

# G SERIES

## DOUBLE INLET BELT DRIVE BLOWERS

### OPERATION INSTRUCTIONS

PLEASE READ AND SAVE THESE INSTRUCTIONS



The purpose of this manual is to aid in the proper installation and operation of the G series double inlet belt drive blowers. These instructions are intended to supplement good general practices and are not intended to cover detailed installation procedures. It is the responsibility of the purchaser to ensure that no foreign material is present which could become airborne in the system.

## BEFORE YOU BEGIN

Inspect unit for damage, report any shipping damage to carrier. Check all fasteners, re-tighten as required. Rotate the blower wheel by hand to ensure free rotation. If rubbing occurs, loosen the set screw(s), re-position the wheel to the shaft center, re-tighten set screws.

## GENERAL SAFETY

Rotating parts, (pulleys, shafts and belts) on fans should not be exposed. Where these components are not protected by ductwork, cabinets or covers, appropriate guards should be employed to restrict exposure to rotating parts. Access doors should not be opened with the fan operating to avoid foreign objects being drawn into the system. On initial start-up, a careful inspection should be carried out to ensure no foreign material is present which could become airborne in the system.

Read installation and operation instructions carefully before attempting to install, operate or service Canarm/Delhi 200 Series or Canarm/Delhi IDB Series Blowers. Failure to comply with instructions could result in personal injury and/or property damage. **Retain instructions for future reference.**

## MOTOR, PULLEYS & BELTS

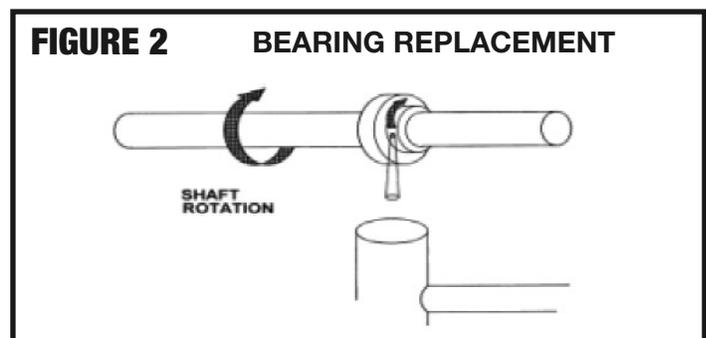
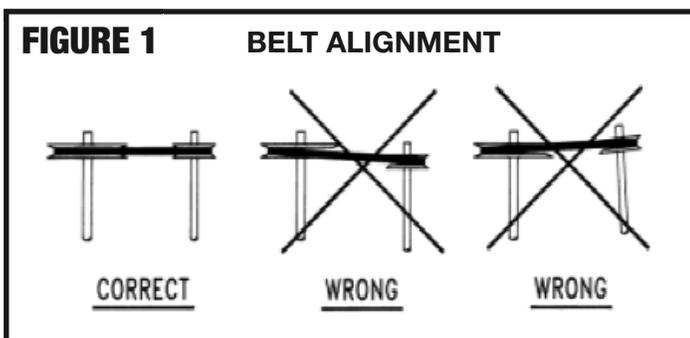
1. Mount the blower pulley on the blower shaft and tighten the set screw securely on the key of the shaft.
2. Mount the motor pulley on the motor shaft. Leave some clearance between the pulley and the motor end bell. Tighten the set screws on the key of the motor shaft.
3. Install the motor on the motor platform using the hardware provided.
4. With the platform in its minimum position, install the V-belt within the pulley grooves. Position the motor on the motor platform to ensure proper pulley alignment (see Fig. 1) and secure to the motor platform. (A straight edge across the face of the driven pulley should be parallel to the belt once proper alignment has been achieved).  
**Note: Adjustments in the variable speed pulley require pulley re-alignment.**
5. Pivot the motor platform to tension the V-belt and lock in place using the 2 bolts on both sides of the blower. (Ideal belt tension is the lowest tension at which the belt will not slip during start up. A rule of thumb suggests that 3/4" of deflection mid-span under medium finger pressure (2-3 lbs.) for every foot of span is appropriate.)



### WARNING

**EXCESSIVE BELT TENSION IS THE MOST FREQUENT CAUSE OF BEARING WEAR AND RESULTING NOISE. PROPER BELT TENSION IS CRITICAL FOR QUIET EFFICIENT OPERATION.**

Ideal belt tension is the lowest value under which belt slip will not occur at peak load conditions.



## ELECTRICAL



**WARNING**

**ENSURE POWER SUPPLY IS DISCONNECTED & LOCKED OUT PRIOR TO MAKING ELECTRICAL CONNECTIONS.**

Before connecting the motor to the electrical supply, check the electrical characteristics and wiring instructions as indicated on the motor nameplate or inside the conduit box cover to ensure proper voltage and phase. Complete electrical connections as indicated.



**WARNING**

**A GROUND WIRE MUST BE CONNECTED FROM THE MOTOR HOUSING TO A SUITABLE ELECTRICAL GROUND.**

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## OPERATION

1. Complete the electrical connections, energize the unit momentarily and ensure proper wheel rotation.
2. Apply full power.
3. With all ducts attached and the air system in full operation, measure the motor current and ensure that it is less than the rated full load motor amperage as indicated on the motor nameplate.

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## MAINTENANCE



**WARNING**

**ENSURE POWER SUPPLY IS DISCONNECTED & LOCKED OUT PRIOR TO MAKING ELECTRICAL CONNECTIONS.**

1. Inspect and tighten all bearing collar and wheel set screws after the first 50 to 100 hours of operation and periodically thereafter.
2. Follow motor manufacturer's instructions for motor lubrication. Remove any excess lubrication.
3. Check the drives.
  - a. Tighten set screws on pulleys, wheel and bearing locking collars.
  - b. Check belt tension and alignment.
  - c. Replace cracked or worn belts.
4. Blower bearings are permanently lubricated and require no further lubrication.
5. Inspect V-belts for wear and proper tension. If it is necessary to replace one belt on a multiple belt drive, replace all the belts with a matched set. Do not use belt dressing.
6. Clean the blower wheel periodically. Material build up on the blades can cause wheel imbalance which may result in wheel or bearing failure.
7. To reinstall replacement ball bearings press the locking collar against the inner ring of the bearing and turn in the direction of the shaft rotation until engaged. Insert a drift pin into the pin hole and tap lightly to set. Tighten set screw on locking collar firmly (see **Fig. 2**).

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## WARRANTY

Canarm Ltd. Air Moving Products are guaranteed for a period of one year against manufacturing defects in material and workmanship when operating under normal conditions. Liability is limited to the replacement of defective parts. Labour and transportation costs are not included.



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