

# Industrial Air Circulator Instructions

## For All Direct Drive Commercial Exhaust Fans

### READ AND SAVE THESE IMPORTANT INSTRUCTIONS

It is important that the following safety precautions be followed when using this product:

- ALWAYS disconnect unit from power source before cleaning or maintenance.
- ALWAYS turn off unit when not in use.
- DO NOT use an extension cord, unit is intended to be permanently hard wired to properly rated electrical service outlet.
- DO NOT place foreign objects through guards into blades.
- DO NOT allow unit to become wet or damp.
- DO NOT use this fan with any solid state speed control device.

**WARNING:** To avoid risk of fire, electrical shock or injury to persons, observe the following:

- A. Use this unit only in the manner intended by the manufacturer. If you have any questions contact the manufacturer.
- B. Before servicing or cleaning unit, switch power off at service panel and lock service panel to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag to the service panel.

### ASSEMBLY INSTRUCTIONS

#### Models CE 10-D Thru CE 30-D, CE 10-DV and CE 30-DV

1. All of the above mentioned Direct Drive Commercial Exhaust Fans come pre-assembled. If you have purchased models incorporating a shutter or venturi please refer to the assembly instructions below.

Note: Models ending in “-DV” have the same assembly procedure described below, except the fan is attached to a venturi rather than a shutter. Venturi throat should be directed away from fan.

#### Models CE 10-DS Thru CE 24-DS

1. Find hardware kit provided with fan. Insert screw, #12 x 1, type AB (Item 3) into rubberized washer (Item 2). Screw should fully insert into washer with rubber side down. See figure 2 on reverse side.
2. Find nylon insert nuts (Item 5) provided with hardware kit. See figure 4 on reverse side.
3. Place nylon insert nuts (Item 5) into square holes on corner gussets located on the back side of the shutter (Item 6). See figure 6 on reverse side.
4. After installing insert nuts, place shutter face down (gusset side up). Find rubber bushing (Item 8) provided with hardware kit and place bushing so that they are centered over each nylon insert nut. Then place the fan assembly (Item 7) on top of the shutter so that the wire mounting hooks of the fan assembly's guard rest centered over the rubber bushings and insert nuts. Using a 5/16 nut driver or equivalent run the #12 screw (Item 3) and rubberized washer (Item 2) combination down through the centers of the guard mounting hooks, rubber bushings and into the nylon insert nuts. Securely tighten fasteners. Take care to avoid over tightening and stripping of the nylon insert nuts. See figure 8 on reverse side.

#### Models CE 30-DS

1. Find hardware kit provided with fan. Insert screw, #8-32 x 1 1/2" (Item 1) into rubberized washer (Item 2). Screw should fully insert into washer with rubber side down. See figure 1 on reverse side.
2. Find rubber insert nuts (Item 4) provided with hardware kit. See figure 3 on reverse side.

Note assembly instructions continued on page 3.

FIGURE 5  
CE 30-DS

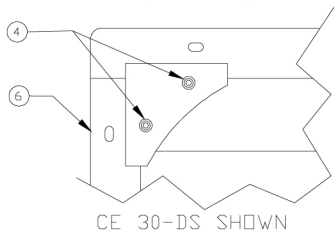
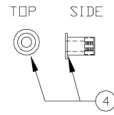


FIGURE 3

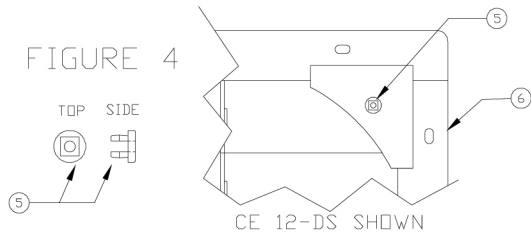


CE 30-DS SHOWN

FIGURE 6

CE 10-DS thru CE 24-DS

FIGURE 4



CE 12-DS SHOWN

FIGURE 7  
CE 30-DS SHOWN

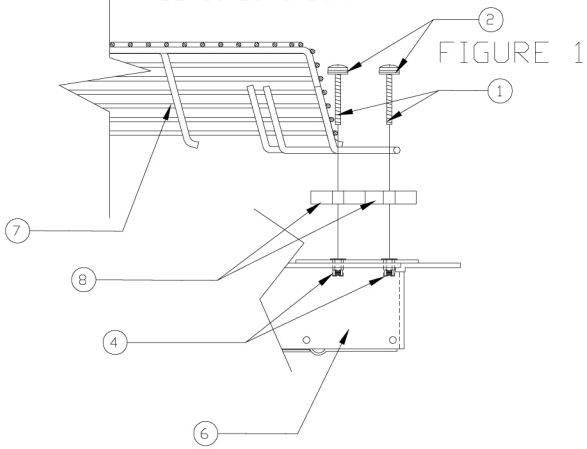
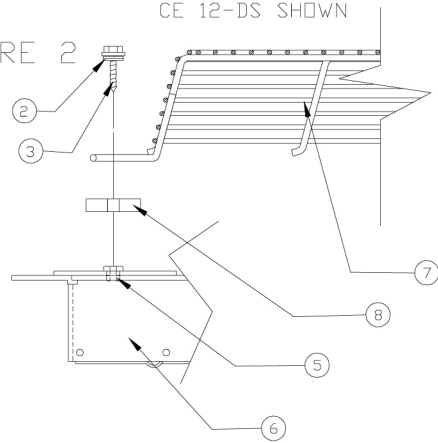


FIGURE 8

CE 12-DS SHOWN

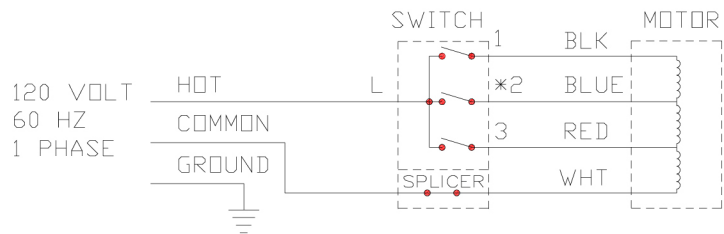
FIGURE 2



TPI MODEL	RECOMMENDED ROUGH IN HOLE SIZE
CE 10-D	* 10.50 DIA. CIRCLE
CE 12-D	* 12.50 DIA. CIRCLE
CE 14-D	* 14.50 DIA. CIRCLE
CE 16-D	* 16.50 DIA. CIRCLE
CE 18-D	* 19.00 DIA. CIRCLE
CE 20-D	* 21.00 DIA. CIRCLE
CE 24-D	* 25.00 DIA. CIRCLE
CE 30-D	* 31.00 DIA. CIRCLE
CE 10-DS	10.50 SQ. HOLE
CE 12-DS	12.50 SQ. HOLE
CE 14-DS	14.50 SQ. HOLE
CE 16-DS	16.50 SQ. HOLE
CE 18-DS	18.50 SQ. HOLE
CE 20-DS	20.50 SQ. HOLE
CE 24-DS	24.50 SQ. HOLE
CE 30-DS	30.50 SQ. HOLE
CE 10-DV	10.50 SQ. HOLE
CE 12-DV	12.50 SQ. HOLE
CE 14-DV	14.50 SQ. HOLE
CE 16-DV	16.50 SQ. HOLE
CE 18-DV	18.50 SQ. HOLE
CE 20-DV	20.50 SQ. HOLE
CE 24-DV	24.50 SQ. HOLE
CE 30-DV	30.50 SQ. HOLE

\* HOLE MAYBE SQUARE IF NECESSARY

WIRING DIAGRAM



SWITCH WIRING MODELS:

CE 10-D thru CE 18-D

L=SUPPLY, HDT, BLACK

1=MOTOR, BLACK

2=MOTOR, BLUE

3=MOTOR, RED

SPLICER=MOTOR & SUPPLY, COMMON, WHITE

SCREW IN HANDY BOX=GREEN, GROUND

SWITCH WIRING MODELS:

CE 20-D thru CE 30-D

L=SUPPLY, HDT, BLACK

1=MOTOR, BLACK

\*2=NOT USED

3=MOTOR, RED

SPLICER=MOTOR & SUPPLY, COMMON, WHITE

SCREW IN HANDY BOX=GREEN, GROUND

# READ AND SAVE THESE IMPORTANT INSTRUCTIONS

## ASSEMBLY INSTRUCTIONS con't.

### Models CE 30-DS

- Place rubber insert nuts (Item 4) into round holes on corner gussets located on the back side of the shutter (Item 6). It may be necessary to twist insert nut while pushing or lightly tap insert nuts into round holes using a hammer. See figure 5 on reverse side.
- After installing insert nuts, place shutter face down (gusset side up). Find rubber bushing (Item 8) provided with hardware kit and place bushing so that they are centered over each rubber insert nut. Then place the fan assembly (Item 7) on top of the shutter so that the wire mounting hooks of the fan assembly's guard rest centered over the rubber bushings and insert nuts. Using a #2 phillips screw driver or equivalent run the #8-32 x 1/2" screw (Item 1) and rubberized washer (Item 2) combination down through the centers of the guard mounting hooks, rubber bushings and into the rubber insert nuts. Securely tighten fasteners. Take care to avoid allowing the rubber insert nuts (Item 4) from being pulled up through the shutter gusset hole before nut has properly expanded. See figure 8 on reverse side.

## INSTALLATION INSTRUCTIONS

### Models: CE 10-D Thru CE 30-D and CE 10 DS Thru CE 30-DS and CE 10-DV thru CE 30-DV

- See previous side for recommended wall holes sizes.
- Attach fan to installation wall surface as follows for applicable wall structure.
  - Wood structure - use 1/4" lag screws of appropriate length through each mounting hole.
  - Steel Structure - use 1/4" bolt of appropriate length for application, in combination with a 1/4" flat washer and a 1/4" nut.
  - Masonry Structure - use 1/4" lag screw in combination with a lag shield or equivalent 1/4" masonry fastener of appropriate length.
- The above mentioned hardware for mounting fans to wall surfaces is not provided by the manufacturer, since each mounting application is different. However these items can be obtained from your local hardware store.
- If shutter is attached be sure when mounted that the shutter blades will open upward.

#### Note:

This unit is equipped with a speed selector switch, which allows you to select a desired amount of air delivery. The motor is equipped with a thermo-protector and will automatically de-energize the fan if it were to over heat for any reason. If this should happen immediately disconnect unit from the power source.

## CLEANING / MAINTENANCE INSTRUCTIONS

All maintenance should be done by either TPI Corporation or a qualified electrician. The motor bearings are lubricated at the factory and should not require any additional lubrication. However, if bearings lubrication is required apply a small amount of a high temperature bearing grease.

Use an air hose or vacuum to remove any air born contaminates which may have settled on motor or bearings. Use mild detergent to clean blade and guards. Avoid allowing the cleanser to come in contact with the motor bearings or windings. Allow fan to completely dry before next use.

Reference parts list on reverse side of this instruction sheet. Save these important instructions. Your TPI Air Circulator carries a one year warranty.

For additional information on TPI Products or replacement parts, call TPI Customer Service Department at 1-800-251-0382 or write the address below.

ITEM NO.	CE MODEL							TPI P/N:	QTY.	DESCRIPTION
	-10	-12	-14	-16	-18	-20	-24			
1	X							58419-000	1	GUARD, 10", W/ WALL MOUNT BRACKETS
1	X	X						63807-001	1	GUARD, 12", W/ WALL MOUNT BRACKETS
1	X	X	X					58419-001	1	GUARD, 14", W/ WALL MOUNT BRACKETS
1	X	X	X	X				58419-002	1	GUARD, 16", W/ WALL MOUNT BRACKETS
1	X	X	X	X	X			63806-001	1	GUARD, 18", W/ WALL MOUNT BRACKETS
1	X	X	X	X	X	X		58419-003	1	GUARD, 20", W/ WALL MOUNT BRACKETS
1	X	X	X	X	X	X	X	63804-001	1	GUARD, 24", W/ WALL MOUNT BRACKETS
1	X	X	X	X	X	X	X	63804-001	1	GUARD, 30", W/ WALL MOUNT BRACKETS
2	X	X						58181-002	1	MOTOR, 120V, 1.1A, 1725, 3 SPD, SHADED POLE
2	X	X	X	X				58158-002	1	MOTOR, 120V, 2.2A, 1725, 3 SPD, PSC
2	X	X	X	X	X	X		58165-001	1	MOTOR, 120V, 2.5A, 1100, 2 SPD, PSC
3	X	X	X	X	X	X	X	41449-001	1	COVER, PLATE, HANDY BOX
4	X	X	X	X	X	X	X	58071-001	1	SWITCH, PULL CHAIN
5	X	X	X	X	X	X	X	4418	2	ROMEX CONNECTOR
6	X	X	X	X	X	X	X	43651-001	2	SCREW, #6-32, PANHEAD, PHILLIPS
7	X	X	X	X	X	X	X	41315-001	1	HANDY BOX
8	X	X	X	X	X	X	X	1374	2	SCREW, #8-18 x 1/2, HEX, SELF DRILLING
9	X							54936-001	1	FAN BLADE ASSEMBLY, 10 INCH
9	X	X						58478-001	1	FAN BLADE ASSEMBLY, 12 INCH
9	X	X	X					58514-001	1	FAN BLADE ASSEMBLY, 14 INCH
9	X	X	X	X				58514-002	1	FAN BLADE ASSEMBLY, 16 INCH
9	X	X	X	X	X			58299-008	1	FAN BLADE ASSEMBLY, 18 INCH
9	X	X	X	X	X	X		58514-003	1	FAN BLADE ASSEMBLY, 20 INCH
9	X	X	X	X	X	X	X	58299-003	1	FAN BLADE ASSEMBLY, 24 INCH
9	X	X	X	X	X	X	X	58299-004	1	FAN BLADE ASSEMBLY, 30 INCH
10	X	X	X	X	X	X	X	4900	4	NUT, #8-32, NYLOCK, HEX
11	X	X	X	X	X	X	X	43957-001	4	WASHER FLAT
12	X	X	X	X	X	X	X	1458	1	GROUND SCREW
13	X	X	X	X	X	X	X	43944-001	1	KIT, HARDWARE CE 10-24 INCH
14	X	X	X	X	X	X	X	43945-001	1	KIT, HARDWARE CE 30 INCH
15	X							08684302	1	SHUTTER, WALL 10"
15	X	X						07985502	1	SHUTTER, WALL 12"
15	X	X	X					08684502	1	SHUTTER, WALL 14"
15	X	X	X	X				08684702	1	SHUTTER, WALL 16"
15	X	X	X	X	X			07985602	1	SHUTTER, WALL 18"
15	X	X	X	X	X	X		07975202	1	SHUTTER, WALL 20"
15	X	X	X	X	X	X	X	07985702	1	SHUTTER, WALL 24"
15	X	X	X	X	X	X	X	07985802	1	SHUTTER, WALL 30"
16	X							58184-003	1	VENTURI, 10 INCH
16	X	X						58184-001	1	VENTURI, 12 INCH
16	X	X	X					58184-004	1	VENTURI, 14 INCH
16	X	X	X	X				58184-005	1	VENTURI, 16 INCH
16	X	X	X	X	X			58184-002	1	VENTURI, 18 INCH
16	X	X	X	X	X	X		58184-006	1	VENTURI, 20 INCH
16	X	X	X	X	X	X	X	63812-001	1	VENTURI, 24 INCH
16	X	X	X	X	X	X	X	63812-002	1	VENTURI, 30 INCH
17					X	X	X	29699-006	1	CAPACITOR
18					X	X	X	43942-001	1	BRACKET, CAPACITOR
19					X	X	X	41019-001	1	BOOT, RUBBER CAPACITOR