



TORO Analysis of Team Assemblers to Sewing Machine Operators

INPUT SECTION:

Transfer	Title	O*NET	Filters		
From Title:	Team Assemblers	51-2092.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Sewing Machine Operators	51-6031.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

OUTPUT SECTION:

Grand TORQ:



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Ability TORQ		Skills TORQ		Knowledge TORQ	
Level	87	Level	91	Level	90

Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Arm-Hand Steadiness	51	12	65	No Skills Upgrade Required!				No Knowledge Upgrades Required!			
Visual Color Discrimination	46	9	56								
Rate Control	39	4	59								
Near Vision	48	4	56								
Finger Dexterity	44	2	56								
Manual Dexterity	42	1	62								

LEVEL and IMPT (IMPORTANCE) refer to the Target Sewing Machine Operators. GAP refers to level difference between Team Assemblers and Sewing Machine Operators.

ASK ANALYSIS

Ability Level Comparison - Abilities with importance scores over 50

Description	Team Assemblers	Sewing Machine Operators	Importance
Arm-Hand Steadiness	39	51	65
Manual Dexterity	41	42	62
Control Precision	44	42	62
Rate Control	35	39	59
Information Ordering	42	37	56
Finger Dexterity	42	44	56
Near Vision	44	48	56

Visual Color Discrimination	37	46	56
Problem Sensitivity	41	39	53
Multilimb Coordination	46	37	53
Deductive Reasoning	41	35	50
Visualization	39	39	50
Skill Level Comparison - Abilities with importance scores over 69			
Description	Team Assemblers	Sewing Machine Operators	Importance
Knowledge Level Comparison - Knowledge with importance scores over 69			
Description	Team Assemblers	Sewing Machine Operators	Importance

Experience & Education Comparison					
Related Work Experience Comparison			Required Education Level Comparison		
Description	Team Assemblers	Sewing Machine Operators	Description	Team Assemblers	Sewing Machine Operators
10+ years	0%	0%	Doctoral	0%	0%
8-10 years	0%	0%	Professional Degree	0%	0%
6-8 years	0%	0%	Post-Masters Cert	0%	0%
4-6 years	0%	8%	Master's Degree	0%	0%
2-4 years	4%	13%	Post-Bachelor Cert	0%	0%
1-2 years	6%	9%	Bachelors	0%	2%
6-12 months	10%	11%	AA or Equiv	0%	0%
3-6 months	2%	0%	Some College	1%	8%
1-3 months	6%	5%	Post-Secondary Certificate	11%	2%
0-1 month	17%	0%	High School Diploma or GED	63%	12%
None	50%	51%	No HSD or GED	22%	73%
Team Assemblers			Sewing Machine Operators		
Most Common Educational/Training Requirement:					
Moderate-term on-the-job training			Moderate-term on-the-job training		
Job Zone Comparison					
2 - Job Zone Two: Some Preparation Needed			1 - Job Zone One: Little or No Preparation Needed		
Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty.			No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a cashier even if he/she has never worked before.		
These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.			These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.		
Employees in these occupations need anywhere from a few months to one year of working with experienced employees.			Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.		

Tasks



Team Assemblers

Core Tasks

Generalized Work Activities:

- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Identifying Objects, Actions, and Events - Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.

Specific Tasks

Occupation Specific Tasks:

- Determine work assignments and procedures.
- Operate heavy equipment such as forklifts.
- Provide assistance in the production of wiring assemblies.
- Rotate through all the tasks required in a particular production process.
- Shovel and sweep work areas.

Detailed Tasks

Detailed Work Activities:

- confer with engineering, technical or manufacturing personnel
- direct and coordinate activities of workers or staff
- examine products or work to verify conformance to specifications
- fabricate, assemble, or disassemble manufactured products by hand
- perform safety inspections in manufacturing or industrial setting
- read work order, instructions, formulas, or processing charts
- use computers to enter, access or retrieve data
- use hand or power tools
- work as a team member

Sewing Machine Operators

Core Tasks

Generalized Work Activities:

- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

Specific Tasks

Occupation Specific Tasks:

- Attach buttons, hooks, zippers, fasteners, or other accessories to fabric, using feeding hoppers or clamp holders.
- Attach tape, trim, appliques, or elastic to specified garments or garment parts, according to item specifications.
- Baste edges of material to align and temporarily secure parts for final assembly.
- Cut excess material or thread from finished products.
- Cut materials according to specifications, using blades, scissors, or electric knives.
- Draw markings or pin appliques on fabric to obtain variations in design.
- Examine and measure finished articles to verify conformance to standards, using rulers.
- Fold or stretch edges or lengths of items while sewing, in order to facilitate forming specified sections.
- Guide garments or garment parts under machine needles and presser feet to sew parts together.
- Inspect garments, and examine repair tags and markings on garments to locate defects or damage, and mark errors as necessary.
- Match cloth pieces in correct sequences prior to sewing them, and verify that dye lots and patterns match.
- Monitor machine operation to detect problems such as defective stitching,

Technology - Examples
Computer aided design CAD software
• Computer aided design CAD software
Data base user interface and query software
• Data entry software
Office suite software
• Microsoft Office
Spreadsheet software
• Microsoft Excel
• Spreadsheet software
Word processing software
• Microsoft Word
• Word processing software
Tools - Examples
• Adjustable wrenches
• Bearing installation tools
• Bench vises
• Welding torches
• Dial calipers
• Metal chisels
• Dividers
• Burring tools
• Desktop computers
• Protective ear muffs
• Protective ear plugs
• Engine repair stands
• Fiber reinforced polymer FRP rollers
• Feeler gauges
• Hand files
• Torque angle meters
• Forklifts
• Arc welding equipment
• Dial indicators
• Vacuum bags

- breaks in thread, or machine malfunctions.
- Mount attachments, such as needles, cutting blades, or pattern plates, and adjust machine guides according to specifications.
- Perform equipment maintenance tasks such as replacing needles, sanding rough areas of needles, or cleaning and oiling sewing machines.
- Perform specialized or automatic sewing machine functions, such as buttonhole making or tacking.
- Place spools of thread, cord, or other materials on spindles, insert bobbins, and thread ends through machine guides and components.
- Position and mark patterns on materials to prepare for sewing.
- Position items under needles, using marks on machines, clamps, templates, or cloth as guides.
- Position material or articles in clamps, templates, or hoop frames prior to automatic operation of machines.
- Record quantities of materials processed.
- Remove holding devices and finished items from machines.
- Repair or alter items by adding replacement parts or missing stitches.
- Select supplies such as fasteners and thread, according to job requirements.
- Start and operate or tend machines, such as single or double needle serging and flat-bed felling machines, to automatically join, reinforce, or decorate material or articles.
- Tape or twist together thread or cord to repair breaks.
- Turn knobs, screws, and dials to adjust settings of machines, according to garment styles and equipment performance.

Detailed Tasks

- Detailed Work Activities:
- adjust production equipment/machinery setup
 - clean equipment or machinery
 - cut or trim fabric or leather
 - examine products or work to verify conformance to specifications
 - install equipment or attachments on machinery or related structures
 - load or unload material or workpiece into machinery
 - maintain consistent production quality
 - maintain production or work records
 - monitor production machinery/equipment operation to detect problems
 - operate sewing machine

- Grinding machines
- Material guiding jigs
- Claw hammers
- Hand clamps
- Heat guns
- Pin protrusion gauges
- Allen wrenches
- Power hoists
- Ring squeezers
- Hydraulic press frames
- Power wrenches
- Heating furnaces
- Threaded insert tools
- Hand jacks
- Heat lamps
- Ladders
- Lathes
- Transits
- Locking pliers
- End milling machines
- Plastic mallets
- Metal inert gas MIG welders
- Electrochemical etching devices
- Micrometers
- Computerized numerical control CNC metal-cutting machines
- Milling machines
- Needlenose pliers
- Nut drivers
- Paint application brushes
- Paint application rollers
- High-volume low-pressure HVLP spray guns
- Curing ovens

- operate sewing machine
- perform safety inspections in manufacturing or industrial setting
- read work order, instructions, formulas, or processing charts
- repair tears or defects in fabrics, garments, or leather products
- sew by hand
- use hand or power tools
- use portable electric fabric cutter

Technology - Examples

- Assembly robots
- Rotating mandrels
- Tube cutters
- Flame cutters
- Pneumatic drills
- First assembly jigs
- Power chippers
- Cordless drills
- Bench grinders
- Edge planers
- Belt sanders
- Cutoff saws
- Power drivers
- Anti-vibration gloves
- Protractors
- Pry bars
- Gear pullers
- Center punches
- Ratchets
- Line reamers
- Chopper guns
- Respirators
- Snap ring pliers
- Alligator jaw compression riveters
- Steel rules
- Safety glasses
- Scaffolding
- Straight screwdrivers
- Scribes
- Adhesive application robots
- Beverly shears
- Socket wrenches

- Soldering guns
- Spanner wrenches
- Case wrenches
- Timing lights
- Layout squares
- Squeegees
- Bearing staking tools
- Measuring tapes
- Taps
- Drafting templates
- Tensiometers
- Fuel control wrenches
- Beading tools
- Crimping tools
- Lapping tools
- Tungsten inert gas TIG welding equipment
- Turnbuckles
- Radial drills
- Ultrasonic inspection equipment
- Trimming knives
- Vacuum pumps
- Wedges
- Tack welding equipment
- Welding hoods
- Welding robots
- Spot welding equipment
- Cable cutters
- Jib cranes
- Brakes

Labor Market Comparison

Description	Team Assemblers	Sewing Machine Operators	Difference
Median Wage	\$ 23,730	\$ 22,440	\$(1,290)
10th Percentile Wage	\$ 18,550	\$ 16,350	\$(2,200)
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 28,380	\$ 27,200	\$(1,180)
90th Percentile Wage	\$ 32,810	\$ 31,710	\$(1,100)
Mean Wage	\$ 25,040	\$ 23,030	\$(2,010)
Total Employment - 2007	3,850	1,080	-2,770
Employment Base - 2006	3,958	1,077	-2,881
Projected Employment - 2016	3,691	990	-2,701
Projected Job Growth - 2006-2016	-6.7 %	-8.1 %	-1.3 %
Projected Annual Openings - 2006-2016	82	10	-72

National Job Posting Trends

Trend for Team Assemblers

Trend for Sewing Machine Operators



Data from [Indeed](http://Indeed.com)

Recommended Programs

No program data for the occupation.

Maine Statewide Promotion Opportunities for Team Assemblers



O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
51-2092.00	Team Assemblers	100	2	3,850	\$23,730.00	\$0.00	-7%	82
51-4121.07	Solderers and Brazers	89	2	1,610	\$38,030.00	\$14,300.00	7%	49
51-2021.00	Coil Winders, Tapers, and Finishers	89	2	90	\$31,910.00	\$8,180.00	-53%	1
51-7041.00	Sawing Machine Setters, Operators, and Tenders, Wood	87	2	700	\$24,790.00	\$1,060.00	-8%	15
51-9061.00	Inspectors, Testers, Sorters, Samplers, and Weighers	87	2	1,700	\$29,700.00	\$5,970.00	-14%	26
51-2031.00	Engine and Other Machine Assemblers	87	3	20	\$29,010.00	\$5,280.00	-45%	1
51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	87	2	910	\$38,230.00	\$14,500.00	-26%	23
51-4121.06	Welders, Cutters, and Welder Fitters	86	2	1,610	\$38,030.00	\$14,300.00	7%	49
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	86	2	710	\$31,350.00	\$7,620.00	-23%	12
53-7063.00	Machine Feeders and Offbearers	86	1	480	\$26,820.00	\$3,090.00	-22%	9
51-9195.07	Molding and Casting Workers	85	2	0	\$26,980.00	\$3,250.00	7%	20
51-2023.00	Electromechanical Equipment Assemblers	85	3	90	\$26,430.00	\$2,700.00	-20%	2
51-4022.00	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	85	2	20	\$28,330.00	\$4,600.00	-18%	1
51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	84	2	260	\$28,330.00	\$4,600.00	-7%	5
51-9121.00	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	84	2	850	\$38,860.00	\$15,130.00	-26%	19

Top Industries for Sewing Machine Operators



Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Cut and sew apparel manufacturing	315200	37.46%	87,218	36,829	-57.77%
Other textile product mills	314900	8.50%	19,797	17,782	-10.18%
Textile furnishings mills	314100	7.91%	18,422	16,690	-9.40%
Self-employed workers, primary job	000601	7.29%	16,967	18,076	6.54%
Household and institutional furniture manufacturing	337120	6.35%	14,794	12,383	-16.30%
Apparel accessories and other apparel manufacturing	315900	2.75%	6,400	4,026	-37.09%
Apparel knitting mills	315100	2.14%	4,987	2,805	-43.75%
Medical equipment and supplies manufacturing	339100	2.01%	4,674	4,781	2.29%
Other furniture related product manufacturing	337900	1.88%	4,384	4,577	4.40%
Printing and related support activities	323100	1.73%	4,029	3,192	-20.77%
Motor vehicle parts manufacturing	336300	1.48%	3,443	2,741	-20.39%
Fabric mills	313200	1.36%	3,162	2,233	-29.38%
Drycleaning and laundry services	812300	1.35%	3,133	3,133	0.01%
Clothing stores	448100	1.31%	3,053	2,973	-2.63%
Footwear manufacturing	316200	0.92%	2,134	1,000	-53.16%

Top Industries for Team Assemblers

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Employment services	561300	15.68%	199,847	252,932	26.56%
Motor vehicle parts manufacturing	336300	7.79%	99,321	80,278	-19.17%
Motor vehicle manufacturing	336100	4.50%	57,395	57,191	-0.35%
Other wood product manufacturing	321900	3.65%	46,477	43,797	-5.77%
Motor vehicle body and trailer manufacturing	336200	3.47%	44,237	44,350	0.25%
Plastics product manufacturing	326100	3.40%	43,379	45,983	6.00%
Architectural and structural metals manufacturing	332300	2.80%	35,620	38,043	6.80%
Medical equipment and supplies manufacturing	339100	2.66%	33,860	34,635	2.29%
Other fabricated metal product manufacturing	332900	2.47%	31,442	27,859	-11.39%
Ventilation, heating, air-conditioning, and commercial refrigeration equipment manufacturing	333400	2.41%	30,715	28,255	-8.01%
Other general purpose machinery manufacturing	333900	2.36%	30,035	27,113	-9.73%
Navigational, measuring, electromedical, and control instruments manufacturing	334500	1.84%	23,417	22,419	-4.26%

Agriculture, construction, and mining machinery manufacturing	333100	1.79%	22,809	21,297	-6.63%
Household appliance manufacturing	335200	1.65%	21,088	15,957	-24.33%
Semiconductor and other electronic component manufacturing	334400	1.65%	21,011	18,365	-12.59%