

47-5081 Helpers--Extraction Workers



Help extraction craft workers, such as earth drillers, blasters and explosives workers, derrick operators, and mining machine operators, by performing duties of lesser skill. Duties include supplying equipment or cleaning work area.

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$19.33
2016 Estimated Employment:	45
2026 Projected Employment:	54
Growth Rate, 2016-2026:	20.0%
Annual Openings:	8

Industry	2016 Share	2026 Share
213 Support Activities for Mining	n	n
237 Heavy and Civil Engineering Construction	n	n
5413 Architectural and Engineering Services	n	n

49-1011 First-Line Supervisors of Mechanics, Installers, and Repairers



Supervise and coordinate the activities of mechanics, installers, and repairers. *Examples: Marine Service Manager; Ground Crew Chief; Engine Repair Supervisor*

Training Category: High School | < 5 yrs | none

2017 Average Wage:	\$35.30
2016 Estimated Employment:	2,327
2026 Projected Employment:	2,485
Growth Rate, 2016-2026:	6.8%
Annual Openings:	218

Industry	2016 Share	2026 Share
441 Motor Vehicle and Parts Dealers	13.5%	13.8%
811 Repair and Maintenance	10.4%	10.7%
238 Specialty Trade Contractors	6.7%	7.0%
221 Utilities	4.6%	4.4%
423 Merchant Wholesalers, Durable Goods	4.4%	4.7%
517 Telecommunications	n	n

49-2011 Computer, Automated Teller, and Office Machine Repairers



Repair, maintain, or install computers, word processing systems, automated teller machines, and electronic office machines, such as duplicating and fax machines. *Examples: ATM Specialist; Computer Installer*

Training Category: Some College | none | Short OJT

2017 Average Wage:	\$22.07
2016 Estimated Employment:	883
2026 Projected Employment:	908
Growth Rate, 2016-2026:	2.8%
Annual Openings:	88

Industry	2016 Share	2026 Share
443 Electronics and Appliance Stores	29.6%	26.7%
423 Merchant Wholesalers, Durable Goods	19.4%	20.4%
Self-employed Workers	13.1%	13.0%
425 Wholesale Electronic Markets and Agents/Brokers	12.2%	12.7%
811 Repair and Maintenance	6.5%	6.3%
5415 Computer Systems Design and Related Services	4.9%	5.8%

49-2021 Radio, Cellular, and Tower Equipment Installers and Repairers



Test or repair mobile or stationary radio transmitting and receiving equipment and two-way radio communications systems used in ship-to-shore communications and found in service and emergency vehicles.

Training Category: Associate | none | Moderate OJT

2017 Average Wage:	n/a
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
517 Telecommunications	n	n
551 Management of Companies and Enterprises	n	n
811 Repair and Maintenance	n	n
5613 Employment Services	n	n
Local Government, Excluding Education	n	n

49-2022 Telecommunications Equipment Installers and Repairers, Except Line Installers



Set-up, rearrange, or remove switching and dialing equipment used in central offices. Service or repair telephones and other communication equipment on customers' property. May install equipment in new locations or install wiring and telephone jacks in buildings under construction. *Examples: Central Office Equipment Installer; Electronics Installer; Exchange Mechanic*

Training Category: Postsecondary | none | Moderate OJT

2017 Average Wage:	\$33.68
2016 Estimated Employment:	1,165
2026 Projected Employment:	1,095
Growth Rate, 2016-2026:	-6.0%
Annual Openings:	111

Industry	2016 Share	2026 Share
517 Telecommunications	75.5%	72.2%
811 Repair and Maintenance	6.9%	7.3%
5613 Employment Services	5.0%	5.8%
622 Hospitals	2.0%	2.3%
423 Merchant Wholesalers, Durable Goods	n	n
5415 Computer Systems Design and Related Services	n	n

49-2091 Avionics Technicians



Install, inspect, test, adjust, or repair avionics equipment, such as radar, radio, navigation, and missile control systems in aircraft or space vehicles. *Examples: Aircraft Electrician; Automatic Pilot Mechanic*

Training Category: Associate | none | none

2017 Average Wage:	\$31.56
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
334 Computer and Electronic Product Manufacturing	n	n
488 Support Activities for Transportation	n	n
Federal Government, Excluding Post Office	n	n

49-2092 Electric Motor, Power Tool, and Related Repairers



Repair, maintain, or install electric motors, wiring, or switches. *Examples: Armature Winder; Generator Mechanic; Electric Golf Cart Repairer*

Training Category: High School | < 5 yrs | Moderate OJT

2017 Average Wage:	\$23.39
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
Self-employed Workers	n	n
423 Merchant Wholesalers, Durable Goods	n	n
444 Building Material and Garden Supply Stores	n	n
6113 Colleges and Universities	n	n

49-2093 Electrical and Electronics Installers and Repairers, Transportation Equipment



Install, adjust, or maintain mobile electronics communication equipment, including sound, sonar, security, navigation, and surveillance systems on trains, watercraft, or other mobile equipment. *Example: Locomotive Electrician*

Training Category: Postsecondary | none | Long OJT

2017 Average Wage:	\$22.41
2016 Estimated Employment:	27
2026 Projected Employment:	29
Growth Rate, 2016-2026:	7.4%
Annual Openings:	3

Industry	2016 Share	2026 Share
423 Merchant Wholesalers, Durable Goods	n	n
6113 Colleges and Universities	n	n
State Government, excl. Education and Hospitals	n	n

49-2094 Electrical and Electronics Repairers, Commercial and Industrial Equipment



Repair, test, adjust, or install electronic equipment, such as industrial controls, transmitters, and antennas. *Examples: Missile Pad Mechanic; Amplifier Mechanic*

Training Category: Postsecondary | none | Long OJT

2017 Average Wage:	\$26.78
2016 Estimated Employment:	374
2026 Projected Employment:	394
Growth Rate, 2016-2026:	5.4%
Annual Openings:	35

Industry	2016 Share	2026 Share
423 Merchant Wholesalers, Durable Goods	22.2%	23.4%
811 Repair and Maintenance	19.3%	19.3%
238 Specialty Trade Contractors	17.1%	17.5%
425 Wholesale Electronic Markets and Agents/Brokers	13.6%	14.0%
333 Machinery Manufacturing	7.5%	7.4%
221 Utilities	n	n

49-2095 Electrical and Electronics Repairers, Powerhouse, Substation, and Relay



Inspect, test, repair, or maintain electrical equipment in generating stations, substations, and in-service relays. *Examples: Powerhouse Electrician; Relay Technician; Power Transformer Repairer*

Training Category: Postsecondary | < 5 yrs | Moderate OJT

2017 Average Wage:	\$38.03
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
221 Utilities	n	n
5413 Architectural and Engineering Services	n	n

49-2096 Electronic Equipment Installers and Repairers, Motor Vehicles



Install, diagnose, or repair communications, sound, security, or navigation equipment in motor vehicles. *Examples: Auto Phone Installer; Automotive Electrician*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$17.45
2016 Estimated Employment:	45
2026 Projected Employment:	22
Growth Rate, 2016-2026:	-51.1%
Annual Openings:	1

Industry	2016 Share	2026 Share
443 Electronics and Appliance Stores	91.1%	86.4%
Self-employed Workers	2.2%	4.6%
441 Motor Vehicle and Parts Dealers	n	n
5613 Employment Services	n	n
6113 Colleges and Universities	n	n

49-2097 Electronic Home Entertainment Equipment Installers and Repairers



Repair, adjust, or install audio or television receivers, stereo systems, camcorders, video systems, or other electronic home entertainment equipment. *Examples: Electric Organ Technician; Television Mechanic; Satellite Dish Installer*

Training Category: Postsecondary | none | Short OJT

2017 Average Wage:	\$22.97
2016 Estimated Employment:	296
2026 Projected Employment:	307
Growth Rate, 2016-2026:	3.7%
Annual Openings:	32

Industry	2016 Share	2026 Share
425 Wholesale Electronic Markets and Agents/Brokers	60.1%	61.6%
Self-employed Workers	17.6%	16.9%
238 Specialty Trade Contractors	n	n
443 Electronics and Appliance Stores	n	n
811 Repair and Maintenance	n	n

49-2098 Security and Fire Alarm Systems Installers



Install, program, maintain, and repair security and fire alarm wiring and equipment. Ensure that work is in accordance with relevant codes. *Examples: Fire Alarm Installer; Burglar Alarm Mechanic*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$24.33
2016 Estimated Employment:	333
2026 Projected Employment:	378
Growth Rate, 2016-2026:	13.5%
Annual Openings:	43

Industry		2016 Share	2026 Share
5616	Investigation and Security Services	64.3%	65.6%
238	Specialty Trade Contractors	22.5%	21.4%
	Self-employed Workers	4.5%	4.2%
423	Merchant Wholesalers, Durable Goods	4.2%	4.5%
	Local Government, Excluding Education	2.1%	1.9%
334	Computer and Electronic Product Manufacturing	n	n

49-3011 Aircraft Mechanics and Service Technicians



Diagnose, adjust, repair, or overhaul aircraft engines and assemblies, such as hydraulic and pneumatic systems. Include helicopter and aircraft engine specialists.

Training Category: Postsecondary | none | none

2017 Average Wage:	\$30.44
2016 Estimated Employment:	236
2026 Projected Employment:	259
Growth Rate, 2016-2026:	9.8%
Annual Openings:	21

Industry		2016 Share	2026 Share
488	Support Activities for Transportation	57.6%	60.6%
	Federal Government, Excluding Post Office	23.7%	21.6%
336	Transportation Equipment Manufacturing	n	n
481	Air Transportation	n	n
492	Couriers and Messengers	n	n
811	Repair and Maintenance	n	n

49-3021 Automotive Body and Related Repairers



Repair and refinish automotive vehicle bodies and straighten vehicle frames. *Examples: Auto Body Customizer; Collision Mechanic; Frame Straightener*

Training Category: High School | none | Long OJT

2017 Average Wage:	\$20.76
2016 Estimated Employment:	707
2026 Projected Employment:	763
Growth Rate, 2016-2026:	7.9%
Annual Openings:	75

Industry		2016 Share	2026 Share
811	Repair and Maintenance	84.4%	84.0%
	Self-employed Workers	8.1%	8.0%
441	Motor Vehicle and Parts Dealers	6.5%	7.0%
423	Merchant Wholesalers, Durable Goods	n	n
5613	Employment Services	n	n
	State Government, excl. Education and Hospitals	n	n

49-3022 Automotive Glass Installers and Repairers



Replace or repair broken windshields and window glass in motor vehicles. *Examples: Auto Glass Mechanic; Windshield Installer; Auto Glass Fitter*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$20.12
2016 Estimated Employment:	70
2026 Projected Employment:	75
Growth Rate, 2016-2026:	7.1%
Annual Openings:	7

Industry		2016 Share	2026 Share
811	Repair and Maintenance	97.1%	97.3%
	Self-employed Workers	2.9%	2.7%

49-3023 Automotive Service Technicians and Mechanics



Diagnose, adjust, repair, or overhaul automotive vehicles. *Examples: Auto Brake Mechanic; Fuel Injection Servicer; Auto Transmission Specialist*

Training Category: Postsecondary | none | Short OJT

2017 Average Wage:	\$21.22
2016 Estimated Employment:	4,162
2026 Projected Employment:	4,393
Growth Rate, 2016-2026:	5.6%
Annual Openings:	416

Industry	2016 Share	2026 Share
441 Motor Vehicle and Parts Dealers	42.4%	43.2%
811 Repair and Maintenance	34.1%	34.4%
Self-employed Workers	11.5%	11.5%
447 Gasoline Stations	3.7%	2.9%
5613 Employment Services	1.4%	1.4%
Local Government, Excluding Education	1.0%	0.8%

49-3031 Bus and Truck Mechanics and Diesel Engine Specialists



Diagnose, adjust, repair, or overhaul trucks, buses, and all types of diesel engines. *Examples: Tractor Trailer Mechanic; Diesel Mechanic; Farm Equipment Engine Mechanic*

Training Category: High School | none | Long OJT

2017 Average Wage:	\$23.19
2016 Estimated Employment:	944
2026 Projected Employment:	1,064
Growth Rate, 2016-2026:	12.7%
Annual Openings:	100

Industry	2016 Share	2026 Share
811 Repair and Maintenance	16.4%	17.2%
441 Motor Vehicle and Parts Dealers	11.8%	12.0%
423 Merchant Wholesalers, Durable Goods	10.5%	11.4%
Local Government, Excluding Education	8.7%	8.7%
484 Truck Transportation	6.5%	6.3%
Self-employed Workers	6.0%	5.6%

49-3041 Farm Equipment Mechanics and Service Technicians



Diagnose, adjust, repair, or overhaul farm machinery and vehicles, such as tractors, harvesters, dairy equipment, and irrigation systems. *Examples: Irrigation Equipment Mechanic; Dairy Equipment Installer*

Training Category: High School | none | Long OJT

2017 Average Wage:	n/a
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
Self-employed Workers	n	n
111 Crop Production	n	n
115 Agriculture and Forestry Support Activities	n	n
423 Merchant Wholesalers, Durable Goods	n	n
444 Building Material and Garden Supply Stores	n	n
445 Food and Beverage Stores	n	n

49-3042 Mobile Heavy Equipment Mechanics, Except Engines



Diagnose, adjust, repair, or overhaul mobile mechanical, hydraulic, and pneumatic equipment, such as cranes, bulldozers, graders, and conveyors, used in construction, logging, and surface mining. *Examples: Construction Equipment Mechanic; Fork Lift Mechanic; Bulldozer Mechanic*

Training Category: High School | none | Long OJT

2017 Average Wage:	\$25.02
2016 Estimated Employment:	382
2026 Projected Employment:	423
Growth Rate, 2016-2026:	10.7%
Annual Openings:	41

Industry	2016 Share	2026 Share
423 Merchant Wholesalers, Durable Goods	30.1%	31.4%
State Government, excl. Education and Hospitals	9.7%	8.8%
Local Government, Excluding Education	5.8%	5.7%
238 Specialty Trade Contractors	7.3%	7.3%
237 Heavy and Civil Engineering Construction	n	n
532 Rental and Leasing Services	n	n

49-3043 Rail Car Repairers



Diagnose, adjust, repair, or overhaul railroad rolling stock, mine cars, or mass transit rail cars.

Training Category: High School | none | Long OJT

2017 Average Wage:	\$23.65
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
485 Transit and Ground Passenger Transportation	n	n
487 Scenic and Sightseeing Transportation	n	n
488 Support Activities for Transportation	n	n

49-3051 Motorboat Mechanics and Service Technicians



Repair and adjust electrical and mechanical equipment of gasoline or diesel powered inboard or inboard-outboard boat engines. *Example: Outboard Motor Mechanic*

Training Category: High School | none | Long OJT

2017 Average Wage:	\$20.67
2016 Estimated Employment:	184
2026 Projected Employment:	188
Growth Rate, 2016-2026:	2.2%
Annual Openings:	20

Industry	2016 Share	2026 Share
713 Amusement, Gambling, and Recreation	42.9%	46.8%
441 Motor Vehicle and Parts Dealers	39.1%	36.2%
Self-employed Workers	10.9%	10.1%
532 Rental and Leasing Services	n	n
811 Repair and Maintenance	n	n
State Government, excl. Education and Hospitals	n	n

49-3052 Motorcycle Mechanics



Diagnose, adjust, repair, or overhaul motorcycles, scooters, mopeds, dirt bikes, or similar motorized vehicles. *Examples: Motor Scooter Mechanic; Motorcycle Repairer*

Training Category: Postsecondary | none | Short OJT

2017 Average Wage:	\$21.17
2016 Estimated Employment:	220
2026 Projected Employment:	220
Growth Rate, 2016-2026:	0.0%
Annual Openings:	23

Industry	2016 Share	2026 Share
441 Motor Vehicle and Parts Dealers	78.6%	77.7%
Self-employed Workers	10.9%	10.5%
336 Transportation Equipment Manufacturing	n	n
811 Repair and Maintenance	n	n

49-3053 Outdoor Power Equipment and Other Small Engine Mechanics



Diagnose, adjust, repair, or overhaul small engines used to power lawn mowers, chain saws, and related equipment. *Examples: Chainsaw Mechanic; Lawn Mower Repairer; Snowmobile Mechanic*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$18.68
2016 Estimated Employment:	386
2026 Projected Employment:	424
Growth Rate, 2016-2026:	9.8%
Annual Openings:	45

Industry	2016 Share	2026 Share
444 Building Material and Garden Supply Stores	32.9%	35.6%
713 Amusement, Gambling, and Recreation	10.9%	11.1%
Self-employed Workers	10.6%	9.4%
441 Motor Vehicle and Parts Dealers	10.1%	8.7%
532 Rental and Leasing Services	8.8%	8.5%
5617 Services to Buildings and Dwellings	8.3%	8.0%

49-3091 Bicycle Repairers



Repair and service bicycles. *Example: Bicycle Mechanic*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$12.42
2016 Estimated Employment:	175
2026 Projected Employment:	225
Growth Rate, 2016-2026:	28.6%
Annual Openings:	29

Industry		2016 Share	2026 Share
451	Sporting Goods, Hobby, Book, and Music Stores	88.0%	90.2%
	Self-employed Workers	1.7%	1.3%
551	Management of Companies and Enterprises	n	n
713	Amusement, Gambling, and Recreation	n	n

49-3092 Recreational Vehicle Service Technicians



Diagnose, inspect, adjust, repair, or overhaul recreational vehicles including travel trailers. May specialize in maintaining gas, electrical, hydraulic, plumbing, or chassis/towing systems as well as repairing generators, appliances, and interior components. Include workers who perform customized van conversions. *Example: RV Mechanic*

Training Category: High School | none | Long OJT

2017 Average Wage:	\$17.61
2016 Estimated Employment:	184
2026 Projected Employment:	177
Growth Rate, 2016-2026:	-3.8%
Annual Openings:	22

Industry		2016 Share	2026 Share
441	Motor Vehicle and Parts Dealers	91.9%	91.0%
811	Repair and Maintenance	6.5%	7.3%
	Self-employed Workers	1.6%	1.7%

49-3093 Tire Repairers and Changers



Repair and replace tires. *Example: Tire Fixer*

Training Category: High School | none | Short OJT

2017 Average Wage:	\$12.40
2016 Estimated Employment:	400
2026 Projected Employment:	405
Growth Rate, 2016-2026:	1.3%
Annual Openings:	49

Industry		2016 Share	2026 Share
441	Motor Vehicle and Parts Dealers	81.0%	78.5%
423	Merchant Wholesalers, Durable Goods	6.3%	7.2%
452	General Merchandise Stores	5.0%	5.9%
811	Repair and Maintenance	4.5%	4.9%
	Self-employed Workers	n	n
551	Management of Companies and Enterprises	n	n

49-9011 Mechanical Door Repairers



Install, service, or repair automatic door mechanisms and hydraulic doors. Includes garage door mechanics. *Example: Automatic Door Mechanic*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$21.11
2016 Estimated Employment:	200
2026 Projected Employment:	220
Growth Rate, 2016-2026:	10.0%
Annual Openings:	17

Industry		2016 Share	2026 Share
238	Specialty Trade Contractors	78.0%	78.2%
	Self-employed Workers	2.0%	1.8%
332	Fabricated Metal Product Manufacturing	n	n
335	Electrical Equipment and Appliance Manufacturing	n	n
423	Merchant Wholesalers, Durable Goods	n	n

49-9012 Control and Valve Installers and Repairers, Except Mechanical Door



Install, repair, and maintain mechanical regulating and controlling devices, such as electric meters, gas regulators, thermostats, safety and flow valves, and other mechanical governors. *Examples: Gas Meter Prover; Thermostat Repairer*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$29.82
2016 Estimated Employment:	125
2026 Projected Employment:	133
Growth Rate, 2016-2026:	6.4%
Annual Openings:	10

Industry	2016 Share	2026 Share
221 Utilities	36.8%	33.1%
423 Merchant Wholesalers, Durable Goods	20.8%	23.3%
Local Government, Excluding Education	13.6%	13.5%
237 Heavy and Civil Engineering Construction	n	n
562 Waste Management and Remediation Services	n	n
811 Repair and Maintenance	n	n

49-9021 Heating, Air Conditioning, and Refrigeration Mechanics and Installers



Install or repair heating, central air conditioning, or refrigeration systems, including oil burners, hot-air furnaces, and heating stoves. *Examples: Furnace Converter; Gas Furnace Installer; Oil Burner Repairer*

Training Category: Postsecondary | none | Long OJT

2017 Average Wage:	\$24.69
2016 Estimated Employment:	2,023
2026 Projected Employment:	2,198
Growth Rate, 2016-2026:	8.7%
Annual Openings:	218

Industry	2016 Share	2026 Share
238 Specialty Trade Contractors	48.9%	52.4%
454 Nonstore Retailers	22.6%	19.7%
Self-employed Workers	7.9%	7.8%
425 Wholesale Electronic Markets and Agents/Brokers	7.5%	7.3%
424 Merchant Wholesalers, Nondurable Goods	2.8%	2.6%
6113 Colleges and Universities	1.7%	1.6%

49-9031 Home Appliance Repairers



Repair, adjust, or install all types of electric or gas household appliances, such as refrigerators, washers, dryers, and ovens. *Examples: Window Air Conditioner Mechanic; Vacuum Cleaner Repairer; Washing Machine Installer*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$20.99
2016 Estimated Employment:	184
2026 Projected Employment:	192
Growth Rate, 2016-2026:	4.4%
Annual Openings:	18

Industry	2016 Share	2026 Share
811 Repair and Maintenance	28.3%	26.6%
Self-employed Workers	25.5%	23.4%
453 Miscellaneous Store Retailers	17.4%	22.4%
443 Electronics and Appliance Stores	14.1%	12.5%
442 Furniture and Home Furnishings Stores	n	n
5613 Employment Services	n	n

49-9041 Industrial Machinery Mechanics



Repair, install, adjust, or maintain industrial production and processing machinery or refinery and pipeline distribution systems. *Examples: Conveyor Belt Installer; Turbine Mechanic; Hydroelectric Machinery Mechanic*

Training Category: High School | none | Long OJT

2017 Average Wage:	\$27.01
2016 Estimated Employment:	2,210
2026 Projected Employment:	2,405
Growth Rate, 2016-2026:	8.8%
Annual Openings:	217

Industry	2016 Share	2026 Share
811 Repair and Maintenance	11.7%	12.4%
335 Electrical Equipment and Appliance Manufacturing	9.4%	9.5%
423 Merchant Wholesalers, Durable Goods	9.3%	9.8%
334 Computer and Electronic Product Manufacturing	8.7%	8.1%
332 Fabricated Metal Product Manufacturing	8.0%	7.8%
326 Plastics and Rubber Products Manufacturing	6.3%	6.1%

49-9043 Maintenance Workers, Machinery



Lubricate machinery, change parts, or perform other routine machinery maintenance. *Examples: Grease Packer; Machine Oiler*

Training Category: High School | none | Long OJT

2017 Average Wage:	\$20.27
2016 Estimated Employment:	221
2026 Projected Employment:	231
Growth Rate, 2016-2026:	4.5%
Annual Openings:	24

Industry	2016 Share	2026 Share
326 Plastics and Rubber Products Manufacturing	17.2%	16.9%
221 Utilities	n	n
313 Textile Mills	n	n
321 Wood Product Manufacturing	n	n
331 Primary Metal Manufacturing	n	n
332 Fabricated Metal Product Manufacturing	n	n

49-9044 Millwrights



Install, dismantle, or move machinery and heavy equipment according to layout plans, blueprints, or other drawings. *Examples: Machine Erector; Machine Rigger; Machinery Dismantler*

Training Category: High School | none | Apprenticeship

2017 Average Wage:	\$26.67
2016 Estimated Employment:	136
2026 Projected Employment:	144
Growth Rate, 2016-2026:	5.9%
Annual Openings:	13

Industry	2016 Share	2026 Share
238 Specialty Trade Contractors	60.3%	63.2%
237 Heavy and Civil Engineering Construction	n	n
322 Paper Manufacturing	n	n
332 Fabricated Metal Product Manufacturing	n	n
339 Miscellaneous Manufacturing	n	n
811 Repair and Maintenance	n	n

49-9051 Electrical Power-Line Installers and Repairers



Install or repair cables or wires used in electrical power or distribution systems. May erect poles and light or heavy duty transmission towers. *Examples: Pole Climber; High Tension Tester; Electric Utility Wire Stretcher*

Training Category: High School | none | Long OJT

2017 Average Wage:	\$34.94
2016 Estimated Employment:	732
2026 Projected Employment:	787
Growth Rate, 2016-2026:	7.5%
Annual Openings:	65

Industry	2016 Share	2026 Share
221 Utilities	62.0%	58.7%
238 Specialty Trade Contractors	19.0%	18.9%
237 Heavy and Civil Engineering Construction	15.6%	19.1%
Self-employed Workers	1.5%	1.4%
551 Management of Companies and Enterprises	n	n
Local Government, Excluding Education	n	n

49-9052 Telecommunications Line Installers and Repairers



String and repair telephone and television cable, including fiber optics and other equipment for transmitting messages or television programming. *Examples: Telecommunications Cable Splicer; Telecommunications Wire Stretcher; Cable Television Installer*

Training Category: High School | none | Long OJT

2017 Average Wage:	\$32.13
2016 Estimated Employment:	534
2026 Projected Employment:	523
Growth Rate, 2016-2026:	-2.1%
Annual Openings:	51

Industry	2016 Share	2026 Share
517 Telecommunications	68.5%	62.1%
238 Specialty Trade Contractors	12.9%	14.2%
237 Heavy and Civil Engineering Construction	12.4%	16.6%
Self-employed Workers	4.1%	4.4%
5416 Management and Technical Consulting Services	n	n
811 Repair and Maintenance	n	n

49-9061 Camera and Photographic Equipment Repairers



Repair and adjust cameras and photographic equipment, including commercial video and motion picture camera equipment.

Training Category: High School | none | Long OJT

2017 Average Wage:	n/a
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
6113 Colleges and Universities	100.0%	100.0%

49-9062 Medical Equipment Repairers



Test, adjust, or repair biomedical or electromedical equipment. *Examples: Biomedical Equipment Technician; Hearing Aid Mechanic; Surgical Instrument Mechanic*

Training Category: Associate | none | Moderate OJT

2017 Average Wage:	\$26.99
2016 Estimated Employment:	116
2026 Projected Employment:	126
Growth Rate, 2016-2026:	8.6%
Annual Openings:	12

Industry	2016 Share	2026 Share
622 Hospitals	50.9%	50.0%
811 Repair and Maintenance	17.2%	15.9%
621 Ambulatory Health Care Services	7.8%	9.5%
Self-employed Workers	6.0%	5.6%
423 Merchant Wholesalers, Durable Goods	n	n
532 Rental and Leasing Services	n	n

49-9063 Musical Instrument Repairers and Tuners



Repair percussion, stringed, reed, or wind instruments. May specialize in one area, such as piano tuning. *Examples: Piano Tuner; Violin Repairer; Tone Regulator*

Training Category: High School | none | Apprenticeship

2017 Average Wage:	\$20.46
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
Self-employed Workers	n	n
451 Sporting Goods, Hobby, Book, and Music Stores	n	n
454 Nonstore Retailers	n	n
811 Repair and Maintenance	n	n
6113 Colleges and Universities	n	n

49-9064 Watch Repairers



Repair, clean, and adjust mechanisms of timing instruments, such as watches and clocks. Include watchmakers.

Training Category: High School | none | Long OJT

2017 Average Wage:	n/a
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
Self-employed Workers	n	n
453 Miscellaneous Store Retailers	n	n
811 Repair and Maintenance	n	n

49-9069 Precision Instrument and Equipment Repairers, All Other 

All precision instrument and equipment repairers not listed separately. *Examples: Laboratory Equipment Installer; Gyro Mechanic; Meteorological Equipment Repairer*

Training Category: High School | none | Long OJT

2017 Average Wage:	\$32.69
2016 Estimated Employment:	148
2026 Projected Employment:	153
Growth Rate, 2016-2026:	3.4%
Annual Openings:	13

Industry	2016 Share	2026 Share
811 Repair and Maintenance	41.2%	40.5%
Self-employed Workers	4.7%	4.6%
Federal Government, Excluding Post Office	5.4%	5.2%
325 Chemical Manufacturing	n	n
333 Machinery Manufacturing	n	n
334 Computer and Electronic Product Manufacturing	n	n

49-9071 Maintenance and Repair Workers, General 

Perform work involving the skills of two or more maintenance or craft occupations to keep machines, mechanical equipment, or the structure of an establishment in repair. Duties may involve pipe fitting; boiler making; insulating; welding; machining; carpentry; repairing electrical or mechanical equipment; installing, aligning, and balancing new equipment; and repairing buildings, floors, or stairs. *Example: Building Maintenance Mechanic*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$20.48
2016 Estimated Employment:	4,711
2026 Projected Employment:	5,067
Growth Rate, 2016-2026:	7.6%
Annual Openings:	507

Industry	2016 Share	2026 Share
531 Real Estate	18.2%	18.8%
721 Accommodation	12.2%	11.9%
Local Government, Excluding Education	6.5%	6.3%
813 Membership Organizations	5.4%	5.4%
6111 Elementary and Secondary Schools	4.0%	3.8%
623 Nursing and Residential Care Facilities	3.7%	4.0%

49-9081 Wind Turbine Service Technicians 

Inspect, diagnose, adjust, or repair wind turbines. Perform maintenance on wind turbine equipment including resolving electrical, mechanical, and hydraulic malfunctions.

Training Category: Postsecondary | none | Long OJT

2017 Average Wage:	n/a
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
Self-employed Workers	n	n
221 Utilities	n	n

49-9091 Coin, Vending, and Amusement Machine Servicers and Repairers 

Install, service, adjust, or repair coin, vending, or amusement machines including video games, juke boxes, pinball machines, or slot machines. *Examples: Cigarette Machine Mechanic; Slot Machine Mechanic; Video Game Mechanic*

Training Category: High School | none | Short OJT

2017 Average Wage:	n/a
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
Self-employed Workers	n	n
454 Nonstore Retailers	n	n
713 Amusement, Gambling, and Recreation	n	n
722 Food Services and Drinking Places	n	n

49-9092 Commercial Divers



Work below surface of water, using scuba gear to inspect, repair, remove, or install equipment and structures. *Examples: Marine Diver; Scuba Diver; Skin Diver*

Training Category: Postsecondary | none | Moderate OJT

2017 Average Wage:	\$28.60
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
Self-employed Workers	n	n
237 Heavy and Civil Engineering Construction	n	n
5619 Other Support Services	n	n

49-9093 Fabric Menders, Except Garment



Repair tears, holes, and other defects in fabrics, such as draperies, linens, parachutes, and tents.

Training Category: High School | none | Long OJT

2017 Average Wage:	n/a
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
Self-employed Workers	n	n
313 Textile Mills	n	n
6113 Colleges and Universities	n	n

49-9094 Locksmiths and Safe Repairers



Repair and open locks; make keys; change locks and safe combinations; and install and repair safes. *Examples: Key Maker; Vault Service Mechanic; Lock Expert*

Training Category: High School | none | Long OJT

2017 Average Wage:	\$24.76
2016 Estimated Employment:	84
2026 Projected Employment:	79
Growth Rate, 2016-2026:	-6.0%
Annual Openings:	7

Industry	2016 Share	2026 Share
5616 Investigation and Security Services	33.3%	32.9%
Self-employed Workers	29.8%	34.2%
6113 Colleges and Universities	19.1%	16.5%
238 Specialty Trade Contractors	n	n
6111 Elementary and Secondary Schools	n	n

49-9095 Manufactured Building and Mobile Home Installers



Move or install mobile homes or prefabricated buildings. *Examples: Mobile Home Mechanic; Housetrailer Servicer*

Training Category: High School | none | Short OJT

2017 Average Wage:	\$17.62
2016 Estimated Employment:	n
2026 Projected Employment:	n
Growth Rate, 2016-2026:	n
Annual Openings:	n

Industry	2016 Share	2026 Share
Self-employed Workers	n	n
321 Wood Product Manufacturing	n	n
453 Miscellaneous Store Retailers	n	n
531 Real Estate	n	n

49-9096 Riggers



Set up or repair rigging for construction projects, manufacturing plants, logging yards, ships and shipyards, or for the entertainment industry.
Examples: Crane Rigger; Yard Rigger

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$20.03
2016 Estimated Employment:	28
2026 Projected Employment:	31
Growth Rate, 2016-2026:	10.7%
Annual Openings:	3

Industry	2016 Share	2026 Share
238 Specialty Trade Contractors	n	n
336 Transportation Equipment Manufacturing	n	n
441 Motor Vehicle and Parts Dealers	n	n
484 Truck Transportation	n	n
532 Rental and Leasing Services	n	n
713 Amusement, Gambling, and Recreation	n	n

49-9098 Helpers--Installation, Maintenance, and Repair Workers



Help installation, maintenance, and repair workers in maintenance, parts replacement, and repair of vehicles, industrial machinery, and electrical and electronic equipment. Perform duties, such as furnishing tools, materials, and supplies to other workers; cleaning work area, machines, and tools; and holding materials or tools for other workers. *Examples: Mechanic's Helper; Diver's Helper; Blacksmith's Helper*

Training Category: High School | none | Short OJT

2017 Average Wage:	\$12.95
2016 Estimated Employment:	546
2026 Projected Employment:	609
Growth Rate, 2016-2026:	11.5%
Annual Openings:	78

Industry	2016 Share	2026 Share
238 Specialty Trade Contractors	22.9%	23.3%
811 Repair and Maintenance	20.0%	19.7%
441 Motor Vehicle and Parts Dealers	17.2%	17.4%
713 Amusement, Gambling, and Recreation	4.8%	4.8%
Local Government, Excluding Education	3.7%	3.5%
State Government, excl. Education and Hospitals	3.3%	3.1%

49-9099 Installation, Maintenance, and Repair Workers, All Other



All installation, maintenance, and repair workers and helpers not listed separately. *Examples: Blacksmith; Cooper; Gunsmith*

Training Category: High School | none | Moderate OJT

2017 Average Wage:	\$21.06
2016 Estimated Employment:	476
2026 Projected Employment:	527
Growth Rate, 2016-2026:	10.7%
Annual Openings:	52

Industry	2016 Share	2026 Share
423 Merchant Wholesalers, Durable Goods	18.1%	19.0%
Self-employed Workers	13.9%	13.7%
238 Specialty Trade Contractors	9.2%	9.3%
Federal Government, Excluding Post Office	4.8%	4.4%
531 Real Estate	4.2%	4.0%
5617 Services to Buildings and Dwellings	4.2%	4.2%

51-1011 First-Line Supervisors of Production and Operating Workers



Supervise and coordinate the activities of production and operating workers, such as inspectors, precision workers, machine setters and operators, assemblers, fabricators, and plant and system operators. *Examples: Laundromat Manager; Station Chief; Assembly Line Supervisor*

Training Category: High School | < 5 yrs | none

2017 Average Wage:	\$31.34
2016 Estimated Employment:	3,008
2026 Projected Employment:	3,012
Growth Rate, 2016-2026:	0.1%
Annual Openings:	289

Industry	2016 Share	2026 Share
332 Fabricated Metal Product Manufacturing	14.7%	14.8%
334 Computer and Electronic Product Manufacturing	13.7%	12.6%
326 Plastics and Rubber Products Manufacturing	9.0%	8.6%
333 Machinery Manufacturing	5.8%	6.1%
335 Electrical Equipment and Appliance Manufacturing	5.4%	5.4%
339 Miscellaneous Manufacturing	4.5%	4.2%