

Preparation

The Short Instruction section of this manual are for quick reference only. Operator's need to read through and understand the entire manual.


Before using the Stationary Pump, please review the following topics;

- Safety Manual - page 25
- Machine Overview - page 38
- Safety Equipment - page 34
- Personal Protection - page 63
- Unit Setup - page 67
- Machine Preparation - page 68



Figure 1
Protective clothing

Starting the Machine

- Be sure all safety guards are in place.
- From the Rear Operator Panel, turn ignition switch to the RUN position. The SCT controller will initialize, the Schwing logo will appear on the screen. When the system has finished initializing, the Engine Status screen will be displayed. When the glow plug indicator icon disappears, turn and hold the key switch in (III) START  position; when the engine starts - release. You can't start the engine until the SCT controller has initialized.
- After starting, the engine may be held at low speed for a duration between 1 to 25 seconds to allow engine systems to stabilize. The duration will depend on the ambient temperature, time since last run and other factors.

NOTE In ambient temperatures from 32 to 140°F (0 to 60°C), the warm-up time is approximately 3 minutes. In temperatures below 32°F (0°) additional warm-up time may be required.

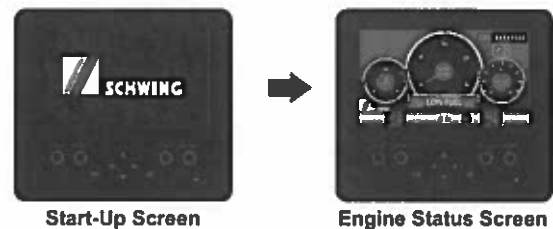


Figure 2
Start up and Engine Status screen

- With the engine properly warmed-up, press the Horn button, to clear the E-Stops.
- Use the Throttle Up button to increase engine RPM's. Press and hold this button until the engine is at maximum RPM.

Checking the machine

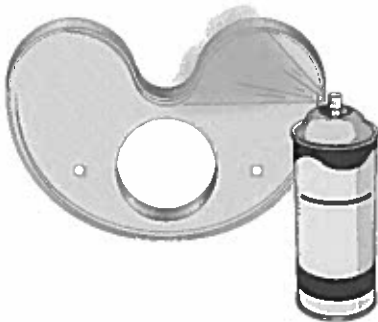
- Raise the hopper cover and secure with locking pin.

⚠ WARNING Crushing hazard. Always secure the hopper cover with the locking pin.

- Press the agitator enable button. Place the agitator handvalve in either the forward or reverse position. Carefully lift the hopper grate cover. Ensure the agitator stops when lifted. If the agitator continues to move, shut down the machine and check the hopper grate switch.

⚠ WARNING Do not operator the machine, if the hopper grate switch is malfunctioning.

- Check your hydraulic pressures. See "Check hydraulic pressures" on page 99.
- Lubricate the outlet wear plate with water or WD40. Spray inside the outlet pipe and in front of the Rock Valve. DO NOT put your hand inside the outlet pipe, spray from the outside only. Never operate the Rock Valve without first lubricating the outlet wear plate. Moving the kidney seal against a dry plate will cause excessive wear and premature failure.



- Fill the waterbox if you haven't done so already.
- With the outlet wear plate lubricated and the waterbox filled, stroke the machine a couple of times by putting the concrete pump in the forward position.
- If the machine is stroking properly, you can either shutdown the machine or begin pumping the job, see "Pumping the Job" on page 77 to continue.

Shutting the Machine Down

NOTE Stopping the engine immediately after the engine has been working under load, can result in overheating and accelerated wear of engine components.

Avoid accelerating the engine prior to shutting down the engine.

Avoiding hot engine shutdowns will maximize turbocharger shaft bearing life.

To shut the machine down, put all functions in the neutral or OFF position. Reduce engine RPM to a low idle, allow the engine to idle for 5 minutes in order to cool.

When the engine has cooled, turn the ignition keyswitch to the OFF position.

After key-off, the DEF pump will circulate the DEF fluid for a given time, in order to cool the DEF injector. The DEF pump will also purge the DEF system of fluid to protect the lines from freezing in cold conditions. The SCT screen will remain ON during this process. When finished the SCT system will shut off and the screen will go blank.

Disconnecting the battery power too soon may prevent purging of the DEF fluid lines after the engine has shutdown. Do not disconnect the battery until "Wait to Disconnect" symbol is no longer displayed on the SCT screen (Figure 23).

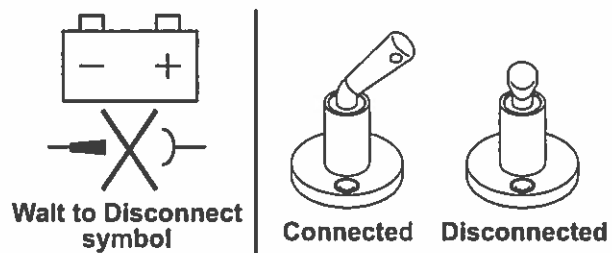
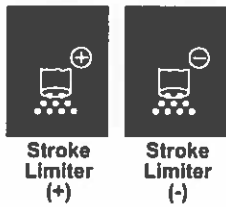


Figure 3
Wait to Disconnect symbol / Battery switch

Controlling the Concrete Pump

Stroke Limiter



The stroke limiter is a hydraulic device that can be electrically adjusted with the stroke limiter (+) and (-) buttons, located at the rear operators station or cable remote. Its function is to raise and lower the output of the hydraulic pumps

that operate the concrete pumpkit. This has the advantage of allowing the engine to remain at higher RPM, where horsepower is at the maximum.

The stroke limiter has an adjustment range of 95 percent. That means it can go from as low as 2 strokes per minute to maximum strokes per minute. The stroke limiter only adjusts the output of the hydraulic pumps while the differential cylinders are moving. That means that when the differential cylinders are stopped at the end of the stroke and the Rock Valve is moving, the pumps don't return to maximum output until the Rock Valve cylinder has completed its travel.

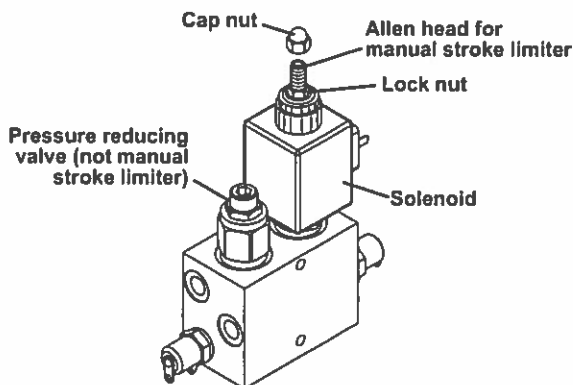


Figure 4
Stroke limiter control block

If electrical control of the stroke limiter is lost, it can be adjusted manually by removing the cap nut located on the top of the solenoid assembly and loosening the lock nut with a 1/2 inch wrench. The adjustment is then accomplished with a 5/32 inch allen wrench by turning the screw in (clockwise) to decrease strokes or out (counter clockwise) to increase strokes. Always return the manual stroke limiter to maximum strokes (full counter clockwise out position) when electrical power is restored.

Cable Remote

To use the cable remote, remove the dummy plug from the rear socket and replace it with the cable remote plug. At the operator control panel, put the Local/Remote button in the remote position. Clear the E-stop by releasing the E-stop button on the Cable remote and pressing the horn button.

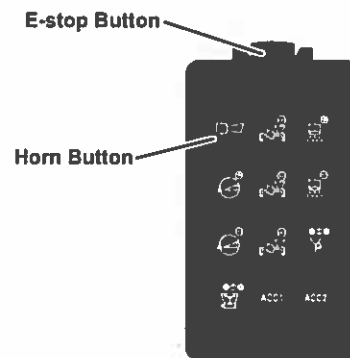
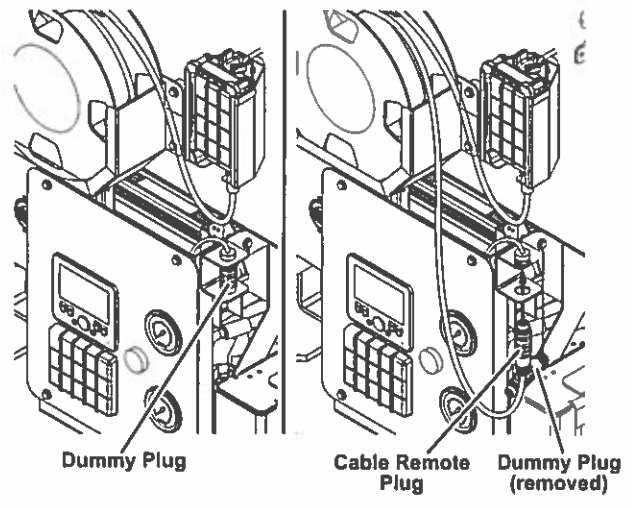
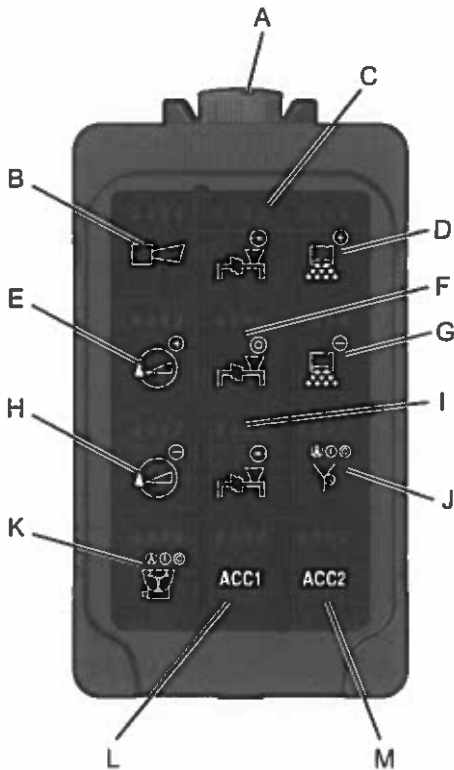


Figure 5
Connecting the radio remote

Cable Remote Functions

The cable remote includes the following buttons:

- A. E-Stop Button
- B. Horn
- C. Concrete Pump Forward
- D. Stroke Limiter (+)
- E. Throttle (+)
- F. Concrete Pump - Off
- G. Stroke Limiter (-)
- H. Throttle (-)
- I. Concrete Pump - Reverse
- J. Vibrator Auto/Manual - On/Off
- K. Agitator - On/Off
- L. Optional Accessories 1 - On/Off
- M. Optional Accessories 2 - On/Off



Radio Remote (Optional)

To use the wireless remote, remove the dummy or cable remote plug from the socket and install the receiver plug. At the operator control panel, put the Local/Remote button in the remote position. On the wireless remote, unlock the E-stop button by turning it clockwise. Press the Power ON button and then press the horn button. If the transmitter's signal light does not flash, check the battery orientation.

To turn off the transmitter, press the Power OFF button or the E-Stop button.

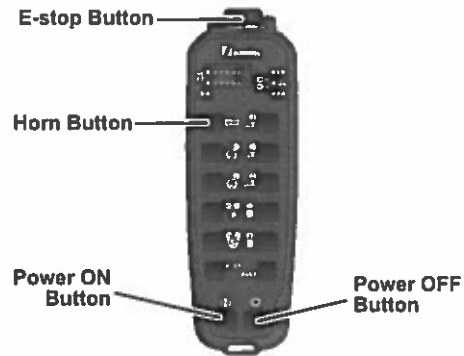
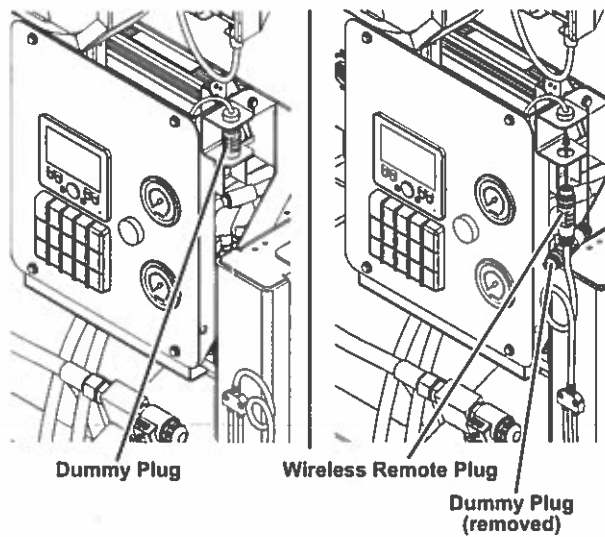
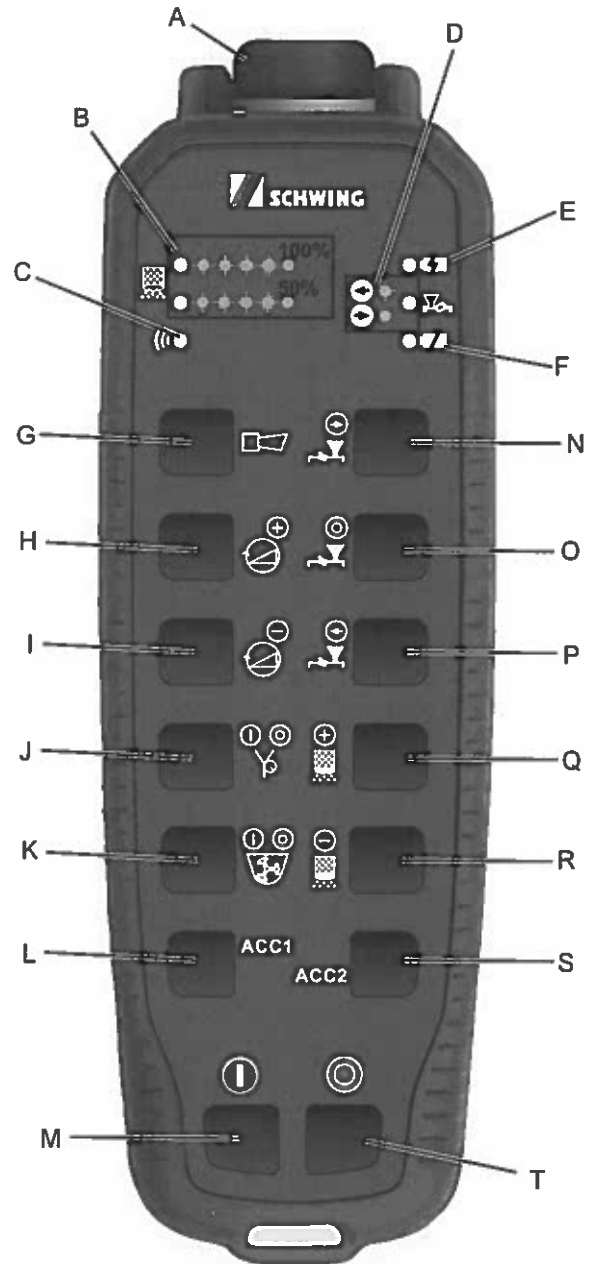


Figure 6
Connecting the wireless remote

Radio Remote Functions

The radio remote includes the following lights and buttons:

- A. E-Stop Button
- B. Stroke Limiter Indicator Lights
- C. Link Active Light
- D. Concrete Pump Fwd/Rev Indicator Light
- E. Battery Charging Light
- F. Battery Low Warning Light
- G. Horn
- H. Throttle (+)
- I. Throttle (-)
- J. Vibrator Auto - On/Off
- K. Agitator - On/Off
- L. Optional Accessories 1
- M. Remote - On
- N. Concrete Pump Forward
- O. Concrete Pump - Off
- P. Concrete Pump - Reverse
- Q. Stroke Limiter (+)
- R. Stroke Limiter (-)
- S. Optional Accessories 2
- T. Remote - Off



Emergency Procedures

Electrical power loss

If there is an electrical malfunction, the E-stop circuit dump valves will open, disabling the hydraulic circuit. To continue use, remove the cable connector from the E-Stop harness and replace it with the Emergency Power Cable Plug. This will restore power to the dump valves and allow the system to build hydraulic pressure. Hydraulic functions can now be controlled by the override handles.

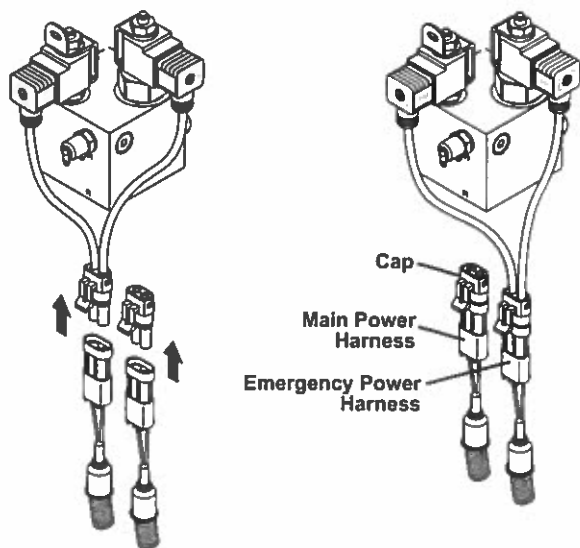
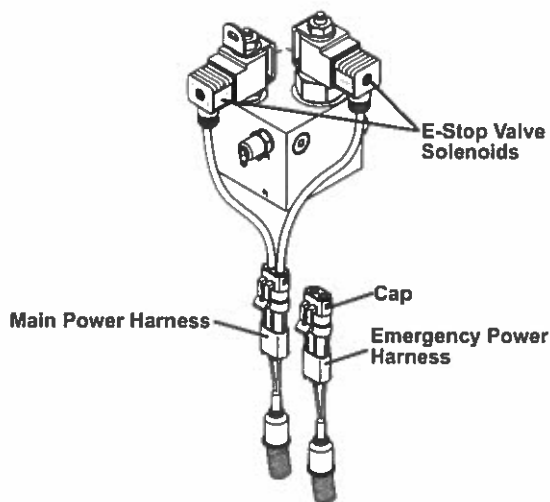


Figure 7
Connecting the Emergency Power Harness

Emergency Override Button

If you cannot correct the electrical power loss problem, try activating the dump valves by pushing the two override buttons on the E-stop while another person activates the concrete pump forward/reverse handle, on the S1/S2 Control Block. Activating the three valves will close the dump valves allowing the accumulator to shift the concrete valve and the pump to be cleaned out.

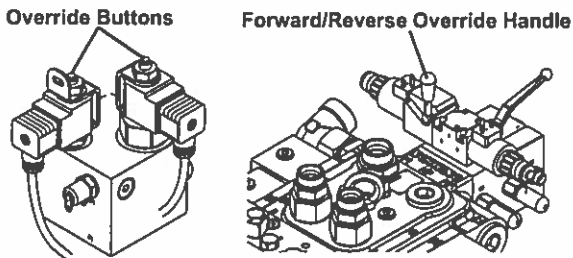


Figure 8
E-stop override buttons / Concrete Pump forward/reverse override handle

For information on where to look and what to do if you lose electricity on the unit, contact the Schwing Service Center at (888) 292-0262.

Loss of Radio/Cable remote

The Radio/Cable Remote is considered the primary control source for the stationary pump. If you lose the remote control for any reason, you can still operate the stationary pump from the rear operator panel.

If your Radio Remote stops functioning and the battery LED is off, the battery is probably dead. Remove the battery from the Radio Remote, and replace it with a fully charged battery. The dead battery should then be placed in the charger.

Disposal of spent batteries

NiCd and NiMH batteries are recyclable. You can help preserve our environment by returning your unwanted batteries to the nearest collection point for recycling or proper disposal. Call 1-800-822-8837 toll free for information about spent battery collection.

NOTE Do not dispose of nickel cadmium or nickel metal hydride batteries in household or business trash.