BLASTRAC

OPERATING MANUAL BMR-75D

VERSION 1.0

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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 BMR-75D ride-on shot blaster is ideally suited for medium and large sized applications with the added benefit of being diesel operated for increased versatility. It is very maneuverable with zero turn radius, non-mark tires and complete hydraulic control.

Main advantages of the BMR-75D:

- Ergonomic design for safe maneuvering, non–marking tires
- Very versatile, total freedom of movement, no electric cable.
- Powered by a heavy-duty motor delivering strong power with no worries of charging.

1	Blasthead	5	Access Door
2	Steering Wheel	6	Hepa
3	Shifter	7	Dust Collector
4	Control panel		

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.

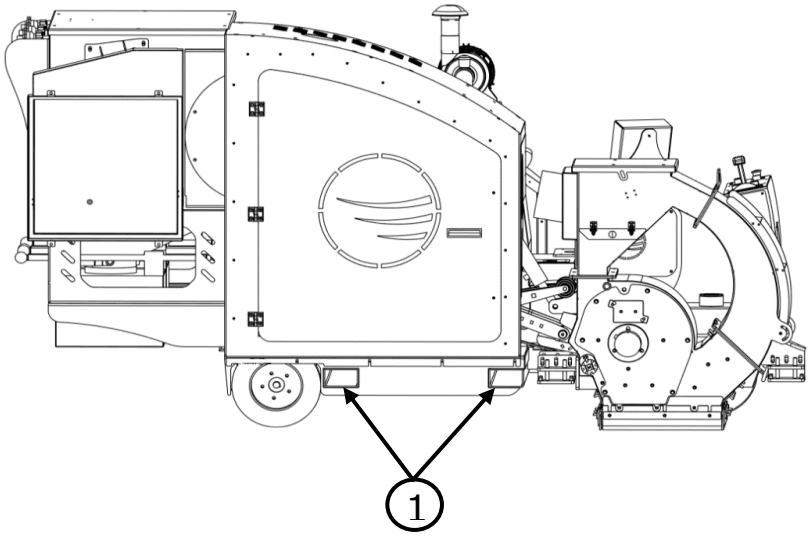
Meanings of these symbols are:

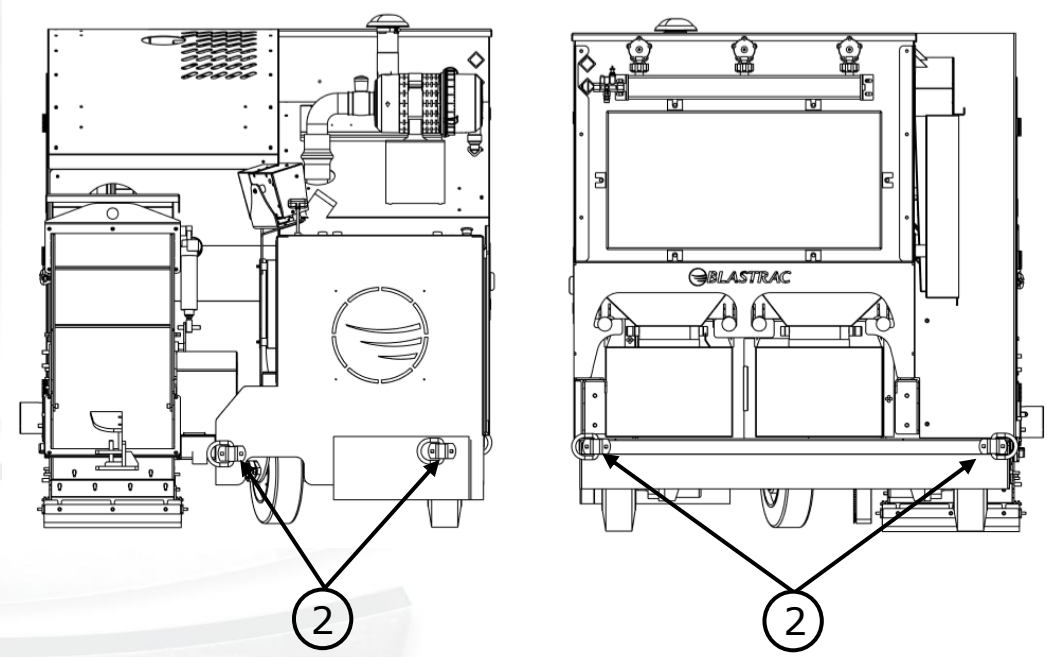
- Ear protection is required
- Safety glasses with lateral protection are required
- CE-mark on this machine
- Safety shoes required
- Consult the manual before operating the machine

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

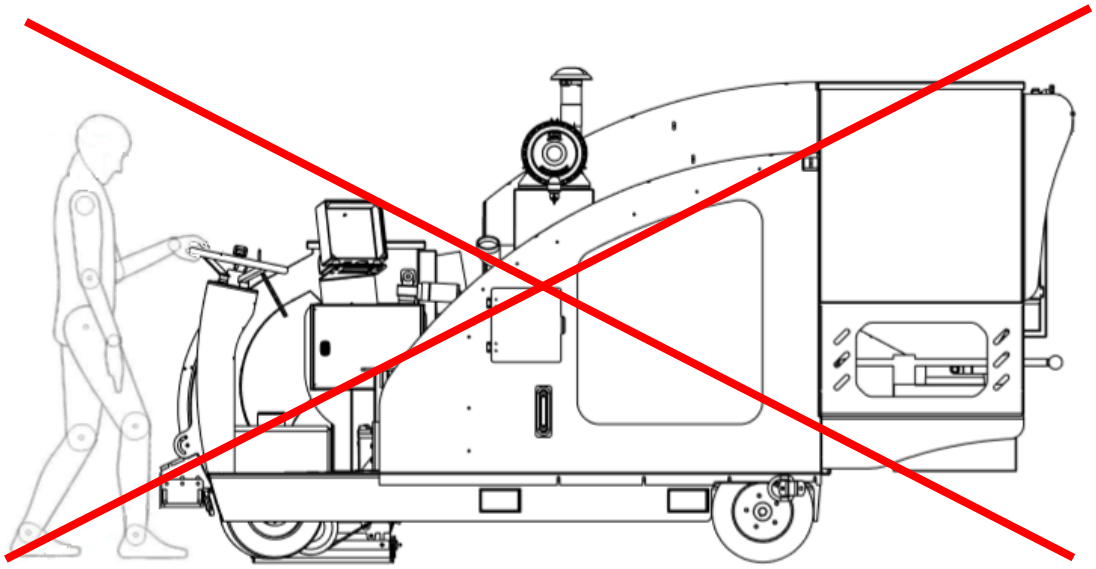
- Turn key to OFF when machine is parked.
  - Park the machine always on a flat horizontal and levelled surface.
- The weight of the BMR-75D is 5200 pounds. Only use an appropriately sized lift to move/hoist the BMR-75D. The forklift pockets are shown below (1).





- Chock wheels for transport and keep the shifter in neutral position. It can be secured using the shown tie down spots. (2)
- Don't leave the machine unsecured on jobsites.

- Do not run the machine in unsafe environments.
- Only operate this machine when sitting in the operator seat.
  DO NOT OPERATE THIS MACHINE WHEN STANDING IN FRONT OF IT!



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

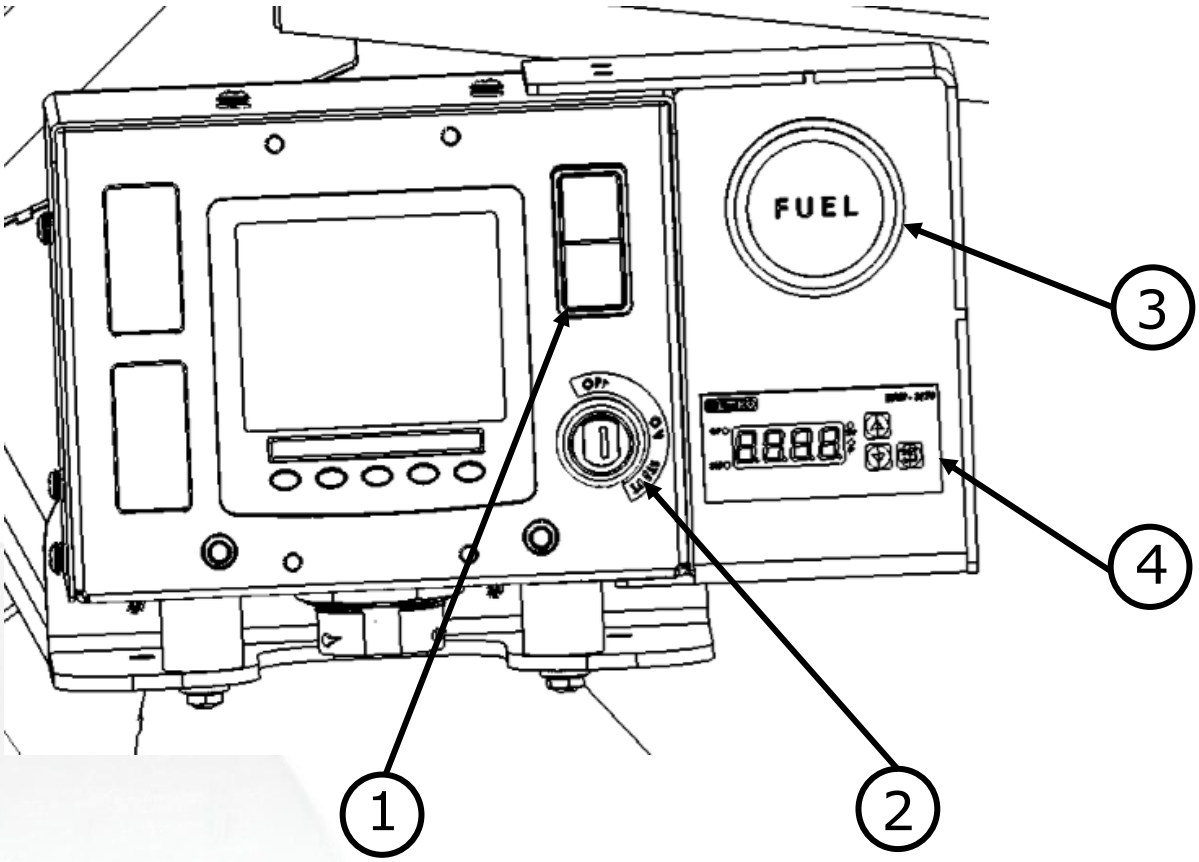
Before using the machine it is essential to inspect the machine every day.
It is not permitted to use the machine if it does not pass all of the checkpoints below.

Checkpoints of Machine Safety:

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

5. Operation

During the operation of the BMR-75D, the following additional safety instructions must be followed closely.

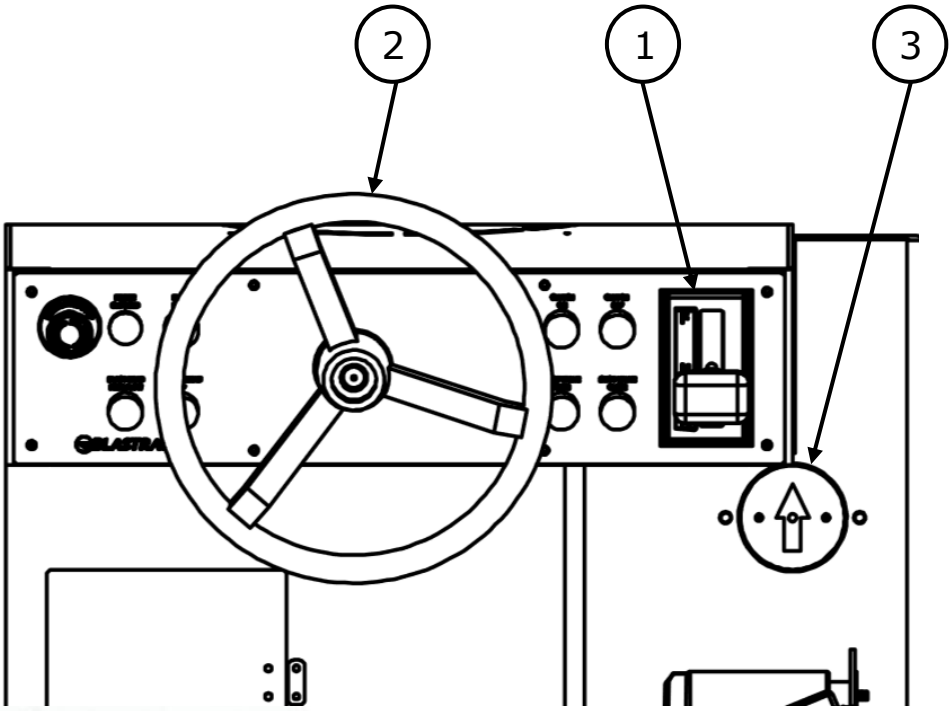


Switching on the Machine:

- Take place on the seat. Operating the machine without being seated is not possible because of the safety switch of the seat.
- Turn the key contact switch (2) to the right.
- Run the RPM up to 2200 using the throttle buttons (1).
- You can see your fuel level by looking at the fuel gauge (3).
- You can see your speed by looking at the feet per minute gauge (4).

Driving the Machine

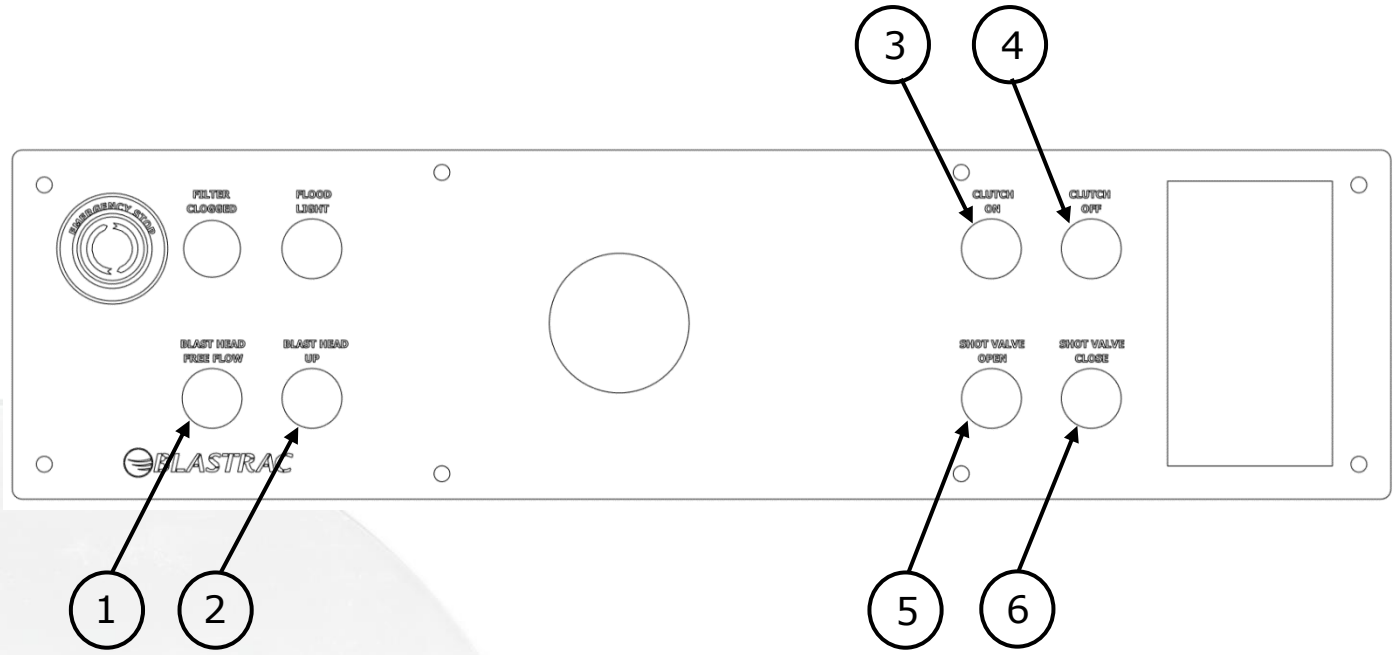
The drive wheels are controlled by the shifter. Pushing the shifter (1) forward makes the machine go forward and pushing it back makes the machine go in reverse. The driving speed depends on the position of the shifter. The steering wheel (2) controls the front wheel, controlling the direction the machine goes. There is an arrow (3) above the front wheel that shows what direction the wheel is facing.



1) Shifter
2) Steering Wheel
3) Direction Arrow

Controlling the Blasthead

Pressing the free float button (1) will lower the Blasthead down to the ground. To raise the BlastHead hold the up button (2) until it is at the desired height. The Clutch On Button (3) will engage the clutch and run up the blast wheel and blower. The Clutch Off Button (4) will disengage the clutch turning the blast wheel and blower off. The Shot Valve Open Button (5) will engage the linear actuator opening the shot valve on the blast head. The Shot Valve Close Button (6) will disengage the linear actuator closing the shot valve.



1) Blasthead Free Float
2) Blasthead Up
3) Clutch On
4) Clutch Off
5) Shot Valve Open
6) Shot Valve Close

Order of operation

Start up

- Start the BMR-75
- Run the machine up to 2200 RPM
- Press the free float button and wait for it to lower
- Turn the clutch on
- Run the machine to the desired speed
- Open the shot valve

Shut down

- Close the shot valve
- Turn the clutch off
- Idle down the BMR
- Turn the key to off

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 BMR-75D. **Regular** maintenance, therefore, is imperative.

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

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

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. Grease all the grease zerks on the bearings Rotate the pinch bar
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.

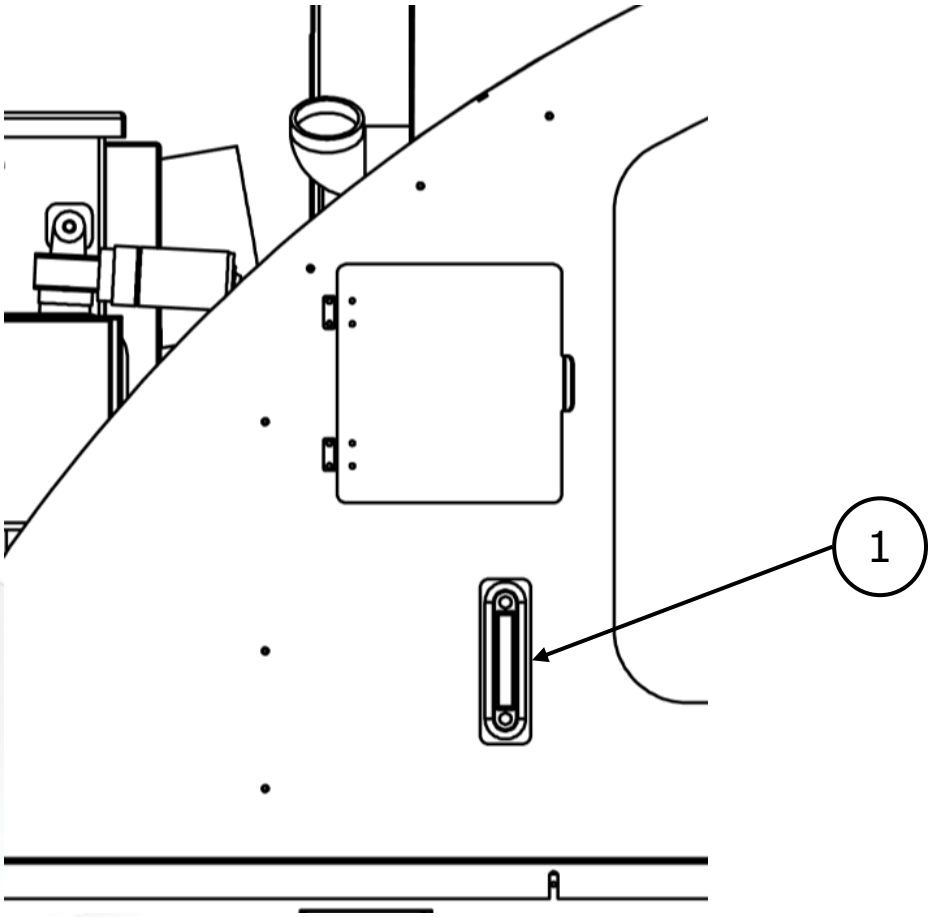
All repair work must to be done by qualified Blastrac personnel, this is to guarantee a safe and reliable machine.

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 there is an indicator (1) installed on the side of the tank. The indicator can be seen from the driver side of the BMR-75D under the diesel tank door. The level shouldn't be lower than half the range of the indicator.



1) Oil Level indicator

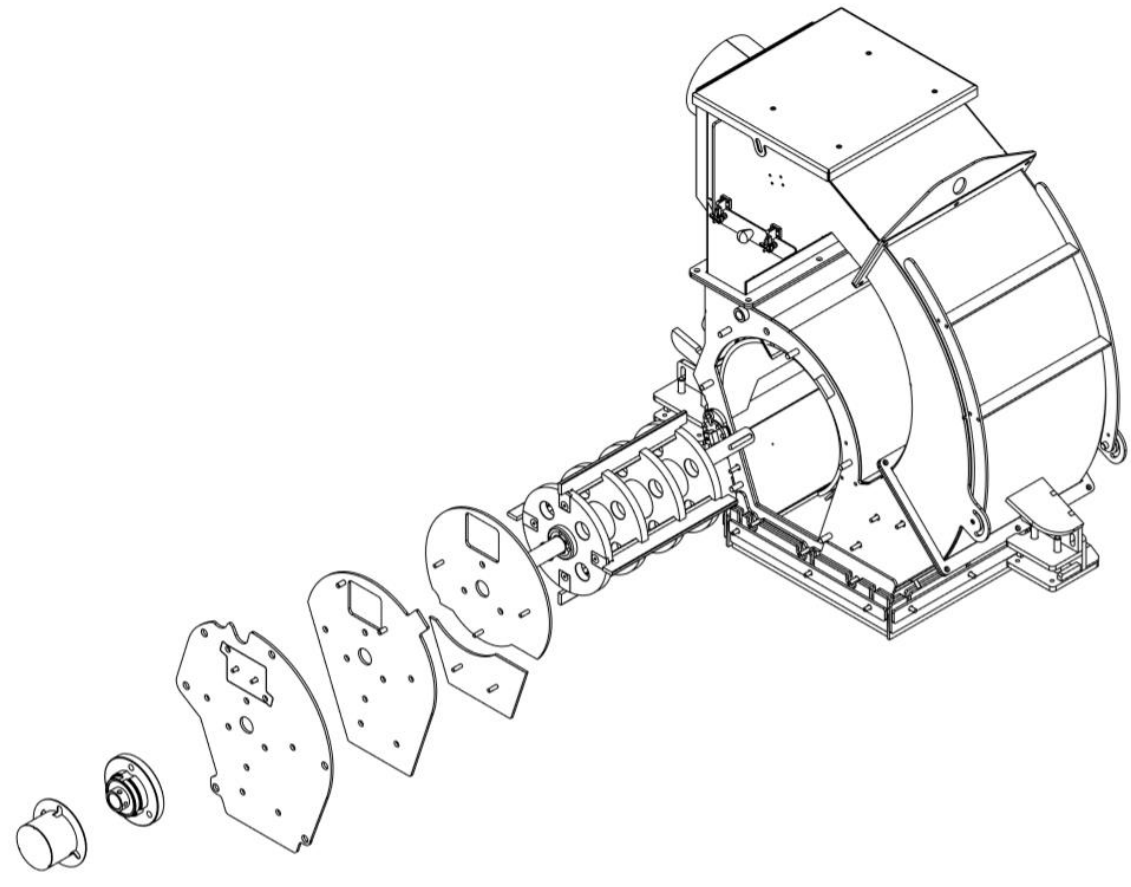
At least one time during the year or every 150 hours the oil from system and filter should be replaced. For this operation disconnect the battery. The oil drain plug is located on the back of the machine near the rear axle. You can refill the hydraulic oil from the diesel tank access door. The oil filter is located on the back side of the hydraulic oil tank. Before doing any maintenance, disconnect the power and block machine in stable position.

7. Blasthead and Scarifier

Blasthead

To take the blast wheel out you will need to do the following steps

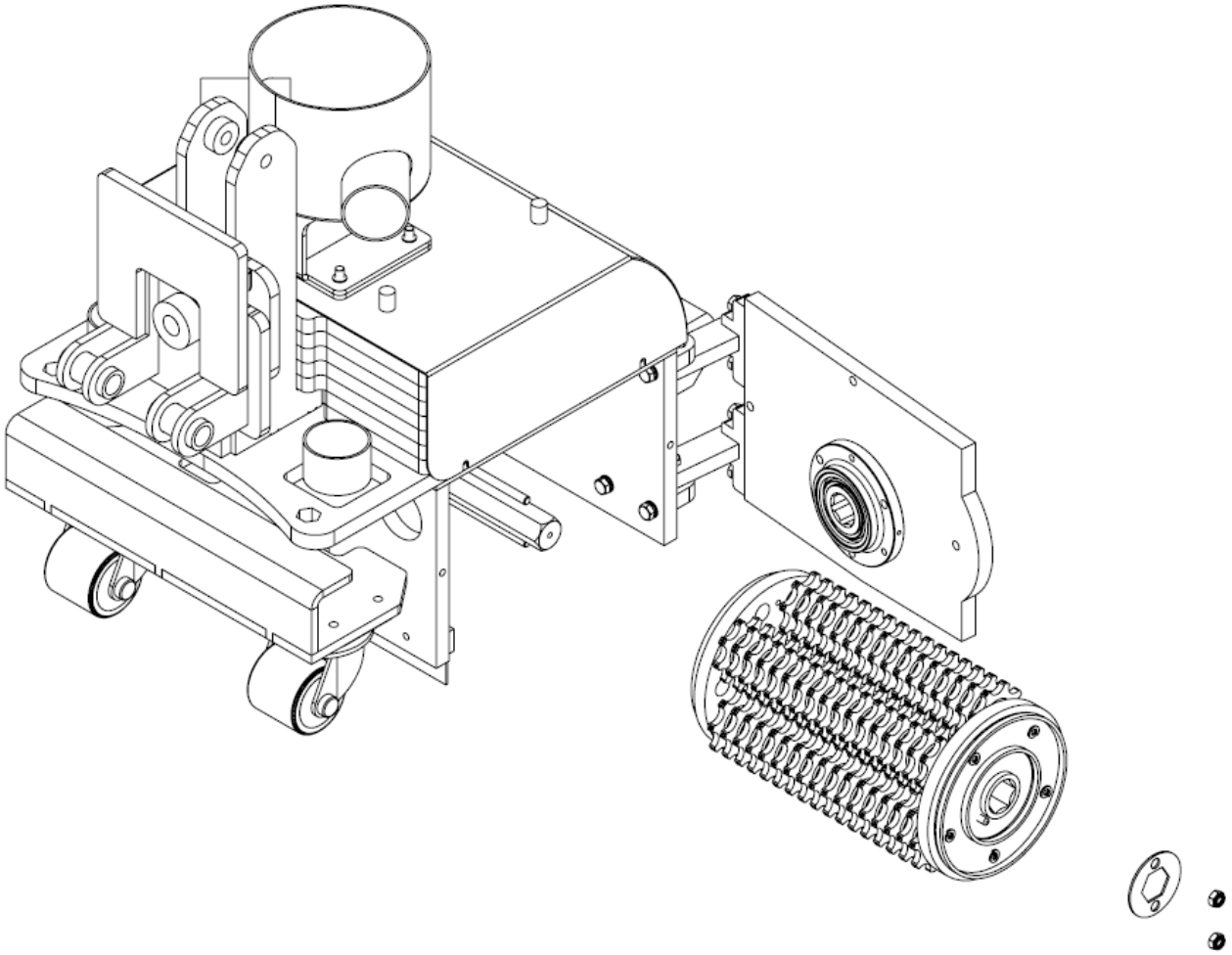
- Remove the bearing cover
- Remove the side cover with the bearing on it
- Remove the outer liner
- Remove the lower and upper inner liners
- Pull the blast wheel out



Scarifier

To take the Scarifier drum out you will need to do the following steps

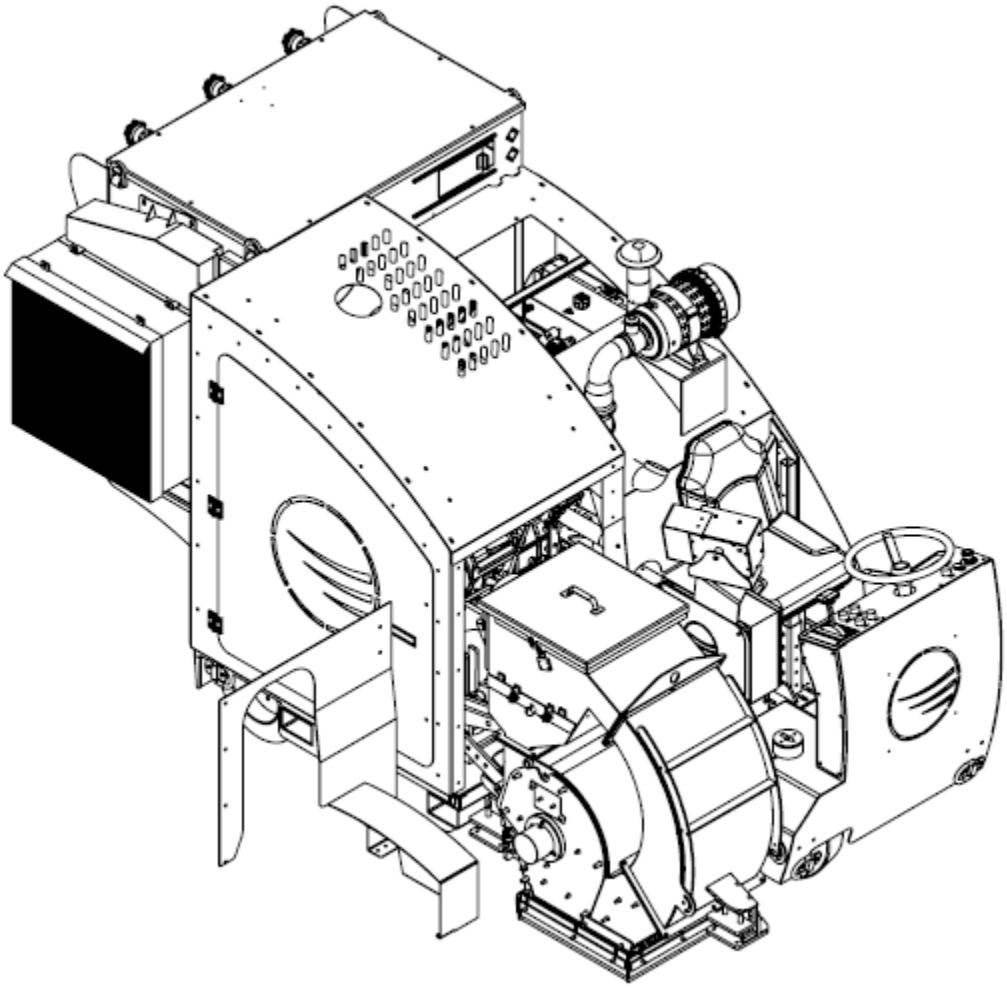
- Unbolt the three bolts holding the door closed
- Pull the door straight out then hinge it to the side
- Take the two nuts and the plate that hold the drum in
- Pull the drum out



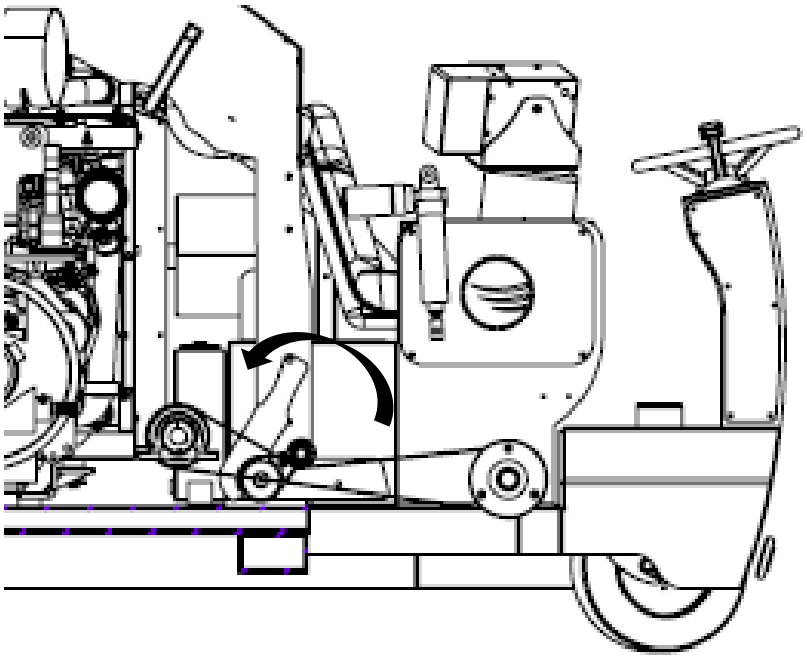
Attachment Swap

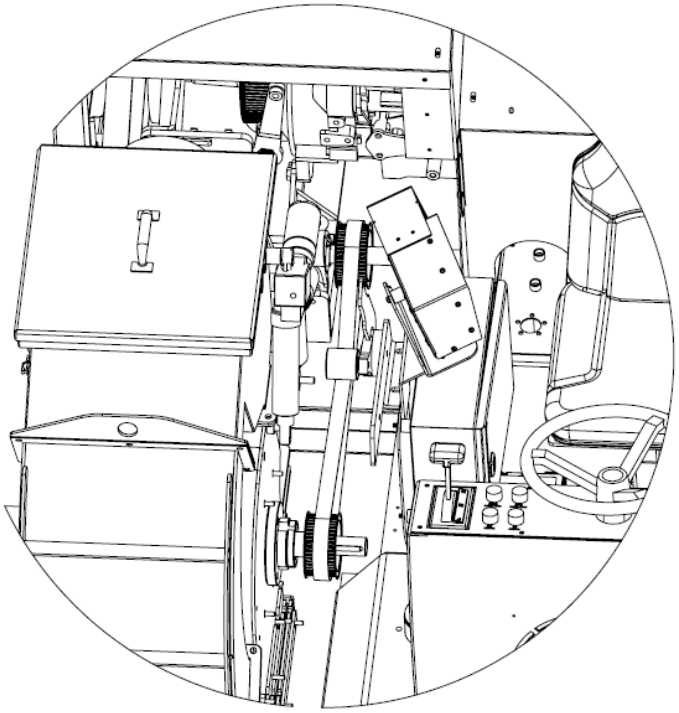
Removing the Blasthead

Disconnect the dust collector hose from the Blasthead by taking off the hose clamp holding it on to the Blasthead. Remove the cover and belt guard from the frame by taking out the twelve M6 hex cap screws.



Use the tensioner wrench to loosen the belt tensioner and take the belt (1800-8M-50) off of the Blasthead pully and the jack shaft. Then unplug the linear actuator from the machine.





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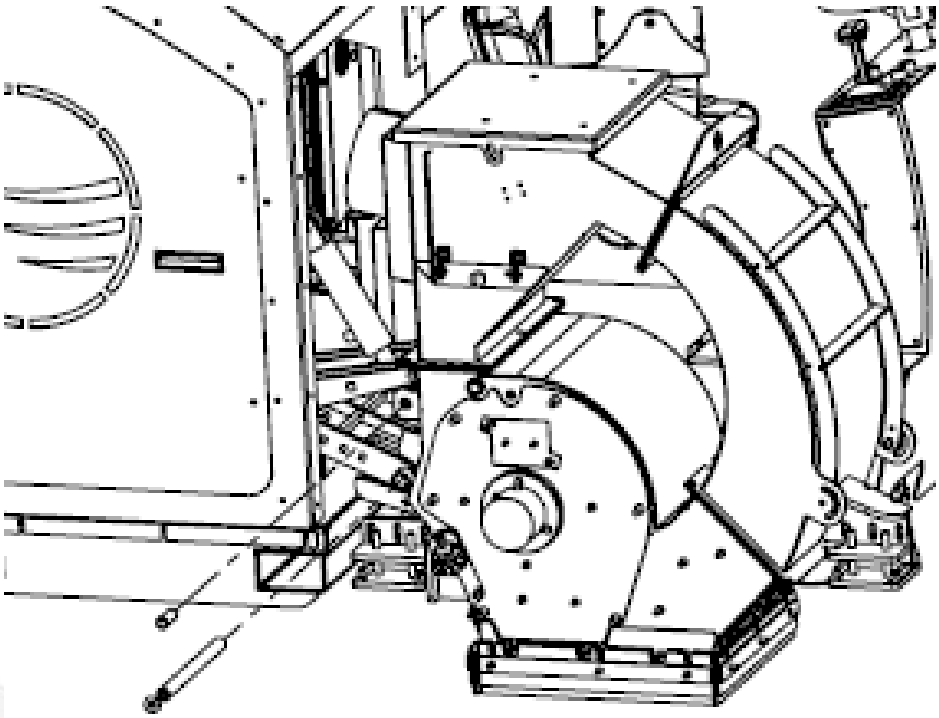
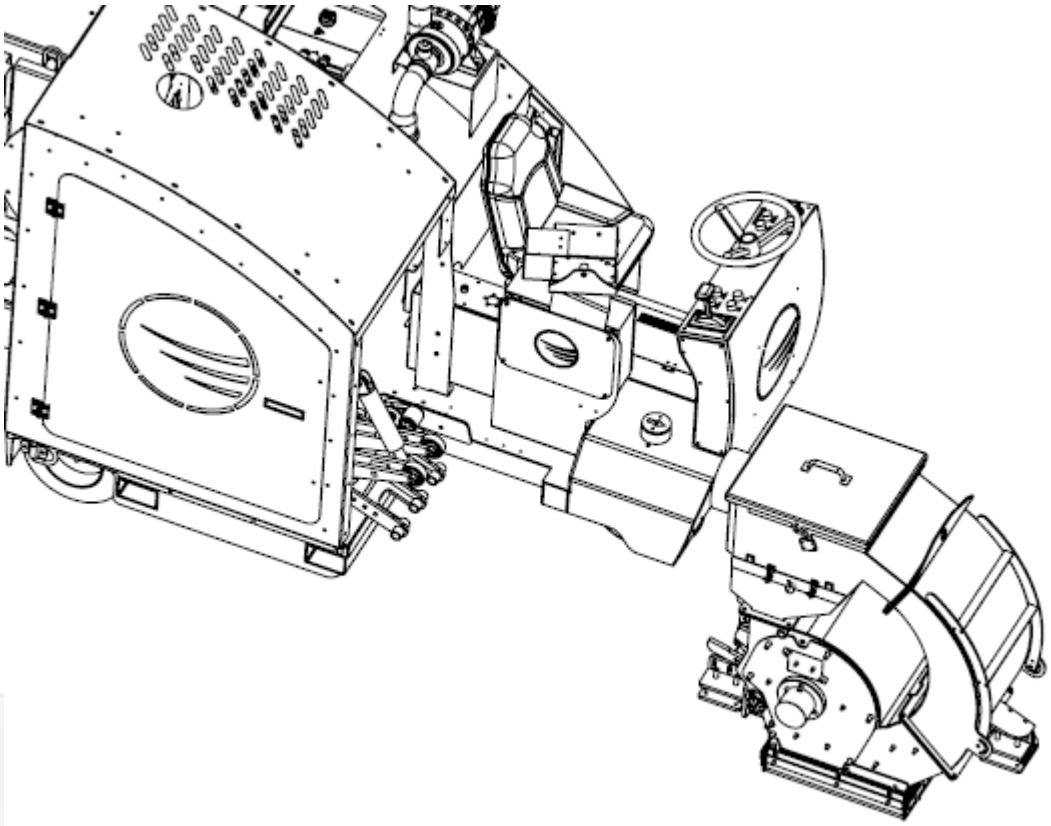
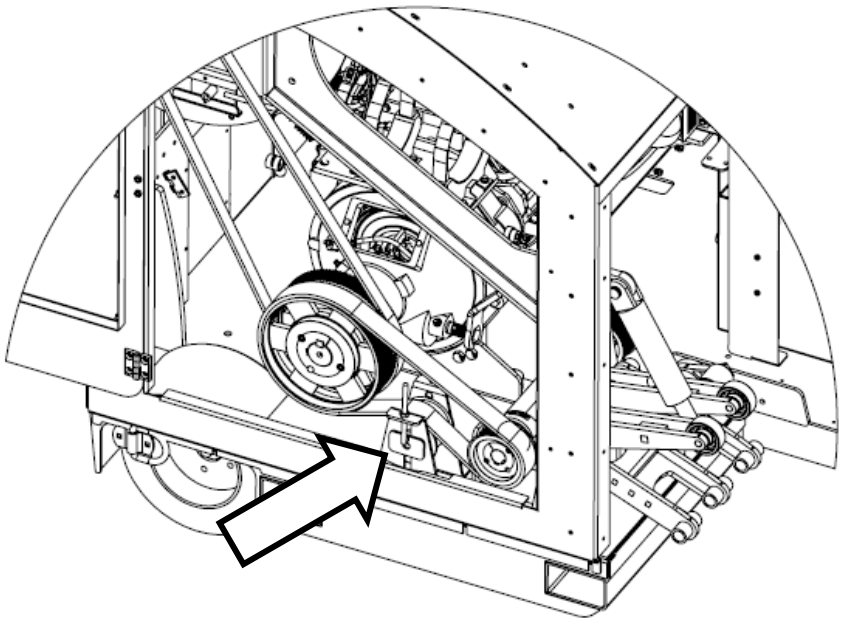
Use the dent puller to remover the shaft out of the Blasthead and the Blasthead mount. Unclip the pin that holds the hydraulic cylinder to the Blasthead and remove the pin.

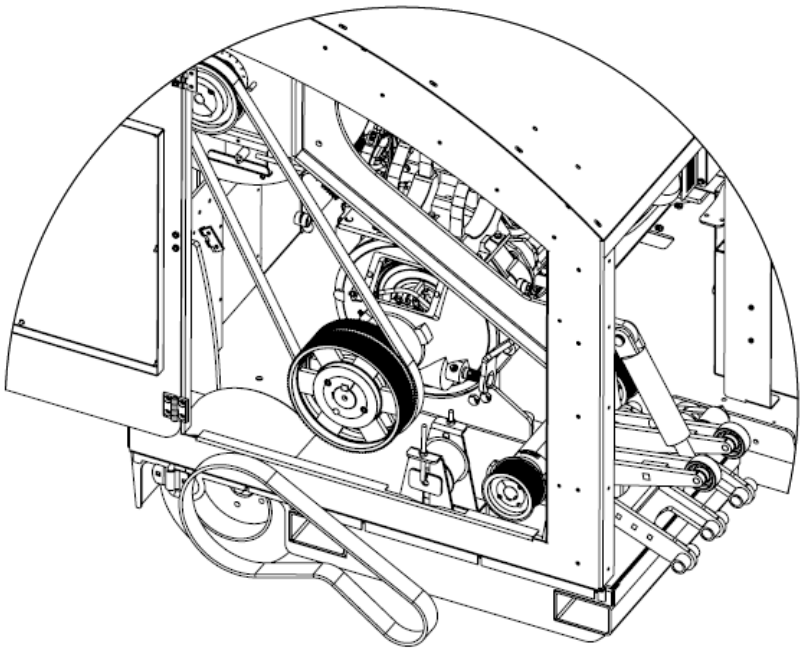


Roll the Blasthead away from the BMR-75.

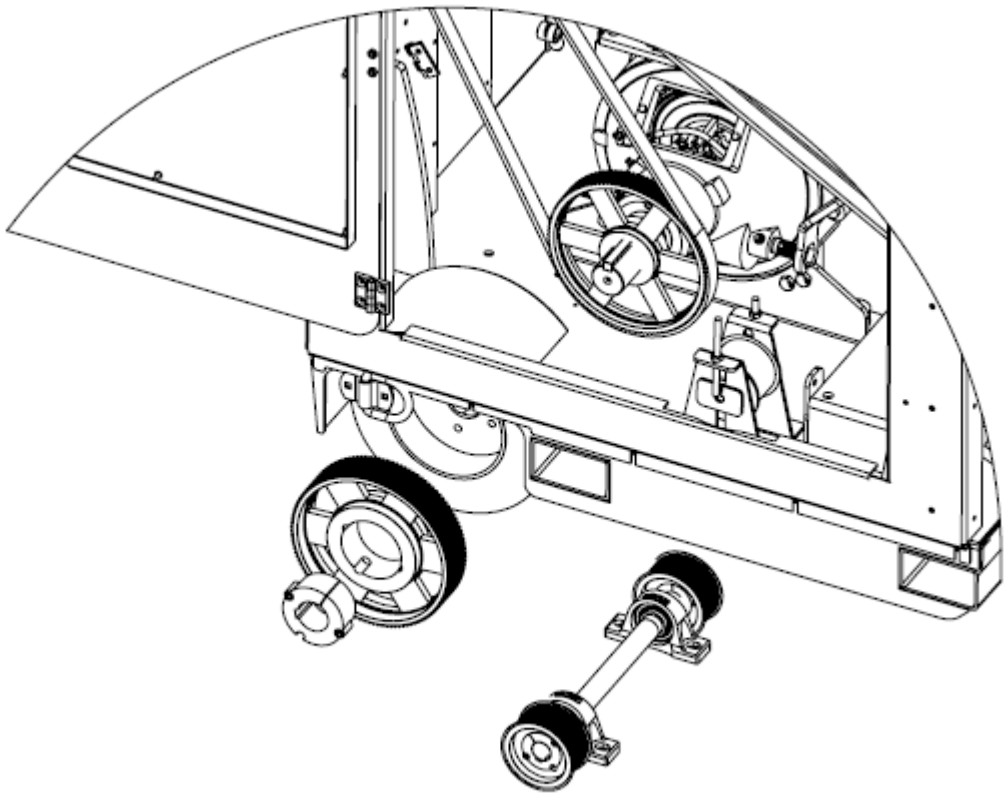


Open the side door and loosen the tensioner between the clutch and the jack shaft with a 17mm wrench and take off the belt (1520-8m-50).



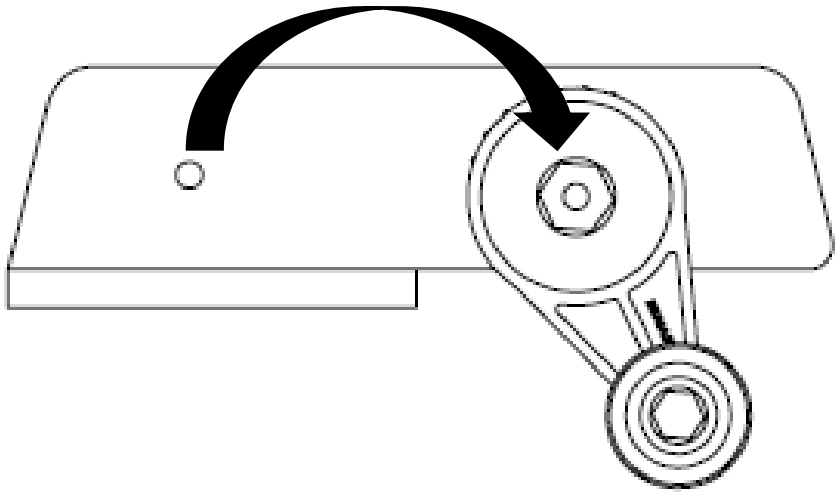


Unbolt the jack shaft with the two 48-8M-50 pulleys using a 22mm ratchet then remove it from the frame. Then take out the two set screws using a 8mm allen wrench and take the taper lock off the clutch pulley (112-8M-50) and then remove the pulley.

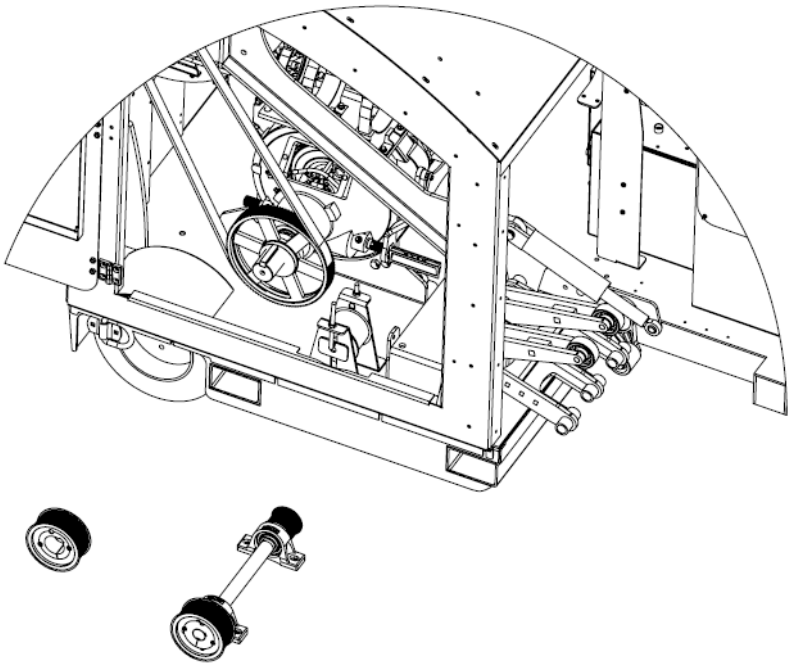


Attaching the Scarifier

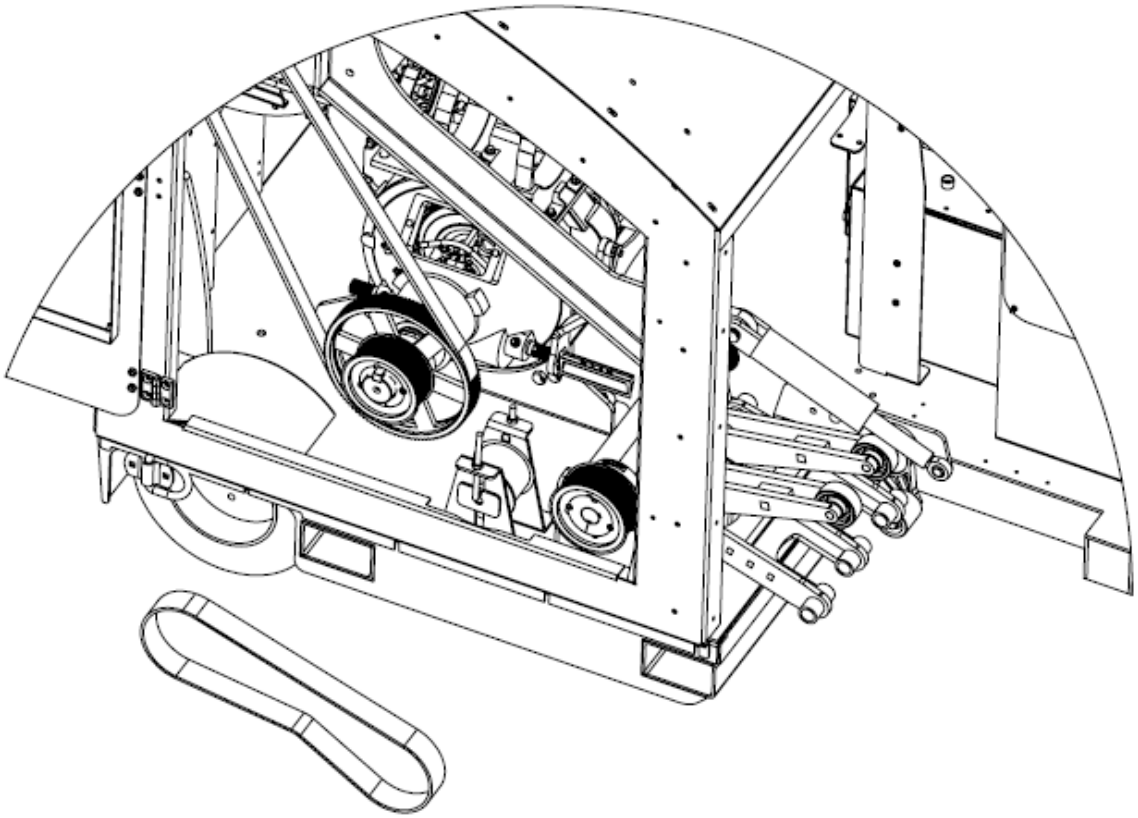
Repostion the tensioner for the blast head to the front hole for the scarifier head.



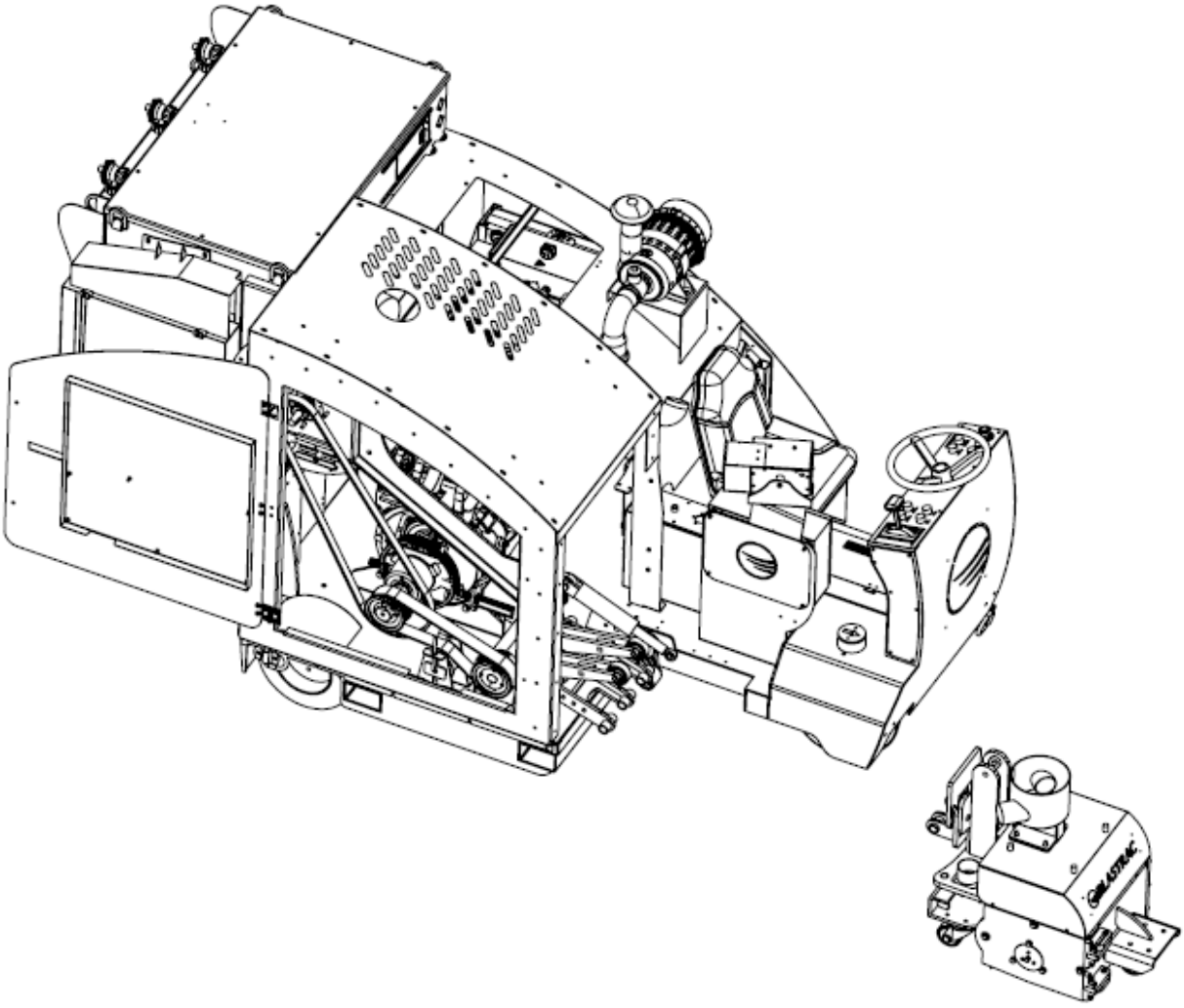
Put the new pulley 56-8M-50 and taperlock on the clutch shaft using a 6mm allen wrench. Bolt the new jack shaft assembly into place with the 56-8M-50 pulley on the outside and the 30-8M-50 pulley on the inside using a 22mm ratchet.



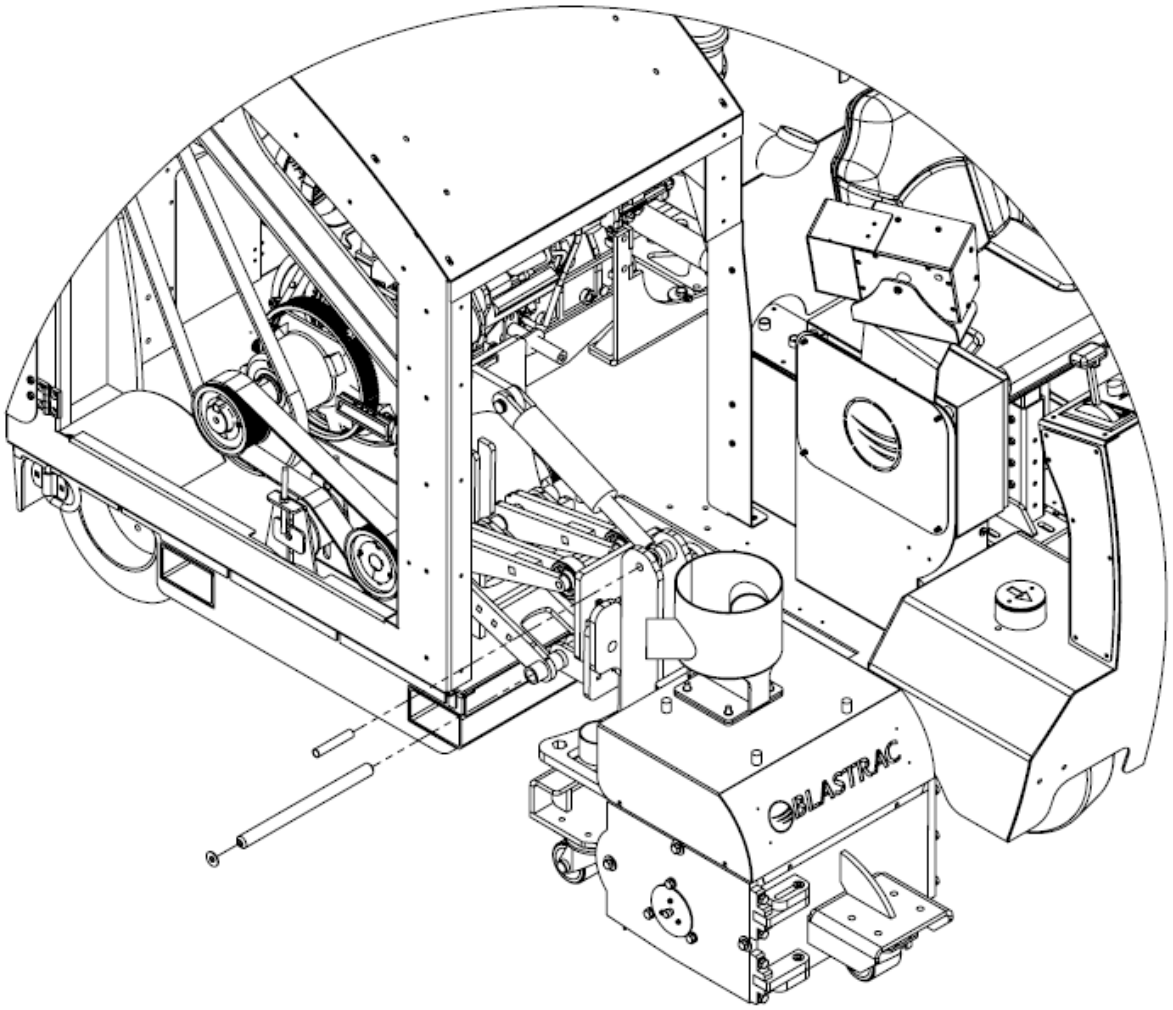
Put the 1304-8M-50 belt on between the clutch and jackshaft, then tighten the tensioner up using a 17mm ratchet.



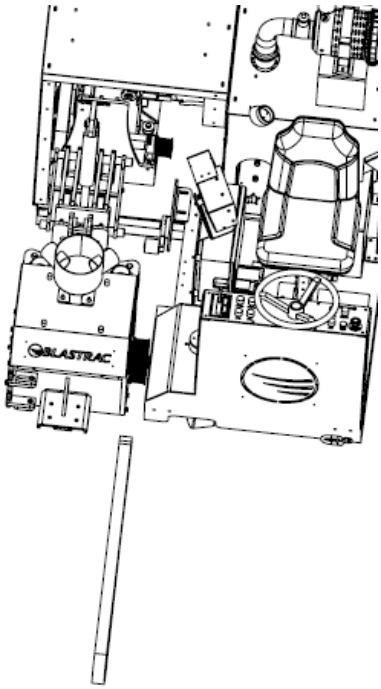
Roll the Scarifier head up to the BMR-75.

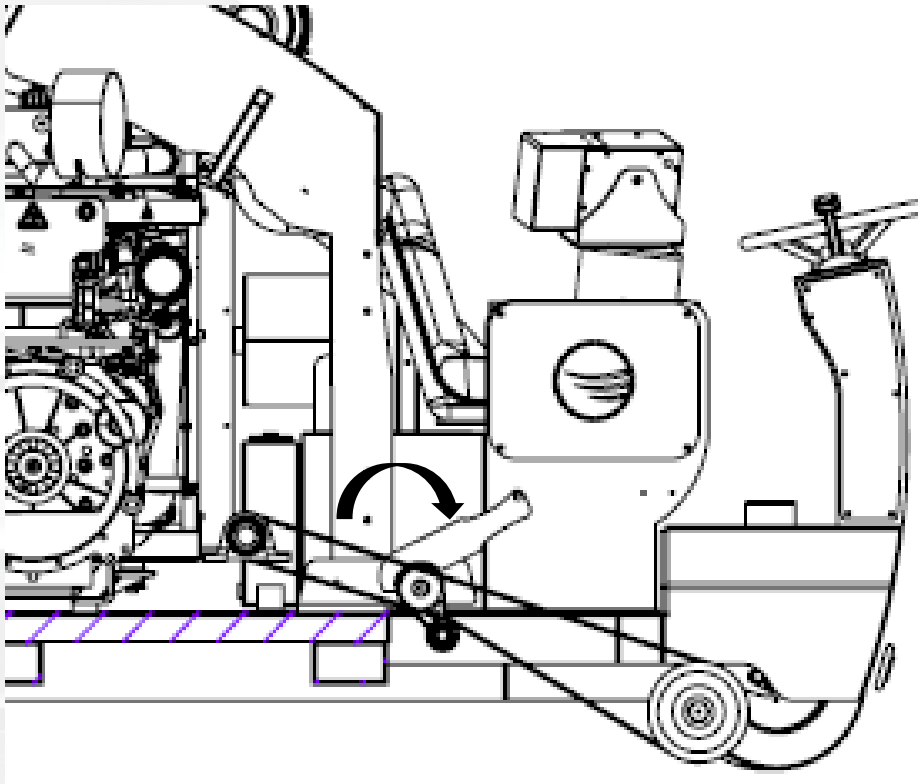


Put the bar in to hold the Scarifier head to the frame and then line up the hydraulic cylinder with the lifting point and put the pin in.



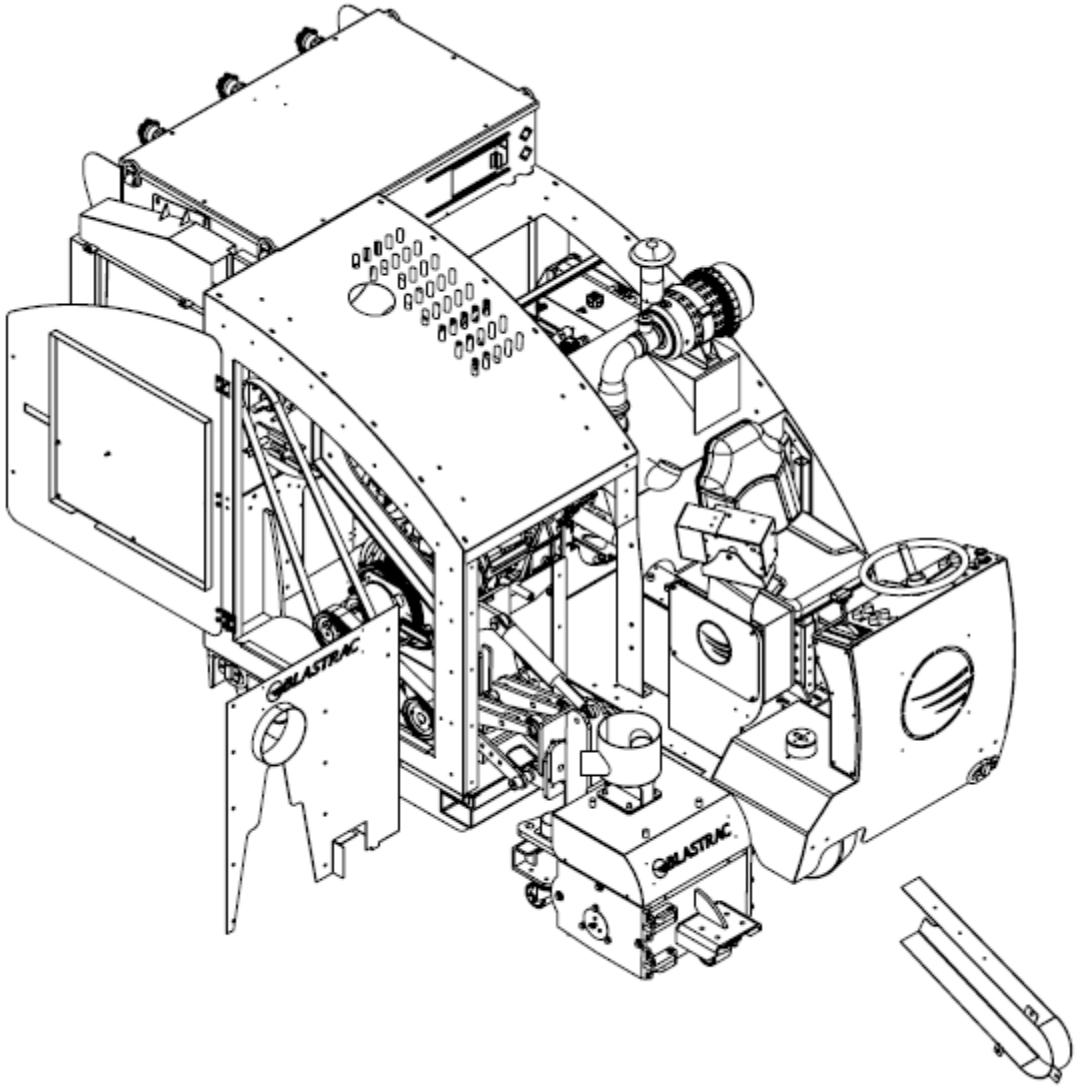
Put belt 2304-8M-50 on the scarifier head and the jack shaft. Then use the tensioner wrench to tension the belt.





Bolt the cover onto to the frame of the BMR-75 using tweleve M6 hex cap screws. Then bolt the belt guard on to the side of the scarifier head with M6 bolts.

10.



Technical Data

BMR-75D	
Working width Shotblasting / Scarifiying	16” / 13.2”
Motor power	75 HP
Drive system/ Speed	Diesel- up to 330ft/min
Machine type	Ride-on
Application	Asphalt / Concrete / Steel
Length	120”
Width	62”
Height	65”
Weight	5200 lbs.

11. Contact

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