



E BRAKE
by Jacobs®

Parts Manual
For ISC, ISL, ISC03 and
ISL03 Engines

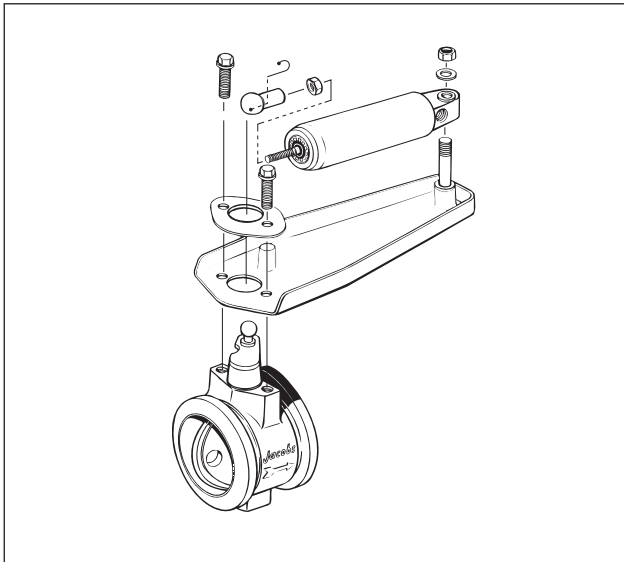
Application Notes

- A. The E Brake for the ISC, ISL, ISC03 and ISL03 engine is designed for all horsepower ratings. The kit is available in turbo-mount and in-line version.

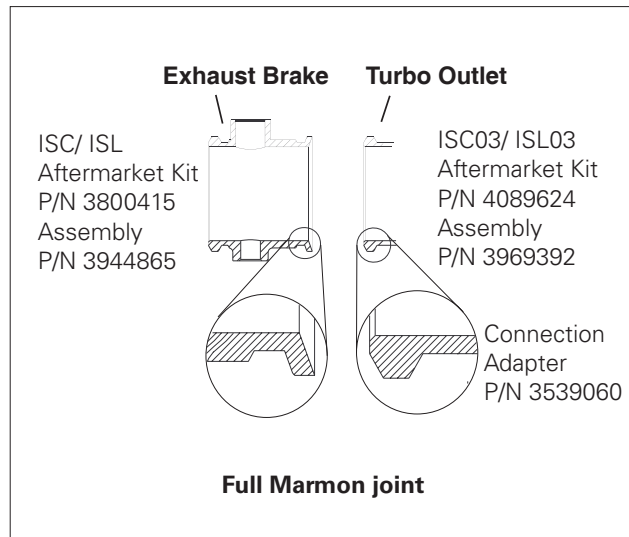
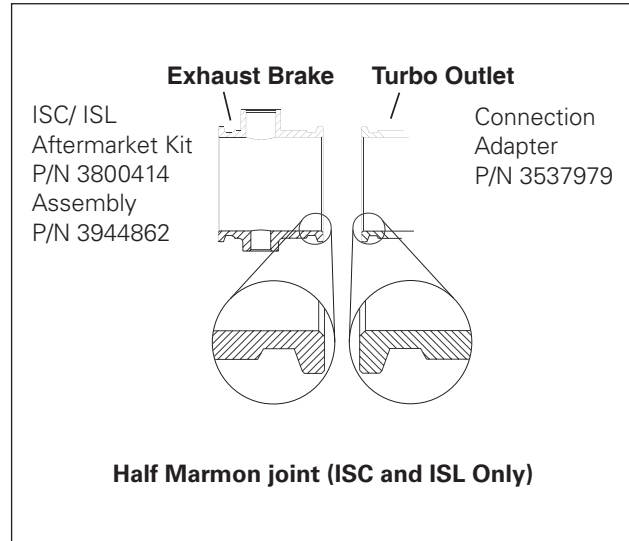
For a turbo mount application, there must be a minimum of 3" clearance from any exhaust component to the vehicle firewall or body after the E Brake is installed. The E Brake housing extends approximately 3" from the turbo outlet. If the vehicle does not have the required clearance, you must install the in-line kit, Cummins P/N 3800372 for ISC and ISL engines and Cummins P/N 4089623 for ISC03 and ISL03.

For Turbo-mount applications, determine the type of mounting joint on the vehicle turbocharger. The type of mounting joint can be determined by the connection adapter part number, which is cast into the adapter housing. See Figure 1 for an illustration of the half Marmon, full Marmon types and a list of adapter part numbers. In ISC and ISL engines, for full Marmon applications, install kit P/N 3800415, for half Marmon applications, install kit P/N 3800414. In ISC03 and ISL03 engines, for full Marmon applications, install kit P/N 4089624.

- B. Pneumatic Groups are not included in the base kit and must be ordered separately. The type of pneumatic group required depends on the vehicle configuration. Vehicles equipped with an on-board air supply (vehicles with air brakes) require Pneumatic Group P/N 3806238. Vehicles equipped with hydraulic brakes require the installation of an auxiliary air supply system. For these vehicles, order Pneumatic Group with Air Supply, P/N 3806237.



Exploded view of exhaust brake assembly



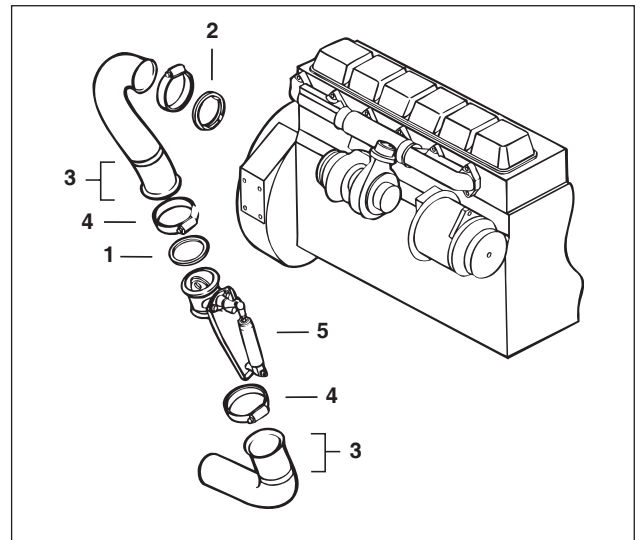
Assembly Groups

Assembly Group, In-line

III.		ISC/ISL	ISC03/ISL03	
No.	P/N	Description	Quan./ Group	Quan./ Group
	3800374	Gasket group	1	1
1	3870865	• Gasket	1	1
2	3929070	• Gasket	1	1
3	3929072	Exhaust sleeve (4")	2	2
4	3929073	"V" clamp	2	2
5	3800372	E Brake assembly, in-line	1	0
6	4089622	E Brake assembly, in-line	0	1

* Kit includes switch group and wire harness group

IN-LINE MOUNT INSTALLATION



Assembly Group, Half-Marmon Turbo Mount

(ISC/ISL Only)

III.		Quan./ Group	
No.	P/N	Description	Quan./ Group
1	3944864	Gasket	1
2	3945092	Clamp	1
3	3944862	E Brake assy, half-Marmon	1

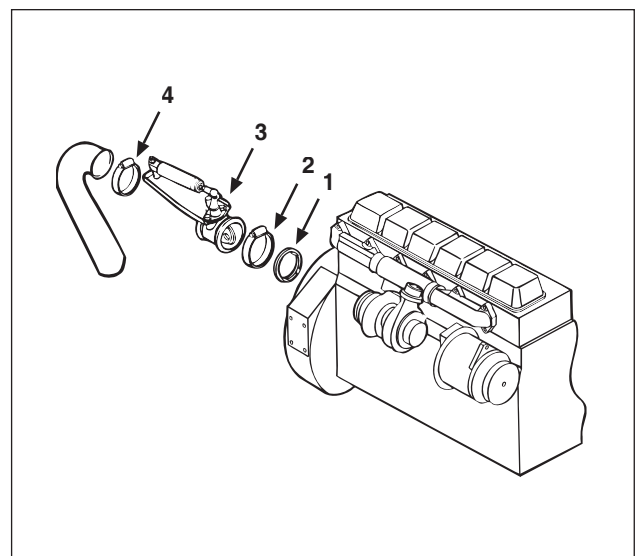
* Kit includes switch group and wire harness group

Assembly Group, Full-Marmon Turbo Mount

III.		ISC/ISL	ISC03/ISL03	
No.	P/N	Description	Quan./ Group	Quan./ Group
1	3944864	Gasket	1	1
2	3944863	Clamp	1	1
3	3944865	E Brake assy, full-Marmon	1	0
4	3969392	E Brake assy, full-Marmon	0	1
5	3929060	Clamp	1	1

* Kit includes switch group and wire harness group

TURBO MOUNT INSTALLATION



Control Groups

Dash Switch Group P/N 3803908

III.			Quan./
No.	P/N	Description	Group
NI	3871243	Dash switch	1
NI	3800408	Switch Plate Group	1
NI	NSS	• Switch plate (English)	1
NI	NSS	• Switch plate (Spanish)	1

Wire Harness Group (NI) P/N 3803918

III.			Quan./
No.	P/N	Description	Group
NI	3099283	Wire harness (switch/ground)	1
NI	3099284	Wire harness (switch/ECM)	1
NI	3099285	Wire harness (ECM/solenoid)	1
NI	3099286	Wire harness (ECM/MD Trans)	1

NI = Not illustrated

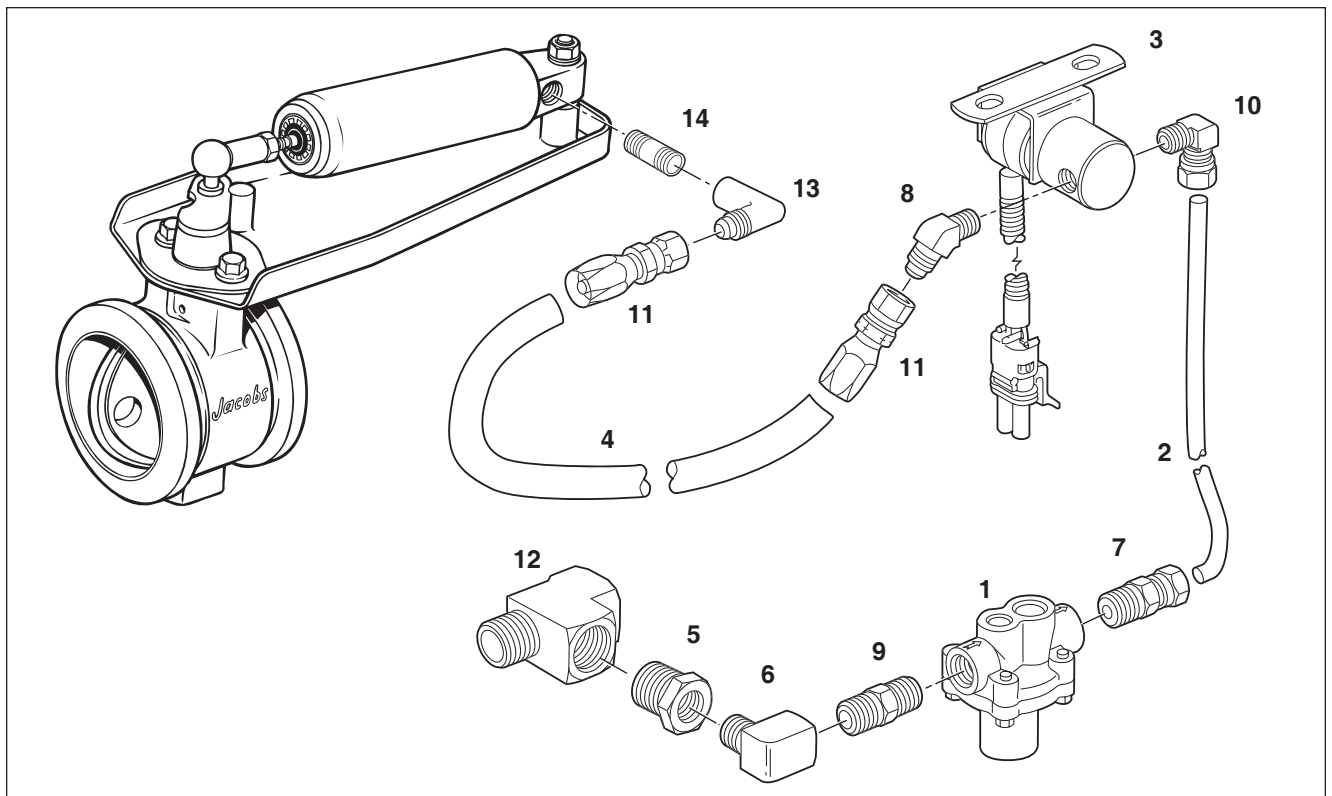
Pneumatic Group, P/N 3806238

III. No.	P/N	Description	Quan./ Group
1	3929050	Protection valve	1
3	3870850	Solenoid valve assembly	1
	3800409	Pneumatic subgroup	1
2	NSS	• Air brake tube	1
4	NSS	• Air brake hose	1
NI	3806267	Clamp subgroup	1
	3870853	• Support clamp	5
	3800410	Fastener group	1
	NSS	• 1/4 - 20 x 1 hex bolt	5
	NSS	• 1/4 - 20 hex nut	5
	NSS	• Plain washer	5
	NSS	• Lock washer	5
NI	3800450	Fittings subgroup	1
5	NSS	• Bushing	1
6	NSS	• 90° street elbow, 1/4 NPT	1
NI	NSS	• 45° flared, 90° elbow, 1/8 NPT	1
7	NSS	• Compression fit. assy.	1
8	NSS	• 45° flared, 45° elbow, 1/8 NPT	1
9	NSS	• Hex nipple	1
10	NSS	• Compression fit. assy.	1
11	NSS	• Hose fitting assembly	2
12	NSS	• Pipe tee	1
13	NSS	• Internal pipe adapter, 1/4 NPT	1
14	NSS	• Nipple	1

Pneumatic Group w/ Air Supply, P/N 3806237

III. No.	P/N	Description	Quan./ Group
NI	3929062	Air reservoir	1
NI	3929063	Air compressor	1
NI	3099086	Harness	1
3	3870850	Solenoid valve assembly	1
	3800409	Pneumatic subgroup	1
2	NSS	• Air brake tube	1
4	NSS	• Air brake hose	1
NI	3803917	Air supply subgroup	1
NI	3929064	• Drain valve	1
NI	3929065	• Pressure relief valve	1
NI	3929066	• Check valve	1
NI	3929067	• Pressure switch	1
NI	3806267	Clamp subgroup	1
	3870853	• Support clamp	5
	3800410	Fastener group	1
	NSS	• 1/4 - 20 x 1 hex bolt	5
	NSS	• 1/4 - 20 hex nut	5
	NSS	• Plain washer	5
	NSS	• Lock washer	5
NI	3800411	Fittings subgroup	1
NI	NSS	• 45° flared, 90° elbow, 1/8 NPT	1
NI	NSS	• Coupling	1
NI	NSS	• Bushing	1
7	NSS	• Compression fit. assy.	2
10	NSS	• Compression fit. assy.	2
11	NSS	• Hose fitting assembly	2
13	NSS	• Internal pipe adapter, 1/4 NPT	1
14	NSS	• Nipple	1

NI = Not illustrated
NSS = Not sold separately





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