

BLAST CLEANING EQUIPMENT

OWNERS MANUAL

RCG-12 - REMOTE CONTROL SYSTEM PNEUMATIC OPERATION TANK EXHAUSTS TO STOP BLASTING

**CAUTION - IMPORTANT
IMPROPER USE OF PRESSURE BLAST CLEANING
EQUIPMENT CAN BE EXTREMELY HAZARDOUS. ALL
OPERATING PERSONNEL SHOULD READ THESE
INSTRUCTIONS AND CAUTIONARY LABELS ON THE
EQUIPMENT BEFORE PROCEEDING.**

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GENERAL OPERATION

The RCG-12 Remote Control System is a pneumatically operated device to control the stop/start function of a pressure blast cleaning machine from the abrasive discharge point. A “deadman” control switch must be held continuously engaged for the blast cleaning machine to operate.

This system exhausts all working pressure in the tank and simultaneously shuts down the incoming air when blasting is terminated. System control is by means of an air actuated AUTOMATIC EXHAUST VALVE, Part No. RCE-13, maintaining or relieving tank pressure and Part No. RCI-13 INLET VALVE acting on the inlet air line. These valves are controlled remotely from the nozzle end by the Part No. 6100 Deadman Control Switch.

The RCG series remote control system complies with all existing Federal regulations for pressure blast cleaning equipment control as of the date of this manual.

PREPARATION - FACTORY INSTALLED SYSTEM

When the system is installed at the factory it is completely assembled and tested. For shipping purposes it is necessary to disconnect the twin control line hose, with the deadman switch attached, from the connection points on the machine marked Gray and Yellow. When the equipment is received reconnect the twin line hose, tighten securely and proceed to the TEST CYCLE section.

PREPARATION - FIELD INSTALLED SYSTEM - TITAN MACHINES

1. Inventory the parts received with the field installation kit. The following items should be included:
 - a. 1 - No. RCI-13 Normally closed air inlet valve
 - b. 1 - No. 6053 30' Length twin control line
 - c. 1 - No. 6100 Ultra Safe deadman switch
 - d. 1 - No. RCE-13 Automatic exhaust valve
 - e. 1 - No. 06016 Valve interconnect hose approx. 24"

Since the system is assembled as far as practical for shipment most of the items on the list above will be connected to another item.

2. Remove all manual air control valves from the blast machine.
3. Install the No. RCI-13 AUTOMATIC AIR INLET VALVE in position as shown in the diagram. The arrow should face opposite the air flow. The original manual control inlet valve can be reused and provides an excellent safety shutoff valve when leaving the machine unattended for any length of time.
4. Install the RCE-13 AUTOMATIC EXHAUST VALVE at the location where the manual exhaust valve was removed from. The flow arrow should point away from the piping.
5. Connect the No. 6016 Interconnect line as shown in the diagram.

6. Connect the open ends of the 6053 Twin Control line to the corresponding tees using the gray/yellow color coding. The 6100 deadman switch should be attached at the nozzle end of the blast hose in a comfortable location near the nozzle using the clamps provided. Proceed to the TEST CYCLE.

TEST CYCLE

1. Before filling the tank with abrasive the system should be tested for correct operation.
 - A. Hold nozzle end of hose and direct away from personnel and equipment.
 - B. Open manual air inlet valve on blast tank, if so equipped.
 - C. Turn on the air supply from the source to the blast machine. CAUTION: At this point the blast machine should not pressurize. If this does happen shut off the incoming air supply or close the manual air inlet valve immediately and review all connections.
 - D. Activate the No. 6100 Deadman Control Switch by first pressing the safety button in, then depressing the handle. The safety button prevents accidental discharge if the hose is dropped or the switch bumped.. CAUTION: THIS WILL PRESSURIZE THE UNIT AND HIGH PRESSURE AIR WILL BE DISCHARGED FROM THE BLAST NOZZLE.
 - E. To stop, release the deadman switch. CAUTION! HIGH PRESSURE AIR WILL BE DISCHARGED FROM THE OPEN PORT ON THE RCE-13 EXHAUST VALVE AND DURING NORMAL OPERATION IT IS POSSIBLE THAT ABRASIVE PARTICLES WILL BE IN THE AIR STREAM. ADVISE ANY PERSONNEL LIKELY TO BE WITHIN 50' OF THE BLAST OPERATION THAT THE MACHINE COULD DISCHARGE AT ANY TIME. Blasting will stop when the air pressure is exhausted from the tank. In addition, increasing the control line length will add approximately 1.5 seconds to the response time for each 50' added. An electric control should be considered if operating over 150'.

OPERATION

1. Fill the machine with dry abrasive. Do not overfill! This results in increased wear on the automatic sealing mechanism.
2. Depress the deadman switch to begin blasting.
3. To stop blasting at any time release the deadman switch handle.

CAUTION: DO NOT DEPRESSURIZE THE AIR LINE FROM THE COMPRESSOR TO THE BLASTER BEFORE THE TANK IS COMPLETELY DEPRESSURIZED. IT IS POSSIBLE FOR SUCTION TO BE CREATED THAT WILL BACKFEED ABRASIVE FROM THE BLASTER TO THE COMPRESSOR THROUGH THE AIR LINES, POSSIBLY DAMAGING THE COMPRESSOR.

SYSTEM MALFUNCTION

1. Blasting stops, deadman switch is depressed - Indicates loss of pilot line air pressure. Check the condition of the No. 6106 nylon sealing bumper in the deadman switch handle.
2. Machine will not start, deadman switch is depressed - See No. 1 above.
3. Machine leaks air at the RCE-13 exhaust valve - Valve gasket is worn. Remove valve cover and inspect internal condition.

MAINTENANCE - SCHEDULE BASED ON 20 HOURS PER WEEK USE

DAILY - Check condition of all air pilot lines and fittings.

WEEKLY - Check No. 6106 Sealing bumper on No. 6100 Deadman switch for wear. Replace if necessary.

MONTHLY - Remove cover from the No. RCE-13 automatic exhaust valve. Check condition of the RCE-13A diaphragm. Valve should be thoroughly cleaned before reassembly.

SEMIANNUALLY - Inspect the No. RCI-13 Automatic Air Inlet Valve by removing the four 9/16" bolts and lifting off the cover. Closely inspect the No. RCI-13A diaphragm for cracking and the seat for wear. We recommend replacement of the diaphragm at this inspection period.

TITAN RCG-12 REMOTE CONTROL SYSTEM INSTALLATION INSTRUCTIONS

1. Remove moisture trap from machine.
2. Install air inlet valve with arrow facing OPPOSITE air flow.
3. Install moisture trap.
4. Install 1/4" brass tee provided on top of moisture trap.

5. Remove manual exhaust valve, do not remove 90° elbow.
6. Install exhaust valve with arrow facing AWAY from machine, WITH the air flow.
7. Face 90° elbow provided with new exhaust valve down.
8. Connect pilot hose to top hex of exhaust valve.
9. Connect other end to 1/8" brass tee on inlet valve.
10. Connect twin control line, gray line to 1/8" brass tee marked gray, yellow line to 1/4" brass tee on moisture trap.
11. Connect deadman switch to twin control line, marked yellow and gray.
12. Tighten all brass connections 1/4" turn after hand tight (DO NOT OVER TIGHTEN)
13. Test machine for proper function, refer to test cycle in RCG-12 operating instructions.

<u>PART NO.</u>	<u>KEY</u>	<u>DESCRIPTION</u>
RCS-13	(1)	Exhaust Valve (Prior 1/92)
RCE-13	(1)	Exhaust Valve (New Style)
RCS-13A	(1)	Diaphragm (Prior 1/92)
RCE-13A	(1)	Diaphragm Kit (New Style)
16060	(2)	Air Inlet Valve (Prior 1/92)
RCI-13	(2)	Air Inlet Valve (New Style)
RCI-13A	(2)	Diaphragm Kit (New Style)

6100

(3) Deadman Switch

6056

(4) 30' Twin Control Line, Coupled

6016

(5) 3' Hose Assembly, Coupled

