

# INSTRUCTIONS FOR THE ELECTRIC CLOTHES DRYER BOOSTER KIT SUNCOURT READ AND SAVE THESE INSTRUCTIONS

MODEL: DRM04

# PLEASE READ AND UNDERSTAND THESE INSTRUCTIONS BEFORE YOU BEGIN THE INSTALLATION OF YOUR DRM04 DRYER EXHAUST DUCT POWERED VENTILATOR (DEDPV).

## **DRM04 Kit Contains:**

- (x1) TFM04 4" corded metal centrifugal fan with monitor
- (x1) TFR100 remote operation indicator
- (x1) English and French TFR100 warning card
- (x35') of 22 gauge 5-conductor wire
- (x1) CS100 clip-on clothes dryer current sensor with 6' cord
- (x2) 4" metal cleanout sleeves with band clamps
- (x4) self-adhesive foam strips (to limit vibration transferred to ductwork)

### **Screwpack Contents:**

(x4) 1/4" x 1 1/2" lag bolts (mounting the fan)

(x4) 1/4" washers (mounting the fan)

(x4) 3/8" rubber grommets (lag bolt vibration isolation)

(x2) 6-32 x 1 1/2" machine screws (for mounting remote indicator to electrical box)

(x2) #6 x 1 1/2" sheetmetal screws (for mounting remote indicator flush to drywall)

(x2) #6 7/8" long wall anchors (for mounting remote indicator flush to drywall)

(x3) self-adhesive cord clips (for securing low-voltage signal wiring)

### Tools / supplies you will need:

3/16" drill bit (wall anchors if remote is flush-mount, pilot holes for lag bolts). 7/16" socket and ratchet (to tighten lag bolts).

Phillips screwdriver (for mounting remote indicator).

Flathead screwdriver or 5/16" nut driver (for cleanout band clamps).

Sheetmetal shears.

Foil duct tape.

Wire cutters (to cut slot in operation indicator if flush-mounted).

Wire strippers (to cut low-voltage wire to length and strip if needed).

Use this unit only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer. You may phone the manufacturer during normal business hours at 1-800-999-3267 or submit your questions from our website: www.suncourt.com.

The DRM04 Dryer Booster Fan Kit is a Dryer Exhaust Duct Power Ventilator (DEDPV) designed for compliance to UL Standard 705. Any UL705 DEDPV is only suitable for residential electric clothes dryers employing 4" ductwork. Suncourt accepts no responsibility for use of this product in other applications.

# **SECTION I: GENERAL SAFETY WARNINGS**

WARNING - FOR INTERIOR USE ONLY.

WARNING - DO NOT USE TO EXHAUST HAZARDOUS OR EXPLOSIVE MATERIALS AND VAPOR OR DUST.

WARNING - DO NOT EXHAUST AIR IN EXCESS OF 158F (70C).

WARNING - NEVER EXPOSE YOUR FAN TO AMBIENT TEMPERATURES OVER 140F (60C).

WARNING - THE VENTILATOR MUST NOT BE USED IN CONJUNCTION WITH HIGH OUTPUT DRYERS.

WARNING - THE VENTILATOR MUST NOT BE USED WITH GAS DRYERS.

WARNING - THE VENTILATOR MUST NOT BE USED WITH STACKED WASHER / DRYERS USING A SINGLE (SHARED) POWER SUPPLY.

WARNING - ALL DRYER VENT DUCTWORK, FITTINGS, AND VENT CAPS MUST BE 4" DIAMETER. DO NOT INSULATE DUCTWORK BETWEEN THE BOOSTER FAN AND EXHAUST CAP.

WARNING - DO NOT INSTALL VENTILATOR LESS THAN 10 LINEAR FEET FROM THE CLOTHES DRYER EXHAUST OUTLET, MORE THAN 65 EQUIVALENT FEET\* FROM THE CLOTHES DRYER, OR MORE THAN 35 EQUIVALENT FEET\* FROM EXTERIOR VENT.

WARNING - DO NOT INSTALL IN AN EXHAUST DUCTWORK OF A CLOTHES DRYER WHOSE INSTRUCTIONS PROHIBIT THE INSTALLATION OF A CLOTHES DRYER BOOSTER FAN.

WARNING - DO NOT INSTALL IN AN EXHAUST DUCTWORK WHERE THE EQUIVALENT DUCT LENGTH IS < 25 FEET\*. THE DRM04 IS SUITABLE TO OVERCOME AN EQUIVALENT DUCT LENGTH OF 100 FEET\* OF 4 INCH DIAMETER RIGID METAL DUCT, AND TO MAINTAIN AN AIR VELOCITY OF 1200FPM.

WARNING - A SECONDARY LINT TRAP MUST BE INSTALLED BETWEEN THE CLOTHES DRYER AND THE DRM04 IF THE DRM04 IS LOCATED LESS THAN 15 LINEAR FEET FROM THE EXHAUST OF THE CLOTHES DRYER.

WARNING - NEVER RELY ON THE DUCT VENTILATOR AS A SUBSTITUTE FOR A DE-ENGERGIZED OR OTHERWISE DEFECTIVE CLOTHES DRYER BLOWER. THIS DEDPV IS DESIGNED TO WORK IN TANDEM WITH THE CLOTHES DRYER'S INTEGRAL BLOWER.

WARNING - NEVER USE A RHEOSTAT, LIGHT DIMMER SWITCH, SOLID STATE SPEED CONTROL, VARIAC OR ANY OTHER DEVICE TO ALTER THE SPEED OF THE VENTII ATOR

WARNING - INSTALLATION MUST COMPLY WITH LOCAL ELECTRICAL AND MECHANICAL, FUEL GAS, OR BUILDING CODES, AND MUST BE INSPECTED AND ACCEPTED BY AUTHORITIES HAVING JURISDICTION.

### **ELECTRICAL SAFETY WARNINGS**

WARNING - RISK OF ELECTRIC SHOCK. CAN CAUSE INJURY OR DEATH: DISCONNECT AND/OR LOCKOUT ALL REMOTE ELECTRIC POWER SUPPLIES BEFORE SERVICING OR INSTALLING. WHEN THE SERVICE DISCONNECTING MEANS CANNNOT BE LOCKED, SECURELY FASTEN A PROMINENT WARNING DEVICE, SUCH AS A TAG TO THE SERVICE PANEL.

WARNING - USE COPPER SUPPLY WIRES ONLY.

WARNING - ALWAYS UNPLUG OR OTHERWISE REMOVE POWER TO YOUR CLOTHES DRYER BEFORE INSTALLING THE REMOTE CURRENT SENSOR.

WARNING - THE VENTILATOR AND INTEGRAL CONTROL BOX CONTAIN NO USER SERVICEABLE PARTS INSIDE. ALTERATIONS TO FACTORY WIRING OR FACTORY CIRCUIT ADJUSTMENT CONTROLS WILL VOID THE WARRANTY.

WARNING - TO REDUCE THE RISK OF FIRE, ELECTRICAL SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

Your ventilator must be connected to a 110/120 Volt AC, 60Hz fuse or circuit breaker protected power source only in a manner approved by all applicable codes. Never connect your ventilator to a 208 or 240 Volt AC system.

The power source must be protected by a fuse or circuit breaker rated at a minimum of 15 amperes.

The power cord can be plugged in to any standard (NEMA 5-15) 3-prong outlet. The outlet supplying power to the cord must include a ground terminal properly connected to a ground source. The power cord should be secured to a location where it is not subject to damage, abrasion, or temperatures exceeding 140°F (60°C).

### **GENERAL INSTALLATION NOTES**

Installation work should be done by a qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction and accessibility.

Always mount the ventilator to an adjacent framing member using the included hardware. Never rely on the ductwork to support the fan.

Always mount the remote operation indicator in a location where it can remain visible to the clothes dryer user.

Always be sure that the function switch on the operation indicator is set to "Sense".

Use the provided rubber grommets to isolate the fan feet from the mounting bolts to minimize vibration noise. Use the provided foam strips to reduce vibration transferred to the ductwork.

Care should be taken to ensure that the current sensor does not become unplugged from the remote indicator panel. Using the provided self-adhesive cord clips to help keep the current sensor cord securely mounted against the wall will minimize the risk of dislodging the current sensor cord plug.

To prevent air leaks, use a good quality foil duct tape to seal the seams in the ductwork after installing the ventilator and removable cleanout sleeves.

Always leave your ventilator accessible for maintenance, cleaning, or repair.

Always minimize the use of flexible ducting to ensure proper airflow and minimize lint buildup.

When your clothes dryer is installed in an unventilated closet, follow the dryer manufacturer's recommendations for proper door louver sizing and placement.

## (\*)GENERAL NOTE ABOUT DUCT LENGTH

Maximum and minimum equivalent lengths shown in this literature are for "effective" length of ductwork. Subtract 10' for each standard 90 degree elbow, subtract 5' for each long sweep elbow, and subtract double the length of flexible duct to determine the maximum or minimum allowable duct run. Consult manufacturer's literature for equivalent duct length of exterior vent hood and secondary lint trap (if applicable).

A minimum of 1200 feet per minute air velocity is required to move entrained lint through the duct system. The DRM04 ventilator is certified to 1230FPM for all equivalent duct lengths up to 100 feet long. However, duct runs before and after the DEDPV must be optimized to ensure reliable operation of the DEDPV visual alarm conditions. (See Section II for information about minimum and maximum duct lengths.)

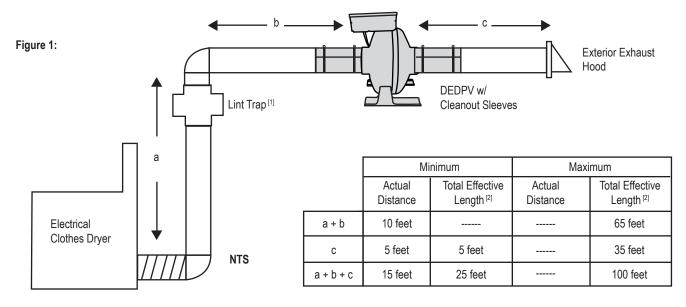
### GENERAL WARNING ABOUT DEDPY OPERATION / INSTALLATION

### WARNING - TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:

- (1) Your clothes dryer installation incorporates a dryer exhaust duct power ventilator (DEDPV) which may be in a different location than your clothes dryer, such as in the attic, crawl space, or basement.
- (2) Your clothes dryer depends on the DEDPV for its safe and efficient operation. Operating your dryer without a functional DEDPV will result in inefficient dryer operation, excess energy consumption, and a possible fire hazard. See warning on the alarm notification panel (operation indicator).
- (3) The notification/annunciator panel shall be permanently installed within the space in which the clothes dryer is installed. In the case of a dryer installed in an alcove provided with a door or doors, the notification/annunciator panel shall be installed within the alcove or be installed immediately adjacent to the doors of the alcove. The notification/annunciator panel shall be located where it will be readily visible after the dryer is installed without having to open any doors other than those necessary to access the clothes dryer.

## **SECTION II: PLANNING YOUR DUCT RUN**

Use the diagram and chart below to find the optimum position for your DEDPV within the duct system. Observe the minimum and maximum allowable distances.



### Notes:

- (1) Lint trap is required if (a+b) < 15 feet actual distance. Lint trap will also reduce the frequency of required periodic cleaning of the DEDPV.
- (2) For total effective length (TEL), add 10 feet for each short sweep elbow, add 5 feet for each long sweep elbow, and double the length of flexible duct used.

Minimizing the total effective length (TEL) of (a+b) will ensure reliable shutdown of the DEDPV in the event of an overheating duct condition. Minimizing the total effective length (TEL) of c will ensure accurate low airflow alarm indication in the event of a vent blockage.

## SECTION III: MOUNTING THE VENTILATOR

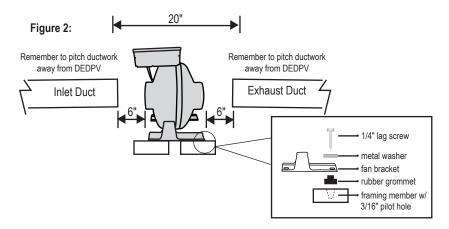
After determining the ideal position within the duct run per Section II, a suitable mounting location for the ventilator must be chosen. The ventilator can mount in any orientation. Chose a location where the ventilator can be securely mounted to a framing member. Never rely on the ductwork to support the fan. Add framing if necessary to ensure that all four mounting holes are bolted down.

Be sure to locate the fan such that there will not be an elbow or duct hanger within 16" of either side of the fan. This will allow full clearance for both cleanout sleeves to slide out for cleaning.

Step 1: Prepare the ductwork for installation.

- For an existing installation, cut out a 20" section of ductwork and mount the ventilator in the center.
- For a new installation, mount the ventilator and install the inlet and exhaust duct leaving a 6" gap between the end of the duct and the inlet/exhaust ports of the ventilator.
- Step 2: Hold the ventilator in position being sure to note the airflow direction arrow and trace the bracket holes onto the framing.
- Step 3: Use a 3/16" drill bit to drill pilot holes for the mounting bolts.
- Step 4: Press each of the four provided rubber grommets onto the underside of the ventilator bracket holes, place the ventilator, and align each rubber grommet with the pilot holes

Step 5: Place each of the provided washers onto the provided lag bolts and press into rubber grommet and pilot hole. Use a 7/16" wrench or socket to secure all four lag bolts. As the bolts are tightened, the washer will squeeze the rubber grommet onto the bracket providing isolation from the framing.



Provide or locate a power source for the ventilator. The DEDPV requires a constant (un-switched) power source and comes with a 6' 3-prong power cord attached to the ventilator. Locate or provide a suitable nearby outlet. Ideally, this would be an isolated power source with its own breaker. At a minimum, the DEDPV should not share its power source with other motorized equipment such as the washing machine.

WARNING - DO NOT APPLY POWER TO THE DEDPV UNTIL ALL INSTALLATION STEPS ARE COMPLETED.

## GENERAL NOTE ABOUT VENTILATOR MOUNTING POSITION

The ventilator can mount in any orientation, both horizontal or vertical. In a horizontal installation, it is important to keep the ductwork pitched away from the fan in both directions. In the event of moisture intrusion either from the exterior vent or internal condensation, this will ensure that the excess moisture will not build up inside the ventilator body.

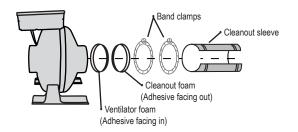
# **SECTION IV: MOUNTING THE CLEANOUT SLEEVES**

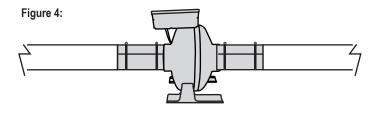
Removable cleanout sleeves are provided for periodic inspection and/or cleaning of the DEDPV. The sleeves are secured with band clamps and slide out of the way to inspect the inside of the DEDPV.

The sleeves ship nested together. Remove each sleeve from the package and place one provided self-adhesive foam strip to only one end of each sleeve. The strip should be adhered to the underside of the sleeve flush with the rounded edge. Place the other two self-adhesive foam strips on the outside surface of the inlet/outlet neck of the ventilator. When the sleeves are installed, the foam on the sleeves should be pressed into the foam on the ventilator neck. This will provide additional vibration isolation.

With the 'foamed' end facing the ventilator, open each cleanout sleeve and press onto the pipe end. Leave 3-4" of clearance between the open end of the sleeve and the ventilator. Ensure that the sleeve is overlapping itself, hold it in position, and slide two provided band clamps over each sleeve. Slide each sleeve into position such that the sleeve end is fully mated with the ventilator neck. Each sleeve should overlap the dryer ductwork by 3-4". Move one band clamp in between the ventilator and the first bead on the sleeve. Move the second band clamp toward the ductwork end. This clamp should be positioned behind the bead on the ductwork end of the sleeve. Using a ratchet or drill/driver with 5/16" bit, tighten each band clamp. Do not fully tighten one clamp before tightening the next. Instead, alternate between both clamps as you tighten. When fully tightened, the seam in the cleanout sleeve should appear nearly straight and the sleeve should overlap itself by approximately 1 1/2". Use a good quality foil duct tape to seal the connections and the seam. As with the remainder of the dryer duct system, no screws are permissible. Repeat this process for the other cleanout sleeve.

Figure 3:





### WARNING - DO NOT APPLY POWER TO THE DEDPV UNTIL ALL INSTALLATION STEPS ARE COMPLETED.

### SECTION V: MOUNTING THE OPERATION INDICATOR

Choose a location for the operation indicator where it will be visible to the clothes dryer end-user. Also choose a location where the 6 foot cord from the current sensor (see Section VI) will reach the operation indicator. If this does not suit your ideal location, any standard 1/8" (3.5mm) "headphone" extension cable can be used to extend the distance between the indicator and the current sensor.

The DRM04 ships with the control wiring connected to both the ventilator and the remote indicator. When disconnecting the control wiring from the indicator to route the cable, make note that the underside of the indicator includes a sticker showing the terminal block connections "A" thru "E" and the corresponding colors of each control wire lead. Care should be taken to ensure that the control wiring does not run along side any power lines, telephone, Ethernet, or coax cabling. If additional control wiring length is needed, the provided cabling should be spliced with either the same 5-conductor type CM wire included with the unit, or standard CL2 (thermostat) wire. Alternate color codes for thermostat wire are also shown on the wiring sticker. The remote indicator wire can be a maximum length of 75 feet.

The operation indicator front panel card has English printed on one side and French on the other. Spanish warning cards are available by contacting the manufacturer. The operation indicator for the DRM04 dryer exhaust duct power ventilator has two LED's visible from the front.

The operation indicator can be installed on a standard single-gang electrical box with the control wiring concealed in the wall. It can also be flush-mounted to the wall with the control wiring exposed or concealed. Both installation methods are addressed below.

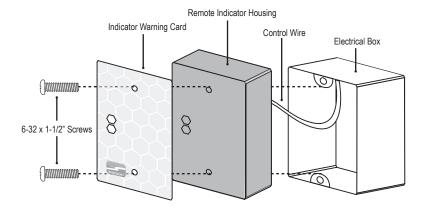
#### MOUNTING THE REMOTE INDICATOR TO AN ELECTRICAL BOX

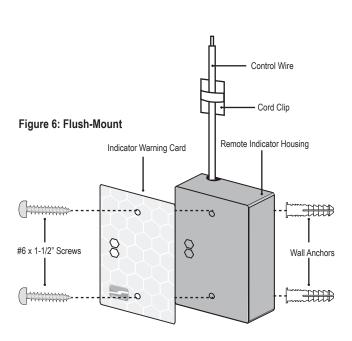
- Step 1: Cut an appropriate hole in the drywall for the electrical box and route the control wiring to the electrical box. Either a standard enclosed box or low-voltage open frame can be used. In both cases, choose a "new work" box for ease of installation.
- Step 2: Be sure that the 2-position switch on the back of the indicator is set to "sense".
- Step 3: Reconnect control wiring to the indicator following the colors shown on the wiring sticker.
- Step 4: Locate the provided indicator warning card and align it to the front of the indicator. Be sure that the clear hexagonal holes in the card are placed over the hexagonal holes in the indicator housing.
- Step 5: Use the provided 6-32 x 1 1/2" machine screws to hold the card in place and mount the indicator to the electrical box or low-voltage frame with a Phillips screwdriver.

### MOUNTING THE REMOTE INDICATOR FLUSH ON THE WALL

- Step 1: Use the provided indicator warning card as a stencil to mark the locations of the drywall anchors.
- Step 2: Drill holes for the wall anchors using a 3/16" drill bit.
- Step 3: Install the two provided wall anchors.
- Step 4: Be sure that the 2-position switch on the back of the indicator is set to "sense".
- Step 5: Reconnect control wiring to the indicator following the colors shown on the wiring sticker.
- Step 6: Locate the square wiring knock-out on the top of the housing and remove it using either wire cutters or a utility knife.
- Step 7: Locate the provided indicator warnings card and align it to the front of the indicator. Be sure that the clear hexagonal holes in the card are placed over the hexagonal holes in the indicator housing.
- Step 8: Use the provided #6 x 1 1/2" sheetmetal screws to hold the card in place and mount the indicator to the wall anchors with a Phillips screwdriver. Remember to route the control wiring through the knockout so the indicator will sit flush on the wall.
- Step 9: Use two provided cord clips to hold the control wiring flush to the drywall.

Figure 5: Mounting to Electrical Box





### WARNING - DISCONNECT POWER TO DRYER BEFORE OPENING THE WIRING COMPARTMENT.

## SECTION VI: MOUNTING THE DRYER CURRENT SENSOR

Disconnect power source and exhaust duct from the clothes dryer and locate the power wiring compartment next to the power cord entry. Open the wiring compartment and make note of the number of conductors on your power cord. If you have only three conductors, the middle conductor is a shared ground/neutral, the two remaining conductors are "hot", and the cord is typically grey in color. If you have four conductors, the green conductor is ground, the white conductor is neutral, the two remaining black and red conductors are "hot", and the cord is typically black in color.

The current sensor must be clipped on to a "hot" conductor to properly interlock the ventilator to the clothes dryer. Choosing the correct "hot" conductor can sometimes involve some trial-and-error. The clothes dryer's motor is only connected to one hot conductor and this is the conductor that needs to be monitored.

Figure 7: Current sensor installation in dryer wiring compartment (4-wire power cord)

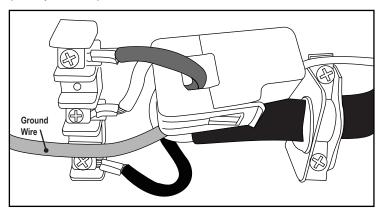
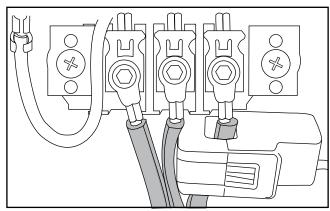


Figure 8: Current sensor installation in dryer wiring compartment (3-wire power cord)



### CONNECTIONS AND MOUNTING

- Step 1: Start by selecting one "hot" conductor and clip the provided blue current sensor onto that conductor. Only that single conductor should be inside the current sensor's body once clipped on.
- Step 2: Tuck the current sensor back into the compartment and replace the wiring compartment cover being careful not to crush the current sensor wire exiting the compartment.
- Step 3: Temporarily plug the current sensor wire into the jack on the remote indicator panel.
- Step 4: Temporarily re-connect power to the dryer.
- Step 5: Temporarily connect power to the DEDPV ventilator. If the red "fail" light is lit solid on the indicator, make sure the plug from the current sensor wire is fully seated into the jack.

### **TESTING INTERLOCK**

- Step 6: With the clothes dryer's exhaust duct still disconnected, set the dryer to an "air fluff" (no heat) cycle and start the dryer.
- Step 7: Observe that the green "sense" light on the remote indicator is lit solid after 2-3 seconds of clothes dryer operation. This indicates that the interlock is successful and the ventilator is operating.
- Step 8: Observe that the ventilator is drawing air through the exhaust duct.
- Step 9: Stop the clothes dryer and observe that the green "sense" light turns off after 10-15 seconds. This indicates that the ventilator is no longer operating.

\*\* If the behavior of the remote indicator and ventilator described during steps 7 thru 9 does not match your observations, your interlock was not successful. Remove power to the clothes dryer and ventilator. Disconnect the current sensor plug from the remote indicator jack. Open the clothes dryer's wiring compartment. Select the other "hot" conductor and repeat steps 1 thru 9 \*\*

## **FINAL STEPS**

- Step 10: Reconnect exhaust duct to clothes dryer and move the clothes dryer back into position.
- Step 11: Mount a provided self-adhesive cord clip on the current sensor wire close to the plug. This will help prevent the current sensor plug from becoming dislodged.

# **SECTION VII: CARE AND MAINTENANCE**

### WARNING - DISCONNECT POWER TO THE DEDPV BEFORE INSPECTING THE UNIT.

The DRM04 is designed to provide years of trouble-free operation. However, periodic maintenance of the DRM04 and the duct system is required to ensure optimum performance and safety of your overall dryer exhaust system.

The DRM04 motor includes permanently lubricated bearings. No periodic maintenance of the motor itself is required.

### RECOMMENDATIONS

Even with a properly installed DEDPV, lint accumulation within the duct system and connected accessories is unavoidable. But the degree to which the lint accumulates over time can be reduced by following some general recommendations. To reduce the lint accumulation in your duct system and DEDPV, observe the following:

- Never operate your clothes dryer without a lint trap installed.
- · Always clean your clothes dryer's lint trap after each cycle.
- Ensure that your clothes dryer's lint trap does not have any holes in the mesh or cracks in the frame and is fully secured in place.
- Check your secondary lint trap (if any) after each cycle.
- Even if a secondary lint trap is not required per note 1 of Section II, its installation will reduce the lint accumulation downstream of the trap and will reduce the frequency of periodic duct system and/or DEDPV inspections.
- If your clothes dryer is located in a closet, follow the clothes dryer manufacturer's recommendations regarding the placement and size of door louvers for adequate make-up air.
- · Minimize the use of flexible ductwork.
- Make sure the flexible ductwork behind the clothes dryer is not blocked or crushed and minimize the number of bends, dips/valleys, or changes in direction. Remove length from this flexible duct if necessary to ensure this recommendation is followed.
- Never mount a bird guard on a clothes dryer exhaust vent hood.
- Avoid soffit-mounted vents for dryer duct applications if possible. Their mesh bird-guards are typically not removable and their location often requires a 90 degree elbow immediately preceding the vent. An elbow in this location will cause unnecessary back-pressure and will significantly reduce the performance of the exhaust duct system.
- Do not mount your exterior vent hood in a location where it can be blocked by snow, foliage, or other obstructions.
- Remember to periodically check your exterior exhaust vent hood for blockages.

## **CLEANING AND MAINTENANCE**

This section refers specifically to the cleaning and maintenance of the DRM04 DEDPV clothes dryer booster fan. Refer to your clothes dryer's literature or related trade publications regarding the cleaning and maintenance of the dryer duct, exterior vent hood, and the clothes dryer itself.

We recommend inspecting the interior of the DRM04 for lint accumulation every 3 months after initial installation. If after several inspections you find this to be too frequent (little accumulation inside the ventilator), you can extend the time between inspections as necessary. The rate of required inspection depends on dryer usage and the overall duct system design and orientation. At a minimum, we recommend inspecting the DRM04 for lint accumulation every 6 months.

Record the date of your last inspection. If you are inspecting the DEDPV due to an error indication[1] as noted in Section IX, make note of your last inspection date and adjust your inspection/cleaning frequency as required.

Follow these steps to inspect and clean your DRM04 DEDPV:

- 1. Remove power to the DEDPV.
- 2. Slice the foil tape on each end of each cleanout sleeve and across each seam of the sleeve.
- 3. Loosen all 4 band clamps using a Flat head screwdriver or ratchet/drill driver with 5/16" bit. Loosen each clamp until the cleanout's seam has moved by about 3/4" (use the two cut pieces of foil tape along the seam as a reference). This should provide adequate clearance to slide the sleeves out of the way for inspection. The position of each band clamp needn't be moved.
- 4. Slide both cleanout sleeves away from the ventilator. Be careful not to force each sleeve too far back toward the duct to avoid disturbing the foam gasket on the underside of the sleeve.
- 5. Inspect the interior of the ventilator. Most accumulation will be noted on the inlet side, but it is important to inspect both sides.
- 6. Remove any accumulated lint[1].
- a. Do not use any sharp tools or objects to remove lint. This could damage the impeller, motor wiring, or high-limit fuse inside the ventilator body.
- b. Be careful not to disturb the balancing clips on the impeller.
- c. Do not apply any chemicals to the ventilator's interior or use aerosol sprays. This could weaken the impeller material or damage the motor.
- 7. Slide each cleanout sleeve back into position such that they are fully mated with the ventilator's inlet/outlet necks and the ventilator foam gasket will mate with the sleeve's foam gasket once tightened.
- 8. After noting that the band clamps are each in their correct position (see Section IV), re-tighten the band clamps. As noted in Section IV, alternate between both clamps until both are fully tightened to ensure that the seam of each cleanout sleeve is straight.
- 9. Reseal both ends of each cleanout sleeve with foil tape.
- 10. Reseal the seam of each cleanout sleeve with foil tape.
- 11. Restore power to the DEDPV.

Notes[1]: If your lint accumulation is excessive (complete blockage of inlet side of ventilator) and you are assured that your inspection frequency is adequate, then revisit all items in the 'Recommendations' section above. If you have eliminated all other items in the 'Recommendations' section as the root cause of this excessive buildup, you will need to install a secondary lint trap between the clothes dryer and the DEDPV.

## **SECTION VIII: LIMITED WARRANTY**

Subject to the following limitation, Suncourt Inc. (manufacturer) warrants that this DEDPV (Dryer Exhaust Duct Power Ventilator) will, for 5 (five) years from the date of original purchase, remain free from appearance of defects in workmanship or materials when installed in accordance with this instruction set, all applicable codes and standards and fire rated construction in the application for its designed and specified use. This Limited Warranty is subject to the following limitations: (a) manufacturer's liability is limited to the replacement or repair of the unit, as decided by the manufacturer; (b) a defective unit must be returned, prepaid, with proof of purchase, to Suncourt Inc, and (c) this Limited Warranty does not apply if:

- a. Shipping damage occurs. Claims must be filed with the freight company within 1 (one) week.
- b. Damage results from faulty installation or electrical wiring.
- c. Inadequate maintenance.
- d. Damage results from: Incorrect wiring, voltage, voltage spikes from lightning or other sources.
- e. The DEDPV (Dryer Exhaust Duct Power Ventilator) including any packaged accessories is altered or modified in any form whatsoever, including unauthorized repair.
- f. Suncourt ID label is removed.
- g. Damage or failure is due to an act of God.
- h. This product is used in other than a residential application.
- i. The damage or failure is found to have violated one or more of the General Safety Warnings specified in Section I of this document.

This Limited Warranty is given in lieu of all other warranties, guarantees and conditions on manufacturer's part and manufacturer shall have no tortious or other liability with respect to this DEDPV (Dryer Exhaust Duct Power Ventilator).

Suncourt reserves the right to change product specifications without notice.

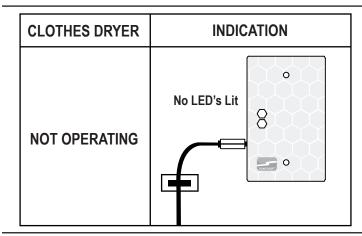
## **SECTION IX: ERROR INDICATIONS AND REMEDIATION**

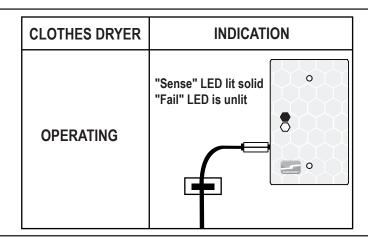
WARNING - ANY ERROR INDICATED BY THE OPERATION INDICATOR SHOULD BE ADDRESSED IMMEDIATELY. A VENTILATOR FAILURE, CLOGGED DUCT, BLOCKED VENT, OR OTHERWISE UNDERPERFORMING CLOTHES DRYER EXHAUST DUCT SYSTEM IS A HAZARDOUS CONDITION. DO NOT OPERATE THE CLOTHES DRYER UNTIL THE PROBLEM HAS BEEN RESOLVED.

USE THIS GUIDE TO HELP YOU IDENTIFY THE CAUSE OF THE ERROR. IF YOU HAVE ANY QUESTIONS OR CONCERNS, CALL THE MANUFACTURER AT 800-999-3267 DURING NORMAL BUSINESS HOURS OR SUBMIT A QUESTION USING OUR WEBSITE. BOTH THE MANUFACTURER'S PHONE NUMBER AND WEBSITE URL ARE PRINTED ON THE OPERATION INDICATOR CARD.

- A green "sense" LED indicates that the DRM04 detects the operation of the clothes dryer. It should remain lit throughout the clothes dryer cycle and for 10-15 seconds after the dryer stops.
- A red "fail" LED indicates a problem. If the system is working properly, it should never be lit. If an error is detected, the red "fail" LED will either blink or remain solidly lit depending on the type of error. It will continue to indicate the failure after the clothes dryer cycle has ended. Once the problem has been resolved, the "fail" LED should stop its indication after 15-20 seconds of another new clothes dryer cycle (or if the DEDPV loses its power source).

### NORMAL OPERATION INDICATIONS





### ABNORMAL OPERATION INDICATIONS

CLOTHES DRYER	INDICATION	POSSIBLE CAUSES	POSSIBLE REMEDIES
NOT OPERATING	"Sense" LED lit solid	- Micro switch on back of indicator is set to "cont".	- Remove indicator and verify that the micro switch on the back of the circuit board is set to "sense".
		- One or more conductors in the control wiring is (are) not connected properly.	- Remove indicator and verify that all 5 conductors are fully secured and match the color codes shown on the sticker.
OPERATING	No LED lit	- No power to DEDPV	- Check that the outlet providing power to the DEDPV has 120V
		Current sensor connected to wrong clothes dryer 'hot' conductor (see Section VI)	- Revisit Section VI of the instructions
		- One or more conductors in the control wiring is (are) not connected properly.	<ul> <li>Remove indicator and verify that all 5 conductors are fully secured and match the color codes shown on the sticker.</li> </ul>

# **Error Codes**

CLOTHES DRYER	INDICATION	POSSIBLE CAUSES	POSSIBLE REMEDIES
OPERATING	"Fail" LED lit solid "Sense" LED is unlit	- Current sensor plug has become dislodged from the jack on the indicator panel.	- Ensure that the plug from the current sensor is fully seated into the jack on the indicator panel. Using the self-adhesive cord clip will help prevent this situation.
OPERATING	"Fail" LED - slow blink (1HZ or once per second)	- DEDPV is operating at lower than standard RPM	- Check for lint buildup or obstructions in the DEDPV* (see Section VII)
		- DEDPV has shut down due to an overheat condition	- Observe that the minimum distance between the dryer and DEDPV is as specified in Sec II
		- DEDPV motor is not operational	- After checking the above 2 solutions, physically check the fan's operation. If fan is not operating while the dryer is on, return the fan for service.
OPERATING	"Fail" LED - fast blink (2HZ or twice per second)	- Exhaust vent blockage	- Check vent cap for debris and ensure that the backdraft damper(s) is/are not stuck shut
		- Lint buildup in duct system	- Inspect ductwork and lint trap
		- Duct system is too long	- Ensure that the total effective length of the duct system does not exceed 100 equivalent feet
		- Inlet vent blockage	-Check for crushed flex duct

<sup>\*</sup> Remember to remove power to the DEDPV before inspecting the interior of the fan.

All three error codes will continue to annunciate after the dryer cycle has ended.

CLOTHES DRYER	SENSOR UNPLUGGED	LOW OR NO RPM	LOW AIRFLOW
	"Fail" LED lit solid	"Fail" LED - slow blink	"Fail" LED - fast blink
NOT OPERATING			(((((( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (