



Parts Manual

Model T346A Engine Brakes

**For Caterpillar 3406, 3406B
And 3406C Series Engines**

TecBrake
P.O. Box 27822
Houston, Texas 77227

TecBrake Engine Brake Model T346A For Caterpillar 3406, 3406B, and 3406C Series Engines

The TecBrake T346A engine brake may be installed on either the 3406, 3406B, 3406C series Caterpillar engines. The engine brake kit is offered without control groups. Five control groups are available to complete the installation. Refer to the Engine Brake Kit Contents and Optional Parts list when ordering an engine brake.

IMPORTANT: Information required to order engine brake kits:

CONTROL GROUPS:

Control Group TB940013 for 3406, 3406B & 3406C Caterpillar engines equipped with mechanical fuel systems. The control group includes an **external** fuel pump switch (bare switch TJ018188), clutch switch, dash switches, wiring harness and hardware required to make the installation.

Control Group TB940049 for 3406B & 3406C Caterpillar engines equipped with mechanical fuel systems. The control group includes an **internal** fuel pump switch (double diode), clutch switch, dash switches, wiring harness and hardware require to make the installation.

Control Group TB940050 for 3406B Caterpillar engines equipped with the PEEC electronic fuel system having a serial number prefixes beginning with 8TC, 5YG and 2LK. The control group contains all of the switches, wiring harnesses and hardware required to make the installation.

Control Group TB940051 for 3406B & 3406C Caterpillar engines equipped with PEEC III electronic fuel system having a serial number prefix beginning with 4CK. The control group contains dash switches, wiring harness, relay and hardware required to complete the installation.

Control Group TB940052 for 3406B & 3406C Caterpillar engines equipped with PEEC III electronic fuel system having a serial number prefix beginning with 4CK and installed on vehicles equipped with **ABS**.

SHIM AND WASHER KIT:

A shim and washer kit (Part No. TJ013677) is required on all engines with a serial number lower than 7FB39279, or with a 92U prefix. This kit is not included with the engine brake kit and must be ordered separately.

OPTIONAL FOOT SWITCH:

A foot switch may be used in place of the clutch switch. The clutch switch is included in the kit. The foot switch is not included and must be ordered separately.

ENGINE BRAKE KIT CONTENTS AND OPTIONAL PARTS

PART NO.	DESCRIPTION	QTY./ENG.
TB960013	BRAKE KIT, W/OUT CTRL. GRP.	
TB940009	KIT, LITERATURE	1
TB940010	HOUSING ASSEMBLY, FRONT	1
TB940011	HOUSING ASSEMBLY, REAR	1
TB940012	ATTACHING PARTS GROUP	1
TB940013	CTRL. GROUP, MECH. EXTERNAL	1
TB940049	CTRL. GROUP, MECH. INTERNAL	1
TB940050	CTRL. GROUP, PEEC	1
TB940051	CTRL. GROUP, PEEC III, NON ABS	1
TB940052	CTRL. GROUP, PEEC III, ABS	1
TJ013677	KIT, SHIM AND WASHER	1
TJ012260	FOOT SWITCH (OPTIONAL)	1
TB900004	FEELER GAUGE (0.060")	
TB900005	FEELER GAUGE (0.080")	
TB900006	FEELER GAUGE (0.067")	

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

MODEL T346A HOUSING ASSEMBLY

Part No. TB940010 - Front

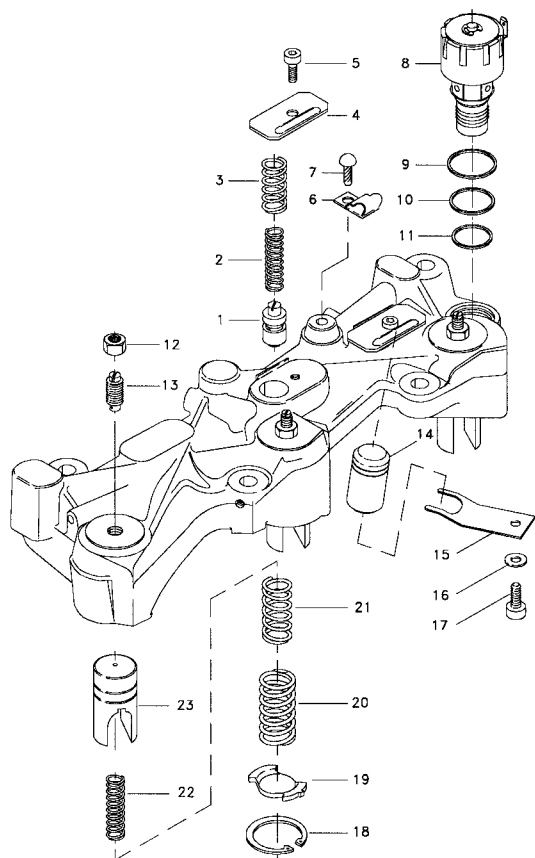
Part No. TB940011 - Rear

REF.	PART NO.	DESCRIPTION	QTY./HSG.
1	TJ011930	CONTROL VALVE	3
2	TJ011435	SPRING, CTRL VALVE, INNER	3
3	TJ011434	SPRING, CTRL VALVE OUTER	3
4	TJ017925	COVER, CONTROL VALVE	2
5	TJ001722	SCREW, BUTTON HEAD	2
6	TJ017259	CLIP, WIRING HARNESS	1
7	TJ017303	DRIVE SCREW	1
8	TJ016440	SOLENOID VALVE (12 VOLT)	1
9	TJ001081	SEAL RING, UPPER	1
10	TJ001082	SEAL RING, MIDDLE	1
11	TJ001083	SEAL RING, LOWER	1
12	TB909354	NUT, JAM	3
13	TJ013177	SCREW ASSEMBLY, PLUNGER	3
14	TJ005612	MASTER PISTON (3/4")	3
15	TJ013158	SPRING, FLAT	3
16	TJ001030	WASHER, PLAIN	3
17	TJ003790	SCREW, BUTTON HEAD	3
18	TJ005611	RING, RETAINER	3
19	TJ005610	RETAINER, SPRING	3
20	TJ007833	SPRING, SLAVE PISTON, OUTER	3
21	TJ007832	SPRING, SLAVE PISTON, CENTER	3
22	TJ011433	SPRING, SLAVE PISTON, INNER	3
23	TJ010830	SLAVE PISTON	3

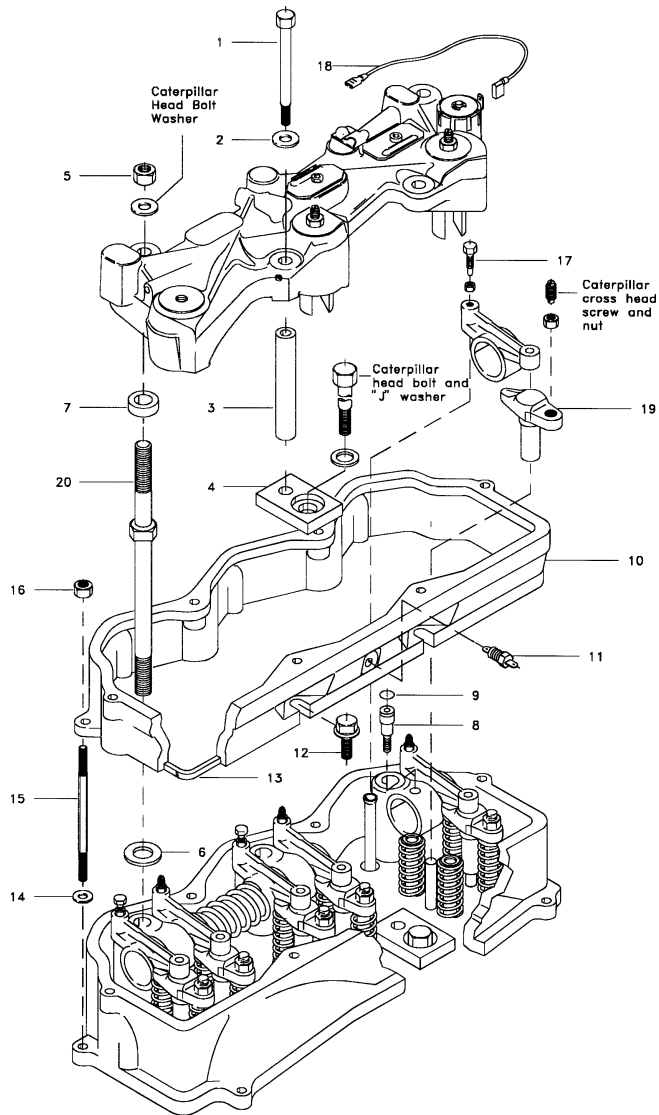
ATTACHING PARTS GROUP

Part No. TB940012

REF.	PART NO.	DESCRIPTION	QTY./ENG.
1	TJ016642	BOLT, 6"	4
2	TJ016742	WASHER, FLAT	4
3	TJ016625	SPACER, SUPPORT	4
4	TJ016939	BASE, SUPPORT	4
5	TJ013094	NUT, HOLD DOWN	4
6	TJ013695	WASHER "A" (0.090")	4
7	TJ013696	SPACER "B" (0.180")	4
8	TJ005647	ADAPTER, OIL SUPPLY	2
9	TJ002411	O-RING	2
10	TJ017767	SPACER	2
11	TJ002299	TERMINAL ASSEMBLY	2
12	TJ005653	SCREW, SERRATED	4
13	TJ005639	SEAL	2
14	TJ005656	WASHER, PLAIN	8
15	TJ011470	STUD, SPACER MOUNT	8
16	TJ005654	NUT, SERRATED	8
17	TJ012810	SCREW, ADJ., EXHAUST	6
18	TJ015843	HARNES, SOLENOID	2
19	TJ013469	CROSSHEAD, EXHAUST	6
20	TJ016681	STUD, MOUNTING	4
NI	TJ011722	HOSE, OIL BREATHER	1



HOUSING ASSEMBLY



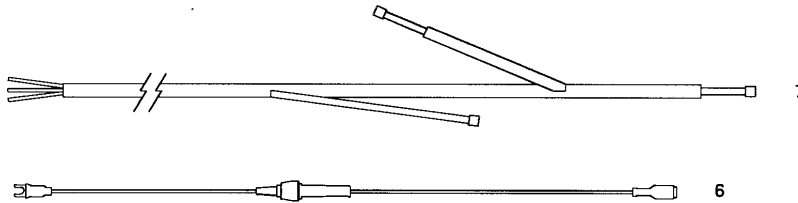
ATTACHING PARTS GROUP

CONTROL GROUP
Part No. TB940013

REF.	PART NO.	DESCRIPTION	QTY./ENG.
1	TJ012261	SWITCH ASSEMBLY, CLUTCH	1
	TB901216	SWITCH (BARE FOR TJ012261)	1
2	TJ001304	SWITCH, TOGGLE, DASH	2
3	TJ001305	PLATE, SWITCH (ON-OFF)	2
4	TJ003707	SHRINK TUBE	4
5	TJ003278	TERMINAL (FAST ON)	6
6	TJ015759	HARNESS, FUSE HOLDER	1
7	TB900007	HARNESS CAB/ENGINE	1
8	TJ005666	SWITCH ASSY. FUEL PUMP	1
	TJ018188	SWITCH (BARE FOR TJ005666)	1
	TJ001534	DIODE	1
NI	TJ006833	TIE, CABLE	8
*	TB900001	HARNESS, GROUND	1

PEEC CONTROL GROUPS

PART NO.	DESCRIPTION	QTY./ENG.
TB940050	CTRL. GROUP PEEC	1
TB940051	CTRL. GROUP PEEC, NON ABS	1
TB940052	CTRL. GROUP PEEC, ABS	1



MAJOR TUNE UP KIT
Part No. TJ014087

PART NO.	DESCRIPTION	QTY./KIT
TJ011930	CONTROL, VALVE	6
TJ011435	SPRING, CTRL. VALVE, INNER	6
TJ011434	SPRING, CTRL. VALVE, OUTER	6
TJ001081	SEAL RING, UPPER	2
TJ001082	SEAL RING, MIDDLE	2
TJ001083	SEAL RING, LOWER	2
TJ013158	SPRING, FLAT	6
TJ002411	O-RING	2
TJ017657	TERMINAL ASSY. W/O-RING	2
TJ015843	HARNESS, SOLENOID (FAST-ON)	2
TJ003790	SCREW, BUTTON HEAD	6
TJ001030	WASHER	6
TJ017259	CLAMP, CABLE C346A,B,C&D	2
TJ001722	SCREW, BUTTON HEAD	2
TJ004490	TERMINAL	2
TJ006837	SHIM	8
TJ013695	WASHER, STUD "A"	4
TJ017303	SCREW, DRIVE	2
TJ017366	TERMINAL ASSY.	2
TJ018458	HARNESS, SOLENOID (BULLET)	2

CONTROL GROUP
Part No. TB940049

REF.	PART NO.	DESCRIPTION	QTY./ENG.
1	TJ012261	SWITCH ASSEMBLY, CLUTCH	1
	TB901216	SWITCH (BARE FOR TJ012261)	1
2	TJ001304	SWITCH, TOGGLE, DASH	2
3	TJ001305	PLATE, SWITCH (ON-OFF)	2
4	TJ003707	SHRINK TUBE	4
5	TJ003278	TERMINAL (FAST ON)	6
6	TJ015759	HARNESS, FUSE HOLDER	1
7	TB900007	HARNESS CAB/ENGINE	1
9	TJ019490	SWITCH INTERNAL FUEL PUMP	1
NI	TJ006833	TIE, CABLE	8
*	TB900001	HARNESS, GROUND	1

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

NI. - Not Illustrated.

* For lighted dash switches only.

