



Half Round G2

OPERATING AND MAINTENANCE
TROUBLESHOOTING GUIDE



Get the app!





In purchasing a KWM Gutterman Inc. gutter-forming machine, you are welcomed to the growing group of people who recognize quality and precision. KWM is proud of our modern facility and highly trained personnel that allow KWM Gutterman Inc. to manufacture the very best roll-forming equipment.

The operating and maintenance guide explains the features of your new KWM Gutterman Inc. gutter machine. Please read it and follow the instructions carefully.

As the manufacturer of your roll-forming machine, KWM wants you to be completely satisfied with your purchase. The maintenance and troubleshooting guide is designed to help answer most questions or concerns on your roll-forming machine. A copy of our warranty is included in our maintenance guide.

“Manufacturing the Best, Built to Stand the Test”

Please visit us at www.kwmgutterman.com for product information.

Our family business will only succeed by making you, our customer, our top priority! We are only a phone call or a click away.

1- 888-729-4290
sales@kwmgutterman.com

Thank you for your purchase!

At Your Service, We Remain.

Kenneth W. Minor Sr.
Keith W. Minor Sr.

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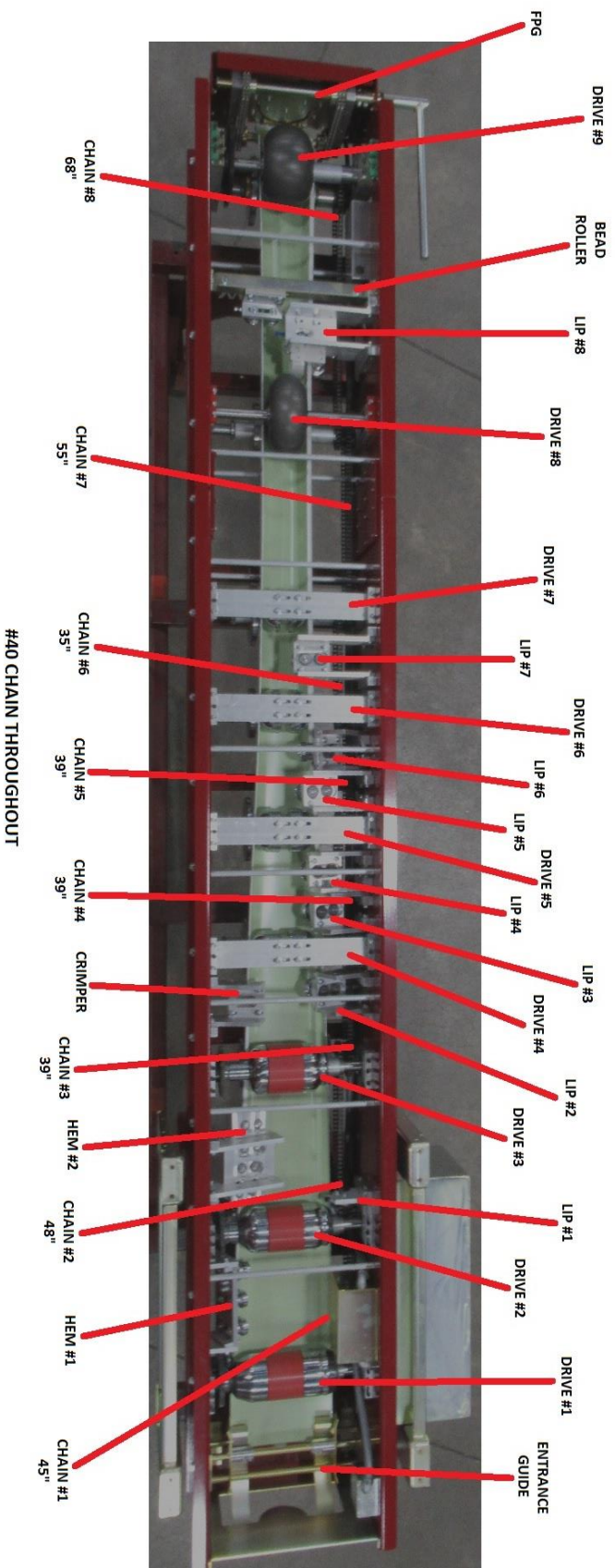
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WARNING

**-TO PREVENT DAMAGE TO
ROLLERS, RUN MATERIAL
THROUGH ALL STATIONS BEFORE
TRANSPORT**

**-USE A 10,000 WATT GENERATOR
MINIMUM**

MACHINE OVERVIEW



SECTION 1

HALF ROUND GUTTER MACHINE SPECIFICATIONS

POWER:

- 1.5 HP, FAN COOLED (T.E.F.C.) MOTOR
- SINGLE PHASE
- 110V
- 18 AMP

DIMENSIONS:

- LENGTH 162" (411.50 cm)
- HEIGHT 51" (129.5 cm)
- WIDTH 34.5" (87.6 cm)

WEIGHT:

- APPROX. 2000 LBS. (907.2 kg)

DRIVE:

- TOP AND BOTTOM STEEL/ALUMINUM/POLYURETHANE ROLLERS
- VIA CHAINS & SPROCKETS

SHEAR

- FRONT PULL GUILLOTINE STYLE SHEAR

SPEED:

- APPROXIMATELY 35' PER MINUTE

CONTROLS:

- **ENTRANCE END**
 - o EMERGENCY STOP
 - o JOG PUSH BUTTON
- **EXIT END**
 - o STOP BUTTON
 - o FORWARD & REVERSE SWITCH
 - o RUN & JOG SWITCH
 - o START BUTTON

RECOMMEND MATERIALS:

- PAINTED STEEL (MAX: 24 GAUGE)
- ALUMINUM STEEL (MAX: 24 GAUGE)
- TERNECOAT STEEL (MAX: 24 GAUGE)
- ALUMINUM (MAX: .032")
- COPPER (MAX: 16/20 OZ. 3/4" HARD)

WARNING: NO RAW OR UNCOATED MATERIAL
CALL MANUFACTURER FOR PAINT GRIP & RAW
GALVANIZED

SECTION 2

SAFETY AND GENERAL MAINTENANCE

1. Read the entire manual prior to operation of this machine.
2. Always keep covers and lids on during transportation, operation and storage. The covers are for the operator's safety. Not only will this protect the operator against injury, the covers protect the machine from outside elements.
3. Read all warning labels on machine.
4. Disconnect the machine from power source prior to cleaning, or performing any maintenance.
5. Perform a daily inspection for debris, loose nuts, and or bolts. With a clean machine you can expect longer life from your machine and a better-finished product.
6. Oil guillotine blade daily.
7. OUTSIDE STORAGE. If machine must be stored outside on an open trailer, tarp machine loosely providing good ventilation to prevent condensation.
8. BE SURE the operator is trained in the operating procedures of this equipment, and all local and national safety codes concerning the operation and the lifting of coils.
9. Use a 10,000 watt generator minimum
10. **TO PREVENT DAMAGE TO ROLLERS, RUN MATERIAL THROUGH ALL STATIONS BEFORE TRANSPORT**

MOUNTING MACHINE

Mounting machine in truck and or trailer.

REMOVE MACHINE FROM WOODEN SHIPPING SKID

1. When choosing a vehicle or trailer for your machine, consider the gross machine weight including coil.
2. Check mounting surface for its integrity and make any repairs necessary prior to installation.
3. Bolt machine to the bed of the vehicle using 3/8" dia. bolts grade 5 four places. **DO NOT DRAW MACHINE DOWN TO AN UN-FLAT SURFACE.** Shim as needed to insure four place mounting.

MACHINE ORIENTATION

Machine orientation is as follows: (For communication purposes in the manual.)

A. Entrance

The entrance is where the forming process begins, where the material is fed.

B. Exit

The exit is where the forming process is complete and the finished gutter exits the machine.

C. Right Side

The right side of the machine is determined when facing entrance end of the machine. This is where the LIP of the gutter is formed.

Components on Right Side:

1. Lip Side Guide Shoe (Right Shoe)
2. Lip Side Assemblies
3. Motor and Gearbox

D. Left Side

The left side of the machine is determined when facing the entrance end. This is where the HEM of the gutter is formed.

Components on Left Side:

6. Hem Side Guide Shoe
7. Hem Assemblies
8. Bead Roller Assembly
9. Crimper Support Assembly

E. Center of Machine

The center of machine forms bottom section of gutter and is the drive assembly.

Components in Center of Machine:

10. Entrance Guide Assembly
11. Drive Assemblies
12. FPG

SECTION 3

ELECTRICAL SYSTEM AND CONTROL LOCATIONS

1E. **MAIN OPERATORS PANEL** (located on the lip side of the machine at the exit end)

The main operators panel consists of:

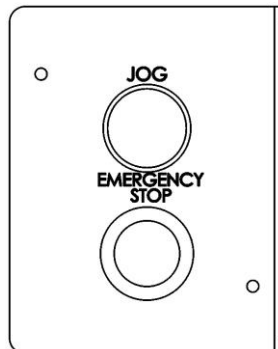
- (2) Selector switch. (JOG/RUN & FORWARD/REVERSE)
- (2) Push button. (START & STOP)



2E. **ENTRY OPERATORS PANEL** (located on the lip side of the machine at the entrance end)

The entry operator's panel consists of:

- (1) Jog button (push button)
- (1) Emergency stop button. (power shut off)

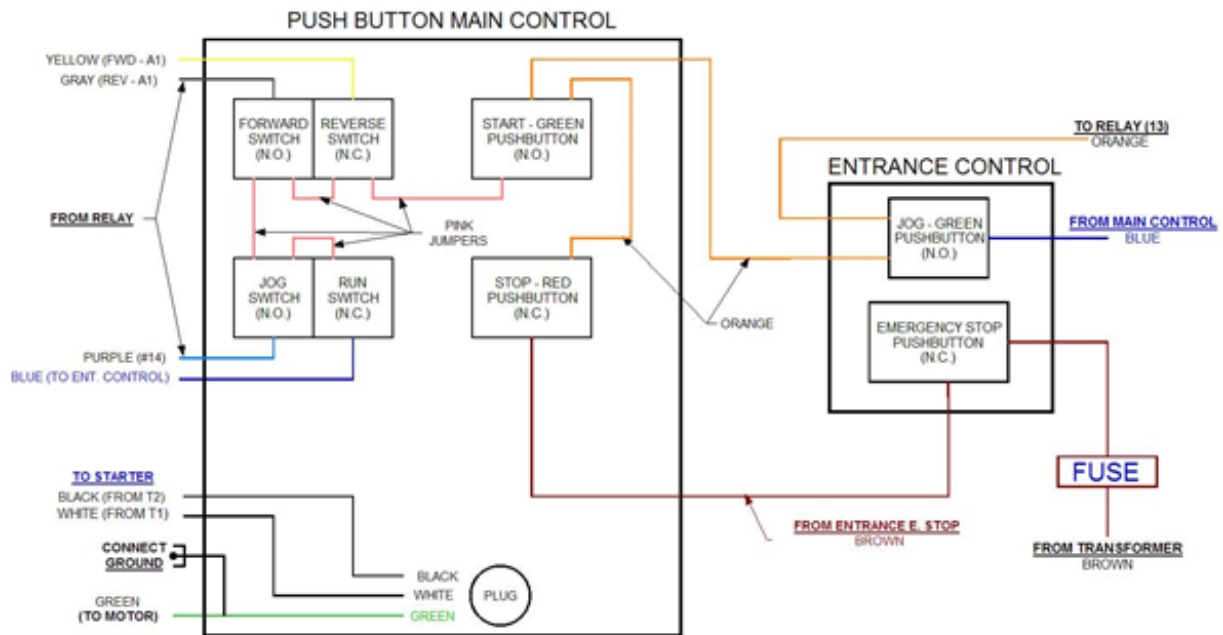


ELECTRICAL CORD REQUIREMENTS

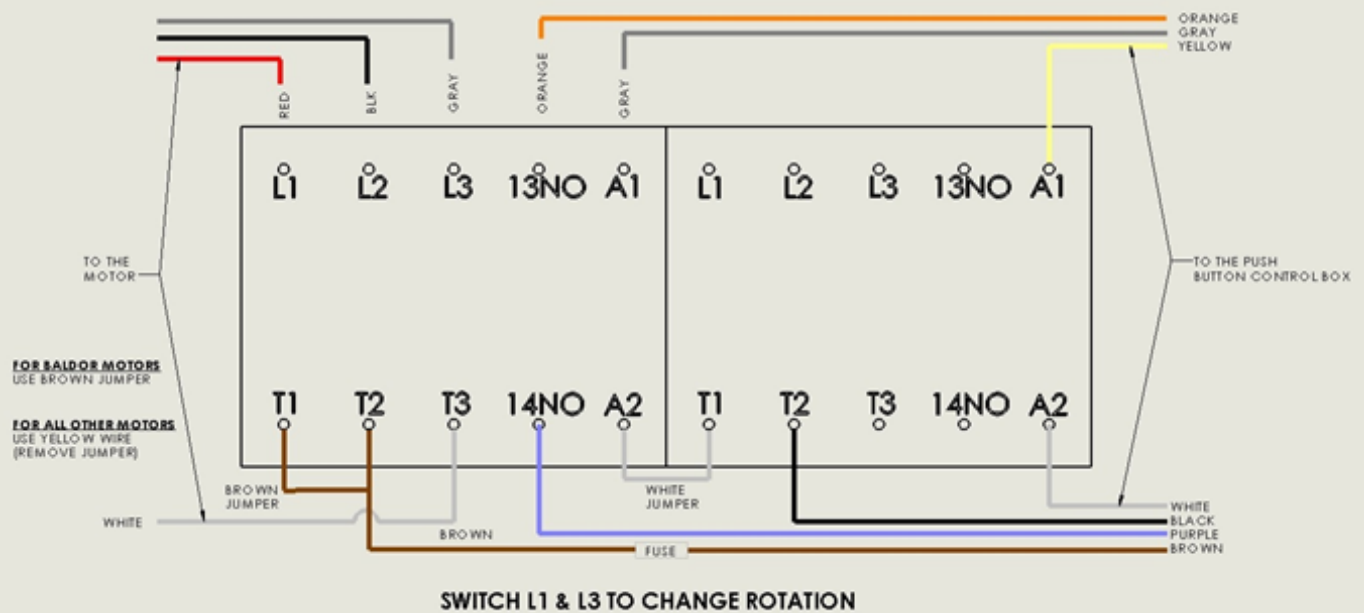
It is important that the motor manufactures minimum wire gage be adhered to in order to maintain the warranty on motor.

<u>LENGTH</u>	<u>GAGE CORD</u>
0 – 25'	12 ga
25 – 50'	10 ga
50 – 100'	7 ga

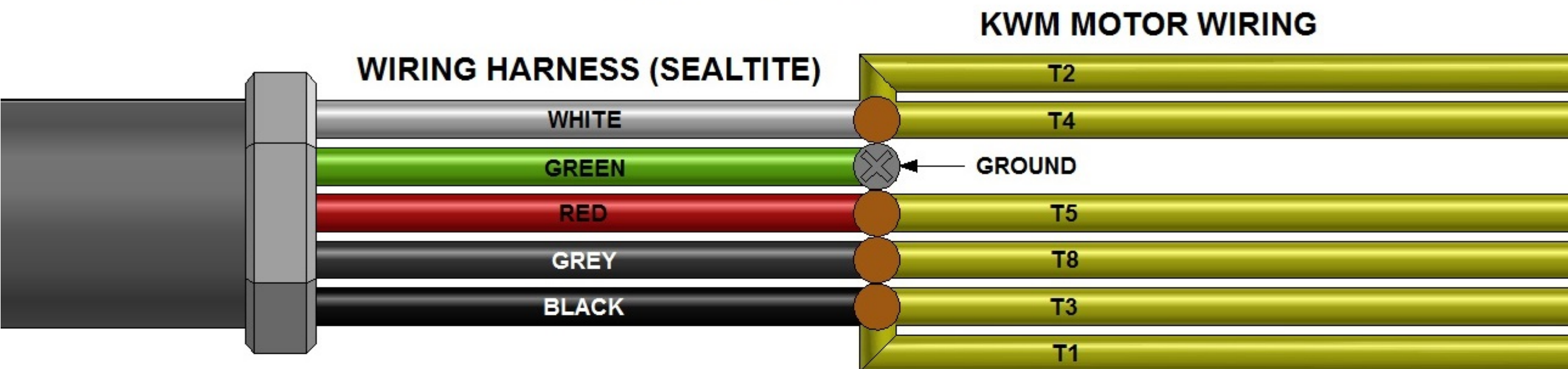
IRONMAN 110V - PUSH BUTTON WIRING DIAGRAM



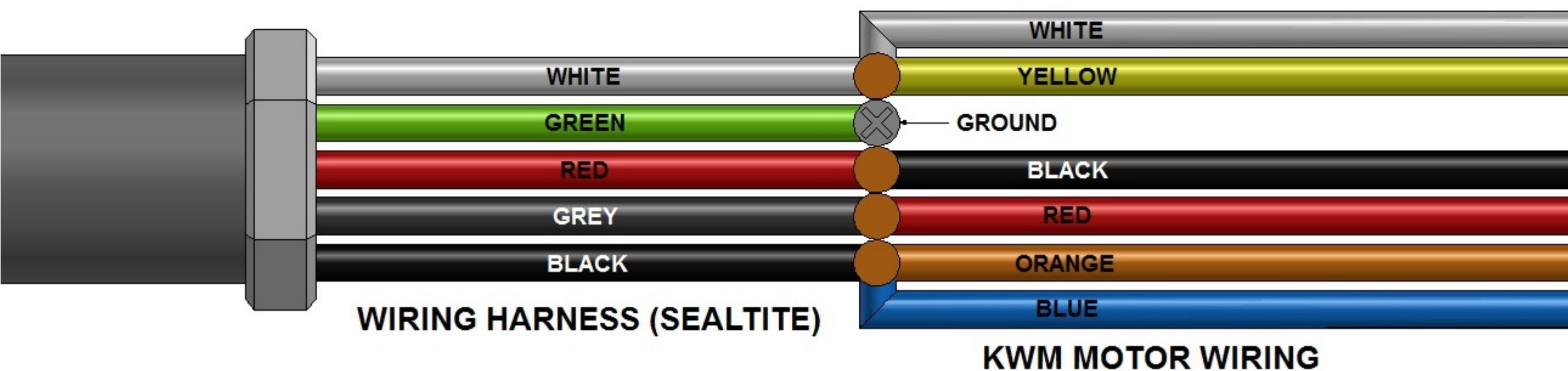
IRONMAN 110V - WIRING DIAGRAM



**WIRING CONNECTIONS FOR KWM MOTOR 110v 60hz
LEESON MOTOR**



**WIRING CONNECTIONS FOR KWM MOTOR 110v 60hz
BALDOR & DAYTON MOTORS**



SECTION: 4

SPOOL UPRIGHT SUPPORTS

The IRONMAN TURNSTILE UPRIGHT is a modular turnstile support used to hold coil. Your machine may have up to two uprights.

ONE TURNSTILE UPRIGHT ASSEMBLY CONSISTS OF: (SEE PG. 13)

TURNSTILE UPRIGHT (1)	UPRIGHT BRAKE (2)
BASE PLATE (1)	LOCK THUMB SCREW (1)
TURNSTILE LOCKING PIN (1)	SAFETY PIN (2)
BRAKE THUMB SCREW (2)	LOCK BLOCK (1)
WING NUT (1)	

TO ROTATE TURNSTILE FOR TWO-SIDED COIL:

1. Loosen WING NUT loosen LOCK THUMB SCREW.
2. Slide LOCK BLOCK outward.
3. Rotate TURNSTILE 180 degrees.
4. Slide LOCK BLOCK inward.
5. Tighten LOCK THUMB SCREW then tighten WING NUT.

SPOOL ASSEMBLY AND LOADING COIL

ONE SPOOL ASSEMBLY CONSISTS OF: (SEE PG. 13)

SPOOL SHAFT (1) SPOOL HALF (2) 5/16" QUICK RELEASE PIN (2)

TO LOAD COIL ONTO SPOOL ASSEMBLY:

1. Remove Safety Pins, Loosen Thumb Screws, Release the safety brakes.
2. Place the empty spool assembly on the ground or on a flat surface.
3. Remove one of the 5/16" quick release pins.
4. Slide the spool half off of the 1 1/4" spool shaft.
5. Insert the spool shaft through the center of the coil.
6. Replace spool half on the spool shaft, and reinstall the 5/16" quick release pin.
7. Install loaded spool assembly onto the upright. Use of mechanical lifting device recommended.
8. Engage Safety Brakes; lightly tighten thumb screws And Install Safety Pins.

NOTE: The spool assembly is adjustable to accept both 5" gutter material (11 3/4" – 12") and 6" gutter material (15").

PLACING SPOOL & COIL IN THE UPRIGHT:

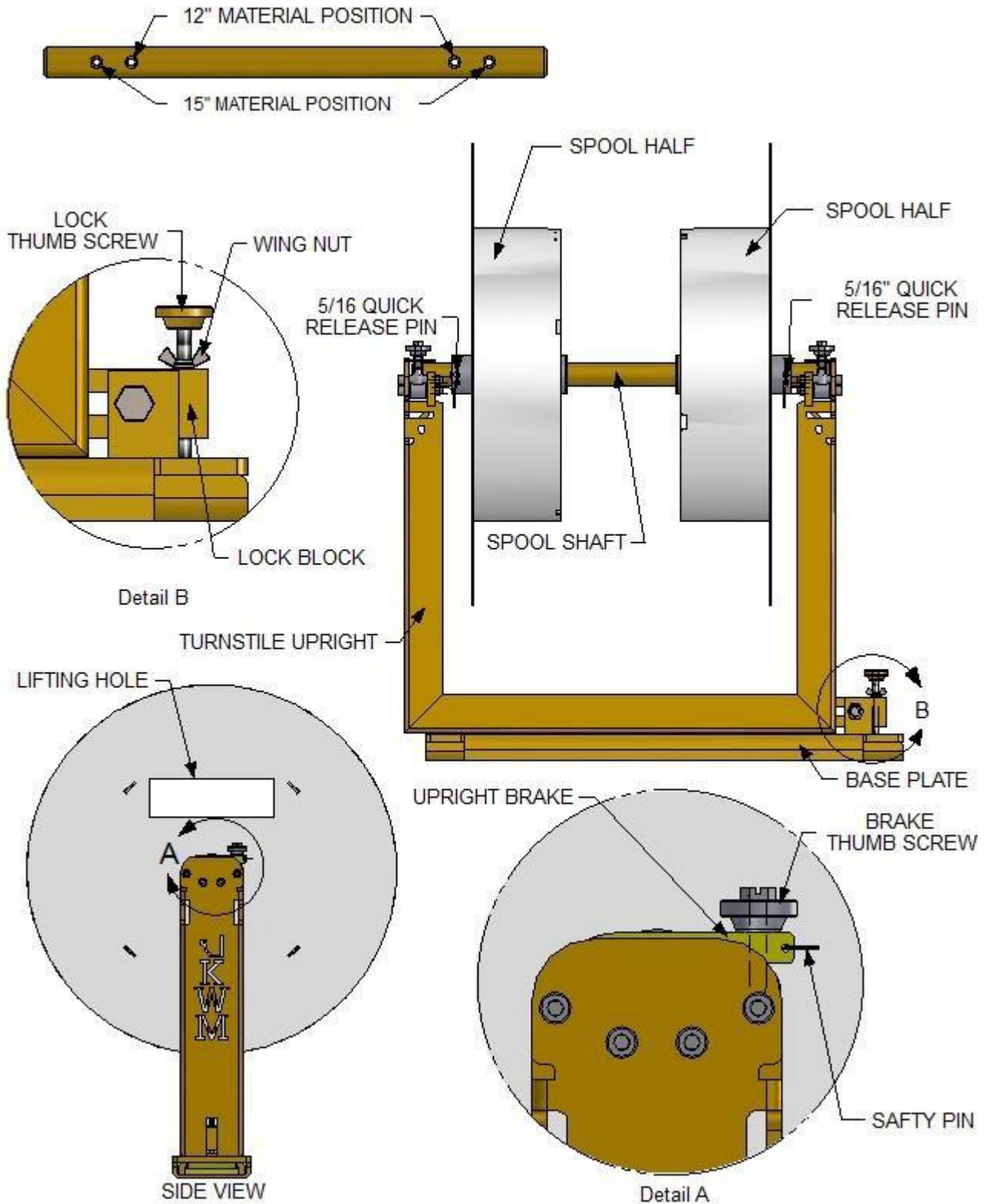
Use an approved lifting device in the designated spool lifting area to position the spool assembly into the turnstile upright.

(IMPORTANT! – Please read PRECAUTIONS)

PRECAUTIONS:

- Make sure loading area is clean and clear of debris.
- Make sure Turnstile Locking Pin is securely installed.
- Always wear protective footwear when handling coil.
- Never load coil with the brake in closed position.
- Never operate machine without first checking brake & pin positions.
- Never transport machine without locking brake in closed position and safety pins installed.

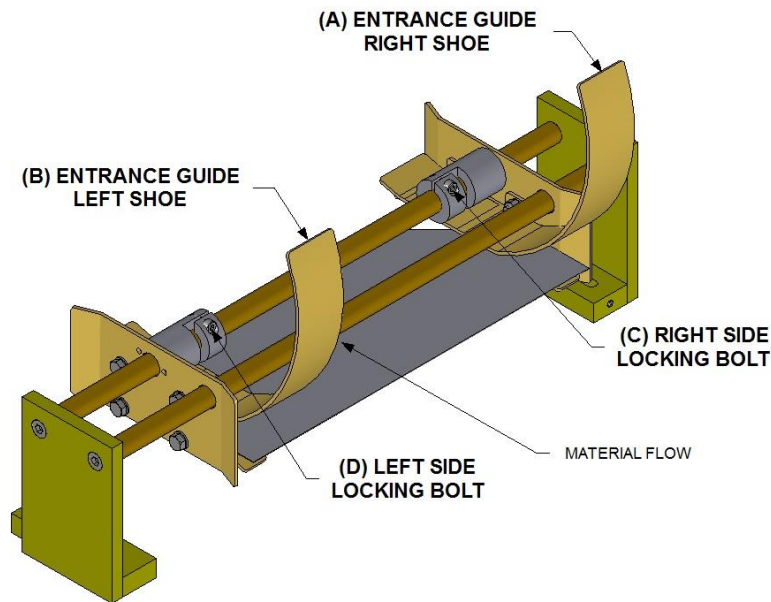
SPOOL & UPRIGHT ASSEMBLY



SECTION 5

ENTRANCE GUIDE SYSTEM

ENTRANCE GUIDE ASSEMBLY



ADJUSTING ENTRANCE GUIDE SYSTEM

***THE LOCATIONS OF THE ENTRANCE GUIDE SHOES ARE
FACTORY SET AND SHOULD NOT BE ALTERED
UNLESS AUTHORIZED – PLEASE CALL***

To INCREASE THE AMOUNT OF LIP TURNED UNDER;

Move the guides toward the right side (face side) of the machine.

To DECREASE THE AMOUNT OF LIP TURNED UNDER;

Move the guides toward the left side (back side) of the machine.

TO MOVE GUIDES

- 1.) Loosen the set screws on right collar.
- 2.) Side shoes towards the direction needed using a tape measure
- 3.) Tighten the set screws on right collar
- 4.) Loosen the set screws on the left collar
- 3.) Adjust width between the guide shoes using a piece of coil as a gauge
- 4.) Tighten set screws on left collar

SECTION: 6

GUTTER TALK

Common terms describing the condition of the gutter:

RUNNING UPHILL

This term describes a condition where the ends of the gutter are higher along the fascia board than the center.



GUTTER RUNNING UPHILL



GUTTER RUNNING DOWNHILL

RUNNING DOWNHILL

This term describes a condition where the ends of the gutter are higher along the fascia board than the center.



GUTTER RUNNING INTO THE HOUSE

INTO THE HOUSE

This term describes a condition where the ends of the gutter are closer to the fascia board than the center. Looking from the machine the gutter has a left hand curve.



GUTTER RUNNING AWAY FROM THE HOUSE

AWAY FROM THE HOUSE

This term describes a condition where the center of the gutter is closer to the fascia board than the ends. Looking from the machine the gutter has a right hand curve.



GUTTER LIP RUNNING INTO THE HOUSE

TOP LIP INTO THE HOUSE

This term describes a condition where the end of the top lip is closer to the fascia board than the middle.

TOP LIP AWAY FROM THE HOUSE

This term describes a condition where the end of the top lip is further away from the fascia than the middle.



GUTTER LIP RUNNING AWAY FROM THE HOUSE

SECTION 7

Daily operation

Feeding Machine

1. Position selector switch to jog.
2. Position selector switch to forward position.
3. Loosen upright brakes
4. Trim corners of coil 3" X 3"
5. Standing at entrance of machine, position material in the center of the entrance guides and hand feed to material into first drive.
6. Activate jog button using your right hand at the same time using your left hand to push the material so as to engage with #1 drive assembly, Jog material approximately two feet. Release jog button.
7. Continue feed material, using exit end start button.
8. Stop material before guillotine and make sure it clears.
9. Jog material thru guillotine using start push button.

SECTION 8

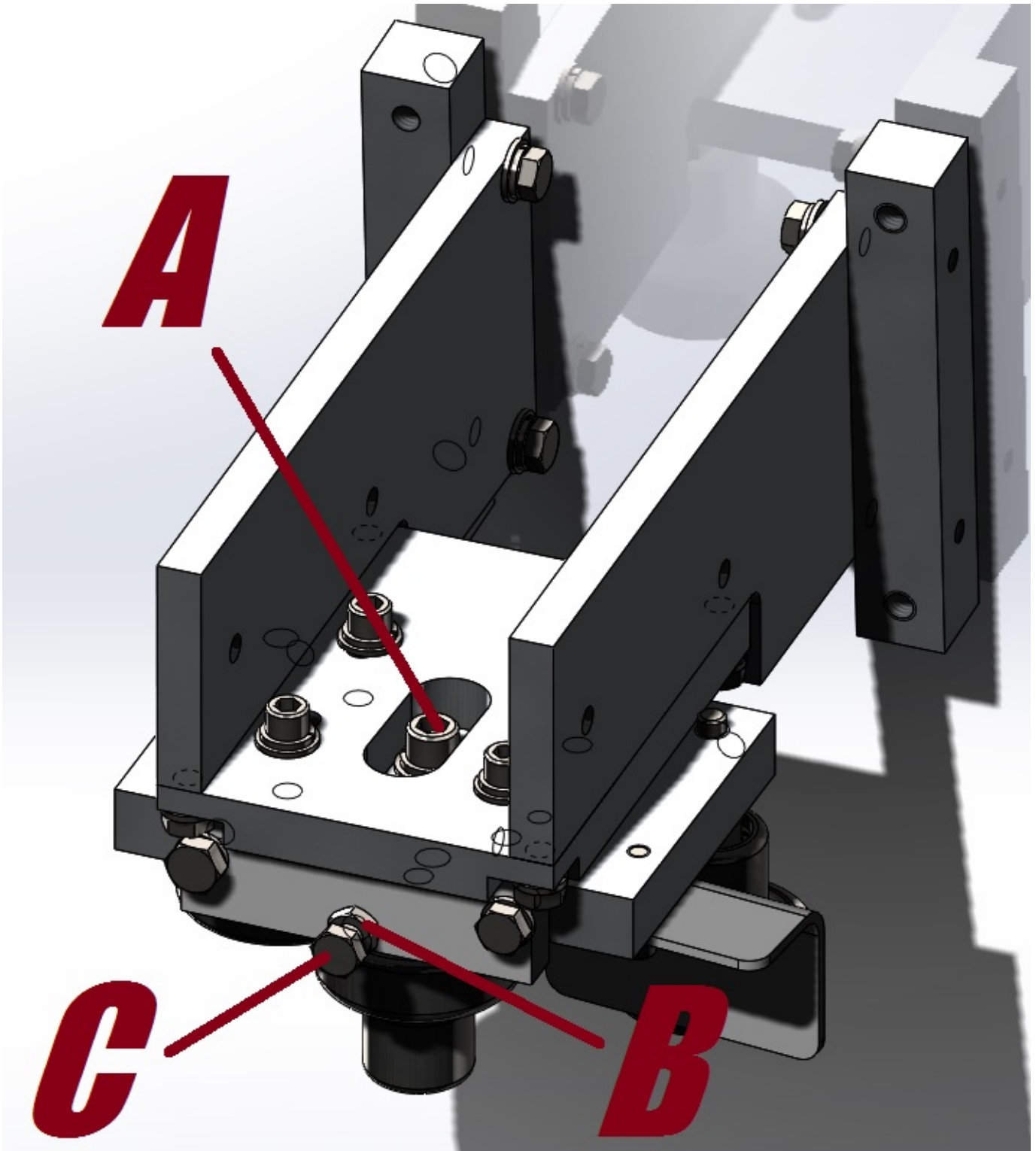
ADJUSTING STRAIGHTNESS OF GUTTER **ONLY MAKE 1/2 TURN ADJUSTMENTS AT A TIME**

Adjusting an into the house curve

1. This is controlled by the **Blue Station**
2. Loosen nut "B" and bolt "A", turn bolt "C" counter-clockwise to move the center roller away from the outside rollers by jogging material forward
3. Tighten bolt "A" and nut "B" to lock back in place.

Adjusting an away from the house curve

1. Loosen nut "B" and bolt "A" turn bolt "C" clockwise to move center roller towards the outside rollers
2. Tighten nut "B" and bolt "A" to lock back in place



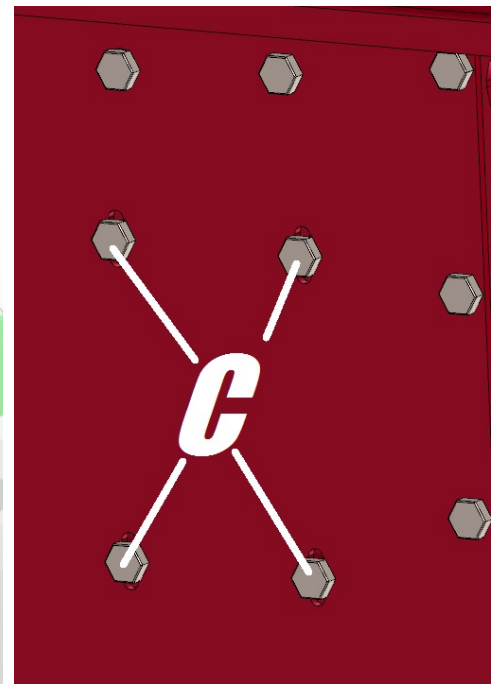
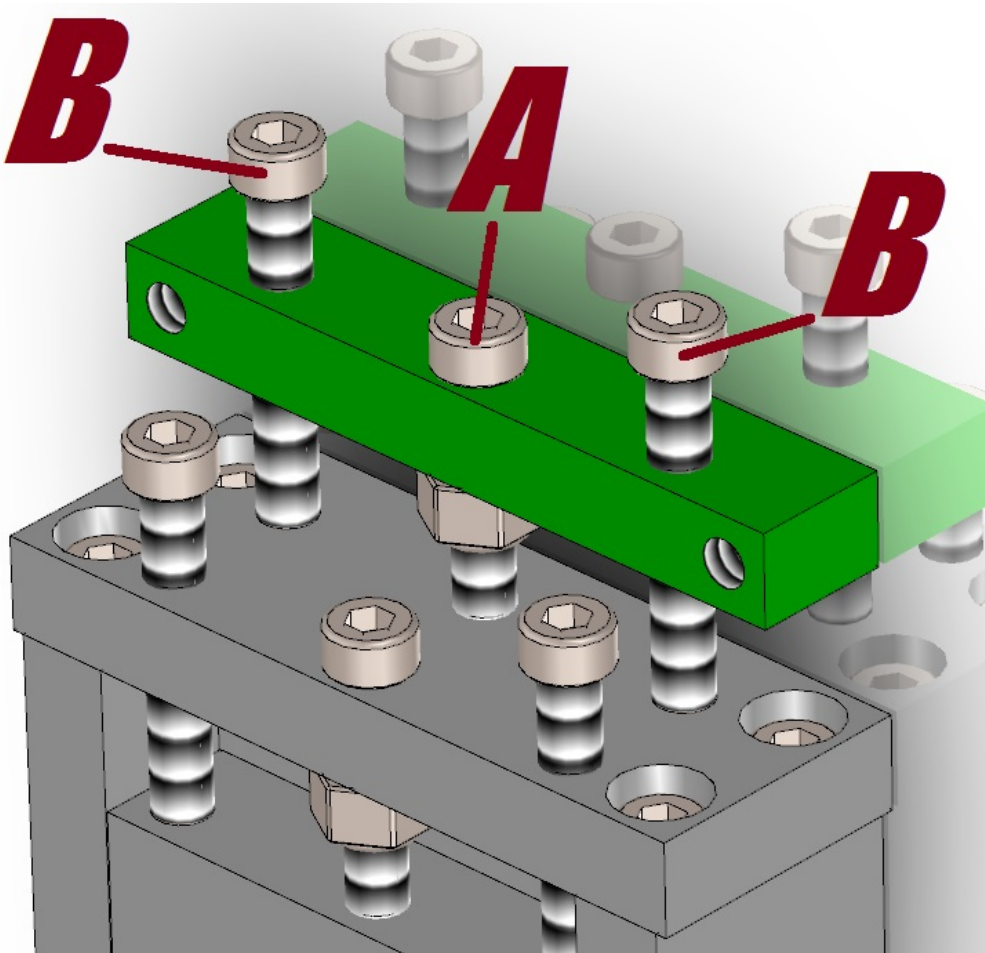
BLUE STATION

Adjusting a downhill curve

1. Station #9 (**Green Station**) is too low, raise drive station #9, you may need to raise the FPG to line up.
2. Loosen 8 C bolts outside machine, loosen push bolts B 1/2 turn
3. Tighten pull bolt A 1/2 turn

Adjusting an uphill curve

1. Station #9 (**Green Station**) is too high, lower drive station #9, you may need to lower the FPG to line up.
2. Loosen 8 C bolts outside machine, push bolts B 1/2 turn
3. Loosen pull bolt A 1/2 turn



GREEN STATION

SECTION 9

Adjusting width of gutter

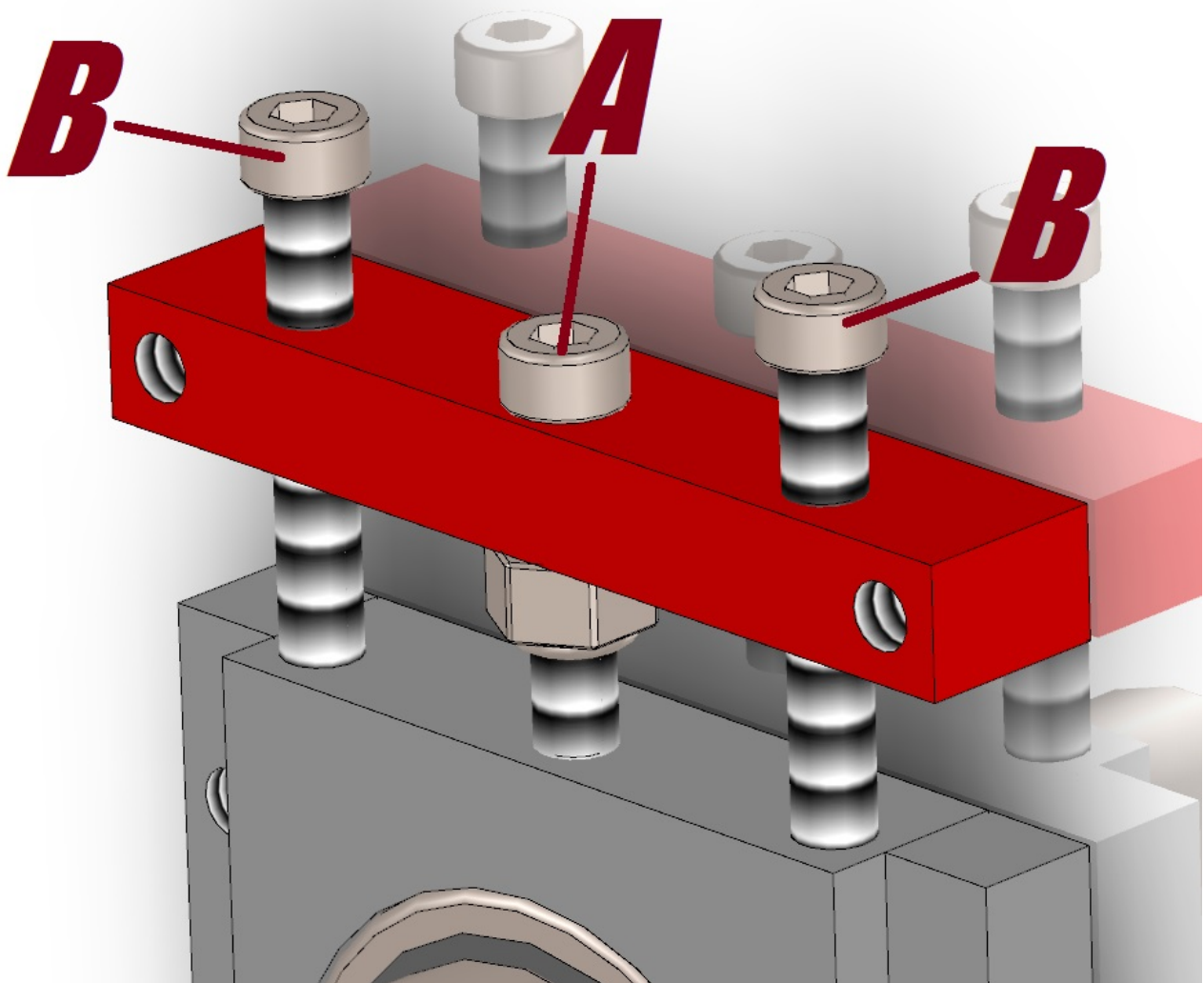
Making the gutter wider

1. Loosen push bolts B 1/2 turn
2. Tighten pull bolt A 1/2 turn

Making the gutter narrower

1. Loosen push bolts B 1/2 turn
2. Loosen pull bolt A 1/2 turn

NOTE: DO NOT LET TOP ROLLER CONTACT BOTTOM ROLLER!
APPRX. 1 TURN FROM AL SETTING .055"



RED STATION

SECTION 10

GUILLOTINE AND FACE PLATE ASSEMBLY

The guillotine assembly is machined to very tight tolerance, requiring that it be maintained on a regular basis. If the guillotine assembly is kept clean, lubricated and all hardware tight, you can expect trouble free performance for years to come.

DAILY MAINTENANCE:

Lubricate GUILLOTINE blade using WD40.

ADJUSTING GUILLOTINE POSITION

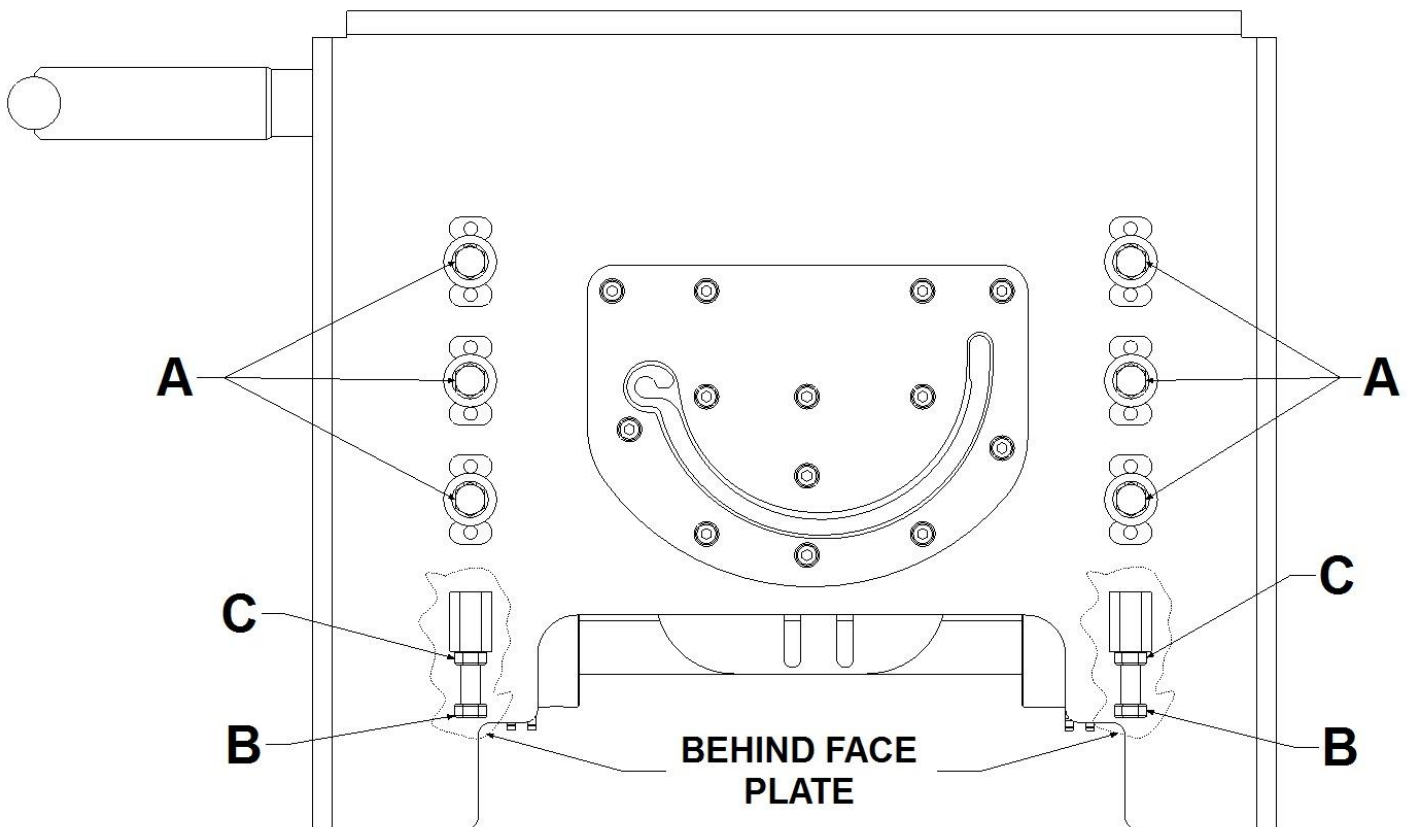
The guillotine is moveable in all directions.

UP & DOWN ADJUSTMENT

1. loosen bolt A six places, loosen locking nut C on adjustment bolt B two places.
2. Turn adjustment B clockwise to raise and counter clockwise to lower.
3. Retighten locking nut C when desired position is reached

SIDE TO SIDE ADJUSTMENT

1. Loosen bolt A six places, The guillotine is now free to move in all directions.
2. After the desired position is acquired, retighten A six places.



SECTION 11

TROUBLESHOOTING

This section is only a brief summary. Please read the entire manual prior to operating machine.

COMMON PROBLEMS

MACHINE NOT RUNNING

No power - check power supply (outlet, generator, power cord) Check that emergency stop has been disengaged

COIL DOES NOT FIT GUIDES

Adjust Left Guide (Section 5)

GUTTER TOO WIDE

Adjust Red Station (Section 9)

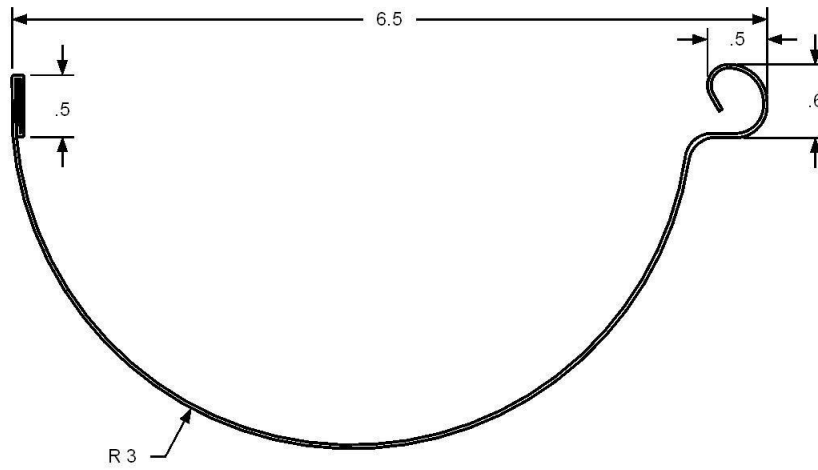
GUTTER TOO NARROW

Adjust Red Station (Section 9)

For helpful tips & more download the KWM Gutterman App!



SECTION 19
GUTTER PROFILE





KWM GUTTERMAN, INC. Warrants the machine described in your invoice by serial number. The manufacturer will replace or repair any part or parts of the machine that are defective in workmanship or material manufactured by KWM Gutterman Inc. for a period of 36 months from the date of purchase. All Electrical components including but not limited to motor, relays, switches and buttons for a period of 12 months from the date of purchase. Claims under this warranty, are the sole option of the manufacturer.

The obligation under this warranty is limited to the replacement or repair of such parts defective in material or workmanship. This warranty does not cover failures found to have been caused by wear, damage, low voltage, abuse, misuse, accident or any procedures contrary to instructions set forth in the instruction manual. This warranty does not obligate the manufacturer to bear the cost of material used for adjustment, transportation charges or down time in connection with the replacement or repair of defective parts nor shall it apply to machine upon which repairs or alterations have been made unless authorized by KWM GUTTERMAN, INC.

KWM GUTTERMAN, INC. shall in no event be liable for consequential damage or contingent liabilities arising out of the failure of any machine or parts to operate properly.

KWM GUTTERMAN, INC. shall in no event be liable to bear costs of lost work, material, travel, or freight, caused by any part or parts of the machine that are defective in workmanship or material. All warranty work must be returned to 795 South Larkin Avenue, Rockdale, Illinois. Prior authorization must be obtained from KWM GUTTERMAN, INC. before any warranty work will be performed.

THE WARRANTIES SET FORTH HEREIN ARE IN LIEU OF ANY AND ALL OTHER WARRANTIES EXPRESSED OR IMPLIED. THE BUYER ACKNOWLEDGES THAT NO OTHER REPRESENTATIONS WERE MADE TO HIM OR RELIED UPON BY HIM WITH RESPECT TO THE QUALITY AND FUNCTIONS OF THE MACHINE.

KWM GUTTERMAN, INC.
Phone (815) 725-9205. Fax (815) 725-4429
795 South Larkin Avenue. Rockdale, Illinois 60436
www.kwmgutterman.com



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795 South Larkin Avenue

Rockdale, Illinois 60436

Phone (815) 725-9205

Fax (815) 725-4429

Toll-Free (888) 729-4290

E-mail sales@kwmgutterman.com

www.kwmgutterman.com