Replacement Parts Manual

TSF-80 Downflow/Horizontal Gas Furnace

Models: TDH042, TDH063, TDH084, TDH105, TDH126

General Notes

9 Revised and/or additional pages may be issued from time to time,

9 A complete and current manual consists of pages shown in the following contents section.

Important

9 Contact the installing and/or local Bard distributor for all parts requirements. Make sure you have the complete model and serial number available from the unit rating plates.

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| Wire Components • Usage List • Exploded View | |



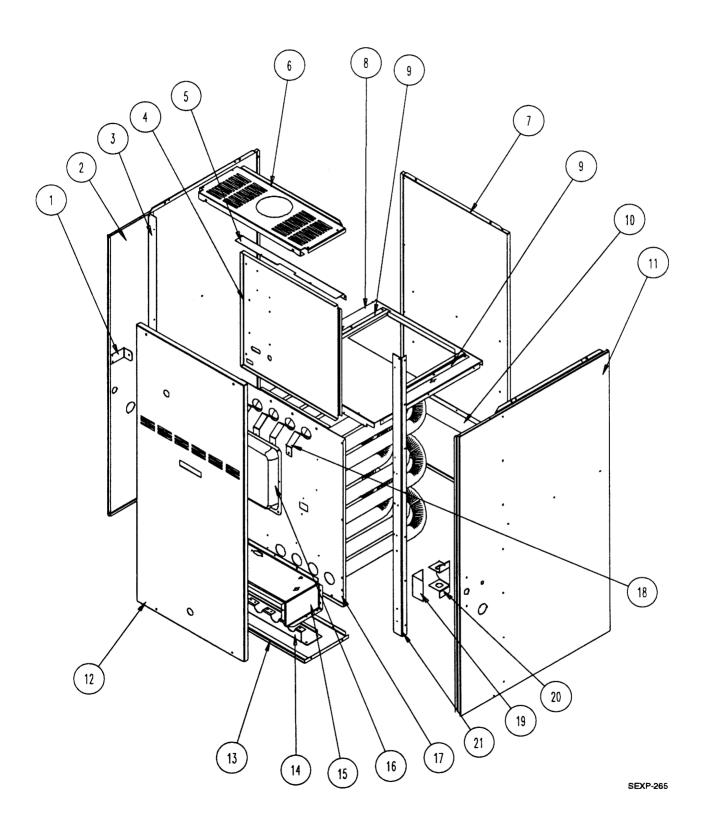
BARD MANUFACTURING COMPANY Bryan, Ohio 43506

Since 1914...Moving ahead, just as planned.

Manual: 211 O-874

Rev.

Date: 07-18-97



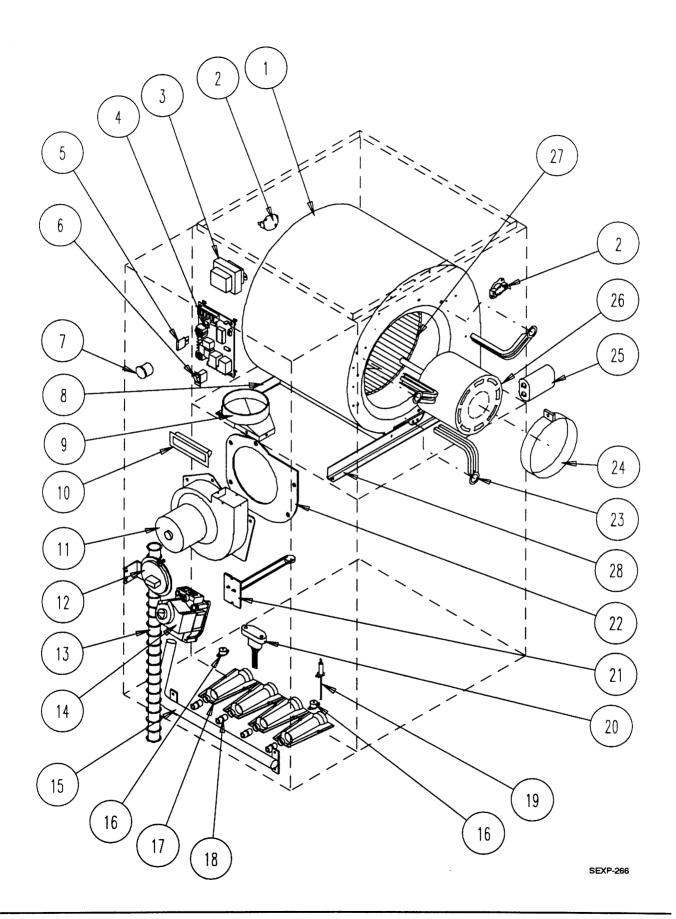
Cabinet Components

| Drawing | | | | TDH042 | TDH063 | TDH084 | TDH105 | TDH126 |
|---------|--------------------|-------------------------------|-----|--------|--------------|--------------|--------------|------------------|
| No. | Part No. | Description | | F | <u> </u> | _ <u> </u> | = | <u> </u> |
| 1 | 141-243 | Wire Channel Support | | Х | X | X | Х | X |
| 2 | 5101-335-X | Left Side Assembly | | Х | X | X | Х | Х |
| 3 | 105Y993 | Left Side Angle | | Х | X | X | X | X |
| 4 | 5153-274 | Blower Door Assembly | | Х | | | 1 | |
| 4 | 5153-275 | Blower Door Assembly | | | X | | 1 | |
| 4 | 5153-276 | Blower Door Assembly | | | | X | | |
| 4 | 5153-277 | Blower Door Assembly | | | | | Ιx | |
| 4 | 5153-278 | Blower Door Assembly | | | | | | X |
| 5 | 105-997 | Blower Door Angle | | Х | | | | |
| 5 | 105-998 | Blower Door Angle | | | X | | | |
| 5 | 105-999 | Blower Door Angle | | | | Ιx | | |
| 5 | 105-1000 | Blower Door Angle | | | | `` | X | 1 |
| 5 | 105-1001 | Blower Door Angle | | | | | `` | X |
| 6 | 5107-197-X | Top Fill | | X | | | | ^` |
| 6 | 5107-198-X | Top Fill | | - 1 | Ιx | | | |
| 6 | 5107-199-X | Top Fill | | | ^ | Ιx | | |
| 6 | 5107-200-X | Top Fill | | | ł | ^ | X | |
| 6 | 5107-201-X | Top Fill | | | | | ^ | x |
| 7 | 5109-134-X | Back Assembly | | Х | | <u> </u> | ├ | ^ |
| 7 | 5109-135-X | Back Assembly | | ^ | x | | | 1 |
| 7 | 5109-136-X | Back Assembly | | | ^ | x | | |
| 7 | 5109-137-X | Back Assembly | | | | ^ | | 1 |
| 7 | 5109-138-X | Back Assembly | | | | | X | |
| 8 | 5127-270 | Blower Base Assembly | | X | | - | | L X |
| 8 | 5127-271 | Blower Base Assembly | | ^ | | | | |
| 8 | 5127-271 | Blower Base Assembly | | | X | | | |
| 8 | 5127-272 | Blower Base Assembly | | | | X | ١., | |
| 8 | 5127-273 | • | | | | | X | |
| 9 | 102-412 | Blower Base Assembly | | | ļ.,, | | | X |
| 10 | 135-158 | Blower Base Offset Air Baffle | | X | X | Х | X | X |
| 10 | 135-159 | | 1 | X | | | İ | |
| 10 | 135-160 | Air Baffle | | | Х | | | |
| 10 | | Air Baffle | | | | Х | | |
| 10 | 135-161 135-162 | Air Baffle | ľ | | | | X | |
| 11 | | Air Baffle | | | | | | X |
| 12 | 5101-336-X | Right Side Assembly | | X | Х | Х | Х | Х |
| | 5153-279-X | Vestibule Door Assembly | İ | X | | | | 1 1 |
| 12 | 5153-280-X | Vestibule Door Assembly | l | | X | | ĺ | 1 1 |
| 12 | 5153-281-X | Vestibule Door Assembly | | | | Х | | i i |
| 12 | 5153-282-X | Vestibule Door Assembly | | | | | Х | i I |
| 12 | 5153-283-X | Vestibule Door Assembly | | | | | | X |
| 13 | 107-189 | Bottom Fill | | X | | | | |
| 13 | 107-190 | Bottom Fill | | | Х | | | |
| 13 | 107-191 | Bottom Fill | | | | Х | ŀ | |
| 13 | 107-192 | Bottom Fill | ļ | | | | Х | |
| 13 | 107-193 | Bottom Fill | | | L | | | x |
| 14 | 162-033 | Burner Bracket | | Х | | | | |
| 14 | 162-035 | Burner Bracket | | | Х | | | |
| 14 | 162-031 | Burner Bracket | - 1 | | | Х | | |
| 14 | 162-037 | Burner Bracket | | | | | х | |
| 14 | 162-039 | Burner Bracket | | | | | `` | x |

Cabinet Components

| D | | | | TDH042 | FDH063 | TDH084 | TDH105 | TDH126 |
|----------------|---------------|-------------------------|---|--------------|----------|--------|----------|----------|
| Drawing No. | Part No. | Description | | | <u> </u> | F | <u> </u> | <u> </u> |
| 15 | 162-034 | Burner Box | | X | | | | |
| 15 | 162-036 | Burner Box | | | Х | | | i |
| 15 | 162-032 | Burner Box | | | | Х | | |
| 15 | 162-038 | Burner Box | } | | | | Х | |
| 15 | 162-040 | Burner Box | | | | | | X |
| 16 | S168-113 | Collector Box Assembly | | Х | ., | | | |
| 16 | S168-114 | Collector Box Assembly | | | Х | ., | | |
| 16 | S168-115 | Collector Box Assembly | | | | X | ١., | |
| 16 | S168-116 | Collector Box Assembly | | | | | Х | |
| 16 | S168-117 | Collector Box Assembly | | | | | | X |
| 17 | S170-235 | Heat Exchanger Assembly | | Х | | l | | |
| 17 | S170-236 | Heat Exchanger Assembly | | | X | | ļ | |
| 17 | S170-237 | Heat Exchanger Assembly | | | | X | ١., | |
| 17 | S170-238 | Heat Exchanger Assembly | | | | | X | |
| 17 | S170-239 | Heat Exchanger Assembly | | | <u></u> | ļ | <u> </u> | X |
| 18 | 7090-012 | Flue Baffle | | 2 | 3 | 4 | 5 | 6 |
| 19 | 132-107 | Junction Box Cover | | X | X | X | X | X |
| 20 | 117-194 | Junction Box | | X | X | X | X | X |
| 21 | 105X993 | Right Side Angle | | X | X | X | X | X |
| NS | 5452-008-1200 | Pressure Switch Tubing | | X | X | X | X | X |

NS Not Shown



| Drawing No. | Part No. | Describetion | TDH042 | TDH063 | TDH084 | TDH105 | TDH126 |
|----------------|---------------|---------------------------------|---------------|--------------------|---------------------|--------------------|----------|
| 1 | 151-109 | Description | | <u> </u> | <u> </u> | | <u> </u> |
| 1 1 | 151-109 | Blower Housing Assembly | X | ١ | | | |
| 1 | 151-082 | Blower Housing Assembly | | X | | l | |
| 1 1 | 5152-050 ② | Blower Housing Assembly | | | X | | |
| 2 | | Blower Housing Assembly | | | | X | X |
| 3 | 8402-044 | Upper Limit | 2 | 2 | 2 | 2 | 2 |
| 4 | 8407-045 | Transformer 120/24V 40VA | X | Х | Х | Х | X |
| 5 | 5651-144 | Integrated Furnace Control | X | Х | Х | Х | X |
| | 8614-045 | 3 Amp Fuse | X | X | Х | Х | Х |
| 6 | 8406-076 | Door Switch | X | Х | Х | Х | Х |
| 7 | 8611-075 | Clear Sight Glass | X | Х | X | X | X |
| 8 | 104Y951 | Left Blower Angle | X | Х | Х | X | X |
| 9 | 5809-013 | 3" Inducer Transition | X | | | | |
| 9 | 5809-014 | 4" Inducer Transition | | Х | Х | Х | X |
| 10 | 1171-025 | Door Pull | X | Х | Х | X | X |
| 11 | 8109-010 | Induced Draft Blower | X | X | X | X | X |
| 12 | 8406-089 | Pressure Switch .25" Setpoint ① | X | | | | <u> </u> |
| 12 | 8406-090 | Pressure Switch .30" Setpoint ① | | х | | | |
| 12 | 8406-091 | Pressure Switch .35" Setpoint ① | | | Х | x | x |
| 13 | 8611-089-1400 | Plastic Wire Channel | X | Х | X | X | X |
| 14 | 5651-136 | Gas Valve | X | X | X | X | X |
| 15 | 5818-033 | Gas Manifold | X | | | | <u> </u> |
| 15 | 5818-034 | Gas Manifold | | Х | | | |
| 15 | 5818-035 | Gas Manifold | | `` | Х | | |
| 15 | 5818-036 | Gas Manifold | 1 | | ^ | х | |
| 15 | 5818-037 | Gas Manifold | ļ | | | ^ | Х |
| 16 | 8406-036 | Flame Rollout Switch | 2 | 2 | | 2 | |
| 16 | 8406-037 | Flame Rollout Switch | - | - | 2 | - | 2 |
| 17 | 9010-074 | Inshot Burner | 2 | 3 | 4 | 5 | 6 |
| 18 | 9010-076 | Gas Orifice 2.25mm Drill | 2 | 3 | 4 | 5 | 6 |
| 19 | 8554-019 | Flame Sensor | X | $\frac{3}{x}$ | X | X | X |
| 20 | 8620-133 | Hot Surface Ignitor | $\frac{1}{x}$ | $\hat{\mathbf{x}}$ | $\frac{\hat{x}}{x}$ | $\hat{\mathbf{x}}$ | x |
| 21 | 8402-107 | Primary Limit Control | $\frac{1}{x}$ | $\hat{\mathbf{x}}$ | _^_ | -^- | |
| 21 | 8402-102 | Primary Limit Control | ^ | ^ | х | $_{x}$ | |
| 21 | 8402-108 | Primary Limit Control | | | ^ | ^ | v |
| 22 | 1921-043 ③ | Gasket Set | - | \mathbf{x} | | | Х |
| 22 | 1921-044 ③ | Gasket Set | ^ | ^ | х | | |
| 22 | 1921-045 ③ | Gasket Set | | 1 | ^ | | |
| 22 | 1921-046 ③ | Gasket Set | | | | X | х |

 $[\]odot$ Setpoints shown are nominal cutout (open on pressure fall) ratings and have \pm .05 tolerance.

② Includes: Wheel P/N 5152-053, Housing and diffuser

³ Includes gaskets for primary limit, collector box, and induced draft blower

Functional Components

| Drawing | | | TDH042 | rdH063 | TDH084 | TDH105 | TDH126 |
|---------|---------------------------------|--------------------|----------|--------|-----------------|---------------------|------------------|
| No. | Part No. | Description | <u>T</u> | 10 | 1 | 1 | 百 |
| 23 | 8200-036 | Motor Mount Arm | 3 | 3 | | | |
| 23 | 8200-034 | Motor Mount Arm | - | | 3 | | |
| 23 | 8200-035 | Motor Mount Arm | | | | 3 | 3 |
| 24 | 8200-033 | Motor Mount Band | X | X | X | X | $\frac{3}{X}$ |
| 25 | 8552-002 | Capacitor 5/3/70 | X | X | ^` | <u> </u> | 1 |
| 25 | 8552-004 | Capacitor 7.5/3/70 | `` | | x | | |
| 25 | 8552-026 | Capacitor 15/3/70 | | | ^` | x | x |
| 26 | 8105-038 | Motor 1/3 H.P. | X | | · | <u> </u> | ^ |
| 26 | 8105-041 | Motor 1/3 H.P. | `` | х | l | | |
| 26 | 8105-033 <i>8106-033</i> | Motor 1/2 H.P. | | \ \ \ | х | | 1 1 |
| 26 | 8107-007 | Motor 3/4 H.P. | | | ^ | x | _x |
| 27 | 5152-073 | Blower Wheel | X | | | | $\vdash \vdash$ |
| 27 | 5152-013 | Blower Wheel | ^ | х | | | 1 1 |
| 27 | 5152 <u>-05</u> 9 | Blower Wheel | | | х | | 1 1 |
| 27 | 5152 <mark>≡_</mark> 3 | Blower Wheel | | | ^` | x | X |
| 28 | 104X=51 | Right Blower Angle | Х | X | X | $\frac{\lambda}{x}$ | $\frac{1}{x}$ |

| Drawing No. | Part No. | Description | TDH042 | TDH063 | TDH084 | TDH105 | TDH126 |
|----------------|-----------|--------------|----------------|--------|----------------|--|--|
| 1 | 3000-1067 | Wire Harness | X | Х | Y | V | T v |
| 2 | 3000-1068 | Wire Harness | Y | V | ŷ | | |
| 3 | 3000-1069 | Wire Harness | ${\mathbf{x}}$ | Ŷ | Ŷ | | I ≎ |
| 4 | 3000-1070 | Wire Harness | | Ŷ | ÷ | | |
| 5 | 3000-1071 | Wire Harness | X | x | X | $\frac{\hat{x}}{x}$ | $\frac{\lambda}{x}$ |

