

Ultra Kut III Saw

Operating and Maintenance Manual



Ultra Kut III Saw

910196

Record of Changes

Rev No.	Date	Description of Changes
Rev 1	9.2019	New Release
1.1	11.2019	Add fuel: oil mixture ratio
1.2	2.2020	Add engine parts list
1.3	4.2021	Update Engine Parts List: add 475783
1.4	1.2022	Add Adjusting the Belt Tension
2	6.2022	Update RRP# 473933 Engine drawing with additional service parts
2.1	7.2022	Update RRP# 473933 Engine drawing
2.2	8.2022	Update RRP# 718833 Engine drawing
2.3	9.2022	Update RRP# 473933 Engine Service part List
2.4	1.2023	Update RRP# 473933 Engine drawing – add FILTER 476766 Update Format and Layout
2.5	3.2023	Update Footer and Contact Information Update Parts and Service page with contact information
2.6	10.2023	Update Technical Support & Service information

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Section 1: Overview and Safety

Ultra Kut III Saw Overview

RRP designs and manufactures equipment primarily for the repair and new construction of rail and railroad tie track maintenance.

The Racine Railroad Products Ultra Kut III Saw is a portable, gasoline/petrol engine powered, single blade saw designed for vertical on track rail cutting. The Racine Ultra Kut III Saw has an over-center, screw-type rail clamp that accommodates 80 lbs to 175 lbs rail.

Cutting position is set with clamp and spring loaded articulating pivoting arms with an adapting rail clamp and a manual screw with T- handle. The Racine Ultra Kut III Saw uses ANSI approved abrasive cutting disc blades.

Do not use this machine for other than its intended purpose.

Please read these instructions when using this tool, which can only be used for the specified purpose. Failure to do so could result in personal injury or equipment damage. This instruction manual should be kept throughout the life of the tool.

Note: Information in this document is subject to change without notice.

The operator of this tool should:

- Have access to this operation instruction.
- Read and understand this operation instruction.

Environmental Protection



Comply with relevant national waste disposal laws and regulations. Waste electronic devices cannot be treated as household waste.

Equipment, accessories, and packaging shall be recyclable.



Don't throw the discarded equipment in trash cans.

Safety Information

For safe installation and operation of this equipment, carefully read and understand the contents of this manual. Improper operation, handling, or maintenance can result in equipment damage and personal injury.

Only trained and authorized personnel should be allowed to operate this

machine. In addition, all personnel at the worksite should be aware of the safety concerns and their individual responsibilities prior to working with this machine.

Please read and comply with all the safety precautions in this manual **before** operating this machine. Your safety is at risk.

Safety Terms



DANGER indicates a hazardous operating procedure, practice, or condition. If the hazardous situation is not avoided death or serious injury will occur.



WARNING indicates a hazardous operating procedure, practice, or condition. If the hazardous situation is not avoided death or serious injury could occur.



CAUTION indicates a potentially hazardous operating procedure, practice, or condition. If the hazardous situation is not avoided moderate or minor injury could occur.

Machine Use and Safety Precautions



Failure to follow safety precautions when operating this equipment can result in serious injury or death to the operator or other persons in the area.

Observe the following precautions whenever you are operating, working on or near this equipment.

Do not make any modifications without authorization or written approval from Racine Railroad Products. Replace all Racine Railroad Products and OEM parts with genuine Racine Railroad Products and OEM parts. Using non-OEM parts may compromise the safety of the machine.

Do not wear loose clothing, jewelry, radio belts, etc., when operating, working on or near this equipment. They can be caught in moving parts and may result in severe injury.

Always wear appropriate personal protective clothing when operating this equipment: e.g., orange safety vest, hard hat, safety glasses with side shields, hearing protection, steel-toed safety boots, leather gloves, dust respirator, etc.

Always lift heavy objects with the knees and legs, not the arms and back.

Always keep hands, arms, feet, head, clothing, etc., out of the operating area and away from all rotating or moving components when operating, working on or near this machine.

Always make sure that all guards, covers, belts, hoses, and operating components are in good working order and that all controls are in the appropriate position before starting the engine.

Always make sure that all safety equipment (e.g., fire extinguishers, first aid kits, locking and safety devices) are installed properly and are in good working order. **Do not operate the machine until unsafe conditions have been corrected.**

Always operate the engine only in a well-ventilated area and make sure that the air filters, air filter covers, and muffler are in good condition.

Always keep the machine clean and free of debris. Operate the machine in a safe and responsible manner. Exercise caution when fueling, working on or near rotating or moving components, hot components, and fuel systems. Be aware of potential fire hazards and prevent sparks, exhaust, etc., from starting fires on the machine and/or work area.

Always comply with all instructions provided on any decals or placards installed on the machine and with any relevant amplifying information provided in this manual or other general operating procedures.

Always turn off the engine. Make sure that all controls are in a safe position and install all appropriate locking and safety devices before doing any of the following:

- Lubricating
- Adjusting
- Installing Tooling
- Making Repairs
- Performing Service

Always comply with all Lock Out / Tag Out Procedures and other safety procedures established for the local work environment.

Inspect safety decals and replace when they become unreadable or are damaged.

Rail Conditions



Personal Injury. Do not attempt to saw the rail if the rail clamp cannot be secured to the rail.

If the saw the clamp cannot be secured onto a rail due to worn roll over rail, prepare the rail by grinding off the roll over flow first so the saw clamp can be secured.

Do not use the saw if the saw clamp cannot be secured to the rail.

Section 2: Specifications and Installation

Specifications

Powerhead

Length:	38 in.	(96 cm)
Width:	24 in.	(60 cm)
Height, Work Mode:	20 in.	(50 cm)
Weight:	46 lbs.	(20 kgs)

Operating Parameters

Engine

Idle Speed	2700 rpm
Wide Open Throttle (No Load)	9300 rpm
Horsepower	7.9 at 8400 rpm
Cutting Blade Speed	16-inch (40 cm) diameter blades are rated for 4775 rpm
Maximum Spindle Speed	4300 rpm

Production Rate

Typical rail cutting time for a 16-inch saw against a 132 lbs. rail is approximately two minutes.

Section 3: Tool Operation

Personal Protective Equipment



Before operating this machine, make sure that all general safety precautions are observed, and that proper personal protective clothing is worn as described below.

At a minimum, operators should wear the following Personal Protective Equipment:

1. Safety Glasses
2. Hearing Protection
3. Hard Hat
4. High Visibility Safety Vest
5. Leather Work Gloves
6. Steel Toed Safety Shoes

Initial Assembly

The Ultra Kut III Saw was tested after assembly at our factory. Flammable liquids were removed for shipping and must be reinstalled.

After assembly, perform a thorough In-Service inspection before initial operation. If you do not feel qualified to perform this In-Service work yourself, contact a competent mechanic or the Racine Railroad Products Service Department for technical support.

After unpacking and inspecting the Ultra Kut III Saw, prepare it for service by:

- Fill the engine fuel tank [25:1 fuel: oil].
- Check all aspects of the engine, arm, and rail clamp.
- Check the controls for proper operation.
- Install a cutting blade.

Normal Start Up

Before starting the engine, perform a daily inspection.

Note: Depending on temperature, let the engine warm up before applying full load.



Do Not use pressurized starting fluids.

1. Slide the Stop Switch left (opposite the indicating arrow).
2. Pull the Choke Out (blue button handle) to choke position.
3. Press the throttle control catch pin.
4. Push the Decompression Button In (black toggle switch on the top of the saw).
5. Grab the recoil start handle and pull slowly until resistance is felt and then pull rapidly to start engine and avoid kickback.
6. If the choke is used, rev the Throttle Trigger slowly to RUN as engine warms up.
7. Reset the choke after the engine is warm and idles without stopping.
8. Operate the engine at full throttle position when cutting rail.

Rail Conditions



Personal Injury. Do not attempt to saw the rail if the rail clamp cannot be secured to the rail.

If the saw the clamp cannot be secured onto a rail due to worn roll over rail, prepare the rail by grinding off the roll overflow first so the saw clamp can be secured.

Do not use the saw if the saw clamp cannot be secured to the rail.

Rail Cutting

Note: The Rail Clamp assembly has a T-handle screw in the rail clamp fixture that is used to clamp the rail clamp onto the rail ball. **The T-handle must be secure to prevent the clamp from moving during cutting use.**

1. Place and clamp the Ultra Kut III Saw on the rail and all adjustments as needed.
2. Start the engine and advance to full speed.
3. Start the cutting at the top of rail head.
4. Work the blade in an arc swinging motion using the arms and pivot shaft.
5. Continue cutting through the rail web and rail base.
6. Release the engine throttle once the blade completely cuts the rail.
7. Shut the engine off before unclamping and moving the rail saw to the next location.
8. Set the rail saw onto the track rail designated work area and clamp securely.
9. Restart engine and repeat the operation.

Engine Shut-Down

To safely transport and store the Ultra Kut III Saw perform a normal shut down.

1. Stop the engine with the control lever and allow sufficient time for the engine to cool off.
2. Disengage the rail clamp and remove the index and support bars.

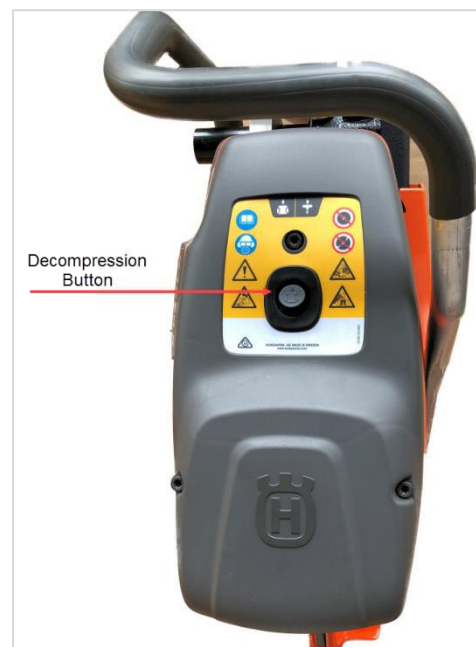
Setup and Adjustments



Ultra Kut III Saw – Left Side View



Ultra Kut III Saw Controls



Ultra Kut III Saw Top View



Inner and Outer Wheel Flanges



Ultra Kut III Proper Hand Position



Ultra Kut III Proper Hand Position

Mounting the Rail Clamp and Ultra Kut III Saw



Rail Clamp Installed

Rail clamp tensioning screw with T-Handle.



Mounting the Ultra Kut III Saw

Rail clamp shaft shown being inserted into mounting receptacle.



Cutting Position Outside View

Pivot shaft and thread engaging tightening crank.



Cutting Position Inside View

Rail Top and Rail Side Cutting

Rail Top Cutting



Top Rail Cutting



Top Rail Close Up View

Rail Side Cutting



Rail Side Cutting View



Side Close Up View



**Rail Side Cutting with Operator's Position
Adjacent to Clamp Tensioning Screw**
Stop Pin is inserted on operator's side.



**Rail Side Cutting with Operator's Position
Opposite of Clamp Tensioning Screw**
Stop Pin is inserted on operator's side.

Daily Inspection, Fueling and Lubrication

At a minimum, perform the following routine daily maintenance on the Ultra Kut III Saw to keep it in good working condition.

- General condition of the machine.
- All guards and safety devices are installed and operable.
- All controls are operable.
- Rail clamp device is operable.
- Engine fuel level is full.
- Engine air filter element is clean and serviceable.

Engine Fuel

The engine mounted fuel tank holds 2.65 US pints (1.25 liter). **Use clean, fresh regular unleaded fuel with a minimum of 90 octane.**

Fresh fuel prevents gum from forming in the fuel system or the essential carburetor parts. Purchase fuel in quantity that can be used within 30 days.



DANGER

Fill the fuel tank outdoors or in a well-ventilated area, away from sparks, open flames, pilot lights, heat, and other ignition sources.

If fuel spills, wait until it evaporates before starting the engine.

Turn the engine OFF and let it cool at least two minutes before removing the fuel cap. Replace the fuel cap before starting.



CAUTION

Some fuels are blended with alcohols or ethers. Excessive amounts of these blends can damage the fuel system or cause performance problems.

Engine Injection Oil

The engine holds approximately 0.66 US quarts (0.70 liter) of oil. Use ACC-YS00-00-12 (S-2) oil.

The engine manufacturer recommends cleaning of residue, dirt, or contaminated oil every 6 months / 100 hours thereafter.

Grease Type and Locations

Permanently sealed bearing and self-lubricating bushings are used extensively on the Ultra Kut III Saw to reduce daily maintenance. Make sure all bearings and moving parts are properly lubricated.

Section 4: Maintenance

It is highly recommended to practice regular check-ups and maintenance in accordance with the usage frequency to keep your tool in better condition and reduces total running costs.

Maintenance of the Ultra Kut III Saw can be performed without any special maintenance related safety devices. Before operating the Ultra Kut III Saw, perform a daily inspection of the machine.

Make sure all general safety precautions are observed and that proper personal protective clothing is worn.



Do not perform maintenance on the Ultra Kut III Saw while the engine is running.

Engine Maintenance

Maintain the engine in accordance with the engine operator's manual.

Cleaning and Maintenance Recommendations

- Wipe all external surfaces after each use with a clean, lint free cloth to remove surface contaminants from the tool.
- Store all tools in an enclosed area to prevent the weather from contaminating their systems.

Storage Preparation

- Store in the upright position. Secure tool to prevent it from being knocked over.
- Store the machine on a smooth level surface.
- The tool should be stored in a cool, dry environment which is not subjected to rapid temperature changes.

Daily

- Wipe all tool surfaces, fittings, and couplings free of grease, dirt, and foreign materials.
- Inspect the tool, hoses, and fittings for signs of leaks, cracks, wear, and/or damage. Replace if necessary.
- Inspect machine for damage and wear, replace as required.

Safety Devices

After performing maintenance on the saw, make sure the following safety devices are installed:

- Fuel tank and injection oil tank caps are properly installed.
- The rail clamp is secure.
- The rail saw blade is installed properly.

Belt Tension

Loose belt tension can result in poor performance and wheel glazing.

Too much tension results in excessive stress on belts, bearings, and shafts.

Note: When changing the cutting wheel, always check the belt tension.

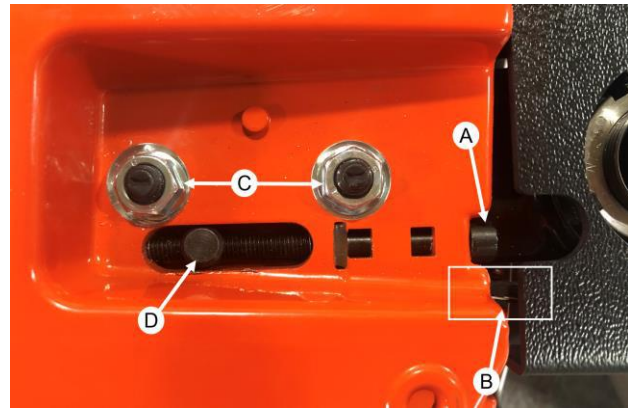
Adjusting the Belt Tension

Tools Required

- M8 Hex Wrench
- Flat-tip Screwdriver



Belt Tension Location



Belt Tension Close Up

- | | |
|--------------------|------------------------------|
| A. Adjusting Screw | C. Retaining Bolts |
| B. Belt | D. Adjusting Screw Indicator |

1. Loosen the two hex nuts (C).
2. Adjust the tensioning screw (A).
 - Rotate clockwise to loosen the belt (B).
 - Rotate counter-clockwise to tighten the belt (B).
3. Once the belt is adjusted, tighten the two hex nuts (C) to 6.6 – 8.1 lb-ft.

Troubleshooting

Problem	Possible Cause	Resolution
Starter fails to crank engine.	Broken recoil assembly.	Replace recoil assembly.
	Engine seized.	Remove engine and test for cranking replace engine if required.
	Broken lanyard.	Replace lanyard.
Engine starts hard or fails to start.	No fuel in fuel tank.	Fill fuel tank with fresh, clean fuel.
	Fuel lines or filter clogged.	Clean fuel lines or replace filter.
	Engine flooded.	Open choke and crank until engine starts.
	Spark plug fouled.	Clean / replace spark plug.
	Solid state ignition malfunction.	Replace solid state module.
	Contaminated / stale fuel.	Thoroughly clean fuel tank, lines, replace all fuel filters and refill with fresh, clean regular unleaded fuel. Replace reformulated (low emissions) fuels after 30 days.
	out of adjustment.	Readjust carburetor.
	Low oil in injection oil reservoir.	Refill engine oil to within 0.50 inch of fill opening.
Engine stops suddenly.	No fuel in fuel tank.	Fill fuel tank with fresh, clean fuel.
	Fuel lines or filter clogged.	Clean fuel lines or replace filter.
	Low oil in injection oil reservoir.	Refill injection oil to within 0.50 inch of fill opening.
Engine misses or runs rough.	Contaminated / stale fuel.	Thoroughly clean fuel tank, lines, replace all fuel filters and refill with fresh, clean regular unleaded fuel. Replace reformulated (low emissions) fuels after 30 days.
	Carburetor out of adjustment.	Readjust carburetor.
	Spark plug fouled.	Clean / replace plug.
	Low oil in injection reservoir.	Refill injection oil to within 0.50 inch of fill opening.
Engine lacks power or stalls under load.	Air Filter clogged.	Replace air filter element.
	Fuel lines or filter clogged.	Clean fuel lines or replace filter.
	Carburetor out of adjustment.	Readjust carburetor.
	Spark plug fouled.	Clean / replace spark plug.
	Fuel tank vent inoperative.	Replace with proper fuel tank cap.

Troubleshooting Continued

Problem	Possible Cause	Resolution
Engine noisy or knocking.	Loose flywheel.	Tighten flywheel nut.
	Worn bearings or loose connecting rod.	Overhaul or replace engine.
Saw cuts incorrectly or out of squareness.	Rail clamp may be out of alignment.	Refer to rail chart for rail size.
	Clamp bearings may be worn.	Replace clamp bearings.
	Reverse blade on spindle.	
Breaks saw blades.	Mis-aligned blades with rail.	Reposition accordingly.
	Worn or poor grade of blades.	replace worn or bad blades.
	Engine is running too slow.	Set throttle to maximum required R.P.M.'s
Will not clamp to rail	Clamp mechanism loose or damaged.	Replace clamp.
	Tensioning screw point worn.	Replace tensioning screw.
Blade will not Rotate under Power.	Check belt tension.	Replace belt if needed.
	Clutch wheel worn (broken).	Replace clutch / sheave.
	Clutch springs worn/broken.	Replace springs.

Section 5: Parts and Service Support

Technical Support & Service

Telephone and web-based technical support is available for current production models through our Customer Service Department. Service Manuals and limited technical support may be available for models that are no longer in production.

Telephone and E-mail Technical Support

Telephone and e-mail technical support is available on normal U.S. business days from 8:00 AM to 5:00 PM U.S. Central Time Zone (GMT +6 (+5 Daylight Savings Time)).



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Mount Pleasant, WI 53403
Phone: (262) 637-9681
Email: custserv@racinerailroad.com
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Email: info@racinerailroad.co.uk
racinerailroad.co.uk

Non-Warranty Technical Support

Depending upon the circumstances and availability of technical service personnel, we may provide technical assistance and/or field service support, *at the customer's expense*, to assist in the correction of non-warranty related problems. Contact our Customer Service Department to coordinate Non-Warranty Technical or Field Service Support.

Warranty Support Technical Support

Depending upon the circumstances and availability of technical service personnel, we may provide technical assistance and/or field service support, *at no charge to the customer*, to assist in the correction of warranty related problems. Contact our Customer Service Department to coordinate Warranty Technical or Field Service Support.

Warranty Parts Claims

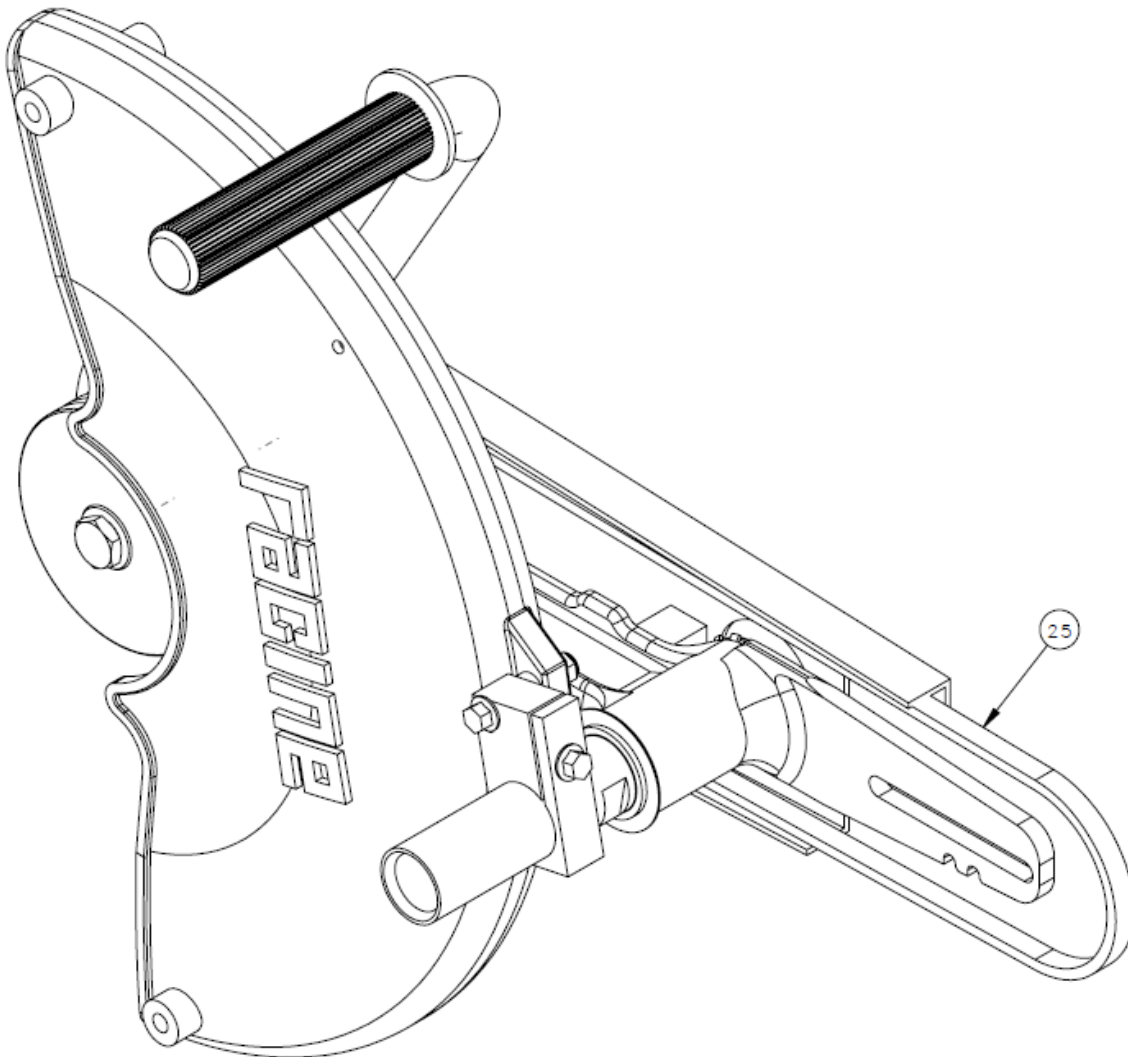
Material claimed to be defective must be returned to our factory for evaluation. Defective materials will be replaced, or your account will be credited if replacement materials have already been purchased. Please contact our Customer Service Department at the address provided below if you have any questions or problems.

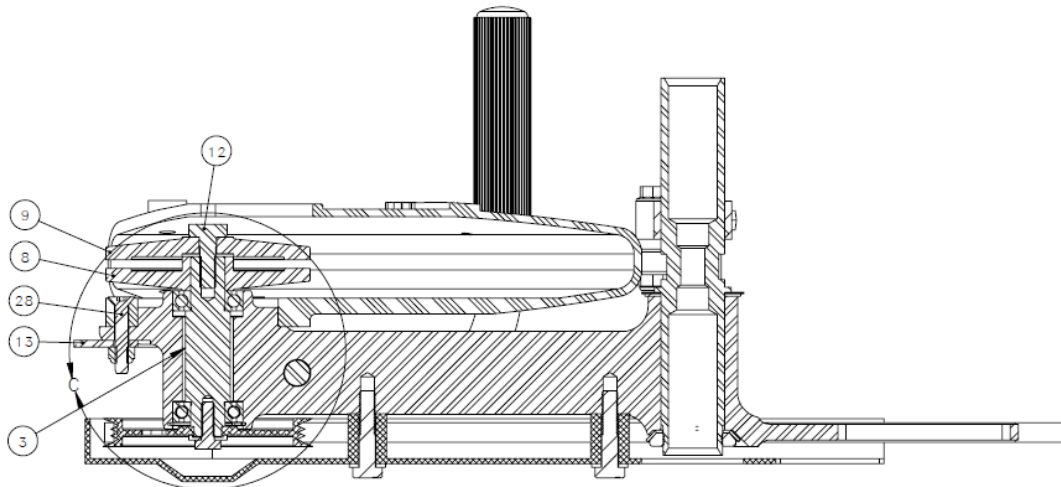
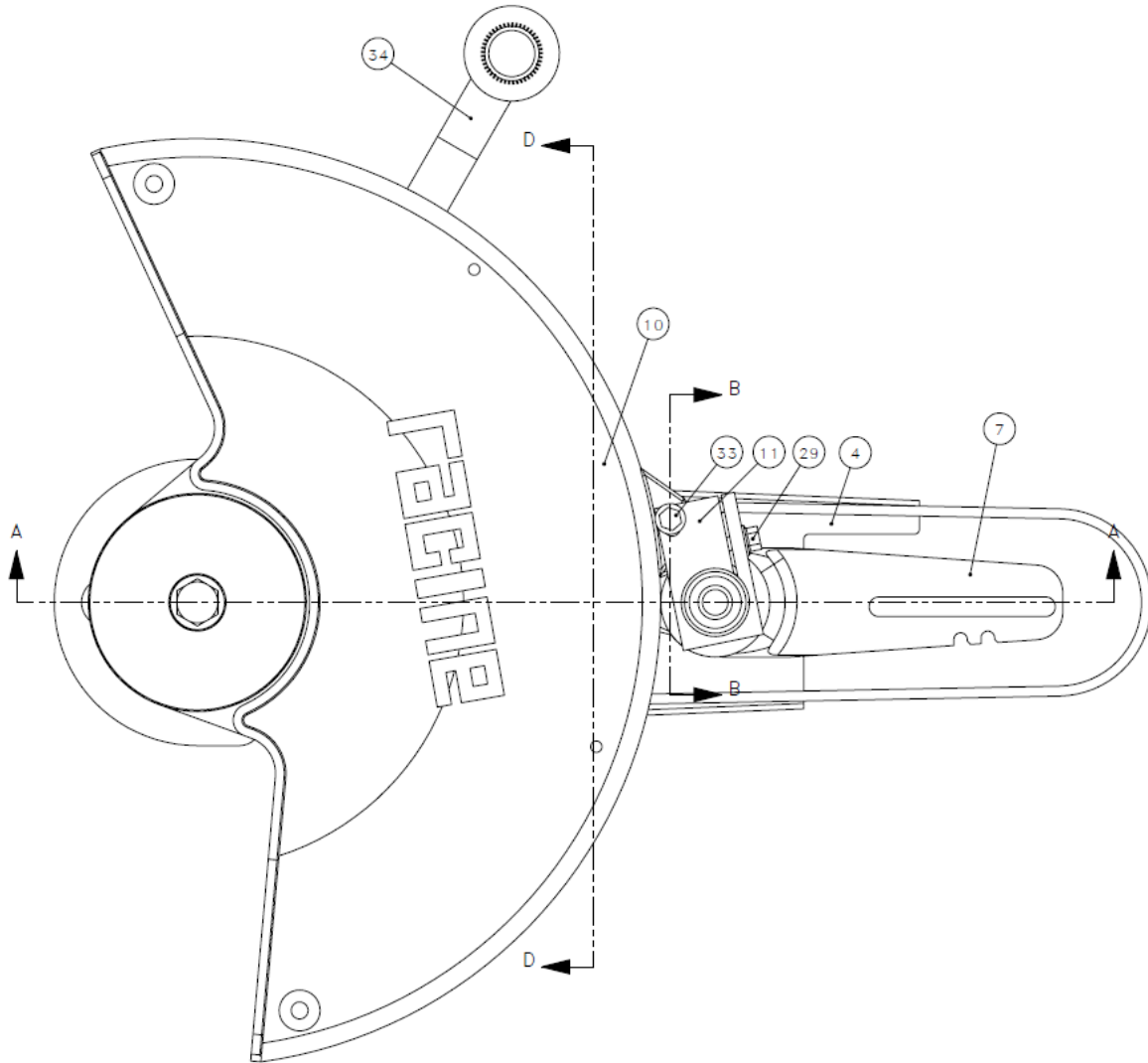
Warranty Service Support

Depending upon the circumstances and availability of technical service personnel, we may provide technical assistance and/or field service support, at no charge to the customer, to assist in the correction of warranty related problems. Contact our Customer Service Department at the address provided above to coordinate Warranty Service Support.

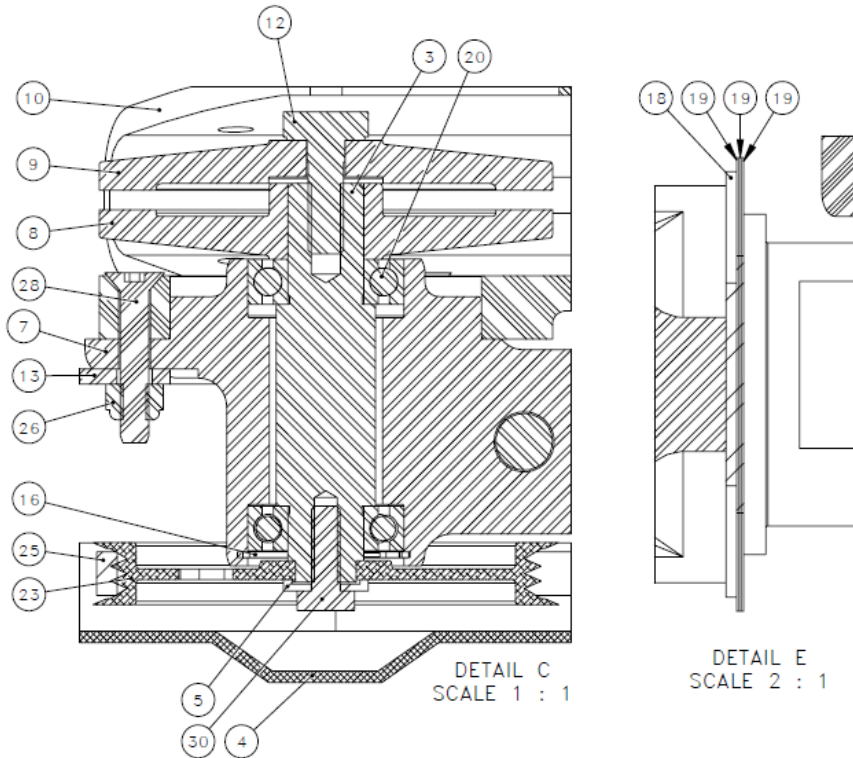
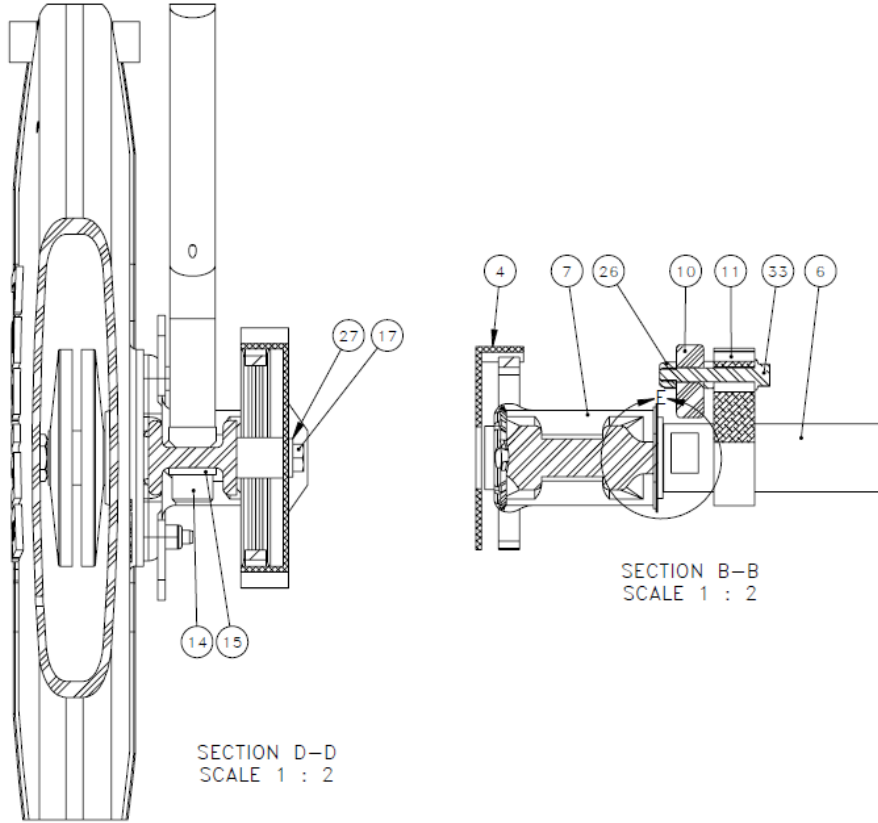
Arm, Ultra Kut III / RRP# 719143

NO.	QTY	DESCRIPTION	PART NO.				
1	AR	LOCTITE, 609	008804	18	1	WASHER, FLT: 1.25	404883
2	AR	LOCTITE, 242	008806	19	3	WASHER, FLT: 1.25	456791
3	1	SHAFT	320229	20	2	BRG, BALL: .67 ID	461780
4	1	GUARD, UK3 BELT	320254	21	1	KEY, SQ: .19 X .62	462192
5	1	SPACER, SHAFT	320257	22	1	WASHER, SPRING: 1.11	462368
6	1	HOUSING	390498	23	1	PULLEY	474197
7	1	ARM	390647	24	1	SPACER, .25 ID X .5 OD X .19 L	474384
8	1	FLANGE, KEYED	390649	25	1	BELT, 425K3	474395
9	1	FLANGE, KEYED	390650	26	4	NUT, HEX ES: .25-20	491232
10	1	GUARD	390773	27	2	WASHER, FLT: .31	491259
11	1	CLAMP	391287	28	3	SCR, SOC FLT: .25-20 X 1.5	491333
12	1	SCREW	391328	29	1	SCR, HEX FLG: .25-20 X .75	491553
13	1	PROTECTOR, BELT GUARD	393091	30	1	SCR, HEX: .25-20 X .75 LH	491554
14	1	SCR, SOC: .5-13 X 1	400826	31	1	NUT, LOCK: NT-06	491604
15	1	WASHER, LOCK: .5 SPLIT	400909	32	1	WASHER, LOCK: WT-06	491605
16	1	RING, RETAINING: 1.378 DIA INT	401238	33	1	SCR, HEX FLG: .25-20 X 1.75	491620
17	2	SCR, HEX FLG: .31-24 X 1.5	402605	34	1	HANDLE	713013





SECTION A-A
SCALE 1 : 2



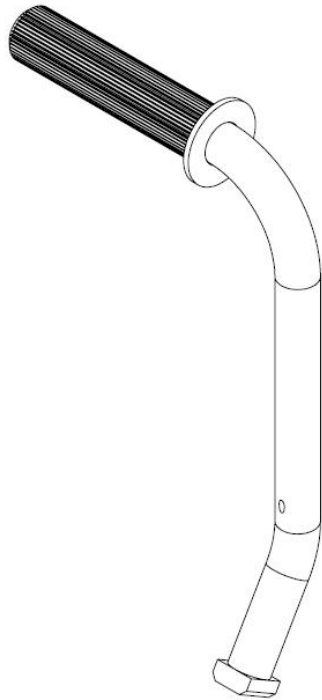
Engine, Ultra Kut III / RRP# 473933

HUSQVARNA ENGINE K1270R
 HUSQVARNA #967 05 81-01
 TWO STROKE ENGINE
 DISPLACEMENT: 7.3 CUBIC INCHES
 CYLINDER BORE: 2.4 INCHES
 STROKE: 1.7 INCHES
 IDLE SPEED: 2700 RPM
 WIDE OPEN THROTTLE (NO LOAD): 9300 RPM
 HORSEPOWER: 7.9 AT 8400 RPM
 MAX. SPINDLE SPEED: 4300 RPM
 BLADE SPEED RATING: 4775 RPM

FOR SERVICE ONLY

NO.	QTY	DESCRIPTION	PART NO.
1	REF	CARBURETOR	475075
2	REF	COVER, FILTER	476749
3	REF	DEFLECTOR, HEAT	476588
4	REF	FILTER	476766
5	REF	FILTER, AIR	475081
6	REF	FLYWHEEL	475405
7	REF	KIT, GASKET	476197
8	REF	MODULE, IGNITION	475073
9	REF	MUFFLER	476589
10	REF	PLUG, SPARK	475072
11	REF	SCREW	475821
12	REF	SCREW ITXSCM	476590
13	REF	STARTER, RECOIL	474897
14	REF	SWITCH, STOP	475783
15	REF	TOOL, HEX/TORX	472998
16	REF	VALVE, DECOMPRESSION	476641

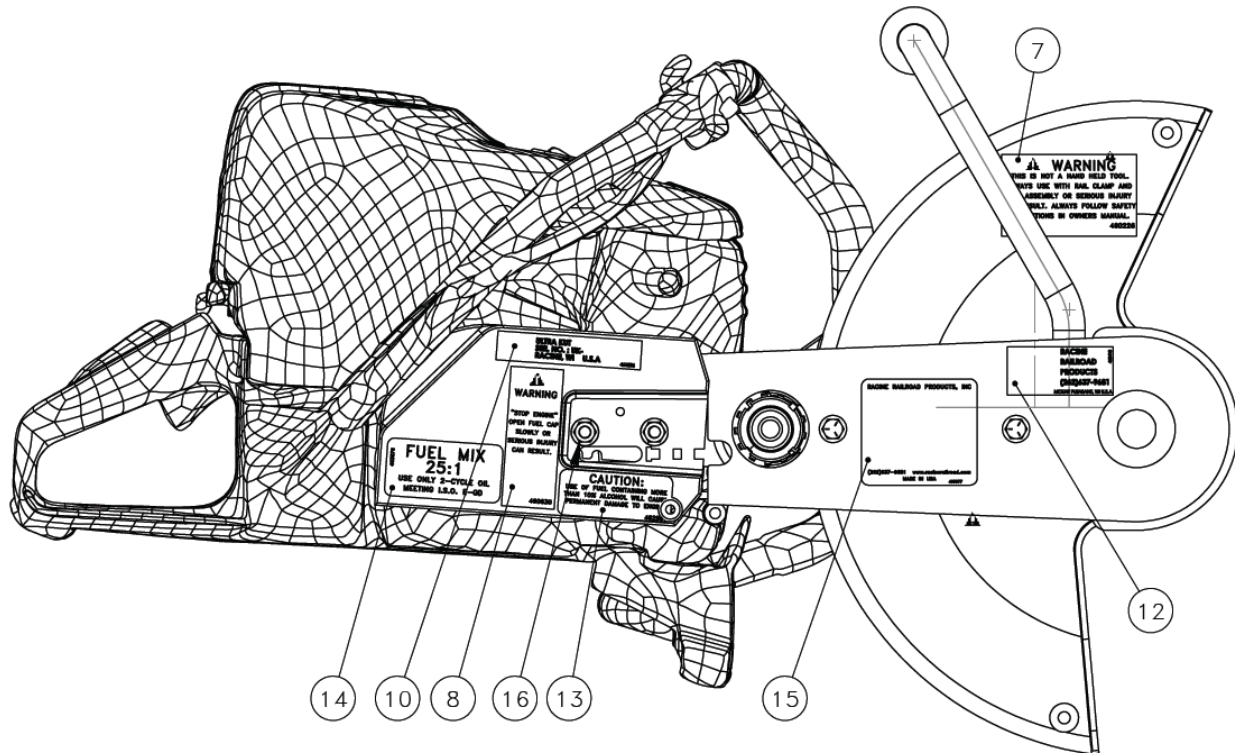
Handle, Ultra Kut III / RRP# 713013

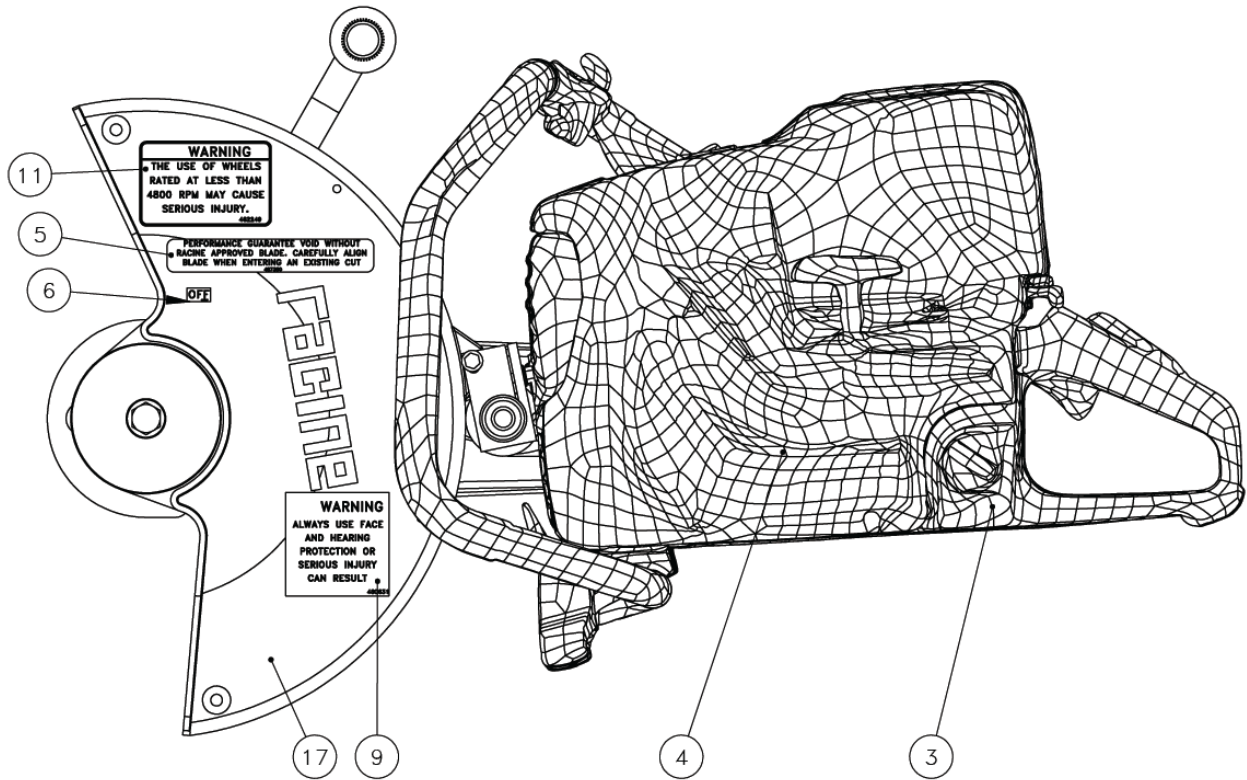


NO.	QTY	DESCRIPTION	PART NO.
1	1	TUBE	390712
2	1	BUSHING	390718
3	1	GRIP	462263

Powerhead, Ultra Kut III / RRP# 718833

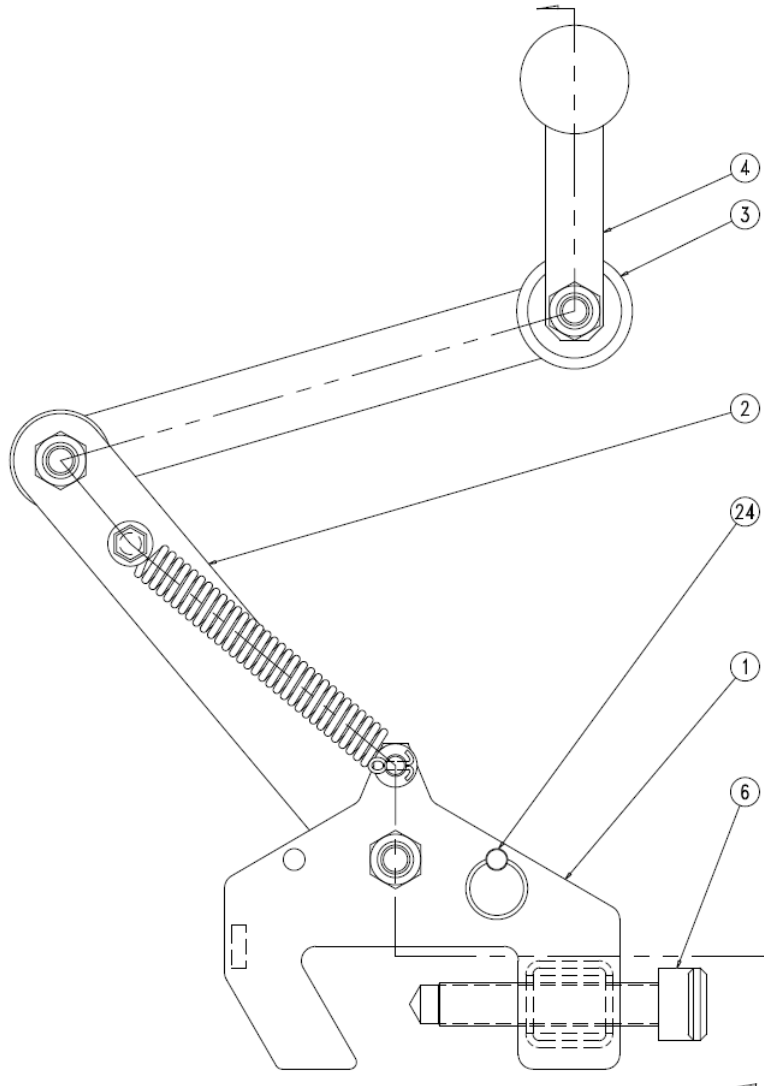
NO.	QTY	DESCRIPTION	PART NO.
1	1	SEALANT, SILICONE	008800
2	AR	LOCTITE, 242	008806
3	1	ENGINE, MACHINED	320343
4	1	COVER, CLUTCH	320344
5	1	DECAL, PERFORMANCE GUARANTEE VOID...	457350
6	1	DECAL, OFF	458330
7	1	DECAL, WARNING: THIS IS NOT A HAND HELD...	460226
8	1	DECAL, WARNING: OPEN CAP SLOWLY...	460630
9	1	DECAL, WARNING: ALWAYS USE FACE...	460631
10	1	PLACARD, SERIAL NUMBER: ULTRA KUT	461836
11	1	DECAL, WARNING: THE USE OF WHEELS RATED LESS THAN 4800...	462249
12	1	DECAL, RACINE	462418
13	1	DECAL, CAUTION: USE OF FUEL CONTAINING...	462987
14	1	DECAL, FUEL MIX 25:1	463676
15	1	DECAL, LOGO: 3 X 2.75 RRP	463677
16	2	NUT, HEX FLG: M8-1.25	476627
17	1	ARM	719143

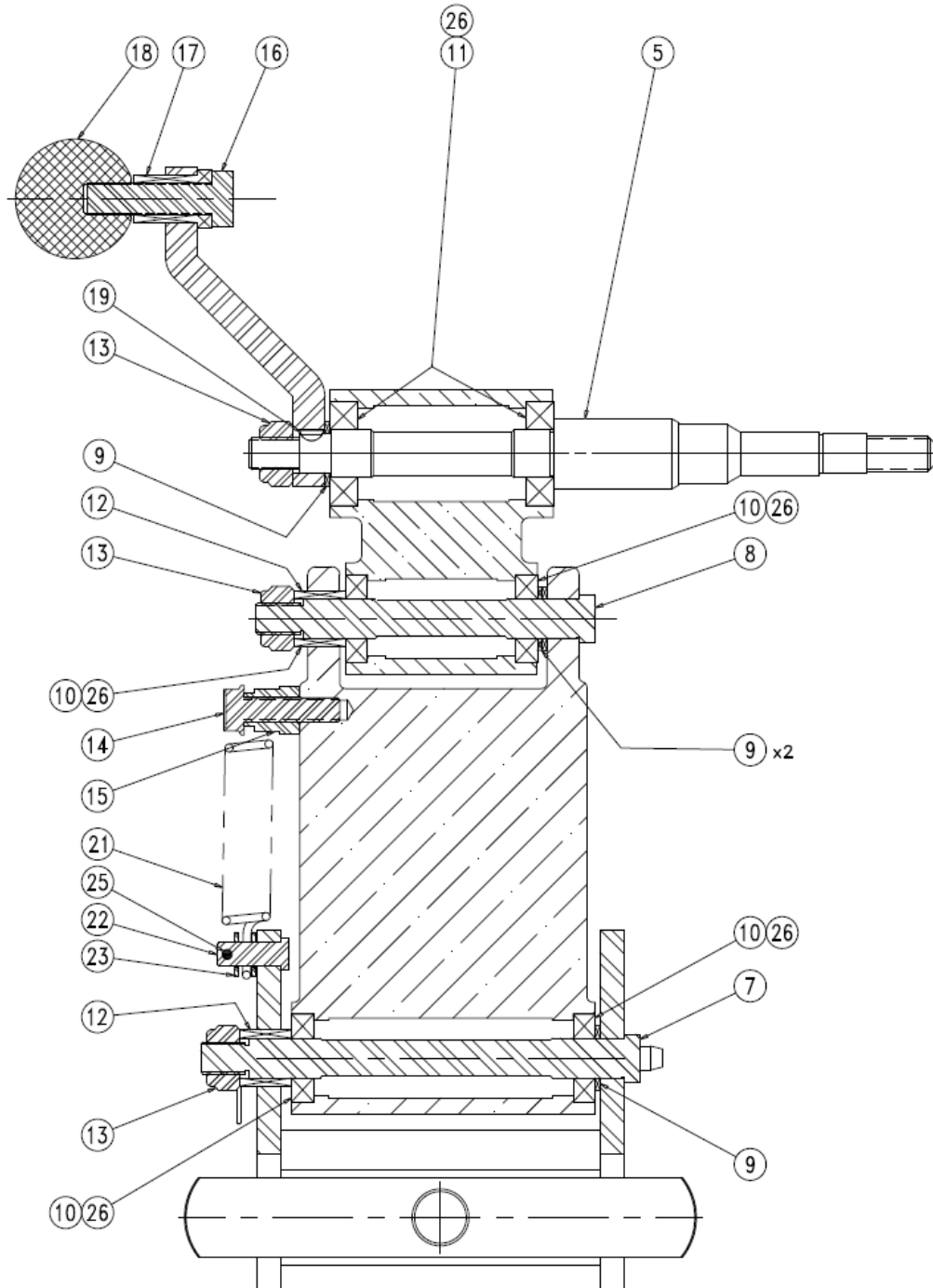




Rail Clamp, Ultra Kut III / RRP# 712992

NO.	QTY.	DESCRIPTION	PART NO.
1	1	CLAMP WELDMENT	777460
2	1	ARM, CLAMP	390642
3	1	ARM, SPINDLE	390685
4	1	ARM, SCREW	390597
5	1	SPINDLE	390585
6	1	CLAMP	712991
7	1	SHAFT	388462
8	1	SHAFT	388463
9	4	BUSHING, DRILL: .62 ID	403183
10	4	BRG, BALL: .62 ID	460679
11	2	BRG, BALL: .75 ID	459272
12	2	SPACER	388464
13	3	NUT, HEX ES JAM: .5-13 HVY	403900
14	1	SCR, HEX FLG: .38-16 X 1.5	461833
15	1	SPACER	390627
16	1	SCR, HEX: .5-20 X 2	405366
17	1	BUSHING	390599
18	1	KNOB, PLASTIC	401703
19	1	KEY, WOODRUFF: #213	491137
20			
21	1	SPRING, TENSION	462152
22	1	PIN, CLEVIS	391309
23	2	WASHER	387087
24	1	PIN, HITCH: .38 X 6.38	462230
25	1	PIN, COTTER: .12 X .75	491347
26	AR	LOCTITE, 609	008804





Section 6: Warranty Terms and Conditions

Warranty Period

Each new machine and new parts of our manufacture are warranted against defects in material and workmanship for one year from the date of shipment from our factory.

When contacting customer service for factory parts, service or warranty support please provide the:

- Racine Railroad Products Model
- Serial Number
- Any locally assigned identification

Vendor Parts Warranty Period

Other equipment and parts used, but not manufactured by Racine Railroad Products, Inc., are covered directly by the manufacturer's warranty for their products.

Warranty Parts and Service

We will repair or replace, without charge, F.O.B. factory, Racine, Wisconsin, USA, any part Racine Railroad Products manufactures which is proven to be defective during the warranty period.

Material claimed defective must be returned, if requested, to the factory within 30 days from the date of the claim for replacement. Ordinary wear and tear, abuse, misuse, and neglect are not covered by this warranty. Depending upon the circumstances, we may provide technical assistance and/or technical service support, without charge, to assist in the correction of warranty related problems.

Non-Warranty Parts and Service

Material damaged through normal wear and tear, abuse, misuse and/or neglect are not covered by our warranty and should be ordered directly from Customer Service.

Note: Parts for models that are no longer in production may not be available.

Non-Warranty Parts Orders

When placing a parts order please provide the following information:

- Company Name and Billing Address
- Purchase Order Number and Issuing Authority
- Shipping Address
- Special Handling Instructions
- Contact Phone Number
- Machine Model and Serial Number
- Part Numbers and Quantities Being Ordered

Note: *Please use Racine Railroad Products part numbers when ordering parts.* Racine Railroad Products part numbers are shown in the parts lists and drawings of this manual and have only six (6) numbers.

Any part number with other than six numbers (e.g., contains alpha-numeric characters) is a Vendor Part Number and **not** a Racine Railroad Products part number.

Unauthorized Modifications and Parts

Racine Railroad Products is not responsible for any modifications made without authorization or written approval. Replace all Racine Railroad Products and OEM parts with genuine Racine Railroad Products and OEM parts. Using non-OEM parts may compromise the safety of the machine.

Inspection and Warranty Registration

The warranty period begins on the date of shipment from our factory. Upon delivery by the carrier, inspect the machine and shipping materials for damage. Make sure that all items indicated on the packing list have been received. Address items lost or damaged in shipment with the freight carrier.

Removing Packing Materials / Delivery Inspection

Remove the packing materials and inventory the contents of the packing list. Make sure that the Operating and Service Manuals, tool kits and any other materials sent with the machine are in good condition.