

# THE DRIVING FORCE BEHIND A GOOD FENCE



"Good enough won't do - it must be right," - K.B. Danuser, Founder 1910,



Equipped with offset mounting for front-end loaders



DANUSER

DANUSER

### SKID-STEER OFFSET Quick Attach Mount PN 21355

Telescopes left or right 5' from center in 6" increments. Allows operator to drive parallel with fence. (Shown Arm Retracted)

(Shown Arm Extended)

### MINI-SKID Quick Attach Mount PN 220240

### JOHN DEERE

200/300/400/500 Series Quick Attach Mount PN 21304

# EURO/GLOBAL

Quick Attach Mount PN 21303

LAN GUILLE

A SAMADA









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6 hits per second up to 30 GPM

Drives T-posts, tent stakes, sign posts, and up to 3 O.D. pipe

Versatile mounting options available for quick attach systems as well as a bolt-on weld-on bracket that mounts to a flat surface (all mounts are interchangeable with the T3 and tilt bracket)

Year Warranty

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### Plumb Bob - PN 21356

Provides vertical line reference for operator

### Extra Mount Bracket - PN 21302

Concernance (

Bolt-on/weld-on bracket that mounts to a flat surface



### Tilt Bracket Assembly - PN 21301

Tilt left or right up to 20°





### A HISTORY OF INNOVATION

Established in 1910, DANUSER has been family owned and operated by four generations. We have manufactured auger systems since the mid-1940's. With decades of design and manufacturing experience, our machines have stood the test of time. Today our commitment to our customer remains to design and build products that are the benchmark of quality, reliability, and longevity. In the words of our founder K.B. Danuser, "Good enough won't do – it must be right."

DANUSER manufactures several attachments for various equipment, serving several industries worldwide. Please visit www.danuser.com to see our full line of attachments.

Danuser reserves the right to make changes in design, specifications, and prices without notice and without incurring any obligation relating to such changes.



### Visit danuser.com for more Danuser attachments.



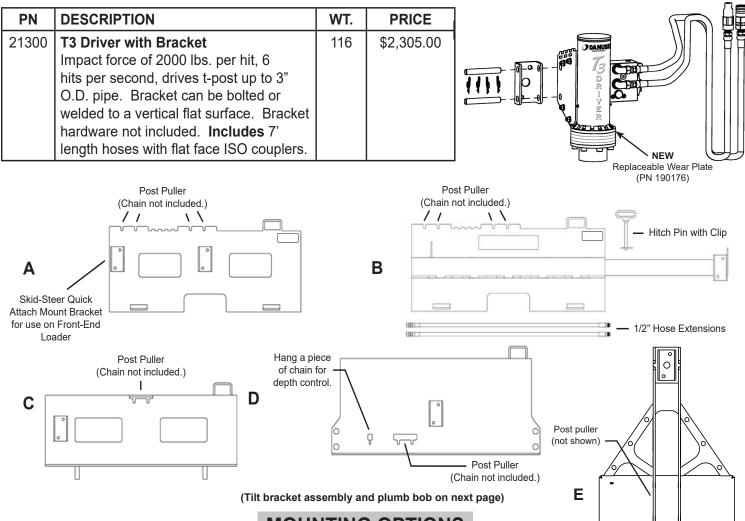




# **T3 DRIVER PRICE SHEET**

### **1-Year Warranty**

WARNING This product can expose you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov/product.



### MOUNTING OPTIONS

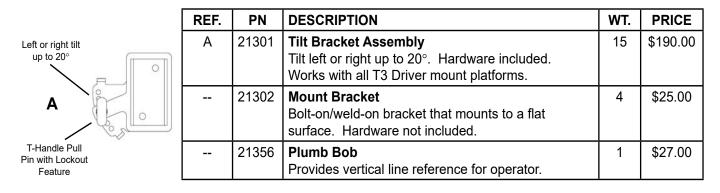
| REF. | PN     | DESCRIPTION   | WT. | PRICE    |
|------|--------|---|-----|----------|
| A    | 21305  | Skid-Steer Quick Attach Mount<br>Equipped with center or offset mounting options. Integrated post puller.   | 117 | \$307.00 |
| В    | 21355  | <b>Skid-Steer Offset Quick Attach Mount</b><br>Telescopes left or right up to 5' from center in 6" increments. <b>Includes</b> two<br>4' long 1/2" hose extensions and hitch pin with clip. Integrated post puller. | 230 | \$834.00 |
| С    | 21303  | Euro/Global Offset Quick Attach Mount<br>Integrated post puller.  | 126 | \$407.00 |
| D    | 21304  | John Deere 200/300/400/500 Series Quick Attach Mount<br>Chain slot available for depth control. Integrated post puller.   | 137 | \$553.00 |
| E    | 220240 | <b>Mini-Skid-Steer Quick Attach Mount</b><br>Mounts to mini skid-steers with integrated post puller. (Does not fit<br>Kubota or Bobcat MT)  | 55  | \$325.00 |



Prices and Specifications may be subject to change without notice. Prices do not include shipping or setup.



### ACCESSORIES



### FRONT-END LOADER HOSE KIT

| PN     | DESCRIPTION   | WT. | PRICE    |
|--------|---|-----|----------|
| 196056 | <b>Front-End Loader Hose Kit</b><br>1/2" hoses, 25' long, with 1/2" flush-face couplers (ISO 16028) on one end to connect<br>to T3 hoses, and ISO 7241 Series A couplers (compatible with ISO 5675 Pioneer<br>couplers) on the opposite end to connect to tractor rear remotes. <b>Includes</b> bolt-on/<br>weld-on mounting bracket. | 27  | \$482.00 |

### **REPAIR PARTS & SAFETY SIGNS**

To find repair parts and safety signs, see Danuser's online Parts Catalog at **parts.danuser.com**. The Parts Catalog includes all current attachment parts and decals in a user-friendly, accessible, and portable format. Be sure to have model and serial number at hand to find the correct items.



Prices and Specifications may be subject to change without notice. Prices do not include shipping or setup.

### PART ID: 21300 (includes hoses and mount bracket) Patent Pending

Designed for T-posts, the T3 can drive up to 3" O.D. pipe. Eliminate the fatigue often associated with hand-held drivers, and let the vehicle carry the weight.

Versatile mounting options available for quick attach systems as well as a bolt-on/weld-on bracket that mounts to a flat surface. Limit vehicle fuel consumption by operating at a lower RPM, maximum efficiency is achieved at 15 GPM. Ideal product for farmers, ranchers, and fencing contractors.

### Warranty:

1-year

### Specifications:

| Specification         | s                    | Mounts          | Acc   | essories                | .it & Media | 1                            |                           |                   |            |
|-----------------------|----------------------|-----------------|-------|-------------------------|-------------|------------------------------|---------------------------|-------------------|------------|
| Post Dimensions:      | Т-р                  | ost to 3" O.D.  | pipe  | 8                       |             | 0                            | Mo                        | ounts             |            |
| Impact Force:         | 2,0                  | 00 lbs. per str | oke   |                         | 1           |                              |                           | P                 | John Deere |
| Impact Energy:        | 40 ftIbs. per stroke |                 |       | T3 Driver               | Skid-Steer  | Skid-Steer                   | Euro/Global               | 200-500           |            |
| Hammer Weight:        | 10                   | lbs.            |       |                         |             |                              | Offset                    | 1.1.1.1.1.0.0.0.0 | Series     |
| Strokes Per Second: 6 |                      | Overall Dept    | n 12" | 14"                     | 18"         | 16"                          | 15"                       |                   |            |
|                       |                      |                 |       | Overall Widt            | h 11"       | 45.5"                        | Extendable<br>50.5"-86.5" | 45"               | 49"        |
|                       |                      |                 |       | Overall Heig            | ht 17"      | 19"                          |                           | 21"               | 24"        |
|                       |                      |                 |       | Weight                  | 86 lbs.     | 173 lbs.                     | 286 lbs.                  | 181 lbs.          | 193 lbs.   |
|                       |                      |                 |       | Hydraulic<br>Requiremen | ts          | 1500-3000 PSI & Up to 30 GPM |                           |                   |            |







# T3 Driver Wear Plate Kit Installation Instructions Form No. 3507

### **Before You Start**

This SAFETY ALERT symbol identifies important safety messages. Carefully read each safety message that follows. Failure to understand and obey a safety message, or recognize a safety hazard, could result in injury or death to you or others around you.

| Symbol | Meaning  |
|--------|--|
|        | Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.   |
|        | Indicates a potentially hazardous<br>situation which, if not avoided,<br><b>could</b> result in death or serious<br>injury, including hazards that are<br>exposed when guards are removed. |
|        | Indicates a potentially hazardous<br>situation which, if not avoided,<br><b>may</b> result in minor or moderate<br>injury. It may also be used to<br>alert against unsafe practices.       |
| NOTE   | This is important information<br>for proper use of this equipment.<br>Failure to comply may lead to<br>premature equipment failure.  |

Before beginning installation, please thoroughly read these instructions and the Operator's Manual for your attachment. If there is anything you do not understand, immediately contact your dealer, or call our factory direct at (573) 642-2246.

### **General Information**

These assembly and installation instructions apply to **PN 200290 T3 Driver Wear Plate Kit** for T3 Drivers in the serial number range **3210 to 9618**.

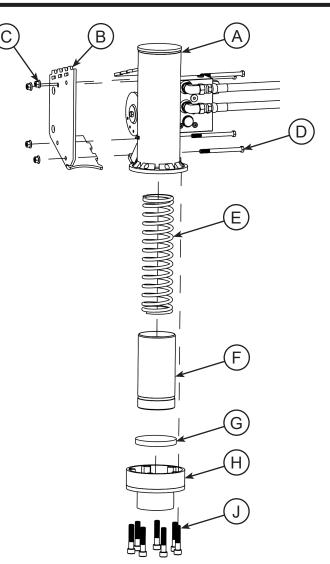
# **Installation Instructions**

Starting with STEP 5, parts have reference callouts in parentheses, e.g. "bolts (J)." Alphabetic reference callouts refer to existing parts in your T3, depicted in *Fig. 1*. Numerical reference callouts refer to the new parts in the kit, depicted in the *Parts* section

#### Recommended Tools

- Torque wrench
- 9/16" wrench (2)
- Ratchet
  - 9/16" socket
- 3/8" Allen socket bit
- MIG, TIG, or arc welder
- Straight edge
- Cleaning rag
- Angle grinder with flap disc
- Die grinder or rotary tool
- Grease gun





- Fig. 1
- STEP 1: Slowly lower the T3 onto a flat, level surface, or use blocking to securely support the T3.

# **AWARNING**

Never work under equipment supported by hydraulics. Even with the vehicle shut off, equipment can suddenly drop if controls are actuated or if hydraulic lines burst.

STEP 2: Shut off the vehicle. Engage the parking brake, or securely chock vehicle to prevent movement.



Always shut off the vehicle engine, remove the key, lower vehicle arms, and relieve all hydraulic pressure before dismounting the vehicle. Never leave equipment unattended with the vehicle running.

®

### **T3 Driver Wear Plate Kit Installation Instructions**

STEP 3: Disconnect the hydraulic hoses from the vehicle's auxiliary hydraulics.

# **AWARNING**

Before connecting or disconnecting hydraulic lines or fittings, be sure to relieve all pressure by cycling all hydraulic controls after shutdown. Remember hydraulic systems are under pressure whenever the engine is running and may hold pressure after shutdown.

- STEP 4: Remove the T3 from its mount by removing the four rue clips and two 3/4" pins.
- STEP 5: Using two 9/16" wrenches, remove the four bolts
  (D) and nuts (C) holding the housing cover plate (B) in place, and remove the cover plate. Inspect the weight assembly (F) to ensure it moves freely and is not bound or jammed. A bound or jammed weight assembly may hold the spring (E) under tension, causing a risk of injury when the foot (H) is removed from the housing (A).

# **AWARNING**

# Before servicing or adjusting attachment, relieve all stored energy.

- STEP 6: Using a ratchet with 3/8" Allen socket bit, remove the seven bolts (J) holding the foot (H) onto the housing (A).
- STEP 7: With the foot (H) removed, remove the strike plate (G), weight assembly (F), and spring (E) from the housing (A). Inspect the housing for wear as in *Fig. 2*.



*Fig. 2: Worn housing bottom flange* 

STEP 8: The housing (A) wear pictured in *Fig. 2* is in excess of 1/32". If the wear on your T3 Driver housing is less than this amount, skip to STEP 15. If the wear on your T3 Driver housing is equal to or greater than 1/32", continue to STEP 9.



A worn housing must be repaired as outlined in STEPS 9 through 14, or the wear plate (1) may malfunction and cause damage to the T3 Driver.

- STEP 9: Using a cleaning rag and an appropriate solvent, remove grease from inside of housing (A), inside cover plate (B) area, and inside housing bottom flange.
- STEP 10: Apply a series of small spot welds around the worn inside circumference of the housing (A) bottom flange to build it up as in *Fig. 3*.



Fig. 3: Spot welds around flange circumference

STEP 11: Using an angle grinder and flap disc, grind the spot welds to recreate a smooth, flat surface comparable to the original housing (A) bottom flange profile as in *Fig. 4.* 





Fig. 4: Flange restored to its original surface profile

- STEP 12: If low spots remain in the flange surface, apply additional spot welds, then grind to a smooth surface as in STEPS 10 and 11. Use a straight edge to check that the surface is smooth, even, and flat.
- STEP 13: Using a die grinder or rotary tool, smooth the inner circumference of the housing (A) bottom flange as in *Fig. 5.*



Fig. 5: Flange restored to its original inner circumference profile

- **NOTE** Ensure all metal shavings are removed prior to reassembly.
- STEP 15: Insert the spring (E) into the weight assembly (F), then insert the weight assembly and spring into the housing (A).
- STEP 16: With the housing (A) inverted, set the new wear plate (1) in position on the housing bottom flange. Ensure the large slot in the wear plate aligns with the gear rack on the weight assembly (F) as in *Fig. 6*.

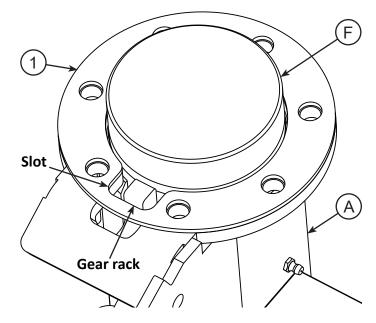


Fig. 6: Wear plate oriented correctly on housing flange

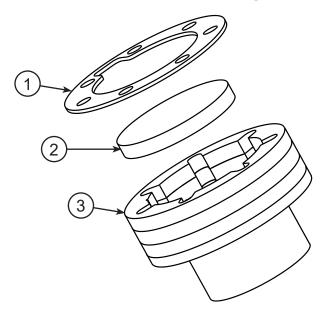
- STEP 17: Insert the new strike plate (2) into the new foot (3). Apply Loctite 271 to the seven foot bolts (J). Using a torque wrench with 3/8" Allen socket bit, install the wear plate (1), strike plate (2), and foot (3) onto the housing (A) with the seven bolts. Torque to 120 ft.-lbs.
- STEP 18: Using a torque wrench with 9/16" socket and a 9/16" wrench, reinstall the housing cover plate (B) using the four bolts (D) and nuts (C). Torque to 31 ft.-lbs.
- STEP 19: Reinstall the T3 onto its mount using the two 3/4" pins and four rue clips.
- STEP 20: Grease the T3 liberally prior to use.
- STEP 14: Using a cleaning rag and an appropriate solvent, clean inside the housing (A) to remove grease that may contain metal shavings from welding and grinding.



### **Parts**

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This product can expose you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <u>www.P65Warnings.ca.gov/product</u>.



| REF. NO. | PART NO. | DESCRIPTION                              | QTY. |
|----------|----------|--|------|
| 1        | 190176   | Wear Plate                               | 1    |
| 2        | 21391    | Strike Plate                             | 1    |
| 3        | 200145S  | Foot (Includes Decals<br>& Safety Signs) | 1    |





Redesigned T3 Driver works on all existing mount platforms.

Increased weld size from 3/8" to 1/2" and an added gusset for a more robust housing.



Old Style Strike Plate New Style Strike Plate

Enhanced strike plate is completely round making it stronger, eliminating binding or cutting for better durability. New hydraulic manifold means the driver operates on vehicles with flow from 0-30 GPM, similar to the Hammer Post Driver! Simple plug and play operation without the hassle of velocity fuses or check valves.

> Hoses and couplers can be interchanged without affecting the performance of the T3 Driver.

Improved lower housing design features seven 1/2" bolts, as opposed to five 3/8" bolts on previous design, with more threads per inch for increased strength and better engagement.



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# **OVERVIEW**

Danuser is proud to offer the T3 Driver in our innovative line of attachments. The T3 Driver is designed for T-posts and can drive up to 3" O.D. pipe. It eliminates the fatigue often associated with hand-held drivers as well as reduces vehicle fuel consumption by operating at a lower RPM. Maximum efficiency (6 strokes per second) is achieved at 15 GPM. Models equipped with a manifold (SN 3210 - current) regulate flow up to 30 GPM, fitting a wide variety of vehicles. This is an ideal product for most driving applications.

### **COMPETITIVE ADVANTAGES**

- Versatile mounting options for quick attach systems or a bolt-on/weld-on bracket that mounts to a flat surface.
- No setup or lubrication required to start; it's ready to go to work.
- No compressor, fuel, or carburetor; let the vehicle carry the weight.
- Top of the post is fully contained in the machine, preventing the post from kicking out.
- Using the float option eliminates the need to manually lower the loader arms.
- Tilt Bracket option works with all T3 Driver mount platforms for up to 20° tilt either left or right.
- Strike Plate prevents the top of the post from becoming damaged.
- Skid-Steer Offset Quick Attach Mount allows the operator to drive posts near objects that might obstruct other drivers, like fence lines or debris, and is reversible for use on either side of vehicle.
- Drives posts as low as 3" off the ground.



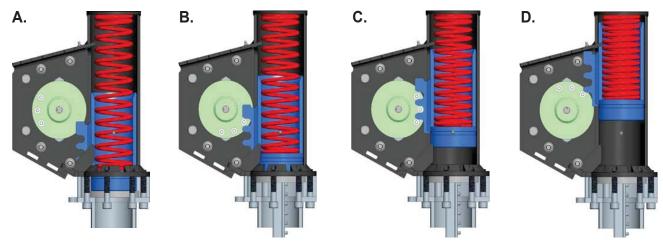
# **MOUNTS & ACCESSORIES**





# DESIGN

- **A.** Anti-Dry-Fire Mechanism if the hydraulics are accidently engaged, the drive wheel cannot pick up the weight. The top tooth of the weight is designed as a stop block to prevent the wheel from rotating and prevent the unit from dry firing. The wheel cannot make a complete rotation in either direction.
- **B.** When a post is loaded, the catch fingers on the weight are aligned with the drive wheel. The drive wheel has 3 hardened rollers that engage the catch fingers.
- C. As the hydraulics cycle, the motor rotates the drive wheel which lifts the weight.
- **D.** At the top of the rotation the drive wheel rolls over, releasing the weight. The compression spring forces the weight into the strike plate. This cycle is repeated up to 6 times per second.





# **OPERATING INSTRUCTIONS**

#### Please refer to the Operator's Manual for complete operating and safety information.

- 1. The T3 Driver requires a second person to position the post. This person will set the post at the desired location and grasp the post securely, making sure their hands are at least 30" from the top of the post.
- 2. Once the post is in position, raise the T3 Driver above the post, tilting slightly forward to see the opening of the driver. Tilt back and lower the driver onto the post until it's fully loaded inside the driver.
- **3.** After the second person has cleared the area, place the loader arms in the float position. If the vehicle is not equipped with float, the loader arms should be lowered, applying down force to the post.
- **4.** Move the vehicle slowly left, right, forward, or backward as needed until the post appears vertical to the ground. The Plumb Bob, PN 21356, can be useful here, especially when driving pipe.
- 5. With the machine at idle, cycle the hydraulics to activate the T3 Driver. (It will only work in one direction.) Increase engine RPM until driver is at desired speed.
  - a. SN 3210 Current: Manifold equipped models are designed to operate up to 30 GPM.
  - **b. SN 1001 3209:** If the hydraulic flow is too fast (over 15 GPM), the velocity fuse in the hydraulic system will shut down to prevent overspinning the driver. If this happens, lower the engine RPM and cycle the hydraulics in reverse then forward to reset the velocity fuse.
- 6. Drive the post to the desired depth.
- **7.** As soon as the weight is released, shut off the hydraulics, raise the T3 until the post is cleared, and move to the next post.



# **SHARING TIPS**

As you introduce the T3 Driver to dealers and end-users, be sure to implement the following helpful tips:

#### Don't sell...Inform

- When conceptualizing a T-post and pipe driver, we wanted to improve existing hand-held air, nitrogen, and gas powered driver designs. The T3 Driver is vehicle mounted, allowing the vehicle to carry the driver's weight and the operator to use down pressure in difficult driving conditions. There is no better post driving experience than from the comfort of the cab!
- This is a driver designed to get more work done in less time.

#### Offer an alternative solution

 What's the problem? Hand-held drivers cause fatigue and often require a cumbersome power source such as an air tank or compressor. Competitors also recommend ordering anti-vibration gloves, a hose reel for transportation, and extra air hoses. What's the solution? Try the Danuser T3 Driver and forgo these costly and cumbersome accessories.

#### **Create opportunities**

- Give your customer the opportunity to try the product by performing a product demonstration.
- Encourage dealers to demonstrate the T3 Driver to end-users.





# **HOW TO RESPOND TO FAQs**

#### What is the purpose of the manifold?

**A.** It eliminates the velocity fuse and incorporates the check valve into the manifold for simple plug and play operation, similar to the Hammer Post Driver. It will allow the T3 Driver to operate continuously with flows up to 30 GPM.

#### What type of machine can the T3 Driver be used on?

**A.** Quick attach mounts are available for tractors and skid-steers. The T3 Driver comes standard with a bolt-on/weld-on bracket for excavators, backhoes, mini-machines, pallet forks, loaders, etc.

#### Can I mount the T3 Driver to my Hammer?

A. Yes, it's a great option for a complete post-driving package.

#### What type of maintenance is required?

**A.** The T3 Driver must be greased daily on all three grease fittings. During longer driving periods, grease more frequently.

#### How do I know when the post is straight?

A. The Plumb Bob option, PN 21356, provides a vertical reference for the operator.

#### How do I drive a post straight if I am driving on a hillside?

**A.** The Tilt Bracket Assembly, PN 21301, can tilt 20° left or right and easily attaches to all T3 Driver mounts.

#### Can I drive parallel to my fence?

**A.** Yes, the Skid-Steer Offset Quick Attach Mount, PN 21355, telescopes up to 5' from center of the mount and is reversible for use on either side of the vehicle.



# HOW TO RESPOND TO FAQs (continued)

### What is the warranty for the T3 Driver?

**A.** 1-Year Warranty

#### The questions below are serial number specific, please refer to your T3 Driver serial number.

#### What are the hydraulic requirements?

- **A. SN 3210 Current:** The T3 Driver is equipped with a hydraulic manifold designed to operate up to 30 GPM and from 1500-3000 PSI. The T3 performs at maximum efficiency (6 strokes per second) from 15 to 30 GPM. The unit is functional at lower GPM but will operate with fewer strokes per second.
- A. SN 1001 3209: The T3 Driver performs at maximum efficiency (6 strokes per second) at 15 GPM. The unit is functional at a lower GPM but will operate at fewer strokes per second. The T3 can also function on machines with more than 15 GPM, but the operator will need to run the machine at a lower RPM to reduce flow.

#### How does the velocity fuse work?

- A. SN 3210 Current: There is no velocity fuse on these models.
- A. SN 1001 3209: The velocity fuse is designed to prevent excess flow from overspinning the wheel, damaging the driver. If flow is over 15 GPM, the fuse will close, stopping flow. The velocity fuse will only reset when the hydraulic flow is put into reverse then forward at a lower RPM. Repeated tripping of the velocity fuse will cause it to fail.

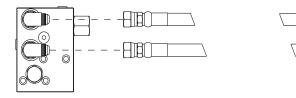


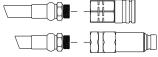
# **HOW TO RESPOND TO FAQs (continued)**

#### The questions below are serial number specific, please refer to your T3 Driver serial number.

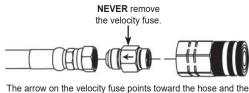
#### Can I change the couplers on my hoses?

**A. SN 3210 - Current:** Yes. If the couplers on the hoses are switched, it will reverse the hydraulic controls for the operator. The T3 Driver operation will not be affected.

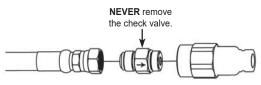




A. SN 1001 - 3209: Yes. The diagram below points out the parts you cannot change.



hose is connected to the top motor port. **NEVER** move the velocity fuse or switch the hose connection.



The arrow on the check valve points toward the coupler and the hose is connected to the bottom of the motor port. **NEVER** move the check valve or switch the hose connection.





