

# Model 675A

The Model 675 Jake Brake® engine retarder is designed and approved for use on all Mack® 6 cylinder 672 (and 711) CID Automotive engines: E6, EC6, EM6 and EMC6 which have the two-valve head configuration. The Model 675A replaces the Model 675 in the Jacobs Engine Brake product line. Information in this manual was current at the time of printing and is subject to change without notice or liability.

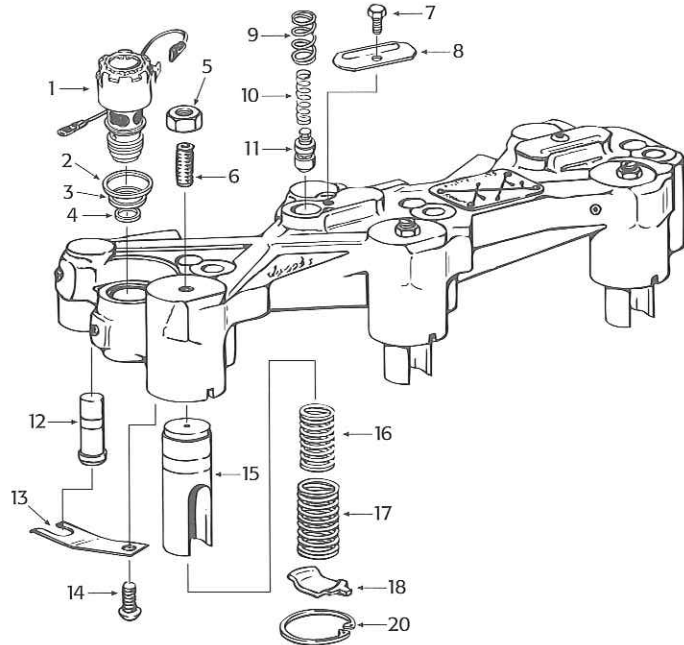
Refer to Jacobs Service Letters and instructional literature for specific application information.

# PARTS MANUAL

# Model 675A Housing Assembly

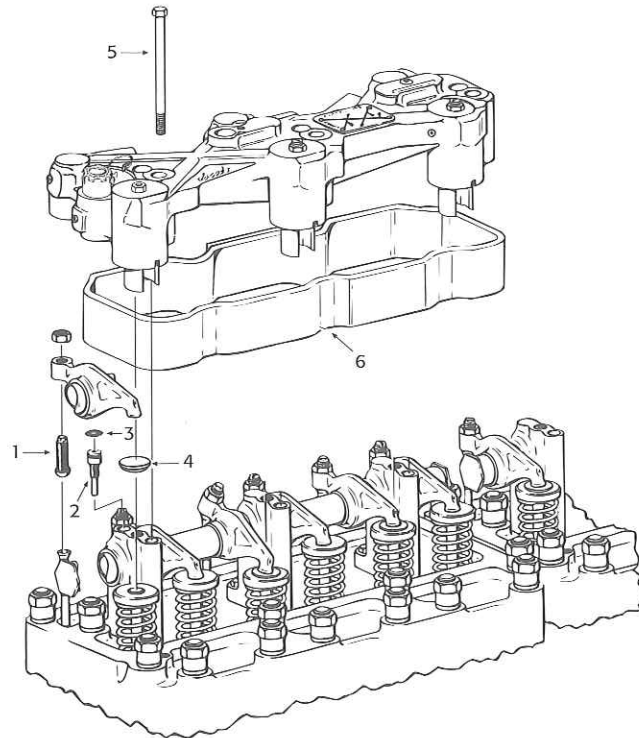
Engine Brake Model	Packaged Housing P/N	Description
675A	012751	Housing Assembly, Front
675A	012752	Housing Assembly, Rear

Ill. No.	Part No.	Part Name	Quantity/Housing
1	016440	Solenoid valve assembly	1
2	001081	Upper seal ring	1
3	001082	Center seal ring	1
4	001083	Lower seal ring	1
5	001026	Hex jam nut	3
6	013823	Slave piston adjusting screw	3
7	001492	Hex head capscrew	2
8	012757	Control valve cover	2
9	011435	Control valve spring	3
10	011434	Stop spring	3
11	011930	Control valve spool assembly	3
12	013413	Master piston	3
13	002030	Flat spring	3
14	003790	Button head capscrew	3
15	007622	Slave piston	3
16	007772	Slave piston inner spring	3
17	001288	Slave piston outer spring	3
18	007620	Spring retainer	3
19	001023	Retaining ring	3
23	014619	Solenoid harness	1



## Attaching Parts Group

Ill. No.	Part No.	Part Name	Quantity/Kit
	<b>002095</b>	<b>Hsg. Attach. Parts Grp. - 675A</b>	<b>1</b>
1	002034	• Adjusting screw	6
2	002033	• Oil supply screw	2
3	002411	• "O" ring	2
4	009263	• Valve stem cap	6
5	002031	• Rocker shaft bracket bolt	6
6	002035	Spacer, cover	



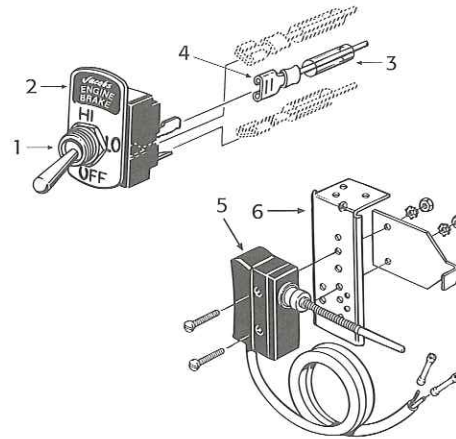
Mack® and V-MAC® are registered trademarks of Mack Trucks, Inc.

# Control Groups

## 003975 Cab Control Group

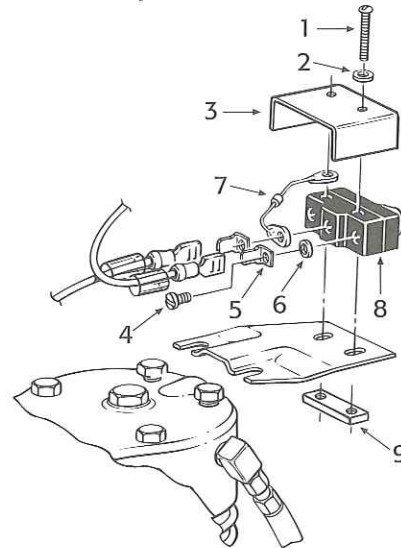
Ill. No.	Part No.	Part Name	Quantity/Kit
	<b>003975</b>	<b>Cab Control Group</b>	
1	003586	• Toggle switch (3-pos.)	1
2	003777	• Switch plate	1
3	003707	• Shrink tube	3
4	003278	• Receptacle	3
	<b>012261</b>	<b>Switch Clutch Group</b>	<b>1</b>
5	012246	• Switch clutch	
6	012269	• Bracket	
7	012341	• Switch clutch subgroup	
8	003781	Harness	2
9	015758	Wire	1
NI	006833	Cable tie	12
NI	003976	Wiring diagram	1
NI	003778	Auto loom	1

**NOTE:**  
Controls installed by Mack Trucks, Inc. may be different than controls supplied by Jacobs.



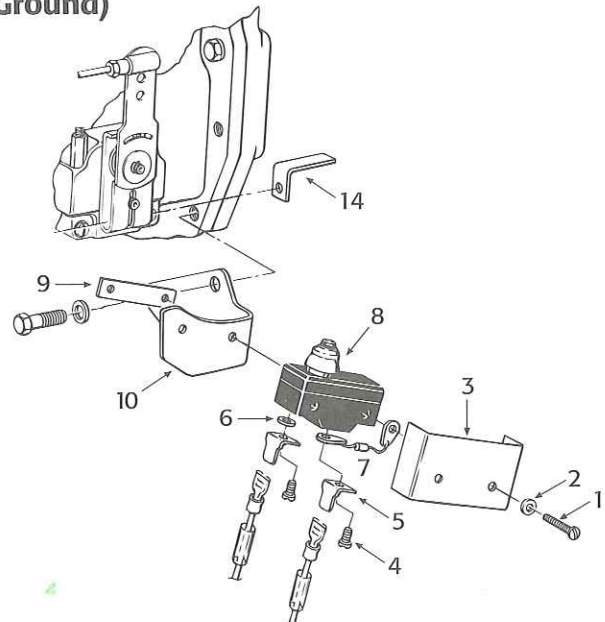
## 007379 Engine Control Group (Robert Bosch) (Negative Ground)

	<b>007382</b>	<b>Fuel Pump Switch Assy.</b>	<b>1</b>
1	001537	• Round head screw	2
2	001538	• Plain washer	2
3	001180	• Switch cover	1
4	001558	• Binder head screw	2
5	001512	• Quick disconnect tab	2
6	001559	• Lock washer	1
7	001534	• Diode	1
8	018188	• Switch	1
9	001531	• Clamp	1
10	003093	• Switch bracket	1
11	003881	Harness (sw. to solenoid leadout term.)	2
12	003708	Shrink tube	2
13	002014	Receptacle	2
14	003622	Switch actuator arm	1



## 012725 Engine Control Group (A.P.E.) (Negative Ground)

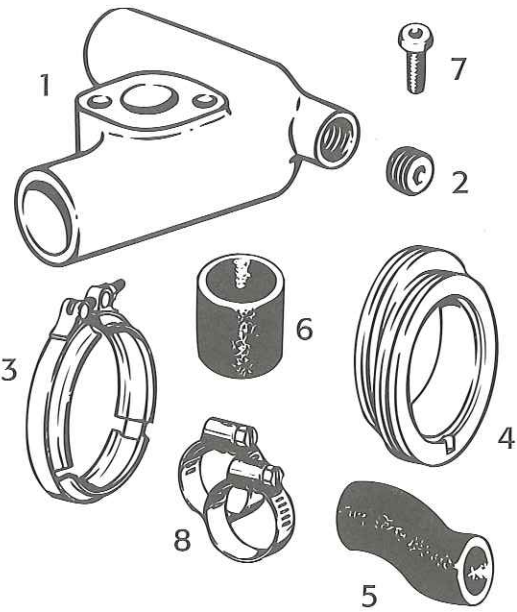
	<b>012724</b>	<b>Fuel Pump Switch Assy.</b>	<b>1</b>
1	002744	• Round head screw	2
2	001538	• Plain washer	2
3	001180	• Switch cover	1
4	001558	• Binder head screw	2
5	001512	• Quick disconnect tab	2
6	001559	• Lock washer	1
7	001534	• Diode	1
8	018188	• Switch	1
9	001531	• Clamp	1
10	012411	• Switch bracket	1
11	003881	Harness (sw. to solenoid leadout term.)	2
12	003708	Shrink tube	2
13	002014	Receptacle	2
14	012413	Switch actuator arm	2



NI = Not Illustrated

## 010174 Air to Air Adapter Kit (For use on engines with intercoolers)

Ill. No.	Part No.	Part Name	Quantity/Group
1	010012	Manifold, breather	1
2	010832	Pipe plug	1
3	003835	Clamp, V-band	1
4	003832	Spacer, offset	1
5	003833	Hose, offset air inlet	1
6	006821	Coupling hose	1
7	004563	Button head screw	1
8	006827	Hose clamp	2

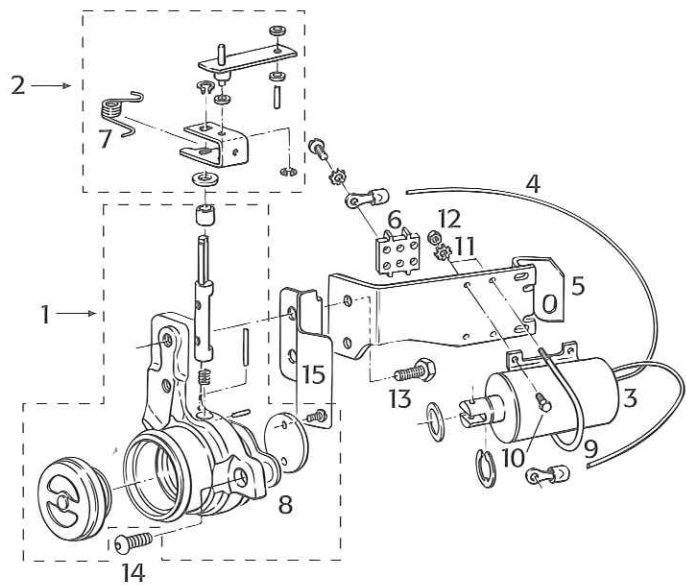


### Options

002971	Transmission kit, Allison CLBT
003590	Switch group, Allison HT-700D
015644	Low speed switch
012260	Foot switch
002615	Switch actuator arm
002614	Fuel switch bracket
003621	Fuel switch bracket

## 010850 TTF Cutoff Valve Assembly

Ill. No.	Part No.	Part Name	Quantity/Group
1	010183	Housing assembly	1
2	010184	Link assembly	1
3	010185	Solenoid assembly	1
4	010187	Harness	1
5	010186	Bracket assembly	1
6	010189	Block, terminal assembly	1
7	010188	Torsion spring	1
8	010190	Gasket	1
9	010191	U-bolt	1
10	010193	Hex head screw	4
11	010194	Star washer	6
12	010195	Hex nut	6
13	010196	Hex head screw	2
14	010197	Button head screw	2
15	010199	Dirt shield	1



# Control System Options

Part No.	Part Name	Quantity/Kit
<b>012415</b>	<b>Engine Control Group (Positive Ground)</b>	
012412	• Fuel pump switch assy.	1
012413	• Switch actuator arm	1
003881	• Harness	2
002014	• Receptacle	2
003708	• Shrink tube	2

For use on engines equipped with American Bosch "A" type fuel pumps.

Part No.	Part Name	Quantity/Kit
<b>003620</b>	<b>Engine Control Group (Positive Ground)</b>	
003620	• Fuel pump switch assy.	1
003622	• Switch actuator arm	1
003881	• Harness	2
002014	• Receptacle	2
003708	• Shrink tube	2

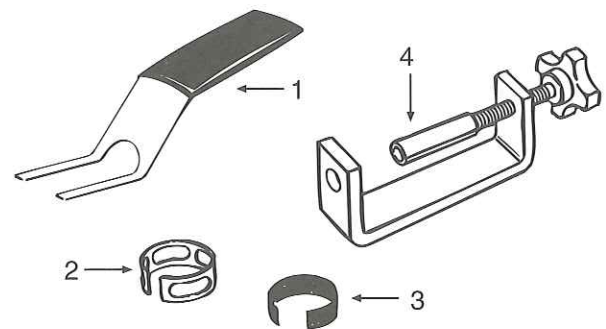
For use on engines equipped with Robert Bosch fuel pumps and Bendix Westinghouse 501 compressors.

Part No.	Part Name	Quantity/Kit
<b>007378</b>	<b>Engine Control Group (Negative Ground)</b>	
006985	• Fuel pump switch assy.	1
003622	• Switch actuator arm	1
003881	• Harness	2
002014	• Receptacle	2
003708	• Shrink tube	2

For use on engines equipped with Robert Bosch fuel pumps and Bendix Westinghouse 501 compressors.

## Service Parts

III. No.	Part No.	Part Name
1	011355	Feeler gauge 0.030" (0.760 mm)
2	001283	Solenoid retainer
3	001282	Solenoid screen
4	017397	Slave piston removal tool
NI	019198	Tune-up kit



---

*Jacobs*<sup>®</sup>

Jacobs<sup>®</sup> and Jake Brake<sup>®</sup> are registered trademarks of  
Jacobs Vehicle Equipment Company  
22 East Dudley Town Road  
Bloomfield, CT 06002  
Jake is a Marc. Reg. in Mexico