

**drill systems**  
International Ltd.

**CSR-1000AV**





## Drill Systems

A Division of Canadian Foremost Ltd.

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### 1 ANGLE & VERTICAL DRILLING

The drill is designed to drill holes from vertical to 45° off vertical. The lateral travel of the mast on the deck allows the hole to be positioned within working distance of the operator. The mast base rests on the ground allowing the force exerted on the mast to be carried by the surface terrain rather than the mast rest.

### 2 OPERATOR'S CONSOLE

The operator in position at the console can control the total drilling operation, from starting the motor to leveling the drilling unit and commencing drilling. Gauges for the total operation are clearly visible. All controls are arranged in a logical sequence to ensure smooth operation.

### 3 DRILL COMPRESSOR

A rotary screw compressor provides air at a rate of 750 CFM at 350 PSI. The compressor is cooled and lubricated by an independent oil supply. Power for the compressor is provided by the carrier engine via the transfer case. Optional 900 CFM at 350 PSI available.

### 4 ROTARY TOP DRIVE

Produces 51,600 ft. lbs. (4,300 ft. lbs.) of torque (optional to 89,000 ft. lbs. (7,400 ft. lbs.)). Speed is variable to 100 rpm.

### 5 HOSE REEL ASSEMBLY

Allows the discharge hose to travel freely up and down the mast ensuring trouble free operation.

### 6 ROTARY BREAKOUT

Twin hydraulic motors ensure quick and efficient separation of drill pipe. Provides for pipe and casing to 12 inches in diameter breakout torque 8,100 ft. lbs.

### 7 WATER INJECTION

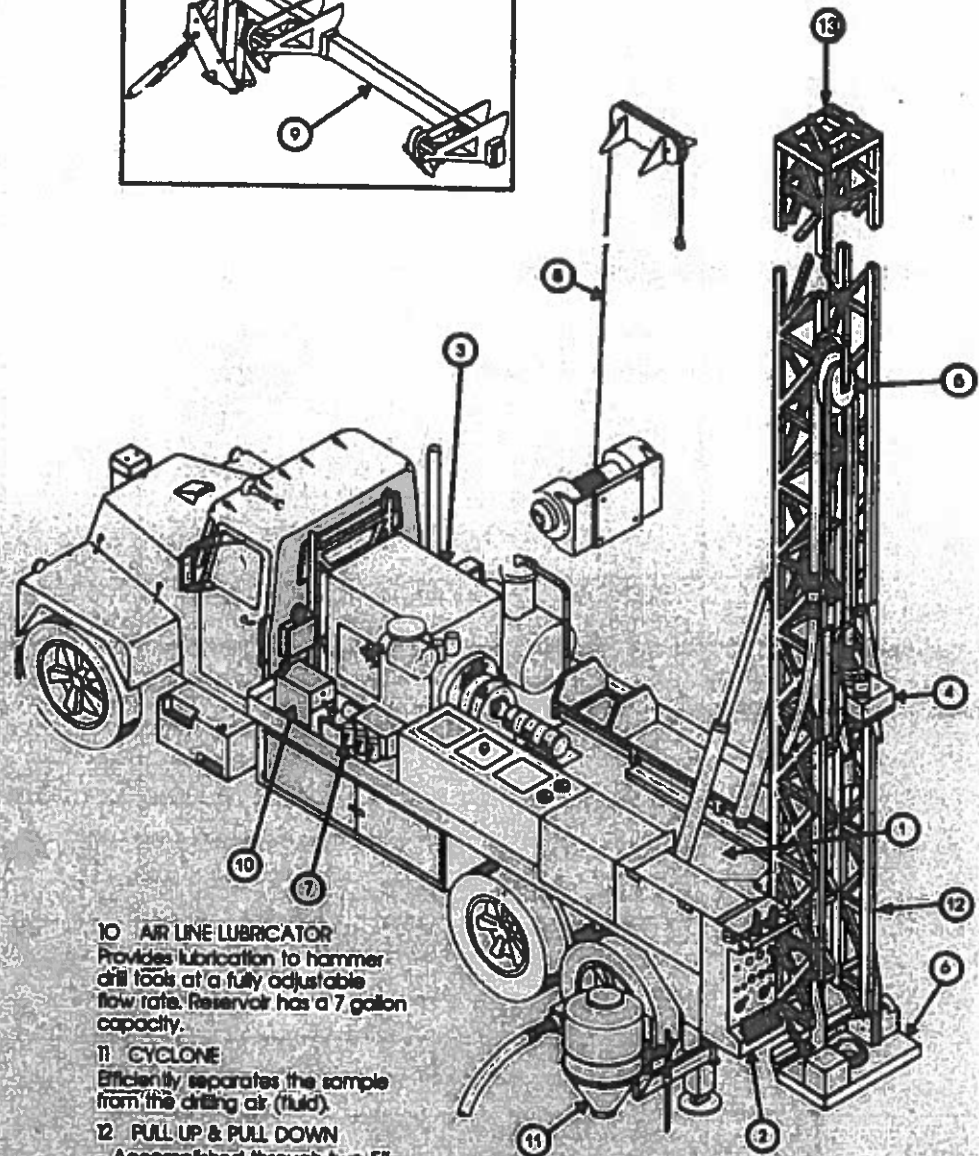
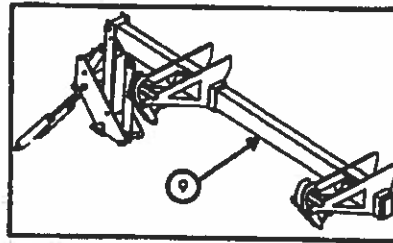
- hydraulically operated pump
- injects water at 600 PSI (4100 Kpa)
- flow rate variable to 20 GPM (76 L/min)
- speed variable to maximum rated delivery

### 8 WINCH

- produces 22,000 lbs. (98,000 N) of line pull
- line speed variable to a maximum of 75 feet per minute (23 M/MIN)

### 9 HYDRAULIC PIPE CHANGER

Provides extremely quick and efficient addition or removal of drill pipe.



### 10 AIR LINE LUBRICATOR

Provides lubrication to hammer drill tools at a fully adjustable flow rate. Reservoir has a 7 gallon capacity.

### 11 CYCLONE

Efficiently separates the sample from the drilling air (fluid).

### 12 PULL UP & PULL DOWN

- Accomplished through two 5" (12.7 cm) hydraulic cylinders.
- Travel 26 ft. (7.9 m)
- Pull up force 38,000 lbs. (169,000 N) which add 22,000 lbs. (98,000 N) total pull up force
- 60,000 lbs. (264,000 N)
- Pull down force 26,000 lbs. (116,000 N)
- Feed rate infinitely variable to 100 ft. per minute
- (30.48 M/MIN)

### 13 DIMENSIONS

Length - Mast down 36' - 7" (11.05 M)  
Height - Mast up 36' - 7" (11.05 M)  
Height - Mast down - Maximum 13' - 6" (4.15 M)

### 14 WEIGHT

- Approximately 53,000 lbs. (24,090 kg.)  
- Carrier included.