

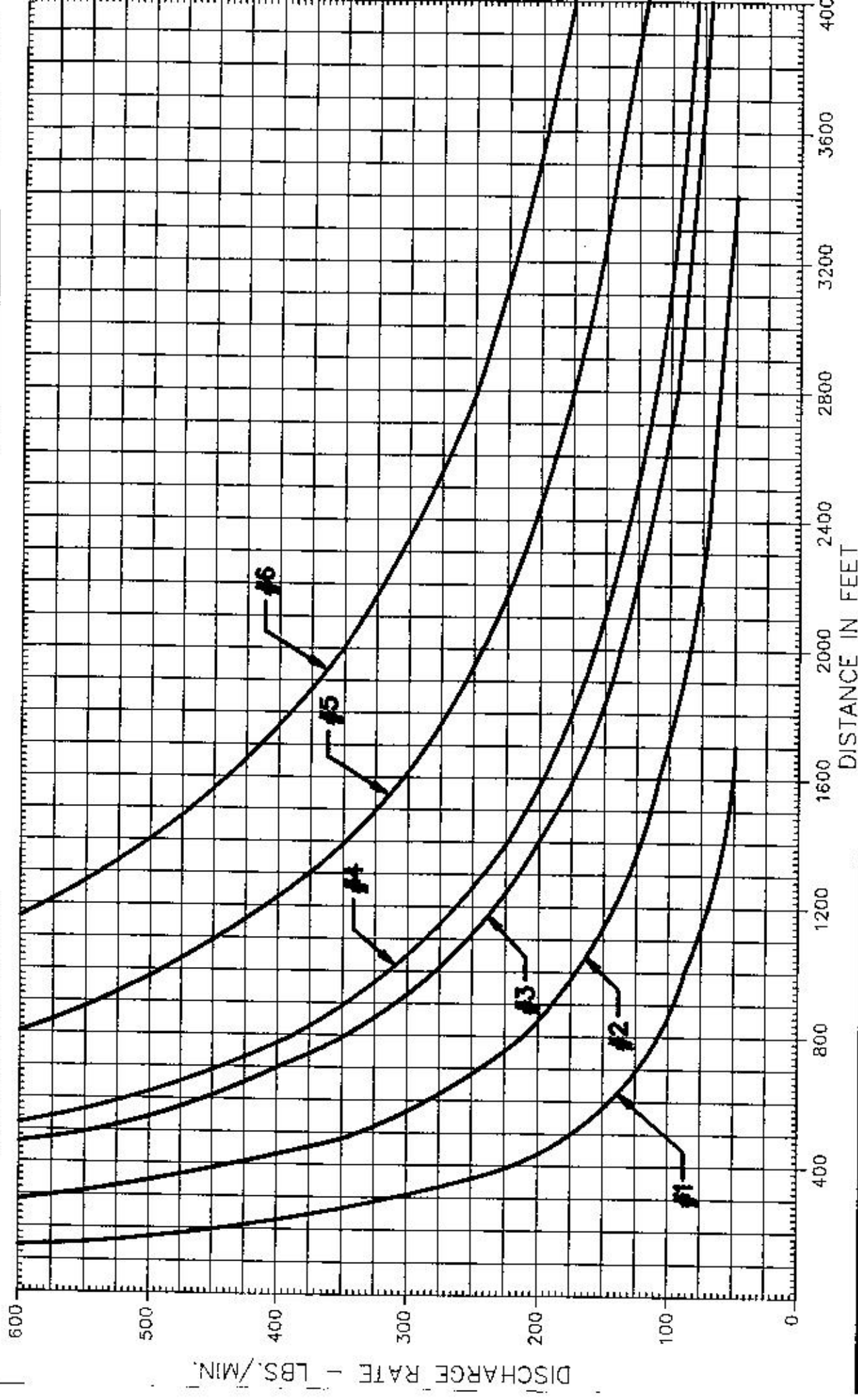
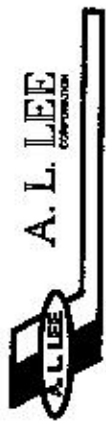
OPERATING INSTRUCTIONS  
 MODEL 628RM-NS03 ROCKDUSTER  
 REFERENCE DRAWING A62621B-OP

VALVE DESIGNATION, CODE AND DESCRIPTION

LETTER	COLOR CODE	DESCRIPTION
A	BLACK	<u>Fluidizer Valve</u> - This 1.5" ball valve controls the air going into the air slides located in the bottom of the pod. This air fluidizes the rockdust.
B	BLUE	<u>Material Discharge Valve</u> - This 2" ball valve controls the discharge of the rockdust from the pod.
C	GREEN	<u>Free Air Valve</u> - This 1.5" ball valve controls the amount of air that escapes from the top of the pod. Air passing through the rockdust from the bottom of the pod at the air slides and out the top of the pod causes fluidization. Fluidization causes rockdust - a solid - to act like a liquid. Opening the "Free Air Valve" increases fluidization, which smoothes out the delivery and dilutes the density.
D	RED (UPPER)	<u>Free Air Clean-out Valve</u> - This 1.5" ball valve is "normally closed" is used to clean out the discharge hose or to assist when rockdusting long distances.
E	RED (LOWER)	<u>P/O Valve</u> - This 1.5" ball valve is open only when supplying air to the slave unit.
F	N/A	<u>Automatic Flow Control Valve</u> - This valve closes and opens automatically as the back pressure in the discharge hose changes to prevent plugging of the hose. The valve is fully closed when the back pressure exceeds the pressure set by the "Material Flow Control Valve Regulator".
G	N/A	<u>Material Valve Pressure Gauge</u> - This gauge indicates the pressure setting for the "Automatic Flow Control Valve".
H	N/A	<u>Pressure Regulator</u> - This regulator is used to set the pressure for the "Automatic Flow Control Valve".

MODEL 600 ROCKDUSTERS + 800  
DISCHARGE RATES

34-5361  
b.d./42-6065



DATA

- #1) 2" HOSE - 15 HP., 94 CFM
- #2) 2 1/2" HOSE - 25 HP., 153 CFM
- #3) 3" PIPE - 30 HP. 201 CFM

- #4) 3" PIPE - 40 HP., 246 CFM
- #5) 3 1/2" PIPE - 50 HP., 315 CFM
- #6) 4" PIPE - 60 HP. 300 CFM

## Operating Instructions (continued)

I	N/A	<u>Hose Back Pressure Gauge</u> - This gauge indicates the back pressure in the rockdust hose.
J	N/A	<u>Manifold Pressure Gauge</u> - This gauge indicates the compressor discharge pressure.
K	N/A	<u>Pod Pressure Gauge</u> - These gauges indicate the pod pressure.
L	N/A	<u>Pilot Unloader Valve</u> - This valve controls the loading and unloading of the compressor. Normally this valve is set so the compressor stops building pressure and 37 psi.
M	N/A	<u>Back Pressure Bleed-off Valve</u> - This 1/2" hose bib valve allows the operator to bleed back pressure off of the discharge hose.
N	N/A	<u>Moisture Bleed-off Valve</u> - This 1/2" hose bib valve is used to bleed off moisture that may collect in the chamber under the air slide material.
O	N/A	<u>Fill and Vent Valves</u> - These 3" butterfly valves are used during the filling process only. They may also be used to depressurize the pod.

## FILLING PROCEDURES

### Bulk Filling

1. Machine must be turned off.
2. Depressurize pod by slowly opening a fill or vent valve (O). Wear safety glasses and turn your head away from the air flow. Also, make sure there are no other personnel in the direction of the air flow.
3. Attach the 4" rockdust hose from the bulk bin discharge or borehole to the rockduster fill pipe with quick lock coupler. Attach the safety chain from the fill hose to the rockduster. Open the vent valve.  
CAUTION: Do not stand near the fill hose while filling the pods.

#### Operating Instructions (continued)

4. Pod is full when rockdust starts to come out of the vent pipe.  
CAUTION: Do not overfill pods. Overfilling will prevent proper fluidization of the rockdust. This could cause plugging of the discharge line or the free air line.
5. Uncouple 4" hose from rockduster fill pipe.
6. Close fill and vent valves (O).
7. Repeat steps 1 through 6 to fill the other pod.

#### Bag Filling

1. Machine must be turned off.
2. Depressurize pod. (See step 2 above.)
3. Open the top hatch.
4. Fill the pod through the open hatch being careful to keep pieces of rockdust bags and other foreign material out of the pod. When the pod is filled under the hatch, open the "black" fluidizer valve (A) to the pod you are filling.
6. Start the diesel engine and engage the PTO to start compressor. This will fluidize the rockdust and distribute it evenly throughout the pod. Once the dust has leveled out, turn off the compressor by disengaging the clutch or turning off the engine. Continue to fill the pod until the rockdust is 4" below the hatch.  
DO NOT OVERFILL pods. Overfilling will not let the rockdust fluidize properly and could cause plugging of the discharge and vent lines.
7. Close the hatch and tighten the three (3) bolts to secure the lid.
8. Close all valves.
9. Repeat steps 1 through 8 to fill the other pod.

Operating Instructions (continued)

HOSE DUSTING

1. Attach rockdust hose to discharge with quick lock coupler.
2. Open the "black" fluidizer valve (A) to the pod you wish to operate. All other valves must be closed at this time.
3. Disengage the PTO and start the diesel engine. Let engine run for a minute then engage the PTO to start the compressor.
4. If the manifold pressure (J) gauge fails to show building pressure, check to make sure the Pilot Unloader Valve (L) is engaged. To engage the Pilot Unloader Valve turn the knurled wheel on top of the valve until it moves downward. The compressor should start to load immediately.
5. Allow the manifold pressure to build to 35 psi. At this time the compressor should begin to unload.
6. Open the "green" free air valve (C) half way and check the hose back pressure gauge (H) to determine that the line is clear. If the pressure is 10 psi or less the line should be clear and ready for rockdust.
7. To start rockdusting fully open the "blue" material valve (B). To increase the density of the discharge, slowly close the "green" free air valve (C). To decrease the density and smooth the delivery slowly open the "green" free air valve (C).
8. The hose back pressure will be between 20 to 25 psi with 300 to 500 feet of hose. Rockdusting at longer distances will increase the back pressure.
9. When the hose back pressure and pod pressure decrease and discharge ceases the pod is empty. Close the material discharge valve and fully open the free air valve to purge the line. Let the machine run for a couple of minutes then shut off the compressor.
10. Repeat steps 1 through 9 to rockdust from the other pod.

Operating Instructions (continued)

DUAL ENTRY DUSTING

1. Couple the entry dusting hose to the discharge adapter.
2. Open the "black" fluidizer valve (A) to the pod you wish to operate.
3. Disengage the PTO and start the diesel engine. Let engine run for a minute then engage the PTO to start the compressor.
4. Allow manifold pressure (J) to build to 35 psi.
5. Open the "green" free air valve (C) half way.
6. Be sure entry nozzles are clear before proceeding to next step.
7. Fully open the "blue" material valve (B) and proceed to rockdust.
8. When pod is empty, close the material valve and fully open the free air valve to purge the line.
9. Close the free air valve and repeat steps 1 through 8 to rockdust from the other pod.
10. Disengage PTO and turn engine off.