

USER MANUAL

USER MANUAL
Vapor Recovery Units

MANUAL



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PLATINUM VAPOR CONTROL

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For Manual updates,
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WARRANTY STATEMENT

A. GENERAL PROVISIONS

The warranties described below are provided by Platinum Vapor Control (the “Company”) to the original purchasers of new Vapor Recovery & Wellhead Compression Units (“Units”) from the Company or authorized agents of the Company. Under these warranties, the Company will repair or replace, at its option, any covered part which is found to be defective in material or workmanship during the applicable warranty term. Warranty service must be performed by the Company or an authorized agent of the Company. Warranty service will be performed without charge to the purchaser for parts and labor. The purchaser will be responsible, however, for any service call and/or transportation of product to and from the Company’s place of business, for any premium charged for overtime labor requested by the purchaser, and for any service and/or maintenance not directly related to any defect covered under the warranties below. These warranties are not transferable, unless specifically previously authorized in writing by the Company.

B. WHAT IS WARRANTED

All parts of any new Company Units are warranted for the number of months specified below.

C. WHAT IS NOT WARRANTED

THE COMPANY IS NOT RESPONSIBLE FOR THE FOLLOWING:

1. Used equipment, unless specified differently in the sales contract;
2. Any equipment that has been altered or modified in ways not approved by the Company;
3. Depreciation or damage caused by normal wear, lack of reasonable and proper maintenance (including failure to perform monthly preventative maintenance as described in this manual), failure to follow operating instructions, misuse, lack of proper protection during storage, or accident;
4. Normal maintenance parts and service;
5. Unit performance failure if the vapors entering the Unit do not meet specifications.

D. SECURING WARRANTY SERVICE

To secure warranty service, the purchaser must:

1. Report the product defect to the Company and request repair within the applicable warranty term;
2. Present evidence of the warranty start date;
3. Make the Unit(s) available to the Company or an authorized agent of the Company within a reasonable period of time;
4. Provide to the company acceptable proofs that proper monthly preventive maintenance service was completed according to the guidelines.

E. LIMITATION OF IMPLIED WARRANTIES AND OTHER REMEDIES

To the extent permitted by law, neither the Company nor any company affiliated with it makes any warranties, representations or promises as to the quality, performance or freedom from defect of the

Units covered by this warranty. IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, TO THE EXTENT APPLICABLE, SHALL BE LIMITED IN DURATION TO THE APPLICABLE PERIOD OF WARRANTY SET FORTH ON THIS PAGE. THE PURCHASER'S ONLY REMEDIES IN CONNECTION WITH THE BREACH OR PERFORMANCE OF ANY WARRANTY ON THE COMPANY'S UNITS ARE THOSE SET FORTH ON THIS PAGE. IN NO EVENT WILL THE COMPANY OR ANY OF ITS AFFILIATES, EMPLOYEES, OFFICERS, DIRECTORS OR AGENTS BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

F. NO AGENT WARRANTY

The selling agent, if any, makes no warranty of its own and the agent has no authority to make any representation or promise on behalf of the Company, or to modify the terms or limitations of this warranty in any way.

G. WARRANTY TERM

The term of the warranty is for exactly one calendar year, commencing on the date of delivery of the Unit(s) to the purchaser, unless specified differently in the sales agreement.

WARNINGS

1. EXPLOSION HAZARD - DO NOT REMOVE OR REPLACE FUSES OR PLUG-IN MODULES UNLESS POWER HAS BEEN DISCONNECTED OR THE AREA IS KNOWN TO BE FREE OF IGNITABLE CONCENTRATION OF FLAMMABLE GASES OR VAPORS.
2. EXPLOSION HAZARD. DO NOT DISCONNECT THE EQUIPMENT WHILE THE CIRCUIT IS LIVE OR UNLESS THE AREA IS KNOWN TO BE FREE OF IGNITABLE CONCENTRATIONS.
3. DO NOT OPEN THE PLATINUM COMPRESSOR PANEL UNLESS THE AREA HAS BEEN DETERMINED TO BE NONHAZARDOUS
4. RISK OF EXPLOSION - ANY SUBSTITUTION OF PARTS OR ASSEMBLIES MAY COMPROMISE SUITABILITY OF CLASSIFICATION, CAUSING INJURY OR DEATH.
5. BEFORE BEGINNING THE INSTALLATION OR OPERATION OF A PLATINUM COMPRESSOR, PLEASE READ THIS ENTIRE MANUAL.

INTRODUCTION

Congratulations on purchasing one of the most reliable, user friendly and efficient compression skids on the market. Whether your unit will be used for Vapor Recovery, Wellhead Compression or Gas Lift, it is crucial that it is installed properly by certified personnel and maintained regularly per the preventive maintenance requirements described in this document. Following the directions of this document will ensure proper functionality, lengthen lifespan and ensure warranty coverage of the unit.

At Platinum Vapor Control, our first priority is customer satisfaction through quality of products as well as best in class service. Should you have any questions, concerns or issues regarding your new unit, please feel free to contact us at:

Platinum Vapor Control

24/7 Service line: 1-800-994-0579 or 432-770-9449

RECEIVING YOUR UNIT

Upon delivery of your unit, ensure that no physical damage occurred during transport. As we only use experienced transport companies, issues are unlikely, but should there be an issue, document the problems by taking pictures and communicate immediately with your Platinum representative.

Some of these compressor skids can weigh close to 20,000 lbs. Since each type of unit varies greatly in weight and size, make sure you use the proper equipment and the proper attachment/lifting points on the unit. Weight and size can be found on the BOL as well as in the specific skid documentation.

PHYSICAL LOCATION OF THE COMPRESSOR

In order to prevent shifting, excessive vibrations and overflowing of the containment pan, several things must be taken into consideration regarding the location of the unit.

The location where the Compressor will be installed must be:

1. Leveled
2. Compacted
3. Free of debris
4. Slightly elevated from your spillage gathering container

Also, it is important to note that our standard units are not Class I Division 2 certified. Therefore, the unit must be placed in a non-classified area. Units ordered with the Class I Division 2 option can be installed in a hazardous location as long as the control panel is installed outside of the area.

LOCAL CLIMATE

Depending on what environment your unit will be operating in, there may be extra steps required to ensure proper functionality throughout the seasons. Colder areas may require enclosures and/or heat tracing. Platinum Vapor Control has significant experience when it comes to winterizing and can point you towards the recommended items in your area.



CONNECTING THE UNIT

Several items need to be connected to the unit to complete the installation: gas, spillage containment pan, dump lines, power, communication, sensors. Each one of these items must be accomplished by certified personnel according to the industry standards of your area. Failure to do so may result in explosion hazard or functionality issues.

GAS

It is recommended to use 3" pipes to connect to the scrubber bottles.

SPILLAGE CONTAINMENT PAN

The containment pan empties through gravity. You must ensure that the gathering container is situated lower than the skid to prevent overflowing.

DUMP LINES

The dump lines out of the scrubber are susceptible to freezing in colder areas. Ensure proper heat tracing is applied to these pipes. Also, check valves are recommended on this line to prevent any backpressure to push liquids back into the pump.

POWER

Different panels require different voltage, max currents and phases. Refer to your panel specification sheet to make sure that you have the right source. Also, motor inrush current must be taken into account when sizing the wires to prevent excessive voltage drop.

COMMUNICATION

The PLC allows users to control everything through a remote system (PLC/SCADA) by using the MODBUS port of the panel. The standard configuration of the MODBUS port is the following:

- Speed: 9600 Bauds
- Parity: None
- Data: 8 bits
- Stop: 1 bit
- Mode: Half Duplex
- Protocol: RS-485

SENSORS

In some instances, you may require to have some of the sensors relocated outside of the skid. As an example, relocating the inlet pressure transducer from the scrubber bottle to the VRT. When reconnecting the transducer, you must ensure that all wires are shielded and routed in different conduits than the power wires and high voltage signals.

PROGRAMMING

Depending on the model purchased, there could be additional menus. However, the menus below will cover most of your needs.

MAIN MENU

Upon power up, the Main Menu will be displayed. This is used to access all other screens and menus. Main Menu can be returned to from most other screens by pressing the F1 button.

MAIN MENU	
COMP PRESS	
OIL PRESS	
USAGE	
FAULT TIMES	

MAIN MENU	
USAGE	
FAULT TIMES	
SET POINTS	
SD CARD DATA	

COMPRESSOR PRESSURE

The first item under Main Menu is Comp Pres. Move the cursor over it by using the up and down arrows and hit Enter to access the Comp Pres screen. This displays Suction Pressure and Discharge Pressure. Press F1 to return to Main Menu.

SUCT PRES	OZ
11.9	
DISC PRES	LBS
67.1	

OIL PRESSURE

The second item under Main Menu is Oil Pres. Move the cursor over it by using the up and down arrows and hit Enter to access the Oil Pres screen. This displays the Oil Pressure. Press F1 to return to Main Menu.

OIL PRES	LBS
100.0	

USAGE IN HOURS

The third item under Main Menu is Usage. Move the cursor over it by using the up and down arrows and hit Enter to access the Usage screen. This displays the hours Running, Faulted, and with Low Suction. Press Esc to return to Main Menu.

USAGE	
TOTAL HRS	36
RUNNING HRS	0
FAULTED HRS	28
LOW SUCT HRS	2

FAULT TIMES

The fourth item under Main Menu is Fault Times. Move the cursor over it by using the up and down arrows and hit Enter to access the Fault Times screen. This displays the elapsed time of various faults. Press F1 to return to Main Menu.

FAULT TIMES		
COMP FAILURE	2	
COND FAILURE	0	
HI SCRBR FLT	0	
HI DISCH FLT	0	

FAULT TIMES		
SUCT XDCH FLT	21	
DISC XDCH FLT	4	
OIL XDCH FLT	1	
BERM FULL	0	

SETPOINTS

The fifth item under Main Menu is Set Points. Move the cursor over it by using the up and down arrows and hit Enter to access the Setpoints screen. These are the parameters that determine the PLC's behavior. To change a Setpoint, use the up and down arrows to move the cursor over the desired Setpoint. Press Enter. Use the numbers on the keypad to enter a new value. Press Enter to save. To exit Setpoints, scroll to the bottom using the down arrow.

Move the cursor over Main Menu and press Enter. Please see the schematic for listings under Setpoints.

SETPOINTS		
HIDISPR	90.0	
HIDISRES ON	5	
HIDISRES	1.0	
HIDISRES	<<<MIN	

SETPOINTS		
COMPON	0.0	
COMPOFF	1.0	
LO OIL TMR	6SEC	
LO OIL PR	10.0	

SETPOINTS		
COND PMP TMR	30SEC	
LOG ENABLD	1	
LOG INTERVAL	2MIN	
MAIN MENU		

SD CARD

The sixth item under Main Menu is SD Card Data. Move the cursor over it by using the up and down arrows and hit Enter to access the SD Card Data screen. This displays how much Free Space is remaining. Press F1 to return to Main Menu.

SD CARD FREE SPACE
1974894592BYTES

SETTING COMPRESSOR SETPOINTS TO RUN

Under Setpoints:

- Comp On – the Setpoint at which the compressor starts
- Comp Off – the Setpoint at which compressor stops

*** Note**

Selecting an “On Pressure” too high may create issues with starting the compressor. Also, it is recommended to select a wide spread of pressures to limit the start/stop of the compressor.

FAULT

To access the Fault screen, you must first be on a Pressure screen, NOT in Main Menu. You then press the F5 key. Active Alarms will be displayed. To exit the Fault screen, press F1. To reset the Faults, you must be on the Comp Pres, Oil Pres screen, or Fault screen – then press the F10 key






STARTUP CHECKLIST




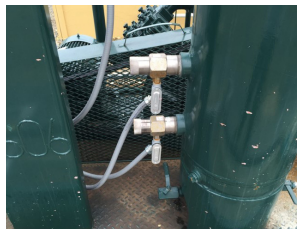
Before turning the unit on for the 1st time, you must ensure that the following items are in proper order:

1. Compressor filled with oil
2. Murphy oil level maintainer leveled to the compressor filled line
3. Day tank filled with oil
4. All valves open (input and output)
5. Parameters setup properly on the VRU
6. No loose electrical connections
7. All belts straight and tighten

PREVENTATIVE MAINTENANCE REQUIREMENT

Preventive maintenance must be executed monthly. PM log, work order or reports must be completed and filed after each PM is completed. The information should include: technician name, unit serial number, Date/Time, items completed.

PM STEPS	
1. Power down the compressor	
2. Isolate Unit by closing both suction and discharge ball valves	
3. Drain Oil	
4. Remove cover plate on right side of compressor and wipe out any residual condensate with rag if required.	
5. Replace gasket of cover plate if required. 6. Change Filter	

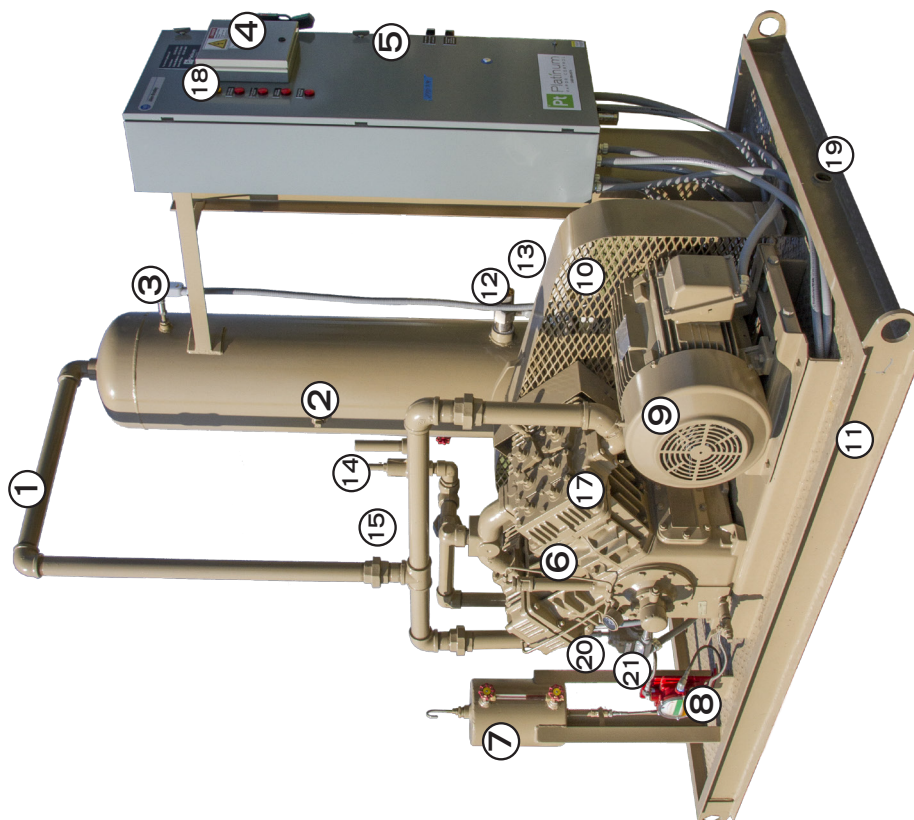
PM STEPS	
7. Fill unit with new oil through the vertical pipe	
8. Adjust oil pressure to 30 psi 9. Top off day tank (see mark on sight glass)	
10. Remove cover from pump; inspect for debris	
11. Grease pump 12. Verify all belts are tight 13. Turn Power back on 14. Test pump – Open cap of LLS press, down on switch, motor should run for 30 seconds	

TROUBLESHOOTING GUIDE

FAULT CODE	CAUSE
OIL LEVEL ALARM	Contact closure in Oil Level Contact (Term F5 – I3)
HI SCRUBBER LEVEL	High liquid level in Scrubber (Term F6 – I4)
E-STOP	E-Stop on door depressed
COMPRESSOR FAILURE	Run input lost – the Compressor is not running, or its Overload has tripped.
CONDENSATE FAILURE	Run input lost – the Condensate Pump is not running, or its MMS has tripped.
SUCT PRES XDUCER F	Suction Pressure transducer has failed. <ul style="list-style-type: none"> • Has a wire come loose? • Is the A1 fuse blown? (Term A1)
DISC PRESSURE XDUCER F	Discharge Pressure transducer has failed. <ul style="list-style-type: none"> • Has a wire come loose? • Is the A2 fuse blown? (Term A2)
OIL PRESSURE XDUCER F	Compressor Oil Pressure transducer has failed. <ul style="list-style-type: none"> • Has a wire come loose? • Is the A3 fuse blown? (Term A3)
LO COMP OIL PSI	Low oil pressure for compressor.
HI DISCHARGE PRESS	High pressure on discharge.

VRU LAYOUT

1. INLET PIPING
 - FROM SCRUBBER TO COMPRESSOR
2. INLET SCRUBBER
 - SEPARATES GAS FROM CONDENSATE
3. SCRUBBER TRANSDUCER
 - PRESSURE GAUGE FOR SUCTION GAS
4. PLC PANEL
 - RECORDS RUN TIMES,
- LOGS PRESSURES AND ACTIVITIES
5. CONTROL PANEL
 - 240V
6. COMPRESSOR
 - COMPRESSES GAS
7. OIL MAKEUP TANK
 - HOLDS ENGINE OIL FOR COMPRESSOR
8. MURPHY OIL CONTROL/LEVEL
 - SET AT GREEN LINE (1/2 WAY)
- WHEN COMPRESSOR IS LOW, FLOAT KICKS ON, OIL COMES OVER FROM MAKEUP TANK
9. ELECTRIC MOTOR
 - PROVIDES POWER, 240V CLASS 1, DIV 2
10. BELT COVER
 - PROTECTS IN CASE BELT BREAKS
11. CONTAINMENT SKID
 - CONTAINS LEAKS/SPILLS, HAS DRAIN OR PLUG
12. CONDENSATE PUMP SHUTOFF
 - LEVEL OF CONDENSATE GETS TOO HIGH, SHUTS OFF
- CAN'T KEEP UP WITH PUMP
13. CONDENSATE PUMP STARTER
 - KICKS ON CONDENSATE PUMP TO REMOVE
- HIDDEN FROM VIEW
14. DISCHARGE RELIEF VALVE
 - PRESSURE BETWEEN COMPRESSOR, CHECK VALVE
GETS TOO HIGH BLOWS OFF TO PREVENT EXPLOSION
15. CONDENSATE PUMP
 - KICKS OUT CONDENSATE TO TANKS
- HIDDEN FROM VIEW
16. CONDENSATE PRESSURIZED FLOAT (WELLHEAD)
 - PRESSURE KICKS ON THE DUMP RELEASE
- NOT PICTURED
17. COILS/COOLER (2 STAGE, OPTIONAL)
 - COOLS GAS TO BE RECOMPRESSED
- NOT PICTURED
18. SD CARD
 - RECORDS ALL EVENTS
19. SKID DRAIN
 - DRAINS SPILLS/LEAKS
20. DISCHARGE PRESSURE TRANSDUCER
 - MEASURES DISCHARGE PRESSURE
21. OIL PRESSURE TRANSDUCER
 - MEASURES OIL PRESSURE





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