



***TECHANICAL REPORT***

***ON***

***STUDENT INDUSTRIAL WORK EXPERIENCE SCHEMES***

***(SIWES)***

***HELD AT***

***TEE N TEE SOLUTIONS TECHNOLOGY***

***9, Simbiat Abiola way Medical Road Computer Village Ikeja Lagos***

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***SUBMITTED TO:***

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## **DEDICATION**

***To my Dearest Parents, with boundless gratitude and immeasurable love, thought the journey of my SIWES experience, your unwavering support has been my guiding light. Your***

***encouragement, sacrifices, and ceaseless belief in my aspirations have been the driving force behind every stride I've taken.***

***Your steadfast encouragement, imparted wisdom, and endless motivation have been instrumental in navigating the challenges and triumphs of this experience. Your unwavering faith in my abilities has fortified my determination to excel and to pursue excellence in every endeavor.***

***I dedicate this SIWES report to you, my pillars of strength. Your tireless efforts in shaping me into the person I am today have been the cornerstone of my success. Your teachings and values my compass, guiding me through the maze of professional growth and personal have been development.***

***I am profoundly grateful for your unyielding love and support, which have paved the way for my accomplishments. Your belief in me has instilled the confidence to face challenges and chase***

***dreams.***

### ***ACKNOWLEDGEMENT***

**This SIWES work has been a great journey for me and has helped me to understand an area of work that is vast and wonderful. It has been completed with months of hard work and dedication and would not have been possible if not for the blessing and guidance I have received from a number of people. For this I am particularly indebted to all staffs of Mechanical Engineering Department of Kwara Poly who had earlier thought me all the basics involved with automobile engineering.**

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## **CHAPTER ONE**

### **1.0 INTRODUCTION**

Welcome to TEE N TEE SOLUTIONS TECHNOLOGY , where automotive expertise meets dedicated service. Situated in simbiat Abiola way medical road opposite zenith bank GIG plaza computer village Ikeja Lagos.. The workshop stands as a reliable hub for resolving a spectrum of automotive issues. With a team of proficient and experienced mechanics, we take pride in offering comprehensive solutions for vehicle maintenance, repairs, and diagnostics.

At TEE N TEE, our commitment is clear: ensuring vehicles receive meticulous attention and expert care. From routine check-ups to intricate repairs and diagnostics, our skilled mechanics handle a diverse range of car issues. Our workshop is equipped to address not just the basic fixes but also the more complex technical challenges, allowing us to provide a holistic service to our clients.

Our primary goal is to keep vehicles operating smoothly and safely. We understand the importance of reliable transportation and strive to ensure every car that enters our workshop leaves in optimal condition. Quality and precision are at the core of our work ethic, and we take great pride in delivering top-notch service to every vehicle that comes through our doors.

Beyond our technical expertise, what truly sets us apart is our dedication to customer satisfaction. We prioritize clear communication and transparency, ensuring our clients are informed every step of the way. We take the time to explain the necessary repairs or maintenance required, enabling our customers to make informed decisions about their vehicles.

At TEE N TEE SOLUTIONS TECHNOLOGY , our passion for automotive care drives our commitment to excellence. We go above and beyond to deliver reliable service, making sure that each car entrusted to us receives the attention and care it deserves. Our ultimate goal is not just fixing cars; it's ensuring our clients' peace of mind and satisfaction, knowing their vehicles are in capable hands.

### **1.1 Safety Precautions, Rules, and Regulations**

**1 Personal Protection Equipment (PPE):** All employees and visitors are required to wear appropriate PPE, such as safety glasses, gloves, and protective clothing, when working in designated areas.

**2 Tool Handling and Usage:** Proper handling and usage of tools and equipment are mandatory. Employees must be trained in using tools safely and report any damaged or faulty equipment immediately.

**3 Workplace Cleanliness:** Maintaining a clean and organized workspace is essential. Regular cleanups and disposal of waste materials must be adhered to, promoting a safe working environment.

**4. Emergency Procedures:** Know the location of emergency exits, fire extinguishers, and first aid kits. Be aware of the procedures for emergencies.

**5. No Distractions:** Avoid distractions while working, such as using mobile phones. Stay focused on the task at hand to prevent accidents.

**6. Proper Ventilation:** Ensure the workshop is well-ventilated, especially when working with chemicals or materials that produce fumes.

**7. Training and Supervision:** Only operate machinery or tools if you have received proper training. Always work under supervision if you are inexperienced.

**8. Report Hazards:** Immediately report any unsafe conditions or incidents to a supervisor to ensure a safe working environment for everyone.

## **1.2 History and background of SIWES scheme**

The Structured Industrial Work Experience (SIWES) is a Skill training program designed to prepare student of Universities, Polytechnics, Colleges of Technology, Colleges of expose and Agriculture and College of Education for the Industrial Work experience they are likely to meet after graduation. The scheme also afford student the opportunity of familiarizing and exposing themselves to the needed experience in handling equipment and machinery that are usually not available in their institute. Before the establishment of the scheme, there was a growing concern industrialist that graduated of tertiary institution lacked adequate practical background among (studies) preparatory for employment in industries. Thus, the employer were of the opinion that the theoretical education going on in institutions of higher learning was not responsive to their needs. It is against this background that the rotation for initiating and designing the scheme by the Fund during its formative year- 1973/74 was introduced to acquaint student with the skill of handling employers equipment and machinery. The ITF solely funded the scheme during its formative years. But as the financial involvement become unbearable to Fund, it withdrew from the Scheme in 1978. The Federal Government handed over the scheme in 1979 to both

the National Universities Commission (NUC) and the National Board for Technical Education (NBTE). Later, the Federal Government in November 1984 reverted the management and implementation of the SIWESS programme to ITF and effectively taken over by industrial Training Fund in July 1985 with the funding being solely borne by the Federal Government.

SIWES is a tripartite programme involving the student, the Polytechnic and the industries (employer of labour). The programme is funded by the Federal Government of Nigeria and jointly coordinated by Industrial Training Fund (ITF) and National Board for Technical Education (NBTE).

### **1.3 Objectives of the Structured Industrial Work Experience (SIWES)**

The Industrial Training Fund's policy Document No. 1 of 1973 which established SIWESS outlined the objectives of the scheme. The objectives are to:

- a. Provides an avenue for students in institutions of higher learning to acquire industrial skill and experience during their course of study.?
- b. It exposes Students to work methods and techniques in handling equipment machinery that may not be available in their institutions.
- c. It makes the transition from school to the world of work easier and enhance students' contact for later job placements and a chance to evaluate companies for which they might wish to work.
- d. It provides students with the opportunities to apply their educational knowledge in real work and industrial situations, thereby bridging the gap between theory and practice.
- e. The programme teaches the students on how to interact effectively with other workers and supervisors under various conditions in the organization

### **1.4 Aim of the Structured Industrial Work Experience (SIWES)**

The primary goal of Structured Industrial Work Experience (SIWES) is to bridge the gap between theoretical knowledge gained in classrooms and real-world application within professional settings. This program aims to provide hands-on experience, allowing participants to develop industry-specific skills, understand workplace dynamics, and establish connections with industry professionals. Ultimately, SIWES prepares individuals for their future careers by offering practical insights and a deeper understanding of the

demands and practices within their chosen field.

## **CHAPTER TWO**

### **2.1 Historical Context of TEE N TEE SOLUTIONS TECHNOLOGY**

Amidst the industrial revolution's roar, the inception of TEE N TEE SOLUTIONS in Year 2019 marked a pivotal moment in the automotive landscape. Nestled within 9, Simbiat Abiola way Medical Road GIG Plaza Opposite Zenith Bank Computer Village Ikeja Lagos. This workshop emerged during an era of burgeoning automobile innovation and societal transformation.

At its genesis, TEE N TEE SOLUTIONS mirrored the nascent automotive industry's spirit, catering to a burgeoning demand for vehicular maintenance and repair. As horse-drawn carriages faded into memory, the workshop embraced the burgeoning era of automobiles, offering services that evolved alongside technological advancements.

Through wars, economic upheavals, and technological leaps. TEE N TEE SOLUTIONS TECHNOLOGY weathered the tides of time. It witnessed the transition from rudimentary mechanical systems to the advent of complex engines and digital diagnostics.

Throughout its journey, TEE N TEE SOLUTIONS remained a cornerstone of reliability, its seasoned craftsmen and technicians adapting their expertise to meet the ever-evolving needs of modern vehicles. The workshop not only serviced cars but also became a repository of automotive history, preserving the legacy of bygone vehicles while embracing the cutting-edge technologies of today.

TEE N TEE's story intertwines with the tapestry of automotive evolution-a saga of wrenches, grease, and relentless dedication. Its journey from the humble beginnings of a mechanic workshop to a bastion of automotive expertise symbolizes the enduring spirit of innovation and adaptability in the realm of automobile servicing.

### **2.2 Objectives of TEE N TEE SOLUTIONS TECHNOLOGY**

**Exception service Quality:** TEE N TEE SOLUTIONS TECHNOLOGY aims to deliver top-notch automotive services, ensuring that every customer receives reliable and high-quality repairs and maintenance

**Customer satisfaction:** The workshop prioritizes customer happiness by providing a welcoming environment, transparent communication, and personalized attention to meet individual needs **Technical Expertise:** TEE N TEE SOLUTIONS TECHNOLOGY strives

to maintain a team of skilled technicians and mechanics who stay updated with the latest automotive technologies and repair techniques.

**Timely and Efficient service:** The objective is to minimize vehicle downtime by efficiently diagnosing issues and executing repairs or maintenance promptly. From routine maintenance to complex repairs,?

**Comprehensive Automotive solutions:** TEE N TEE SOLUTIONS TECHNOLOGY aims to offer a wide range of services, catering to diverse vehicle models and addressing various automotive needs.

**Ethical Practices:** Upholding honesty and integrity, the workshop commits to fair pricing, transparent assessments, and recommendations that prioritize customers' best interests.

**Continuous improvement:** TEE N TEE SOLUTION TECHNOLOGY seeks ongoing refinement by embracing technological advancements, implementing feedback mechanisms, and adapting to industry changes to enhance service quality continually.

**Community Engagement:** Beyond servicing vehicles, the workshop aims to foster relationships within the community, participating in local initiatives and contributing positively to the neighborhood.

**Environmentally Conscious Practices:** TEE N TEE SOLUTIONS TECHNOLOGY is committed to adopting eco-friendly practices, where possible, by responsibly disposing of waste materials and promoting sustainable solutions in the automotive industry.

## **2.3 Departments within TEE N TEE SOLUTIONS TECHNOLOGY**

These are the departments in RESPECT Automobile Garage:

- 1. Mechanical Department**
- 2. Electrical Department**
- 3. Aesthetic Department (Panel-beating/ body work and painting)**

## **2.4 Organizational Chart of the Company**

- **CEO**
- **WORKSHOP**
- **MANAGER**
- **FOREMAN (MECHANICAL)**
- **FOREMAN (ELECTRICAL)**



- **FOREMAN (AESTHETIC)**

### **3.4 Equipment Utilization at Al-hameeq Automobile Service**

#### **SAFETY EQUIPMENTS:**

**Engineering overall**

**Industrial steel toe safety boot (fig 3.5)**

**Cotton and rubber hand glove (fig 3.6)**

**Safety goggle (fig 3.7)**

**Face masks and nose masks**

**Fire extinguisher (fig 3.8)**

#### **POWER TOOLS**

**Drills**

**Grinder (fig 3.9)**

**Circular saw ?**

**Planers**

#### **HAND TOOL**

**Wrencher (adjustable,socket, torque) (fig 3.10)**

**Screwdrivers (Philips, flathead)**

**Hammers (claws, ball-peen)**

**Piler (needle-nose, locking)**

**Spanners (fig3.11)**

#### **MEASURING TOOL**

**Caliper (vernier, digital) (fig 3.12)**

**Rulers (steel, flexible, tape ruler) Micrometers (fig 3.13)?**

**Protractors**

**Dial indicator**

## **CUTTING TOOL**

**Lathes (fig 3.14)**

**Milling machines (fig 3.15)**

**Band saw**

**Plasma cutter (fig 3.16)**

**CNC machines**

## **CLEANING TOOLS**

**Vacuums (wet/dry)**

**Pressure washers**

**Solvents (degreaser, cleaners)**

**Brushes**

**Air compressor (for blowing dust)**

## **LIFTING AND HANDLING EQUIPMENT**

**Cranes (overhead, gantry) (fig 3.17)**

**Hoists**

**Jacks (hydraulic, bottle, scissor) (fig 3.18)**

**Forklifts (fig 3.19)**

**Trolleys/cart (fig 3.20)**

## ***Chapter 4***

### **4.1 Changing of nozzles**

- 1. Gather Tools and Materials:** Collect the necessary tools such as a wrench set, screwdriver, and cleaning supplies. You may also need a new nozzle if replacement is required.
- 2. Safety First:** Ensure the vehicle is parked on a level surface, the engine is turned off, and the keys are removed. Allow the engine to cool down before starting.
- 3. Locate the Nozzle:** Depending on the vehicle, locate the fuel nozzle or injector. This is usually found near the engine intake manifold.
- 4. Remove the Nozzle:** Carefully disconnect the fuel line from the nozzle. Use a wrench to remove any bolts or screws holding the nozzle in place. Be cautious of any residual fuel.
- 5. Clean the Nozzle:** If you are cleaning the nozzle, use a cleaning solution designed for fuel injectors. Soak the nozzle in the solution and use a soft brush to clean any deposits.
- 6. Inspect for Damage:** Check the nozzle for any signs of damage or wear. If it's damaged, replace it with a new one.
- 7. Reinstall the Nozzle:** Position the cleaned or new nozzle back in place. Secure it with the bolts or screws you removed earlier. Reconnect the fuel line, ensuring it is tight.

**8. Test the System:** Turn the ignition on (without starting the engine) to pressurize the fuel system. Check for any leaks around the nozzle.

**9. Start the Engine:** Start the engine and let it run for a few minutes. Monitor for any irregularities in performance or leaks.

**10. Dispose of Waste Properly:** Dispose of any cleaning solution or old parts according to local regulations.

(Shown in fig 4.2)

### **4.3 Scanning and erasing of error code**

**1. Gather Equipment:** You will need an OBD-II scanner or diagnostic tool compatible with your vehicle.

**2. Locate the OBD-II Port:** Find the OBD-II port in your vehicle, usually located under the dashboard near the driver's seat.

**3. Connect the Scanner:** Plug the OBD-II scanner into the port. Make sure the vehicle is in the "On " or "Run " position, but the engine doesn't need to be running.

**4. Turn on the Scanner:** Power on the scanner and follow the prompts to select your vehicle make and model if necessary.

**5. Scan for Codes:** Choose the option to read trouble codes (DTCs). The scanner will communicate with the vehicle's computer and retrieve any stored error codes.

**6. Review the Codes:** Take note of the error codes displayed. Research these codes to understand the issues they represent.

**7. Clear the Codes:** After addressing any underlying issues (if applicable), select the option to erase or clear the codes from the scanner. This will reset the vehicle's computer.

**8. Recheck for Codes:** After clearing, it's good practice to scan again to ensure no new codes appear. If they do, further investigation may be needed.

**9. Test Drive:** Take the vehicle for a short drive to see if the check engine light reappears or if any issues persist.

**10. Monitor Performance:** Keep an eye on the vehicle's performance for any signs of the previous issues.

(Shown in fig 4.4)

## **4.5 Changing and replacement of front of hubs**

**1. Gather Tools and Materials:** You will need a jack, jack stands, lug wrench, socket set, torque wrench, hammer, and possibly a hub puller. Make sure you have the new hub assembly ready.

**2. Safety First:** Park the vehicle on a flat surface, engage the parking brake, and wear safety glasses.

**3. Loosen Lug Nuts:** Use the lug wrench to loosen the lug nuts on the front wheel slightly while the vehicle is still on the ground. Do not remove them completely yet.

**4. Lift the Vehicle:** Use the jack to lift the front of the vehicle and then place jack stands under the vehicle for safety.

**5. Remove the Wheel:** Finish removing the loosened lug nuts and take off the front wheel.

**6. Remove the Brake Caliper:** Locate the brake caliper and remove the bolts holding it in place. Carefully hang the caliper using a wire or bungee cord to avoid putting stress on the brake line.

**7. Remove the Brake Rotor:** If necessary, remove the brake rotor by unscrewing any retaining screws or gently tapping it off with a hammer.

**8. Remove the Hub Assembly:** Depending on your vehicle, you may need to remove the axle nut first. Then, remove the bolts that secure the hub assembly to the steering knuckle. If it's stuck, you might need to use a hub puller or gently tap it with a hammer.

**9. Install the New Hub:** Position the new hub assembly into place and secure it with the bolts. Make sure to torque them to the manufacturer's specifications.

**10. Reinstall the Brake Rotor:** Place the brake rotor back onto the hub and secure it if applicable.

**11. Reattach the Brake Caliper:** Position the brake caliper back onto the rotor and tighten the bolts securely.

**12. Reinstall the Wheel:** Place the wheel back on and hand-tighten the lug nuts.

**13. Lower the Vehicle:** Remove the jack stands and lower the vehicle back to the ground.

**14. Tighten Lug Nuts:** With the vehicle back on the ground, use the torque wrench to tighten the lug nuts to the proper specifications.

**15. Test Drive:** After completing the installation, take the vehicle for a test drive to ensure everything is functioning properly.

(Shown in fig 4.6)

## ***Chapter 5***

### **5.1 Servicing and replacement of engine oil**

**1. Gather Tools and Materials:** Before you start, collect all necessary tools (like wrenches, screwdrivers, oil filter wrench) and materials (engine oil, oil filter, air filter, spark plugs, coolant).

**2. Prepare the Vehicle:** Park the vehicle on a level surface and turn off the engine. Allow it to cool down. Engage the parking brake for safety.

**3. Change the Engine Oil:**

- Locate the oil drain plug under the vehicle and place a drain pan underneath.
- Remove the drain plug and let the old oil drain completely.
- Replace the drain plug and tighten it securely.
- Remove the old oil filter using the oil filter wrench and install a new one.
- Pour new engine oil into the engine through the oil filler cap, using the recommended type and amount specified in the owner's manual.

**4. Run the Engine:** Start the engine and let it run for a few minutes. Check for any leaks and ensure everything is functioning properly.

**5. Dispose of Old Oil and Parts:** Properly dispose of the old oil and oil filter according to local regulations.

(Shown in fig 5.2, 5.3)

## **5.4 Changing of front and back of brake pads**

**1. Safety First:** Park the vehicle on a flat surface, engage the parking brake, and wear safety glasses and gloves.

**2. Loosen Lug Nuts:** Use the lug wrench to loosen the lug nuts on the front wheel slightly while the vehicle is still on the ground.

**3. Lift the Vehicle:** Use the jack to lift the front of the vehicle and then place jack stands under the vehicle for safety.

**4. Remove the Wheel:** Finish removing the loosened lug nuts and take off the front wheel.

**5. Remove the Brake Caliper:** Locate the brake caliper and remove the bolts holding it in place. Carefully slide the caliper off the brake rotor. You can use a wire or bungee cord to hang it and avoid putting stress on the brake line.

**6. Remove Old Brake Pads:** Slide the old brake pads out of the caliper bracket. Take note of their orientation for installation of the new pads.

**7. Compress the Caliper Piston:** Use a brake pad spreader or C-clamp to compress the caliper piston back into the caliper housing. This will make room for the new, thicker brake pads.



**8. Install New Brake Pads:** Place the new brake pads into the caliper bracket in the same orientation as the old ones.

**9. Reattach the Brake Caliper:** Slide the caliper back over the new pads and secure it with the bolts. Tighten them to the manufacturer's specifications.

**10. Reinstall the Wheel:** Place the wheel back on and hand-tighten the lug nuts.

**11. Lower the Vehicle:** Remove the jack stands and lower the vehicle back to the ground.

**12. Tighten Lug Nuts:** With the vehicle back on the ground, use the torque wrench to tighten the lug nuts to the proper specifications.

( Shown in fig 5.6)

## **5.7 Changing Back Brake Pads:**

**1. Repeat Steps 1-4:** Follow the same initial steps to loosen the lug nuts, lift the vehicle, and remove the rear wheel.

**2. Remove the Brake Caliper:** Just like the front, remove the bolts holding the rear brake caliper in place and hang it safely.

**3. Remove Old Brake Pads:** Slide the old rear brake pads out of the caliper bracket.

**4. Compress the Caliper Piston:** Use a brake pad spreader or C-clamp to compress the caliper piston. Note that some rear calipers may require a special tool to turn and compress the piston.

**5. Install New Brake Pads:** Insert the new brake pads into the caliper bracket.

**6. Reattach the Brake Caliper:** Slide the caliper back over the new pads and secure it with the bolts. Tighten them properly.

**7. Reinstall the Wheel:** Place the wheel back on and hand-tighten the lug nuts.

**8. Lower the Vehicle:** Remove the jack stands and lower the vehicle back to the ground.

**9. Tighten Lug Nuts:** Use the torque wrench to tighten the lug nuts to the correct specifications.

- **Pump the Brake Pedal:** Before driving, pump the brake pedal a few times to ensure the brake pads seat properly against the rotors.

- **Test Drive:** Take the vehicle for a short test drive to ensure everything is functioning correctly.

**(Shown in fig 5.8)**

## ***Chapter 6***

### **6.1 changing of shock absorber**

Changing the absorber (also known as a shock absorber) of a vehicle involves several steps. Here's a detailed guide to help you through the process:

#### **1. Preparation:**

- Gather the necessary tools: a jack, jack stands, wrenches, a socket set, and possibly a spring compressor if you're working with strut assemblies.

#### **2. Safety First:**

- Ensure the vehicle is parked on a flat surface and turn off the engine. Engage the parking brake and wear safety gear.

#### **3. Lift the Vehicle:**

- Use the jack to lift the vehicle and then place jack stands under the vehicle to secure it. Never rely solely on the jack for support.

#### **4. Remove the Wheel:**

- Use a wrench to loosen the lug nuts on the wheel that corresponds to the absorber you are replacing. Once loosened, remove the lug nuts completely and take off the wheel.

#### **5. Locate the Absorber:**

- Identify the absorber you need to replace. It is usually mounted between the vehicle's frame and the suspension.

#### **6. Disconnect the Absorber:**

- Remove any bolts or nuts securing the absorber to the vehicle. This typically involves removing nuts from the top and bottom mounting points. You may need to use a socket set for this.

#### **7. Remove the Old Absorber:**

- Carefully pull the old absorber out from its mounting points. If it's stuck, you may need to wiggle it gently or use a rubber mallet to help free it.

#### **8. Install the New Absorber:**

- Position the new absorber in place and align it with the mounting points. Insert and hand-tighten the bolts or nuts to secure it.

#### **9. Tighten the Bolts:**

- Use a wrench or socket to tighten the bolts to the manufacturer's specifications. Make sure they are secure but avoid overtightening.

#### **10. Reattach the Wheel:**

- Place the wheel back onto the hub, hand-tighten the lug nuts, and then lower the vehicle slightly so that the wheel is just touching the ground. Tighten the lug nuts in a crisscross pattern to ensure even pressure.

#### **11. Lower the Vehicle:**

- Fully lower the vehicle to the ground and remove the jack stands. Once on the ground, completely tighten the lug nuts.

#### **12. Final Checks:**

- Double-check all connections and ensure everything is secure.

### **13. Test Drive:**

- Take the vehicle for a short test drive to ensure the new absorber is functioning correctly. Listen for any unusual noises and check the ride quality.

(Shown in fig 6.2)

## **6.3 Changing of complete shaft**

### **1. Preparation:**

- Gather all necessary tools and materials. Common tools include wrenches, screwdrivers, a jack, and possibly a hoist, depending on the size of the shaft.

### **2. Safety First:**

- Ensure that the machine or vehicle is turned off and properly secured. Disconnect the battery if applicable, and wear safety gear like gloves and goggles.

### **3. Remove the Old Shaft:**

- Access the Shaft: Depending on the equipment, you may need to remove covers or other components to access the shaft.

- Disconnect Attachments: Remove any components attached to the shaft, such as gears, pulleys, or couplings. Make sure to note the order and orientation of these parts for reassembly.

- Unbolt the Shaft: If the shaft is bolted in place, use the appropriate tools to remove the bolts. Keep them in a safe place for reuse.

- Extract the Shaft: Carefully pull the shaft out of its housing. If it is stuck, gently tap it with a hammer or use a puller to assist in removal.

### **4. Inspect the Components:**

- Check the bearings, seals, and any other components for wear. Replace any damaged parts to ensure the longevity of the new shaft.

## **5. Install the New Shaft:**

- Position the New Shaft:** Align the new shaft with the housing and carefully slide it into place.
- Secure the Shaft:** Reattach any bolts or fasteners that hold the shaft in position. Make sure they are tightened to the manufacturer's specifications.
- Reconnect Attachments:** Reattach any components that were removed earlier, ensuring they are correctly oriented and secured.

## **6. Final Checks:**

- Double-check all connections and ensure everything is tight.** Make sure there are no loose parts that could cause issues during operation.

## **7. Testing:**

- Reconnect the battery and power on the machine or vehicle.** Observe its operation to ensure everything is functioning correctly. Listen for any unusual noises that might indicate a problem.

## **8. Cleanup:**

- Clean up the work area, dispose of any old parts responsibly, and store tools properly.**

(shown in fig 6.4)

## ***Chapter 7***

### **7.1 CONCLUSION**

The issue of SIWES in the various institutions should be compulsory to all under graduate student to have practical experience of what has been taught. It also enables be friendlier with an organization of the course of study.

My impression about the organization is that the company I fell happy with. Because of the way the director of the company treated me, just as if I should work there after my diploma course.

My industrial attachment as a junior technician was a huge success and a great time of acquisition of knowledge and skills. Through my training I was able to appreciate my chosen course of study even more, because I had the opportunity to blend the theoretical knowledge acquired from school with the practical handsome application of knowledge gained here to perform very important tasks that contributed in a way to my productivity in the company My training here has given me a broader view to the importance and relevance of Mechanical Technician in the immediate society and the world as a whole, as I now look forward to impacting it positively after graduation. I have also been able to improve my communication and presentation skills and thereby developed good relationship with my fellow colleagues at work. ! have also been able to appreciate the connection between my course of study and other disciplines in producing a successful result.

### **7.2 SUGGESTION**

**TO THE ORGANISATION AND THE POTECHNIC  
CONCERNING THE SIWES PROGRAMME.**

The deal of giving opportunity to do SIWES programme is a good idea because it aid the

student to know practical aspect of the field of study.

Any organization likes is where he/she goes for the programme that he/she may be kindly employed, if it is relevant to the course of his/her study.

### **7.3 RECOMMENDATION**

I use this means to make the following recommendations concerning the training of students in Industrial Attachments. I would like to recommend that allowances should be paid to students during their programme just like NYSC and not after. This would help them a great deal t handle some financial problems during their training course.

### **7.4 CHALLENGES ENCOUNTERED DURING PERIOD OF TRAINING**

I wasn't allowed to drive cars after repair. So I could not do active test using Diagnostic And I was not allow to go out to repair car. I was restricted to the machines on my own in the workshop.



## 7.5 Appendices



Fig 3.5



**Fig 3.6**



**Fig 3.7**



Fig 3.8





**Fig 3.9**



**Fig 3.10**



**Fig 3.11**



**Fig 3.12**



**Fig 3.13**



**Fig 3.14**



**Fig 3.15**



Fig 3.16





**Fig 3.17**



**Fig 3.18**



**Fig 3.19**



?

**Fig 3.20**



**Fig 4.2**



**Fig 4.4**





**Fig 4.6**



**Fig 5.2**



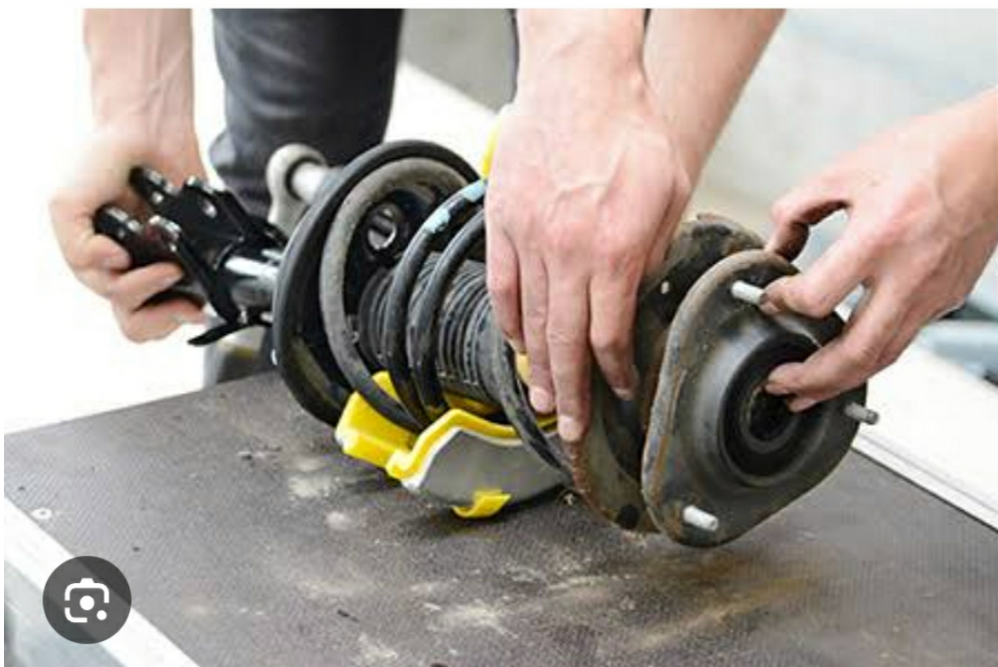
**Fig 5.3**



**Fig 5.6**



**Fig 5.8**



**Fig 6.2**





**Fig 6.4**