PALMGREN®

1490 CFM
Dust Collector

Read carefully and follow all safety rules and operating instructions before first use of this product.

964328604 - 0224

GETTING STARTED

DESCRIPTION

The Palmgren Dust Collector is designed to remove and collect wood dust and wood chips from woodworking machinery. Lower polypropylene bag collects dust and chips while upper cloth bag filters fine dust. Lower bag design makes disposal of dust and chips easy. Collector features 4" intake hose and casters on base for mobility.

STRUCTURAL REQUIREMENTS

Make sure all supporting structures and load attaching devices are strong enough to hold your intended loads. If in doubt, consult a qualified structural engineer.

ELECTRICAL REQUIREMENTS

The power supply to the Dust Collector needs to be 120 volt, 12.6 amp, 60 Hz. The standard allowable voltage variation is plus or minus 10%.

TOOLS NEEDED

Standard mechanic's hand tool set.

UNPACKING

WARNING: Be careful not to touch overhead power lines, piping, lighting, etc. if lifting equipment is used. Dust Collector weighs approximately 101 lbs, proper tools, equipment and qualified personnel should be employed in all phases of unpacking and installation.

Carton should be handled with care to avoid damage from dropping, bumping, etc. Store and unpack carton with correct side up. After unpacking Dust Collector, inspect carefully for any damage that may have occurred during transit. Check for loose, missing or damaged parts. If any damage or loss has occurred, claim must be filed with carrier immediately. Check for completeness. Immediately report missing parts to dealer.

CONTENTS

- Main Base Plate Assembly (1)
- Collector Assembly (1)
- Main On-Board hose (1)
- Motor/Fan Assembly (1)
- Collector Support (3)
- Upper Bag Support (1)
- Double Inlet Adaptor (1)
- Caster (4)
- Motor Support Bracket (1)
- Main Fan Assembly Outlet (1)
- Main Fan Assembly Outlet Seal (1)
- Large Pipe Clips (2)
- Small Pipe Clips (2)
- Filter/Collection Bag Retaining Straps (2)
- Caster Fixing Kit (4 Sets)
- Main Assembly Fixing Kit (1 Set)
- Operating Instructions & Parts Manual (1)

UNPACK

Do not discard packing materials until after Dust Collector has been inspected for damage and completeness. Locate loose parts and set aside.

INSPECT

After unpacking the unit, carefully inspect for any damage that may have occurred during transit. Check for loose, missing or damaged parts. Shipping damage claims must be filed with the carrier.

All tools should be visually inspected before use, in addition to regular periodic maintenance inspections.

Be sure that the voltage labeled on the unit matches your power supply.

SAFETY RULES

WARNING: For your own safety, read all of the instructions and precautions before operating tool.

PROPOSITION 65 WARNING: Some dust created by using power tools contain chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks and cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area and work with approved safety equipment. Always wear **OSHA/NIOSH** approved, properly fitting face mask or respirator when using such tools.

WARNING: Always follow proper operating procedures as defined in this manual even if you are familiar with the use of this or similar tools. Remember that being careless for even a fraction of a second can result in severe personal injury.

BE PREPARED FOR JOB

- Wear proper apparel. Do not wear loose clothing, gloves, neckties, rings, bracelets or other jewelry which may get caught in moving parts of machine.
- Wear protective hair covering to contain long hair.
- Wear safety shoes with non-slip soles.
- Wear safety glasses complying with United States ANSI Z87.1. Everyday glasses have only impact resistant lenses. They are **NOT** safety glasses.
- Wear face mask or dust mask if operation is dusty.
- Be alert and think clearly. Never operate power tools when tired, intoxicated or when taking medications that cause drowsiness.

PREPARE WORK AREA FOR JOB

- Keep work area clean. Cluttered work areas invite accidents.
- Do not use power tools in dangerous environments. Do not use power tools in damp or wet locations. Do not expose power tools to rain.
- Work area should be properly lighted.
- Proper electrical receptacle should be available for tool. Three-prong plug should be plugged directly into properly grounded, three-prong receptacle.
- Extension cords should have a grounding prong and the three wires of the extension cord should be of the correct gauge.
- Keep visitors at a safe distance from work area.
- Keep children out of workplace. Make workshop childproof. Use padlocks, master switches or remove switch keys to prevent any unintentional use of power tools.

SAFETY RULES (CONTINUED)

TOOL SHOULD BE MAINTAINED

- Always unplug tool prior to inspection.
- Consult manual for specific maintaining and adjusting procedures.
- Keep tool lubricated and clean for safest operation.
- Remove adjusting tools. Form habit of checking to see that adjusting tools are removed before switching machine on.
- Keep all parts in working order. Check to determine that the guard or other parts will operate properly and perform their intended function.
- Check for damaged parts. Check for alignment of moving parts, binding, breakage, mounting and any other condition that may affect a tool's operation.
- A guard or other part that is damaged should be properly repaired or replaced. Do not perform makeshift repairs. (Use parts list provided to order repair parts.)

KNOW HOW TO USE TOOL

- Use right tool for job. Do not force tool or attachment to do a job for which it was not designed.
- Disconnect tool when changing the blade.
- Avoid accidental start-up. Make sure that the tool is in the OFF position before plugging in.
- Do not force tool. It will work most efficiently at the rate for which it was designed.
- Leave hands free to operate machine. Protect hands from possible injury.
- Never leave tool running unattended. Turn the power off and do not leave tool until it comes to a complete stop.
- Do not overreach. Keep proper footing and balance.
- Never stand on tool. Serious injury could occur if tool is tipped or if blade is unintentionally contacted.
- Keeps hands away from moving parts.
- Know your tool. Learn the tool's operation, application and specific limitations.

WARNING: The operation of any power tool can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear safety goggles complying with United States ANSI Z87.1 before commencing power tool operation.

CAUTION: Think safety! Safety is a combination of operator common sense and alertness at all times when tool is being used.

SPECIFICATIONS

Motor	2 HP, 3450 RPM, 120 VAC, 12.6 A
Air flow rate	1490 CFM
Maximum static pressure	10.8″ of water
Sound level	80 dB
Inlet	4″
Collector bag capacity	40 gal.
Weight	101 lbs.
Overall size	36″ x 27″ x 76″

ASSEMBLY

CAUTION: Do not attempt assembly if parts are missing. Use this manual to order repair parts.

GETTING TO KNOW YOUR DUST EXTRACTOR

Refer to Figure 1.

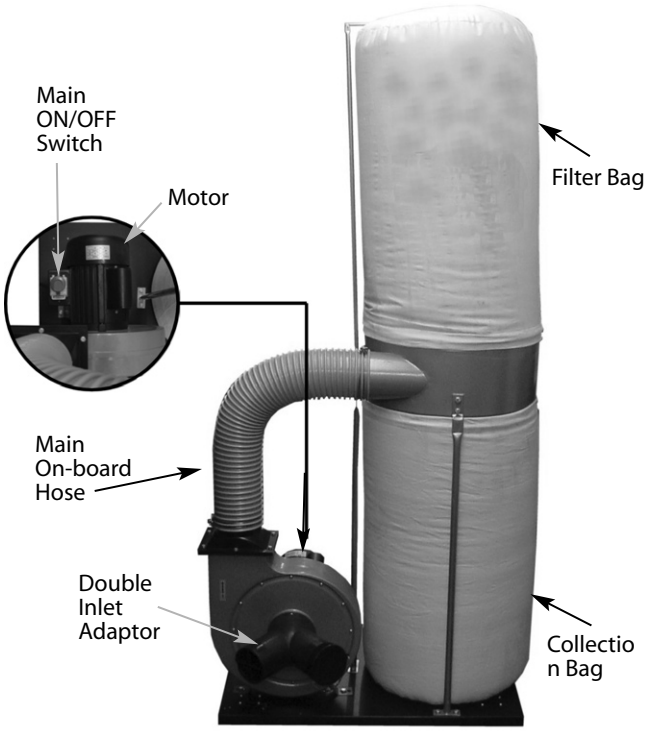

Figure 1 - Know your dust collector.

BASE PLATE LAYOUT GUIDE

Refer to Figures 2 and 16.

This is a brief guide to where the separate components should be attached to the base plate (Ref. No. 3) (as viewed from above).

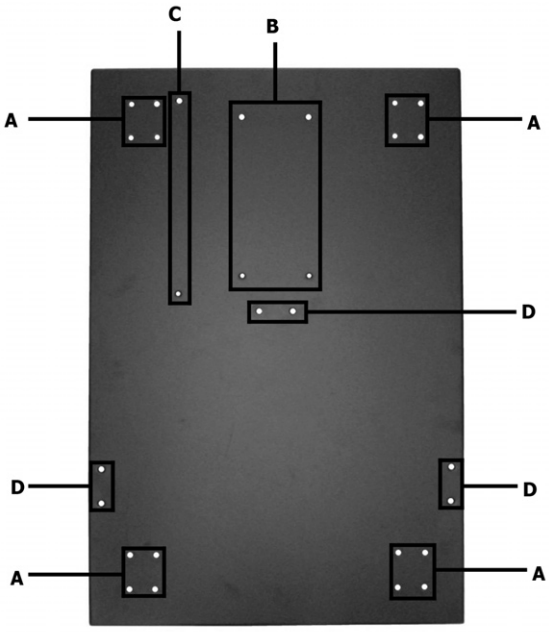

Figure 2 - Layout guide to main base plate assembly.

ASSEMBLY (CONTINUED)

A. These holes are for fitting the 4 casters (Ref. No. 1).
B. These holes are for fitting the motor support bracket (Ref. No 5).
C. These holes are for fitting the bracket of the motor/fan assembly (Ref. No. 8).
D. These holes are for fitting the 3 collector supports (Ref. No. 14).

FITTING THE CASTERS

Refer to Figures 2, 3 and 16.

1. Locate the holes (Ref. A) for mounting the casters (Ref. No. 1) onto the base plate (Ref. No. 3). There are 4 at each corner.
2. Line up the holes on the casters with those on the base plate.
3. Use the 4 x cross head screws, washers and nuts (Ref. Nos. 23, 16 and 19) to secure the 4 x casters.

NOTE: The 2 x strengthening braces (Fig. 3) should be on the bottom of the completed assembly.

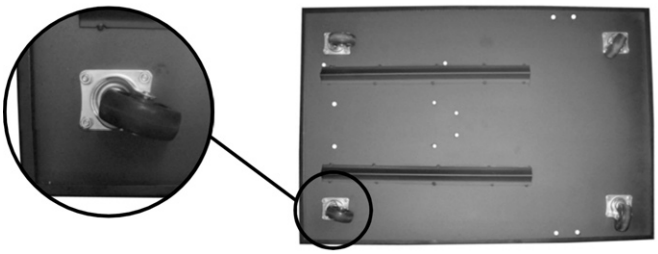

Figure 3 - Fitting casters to baseplate.

FITTING THE MOTOR SUPPORT BRACKET

Refer to Figures 2, 4 and 16.

1. Locate the holes (Ref. B) for mounting the motor support bracket (Ref. No. 5).
2. Line up the holes on the bracket with those located on the base plate (Ref. No. 3).
3. Secure with 4 x M8 x 16 bolts and washers (Ref. Nos. 6 and 4.)

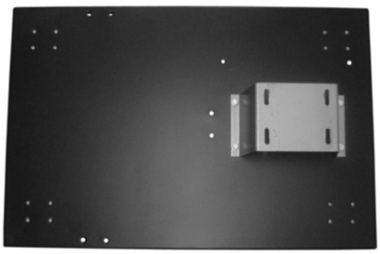

Figure 4 - Fitting motor support bracket to base plate.

FITTING THE MOTOR/FAN ASSEMBLY

Refer to Figures 2, 5 and 16.

CAUTION: Due to the weight of the motor/fan assembly, this operation should be carried out by at least 2 persons to reduce the risk of injury.

1. Locate the holes (Fig. 2, Ref. C) for mounting the motor/fan assembly (Ref. No. 8) onto the base plate (Ref. No. 3).
2. Place the motor/fan assembly onto the base plate. Use the motor support bracket (Ref. No. 5) to take the weight of the motor.
3. Line up the holes on the motor/fan assembly with the holes on the base plate, as well as the holes on the motor with the holes on the motor support bracket.
4. Secure the fan/motor assembly to the base plate with 2 x M8 x 16 bolts and washers (Ref. No. 6 and 4).
5. Secure the motor to the motor support bracket with 4 x M8 x 25 bolts, 8 x washers (1 above and 1 below) and 4 x M8 nuts No. 12, 4 and 2).

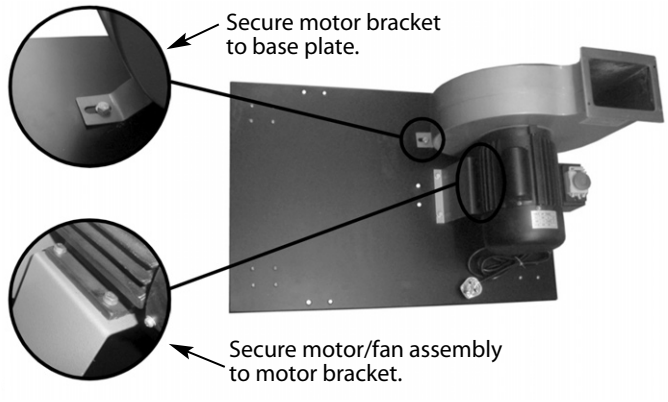

Figure 5 - Fitting motor/fan assembly.

FITTING THE MAIN FAN ASSEMBLY OUTLET

Refer to Figures 6, 7 and 16.

1. Fit the main fan assembly outlet seal (Ref. No. 29) over the fan assembly outlet, ensuring that the holes on the seal line up with the holes on the outlet.

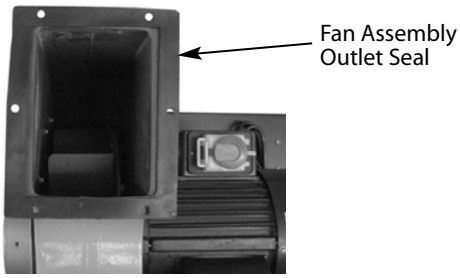

Figure 6 - Fan assembly outlet seal.

2. Fit the main fan assembly outlet (Ref. No. 30) over the seal.
3. Secure it in place with 6 x M6 x 20 bolts, 12 x washers (one above and one below) and 6 x nuts (Ref. Nos. 15, 16 and 19).

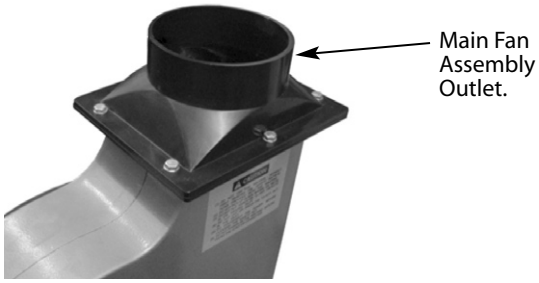

Figure 7 - Main fan assembly outlet.

ASSEMBLY (CONTINUED)

FITTING THE COLLECTOR SUPPORTS

Refer to Figures 2, 8 and 16.

1. Locate the holes (D) on the base plate (Ref. No. 3) where the collector supports (Ref. No. 14) are to be fitted.
2. Line up the holes on the collector supports with those on the base plate.
3. Secure the collector supports with 2 x M8 x 16 bolts and 2 x washers (each) (Ref. Nos. 6 and 4).

NOTE: Ensure that the supports are fitted with the bracket at the top stepping inwards, this will allow for the collector assembly (Ref. No. 33) to be fitted correctly. Refer to Figure 8.

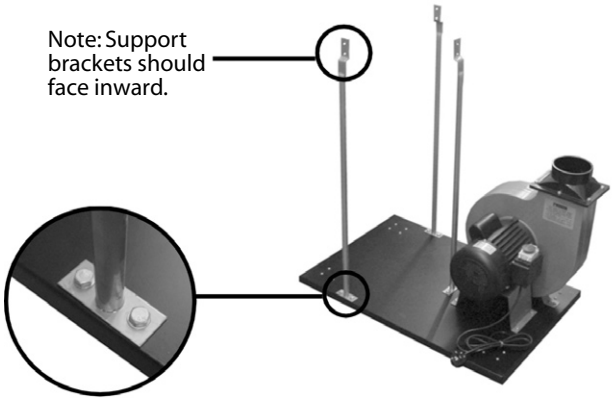

Figure 8 - Fitting collector supports.

FITTING THE COLLECTOR ASSEMBLY

Refer to Figures 8, 9, 10 and 16.

1. Set the collector assembly (Ref. No. 33) inside the collector supports (Ref. No. 14).

NOTE: Ensure the inlet of the collector assembly faces towards the motor and that the angled section inside the collector faces upwards. Refer to Figure 9.

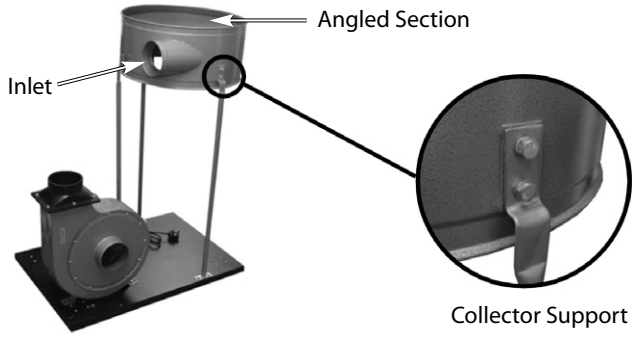

Figure 9 - Fitting collector assembly.

2. Line up the holes on the supports with those on the collector assembly.
3. Secure the 2 side supports to the collector assembly with 2 x M8 x 16 bolts and washers (each) (Ref. No. 6 and 4).

NOTE: The fixing point of the 3rd support is also used to connect the upper bag support (Ref. No. 13).

4. Line up the holes on the upper bag support with those on the collector and collector support.
5. Secure with 2 x M8 x 16 bolts and washers.

NOTE: The fixing point of the 3rd support is also used to connect the upper bag support.

6. Line up the holes on the upper bag support with those on the collector and collector support.
7. Secure with 2 x M8 x 16 bolts and washers.

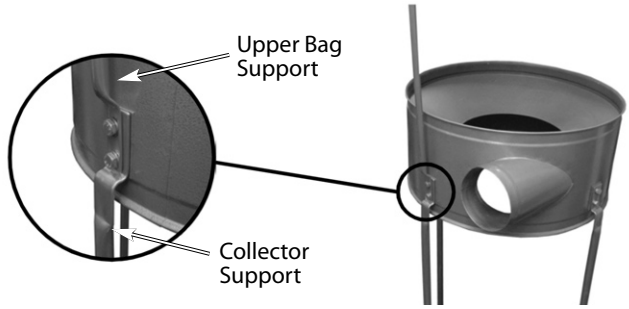

Figure 10 - Fitting collector assembly.

FITTING THE ON-BOARD HOSE

Refer to Figure 11 and 16..

1. Slide the 2 x hose clamps (1 at each end) (Ref. No. 31) over the main on-board hose (Ref. No. 32).
2. Slide one end of the hose over the main fan assembly outlet (Ref. No. 30) and the other end over the inlet of the collector assembly (Ref. No. 33).
3. Tighten both hose clamps to secure.

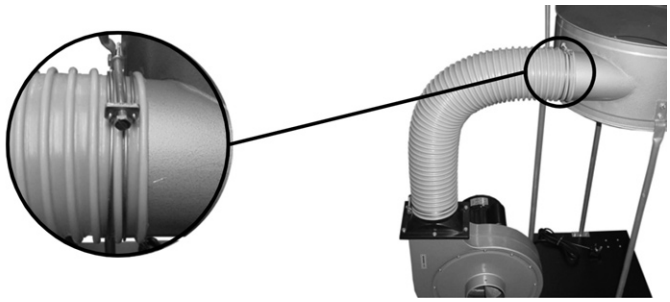

Figure 11 - Fitting on-board hose.

ASSEMBLY (CONTINUED)

FITTING THE DOUBLE INLET ADAPTOR

Refer to Figures 12, 13, 14 and 16.

1. To fit the double inlet adaptor (Ref. No. 24), simply slide it over the main inlet of the motor/fan assembly (Ref. No. 8).
2. Line up the securing hole on the double inlet adaptor with the hole on the main inlet.
3. Secure with the screw provided.

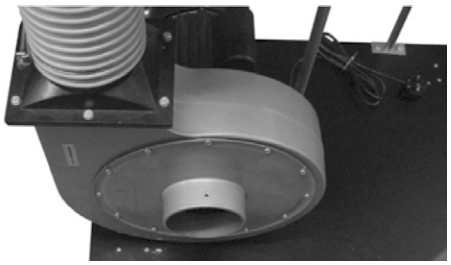

Figure 12 - Main inlet.

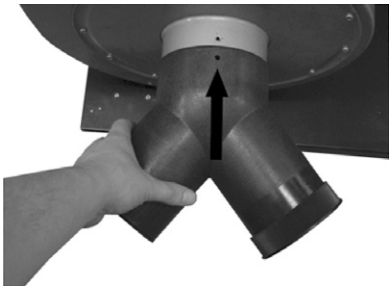

Figure 13- Slide double inlet adapter over main inlet.

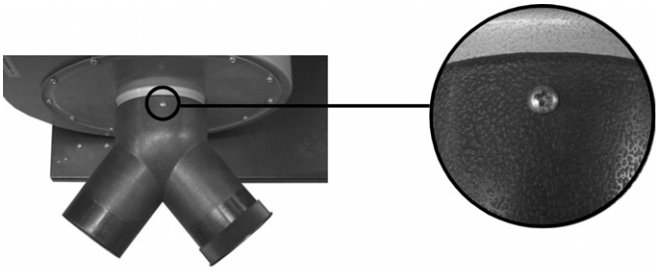

Figure 14 - Secure with screw.

INSTALLATION

WARNING: Do not permit fingers to touch terminals of plug when installing or removing the plug to or from the outlet.

WARNING: Do not connect to power source until unit is completely assembled.

POWER SOURCE

- Motor is designed for operation on the voltage and frequency specified on motor nameplate.
- Normal loads will be handled safely on voltages not more than 10% above or below the specified voltage.
- Running unit on voltages not within range may cause overheating and motor burnout.

GROUNDING INSTRUCTIONS

Refer to Figure 15.

- This tool is equipped with a 3-conductor cord.
- Do not remove or alter grounding prong in any manner. In the event of malfunction or breakdown, grounding provides path of least resistance for electrical current to reduce risk of electrical shock.
- Plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

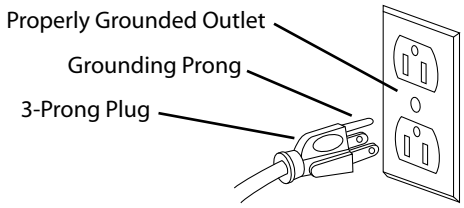

Figure 15 – Properly grounded outlet.

- The conductor with insulation having an outer surface which is green is equipment grounding conductor. If repair or replacement is necessary, make sure equipment grounding conductor is not connected to line terminal.
- If power cord is worn, cut or damaged in any way, have it replaced immediately.

CAUTION: Improper connection of the equipment-grounding conductor can result in a risk of electrical shock.

EXTENSION CORDS

Use proper extension cord. Make sure your extension cord 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 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

Extension Cord Table

		Volts	Total Length of Cord in Feet			
Ampere Rating		120	25	50	100	150
More Than	Not More Than	240	50	100	150	300
			Minimum Gage for Cord			
0	6		18	16	16	14
6	10		18	16	14	12
10	12		16	16	14	12
12	16		14	12	Not Recommended	

NOTE: Using extension cords over 25 ft. long is not recommended.

OPERATION

DUST COLLECTOR

1. Position dust collector near dust producing machine on a flat level surface.
2. Connect collector hose to dust producing machine using hose clamp.
3. Turn dust collector on before starting dust producing machine.

EMPTYING COLLECTOR BAG

WARNING: Turn switch off and remove plug from power source outlet before emptying collector bag.

1. Empty collector bag by lifting bag clamp handle and releasing spring connector from latch. Slide bag away from housing. Dispose of dust properly.
2. Mount collector bag by sliding bag over opening on housing bottom. Position the spring connector into one of the slots on the latch and lock the clamp handle. Make sure collector bag is secure.

MAINTENANCE

WARNING: Turn switch off and remove plug from power source outlet before maintaining your dust collector.

CAUTION: Never use highly volatile solvents. Avoid getting cleaning solution on paint as it may tend to deteriorate these finishes. Use soap and water on painted components.

- Clean motor of dust, chips or other particles. If operation is excessively dusty or dirty, frequent inspection of motor is required. Vacuum any particles that may have entered the motor.
- Replace worn, cut or damaged line cord.
- Replace worn or damaged collector hose.
- Replace worn or damaged filter and collector bags.
- Clean casters as needed to ensure proper operation.
- Frequently check that all nuts, bolts, screws, etc. have not loosened due to collector vibration.

NOTES

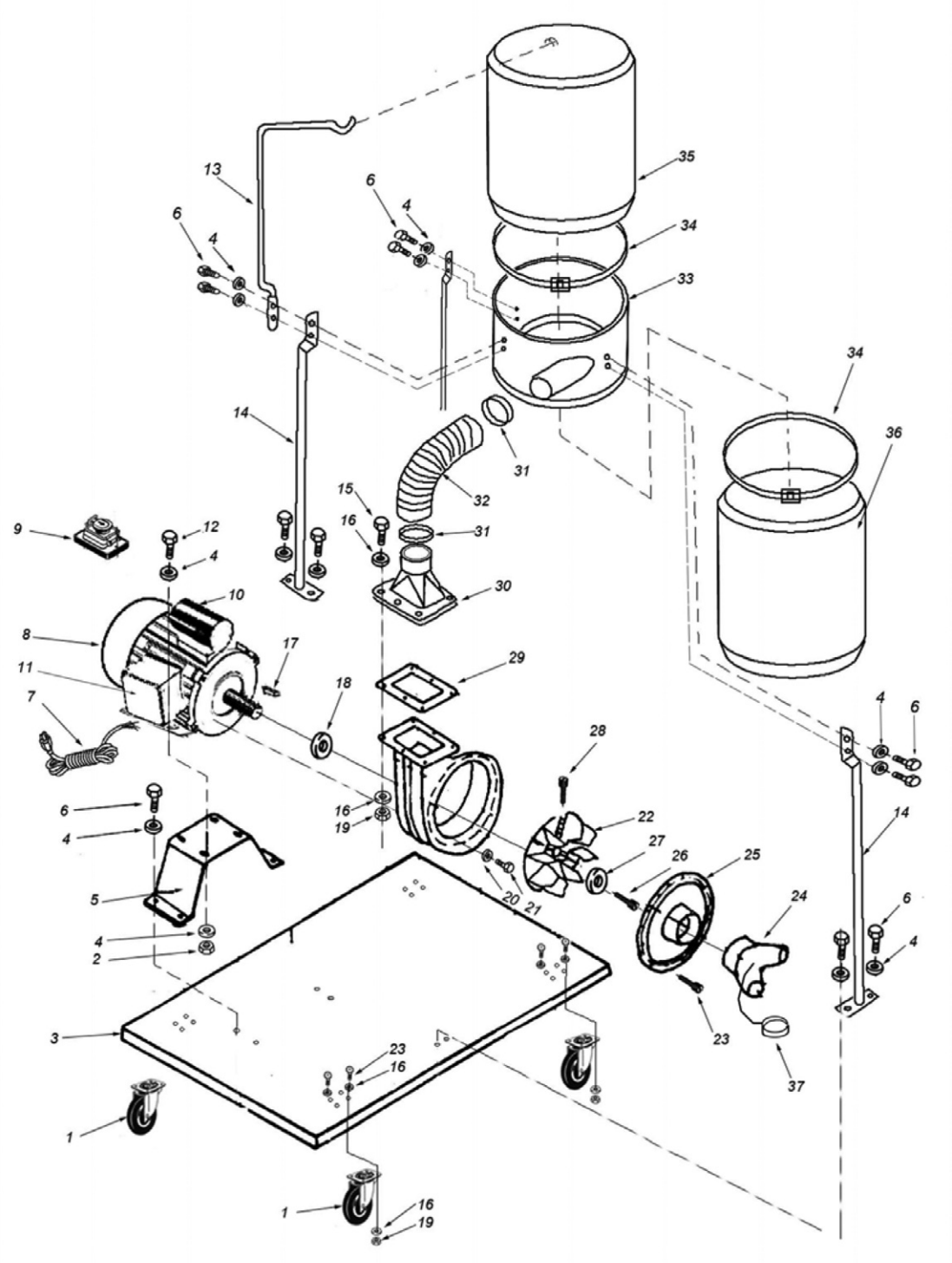

Figure 16 - Replacement parts illustration for 9686010 1490 CFM Dust Collector.

REPLACEMENT PARTS LIST FOR 9686010 1490 CFM DUST COLLECTOR

Ref. No.	Description	Part Number	Qty.
1	Universal Caster	964325001	4
2	Nut M8	*	4
3	Base Plate	964325101	1
4	Washer 8 mm	*	18
5	Motor Support Bracket	964325201	1
6	Bolt M8 x 16	*	4
7	Line Cord	964325301	1
8	Motor w/Key	964325401	1
9	Switch	961608000	1
10	Capacitor	964325601	1
11	Switch Box	964325701	1
12	Bolt M8 x 25	*	4
13	Upper Bag Support	964325801	1
14	Collector Support	964325801	1
15	Bolt M6 x 20	*	6
16	Washer 6 mm	*	12
17	Key	N/A	1
18	Bushing	964325901	1
19	Nut M6	*	6
20	Washer	*	6
21	Screw Hex	*	6
22	Turbo Fan	9643260.01	1
23	Screw M6	*	6
24	Double Inlet Adaptor	964326101	1
25	Inlet Cover	964326201	1
26	Screw Hex	*	1
27	Washer	*	1
28	Screw Hex	*	1
29	Main Fan Assembly Outlet Seal	964326301	1
30	Main Fan Assembly Outlet	964326401	1
31	Hose Clamp	964326501	2
32	Main On-board Hose	964326601	1
33	Collector Assembly	964326701	1
34	Bag Clamp	964326801	1
35	Filter Bag	964326901	1
36	Collector bag	9686007	1
37	Inlet Adaptor Cover	964327001	1
Δ	Operating Instructions & Parts Manual	964328604	

(Δ) Not shown.
(N/A) Not available as repair part.
(*) Standard hardware item, available locally.

TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Motor will not run	1. Defective plug, cord, switch or motor	1. Check wiring, replace defective parts
	2. Blown fuse or circuit breaker	2. Check fuse or breaker, replace
Excessive dust in air	1. Leaking bag or hose connection	1. Check filter and collector bag connections. Check collector hose connections
	2. Filter or collector bag leaks	2. Dust trapped under bag clamp or collector bag not sealed on flange
Excessive impeller noise	1. Large debris or piece of wood in impeller housing	1. Do not vacuum metal materials. Turn collector off and let debris settle in collector bag
	2. Loose impeller	2. Disconnect collector from power source. Remove connector and tighten impeller
Excessive motor noise	Defective motor	Have motor checked by qualified motor service technician
Motor fails to develop full power or motor stalls	1. Low voltage to collector caused by circuit overload	1. Remove other electric machines or appliances from circuit
	2. Low voltage to collector caused by undersized extension cords	2. Increase wire gauge size of extension cords or shorten extension cords
	3. Low voltage from power source	3. Request voltage check from power company
Motor slow to start or fails to reach full speed	1. Burned or defective motor	1. Check motor, replace if necessary
	2. Defective motor capacitor switch	2. Check switch, replace if necessary
Motor overheats	1. Motor overload	1. Reduce load by slowing dust production
	2. Improper motor cooling	2. Clean sawdust from motor
Tripping circuit breaker or fuses	1. Motor overloaded	1. Reduce load by slowing dust production
	2. Improper capacity of circuit breaker or fuses	2. Use proper capacity circuit breaker or fuse

NOTES

PALMGREN WARRANTY

C.H. Hanson / Palmgren warrants their products to be free of defects in material or workmanship. This warranty does not cover defects due directly or indirectly to misuse, abuse, normal wear and tear, failure to properly maintain the product, heated, ground or otherwise altered, or used for a purpose other than that for which is was intended.

The warranty does not cover expendable and/or wear part (i.e. v-belts, screws, abrasives, jaws), damage to tools arising from alteration, abuse or use other than their intended purpose, packing and freight. The duration of this warranty is expressly limited to the terms noted below beginning from the date of delivery to the original user.

The Palmgren branded items carry the following warranties on parts:

All arbor presses, vises, clamps, positioning tables, tombstones, jack screws and vise accessories - LIFETIME.

All bench grinders, drill presses, tapping machines, band saws, lathes, milling machines, abrasive finishing machines and work stands - 3 YEARS.

The obligation of C.H. Hanson / Palmgren is limited solely to the repair or replacement, at our option, at its factory or authorized repair agent of any part that should prove inoperable. Purchaser must lubricate and maintain the product under normal operating conditions at all times. Prior to operation become familiar with product and the included materials, i.e. warnings, cautions and manuals.

Failure to follow these instructions will void the warranty.

This warranty is the purchaser's exclusive remedy against C.H. Hanson for any inoperable parts in its product. Under no circumstances is C.H. Hanson liable for any direct, indirect, incidental , special or consequential damages including loss of profits in any way elated to the use or inability to use our products. This warranty gives you specific legal rights which may vary from state to state.

PALMGREN®

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