

e-Stroke e-S³ / GEN 3 Tractor / Truck / Bus Parts List

e-S³ / GEN 3 Tractor / Truck / Bus CCMs

Description	Part #	System Type	Vehicle Type	Axle No	Axle Configuration
CCM	8291100	e-S ³ / GEN 3	Truck / Bus	2	e-Stroke & Lining Wear
CCM	8291101	e-S ³ / GEN 3	Truck / Bus	2	e-Stroke Only
CCM	8291102	e-S ³ / GEN 3	Truck / Bus	3	e-Stroke Only
CCM	8291103	e-S ³ / GEN 3	Truck / Bus	3	e-Stroke & Lining Wear
CCM	8291108	e-S ³ / GEN 3	Truck / Bus	4	e-Stroke Only
CCM	8291109	e-S ³ / GEN 3	Truck / Bus	4	e-Stroke & Lining Wear
CCM	8291104	e-S ³ / GEN 3	Tractor	2	e-Stroke Only
CCM	8291105	e-S ³ / GEN 3	Tractor	2	e-Stroke & Lining Wear
CCM	8291106	e-S ³ / GEN 3	Tractor	3	e-Stroke Only
CCM	8291107	e-S ³ / GEN 3	Tractor	3	e-Stroke & Lining Wear
CCM	8291110	e-S ³ / GEN 3	Tractor	4	e-Stroke Only
CCM	8291111	e-S ³ / GEN 3	Tractor	4	e-Stroke & Lining Wear

e-S³ / GEN 3 Tractor / Truck / Bus Power & Auxiliary Cables

Description	Part #	Length ft (m)	Function
Power Harness	8290233	12' (3.7m)	Connects e-S ³ / GEN 3 CCM to Power, J1708, Alarm 1 & 2
SAE J1939 Drop Leg Harness, Receptacle	8290218	1.5' (0.5m)	Drop Leg Harness, Deutsch Receptical-A-DT04-3P-E008 Connector, Wedge-A-W3P
SAE J1939 Drop Leg Harness, Plug	8290257	3' (0.9m)	Drop Leg Harness, Deutsch Plug-A-DT06-3S-E008 Connector, Wedge-A-W3S
SAE J1708 Harness	8290189	12' (3.7m)	Blunt Cut SAE J1708 Connection Harness
Warning Light Harness Kit	9090105	6' (1.8m)	Warning Light Harness & Label Kit, Amber
Warning Light Harness Kit	9090106	12' (3.7m)	Warning Light Harness & Label Kit, Amber
Warning Light Adapter Harness	8290235	2' (0.6m)	Allows for Alarm 3 Connection to CCM, Tractor Applications Only

e-S³ / GEN 3 Pressure Transducer & Harnesses

Description	Part #	Length ft (m)	Function
Pressure Transducer, 100psi	8090550	0	Signals brake pedal application to CCM
Pressure Transducer Harness	8290243	5' (1.5m)	Connects Pressure Transducer to CCM
Pressure Transducer Harness	8290244	10' (3.0m)	Connects Pressure Transducer to CCM
Pressure Transducer Harness	8290245	15' (4.6m)	Connects Pressure Transducer to CCM
Pressure Transducer Harness	8290246	20' (6.1m)	Connects Pressure Transducer to CCM

e-S³ / GEN 3 Actuator Sensor & Harnesses

Description	Part #	Length ft (m)	Function
Actuator Sensor	8290120	5' (1.5m)	Outputs actuator stroke to CCM
Sensor Harness	8290260	10' (3.0m)	Connects Actuator Sensor to CCM
Sensor Harness	8290261	15' (4.6m)	Connects Actuator Sensor to CCM
Sensor Harness	8290262	20' (6.1m)	Connects Actuator Sensor to CCM
Sensor Harness	8290263	25' (7.6m)	Connects Actuator Sensor to CCM
Sensor Harness	8290264	30' (9.1m)	Connects Actuator Sensor to CCM
Sensor Harness	8290265	35' (10.7m)	Connects Actuator Sensor to CCM
Sensor Harness	8290266	40' (12.2m)	Connects Actuator Sensor to CCM
Sensor Harness	8290267	45' (13.7m)	Connects Actuator Sensor to CCM

e-Stroke e-S³ / GEN 3 Tractor / Truck / Bus Parts List

e-S³ / GEN 3 Lining Wear Harnesses

Description	Part #	Length ft (m)	Function
Lining Wear Sensor*	NA	NA	Available through Brake Lining Manufacturer
Sensor Adapter Harness	8290238	2' (0.6m)	Adapts Sensor & Lining Wear Harnesses to CCM
Lining Wear Sensor Harness**	8290210	15' (4.6m)	Connects Lining Wear Sensor to CCM
Lining Wear Sensor Harness**	8290211	20' (6.1m)	Connects Lining Wear Sensor to CCM
Lining Wear Sensor Harness**	8290212	25' (7.6m)	Connects Lining Wear Sensor to CCM
Lining Wear Sensor Harness**	8290213	30' (9.1m)	Connects Lining Wear Sensor to CCM
Lining Wear Sensor Harness**	8290214	35' (10.7m)	Connects Lining Wear Sensor to CCM
Lining Wear Sensor Harness**	8290215	40' (12.2m)	Connects Lining Wear Sensor to CCM
Lining Wear Sensor Harness**	8290216	45' (13.7m)	Connects Lining Wear Sensor to CCM
Lining Wear Sensor Harness**	8290217	50' (15.2m)	Connects Lining Wear Sensor to CCM

* Lining Wear Sensors should be purchased with Brake Linings from Lining Manufacturer or approved distributor

** P/N 8290210 - 8290217 Lining Wear Sensor Harnesses are designed with Arvin Meritor Lining Wear Sensor Connectors.

Typical e-Stroke e-S³ / GEN 3 Tractor / Truck / Bus System Bill of Material

Typical e-Stroke e-S³ / GEN 3 System must contain the following components to be complete:

- (1) - CCM for appropriate vehicle configuration
- (1) - CCM Power Harness P/N 8290233
- (1) - J1939 or J1708 Harness
- (1) - Warning Light for Truck / Bus Applications, (2) - Tractor Applications
- (1) - Pressure Transducer P/N 8090550
- (1) - Pressure Transducer Harness of appropriate Length
- (1) per Wheel - Actuator Sensor for each wheel on the vehicle, P/N 8290120
- (1) per Wheel - Actuator Sensor Harness of appropriate length for each brake actuator on the vehicle
- (1) per Wheel - MGM ESH Brake Actuators per wheel appropriately sized for the vehicle application

Typical e-Stroke e-S³ / GEN 3 Tractor / Truck / Bus with Lining Wear System Bill of Material

Typical e-Stroke e-S³ / GEN 3 System with lining wear must contain the following components to be complete:

- (1) - CCM for appropriate vehicle configuration
- (1) - CCM Power Harness P/N 8290233
- (1) - J1939 or J1708 Harness
- (1) - Warning Light for Truck / Bus Applications, (2) - Tractor Applications
- (1) - Pressure Transducer P/N 8090550
- (1) - Pressure Transducer Harness of appropriate Length
- (1) per Wheel - Actuator Sensor Adapter Harness for each wheel on the vehicle, P/N 8290238
- (1) per Wheel - Actuator Sensor for each wheel on the vehicle, P/N 8290120
- (1) per Wheel - Actuator Sensor Harness of appropriate length for each brake actuator on the vehicle
- (1) per Wheel - Lining Wear Sensor for each wheel on the vehicle. Contact Lining Manufacturer for Sensor Options.
- (1) per Wheel - Lining Wear Sensor Harness of appropriate length for each wheel on the vehicle
- (1) per Wheel* - MGM ESH Brake Actuators per wheel appropriately sized for the vehicle application

*Reference MGM Brakes Master Catalog for e-Stroke Actuators Available

e-S³ / GEN 3 Diagnostic Tool Kits

Description	Part #	Function
e-Stroke RS-232 Laptop Diagnostic Tool Kit	9090109	Provides e-Stroke diagnostic capabilities with a laptop computer
e-DT Hand Held Diagnostic Tool Kit	9090110	Plug & play diagnostic display for use with e-Stroke systems

e-Stroke Trailer System Parts List

Trailer CCMs

Description	Part #	Axle	Function
CCM, GEN 1, 1 Axle, Trailer	8290034	1	Use with Trailer 1 Axle Applications
CCM, GEN 1, 2 Axle, Trailer	8290035	2	Use with Trailer 2 Axle Applications
CCM, GEN 1, 3 Axle, Trailer	8290036	3	Use with Trailer 3 Axle Applications

Trailer Power Cables

Description	Part #	Length ft (m)	Function
Trailer ABS "T" Power Breakout Adapter	8290178	8" (203.2mm)	Allows CCM to be powered from existing Trailer ABS System wiring by plugging "T" connector in-line with ABS wiring.
Trailer ABS Power Cable	8290123	5' (1.5m)	Connects Trailer ABS "T" Power Breakout Adapter to CCM
Trailer ABS Power Cable	8290124	10' (3.0m)	Connects Trailer ABS "T" Power Breakout Adapter to CCM
Trailer ABS Power Cable	8290125	15' (4.6m)	Connects Trailer ABS "T" Power Breakout Adapter to CCM
Trailer ABS Power Cable	8290122	20' (6.1m)	Connects Trailer ABS "T" Power Breakout Adapter to CCM
Trailer ABS Power Cable	8290121	25' (7.6m)	Connects Trailer ABS "T" Power Breakout Adapter to CCM
Trailer ABS Power Cable	8290126	30' (9.1m)	Connects Trailer ABS "T" Power Breakout Adapter to CCM
Trailer ABS Power Cable	8290127	35' (10.7m)	Connects Trailer ABS "T" Power Breakout Adapter to CCM

Note: To connect Trailer CCM power without using ABS system wiring use appropriate length Trailer ABS Power Cable and cut off one connector to allow for direct wire hook-up to power source.

Actuator Sensors & Harnesses

Description	Part #	Length ft (m)	Function
Actuator Sensor	8290120	60 in	Outputs actuator stroke to CCM
Sensor Harness	8290077	10' (3.0m)	Connects Actuator Sensor to CCM
Sensor Harness	8290079	15' (4.6m)	Connects Actuator Sensor to CCM
Sensor Harness	8290081	20' (6.1m)	Connects Actuator Sensor to CCM
Sensor Harness	8290083	25' (7.6m)	Connects Actuator Sensor to CCM
Sensor Harness	8290085	30' (9.1m)	Connects Actuator Sensor to CCM
Sensor Harness	8290087	35' (10.7m)	Connects Actuator Sensor to CCM
Sensor Harness	8290089	40' (12.2m)	Connects Actuator Sensor to CCM
Sensor Harness	8290091	45' (13.7m)	Connects Actuator Sensor to CCM
Sensor Harness	8290097	60' (18.3m)	Connects Actuator Sensor to CCM

Optional Trailer System Parts

Description	Part #	Length ft (m)	Function
e-LINK	8290200	NA	Provides Remote Trailer System Warning Light in Tractor
CCM Mounting Bracket	8090021	NA	Optional, Mounts to Frame Rail of Trailer providing mounting surface for CCM.

Typical Trailer e-Stroke System Bill of Material

Typical e-Stroke Trailer System must contain the following components to be complete:
(1) - CCM for appropriate trailer configuration
(1) - e-LINK, P/N 8290200
(1)* - Trailer ABS "T" Power Breakout Adapter P/N 8290178
(1) - Trailer ABS Power Cable of appropriate length
(1) per Wheel - Actuator Sensor for each wheel on the Trailer, P/N 8290120
(1) per Wheel - Actuator Sensor Harness of appropriate length for each brake actuator on the Trailer
(1) per Wheel* - MGM ESH Brake Actuators per wheel appropriately sized for the Trailer application

***Reference MGM Brakes Master Catalog for e-Stroke Actuators Available**

e-Stroke Tractor / Truck / Bus Service Parts List

Tractor / Truck / Bus CCMs

Description	Part #	Axle	Function
CCM, GEN 1, 2 Axle, Truck / Bus	8290106	2	Use with Truck / Bus 2 Axle Applications, GEN 1
CCM, GEN 1, 3 Axle, Tractor	8290105	3	Use with Tractor / Truck / Bus 3 Axle Applications, GEN 1
CCM, GEN 2, 2 Axle, Truck / Bus	8290110	2	Use with Truck / Bus 2 Axle Applications, GEN 2
CCM, GEN 2, 3 Axle, Tractor	8290113	3	Use with Tractor / Truck / Bus 3 Axle Applications, GEN 2

Note: Contact MGM Brakes e-Stroke Customer Service for available service CCMs. MGM Brakes e-Stroke Customer Service: 1-877-4-e-Stroke

Tractor / Truck / Bus Power Cables

Description	Part #	Length ft (m)	Function
CCM Power Connect Lead	8290051	3' (0.9m)	Blunt power leads with fuse allows for direct connection to power
CCM Power Cable	8290175	5' (1.5m)	Connects CCM Power Lead to GEN 1 & 2 CCM
CCM Power Cable	8290176	10' (3.0m)	Connects CCM Power Lead to GEN 1 & 2 CCM
CCM Power Cable	8290098	15' (4.6m)	Connects CCM Power Lead to GEN 1 & 2 CCM
CCM Power Cable	8290099	30' (9.1m)	Connects CCM Power Lead to GEN 1 & 2 CCM
Warning Light Harness Kit	9090106	12' (3.7m)	Warning Light Harness & Label Kit
SAE J1708 Harness	8290189	12' (3.7m)	Blunt Cut SAE J1708 Connection Harness
Power Adapter Harness for e-S ³ / GEN 3 CCM	8290232	2' (0.6m)	Adapts e-S ³ / GEN 3 CCM to GEN 1 & 2 type power harnesses. Required for retrofitting a e-S ³ / GEN 3 CCM to an existing GEN 1 or 2 system.

Pressure Transducer & Harnesses (GEN 2 Only)

Description	Part #	Length ft (m)	Function
Pressure Transducer, 50psi	8090075	0	Signals brake pedal application to CCM
Pressure Transducer Harness	8290170	5' (1.5m)	Connects Pressure Transducer to CCM
Pressure Transducer Harness	8290171	10' (3.0m)	Connects Pressure Transducer to CCM
Pressure Transducer Harness	8290172	15' (4.6m)	Connects Pressure Transducer to CCM
Pressure Transducer Harness	8290173	20' (6.1m)	Connects Pressure Transducer to CCM
Pressure Transducer Adapter Harness	8290223	2' (0.6m)	Required for applications where a GEN 3 CCM is retrofitted to an existing GEN 2 System and Pressure Transducer Harnesses.

Actuator Sensors & Harnesses			
Description	Part #	Length ft (m)	Function
Actuator Sensor	8290120	5' (1.5m)	Outputs actuator stroke to CCM. Acceptable replacement for 8290116 2.5' (0.8m) Sensor.
Sensor Harness	8290077	10' (3.0m)	Connects Actuator Sensor to CCM
Sensor Harness	8290079	15' (4.6m)	Connects Actuator Sensor to CCM
Sensor Harness	8290081	20' (6.1m)	Connects Actuator Sensor to CCM
Sensor Harness	8290083	25' (7.6m)	Connects Actuator Sensor to CCM
Sensor Harness	8290085	30' (9.1m)	Connects Actuator Sensor to CCM
Sensor Harness	8290087	35' (10.7m)	Connects Actuator Sensor to CCM
Sensor Harness	8290089	40' (12.2m)	Connects Actuator Sensor to CCM
Sensor Harness	8290091	45' (13.7m)	Connects Actuator Sensor to CCM
Sensor Harness	8290097	60' (18.3m)	Connects Actuator Sensor to CCM
e-S ³ / GEN 3 Sensor Adapter Harness	8290222	2' (0.6m)	Adapts e-S ³ / GEN 3 CCM to GEN 1 & 2 Sensor Harness. 1 per wheel required for retrofitting a e-S ³ / GEN 3 CCM to an existing GEN 1 or 2 system.

e-Stroke e-DT Display, Hand Held Diagnostic Tool Kit Parts			
Description	Part #	Length ft (m)	Function
e-DT, e-Stroke Display Diagnostic Tool	8290240	NA	Plug & Play Diagnostic Display for use with e-Stroke Systems
e-Stroke Display Diagnostic Harness	8290224	3' (0.9m)	1 meter Display Diagnostic Harness
New Flyer Display Adapter (Model Year 2009 On)	8290239	NA	Converts standard 9-PIN OBD Connector to New Flyer J1939 Chassis Pin-Out

e-Stroke RS-232 Diagnostic Tool Kit Parts			
Description	Part #	Length ft (m)	Function
e-Stroke Technical Manual & RS-232 Diagnostic Software CD	8090091	NA	CD Includes e-Stroke Technical Manual & RS-232 Diagnostic Software
RS-232 Diagnostic Harness	8290220	10' (3.0m)	10 ft RS-232 Diagnostic Harness
RS-232 to USB Adapter Cable, Kit	8090090	NA	RS-232 to USB Adapter Cable, Kit

Miscellaneous Parts			
Description	Part #	Length (ft)	Function
Cable Tie, Black, 5"	8090040	NA	Used to secure harness during installation, Typically 200pcs per system
Wire Label	8090058	NA	Self Laminating, Write On, Used for marking cables during installation, Typically 24pcs per system, 40pcs with lining wear
Fitting, 1/4" NPT Brass Hex Nipple	8160038	NA	Connects Pressure Transducer to Vehicle Air-System
Fitting, 1/4" NPT Brass Tee	8160040	NA	Connects Pressure Transducer to Vehicle Air-System