U.S.C.G. Merchant Marine Exam

OSV – Chief Engineer

Q682 General Subjects

(Sample Examination)

Choose the best answer to the following Multiple-Choice Questions.

1. In a closed-loop process control system, what term is used to describe the progressive reduction or suppression of oscillation in a component?

A. Hysteresis
B. Saturation
C. Damping
D. Deadband

Correct answer: C

2. In a closed-loop process control system, what is meant by error?

A. The ratio of the amplitude of the output signal of a component divided by the amplitude of the input signal.
B. The criterion of good control that permits no overshoot when the setpoint is changed.
C. The signal in a controller that is obtained by subtracting the measured value of the controlled value from the setpoint.
D. The progressive reduction or suppression of oscillation in a component.

Correct answer: C

3. A hydraulic fluid flow control circuit, controlling linear actuator speed, with the pump operating below maximum operating pressure is known as the _____.

A. bleed-in circuit
B. metered-in circuit
C. bleed-off circuit
D. metered-out circuit

Correct answer: C

4. A hydraulic system flow control circuit is shown in the illustration and is known as a _____. Illustration GS-0105

A. metered-in circuit
B. bleed-off circuit
C. bleed-in circuit
D. metered-out circuit

Correct answer: A

5. A hydraulic system flow control circuit is shown in the illustration and is known as a _____. Illustration GS-0106

A. metered-out circuit
B. metered-in circuit
C. bleed-in circuit
D. bleed-off circuit

Correct answer: A

6. A horizontal electro-mechanical anchor windlass is equipped with two warping heads, two wildcats, two manual brake handwheels, two clutch control levers, and a multipoint lever-operated, pedestal-mounted controller. What statement is true as it pertains to the operation of the warping heads and wildcats?

A. The wildcats can be rotated in either direction of rotation without rotating the warping heads by disengaging the warping head clutches. As long as electric power is applied to the electric drive motor, the warping heads will rotate.
B. The wildcats can be rotated in either direction of rotation without rotating the warping heads by disengaging the warping head clutches. As long as electric power is applied to the electric drive motor, the wildcats will rotate.
C. The warping heads can be rotated in either direction of rotation without rotating the wildcats by disengaging the wildcat clutches. As long as electric power is applied to the electric drive motor, the wildcats will rotate.
D. The warping heads can be rotated in either direction of rotation without rotating the wildcats by disengaging the wildcat clutches. As long as electric power is applied to the electric drive motor, the warping heads will rotate.

Correct answer: D

7. As it pertains to the luffing motion limits associated with an electro-hydraulic cargo-handling pedestal-type deck crane, what statement is true?

A. When the boom is raised to a maximum permissible height or lowered to a minimum permissible height, the luffing pump shall be stroked to zero and the luffing winch brake set.
B. When the boom is raised to a maximum permissible height or lowered to a minimum permissible height, the luffing pump shall be placed on stroke and the luffing winch brake released.
C. When the hoist block is raised to a maximum permissible height with respect to the boom, the luffing pump shall be placed on stroke and the luffing winch brake released.
D. When the hoist block is raised to a maximum permissible height with respect to the boom, the luffing pump shall be stroked to zero and the luffing winch brake set.

Correct answer: A

8. While a vessel is underway in periodically unmanned engine room status, the oily-water separator is undergoing extensive maintenance and repairs and will not be available for service for another 24 hours. With bilge holding tanks nearing capacity, as chief engineer you wish to be informed of when the oily-water separator is available for service. How would you best ensure that you will be so informed?

A. The request would be written as a note posted in the vicinity of the engineering department coffee mess.
B. The request would be written as a special instruction in the chief engineer's night order book.
C. The request would be written as a note inserted into the chief engineer's standing order book.
D. The request would be made of the duty engineer orally assuming that the word shall be passed on to his or her relief.

Correct answer: B

9. Lint from cleaning rags can be harmful to hydraulic systems because the lint _____.

A. can cause rusting of internal parts
B. can clog filters and promote component leakage
C. solidifies and causes cracked lines
D. breaks down hydraulic fluid

Correct answer: B

10. How can the chance of contaminating hydraulic fluid be decreased when working on hydraulic systems?

A. Seal any cracks in lines with Permatex.
B. Clean the fittings before they are disconnected.
C. Place drip pans under leaky fittings.
D. Coat all threads with graphite oil.

Correct answer: B

11. After installing a new hydraulic pump in a system, what special attention should be given to the hydraulic system?

A. The filters and strainers should be checked frequently.
B. The relief valves in the system should be readjusted.
C. All system pressure should be readjusted.
D. The system should be drained and renewed with a fluid of different operating characteristics.

Correct answer: A

12. Which of the following problems may be encountered by using an oil having a viscosity higher than that specified for an operating hydraulic system?

A. Increased power consumption.
B. External seal leakage.
C. Hunting due to fast response.
D. Hydraulic oil film breakdown.

Correct answer: A

13. A hydraulic system gear pump being fed from a reservoir frequently indicates signs of excessive pitting after two months of service. Which of the following would most likely contribute to this condition?

A. A partial restriction in the return line has developed.
B. A vacuum condition has developed in the reservoir.
C. Operating oil temperature is determined to be below normal.
D. Abnormal pressurization is occurring in the reservoir.

Correct answer: B

14. If the pump in a hydraulic system produces a low rumbling noise while in operation, this is a probable indication of _____.

A. air passing through the pump
B. internal system fluid leakage
C. strained hydraulic fluid
D. excess internal slippage

Correct answer: A

15. The line labeled "C", as shown in the illustration, would be identified as the _____. Illustration GS-0175

A. oily bilge water inlet line
B. processed water outlet line
C. waste oil discharge line
D. clean water inlet line

Correct answer: D

16. Referring to the illustration, suppose while in the oil separation processing mode, the oil content detector display screen shows 17.9 ppm and the oily-water separator is discharging back to the bilge water holding tank for recirculation. What is most likely the cause? Illustration GS-0175

A. The bilge water holding tank level is excessively high resulting in a high-level alarm.
B. The oily-water separator bilge suction strainer is excessively clogged.
C. The bilge water holding tank contents is excessively contaminated with oil.
D. The oily-water separator service pump is excessively worn.

Correct answer: C

17. Referring to the illustration, suppose after initiating the oil discharge mode, the oily-water separator fails to come out of the oil discharge mode in a timely fashion. Cracking open the upper sampling valve reveals the presence of oil exiting under positive pressure. What is most likely the cause? Illustration GS-0175

A. The oil discharge check valve fails to open, and as a result no oil actually discharges.
B. The clean water supply solenoid fails to open, and as a result provides no discharge pressure.
C. The upper oil/water interface detection probe fails to end the oil discharge mode.
D. The lower oil/water interface detection probe fails to initiate the oil discharge mode.

Correct answer: A

18. Coast Guard regulations concerning marine sanitation devices may be found in _____.

A. 33 CFR Section 159
B. 33 CFR Section 153
C. 33 CFR Section 155
D. 33 CFR Section 156

Correct answer: A

19. In the pump shown in the illustration, what is the distance from the bottom of the inlet to the bottom end of the motor shaft? Illustration GS-0011

A. 45 1/4 inches
B. 45 5/16 inches
C. 53 5/8 inches
D. 57 5/8 inches

Correct answer: D

20. Of the views labeled "1", "2", "3", and "4", select the one that correctly represents the right side view of the unnumbered object in the illustration. Illustration GS-0003

A. 1
B. 2
C. 3
D. 4

Correct answer: D

21. When the helm angle position is changed, the series of corresponding events of the steering gear will include _____.

I. rate of steering gear ram movement will be proportional to amount of helm angle input
II. degree of tilting plate (box) angle will be proportional to the amount of helm angle input

A. I only
B. II only
C. Both I and II
D. Neither I nor II

Correct answer: C

22. What will happen if oil under pressure is supplied to the area noted as "N" on the vane in the illustration?

A. "O" will rotate clockwise as oil is returned from the area between "M" and "I"
B. "Q" will rotate counterclockwise as oil is returned from the area between "M" and "I"
C. "O" will rotate counterclockwise as oil is returned from the area between "M" and "I"
D. "O" will be hydraulically locked in place even though oil is returned to the main pump from the area between "M" and "I"

Correct answer: C

23. Referring to the device shown in the illustration, which statement is TRUE in regard to what happens when the rudder stock rotates? Illustration GS-0116

A. All items similar to "I" move
B. All items similar to "N" move
C. All items similar to both "I" and "N" move
D. None of the items similar to "I" nor "N" move

Correct answer: B

24. Who is responsible for ensuring that someone is assigned to close the watertight doors in an emergency?

A. Chief Mate
B. Coast Guard
C. Chief Engineer
D. Master of the vessel

Correct answer: D

25. In accordance with 46 CFR Subchapter I (Cargo and Miscellaneous Vessels), it is the duty of the chief engineer to acquire and seal a sample of fuel oil received whenever fuel oil bunkers are taken. This sample must be preserved until _____.

A. that particular supply of oil is exhausted
B. the voyage is completed
C. return to the first U.S. port where upon it must be sent ashore for chemical analysis and the findings submitted to the nearest officer in charge, Marine Inspection
D. it can be sent ashore to the proper oil company personnel for testing and the results entered in the Oil Record Book, CG-480

Correct answer: A

26. Where would you find a list of the firefighting equipment required on your vessel?

A. Certificate of Inspection
B. In the captain's desk
C. Official logbook
D. Muster List ("Station Bill")

Correct answer: A

27. A 'Proportional Only' controlled automatic process loop is oscillating continually, above and below the setpoint. To stabilize this controller and loop using the 'gain' adjustment, what controller/loop response would you expect upon process changes vs. setpoint?

A. By decreasing gain, the process should return to a straight-line response vs. setpoint after an upset.
B. By increasing gain, the system's oscillations should subside vs. setpoint after an upset.
C. By decreasing reset, the system's oscillations should subside vs. setpoint after an upset.
D. By decreasing gain gradually, the process should stabilize in a 'quarter wave' response to system's upsets vs. the setpoint.

Correct answer: D

28. While calibrating a 4-20 mA electronic, or a 3-15 psi pneumatic controller, with a process output of 50-250 psi, what is the controller span/range you are dealing with?

A. Output process range is 0-250 psi.
B. Output process span is 200 psi.
C. Controller input ranges are 0-40 mA and 0-15 psi.
D. Controller process output span is 0-250 psi.

Correct answer: B

29. The gas that exists in the stratosphere forming a protective shield that helps to protect the environment from the harmful effects of ultraviolet radiation is called what?

A. radon
B. ozone
C. nitrogen
D. oxygen

Correct answer: B

30. Which of the fluids listed is NOT suitable for use as a secondary refrigerant?

A. Carbon dioxide
B. Cupric chloride
C. Brine
D. Methyl alcohol

Correct answer: B

31. When one belt of a multiple V-belt drive requires replacing, what will be required?

A. replace the entire belt set
B. ensure the seasoned belts are reinstalled in their proper sequence
C. ensure the proper belt dressing is applied
D. season the new belt prior to installation

Correct answer: A

32. If a refrigeration system, equipped with a reciprocating compressor, has a liquid-line solenoid valve that is leaking during the "off" cycle, what would this cause?

A. refrigerant slugs in the receiver
B. noisy compressor operation upon starting
C. high superheat in the outlet coil
D. low suction pressure

Correct answer: B

33. Which of the following statements describes the accepted method for testing a thermostatic expansion valve?

A. Heat the bulb by using a halide torch or similar device and observe the valve stem movement.
B. Remove the power head from the unit, heat the bulb with a torch while using a scale to measure the distance the diaphragm has moved.
C. Chill the bulb in ice water while observing the compressor for an increase in suction pressure.
D. Place the sensing bulb in ice water and then warm by hand. Observe flood-through and temperature change at the suction line.

Correct answer: D

34. Of the various possible methods shown in the illustration, which is the correct method of attaching a TXV feeler bulb to a large line (7/8" and larger) with a horizontal run? Illustration RA-0050

A. A
B. B
C. C
D. D

Correct answer: C

35. Which of the following conditions will occur if the power element of the thermostatic expansion valve shown in the illustration loses its charge? Illustration RA-0007

A. The valve will begin to close, but the external equalizing line will assist in keeping the valve unseated.
B. The valve will fail open and the cooling capacity will be increased.
C. The valve will fail open as designed to provide continuous cooling.
D. The valve will fail closed, providing no cooling capacity.

Correct answer: D

36. If the superheat value of the thermostatic expansion valve is adjusted too high, what would be the result?

A. the suction line of the compressor will be abnormally warm
B. the heat removal capacity of the evaporator will increase
C. the suction line of the compressor will be abnormally cold
D. the evaporator will be overfed with liquid refrigerant

Correct answer: A

37. High suction pressure accompanied by low suction temperature to a refrigeration system compressor is caused by which of the following?

A. a clogged liquid-line strainer
B. the expansion valve is insufficiently opened
C. the king valve is insufficiently open
D. the expansion valve being open too wide

Correct answer: D

38. What is true concerning highly contaminated refrigerant recovered from burned out small appliances?

A. The recovered refrigerant should be sent to a designated reclamation facility for processing.
B. The recovered refrigerant may be blended with new refrigerant for eventual re-use.
C. The recovered refrigerant may be used to clean out systems that have suffered from a burn-out.
D. The recovered refrigerant must be destroyed by the refrigeration technician.

Correct answer: A

39. When a refrigeration system is being topped off with a small amount of refrigerant through the low side with the compressor running, what should be done?

A. the discharge service valve must be front seated
B. the refrigerant charging cylinder should be turned upside down
C. the suction service valve must be back seated
D. the refrigerant should be charged into the system as a vapor

Correct answer: D

40. For safe storage, the maximum allowable temperature to which refrigerant bottles should be exposed is what temperature?

A. 100°F
B. 125°F
C. 150°F
D. 175°F

Correct answer: B

41. A room humidistat initiates the lowering of the humidity of the conditioned supply air to a space, while the actual process is accomplished by what means?

A. lowering the cooling coil temperature and raising the reheater temperature
B. raising the cooling coil temperature and lowering the reheater temperature
C. lowering both the cooling coil temperature and the reheater temperature
D. raising both the cooling coil temperature and the reheater temperature

Correct answer: A

42. In general, the thermal bulb for a thermal expansion valve used in a reciprocating air conditioning system is usually charged with what substance?

A. distilled water
B. the same refrigerant as the system
C. mercuric sulfate
D. bees wax

Correct answer: B

43. When pumping down an air conditioning system to test the low-pressure cutout switch, assuming that the compressor is running, what should be done to initiate the test?

A. stop the circulating pump
B. stop the compressor
C. secure the condenser
D. close the "king" valve

Correct answer: D

44. What form of communication provides the greatest information richness, which is the amount of verbal and non-verbal information that a communication channel carries?

A. Small-group meeting
B. Telephone conversation
C. Large-group meeting
D. One-on-one, face-to-face

Correct answer: D

45. Leadership style sometimes must change with the situation faced by the manager. Which of the following situations would be best suited for adopting a structured, autocratic leadership style?

A. The supervision of an emergency procedure.
B. The supervision of daily operations.
C. The supervision of a training session.
D. The supervision of routine maintenance.

Correct answer: A

46. Which of the following shipboard groups would be an example of an informal group?

A. Those officers and crew assigned to a maintenance task on a ship.
B. Those officers and crew assigned to the engineering department of a ship.
C. Those officers and crew assigned to the safety committee of a ship.
D. Those officers and crew assigned to a particular ship.

Correct answer: A

47. Of all the individual components of a pre-fire planning package, which component contains information about emergency duty station locations and responsibilities for each crew member by position AND name?

A. Station bill
B. Pre-fire plan
C. Fire control plan
D. Muster list

Correct answer: D

48. When preparing/writing shipyard items for your vessel's upcoming dry-docking period, what would you consider as an item regarding CuNi saltwater cooling systems/piping?

A. Identify in your item all steel waster piece pipe spools in the CuNi systems and require them to be removed and replaced.
B. This item should be of no concern since you have not experienced system piping degradation/leaks.
C. Remove certain designated CuNi piping sections for inspection.
D. Replace all bonding pieces/wires between all CuNi system flanges.

Correct answer: A

49. What responsibilities does a Senior Officer have while on Builder's Sea Trials of a new vessel to which one will be assigned?

A. Be involved operationally with shipyard operators/crew and report any possible deficiencies to the owner's representatives.
B. None operationally, observe/witness tests and document any possible discrepancies to owners' representatives.
C. Witness/observe operations and tests, report any perceived discrepancies to regulatory bodies on board.
D. Be involved operationally with the shipyard operating personnel and assist in operations.

Correct answer: B

50. A vessel you are sailing on as chief engineer had its last dry-docking survey 2 years prior and is not enrolled in an underwater survey program in lieu of dry-docking. When is the next dry-docking due?

A. 1 year
B. 6 months
C. 2 years
D. 3 years

Correct answer: A

51. If a vessel is to be laid up for an extended period of time with minimal utilities provided where freezing is not a concern, boilers may be laid up wet. What statement concerning wet boiler lay-up is true?

A. The boiler should be filled with deaerated and chemically treated water until the water level is brought to the top of the sight glass.
B. The boiler should be completely filled with ordinary fresh water (such as potable water) until water issues from the atmospheric vent.
C. The boiler should be filled with ordinary water (such as potable water) until the water level is brought to the top of the sight glass.
D. The boiler should be completely filled with deaerated and chemically treated water until water issues from the atmospheric vent.

Correct answer: D

52. In a compression type automatic grease cup, the lubricant is forced into the bearing by_____.

A. a pressure gun
B. gravity flow
C. a Zerk fitting
D. spring force

Correct answer: D

53. A dented race in an antifriction bearing could be caused by _____.

A. water in the bearing
B. dirt in the bearing
C. vibration while the bearing is not in operation
D. abrasives in the lubricant

Correct answer: C

54. If there is any doubt that a newly employed engine department crew member is sufficiently familiar with the engine room equipment, operating and maintenance procedures needed for the proper performance of his or her duties, what should be done?

A. The employee should be allowed to perform his or her duties without supervision in the hopes that he or she will eventually become familiar enough to be competent.
B. The employee should be immediately terminated and arrangements made for a relief to be sent out whenever practical.
C. The employee should be provided a period of close supervision until there is no longer any doubt that he or she is familiar enough to be competent.
D. The employee should be demoted and required to function at the lowest level for the entire duration of his or her assignment.

Correct answer: C

55. As a first assistant or chief engineer, what is the source of your authority?

A. Your authority is conferred upon you by the ship's master upon reporting aboard.
B. Your authority is bestowed upon you by its acceptance by your subordinates.
C. Your authority is conferred upon you by the license you hold and maritime tradition.
D. Your authority is earned by you as a function of daily performance.

Correct answer: C

56. Which of the following would be a positive outcome associated with performing a trend analysis of data acquired from lube oil testing, vibration sensors, performance data sensors, and thermographic sensors?

I) Avoidance of catastrophic failures.
II) Determining the need of when to perform corrective maintenance.
III) Improving the overall effectiveness of the engineering plant.

A. I only
B. II only
C. I and II only
D. I, II, and III

Correct answer: D

57. As a management level engineering officer, you are apt to be the primary investigator investigating the root cause of the failure of a piece of machinery. Besides collecting and preserving the physical evidence of the failure and interviewing key personnel, which of the following supplemental information should be considered?

I) Onboard operating and maintenance procedures
II) Historical operating and maintenance records
III) Technical manuals and specifications
IV) Personnel training records

A. I, II, and III only
B. I, III, and IV only
C. II, III, and IV only
D. I, II, III, and IV

Correct answer: D

58. What is the critical first step that must be carried out before executing a plan?

A. Assessing present and future conditions affecting achievement of the plan.
B. Setting an objective or goal to be achieved by the plan.
C. Developing a systematic approach to achievement of the plan.
D. Identifying present and future conditions affecting achievement of the plan.

Correct answer: B

59. What federal agency enforces the prohibition of employment discrimination based on race, color, religion, sex, or national origin as it applies to shipboard employment onboard US flag vessels?

A. International Transport Workers' Federation (ITWF)
B. Equal Employment Opportunity Commission (EEOC)
C. Maritime Administration (MARAD)
D. U.S. Coast Guard (USCG)

Correct answer: B

60. One of the means of alternative dispute resolution regarding a collective bargaining agreement dispute is arbitration. What is meant by arbitration?

A. Direct, in-house negotiated settlement between company and union representatives.
B. Settlement reached as the result of litigation as part of a judicial proceeding in court.
C. Agreement to abide by a binding decision rendered by a company and union agreed-upon impartial person.
D. Negotiated settlement between company and union representatives facilitated by a mediator.

Correct answer: C

61. In accordance with 33 CFR Subchapter O (Pollution), how long must the Oil Record Book be maintained on board those vessels for which the regulations apply?

A. 1 year at a minimum
B. 2 years at a minimum
C. 3 years at a minimum
D. 4 years at a minimum

Correct answer: C

62. In accordance with 46 CFR Subchapter J, which of the following electrical repairs is permitted?

A. Connect a flexible cord or cable to a fitting with so that tension is not transmitted to joints or terminal screws.
B. Splice a flexible cord or cable with twist-on connectors if smaller than 18 AWG.
C. Extend the length of a circuit with twist-on connectors if in an enclosure and wrapped securely with insulating tape.
D. Splice a damaged conductor with twist-on connectors if the insulated cap is firmly secured to prevent loosening due to vibration.

Correct answer: A

63. One of your ship's indirect-drive steering gear drive motors needs to be replaced. In accordance with 46 CFR Subchapter J, what minimum short-time rating should the replacement motor have in hours?

A. 1/4 hour
B. 1/2 hour
C. 1 hour
D. Continuous operation at 15 percent load followed by 1 hour at full load.

Correct answer: D

64. Prior to arrival in Charleston, SC your vessel must conduct drills within 48 hours prior to entry and log that in the vessel logbook. Alternatively, you can log regularly scheduled quarterly drills according to 33 CFR regulations governing ports and waterways safety. Which of the following are included in the drills that must be performed?

(1) Operation of the main steering gear from within the steering gear compartment.
(2) Operation of the means of communications between the navigating bridge and the steering compartment.
(3) Operation of the alternative power supply for the steering gear, if the vessel is so equipped.
(4) Operation of the low lube pressure trip on the main engine.
(5) Operation of the reverse power relay on the ship's diesel generator.

A. Drills 1,4,3
B. Drills 1,3,5
C. Drills 2,3,5
D. Drills 1,2,3

Correct answer: D

65. Prior to entering the navigable waters of the United States after an international voyage, your vessel must conduct drills according to 33 CFR regulations for ports and waterways safety that test steering system functionality and log that in the vessel logbook, unless the drill is conducted and logged on a regular basis at least once every three months. Within how many hours of arrival must these drills be performed?

A. 6 hours
B. 12 hours
C. 24 hours
D. 48 hours

Correct answer: D

66. Resonant vibrations, which can cause machinery failure, occur when which of the following conditions happen?

A. The machinery is operated at the natural frequency with no external forces in play.
B. A forced frequency is placed on a piece of operating machinery.
C. The natural frequency of the machinery is the same as the free vibration frequency.
D. The frequency of an external vibration is the same as one of the natural frequencies of the machinery.

Correct answer: D

67. Elevated metal levels present in a recent sample of used diesel engine crankcase lubricating oil is indicative of a condition. What would high silicon levels indicate?

A. The lubricating oil's detergent additives have become depleted.
B. The lubricating oil has become contaminated with sand, dust, and dirt.
C. The lubricating oil has become contaminated with engine coolant.
D. The lubricating oil has become excessively diluted with fuel oil.

Correct answer: B

68. Compatibility of fuel is easily checked onboard ship to ensure that serious problems do not result. What statement concerning fuel incompatibility is true?

A. Incompatible fuels, if allowed to mix, have a tendency to separate out from one another, and therefore must be vigorously blended.
B. Incompatible fuels, if allowed to mix, have a tendency to form sludge, and therefore must not be blended.
C. Incompatible fuels, if allowed to mix, have a tendency to separate out from one another, and therefore must not be blended.
D. Incompatible fuels, if allowed to mix, have a tendency to form sludge, and therefore must be vigorously blended.

Correct answer: B

69. Which of the following maintenance criteria would be the basis of planned maintenance?

A. Vibration analysis
B. Lubricating oil analysis
C. Engine mounted sensor data
D. Equipment running hours

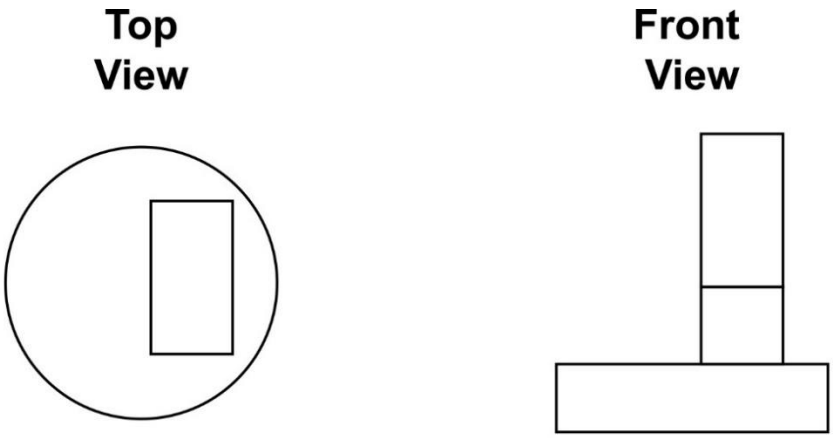
Correct answer: D

70. Which of the following condition-based maintenance data continuous monitoring techniques has the greatest value in predicting wear?

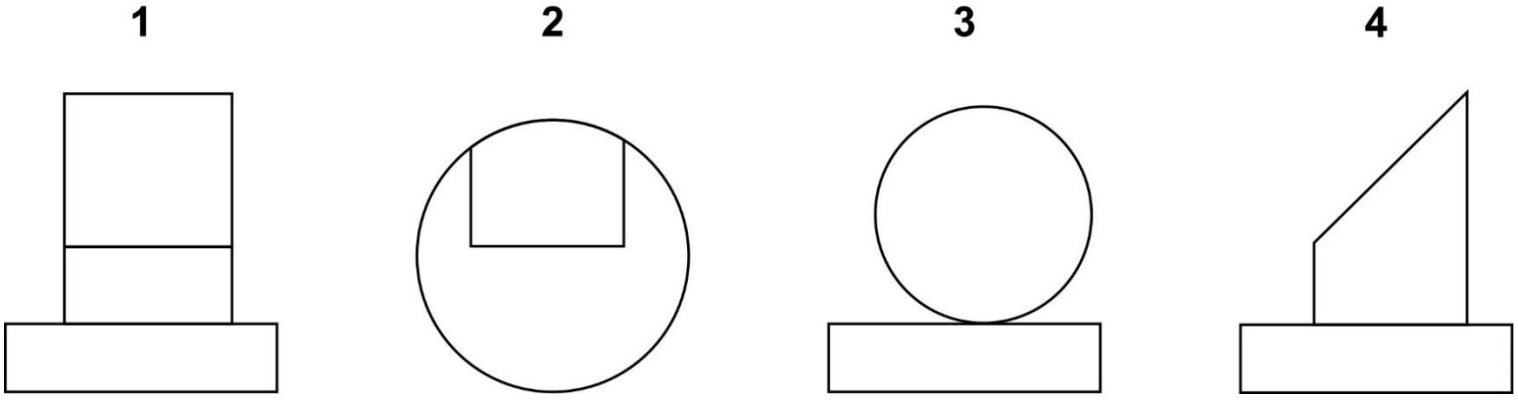
A. Vibration analysis
B. Lubricating oil analysis
C. Thermography
D. Acoustic analysis

Correct answer: A

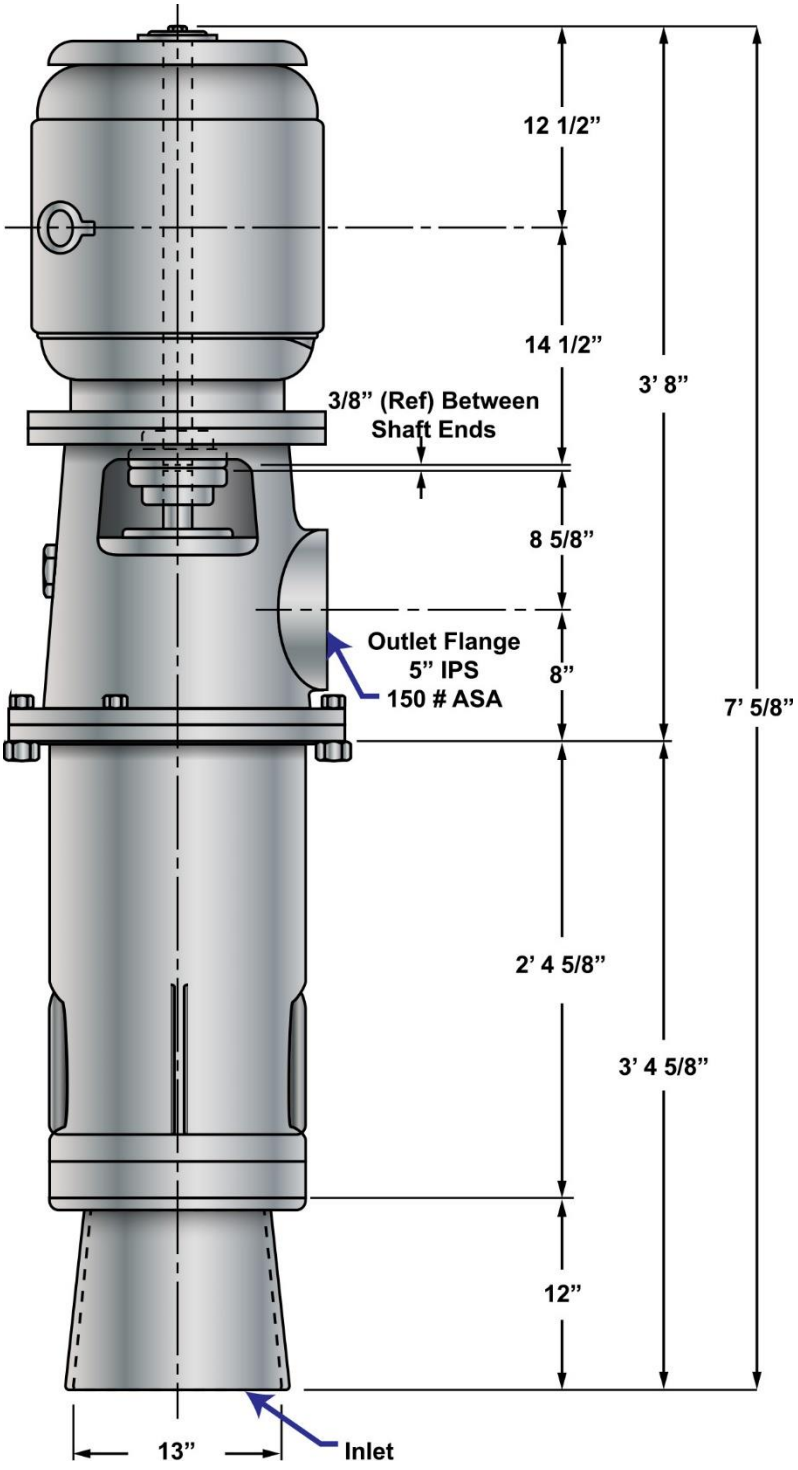
GS-0003



Possible Right Side View



GS-0011



MOTOR CHARACTERISTICS

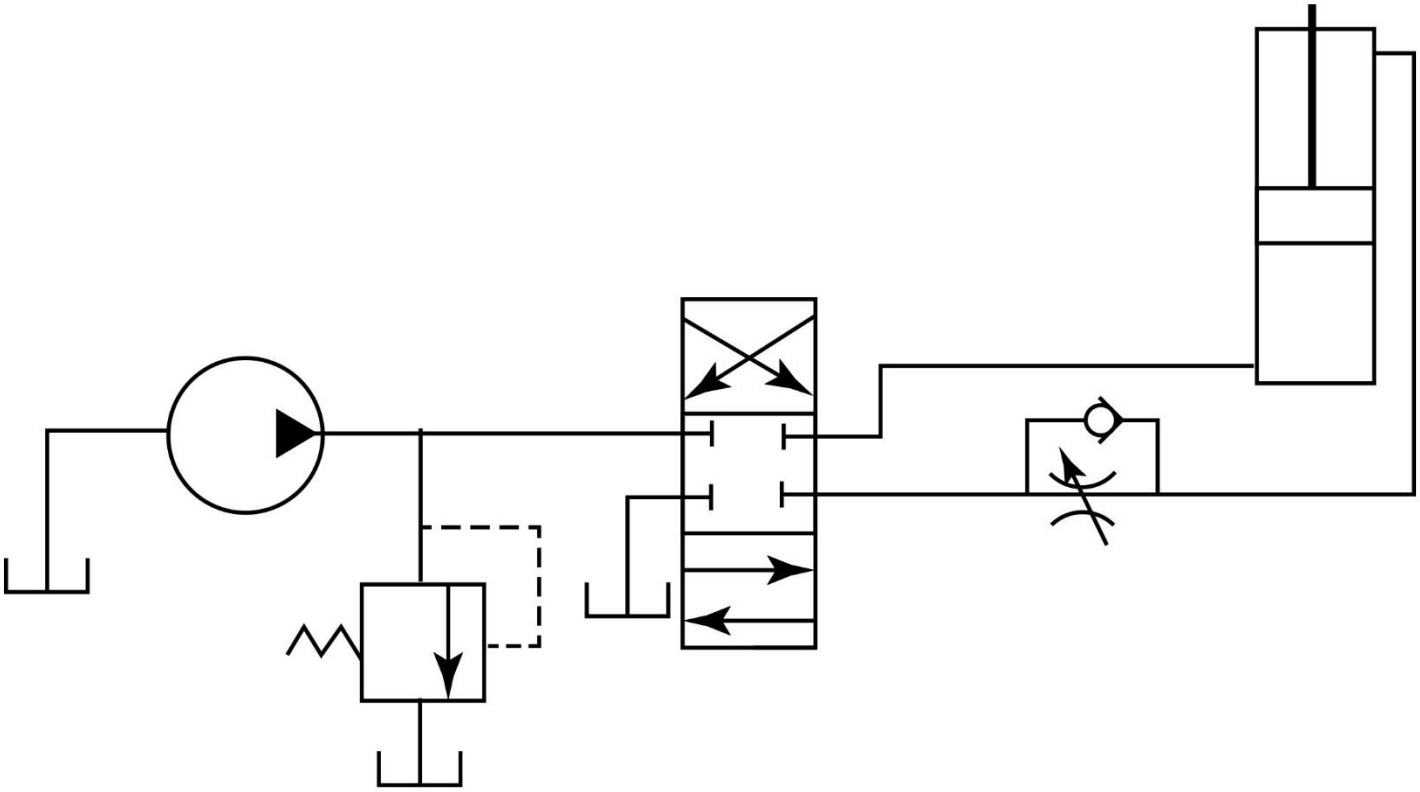
Motor (A. C.)	Electro Dynamic
Rating H. P.	25
Speed R. P. M. (SYN.)	1200
Frame	365 VY
Type	TN
Volts	440
Cycles	60
Phase	3

PUMP CHARACTERISTICS

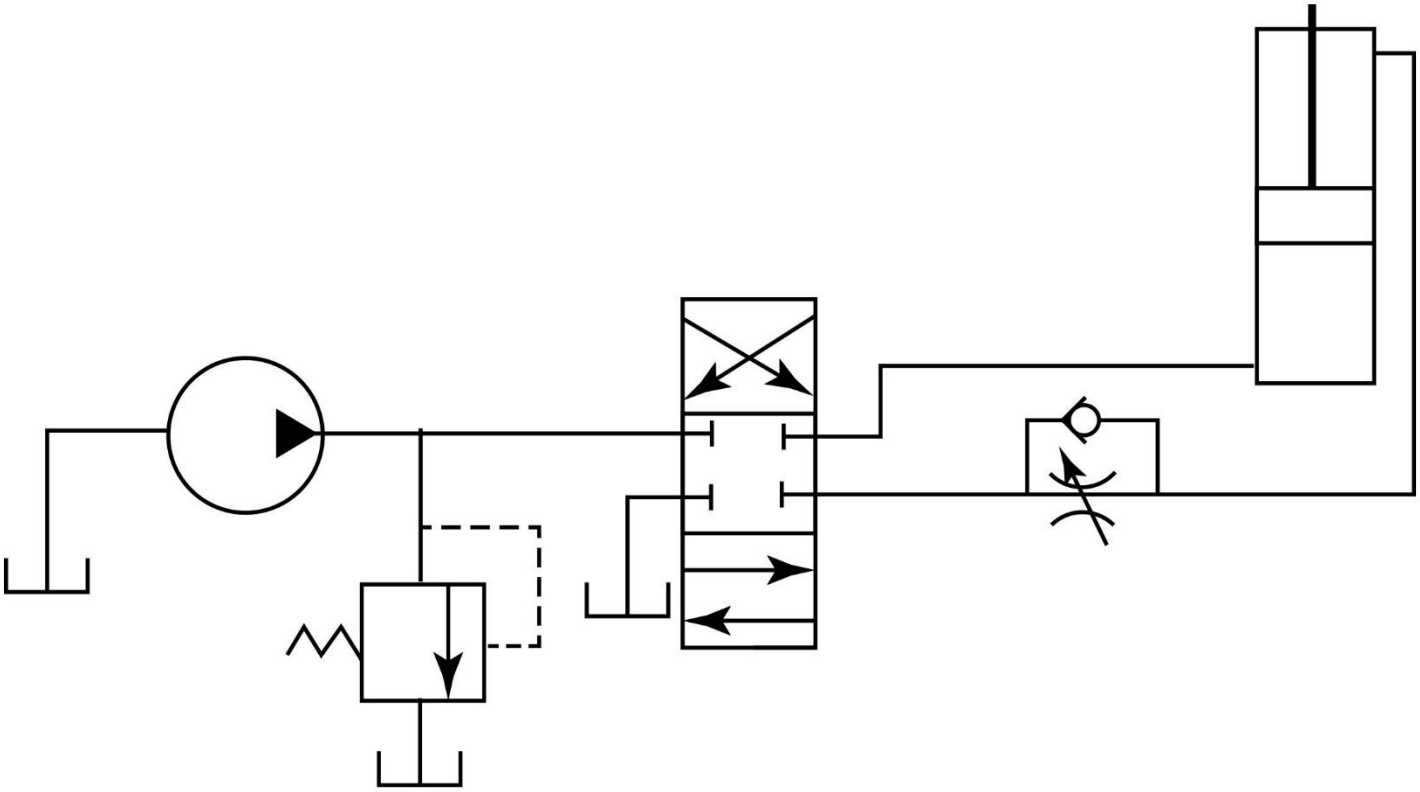
Capacity G. P. M.	400
Speed R. P. M.	1150
Suction Lift “HG	10
B, H, P. @ 1200 SSU-75° F	24.9
Oil viscosity Range, SSU	74-7000
Viscosity Normal SSU @ 140° F	155
Discharge Normal PSIG	55
Fluid Handled, Lube Oil	2190 TEP.
Navy Specification	MIL-L-17331
Oil Temperature Range ° F	40-180

Illustration scale: 1” = 1’

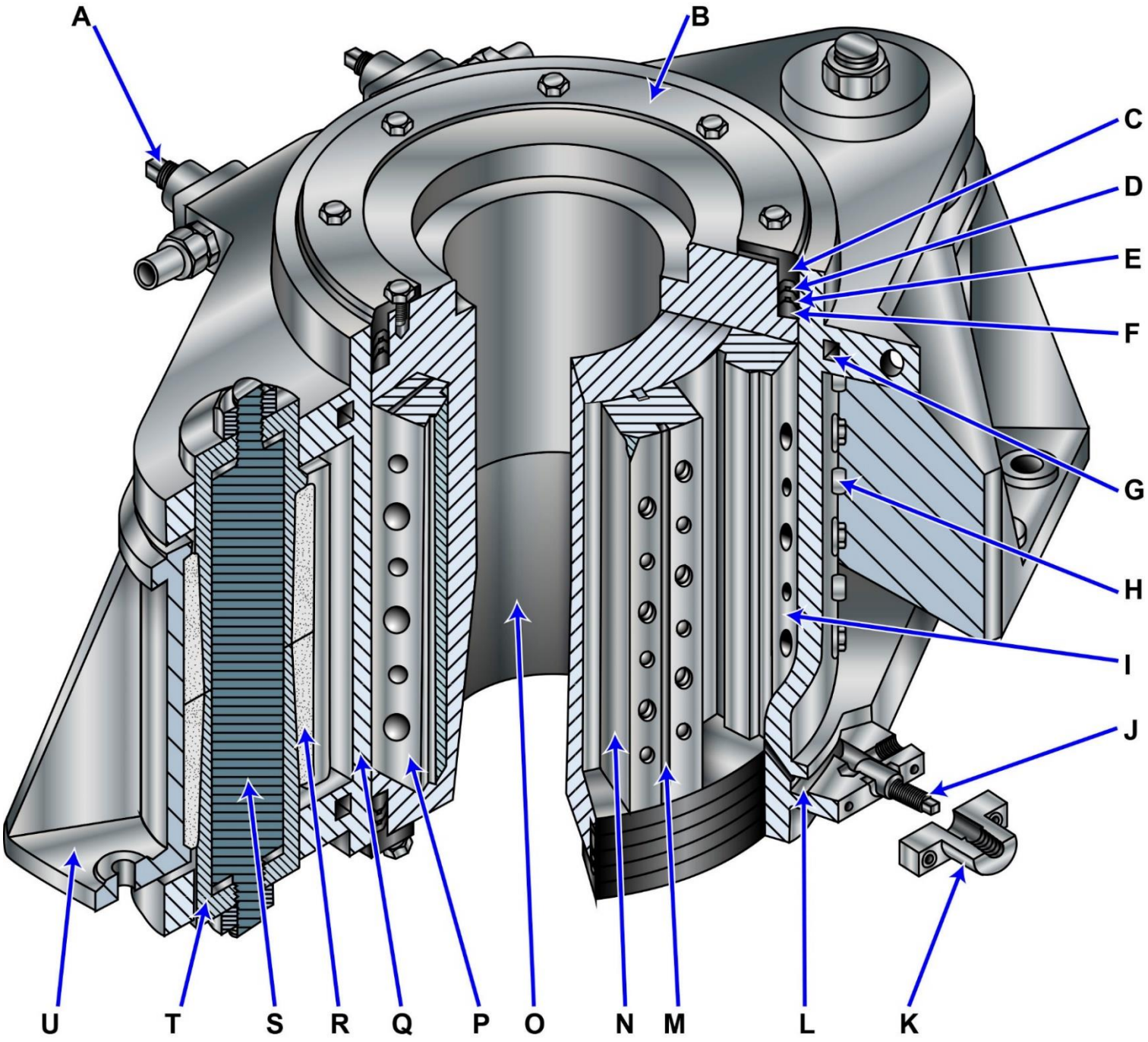
GS-0105



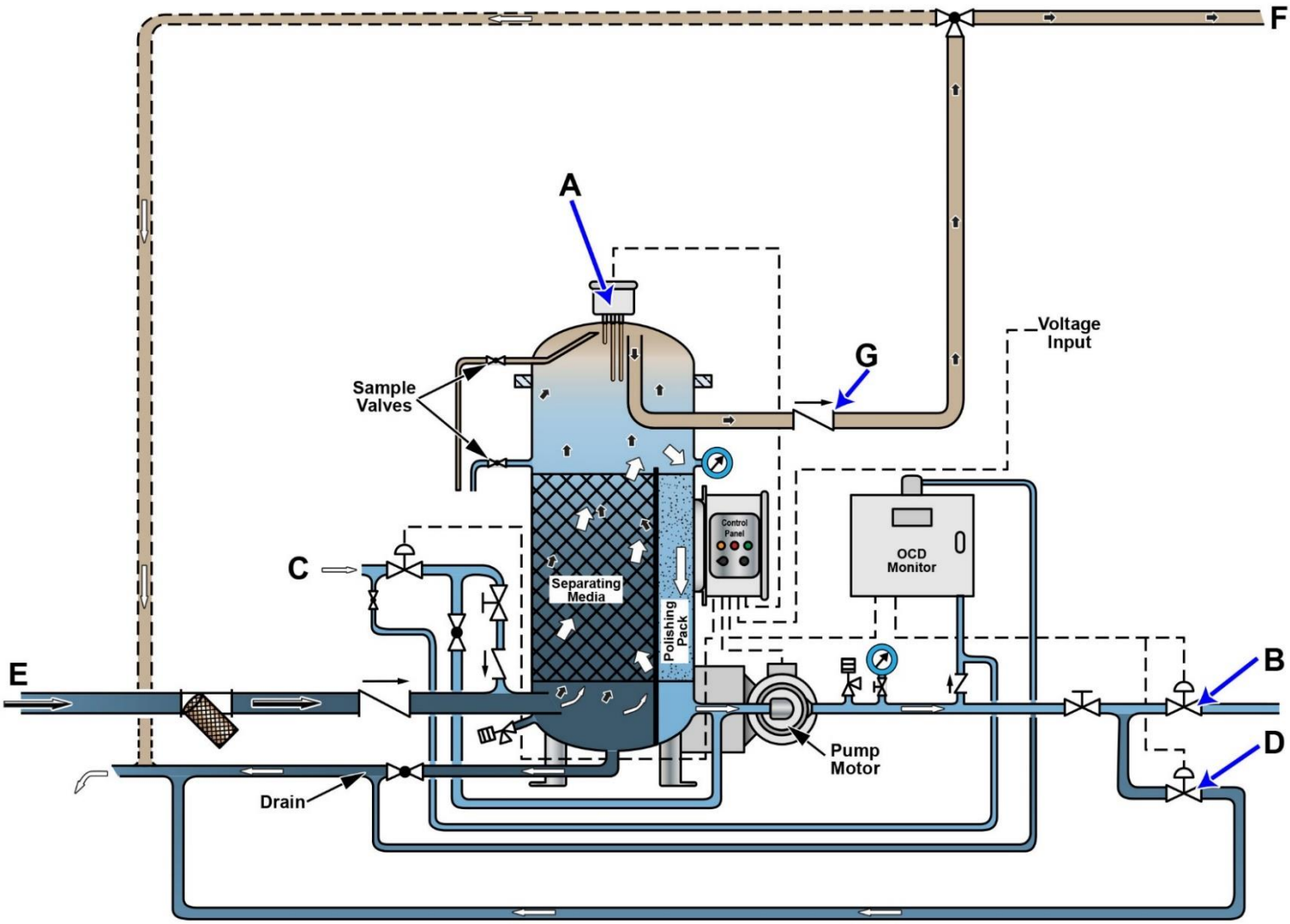
GS-0106



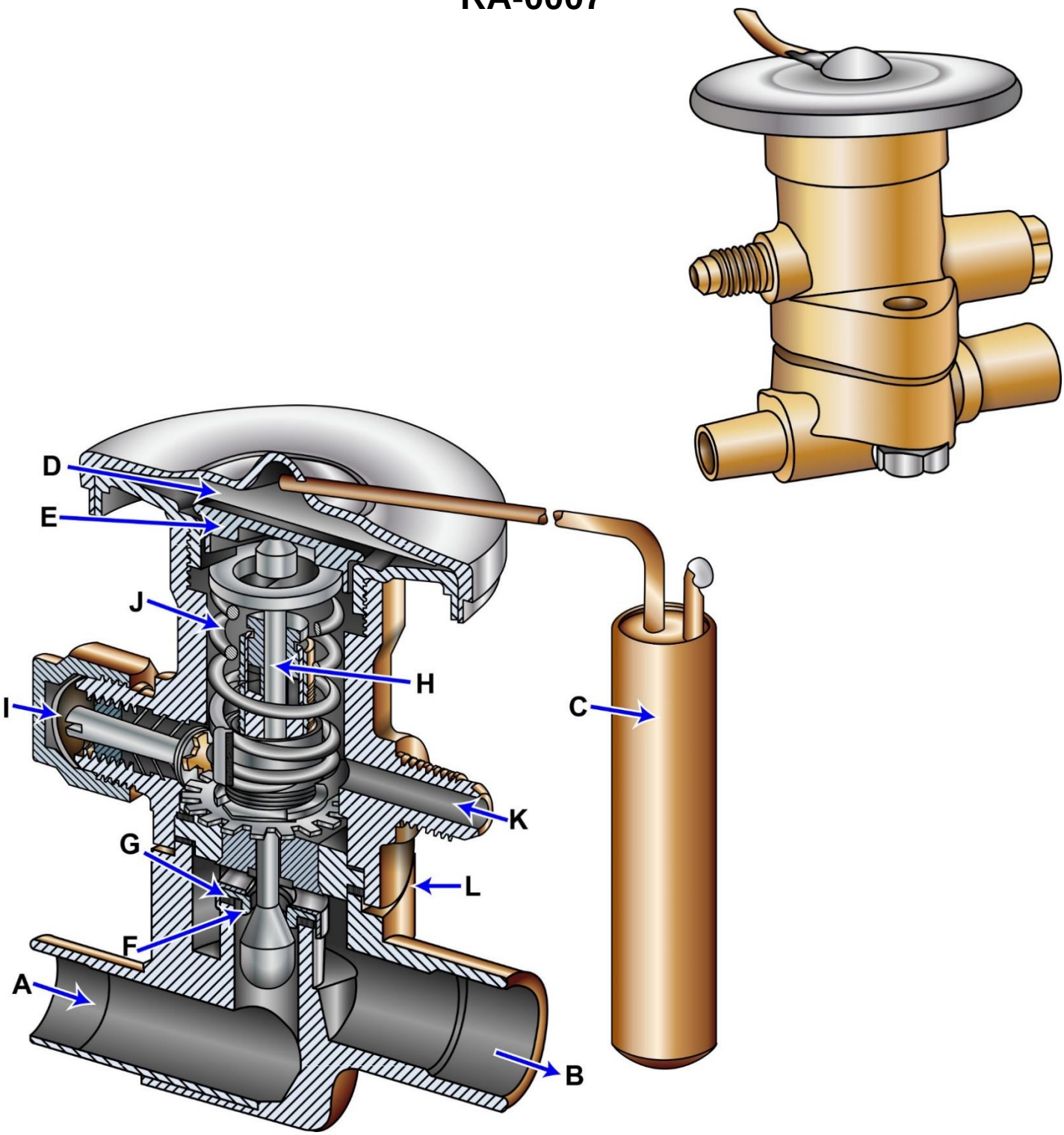
GS-0116



GS-0175



RA-0007



RA-0050
TXV Feeler Bulb on Small Suction Line (7/8” and larger)