



# Installation Instructions

KIT  
800127

**This Field Modification Kit is intended to modify the parking brake system on a 4x2 Navistar or Mack refuse truck.**

## Contents:

Refer to system schematic.

## Instructions:

1. Chock the wheels, release the parking brakes, and drain all air reservoirs.
2. Remove the ITI actuators in the released position noting the push rod length. Replace with Type 30/30 spring brake actuators installing per the manufacturer's recommendations for push rod length, mounting, etc. Note: It may also be advisable to inspect all other foundation brake parts that impact brake output (slack adjusters, shoes, linings, drums, cams, bushings, etc.) at this time.
3. Remove the ITI control valve identifying the following ports:

<u>ITI Control Vlv. Ports</u>	<u>SR-1 Spring Brake Vlv. Ports</u>
EMR	SUP
PRM. RES.	RES 1
DELIVERY PORT (3/8 NPT)	DEL
Balance Port (brass capnut top)	CON

Replace with the SR-1 spring brake control valve.

**IMPORTANT: Make certain that all lines affected by this retrofit are installed per the schematic contained in this instruction sheet.**

4. Remove the two Bendix R-14 relay valves and any axle mounted quick release valves that may be in the relay valve delivery circuit.
5. Install the QR-N service quick release valve and the QR-1C quick release valve per the attached system drawing. Note that these valves are mounted on the axle housing on the Mack with hoses from the frame rail and are mounted to the cross member on the Navistar with hoses to the chambers. Do not reduce any line sizes from the original equipment. Refer to drawing for details.

6. Remove and replace the existing PP-1 parking control valve with the new valve in the kit.
7. Replace or install the new TW-2 dual circuit "work brake" control valve making certain that the indicator light is installed and operating properly.
8. Temporarily cap off any remaining air lines and charge the system to governor cut-out (120-130 PSI).
9. Release the parking brake and make a service brake application checking to see that the service brakes apply on all axles.
10. With the system charged and the parking brake released, turn off the engine, and drain the rear service reservoir. Apply the service brake and check to see that the front service chambers apply air pressure and the rear spring brakes exhaust with the application of the foot valve. Check to see that the TW-2 control valve produces the same results. If it does not the supply and delivery ports may be crossed at the TW-2.

Note: It may be necessary to install gages at the front and rear service chambers and the spring brakes to determine if the system is operating properly.

11. Recharge the system with the parking brakes released and drain the other (front) service reservoir. The rear service brakes should be operational via the foot valve or the TW-2 control valve without front brakes. The spring brakes should not be affected. Apply the TW-2 to make certain of its operation.
12. Recharge the system, release the parking brake and adjust to the manufacturers recommended brake adjustment. Drain one service reservoir and slowly drain the other to verify that the PP-1 parking control "pops" at approximately 40 PSI.
13. Remove any extra lines from the vehicles' chassis and plug at the source.

KIT COMPONENTS

ITEM NO	QTY	MODEL	DESCRIPTION
27	1	TW-2	CONTROL VALVE
28	1	PP-1	PARKING CONTROL VALVE
29	1	SR-1	SPRING BRAKE CONTROL VALVE
30	1	QR-1C	QUICK REALEASE VALVE W/DOUBLE CHECK
31	1	QR-N	QUICK RELEASE VALVE

LIST OF MATERIAL

ITEM NO	QTY	MODEL	DESCRIPTION
1	1		AIR COMPRESSOR
2	1	D-2	GOVERNOR
3	1	AD-4	AIR DRYER
4	1		RESERVOIR-SUPPLY
5	1		RESERVOIR-SERVICE -FRONT
6	1		RESERVOIR-SERVICE -REAR
7	3		DRAIN COCK
8	1	ST-3	SAFETY VALVE
9	1	PR-4	PRESSURE PROTECTION VALVE
10	2	SC-1	SINGLE CHECK VALVE
11	2	LP-3	LOW PRESSURE INDICATOR (80 PSI NOM CLOSING)
12	2		AIR PRESSURE GAGE
13	3	DC-4	DOUBLE CHECK VALVE
14	2	E-6/E-7	DUAL BRAKE VALVE
15	2	DS-2	DOUBLE CHECK VALVE & STOPLAMP SWITCH
16	1	QR-1/QR-N	QUICK RELEASE VALVE
17	1	RV-3	PRESSURE REDUCING VALVE
18	1	RV-3	PRESSURE REDUCING VALVE
19	1	LP-3	PARKING INDICATOR
20	1	LP-3	EMERGENCY STOPLAMP INDICATOR
21	1		INDICATOR
22	1	SL-5	STOPLIGHT SWITCH
23	2	ASA-5	SLACK ADJUSTER-FRONT-AUTOMATIC
24	2	ASA-5	SLACK ADJUSTER-REAR-AUTOMATIC
25	2		BRAKE CHAMBER-FRONT
26	2		SPRING BRAKE ACTUATOR-REAR

