

Operating Instructions and Parts Manual Metalworking Dust Collection Stand Model JDCS-505





frick-Tools.com

80 Truman Road
Pella, IA 50219
Phone:1-877-VAN-SANT
E-mail: sales@trick-tools.com



Part No. M-414800 Edition 3 09/2016 Copyright © 2016 JET



1.0 IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precautions should always be followed, including the following:

READ ALL INSTRUCTIONS BEFORE USING THIS DUST COLLECTOR.

WARNING – To reduce the risk of fire, electric shock, or injury:

- Read and understand entire owner's manual before attempting assembly or operation of this dust collector.
- 2. Read and understand the warnings posted on the machine and in this manual.
- Replace warning labels if they become obscured or removed.
- 4. This dust collection stand is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of a dust collector, do not use until proper training and knowledge have been obtained.
- Do not use this dust collection stand for other than its intended use. If used for other purposes, JET disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
- Always wear approved safety glasses/face shield while using this dust collection stand. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses.
- 7. Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
- 8. Wear hearing protection (plugs or muffs) during extended periods of operation.
- CALIFORNIA PROPOSITION 65 WARNING: This product contains chemicals known to the State of California to cause cancer, or birth defects or other reproductive harm.
- This product, when used for welding, cutting, or working with metal, produces fumes, gases, or dusts which contain chemicals known to the State of California to cause birth defects and, in some cases, cancer. (California Health and Safety Code Section 25249.5 et seq.)
- Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.

- Make certain the switch is in the OFF position before connecting the machine to the power supply. Turn off all controls before unplugging.
- Make certain the machine is properly grounded. Connect to a properly grounded outlet only. See Grounding instructions.
- Make all machine adjustments or maintenance with the machine unplugged from the power source.
- 15. Remove adjusting keys and wrenches. Form a habit of checking to see that keys and adjusting wrenches are removed from the machine before turning it on.
- 16. Keep safety guards in place at all times when the machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately after maintenance is complete.
- 17. Check damaged parts. Before further use of the machine, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- 18. Provide for adequate space surrounding work area and non-glare, overhead lighting.
- 19. Keep the floor around the machine clean and free of scrap material, oil and grease.
- 20. Keep visitors a safe distance from the work area. **Keep children away.**
- 21. Make your workshop child proof with padlocks, master switches or by removing starter keys.
- Give your work undivided attention. Looking around, carrying on a conversation and "horseplay" are careless acts that can result in serious injury.
- 23. The dust collection stand is intended for indoor use. To reduce the risk of electric shock, do not use outdoors or on wet surfaces.
- Do not use to pick up anything that is burning or smoking, such as cigarettes, matches or hot ashes.
- 25. Do not use to pick up flammable or combustible liquids such as gasoline, or use in areas where they may be present.
- 26. Do not pull or carry by cord, use cord as a handle, close a door on cord, or pull cord around sharp edges or corners. Do not run dust collector over cord. Keep cord away from heated surfaces.

- 27. Do not use this dust collector with a damaged cord or plug. If the unit is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service center.
- 28. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- 29. Do not use without dust bag and/or filters in place.
- 30. Do not handle plug or machine with wet hands.
- Do not put any objects into the openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
- 32. Do not operate without hose connected to the inlet. Place cap on unused inlet port. Hazardous moving parts inside. Unplug before removing or connecting inlet or inlet guard.

- 33. Use recommended accessories; improper accessories may be hazardous.
- 34. Maintain tools with care. Follow instructions for lubricating and changing accessories.
- 35. Turn off machine and disconnect from power before cleaning. Use a brush or compressed air to remove chips or debris; do not use bare hands.
- Do not leave the machine when it is plugged in.
 Unplug from outlet when not in use and before servicing.
- 37. Do not stand on the machine. Serious injury could occur if the machine tips over.
- 38. The dust collector is intended for industrial use only.

Familiarize yourself with the following safety notices used in this manual:

This means that if precautions are not heeded, it may result in minor injury and/or possible machine damage.

This means that if precautions are not heeded, it may result in serious, or possibly even fatal, injury.

SAVE THESE INSTRUCTIONS

2.0 About this manual

This manual is provided by JET, covering the safe operation and maintenance procedures for a JET Model JDCS-505 Metalworking Dust Collection Stand. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. The dust collector has been designed and constructed to provide consistent, long-term operation if used in accordance with the instructions as set forth in this document.

If there are questions or comments, please contact your local supplier or JET. JET can also be reached at our web site: www.jettools.com.

Retain this manual for future reference. If the machine transfers ownership, the manual should accompany it.

3.0 Table of contents

Section	Page
1.0 IMPORTANT SAFETY INSTRUCTIONS	2
2.0 About this manual	3
3.0 Table of contents	4
4.0 Specifications	5
4.1 Mounting hole dimensions	6
5.0 Setup and assembly	8
5.1 Unpacking and cleanup	
5.2 Shipping contents	8
5.3 Tools required for assembly:	8
5.4 Assembly	8
5.5 Mounting a tool	8
5.6 Adaptor plate (optional)	
6.0 Electrical connections	9
6.1 GROUNDING INSTRUCTIONS	
6.2 Extension cords	9
7.0 Operations	10
7.1 Main switch	10
7.2 Safety Key	10
7.3 Receptacles	
7.4 Fuse replacement	
8.0 User-maintenance	
9.0 Optional accessories	10
10.0 Replacement Parts	
10.1.1 JDCS-505 Grinder Stand – Exploded View	
10.1.2 JDCS-505 Grinder Stand – Parts List	
11.0 Electrical Connections for JDCS-505	
12.0 Warranty and service	15

4.0 Specifications

•	
Model number	JDCS-505
Stock number	414800
Motor and electricals:	
	induction, capacitor run
Horsepower	
	single
	115V
	60Hz
Listed FLA (full load amps)	4.5 A
Starting amps	30A
Running amps (no load)	2.4A
Run capacitor	300VAV, 15µF C/us listed
On/off switch	mushroom style with removable safety key
Motor speed	3450 RPM
Power cord	12 AWG (3.32mm ² , x 3C, 6 ft. (183cm), SJT, UL listed
	5-20P, 125V/20A installed
	glass type, 10A/15A
	115V x 2
Recommended circuit and fuse/breaker size 1	20A
Sound emission ²	75 dB at 9.84 ft./3m
Performance:	
	5 in. (127 mm)
	2
	3in. (76.2 mm)
	90% of 50 micron particles
Maximum static pressure loss (WO)	2.44
Impeller:	
	radial fin
	steel
impelier material	3001
Filter:	
	50 micron, non-woven heat-resistant cotton
Filler emolericy	90 % of 50 micron particles
Collection drawer:	
	2.20 gal (2.70 L)
	12.2 L x 8.66 W x 5.11 D in. (310 x 220 x 130 mm)
wateriai	steel
Main matarials.	
Main materials:	40
	16 ga. steel, 1.6mm thk.
Paint type/finisn	powder coat
Discontinue	
<u>Dimensions:</u>	4551 450141 (000 100)
lop of stand from floor (approximate)	
Overall dimensions, shipping carton	18.1 L x 18.1 W x 39.8 H in. (460 x 460 x 1010 mm)
Overall dimensions, assembled	15 5 L x 15 9 W x 34 25 H in (396 x 406 x 870 mm)

Subject to local/national electrical codes.
 The specified values are emission levels and are not necessarily to be seen as safe operating levels. As workplace conditions vary, this information is intended to allow the user to make a better estimation of the hazards and risks involved only.

<u>Dust ports:</u>	
Main dust port, outside diameter	5 in. (127 mm)
Inlet adaptor ports, outside diameter	two at 3 in. (76.2 mm)
Weights:	
Net weight	
Shipping weight	110 lb. (50 kg)

The specifications in this manual were current at time of publication, but because of our policy of continuous improvement, JET reserves the right to change specifications at any time and without prior notice, without incurring obligations.

4.1 Mounting hole dimensions

4.1.1 Dust collection stand

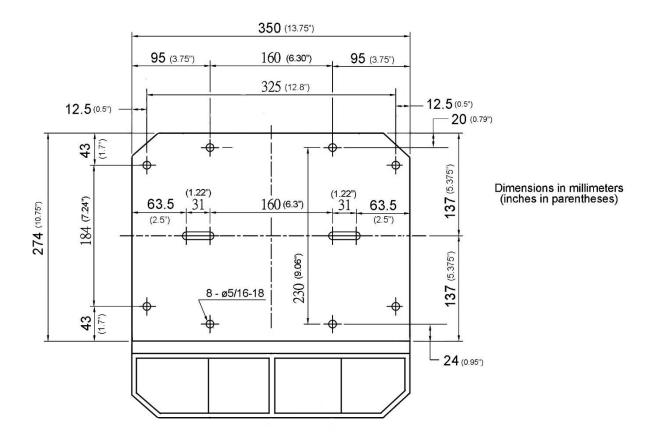


Figure 1: Hole pattern on dust collection stand

4.1.2 Adaptor plate (optional accessory #414830)

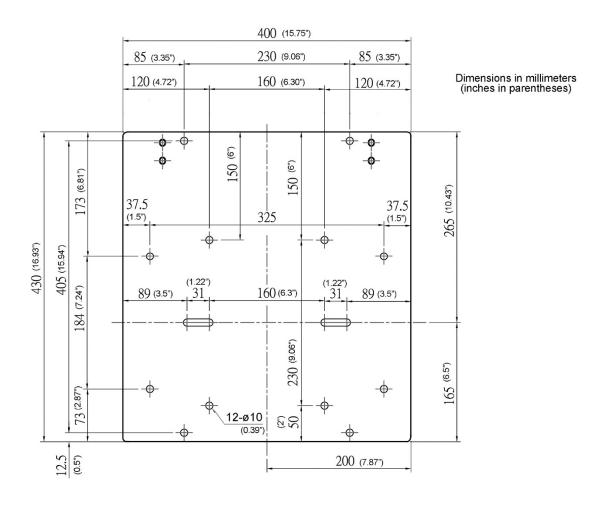


Figure 2: Hole pattern on adaptor plate (OPTIONAL ACCESSORY p/n 414830)

AWARNING Read and understand the entire contents of this manual before attempting assembly or operation. Failure to comply may cause serious injury.

5.0 Setup and assembly

5.1 Unpacking and cleanup

Remove all contents from shipping carton, and remove accessories from drawer inside stand. Compare parts to the contents list in this manual. If shipping damage or any part shortages are identified, contact your distributor. Do not discard carton or packing material until dust collector is assembled and running satisfactorily.

5.2 Shipping contents

Carton contents (see Figure 2)

- 1 Grinder stand
- 2 Water trays (L and R)
- 1 Inlet adaptor assembly
- 4 Foot pads
- 1 Open end wrench 10/12 mm

5.3 Tools required for assembly:

10/12mm wrench - provided

5.4 Assembly

- Install foot pads beneath corners of stand. Rotate pads to adjust height at each corner until stand is level.
- 2. Install inlet adaptor onto dust port and secure with screw (A, Figure 3).

installed before plugging in or operating dust collector.

Place water trays (left and right version) into the recesses on front of stand.

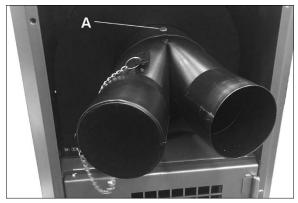


Figure 3

5.5 Mounting a tool

Position tool, such as grinder or sander (not provided) atop stand and secure with fasteners through the hole/slot pattern. Connect 3-inch dust hose (optional accessory) to inlet adaptor port and tool, and secure with hose clamps.

IMPORTANT: An inlet port that is not used during operation should be capped. An open port will diminish the efficiency of the dust collector and may present a safety hazard.

5.6 Adaptor plate (optional)

An adaptor plate kit (optional accessory, p/n #414830) is available, and will accept tools with different mounting hole patterns.

To install adaptor plate kit:

- Install left and right supports (A, Figure 13) to stand with 1/4 in. screws.
- Install adaptor plate (B) to supports with 1/4 in. screws, and secure to top of stand with 5/16 in. screws.
- 3. Mount tool to adaptor plate, and secure with appropriate fasteners.

Table 1 shows JET machines that will mount to either the stand or the adaptor plate.

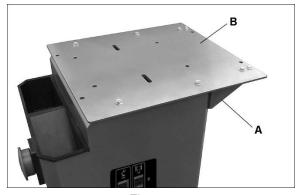


Figure 4

JET Tool	stock no.	mounts to:
IBG-8 Grinder*	578008	Stand
IBG-10 Grinder*	578010	Stand
JBG-6A Grinder	577101	Stand
JBG-8A Grinder	577102	Stand
JBG-10A Grinder	577103	Stand

*Connect IBG Bench grinders to stand using 414811 hose and 414825 reducer.

Table 1

6.0 Electrical connections

AWARNING All electrical connections must be done by a qualified electrician in compliance with all local codes and ordinances. Failure to comply may result in serious injury.

This appliance is rated more than 15 Amp. The dust collection stand comes with a plug designed for use on a circuit with a *grounded outlet* that looks like the one pictured in Figure 5.

IMPORTANT: Due to high starting current demands, it is not recommended to use this plug for belt style grinders.

Keep in mind that a circuit being used by other machines, tools, lights, heaters, etc., at the same time will add to the electrical load. A dedicated circuit to the dust collection stand will offer best results since dust collectors are generally used while other tools are running.

Before connecting to power source, be sure switch is in *off* position.

It is recommended that the dust collection stand be connected to a dedicated 20 amp circuit with circuit breaker or fuse. If connected to a circuit protected by fuses, use time delay fuse marked "D". Local codes take precedence over recommendations.

6.1 GROUNDING INSTRUCTIONS

This appliance must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

AWARNING Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance – if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.

Repair or replace damaged or worn cord immediately.

This appliance is rated more than 15 A and is for use on a circuit having a nominal rating of 120 V. It is factory-equipped with a specific electric cord and plug to permit connection to a proper electric circuit. Make sure that the appliance is connected to an outlet having the same configuration as the plug. No adaptor should be used with this appliance. If the appliance must be reconnected for use on a different type of electric circuit, the reconnection should be made by qualified service personnel.

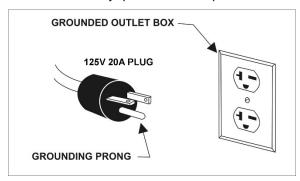


Figure 5

6.2 Extension cords

The use of extension cords is discouraged; try to position machines near the power source. If an extension cord is necessary, make sure it is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table 2 shows correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

Amp F	Rating	Volts	Total length of cord in feet		in feet	
More	Not More	120 240	25 50	50 100	100 200	150 300
Than Than			AWG			
0	6		18	16	16	14
6	10		18	16	14	12
10	12		16	16	14	12
12	16		14	12	Not Recomi	mended

Table 2: Extension cord recommendations

7.0 Operations

7.1 Main switch

Pull out on switch (A, Figure 6) to start machine. Green power indicator lamp (B) will illuminate.

Push switch in to stop machine. (Power indicator lamp will turn off.)

7.2 Safety Key

The safety key (C, Figure 6) prevents unauthorized use of machine. Remove key to deactivate switch. Key must be reinserted to start machine – press until it snaps back in.

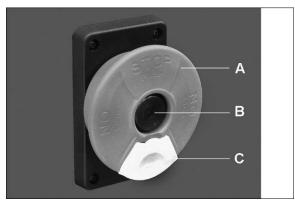


Figure 6

7.3 Receptacles

Two 115-volt receptacles are installed on side of stand for connecting tools, such as a grinder and work lamp.

IMPORTANT: The receptacles are always live when power is connected, not just when dust collector is running.

Maximum total amperage draw of each receptacle is 15-amp, as marked on the adjoining label. **CAUTION: Do not exceed 15 amps total.**

If a receptacle should fail to work, inspect the 15amp fuse – replace if needed. (The 10-amp fuse is for dust collector operation.) Make sure to install correct fuse in its proper location.

7.4 Fuse replacement

AWARNING Disconnect dust collection stand from power before changing fuses.

To inspect or replace a fuse:

- Rotate fuse seat (D, Figure 7) counterclockwise and remove from socket.
- If fuse is bad, pull it out of seat. Push new fuse into seat.
- Reinstall fuse seat by pushing in and rotating clockwise.



Figure 7

8.0 User-maintenance

Always disconnect power to the machine before performing maintenance. Failure to do this may result in serious personal injury.

Keep dust collection stand clean. Brush away chips and debris after use.

Periodically empty collection drawer and clean out interior of dust collector stand.

Replace filter after maximum 800 hours of use.

Inspect power cord; have damaged or worn cord replaced before operating dust collector.

Any other servicing should be performed by an authorized service representative.

9.0 Optional accessories

The following accessories are available for the JDCS-505 Dust Collection Stand, and are ordered separately.

414830 Adaptor Plate Kit

414815 Reducer, 3 in. to 1.5 in.

414820 Reducer, 3 in. to 2 in.

414825 Reducer, 3 in. to 2.5 in.

414811 0.6M Hose, Heat Resistant, ø2.5 x 24.4 in.

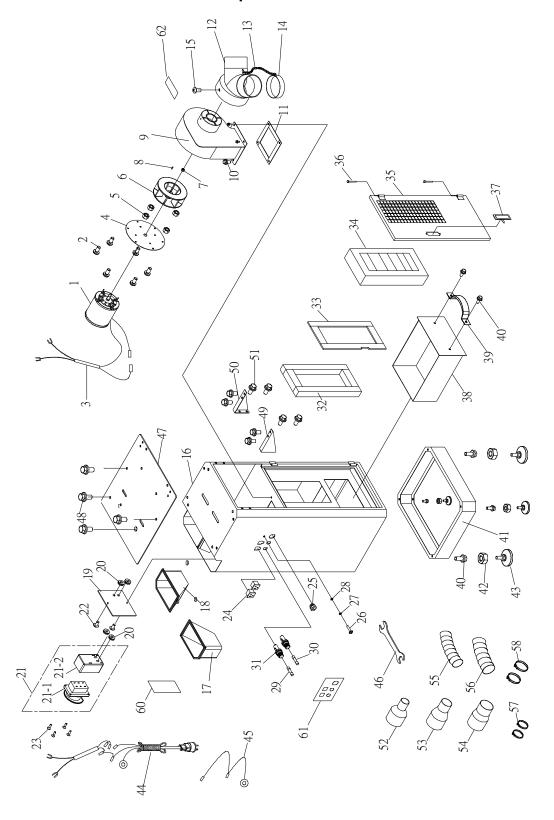
414812 0.6M Hose, Heat Resistant, ø2 x 24.4 in.

414813 0.6M Hose, Heat Resistant, Ø3 x 24.4 in.

10.0 Replacement Parts

To order parts or reach our service department, call 1-800-274-6848 Monday through Friday, 8:00 a.m. to 5:00 p.m. CST. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

10.1.1 JDCS-505 Grinder Stand - Exploded View



10.1.2 JDCS-505 Grinder Stand – Parts List

Index No		Description	Size	Qty
1	.JDCS505-01	. Motor	1/2 HP	1
	.JDCS505-RC	. Run Capacitor (not shown)	300VAC 15μF	1
2	.F000299	. Phillips Pan Head Screw	1/4 x 1/2 in	6
3	.JDCS505-03	. Motor Cord		1
		. Motor Plate		
5	.F001692	. Lock Nut	M4	4
		. Impeller		
		. Lock Nut		
		. Key		
		. Impeller Housing		
		. Hex Flange Screw		
		. Gasket		
		. Inlet Adaptor Assembly (includes #12,13,14)		
		. Inlet Adaptor		
		. Chain		
		. End Cap		
		. Hex Cap Bolt		
		. Main Body		
		Right Tray		
		. Left Tray		
		. Plate		
		. Bushing		
		. Switch Assembly (includes # 21-1, 21-2, 21-3)		
		. Switch Base		
		. Switch Cover		
		Safety Key (not shown)		
21-0	E000652	. Phillips Flange Head Screw	2/16 v 2/9 in	1
		. Phillips Head Sheet Metal Screw		
		. Receptacle		
		. Strain Relief		
		. Phillips Pan Head Screw		
		. Lock Washer External Tooth		
		. Hex Nut		
		. Fuse		
		. Fuse15A 2		
		Fuse Seat		
		. Fuse Cap (not shown)		
		Foam Strip		
		Foam Strip		
		. Filter		
35	.JDCS505-35	. Door		1
		. Bolt		
		. Door Latch		
		. Drawer		
		. Handle		
		. Hex Flange Screw		
		. Base		
		. Hex Nut		
		. Foot Pad		
		. Power Cord		
45	.JDCS505-45	. Ground Wire		1
		. Open-end Wrench		
		. JET Logo with Adhesive (not shown)		
		. ID/Warning Label, JDCS-505		
		. Caution Label – Receptacles		
62	.LM000085	. Caution Label – Adaptor		1

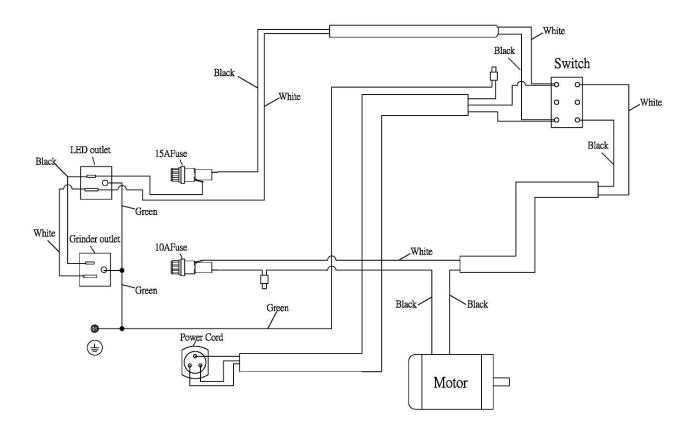
Optional parts:

414830	. Adaptor Plate Kit * (incl. #47 thru 51)		1
	. Adaptor Plate *		
48F012439	. Hex Flange Screw *	5/16 x 1/2 in	4
49JDCS505-49	. Left Support *		1
50JDCS505-50	. Right Support *		1
51F012430	. Hex Flange Screw *	1/4 x 1/2 in	8
52414815	. Reducer *	3 to 1.5 in	1
	. Reducer *		
54414825	. Reducer *	3 to 2.5 in	1
55414812	. 0.6M Hose, Heat Resistant *	Ø2 x 24.4 in	1
	. 0.6M Hose, Heat Resistant *		
57605417	. Wire Hose Clamp *	Ø2 in	2
	. Wire Hose Clamp *		
	. 0.6M Hose, Heat Resistant * (not shown)		

Parts with asterisk (*) are optional and ordered separately.

Some parts may be shown for reference only, and not available individually.

11.0 Electrical Connections for JDCS-505



12.0 Warranty and service

JET warrants every product it sells against manufacturers' defects. If one of our tools needs service or repair, please contact Technical Service by calling 1-800-274-6846, 8AM to 5PM CST, Monday through Friday.

Warranty Period

The general warranty lasts for the time period specified in the literature included with your product or on the official JET branded website.

- JET products carry a limited warranty which varies in duration based upon the product. (See chart below)
- Accessories carry a limited warranty of one year from the date of receipt.
- Consumable items are defined as expendable parts or accessories expected to become inoperable within a reasonable amount of use and are covered by a 90 day limited warranty against manufacturer's defects.

Who is Covered

This warranty covers only the initial purchaser of the product from the date of delivery.

What is Covered

This warranty covers any defects in workmanship or materials subject to the limitations stated below. This warranty does not cover failures due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair, alterations or lack of maintenance. JET woodworking machinery is designed to be used with Wood. Use of these machines in the processing of metal, plastics, or other materials outside recommended guidelines may void the warranty. The exceptions are acrylics and other natural items that are made specifically for wood turning.

Warranty Limitations

Woodworking products with a Five Year Warranty that are used for commercial or industrial purposes default to a Two Year Warranty. Please contact Technical Service at 1-800-274-6846 for further clarification.

How to Get Technical Support

Please contact Technical Service by calling 1-800-274-6846. Please note that you will be asked to provide proof of initial purchase when calling. If a product requires further inspection, the Technical Service representative will explain and assist with any additional action needed. JET has Authorized Service Centers located throughout the United States. For the name of an Authorized Service Center in your area call 1-800-274-6846 or use the Service Center Locator on the JET website.

More Information

JET is constantly adding new products. For complete, up-to-date product information, check with your local distributor or visit the JET website.

How State Law Applies

This warranty gives you specific legal rights, subject to applicable state law.

Limitations on This Warranty

JET LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. JET SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

JET sells through distributors only. The specifications listed in JET printed materials and on official JET website are given as general information and are not binding. JET reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever. JET® branded products are not sold in Canada by JPW Industries, Inc.

Product Listing with Warranty Period

90 Days - Parts; Consumable items

1 Year - Motors; Machine Accessories

2 Year – Metalworking Machinery; Electric Hoists, Electric Hoist Accessories; Woodworking Machinery used for industrial or commercial purposes

5 Year – Woodworking Machinery

Limited Lifetime – JET Parallel clamps; VOLT Series Electric Hoists; Manual Hoists; Manual Hoist Accessories; Shop Tools; Warehouse & Dock products; Hand Tools; Air Tools

NOTE: JET is a division of JPW Industries, Inc. References in this document to JET also apply to JPW Industries, Inc., or any of its successors in interest to the JET brand.