Black-Topper®
Asphalt Distributor
With BT1 Controls

Smart Clean Recirculating Flushing System

Smart Clean Operation
- Spray Bar Smart Clean Procedure
- Asphalt Pump Smart Clean Procedure
- Empty Smart Clean Tank Into Main Tank
- Adjusting Preset Smart Clean Functions
- Smart Clean Flow Diagrams
- Smart Clean Repair Parts
SYSTEM OFF

1 CLOSED
STRAINER BOX
4 WAY VALVE
2 CLOSED

SMART CLEAN TANK

VALVE = OPEN
VALVE = CLOSE

PUMP CLEAN

1 OPEN
IN CIRC IN TANK POSITION
STRAINER BOX
4 WAY VALVE
2 OPEN

SMART CLEAN TANK

VALVE = OPEN
VALVE = CLOSE

REAR SUCTION = CLOSED
TANK RETURN = CLOSED

BAR CLEAN

1 OPEN
IN CIRC IN BAR POSITION
STRAINER BOX
4 WAY VALVE
2 OPEN

SMART CLEAN TANK

VALVE = OPEN
VALVE = CLOSE

REAR SUCTION = CLOSED

BAR CLEAN SUCKBACK

1 CLOSED
STRAINER BOX
4 WAY VALVE
2 OPEN

SMART CLEAN TANK

VALVE = OPEN
VALVE = CLOSE

REAR SUCTION = CLOSED
TANK RETURN = CLOSED

FLUSH TANK
EMPTY INTO MAIN TANK

1 OPEN
IN CIRC IN TANK POSITION
STRAINER BOX
4 WAY VALVE
2 CLOSED

SMART CLEAN TANK

VALVE = OPEN
VALVE = CLOSE

REAR SUCTION = CLOSED
TANK RETURN = OPENED

E. D. ETNYRE & CO.
OREGON, IL. 61061
FLOW DIAGRAM - SMART CLEAN
9307121
Optional Smart Clean System

The Smart Clean system is an automatic closed system which pulls flushing solvent from the Smart Clean tank, pumps it through the circulating system and spray bar and returns the solvent to the Smart Clean Tank.

Recirculating Smart Clean Operation

Complete the standard suck back procedure(s) found in M-103-19 Black-Topper Operation manual before starting the Smart Clean operation.

Normally the standard suckback procedure will remove sufficient material from the circulating system to negate the need for performing the Smart Clean procedure.

Flushing Solvent must be in the Smart Clean tank for the Smart Clean procedure.
Spray Bar Smart Clean

At the cab control panel:
Turn on the POWER switch.

At the rear control panel:
1. Turn the EMERGENCY STOP switch ON.
2. Confirm unit is properly sucked back.
3. Press the AUX1 button on the Function keypad (Spray Bar Smart Clean).
4. Put the PUMP CONTROL to AUTO.
5. Press START. The pump will start turning at a preset circulation rate (200 GPM). For two minutes the system will engage a standard suckback. After this the pump will start turning at the preset circulation rate (50 GPM).

NOTE: If fluid does not begin to drain from the Smart Clean tank, the following steps may need to be done in order to form a vacuum.
   a. Press the AUX1 button on the Function keypad (Spray Bar Smart Clean).
   b. Put the PUMP CONTROL to MANUAL.
   c. Press Start.
   d. Slowly turn speed up until Smart Clean tank starts to empty (near 150 GPM).

6. After the desired clean time (factory set at 120 seconds) the Smart Clean valves will switch and the pump will change speed to 200 GPM and begin to suck back the solution in the bar automatically.
7. Open the bleeder valve on the left wing for one minute and then close the valve. Open the bleeder valve on the right wing for one minute and then close the valve.
8. Check Smart Clean tank to confirm fluid is returning after the set suck back time (factory set at 120 seconds). The pump will stop.
9. Press the HOME button on the Function keypad.

NOTE: To stop the pump in MANUAL control select AUTO control. To stop the pump in AUTO control turn the PUMP SPEED knob fully counter clockwise and select MANUAL control.

The pump can be stopped by turning the EMERGENCY STOP switch OFF.

BAR CLEAN

SUCK BACK

After the desired clean time, the system will suck back the bar automatically.
Asphalt Pump Smart Clean

At the cab control panel:
Turn the POWER switch ON.

At the rear control panel:
1. Turn the EMERGENCY STOP switch ON.
2. Confirm unit is properly sucked back.
3. Press the AUX2 button on the Function keypad (Asphalt Pump Smart Clean).
4. Put the PUMP CONTROL to AUTO.
5. Press START. The pump will start turning at a preset circulation rate (200 GPM). For two minutes the system will engage a standard suckback. After this the pump will start turning at the preset circulation rate (50 GPM).
   NOTE: If fluid does not begin to drain from the Smart Clean tank, the following steps may need to be done in order to form a vacuum.
   a. Press the AUX1 button on the Function keypad (Spray Bar Smart Clean).
   b. Switch the PUMP CONTROL to MANUAL.
   c. Press START.
   d. Slowly turn speed up until Smart Clean tank starts to empty (near 150 GPM).
   e. Turn the PUMP SPEED control back to AUTO to stop the pump. The pump should now have appropriate vaccum to run in auto Smart Clean modes.
6. During the pump clean period (factory set to 120 seconds), check Smart Clean Tank to confirm fluid is both draining and returning.
7. Press the HOME button on the Function keypad.

NOTE: To stop the pump in MANUAL control select AUTO control. To stop the pump in AUTO control turn the PUMP SPEED knob fully counter clockwise and select MANUAL control.

The pump can be stopped by turning the EMERGENCY STOP switch OFF.
Empty Smart Clean Tank Into Main Tank

At the cab control panel:
Turn the POWER switch on.

At the rear control panel:
1. Turn EMERGENCY STOP switch ON.
2. Must be in AUX1 or AUX2.
3. Press and hold Smart Clean Tank Empty button for 5 seconds. The pump will run for 30 seconds at 50 GPM. If the tank does not drain completely, repeat step 3.

**CAUTION:** This function will put the Smart Clean solution into the main tank. Be sure you want to mix before using this function.

**WARNING**

To prevent possible burns from foaming or violent eruption:
Do not transfer the contents of the Smart Clean Tank if the material temperature in the Asphalt Tank is over 200°F or if water and/or condensation is present in the Smart Clean Tank or if emulsion was previously flushed with the Smart Clean system.

Adjusting Preset Smart Clean Functions:

Enter the setup screens.
1. Press and hold Memory 6 & 10 buttons down while turning power switch to On. Release buttons.
2. Use the Select switch to navigate to the Smart Clean window pictured below.

3. When cursor is over SM FLUSH TIME or SM SKBCK TIME, use the Value switch to adjust the time. **NOTE:** SM FLUSH TIME adjusts both Spray Bar Smart Clean and Asphalt Pump Smart Clean time.
4. Cycle power to control panel to exit setup screens (use the EMERGENCY STOP button on the rear control panel or MASTER POWER switch in the front control panel).
### Smart Clean Recirculating Flushing System - Optional
#### Serial Numbers S7784 & Up

#### Table of Parts

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