



GOVERNMENT OF TAMILNADU
DIRECTORATE OF TECHNICAL EDUCATION, CHENNAI

STATE PROJECT COORDINATION UNIT
(Established under Canada India Institutional Cooperation Project)
CURRICULUM

Course Name	Sewing Machine Servicing
Course Code	TEX/2020/014
Course Duration	40 Hours
Minimum Eligibility Criteria and Pre-requisites (if any)	10 th /+2/Diploma/Graduates
Course Objectives	Training module has been designed to provide the participants <ul style="list-style-type: none"> • Learning of Sewing Machine parts • Able to Know the Dismantling and Assembly of Machine parts • Able to Know the Reassembly of Machine parts
Course Outcomes	At the end of training, the participants will be able to <ul style="list-style-type: none"> • Gain knowledge in Lubrication of Sewing Machine • Gain knowledge in Cleaning, Oiling and Reassembling of Machine parts
Expected Job Roles	Sewing Machine Operator & Mechanic

TEACHING AND SCHEME OF EXAMINATION						
Course Code	Course Name	Hours		Assessment Marks		Duration of Examination
				Min	Max	
TEX/2020/014	Sewing Machine Servicing	Theory	08	10	20	3 Hours
		Practical	32	40	80	
		Total	40	50	100	

TEX/2020/014- SEWING MACHINE SERVICING

DETAILED SYLLABUS

Unit No	Modules	No. Of Hours	
		Theory	Practical
I	Introduction	10Hours	
1.1	Parts of Sewing Machines-Foot pedal, Presser foot, Needle bar, Feed dog, Tensioner, Thread holder, Bobbin, Bobbin case, Bobbin winder, Stitch length adjuster, Take-up lever, Throat plate, Slide plate etc.	2	8
II	Dismantling and Assembly of Flywheel	5Hours	
2.1	E Loosening of side screw	1	4
2.2	Removal of lock wheel-Taking out of setting Bush		
2.3	Removal of Flywheel, Clearing it & Reassembling it in reverse order		
III	Dismantling and Reassembling-Needle bar	5 Hours	
3.1	Dismantling and Reassembling of needle bar, Presser foot and Pressure bar with spring	1	4
3.2	Unscrewing of fasteners, Presser foot and Pressure bar		
3.3	Removal, Cleaning and Reassembling of Presser foot and Pressure bar		
IV	Dismantling and Reassembling-Bobbin case set	10 Hours	
4.1	Lifting of Sewing Machine	2	8
4.2	Unscrewing and Taking out of Double screws of Bobbin case set		
4.3	Removal of Locking metal spring by Unscrewing of fastener		
4.4	Cleaning, Oiling & Reassembling of Inner parts in reverse order		
4.5	Precautions taken for free functioning of Bobbin case and Needle		
V	Lubrication	10 hours	
5.1	Lubrications – Purpose – types such as Liquid, Semi-liquid & Solid. Lubrication Systems – Gravity circulation System, Pressure circulating systems with diagram	2	8
5.2	Lubrication of Needle bar, Pressure bar, Flywheel joining place, Cams-Crank bar		
Total Theory and Practical Hours		08	32
Total hours		40	

HARDWARE REQUIREMENT

S.NO	LIST OF TOOLS /EQUIPMENTS
1	Sewing machine
2.	Scissors
3.	Screw Drivers
4.	Wire type brush
5.	Needle inserter
6.	Sewing machine parts

SOFTWARE REQUIREMENT

Nil

REFERENCE WEBSITE / BOOKS

1. textilestudycentre.com
2. clothingindustry.blogspot.com
3. fashion2apparel.blogspot.com
4. textilelearner.blogspot.com

S.NO	NAME OF THE BOOK	AUTHOR	PUBLISHER
1	Theory of Machines	P L Ballaney	Kanna Publications, Delhi
2	The complete book of Sewing	Dorling Kindersley	London
3	A Text book of Machine Design	R S Khurmi, J K Gupta	Eurasia Publications, New Delhi

ASSESSMENT AND CERTIFICATION

S.No	Criteria for assessment
1.	A trainee will be assessed based on the performance in End Examination for Theory and Practical conducted internally in the Project Polytechnic College for a duration of 3 hours
2.	A trainee must have 75% of attendance to appear for End examination in Theory and Practical.
3.	The assessment for theory part will be based on the marks scored in the end examination on the knowledge bank of questions (1 word/objective type questions)
4.	The assessment for practical part will be based on the marks scored in the end examination conducted by the Project Polytechnic and assessed by the Examiners approved by Strategic Plan Implementation Committee (SPIC) of the project polytechnic.
5.	The passing criteria for successful completion of training is every trainee should score 50% of marks in theory and practical examination.
6.	On successful completion of training , Certificate will be issued to the participants by the Directorate of Technical Education through the Project Polytechnics.

END EXAMINATION

ALLOCATION OF MARKS

S.NO	DESCRIPTION	Max.Marks
1.	Theory Examination	20
2.	Practical Examination	
	a)Write up/Diagram	15
	b)Experiment	35
	c)Result	10
	d)Record	20
Total Marks		100

THEORY MODEL QUESTION PAPER

TEX/2020/014 - SEWING MACHINE SERVICING

(Maximum Marks : 20)

(N.B: Answer any **twenty** questions)

20 x 1 = 20 Marks

1. What are the machine parts available in sewing machine?
2. Write the different types of presser foot?
3. What is take-up lever?
4. What is thread holder?
5. Differentiate between bobbin and bobbin case.
6. How to clear thread tension?
7. What is meant by dismantling?
8. What are the tools needed for sewing machine servicing?
9. What are the uses of pressure bar with spring?
10. How to do unscrewing of fasteners?
11. How will you clean and reassemble the pressure foot?
12. How to maintain sewing machine?
13. What is machine cleaning?
14. How to clear defects in top stitch?
15. What are the applications of bobbin and bobbin case?
16. What is lubrication?
17. Write the Classification lubrication system.
18. How to avoid thread breaks in sewing machine?
19. How to rectify cams mistake?
20. How dismantling of five wheel is done?
21. Classify sewing needle?
22. What is feed dog?
23. What is bobbin winder?
24. How to control stitching length adjuster?
25. What is foot pedal?