

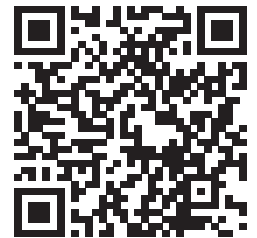


# DURATECH®



Manual I: Operating Instructions and Parts Reference

# TC-12™ Tree Chipper



PRODUCT INFORMATION



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 **DURATECH<sup>®</sup>**  
**Clearing the Way for a Better Tomorrow**




# **TC-12<sup>TM</sup>**

## **Tree Chipper**

# **Operating Instructions and Parts Reference**

DuraTech Industries International Inc. (DuraTech) has made every effort to assure that this manual completely and accurately describes the operation and maintenance of the TC-12<sup>TM</sup> Tree Chipper as of the date of publication. DuraTech reserves the right to make updates to the machine from time to time. Even in the event of such updates, you should still find this manual to be appropriate for the safe operation and maintenance of your unit.

This manual, as well as materials provided by component suppliers to DuraTech are all considered to be part of the information package. Every operator is required to read and understand these manuals, and they should be located within easy access for periodic review.

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## Foreword

### **All personnel must read and understand before operating unit**

DuraTech Industries International Inc. (DuraTech Industries) has made every effort to assure that this manual completely and accurately describes the operation and maintenance of this Industrial Grinder as of the date of publication. DuraTech Industries reserves the right to make updates to the machine from time to time. Even in the event of such updates, you should still find this manual to be appropriate for the safe operation and maintenance of your machine.

This manual, as well as materials provided by component suppliers to DuraTech Industries are all considered to be part of the information package. Every operator is required to read and understand these manuals. All manuals should be located within easy access for troubleshooting and periodic review.

### **Appropriate use of the unit**

This Tree Chipper is designed to grind brush and tree branches no larger than 12 inches in diameter.

### **Operator protection**

As with all machinery, care needs to be taken by the operator in order to insure the safety of the operator and those in the surrounding area.



**WARNING:** Operators and those observing the operation of the Industrial Grinder are required to wear head, eye, and ear protection. No loose clothing is allowed.



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# **TC-12<sup>TM</sup>**

## **TREE Chipper**

### **Part 1:**

# **Operating Instructions**



# Introduction

This TC-12 TREE CHIPPER is designed to chip trees and shrubs 12" diameter or less.

## Purpose

Purpose of this owner's manual is to explain maintenance requirements, safety and routine adjustments for most efficient operation of your TC-12 TREE CHIPPER. There is also a trouble shooting section that may help in case of problems in the field. Any information not covered in this manual may be obtained from your dealer.



**SPECIAL NOTE:** When reference is made as to front, rear, left hand or right hand of this machine, the reference is always made from standing at the rear of the machine and looking toward the hitch. Always use serial number and model number when referring to parts or problems. Please obtain your serial number and write it below for your future reference.

MODEL: \_\_\_\_\_ SERIAL NUMBER: \_\_\_\_\_



# How to use this manual

## Manual organization

This manual is organized into the following parts:

- **Part 1: Operating instructions** explain how to set up, use and maintain the TC-12 TREE CHIPPER.
- **Part 2: Parts reference** contains diagrams of each assembly with the number of each part identified. A key on the facing page contains a description of the part and the quantity used.

## Operator responsibilities

- The operator is responsible for his own safety.
- The operator is responsible for the safety of others near the machine.
- Note the important safety information in the Foreword and in Section 1, “Safety.”
- Thoroughly review sections 1 through 3 which explain normal operation of the machine, and section 4, which explain maintenance requirements.
- Keep copies of manual in a readily accessible location for future reference.



## Section 1: Safety

The safety of the operator is of great importance to DuraTech Industries. We have provided decals, shields and other safety features to aid in using your machine safely. In addition, we ask you to be a careful operator who will properly use and service DuraTech Industries equipment.



**WARNING: FAILURE TO COMPLY WITH SAFETY INSTRUCTIONS THAT FOLLOW WITHIN THIS MANUAL COULD RESULT IN SEVERE PERSONAL INJURY OR DEATH. BEFORE ATTEMPTING TO OPERATE THIS MACHINE, CAREFULLY READ ALL INSTRUCTIONS CONTAINED WITHIN THIS MANUAL.**

**THIS MACHINE IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THOSE EXPLAINED IN THE OPERATOR'S MANUAL, ADVERTISING LITERATURE OR OTHER DURATECH INDUSTRIES WRITTEN MATERIAL PERTAINING TO THE TC-12 TREE CHIPPER.**

### 1.1 Safety-alert symbols

Decals are illustrated in Part 2: Parts Reference.

The safety decals located on your machine contain important and useful information that will help you operate your equipment safely.

To assure that all decals remain in place and in good condition, follow the instructions below:

- Keep decals clean. Use soap and water- not mineral spirits, adhesive cleaners and other similar cleaners that will damage the decal.
- Replace all damaged or missing decals. When attaching decals, surface temperature of the machine must be at least 40 degrees F (5 degrees C). The surface must be also clean and dry.
- When replacing a machine component to which a decal is attached, be sure to also replace the decal.



DuraTech Industries uses industry accepted ANSI standards in labeling its products for safety and operational characteristics.



## Safety-Alert Symbol

Read and recognize safety information. Be alert to the potential for personal injury when you see this safety-alert symbol.

**DANGER:** Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations, typically for machine components that, for functional purposes, cannot be guarded.

**WARNING:** Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

**CAUTION:** Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

This manual uses the symbols to the right to denote important safety instructions and information.

The **DANGER**, **WARNING** and **CAUTION** symbols are used to denote conditions as stated in the text above. Furthermore, the text dealing with these situations is surrounded by a box with a white background, will begin with **DANGER**, **WARNING**, or **CAUTION**.

The **INFORMATION** symbol is used to denote important information or notes in regards to maintenance and use of the machine. The text for this information is surrounded by a box with a light grey background, and will begin with either **IMPORTANT** or **NOTE**.



**DANGER:**

Signal word - White Lettering/Red Background

Safety Alert Symbol - White Triangle/Red Exclamation Point



**WARNING:**

Signal word - Black Lettering/Orange Background

Safety Alert Symbol - Black Triangle/Orange Exclamation Point



**CAUTION:**

Signal word - Black Lettering/Yellow Background

Safety Alert Symbol - Black Triangle/Yellow Exclamation Point





## 1.2 Operator - personal equipment

### THE OPERATOR



**NOTE: DO NOT OPERATE THIS MACHINE ALONE!** Always have two operators present at all times.

#### Physical Condition

You must be in good physical condition and mental health and not under the influence of any substance (drugs, alcohol) which might impair vision, dexterity or judgment.

Do not operate a TC-12 TREE CHIPPER when you are fatigued. Be alert - If you get tired while operating your TC-12 TREE CHIPPER, take a break. Fatigue may result in loss of control. Working with any industrial equipment can be strenuous. If you have any condition that might be aggravated by strenuous work, check with your doctor before operating.

#### Proper Clothing



Clothing must be sturdy and snug-fitting, but allow complete freedom of movement. Avoid loosefitting jackets, scarfs, neckties, jewelry, flared or cuffed pants, unconfined long hair or anything that could become entangled with the machine.



Protect your head with a hard hat to reduce the risk of injury from flying debris.



Protect your hands with gloves when handling hammers, screens, etc.. . Heavy-duty, non-slip gloves improve your grip and protect your hands.



Good footing is most important. Wear sturdy boots with nonslip soles. Steel-toed safety boots are recommended.



To reduce the risk of injury to your eyes never operate a **TC-12 Tree Chipper** unless wearing goggles or properly fitted safety glasses with adequate top and side protection.




Tractor noise may damage your hearing. Always wear sound barriers (ear plugs or ear muffs) to protect your hearing. Continual and regular users should have their hearing checked regularly.






### 1.3 Machine safety labels





The safety decals located on your machine contain important information that will help you operate your equipment. Become familiar with the decals and their locations.

 **DANGER: ROTATING PARTS WITHIN CAN KILL OR DISMEMBER. WAIT FOR ALL MOVEMENT TO STOP BEFORE SERVICING, UNLOADING, OR INSPECTING MACHINE.**


 **DANGER**  
**ROTATING PARTS WITHIN CAN KILL OR DISMEMBER**  
**WAIT FOR ALL MOVEMENT TO STOP BEFORE SERVICING, UNLOADING OR INSPECTING MACHINE**  
6500082

6500082

 **DANGER: OBJECTS THROWN BY MACHINE DO NOT OPERATE WITHOUT WEARING SAFETY GLASSES AND A HARD HAT. KEEP UNAUTHORIZED PERSONNEL OUT OF THE GRINDING AREA**

<p> <b>DANGER</b>  <b>OBJECTS THROWN BY MACHINE</b>  <small>Do not operate without wearing safety glasses and a hard hat. Keep all unauthorized personnel out of grinding area!</small></p>	<p>  </p>	<p> <b>PELIGRO</b>  <b>OBJETOS LANZADOS POR LA MÁQUINA</b>  <small>No opere esta máquina sin llevar puestos los anteojos de seguridad y el casco. Mantenga al personal no autorizado fuera del área de esmerilado!</small></p>
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6500118

 **DANGER: THROWN OBJECT HAZARD KEEP AWAY**

- TO PREVENT SERIOUS INJURY OR DEATH THROWN OBJECT:
- STAY AWAY FROM DISCHARGE AREA DURING OPERATION. KEEP OTHERS AWAY.
- DO NOT POINT DISCHARGE TOWARD PEOPLE, ANIMALS OR PROPERTY.

 **DANGER**




**THROWN OBJECT HAZARD KEEP AWAY**

- To prevent serious injury or death from thrown object:
- Stay away from discharge area during operation. Keep others away.
- Do not point discharge toward people, animals or property.

6500221

6500221

 **DANGER: DO NOT OPEN WHEN CHIPPER IS TURNING.**

 **DANGER**

**DO NOT OPEN WHEN CHIPPER IS TURNING**

6500447



**DANGER:** ALWAYS USE THE CHIPPER DISC LOCK WHEN CHANGING CHIPPER KNIVES

**⚠ DANGER**

ALWAYS USE THE CHIPPER DISC LOCK WHEN CHANGING CHIPPER KNIVES

6500446



**DANGER:** DO NOT USE STARTING FLUID WITH ENGINE PREHEATER

**⚠ DANGER**

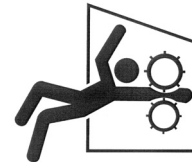
DO NOT USE STARTING FLUID WITH ENGINE PREHEATER

6500448



**DANGER:** NEVER REACH INSIDE INFEED CHUTE!

**⚠ DANGER**



NEVER REACH INSIDE INFEED CHUTE!

6500445



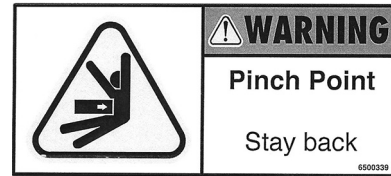
**WARNING:** FOR YOUR PROTECTION KEEP ALL SHIELDS IN PLACE AND SECURED WHILE MACHINE IS OPERATING. MOVING PARTS WITHIN CAN CAUSE SEVERE PERSONAL INJURY.

**⚠ WARNING ⚠ ADVERTENCIA**

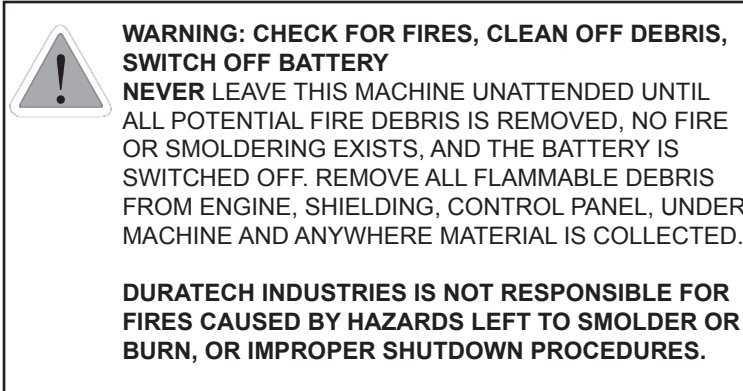
FOR YOUR PROTECTION KEEP ALL SHIELDS IN PLACE AND SECURED WHILE MACHINE IS OPERATING. MOVING PARTS WITHIN CAN CAUSE SEVERE PERSONAL INJURY.

PARA ASEGURAR SU PROTECCION, MANTENGA TODOS LOS PROTECTORES EN SU LUGAR Y ASEGURADOS MIENTRAS LA MAQUINA ESTE OPERANDO. LAS PIEZAS MOVILES INTERNAS PUEDEN CAUSAR LESIONES PERSONALES GRAVES.

6500040



6500339



6500425

## 1.4 Shielding

Shields are installed for your protection. Keep them in place and replace damaged shields.

## 1.5 Safety Review Section

### Before operating

Read and follow all instructions contained in:

- This TC-12 TREE CHIPPER operator’s manual
- Decals placed on the TC-12 TREE CHIPPER
- Check hydraulic oil level

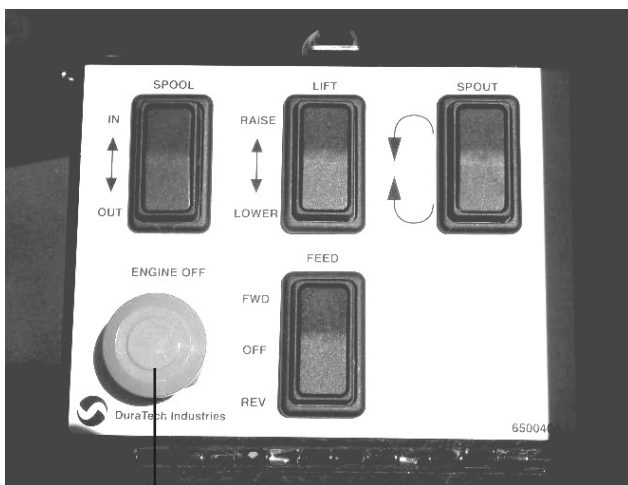


**NOTE:** Additional copies of the above mentioned materials can be obtained from your dealer.

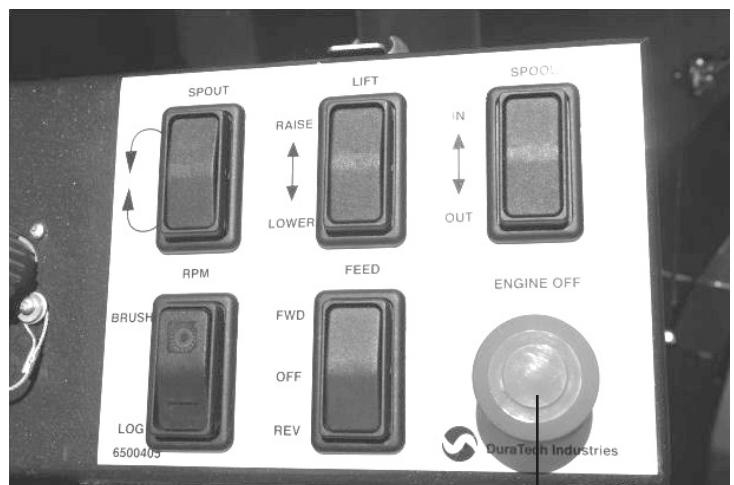
- Allow only responsible, properly instructed individuals to operate your machine. Carefully supervise inexperienced operators.
- Make sure the machine is in good operating condition and that all protective shields are in place and in proper working order. Replace damaged shields before operating.
- Be sure all bystanders and other workers are clear before starting the TC-12 TREE CHIPPER. Machine should be in a restricted area from people passing by and the area around the machine should be clear of all objects that can obstruct your movement when working with the machine.
- Machine should never be operated unless hooked to a towing vehicle.
- Make no modifications to the machine unless specifically recommended or requested by DuraTech Industries.
- Check periodically for breaks or unusual wear and make necessary repairs.
- **Do not** wear torn or loose clothing as they can get caught in moving machinery and tree branches. Items such as long hair, shirt sleeves and shirt need to be kept contained. Wear all personal protection equipment and follow all safety standards.

### During operation

- Operators need to be located within easy reach of all feed controls and shut-off devices when the unit is running. Always be attentive and prepared to activate the devices.
- Always know the direction of the discharge chute before chipping. Never stand in front or direct the chute towards anyone or any thing.
- Never allow anyone to sit, stand, lay, climb or ride on the TC-12 TREE CHIPPER while it is running, operating, or in transit.
- Emergency stop switches (will shut down the engine when pressed)



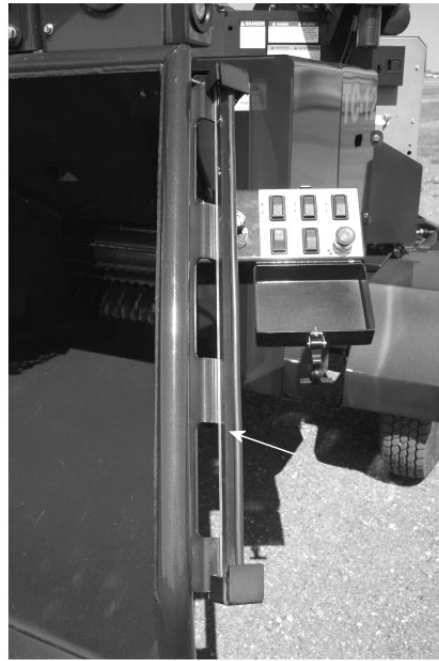
Emergency stop  
(left control panel)



Emergency stop  
(right control panel)



**Figure 1.1**  
**Safety Bumper Bar**



**Safety bumper bar**

- Feed forward will not operate if the safety bumpers bars are not properly functioning. Consult your dealer if feed forward does not work after pressing reset.
- After the safety bumper bars are pressed the feed forward switch will not work until the reset on the engine control panel is pressed. Feed reverse will still function after the safety bumper is activated.
- Never reach into the infeed hopper area. The feedwheels are designed to pull trees and shrubs into the machine and could easily pull a person or extremities through much easier.
- Always stand to the side of the infeed hopper when inserting material. This allows you to turn away from the wood, and walk away, without passing through the material. (Figure 1.2)

**Figure 1.2**  
**Proper position for**  
**feeding material into**  
**the hopper**







## During service and maintenance

- Before working in or near the TC-12 TREE CHIPPER for any reason, including servicing, cleaning, unplugging or inspecting the machine, use the normal shut down procedures unless instructed differently in this manual.
- Never work on or near the TC-12 TREE CHIPPER unless engine is shut off.
- Check periodically and tighten any loose bolts or connections.
- Use only replacement parts that are recommended by DuraTech Industries.
- Use cylinder stop when cleaning or unplugging debris between feedwheels and chipping disc. (See Figure 1.3)

**Figure 1.3**  
Cylinder Stop



- Use disc lock pin when servicing knives. (See Figure 1.4)

**Figure 1.4**  
Disc Locking Pin







- Hydraulic fluid escaping under pressure can be invisible and have enough force to penetrate the skin. When searching for a suspected leak, use a piece of wood or cardboard rather than your hands. If injured, seek medical attention immediately to prevent serious infection or reaction.
- Do not operate the TC-12 TREE CHIPPER indoors.
- Make sure wheels are always blocked before running the chipper.

## **1.6 Towing/road transport**

- Discharge spout needs to be in transport position pointed towards the hitch of the TC-12 TREE CHIPPER.
- Close and secure all doors and covers on the TC-12 TREE CHIPPER.
- Check tire pressure.
- Raise hitch to proper height and attach to towing vehicle securely.
- Locate jack and place in towing position.
- Hook safety chains to towing vehicle.
- Hook breakaway safety switch cable securely to towing vehicle.



## Section 2: Introduction

### 2.1 Dry Clutch

The **HPTOTM Hydraulic Power Take off** is hydraulically actuated, enclosed dry clutch that requires no adjustment throughout its wear life. During a torque spike, the clutch will act as a torque limiter by slipping to absorb the shock load. The bearings in the clutch are grease for the life of the product.

A **Microprocessor Controller** provides remote push button controlled clutch engagement of the HPTO. The controller monitors clutch pressure, engine speed and equipment safety switch.

A **Hydraulic Manifold Assembly** controls the pressure required for clutch engagement. System components include a DC coil, a pressure regulating cartridge, and a pressure switch.

The pre-programmed setting of the controller determines how the HPTO unit will function during start up.

The “Power” LED illuminates to notify the operator that the controller is receiving switched power from the engine ignition switch.

The “Engine RPM” LED illuminates when the engine is running.

To engage the clutch, set the engine rpm below 1100 rpm, press and hold the “Engage/Disengage Button” for 3 seconds. Once the “Clutch Engage Symbol” illuminates, the reset button can be released. The controller will begin the engagement of the clutch and perform a series of “bumps” to bring the driven equipment up to engine speed.



**Note:** There is a safety switch that prevents the rotor from engaging when the disc cover is raised.

If the engine speed is above 1100 rpm while attempting to engage the clutch, the “Engine Over-speed Symbol” will illuminate. Reduce speed below 1100 rpm and the light will turn off.



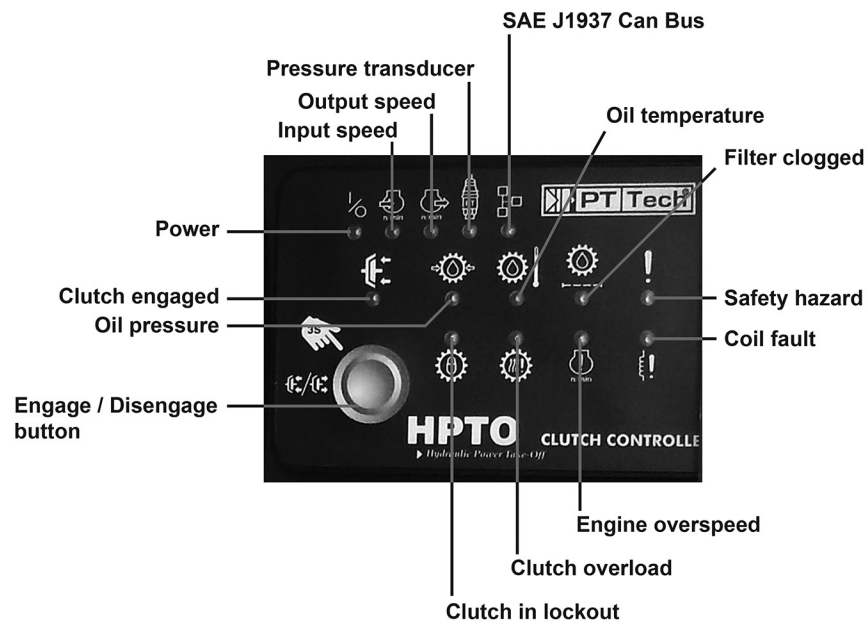
To disengage the clutch, set engine speed below 1200 rpm and push the “Engage/Disengage Button”. The clutch will immediately disengage.

The controller will allow 3 failed clutch startup attempts in a row. After the 3<sup>rd</sup> failed clutch startup attempt, the controller will prevent the clutch from being engaged for 10 minutes.

There are three different conditions that are considered as “failed start attempts”. They are:

- The engine speed goes to zero and the engine stalls while the clutch is engaging.
- The operator attempts to increase engine speed while the clutch is engaging.
- The operator pushes the green engage/disengage button to disengage the clutch while the clutch is engaging.

If there is a pressure loss while the clutch is engaged, the controller will disengage the clutch and the “Oil Pressure Loss Symbol” will flash to indicate that there was a pressure loss while the clutch was engaged.





## 2.2 Engine Control Panel

The engine control panel is located on rear of the engine compartment. Controls and gauges on the control panel include the key switch, fuel gauge, safety bar reset, and the engine management screen and controls.

Engine management system

5701021 - CAT (Tier II)

5701022 - Kubota Mechanical



Dry clutch display - 57000916

Start and feed reset switch - 5700831  
Boot - 5700639

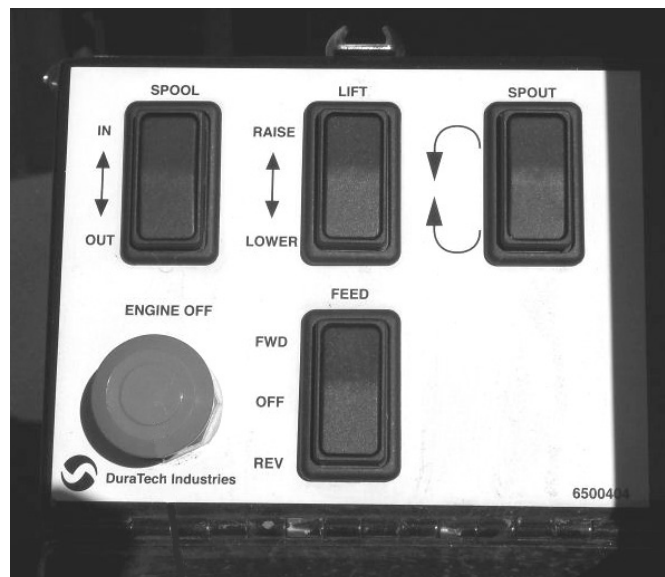
Key switch

Battery disconnect - 5700016

Throttle cable - 7501541

## Left side control panel

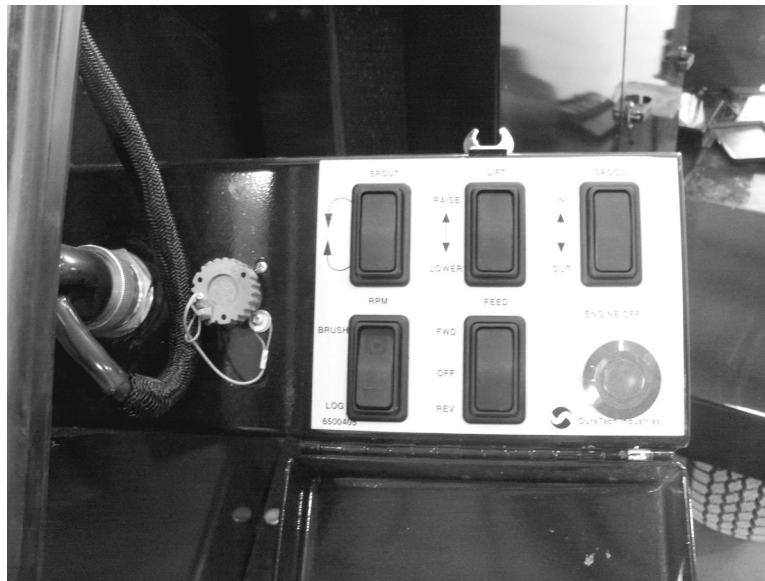
Located on the left side of the machine, the switches control the spool, lift, spout, feed mode and engine off.





## Right side control panel

Located on the right side of the machine, the switches control the spool, lift, spout, feed mode, rpm, engine off and a computer plug in.



## 2.3 Other controls

### Battery disconnect switch

The battery disconnect switch is used to connect and disconnect the main battery ground to the machine. When the machine is not in use, it should be disconnected.



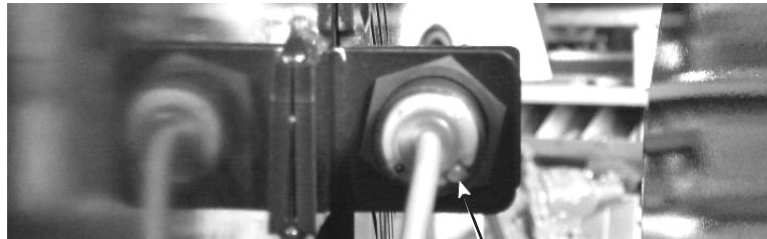


## Governed Feed System

Governed feed system is intended to optimize engine horsepower and maintain consistent feed flow, it is always functioning. The hydraulic flow to the feedwheel drive mechanism is regulated proportionally to the engine speed. When the engine begins to lug down, the hydraulic oil flow is reduced which in turn slows down the feedwheel. The engine will only lug down to its optimum horsepower RPM and the feedwheel speed will be varied proportionally to keep the engine at this RPM. The result is a nearly constant load on the engine, which will maximize chipping efficiency. However, if the engine RPM goes below this preprogrammed RPM, the feedwheels will stop, reverse briefly, then when engine RPM recovers feed forward will reengage. If engine RPM does not recover in 10 seconds feed forward will not reengage until RPM's recover and feed forward switch is pressed.

## Disc access safety switch

The TC-12 TREE CHIPPER is designed with a proximity switch assembled to the chipper hood. This safety feature is designed to shut down the engine if the chipper hood is not in a closed position. Engine will not start when switch and mating magnet are not aligned. The sensor has a yellow LED at the cable end of it that will light up when properly aligned. Proper clearance is 5mm and the sensor must be properly rotated to match the sensor with the polarity of the magnet. The magnet has an anti-rotation pin and a tamper proof screw.



Proximity switch  
(LED light location)

## Radio remote transmitter (Option)

The radio remote transmitter has two possible functions.

The choices are:

- 1) Feed roller Raise/Lower
- 2) Feed roller Fwd./Rev.
- 3) Winch In/Out



Radio remote transmitter

Function 1

Function 2





## Section 3: Operation

To insure long life and economical operation, we highly recommend the operator of the TC-12 TREE CHIPPER be thoroughly instructed in the maintenance and operation of the machine. There is no substitute for a sound preventative maintenance program and a well trained operator.

Prior to starting the engine of the TC-12 TREE CHIPPER, we recommend the operator make a visual inspection of the unit. This can be done as the lubrication is being carried out. Any items that are worn, broken, missing, or needing adjustment must be serviced accordingly before operating the TC-12 TREE CHIPPER.

### 3.1 Pre-starting inspection instructions

Check the following:



**Warning:** Hydraulic fluid escaping under pressure can be invisible and have enough force to penetrate the skin. When searching for a suspected leak, use a piece of wood or cardboard rather than your hands. If injured, seek medical attention immediately to prevent serious infection or reaction.

- Check for loose bolts, worn or broken parts.
- Lug nuts for tightness.
- Condition of tire rims.
- Installation and condition of shields.
- Condition of decals.

### 3.2 Normal shut down procedure

Use this procedure before servicing, cleaning, inspecting, or transporting the TC-12 TREE CHIPPER.

Use a variation of this procedure only when instructed to so within this manual, or if an emergency requires it.

1. Reduce engine speed to idle.



**Important:** Whenever practical and consistent with good safety practices, allow the engine to run without being under load for a few minutes before shutting it off. This allows the engine temperature to decrease and equalize, which will increase engine life.

2. Disengage clutch.



**Warning:** The chipper disc will continue to turn for a short time after clutch has been disengaged.



3. Turn ignition key to the OFF position and remove the key.
4. Wait for the chipper disc to stop turning.



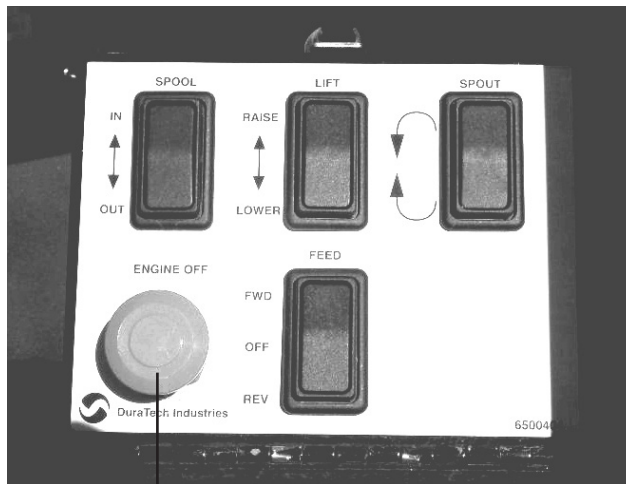
**Note:** Chipper disc rotation can be checked by looking at the end of the shaft on the side of the chipper housing.

### 3.3 Emergency stopping



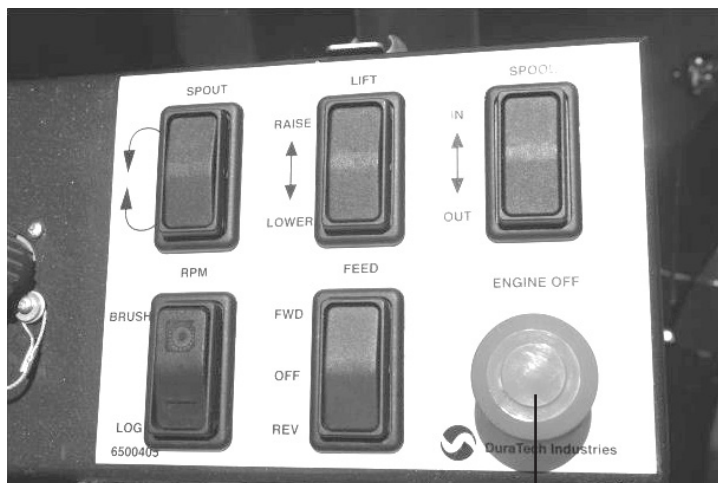
**Notice:** Emergency shutoff controls are for **EMERGENCY** use **ONLY**. **DO NOT** use the emergency shutoff devices or controls for normal stopping procedure.

#### Left Control Panel



Emergency stop

#### Right Control Panel

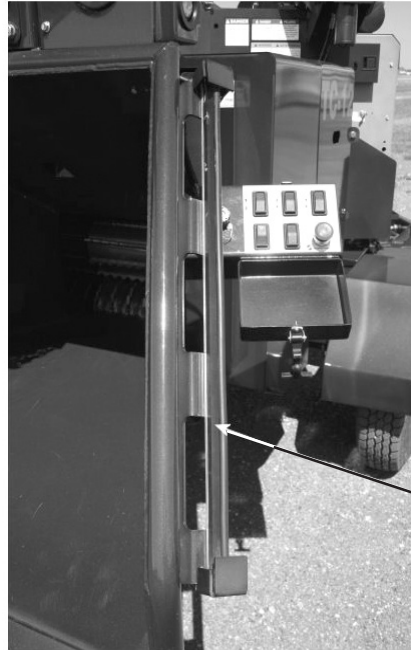


Emergency stop



### 3.4 Safety bumper bars

The safety bumper bars are located on each side of the infeed. After these bumpers are pressed, the feed forward switch will not work until the reset button on the engine control panel is pressed. Feed reverse will still work if bumper is pressed. Feed forward will not function if either bumper bar is not working properly. If feed forward does not work after pressing reset button consult your dealer.



Safety bar

### 3.5 Normal Start up procedure



**Note:** Do not adjust the engine speed control during start-up. The electronic control Unit (ECU) will control the engine speed during start-up.

#### Starting a cold engine



**Warning:** If engine is equipped with an intake preheater, DO NOT use starting fluid.

When starting, both emergency stops must be pulled out. Rotor cover must be closed. By pressing the start toggle switch, the yellow LED rotor cover proximity switch will light. Turn engine key.

1. Disengage any equipment that is driven by the engine.
2. Turn the key switch to the RUN position. Leave the key switch in the RUN position for 20 seconds. (This allows glow plugs time to heat)



3. Turn the key switch to the START position in order to engage the electric starting motor and crank the engine.



**Notice:** Do not engage the starting motor when flywheel is turning. Do not start the engine under load.

If the engine fails to start within 30 seconds, release the starter switch or button and wait two minutes to allow the starting motor to cool before attempting to start the engine again.

4. Allow the key switch to return to the RUN position after the engine starts.
5. Repeat step 2 through 4 if the engine fails to start.

### Starting a warm engine

1. Disengage any equipment that is driven by the engine.
2. Turn the key switch to the START position in order to engage the electric starting motor and crank the engine.



**Notice:** Do not engage the starting motor when flywheel is turning. Do not start the engine under load.

If the engine fails to start within 30 seconds, release the starter switch or button and wait two minutes to allow the starting motor to cool before attempting to start the engine again.

3. Allow the key switch to return to the RUN position after the engine starts.
4. Repeat step 2 and 3 if the engine fails to start.

### 3.6 Rotating Discharge Spout



**Notice:** Operator is responsible for insuring the spout is directed properly prior to engaging the chipper disc. Spout should “NEVER” be pointed toward the infeed area of the chipper. Spout should not be pointed at buildings, roadways, vehicles or anywhere flying debris may cause injury to others. Use traffic cones or tape off a perimeter to help alert others to flying debris hazard. Never point spout at surface of object or trees for example, that may deflect flying debris back at the chipper or operators.

1. With engine running, use the spout rotation switch on either control panel to adjust spout direction.
2. Adjust the spout deflector by pulling the handle down, then sliding toward end of spout to raise the deflector or toward chipper to lower the deflector.
3. Point spout toward the hitch for transport.



### 3.7 Engage Chipper Disc

1. Engine must be at low idle RPM to engage the clutch.
2. Press and hold clutch engagement button on the clutch control panel.
3. If the clutch control system fails to engage the clutch after the start sequence is complete, turn off the engine and inspect the disc housing and feed area for obstruction. Be sure that the disc is not rotating before servicing. (See 3.13 Unplugging Procedure)
4. Repeat step 2.

### 3.8 Adjusting Engine Speed

Use the up and down arrow keys on the engine management display to control the engine RPM. The engine will run at two preset engine RPM, Either 850 rpm (low idle) or 2400 rpm (high idle)

### 3.9 Select Feed Speed (RPM)

On the right control panel located at the right side of the chipper, the switch labeled RPM is used to set the feedroll speed and enables the auto height sensor if installed. Tree Mode is intended for chipping small log and brush with a faster feed RPM. Log Mode is intended for larger logs 6" diameter or larger. It has a slower feed RPM and enables the auto height sensor if equipped. Auto feed speed is always on and will stop when low engine RPM limit is reached, then reverse briefly to help the engine RPM recover.

### 3.10 Feed Forward/Reverse

Located on either control panel, the switch labeled FEED will start the feed wheels when pressing FWD or REV. If the light bars were contacted to stop the feed wheels, then auto feed reset must be pressed prior to FEED FWD. FEED Rev is momentary and requires the button to be held down to keep reverse engaged. If going from FEED FWD to FEED REV, then FEED REV must be pressed to turn off FEED FWD and pressed and held to engage FEED REV.

Engine must be at high idle and the chipper turning (clutch engaged) for FEED FWD to work.

### 3.11 Feeding Chipper without Auto Feed Height

1. Never enter feed hopper while engine is running.
2. Always stand to the side of the feed hopper while feeding the chipper to avoid being pulled into feed hopper by trailing branches, standing to the side of the feed hopper insures access to a safety bar.
3. Cut pieces into manageable sizes. Trying to feed logs too heavy or branches not easily handled by one operator increases the chances of strains and fatigue.
4. Load trees and limbs so the trunk end of the limb enters first with crotches and brush after. Once material has engaged the feed wheels and is advancing, step back from infeed hopper to avoid trailing limbs and branches.
5. When loading larger diameter logs, using the feed wheel lift to open the feed "throat" reduces the force required to push the log into the opposing feed wheels.



### 3.12 Feeding Chipper with Auto Feed Height

1. Select log RPM on the right control panel.
2. Never enter feed hopper while engine is running.
3. Always stand to the side of the feed hopper while feeding the chipper to avoid being pulled into feed hopper by trailing branches, standing to the side of the feed hopper insures access to a safety bar.
4. Cut pieces into manageable sizes. Trying to feed logs too heavy or branches not easily handled by one operator increases the chances of strains and fatigue.
5. Load trees and limbs so the trunk end of the limb enters first with crotches and brush after. Once material has engaged the feed wheels and is advancing, step back from infeed hopper to avoid trailing limbs and branches.
6. Load end of limb or log onto feed hopper and pass under height sensor. Height sensor will immediately open feed wheel throat to accept the material and release the top feed wheel to the spring applied down pressure to close the throat. The diameter of the material being fed will determine how high the top feed wheel will rise. Once material has engaged the feed wheels and is advancing step back from hopper to avoid trailing limbs and branches.

### 3.13 Unplugging Procedure

**Always run the chipper at full engine speed.** Dull knives can create chunks, and slivers, causing the engine to lug. This also contributes to the chipper plugging. Follow the steps below if your TC-12 TREE CHIPPER becomes plugged:

1. Follow the normal shut-down procedure.
2. Open the hinged portion of chipper hood when the disc is **NOT** turning.
3. Install disc/drum lock pin, and disconnect battery.
4. Open the hinged portion of chipper hood when the disc is **NOT** turning.
5. Open cleanout door on bottom of chipper housing.
6. Using a raking tool or gloved hands dig the chips out of the chipper housing.
7. If the discharge chute is plugged, use a raking tool to pull out the majority of the chips out of the open end of chute. Remove chute access located beneath curve in chute. Push/pull chips to clean as needed. Install discharge chute access cover.
8. **NEVER** turn the disc when someone is working inside the chipper housing. The chipper disc will turn hard then loose causing it to turn faster. Injury could result.
9. **ALWAYS** use a pry bar to turn the disc. **NEVER** turn by hand!
10. When the chipper disc turns freely, close and secure the chipper hood and close cleanout door. Engine will not start until this is done.
11. Follow normal start up procedure, engage clutch and throttle to full speed.
12. Insert small branch into feedwheel and check that it discharges properly then resume normal operations.



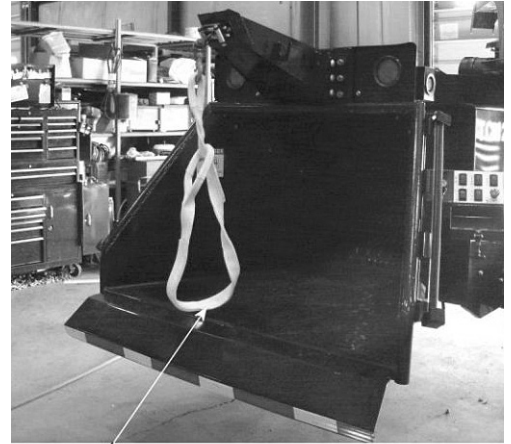


### 3.14 Winch Operating Procedure



**DANGER:** NEVER REACH INTO THE WINCH OR WINCH ROLLER AREA.

1. Disengage the winch clutch and pull cable to the material to be reeled in. Securely attach cable to the wood material that needs to be pulled to the chipper.
2. Make sure area is clear of workers and bystanders. Rotate clutch handle to rubber stop to engage winch clutch and make sure handle is in the lock position.
3. Using the SPOOL switch on the left or right control panel, pull the wood material to the chipper.
4. Unhook cable from the wood material and make sure it is completely reeled back in and out of the way.
5. Inspect winch cable daily for broken wires or frayed cable. Replace cable if it is damaged.



Choker sling



**IMPORTANT:** Always make sure that the cable is clear of the feedwheel. Severe damage can occur if the cable enters the chipper.

6. Engage the feedwheel and begin feeding the wood material.





### **3.15 Transporting the TC-12 TREE CHIPPER**

1. Make sure towing vehicle hitch is properly equipped for the hitch of the TC-12 TREE CHIPPER.
2. Properly attach the chipper to the towing vehicle and install safety pins. Securely attach safety chains to the towing vehicle.
3. Check tire pressure and wheel rims for fatigue or loose bolts.
4. Hook up electrical connections and make sure all taillights and turn signals function properly.
5. Raise tongue jack to transport position.
6. Clean infeed of all debris.
7. Point discharge chute toward the hitch for transport.
8. Remove wheel blocks and check machine for any loose items that might get lost during transport.

## **Section 4: Engine Maintenance**

Engine oil level, engine coolant level, air filters, and fan belt tension should be checked daily. All debris and combustible or ignitable material should be cleared from the engine compartment daily or more often as conditions warrant. When cleaning the engine compartment, pay particular attention to the top of the engine. Follow the engine manufacturer's recommendations for the replacement of parts and fluids, and follow the manufacturer's recommended maintenance schedule. Engine specifications should be found in the Operation and Maintenance manual for the engine.





## Section 5: General Maintenance



**Warning:** Before servicing the TC-12 TREE CHIPPER, read the Service and Maintenance section of the Safety Instructions.

### 5.1 Welding Procedure

Welding on a machine that is equipped with an Electronic Engine.

Proper welding procedures are necessary in order to avoid damage to the computerized equipment. Computerized equipment includes but not limited to the following; the Engine Control Unit (ECU), HPTO Control Module and auto-feed controller.

If at all possible, the component that is to be welded should be removed from the machine for welding. If removal of the component is not possible, the following procedure must be followed when welding on a machine that is equipped with electronic engine. This procedure is considered the safest and should provide minimum risk of electronic component damage.



**Note:** Do not ground the welder to electrical components such as the ECU or sensors. Improper grounding can also damage the drive train bearings or hydraulic components. Clamp the ground cable from the welder to the component that will be welded. Place the clamp as close as possible to the weld. This will help reduce the possibility of damage.

1. Stop the engine. Turn the battery disconnect switch to the OFF position.
2. Disconnect the negative battery cable from the battery.
3. Disconnect the connectors from the computerized equipment listed on the previous page. Move each harness to a position that will not allow the harness to accidentally move back and make contact with any of the connector pins.
4. Connect the welding ground cable directly to the part that will be welded. Place the ground cable as close as possible to the weld in order to reduce the possibility of welding current damage to the bearings, hydraulic components, electrical components, and ground straps.



**Note:** If the electrical/electronic components are used as a ground for the welder, or electrical/electronic components are located between the welder ground and the weld, current flow from the welder could damage the components.

5. Protect the wiring harness and hydraulic hoses from welding debris and spatter.
6. Use standard techniques to weld the materials.



## 5.2 Batteries

Check the condition of the batteries to insure that the electrolyte level is correct. Make sure that the terminals and cables are not corroded. Also make sure there is no arcing or grounding by the terminals.

The system uses two 12 volt batteries in a series for a 24 volt system.



**Caution:** Hydrogen gas given off by a battery is explosive. Keep sparks and flames away from the battery. Before connecting or disconnecting a battery charger, turn the charger off. Make last connection and first disconnection at a point away from the battery. Always connect the NEGATIVE (-) cable last and disconnect the NEGATIVE (-) cable first.

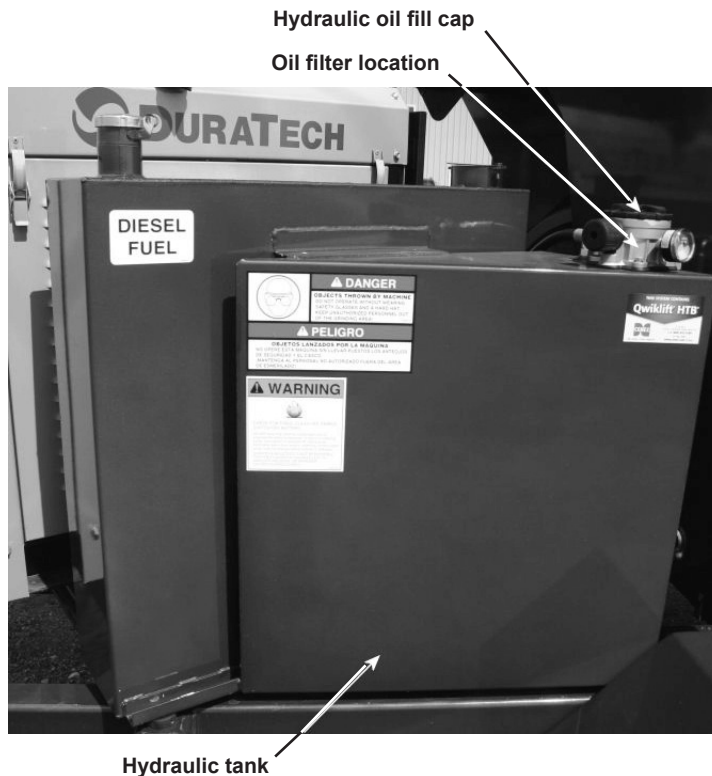
## 5.3 Hydraulic system



**Caution:** Lack of proper hydraulic oil level in the reservoir tank will cause system to heat under continuous running. Check the hydraulic oil level daily and replace as necessary.

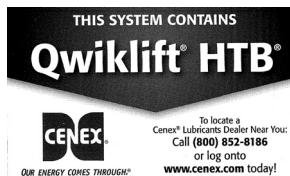
The in-tank hydraulic oil filter should be changed after the first 10 hours of operation. Then change hydraulic oil and filters after 100 hours of operation. Thereafter, change hydraulic oil filters every 3 months or 400 hours of operation. Oil filter must be removed first before changing the oil or adding oil if the oil level is low. Maintain hydraulic oil level 7/8 full. Check hydraulic oil level daily. The filter housing has a filter restriction gage installed to monitor filter life.

Check the hydraulic oil regularly, and if the oil has a burnt smell or milky appearance, change immediately.





Hydraulic oil level  
sight  
glass



DuraTech Industries recommend using Cenex Qwicklift HTB if your machine has a Qwicklift decal on the hydraulic tank. Other acceptable fluids include Mobil 423, Farm-land Super HTB, Conoco Hydroclear Power Tran Fluid, or similar fluids. If the hydraulic tank does not have a decal, then all the above fluid is acceptable.

## 5.4 Clutch system

Check all HPTO bolted connections and hydraulic connections every 500 hours.

Clutch is to be serviced and inspected after 5000 hours of operation – contact your dealer for details.



## 5.5 Axle, wheels, and tires

### Tire Pressure

Set the tire pressure according to the manufacturer's specifications. The appropriate tire pressure can be found on the sidewall of the tire.

### Brakes

The brakes are electrically activated drum style brakes that are actuated by an electromagnet. These braking systems are self-adjusting, but if manual adjustment is required, use the following procedure:

Brakes should be adjusted after the first 200 miles of operation when the brake shoes and drums have seated, at 3,000 mile intervals, or as the use and performance requires.

## 5.6 Lubrication

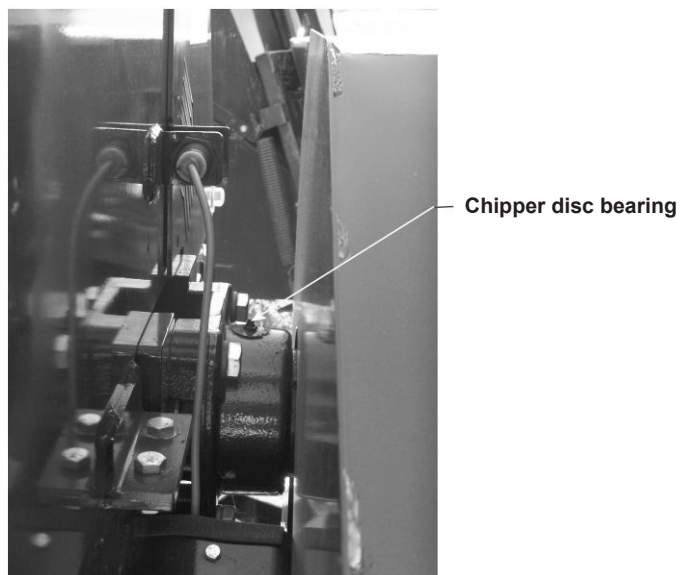
Use only high quality, #2 multi-purpose grease when lubricating the unit. Make sure all fittings and the nozzles or the grease applicators are clean before applying grease. If any grease fittings are missing, replace them immediately.

The TC-12 TREE CHIPPER has eight points to lubricate with a grease gun.

1. Chipper disc bearings - (2) places every 50 hrs.
2. Feedwheel bearings - (2) places every 50 hrs.
3. Discharge swivel - (2) places as needed
4. Wheel bearings – (2) places every 12 months

Discharge swivel chain- use a dry lubricant on it weekly

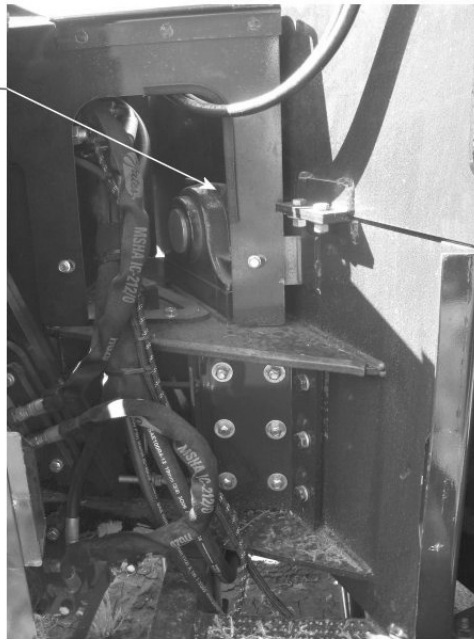
**Figure 5.1**  
Chipper Disc Bearing  
lubrication zerk (1 of 2)





**Figure 5.2**  
**Chipper Disc Bearing**  
lubrication zerk (2 of 2)

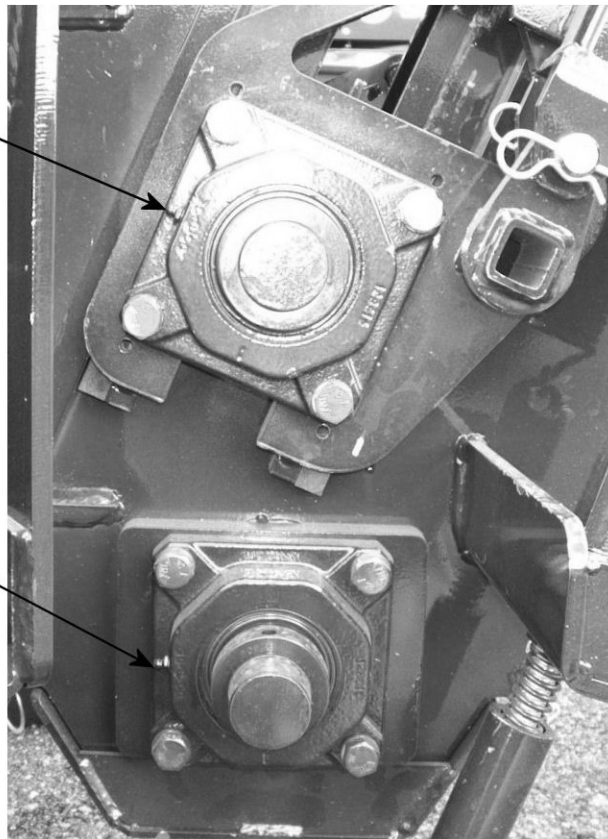
Chipper disc bearing



**Figure 5.3**  
**Feedwheel Bearings**  
lubrication zerks

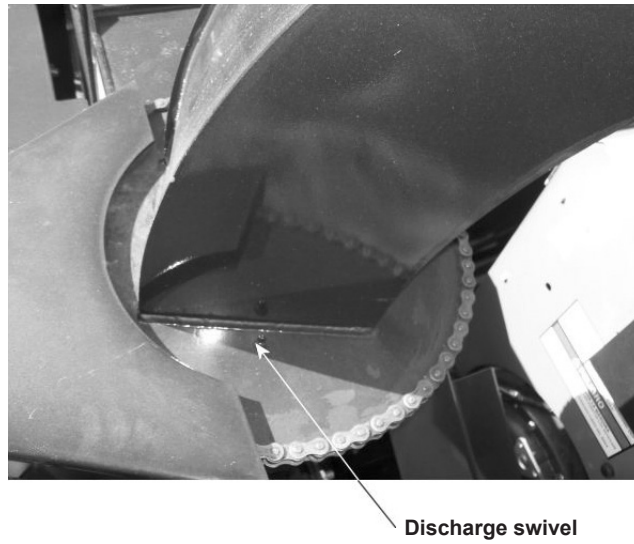
Feedwheel bearings (1 of 2)

Feedwheel bearings (2 of 2)





**Figure 5.4**  
Discharge Swivel  
lubrication point



## 5.7 Wear parts

The feedwheel slide has friction pads and wear pads that will need to be replaced from time to time.

**Figure 5.5**  
Feedwheel Slide Arm







## 5.8 Checking and setting belt tension procedures



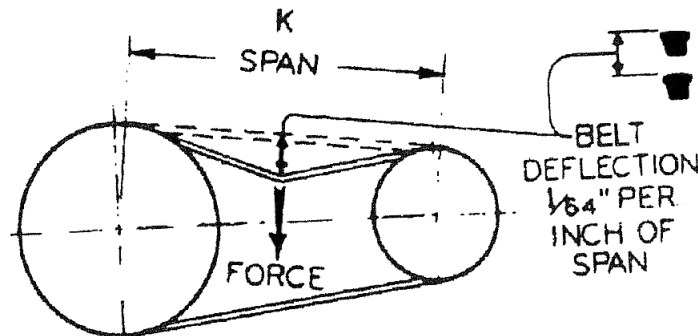
**NOTE:** Check new belts as they stretch and must be adjusted several times in the first few hours of operation. Adjust after the first hour of operation and then every four hours until the belts quit stretching. If belt “chirps” or slips during clutch engagement sequence it is not tight enough.

### General rules for tensioning:

1. Ideal tension is the lowest tension at which the belt will not slip under peak load conditions.
2. Check tension frequently during the first 24-48 hours of run-in operation.
3. Over tensioning shortens belt and bearing life.
4. Keep belts free of debris which may cause slipping.
5. Make V-Drive inspection on a periodic basis. Tension when slipping. Never apply belt dressing as this will damage the belt and cause early failure.
6. Make sure tension belt does not slip at start up.
7. Verify sheave alignment by laying a straight edge across the face of the sheaves. Alignment should be a  $\frac{1}{4}$ " or less for the given span.

### Tensioning procedure:

1. Measure the span length, K.
2. At the center of the span (K) apply a force (perpendicular to the span) large enough to deflect the  $\frac{1}{64}$ ", for every inch of span length. For the TC-12 Chipper  $K=28$ ", so  $28/64=7/16$ " deflection.

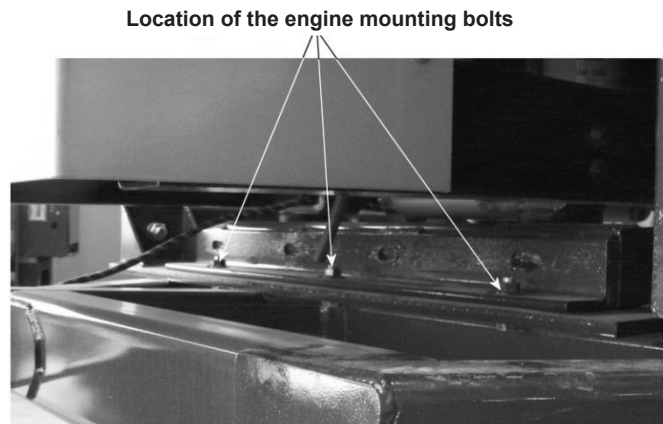


3. Belt Deflection force for the TC-12 chipper with a new belt is 92 lbs at  $7/16$ " deflection and the normal value is at 64 lbs at  $7/16$ " deflection. If the force is between the values for normal tension and 1-1/2 times normal, then drive tension should be satisfactory. A force below the value for normal tension indicates an under-tensioned drive. If the force exceeds the value for 1-1/2 times normal tension, the drive is tighter than it needs to be.

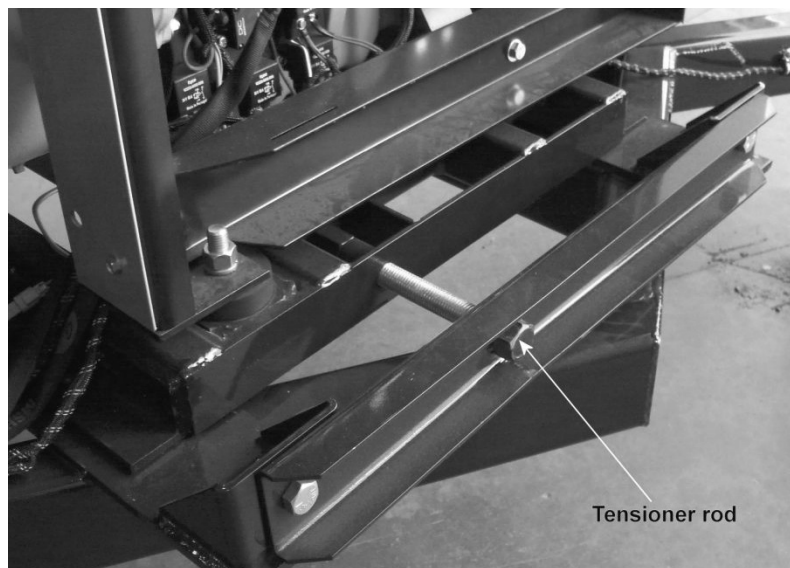


## Adjusting the belt tension on the TC-12 Chipper

1. Open belt shield.
2. Loosen all (6) bolts on the engine mount.



3. Using the “Tensioning Procedure”, adjust belt tension using the tensioner rod on the tension assembly.



4. Retighten the (6) engine mounting bolts.
5. Close belt cover.

## Torques for sheave bolts

Disc side sheave (1400618) torque for bolts is 900 in-lbs (124.4 m-kg) and 720 in-lbs (99.5 m-kg) for engine side sheave (1400617).



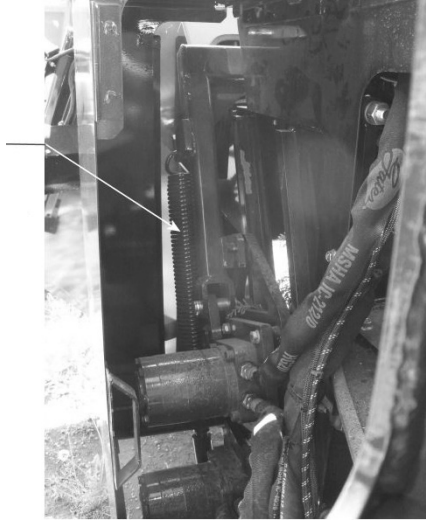


## 5.9 Spring tensioner for feed wheel

The spring tensioners allow you to adjust the amount of tension on the top feedwheel.

1. Spring tension can be increased by tightening jam nuts on the bottom spring hook assembly.
2. Higher spring tension provides greater grip force.

Spring tensioner for feedwheel



### 5.9A Torquing the feed wheel motor nut

Torque tolerance for the feed wheel motor nut is 300-400 ft-lbs (41.5-55.3 m-kg). Torque to 300 ft-lbs (41.5 m-kg) then tighten until the pin holes line up with the castle nut.



## 5.10 Anvil adjustment



**ALWAYS FOLLOW NORMAL SHUT DOWN PROCEDURE!**

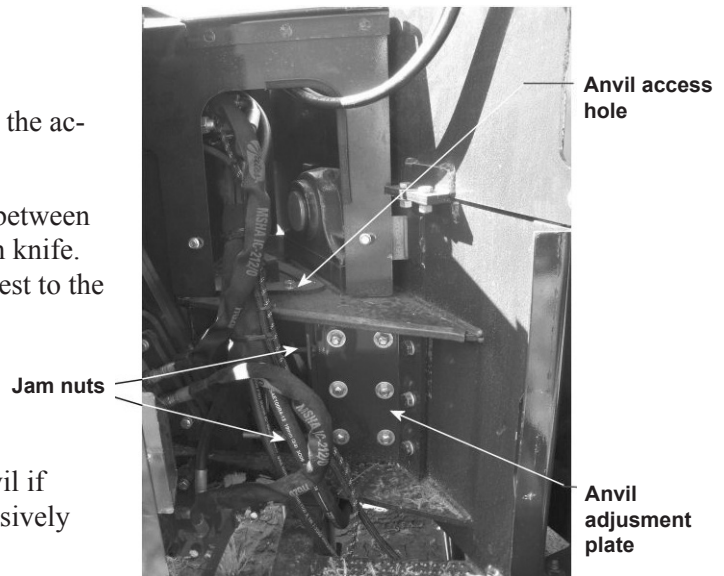
Locate the access hole on top of the feed housing in front of the bearing. Remove the three nuts and lift off cover.



**Warning: Never turn disc while someone is adjusting the anvil. Disc should be turned by operator adjusting the anvil only!** Operator adjusting anvil should only turn the disc in a clockwise direction to avoid limbs dismembered.

### Checking and adjusting anvil to knife clearance

1. Follow the above safety features.
2. Check the anvil clearance by reaching into the access hole.
3. Using a feeler gauge, check the clearance between the knife anvil and the cutting edge of each knife. Anvil is set to the knife that is located closest to the anvil.
4. Inspect anvil edge for wear. Flip/rotate anvil if the cutting edge is unevenly worn or excessively rounded.
5. Loosen the six anvil bolts enough to move the anvil adjustment plate with the jam nuts.
6. Using the adjustment plate located by the anvil bolts, adjust the jam nuts to move the anvil to the desired position.
7. Retighten the anvil bolts and jam nuts.
8. Turning the disc clockwise, check the clearance on the knives making sure the closest knife is no closer than .050" and no further than 0.10". If anvil is not set close enough to knives, excessive knife wear will occur.





## 5.11 Changing knives

Knives should always be replaced in pairs. Pairs are determined by the amount of resharpening done to the knives. Re-install with another knife of comparable usage. This helps to keep the disc balanced and it maintains chip quality.



**ALWAYS FOLLOW NORMAL SHUT DOWN PROCEDURE!**

1. With chipper properly shut down, open disc hood and insert disc lock pin through hole in chipper housing and hole in disc that allows access to knives to be changed.



Disc locking pin (in the locked position)

2. Loosen nuts and remove bolts and knife. Either rotate knife and replace, or insert new replacement knife, insert bolt and tighten to 125 ft-lbs (17.28 m-kg).
3. Always use same generation knives on the disc. Never install one or two resharpened knives with new knives. All knife surfaces should have the same clearance from the disc face. Failure to use like knives will cause premature knife and anvil wear.
4. Using anvil adjustment procedure from above, set anvil to 0.05-0.10" tolerance.
5. Replace hood and insert hood pin.



# Section 6: Troubleshooting the TC-12

## 6.1 General trouble shooting

<b>Problem</b>	<b>Possible cause</b>	<b>Solution</b>
Chipper disc will not turn.	<ol style="list-style-type: none"> <li>1. Obstruction in chipper housing</li> <li>2. Check for seized chipper bearings</li> </ol>	<ol style="list-style-type: none"> <li>1. Check chipper housing and clean out</li> <li>2. Lubricate or replace</li> </ol>
Chipper disc wobbles.	<ol style="list-style-type: none"> <li>1. Disc hub loose</li> <li>2. Bearing loose</li> <li>3. Chipper bearings worn</li> <li>4. Knife pocket or paddle is plugged with material</li> </ol>	<ol style="list-style-type: none"> <li>1. Re-torque to 1620 in-lbs</li> <li>2. Re-torque to 270 ft-lbs</li> <li>3. Replace</li> <li>4. Unplug pockets</li> </ol>
Chipper bearings running too hot.	<ol style="list-style-type: none"> <li>1. Improper lubrication</li> <li>2. Belt too tight</li> <li>3. Bearing lock collar may be loose</li> <li>4. Bearings worn out</li> </ol>	<ol style="list-style-type: none"> <li>1. Purge bearings once a day with lithium grease</li> <li>2. Set belt tension with tension gauge</li> <li>3. Tighten bearing lock collar set screws</li> <li>4. Replace</li> </ol>
Discharge plugs or does not throw chips properly.	<ol style="list-style-type: none"> <li>1. Knives are dull or worn</li> <li>2. Obstruction in discharge chute</li> </ol>	<ol style="list-style-type: none"> <li>1. Sharpen knives or replace with new ones</li> <li>2. Remove access cover on chute to remove obstruction</li> </ol>
Chipper knife hits anvil	<ol style="list-style-type: none"> <li>1. Anvil not set properly</li> <li>2. Shaft misaligned</li> <li>3. Disc is not properly set on shaft.</li> </ol>	<ol style="list-style-type: none"> <li>1. Follow anvil adjustment procedure.</li> <li>2. Disc should have same clearance side to side. Adjust pillow block bearing.</li> <li>3. Disc should have min. 11/16" clearance to housing on feed side. Slide disc on shaft</li> </ol>
Chipper makes poor quality chips or does not feed properly.	<ol style="list-style-type: none"> <li>1. Knives lost their edge</li> <li>2. Knife anvil worn or need adjustment.</li> <li>3. Knives are at wrong angle</li> <li>4. Not sufficient feedwheel down pressure</li> <li>5. Material being chipped is small, dry or rotting</li> </ol>	<ol style="list-style-type: none"> <li>1. File, grind or replace knives</li> <li>2. Rotate, repair or replace</li> <li>3. Use DuraTech knives and sharpen to 30 degree angle</li> <li>4. Increase spring tension</li> <li>5. Type of material does not produce good quality chips</li> </ol>
Feedwheel slow or stops when feeding.	<ol style="list-style-type: none"> <li>1. Dull knives</li> <li>2. Relief valve is worn or dirty</li> <li>3. Pump is worn</li> <li>4. Motors are worn</li> <li>5. Feedwheel springs too tight</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace knives/Resharpen</li> <li>2. Clean, rest or replace</li> <li>3. Replace</li> <li>4. Replace</li> <li>5. Adjust</li> </ol>
Feedwheel turns slowly or not at all.	<ol style="list-style-type: none"> <li>1. Relief valve stuck open</li> <li>2. Worn hydraulic motor</li> <li>3. Pump worn</li> <li>4. Pinched hydraulic or damaged hydraulic hose</li> <li>5. Feedwheel valve worn and leaking internally</li> <li>6. Low hydraulic oil level</li> <li>7. Plugged oil screen</li> <li>8. binding such as worn bearing, etc,</li> <li>9. Hydraulic oil is cold</li> <li>10. Speed sensor is out of adjustment/not working or program set points are wrong</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean or replace</li> <li>2. Replace</li> <li>3. Replace</li> <li>4. Replace</li> <li>5. Replace</li> <li>6. Fill 7/8 full minimum</li> <li>7. Replace</li> <li>8. Repair</li> <li>9. Should warm up while running</li> <li>10. Turn sensor in until it contacts side of flywheel and turn out one turn.</li> </ol>



## 6.2 Troubleshooting the feed control and electronic monitoring system (PLC)

### General:

Tree chipper control to start and stop the feed roll based on engine speed and safety bar input. In log mode, ultrasonic sensor will adjust the feed roll height according to log size.

### Details:

#### Feed Speed

- This output will drive the Feed Speed output proportionally to the engine RPM and the max speed will be set by the mode setting. There are two speed settings Log mode and Tree mode.

#### Feed Roller Forward

- Feed roller forward input will turn on feed roller forward output
- The safety bar, safety bar reset, and rpm will affect the forward direction

#### Feed Roller Reverse

- Feed roller reverse input will turn on feed roller reverse output to a fixed speed.

#### Feed Roll Raise

- Feed roll raise input will turn on feed roll raise output.

#### Clutch

- This input will tell the controller if the clutch is engaged. If the clutch is not engaged the feed forward cannot be turned on.

#### Log Mode

- When the log mode input is turned on the log height will be sensed by the Ultrasonic Sensor and raise the feed roll for a proportional amount of time based on the sensor output. After the time has elapsed the controller will bump the output for a number of times to hold the feed roll up. Then the output will be turned off. The Feed Roll height output will not be turned on until the feed position reaches the bottom Feed Roll Reset prox sensor.
- The feed roll output speed will be set to eeLogMode setting.

#### Tree Mode

- In brush mode the controller will not use the Ultrasonic Sensor and the Feed Roll feed position sensor.



- The feed roll output speed will be set to eeTreeMode setting.

### **Engine RPM**

- The control will monitor the chipper speed, and based on when the engine rpm will proportionally control the feed roll speed until the speed drops to its programmable adjustable set point, will determine when the feed roller reverses.
- There will be an engine rpm set point and time of reversal setting for when the drop set point is reached.
- When the engine rpm starts to rise and reaches a programmable adjustable set point, the feed rollers will turn back on in the forward direction.
- If engine rpm does not reach the forward set point, feed roll stays in neutral
- This rpm will be taken off of the Engine flywheel (126 pulses per revolution)
- Low rpm fault
- When feed roll forward is on, and engine rpm is below its programmable adjustable set point for 10 seconds, the low rpm fault is true. If the rpm fault is true, the operator will have to momentarily reselect the direction desired with the switch.
- If engine rpm is below its programmable adjustable set point when the feed roll forward is pressed, the low rpm fault will be true. The engine rpm will have to be raised above the programmable adjustable set point and the feed roll forward switch will need to be pressed to start operation.

### **Safety Bar**

- If safety bar is pressed or disconnected, the feed roller will stop.
- Feed roll will not go into forward position until Safety Bar Reset is pressed and the operator will have to momentarily press the forward direction with the feed forward switch.
- The safety bar will have no effect on the feed roller reverse switch; the feed roller will reverse at all times.

### **Safety Bar Reset**

- Any time the safety bar is pressed, the safety bar reset will need to be pressed to reset the safety bar.
- If the safety bar is pressed, the operator must press the safety bar reset and then press the feed roll forward switch to continue forward movement of the feed rollers. If the safety bars have not reset, the feed rollers will not move forward.

### **Winch Override**

- Any time the winch override input is turned on the feed roll will stop and the feed speed will = 100%.

### **LED Fault Lights**

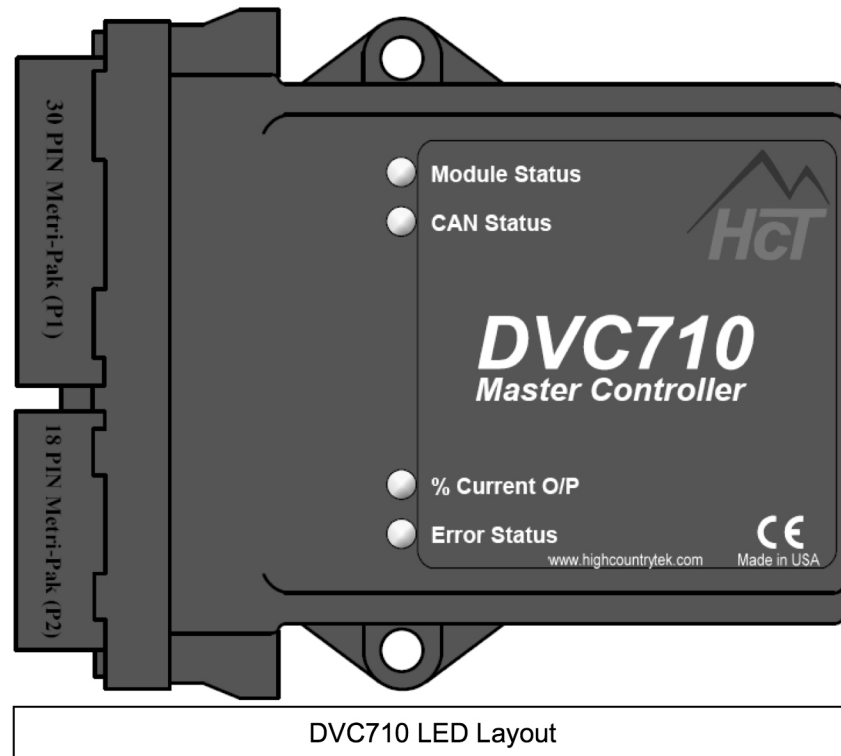
- The DCV710 has four Red/Green LEDs. Two are positioned on each side. The application can switch the meaning of the LEDs using the Programming Tool DVC710 IO configuration screen. Note the Power On period time can be changed as well. This is provided so that depending on how your controller is oriented in your vehicle the appropriate LEDs for your application can be seen.





### **LED Indicators**

The DVC710 has four Red/Green LEDs, positioned on top of the module. They are labeled, Module Status, CAN Status, % Current and Error Status.



### **Operation**

When a BIOS or application is being downloaded to the controller all LED's will be off. The Following is a list of the individual LED behaviors:

<b>Module Status</b>	
<b>LED STATE</b>	<b>MEANING</b>
Off	There is no power applied to the module.
On <b>GREEN</b>	The module is operating in a normal condition.
Flashing <b>GREEN</b>	Device is in standby state. May need servicing.
On <b>RED</b>	Module has an unrecoverable fault.
On <b>YELLOW</b>	System Disabled active
Flashing <b>RED</b>	Low Supply Voltage.



<b>CAN Status</b>	
<b>LED STATE</b>	<b>MEANING</b>
Off	There is no J1939 device (or other DVCs) in the project.
On <b>GREEN</b>	Communication established with another DVC module through DVC Devicenet.
Flashing <b>GREEN</b>	Waiting to establish communication with another DVC (i.e. DVC61) or J1939 Bus Enabled
On <b>RED</b>	The device has detected an error that has rendered it incapable of communicating on the network.
Flashing <b>RED</b>	The DVC Devicenet communication is in a timed-out state

<b>% Current O/P</b>	
<b>LED STATE</b>	<b>MEANING</b>
Off (Outputs Disabled) <b>GRN</b> (0-33%) <b>YEL</b> (34-66%) <b>RED</b> (66-100%)	
Flashing <b>GREEN</b>	PWM or High Side output Open circuit detected
Flashing <b>RED</b>	PWM or High Side output Short circuit detected

<b>Error Status</b>	
<b>LED STATE</b>	<b>MEANING</b>
Off	No errors
On <b>RED</b>	PWM1 Open or Short Detected
On <b>GREEN</b>	PWM2 Open or Short Detected
Flashing <b>YELLOW</b>	High Side Open or Short Detected
Multi Digit Blink Code	Application defined blink codes.

### **The Status LED**

The programmer can send different single or multi digit blink codes to the status LED by using the application variable "Blinkcode". In the application code, the programmer would assign a 1, 2 or 3 digit non-zero value to the Blinkcode variable (i.e. Blinkcode = 501). The BIOS would then read this value, and then start flashing the Status LED to the assigned code, for example, in the example above (Blinkcode = 501) the Status LED would flash 5 times followed by a short pause then flash 10 times followed by a short pause then flash once then stop if no other code has been assigned. If a new code was assigned during the time that the code was flashing, there would be a longer pause before the next code began flashing. After the BIOS reads a blink code it will reset the Blinkcode variable to 0 allowing the application to test and see if the BIOS is ready for the next blink code assignment.

The following is an example of valid Blink Code assignments:

- Solid red = PWM1 Open or Short Detected (Feed Roll)
- Safety Fault - Error Light should blink 2 times
- RPM loss - Error light should blink 3 times
- Low Speed – Error light should blink 4 times



## Appendix A: WARRANTY

DuraTech Industries International Inc. warrants to the original purchaser for one year from purchase date that this product will be free from defects in material and workmanship when used as intended and under normal maintenance and operating conditions. This warranty is limited to the replacement of any defective part or parts returned to our factory in Jamestown, N.D., within thirty (30) days of failure.

This warranty shall become void if in DuraTech Industries International, Inc.'s, judgment the machine has been subject to misuse, negligence, alterations, damaged by accident or lack of required normal maintenance, or if the product has been used for a purpose for which it was not designed.

All claims for warranty must be made through the dealer which originally sold the product and all warranty adjustments must be made through same.

This warranty does not apply to tires or bearings or any other trade accessories not manufactured by DuraTech Industries International Inc.'s. Buyer must rely solely on the existing warranty, if any, of these respective manufactures.

DuraTech Industries International Inc., shall **not** be held liable for damages of any kind, direct, contingent, or consequential to property under this warranty. DuraTech Industries International Inc., cannot be held liable for any damages resulting from causes beyond its control. DuraTech Industries International Inc., shall **not** be held liable under this warranty for loss of crops, or rental costs or any expense or loss for labor or supplies.

DuraTech Industries International Inc., reserves the right to make changes in material and/or designs of this product at any time without notice.

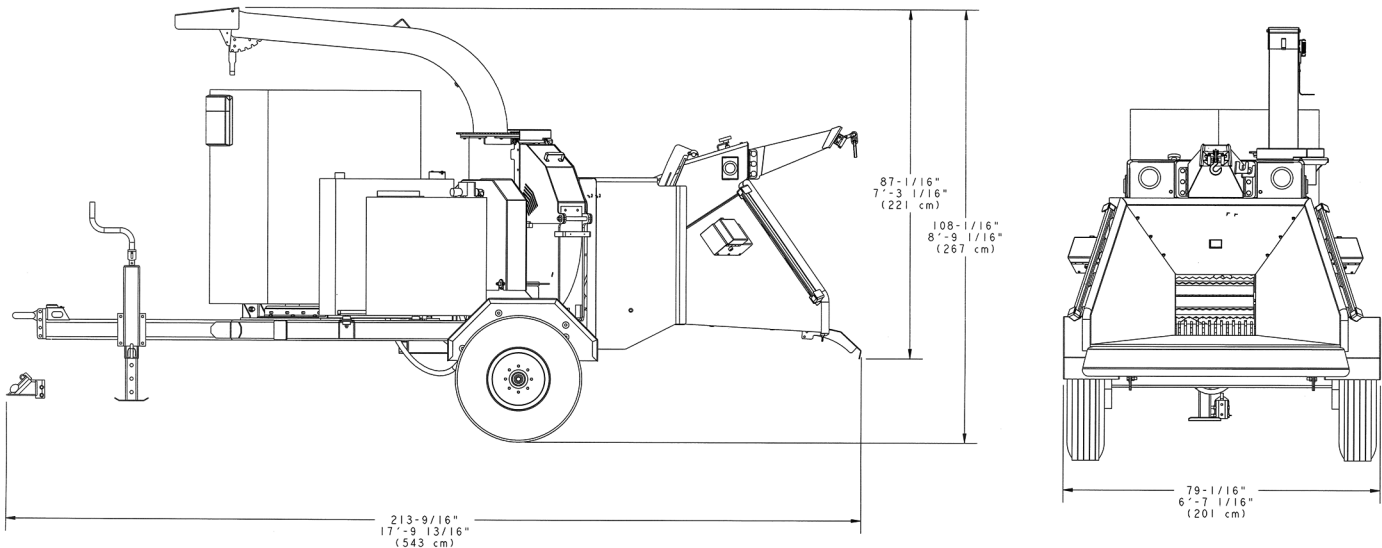
All other warranties made with respect to this product, either expressed or implied, are hereby disclaimed by DuraTech Industries International Inc.



# Appendix B: TC-12 Specifications

## General Specifications

Engine.....	Cat C4.4 122 HP
Gross Weight .....	7,640 lbs.
Transport width .....	79" (200 cm)
Transport length .....	208" (528 cm)
Hitch .....	Pintle or 2-5/16" ball
Tongue weight .....	740 lbs.
Axle .....	7K Torflex
Electrical control system .....	24 V
Tires.....	235/85R16E
Fuel capacity .....	40 gallon (152 L)
Hydraulic oil capacity .....	25 gallon (95 L)
Lights.....	Clearance and Directional 12V
Transmission .....	PT Tech Hpto 8
Chipping capacity.....	12" (305. cm)
Infeed hopper opening.....	40" x 62" (102 cm x 157 cm)
Throat opening .....	12" x 20" (30 cm x 51 cm)
Disc size .....	42" (107 cm) diameter x 2" (5 cm)
Disc shaft size.....	3-15/16" (10 cm) diameter
Feed system .....	Hydraulic 2 drum
Number of knives .....	4, 2 slots
Size of knives .....	4-1/2" (11.5 cm) x 7-3/4" (19.5 cm) 3-bolt
Discharge system.....	360 degree, hydraulic rotation w/adjustable chip spout
Frame size .....	3" (7.6cm) x 5" (12.7 cm) x 1/4 " (0.64 cm)





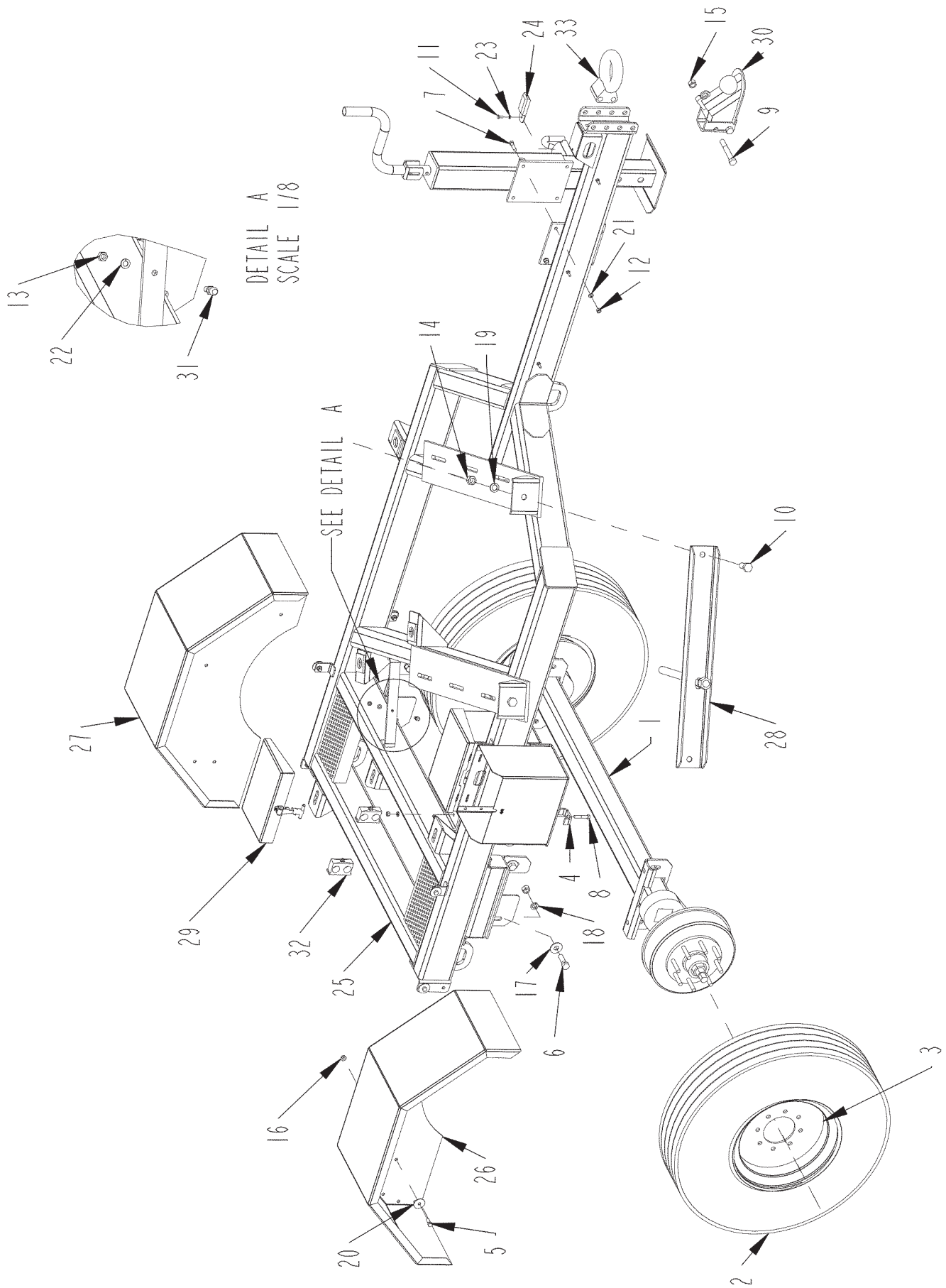
# **TC-12<sup>TM</sup>**

## **Tree Chipper**

### **Part 2:**

### **Parts Reference**

TRAILER ASSEMBLY (FOR SN UP TO 0043)





**TRAILER ASSEMBLY (FOR SN UP TO 0043)**

ITEM	PART	QTY.	PART DESCRIPTION
1	2500969	1	AXLE\TOR\7KLB
2	2600854	2	TIRE\LT235\85R16
3	2600855	2	WHL\8-BOLT\16X6.5"
4	4700777	1	CLMP\HOSE\1/2
5	4800003	8	BOLT\HEX\3/8X1
6	4800010	4	BOLT\HEX\5/8X2
7	4800034	4	BOLT\HEX\3/8X1-1/2
8	4800146	1	BOLT\HEX\3/8X2
9	4800158	2	BOLT\HEX\5/8X4-1/2
10	4800469	2	BOLT\HEX\3/4X1-3/4
11	4800503	1	BOLT\HEX\1/4X5/8\NC
12	4900002	5	NUT\HEX\3/8\NC
13	4900003	1	NUT\HEX\5/16\NC
14	4900004	2	NUT\HEX\3/4\NC
15	4900005	6	NUT\HEX\5/8\NC
16	4900076	8	NUT\FLG\SERR\3/8\NC
17	5000002	4	WASH\FLAT\5/8
18	5000003	4	WASH\LOCK\5/8
19	5000012	2	WASH\LOCK\3/4
20	5000017	8	WASH\FLAT\FNDR\395X1-5/8X.090
21	5000019	5	WASH\LOCK\3/8
22	5000022	1	WASH\LOCK\5/16
23	5000024	1	WASH\LOCK\1/4
24	5700725	1	SWITCH\BRAKE\BREAKAWAY
25	6300045	1	FRM\WELD\TC12
26	6300052	1	FNDR\R\CHPPR
27	6300053	1	FNDR\L\CHPPR
28	6300137	1	TENSIONER\ASSY\CHIPPER
29	6300162	2	LID\BOX\BATT\CHIP\ASSY
30	7500227	1	HITCH\BALL\2-5/16"
31	7500345	1	BALL STUD
32	7501337	2	CLMP\HOSE\CUSH\3/8
33	7501405	1	HITCH\PINTLE\12K\W\MNT

**6300001**

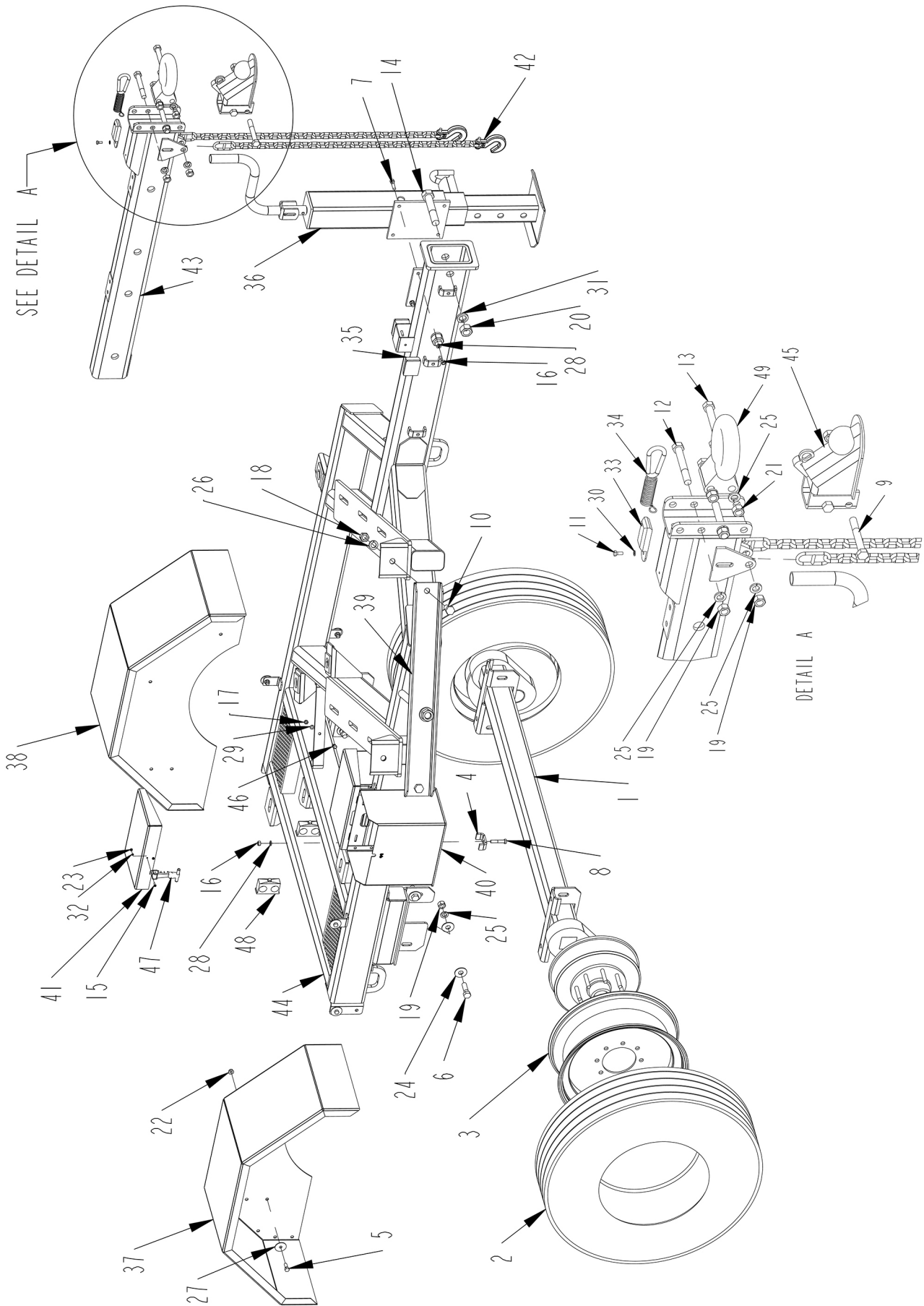
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1100221 1

CHAIN\3/8\GR43\5400#WL\5FT\W/HOOKS&KEEPERS

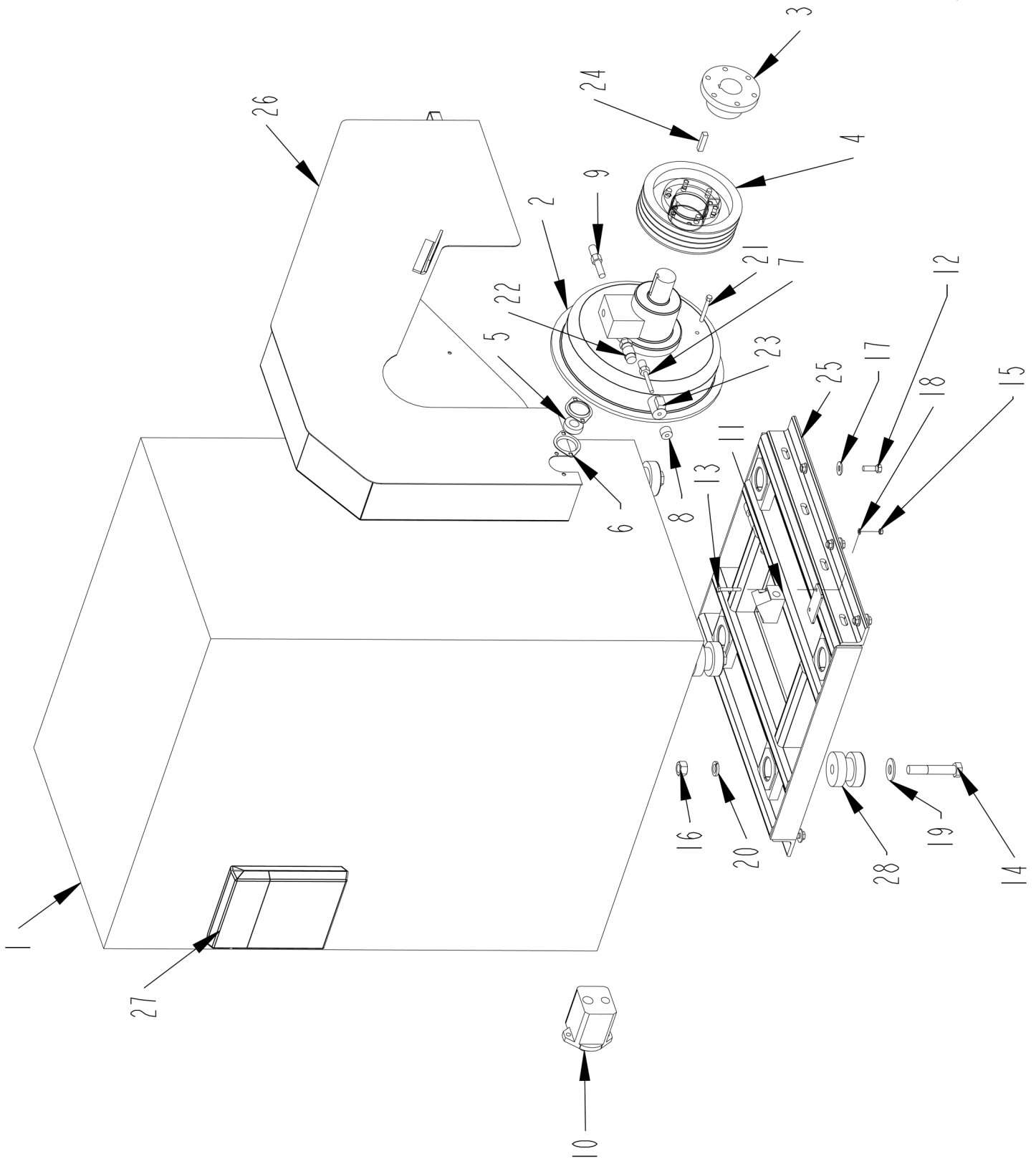
**TRAILER ASSEMBLY (FOR SN 0044 AND UP)**



**TRAILER ASSEMBLY (FOR SN 0044 AND UP)**

ITEM	PART	QTY.	PART DESCRIPTION
1	2500969	1	AXLE\TOR\7KLB
2	2600854	2	TIRE\LT235\85R16
3	2600855	2	WHL\8-BOLT\17.5X6.75
	2600856		WHL\ASSY\235/85/R16\8 BOLT 16X7 3750# 14 PLY TIRE (INCLUDES 2 & 3)
4	4700777	4	CLMP\HOSE\1/2
5	4800003	8	BOLT\HEX\3/8X1
6	4800010	4	BOLT\HEX\5/8X2
7	4800034	4	BOLT\HEX\3/8X1-1/2
8	4800146	1	BOLT\HEX\3/8X2
9	4800158	2	BOLT\HEX\5/8X4-1/2
10	4800469	2	BOLT\HEX\3/4X1-3/4
11	4800503	1	BOLT\HEX\1/4X5/8\NC
12	4800573	3	BOLT\HEX\5/8X4-1/2\NF\GR8
13	4800582	2	BOLT\HEX\5/8X4-1/2\GR8
14	4800633	2	BOLT\HEX\1X5-1/2\NC\GR5\PLT
15	4801225	8	SCR\RD\SLOT\#8-32X1/2\NC
16	4900002	5	NUT\HEX\3/8\NC
17	4900003	1	NUT\HEX\5/16\NC
18	4900004	2	NUT\HEX\3/4\NC
19	4900005	9	NUT\HEX\5/8\NC
20	4900031	4	NUT\HEX\1\NC
21	4900070	2	NUT\HEX\5/8\GR8\NC
22	4900076	8	NUT\FLG\SERR\3/8\NC
23	4900096	8	NUT\HEX\#8\NC
24	5000002	8	WASH\FLAT\5/8
25	5000003	9	WASH\LOCK\5/8
26	5000012	2	WASH\LOCK\3/4
27	5000017	8	WASH\FLAT\FNDR\3.395X1-5/8X.090
28	5000019	5	WASH\LOCK\3/8
29	5000022	1	WASH\LOCK\5/16
30	5000024	1	WASH\LOCK\1/4
31	5000053	2	WASH\LOCK\1
32	5000092	8	WASH\LOCK\#8
33	5701145	1	SWITCH\BREAKAWAY\W_LED
34	5701146	1	CABLE\BREAKAWAY\COILED W\CLIP
35	5701154	2	LIGHT\CLR\NC\RECT\AMBER
36	6300046	1	JACK\10K\SINGLE SPEED\TC12
37	6300052	1	FNDR\R\CHPPR
38	6300053	1	FNDR\L\CHPPR
39	6300137	1	TENSIONER\ASSY\CHIPPER
40	6300138	2	BOX\BATTERY\TC12
41	6300161	2	SH\LID\BOX\BATT\CHIP
	6300162		LID\BOX\BATT\CHIP\ASSY (INCLUDES #15, #23, #32, #41 & #47)
42	6300202	2	CHAIN\SAFETY\TC15
43	6300214	1	HITCH\ASSY\ADJ
44	6300251	1	FRM\WELD\TC12
45	7500227	1	HITCH\BALL\2-5/16"
46	7500345	1	BALL STUD
47	7500606	2	LATCH\35-MAUSTIN
48	7501337	2	CLMP\HOSE\CUSH\3/4
49	7501405	1	HITCH\PINTLE\12K\W\MNT
	<b>6300001</b>		<b>TRAILER\ASSY\TC12</b>

CAT ENGINE ASSEMBLY (FOR SN UP TO 0038)



**CAT ENGINE ASSEMBLY (FOR SN UP TO 0038)**

ITEM	PART	QTY.	PART DESCRIPTION
1	0900148	1	ENG\CAT\C4.4\122HP\ATAAC
2	0900150	1	CLUTCH\HPTO8\CHIPPER
3	1400533	1	BUSH\QD\E\2-1/8
4	1400617	1	SHVE\5V-4\10.3\4/5V10.3-E
5	2000002	2	1" BEARING W/ LOCK COLLAR
6	2000703	4	2 HOLE FLANGETTE
7	4000290	1	VALVE\HYD\CART\2POS
8	4000434	1	NUT;O-RING\CART\HPTO
9	4000487	1	VALVE\CART\REDUCE\310P
10	4200124	1	PUMP\HYD\89CID\CASAPPA
11	4200139	1	VLV\SEQ\0-15GPM\PTTECH
12	4800082	6	BOLT\HEX\1/2X1-1/2
13	4800162	2	BOLT\HEX\5/16X2-1/4
14	4800925	4	BOLT\HEX\7/8X5
15	4900003	2	NUT\HEX\5/16\NC
16	4900022	4	NUT\HEX\7/8\NC
17	5000004	6	WASH\FLAT\1/2
18	5000022	2	WASH\LOCK\5/16
19	5000098	4	WASH\FLAT\7/8
20	5000106	4	WASH\LOCK\7/8
21	5700682	1	SNSR\MAG\HPTO12\3/8"DIA
22	5700957	1	SWITCH\PRESS\295\NO
23	5700970	1	VALVE\CLTCH\SOL\24V\770\DEUTSCH
24	6200061	1	KEY\SQ\1/2X2-1/4
25	6300051	1	MNT\ENG\ASSY\TC12
26	6300059	1	GUARD\PLY\END\WELD
27	7500590	1	ENCL\OPS\8-1/2X11X1-5/8
28	7501062	4	CUSH\RBBR\3-1/2ODX2-7/8\>

**6300003**

**ASSY\ENG\TC12**

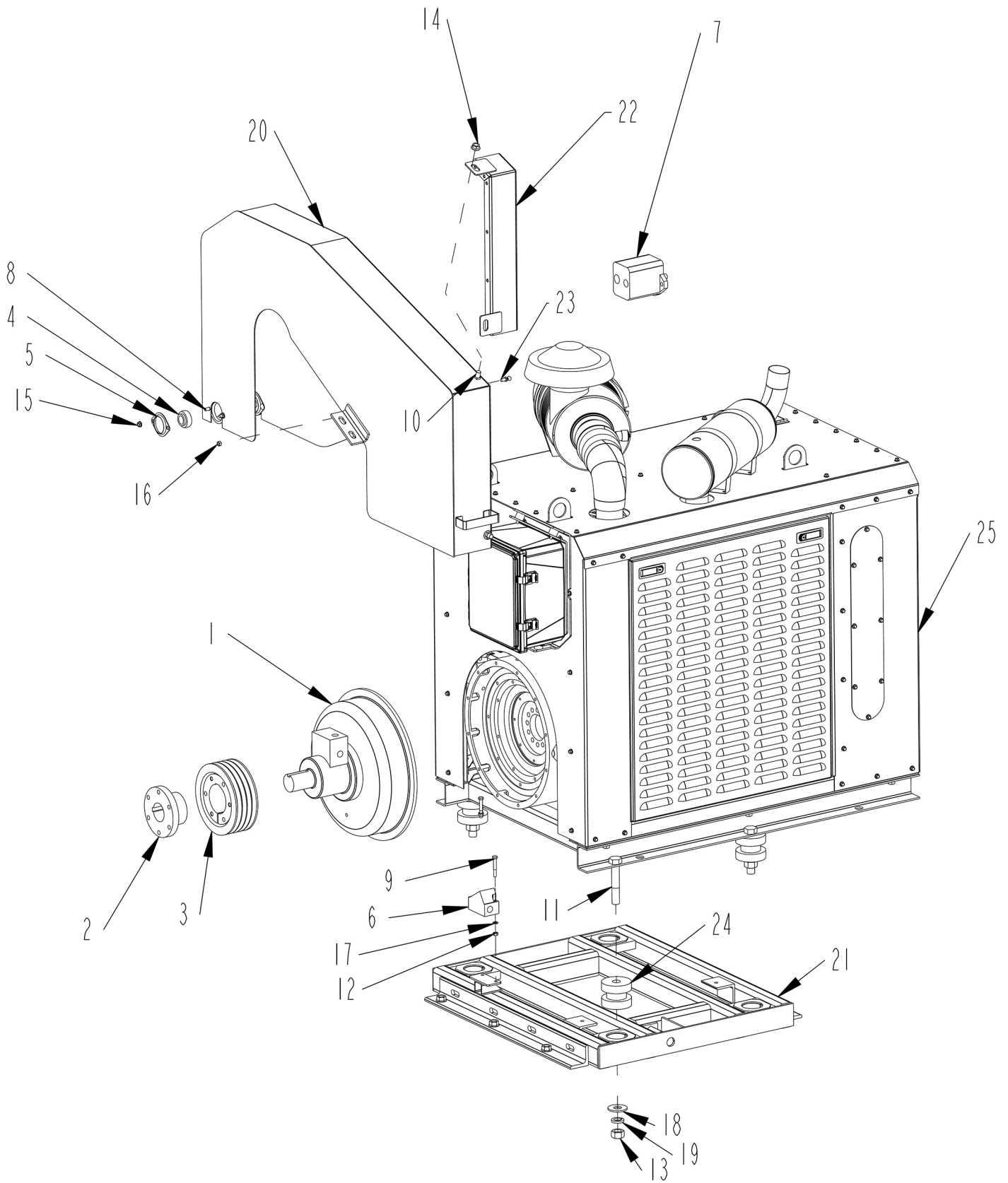
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1700237	1	BELT\5VX1120
4400129	1	FLTR\ELMT\AIR\C4.4
4400130	1	FLTR\FUEL\C4.4
4400131	1	FLTR\OIL\ENG\C4.4
4400132	1	FLTR\FUEL\WATER\C4.4
4400161	1	FLTR\ELMT\AIR\INNER\C4.4
5700854	1	SNSR\MAG\ENG\C4.4\2PIN\16MMDIA\DEUTSCH

**NOT SHOWN**

5701013	1	CNTRLLR\ASSEM\BR72\HPTO8,10 <b>(FOR SN UP TO 12-2-10-0023)</b>
5700916	1	CNTRLLR\UNIT\DISPLAY\ADV3 <b>(FOR SN 12-2-12-0024 &amp; UP)</b>
5701020	1	CNTRLLR\UNIT\MSTR\BR72\HPTO8&10\ <b>(FOR SN 12-2-12-0024 &amp; UP)</b>
5701021	1	DISPLAY\CAN\J1939\C3-2500
5701082	1 SET	KEY\IGN\CHIPPERS\CONTROLS_INC
7500346	1	SAFETY CLIP
7500583	2	END FITTING\GAS SPRNG\
7500706	1	GAUGE\FUEL\24V\>
7501090	1	SPRNG\GAS\100LB\9416K22->
7501554	4	LATCH\DRAW\PANEL\ENG\CAT\C4.4

CAT ENGINE TIER 3 ASSEMBLY (FOR SN 0044 AND UP)



**CAT ENGINE TIER 3 ASSEMBLY (FOR SN 0044 AND UP)**

ITEM	PART	QTY.	PART DESCRIPTION
1	0900150	1	CLUTCH\HPTO8\CHIPPER
2	1400533	1	BUSH\QD\E\2-1/8
3	1400617	1	SHVE\5V-4\10.3\4/5V10.3-E
4	2000002	2	1" BEARING W/ LOCK COLLAR
5	2000703	4	2 HOLE FLANGETTE
6	4200139	1	VLV\SEQ\0-15GPM\PTTECH
7	4200201	1	Pump\HYD\89C\ICWA-PAD\5/8" 9T\CASAPPA
8	4800153	4	BOLT\CRG\5/16X3/4\NC
9	4800162	2	BOLT\HEX\5/16X2-1/4
10	4800908	2	BOLT\CRG\1/2X1
11	4800925	4	BOLT\HEX\7/8X5
12	4900003	2	NUT\HEX\5/16\NC
13	4900022	4	NUT\HEX\7/8\NC
14	4900100	2	NUT\FLG\TPLCK\1/2\NC
15	4900108	4	NUT\FLG\SERR\5/16\NC
16	4900142	1	NUT\TPLCK\5/16\NC
17	5000022	2	WASH\LOCK\5/16
18	5000098	4	WASH\FLAT\7/8
19	5000106	4	WASH\LOCK\7/8
20	6300156	1	GUARD\PLLY\END\WELD
21	6300229	1	MNT\ENG\CAT_C4.4\T3\CHIP
22	6300233	1	SHLD\CLUTCH\TC
23	7500345	1	BALL STUD
24	7501062	4	CUSH\RBBR\3-1/2ODX2-7/8\>
25	0900148	1	ENG\CAT\C-4.4\122HP\ATAAC 24V

**6300230**

**ENG\ASSY\CAT\_C4.4\TIER3\TC12**

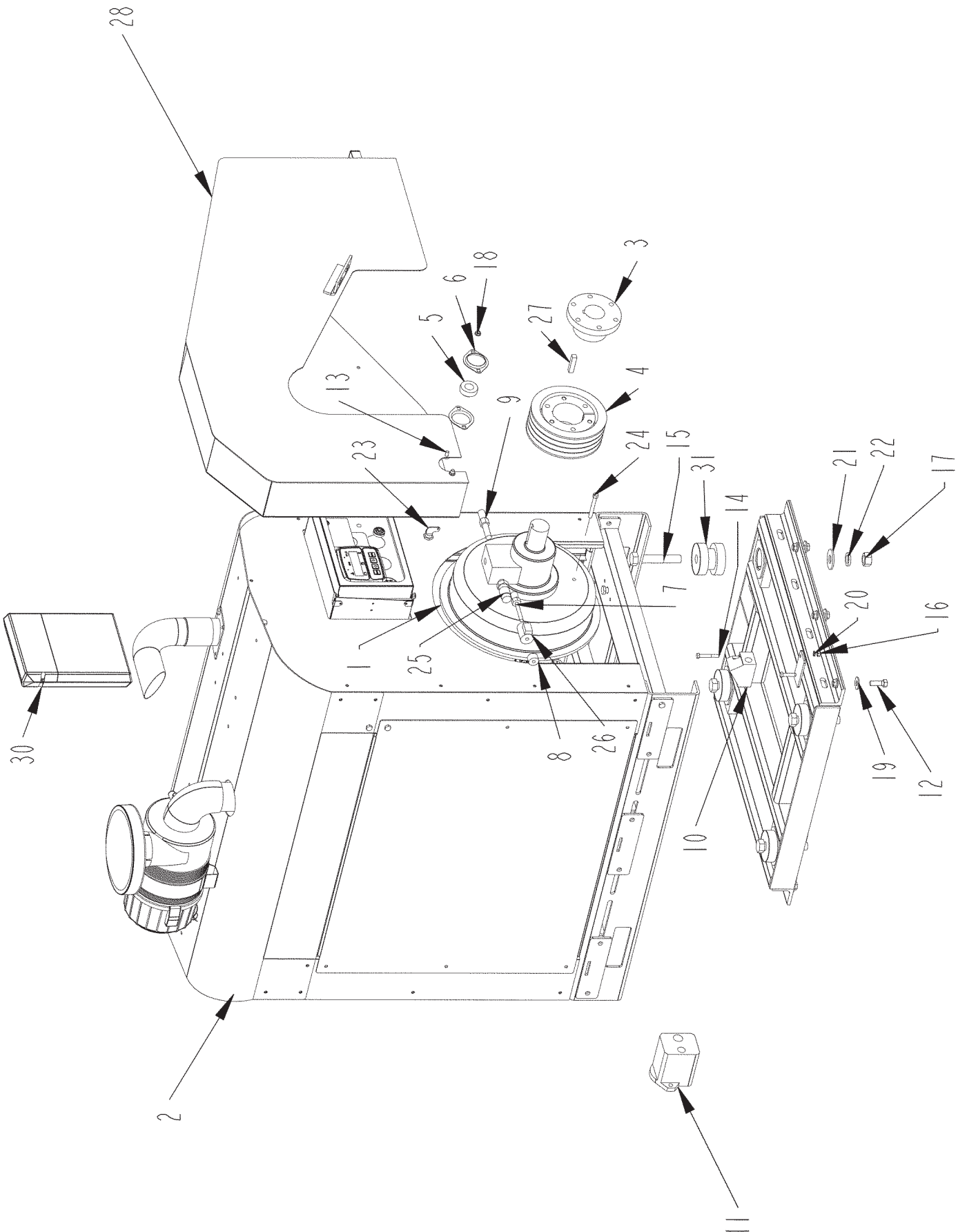
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4400130	FLTR\FUEL\C4.4
4400131	FLTR\OIL\ENG\C4.4
4400132	FLTR\FUEL\WATER\C4.4
4400161	FLTR\ELMT\AIR\INNER\C4.4
5700854	SNSR\MAG\ENG\C4.4\2PIN\16MMDIA\DEUTSCH

**NOT SHOWN**

5700916	1	CNTRLLR\UNIT\DISPLAY\ADV3
5701020	1	CNTRLLR\UNIT\MSTR\BR72\HPTO8&10\
5701021	1	DISPLAY\CAN\J1939\C3-2500
5701082	1 SET	KEY\IGN\CHIPPERS\CONTROLS_INC
7500346	1	SAFETY CLIP
7500583	2	END FITTING\GAS SPRNG\
7500590	1	ENCL\OPS\8-1/2X11X1-5/8\>
7500706	1	GAUGE\FUEL\24V\>
7501090	1	SPRNG\GAS\100LB\9416K22->
7501554	4	LATCH\DRAW\PANEL\ENG\CAT\C4.4





**KUBOTA ENGINE ASSEMBLY (FOR SN UP TO 0043)**

ITEM	PART	QTY.	PART DESCRIPTION
1	0900150	1	CLUTCH\HPTO8\CHIPPER
2	0900184	1	ENG\PKG\KUBOTA_W\ENCLOSURE
3	1400533	1	BUSH\QD\E\2-1/8
4	1400617	1	SHVE\5V-4\10.3/4\5V10.3-E
5	2000002	2	1" BEARING W/ LOCK COLLAR
6	2000703	4	2 HOLE FLANGETTE
7	4000290	1	VALVE\HYD\CART\2POS <b>(INCLUDES #8-4000434)</b>
8	4000434	1	NUT;O-RING\CART\HPTO
9	4000487	1	VALVE\CART\REDUCE\310P
10	4200139	1	VLV\SEQ\0-15GPM\PTTECH
11	4200170	1	PUMP\HYD\.89CID\CASAPPA\LH ROT
12	4800082	6	BOLT\HEX\1/2X1-1/2
13	4800153	4	BOLT\CRG\5/16X3/4\NC
14	4800162	2	BOLT\HEX\5/16X2-1/4
15	4800925	4	BOLT\HEX\7/8X5
16	4900003	2	NUT\HEX\5/16\NC
17	4900022	4	NUT\HEX\7/8\NC
18	4900108	4	NUT\FLG\SERR\5/16\NC
19	5000004	6	WASH\FLAT\1/2
20	5000022	2	WASH\LOCK\5/16
21	5000098	4	WASH\FLAT\7/8
22	5000106	4	WASH\LOCK\7/8
23	5700016	1	SWITCH\DISC\BATT\KEYED
24	5700682	1	SNSR\MAG\HPTO12\3/8"DIA
25	5700957	1	SWITCH\PRESS\295\NO
26	5700970	1	VALVE\CLTCH\SOL\24V\770\DEUTSCH
27	6200061	1	KEY\SQ\1/2X2-1/4
28	6300156	1	GUARD\PLLY\END\WELD
29	6300164	1	ENG\ASSY\KUBOTA\TC12
30	7500590	1	ENCL\OPS\8-1/2X11X1-5/8
31	7501062	4	CUSH\RBBR\3-1/2ODX2-7/8\>

**6300164**

**ENG\ASSY\KUBOTA\TC12**

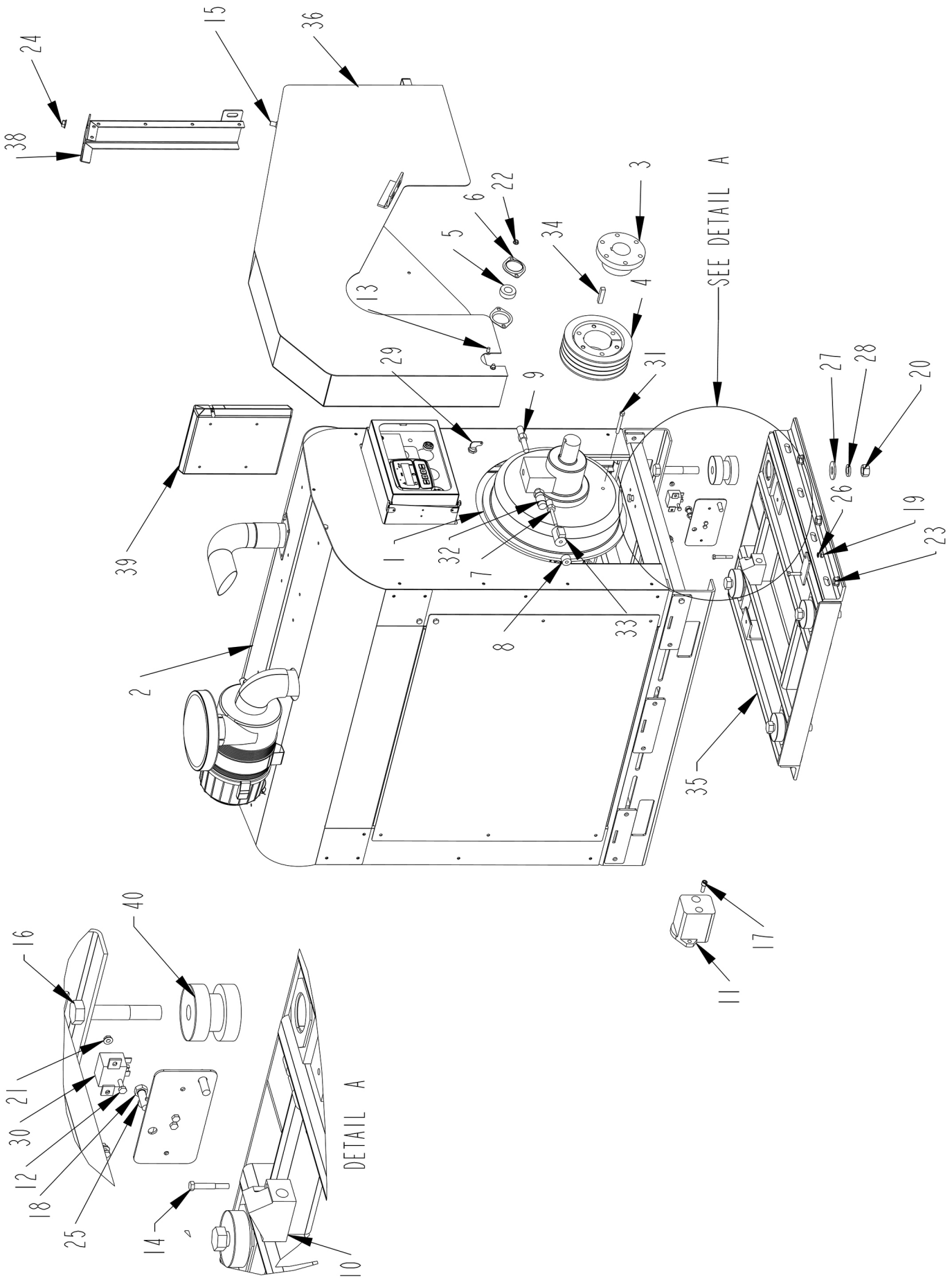
**NOT SHOWN (WEAR PARTS)**

1700237	1	BELT\5VX1120
1700245	1	BELT\FAN\KUBOTA
4400143	1	FLTR\FUEL\KUBOTA
4400144	1	FLTR\OIL\ENG\KUBOTA
4400145	1	FLTR\ELMT\AIR\KUBOTA
4400146	1	FLTR\ELMT\SECONDARY\AIR\KUBOTA
5701008	1	SNSR\MAG\ENG\KUBOTA

**NOT SHOWN**

5701013	1	CNTRLLR\ASSEM\BR72\HPTO8,10 <b>(FOR SN UP TO 12-2-10-0023)</b>
5700916	1	CNTRLLR\UNIT\DISPLAY\ADV3 <b>(FOR SN 12-2-12-0024 &amp; UP)</b>
5701020	1	CNTRLLR\UNIT\MSTR\BR72\HPTO8&10\ <b>(FOR SN 12-2-12-0024 &amp; UP)</b>
5701022	1	DISPLAY\IMECH\CM-2500
7501567	1	HANDLE\T\ADJUSTABLE\BLACK

**KUBOTA ENGINE ASSEMBLY (FOR SN 0044 AND UP)**



**KUBOTA ENGINE ASSEMBLY (FOR SN 0044 AND UP)**

ITEM	PART	QTY.	PART DESCRIPTION
1	0900150	1	CLUTCH\HPTO8\CHIPPER
2	0900184	1	ENG\PKG\KUBOTA_W\ENCLOSURE
3	1400533	1	BUSH\QD\E\2-1/8
4	1400617	1	SHVE\5V-4\10.3/4\5V10.3-E
5	2000002	2	1" BEARING W/ LOCK COLLAR
6	2000703	4	2 HOLE FLANGETTE
7	4000290	1	VALVE\HYD\CART\2POS (INCLUDES #8-4000434)
8	4000434	1	NUT;O-RING\CART\HPTO
9	4000487	1	VALVE\CART\REDUCE\310P
10	4200139	1	VLV\SEQ\0-15GPM\PTTECH
11	4200170	1	PUMP\HYD\89CID\CASAPPA\LH ROT
12	4800024	4	BOLT\HEX\1/4X3/4
13	4800153	4	BOLT\CRG\5/16X3/4\NC
14	4800162	2	BOLT\HEX\5/16X2-1/4
15	4800908	2	BOLT\CRG\1/2X1
16	4800925	4	BOLT\HEX\7/8X5
17	4801242	2	SCR\CAP\ALNM10-1.5X30
18	4801281	2	BOLT\HEX\M12XM35X1.25
19	4900003	2	NUT\HEX\5/16\NC
20	4900022	4	NUT\HEX\7/8\NC
21	4900040	4	NUT\FLG\SERR\1/4\NC
22	4900108	4	NUT\FLG\SERR\5/16\NC
23	4900110	6	NUT\FLG\SERR\5/8\NC
24	4900133	2	NUT\FLG\1/2\NC
25	5000015	2	WASH\LOCK\7/16
26	5000022	2	WASH\LOCK\5/16
27	5000098	4	WASH\FLAT\7/8
28	5000106	4	WASH\LOCK\7/8
29	5700016	1	SWITCH\DISC\BATT\KEYED
30	5700504	2	RELAY\POWR\24V\SPST\W/DIO
31	5700682	1	SNSR\MAG\HPTO12\3/8"DIA
32	5700957	1	SWITCH\PRESS\295\NO
33	5700970	1	VALVE\CLTCH\SOL\24V\770\DEUTSCH
34	6200061	1	KEY\SQ\1/2X2-1/4
35	6300155	1	MNT\ENG\KUBOTA\ASSY\TC12
36	6300156	1	GUARD\PLLY\END\WELD
37	6300164	1	ENG\ASSY\KUBOTA\TC12
38	6300233	1	SHLD\CLUTCH\TC
39	7500590	1	ENCL\OPS\8-1/2X11X1-5/8
40	7501062	4	CUSH\RBBR\3-1/2ODX2-7/8\>

**6300164**

**ENG\ASSY\KUBOTA\TC12**

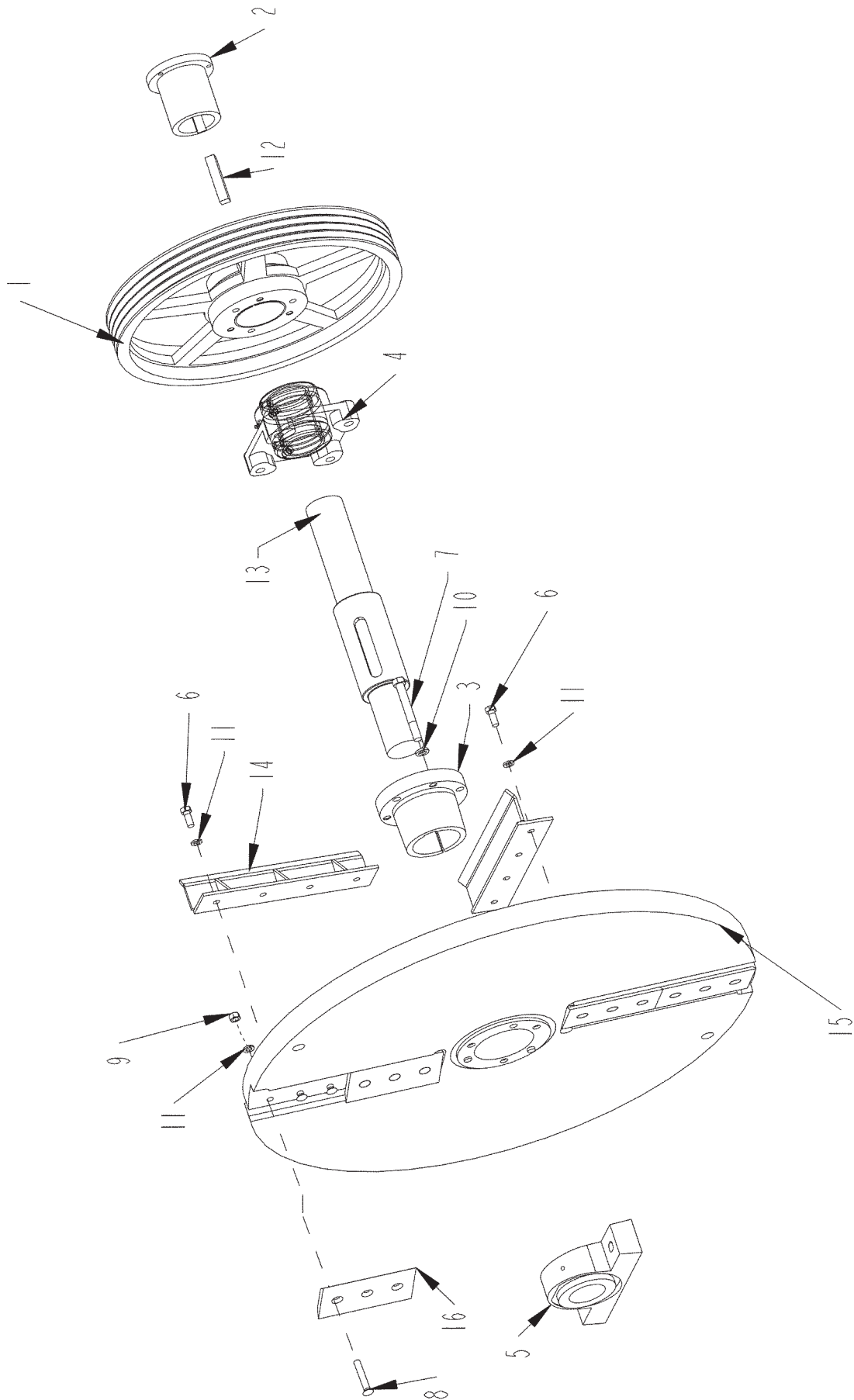
**NOT SHOWN (WEAR PARTS)**

1700237	1	BELT\5VX1120
1700245	1	BELT\FAN\KUBOTA
4400143	1	FLTR\FUEL\KUBOTA
4400144	1	FLTR\OIL\ENG\KUBOTA
4400145	1	FLTR\ELMT\AIR\KUBOTA
4400146	1	FLTR\ELMT\SECONDARY\AIR\KUBOTA
5701008	1	SNSR\MAG\ENG\KUBOTA

**NOT SHOWN**

5700916	1	CNTRLLR\UNIT\DISPLAY\ADV3
5701020	1	CNTRLLR\UNIT\MSTR\BR2\HPTO8&10\
5701022	1	DISPLAY\IMECH\CM-2500
7501567	1	HANDLE\TADJUSTABLE\BLACK

# DISC ASSEMBLY



**DISC ASSEMBLY**

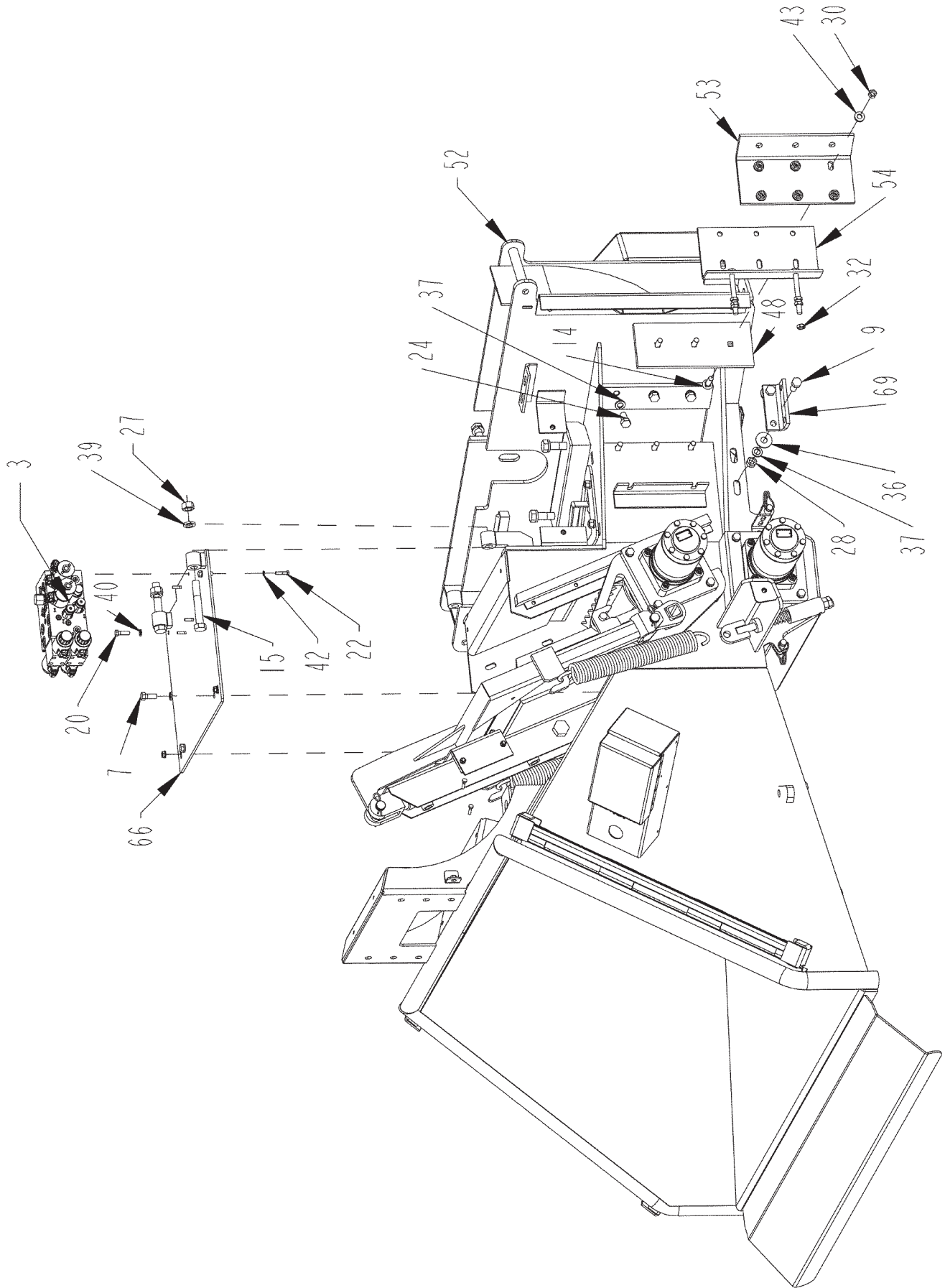
<b>ITEM</b>	<b>PART</b>	<b>QTY.</b>	<b>PART DESCRIPTION</b>
1	1400618	1	SHVE\5V-4\23.6\4\5V23.6-F
2	1400624	1	BUSH\QD\F\3"
3	1400625	1	BUSH\QD-J\3-15/16
4	2000336	1	BRG\FLG\E\3"4BOLT
5	2000512	1	BRG\PB\3\2BOLT\E\DODGE
6	4800018	16	BOLT\HEX\1/2X1-1/4
7	4800567	3	BOLT\HEX\5/8X5\NC\GR8
8	4801204	12	SCR\CSK\ALN\1/2X3\NC
9	4900001	12	NUT\HEX\1/2\NC
10	5000003	3	WASH\LOCK\5/8
11	5000006	28	WASH\LOCK\1/2
12	6200024	1	KEY\SQ\3/4X4
13	6300007	1	SHAFT\DISC\CHIPPER
14	6300009	4	PADDLE\DISC\CHIPPER
15	6300012	1	DISC\HUB\ASSY\CHIPPER
16	6300244	1 SET	KNIFE\CHIPPER\SET OF 4\TC12

**6300060                      ASSY\DISC\TC12**

**NOT SHOWN (WEAR PARTS)**

1700237                      BELT\5VX1120

INFEED ASSEMBLY VIEW 1 (FOR SN UP TO 0043)





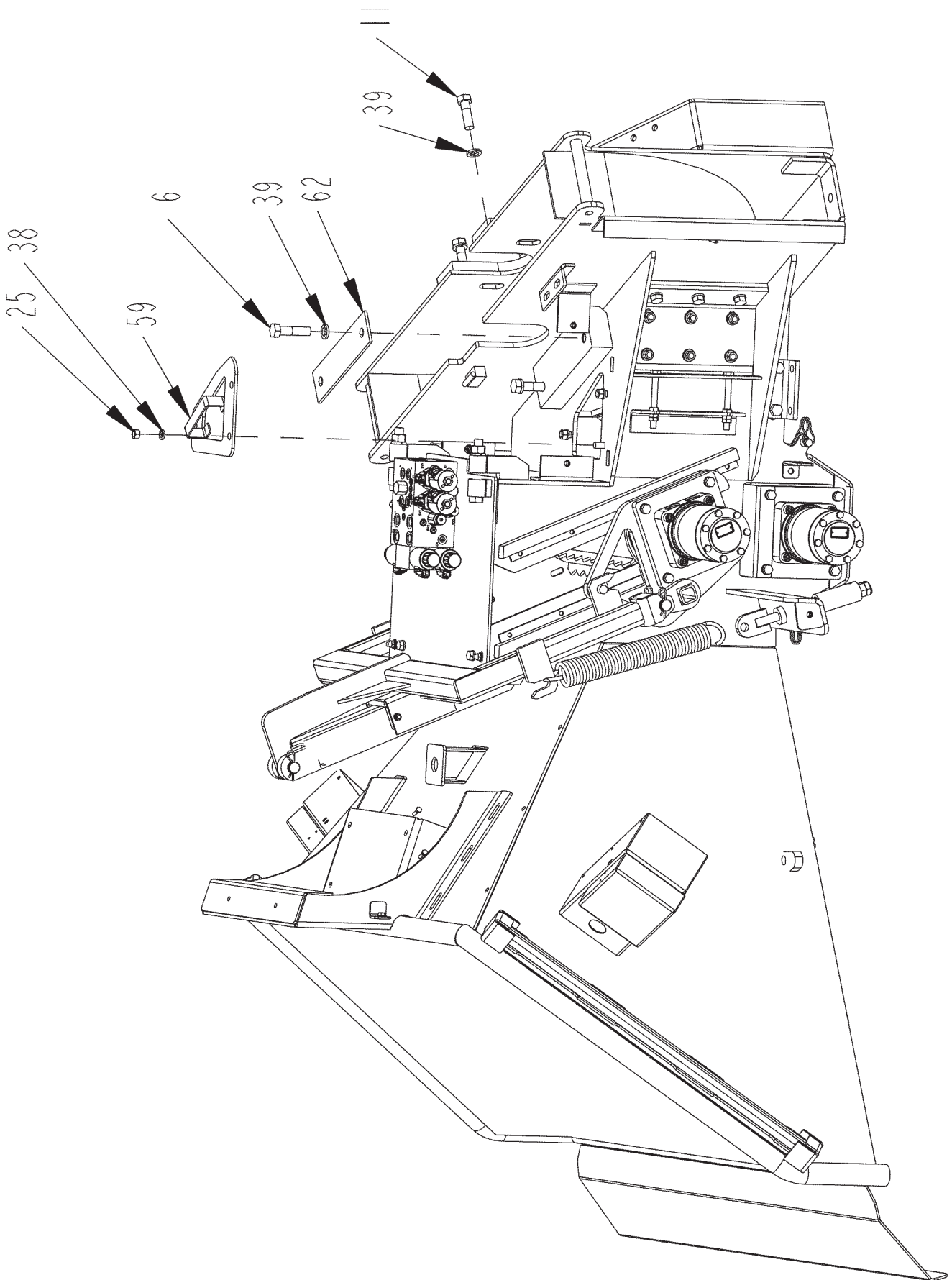
**INFEED ASSEMBLY VIEW 1 (FOR SN UP TO 0043)**

ITEM	PART	QTY.	PART DESCRIPTION
1	2000337	2	BRG\FLG\CAST4BOLT2"
2	3900047	2	MTR\HYD\39.6C\DELTA\TAPERED
3	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER
4	4100030	3	PIN 1" X 3-1/2" HYD. CYL.
5	4100262	1	CYL\HYD\2X12\1-1/4\TUBE
6	4800017	2	BOLT\HEX\3/4X3
7	4800018	2	BOLT\HEX\1/2X1-1/4
8	4800024	2	BOLT\HEX\1/4X3/4
9	4800106	10	BOLT\HEX\5/8X1-1/2
10	4800107	6	PIN\HAIR\1/8(#9)
11	4800115	4	BOLT\HEX\3/4X2-1/2
12	4800135	4	BOLT\HEX\1/2X3-1/2
13	4800166	6	SCR\CSK\ALN\5/16X1\NC
14	4800201	6	BOLT\CRG\1/2X1-3/4\NC\GR5
15	4800224	2	BOLT\HEX\3/4X5
16	4800251	4	BOLT\HEX\1/2X2-1/4\NC
17	4800365	7	PIN\LYNCH\3/8X1-1/2\W/U WIRE;KEEPER
18	4800404	8	SCR\BUT\ALN\1/4X1\NC
19	4800433	8	SCR\CAP\ALN\1/2X2\NC
20	4800486	2	BOLT\HEX\3/8X1-1/4\GR8\NC
21	4800546	1	BOLT\HEX\1X5\NC
22	4800602	4	BOLT\HEX\1/4X1-1/4\NC
23	4800662	12	SCR\CAP\ALN\1/4X3/4\NC
24	4801199	3	BOLT\HEX\5/8X1-1/4\GR8
25	4900001	3	NUT\HEX\1/2\NC
26	4900003	6	NUT\HEX\5/16\NC
27	4900004	4	NUT\HEX\3/4\NC
28	4900005	2	NUT\HEX\5/8\NC
29	4900009	8	NUT\HEX\1/4\NC
30	4900014	6	NUT\TPLCK\1/2\NC
31	4900030	2	NUT\NYLCK\3/8\NC
32	4900046	8	NUT\JAM\1/2\NC
33	4900084	2	NUT\TPLCK\1/4\NC
34	4900104	2	NUT\JAM\3/4\NC
35	4900127	1	NUT\TPLCK\1\NC
36	5000002	2	WASH\FLAT\5/8
37	5000003	13	WASH\LOCK\5/8
38	5000006	13	WASH\LOCK\1/2
39	5000012	8	WASH\LOCK\3/4
40	5000019	2	WASH\LOCK\3/8
41	5000022	6	WASH\LOCK\5/16
42	5000024	12	WASH\LOCK\1/4
43	5000113	6	WASH\FLAT\1/2\EXTRTHK\GR8
44	5700722	2	SNSR\IR\T\RSET\ASSY
45	6100024	2	SPG\COMP\1.125OD\1.152WD\8"LONG
46	6100088	2	SPRING.156OT 63/64OD\13LIH
47	6300005	1	RLLR\FEED\WELD
48	6300010	1	ANVIL\CHIPPER
49	6300011	1	ARM\L\ROCKER\RLLR\FEED
50	6300014	1	ARM\R\ROCKER\RLLR\FEED
51	6300015	1	DOOR\BTTM\ACCESS
52	6300016	1	HSG\DISC\WELD
53	6300023	1	MNT\ANVIL
54	6300024	1	GUIDE\ANVIL
55	6300029	1	LIFT\FEED\RLLR
56	6300030	2	PAD\FRICTION\LIFT\RLLR
57	6300031	1	PAD\FRICTION\LIFT\FEED\RLLR
58	6300032	1	PIN\LATCH\HSG\ACCESS
59	6300036	1	ACCESS\HSG\DISC
60	6300050	1	SHLD\CHAIN\SPOUT
61	6300058	2	LNK\SPRG\CHPPR
62	6300062	1	SHIM\1/4\BRG\FEED
63	6300078	2	COUPLER\ROLLER\FEED
64	6300080	1	RLLR\FEED\WELD\BTTM
65	6300083	2	SHAFT\ROLLER\FEED
66	6300086	1	COVER\FEED\HSG
67	6300092	1	RAMP\SPOUT\INFEED
68	6300094	2	RETAINER\SPG\TNSM\FEED\ROLL
69	6300095	1	PL\ANGL\MNT\CHPPR
70	6300098	4	SHLD\T\R\CHPPR (FOR SN UP TO 12-2-100023)
70A	6300158	2	SHLD\LEFT\LIGHTBAR (FOR SN 12-2-110023 & UP)
70B	6300159	2	SHLD\RIGHT\LIGHTBAR (FOR SN 12-2-110023 & UP)
70C	6300160	4	SHLD\EXT\LIGHTBAR (FOR SN 12-2-110023 & UP)
71	6300102	1	MNT\MTR\FEED\SLIDE
72	6300104	1	MNT\MTR\FEED\BTTM
73	6300121	1	SHIM\WHL\FEED\CPLR
74	6300125	1	COVER\CLEANOUT\HSG\DISC\ASSY
75	6300154	1	COVER\BRG\FEED
76	7501045	1	LATCH\ADJ\OTC\4" GRIP
77	7501351	4	PAD\WEAR\NY\9-1/2X1X3/4

**WEAR PARTS**  
3900056

SEAL\KIT\MTR\3900047

INFEED ASSEMBLY VIEW 2 (FOR SN UP TO 0043)



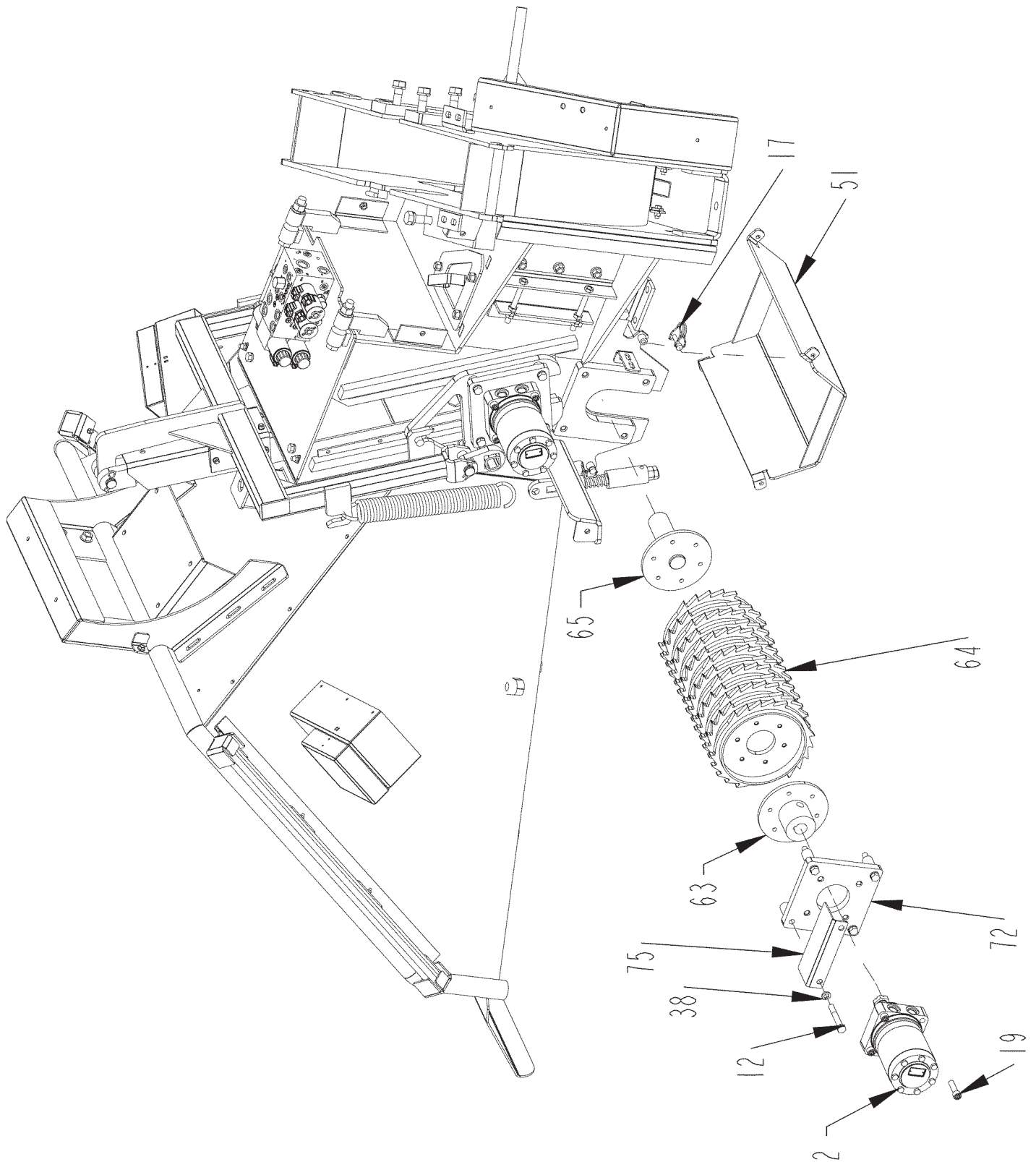
**INFEED ASSEMBLY VIEW 2 (FOR SN UP TO 0043)**

ITEM	PART	QTY.	PART DESCRIPTION
1	2000337	2	BRG\FLG\CAST4BOLT2"
2	3900047	2	MTR\HYD\39.6C\DELTA\TAPERED
3	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER
4	4100030	3	PIN 1" X 3-1/2" HYD. CYL.
5	4100262	1	CYL\HYD\2X12\1-1/4\TUBE
6	4800017	2	BOLT\HEX\3/4X3
7	4800018	2	BOLT\HEX\1/2X1-1/4
8	4800024	2	BOLT\HEX\1/4X3/4
9	4800106	10	BOLT\HEX\5/8X1-1/2
10	4800107	6	PIN\HAIR\1/8(#9)
11	4800115	4	BOLT\HEX\3/4X2-1/2
12	4800135	4	BOLT\HEX\1/2X3-1/2
13	4800166	6	SCR\CSK\ALN\5/16X1\NC
14	4800201	6	BOLT\CRG\1/2X1-3/4\NC\GR5
15	4800224	2	BOLT\HEX\3/4X5
16	4800251	4	BOLT\HEX\1/2X2-1/4\NC
17	4800365	7	PIN\LYNCH\3/8X1-1/2\W/U WIRE;KEEPER
18	4800404	8	SCR\BUT\ALN\1/4X1\NC
19	4800433	8	SCR\CAP\ALN\1/2X2\NC
20	4800486	2	BOLT\HEX\3/8X1-1/4\GR8\NC
21	4800546	1	BOLT\HEX\1X5\NC
22	4800602	4	BOLT\HEX\1/4X1-1/4\NC
23	4800662	12	SCR\CAP\ALN\1/4X3/4\NC
24	4801199	3	BOLT\HEX\5/8X1-1/4\GR8
25	4900001	3	NUT\HEX\1/2\NC
26	4900003	6	NUT\HEX\5/16\NC
27	4900004	4	NUT\HEX\3/4\NC
28	4900005	2	NUT\HEX\5/8\NC
29	4900009	8	NUT\HEX\1/4\NC
30	4900014	6	NUT\TPLCK\1/2\NC
31	4900030	2	NUT\NYLCK\3/8\NC
32	4900046	8	NUT\JAM\1/2\NC
33	4900084	2	NUT\TPLCK\1/4\NC
34	4900104	2	NUT\JAM\3/4\NC
35	4900127	1	NUT\TPLCK\1\NC
36	5000002	2	WASH\FLAT\5/8
37	5000003	13	WASH\LOCK\5/8
38	5000006	13	WASH\LOCK\1/2
39	5000012	8	WASH\LOCK\3/4
40	5000019	2	WASH\LOCK\3/8
41	5000022	6	WASH\LOCK\5/16
42	5000024	12	WASH\LOCK\1/4
43	5000113	6	WASH\FLAT\1/2\EXTRTHK\GR8
44	5700722	2	SNSR\IR\T\RSET\ASSY
45	6100024	2	SPG\COMP\1.125OD\1.152WD\8"LONG
46	6100088	2	SPRING.156OT 63/64OD\13LIH
47	6300005	1	RLLR\FEED\WELD
48	6300010	1	ANVIL\CHIPPER
49	6300011	1	ARM\L\ROCKER\RLLR\FEED
50	6300014	1	ARM\R\ROCKER\RLLR\FEED
51	6300015	1	DOOR\BTTM\ACCESS
52	6300016	1	HSG\DISC\WELD
53	6300023	1	MNT\ANVIL
54	6300024	1	GUIDE\ANVIL
55	6300029	1	LIFT\FEED\RLLR
56	6300030	2	PAD\FRICTION\LIFT\RLLR
57	6300031	1	PAD\FRICTION\LIFT\FEED\RLLR
58	6300032	1	PIN\LATCH\HSG\ACCESS
59	6300036	1	ACCESS\HSG\DISC
60	6300050	1	SHLD\CHAIN\SPOUT
61	6300058	2	LNK\SPRG\CHPPR
62	6300062	1	SHIM\1/4\BRG\FEED
63	6300078	2	COUPLER\ROLLER\FEED
64	6300080	1	RLLR\FEED\WELD\BTTM
65	6300083	2	SHAFT\ROLLER\FEED
66	6300086	1	COVER\FEED\HSG
67	6300092	1	RAMP\SPOUT\INFEED
68	6300094	2	RETAINER\SPG\TNSM\FEED\ROLL
69	6300095	1	PL\ANGL\MNT\CHPPR
70	6300098	4	SHLD\T\R\CHPPR (FOR SN UP TO 12-2-100023)
70A	6300158	2	SHLD\LEFT\LIGHTBAR (FOR SN 12-2-110023 & UP)
70B	6300159	2	SHLD\RIGHT\LIGHTBAR (FOR SN 12-2-110023 & UP)
70C	6300160	4	SHLD\EXT\LIGHTBAR (FOR SN 12-2-110023 & UP)
71	6300102	1	MNT\MTR\FEED\SLIDE
72	6300104	1	MNT\MTR\FEED\BTTM
73	6300121	1	SHIM\WHL\FEED\CPLR
74	6300125	1	COVER\CLEANOUT\HSG\DISC\ASSY
75	6300154	1	COVER\BRG\FEED
76	7501045	1	LATCH\ADJ\OTC\4" GRIP
77	7501351	4	PAD\WEAR\NY\9-1/2X1X3/4

**WEAR PARTS**  
3900056

SEAL\KIT\MTR\3900047

INFEED ASSEMBLY VIEW 3 (FOR SN UP TO 0043)



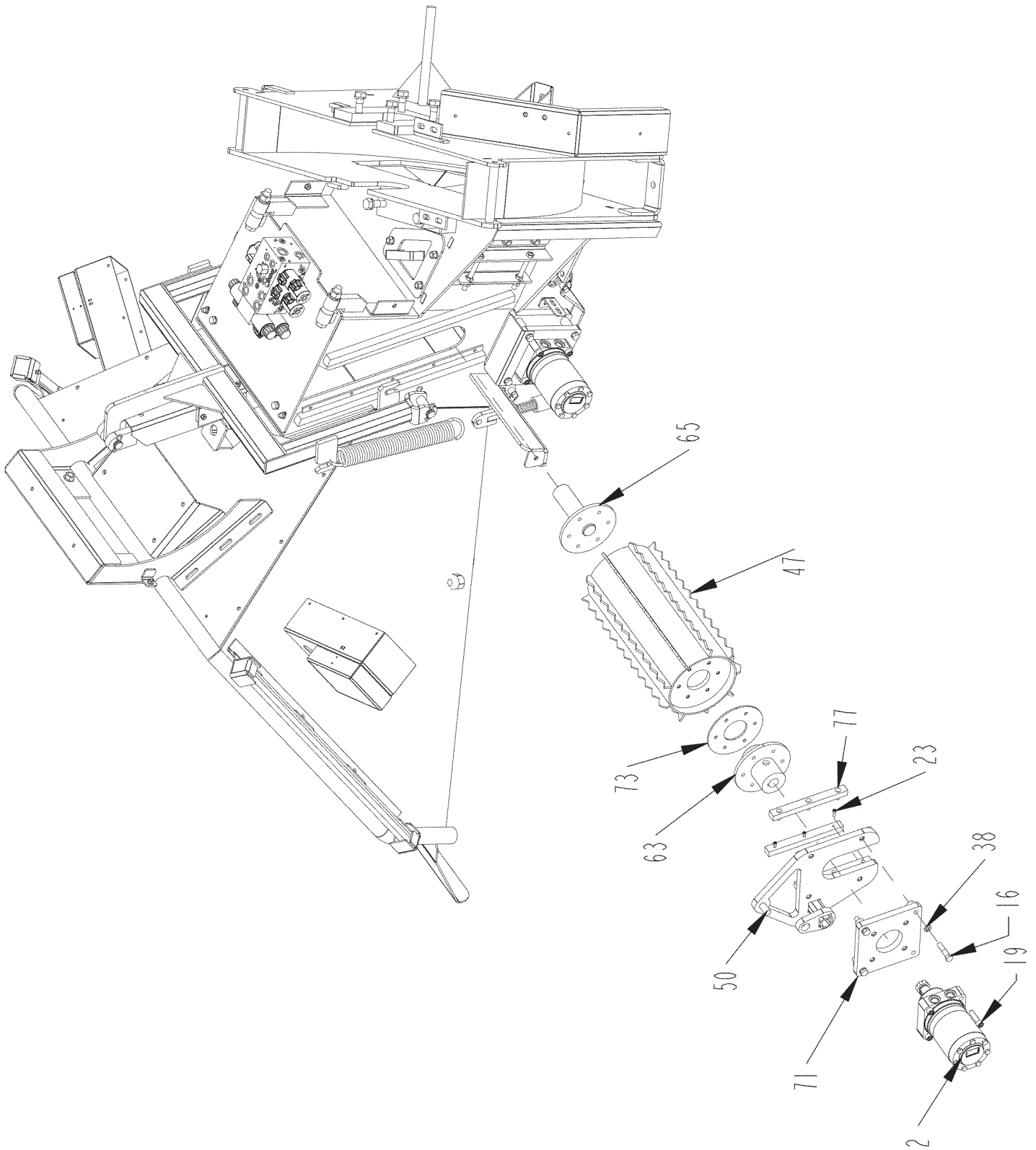
**INFEED ASSEMBLY VIEW 3 (FOR SN UP TO 0043)**

ITEM	PART	QTY.	PART DESCRIPTION
1	2000337	2	BRG\FLG\CAST4BOLT2"
2	3900047	2	MTR\HYD\39.6C\DELTA\TAPERED
3	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER
4	4100030	3	PIN 1" X 3-1/2" HYD. CYL.
5	4100262	1	CYL\HYD\2X12\1-1/4\TUBE
6	4800017	2	BOLT\HEX\3/4X3
7	4800018	2	BOLT\HEX\1/2X1-1/4
8	4800024	2	BOLT\HEX\1/4X3/4
9	4800106	10	BOLT\HEX\5/8X1-1/2
10	4800107	6	PIN\HAIR\1/8(#9)
11	4800115	4	BOLT\HEX\3/4X2-1/2
12	4800135	4	BOLT\HEX\1/2X3-1/2
13	4800166	6	SCR\CSK\ALN\5/16X1\NC
14	4800201	6	BOLT\CRG\1/2X1-3/4\NC\GR5
15	4800224	2	BOLT\HEX\3/4X5
16	4800251	4	BOLT\HEX\1/2X2-1/4\NC
17	4800365	7	PIN\LYNCH\3/8X1-1/2\W/U WIRE;KEEPER
18	4800404	8	SCR\BUT\ALN\1/4X1\NC
19	4800433	8	SCR\CAP\ALN\1/2X2\NC
20	4800486	2	BOLT\HEX\3/8X1-1/4\GR8\NC
21	4800546	1	BOLT\HEX\1X5\NC
22	4800602	4	BOLT\HEX\1/4X1-1/4\NC
23	4800662	12	SCR\CAP\ALN\1/4X3/4\NC
24	4801199	3	BOLT\HEX\5/8X1-1/4\GR8
25	4900001	3	NUT\HEX\1/2\NC
26	4900003	6	NUT\HEX\5/16\NC
27	4900004	4	NUT\HEX\3/4\NC
28	4900005	2	NUT\HEX\5/8\NC
29	4900009	8	NUT\HEX\1/4\NC
30	4900014	6	NUT\TPLCK\1/2\NC
31	4900030	2	NUT\NYLCK\3/8\NC
32	4900046	8	NUT\JAM\1/2\NC
33	4900084	2	NUT\TPLCK\1/4\NC
34	4900104	2	NUT\JAM\3/4\NC
35	4900127	1	NUT\TPLCK\1\NC
36	5000002	2	WASH\FLAT\5/8
37	5000003	13	WASH\LOCK\5/8
38	5000006	13	WASH\LOCK\1/2
39	5000012	8	WASH\LOCK\3/4
40	5000019	2	WASH\LOCK\3/8
41	5000022	6	WASH\LOCK\5/16
42	5000024	12	WASH\LOCK\1/4
43	5000113	6	WASH\FLAT\1/2\EXTRTHK\GR8
44	5700722	2	SNSR\IR\T\RSET\ASSY
45	6100024	2	SPG\COMP\1.125OD\1.152WD\8"LONG
46	6100088	2	SPRING.156OT 63/64OD\13LIH
47	6300005	1	RLLR\FEED\WELD
48	6300010	1	ANVIL\CHIPPER
49	6300011	1	ARM\L\ROCKER\RLLR\FEED
50	6300014	1	ARM\R\ROCKER\RLLR\FEED
51	6300015	1	DOOR\BTTM\ACCESS
52	6300016	1	HSG\DISC\WELD
53	6300023	1	MNT\ANVIL
54	6300024	1	GUIDE\ANVIL
55	6300029	1	LIFT\FEED\RLLR
56	6300030	2	PAD\FRICTION\LIFT\RLLR
57	6300031	1	PAD\FRICTION\LIFT\FEED\RLLR
58	6300032	1	PIN\LATCH\HSG\ACCESS
59	6300036	1	ACCESS\HSG\DISC
60	6300050	1	SHLD\CHAIN\SPOUT
61	6300058	2	LNK\SPRG\CHPPR
62	6300062	1	SHIM\1/4\BRG\FEED
63	6300078	2	COUPLER\ROLLER\FEED
64	6300080	1	RLLR\FEED\WELD\BTTM
65	6300083	2	SHAFT\ROLLER\FEED
66	6300086	1	COVER\FEED\HSG
67	6300092	1	RAMP\SPOUT\INFEED
68	6300094	2	RETAINER\SPG\TNSM\FEED\ROLL
69	6300095	1	PL\ANGL\MNT\CHPPR
70	6300098	4	SHLD\T\R\CHPPR (FOR SN UP TO 12-2-100023)
70A	6300158	2	SHLD\LEFT\LIGHTBAR (FOR SN 12-2-110023 & UP)
70B	6300159	2	SHLD\RIGHT\LIGHTBAR (FOR SN 12-2-110023 & UP)
70C	6300160	4	SHLD\EXT\LIGHTBAR (FOR SN 12-2-110023 & UP)
71	6300102	1	MNT\MTR\FEED\SLIDE
72	6300104	1	MNT\MTR\FEED\BTTM
73	6300121	1	SHIM\WHL\FEED\CPLR
74	6300125	1	COVER\CLEANOUT\HSG\DISC\ASSY
75	6300154	1	COVER\BRG\FEED
76	7501045	1	LATCH\ADJ\OTC\4" GRIP
77	7501351	4	PAD\WEAR\NY\9-1/2X1X3/4

**WEAR PARTS**  
3900056

SEAL\KIT\MTR\3900047

INFEED ASSEMBLY VIEW 4 (FOR SN UP TO 0043)



**INFEED ASSEMBLY VIEW 4 (FOR SN UP TO 0043)**

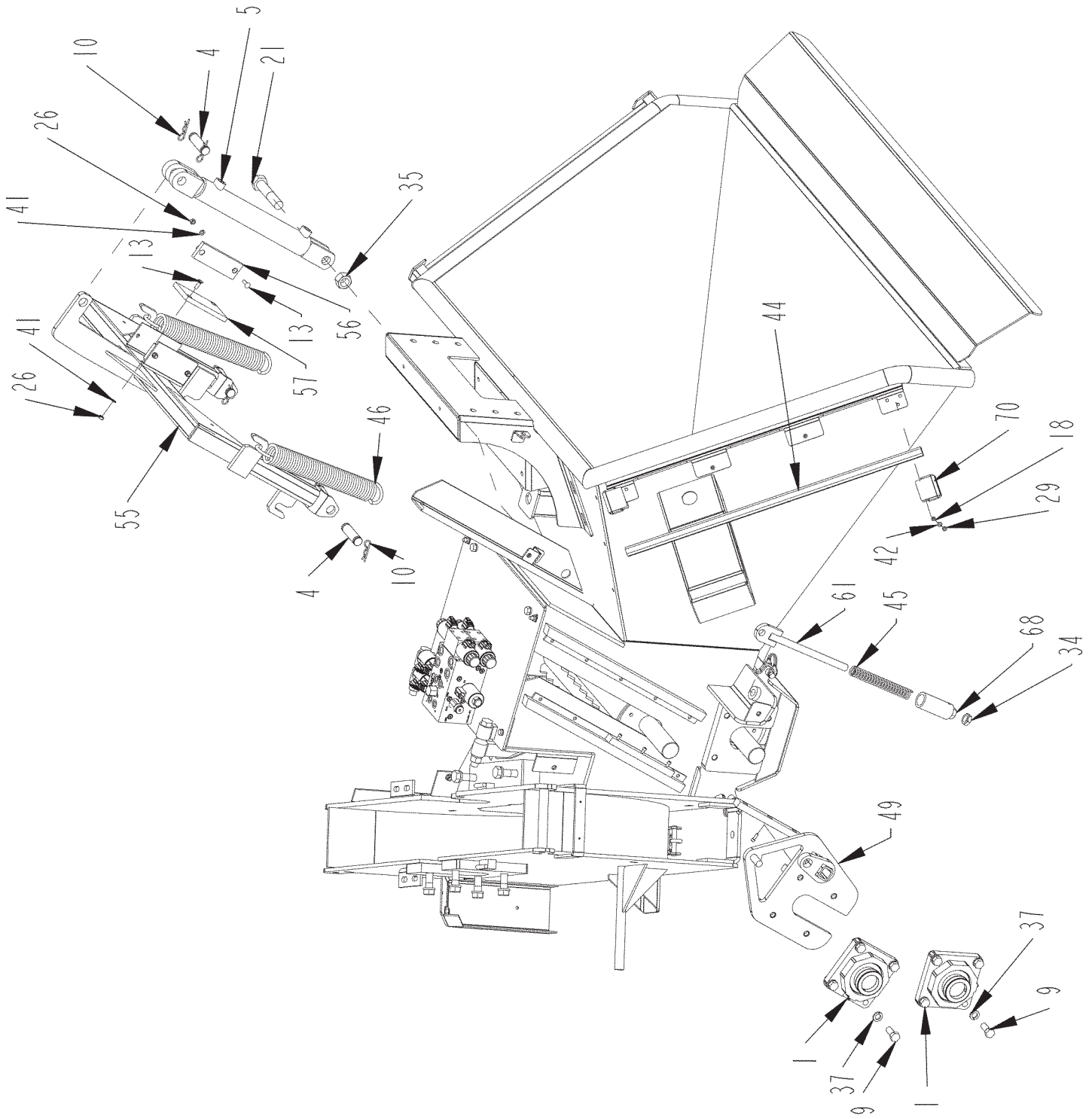
ITEM	PART	QTY.	PART DESCRIPTION
1	2000337	2	BRG\FLG\CAST\4BOLT\2"
2	3900047	2	MTR\HYD\39.6C\DELTA\TAPERED
3	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER
4	4100030	3	PIN 1" X 3-1/2" HYD. CYL.
5	4100262	1	CYL\HYD\2X12\1-1/4\TUBE
6	4800017	2	BOLT\HEX\3/4X3
7	4800018	2	BOLT\HEX\1/2X1-1/4
8	4800024	2	BOLT\HEX\1/4X3/4
9	4800106	10	BOLT\HEX\5/8X1-1/2
10	4800107	6	PIN\HAIR\1/8(#9)
11	4800115	4	BOLT\HEX\3/4X2-1/2
12	4800135	4	BOLT\HEX\1/2X3-1/2
13	4800166	6	SCR\CSK\ALN\5/16X1\NC
14	4800201	6	BOLT\CRG\1/2X1-3/4\NC\GR5
15	4800224	2	BOLT\HEX\3/4X5
16	4800251	4	BOLT\HEX\1/2X2-1/4\NC
17	4800365	7	PIN\LYNCH\3/8X1-1/2\W/U WIRE;KEEPER
18	4800404	8	SCR\BUT\ALN\1/4X1\NC
19	4800433	8	SCR\CAP\ALN\1/2X2\NC
20	4800486	2	BOLT\HEX\3/8X1-1/4\GR8\NC
21	4800546	1	BOLT\HEX\1X5\NC
22	4800602	4	BOLT\HEX\1/4X1-1/4\NC
23	4800662	12	SCR\CAP\ALN\1/4X3/4\NC
24	4801199	3	BOLT\HEX\5/8X1-1/4\GR8
25	4900001	3	NUT\HEX\1/2\NC
26	4900003	6	NUT\HEX\5/16\NC
27	4900004	4	NUT\HEX\3/4\NC
28	4900005	2	NUT\HEX\5/8\NC
29	4900009	8	NUT\HEX\1/4\NC
30	4900014	6	NUT\TPLCK\1/2\NC
31	4900030	2	NUT\NYLCK\3/8\NC
32	4900046	8	NUT\JAM\1/2\NC
33	4900084	2	NUT\TPLCK\1/4\NC
34	4900104	2	NUT\JAM\3/4\NC
35	4900127	1	NUT\TPLCK\1\NC
36	5000002	2	WASH\FLAT\5/8
37	5000003	13	WASH\LOCK\5/8
38	5000006	13	WASH\LOCK\1/2
39	5000012	8	WASH\LOCK\3/4
40	5000019	2	WASH\LOCK\3/8
41	5000022	6	WASH\LOCK\5/16
42	5000024	12	WASH\LOCK\1/4
43	5000113	6	WASH\FLAT\1/2\EXTRTHK\GR8
44	5700722	2	SNSR\IR\T\RSET\ASSY
45	6100024	2	SPG\COMP\1.125OD\1.152WD\8"LONG
46	6100088	2	SPRING.156OT 63/64OD\13LIH
47	6300005	1	RLLR\FEED\WELD
48	6300010	1	ANVIL\CHIPPER
49	6300011	1	ARM\L\ROCKER\RLLR\FEED
50	6300014	1	ARM\R\ROCKER\RLLR\FEED
51	6300015	1	DOOR\BTTM\ACCESS
52	6300016	1	HSG\DISC\WELD
53	6300023	1	MNT\ANVIL
54	6300024	1	GUIDE\ANVIL
55	6300029	1	LIFT\FEED\RLLR
56	6300030	2	PAD\FRICTION\LIFT\RLLR
57	6300031	1	PAD\FRICTION\LIFT\FEED\RLLR
58	6300032	1	PIN\LATCH\HSG\ACCESS
59	6300036	1	ACCESS\HSG\DISC
60	6300050	1	SHLD\CHAIN\SPOUT
61	6300058	2	LNK\SPRG\CHPPR
62	6300062	1	SHIM\1/4\BRG\FEED
63	6300078	2	COUPLER\ROLLER\FEED
64	6300080	1	RLLR\FEED\WELD\BTTM
65	6300083	2	SHAFT\ROLLER\FEED
66	6300086	1	COVER\FEED\HSG
67	6300092	1	RAMP\SPOUT\INFEED
68	6300094	2	RETAINER\SPG\TNSM\FEED\ROLL
69	6300095	1	PL\ANGL\MNT\CHPPR
70	6300098	4	SHLD\T\R\CHPPR (FOR SN UP TO 12-2-100023)
70A	6300158	2	SHLD\LEFT\LIGHTBAR (FOR SN 12-2-110023 & UP)
70B	6300159	2	SHLD\RIGHT\LIGHTBAR (FOR SN 12-2-110023 & UP)
70C	6300160	4	SHLD\EXT\LIGHTBAR (FOR SN 12-2-110023 & UP)
71	6300102	1	MNT\MTR\FEED\SLIDE
72	6300104	1	MNT\MTR\FEED\BTTM
73	6300121	1	SHIM\WHL\FEED\CPLR
74	6300125	1	COVER\CLEANOUT\HSG\DISC\ASSY
75	6300154	1	COVER\BRG\FEED
76	7501045	1	LATCH\ADJ\OTC\4" GRIP
77	7501351	4	PAD\WEAR\NY\9-1/2X1X3/4

**WEAR PARTS**  
3900056

SEAL\KIT\MTR\3900047



INFEED ASSEMBLY VIEW 5 (FOR SN UP TO 0043)



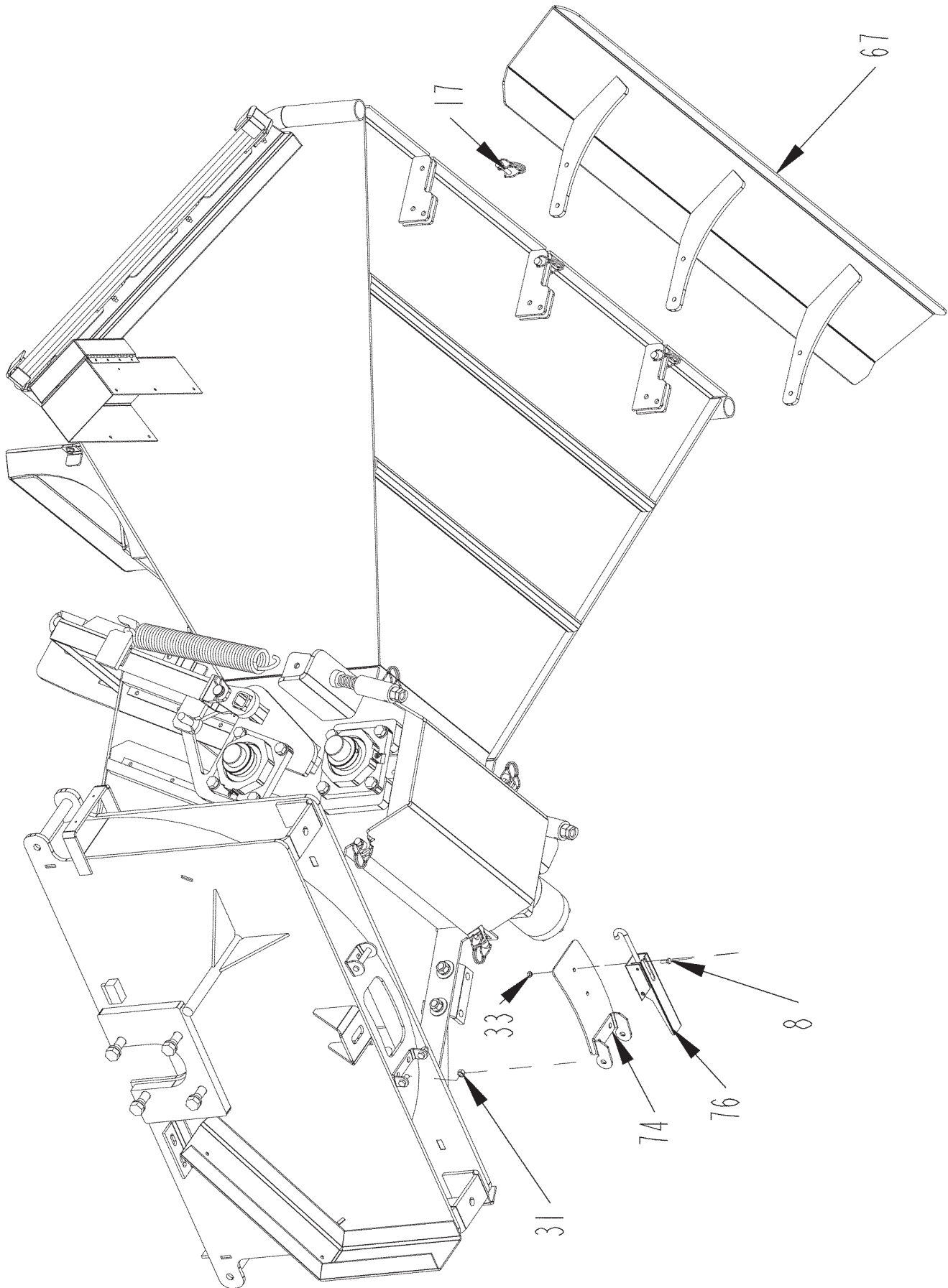
**INFEED ASSEMBLY VIEW 5 (FOR SN UP TO 0043)**

ITEM	PART	QTY.	PART DESCRIPTION
1	2000337	2	BRG\FLG\CAST4BOLT2"
2	3900047	2	MTR\HYD\39.6C\DELTA\TAPERED
3	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER
4	4100030	3	PIN 1" X 3-1/2" HYD. CYL.
5	4100262	1	CYL\HYD\2X12\1-1/4\TUBE
6	4800017	2	BOLT\HEX\3/4X3
7	4800018	2	BOLT\HEX\1/2X1-1/4
8	4800024	2	BOLT\HEX\1/4X3/4
9	4800106	10	BOLT\HEX\5/8X1-1/2
10	4800107	6	PIN\HAIR\1/8(#9)
11	4800115	4	BOLT\HEX\3/4X2-1/2
12	4800135	4	BOLT\HEX\1/2X3-1/2
13	4800166	6	SCR\CSK\ALN\5/16X1\NC
14	4800201	6	BOLT\CRG\1/2X1-3/4\NC\GR5
15	4800224	2	BOLT\HEX\3/4X5
16	4800251	4	BOLT\HEX\1/2X2-1/4\NC
17	4800365	7	PIN\LYNCH\3/8X1-1/2\W/U WIRE;KEEPER
18	4800404	8	SCR\BUT\ALN\1/4X1\NC
19	4800433	8	SCR\CAP\ALN\1/2X2\NC
20	4800486	2	BOLT\HEX\3/8X1-1/4\GR8\NC
21	4800546	1	BOLT\HEX\1X5\NC
22	4800602	4	BOLT\HEX\1/4X1-1/4\NC
23	4800662	12	SCR\CAP\ALN\1/4X3/4\NC
24	4801199	3	BOLT\HEX\5/8X1-1/4\GR8
25	4900001	3	NUT\HEX\1/2\NC
26	4900003	6	NUT\HEX\5/16\NC
27	4900004	4	NUT\HEX\3/4\NC
28	4900005	2	NUT\HEX\5/8\NC
29	4900009	8	NUT\HEX\1/4\NC
30	4900014	6	NUT\TPLCK\1/2\NC
31	4900030	2	NUT\NYLCK\3/8\NC
32	4900046	8	NUT\JAM\1/2\NC
33	4900084	2	NUT\TPLCK\1/4\NC
34	4900104	2	NUT\JAM\3/4\NC
35	4900127	1	NUT\TPLCK\1\NC
36	5000002	2	WASH\FLAT\5/8
37	5000003	13	WASH\LOCK\5/8
38	5000006	13	WASH\LOCK\1/2
39	5000012	8	WASH\LOCK\3/4
40	5000019	2	WASH\LOCK\3/8
41	5000022	6	WASH\LOCK\5/16
42	5000024	12	WASH\LOCK\1/4
43	5000113	6	WASH\FLAT\1/2\EXTRTHK\GR8
44	5700722	2	SNSR\IR\T\RSET\ASSY
45	6100024	2	SPG\COMP\1.125OD\1.152WD\8"LONG
46	6100088	2	SPRING.156OT 63/64OD\13LIH
47	6300005	1	RLLR\FEED\WELD
48	6300010	1	ANVIL\CHIPPER
49	6300011	1	ARM\L\ROCKER\RLLR\FEED
50	6300014	1	ARM\R\ROCKER\RLLR\FEED
51	6300015	1	DOOR\BTTM\ACCESS
52	6300016	1	HSG\DISC\WELD
53	6300023	1	MNT\ANVIL
54	6300024	1	GUIDE\ANVIL
55	6300029	1	LIFT\FEED\RLLR
56	6300030	2	PAD\FRICTION\LIFT\RLLR
57	6300031	1	PAD\FRICTION\LIFT\FEED\RLLR
58	6300032	1	PIN\LATCH\HSG\ACCESS
59	6300036	1	ACCESS\HSG\DISC
60	6300050	1	SHLD\CHAIN\SPOUT
61	6300058	2	LNK\SPRG\CHPPR
62	6300062	1	SHIM\1/4\BRG\FEED
63	6300078	2	COUPLER\ROLLER\FEED
64	6300080	1	RLLR\FEED\WELD\BTTM
65	6300083	2	SHAFT\ROLLER\FEED
66	6300086	1	COVER\FEED\HSG
67	6300092	1	RAMP\SPOUT\INFEED
68	6300094	2	RETAINER\SPG\TNSM\FEED\ROLL
69	6300095	1	PL\ANGL\MNT\CHPPR
70	6300098	4	SHLD\T\R\CHPPR (FOR SN UP TO 12-2-100023)
70A	6300158	2	SHLD\LEFT\LIGHTBAR (FOR SN 12-2-110023 & UP)
70B	6300159	2	SHLD\RIGHT\LIGHTBAR (FOR SN 12-2-110023 & UP)
70C	6300160	4	SHLD\EXT\LIGHTBAR (FOR SN 12-2-110023 & UP)
71	6300102	1	MNT\MTR\FEED\SLIDE
72	6300104	1	MNT\MTR\FEED\BTTM
73	6300121	1	SHIM\WHL\FEED\CPLR
74	6300125	1	COVER\CLEANOUT\HSG\DISC\ASSY
75	6300154	1	COVER\BRG\FEED
76	7501045	1	LATCH\ADJ\OTC\4" GRIP
77	7501351	4	PAD\WEAR\NY\9-1/2X1X3/4

**WEAR PARTS**  
3900056

SEAL\KIT\MTR\3900047

INFEED ASSEMBLY VIEW 6 (FOR SN UP TO 0043)



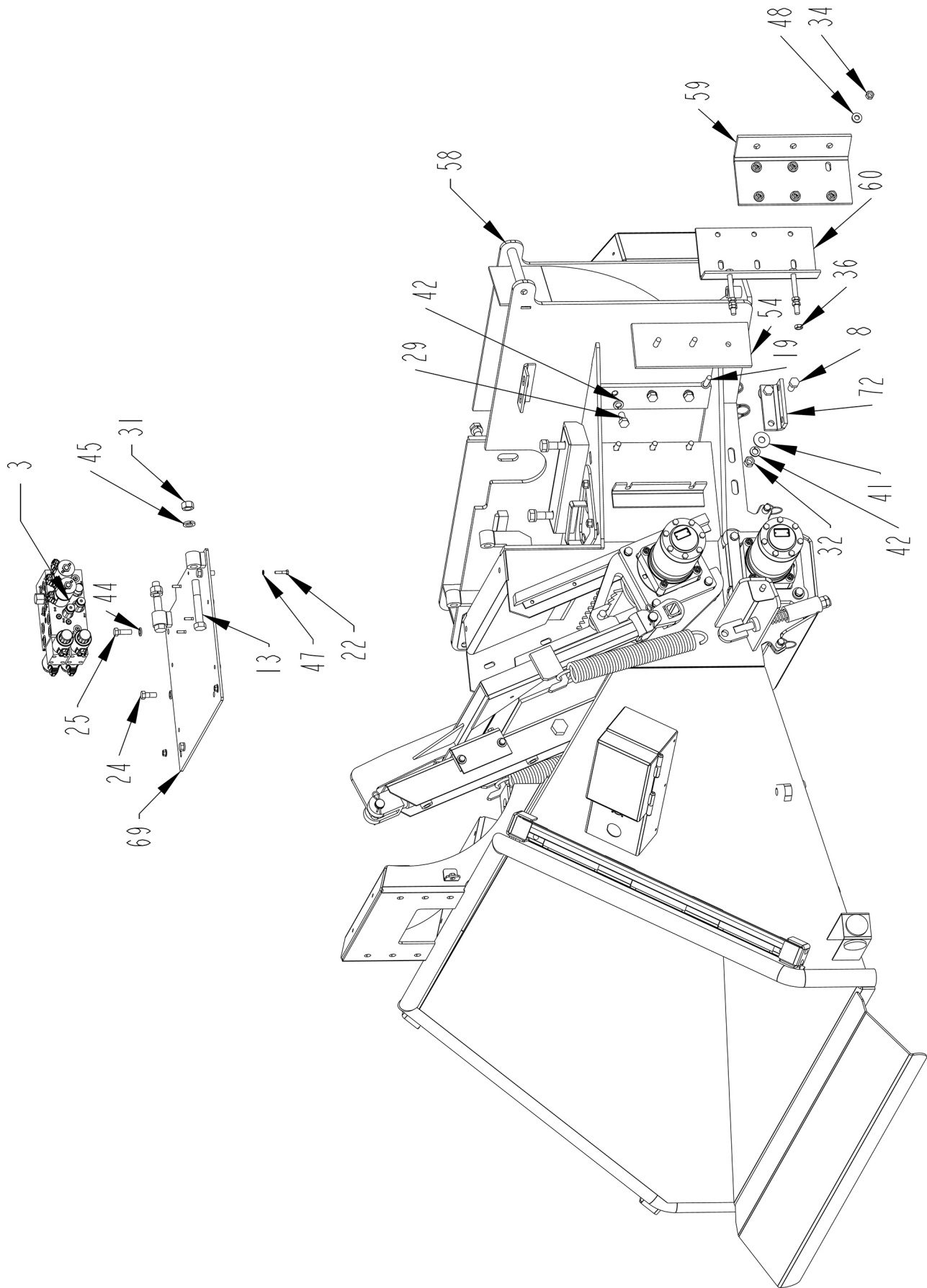
**INFEED ASSEMBLY VIEW 6 (FOR SN UP TO 0043)**

ITEM	PART	QTY.	PART DESCRIPTION
1	2000337	2	BRG\FLG\CAST4BOLT2"
2	3900047	2	MTR\HYD\39.6C\DELTA\TAPERED
3	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER
4	4100030	3	PIN 1" X 3-1/2" HYD. CYL.
5	4100262	1	CYL\HYD\2X12\1-1/4\TUBE
6	4800017	2	BOLT\HEX\3/4X3
7	4800018	2	BOLT\HEX\1/2X1-1/4
8	4800024	2	BOLT\HEX\1/4X3/4
9	4800106	10	BOLT\HEX\5/8X1-1/2
10	4800107	6	PIN\HAIR\1/8(#9)
11	4800115	4	BOLT\HEX\3/4X2-1/2
12	4800135	4	BOLT\HEX\1/2X3-1/2
13	4800166	6	SCR\CSK\ALN\5/16X1\NC
14	4800201	6	BOLT\CRG\1/2X1-3/4\NC\GR5
15	4800224	2	BOLT\HEX\3/4X5
16	4800251	4	BOLT\HEX\1/2X2-1/4\NC
17	4800365	7	PIN\LYNCH\3/8X1-1/2\W/U WIRE;KEEPER
18	4800404	8	SCR\BUT\ALN\1/4X1\NC
19	4800433	8	SCR\CAP\ALN\1/2X2\NC
20	4800486	2	BOLT\HEX\3/8X1-1/4\GR8\NC
21	4800546	1	BOLT\HEX\1X5\NC
22	4800602	4	BOLT\HEX\1/4X1-1/4\NC
23	4800662	12	SCR\CAP\ALN\1/4X3/4\NC
24	4801199	3	BOLT\HEX\5/8X1-1/4\GR8
25	4900001	3	NUT\HEX\1/2\NC
26	4900003	6	NUT\HEX\5/16\NC
27	4900004	4	NUT\HEX\3/4\NC
28	4900005	2	NUT\HEX\5/8\NC
29	4900009	8	NUT\HEX\1/4\NC
30	4900014	6	NUT\TPLCK\1/2\NC
31	4900030	2	NUT\NYLCK\3/8\NC
32	4900046	8	NUT\JAM\1/2\NC
33	4900084	2	NUT\TPLCK\1/4\NC
34	4900104	2	NUT\JAM\3/4\NC
35	4900127	1	NUT\TPLCK\1\NC
36	5000002	2	WASH\FLAT\5/8
37	5000003	13	WASH\LOCK\5/8
38	5000006	13	WASH\LOCK\1/2
39	5000012	8	WASH\LOCK\3/4
40	5000019	2	WASH\LOCK\3/8
41	5000022	6	WASH\LOCK\5/16
42	5000024	12	WASH\LOCK\1/4
43	5000113	6	WASH\FLAT\1/2\EXTRTHK\GR8
44	5700722	2	SNSR\IR\T\RSET\ASSY
45	6100024	2	SPG\COMP\1.125OD\1.152WD\8"LONG
46	6100088	2	SPRING.156OT 63/64OD\13LIH
47	6300005	1	RLLR\FEED\WELD
48	6300010	1	ANVIL\CHIPPER
49	6300011	1	ARM\L\ROCKER\RLLR\FEED
50	6300014	1	ARM\R\ROCKER\RLLR\FEED
51	6300015	1	DOOR\BTTM\ACCESS
52	6300016	1	HSG\DISC\WELD
53	6300023	1	MNT\ANVIL
54	6300024	1	GUIDE\ANVIL
55	6300029	1	LIFT\FEED\RLLR
56	6300030	2	PAD\FRICTION\LIFT\RLLR
57	6300031	1	PAD\FRICTION\LIFT\FEED\RLLR
58	6300032	1	PIN\LATCH\HSG\ACCESS
59	6300036	1	ACCESS\HSG\DISC
60	6300050	1	SHLD\CHAIN\SPOUT
61	6300058	2	LNK\SPRG\CHPPR
62	6300062	1	SHIM\1/4\BRG\FEED
63	6300078	2	COUPLER\ROLLER\FEED
64	6300080	1	RLLR\FEED\WELD\BTTM
65	6300083	2	SHAFT\ROLLER\FEED
66	6300086	1	COVER\FEED\HSG
67	6300092	1	RAMP\SPOUT\INFEED
68	6300094	2	RETAINER\SPG\TNSM\FEED\ROLL
69	6300095	1	PL\ANGL\MNT\CHPPR
70	6300098	4	SHLD\T\R\CHPPR (FOR SN UP TO 12-2-100023)
70A	6300158	2	SHLD\LEFT\LIGHTBAR (FOR SN 12-2-110023 & UP)
70B	6300159	2	SHLD\RIGHT\LIGHTBAR (FOR SN 12-2-110023 & UP)
70C	6300160	4	SHLD\EXT\LIGHTBAR (FOR SN 12-2-110023 & UP)
71	6300102	1	MNT\MTR\FEED\SLIDE
72	6300104	1	MNT\MTR\FEED\BTTM
73	6300121	1	SHIM\WHL\FEED\CPLR
74	6300125	1	COVER\CLEANOUT\HSG\DISC\ASSY
75	6300154	1	COVER\BRG\FEED
76	7501045	1	LATCH\ADJ\OTC\4" GRIP
77	7501351	4	PAD\WEAR\NY\9-1/2X1X3/4

**WEAR PARTS**  
3900056

SEAL\KIT\MTR\3900047

INFEED ASSEMBLY VIEW 1 (FOR SN 0044 AND UP)



**INFEED ASSEMBLY VIEW 1 (FOR SN 0044 AND UP)**

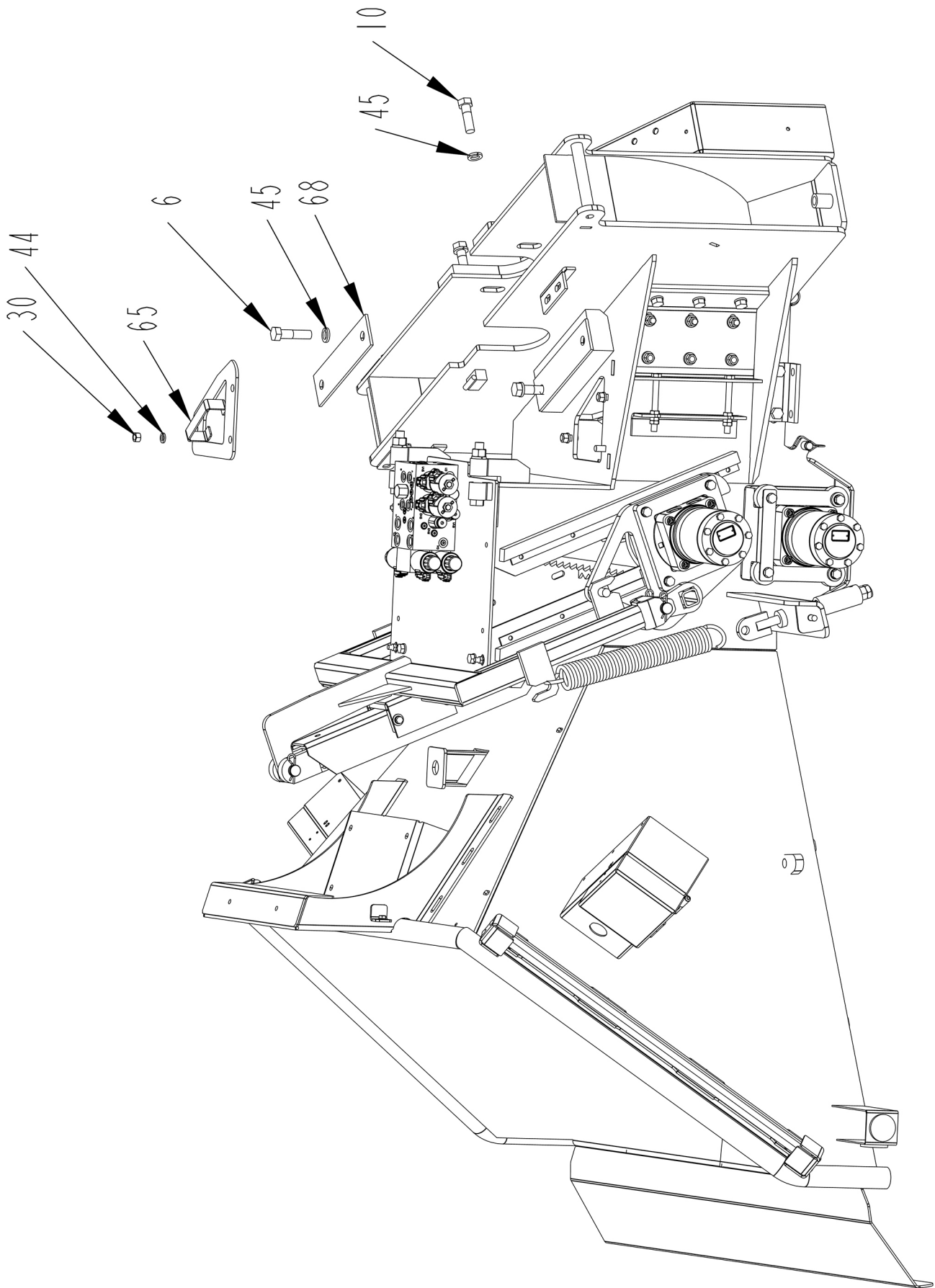
ITEM	PART	QTY.	PART DESCRIPTION
1	2000337	2	BRG\FLG\CAST\4BOLT\2"
2	3900047	2	MTR\HYD\39.6C\DELTA\TAPERED
3	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER
4	4100030	3	PIN 1" X 3-1/2" HYD. CYL.
5	4100262	1	CYL\HYD\2X12\1-1/4\TUBE
6	4800017	2	BOLT\HEX\3/4X3
7	4800034	6	BOLT\HEX\3/8X1-1/2
8	4800106	10	BOLT\HEX\5/8X1-1/2
9	4800107	6	PIN\HAIR\1/8(#9)
10	4800115	4	BOLT\HEX\3/4X2-1/2
11	4800164	6	BOLT\HEX\3/8X3/4
12	4800201	3	BOLT\CRG\1/2X1-3/4\INC\GR5
13	4800224	2	BOLT\HEX\3/4X5
14	4800231	4	BOLT\HEX\1/2X3-3/4
15	4800251	4	BOLT\HEX\1/2X2-1/4\INC
16	4800291	16	BOLT\CRG\1/4X3/4\INC
17	4800365	4	PIN\LNCH\3/8X1-1/2\W\KEEPER
18	4800376	2	SCR\RD\SLOT\#8X1-1/2\INC
19	4800398	3	SCR\BUT\ALN\1/2X2\INC
20	4800404	8	SCR\BUT\ALN\1/4X1\INC
21	4800546	1	BOLT\HEX\1X5\INC
22	4800602	4	BOLT\HEX\1/4X1-1/4\INC
23	4800609	4	PIN\LYNCH\3/8X1-3/4\W/_U_WIRE\KEEPER
24	4800628	2	BOLT\HEX\1/2X1-1/4\GR8\INC
25	4800634	14	BOLT\HEX\1/2X1-1/2\GR8\INC
26	4800662	9	SCR\CAP\ALN\1/4X3/4\INC
27	4800985	4	SCR\CAP\ALN\1/2X3\INC
28	4800986	4	SCR\CAP\ALN\1/2X2-3/4\INC
29	4801199	3	BOLT\HEX\5/8X1-1/4\GR8
30	4900001	6	NUT\HEX\1/2\INC
31	4900004	4	NUT\HEX\3/4\INC
32	4900005	2	NUT\HEX\5/8\INC
33	4900009	24	NUT\HEX\1/4\INC
34	4900019	3	NUT\HEX\1/2\GR8\INC
35	4900023	6	NUT\TPLCK\3/8\INC
36	4900046	12	NUT\JAM\1/2\INC
37	4900096	2	NUT\HEX\#8\INC
38	4900104	2	NUT\JAM\3/4\INC
39	4900127	1	NUT\TPLCK\1\INC
40	5000001	8	WASH\FLAT\3/8
41	5000002	2	WASH\FLAT\5/8
42	5000003	9	WASH\LOCK\5/8
43	5000004	4	WASH\FLAT\1/2
44	5000006	27	WASH\LOCK\1/2
45	5000012	8	WASH\LOCK\3/4
46	5000019	8	WASH\LOCK\3/8
47	5000024	29	WASH\LOCK\1/4
48	5000113	6	WASH\FLAT\1/2\EXTRTHK\GR8
49	5000114	4	WASH\FLAT\5/8\EXTRTHK\GR8
50	5700722	2	SNSR\WRT\RSET\ASSY
51	5701155	4	REFL\RD\2.375\RED\ADHESIVE
52	6100024	2	SPG\COMP\1.125OD\152WD\8"LONG
53	6100088	2	SPRING\156OT 63/64OD\13LIH
54	6300010	1	ANVIL\CHIPPER
55	6300011	1	ARM\L\ROCKER\RLLR\FEED
56	6300014	1	ARM\R\ROCKER\RLLR\FEED
57	6300015	1	DOOR\BTM\ACCESS
58	6300016	1	HSG\DISC\WELD
59	6300023	1	MNT\ANVIL
60	6300024	1	GUIDE\ANVIL
61	6300029	1	LIFT\FEED\RLLR
62	6300030	2	PAD\FRICTION\LIFT\RLLR
63	6300031	1	PAD\FRICTION\LIFT\FEED\RLLR
64	6300032	1	PIN\LATCH\HSG\ACCESS
65	6300036	1	ACCESS\HSG\DISC
66	6300050	1	SHLD\CHAIN\SPOUT
67	6300058	2	LNK\SPRG\CHPPR
68	6300062	2	SHIM\1/4\BRG\FEED
69	6300086	1	COVER\FEED\HSG
70	6300092	1	RAMP\SPOUT\INFEED
71	6300094	2	RETAINER\SPG\TNSM\FEED\ROLL
72	6300095	1	PLI\ANGL\MNT\CHPPR
73	6300102	1	MNT\MTR\FEED\SLIDE
74	6300158	2	SHLD\LEFT\LIGHTBAR
75	6300159	2	SHLD\RIGHT\LIGHTBAR
76	6300160	4	SHLD\EXT\LIGHTBAR
77	6300219	2	COUPLER\ROLLER\FEED
78	6300220	1	MNT\MTR\FEED\BTM
79	6300222	2	SHIM\MTR\WHL
80	6300223	4	SHIM\MTR\WHL
81	6300232	1	COVER\CLEANOUT\HSG\DISC
82	6300253	1	RLLR\FEED\WELD\BTM
83	6300254	1	RLLR\FEED\WELD
84	6300255	1	COVER\BRG\FEED
85	7500756	2	BMPR\RBBR\1-1/32X5/8
86	7501351	4	PAD\WEAR\NY\9-1/2X1X3/4

**Wear Parts**  
3900056

SEAL\KIT\MTR\3900047



**INFEED ASSEMBLY VIEW 2 (FOR SN 0044 AND UP)**





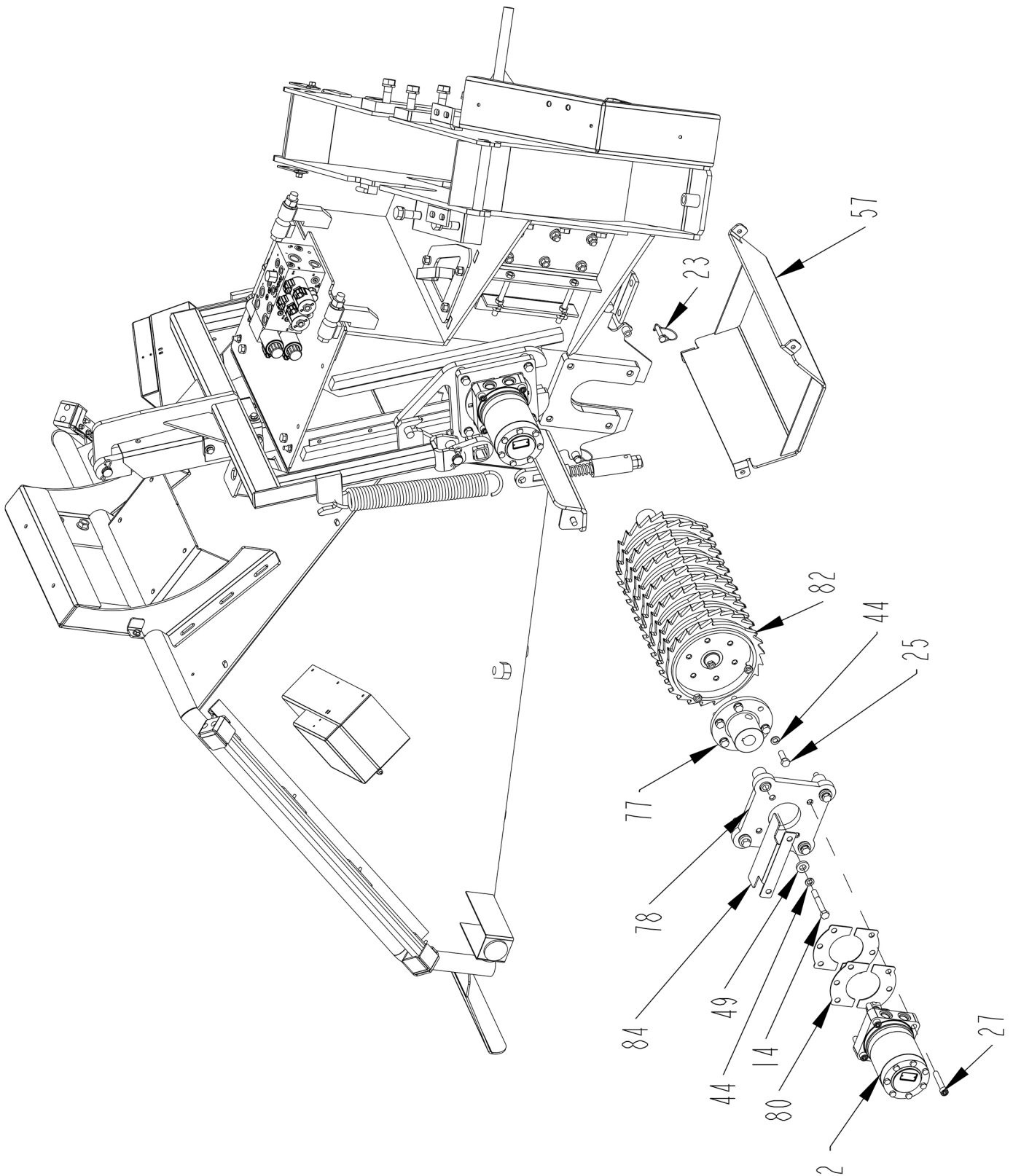
**INFEED ASSEMBLY VIEW 2 (FOR SN 0044 AND UP)**

ITEM	PART	QTY.	PART DESCRIPTION
1	2000337	2	BRG\FLG\CAST\4BOLT\2"
2	3900047	2	MTR\HYD\39.6C\DELTA\TAPERED
3	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER
4	4100030	3	PIN 1" X 3-1/2" HYD. CYL.
5	4100262	1	CYL\HYD\2X12\1-1/4\TUBE
6	4800017	2	BOLT\HEX\3/4X3
7	4800034	6	BOLT\HEX\3/8X1-1/2
8	4800106	10	BOLT\HEX\5/8X1-1/2
9	4800107	6	PIN\HAIR\1/8(#9)
10	4800115	4	BOLT\HEX\3/4X2-1/2
11	4800164	6	BOLT\HEX\3/8X3/4
12	4800201	3	BOLT\CRG\1/2X1-3/4\INC\GR5
13	4800224	2	BOLT\HEX\3/4X5
14	4800231	4	BOLT\HEX\1/2X3-3/4
15	4800251	4	BOLT\HEX\1/2X2-1/4\INC
16	4800291	16	BOLT\CRG\1/4X3/4\INC
17	4800365	4	PIN\LNCH\3/8X1-1/2\W\KEEPER
18	4800376	2	SCR\RD\SLOT\#8X1-1/2\INC
19	4800398	3	SCR\BUT\ALN\1/2X2\INC
20	4800404	8	SCR\BUT\ALN\1/4X1\INC
21	4800546	1	BOLT\HEX\1X5\INC
22	4800602	4	BOLT\HEX\1/4X1-1/4\INC
23	4800609	4	PIN\LYNCH\3/8X1-3/4\W/_U_WIRE\KEEPER
24	4800628	2	BOLT\HEX\1/2X1-1/4\GR8\INC
25	4800634	14	BOLT\HEX\1/2X1-1/2\GR8\INC
26	4800662	9	SCR\CAP\ALN\1/4X3/4\INC
27	4800985	4	SCR\CAP\ALN\1/2X3\INC
28	4800986	4	SCR\CAP\ALN\1/2X2-3/4\INC
29	4801199	3	BOLT\HEX\5/8X1-1/4\GR8
30	4900001	6	NUT\HEX\1/2\INC
31	4900004	4	NUT\HEX\3/4\INC
32	4900005	2	NUT\HEX\5/8\INC
33	4900009	24	NUT\HEX\1/4\INC
34	4900019	3	NUT\HEX\1/2\GR8\INC
35	4900023	6	NUT\TPLCK\3/8\INC
36	4900046	12	NUT\JAM\1/2\INC
37	4900096	2	NUT\HEX\#8\INC
38	4900104	2	NUT\JAM\3/4\INC
39	4900127	1	NUT\TPLCK\1\INC
40	5000001	8	WASH\FLAT\3/8
41	5000002	2	WASH\FLAT\5/8
42	5000003	9	WASH\LOCK\5/8
43	5000004	4	WASH\FLAT\1/2
44	5000006	27	WASH\LOCK\1/2
45	5000012	8	WASH\LOCK\3/4
46	5000019	8	WASH\LOCK\3/8
47	5000024	29	WASH\LOCK\1/4
48	5000113	6	WASH\FLAT\1/2\EXTRTHK\GR8
49	5000114	4	WASH\FLAT\5/8\EXTRTHK\GR8
50	5700722	2	SNSR\WRT\RSET\ASSY
51	5701155	4	REFL\RD\2.375\RED\ADHESIVE
52	6100024	2	SPG\COMP\1.125OD\152WD\8"LONG
53	6100088	2	SPRING:156OT 63/64OD13LIH
54	6300010	1	ANVIL\CHIPPER
55	6300011	1	ARM\L\ROCKER\RLLR\FEED
56	6300014	1	ARM\R\ROCKER\RLLR\FEED
57	6300015	1	DOOR\BTM\ACCESS
58	6300016	1	HSG\DISC\WELD
59	6300023	1	MNT\ANVIL
60	6300024	1	GUIDE\ANVIL
61	6300029	1	LIFT\FEED\RLLR
62	6300030	2	PAD\FRICTION\LIFT\RLLR
63	6300031	1	PAD\FRICTION\LIFT\FEED\RLLR
64	6300032	1	PIN\LATCH\HSG\ACCESS
65	6300036	1	ACCESS\HSG\DISC
66	6300050	1	SHLD\CHAIN\SPOUT
67	6300058	2	LNK\SPRG\CHPPR
68	6300062	2	SHIM\1/4\BRG\FEED
69	6300086	1	COVER\FEED\HSG
70	6300092	1	RAMP\SPOUT\INFEED
71	6300094	2	RETAINER\SPG\TNSM\FEED\ROLL
72	6300095	1	PLI\ANGL\MNT\CHPPR
73	6300102	1	MNT\MTR\FEED\SLIDE
74	6300158	2	SHLD\LEFT\LIGHTBAR
75	6300159	2	SHLD\RIGHT\LIGHTBAR
76	6300160	4	SHLD\EXT\LIGHTBAR
77	6300219	2	COUPLER\ROLLER\FEED
78	6300220	1	MNT\MTR\FEED\BTM
79	6300222	2	SHIM\MTR\WHL
80	6300223	4	SHIM\MTR\WHL
81	6300232	1	COVER\CLEANOUT\HSG\DISC
82	6300253	1	RLLR\FEED\WELD\BTM
83	6300254	1	RLLR\FEED\WELD
84	6300255	1	COVER\BRG\FEED
85	7500756	2	BMPR\RBBR\1-1/32X5/8
86	7501351	4	PAD\WEAR\NY9-1/2X1X3/4

**Wear Parts**  
3900056

SEAL\KIT\MTR\3900047

**INFEED ASSEMBLY VIEW 3 (FOR SN 0044 AND UP)**



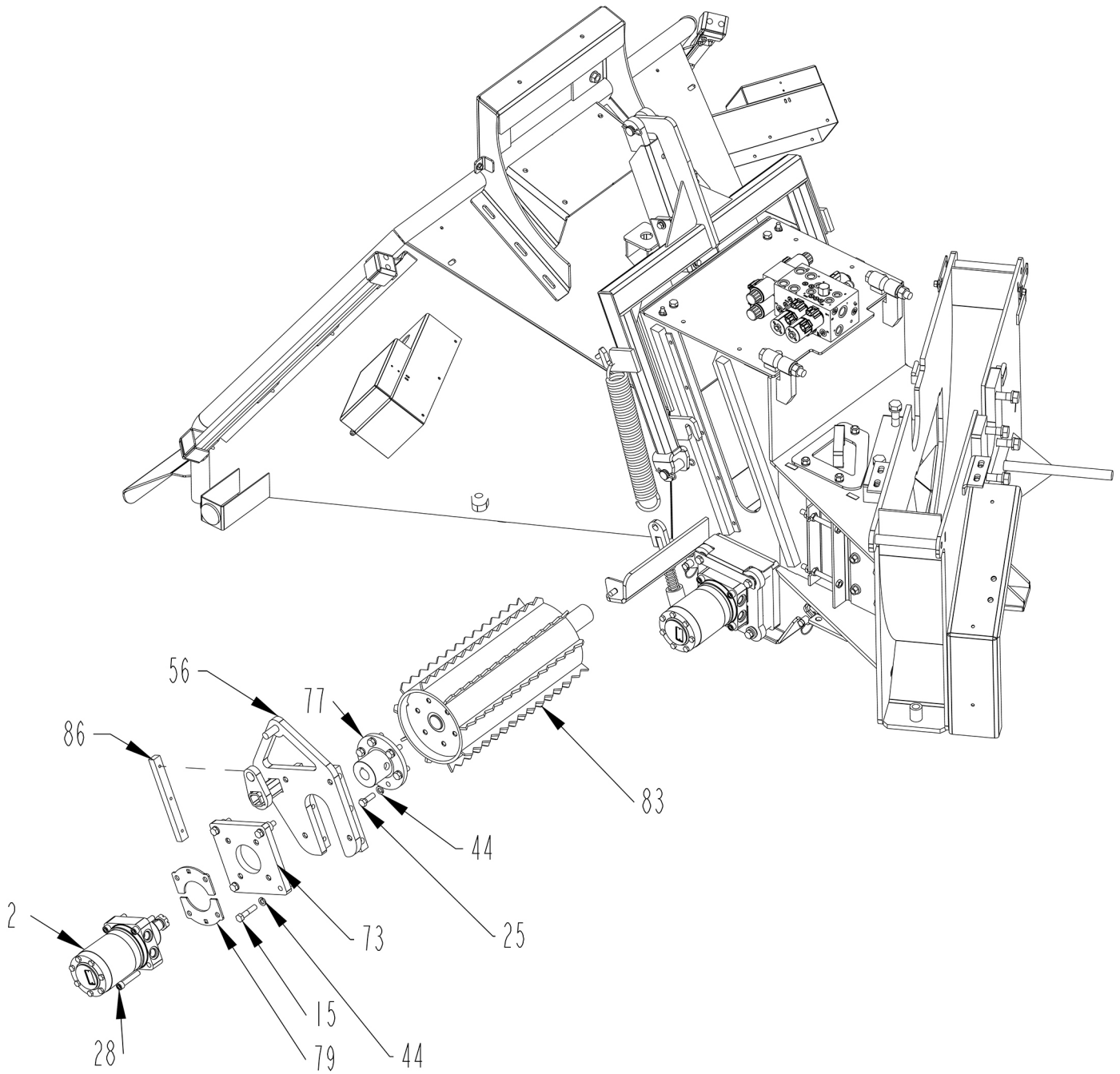
**INFEED ASSEMBLY VIEW 3 (FOR SN 0044 AND UP)**

ITEM	PART	QTY.	PART DESCRIPTION
1	2000337	2	BRG\FLG\CAST\4BOLT\2"
2	3900047	2	MTR\HYD\39.6C\DELTA\TAPERED
3	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER
4	4100030	3	PIN 1" X 3-1/2" HYD. CYL.
5	4100262	1	CYL\HYD\2X12\1-1/4\TUBE
6	4800017	2	BOLT\HEX\3/4X3
7	4800034	6	BOLT\HEX\3/8X1-1/2
8	4800106	10	BOLT\HEX\5/8X1-1/2
9	4800107	6	PIN\HAIR\1/8(#9)
10	4800115	4	BOLT\HEX\3/4X2-1/2
11	4800164	6	BOLT\HEX\3/8X3/4
12	4800201	3	BOLT\CRG\1/2X1-3/4\INC\GR5
13	4800224	2	BOLT\HEX\3/4X5
14	4800231	4	BOLT\HEX\1/2X3-3/4
15	4800251	4	BOLT\HEX\1/2X2-1/4\INC
16	4800291	16	BOLT\CRG\1/4X3/4\INC
17	4800365	4	PIN\LNCH\3/8X1-1/2\W\KEEPER
18	4800376	2	SCR\RD\SLOT\#8X1-1/2\INC
19	4800398	3	SCR\BUT\ALN\1/2X2\INC
20	4800404	8	SCR\BUT\ALN\1/4X1\INC
21	4800546	1	BOLT\HEX\1X5\INC
22	4800602	4	BOLT\HEX\1/4X1-1/4\INC
23	4800609	4	PIN\LYNCH\3/8X1-3/4\W/_U_WIRE\KEEPER
24	4800628	2	BOLT\HEX\1/2X1-1/4\GR8\INC
25	4800634	14	BOLT\HEX\1/2X1-1/2\GR8\INC
26	4800662	9	SCR\CAP\ALN\1/4X3/4\INC
27	4800985	4	SCR\CAP\ALN\1/2X3\INC
28	4800986	4	SCR\CAP\ALN\1/2X2-3/4\INC
29	4801199	3	BOLT\HEX\5/8X1-1/4\GR8
30	4900001	6	NUT\HEX\1/2\INC
31	4900004	4	NUT\HEX\3/4\INC
32	4900005	2	NUT\HEX\5/8\INC
33	4900009	24	NUT\HEX\1/4\INC
34	4900019	3	NUT\HEX\1/2\GR8\INC
35	4900023	6	NUT\TPLCK\3/8\INC
36	4900046	12	NUT\JAM\1/2\INC
37	4900096	2	NUT\HEX\#8\INC
38	4900104	2	NUT\JAM\3/4\INC
39	4900127	1	NUT\TPLCK\1\INC
40	5000001	8	WASH\FLAT\3/8
41	5000002	2	WASH\FLAT\5/8
42	5000003	9	WASH\LOCK\5/8
43	5000004	4	WASH\FLAT\1/2
44	5000006	27	WASH\LOCK\1/2
45	5000012	8	WASH\LOCK\3/4
46	5000019	8	WASH\LOCK\3/8
47	5000024	29	WASH\LOCK\1/4
48	5000113	6	WASH\FLAT\1/2\EXTRTHK\GR8
49	5000114	4	WASH\FLAT\5/8\EXTRTHK\GR8
50	5700722	2	SNSR\WRT\RSET\ASSY
51	5701155	4	REFL\RD\2.375\RED\ADHESIVE
52	6100024	2	SPG\COMP\1.125OD\152WD\8"LONG
53	6100088	2	SPRING:156OT 63/64OD13LIH
54	6300010	1	ANVIL\CHIPPER
55	6300011	1	ARM\L\ROCKER\RLLR\FEED
56	6300014	1	ARM\R\ROCKER\RLLR\FEED
57	6300015	1	DOOR\BTM\ACCESS
58	6300016	1	HSG\DISC\WELD
59	6300023	1	MNT\ANVIL
60	6300024	1	GUIDE\ANVIL
61	6300029	1	LIFT\FEED\RLLR
62	6300030	2	PAD\FRICTION\LIFT\RLLR
63	6300031	1	PAD\FRICTION\LIFT\FEED\RLLR
64	6300032	1	PIN\LATCH\HSG\ACCESS
65	6300036	1	ACCESS\HSG\DISC
66	6300050	1	SHLD\CHAIN\SPOUT
67	6300058	2	LNK\SPRG\CHPPR
68	6300062	2	SHIM\1/4\BRG\FEED
69	6300086	1	COVER\FEED\HSG
70	6300092	1	RAMP\SPOUT\INFEED
71	6300094	2	RETAINER\SPG\TNSM\FEED\ROLL
72	6300095	1	PLI\ANGL\MNT\CHPPR
73	6300102	1	MNT\MTR\FEED\SLIDE
74	6300158	2	SHLD\LEFT\LIGHTBAR
75	6300159	2	SHLD\RIGHT\LIGHTBAR
76	6300160	4	SHLD\EXT\LIGHTBAR
77	6300219	2	COUPLER\ROLLER\FEED
78	6300220	1	MNT\MTR\FEED\BTM
79	6300222	2	SHIM\MTR\WHL
80	6300223	4	SHIM\MTR\WHL
81	6300232	1	COVER\CLEANOUT\HSG\DISC
82	6300253	1	RLLR\FEED\WELD\BTM
83	6300254	1	RLLR\FEED\WELD
84	6300255	1	COVER\BRG\FEED
85	7500756	2	BMPR\RBBR\1-1/32X5/8
86	7501351	4	PAD\WEAR\NY\9-1/2X1X3/4

**Wear Parts**  
3900056

SEAL\KIT\MTR\3900047

**INFEED ASSEMBLY VIEW 4 (FOR SN 0044 AND UP)**



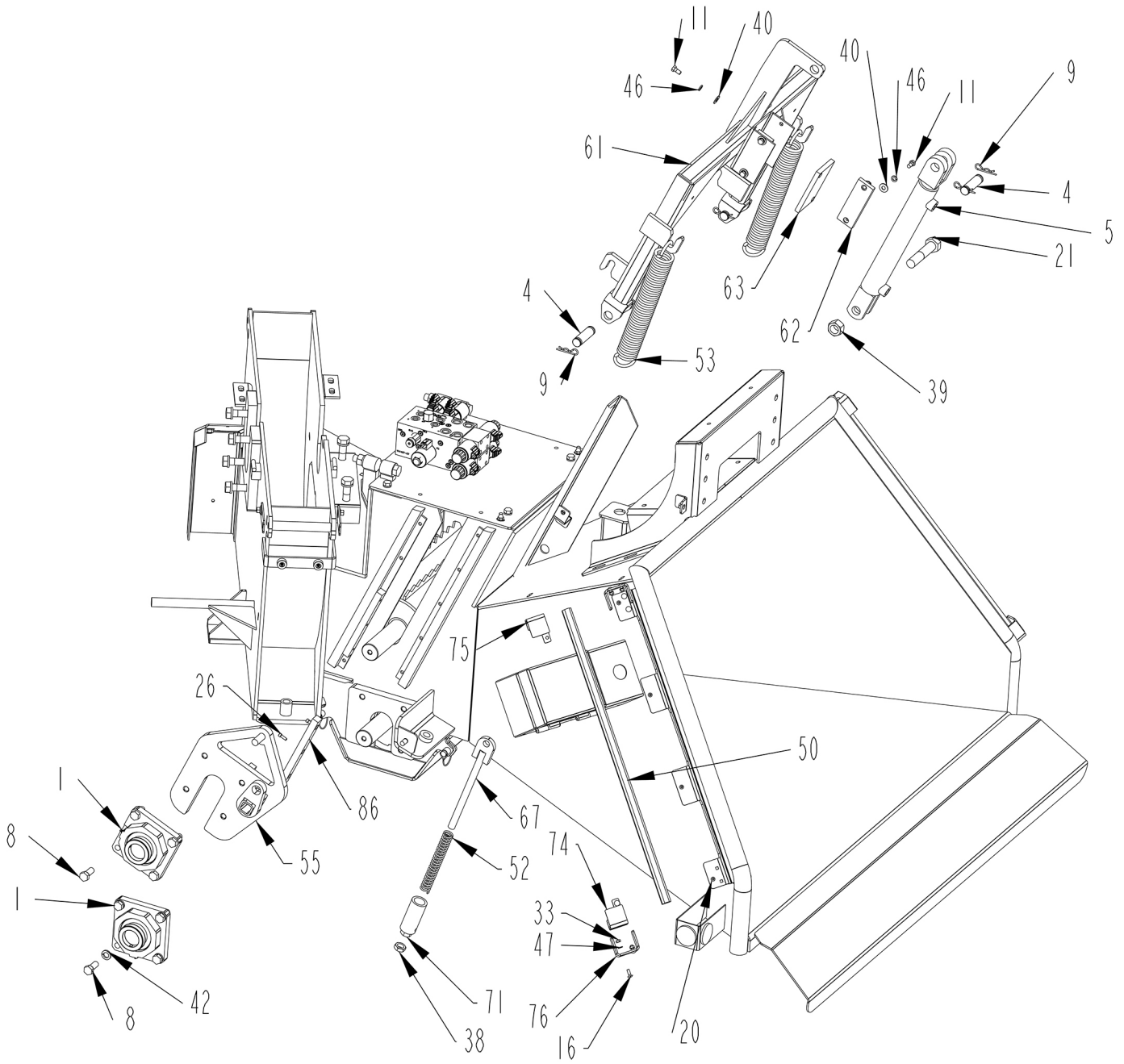
**INFEED ASSEMBLY VIEW 4 (FOR SN 0044 AND UP)**

ITEM	PART	QTY.	PART DESCRIPTION
1	2000337	2	BRG\FLG\CAST\4BOLT\2"
2	3900047	2	MTR\HYD\39.6C\DELTA\TAPERED
3	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER
4	4100030	3	PIN 1" X 3-1/2" HYD. CYL.
5	4100262	1	CYL\HYD\2X12\1-1/4\TUBE
6	4800017	2	BOLT\HEX\3/4X3
7	4800034	6	BOLT\HEX\3/8X1-1/2
8	4800106	10	BOLT\HEX\5/8X1-1/2
9	4800107	6	PIN\HAIR\1/8(#9)
10	4800115	4	BOLT\HEX\3/4X2-1/2
11	4800164	6	BOLT\HEX\3/8X3/4
12	4800201	3	BOLT\CRG\1/2X1-3/4\INC\GR5
13	4800224	2	BOLT\HEX\3/4X5
14	4800231	4	BOLT\HEX\1/2X3-3/4
15	4800251	4	BOLT\HEX\1/2X2-1/4\INC
16	4800291	16	BOLT\CRG\1/4X3/4\INC
17	4800365	4	PIN\LNCH\3/8X1-1/2\W\KEEPER
18	4800376	2	SCR\RD\SLOT\#8X1-1/2\INC
19	4800398	3	SCR\BUT\ALN\1/2X2\INC
20	4800404	8	SCR\BUT\ALN\1/4X1\INC
21	4800546	1	BOLT\HEX\1X5\INC
22	4800602	4	BOLT\HEX\1/4X1-1/4\INC
23	4800609	4	PIN\LYNCH\3/8X1-3/4\W/_U_WIRE\KEEPER
24	4800628	2	BOLT\HEX\1/2X1-1/4\GR8\INC
25	4800634	14	BOLT\HEX\1/2X1-1/2\GR8\INC
26	4800662	9	SCR\CAP\ALN\1/4X3/4\INC
27	4800985	4	SCR\CAP\ALN\1/2X3\INC
28	4800986	4	SCR\CAP\ALN\1/2X2-3/4\INC
29	4801199	3	BOLT\HEX\5/8X1-1/4\GR8
30	4900001	6	NUT\HEX\1/2\INC
31	4900004	4	NUT\HEX\3/4\INC
32	4900005	2	NUT\HEX\5/8\INC
33	4900009	24	NUT\HEX\1/4\INC
34	4900019	3	NUT\HEX\1/2\GR8\INC
35	4900023	6	NUT\TPLCK\3/8\INC
36	4900046	12	NUT\JAM\1/2\INC
37	4900096	2	NUT\HEX\#8\INC
38	4900104	2	NUT\JAM\3/4\INC
39	4900127	1	NUT\TPLCK\1\INC
40	5000001	8	WASH\FLAT\3/8
41	5000002	2	WASH\FLAT\5/8
42	5000003	9	WASH\LOCK\5/8
43	5000004	4	WASH\FLAT\1/2
44	5000006	27	WASH\LOCK\1/2
45	5000012	8	WASH\LOCK\3/4
46	5000019	8	WASH\LOCK\3/8
47	5000024	29	WASH\LOCK\1/4
48	5000113	6	WASH\FLAT\1/2\EXTRTHK\GR8
49	5000114	4	WASH\FLAT\5/8\EXTRTHK\GR8
50	5700722	2	SNSR\WRT\RSET\ASSY
51	5701155	4	REFL\RD\2.375\RED\ADHESIVE
52	6100024	2	SPG\COMP\1.125OD\152WD\8"LONG
53	6100088	2	SPRING:156OT 63/64OD13LIH
54	6300010	1	ANVIL\CHIPPER
55	6300011	1	ARM\L\ROCKER\RLLR\FEED
56	6300014	1	ARM\R\ROCKER\RLLR\FEED
57	6300015	1	DOOR\BTM\ACCESS
58	6300016	1	HSG\DISC\WELD
59	6300023	1	MNT\ANVIL
60	6300024	1	GUIDE\ANVIL
61	6300029	1	LIFT\FEED\RLLR
62	6300030	2	PAD\FRICTION\LIFT\RLLR
63	6300031	1	PAD\FRICTION\LIFT\FEED\RLLR
64	6300032	1	PIN\LATCH\HSG\ACCESS
65	6300036	1	ACCESS\HSG\DISC
66	6300050	1	SHLD\CHAIN\SPOUT
67	6300058	2	LNK\SPRG\CHPPR
68	6300062	2	SHIM\1/4\BRG\FEED
69	6300086	1	COVER\FEED\HSG
70	6300092	1	RAMP\SPOUT\INFEED
71	6300094	2	RETAINER\SPG\TNSM\FEED\ROLL
72	6300095	1	PLI\ANGL\MNT\CHPPR
73	6300102	1	MNT\MTR\FEED\SLIDE
74	6300158	2	SHLD\LEFT\LIGHTBAR
75	6300159	2	SHLD\RIGHT\LIGHTBAR
76	6300160	4	SHLD\EXT\LIGHTBAR
77	6300219	2	COUPLER\ROLLER\FEED
78	6300220	1	MNT\MTR\FEED\BTM
79	6300222	2	SHIM\MTR\WHL
80	6300223	4	SHIM\MTR\WHL
81	6300232	1	COVER\CLEANOUT\HSG\DISC
82	6300253	1	RLLR\FEED\WELD\BTM
83	6300254	1	RLLR\FEED\WELD
84	6300255	1	COVER\BRG\FEED
85	7500756	2	BMPR\RBBR\1-1/32X5/8
86	7501351	4	PAD\WEAR\NY\9-1/2X1X3/4

**Wear Parts**  
3900056

SEAL\KIT\MTR\3900047

**INFEED ASSEMBLY VIEW 5 (FOR SN 0044 AND UP)**





**INFEED ASSEMBLY VIEW 5 (FOR SN 0044 AND UP)**

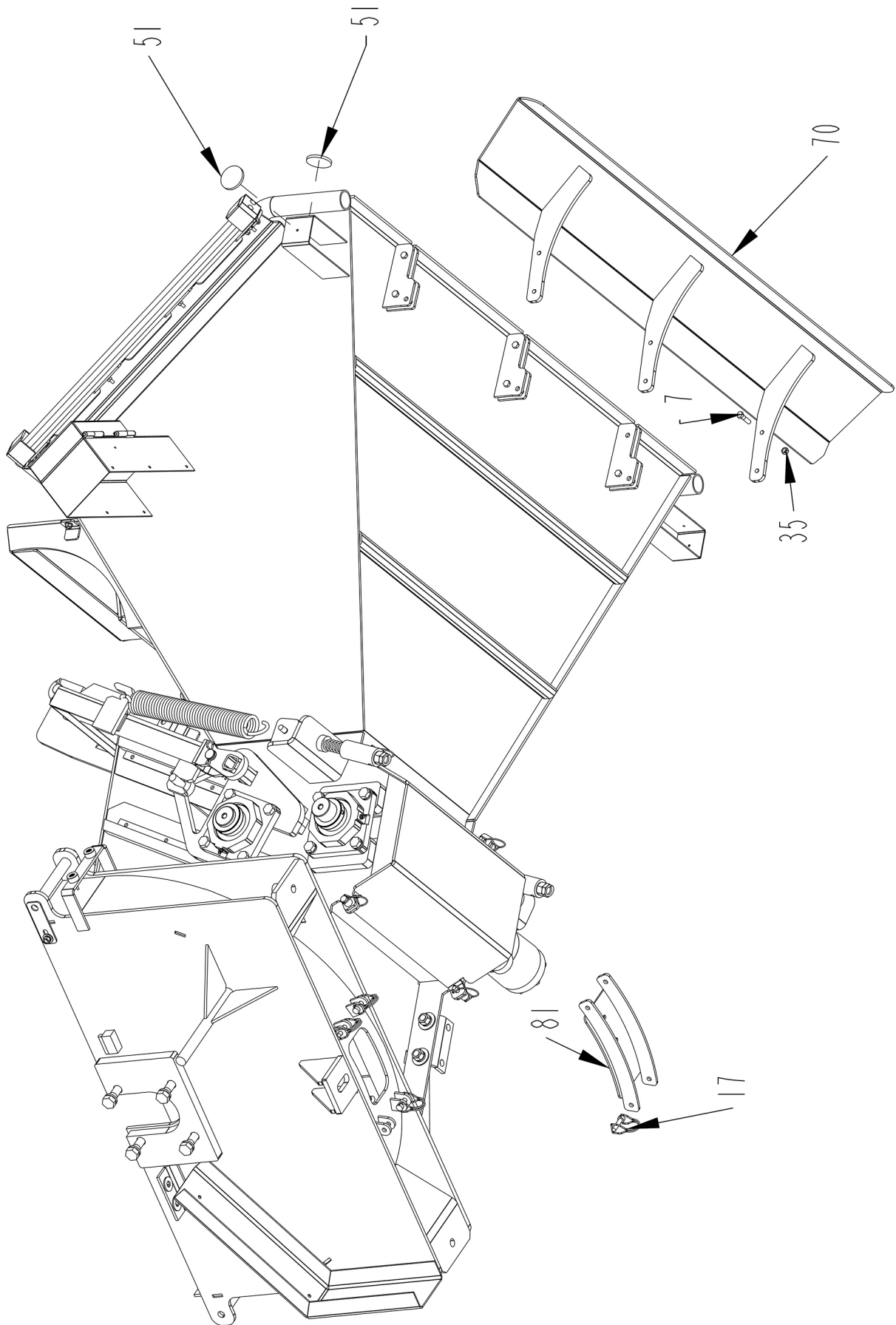
ITEM	PART	QTY.	PART DESCRIPTION
1	2000337	2	BRG\FLG\CAST\4BOLT\2"
2	3900047	2	MTR\HYD\39.6C\DELTA\TAPERED
3	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER
4	4100030	3	PIN 1" X 3-1/2" HYD. CYL.
5	4100262	1	CYL\HYD\2X12\1-1/4\TUBE
6	4800017	2	BOLT\HEX\3/4X3
7	4800034	6	BOLT\HEX\3/8X1-1/2
8	4800106	10	BOLT\HEX\5/8X1-1/2
9	4800107	6	PIN\HAIR\1/8(#9)
10	4800115	4	BOLT\HEX\3/4X2-1/2
11	4800164	6	BOLT\HEX\3/8X3/4
12	4800201	3	BOLT\CRG\1/2X1-3/4\INC\GR5
13	4800224	2	BOLT\HEX\3/4X5
14	4800231	4	BOLT\HEX\1/2X3-3/4
15	4800251	4	BOLT\HEX\1/2X2-1/4\INC
16	4800291	16	BOLT\CRG\1/4X3/4\INC
17	4800365	4	PIN\LNCH\3/8X1-1/2\W\KEEPER
18	4800376	2	SCR\RD\SLOT\#8X1-1/2\INC
19	4800398	3	SCR\BUT\ALN\1/2X2\INC
20	4800404	8	SCR\BUT\ALN\1/4X1\INC
21	4800546	1	BOLT\HEX\1X5\INC
22	4800602	4	BOLT\HEX\1/4X1-1/4\INC
23	4800609	4	PIN\LYNCH\3/8X1-3/4\W/_U_WIRE\KEEPER
24	4800628	2	BOLT\HEX\1/2X1-1/4\GR8\INC
25	4800634	14	BOLT\HEX\1/2X1-1/2\GR8\INC
26	4800662	9	SCR\CAP\ALN\1/4X3/4\INC
27	4800985	4	SCR\CAP\ALN\1/2X3\INC
28	4800986	4	SCR\CAP\ALN\1/2X2-3/4\INC
29	4801199	3	BOLT\HEX\5/8X1-1/4\GR8
30	4900001	6	NUT\HEX\1/2\INC
31	4900004	4	NUT\HEX\3/4\INC
32	4900005	2	NUT\HEX\5/8\INC
33	4900009	24	NUT\HEX\1/4\INC
34	4900019	3	NUT\HEX\1/2\GR8\INC
35	4900023	6	NUT\TPLCK\3/8\INC
36	4900046	12	NUT\JAM\1/2\INC
37	4900096	2	NUT\HEX\#8\INC
38	4900104	2	NUT\JAM\3/4\INC
39	4900127	1	NUT\TPLCK\1\INC
40	5000001	8	WASH\FLAT\3/8
41	5000002	2	WASH\FLAT\5/8
42	5000003	9	WASH\LOCK\5/8
43	5000004	4	WASH\FLAT\1/2
44	5000006	27	WASH\LOCK\1/2
45	5000012	8	WASH\LOCK\3/4
46	5000019	8	WASH\LOCK\3/8
47	5000024	29	WASH\LOCK\1/4
48	5000113	6	WASH\FLAT\1/2\EXTRTHK\GR8
49	5000114	4	WASH\FLAT\5/8\EXTRTHK\GR8
50	5700722	2	SNSR\WRT\RSET\ASSY
51	5701155	4	REFL\RD\2.375\RED\ADHESIVE
52	6100024	2	SPG\COMP\1.125OD\152WD\8"LONG
53	6100088	2	SPRING:156OT 63/64OD13LIH
54	6300010	1	ANVIL\CHIPPER
55	6300011	1	ARM\L\ROCKER\RLLR\FEED
56	6300014	1	ARM\R\ROCKER\RLLR\FEED
57	6300015	1	DOOR\BTM\ACCESS
58	6300016	1	HSG\DISC\WELD
59	6300023	1	MNT\ANVIL
60	6300024	1	GUIDE\ANVIL
61	6300029	1	LIFT\FEED\RLLR
62	6300030	2	PAD\FRICTION\LIFT\RLLR
63	6300031	1	PAD\FRICTION\LIFT\FEED\RLLR
64	6300032	1	PIN\LATCH\HSG\ACCESS
65	6300036	1	ACCESS\HSG\DISC
66	6300050	1	SHLD\CHAIN\SPOUT
67	6300058	2	LNK\SPRG\CHPPR
68	6300062	2	SHIM\1/4\BRG\FEED
69	6300086	1	COVER\FEED\HSG
70	6300092	1	RAMP\SPOUT\INFEED
71	6300094	2	RETAINER\SPG\TNSM\FEED\ROLL
72	6300095	1	PLI\ANGL\MNT\CHPPR
73	6300102	1	MNT\MTR\FEED\SLIDE
74	6300158	2	SHLD\LEFT\LIGHTBAR
75	6300159	2	SHLD\RIGHT\LIGHTBAR
76	6300160	4	SHLD\EXT\LIGHTBAR
77	6300219	2	COUPLER\ROLLER\FEED
78	6300220	1	MNT\MTR\FEED\BTM
79	6300222	2	SHIM\MTR\WHL
80	6300223	4	SHIM\MTR\WHL
81	6300232	1	COVER\CLEANOUT\HSG\DISC
82	6300253	1	RLLR\FEED\WELD\BTM
83	6300254	1	RLLR\FEED\WELD
84	6300255	1	COVER\BRG\FEED
85	7500756	2	BMPR\RBBR\1-1/32X5/8
86	7501351	4	PAD\WEAR\NY9-1/2X1X3/4

**Wear Parts**  
3900056

SEAL\KIT\MTR\3900047



INFEED ASSEMBLY VIEW 6 (FOR SN 0044 AND UP)



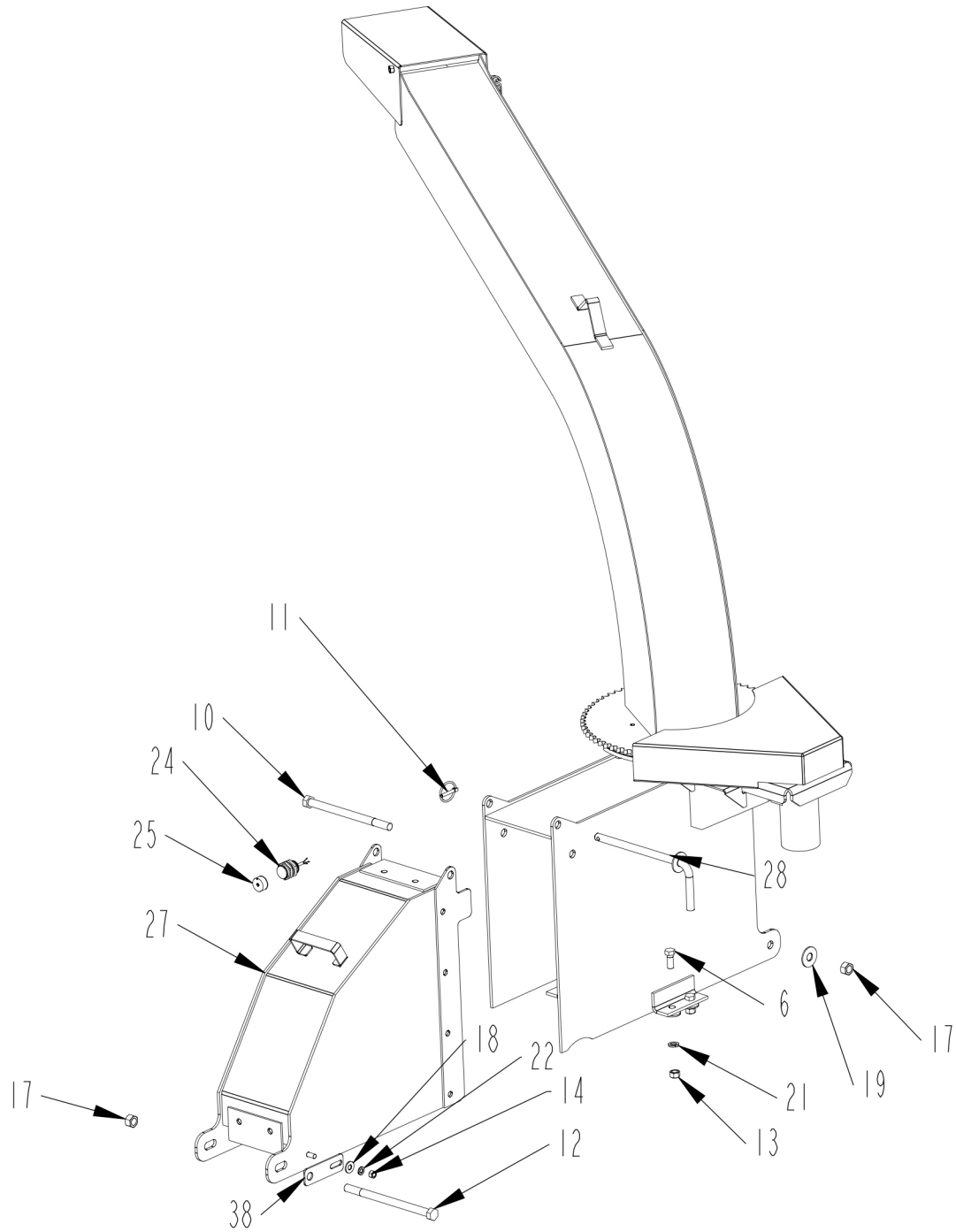
**INFEED ASSEMBLY VIEW 6 (FOR SN 0044 AND UP)**

ITEM	PART	QTY.	PART DESCRIPTION
1	2000337	2	BRG\FLG\CAST\4BOLT\2"
2	3900047	2	MTR\HYD\39.6C\DELTA\TAPERED
3	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER
4	4100030	3	PIN 1" X 3-1/2" HYD. CYL.
5	4100262	1	CYL\HYD\2X12\1-1/4\TUBE
6	4800017	2	BOLT\HEX\3/4X3
7	4800034	6	BOLT\HEX\3/8X1-1/2
8	4800106	10	BOLT\HEX\5/8X1-1/2
9	4800107	6	PIN\HAIR\1/8(#9)
10	4800115	4	BOLT\HEX\3/4X2-1/2
11	4800164	6	BOLT\HEX\3/8X3/4
12	4800201	3	BOLT\CRG\1/2X1-3/4\INC\GR5
13	4800224	2	BOLT\HEX\3/4X5
14	4800231	4	BOLT\HEX\1/2X3-3/4
15	4800251	4	BOLT\HEX\1/2X2-1/4\INC
16	4800291	16	BOLT\CRG\1/4X3/4\INC
17	4800365	4	PIN\LNCH\3/8X1-1/2\W\KEEPER
18	4800376	2	SCR\RD\SLOT\#8X1-1/2\INC
19	4800398	3	SCR\BUT\ALN\1/2X2\INC
20	4800404	8	SCR\BUT\ALN\1/4X1\INC
21	4800546	1	BOLT\HEX\1X5\INC
22	4800602	4	BOLT\HEX\1/4X1-1/4\INC
23	4800609	4	PIN\LYNCH\3/8X1-3/4\W/_U_WIRE\KEEPER
24	4800628	2	BOLT\HEX\1/2X1-1/4\GR8\INC
25	4800634	14	BOLT\HEX\1/2X1-1/2\GR8\INC
26	4800662	9	SCR\CAP\ALN\1/4X3/4\INC
27	4800985	4	SCR\CAP\ALN\1/2X3\INC
28	4800986	4	SCR\CAP\ALN\1/2X2-3/4\INC
29	4801199	3	BOLT\HEX\5/8X1-1/4\GR8
30	4900001	6	NUT\HEX\1/2\INC
31	4900004	4	NUT\HEX\3/4\INC
32	4900005	2	NUT\HEX\5/8\INC
33	4900009	24	NUT\HEX\1/4\INC
34	4900019	3	NUT\HEX\1/2\GR8\INC
35	4900023	6	NUT\TPLCK\3/8\INC
36	4900046	12	NUT\JAM\1/2\INC
37	4900096	2	NUT\HEX\#8\INC
38	4900104	2	NUT\JAM\3/4\INC
39	4900127	1	NUT\TPLCK\1\INC
40	5000001	8	WASH\FLAT\3/8
41	5000002	2	WASH\FLAT\5/8
42	5000003	9	WASH\LOCK\5/8
43	5000004	4	WASH\FLAT\1/2
44	5000006	27	WASH\LOCK\1/2
45	5000012	8	WASH\LOCK\3/4
46	5000019	8	WASH\LOCK\3/8
47	5000024	29	WASH\LOCK\1/4
48	5000113	6	WASH\FLAT\1/2\EXTRTHK\GR8
49	5000114	4	WASH\FLAT\5/8\EXTRTHK\GR8
50	5700722	2	SNSR\WRT\RSET\ASSY
51	5701155	4	REFL\RD\2.375\RED\ADHESIVE
52	6100024	2	SPG\COMP\1.125OD\152WD\8"LONG
53	6100088	2	SPRING:156OT 63/64OD13LIH
54	6300010	1	ANVIL\CHIPPER
55	6300011	1	ARM\L\ROCKER\RLLR\FEED
56	6300014	1	ARM\R\ROCKER\RLLR\FEED
57	6300015	1	DOOR\BTM\ACCESS
58	6300016	1	HSG\DISC\WELD
59	6300023	1	MNT\ANVIL
60	6300024	1	GUIDE\ANVIL
61	6300029	1	LIFT\FEED\RLLR
62	6300030	2	PAD\FRICTION\LIFT\RLLR
63	6300031	1	PAD\FRICTION\LIFT\FEED\RLLR
64	6300032	1	PIN\LATCH\HSG\ACCESS
65	6300036	1	ACCESS\HSG\DISC
66	6300050	1	SHLD\CHAIN\SPOUT
67	6300058	2	LNK\SPRG\CHPPR
68	6300062	2	SHIM\1/4\BRG\FEED
69	6300086	1	COVER\FEED\HSG
70	6300092	1	RAMP\SPOUT\INFEED
71	6300094	2	RETAINER\SPG\TNSM\FEED\ROLL
72	6300095	1	PLI\ANGL\MNT\CHPPR
73	6300102	1	MNT\MTR\FEED\SLIDE
74	6300158	2	SHLD\LEFT\LIGHTBAR
75	6300159	2	SHLD\RIGHT\LIGHTBAR
76	6300160	4	SHLD\EXT\LIGHTBAR
77	6300219	2	COUPLER\ROLLER\FEED
78	6300220	1	MNT\MTR\FEED\BTM
79	6300222	2	SHIM\MTR\WHL
80	6300223	4	SHIM\MTR\WHL
81	6300232	1	COVER\CLEANOUT\HSG\DISC
82	6300253	1	RLLR\FEED\WELD\BTM
83	6300254	1	RLLR\FEED\WELD
84	6300255	1	COVER\BRG\FEED
85	7500756	2	BMPR\RBBR\1-1/32X5/8
86	7501351	4	PAD\WEAR\NY\9-1/2X1X3/4

Wear Parts  
3900056

SEAL\KIT\MTR\3900047

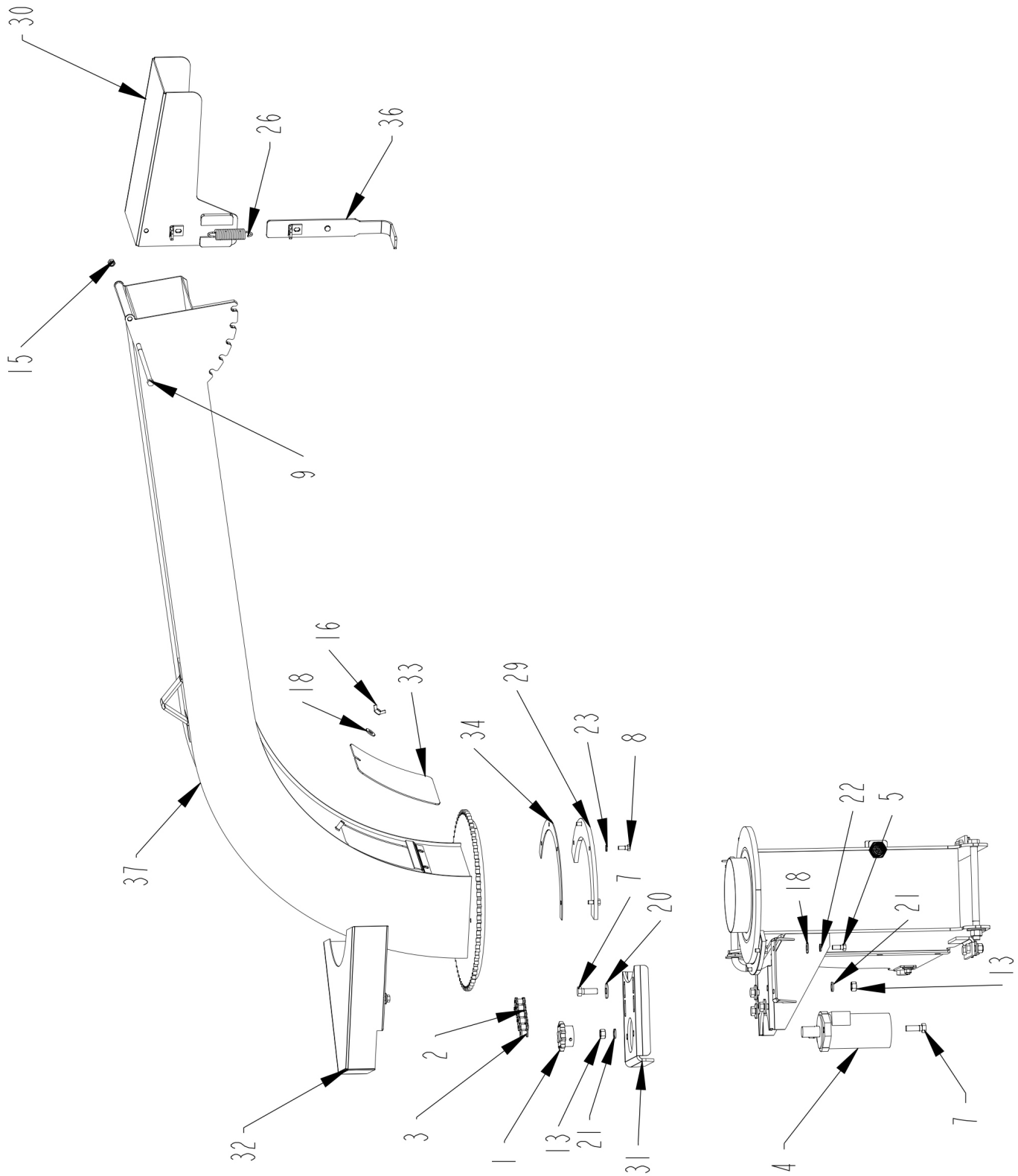
**DISCHARGE ASSEMBLY VIEW 1 (FOR SN UP TO 0043)**



**DISCHARGE ASSEMBLY VIEW 1 (FOR SN UP TO 0043)**

ITEM	PART	QTY.	PART DESCRIPTION
1	1000215	1	SPKT\60\B\10\1
2	1100062	1	CHAIN\60\CL
3	1100266	1	CHAIN\60 PITCH\81 LINK
4	3900032	1	MOTOR\HYD\22.6\H
5	4800003	4	BOLT\HEX\3\8X1
6	4800018	4	BOLT\HEX\1\2X1-1/4
7	4800082	6	BOLT\HEX\1\2X1-1/2
8	4800147	8	BOLT\HEX\5\16X7/8
9	4800222	1	BOLT\HEX\3\8X8
10	4800576	1	BOLT\HEX\5\8X9
11	4801236	1	PIN\LYNCH\1\4X1-9\16\ZN_PLT
12	4801280	1	BOLT\HEX\5\8X9-1/2
13	4900001	10	NUT\HEX\1\2\NC
14	4900002	2	NUT\HEX\3\8\NC
15	4900030	1	NUT\NYLCK\3\8\NC
16	4900032	1	NUT\WING\3\8\NC
17	4900141	2	NUT\TPLCK\5\8\GR8\NC
18	5000001	7	WASH\FLAT\3\8
19	5000002	2	WASH\FLAT\5\8
20	5000004	8	WASH\FLAT\1\2
21	5000006	10	WASH\LOCK\1\2
22	5000019	6	WASH\LOCK\3\8
23	5000022	8	WASH\LOCK\5\16
24	5700724	1	SW\MAG\CODED\1M_CABLE
25	5700730	1	ACTUATOR\CODED\MAGNET
26	6100010	1	SPRING\EXT\.55W X 1\2O.D. X 3
27	6300022	1	HSG\ACCESS\CHIPPER
28	6300032	1	PIN\LATCH\HSG\ACCESS
29	6300033	2	CLAMP\SPOUT\DISCH
30	6300035	1	DEFL\SPOUT\DISCH
31	6300044	1	PL\BRKT\MTR\CHUTE\ROT
32	6300050	1	SHLD\CHAIN\SPOUT
33	6300115	1	COVER\CLEANOUT\SPOUT
34	6300124	2	SHIM\CLAMP\SPOUT
35	6300125	1	COVER\CLEANOUT\HSG\DISC\ASSY
36	6300139	1	LATCH\DEFL\SPOUT
37	6300157	1	SPOUT\DISCH\CHIPPER
38	6300163	2	PL\ADJ\HINGE\HSG\ACCESS
37	6300157	1	SPOUT\DISCH\CHIPPER
38	6300163	2	PL\ADJ\HINGE\HSG\ACCESS

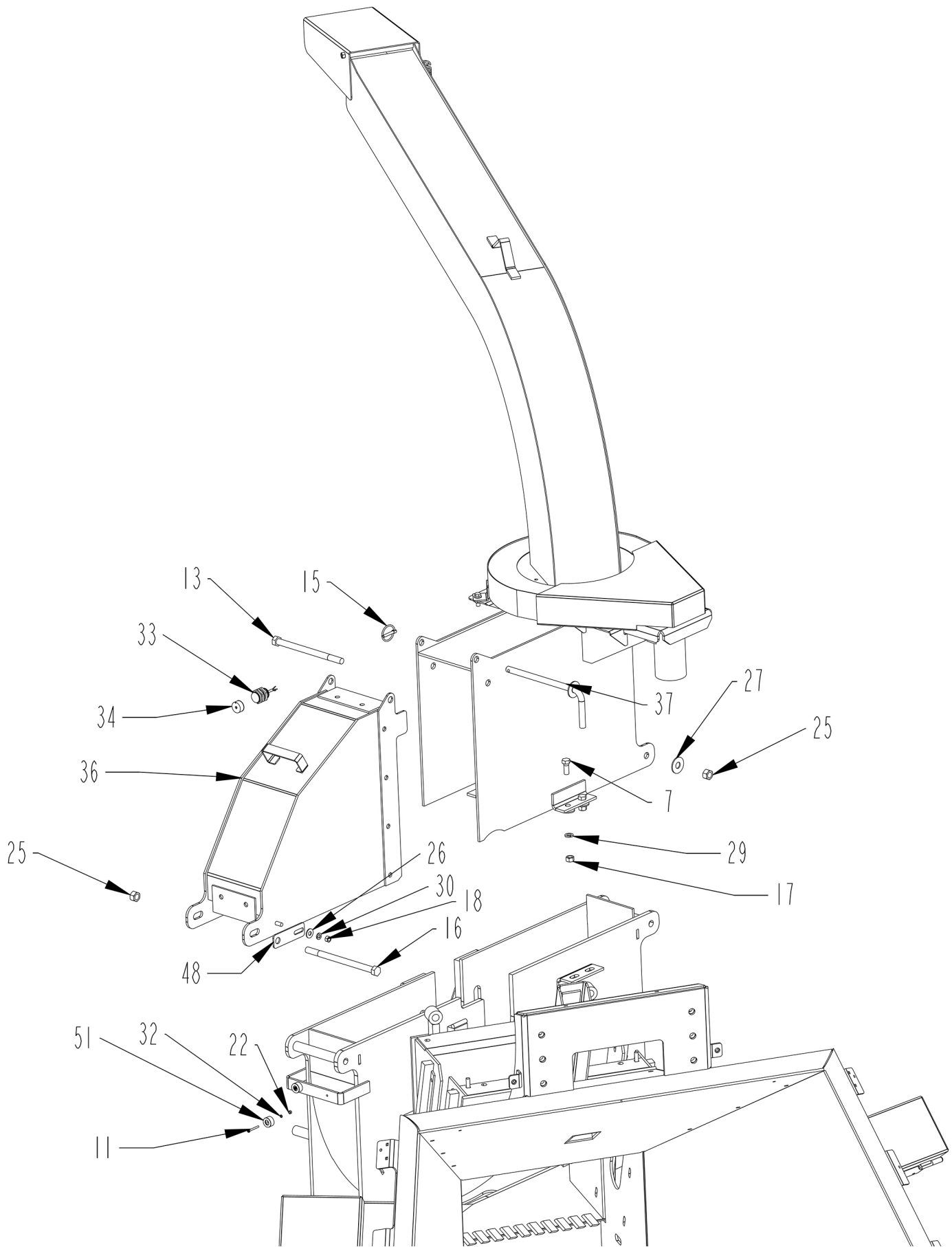
**DISCHARGE ASSEMBLY VIEW 2 (FOR SN UP TO 0043)**



**DISCHARGE ASSEMBLY VIEW 2 (FOR SN UP TO 0043)**

ITEM	PART	QTY.	PART DESCRIPTION
1	1000215	1	SPKT\60\B\10\1
2	1100062	1	CHAIN\60\CL
3	1100266	1	CHAIN\60 PITCH\81 LINK
4	3900032	1	MOTOR\HYD\22.6\H
5	4800003	4	BOLT\HEX\3\8X1
6	4800018	4	BOLT\HEX\1\2X1-1/4
7	4800082	6	BOLT\HEX\1\2X1-1/2
8	4800147	8	BOLT\HEX\5\16X7/8
9	4800222	1	BOLT\HEX\3\8X8
10	4800576	1	BOLT\HEX\5\8X9
11	4801236	1	PIN\LYNCH\1\4X1-9\16\ZN_PLT
12	4801280	1	BOLT\HEX\5\8X9-1/2
13	4900001	10	NUT\HEX\1\2\NC
14	4900002	2	NUT\HEX\3\8\NC
15	4900030	1	NUT\NYLCK\3\8\NC
16	4900032	1	NUT\WING\3\8\NC
17	4900141	2	NUT\TPLCK\5\8\GR8\NC
18	5000001	7	WASH\FLAT\3\8
19	5000002	2	WASH\FLAT\5\8
20	5000004	8	WASH\FLAT\1\2
21	5000006	10	WASH\LOCK\1\2
22	5000019	6	WASH\LOCK\3\8
23	5000022	8	WASH\LOCK\5\16
24	5700724	1	SW\MAG\CODED\1M_CABLE
25	5700730	1	ACTUATOR\CODED\MAGNET
26	6100010	1	SPRING\EXT\.55W X 1/2O.D. X 3
27	6300022	1	HSG\ACCESS\CHIPPER
28	6300032	1	PIN\LATCH\HSG\ACCESS
29	6300033	2	CLAMP\SPOUT\DISCH
30	6300035	1	DEFL\SPOUT\DISCH
31	6300044	1	PL\BRKT\MTR\CHUTE\ROT
32	6300050	1	SHLD\CHAIN\SPOUT
33	6300115	1	COVER\CLEANOUT\SPOUT
34	6300124	2	SHIM\CLAMP\SPOUT
35	6300125	1	COVER\CLEANOUT\HSG\DISC\ASSY
36	6300139	1	LATCH\DEFL\SPOUT
37	6300157	1	SPOUT\DISCH\CHIPPER
38	6300163	2	PL\ADJ\HINGE\HSG\ACCESS
37	6300157	1	SPOUT\DISCH\CHIPPER
38	6300163	2	PL\ADJ\HINGE\HSG\ACCESS

**DISCHARGE ASSEMBLY VIEW 1 (FOR SN 0044 AND UP)**

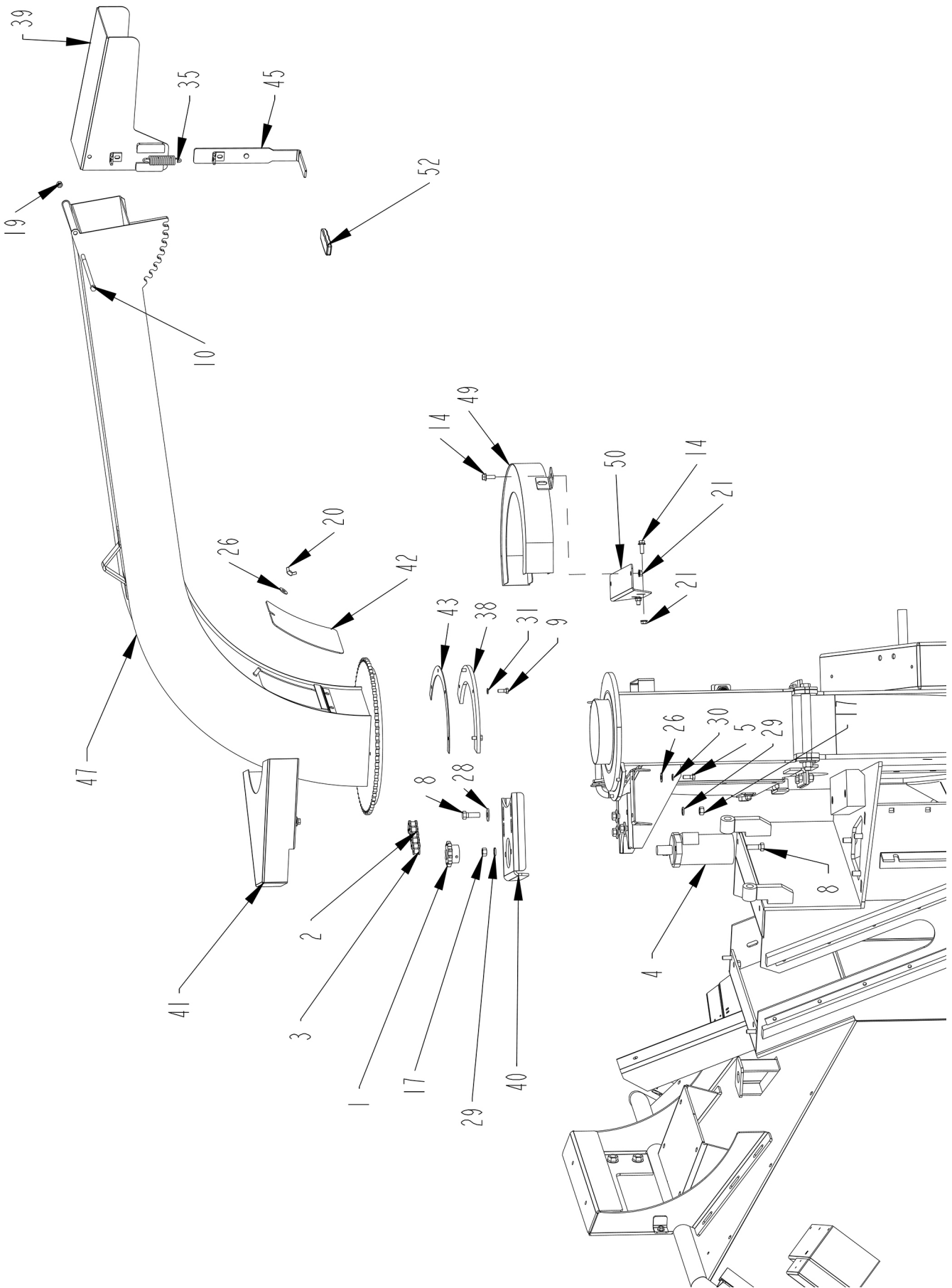




**DISCHARGE ASSEMBLY VIEW 1 (FOR SN 0044 AND UP)**

ITEM	PART	QTY.	PART DESCRIPTION
1	1000215	1	SPKT\60\B\10\1
2	1100062	1	CHAIN\60\CL
3	1100266	1	CHAIN\60 PITCH\81 LINK
4	3900032	1	MOTOR\HYD\22.6\H
5	4800003	4	BOLT\HEX\3\8X1
6	4800012	2	BOLT\CRG\3\8X1-1/4\NC
7	4800018	4	BOLT\HEX\1/2X1-1/4
8	4800082	6	BOLT\HEX\1/2X1-1/2
9	4800147	8	BOLT\HEX\5/16X7/8
10	4800222	1	BOLT\HEX\3\8X8
11	4800376	2	SCR\RD\SLOT\#8X1-1/2\NC
12	4800481	3	BOLT\CRG\1/2X1-1/4\NC
13	4800576	1	BOLT\HEX\5\8X9
14	4800913	4	BOLT\FLG\SERR\3\8X1\NC
15	4801236	1	PIN\LYNCH\1/4X1-9/16\ZN_PLT
16	4801280	1	BOLT\HEX\5\8X9-1/2
17	4900001	10	NUT\HEX\1/2\NC
18	4900002	2	NUT\HEX\3\8\NC
19	4900030	1	NUT\NYLCK\3\8\NC
20	4900032	1	NUT\WING\3\8\NC
21	4900076	14	NUT\FLG\SERR\3\8\NC
22	4900096	2	NUT\HEX\#8\NC
23	4900110	6	NUT\FLG\SERR\5\8\NC
24	4900133	6	NUT\FLG\1/2\NC
25	4900141	2	NUT\TPLCK\5\8\GR8\NC
26	5000001	7	WASH\FLAT\3\8
27	5000002	2	WASH\FLAT\5\8
28	5000004	8	WASH\FLAT\1/2
29	5000006	10	WASH\LOCK\1/2
30	5000019	6	WASH\LOCK\3\8
31	5000022	8	WASH\LOCK\5\16
32	5000092	2	WASH\LOCK\#8
33	5700724	1	SW\MAG\CODED\1M_CABLE
34	5700730	1	ACTUATOR\CODED\MAGNET
35	6100010	1	SPRING\EXT\.55W X 1/20.D. X 3
36	6300022	1	HSG\ACCESS\CHIPPER
37	6300032	1	PIN\LATCH\HSG\ACCESS
38	6300033	2	CLAMP\SPOUT\DISCH
39	6300035	1	DEFL\SPOT\DISCH
40	6300044	1	PL\BRKT\MTR\CHUTE\ROT
41	6300050	1	SHLD\CHAIN\SPOUT
42	6300115	1	COVER\CLEANOUT\SPOUT
43	6300124	2	SHIM\CLAMP\SPOUT
44	6300126	2	ADJ\COVER\FEED
45	6300139	1	LATCH\DEFL\SPOUT
46	6300144	1	MNT\SENSOR\HEIGHT\FEED
47	6300157	1	SPOUT\DISCH\CHIPPER
48	6300163	2	PL\ADJ\HINGE\HSG\ACCESS
49	6300210	1	SHIELD\CHAIN\SPOUT\TC15
50	6300211	1	BRKT\SHIELD\CHAIN\SPOUT
51	7500756	2	BMPR\RBBR\1-1/32X5/8
52	7500938	1	GRIP\LVR\ADJ

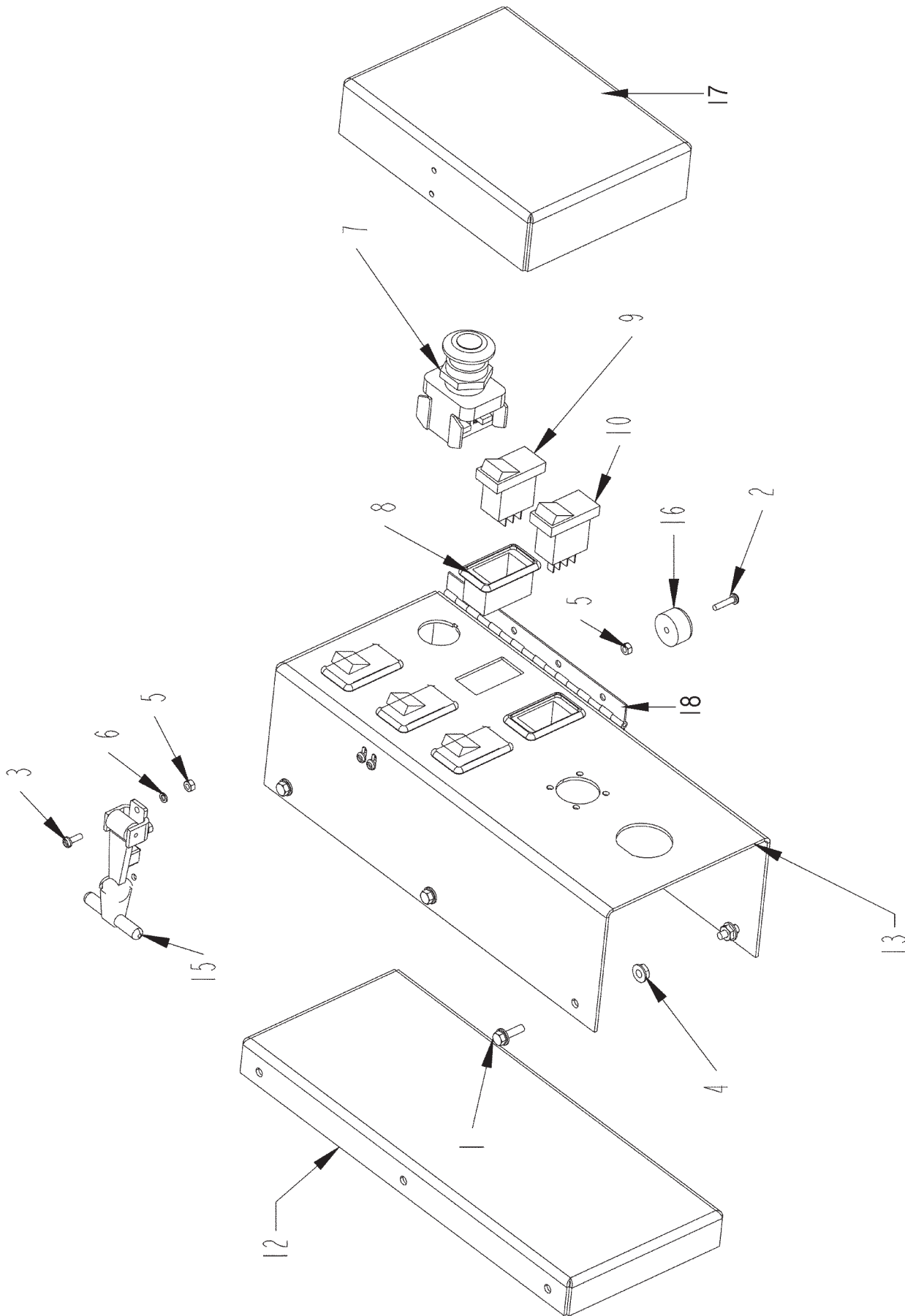
**DISCHARGE ASSEMBLY VIEW 2 (FOR SN 0044 AND UP)**



**DISCHARGE ASSEMBLY VIEW 2 (FOR SN 0044 AND UP)**

ITEM	PART	QTY.	PART DESCRIPTION
1	1000215	1	SPKT\60\B\10\1
2	1100062	1	CHAIN\60\CL
3	1100266	1	CHAIN\60 PITCH\81 LINK
4	3900032	1	MOTOR\HYD\22.6\H
5	4800003	4	BOLT\HEX\3\8X1
6	4800012	2	BOLT\CRG\3\8X1-1/4\NC
7	4800018	4	BOLT\HEX\1\2X1-1/4
8	4800082	6	BOLT\HEX\1\2X1-1/2
9	4800147	8	BOLT\HEX\5\16X7/8
10	4800222	1	BOLT\HEX\3\8X8
11	4800376	2	SCR\RD\SLOT\#8X1-1/2\NC
12	4800481	3	BOLT\CRG\1\2X1-1/4\NC
13	4800576	1	BOLT\HEX\5\8X9
14	4800913	4	BOLT\FLG\SERR\3\8X1\NC
15	4801236	1	PIN\LYNCH\1\4X1-9\16\ZN_PLT
16	4801280	1	BOLT\HEX\5\8X9-1/2
17	4900001	10	NUT\HEX\1\2\NC
18	4900002	2	NUT\HEX\3\8\NC
19	4900030	1	NUT\NYLCK\3\8\NC
20	4900032	1	NUT\WING\3\8\NC
21	4900076	14	NUT\FLG\SERR\3\8\NC
22	4900096	2	NUT\HEX\#8\NC
23	4900110	6	NUT\FLG\SERR\5\8\NC
24	4900133	6	NUT\FLG\1\2\NC
25	4900141	2	NUT\TPLCK\5\8\GR8\NC
26	5000001	7	WASH\FLAT\3\8
27	5000002	2	WASH\FLAT\5\8
28	5000004	8	WASH\FLAT\1\2
29	5000006	10	WASH\LOCK\1\2
30	5000019	6	WASH\LOCK\3\8
31	5000022	8	WASH\LOCK\5\16
32	5000092	2	WASH\LOCK\#8
33	5700724	1	SW\MAG\CODED\1M_CABLE
34	5700730	1	ACTUATOR\CODED\MAGNET
35	6100010	1	SPRING\EXT\.55W X 1/20.D. X 3
36	6300022	1	HSG\ACCESS\CHIPPER
37	6300032	1	PIN\LATCH\HSG\ACCESS
38	6300033	2	CLAMP\SPOUT\DISCH
39	6300035	1	DEFL\SPOT\DISCH
40	6300044	1	PL\BRKT\MTR\CHUTE\ROT
41	6300050	1	SHLD\CHAIN\SPOUT
42	6300115	1	COVER\CLEANOUT\SPOUT
43	6300124	2	SHIM\CLAMP\SPOUT
44	6300126	2	ADJ\COVER\FEED
45	6300139	1	LATCH\DEFL\SPOUT
46	6300144	1	MNT\SENSOR\HEIGHT\FEED
47	6300157	1	SPOUT\DISCH\CHIPPER
48	6300163	2	PL\ADJ\HINGE\HSG\ACCESS
49	6300210	1	SHIELD\CHAIN\SPOUT\TC15
50	6300211	1	BRKT\SHIELD\CHAIN\SPOUT
51	7500756	2	BMPR\RBBR\1-1\32X5/8
52	7500938	1	GRIP\LVR\ADJ

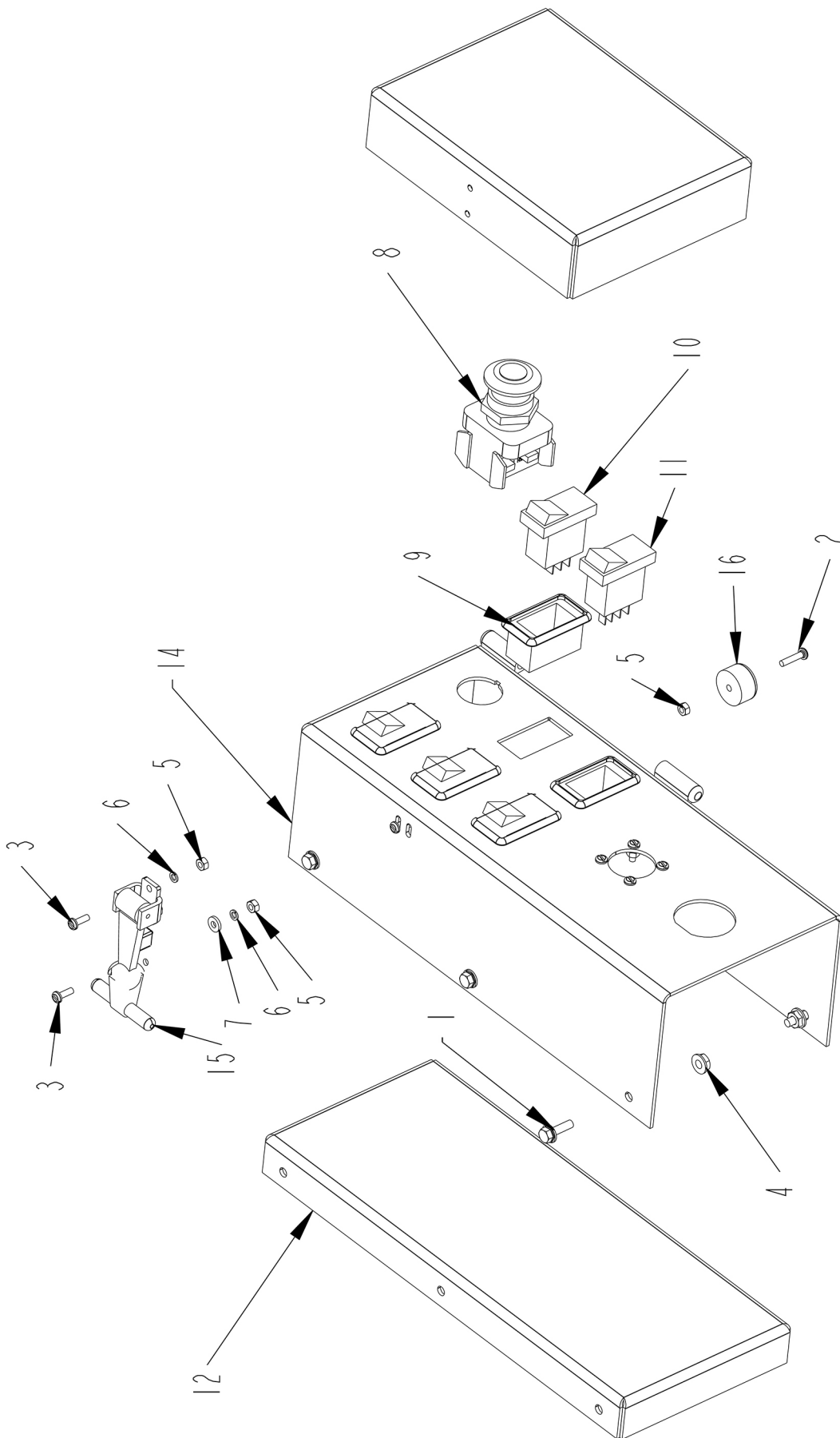
**RIGHT HAND CONTROL PANEL ASSEMBLY (FOR SN UP TO 0043)**



**RIGHT HAND CONTROL PANEL ASSEMBLY (FOR SN UP TO 0043)**

<b>ITEM</b>	<b>PART</b>	<b>QTY.</b>	<b>PART DESCRIPTION</b>
1	4800194	12	SCR\FLG\1/4X3/4
2	4800463	2	SCR\RD\SLOT\#8X3/4\NC
3	4801225	8	SCR\RD\SLOT\#8X1/2\NC
4	4900040	12	NUT\FLG\SERR\1/4\NC
5	4900096	10	NUT\HEX\#8\NC
6	5000092	4	WASH\LOCK\#8
7	5700028	2	SWITCH\MAINT\PB\RED\MUSH
8	5700328	9	SWITCH\RCKR\MNT\PNL\SNGL
9	5700542	8	SWITCH\RCKR\DPDT\24VUNLIT\15A\MOMNTRY\W/RASED BRCKT
10	5700545	1	SWITCH\RCKR\DPST\24V\2LIT\15A\LATCH\W/RAISED BRACKET
11	5700722	2	SNSR\IR\T\RSET\ASSY
12	6300105	2	BACK\PANEL\CNTRL
13	6300128	1	PANEL\CNTRL\RIGHT
14	6300129	1	PANEL\CNTRL\LEFT
15	7500606	2	LATCH\35-M\AUSTIN
16	7500756	2	BMPR\RBBR\1-1/32X5/8
17	D1026051	1	COVER\PANEL\CNTRL
18	D1026052	1	HINGE\CVR\PNL\CNTRL
	<b>6300128</b>		<b>PNL\CNTRL\RIGHT</b>
	<b>6300129</b>		<b>PNL\CNTRL\LEFT</b>

# RIGHT HAND CONTROL PANEL ASSEMBLY (FOR SN 0044 AND UP)

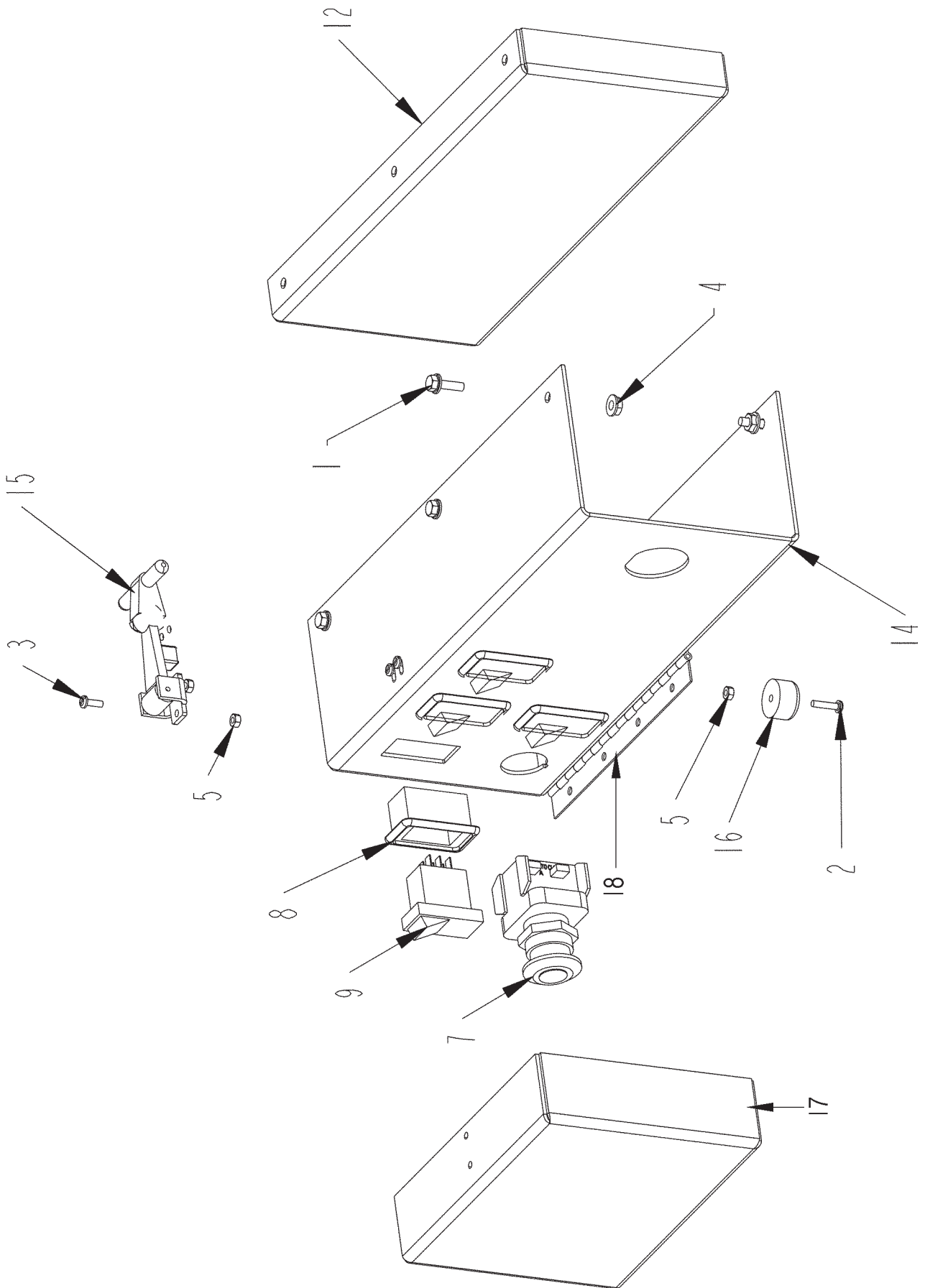


**RIGHT HAND CONTROL PANEL ASSEMBLY (FOR SN 0044 AND UP)**

<b>ITEM</b>	<b>PART</b>	<b>QTY.</b>	<b>PART DESCRIPTION</b>
1	4800194	12	SCR\FLG\1/4X3/4
2	4800463	2	SCR\RD\SLOT\#8X3/4\NC
3	4801225	12	SCR\RD\SLOT\#8-32X1/2\NC
4	4900040	12	NUT\FLG\SERR\1/4\NC
5	4900096	14	NUT\HEX\#8\NC
6	5000092	14	WASH\LOCK\#8
7	5000136	4	WASH\FLAT\#8
8	5700028	2	SWITCH\MAINT\PB\RED\MUSH
9	5700328	9	SWITCH\RCKR\MNT\PNL\SNGL
10	5700542	8	SWITCH\RCKR\DPDT\24VUNLIT\15A\MOMNTRY\W/RAISED BRCKT
11	5700545	1	SWITCH\RCKR\DPST\24V\2LIT\15A\LATCHW/RAISED BRACKET
12	6300105	2	BACK\PANEL\CNTRL
13	6300190	1	PANEL\CNTRL\LEFT
14	6300191	1	PANEL\CNTRL\RIGHT
15	7500606	2	LATCH\35-MAUSTIN
16	7500756	2	BMPR\RBBR\1-1/32X5/8
	<b>6300190</b>		<b>PANEL\CNTRL\LEFT</b>
	<b>6300191</b>		<b>PANEL\CNTRL\RIGHT</b>



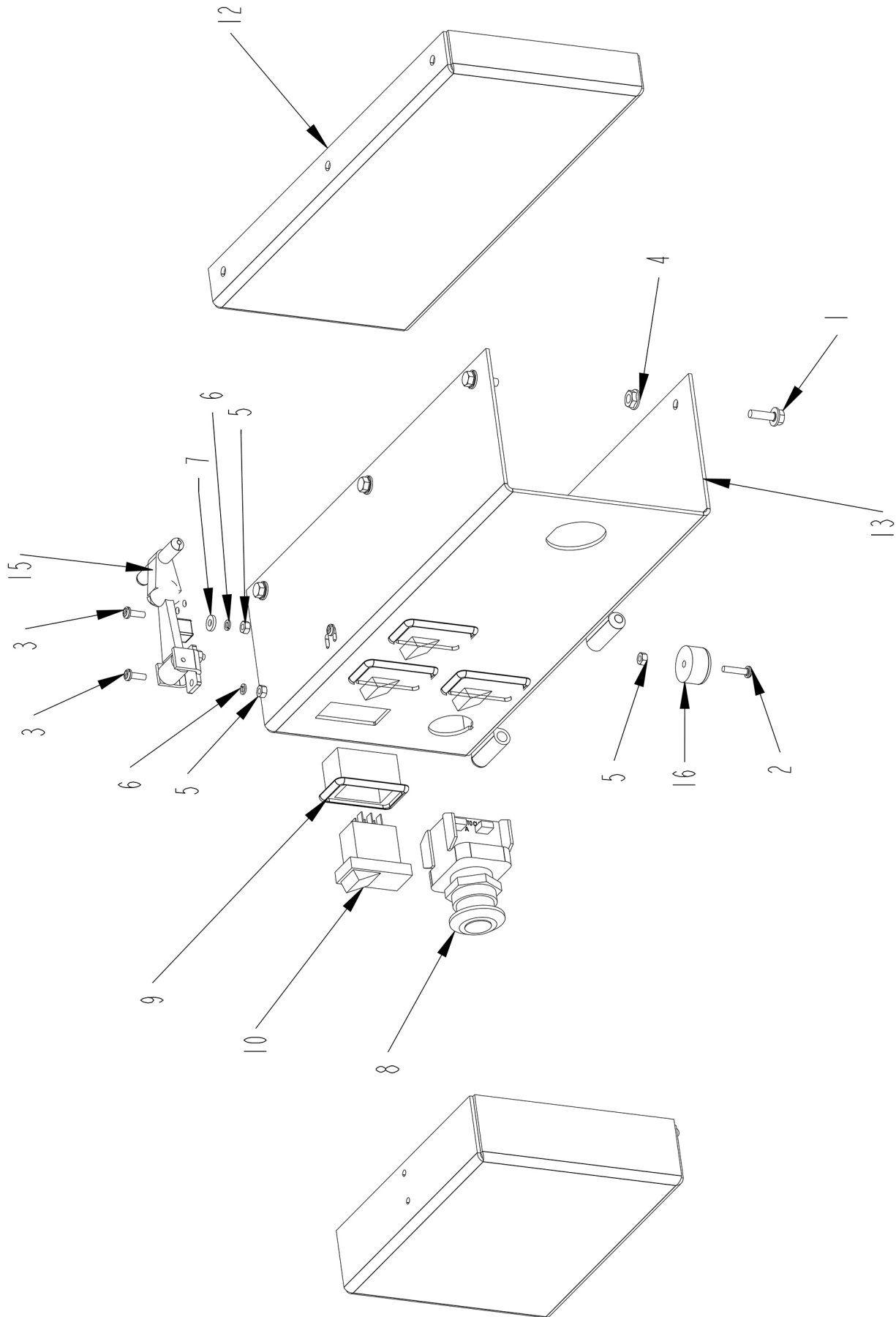
**LEFT HAND CONTROL PANEL ASSEMBLY (FOR SN UP TO 0043)**



**LEFT HAND CONTROL PANEL ASSEMBLY (FOR SN UP TO 0043)**

<b>ITEM</b>	<b>PART</b>	<b>QTY.</b>	<b>PART DESCRIPTION</b>
1	4800194	12	SCR\FLG\1/4X3/4
2	4800463	2	SCR\RD\SLOT\#8X3/4\NC
3	4801225	8	SCR\RD\SLOT\#8X1/2\NC
4	4900040	12	NUT\FLG\SERR\1/4\NC
5	4900096	10	NUT\HEX\#8\NC
6	5000092	4	WASH\LOCK\#8
7	5700028	2	SWITCH\MAINT\PB\RED\MUSH
8	5700328	9	SWITCH\RCKR\MNT\PNL\SNGL
9	5700542	8	SWITCH\RCKR\DPDT\24VUNLIT\15A\MOMNTRY\W/RASED BRCKT
10	5700545	1	SWITCH\RCKR\DPST\24V\2LIT\15A\LATCH\W/RAISED BRACKET
11	5700722	2	SNSR\IR\T\RSET\ASSY
12	6300105	2	BACK\PANEL\CNTRL
13	6300128	1	PANEL\CNTRL\RIGHT
14	6300129	1	PANEL\CNTRL\LEFT
15	7500606	2	LATCH\35-M\AUSTIN
16	7500756	2	BMPR\RBBR\1-1/32X5/8
17	D1026051	1	COVER\PANEL\CNTRL
18	D1026052	1	HINGE\CVR\PNL\CNTRL
	<b>6300128</b>		<b>PNL\CNTRL\RIGHT</b>
	<b>6300129</b>		<b>PNL\CNTRL\LEFT</b>

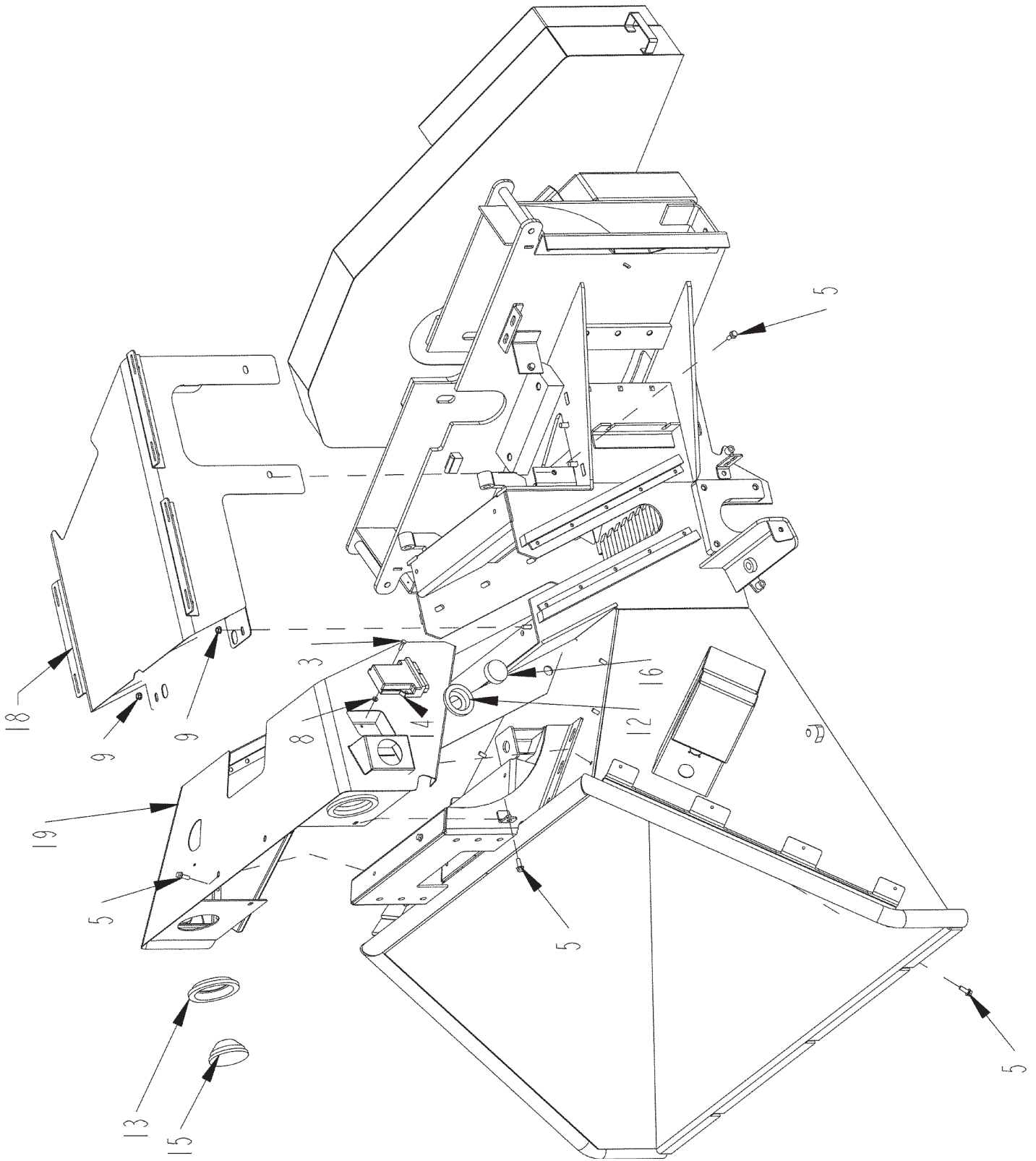
**LEFT HAND CONTROL PANEL ASSEMBLY (FOR SN 0044 AND UP)**



**LEFT HAND CONTROL PANEL ASSEMBLY (FOR SN 0044 AND UP)**

<b>ITEM</b>	<b>PART</b>	<b>QTY.</b>	<b>PART DESCRIPTION</b>
1	4800194	12	SCR\FLG\1/4X3/4
2	4800463	2	SCR\RD\SLOT\#8X3/4\NC
3	4801225	8	SCR\RD\SLOT\#8X1/2\NC
4	4900040	12	NUT\FLG\SERR\1/4\NC
5	4900096	10	NUT\HEX\#8\NC
6	5000092	4	WASH\LOCK\#8
7	5700028	2	SWITCH\MAINT\PB\RED\MUSH
8	5700328	9	SWITCH\RCKR\MNT\PNL\SNGL
9	5700542	8	SWITCH\RCKR\DPDT\24VUNLIT\15A\MOMNTRY\W/RASED BRCKT
10	5700545	1	SWITCH\RCKR\DPST\24V\2LIT\15A\LATCH\W/RAISED BRACKET
11	5700722	2	SNSR\IR\T\RSET\ASSY
12	6300105	2	BACK\PANEL\CNTRL
13	6300128	1	PANEL\CNTRL\RIGHT
14	6300129	1	PANEL\CNTRL\LEFT
15	7500606	2	LATCH\35-M\AUSTIN
16	7500756	2	BMPR\RBBR\1-1/32X5/8
17	D1026051	1	COVER\PANEL\CNTRL
18	D1026052	1	HINGE\CVR\PNL\CNTRL
	<b>6300128</b>		<b>PNL\CNTRL\RIGHT</b>
	<b>6300129</b>		<b>PNL\CNTRL\LEFT</b>

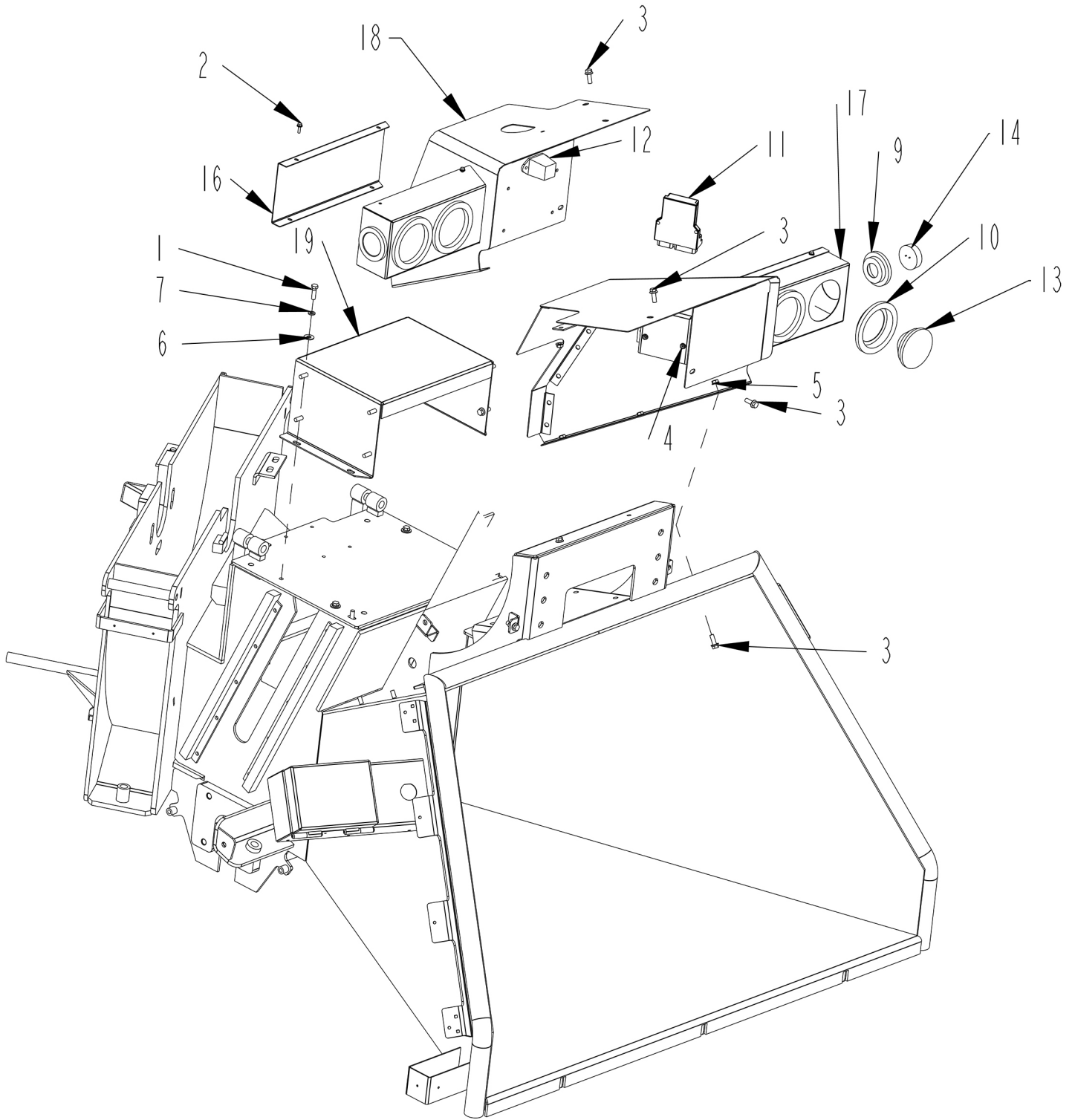
COVERS (FOR SN UP TO 0043)



**COVERS (FOR SN UP TO 0043)**

<b>ITEM</b>	<b>PART</b>	<b>QTY.</b>	<b>PART DESCRIPTION</b>
1	2000002	2	1" BEARING W/ LOCK COLLAR
2	2000703	4	2 HOLE FLANGETTE
3	4800277	2	BOLT\HEX\1/4X1
4	4800394	4	BOLT\CRG\3/8X3/4\NC
5	4800913	13	BOLT\FLG\SERR\3/8X1\NC
6	4800928	2	BOLT\FLG\SERR\1/2X1-1/4\NC
7	4900003	1	NUT\HEX\5/16\NC
8	4900040	2	NUT\FLG\SERR\1/4\NC
9	4900076	17	NUT\FLG\SERR\3/8\NC
10	4900090	4	NUT\FLG\3/8\NC
11	5000022	1	WASH\LOCK\5/16
12	5700202	2	LAMP\GRMMT\2-1/2KIT\W\PLUG
13	5700539	2	LAMP\GRMMT\4-1/2
14	5700723	1	PLC\DVC710
15	5700860	2	LAMP\TAIL\12VDC\4-1/2RD
16	5700861	2	LAMP\CL\12VDC\2-1/2ROUND\RED\SEALED
17	6300059	1	GUARD\PLY\END\WELD
18	6300074	1	COVER\ROLLS\FEED
19	6300085	1	HOOD\TAIL\CHIPPER
20	6300125	1	COVER\CLEANOUT\HSG\DISC\ASSY
21	6300140	1	DEFL\SPOUT\DISCH\ASSY
22	7500345	1	BALL STUD
	<b>NOT SHOWN</b>		
	7500583	2	END FITTING\GAS SPRNG\
	7501090	1	SPRNG\GAS\100LB\9416K22->
	7500346	1	SAFETY CLIP

**COVERS (FOR SN 0044 AND UP)**

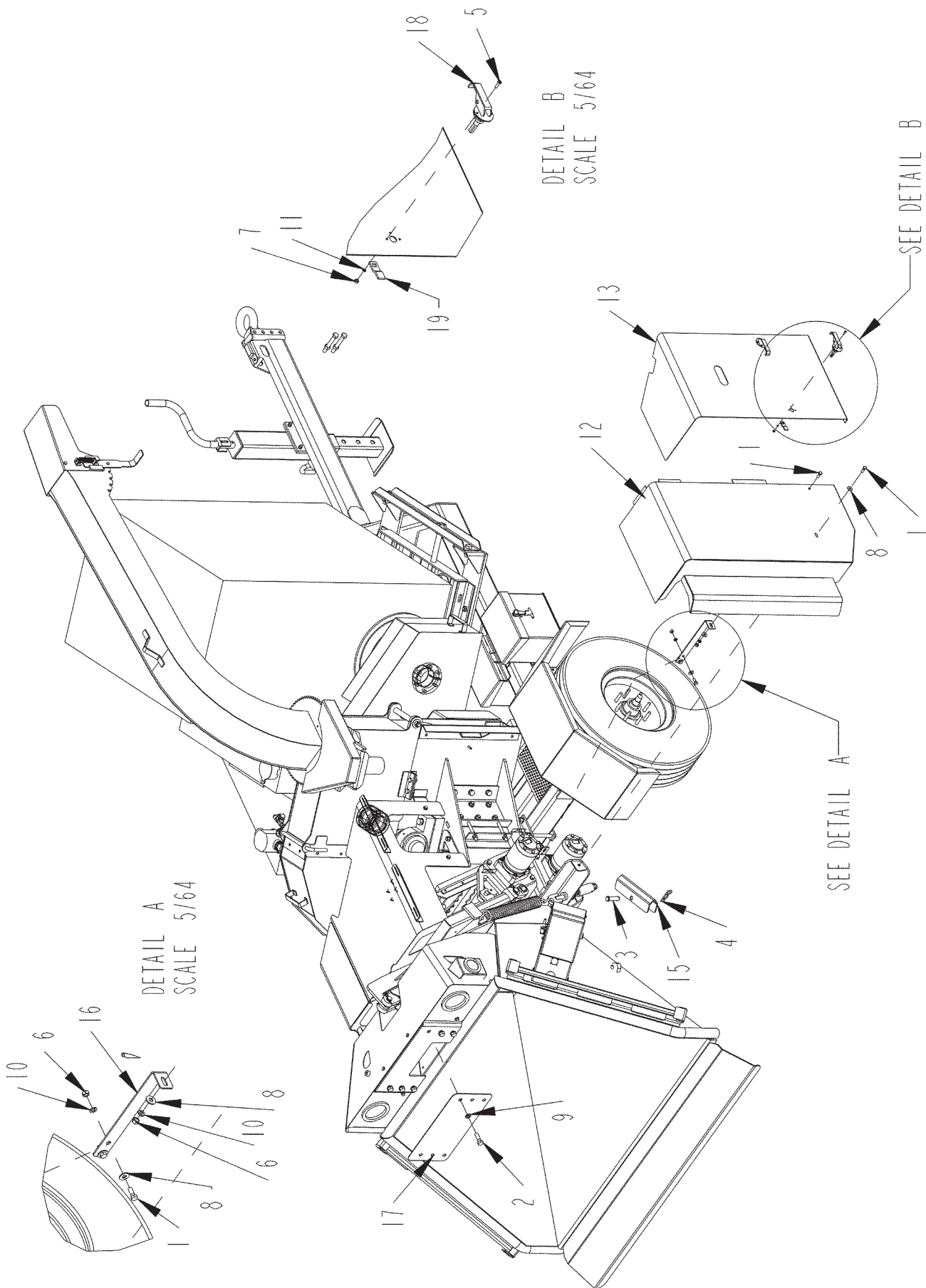




**COVERS (FOR SN 0044 AND UP)**

<b>ITEM</b>	<b>PART</b>	<b>QTY.</b>	<b>PART DESCRIPTION</b>
1	4800098	4	BOLT\HEX\3/8X1-1/4\NC
2	4800301	8	SCR\FLNG\SERR\1/4X3/4
3	4800913	19	BOLT\FLG\SERR\3/8X1\NC
4	4900040	10	NUT\FLG\SERR\1/4\NC
5	4900076	17	NUT\FLG\SERR\3/8\NC
6	5000001	4	WASH\FLAT\3/8
7	5000019	4	WASH\LOCK\3/8
8	5000092	2	WASH\LOCK\#8
9	5700202	2	LAMP\GRMMT\2-1/2KITW\PLUG
10	5700539	4	LAMP\GRMMT\4-1/2
11	5700723	1	PLC\DVC710
12	5700818	1	LAMP\LIC\KIT
13	5700860	4	LAMP\TAIL\12VDC\4-1/2RD
14	5700861	2	LAMP\CL\12VDC\2-1/2ROUND\RED\SEALED
15	6300140	1	DEFL\SPOUT\DISCHASSY
16	6300195	2	COVER\LIGHT\TAIL\R
17	6300256	1	HOOD\RH\TAIL\CHIPPER
18	6300257	1	HOOD\LH\TAIL\CHIPPER
19	6300258	1	BRKT\COVER\VLV
	<b>6300002</b>		<b>CHIPPER\ASSY\TC12</b>

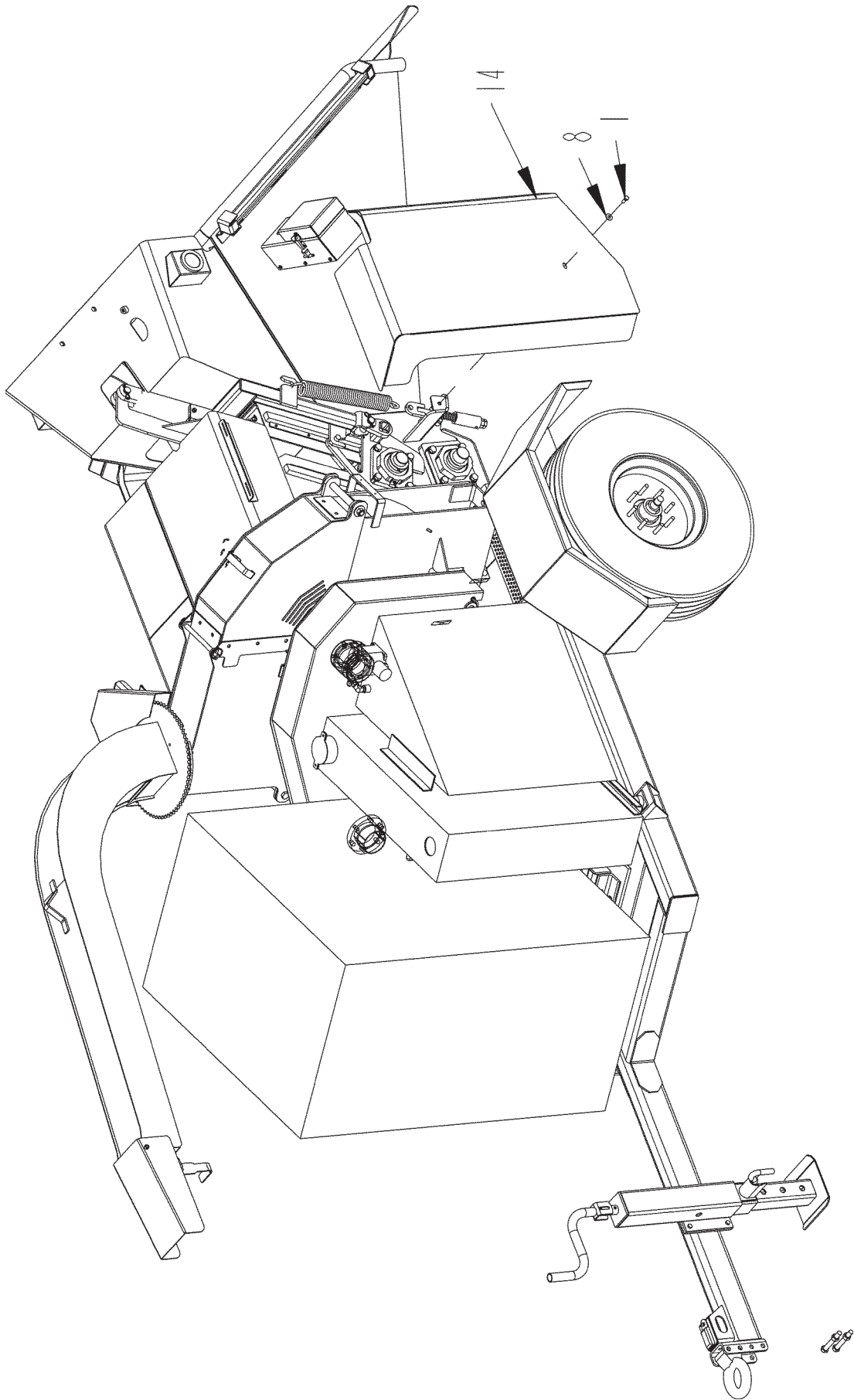
SHROUDS VIEW 1 (FOR SN UP TO 0043)



**SHROUDS VIEW 1 (FOR SN UP TO 0043)**

<b>ITEM</b>	<b>PART</b>	<b>QTY.</b>	<b>PART DESCRIPTION</b>
1	4800003	19	BOLT\HEX\3/8X1
2	4800010	10	BOLT\HEX\5/8X2
3	4800045	1	PIN\CLEVIS\3/4X2-1/2
4	4800056	1	PIN\HAIR\3/16(#3)
5	4800495	4	SCR\RD\SLOT\#10-24X3/4
6	4900002	11	NUT\HEX\3/8\NC
7	4900072	5	NUT\HEX\#10\NC
8	5000001	10	WASH\FLAT\3/8
9	5000003	28	WASH\LOCK\5/8
10	5000019	17	WASH\LOCK\3/8
11	5000071	4	WASH\LOCK;EXT\STAR\#10
12	6300084	1	COVER\RIGHT\SIDE
13	6300090	1	COVER\ANVIL\WELD
14	6300093	1	COVER\LEFT\SIDE
15	6300145	1	STOP\CYL\CHIPPER
16	6300148	1	BRKT\MNT\SIDE\COVER
17	6300153	1	COVER\WINCH\HOOD
18	7500907	2	LATCH\COMP\HD\1.18-2.36
19	7500908	2	LATCH\COMP\HD\OFFSET;CAM

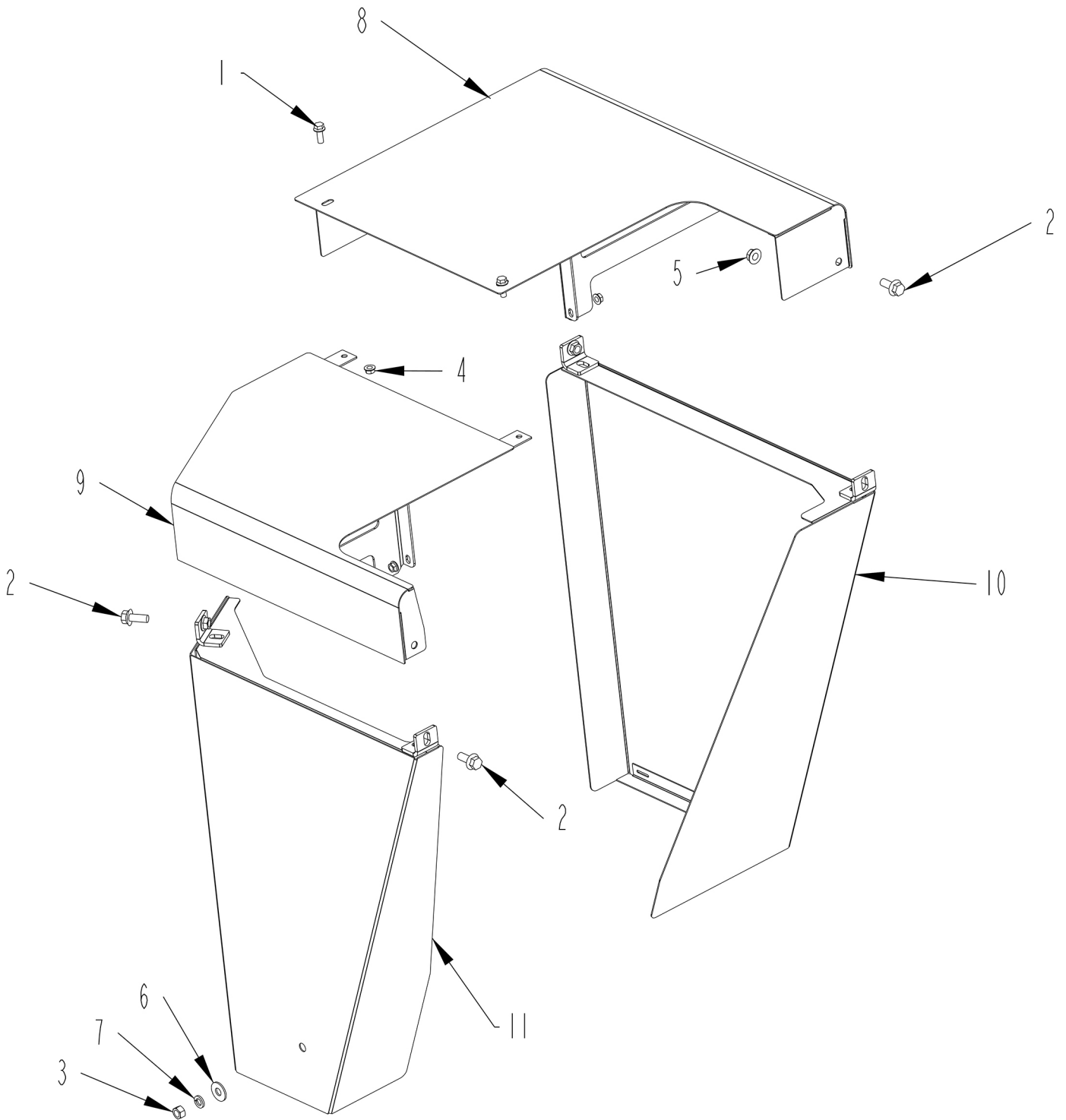
SHROUDS VIEW 2 (FOR SN UP TO 0043)



**SHROUDS VIEW 2 (FOR SN UP TO 0043)**

ITEM	PART	QTY.	PART DESCRIPTION
1	4800003	19	BOLT\HEX\3/8X1
2	4800010	10	BOLT\HEX\5/8X2
3	4800045	1	PIN\CLEVIS\3/4X2-1/2
4	4800056	1	PIN\HAIR\3/16(#3)
5	4800495	4	SCR\RD\SLOT\#10-24X3/4
6	4900002	11	NUT\HEX\3/8\NC
7	4900072	5	NUT\HEX\#10\NC
8	5000001	10	WASH\FLAT\3/8
9	5000003	28	WASH\LOCK\5/8
10	5000019	17	WASH\LOCK\3/8
11	5000071	4	WASH\LOCK;EXT\STAR\#10
12	6300084	1	COVER\RIGHT\SIDE
13	6300090	1	COVER\ANVIL\WELD
14	6300093	1	COVER\LEFT\SIDE
15	6300145	1	STOP\CYL\CHIPPER
16	6300148	1	BRKT\MNT\SIDE\COVER
17	6300153	1	COVER\WINCH\HOOD
18	7500907	2	LATCH\COMP\HD\1.18-2.36
19	7500908	2	LATCH\COMP\HD\OFFSET;CAM

**SHROUDS (FOR SN 0044 AND UP)**

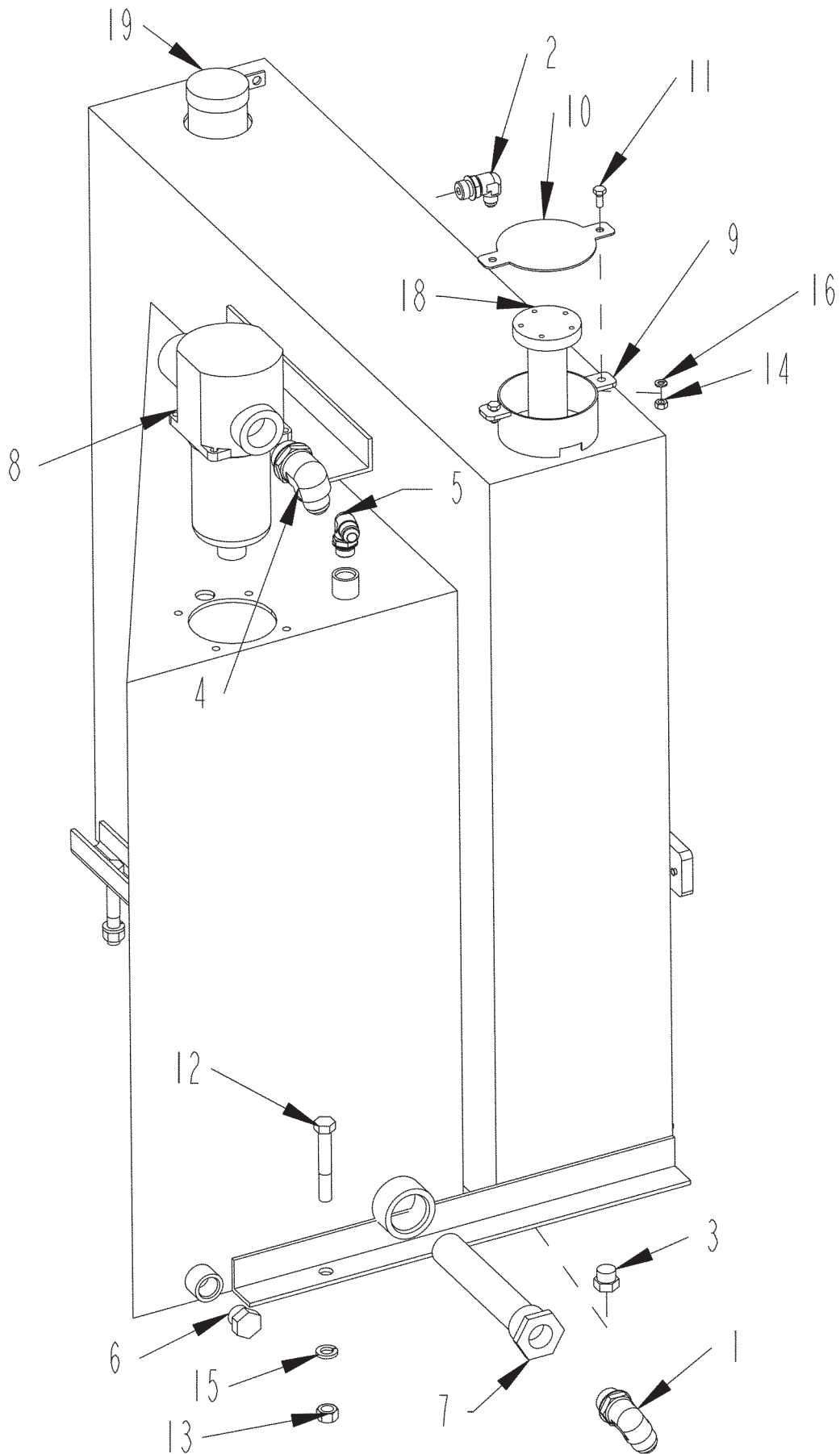


**SHROUDS (FOR SN 0044 AND UP)**

<b>ITEM</b>	<b>PART</b>	<b>QTY.</b>	<b>PART DESCRIPTION</b>
1	4800913	2	BOLT\FLG\SERR\3/8X1\NC
2	4800928	4	BOLT\FLG\SERR\1/2X1-1/4\NC
3	4900001	2	NUT\HEX\1/2\NC
4	4900076	10	NUT\FLG\SERR\3/8\NC
5	4900133	4	NUT\FLG\1/2\NC
6	5000004	2	WASH\FLAT\1/2
7	5000006	2	WASH\LOCK\1/2
8	6300259	1	SHIELD\TOP\R
9	6300260	1	SHIELD\TOP\L
10	6300261	1	SHIELD\R\TC-12
11	6300262	1	SHIELD\L\TC-12



# FUEL AND HYDRAULIC OIL TANK ASSEMBLY



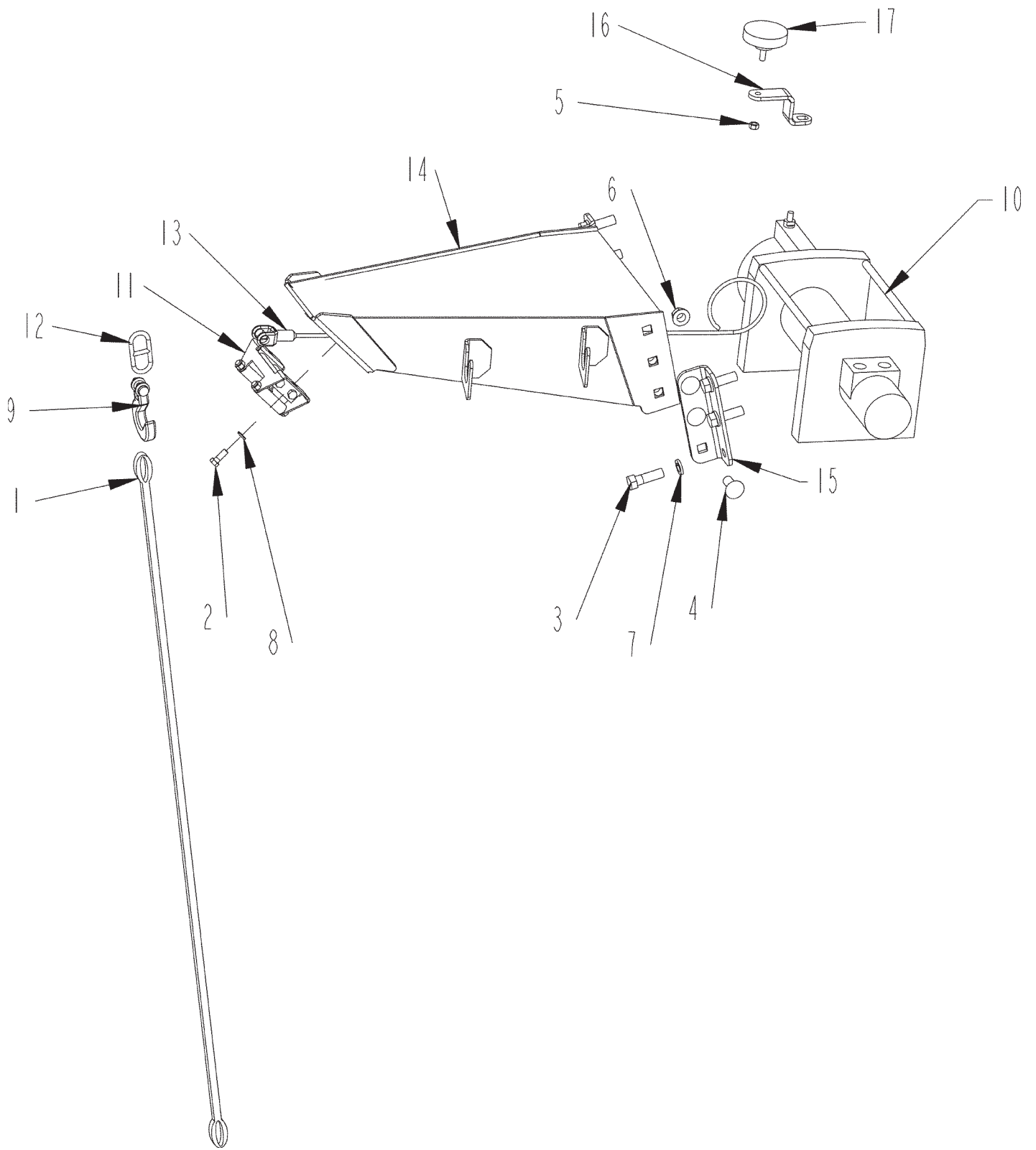
**FUEL AND HYDRAULIC OIL TANK ASSEMBLY**

<b>ITEM</b>	<b>PART</b>	<b>QTY.</b>	<b>PART DESCRIPTION</b>
1	3800279	1	FTG\1-1/16MORX1-1/16MJIC\90
2	3800453	1	FTG\3/4MORX9/16MJIC\90
3	3800490	1	FTG\3/4MOR\PLUG\HEX
4	3800534	1	FTG\1-5/16MORX1-1/16MJIC\90
5	3800537	1	FTG\3/4MORX3/4MJIC\90
6	3800847	1	FTG\7/8MOR\PLUG\HEX
7	4400111	1	FLTR\SCRN\1-5/8MORX1-1-16FOR\10GPM
8	4400112	1	FLTR\HYD\RET\15GPM\TTF
9	4704786	1	GUARD\SENSOR\TANK\FUEL
10	4704787	1	CVR\SENSOR\TANK\FUEL
11	4800503	2	BOLT\HEX\1/4X5/8\NC
12	4800592	3	BOLT\HEX\1/2X3-1/4
13	4900001	3	NUT\HEX\1/2\NC
14	4900009	2	NUT\HEX\1/4\NC
15	5000006	3	WASH\LOCK\1/2
16	5000024	2	WASH\LOCK\1/4
17	6300057	1	TANK\FUEL\WELD\CHPPR
18	7501475	1	GAUGE\FUEL\SEND\WEMA\32"240-33OHMS
19	7501472	1	FUEL\CAP\DT-20

**NOT SHOW (WEAR PARTS)**

4400127	1	FLTR\ELMT\OIL\MPFILTRI
4400066	1	GAUGE\FLTR\25PSI\1/8NPTF\COLOR CODED
4400148	1	FLTR\BRTHR\ASSY\10MIC\MPFILTRI
7501511	1	SEAL\SENDER\FUEL

**GATHERING WINCH ASSEMBLY (OPTION)**

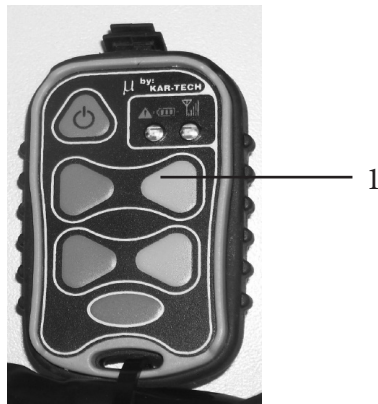


## GATHERING WINCH ASSEMBLY (OPTION)

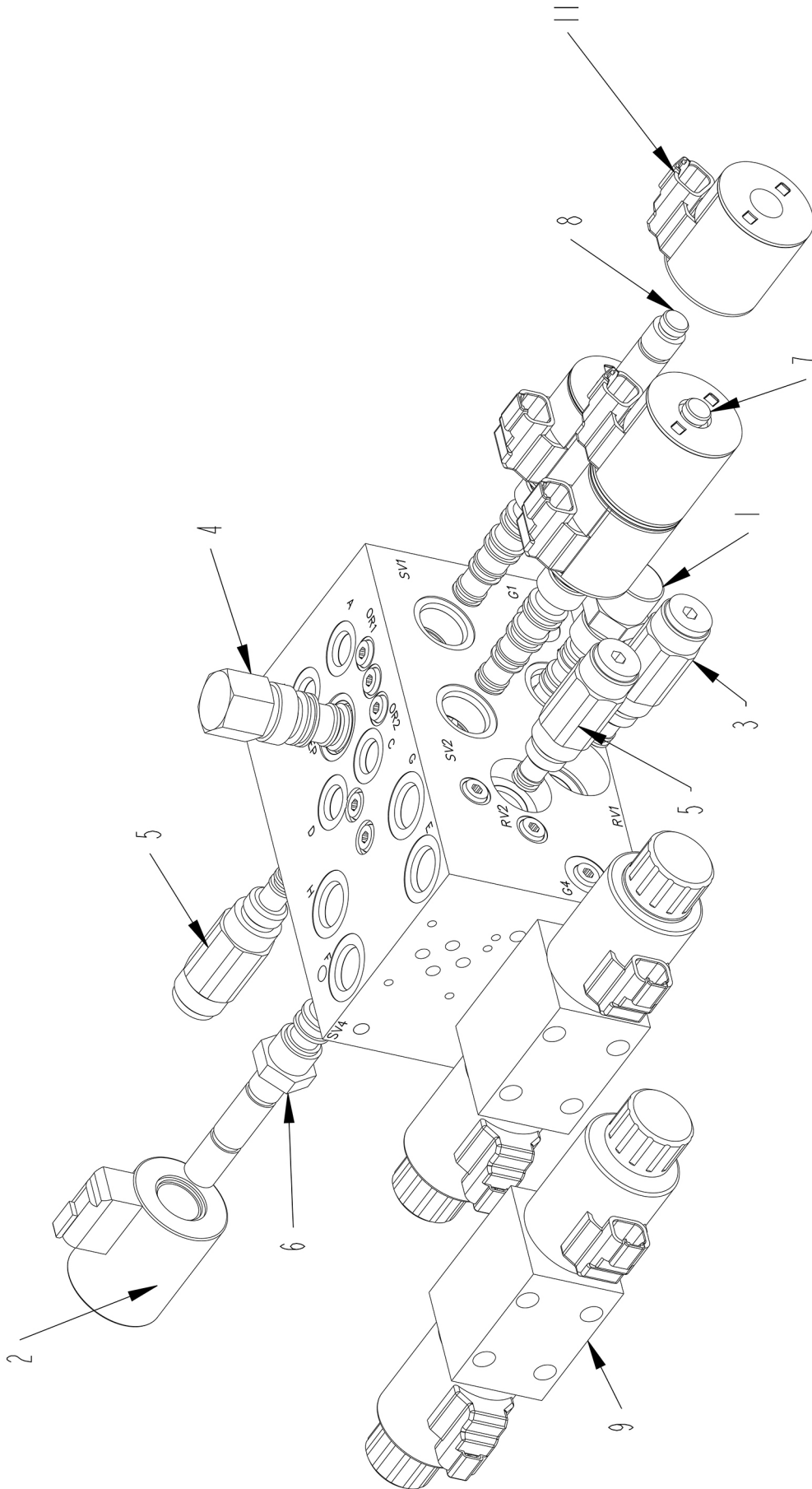
ITEM	PART	QTY.	PART DESCRIPTION
1	1100297	1	SLING\2EYE\2PLY\2" X 6'
2	4800003	2	BOLT\HEX\3/8X1
3	4800010	6	BOLT\HEX\5/8X2
4	4800482	6	BOLT\CRG\5/8X1-1/2\NC
5	4900023	1	NUT\TPLCK\3/8\NC
6	4900110	6	NUT\FLG\SERR\5/8\NC
7	5000003	6	WASH\LOCK\5/8
8	5000019	2	WASH\LOCK\3/8
9	5800032	1	HOOK\SLIP\5/16\GR70\LATCH
10	5800035	1	WINCH\HYD\9000#
11	5800036	1	FAIRLEAD\RLLR\ASSY
12	5800041	1	LOCK\HMMR\CHAIN\WINCH\9/32
13	5800331	1	CABLE\1/4\ASSY\CHIPPER
14	6300107	1	SUPPORT\CABLE\WINCH\WELD
15	6300110	2	BRKT\SUPPORT\CABLE\WINCH
16	6300127	1	LEVER\CLTCH\WINCH
17	7500891	1	KNOB\CLAMP\3/8NCx1"STUD
	6300147		OPTION\WINCH\TC-12

## REMOTE RADIO (OPTION)

ITEM	PART	QTY.	PART DESCRIPTION
1	5701007	1	TRANSMITTER\RADIO\MINI\KARTECH
	<b>5700954</b>		<b>RADIO\MINI\KARTECH</b>
	<b>NOT SHOWN</b>		
	5701006	1	RECEIVER\RADIO\MINI\KARTECH
	5701075	1	CHARGER\BATTERY\REMOTE\TRANSMITTER



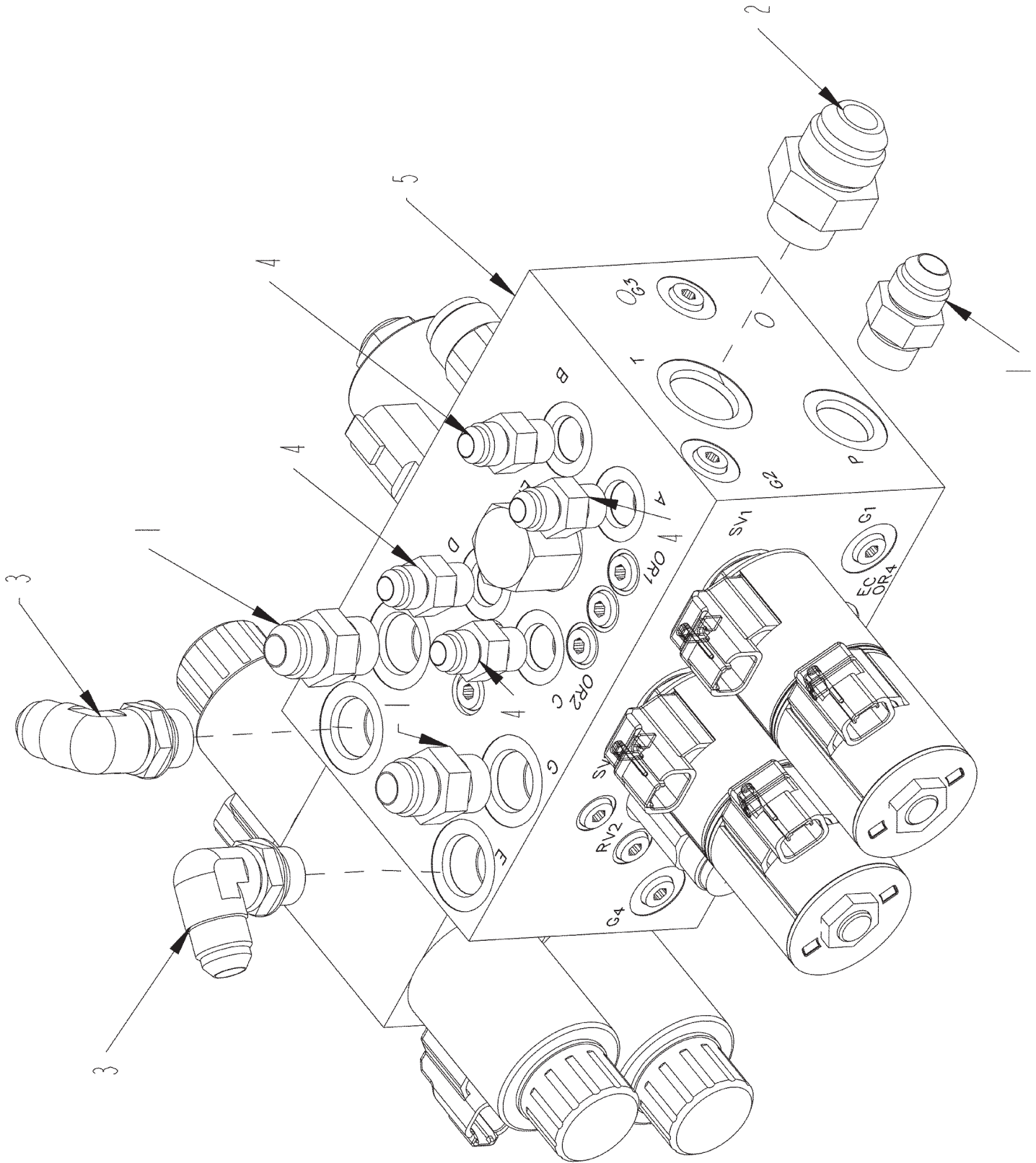
# 4000403 MANIFOLD VALVE ASSEMBLY



**4000403 MANIFOLD VALVE ASSEMBLY**

<b>ITEM</b>	<b>PART</b>	<b>QTY.</b>	<b>PART DESCRIPTION</b>
	<b>4000403</b>		<b>VLV\MANIFOLD\ASSY\CHIPPER</b>
1	4000346	1	VALVE\HYD\CART\COMP\150PSI
1 Seal	4000358		VALVE\SEAL\KIT\SZ10\2,3 OR 4 WAY
2	4000348	1	VALVE\HYD\SOL\24\VE70\DTZ
3	4000349	1	VALVE\HYD\CART\RELIEF\2500
3 Seal	7501370		SEAL\KIT\VLV\SZ8\2WAY
4	4000350	1	VALVE\HYD\CART\PILOT\110P
4 Seal	4000358		VALVE\SEAL\KIT\SZ10\2,3 OR 4 WAY
5	4000351	2	VALVE\HYD\CART\RELIEF\1000
5Seal	7501370		SEAL\KIT\VLV\SZ8\2WAY
6	4000352	1	VALVE\HYD\CART\PROPOR\6GPM
6Seal	4000358		VALVE\SEAL\KIT\SZ10\2,3 OR 4 WAY
7	4000353	1	VALVE\HYD\CART\3POS,5WAY\FLOAT;CENTER
7Seal	4000359		VALVE\SEAL\KIT\SZ10\5 WAY
8	4000354	1	VALVE\HYD\CART\3POS,5WAY\CLOSED;CENTER
8Seal	4000359		VALVE\SEAL\KIT\SZ10\5 WAY
9	4000355	2	VALVE\HYD\VCKR\3POS4WAY
<b>NOTE - There are (4) size -012 O-rings between 4000356 and main body</b>			
11	4000407	4	VALVE\HYD\SOL\24\VE10\DTZW/DIODE

# MANIFOLD VALVE ASSEMBLY

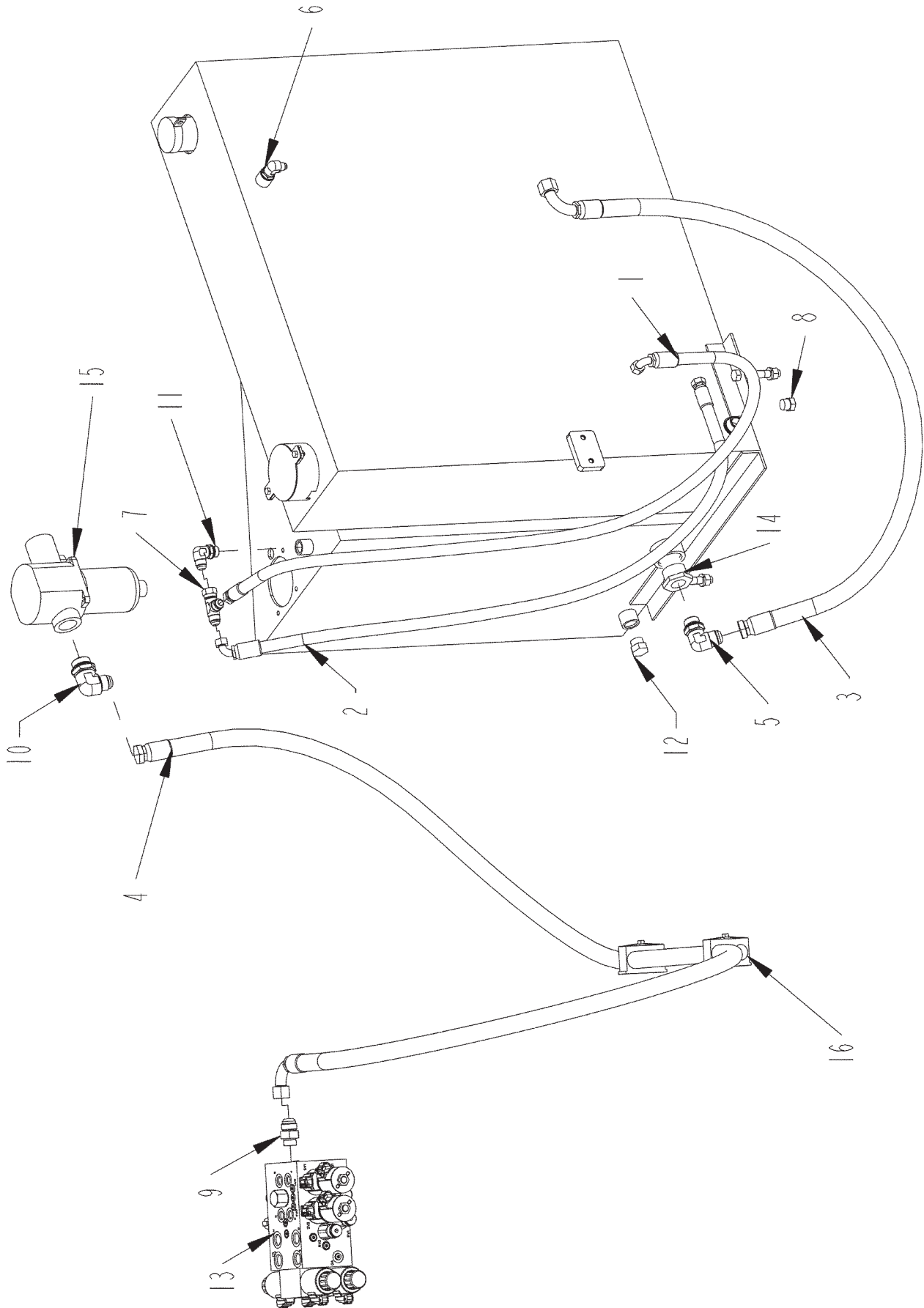




## MANIFOLD VALVE ASSEMBLY

ITEM	PART	QTY.	PART DESCRIPTION
1	3800477	3	FTG\3/4MORX3/4MJIC\ST
2	3800527	1	FTG\7/8MORX1-1/16MJIC\ST
3	3800537	2	FTG\3/4MORX3/4MJIC\90
4	3800631	4	FTG\9/16MORX9/16MJIC\ST
5	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER

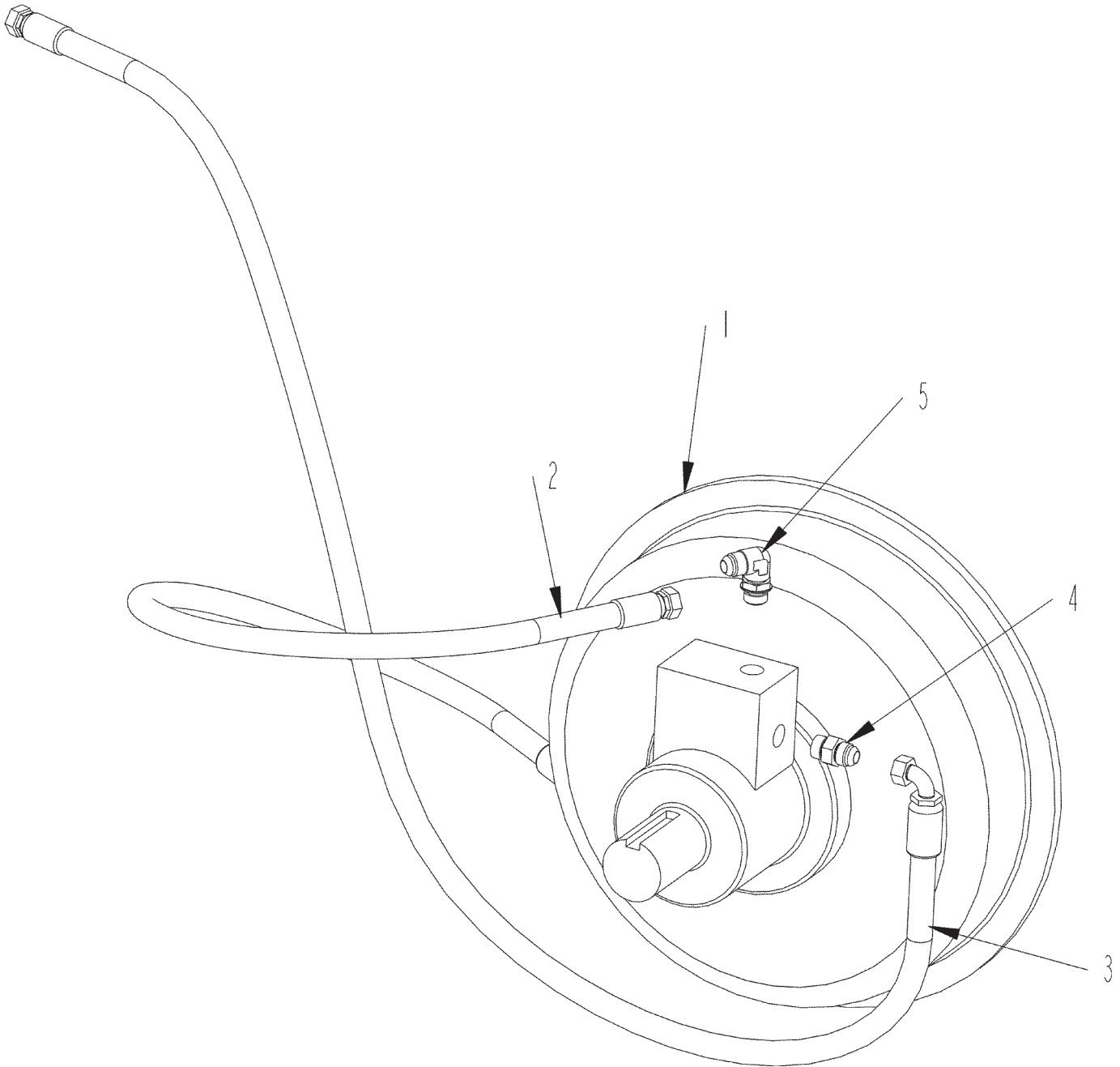
# HYDRAULIC TANK ASSEMBLY



## HYDRAULIC TANK ASSEMBLY

ITEM	PART	QTY.	PART DESCRIPTION
1	3700998	1	HOSE\HYD\1/2X62\3/4FJICSX3/4FJIC90 FROM CLUTCH SIDE TO TANK T
2	3700999	1	HOSE\HYD\1/2X48\3/4FJICSX3/4FJIC90 FROM SEQUENCE SIDE TO TANK T
3	3701000	1	HOSE\HYD\3/4X54\1-1/16FJICSX1-1/16FJIC90 FROM TANK OUT TO PUMP IN
4	3701001	1	HOSE\HYD\3/4X112\1-1/16FJICSX1-1/16FJIC90 FROM VALVE T TO FILTER
5	3800279	1	FTG\1-1/16MORX1-1/16MJIC\90
6	3800453	1	FTG\3/4MORX9/16MJIC\90
7	3800484	1	FTG\3/4FJICSX3/4MJICX3/4MJIC\RUN;TEE
8	3800490	1	FTG\3/4MOR\PLUG\HEX
9	3800527	1	FTG\7/8MORX1-1/16MJIC\ST
10	3800534	1	FTG\1-5/16MORX1-1/16MJIC\90
11	3800537	1	FTG\3/4MORX3/4MJIC\90
12	3800847	1	FTG\7/8MOR\PLUG\HEX
13	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER
14	4400111	1	FLTR\SCRN\1-5/8MORX1-1-16FOR\10GPM
15	4400112	1	FLTR\HYD\RET\15GPM\TTF
16	7501337	2	CLMP\HOSE\CUSH\3/8

## CLUTCH HYDRAULICS



ITEM	PART	QTY.	PART DESCRIPTION
1	O900150	1	CLUTCH\HPTO8\CHIPPER
2	3700997	1	HOSE\HYD\1/2X26\3/4FJCSX3/4FJIC90 FROM SEQUENCE T TOP TO CLUTCH TOP
3	3700998	1	HOSE\HYD\1/2X62\3/4FJCSX3/4FJIC90 FROM CLUTCH SIDE TO TANK T
4	3800477	1	FTG\3/4MORX3/4MJIC\ST
5	3800537	1	FTG\3/4MORX3/4MJIC\90

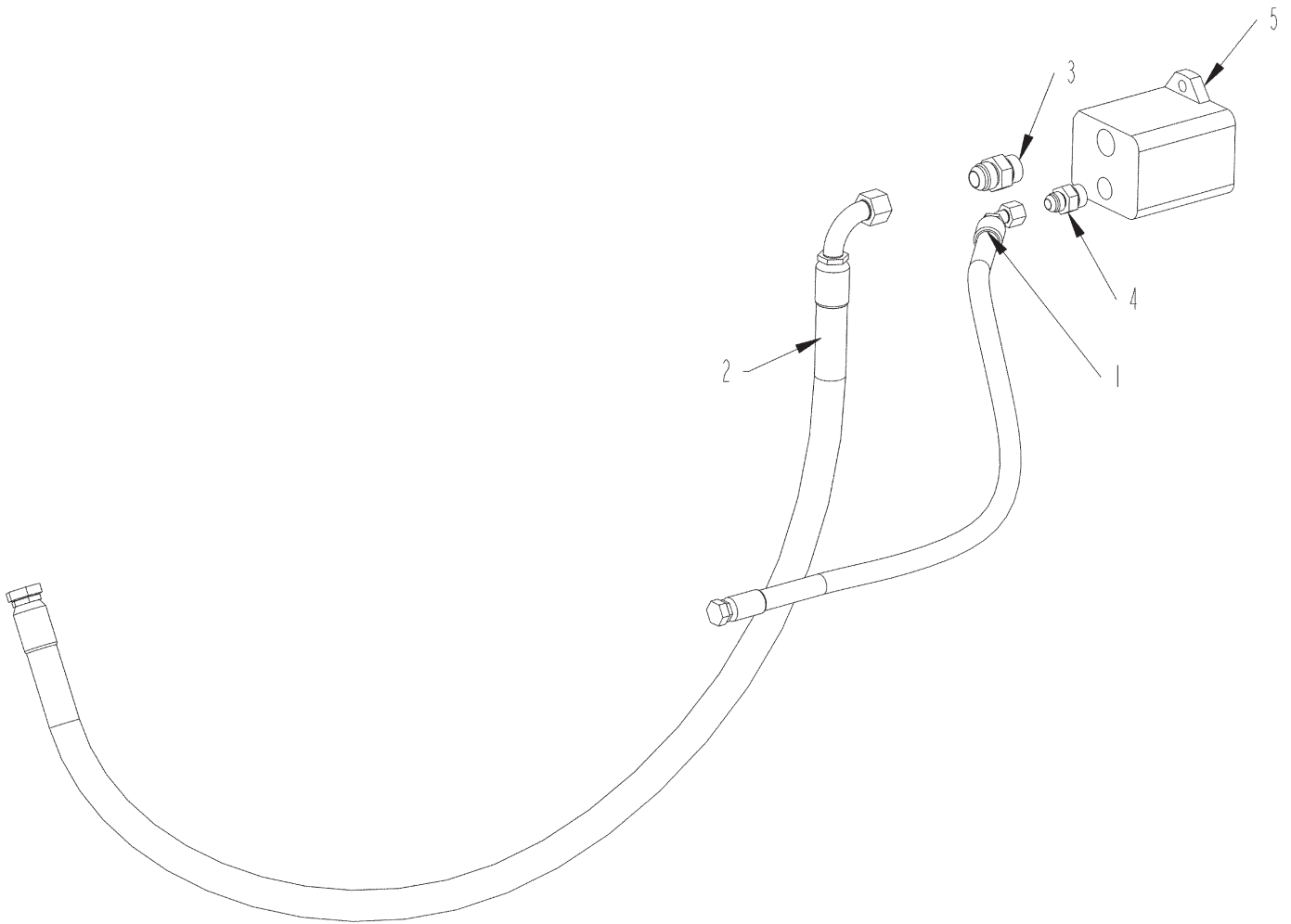
## HYDRAULIC PUMP ASSEMBLY - CAT ENGINE

ITEM	PART	QTY.	PART DESCRIPTION
1	3700996	1	HOSE\HYD\1/2X23\3/4FJICSX3/4FJIC45 FROM PUMP TO SEQUENCE T FRONT
2	3701000	1	HOSE\HYD\3/4X54\1-1/16FJICSX1-1/16FJIC90 FROM TANK OUT TO PUMP IN
3	3800277	1	FTG\1-1/16MORX1-1/16MJIC\ST
4	3800328	1	FTG\7/8MORX3/4MJIC\ADPT
5	4200124	1	PUMP\HYD\89CID\CASAPPA

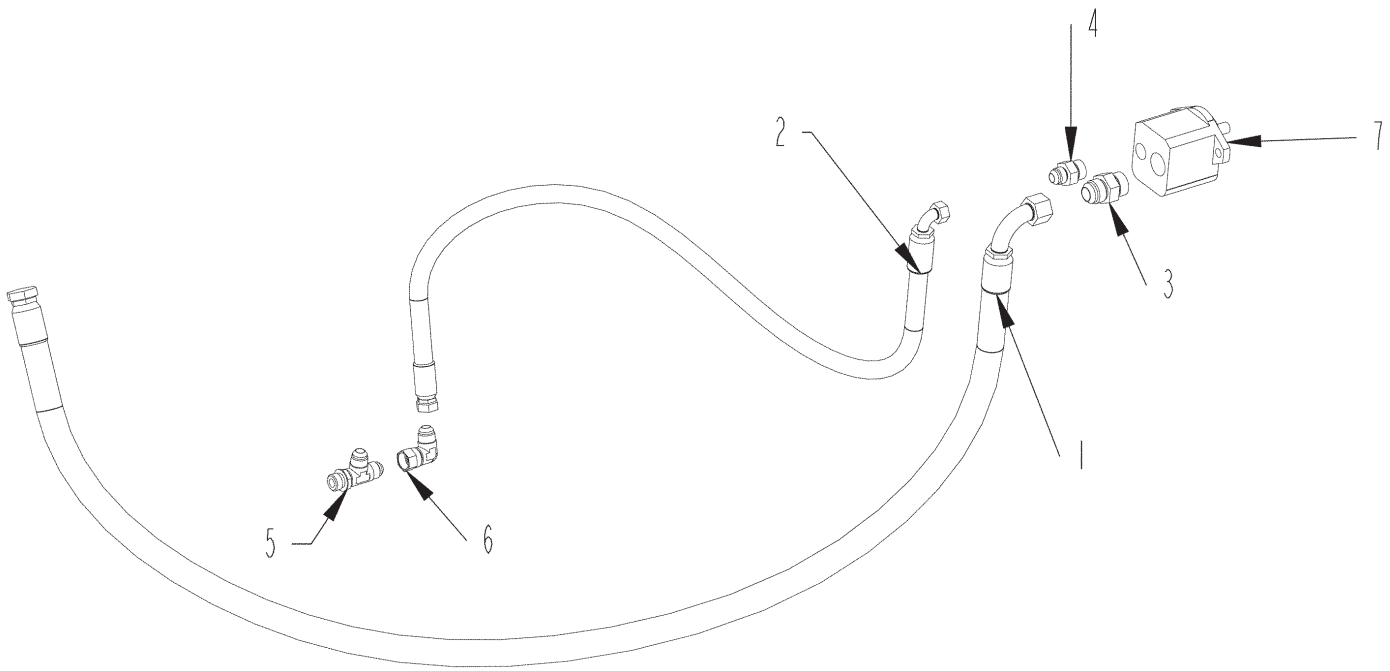
**NOT SHOWN (WEAR PARTS)**

4200161  
4200168

PUMP\SEAL\KIT\4200142



## HYDRAULIC PUMP ASSEMBLY - KUBOTA ENGINE



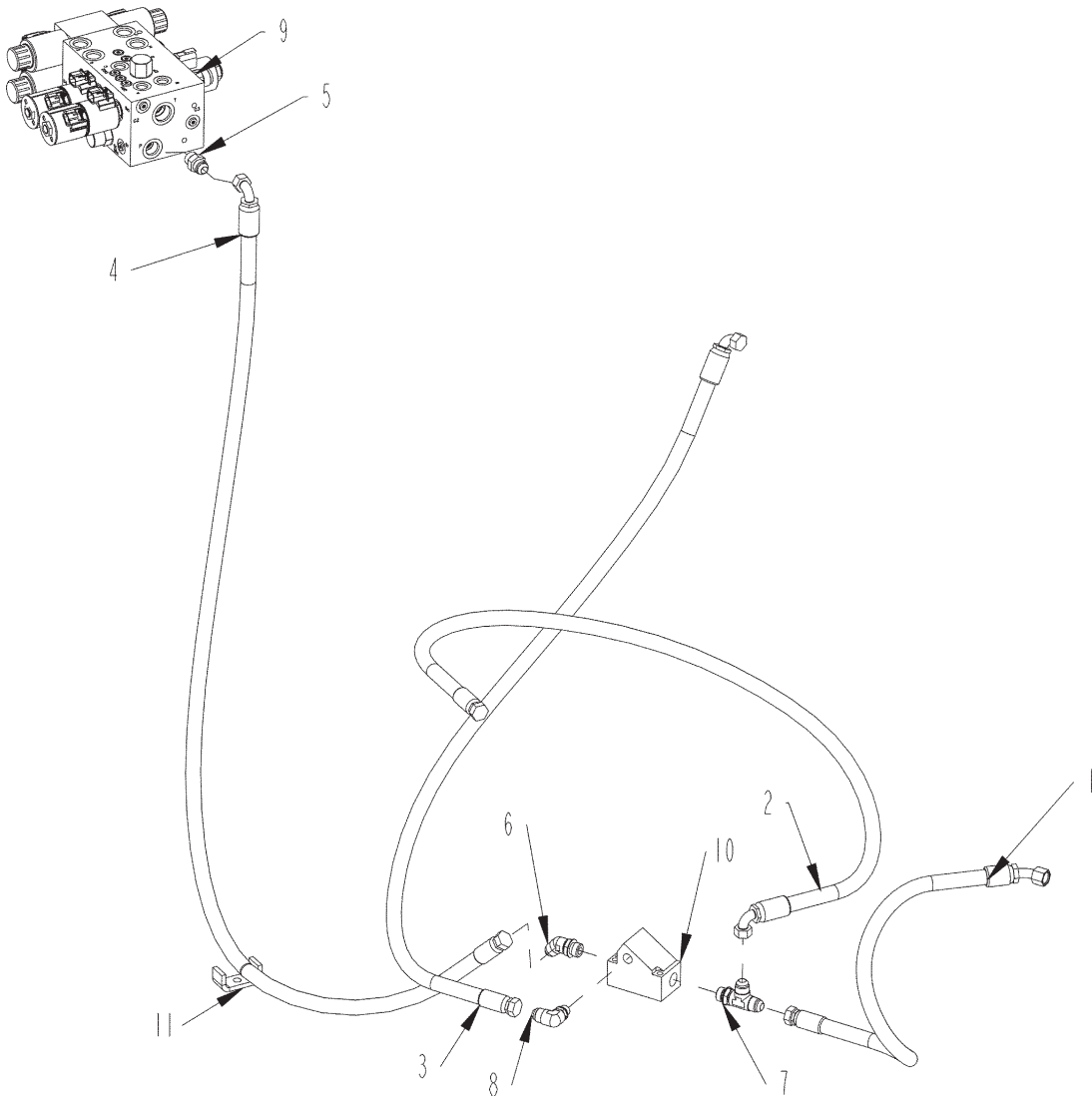
ITEM	PART	QTY.	PART DESCRIPTION
1	3701369	1	HOSE\HYD\3/4X66\1-1/16FJICSX1-1/16FJIC90 FROM TANK OUT TO PUMP IN
2	3701370	1	HOSE\HYD\1/2X34\3/4FJICSX3/4FJIC90 FROM PUMP TO SEQUENCE T FRONT
3	3800277	1	FTG\1-1/16MORX1-1/16MJIC\ST
4	3800328	1	FTG\7/8MORX3/4MJIC\ADPT
5	3800483	1	FTG\3/4MORX3/4MJICX3/4MJIC\RUN;TEE
6	3800546	1	FTG\3/4MJICX3/4FJIC\90\SW
7	4200171	1	PUMP\HYD\13CID\CASAPPA

**NOT SHOWN (WEAR PARTS)**

4200161	PUMP\SEAL\KIT4200142
4200178	ORING\SEAL\A\PUMP

## SEQUENCE VALVE ASSEMBLY

ITEM	PART	QTY.	PART DESCRIPTION
1	3700996	1	HOSE\HYD\1/2X23\3/4FJICSX3/4FJIC45 FROM PUMP TO SEQUENCE T FRONT
2	3700997	1	HOSE\HYD\1/2X26\3/4FJICSX3/4FJIC90 FROM SEQUENCE T TOP TO CLUTCH TOP
3	3700999	1	HOSE\HYD\1/2X48\3/4FJICSX3/4FJIC90 FROM SEQUENCE SIDE TO TANK T
4	3701002	1	HOSE\HYD\1/2X76\3/4FJICSX3/4FJIC90 FROM SEQUENCE REAR TO VALVE P
5	3800477	1	FTG\3/4MORX3/4MJIC\ST
6	3800479	1	FTG\3/4MORX3/4MJIC\45
7	3800483	1	FTG\3/4MORX3/4MJICX3/4MJIC\RUN;TEE
8	3800816	1	FTG\9/16MORX3/4MJIC\90
9	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER
10	4200139	1	VLV\SEQ\0-15GPM\PTTECH
11	4700777	1	CLMP\HOSE\1/2

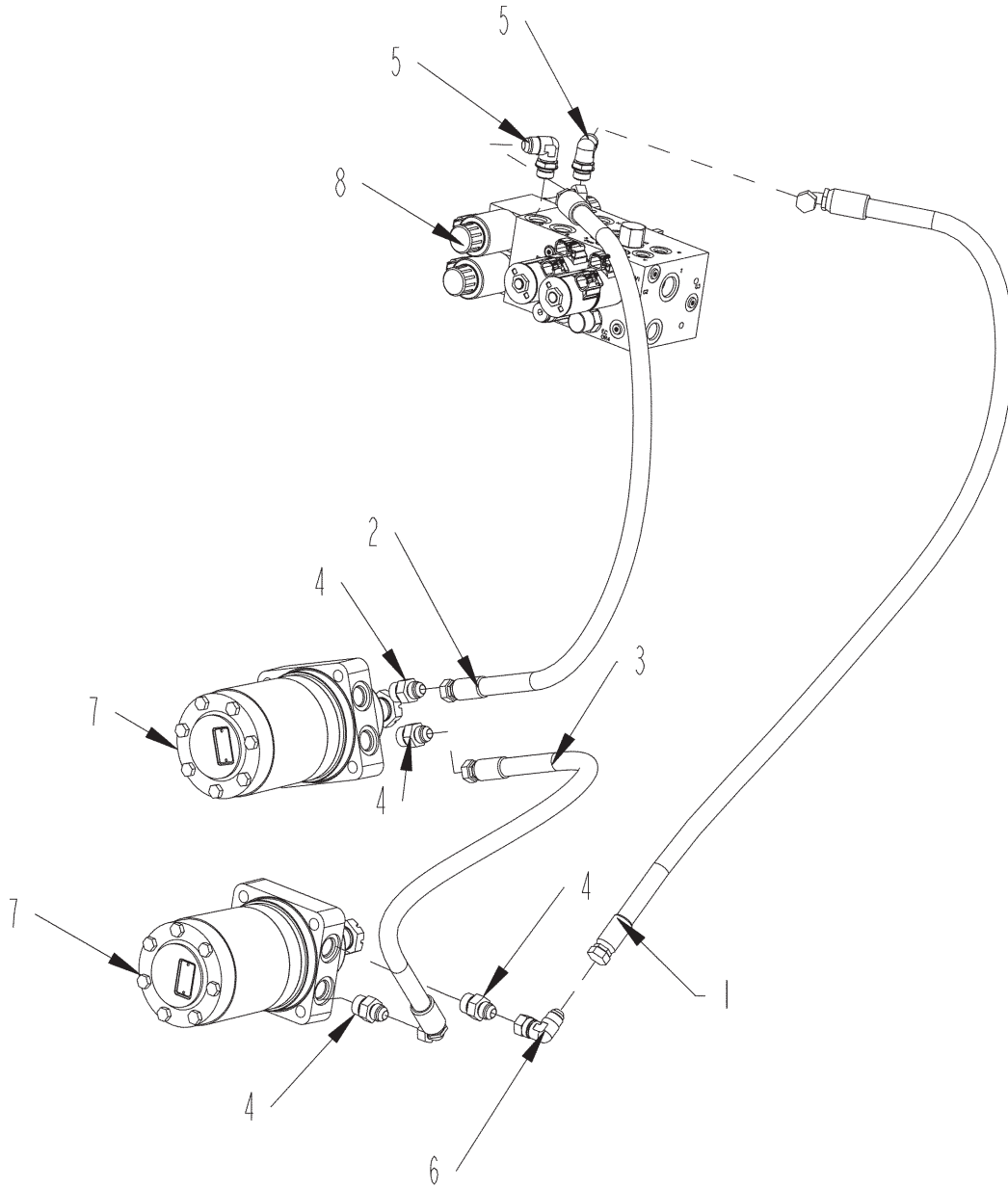


TC-12 Tree Chipper

PARTS REFERENCE



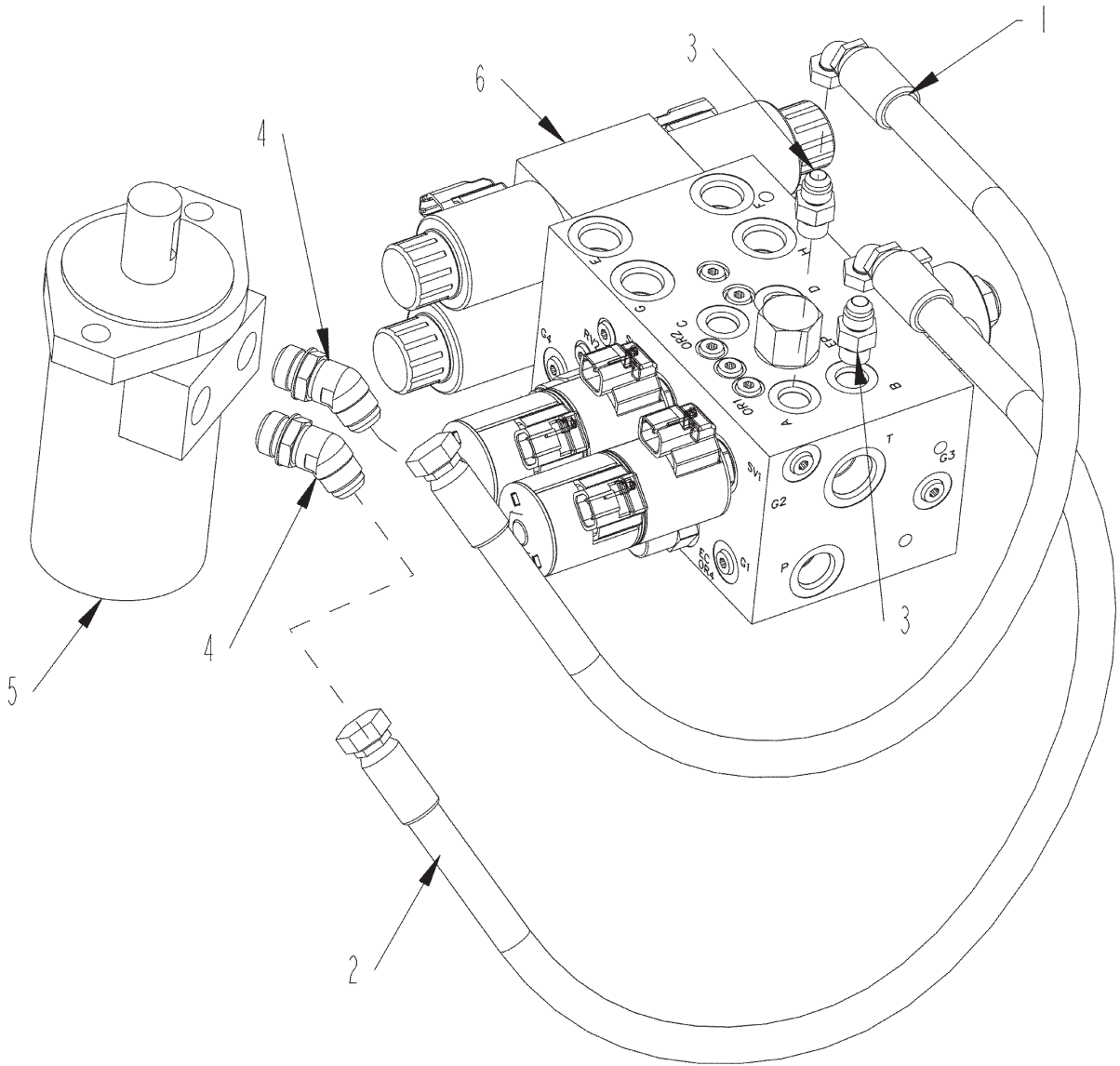
## FEEDWHEEL HYDRAULIC MOTORS



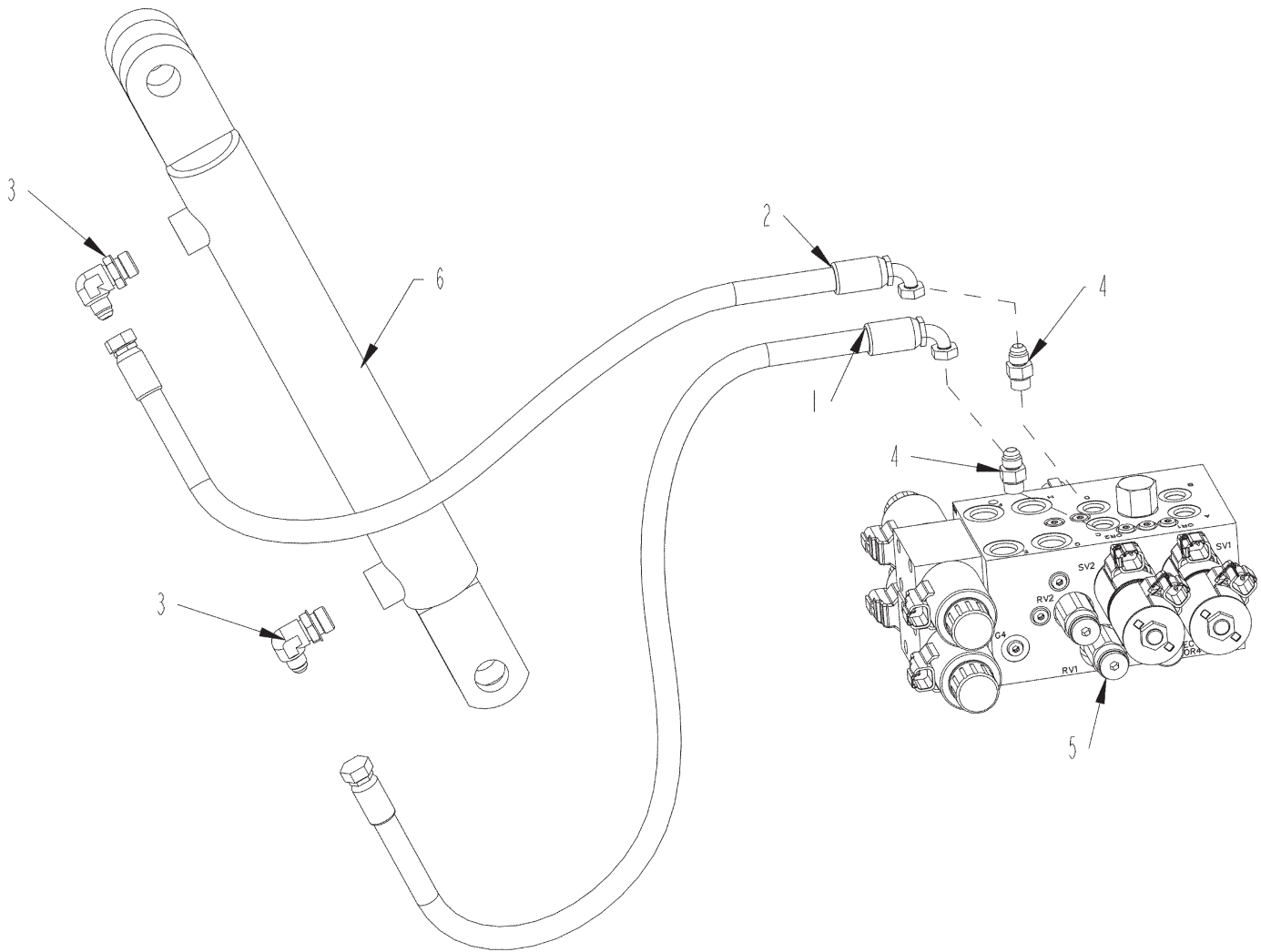
ITEM	PART	QTY.	PART DESCRIPTION
1	3701009	1	HOSE\HYD\1/2X48\3/4FJICSX3/4FJIC90 VALVE F TO MOTOR FEED BOTTOM TOP PORT
2	3701010	1	HOSE\HYD\1/2X36\3/4FJICSX3/4FJIC90 VALVE E TO MOTOR FEED TOP TOP PORT
3	3701011	1	HOSE\HYD\1/2X31\3/4FJICSX3/4FJIC90 MOTOR FEED BOTTOM BOTTOM PORT TO MOTOR FEED TOP BOTTOM PORT
4	3800328	4	FTG\7/8MORX3/4MJIC\ADPT
5	3800537	2	FTG\3/4MORX3/4MJIC\90
6	3800546	1	FTG\3/4MJICX3/4FJIC\90\SW
7	3900047	2	MTR\HYD\39.6C\DELTA\TAPERED
8	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER

## DISCHARGE HYDRAULICS

ITEM	PART	QTY.	PART DESCRIPTION
1	3701003	1	HOSE\HYD\3\8X39\3\4\FJICSX9\16FJIC90 FROM VALVE A TO MOTOR SPOUT RH
2	3701004	1	HOSE\HYD\3\8X39\3\4\FJICSX9\16FJIC90 FROM VALVE B TO MOTOR SPOUT LH
3	3800631	2	FTG\9\16MORX9\16MJIC\ST
4	3800675	2	FTG\7\8MORX3\4MJIC\45
5	3900032	1	MOTOR\HYD\22.6\H
6	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER



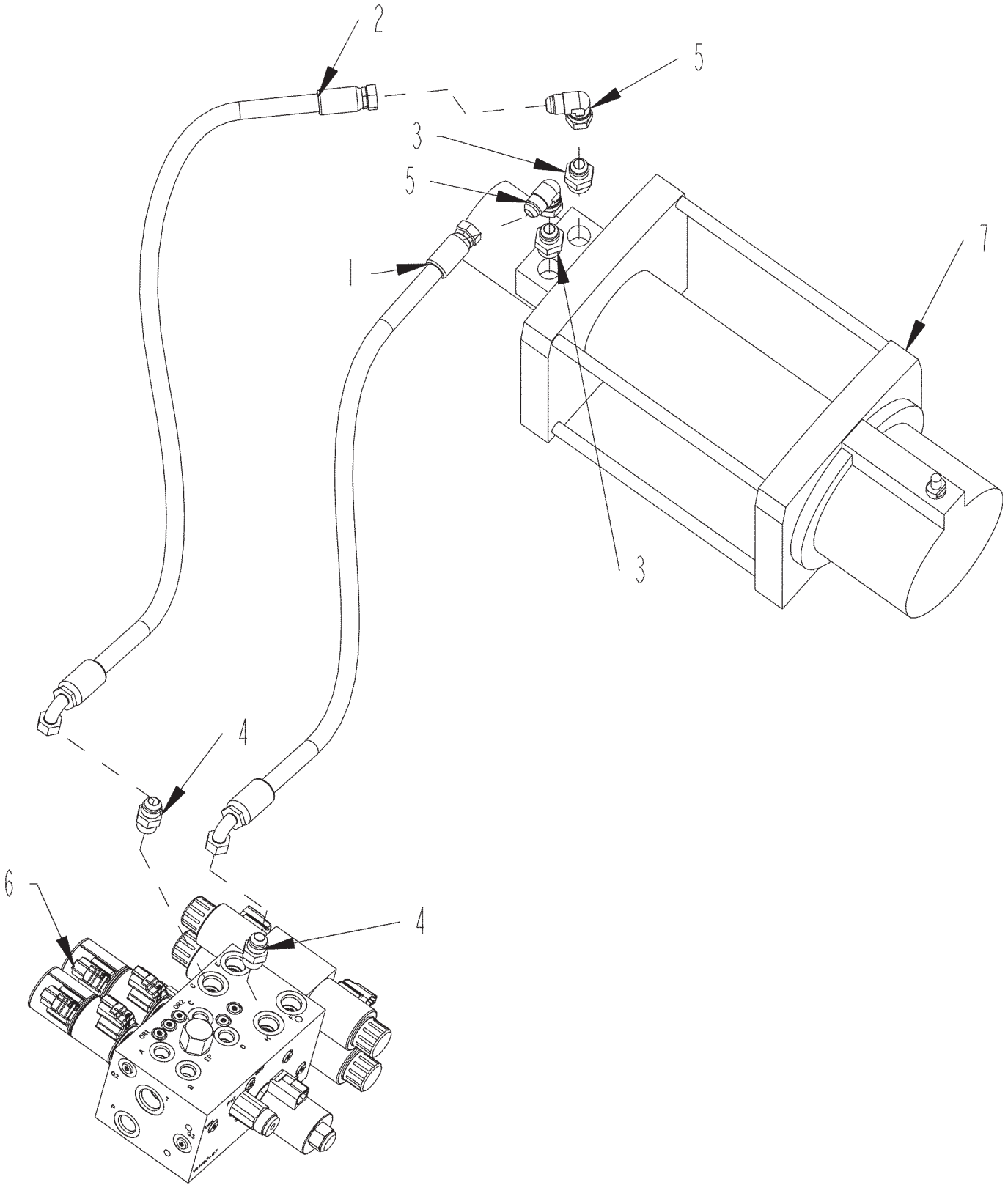
# HYDRAULIC CYLINDER ASSEMBLY



## HYDRAULIC CYLINDER ASSEMBLY

ITEM	PART	QTY.	PART DESCRIPTION
1	3701005	1	HOSE\HYD\3\8X28\9\16FJICSX9\16FJIC90 VALVE D TO CYLINDER BOTTOM LIFT
2	3701006	1	HOSE\HYD\3\8X33\9\16FJICSX9\16FJIC90 VALVE C TO CYLINDER TOP LIFT
3	3800453	2	FTG\3\4MORX9\16MJIC\90
4	3800631	2	FTG\9\16MORX9\16MJIC\ST
5	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER
6	4100262	1	CYL\HYD\2X12\1-1\4TUBE

# GATHERING WINCH HYDRAULICS (OPTION)

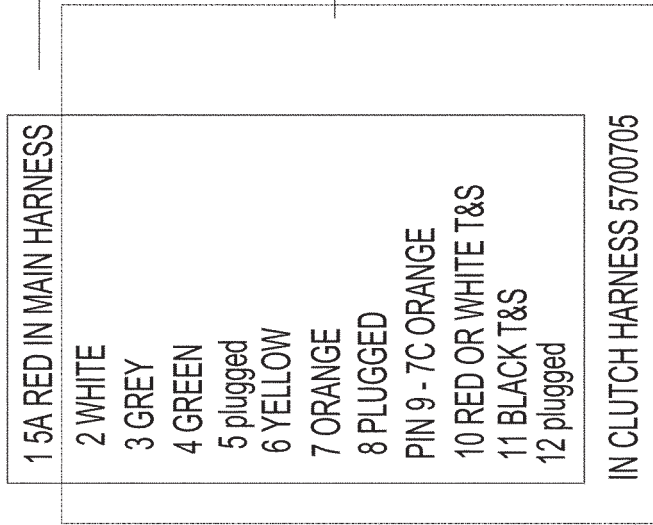


## GATHERING WINCH HYDRAULICS (OPTION)

ITEM	PART	QTY.	PART DESCRIPTION
1	3701007	1	HOSE\HYD\1/2X35\3/4FJICSX3/4FJIC90 FROM VALVE H TO MOTOR WINCH FRONT
2	3701008	1	HOSE\HYD\1/2X37\3/4FJICSX3/4FJIC90 FROM VALVE G TO MOTOR WINCH REAR
3	3800328	2	FTG\7/8MORX3/4MJIC\ADPT
4	3800477	2	FTG\3/4MORX3/4MJIC\ST
5	3800546	2	FTG\3/4MJICX3/4FJIC\90\SW
6	4000403	1	VLV\MANIFOLD\ASSY\CHIPPER
7	5800035	1	WINCH\HYD\9000#

# 5700705 HPTO HARNESS, chipper

## CLUTCH 12 PIN CONNECTOR



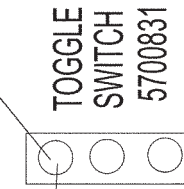
5A RED - MAIN

SPLICE 4B GREEN TO 251 GREEN IN MAIN HARNESS

- ENGINE RPM SENSOR  
5700682
- 10 RED (or WHITE) PIN, #1
- 11 BLACK, PIN, #2
- BARE METAL SHIELD DRAIN, PIN #3
- PRESSURE SWITCH  
5700957
- SOLENOID  
5700595
- 6 YELLOW 2 PIN DTZ PLUG "2"
- 7B ORANGE 2 PIN DTZ PLUG "1"
- 3 GREY 2 PIN DTZ PLUG "2"
- 4A GREEN 2 PIN DTZ PLUG "1"

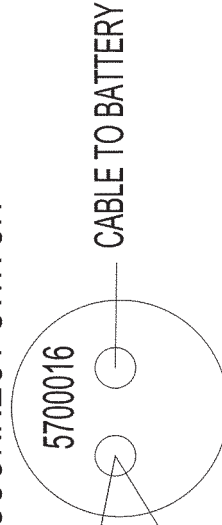
START

07A ORANGE



101B VIOLET  
101S VIOLET  
5B RED

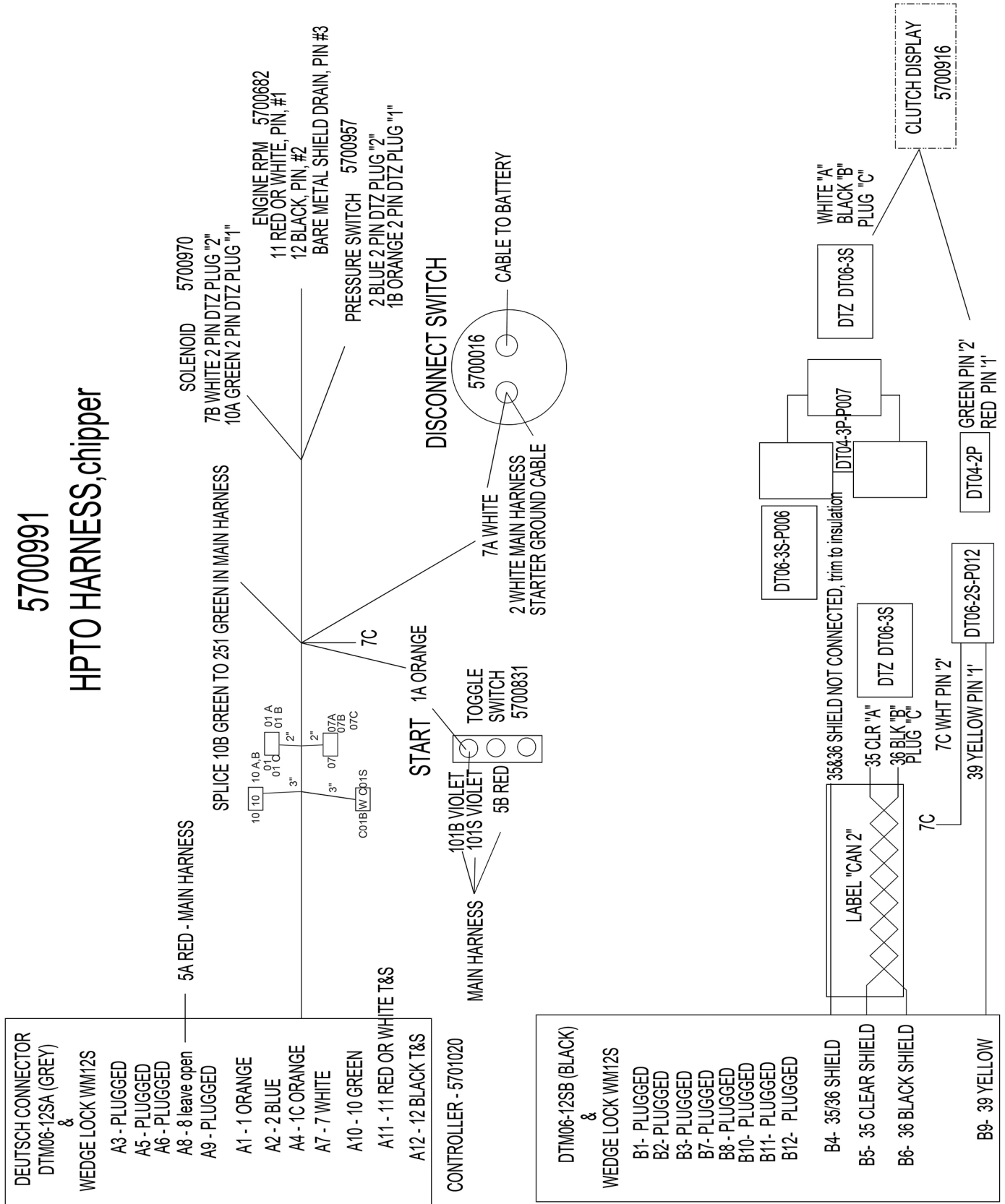
DISCONNECT SWITCH



2 WHITE  
2 WHITE MAIN HARNESS  
STARTER GROUND CABLE

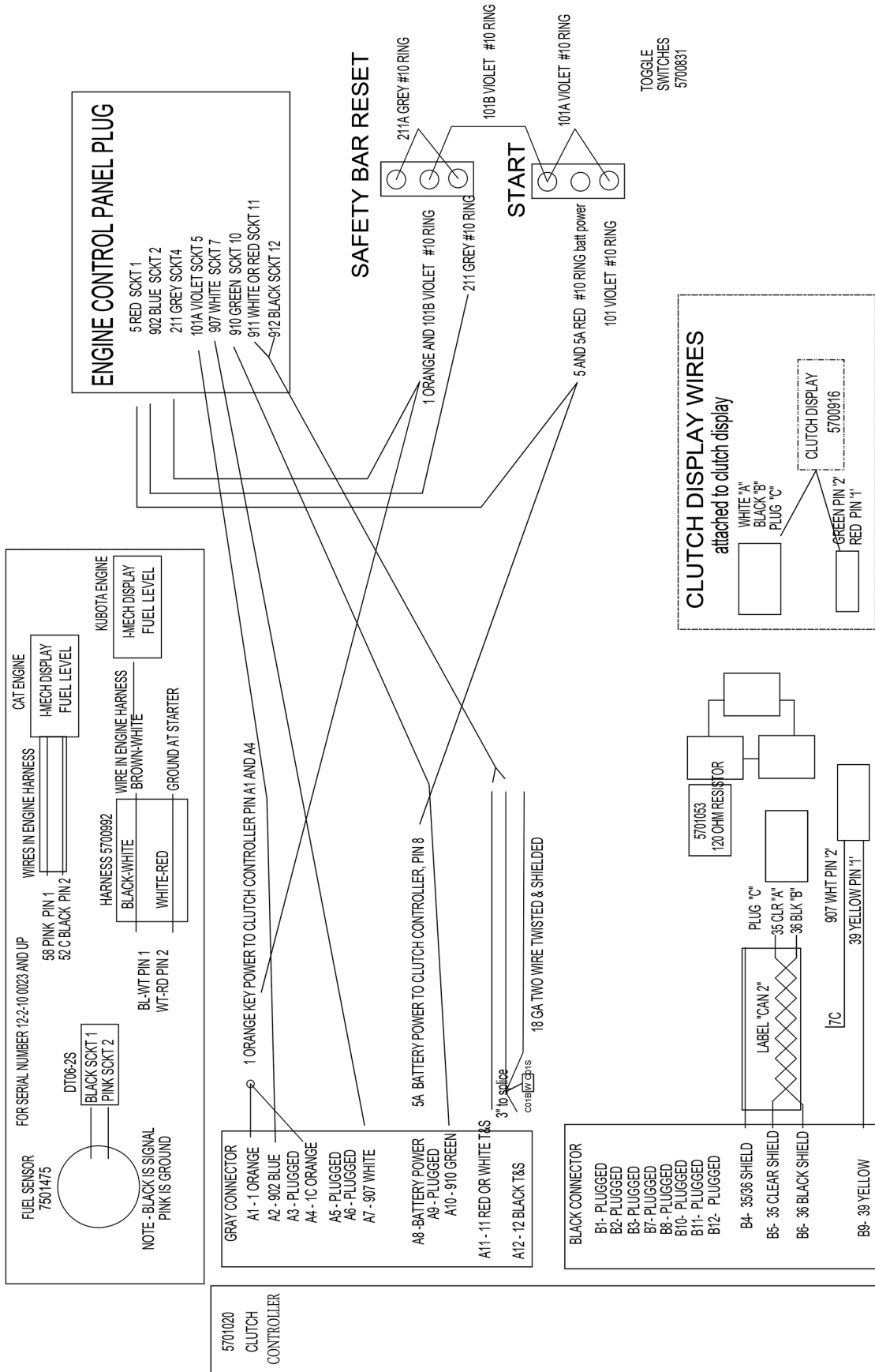
CABLE TO BATTERY

# 5700991 HPTO HARNESS, chipper

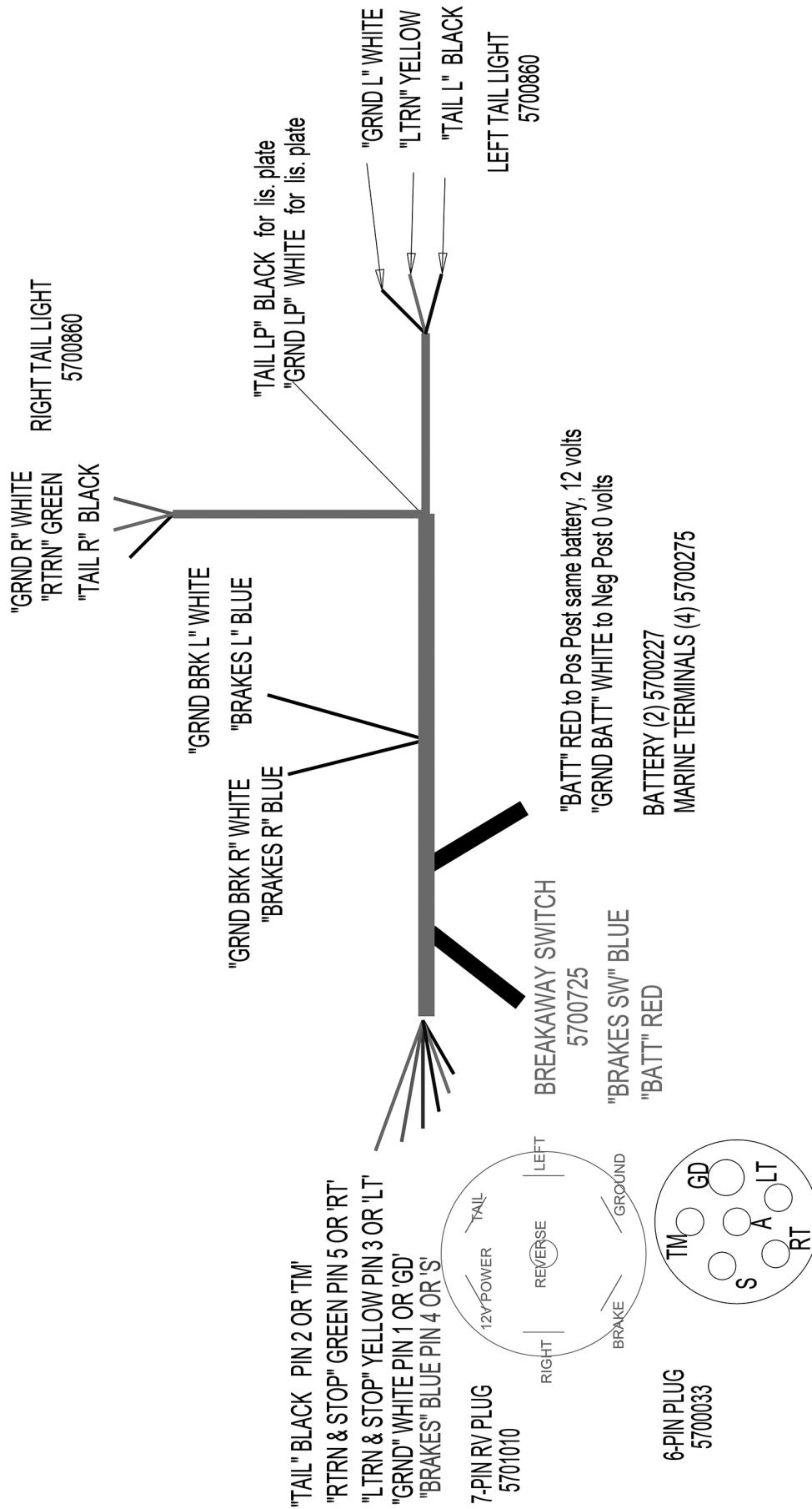




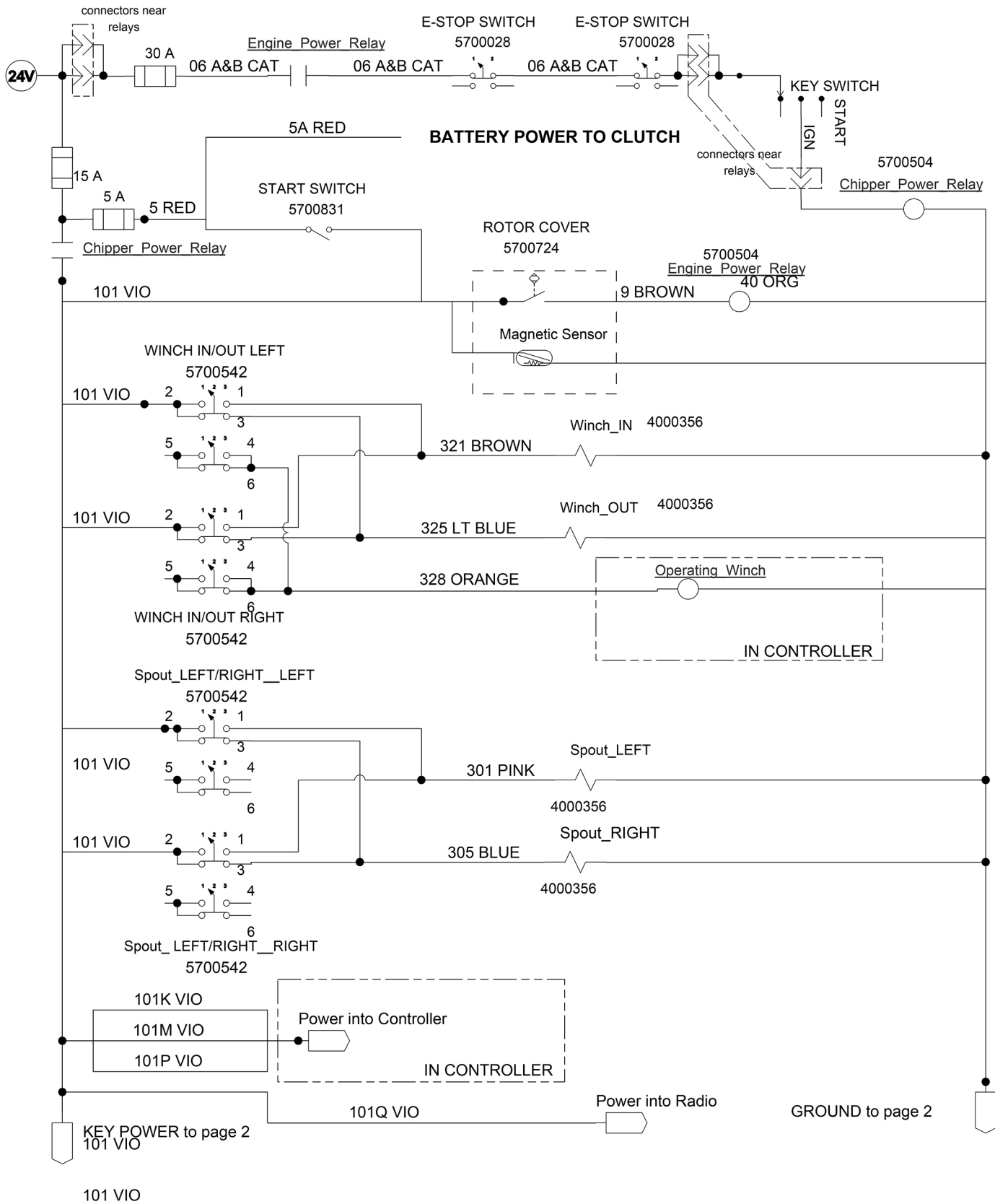
# ENGINE CONTROL PANEL FOR DURATECH HARNESS 5701143



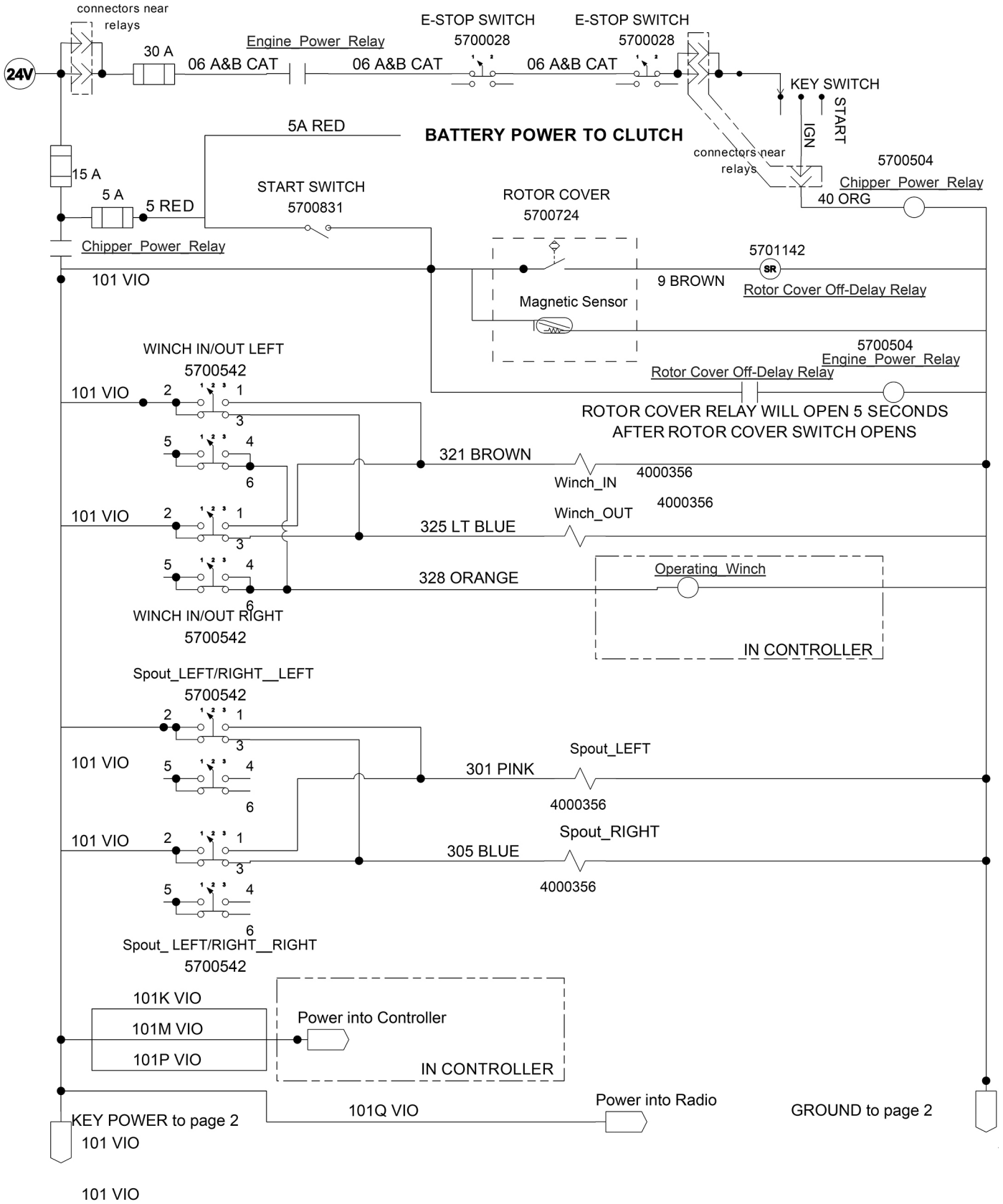
5700706 MACHINE WIRING HARNESS



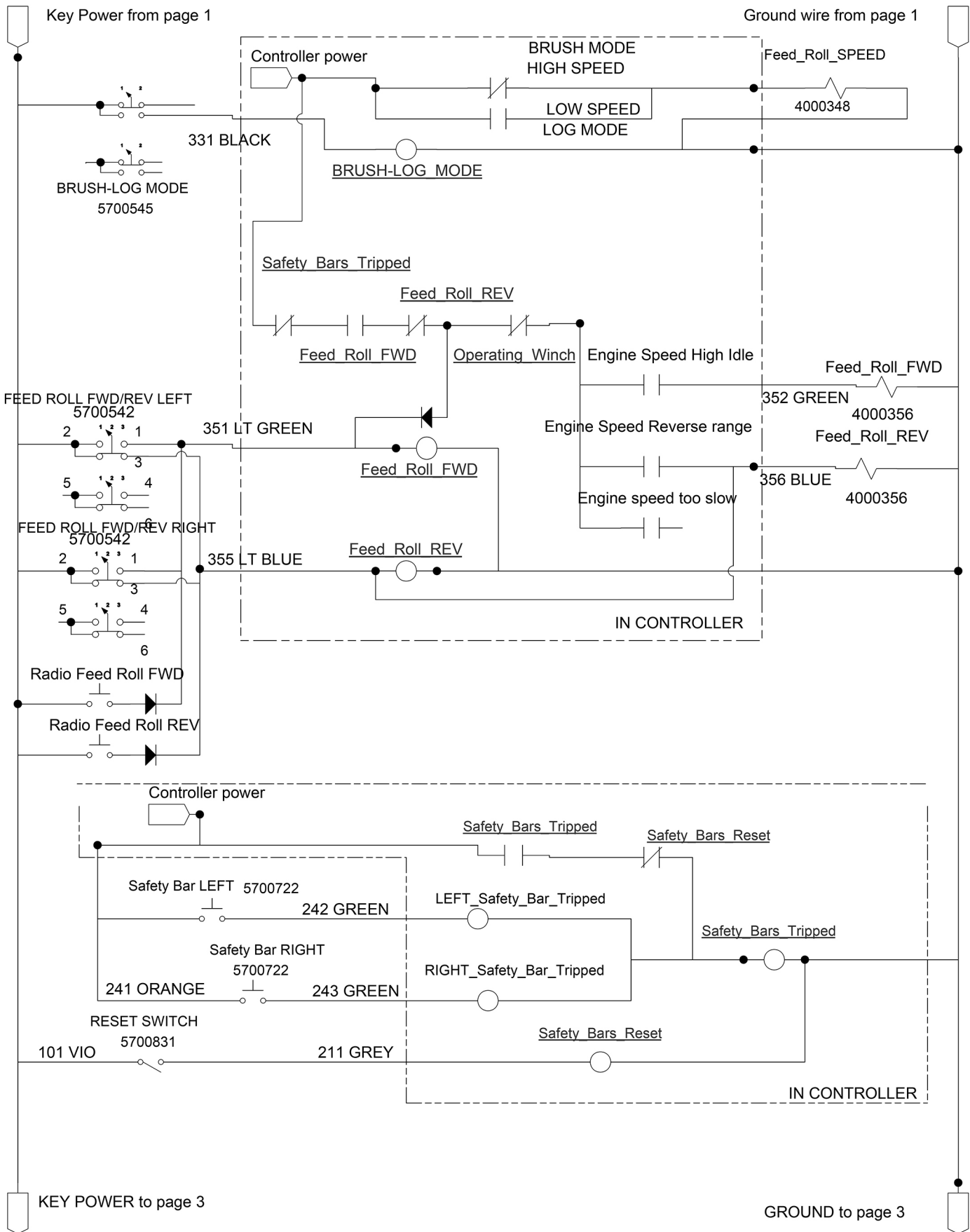
# ELECTRICAL SCHEMATIC #1 (FOR SN UP TO 0043)



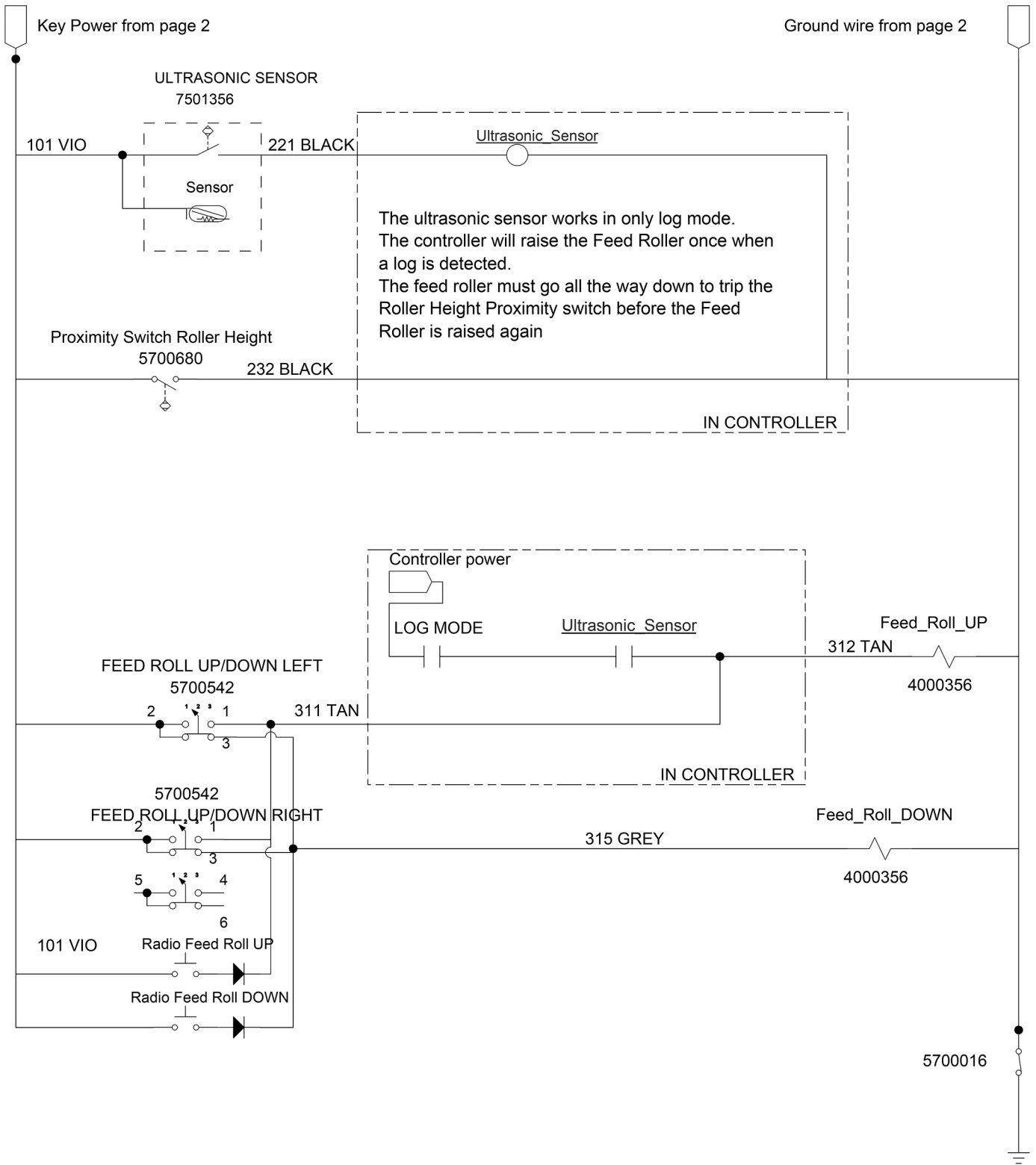
**ELECTRICAL SCHEMATIC #1 (FOR SN 0044 AND UP)**



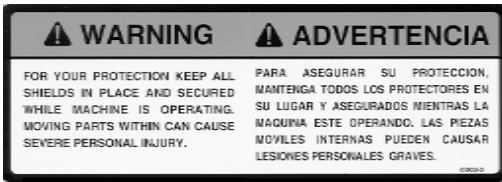
## ELECTRICAL SCHEMATIC #2



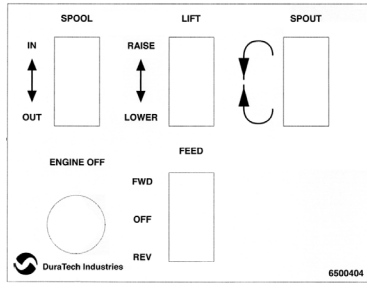
# ELECTRICAL SCHEMATIC #3



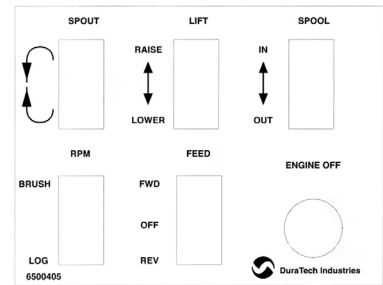
**DECALS**



6500040



6500404



6500405



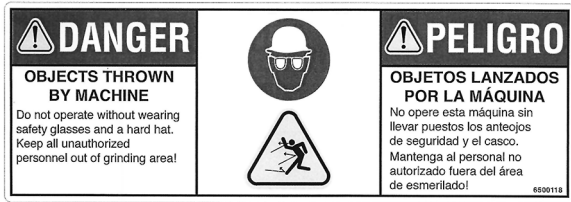
6500082



6500445



6500446



6500118



6500448

**DIESEL FUEL**

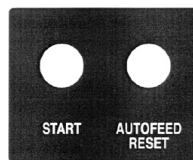
6500123



6500447



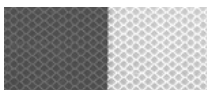
6500221



6500449



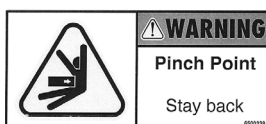
6500445



6500245

**TC-12**

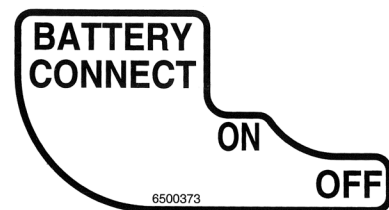
6500454



6500339



6500253



6500373



**DECALS**

PART	QTY.	PART DESCRIPTION
<b>6500444</b>		<b>DECAL\KIT\TC-12</b>
6500040	2	DECAL\WARN\SHIELD\PROT
6500082	2	DECAL\WARN\ROTATN;PART;>
6500118	2	DECAL\DNGR\OBJECTS;THROWN
6500123	1	DECAL\INFO\DIESEL;FUEL
6500221	2	DECAL\WARN\THROWN;OBJCTS
6500224	2	DECAL\LOGO\DURA\4-3/4\SIL
6500245	5.5 ft	DECAL\TAPE\REFL\RED\WHT
6500253	1	DECAL\INFO\FLUID;LEVEL\INDICATOR\
6500339	2	DECAL\WARN\PINCH;POINT
6500373	1	DECAL\INFO\BATT;DISC
6500404	1	DECAL\PNL\CNTRL\LEFT\CHIPPER
6500405	1	DECAL\PNL\CNTRL\RIGHT\CHIPPER
6500425	2	DECAL\WARN\FIRE\PREVENT
6500445	2	DECAL\DNGR\CHUTE\INFEED
6500446	2	DECAL\DNGR\LOCK\DISC\CHIPPER
6500447	2	DECAL\DNGR\TURNING\CHIPPER
6500448	1	DECAL\DNGR\FLUID\STARTING
6500449	1	DECAL\START\AUTOFEED
6500454	2	DECAL\LOGO\TC-12
6500455	2	DECAL\LOGO\DURATECH\3"
6500529	1	DECAL\notice\switch\proximity
6500537	1	DECAL\BRAKE\ELEC\PULL\BUMPER
7500933		PAINT\BLUE\SPRAY\MET
7500984		PAINT\BLUE\GALLON

**PRODUCED UNDER  
U.S. PATENT NO.  
7,954,736**

6500478

## NOTICE

### Proximity Switch Check

5mm (3/16") clearance between sensor and magnet.

Sensor is properly rotated with the polarity of the magnet.

Yellow LED light will illuminate when sensor and magnet are aligned.

6500529

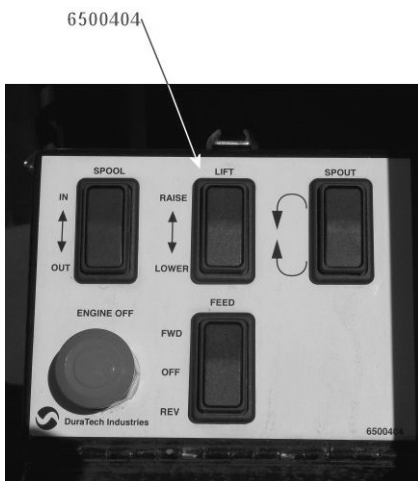
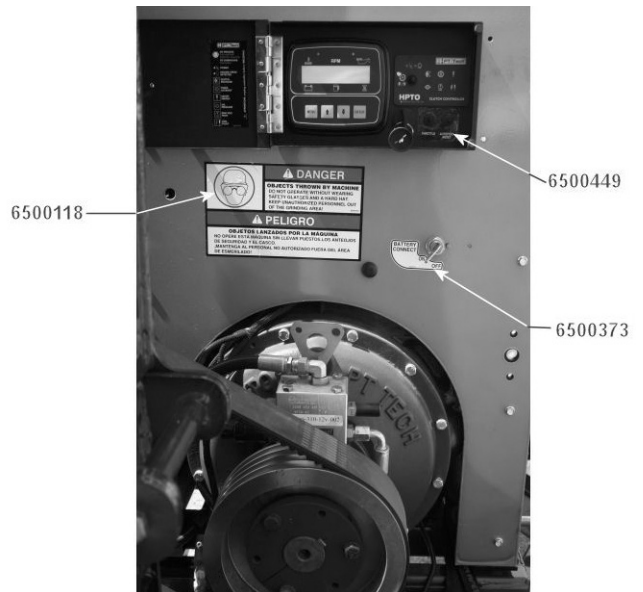
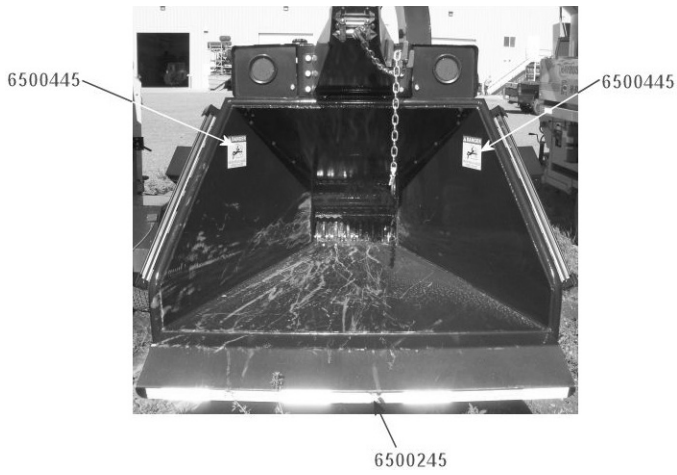
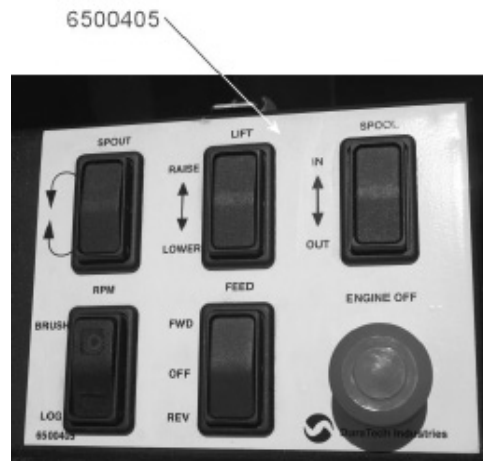
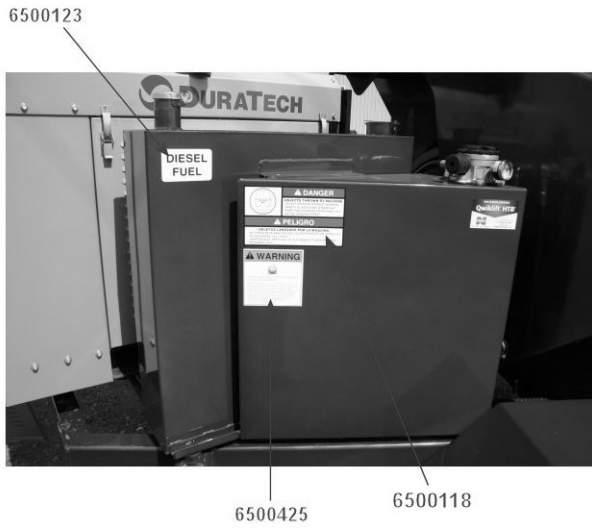
6500529

⚠ WARNING	⚠ WARNING	⚠ WARNING	⚠ WARNING	⚠ WARNING
Misrouting will cause trailer to come loose from tow vehicle. You must: 1. CHECK that ball LOAD RATING is same as or greater than coupler LOAD RATING. 2. CHECK that ball SIZE is same as coupler. 3. CLOSE COUPLER CLAMP on ball. 4. LIFT coupler upwards to test that it will not separate from ball. 5. LOCK coupler clamp with pin or padlock.	ALWAYS use safety chains. Chains hold trailer if connection fails. You must: 1. CROSS chains underneath coupler. 2. ALLOW slack for trailer to turn. 3. ATTACH chain hooks securely to tow vehicle frame.	Trailer can roll if it comes loose. Electric safety brakes apply when cable pulls pin out of switch box. 1. PULL handle to get pin out of switch box. 2. CHECK brake by PULLING TRAILER with tow vehicle. 3. ATTACH pin CABLE to tow vehicle so pin will be pulled out if tow vehicle stops. 4. Promptly REPLACE pin in switch box.	Lights can prevent trailer from being hit by other vehicles. You must: 1. CONNECT trailer and tow vehicle electrical connectors. 2. CHECK all lights: tail lights, turn signal, and brake lights. 3. DO NOT TOW if lights are not working.	Tire, wheel or lug nut failure can cause loss of control. Before towing, you must CHECK: 1. Tire pressure and tread. 2. Tires and wheels for damage. 3. Lug nuts for tightness. For new and remounted wheels, re-tighten lug nuts at the first 10, 25 and 50 miles of driving.

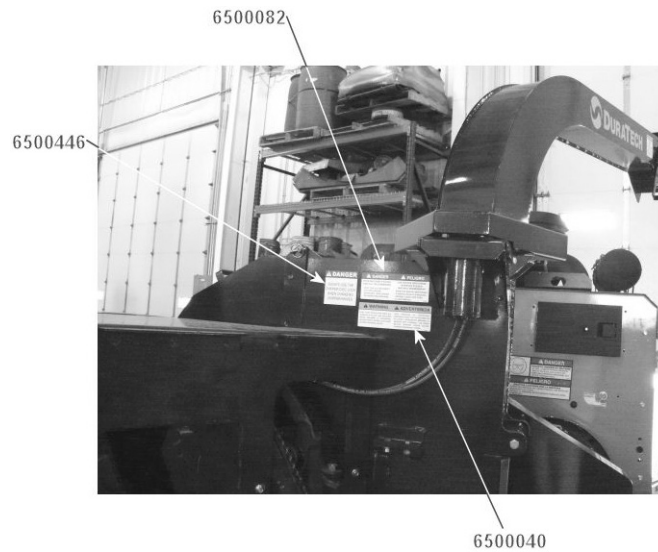
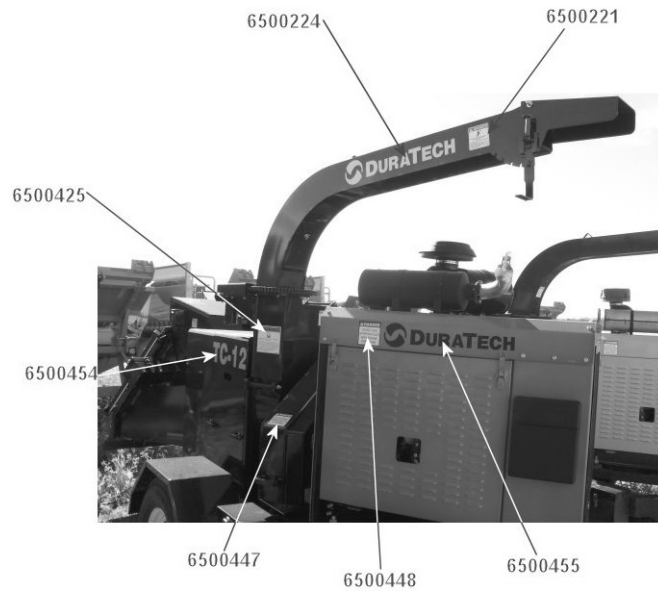
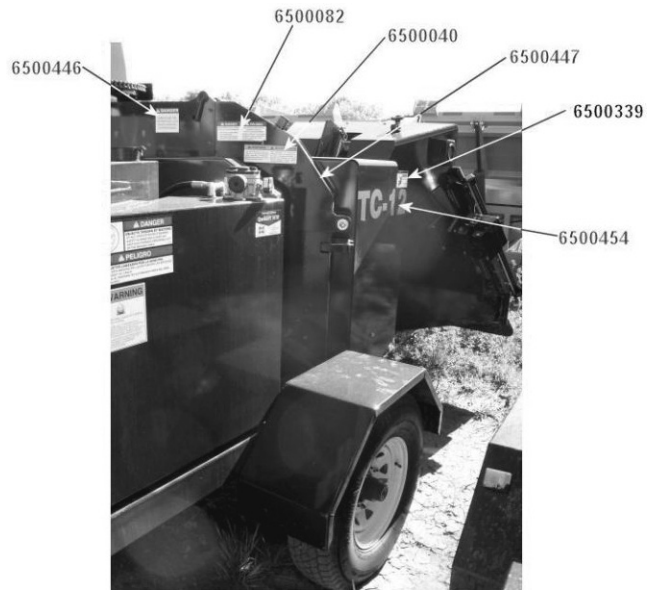
6500537



# DECAL LOCATIONS



# DECAL LOCATIONS





## TC-12 Documentation Comment Form

DuraTech Industries welcomes your comments and suggestions regarding the quality and usefulness of this manual. Your comments help us improve the documentation to better meet your needs.

- Did you find any errors?
- Is the information clearly presented?
- Does the manual give you all the information you need to operate the equipment safely and effectively?
- Are the diagrams and illustrations correct?
- Do you need more illustrations?
- What features do you like most about the manual? What features do you like least?

If you find errors or have specific suggestions, please note the topic, chapter and page number.

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Thank you for taking the time to help us improve our documentation.

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[www.duratechindustries.net](http://www.duratechindustries.net)

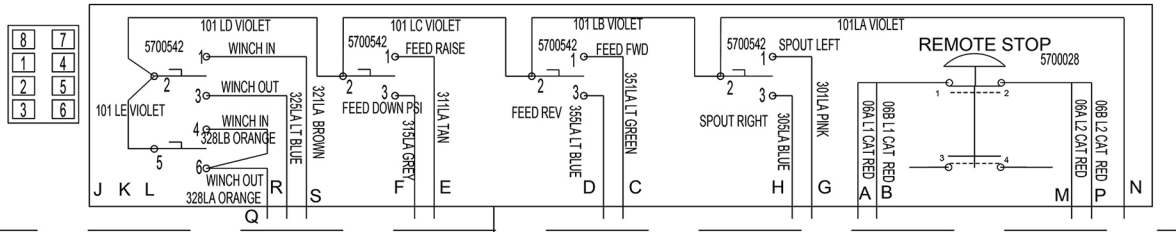
Send your comments to:

DuraTech Industries International, Inc.  
P.O. Box 1940  
Jamestown, ND 58402-1940

**APPENDIX C SCHEMATIC FOLDOUTS**



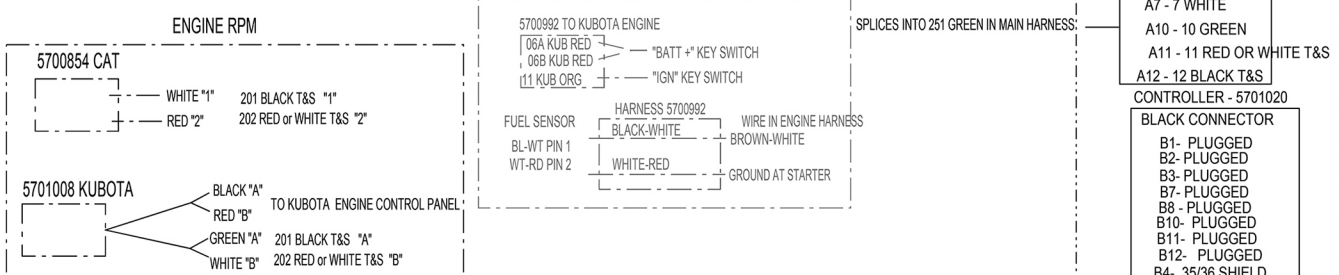
### 5700932 LEFT CONTROL BOX



### 5700912 harness X11 DVC710

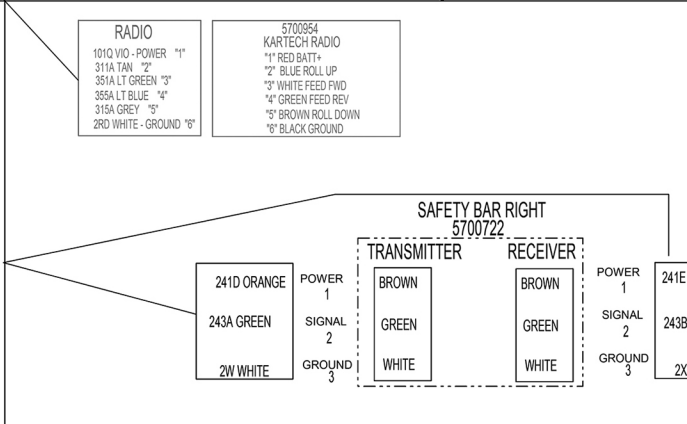
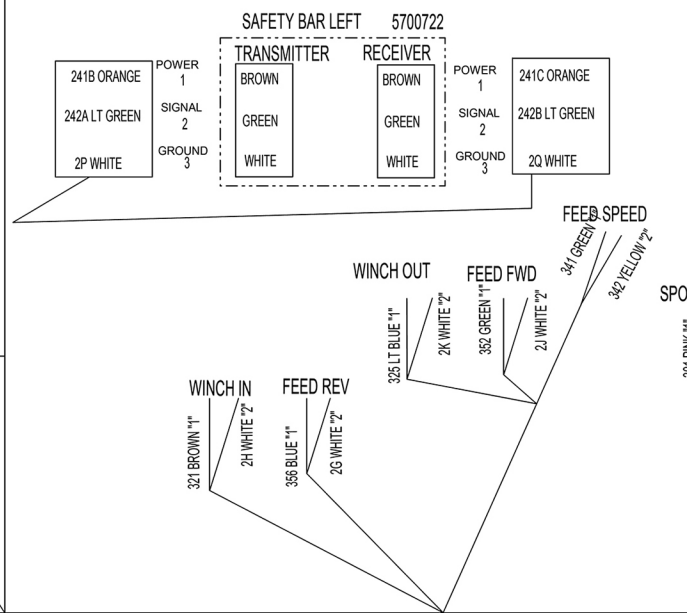
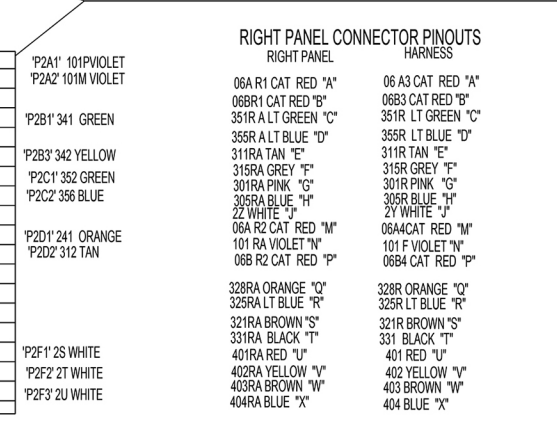
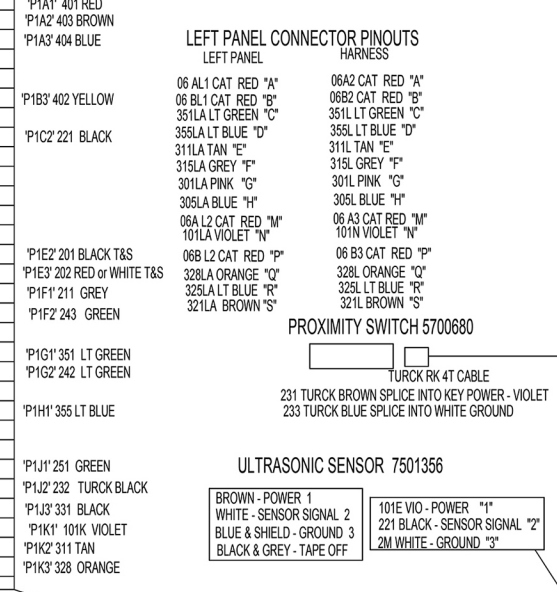
2/18/2010 REV 0  
 5/18/2010 REV A FIRST PRODUCTION RELEASE. ADDED PWR RELAY2, ROTOR COVER SW, START SW, RENAMED CAT WIRES  
 6/18/2010 REV B DELETED 15AMP RED WIRE, KEEP 15 AMP FUSE  
 7/15/2010 ADDED FUEL GAUGE  
 02/08/2011 REV D ADDED RADIO CONNECTOR, FUEL GAUGE MOVED INTO DISPLAY PANEL, ADDED KUBOTA INFORMATION

### 5700930 MACHINE PORTION

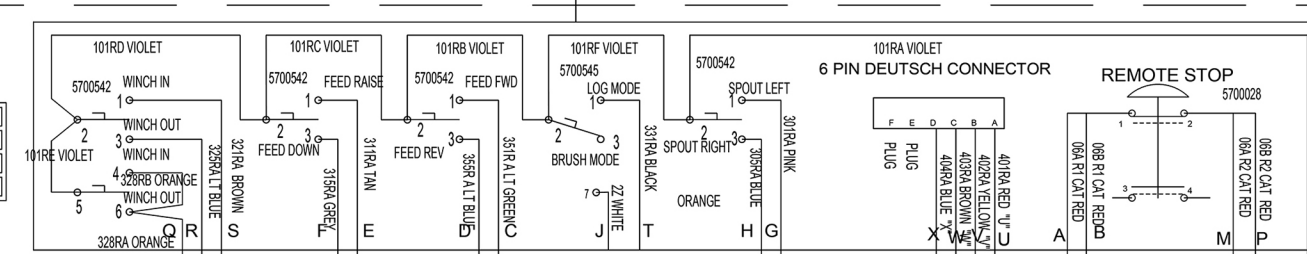


- HARNESS 5700991  
 CLUTCH (2) 12 PIN CONNECTOR  
 GREY CONNECTOR  
 A3 - PLUGGED  
 A5 - PLUGGED  
 A6 - PLUGGED  
 A8 - 8 leave open  
 A9 - PLUGGED  
 A1 - 1 ORANGE  
 A2 - 2 BLUE  
 A4 - 1C ORANGE  
 A7 - 7 WHITE  
 A10 - 10 GREEN  
 A11 - 11 RED OR WHITE T&S  
 A12 - 12 BLACK T&S  
 CONTROLLER - 5701020  
 BLACK CONNECTOR  
 B1 - PLUGGED  
 B2 - PLUGGED  
 B3 - PLUGGED  
 B7 - PLUGGED  
 B8 - PLUGGED  
 B10 - PLUGGED  
 B11 - PLUGGED  
 B12 - PLUGGED  
 B4 - 35/36 SHIELD  
 B5 - 35 CLEAR SHIELD  
 B6 - 36 BLACK SHIELD  
 B9 - 39 YELLOW

- DVC 710 CONTROLLER  
 5700723  
 P1
- |    |                |      |                      |
|----|----------------|------|----------------------|
| A1 | RS232 TXD      | P1A1 | 401 RED              |
| A2 | RS232 RXD      | P1A2 | 403 BROWN            |
| A3 | RS232 RTS      | P1A3 | 404 BLUE             |
| B1 | CAN 0 HIGH     |      |                      |
| B2 | CAN 0 LOW      |      |                      |
| B3 | SIG COM        | P1B3 | 402 YELLOW           |
| C1 | CAN 1 HIGH     |      |                      |
| C2 | UNI IN 1       | P1C2 | 221 BLACK            |
| C3 | SIG COM        |      |                      |
| D1 | CAN 1 LOW      |      |                      |
| D2 | UNI IN 2       |      |                      |
| D3 | SIG COM        |      |                      |
| E1 | 5 V REF OUTPUT | P1E2 | 201 BLACK T&S        |
| E2 | UNI 3          | P1E3 | 202 RED or WHITE T&S |
| E3 | SIG COM        | P1F1 | 211 GREY             |
| F1 | DIG IN 1       | P1F2 | 243 GREEN            |
| F2 | ANA IN 1       |      |                      |
| F3 | SIG COM        |      |                      |
| G1 | DIG IN 2       | P1G1 | 351 LT GREEN         |
| G2 | ANA IN 2       | P1G2 | 242 LT GREEN         |
| G3 | SIG COM        |      |                      |
| H1 | DIG IN 3       | P1H1 | 355 LT BLUE          |
| H2 | ANA 3          |      |                      |
| H3 | SIG COM        |      |                      |
| J1 | DIG IN 4       | P1J1 | 251 GREEN            |
| J2 | DIG IN 5       | P1J2 | 232 TURCK BLACK      |
| J3 | DIG IN 6       | P1J3 | 331 BLACK            |
| K1 | +POWER IN      | P1K1 | 101K VIOLET          |
| K2 | DIG IN 7       | P1K2 | 311 TAN              |
| K3 | DIG IN 8       | P1K3 | 328 ORANGE           |



- P2
- |    |           |      |             |
|----|-----------|------|-------------|
| A1 | +POWER IN | P2A1 | 101P VIOLET |
| A2 | +POWER IN | P2A2 | 101M VIOLET |
| A3 | V OUT 1   |      |             |
| B1 | HS OUT 1  | P2B1 | 341 GREEN   |
| B2 | HS OUT 2  |      |             |
| B3 | PWM OUT 1 | P2B3 | 342 YELLOW  |
| C1 | HS OUT 3  | P2C1 | 352 GREEN   |
| C2 | HS OUT 4  | P2C2 | 356 BLUE    |
| C3 | PWM OUT 2 |      |             |
| D1 | HS OUT 5  | P2D1 | 241 ORANGE  |
| D2 | HS OUT 6  | P2D2 | 312 TAN     |
| D3 | PWM OUT 3 |      |             |
| E1 | POWER COM |      |             |
| E2 | V OUT 2   |      |             |
| E3 | V OUT 3   |      |             |
| F1 | POWER COM | P2F1 | 2S WHITE    |
| F2 | POWER COM | P2F2 | 2T WHITE    |
| F3 | POWER COM | P2F3 | 2U WHITE    |



### 5700931 RIGHT CONTROL BOX

