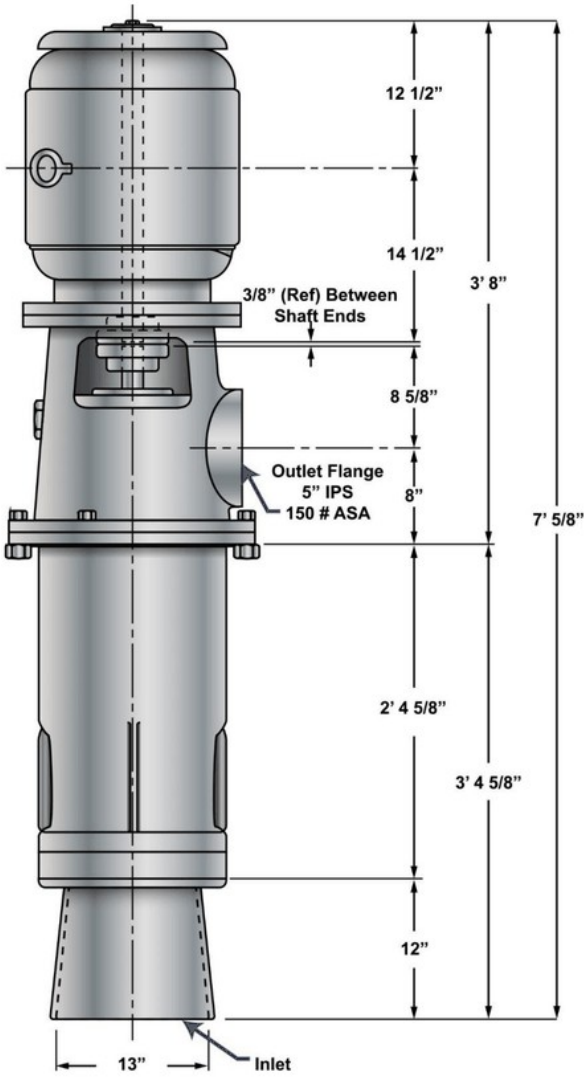

Q535 - General Subjects

1. What is the distance between the center of the discharge outlet and the top of the motor illustrated

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

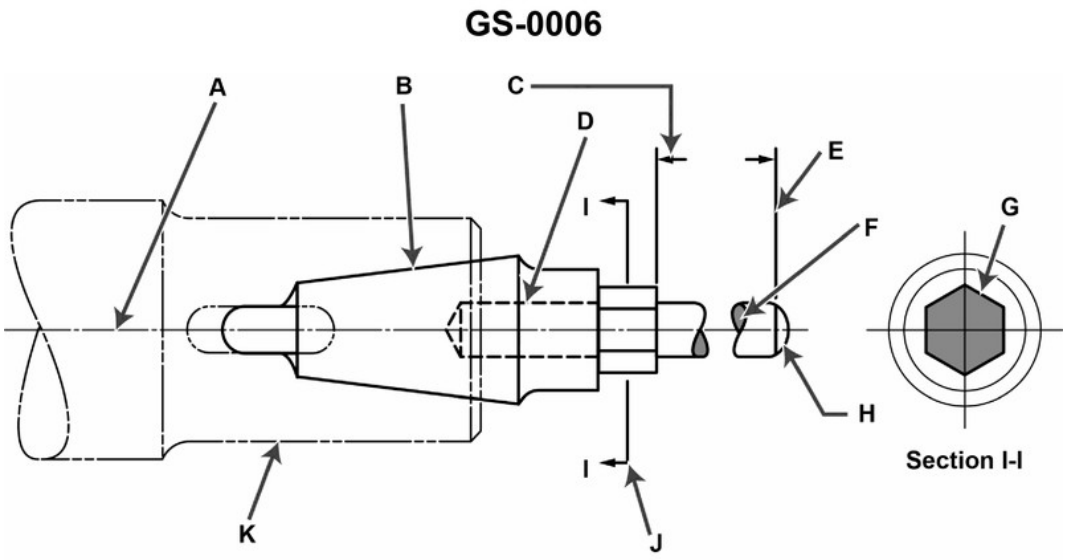
Illustration scale: 1" = 1'

- 34 5/8 inches
- 35 inches
- 35 5/8 inches
- **36 inches**

Note:
The correct answer is 36 inches. This distance is determined by summing the labeled vertical segments on the illustration, representing the total vertical distance from the discharge outlet centerline to the top of the motor.

---

2. In the illustration, line "J" is used to depict a _____



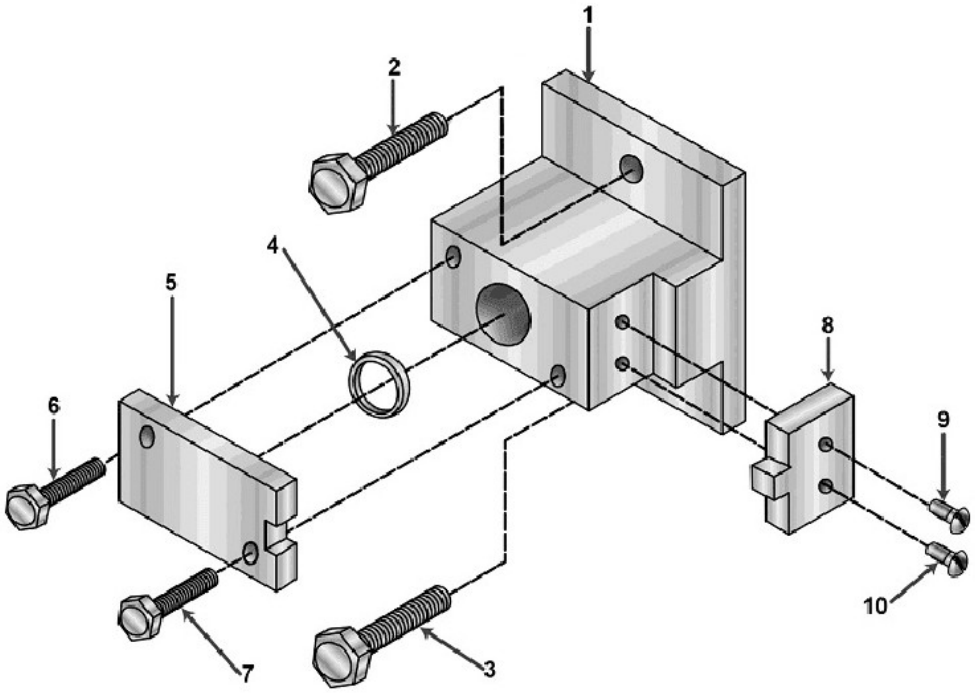
- hidden line
- **cutting plane line**
- outline
- centerline

Note:
Line 'J' indicates the location and direction of a sectional view, and is therefore a cutting plane line. This line is characterized by its heavy, dashed appearance and association with a sectional view label, distinguishing it from hidden lines (thin, short dashes), outlines (continuous lines), and centerlines (alternating long and short dashes).

---

3. The exploded view of the drawing shown in the illustration is intended to show the _____

GS-0025



- total number of parts in the assembled component
- **parts aligned for the correct order of reassembly**
- disassembled component in a one point perspective view
- parts without using hidden lines

Note:
Exploded views illustrate the assembly sequence by showing parts separated along their axes and aligned for reassembly. The primary purpose is to demonstrate the correct order and position of parts during reassembly, not to count parts, eliminate hidden lines, or represent a one-point perspective.

---

4. When renewing sections of pipe in a hydraulic system, the nominal pipe size of the piping always indicates the _____.

- actual inside diameter
- actual outside diameter
- wall thickness
- **size for threaded connections**

Note:
Nominal pipe size designates the size for threaded connections, not the actual inside or outside diameter, or wall thickness. This standard ensures compatibility with fittings, flanges, and valves.

---

5. For the various sizes of tubing and wall thickness used in a hydraulic system, the inside diameter can be determined if it is remembered that the inside diameter equals the outside diameter less _____.

- the wall thickness
- 1.5 times the wall thickness
- **2 times the wall thickness**
- 2.5 times the wall thickness

Note:
The inside diameter is calculated by subtracting twice the wall thickness from the outside diameter, accounting for the material on both sides of the tubing.

---

6. If the speed of a drill is too great, the drill will _____.

- not cut
- **rapidly dull**
- cut slower
- cut faster

Note:
Excessive drill speed generates heat, which reduces the drill's hardness and causes rapid dulling.

---

7. Before boring a blind tapered hole, a good shop practice to follow is to _____.

- **drill to the small diameter of the taper**
- bore a straight hole
- drill to the large diameter of the taper
- use a tapered reamer

Note:
To ensure accurate taper formation and prevent over-cutting, a blind tapered hole should first be drilled to the small diameter.

---

8. Failing to decrease the feed pressure on a drill as its point begins to break through the bottom of the work piece will cause the drill to _____.

- break cleanly through the bottom of the work piece
- cut an elongated hole in the bottom of the work piece
- form a tapered hole in the bottom of the work piece
- **jam in the work piece and tend to whirl it around**

Note:
Maintaining excessive feed pressure as a drill exits a workpiece causes the cutting edges to bind, resulting in drill jamming and potential workpiece rotation.

---

9. One of the steps required to increase the drilling speed of a drill press is to _____.

- move the drive belt to a smaller diameter motor pulley
- change the terminal connections of the drive motor
- **move the drive belt to a smaller diameter spindle pulley**
- change to a larger diameter spindle

Note:
Decreasing the spindle pulley diameter increases spindle RPM, as spindle speed is inversely proportional to pulley diameter. This adjustment directly increases drilling speed and is the standard method for modifying drill press speed, unlike altering motor connections or spindle size.

---

10. A tapered shank drill is removed from the drill press spindle with a _____.

- taper punch
- **drill drift**
- vice grip
- leather mallet

Note:
A drill drift is the correct tool for removing a tapered shank drill from a drill press spindle because it is specifically designed to fit the drift slot and break the taper friction holding the drill in place; using other tools can damage the drill, spindle, or cause injury.
