Screening Bucket

Operation and Maintenance Manual





145010, 145015, 145110, 145115, 145117, 145120, 145135



888-376-7027 | BlueDiamondAttachments.com

Register your
WARRANTY
within 30 days
of purchase



Introduction: Owner Information

Thank you for your decision to purchase a Blue Diamond® Screening Bucket. To ensure maximum performance of your equipment, it is mandatory that you thoroughly study the Operator's manual and follow the recommendations. Proper operation and maintenance are essential to maximize equipment life and prevent personal injury.

Operate and maintain this equipment in a safe manner and in accordance with all applicable local, state, and federal codes, regulations and /or laws. Follow all onproduct labeling and instructions.

Make sure that all personnel have read this Operator's Manual and thoroughly understand safe and correct operating, installation and maintenance procedures.

Blue Diamond® is continually working to improve its products. Blue Diamond® reserves the right to make any improvements or changes as deemed practical and possible without incurring any responsibility or obligation to make any changes or additions to equipment sold previously.

Although great care has been taken to ensure the accuracy of this publication, Blue Diamond® makes no warranty or guarantee of any kind, written or expressed, implied or otherwise with regard to the information contained within this manual. Blue Diamond® assumes no responsibility for any errors that may appear in this manual and shall not be liable under any circumstances for incidental, consequential or punitive damages in connection with, or arising from the use of this manual.

Keep this manual available for frequent reference. All new operators or owners must review the manual before using the equipment and annually thereafter. Contact your Blue Diamond® Attachments Dealer for assistance, information, or additional copies of the manual. Contact www.bluediamondattachments.com or call 888-376-7027 for a complete list of dealers in your area.

Serial Number Location:

Please record attachment information in the space provided for future reference.



| Model Number: | |
|-------------------|--|
| Serial Number: | |
| Dealer Name: | |
| Dealer Number: | |
| Date of Purchase: | |

The serial number plate is located on the top right hand side of the bucket when looking at the bucket with the stars closest to you.

Always use your serial number when requesting information or when ordering parts.

NOTE: The directions left, right, front and rear, as mentioned throughout this manual, are as viewed from the operator's position.

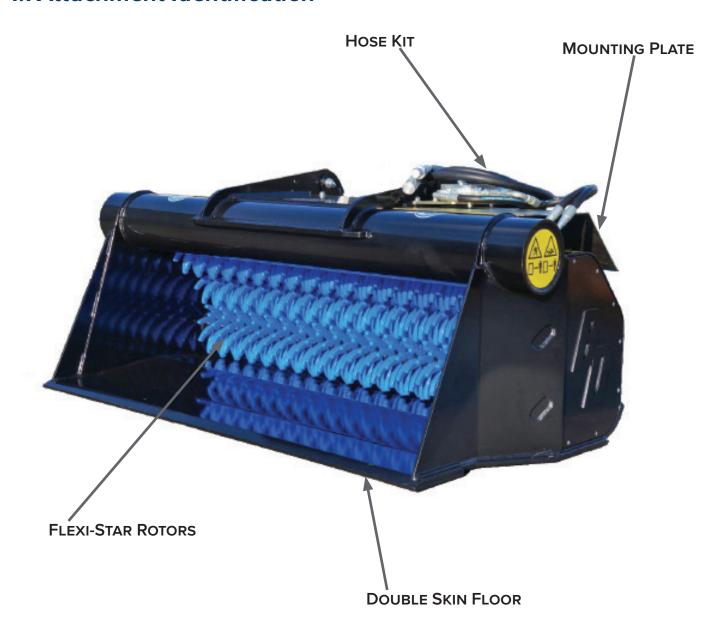
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1. Introduction

1.1 Attachment Identification



2. Safety

1.2 Intended Purpose

The Screening Bucket is to be used for the screening, aerating, separating, and mixing of soils, aggregates, woodchips, and compost.

The screening bucket is to be used exclusively for the purpose intended (e.g. not as a primary digging bucket). The operator of the Screening Bucket is responsible for damage resulting from the Screening Bucket not being used for the purpose intended as well damage from not following the manufacturer's instructions for operation and maintenance.

1.3 Scope of Use

The Screening Bucket is a bucket type attachment fitted either to a hydraulic excavator or a skid steer loader (prime mover) that replaces a standard digging bucket.

The bucket shell is a steel structure with welded joints, integrated driveline cavities, double skin floor, and wear resistant cutting edge.

The horizontal shafts are fitted with Polypropylene flexi-stars that rotate in the same upwards direction. The rotors are supported at each end by a sealed bearing unit and are driven by a hydraulic motor.

The hydraulic motor, driveline, and bearings are all housed within the main structure of the bucket with access via a bolted access panel.

Only screen non-hazardous material. Load the material into the screening bucket in the same manner as loading a standard excavator or wheeled loader bucket. Once the bucket has been loaded and positioned, the prime mover's auxiliary hydraulic circuit is activated causing the star rotors to turn in an upwards direction.

The efficient screening process is created by the star rotors agitating the material. The agitation causes the finer material to flow through the rotating stars leaving the oversized/larger material in the bucket.

The larger material can then be tipped out so the process can be repeated.

2. Safety

2.1 General Safety Information



SAFETY ALERT SYMBOL



This SAFETY ALERT SYMBOL identifies important safety messages on the equipment and in the owner's manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.



IMPORTANT A



The signal word IMPORTANT identifies procedures which must be followed to avoid damage to the machine.



DANGER



The signal word DANGER on the machine and in the manuals indicates a hazardous situation which, if not avoided, will result in death or serious injury.



WARNING



The signal word WARNING on the machine and in the manuals indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION



The signal word CAUTION on the machine and in the manuals indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

- Read and follow instructions in this manual and the machine's Operators Manual before operating.
- The manual must always remain with the machine. In case of loss or damage, request a new copy from your dealer or from Blue Diamond.
- Strictly follow all rules prescribed by the safety pictograms/decals applied to the machine.
 Ensure that all safety pictograms/decals are legible. If pictograms/decals are worn, they must be replaced with new ones obtained from Blue Diamond and placed in the position indicated by this manual.
- Before using the machine, make sure that all safety devices are installed and in good working conditions. In case of damage or shields, replace them immediately.
- It is absolutely forbidden to remove or alter safety devices.
- Before starting, and during operation of the attachment, clear an operation area of 10 meters in all directions. Make sure there are no people or animals in the operation area; the machine can project material from the back with risks of serious injury or death.
- Pay maximum attention to avoid any accidental contact with rotating parts of the machine.
- During operation, adjustment, maintenance, repairing, or transportation of the machine, the operator must always use appropriate Personal Protective Equipment (PPE) including but not limited to safety glasses, gloves, and hearing protection.
- Do not operate the attachment or machine while wearing loose fitting clothing that can be entangled or caught in parts of the machine.
- Do not operate the implement when tired, not in good condition, or under the influence of alcohol or drugs.

2. Safety



Failure to follow all safety instructions may result in serious injury or death.

2.2 Qualified Operators

Safe Operation Needs a Qualified Operator



DANGER



AVOID SERIOUS INJURY OR DEATH
Operators must receive instructions before
operating the machine. Untrained operators can
cause serious injury or death.

For an operator to be qualified, he or she must not use drugs or alcoholic drinks which impair alertness or coordination while working. An operator who is taking prescription drugs must get medical advice to determine if he or she can safely operate a machine and the equipment. For an operator to be qualified, he or she must have read and understood the instructions of this manual, he or she must make adequate preparation for the proper use of the machine, and he or she must hold a driving license. In case of doubt regarding the use of the machine and/or the interpretation of this manual, the operator must contact either their dealer or Blue Diamond.

Operator Training

- Check the rules and regulations at your location. The rules may include an employer's work safety requirements. Regulations may apply to local driving requirements or use of a Slow Moving Vehicle (SMV) emblem.
 Regulations may identify a hazard such as a utility line.
- The new operator must start in an area without bystanders and use all the controls until he or she can operate the machine safely under all conditions of the work area.

2.3 Safety Guidelines

Operating Safety

- Read and follow instructions in this manual and the machine's Operator's Manual before operating.
- Under no circumstances should young children be allowed to work with this equipment.
- This equipment is dangerous to persons unfamiliar with its operation.
- Check for overhead and / or underground lines before operating equipment (if applicable).
- In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.
- Check that the attachment is securely fastened to the machine.
- Make sure all the machine controls are in the NEUTRAL before starting the machine.
- Operate the equipment only from the operator's position.
- When learning to operate the equipment, do it at a slow rate in an area clear of bystanders.

2.3 Safety Guidelines Cont'd

Operating Safety Cont'd

- DO NOT permit personnel to be in the work area when operating the equipment.
- The equipment must be used ONLY on approved machines.
- DO NOT modify the equipment in any way.
 Unauthorized modification may impair the function and / or safety and could affect the life of the equipment.
- DO NOT make any adjustments or repairs on the equipment while the machine is running.
- Keep shields and guards in place. Replace if damaged.
- DO NOT operate equipment in poor visibility conditions such as fog, darkness, or any conditions that limit clear visibility less than 300 feet (100 m) in front of and to the sides of the equipment.
- When conditions make it necessary to slow ground speed, shift to a lower gear rather than reducing engine speed. The engine will maintain rated speed and keep cutter running at optimum cutting speed.
- DO NOT operate in a work area that has not been inspected for foreign debris and obstacles.
- Remove any foreign objects and clearly mark any objects that cannot be removed.
- Wear safety glasses, gloves, hearing protection and other protective clothing when required.

Machine Requirements and Capabilities

- The machine's operator's cab should be equipped with a thermoplastic polycarbonate or similar material front window, and similar protection on the sides of the operator's cab before operating the equipment.
- Keep bystanders clear of moving parts and the work area. Keep children away.
- Do Not exceed 3000 psi (206 bar) operating pressure.

 Use caution on slopes and near banks and ditches to prevent overturn.

Fire Prevention Safety

- Flammable debris (leaves, grass, etc.) must be removed regularly. If flammable debris is allowed to accumulate, it can cause a fire hazard. Clean often to avoid this accumulation.
- The equipment's hydraulic motor compartment must be inspected every day and cleaned if necessary to prevent fire hazards and overheating.
- All fuels, most lubricants, and some coolant mixtures are flammable. Flammable fluids that are leaking or spilled onto hot surfaces or onto electrical components can cause a fire.

Transporting Safety

- Comply with state and local laws governing highway safety and movement of machinery on public roads.
- Check local laws for all highway lighting and marking requirements.
- Always yield to oncoming traffic and move to the side of the road so any following traffic may pass.
- Never allow riders on either machine or equipment.
- If transporting the equipment on a truck or trailer, make sure the equipment is properly secured to the transport vehicle.

Hydraulic System

- Check hydraulic tubes, hoses and fittings for damage and leakage. Never use open flame or bare skin to check for leaks. Hydraulic tubes and hoses must be properly routed and have adequate support and secure clamps. Tighten or replace any parts that show leakage.
- Always clean fluid spills. Do not use gasoline or diesel fuel for cleaning parts. Use commercial nonflammable solvents.

3.1 Entering and Exiting the Prime Mover





See the machine's Operator's Manual for detailed information on operating the loader.

Entering The Operator's Position

Use the attachment safety treads, handles and steps (on the machine) to enter the operator's position.

When in the operator's position, lower safety seat bar, start the engine and release the parking brake.

Leaving The Operator's Position



WARNING



AVOID SERIOUS INJURY OR DEATH

- · Always park on a flat level surface.
- Lower lift arms and place attachment flat on the ground.
- Place all controls in NEUTRAL.
- Engage the park brake.
- Stop the engine and remove the key.
- Wait for all moving parts to stop.

SEE MACHINE'S OPERATOR'S MANUAL FOR ADDITIONAL INFORMATION.

Park the machine/attachment on a flat level surface.

Place all controls in neutral, engage the park brake, stop the engine and wait for all moving parts to stop. Leave the operator's position.

3.2 Attachment Installation with Skid Steer

Connecting Attachment To The Machine



WARNING





CRUSH HAZARD

- Before moving the machine, look in all directions and make sure no bystanders, especially small children are in the work area.
- Do not allow anyone between the machine and attachment when approaching the attachment for connecting.
- Keep fingers and hands out of pinch points when connecting and disconnecting the attachment.

Before connecting to the attachment, inspect the machine's mounting plate. (See the machine's Operator's Manual for inspecting the mounting frame).

Enter the operator's position. See "Entering The Operator's Position" on page 9.

Drive the machine slowly forward, until the top edge of the machine's mounting plate is under the top flange of the attachment mounting frame.

Slowly tilt the machine's mounting plate back until the attachment mounting frame fully contacts the front of the machine's mounting plate.

Leave the operator's position. See "Leaving The Operator's Position" on page 9.

Slowly tilt the machine's mounting plate back until the attachment mounting frame fully contacts the front of the machine's mounting plate.

Leave the Operator's position. See "Leaving the Operator's Position" on page 9.

3.2 Attachment Installation with Skid Steer Cont'd

Connecting Attachment to the Machine Cont'd



WARNING



AVOID SERIOUS INJURY OR DEATH

The locking pins / wedges must extend through the holes in the attachment mounting frame. Failure to secure locking pins / wedges can allow attachment to come off.

SEE MACHINE'S OPERATOR'S MANUAL FOR ADDITIONAL INFORMATION.

Engage attachment locking levers / wedges (See the machine's Operator's Manual for detailed information).

Connecting Hydraulic Hoses



IMPORTANT A



Throughly clean the quick couplers before making connections. Dirt can quickly damage the hydraulic system.

Remove dirt or debris from the male and female couplers. Visually inspect the couplers for corroding, cracking, damage, or excessive wear. Replace as needed.

Connect the attachment hydraulic hoses to the machine. Pull on each hose to verify full connection is made.

Disconnecting Hydraulic Hoses



WARNING



AVOID SERIOUS INJURY OR DEATH

Hydraulic fluid, tubes, fittings, and quick couplers can get hot during operation. Be careful when connecting and disconnecting hydraulic hoses.

WARNING





Leaking fluids under pressure can enter the skin and cause serious injury or death. Immediate medical attention is required. Wear goggles. Use cardboard to check for leaks.

Relieve auxiliary hydraulic pressure. (See the machine's Operator's Manual for correct procedure.)

Disconnect attachment hydraulic hoses from the machine.

Disconnecting Attachment From the Machine

Relieve auxiliary hydraulic pressure. (See the machine's Operator's Manual for correct procedure.)

Park the machine and attachment on a flat level surface. Lower the attachment flat on the ground.

Leave the operator's position. See "Leaving The Operator's Position" on page 9.

Disconnect attachment hydraulic hoses from the machine.

Disengage locking pins / wedges. (See the machine's Operator's Manual for correct procedure.)

Enter the operator's position. See "Entering The Operator's Position" on page 9.

Slowly tilt the machine's mounting plate forward until the attachment mounting frame is free from the machine's mounting plate.

Drive the machine slowly backward, away from the attachment.

10

3.3 Attachment Installation with Excavator

Connecting Attachment to the Machine



WARNING



AVOID SERIOUS INJURY OR DEATH The locking pins must extend through the holes in the attachment mounting frame. Failure to secure locking pins can allow attachment to

SEE MACHINE'S OPERATOR'S MANUAL FOR ADDITIONAL INFORMATION.

Order the appropriate bracket interchange from your local Blue Diamond® Attachments dealer by supplying the brand and model information of your machine.

The bracket interchange is secured to the attachment with bolts.

Use an appropriate lifting device and slings to place the bracket interchange onto the attachment.

Align the holes between the bracket interchange and deck and install the appropriate hardware.

Torque hardware to the specification detailed in the "Specifications" section on page XX.

Position the excavator at the rear of the attachment.

Extend the tool cylinder and paddle until the pin position is aligned.

Leave the operator's position. See "Leaving the Operator's Position" on page 9.

Install the pin through the attachment and paddle and secure with appropriate hardware.

Enter the operator's position. See "Entering the Operator's Position" on page 9.

Adjust the height of the dipperstick to align with the pin position.

Leave the operator's position. See "Leaving the Operator's Position" on page 9.

Install the pin through the attachment and paddle and secure with appropriate hardware.

Connecting Hydraulic Hoses



IMPORTANT A



Throughly clean the quick couplers before making connections. Dirt can quickly damage the hydraulic system.

Remove dirt or debris from the male and female couplers. Visually inspect the couplers for corroding, cracking, damage, or excessive wear. Replace as needed.

Connect the attachment hydraulic hoses to the machine. Pull on each hose to verify full connection is made.

Disconnecting Hydraulic Hoses



WARNING



AVOID SERIOUS INJURY OR DEATH

Hydraulic fluid, tubes, fittings, and quick couplers can get hot during operation. Be careful when connecting and disconnecting hydraulic hoses.



WARNING





Leaking fluids under pressure can enter the skin and cause serious injury or death. Immediate medical attention is required. Wear goggles. Use cardboard to check for leaks.

Relieve auxiliary hydraulic pressure. (See the machine's Operator's Manual for correct procedure).

Disconnect attachment hydraulic hoses from the machine.

3.3 Attachment Installation with Excavator Cont'd

Disconnecting Attachment From the Machine

Relieve auxiliary hydraulic pressure. (See the machine's Operator's Manual for correct procedure.)

Park the machine and attachment on a flat level surface. Lower the attachment flat on the ground.

Leave the operator's position. See "Leaving The Operator's Position" on page 9.

Disconnect attachment hydraulic hoses from the machine.

Remove hardware securing the pins and remove the pins from the paddle and attachment.

Enter the operator's position. See "Entering The Operator's Position" on page 9.

Raise the dipperstick to clear the attachment.

Drive the machine slowly backward, away from the attachment.

3.4 Operating the Attachment

General Operation Guidelines

- The screening bucket should only be lifted or moved by the mounting bracket securely attached to the machine.
- The screening bucket must be placed on firm and level ground when it is detached from the machine.
- Never stand or walk under a suspended load.
- When transporting the screening bucket, adhere to all local and national regulations of the country in which the screening bucket is being transported in.

Operating Instructions

The Screening Bucket is designed as a re-handling bucket only for the screening, aeration, and mixing of non-hazardous, pre-dug material. It is not to be used as a primary digging bucket for use in contaminated areas.

The material to be screened should be loaded into the screening bucket in the same manner as a standard excavator or skid steer bucket. Once the bucket has been loaded with material to be screened and positioned, the prime mover's auxiliary hydraulic circuit is activated causing the star rotors to turn in an upwards direction.

Rotor Direction

Ensure that the rotor direction is correct or serious damage can occur [Figure 1]

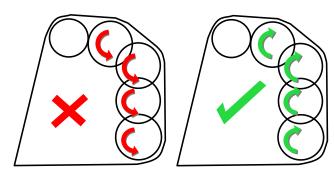


Figure 1

Operation Angle

Keep the screening bucket at the appropriate angle for maximum performance [Figure 2]

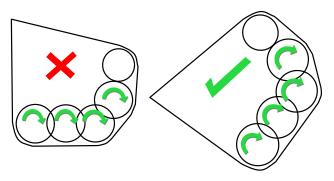


Figure 2

Material Handling

Do not overfill the screening bucket as this will reduce the performance of the screening process and can damage your screening bucket [Figure 3].

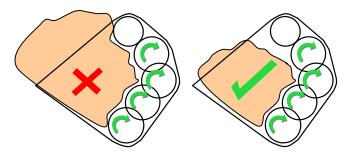


Figure 3

The screening bucket's efficient screening process is created by the star rotors rotating the prescreened material in the bucket, agitating the prescreened material allowing fine material to flow through the rotating stars leaving oversized/larger material in the bucket to be dumped out [Figure 4].

The less material in your screening bucket means more production.

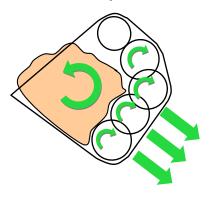


Figure 4

4. Maintenance

4.1 Maintenance Safety



WARNING



AVOID SERIOUS INJURY OR DEATH

Never operate the machine in a closed building. Proper ventilation is required when operating the machine under all circumstances.

- Always keep the work area clean and dry.
- Always use personal protective equipment (PPE) such as eye, hand, and hearing protection when performing any service or maintenance.
- A fire extinguisher and first aid kit should be readily accessible while performing maintenance on this machine.
- Before working or doing maintenance on this machine, shut off the engine and remove the key. Make sure the machine's wheels are blocked.
- Never work under the machine or attachment unless the machine or equipment is blocked or supported securely.
- Disconnect the battery (both terminals) before welding on any part of the machine. Failure to do so may cause damage to electrical components.
- When working around batteries, remember that all of the exposed metal parts are "live".
 Never lay a metal object across the terminals because a spark, short circuit, explosion, or personal injury may result.
- Battery posts, terminals, and related accessories contain lead and lead compounds.
 Wash hands after handling.
- Always relieve hydraulic system pressure before repairing, adjusting, or disconnecting.
 Never search for leaks with your hands. (See "Disconnecting Hydraulic Hoses" on page 10).
- When replacement parts are necessary, genuine factory replacement parts must be used to restore your equipment to original specifications. Blue Diamond® will not be responsible for injuries or damaged caused by use of unapproved parts and/or accessories.

 When completing service or maintenance on this machine, make sure all shields and guards are installed before placing the machine into service.

4.2 General Maintenance



WARNING



AVOID SERIOUS INJURY OR DEATH

Before operating or servicing system: Read and understand the machine's owners manual. Follow the warnings and instructions in the manual when making repairs, adjustments, or servicing. Check for correct function after adjustments, repairs, or service. Untrained operators and failure to follow instructions can cause injury or death.

To ensure efficient operation, you should inspect, lubricate, and make necessary adjustments and repairs at regular intervals. Keep good maintenance records and adequately clean your machine after each use.

4. Maintenance

4.2 General Maintenance Cont'd

Daily Inspection

| | ITEMS |
|----------|---|
| ✓ | All components and hardware to ensure equipment is secure and thoroughly tightened. |
| ✓ | Frame and all welds for cracks or damage. |
| ✓ | Mounting frame for proper operation and signs of damage or unusual wear. |
| ✓ | Remove any material wrapped around the flexi-star rotor shafts. |
| ✓ | Hydraulic hoses and fittings for wear, damage, or leaks. |

NOTE: Repair or replace any damaged parts.

NOTE: After initial use, or repair/replacement of damaged parts, it is important to check the repaired or replaced parts for proper bolt torque and operation.

Monthly Inspection

| | ITEMS |
|----------|--|
| ✓ | Check the flexi-star rotor bearings for wear and replace if necessary. |
| ✓ | Check rotors for damaged flexi-stars and replace if necessary. |

4.3 Flexi-Star Replacement



AVOID SERIOUS INJURY OR DEATH

Before servicing the attachment:

- · Always park on a flat level surface.
- Lower lift arms and place attachment flat on the ground.
- Place all controls in NEUTRAL.
- Engage the park brake.
- · Wait for all moving parts to stop.
- Stop the engine and remove the key.

SEE MACHINE OPERATOR'S MANUAL FOR ADDITIONAL INFORMATION.

Before commencing flexi-star replacement, ensure the Screening Bucket is on a flat level surface.

Remove both driveline covers. Remove the carbon chain belt and drive wheel by releasing the carbon chain belt adjuster of the intended rotor.

Support the flexi-star rotor and remove both rotor support bearing fixings. With the rotor supported, pull both stub shaft assemblies complete with bearings out from the rotor shaft.

Slide the flexi-star discs from square section shaft observing the stagger pattern.

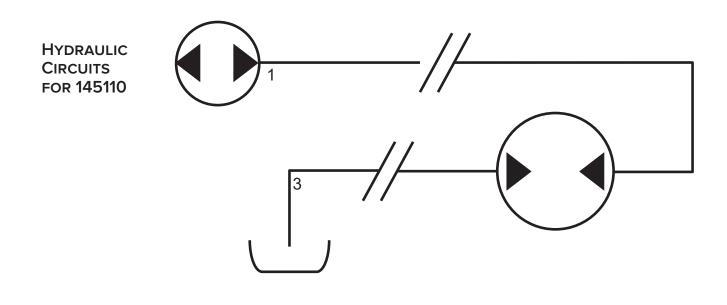
To re-assemble, repeat the above instructions in reverse.

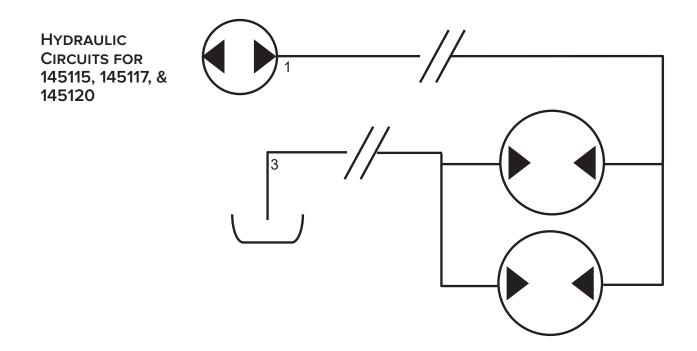
4. Maintenance

4.4 *Troubleshooting*

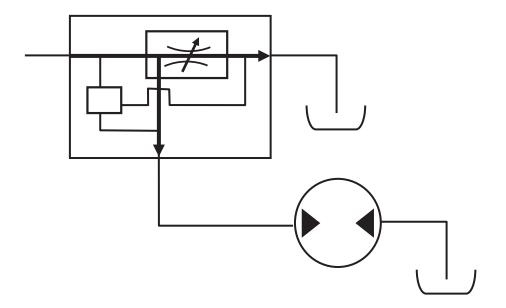
| PROBLEM | CAUSE | SOLUTION |
|------------------------|---|--|
| | Prime mover's hydraulic circuit loaded incorrectly. | Follow the appropriate diagram in section 5.1 Hydraulic Circuits beginning on page 15. |
| | QRC couplers are fitted incorrectly. | Connect, repair, or replace the QRC couplings correctly. |
| | Screening bucket is overloaded. | Dump out some material or contact your Blue Diamond® dealer for more assistance. |
| Rotors do not rotate | If only the top rotor rotates, the prime mover's hydraulic circuit may be loaded incorrectly. | Follow the appropriate diagram in section 5.1 Hydraulic Circuits beginning on page 15. |
| when carrier hydraulic | Motor shaft couplings are defective. | Replace couplings. Contact your Blue Diamond® dealer for more assistance. |
| circuit is activated. | Hydraulic motor is defective. | Replace the hydraulic motor. Contact your Blue Diamond® dealer for more assistance. |
| | Carbon belt may be broken. | Replace broken or damaged carbon belt. Contact your Blue Diamond® dealer for more assistance. |
| | Carbon belt slipping. | Check the Rosta Belt Adjuster Unit. Contact your Blue Diamond® dealer for more assistance. |
| | Rotor stub shaft failed. | Replace the broken or damaged stub shaft. Contact your Blue Diamond® dealer for more assistance. |

5.1 Hydraulic Circuits

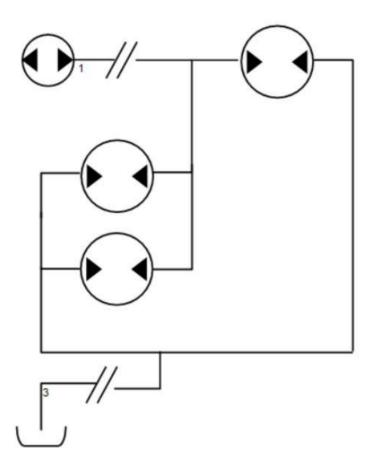




5.1 Hydraulic Circuits

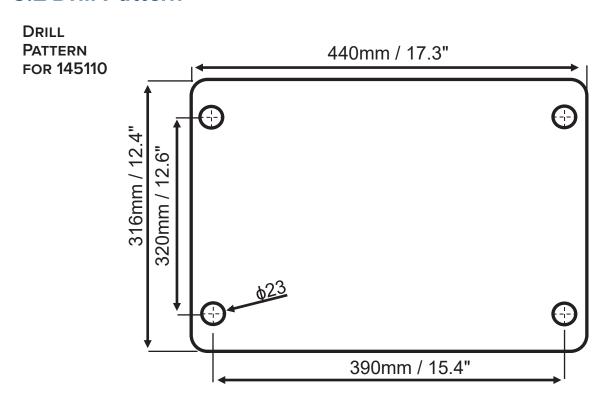


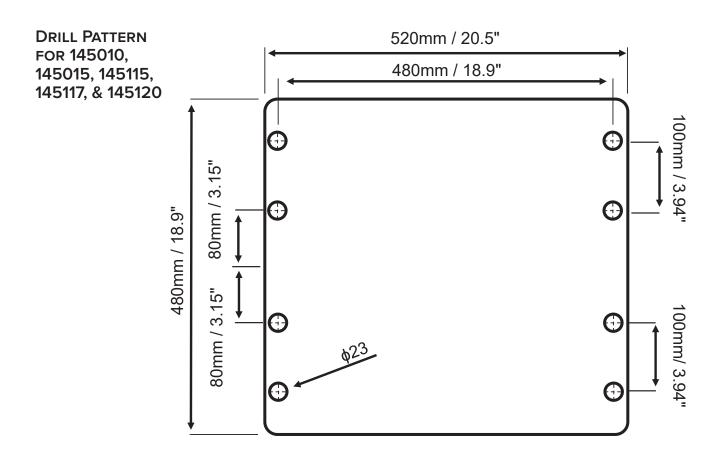
HYDRAULIC CIRCUITS FOR 145010 & 145015



HYDRAULIC CIRCUITS FOR 145135

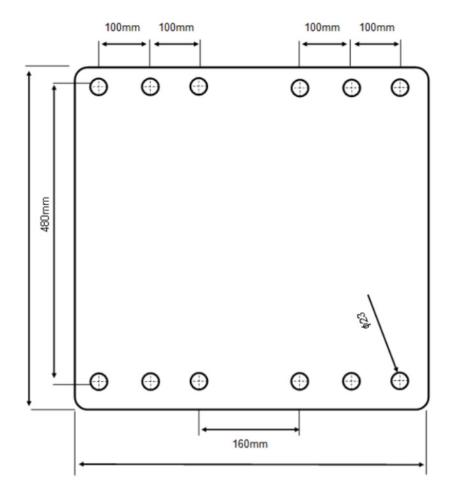
5.2 Drill Pattern





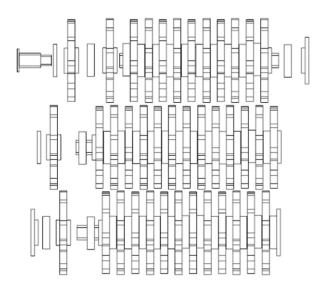
5.2 Drill Pattern

DRILL PATTERN FOR 145135

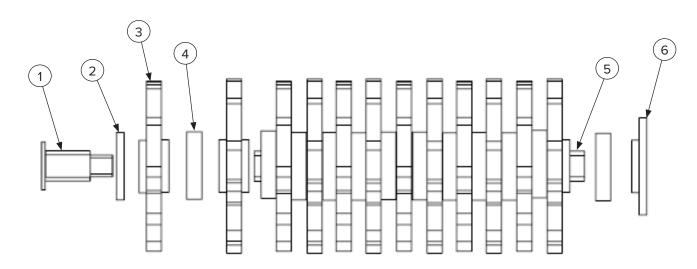


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6.1 Rotor Group & Assembly Rotor Group Overview



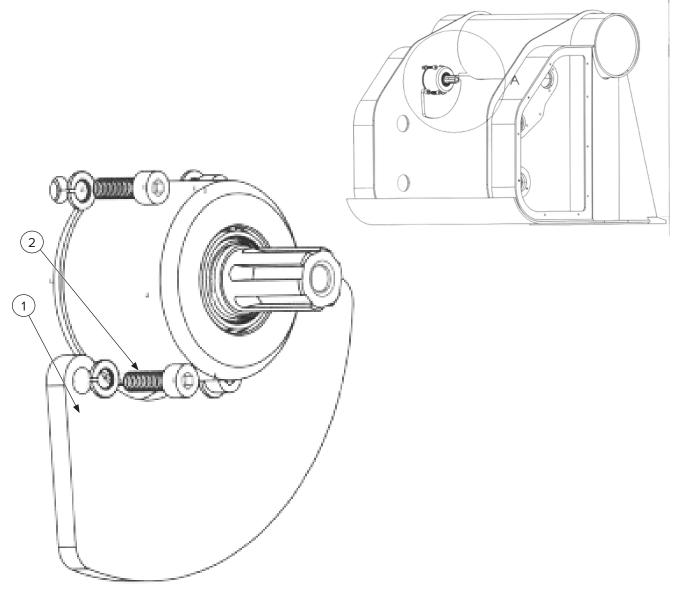
Rotor Group Top Shaft



| ITEM | PART NUMBER | DESCRIPTION | 145110 | 145010 | 145015 |
|------|-------------|------------------------------------|--------|--------|--------|
| 4 | 02-50262 | SAE Splined Drive Coupling (STD) | 1 | _ | _ |
| | 02-33888 | SAE Splined Drive Coupling (HD) | _ | 1 | 1 |
| 2 | 03-99135 | Nylon Locking Ring 90mm OD | 1 | 1 | 1 |
| 3 | 03-80833 | Poly-Star (230mm Ten Finger) Blue | 18 | 28 | 36 |
| 4 | 03-86116 | 20mm Locking Ring | 18 | 28 | 36 |
| | 03-6789 | Rotor Shaft 145110 (Motor Pick-up) | 1 | _ | _ |
| 5 | 03-30563 | Rotor Shaft 145010 (Motor Pick-up) | ı | 1 | _ |
| | 03-53331 | Rotor Shaft 145015 (Motor Pick-up) | _ | _ | 1 |
| 6 | 03-92358 | 20mm End Cap | 1 | 1 | 1 |

6.1 Rotor Group & Assembly Cont'd

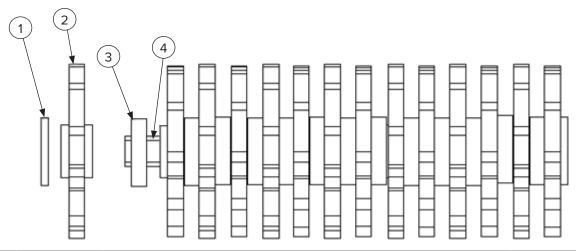
For 2024 Models



| ITEM | PART NUMBER | DESCRIPTION | 145110 | 145010 | 145015 |
|------|-------------|-----------------------------|--------|--------|--------|
| 1 | 05-94470 | End Spacer 3 Rotor | 1 | 1 | 1 |
| 2 | 06-38462 | M10 x 35mm Socket Cap Screw | 2 | 2 | 2 |

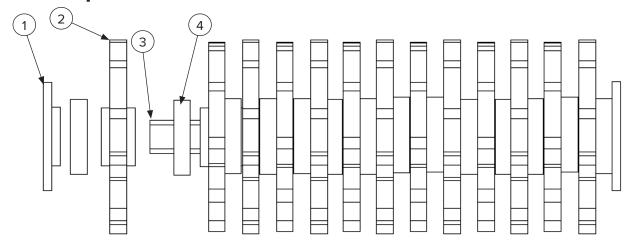
 $\textbf{Note:} \ \text{M10} \ \text{x 35mm Socket Cap Screws replace two (2) of the M10} \ \text{x 30mm Socket Cap Screws used previously}.$

6.1 Rotor Group and Assembly Cont'd



| ITEM | PART NUMBER | DESCRIPTION | 145110 | 145010 | 145015 |
|------|-------------|-----------------------------------|--------|--------|--------|
| 1 | 03-99135 | Nylon Locking Ring 90mm OD | 2 | 2 | 2 |
| 2 | 03-80833 | Poly-Star (230mm Ten Finger) Blue | 20 | 30 | 38 |
| 3 | 03-86116 | 20mm Locking Ring | 19 | 29 | 37 |
| | 03-10974 | Rotor Shaft 145110 | 1 | _ | _ |
| 4 | 03-97866 | Rotor Shaft 145010 | _ | 1 | _ |
| | 03-66775 | Rotor Shaft 145015 | _ | _ | 1 |

Rotor Group Middle Shaft



| ITEM | PART NUMBER | DESCRIPTION | 145110 | 145010 | 145015 |
|------|-------------|-----------------------------------|--------|--------|--------|
| 1 | 03-92358 | 20mm End Cap | 2 | 2 | 2 |
| 2 | 03-80833 | Poly-Star (230mm Ten Finger) Blue | 19 | 29 | 37 |
| | 03-10974 | Rotor Shaft 145110 | 1 | _ | _ |
| 3 | 03-97866 | Rotor Shaft 145010 | ı | 1 | _ |
| | 03-66775 | Rotor Shaft 145015 | _ | | 1 |
| 4 | 03-86116 | 20mm Locking Ring | 20 | 30 | 38 |

6.1 Rotor Group and Assembly Cont'd Rotor Assembly — 145110

| PART NUMBER | DESCRIPTION | QTY | NOTES |
|-------------|------------------------------------|-----|--|
| 03-32163 | Complete Rotor Assembly for 145110 | 1 | Consists of: 03-44726 QTY 1 03-44276 QTY 1 03-44267 QTY 1 |
| 03-44726 | 145110 Driven Top Shaft | 1 | _ |
| 03-44276 | 145110 Non-Driven Middle Shaft | 1 | _ |
| 03-44267 | 145110 Non-Driven Lower Shaft | 1 | _ |

Rotor Assembly — 145010

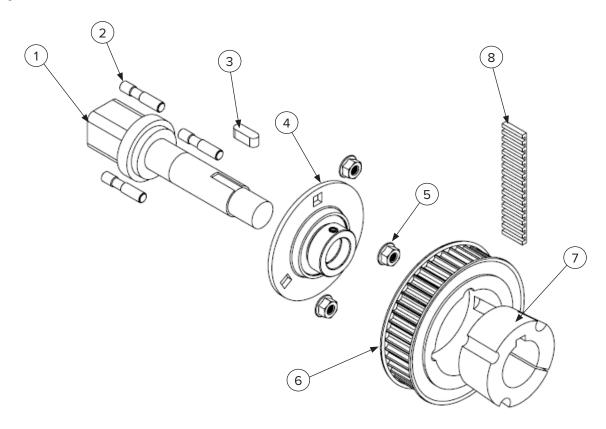
| PART NUMBER | DESCRIPTION | QTY | NOTES |
|-------------|--------------------------------|-----|--|
| 03-40905 | Complete Rotor Assembly 145010 | 1 | Consists of: 03-47642 QTY 1 03-47462 QTY 1 03-47246 QTY 1 |
| 03-47642 | 145010 Driven Top Shaft | 1 | _ |
| 03-47462 | 145010 Non-Driven Middle Shaft | 1 | _ |
| 0347246 | 145010 Non-Driven Lower Shaft | 1 | _ |

Rotor Assembly — 145015

| PART NUMBER | DESCRIPTION | QTY | NOTES |
|-------------|--------------------------------|-----|--|
| 03-48219 | Complete Rotor Assembly 145015 | 1 | Consists of: 03-16104 QTY 1 03-16041 QTY 1 03-16403 QTY 1 |
| 03-16104 | 145015 Driven Top Shaft | 1 | _ |
| 03-16041 | 145015 Non-Driven Middle Shaft | 1 | _ |
| 03-16403 | 145015 Non-Driven Lower Shaft | 1 | - |

6.2 Shaft Assemblies

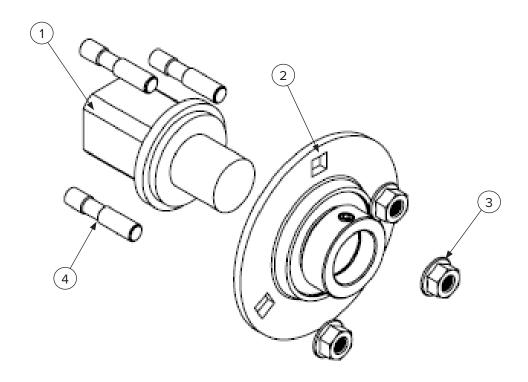
Keyed Shaft



| ITEM | PART NUMBER | DESCRIPTION | 145110 | 145010 | 145015 |
|------|-------------|---------------------------------|--------|--------|--------|
| 4 | 02-77581 | Variat Chaft | 4 | _ | _ |
| | 02-71524 | Keyed Shaft | _ | 4 | 4 |
| 2 | 06-44972 | M8 X 25mm Stud | 12 | 12 | 12 |
| 3 | 02-62292 | Key | 4 | 4 | 4 |
| 4 | 02-26057 | Bearing SLFE25C99 | 4 | 4 | 4 |
| 5 | 06-95773 | M8 Flange Nut | 12 | 12 | 12 |
| | 02-91304 | Carbon Belt Pulley (8MDC21TB45) | 4 | _ | _ |
| 6 | 02-45078 | Carbon Belt Pulley (8MDC3645) | _ | 4 | 4 |
| 7 | 02-14066 | Taper Bush | 4 | 4 | 4 |
| 8 | 02-63027 | Carbon Belt (8MDC-21) | 2 | _ | _ |
| 8 | 02-28566 | Carbon Belt (8MDC-37) | _ | 2 | 2 |

6.2 Shaft Assemblies Cont'd

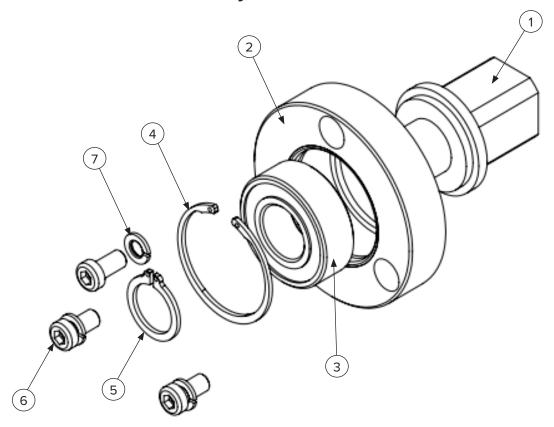
Stub Shaft



| ITEM | PART NUMBER | DESCRIPTION | 145110 | 145010 | 145015 |
|------|-------------|--------------------------------|--------|--------|--------|
| 4 | 02-96405 | Charle Chirle Charle | 1 | _ | _ |
| | 02-77903 | Short Stub Shaft | _ | 1 | 1 |
| 2 | 02-26057 | Bearing SFLE25C99 with Housing | 1 | 1 | 1 |
| 3 | 06-95773 | M8 Flange Nut | 3 | 3 | 3 |
| 4 | 06-44972 | M8 X 25mm Stud | 3 | 3 | 3 |

6.2 Shaft Assemblies Cont'd

Stub Shaft - 2024 145015 Models Only



| ITEM | PART NUMBER | DESCRIPTION | 145015 |
|------|-------------|------------------------------|--------|
| 1 | 02-59183 | Short Stub Shaft 3 & 4 Rotor | 1 |
| 2 | 02-40685 | Bearing Housing | 1 |
| 3 | 02-56867 | 32052RS Bearing | 1 |
| 4 | 02-66289 | Circlip D1360 – 52mm | 1 |
| 5 | 06-66588 | M8 Spring Washer | 3 |
| 6 | 06-20616 | M8 x 16 Socket Cap Screw | 3 |
| 7 | 02-61562 | Circlip D1460 – 25mm | 1 |

Note: The new stub shaft assembly can be fitting into all pre–2024 models with no other modifications required.

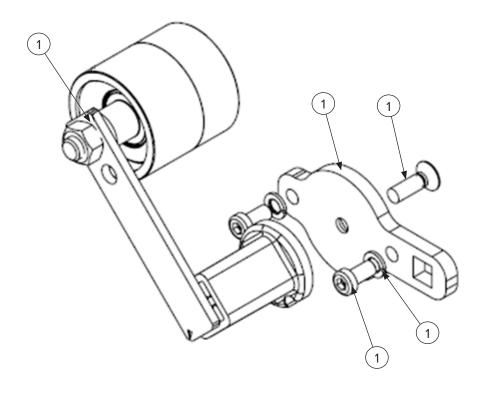
6.2 Shaft Assemblies Cont'd

Shaft Assembly

| PART NUMBER | DESCRIPTION | QTY | NOTES |
|-------------|--|-----|--|
| 02-27799 | Keyed Shaft Assembly 145110 | 1 | Consists of: 02-77581 QTY 1 02-26057 QTY 1 |
| 02-77581 | Keyed Shaft | 1 | _ |
| 02-26057 | Bearing SLFE25C99 with Housing | 1 | _ |
| 02-29021 | Keyed Shaft Assembly 145010 & 145015 | 1 | Consists of: 02-71524 QTY 1 02-26057 QTY 1 |
| 02-71524 | Keyed Shaft | 1 | _ |
| 02-26057 | Bearing SLFE25C99 with Housing | 1 | _ |
| 02-96187 | Short Stub Shaft Assembly 145110 | 1 | Consists of: 02-96405 QTY 1 02-26057 QTY 1 |
| 02-96405 | Short Stub Shaft | 1 | _ |
| 02-26057 | Bearing SLFE25C99 with Housing | 1 | _ |
| 02-97603 | Short Stub Shaft Assembly 145010 | 1 | Consists of: 02-77903 QTY 1 02-26057 QTY 1 |
| 02-77903 | Short Stub Shaft | 1 | |
| 02-26057 | Bearing SLFE25C99 | 1 | |
| 02-48267 | Bearing Unit 3 & 4 Rotor Models 145015 | 1 | _ |

6.3 Subassemblies

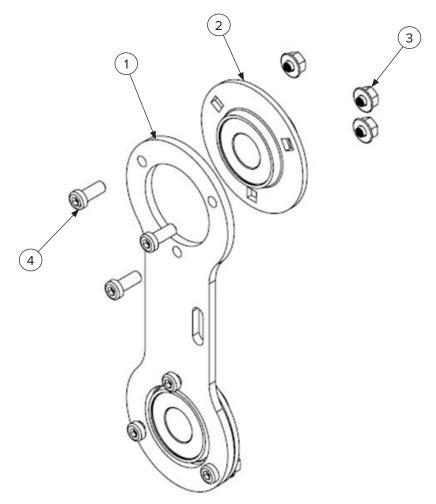
Belt Adjuster



| ITEM | PART NUMBER | DESCRIPTION | 145110 | 145010 | 145015 |
|------|-------------|---------------------------------------|--------|--------|--------|
| 1 | 02-79369 | Rosta Belt Adjuster | 2 | 2 | 2 |
| 2 | 02-72480 | Belt Adjuster Plate | 2 | 2 | 2 |
| 3 | 06-45595 | M8 X 25mm SS Socket Countersunk Screw | 2 | 2 | 2 |
| 4 | 06-66588 | M8 Spring Washer | 4 | 4 | 4 |
| 5 | 06-20616 | M8 X 16mm Socket Cap Screw | 4 | 4 | 4 |

6.3 Subassemblies Cont'd

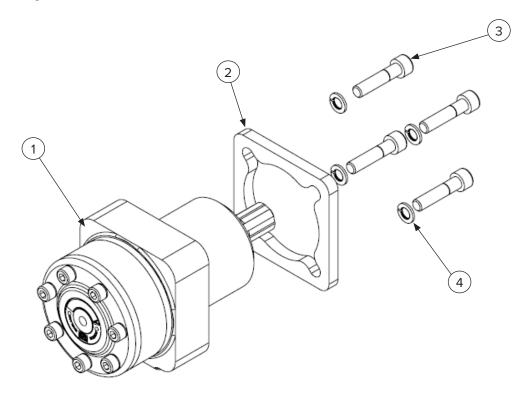
Bearing Support Plate



| ITEM | PART NUMBER | DESCRIPTION | 145110 | 145010 | 145015 |
|------|-------------|-------------------------------|--------|--------|--------|
| 1 | 02-55196 | Bearing Support Plate 3 Rotor | 2 | 2 | 2 |
| 2 | 02-45008 | Bearing SLFE7/8C99 | 4 | 4 | 4 |
| 3 | 06-95773 | M8 Flange Nut | 12 | 12 | 12 |
| 4 | 06-24550 | M8 X 20mm Socket Cap Screw | 12 | 12 | 12 |

6.3 Subassemblies Cont'd

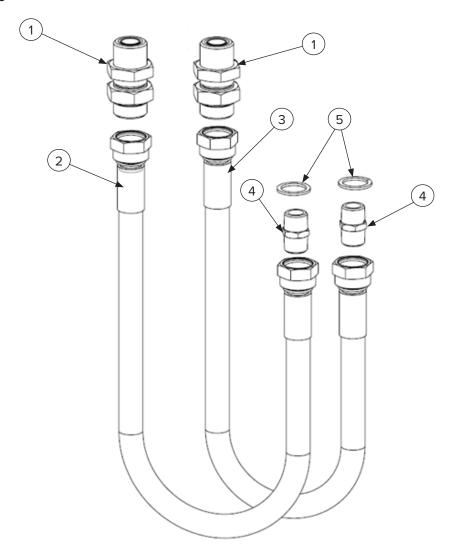
Motor Assembly



| ITEM | PART NUMBER | DESCRIPTION | 145110 | 145010 | 145015 |
|------|-------------|----------------------------|--------|--------|--------|
| | 04-22223 | MR Motor 125cc Wheel Mount | 1 | _ | _ |
| 1 | 04-66620 | MR Motor 160cc Wheel Mount | _ | 1 | _ |
| | 04-62823 | MR Motor 200cc Wheel Mount | ı | - | 1 |
| 2 | 04-74053 | 5mm Motor Spacer Plate | 1 | 1 | 1 |
| 3 | 06-81127 | M10 X 30 Socket Cap Screw | 4 | 4 | 4 |
| 4 | 06-23107 | M10 Spring Washer | 4 | 4 | 4 |

6.3 Subassemblies Cont'd

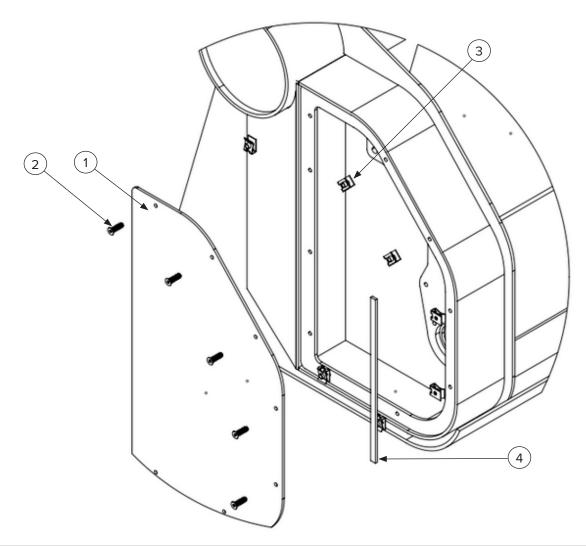
Hose Group



| ITEM | PART NUMBER | DESCRIPTION | 145110 | 145010 | 145015 |
|------|-------------|-------------------------------|--------|--------|--------|
| 1 | 04-53778 | Bulkhead Fitting 7/8" JIC | 2 | 2 | 2 |
| 2 | 04-91299 | Supply Hose JIC 3 Rotor | 1 | 1 | 1 |
| 3 | 04-32379 | Return Hose JIC 3 Rotor | 1 | 1 | 1 |
| 4 | 04-42385 | 7/8" JIC — 1/2 BSP MM Adapter | 2 | 2 | 2 |
| 5 | 04-46759 | Bonded Seal 1/2" | 2 | 2 | 2 |

6.4 Subassemblies Cont'd

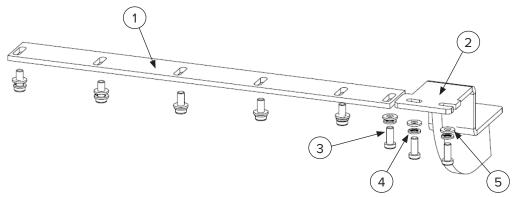
Door Assembly for 2024 Models



| ITEM | PART NUMBER | DESCRIPTION | 145110 | 145010 | 145015 |
|------|-------------|-------------------------------------|--------|--------|--------|
| | 01-46738 | Door Cover (Left) | 1 | 1 | 1 |
| ' | 01-34567 | Door Cover (Right) | 1 | 1 | 1 |
| 2 | 06-57851 | M6 X 25mm Socket Counter Screw | 14 | 14 | 14 |
| 3 | 06-87811 | M6 Speed Nut | 14 | 14 | 14 |
| 4 | 07-89732 | Self Adhesive Seal (1 metre length) | 3 | 3 | 3 |

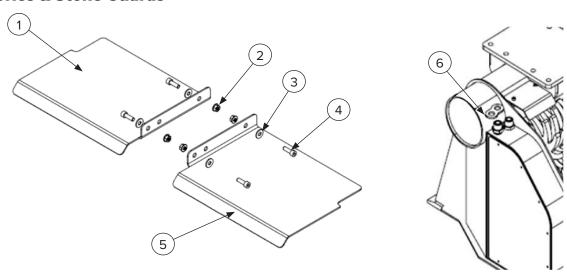
6.4 Subassemblies Cont'd

Stripper Plate & Motor Protection Plate



| ITEM | PART NUMBER | DESCRIPTION | 145110 | 145010 | 145015 |
|------|-------------|----------------------------|--------|--------|--------|
| | 05-51285 | Stripper Plate 145110 | 1 | _ | _ |
| 1 | 05-23800 | Stripper Plate 145010 | _ | 1 | _ |
| | 05-9355 | Stripper Plate 145015 | _ | _ | 1 |
| 2 | 05-94464 | Motor Protection Plate | 1 | 1 | 1 |
| 3 | 06-24550 | M8 X 20mm Socket Cap Screw | 10 | 14 | 17 |
| 4 | 06-66588 | M8 Spring Washer | 10 | 14 | 17 |
| 5 | 06-44950 | M8 Flat Washer | 10 | 14 | 17 |

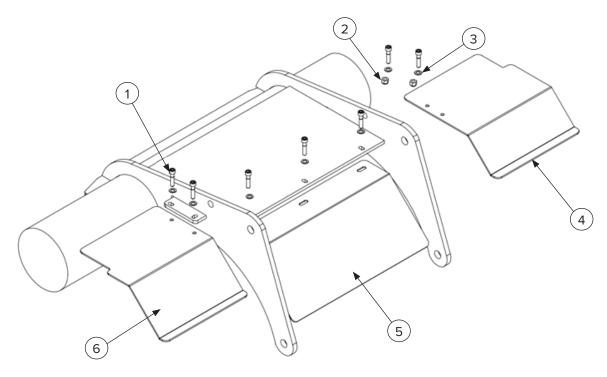
Accessories & Stone Guards



| ITEM | PART NUMBER | DESCRIPTION | 145110 | 145010 | 145015 |
|------|-------------|-----------------------------|--------|--------|--------|
| 1 | 05-50597 | Stone Guard 145110 (Left) | 1 | _ | _ |
| 2 | 06-18546 | M10 Nyloc Nut | 4 | _ | _ |
| 3 | 06-83734 | Flat Washer S10 | 4 | _ | _ |
| 4 | 06-81127 | M10 X 30mm Socket Cap Screw | 4 | _ | _ |
| 5 | 05-92784 | Stone Guard 145110 (Right) | 1 | _ | _ |
| 6 | 01-37380 | Hose Plate | 1 | 1 | 1 |

6.4 Subassemblies Cont'd

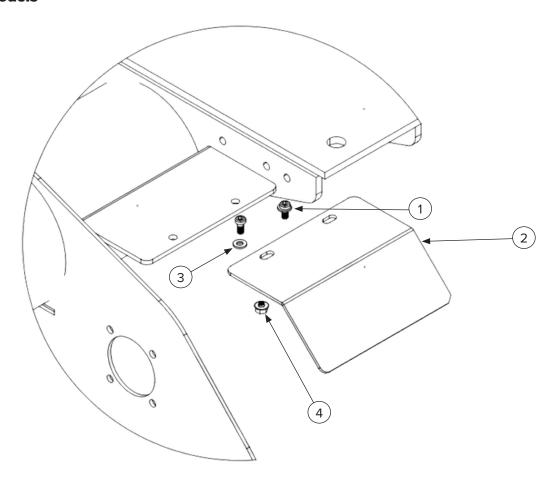
Accessories & Stone Guards Cont'd



| ITEM | PART NUMBER | DESCRIPTION | 145110 | 145010 | 145015 |
|------|-------------|-----------------------------|--------|--------|--------|
| 1 | 06-18546 | M10 Nyloc Nut | _ | 7 | 7 |
| 2 | 06-83734 | Flat Washer S10 | _ | 7 | 7 |
| 3 | 06-81127 | M10 X 30mm Socket Cap Screw | _ | 5 | 5 |
| | 06-38709 | M10 X 45mm Socket Cap Screw | _ | 2 | 2 |
| 4 | 05-90338 | Stone Guard 145010 (Left) | ı | 1 | _ |
| | 05-88964 | Stone Guard 145015 (Right) | - | - | 1 |
| 5 | 05-51057 | Center Stone Guard | _ | 1 | 1 |
| 6 | 05-30857 | Stone Guard 145010 (Right) | _ | 1 | _ |
| | 05-33533 | Stone Guard 145015 (Right) | _ | _ | 1 |

6.4 Subassemblies Cont'd

Accessories & Stone Guards Cont'd for 2024 Models

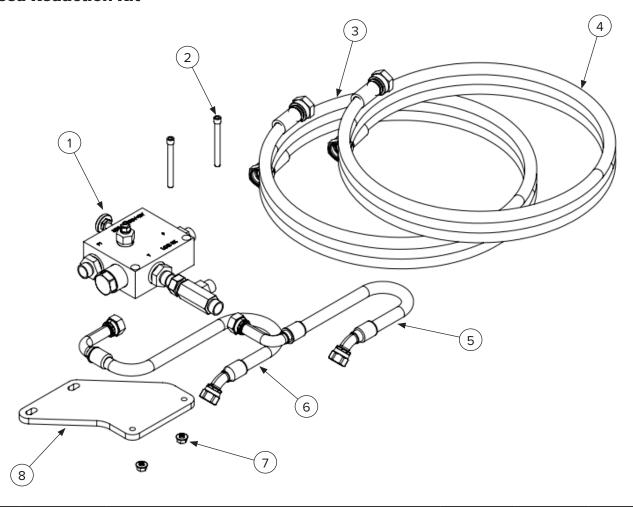


| ITEM | PART NUMBER | DESCRIPTION | 145110 | 145010 | 145015 |
|------|-------------|-----------------------------|--------|--------|--------|
| 1 | 06-81127 | M10 x 30mm Socket Cap Screw | 2 | _ | _ |
| 2 | 06-83734 | Stoneguard 145110 | 1 | _ | _ |
| 3 | 06-81127 | Flat Washer M10 | 4 | _ | _ |
| 4 | 05-88964 | M10 Nyloc Nut | 2 | _ | _ |

Note: The new shell design allows for 145110 stoneguard to be universal and can be used on both sides of the bucket.

6. Part Breakdowns for 145010, 145015, & 145110

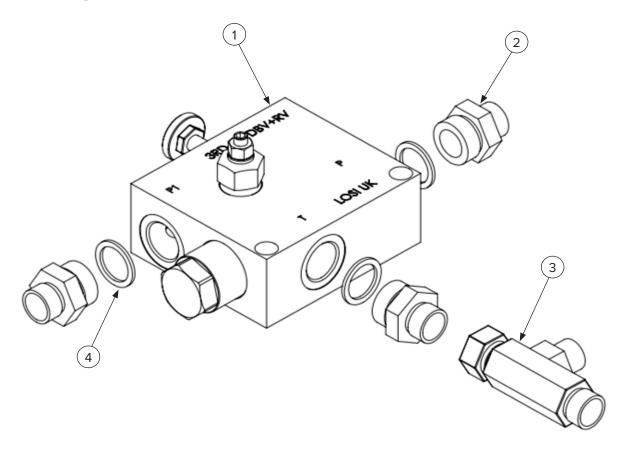
6.5 Speed Reduction Assemblies Speed Reduction Kit



| ITEM | PART NUMBER | DESCRIPTION | 145110 | 145010 | 145015 |
|------|-------------|--|--------|--------|--------|
| 1 | _ | See Pressure Compensated Flow Valve on Page 35 | _ | _ | _ |
| 2 | 06-62592 | M8 X 60mm Socket Cap Screw | _ | 2 | 2 |
| 3 | 04-52665 | Hose Supply 1725mm JIC with Burst Sleeve | _ | 1 | 1 |
| 4 | 04-79212 | Hose Return 1800mm JIC with Burst Sleeve | _ | 1 | 1 |
| 5 | 04-56512 | Hose Return for Speed Reduction Kit | _ | 1 | 1 |
| 6 | 04-31872 | Hose Supply for Speed Reduction Kit | _ | 1 | 1 |
| 7 | 06-95773 | M8 Flange Nut | _ | 2 | 2 |
| 8 | 04-24620 | Valve Plate for Pressure Compensated Valve | _ | 1 | 1 |

6. Part Breakdowns for 145010, 145015, & 145110

6.5 Speed Reduction Assemblies Cont'd Pressure Compensated Flow Valve



| ITEM | PART NUMBER | DESCRIPTION | 145110 | 145010 | 145015 |
|------|-------------|---------------------------------|--------|--------|--------|
| 1 | 04-26150 | Pressure Compensated Flow Valve | _ | 1 | 1 |
| 2 | 04-73988 | 3/4" M BSP — 7/8" JIC Adapter | _ | 3 | 3 |
| 3 | 04-58068 | Tee Fitting M-M-F 7/8" JIC | - | 1 | 1 |
| 4 | 04-50138 | Bonded Seal 3/4" | _ | 3 | 3 |

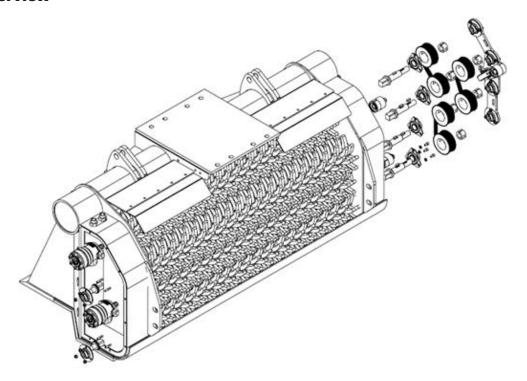
6. Part Breakdowns for 145010, 145015, & 145110

6.5 Speed Reduction Assemblies Cont'd Speed Reduction Assembly

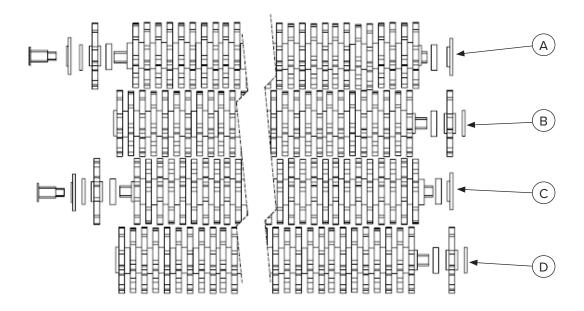
| PART NUMBER | DESCRIPTION | QTY | NOTES |
|-------------|--|-----|---|
| 02-27799 | Speed Reduction Kit JIC | 1 | Consists of: 04-26150 QTY 1 04-73988 QTY 3 04-58068 QTY 1 04-50138 QTY 3 06-62592 QTY 2 04-52665 QTY 1 04-79212 QTY 1 04-56512 QTY 1 04-31872 QTY 1 06-95773 QTY 2 04-24620 QTY 1 |
| 04-26150 | Pressure Compensated Flow Valve | 1 | _ |
| 04-73988 | 3/4" M BSP $ 7/8$ " JIC Adapter | 3 | _ |
| 04-58068 | Tee Fitting M-M-F 7/8" JIC | 1 | _ |
| 04-50138 | Bonded Seal 3/4" | 3 | _ |
| 06-62592 | M8 X 60mm Socket Cap Screw | 2 | _ |
| 04-52665 | Hose Supply 1725 mm JIC with Burst Sleeve | 1 | _ |
| 04-79212 | Hose Return 1800mm JIC with Burst Sleeve | 1 | |
| 04-56512 | Hose Return for Speed Reduction Kit | 1 | |
| 04-31872 | Hose Supply for Speed Reduction Kit | 1 | |
| 06-95773 | M8 Flange Nut | 2 | _ |
| 04-24620 | Valve Plate for Pressure Compensated Valve | 1 | _ |

7.1 Rotor Assemblies

Rotor Overview

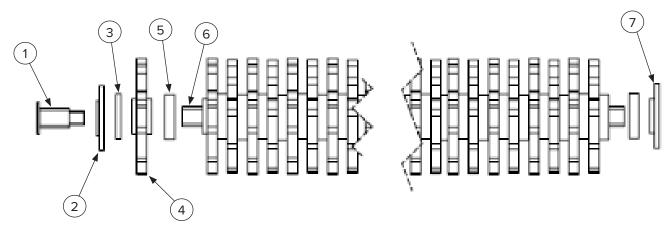


Rotor Group Overview



40

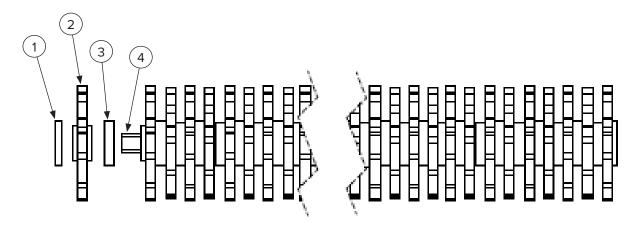
7.1 Rotor Assemblies Cont'd Rotor Shaft A & C



| | ROTOR A | | | | | |
|------|-------------|-------------------------------------|--------|--------|--------|--|
| ITEM | PART NUMBER | DESCRIPTION | 145115 | 145117 | 145120 | |
| 1 | 02-33888 | SAE Splined Drive Coupling | 1 | 1 | 1 | |
| 2 | 03-78905 | 15mm End Cap | 1 | 1 | 1 | |
| 3 | 03-99135 | Nylon Locking Ring 90mm OD | 1 | 1 | 1 | |
| 4 | 03-56281 | Poly Star (230mm Ten Finger) Yellow | 24 | 29 | 37 | |
| 5 | 03-86116 | 20mm Locking Ring | 25 | 30 | 38 | |
| | 03-46491 | Rotor Shaft 145115 (Motor Pick Up) | 1 | _ | _ | |
| 6 | 03-82264 | Rotor Shaft 145117 (Motor Pick Up) | _ | 1 | _ | |
| | 03-30536 | Rotor Shaft 145120 (Motor Pick Up) | _ | _ | 1 | |
| 7 | 03-92358 | 20mm End Cap | 1 | 1 | 1 | |

| | ROTOR C | | | | | | |
|------|-------------|-------------------------------------|--------|--------|--------|--|--|
| ITEM | PART NUMBER | DESCRIPTION | 145115 | 145117 | 145120 | | |
| 1 | 02-33888 | SAE Splined Drive Coupling | 1 | 1 | 1 | | |
| 2 | 03-78905 | 15mm End Cap | 1 | 1 | 1 | | |
| 3 | 03-99135 | Nylon Locking Ring 90mm OD | 1 | 1 | 1 | | |
| 4 | 03-56281 | Poly Star (230mm Ten Finger) Yellow | 24 | 29 | 37 | | |
| 5 | 03-86116 | 20mm Locking Ring | 25 | 30 | 38 | | |
| | 03-46491 | Rotor Shaft 145115 (Motor Pick Up) | 1 | _ | _ | | |
| 6 | 03-82264 | Rotor Shaft 145117 (Motor Pick Up) | _ | 1 | _ | | |
| | 03-30536 | Rotor Shaft 145120 (Motor Pick Up) | _ | _ | 1 | | |
| 7 | 03-92358 | 20mm End Cap | 1 | 1 | 1 | | |

7.1 Rotor Assemblies Cont'd Rotor Shaft B & D



| | ROTOR B | | | | | | | |
|------|-------------|-------------------------------------|--------|--------|--------|--|--|--|
| ITEM | PART NUMBER | DESCRIPTION | 145115 | 145117 | 145120 | | | |
| 1 | 03-99135 | Nylon Locking Ring 90mm OD | 2 | 2 | 2 | | | |
| 2 | 03-56281 | Poly Star (230mm Ten Finger) Yellow | 25 | 30 | 38 | | | |
| 3 | 03-86116 | 20mm Locking Ring | 24 | 29 | 37 | | | |
| 4 | 03-56281 | Poly Star (230mm Ten Finger) Yellow | 24 | 29 | 37 | | | |
| | 03-39360 | Rotor Shaft 145115 | 1 | _ | _ | | | |
| 5 | 03-97866 | Rotor Shaft 145117 | _ | 1 | _ | | | |
| | 03-66775 | Rotor Shaft 145120 | _ | _ | 1 | | | |

| | ROTOR D | | | | | | |
|------|-------------|-------------------------------------|--------|--------|--------|--|--|
| ITEM | PART NUMBER | DESCRIPTION | 145115 | 145117 | 145120 | | |
| 1 | 03-99135 | Nylon Locking Ring 90mm OD | 2 | 2 | 2 | | |
| 2 | 03-56281 | Poly Star (230mm Ten Finger) Yellow | 25 | 30 | 38 | | |
| 3 | 03-86116 | 20mm Locking Ring | 24 | 29 | 37 | | |
| 4 | 03-56281 | Poly Star (230mm Ten Finger) Yellow | 24 | 29 | 37 | | |
| | 03-39360 | Rotor Shaft 145115 | 1 | | _ | | |
| 5 | 03-97866 | Rotor Shaft 145117 | _ | 1 | _ | | |
| | 03-66775 | Rotor Shaft 145120 | _ | _ | 1 | | |

7.1 Rotor Assemblies Cont'd

Rotor Assembly — 145115

| PART NUMBER | DESCRIPTION | QTY | NOTES |
|-------------|------------------------------------|-----|--|
| 03-79464 | Complete Rotor Assembly for 145110 | 1 | Consists of: 03-12378 QTY 2 03-57483 QTY 2 |
| 03-12378 | 145115 Driven Top Shaft | 2 | _ |
| 03-57483 | 145115 Non-Driven Middle Shaft | 2 | _ |

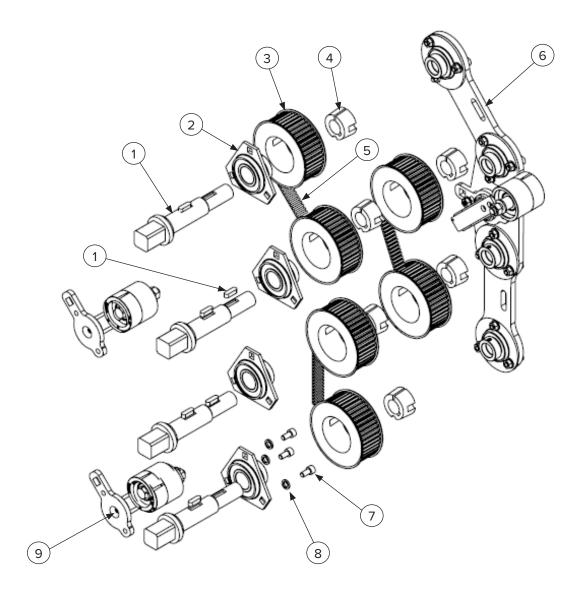
Rotor Assembly — 145117

| PART NUMBER | DESCRIPTION | QTY | NOTES |
|-------------|--------------------------------|-----|--|
| 03-44627 | Complete Rotor Assembly 145117 | 1 | Consists of: 03-56738 QTY 2 03-47462 QTY 2 |
| 03-56738 | 145117 Driven Top Shaft | 2 | _ |
| 03-47462 | 145117 Non-Driven Middle Shaft | 2 | _ |

Rotor Assembly — 145120

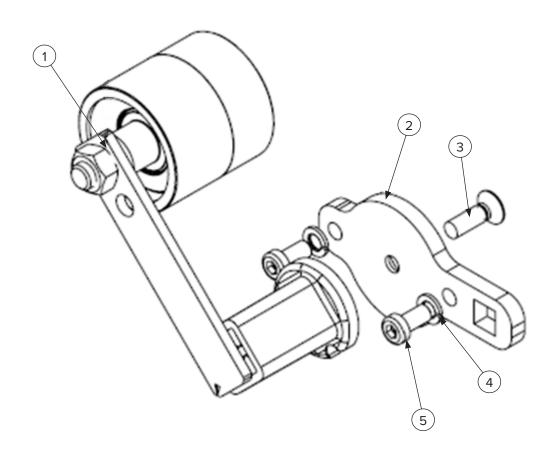
| PART NUMBER | DESCRIPTION | QTY | NOTES |
|-------------|--------------------------------|-----|--|
| 03-44672 | Complete Rotor Assembly 145120 | 1 | Consists of: 03-95637 QTY 2 03-16041 QTY 2 |
| 03-95637 | 145120 Driven Top Shaft | 2 | _ |
| 03-16041 | 145120 Non-Driven Middle Shaft | 2 | _ |

7.2 *Driveline Assembly* **Driveline**



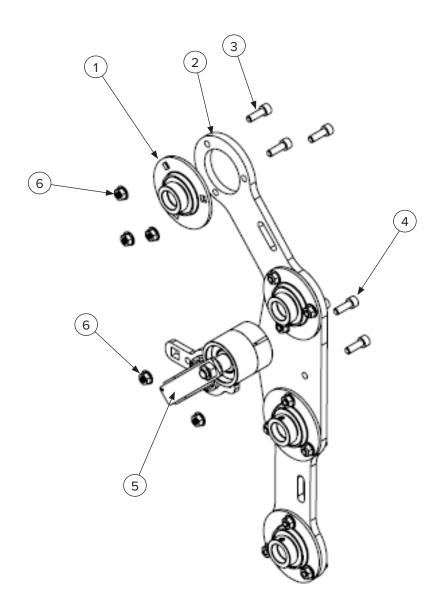
| ITEM | PART NUMBER | DESCRIPTION | 145115 | 145117 | 145120 |
|------|-------------|--|--------|--------|--------|
| 1 | 02-44051 | Keyed Shaft | 4 | 4 | 4 |
| 2 | 02-23430 | Bearing SLFT30C99 with Housing | 4 | 4 | 4 |
| 3 | 02-45078 | Carbon Belt Pulley (8MDC3645) | 6 | 6 | 6 |
| 4 | 02-91615 | Taper Bush 2012-30 | 6 | 6 | 6 |
| 5 | 02-28566 | Carbon Belt | 3 | 3 | 3 |
| 6 | _ | See Bearing Support Plate Diagram on page 43 | _ | _ | _ |
| 7 | 06-47900 | M10 X 16mm Socket Cap Screw | 12 | 12 | 12 |
| 8 | 06-23107 | M10 Spring Washer | 12 | 12 | 12 |
| 9 | _ | See Belt Adjuster Diagram on page 42 | _ | _ | _ |
| 10 | 02-62292 | Key | 6 | 6 | 6 |

7.2 Driveline Assembly Cont'd Belt Adjuster



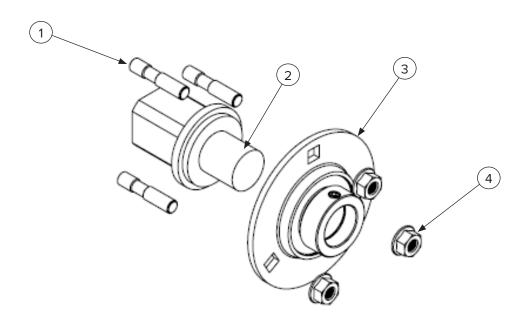
| ITEM | PART NUMBER | DESCRIPTION | 145115 | 145117 | 145120 |
|------|-------------|---|--------|--------|--------|
| 1 | 02-79369 | Rosta Belt Adjuster | 3 | 3 | 3 |
| 2 | 02-72480 | Belt Adjuster Plate | 3 | 3 | 3 |
| 3 | 06-45595 | M8 X 25mm Stainless Steel Countersunk Screw | 3 | 3 | 3 |
| 4 | 06-66588 | M8 Spring Washer | 6 | 6 | 6 |
| 5 | 06-20616 | M8 X 16mm Socket Cap Screw | 6 | 6 | 6 |

7.2 Driveline Assembly Cont'd Bearing Support Plate



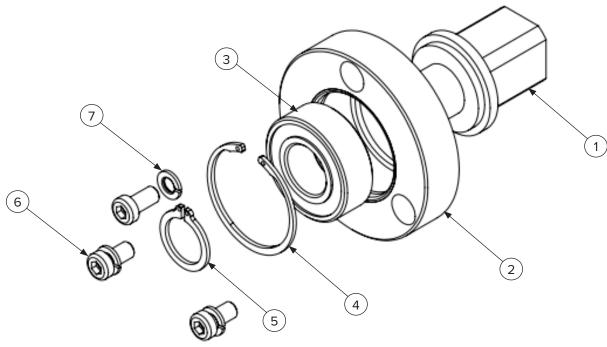
| ITEM | PART NUMBER | DESCRIPTION | 145115 | 145117 | 145120 |
|------|-------------|--------------------------------------|--------|--------|--------|
| 1 | 02-26057 | Bearing SLFE25C99 | 4 | 4 | 4 |
| 2 | 02-94994 | Bearing Support Plate | 1 | 1 | 1 |
| 3 | 06-24550 | M8 X 20mm Socket Cap Screw | 12 | 12 | 12 |
| 4 | 06-28181 | M8 X 30mm Socket Cap Screw | 2 | 2 | 2 |
| 5 | _ | See Belt Adjuster Diagram on page 42 | _ | _ | _ |
| 6 | 06-95773 | M8 Flange Nut | 14 | 14 | 14 |

7.3 Shaft Assembly Stub Shaft



| ITEM | PART NUMBER | DESCRIPTION | 145115 | 145117 | 145120 |
|------|-------------|-------------------|--------|--------|--------|
| 1 | 06-44972 | M8 X 25mm Stud | 6 | 6 | 6 |
| 2 | 02-77903 | Short Stub Shaft | 2 | 2 | 2 |
| 3 | 02-26057 | Bearing SLFE25C99 | 2 | 2 | 2 |
| 4 | 06-95773 | M8 Flange Nut | 2 | 2 | 2 |

7.3 Shaft Assembly Cont'd Stub Shaft Cont'd



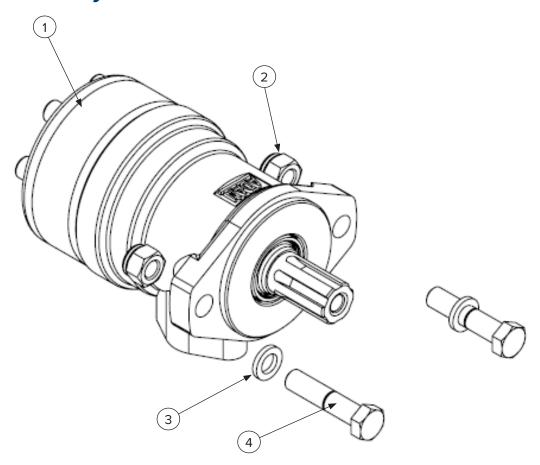
| ITEM | PART NUMBER | DESCRIPTION | 145120 |
|------|-------------|------------------------------|--------|
| 1 | 02-59183 | Short Stub Shaft 3 & 4 Rotor | 1 |
| 2 | 02-40685 | Bearing Housing | 1 |
| 3 | 02-56867 | 32052RS Bearing | 1 |
| 4 | 02-66289 | Circlip D1360 – 52mm | 1 |
| 5 | 06-66588 | M8 Spring Washer | 3 |
| 6 | 06-20616 | M8 x 16 Socket Cap Screw | 3 |
| 7 | 02-61562 | Circlip D1460 – 25mm | 1 |

Note: The new stub shaft assembly can be fitted into all pre–2024 models with no other modifications required.

Shaft Assembly

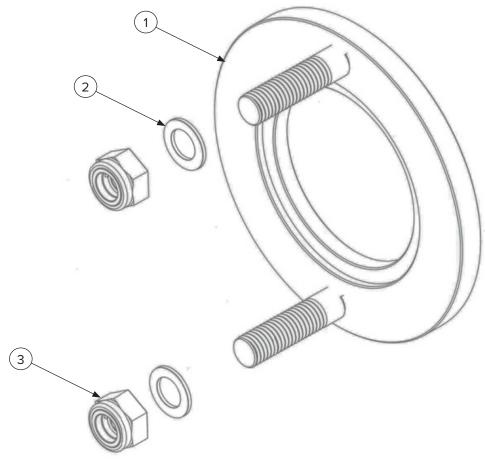
| PART NUMBER | DESCRIPTION | QTY | NOTES |
|-------------|--------------------------------------|-----|--|
| 02-85346 | Keyed Shaft Assembly 4 Rotor | 1 | Consists of: 02-44051 QTY 1 02-23430 QTY 1 |
| 02-44051 | Keyed Shaft | 1 | _ |
| 02-23430 | Bearing SLFT30C99 | 1 | _ |
| 02-67603 | Short Stub Shaft Assembly Heavy Duty | 1 | Consists of: 02-77903 QTY 1 02-26057 QTY 1 |
| 02-77903 | Short Stub Shaft | 1 | _ |
| 02-26057 | Bearing SLFEW25C99 | 1 | _ |
| 02-48267 | Bearing Unit 3 & 4 Rotor - 145120 | 1 | _ |

7.4 Motor Assembly



| ITEM | PART NUMBER | DESCRIPTION | 145115 | 145117 | 145120 |
|------|-------------|---------------------------------------|--------|--------|--------|
| 1 | 04-56662 | MR Motor 125cc 6B Shaft HP Shaft Seal | 2 | 2 | 2 |
| 2 | 06-21695 | M12 Nyloc Nut | 4 | 4 | 4 |
| 3 | 06-85970 | M12 Form A Flat Washer | 4 | 4 | 4 |
| 4 | 06-97778 | M12 X 50mm Hexagon Bolt | 4 | 4 | 4 |

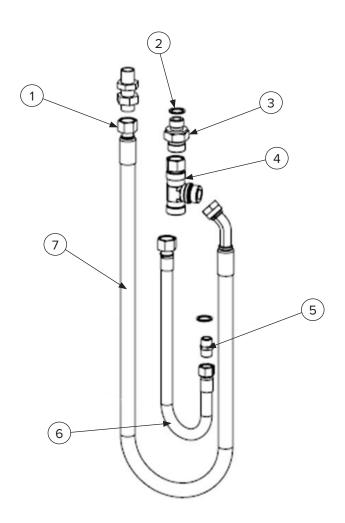
7.4 Motor Assembly Cont'd



| ITEM | PART NUMBER | DESCRIPTION | 145115 | 145117 | 145120 |
|------|-------------|------------------------|--------|--------|--------|
| 1 | 03-96483 | Sealing Ring | 2 | 2 | 2 |
| 2 | 06-85970 | M12 Form A Flat Washer | 4 | 4 | 4 |
| 3 | 06-57851 | M12 Nyloc Nut | 4 | 4 | 4 |

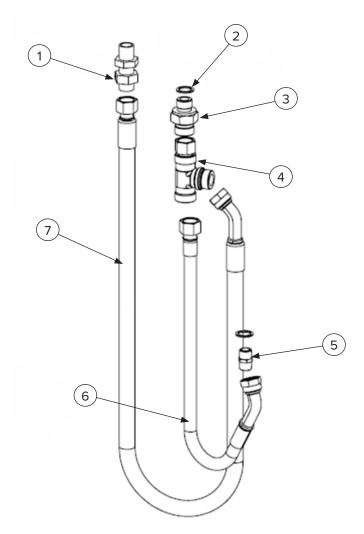
Note: In the 2024 Model, the Sealing Ring (03-96483) replaces M12 x 50mm Hexagon Bolts (06-97778) in Motor Assembly.

7.5 Hose Group Supply Circuit



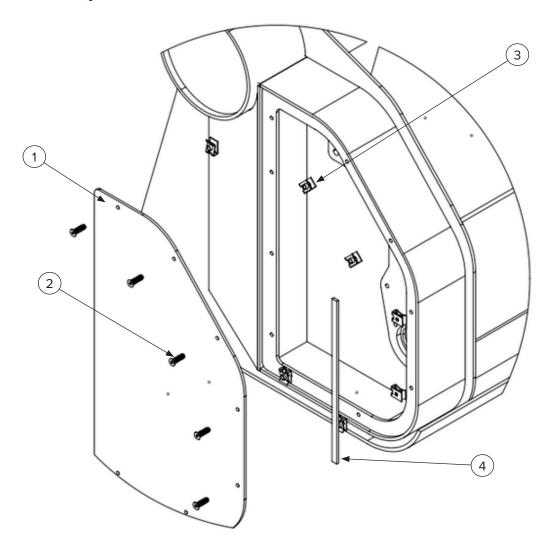
| ITEM | PART NUMBER | DESCRIPTION | 145115 | 145117 | 145120 |
|------|-------------|----------------------------------|--------|--------|--------|
| 1 | 04-69494 | Bulkhead Fitting 11/6" JIC | 1 | 1 | 1 |
| 2 | 04-46759 | Bonded Seal 1/2" | 2 | 2 | 2 |
| 3 | 04-35281 | 11/16" JIC — 1/2" BSP MM Adapter | 1 | 1 | 1 |
| 4 | 04-15055 | Tee Fitting F-M-M 11/16" JIC | 4 | 4 | 4 |
| 5 | 04-42385 | 7/8"JIC — 1/2" BSP MM Adapter | 1 | 1 | 1 |
| 6 | 04-59857 | Supply Hose JIC | 1 | 1 | 1 |
| 7 | 04-88880 | Hose JIC | 1 | 1 | 1 |

7.6 Hose Group Cont'd Return Circuit



| ITEM | PART NUMBER | DESCRIPTION | 145115 | 145117 | 145120 |
|------|-------------|----------------------------------|--------|--------|--------|
| 1 | 04-69494 | Bulkhead Fitting 1 1/16" JIC | 1 | 1 | 1 |
| 2 | 04-46759 | Bonded Seal 1/2" | 2 | 2 | 2 |
| 3 | 04-35281 | 11/16" JIC — 1/2" BSP MM Adapter | 1 | 1 | 1 |
| 4 | 04-15055 | Tee Fitting F-M-M 1 1/16" JIC | 4 | 4 | 4 |
| 5 | 04-42385 | 7/8" JIC — 1/2" BSP MM Adapter | 1 | 1 | 1 |
| 6 | 04-30796 | Return Hose JIC | 1 | 1 | 1 |
| 7 | 04-88880 | Hose JIC | 1 | 1 | 1 |

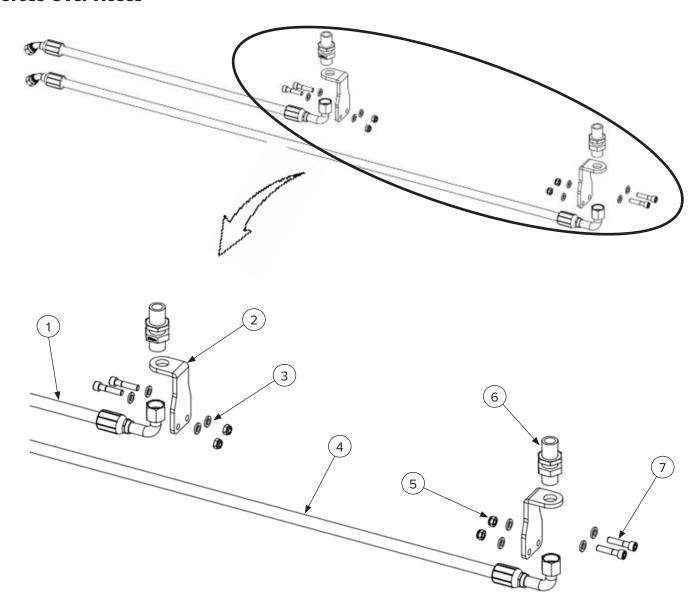
7.7 Door Group



| ITEM | PART NUMBER | DESCRIPTION | 145115 | 145117 | 145120 |
|------|-------------|-------------------------------------|--------|--------|--------|
| | 01-65478 | 4 Rotor Door Cover (Left) | 1 | 1 | 1 |
| ' | 01-10293 | 4 Rotor Door Cover (Right) | 1 | 1 | 1 |
| 2 | 06-57851 | M6 X 25mm Socket Countersunk Screw | 16 | 16 | 16 |
| 3 | 06-87811 | M6 Speed Nut | 16 | 16 | 16 |
| 4 | 04-42385 | Self Adhesive Seal (1 meter length) | 3 | 3 | 3 |

7.8 Cross-Over Hose Group

Cross-Over Hoses



| ITEM | PART NUMBER | DESCRIPTION | 145115 | 145117 | 145120 |
|------|-------------|----------------------------------|--------|--------|--------|
| | 04-57947 | 145115 Cross Over Short Hose JIC | 1 | _ | _ |
| 1 | 04-19064 | 145117 Cross Over Short Hose JIC | - | 1 | - |
| | 04-64186 | 145120 Cross Over Short Hose JIC | - | _ | 1 |
| 2 | 04-43374 | Hose Ear 4 Rotor Cross Over | 2 | 2 | 2 |
| 3 | 06-83734 | Flat Washer S10 | 4 | 4 | 4 |
| | 04-73761 | 145115 Cross Over Long Hose JIC | 1 | _ | - |
| 4 | 04-92878 | 145117 Cross Over Long Hose JIC | _ | 1 | - |
| | 04-61265 | 145120 Cross Over Long Hose JIC | _ | _ | 1 |
| 5 | 06-18546 | M10 Nyloc Nut | 4 | 4 | 4 |
| 6 | 04-69494 | Bulkhead Fitting 1 1/16" JIC | 2 | 2 | 2 |
| 7 | 06-38709 | M10 X 45mm Socket Cap Screw | 4 | 4 | 4 |

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7.8 Cross-Over Hose Group Cont'd

Cross-Over Kit — 145115

| PART NUMBER | DESCRIPTION | QTY | NOTES |
|-------------|----------------------------------|-----|--|
| 04-90335 | 145115 Cross Over Kit | 1 | Consists of: 04-57947 QTY 1 04-73761 QTY 1 04-43374 QTY 2 06-94396 QTY 4 06-38709 QTY 4 06-83734 QTY 4 04-69494 QTY 2 |
| 04-57947 | 145115 Cross Over Short Hose JIC | 1 | _ |
| 04-73761 | 145115 Cross Over Long Hose JIC | 1 | - |
| 04-43374 | Hose Ear 4 Rotor Cross-Over | 2 | - |
| 06-18546 | M10 Nyloc Nut | 4 | - |
| 06-38709 | M10 X 45mm Socket Cap Screw | 4 | _ |
| 06-83734 | Flat Washer S10 | 4 | |
| 04-69494 | Bulkhead Fitting 1 1/16" JIC | 2 | _ |

Cross-Over Kit — 145117

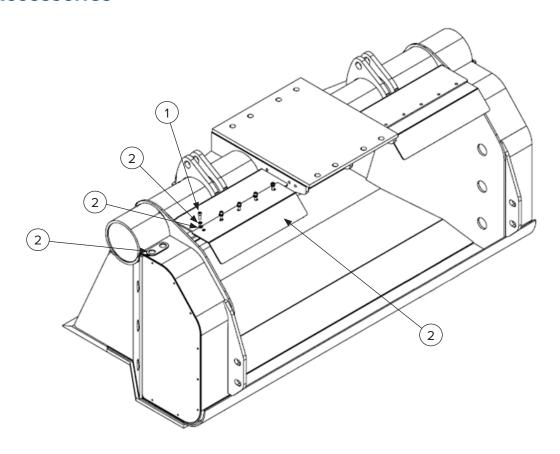
| PART NUMBER | DESCRIPTION | QTY | NOTES |
|-------------|----------------------------------|-----|--|
| 04-29205 | 145117 Cross Over Kit | 1 | Consists of: 04-16064 QTY 1 04-92878 QTY 1 04-43374 QTY 2 06-94396 QTY 4 06-38709 QTY 4 06-83734 QTY 4 04-69494 QTY 2 |
| 04-19064 | 145117 Cross Over Short Hose JIC | 1 | _ |
| 04-92878 | 145117 Cross Over Long Hose JIC | 1 | _ |
| 04-43374 | Hose Ear 4 Rotor Cross-Over | 2 | _ |
| 06-18546 | M10 Nyloc Nut | 4 | _ |
| 06-38709 | M10 X 45mm Socket Cap Screw | 4 | _ |
| 06-83734 | Flat Washer S10 | 4 | _ |
| 04-69494 | Bulkhead Fitting 11/16" JIC | 2 | _ |

7.8 Cross-Over Hose Group Cont'd

Cross-Over Kit — 145120

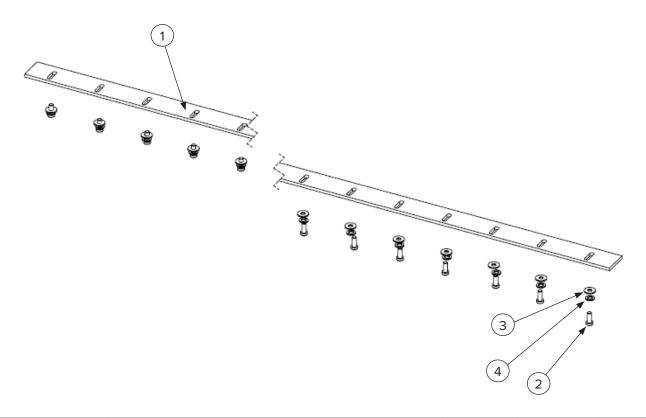
| PART NUMBER | DESCRIPTION | QTY | NOTES |
|-------------|----------------------------------|-----|--|
| 04-55215 | 145120 Cross Over Kit | 1 | Consists of: 04-57947 QTY 1 04-73761 QTY 1 04-43374 QTY 2 06-94396 QTY 4 06-38709 QTY 4 06-83734 QTY 4 04-69494 QTY 2 |
| 04-64186 | 145120 Cross Over Short Hose JIC | 1 | _ |
| 04-61265 | 145120 Cross Over Long Hose JIC | 1 | _ |
| 04-43374 | Hose Ear 4 Rotor Cross-Over | 2 | _ |
| 06-18546 | M10 Nyloc Nut | 4 | _ |
| 06-38709 | M10 X 45mm Socket Cap Screw | 4 | |
| 06-83734 | Flat Washer S10 | 4 | _ |
| 04-69494 | Bulkhead Fitting 11/16" JIC | 2 | _ |

7.9 Accessories



| ITEM | PART NUMBER | DESCRIPTION | 145115 | 145117 | 145120 |
|------|-------------|-----------------------------|--------|--------|--------|
| | 05-64440 | 145115 Stone Guard | 2 | _ | _ |
| 1 | 05-64946 | 145117 Stone Guard | _ | 2 | _ |
| | 05-92216 | 145120 Stone Guard | _ | _ | 2 |
| 2 | 06-81127 | M10 X 30mm Socket Cap Screw | 4 | 6 | 10 |
| 3 | 06-83734 | Flat Washer S10 | 4 | 6 | 10 |
| 4 | 06-18546 | M10 Nyloc Nut | 4 | 6 | 10 |
| 5 | 01-20740 | Hose Plate | 1 | 1 | 1 |

7.10 Stripper Plate

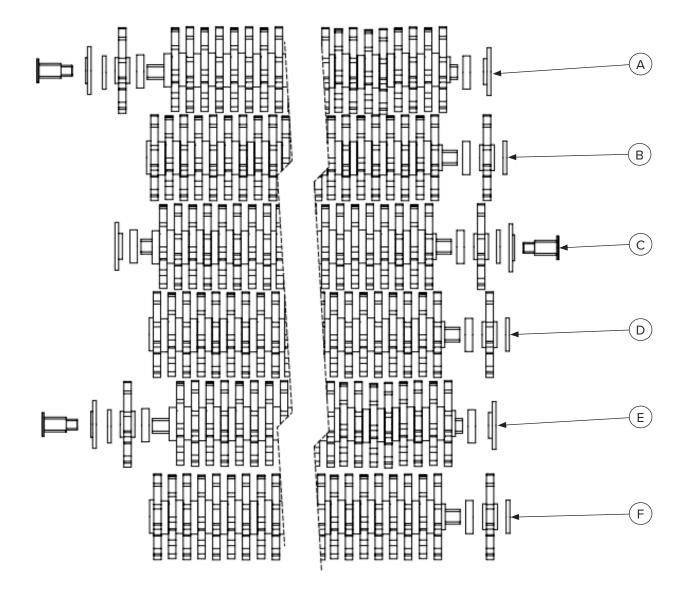


| ITEM | PART NUMBER | DESCRIPTION | 145115 | 145117 | 145120 |
|------|-------------|--|--------|--------|--------|
| | 05-62551 | 145115 Stripper Plate | 1 | _ | _ |
| 1 | 05-25153 | 145117 Stripper Plate | _ | 1 | _ |
| | 05-62817 | 145120 Stripper Plate | _ | _ | 1 |
| 2 | 06-45595 | M8 X 25mm Stainless Steel Socket Countersunk Screw | 10 | 12 | 15 |
| 3 | 06-44950 | M8 Flat Washer | 10 | 12 | 15 |
| 4 | 06-66588 | M8 Spring Washer | 10 | 12 | 15 |

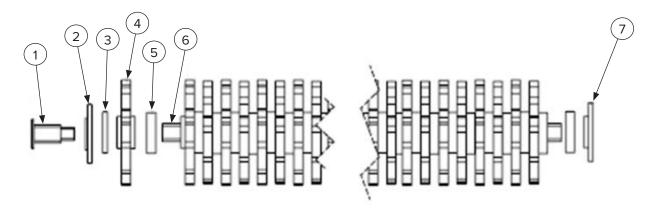
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8.1 Rotor Assembly

Rotor Group



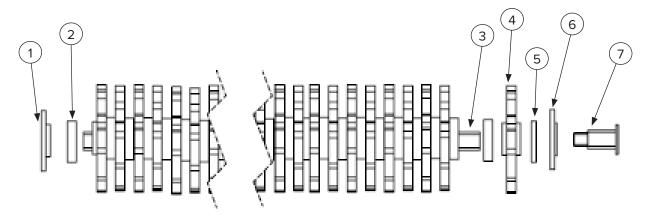
8.1 Rotor Assembly Cont'd Rotor Group



| | | ROTOR A | |
|------|-------------|------------------------------------|--------|
| ITEM | PART NUMBER | DESCRIPTION | 145135 |
| 1 | 02-33888 | SAE Splined Drive Coupling (HD) | 1 |
| 2 | 03-78905 | 15mm End Cap | 1 |
| 3 | 03-99135 | Nylon Locking Ring 90mm OD | 1 |
| 4 | 03-80833 | Poly Star (230mm Ten Finger) Blue | 37 |
| 5 | 03-86116 | 20mm Locking Ring | 37 |
| 6 | 03-95310 | 145135 Rotor Shaft (Motor Pick Up) | 1 |
| 7 | 03-92358 | 20mm End Cap | 11 |

| | | ROTOR E | |
|------|-------------|------------------------------------|--------|
| ITEM | PART NUMBER | DESCRIPTION | 145135 |
| 1 | 02-33888 | SAE Splined Drive Coupling (HD) | 1 |
| 2 | 03-78905 | 15mm End Cap | 1 |
| 3 | 03-99135 | Nylon Locking Ring 90mm OD | 1 |
| 4 | 03-80833 | Poly Star (230mm Ten Finger) Blue | 37 |
| 5 | 03-86116 | 20mm Locking Ring | 37 |
| 6 | 03-95310 | 145135 Rotor Shaft (Motor Pick Up) | 1 |
| 7 | 03-92358 | 20mm End Cap | 11 |

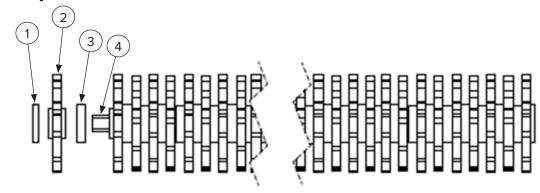
8.1 Rotor Assembly Cont'd Rotor Group



| | | ROTOR C | |
|------|-------------|------------------------------------|--------|
| ITEM | PART NUMBER | DESCRIPTION | 145135 |
| 1 | 03-92358 | 20mm End Cap | 1 |
| 2 | 03-86116 | 20mm Locking Ring | 37 |
| 3 | 03-95310 | 145135 Rotor Shaft (Motor Pick Up) | 1 |
| 4 | 03-80833 | Poly Star (230mm Ten Finger) Blue | 37 |
| 5 | 03-99135 | Nylon Locking Ring 90mm OD | 1 |
| 6 | 03-78905 | 15mm End Cap | 1 |
| 7 | 03-33888 | SAE Splined Drive Coupling (HD) | 1 |

8.1 Rotor Assembly Cont'd

Rotor Group



| | | ROTOR B | |
|------|-------------|-----------------------------------|--------|
| ITEM | PART NUMBER | DESCRIPTION | 145135 |
| 1 | 03-99135 | Nylon Locking Ring 90mm OD | 2 |
| 2 | 03-80833 | Poly Star (230mm Ten Finger) Blue | 38 |
| 3 | 03-66775 | 145135 Rotor Shaft | 1 |
| 4 | 03-86116 | 20mm Locking Ring | 38 |

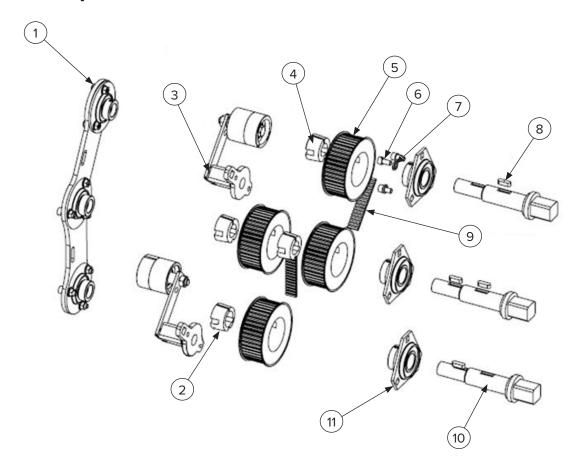
| | | ROTOR D | |
|------|-------------|-----------------------------------|--------|
| ITEM | PART NUMBER | DESCRIPTION | 145135 |
| 1 | 03-99135 | Nylon Locking Ring 90mm OD | 2 |
| 2 | 03-80833 | Poly Star (230mm Ten Finger) Blue | 38 |
| 3 | 03-66775 | 145135 Rotor Shaft | 1 |
| 4 | 03-86116 | 20mm Locking Ring | 38 |

| | | ROTOR F | |
|------|-------------|-----------------------------------|--------|
| ITEM | PART NUMBER | DESCRIPTION | 145135 |
| 1 | 03-99135 | Nylon Locking Ring 90mm OD | 2 |
| 2 | 03-80833 | Poly Star (230mm Ten Finger) Blue | 38 |
| 3 | 03-66775 | 145135 Rotor Shaft | 1 |
| 4 | 03-86116 | 20mm Locking Ring | 38 |

Rotor Assembly 145135

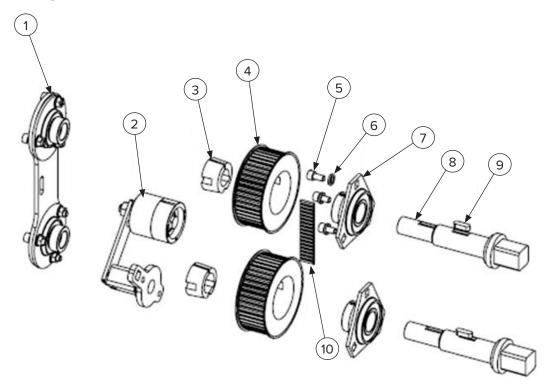
| PART NUMBER | DESCRIPTION | QTY | NOTES |
|-------------|------------------------------------|-----|--|
| 03-44762 | Complete Rotor Assembly 145135 | 1 | Consists of: 03-57574 QTY 2 03-45678 QTY 1 04-16041 QTY 3 |
| 03-57574 | 145135 Driven Motor Shaft | 2 | _ |
| 03-45678 | 145135 Driven Reversed Motor Shaft | 1 | _ |
| 03-16041 | 145135 Non-Driven Shaft | 3 | _ |

8.2 Driveline Shaft Assembly Driveline Group A



| ITEM | PART NUMBER | DESCRIPTION | 145135 |
|------|-------------|--------------------------------------|--------|
| 1 | _ | See Bearing Support Plate A on page | _ |
| 2 | 02-14066 | Taper Bush 2012-25 | 2 |
| 3 | _ | See Belt Adjuster Diagram on page 62 | _ |
| 4 | 02-91615 | Taper Bush 2012-30 | 2 |
| 5 | 02-45078 | Carbon Belt Pully (8MDC3645) | 4 |
| 6 | 06-47900 | M10 X 16mm Socket Cap Screw | 9 |
| 7 | 06-23107 | M10 Spring Washer | 9 |
| 8 | 02-62292 | Key | 4 |
| 9 | 02-28566 | Carbon Belt (8MDC-37) | 2 |
| 10 | 02-51376 | Keyed Shaft | 3 |
| 11 | 02-23430 | Bearing SLFFT30C99 | 3 |

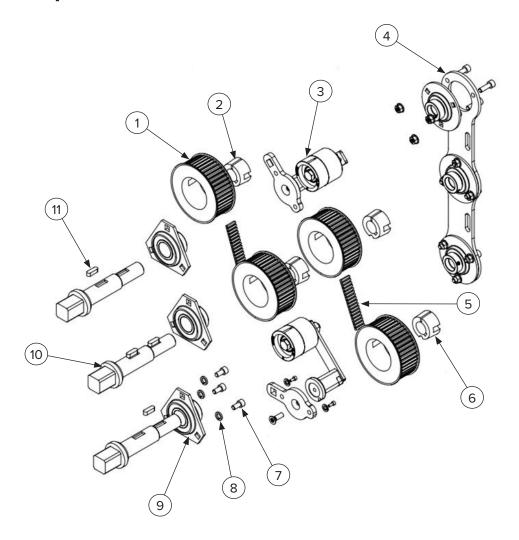
8.2 Driveline Shaft Assembly Cont'd Driveline Group B



| ITEM | PART NUMBER | DESCRIPTION | 145135 |
|------|-------------|--------------------------------------|--------|
| 1 | _ | See Bearing Support Plate B on page | _ |
| 2 | _ | See Belt Adjuster Diagram on page 62 | _ |
| 3 | 02-91615 | Taper Bush 2012-30 | 2 |
| 4 | 02-45078 | Carbon Belt Pulley (8MDC3645) | 2 |
| 5 | 06-47900 | M10 X 16mm Socket Cap Screw | 6 |
| 6 | 06-23107 | M10 Spring Washer | 6 |
| 7 | 02-23430 | Bearing SLFFT30C99 | 2 |
| 8 | 02-51376 | Keyed Shaft | 2 |
| 9 | 02-62292 | Key | 4 |
| 10 | 02-28566 | Carbon Belt (8MDC-37) | 2 |

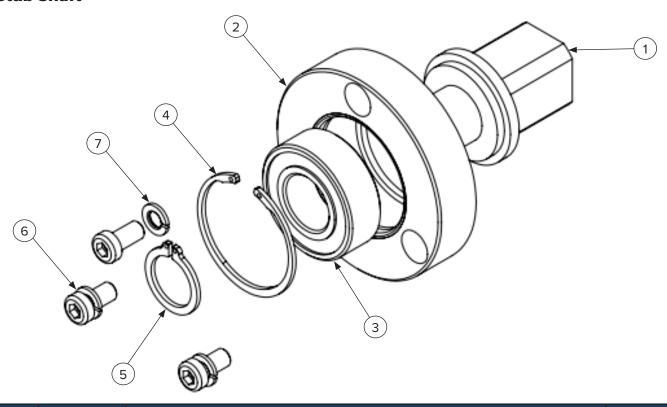
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8.2 Driveline Shaft Assembly Cont'd Driveline Group C



| ITEM | PART NUMBER | DESCRIPTION | 145135 |
|------|-------------|--------------------------------------|--------|
| 1 | 02-45078 | Carbon Belt Pulley (8MDC3645) | 4 |
| 2 | 02-91615 | Taper Bush 2012-30 | 4 |
| 3 | _ | See Belt Adjuster Diagram on page 62 | - |
| 4 | _ | See Bearing Support Plate D on page | - |
| 5 | 02-28566 | Carbon Belt (8MDC-37) | 2 |
| 6 | 02-14066 | Taper Bush 2012-25 | 2 |
| 7 | 06-47900 | M10 X 16mm Socket Cap Screw | 9 |
| 8 | 06-23107 | M10 Spring Washer | 9 |
| 9 | 02-23430 | Bearing SLFT30C99 | 3 |
| 10 | 02-51376 | Keyed Shaft | 3 |
| 11 | 02-62292 | Key | 5 |

8.2 Driveline Shaft Assembly Cont'd Stub Shaft



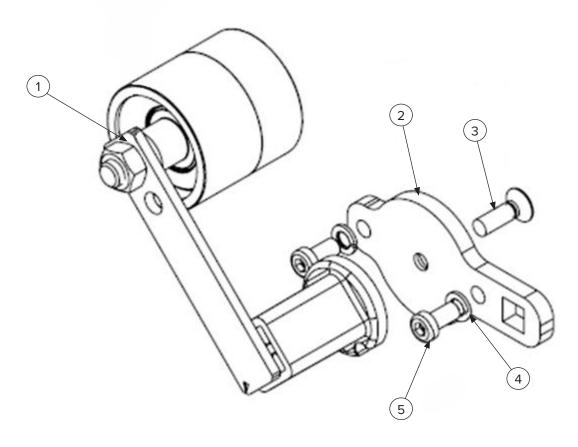
| ITEM | PART NUMBER | DESCRIPTION | 145135 |
|------|-------------|--------------------------|--------|
| 1 | 02-54762 | Short Stub Shaft 6 Rotor | 1 |
| 2 | 02-40685 | Bearing Housing | 1 |
| 3 | 02-56867 | 32052RS Bearing | 1 |
| 4 | 02-66289 | Circlip D1360 – 52mm | 1 |
| 5 | 06-66588 | M8 Spring Washer | 3 |
| 6 | 06-20616 | M8 x 16 Socket Cap Screw | 3 |
| 7 | 02-61562 | Circlip D1460 – 25mm | 3 |

Note: The new stub shaft assembly can be fitted into all pre–2024 models with no other modifications required.

Shaft Assembly

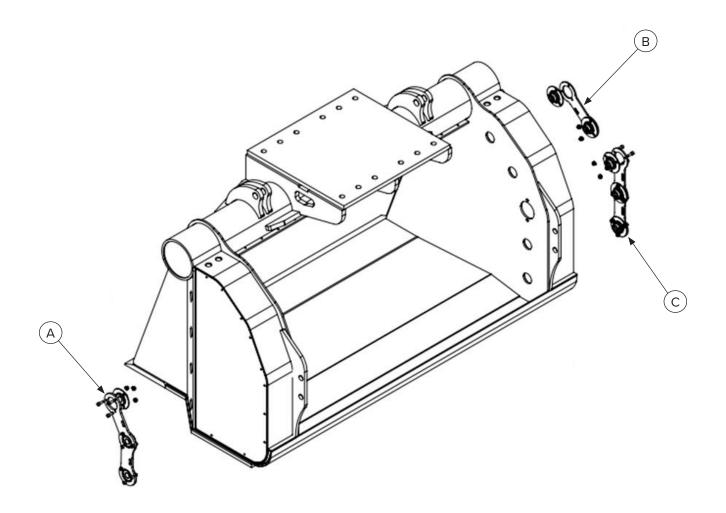
| PART NUMBER | DESCRIPTION | QTY | NOTES |
|-------------|--------------------------------|-----|--|
| 02-96587 | Keyed Shaft Assembly 145135 | 1 | Consists of: 02-51376 QTY 1 02-23430 QTY 1 |
| 02-51376 | Keyed Shaft | 1 | _ |
| 02-23430 | Bearing SLFT30C99 with Housing | 1 | _ |
| 02-67115 | Bearing Unit 6 Rotor 145135 | 1 | _ |

8.3 Belt Adjuster



| ITEM | PART NUMBER | DESCRIPTION | 145135 |
|------|-------------|---|--------|
| 1 | 02-79369 | Rosta Belt Adjuster | 4 |
| 2 | 02-72480 | Belt Adjuster Plate | 4 |
| 3 | 06-45595 | M8 X 25mm Stainless Steel Countersunk Screw | 4 |
| 4 | 06-66588 | M8 Spring Washer | 8 |
| 5 | 06-20616 | M8 X 16mm Socket Cap Screw | 8 |

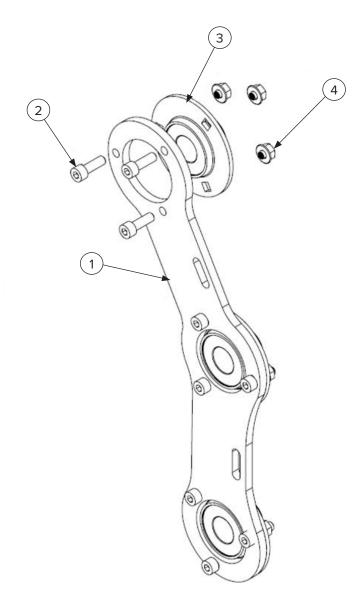
8.4 Bearing Support Group Bearing Support Group Overview



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8.4 Bearing Support Group Cont'd

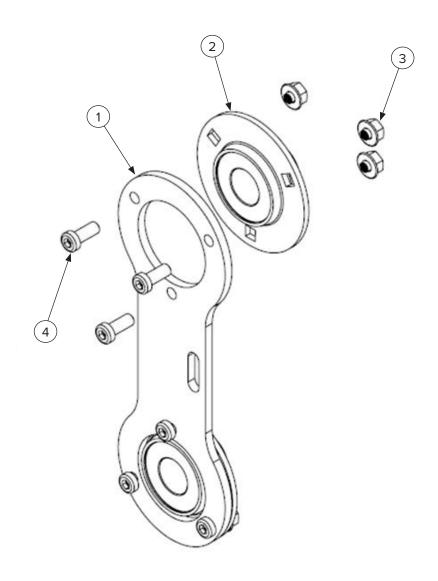
Bearing Support A



| ITEM | PART NUMBER | DESCRIPTION | 145135 |
|------|-------------|--------------------------------|--------|
| 1 | 02-81403 | Angled Bearing Support Plate | 1 |
| 2 | 06-24550 | M8 X 20mm Socket Cap Screw | 9 |
| 3 | 02-26057 | Bearing SLFE25C99 with Housing | 3 |
| 4 | 06-95773 | M8 Flange Nut | 9 |

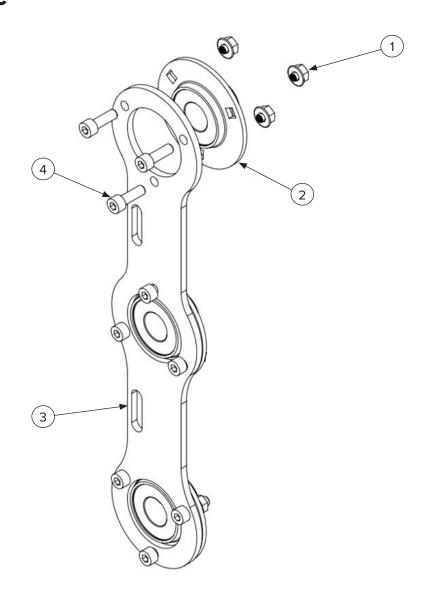
8.4 Bearing Support Group Cont'd

Bearing Support B



| ITEM | PART NUMBER | DESCRIPTION | 145135 |
|------|-------------|--------------------------------|--------|
| 1 | 02-55196 | Bearing Support Plate | 1 |
| 2 | 02-26057 | Bearing SLFE25C99 with Housing | 2 |
| 3 | 06-95773 | M8 Flange Nut | 6 |
| 4 | 06-24550 | M8 X 20mm Socket Cap Screw | 6 |

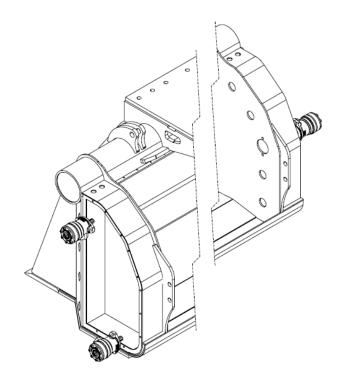
8.4 Bearing Support Group Cont'd Bearing Support C



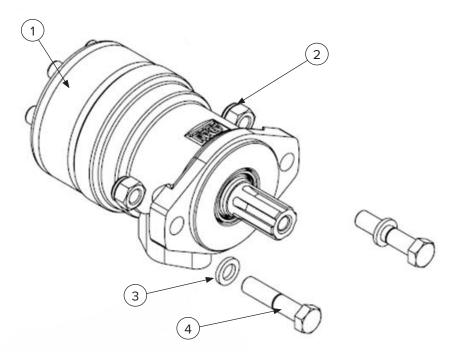
| ITEM | PART NUMBER | DESCRIPTION | 145135 |
|------|-------------|--------------------------------|--------|
| 1 | 06-95773 | M8 Flange Nut | 9 |
| 2 | 02-26057 | Bearing SLFE25C99 with Housing | 3 |
| 3 | 06-24550 | M8 X 20mm Socket Cap Screw | 9 |
| 4 | 02-20139 | Straight Bearing Support Plate | 1 |

8.5 Motor

Motor Placement

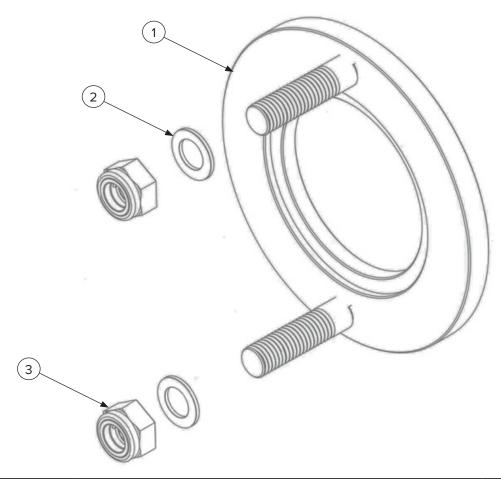


Motor Assembly



| ITEM | PART NUMBER | DESCRIPTION | 145135 |
|------|-------------|------------------------------------|--------|
| 1 | 04-74319 | MR Motor 160cc Shaft HP Shaft Seal | 3 |
| 2 | 06-21695 | M12 Nyloc Nut | 6 |
| 3 | 06-85970 | M12 Form A Flat Washer | 6 |
| 4 | 06-97778 | M12 X 50mm Hexagon Bolts | 6 |

8.5 Motor Cont'd

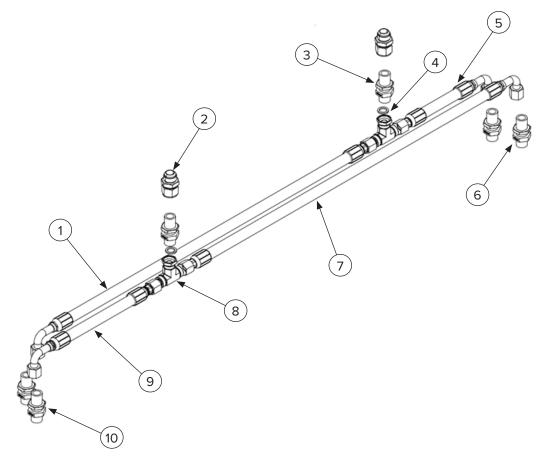


| ITEM | PART NUMBER | DESCRIPTION | 145115 | 145117 | 145120 |
|------|-------------|------------------------|--------|--------|--------|
| 1 | 03-96483 | Sealing Ring | 2 | 2 | 2 |
| 2 | 06-85970 | M12 Form A Flat Washer | 4 | 4 | 4 |
| 3 | 06-57851 | M12 Nyloc Nut | 4 | 4 | 4 |

Note: In the 2024 Model, the Sealing Ring (03-96483) replaces M12 x 50mm Hexagon Bolts (06-97778) in Motor Assembly.

8.6 Hose Assemblies

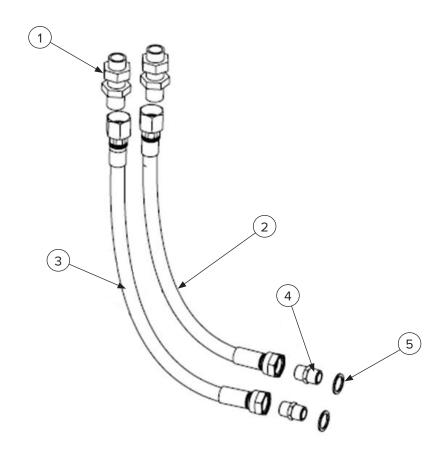
Cross-Over Hose Group



| ITEM | PART NUMBER | DESCRIPTION | 145135 |
|------|-------------|-------------------------------------|--------|
| 1 | 04-65534 | Hose | 1 |
| 2 | 04-96125 | 1" BSP — 1 3/4" M JIC Adapter | 2 |
| 3 | 04-42954 | Bulkhead Fitting 1" BSP | 2 |
| 4 | 04-17613 | Bonded Seal 1" | 2 |
| 5 | 04-21965 | Hose | 1 |
| 6 | _ | See Hose Group A Diagram on page 68 | _ |
| 7 | 04-55391 | Hose | 1 |
| 8 | 04-87882 | Tee Fitting F-F-F BSP 1" | 2 |
| 9 | 04-71074 | Hose | 1 |
| 10 | _ | See Hose Group B Diagram on page 69 | _ |

8.6 Hose Assemblies Cont'd

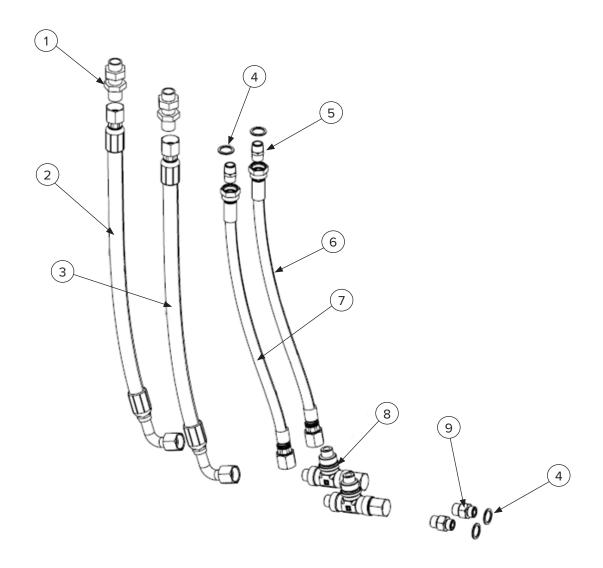
Hose Group A



| ITEM | PART NUMBER | DESCRIPTION | 145135 |
|------|-------------|-----------------------------|--------|
| 1 | 04-36833 | Bulkhead Fitting 3/4" BSP | 2 |
| 2 | 04-42188 | Hose | 1 |
| 3 | 04-76783 | Hose | 1 |
| 4 | 04-80534 | 1/2" M — 1/2" M BSP Adapter | 2 |
| 5 | 04-46759 | Bonded Seal 1/2" | 2 |

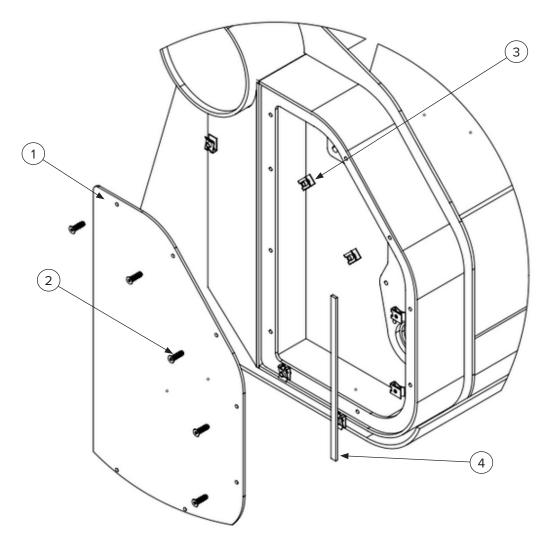
8.6 Hose Assemblies Cont'd

Hose Group B



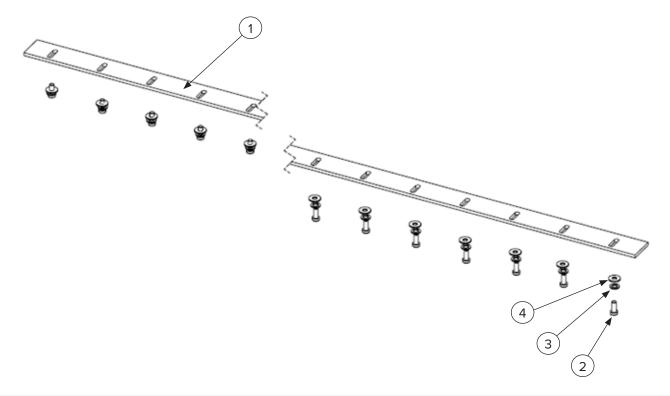
| ITEM | PART NUMBER | DESCRIPTION | 145135 |
|------|-------------|---------------------------------|--------|
| 1 | 04-36833 | Builhead Fitting 3/4" BSP | 2 |
| 2 | 04-83379 | Hose | 1 |
| 3 | 04-23514 | Hose | 1 |
| 4 | 04-46759 | Bonded Seal 1/2" | 4 |
| 5 | 04-80534 | 1/2" M — 1/2" M BSP Adapter | 2 |
| 6 | 04-73756 | Hose | 1 |
| 7 | 04-66626 | Hose | 1 |
| 8 | 04-68802 | Tee Fitting F-M-M 3/4" BSP | 2 |
| 9 | 04-27713 | 3/4" M BSP — 1/2" M BSP Adapter | 2 |

8.7 Door Group



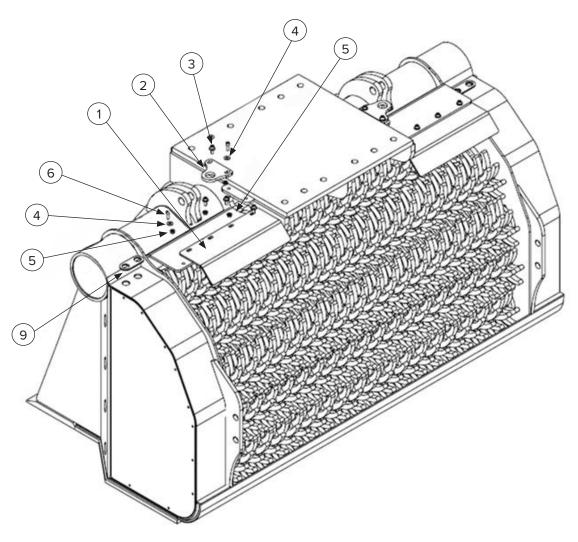
| ITEM | PART NUMBER | DESCRIPTION | 145135 |
|------|-------------|-------------------------------------|--------|
| 4 | 01-57483 | 6 Rotor Door Cover (Left) | 1 |
| | 01-65748 | 6 Rotor Door Cover (Right) | 1 |
| 2 | 06-57851 | M6 X 25mm Socket Countersunk Screw | 20 |
| 3 | 06-89811 | M6 Speed Nut | 20 |
| 4 | 07-89732 | Self Adhesive Seal (1 meter length) | 6 |

8.8 Stripper Plate



| ITEM | PART NUMBER | DESCRIPTION | 145135 |
|------|-------------|----------------------------|--------|
| 1 | 05-62817 | Stripper Plate | 1 |
| 2 | 06-24550 | M8 X 20mm Socket Cap Screw | 15 |
| 3 | 06-66588 | M8 Spring Washer | 15 |
| 4 | 06-44950 | M8 Flat Washer | 20 |

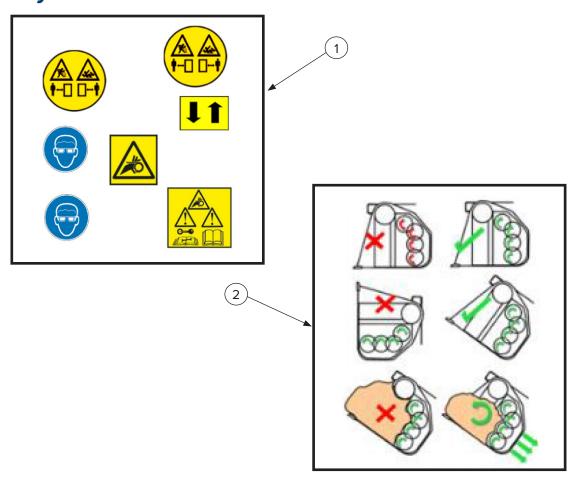
8.9 Accessories



| ITEM | PART NUMBER | DESCRIPTION | 145135 |
|------|-------------|-----------------------------|--------|
| 1 | 05-92216 | Stone Guard | 2 |
| 2 | 01-33950 | Hose Ear | 2 |
| 3 | 06-38462 | M10 X 35mm Socket Cap Screw | 4 |
| 4 | 06-83734 | Flat Washer S10 | 20 |
| 5 | 06-18546 | M10 Nyloc Nut | 8 |
| 6 | 06-81127 | M10 X 30mm Socket Cap Screw | 8 |
| 7 | 01-20740 | Hose Plate | 2 |

9. Decals

9.1 Safety Decals

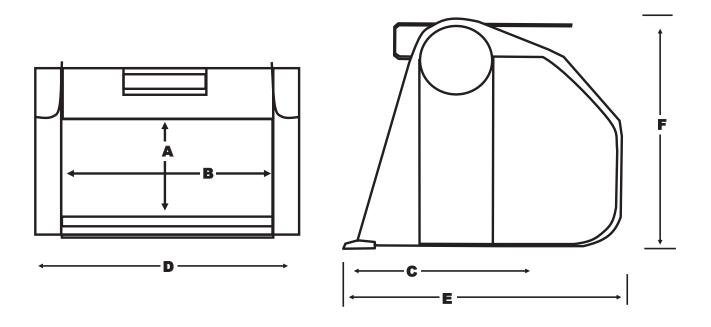


| ITEM | PART NUMBER | DESCRIPTION | 145110 | 145010 | 145015 |
|------|-------------|-------------------------|--------|--------|--------|
| 1 | 07-16894 | Safety Decal Kit | 1 | 1 | 1 |
| 2 | 07-50421 | Advisory Decal One Size | 1 | 1 | 1 |

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10. Specifications

10.1 Attachment Specifications



| MODEL NUMBER | SCREENING | G AREA (IN) | SCREENING AREA (MM) | | |
|--------------|-----------|-------------|---------------------|------|--|
| MODEL NUMBER | А | В | Α | В | |
| 145110 | 17 | 32 | 430 | 800 | |
| 145010 | 17 | 47 | 430 | 1200 | |
| 145015 | 17 | 59 | 430 | 1500 | |
| 145115 | 24 | 39 | 615 | 1000 | |
| 145117 | 24 | 47 | 615 | 1200 | |
| 145120 | 24 | 59 | 615 | 1500 | |
| 145135 | 41 | 59 | 1030 | 1500 | |

10. Specifications

10.2 Attachment Specifications Cont'd

| DESCRIPTION | 145110 | 145010 | 145015 | 145115 | 145117 | 145120 | 145135 |
|------------------------------|------------------------|------------------------|------------------------|------------------------|--|------------------------|------------------------|
| Scooping Depth (C) (in / cm) | 20 in / | 20 in / | 20 in / | 23 in / | 23 in / | 22 in / | 35 in / |
| | 500 mm | 620 mm | 620 mm | 670 mm | 670 mm | 570 mm | 900 mm |
| Width (D) | 40 in / | 56 in / | 74 in / | 53 in / | 61 in / | 74 in / | 74 in / |
| (in / mm) | 1010 mm | 1410 mm | 1710 mm | 1350 mm | 1350 mm | 1870 mm | 1870 mm |
| Full Depth (E) | 30 in / | 30 in / | 30 in / | 32 in / | 32 in / | 32 in / | 53 in / |
| (in / mm) | 790 mm | 850 mm | 850 mm | 900 mm | 900 mm | 820 mm | 1340 mm |
| Height (F) | 25 in / | 25 in / | 25 in / | 35 in / | 35 in / | 35 in / | 51 in / |
| (in / mm) | 640 mm | 640 mm | 640 mm | 880 mm | 880 mm | 880 mm | 1300 mm |
| Capacity | 0.24 yd ³ / | 0.34 yd ³ / | 0.46 yd ³ / | 0.46 yd ³ / | 0.52 yd ³ / 0.40 m ³ | 0.79 yd ³ / | 1.57 yd ³ / |
| (yd³/ m³) | 0.18 m ³ | 0.26 m ³ | 0.35 m ³ | 0.35 m ³ | | 0.60 m ³ | 1.20 m ³ |

| MODEL NUMBER | HYDRAULIC REQUIREMENT | | | | | | |
|--------------|-----------------------|------------|----------------|----------------|--|--|--|
| MODEL NUMBER | FLOW (Gal/min) | FLOW (L/m) | PRESSURE (PSI) | PRESSURE (Bar) | | | |
| 145110 | 14.5 | 55 | 2900 | 200 | | | |
| 145010 | 17.2 | 65 | 2900 | 200 | | | |
| 145015 | 18.5 | 70 | 2900 | 200 | | | |
| 145115 | 23.75 | 90 | 2900 | 200 | | | |
| 145117 | 23.75 | 90 | 2900 | 200 | | | |
| 145120 | 24 | 90 | 2900 | 200 | | | |
| 145135 | 42 | 150 | 2900 | 200 | | | |

10. Specifications

10.2 Torque Specifications

Standard Hardware and Lock Nuts

| BOLT TYPE | CLASS 4.8 | | CLASS 8.8 OR 9.8 | | CLASS 10.9 | | CLASS 12.9 | |
|---------------|-------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|
| Size | Lubricated | Dry | Lubricated | Dry | Lubricated | Dry | Lubricated | Dry |
| MC | 4.8 N•m | 6 N•m | 9 N•m | 11 N•m | 13 N•m | 17 N•m | 15 N•m | 19 N•m |
| M6 | 3.5 in / lb | 4.5 in / lb | 6.5 in / lb | 8.5 in / lb | 9.5 in / lb | 12 in / lb | 11.5 in / lb | 14.5 in / lb |
| MO | 12 N•m | 15 N•m | 22 N•m | 28 N•m | 32 N•m | 40 N•m | 37 N•m | 47 N•m |
| M8 | 8.5 in / lb | 11 in / lb | 16 in / lb | 20 in / lb | 24 in / lb | 30 in / lb | 28 in / lb | 35 in / lb |
| 1440 | 23 N•m | 29 N•m | 43 N•m | 55 N•m | 63 N•m | 80 N•m | 75 N•m | 95 N•m |
| M10 | 17 in / lb | 21 in / lb | 32 in / lb | 40 in / lb | 47 in / lb | 60 in / lb | 55 in / lb | 70 in / lb |
| 1440 | 40 N•m | 50 N•m | 75 N•m | 95 N•m | 110 N•m | 140 N•m | 130 N•m | 165 N•m |
| M12 | 29 in / lb | 37 in / lb | 55 in / lb | 70 in / lb | 80 in / lb | 105 in / lb | 95 in / lb | 120 in / lb |
| N 44.4 | 63 N•m | 80 N•m | 120 N•m | 150 N•m | 175 N•m | 225 N•m | 205 N•m | 260 N•m |
| M14 | 47 in / lb | 60 in / lb | 88 in / lb | 110 in / lb | 130 in / lb | 165 in / lb | 150 in / lb | 190 in / lb |
| N44C | 135 N•m | 175 N•m | 260 N•m | 330 N•m | 375 N•m | 475 N•m | 440 N•m | 560 N•m |
| M16 | 100 in / lb | 125 in / lb | 195 in / lb | 250 in / lb | 275 in / lb | 350 in / lb | 325 in / lb | 410 in / lb |
| N440 | 135 N•m | 175 N•m | 260 N•m | 330 N•m | 375 N•m | 475 N•m | 440 N•m | 560 N•m |
| M18 | 100 in / lb | 125 in / lb | 195 in / lb | 250 in / lb | 275 in / lb | 350 in / lb | 325 in / lb | 410 in / lb |
| M20 | 190 N•m | 240 N•m | 375 N•m | 475 N•m | 530 N•m | 675 N•m | 625 N•m | 800 N•m |
| M20 | 140 in / lb | 180 in / lb | 275 in / lb | 350 in / lb | 400 in / lb | 500 in / lb | 460 in / lb | 580 in / lb |
| | 260 N•m | 330 N•m | 510 N•m | 650 N•m | 725 N•m | 925 N•m | 850 N•m | 1075 N•m |
| M22 | 190 in / lb | 250 in / lb | 375 in / lb | 475 in / lb | 540 in / lb | 675 in / lb | 625 in / lb | 800 in / lb |
| N42.4 | 330 N•m | 425 N•m | 650 N•m | 825 N•m | 925 N•m | 1150 N•m | 1075 N•m | 1350 N•m |
| M24 | 250 in / lb | 310 in / lb | 475 in / lb | 600 in / lb | 675 in / lb | 850 in / lb | 800 in / lb | 1000 in / lb |
| MOZ | 490 N•m | 625 N•m | 950 N•m | 1200 N•m | 1350 N•m | 1700 N•m | 1600 N•m | 2000 N•m |
| M27 | 360 in / lb | 450 in / lb | 700 in / lb | 875 in / lb | 1000 in / lb | 1250 in / lb | 1150 in / lb | 1500 in / lb |
| M30 | 675 N•m | 850 N•m | 1300 N•m | 1650 N•m | 1850 N•m | 2300 N•m | 2150 N•m | 2700 N•m |
| IVISO | 490 in / lb | 625 in / lb | 950 in / lb | 1200 in / lb | 1350 in / lb | 1700 in / lb | 1600 in/lb | 2000 in / lb |
| M33 | 900 N•m | 1150 N•m | 1750 N•m | 2200 N•m | 2500 N•m | 3150 N•m | 2900 N•m | 3700 N•m |
| 14133 | 675 in / lb | 850 in / lb | 1300 in / lb | 1650 in / lb | 1850 in / lb | 2350 in / lb | 2150 in / lb | 2750 in / lb |
| M36 | 1150 N•m | 1450 N•m | 2250 N•m | 2850 N•m | 3200 N•m | 4050 N•m | 3750 N•m | 4750 N•m |
| IVIJO | 850 in / lb | 1075 in / lb | 1650 in / lb | 2100 in / lb | 2350 in / lb | 3000 in / lb | 2750 in/lb | 3500 in/lb |

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Warranty

MANUFACTURER'S LIMITED WARRANTY

BLUE DIAMOND® ATTACHMENTS, a manufacturer of quality attachments, warrants new BLUE DIAMOND® ATTACHMENTS products and/or attachments at the time of delivery to the original purchaser, to be free from defects in material and workmanship when properly set up and operated in accordance with the recommendations set forth by BLUE DIAMOND® ATTACHMENTS, LLC.

BLUE DIAMOND® ATTACHMENTS liability for any defect with respect to accepted goods shall be limited to repairing the goods at a BLUE DIAMOND® ATTACHMENTS designated location or at an authorized dealer location, or replacing them, as BLUE DIAMOND® ATTACHMENTS shall elect. The above shall be in accordance with BLUE DIAMOND® ATTACHMENTS warranty adjustment policies. BLUE DIAMOND® ATTACHMENTS obligation shall terminate twelve (12) months for the Screening Bucket after the delivery of the goods to original purchaser.

This warranty shall not apply to any machine or attachment which shall have been repaired or altered outside the BLUE DIAMOND® ATTACHMENTS factory or authorized BLUE DIAMOND® ATTACHMENTS dealership or in any way so as in BLUE DIAMOND® ATTACHMENTS judgment, to affect its stability or reliability, nor which has been subject to misuse, negligence or accident beyond the company recommended machine rated capacity.

WARRANTY CLAIM

To submit a warranty claim, a claim must be filed with BLUE DIAMOND® ATTACHMENTS before work is performed. The BLUE DIAMOND® PRODUCT SUPPORT TEAM will advise repairs and applicable parts exchanges. Tampering with the failed part may void the warranty. This warranty does not include freight or delivery charges incurred when returning machinery for servicing. Dealer mileage, service calls, and pickup/delivery charges are the customers' responsibility.

EXCLUSIONS OF WARRANTY

Except as otherwise expressly stated herein, BLUE DIAMOND® ATTACHMENTS makes no representation or warranty of any kind, expressed or implied, AND MAKES NO WARRANTY OF MERCHANTABILITY IN RESPECT TO ITS MACHINERY AND/OR ATTACHMENTS ARE FIT FOR ANY PARTICULAR PURPOSE. BLUE DIAMOND® ATTACHMENTS shall not be liable for incidental or consequential damages for any breach or warranty, including but not limited to inconvenience, rental of replacement equipment, loss of profits or other commercial loss. Upon purchase, the buyer assumes all liability for all personal injury and property resulting from the handling, possession, or use of the goods by the buyer.

No agent, employee, or representative of BLUE DIAMOND® ATTACHMENTS has any authority to bind BLUE DIAMOND® ATTACHMENTS to any affirmation, representation, or warranty concerning its machinery and/or attachments except as specifically set forth herein.

This warranty policy supersedes any previous documents.

NOTE: Blue Diamond® Attachments is a trademark of BLUE DIAMOND® ATTACHMENTS



QUALITY | DEPENDABILITY | INTEGRITY

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