TENNANT® TECHNICAL SERVICE BULLETIN 98800–011

DATE: Revised 11/97

TITLE:
HOPPER ROLL–OUT ACTUATOR ADJUSTMENTS

APPLICABLE MACHINES:
800,810

SYNOPSIS:
For Model 800 with s/n 0000–1103 and Model 810 with a s/n of 0000–2046. The hopper roll–out tether cables break due to the actuators not slowing down at the end of their stroke. If there is severe damage to some of the components, it may not be feasible to repair these items. There is an update kit that will eliminate most of these parts. The kit is part number 76272. See the machine service kit notes in the 800/810 TSB section for more details.

The following parts are components of the hopper roll–out cylinder operation.

1. The mercury switch
2. Two hydraulic cylinders
3. The roll–out wiring harness
4. Roll–out solenoid valve

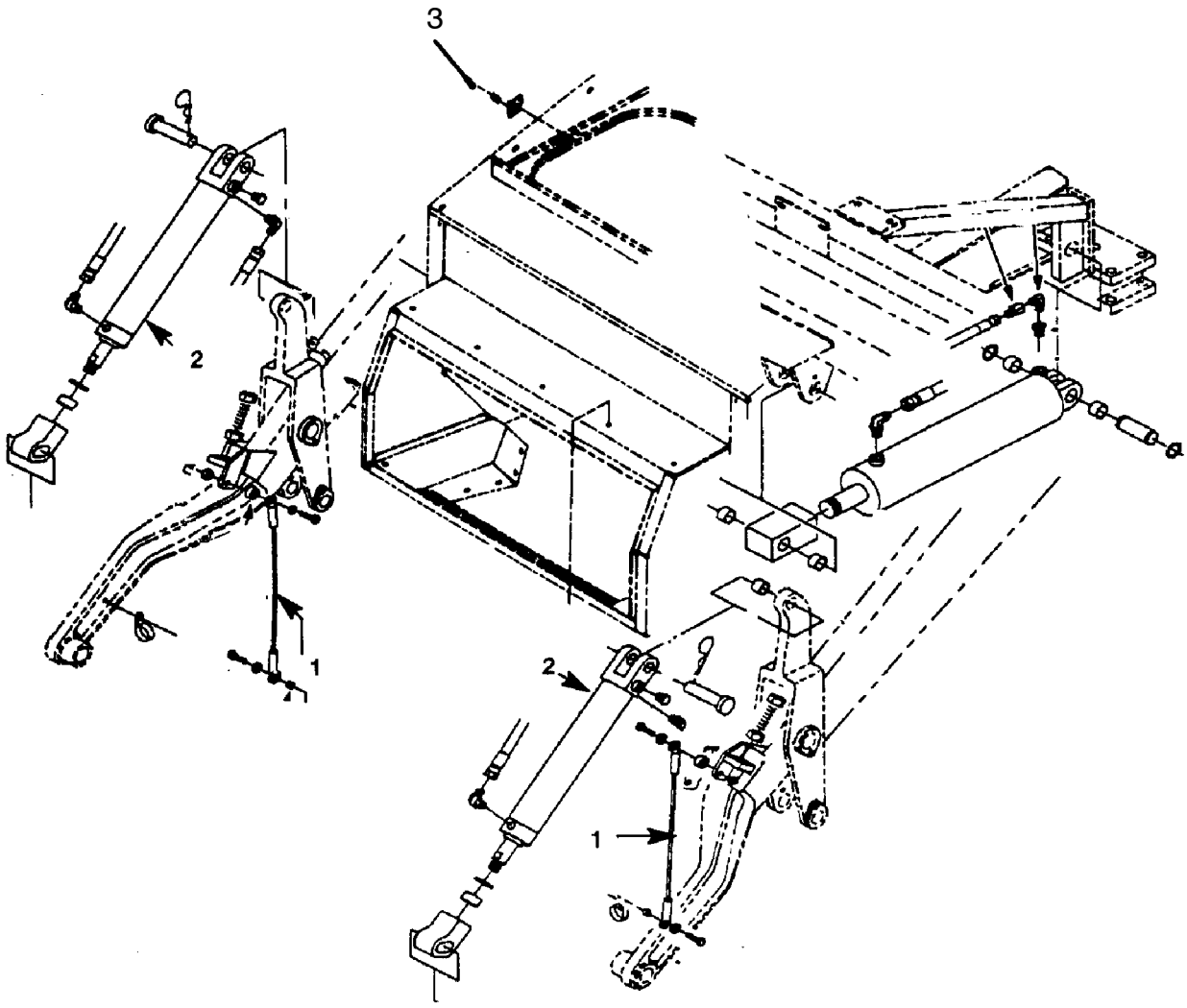
Component operation: As the hopper roll–out actuators operate, the mercury switch should reduce power to the hydraulic solenoid valve, which in turn will restrict flow of hydraulic fluid to the actuators at the end of their stroke.

There are two ways to test the system.

1. Connect a pressure gauge to the actuator on the right of the hopper. As the actuator extends, the pressure should drop to 200 psi before reaching the end of the stroke.

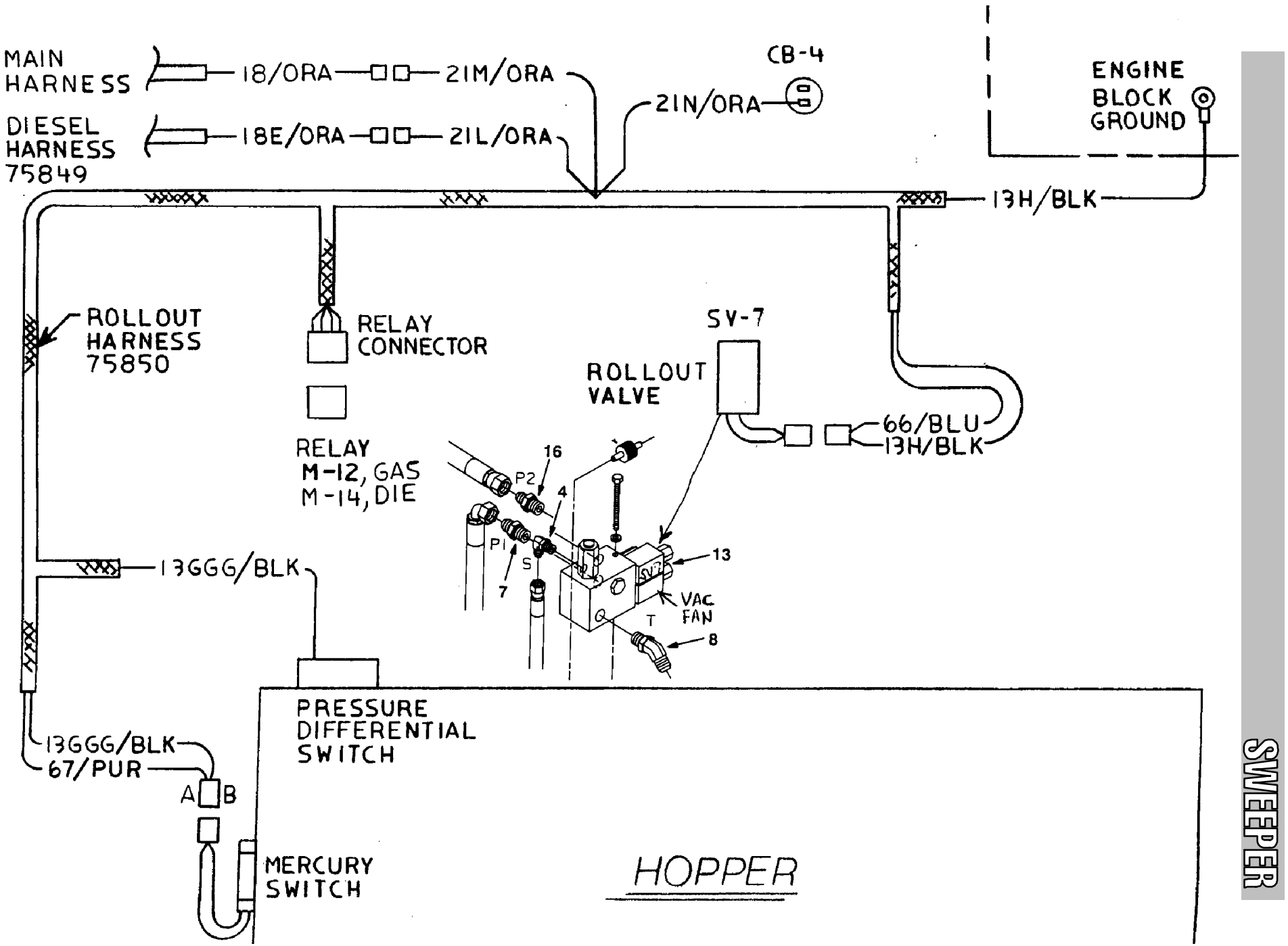
2. Connect a VOM to the solenoid valve. The mercury switch should cut voltage to the solenoid to reduce hydraulic flow to the cylinders.

The following two pages show the components on the hopper lift arms and a wiring schematic of the system.



Hopper roll out cylinder components

1. Tether cables
2. Roll–out cylinders
3. Mercury switch


MAIN HARNESS
18/ORA
21M/ORA
DIESEL HARNESS 75849
18E/ORA
21L/ORA
CB-4
21N/ORA
ENGINE BLOCK GROUND
13H/BLK
ROLLOUT HARNESS 75850
RELAY CONNECTOR
RELAY M-12, GAS M-14, DIE
SV-7
ROLLOUT VALVE
66/BLU
13H/BLK
16
P2
4
P1
S
7
13
SV7
VAC FAN
T
8
13GGG/BLK
PRESSURE DIFFERENTIAL SWITCH
13GGG/BLK
67/PUR
A
B
MERCURY SWITCH
HOPPER

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