

CREWSON®

AUTOMATIC BRAKE ADJUSTER



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AUTO-CHECK® STROKE INDICATOR OPTION





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Help reduce time spent under vehicles and increase performance with Crewson® 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.

Crewson 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: Crewson 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 Crewson 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 yellow 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

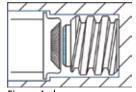


Figure A shows components disengaged to reduce wear (over 90% of the time).

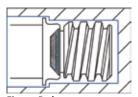


Figure B shows components engaged during brake adjustment (less than 10% of the time).

LONG-LIFE ADJUSTMENT SYSTEM

Heavy-duty internal components with a clearance-sensing clutch enable the brake system to adjust for hot braking conditions. This Crewson 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 Crewson 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.



CREWSON® COMPETITIVE QUICK CROSSOVER

To convert from Crewson 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	MK24300S	MK44300S
065164	MK24200S	MK34200S
065167	MK25100S	MK45100S
065169	MK21300S	MK41300S
065170	MK21100S	MK41100S
065172	MK21106S	MK41106S
065174	MK22100S	MK42100S
065175	MK22106S	MK42106S
065176	MK22106S	MK42106S
065177	MK23106S	MK43106S
065178	MK23100S	MK43100S
065179	MK23106S	MK43106S
065182	MK23100S	MK43100S
065221	MK22200S	MK32200S
065244	MK24400S	MK34400S
065245	MK22400S	MK32400S
065247	MK22100S	MK42100S
065274	MK24200S	MK44200S
065276	MK22400S	MK42400S
065306	MK25400S	MK45400S
065344	MK21106S	MK41106S
065335	MK25200S	MK35200S
065403	MK25100S	MK45100S
065488	MK21300S	MK41300S
065700	MK21100S	MK41100S
801351	MK24100S	MK44100S
801353	MK21200S	MK31200S
801355	MK22200S	MK32200S
801356	MK22106S	MK42106S
801358	MK21300S	MK41300S

001330	IVIN 22 1003	IVIN42 1003	
801358	MK21300S	MK41300S	
EUCLID	NON AUTO-CHECK	AUTO-CHECK	
E-6987A	MK24100S	MK44100S	
E-6988A	MK24300S	MK44300S	
E-6987A	MK24100S	MK44100S	
E-6988A	MK24300S	MK44300S	
E-6989A	MK25100S	MK45100S	
E-6990A	MK25300S	MK45300S	
E-6991A	MK21103S B	MK41106S C	
E-6992A	MK21102S B	MK41100S D	
E-6993A	MK22103S B	MK42106S C	
E-6994A	MK22102S B	MK42100S D	
E-6995A	MK23103S B	MK43106S C	
E-6996A	MK23102S B	MK43100S D	
E-10779A	MK22100S	MK42100S A	
E-10780A	MK21100S	MK41100S A	
E-10781A	MK22106S	MK42106S A	
E-10782A	MK21106S	MK41106S A	
E-10783A	MK23106S	MK43106S A	
E-10784A	MK24100S	MK34100S A	
E-10785A	MK22100S	MK42100S A	
E-10786A	MK21100S	MK41100S A	
E-10787A	MK23106S	MK43106S A	
E-10788A	MK22106S	MK42106S A	
E-10789A	MK21106S	MK41106S A	
E-10949A	MK22153S E	E	
E-10950A	MK21153S E	E	
E-11872	MK24101S	MK44101S A	
E-11873	MK22101S	MK42101S A	
E-11875	MK23101S	MK43101S A	
E-11877	MK25100S	MK35100S A	
E-11879	MK25200S	MK35200S A	
E-11880	MK24200S	MK34200S A	

GUNITE	NON AUTO-CHECK	AUTO-CHECK
AS1132	MK21100S F	MK41100S F
AS1133	MK21106S	MK41106S
AS1134	MK21101S	MK41101S
AS1136	MK24100S F	MK44100S F
AS1138	MK25100S F	MK45100S F
AS1140	MK22100S F	MK42100S F

GUNITE (CONT.)	NON AUTO-CHECK	AUTO-CHECK
AS1141	MK22106S	MK42106S
AS1142	MK22101S	MK42101S
AS1143	MK23100S	MK43100S
AS1144	MK23106S	MK43106S
AS1146	MK21100S	MK41100S
AS1147	MK21106S	MK41106S
AS1148	MK21101S	MK41101S
AS1149	MK22100S	MK42100S
AS1150	MK22106S	MK42106S
AS1151	MK22101S	MK42101S
AS1152	MK24400S	MK34400S
AS1153	MK24300S	MK44300S
AS1154	MK25400S	MK35400S
AS1155	MK25300S	MK45300S
AS1156	MK21300S	MK41300S
AS1157	MK22300S	MK42300S
AS1159	MK23100S	MK43100S
AS1160	MK23106S	MK43106S
AS1162	MK21100S	MK41100S
AS1163	MK21106S	MK41106S
AS1164	MK21101S	MK41101S
AS1165	MK22100S	MK42100S
AS1166	MK22106S	MK42106S
AS1167	MK22101S	MK42101S

Use clevis kit MC8410KTS for 1/2" push rods.

ALL Gunite AS1000 numbers are without clevises.

IE: AS1040 is a AS1140 with clevis.

HALDEX	NON AUTO-CHECK	AUTO-CHECK
40010002	MK24300S	MK44300S
40010003	MK24300S	MK44300S
40010005	MK21100S	MK41100S
40010006	MK21300S	MK41300S
40010007	MK21300S	MK41300S
40010008	MK22100S	MK42100S
40010013	MK24100S	MK44100S
40010048	MK22300S	MK32300S
40010049	MK22300S	MK32300S
40010070	MK22100S	MK42100S
40010071	MK21100S	MK41100S
40010072	MK24100S	MK44100S
40010081	MK22100S	MK42100S
40010140	MK22103S B	MK42106S C
40010141	MK22102S B	MK42100S D
40010142	MK21103S B	MK41106S C
40010143	MK22102S B	MK42100S D
40010144	MK22106S	MK42106S
40010145	MK21106S	MK41106S
40010155	MK21100S	MK41100S
40010211	MK22100S	MK42100S
40010212	MK22106S	MK42106S
40010213	MK23100S	MK43100S
40010214	MK23106S	MK43106S
40010215	MK21100S	MK41100S
40010216	MK21106S	MK41106S
40010302	MK21153S E	E
40010304	MK22152S E	E

MERITOR	NON AUTO-CHECK	AUTO-CHECK
R801001	MK24200S	MK34200S
R801002	MK25200S	MK34200S
R801003	MK25100S	MK45100S
R801004	MK24100S	MK44100S
R801040	MK21106S	MK42106S
R801041	MK21100S	MK41100S
R801042	MK21106S	MK41106S
R801043	MK21100S	MK41100S
R801044	MK21106S	MK42106S
R801070	MK22200S	MK42200S
R801071	MK22106S	MK42106S
R801072	MK22100S	MK42100S

	NON-AUTO-CHECK	
R801073	MK22100S	MK42100S
R801074	MK22106S	MK42106S
R801075	MK22106S	MK42106S
R801079	MK22100S	MK42100S
R801080	MK22100S	MK42100S
R801100	MK23106S	MK43106S
R801101	MK23100S	MK43100S
R801102	MK23106S	MK43106S
R802032	MK24400S	MK34400S
R802033	MK24400S	MK34400S
R802060	MK25200S	MK35200S
R802061	MK25200S	MK35200S
R802070	MK25100S	MK45100S
R802071	MK25100S	MK45100S
R802446	MK22100S	MK42100S
R802447	MK22100S	MK42100S
R806005	MK22152S E	E
R806006	MK22153S E	E
R806013	MK22106S	MK42106S
R806014	MK23106S	MK43106S
R806015	MK21106S	MK42106S
R806019	MK22100S	MK42100S
R806020	MK23100S	MK43100S
R806021	MK21100S	MK41100S
R806022	MK21102S B	MK41100S D
R806023	MK21103S B	MK41106S C
R806024	MK22103S B	MK42106S C
R806026	MK22102S B	MK42100S D
R806504	MK25300S	MK45300S
R806505	MK25300S	MK45300S

MIDLAND	NON AUTO-CHECK	AUTO-CHECK
CS52315	MK21103S B	MK411065 C
CS52316	MK211025 B	MK411005 D
CS52317	MK21104S	N/A
CS52317	MK221025 B	MK42100S D
CS52321	MK221025 B	MK421065 C
CS52321	MK221033 B	N/A
CS52325	MK231025 B	MK43100S D
CS52326	MK23106S	MK43106S
CS52320	MK24102S B	MK44100S D
CS52331	MK24300S	MK44300S
CS52337	MK24103S B	MK441065 C
CS52335	MK25102S B	MK45100S D
CS52336	MK25300S	MK45300S
CS52337	MK25103S B	MK45106S C
CS53342	MK21153S E	E
CS52343	MK221535 E	Ē
CS52344	MK21104S	N/A
CS52345	MK22104S	N/A
CS52346	MK21100S	MK41100S A
CS52347	MK22100S	MK42100S A
CS52348	MK21106S	MK41106S A
CS52349	MK22106S	MK42106S A
CS52350	MK23106S	MK43106S A
CS52351	MK21152S E	E
CS52352	MK22152S E	E
CS52353	MK21103S B	MK41106S C
CS52354	MK21102S B	MK41100S D
CS52355	MK22103S B	MK42106S C
CS52356	MK22102S B	MK42100S D
CS52357	MK23100S	MK43100S A
CS52358	MK24100S	MK34100S A
CS52359	MK25100S	MK35100S A
CS52360	MK24200S	MK34200S A
CS52361	MK25200S	MK35200S A
CS52362	MK21100S	MK41100S A
CS52363	MK21106S	MK41106S A
CS52364	MK22100S	MK42100S A
CS52365	MK22106S	MK42106S A
CS52366	MK23106S	MK43106S A

- 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



CREWSON® 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

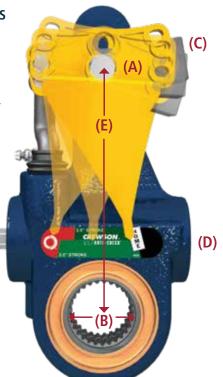
- (2) No "AUTO-CHECK" Indicator
- T-16, 20, 24 Std. Stroke Chamber
- (4) T-30 Std. Stroke or T-16 LS, 20 LS Chamber, 24 LS Chamber and T-24 LLS, 30 Long Stroke Chamber

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

(E) ARM LENGTH

- (0) 5.5"
- (1) 6.5'

- (1) 0.5 (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	
MC8056KTAS	-	PIN KIT FOR ABA (AUTO-CHECK)	
MC8056KTS	-	PIN KIT FOR ABA (NON AUTO-CHECK)	
MC8500S	-	POINTER FOR ABA W/AUTO-CHECK	
MC8410KTAS	2	CLEVIS 1/2" — 20 STD W/ PIN KIT (AUTO-CHECK)	
MC8410KTS	2	CLEVIS 1/2" — 20 STD W/ PIN KIT (NON AUTO-CHECK)	
MC8412KTAS	-	SHORT CLEVIS 1/2" — 20 W/ PIN KIT (AUTO-CHECK)	
MC8412KTS	-	SHORT CLEVIS 1/2" — 20 W/ PIN KIT (NON AUTO-CHECK)	
MC8415KTAS	4	CLEVIS 1/2" — 20 OFFSET W/ PIN KIT (AUTO-CHECK)	
MC8415KTS	4	CLEVIS 1/2" — 20 OFFSET W/ PIN KIT (NON AUTO-CHECK)	

COMPONENT PART NO.	OPTION	COMPONENT DESCRIPTION
MC8420KTAS	1	CLEVIS 5/8" — 18 STD W/ PIN KIT (AUTO-CHECK)
MC8420KTS	1	CLEVIS 5/8" — 18 STD W/ PIN KIT (NON AUTO-CHECK)
MC8485KTAS	8	SHORT CLEVIS 5/8" — 18 W/ PIN KIT (AUTO-CHECK)
MC8485KTS	8	SHORT CLEVIS 5/8" — 18 W/ PIN KIT (NON AUTO-CHECK)
MC8425KTAS	3	CLEVIS 5/8" — 18 OFFSET W/ PIN KIT (AUTO-CHECK)
MC8425KTS	3	CLEVIS 5/8" — 18 OFFSET W/ PIN KIT (NON AUTO-CHECK)
MC8480KTAS	7	CLEVIS 5/8" — 18 EXT W/ PIN KIT (AUTO-CHECK)
MC8480KTS	7	CLEVIS 5/8" — 18 EXT W/ PIN KIT (NON AUTO-CHECK)
MC8530S	-	PUSHROD CUTOFF TOOL

WARRANTY

The below table summarizes the applicable warranty periods for Crewson 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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