



SPRING SET BRAKE SYSTEM OPERATING MANUAL



SECTION 1 – INSTALLATION

The emergency/ park brake can be supplied as a pneumatic operated system or electronic system to apply the brake. (Pneumatic operated system shown above).

1. Installation of Brake Chamber Harness

1.1.Chain Brake Handle to Safe Setting

1.2.Clamp Brake Chamber Harness and Spacers to Brake Shaft and brace in final position – Should be full stroke of Brake if no air is supplied to the chamber

1.3.Tack Weld Stop (Half Moon) on Shaft so that the Actuator from Chamber touches the edge

1.4.Weld Stabilizer Clevis to Draw works support beam (see picture below)

1.5.Remove Brake Chamber Assembly and Weld out Stop (Half Moon)

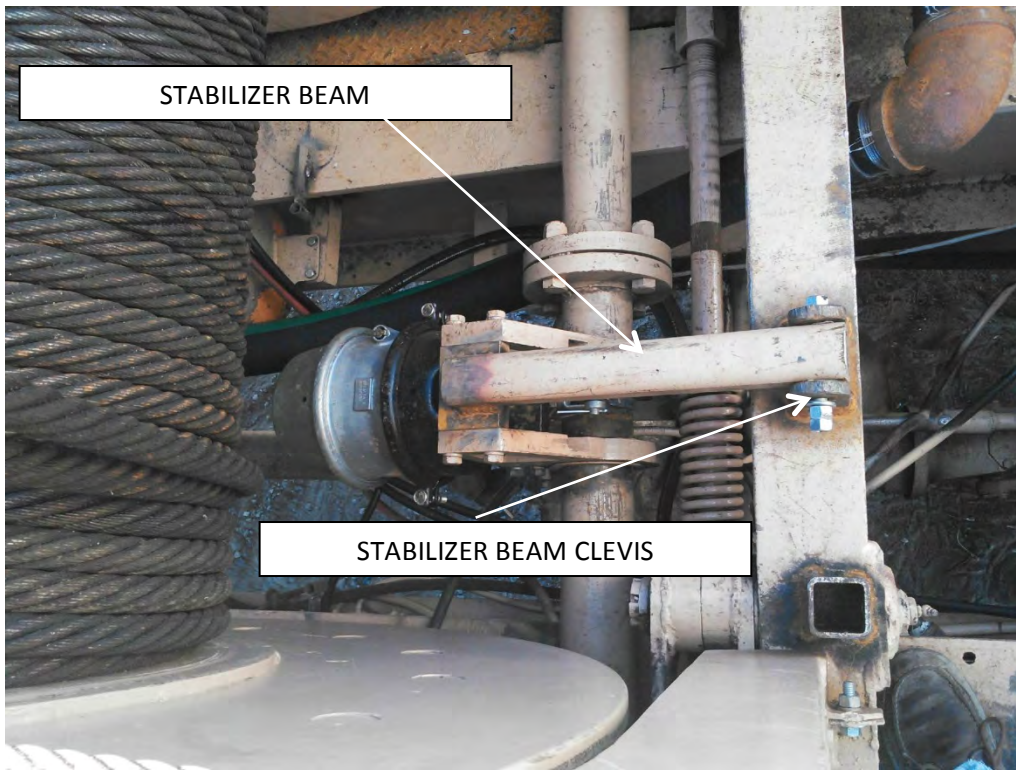
1.6.Install Brake Chamber Harness

1.7.Weld stabilizer Option 1: Weld 2 plates (at least 1/4in thick not supplied by PTS) to a strong point near the brake harness. Bolt the top section of the stabilizer plates to the brake harness. These stabilizers keep the brake harness in proper alignment and prevent torquing of the brake piston.





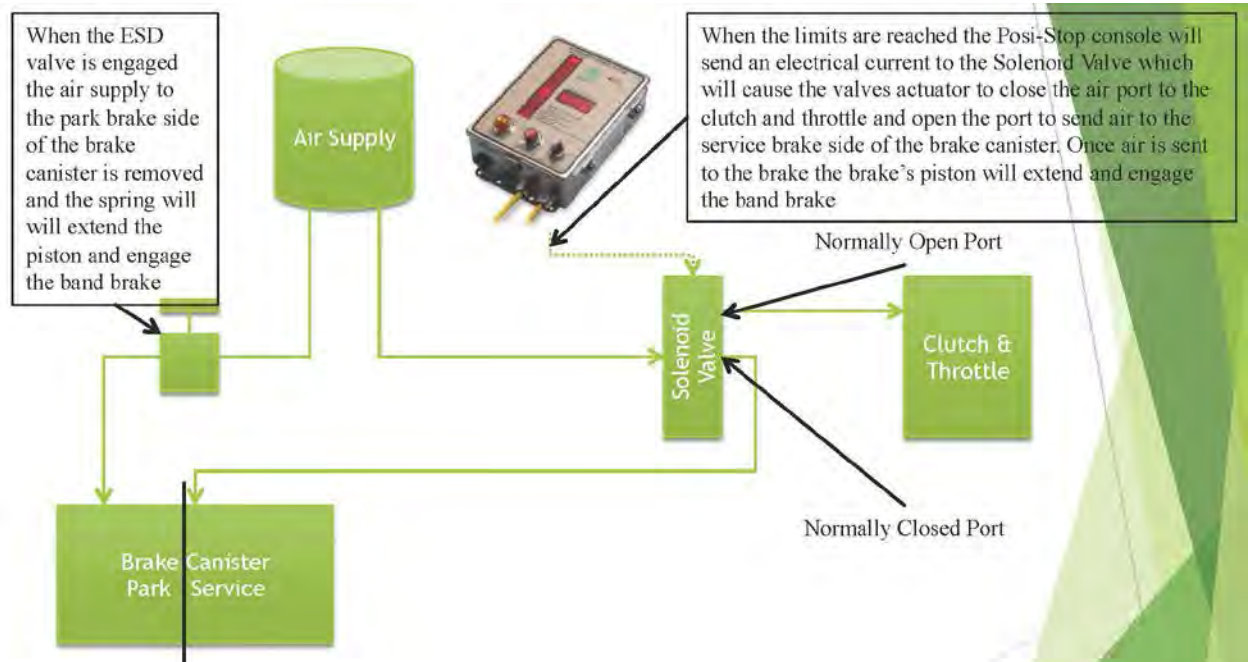
1.8 Weld Stabilizer Option 2: Weld stabilizer (not supplied by PTS) on the top brake harness plate and connect to Stabilizer Clevis (not supplied by PTS)



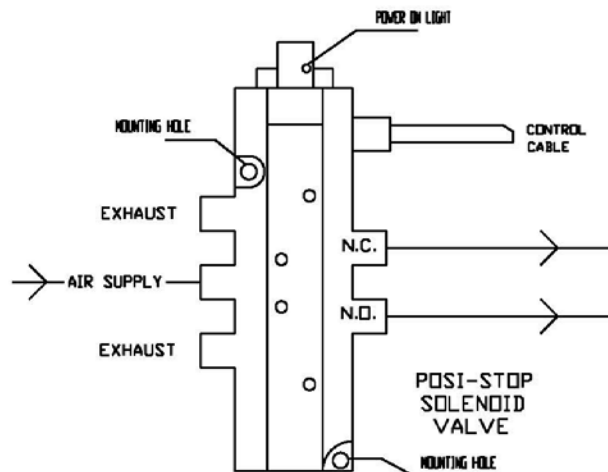
1. Installation of Air Hoses

1.1. Tubing and Fittings not Supplied by PTS

1.2. See schematic below for air hose system



2.3 Solenoid Valve Details



SECTION 2 – OPERATOR’S INSTRUCTIONS

This system applies the brake when the Posi-Stop Crown and Floor protection system detects that the block has moved to either the lower or upper limit. The solenoid will remove air supply to the clutch and throttle and supply air to the service brake side of the brake canister. When this occurs the brake handle will abruptly lower unless a safety handle has also been installed on the rig.

WARNING!: The operator is to exercise great care not to have any body parts below the handle or to try and prevent the lowering of the handle as this may cause harm.

The Park Brake allows the operator to activate the brake by removing air supply to the park (spring) side of the brake canister, which will activate the brakes. The operator can set the brakes independently of the Posi-Stop system. This feature can be useful if the operator feels that there is a failure in the brake linkage to set the brakes asap rather than try and engage the clutch and/or wait for the lower limit to be reached for the Posi-Stop to start the stopping action.

The Park Brake should be set once the operator chains the brake handle down. The Park Brake provides constant pressure on the equalizer shaft so that even if the brake pads were hot when set that as the brake pads cool and condense the park brake will continue to apply the necessary pressure (when properly aligned).

The operator should calibrate or set the Posi-Stop system at least each shift to function test the entire system to ensure that the system including the brake system is operational before starting work.

SECTION 3 – MAINTENANCE & PARTS LIST

This system is designed for extremely low maintenance and will provide years of reliable service. However if damage to parts occurs replacement parts are available and are easily changed out. Please reference part number when ordering. Call for pricing.

The brakes should be routinely inspected and tested by a mechanic. Recommended to be performed when brake pad's inspections occur or no longer than 180 days.

Each year the brake canister should be replaced. This is a low cost easily obtained part from any tractor-trailer supply retailer.

Whenever brakes are adjusted or new pads are installed the alignment of the brakes must be checked by the mechanic to ensure the piston on the equalizer shaft's welded stop applies full pressure. "Full pressure" is defined as the same pressure applied as the operator pushes down on the brake handle for a quick full stop of the blocks.

WARNING: Improperly aligned brake piston can result in over "camming" the brakes or insufficient force applied to prevent the block from stopping when the Posi-Stop has detected the block has reached the upper/lower limit.

Part List Table

Part Number	Description
	BRAKE CHAMBER ASSEMBLY COMPONENTS
C-BS-DBS-BRC	Brake Chamber
C-BS-DBS-BSA (Size)	Brake Shaft Actuator (Indicate Size of Brake Shaft, e.g. "2-1/2in")
C-BS-DBS-BSS (Size)	Brake Shaft Spacer (Indicate Size of Brake Shaft, e.g. "2-1/2in")
C-BS-DBS-ACT	Brake Chamber Rod Clevis
C-BS-DBS-PIN	Brake Chamber Rod Clevis Pin
C-BS-DBS-IQR	Brake Chamber Quick Release Valve
A-BS-DBS-BCC	Brake Chamber Cradle
	BRAKE HANDLE ASSEMBLY COMPONENTS
C-BS-DBS-HAN	Handle
C-BS-DBS-TRV	Handle Valve
A-BS-DBS-BHM	Handle Mount Assembly
	PNEUMATIC EMERGENCY/PARK BRAKE COMPONENTS
C-BS-DBS-PBV	Park Brake Valve
C-BS-DBS-BMK	Park Brake Knob
C-BS-DBS-BOX	Park Brake Valve Box
C-BS-DBS-QEV	Park Brake Quick Release Valve
	ELECTRONIC EMERGENCY/PARK BRAKE COMPONENTS
A-BS-DBS-EMP	Electronic Emergency/Park Brake Assembly

SECTION 4 – CONTACT INFORMATION

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