WILSON BIFOLD DOOR IS TO BE OPERATED BY AUTHORIZED AND TRAINED PERSONNEL ONLY

NO OPERATION BY UNAUTHORIZED PERSONS

All authorized personnel will have received formal training in proper operating techniques and made aware of safety hazards and precautions.

Wilson Bifold Door Training Acknowledgement

I, _____, have received formal training in the proper operating techniques of the Wilson Bifold Door. I was also made aware of safety hazards and precautions.

Signed _____

Trainer _____

Date _____

(To be filed in personnel file)

.....

The management at Wilson Doors Inc., strongly recommends formal bifold door operating technique instructions for every person that will be operating the Wilson Door. Safety for you and your personnel is of great importance to us.

This form is enclosed for the purpose of encouraging safe door operation by everyone.

LUBRICATING INSTRUCTIONS AND SPECIFICATIONS FOR WILSON BIFOLD DOOR

SYMBOL	WHEN TO LUBE	PARTS LUBRICATED	LUBRICATING INSTRUCTIONS	SPECIFICATIONS
▲	*L- annually M - 6 months H - 30 days	Driveshaft bearings. Lock hinges.	Grease zerk fitting until grease starts to seep along edge of bearing or hinge, wipe off excess grease	Standard automotive chasis lube.
⬢	*L - annually M - 6 months H - 30 days	Center hinges.	Lubricate middle hinge of center hinges ONLY	80-90W gear lube.
■	*L - annually M - 6 months H - 30 days	Drive chain.	Spray entire chain with lubricant.	Motorcycle chain lube.
●	*L - 6 years M - 3 years H - annually drain-check for metal.	Gear box.	Check seals when lubricating doors. Level needs to be checked only if seals are leading. Check level plug on side of gear box, fill at top plug as necessary. CAUTION:Do not over fill, will blow seals if over-filled. See gear box instructions sent w/door.	Mobile synthetic lube-SHC634.

*

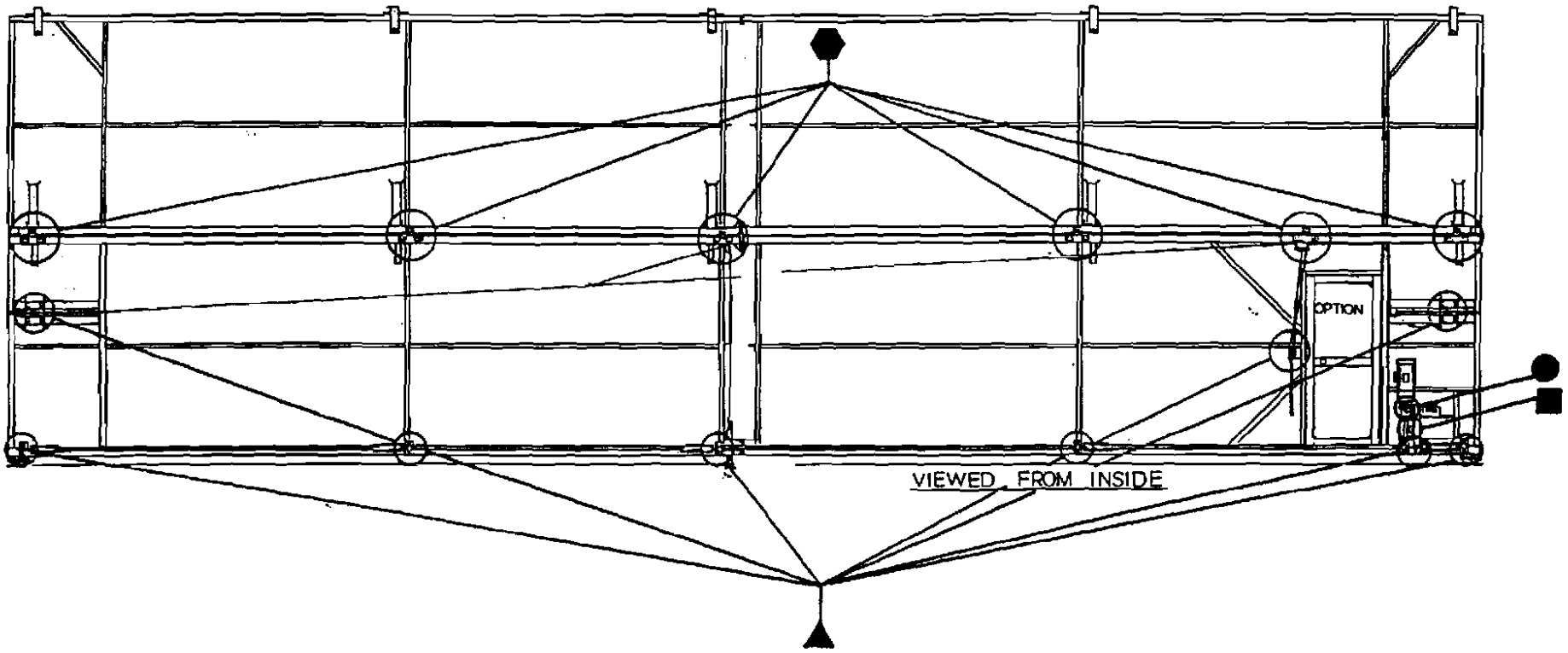
L - Light Usage - Door averages less than one cycles per day.

M - Moderate Usage - Door averages 1 - 2 cycles per day.

H - Heavy Usage - Door averages over three cycles per day.

NOTE: Lubricate all moving parts on locking system with 80-90W gear lube

LUBRICATING CHART



▲ Driveshaft Bearings and Lock Hinges

⬢ Center Hinges

■ Drive Chain

● Gear Box

WARNINGS AND CAUTIONS

Statements in this manual preceded by the following words are of special significance.

WARNING

Means there is the possibility of personal injury to yourself or others.

CAUTION

Means there is the possibility of damage to the door.

We recommend that you take special notice of these statements. Read them carefully before proceeding.

PREFACE

The purpose of the Owner's Service Manual is to familiarize you with the operation and maintenance of your Wilson Bifold Door.

Wilson Doors Inc. has to assume the door was installed properly. The general maintenance will assure continued, reliable and safe operation of the door.

GENERAL MAINTENANCE

You are the owner of the finest bifold door on the market. Your Wilson Bifold Door was manufactured with the best quality material and workmanship for extended trouble-free service.

To assure continued trouble free service, your bifold door should be inspected and maintained on a regular basis.

The following steps should be included in your routine maintenance schedule. Maintenance should include, but not be limited to, the mentioned components.

If you have any questions regarding your Wilson Bifold Door, do not hesitate to call customer service at Wilson Doors Inc. for assistance.

Toll Free (800)558-5974

In Wisconsin (262)723-6869

WILSON BIFOLD DOOR PRECAUTIONS AND FEATURES

..Stop door if anything sounds wrong, looks wrong, or personnel start to walk under door while door is in motion.

..Make sure door center pins are adjusted properly and in a down and locking position when bifold door is closed. Center pins prevent the door from flexing under windload.

OPTIONS

Your bifold door is equipped with options that have been checked off.

☐ SERVICE DOOR - A service door has been built into your bifold door for easy access into your building to unlock and open your bifold door. The service door should be securely latched at all times when not in use. Your service door comes with a cylinder lock and keys.

☐ COLD WEATHER PACKAGE - A cold weather package is included with your bifold door. The cold weather package is a second bottom rubber seal and foam seal for the centerfold area of the door to increase heating or cooling efficiency.

☐ THREE BUTTON CONTROL STATION - A three button control station is an electrical switch with three positions - up, down and stop. Depress and release the up or down button and the door will travel through its cycle until it reaches its travel limit. The stop button will stop the door immediately at any position.

☐ AUTO LOCKS - Auto locks have been installed for your convenience and for the protection of your property. The auto locks will automatically close and lock your door when in a full down position and automatically unlock the door when the door is to be opened.

☐ RADIO CONTROL - Your radio control will conveniently allow you to open or close your bifold door from a distance. You have received two (2) transmitters with this option.

☐ DOOR SENSING EDGE W/REVERSER - Your electrically operated bifold door is equipped with a sensing switch on the bottom edge of the door. (This device operates on a down mode only.) As door is closing, should the door contact an obstruction in the door opening, the sensing switch will stop the door, reverse door travel and stop the door in a fully opened position. Remove the obstruction and clear the door opening before operating door again.

☐ UPPER OVERRIDE DISCONNECT This switch was designed to electrically kill the door should the door ever go beyond its designed opening height. If activiated, this switch will have to be manually reset before the door will run.

To reset switch:

1. Disconnect power to door.
2. Reset upper override switch which is located on the upper door track.
   A. Remove pivot bolt and release pressure on switch.
   B. Turn switch on.
3. Turn door power back on. If door starts to run without push button being pushed in, shut door power off immediately and determine cause.
4. Run door down.
5. Reinstall pivot bolt on switch lever setting override switch.
6. Before using door determine cause of problem.

☐ SOLAR POWER - This is a self-contained electrically operated door designed for remote areas where standard electrical power is not available or is cost prohibitive.

☐ SERVICE DOOR SECURITY SWITCH - For personnel safety, the service door must be securely latched before operation of the bifold door. For added personnel protection, your Wilson Bifold Door is equipped with a SERVICE DOOR SECURITY SWITCH to prevent bifold door operation when service door is open.

☐ PHOTO SENSOR EYE - A beam source and a receiver to be installed eight (8) inches off the floor. If the beam of light is interrupted, when door is in motion, door will stop.

☐ MANUAL BACK-UP - From the floor method of operating your bifold door if power is temporarily lost.

INSPECTION AND MAINTENANCE

Lift Cables (fig. 1)

Check for:

...Cable wear (steel slivers). With a gloved hand, wrap a paper towel around cable and run towel up and down cable a couple of times. A worn cable will hold bits of paper on it. If cable is worn, call Wilson Industrial Doors, Inc. for replacement cables.

CAUTION

All lift cables should be adjusted properly. For proper lift cable adjustment refer to the Installation Instruction Manual, page 51 section E Lift Cables - Down Limits.

Cable Guards (fig. 2)

Check for:

...All cables to have cable guards in place.

...Bent or damaged guards. Damaged guards could cause cable to break.

...Proper cable adjustment or guards will not work properly.

Lock Cables (fig. 1)

Check for:

...Cable wear (same as for lift cables)

...Kinked or frayed cables.

...Cables are on pulleys.

CAUTION

As manufactured, cables should not come off pulley. If cable is off pulley, determine cause and correct.

Possible cause:

...Bent lock pulley clevis pins, usually caused by opening door when locks are not released. Check lock switches.

Drive Chains (fig. 4)

Check for:

...Slack (maximum: ½")

...Wear (right to left)

...Chain lubrication - use motorcycle chain lube to lubricate once a month.

Gear Box (fig. 4)

Check for:

...Leaks - if leaking, determine cause and correct.

...Proper fluid level - unscrew level plug on side of gear box to check fluid level. If necessary, add fluid at top of gear box. Use Mobile synthetic lube SHC 634. Do not overfill.

Service Door (if applicable)

Check for:

...Door binding on frame - hinge(s) may need adjustment or replacement.

...Latch catches properly

...Lock operates properly.

...Wind chain is in place.

...Lubrication - lube door hinges and lock mechanism monthly with WD40.

Rubber Seal - Bottom (fig. 5)

Check for:

...Cracks or breaks.

...Replace rubber seal if cracked or broken.

CAUTION

Center Pin (fig. 8 & 9)

Check for:

...Clean floor socket for center pin. Door will not take full wind loading without engagement of floor locks. FAILURE TO KEEP CLEAN COULD RESULT IN DOOR FAILURE UNDER HIGH WINDS.

...Center pin cable not bottoming out on alignment tube.

...Center pin drops into floor socket a minumum of 3 inches.

Door Track (fig. 3)

Check for:

...Bent track - check track very closely from top to bottom.

...Secured track - check bottom and top attach points. Keep tight!

DO NOT LUBRICATE TRACK

Bottom Rollers (fig. 3)

Check for:

...Free turning rollers.

...Slop in bearing - this would indicate replacement is necessary.

Wind Drag Pin (fig. 3)

Check for:

...Proper adjustment of drag pin.

Electric Cable

Check for:

...Secured wire attachment.

...Age cracking of outer wire shield where it flexes at center and top of door.

Center Hinges (fig. 6)

Check for:

...Proper installation of hinge pin cotter keys. Replace any broken or missing cotter keys making sure both legs are bent over properly.

...Lubrication of center hinges. Lubricate middle hinge only of center hinges with 80-90W gear lube.

Top Hinges

Check for:

...Proper attachment to building (welds not cracked or broken.)

...Proper installation of cotter keys. Replace any broken or missing cotter keys making sure both legs are bent over properly.

...Lubrication of top hinges. Top hinges are lubricated at the factory. They are not accessible to lube unless top seal is removed. When top seal is removed, we recommend the top hinge pins be pulled, one at a time, and greased with low/high temperature lithium grease.

Rubber Seal - Top (fig. 7)

Check for:

...Cracks.

...Breaks.

...Good caulk seal between door and door sheeting.

...Replace rubber seal if cracked or broken.

REPLACE any part that is worn, damaged or questionable. Not limited to but including:

Lift Cables	Drive Bearings
Cable Guards	Clevis Pins
Lock Cables	Bottom Rollers
Center Pin Cable	Rubber Seal - Top and Bottom
Drive Chain	Electric Cables
Gear Box Seals	

Lubrication

...Grease driveshaft bearing zerk fittings with automotive chassis lube.

...Grease lock bearing zerk fittings with automotive chassis lube.

Photo Sensor Eye

...The emitter and the receiver eyes should be kept clean at all times. Dirt may collect on the eye(s) and cause the door to not operate. See page 52, section G of Installation Instruction Manual.

WARNING

CAUTION

WILSON DOORS INC., DOES NOT RECOMMEND OPERATION OF YOUR WILSON DOOR SHOULD ANY DEFICIENCIES APPEAR. REPORT AND CORRECT DEFICIENCY BEFORE OPERATING DOOR.

ILLUSTRATIONS

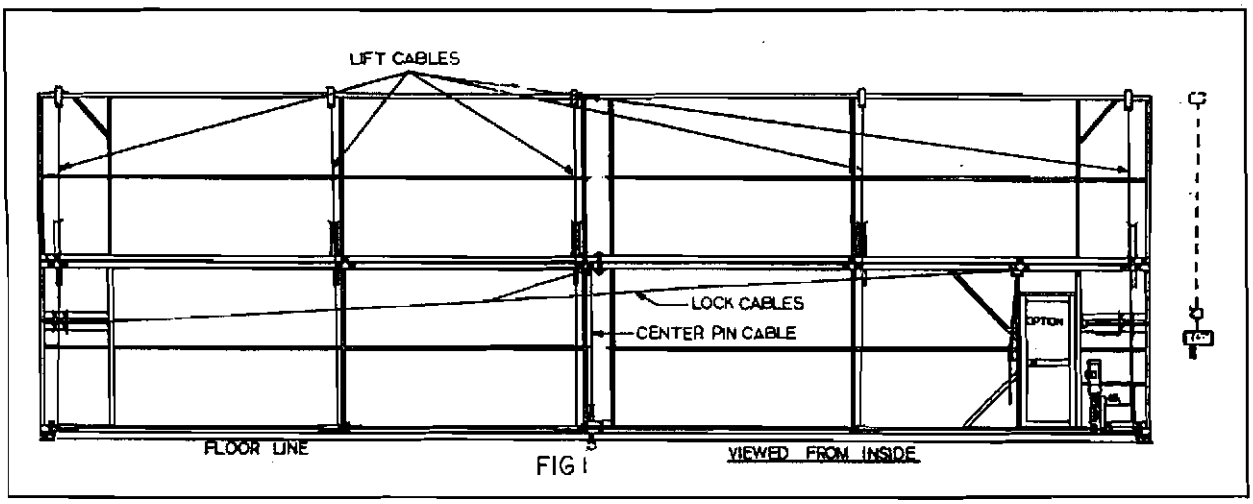


FIG 1

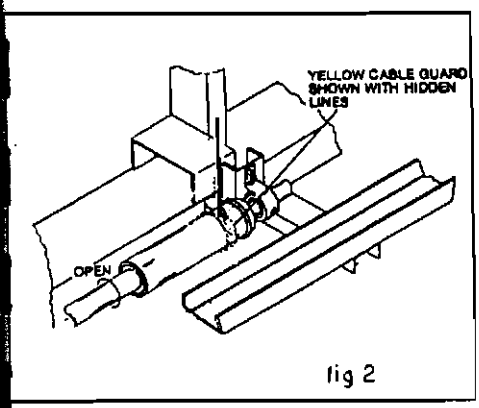


fig 2

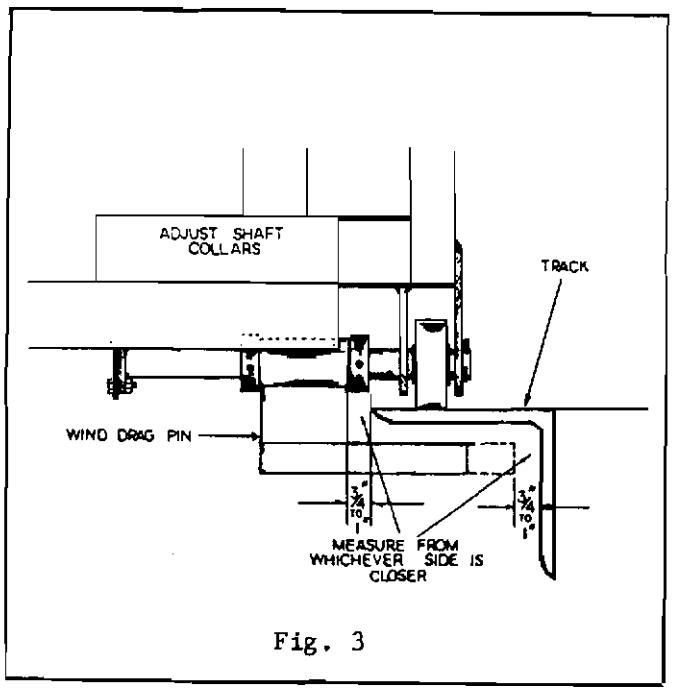


Fig. 3

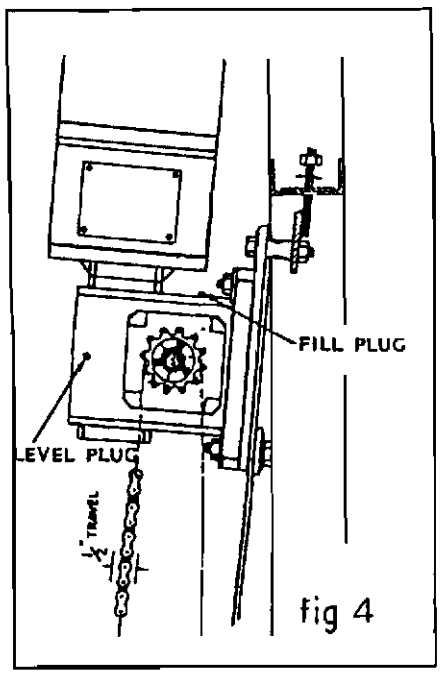
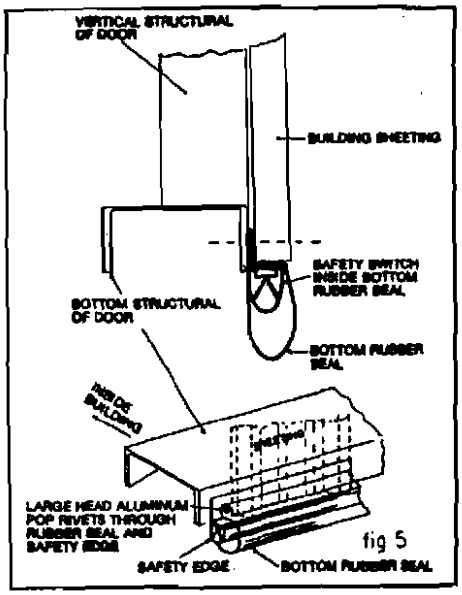
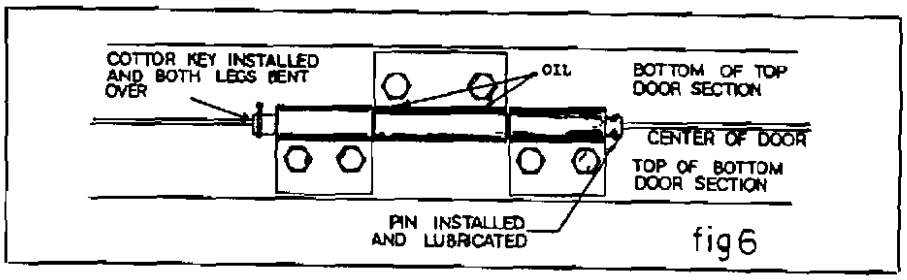
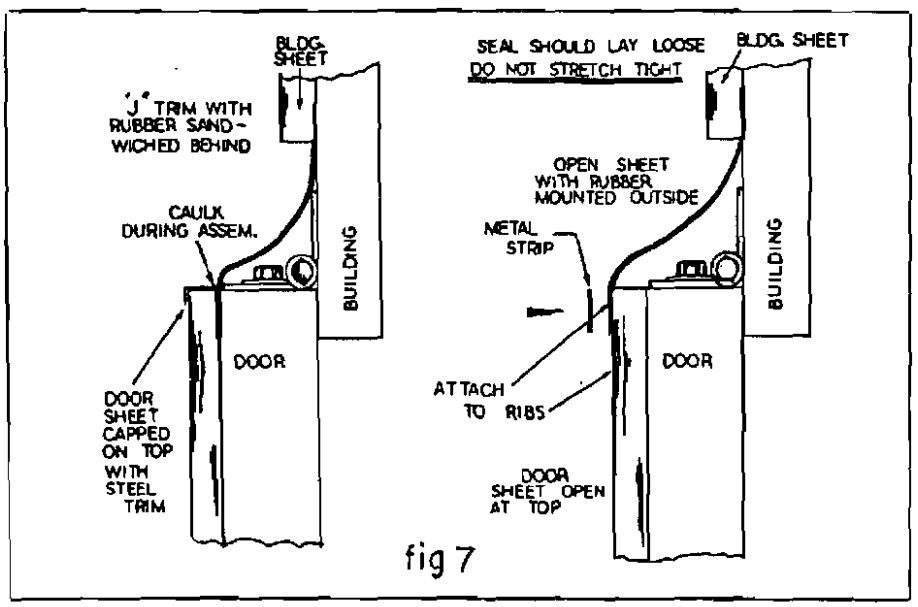


fig 4


VERTICAL STRUCTURAL OF DOOR
BUILDING SHEETING
SAFETY SWITCH INSIDE BOTTOM RUBBER SEAL
BOTTOM STRUCTURAL OF DOOR
BOTTOM RUBBER SEAL
INSIDE BUILDING
LARGE HEAD ALUMINUM POP RIVETS THROUGH RUBBER SEAL AND SAFETY EDGE
SAFETY EDGE
BOTTOM RUBBER SEAL
fig 5


COTTOR KEY INSTALLED AND BOTH LEGS BENT OVER
OIL
BOTTOM OF TOP DOOR SECTION
CENTER OF DOOR
TOP OF BOTTOM DOOR SECTION
PIN INSTALLED AND LUBRICATED
fig 6


BLDG. SHEET
"J" TRIM WITH RUBBER SAND-WICHED BEHIND
CAULK DURING ASSEM.
BUILDING
DOOR
DOOR SHEET CAPPED ON TOP WITH STEEL TRIM
SEAL SHOULD LAY LOOSE DO NOT STRETCH TIGHT
BLDG. SHEET
OPEN SHEET WITH RUBBER MOUNTED OUTSIDE
METAL STRIP
BUILDING
DOOR
ATTACH TO RIBS
DOOR SHEET OPEN AT TOP
fig 7

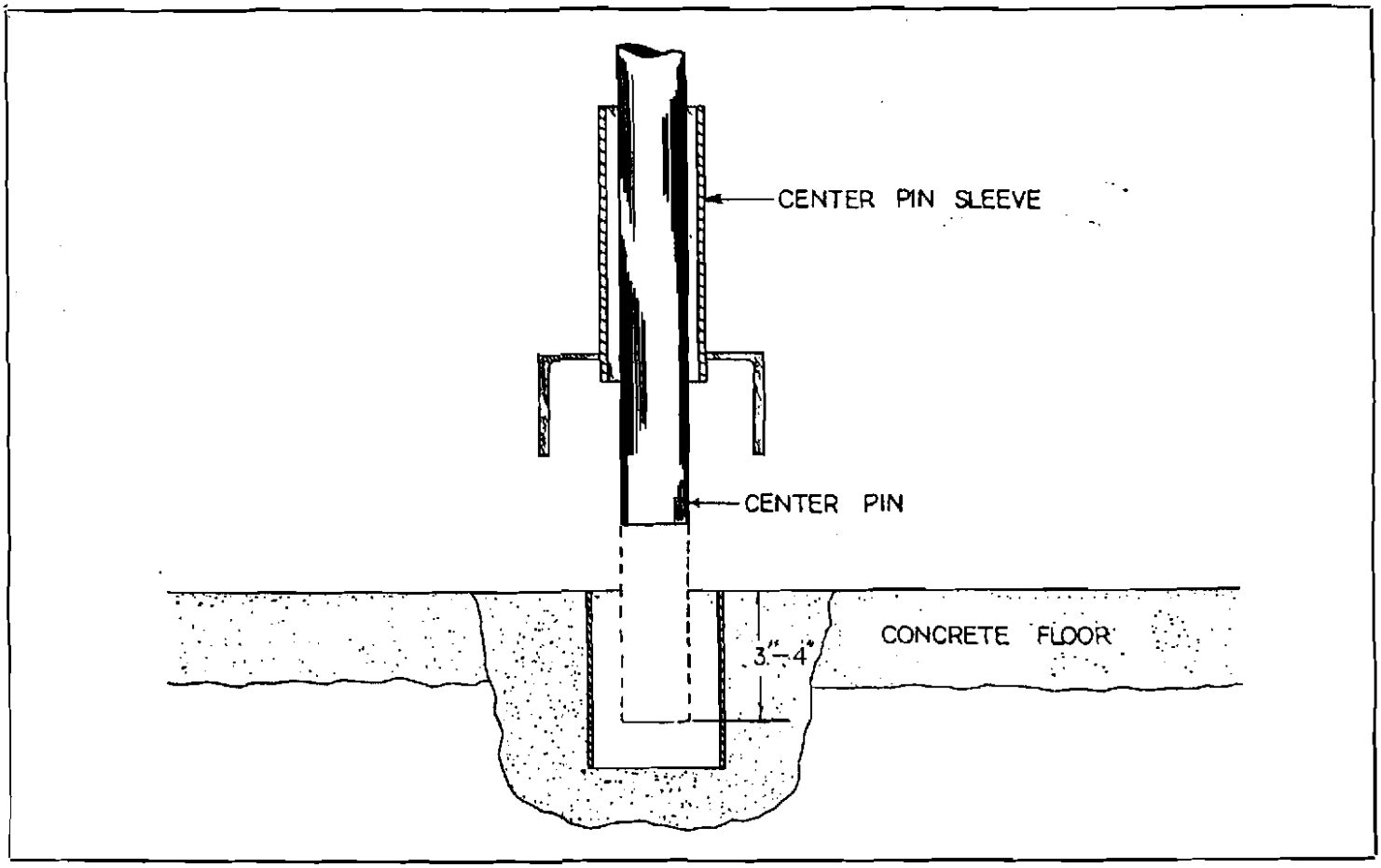


Figure 8

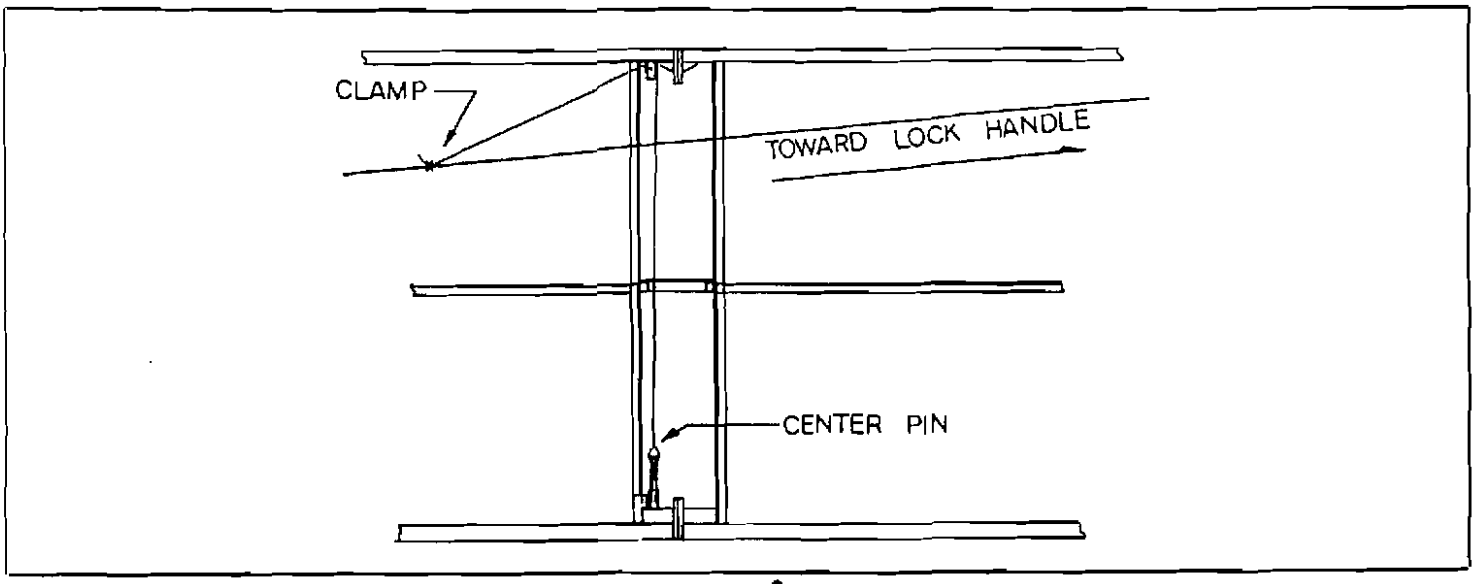


Figure 9.

SATISFACTION

Wilson Doors, Inc. wants you to be satisfied with your bifold door. All manufacturing precautions have been taken to deliver the best quality and safest product on the market. If you have any questions regarding your Wilson Bifold Door, call customer service at Wilson Doors, Inc. for assistance.

Toll Free	(800)558-5974
Local	(262)723-6869

NEED REPLACEMENT PARTS FOR YOUR DOOR?

We stock all replacement parts for your Wilson Bifold Door. Simply call customer service at Wilson Doors, Inc. for same day or next day UPS or air shipments.

AUTO LOCK CABLE REPLACEMENT INSTRUCTIONS

Step 1

Be sure all autolock components are included in the assembly package. Do not crimp attach or tighten anything yet. Included are:

a. Four Brass Buttons:

1a. One will be crimped to each end of the autolock cable.

2a. Two will be crimped together on the autolock cable and act as the locking buttons.

b. One 3/16" aircraft cable _____ feet long.

c. Any additional hardware which was sent to replace or repair any broken or defective autolock part... NOTE: When replacing or repairing any autolock part, take special care to reassemble the unit EXACTLY the way the directions specify or the way it was before disassembly.

Step 2

Be sure all components other than the autolock cable and buttons are correctly assembled and attached to the door. Included are:

a. An autolock drive should be included in your drive train.

b. An autolock arm should be attached to the vertical nearest your autolock drive.

c. An autolock idler assembly which will consist of a pulley unit, two springs and a welded bracket from which to suspend the idler assembly.

NOTE: The above components pertain to a single autolock type door. On double autolock type doors, simply double the components and parts list.

INSTALLATION:

NOTE: To simplify installation, complete step by step instructions in numerical order.

1. Place cable, buttons, crimper, and cable cutter within easy-hands reach of autolock drive, but do not place on door.

2. Suspend autolock idler assembly from welded bracket with 1 spring only. Leave the other spring attached only to the bracket, not to the idler assembly. This will be attached later.

3. With the aid of "C" clamps or vise grip type devices, close the door to the fully closed position. Be sure rings are in proper position.

4. Attach the two lock cam cables to the appropriate turnbuckles on the autolock arm or arms. The proper setting is achieved when there is an equal amount ot travel in the autolock arm above and below the horizontal centerline of the autolock arm. One measurement will be made when the lock arm is in the down position, which means the lock cams will be in the tightly closed position. The other measurement

will be made when the lock arm is in the up position, which means the lock cams will be in the open position with the aid of the lock cam springs.

5. Familiarize yourself with the autolock drive. The drive itself is composed of a short drive with a 12 inch drum with two rings on it. Pay special attention to the two rings. One ring is near the center of the drive and this ring will act the same as the rest of the pickup drum rings on the door. The other ring will be at the end of the autolock drive nearest the pillow block bearing. This ring acts as the locking ring and this is the ring you will be concerned with first.

6. Unravel autolock cable and securely crimp one button on one end only of the cable. The other end of the cable will be threaded through the ring in the next step.

7. With the aid of a ladder and an assistant. raise the door to its highest proper height allowed by its limit switch. CAUTION: Be sure door is unclamped before raising.

8. With the buttonless end of the cable in one hand, climb the ladder to a point where you can easily manipulate the end of the cable through the locking ring of the autolock drive. Be sure to thread the cable into the hole nearest the end of the drive so that when you pull the cable through the ring the button will end up on the outside of the ring rather than in between the two rings. Pull on buttonless end of cable until the button on the other end of the cable is snug against the outer opening in the ring.

9. CAUTION: With next step be sure ladder is not resting on door or in the way of the downward travel of the door.

10. With aid of an assistant, lower the door and keep tension on the cable. The cable will wrap on the drum as the door descends. When the door has reached its lower limit, clamp it shut again.

11. Wrap cable around drum one more full wrap in case of incorrect limit switch adjustment.

12. Now while keeping moderate tension on the cable, thread the buttonless end of the cable through the small opening in the button bolt. The button bolt is located on the autolock arm between the pivot bolt and the turnbuckle bolt. When the cable extends through the large opening in the button bolt, place two copper buttons on the cable, but do not crimp them yet.

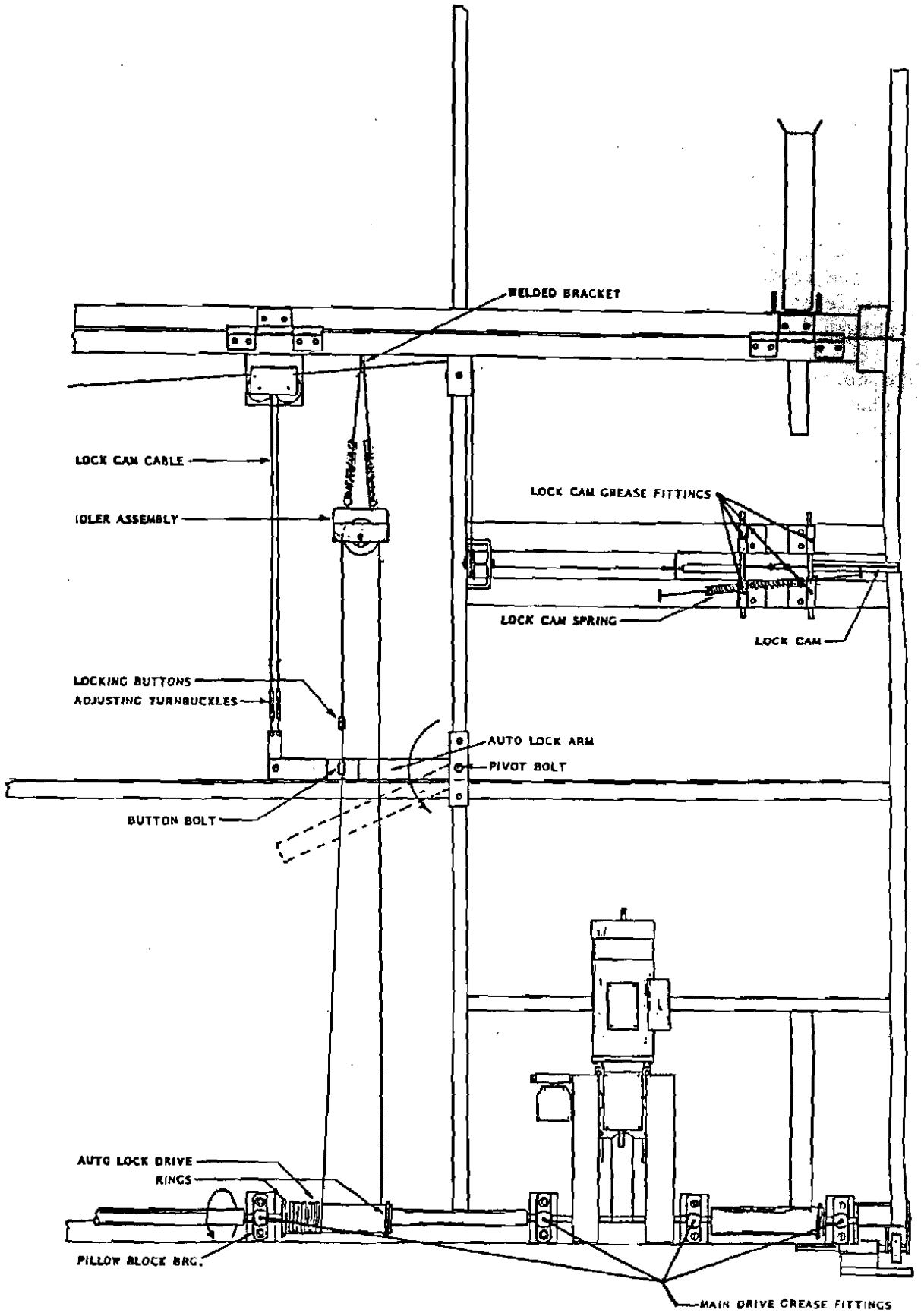
13. Still keeping tension on the cable, thread the cable through the idler assembly, around the top of the pulley and back down towards the unused ring on the autolock drive. Note: Be sure to keep the two locking buttons between the button bolt and idler assembly. Be sure travel of cable is not in the way of any moving parts or will not wear on any parts, expecially on the autolock arm.

14. Bring the unbuttoned cable end down to the drum and place one full wrap around the drum before threading it through the ring. Note: You will notice the direction of the cable wrappings and the drum sides at which the cables wrap will be opposite.

15. When you have the buttonless cable end through the ring and it is extending out of the hole furthest from the drum, slip a copper button on the cable. Then pull all the slack out of the cable and put a little stretch on the idler assembly spring. Crimp the button at this point and then attach the second spring.

16. To correctly crimp the locking buttons be sure the door is tightly shut, then pull down on the autolock arm, this will take the slack out of the lock cam cables. When the door is shut and the arm is pulled down tight, slide the copper buttons down the cable until they are seated firmly inside the bored hole of the button bolt. Mark their location on the cable and then crimp both of them very tightly on the marked location. Note: Be sure to remove rough edges on the crimped buttons to insure smooth operation and travel through the idler assembly.

17. Remove clamps holding the door shut. Open and close door to insure correct locking operation. Any minor adjustments can be made using the turnbuckles. Otherwise careful use of the limit switch can be used to tune your autolock system.



OPTIONAL AUTO LOCK

ONE YEAR LIMITED WARRANTY

Wilson Doors, Inc. guarantees its products to be free of defects in material and workmanship for one year from date of shipping. Electrical components are not a product manufactured by Wilson Doors, Inc. and are guaranteed by their manufacturer for one year through Wilson.

All defective parts must be returned shipping prepaid, for our evaluation before replacement parts will be sent out.

Normal maintenance and adjustments are not covered under this warranty, as they are the responsibility of the owner-user.

Wilson Doors, Inc. is not responsible for down time of door or labor required for replacement of bolt on items.

Subsequent damage to other than products manufactured by Wilson Doors, Inc. is not covered under this warranty.

This is a limited warranty. Your rights may vary according to state laws.

If you are unable to return a defective part immediately we will ship new parts UPS-COD and refund your money for the parts when it is returned. WE MUST HAVE DEFECTIVE PARTS BACK FOR EVALUATION.

Warranty void if registration is not filled out and sent within 30 days of installation.