



OPERATING MANUAL BMS-220LP-V2

VERSION 1.1



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1. Introduction

It is important that all persons who are working or maintaining this machine read the manual carefully and understand it fully. Keep this manual near to the machine, so it can always be consulted.

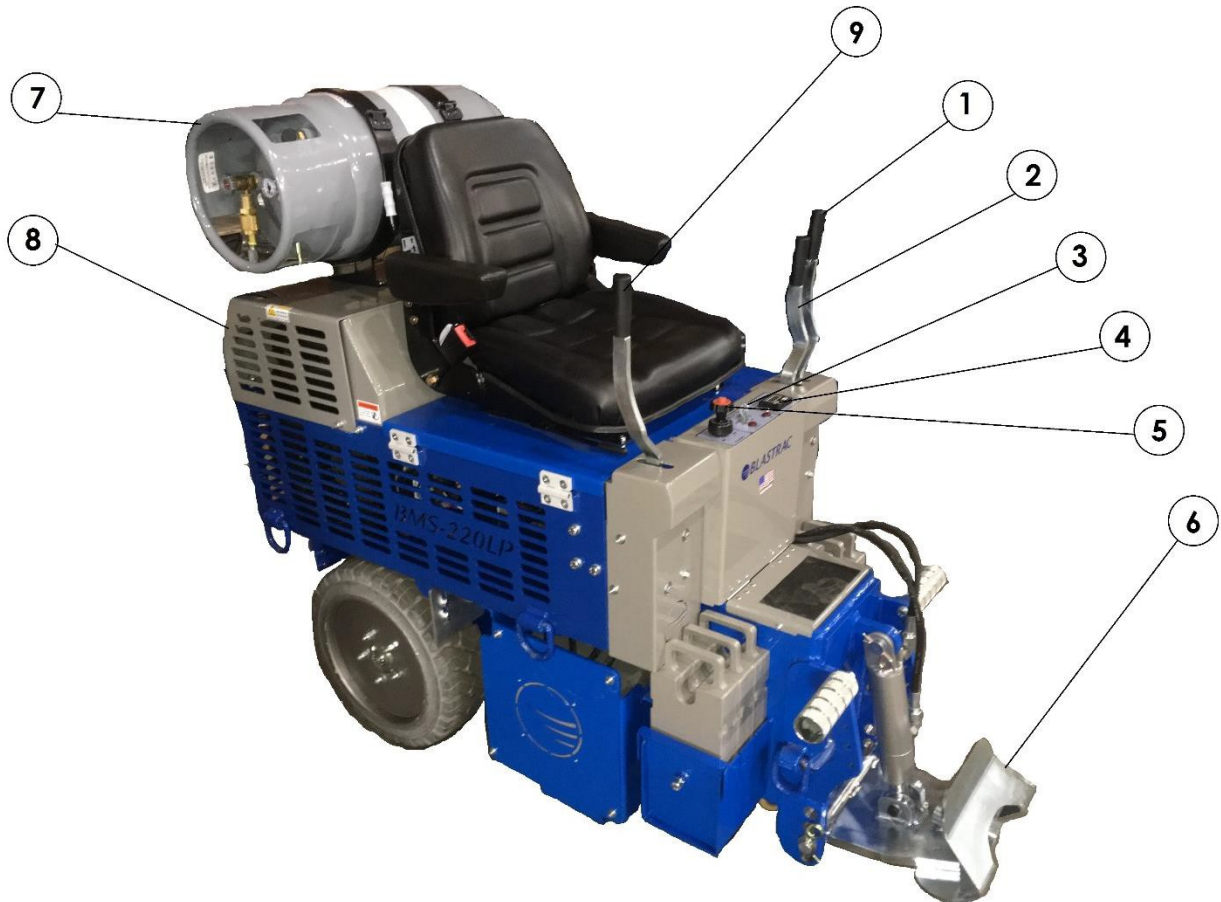
Only authorized and trained personnel may operate this machine.

2. Machine Description

The Blastrac BMS-220LP ride-on scraper is ideally suited for medium and large sized applications with the added benefit of being gas operated for increased versatility. It is very maneuverable with zero turn radius, non-mark tires and complete hydraulic control.

Main advantages of the BMS-220LP:

- Fast and easy removal of all types of flooring material
- Very compact, goes through standard doors & elevators
- Zero turn radius, ergonomic design for safe maneuvering, non-marking tires
- Very versatile, total freedom of movement, no electric cable.
- Complete hydraulic control (drive and tool control)
- Powered by a heavy duty motor delivering strong power with no worries of charging.
- Very high output compared to manual material removal.





Update image to new 220LP?

1	Left Wheel Drive Lever	6	Tool Holder
2	Tool Lift/Lower Lever	7	Propane Tank (Liquid Propane Type)
3	Ignition	8	Engine Cover
4	Tachometer/Hour Meter	9	Right Wheel Drive Lever
5	Throttle		

3. Safety

It is important that all persons who are working with or maintaining this machine must read the manual carefully and understand it fully.

Always keep this manual with the machine, so it can be referenced to at any time.

Safety Precautions

- Make sure that persons who are not operating the machine are not in the surrounding area of the machine.
- Make sure that there is nothing standing or situated on the surface to be treated
- Make sure that there are no cables or hoses in the driving direction of the machine.
- Always drive backwards when driving up to a ramp or grade, and forwards when driving down the ramp.
- Do not consume drugs or alcohol prior to or during the use of this machine.

Safety Regulations

- Never change anything from the safety devices on the machine!
- Persons who are not operating the machine must not be permitted to stay within 20 feet of the machine.
- Always call a skilled electrician or your distributor when you have questions about the safety of the electrical components.
- Work on electrical equipment or operating materials may only be undertaken by a skilled electrician or by trained persons under the guidance and supervision of a skilled electrician as well as in accordance with the electrical engineering regulations.

The following sticker is placed on the machine.



Meanings of these symbols are:

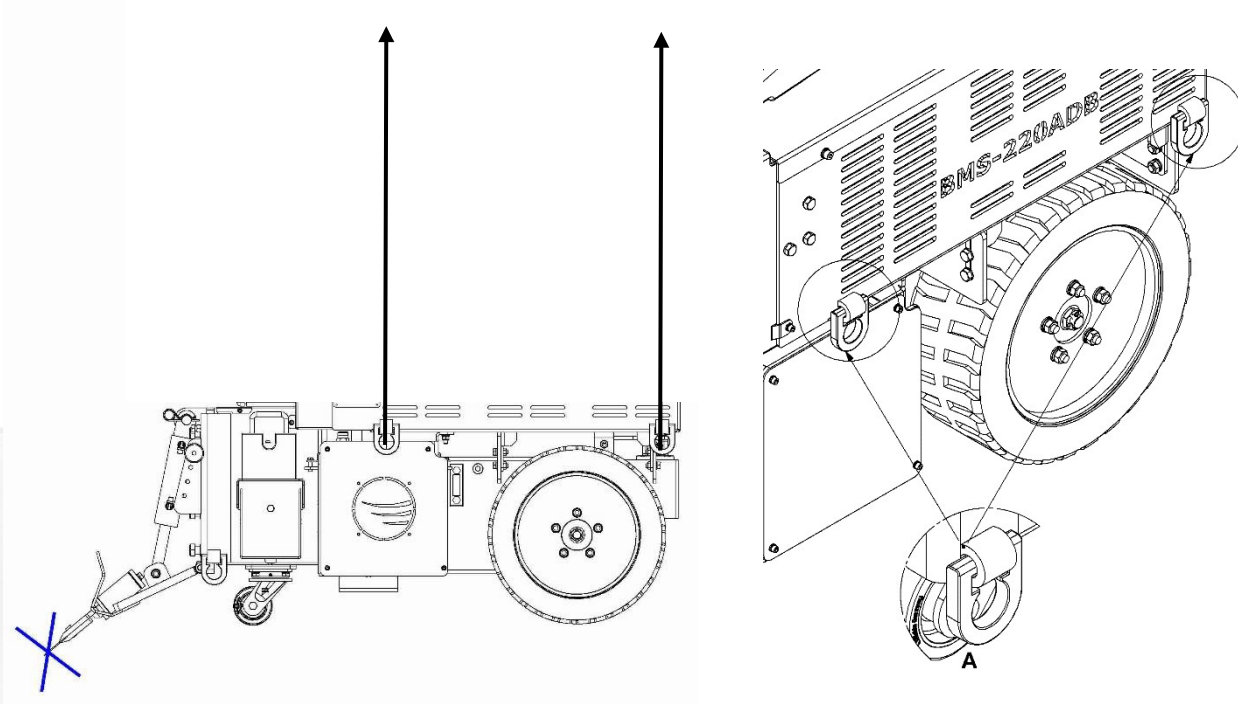
- Ear protection is required
- Safety glasses with lateral protection are required
- CE-mark on this machine
- Safety shoes required
- Consult the manual before operating the machine

Personnel must tie back long hair and not wear loose clothing or jewellery including rings.
Wear gloves and dust mask during operation of the machine.

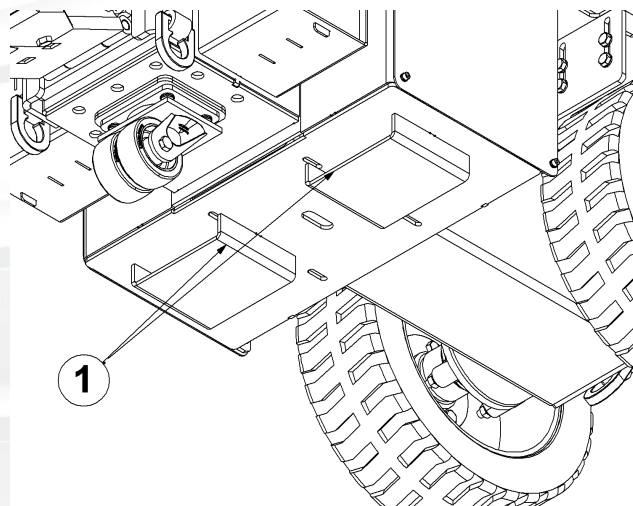


Safety Instructions

- Turn key to OFF when machine is parked.
 - Park the machine always on a flat horizontal and levelled surface.
 - Cover the sharp blade or remove it when the machine is off.
- Make sure the machine is clean and that the footrests are dry and free of grease and oil.
- NEVER lift the machine with the mounted tool for maintenance! This sharp tool can be very dangerous!
- The weight of the BMS-220LP is 2000 pounds. Only use an appropriately sized lift or crane to move/hoist the BMS-220LP. The lift points are as shown below.

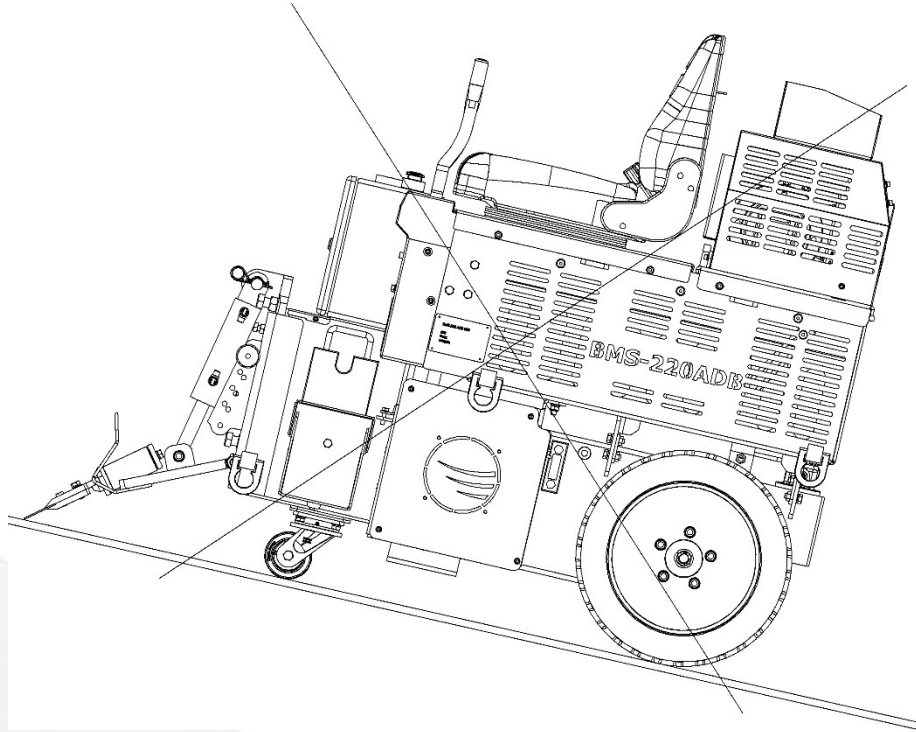


- Chock wheels for transport and keep control handles in neutral position.
- Don't leave the machine unsecured on jobsites.
- Machine can be lifted by a forklift. For this use prepared bracket (1) on bottom of machine:





- Be aware of your surroundings and machine operating level. Do not run across hill, do not run on steep incline, this could cause machine to tip over.
- Always drive backwards when driving up to a ramp or grade, and forwards when driving down the ramp.
- Do not run the machine in unsafe environments.





Engine Safety

DANGER: Engine exhaust gases contain poisonous carbon monoxide. Carbon monoxide is odorless and colorless and can cause injury or death if inhaled. Do not use equipment indoors without adequate ventilation. Refer to OSHA guidelines and regulations concerning maximum levels of exposure to carbon monoxide gases and other hazards associated with using internal combustion engines. It is highly recommended that a CO (carbon monoxide) detector be used to warn the user if levels become unsafe.

Warning: Engine, exhaust system and hydraulic component temperatures could be in excess of 200°F causing severe burns if touched.



4. Initial Operation

Before using the machine it is essential to inspect the machine every day. It is not permitted to use the machine if it does not pass all of the checkpoints below.

Checkpoints of Gas Cylinder Safety:

- Check the bottle for any damage before use.
- Ensure hose to gas cylinder is fully seated and sealed before turning on the bottle.
- Always turn the bottle completely on before starting the engine.
- Always turn the bottle completely off after using the machine.

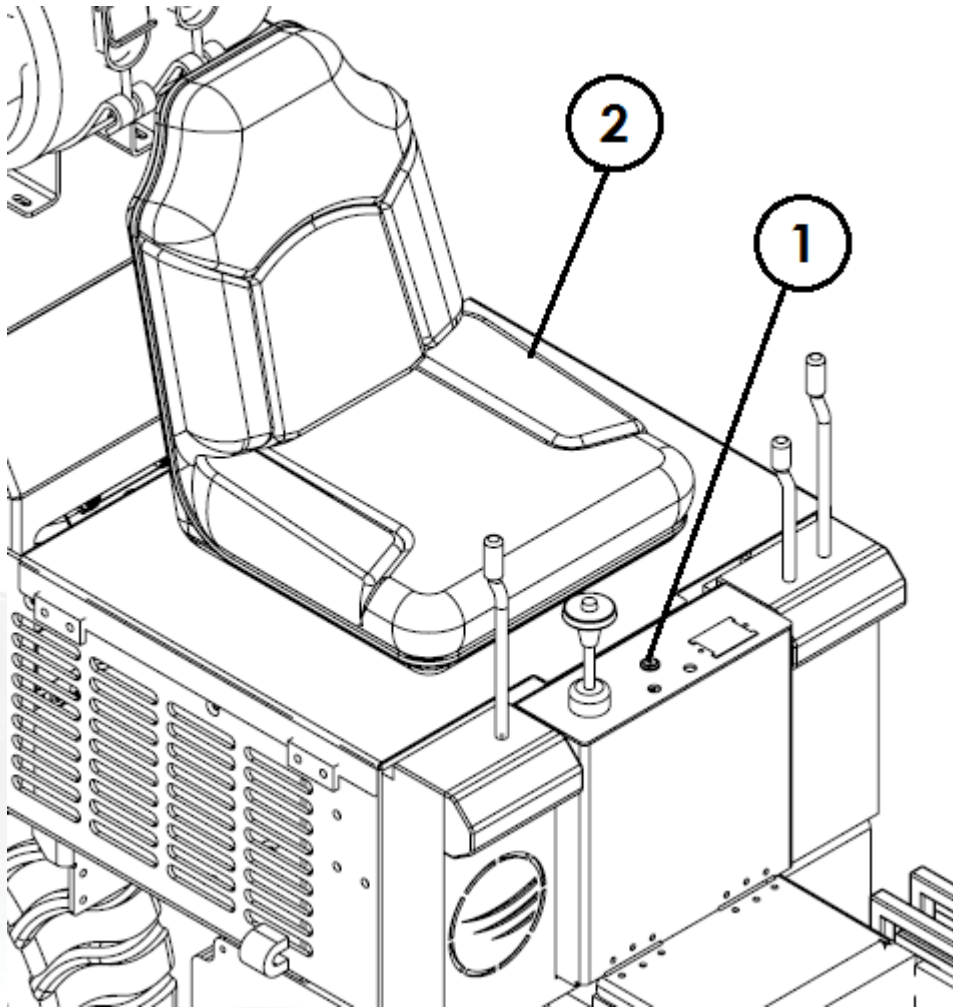
Checkpoints of Machine Safety:

- Control levers should be in neutral position.
- All hydraulic hose connections are tightened and there is no leakage of oil.
- The safety functions and operating functions work correct.
- There are not any loose nuts or bolts.



5. Operation

During the operation of the BMS-220LP, the following additional safety instructions must be followed closely.



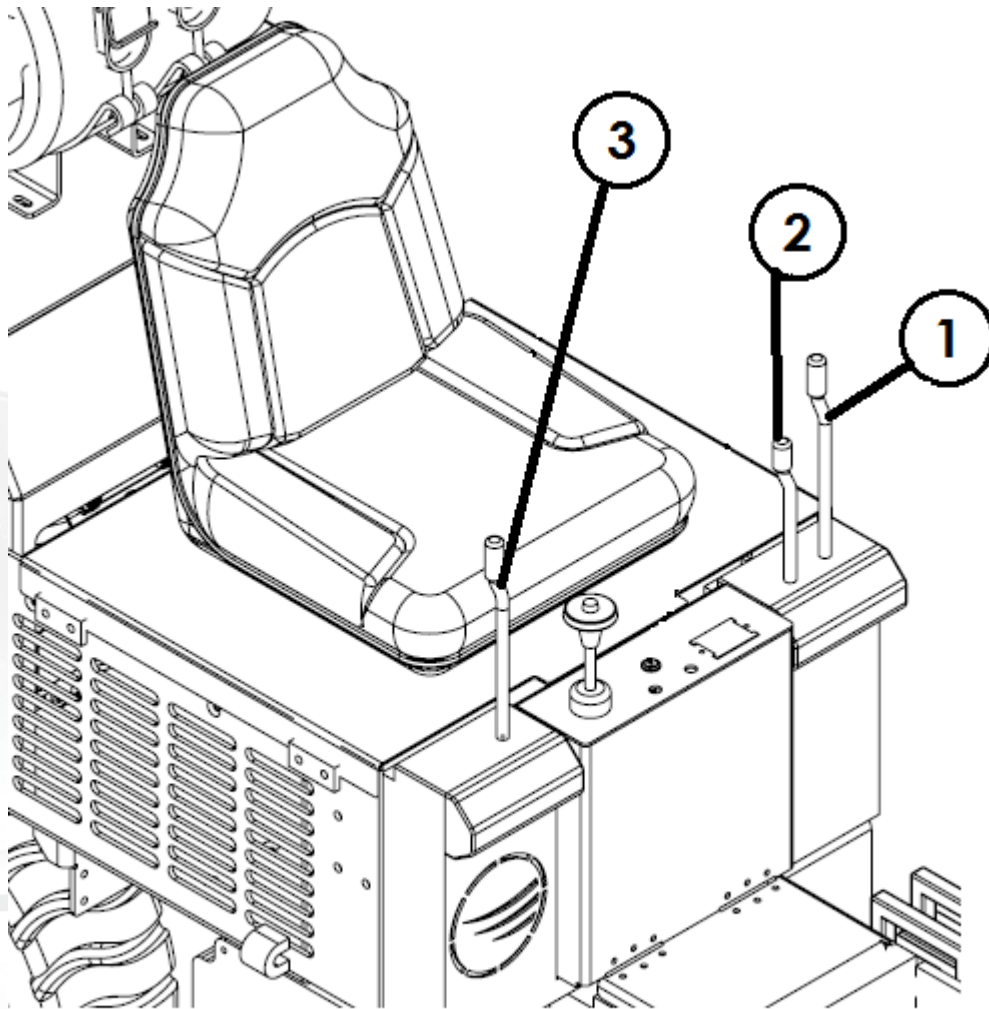
Switching on the Machine:

- Turn the valve on the propane tank CCW until it stops.
- Take place on the seat (2) and put feet on the footrests. Operating the machine without being seated is not possible because of the safety switch of the seat.
- Turn the key contact switch (1) to the right.



Driving the Machine

The wheels of the machine are controlled by the two outside handles (1 and 3). Pushing both handles forwards, the machine drives forwards. Pulling both handles backwards, the machine drives backwards. The driving speed depends on the position of the handles. Pushing the right handle forwards the machine turns to the left. Pushing one handle forwards and pulling another handle backwards the machine will turn around its axis. Correcting direction while moving is accomplished by slightly reducing pressure on one handle or the other while moving.

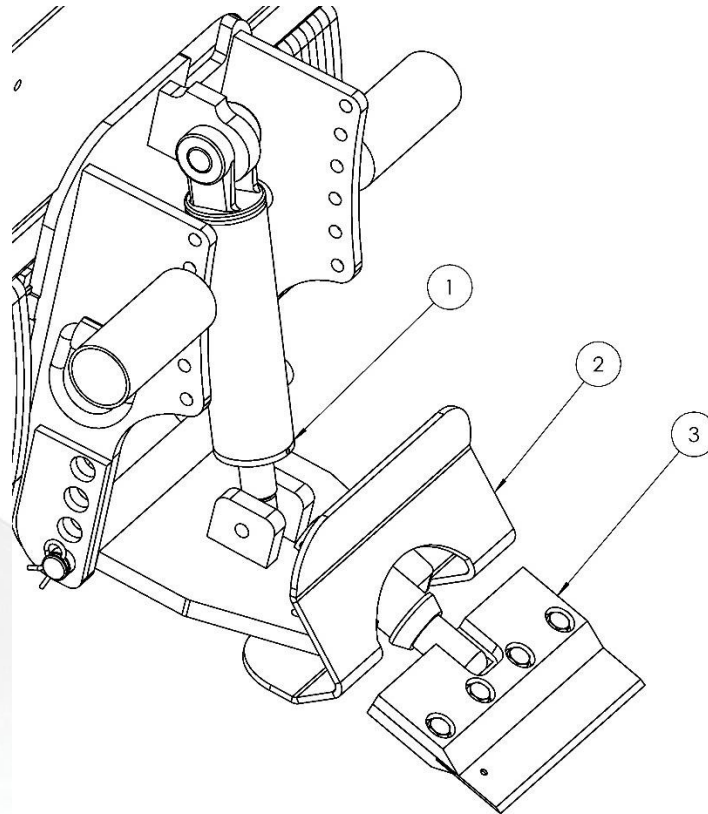


- 1) Left wheel control handle.
- 2) Tool positioning control handle.
- 3) Right wheel control handle.



Controlling Tool Position Cylinder

The tool position cylinder is controlled by the left inner handle. Push the handle to lower the tool and pull the handle to lift the tool to the proper cutting angle. Continuing to push the handle will lift the front of the machine. This will need to be done when doing maintenance on the machine. When lifting the machine like this, immediately place blocks under the machine. **Never use the cutting head only.**



- 1) Hydraulic cylinder
- 2) Debris deflector
- 3) Cutting head - set



6. Maintenance

Warning: Engine, exhaust system and hydraulic component temperatures could be in excess of 200 °F causing severe burns if touched.

Pay attention to Chapter 3 "**Safety**" during maintenance and repair works.

Failures due to inadequate or incorrect maintenance may generate very **high repair costs** and long downtimes of the scraper. **Regular** maintenance, therefore, is imperative.

Operational safety and service life of the scraper depend, among other things, on proper maintenance.

The following table shows recommendations about time, inspection, and maintenance for the normal use of the scraper.

Operating hours/ time period	Inspection points, maintenance instructions
12 h after repairing	Check all accessible screw connections for tight seat.
Daily and prior to starting work	Check all safety devices working adequate. Check the function of the residual current operated device. Check the hose connections for tightness and fixed seat. Check the electric connections for sediments of dirt or foreign bodies. Check the electric motors for dirt and other contaminants.
Annually	Full overhaul and cleaning of the complete machine.

The time indications are based on uninterrupted operation. When the indicated number of working hours is not achieved during the corresponding period, the period can be extended. However a full overhaul must be carried out at least once a year.

Due to different working conditions it can't be foreseen how frequently inspections for wear checks, inspection, maintenance, and repair work ought to be carried out. Prepare a suitable inspection schedule considering your own working conditions and experience.

Our specialists will be happy to assist you with more advice.



Follow additional operating and maintenance of OEM if included during your service and maintenance work.

Store the cleaned and dry machine in a dry and humid free room. Protect the components from moisture, heat, dust and shocks.

All repair work must to be done by qualified Blastrac personnel, this is to guarantee a safe and reliable machine.

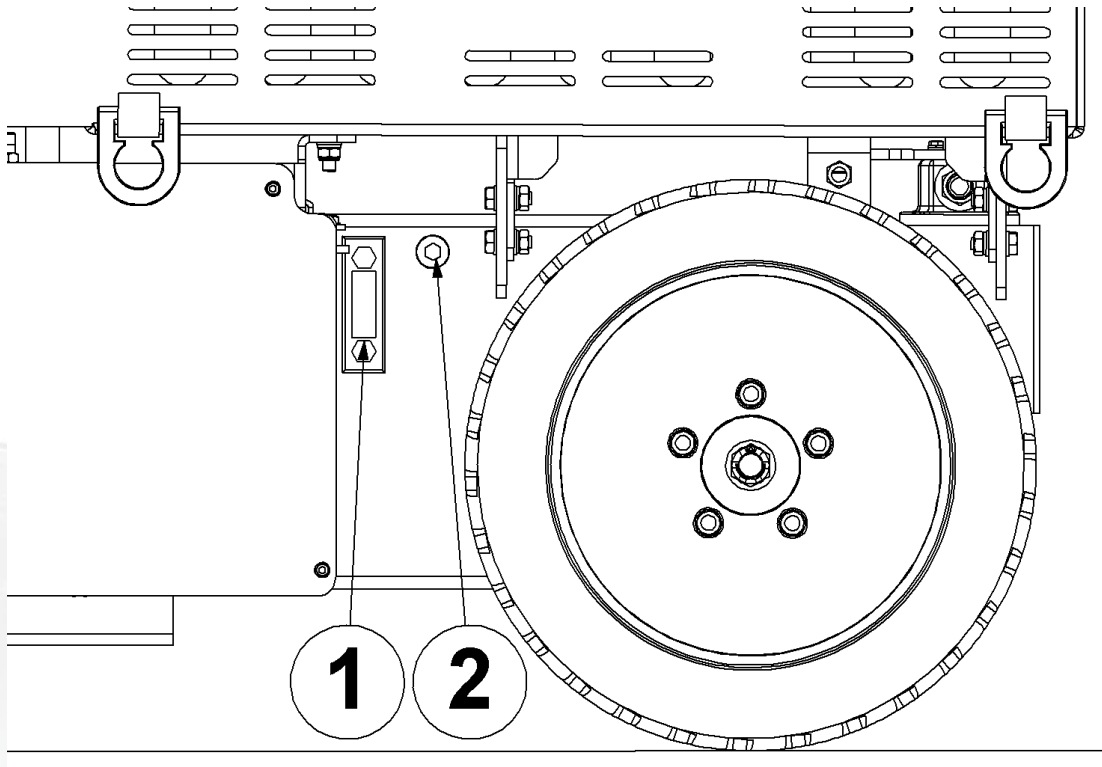
Any guarantee on the machine is expired when:

- Non original Blastrac parts have been used
- Repair work is not done by qualified Blastrac personnel
- Changes or conversions without the express written consent of Blastrac NA



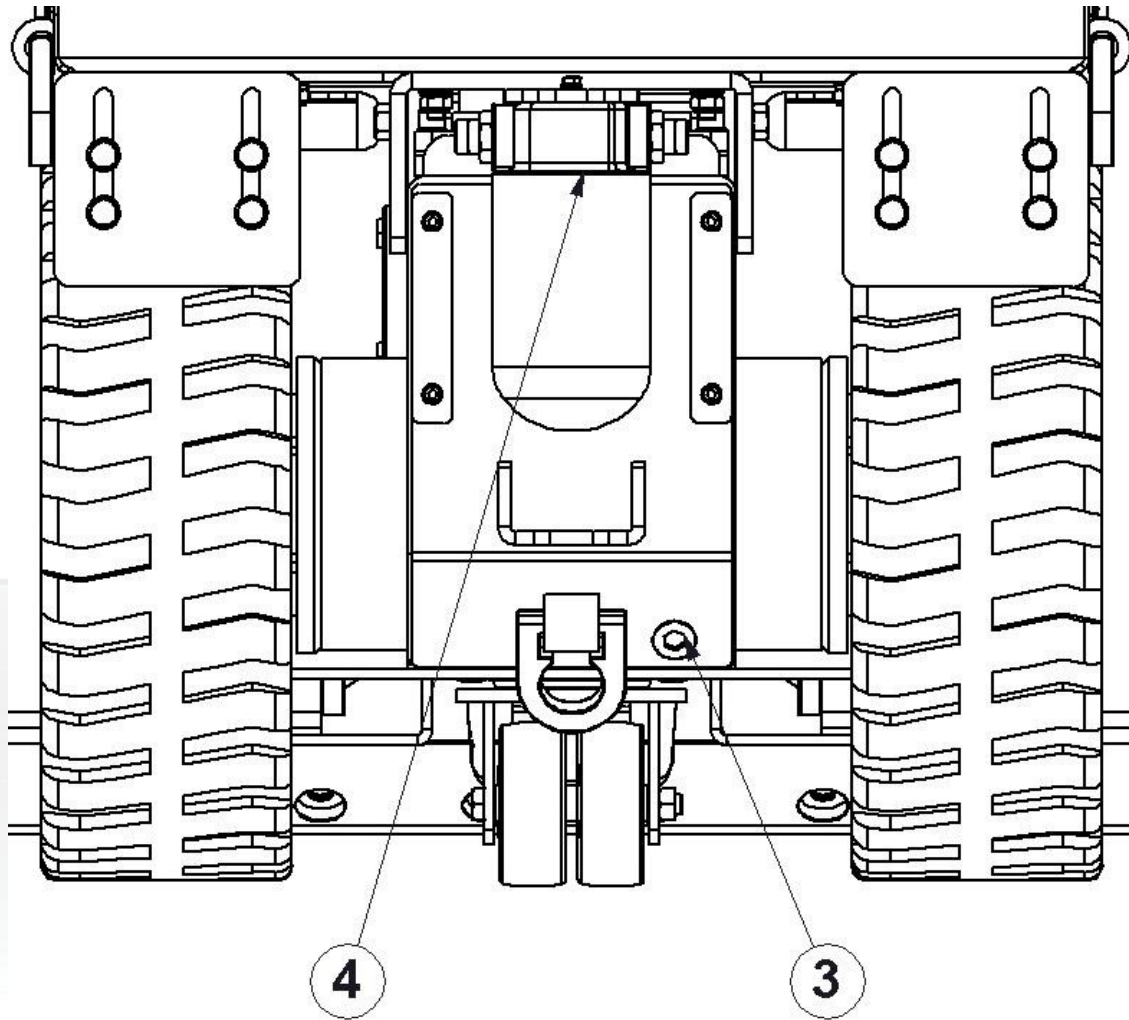
Hydraulic System Instruction

To check the oil level on the side of the tank is an installed indicator. The level shouldn't be lower than half the range of the indicator. Next to the indicator is a plug which can be removed to fill the reservoir.



- 1) Oil level indicator
- 2) Plug to refill oil in tank

At least one time during the year the oil from system and filter should be replaced. For this operation disconnect the battery as well as remove the LPG tank. The oil drain plug is located on the back of the machine near the rear axle.



3) Drain plug

4) Oil filter

Before doing any maintenance, disconnect the power and block machine in stable position. Because most of fittings in machine are O-ring style, it is important is to know how to solve O-ring leaks. Fittings should be tightened with the proper wrench size. Over tightening could damage O-rings. If a leak still persists, remove fitting and replace O-ring.



7. Cutting Head & Blades

Weight vs. Sharpness

The most common way to compensate for a dull blade is to add more weight and raise the blade angle (see re-scrape setting). Weight allows dull blades to be used to a point. Weight also causes blades to dull and break easier. Blades of any thickness tend to catch cracks and expansion joints and will bend or break the blade if set at a high angle. For best results, run a small ditching blade at a low angle to identify as many cracks and joints as possible. If blades are breaking, you are misunderstanding the conditions.

Cutting Head Angle

Set the cutting head angle to where the material comes up the easiest. The lowest is usually the best.

Steep Cutting Head Angle

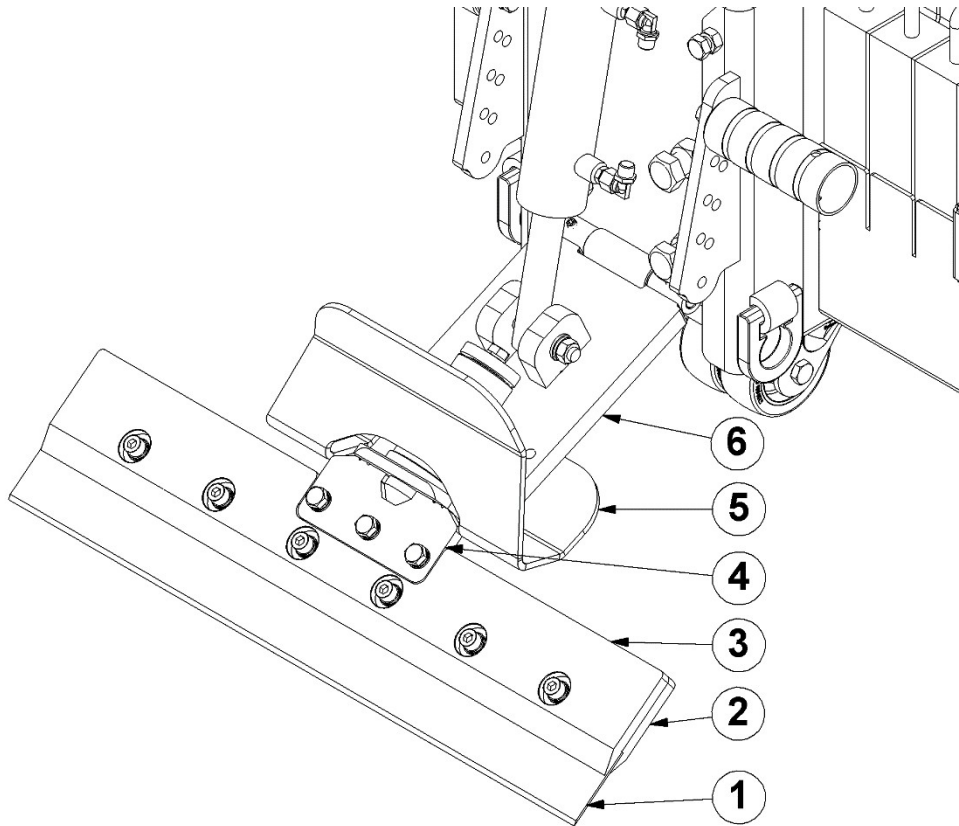
A steep angle is only used for re-scraping. The slide plate has to be raised so the bottom of the slide plate is higher or even with the bottom of the guide channels. Not raising the slide plate when operating the machine at a steep angle will cause the machine to jump and buck. It does not give the operator a clear vision of the cutting head and it causes the machine to operate at an unsafe operating height. Failure to raise the slide plate could cause machine damage and/or bodily injury.

Swivel Head

The swivel head keeps the blade in contact with the floor even when the floor is uneven. When using a flat blade with no bevel, flipping the blade to the other side after it dulls is one of the fastest methods to keep the machine running as much as possible.

Saving Time With Extra Cutting Heads

The machine is supplied with one cutting head. Having additional cutting heads will save time on the job. Insert blades into the extra cutting heads before starting a job. When the blade is dull, instead of taking the time to replace it or sharpen it on the job, take out the cutting head and replace it with another. When a different type or size of blade is needed, you can already have them ready in additional cutting heads.



- 1) Tool – depending of the needs
- 2) Tool holder – lower part
- 3) Tool holder – upper part
- 4) Tool holder
- 5) Debris deflector – new holder shape
- 6) Universal lower cutting head support

Cutting Head Insertion

With machine off, insert desired cutting head into cutting head holder. Secure with cutting head clip.

Shank Blade Insertion

Shank blades do not require a cutting head. Insert desired shank blade into cutting head holder. Secure with cutting head clip.



Blade Setting

- Dull blades greatly reduce cutting ability. Re-sharpen or replace as needed.
- Proper blade size and placement, depending on material and sub-floor type, affects performance.
- If the material isn't coming up easily, use a smaller blade for best results.
- Start with a narrow blade, then increase blade size to optimize cutting pass. Narrower blades work easier than wider blades and usually clean the floor better. Wider is not always better or faster.
- Normally bevel on blade is up for concrete. Bevel down for wood and shoe blades for soft sub-floors.
- KEEP BLADES SHARP.
- Dull blades greatly affect the performance of the machine and reduce cutting ability, re-sharpen or replace as needed.
- Keep your work area clean and clear of debris.
- After you have removed a portion of material, remove it out of the way. This will give the machine maximum performance and help to keep the work area safe.
- Always wear gloves when handling blades.
- Everyone in work area should wear eye protection.



**BEVEL UP
CONCRETE FLOORS**



**BEVEL DOWN OR
SHOE BLADES
WOOD FLOORS**



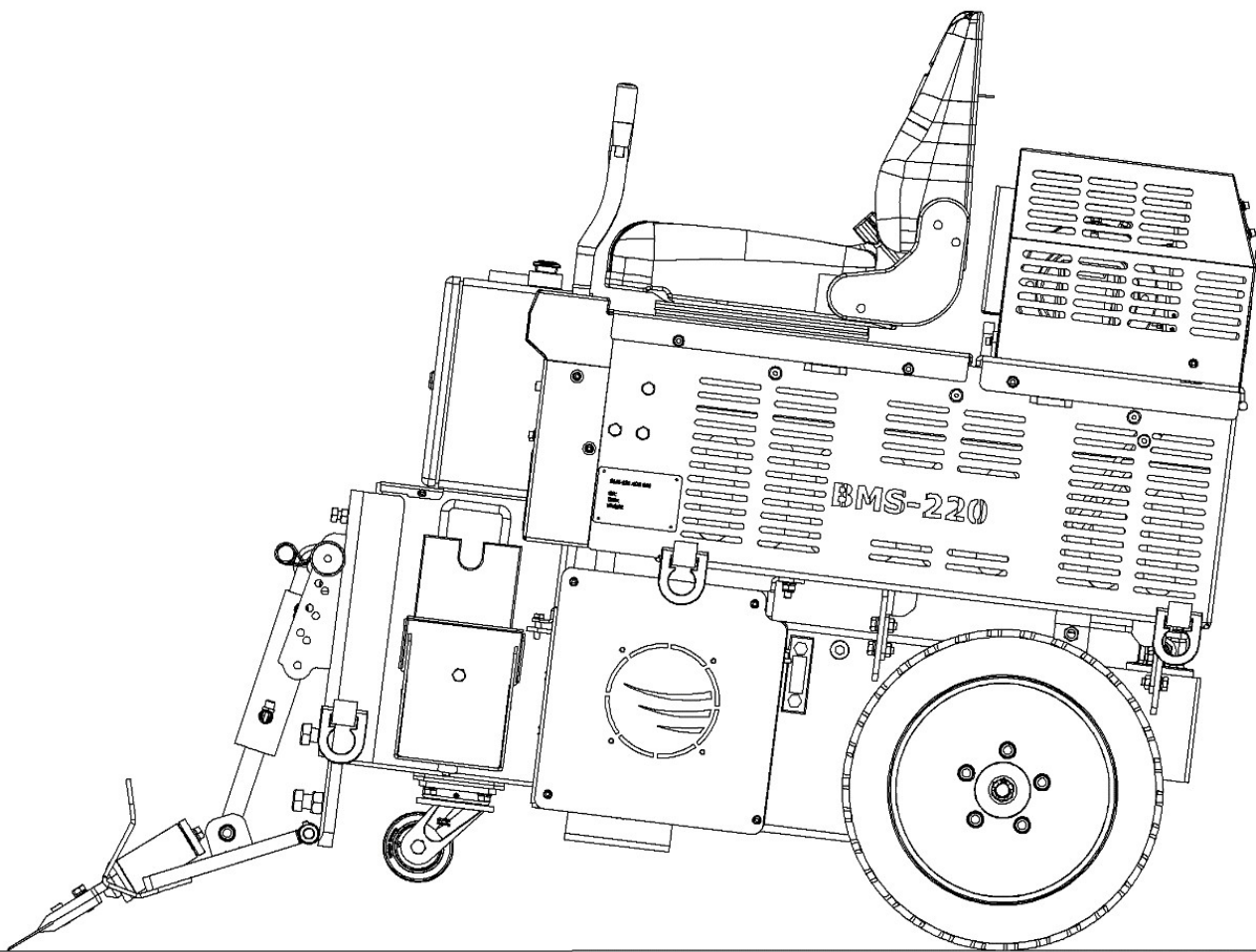
**SHOE BLADE
SOFT SUB-FLOORS**





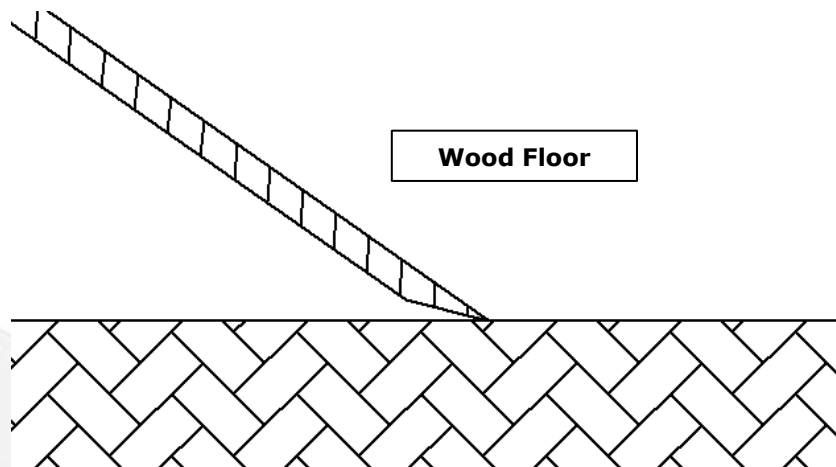
8. Blade Application

A great deal of work can be accomplished in a short amount of time using the scraper. To do this however, the operator must use the correct blade type and correct blade angle. Often when the blade begins to dull, it is tempting to raise the angle of the blade. This method can be used for small amounts of time to ensure the same quality of cut; however, too high of an angle can result in broken blades. When the angle of the blade to the floor is too great, the machine can also buck and jump resulting in a tip over, and grave injury to the operator. Never operate the machine at an angle is that unsafe for the working conditions of the job.

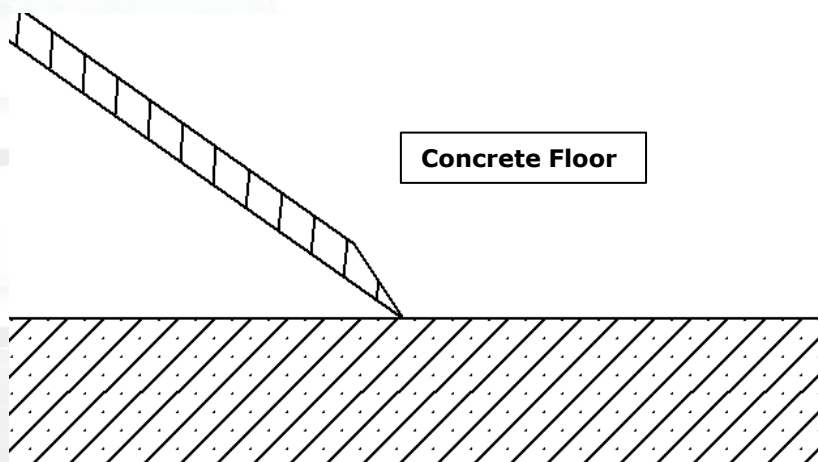


When the blade is dull it is necessary to immediately sharpen or replace. In that operation a second cutting head can be immediately swapped on to save time. When the machine is running on the second set of tooling the first set can be serviced to ensure constantly ready tooling.

Many different floor conditions exist but the hard and fast rule for scraping is that the tougher the material being removed, the skinnier the blade. The best course of action is to start small and the move to wider blades as per the conditions of the job. Generally speaking, wood floors require the bevel to be faced down, as shown below:



On concrete the bevel must be faced upwards:

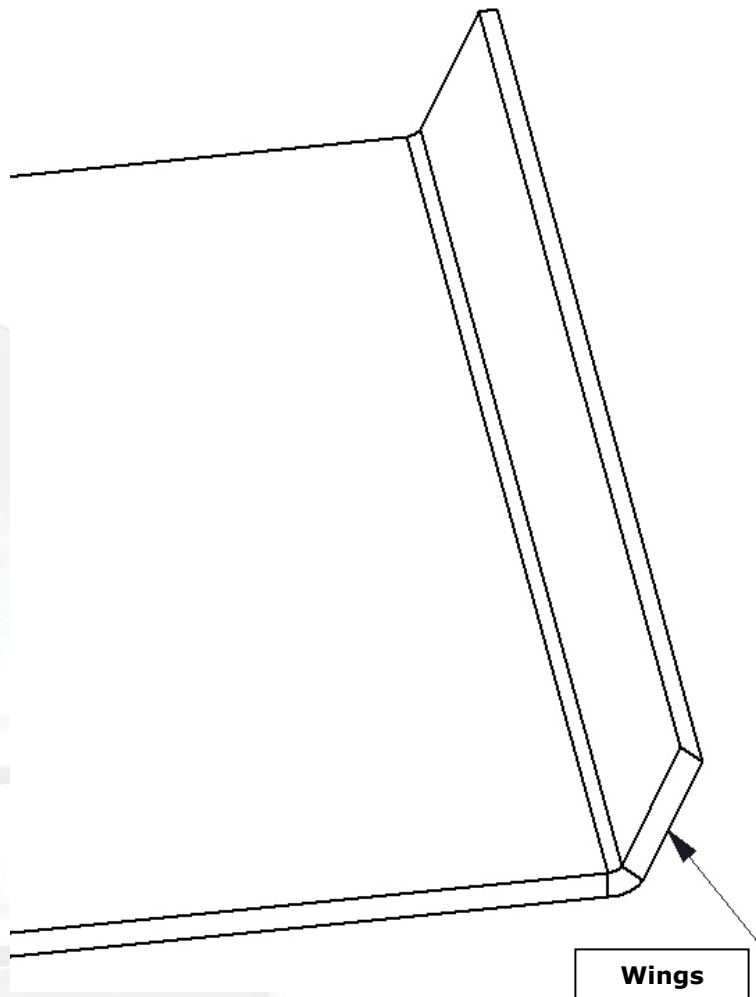




Working place should be keep clean. Furthermore; ensure the floor is cleaned before crosshatching to ensure the best possible material removal. Excess debris and dirt can make the blade dull quickly.

Dull blades can be sharpening by using electric grinder with disc of 120 grit or finer. Also a tooth hand file can be used. Caution is required during sharpening.

For soft materials like carpet, vinyl, and membranes it is possible to use self-scoring blades:



It's important to keep the "wings" sharp. They can be sharpened by the same way as the other blades.



Types of Blades

Different blades are required for different materials and different sub-straights. Although the choice is situation dependent, below are describe a few examples of common industry practice:

- **Self-scoring blades** used to vinyl, carpet tiles, soft to medium PVC, soft cork, linoleum, enhancer and unbond hot melts. Scoring is made automatically by the “wings” of the blades.
- **Heavy duty blades** are prepared to work on wood, thin ceramic, tile, VCT, VAT, re-scraping thin set, glued ceramic, elastomeric coating, or rubber epoxy. After some work period the blades need to be sharpened.
- **Shoe blades/angle shank blades** for ceramic, thin set, wood, decorative concrete, mud set.
- **Extra heavy duty blades** for wood, VCT, VAT, thin ceramic, re-scraping, all carpets, elastomeric coatings, cork, rubber, and urethane coatings.
- **Premium tempered blades** for VCT, VAT, rubber tile, cork, all glued carpets, and elastomeric coatings.
- **Razor/scrapper blades** for thin mil coatings (urethane paint), thin epoxies, poured elastomeric, and hard to remove adhesive.
- **Shoe blades/angle shank blades with carbide tips** for wood, ceramic, elastomeric coatings and epoxy.

Using correct blades is only half of being successful. Second is to put the tool in optimal geometry to the ground. Listed below is a basic guideline to the most popular angles for specific materials:

- **VCT tiles:** slide plate with distance between 1/4” to 1/2” from floor. It’s better to start with narrow cutting head.
- **Foam back carpet set-up:** slide plate with distance from 1/4” to 1/2” to the floor. Is possible to use cutting head from 10” to 14”. In some situations however wider blades can be used.
- **Ceramic set-up:** slide plate from 1/4” to 1/2”. Best working blades are Shank Blade or Shank Blade with a carbide tip.
- **Secondary backing carpet set-up:** slide plate with distance from 1/4” to 1/2” to the floor. Proposed settings are cutting head from 10” to 26” with Heavy Duty Blades or a cutting head (10” to 14”) with Self Scoring Blade.
- **Double stick carpet set-up:** slide plate with distance from 1/4” to 1/2” from floor. In this case it good to start with cutting head (10” to 14”) with Self Scoring Blade. It is important to have very sharp blades.
- **Wood set-up:** slide plate with distance from 1/4” to 1/2” to the floor. Preferred are Shank Blades, Shank Blades with carbide tips or a cutting head (6” to 8”) with Shoe Blades, Bent Shoe Blades or Heavy Duty Blades. Machine needs to have angle 45° to the grain of the wood.

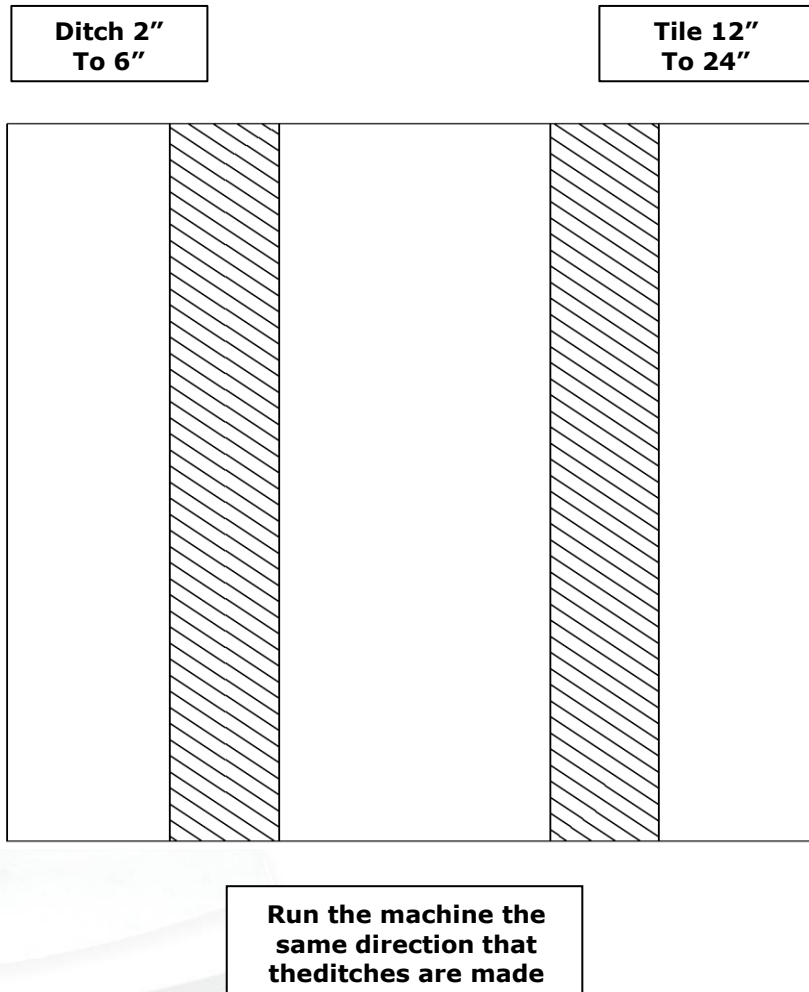


- **Thin coating set-up:** slide plate with distance from 6" to 8" to the floor or from 1/4" to 1/2" off the wood. Correct distance need to be set after tests. Preferred application is cutting head (8" to 26") with Razor Blades. But it is possible also to work with cutting head (8" to 14") with standard blade.
- **Re- scraping set-up:** slide plate with distance from 6" to 8". Cutting head (8" to 26") with Scraper Blades can be used. Good to remember that the blade should be one step bigger than the cutting head.
- **Working over concrete:** it is imperative to orient the bevel upwards. Starting small and then moving to wider blades is also the normal course of action.
- **Working over soft sub-floor:** slide plate with distance from 1/4" to 1/2" from floor. Preferred are Extra Heavy Duty Blade or regular blade. Blades need to be installed bevel up and the position needs to be flat as is possible. On a regular blade the operator can try to bend up the corners if the blade is gouging the sub-straight. This should help to mitigate digging into the floor.
- **Working over wood:** First ensure that the floor is strong enough to handle to full weight of the machine plus the operator. Start with none of the weights on the machine. Distance between slide plate and floor should be from 1/4" to 1/2". Preferred are Extra Heavy Duty Blades, shoe blades or regular, always mounted bevel up. It is also important to always keep the blades as flat as possible to the floor.



9. Ditching

Cross room ditching



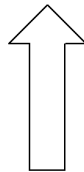
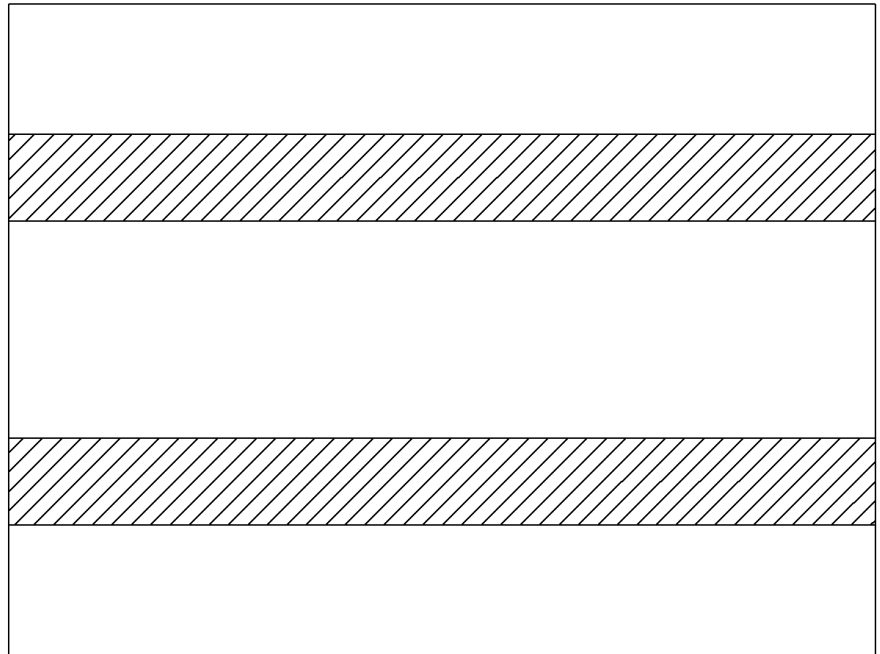
When removing hard to remove ceramic, VCT or VAT, cross-room ditching will help to make the removal easier. Using a blade 2" to 6" in width, make ditches 12" to 24" apart in the same direction the machine will be removing the material. This "relieves" the pressure holding the tiles together. If ditching helps and the material is coming up easy, try using a wider blade to ditch with.



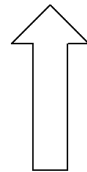
Checker Board Ditching

Ditch should be as wide as possible

Carpet should be from 48" to 72"



Run the machine crossways from the directions that the ditches are made



To make carpet removal and debris cleanup easier, checker board ditching is very helpful. Using as wide of a self-scoring blade as possible, make ditches apart crossways from the way the machine will be removing the materials. Running the machine crossways from the ditches will make smaller pieces of debris to be hauled away. Instead of large gummy rolls of carpet, there are small squares that can be rolled, palletized, put on a dolly or folded with the sticky side in. This makes removing the debris easier and reduces the amount of debris that can block the machines movement.



10. Technical Data

BMS-220LPG	
Working width	Up to 22"
Motor power	25 HP
Drive system/ Speed	Propane- up to 320ft/min
Machine type	Ride-on
Application	Hard Wood Parquet, Ceramics, Linoleum, Vinyl, Carpet, Adhesives, Glue, Tiles etc...
Length	65"
Width	27"
Height	64"
Weight	2000 lbs.



SERVICE MANUAL BMS-220LP-V2

VERSION 1.1



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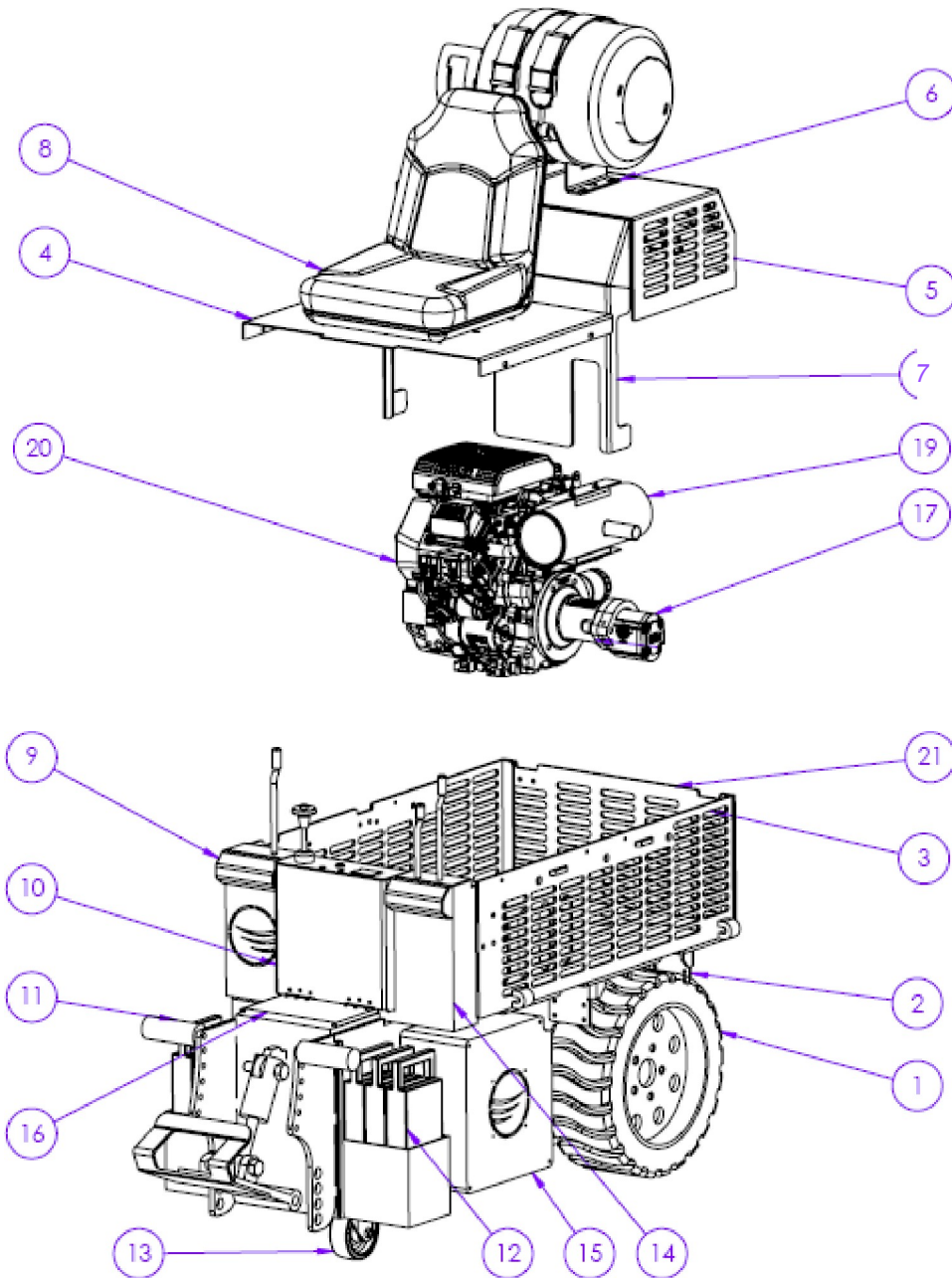
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1. Spare parts

Full Assembly

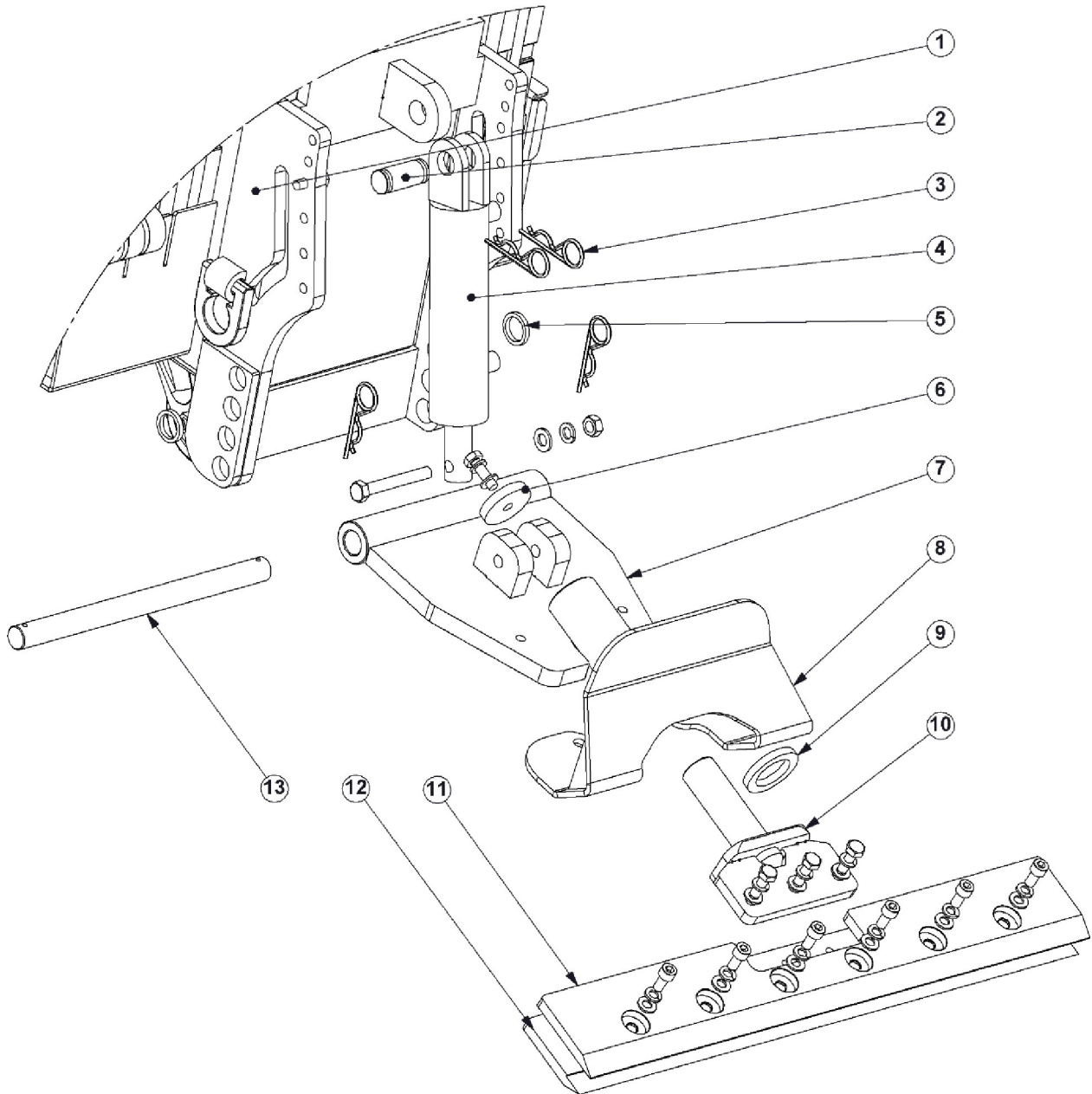




Item	Blastrac Part Number	HQV Part Number	Description	Qty.
1	E09169	533768901	Wheel Complete	2
2	E09716	535236101	Wheel Scraper	4
3	PG-10568	533137701	Tub	1
4	E11262	534911401	Tub Cover	1
5	PG-10492	533269501	Cover	1
6	07510005	533314201	Propane Tank Clamps	1
7	PG-10567	533448601	Middle Support	1
8	E09168	533925001	Seat	1
9	E09704	533744701	Single Spool Cover	1
10	PG-10571	533753701	Control Panel	1
11	E08622	533454101	Foot Support	2
12	E03185	533032801	Weight	6
13	E09277	533298401	Front Wheel	1
14	E09702	535246101	Double Spool Cover	1
15	E09942	535241601	Side Cover Lh	1
16	PA-11237	533431101	Battery Cover	1
17	CP-10969	533927501	Concentric Pump Mount	1
18	CP-10968	533931901	Concentric Pump	1
19	CP-10976	533614101	Muffler	1
20	CP-10735	533893001	Kohler Engine	1
21	PG-10566	533286901	Rear Panel	1

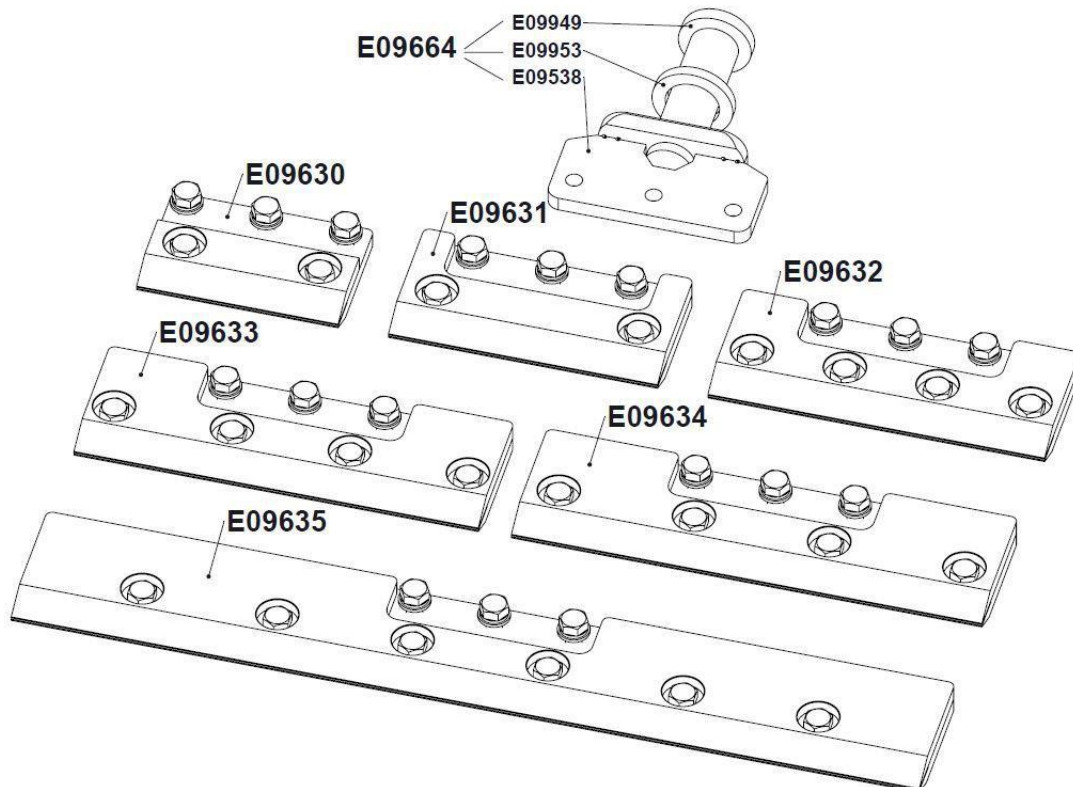
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Tooling Assembly

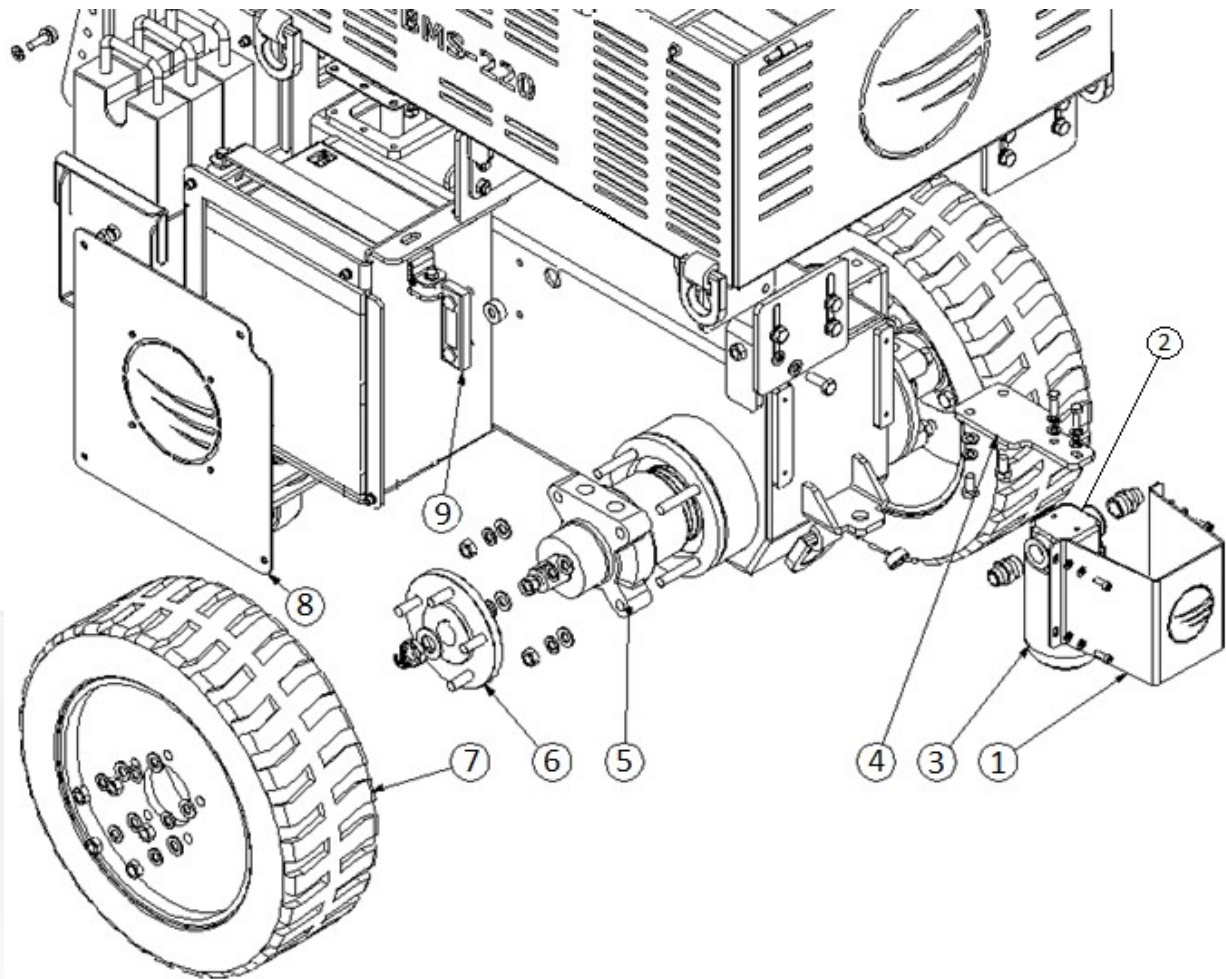




Item	Blastrac Part Number	HQV Part Number	Description	Qty.
1	PG-10530	533361301	Main Frame BMS-280	1
2	E09711	533738001	Cylinder Connecting Rod	1
3	BE0234	533858601	Locking Clip Double 4,5mm	4
4	E09171	533783401	Hydraulic Cylinder	1
5	E11510	533389501	Locking Washer	2
6	E09949	533670301	Tool Holder Plate	1
7	E12246	533925701	Lower Cutting Head	1
8	E09950	533865701	Debris Deflector - New Holder Shape	1
9	E09953	533736301	Tool Holder Washer	1
10	E09538	531488401	Tool Holder	1
6+8+10	E09664	534046701	Tool Holder Complete	1
11+12	E09635	533335601	Blade Holder 686mm(27")	1
	BE0037	533073501	M12x30 Hexagon Bolt	3
	BE0027	533288701	M12 Spring Lock Washer	3
	BE0026	533250701	M12 Plain Washer	3
	E09630	533335701	Blade Holder 152mm(6")	1
	E09631	533090301	Blade Holder 203mm(8")	1
	E09632	533495601	Blade Holder 254mm(10")	1
	E09633	533110301	Blade Holder 305mm(12")	1
	E09634		Blade Holder 355mm(14")	1
13	E12247	534080301	Cutting Head Axle	1



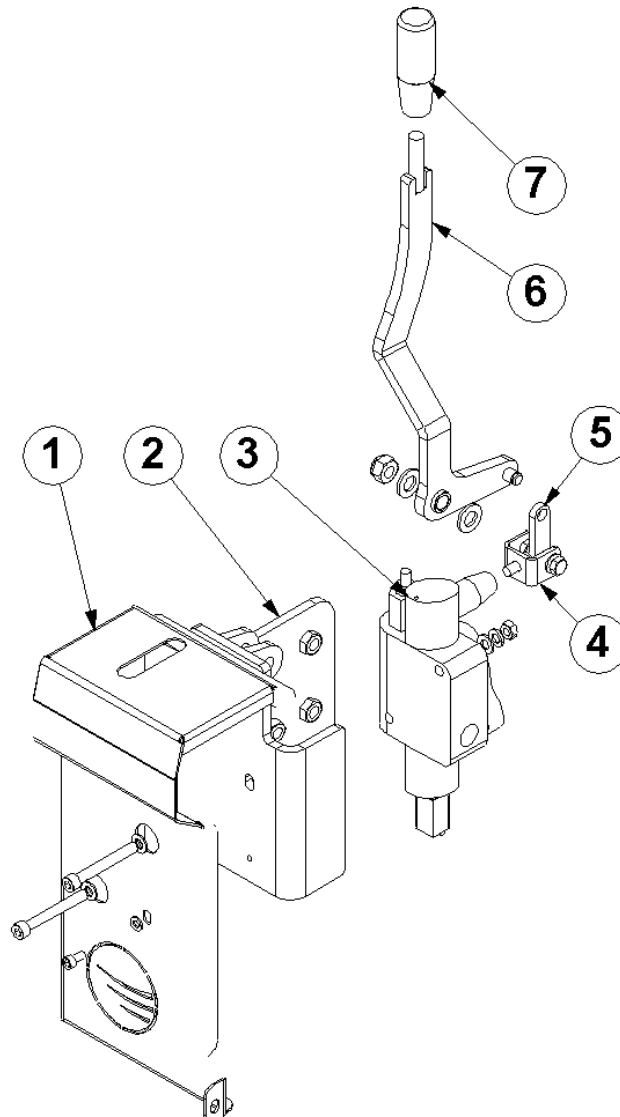
Rear Assembly



Item	Blastrac Part Number	HQV Part Number	Description	Qty.
1	E09709	533741601	Filter Cover	1
2	E10772	533299801	Filter Head	1
3	E10773	533394801	Filter Element	1
4	E09708	533131301	Filter Bracket	1
5	E07732	533280701	Hydraulic Motor	2
6	E09170	533190601	Wheel Hub	2
7	E09169	533768901	Wheel Complete -BMS 220ADB	2
8	E09942	535241601	Side Cover LH	1
9	350-4172-S	533872801	Level Gauge with Thermo	1

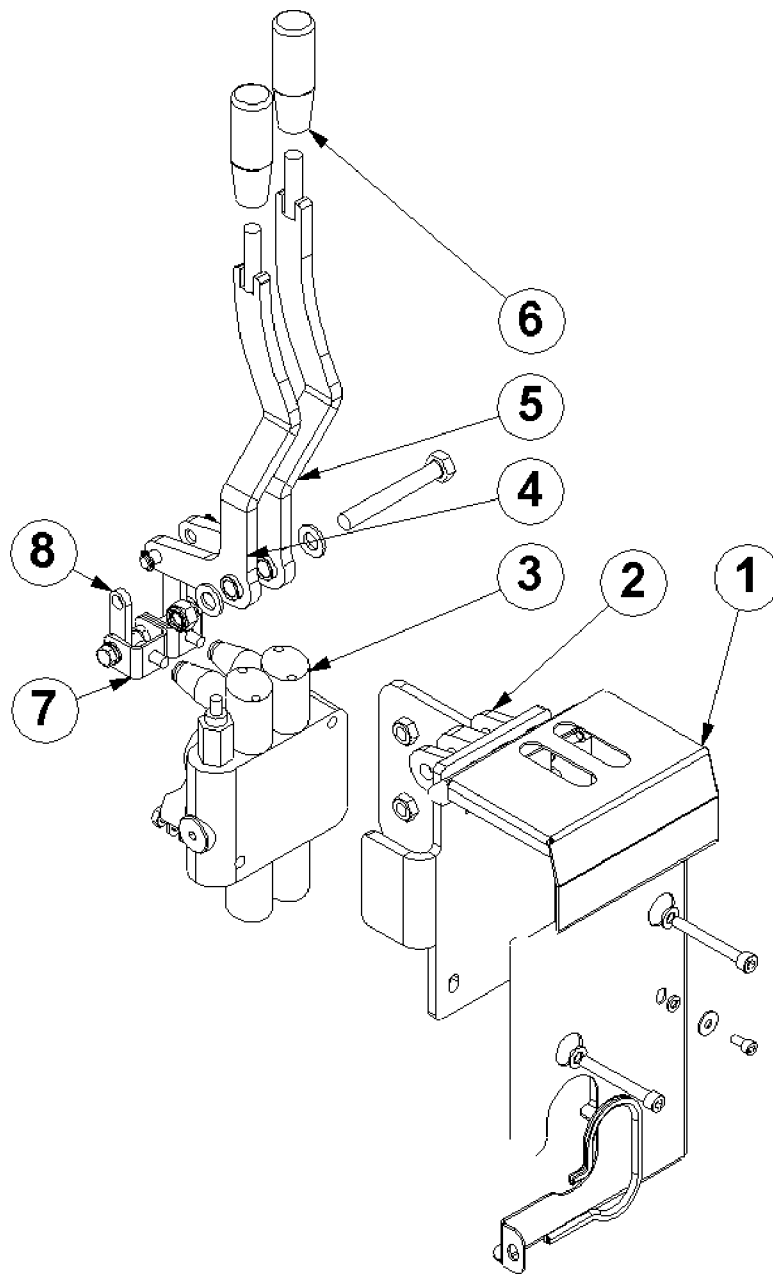


Drive Lever Assembly



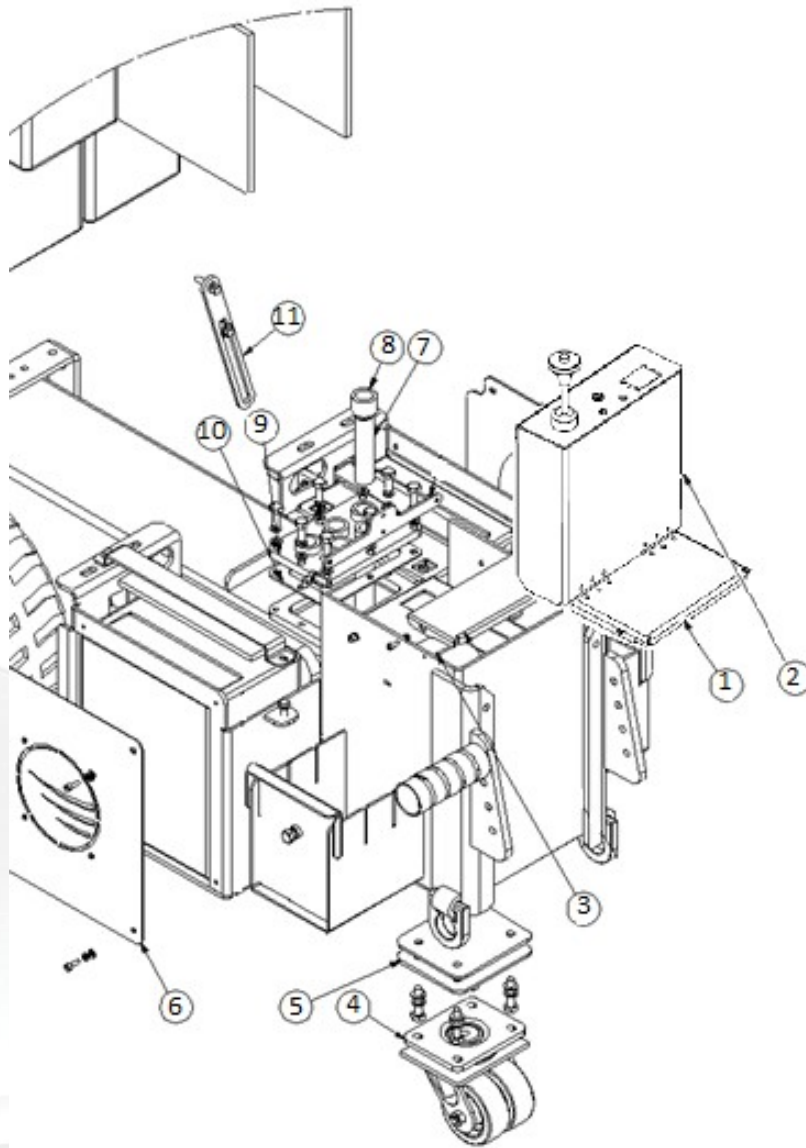
Item	Blastrac Part Number	HQV Part Number	Description	Qty.
1	E09704	533744701	Single Spool Cover	1
2	E09703	535243401	Single Spool Bracket	1
3	E10351	533847001	Single Spool Control	1
4	E09717	533734201	Spool Lever Bracket	1
5	E09718	533222301	Spool Tie	1
6	E09707	533094701	Steering Handle RH	1
7	E09701	533916301	Handle Grip	1

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Item	Blastrac Part Number	HQV Part Number	Description	Qty.
1	E09702	535246101	Spool Cover	1
2	E08638	535165601	Double Spool Bracket	1
3	E10352	533865301	Double Spool Control	1
4	E09706	533026501	Lifting Handle	1
5	E09700	533369201	Steering Handle LH	1
6	E09701	533916301	Handle Grip	2
7	E09717	533734201	Spool Lever Bracket	2
8	E09718	533222301	Spool Tie	2

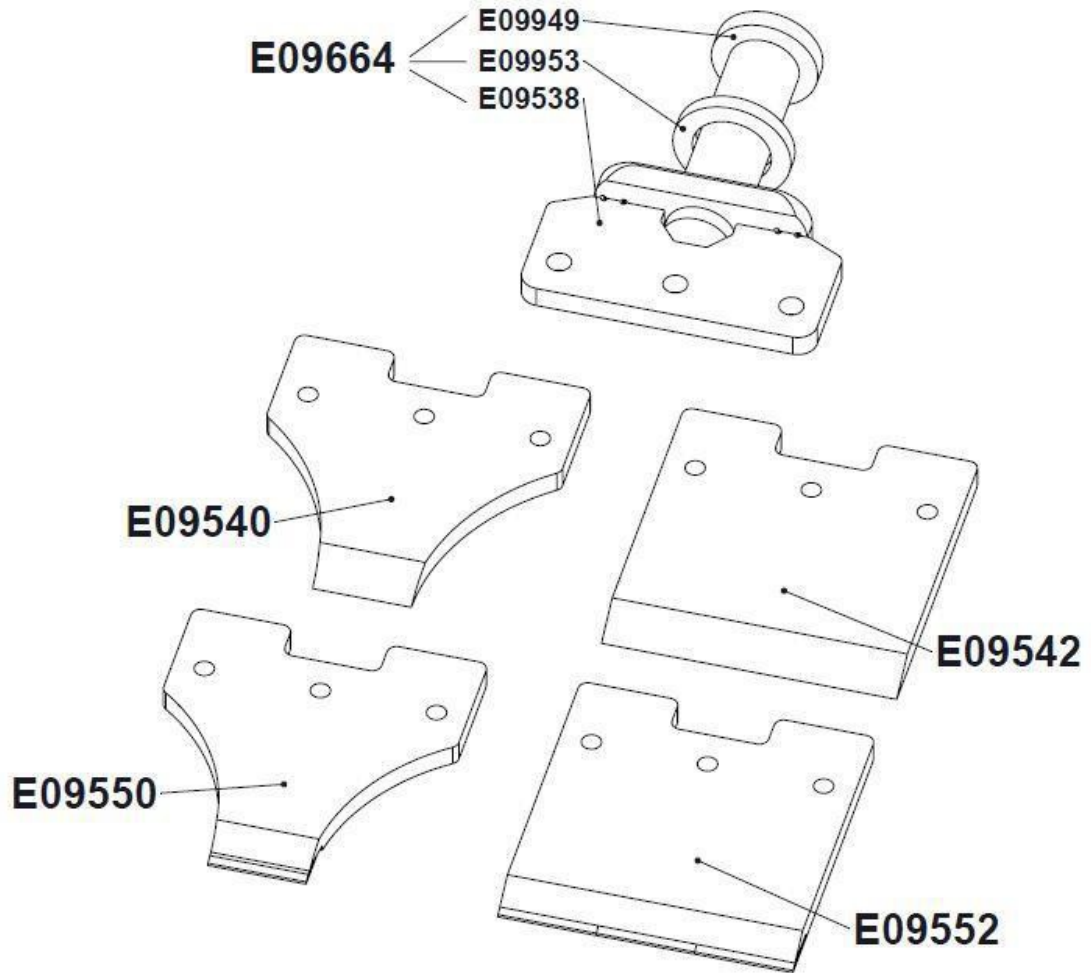
Front Assembly



Item	Blastrac Part Number	HQV Part number	Description	Qty.
1	E09376	535364301	Battery Cover	1
2	E08628	535184101	Control Panel	1
3	E08629	533886501	Front Battery Tight Plate	1
4	E09277	533298401	Front Wheel	1
5	E09712	533343101	Wheel Spacer	2
6	E09710	535242001	Side Cover - RH	1
7	E09837	533018101	Breather Pipe	1
8	E09939	533211401	Breather Mounting Bushing	1
9	E09705	533174501	Hose Connection Plate	1
10	E09172	533225701	Oil Tank Seal	1
11	E09838	533444801	Protection Plate	1

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Chisels



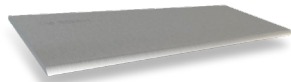
Item	Blastrac Part Number	HQV Part number	Description	Qty.
1	E09540	533858501	Premium Chisel 2"	1
2	E09542	533865601	Premium Chisel 6"	1
3	E09550	533127801	Heavy Duty Chisel 2"	1
4	E09552	533128001	Heavy Duty Chisel 6"	1

COMMON PARTS

BMS-220LP



6" STANDARD BLADE
P000859



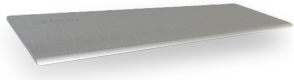
8" STANDARD BLADE
P000854



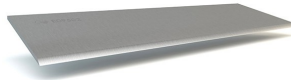
10" STANDARD BLADE
P000886



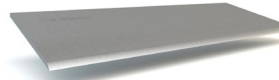
12" STANDARD BLADE
P000855



18" STANDARD BLADE
P000856



24" STANDARD BLADE
P000858



10" EXTREME DUTY BLADE
P000886XD



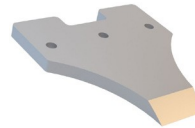
8" SELF-SCORING BLADE
P000553



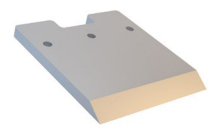
10" SELF-SCORING BLADE
P000554



12" SELF-SCORING BLADE
P000555



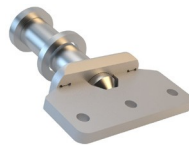
2" PREMIUM CHISEL
E09540



6" PREMIUM CHISEL
E09542



TRANSPORT DOLLY
PG-10544



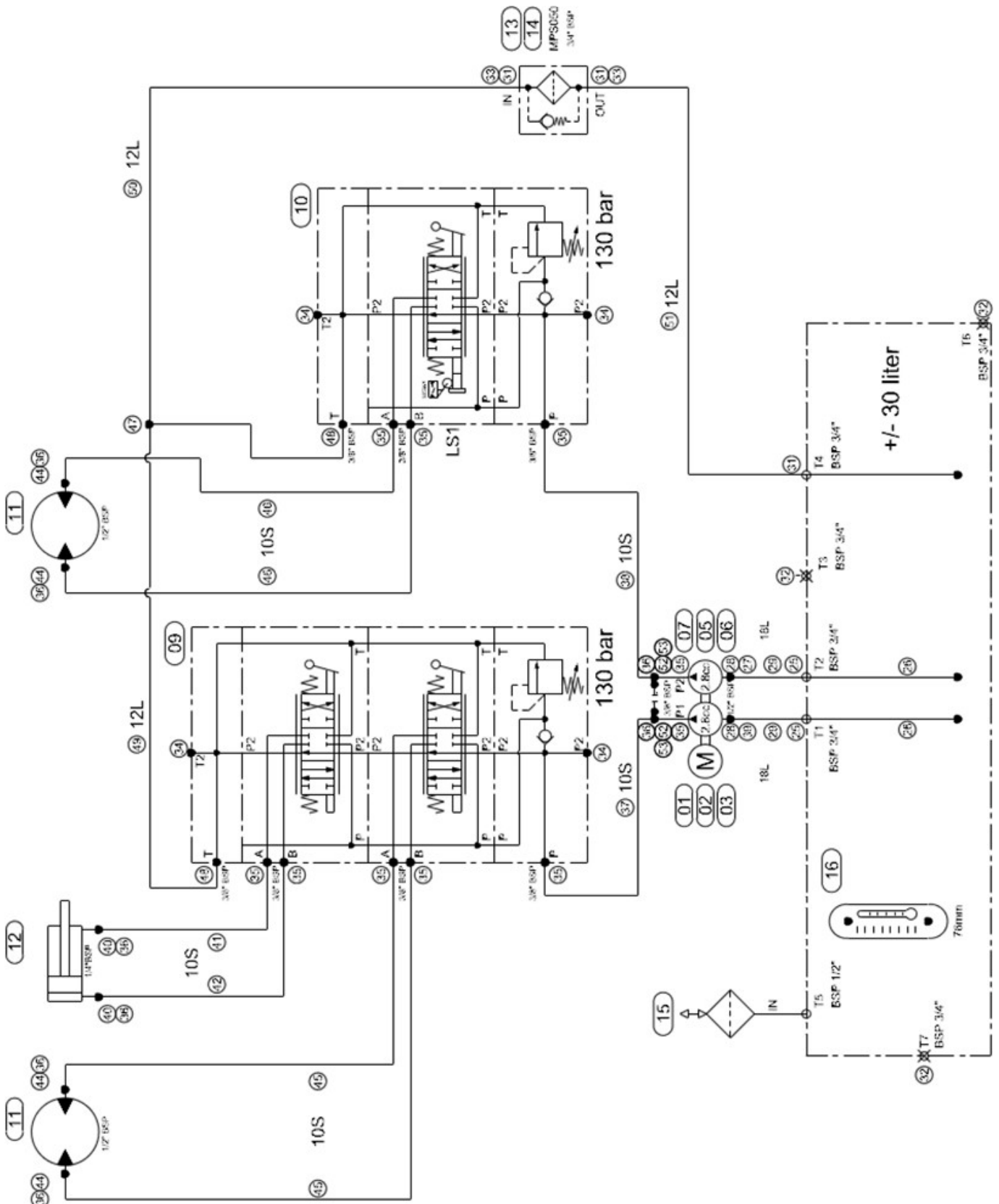
TOOL HOLDER COMPLETE
E09664



12" BLADE HOLDER
E09633

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2. Hydraulic Schematic



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Contact

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Oklahoma City, OK 73114
Tel: 800-256-3440
Fax: 405-478-8608
www.blastrac.com



13201 North Santa Fe Avenue ☎ Oklahoma City, OK 73114 ☎ Ph: 800-256-3440 ☎ F: 405-478-8608 blastrac.com

Product Warranty

Standard Equipment Products:

Blastrac warrants its Blastrac Standard Equipment Products against defects in quality of material and workmanship, under normal and proper use for a period of **1 Year** from the date of delivery, as noted on the returned warranty registration card, or, in the case of **Rental Fleet Machines, 180 Days** from the date of assignment to Rental Fleet. This warranty is non-transferable and is extended to machines purchased and entered into the normal service of surface preparation by a recognized professional or qualified contractor. Blastrac makes this warranty only to the buyer who purchases the products directly from Blastrac or its Authorized Distributor. This warranty does not include expendable parts such as, but not limited to, blades, blast wheels, wear plates, liners, seals, and electrical components. All purchased parts utilized in the manufacture will be honored to the original manufacturer's specified warranty.

If the buyer does not return the warranty card or register the product online at www.blastrac.com within **30 days** after taking delivery of Blastrac Standard Equipment Products, the warranty period is limited to **6 months** from the date of delivery noted on shipping receipt.

Hand Tool Products:

Blastrac warrants its BLASTRAC Hand Tool Products, including hand grinders and accessories, against defects in material and workmanship under normal and proper use for a period of **90 days** from the date of delivery or, in the case of Rental Fleet Machines, from the date of assignment to a Rental Fleet. Blastrac makes this warranty only to the buyer who purchases the products directly from Blastrac or its authorized distributor. This warranty does not include expendable parts such as blades.

If the buyer does not return the warranty card, or register online at www.blastrac.com within **15 days** after taking delivery of Blastrac Hand Tool Products, the warranty period is limited to **30 days** from the date of delivery noted on shipping receipt.

WARRANTY TERMS AND CONDITIONS:

1. Blastrac's obligation under this warranty is limited to the replacement or repair, at Blastrac's option, of products and does not include, labor, the cost of transportation, loss of operating time, or normal maintenance services.
2. This warranty does not apply to failure occurring as a result of abuse, misuse, negligence, corrosion, erosion, normal wear and tear, alterations or modifications made to products without the express written consent of Blastrac.
3. The buyer must submit all warranty claims no later than thirty (30) days after buyer becomes aware of the basis for any such claim, or should have become aware of the basis for any such claim in the exercise of reasonable diligence.

To return parts for warranty consideration, please call Blastrac Customer Service at **800-256-3440**. Your customer service representative will obtain the necessary information to complete the Blastrac Returned Merchandise Authorization (RMA) Form. Blastrac will then send the RMA form to the customer authorizing the return of the parts for warranty evaluation. The parts must be received within sixty (60) days following the RMA origination date or the warranty claim will be denied. Once the parts are received they will be evaluated for warranty.

If the customer cannot wait for the evaluation/replacement of the parts during this process, the customer must issue a new purchase order to Blastrac for the replacement parts before they can be shipped. Once the evaluation process is complete and parts are deemed a valid warranty claim, a credit will be issued against this invoice.

4. The buyer may not return Blastrac products without written authorization to do so through a Blastrac RMA.

5. Blastrac reserves the right to inspect and determine the scope of its warranty responsibilities for any returned Blastrac products.

6. Blastrac makes no warranty with respect to accessories it does not manufacture, including but not limited to, engines, motors, batteries, tires and all other parts. See component manufacture warranty.

7. Blastrac reserves the right to make product changes or improvements without prior notice and without undertaking any obligation for such changes or improvements on previously sold products.

8. The above warranty conditions can only be altered by Blastrac. Blastrac must confirm alterations in writing for each specific transaction.

9. Blastrac reserves the right to modify this warranty for used or demo products on an individual transaction basis. Blastrac will include warranty modifications on its invoices for used or demo products.

10. BLASTRAC DOES NOT AUTHORIZE ANY PERSON, REPRESENTATIVE, SERVICE OR SALES OUTLET TO MAKE ANY WARRANTY DIFFERENT FROM THIS PRODUCT WARRANTY.

11. EXCEPT FOR ITS PRODUCT REPAIR OR REPLACEMENT OBLIGATIONS DESCRIBED IN THIS PRODUCT WARRANTY, UNDER NO CIRCUMSTANCES SHALL BLASTRAC BE LIABLE TO THE BUYER, OR ANY OTHER PERSON, FOR ANY DIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE BLASTRAC PRODUCT, OR FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER, INCLUDING WITHOUT LIMITATIONS, DAMAGES FOR ANY LOSS OF GOODWILL, WORK STOPPAGE, OR ANY AND ALL OTHER COMMERCIAL DAMAGES OR LOSSES.

12. BLASTRAC MAKES NO OTHER PRODUCT WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

 **BLASTRAC®** Warranty Registration Notification
IMPORTANT!



TO THE DELIVERING DISTRIBUTOR OR END USER

To ensure the proper warranty coverage is extended to the owner of this machine, fill in the necessary information below **COMPLETELY** and **ACCURATELY** and retain for your records. Go to www.blastrac.com and register online. Click on the Register icon in the left column of the homepage, and fill out the product registration form with the same information that will be recorded here.

The warranty period will start upon the delivery date of the machine.

The distributor or the end user must provide the machine warranty information when the machine is delivered. Registration of the machine will extend the warranty period from the recorded delivery date entered with product registration. **Failure to comply will make any and all warranties on the equipment void after 6 months.**

OWNER/END USER'S REFERENCE INFORMATION

Delivery Date _____	Machine Model No. _____
Delivering Distributor's Name and Address _____	Machine Serial No. _____
_____	Modifications _____
_____	_____
_____	_____
_____	_____

Signature of Delivering Distributor's Representative _____

Blastrac is a registered trademark of Blastrac, NA
Fold and Detach Here if Mailing

Warranty Registration

IMPORTANT! To ensure that your Blastrac® machine is covered under warranty, please provide the information recorded here by registering online at blastrac.com, or complete this page and fax to 866-485-1046, or if you prefer, detach and mail to:

Blastrac, 13201 North Santa Fe Avenue, Oklahoma City, OK 73114-9901

(Please print legibly)

Company _____

Address _____

City, State, & Zip _____

Telephone No. _____ Contact Person _____

Date of Purchase _____ Date Received _____

Machine Model No. _____ Serial No. _____

Distributor Name _____

End User Name _____

End User E-mail _____