



SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, Affiliated to Anna University, Accredited by NAAC)

Dindigul – Palani Highway, Dindigul-624 002.

Department of Mechanical Engineering

Organizes

HANDS ON TRAINING PROGRAMME ON DISMANTLING AND ASSEMBLE OF ELECTRIC BIKE PARTS

on

01st February 2020, Saturday, 2.30 PM

@

Auditorium (Hostel Mess)

Industry Resource Persons

Mr.M.Sathasivam B.E.

Lead – Sales and Service,
Tirupathi E Power Motors

Mr.B.Venkatsurya M.Sc

Manager
Tirupathi E Power Motors

Presided Over by

Dr.Senthil Kumaran Durairaj

Principal

Dr.M.Muthukannan ASP/Mech.

Prof.S.Srinivasan, AP/Mech.

Programme Coordinator (s)

Dr.G.Sankaranarayanan

HoD/Mech



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Dismantling and Assemble of Electric Bike Parts-Attendance

S.No	Reg.No	Name of the Student	Signature of the Students
1	922117114001	ADITHYAN B	B. Adithyan
2	922117114002	AFZALIBRAHIM M	Afzal Ibrahim.
3	922117114003	AKTHARALI S	S. Aktharali
4	922117114004	ANAND ALBERT RAJA A	A. Anand Albert Raja
5	922117114005	ANISH ROBERT J	J. Anish Robert
6	922117114006	ARULSELVAN K	K. Arulselvan
7	922117114007	ARUN KUMAR E	E. Arun Kumar
8	922117114008	ARUN KUMAR M	M. Arun Kumar
9	922117114009	ARUN KUMAR B	B. Arun Kumar
10	922117114010	ARUNKUMAR M	M. Arunkumar
11	922117114011	ARUNKUMAR M	M. Arunkumar
12	922117114013	BALASUBRAMANIAN G	G. Balasubramanian
13	922117114014	BHARATHI DASAN A	A. Bharathi Dasan
14	922117114016	DANNI CLEMENT S	S. Danni Clement
15	922117114017	DEEPAK R	R. Deepak
16	922117114018	DEEPAK RAJ D	D. Deepak Raj
17	922117114019	DEEPAKRAJ T	T. Deepakraj
18	922117114021	DEVARAJAN A	A. Devarajan
19	922117114022	DHAYALAPRABAKAR S	S. Dhayalaprabakar
20	922117114023	DINESH S	S. Dinesh
21	922117114024	DINESHKUMAR M	M. Dineshkumar
22	922117114025	DIVYA DHARSHINI K	K. Divya Dharshini
23	922117114026	ESAKKI DURAI PANDI M	M. Esakki Durai Pandi
24	922117114027	ETHIRAJ YOGESH P	P. Ethiraj Yogesh
25	922117114028	GAJENDREN R	R. Gajendren
26	922117114029	GOUTHAM SANKAR K	K. Goutham Sankar
27	922117114030	GRACE A	A. Grace
28	922117114031	GUNAKARAN C	C. Gunakaran
29	922117114032	GUNA SEKAR S	S. Guna Sekar
30	922117114033	HARI HARAN N (01-10-99)	N. Hari Haran
31	922117114034	HARI HARAN S K (04-10-1999)	K. Hari Haran S
32	922117114035	HARIHARAN N (26-11-1999)	N. Hariharan
33	922117114036	HARI HARA SUDHAN G (11-04-2000)	G. Harihara Sudhan
34	922117114037	HARI KRISHNAN S (27-09-1999)	S. Hari Krishnan
35	922117114041	JAYAPRATHAP N	N. Jayaprathap

36	922117114045	KAMAL K	Kamal
37	922117114046	KAPIL DEEPAK J	J. Kapil Deepak
38	922117114047	KARTHIC S	S. Karthi
39	922117114048	KARTHICK RAJA S	Rathheeraj
40	922117114049	KASI VISWANATHAN K	Karasi Viswanathan
41	922117114050	KAVINKAILASH P C	P.C. Kavinkailash
42	922117114051	KAVIN RAJ K	Kavin Raj K
43	922117114053	MANICKAVEL V	V. Manickavel
44	922117114054	MANIKANDAN P	P. Manikandan
45	922117114055	MANIKANDARAJA M	M. Manikandaraja
46	922117114057	MANOJKUMAR V	V. Manoj Kumar
47	922117114058	MATHANRAJ G	G. Mathanraj
48	922117114059	MATHESHKUMAR B	B. Mathesha Kumar
49	922117114061	MOHAMED HANIEF NOUFIL S	S. Noofil Hanief Mohamed
50	922117114062	MOHAMED SYED ABUTHAHIR M	M. Abuthahir Syed Mohamed
51	922117114063	MOHAMED THARIQ G	G. Thariq Mohamed
52	922117114064	MONISHKUMAR M	M. Monish Kumar
53	922117114065	MUJIPUR RAHMAN J	J. Mujipur Rahman
54	922117114066	NAGARAJ A	A. Nagaraj
55	922117114067	NAGA SARAVAN B	B. Naga Saravan
56	922117114068	NANDHAKUMAR V	V. Nandha Kumar
57	922117114069	NAVANEETHA KRISHNAN M	M. Navaneetha Krishnan
58	922117114070	NAVEEN G A	A. Naveen G
59	922117114071	NAVEEN BHARATH V	V. Naveen Bharath
60	922117114072	NAVEENKUMAR S (12-07-2000)	S. Naveen Kumar
61	922117114073	NAVEEN KUMAR S (22-09-1998)	S. Naveen Kumar
62	922117114074	NAVEEN KUMAR S	S. Naveen Kumar

Dr.M.Muthukannan ASP/Mech.

Prof.S.Srinivasan, AP/Mech.

Programme Coordinator (s)

Dr.G.Sankaranarayanan

HoD/Mech

Glimpses of an Event



Dr.M.Muthukannan, Professor, Mechanical Department highlighting the Futuristic importance of electric vehicles.



Mr.M.Sathasivam ,service engineer,Tirupathi E-Motors explained the disassemble and reassemble of Electric bike

Student's Outcomes of the Hands on Training Programme

Introduction

Electric bikes, commonly known as e-bikes, have gained immense popularity in recent years due to their eco-friendly nature, efficiency, and convenience. These innovative modes of transportation provide an excellent alternative to traditional bicycles or gas-powered vehicles. As a cyclist or e-bike enthusiast, understanding how to disassemble and reassemble an electric bike can be a valuable skill. Whether for maintenance, repair, or transport, knowing the ins and outs of your e-bike can save you time and money. In this essay, we will provide a comprehensive guide on the disassembly and reassembly of an electric bike.

Dismantling

Start by removing the battery: Unplug the battery from the bike and remove it to prevent electrical accidents. Store the battery in a cool, dry place to avoid damage.

Unplug and secure cables: Carefully unplug all electric cables and wires connected to the motor, controller, and display unit. Use cable ties or labels to mark each cable for easy reassembly.

Remove the wheels: To access the motor and internal components, you'll need to remove the wheels. First, release the brakes and then use a wrench or a quick-release lever to detach the wheels from the frame.

Disconnect the motor: Disconnect the motor from the frame. Depending on your e-bike's design, you may need to remove the chain and the rear derailleur.

Disassemble the frame: Unscrew and remove the frame components. This step may vary depending on your e-bike's frame design, but it typically involves removing the bolts that hold the frame together.

Inspect and clean components: As you disassemble, inspect each part for wear, damage, or loose connections. Clean components, removing dirt, debris, and old lubricants.

Assembly

Assembling an electric bike is essentially the reverse of disassembly. However, it's essential to follow a systematic approach to ensure everything is properly reconnected and adjusted:

Frame assembly: Start by reassembling the frame. Attach the frame components and tighten the bolts securely. Make sure everything aligns properly.

Motor and wheels: Reattach the motor to the frame and connect it to the cables. Reinstall the wheels, ensuring they are properly aligned and the brakes are functioning correctly.

Reconnect cables: Carefully reconnect all the cables to their respective connectors. Make sure the connections are secure and properly insulated to prevent electrical issues.

Battery installation: Reinstall the battery, ensuring it's securely in place and properly connected. Be cautious of the battery's orientation and any safety mechanisms that need to be engaged.

Test ride: Before you take your e-bike for a spin, perform a brief test ride to check if everything is functioning correctly. Pay attention to the brakes, motor, and electrical components.

Final adjustments: Fine-tune your e-bike by adjusting the brakes, gears, and motor settings if necessary. Refer to the manufacturer's instructions for any specific adjustments.

Conclusion

Disassembling and reassembling an electric bike can be a rewarding experience, whether for maintenance, repair, or transportation. By following the safety guidelines and a systematic approach, you can confidently work on your e-bike and ensure it operates smoothly and efficiently. Remember that, in case of complex issues or if you are not confident in your abilities, it is always wise to consult a professional or refer to your e-bike's manufacturer for guidance and support.



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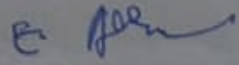
Department of Mechanical Engineering

Feedback on HANDS ON TRAINING PROGRAMME ON DISMANTLING AND ASSEMBLE OF ELECTRIC BIKE PARTS

Name of the Student: Arun Kumar E
Register Number of the Student 922117114007
Year & Section IV - A

Questionnaire

1. Were objectives of the session met?
 - ☒ Completely agree
 - ☐ Agree
 - ☐ Partially agree
 - ☐ Not agree
2. Did this session meet your expectation?
 - ☒ Completely agree
 - ☐ Agree
 - ☐ Partially agree
 - ☐ Not agree
3. Were the lectures clear and easy to understand?
 - ☐ Completely agree
 - ☒ Agree
 - ☐ Partially agree
 - ☐ Not agree
4. Did the expert encourage the interaction?
 - ☒ Completely agree
 - ☐ Agree
 - ☐ Partially agree
 - ☐ Not agree
5. Whether the information delivered at this program was highly beneficial?
 - ☒ Completely agree
 - ☐ Agree
 - ☐ Partially agree
 - ☐ Not agree
6. Overall the Programme content (1-Insufficient, 5-Excellent)


Signature of the Student



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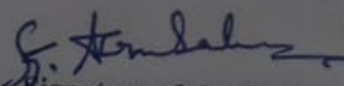
Name of the Student: K. ARUNSELVAN

Register Number of the Student 922117114 006

Year & Section III & A

Questionnaire

1. Were objectives of the session met?
 - ☒ Completely agree
 - ☐ Agree
 - ☐ Partially agree
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2. Did this session meet your expectation?
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5


Signature of the Student



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Feedback on HANDS ON TRAINING PROGRAMME ON

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Name of the Student: J. ANISH ROBERT

Register Number of the Student 922117114005

Year & Section III A

Questionnaire

1. Were objectives of the session met?
 - ☒ Completely agree
 - ☐ Agree
 - ☐ Partially agree
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2. Did this session meet your expectation?
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 - ☐ Not agree
6. Overall the Programme content (1-Insufficient, 5-Excellent)

4.

J. Anish Robert
Signature of the Student



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Name of the Student: K. Kamal

Register Number of the Student 922117114095

Year & Section III - B

Questionnaire

1. Were objectives of the session met?
 - ☒ Completely agree
 - ☐ Agree
 - ☐ Partially agree
 - ☐ Not agree
2. Did this session meet your expectation?
 - ☒ Completely agree
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 - ☐ Partially agree
 - ☐ Not agree
5. Whether the information delivered at this program was highly beneficial?
 - ☒ Completely agree
 - ☐ Agree
 - ☐ Partially agree
 - ☐ Not agree
6. Overall the Programme content (1-Insufficient, 5-Excellent)

4.75

Kamal

Signature of the Student



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Name of the Student: Dinesh, S

Register Number of the Student 922117114023

Year & Section III & A

Questionnaire

1. Were objectives of the session met?
 - ☒ Completely agree
 - ☐ Agree
 - ☐ Partially agree
 - ☐ Not agree
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3.

B. S. S.
Signature of the Student