24

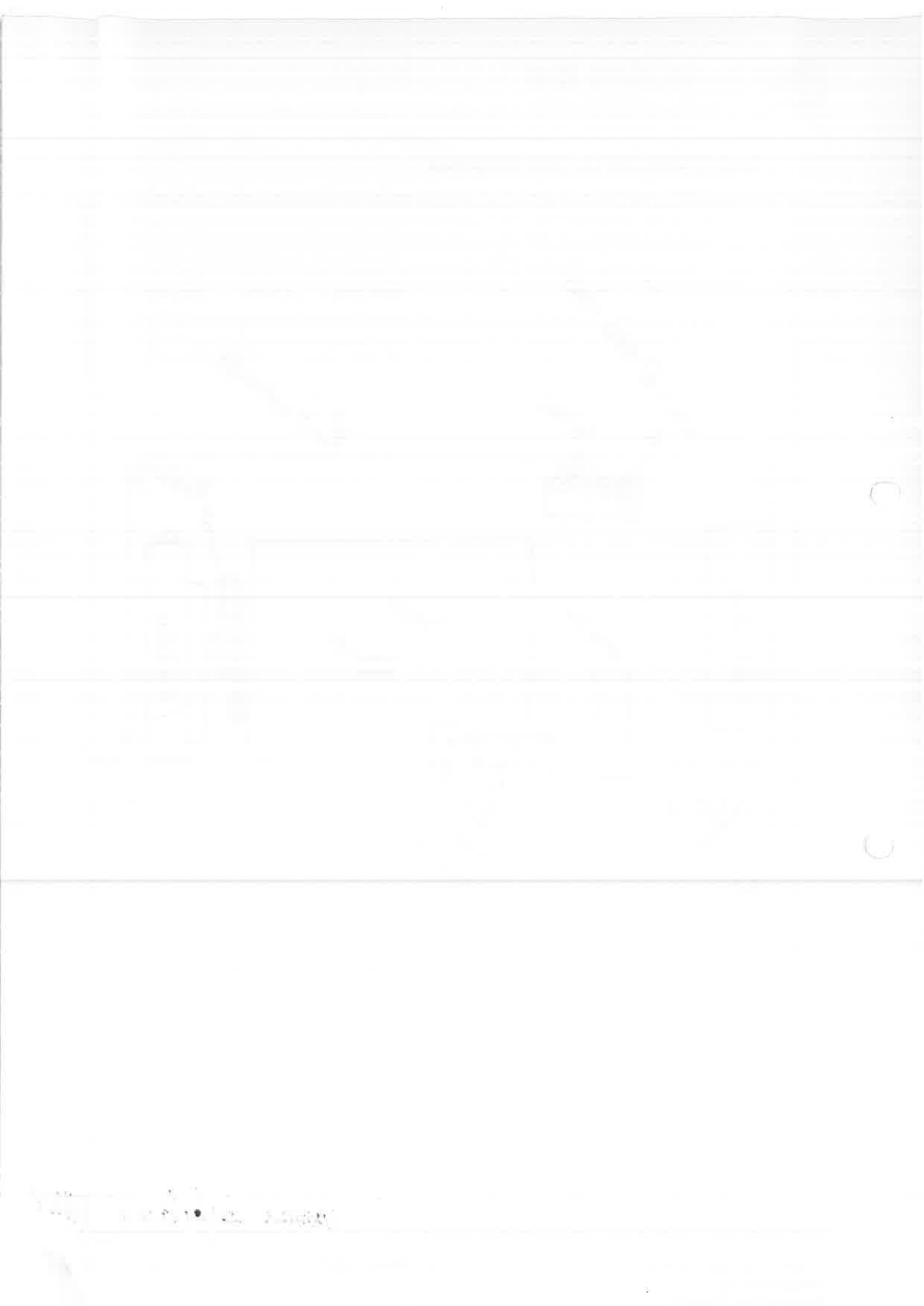




Draw & name each part of Air Compressor



James 21/1/24



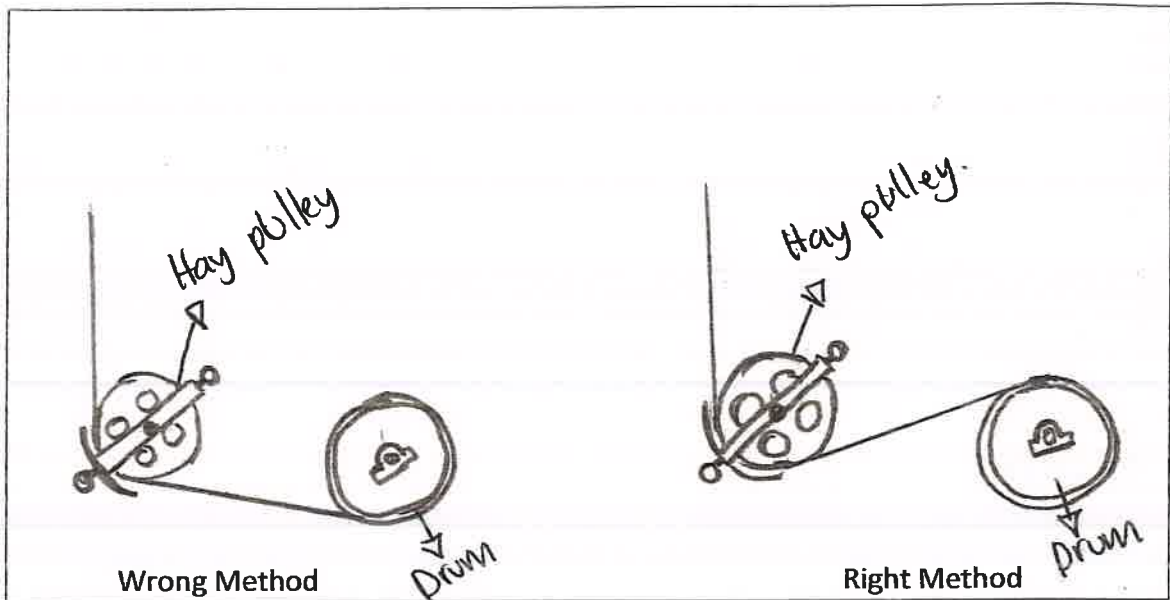


13. Drum

What is the purpose of Drum

to storage wire.

Do the right and wrong wire arrangement from drum to hay pulley



What is maintenance required for Drum

- Greasing bearing.

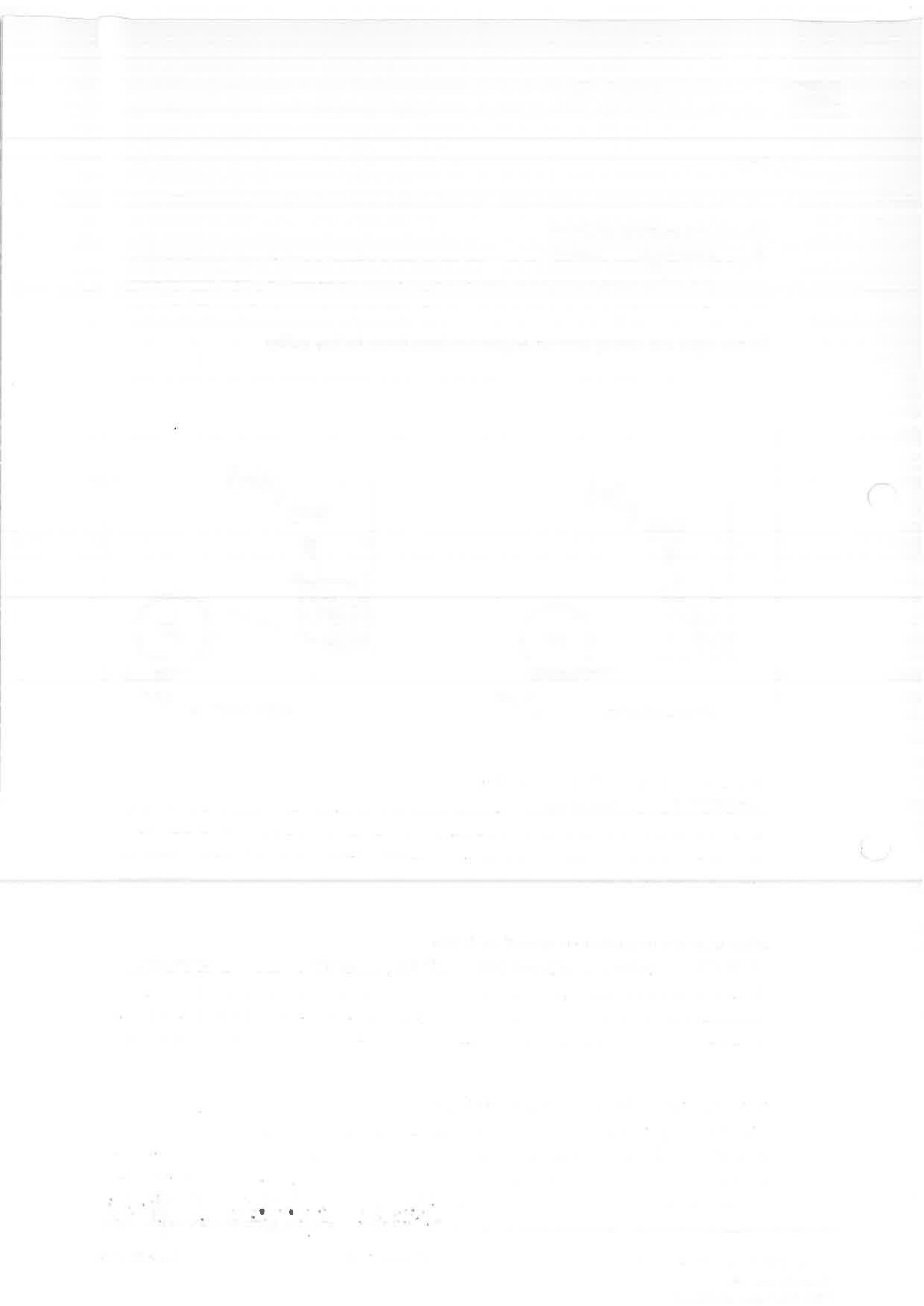
What is safety precaution required for Drum

- Ensure wire direction from drum is correct way.

What is potential hazard during handling Drum

- Pinch point
- sharp edge

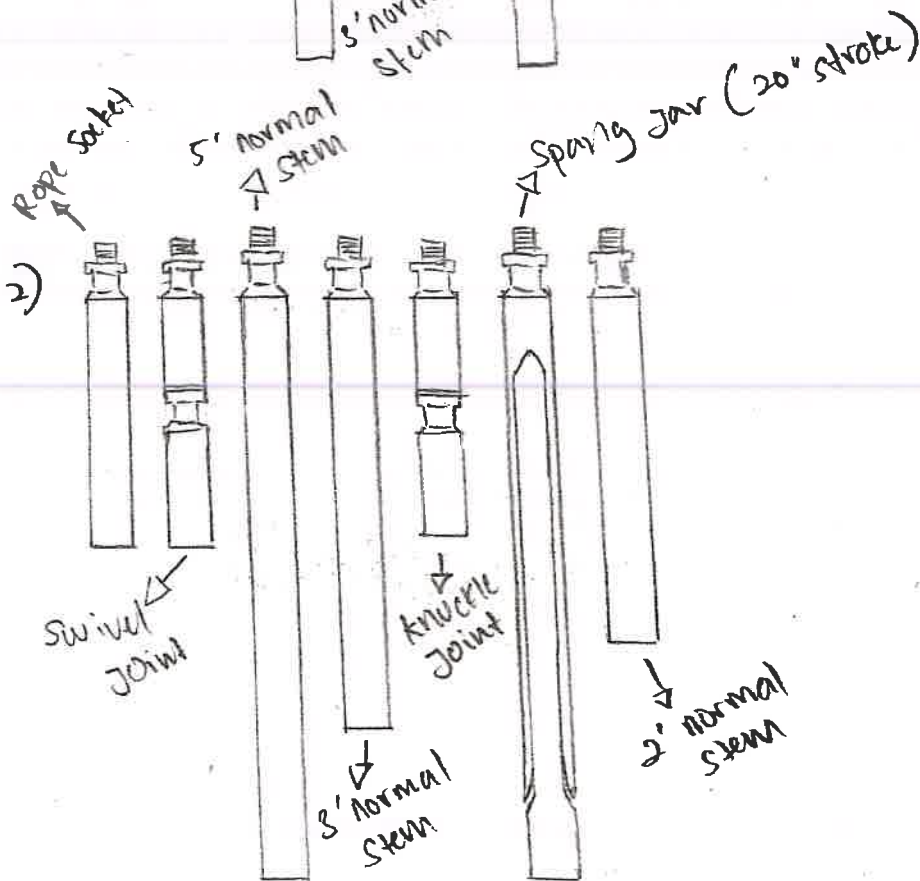
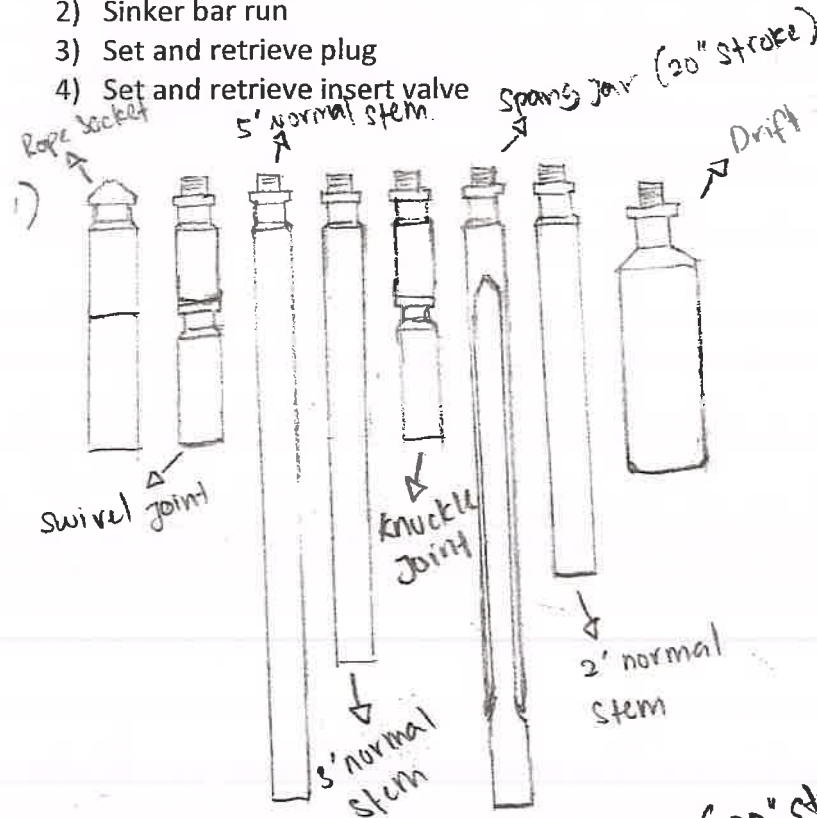
James 21/11/20 James





Please draw/sketch the toolstring configuration for:

- 1) Drift run/tubing clearance check
- 2) Sinker bar run
- 3) Set and retrieve plug
- 4) Set and retrieve insert valve



James 2/11/24 *[Signature]*

