



Tromax 6012

Trommel Screening System

Operating Instructions and Parts Reference





Foreword

All personnel must read and understand before operating unit

DuraTech Industries International Inc. has made every effort to assure that this manual completely and accurately describes the operation and maintenance of the Tromax 6012 trommel screen 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 Industries 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.

Appropriate use of the unit

The DuraTech Industries Tromax 6012 trommel screen incorporates a proprietary design allowing the feed of materials of a wide variety. The trommel screen unit was designed for sizing and separating most organic material, including compost, wood waste, ground-up construction and demolition debris, many types of soils, and salt. However, it is NOT designed to screen aggregates such as rock and gravel.

Operator protection

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

Operators of the trommel screen are required to wear head, eye, and ear protection. No loose clothing is allowed.





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Tromax 6012

Trommel Screening System

Part 1: Operating Instructions



Section 1: How to use this manual

1.1 Manual organization

This manual is organized into the following parts:

- **Part 1: Operating Instructions** explains how to set up, use and maintain the Tromax 6012 trommel screen unit.
- **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.

1.2 Dealer responsibilities

- Thoroughly review Section 2, “Dealer Preparation,” and perform the tasks outlined. Note that this section makes reference to other sections of the manual pertaining to operation and engine maintenance.
- Upon delivery of the unit to the customer, it is your responsibility to conduct a training session in the safe operation of the unit for the primary operator(s). You must also conduct a “walk-around” inspection of all safety instructional decals on the machine itself. Decals are illustrated in **Part 2: Parts Reference**.

When you are satisfied that the primary operators have read the operating instructions, and understand all information concerning the safe operation of the unit, sign and return the User Training Verification Form found in Appendix D. Note that this form requires both your signature and the signatures of up to four primary operators.

- Complete and return the Delivery Notification Form found in Appendix C. Receipt of this form is required to activate the warranty. Appendix A provides details of the warranty.



SECTION 1: HOW TO USE THIS MANUAL

1.3 Operator responsibilities

- Review Section 2: Dealer Preparation, to verify that the machine has been prepared for use.
- Note the important safety information in the Foreword and in Section 4, “Safety.”
- Thoroughly review sections 3 through 5, which explain normal operation of the machine, and sections 6 and 7, which explain maintenance requirements. These sections will function as your textbook during the dealer-conducted training course that is required before you can use the unit.

When all primary operators have read the operating instructions, and understand all information concerning the safe operation of the unit, you will be required to sign the User Training Verification Form found in Appendix D. Note that this form requires both the dealer signature and the signatures of up to four primary operators. The dealer is responsible for returning the signed form to DuraTech Industries.

- Manuals for the Isuzu engine and certain other third-party components are provided separately. You should also be familiar with their contents.
- Keep copies of all manuals in a readily-accessible location for future reference.



Section 2: Dealer Preparation

Some setup will be required when the machine is shipped overseas in a freight container. See section 2.4, “Assembly after container shipping,” for instructions.

As each task in the following sections is performed, check or initial the adjacent box. Perform repairs or adjustments as needed.

2.1 Predelivery inspection

- Perform a thorough predelivery inspection of the Tromax 6012 trommel screen unit.
- Lubricate all bearings. Refer to Section 7.3, “Bearing and chain lubrication.”
- Check engine oil level. Refer to Section 6.2, “Engine lubrication requirements,” and to the Isuzu engine operation and maintenance manual.
- Check engine coolant level. Refer to Section 6.3, “Engine coolant requirements,” and to the Isuzu engine operation and maintenance manual.
- Check battery electrolyte levels and verify that cable connections are secure.
- Check hydraulic fluid level. Refer to Section 7.4, “Hydraulic system.” The hydraulic system includes a pressure relief valve that is preset at the factory; it should not require further adjustment.
- Check diesel fuel level. Refer to Section 6.1, “Diesel fuel requirements,” and to the Isuzu engine operation and maintenance manual.
- Check that there are no fuel or hydraulic leaks.
- Check barrel drive chains for alignment.
- Check that all shields are in place.
- Check that brushes are adjusted so bristles are approximately 1/8 inch into the screens.
- Check tightness of hitch mounting bolts and verify that cotter pins are installed.
- Check electric brakes for proper operation.
- Check tires for proper inflation pressure (125 psi cold).



2.2 Engine operation check

- Start the engine and check for normal operation. Refer to Section 5.5, “Operation and care of a new engine,” and to the Isuzu engine operation and maintenance manual.

If the engine fails to start, refer to Section 5.7, “If the engine fails to start.” DO NOT use starting aids such as ether.

The engine will automatically shut down if it overheats or if engine oil pressure is inadequate. If this happens, refer to Section 5.9, “Automatic engine shutdown system.”

- Test throttle operation. Refer to Section 5.8, “Throttle operation.” Observe engine break-in recommendations in Section 5.5, “Operation and care of a new engine.”

2.3 Trommel screen operation check

- Check that the stripper blades on the barrel clear the stripper sheets.
- Check that the barrel drive chain is running in alignment with sprockets and the idler.
- Start the trommel screen and check for normal operation. Refer to Section 5.10, “Starting the trommel screen.”

2.4 Assembly after container shipping

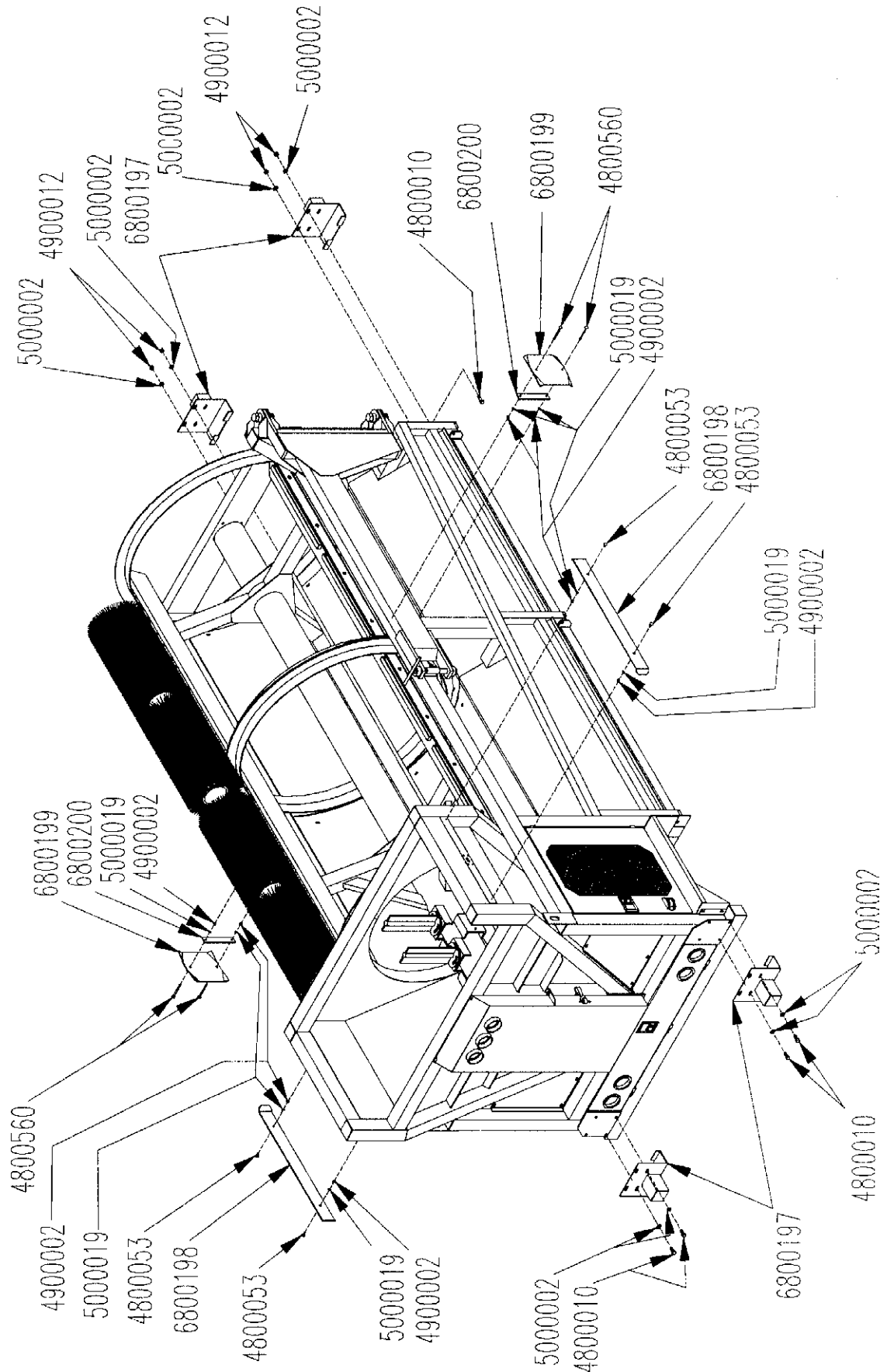
To assemble the unit after container shipping, perform these steps:

1. Hoist the Tromax 6012 trommel screen and place on blocking of sufficient height for removal of skid plates and installation of jacks (Part No. 6800186).
2. Remove all shipping skids shown on Fig. 2.1 on the following page.
3. Install all four jacks using 5/8” x 2” bolts (Part No. 4800010) to secure to the frame. Refer to Fig. 2.2 for proper orientation.
4. Install the coupling shaft assembly between the jack operating shafts. Measure the amount of extension on the jacks and equalize them before installing the coupling shaft assembly. The trommel will not be level if jacks are not equalized.
5. Install the wheel frame under the trommel frame. Raise the frame with the jacks if necessary. Secure wheel frame with 1/2” x 1-1/4” bolts (Part No. 4800018).
6. Connect the electric brake wiring from the axle to the wiring harness.
7. Install two clearance lights (Part No. 5700037) on upper part of hopper using pop rivets provided (Part No. 4800335). For locations, refer to Fig. 2.2 on the following page.
8. Connect clearance lights to wiring harness.



SECTION 2: DEALER PREPARATION

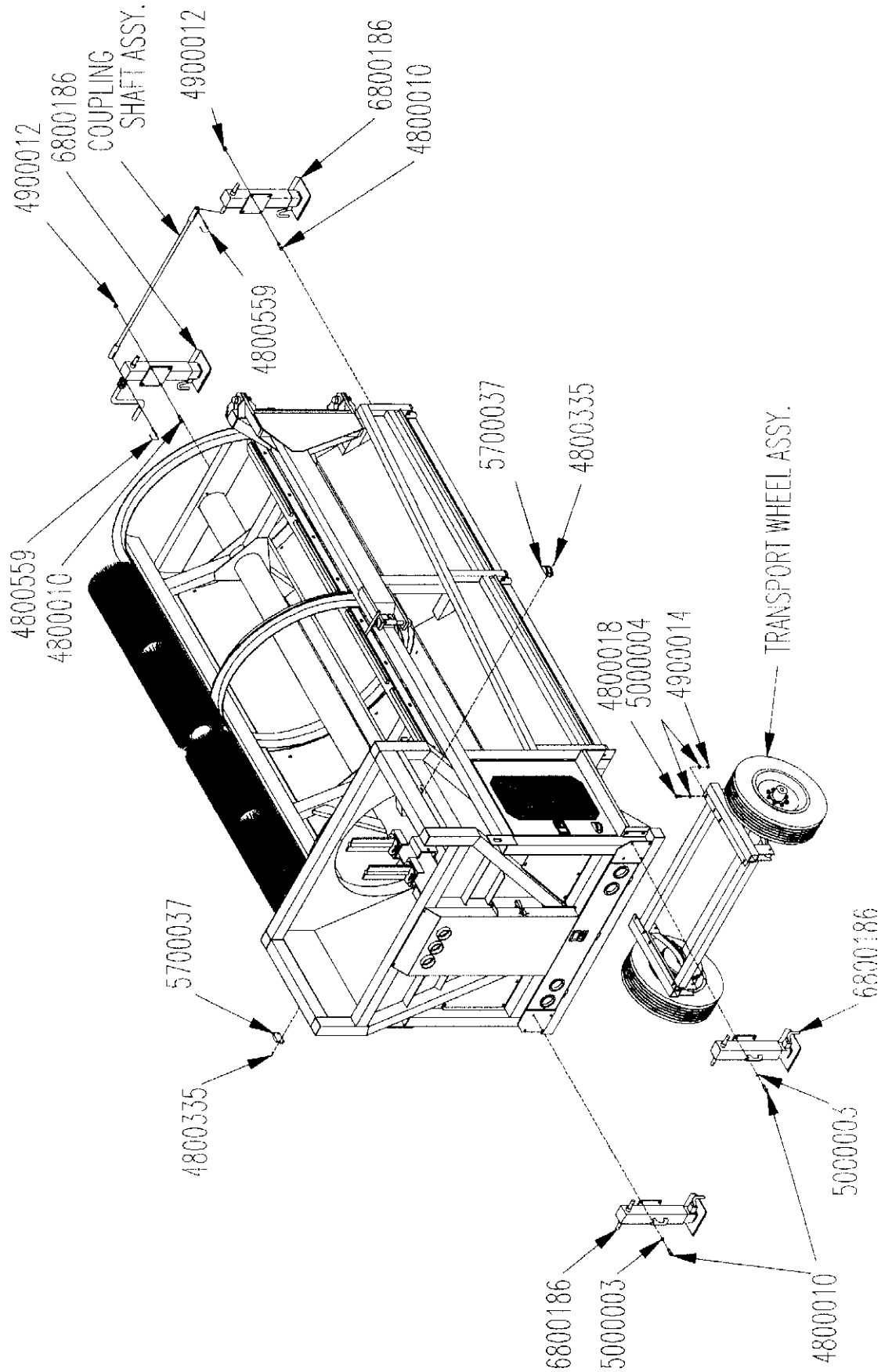
**Figure 2.1
Assembly diagram**





SECTION 2: DEALER PREPARATION

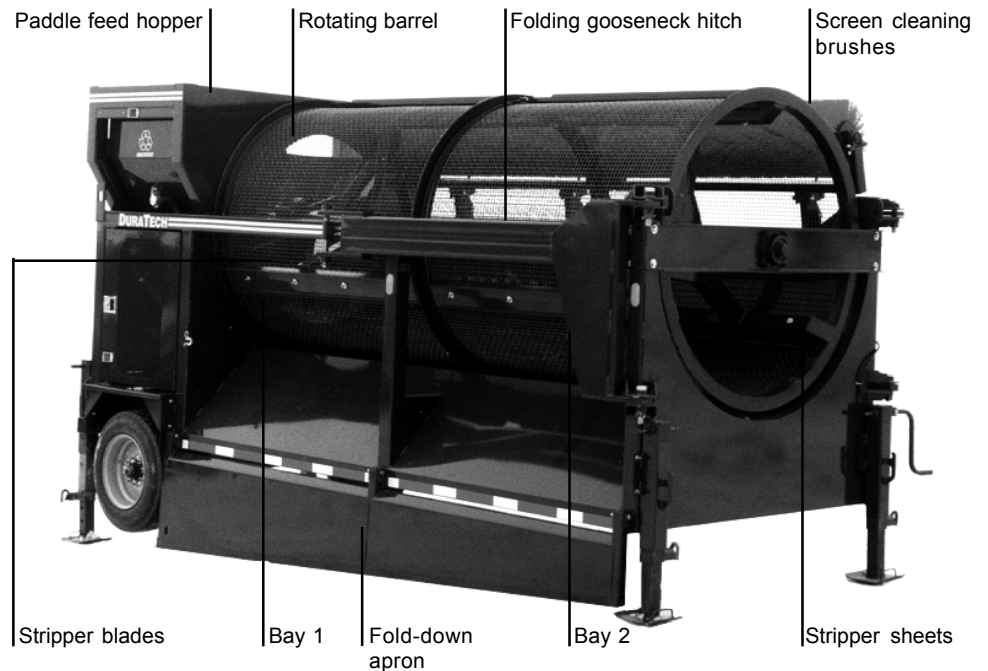
Figure 2.2
Assembly diagram





Section 3: Introduction

Figure 3.1
Unit overview



3.1 Description of the Tromax 6012 trommel screen

The Tromax 6012 trommel screen unit was designed and developed to provide a mechanism for sizing and separating most organic type material including compost, wood waste, ground-up construction and demolition debris, many types of soils, and salt. However, it is not designed to screen aggregates such as rock and gravel. The design incorporates a number of basic features including the rotating barrel itself, the stripper blades affixed to the outside of the rotating barrel, the stripper sheets located beneath the barrel, the paddle feed hopper, the fold down apron, and the screen cleaning brushes.

Material is fed into the hopper of the unit by an appropriate means, such as a small wheel loader, a large skid loader, or a conveyor. Paddles in the hopper act to feed the material into the rotating barrel. Due to the acute angle of the barrel, material feeds towards the discharge end of the barrel. During this transition from the feed to the discharge end, material fraction is sifted through the screens and subsequently is pushed off the stripper sheets by the stripper blades which are attached to the rotating periphery of the barrel. When equipped with the fold down apron, material can be gathered via a bucket more easily than if material had to be retrieved from directly underneath the rotating barrel.

NOTE: References to left and right are made viewing the hopper end of the machine.



SECTION 3: INTRODUCTION

3.2 Trommel screen setup

The Tromax 6012 trommel screen is set up as much as possible at the factory prior to shipping. Some setup will be required when the machine is shipped overseas in a freight container. See Section 2.4, “Assembly after container shipping,” for assembly instructions.

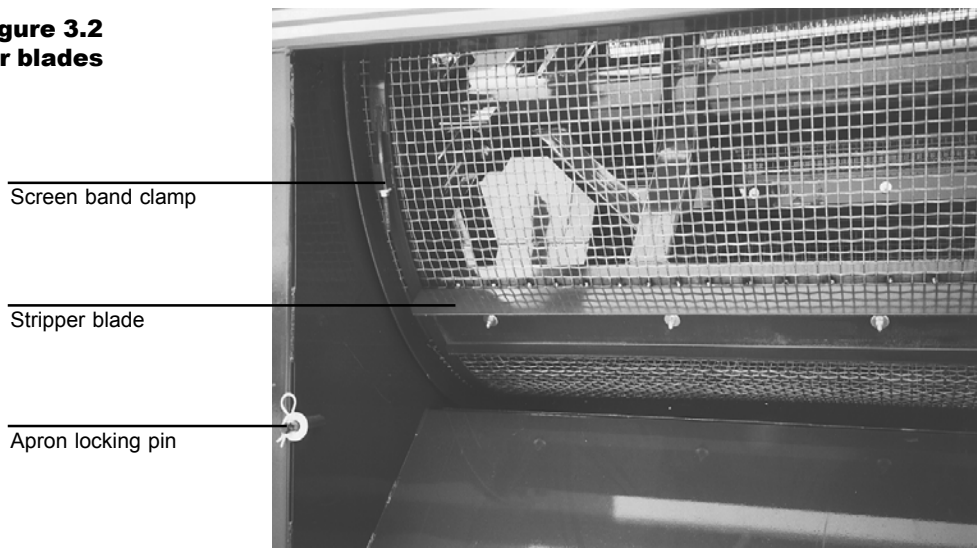
3.3 Barrel and feed paddles

The rotating barrel provides the framework for the sizing screens and is built on a large center shaft. The center shaft design is much simpler than competitive designs since the entire barrel assembly is supported on only two bearings rather than many support rollers. The feeding mechanism is attached directly to the center shaft so no separate drive is required to feed the unit. Feeding rate is set by adjusting the pitch of the feed paddle mechanism. The center shaft design also helps to break up agglomerated material by providing greater agitation in the material.

3.4 Stripper blades

Stripper blades are attached to the outer periphery of the barrel and serve to push the screened material from below the barrel to the discharge side of the machine. They also assist in holding the screens in place.

Figure 3.2
Stripper blades



3.5 Stripper sheets

The stripper sheets are located underneath the barrel and guide the screened material towards the discharge side of the machine. In special cases the stripper sheets may be removed and the material allowed to fall directly below the trommel screen barrel. In this case, the material will have to be removed from below the unit by alternate methods.



SECTION 3: INTRODUCTION

3.6 Screens

As standard equipment, the unit is equipped with 3/4-inch screen constructed with 8 gauge (5/32-inch) steel wire. Standard alternate screens include 1/4, 3/8, 1/2 and 1-inch openings. A wide variety of special screen sizes can be made available. Generally wire cloth is used; however, punched sheet-type screens can be made available.

CAUTION: Care should be taken when operating the unit with opening sizes larger than 1.5 inches. Opening sizes larger than this can allow spears and other oversized material through the screen, causing jams between the screens and the stripper sheets.

3.7 Apron

The trommel screen is equipped with a fold-down apron system. This apron allows easy access to sized material by providing a solid backstop for the material. The apron is raised and lowered manually.

3.8 Brushes

The unit includes rotating brushes to keep the screens clean. These brushes are located above the rotating barrel and are equipped with a threaded stop bolts. Adjust the stop bolts so brush tips extend 1/8 inch into the screen. This provides adequate screen cleaning and minimizes wear on the brushes.

Figure 3.3
Brush assembly



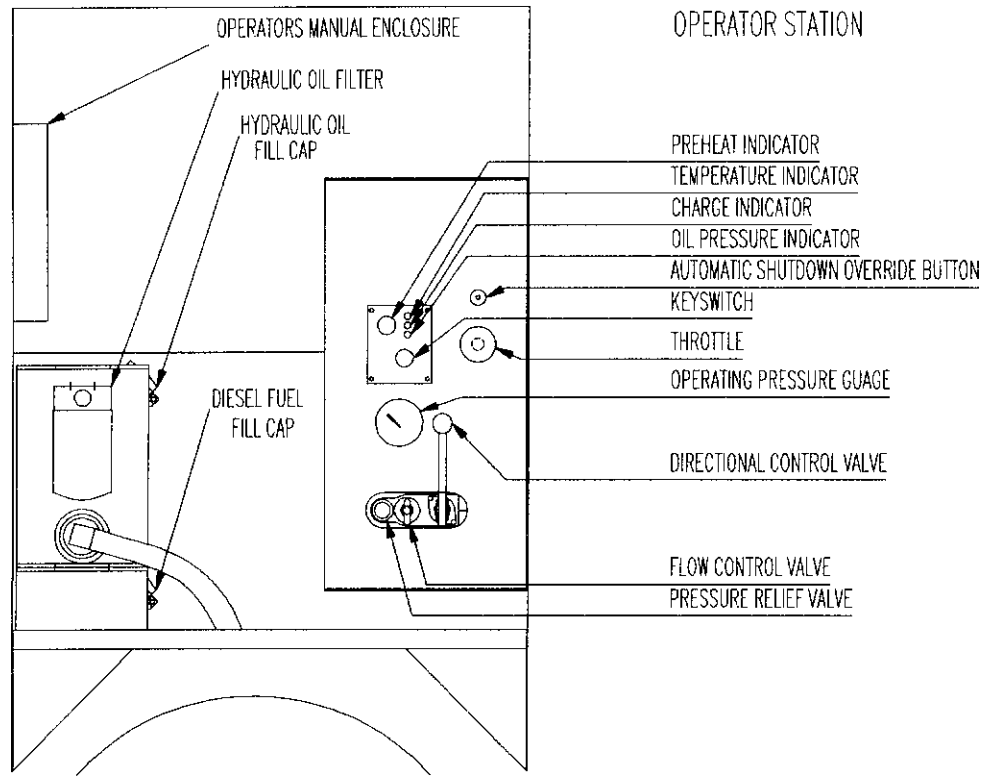
Brush adjustment



SECTION 3: INTRODUCTION

3.9 Operator station

The operator station is diagrammed below:





Section 4: Safety

Thank you for taking the time to read the operation and maintenance manual for the Tromax 6012 trommel screen system. Your safety and that of others is of the utmost importance and you should familiarize yourself with this entire manual.

Safety is an ongoing job experience and DuraTech Industries has made every effort to make sure that the trommel screen provides operator security. DuraTech Industries encourages you to bring to our attention as quickly as possible any suggestions you may have concerning safety issues on the equipment. DuraTech is committed to enhancing the safety of the DuraTech Tromax 6012 trommel screen system.

4.1 Warning decals

DuraTech uses industry accepted ANSI standards in labeling its products for safety and operational characteristics. Red and white **DANGER** signs indicate that you **WILL** be severely injured if the recommendations on the danger sign are not followed. Orange **WARNING** decals indicate a potentially hazardous situation, which if not avoided, may result in death or serious injury. Yellow **CAUTION** decals indicate a potentially hazardous situation, which if not avoided, may result in a minor or moderate injury. In addition, black on white **ATTENTION** decals indicate non-safety related operational characteristics and procedures for the machine.

Decals are illustrated in **Part 2: Parts Reference**.



SECTION 4: SAFETY

4.2 Shielding

The trommel screen is equipped with heavy-duty shielding at all points of potential injury. Shields covering the main sprocket drives should be kept in place at all times. Bodily injury may occur if the unit is operated without shields.

The unit is equipped with an operation and maintenance manual and this manual should be kept in the unit for periodic review by operational personnel.

Operators should be equipped with head, eye and ear protection as well as clothing appropriate for the application. No loose clothing, no unrestrained long hair, no necklaces or neckties, etc., should be allowed near the machine.

Figure 4.1
Shields and manual
storage compartment





4.3 Trommel screen safety review

Each and every safety aspect of the DuraTech Trommel Screen should be reviewed by each operator on a frequent basis. Safety systems are in place that result in direct operator security.

- **NEVER OPERATE THE UNIT WITHOUT ALL SAFETY FEATURES, INCLUDING SHIELDS, IN PLACE AND IN OPERATING CONDITION.**
- Only one (1) operator at a time should be allowed at or near the machine.
- As most units are equipped with their own power systems, never service any component of the trommel screen without first disconnecting or shutting off the power unit and removing ignition keys. Always place a tag near the key switch to prevent others from starting the machine while service work is being performed on the machine.
- **NEVER ENTER THE FEED AREA WITHOUT HAVING FIRST DISCONNECTED OR SHUT DOWN THE POWER SOURCE.**
- Review all safety decals daily.
- In the event the unit is equipped with a power unit such as a diesel engine, wear proper clothing when refueling.
- Do not smoke near the unit when refueling.
- Bleed off any pressurized lines such as fuel or hydraulic lines before servicing these systems.
- Do not operate the machine in an enclosed building where exhaust gases are allowed to accumulate.
- Review the exhaust system for any leaks and repair or replace system if necessary.
- Deflate tires before removing them from the unit.
- Never leave the vicinity of the unit with the engine running or with the barrel turning.

4.4 Fire safety

Locate a fire extinguisher prior to startup or operation of the unit. When processing any flammable products, always use a water spray system. At shutdown always clean off the unit using high-pressure air or water. All debris, wood chips, paper, and combustible or ignitable material should be cleaned off the unit.



SECTION 4: SAFETY

4.5 Important safety reminders

- Always follow basic safety precautions when using this unit to reduce the risk of injury.
- Never perform maintenance in the barrel without first disconnecting the power source.
- When operating the unit, stay a minimum distance of 8 feet away from the unit discharge area. Flying debris can cause injury.
- Never climb on the machine or enter the barrel or feed hopper when the engine is running or the machine is in operation.

4.6 Towing

Check lights, brakes, safety chains and hitch connections before towing.

A commercial driver's license may be required to tow this unit; verify with traffic control or licensing authorities.

The unit weighs approximately 9,600 lb. and has a high center of gravity. Use caution when traveling on public roads, rough or winding roads, or steep terrain.



Section 5: Operation

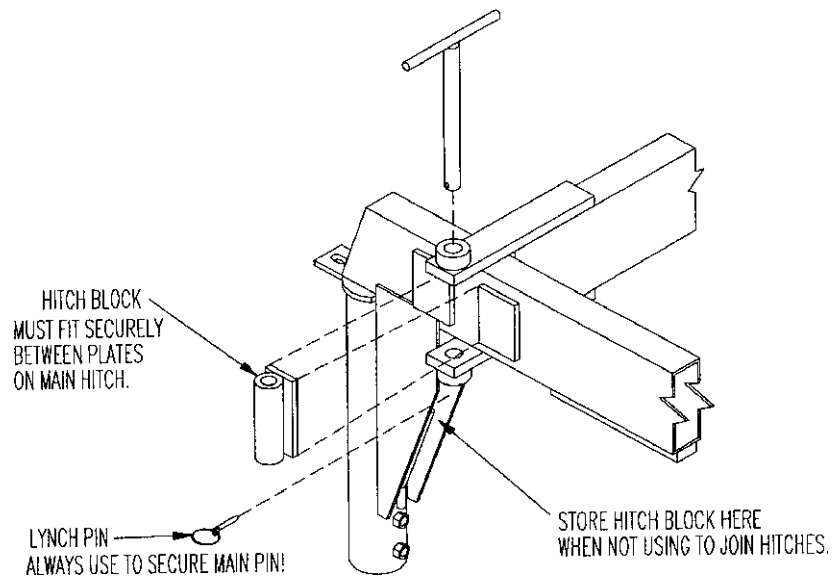
5.1 Hitching to tow vehicle

The Tromax 6012 trommel screen weighs just under 10,000 pounds and the weight on the hitch coupling is approximately 2,500 pounds. Be certain the tow vehicle has sufficient ratings and braking capacity for this load. An electric brake controller is required on the tow vehicle. A standard six-pin connector is required for trailer lighting and electric brakes. Use a 2-5/16-inch hitch ball for proper coupling to gooseneck hitch.

To hitch the machine to a towing vehicle, perform the following steps:

1. Fold the gooseneck hitch halves together at discharge end of machine.
2. The hitch requires a block which is found on the welded pin just to the rear of the hitch coupling on the left half of the hitch.
3. Pin hitch halves together with block in place as shown in Fig. 5.1 and secure with lynch pin. **Do not hitch to tow vehicle without the block pinned properly in place.**

Figure 5.1
Hitch diagram



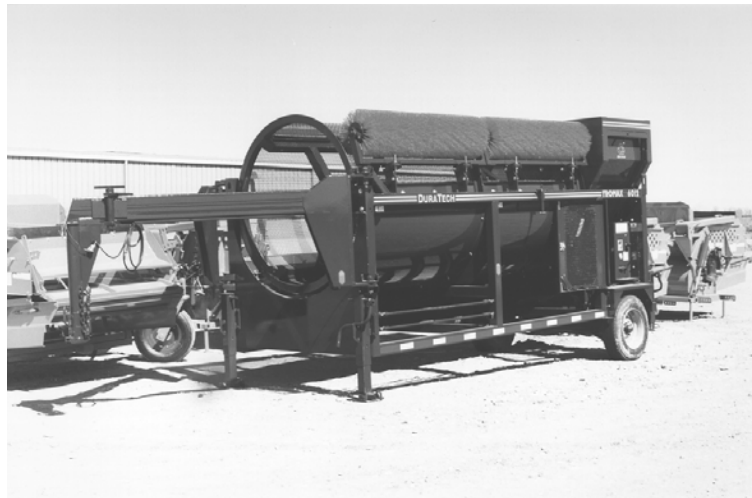
4. Make certain that the jacks are extended equally if the trommel unit had previously been set up on uneven ground.
5. Install jack coupling shafts.
6. Raise the discharge end of the trommel unit sufficiently to clear the tow vehicle hitch ball.
7. Back the tow vehicle under the gooseneck hitch and lower the hitch onto a 2-5/16-inch hitch ball. Close the coupling and latch the coupling to the hitch ball.
8. Connect the safety chains to the tow vehicle.
9. Connect the breakaway switch cable to the tow vehicle.



SECTION 5: OPERATION

10. Connect the trailer wiring harness to the tow vehicle.
11. Raise all four jacks on the trommel screen as far as they will go.
12. Raise the drop pads on all four jacks as high as they will go.
13. Test the trailer lights for proper function.
14. Test the electric brakes for proper function.
15. Check hitch mounting bolts for tightness and that cotter pins are installed.
16. Check tires for proper inflation pressure. (125 psi cold).
17. Carefully check for clearance between the tow vehicle and the gooseneck hitch.

Figure 5.2
Hitch extended to
towing position

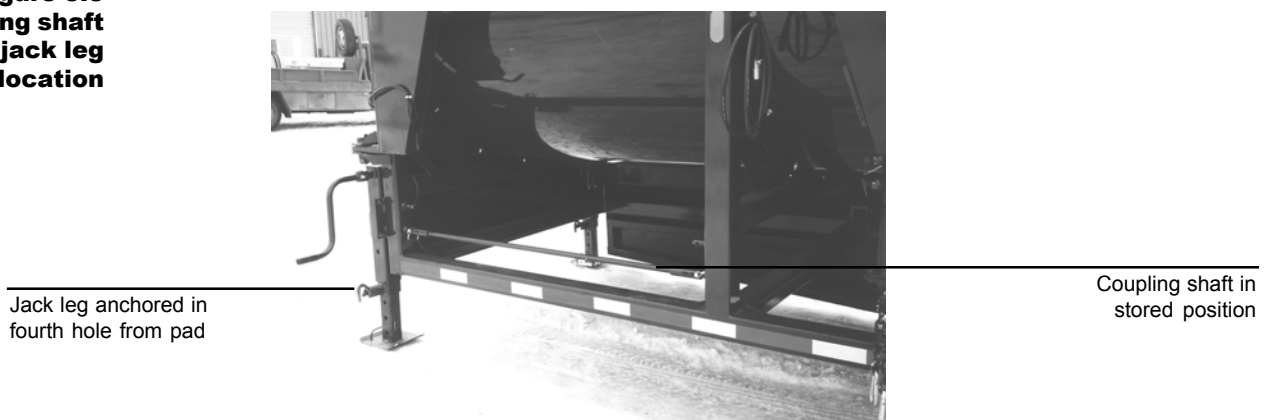


5.2 Disconnecting from tow vehicle

To unhitch the machine to a towing vehicle, perform the following steps:

1. Choose a level site with adequate room to maneuver around the trommel screen for loading, and removing the screened material and overs.
2. Park the trommel screen in position and block the transport wheels.
3. Place drop-down legs on all four jacks in the fourth hole from the bottom jack pad.

Figure 5.3
Coupling shaft
storage and jack leg
hole location





SECTION 5: OPERATION

4. On the discharge end of the trommel, lower the jacks to the ground and uncouple the tow vehicle.
5. Disconnect the safety chains, breakaway switch cable, and trailer lighting harness from the tow vehicle.
6. Raise the discharge end of the trommel screen sufficiently to clear the tow vehicle hitch. Disconnect the safety chains, breakaway switch and trailer lighting cable.
7. Drive the tow vehicle away.
8. Remove pin and block from junction of the left and right hitch halves. Store the block on the welded pin found just to the rear of the hitch coupling.
9. Fold the hitch halves back against the machine frame and pin to frame.
10. Lower the discharge end of the trommel screen as far as the jacks allow.
11. Fold out the apron and allow it to rest on the ground.
12. Raise the hopper end of the trommel screen until the apron is vertical.
13. Adjust the discharge end of the machine until the lower edge of the apron is parallel with the ground.
14. Remove the coupling shaft from between the discharge jacks and store on the pegs provided on the left side of the machine. See Fig. 5.3.
15. Adjust the left hand discharge jack until all four jacks are firmly on the ground. Record the number of turns required to do this for later reference when preparing the machine for towing.

5.3 Hopper loading requirements

The Tromax 6012 trommel hopper will hold up to 2 cubic yards of material. The hopper width is 6-1/3 feet and the loading height is approximately 9 feet. Use a suitable means to place material in the trommel hopper such as a small wheel loader, a skid loader, or a conveyor. If lifting height is insufficient on your loader, a small earth ramp can be constructed at the hopper end of the trommel screen so the loader will reach. To reduce the chance of paddles binding in large or fibrous materials, the hopper should not be filled higher than the barrel shaft height.



SECTION 5: OPERATION

5.4 Daily pre-operation inspection

Before operating the Tromax 6012 trommel screen, a daily inspection routine should include the following items. As each task is performed, check or initial the adjacent box.

- Lubricate all bearings according to the instructions found in Section 7.3.
- Check engine oil level.
- Check engine coolant level.
- Clean the air intake precleaner bowl.
- Check air filter restriction indicator. If indicator is red, service filter element.
- Check hydraulic fluid level and diesel fuel level.
- Check that there are no fuel or hydraulic leaks.
- Inspect barrel drive chain for proper tension, lubrication and alignment.
- Verify that all shields are in place.
- Check that brushes are adjusted so bristles are approximately 1/8 inch into the screens.



SECTION 5: OPERATION

5.5 Operation and care of a new engine

The Isuzu diesel is tested and adjusted at the engine factory but a thorough break-in period of 100 hr. is recommended for long engine life.

- Do not race the engine until a warm-up period of 10 minutes has elapsed.
- Do not rapidly accelerate the engine after warm-up.
- Reduced throttle settings (2/3 throttle) are recommended during the break-in period.

5.6 Engine starting

To start the engine, perform the following steps:

1. Make certain that the hydraulic control lever is in the neutral (centered) position and the flow control valve is reduced to the “0” setting (fully clockwise).
2. Insert the key into the key switch.
3. Rotate and hold the key to the counterclockwise position to preheat the engine. Hold the key until the preheat indicator begins to glow. Release the key.
4. Shout the word “CLEAR”.
5. Depress and hold the automatic shutdown override button and turn the key clockwise to crank the engine. Do not crank for more than 10 seconds.
6. When the engine begins to run, release the key but continue to hold the automatic shutdown override button until the oil pressure warning light switches off. Release the override button.
7. Allow the engine to run at idle speed for 10 minutes to allow adequate warm-up.

5.7 If the engine fails to start

If the engine doesn't start on the first try, perform the following steps:

1. Allow a 30-second rest period before attempting to restart.
2. Rotate and hold the key to the counterclockwise position to preheat the engine. Hold the key until the preheat indicator begins to glow. Release the key.
3. Shout the word “CLEAR”.
4. Depress and hold the automatic shutdown override button and turn the key clockwise to crank the engine. Do not crank for more than 10 seconds.
5. If the engine fails to start, contact a qualified diesel mechanic for further advice.

CAUTION: Do not use starting aids such as ether.



SECTION 5: OPERATION

5.8 Throttle operation

- To increase throttle speed slowly, turn the throttle knob counterclockwise rather than pulling the knob straight out.
- To decrease throttle speed, turn the knob clockwise.
- During the break-in period increase throttle setting slowly to no more than 2/3 of the maximum throttle setting.
- After the break-in period, the engine should be operated at full throttle to produce rated horsepower.
- For emergency slowdown, depress and hold the lock button in center of the throttle knob and push the throttle knob straight in.

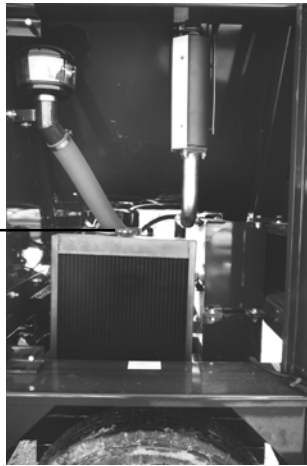
5.9 Automatic engine shutdown system

The engine will automatically shut down if it overheats or if engine oil pressure is inadequate. If this happens, perform the following steps:

- Check oil level in crankcase.
- Inspect radiator and clean if necessary.
- Check tension and condition of fan belt.
- Allow engine to cool and check coolant level.

Figure 5.4
Radiator filler cap

Radiator filler cap



CAUTION: Cover the radiator filler cap with a thick rag and open radiator cap very slowly to release internal steam pressure. Allow system to completely depressurize before removing radiator cap.

- Attempt to restart engine following the normal starting procedure.
- If the engine will not continue running, contact a qualified mechanic.

CAUTION: Do not breathe exhaust gas because it contains carbon monoxide. Carbon monoxide is an odorless, colorless gas which, if breathed, can cause unconsciousness and death. Do not run the engine in confined areas, such as garages or shops.



SECTION 5: OPERATION

5.10 Starting the trommel screen

To start the trommel screen, perform the following steps:

1. As described above, an inspection needs to be made of the entire unit prior to starting the engine.
2. As per the engine manufacturers recommendations, allow the engine to warm up for 10 minutes.
3. In order to bring the barrel up to the proper speed, push the directional control valve lever “in” towards the machine and turn the flow control knob counterclockwise until the barrel begins to turn.
4. Continue turning the flow control knob until desired speed is obtained.

5.11 Setting barrel speed

Ideal barrel speed should carry the material to a point near the top of the barrel where it can fall the greatest distance to the bottom. This provides the greatest agitation and breaks up lumps to the greatest degree. If the product being screened is fragile, reduce the barrel speed until desired agitation is obtained.

5.12 Evaluating sized material

The trommel barrel can be equipped with two screens of the same size, or a separate size for each bay. In some situations the first bay will produce material of the desired size but the second bay will have oversize products and sticks due to spiking. In this situation, it may be beneficial to install a smaller screen in the second section of the trommel barrel. For example, you could equip the first section of the barrel with a 1/2-inch screen and the second section with 3/8-inch screen.

By equipping the first section of the barrel with a fine screen and the second section with a coarser screen, a separate graded product can be obtained from each section of the barrel. You can set up a wall, such as a sheet of plywood, between the sections to keep the graded product separated. This feature is unique to the Tromax design with the side discharge. Competitive models with conveyors located below the barrel can't grade a separate product from separate sections of the barrel because all sized product falls to a common discharge conveyor.



5.13 Adjusting trommel feed paddles

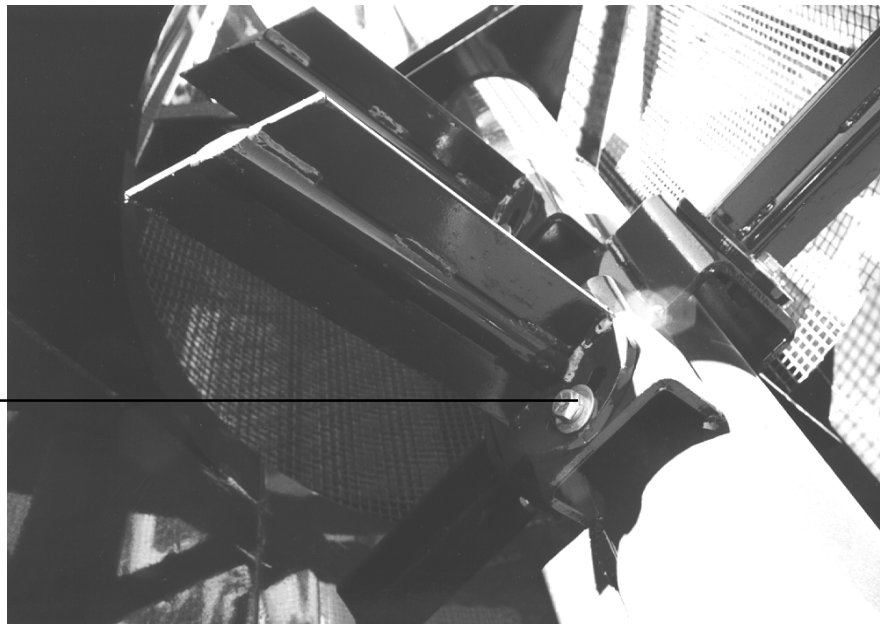
The trommel feed paddles are bolted to the barrel shaft and the pitch of the paddles is adjustable. Notches are cut into the base plate of the paddles at 5-degree increments, for reference when adjusting the pitch. All paddles can be adjusted to the same pitch or they can be adjusted to different pitches. For example, you can adjust the paddles closest to the outlet to a negative pitch and the remainder to a positive pitch to keep the material in the hopper longer.

To adjust the trommel feed paddles, perform the following steps:

1. Stop the barrel by rotating the flow control valve fully clockwise and placing the hydraulic control valve in the neutral (centered) position.
2. Idle the engine for three minutes to allow it to cool down.
3. Shut off engine and remove key. Place a warning lockout tag near the switch to prevent other personnel from inadvertently starting the equipment while adjustments are being performed.
4. Use a portable ladder to enter the hopper for paddle pitch adjustments.
5. Locate the notches cut into the paddle mounting base and scribe a mark in the paddle mount for reference.
6. Loosen the paddle mounting bolts and rotate the paddle to the desired pitch. Each notch indicates a pitch change of 5 degrees. To increase feed rate from the hopper into the barrel, rotate paddles counterclockwise to increase pitch. Rotate the paddles clockwise on the mounts to decrease paddle pitch and reduce the feed rate from the hopper into the barrel.
7. Tighten the paddle mounting bolts.
8. Remove portable ladder from hopper area before starting the machine.

Figure 5.5
Trommel feed paddle
adjustment

Pitch adjustment nut



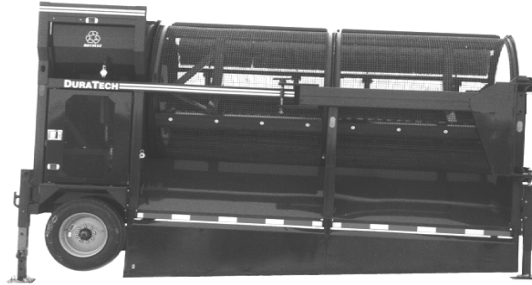


SECTION 5: OPERATION

5.14 Adjusting trommel screen pitch

The time that a product is retained in the trommel screen is determined by the angle or “pitch” of the barrel. As a starting point, set the pitch to match the lower edge of the side apron when it is folded down. To reduce retention time, raise the hopper end. To increase retention time, raise the discharge end.

Figure 5.6
Setting trommel
screen pitch using
sets of jacks at the
front and rear of the
unit. Pairs of jacks
are joined using the
shaft coupler
illustrated in Fig. 5.3,
then a hand crank is
used to raise or lower
the end of the unit.



5.15 Replacing the screen

To replace a screen, perform the following steps:

1. Shut down using the normal shutdown procedure found in Section 5.17.
2. Place the machine under a hoist capable of lifting at least 150 lb.
3. Two persons are required to change screens, one person inside and one person outside of the barrel.
4. Remove the screen band clamps.
5. Manually rotate the barrel until a screen section is on the top of the barrel.
6. Remove both stripper blades that clamp the top screen section.
7. Remove top screen section with hoist and replace with new screen section.
8. Secure new screen section with the stripper blades but use only two bolts per stripper blade to hold the screens in place until all sections are replaced.
9. After both top screen sections have been replaced, manually rotate the barrel 1/3 turn and repeat the process until all screen sections have been replaced.
10. After all screen sections have been replaced, insert all bolts into the stripper blades and secure with lock nuts.
11. Replace the screen band clamps and tighten.



SECTION 5: OPERATION

5.16 Unplugging and restarting the trommel screen

To reverse the trommel screen barrel in order to clear minor jams, perform the following steps:

1. Place the directional control valve in the neutral (center) position and rotate the flow control fully clockwise.
2. Place the directional valve in reverse by pulling the control lever **outward**.
3. Rotate the flow control counterclockwise until the barrel attempts to move.
4. If the barrel will not move and the relief valve is bypassing, shift the directional valve to neutral and rotate the flow control fully clockwise. Clear the jam manually.
5. Idle the engine for three minutes to allow it to cool down.
6. Shut off engine and remove the key. Place a warning lockout tag near the switch to prevent other personnel from inadvertently starting the equipment while the jam is being cleared.
7. Material should be removed from beneath the screen. Spears, sticks or other protruding materials should be pulled back up through the screen by entering the barrel and pulling them out internally.
8. In the event that something has jammed in the paddles, an operator will need to enter the feed hopper and dislodge the material. Use a portable ladder to enter the hopper area.

Please note that the hydraulic system is equipped with a pressure relief valve that has been factory set to 2,000 psi. The relief valve is set at a level that allows proper functioning of the barrel. If something becomes jammed in the screen or paddle area, the pressure relief valve should be set at a level that will open the pressure relief valve without stalling the engine.

CAUTION: Do not set the pressure relief valve at such a level that, in the event that something becomes jammed in the system, the engine stalls. Do not exceed a relief valve setting of 2,500 psi or severe damage to components will result.



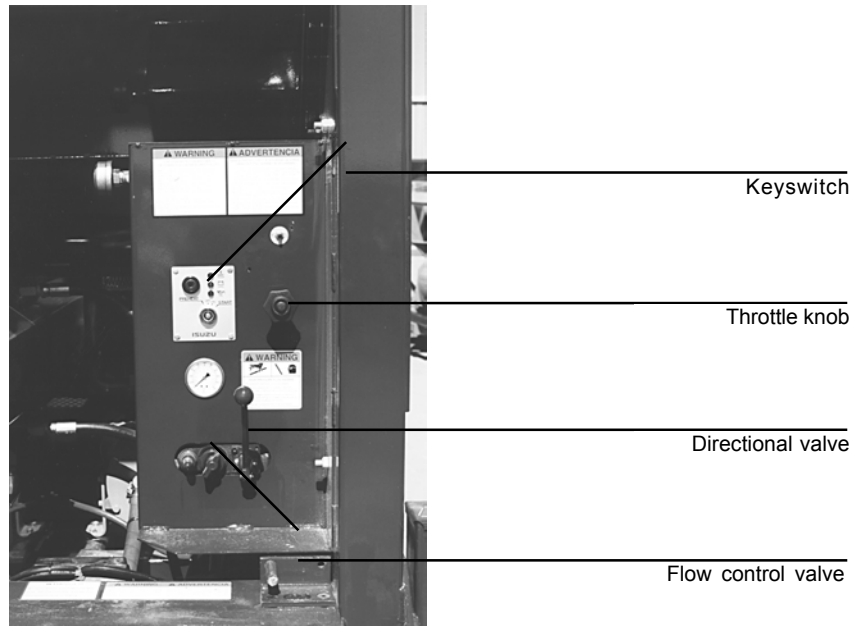
SECTION 5: OPERATION

5.17 Normal shutdown

Use the following procedure to shut down the trommel screen under normal operation:

- Allow all material in the feed hopper to proceed through the barrel.
- Set the flow control valve down to the fully clockwise, or “O” setting, and place the directional valve in neutral, or centered, position.
- Allow the engine to idle for three minutes before shutting down.
- Shut engine down and remove the key.

Figure 5.7
Shutdown controls



5.18 Emergency shutdown

Use the following procedure to shut down the trommel screen in an emergency:

- Set the flow control valve to “O”.
- Place the directional valve in neutral.
- Depress and hold lock button in center of throttle knob and push throttle knob straight in.
- Shut engine down and remove the key.

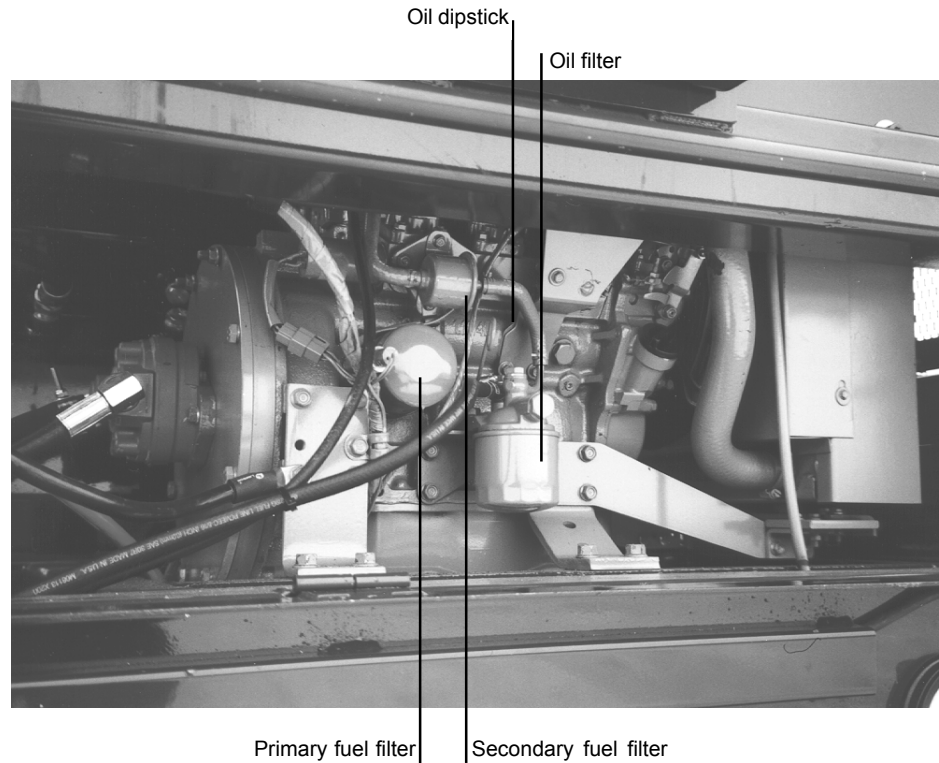


Section 6: Engine Maintenance

Every effort should be made by the operator of the Tromax 6012 trommel screen to complete all maintenance routines on time, paying particular attention to lubrication. An established maintenance routine results in long-term efficiency and economy.

This section contains highlights from the Isuzu engine operation and maintenance manual. For more detailed information, review the Isuzu engine manual.

Figure 6.1
Engine bay



6.1 Diesel fuel requirements

The engine is designed to use Number 1-D or Number 2-D diesel fuel. The use of Number 2-D is preferred for normal operating conditions. If you plan to operate at atmospheric temperatures of 20 degrees F (-7 degrees C), use a “winterized” blend of Number 1-D and Number 2-D diesel fuel.

- Do not use heating oil or gasoline in your diesel engine or engine damage may result.
- Do not use diesel fuels that have been blended with used engine oil.
- Check with your fuel supplier to be sure of the quality of fuel you are buying.
- Take care to prevent contaminants such as dust, or water from entering the fuel tank while fueling.
- There is some water found in diesel fuel which will pool at the bottom of the fuel tank. This water should be drained periodically.
- Change engine fuel filter every 500 hours of operation.

See the Isuzu engine operation and maintenance manual for further details

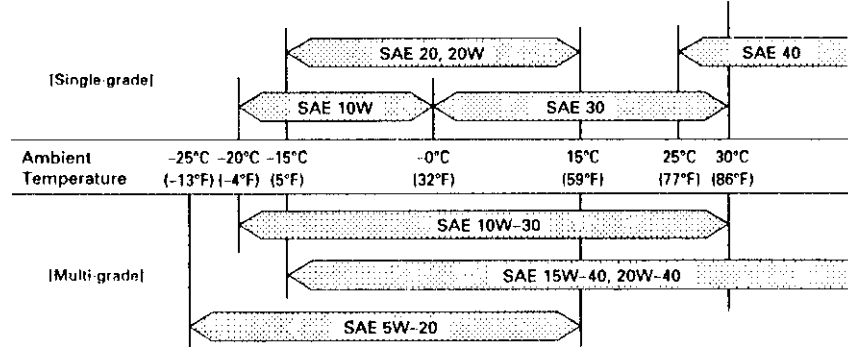


6.2 Engine lubrication requirements

The quality of engine oil may have a large effect on engine performance, startability and engine life. Use engine oil with an API CC or CD rating. Engine oil viscosity should be selected in accordance with the prevailing atmospheric temperatures.

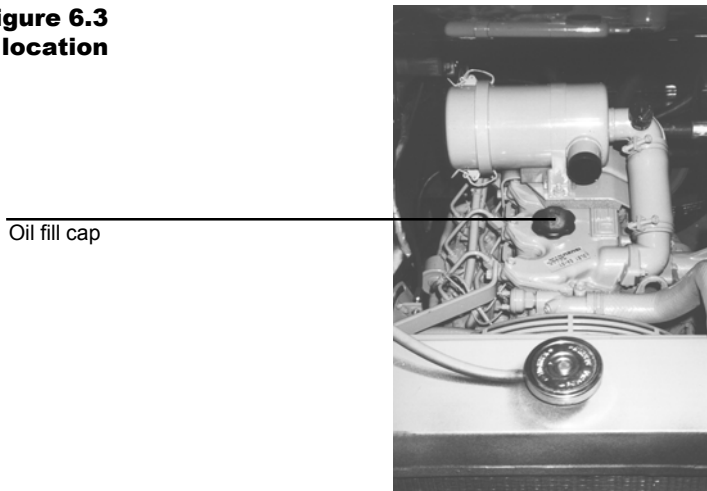
ENGINE OIL VISCOSITY GRADE - AMBIENT TEMPERATURE

Figure 6.2
Engine lubrication requirements



- The engine oil and oil filter should be changed after the first 50 hours of operation and every 250 hours thereafter.
- It is advisable that the oil be drained while the engine is warm, but wait until the engine is cooled sufficiently to avoid burns.
- Wipe all contaminants away from the oil filter, drain plug and oil filler cap before beginning the oil change procedure.
- When installing a new filter, lightly oil the “O” ring and turn in until the “O” ring contacts the sealing surface. Use an oil filter wrench and tighten the cartridge by 3/4 turn.
- Engine oils with the API CC or CD ratings contain all the necessary additives for proper lubrication in this engine. The use of additional additives is not recommended.
- Do not mix different brands of oil or different quality oils.
- See the Isuzu engine operation and maintenance manual for further details.

Figure 6.3
Oil fill cap location





6.3 Engine coolant requirements

- A 50/50 blend of ethylene glycol-based antifreeze is recommended for this engine.
- The coolant should be drained and replaced with fresh coolant every six months.
- The cooling system should be flushed at least every 1,000 hours of engine operation.
- See the Isuzu engine operation and maintenance manual for further details.

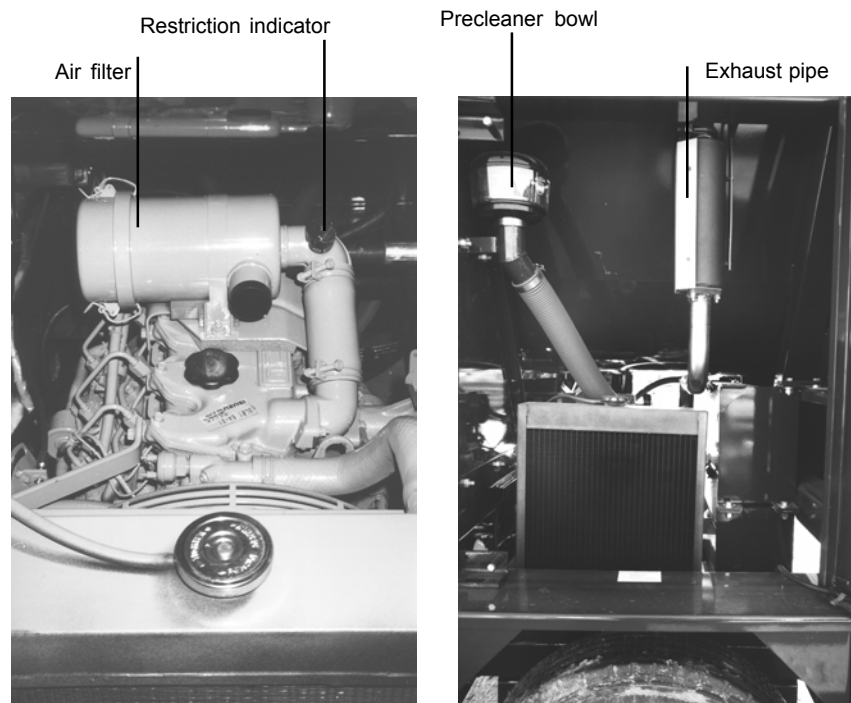
6.4 Fan belt tension

- Proper belt tension is indicated when the belt can be depressed approximately 3/8 inch with firm thumb pressure midway between the fan pulley and the generator pulley.
- See the Isuzu engine operation and maintenance manual for further details.

6.5 Air cleaner

- A dirty air cleaner can cause reduced engine output and reduced engine life. This machine is equipped with an air filter restriction indicator, which can be found between the air filter housing and the engine intake manifold. The filter is normal when the indicator is green and requires service when the indicator turns red.
- A bowl type precleaner is located in the upper right corner at the rear of the engine compartment. The bowl should be emptied daily or more frequently if conditions warrant. Inspect the flexible tubing between the precleaner bowl and the filter on a monthly basis and replace if damage is apparent. Small leaks will not damage the engine but will shorten the service life of the air filter element.

Figure 6.5
Precleaner bowl
(right)





SECTION 6: ENGINE MAINTENANCE

6.6 Operation and care of a new engine

The Isuzu diesel is tested and adjusted at the engine factory but a thorough break-in period of 100 hr. is recommended for long engine life.

- Do not race the engine until a warm-up period of 10 minutes has elapsed.
- Do not rapidly accelerate the engine after warm-up.
- Reduced throttle settings (2/3 throttle) are recommended during the break-in period.

6.7 If the engine fails to start

- Allow a 30 second rest period before attempting to restart.
- Rotate and hold the key to the counterclockwise position to preheat the engine. Hold the key until the preheat indicator begins to glow. Release the key.
- Shout the word "CLEAR".
- Depress and hold the automatic shutdown override button and turn the key clockwise to crank the engine. Do not crank for more than 10 seconds.
- If the engine fails to start, contact a qualified diesel mechanic for further advice.
- Do not use starting aids such as ether.



Section 7: General Maintenance

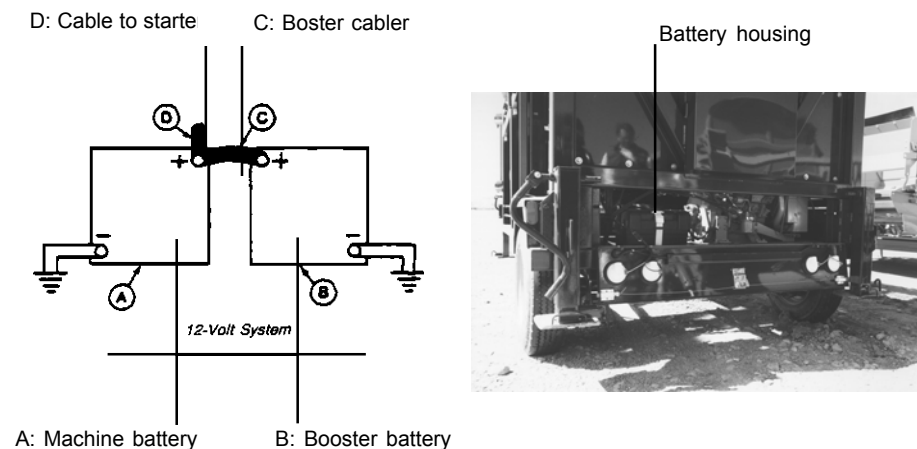
7.1 Checking battery condition

The condition of the battery should be checked to insure the electrolyte level is correct, that the terminals and cables are not corroded or misrouted, that the battery is held in place properly, and that there is no arcing or grounding by the terminals. The system uses a 12-volt battery with a negative ground system.

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

7.2 Using a booster battery

A 12-volt booster battery can be connected in parallel with the battery (or batteries) on the unit to aid in cold weather starting. ALWAYS use heavy-duty jumper cables.



IMPORTANT: Be sure polarity is correct before making connections. Reversed polarity will damage electrical system. Always connect positive to positive and negative to ground. Always use a 12-volt booster battery for 12-volt electrical systems.

1. Connect one end of the jumper cable to the POSITIVE (+) post of the battery connected to the starting motor.
2. Connect the other end of the jumper cable to the POSITIVE (+) post of the booster battery.
3. Connect one end of the other jumper cable to the NEGATIVE (-) post of the booster battery.
4. ALWAYS complete the hook-up by making the last connection of the NEGATIVE (-) cable to a good ground on the engine frame and away from any battery. When disconnecting, make this the first connection to disconnect.



7.3 Bearing and chain lubrication

Bearings operating in the presence of dust and water should contain as much grease as speed will permit, since a full bearing with a slight leakage is the best protection against entrance of foreign material. In the higher speed ranges, too much grease will cause overheating.

When operating during cold weather, all lubrication should be performed after bearings are at operating temperatures.

Any bearing operated at high speed and operating at abnormal bearing temperature may indicate faulty lubrication. A bearing operating under normal conditions should feel cool to warm to the touch. Unusually high temperatures, too hot to touch for more than a couple of seconds, accompanied by excessive leakage of grease at the seals, indicates too much grease. High temperatures with no grease showing at the seals, particularly if the bearing seems noisy, usually indicates too little grease. Normal temperature and a slight showing of grease at the seals indicate proper lubrication. When lubricating the Trommel Screen, a heavy-duty lithium based general purpose grease is recommended.

- A heavy-duty bearing is located at each end of the trommel screen barrel shaft. Open the drive chain guard and find the flange bearing zerk behind the large barrel drive sprocket. See Figure 11.3. Also, a flange bearing is mounted on the large channel crossmember on the discharge end of the barrel, see figure 11.4. Lubricate these bearings daily.
- Four pillow block bearings are located on the screen cleaning brush shafts. Lubricate these bearings daily. See Figure 11.5.
- Lubricate the drive chain daily with a spray-on chain lubricant.
- Lubricate the brush assembly pivot monthly.

Figure 7.3
Drive chain
lubrication point



Figure 7.5
Cleaning brush shaft

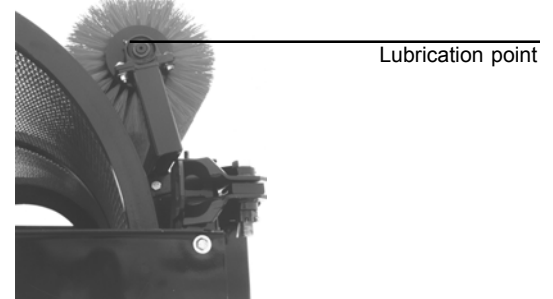
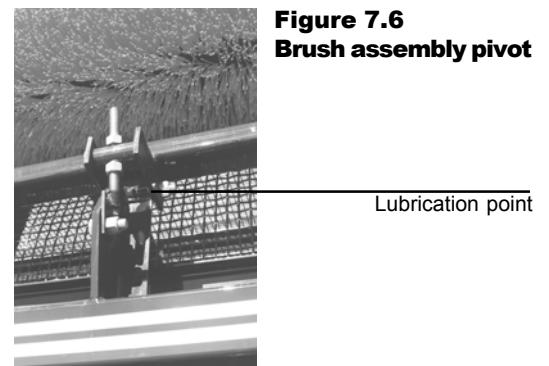


Figure 7.4
Barrel shaft
lubrication point



Figure 7.6
Brush assembly pivot





SECTION 7: GENERAL MAINTENANCE

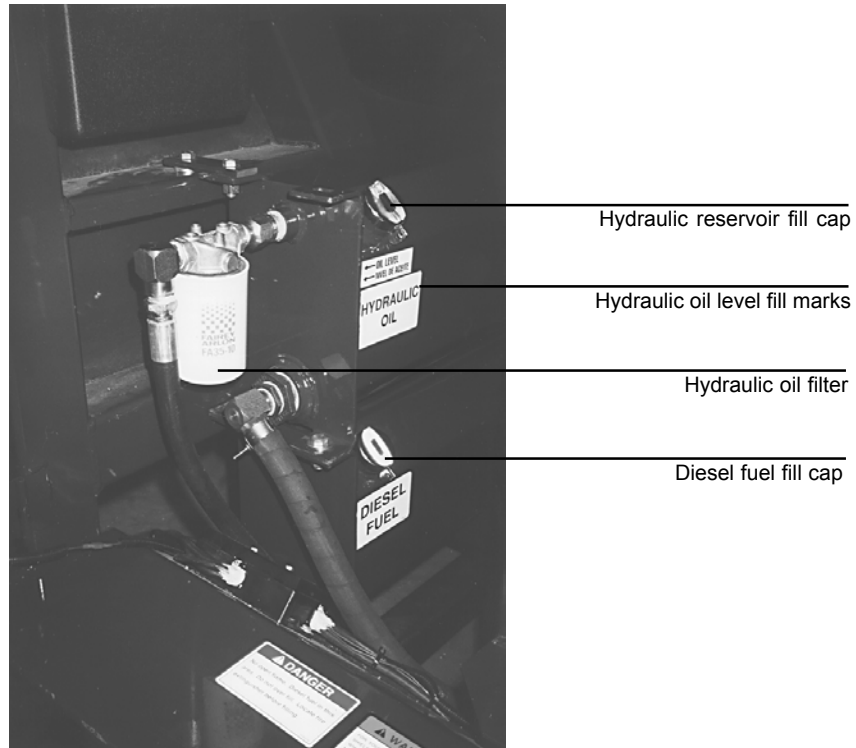
7.4 Hydraulic system

The unit has a 15-gallon capacity hydraulic reservoir. Always check the hydraulic oil level, as marked on reservoir, before starting the unit. Fill to fluid level as required. The unit has a screw-on type hydraulic oil filter, which should be changed after the first 50 hours of operation and then every 500 hours thereafter.

The unit has an open-center hydraulic system. Fluid is drawn from the oil reservoir through the pump and to the selector valve. A pressure relief valve is located in the valve body just next to the flow control knob. As described in earlier sections, do not set the pressure relief valve higher than 2,500 PSI in order to protect the system. The oil is routed by the pressure relief valve and then to the flow control. From the flow control the metered fluid is directed to the directional portion of the valve body. A cushion valve is mounted to the hydraulic drive motor to “soften” sudden stops on the barrel. The system also includes a return line oil filter with 10-micron filtration. The system does not include a high-temperature hydraulic oil shutdown system.

NOTE: Keep the engine compartment clean and free from dust buildup as much as possible. The movement of the engine cooling air by the hydraulic reservoir assists in keeping the hydraulic system cool.

Figure 7.7
Hydraulic reservoir
and filter



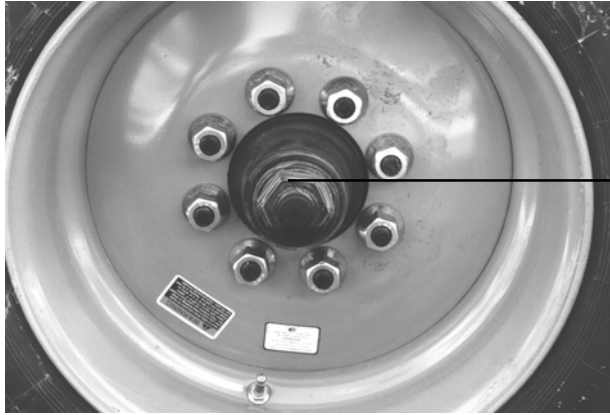


SECTION 7: GENERAL MAINTENANCE

7.5 Axle, wheels and tires

The axle should be inspected before the machine moves to make sure that the bolts holding the leaf springs to the axle are tight. Further inspect the leaf springs to ensure that there is no breakage or abnormal wear. Check the oil level in the hubs, and add if necessary.

Figure 7.8
Wheel bearing
lubrication point



Oil level indicator on plastic cap

Inspect the tires to ensure that there is sufficient tread and no cuts or abrasion marks on the tires. The air pressure should also be checked. Proper tire inflation pressure is 125 psi. Make sure that the wheel lug nuts are properly torqued and that the brakes are in fact braking the unit. Prior to moving the unit, the brakes should be checked to insure that they are in operating condition. Once the vehicle is hooked to the trommel screen, the brakes should be rechecked before moving the unit onto a public thoroughfare.

Use safety chains when hitching the unit to a towing vehicle.

7.6 General appearance

Clean the unit frequently with high-pressure air or water in order to make the inspection process easier. Leaking hoses and loose fittings or fasteners are much more easily observed on a clean machine. Use no solvents to clean the unit.



Appendix A: Warranty

DuraTech Industries International Inc. warrants to the original purchaser for 6 months 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, North Dakota, USA, within thirty (30) days of failure.

This warranty shall become void if in the judgment of DuraTech Industries International, Inc. 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. Buyer must rely solely on the existing warranty, if any, of these respective manufacturers.

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 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.

This warranty is void if DuraTech Industries International Inc. does not receive a valid warranty registration card at its office in Jamestown, North Dakota, USA, within 10 days from date of original purchase.

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



APPENDIX B

Appendix B: Specifications

General

Length with hitch folded	17 ft.
Length in transport position	25 ft. 3 in.
Width	7 ft. 2 in.
Height	9 ft. 2 in.
Loading height	8 ft. 10 in.
Approximate weight	9,600 lb.

Barrel

Length	12 ft.
Diameter	5 ft.
Shaft diameter	2-7/16 in.
Total screen area	152 sq. ft.

Drive system

Engine	Isuzu 25 hp 3-cylinder Diesel
Hydraulic drive	Char-Lyn 4000 Series motor
Final drive	80 pitch heavy chain
Paddle-type feed system	Adjustable pitch
Drop legs	Four 10,000 lb. cap. manual jacks
Anti-blinding brushes	16 in. diameter nylon
Hitch	Gooseneck, 2-5/16 in. ball fitting
Axle	8,000 lb. cap.
Tires	215/75R x 17.5 6-ply radial
Side apron	Standard equipment
Security package	Standard equipment

NOTE: Two units can be packaged to ship in a standard 40-ft. shipping container.



Appendix C: Delivery Notification Form

To be filled out and returned to the factory upon delivery of any trommel screen unit.

IMPORTANT: No action, in terms of service or warranty, will be taken until this form, together with the “Verification of User Training Form” on the following page, are completed and returned to the factory.

Model of machine _____

Serial number of machine _____

Customer name _____

Dealer name _____

Address _____

Phone _____

Is owner a business? _____

Is owner a government entity? _____

Other? _____

What will be the primary application of this unit? _____

Engine type _____

Engine serial number _____

Date of sale of machine _____

Date of delivery of machine _____

IMPORTANT: All engine registration papers must be filed with the engine dealer in order to handle any future engine claims.



APPENDIX D

Appendix D: User Training Verification Form

We certify that the users of the Tromax 7216 trommel screen unit named below have read the instructions in the operating manual, and understand all information concerning the safe operation of the unit. We further certify that dealer personnel have provided instruction in the use of the unit, and have conducted a “walk-around” inspection of all safety instructional decals on the machine itself.

Signatures

User: _____ **Date:** _____

User: _____ **Date:** _____

User: _____ **Date:** _____

User: _____ **Date:** _____

Dealer: _____ **Date:** _____

IMPORTANT: This form, together with the “Delivery Notification Form” on the previous page, is to be completed and returned to the factory. No action, in terms of service or warranty, will be taken until this information is received by the factory.





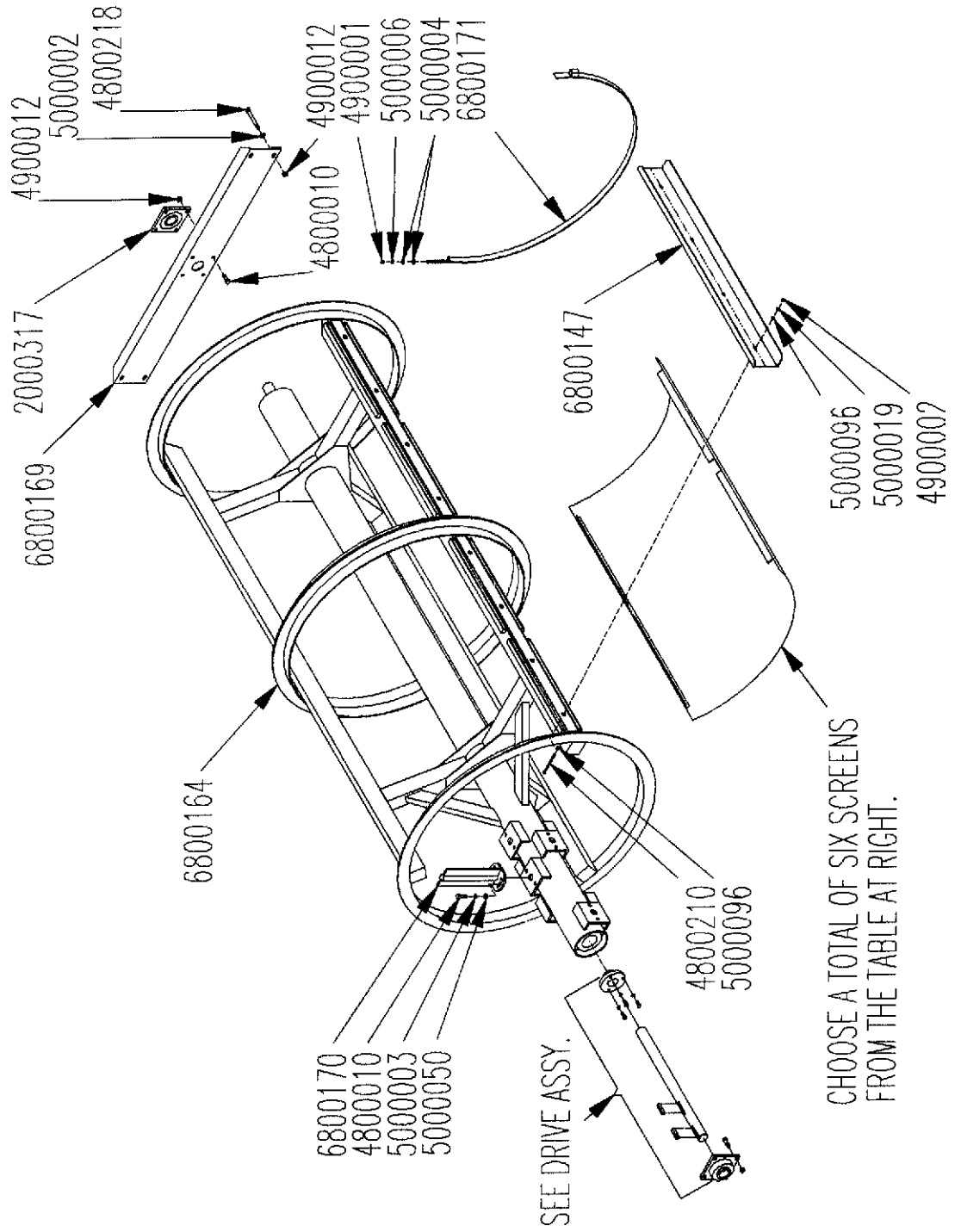
Tromax 6012

Trommel Screening System

Part 2: Parts Reference



BARREL



**BARREL****Barrel**

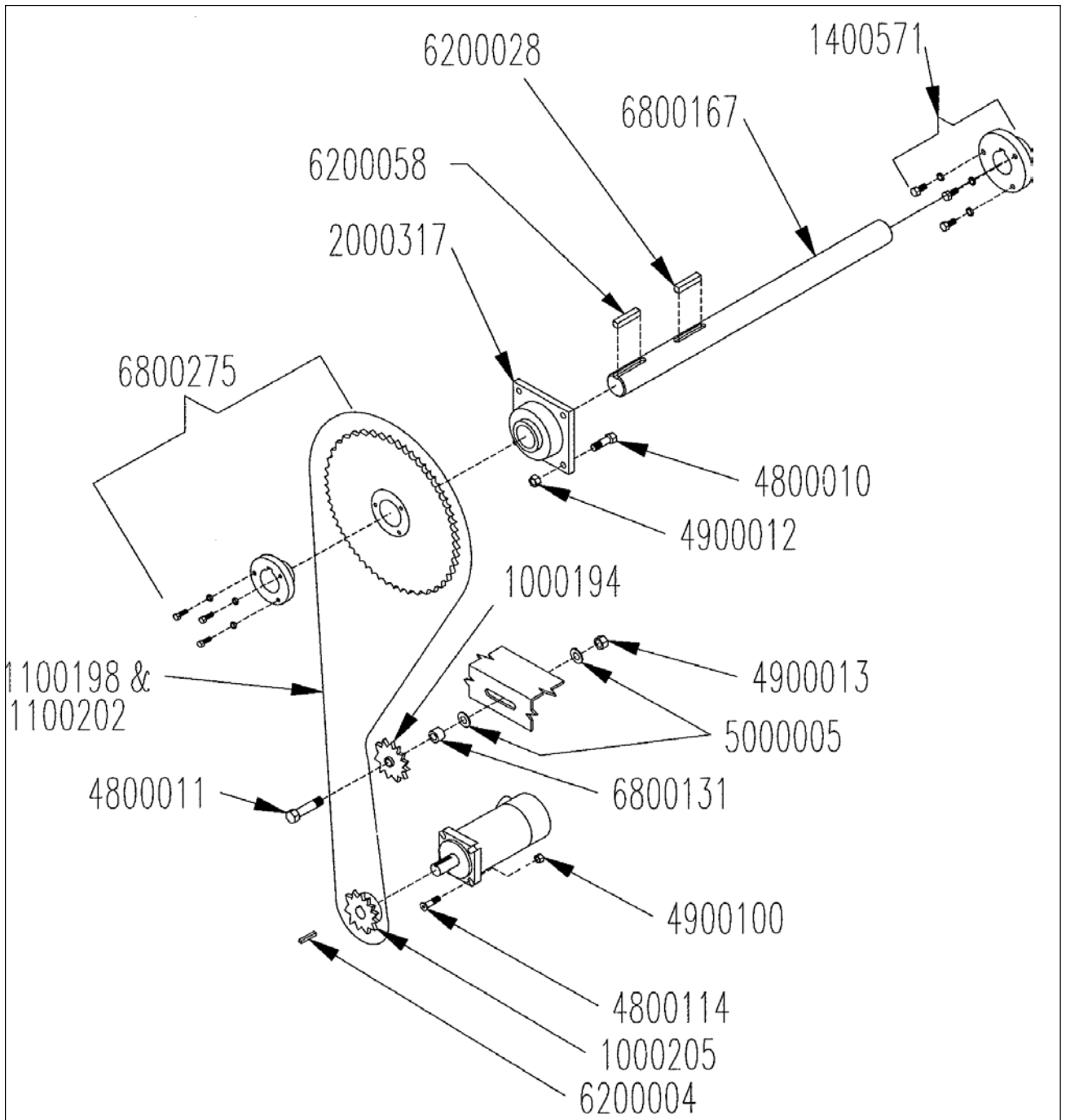
Part No.	Qty.	Description
2000317	1	BRG\FLG\2-7/16\4BOLT\SCM
4800010	20	BOLT\HEX\5/8X2\NC
4800210	24	BOLT\HEX\3/8X6\NC
4800218	4	BOLT\HEX\5/8X5-1/2\NC
4900001	8	NUT\HEX\1/2\NC
4900002	24	NUT\HEX\3/8\NC
4900012	8	NUT\TPLCK\5/8\NC
5000002	4	WASH\FLAT\5/8
5000003	16	WASH\LOCK\5/8
5000004	16	WASH\FLAT\1/2
5000006	8	WASH\LOCK\1/2
5000019	24	WASH\LOCK\3/8
5000050	16	WASH\FLAT\SPCL\0.681X2X1/4
5000096	48	WASH\FLAT\SPCL\13/32\7GA
6800147	6	BRKT\SWEEP\66X3-1/2\6012
6800164	1	FRAME\BRRL\60\6012
6800169	1	BRKT\SPPRT\BRRL\77-1/2X9
6800170	8	AGGTR\PDDL\17\6012
6800171	8	STRAP\SCRN\60\6012

SELECT SCREENS (TOTAL OF SIX REQD.)

6800222	SCRN\WIRE\71X30R\1/4\120
6800221	SCRN\WIRE\71X30R\3/8\120
6800220	SCRN\WIRE\71X30R\1/2\190
6800174	SCRN\WIRE\71X30R\3/4-#8
6800219	SCRN\WIRE\71X30R\1\192
6800176	SCRN\WIRE\71X30R\1-1/2X3/8
6800218	SCRN\WIRE\71X30R\2X5/16



BARREL DRIVE





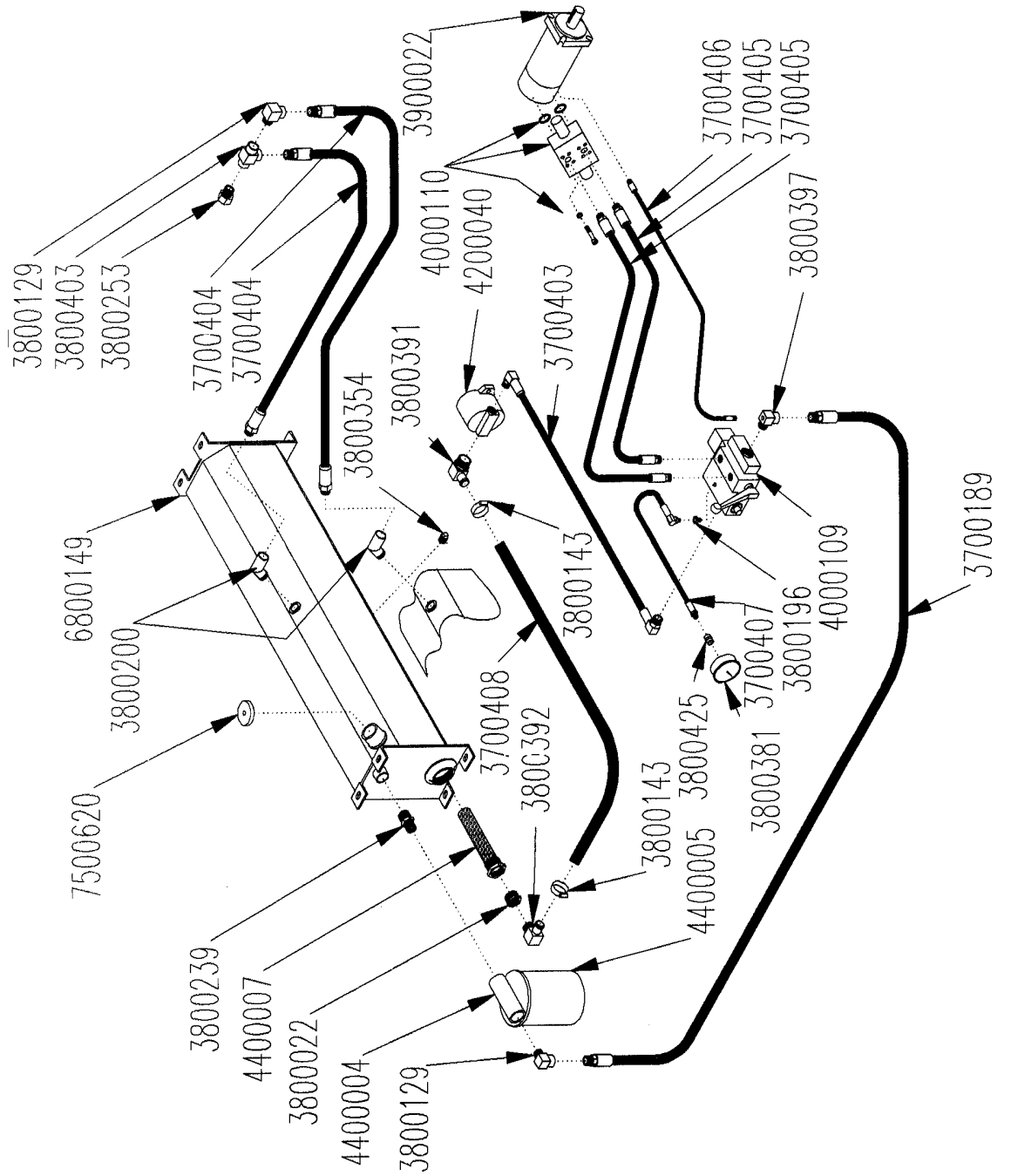
BARREL DRIVE

Barrel drive

Part No.	Qty.	Description
1000194	1	SPKT\80\12\3/4\IDLER
1000204	1	SPKT\80\QD\54\SF
1000205	1	SPKT\80\B\15\1-1/4\5/16KW
1100198	1	CHAIN\80\DIAMND\CL
1100202	1	CHAIN\80\DIAMND\95LINKS
1400571	1	BUSH\QD\E\2-7/16
1400572	1	BUSH\QD\SF\2-7/16
2000317	1	BRG\FLG\2-7/16\4BOLT\SCM
4800010	4	BOLT\HEX\5/8X2\NC
4800011	1	BOLT\HEX\3/4X3-1/2\NC
4800417	4	SCR\SCK\ALN\1/2X2\NC
4900012	4	NUT\TPLCK\5/8\NC
4900013	1	NUT\TPLCK\3/4\NC
4900014	4	NUT\TPLCK\1/2\NC
5000004	4	WASH\FLAT\1/2
5000005	2	WASH\FLAT\3/4
6200004	1	KEY\SQ\5/16X1-1/2
6200028	1	KEY\SQ\5/8X3
6200058	1	KEY\REC\5/8X3/4X3
6800131	1	BUSH\SPCR\1-1/4DX7/8X25/32
6800167	1	SHFT\BRRL\36X2-7/16\6012
6800275	1	SPKT\ASSY\DRV\BARREL



HYDRAULIC ASSEMBLY





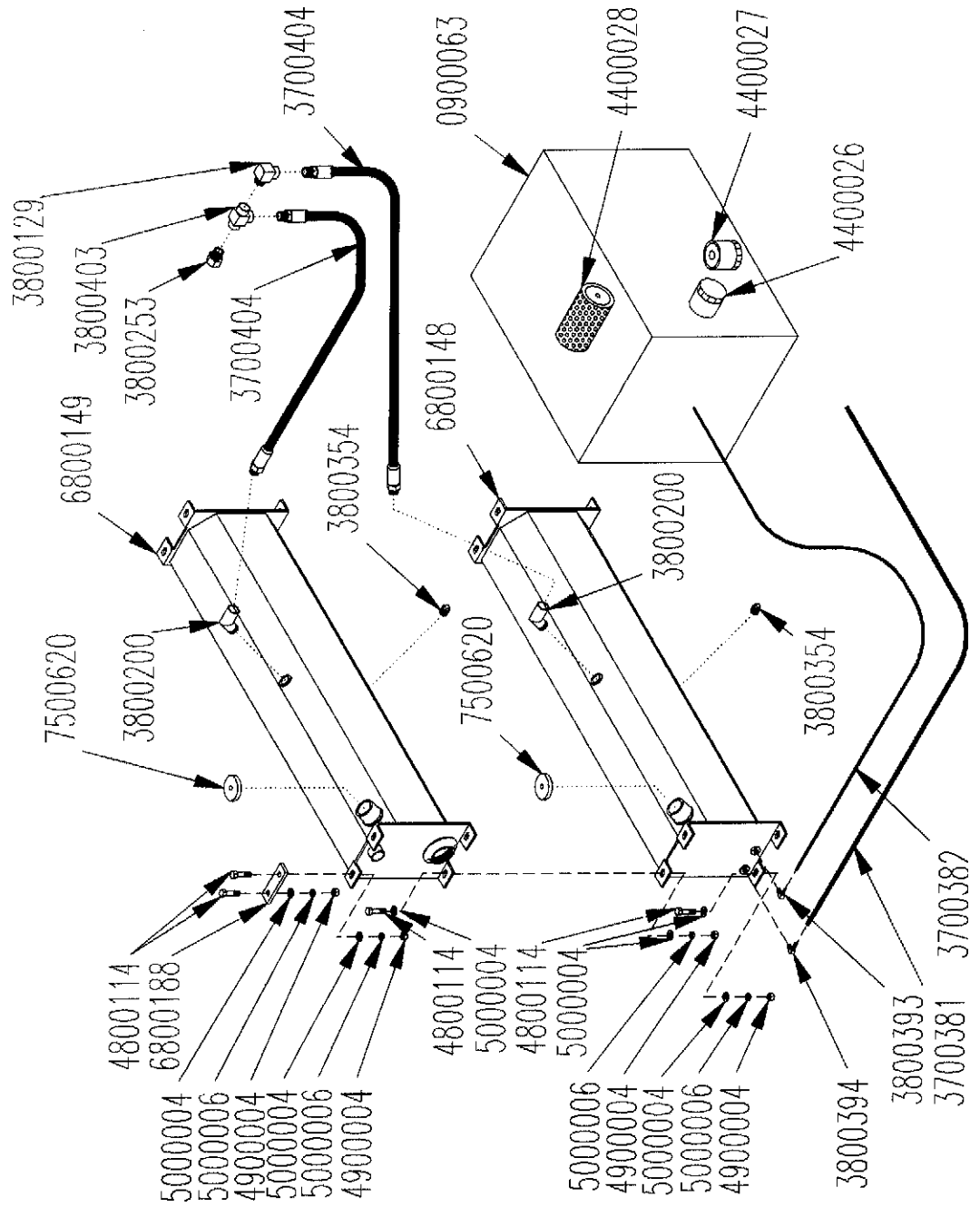
HYDRAULIC ASSEMBLY

Hydraulic assembly

Part No.	Qty.	Description
3700189	1	HOSE\HYD\3/4X56\3/4MPS
3700403	1	HOSE\HYD\1/2X34\1-1/16MORS
3700404	2	HOSE\HYD\3/4X42\3/4MPS
3700405	2	HOSE\HYD\3/4X30\1-1/16MORS
3700406	1	HOSE\HYD\1/4X33\7/16MOR
3700407	1	HOSE\HYD\1/4X14\1/4MPS
3700408	1	HOSE\SUCT\1X40
3800022	1	FTG\1-1/4MPX1FP\BUSH\LW
3800129	1	FTG\3/4MPX3/4FP\90D\ST;ELL
3800143	2	CLAMP\HOSE\1-1/2T-BOLT
3800196	1	FTG\3/4MORX1/4FP\ADPT
3800200	2	FTG\3/4MPX3/4FP\45D\ST;ELL
3800239	1	FTG\1MPX3/4MP\NPL
3800253	1	FTG\3/4MP\VENT\ABS-40
3800354	2	FTG\3/4MP\PLUG\ALN
3800381	1	GUAGE\3000PSI\REAR;STEM
3800391	1	FTG\1-5/16MOR\1BARB\90D
3800392	1	FTG\1MPX1BARB\90D\ELL\LW
3800397	1	FTG\1-1/16MORX3/4FP\90D\
3800403	1	FTG\3/4FP\TEE\HI-PRESS
3800425	1	FTG\1/4FP\CPLG
3900022	1	MTR\HYD\30\4000
4000109	1	VALVE\HYD\1-SPL\FLO;CNTRL
4000110	1	VALVE\HYD\CUSH\3/4FLG
4200040	1	PUMP\HYD\1.02CU.IN.\RH
4400004	1	FLTR\BASE\3/4FP\3.7D
4400005	1	FLTR\ELMT\10MICRON\3.7D
4400006	1	FLTR\COMP\10MICRON\3.7D
4400007	1	FLTR\SCRN\2MPX1-1/4FP\25GP
6800149	1	TANK\HYD\15\6012
7500620	1	CAP\OIL\4777\300 SERIES



TANKS AND ENGINE





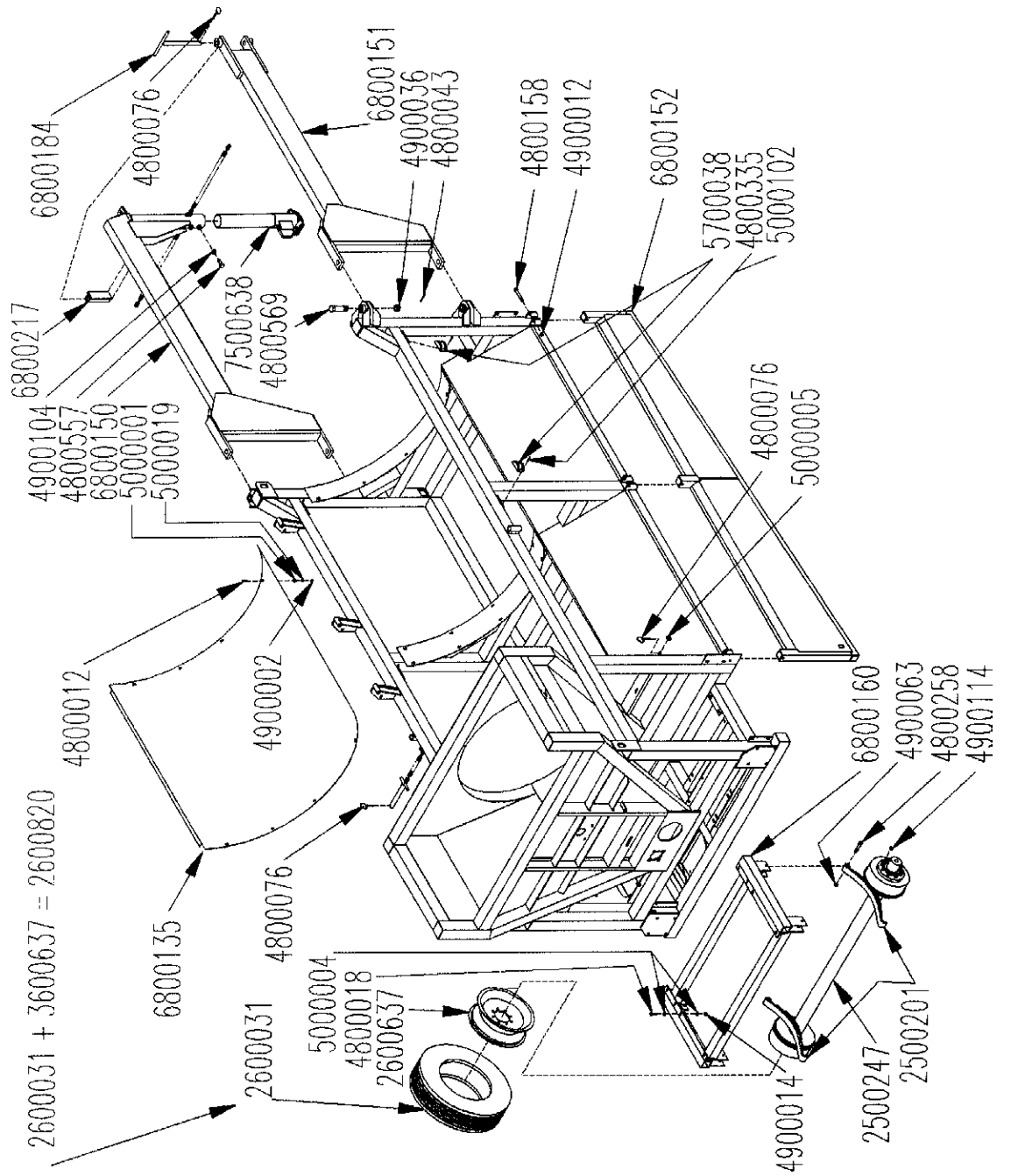
TANKS AND ENGINE

Tanks and engine

Part No.	Qty.	Description
O900063	1	ENG\ISUZU\25HP\3LB1
3700381	6	HOSE\FUEL\5\16\FT
3700382	6	HOSE\FUEL\3\16\FT
3800129	1	FTG\3\4MPX3\4FP\90D\ST;ELL
3800200	2	FTG\3\4MPX3\4FP\45D\ST;ELL
3800253	1	FTG\3\4MP\VENTABS-40
3800354	2	FTG\3\4MP\PLUG\ALN
3800393	1	FTG\1\4MPX3\16BARB\90D\ELL\LW
3800394	1	FTG\5\16BARBX1\4MP\90D\ELL\LW
3800403	1	FTG\3\4FP\TEE\HI-PRESS
4400026	1	FLTR\ELMT\OIL\ISUZU\25
4400027	1	FLTR\ELMT\FUEL\ISUZU\25
4400028	1	FLTR\ASSY\AIR\ISUZU\25
4400086		FLTR\ELMT\AIR\ISUZU\25 element for 4400028
4800114	12	BOLT\HEX\1\2X2\NC
4900001	12	NUT\HEX\1\2\NC
5000004	20	WASH\FLAT\1\2
5000006	12	WASH\LOCK\1\2
6800148	1	TANK\FUEL\15\6012
6800149	1	TANK\HYD\15\6012
6800188	1	STRAP\STBLZG\TANK\6012
7500620	2	CAP\OIL\4777\300SERIES
5700231	1	CBL\BATT\4GAX42\BATT+
5700232	1	CBL\BATT\4GAX18\BATT-
7500694		CBL\THRTL\5\25HP;ISUZU



MAIN FRAME FRONT





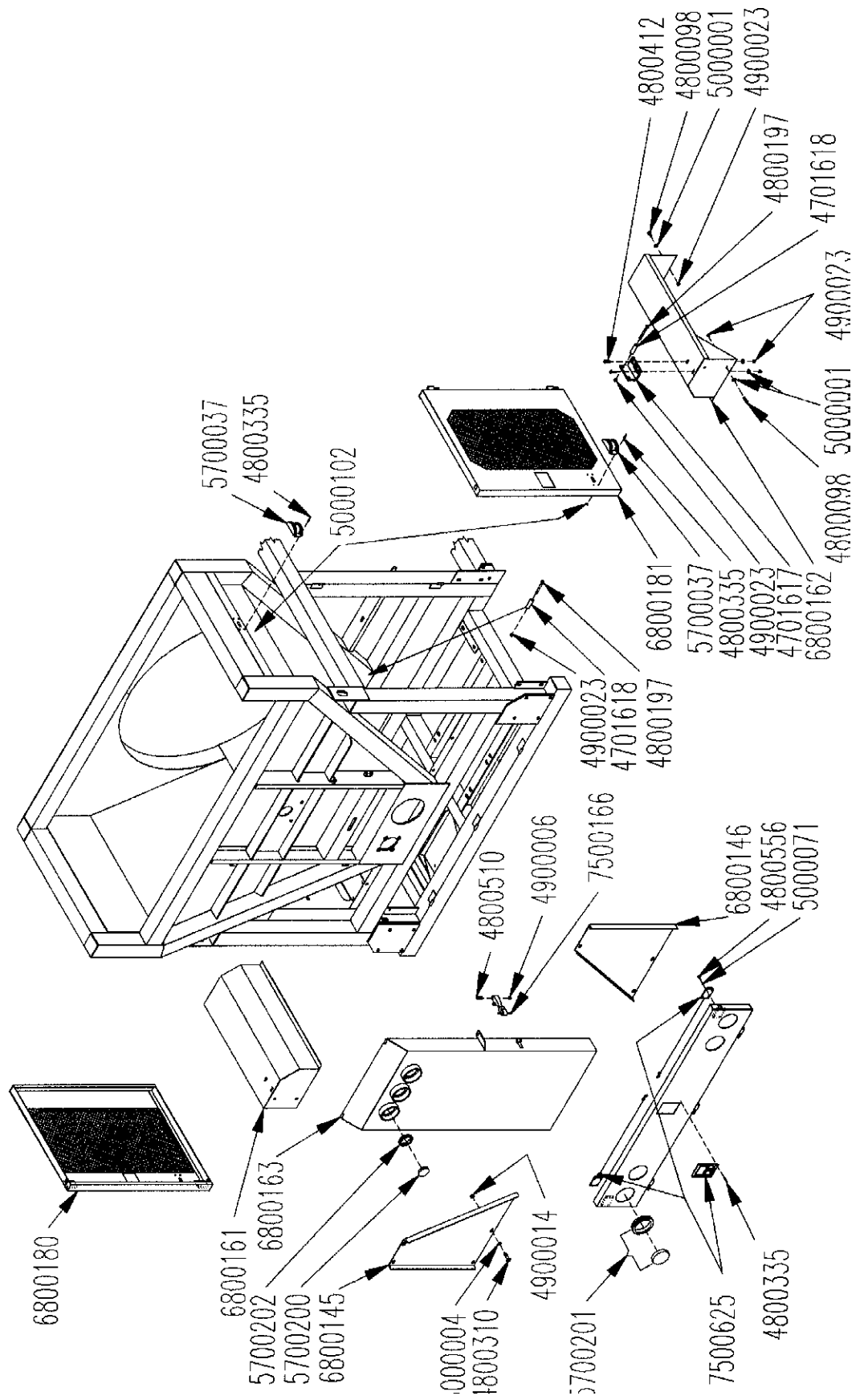
MAIN FRAME FRONT

Main frame front

Part No.	Qty.	Description
2500201	1	SPRG\AXLE\8K\KIT\MDT
2500247	1	AXLE\ELEC\8K\+11-1/2"
2600031	2	TIRE\HWY\215\75RX17.5
2600637	2	WHL\17.5X6.75\HD8\SNGL
2600820	2	WHL\ASSY\9.50X17.5\8BOLT
4800012	20	BOLT\CRG\3\8X1-1/4\NC
4800018	8	BOLT\HEX\1\2X1-1/4\NC
4800043	4	PIN\COT\1\4X2-1/2
4800076	3	PIN\KLIK\5\16
4800158	3	BOLT\HEX\5\8X4-1/2\NC
4800258	4	BOLT\HEX\9\16X3-1/2\NC
4800335	8	RIV\POP\AL\3\16X1/2
4800557	2	SCR\SET\SQ\3\4X2\NC
4800569	4	BOLT\HEX\1-1/4X6-1/2\NC
4900002	20	NUT\HEX\3\8\NC
4900012	3	NUT\TPLCK\5\8\NC
4900014	8	NUT\TPLCK\1\2\NC
4900036	4	NUT\SLOT\1-1/4\NC
4900063	4	NUT\TPLCK\9\16\NC
4900104	2	NUT\JAM\3\4\NC
4900114	16	NUT\TPRWHL\5\8\NF
5000001	20	WASH\FLAT\3\8
5000004	16	WASH\FLAT\1\2
5000005	1	WASH\FLAT\3\4
5000019	20	WASH\LOCK\3\8
5000102	8	WASH\FLAT\3\16\RIV\POP
5700038	4	LAMP\CL\12VDC\AMB
6800135	2	SH\STRPPR\71X72\6012\TROM
6800150	1	FRAME\HITCH\LH\6012
6800151	1	FRAME\HITCH\RH\BRACE\6012
6800152	1	FRAME\APRON\149X29
6800160	1	FRAME\AXLE\8K\6012
6800184	1	PIN\HITCH\1-1/4X14-3/4
6800217	1	BRKT\BLOCK\HITCH\6012
7500638	1	CPLG\HITCH\2-5\16\RD



MAIN FRAME REAR





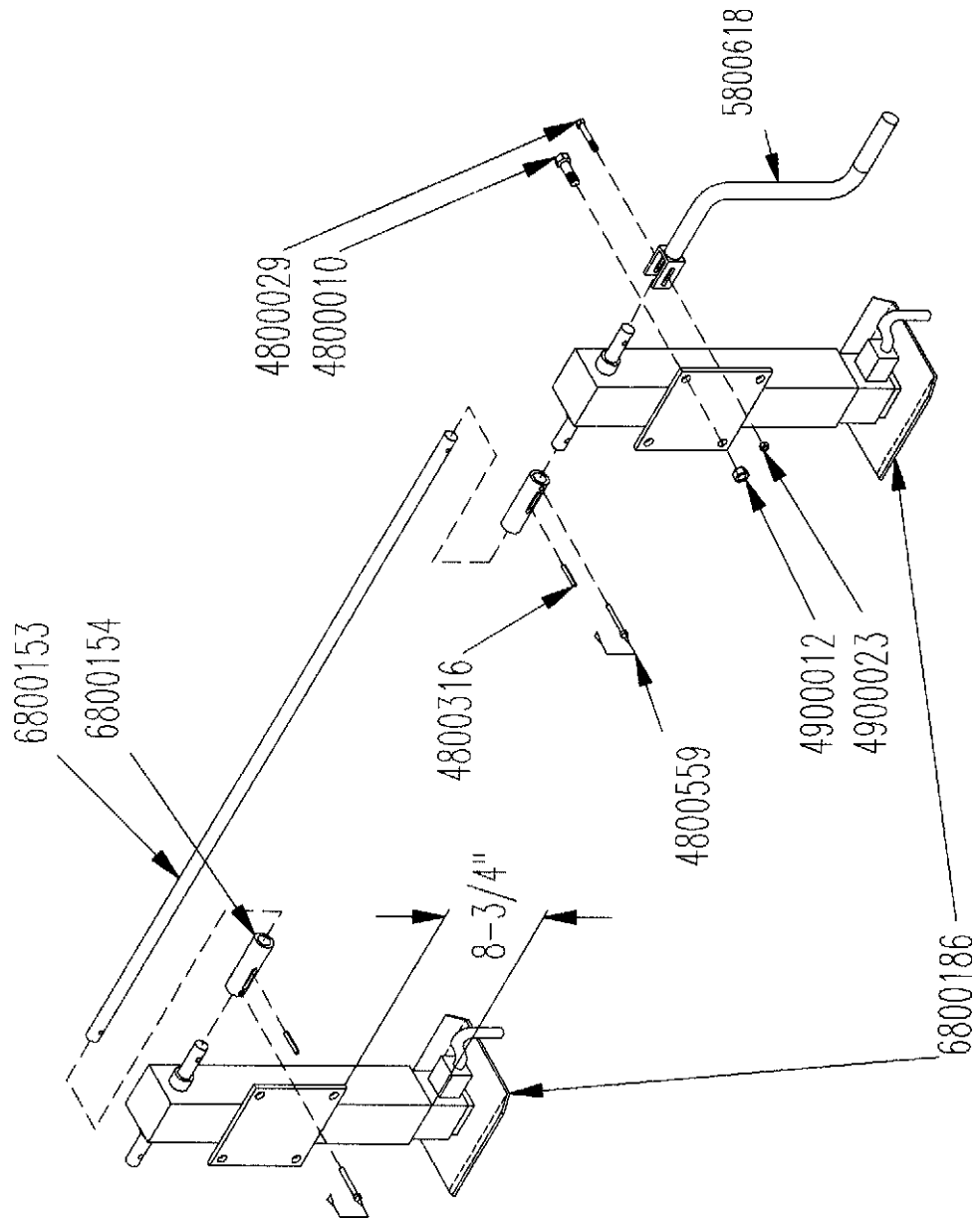
MAIN FRAME REAR

Main frame rear

Part No.	Qty.	Description
4701617	2	LATCH\STOP\DOOR\SECURITY
4701618	4	CUSH\STOP\DOOR\2-1/2
4800098	8	BOLT\HEX\3/8X1-1/4\NC
4800197	4	BOLT\HEX\3/8X3-1/2\NC
4800310	10	SCR\BUT\ALN\1/2X1-1/4\NC
4800335	20	RIV\POP\AL\3/16X1/2
4800412	4	SCR\CSK\ALN\1/2X1-1/4\NC
4800510	1	BOLT\HEX\5/16X1-3/4\NC
4800556	24	SCR\RD\SLOT.\#10X1/4
4900006	1	NUT\NYLCK\5/16\NC
4900014	10	NUT\TPLCK\1/2\NC
4900023	16	NUT\TPLCK\3/8\NC
5000001	12	WASH\FLAT\3/8
5000004	10	WASH\FLAT\1/2
5000071	24	WASH\LOCK\EXT;STAR\#10
5000102	8	WASH\FLAT\3/16\RIV\POP
5700037	4	LAMP\CL\12VDC\RED
5700200	3	LAMP\CL\2-1/2\RD\RED
5700201	4	LAMP\TAIL\4-1/2\COMP\RED
5700202	3	LAMP\GRMMT\2-1/2\KIT
6800145	1	GUARD\ENG\REAR\LH\6012
6800146	1	GUARD\ENG\REAR\RH\6012
6800161	1	FNDR\LH\6012
6800162	1	FNDR\RH\6012
6800163	1	GUARD\DRIVE\REAR\6012
6800180	1	DOOR\ENG\38-1/2X32\LH
6800181	1	DOOR\ENG\38-1/2X32\RH
6800182	1	DOOR\ENG\REAR
7500166	1	LATCH\RBBR\6
7500625	3	LATCH\PDDL\3-4974\KEY



JACK ASSEMBLY





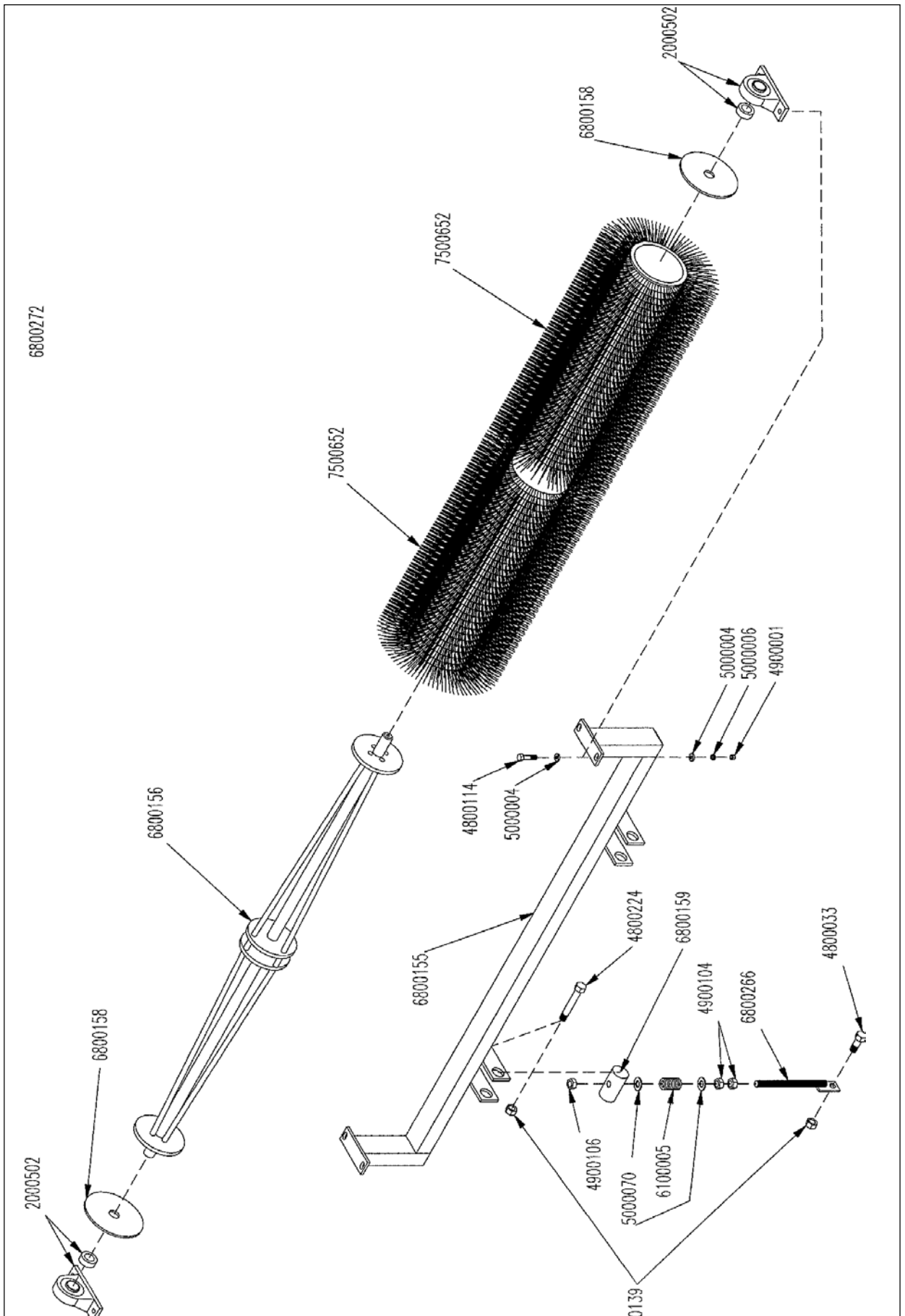
JACK ASSEMBLY

Jack assembly

Part No.	Qty.	Description
4800010	8	BOLT\HEX\5/8X2\NC
4800029	2	BOLT\HEX\3/8X2-1/2\NC
4800316	4	PIN\RLLD\5/16X2
4800559	4	PIN\LYNCH\5/16X2-1/2
4900012	8	NUT\TPLCK\5/8\NC
4900023	2	NUT\TPLCK\3/8\NC
5800618	2	JACK\HANDLE\10000
6800153	2	SHAFT\JACK\1\REMOVEABLE
6800154	4	CPLG\SLIDE\SHAFT\JACK
6800186	4	JACK\10000\ONE;SPD\WLD\MNT



BRUSH ASSEMBLY





BRUSH ASSEMBLY

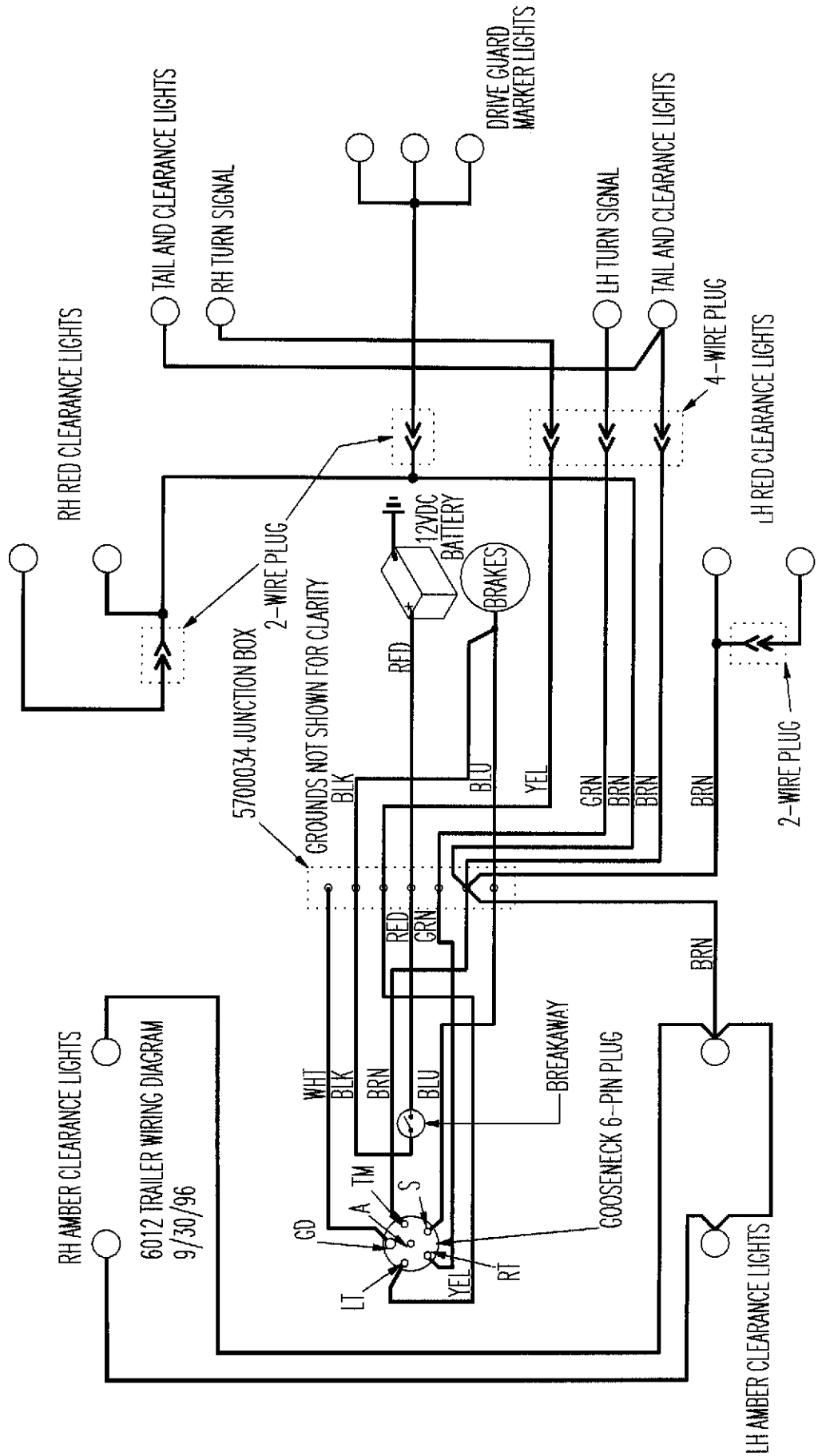
Brush assembly

Part No.	Qty.	Description
6800272		BRUSH\NYL\UPDATE\KIT\6012
2000502	4	BRG\PB\1-1/4
4800033	4	BOLT\HEX\3/4X2
4800114	8	BOLT\HEX\1/2X2
4800224	4	BOLT\HEX\3/4X5
4900001	8	NUT\HEX\1/2\NC
4900104	8	NUT\JAM\3/4\NC
4900106	4	NUT\NYLCK\3/4\NC
4900139	8	NUT\TPLCK\3/4\GR8\NC
5000004	16	WASH\FLAT\1/2
5000006	8	WASH\LOCK\1/2
5000070	8	1 1/2 X 25/32 X 3/16 WASH
6100005	4	SPRNG\249OT\13/16ID^
6800155	2	FRM\BRUSH\71-1/8\6012
6800156	2	SHAFT\BRUSH\71-6012
6800158	4	FLG\END\BRUSH\7-1/2\6012
6800159	4	PIVOT\BOLT\ADJ\BRUSH\6012
6800266	4	BOLT\ADJ\BRUSH\3/4X12X>
6800271	1	MNT\BRUSH\UPDATE\WLDMNT
7500652	4	BRUSH\32-3/4\SPLIT\6012

Note - Machines with serial numbers GI0108 and below must order 6800271 if ordering 6800155



WIRING HARNESS





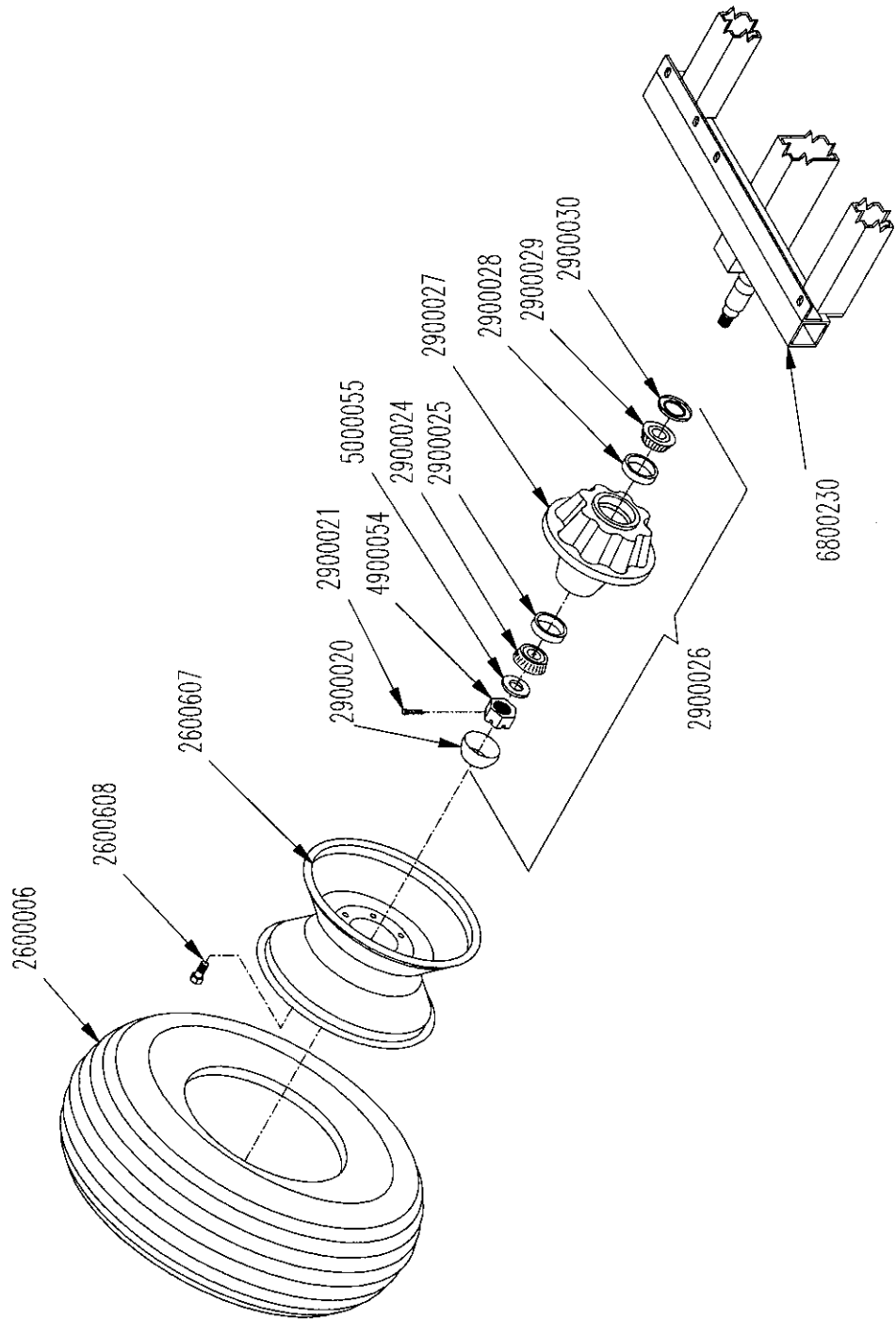
WIRING HARNESS

Wiring harness

Part No.	Qty.	Description
5700033	1	TERM\6POLE\TRLR\CONN\PIN-RECEIVER
5700034	1	ENCL\JCT\7POLE\TRLR\HARN
5700037	4	LAMP\CL\12VDC\RED
5700038	4	LAMP\CL\12VDC\AMBER
5700200	3	LAMP\CL\12VDC\2-1/2\RED
5700201	4	LAMP\TAIL\4-1/2\COMP\RED
5700202	3	LAMP\GRMMT\2-1/2\KIT
5700213	1	SWITCH\BRKAWAY\12VDC



AXLE ASSEMBLY





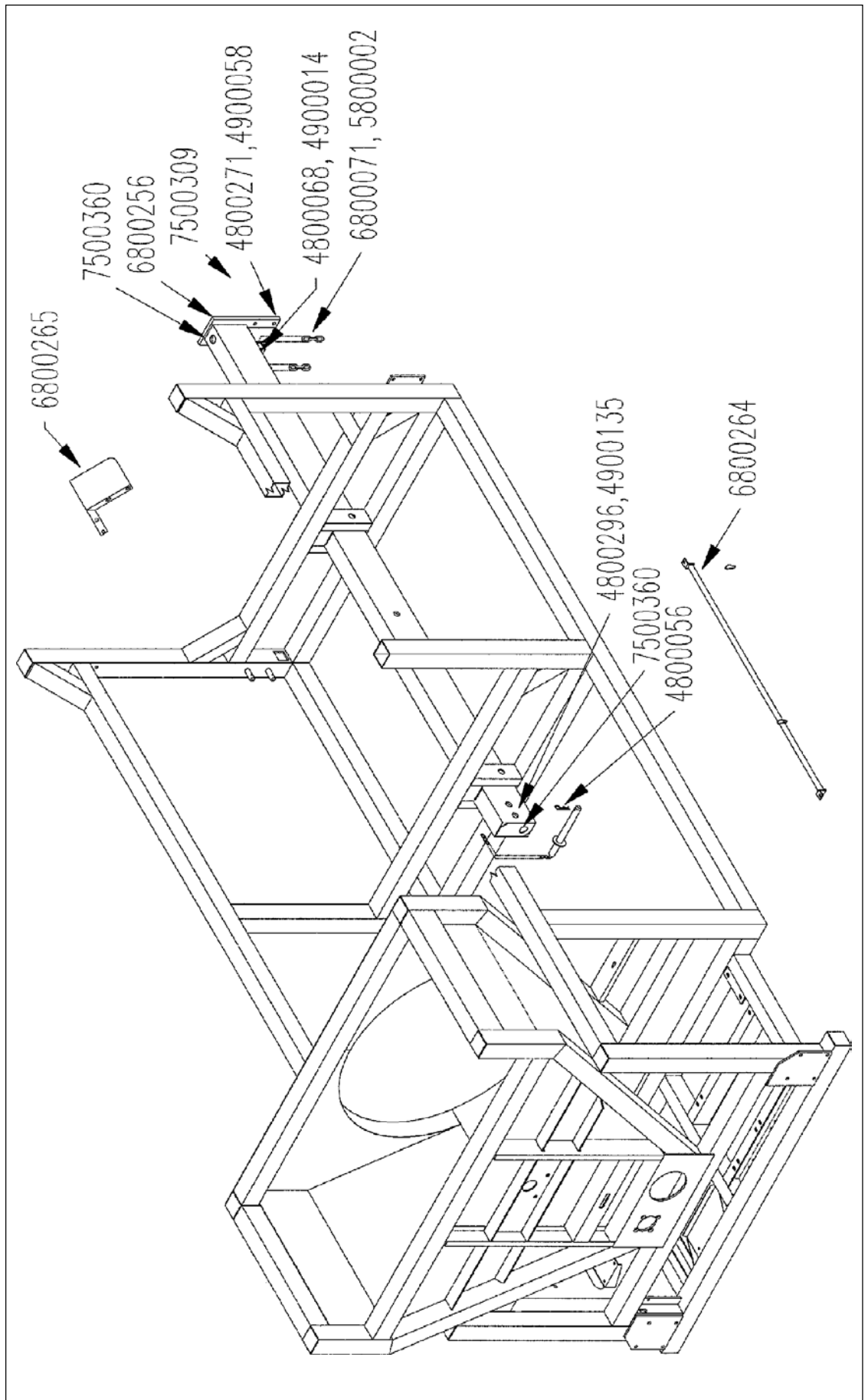
AXLE ASSEMBLY

Axle assembly

Part No.	Qty.	Description
6800234		AXLE\ASSY\SLOW;SPEED
2600006	2	11LX16X8 PLY TIRE
2600607	2	16 X 10 8-BOLT WHEEL
2600608	16	WHEEL BOLT
2900026	2	HUB/WHEEL HUB(811)COMPLET
2900020	2	HUB CAP/WHL HUB(DC17)
2900021	2	COTTER PIN/WHL HUB
2900024	2	OUTER CONE/WHL HUB(25877)
2900025	2	OUTER CONE/WHL HUB (25821)
2900027	2	NA, ORDER PART NUMBER 2900026
2900028	2	INNER CUP/WHL HUB(4T25520)
2900029	2	CONE INNER/WHEL HUB(25590)
2900030	2	SEAL/WHEEL HUB(20148)
4900054	2	NUT\CASTLE\7/8\NF
5000055	2	WASH\SPINDLE\7/8
6800230	1	FRAME\AXLE\SLOW;SPEED



PINTLE HITCH OPTION





PINTLE HITCH OPTION

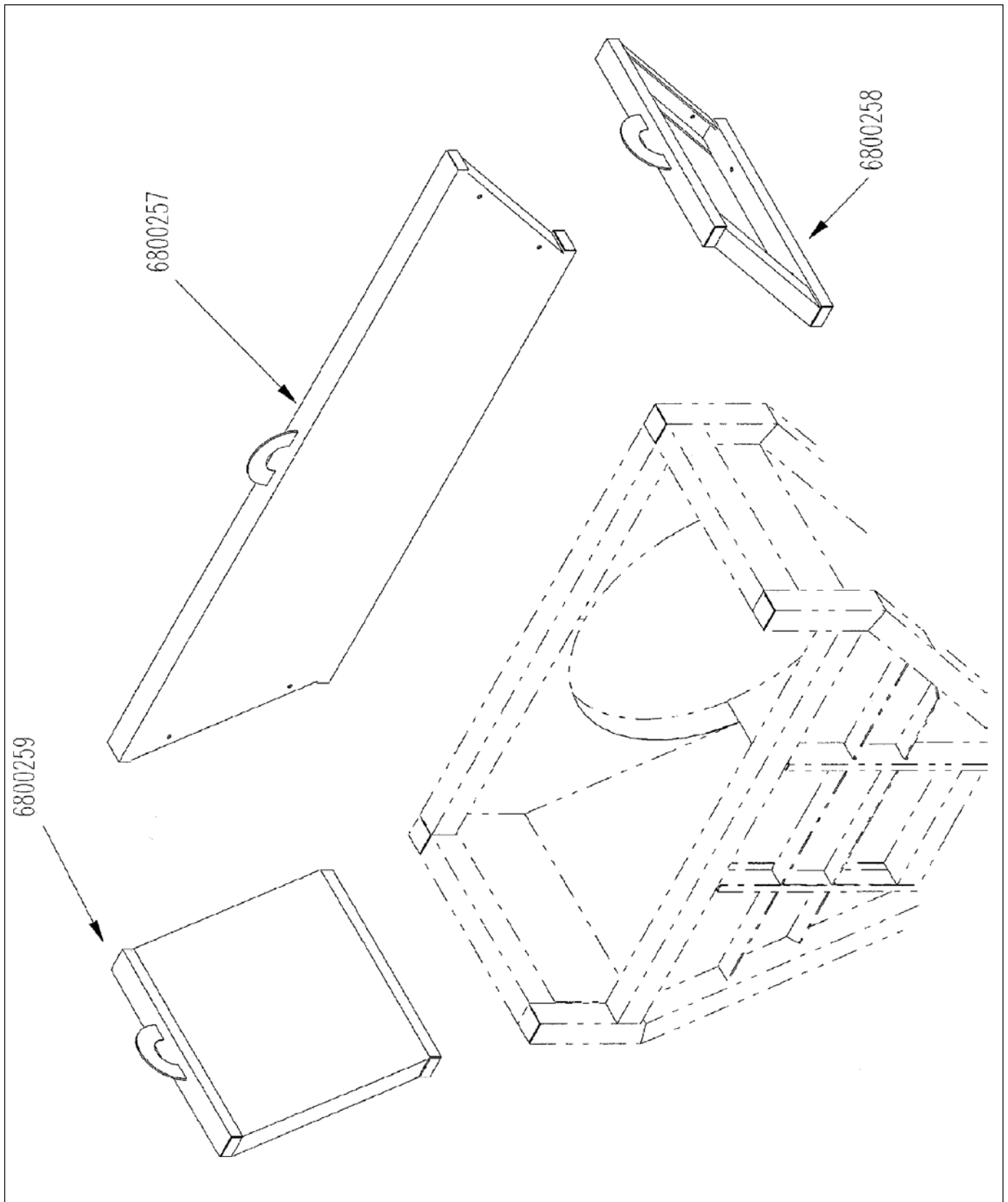
Pintle Hitch Option

Part No.	Qty.	Description
6800260		HITCH\PNTL\6012\OPTN
4800056	1	PIN\HAIR\3/16X3 (#6)
4800068	1	BOLT\HEX\1/2X3
4800271	4	BOLT\HEX\5/8X2-1/2\GR8
4800296	1	BOLT\HEX\1-1/4X5
4900014	1	"NUT\TPLCK\1/2\INC\.500""MAX"
4900058	4	NUT\FLG\TPLCK\5/8\NC
4900135	1	NUT\NYLCK\1-1/4\NC
5800002	2	5/16 SLIP HOOK
6800071	1	CHAIN\HITCH\40X3/8\TROM
6800256	1	HITCH\PNTL\6012
6800264	1	BRKT\SUPPT\HARNESS\WIRING
6800265	1	GUARD\HITCH\PNTL\6012
7500309	1	PINTLE HITCH 4 BOLT
7500360	2	GROMMET 1.75ID .25MT

Note - Check to verify that you have the vertical tubes the hitch bar slides between. A mount kit is available to update older machines.



HOPPER EXTENSION OPTION





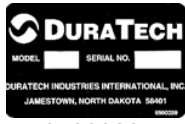
HOPPER EXTENSION OPTION

Hopper Extension Option

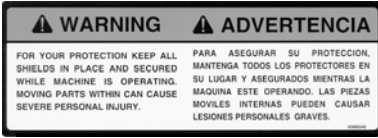
Part No.	Qty.	Description
4800062	4	BOLT\HEX\1/2X11
4800077	4	BOLT\HEX\1/2X5-1/2
4800080	2	BOLT\HEX\1/2X7
4900014	10	NUT\TPLCK\1/2\NC
5000004	20	WASH\FLAT\1/2
6800257	1	FRM\BCKPLT\EXT\HPPR\6012
6800258	1	FRM\EXT\RH\HPPR\6012
6800259	1	FRM\EXT\LH\HPPR\6012



DECALS



6500039



6500040



6500042



6500052



6500056



6500065

HYDRAULIC OIL
6500124

ENGINE SERVICE REPORT

- ___ Check engine oil level.
- ___ Check engine coolant.
- ___ Check batteries.
- ___ Check air cleaner for obstructions.
- ___ Check exhaust for obstructions.

6500132

6500132



6500156



RECYCLE

6500157



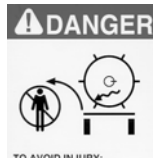
6500219



6500220



6500224



6500227



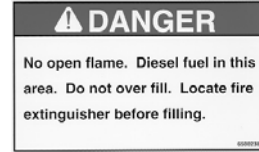
6500227

TROMAX

6500228



6500237



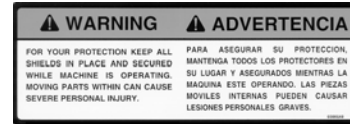
6500238

OPERATION AND MAINTENANCE

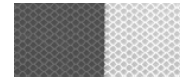
MANUAL

Read Before Operating Machine.

6500239



6500240



6500245



6500248



6500208

OPERATION AND MAINTENANCE

MANUAL

Read Before Operating Machine.

6500236



DECALS Decals

Part No.	Qty.	Description
5700192	4	LAMP\RFLCTR\AMB\4-3/8
5700193	4	LAMP\RFLCTR\RED\4-3/8
6500039	1	DECAL\INFO\NDURATECH
6500040	3	DECAL\WARN\SHIELD;PROT
6500042	1	DECAL\WARN\KEEP;WHL;BOLTS
6500052	1	DECAL\INFO\OIL;LEVEL
6500056	1	DECAL\INFO\ROTATION;STR
6500082	1	DECAL\WARN\ROTATN;PART
6500124	1	DECAL\INFO\HYD;OIL
6500132	1	DECAL\INFO\ENG;SERV
6500156	24	DECAL\LOGO\2\STRIPE\SLV
6500157	2	DECAL\LOGO\RECYCLE\SLV
6500208	1	DECAL\WARN\GENERAL
6500219	1	DECAL\DNGR\MOVING;PRTS
6500220	2	DECAL\WARN\HI;PRESS;FLUID
6500224	2	DECAL\LOGO\DURA\4-3/4\SLV
6500228	2	DECAL\LOGO\TROMAX\3\SLV
6500238	1	DECAL\DNGR\OPEN;FLAME
6500240	1	DECAL\WARN\MOVE;PART
6500245	22	DECAL\MISC\TAPE\RED\WHT
6500248	5	DECAL\MISC\RFLCTR\2\WHT
6500259	2	DECAL\LOGO\6012\3\SLV
7500629	1	GAUGE\LEVEL\SET
6500123		DECAL\INFO\DIESEL;FUEL
6500236		DECAL\INFO\MANUAL\BLACK;ON;WHITE

