



**PAVEMENT ROUTER
DUST CONTROL RETROFIT KIT
INSTALLATION INSTRUCTIONS**

PART NUMBER 31549
Revision C

Fill in appropriate fields that apply to this machine

Machine S/N: _____

Engine S/N: _____



MODEL 30 DUST CONTROL ROUTER

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Pavement Router Dust Control Retrofit Kit Installation

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Chapter 1 Introduction

1.0 About This Manual

This manual is supplied with each new Crafcro Pavement Router Dust Control Retrofit Kit. The manual assists your machine operators in the proper installation of the retrofit kit.

Your Crafcro Router and the dust control kit is specially made to give excellent service and save maintenance expense. However, as with all specially engineered equipment, you get best results at minimum cost if you:

Operate your machine as instructed in this manual and the included operations manual.

Maintain your machine regularly as stated in the included operations manual.

1.1 How to use this manual:

This manual is formatted to start each new chapter on the right page. There may be a blank page on the left page if the previous chapter ends on the right page.

If you are viewing this in a digital format (PDF) the following features are available:

1. The Table of Contents, List of Tables, and List of Figures are all hyperlinks, when left mouse clicked on section, table, or figure you will be sent to that page.
2. The blue highlighted text throughout the manual is a hyperlink, when left mouse clicked you will be sent to that page, table, or figure.
3. The panel to the left in the PDF is a bookmarks panel, if you left mouse click on any section/heading in the bookmarks panel you will be sent to that page.

Chapter 2 Safety

2.0 Safety Precautions

For more in-depth safety information, please see Safety Manual (P/N 26221) which comes with the machine. Or contact your nearest authorized CrafcO Distributor at [crafco.com/Distributors](https://www.crafco.com/Distributors).

2.1 General Safety

- CrafcO, Inc. assumes no liability for an accident or injury incurred through improper use of the machine.
- Read this manual thoroughly before kit installation.
- Obey all CAUTION and WARNING signs posted on the machine and included in the kit.
- Make sure an operator fully knows how to operate the machine before using the machine.

2.2 Personal Safety

- Eye and ear protection devices along with a dust mask are required when operating the machine.
- Wear long pants, work gloves and heavy leather boots or shoes.
- When cleaning cracks and joints near moving traffic, always move in a direction away from traffic to protect the operator.
- Never allow fatigued operators to run the machine. Due to the nature of running this machine, the crew leader should rotate operators as they see fit according to their performance.
- Keep hands, feet, and clothing away from all moving parts.

Chapter 2 Safety

2.3 Equipment or Operational Safety


- Do not operate the machine in buildings or work areas that do not have sufficient airflow.
- Always keep a correctly maintained fire extinguisher near the machine and know how to use it.
- Check equipment before every use.
- Do not operate the equipment when fatigued or under the influence of alcohol or drugs.
- Do not modify the equipment.
- Know how to operate the equipment, fully read the manual.
- Avoid the entrance of water into any part of the machine.
- Shut down engine prior to refilling fuel tank.
- Keep hands, feet and clothing away from all moving parts.
- Replace any hoses or belts which show signs of wear, fraying, or splitting. Assure all fittings and joints are tight and no leaks are present.
- Use only approved hoses and replacement parts.
- Tighten all bolts and screws every 100 hours of machine operation.
- Never attempt to make repairs to the equipment when the engine is running.
- Never operate the machine without belt guards in place.
- Never transport the machine with the engine running.
- Never exceed maximum recommended engine RPM.
- Never leave the machine unattended while engine is running.
- Never stand on any part of the machine.
- When cleaning cracks and joints near moving traffic, always move in a direction away from traffic to protect the operator.

Chapter 2 Safety


2.4 California Proposition 65

The state of California currently maintains a list of chemicals that can cause cancer, birth defects or other reproductive harm. Your CrafcO, Inc. equipment comes with the following warnings

2.4.1 All CrafcO Inc. Equipment

 **WARNING:** Cancer and Reproductive Harm - www.P65Warnings.ca.gov
2647 1N

2.4.2 All CrafcO Inc. Equipment using a gasoline engine

 **WARNING:** Breathing engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

- Always start and operate the engine in a well-ventilated area.
- If in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with the exhaust system.
- Do not idle the engine except as necessary.

For more information go to www.P65warnings.ca.gov/diesel.








26157

Chapter 2 Safety

2.5 Safety Symbols and Notices






Important safety symbols and notices are marked on the machine and in this manual. Failure to comply could result in equipment damage, operational malfunction, serious injury, or death. Please read and comply with all symbols and notices. The table below includes the most commonly used symbols and notices.

Table 2-1 Safety Symbols and Notices

Symbol	Item	Remarks
WARNING	Warning	Refers to possible bodily injury or death.
CAUTION	Caution	Refers to possible equipment damage or operational malfunction.
	Severe Burn Hazard	Hot surfaces can cause severe burns.
	Protective Shoes	Wear hard-soled work shoes.
	Protective Gloves	Wear heat resistant gloves.
	Protective Face or Eye Wear	Wear face shield or safety glasses.
	Hearing Protection	Wear ear plugs or ear muffs.
	Dust Mask	Wear a dust mask when appropriate.
	Body Crush Hazard	Do not stand between trailer and hitch when hooking a trailer mounted Crack-Vac to a truck.

Chapter 2 Safety

Table 2-2 Safety Symbols and Notices (continued)

Symbol	Item	Remark
	Crush Hazard	Keep feet and legs clear.
	Pinch Hazard	Keep hands and feet clear.
	Exhaust Hazard	Avoid breathing engine exhaust.
	High Pressure Fluid Hazard	Do not use hands to search for leaks, use cardboard instead.
	Read Manual	Read and understand operator and safety manuals before operating machine.

Chapter 3 Warranty Information

3.0 Limited Warranty

Crafco, Inc. (Manufacturer), or one of its affiliated distributors, will replace for the original purchaser free of charge any parts found upon examination by the Manufacturer, to be defective in material or workmanship. This warranty is for a period **two years** from the invoice date, but excludes engine or components, tires, and battery as these items are subject to warranties issued by their manufacturers.

Crafco, Inc. shall not be liable for parts that have been damaged by accident, alteration, abuse, improper lubrication/maintenance, normal wear, or other cause beyond our control.

The warranty provided herein extends only to the repair and/or replacement of those components on the equipment covered above and does not cover labor costs. The warranty does not extend to incidental or consequential damages incurred as a result of any defect covered by this warranty.

All transportation and labor costs incurred by the purchaser in submitting or repairing covered components must be borne by the purchaser. Crafco, Inc. specifically disavows any other representation, warranty, or liability related to the condition or use of the product.

CAUTION

Use of replacement parts other than genuine Crafco parts may impair the safety or reliability of your equipment and nullifies any warranty.

Chapter 3 Warranty Information

3.1 Warranty Claim Instructions

Crafco, Inc. warrants parts and machinery purchased through Crafco or one of its affiliated distributors for two years from the invoice date. Wear items are not covered under the Crafco, Inc. limited warranty. A wear item is defined as but not limited to: material pumps, sealing tips, tires, etc.

If parts fail to function within two years of invoice date, a return authorization number (RA) must be obtained. If the part was purchased through Crafco, Inc., please contact Crafco returns department at [Returns@Crafco.com](mailto>Returns@Crafco.com) for an RA number or if purchased through a Crafco distributor please contact your distributor.

Note: if the part has a serial number associated with it, for example; a machine or electric hose or wand, this must be furnished when requesting the RA number. The customer will be emailed or faxed an RA form with all instructions to return the item to Crafco, Inc. See example. If the part is found to be within the two year warranty period and has not been abused or modified, a credit will be issued to the customer's account or credit card. The customer may request the part be replaced instead of a credit, if desired.

Note: All engine warranties are covered through the engine manufacturer. If you need information for a distributor in your area please contact us and we will direct you to the closest engine distributor.

All parts returned are tested and evaluated. If the part has been modified in any way without prior consent from a Crafco, Inc. representative, warranty is void.

Please follow the instructions stated below when calling in a Warranty Claim. Failure to follow these procedures may be cause to void the warranty.

Call your local Crafco Distributor. If you do not know who your local distributor is, call a Crafco Customer Service Representative, (Toll Free 1-800-528-8242) for name, location and telephone number.

On contacting the distributor, be prepared to identify the serial number, model number, engine number, engine manufacturer, and the date of purchase if available.

Should the cause of the malfunction be a defective part, the Distributor will advise you of the procedure to follow for a replacement.

The warranty is valid only for parts, which have been supplied or recommended by Crafco, Inc.

If you have any additional questions regarding warranty repairs and parts, please do not hesitate to call toll free 1-800-528-8242.

For Warranty:

Crafco, Inc.

25527 South Arizona Avenue, Chandler, AZ
85248

Phone: (480) 655-8333 or (800) 528-8242

Fax: (480) 655-1712

For all other inquires:

Crafco, Inc.

6165 W Detroit St,
Chandler, AZ 85226

Phone: (602) 276-0406 or (800) 528-8242

Fax: (480) 961-0513

CustomerService@crafco.com

Chapter 4 Pre-Assembly and Compatibility Check

4.0 Pre-Assembly and Compatibility Check

Before starting the assembly process of the Router Dust Control Retrofit Kit (DC Retrofit Kit), verify that the DC Retrofit Kit is compatible with the model pavement router that it is intended to be installed on. The DC Retrofit Kit part number 31496K is compatible with the following Crafcro routers:

- Model 30 routers with an electric clutch and Honda engine

The DC Retrofit Kit part number 31550K is compatible with the following Crafcro routers:

- Model 30 routers with an electric clutch and Kohler engine
- All Model 25 routers with an electric clutch
- Model 200 routers that were built after July of 2004, and have an electric clutch

The DC Retrofit Kit is *NOT* compatible with the following Crafcro routers:

- Saw-cut routers
- Router than have an Onan, or a Lindemar engine

Review that parts list to ensure that all parts were included with this kit. If not all parts were included with this kit, or there are any questions concerning the assembly or compatibility of this kit, contact us to speak to a Crafcro customer service representative.

It is recommended that you read through this entire set of instructions before starting the assembly process. These instructions are not meant to be all inclusive, if any problems should arise during the installation of the DC Retrofit Kit, please contact Crafcro before proceeding. Crafcro will not be responsible for improper installation or use of the DC Retrofit Kit.



Chapter 4 Pre-Assembly and Compatibility Check

Chapter 5 Illustrated Parts List

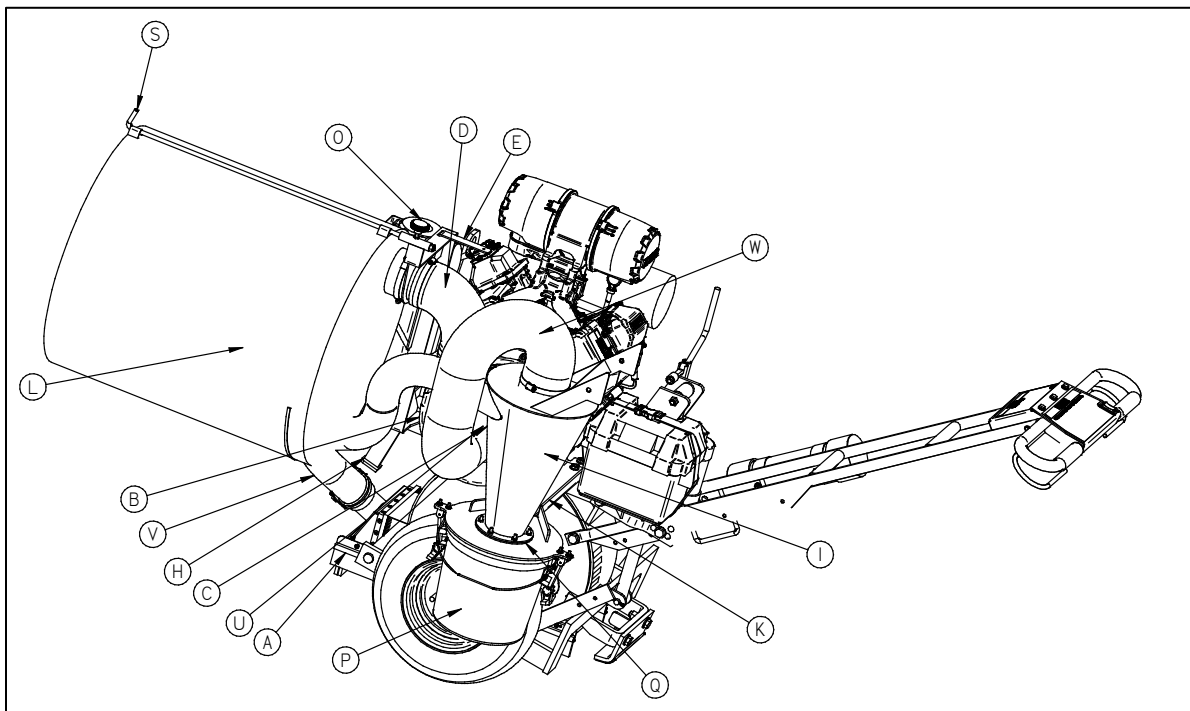
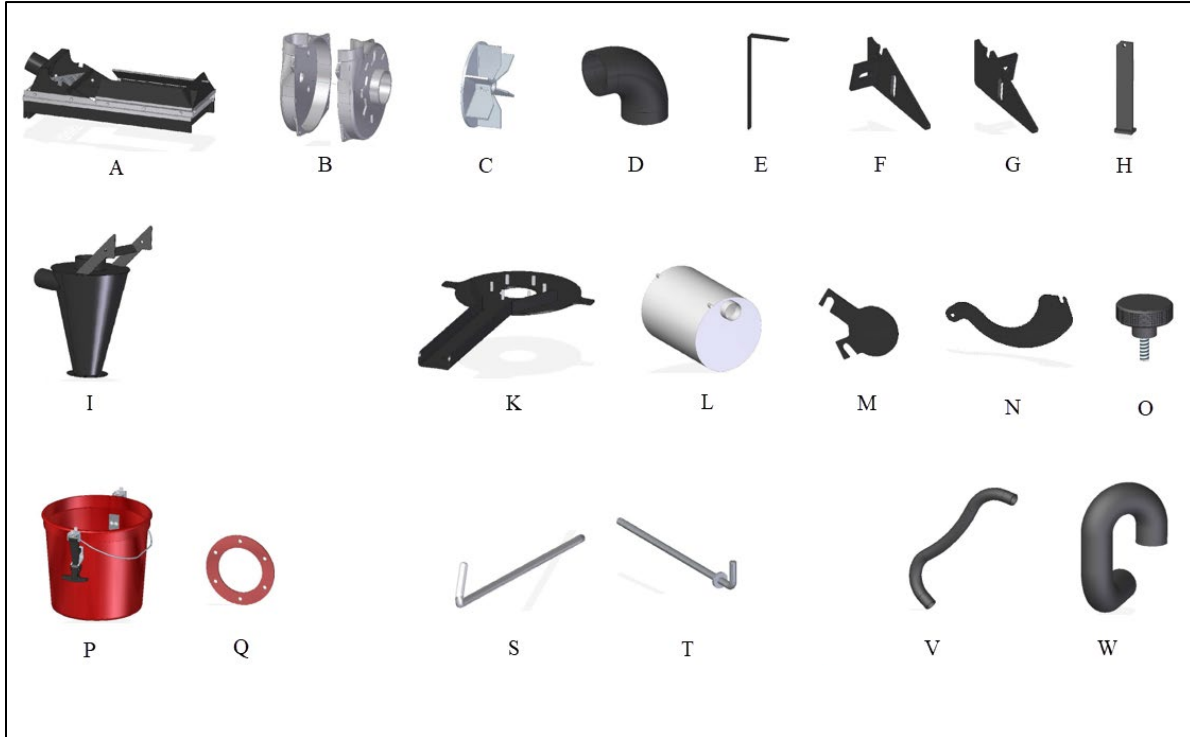
5.0 Illustrated Parts List

The Illustrated Parts List (IPL) is designed to help personnel correctly identify the parts supplied in the DC Retrofit Kit. Illustrations are designed to show general shape and size of a part and the relationship that part has to other parts. Actual size and shape of parts or components may differ or vary from the actual part or component.

Chapter 5 Illustrated Parts List

5.1 DC Retrofit Kit Common Parts 31550K and 31496K

Figure 5-1 DC Retrofit Kit Common Parts



Chapter 5 Illustrated Parts List

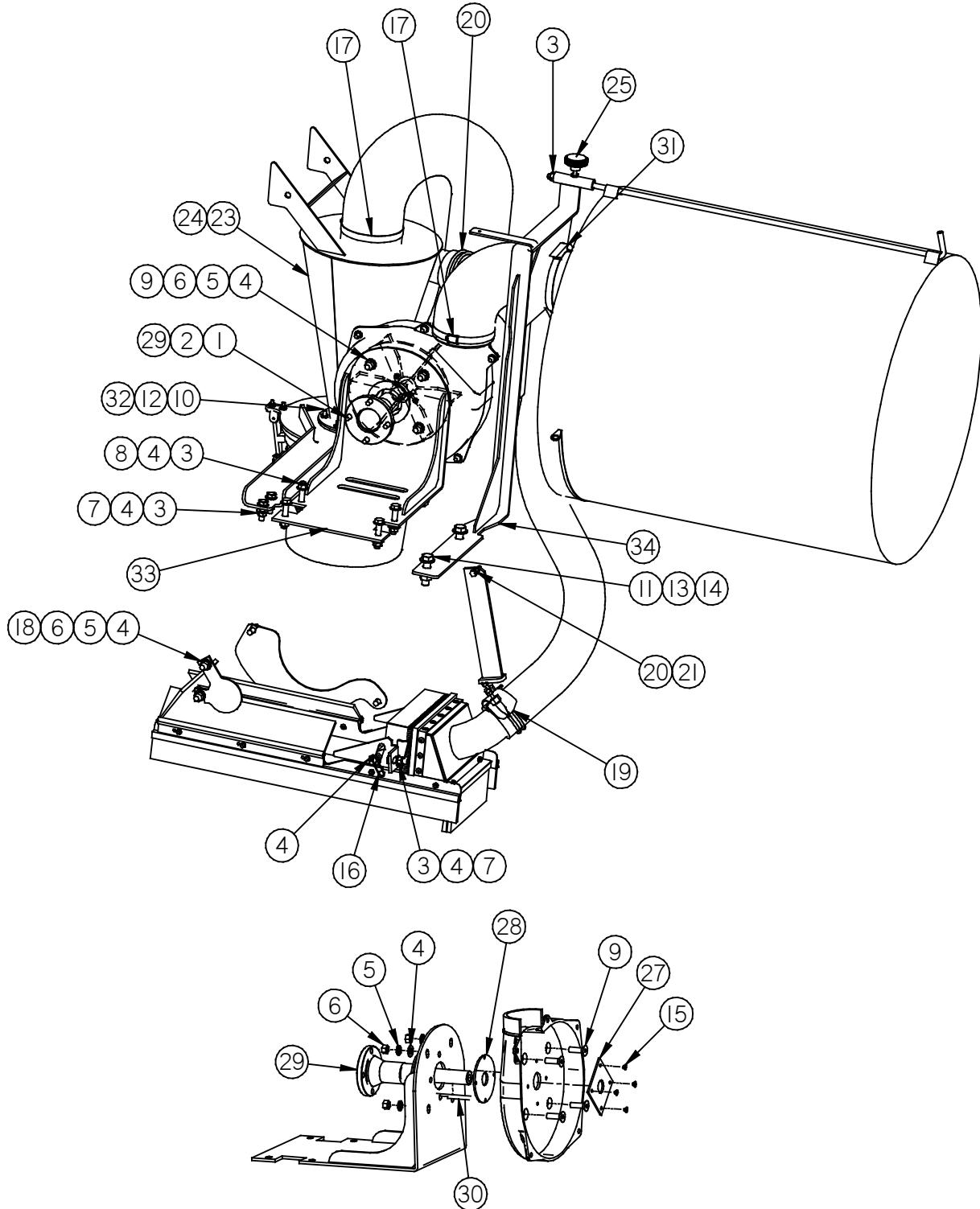
Table 5-1 DC Retrofit Kit Common Parts

FIG.	ITEM	PART NO.	DESCRIPTION	QTY.	
Figure 5-1	A	31730N	Cutter Head Dust Shroud	1	
	B	31411	Blower Housing	1	
	C	31412	Blower Fan	1	
	D	31415	90° X 4" ID Rubber Elbow	1	
	E	31410	Brush Manipulation Tool	1	
	F	31726N	Dust Shroud Mnt. Bracket, Left Side	1	
	G	31727N	Dust Shroud Mnt. Bracket, Right Side	1	
	H	31535	Support Strip Assembly	1	
	I	31555	Cyclone	1	
	J	Removed, See sections 5.3 and 5.4			
	K	31560	Cyclone Mounting Bracket Assembly	1	
	L	31414	Dust Collection Bag	2	
	M	31417	Cover, Pin Removal Hole	1	
	N	31416	Cover, Pin Retaining Hole	1	
	O	31409	Locking Knob (for filter bag support assembly)	1	
	P	31575	Large Particle Dust Collection Bin	2	
	Q	31433	Rubber Gasket, Cyclone	1	
	R	Removed, See sections 5.3 and 5.4			
	S	31567	Filter support Rod	1	
	T	31545	Dust Shroud Retaining Pin	1	
U	Removed, See sections 5.3 and 5.4				
V	31437	2-1/2" Suction Hose	1		
W	31438	4" Suction Hose	1		

Chapter 5 Illustrated Parts List

5.2 Kit Part Number 31550K, Model 30 Router with Kohler Engine

Figure 5-2 DC Retrofit Kit Part Number 31550K



Chapter 5 Illustrated Parts List

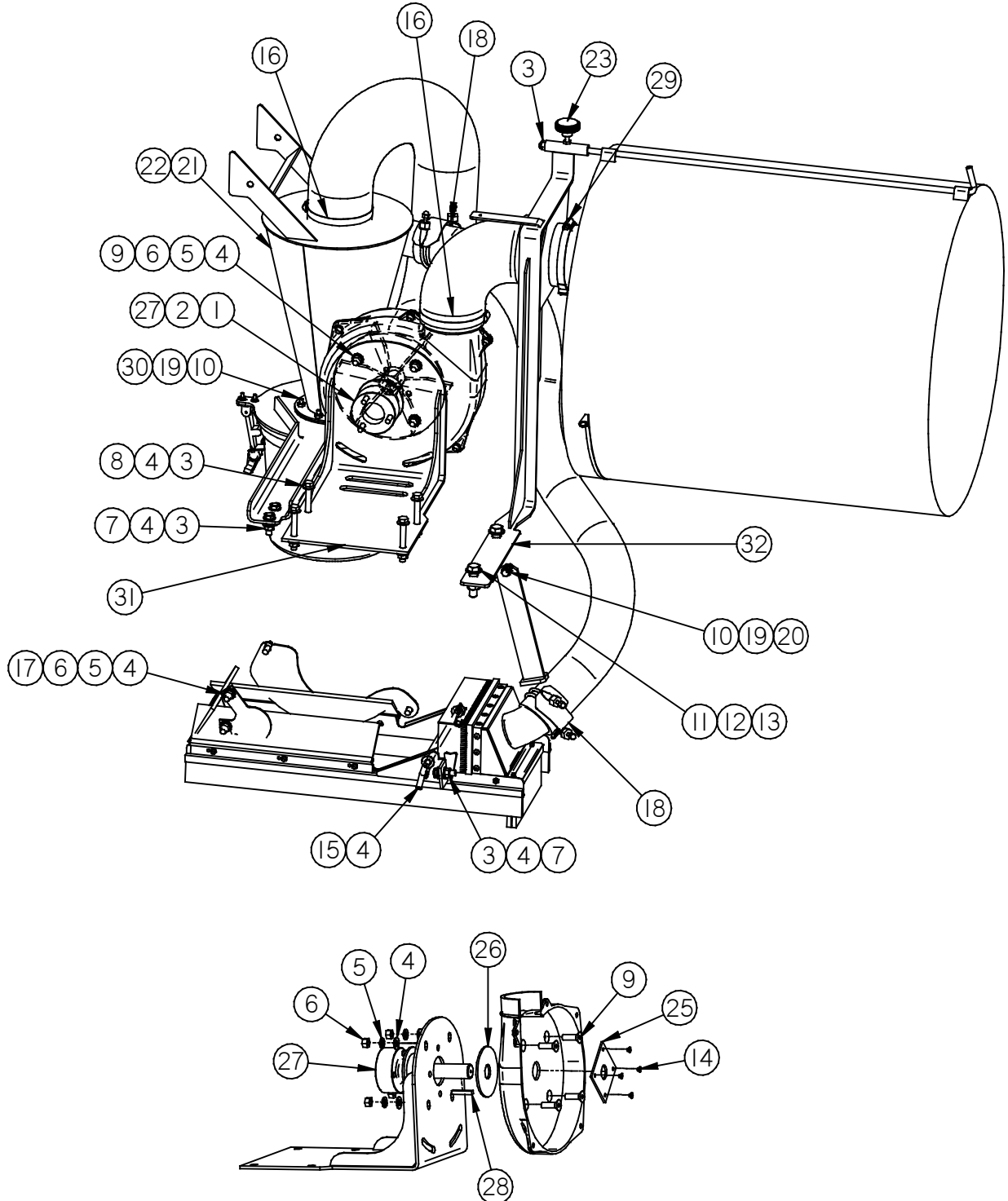
Table 5-2 DC Retrofit Kit Part Number 31550K

FIG.	ITEM	PART NO.	DESCRIPTION	QTY.
Figure 5-2	1	29041	M8-1.25 x 25mm Bolt	4
	2	28646	5/16" Lock Washer	4
	3	28538	3/8"-16 Upset Nut	9
	4	28672	3/8" Flat Washer	25
	5	28647	3/8" Lock Washer	8
	6	28502	3/8"-16 Hex Nut	8
	7	28732	3/8"-16 x 1-1/4" Bolt	4
	8	28735	3/8"-16 x 2" Bolt	4
	9	31407	3/8"-16 x 1-1/4" Flat Head Socket Cap Screw	4
	10	28670	1/4" Flat Washer	8
	11	28642	1/2" Grade 8 Flat Washer	4
	12	28524	1/4"-20 Nylon Lock Nut	6
	13	28764	1/2"-13 x 2" Bolt	2
	14	28540	1/2" Upset Nut	2
	15	28992	3/16 Blind Rivet – 7/8 LG.	4
	16	29657N	Locking Pin, Coiled Bent-Wire	1
	17	26092	Gear Clamp, SAE #64	4
	18	31408	3/8"-16 x 1-1/2" Threaded Stud	4
	19	31739N	Clamp, 2-1/2" SDBC	2
	20	28536	1/4" Upset Nut	1
	21	28703	1/4" x 1-1/4" Bolt	1
	22	21320	Model 30 Router Manual	1
	23	31543	Decal, Dust Shroud Storage	1
	24	31544	Decal, Dust Shroud Attachment	1
	25	31409	1/4"-20 x 3/4" Knob w/ Threaded Stud	1
	26	31439N	RTV Silicone Tube	1
	27	31736N	Blower Shaft, Inner Seal	1
	28	31737N	Blower Shaft, Outer Seal	1
	29	31413	Front Drive Shaft, Kohler	1
	30	31738N	Modified Keyway, Blower Shaft	1
	31	31418	Adjustable Quick Release Gear Clamp	1
	32	28702	1/4"-20 x 1" Hex Bolt	6
	33	31570	Blower Mounting Bracket	1
	34	31565	Filter Mounting Bracket	1

Chapter 5 Illustrated Parts List

5.3 Kit Part Number 31496K, Model 30 Router with Honda Engine

Figure 5-3 DC Retrofit Kit Pat Number 31496K



Chapter 5 Illustrated Parts List

Table 5-3 DC Retrofit Kit Part Number 31496K

FIG.	ITEM	PART NO.	DESCRIPTION	QTY.
Figure 5-3	1	29084N	M8-1.25 x 55mm Bolt	3
	2	28646	5/16" Lock Washer	3
	3	28538	3/8"-16 Upset Nut	9
	4	28672	3/8" Flat Washer	25
	5	28647	3/8" Lock Washer	8
	6	28502	3/8"-16 Hex Nut	8
	7	28732	3/8"-16 x 1-1/4" Bolt	4
	8	28737	3/8"-16 x 3" Bolt	4
	9	31407	3/8"-16 x 1-1/4" Flat Head Socket Cap Screw	4
	10	28670	1/4" Flat Washer	8
	11	28642	1/2" Grade 8 Flat Washer	4
	12	28764	1/2"-13 x 2" Bolt	2
	13	28540	1/2" Upset Nut	2
	14	28992	3/16 Blind Rivet – 7/8 LG.	4
	15	29657N	Locking Pin, Coiled Bent-Wire	1
	16	26092	Gear Clamp, SAE #64	4
	17	31408	3/8"-16 x 1-1/2" Threaded Stud	4
	18	31739N	Clamp, 2-1/2" SDBC	2
	19	28536	1/4" Upset Nut	7
	20	28703	1/4" x 1-1/4" Bolt	1
	21	31543	Decal, Dust Shroud Storage	1
	22	31544	Decal, Dust Shroud Attachment	1
	23	31409	1/4"-20 x 3/4" Knob w/ Threaded Stud	1
	24	31439N	RTV Silicone Tube	1
	25	31736N	Blower Shaft, Inner Seal	1
	26	31737N	Blower Shaft, Outer Seal	1
	27	20898N	PTO Shaft, Honda	1
	28	27017	Key, 1/4" Square x 1-1/2"	1
	29	31418	Adjustable Quick Release Gear Clamp	1
	30	28702	1/4"-20 x 1" Hex Bolt	6
	31	31560	Blower Mounting Bracket, Honda	1
	32	20856N	Filter Bag Support, Honda	1

Chapter 5 Illustrated Parts List

5.4 Ordering Crafco Parts

Crafco distributors and Crafco Pavement Preservation Supply Centers are strategically located throughout the United States. Parts can be ordered from your local Crafco distributor or directly from Crafco, Inc. if a distributor is not available in your area.

When ordering parts, give the following information:

- Part Number
- Machine Model
- Serial Number

Write, call, or Fax Crafco, Inc. at the following:

Crafco, Inc. Headquarters

6165 W Detroit St.

Chandler, AZ 85226

Phone: (602) 276-0406

Toll Free: (800) 528-8242

Fax: (480) 961-0513

Visit our website at www.crafco.com

Chapter 6 Installation Instructions

6.0 Installation Instructions

6.1 Kit Part Number 31550K Installation, Model 30 Router with Kohler Engine

Table 6-1 Installation Instructions, DC Retrofit Kit 31550K

Step	Action
1	Turn the fuel valve on the gas tank to the off position. Disconnect the negative battery cable and remove the following parts: Belt guard and belts, router lifting bracket, deflector chain assembly, and the rubber rock deflector. Remove the flywheel cover from Kohler engine, and then remove the grass screen. Retain hardware for later installation.
2	Install Kohler front drive shaft onto the flywheel of the Kohler engine using (4) M8-1.25 x 25mm long bolts and 5/16" lock washers. Torque bolts to 20 ft/lbs. (See Figure 6-1)
3	Securely hold flywheel cover against bench and drill out center with 1 5/8" hole saw. Drill out center of grass screen in the same manner. (See Figure 6-2) Reattach the grass screen and the flywheel cover to the engine with existing hardware.



Figure 6-1 Kohler Front Drive Shaft Installed



Figure 6-2 Flywheel Cover and Grass Screen Hole Cutting

Chapter 6 Installation Instructions

Table 6-2 Installation Instructions, DC Retrofit Kit 31550K (continued)

Step	Action
4	On Router's built before June 2018, layout and cut 8.88" x 1.62" opening in the rock deflector mounting plate, (See Figure 6-3). If a plasma cutter isn't available, a grinder with a cutoff wheel can be used. Routers built after June 2018 will have this opening.
5	Attach the dust shroud mounting brackets with 3/8" x 1-1/4" bolts, 3/8" flat washers, and 3/8" upset nuts supplied with kit. Ensure that the brackets are pressed firmly against the rock deflector mounting plate before tightening. (See Figure 6-4)

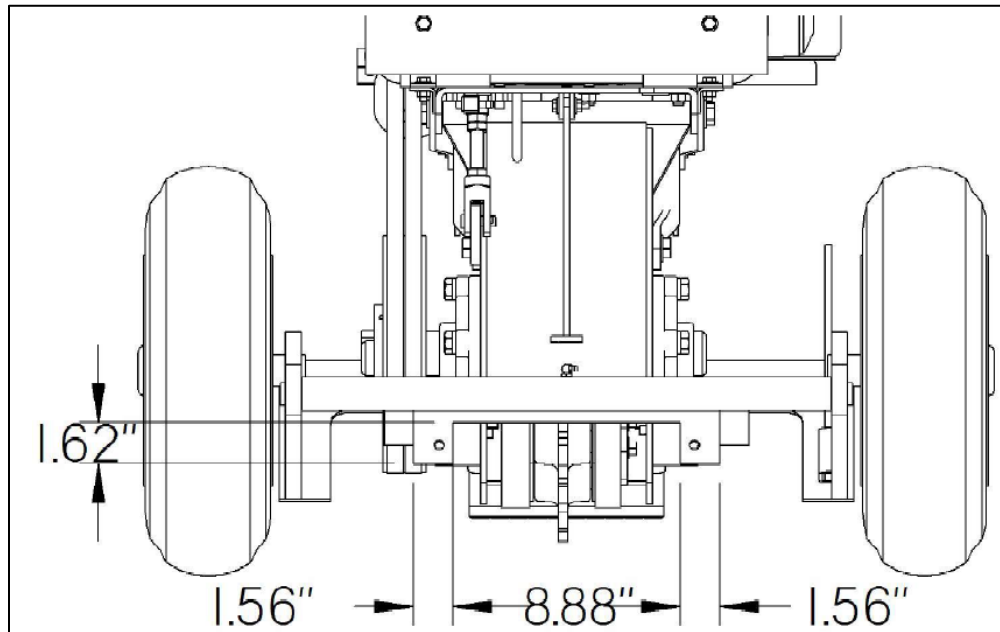


Figure 6-3 Rock Deflector Opening Cut Dimensions



Figure 6-4 Dust Shroud Mounting Brackets

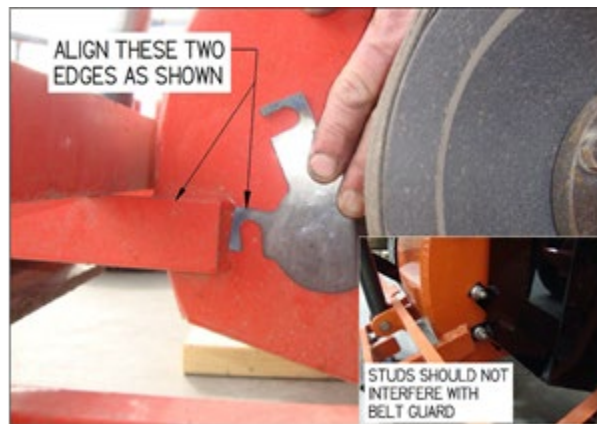
Chapter 6 Installation Instructions**Table 6-3 Installation Instructions, DC Retrofit Kit 31550K (continued)**

Step	Action
	Steps 6-9 are only required on routers built before June 2018. Routers built after June 2018 will have the holes and threaded insert in place.
6	Place the router on (2) 4"x4" wood blocks as shown in (See Figure 6-5) and remove the wheels.
7	Place pin retaining hole cover against cutter housing and push the inside arch of the cover against the shaft bearing. Rotate the cover until the center of the front mounting hole measures 7/8" up from the rock deflector gusset. Mark the front hole and outline the rear slot with a marker. (See Figure 6-6)

**Figure 6-5 Router on Blocks, Wheels Removed****Figure 6-6 Pin Retaining Hole Cover Placement**

Chapter 6 Installation Instructions**Table 6-4 Installation Instructions, DC Retrofit Kit 31550K (continued)**

Step	Action
8	Place the pin removal hole cover against the cutter housing. Center the cover over the center of the pin removal hole and align the bolt slots as shown in (See Figure 6-7). Outline the slots with a marker. Before proceeding, temporarily place the belt guard back into position and ensure that the location of the threaded studs will not interfere with the belt guard.
9	Center punch all four hole marks for the two hole covers. Drill (4) 5/16" dia. holes and tap to 3/8-16 NC thread. To access the drill points with a hand drill it will be necessary to raise or lower the router frame with the actuator up/down switch (reconnect the negative battery cable to the battery and turn the key to the on position to raise/lower the frame). (See Figure 6-8)

**Figure 6-7 Pin Removal Hole Cover Placement****Figure 6-8 Hole Drilling**

Chapter 6 Installation Instructions**Table 6-5 Installation Instructions, DC Retrofit Kit 31550K (continued)**

Step	Action
10	Apply thread locking compound to the short side of the 3/8-16 x 1-1/4" threaded studs and thread into four threaded holes. Install two 3/8" hex nuts on the long thread side of the threaded stud and apply opposing force with two 9/16" wrenches to lock the two nuts together. The nuts can now be used to tighten the studs into the cutter housing. After the studs are tight, rotate the cutter head to ensure that the threaded studs are not hitting the cutter head. Remove the two hex nuts and install the hole covers and secure with 3/8" flat washers, 3/8" lock washers, and 3/8" hex nuts. (See Figure 6-9) Reinstall the wheels and remove the wood blocks, Disconnect the negative battery cable.

**Figure 6-9 Cover Installation**

Chapter 6 Installation Instructions**Table 6-6 Installation Instructions, DC Retrofit Kit 31550K (continued)**

Step	Action
11	Disconnect the positive battery cable from the battery. Disconnect the red wire with the in-line fuse coming from the router handle and going to the engine. Disconnect the electric clutch wires. If the engine has a carbon canister installed, disconnect the fuel return line from the filler spout of the gas tank. Be careful not to break the barbed fitting on the fuel tank when detaching the fuel line. It may be necessary to split the fuel line at the fitting with a razor knife to separate it from the fitting. Remove the four engine mounting bolts. If no hoist is available, have someone assist with the removal of the engine from the engine mounting plate. Place the engine on the floor next to the router. This can be accomplished without disconnecting the fuel line from the bottom of the fuel tank by rotating the engine to the non-clutch side and to the front of the router. (See Figure 6-10)

**Figure 6-10 Engine Removed from Router**

Chapter 6 Installation Instructions

Table 6-7 Installation Instructions, DC Retrofit Kit 31550K (continued)

Step	Action
12	If installing the DC Retrofit Kit on a Model 200 Pavement Router, layout and center punch holes for the cyclone mounting plate according to (See Figure 6-11). If installing the DC Retrofit Kit on a Model 25 Pavement Router or a Model 30 Pavement Router built before June 2018, layout and center punch holes for the cyclone mounting plate according to (See Figure 6-12). Drill the two holes through engine mounting plate with a “Z” sized (.4130” dia.) drill bit.

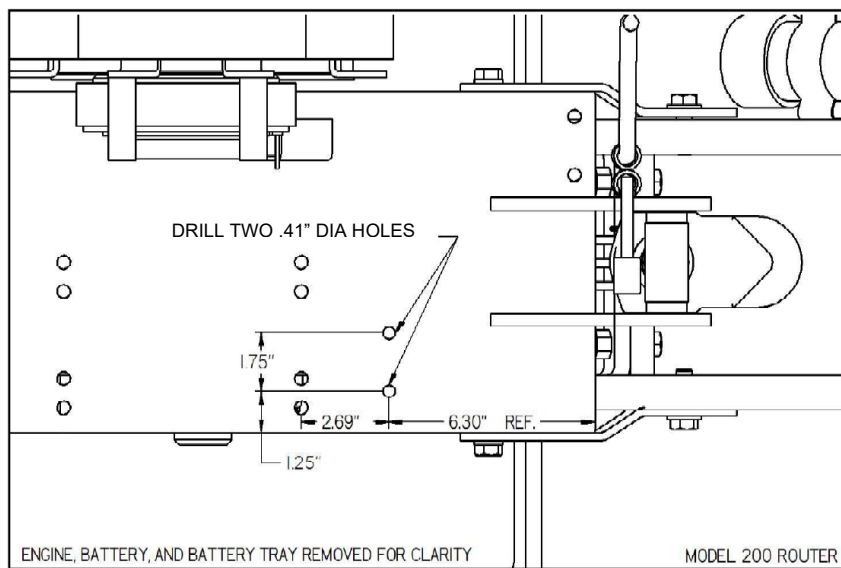


Figure 6-11 Hole Location for Model 200 Router

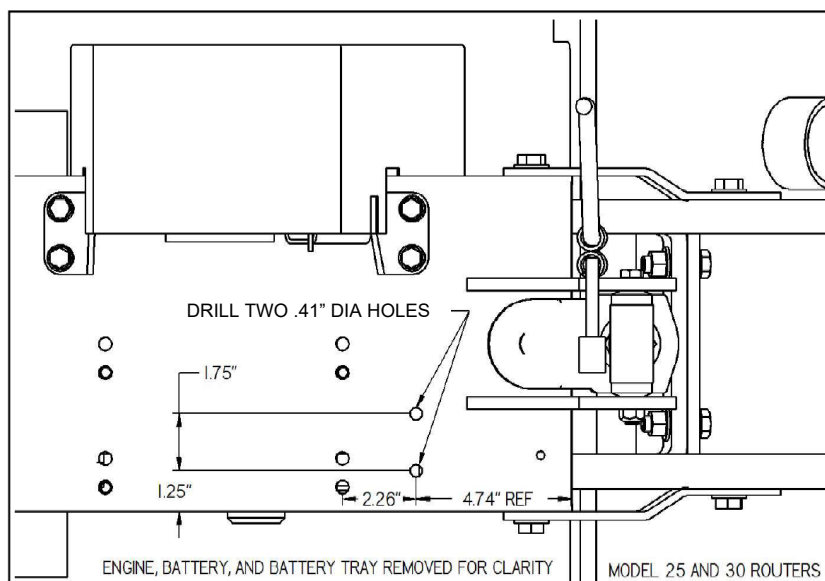


Figure 6-12 Hole Location for Model 25 or Model 30 Router

Chapter 6 Installation Instructions

Table 6-8 Installation Instructions, DC Retrofit Kit 31550K (continued)

Step	Action
13	<p>Return the engine to the engine mounting plate. Place the blower mounting plate between the engine and the engine channel assembly. (See Figure 6-13)</p> <p>Be sure the hole in the blower mounting plate is centered with the drive shaft. When attaching the battery ground cable to engine, turn the eyelet so the cable is running toward the clutch side of the engine. This is so the cable will not rub on the cyclone mounting plate when it is installed in the next step (See Figure 6-14). Secure the engine and blower plate to engine mounting channel with 3/8-16 x 2" bolts, 3/8" flat washers, and 3/8" upset nuts supplied with kit.</p>
14	<p>Place the cyclone mounting plate on top of the engine mounting plate and secure with 3/8-16 x 1 1/4" bolts, 3/8" flat washers, and 3/8" upset nuts. (See Figure 6-14)</p> <p>Be sure the battery cable is not rubbing on the bracket.</p>



Figure 6-13 Blower Mounting Plate Installation



Figure 6-14 Cyclone Mounting Plate Installation

Chapter 6 Installation Instructions

Table 6-9 Installation Instructions, DC Retrofit Kit 31550K (continued)

Step	Action
15	Reconnect the clutch wires and the red power wire with the in-line fuse and reconnect the fuel line. Reinstall the belts using the proper tensioning method (see section on V-Belts in the operator’s manual supplied with the kit). Install the belt guard.
16	Install the Blower Shaft Outer Seal over the drive shaft (Ref figure 15) and attach the drive side blower half to the blower mounting bracket with 3/8 x 1 1/4” flat head socket cap screws, 3/8” flat washers, 3/8” lock washers, and 3/8” hex nuts. The outlet port on the blower half should be pointing up. The hole in the drive side blower half should be centered around the shaft (See Figure 6-15)
16a	Install the Blower Shaft Inner Seal over the drive shaft. Orient the seal so the four corners point between the blower’s mounting holes and drill through the aluminum blower housing and the blower shaft outer seal with a 13/64 drill bit. The holes should align with the clearance holes in the blower mounting bracket. Secure the blower shaft inner seal with four 3/16” diameter blind rivets. (See Figure 6-15).

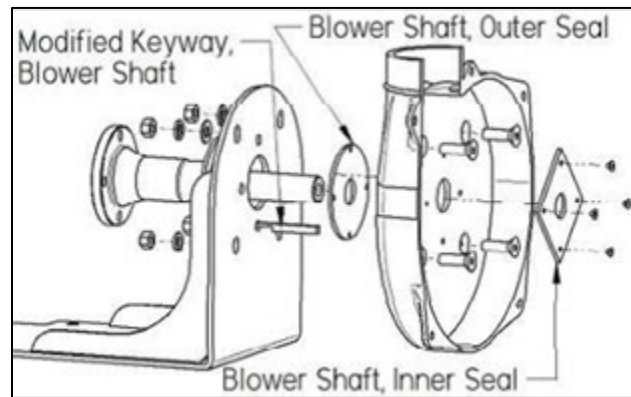


Figure 6-15 Blower Seal Installation

Chapter 6 Installation Instructions

Table 6-10 Installation Instructions, DC Retrofit Kit 31550K (continued)

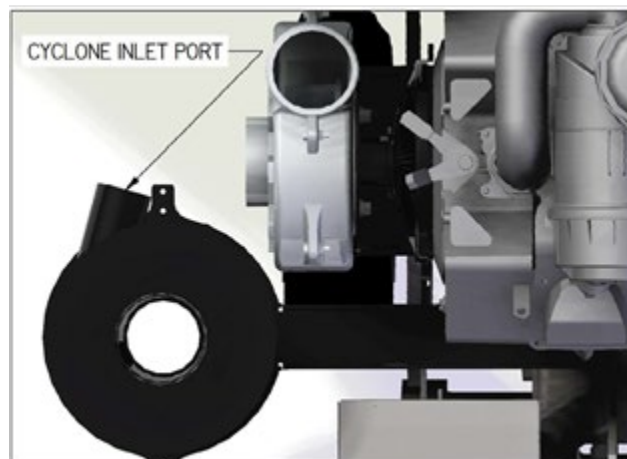
Step	Action
17	Install the blower fan onto the drive shaft with supplied keyway. Keyway should be flush with end of shaft, with the milled end protruding through the shaft seals and blower housing. Install the fan so that there is a 5/16" space between the blower housing and the drive side of the fan (See Figure 6-16). Before tightening the set screws, temporarily hold the inlet half of blower housing against the drive half of the blower housing to ensure the fan is evenly spaced between the two housing half's. Once the fan is centered, torque the fan set screws to 65 in-lbs., starting with the set screw that is over the keyway, and then tighten the second set screw onto the shaft.
CAUTION	
	The set screws must be tightened to the proper torque. DO NOT use an air driven tool. These tools could weaken or strip the threads in the fan. The set screws have a nylon "locking patch" on the threads of the set screws. The head of the screws have a "knurled cup-point head". These two features are only good for one time use but will prevent the set screws from vibrating loose. If for any reason, the set screws should need to be backed off after tightening, discard and use new set screws. Apply a medium strength thread locking compound on the new screws.



Figure 6-16 Blower Fan Installation

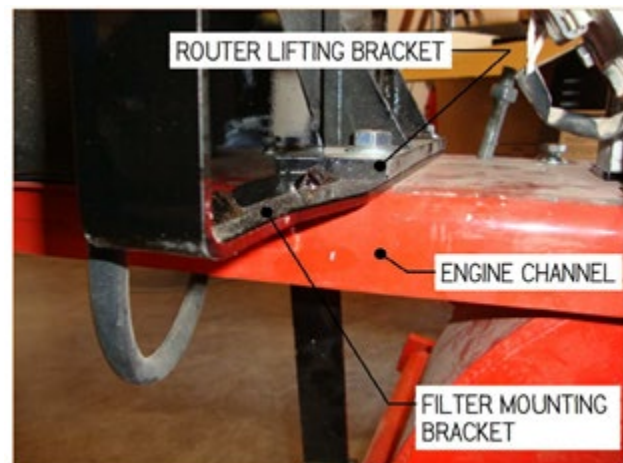
Chapter 6 Installation Instructions**Table 6-11 Installation Instructions, DC Retrofit Kit 31550K (continued)**

Step	Action
18	Run a bead of supplied silicone around the mating surface of the inlet blower housing half. This silicone acts as a sealant and an adhesive. Mate the two surfaces together and secure them with 1/4" x 1" bolts and 1/4" serrated flange hex nuts supplied with kit. (See Figure 6-17)
19	Install six-hole flange gasket on cyclone mounting bracket. Place the cyclone on cyclone mounting bracket so that the inlet port is pointing to the front of the router. Secure with 1/4" flat washers, 1/4" lock washers, and 1/4" hex nuts. (See Figure 6-18)

**Figure 6-17 Blower Housing Halves****Figure 6-18 Cyclone Inlet Port Orientation**

Chapter 6 Installation Instructions**Table 6-12 Installation Instructions, DC Retrofit Kit 31550K (continued)**

Step	Action
20	Install rubber pull latches for the large particle dust collection bin to the cyclone mounting bracket with 10/32" x 1/2" round head screws, #10 lock washers, and 10/32" hex nuts. Attach the large particle dust collection bin to the cyclone mounting bracket. (See Figure 6-19)
21	Mount the filter mounting bracket between the motor mounting plate and the router lifting bracket (See Figure 6-20). Replace the 1/2" x 1 3/4" bolts with 1/2" x 2" bolts, re-use 1/2" flat washers, and use new upset lock nuts to secure the two brackets in place.

**Figure 6-19 Large Particle Dust Collection Bin****Figure 6-20 Filter Mounting Bracket Installation**

Chapter 6 Installation Instructions**Table 6-13 Installation Instructions, DC Retrofit Kit 31550K (continued)**

Step	Action
22	Install 4" x 90° rubber elbow between blower outlet and the filter mounting bracket, secure with SAE #64 gear clamps. (See Figure 6-21)
23	Install 4" flex hose between the blower inlet port and the cyclone outlet port. Secure with SAE #64 gear clamps. Temporarily install the cutter head dust shroud onto the router according to the instructions in the Model 30 Pavement Router manual section on attaching cutter head dust shroud. Run the 2 1/2" flex hose from the cyclone inlet port to the cutter head dust shroud and secure with 2-1/2" SBDC clamp. (See Figure 6-22)

**Figure 6-21 Rubber Elbow Installation****Figure 6-22 Flex Hose Installation**

Chapter 6 Installation Instructions

Table 6-14 Installation Instructions, DC Retrofit Kit 31550K (continued)

Step	Action
24	<p>Install the dust collection bag onto the filter mounting bracket by threading the hanging loops over the filter support rod and pulling the inlet hole of the dust collection bag over the outlet tube of the filter support bracket. Secure the dust collection bag with adjustable quick release gear clamp (See Figure 6-23). Adjust the clamp so that it is just tight enough to hold the dust collection bag in place. Do not overtighten the clamp as this may damage the dust collection bag. Place the brush manipulation tool in its storage slot on the filter mounting bracket.</p> <p>Note: The filter support rod can be slid into a rearward position for transportation of router when space is limited. (See Figure 6-24)</p>
25	<p>Remove the cutter head dust shroud from the cutter head and place the shroud in the shroud holder on top of the cyclone. (See Figure 6-24)</p> <p>Note: To prevent deformation of the seal brushes, the cutter head dust shroud should be stored in the storage bracket located on the cyclone when the router is not in use.</p>



Figure 6-23 Dust Collection Bag Installation



Figure 6-24 Dust Shroud in Holder on Cyclone

Chapter 6 Installation Instructions

Table 6-15 Installation Instructions, DC Retrofit Kit 31550K (continued)

Step	Action
26	Remove the existing router support strip assembly and replace it with the new router support strip assembly supplied with kit. (See Figure 6-25)
27	On the rear support strip, drill a new 5/16" hole according to (See Figure 6-26). Reconnect the negative battery cable.
CAUTION	
For operation, safety precautions, and maintenance of the Crafcro Router with Dust Control, see the Model 30 Pavement Router Manual supplied with kit.	



Figure 6-25 Support Strip Assembly Installation

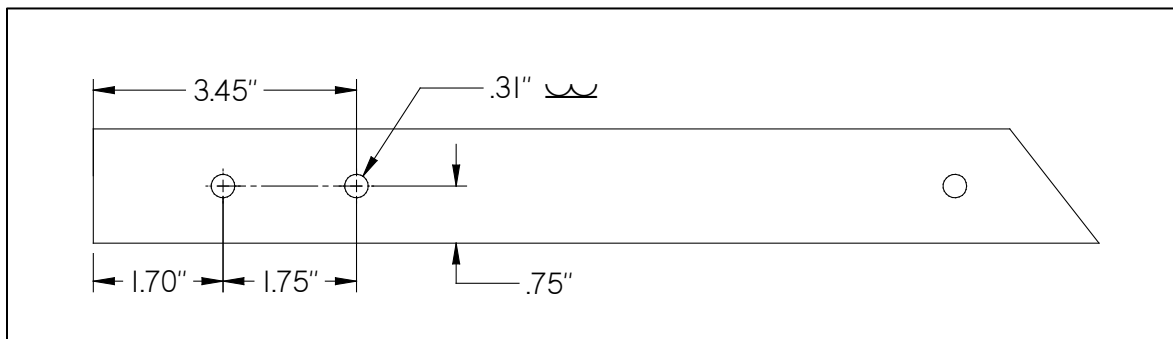


Figure 6-26 Rear Support Strip Hole Dimensions

Chapter 6 Installation Instructions

6.2 Kit Part Number 31496K Installation, Model 30 Router with Honda Engine

The installation of Dust Control Kit 31496K for the Model 30 Router with Honda engine, is the same as the installation of kit 31550K except for the following changes:

Table 6-16 Installation Steps 1-3 for kit 31496K

Step	Action
1	Turn the fuel valve on the gas tank to the off position. Disconnect the negative battery cable and remove the following parts: Belt guard and belts, router lifting bracket, deflector chain assembly, and the rubber rock deflector. Remove the flywheel cover from Honda engine. Retain hardware for later installation.
2	Install Honda PTO shaft onto the flywheel of the engine using (3) M8-1.25 x 55mm long bolts, 5/16" lock washers, and blue thread locker. Torque bolts to 20 ft/lbs. (See Figure 6-1)
3	Securely hold flywheel cover against bench and drill out center with 1 5/8" hole saw. (See Figure 6-2) Reattach the flywheel cover to the engine with existing hardware.
	Omit steps 4, and 6 – 9.

Table 6-17 Installation Step 12 for Kit 31496K

Step	Action
12	If installing the DC Retrofit Kit on a Model 30 Pavement Router with Honda engine, the two holes pointed out in Figure 6-27 for cyclone mounting plate are already included. It may be necessary to enlarge the two holes through the engine mounting plate with a "Z" sized (.4130" dia.) drill bit.

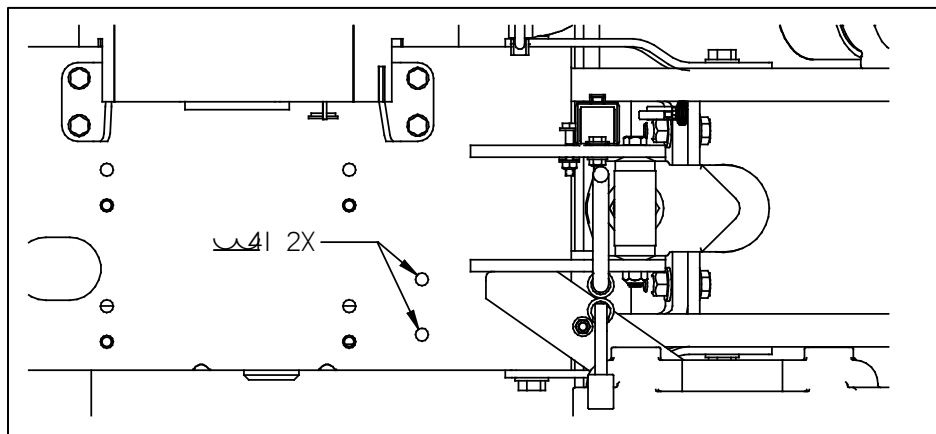


Figure 6-27 Honda Engine Cyclone Mounting Plate Holes

Chapter 6 Installation Instructions**Table 6-18 Installation Step 13 for Kit 31496K**

Step	Action
13	<p>Return the engine to the engine mounting plate. Place the blower mounting plate between the engine and the engine channel assembly, underneath the engine mounting spacers. (See Figure 6-28)</p> <p>Be sure the hole in the blower mounting plate is centered with the drive shaft. When attaching the battery ground cable to the engine, turn the eyelet so the cable is running toward the clutch side of the engine. This is so the cable will not rub on the cyclone mounting plate when it is installed in the next step (See Figure 6-14). Secure the engine and blower plate to engine mounting channel with 3/8-16 x 3" bolts, 3/8" flat washers, and 3/8" upset nuts supplied with kit.</p>

**Figure 6-28 Honda Engine Blower Mounting Plate Installation**

Chapter 6 Installation Instructions

Table 6-19 Installation Step 17 for Kit 31496K

Step	Action
17	Install the blower fan onto the drive shaft with supplied 1/4" square x 1-1/2" long key (See Figure 6-29). Key end should be flush with end of shaft. Install the fan so that there is a 5/16" space between the blower housing and the drive side of the fan (See Figure 6-16). Before tightening the set screws, temporarily hold the inlet half of blower housing against the drive half of the blower housing to ensure the fan is evenly spaced between the two housing halves. Once the fan is centered, torque the fan set screws to 65 in-lbs., starting with the set screw that is over the keyway, and then tighten the second set screw onto the shaft.
CAUTION	
The set screws must be tightened to the proper torque. DO NOT use an air driven tool. These tools could weaken or strip the threads in the fan. The set screws have a nylon "locking patch" on the threads of the set screws. The head of the screws have a "knurled cup-point head". These two features are only good for one time use but will prevent the set screws from vibrating loose. If for any reason, the set screws should need to be backed off after tightening, discard and use new set screws. Apply a medium strength thread locking compound on the new screws.	

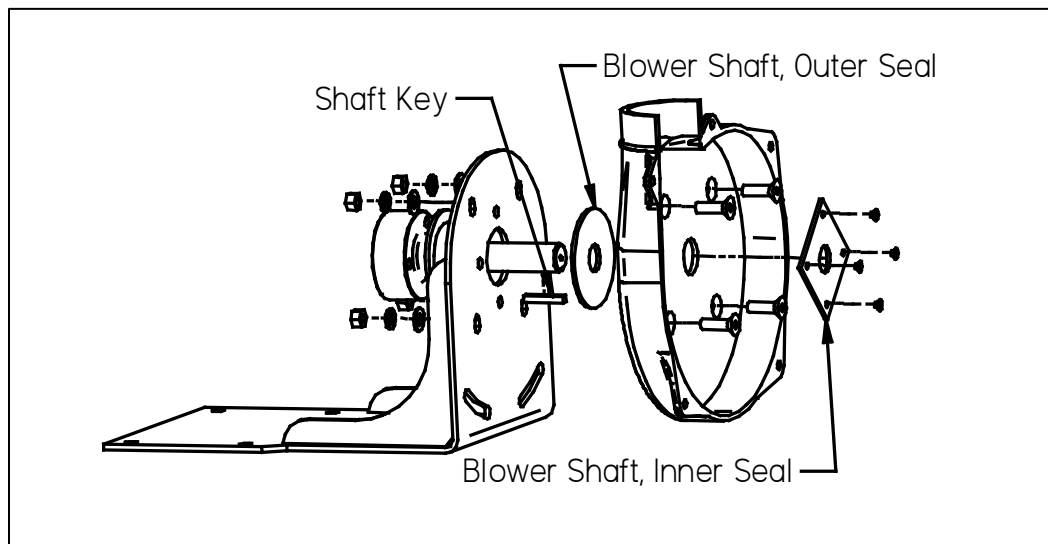


Figure 6-29 Shaft Seals and Keyway for Kit 31496K

Chapter 6 Installation Instructions**Table 6-20 Installation Step 27 for Kit 31496K**

Step	Action
27	On the rear support strip, ensure both 5/16" holes are present according to Figure 6-26 . If bolt holes are not present, drill a new 5/16" hole according to the figure. Reconnect the negative battery cable.
	CAUTION
	For operation, safety precautions, and maintenance of the Crafco Router with Dust Control, see the Model 30 Pavement Router Manual.

Chapter 6 Installation Instructions

6.3 Post Installation Inspection

After assembly of the DC Retrofit Kit, inspect the entire router. Make sure that all parts are properly installed. Make sure all nuts and bolts are in place and are properly tightened. Make sure all wiring and hoses are connected. Start the engine and run at low idle for a few minutes. Listen for any abnormal sounds or machine vibration. Increase engine to full throttle, make sure engine does not go above 3750 RPM's, and adjust if necessary. Listen for any abnormal sounds or machine vibration. Make sure the actuator is in its full upright position and check the electric clutch by engaging the pull handle and releasing it to make sure it is working properly.



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