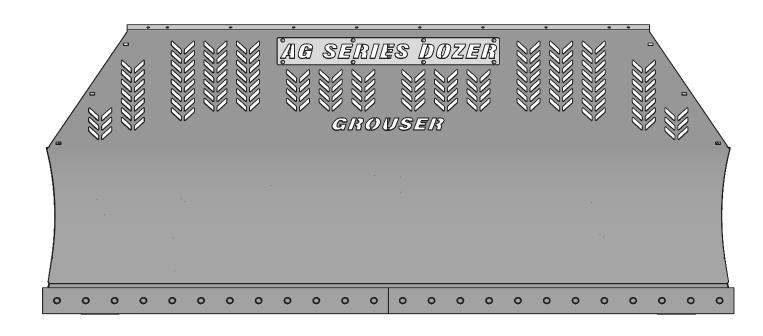


# AG240 Dozer Owner's Manual & Parts Book



#### **Grouser Products**

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Purchase Date

Serial Number

Model Number

Tractor Model

Dealer

PN: 63-45043 Serial #:10209112-Current Date 5-7-2024

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Thank you for your recent purchase of a Grouser dozer blade. Welcome to the family of satisfied Grouser blade owners. Grouser Products is committed to offering quality products to help professionals in their daily jobs. We are also committed to providing you the highest level of customer satisfaction possible. Again, thank you for your patronage. We look forward to serving you.

This manual contains information concerning the operation, adjustment, safety and maintenance of the AG240 Dozer. You have purchased a dependable, long lasting piece of equipment. You can expect to receive long lasting performance and long service built into our products with proper care and operation. Please have all operators read and understand this manual carefully. Keep the manual available for reference. If, for any reason, you have questions or comments, we would be happy to hear from you. Call our toll-free number, 701-282-7710, or send us an e-mail at info@grouser.com. You can expect us to respond to your e-mail in a timely manner.

Torque Specifications

A careful operator is the best operator. Most accidents can be avoided by observing certain precautions. To help prevent accidents, read and take the following precautions before operating this equipment. In addition, please follow all safety and operational instructions of your tractor manufacturer.

#### The Dozer:

- 1. The AG240 Dozer should be operated only by those who are responsible and instructed to do so.
- 2. Read the owner's manual carefully before using this equipment. Lack of operating knowledge can lead to accidents.
- 3. Keep the dozer maintained in reliable and satisfactory condition to ensure your safety.
- 4. Make sure the area is clear of people before moving any equipment.
- 5. Do not modify or permit anyone else to modify or alter the equipment and its components without first consulting Grouser Products.
- 6. Lower the blade to the ground when not in use.

#### Servicing the Dozer:

- 1. Read and follow all safety instructions provided by the tractor manufacturer.
- 2. Always use proper personal safety gear when performing maintenance on equipment.
- 3. Before servicing, relieve hydraulic pressure, stop engine and fully engage parking brake.
- 4. Escaping hydraulic fluid under pressure can penetrate skin causing serious injury. If fluid is injected into skin, obtain medical attention immediately.
  - DO NOT use your hand to check for leaks. Use a piece of cardboard or paper to search for leaks.
  - Stop the engine and relieve pressure before connecting or disconnecting lines.
  - Tighten all connections before starting the engine or pressurizing lines.

#### Storing the Dozer:

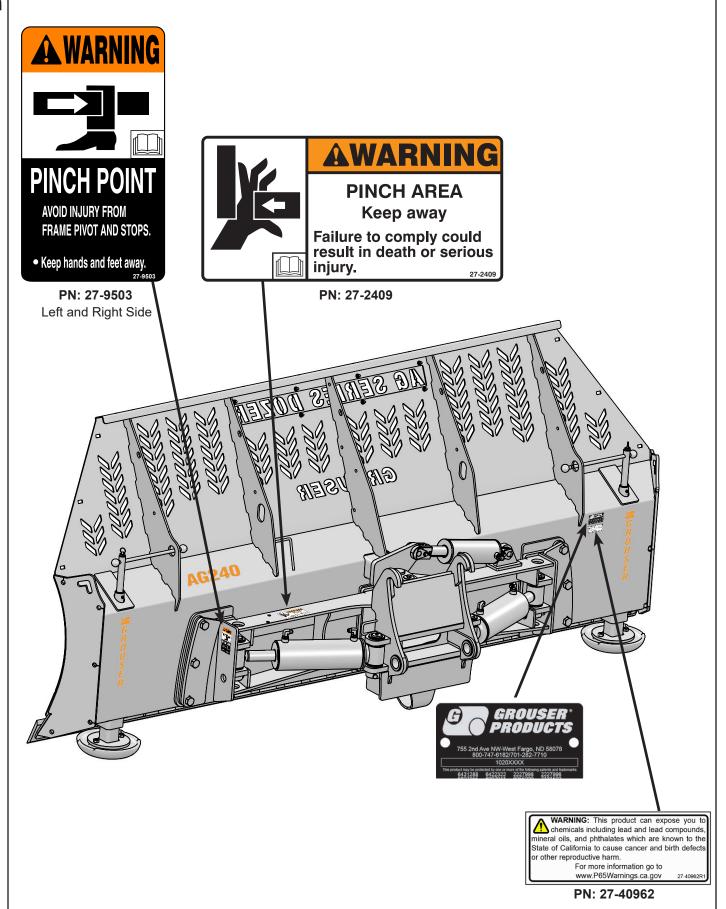
- 1. Thoroughly clean the inside and outside of the dozer before storage. Use paint where necessary to prevent rust.
- 2. Check the dozer for worn or damaged parts. Install new parts as required.
- 3. Lubricate all pins and joints.

Tighten all bolts to the values listed below unless otherwise noted. Refer to the parts lists for proper length and grade of the bolts.

|      | Torque - Dry (ft-lbs) |        |       |        |  |  |
|------|-----------------------|--------|-------|--------|--|--|
|      | SAE G                 | rade 5 | SAE G | rade 8 |  |  |
| Size | UNC                   | UNF    | UNC   | UNF    |  |  |
| 5/16 | 17                    | 19     | 24    | 27     |  |  |
| 3/8  | 30                    | 35     | 45    | 50     |  |  |
| 7/16 | 50                    | 55     | 70    | 80     |  |  |
| 1/2  | 75                    | 85     | 110   | 120    |  |  |
| 9/16 | 110                   | 120    | 150   | 170    |  |  |
| 5/8  | 150                   | 170    | 210   | 240    |  |  |
| 3/4  | 260                   | 300    | 380   | 420    |  |  |
| 7/8  | 430                   | 470    | 600   | 670    |  |  |
| 1    | 640                   | 720    | 910   | 1020   |  |  |

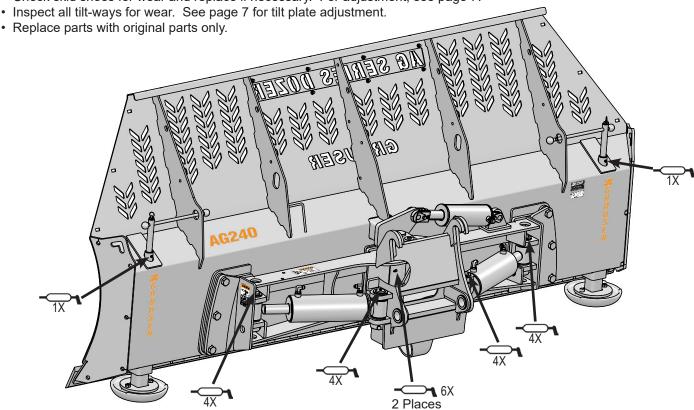
|            | Torque - Dry (ft-lbs) |
|------------|-----------------------|
| Size       | Grade 10.9            |
| M18 x 2.50 | 284                   |
| M20 x 2.50 | 401                   |
| M22 x 2.50 | 547                   |
| M24 x 3.00 | 694                   |

|      | Angle/Tilt Function Abbreviation Key |       |  |  |  |  |  |
|------|--------------------------------------|-------|--|--|--|--|--|
| HAHT | Hydraulic Angle - Hydraulic Tilt     | 6-Way |  |  |  |  |  |
| HANT | Hydraulic Angle - No Tilt            | 4-Way |  |  |  |  |  |
| NANT | No Angle - No Tilt                   | 2-Way |  |  |  |  |  |



# Due to the harsh environment this equipment operates in, the following tasks should be performed every 10 hours or less.

- Inspect all equipment before operation for existing or potential damage.
- · Lubricate all joints with high quality grease. See below for grease locations.
- Inspect all bolts, and tighten any loose bolts to torque specifications on page 3.
- · Check replaceable cutting edge for wear ensuring there is enough material to prevent permanent damage to the blade.
- Check hydraulic cylinders and hoses for damage or leaks. For replacement parts, see hydraulic pages for your specific system.
- If equipped with hydraulic multi-coupler, see page 16-18 for hydraulic multi-coupler maintenance.
- Make sure all non-rotating pins are secured properly.
- Inspect all decals and order replacement decals from your dealer if any are damaged or worn.
- Check skid shoes for wear and replace if necessary. For adjustment, see page 7.



|                                  | Grease Locations |
|----------------------------------|------------------|
| Hydraulic Angle & Hydraulic Tilt | 10               |
| Hydraulic Angle & No Tilt        | 10               |
| No Angle & No Tilt               | 4                |

NOTE: Only the HAHT system is shown.

HAHT and HANT have similar grease locations.

NANT only has grease locations on the ratchet jacks.

#### To Connect:

Note: If necessary, use a spotter to help center the blade on the lift system.

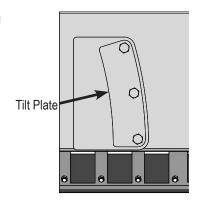
- 1. Lift the locking latch and push the quick attach lock handle on the left side of the lift system to open the quick attach system. Refer to Lift System Parts Book for further clarification on the quick attach system.
- 2. Drive the tractor forward slowly until the top edge of the male quick attach is under the top angle frame hook.
- 3. Raise the lift system until the male quick attach engages the angle frame hooks. Continue to raise the lift system until the blade is off the ground and the angle frame is against the front of the male quick attach.
- 4. Shut off the tractor engine and set the parking brake.
- 5. Pull the quick attach lock handle to engage the quick attach pins and lift the locking latch to lock the handle in place.
- 6. Clean and connect hydraulic couplers on the top arm. Refer to Lift System Parts Book for proper locations of all functions.

#### To Disconnect:

- 1. Lower the blade until the cutting edge is off the ground a few inches.
- 2. Shut off the tractor engine and set the parking brake.
- 3. Unhook all of the hydraulic couplers on the top arm.
- 4. Lift the locking latch and push the quick attach lock handle to disengage the quick attach pins.
- 5. Start tractor, disengage the parking brake, and lower the blade until cutting edge is on the ground.
- 6. Continue to slowly lower the lift system to disengage the blade.
- 7. Slowly back away from the blade. When lift system is clear from the blade, raise the lift system.
- 8. Shut off the tractor engine and set the parking brake.
- 9. Pull the quick attach lock handle and lift the locking latch to lock the handle in place.

#### Note: Do not remove all of the bolts at the same time.

- 1. The preferred blade position for adjusting the tilt plates is laying face down on blocks.
- 2. Remove the top and bottom bolts from each tilt plate.
- 3. Add or remove washers as needed to adjust tilt-way clearance to 1/16" 1/8".
- 4. Reinstall top and bottom bolts.
- 5. Follow Steps #2-4 for the center bolts.
- 6. Once the tilt-way clearance is set, torque bolts to 640 ft-lbs.

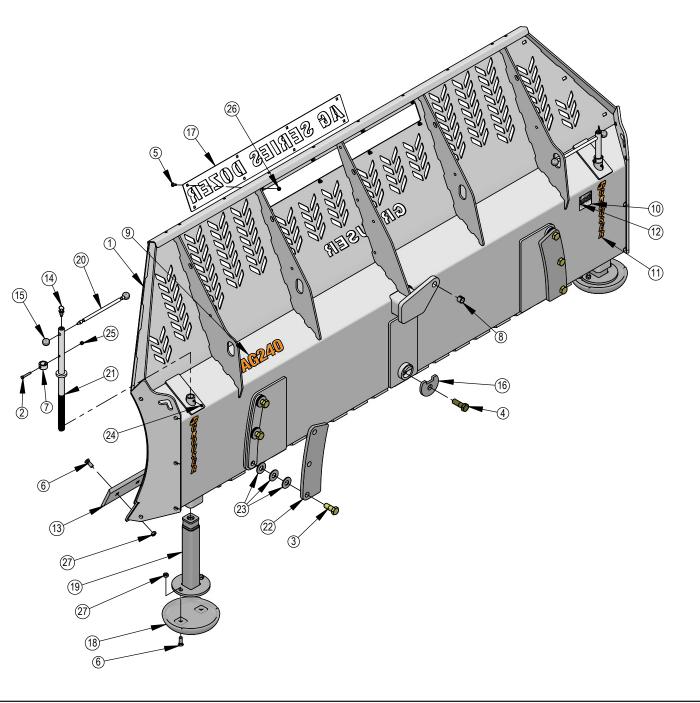


#### **Skid Shoe Adjustment:**

- 1. Pull up on the retractable plunger on the top of the threaded rod to release the handle.
- 2. Slide the handle out from the locking position on the blade.
- 3. Turn the handle to adjust the skid shoe to the preferred height.
- 4. Place the hande back in the hole on the blade and lock in place with the retractable plunger.

| ITEM<br>No. | PART NO.    | 12'<br>Qty. | 14'<br>Qty. | 16'<br>Qty. | DESCRIPTION                        |
|-------------|-------------|-------------|-------------|-------------|------------------------------------|
| 1           | 15-41815-12 | 1           | -           | -           | 240 Blade Weld - 12'               |
| 1           | 15-41815-14 | -           | 1           | -           | 240 Blade Weld - 14'               |
| 1           | 15-41815-16 | -           | -           | 1           | 240 Blade Weld - 16'               |
| 2           | 16-20069    | 2           | 2           | 2           | 3/8" X 2-1/4" Hex Bolt Gr 5 NC CZ  |
| 3           | 16-20560    | 6           | 6           | 6           | 1" X 2-1/2" Hex Bolt Gr 8 NC YZ    |
| 4           | 16-20562    | 1           | 1           | 1           | 1" X 3" Hex Bolt Gr 8 NC YZ        |
| 5           | 16-21064    | 8           | 8           | 8           | 3/8" x 1" Carriage Bolt Gr 5 NC CZ |
| 6           | 16-21666    | 28          | 32          | 36          | 5/8" X 1-3/4" Plow Bolt Gr 5 NC    |
| 7           | 19-43777    | 2           | 2           | 2           | Bushing                            |
| 8           | 19-7774     | 1           | 1           | 1           | 1" x 1" Spring Bushing             |
| 9           | 27-17262    | 1           | 1           | 1           | Ag 240 Decal                       |
| 10          | 27-40962    | 1           | 1           | 1           | Warning Prop 65 Decal              |
| 11          | 27-9505     | 2           | 2           | 2           | Grouser Vertical Decal             |
| 12          | NA          | 1           | 1           | 1           | Serial Number Tag                  |
| 13          | 29-7950-6   | 2           | -           | -           | Cutting Edge                       |
| 13          | 29-7950-7   | -           | 2           | -           | Cutting Edge                       |
| 13          | 29-7950-8   | -           | -           | 2           | Cutting Edge                       |

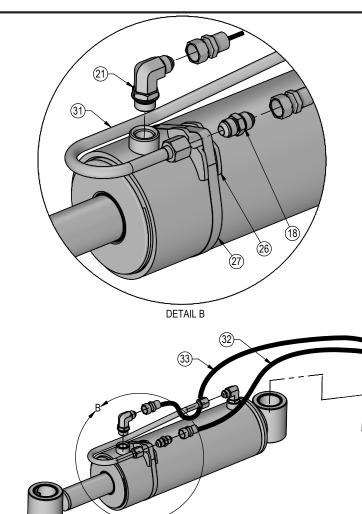
| ITEM<br>NO. | PART NO. | 12'<br>Qty.         | 14'<br>Qty. | 16'<br>Qty.             | DESCRIPTION                      |
|-------------|----------|---------------------|-------------|-------------------------|----------------------------------|
| 14          | 34-40852 | 2                   | 2           | 2                       | Retractable Spring Plunger, 3/8" |
| 15          | 34-40853 | 4                   | 4           | 4                       | Knob, 1-1/2" Ball                |
| 16          | 44-15339 | 1                   | 1           | 1                       | Back Drag Plate                  |
| 17          | 44-16880 | 1                   | 1           | 1                       | Ag Series Name Plate             |
| 18          | 50-15458 | 2                   | 2           | 2                       | 12" Round Mushroom Skid Shoe     |
| 19          | 50-40739 | 2                   | 2           | 2                       | Skid Shoe Mount, 240             |
| 20          | 50-40857 | 2                   | 2           | 2                       | Handle, Skid Shoe                |
| 21          | 50-43775 | i0-43775 2 2 2 Thre |             | Threaded Rod, Skid Shoe |                                  |
| 22          | 52-17265 | 2                   | 2           | 2                       | 240 Tilt Plate                   |
| 23          | 57-20749 | 18                  | 18          | 18                      | 1" Flat Washer CZ                |
| 24          | 58-9369  | 2                   | 2           | 2                       | Straight 1/8" NPT Grease Zerk    |
| 25          | 70-20612 | 2                   | 2           | 2                       | 3/8" Nyloc Hex Nut Gr 5 NC CZ    |
| 26          | 70-20622 | 8                   | 8           | 8                       | 3/8" Flange Hex Nut Gr 5 NC CZ   |
| 27          | 70-20646 | 28                  | 32          | 36                      | 5/8" Hex Top Lock Nut Gr 5 NC CZ |

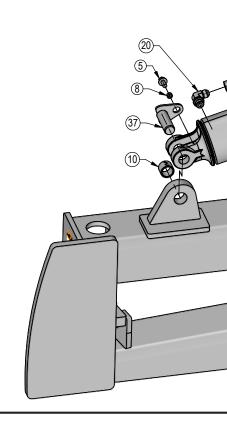


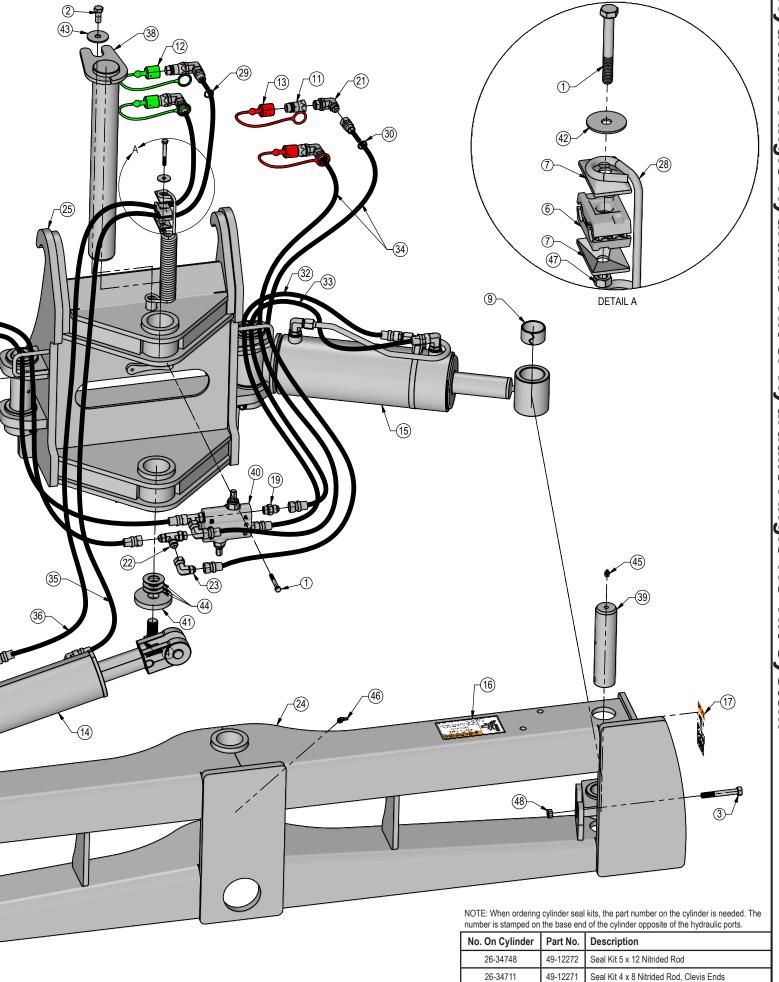
| Qtv. | Qtv.  | 16'<br>Qty. | DESCRIPTION                                    |   |
|------|---|-------------|--|---|
| 1    | -   | -           | 240 HANT Blade Weld                            |   |
| -    | 1   | -           |  |   |
| -    | -   | 1           |  |   |
| 2    | 2   | 2           | 3/8" X 2-1/4" Hex Bolt Gr 5 NC CZ              |   |
| 8    | 8   | 8           | 3/8" x 1" Carriage Bolt Gr 5 NC CZ             |   |
| 28   | 32  | 36          | 5/8" X 1-3/4" Plow Bolt Gr 5 NC (#3 Flat Head) |   |
| 2    | 2   |             | Bushing  |   |
| 1    | 1   |             |  |   |
|      |   |             |  |   |
|      | +   | _           |  |   |
|      |   |             | _  |   |
| -    |   | <b>!</b>    |  |   |
| _    | -   |             |  |   |
|      |   |             |  |   |
|      |   |             |  |   |
|      |   |             |  |   |
|      |   | _           |  |   |
|      |   |             | -  |   |
|      |   |             |  |   |
|      |   |             |  |   |
| 4    | 4   | 4           |  |   |
| 2    | 2   | 2           | 3/8" Nyloc Hex Nut Gr 5 NC CZ                  |   |
| 8    | 8   | 8           | 3/8" Flange Hex Nut Gr 5 NC CZ                 |   |
| 28   | 32  | 36          | 5/8" Hex Top Lock Nut Gr 5 NC CZ               |   |
|      |   |             |  |   |
|      | 2<br>8<br>28<br>2<br>1<br>1<br>2<br>1<br>2<br>2<br>4<br>2<br>2<br>4<br>2<br>2<br>2<br>4<br>2<br>2<br>8<br>2<br>2<br>8<br>2<br>8<br>2<br>8 | 1           | 1 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1            | 1 - 240 HANT Blade Weld 1 1 240 HANT Blade Weld 2 2 2 3/8" X 2" Hex Bolt Gr 5 NC CZ 8 8 8 8 8 3/8" x 1" Carriage Bolt Gr 5 NC CZ 2 8 32 36 5/8" X 1-3/4" Plow Bolt Gr 5 NC (#3 Flat Head) 2 2 2 2 Bushing 1 1 1 1 Ag 240 Decal 1 1 1 1 Grouser Dozer Metal Serial Tag 2 2 2 2 Grouser Vertical Decal 2 2 2 2 Cutting Edge Cutting Edge 2 Cutting Edge 2 2 2 Retractable Spring Plunger, 3/8" 4 4 4 4 Knob, 1-1/2" Ball 2 2 2 2 Skid Shoe Mount, 240 1 1 1 Ag Series Name Plate 2 2 2 12" Round Mushroom Skid Shoe 2 2 2 2 Handle, Skid Shoe 2 2 2 12" Round Mushroom Skid Shoe 4 4 4 Straight 1/8" NPT Grease Zerk 2 2 2 3/8" Nyloc Hex Nut Gr 5 NC CZ 3 8 8 8 8 3/8" Flange Hex Nut Gr 5 NC CZ 3 8 8 8 8 3/8" Flange Hex Nut Gr 5 NC CZ 3 8 8 8 8 8 3/8" Flange Hex Nut Gr 5 NC CZ 3 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 |

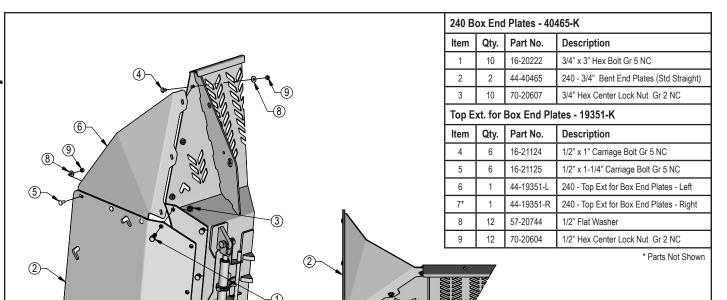
|      |                   | Configuration                                      | НАНТ | HANT |
|------|-------------------|--|------|------|
| Item | Part No.          | Description  | Qty. | Qty. |
| 1    | 16-20040          | 5/16" x 2-1/2" Hex Bolt Gr 5 NC                    | 3    | 2    |
| 2    | 16-20125          | 1/2" X 1-1/4" Hex Bolt Gr 5 NC                     | 1    | -    |
| 3    | 16-20134          | 1/2" x 3-1/2" Hex Bolt Gr 5 NC                     | 4    | 4    |
| 4    | 16-20558          | 1" x 2" Hex Bolt Gr 8 NC                           | 1    | 1    |
| 5    | 16-35C612         | 3/8" x 3/4" Flanged Bolt                           | 2    | -    |
| 6    | 18-19311-02-P-062 | Hose Clamp   | 1    | -    |
| 7    | 18-19312-02       | Twin Cover Plate                                   | 2    | -    |
| 8    | 19-13577          | NR Pin Spacer Clevis End                           | 2    | -    |
| 9    | 19-40419          | 2.25 x 2.00 x 1.38 Spring Bushing                  | 8    | 8    |
| 10   | 19-7774           | 1"x1" Spring Bushing                               | 1    | -    |
| 11   | 25-34342          | Tappet Quick Coupler - Male                        | 4    | 2    |
| 12   | 25-3453           | Pioneer Dust Cap Tilt (Green)                      | 2    | -    |
| 13   | 25-3455           | Pioneer Dust Cap Angle (Red)                       | 2    | 2    |
| 14   | 26-34711          | 4 x 8 Cylinder W/ Cast Clevis Ends                 | 1    | -    |
| 15   | 26-34748          | 5 x 12 Cylinder W/ Tube Ends (2.0")                | 2    | 2    |
| 15A  | 26-34759          | 5 x 10 Cylinder W/ Tube Ends (2.0")                | 2    | 2    |
| 16   | 27-2409           | Pinch Decal (Hand)                                 | 1    | -    |
| 17   | 27-9503           | Pinch Decal (Foot)                                 | 2    | -    |
| 18   | 31-11699-8-8      | JIC Union (2403-8-8)                               | 2    | 2    |
| 19   | 31-34040          | Straight JIC x O-Ring (6400-8-8)                   | 2    | 2    |
| 20   | 31-34050          | Straight Thread Elbow 90° JIC x O-Ring (6801-8-8)  | 2    | -    |
| 21   | 31-34051          | Straight Thread Elbow 90° JIC x O-Ring (6801-8-10) | 8    | 6    |
| 22   | 31-34070          | Run Tee JIC x O-Ring (6804-8-8-8)                  | 2    | 2    |
| 23   | 31-34100          | Swivel Nut Elbow 90° JIC (6500-8-8)                | 2    | 2    |
| 24   | 32-18400          | Tilt Frame (2.0")                                  | 1    | -    |
| 25   | 32-18410          | Angle Frame (2.0")                                 | 1    | 1    |
| 26   | 34-12932          | Cylinder Saddle                                    | 2    | 2    |
| 27   | 34-12933          | Hose Clamp   | 2    | 2    |
| 28   | 34-13807          | Spring, Hose Support                               | 1    | -    |
| 29   | 34-18888-GR       | -12 Green - Spiral Band                            | 2    | -    |
| 30   | 34-18888-RD       | -12 Red - Spiral Band                              | 2    | 2    |
| 31   | 35-17260          | 240 Formed Steel Line                              | 2    | 2    |
| 31A  | 35-40780          | 240 Formed Steel Line (LPA)                        | 2    | 2    |
| 32   | 35-31010          | 25" x 3/8" -8 JIC/-8 JIC Hose w/ Cordura           | 2    | 2    |
| 33   | 35-31013          | 28" x 3/8" -8 JIC/-8 JIC Hose w/ Cordura           | 2    | 2    |
| 34   | 35-31022          | 39" x 3/8" -8 JIC/-8 JIC Hose w/ Cordura           | 2    | 2    |
| 35   | 35-31030          | 63" x 3/8" -8 JIC/-8 JIC Hose w/ Cordura           | 1    |      |
| 36   | 35-31032          | 69" x 3/8" -8 JIC/-8 JIC Hose w/ Cordura           | 1    | _    |
| 37   | 43-13580          | 1" Clevis Bolt in Pin                              | 2    | _    |
| 38   | 43-16925          | Angle Pin  | 1    | 1    |
| 39   | 43-18405          | Cylinder Pin (2")                                  | 4    | 4    |
| 40   | 56-7772           | Relief Valve                                       | 1    | 1    |
| 41   | 57-16928          | 3.50" OD x 1.06" ID Washer                         | 1    | 1    |
| 42   | 57-20791          | 5/16" Fender Washer                                | 1    | -    |
| 43   | 57-20794          | 1/2" Fender Washer                                 | 1    |      |
| 44B  | 57-20794          | 1" Machinery Washer                                | 3    | 3    |
| 45   | 58-9369           | Grease Zerk 1/8" NPT Straight                      | 4    | 4    |
| 46   | 58-9371           | Grease Zerk 1/8" NPT 45°                           | 2    | 2    |
| -    | <del> </del>      | 5/16" Hex Nut NC                                   | 1    |      |
| 47   | 70-20581          |  |      | -    |
| 48   | 70-20604          | 1/2" Hex Center Lock Nut NC                        | 4    | 4    |

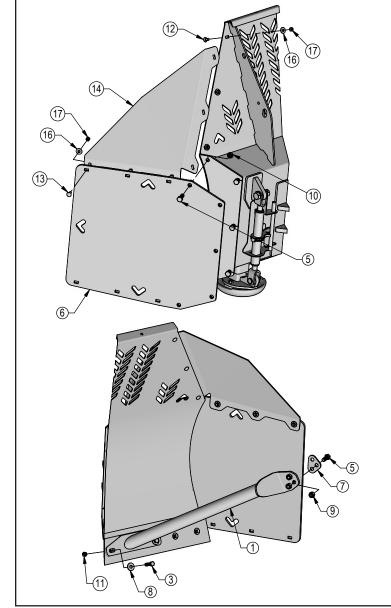
Item A: For Challenger 1000 & Fendt 1000 Tractors. Item B: Quantity of washer may vary. See Page 19 for hydraulic schematic.











| _ |                             |              |             |                                     |
|---|-----------------------------|--------------|-------------|-------------------------------------|
|   | 240 U-E                     | nd Pla       | tes (U-End) | - 45030-K                           |
|   | Item                        | Qty.         | Part No.    | Description                         |
|   | 1                           | 1            | 11-18640-L  | 240 - U-End Plate Brace - Left      |
|   | 2*                          | 1            | 11-18640-R  | 240 - U-End Plate Brace - Right     |
|   | 3                           | 4            | 16-20190    | 5/8" x 2 1/2" Hex Bolt Gr 5 NC      |
|   | 4                           | 10           | 16-20222    | 3/4" 3" Hex Bolt Gr 5 NC            |
|   | 5                           | 6            | 16-22220    | 3/4" x 2-1/2" Hex Bolt Gr 8 NC      |
|   | 6                           | 2            | 44-45030    | 240 - 3/4" Box End Plates (U-End)   |
|   | 7                           | 2            | 44-18645    | Lift Hook Washer                    |
|   | 8                           | 8 4 57-20816 |             | 5/8" Flat Washer Grade 8 (USS)      |
|   | 9                           | 6            | 70-20597    | 3/4" Hex Nut Gr 8 NC                |
|   | 10                          | 10           | 70-20607    | 3/4" Hex Center Lock Nut Gr 2 NC    |
|   | 11                          | 4            | 70-20646    | 5/8" Hex Top Lock Nut Gr 5 NC       |
|   | Top Ext. for U-End Plates - |              |             | 19348-K                             |
|   | Item Qty.                   |              | Part No.    | Description                         |
|   | 12                          | 6            | 16-21124    | 1/2" x 1" Carriage Bolt Gr 5 NC     |
|   | 13                          | 6            | 16-21125    | 1/2" x 1-1/4" Carriage Bolt Gr 5 NC |

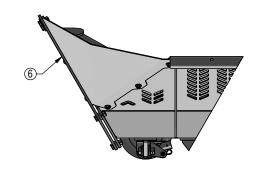
\* Parts Not Shown

240 - Top Ext for U-End Plates - Left

240 - Top Ext for U-End Plates - Right

1/2" Hex Center Lock Nut Gr 2 NC

1/2" Flat Washer



44-19348-L

44-19348-R

57-20744

70-20604

14

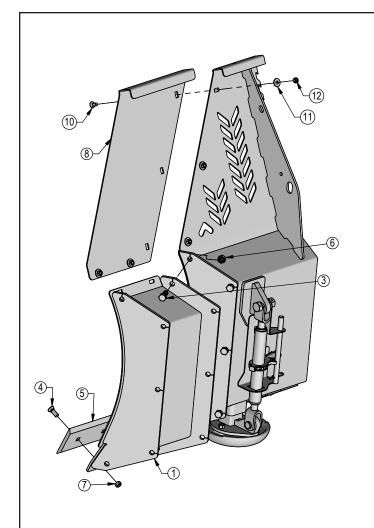
15\*

16

17

12

12



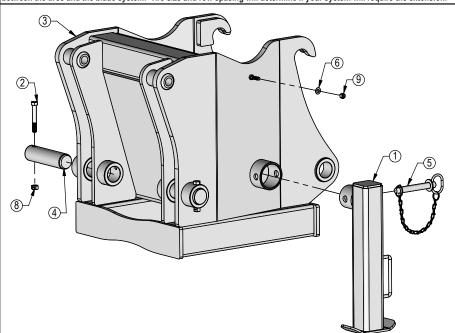
| 240 - 1' End Extension Kit - 17525-1-A |  |              |   |  |  |  |  |
|--|--|--------------|---|--|--|--|--|
| Item                                   | Qty.   | Part No.     | Description                             |  |  |  |  |
| 1                                      | 1  | 15-17525-1-L | 1' End Extension - Left                 |  |  |  |  |
| 2*                                     | 1  | 15-17525-1-R | 1' End Extension - Right                |  |  |  |  |
| 3                                      | 10   | 16-20218     | 3/4" x 2" Hex Bolt Gr 5 NC              |  |  |  |  |
| 4                                      | 4  | 16-21666     | 5/8" x 1-3/4" Plow Bolt Gr 5 NC         |  |  |  |  |
| 5                                      | 2  | 29-7950-1    | 1'- 5/8" x 6" Double Bevel Cutting Edge |  |  |  |  |
| 6                                      | 10   | 70-20607     | 3/4" Hex Center Lock Nut Gr 2 NC        |  |  |  |  |
| 7                                      | 4  | 70-20646     | 5/8" Hex Top Lock Nut Gr 5 NC           |  |  |  |  |
| 240                                    | 240 1' End Extension Ton Extension Kit 10215 K |              |   |  |  |  |  |

| 240 - 1' End E | xtension Top | Extension h | (it - 19 | 3215-K |
|----------------|--------------|-------------|----------|--------|
|----------------|--------------|-------------|----------|--------|

| Item | Qty. | Part No.   | Description                                |
|------|------|------------|--|
| 8    | 1    | 15-19215-L | 240 1' End Extension Top Extension - Left  |
| 9*   | 1    | 15-19215-R | 240 1' End Extension Top Extension - Right |
| 10   | 10   | 16-21124   | 1/2" x 1" Carriage Bolt Gr 5 NC            |
| 11   | 10   | 57-20744   | 1/2" Flat Washer                           |
| 12   | 10   | 70-20604   | 1/2" Hex Center Lock Nut Gr 2 NC           |

\* Parts Not Shown

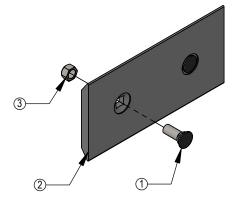
NOTE: The FH-440 to 240 Extension is an option for tractors equipped with duals. The extension provides extra clearance between the tires and the blade system. Tire size and row spacing will determine if your system will require the extension.

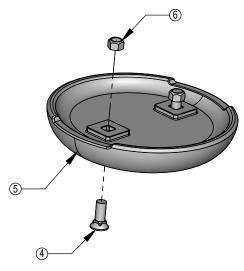


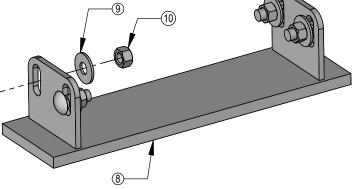
| FH-440 to 240 Extension Assy - 40285-A |      |            |                                  |
|--|------|------------|----------------------------------|
| Item                                   | Qty. | Part No.   | Description                      |
| 1                                      | 1    | 11-40610R1 | 440 To 240 Adapter Stand         |
| 2                                      | 2    | 16-20134   | 1/2" X 3 1/2" Hex Bolt Gr 5 NC   |
| 3                                      | 1    | 32-40285R2 | FH-440 to 240 Extension          |
| 4                                      | 2    | 43-16923R2 | 240 Pin Pulling Pin              |
| 5                                      | 1    | 43-40453   | Hitch Pin with Chain             |
| 6                                      | 1    | 57-20742   | 3/8" Flat Washer                 |
| 7*                                     | 1    | 59-16899-6 | Heavy Duty Velcro Strap          |
| 8                                      | 2    | 70-20604   | 1/2" Hex Center Lock Nut Gr 2 NC |
| 9                                      | 1    | 70-20612   | 3/8" Nyloc Nut                   |

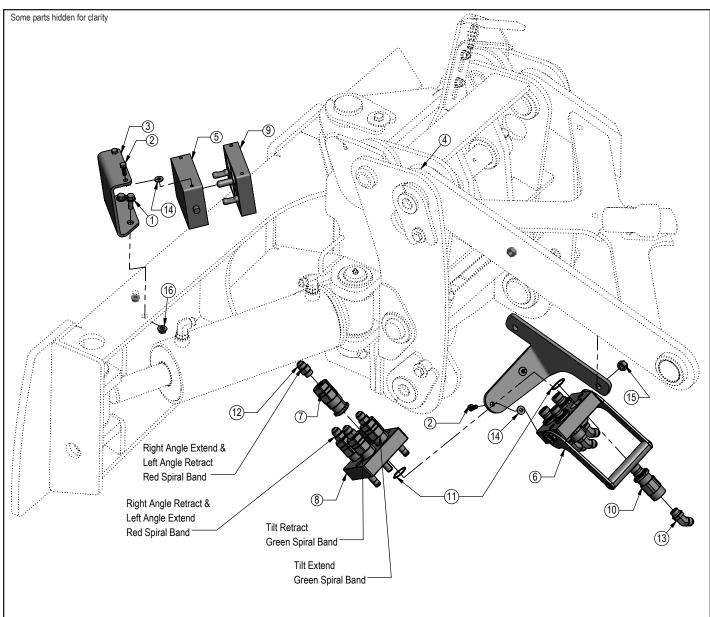
\* Parts Not Shown

|          |          |                 | e w/ Hardware Kit - 7950-1K                      | $\dashv$ |
|----------|----------|-----------------|--|----------|
| Item     | Qty.     | Part No.        | Description 5 to 5 | _        |
| 1        | 2        | 16-21666        | 5/8" x 1-3/4" Plow Bolt Gr 5 NC                  | _        |
| 2        | 1        | 29-7950-1       | 1'- 5/8" x 6" Double Bevel Cutting Edge          | _        |
| 3        | 2        | 70-20646        | 5/8" Hex Top Lock Nut Gr 5 NC                    | _        |
|          |          |                 | e w/ Hardware Kit - 7950-2K                      | _        |
| ltem     | Qty.     | Part No.        | Description                                      | _        |
| 1        | 4        | 16-21666        | 5/8" x 1-3/4" Plow Bolt Gr 5 NC                  | _        |
| 2        | 1        | 29-7950-2       | 2'- 5/8" x 6" Double Bevel Cutting Edge          | _        |
| 3        | 2        | 70-20646        | 5/8" Hex Top Lock Nut Gr 5 NC                    |          |
| 5' - 5/8 | 8" x 6"  | Cutting Edge    | e w/ Hardware Kit - 7950-5K                      |          |
| ltem     | Qty.     | Part No.        | Description                                      |          |
| 1        | 10       | 16-21666        | 5/8" x 1-3/4" Plow Bolt Gr 5 NC                  |          |
| 2        | 1        | 29-7950-5       | 5'- 5/8" x 6" Double Bevel Cutting Edge          |          |
| 3        | 10       | 70-20646        | 5/8" Hex Top Lock Nut Gr 5 NC                    |          |
| 6' - 5/8 | 8" x 6"  | Cutting Edge    | e w/ Hardware Kit - 7950-6K                      |          |
| ltem     | Qty.     | Part No.        | Description                                      | $\neg$   |
| 1        | 12       | 16-21666        | 5/8" x 1-3/4" Plow Bolt Gr 5 NC                  |          |
| 2        | 1        | 29-7950-6       | 6'- 5/8" x 6" Double Bevel Cutting Edge          | $\neg$   |
| 3        | 12       | 70-20646        | 5/8" Hex Top Lock Nut Gr 5 NC                    | $\neg$   |
| 7' - 5/8 | 8" x 6"  | Cutting Edge    | e w/ Hardware Kit - 7950-7K                      |          |
| Item     | Qty.     | Part No.        | Description                                      | _        |
| 1        | 12       | 16-21666        | 5/8" x 1-3/4" Plow Bolt Gr 5 NC                  | $\dashv$ |
| 2        | 1        | 29-7950-7       | 7'- 5/8" x 6" Double Bevel Cutting Edge          | $\dashv$ |
| 3        | 14       | 70-20646        | 5/8" Hex Top Lock Nut Gr 5 NC                    | _        |
| B' - 5/8 | 8" x 6"  | Cuttina Eda     | e w/ Hardware Kit - 7950-8K                      | _        |
| Item     | Qty.     | Part No.        | Description                                      | $\dashv$ |
| 1        | 16       | 16-21666        | 5/8" x 1-3/4" Plow Bolt Gr 5 NC                  | $\dashv$ |
| 2        | 1        | 29-7950-1       | 1'- 5/8" x 6" Double Bevel Cutting Edge          | $\dashv$ |
| 3        | 16       | 70-20646        | 5/8" Hex Top Lock Nut Gr 5 NC                    | _        |
|          |          |                 |  | _        |
| 12" R    | ound M   | ushroom Sk      | id Shoe Kit (12'-16' Blades) - 15458-K           |          |
| ltem     | Qty.     | Part No.        | Description                                      |          |
| 4        | 4        | 16-21666        | 5/8" x 1-3/4" Plow Bolt Gr 5 NC                  |          |
| 5        | 2        | 50-15458        | 12" Round Mushroom Skid Shoe                     |          |
| 6        | 4        | 70-20646        | 5/8" Hex Top Lock Nut Gr 5 NC                    |          |
|          |          |                 |  | _        |
| 240 S    | kid Sho  | e Kit (10' Bla  | ades) - 8740-K                                   |          |
| ltem     | Qty.     | Part No.        | Description                                      |          |
| 7        | 8        | 16-21218        | 3/4" x 2" Carriage Bolt Gr 5 NC                  |          |
| 8        | 2        | 50-8740         | 2X0 Skid Shoe                                    |          |
| 9        | 8        | 57-20747        | 3/4" Flat Washer                                 |          |
| 10       | 8        | 70-20607        | 3/4" Hex Center Lock Nut Gr 2 NC                 | 27       |
| NOTE:    | Multiple | cutting edge ki | ts may be required.                              |          |



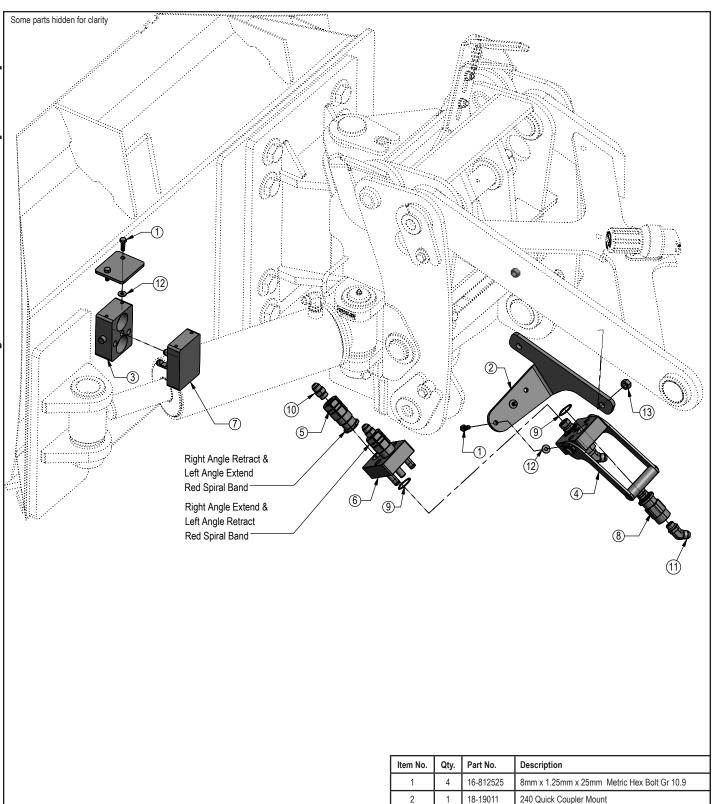






| Item No. | Qty. | Part No.  | Description                                       |
|----------|------|-----------|---|
| 1        | 2    | 16-35C616 | 3/8" x 1" Flanged Bolt                            |
| 2        | 4    | 16-812525 | 8mm x 1.25mm x 25mm Metric Hex Bolt Gr 10.9       |
| 3        | 1    | 18-19008  | 240 Quick Coupler - Parking Station Mount         |
| 4        | 1    | 18-19011  | 240 Quick Coupler Mount                           |
| 5        | 1    | 25-18956  | Multi-Coupling Plate - 4 Port Parking Station     |
| 6        | 1    | 25-19864  | Multi-Coupling Plate - 4 Port Fixed               |
| 7        | 4    | 25-19865  | Multi-Coupling Plate - Coupler - Female           |
| 8        | 1    | 25-19866  | Multi-Coupling Plate - 4 Port Mobile              |
| 9        | 1    | 25-19867  | Multi-Coupling Plate - 4 Port - Cap               |
| 10       | 4    | 25-19870  | Multi-Coupling Plate - Coupler - Male             |
| 11       | 8    | 25-40407  | Multi-Coupling Plate - Snap Ring                  |
| 12       | 4    | 31-34040  | Straight JIC x O-Ring (6400-08-08)                |
| 13       | 4    | 31-34150  | Straight Thread Elbow 45° JIC x O-Ring (6802-8-8) |
| 14       | 4    | 57-20740  | 1/4" Flat Washer                                  |
| 15       | 2    | 70-20604  | 1/2" Hex Center Lock Nut Gr 2 NC                  |
| 16       | 2    | 70-20622  | 3/8" Flange Hex Nut Gr 5 NC                       |

- Follow the multi-coupler maintenance steps for connecting and disconnecting on pages 19-20.
   After any maintenance, verify that hoses are in their correct position during reinstallation.



|  | 3  | 1 | 25-19657 | Multi-Coupling Plate - 2 Port Parking Station     |
|--|----|---|----------|---|
|  | 4  | 1 | 25-19868 | Multi-Coupling Plate - 2 Port Fixed               |
|  | 5  | 2 | 25-19865 | Multi-Coupling Plate - Coupler - Female           |
|  | 6  | 1 | 25-19869 | Multi-Coupling Plate - 2 Port Mobile              |
|  | 7  | 1 | 25-19871 | Multi-Coupling Plate - 2 Port - Cap               |
|  | 8  | 2 | 25-19870 | Multi-Coupling Plate - Coupler - Male             |
|  | 9  | 4 | 25-40407 | Multi-Coupling Plate - Snap Ring                  |
|  | 10 | 2 | 31-34040 | Straight JIC x O-Ring (6400-08-08)                |
|  | 11 | 2 | 31-34150 | Straight Thread Elbow 45° JIC x O-Ring (6802-8-8) |
|  |    |   |          |   |

1/4" Flat Washer

1/2" Hex Center Lock Nut Gr 2 NC

57-20740

70-20604

Follow the multi-coupler maintenance steps for connecting and disconnecting on pages 19-20.
 After any maintenance, verify that hoses are in their correct position during reinstallation.

#### Before Each Use:

- 1. Disconnect the mobile half from the parking station and the cap from the fixed half.
- 2. Check that there is no contamination (salt, sand, dirt, etc.):
  - A. On the pins.
  - B. Inside the cam.
  - C. In the locking mechanism area.
  - D. On the face of the plates and couplings.
- 3. In case of contamination, remove it with a cloth and/or compressed air.
- 4. Check that there is still a lubricant/anti-corrosion (grease or silicone see Note 1):
  - A. On the pins.
  - Inside the cam.
  - C. In the locking mechanism area.
- 5. Connect the mobile and fixed halves together.

#### After Each Use:

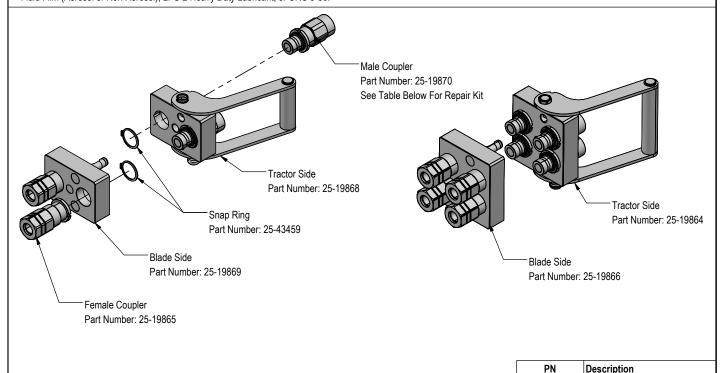
- 1. Disconnect the mobile half from the fixed half.
- 2. Clean all contamination (salt, sand, dirt, etc.) from the following areas:
  - A. On the pins.
  - B. Inside the cam.
  - C. In the locking mechanism area.
  - D. On the face of the plates and couplings.
  - \*Use a cloth or compressed air. It is advised to not use water to clean these surfaces
- Apply a lubricant/anti-corrosion (grease or silicone see Note 1):
  - A. On the pins.
    - B. Inside the cam.
    - C. In the locking mechanism area.
- 4. Connect the cap to the fixed half and the mobile half to the parking station.

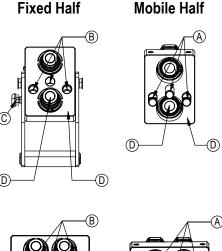
#### Note 1:

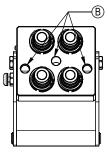
When sand and salt are present, or the plates under go a washdown, a heavy duty silicone spray lubricant should be used to replace grease from the factory. The lubricant should help protect from corrosion without collecting dust and contaminants, and will resist washing off when exposed to water.

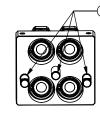
#### **Recommended Lubricant Brands:**

Fluid Film (Aerosol or Non-Aerosol), LPS-2 Heavy Duty Lubricant, or CRC 3-36.









Male Coupler O-Ring Repair Kit

25-43425





- Make sure the coupling is securely fastened into the plate or place in a vice.
- . Using a blunt, non-marring tool, depress the valve face until the seal is exposed. Insert a bent metal wire between the valve face and the body of the coupling. <u>Use caution not to damage or scratch the seal when inserting the wire.</u>
- Inspect the seal and interior surfaces for contamination.

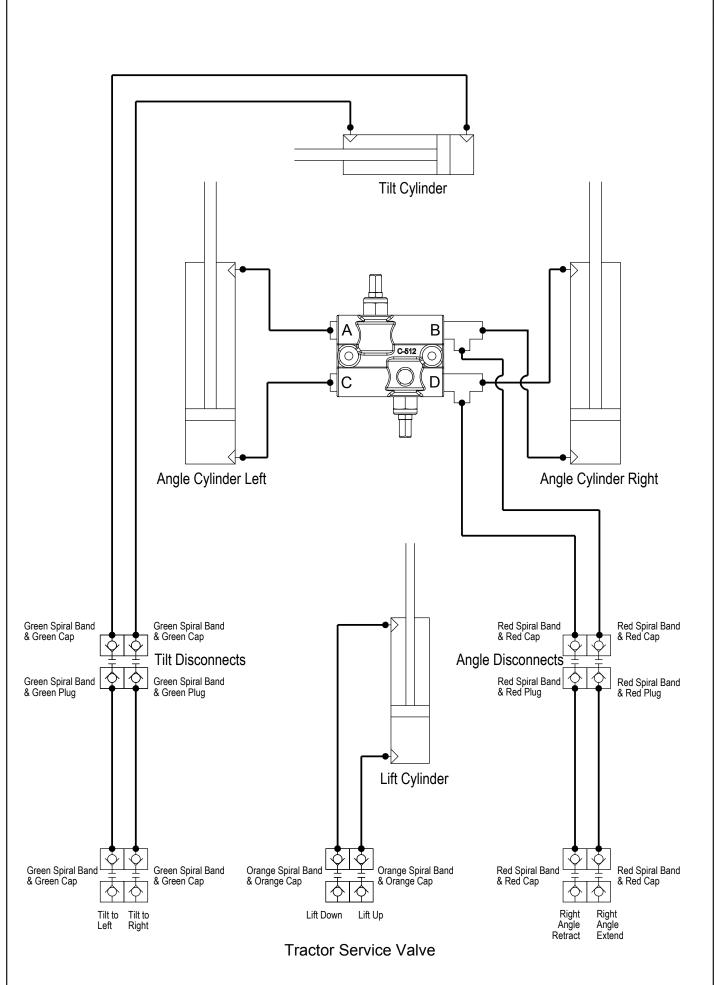
- In case of contamination, carefully wipe surfaces with a soft cloth, or use compressed air to blow the contamination out. Do Not press hard on the seal as contamination can scratch the seal surface.
- Using a non-marring tool, depress the valve face and remove the metal wire. Release the valve to the flush position.



#### Cleaning The Female Bushing:

- Make sure the coupling is securely fastened into the plate or place in a vice.
- Using a non-marring tool, depress the outer ring to expose the bushing. There is no need to expose the valve seal, so stop pressing before the valve is opened.
- 3. Inspect the interior body and bushing surfaces for contamination.

- In case of contamination, carefully wipe surfaces with a soft cloth, or use compressed air to blow the contamination out.
- 5. Release the outer ring so that it returns to the flush position.



# **Improvements**

Grouser Products Inc. is continually striving to improve its products. We reserve the right to change prices, specification, or equipment at any time without notice. We also reserve the right to make improvements or changes when it becomes practical and possible to do so without incurring any obligation to make changes or additions to the equipment sold previously.

# Warranty

Grouser Products warrants to the original purchaser of each item that the product be free from defects in material and workmanship under normal use and service for a period of two (2) years for Agriculture Series Blades and one (1) year for Heavy Duty Series from date of original retail delivery.

#### The obligation of the consumer under this warranty:

- 1. To read the operators manual and to operate, lubricate, maintain and store equipment in accordance with the instructions listed in the operators manual.
- 2. To inspect equipment and if any part needs repair or replacement when continued use would cause damage or wear to other parts or safety.
- 3. All equipment or parts claimed to be defective in material or workmanship must be made available for inspection at the place of business of a dealer authorized to handle the equipment covered by this warranty, or, upon request by Grouser Products, shipped to the Grouser Products factory in West Fargo, North Dakota.

### The obligation of the dealer under this warranty:

- 1. Complete warranty registration form and submit within 30 days of sale.
- 2. Contact Grouser Products for authorization prior to performing any warranty repairs or part replacement.
- 3. Complete warranty request form and submit with photos and supporting documentation.

#### The obligation of Grouser Products under this warranty:

- Repair or replace, any equipment or parts, in the judgment of Grouser Products to be defective in material or workmanship.
- 2. Grouser Products will cover the cost of parts and ground shipping at dealer invoice only.
- 3. Grouser Products shall have no obligation to bear the cost of labor or transportation in connection with replacement or repair of any such defective parts.

## This warranty does not cover:

- 1. Depreciation or damage caused by normal wear, accident, improper assembly, improper adjustments.
- 2. Improper maintenance including lack of proper lubrication, or improper use. Including loose bolts, nuts, or fitting due to over tightening or vibration after 20 hours of operation.
- 3. Repairs or alterations without authorization from a Grouser Products representative.
- 4. Grouser Products shall have no liability if the equipment has been altered or reworked without the written authorization of Grouser Products.

Grouser Products' parts, which are furnished under this warranty and properly installed, shall be warranted to the same extent as the original parts under this warranty if, and only if, such parts are found to be defective within the original warranty period covering the original equipment.

NO EMPLOYEE OR REPRESENTATIVE OF GROUSER PRODUCTS IS AUTHORIZED TO CHANGE THE WARRANTY IN ANY WAY OR GRANT ANY OTHER WARRANTY.

# Contact Us

As always, if you have any questions about your system or other products made by Grouser, feel free to contact us.

