



Parts Manual

**Model T765A & T760A
Engine Brakes**

**For Detroit Diesel 12.7L & 11.1L
Series 60® Engines**

TecBrake
P.O. Box 27822
Houston, Texas 77227

**TecBrake Engine Brake
Model T765A and T760A
For Detroit Diesel Series 60® Engines**

The TecBrake T765A engine brake may be installed on popular versions of the Detroit Diesel Series 60® 12.7L engines. The TecBrake T760A engine brake may be installed on popular versions of the Detroit Diesel Series 60® 11.1L engines and Detroit Diesel Series 60® 12.7 Pre-1991 engines. It should only be installed on engines whose model numbers are included in the Application Chart. Applications for Detroit Diesel Series 60® engines with serial number &R0004455 and higher only. Verify Application Chart for proper engine brake model selection.

IMPORTANT: Information required to order engine brake kits.

ENGINE IDENTIFICATION:

Identify the engine model and serial number from the option labels located on the valve cover and stamped on the cylinder block below the intake manifold. Refer to the Application Chart, which list all engine model numbers on which the T765A engine brake may be installed.

BASIC KIT FOR BOTH DDECII AND DDECIII ENGINES

Determine whether the engine is a DDECII, or a DDECIII. The TecBrake Application Chart identifies the control type by engine model number. Depending on the engine control type, a different Control Group will be required.

OPTIONAL CLUTCH SWITCH

Clutch switch is included in TecBrake DDECII Control Group. For DDECIII applications, most vehicles already have a vehicle OEM installed clutch switch to use with cruise control. TecBrake clutch switch will only be required if for some reason the vehicle does not have a clutch switch, TecBrake Control Group for DDECIII does not include the clutch switch, if required, must be ordered separately.

OPTIONAL CAB HARNESS

Cab Over vehicles equipped with DDECII engines, may require an extension harness to complete the electrical installation. Harness P/N TB900044 is optional and must be ordered separately.

Most vehicles equipped with DDECIII already have a vehicle OEM installed cab harness from the ECM Vehicle Interface Harness to cab dashboard. If not installed, TecBrake optional cab harness P/N TJ020244 must be ordered separately.

**ENGINE BRAKE KIT CONTENTS
AND OPTIONAL PARTS**

PART NO.	DESCRIPTION	QTY./ENG.
TB960022	BRAKE KIT, T765AW/OUT CTRL. GRP.	
TB940069	KIT, LITERATURE	1
TB940070	HOUSING ASSEMBLY	3
TB940071	ATTACHING PARTS GROUP	1
TB960024	BRAKE KIT,T760W/OUT CTRL. GRP.	
TB940069	KIT, LITERATURE	1
TB940078	HOUSING ASSEMBLY	3
TB940071	ATTACHING PARTS GROUP	1
TJ020244	HARNESS, CAB DDECIII	
TJ012261	SWITCH, CLUTCH DDECIII	
TB900044	HARNESS, CAB OVER DDECII	

Indented part numbers are included in parts under which they are indented.

APPLICATION CHART

ENGINE MODEL	CONTROL TYPE	TEC BRAKE MODEL	LASH SETTING
6067GU40	DDECII	T760A	0.020"
6067WU40	DDECII	T760A	0.026"
6067WU60	DDECII	T760A	0.026"
6067WK60	DDECIII	T760A	0.026"
6067SK60	DDECIII	T760A	0.026"
6067GU28	DDECII	T765A	0.026"
6067GU60	DDECII	T765A	0.026"
6067GU91	DDECII	T765A	0.026"
6067GK28	DDECIII	T765A	0.026"
6067GK60	DDECIII	T765A	0.026"

HOUSING ASSEMBLY

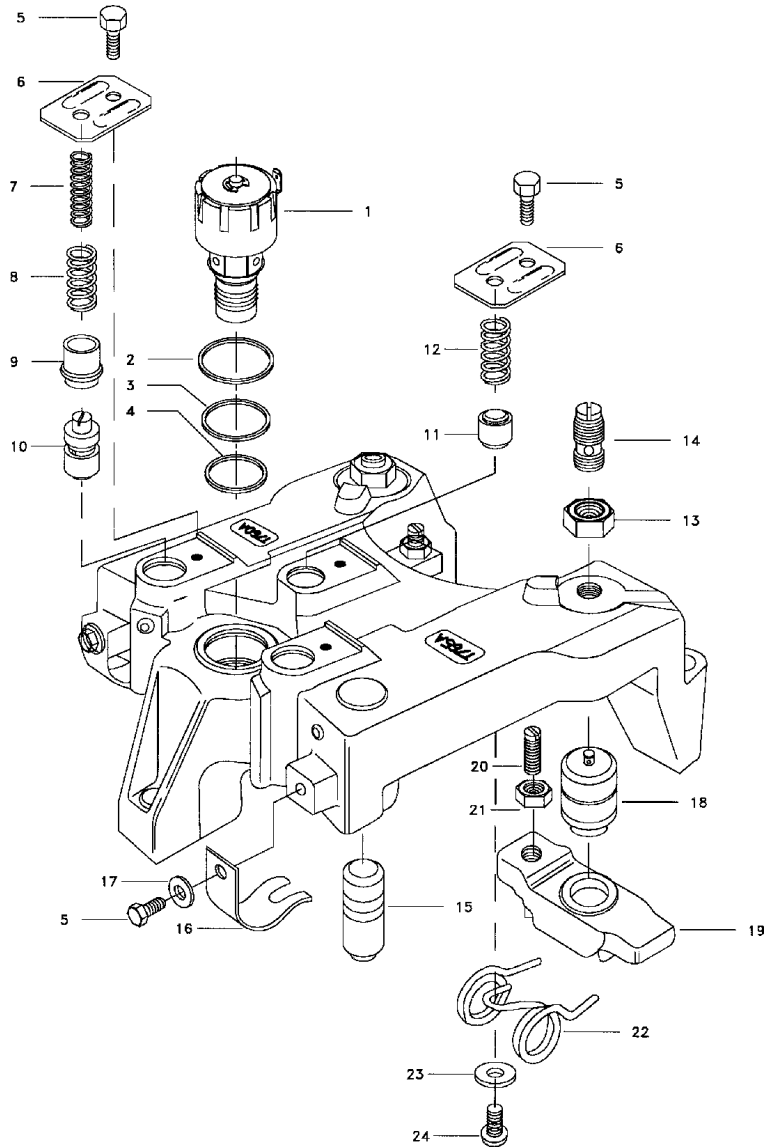
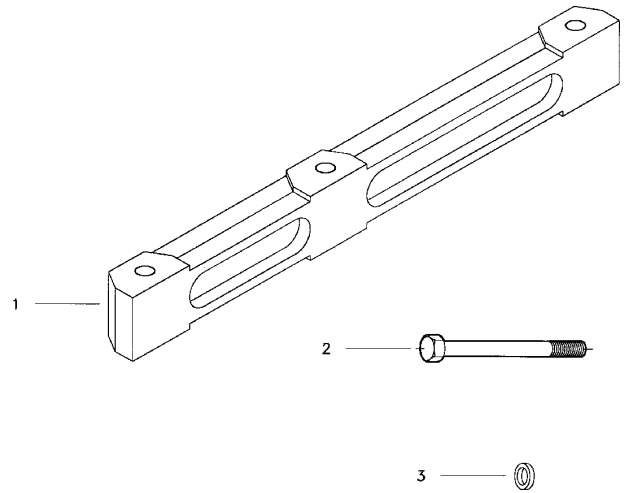
MODEL T765A Part No. TB940070

MODEL T760A Part No. tb940078

REF.	PART NO.	DESCRIPTION	QTY/HSG.
1	TJ016440	SOLENOID VALVE (12 VOLT)	1
2	TJ001081	SEAL RING, UPPER	1
3	TJ001082	SEAL RING, MIDDLE	1
4	TJ001083	SEAL RING, LOWER	1
5	TJ001492	CAPSCREW	5
6	TB900043	COVER, CONTROL VALVE	3
7	TJ018179	SPRING, CTRL. VALVE, INNER	2
8	TJ001519	SPRING, CTRL. VALVE, OUTER	2
9	TJ016557	COLLAR, CONTROL VALVE	2
10	TJ011930	CONTROL VALVE	2
11	TJ012983	ACCUMULATOR PISTON	1
12	TJ012990	ACCUMULATOR SPRING	1
13	TJ011395	NUT, JAM	2
14	TB900042	SCREW, BRAKE ADJUSTING	2
15	TJ017565	MASTER PISTON (15/16") T765A	2
15	TJ012981	MASTER PISTON (7/8") T760A	2
16	TJ017658	SPRING, FLAT	2
17	TJ016505	WASHER, PLAIN	2
18	TB900040	SLAVE PISTON ASSEMBLY	2
19	TJ016771	BRIDGE	2
20	TJ011426	SCREW, BRIDGE ADJUSTING	2
21	TJ016766	NUT, HEX	2
22	TJ019576	SPRING, TORSION	2
23	TJ019741	WASHER, PLAIN	2
24	TJ019740	SCREW, BUTTON HEAD	2

ATTACHING PARTS GROUP
Part No. TB940071

REF. PART	NO.DESCRPTION	QTY./ENG.
1	TJ016687 BAR, SPACER	2
2	TB900030 BOLT, HEX HEAD (120mm)	9
3	TB900031 WASHER, BOLT	9



ATTACHING PARTS

HOUSING ASSEMBLY

CONTROL GROUP- DDECII ENGINES
Part No. TB940072

REF.	PART NO.	DESCRIPTION	QTY./ENG.
1	TJ001304	SWITCH, DASH, ON-OFF	1
2	TJ001305	PLATE, SWITCH, ON-OFF	1
3	TJ002957	SWITCH, DASH, HI-MED-LO	1
4	TB900037	PLATE, SWITCH, HI-MED-LO	1
5	TJ015759	HARNESS, FUSE	1
6	TB900034	HARNESS, ENGINE	1
7	TJ012261	SWITCH, CLUTCH	1
8	TB900033	HARNESS, RELAY* DDECII	1
9	TB900035	HARNESS, THRU HEAD DDECII	1
10	TJ003278	TERMINAL; (FAST-ON)	3
NI	TJ006833	TIE, CABLE	12

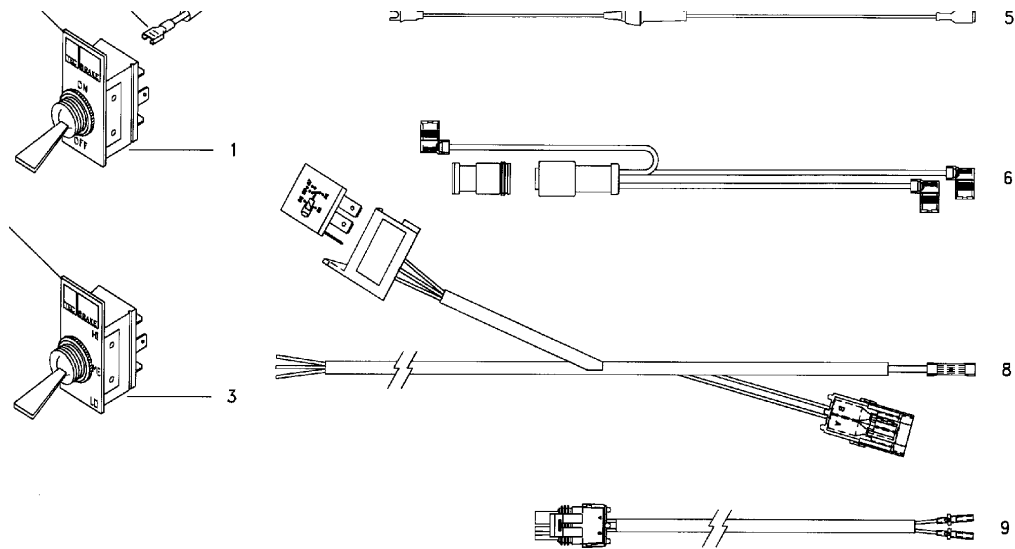
*Relay TJ016933 included in TB900033 harness.

CONTROL GROUP- DDECIII ENGINES
Part No. TB940073

REF.	PART NO.	DESCRIPTION	QTY./ENG.
1	TJ001304	SWITCH, DASH, ON-OFF	1
2	TJ001305	PLATE, SWITCH, ON-OFF	1
3	TJ002957	SWITCH, DASH, HI-MED-LO	1
4	TB900037	PLATE, SWITCH, HI-MED-LO	1
6	TB900034	HARNESS, ENGINE	1
10	TJ003278	TERMINAL, (FAST-ON)	3
NI	TB900036	HARNESS, THRU HEAD DDECIII	1
NI	TB900041	HARNESS, JUMPER DDECIII	1
NI	TJ006833	TIE, CABLE	12

Indented part numbers are included in the parts under which they are indented.

NI.- Not Illustrated.



MAJOR TUNE-UP KIT
Part No. TB940074

PART NO.	DESCRIPTION	QTY./KIT
TJ001081	SEAL, RING UPPER	3
TJ001082	SEAL RING, MIDDLE	3
TJ001083	SEAL RING, LOWER	3
TJ001492	CAPSCREW	15
TJ018179	SPRING, CTRL. VALVE, INNER	6
TJ001519	SPRING, CTRL. VALVE, OUTER	6
TJ016557	COLLAR, CONTROL VALVE	6
TJ011930	CONTROL VALVE	6
TJ012990	SPRING, ACCUMULATOR	3
TJ017658	SPRING, FLAT	6
TJ016505	WASHER/COVER, PLAIN	15
TJ012991	RING, RETAINING	9
TJ019576	SPRING, TORSION	6
TJ019741	WASHER, PLAIN	6
TJ019740	SCREW, BUTTON HEAD	6
TB900043	COVER, CTRL. VALVE	9

