



SPRING BRAKES

Long Stroke Brake Chambers

Watch your brake chambers! Most new vehicles are now being equipped with long-stroke brake chambers. This allows more stroke than older models. You will find clamp type 20 and clamp type 16 long stroke chambers on the steering axles and clamp type 24 and clamp type 30 long stroke chambers on other axles. Some of the type 30 chambers allow a three-inch stroke.

A long stroke brake chamber can be identified by the raised inlets, embossed etching on the side of the chamber and/or a trapezoidal shaped I.D. tag indicating long stroke, and the maximum stroke allowed.

The key advantage of the extra stroke available from the actuator's unapplied position to full extension, is that it keeps brakes in adjustment longer, reduces out of adjustment citations and improves brake efficiency.

All VENDORS advise to never install long stroke and standard stroke chambers on the same vehicle. This can cause poor brake balance and timing.

When servicing these brake actuators, it is imperative that strict attention is paid to the components. These chambers have push rod stroke capabilities in excess of the standard 2.25" to 2.5" design. The components are unique, and include the following: (They are identified as " Long Stroke"- "LS"-or "3"stroke")

- *service diaphragm*
- *service housing*
- *service pushrod*
- *complete piggyback*

All Navistar 2000 & Newer Buses Now Have Long Stroke Brake Chambers With Square Ports. Long Stroke Chambers Provide 17% More Stopping Ability On A Hot Stop!!



Short Stroke w/
Round Ports



Long Stroke w/
Square Ports

According to MGM, single chambers-service chambers also have the square ports, and show pictures of the models to indicate this in the literature they provide. These pictures were scanned from that catalog.





SPRING BRAKES



GOLD SEAL SPRING BRAKE CHAMBERS	
PART No.	DESCRIPTION
GC2430	Type 24/30, Less Clevis
GC3030	Type 30/30, Less Clevis
GC2424	Type 24/24, Complete With Clevis
GC3036	Complete Chamber Type 30/36, Less Clevis
GC3636	Complete Chamber Type 36/36, Less Clevis

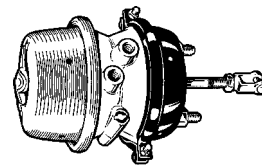
LIFESEAL™ COMPLETE SPRING BRAKE CHAMBERS	
PART No.	DESCRIPTION
LC3030	Type 30/30, Less Clevis
LC3030L	3" Long Stroke Chamber Type 30/30, Less Clevis

SEALED PIGGYBACK CHAMBERS	
PART No.	DESCRIPTION
GP3036	TYPE 30/36 GP Gold Seal Piggyback
GP3636	TYPE 36/36 GP Gold Seal Piggyback
GP3030	Type 30/30 GP Gold Seal Piggyback
GP2430	Type 24/30 GP Gold Seal Piggyback
GP2424	Type 24/24 GP Gold Seal Piggyback

LIFESEAL™SEALED PIGGYBACK CHAMBERS	
PART No.	DESCRIPTION
LP3030	TYPE 30/30
LP3030L	Long Stroke Piggyback, TYPE 30/30

ANCHORLOK LONG STROKE SPRING BRAKES

LONG STROKE SPRING BRAKE CHAMBERS	
PART No.	DESCRIPTION
GC3030L	Long Stroke Chamber Type 30/30
GC2424L	Long Stroke Chamber Type 24/24
PIGGYBACK LONG STROKE CHAMBERS	
PART No.	DESCRIPTION
GP3030L	Long Stroke Piggyback, TYPE 30/30
GP2424L	Long Stroke Piggyback, Type 24/24



PIGGYBACK KITS

PIGGYBACK KITS- ALL BRANDS	
PART No.	DESCRIPTION
1010453	Carlisle Type 30/30 Piggyback Kit w/ Diaphragm Kit
3429008	MGM Piggyback Kit, TR2430L
3230008	MGM 3" Long Stroke Piggyback, Includes Diaphragm & Clamp
5007610	Bendix Type 30/30 Piggyback, w/ Dia. & Clamp
MP3030K	Haldex Piggyback Kit includes diaphragm and clamp





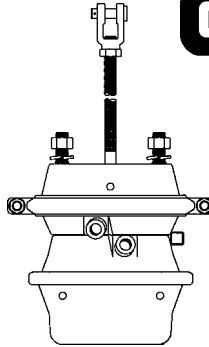
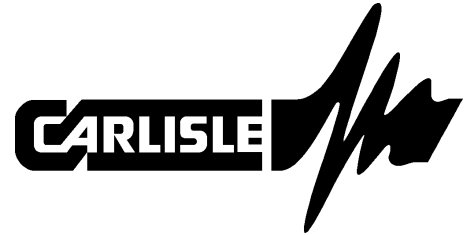
SPRING BRAKES

BLACK MAX II

"Advanced Design & Function"

Permanently Sealed Spring Chamber, With Powder Coated Components Including The Power Spring.

The push rod has a stroke indicator, and is powder coated for long life.



WARNING!
Do not attempt to remove or service the spring chamber clamp ring on any spring brake. The large spring in the spring chamber has extreme force which could cause serious bodily injury if it were suddenly released due to inadvertent removal of this clamp.

COMPLETE SPRING BRAKE CHAMBERS	
PART No.	DESCRIPTION
1010450	Type 24/24, Complete with Clevis
1010447	Type 30/30, Less Clevis
1010449	Type 30/30, Complete With Clevis
SEALED PIGGYBACK CHAMBER	
1010448	Type 3030, w/sealed spring chamber



All units are furnished with a universal fully threaded rod which must be cut to the correct length.

"Tamper Resistant" design prevents accidental disassembly of the power spring housing.

**MGM BRAKES
TR MODEL**

Double Diaphragm Type

Size	Stroke	Combination Part No.	Piggyback Plus Kit
2424L	2.50	3427051	3427008
2430L	2.50	3429051	3429008
3030	2.50	3430051	3430008
3036	2.50	3433051	N/A
3636	3.00	3437051	3437001*

* Piggyback Only

All models available with optional MGM heavy duty weld reinforced mounting pads. This would be a special order.



Note: These model sized offered only in combination assemblies with MGM heavy duty weld-reinforced mounting base.

Use these models to replace like (long stroke) brake chambers only.

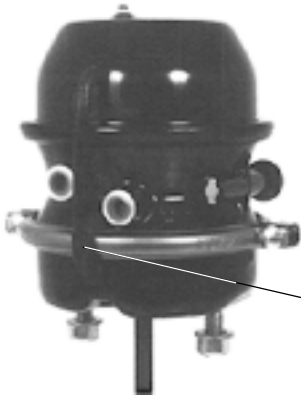
**MGM BRAKES
S-CAM**

TR LONG STROKE MODEL
Double Diaphragm Type

Size	Stroke	Combination Part No.	Piggyback Plus Kit
3030LP3	3.00	3230051	3230008



SPRING BRAKES



**MGM BRAKES
S-CAM**

TRTS MODEL

Double Diaphragm Type

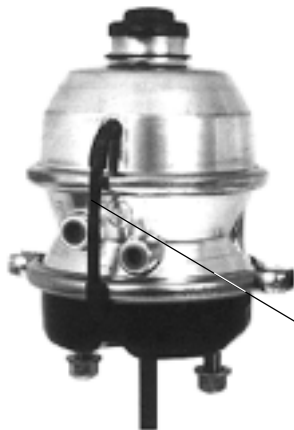
Size	Stroke	Combination Part No.
3030	2.50	3531051

With the MGM Model TR-TS Series Full Epoxy Coated External Tube Breather System, the power spring chamber is "sealed" against any contaminated and corrosive outside air because 100% of the air drawn in originates from the inside protected area of the service brake chamber. The result is an MGM spring brake that is CORROSION-FREE...proven in over 25 years of use on heavy vehicles of European origin equipped with MGM-Europa spring brakes.

**MGM BRAKES
S-CAM**

LTR-T MODEL

Double Diaphragm Type

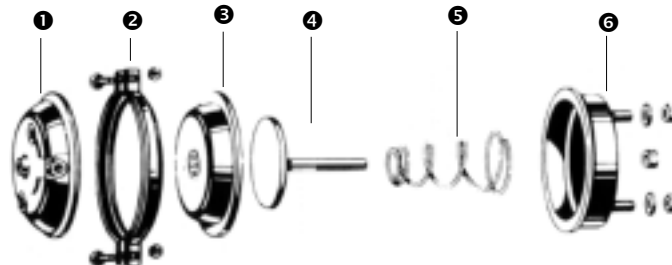
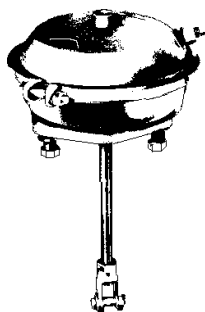


Size	Stroke	Combination Part No.
3030-T	2.50	3831051

With the MGM Model LTR-T Series Full Epoxy Coated External Tube Breather System, the power spring chamber is "sealed" against any contaminated and corrosive outside air because 100% of the air drawn in originates from the inside protected area of the service brake chamber. The result is an MGM spring brake that is CORROSION-FREE...proven in over 25 years of use on heavy vehicles of European origin equipped with MGM-Europa spring brakes.

SERVICE CHAMBERS & COMPONENTS

SERVICE CHAMBERS						
Fully Threaded Push Rod, Complete With Yoke Assembly						
DESCRIPTION	TYPE 9	TYPE 12	TYPE 16	TYPE 20	TYPE 24	TYPE 30
Complete Air Chamber	MA36090M	1036120	1036160	1036200	1036240	1011900



Item	PART DESCRIPTION	CHAMBER SIZE					
		TYPE 9	TYPE 12	TYPE 16	TYPE 20	TYPE 24	TYPE 30
		COMPONENT PART NUMBERS					
1	Cover Assembly	1036092*	1036122*	1036162*	1036202*	1036242	1036302
2	Clamp Band Kit	0964003	1264003	1664005	2064004	1019248	1019308
3	Diaphragm	1018090	1018120	1018160	1018200	1018240	1018300
4	Push Rod Assembly	1036091*	1036121*	1036161*	1036201*	1036241	1036301
5	Return Spring	1036094*	1036124*	1036164*	1036204*	1036204*	1036304
6	Non-Pressure Body	1036093*	1036123*	1036163*	1036203*	1036243	1036303

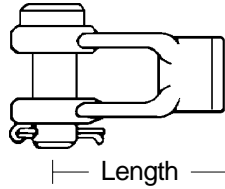
* At the time of Printing these were Non-Stock.

**SPRING BRAKE & SERVICE CHAMBER ACCESSORIES****FORGED YOKE ASSEMBLIES****LONG STROKE BRAKE DIAPHRAGMS**

PART No.	Description
2462001	Type 24 Long Stroke
3062007	Type 30 Long Stroke



Complete with clevis pin and cotter pin.
Zinc and Dichromate plating.



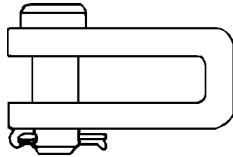
PART No.	PIN SIZE	LENGTH	THREAD	CHAMBER SIZE
1036470	1/2"	1.88"	5/8"-18	20,24,30
KN36480	5/8"	1.88"	5/8"-18	20,24,30



PART No.	PIN SIZE	LENGTH	THREAD	Chamber SIZE
KN36490	1/2"	1.81"	1/2"-20	9,12,16
KN36460	5/8"	2.50"	5/8"-18	20,24,30

STAMPED YOKE ASSEMBLIES

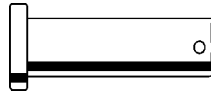
Complete with clevis pin and cotter pin.
Zinc and Dichromate plating.

**CLEVIS PINS**

1/2" Pin

Part No. 19100

5/8" Pin

Part No. 19102**CLEVIS FOR MIDLAND AND GUNITE AUTOMATIC SLACKS**

Includes 2 clevis pins and 2 cotter pins.

For 5/8"
Threaded Pushrod
Part No. AS3000

For 1/2"
Threaded Pushrod
Part No. AS3001



PART No.	PIN SIZE	LENGTH	THREAD	Chamber SIZE
19105	1/2"	1.50"	5/8"-18	20,24,30

DUST BOOT

Plate and rubber boot for chambers with 4^{3/4}" mounting centers (Type 20, 24, 30 & 36). Protects inside of service chamber.

Part No. 11M034**CAGING BOLT PLUG**

For Anchorlok spring brakes
For aluminum (Blue)
Part No. 9999039
For Steel (Gold)
Tethered, with retainer
Part No. 9999116

**SPRING BRAKE RELEASE STUD ASSEMBLY**

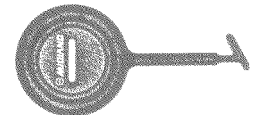
For spring brakes 0916, 1216, 1624, 2024, 2424, 2430, 3030.

Part No. 9999036
For spring brakes 0912, 1212

Part No. 44M011
For spring brakes 3036, 3636:

Part No. 1128M011**DUST PLUG**

New Style for Midland spring brakes.
Replaces 10050 old style
Part No. M143982

**AIR CHAMBER BRACKETS****AIR CHAMBER CLAMP BOLTS**

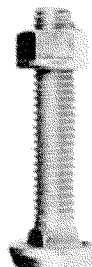
Bolt and Nut Assembly
3/8"-16 X 2^{3/16}".

Replaces

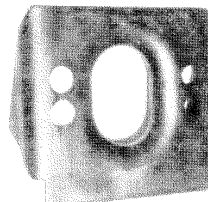
Anchorlok 11M052 Bolt

11M051 Nut

MGM Kit 9003001

Part No. NL1133

Universal Bracket
for 5 Inch Round Axles
Including Spicer, Std. Forge.
5/16" Thick. Can be used
with spring brakes.

Part No. NL1120

Bracket for 5" round axles
including Eaton, Rockwell,
Std. Forge. 5/15" thick.
Can be used with
spring brakes.

Part No. NL1103