ASSEMBLY INSTRUCTIONS

1) Remove Spindle Mounting Adapter if ordered or supplied. Chuck hub end in lathe and indicate O.D. and face to .001" TIR.
Spindle Adapter (MB244=G) is made long to fit through covers of various machines. Face off extra length to keep unit as close to spindle as possible. Bore adapter to length and diameter to fit outboard end of spindle. Thread adapter if outboard end of spindle is threaded. Turn O.D. if necessary to fit through cover of machine. Drill and tap four (4) holes 90 degrees for ¼-20 set screws. Set screws will lock adapter to spindle.

2) Mount Spindle Adapter to Dunham Air Collet Closer. Attach unit to outboard end of spindle. Secure assembly to spindle by tightening screws in Spindle Adapter to OD of spindle. Hook up valves, regulator and gage to unit. With piston in forward position (under pressure) insert Drawtube with threaded end toward front of spindle. With Locking Key Assembly in out position turn drawtube until completely engaged on collet threads; back off 1 ½ revolutions. Cut off excessive length of the drawtube so it is flush with outboard end of Dunham Air Collet Closer.

3) Again make sure piston is in forward position (under pressure). Then tighten one (1) half dog set screw in knurled knob against Drawtube. This will secure drawtube for drilling operation. Remove one of the four half dog set screws from knurled adjusting knob. Insert tubular drill bushing (supplied) on knurled adjusting knob; using ¼" drill with knurled knob and drill bushing as a drill fixture, drill through drawtube. Deburr I.D. of drawtube, re insert half dog set screw and tighten into hole just drilled. Repeat this procedure for the three remaining set screws to produce a total of four cross holes in the drawtube.

4) Adjust four face mount screws in Item 5 (set to finger tight lockup); these four face mount screws connect the Air Collet Closer to the Spindle Adapter. Place dial indicator on diameter of cylinder at outermost point. Rotate spindle slowly. If Air Collet Closer is in dead alignment with spindle, indicator reading will remain constant within a few thousandths. If not, tap Air Collet Closer into alignment position with spindle to within .001". Then lock four face mount screws tight**.

**NOTE: Air Collet Closer body does not rotate. It will ‘rise and fall’ as spindle is rotated if it is not properly aligned.

Other than flange of adapter and special guard (see page 2 Safety) no other special modifications to equipment are needed. The only accessories required are a hand or foot valve, air regulator and gage and hoses for shop air connection.

Inserting Collet:

1) With piston in forward or released position, back off locking key, enabling drawtube to be turned by knurled collet adjusting knob.

2) Place collet in spindle or Collet Chuck. Turn knurled knob clockwise until taper of collet engages with taper of spindle or Collet Chuck.

3) Align locking key with adjusting slot (4 slots provided) on Drawtube, engage Locking Key Assembly. This locks the Drawtube and prevents Drawtube and Collet from rotating (free of the Spindle) and becoming loose during operation.

How to control holding force:
1) By using the regulator and gage, start with air pressure of 40 lbs.; increase pressure gradually until part is held sufficiently for machining operation.

2) The Dunham Air Actuator permits even gripping pressure although workpiece may have diameter variation. Holding force can be adjusted for any type of machining by increasing or decreasing the air pressure.

**Maintenance:**

1) Little or no maintenance is required. Bearings are self lubricating. All components such as bearings, "O" ring seals and retaining rings are standard.

Installing an air cleaner and lubricator in line is advisable, but not essential.

***SAFETY***

The purchaser or end user of this retrofit unit is fully responsible for the fabrication and application of special protective guarding to cover this unit’s moving parts. Drawtube cutoff must be performed as instructed above.

FAILURE TO COMPLETE THE PROPER INSTALLATION AS INSTRUCTED ABOVE CAN RESULT IN OPERATOR INJURY OR PREMATURE WEAR ON THE UNIT.

MANUALS/AIR COLLET CLOSER INSTRUCTIONS MODEL DACC27