



**MOTOR WHEEL  
AUTOMATIC BRAKE ADJUSTER**

**AUTO-CHECK® STROKE INDICATOR OPTION**



For more information on Automatic Brake Adjusters, call 855.743.3733 or visit [www.motorwheel-intl.com](http://www.motorwheel-intl.com)

# MOTOR WHEEL AUTOMATIC BRAKE ADJUSTER

*Help reduce time spent under vehicles and increase performance with Motor Wheel Automatic Brake Adjusters (ABA). Designed with efficiency and convenience in mind, they maintain proper shoe-to-drum clearance in demanding braking modes and can easily be installed in the field or on the shop floor.*

Motor Wheel Automatic Brake Adjusters support efforts in maintaining vehicles up to code and in peak operating conditions. Our brake adjusters have been designed with a variety of proprietary features, including:

- **AUTO-CHECK®:** This advanced, optional feature allows one to check air chamber stroke without crawling under the vehicle.
- **Cam Guard:** This lubrication system protects against seizing and corrosion between the S-Cam and the ABA.
- **Installation Guide:** This handy guide helps ensure correct and precise ABA installation.
- **Clearance Sensing Adjuster System:** Motor Wheel features the industry's premier reduced-wear clutch.
- **High-Strength Gearset:** Provides the ABA with durable operation in demanding conditions.
- **Blue Powder Coat:** Protects the ABA from harsh winter conditions.
- **Sealing:** The gear is sealed with a proprietary system that protects it from environmental contamination.
- **Pushrod Cutoff Tool:** For accurate measurements.

## INSTALLATION

The Motor Wheel Automatic Brake Adjuster comes with our structurally rigid installation guide. This handy and straightforward guide helps ensure that even first-time users can install the ABA correctly time after time.

## AUTO-CHECK

Our AUTO-CHECK option is designed to provide a method of checking the air chamber stroke without going under the vehicle.

- Installed on the ABA facing the center of the vehicle to easily see if brake stroke is within an acceptable range.
- Bright red pointer easily indicates set-up position, indicates working stroke and shows if brake stroke is past acceptable limit without crawling under the vehicle.
- Offers an extra quality-control check.



Installation Guide



Detail of AUTO-CHECK® Optional Feature

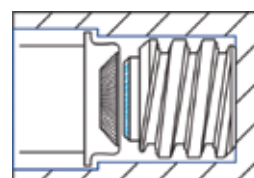


Figure A shows components disengaged to reduce wear (over 90 percent of the time).

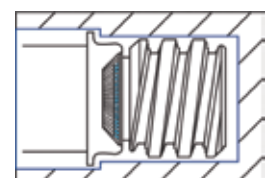


Figure B shows components engaged during brake adjustment (less than 10 percent of the time).

## LONG-LIFE ADJUSTMENT SYSTEM

Heavy-duty internal components with a clearance-sensing clutch enable the brake system to adjust for hot braking conditions. This Motor Wheel design protects the adjusting components during normal brake applications when brake adjustment is not required. In general, up to 85 to 90 percent of all brake applications do not require adjustment, so why subject the adjusting components to continuous wear?

The Motor Wheel Adjustment System operates like the windshield wipers on a car — it is utilized only when needed, not continuously during vehicle operation.

- A typical commercial vehicle can make up to two million brake applications in five years.
- This same vehicle can be expected to require the ABA to adjust the brake up to 10 to 15 percent of the time.

# MOTOR WHEEL COMPETITIVE QUICK CROSSOVER

To convert from Motor Wheel non AUTO-CHECK® to AUTO-CHECK part numbers:

- Change the first number from a (2) to (3) for chamber type 16, 20, 24 STD – 1.75 limit.
- Change the first number from a (2) to (4) for chamber type 16, 20, 24 LS, 30 STD – 2.00 limit and for chamber type 24 LLS, 30 LS – 2.5 limit.

BENDIX	NON AUTO-CHECK	AUTO-CHECK
065163	MK243005	MK443005
065164	MK242005	MK342005
065167	MK251005	MK451005
065169	MK213005	MK413005
065170	MK211005	MK411005
065172	MK211065	MK411065
065174	MK221005	MK421005
065175	MK221065	MK421065
065176	MK221065	MK421065
065177	MK231065	MK431065
065178	MK231005	MK431005
065179	MK231065	MK431065
065182	MK231005	MK431005
065221	MK222005	MK322005
065244	MK244005	MK344005
065245	MK224005	MK324005
065247	MK221005	MK421005
065274	MK242005	MK442005
065276	MK242005	MK442005
065306	MK254005	MK454005
065344	MK211065	MK411065
065335	MK252005	MK352005
065403	MK251005	MK451005
065488	MK213005	MK413005
065700	MK211005	MK411005
801351	MK241005	MK441005
801353	MK212005	MK312005
801355	MK222005	MK322005
801356	MK221065	MK421065
801358	MK213005	MK413005

GUNITE (CONT.)	NON AUTO-CHECK	AUTO-CHECK
AS1141	MK221065	MK421065
AS1142	MK221015	N/A
AS1143	MK231005	MK431005
AS1144	MK231065	MK431065
AS1146	MK211005	MK411005
AS1147	MK211065	MK411065
AS1148	MK211015	N/A
AS1149	MK221005	MK421005
AS1150	MK221065	MK421065
AS1151	MK221015	N/A
AS1152	MK244005	MK344005
AS1153	MK243005	MK343005
AS1154	MK254005	MK354005
AS1155	MK253005	MK353005
AS1156	MK213005	MK413005
AS1157	MK223005	MK423005
AS1159	MK231005	MK431005
AS1160	MK231065	MK431065
AS1162	MK211005	MK411005
AS1163	MK211065	MK411065
AS1164	MK211015	N/A
AS1165	MK221005	MK421005
AS1166	MK221065	MK421065
AS1167	MK221015	N/A

MERITOR (CONT.)	NON-AUTO-CHECK	AUTO-CHECK
R801073	MK221005	MK421005
R801074	MK221065	MK421065
R801075	MK221065	MK421065
R801079	MK221005	MK421005
R801080	MK221005	MK421005
R801100	MK231065	MK431065
R801101	MK231005	MK431005
R801102	MK231065	MK431065
R802032	MK244005	MK344005
R802033	MK244005	MK344005
R802060	MK252005	MK352005
R802061	MK252005	MK352005
R802070	MK251005	MK451005
R802071	MK251005	MK451005
R802446	MK221005	MK421005
R802447	MK221005	MK421005
R806005	MK221525 E	E
R806006	MK221535 E	E
R806013	MK221065	MK421065
R806014	MK231065	MK431065
R806015	MK211065	MK421065
R806019	MK221005	MK421005
R806020	MK231005	MK431005
R806021	MK211005	MK411005
R806022	MK211025 B	MK411005 D
R806023	MK211035 B	MK411065 C
R806024	MK221035 B	MK421065 C
R806026	MK221025 B	MK421005 D
R806504	MK253005	MK453005
R806505	MK253005	MK453005

Use clevis kit MC8410KTS for 1/2" push rods.  
 ALL Gunitite AS1000 numbers are without clevises.  
 IE: AS1040 is a AS1140 with clevis.

EUCLID	NON AUTO-CHECK	AUTO-CHECK
E-6987A	MK241005	MK441005
E-6988A	MK243005	MK443005
E-6987A	MK241005	MK441005
E-6988A	MK243005	MK443005
E-6989A	MK251005	MK451005
E-6990A	MK253005	MK453005
E-6991A	MK211035 B	MK411065 C
E-6992A	MK211025 B	MK411005 D
E-6993A	MK221035 B	MK421065 C
E-6994A	MK221025 B	MK421005 D
E-6995A	MK231035 B	MK431065 C
E-6996A	MK231025 B	MK431005 D
E-10779A	MK221005	MK421005 A
E-10780A	MK211005	MK411005 A
E-10781A	MK221065	MK421065 A
E-10782A	MK211065	MK411065 A
E-10783A	MK231065	MK431065 A
E-10784A	MK241005	MK341005 A
E-10785A	MK221005	MK421005 A
E-10786A	MK211005	MK411005 A
E-10787A	MK231065	MK431065 A
E-10788A	MK221065	MK421065 A
E-10789A	MK211065	MK411065 A
E-10949A	MK221535 E	E
E-10950A	MK211535 E	E
E-11872	MK241015	N/A
E-11873	MK221015	N/A
E-11875	MK231015	N/A
E-11877	MK251005	MK351005 A
E-11879	MK252005	MK352005 A
E-11880	MK242005	MK342005 A

HALDEX	NON AUTO-CHECK	AUTO-CHECK
40010002	MK243005	MK443005
40010003	MK243005	MK443005
40010005	MK211005	MK411005
40010006	MK213005	MK413005
40010007	MK213005	MK413005
40010008	MK221005	MK421005
40010013	MK241005	MK441005
40010048	MK223005	MK323005
40010049	MK223005	MK323005
40010070	MK221005	MK421005
40010071	MK211005	MK411005
40010072	MK241005	MK441005
40010081	MK221005	MK421005
40010140	MK221035 B	MK421065 C
40010141	MK221025 B	MK421005 D
40010142	MK211035 B	MK411065 C
40010143	MK221025 B	MK421005 D
40010144	MK221065	MK421065
40010145	MK211065	MK411065
40010155	MK211005	MK411005
40010211	MK221005	MK421005
40010212	MK221065	MK421065
40010213	MK231005	MK431005
40010214	MK231065	MK431065
40010215	MK211005	MK411005
40010216	MK211065	MK411065
40010302	MK211535 E	E
40010304	MK221525 E	E

MIDLAND	NON AUTO-CHECK	AUTO-CHECK
CS52315	MK211035 B	MK411065 C
CS52316	MK211025 B	MK411005 D
CS52317	MK211045	N/A
CS52320	MK221025 B	MK421005 D
CS52321	MK221035 B	MK421065 C
CS52322	MK221045	N/A
CS52325	MK231025 B	MK431005 D
CS52326	MK231065	MK431065
CS52330	MK241025 B	MK441005 D
CS52331	MK243005	MK443005
CS52332	MK241035 B	MK441065 C
CS52335	MK251025 B	MK451005 D
CS52336	MK253005	MK453005
CS52337	MK251035 B	MK451065 C
CS53342	MK211535 E	E
CS52343	MK221535 E	E
CS52344	MK211045	N/A
CS52345	MK221045	N/A
CS52346	MK211005	MK411005 A
CS52347	MK221005	MK421065 A
CS52348	MK211065	MK411065 A
CS52349	MK221065	MK421065 A
CS52350	MK231065	MK431065 A
CS52351	MK211525 E	E
CS52352	MK221525 E	E
CS52353	MK211035 B	MK411065 C
CS52354	MK211025 B	MK411005 D
CS52355	MK221035 B	MK421065 C
CS52356	MK221025 B	MK421005 D
CS52357	MK231005	MK431005 A
CS52358	MK241005	MK341005 A
CS52359	MK251005	MK351005 A
CS52360	MK242005	MK342005 A
CS52361	MK252005	MK352005 A
CS52362	MK211005	MK411005 A
CS52363	MK211065	MK411065 A
CS52364	MK221005	MK421005 A
CS52365	MK221065	MK421065 A
CS52366	MK231065	MK431065 A

GUNITE	NON AUTO-CHECK	AUTO-CHECK
AS1132	MK211005 F	MK411005 F
AS1133	MK211065 F	MK411065 F
AS1134	MK211015	N/A
AS1136	MK241005 F	MK441005 F
AS1138	MK251005 F	MK451005 F
AS1140	MK221005 F	MK421005 F

MERITOR	NON AUTO-CHECK	AUTO-CHECK
R801001	MK242005	MK342005
R801002	MK252005	MK352005
R801003	MK251005	MK451005
R801004	MK241005	MK341005
R801040	MK211065	MK421065
R801041	MK211005	MK411005
R801042	MK211065	MK411065
R801043	MK211005	MK411005
R801044	MK211065	MK421065
R801070	MK222005	MK422005
R801071	MK221065	MK421065
R801072	MK221005	MK421005

- A AUTO-CHECK part numbers exact crossover
- B Double drilled
- C 6" arm length only
- D 5.5" arm length only
- E No AUTO-CHECK 12-1/4" brakes
- F For 5/8" push rod applications

# MOTOR WHEEL PART NUMBERS

Unlike other manufacturers, determining what part is needed can be done by gathering the following information.

## (MK) ALL AFTERMARKET PART NUMBERS

### (A) AUTO-CHECK® STROKE INDICATOR

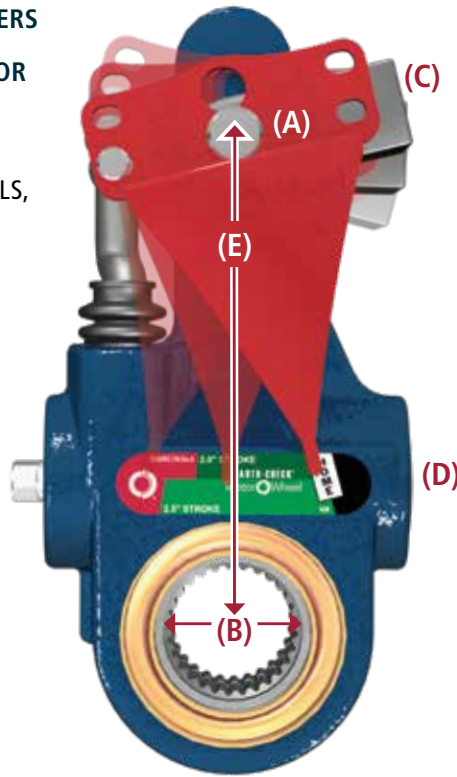
- (2) No "AUTO-CHECK" Indicator
- (3) T-16, 20, 24 Std. Stroke Chamber
- (4) T-30 Std. Stroke or T-16 LS, 20 LS Chamber, 24 LS Chamber and T-24 LLS, 30 Long Stroke Chamber

### (B) SPLINE (Diameter – Splines)

- (1) 1-1/2" – 10
- (2) 1-1/2" – 28
- (3) 1-5/8" – 37
- (4) 1-1/4" – 10
- (5) 1-1/4" – 24

### (C) CLEVIS OPTION

- (0) No Clevis
- (1) 5/8" – 18 Straight
- (2) 1/2" – 20 Straight
- (3) 5/8" – 18 Offset
- (4) 1/2" – 20 Offset
- (7) 5/8" – 18 Straight Extended
- (8) 5/8" – 18 Short



### (D) BRAKE SIZE/TYPE

- (0) Std S-Cam Brake
- (1) Welded Clevis
- (5) 12-1/4" S-Cam Brake Curved Arm

### (E) ARM LENGTH

- (0) 5.5"
- (1) 6.5"
- (2) 5.5", 6.5"
- (3) 5", 6"
- (4) 5", 6", 7"
- (6) 6"

### EXAMPLE

MK	(A)	(B)	(C)	(D)	(E)	S
MK	4	2	1	0	6	S

### In This Example:

- (A) Would be a STD Type 30 AUTO-CHECK
- (B) Would be a 1-1/2" – 28 Spline
- (C) Would be a 5/8" – 18 Straight Clevis
- (D) Would be a Standard S-Cam Brake
- (E) Would be a 6" Arm Length

COMPONENT PART NO.	CLEVIS OPTION	COMPONENT DESCRIPTION
MC8056KTS	-	PIN KIT FOR ABA
MC8420KTS	1	CLEVIS 5/8" — 18 STD W/ PIN KIT
MC8410KTS	2	CLEVIS 1/2" — 20 STD W/ PIN KIT
MC8425KTS	3	CLEVIS 5/8" — 18 OFFSET W/ PIN KIT
MC8415KTS	4	CLEVIS 1/2" — 20 OFFSET W/ PIN KIT
MC8480KTS	7	CLEVIS 5/8" — 18 EXT W/ PIN KIT
MC8485KTS	8	SHORT CLEVIS 5/8" — 18 W/ PIN KIT
MC8500S	-	POINTER FOR ABA W/AUTO-CHECK
MC8530S	-	PUSHROD CUTOFF TOOL

COMPONENT PART NO.	CLEVIS OPTION	COMPONENT DESCRIPTION FOR DISCONTINUED YELLOW POINTER ONLY*
MC8056KTAS	-	PIN KIT FOR ABA
MC8420KTAS	1	CLEVIS 5/8" — 18 STD W/ PIN KIT
MC8410KTAS	2	CLEVIS 1/2" — 20 STD W/ PIN KIT
MC8425KTAS	3	CLEVIS 5/8" — 18 OFFSET W/ PIN KIT
MC8415KTAS	4	CLEVIS 1/2" — 20 OFFSET W/ PIN KIT
MC8480KTAS	7	CLEVIS 5/8" — 18 EXT W/ PIN KIT
MC8485KTAS	8	SHORT CLEVIS 5/8" — 18 W/ PIN KIT

\* These clevises are used to service the older yellow pointers that needed longer pins for the thicker pointer.

## WARRANTY

The below table summarizes the applicable warranty periods for Motor Wheel Automatic Brake Adjusters. Contact your local Motor Wheel representative for complete warranty terms, conditions and limitations.

Warranty Period (Whichever occurs first)	6 years / 1 million miles	2 years / 200,000 miles	1 year / 100,000 miles
ABAs used for:	On-highway applications (tractor and trailer)	Off-highway applications (e.g. construction vehicles)	Vocation specific applications (e.g. school buses, city deliveries)

Actual product performance may vary depending upon vehicle configuration, operation, service and other factors. All applications must comply with applicable specifications from Motor Wheel and the respective vehicle manufacturer. Contact Motor Wheel for additional details regarding specifications, applications, capacities, and operation, service and maintenance instructions.

Contact Motor Wheel at **855.743.3733** for additional information.



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