

# INSTRUCTIONS AND PARTS MANUAL

## TRAC-BUG

Please record your equipment identification information below for future reference. This information can be found on your machine nameplate.

Model Number: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

Whenever you request replacement parts or information on this equipment, always supply the information you have recorded above.

LIT-TRB-IPM-1117

Bug-O Systems is guided by honesty, integrity and ethics in service to our customers and in all we do.



**BUG-O SYSTEMS**  
A DIVISION OF WELD TOOLING CORPORATION

280 TECHNOLOGY DRIVE CANONSBURG, PENNSYLVANIA, 15317-9564 USA  
PHONE: 412-331-1776 <http://www.bugo.com> FAX: 412-331-0383



**NOTES:**

# SAFETY

**PROTECT YOURSELF AND OTHERS FROM SERIOUS INJURY OR DEATH. KEEP CHILDREN AWAY. BE SURE THAT ALL INSTALLATION, OPERATION, MAINTENANCE AND REPAIR PROCEDURES ARE PERFORMED ONLY BY QUALIFIED INDIVIDUALS.**



**ELECTRIC SHOCK can kill.**

1. The equipment is not waterproof. Using the unit in a wet environment may result in serious injury. Do not touch the equipment when wet or standing in a wet location.
2. Never open the equipment without first unplugging the power cord or serious injury may result.
3. Verify the customer-supplied power connections are made in accordance with all applicable local and national electrical safety codes. If none exist, use International Electric Code (IEC) 950.
4. Never remove or bypass the equipment power cord ground. Verify the equipment is grounded in accordance with all applicable local and national electrical safety codes. If none exist, use International Electrical Code (IEC) 950.



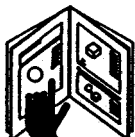
**EQUIPMENT DAMAGE POSSIBLE.**

1. Do not plug in the power cord without first verifying the equipment is OFF and the cord input voltage is the same as required by the machine or serious damage may result.
2. Do not leave the equipment unattended. Remove from the work site and store in a safe location when not in use.



**FALLING EQUIPMENT can cause serious personal injury and equipment damage.**

Faulty or careless user installation is possible. As a result, never stand or walk underneath equipment.



**READ INSTRUCTIONS.**

Read the instruction manual before installing and using the equipment.



**MOVING PARTS can cause serious injury.**

1. Never try to stop the pinion from moving except by removing power or by using the STOP control.
2. Do not remove any protective panels, covers or guards and operate equipment.

## CAUTION

**DO NOT LEAVE EQUIPMENT UNATTENDED WHEN NOT IN USE!**

**Remove from work site and store in a safe location.**

# TRAC-BUG

## INSTRUCTION AND PARTS MANUAL

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**THIS PRODUCT IS COVERED BY ONE OR  
MORE PATENTS WORLD WIDE.**

# OPERATING INSTRUCTIONS / SET-UP

## 1. TRACK SET-UP

The TRAC-BUG will run on any 6" centerline, "V" groove friction track. To position track, simply set it parallel to the cut line of the work piece. For most applications, such as straight or bevel cutting, the rail should be set within 6" to 10" of the cut line. Snapping a chalk line will aid in set-up. Rails can be joined for long cuts.

## 2. TORCH SET-UP

Insert the torch into the torch holder on the rack. Adjust the torch holder, the clamp and the rack to set the torch to the desired position. Connect the **Twin Hose Assembly** to the **Quick Action Manifold** and to the cutting torch. The manifold provides strain relief for the supply hoses and quick shut off of the gas supply to the torch. Once the torch is adjusted, the manifold eliminates the need to readjust the valves after each cut and prevents the supply hoses from dragging the torch out of position.

## 3. MACHINE SET-UP

The TRAC-BUG can be positioned anywhere along the track and in either direction. Be sure the wheels are seated into the "V" of the track. Disengage the clutch on the rear of the unit to allow free rolling along track. Rack torch support to position torch over cut line and roll the unit back and forth to confirm alignment with the cut line. Reengage clutch.

## 4. MACHINE OPERATION

Set **Toggle Switch** to the center "STOP" position. Connect power cord to the appropriate voltage supply. Throw **Toggle Switch** to either direction to verify power to the unit. Adjust travel speed using the **Speed Control**. The **Circuit Breaker** protects the unit from overload or electrical faults.

**CAUTION: IF CIRCUIT BREAKER OPENS, FIND AND CORRECT THE PROBLEM BEFORE RESETTING.**

# TRAC-BUG / OXY-FUEL

## TECHNICAL DATA

**Power requirement:** 60 watts at rated voltage.

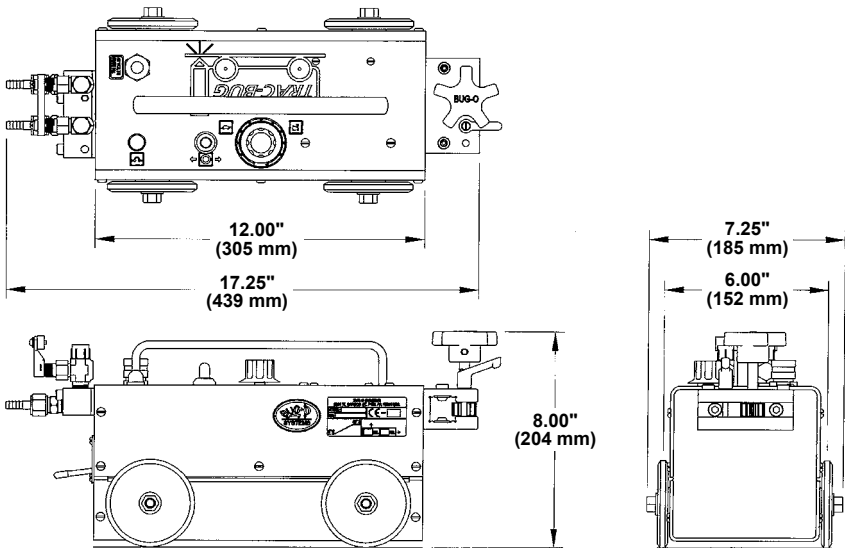
TRB-1000	TRAC-BUG for Oxy-fuel	120 VAC/50-60/1
TRB-1002	TRAC-BUG for Oxy-fuel	240 VAC/50-60/1
TRB-1004	TRAC-BUG for Oxy-fuel	42 VAC/50-60/1

**Travel Speed:** Infinitely variable from 4-72 ipm (100-1800 mm/min)

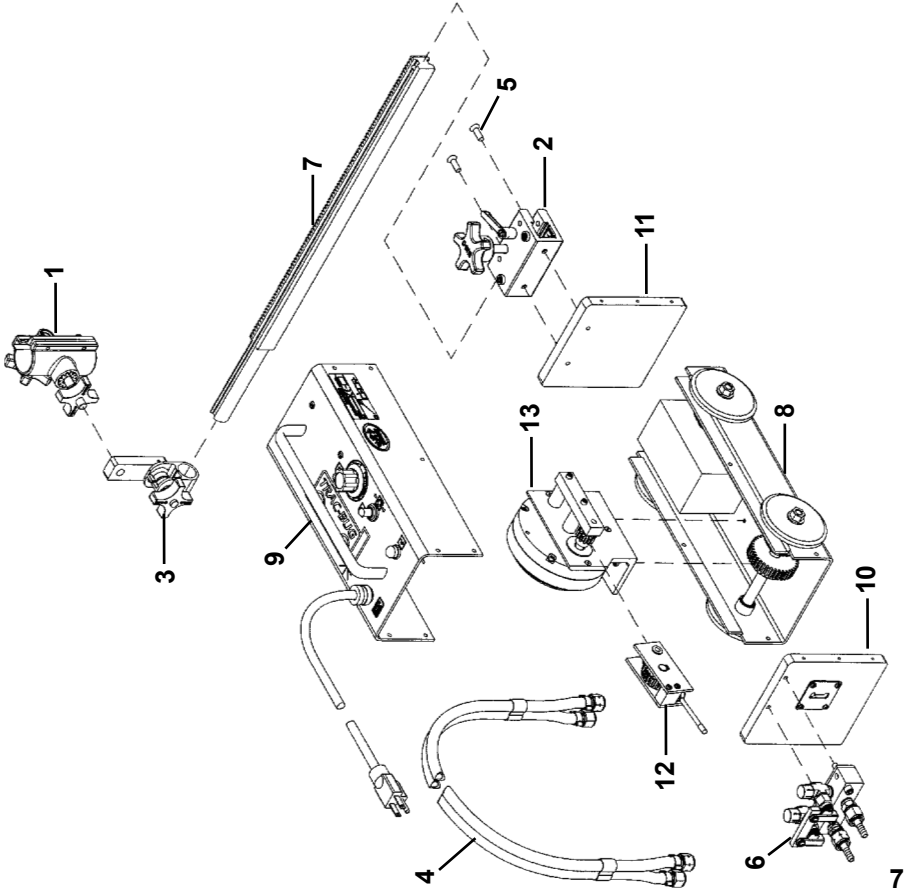
**Net Weight:** 33 lbs. (15 kg)

**Shipping Weight:** 38 lbs. (17 kg)

**Dimensions:** See below.



# TRAC-BUG / OXY-FUEL



## PARTS LIST / TRAC-BUG OXY-FUEL

ITEM	QTY	PART NO.	DESCRIPTION
1	1	BUG-2915	Torch Holder
2	1	BUG-5451	Rack Holder
3	1	BUG-9035	Universal Extender
4	1	CIR-1010-3	Twin Hose Assembly
5	2	FAS-0957	Flt Hd Soc Scr 1/4-20 x 3/4"
6	1	MDS-3025	2 Hose Q & A Manifold
7	1	PAN-1015	Rack 22-5/8"
8	1	TRB-1010	Base Assembly (page 10)
9	1	TRB-102_	Cover Assembly (page 11)
10	1	TRB-1030	Rear Plate Assembly (page 12)
11	1	TRB-1031	Front Plate
12	1	TRB-1040	Clutch Assembly (page 13)
13	1	TRB-1050	Drive Section (page 14)
14	14	FAS-0124	Flt Hd Scr 8-32 x 3/8"

# TRAC-BUG / PLASMA

## TECHNICAL DATA

**Power requirement:** 60 watts at rated voltage.

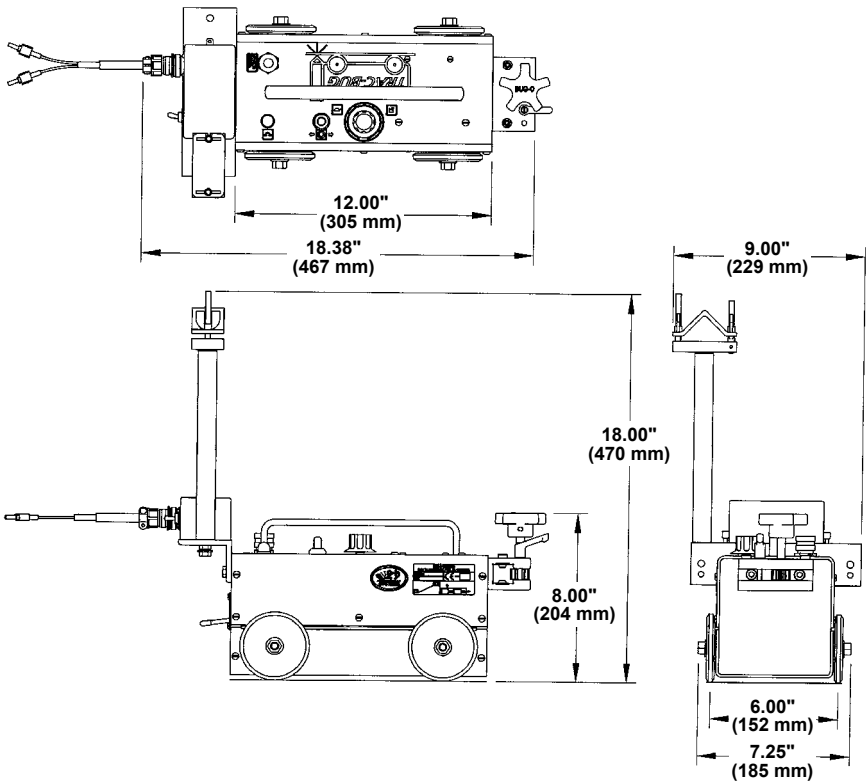
TRB-1500	TRAC-BUG for Plasma	120 VAC/50-60/1
TRB-1502	TRAC-BUG for Plasma	240 VAC/50-60/1
TRB-1504	TRAC-BUG for Plasma	42 VAC/50-60/1

**Travel Speed:** Infinitely variable from 4-72 ipm (100-1800 mm/min)

**Net Weight:** 33 lbs. (15 kg)

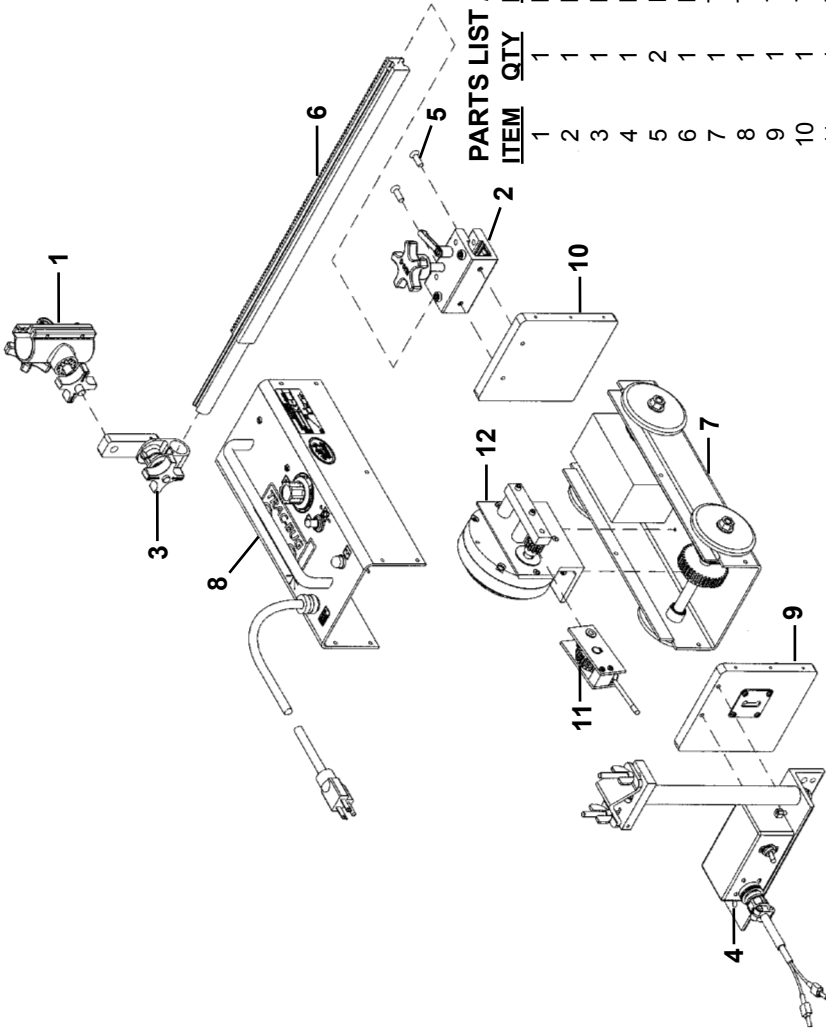
**Shipping Weight:** 38 lbs. (17 kg)

**Dimensions:** See below.





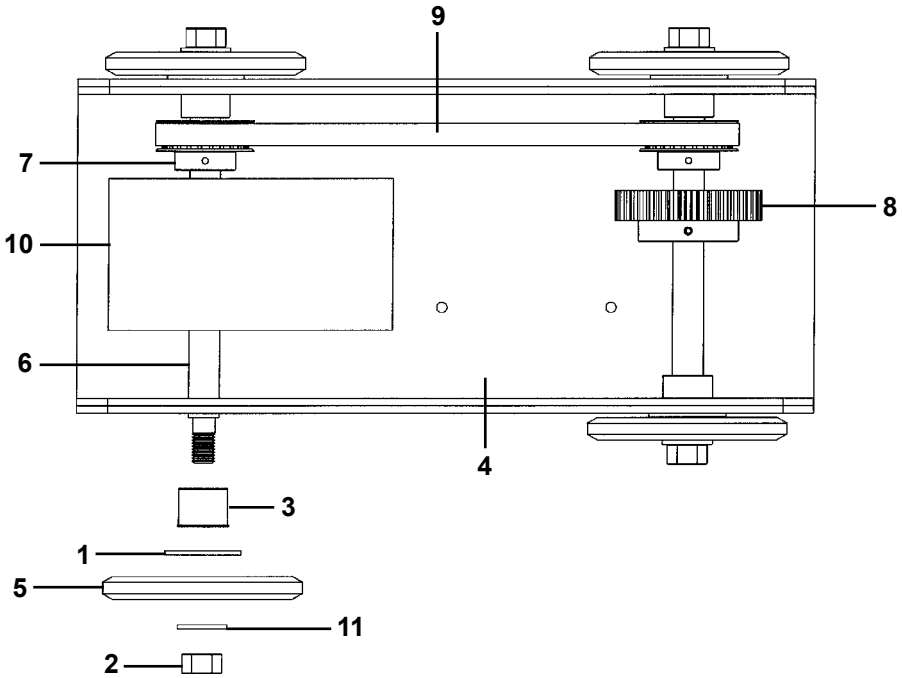
# TRAC-BUG / PLASMA



## PARTS LIST / TRAC-BUG PLASMA

ITEM	QTY	PART NO.	DESCRIPTION
1	1	BUG-2915	Torch Holder
2	1	BUG-5451	Rack Holder
3	1	BUG-9035	Universal Extender
4	1	BUG-5485	Contacto Box
5	2	FAS-0957	Fit Hd Soc Scr 1/4-20 x 3/4"
6	1	PAN-1015	Rack 22-5/8"
7	1	TRB-1010	Base Assembly (page 10)
8	1	TRB-102	Cover Assembly (page 11)
9	1	TRB-1030	Rear Plate Assembly (page 12)
10	1	TRB-1031	Front Plate
11	1	TRB-1040	Clutch Assembly (page 13)
12	1	TRB-1050	Drive Section (page 14)
13	14	FAS-0124	Fit Hd Scr 8-32 x 3/8"

# TRB-1010 BASE ASSEMBLY

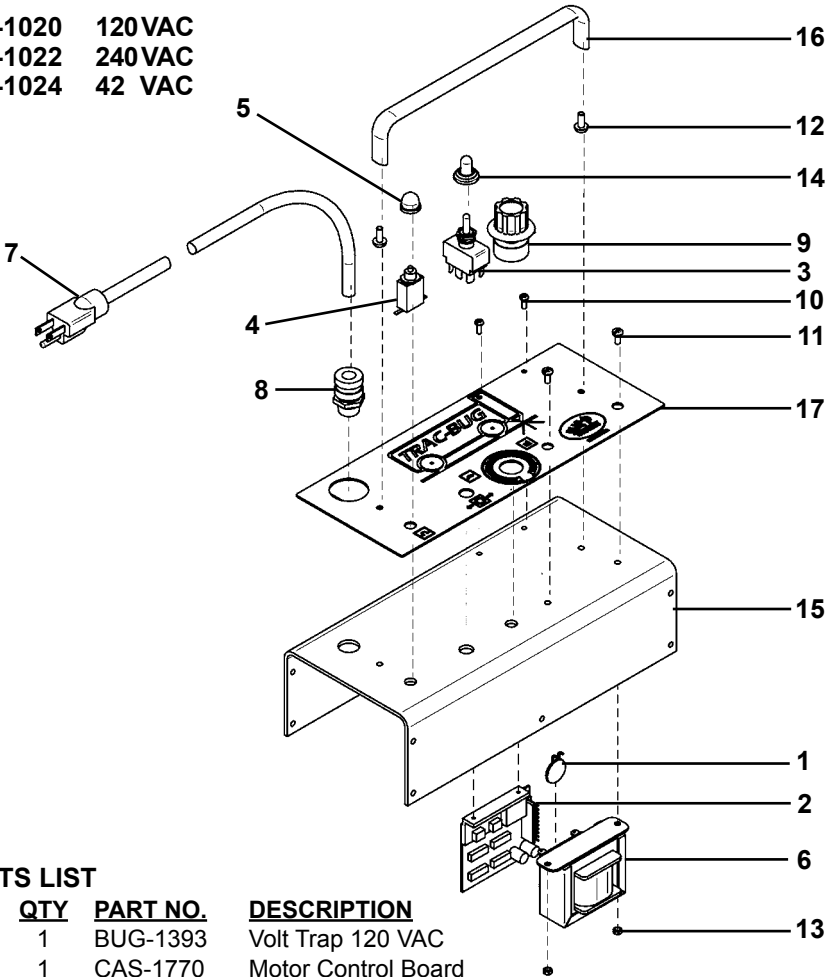


## PARTS LIST

<u>ITEM</u>	<u>QTY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	4	TRB-1032	Teflon Washer
2	4	FAS-1390	3/8-16 Hex Nut
3	4	TRB-1009	Press Bearing
4	1	TRB-1011	Base Panel
5	4	TRB-1014	Steel Wheel
6	2	TRB-1016	Axle
7	2	TRB-1017	Timing Pulley
8	1	TRB-1018	Driven Gear
9	1	TRB-1019	Drive Belt
10	1	TRB-1026	10# Weight
11	4	WAS-0260	3/8" Washer

# TRB-1020 COVER ASSEMBLY

TRB-1020 120 VAC  
 TRB-1022 240 VAC  
 TRB-1024 42 VAC

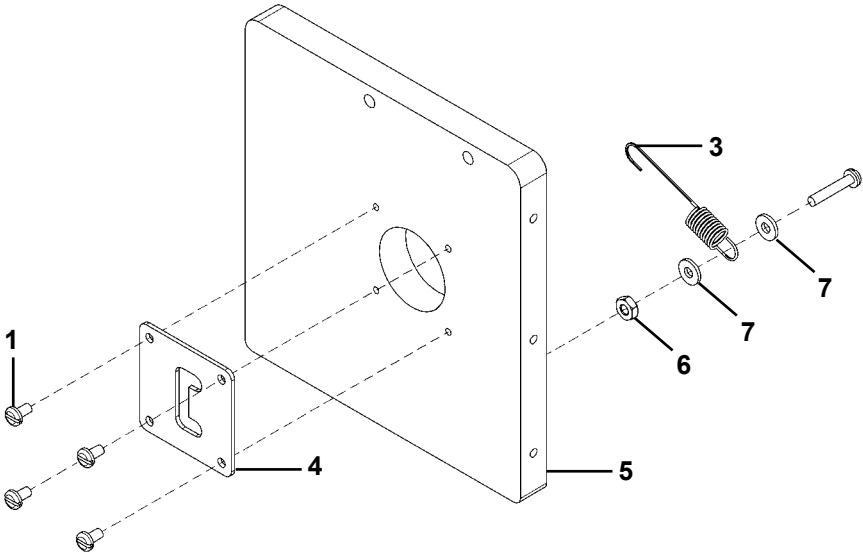


## PARTS LIST

<u>ITEM</u>	<u>QTY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
* 1	1	BUG-1393	Volt Trap 120 VAC
2	1	CAS-1770	Motor Control Board
3	1	BUG-2255	Toggle Switch
* 4	1	BUG-2923	Circuit Breaker .7 amp
5	1	BUG-2924	Reset Button Seal
* 6	1	BUG-5001	Transformer 120 VAC
* 7	1	BUG-9445	Power Cord 120 VAC
8	1	BUG-9446	Cord Grip
9	1	BUG-9686	Potentiometer Control
10	2	FAS-0114	Pan Hd Scr 6-32 x 3/8"
11	2	FAS-0124	Pan Hd Scr 8-32 x 3/8"
12	2	FAS-0235	Rd Hd Scr 10-24 x 1/2"
13	2	FAS-1320	8-32 Hex Nut
14	1	BUG-5758	Seal, Toggle Switch
15	1	TRB-1021	TRB Cover Panel
16	1	TRB-1025	Handle, 9" Centers
17	1	TRB-1080	Trac-Bug Legend Plate

\* See Electrical Component Chart on page 15 for 240 VAC and 42 VAC part numbers.

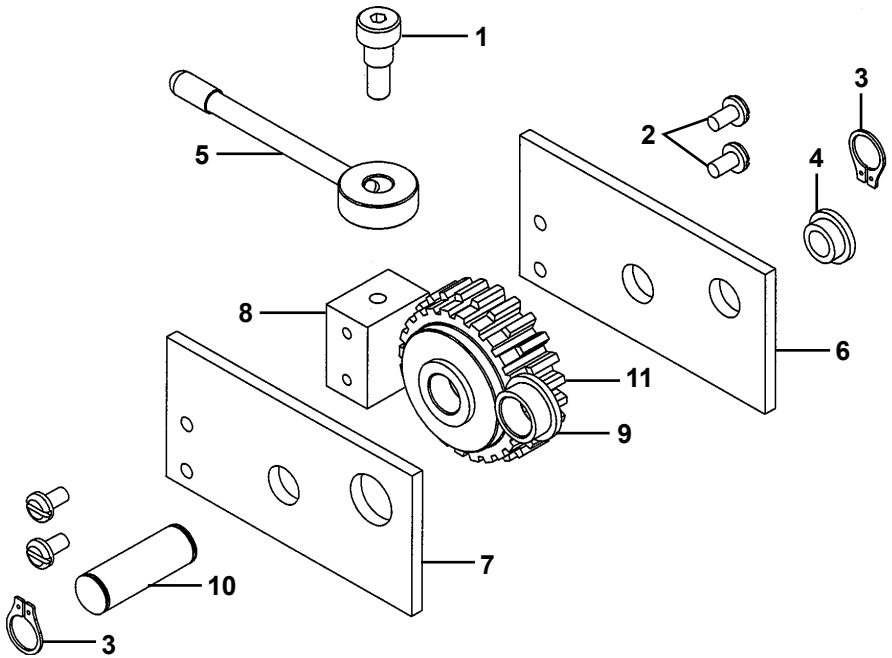
# TRB-1030 REAR PLATE ASSEMBLY



## PARTS LIST

<u>ITEM</u>	<u>QTY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	4	FAS-0112	Pan Hd Scr 6-33 x 1/4"
2	1	FAS-0217	Rnd Hd Scr 6-32 X 3
3	1	TRB-1027	Clutch Spring
4	1	TRB-1028	Clutch Plate
5	1	TRB-1029	Rear Plate
6	1	FAS-1310	Hex Nut 6-32
7	2	WAS-0210	#6 SAE Flat

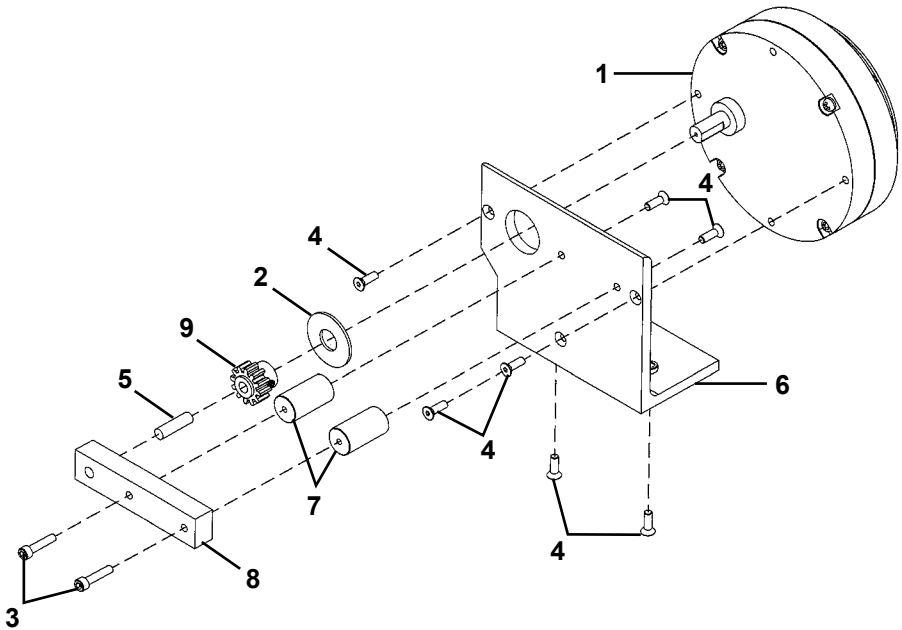
# TRB-1040 CLUTCH ASSEMBLY



## PARTS LIST

<u>ITEM</u>	<u>QTY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	FAS-0634	Soc Hd Shd 1/4" x 3/8" x 10-24
2	4	FAS-0112	Pan Hd Slt 6-32 x 1/4"
3	2	MUG-1579	Retaining Ring For 3/8" Shaft
4	1	SFX-1216	Bearing Flg 1/4" ID x 3/8" OD x 3/16" LG
5	1	TRB-1035	Clutch Lever
6	1	TRB-1041	Inner Side Plate
7	1	TRB-1042	Outer Side Plate
8	1	TRB-1043	Spacer Block
9	1	TRB-1044	Bearing Flg 3/8" ID x 1/2" OD x 1/4" LG
10	1	TRB-1046	3/8" Diameter Shaft
11	1	TRB-1047	Idler Gear Assembly

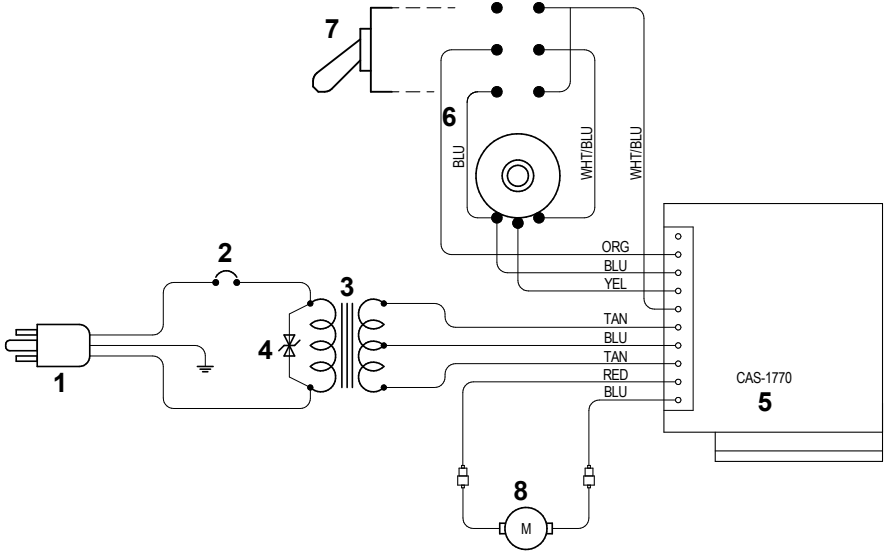
# TRB-1050 DRIVE SECTION



## PARTS LIST

<u>ITEM</u>	<u>QTY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	BUG-1550	Gear Motor 150:1
2	1	BUG-5122	Delrin Washer
3	2	FAS-0527	Soc Hd Cap Scr 8-32 x 3/4"
4	7	FAS-0925	Flt Hd Soc Scr 8-23 x 1/2"
5	1	SFX-1271	Dowel Pin .250" Dia. x .875"
6	1	TRB-1036	Motor Mount Angle
7	2	TRB-1037	Spacer .625" OD x 1.141" LG
8	1	TRB-1038	Clutch Bar
9	1	TRB-1039	Drive Pinion

# TRAC-BUG WIRING DIAGRAM



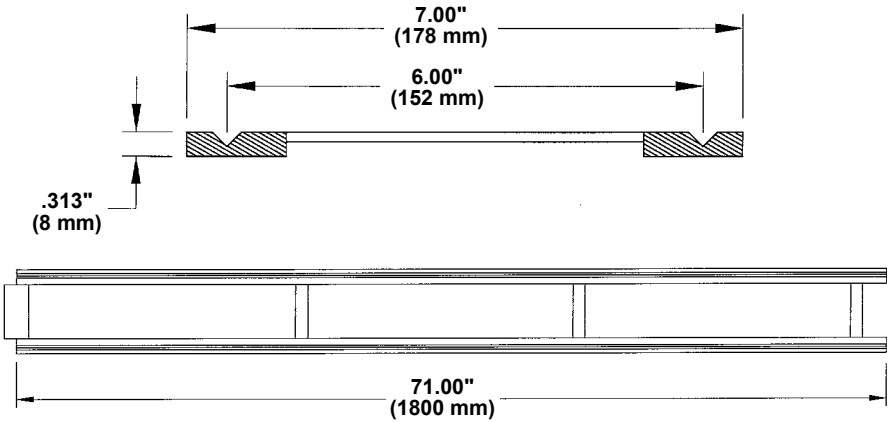
## ELECTRICAL COMPONENT CHART

ITEM	DESCRIPTION	VOLTAGE		
		120 VAC	240 VAC	42 VAC
1	Power Cord	BUG-9445	GOF-3115	BUG-9442
2	Circuit Breaker	BUG-2923	BUG-2952	BUG-2933
3	Transformer	BUG-5001	BUG-5002	BUG-5003
4	Volt Trap	BUG-1393	BUG-1563	BUG-1393
5	Speed Control	CAS-1770		
6	Potentiometer w/knob	BUG-9686		
7	Toggle Sw., F-O-R	BUG-2255		
8	Gear Motor	BUG-1550		

# TRAC-BUG TRACK

## TRB-1250 FRICTION TRACK 71" (1.8 m)

The TRB-1250 Friction Track is made of steel. The design allows the user to join multiple sections together for long cuts. This track can only be used for down-hand applications. The track sections weight 16 lbs. (7.3 kg) each.



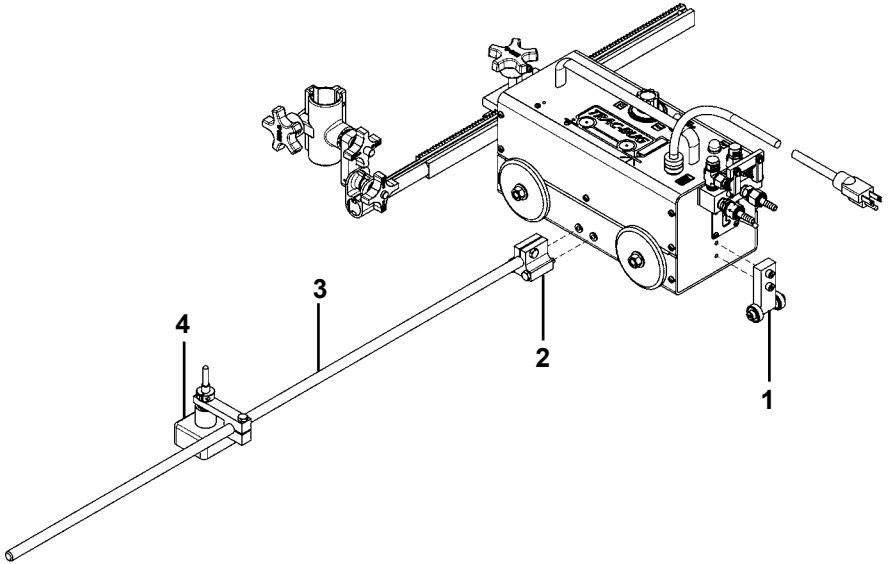


# TRB-1160 RADIUS KIT INSTALLATION

The TRB-1160 Radius Kit enables the Trac-Bug to be quickly changed from a straight line to a circle cutting machine.

Bolt TRB-1153 to the drive unit with the two bolts supplied.

Bolt TRB-1156 to the drive unit with the two bolts supplied. Insert magnet pivot and rod to machine.

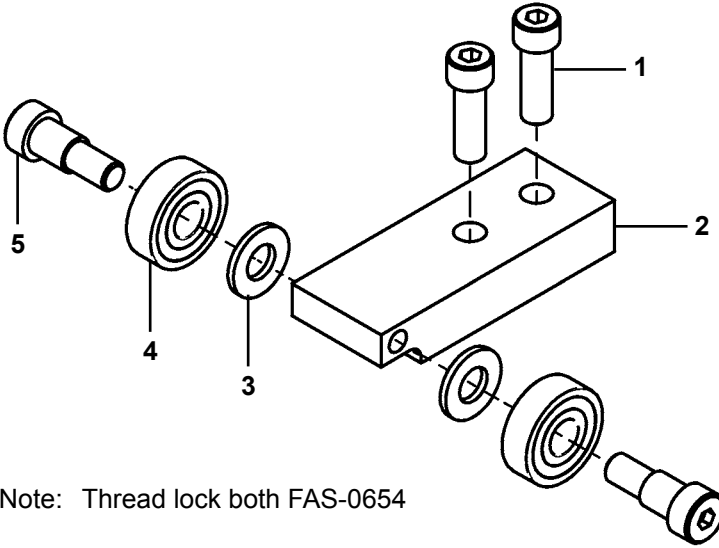


## PARTS LIST

<u>ITEM</u>	<u>QTY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	TRB-1153	Radius Riser Assembly
2	1	TRB-1156	Radius Block Assembly
3	1	GOF-3128	Rod
4	1	TRB-1165	Magnet Pivot Assembly
5	1	TRB-1155	Radius Arm Attachment (includes items 2, 3 and 4)

NOTE: TRB-1160 can be installed on 2012 models and later. Models from 2011 and earlier require additional machining. Consult the factory for instruction.

# TRB-1153 RADIUS RISER ASSEMBLY

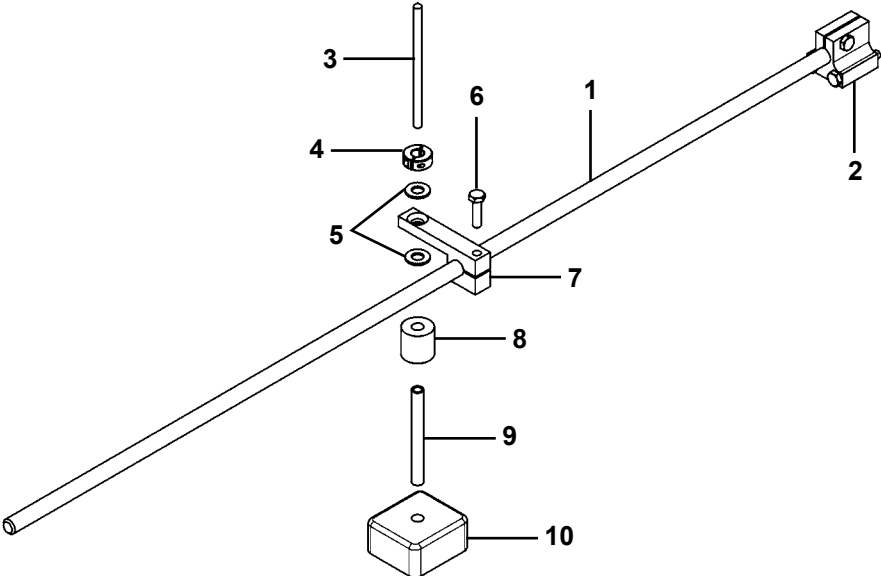


Note: Thread lock both FAS-0654

## PARTS LIST

<u>ITEM</u>	<u>QTY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	FAS-0557	Soc Hd Cap 1/4-20 x 3/4
2	1	TRB-1154	Radius Riser Block
3	2	BUG-2841	Washer 5/8 OD x 5/16 ID
4	2	BUG-2012	Bearing
5	2	FAS-0654	Soc Hd Shr 5/16 x 3/8 x 1/4-20

# TRB-1155 RADIUS ARM ATTACHMENT



Note: Maintain approx. 1/8" gap  
between GOF-3138 & BUG-9012

### PARTS LIST

<u>ITEM</u>	<u>QTY</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	GOF-3128	Rod
2	1	TRB-1156	Radius Block Assembly
*3	1	GOF-3137	Pivot Point
*4	1	BUG-9012	Locking Collar
*5	2	BUG-2034	Teflon Washer 3/4 OD x 3/8 ID x 1/16
*6	1	FAS-0359	Hex Hd Cap Scr 1/4-20 x 1"
*7	1	GOF-3138	Offset Link
*8	1	TRB-1159	Radius Arm Spacer
*9	1	TRB-1158	Sleeve
*10	1	GOF-3133	Magnet

\*Items are part of TRB-1165 Magnet Pivot Assembly

# TROUBLESHOOTING GUIDE

PROBLEM	CAUSE	REMEDY
Does not run, indicator light off.	No power to machine.	Check power line supply voltage. Plug in line cord firmly.
Does not run, indicator light off.  Circuit breaker tripped.	Wiring shorts.  Shorted motor.  Faulty speed control board.  Burned out transformer.	Disconnect machine and examine internally; rewire at fault.  If none found, throw direction switch to "OFF", reset breaker and plug in:  If breaker does not trip, replace drive unit.  If breaker trips again, replace control board.  (OR)  Replace transformer.
Does not run, indicator light on.	Bad connection.  Faulty speed control board.	Check wiring connections, 12 VAC should appear across secondary of transformer.  Tighten terminal screws on speed control board.  If DC Volts = 0 across leads to motor; replace control board.
Unit runs, but no control over speed.	Faulty speed control board.	Replace control board. (Check connection first).

**NOTE:** Make sure unit is plugged into correct voltage, (120 VAC, 240 VAC, 42 VAC) corresponding to Model No. rating.

12 VAC should appear across secondary of transformer in all TRAC-BUG Units.

# WARRANTY

<b>Limited 3-Year Warranty</b>
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Model \_\_\_\_\_  
Serial No. \_\_\_\_\_  
Date Purchased: \_\_\_\_\_  
Where Purchased: \_\_\_\_\_

For a period ending one (1) year from the date of invoice, Manufacturer warrants that any new machine or part is free from defects in materials and workmanship and Manufacturer agrees to repair or replace at its option, any defective part or machine. HOWEVER, if the invoiced customer registers the Product Warranty by returning the Warranty Registration Card supplied with the product within 90 days of the invoice date, or by registering on-line at [www.bugo.com](http://www.bugo.com), Manufacturer will extend the warranty period an additional two (2) years which will provide three (3) total years from the date of original invoice to customer. This warranty does not apply to machines which, after Manufacture's inspection are determined by Manufacturer to have been damaged due to neglect, abuse, overloading, accident or improper usage. All shipping and handling charges will be paid by the customer.

The foregoing express warranty is exclusive and Manufacturer makes no representation or warranty (either express or implied) other than as set forth expressly in the preceding sentence. Specifically, Manufacturer makes no express or implied warranty of merchantability or fitness for any particular purpose with respect to any goods. Manufacturer shall not be subject to any other obligations or liabilities whatsoever with respect to machines or parts furnished by Manufacturer.

Manufacturer shall not in any event be liable to Distributor or any customer for any loss of profits, incidental or consequential damages or special damages of any kind. Distributor's or customer's sole and exclusive remedy against Manufacturer for any breach of warranty, negligence, strict liability or any other claim relating to goods delivered pursuant hereto shall be for repair or replacement (at Manufacturer's option) of the machines or parts affected by such breach.

### **Distributor's Warranty:**

In no event shall Manufacturer be liable to Distributor or to any customer thereof for any warranties, representations or promises, express or implied, extended by Distributor without the advance written consent of Manufacturer, including but not limited to any and all warranties of merchantability or fitness for a particular purpose and all warranties, representations or promises which exceed or are different from the express limited warranty set forth above. Distributor agrees to indemnify and hold Manufacturer harmless from any claim by a customer based upon any express or implied warranty by Distributor which exceeds or differs from Manufacturer's express limited warranty set forth above.

### **HOW TO OBTAIN SERVICE:**

***If you think this machine is not operating properly, re-read the instruction manual carefully, then call your Authorized BUG-O dealer/distributor. If they cannot give you the necessary service, write or phone us to tell us exactly what difficulty you have experienced. BE SURE to mention the MODEL and SERIAL numbers.***