

# TR LONG STROKE BRAKES

## CORROSION


### — FIGHTER™ —

#### TECHNOLOGY

A NEW STANDARD FEATURE TO FIGHT  
HARSH ELEMENTS IN THE ENVIRONMENT!  
(PATENT PENDING)



**MGM MGM Brakes**



**LONG STROKE  
BRAKES...  
better than ever!**

Form 5801

*You Spoke...  
We Listened...*

## CORROSION

### — FIGHTER™ —

#### TECHNOLOGY



A NEW STANDARD FEATURE  
TO FIGHT HARSH ELEMENTS  
IN THE ENVIRONMENT!

**MGM MGM Brakes**  
Form 5802



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**All Long Stroke brakes include  
“patent pending”  
Corrosion Fighter Technology.**

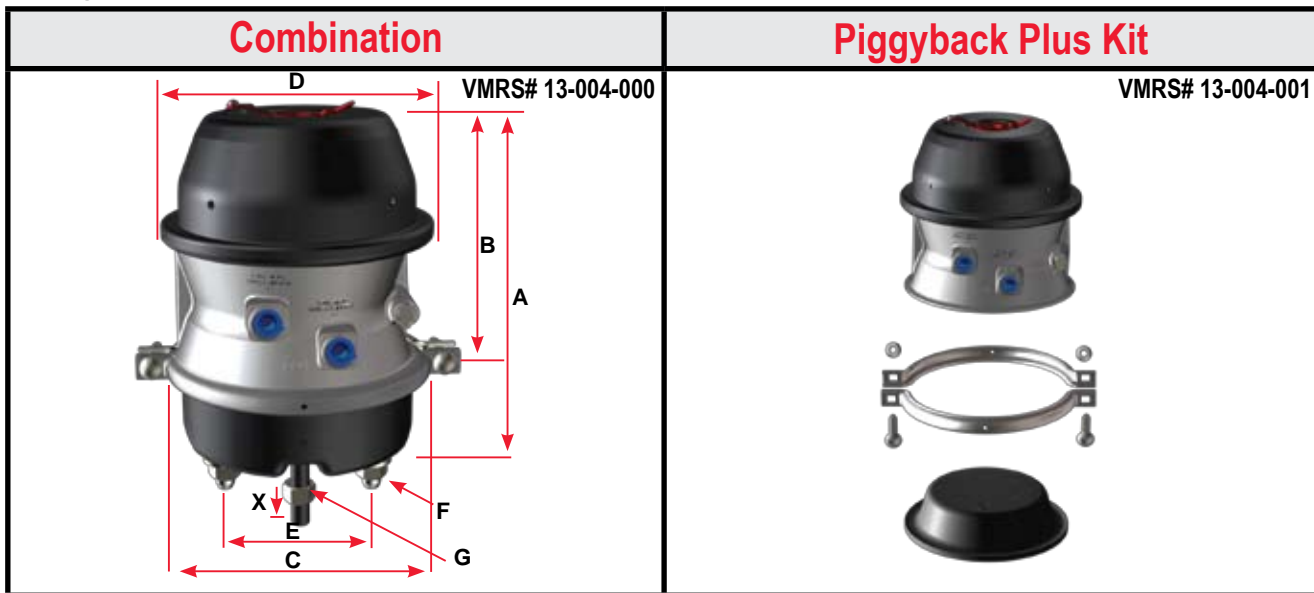
NOTE: Product information and specifications subject to change without notice.



# TR-LP3

## Long Stroke Model

DOUBLE DIAPHRAGM - 3" (76.2 mm) LONG STROKE

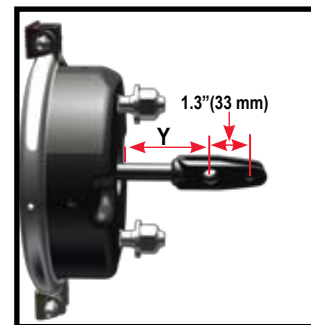


### TR-LP3 Model Features

- Tamper Resistant Design (U.S. Patent No. 5,067,391)
- Long Life Power Spring
- Center Hole Diaphragm (U.S. Patent No. 5,507,217)
- Epoxy-Coated Head, Non-Pressure Chamber and Lower Push-Rod Assembly
- Center Hole Shield
- Square Port Bosses (Long Stroke Identification)
- Weatherseal™ Plug
- Heavy-Duty 8-Gauge Steel Non-Pressure Chamber (Type 3030 Models) - (9 gauge on all other sizes)
- Polymer Push-Rod Guides
- Heavy-Duty Nylon Reinforced Diaphragms
- Heavy-Duty Nylon Reinforced Neoprene Diaphragms (Optional)
- Stroke Alert
- Externally Stored Release Bolt
- 3" (76.2 mm) Long Stroke
- Molded Nitrile Rubber Air Seal
- **Composite Guide - Corrosion Fighter Technology (patent pending)**

P/N Series	3220	3224	3230
Model	TR2030LP3H	TR2430LP3	TR3030LP3
Size	2030	2430	3030
Stroke	3.00" (76.2 mm)	3.00" (76.2 mm)	3.00" (76.2 mm)
P/N Combination SAE	3220051	3224051	3230051
P/N Piggyback Plus Kit SAE	3220008	3224008	3230008
P/N Combination METRIC	3220049	3224049	3230049
Wt. Combination	19.1 lb (8.7 kg)	19.3 lb (8.8 kg)	20.1 lb (9.1 kg)
Wt. Single	11.5 lb (5.2 kg)	11.5 lb (5.2 kg)	11.5 lb (5.2 kg)
A	10.19" (258.8 mm)	10.19" (258.8 mm)	9.99" (253.7 mm)
B	7.81" (198.4 mm)	7.81" (198.4 mm)	7.61" (193.3 mm)
C	7.38" (187.5 mm)	7.38" (187.5 mm)	8.32" (211.3 mm)
D	8.21" (208.5 mm)	8.21" (208.5 mm)	8.21" (208.5 mm)
E	4.75" (120.7 mm)		
F	5/8" - 11 UNC (M16 x 1.5 - 6g)		
G	5/8" - 18 UNF (M16 x 1.5 - 6g)		
Inlets	3/8" - 18 NPTF (M16 x 1.5 - 6H)		
X - Min. (in the caged position)	8.00" (203.2 mm)		

For Transit, Hendrickson Intraax / Vantraax Suspension applications and for units with mixed (SAE-METRIC) specifications and for actuators manufactured with neoprene diaphragms, refer to section 9.



NOTE: Type 2030, 2430 and 3030 units equipped with welded-yoke and 2.25" (57.2 mm) Y- dimension are replaced by part number:

- 3220951 (TR2030LP3H)
- 3224951 (TR2430LP3)
- 3230951 (TR3030LP3)

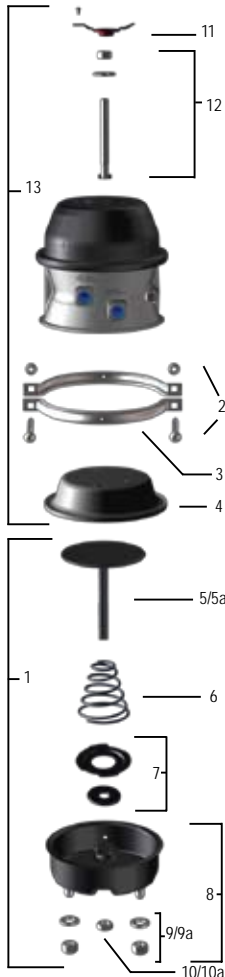
NOTE: 3.0625" (77.8 mm) and 4.2" (106.7 mm) Y-dimensions also available. Contact customer service for more information.

Refer to Section 11 for replacement parts.

NOTE: Product information and specifications subject to change without notice.

Replacement Parts				
P/N Series		3220	3224	3230
Model		TR2030LP3H	TR2430LP3	TR3030LP3
1	Kit - NP Chamber (a)	9015231	9015210	9015212
2	Kit - Nuts & Bolts	9003001	9003001	9003001
3	Clamp Band Assembly	8216027	8216025	8216045
4	Diaphragm	8017226	8017424	8017830
5	Kit - Push-Rod Assembly (a) SAE	9064026	9064006	9064008
5a	Kit - Push-Rod Assembly (a) METRIC	9064036	9064027	9064028
6	Return Spring	8068012	8068012	8068012
7	Kit - Center Hole Shield	9065002	9065002	9065002
8	NP Chamber Assembly (a)	8215200	8215200	8215501
9	Kit - Nuts & Washers SAE	9002001	9002001	9002001
9a	Kit - Nuts & Washers METRIC	9002002	9002002	9002002
10	Hex Nut - Yoke SAE	8130004	8130004	8130004
10a	Hex Nut - Yoke METRIC	8130016	8130016	8130016
11	Kit - Weatherseal™ Plug	9019005	9019005	9019005
12	Kit - Release Bolt	9007003	9007003	9007003
13	Kit - Piggyback Plus SAE	3220008	3224008	3230008
<b>OPTIONAL ITEMS - For additional replacement parts, refer to Section 11.</b>				
Yoke & Welded Yoke Assemblies		Refer to Replacement Parts Section 11		
Boot & Retainer		Refer to Replacement Parts Section 11		

NOTE: (a) To ensure correct stroke alert positioning, these kits must be used only on the designated MGM Brake units.



**"New" Composite Guide - A Standard Feature**  
 Constructed from heavy-duty, non-metallic composite material. Available on all TR - Long Stroke model chambers. Patents Pending.

*Note: guide is depicted in orange for visual purposes. Patents Pending.*

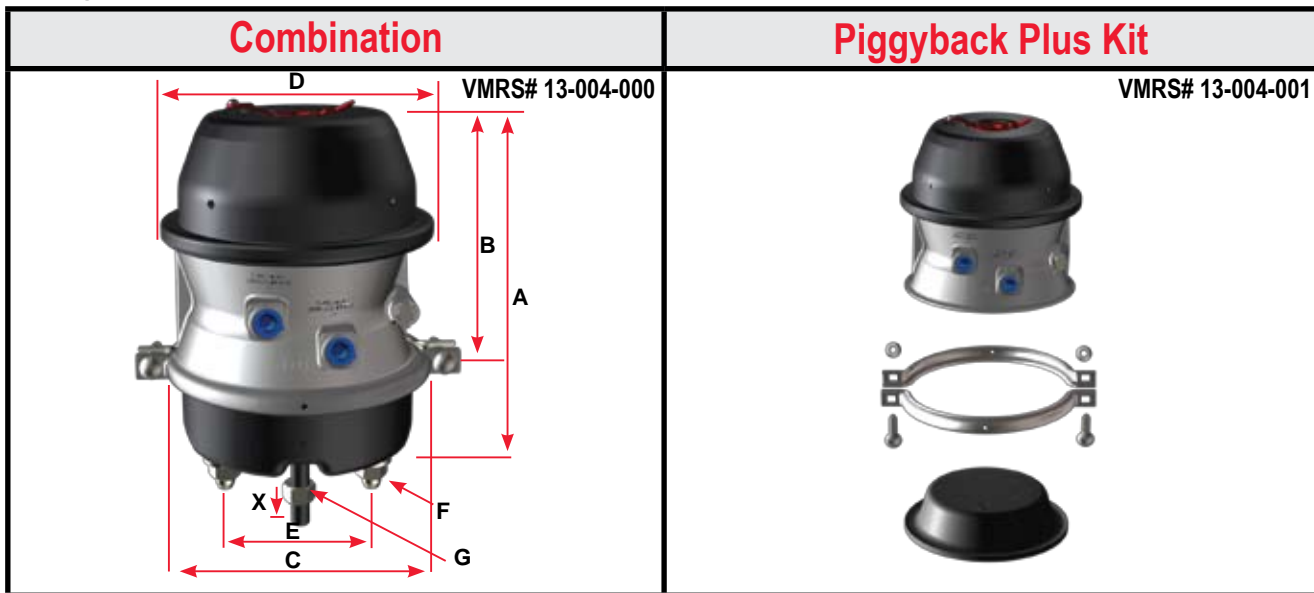


NOTE: Product information and specifications subject to change without notice.



## Long Stroke Model

DOUBLE DIAPHRAGM - 3" (76.2 mm) LONG STROKE

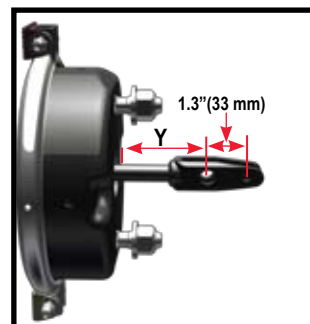


### TR-LP3HD Model Features

- Tamper Resistant Design (U.S. Patent No. 5,067,391)
- Center Hole Diaphragm (U.S. Patent No. 5,507,217)
- Epoxy-Coated Head, Non-Pressure Chamber and Lower Push-Rod Assembly
- Center Hole Shield
- Square Port Bosses (Long Stroke Identification)
- Weatherseal™ Plug
- Heavy-Duty 8-Gauge Steel Non-Pressure Chamber (Type 3030 Models) - (9 gauge on all other sizes)
- Polymer Push-Rod Guides
- Heavy-Duty Nylon Reinforced Diaphragms
- Heavy-Duty Nylon Reinforced Neoprene Diaphragms (Optional)
- Stroke Alert
- Externally Stored Release Bolt
- 3" (76.2 mm) Long Stroke
- Molded Nitrile Rubber Air Seal
- **Heavy-Duty Power Spring 145 lb (65.8 kg) additional parking brake force @ 1.25 inches (31.8 mm) of stroke**
- **Composite Guide - Corrosion Fighter Technology (patent pending)**

P/N Series	3226	3232
Model	TR2430LP3HD	TR3030LP3HD
Size	2430	3030
Stroke	3.00" (76.2 mm)	3.00" (76.2 mm)
P/N Combination SAE	3226051	3232051
P/N Piggyback Plus Kit SAE	3226008	3232008
P/N Combination METRIC	3226049	3232049
Wt. Combination	19.5 lb (8.8 kg)	20.4 lb (9.3 kg)
Wt. Single	11.7 lb (5.3 kg)	11.7 lb (5.3 kg)
A	10.19" (258.8mm)	9.99" (253.7 mm)
B	7.81" (198.4 mm)	7.61" (193.3 mm)
C	7.38" (187.5 mm)	8.32" (211.3 mm)
D	8.21" (208.5 mm)	8.21" (208.5 mm)
E	4.75" (120.7 mm)	
F	5/8" - 11 UNC (M16 x 1.5 - 6g)	
G	5/8" - 18 UNF (M16 x 1.5 - 6g)	
Inlets	3/8" - 18 NPTF (M16 x 1.5 - 6H)	
X - Min. (in the caged position)	8.00" (203.2 mm)	

• For actuators manufactured with neoprene diaphragms, refer to section 9.



NOTE: Type 2430 and 3030 units equipped with welded-yoke and 2.25" (57.2 mm) Y- dimension are replaced by part number:

3226951 (TR2430LP3HD)  
3232951 (TR3030LP3HD)

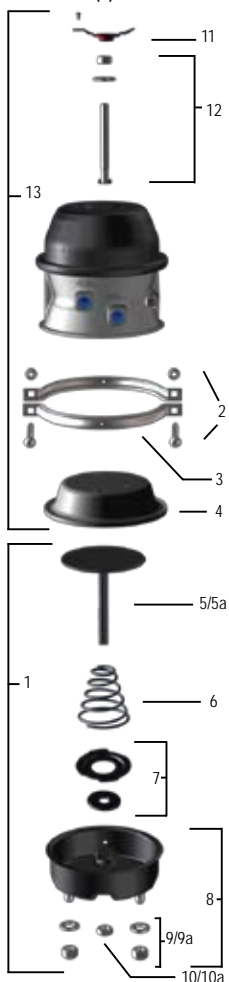
NOTE: 3.0625" (77.8 mm) and 4.2" (106.7 mm) Y-dimensions also available. Contact customer service for more information.

Refer to Section 11 for replacement parts.

NOTE: Product information and specifications subject to change without notice.

Replacement Parts			
P/N Series		3226	3232
Model		TR2430LP3HD	TR3030LP3HD
1	Kit - NP Chamber (a)	9015210	9015212
2	Kit - Nuts & Bolts	9003001	9003001
3	Clamp Band Assembly	8216025	8216045
4	Diaphragm	8017424	8017830
5	Kit - Push-Rod Assembly (a) SAE	9064006	9064008
5a	Kit - Push-Rod Assembly (a) METRIC	9064027	9064028
6	Return Spring	8068012	8068012
7	Kit - Center Hole Shield	9065002	9065002
8	NP Chamber Assembly (a)	8215200	8215501
9	Kit - Nuts & Washers SAE	9002001	9002001
9a	Kit - Nuts & Washers METRIC	9002002	9002002
10	Hex Nut - Yoke SAE	8130004	8130004
10a	Hex Nut - Yoke METRIC	8130016	8130016
11	Kit - Weatherseal™ Plug	9019005	9019005
12	Kit - Release Bolt	9007003	9007003
13	Kit - Piggyback Plus SAE	3226008	3232008
<b>OPTIONAL ITEMS - For additional replacement parts, refer to Section 11.</b>			
Yoke & Welded Yoke Assemblies		Refer to Replacement Parts Section 11	
Boot & Retainer		Refer to Replacement Parts Section 11	

Note: (a) To ensure correct stroke alert positioning, these kits must be used only on the designated MGM Brake units.



**Center Hole Shield**

Permits visual inspection of stroke alert but prevents entry of contaminants.

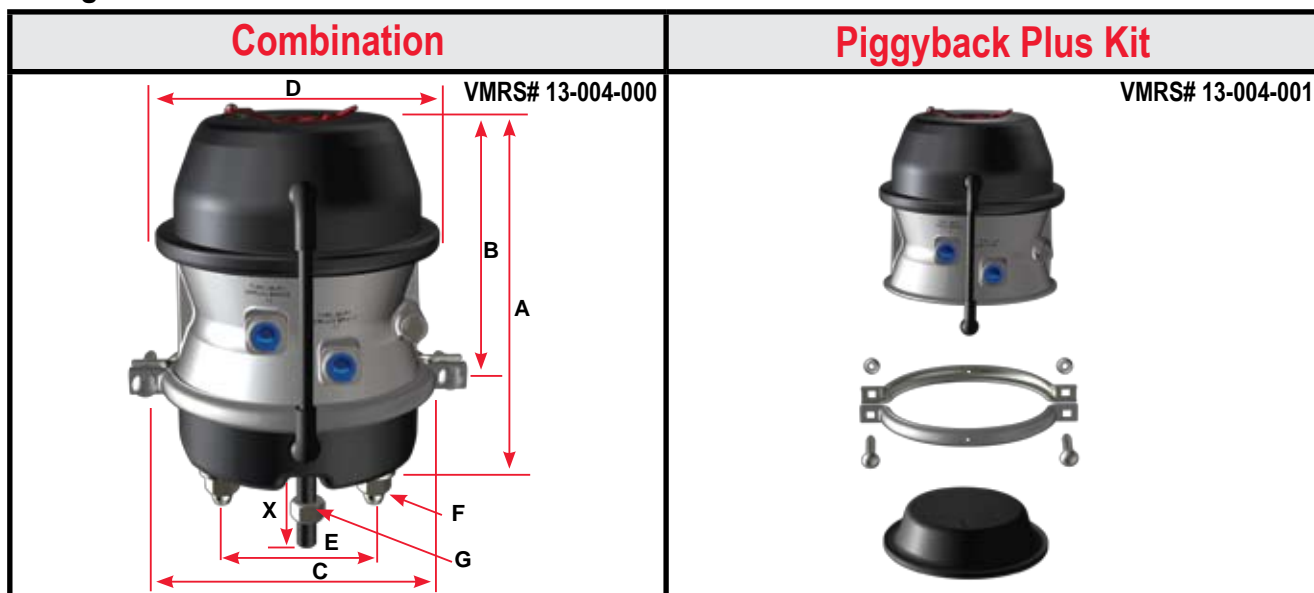
NOTE: Product information and specifications subject to change without notice.



# TR-LP3T

## Long Stroke Model

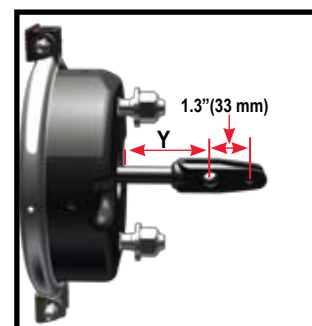
DOUBLE DIAPHRAGM - 3" (76.2 mm) LONG STROKE



### TR-LP3T Model Features

- Tamper Resistant Design (U.S. Patent No. 5,067,391)
- Long Life Power Spring
- Center Hole Diaphragm (U.S. Patent No. 5,507,217)
- Epoxy-Coated Head, Non-Pressure Chamber and Lower Push-Rod Assembly
- Center Hole Shield
- Square Port Bosses (Long Stroke Identification)
- Weatherseal™ Plug
- Heavy-Duty 8-Gauge Steel Non-Pressure Chamber (Type 3030 Models) - (9 gauge on all other sizes)
- Polymer Push-Rod Guides
- Heavy-Duty Nylon Reinforced Diaphragms
- Heavy-Duty Nylon Reinforced Neoprene Diaphragms (Optional)
- Stroke Alert
- Externally Stored Release Bolt
- 3" (76.2 mm) Long Stroke
- Molded Nitrile Rubber Air Seal
- **External Breather Tube**
- **Composite Guide - Corrosion Fighter Technology (patent pending)**

P/N Series	3221	3225	3231
Model	TR2030LP3TH	TR2430LP3T	TR3030LP3T
Size	2030	2430	3030
Stroke	3.00" (76.2 mm)	3.00" (76.2 mm)	3.00" (76.2 mm)
P/N Combination SAE	3221051	3225051	3231051
P/N Piggyback Plus Kit SAE	3221008	3225008	3231008
P/N Combination METRIC	3221049	3225049	3231049
Wt. Combination	19.1 lb (8.7 kg)	19.3 lb (8.8 kg)	20.1 lb (9.1 kg)
Wt. Single	11.5 lb (5.2 kg)	11.5 lb (5.2 kg)	11.5 lb (5.2 kg)
A	10.19" (258.8 mm)	10.19" (258.8 mm)	9.99" (253.7 mm)
B	7.81" (198.4 mm)	7.81" (198.4 mm)	7.61" (193.3 mm)
C	7.38" (187.5 mm)	7.38" (187.5 mm)	8.32" (211.3 mm)
D	8.21" (208.5 mm)	8.21" (208.5 mm)	8.21" (208.5 mm)
E	4.75" (120.7 mm)		
F	5/8" - 11 UNC (M16 x 1.5 - 6g)		
G	5/8" - 18 UNF (M16 x 1.5 - 6g)		
Inlets	3/8" - 18 NPTF (M16 x 1.5 - 6H)		
X - Min. (in the caged position)	8.00" (203.2 mm)		



NOTE: Type 2430 and 3030 units equipped with welded-yoke and 2.25" (57.2 mm) Y-dimension are replaced by part number:

3225951 (TR2430LP3T)  
3231951 (TR3030LP3T)

NOTE: 3.0625" (77.8 mm) and 4.2" (106.7 mm) Y-dimensions also available. Contact customer service for more information.

Refer to Section 11 for replacement parts.

NOTE: Product information and specifications subject to change without notice.

• For actuators manufactured with neoprene diaphragms, refer to section 9.

Replacement Parts				
P/N Series		3221	3225	3231
Model		TR2030LP3TH	TR2430LP3T	TR3030LP3T
1	Kit - NP Chamber (a)	9015232	9015215	9015218
2	Kit - Nuts & Bolts	9003001	9003001	9003001
3	Clamp Band Assembly	8216027	8216025	8216045
4	Diaphragm	8017226	8017424	8017830
5	Kit - Push-Rod Assembly (a) SAE	9064026	9064006	9064008
5a	Kit - Push-Rod Assembly (a) METRIC	9064036	9064027	9064028
6	Return Spring	8068012	8068012	8068012
7	Kit - Center Hole Shield	9065002	9065002	9065002
8	NP Chamber Assembly (a)	9015213	9015213	9015122
9	Kit - Nuts & Washers SAE	9002001	9002001	9002001
9a	Kit - Nuts & Washers METRIC	9002002	9002002	9002002
10	Hex Nut - Yoke SAE	8130004	8130004	8130004
10a	Hex Nut - Yoke METRIC	8130016	8130016	8130016
11	Kit - Weatherseal™ Plug	9019005	9019005	9019005
12	Kit - Release Bolt	9007003	9007003	9007003
13	Kit - Breather Tube	9081001	9081001	9081001
14	Kit - Piggyback Plus SAE	3221008	3225008	3231008
<b>OPTIONAL ITEMS - For additional replacement parts, refer to Section 11.</b>				
Yoke & Welded Yoke Assemblies		Refer to Replacement Parts Section 11		
Boot & Retainer		Refer to Replacement Parts Section 11		

Note: (a) To ensure correct stroke alert positioning, these kits must be used only on the designated MGM Brake units.



**External Breather-Tube**

Vents air from inside the protected area of the non-pressure chamber to effectively prevent entry of liquid and solid corrosive contaminants that can cause premature failure of the spring brake chamber.

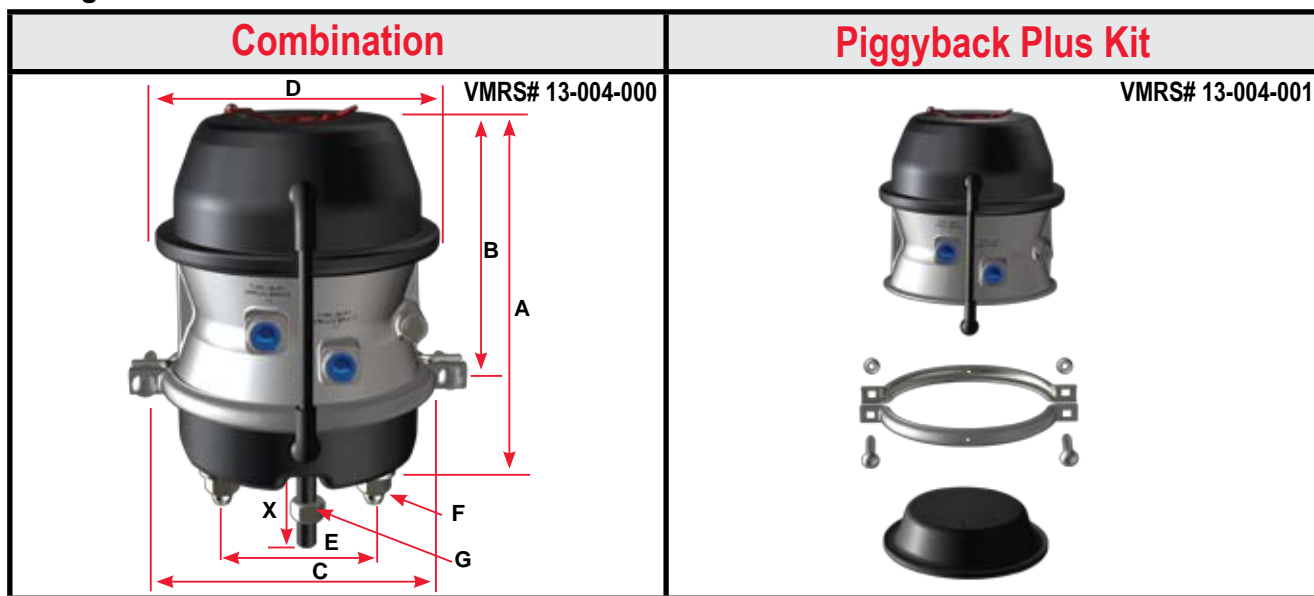
NOTE: Product information and specifications subject to change without notice.





## Long Stroke Model

DOUBLE DIAPHRAGM - 3" (76.2 mm) LONG STROKE

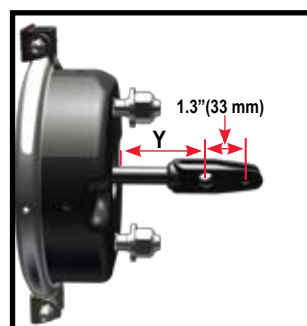


### TR-LP3THD Model Features

- Tamper Resistant Design (U.S. Patent No. 5,067,391)
- Center Hole Diaphragm (U.S. Patent No. 5,507,217)
- Epoxy-Coated Head, Non-Pressure Chamber and Lower Push-Rod Assembly
- Center Hole Shield
- Square Port Bosses (Long Stroke Identification)
- Weatherseal™ Plug
- Heavy-Duty 8-Gauge Steel Non-Pressure Chamber (Type 3030 Models) - (9 gauge on all other sizes)
- Polymer Push-Rod Guides
- Heavy-Duty Nylon Reinforced Diaphragms
- Heavy-Duty Nylon Reinforced Neoprene Diaphragms (Optional)
- Stroke Alert
- Externally Stored Release Bolt
- 3 Inch (76.2 mm) Long Stroke
- Molded Nitrile Rubber Air Seal
- External Breather Tube
- **Heavy-Duty Power Spring 145 lb (65.8 kg) of additional parking brake force @ 1.25 inches (31.8 mm) of stroke**
- **Composite Guide - Corrosion Fighter Technology (patent pending)**

P/N Series	3227	3233
Model	TR2430LP3THD	TR3030LP3THD
Size	2430	3030
Stroke	3.00" (76.2 mm)	3.00" (76.2 mm)
P/N Combination SAE	3227051	3233051
P/N Piggyback Plus Kit SAE	3227008	3233008
P/N Combination METRIC	3227049	3233049
Wt. Combination	19.5 lb (8.8 kg)	20.4 lb (9.3 kg)
Wt. Single	11.7 lb (5.3 kg)	11.7 lb (5.3 kg)
A	10.19" (258.8 mm)	9.99" (253.7 mm)
B	7.81" (198.4 mm)	7.61" (193.3 mm)
C	7.38" (187.5 mm)	8.32" (211.3 mm)
D	8.21" (208.5 mm)	8.21" (208.5 mm)
E	4.75" (120.7 mm)	
F	5/8" - 11 UNC (M16 x 1.5 - 6g)	
G	5/8" - 18 UNF (M16 x 1.5 - 6g)	
Inlets	3/8" - 18 NPTF (M16 x 1.5 - 6H)	
X - Min. (in the caged position)	8.00" (203.2 mm)	

• For actuators manufactured with neoprene diaphragms, refer to section 9.



NOTE: Type 2430 and 3030 units equipped with welded-yoke and 2.25" (57.2 mm) Y- dimension are replaced by part number:

3227951 (TR2430LP3THD)  
3233951 (TR3030LP3THD)

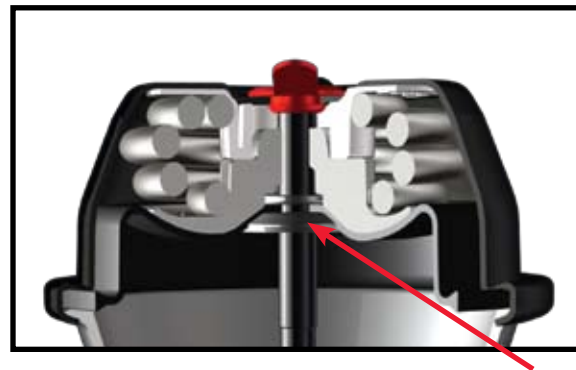
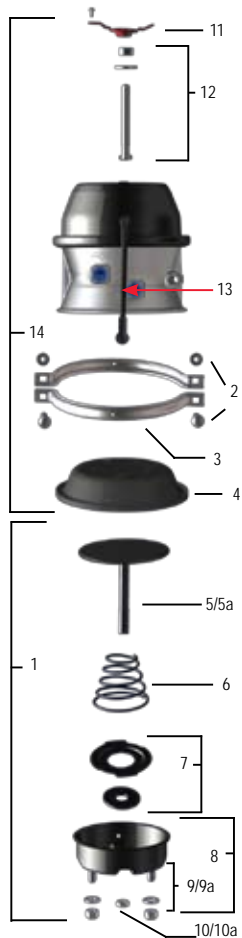
NOTE: 3.0625" (77.8 mm) and 4.2" (106.7 mm) Y-dimensions also available. Contact customer service for more information.

Refer to Section 11 for replacement parts.

NOTE: Product information and specifications subject to change without notice.

Replacement Parts			
P/N Series		3227	3233
Model		TR2430LP3THD	TR3030LP3THD
1	Kit - NP Chamber (a)	9015215	9015218
2	Kit - Bolts & Nuts	9003001	9003001
3	Clamp Band Assembly	8216025	8216045
4	Diaphragm	8017424	8017830
5	Kit - Push-Rod Assembly (a) SAE	9064006	9064008
5a	Kit - Push-Rod Assembly (a) METRIC	9064027	9064028
6	Return Spring	8068012	8068012
7	Kit - Center Hole Shield	9065002	9065002
8	NP Chamber Assembly (a)	9015213	9015122
9	Kit - Nuts & Washers SAE	9002001	9002001
9a	Kit - Nuts & Washers METRIC	9002002	9002002
10	Hex Nut - Yoke SAE	8130004	8130004
10a	Hex Nut - Yoke METRIC	8130016	8130016
11	Kit - Weatherseal™ Plug	9019005	9019005
12	Kit - Release Bolt	9007003	9007003
13	Kit - Breather Tube	9081001	9081001
14	Kit - Piggyback Plus	3227008	3233008
<b>OPTIONAL ITEMS - For additional replacement parts, refer to Section 11.</b>			
Yoke & Welded Yoke Assemblies		Refer to Replacement Parts Section 11	
Boot & Retainer		Refer to Replacement Parts Section 11	

NOTE: (a) To ensure correct stroke alert positioning, these kits must be used only on the designated MGM Brake units.



**Center Hole Diaphragm** (U.S. Patent #5,507,217)  
 Patented feature that aligns the piston, diaphragm, power spring and internal push-rod providing the following advantages: Maintains component alignment; reduces power spring stress; reduces coil clash; increases center-seal life and eliminates the effects of severe vibration.

NOTE: Product information and specifications subject to change without notice.



## Long Stroke Model

DOUBLE DIAPHRAGM - 3" (76.2 mm) LONG STROKE

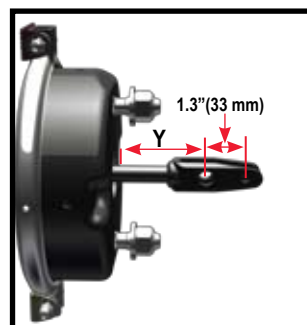
Combination	Piggyback Plus Kit
<p style="text-align: center;">VMRS# 13-004-000</p>	N/A

### TR-LP3THDW Model Features

- Tamper Resistant Design (U.S. Patent No. 5,067,391)
- Center Hole Diaphragm (U.S. Patent No. 5,507,217)
- Epoxy-Coated Head, Non-Pressure Chamber and Lower Push-Rod Assembly
- Center Hole Shield
- Square Port Bosses (Long Stroke Identification)
- Weatherseal™ Plug
- Heavy-Duty 8-Gauge Steel Non-Pressure Chamber (Type 3030 Models) - (9 gauge on all other sizes)
- Polymer Push-Rod Guides
- Heavy-Duty Nylon Reinforced Diaphragms
- Heavy-Duty Nylon Reinforced Neoprene Diaphragms (Optional)
- Stroke Alert
- Externally Stored Release Bolt
- 3 Inch (76.2 mm) Long Stroke
- Molded Nitrile Rubber Air Seal
- External Breather Tube
- Heavy-Duty Power Spring 145 lb (65.8 kg) of additional parking brake force @ 1.25 inches (31.8 mm) of stroke
- **Weld Reinforced Non-Pressure Housing with Welded Bolts**
- **Composite Guide - Corrosion Fighter Technology (patent pending)**

P/N Series	3244
Model	TR3030LP3THDW
Size	3030
Stroke	3.00" (76.2 mm)
P/N Combination SAE	3244051
P/N Piggyback Plus Kit SAE	N/A
P/N Combination METRIC	3244049
Wt. Combination	20.4 lb (9.3 kg)
Wt. Single	N/A
A	9.99" (253.7 mm)
B	7.61" (193.3 mm)
C	8.32" (211.3 mm)
D	8.21" (208.5 mm)
E	4.75" (120.7 mm)
F	5/8" - 11 UNC (M16 x 1.5 - 6g)
G	5/8" - 18 UNF (M16 x 1.5 - 6g)
Inlets	3/8" - 18 NPTF (M16 x 1.5 - 6H)
X - Min. (in the caged position)	8.00" (203.2 mm)

• For actuators manufactured with neoprene diaphragms, refer to Section 9.



**NOTE:** Type 3030 units equipped with welded-yoke and 2.25" (57.2 mm) Y- dimension are replaced by part number:

**3244951 (TR3030LP3THDW)**

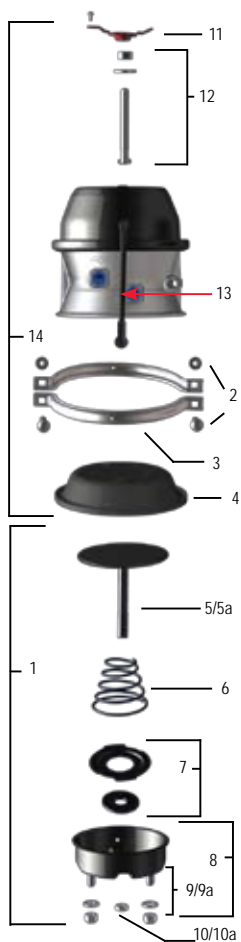
**NOTE:** 3.0625" (77.8 mm) and 4.2" (106.7 mm) Y-dimensions also available. Contact customer service for more information.

Refer to Section 11 for replacement parts.

NOTE: Product information and specifications subject to change without notice.

Replacement Parts		
P/N Series		3244
Model		TR3030LP3THDW
1	Kit - NP Chamber (a)	9015905
2	Kit - Bolts & Nuts	9003001
3	Clamp Band Assembly	8216045
4	Diaphragm	8017830
5	Kit - Push-Rod Assembly (a) SAE	9064008
5a	Kit - Push-Rod Assembly (a) METRIC	9064028
6	Return Spring	8068012
7	Kit - Center Hole Shield	9065002
8	NP Chamber Assembly (a)	9015259
9	Kit - Nuts & Washers SAE	9002001
9a	Kit - Nuts & Washers METRIC	9002002
10	Hex Nut - Yoke SAE	8130004
10a	Hex Nut - Yoke METRIC	8130016
11	Kit - Weatherseal™ Plug	9019005
12	Kit - Release Bolt	9007003
13	Kit - Breather Tube	9081001
<b>OPTIONAL ITEMS - For additional replacement parts, refer to Section 11.</b>		
Yoke & Welded Yoke Assemblies		Refer to Replacement Parts Section 11
Boot & Retainer		Refer to Replacement Parts Section 11

Note: (a) To ensure correct stroke alert positioning, these kits must be used only on the designated MGM Brake units.



**Weld Reinforced Non-Pressure Housing**

Heavy-gauge formed steel flat-bottom design, epoxy-coated for total corrosion protection and "weld-reinforced" mounting studs for added support in extreme vibration applications. (bolt actually epoxy coated - depicted here lighter for visual purposes)

- 8-Gauge Standard on Type 3030 & 3036 Aftermarket Models
- 6 Gauge Standard on Type 36 Models

NOTE: Product information and specifications subject to change without notice.

## Long Stroke Model

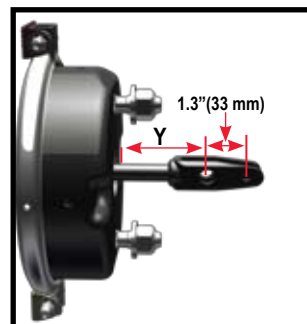
DOUBLE DIAPHRAGM - 3" (76.2 mm) LONG STROKE

Combination	Piggyback Plus Kit
<p style="text-align: center;">VMRS# 13-004-000</p>	N/A

### TR-LP3TS Model Features

- Tamper Resistant Design (U.S. Patent No. 5,067,391)
- Long Life Power Spring
- Center Hole Diaphragm (U.S. Patent No. 5,507,217)
- Epoxy-Coated Head, Non-Pressure Chamber and Lower Push-Rod Assembly
- Center Hole Shield
- Square Port Bosses (Long Stroke Identification)
- Weatherseal™ Plug
- Heavy-Duty 8-Gauge Steel Non-Pressure Chamber (Type 3030 Models) - (9 gauge on all other sizes)
- Polymer Push-Rod Guides
- Heavy-Duty Nylon Reinforced Diaphragms
- Heavy-Duty Nylon Reinforced Neoprene Diaphragms (Optional)
- Stroke Alert
- Externally Stored Release Bolt
- 3 Inch (76.2 mm) Long Stroke
- Molded Nitrile Rubber Air Seal
- External Breather Tube
- Epoxy-Coated Piston, Return Spring, Center Case - Inside & Out
- Composite Guide - Corrosion Fighter Technology (patent pending)

P/N Series	3523	3535
Model	TR2430LP3TS	TR3030LP3TS
Size	2430	3030
Stroke	3.00" (76.2 mm)	3.00" (76.2 mm)
P/N Combination SAE	3523051	3535051
P/N Piggyback Plus Kit SAE	N/A	N/A
P/N Combination METRIC	3523049	3535049
Wt. Combination	19.3 lb (8.8 kg)	20.1 lb (9.1 kg)
Wt. Single	N/A	N/A
A	10.19" (258.8mm)	9.99" (253.7 mm)
B	7.81" (198.4 mm)	7.61" (193.3 mm)
C	7.38" (187.5 mm)	8.32" (211.3 mm)
D	8.21" (208.5 mm)	8.21" (208.5 mm)
E	4.75" (120.7 mm)	
F	5/8" - 11 UNC (M16 x 1.5 - 6g)	
G	5/8" - 18 UNF (M16 x 1.5 - 6g)	
Inlets	3/8" - 18 NPTF (M16 x 1.5 - 6H)	
X - Min. (in the caged position)	8.00" (203.2 mm)	



**NOTE:** Type 2430 and 3030 units equipped with welded-yoke and 2.25" (57.2 mm) Y- dimension are replaced by part number:

3523951 (TR2430LP3TS)  
3535951 (TR3030LP3TS)

**NOTE:** 3.0625" (77.8 mm) and 4.2" (106.7 mm) Y-dimensions also available. Contact customer service for more information.

• For actuators manufactured with neoprene diaphragms, refer to Section 9.

**NOTE:** Product information and specifications subject to change without notice. Refer to Section 11 for replacement parts.

Replacement Parts			
P/N Series		3523	3535
Model		TR2430LP3TS	TR3030LP3TS
1	Kit - NP Chamber (a)	9015215	9015218
2	Kit - Nuts & Bolts	9003001	9003001
3	Clamp Band Assembly	8216025	8216045
4	Diaphragm	8017424	8017830
5	Kit - Push-Rod Assembly (a) SAE	9064006	9064008
5a	Kit - Push-Rod Assembly (a) METRIC	9064027	9064028
6	Return Spring	8068012	8068012
7	Kit - Center Hole Shield	9065002	9065002
8	NP Chamber Assembly (a)	9015213	9015122
9	Kit - Nuts & Washers SAE	9002001	9002001
9a	Kit - Nuts & Washers METRIC	9002002	9002002
10	Hex Nut - Yoke SAE	8130004	8130004
10a	Hex Nut - Yoke METRIC	8130016	8130016
11	Kit - Weatherseal™ Plug	9019005	9019005
12	Kit - Release Bolt	9007003	9007003
13	Kit - Breather Tube	9081001	9081001
<b>OPTIONAL ITEMS - For additional replacement parts, refer to Section 11.</b>			
Yoke & Welded Yoke Assemblies		Refer to Replacement Parts Section 11	
Boot & Retainer		Refer to Replacement Parts Section 11	

Note: (a) To ensure correct stroke alert positioning, these kits must be used only on the designated MGM Brake units.



**Epoxy Coated Components**

The flange case and upper piston are epoxy coated for extra added protection, which, along with our patents pending "corrosion fighter" technology, make MGM "Severe Service" Chambers the best choice for severe operating environments: such as acids, salt, liquid corrosives and concrete.

*Includes composite guide with Corrosion Fighter Technology:*



NOTE: Product information and specifications subject to change without notice.



## Long Stroke Model

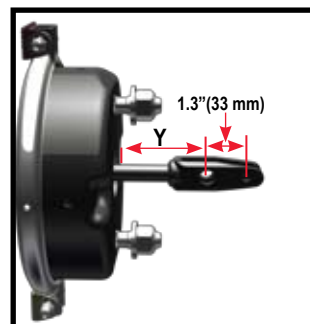
DOUBLE DIAPHRAGM - 3" (76.2 mm) LONG STROKE

Combination	Piggyback Plus Kit
<p>VMRS# 13-004-000</p>	N/A

### TR-LP3TSHD Model Features

- Tamper Resistant Design (U.S. Patent No. 5,067,391)
- Center Hole Diaphragm (U.S. Patent No. 5,507,217)
- Epoxy-Coated Head, Non-Pressure Chamber and Lower Push-Rod Assembly
- Center Hole Shield
- Square Port Bosses (Long Stroke Identification)
- Weatherseal™ Plug
- Heavy-Duty 8-Gauge Steel Non-Pressure Chamber (Type 3030 Models) - (9 gauge on all other sizes)
- Polymer Push-Rod Guides
- Heavy-Duty Nylon Reinforced Diaphragms
- Heavy-Duty Nylon Reinforced Neoprene Diaphragms (Optional)
- Stroke Alert
- Externally Stored Release Bolt
- 3 Inch (76.2 mm) Long Stroke
- Molded Nitrile Rubber Air Seal
- External Breather Tube
- Epoxy-Coated Piston, Return Spring, Center Case - Inside & Out
- **Heavy-Duty Power Spring 145 lb (65.8 kg) additional parking brake force @ 1.25 inches (31.8 mm) of stroke**
- **Composite Guide - Corrosion Fighter Technology (patent pending)**

P/N Series	3527	3534
Model	TR2430LP3TSHD	TR3030LP3TSHD
Size	2430	3030
Stroke	3.00" (76.2 mm)	3.00" (76.2 mm)
P/N Combination SAE	3527051	3534051
P/N Piggyback Plus Kit SAE	N/A	N/A
P/N Combination METRIC	3527049	3534049
Wt. Combination	19.5 lb (8.8 kg)	20.4 lb (9.3 kg)
Wt. Single	N/A	N/A
A	10.19" (258.8mm)	9.99" (253.7 mm)
B	7.81" (198.4 mm)	7.61" (193.3 mm)
C	7.38" (187.5 mm)	8.32" (211.3 mm)
D	8.21" (208.5 mm)	8.21" (208.5 mm)
E	4.75" (120.7 mm)	
F	5/8" - 11 UNC (M16 x 1.5 - 6g)	
G	5/8" - 18 UNF (M16 x 1.5 - 6g)	
Inlets	3/8" - 18 NPTF (M16 x 1.5 - 6H)	
X - Min. (in the caged position)	8.00" (203.2 mm)	



NOTE: Type 2430 and 3030 units equipped with welded-yoke and 2.25" (57.2 mm) Y-dimension are replaced by part number:

3527951 (TR2430LP3TSHD)  
3534951 (TR3030LP3TSHD)

NOTE: 3.0625" (77.8 mm) and 4.2" (106.7 mm) Y-dimensions also available. Contact customer service for more information.

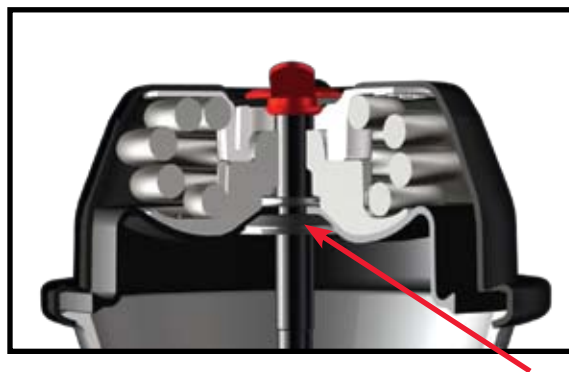
Refer to Section 11 for replacement parts.

• For actuators manufactured with neoprene diaphragms, refer to Section 9.

NOTE: Product information and specifications subject to change without notice.

Replacement Parts			
P/N Series		3527	3534
Model		TR2430LP3TSHD	TR3030LP3TSHD
1	Kit - NP Chamber (a)	9015215	9015218
2	Kit - Nuts & Bolts	9003001	9003001
3	Clamp Band Assembly	8216025	8216045
4	Diaphragm	8017424	8017830
5	Kit - Push-Rod Assembly (a) SAE	9064006	9064008
5a	Kit - Push-Rod Assembly (a) METRIC	9064027	9064028
6	Return Spring	8068012	8068012
7	Kit - Center Hole Shield	9065002	9065002
8	NP Chamber Assembly (a)	9015213	9015122
9	Kit - Nuts & Washers SAE	9002001	9002001
9a	Kit - Nuts & Washers METRIC	9002002	9002002
10	Hex Nut - Yoke SAE	8130004	8130004
10a	Hex Nut - Yoke METRIC	8130016	8130016
11	Kit - Weatherseal™ Plug	9019005	9019005
12	Kit - Release Bolt	9007003	9007003
13	Kit - Breather Tube	9081001	9081001
<b>OPTIONAL ITEMS - For additional replacement parts, refer to Section 11.</b>			
Yoke & Welded Yoke Assemblies		Refer to Replacement Parts Section 11	
Boot & Retainer		Refer to Replacement Parts Section 11	

NOTE: (a) To ensure correct stroke alert positioning, these kits must be used only on the designated MGM Brake units.



**Center Hole Diaphragm** (U.S. Patent #5,507,217)  
 Patented feature that aligns the piston, diaphragm, power spring and internal push-rod providing the following advantages: Maintains component alignment; reduces power spring stress; reduces coil clash; increases center-seal life and eliminates the effects of severe vibration.

NOTE: Product information and specifications subject to change without notice.





## Long Stroke Model

DOUBLE DIAPHRAGM - 3" (76.2 mm) LONG STROKE

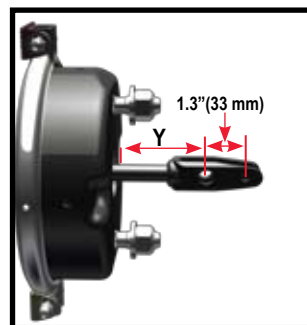
Combination	Piggyback Plus Kit
<p style="text-align: center;">VMRS# 13-004-000</p>	N/A

### TR-LP3TSHDW Model Features

- Tamper Resistant Design (U.S. Patent No. 5,067,391)
- Center Hole Diaphragm (U.S. Patent No. 5,507,217)
- Epoxy-Coated Head, Non-Pressure Chamber and Lower Push-Rod Assembly
- Center Hole Shield
- Square Port Bosses (Long Stroke Identification)
- Weatherseal™ Plug
- Heavy-Duty 8-Gauge Steel Non-Pressure Chamber (Type 3030 Models) - (9 gauge on all other sizes)
- Polymer Push-Rod Guides
- Heavy-Duty Nylon Reinforced Diaphragms
- Heavy-Duty Nylon Reinforced Neoprene Diaphragms (Optional)
- Stroke Alert
- Externally Stored Release Bolt
- 3 Inch (76.2 mm) Long Stroke
- Molded Nitrile Rubber Air Seal
- External Breather Tube
- Epoxy-Coated Piston, Return Spring, Center Case - Inside & Out
- Heavy-Duty Power Spring 145 lb (65.8 kg) additional parking brake force @ 1.25 inches (31.8 mm) of stroke
- **Weld Reinforced Non-Pressure Housing with Welded Bolts**
- **Composite Guide - Corrosion Fighter Technology (patent pending)**

P/N Series	3545
Model	TR3030LP3TSHDW
Size	3030
Stroke	3.00" (76.2 mm)
P/N Combination SAE	3545051
P/N Piggyback Plus Kit SAE	N/A
P/N Combination METRIC	3545049
Wt. Combination	20.4 lb (9.3 kg)
Wt. Single	N/A
A	9.99" (253.7 mm)
B	7.61" (193.3 mm)
C	8.32" (211.3 mm)
D	8.21" (208.5 mm)
E	4.75" (120.7 mm)
F	5/8" - 11 UNC (M16 x 1.5 - 6g)
G	5/8" - 18 UNF (M16 x 1.5 - 6g)
Inlets	3/8" - 18 NPTF (M16 x 1.5 - 6H)
X - Min. (in the caged position)	8.00" (203.2 mm)

• For actuators manufactured with neoprene diaphragms, refer to Section 9.



**NOTE:** Type 3030 units equipped with welded-yoke and 2.25" (57.2 mm) Y-dimension are replaced by part number:

**3545951 (TR3030LP3TSHDW)**

**NOTE:** 3.0625" (77.8 mm) and 4.2" (106.7 mm) Y-dimensions also available. Contact customer service for more information.

Refer to Section 11 for replacement parts.

NOTE: Product information and specifications subject to change without notice.

Replacement Parts		
P/N Series	3545	
Model	TR3030LP3TSHDW	
1	Kit - NP Chamber (a)	9015905
2	Kit - Nuts & Bolts	9003001
3	Clamp Band Assembly	8216045
4	Diaphragm	8017830
5	Kit - Push-Rod Assembly (a) SAE	9064008
5a	Kit - Push-Rod Assembly (a) METRIC	9064028
6	Return Spring	8068012
7	Kit - Center Hole Shield	9065002
8	NP Chamber Assembly (a)	9015259
9	Kit - Nuts & Washers SAE	9002001
9a	Kit - Nuts & Washers METRIC	9002002
10	Hex Nut - Yoke SAE	8130004
10a	Hex Nut - Yoke METRIC	8130016
11	Kit - Weatherseal™ Plug	9019005
12	Kit - Release Bolt	9007003
13	Kit - Breather Tube	9081001
<b>OPTIONAL ITEMS - For additional replacement parts, refer to Section 11.</b>		
Yoke & Welded Yoke Assemblies	Refer to Replacement Parts Section 11	
Boot & Retainer	Refer to Replacement Parts Section 11	

NOTE: (a) To ensure correct stroke alert positioning, these kits must be used only on the designated MGM Brake units.



**Weld Reinforced Non-Pressure Housing**

Heavy-gauge formed steel flat-bottom design, epoxy-coated for total corrosion protection and "weld-reinforced" mounting studs for added support in extreme vibration applications. (bolt actually epoxy coated - depicted here lighter for visual purposes)

- 8-Gauge Standard on Type 3030 & 3036 Aftermarket Models
- 6 Gauge Standard on Type 36 Models

NOTE: Product information and specifications subject to change without notice.