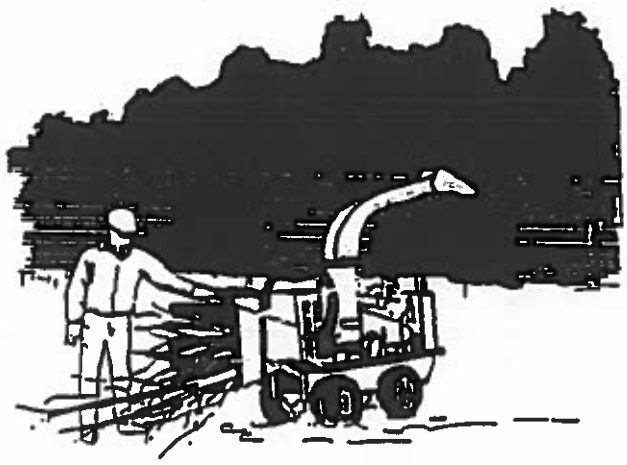
Bandit Industries, Inc.
6750 MILLBROOK ROAD • REMUS, MI 49340 • PHONE: (517) 561-2270 • FAX: (517) 561-2273

Go-Bandit Insert
March 1, 1994

# BASIC INSTRUCTIONS FOR SAFETY, OPERATION & MAINTENANCE FOR THE "GO-BANDIT"



# GO BANDIT

NOTE: NOT TO BE CONSIDERED AS ALL INSTRUCTIONAL. IT IS THE OWNER AND/OR OPERATOR'S RESPONSIBILITY TO USE GENERALLY ACCEPTED "COMMON SENSE" DURING OPERATION, SERVICE, MAINTENANCE AND SAFETY PRECAUTIONS. THIS INSERT IS TO BE USED IN CONJUNCTION WITH THE MIGHTY BANDIT MANUAL.

## THINGS TO DO

1) ALWAYS keep drive chain system for undercarriage properly maintained, tightened and lubricated at least daily (completely coat with spray silicone). All sprockets and adjusters must be kept aligned and tensioned.

2) DAILY check wheel nuts for proper tightness.

3) DAILY visually inspect all hydraulic hoses and fittings for leakage cuts, hose distortions or breakage and repair as needed (caution must be observed when handling hydraulic problems - oil may be under load and/or hot; a pin hole in a hose, which will cause oil to penetrate the skin, causing severe injury).

4) DAILY check tire air pressure. A properly inflated tire helps stability.

5) MONTHLY check hydraulic oil pressure. The correct pressure is 1500 PSI - maximum. This pressure is the same for both the feed system and the drive system.

6) ALWAYS be aware of surroundings, ground pitch, stumps, holes, low wires, and areas that can cause insecure footing for you and the chipper.

7) ALWAYS make sure feed wheels are stopped and no one is in front of the chipper before moving the unit.

8) ALWAYS check drive valves and handles for sticky operation. These must work freely. Failure to do so may result in the operator being run over "if they should slip or tumble when unit is moving".

9) ALWAYS make sure discharge is pointed away from operator's controls when unit is moving.

10) ALWAYS check for proper seating of spacer ring and proper torque on auxiliary tire wheel nuts when using auxiliary tires.

NOTE: ON UNITS BUILT AFTER S/N 2812 AND DATED APRIL 1993, ALWAYS CHECK AUXILIARY TIRE MOUNT HOLE IN END OF MAIN AXLE FOR ANY FOREIGN DEBRIS IN THREADS AND DEBRIS ON OUTSIDE OF MOUNT. ALWAYS LIGHTLY GREASE MAIN AXLE STUB PRIOR TO MOUNTING AUXILIARY TIRE. CHECK MOUNTING TUBE FOR DEBRIS ON INSIDE OF AUXILIARY TIRE MOUNT.

## THINGS NOT TO DO

1) DO NOT work on any part of the "Go-Bandit" unless the engine is shut off, the machine is on level ground, and there are no flammable fluids near unit.

2) DO NOT drive the undercarriage with engine RPM over slightly higher than idle.

3) DO NOT use this as an "ALL-TERRAIN-VEHICLE", as axles will break if unit is abused by running tires into stumps, curbs, rocks, etc. The undercarriage drive system is designed for movement over tractional ground at a moderate speed.

4) DO NOT ride on the chipper when the unit is moving. It runs slow enough to keep up with.

5) DO NOT try to skid the unit with another vehicle if it becomes stuck. This will damage the undercarriage.

6) DO NOT operate the unit if drive controls are sticking. Clean any rust or grime off the rod end of valve.

7) DO NOT force parts together when installing auxiliary tires. If force is required, check all parts for obstructions, dings or misalignment.

8) DO NOT move unit until the feed wheels are stopped and discharge is moved away from the operator's controls.

9) DO NOT adjust hydraulic oil pressure over 1500 PSI - maximum. Pressure over this setting will cause damage to the drive system.

10) DO NOT use the chipper to pull other objects, such as trailers, logs, brush, etc.

D A N G E R

*DO NOT OPERATE THE "GO-BANDIT" UNLESS YOU FIRST HAVE AND USE COMMON SENSE, WHICH INCLUDES BEING CONSISTENT WITH A COMPLETE MAINTENANCE PROGRAM, AND "ABOVE ALL" FOLLOWING MAXIMUM SAFETY PRECAUTIONS.

THE "GO BANDIT" IS A MODIFIED VERSION OF THE "MIGHTY BANDIT" CHIPPER, AND ALL SAFETY PRECAUTIONS IN THAT MANUAL SUPPLIED WITH THE CHIPPER MUST BE FOLLOWED. THE MAJOR MODIFICATION FROM A "MIGHTY BANDIT" IS THAT THE CHIPPER IS MOUNTED ON A TIRE-PROPELLED, HYDRAULICALLY-DRIVEN UNDERCARRIAGE.

## "USE OPERATING CONTROLS DIAGRAM"

1) Start engine and let idle until warm. During this time, check all hoses and fittings for leaks. Make sure selector valve handle (location "C") is pulled out - away from unit. This supplies oil to the undercarriage.

2) Make sure discharge is pointed away from operator position. With engine speed slightly higher than an idle, feather both drive control handles (location "A" & "B") toward machine to move forward, feather both handles ("A" & "B") toward operator for reverse. Use extreme caution when in reverse, be aware of any obstructions or poor footing.

   To turn unit, feather handle "A" toward unit for a right turn, feather handle "B" toward unit for a left turn. To make a tighter turn, feather control "A" toward unit and control "B" toward operator for a right turn or feather control "B" toward unit and control "A" toward operator for a left turn.

3) When unit has reached desired location, move selector valve handle "C" toward unit. This supplies oil to the feed system.

4) Make certain control handle (location "D") is operating properly. Standing right of infeed, pull control handle toward you, feed wheels must be turning as to pull wood into chipper.

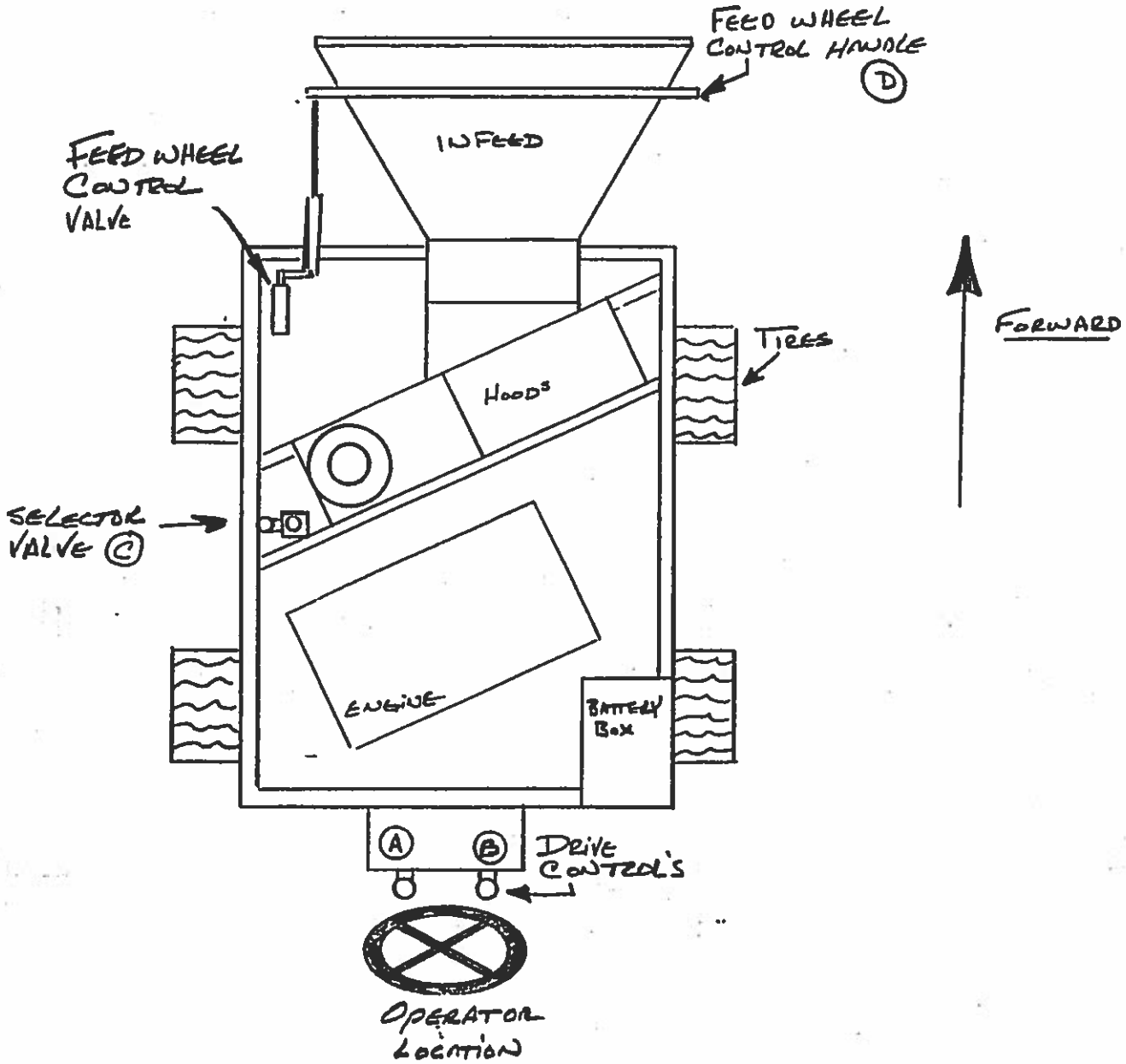
   Push control handle away from you. You will feel a click, stop here. Feed wheels must be stopped, as this is the neutral position. Push control handle away to final position. The feed wheel must be turning to push wood out of the chipper. If this is not the case, shut engine off, wait for disc to stop turning, and make necessary repairs.

5) If all is correct, raise engine speed to full, check discharge location (make sure it is away from infeed or work area), pull control handle toward infeed opening and you are ready to chip.

6) Use all the safety precautions in the manuals and common sense.

# OPERATING CONTROLS

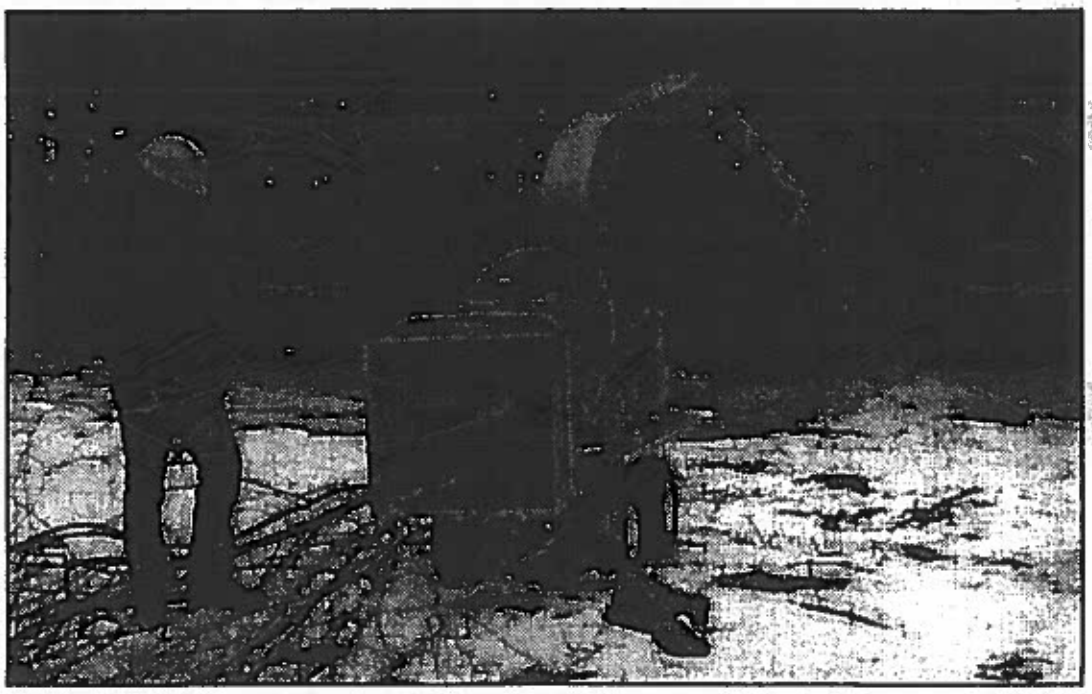
(IF CORRECTLY INSTALLED AND NOT REPOSITIONED)

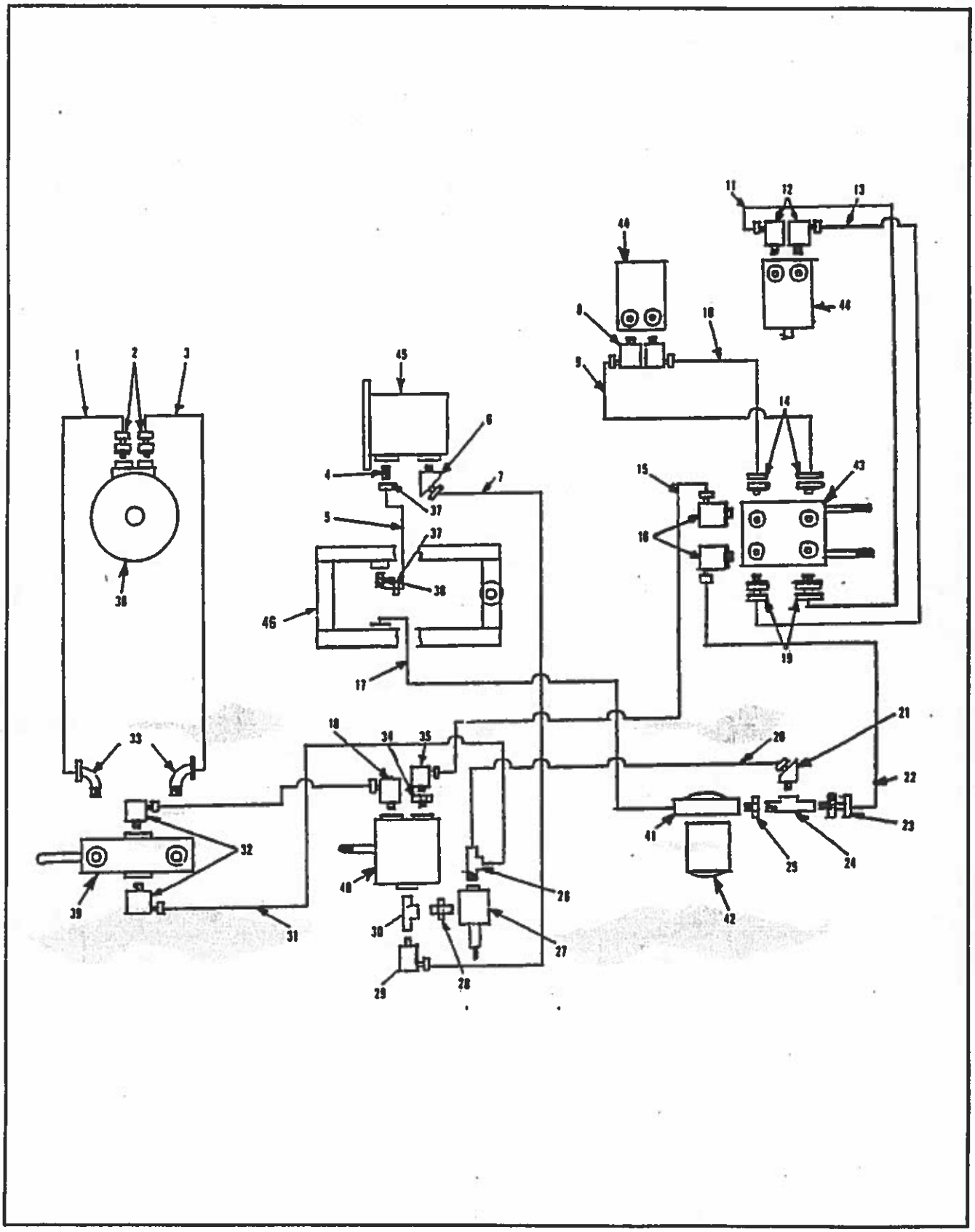


# INFORMATION INSERT

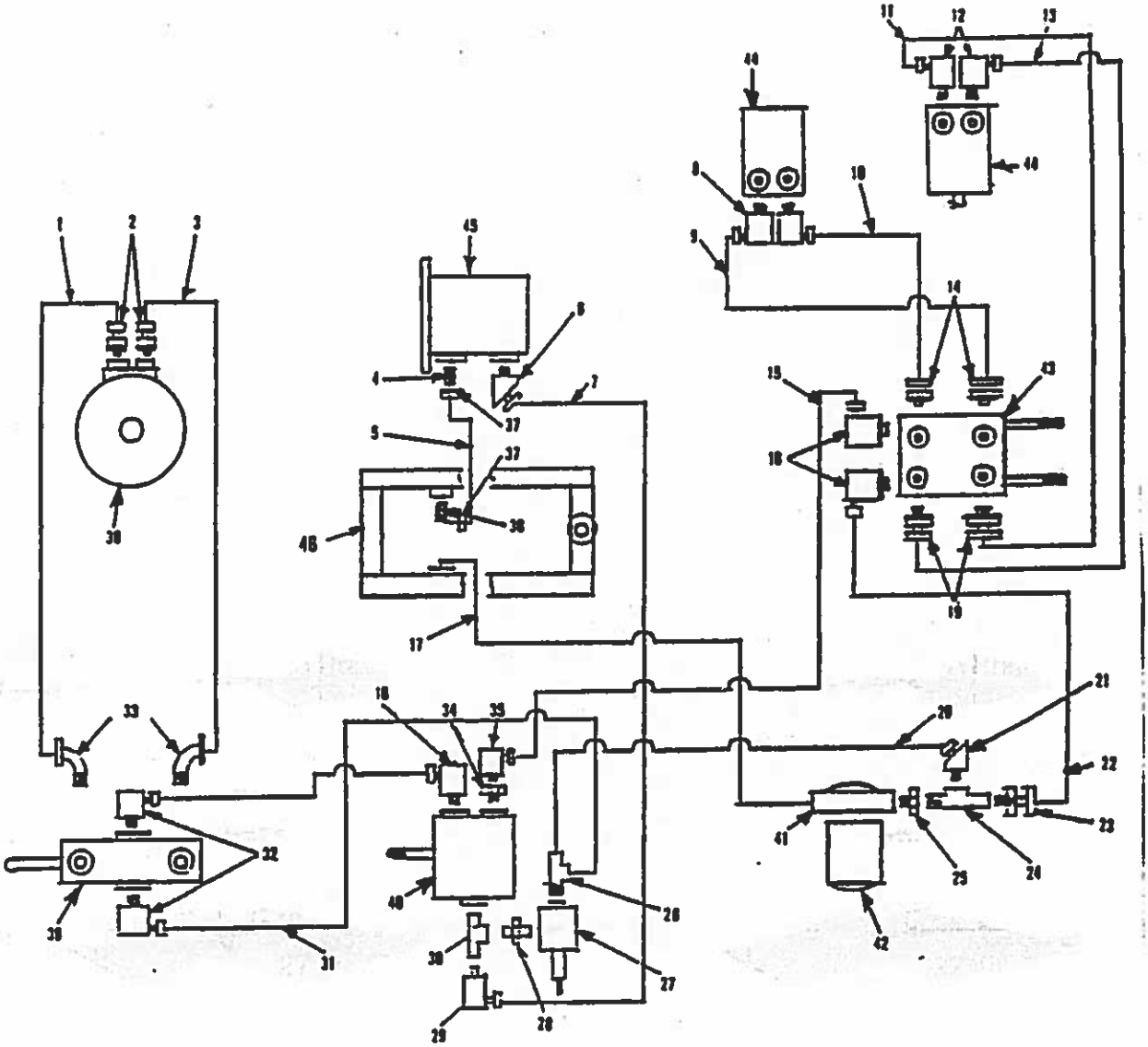
# GO-BANDIT

## BRUSH CHIPPER

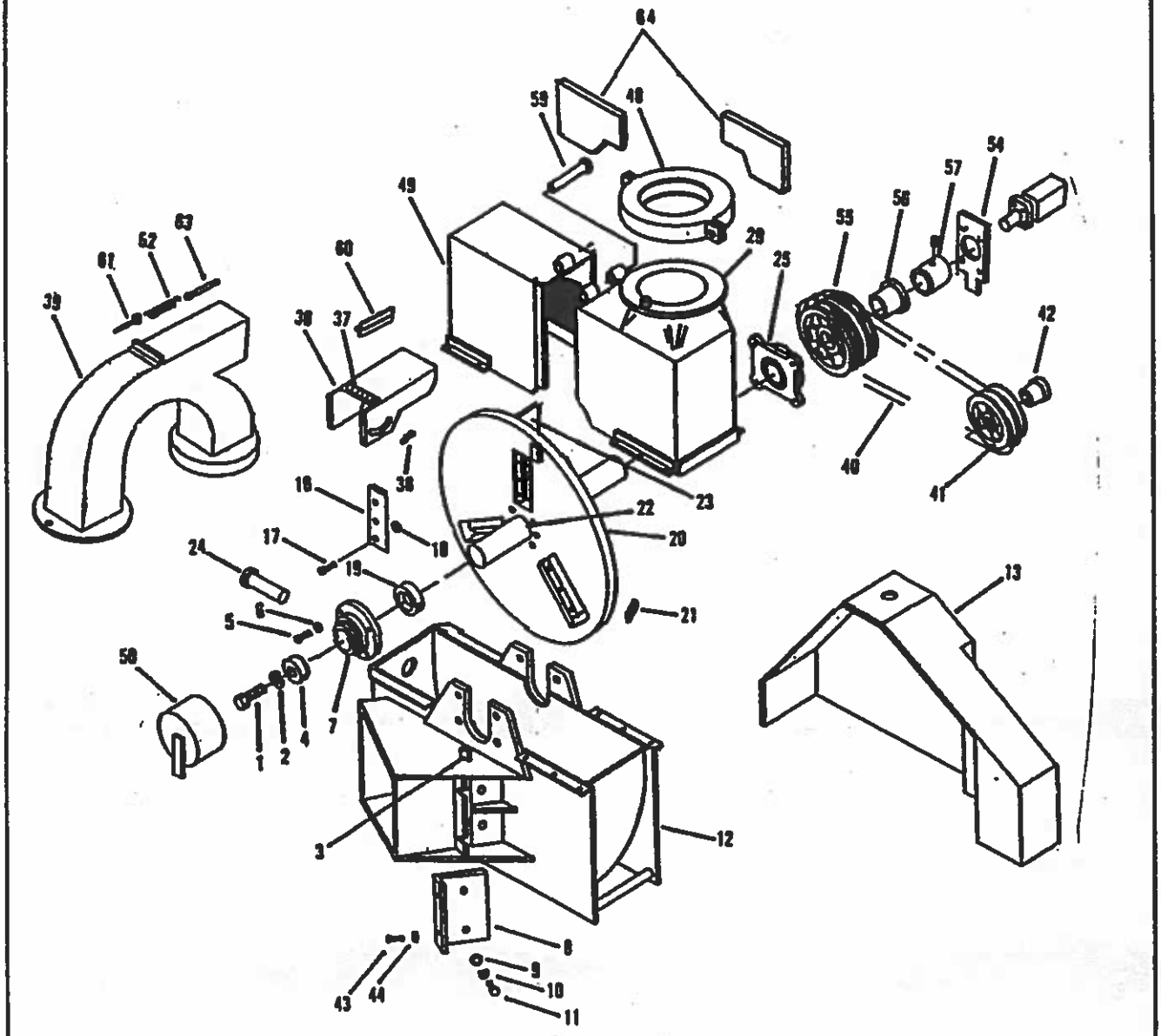




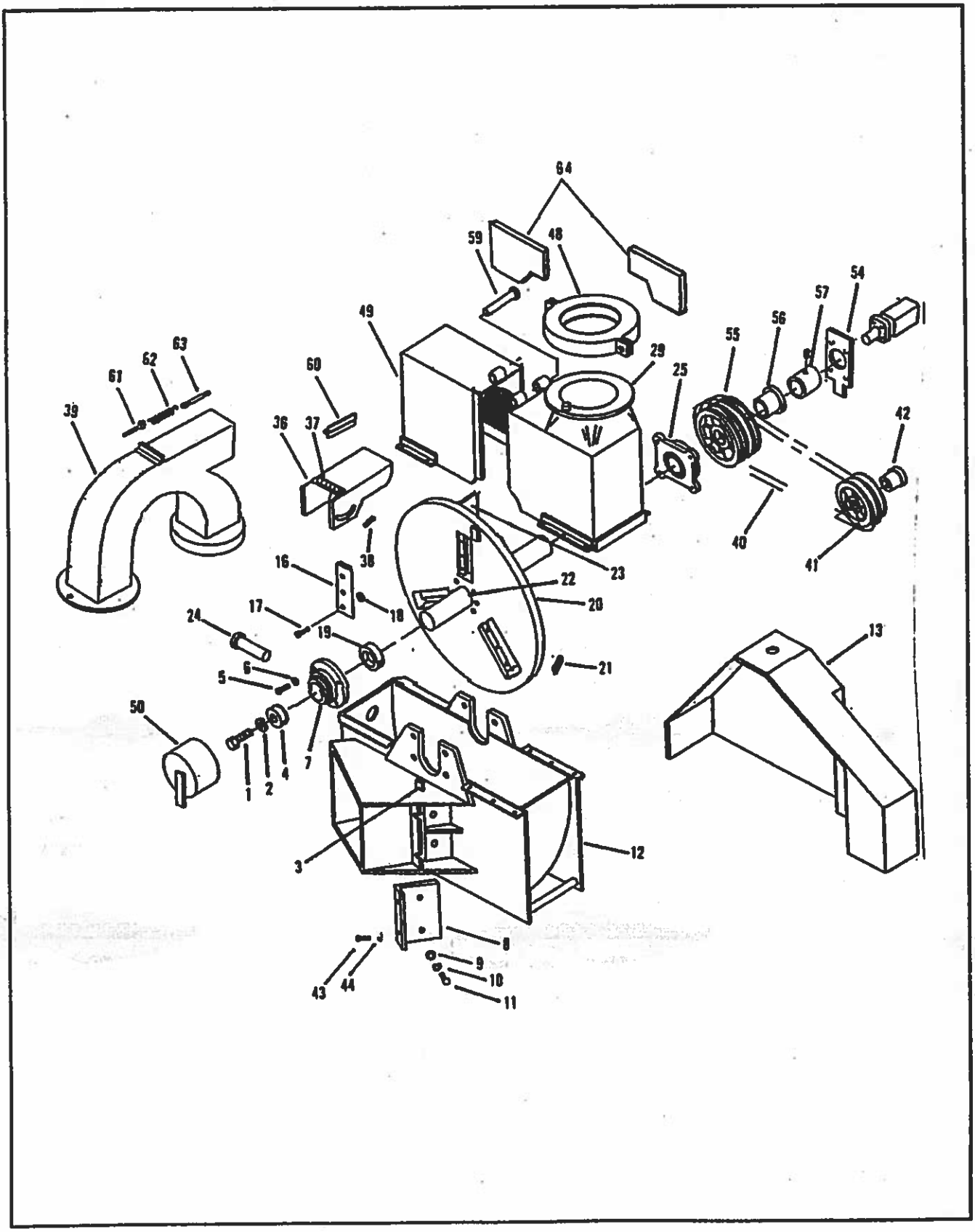
| LOCATION | PART NUMBER | DESCRIPTION |
|---|---|---|
| 1 | 900-3906-13 | Hose 1/2"x66" |
| 2 | 900-3901-83 | Straight Swivel 10x08 |
| 3 | 900-3906-13 | Hose 1/2"x66" |
| 4 | 900-3905-89 | 3/4" to 1" Nipple Barbed |
| 5 | 900-3906-04 | Hose 1" Suction x Cut To Fit |
| 6 | 900-3900-21 | 45° Swivel 1/2"x1/2" |
| 7 | 900-3906-06 | Hose 1/2"x27" |
| 8 | 900-3905-50 | 90° Swivel 10x06 |
| 9 | 900-3906-09 | Hose 3/8"x64" |
| 10 | 900-3906-09 | Hose 3/8"x64" |
| 11 | 900-3906-10 | Hose 3/8"x56" |
| 12 | 900-3905-50 | 90° Swivel 10x06 |
| 13 | 900-3906-10 | Hose 3/8"x56" |
| 14 | 900-3900-20 | Straight Swivel 3/8"x3/8" |
| 15 | 900-3906-07 | Hose 3/8"x72" |
| 16 | 900-3900-18 | 90° Swivel 3/8"x3/8" |
| 17 | 900-3906-06 | Hose 1/2"x27" |
| 18 | 900-3902-52 | 90° Swivel 1/2"x1/2" |
| 19 | 900-3900-20 | Straight Swivel 3/8"x3/8" |
| 20 | 900-3906-11 | Hose 1/2"x43" |
| 21 | 900-3900-21 | 45° Swivel 1/2"x1/2" |
| 22 | 900-3906-12 | Hose 3/8"x29" |
| 23 | 900-3900-16 | Straight Swivel 1/2"x3/8" |
| 24 | 900-3904-40 | Tee 1/2" Street |
| 25 | 900-3900-73 | Bushing 3/4" to 1/2" |
| 26 | 900-3904-40 | Tee 1/2" Street |
| 27 | 900-3905-58 | Inline Relief Valve |
| 28 | 900-3905-52 | Straight Fitting 08 |
| 29 | 900-3902-52 | 90° Swivel 1/2"x1/2" |
| 30 | 900-3904-40 | Tee 1/2" Street |
| 31 | 900-3906-06 | Hose 1/2"x27" |
| 32 | 900-3900-22 | 90° Swivel 3/4" to 1/2" |
| 33 | 900-3900-83 | 90° Streel Elbow 1/2" |
| 34 | 900-3900-84 | Bushing 1/2" to 3/8" |
| 35 | 900-3901-45 | 90° Swivel 3/8" to 3/8" Tall |



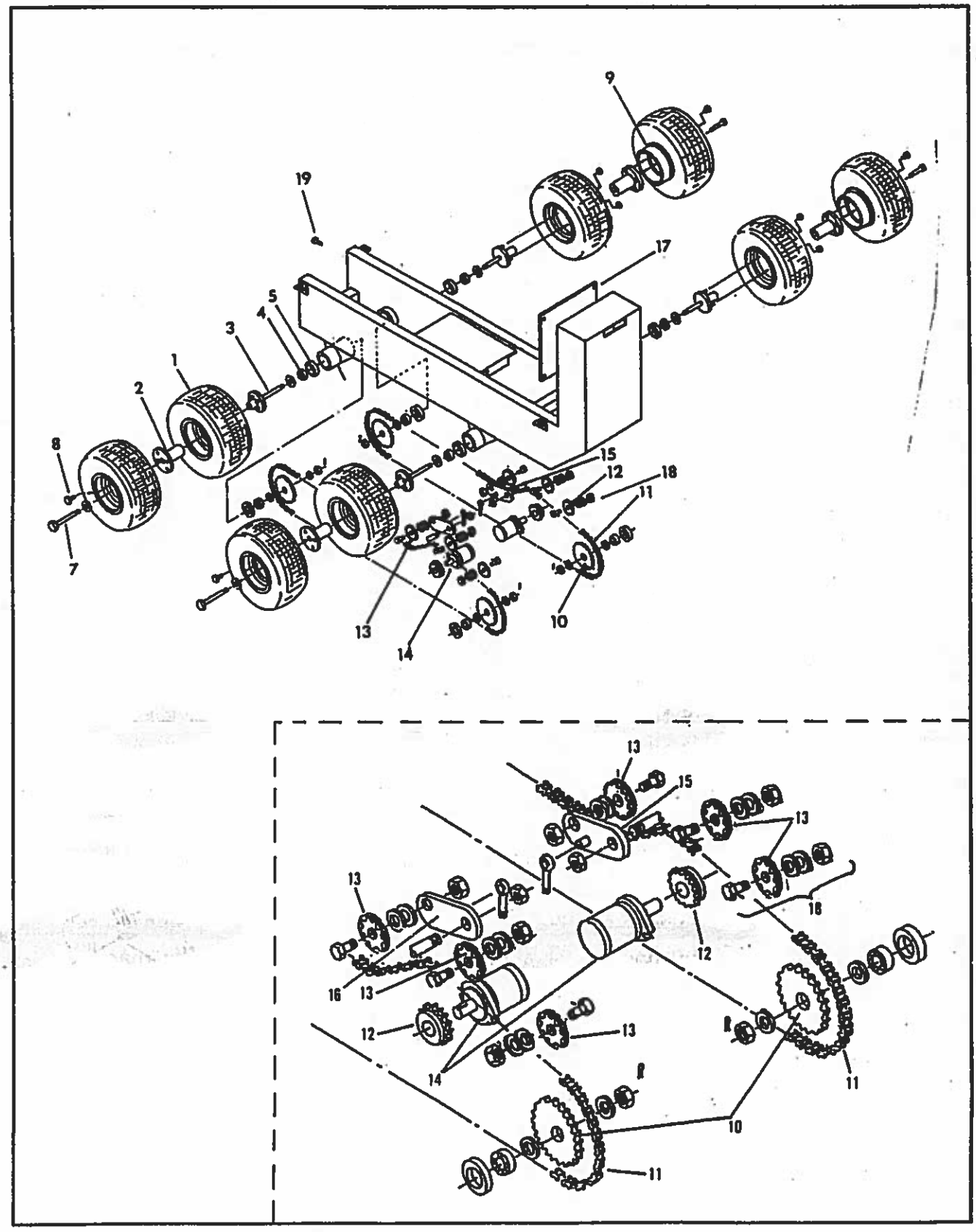
| LOCATION | PART NUMBER | DESCRIPTION |
|---|---|---|
| 36 | 900-3904-74 | 1" to 1" Nipple Barbed |
| 37 | 900-3904-73 | Hose Clamps |
| 38 | 900-3905-43 | Feed Wheel Motor |
| 39 | 900-3900-12 | Valve Feed Wheel |
| 40 | 900-3905-44 | Selector Valve |
| 41 | 900-3905-39 | Filter Head |
| 42 | 900-3905-40 | Filter |
| 43 | 900-3905-42 | 2 Bank Front Control Valve |
| 44 | 900-3905-38 | Drive Motor |
| 45 | 900-3906-02 | Hydraulic Pump |
| Not Shown | 900-3905-41 | Breather/Filler Cap |
| 46 | N/A | Hydraulic Tank/Carriage Frame |


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| LOCATION | PART NUMBER | DESCRIPTION |
|---|---|---|
| 1 | 900-4900-58 | Bolt-Bearing Retainer |
| 2 | 900-4900-32 | Lock Washer-Bearing Retainer |
| 3 | 922-0003-85 | Wear Indicator-Bearing Retainer |
| 4 | 922-0003-96 | Bearing Retainer |
| 5 | 900-4900-16 | Bolt-Front Chipper Bearing |
| 6 | 900-4900-32 | Lock Washer-Front Chipper Bearing |
| 7 | 900-1901-06 | Front Chipper Bearing |
| 8 | 922-0500-11 | Feed Plt. Anvil |
| 9 | 922-0006-02 | Flat Washer Feed Plt. Anvil |
| 10 | 900-4900-31 | Lock Washer-Feed Plt. Anvil |
| 11 | 900-4900-17 | Bolt-Feed Plt. Anvil |
| 12 | N/A | Chipper Base Assy |
| 13 | 922-0501-07 | 2-Knife Disc Belt Shield |
| 16 | 900-4901-04 | Bolt-Chipper Knife |
| 17 | 900-9900-02 | Chipper Knife |
| 18 | 900-4900-27 | Nut-Chipper Knife |
| 19 | 922-0000-07 | Disc Spacer |
| 20 | 922-0500-58 | 2-Knife Chipper Disc Assembly with Shaft and Fan Blades |
| 21 | 922-0003-83 | Rim Blade-Disc |
| 22 | 922-0003-82 | Cleaner Bar-Face Of Disc |
| 23 | 922-0003-81 | Cleaner Bar-End Of Pocket |
| 24 | 980-0500-16 | Disc Stop Pin |
| 25 | 900-1901-07 | Rear Chipper Bearing |
| 26 Not Shown | 900-3901-09 | Grease Line |
| 27 Not Shown | 900-4900-32 | Lock Washer-Rear Chipper Bearing |
| 28 Not Shown | 900-4901-19 | Bolt-Rear Chipper Bearing |
| 29 | 922-0500-02 | Chipper Hood Ass'y (Hinged) Discharge |
| 36A | 922-0500-04 | 12" Deflector-Discharge |
| 36B | 922-0500-05 | 30" Deflector-Discharge |
| 36C | 922-0500-06 | 12" Enclosed Deflector Discharge |

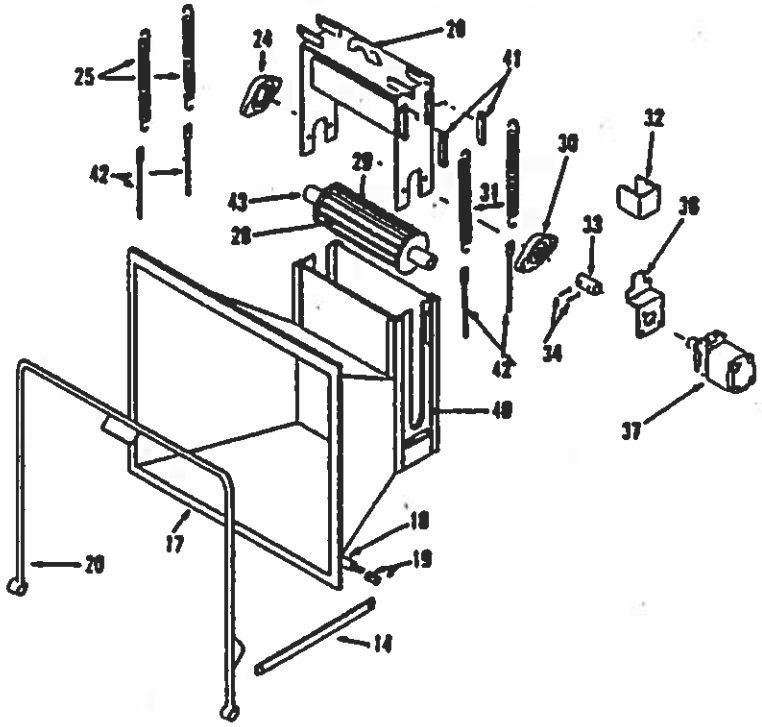

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| LOCATION | PART NUMBER | DESCRIPTION |
|---|---|---|
| 37 | 922-0003-11 | Hinge-Deflector |
| 38 | 900-4900-73 | Handle Deflector |
| 39 | 922-0501-04 | Discharge Chute-(Bagger) Swivel Base |
| 40 | 900-1903-14 | Chipper Belts - Wisconsin VH4D |
| 41 | 900-1903-12 | Engine Sheave - Wisconsin VH4D |
| 42 | 900-1903-13 | Engine Sheave Bushing - Wisconsin VH4D |
| 43 | 922-0001-45 | Adjuster Bolts-Feed Plt. Anvil |
| 44 | 922-0006-02 | Washer-Adjuster Bolts |
| 48 | 980-0506-78 | Swivel Ring Assembly |
| 49 | 922-0500-01 | Chipper Hood Ass'y Infeed Half Hinged |
| 50 | 922-0500-15 | Front Bearing Cover |
| 51 | 922-0500-13 | Pocket Filler Blank Assembly |
| 52 | 922-0004-86 | Hood Hinge Infeed Half |
| 53 Not Shown | OB | Coupler Pump To Chipper |
| 54 | 922-0004-58 | Torque Arm/Pump |
| 55 | 900-1903-15 | Chipper Sheave |
| 56 | 900-1900-17 | Chipper Bushing |
| 57 | 926-1000-58 | Coupler-Pump To Chipper |
| 58 Not Shown | 922-0004-91 | Torque Arm Lock Block |
| 59 | 922-0004-80 | Hood Lock Pin |
| 60 | 922-0004-86 | Hood Hinge |
| Not Shown | 922-0004-59 | Hood Stop |
| 61 | 922-0501-30 | Tension Adjuster For Spring |
| 62 | 922-RC03-14 | Spring-Chip Deflector |
| 63 | 922-0006-65 | Deflector Plate Handle |
| Not Shown | 922-0501-05 | Chip Delfector Plt. Ass'y |
| 64 | 922-0007-29 | Hood Vent Cover |

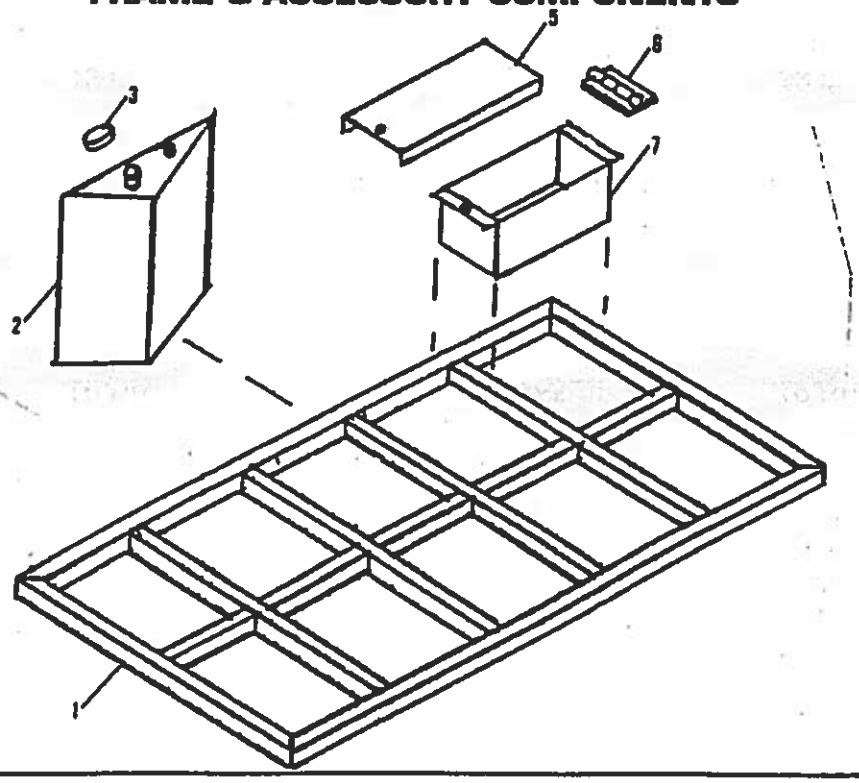

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| LOCATION | PART NUMBER | DESCRIPTION |
|---|---|---|
| 1 | 900-5901-68 | 18-850x8" 4 Ply Dico Turf Tire on 4 Bolt Rim |
| 2 | 922-0501-35 | Aux. Tire Mount Includes-<br>1-3/4 10x7 1/2 Bolt<br>1-3/4 Lock Washer<br>4 Wheel Bolts |
| 3 | 922-0501-34 | Axle Assy Includes-<br>Per Axle-2 - 1 1/4" Mill Carb Spacers, 2 Bearings, 2 Bearing Cups, 4-Drive in Studs 1-1"-8 Castle Nut, 1 Cotter Pin, 1-1" Flat Washer |
| 4 | 900-1903-23 | Axle Bearing |
| 5 | 900-1903-24 | Axle Bearing Cup |
| 6 | 922-0004-41 | Axle Mount Tube |
| 7 | 900-4902-22 | Aux Tire Mount Bolt w/Lock Washer |
| 8 | 900-5901-93 | Wheel Bolt-Aux. Tire Mount |
| 9 | 922-0004-77 | Aux. Tire Spacer |
| 10 | 900-1903-21 | Drive Sprocket-Wheel |
| 11 | 900-1901-34 | Drive Chain |
| 12 | 900-1903-20 | Motor Drive Sprocket |
| 13 | 900-1903-16 | Idler Sprocket |
| 14 | 900-3905-38 | Drive Motor |
| 15 | 922-0501-11 | Puller Assy. Carriage Tensioner-(Left)<br>Includes Connector w/Puller Pivot Tube, Mounting Belt, Nuts, Lock Washer, Flat Washer, Adj. Bolt, Adj. Puller, & Sprocket |
| 16 | 922-0501-22 | Puller Assy. Carriage Tensioner (Right)<br>Includes Right Connector w/Pivot Puller & Same As 922-0501-11 |
| 17 | 922-0004-90 | Valve Bank Cover (Pedestal) |
| 18 | 922-0501-48 | Idler Sprocket Ass'y |
| 19 | 900-3900-44 | Sight Gauge |

## INFEED COMPONENTS



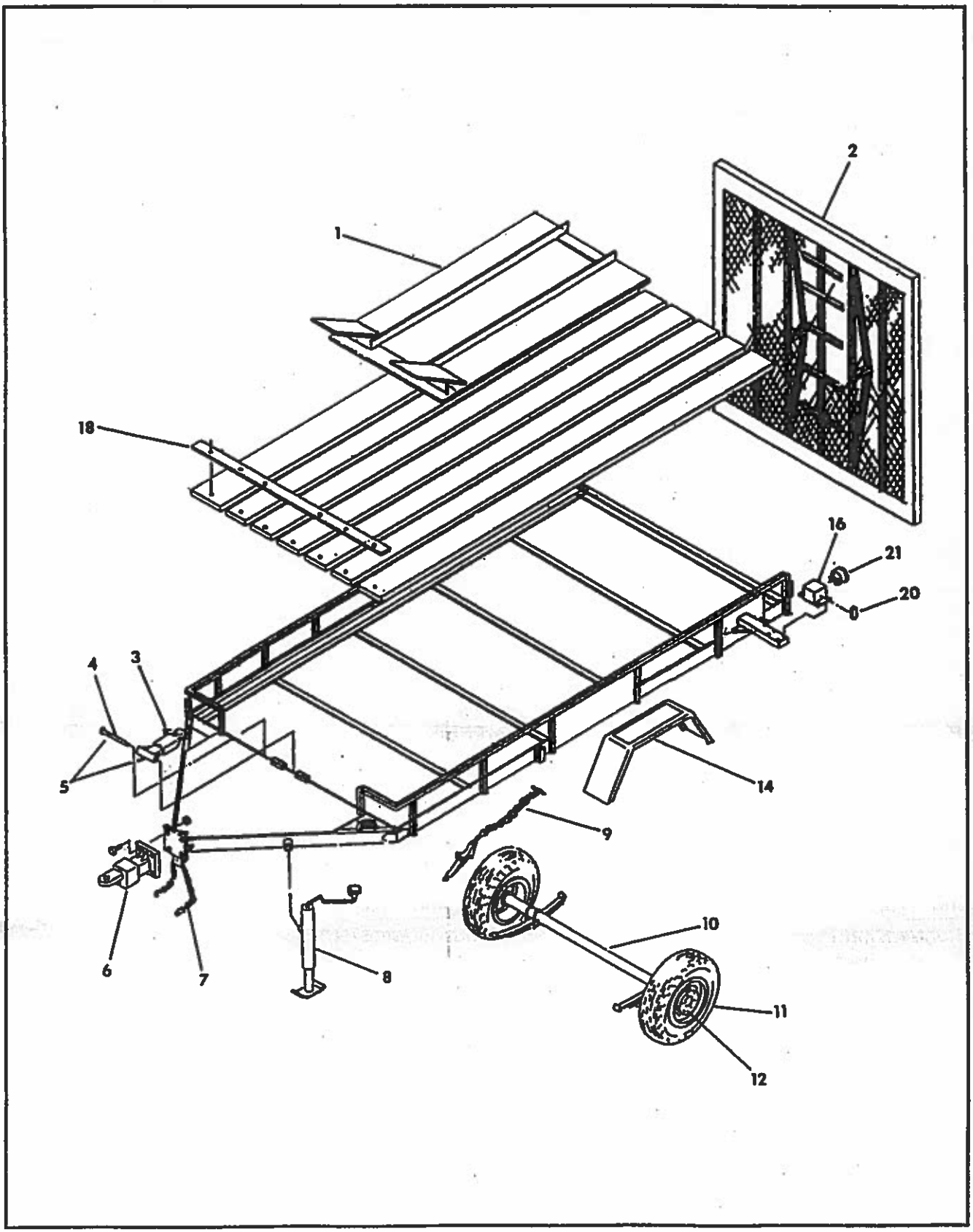

## FRAME & ACCESSORY COMPONENTS



| LOCATION | PART NUMBER | DESCRIPTION |
|---|---|---|
| 14 | 922-0004-31 | Control Valve Arm |
| 17 | 922-0500-92 | Infeed Chute (Weld On) |
| 18 | 980-0100-45 | Pivot Pin Control Handle |
| 19 | 900-4900-44 | Jam Nuts '1'-8 Hex Head |
| 20 | 922-0500-93 | Control Handle |
| 24 | 900-1901-08 | Feed Wheel Bearing |
| 25 | 900-4901-03 | Yoke Spring For Top Wheel |
| 26 | 922-0500-40 | Yoke Assembly For Top Wheel |
| 28 | 922-0500-34 | Top Wheel Assembly |
| 29 | 922-0000-31 | Teeth For Feed Wheel (Weld On) |
| 30 | 900-1901-08 | Feed Wheel Bearing |
| 32 | 922-0004-91 | Lock Block For Torque Arm |
| 33 | 922-0000-52 | Coupler-Top Wheel To Motor |
| 34 | 900-4900-46 | Set Screws For Motor Coupler |
| 35 Not Shown | 900-4901-00 | Small Tube Of Loc-Tite For Coupler |
| 36 | 922-0004-18 | Torque Arm-Top Feed Wheel |
| 37 | 900-3905-43 | Top Feed Wheel Motor |
| 38 | 900-3901-80 | Shaft For Hydraulic Motor (Not Shown) |
| 39 | 900-3901-81 | Seal Kit For Hydraulic Motor (Not Shown) |
| 40 | 922-0500-31 | Yoke Slide Box (Weld On) |
| 41 | 922-0000-33 | Plastic Wear Slide For Yoke |
| 42 | 900-4902-02 | Spring Tightner For Yoke |
| 43 | 922-0000-13 | Shaft For Feed Wheel (Weld On) |
| 44 | 922-0501-29 | Hydraulic Coupling Guard Feed Wheel |

## FRAME & ACCESSORY COMPONENTS

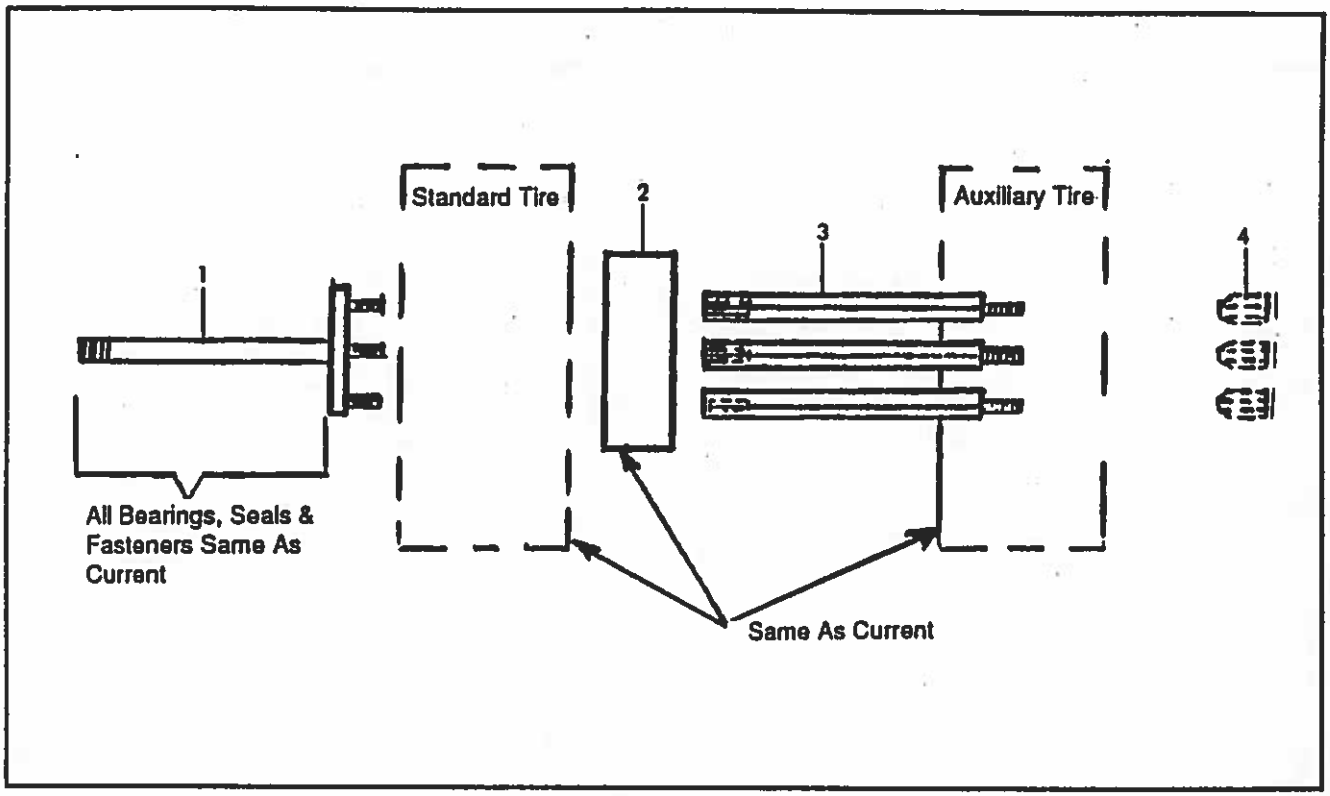
| | | |
|---|---|---|
| 1 | Not Available | Frame |
| 2 | 922-0500-95 | Fuel Tank |
| 3A | 900-3901-51 | Sight Guage Filler Cap x 22" |
| 3B | 900-3900-05 | Filler Cap w/Neck & Strainer |
| 3C | 900-3901-10 | Filler Cap Only |
| 4 | 922-0000-28 | Rubber Cushions For Tank |
| 5 | 922-0004-19 | Battery Box Top |
| 6 | 922-0004-22 | Battery Box Hinge |
| 7 | 922-0500-90 | Battery Box Assy |
| Not Shown | 900-6900-01 | Battery (Std. Wisconsin Engine) |


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| LOCATION | PART NUMBER | DESCRIPTION |
|---|---|---|
| 1 | 922-0501-44 | Aligning Ramp Assy |
| 2 | 922-0501-09 | Ramp Assy |
| 3 | 900-5900-11 | Bolt On Coupler Only - 2" Ball |
| 4 | 922-0501-47 | Hold Down Hitch Pin Assy |
| 5 | 922-0501-45 | Front Hold Down Assy |
| 6 | 922-0501-42 | Drop Pin Hitch Assy |
| 7 | 900-0500-37 | Safety Chain |
| 8 | 900-5900-02 | 2000# Pivoting Tongue Jack w/ Foot Pad |
| 9 | 922-0501-46 | Chain Binder Assy |
| 10A | 900-5901-70 | Axle (Electric Brake) |
| 11 | 900-5901-69 | Tire/Rim Assy |
| 12 | 900-5900-33 | Rim 14" |
| 14 | 922-0501-60 | Left Fender Assy |
| 15 Not Shown | 922-0501-61 | Right Fender Assy |
| 16 | 922-0501-40 | Left Tail Light Assy |
| 17 Not Shown | 922-0501-41 | Right Tail Light Assy |
| 18 | 922-0005-07 | Planking Front Hold Down |
| 19 Not Shown | 900-4902-34 | Plank Hold Down Screws |
| 20 | 900-2900-17 | Clearance/Marker Light |
| 21 | 900-2900-01 | Tail Light |

# INFORMATION INSERT

## ORIGINAL STYLE AXLE/ AUXILIARY MOUNT MODIFIED COMPONENTS




| LOCATION | PART NUMBER | DESCRIPTION |
|---|---|---|
| 1 | 922-0004-51 | Axle-Under Carriage |
| 2 | 922-0004-77 | Spacer Ring |
| 3 | 922-0004-65 | Special Lug Nuts |
| 4 | 900-5901-86 | Standard Lug Nuts |

*This system was used on all units before Serial Number GB2812 and Date April 1-93

**TO BE RETURNED AFTER THIRTY (30) DAYS OF OPERATION**

DATE PURCHASED: _____

MODEL: _____

SERIAL NUMBER: _____

DEALER NAME: _____

_____

# CHIPPER QUALITY REPORT

All of the employees at Performance First, Inc., strive to manufacturer the very highest quality chippers on the market. We would appreciate your efforts in letting us know how we are doing.

We would like you to operate your chipper for thirty (30) days and then fill out this questionnaire and mail it to us. This will help us to keep producing a good product and improving our chippers through your recommendations.

1. Did your chipper perform to your expectations? _____
2. Was the machine delivered on schedule? _____
3. Was the paint color and finish to your satisfaction? _____
4. Was machine equipped as ordered? _____
5. Did all welds appear to be of high quality? _____
6. Was the overall machine to your liking? _____
7. What problems have you experienced? _____
8. Have any components regularly loosened that caused problems? _____
9. Does the hydraulic system seem to have adequate power for feeding wood into the chipper? _____
10. Is the machine manufactured to accommodate service in an adequate manner? If not, please explain:

    _____

11. General comments and/or suggestions: _____

    _____

    _____

    _____

Please return to:

**Performance First, Inc.**
**6750 Millbrook Road**
**Remus, MI 49340**
**(517) 561-2270**

COMPANY: _____

NAME: _____

ADDRESS: _____

CITY: _____

STATE & ZIP: _____

PHONE: (____) _____

# BRUSH BANDIT

BUILT WITH QUALITY AND DESIGN FIRST

## BRUSH CHIPPER

### MIGHTY BANDIT & MIGHTY BANDIT II
### OPERATING & PARTS MANUAL

MODEL NO:_____ SERIAL NO: _____

CUSTOMER: NAME:_____

ADDRESS: _____

_____

PHONE NO: _____

DELIVERY DATE:_____

ENGINE MAKE _____SERIAL NO. _____

CLUTCH MAKE _____MOD. _____S/N_____


MANUFACTURED BY

**PERFORMANCE FIRST, INC.**

REMUS, MICHIGAN 49340

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The purpose of this manual is to provide the user with specifications and procedures for the operation, maintenance and repair of the BANDIT CHIPPER. As with any piece of equipment safety should always be a constant thought while the machine is being operated, serviced or stored. In order to highlight this consideration, the material which addresses safety is proceeded by the following signal words:

| Signal Word | Likelihood of Occurrence | Degree of Potential Injury or Damage |
|---|---|---|
| **DANGER** | Will occur if warning is ignored | Severe |
| **WARNING** | Can occur if warning is ignored | Severe |
| **CAUTION** | Will or can occur if warning is ignored | Minor to Severe |

The chipper is designed and manufactured in accordance with industry needs and standards with safety in mind. This alone does not prevent injury. It is the operator's responsibility to use good judgement and follow the warnings and instructions as indicated in this manual.

## WARNING

Improper use of the chipper can result in severe personal injury. Personnel using the chipper must be qualified, trained and familiar with the operating procedures as defined in this manual.

## WARNING

It is the responsibility of the owner or employer to insure that the operator is trained and practices safe operation while using and servicing the machine. It is also the owner's responsibility to provide and follow a regularly scheduled preventative maintenance and repair program on the chipper using only factory approved replacement parts. Any unapproved repairs or modifications may not only damage the machine and its performance, but could result in severe personal injury. Consult the equipment manufacturer!!!

Each machine is shipped with manual, a customer's check sheet on the chipper, and any available parts & service manuals on component parts not produced by this manufacturer. Additional copies of these manuals and check sheets can be purchased from the manufacturer, or through the dealer. Engine parts, service and maintenance manuals **MUST** be purchased through the engine manufacturer or their dealer.

**NOTE** - The producer of the Bandit Chipper reserves the right to make any modifications or revisions to the design or specifications of its machine without advance notice. The producer also reserves the right to change machine and part prices as needed without advance notice.

# SERVICE RECORD

| DATE | DESCRIPTION | AMOUNT |
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# SAFETY SECTION



THE BANDIT CHIPPER MEETS ALL AMERICAN NATIONAL SAFETY INSTITUTE REQUIREMENTS.-ANSI-Z133.1-1982

The Bandit is manufactured with every consideration of safety in mind. The machine is equipped with belt guards, safety decals, disc lock and rugged design for less chance of an accident.

Regardless of how hard a manufacturer tries to produce a safe machine, accidents still happen. Normally accidents are caused by people making mistakes. They do not read the manual, they ignore warning decals or do not use lockouts provided for their safety. This normally happens after the person has become accustomed to the machinery. In the initial start up and operation of the machinery, they are cautious, they are very careful because they do not understand the machine.

## WARNING

Do not let this person be you. Don't ever take the machine for granted. This is when an accident will happen. The machine is designed to do a job, and it does., the chipper disc turns very fast and can be dangerous! The feed wheels are designed to pull limbs and branches into the chipper. They really do not know the difference between a branch or a hand, they just do their job.



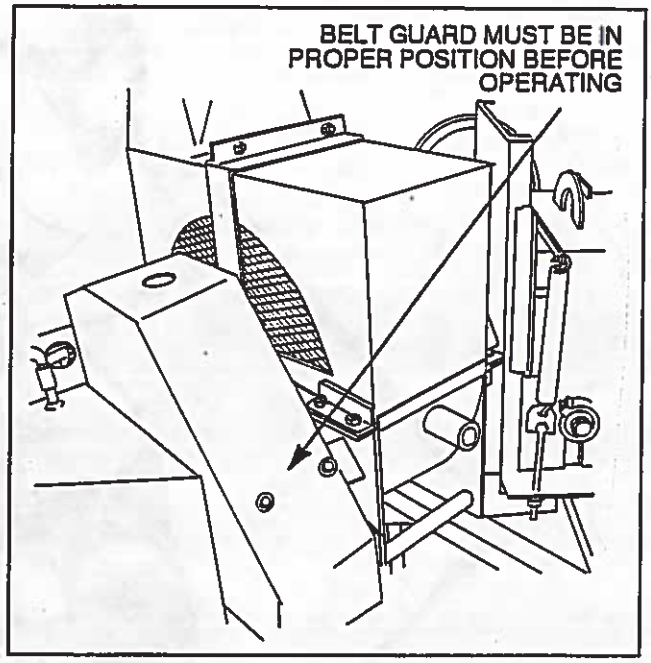
These expressions are not to scare anyone, we just hope that operators and mechanics alike follow our suggestions for safety and use the Bandit in the safest manner possible.

## DANGER

When first starting the machine, take a minute to check a few things before cranking the engine. Check the infeed spout, make sure it is clear of foreign objects such as wrenches, etc. Check the hood bolts on the chipper to make sure they are secure.

## DANGER

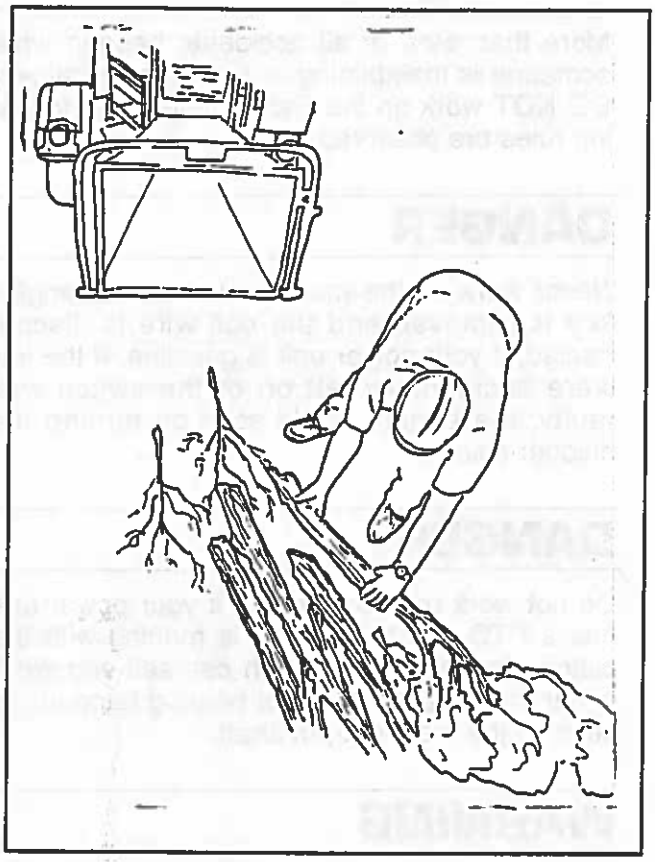
Make sure the chipper discharge is not pointing at someone or something that could cause an accident or a problem. Make sure the chipper belt guard is in the proper position

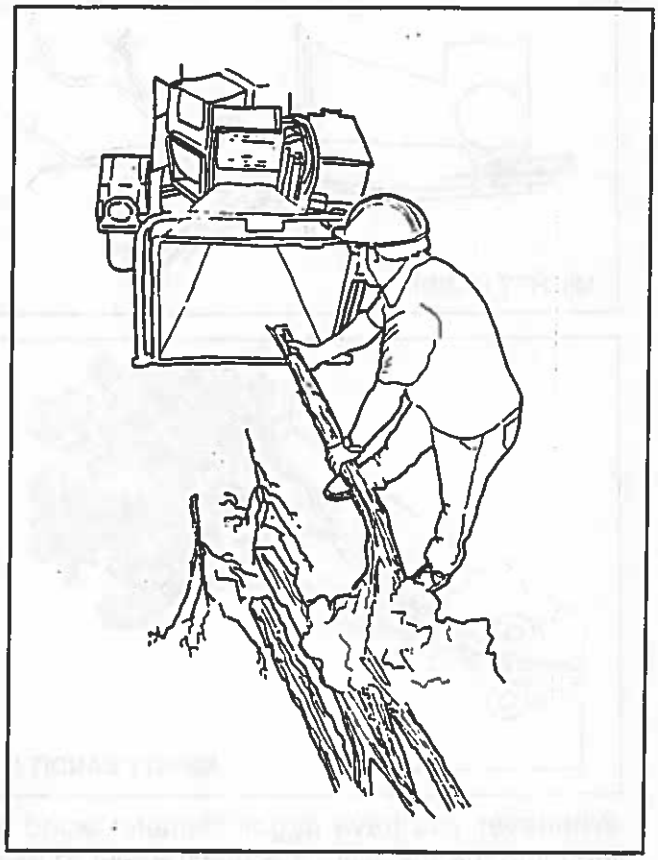



## DANGER

Whenever you are operating any type of machinery, do not wear loose clothing or big bulky gloves. This type of clothing is very dangerous because it can become tangled with the machinery. One of the most dangerous clothing articles is a neck-tie NEVER wear one operating machinery.

After the engine is started, let the chipper disc turn at the lowest RPM's possible. Listen for any type of noise that is foreign. Any steel against steel noise is foreign. If you hear a noise, stop the engine and find the problem before you crank to full throttle. This can help prevent an accident.





When you are feeding wood into the machine, always stand to the right of the limbs. This will make feeding the machine much easier and will also keep the wood away from you. Limbs always have a tendency to kick to the left as they are feeding into the chipper.

## DANGER

Never reach into the infeed spout area of the chipper. There is never any reason to. If you have short pieces or leaves and twigs, just leave them until you are feeding longer pieces. While the long pieces are feeding, simply toss the short pieces on top of them. The longer pieces will take them on into the chipper.

## DANGER

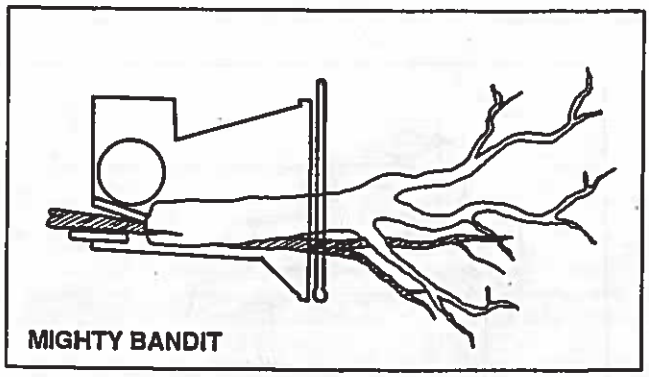
Remember, NEVER reach into the infeed spout of the chipper. You do not have any reason to do so.

## DANGER

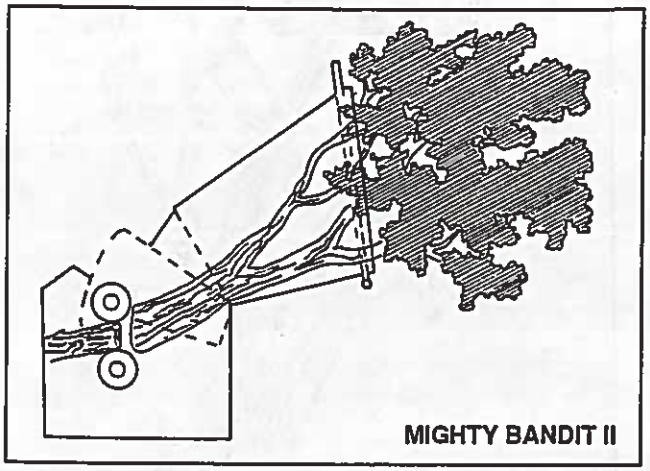
Never stand in front of the chipper discharge spout. Never direct the spout towards anyone or anything that could cause an accident or problem. Wood chips flying out of the discharge spout can be very dangerous!

## DANGER

Always block the tires and the machine tongue whenever the Bandit is unhooked for operation. DO NOT rely on the tongue jack for operational stabilization.



MIGHTY BANDIT



MIGHTY BANDIT II

Whenever you have larger diameter wood to feed into the machine, it is much easier to feed it into the chipper after starting a smaller diameter limb. You won't have to push on the larger piece to get it in between the feed wheels this is because the smaller limb has already partially opened the feed wheel and it is easier to accept the larger diameter limb. Note the photo above: Stump end is always fed first, this will prevent wedging if tree diameter is too large.

## WARNING

Whenever the belt guard is removed for service, make sure it is replaced before the machine is put into service. Guards are built in to protect YOU.

If the Brush Bandit must be disconnected from the towing vehicle when in operation, it is suggested to put the tongue jack on rubber or a fitted wooden block. Doing this will cut down on engine to frame vibration.

## DANGER

More than 50% of all accidents happen while someone is maintaining or repairing machinery. DO NOT work on the Bandit unless the following rules are observed.

## DANGER

Never work on the machine unless the engine key is removed and the coil wire is disconnected, if your power unit is gasoline. If the key were accidentally left on or the switch was faulty, the engine could start by turning the chipper disc.

## DANGER

Do not work on the machine if your power unit has a PTO and the engine is running with the clutch disengaged. A clutch can self-engage if either the pilot or throw-out bearing happens to seize to the main out-put shaft.

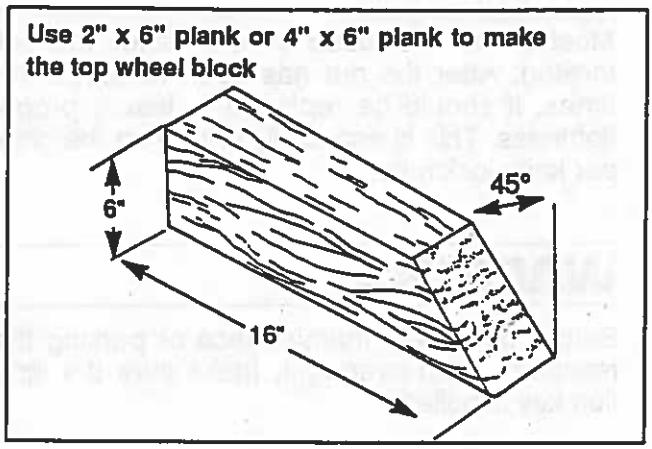
## WARNING

Always read, practice and replace any decals missing or unreadable on the machine. Decals must be replaced immediately.

## DANGER

Do not work inside the mouth of the chipper or around the feed wheels without blocking and chaining the top feed wheel in the raised position. This will have to be done to adjust the knife anvil to the chipper knife. Follow the safety rules explained and make a block according to the illustration on following page.

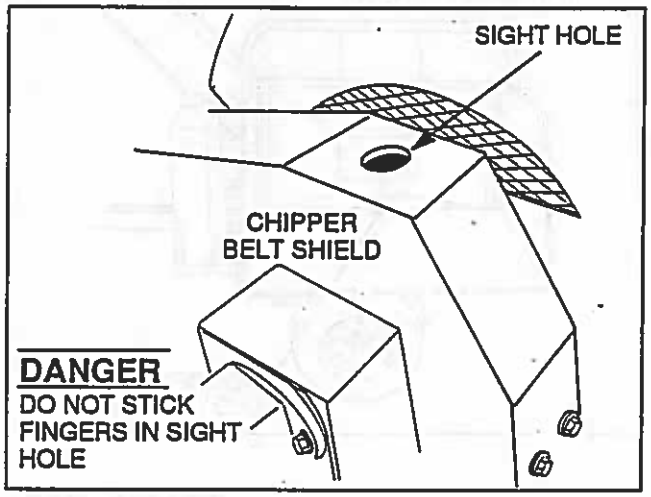
1. Insert block between the top and bottom on the extreme left side. Feather the controls and have the engine running about 600 to 700 RPM's. This will let the feed wheels turn very slowly.




2. After the block is in place SHUT OFF ENGINE, REMOVE IGNITION KEY, and place a CHAIN through the TOP WHEEL YOKE. If you have a mighty model place chain through the top wheel lug and chipper hood handle. If you have a Mighty II place through the top wheel lug and the infeed lug, (both are located on the left hand side of infeed). This practice helps to insure that the top wheel can not come down if the block would happen to slip.

## DANGER

Never open chipper hood when disc is moving. Chipper disc coasts for several minutes before coming to a stop. We have provided a sight hole in chipper belt shield. If belts can be seen moving then do not open chipper hood.

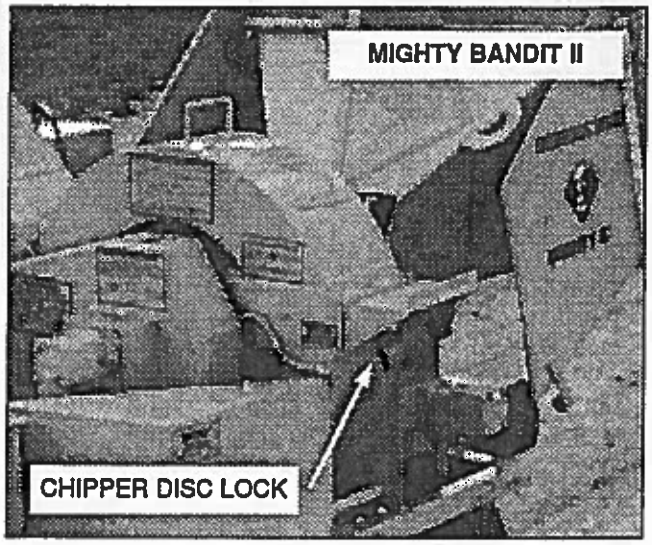



## DANGER

NEVER work inside the chipper unless the engine key is removed and the coil wire disengaged if you have a gasoline powered machine. ALWAYS install the chipper hood lock pin into the chipper disc lock tube before working on the chipper.

Simply slide the disc lock pin into the disc lock tube located on the infeed end of the chipper hood. This is to insure that the disc cannot be started while you are working inside the chipper. If for some reason the disc would start to turn, it would simply hit the disc lock pin.



## DANGER

Never start the engine or chipper disc with the chipper hood open.

**THIS IS VERY DANGEROUS AND IS NOT TO BE DONE!**

## WARNING

If you remove the chipper disc drive guard, REPLACE THEM when you are finished. Guards do absolutely no good if they are left in the shop.

## WARNING

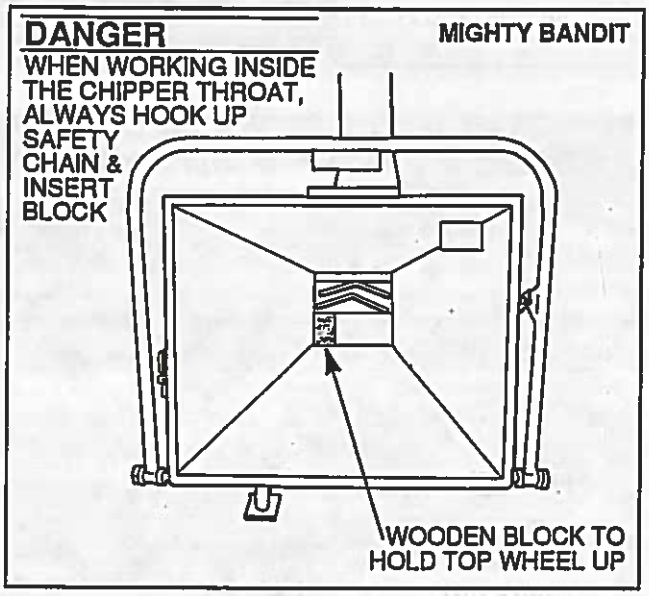
Check all chipper bolts and nuts for proper torque weekly. the chipper turns very fast and requires attention to insure safety.

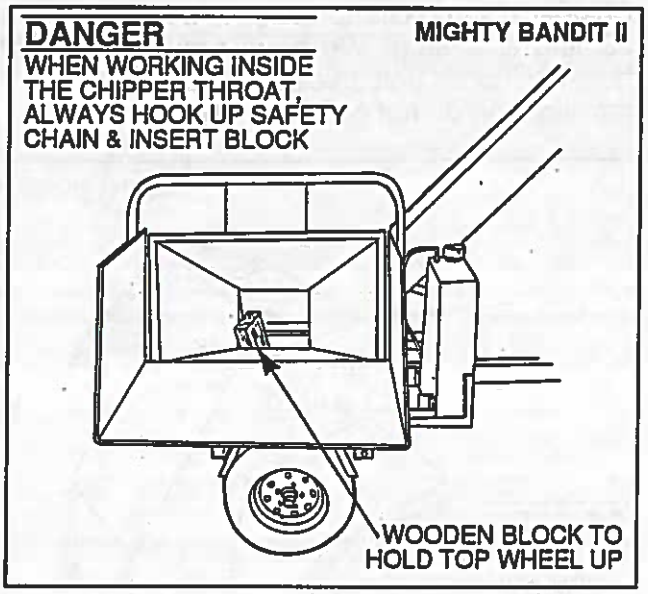
## WARNING

Most of the nuts used on the Bandit are self locking. After the nut has been removed five times, it should be replaced to insure proper tightness. This is especially critical on the chipper knife lock nuts!

## WARNING

Before doing any maintenance or parking the machine, even overnight, make sure the ignition key is pulled.



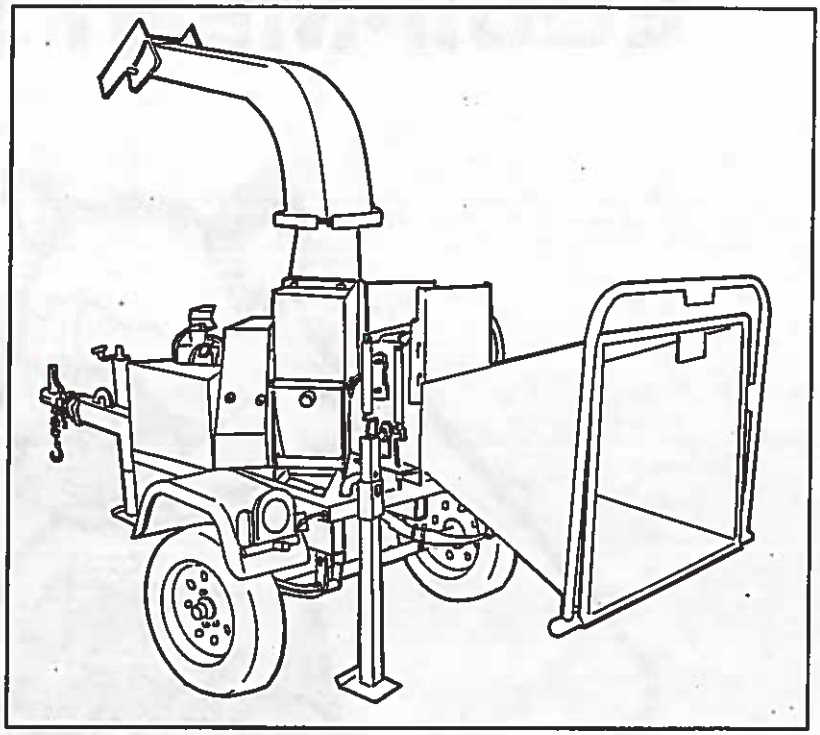
# EQUIPMENT SECTION

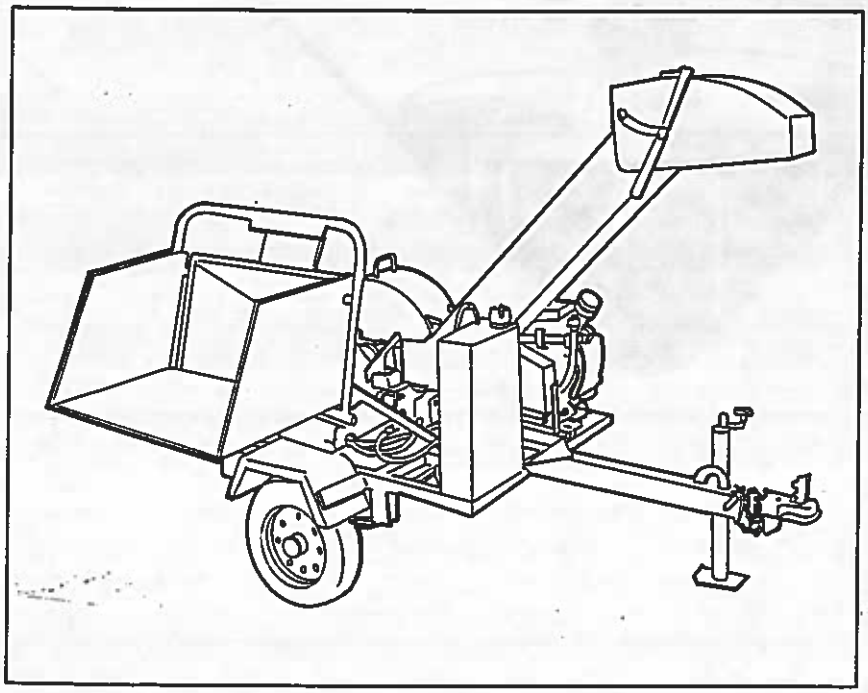


# YOUR BANDIT CHIPPER

## THE MIGHTY BANDIT

The Mighty line of chippers are designed to handle all your brush and small tree jobs. The powerful hydraulic feed system is one of the features that distinguishes your Bandit chipper. Along with the 1" thick chipper disc capable of delivering enough cutting and throwing force to pile or load your chips effectively. This aggressive light duty machine can chip up to 6" diameter tree length material.

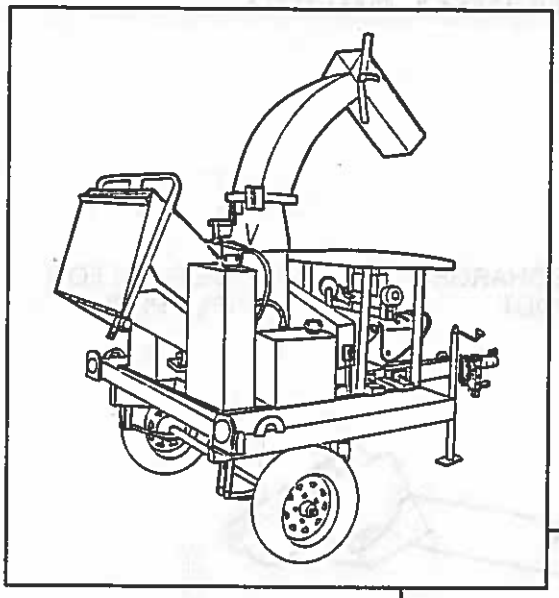




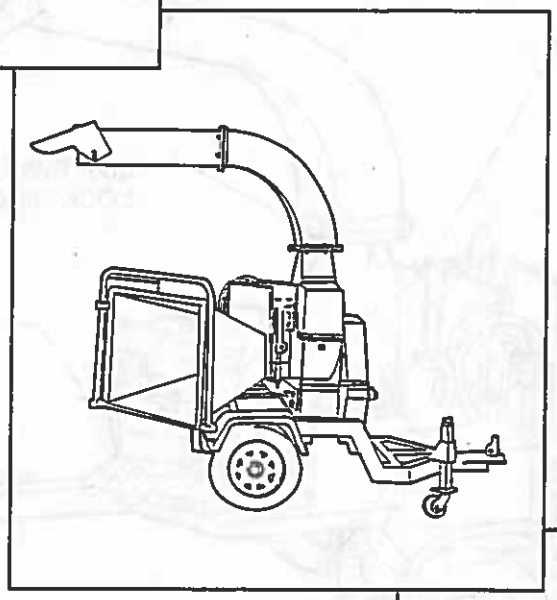
## THE MIGHTY BANDIT II

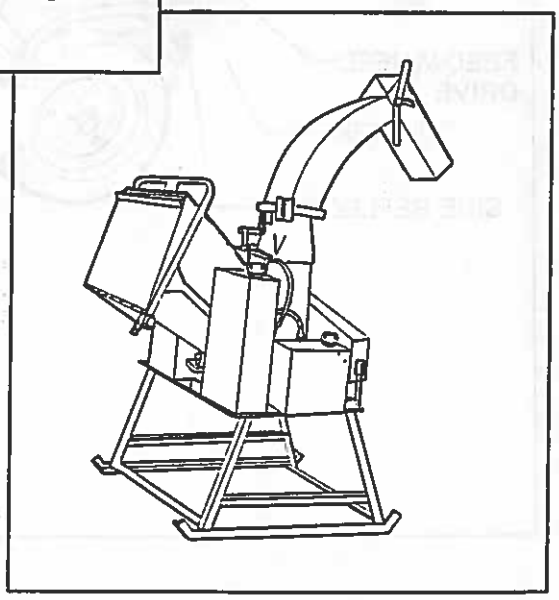
The Mighty II is an excellent machine for your hard to chip material like landscape pruning, vines, construction wood waste, cardboard, plastic, paper, and up to 5" diameter round wood of tree length. The 2-wheel hydraulic feed system is positioned to within 4 1/2" of the chipper disc. The combination of the gravity feed with the dual wheel system enables this chipper to chip what others cannot.

The Mighty II is standard with a fixed side feed infeed and a fixed tongue end discharge. This 3-knife disc chipper produces a dimensional 1/4" chip ideal for mulch and compost.



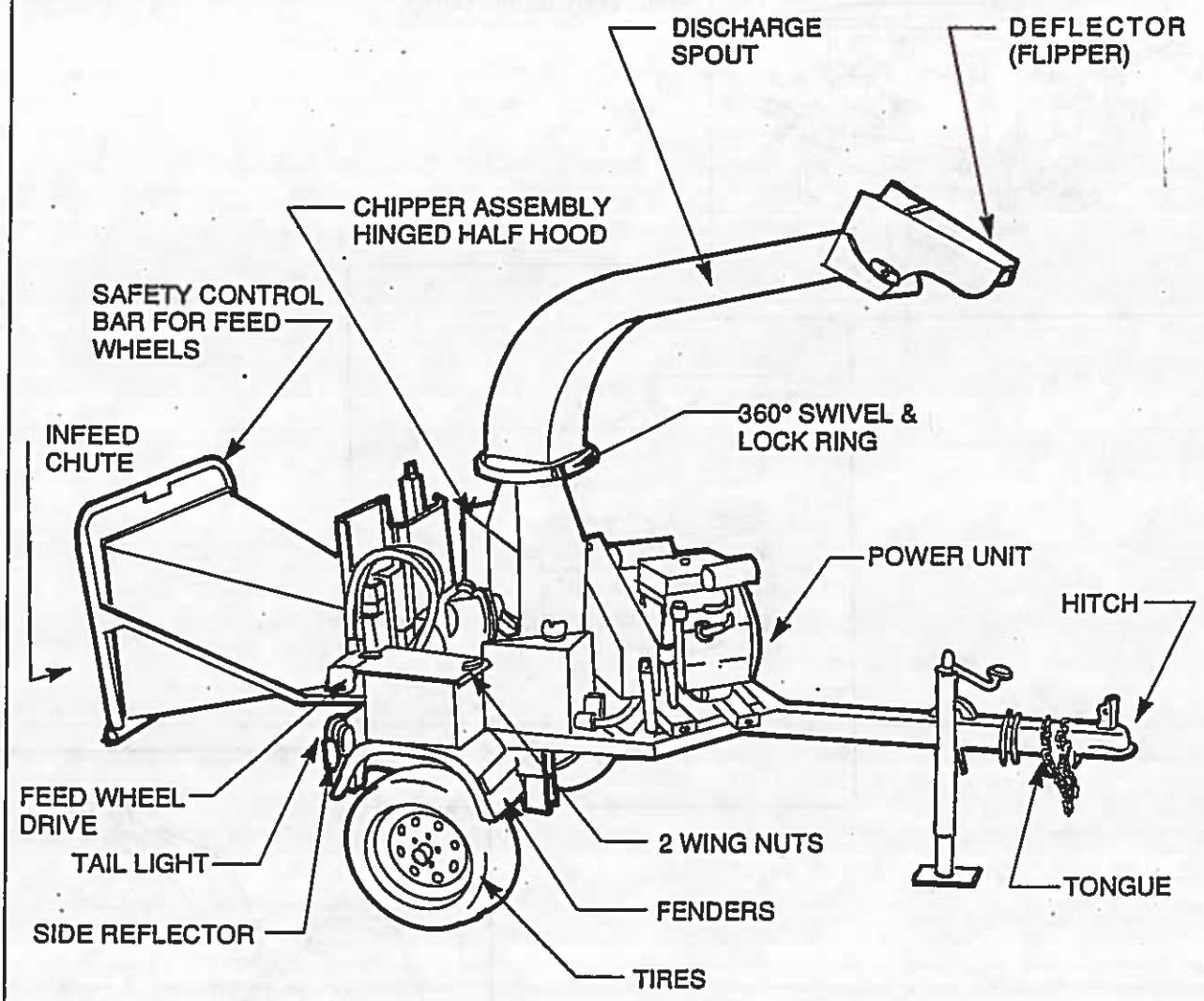
The Mighty II is also available on a turntable with 360 degree rotation. You can feed the chipper from any direction and you can independently swivel the discharge to any desired direction. The Mighty II turntable is built on its own 2" X 4" steel tube frame. Other features of the Might II include a hinged chipper hood for convenient access to chipper knives and a direct drive from chipper shaft to hydraulic pump.



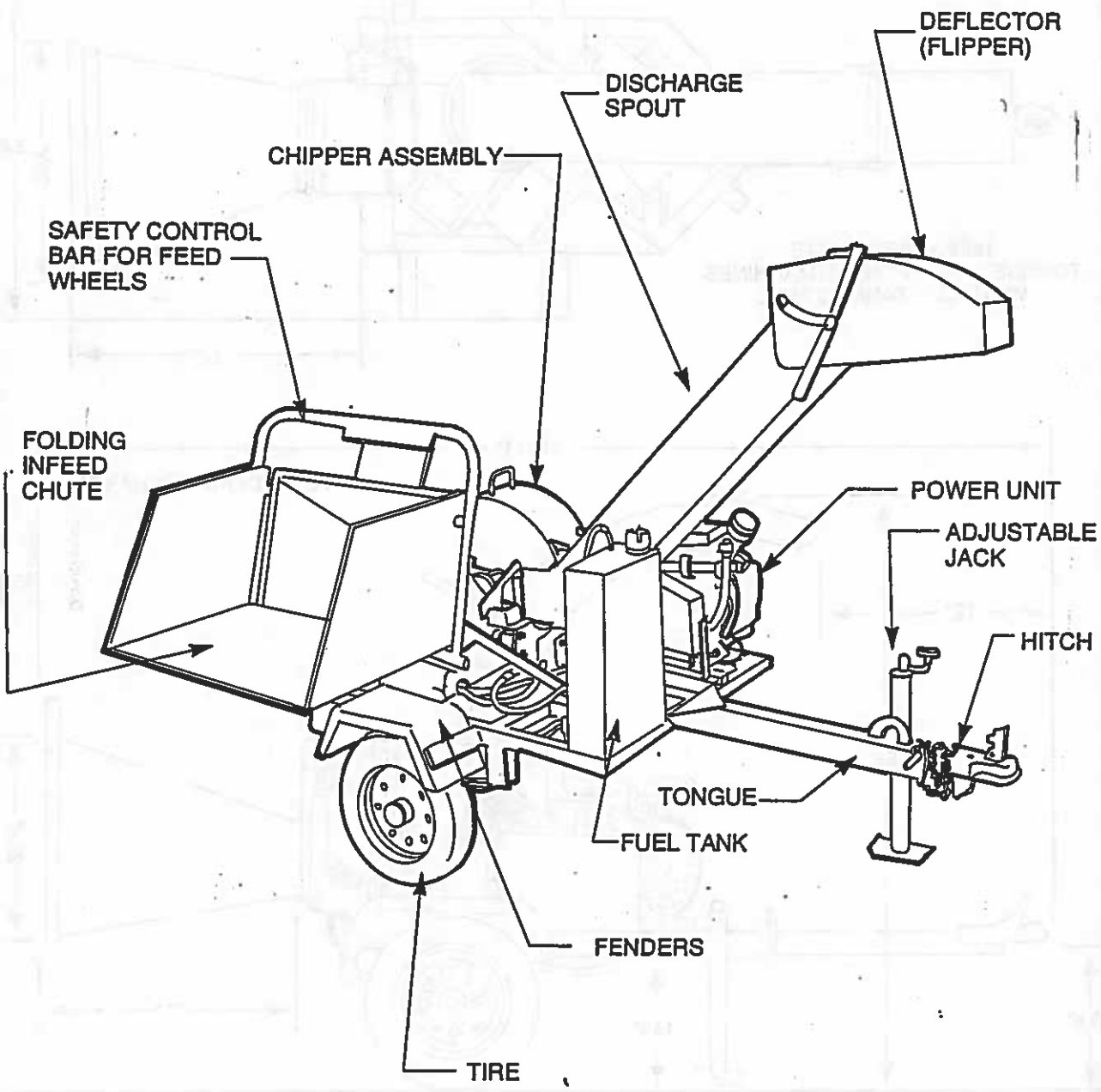


The PTO Mighty Bandits are built with the same quality as the Mighty Models, but designed for those who wish to use just the chipper. The 3-point PTO is built on four sturdy legs welded on slide plates. It has a standard 3-point mount system. (The Mighty PTO has a 360 degree swivel discharge standard). Standard on all these Mighty and Mighty II Bandits is a self contained hydraulic system to power the feeding of chipper.

## COMPONENT PARTS – MIGHTY BANDIT

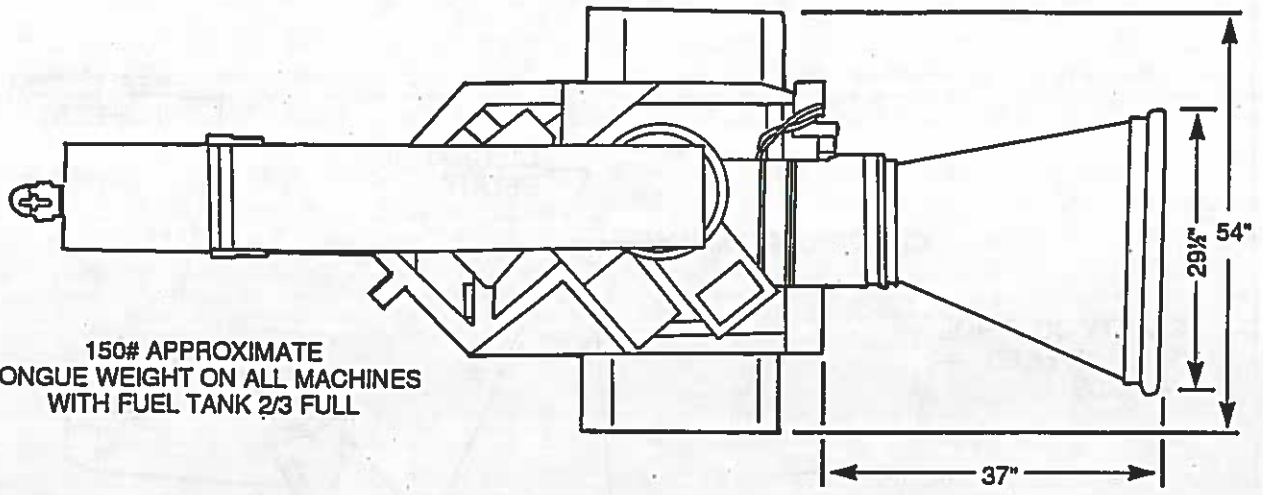


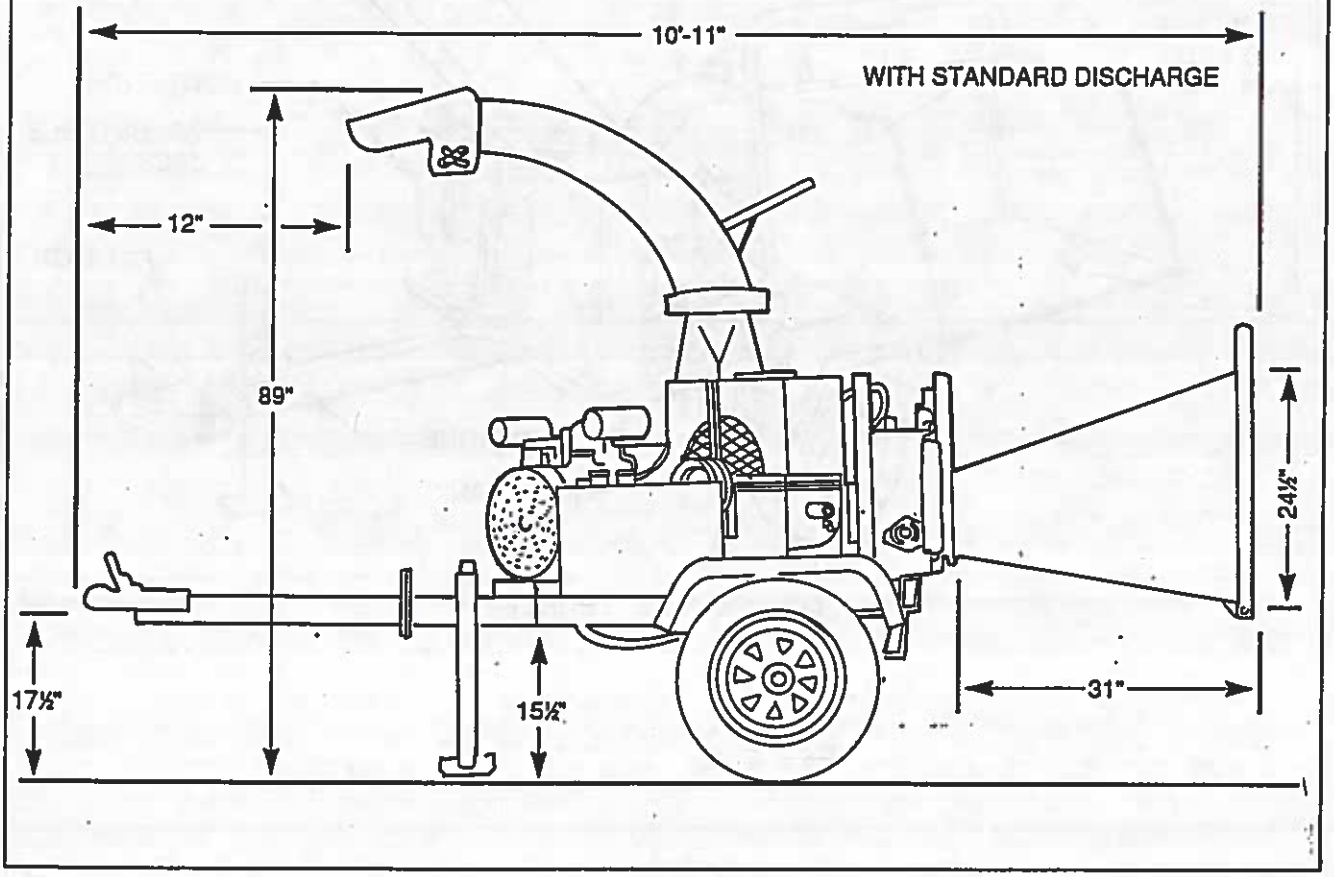
## COMPONENT PARTS – MIGHTY BANDIT II



# MIGHTY BANDIT – DIMENSIONS & WEIGHTS

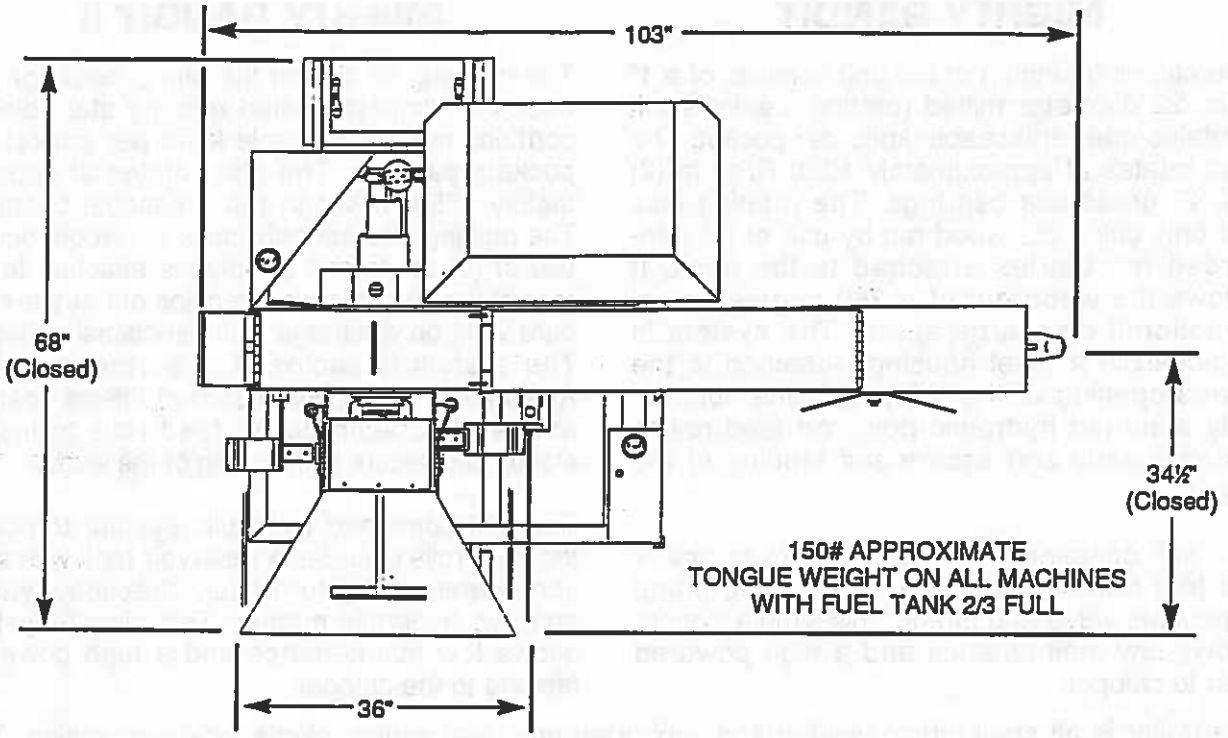
TOTAL WEIGHT VARIES WITH ENGINE AND OPTIONS - BUT APPROX. 1700 LBS.

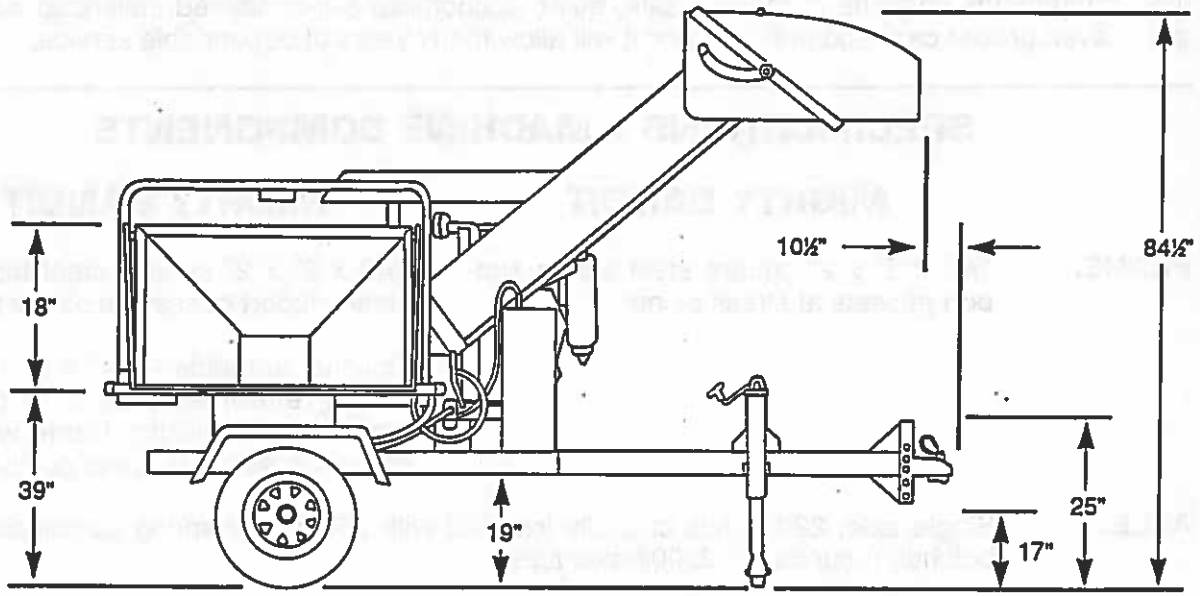


# MIGHTY BANDIT II – DIMENSIONS & WEIGHTS

TOTAL WEIGHT VARIES WITH ENGINE AND OPTIONS - BUT APPROX. 1900 LBS.



The Bandit Chipper is a trailerized machine designed to cut brush and trees into wood chips. The unit is powered by one of several optional engines. Power is transmitted through a V-Belt drive system to the rotating chipper disc. Applicable service manuals should be consulted concerning power units and clutches for proper maintenance. Any available manuals pertaining to these component parts are also shipped with the unit. Additional copies can be purchased through the respective manufacturers.

## MIGHTY BANDIT

The chipping section of the unit consists of a 1" thick-22 diameter milled rotating steel disc. It contains one replaceable knife per pocket. The disc rotates at approximately 1950 RPM in (2) two 2" greasable bearings. The rotating disc not only chips the wood but by use of (4) reinforced fan blades attached to the back, it throws the wood out of a 360 degree swivel directional discharge spout. The system is enclosed in a steel housing. Attached to the infeed opening of the chipper is one horizontally mounted hydraulic powered feed roll to insure steady and secure self feeding of the wood.

The self contained hydraulic system to power the feel roll includes a reservoir tank, pump directional valve and motor. This simple system allows low maintenance and a high powered feed to chipper.

## MIGHTY BANDIT II

The chipping section of the unit consists of a 1" thick-26" diameter milled rotating steel disc. It contains one replaceable knife per pocket, (3) pockets per disc. The disc rotates at approximately 1950 RPM's in two greasable bearings. The rotating disc not only chips the wood, but, by use of (3) reinforced fan blades attached to the rear of the disc, throws the chips out of the standard weld on discharge with directional deflector. The system is enclosed in a steel housing. Attached to the gravity assisted infeed opening are two hydraulic power feed rolls to insure steady and secure self feeding of the wood.

The self contained hydraulic system to power the feed rolls includes a reservoir tank with suction screen and return filter, directional valve, and two hydraulic motors. This simple system allows low maintenance and a high powered feeding to the chipper.

The trailer is all steel tubing welded and supported on a leaf spring, single axle suspension. The unit includes all devices and lighting to meet highway safety requirements for towing.

The components combine to make a safe, quiet, economical self-contained trailerized wood chipper. Given proper care and maintenance it will allow many years of dependable service.

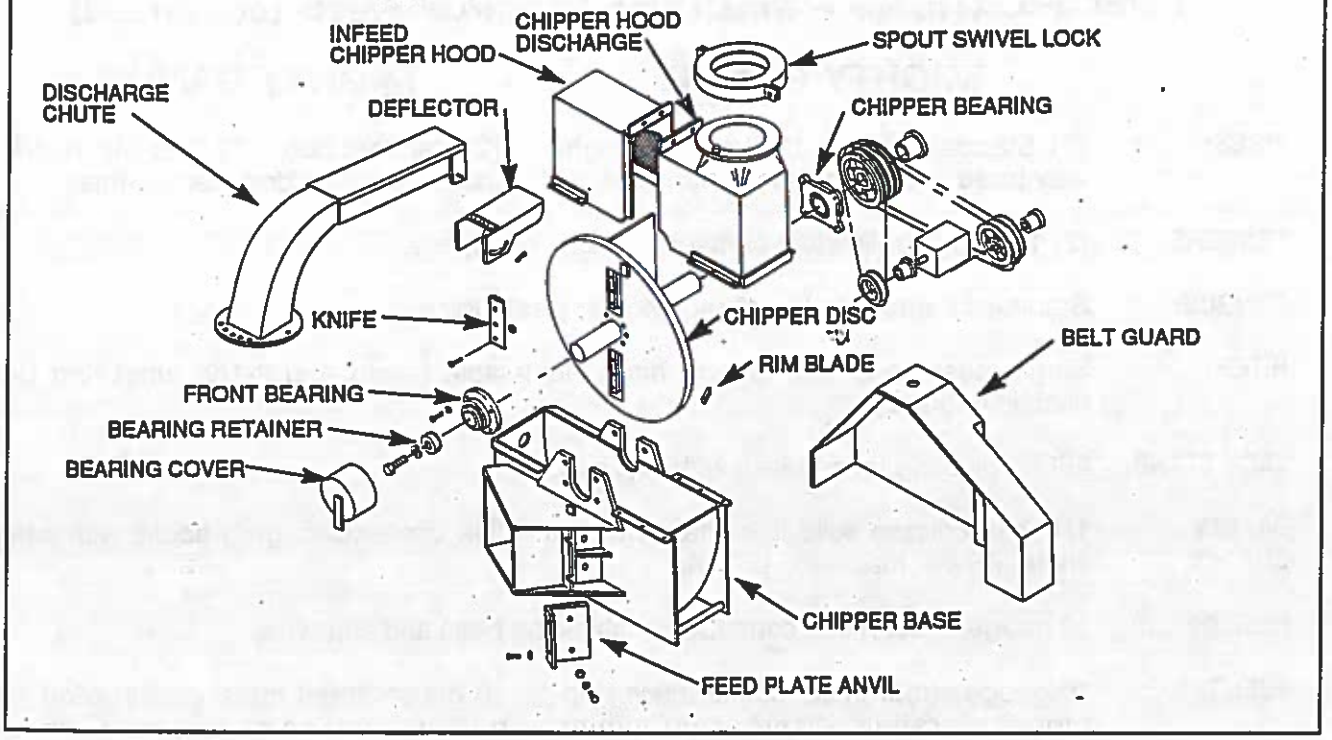
## SPECIFICATIONS – MACHINE COMPONENTS

| | MIGHTY BANDIT | MIGHTY BANDIT II |
|---|---|---|
| **FRAME:** | 1/4" x 2" x 2" square steel tubing support gussets at stress points | 1/4" x 2" x 2" square steel tubing with steel support gussets at stress points.<br><br>Optional turntable - 1/4" x 2" x 4" steel tubing reinforced with a 10 ga. solid steel sheet covering frame with steel support gussets at stress points. |
| **AXLE:** | Single axle, 2200# hub capacity installed with 2500# leaf spring suspension and 5 bolt hub mounted on 2200# axle tube. | |

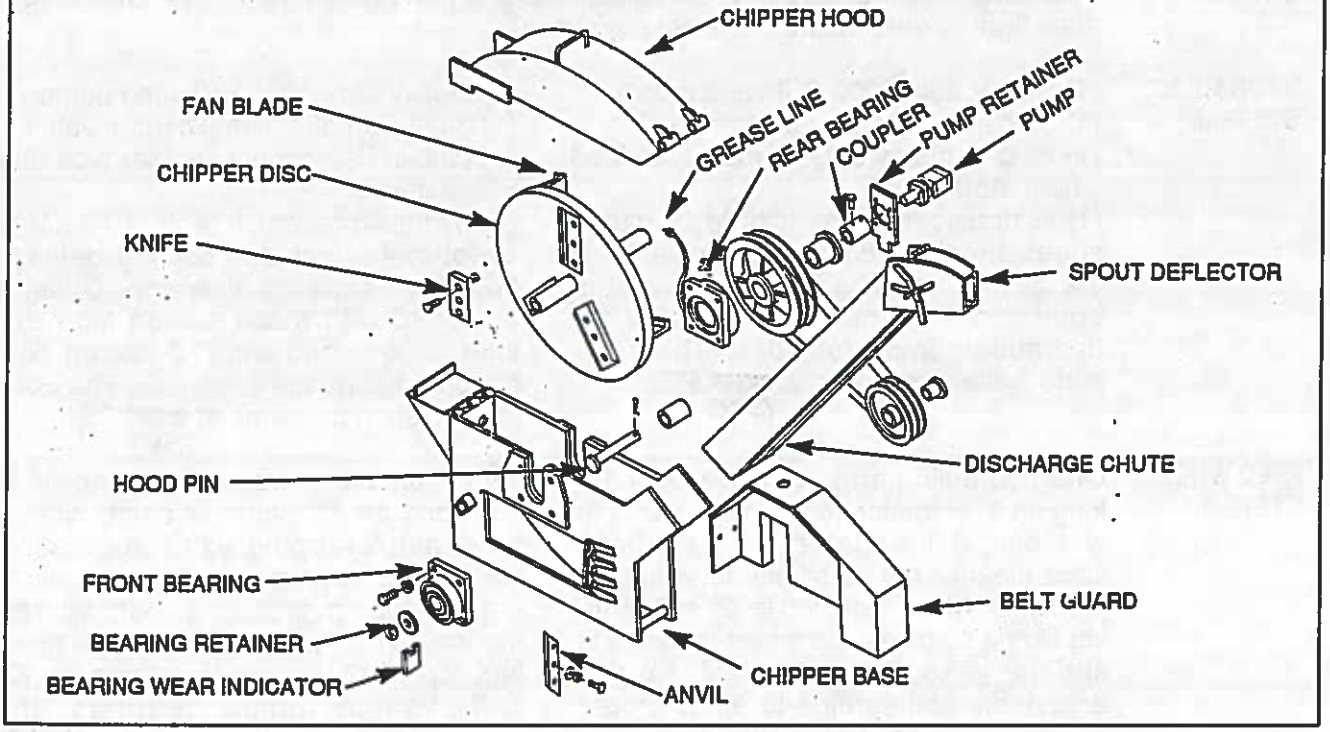
## SPECIFICATIONS – MACHINE COMPONENTS (continued)

| | MIGHTY BANDIT | MIGHTY BANDIT II |
|---|---|---|
| TIRES: | (2) Standard 480 x 12 tires with highway tread mount on drop center rims. | (2) standard 530 x 12 tires with highway tread mount on drop center rims. |
| FENDERS: | (2) 16 gauge solid steel pressed to form - seamless. | |
| TONGUE: | Standard 7 gauge x 2" x 4" rectangular steel tubing. | |
| HITCH: | Single position 2" ball bolt-on hitch (adjustable height and 2-1/2" lunet ring Croft hitch is optional). | |
| JACK STAND: | 2000# pivoting tongue jack with foot pad. | |
| SAFETY CHAINS: | 1/4" self colored solid link chain with quick link connectors, grab hooks with safety snaps (2) per machine, 48" long. | |
| BELT SHIELD: | 12 gauge sheet metal construction shielding belts and sheaves. | |
| FUEL TANK: | 10 gauge sheet metal construction with rubber vibration absorber on mount brackets - 4-1/2 gallon capacity | 10 gauge sheet metal construction with rubber vibration absorbers on mount brackets - 8 gallon capacity |
| LIGHTS: | Clearance and marker lights, tail lights, stop and turn signals, reflectors, and license plate light to meet highway safety regulations. | |
| HYDRAULIC SYSTEM: | (1) Heavy duty 3000 PSI vane pump<br>(1) 3 position directional control valve<br>(1) Plug-in heavy duty Geroler type feed wheel motor<br>(1) Hydraulic reservoir tank of 10 gauge sheet metal includes cooling baffle, 2 1/2 gallon capacity, filler cap. Outlet is equipped with mesh screen filter for hydraulic pump protection. The complete system operates at [redacted] PSI. 1500 | (1) Heavy duty 3000 PSI vane pump<br>(1) 3 position directional control value<br>(1) plug-in heavy duty Geroler type feed wheel motor<br>(1) hydraulic reservoir tank of 10 gauge sheet metal includes cooling baffle, 6 1/2 gallon capacity, filler cap. Outlet is equipped with mesh screen filter and inlet is equipped with 10 micron filter head and cartridge assembly. The complete system operates at [redacted] PSI. 1500 |
| FEED WHEEL SYSTEM: | One hydraulic powered feed wheel 10" long on 1" diameter shaft, wheel has non-wrapping extra aggressive teeth bars, solid cleaner bar to eliminate wrapping problems, wheel mounted in (2) self-aligning flange bearings, top wheel mounted in sliding yoke and attached to two adjustable coil springs to allow proper down pressure, yoke slides on four Ryertex replaceable plastic slides to reduce binding and steel wear. | Two hydraulic powered feed wheels 11 1/2" long on 1" diameter shaft, wheels have non-wrapping extra aggressive teeth bars, solid cleaner plate to eliminate wrapping problems, both wheels mounted in (2) self-aligning flange bearing, top wheel pivots in a yoke on (2) self-aligning flange bearings and attached to two coil springs mounted to provide down pressure. |

## MIGHTY BANDIT CHIPPER COMPONENTS




## MIGHTY BANDIT II CHIPPER COMPONENTS



## SPECIFICATIONS – MACHINE COMPONENTS (continued)

| | MIGHTY BANDIT | MIGHTY BANDIT II |
|---|---|---|
| INFEED CHUTE: | 10 gauge welded sheet metal construction tapered to enhance feeding of limby material. Infeed chute extends 36" from center of feed teeth. Safety control handle extends around sides of infeed. | 10 gauge welded sheet metal construction tapered to allow feeding of brushy material. Infeed opening reinforced by 3/4" round tube adjustable infeed pan extends 45" from feed wheel, allows top position feeding. |

## SPECIFICATIONS – CHIPPER COMPONENTS

| | | |
|---|---|---|
| CHIPPER HOOD: | 10 gauge steel sides and 10 gauge steel top that bolts on to allow access to chipper knives, air vents on rear of hood to increase discharge throwing distance. | 10 gauge steel sides and 10 gauge rolled top and vented rear side to increase discharge throwing distance. Heavy duty hinge and hood open rest to allow access to chipper knives.<br><br>Optional turntable-10 gauge steel sides and 10 gauge steel top, hinged to allow access to chipper knives. Air vents on rear of hood to increase discharge throwing distance. |
| DISCHARGE CHUTE: | Standard 2 piece, elbow and straight extension made of 12 gauge metal with 3/8" thick swivel plate base to allow 360 degree rotation of discharge direction | Standard one piece straight easy flow discharge mounted stationary constructed of 12 gauge metal.<br><br>Optional turntable-one piece, elbow constructed of 12 gauge metal with 3/8" thick swivel base to allow 360 degree rotation of discharge. |
| DEFLECTOR: | 12 gauge directional deflector with slotted adjustment for varying position to load or pile chips. | 12 gauge metal, curved top and straight bottom deflector for directional flow. Slotted for easy adjustment.<br><br>Optional turntable-straight top and bottom pivots at elbow, constructed of 12 gauge metal slotted for easy adjustment. |
| STATIONARY HOOD: | 10 gauge steel sides and a 10 gauge top that includes a 9" square to 8" round 3/16" thick transition for smooth flow of chips | |

## SPECIFICATIONS – CHIPPER COMPONENTS (continued)

| | MIGHTY BANDIT | MIGHTY BANDIT II |
|---|---|---|
| GREASE LINE: | The grease line allows the chipper rear bearing to be lubricated without removing the chipper belt guard. | |
| FRONT & REAR CHIPPER BEARINGS: | One 2" flange spherical roller bearing in front and on 2" flange bearing in rear with easy bearing replacement. | Two 2" flange bearings, one bearing in front and one bearing in rear of disc both are removable for easy replacement. |
| CHIPPER SHAFT: | 2" diameter, solid steel construction, machined to exact tolerances for accurate fit to disc, bearings, and sheave. Shaft welded into disc assembly. | |
| RIM BLADE: | Keeps material from collecting between disc and belly band. | |
| CHIPPER BASE: | The base and throat are of a one piece welded steel construction. Steel thickness specifications. Base front and back 1/4", belly band 7 gauge, throat 7 gauge. | The base and throat are a one piece welded steel construction. With the Mighty II the throat not only serves to guide wood to the chipper disc, but also is the pivot for the feed wheels. The base front and back are constructed of 1/4" metal, the belly band and throat are 7 gauge. |
| FEED PLATE ANVIL: | 1/2" X 4" X 6 1/2" steel adjustable wear plate to allow good quality chips and proper feed. | 3/8" X 2 1/2" X 5 3/4" steel adjustable wear plate to allow good quality chips and proper feed, reversible to allow two working edges. |
| CHIPPER KNIFE: | One 3/8" X 4" X 7 1/4" double edged heat treated hardened knife per pocket. Knife held in position by three bolts. | |
| BEARING RETAINER & BOLT: | Machined to fit accurately to bearing housing, also serves as a protective bearing wear indicator. Bolts to end of chipper shaft to hold disc in position. | |
| BEARING WEAR INDICATOR: | The bearing wear indicator is fitted close to chipper shaft, if bearing is worn wear indicator will rub against chipper shaft. | |
| CHIPPER DISC: | 22" diameter x 1" thick, disc pocket machined to tolerances, statically balanced. | 26" diameter x 1" thick, 3 pocket disc, pocket machined to exact tolerances, statically balanced. |
| FAN BLADES: | (4) reinforced paddle type fan blades on back side of disc to discharge wood chips | (3) reinforced paddle type fan blades on back side of disc to discharge wood chips |

All welding is done by an experienced labor force, using gas MIG welders. They are inspected and reinspected to assure secure, solid welds. Many fabricated components such as drive guards, chipper hoods, etc. are not only externally welded but internally welded as well. This type of quality work insures good looks as well as security.

The painting procedure is just another step in the long list of quality workmanship involved in the Bandit's assembly. The machine is primed with a zinc base penetrating primer to reduce rusting and insure bondage of paint. The paint is durathane polyurethane base that gives long life and good looks.

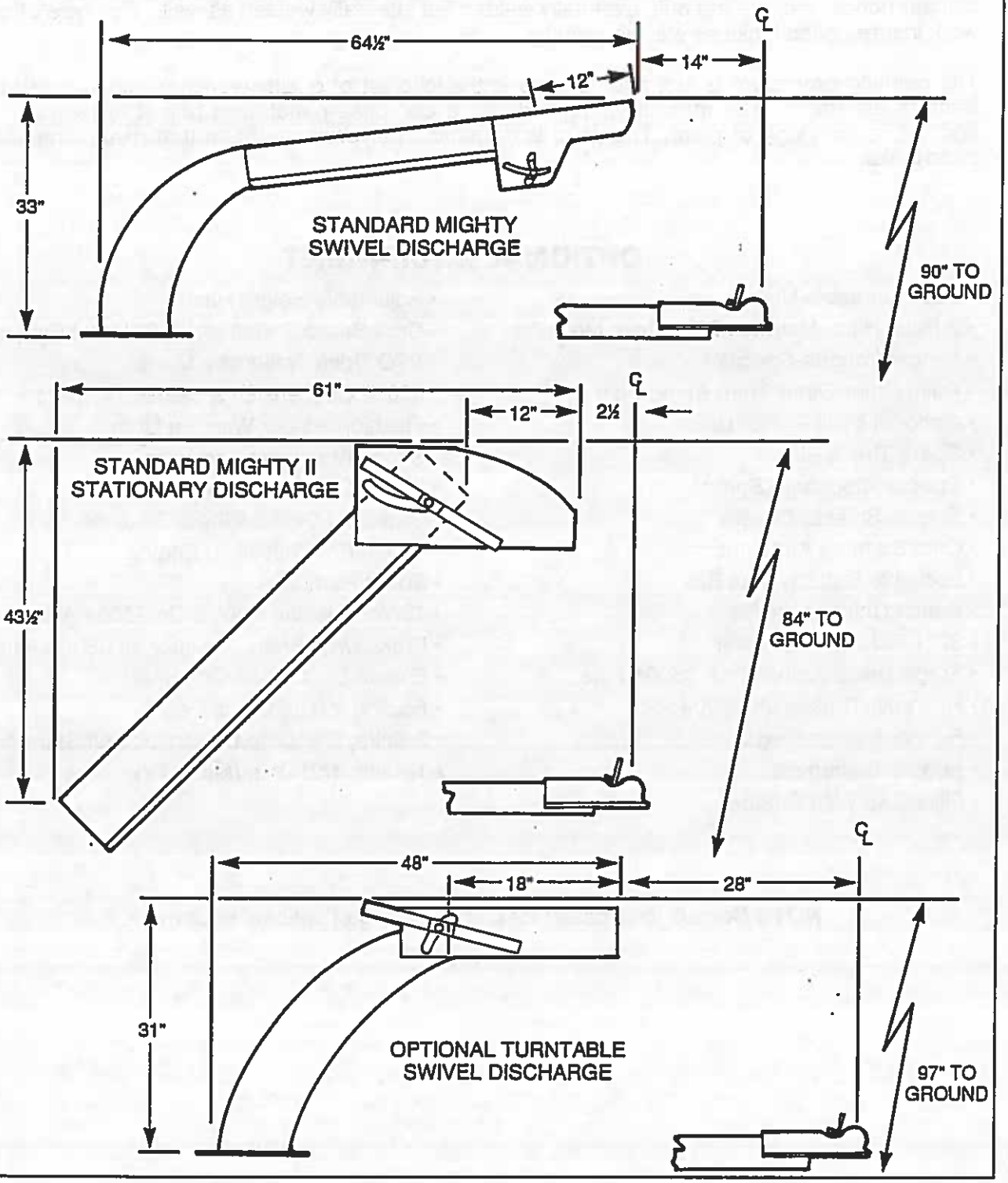
## OPTIONAL EQUIPMENT

- 360° Turntable Unit
- 3 Point Hitch Mounted PTO Drive Model
- Longer Tongue-Specify
- Paint Color Other Than Standard
- Optional Main Power Unit
- Spare Tire & Rim
- Special Discharge Spouts
- Engine Shields-Covers
- Chip Bagging Attachment
- Lockable Battery/ Tool Box
- Bandit Chipper Knives
- 30" Discharge Deflector
- Surge Brake Actuator on 3500# Axle
- Hydraulic Brakes on 3500# Axle
- Fender Marker Flags
- Engine Tachometer
- Filler Cap With Strainer
- Adjustable Height Hitch
- Croft Brand 2" Ball of 2-1/2" Lunet Ring
- PTO Drive Trailerized Model
- 3500# Suspension & Larger 14" Tires
- Flashing Amber Warning Light
- Shock Absorbers For Axles
- Heavy Duty Tail Light Package
- Swiveling Caster Wheel On Jack
- Clutch For Wisconsin Engine
- Spare Parts Kits
- 12 Volt Electric Brakes On 3500# Axle
- Brakeaway Brake Actuator on 3500# Axle
- Engine Shut Down On Infeed
- Folding Infeed Chute Pan
- 2-Knife, 3/8" Chip Disc In Lieu Of Standard
- 1-Knife, 1/2" Chip (MIGHTY)

**NOTE** Consult local dealer for current pricing of optional equipment.

## APPROXIMATE DISCHARGE DIMENSIONS

(NOTE: OTHER SIZED DISCHARGES AVAILABLE ON REQUEST)



# START-UP PROCEDURES

***DO NOT ATTEMPT ANY TYPE OF OPERATION OR MAINTENANCE UNTIL YOU HAVE THOROUGHLY READ THIS MANUAL.***



# PRELIMINARY OPERATION

## DANGER

Do not attempt to operate your Bandit until you have read this entire manual thoroughly. Especially the sections devoted to safety! The more familiar you become with the Bandit through reading this manual, the easier it will be to properly operate and maintain the machine.

## DANGER

Do not let anyone operate the machine or maintain it until they too have read this manual. Too many accidents happen because the manual is filed away in an office and the employee operating or maintaining the machine has never had the opportunity to see it.

You can purchase additional Bandit parts & operators manuals for $50.00 a piece. You have to agree, it is money will spent.

# ENGINE BREAK-IN PROCEDURES

## WARNING

Consult your engine manual for proper break-in procedures. Various engines require somewhat different procedures, but basically the engine needs to operate at lower RPM's and loads for a specific amount of time.

## WARNING

Failure to properly break your engine in will result in poor bearing and piston ring surfaces.

## WARNING

The Bandit has only been run for a short time to test proper hydraulic pressures, possible leaks, etc. The fuel tank will be empty. Fuel is provided through a small auxiliary tank for testing. This immensely helps safety in our manufacturing facility and shipping.

A) Remove the ignition key, install pin into the chipper disc lock tube.

B) Visually check the inside bottom of the chipper housing for any foreign objects.

C) Remove the engine coil wire. Remove disc lock pin and carefully manually turn the chipper disc a full revolution by hand. This is to insure that everything inside the chipper housing is clearing properly.

D) While turning the disc, check the front bearing retainer for proper tightness.

E) Close the chipper hood, secure the hood and turn the disc by hand one more revolution to insure proper hood clearance.

F) Visually check for possible loose nuts or bolts.

G) Check the infeed spout to the chipper for any type of foreign material.

H) Check the hydraulic oil level, tank should be at least 3/4 full. Change return filter after first 10 hours and then each 400 hours of operation.

I) Check engine oil.

J) Check clutch engagement tension for proper engagement.

K) *Position the safety control bar to the center position and start the engine and let it warm up at 1000 RPM's (Follow engine manual information). The machine may show signs of vibration until the engine can be set at full throttle. The engine causes most of this vibration until it is brought up to full speed.

L) Push the safety control bar forward towards the machine. This will allow the feed wheel to turn in reverse and allow the hydraulic oil to warm up along with the engine.

M) Once the engine is properly warmed up, position the discharge pipe to the proper direction and pull the throttle to wide open., (Follow Engine Break-In Procedure).

N) Put your hard hat and safety glasses on and start to feed limbs into the chipper. Feed small ones first to insure everything is clearing properly.

O) DANGER Remember DO NOT reach into the infeed spout area for any reason. The feed wheel grabs the wood and pulls it into the chipper. Simply push the wood into the spout with your hands well away from the feed wheel.

P) After you have operated the machine for approximately on hour, shut down and recheck all bolts. This is a critical time. If the bolts are retightened now, there is a good possibility they will not loosen again.

It is normal for bolts to loosen once on a new piece of machinery. This is because the machine is moving in its' own normal pattern and tightening in assembly cannot insure against this first loosening in operation.

Q) Check the drive belts for proper tension (See Maintenance Section). New belts stretch. Belt tension should be checked twice in the first day of operation, then once every day of operation.

## OPERATION TIPS FOR BRUSH BANDIT

1) DO NOT REACH INTO THE FEED CHUTE FOR ANY REASON. IF YOU HAVE SHORT PIECES, SIMPLY LAY THEM ON TOP OF LONGER MATERIAL WHILE IT IS FEEDING INTO THE MACHINE.
2) ALWAYS STAND ON THE RIGHT SIDE OF THE INFEED CHUTE WHEN INSERTING MATERIAL. THIS WILL ALLOW YOU TO TURN RIGHT AND WALK AWAY WITHOUT WALKING THROUGH THE MATERIAL BEING FED.
3) DO NOT WASTE TIME WATCHING THE WOOD FEEDING. INSERT THE MATERIAL, GET MORE MATERIAL AND LAY IT ON TOP OF THE FEEDING WOOD. IT SAVES TIME!
4) IF YOU HAVE LARGE DIAMETER WOOD TO CHIP, TRY TO INSERT IT IN THE FEED WHEELS WHILE SMALLER PIECES ARE GOING THROUGH. THE SMALL PIECES WILL PARTIALLY OPEN THE WHEELS WHICH ALLOWS EASIER ACCESS FOR THE LARGER DIAMETER WOOD.
5) DO NOT LUG THE ENGINE ON LARGE DIAMETER MATERIAL. LISTEN FOR THE ENGINE. IF IT STARTS LOSING RPM, STOP THE FEED WHEELS FOR A FEW SECONDS TO ALLOW RECOVERY OF ENGINE RPM.
6) KEEP THE TOP WHEEL SPRINGS ADJUSTED ONLY TIGHT ENOUGH TO KEEP THE FEED WHEEL TEETH FROM SLIPPING ON THE MATERIAL. **DO NOT OVERTIGHTEN!** THIS WOULD OVERWORK THE HYDRAULIC SYSTEM AND MAKES IT VERY HARD TO FEED LARGER DIAMETER MATERIAL.
7) ALWAYS START THE LARGER END (BUTT END) OF THE WOOD INTO THE FEED WHEELS FIRST.
8) KEEP THE CHIPPER RPM UP WHETHER CHIPPING BRUSH OR ROUND-WOOD. THE RPM IS NECESSARY FOR THROWING POWER. LOW RPM CAUSES WEAK THROWING AND CAN CAUSE PLUGGING IN DISCHARGE.

## MAINTAINING YOUR BRUSH BANDIT

***THIS MAINTENANCE CHART DOES NOT GO INTO GREAT DETAIL, BUT IS TO BE USED AS A REMINDER. REFER TO THE OPERATOR'S MANUAL FOR COMPLETE INSTRUCTIONS.***

### DAILY

**"DO NOT ATTEMPT ANY MAINTENANCE WITHOUT REMOVING THE ENGINE KEY AND INSTALLING THE DISC LOCK PIN!"**

1) CHECK THE CONDITION OF YOUR KNIVES; REPLACE, GRIND, OR FILE TO KEEP A GOOD WORKING EDGE.
2) CHECK AND/OR ADJUST THE BELT TENSION ON THE CHIPPER AND PUMP DRIVES.
3) CHECK ENGINE OIL AND WATER LEVELS (AS APPLICABLE).
4) CHECK AIR CLEANER - CLEAN AS NECESSARY.
5) CHECK PTO FOR PROPER ENGAGEMENT TENSION (AS APPLICABLE).
6) CHECK RADIATOR - CLEAN AS NECESSARY (AS APPLICABLE).
7) CHECK HYDRAULIC OIL LEVEL.

### WEEKLY

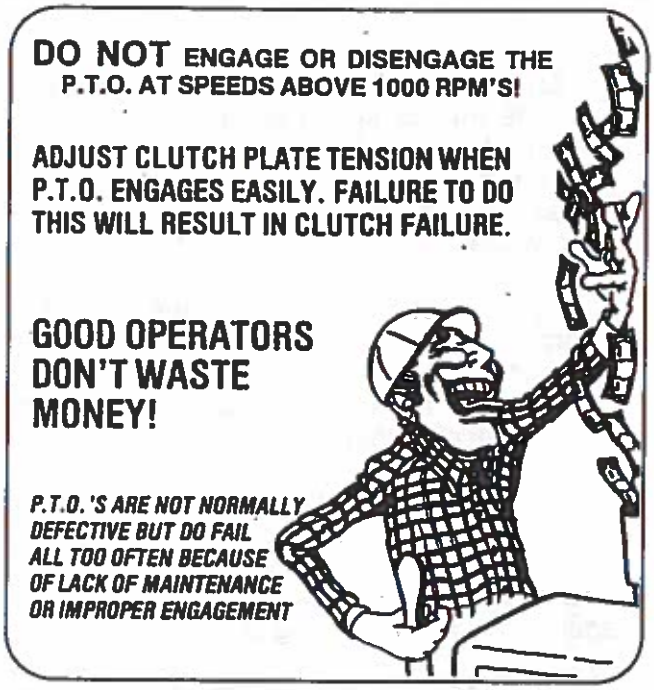
**"DO NOT ATTEMPT ANY MAINTENANCE WITHOUT REMOVING THE ENGINE KEY AND INSTALLING THE DISC LOCK PIN!"**

1) CHECK SET SCREWS IN HYDRAULIC MOTOR SHAFTS. MAKE SURE THE HYDRAULIC MOTOR IS FULLY INSERTED INTO THE FEED WHEEL SHAFT OR COUPLER.
2) CHECK ANVIL CLEARANCE AND WEAR.
3) CHECK WATER LEVEL IN BATTERY.
4) CHECK TIRE INFLATION PRESSURE.
5) LUBRICATE CLUTCH PER CLUTCH MANUAL (AS APPLICABLE).
6) CHECK ALTERNATOR AND FAN BELTS ON ENGINE (AS APPLICABLE).
7) CHECK SPRING TENSION ON FEED WHEEL SYSTEM BUT DO NOT OVERTIGHTEN.
8) GREASE FEED WHEEL BEARINGS WITH ONE SHOT OF GREASE. DO NOT OVERGREASE.
9) CHECK ENTIRE MACHINE FOR POSSIBLE LOOSE BOLTS, NUTS OR PARTS.
10) CHECK FOR ANY POSSIBLE OIL FITTING LEAKS.
11) PURGE CHIPPER BEARINGS, YOU CANNOT OVERGREASE THESE BEARINGS. MAKE SURE ALL THE OLD GREASE IS PUMPED OUT.

### MONTHLY

**"DO NOT ATTEMPT ANY MAINTENANCE WITHOUT REMOVING THE ENGINE KEY AND INSTALLING THE DISC LOCK PIN!"**

1) CHECK HYDRAULIC PRESSURE ON THE FEED WHEEL SYSTEM. SET TO 2200 PSI.
2) CHECK FRICTION WEAR ON THE DISCHARGE SPOUT AND FLIPPER.
3) CHECK FRICTION WEAR ON THE CHIPPER HOOD.
4) CHECK FRICTION WEAR ON SLIDES FOR TOP FEED WHEEL.

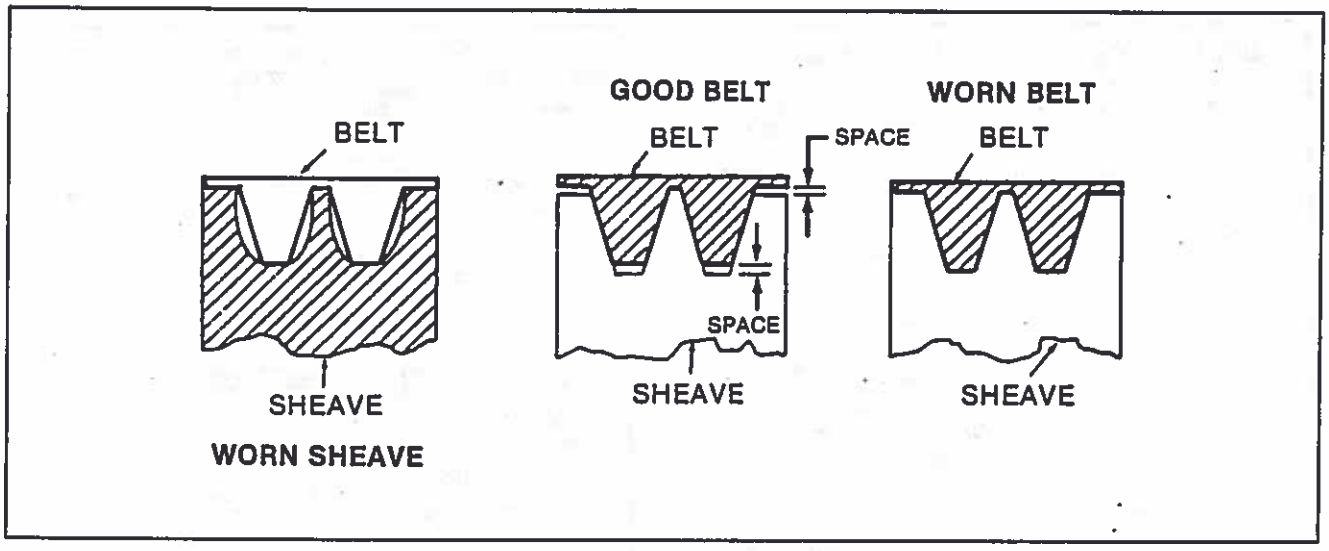



The Optional PTO CLUTCH is a relatively expensive wear item on the chipper. This decal is installed on each machine shipped as a reminder to the operator to save money and down time by proper maintenance and usage. Refer to your PTO manuals for proper maintenance procedures.

Please remember, if it ISN'T taking most of your strength to engage the PTO, IT ISN'T ADJUSTED PROPERLY.

PERFORMANCE FIRST INC. DOES NOT warranty clutch failures. Warranty must be handled through the respective manufacturers.

Worn or mis-aligned belts and sheaves in the power train causes belt slippage, thus power loss. Keep the power train working for you, not against you by checking for needed adjustment or replacement.

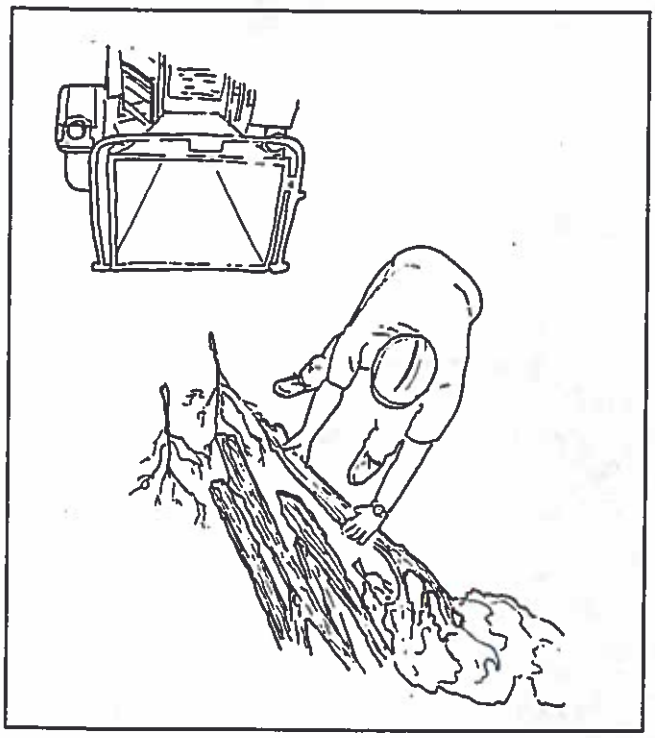


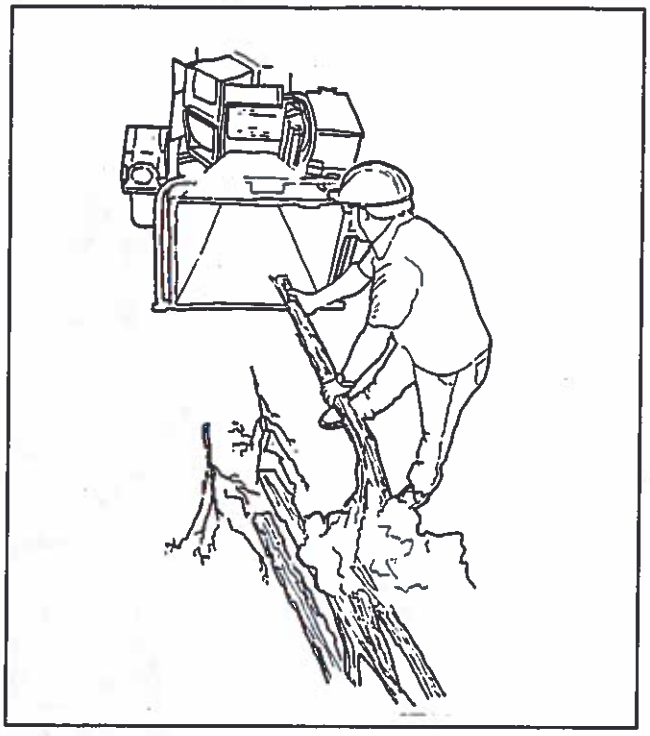
# OPERATING TIPS & PROCEDURES



## WARNING

Whenever you feed limbs into the machine stand on the right side of the wood. Wood has a tendency to pull to the left after the chipper starts feeding. By standing on the right side of the wood, you will then be free to turn and walk away to retrieve more wood.



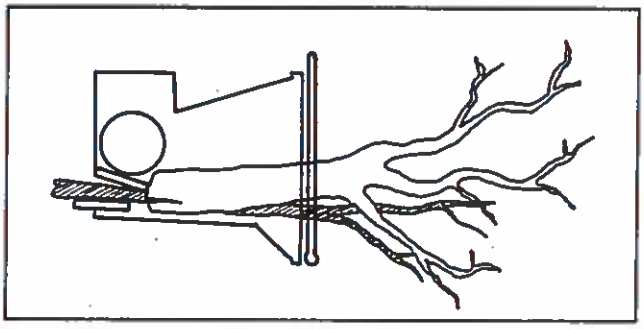


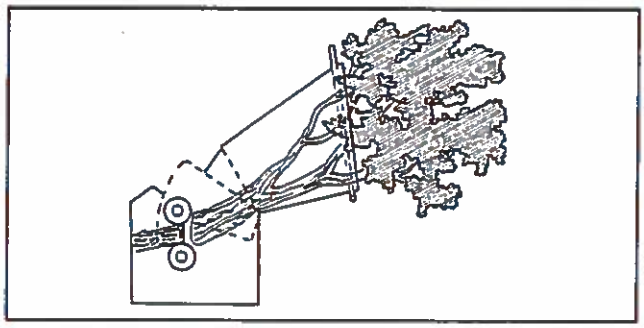
## WARNING

If you have short pieces of wood, DO NOT try to put them into the feed wheels with your hands. Simply start some longer pieces into the feed wheels and then lay the short pieces on top to the longer ones.

If you have large diameter wood, try to feed it with a small diameter wood. Start a small diameter limb which will partially open the feed wheels. Once the feed wheels are partially open, it is much easier to insert the larger diameter wood.

If you are after production, don't stand and watch the limbs feed into the machine. Once the limbs have started into the machine, you can walk away to get more and continue feeding into the wheels. You do not have to wait for limbs to finish feeding into the chipper before inserting more.





If you are feeding large diameter wood, listen for the engine to possibly pull down. If it starts lugging down, stop the feed wheels by pushing the hydraulic control handle to neutral, and let the engine recover to full speed. This will stop the chipper from plugging the discharge pipe.

Small limbs and branches require the most spring tension on the top feed wheel yoke If the feed wheel seems to slip on the wood, this would indicate the need to tighten springs. If you are running mostly larger diameter wood, the springs should be loosened. DO NOT over tighten the springs, this causes a loss in the feeding power of the wheels.

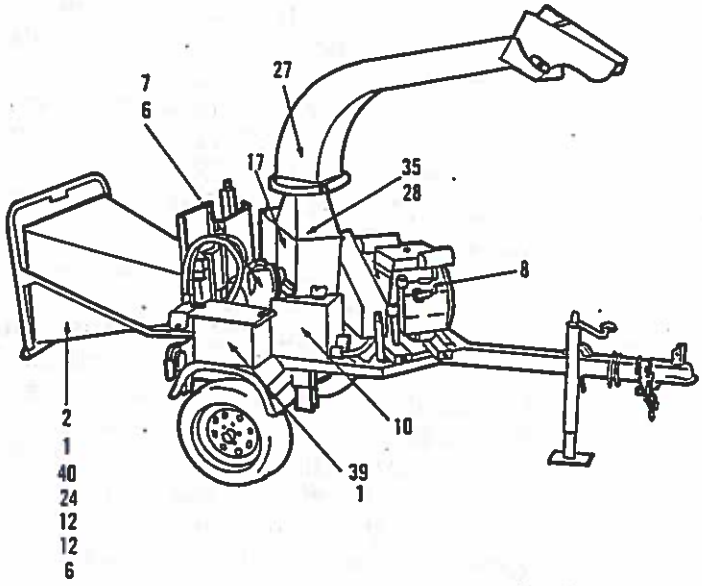
Always check the hydraulic oil and engine fuel before heading to the job sight. Both tanks should be filled at least 3/4" full.

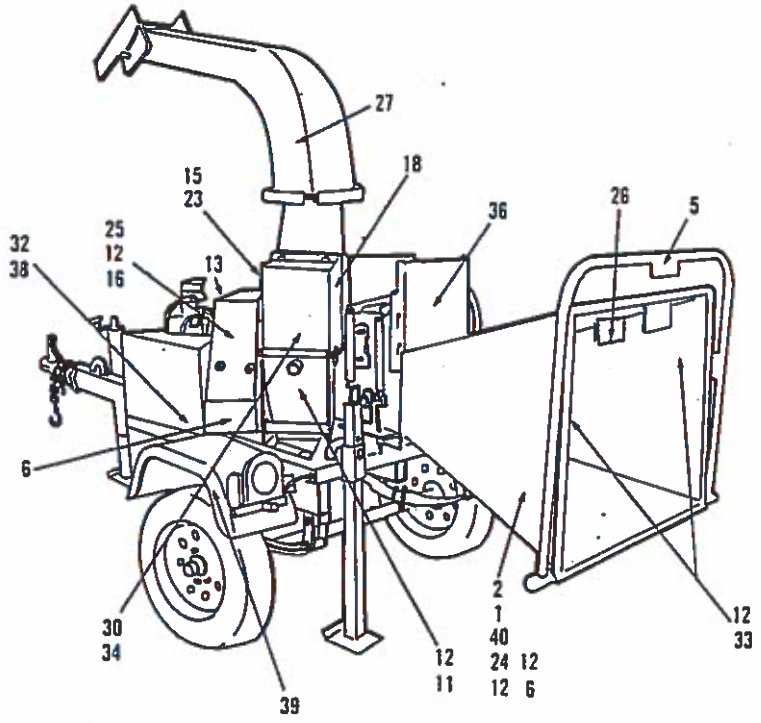
To obtain the most from your chipper, for the least amount of cost, it is a good practice to set and follow a scheduled preventative maintenance program. It will eliminate many possible problems and down time.

The PTO-option is an expensive component part of the Bandit. It needs proper maintenance (see maintenance section and manufacturers manual for detailed information). The operator must take care in the engagement and disengagement of the PTO. When engaging or disengaging the engine, RPM should always be between 700 and 1000 RPM. When the engine has sufficiently warmed up, bump the PTO handle against engagement to start the disc turning. This may have to be repeated until the chipper disc is turning at proper ratio with engine RPM. Then push the handle all the way in gear until it locks into position securely. If PTO engages and disengages loosely it needs adjustment. After engagement raise engine RPM to full throttle. Engaging and disengaging the clutch at high engine RPM will quickly and excessively wear out clutch plates as well as bearings.

# DECAL LOCATIONS – MIGHTY BANDIT

## ALTHOUGH LOCATIONS MAY VARY, ALL DECALS MUST BE ON MACHINE DURING OPERATION. IF ANY DECALS BECOME DAMAGED, REPLACE IMMEDIATELY.



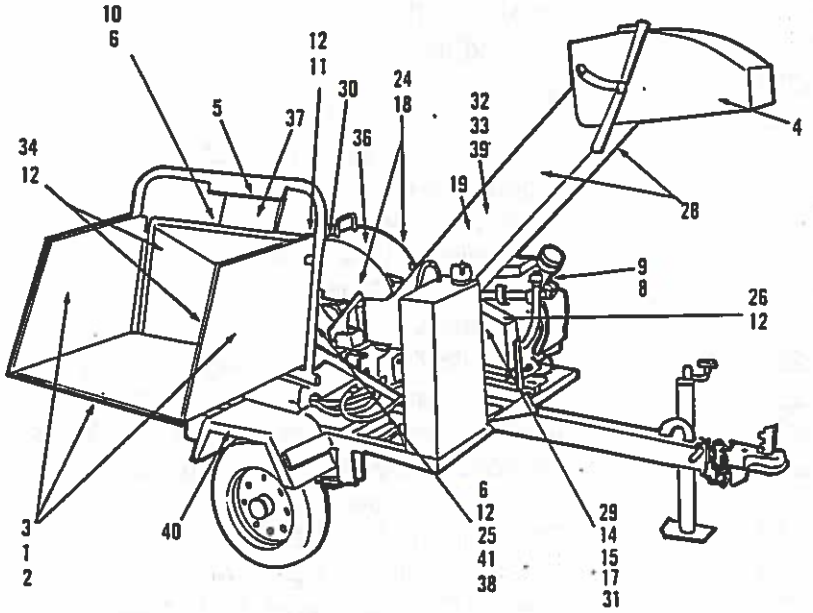



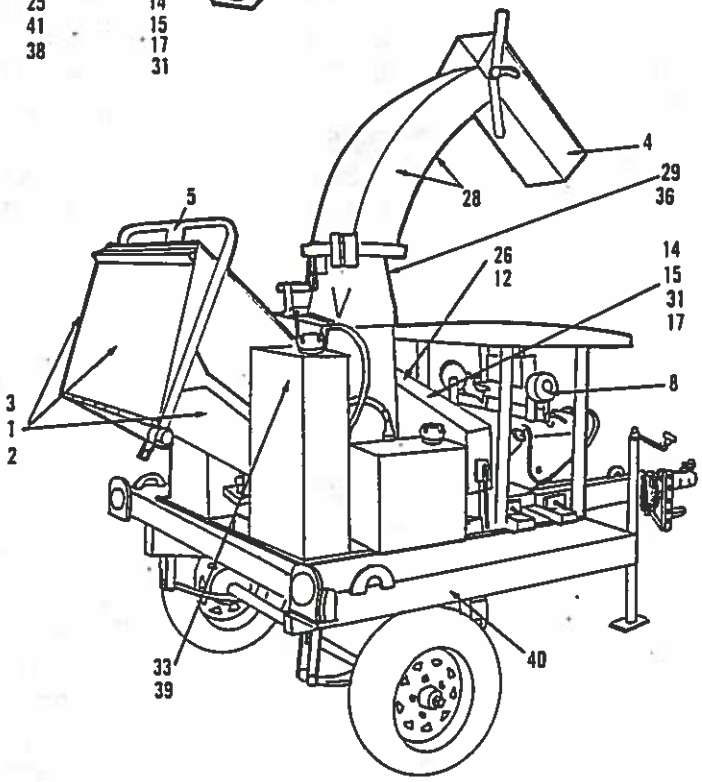
# DECAL LOCATIONS – MIGHTY BANDIT

| LOCATION | NUMBER | DESCRIPTION |
|---|---|---|
| 1 | BRW-105 | Mighty Bandit Logo |
| 2 | OOB-112 | Performance First, Inc. |
| 3 | OOB-128 | Lg. Mighty II |
| 4 | OOB-129 | Sm. Mighty II |
| 5 | OOB-201 | "Safety Control Bar - Push to reverse..." |
| 6 | OOB-202 | "Grease Weekly..." |
| 7 | OOB-208 | "Remove to check torque..." |
| 8 | OOB-212 | "If decals are damaged..." |
| 9 | OOB-213 | "Do not attempt to operate..." |
| 10 | OOB-214 | "Hydraulic oil tank must be..." |
| 11 | OOB-215 | "Chipper Disc Stop" |
| 12 | OOB-223 | 3 1/4" Arrow |
| 13 | OOB-228 | "Hydraulic Trouble Shooting" |
| 14 | OOB-230 | "Do Not over over work this engine..." |
| 15 | OOB-239 | "Avoid Hydraulic Pump Failure..." (Mighty Only) |
| 16 | OOB-242 | "Remove this guard once a month..." |
| 17 | OOB-243 | "Owners Responsibility..." |
| 18 | OOB-247 | "To obtain the best bearing..." |
| 19 | OOB-250 | Optional "Yoke Lift Up-Down" |
| 20 | OOB-252 | Optional "Hydraulic Swivel Discharge Right-Left" |
| 21 | OOB-253 | Optional "Winch In-Out" |
| 22 | OOB-255 | Optional "Selector Winch-Feed |
| 23 | OOB-301 | "CAUTION! This MACHINE Operates..." |
| 24 | OBR-400 | "DANGER-Keep Hands Clear..." |
| 25 | OBR-401 | "DANGER-Never Open Or Close..." |
| 26 | OBR-403 | "DANGER! If You Have Reached..." |
| 27 | OBR-404 | "DANGER! Flying Chips Are..." |
| 28 | OBR-405 | "DANGER! This Machine Is Direct Drive..." |
| 29 | OBR-406 | "DANGER-DO NOT Slam The..." |
| 30 | OBR-407 | "DANGER! Never Perform..." |
| 31 | OBR-408 | "Flammable Fluid Diesel..." |
| 32 | OBR-409 | "Flammable Fluid Gasoline..." |
| 33 | OBR-410 | "DANGER -Moving Parts..." |
| 34 | OBR-411 | "DANGER -This Cutterwheel..." |
| 35 | OBR-412 | "Warning - Do Not Attempt To Operate..." |
| 36 | OBR-413 | "Before Reaching Inside The..." |
| 37 | OBR-414 | "Operation Tips For Brush Bandit..." |
| 38 | OBR-431 | "Warning Do Not Fill The Fuel Full..." |
| 39 | OBR-441 | "Warning - Tighten Wheel Lug Nuts..." |
| | OBR-443 | "Maintaining Your Brush Bandit" |

# DECAL LOCATIONS – MIGHTY BANDIT II

**ALTHOUGH LOCATIONS MAY VARY, ALL DECALS MUST BE ON MACHINE DURING OPERATION. IF ANY DECALS BECOME DAMAGED, REPLACE IMMEDIATELY.**



# DECAL LOCATIONS – MIGHTY BANDIT II

| LOCATION | NUMBER | DESCRIPTION |
|---|---|---|
| 1 | BRW-105 | Mighty Bandit Logo |
| 2 | OOB-112 | Performance First, Inc. |
| 3 | OOB-128 | Lg. Mighty II |
| 4 | OOB-129 | Sm. Mighty II |
| 5 | OOB-201 | "Safety Control Bar - Push to reverse..." |
| 6 | OOB-202 | "Grease Weekly..." |
| 7 | OOB-208 | "Remove to Check Torque..." |
| 8 | OOB-212 | "If decals are damaged..." |
| 9 | OOB-213 | "Do not attempt to operate..." |
| 10 | OOB-214 | "Hydraulic oil tank must be..." |
| 11 | OOB-215 | "Chipper Disc Stop" |
| 12 | OOB-223 | 3 1/4" Arrow |
| 13 | OOB-227 | "Hydraulic Trouble Shooting with Flow Control" |
| 14 | OOB-228 | "Hydraulic Trouble Shooting..." |
| 15 | OOB-230 | "Do Not over over work this engine..." |
| 16 | OOB-239 | "Avoid Hydraulic Pump Failure..." (Mighty Only) |
| 17 | OOB-242 | "Remove this guard once a month..." |
| 18 | OOB-243 | "Owners Responsibility..." |
| 19 | OOB-247 | "To obtain the best bearing..." |
| 20 | OOB-250 | Optional "Yoke Lift Up-Down" |
| 21 | OOB-252 | Optional "Hydraulic Swivel Discharge Right-Left" |
| 22 | OOB-253 | Optional "Winch In-Out" |
| 23 | OOB-255 | Optional "Selector Winch-Feed |
| 24 | OOB-301 | "CAUTION! This MACHINE Operates..." |
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| 26 | OBR-401 | "DANGER-Never Open Or Close..." |
| 27 | OBR-403 | "DANGER! If You Have Reached..." |
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| 29 | OBR-405 | "DANGER! This Machine Is Direct Drive..." |
| 30 | OBR-406 | "DANGER-DO NOT Slam The..." |
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| 32 | OBR-408 | "Flammable Fluid Diesel..." |
| 33 | OBR-409 | "Flammable Fluid Gasoline..." |
| 34 | OBR-410 | "DANGER-Moving Parts..." |
| 35 | OBR-411 | "DANGER-This Cutter Wheel..." |
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| 40 | OBR-441 | "Warning - Tighten Wheel Lug Nuts..." |
| 41 | OBR-443 | "Maintaining Your Brush Bandit" |

# SERVICE RECORD

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# CHIPPER SECTION



# TROUBLE SHOOTING CHIPPER PROBLEMS

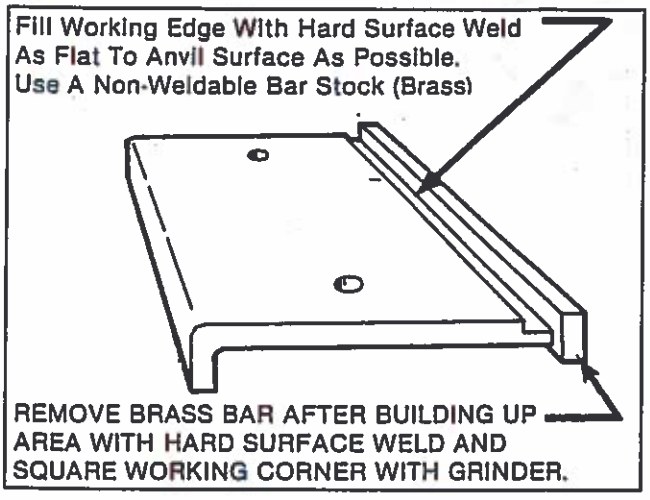
1) **Chipper Makes Poor Quality Chips or Does Not Feed Properly**
   A. Knives have lost their edge. File or grind knives. **DO NOT** operate the Bandit with dull knives.
   B. Knife anvil worn or needs adjustment (See Figure 1).
   C. Feed wheel is not operating correctly. (SEE HYDRAULIC TROUBLE SHOOTING).
   D. The throat/base opening is a high-wear area. The feed plate anvil takes much of this wear but other areas wear as well. Attention must be paid to any areas where outer, non-cutting edges of chipper knife are exposed. These areas must be built up with weld to maintain the original integrity.
   E. Knives ground to the wrong angle. Knives must be ground at 31 degrees.
   F. Feed wheel teeth worn (REPLACE).
   G. Material being chipped is very small, dry or punky. This type of material does not produce good chip quality.

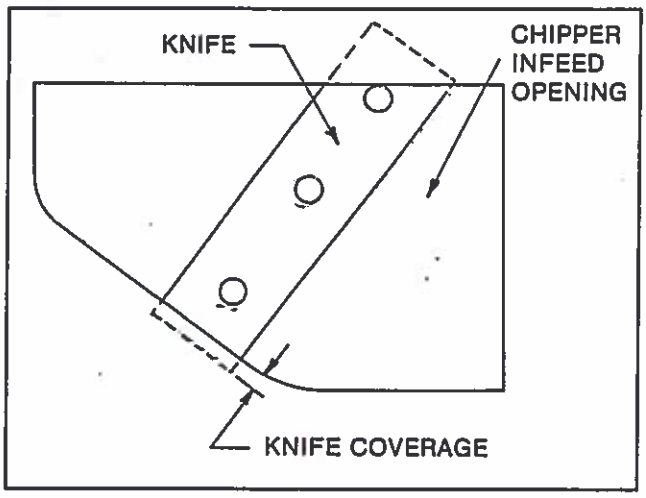
2) **Chipper Knife Hits Anvil**
   A. Check anvil clearance. Knife edge should be set .040 to .065 from edge of the anvil. By use of a feeler gauge.
   B. Check the chipper front bearing retainer cap for tightness (SEE TORQUE CHART).

3) **Discharge Chute Plugs or Does Not Throw Chips Properly**
   A. Lugging engine on large material - keep engine RPM up.
   B. Obstruction in discharge pipe. Patches welded into the pipe can cause obstruction of chip flow. Anything causing an obstruction will cause the pipe to plug.
   C. Chipping punky material that has little substance can also plug the discharge pipe.
   D. Worn fan blades.

4) **Chipper Bearings Running Too Hot**
   A. Improper lubrication-purge bearings once a week with EP type grease
   B. Chipper disc operating at too high RPM's. DO NOT exceed 1950 RPM's.
   C. Front bearing retainer cap loose (SEE TORQUE CHART).
   D. Bearings worn out (REPLACE).
   E. Set screws on sheave side bearing not tight.

FIGURE -1-



# SUGGESTIONS TO ELIMINATE MOST CHIPPER PROBLEMS

One of the first questions most people ask about the Bandit is, how long can I go between knife changes?

All chippers are basically the same, they have knives that cut the wood. These knives are all heat treated 56 to 58 Rockwell hardness. Knives normally become dull from dirt, grit, etc. The knife life naturally depends on the amount of dirt and grit that enters the chipper.

Knives can become dull in the first day of operation or can go a few months without resharpening. Whatever the length of time may be, sharpen the knives when they become dull. Many times the cutting edge can be brought back with a good #10 Bastard Mill File. This saves expensive grinding and replacement cost.

Dull knives produce poor quality chips. The chips will turn out to be chunks and long slivers. Dull knives also cause unnecessary strain on the power unit, excessive fuel consumption, and poor chipper feed characteristics.

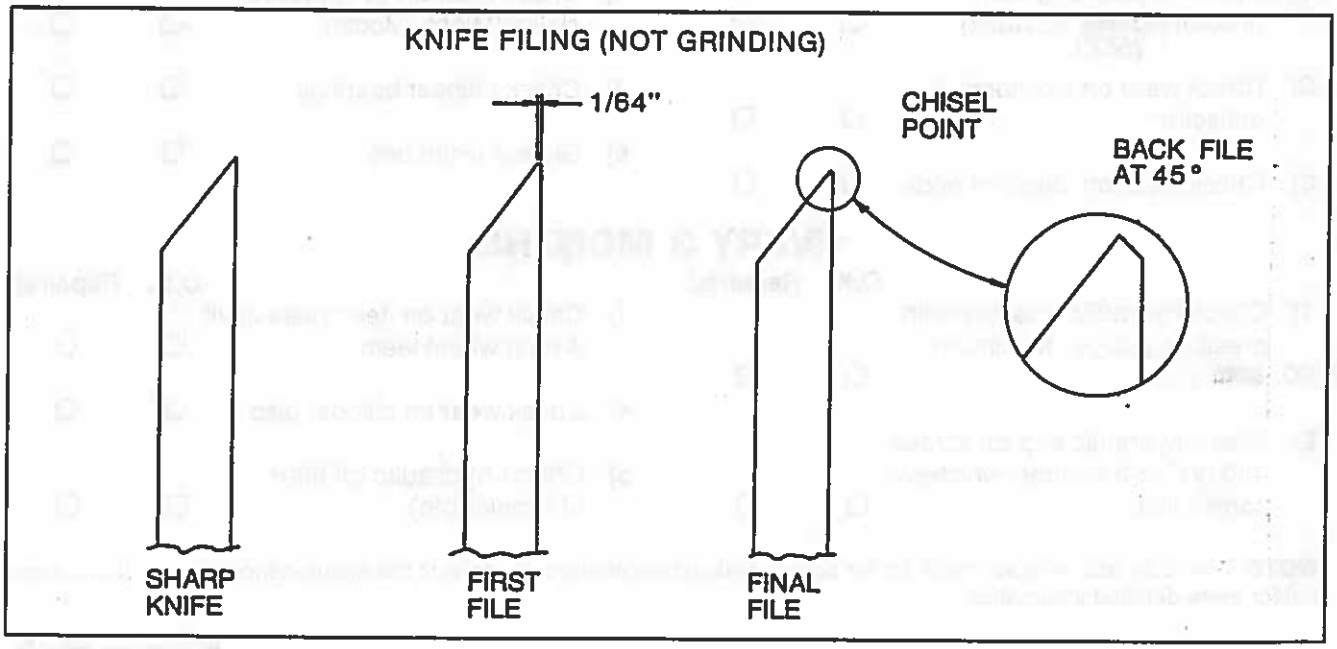
When knives need to be re-ground they should be taken to a qualified chipper knife sharpening facility, to assure quality grinding and accurate 31 degree angle.

Whether the knives are reground or filed to sharpness many chipping people have found back filing to be helpful in sustaining longer knife life.

Using a #10 Flat Bastard File, file with the knife perpendicular to point creating approx. 1/64" flat edge. Then on the back side of knife at approx. 45 degree file the edge back to a small chisel type point.

Knives should be replaced in sets. These sets are determined by the amount of resharpening done to the knives. A reground knife may be 1/16, 1/8 or 3/16" narrower than new. It should be reinstalled with another knife of comparable usage.

Knives begin 4" wide, when they reach a min. of 3-1/2" wide (1/4" of each side)-REPLACE!!



# MAINTENANCE CHECK SHEET

## DAILY

| | O.K. | Repaired |
|---|---|---|
| 1) Check condition of your knives | ❑ | ❑ |
| 2) Check chipper belts & check pump belt (if applicable) | ❑ | ❑ |
| 3) Check engine oil | ❑ | ❑ |
| 4) Check air cleaner | ❑ | ❑ |
| 5) Check PTO engagement (if applicable) | ❑ | ❑ |
| 6) Check debris in fan (if applicable) | ❑ | ❑ |
| 7) Check hydraulic oil level | ❑ | ❑ |

## WEEKLY

| | O.K. | Repaired |
|---|---|---|
| 1) Check installation of hydraulic motor | ❑ | ❑ |
| 2) Check feed plate anvil | ❑ | ❑ |
| 3) Check battery | ❑ | ❑ |
| 4) Check tires | ❑ | ❑ |
| 5) Check PTO (Clutch) | ❑ | ❑ |
| 6) Check engine belts | ❑ | ❑ |
| 7) Check feed spring adjustment | ❑ | ❑ |
| 8) Check feed wheel bearings | ❑ | ❑ |
| 9) Check for loose bolts, nuts & parts | ❑ | ❑ |
| 10) Grease chipper bearings (purge) | ❑ | ❑ |

## MONTHLY

| | O.K. | Repaired |
|---|---|---|
| 1) Check hydraulic system pressure ([redacted] PSI Max) 1500 | ❑ | ❑ |
| 2) Check wear on discharge & deflector | ❑ | ❑ |
| 3) Check wear on chipper hoods | ❑ | ❑ |
| 4) Check wear on yoke plastic slides (Mighty Model) | ❑ | ❑ |
| 5) Check chipper bearings | ❑ | ❑ |
| 6) Grease pintle ring | ❑ | ❑ |

## EVERY 3 MONTHS

| | O.K. | Repaired |
|---|---|---|
| 1) Check hydraulic pressure with pressure gauge - Maximum 1500 [redacted] PSI | ❑ | ❑ |
| 2) Check hydraulic suction screen 400 hrs. or 3 months, whichever comes first | ❑ | ❑ |
| 3) Check wear on feed plate anvil & feed wheel teeth | ❑ | ❑ |
| 4) Check wear on chipper disc | ❑ | ❑ |
| 5) Check hydraulic oil filter (if applicable) | ❑ | ❑ |

**NOTE** This is an abbreviated check list for normal periodic maintenance – consult the maintenance section of this manual for more detailed information

# MAINTENANCE SECTION



The Bandit is a very simple and inexpensive machine to operate and maintain. A few simple maintenance rules to follow will insure years of trouble free operation.

## DANGER

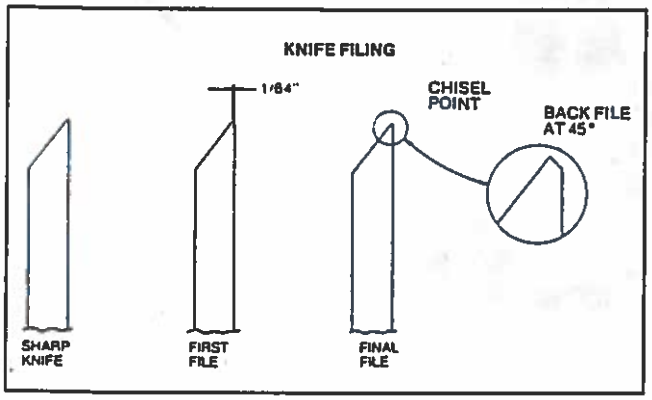
Always remember to follow all the safety procedures explained in this manual.

## DANGER

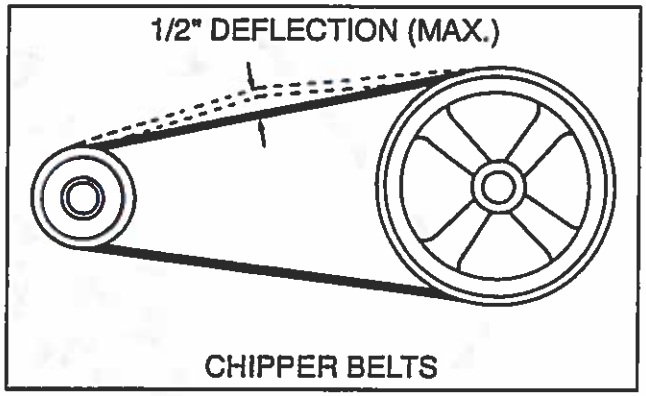
"Do not attempt any maintenance without removing the engine key, disconnecting the coil wire and installing disc locks."

## DAILY MAINTENANCE

**1) Check the condition of your knives.**
Replace, grind, or file to keep a good working edge.
Hand filing your knives can save dollars on new knives. Knife grinding is essential to the performance of your machine. Chippers do not operate properly with dull knives. Dull knives cause excessive engine wear, excessive fuel consumption and poor wood chip quality. It takes 15 minutes to either replace or file the knife edge sharp, it is time well spent.



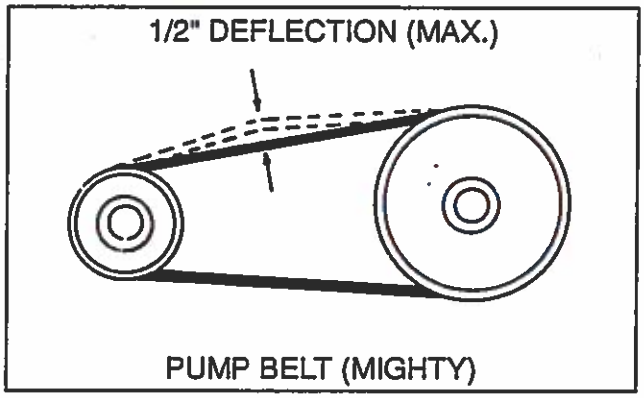

**2) Check and/or adjust the belt tension on chipper and pump drives.**
A loose belt will slip and then glaze over. Once this happens the belt will not transmit power. Do not over tighten belts, replace them. If belts are over tightened you can break the crankshaft on the engine or ruin the PTO from excessive side load. (For example: if the crankshaft on the Wisconsin engine is deflected over .010, it will most definitely break the crankshaft.)



CHIPPER BELTS

Tighten the engine drive belts to 10 lbs. deflection force. Pull the outside belt with your fore finger in the center of the belt span. Pulling fairly hard, the belt should pull out 1/2".

Tighten the hydraulic pump belt to 8 lbs. deflection force using a belt tension checker, or if the tool is not available, pull the belt with your fore finger in the center of the belt span. Pulling fairly hard, the belt should pull out 1/2".



PUMP BELT (MIGHTY)

When your are tightening these belts, it is a good time to check tightness of bolts on the sheave bushings. These bushing bolts should be torque as follows:

Engine Sheave Bushing.....20 ft/lbs
Chipper Sheave Bushing .....20 ft/lbs
Pump Sheave Bushing.....10 ft/lbs

REMEMBER to replace the belt guard after completing maintenance!!!

**3) Check engine oil following engine manual recommendations.**

**4) Check air cleaner and clean as necessary following engine manual recommendations.**

**5) Check PTO handle for proper engagement tension.**
Check the parts and service manual for detained information on the PTO. The clutch manufacturer can supply these manuals. The following instructions have been taken from one of these manuals.

"Clutch Adjustment - If the clutch does not pull, heats, or operating lever jumps out, the clutch must be adjusted. To adjust the clutch, remove the Hand Hole Plate in the housing and turn the clutch shaft assembly until the adjusting lock pin can be reached. Disengage the adjusting lock pin and turn the adjusting yoke or ring to the right or clockwise, until the operating shaft requires 1,270 in/lbs of torque to engage or divide 1,270 by the lever length to obtain pounds pull at end of lever."

NOTE - Clutch lubrication must be followed according to original manufacturers requirements.

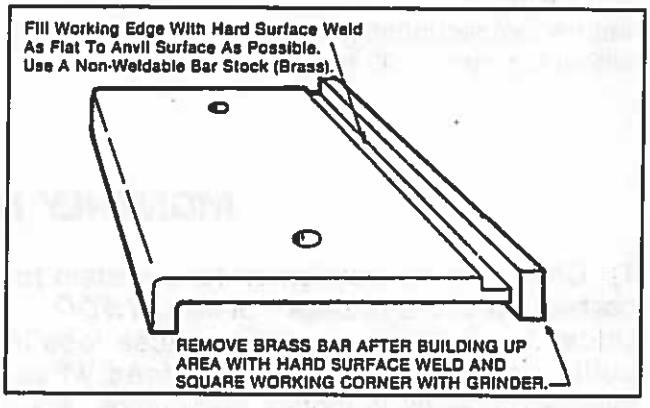
**6) Check engine fan.**
Clean as necessary by using a high pressure air or water nozzle blowing the debris out.

**7) Check hydraulic oil level.**
In reservoir tank the oil level should be at least to the bottom of the mesh screen in the filler cap. Check hydraulic section in this manual for proper oil requirements.

## WEEKLY MAINTENANCE

**1) Check set screws in hydraulic motor couplers.**
Make sure the hydraulic motor is fully inserted into the feed wheel shaft. There are four set screws in each motor shaft. Check the motor shaft to make sure it is all the way inside the feed wheel coupler. If the motor will chuck in and out or the set screws are loose, take out the screws and Loc-Tite the motor shaft and set screws back into position. Use RC-609 Loc-Tite.

**2) Check anvil clearance and wear.**
The anvil is the support for the wood as it is chipped. It is a normal wear item. If the wear edge or wear corner is worn down, the chipping quality as well as the feeding characteristics are disturbed greatly.




The anvil can be rebuilt as shown. If wear is too severe it must be replaced. The anvil clearance can also cause feeding and chipping problems. The clearance between the point of the knife and the corner of the anvil is .025 to .065. To check this anvil setting it is advisable to follow the listed procedure:

## DANGER

Install the top wheel block as explained in the chipper section of this manual. If you have access to a hoist, you can simply raise the top wheel yoke. Always block the top wheel up and slip a chain through the top wheel yoke lug and the chipper hood handle or infeed lug on Mighty II. Use a trouble light or a flash light to measure the knife to anvil clearance. Measure this distance at the top and bottom of the knife anvil using a feeler gauge. The setting clearance should be .040 to .065.

NOTE- This job works much better with two people working carefully together. One person to do the measuring and one person to turn the disc and move the anvil.

To change the anvil, slightly loosen the bolts that hold the anvil and adjust bolts to move in the needed direction. Always recheck the anvil setting after the bolts are tightened. It can easily change!!

**3) Check water level in battery.**
Although it is termed a maintenance free battery, to conserve your investment take the time to check the water level.

**4) Check air pressure in tires & check lug nut torques.**
Insure proper inflation and load rating. Torque wheel lug nuts to 90 ft. lbs.

**5) Lubricate PTO per PTO manufacturers manual (if applicable)**

**6) Check alternator and fan belt tension on the power unit. (if applicable)**

**7) Check spring tension on the top feed wheel yoke.**
The tension must be set for normal material being chipped but **NEVER** over tighten.

**8) Check feed wheel bearings.**
There are two feed wheel bearings. Check the bearings and lubricate with one shot of grease. DO NOT OVERGREASE!!

**9) Check entire machine**
Look for possible loose bolts, nuts or parts. During normal operation, fittings, bolts, nuts, and components can loosen. Always fix the smaller problems to prevent the major problems.

**10) Purge chipper bearings.**
You cannot over grease these bearings, make sure all the old grease is pumped out. The chipper bearings are an important component for safety and chipping, the disc is turning at 1950 RPM. Use a good grade of grease such as EP-2 lithium base.

## MONTHLY MAINTENANCE

**1) Check the hydraulics on feed system for correct pressure of [redacted] PSI max.** 1500
Under powered feed wheels cause loss in pulling power. Over powered feed wheel causes problems in motors and pumps. Keep the setting [redacted] PSI max. 1500

**2) Check friction wear on the discharge spout and deflector(flipper).**
The sliding action of the wood chips causes wear and these parts need replacement when worn out. Patch work on wear holes causes disturbance in the chip flow and plugging in the discharge.

**3) Check friction wear on chipper hood.**
Wood chips cause wear on the hood, patching can be dangerous as well as reduce the throwing power of the chipper.

**4) Check the friction wear on all plastic slides for the top feed wheel yoke. (Mighty Models)**
The plastic slides reduce wear on the steel components and reduce the possibility of binding during the up and down motion.

NOTE - **DO NOT** over grease the feed wheel bearings. The feed wheels turn slowly and don't require a lot of grease. Over greasing will ruin the bearing seals and can cause premature failure. This costs you money.

**5) Check the bolts and set screws on chipper bearings.**
The bearing mount bolts, set screws in lock collar on sheave side bearings, and retainer bolt on feed wheel side bearings. All MUST be kept tight to eliminate major and expensive problems.

**6) Pintle Ring Hitch.**
It is normal practice to obtain the longest life from the pintle ring to keep both the trailer and towing vehicle hitch covered with surface grease - it works.

## EVERY THREE MONTHS (QUARTERLY)

**1) Check hydraulic pressure per instructions in hydraulic section of this manual to insure hydraulic pressure is [redacted] maximum [redacted] PSI. This gives best performance of the feed wheel system. Use a pressure gauge - don't guess.**

1500

**2) Change hydraulic suction screen quarterly or every 400 hours, which ever comes first.**

**3) Check wear on feed plate anvil, and teeth on feed wheel.**

**4) Check wear on chipper disc in front of knife edge, bottom of knife pocket for flatness and outside end of chip slot.**

**5) Hydraulic oil filter cartridge must be replaced every 400 hours (Mighty II Model).**

## BOLT TORQUE CHART

(THESE TORQUES BASED ON DRY, CLEAN THREAD)

| DESCRIPTION | BOLT SIZE | FT. LBS. TORQUE |
|---|---|---|
| Chipper Bearing Bolts | 5/8" - 11 NC | 125 |
| Bearing Retainer | 5/8" - 11 NC | 125 |
| Feed Plate Anvil | 3/8" - 16 NC | 20 |
| Coupler Set Screws Pump to Chipper Shaft | 1/2" - 13 NC | 60 |
| Knife Bolts | 1/2" - 13 NC | 60 |
| Wheel Lug Nuts | 9/16 - 18 NF | 90 |
| Feed Wheel Motor Coupler Set Screws | 3/8" - 16 NC | 20 |
| Engine Hold Downs (Depend on Engine Option) | 3/8" - 16 NC | 20 |
| | 1/2 - 13 NC | 60 |

The following is a list of very important safety rules that must be followed. This applies especially to all new operators and rental companies notifying each user before the Bandit leaves the yard.

## IMPROPER USE OF THIS CHIPPER MAY CAUSE INJURY OR DEATH

A) Use safety footwear, non-bulky gloves, snug-fitting clothing, eye, ear and head protection.

B) Never operate this machine while under the use of drugs or alcohol.

C) Never operate equipment that is in need of repair or adjustment.

D) Keep children, bystanders and animals clear of working area.

E) Never check for hydraulic leaks by touching hoses or fittings with hands. Hydraulic fluid under pressure can penetrate skin and cause serious injury.

F) Never refuel while running. Never refuel in the shop or building. Always refuel in well ventilated area, away from sparks or open flame. Extinguish all smoking materials. Wipe up all spilled fuel before starting engine.

G) Breakdowns - Always call your rental dealer before attempting any kind of repairs. You will not be reimbursed for any unauthorized repairs. You are responsible for any damages due to faulty or improper repairs.

H) Transporting - Make certain that the tow hitch is secured to towing vehicle and safety chains are attached. Check to see that tail/turn signal and brake lights are working. Vehicles towing trailers must be equipped with mirrors on both sides.

I) A tow vehicle/trailer combination is heavier than a vehicle alone. Be sure to leave ample distance between you and the vehicle ahead.

This equipment is intended for use by personnel who are experienced with similar equipment. It is a must for you to read and follow the suggestions in this guide manual, and operate this equipment in a safe manner.

# LUBRICATION



**ENGINE** ..... Follow original equipment manufacturers requirements for both changing oils and filters.

**PTO (Option)** ..... Follow original equipment manufacturers requirements for both greasing and changing oils.

**HYDRAULIC RESERVOIR TANK** ..... Completely change oil and flush tank annually.

Change hydraulic oil suction screen every 400 hours or 3 months

Change hydraulic oil filter every 400 hours or 3 months on Mighty II

Check hydraulic oil level in tank daily

**CHIPPER BEARINGS** ..... Purge chipper bearings!!! You can not over grease these bearings, make sure all the old grease is pumped out. Do this weekly.

**FEED WHEEL BEARINGS** ..... Grease weekly with one shot of grease on each of the (2) bearings per wheel and (2) pivot bearings for Mighty II top feed wheel. **DO NOT OVER GREASE!!** Over greasing will ruin the seals and ruin the bearings.

NOTE: It is recommended to use an EP-2 lithium base grease for bearings. For hydraulic oil recommendations see hydraulic section.

# HYDRAULIC SECTION



# THE BANDIT HYDRAULIC SYSTEM

The Bandit is equipped with a very efficient, simple hydraulic system. Each component is capable of withstanding [redacted] PSI and still operate with a very long life. 1500

If you follow the simple rules mentioned below, the hydraulic components will last for years.

★ Do not operate the machine if the hydraulic oil level is low. This will cause the pump to cavitate and over heat. Keep min. 3/4 full.

★ Do not increase the relief valve setting beyond [redacted],PSI. 1500 This will cause damage to hydraulic components.

★ Keep your oil clean, dirty oil will cause excessive wear and loss of feed wheel power.

★ Replace the hydraulic oil suction screen & oil filter with each 400 hours of operation or 3 months. (Oil filter is on Mighty II)

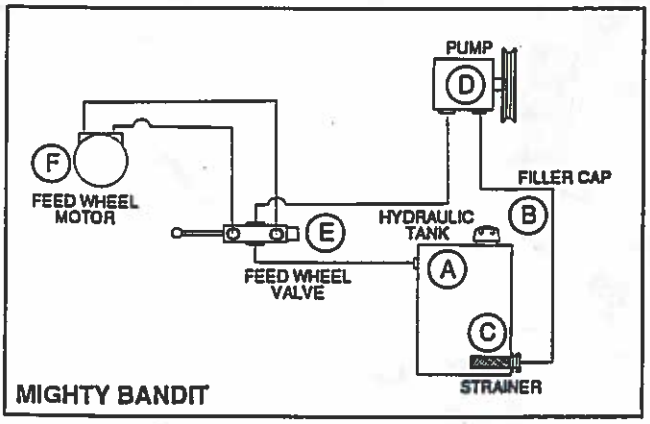
★ Replace your hydraulic oil once yearly. This is also a very good time to flush and clean the tank.

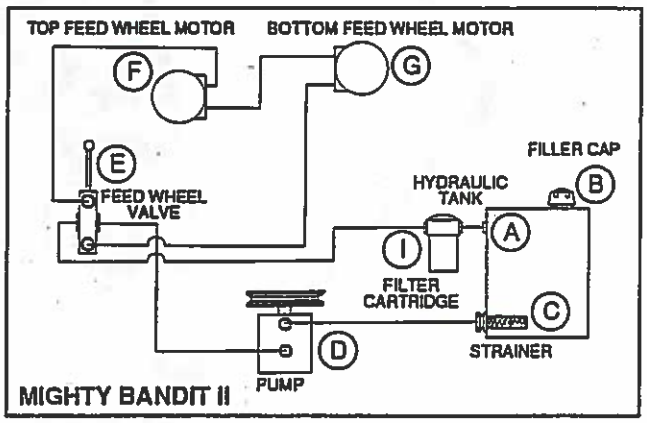
★ If you keep the Bandit's hydraulic system clean and do not increase the hydraulic pressure beyond [redacted],PSI. 1500 You will get the maximum use and life out of your Bandit chipper.

★ If you encounter a problem, it will more than likely be located in the relief valve or something as simple as pump belts slipping.

★ Always check these areas first.

# HYDRAULIC COMPONENTS




**A) Hydraulic Tank** - this tank must be kept clean and filled min. 3/4 full. Clean tank yearly.

**C) Outlet Strainer** - this strainer stops contaminants from reaching the hydraulic pump. The suction strainer should be replaced every 400 hours or 3 months.

**D) Hydraulic Pump** - the Mighty pump is driven by a belt directly from the chipper shaft. Keep the Mighty belt tensioned properly and the pump mount tight. The Mighty II pump is directly connected to chipper shaft by a coupler. The relief valve should not exceed [redacted] PSI. This will protect your pump. 1500

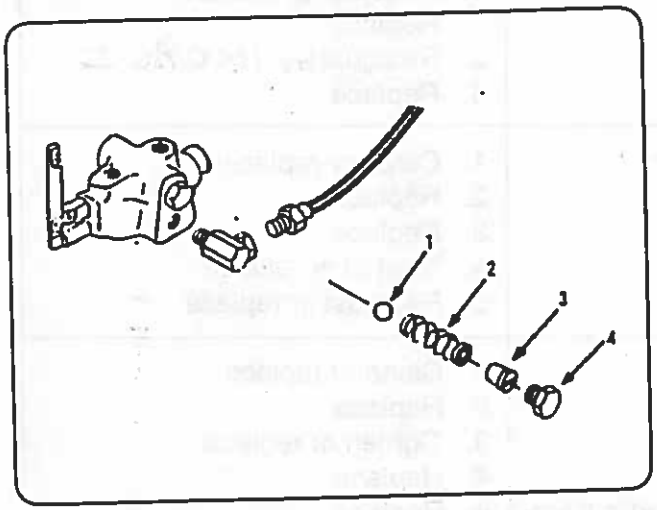
**E) Feed Wheel Hydraulic Motors** - these motors power the feed wheels. Keep the four shaft set screws tight and the four torque arm bolts tight.

**F, G) Manual Control Valve** - this valve is actuated by the safety control bar. The valve actuates the feed wheel for forward, neutral or reverse.

## RELIEF VALVE COMPONENTS

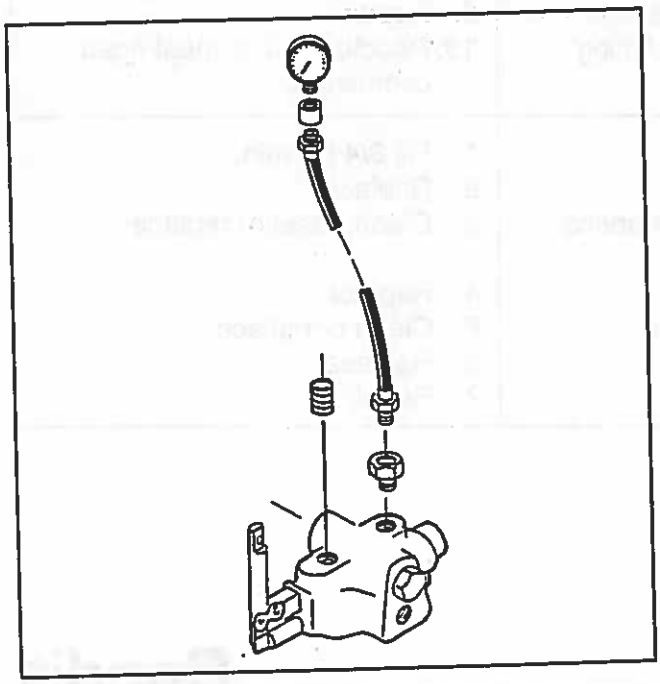
The relief valve is located internally in the control valve. Do not adjust this relief above 1500 [redacted] PSI stalled pressure.

The relief valve system is a simple spring tension design but small pieces or debris can stick the valve partially open which weakens the feed wheel power. The relief as well as hydraulic oil, and screen must be kept clean.




1. **Poppit Valve** - This ball opens and closes to relieve excess pressure on hydraulic system.
2. **Relief Spring** - This spring tensions the amount of pressure required to open the relief valve ball. This spring weakens and must be readjusted every 3 months.
3. **Slotted Set Screw** - Turn clockwise to increase pressure, but do not surpass max. on pressure chart.
4. **Hex Head Plug** - Remove to access the relief valve.

The relief valves on machine must be checked and reset at least every 3 months. If there is a hydraulic problem, in most cases cleaning the relief valves thoroughly with diesel fuel will solve problem. Make sure parts are reassembled correctly and set correctly. Damaged components must be replaced.



## CHECKING RELIEF VALVE PRESSURE

To check relief valve pressure correctly, gauge MUST be installed accurately.

1. Disconnect valve supply hose to motor and install coupling and pressure gauge.
2. Plug port where hose came out.
3. Start engine and engage control handle to activate reading on pressure gauge.
4. Increase engine RPM to full throttle for accurate reading.
5. Adjust pressure setting accordingly.

# TROUBLE SHOOTING – HYDRAULIC SYSTEM

**DO NOT ATTEMPT MAINTENANCE UNLESS THE ENGINE KEY IS REMOVED AND DISC LOCK INSTALLED!**

| PROBLEM | POSSIBLE CAUSE | SOLUTION |
|---|---|---|
| Feed wheels turn at normal speed but does not chip wood properly | 1. Spring tension too loose<br>2. Worn feed teeth<br>3. Low relief valve setting<br>4. Worn pump | 1. Readjust or replace<br>2. Replace<br>3. Readjust to 1500 P.S.I.<br>4. Replace |
| Feed wheels slow or stop when feeding | 1. Relief valve is worn or dirty<br>2. Pump is worn<br>3. Motor is worn<br>4. Pump belts slipping<br>5. Spring tension too tight | 1. Clean or replace<br>2. Replace<br>3. Replace<br>4. Tighten or replace<br>5. Readjust or replace |
| Feed wheels turn slowly or not at not at all | 1. Relief valve stuck open<br>2. Pump worn<br>3. Pump belt slipping<br>4. Worn hydraulic motor<br>5. Pinched or damaged hydraulic hose<br>6. Feed wheels valve (control valve) worn & leaking internally<br>7. Low hydraulic oil level<br>8. Plugged oil screen<br>9. Binding such as worn bearings, etc.<br>10. Control level improperly shifting valve | 1. Clean or replace<br>2. Replace<br>3. Tighten or replace<br>4. Replace<br>5. Replace<br>6. Replace<br>7. Fill 3/4 full min.<br>8. Replace<br>9. Repair<br>10. Readjust, valve must open completely |
| Hydraulic oil very hot, causing system to operate slowly | 1. Low oil level<br>2. Worn pump<br>3. Relief valve stuck open or opens easily<br>4. Damaged hose<br>5. Oil suction screen plugged<br>6. Worn motor<br>7. Binding | 1. Fill 3/4 full min.<br>2. Replace<br>3. Clean, reset or replace<br>4. Replace<br>5. Clean or replace<br>6. Replace<br>7. Repair |

# CORRECTING HYDRAULIC PROBLEMS

| COMPONENT | PROCEDURE |
|---|---|
| Checking relief valve setting | 1. Put control handle in neutral position.<br>2. Unhook hydraulic hoses from hydraulic motor.<br>3. Install pipe cap on end of one hose and install pressure gauge on end of other hose.<br>4. Pull control handle to normal operating position.<br>5. Start engine and pull throttle to approximately 1600 RPM.<br>6. Gauge should read [redacted]max. PSI. 1500<br>7. Reset relief pressure if needed (see Adjusting Relief Gauge Setting), if not needed, shut off engine and reassemble securely.<br>8. Check for leaks.<br>9. Relief valve pressure should be checked every 3 months for best performance. |
| Adjusting relief valve setting | 1. With pressure gauges attached as above, remove plug from feed wheel valve (control valve), (see illustration of relief valve components)<br>2. Using a screw driver, turn relief valve screw clockwise to increase pressure setting.<br>NOTE: This must be done with engine running. If you have properly followed the instructions listed above, the feed wheels cannot turn. |
| Cleaning relief valve | 1. Remove plug from feed wheels valve (control valve), (see illustration of relief valve components.<br>2. Unscrew slotted set screw completely out of the valve.<br>3. Remove poppit spring<br>4. Remove poppit ball.<br>5. Clean all parts, inspect for damage and blow out relief hole with air. |
| Checking for defective pump | 1. On the Mighty II, disconnect the hose from the bottom feed wheel motor to the feed wheel valve at the bottom feed wheel motor.<br>2. Install this same hose into flow meter.<br>3. Start engine and pull to full throttle with the control handle pulled forward in normal working position.<br>4. The pump should be pumping between 2-1/2 and 2-3/4. |
| Checking for defective motor | 1. If everything checks out as correct, it may be time to check the hydraulic motor.<br>2. The procedure to check the motor is simple but it requires great caution. Do not attempt to check your hydraulic motor without first consulting your local dealer or Bandit Industries. |

# HYDRAULIC OIL TYPES

[ANTI-WEAR HYDRAULIC OILS]

| BRAND NAME | SUMMER | WINTER | BRAND NAME | SUMMER | WINTER |
|---|---|---|---|---|---|
| Sun | Sun Tac 202 W. | Sun Tac 152 WR | BP Oil Corp | Energol HLP-C68 | Energol HLP-C46 |
| Cities Service | AW Hyd. 30 | AW Hyd. 20 | Texaco | Rando HD 68 (HDC) | Rando HD 46 (HDB) |
| | Pacemaker XD-30 | Pacemaker XD-20 | | | |
| Shell | Tellus 68(33) | Tellus 46 (29) | Atlantic Richfield | Duro AWS 315 | Duron AWS 215 |
| Exxon | Nuto H68(54) | Nuto H46 (48) | Mobil | DTE 26 | DTE 25 |
| Ashland Valvoline | AW-30 | AW-20 | American Oil &Supply | PO 150 VG 68 | PO Lube C-103 |
| Gulf Oil | Security 54 AW | Harmony 46AW | | | |
| | Harmony 68AW (54AW) | Harmony 48AW | | | |

## MIGHTY BANDIT

At customer's option some Mightys are built with (2) machined pockets in the chipper disc. One holds the normal cutting knife and the other has a "blank" cover over pocket. If the working pocket happens to become damaged or worn out, the customer has the opportunity to switch working pockets.

To take advantage of this benefit all components must be switched from one pocket to the other ("A" to "B" and "B" to "A"). This includes any spacers that may be under the knife or blank which determines chip size, and insures balance on disc.

A) Blanked pocket with plate, balance weight, and possible pocket shim.

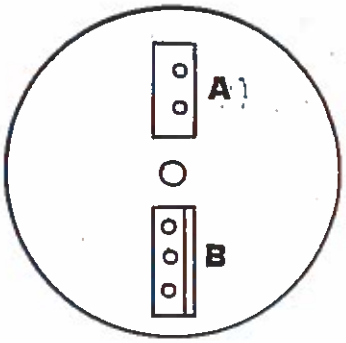
B) Working pocket with knife, bolts, nuts and spacer plate shim.

With this type of pocket system using spacer shims under the knives, a customer has the option of changing his chip size and number of knives in a variety of ways.

| | | |
|---|---|---|
| 2-Knife | 3/8" Chip | 120 feed rate per min. |
| 1-Knife | 1/2" Chip | 80 feed rate per min. |

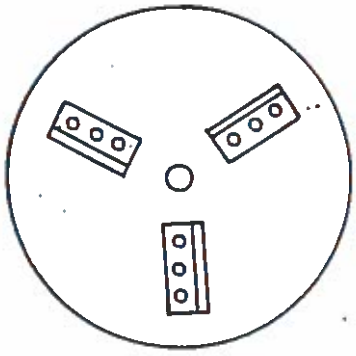
To change chip size or number of knives, you MUST have the correct size and amount of knife shims and the hydraulic pump sheave and belt must be changed to match chipper feed rate requirements. Consult the parts section of this book to determine parts needed for these feed rate requirements.

Whether changing knives, changing working pockets or changing chip size make sure all components are securely tightened in the pocket.




## MIGHTY II

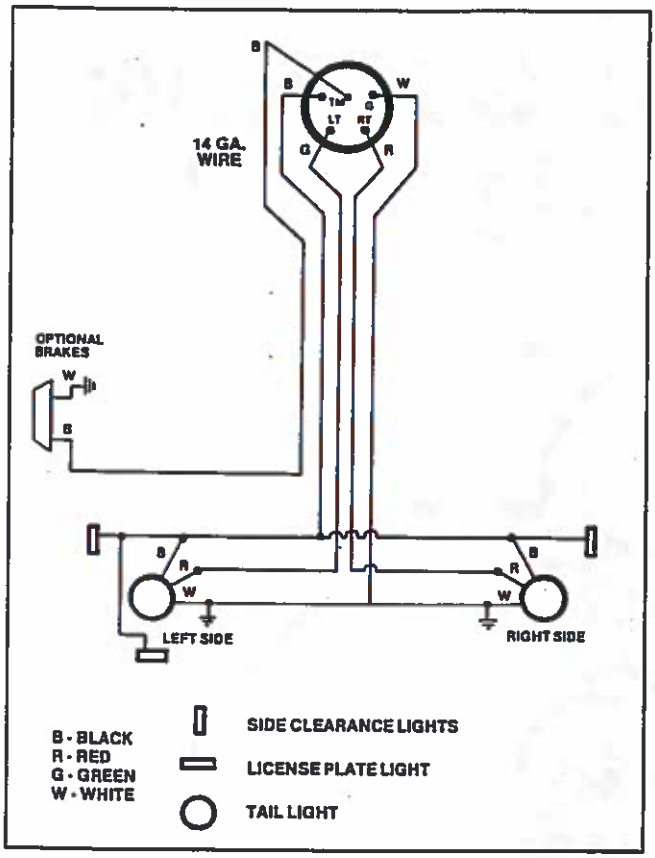
The Mighty II comes with a standard 26" disc with three knife pockets. This 3-knife disc produces a dimensional 1/4" chip.



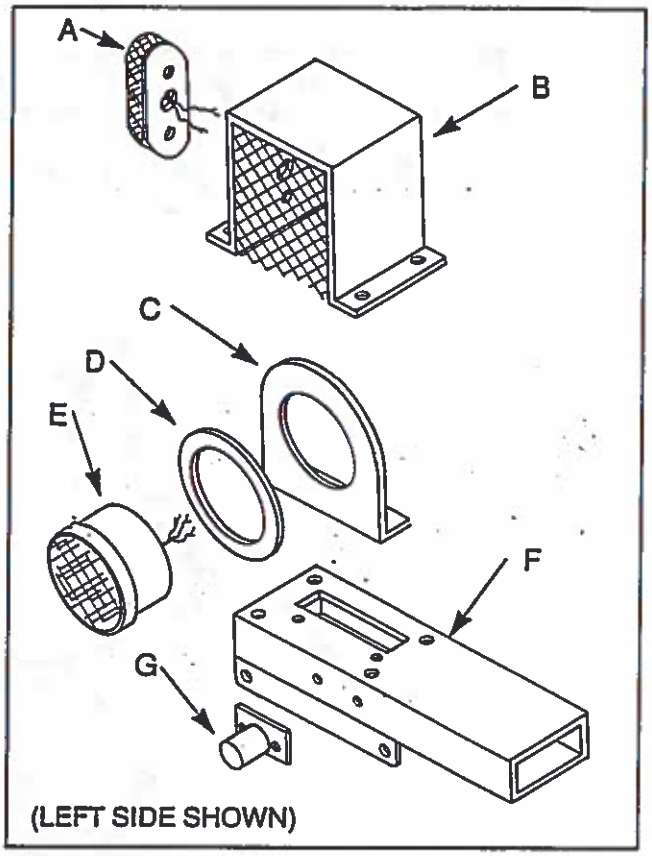
# ELECTRICAL SECTION
# (Highway Lighting)



## LIGHTING ELECTRICAL DIAGRAM




## H.D. TAIL LIGHT ASSEMBLY

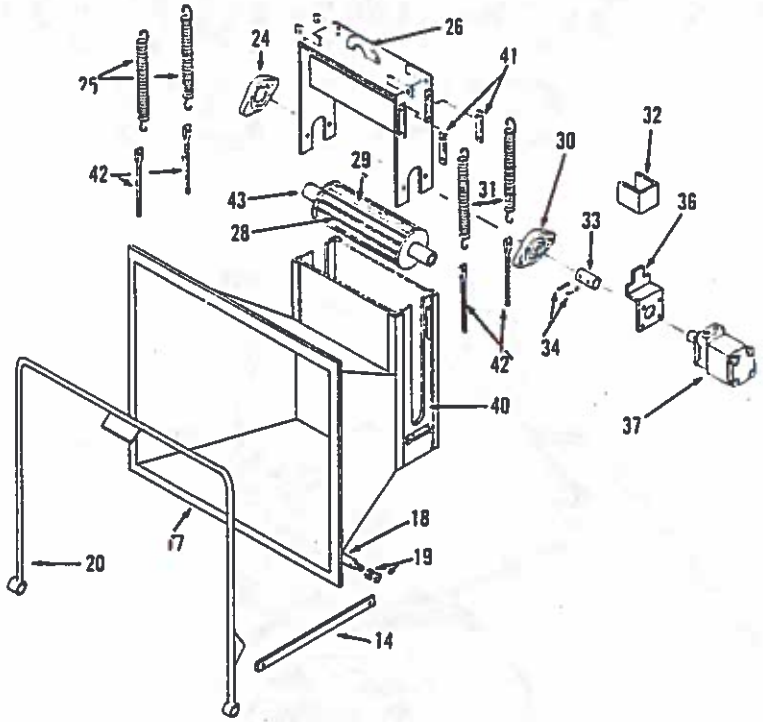



| WIRE COLOR CODING | DESCRIPTION | PART NUMBER |
|---|---|---|
| B - BLACK | A) Side Marker Light | 900-2900-03 |
| | B) Tail Light Enclosure | |
| | Left Side | 922-0500-32L |
| | Right Side | 922-0500-31R |
| R - RED | C) Tail Light Mt. Bracket | 900-2900-21 |
| | D) Rubber Mount | 900-2900-39 |
| | E) Tail Light | 900-2900-01 |
| G - GREEN | F) Tail Light Mount (Weld On) | |
| | Left Side | 922-0500-30L |
| | Right Side | 922-0500-29R |
| W - WHITE | G) License Plate Light | 900-2900-07 |
| | H) 6-Prong Plug In - Female | 900-2900-17 |
| | I) 6-Prong Plug In - Male | 900-2900-18 |
| | J Red Reflector | 900-2900-05 |
| | K) Amber Reflector | 900-2900-06 |

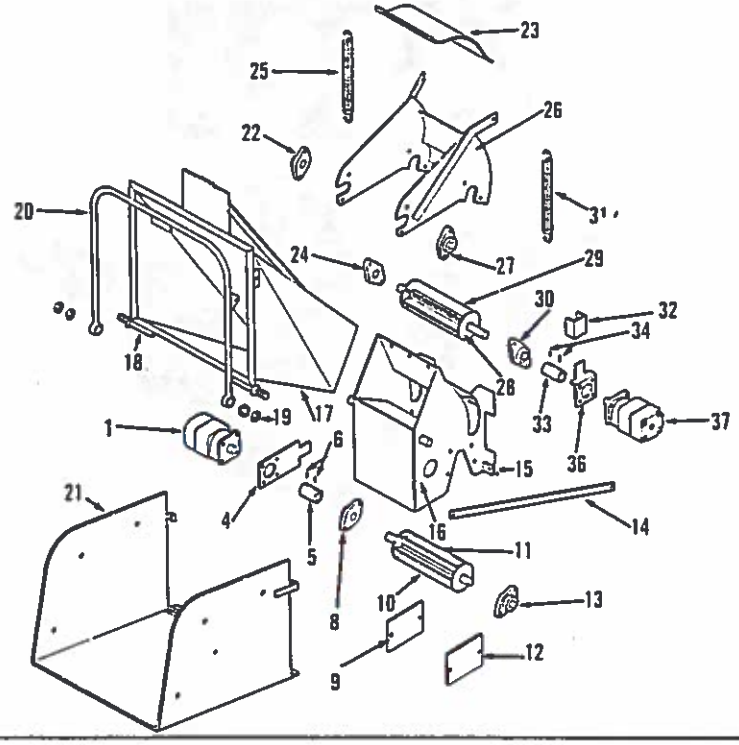
# REPLACEMENT PARTS SECTION



## MIGHTY BANDIT



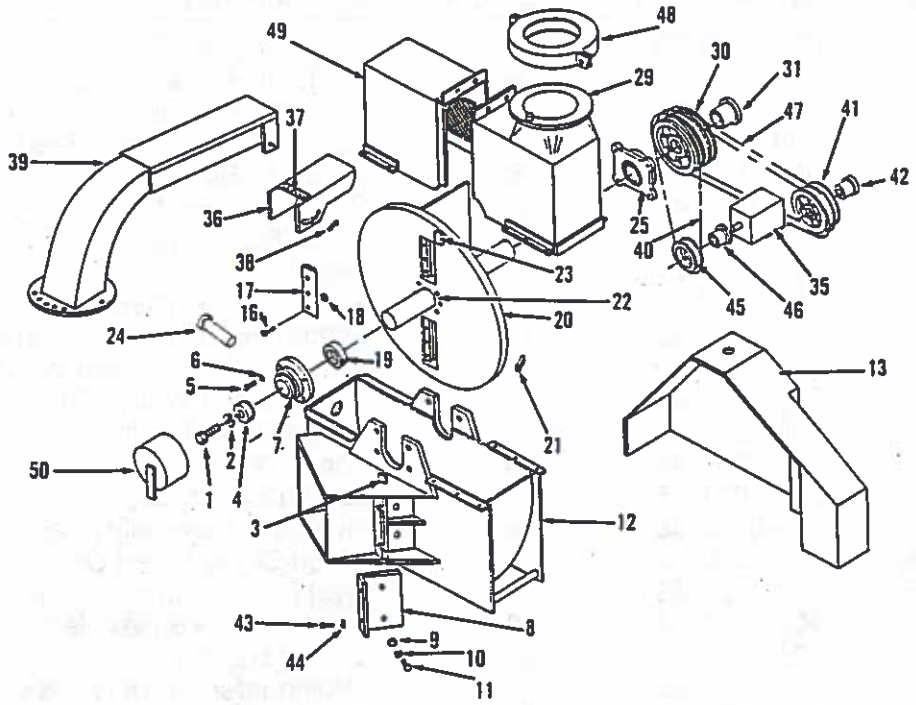

## MIGHTY BANDIT II



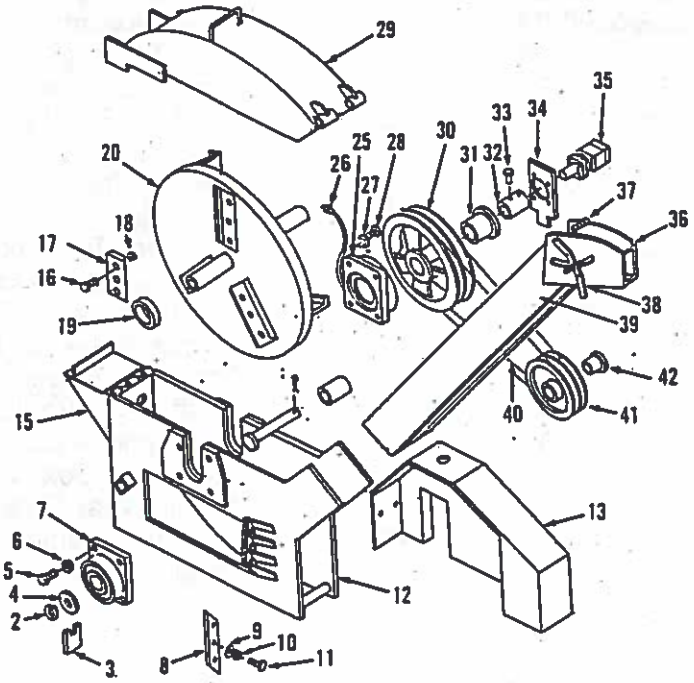
| MIGHTY PART NUMBER | MIGHTY II PART NUMBER | LOCATION | DESCRIPTION |
|---|---|---|---|
| --- | 900-3901-33 | 1 | Motor - Bottom Feed Wheel |
| --- | 900-3901-80 | 2 | Shaft for Hydraulic Motor (not shown) |
| --- | 900-3901-81 | 3 | Seal Kit for Hydraulic Motor (not shown) |
| --- | 900-1000-55 | 4 | Torque Arm - Bottom Feed Wheel |
| --- | 922-1000-18 | 5 | Coupler - Bottom Motor to Feed Wheel |
| --- | 900-4900-46 | 6 | Set Screws for Motor Coupler |
| --- | 900-4901-00 | 7 | Small Tube of Loc-Tite for Coupler |
| --- | 900-1901-08 | 8 | Feed Wheel Bearing |
| --- | 926-1000-97 | 9 | Bottom Feed Wheel Guard |
| --- | 926-0500-33 | 10 | Bottom Feed Wheel Assembly |
| --- | 926-1001-62 | 11 | Teeth for Bottom Feed Wheel (Weld On) |
| --- | 926-1000-97 | 12 | Bottom Feed Wheel Guard |
| --- | 900-1901-08 | 13 | Feed Wheel Bearing |
| 922-0500-37 | 926-1001-48 | 14 | Control Valve Arm |
| --- | 926-1001-35 | 15 | Bottom Spring Lug |
| --- | 926-0500-36 | 16 | Pivot Box Assembly (Weld On) |
| 922-0500-38 | 926-0500-14 | 17 | Infeed Chute (Weld On) |
| 980-0100-45 | 926-1001-46 | 18 | Pivot Pin - Control Handle |
| 900-4900-44 | 900-4900-44 | 19 | Jam Nuts 1" - 8 Hex Head |
| 922-0500-37 | 926-0500-37 | 20 | Control Handle |
| 922-0500-39 | 926-0500-35 | 21 | Folding Infeed Pan (Weld On) |
| --- | 900-1901-08 | 22 | Pivot Bearing |
| --- | 926-1000-88 | 23 | Top Wheel Rubber Guard |
| 900-1901-08 | 900-1901-08 | 24 | Feed Wheel Bearing |
| 900-4901-03 | 900-4900-04 | 25 | Yoke Spring for Top Wheel |
| 922-0500-40 | 926-0500-34 | 26 | Yoke Assembly for Top Wheel |
| --- | 900-1901-08 | 27 | Pivot Bearing |
| 922-0500-34 | 926-0500-32 | 28 | Top Feed Wheel Assembly |
| 922-0000-31 | 926-1001-62 | 29 | Teeth for Feed Wheel (Weld On) |
| 900-1901-08 | 900-1901-08 | 30 | Feed Wheel Bearing |
| 900-4901-03 | 900-4900-04 | 31 | Yoke Spring for Top Wheel |
| 922-0002-06 | 922-1000-57 | 32 | Lock Block for Torque Arm |
| 922-1000-18 | 922-1000-18 | 33 | Coupler - Top Motor to Feed Wheel |
| 900-4900-46 | 900-4900-46 | 34 | Set Screws for Motor Coupler |
| 900-4901-00 | 900-4901-00 | 35 | Small Tube of Loc-Tite for Coupler (not shown) |
| 980-0111-20 | 926-1000-54 | 36 | Torque Arm - Top Feed Wheel |
| 900-3901-33 | 900-3901-33 | 37 | Top Feed Wheel Motor |
| 900-3901-80 | 900-3901-80 | 38 | Shaft for Hydraulic Motor (not shown) |
| 900-3901-81 | 900-3901-81 | 39 | Seal Kit for Hydraulic Motor (not shown) |
| 922-0500-31 | --- | 40 | Yoke Slide Box (Weld On) |
| 922-0000-33 | --- | 41 | Plastic Wear Slide for Yoke |
| 922-0500-35 | --- | 42 | Spring Tightener for Yoke |
| 922-0000-13 | --- | 43 | Shaft for Feed Wheel (Weld On) |

**NOTE:** All nuts & bolts can be ordered by physical description
Grade 8 hardness wherever possible

## MIGHTY BANDIT

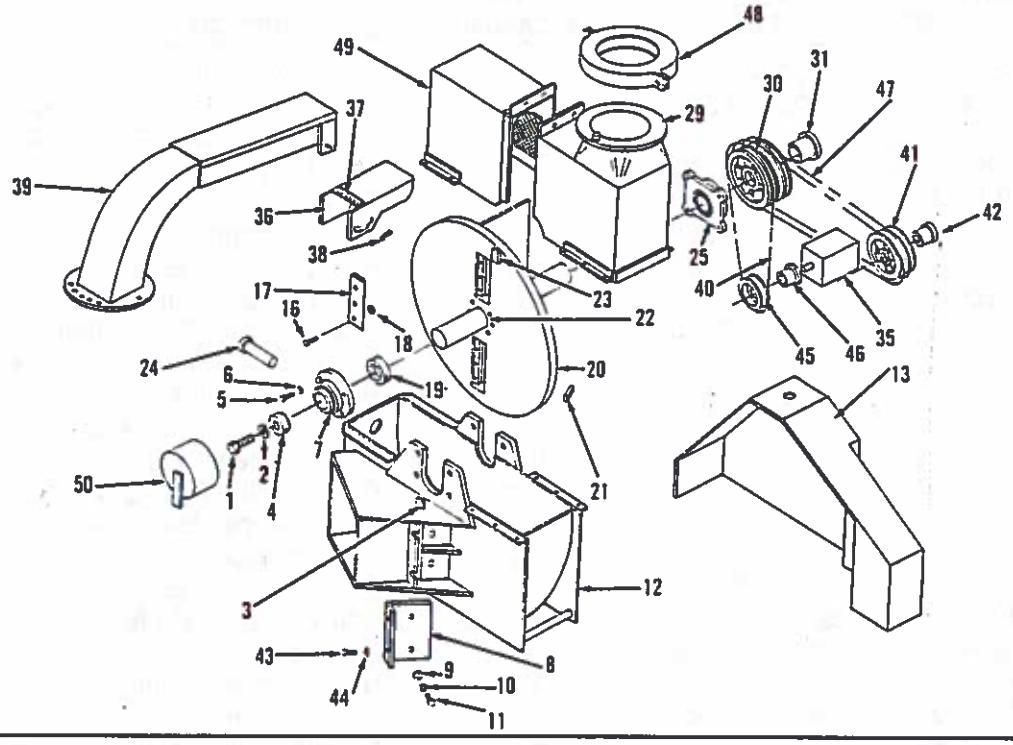



## MIGHTY BANDIT II

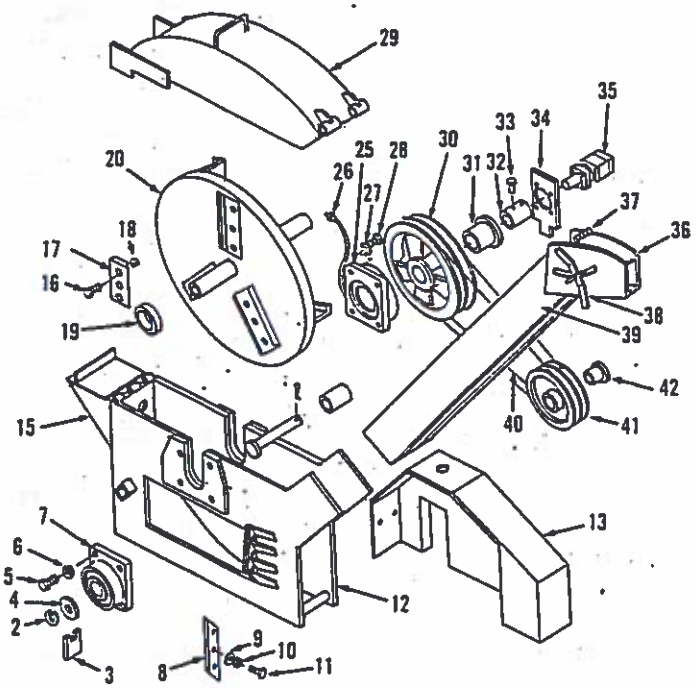


| MIGHTY PART NUMBER | MIGHTY II PART NUMBER | LOCATION | DESCRIPTION |
|---|---|---|---|
| 900-4900-58 | 900-4900-20 | 1 | Bolt - Bearing Retainer |
| 900-4900-32 | 900-4900-32 | 2 | Lock Washer - Bearing Retainer |
| 922-0003-85 | 926-1001-12 | 3 | Wear Indicator - Bearing Retainer |
| 922-0003-96 | 926-1001-11 | 4 | Bearing Retainer |
| 900-4900-16 | 900-4901-19 | 5 | Bolt - Front Chipper Bearing |
| 900-4900-32 | 900-4900-32 | 6 | Lock Washer - Front Chipper Bearing |
| 900-1901-06 | 900-1901-07 | 7 | Front Chipper Bearing |
| 922-0500-11 | 926-1000-82 | 8 | Feed Plate Anvil |
| 900-4900-36 | 900-4900-35 | 9 | Flat Washer - Feed Plate Anvil |
| 900-4900-31 | 900-4900-30 | 10 | Lock Washer - Feed Plate Anvil |
| 900-4900-17 | 900-4900-13 | 11 | Bolt - Feed Plate Anvil |
| Not Available | Not Available | 12 | Chipper Base Assembly |
| 922-0500-09 | --- | 13a | Chipper Belt Shield (1-Knife Disc) |
| 922-0500-10 | 926-0500-11 | 13b | Chipper Belt Shield (2 & 3-Knife Disc) |
| 922-0500-77 | 926-0500-42 | 13c | PTO Chipper Belt Shield |
| --- | 926-1001-17 | 14 | Chipper Hood Hinge |
| --- | 900-1000-78 | 15 | Hood Pivot Stop |
| 900-4901-04 | 900-4901-04 | 16 | Bolt - Chipper Knife |
| 900-9900-02 | 900-9900-02 | 17 | Chipper Knife |
| 900-4900-27 | 900-4900-27 | 18 | Nut - Chipper Knife |
| 922-0000-07 | 926-1001-08 | 19 | Disc Spacer |
| 922-0500-58 | --- | 20a | 1-Knife Chipper Disc Assembly with Shaft and Fan Blades |
| 922-0500-58 | --- | 20b | 2-Knife Chipper Disc Assembly with Shaft and Fan Blades |
| --- | 926-0500-44 | 20c | 3-Knife Chipper Disc Assembly with Shaft and Fan Blades |
| 922-0003-83 | 926-1001-04 | 21 | Rim Blades - Disc |
| 922-0003-82 | 926-1001-05 | 22 | Cleaner Bar - Face of Disc |
| 922-0003-81 | 926-1001-06 | 23 | Cleaner Bar - End of Knife Pocket |
| 922-0500-76 | 926-0500-38 | 24 | Disc Stop Pin (Hood Pin & Clip) |
| 900-1901-07 | 900-1901-07 | 25 | Rear Chipper Bearing |
| 900-3901-09 | 900-3901-09 | 26 | Grease Line |
| 900-4900-32 | 900-4900-32 | 27 | Lock Washer - Rear Chipper Bearing |
| 900-4901-19 | 900-4901-19 | 28 | Bolt - Rear Chipper Bearing |
| --- | 926-0500-41 | 29a | Chipper Hood Assembly - End Discharge |
| 922-0500-02 | 926-0500-26 | 29b | Chipper Hood Assembly - Top Discharge Half |
| 922-0500-79 | 926-0500-23 | 29c | PTO Chipper Assembly - Top Discharge Half |
| * | * | 30 | Chipper Sheave |
| * | * | 31 | Chipper Sheave Bushing |
| --- | 926-1000-58 | 32 | Coupler - Pump to Chipper Shaft |
| --- | 900-4901-75 | 33 | Set Screws - Coupler Pump to Chipper Shaft |
| --- | 926-1000-53 | 34 | Torque Arm - Hydraulic Pump |
| * | * | 35 | Hydraulic Pump |

## MIGHTY BANDIT




## MIGHTY BANDIT II

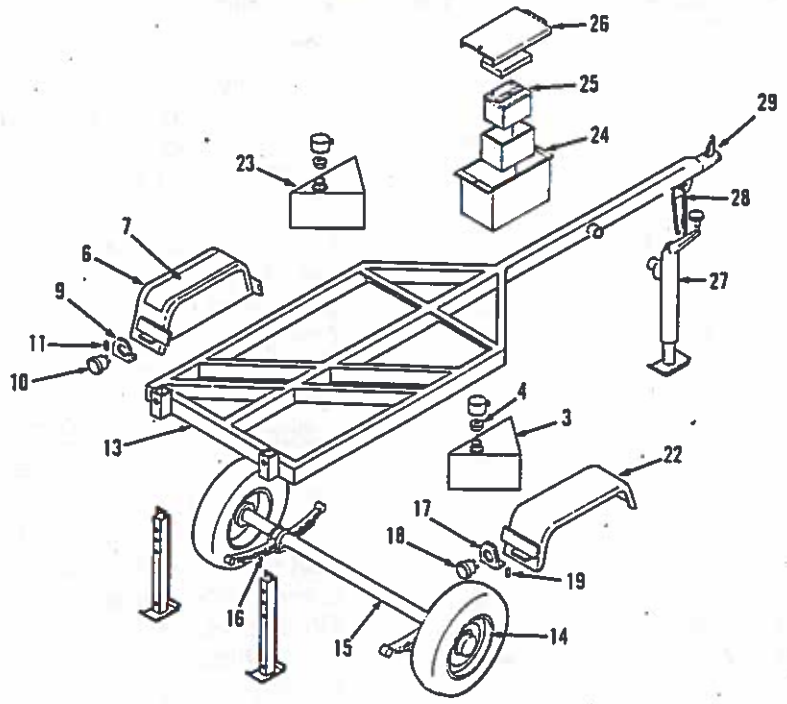


| MIGHTY PART NUMBER | MIGHTY II PART NUMBER | LOCATION | DESCRIPTION |
|---|---|---|---|
| 922-0500-04 | --- | 36a | 12" Deflector - Discharge |
| 922-0500-05 | --- | 36b | 30" Deflector - Discharge |
| 922-0500-06 | 926-0500-17 | 36c | 12" Enclosed Deflector - Discharge |
| 922-0500-07 | --- | 36d | 36" Enclosed Deflector - Discharge |
| --- | 926-0500-43 | 36e | 18" Enclosed Deflector - Discharge Turntable |
| 922-0001-71 | 926-1001-57 | 37 | Hinge - Deflector |
| 900-4900-73 | 980-0505-69 | 38 | Handle - Deflector |
| --- | 926-0500-16 | 39a | Discharge Chute - Stationary |
| 922-0500-03 | 926-0500-29 | 39b | Discharge Chute - Swivel Base |
| * | * | 40 | Chipper Belts |
| * | * | 41 | Engine Sheave |
| * | * | 42 | Engine Sheave Bushing |
| 922-0001-45 | --- | 43 | Adjuster Bolts - Feed Plate Anvil |
| 900-4900-36 | --- | 44 | Washers - Adjuster Bolts |
| * | --- | 45 | Sheave - Pump |
| * | --- | 46 | Bushing - Pump Sheave |
| * | --- | 47 | Belt - Pump to Chipper Shaft |
| 922-0500-45 | --- | 48 | Swivel Ring Assembly |
| 922-0500-01 | 926-0500-40 | 49a | Chipper Hood Assembly - Infeed Half |
| 922-0500-78 | 926-0500-39 | 49b | PTO Chipper Hood Assembly - Infeed Half |
| 922-0500-15 | --- | 50 | Front Bearing Cover |
| 922-0500-13 | --- | 51 | Pocket Filler Blank Assembly |

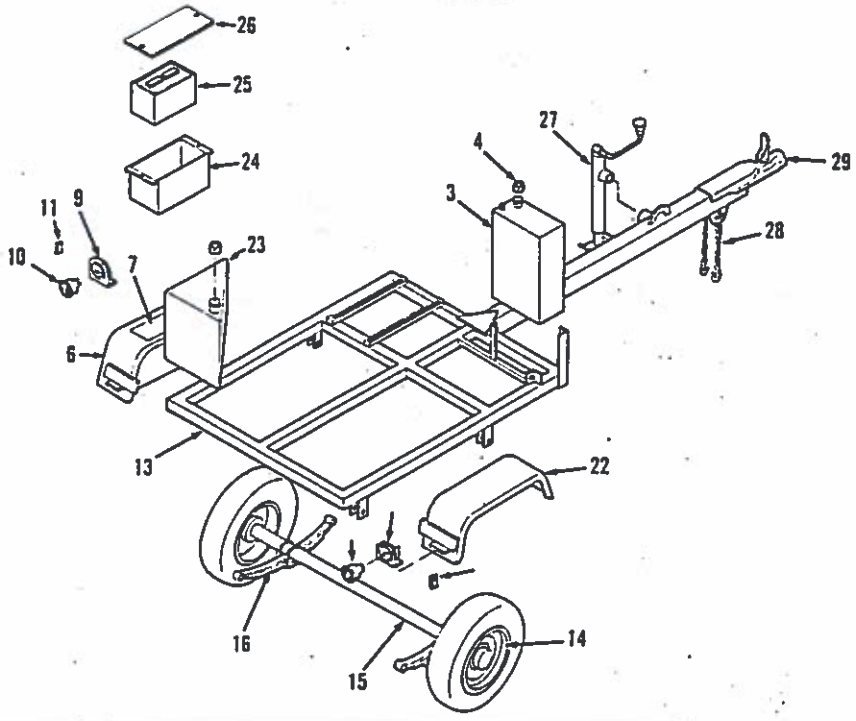
*With all the engine and chipper options available, components will vary from machine to machine. Parts can be ordered by physical description.

**NOTE:** All nuts & bolts are Grade 8 hardness wherever possible

## MIGHTY BANDIT

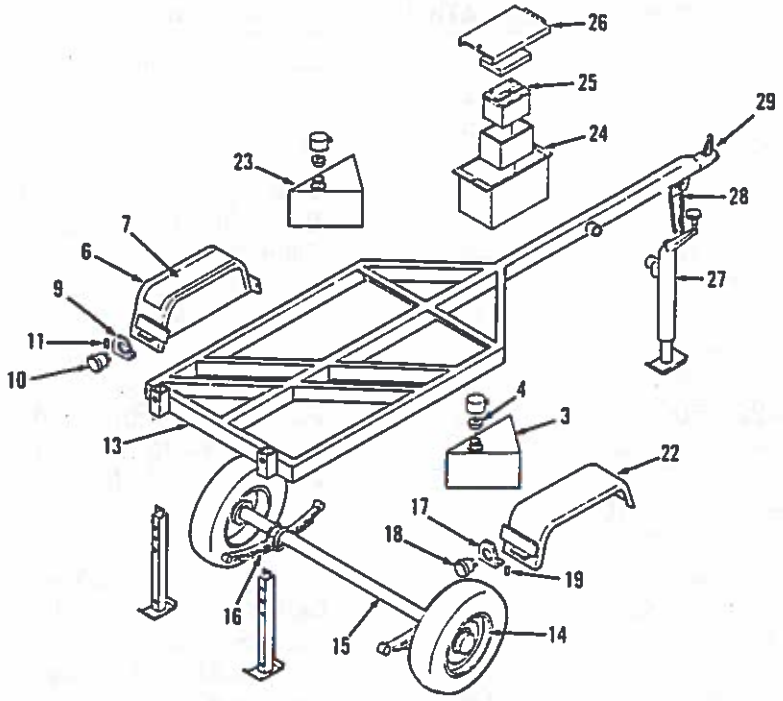



## MIGHTY BANDIT II

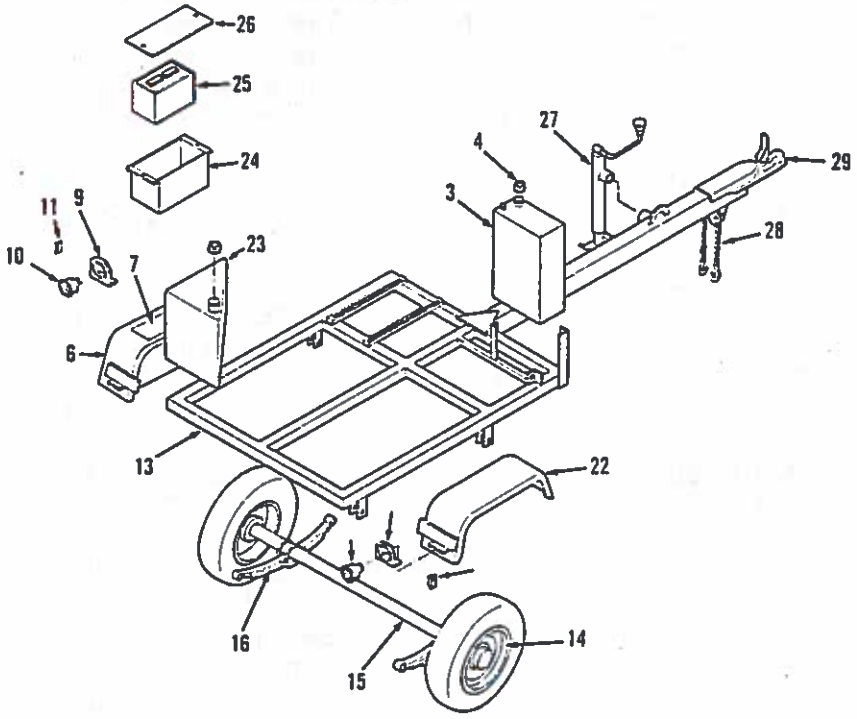


| MIGHTY PART NUMBER | MIGHTY II PART NUMBER | LOCATION | DESCRIPTION |
|---|---|---|---|
| * | * | 1 | Optional Engine Cover |
| 926-1000-32 | 926-1000-32 | 2 | Mounts for Optional Engine Cover |
| 922-0500-17 | --- | 3a | Triangular Fuel Tank |
| --- | 926-0500-20 | 3b | Rectangular Fuel Tank |
| 900-3902-09 | 900-3902-09 | 4a | Sight Gauge Filler Cap x 11" |
| 900-3901-51 | 900-3901-51 | 4b | Sight Gauge Filler Cap x 22" |
| 900-3900-05 | 900-3900-05 | 4c | Filler Cap with Neck and Strainer |
| 900-3901-10 | 900-3901-10 | 4d | Filler Cap Only |
| 900-3901-11 | 900-3901-11 | 4e | Filler Cap Neck Only |
| 922-0000-28 | 922-0000-28 | 5 | Rubber Cushions for Tanks |
| 922-0500-25 | 922-0500-25 | 6a | Left Fender Assembly |
| 922-0500-27L | 922-0500-27L | 6b | HD 1/4" Left Fender Assembly |
| 900-7900-03 | 900-7900-03 | 7 | Step Tread for Fender |
| 922-0500-30L | 922-0500-30L | 8 | Optional HD Left Tail Light Mount |
| 900-2900-21L | 900-2900-21L | 9 | Left Tail Light Mount Bracket |
| 900-2900-01 | 900-2900-01 | 10 | Tail Light |
| 900-2900-03 | 900-2900-03 | 11 | Side Clearance Light |
| 922-0500-32L | 922-0500-32L | 12 | Optional HD Tail Light Enclosure |
| Not Available | Not Available | 13 | Main Frame |
| 900-5900-91 | --- | 14a | Rim for 480 x 12 Tires |
| --- | 900-5901-58 | 14b | Rim for 530 x 12 Tires |
| --- | 900-5901-60 | 14c | Rim for D-60 x 14 Tires |
| 900-5900-33 | --- | 14d | Rim for D-78 x 14 Tires |
| 900-5900-75 | --- | 14e | Tire & Rim for 480 x 12 Tires |
| --- | 900-5901-57 | 14f | Tire & Rim for 530 x 12 Tires |
| --- | 900-5901-59 | 14g | Tire & Rim for D-60 x 14 Tires |
| 900-5900-18 | --- | 14h | Tire & Rim for D-78 x 14 Tires |
| 900-5901-15 | 900-5901-61 | 15a | Standard 2200#, No Brake Axle |
| 900-5901-16 | 900-5901-62 | 15b | Optional 2200#, 12 Volt Electric Brake Axle |
| 900-5900-19 | 900-5901-63 | 15c | Optional 3500#, No Brake Axle |
| 900-5900-20 | 900-5901-64 | 15d | Optional 3500#, 12 Volt Electric Brake Axle |
| 900-5900-89 | 900-5900-89 | 16a | Leaf Spring for 2200# Axle |
| 900-5900-90 | 900-5900-90 | 16b | Leaf Spring for 3500# Axle |
| 900-5900-92 | 900-5900-92 | 16c | Hanger Kit for 2200# Axle |
| 900-5900-10 | 900-5900-10 | 16d | Hanger Kit for 3500# Axle |
| 922-0500-29R | 922-0500-29R | 17 | Optional HD Right Tail Light Mount |
| 900-2900-21R | 900-2900-21R | 18 | Right Tail Light Mount Bracket |
| 900-2900-01 | 900-2900-01 | 19 | Tail Light |
| 900-2900-03 | 900-2900-03 | 20 | Side Clearance Light |
| 922-0500-31R | 922-0500-31R | 21 | Optional HD Tail Light Enclosure |
| 922-0500-24R | 922-0500-24R | 22a | Right Fender Assembly |
| 922-0500-26R | 922-0500-26R | 22b | Optional HD 1/4" Right Fender Assembly |
| --- | --- | 23 | Hydraulic Tank (See Hydraulic Components Section |
| 922-0500-46 | 922-0500-46 | 24a | Complete Battery/Tool Box (Wisconsin) |
| 922-0500-22 | 922-0500-22 | 24b | Complete Battery/Tool Box (Onan) |
| 900-6900-01 | 900-6900-01 | 25a | Battery (Std. Wisconsin Engine) |

## MIGHTY BANDIT



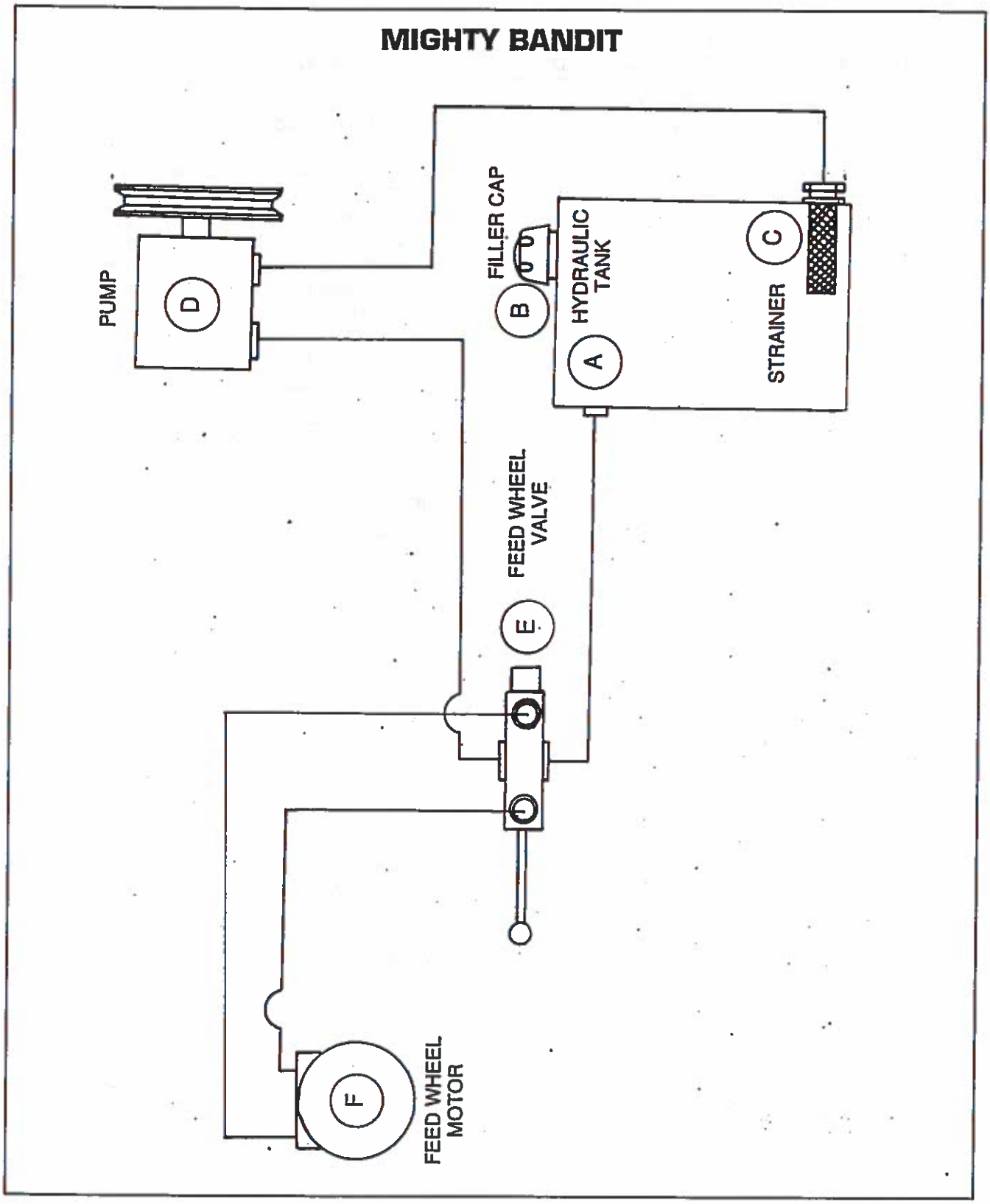

## MIGHTY BANDIT II



| MIGHTY PART NUMBER | MIGHTY II PART NUMBER | LOCATION | DESCRIPTION |
|---|---|---|---|
| 900-6900-68 | 900-6900-68 | 25b | Battery - (Std. Onan Engine) |
| 922-0500-46 | 922-0500-46 | 26a | Lid Battery/Tool Box (Wisconsin) |
| 922-0500-29 | 922-0500-29 | 26b | Lid Battery/Tool Box (Onan) |
| 900-5900-77 | 900-5900-77 | 27a | 2000# Pivoting Tongue Jack w/Foot Pad |
| 900-5900-78 | 900-5900-78 | 27b | 1000# Castor Wheel Tongue Jack |
| 900-0500-22 | 900-0500-22 | 28 | Safety Chain Kit Assembly |
| 900-5901-41 | 900-5901-41 | 29 | Single Position 2" Ball Bolt-On Hitch |
| 900-5901-46 | 900-5901-46 | 30 | Adjustable Height 2" Croft Ball Hitch |
| 900-5901-45 | 900-5901-45 | 31 | Adjustable Height 2-1/2" Lunet Ring Croft Hitch |
| 922-0500-80 | 926-0500-22 | 32 | 3 Point PTO Hitch Mount Assembly |
| --- | 900-1903-01 | 33 | Rollers for Turntable |
| --- | 900-5901-54 | 34 | Complete Turntable Hub Assembly |
| --- | 900-5901-55 | 35 | Shaft Only for Turntable Hub |
| --- | 900-5901-56 | 36 | Bearing & Seal Kit for Turntable Hub |

*Engine covers vary depending on your engine option.
Identify your model chipper and your type of engine when placing an order.

## MIGHTY BANDIT



# MIGHTY BANDIT

| PART NUMBER | ITEM | DESCRIPTION |
|---|---|---|
| | | **From (A) Hydraulic Tank to (D) Hydraulic Pump** |
| 922-0500-16 | 1 | Triangular Hydraulic Tank - 2-1/2 Gallon |
| 900-3900-05 | 2 | Filler Cap with Strainer Assembly |
| 900-3901-10 | 3 | Filler Cap Only |
| 900-3902-09 | 4 | Sight Gauge Filler Cap x 11" |
| 900-3900-07 | 5 | Suction Screen |
| 900-3901-35 | 6 | 1/2" x 35" Hose |
| 900-3902-87 | 7 | Hydraulic Pump |
| | | **From (D) Hydraulic Pump to (E) Feed Wheel Valve** |
| 900-3900-45 | 8 | 1/2" x 43" Hose |
| 900-3900-12 | 9 | Feed Wheel Valve |
| | | **From (E) Feed Wheel Valve to (F) Feed Wheel Motor)** |
| 900-3905-00 | 10 | 1/2" x 38" Hose |
| 900-3901-33 | 11 | Feed Wheel Motor |
| | | **From (F) Feed Wheel Motor to (E) Feed Wheel Valve** |
| 900-3905-00 | 12 | 1/2" x 38" Hose |
| 900-3900-12 | 13 | Feed Wheel Valve |
| | | **From (E) Feed Wheel Valve to (A) Hydraulic Tank** |
| 900-3901-36 | 14 | 1/2" x 18-1/2" Hose |