

# Model 6-32 HOSE CUT-OFF MACHINE OWNER'S MANUAL

For 6-Wire Spiral & 2-Wire Braid Hose through 2" I.D.



## **CUTTER**

**Part Number:** 78018

**Product Number:** 7480-6597

## SCALLOPED-EDGE REPLACEMENT BLADE

**Part Number:** 78003

**Product Number:** 7482-1329

## **SAFETY INSTRUCTIONS**

#### **SPECIFICATIONS**

#### **Power Source:**

3 H.P. (5.2 H.P. Peak)

#### SINGLE PHASE

- 230V
- 60 Hz
- 15 Amp motor

#### THREE PHASE

- 460V
- 60 Hz
- 15 Amp motor

If a 460 volt source is used, it will be necessary to change connections as shown on motor name plate and replace 230 volt heaters in manual starter with 460 volt heaters.

#### **Dimensions:**

22" Wide by 42" Length by 24" High

#### Weight:

215 lbs.

#### **FEATURES:**

- Cuts up to 2" I.D. two-wire braid through six-spiral reinforced hose.
- Reversible 10" scalloped-edge, highspeed steel blade with 3/4" bore. Blade can be sharpened.
- Radius hose feed into blade for reduced friction
- OSHA approved inner blade guard for safe operation.
- Includes Coolant Spray System Kit for reduced heat in high-capacity cutting applications (recommended for multibraid and spiral reinforced hose). Kit includes reservoir, spray nozzle and mounting hardware.

## **MARNING**

## Avoid serious injury. Before using this power saw, follow these instructions:

- 1. Read and follow the user manual.
- 2. Protect your eyes with safety glasses or face shield.
- **3. Do not wear loose clothing –** it can get caught in the moving blade.
- **4. Keep hands away** from the moving blade.
- **5. Turn off power with lockout** before adjusting or servicing saw.
- 6. Use saw only if the blade guard is installed.
- **7. Fasten saw to work surface** before use. (See mounting instructions.)
- 8. Use only to cut hose and do not use a dull blade.
- 9. Support hose on front plate and pins.
- **10.** Use only **the special scalloped 10 inch blades –** other blades may injure you or damage the saw.



## **HOSE CUT-OFF MACHINE**

The Gates Corporation Denver, CO 80202 303-744-5291

#### MORE HELPFUL TIPS:

- Before using this saw, remove all tools from the cutting table and from around the saw.
- Do not overload or use machine for other than intended purpose.
- Do not force hose into blade. The motor may stall and burn out and the blade may break.
- While cutting, apply light, steady pressure to cutting handle.

Si no entiende Ud. este mensaje, es obligatorio por su seguridad de obtener de Gates estos avisos y instrucciones en español.

En cas de difficulté de comprehension de ces conseils, on est obligé pour la sécurité de demander de Gates un document contenant ces avis et instructions en français.

## **OPERATING INSTRUCTIONS**

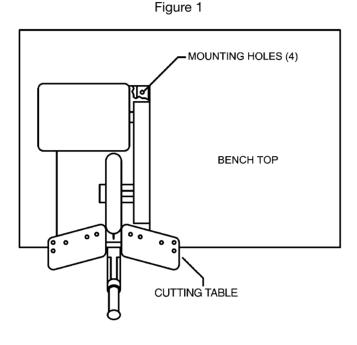
The Model 6-32 hose cut-off machine will cut all types of hose including high pressure 2-wire braided hose and some multi-spiral hose in sizes through 2" I. D. It is not recommended to cut spiral

hose with interwoven helix wire. When used properly, it produces a straight, clean cut on any hose within its range.

## NOTICE – This machine is designed for manual feed only.

#### 1. MOUNTING THE MACHINE

Before operating this machine it must first be firmly bolted through the four mounting holes (located on the base flanges) to a bench or stand so that two sides are accessible to the operator. (See Figure 1.)



#### 2. INSTALL POWER CORD PLUG

WARNING: Have a qualified electrician install the correct plug and outlet for your power supply.

Saw can be hard wired or wired with a plug. In either case, contact a licensed electrician to ensure compliance with local electrical codes.

#### Materials needed (not included):

- 14/4 or 12/4 electrical cable
- NEMA L14-20-P locking plug
- NEMA L14-20-R locking receptacle to match locking plug
- ¾" Romex clamp connector



- Strip 1-½" of outer insulation on electrical cable.
   Strip ½" of insulation from each of the four wires within the cable.
- 2. Connect each of the three wires in the electrical cable to the disassembled plug as follows:

Green - "G" terminal (ground)

White - "W" terminal (neutral)

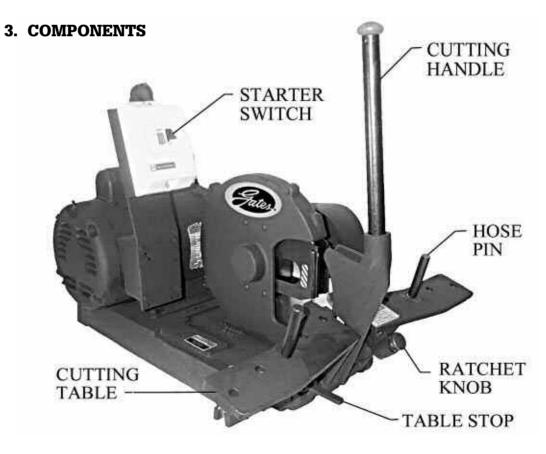
Black - "X" terminal (hot)

3. Replace outer shell of plug and tighten with two Phillips-head screws. Slide and snap moisture barrier in place.



- Connect other side of cable to 6-32 saw by removing cover of power box containing the starter switch.
- Strip outer insulation on electrical cable and insulation from each of the four wires within the cable.
- 6. Punch perforated hole through power box and thread cable through.
- 7. Connect the two hot and one neutral wires to power box. The ground wire should be connected to the grounding lug as illustrated in the photo at right.
- 8. Install locking power cord plug NEMA L14-20-P to a 15 or 20 amp NEMA L14-20-R electrical circuit. Be sure circuit is grounded and complies with all local electrical codes.





#### 4. INSTALLING THE WATER COOLANT SYSTEM

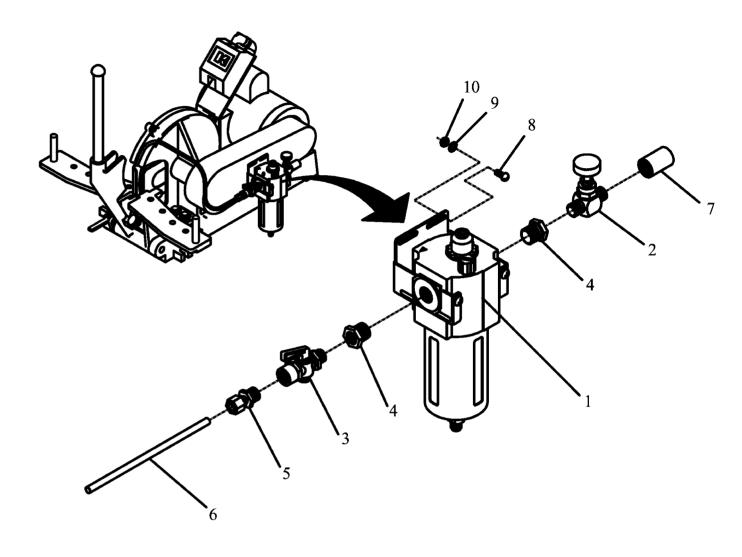
To reduce heat and friction on blade and increase blade life, it is recommended you install the water coolant system. Contents of box are as follows:

- 1 each lubricator with bracket (Part No. 68387)
- 1 each 1/4" copper coolant spray tube
- 2 each #10 32 X ½" round head bolts (Part No. VH03CD)
- 2 each #10 32 hex nut (Part No. VH15C)
- 2 each #10 32 lock washer (Part No. VH35D)
- A. Unpack lubricator contents and check that all parts are in the container. Install lubricator by removing the Phillips head screws on the top and bottom of the belt shroud. Remove the belt shroud.
- B. Locate the four pre-drilled holes on the belt shroud of the 6-32 saw. Attach bracket (Part No. 68387) using the two bolts, washers and hex nuts provided (Items #8, 9, and 10 on illustration on next page) through the top two holes of the lubricator mounting bracket and the top two holes of the belt shroud. (Additional holes available for added support.)
- C. Re-install belt shroud (reverse steps A).
- D. Install Coolant Spray Tube by locating shut-off valve on lubricator (Item #3 of illustration on next page). Remove bite nut and bite sleeve (Item #5) from shut-off valve. Install provided copper coolant spray tube (Item #6).
- E. Position provided coolant spray tube by bending tube for routing through the port on top of the blade shroud.
- F. Insert the other end of the tube into the spray port (located on the top of the blade shroud).
- G. Connect water supply using ½" MPT and bite sleeve to lubricator water inlet port.





## **COOLANT SPRAY SYSTEM**

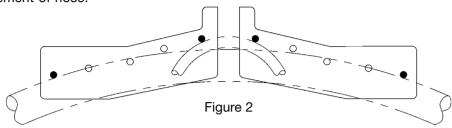


ITEM	DESCRIPTION	QTY.	PART NO.
1	LUBRICATOR WITH BRACKET	1	68387
2	NEEDLE VALVE (water supply)	1	68389
3	SHUT-OFF VALVE (Lubricator)	1	68645
4	BUSHING – 3/8" x 1/4"	2	VA12CBA
5	COMPRESSION CONNECTOR – $\frac{1}{4}$ MPT x $\frac{1}{4}$ BITE SLEEVE AND NUT	1	VA14BCE
6	COOLANT SPRAY TUBE - 1/4" COPPER TUBING	1	16736
7	COUPLING – 1/4"	1	VA16BA
8	MACHINE BOLT – #10-32 x ½"	2	VH03CD
9	LOCK WASHER - #10-32	2	VA35D
10	HEX NUT - #10-32	2	VH15C

#### 5. CUTTING

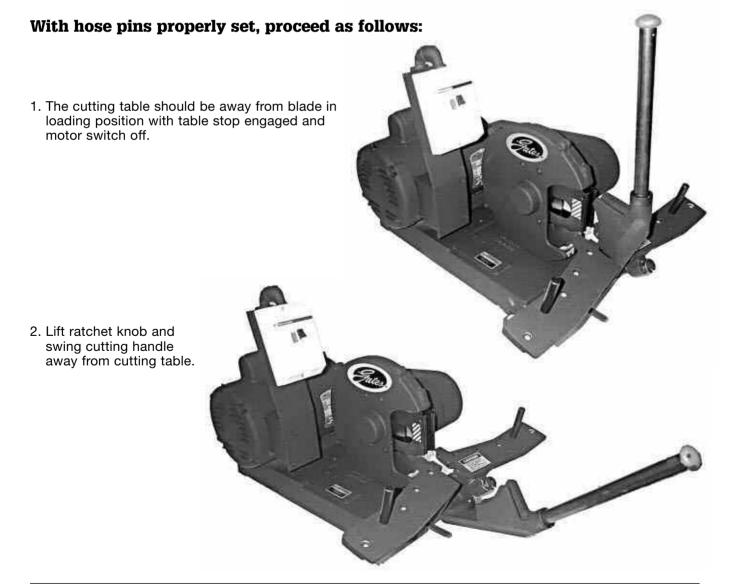
A cutting table is provided with five sets of holes for the two hose pins. Smaller hose sizes require the pins to be in a position closer to the center of cutting table than larger hose sizes as depicted in Figure 2. Experience will enable operator to select which set of holes will work best for each size and reinforcement of hose.

It is possible to square up a ragged end on a piece of larger diameter hose with minimum waste. Place one hose pin in one of the center table holes. Place other pin in outer hole on other side of table.



## △ CAUTION!

Hose should never be forced into blade or cut without proper bend radius. Forcing hose into blade will cause excessive friction heat which will reduce blade life and may cause blade to break.



3. Lay hose on table and push handle into hose to bend to proper arc for cutting. (See Radii of Bends Chart below.) Ratchet will hold hose in this position.

Radii of Bends for Cutting Hose

Hose I.D. (In.)

Bend Radius (In.)

2 6 to 8

1 and ¾ 2 to 4

½ & Smaller 1

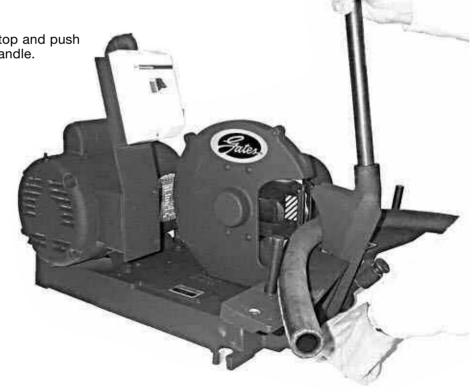
4. Start machine, release table stop and push hose into blade with cutting handle.

4 to 6

Return table to loading position, stop motor, release cutting handle and remove cut hose.

1½ and 1¼

Note: Small sizes of fabricbraided hose may be cut by having table locked and pushing hose between pins and into blade with cutting handle. When used in this way, ratchet is disengaged by lifting knob and turning it 1/4 turn.



#### 6. BLADE CHANGE

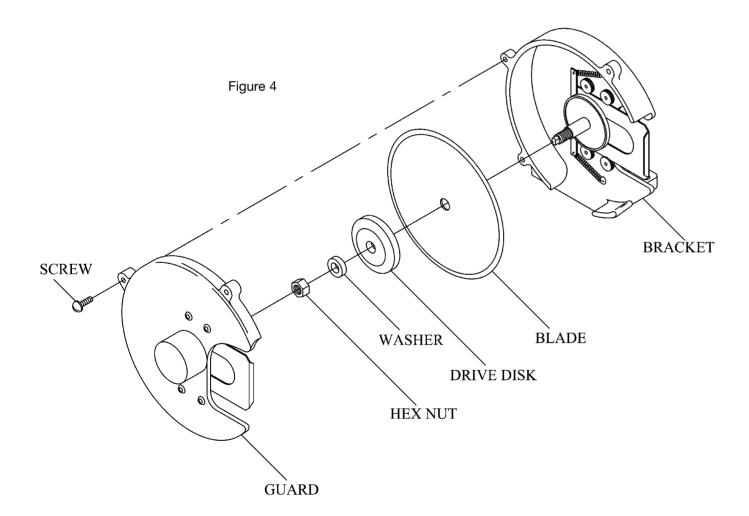
Over time the cutting blade will dull. Do not cut hydraulic hose with a dull blade. New blades are available through Gates (order Part Number

78003/Product Number 7482-1329 for scalloped edge). Blades can also be re-sharpened. See "Blade Re-Sharpening Procedure."

 $\Delta$  **CAUTION!** Cutting blades are very sharp. Handle with caution. Wear heavy-duty gloves to remove and replace blades.

#### Blade can easily be removed from machine as follows: (See Figure 4.)

- 1. Unscrew the (3) screws holding blade guard and remove from blade guard assembly.
- 2. Loosen and remove hex nut from blade shaft.
- 3. Carefully remove washer, drive disk and blade from blade guard bracket.
- 4. Replace with a new or re-sharpened blade.
- 5. Re-install drive disk, washer and hex nut on drive shaft and tighten securely.
- 6. Replace blade guard and secure with (3) mounting screws.

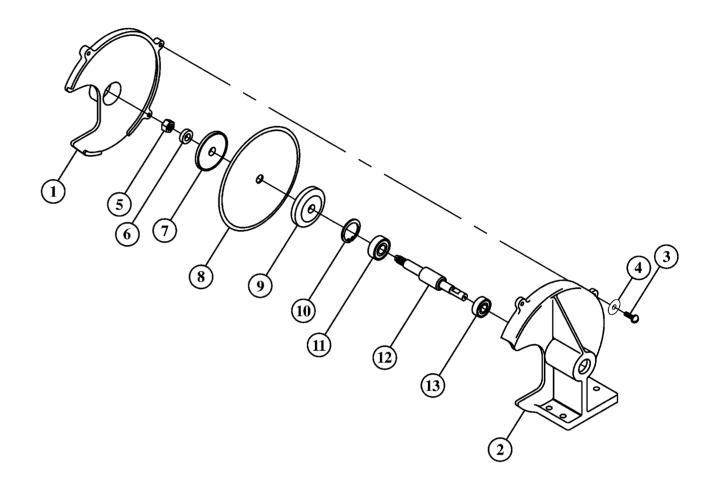


#### BLADE RE-SHARPENING PROCEDURE

A blade re-sharpening service is available through Curtis-Toledo's facility in St. Louis, Missouri.

Contact Curtis-Toledo's customer service department by phone at 314-383-1300 or by fax 314-381-1439 or e-mail at curtiscomp@aol.com.

## Model 6-32 CUT-OFF BRACKET ASSEMBLY PARTS LIST

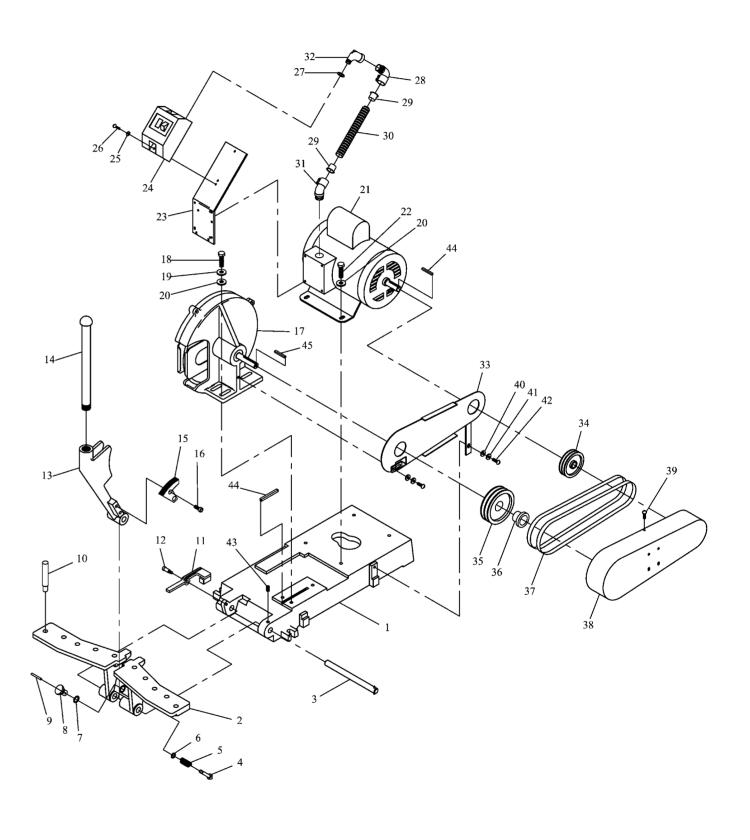


ITEM	DESCRIPTION	QTY.	PART NO. / PROD. NO.
1	CUT-OFF BLADE GUARD	1	*
2	CUT-OFF BLADE BRACKET	1	*
3	SCREW, ¼"-20 X %" LG.	3	26617
4	LOCKWASHER, INTERNAL TOOTH 1/4"	3	4131
5	NUT, %"-11 NC LH HEX	1	15968
6	WASHER, 111/16" OD X 1/8" ID X .070" THICK	1	27029
7	FLANGE, OUTSIDE	1	15943
8	CUT-OFF BLADE, BEVEL EDGE	1	15960
8	CUT-OFF BLADE, SCALLOPED EDGE	1	78003/7482-1329
9	FLANGE, INSIDE	1	19320
10	RING, RETAINING	1	16790
11	BEARING	1	15963
12	SHAFT, CUT-OFF BLADE	1	20914
13	BEARING	1	13591

<sup>\*</sup> Sold as assembly only, part number 21393 (Includes items 1,2,3 & 4)

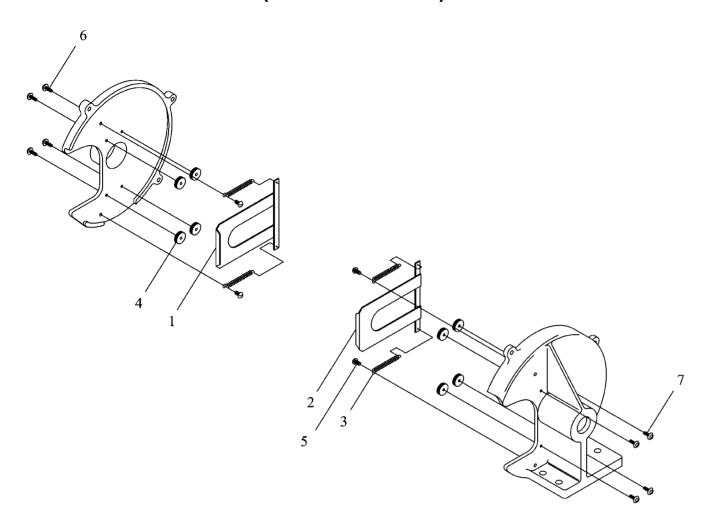
## Model 6-32 HOSE CUT-OFF MACHINE PARTS LIST

ITEM	DESCRIPTION	QTY.	PART NO.
1	BASE	1	20907
2	CUTTING TABLE	1	15927
3	PIVOT PIN ASSEMBLY	1	16012
4	RATCHET PAWL	1	*
5	RATCHET PAWL SPRING	1	13741
6	WASHER	1	13744
7	RETAINING RING	1	26973
8	RATCHET PAWL KNOB	1	*
9	PIN	1	*
10	HOSE PIN	2	15956
11	TABLE STOP	1	15929
12	SHOULDER SCREW, SOCKET HD., 56" X 56" LONG	1	15065
13	CUT-OFF ARM	1	15928
14	HANDLE ASSEMBLY	1	13833
15	RATCHET PLATE	1	15946
16	SCREW, 1/6"-18 X 1/4" SOCKET HD. CAP	2	8319
17	CUT-OFF BRACKET ASSEMBLY	1	21393
18	SCREW, HHCS %"-16UNC X 11/4" GRADE 5	3	VH12KK
19	LOCKWASHER %" INTERNAL TOOTH	7	4906
20	WASHER, PLAIN, SAE 1"	3	VH33X
21	MOTOR, 230/460V, 3 PHASE	1	21135
21	MOTOR, 230V, SINGLE PHASE	1	21136
22	SCREW, HHC %"-16 X 1" LONG, GRADE 5	4	VH12KH
23	BRACKET, STARTER	1	26621
24	STARTER, 230V, 3 PHASE	1	27837
24	STARTER, 460V, 3 PHASE	1	27842
24	STARTER, 230V, SINGLE PHASE	1	27838
25	LOCKWASHER	4	12037
26	SCREW, 10-24 X %" LONG, RHMS	2	4443
27	WASHER, REDUCING, ¾" X ½"	1	VE614
28	CONNECTIN, ANGLE, SQUEEZE BOX, ½" 90°	1	VE605
29	INSULINER	2	12490
30	CONDUIT, FLEXIBLE STEEL, ½"	1	18850
31	CONNECTOR, 1/2" SQUEEZE, 45°	1	11894
32	ELBOW	1	VA08DP
33	BRACKET, BELT GUARD	1	24527
34	PULLEY, MOTOR (SINGLE PHASE UNITS)	1	26640
34	PULLEY, MOTOR (3 PHASE UNITS)	1	23952
35	PULLEY, BLADE SHAFT	1	23951
36	BUSHING, %" BORE	1	20909
37	V-BELT	2	23950
38	BELT GUARD	1	24528
39	SCREW,THREAD CUTTING, PAN HD., TYPE "F" 10-24 X %" LONG	2	7464
40	WASHER, CUT, FLAT 1/4"	2	VH32F
41	LOCKWASHER, INTERNAL TOOTH 1/4"	5	VH38F
42	SCREW, #14 X ¾" SLOTTED, HEX, WASHER HD., S.M.S.	2	68705
43	SCREW, SOCKET HD., CUP POINT, SET 1/4"-20 X 1/2" LONG	1	7207
44	KEY, ¼" X ¼" X 2¾" LONG	1	16001
45	KEY, %6" X %6" X 1½" LONG	1	5149
*Avai	lable as assembly only		



## Model 6-32 INNER GUARD ASSEMBLY PARTS LIST

(Part Number 26692)



ITEM	DESCRIPTION	QTY.	PART NO.
1	INNER GUARD, RIGHT	1	26674
2	INNER GUARD, LEFT	1	26673
3	SPRING-INNER GUARD	4	26983
4	GUARD BUTTON (ROLLER)	8	26667
5	SCREW, MACHINE, ROUND HEAD 10-24 X %" LG.	4	14479
6	SCREW, SOCKET, BUTTON, HEX HEAD CAP 1/4"-20 NC X 1/2" LG.	4	26670
7	SCREW, SOCKET, BUTTON, HEX HEAD CAP 1/4"-20 NC X 1/8" LG.	4	14774

#### Model 6-32 HOSE CUT-OFF MACHINE OWNER'S MANUAL

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## Two-Year Limited Warranty on Equipment\*

For two years from the equipment ship date to the original user, Gates Corporation will, at its option, replace or repair any unit which proves to be defective in material or workmanship, or both, at no cost to the original user of the equipment. This is the exclusive remedy. THERE IS NO OTHER EXPRESS OR IMPLIED WARRANTY. ALL INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO ONE YEAR FROM DATE OF SHIPMENT OF THE EQUIPMENT TO THE ORIGINAL USER. LIABILITY FOR CONSEQUENTIAL AND INCIDENTAL DAMAGES UNDER ANY AND ALL WARRANTIES IS EXCLUDED TO THE EXTENT EXCLUSION IS PERMITTED BY LAW. Some states do not allow the exclusion of incidental or consequential damages, and some states do not allow limitations on how long an implied warranty lasts, so the above limitation and exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state. For warranty service, contact Service Department, Gates Corporation, P.O. Box 5887, Denver, Colorado 80217.

\*Blade is not covered by any warranty.



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