

# PARTS & SERVICE MANUAL

# **SWEEP STAR V62**With Electric Clutch

Models 78-200-A

Starting Serial # 781013

November, 2000

SMITHCO PRODUCT SUPPORT 1-800-891-9435 Hwy SS and Poplar Avenue, Cameron WI 54822

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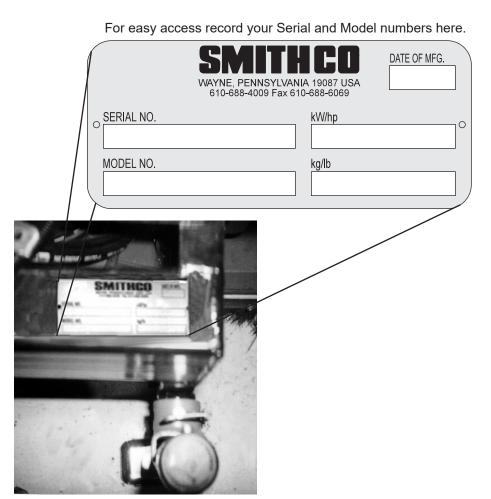
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Thank you for purchasing a **Smithco** product.

Read this manual and all other manuals pertaining to the Sweep Star V62 carefully as they have safety, operating, assembly and maintenance instructions. Failure to do so could result in personal injury or equipment damage.

Keep manuals in a safe place after operator and maintenance personnel have read them. Right and left sides are from the operator's seat, facing forward.

All **Smithco** machines have a Serial Number and Model Number. Both numbers are needed when ordering parts. The serial number plate on the Sweep Star V62 is located on the left front frame. Refer to engine manual for placement of engine serial number.



Information needed when ordering replacement parts:

- 1. Model Number of machine
- 2. Serial Number of machine
- 3. Name and Part Number of part
- 4. Quantity of parts



### **SAFE PRACTICES**

- 1. It is your responsibility to read this manual and all publications associated with this machine (engine, accessories and attachments).
- Never allow anyone to operate or service the machine or its attachments without proper training and instructions. Never allow minors to operate any equipment.
- 3. Learn the proper use of the machine, the location and purpose of all the controls and gauges before you operate the equipment. Working with unfamiliar equipment can lead to accidents.
- 4. Wear all the necessary protective clothing and personal safety devises to protect your head, eyes, ears, hands and feet. Operate the machine only in daylight or in good artificial light.
- 5. Inspect the area where the equipment will be used. Beware of overhead obstructions and underground obstacles. Stay alert for hidden hazards.
- 6. Never operate equipment that is not in perfect working order or without decals, guards, shields, or other protective devices in place.
- 7. Never disconnect or bypass any switch.
- 8. Carbon monoxide in the exhaust fumes can be fatal when inhaled, never operate a machine without proper ventilation.
- 9. Fuel is highly flammable, handle with care.
- 10. Keep engine clean. Allow the engine to cool before storing and always remove the ignition key.
- 11. Never use your hands to search for oil leaks. Hydraulic fluid under pressure can penetrate the skin and cause serious injury.
- 12. This machine demands your attention. To prevent loss of control or tipping of the vehicle:
  - A. Use extra caution in backing up the vehicle. Ensure area is clear.
  - B. Do not stop or start suddenly on any slope.
  - C. Reduce speed on slopes and in sharp turns. Use caution when changing directions on slopes.
  - D. Stay alert for holes in the terrain and other hidden hazards.
  - E. Run up and down slopes, never across the face.
- 13. Before leaving operator's position for any reason:
  - A Disengage all drives.
  - B. Lower all attachments to the ground.
  - C. Shut engine off and remove the ignition key.
- 14. Keep hands, feet and clothing away from moving parts. Wait for all movement to stop before you clean, adjust or service the machine.
- 15. The rubber fingers, sweeper and vacuum pick up and propel debris and small objects in its path during operation. Keep the area of operation clear of all bystanders.
- 16. Never carry passengers.
- 17. Stop engine before making repairs/adjustments or checking/adding oil to the crankcase.
- 18. Use parts and materials supplied by SMITHCO only. Do not modify any function or part.
- 19. Do not remove the radiator cap when the engine is hot. When cooled, loosen cap slightly to the stop to relieve any pressure before removing the cap completely.
- Avoid sharp turns. Watch the tires of the tractor while turning to make sure they do not contact the tongue of the Sweep Star V62.
- 21. Shut down power source before attempting to unclog any part of the machine.
- 22. If reel deck begins to vibrate abnormally, immediately shut off power and determine the cause.
- 23. Do not tow on public roads.

These machines are intended for professional maintenance on large turf areas such as golf courses, baseball fields, parks, recreation areas, and many other large open areas. Other use is forbidden.



### **SPECIFICATIONS FOR SWEEP STAR V62**

**WEIGHTS AND DIMENSIONS** 

 Length
 151" (384 cm)

 Width
 68" (172 cm)

 Height
 87" (221 cm)

 Weight
 1500 lb (680 kg)

**SOUND LEVEL** 

At ear level 98 dB At 3 ft (0.914 m) 104 dB At 30 ft (9.14 m) 86 dB

**ENGINE** 

Make Kawasaki
Model# FD661D
Horsepower 22 Hp (16 kW)
Fuel Unleaded 87 Octane

Gasoline Minimum

Cooling System Liquid Cooled Lubrication System Full Pressure Alternator 20 Amp

**TIRES & WHEELS** Two 24 x 13.00 x 12 NHS (18 psi (1.3 bar))

Castor: 9 x 3.5 x 4 (20 psi (1.4 bar))

**BATTERY** Automotive type 45- 12 volt

BCI Group Size 45
Cold Cranking Amps 480 minimum
Ground Terminal Polarity Negative (-)
Maximum Length 9" (23 cm)
Maximum Width 5.38" (14 cm)
Maximum Height 9" (23 cm)

**FLUID CAPACITY** 

Crankcase Oil See Engine Manual
Fuel 5 gallon (19 liters)
Hydraulic Fluid 2.88 gallon (10.9 liters)
Cooling 2.8 quarts (2.7 liters)

Grade of Hydraulic Fluid SAE 10W-40 API Service SJ or higher Motor Oil

### **OPTIONAL EQUIPMENT**

78-201 Replacement Brush Reel 78-207 Hydraulic Lift System

78-202 Replacement Finger Reel 78-208 Filter System 78-203 Hard Surface Sweeper 78-209 Ball Hitch

78-204 5<sup>th</sup> Wheel Hitch 78-210 Nylon Brush Head 78-205 Remote Vacuum Hose 78-211 Rubber Finger Head

78-206 Clevis Hitch



### MAINTENANCE



Before servicing or making adjustments to machine, stop engine and remove key from ignition.



Use all procedures and parts prescribed by the manufacturer's. Read the engine manual before operation.

#### **LUBRICATION**

Use No. 2 General Purpose Lithium Base Grease and lubricate every 100 hours. The Sweep Star V62 has seventeen grease fittings. All bearings are sealed bearings. When inserting grease, be careful not to ruin the seal, if this happens, replace the bearing at once.

Be sure to wipe grease fitting clean before injecting grease. Give only one or two pumps of grease at each lubrication.

### **REF# LOCATION** 1 One on all four castor wheels. 2 One on right and left hopper door arms. 3 One on each mounted bearing for reel shaft. 4 One on right and left deck lift arm. 5 one on all four castor wheel mount brackets. 6 One on the jack stand. Two on machine control panel that go to the blower shaft mounted bearing.

#### **HYDRAULIC OIL**

- 1. Use SAE 10W-40 API Service SJ or higher motor oil.
- 2. For proper warranty, change oil every 500 hours or annually, which ever is first and change the filter after the first 20 hours, then at 100 hours, then every 250 hours thereafter.
- 3. The oil level should be 2" to  $2^{1}/_{2}$ " from top of the tank when fluid is cold. Do not overfill.
- 4. After changing oil and/or filter, run the machine for a few minutes. Check oil level and for leaks.
- 5. Always use caution when filling hydraulic oil tank or checking level to keep system free of contaminants. Check and service more frequently when operating in extremely cold, hot or dusty conditions.
- 6. If natural color of fluid is now black or smells burnt, it is possible that an overheating problem exists.
- 7. If fluid becomes milky, water contamination may be a problem.
- 8. If either of the above conditions happen, change oil and filter immediately after fluid is cool and find cause. Take fluid level readings when system is cold.
- 9. In extreme temperatures you can use straight weight oil. We recommend SAE 30W API Service SJ or higher when hot (above 90°F (33°C)) and SAE 10W API Service SJ or higher when cold (below 32°F (0°C)) ambient temperature. Use either motor oil or hydraulic oil, but do not mix.
- 10. Oil being added to the system must be the same as what is already in the tank. Mark tank fill area as to which type you put in.



### MAINTENANCE (CONTINUED)

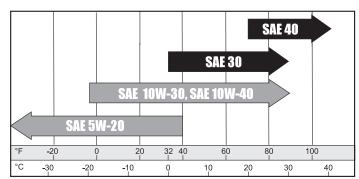
#### **TIRE PRESSURE**

Caution must be used when inflating a low tire to recommended pressure. Over inflating can cause tires to explode. Tires on the machine should be 18 psi (1.3 bar), castor wheels should be 20 psi (1.4 bar). Improper inflation will reduce tire life considerably.

#### **ENGINE OIL KAWASAKI**

Change and add oil according to chart below. Do not overfill. Use a high quality detergent oil. For Kawasaki engine API Service Classification: SJ or higher. Use no special additives with recommended oils. Do not mix oil with gasoline.

#### **SAE VISCOSITY GRADES**



Starting Temperature Range Anticipated Before Next Oil Change

Use of multi-viscosity oils (10W-30, etc) will result in increased oil consumption. Check oil level more frequently if using these types of oils.

### WHEEL MOUNTING PROCEDURE

#### **MACHINE WHEELS**

- 1. Turn machine off and remove key.
- 2. Be sure unit is on a level surface. Unhitch from tow vehicle if possible.
- 3. Block the opposite wheel then the one you are working on.
- 4. Loosen nuts slightly on wheel to be removed.
- 5. Jack up machine being careful not to damage underside of machine.
- 6. Remove nuts, remove wheel.
- 7. Place new wheel on hub lining up bolt holes.
- 8. Torque nuts to 64-74 ft/lb (87-100 Nm) using a cross pattern. Torque again after first 10 hours and every 200 hours thereafter.
- 9. Lower machine to ground and remove blocks and jack.

#### **FILTER SYSTEM**

Filter pack may be cleaned by shaking or spraying off with low pressure water. Filter will disintegrate if high pressure is used on it.



### MAINTENANCE (CONTINUED)

#### **BATTERY**

Batteries normally produce explosive gases which can cause personal injury. Do not allow flames, sparks or any ignited object to come near the battery. When charging or working near battery, always shield your eyes and always provide proper ventilation.

Battery cable should be disconnected before using "Fast Charge".

Charge battery at 15 amps for 10 minutes or 7 amps for 30 minutes. Do not exceed the recommended charging rate. If electrolyte starts boiling over, decrease charging.

Always remove grounded (-) battery clamp first and replace it last. Avoid hazards by:

- 1. Filling batteries in well-ventilated areas.
- 2. Wear eye protection and rubber gloves.
- 3. Avoid breathing fumes when electrolyte is added.

Avoid spilling or dripping electrolyte.

Battery Electrolyte is an acidic solution and should be handled with care. If electrolyte is splashed on any part of your body, flush all contact areas immediately with liberal amounts of water. Get medical attention immediately.

**JUMP STARTING** 

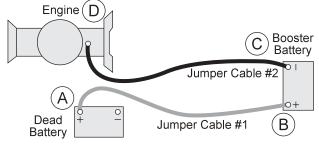
WARNING

WARNING

Use of booster battery and jumper cables. Particular care should be used when connecting a booster battery. Use proper polarity in order to prevent sparks.

To jump start (negative grounded battery):

- 1. Shield eyes.
- Connect ends of one cable to positive (+) terminals of each battery, first (A) then (B).
- 3. Connect one end of other cable to negative (-) terminal of "good" battery (C).
- Connect other end of cable (D) to engine block on unit being started (NOT to negative (-) terminal of battery)



To prevent damage to other electrical components on unit being started, make certain that engine is at idle speed before disconnecting jumper cables.





Before servicing or making adjustments to the machine, stop engine, set park break, block wheels and remove key from ignition.



Follow all procedures and ONLY use parts prescribed by the manufacturer. Read the engine manual before maintenance.

	က Daily	∞ As Required	a 100 Hours	$_{200}$ Hours	250 Hours	a 300 Hours	a 400 Hours	∞ Every 500 Hours/Yearly
of Engine Oil	L	ĸ	K	R		ĸ	R	R
Engine Oil Filter				C			C	C
Engine for Leaks and Loose Parts	O	ļ.,	C				_	
‡ År Cleaner (Paper Bernent)		R	C	Ç,	_	R	C	R
# Ar-Cleaner (Foam Element every 25 hours)		R	C		C	R	0	R
Spark Plugs (Clean and Gap/Replace)		ĸ	L	٠		٠	<u> </u>	
Valve Clearance		_			_			C
lde Speed	_	С	_	_	C	_	<u> </u>	Ç
‡ Cooling System			C	С	_		C	C
Belts and Hoses	o l				o			C
* Tire Pressure	υk		C	υk		υk	υk	C
Visual Inspection of Tires	ان		C	0			С	С
Fuel Level	o	o						
Fuel Filter		R						R
Hydraulic Oil	С		С	C		o	C	R
†Hydraulic Oil Filter					R			R
Hydraulic System for Leaks and Loose Parts	C		С	С		C	C	С
Battery Electrolyte Level			O	O		O	C	С
Clean Battery Terminals								С
§ Torque Lug Nuts				C			C	C
Lubricate Reel and Blower Shaft Bearings					O			С
Lubricate Castor Wheels (Every 25 hrs)	C	C						

C=Check or Clean at specified intervals

R=Replace at specified intervals

- \* Tire pressure: Machine Tires 18 psi (1.3 bar) Castor Wheels 20 psi (1.4 bar)
- † Replace hydraulic filter after the first 20, 100, and every 250 there after.
- § Torque tire nuts after the first 10 hours and every 200 hours there after (64 to 74 ft/lb (87-100 Nm))
- ¤ Kawasaki change oil after first 8 hours.
- £ Change oil every 25 hours when operating under heavy load or in high ambient temperatures.
- ‡ Clean more often under dusty conditions or when airborne debris is present , replace air cleaner parts, if very dirty.

The suggested maintenance checklist is not offered as a replacement for the manufacturer's engine manual but as a supplement. You must adhere to the guidelines established by the manufacturer for warranty coverage. In adverse conditions such as dirt, mud or extreme temperatures, maintenance should be more frequent.



### **END USER'S SERVICE CHART**

¤£ Engine Oil	Daily	As Required	100 Hours	200 Hours	250 Hours	300 Hours	400 Hours	Every 500 Hours/Yearly
Engine Oil Fitter								
Engine for Leaks and Loose Parts			<del>                                     </del>					
‡ Ar Cleaner (Paper Bernent)								
# Air-Cleaner (Foam Bernent every 25 hours)								
Spark Plugs (Clean and Gap/Replace)								
Valve Clearance								
ldle Speed								
‡ Cooling System								
Belts and Hoses								
* Tire Pressure								
Visual Inspection of Tires								
Fuel Level								
Fuel Filter								
Hydraulic Oil								
†Hydraulic Oil Filter								
Hydraulic System for Leaks and Loose Parts								
Battery Electrolyte Level								
Clean Battery Terminals								
§ Torque Lug Nuts								
Lubricate Reel and Blower Shaft Bearings								
Lubricate Castor Wheels (Every 25 hrs)								

C=Check or Clean at specified intervals

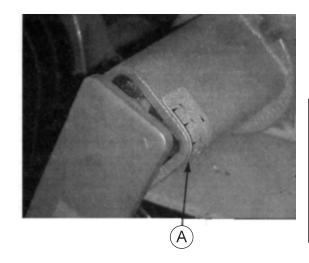
R=Replace at specified intervals

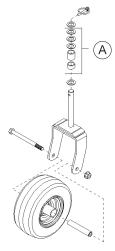
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- ¤ Kawasaki change oil after first 8 hours.
- £ Change oil every 25 hours when operating under heavy load or in high ambient temperatures.
- ‡ Clean more often under dusty conditions or when airborne debris is present, replace air cleaner parts, if very dirty.



#### **ADJUSTMENT OF BELT TENSIONER**

There are two belt tensioners on the Sweep Star V62. One controls the tension on the belt from the engine to blower shaft the other controls the belt on the finger or brush reel. The proper tension of the idler should be 12 to 15 as per the gauge (A) on the side of the tightener. Over tightening the belt will shorten the life of the belt and the machine may not perform to the best of its ability. To adjust belt tensioner, loosen bolt holding tensioner. Bring idler pulley tight to belts and turn tensioner into belts to 15°. Tighten holder bolt.





#### **CASTOR WHEELS**

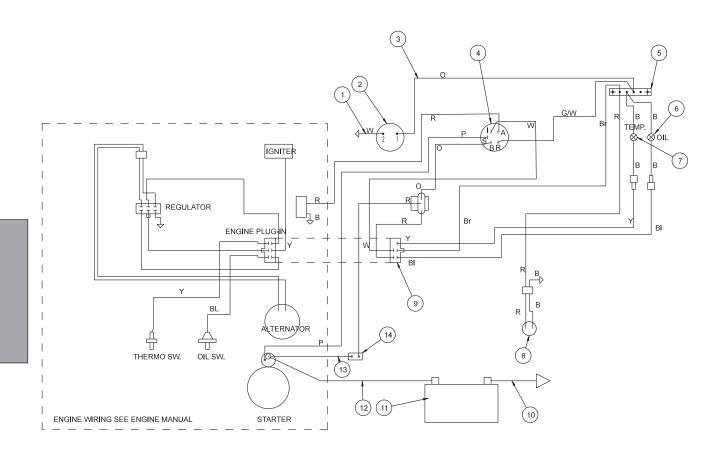
Install castor wheels onto the brush/finger head assembly. You may put the machine bushings and spacers (A) on in any combination to get desired height. You should leave one machine bushing on the very bottom and one on the very top next to the lockpin. Check the tire pressure on Castor Wheels they should be 20 psi (1.4 bar).

### **STORAGE**

When storing, remove the key from the key switch to avoid unauthorized persons from operating machine.

- 1. Before storing clean machine thoroughly.
- 2. Check bolts and nuts, tighten as necessary.
- 3. Make all repairs that are needed and remove any debris.
- 4. Remove the battery, adjust the electrolyte level and recharge it. Store the battery in a dry, dark place.
- 5. Store in a clean and dry area, but NOT near a stove, furnace or water heater which uses a pilot light or any device that can create a spark.
- 6. Engines stored over 30 days need to be protected or drained of fuel to prevent gum from forming in a fuel system or on essential carburetor parts. Check the engine manual and follow the instructions for the storage of the engine.



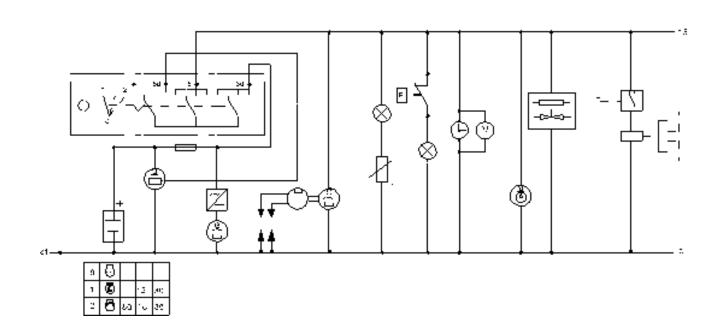




# **WIRING PARTS LIST**

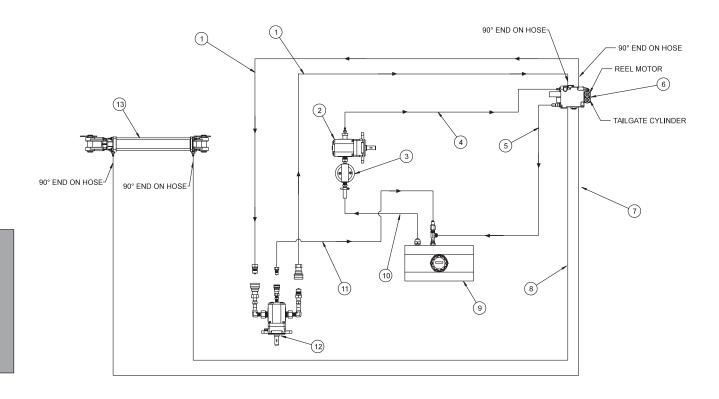
REF#	PART#	DESCRIPTION	QUANTITY
1	78-342	Wire, Hour Meter to Ground	1
2	12-017	Hour Meter	1
3	78-343	Wire, Hour Meter to Buss Bar	1
4	12-016	Ignition Switch	1
	76-310	Key Set (comes with 12-016)	1
5	8935	Buss Bar	1
6	78-340	Oil Light	1
7	78-341	Temperature Light	1
8		Fuel Pump (Part of Engine)	1
9	78-367	Wire Harness (includes all wire colors with *)	1
10	22-054	Battery Cable Black	1
11	22-073	Battery	1
12	78-325	Red Battery Cable with Boot	1
13	48-144	Circuit Breaker Wire	1
14	8975	30 Amp Circuit Breaker	1
	8977	Circuit Breaker Boot	1
15	78-368	Electric Clutch	1
16	15-314	Toggle Switch	1
	15-472	Switch Boot	1

# WIRING SCHEMATIC

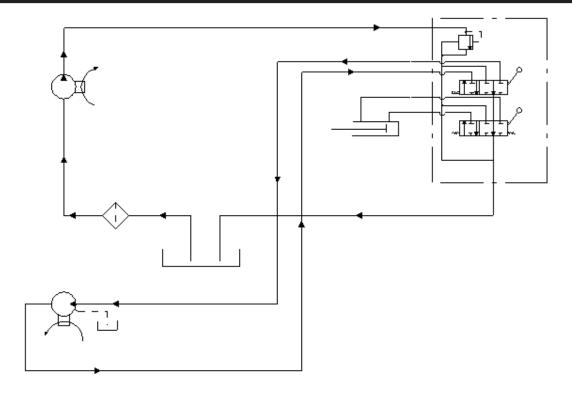




### **HYDRAULIC DRAWING**



### **HYDRAULIC SCHEMATIC**





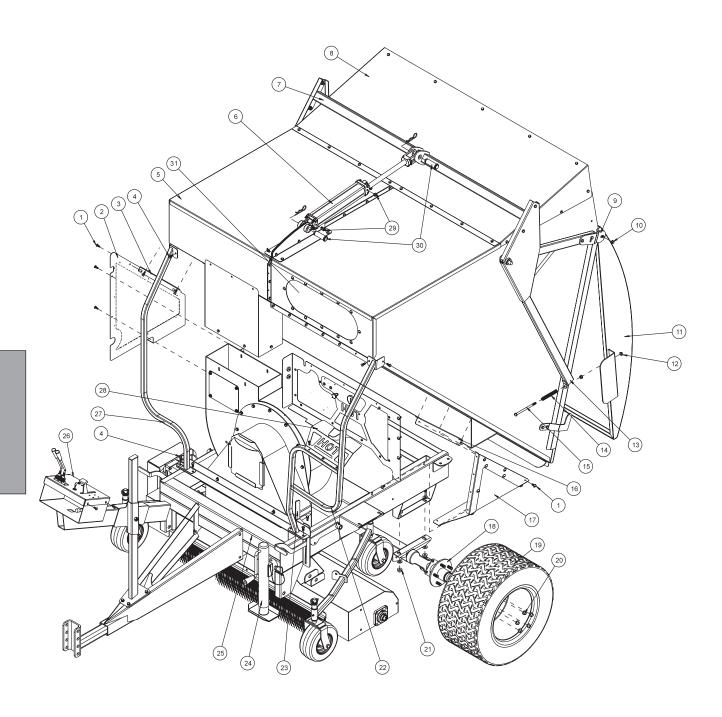
# HYDRAULIC PARTS LIST

REF#	PART#	DESCRIPTION	QUANTITY
1	78-247	Hydraulic Hose (brush motor to valve)	2
2	78-220	Hydraulic Pump	1
3	23-006	Oil Filter	1
	23-031	Filter Element (replacement only)	1
4	78-249	Hydraulic Hose (pump to valve)	1
5	78-250	Hydraulic Hose (return to tank)	1
6	78-306	2-Bank Hydraulic Valve	1
7	78-246	Hydraulic Hose (rear hyd. cyl. to front valve)	1
8	78-248	Hydraulic Hose (front hyd. cyl. to rear valve)	1
9	13-584	Oil Tank	1
10	8917-14	Suction Hose 5/8 ID x 14	1
	18-222	Hose Clamp	2
11	78-251	Hydraulic Hose (case drain hyd. motor to tank)	1
12	78-219	Hydraulic Motor	1
13	78-225	Hydraulic Cylinder	1

### **HYDRAULIC PRESSURES**

Pump Displacement	.4 in <sup>3</sup> /rev
Pump Input Speed (up to)	3600 rpm
Max. Operating Pressure	2500 psi
Max. Inlet Vacuum	10 in. Hg
Max. Case Pressure	80 psi
78-306 Hydraulic Valve (2 bank)	2500 psi





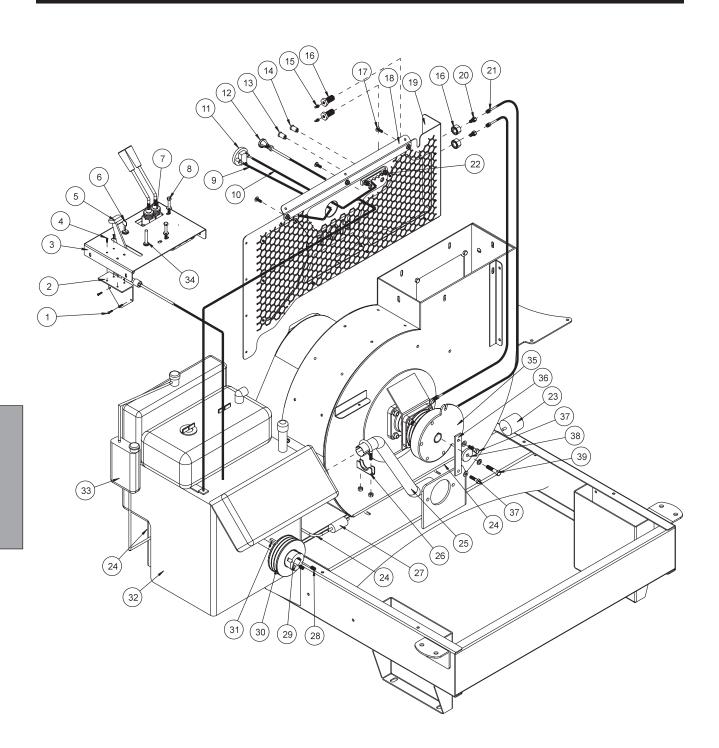


# **BODY AND FRAME PARTS LIST**

REF#   PART# DESCRIPTION   QUANTITY			DODI AND IIIA	
1 HST-14-20-075 Truss Head Machine Screw 1/2 - 20 x 3/4 8 78-253 Right Guard 1 1 2 78-274 Cage Nuts 1 2 2 8 15 78-274 Cage Nuts 2 2 1 1 78-274 Cage Nuts 2 2 1 1 1 78-274 Cage Nuts 2 2 1 1 1 78-274 Cage Nuts 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	REF#	PART#	DESCRIPTION	QUANTITY
2       78-253       Right Guard       1         78-274       Cage Nuts       2         78-274       Cage Nuts       2         HB-516-18-075       Bot *\foath_0 = 18 x^3/4       2         HNFL-516-18       Flange Bolt *\foath_0 = 18 x^3/4       2         HNFL-516-18       Flange Bolt *\foath_0 = 18 x^3/4       8         HNFL-516-18       Flange Bolt *\foath_0 = 18 x^3/4       8         5       78-260       Right Hopper       1         6       78-225       Hydraulic Cylinder       1         7       78-265       Cross Bar       1         8       78-272       Hopper Cover       1         9       78-319       Hopper Door Adjustment       2         10       HNCL-12-13       Center Lock Nut *\foath_2 = 13       2         11       78-265       Cross Bar       1         10       HNCL-12-13       Center Lock Nut *\foath_2 = 13       2         11       HW-12       Washer *\foath_2 = 13       2         12       HNT-13-13       2       1         14       H9-205       Spring       2         12       HNF-38-16       Flange Whiz Lock Nut *\foath_6 = 16       4				
78-274				
3	_			
78-274         Cage Nuts         2           HBS-16-18-075         Bolt ³/16 - 18 x ³/4         2           HNFL-516-18         Flange Whiz Lock Nut ³/16 - 18         2           HNFL-516-18         Flange Bolt ³/16 - 18 x ³/4         8           HNFL-516-18         Flange Whiz Lock Nut ³/16 - 18         8           5         78-260         Right Hopper         1           6         78-225         Hydraulic Cylinder         1           7         78-265         Cross Bar         1           8         78-272         Hopper Cover         1           9         78-319         Hopper Door Adjustment         2           10         HNCL-12-13         Center Lock Nut ¹/2 - 13         2           11         HN-12-13         Washer ¹/2         4           12         HS-12-13-250         Bolt ¹/2 - 13 x 2¹/2         2           11         78-266         Hopper Door         1           12         HS-16-13-250         Bolt ¹/2 - 13 x 2¹/2         2           11         78-266         Hopper Door         1           12         HS-16-18-18-18         Flange Whiz Lock Nut ³/8 - 16         4           13         78-266         Hopper Door	3			
HB-516-18-075   Bolt *y <sub>10</sub> - 18 x *y <sub>14</sub>   2	5			
HNFL-516-18   Flange Whiz Lock Nut \$\frac{1}{16} - 18   S				
## HBFL-516-18-075   Flange Bolt \$\frac{5}{16} = 18 \ x^{3}/4    HNFL-516-18   Flange Whiz Lock Nut \$\frac{5}{16} = 18    78-205   Hydraulic Cylinder   1  78-242-01   Seal Kit   1  7 78-265   Cross Bar   1  7 78-265   Cross Bar   1  8 78-272   Hopper Cover   1  9 78-319   Hopper Door Adjustment   2  10   HNCL-12-13   Center Lock Nut \$\frac{1}{2} = 13    10   HNCL-12-13   Center Lock Nut \$\frac{1}{2} = 13    11 78-266   Hopper Door Adjustment   2  12   HW-12   Washer \$\frac{1}{2} = 4    HB-12-13-250   Bolt \$\frac{1}{2} = 13 \ x^{2}\frac{1}{2} = 2    11 78-266   Hopper Door   1  12   HNFL-38-16   Flange Whiz Lock Nut \$\frac{3}{6} = 16    13 78-264   Left Door Arm   1  14 19-205   Spring   2  15   HB-38-16-575   Bolt \$\frac{3}{6} = 16 \ x \ 5\frac{3}{4}   2  16 78-316   Left Guard Mount   1  78-274   Cage Nuts   3  HB-516-18-075   Bolt \$\frac{1}{6} = 18 \ x^{3}\frac{4}{4}   3  HNFL-516-18   Flange Whiz Lock Nut \$\frac{5}{16} = 18   3  17 78-339   Left Guard Mount   1  78-274   Cage Nuts   3  18 78-274   Cage Nuts   4  18 78-216   Rear Axle   1  19 78-221   Tire and Wheel   2  78-221-02   Wheel   2  20   HNL-12-20   Lug Nut \$\frac{1}{2} = 2 \ Ply   2  HNFL-516-18   Bolt \$\frac{1}{2} = 13 \ x^{1}\frac{1}{2}   4  HNFL-16-18   Bolt \$\frac{1}{2} = 13 \ x^{1}\frac{1}{2}   4  HNFL-17-18   Bolt \$\frac{1}{2} = 13 \ x^{1}\frac{1}{2}   4  HNFL-19-18   Bolt \$\frac{1}{2} = 13 \ x^{1}\frac{1}{2}   4  HNFL-19-19   Hold Bolt \$\frac{1}{2} = 13 \ x^{1}\frac{1}{2}   4  HNFL-19-10   Lock Nut \$\frac{1}{2} = 13 \ x^{1}\frac{1}{2}   4  HNFL-19-16   Bolt \$\frac{1}{2} = 13 \ x^{1}\frac{1}{2}   4  HNFL-19-16   Bolt \$\frac{1}{2} = 13 \ x^{1}\frac{1}{2}   4  HNFL-19-16   Bolt \$\frac{1}{2} = 13 \ x^{1}\frac{1}{2}   4  HNFL-16-18   Flange Whiz Lock Nut \$\frac{5}{16} = 18   1  15-020   Grip   1  24 78-240   Jack   1  25 78-255   Main Frame   1  HC-A-200   Loom Clamp   4  HSDPS-14-075   Stainless Steel Pan Head Drill Screw \$\frac{1}{4} \ x^{3}\frac{4}{4}   4  26 78-281   Operator Control Panel   1  HSDPS-14-075   Stainless Steel Pan Head Drill				
HNFL-516-18 Flange Whiz Lock Nut <sup>5</sup> / <sub>16</sub> - 18  5 78-260 Right Hopper 6 78-225 Hydraulic Cylinder 78-242-01 Seal Kit 7 78-265 Cross Bar 8 78-272 Hopper Cover 9 78-319 Hopper Door Adjustment 2 HN-12-13 Nut <sup>1</sup> /₂-13 2 HN-12-13 Nut <sup>1</sup> /₂-13 3 HW-12 Washer <sup>1</sup> /₂ 4 HB-12-13-250 Bolt <sup>1</sup> /₂-13 x 2 <sup>1</sup> /₂ 2 HB-12-13-250 Bolt <sup>1</sup> /₂-13 x 2 <sup>1</sup> /₂ 2 HNFL-38-16 Flange Whiz Lock Nut <sup>3</sup> /₃-16 4 19-205 Spring 15 HB-38-16-575 Bolt <sup>3</sup> /₃-16 x 5 <sup>3</sup> /₄ 1 HN-12-16-18 Flange Whiz Lock Nut <sup>5</sup> /₁₀-18 3 78-274 Cage Nuts 17 78-339 Left Guard 18 78-216 Rear Axle 19 78-221 Tire and Wheel 20 HN-12-20 Wheel 20 HN-12-20 Lug Nut <sup>1</sup> /₂-20 (part of 78-216) 21 HN-12-13 Lock Nut <sup>1</sup> /₂-20 (part of 78-216) 22 HN-12-13-150 Bolt <sup>1</sup> /₂-13 x 1 <sup>1</sup> /₂ 24 HN-12-20 Ung Nut <sup>1</sup> /₂-20 (part of 78-216) 3 17 78-339 Left Guard 4 1 1 2 - 20 (part of 78-216) 4 1 1 1 2 - 20 (part of 78-216) 4 1 1 1 2 - 20 (part of 78-216) 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4		-	
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9 78-319				
10				
HN-12-13				
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HB-12-13-250   Bolt 1/2 - 13 x 21/2   2   1   78-266   Hopper Door   1   1   1   78-266   Hopper Door   1   1   1   1   1   1   1   1   1			· <del>-</del>	
11 78-266 Hopper Door 12 HNFL-38-16 Flange Whiz Lock Nut <sup>3</sup> / <sub>8</sub> - 16 13 78-264 Left Door Arm 14 19-205 Spring 2 15 HB-38-16-575 Bolt <sup>3</sup> / <sub>6</sub> - 16 x 5 <sup>3</sup> / <sub>4</sub> 16 78-316 Left Guard Mount 1 78-274 Cage Nuts 18 HB-516-18-075 Bolt <sup>5</sup> / <sub>16</sub> - 18 x <sup>3</sup> / <sub>4</sub> 17 78-339 Left Guard 18 78-274 Cage Nuts 18 78-216 Rear Axle 19 78-221 Tire and Wheel 19 78-221 Tire 24 x 13 -12 6 Ply 2 78-221-02 Wheel 20 HNL-12-20 Lug Nut <sup>1</sup> / <sub>2</sub> - 20 (part of 78-216) 21 HB-12-13-150 Bolt <sup>1</sup> / <sub>2</sub> - 13 x <sup>1</sup> / <sub>2</sub> 2 HNTL-12-13 Lock Nut <sup>1</sup> / <sub>2</sub> - 13 22 78-270 Left Brush Guard 23 78-311 Handle Stop 14 HB-516-18 Flange Whiz Lock Nut <sup>5</sup> / <sub>16</sub> - 18 25 78-269 Right Brush Guard 26 78-281 Operator Nut <sup>1</sup> / <sub>2</sub> - 13 27 78-281 Tire and Wheel 2 78-270 Left Brush Guard 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
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15 HB-38-16-575 Bolt <sup>3</sup> / <sub>6</sub> - 16 x 5 <sup>3</sup> / <sub>4</sub> 2 16 78-316 Left Guard Mount 1 78-274 Cage Nuts 3 HB-516-18-075 Bolt <sup>5</sup> / <sub>16</sub> - 18 x <sup>3</sup> / <sub>4</sub> 3 HNFL-516-18 Flange Whiz Lock Nut <sup>5</sup> / <sub>16</sub> -18 3 17 78-339 Left Guard 1 78-274 Cage Nuts 4 18 78-216 Rear Axle 1 19 78-221 Tire and Wheel 2 78-221-01 Tire 24 x 13 -12 6 Ply 2 78-221-02 Wheel 2 20 HNL-12-20 Lug Nut <sup>1</sup> / <sub>2</sub> - 20 (part of 78-216) 10 21 HB-12-13-150 Bolt <sup>1</sup> / <sub>2</sub> - 13 x 1 <sup>1</sup> / <sub>2</sub> 4 HNTL-12-13 Lock Nut <sup>1</sup> / <sub>2</sub> - 13 22 78-270 Left Brush Guard 1 HB-516-18-075 Bolt <sup>5</sup> / <sub>16</sub> - 18 x <sup>3</sup> / <sub>4</sub> 1 HNFL-516-18 Flange Whiz Lock Nut <sup>5</sup> / <sub>16</sub> - 18 1 15-020 Grip 1 24 78-240 Jack 1 25 78-255 Main Frame 1 HC-A-200 Loom Clamp HSDPS-14-075 Stainless Steel Pan Head Drill Screw <sup>1</sup> / <sub>4</sub> x <sup>3</sup> / <sub>4</sub> 4 26 78-281 Operator Control Panel 1 27 78-269 Right Brush Guard 1 28 78-313 Radiator Guard 1 29 18-169 Adapter <sup>3</sup> / <sub>16</sub> SAE 2 20 76-242-02 Clevis Pin with Clip (part of 78-225) 2	13	78-264	Left Door Arm	
16	14	19-205	Spring	
78-274       Cage Nuts       3         HB-516-18-075       Bolt ⁵/₁6 - 18 x ³/₄       3         HNFL-516-18       Flange Whiz Lock Nut ⁵/₁6 - 18       3         17       78-339       Left Guard       1         78-274       Cage Nuts       4         18       78-216       Rear Axle       1         19       78-221       Tire and Wheel       2         78-221-01       Tire 24 x 13 -12 6 Ply       2         78-221-02       Wheel       2         20       HNL-12-20       Lug Nut ¹/₂ - 20 (part of 78-216)       10         21       HB-12-13-150       Bolt ¹/₂ - 13 x 1¹/₂       4         HW-12       Washer ¹/₂       4         HW-12-13       Lock Nut ¹/₂ - 13       4         22       78-270       Left Brush Guard       1         1       HB-516-18-075       Bolt ⁴/₁6 - 18 x ³/₄       1         1       HB-516-18-075       Bolt ⁴/₁6 - 18 x ³/₄       1         15-020       Grip       1         24       78-240       Jack       1         25       78-255       Main Frame       1         HLC-A-200       Loom Clamp       4         HSDPS-14-075	15	HB-38-16-575	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 5 <sup>3</sup> / <sub>4</sub>	2
HB-516-18-075 HNFL-516-18 Flange Whiz Lock Nut ⁵/16 -18  3 HNFL-516-18 Flange Whiz Lock Nut ⁵/16 -18  4 HNFL-10 FR-274 Cage Nuts FR-274 FR-274 FR-271 Fire and Wheel FR-274 FR-221-01 Fire 24 x 13 -12 6 Ply FR-221-02 FR-221-02 FR-221-02 FR-221-02 FR-221-03 FR-222-03 FR-222-03 FR-223-03 FR-22	16	78-316	Left Guard Mount	1
HNFL-516-18 Flange Whiz Lock Nut \$\frac{1}{16}\$ -18 3  17 78-339 Left Guard 1 78-274 Cage Nuts 4  18 78-216 Rear Axle 1  19 78-221 Tire and Wheel 2 78-221-01 Tire 24 x 13 -12 6 Ply 2 78-221-02 Wheel 2  20 HNL-12-20 Lug Nut \$\frac{1}{2}\$ - 20 (part of 78-216) 10  21 HB-12-13-150 Bolt \$\frac{1}{2}\$ - 13 x \$\frac{1}{2}\$ - 4  HW-12 Washer \$\frac{1}{2}\$ 4  HNTL-12-13 Lock Nut \$\frac{1}{2}\$ - 13  22 78-270 Left Brush Guard 1  23 78-311 Handle Stop 1  HB-516-18-075 Bolt \$\frac{5}{1}\$ 6 - 18 x \$\frac{3}{4}\$ 1  HNFL-516-18 Flange Whiz Lock Nut \$\frac{5}{1}\$ 6 - 18 1  15-020 Grip 1  24 78-240 Jack 1  25 78-255 Main Frame 1  HLC-A-200 Loom Clamp 4  HSDPS-14-075 Stainless Steel Pan Head Drill Screw \$\frac{1}{4}\$ x \$\frac{3}{4}\$ 4  26 78-281 Operator Control Panel 1  27 78-269 Right Brush Guard 1  28 78-313 Radiator Guard 1  HSDPS-14-075 Stainless Steel Pan Head Drill Screw \$\frac{1}{4}\$ x \$\frac{3}{4}\$ 4  29 18-169 Adapter \$\frac{3}{6}\$ SAE 2  30 76-242-02 Clevis Pin with Clip (part of 78-225) 2		78-274	Cage Nuts	3
17 78-339		HB-516-18-075	Bolt <sup>5</sup> / <sub>16</sub> - 18 x <sup>3</sup> / <sub>4</sub>	3
78-274 Cage Nuts  78-216 Rear Axle  11 19 78-221 Tire and Wheel 78-221-01 Tire 24 x 13 -12 6 Ply 78-221-02 Wheel 20 HNL-12-20 Lug Nut ½ - 20 (part of 78-216) 21 HB-12-13-150 Bolt ½ - 13 x 1½ HW-12 Washer ½ HNTL-12-13 Lock Nut ½ - 13 22 78-270 Left Brush Guard 1 HB-516-18-075 Bolt 5¼ - 18 x 3¼ HNFL-516-18 Flange Whiz Lock Nut 5¼ - 18 15-020 Grip 14 78-240 Jack 25 78-255 Main Frame 16 HLC-A-200 Loom Clamp 17 HSDPS-14-075 Stainless Steel Pan Head Drill Screw ¼ x 3¼ 4 26 78-281 Operator Control Panel 27 78-269 Right Brush Guard 28 78-313 Radiator Guard 29 18-169 Adapter ⅓ SAE 20 76-242-02 Clevis Pin with Clip (part of 78-225) 20 10 Interval Axis SAE 21 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		HNFL-516-18	Flange Whiz Lock Nut 5/16 -18	3
18       78-216       Rear Axle       1         19       78-221       Tire and Wheel       2         78-221-01       Tire 24 x 13 -12 6 Ply       2         78-221-02       Wheel       2         20       HNL-12-20       Lug Nut ½ - 20 (part of 78-216)       10         21       HB-12-13-150       Bolt ½ - 13 x 1½       4         HW-12       Washer ½       4         HNTL-12-13       Lock Nut ½ - 13       4         22       78-270       Left Brush Guard       1         23       78-311       Handle Stop       1         HB-516-18-075       Bolt ⁵¼ - 18 x ³¼       1         HNFL-516-18       Flange Whiz Lock Nut ⁵¼ - 18       1         15-020       Grip       1         24       78-240       Jack       1         25       78-255       Main Frame       1         HLC-A-200       Loom Clamp       4         HSDPS-14-075       Stainless Steel Pan Head Drill Screw ¼ x ¾ 4         26       78-281       Operator Control Panel       1         27       78-269       Right Brush Guard       1         48       78-313       Radiator Guard       1         <	17	78-339	Left Guard	1
18       78-216       Rear Axle       1         19       78-221       Tire and Wheel       2         78-221-01       Tire 24 x 13 -12 6 Ply       2         78-221-02       Wheel       2         20       HNL-12-20       Lug Nut ½ - 20 (part of 78-216)       10         21       HB-12-13-150       Bolt ½ - 13 x 1½       4         HW-12       Washer ½       4         HNTL-12-13       Lock Nut ½ - 13       4         22       78-270       Left Brush Guard       1         23       78-311       Handle Stop       1         HB-516-18-075       Bolt ⁵¼ - 18 x ³¼       1         HNFL-516-18       Flange Whiz Lock Nut ⁵¼ - 18       1         15-020       Grip       1         24       78-240       Jack       1         25       78-255       Main Frame       1         HLC-A-200       Loom Clamp       4         HSDPS-14-075       Stainless Steel Pan Head Drill Screw ¼ x ¾ 4         26       78-281       Operator Control Panel       1         27       78-269       Right Brush Guard       1         48       78-313       Radiator Guard       1         <		78-274	Cage Nuts	4
78-221-01       Tire 24 x 13 -12 6 Ply       2         78-221-02       Wheel       2         20       HNL-12-20       Lug Nut ½ - 20 (part of 78-216)       10         21       HB-12-13-150       Bolt ½ - 13 x 1½       4         HW-12       Washer ½       4         HNTL-12-13       Lock Nut ½ - 13       4         22       78-270       Left Brush Guard       1         23       78-311       Handle Stop       1         HB-516-18-075       Bolt ½ 16 - 18 x ³/4       1         HNFL-516-18       Flange Whiz Lock Nut ½ 16 - 18       1         15-020       Grip       1         24       78-240       Jack       1         25       78-240       Jack       1         25       78-255       Main Frame       1         HLC-A-200       Loom Clamp       4         HSDPS-14-075       Stainless Steel Pan Head Drill Screw ¼ x ¾ 4         26       78-281       Operator Control Panel       1         27       78-269       Right Brush Guard       1         28       78-313       Radiator Guard       1         4       HSDPS-14-075       Stainless Steel Pan Head Drill Screw ¼ x ¾ 4 <t< td=""><td>18</td><td>78-216</td><td></td><td>1</td></t<>	18	78-216		1
78-221-01       Tire 24 x 13 -12 6 Ply       2         78-221-02       Wheel       2         20       HNL-12-20       Lug Nut ½ - 20 (part of 78-216)       10         21       HB-12-13-150       Bolt ½ - 13 x 1½       4         HW-12       Washer ½       4         HNTL-12-13       Lock Nut ½ - 13       4         22       78-270       Left Brush Guard       1         23       78-311       Handle Stop       1         HB-516-18-075       Bolt ½ 16 - 18 x ³/4       1         HNFL-516-18       Flange Whiz Lock Nut ½ 16 - 18       1         15-020       Grip       1         24       78-240       Jack       1         25       78-240       Jack       1         25       78-255       Main Frame       1         HLC-A-200       Loom Clamp       4         HSDPS-14-075       Stainless Steel Pan Head Drill Screw ¼ x ¾ 4         26       78-281       Operator Control Panel       1         27       78-269       Right Brush Guard       1         28       78-313       Radiator Guard       1         4       HSDPS-14-075       Stainless Steel Pan Head Drill Screw ¼ x ¾ 4 <t< td=""><td>19</td><td>78-221</td><td>Tire and Wheel</td><td>2</td></t<>	19	78-221	Tire and Wheel	2
78-221-02 Wheel 2  20 HNL-12-20 Lug Nut ¹/₂ - 20 (part of 78-216) 10  21 HB-12-13-150 Bolt ¹/₂ - 13 x 1¹/₂ 4  HW-12 Washer ¹/₂ 4  HNTL-12-13 Lock Nut ¹/₂ - 13 4  22 78-270 Left Brush Guard 1  23 78-311 Handle Stop 1  HB-516-18-075 Bolt ⁵/₁₆ - 18 x ³/₄ 1  HNFL-516-18 Flange Whiz Lock Nut ⁵/₁₆ - 18 1  15-020 Grip 1  24 78-240 Jack 1  25 78-255 Main Frame 1  HLC-A-200 Loom Clamp 4  HSDPS-14-075 Stainless Steel Pan Head Drill Screw ¹/₄ x ³/₄ 4  26 78-281 Operator Control Panel 1  27 78-269 Right Brush Guard 1  HSDPS-14-075 Stainless Steel Pan Head Drill Screw ¹/₄ x ³/₄ 3  29 18-169 Adapter ³/₆ SAE 2  30 76-242-02 Clevis Pin with Clip (part of 78-225) 2		78-221-01	Tire 24 x 13 -12 6 Ply	
20			· · · · · · · · · · · · · · · · · · ·	
21 HB-12-13-150 Bolt 1/2 - 13 x 11/2 4 HW-12 Washer 1/2 4 HNTL-12-13 Lock Nut 1/2 - 13 4  22 78-270 Left Brush Guard 1 23 78-311 Handle Stop 1 HB-516-18-075 Bolt 5/16 - 18 x 3/4 1 HNFL-516-18 Flange Whiz Lock Nut 5/16 - 18 1 15-020 Grip 1  24 78-240 Jack 1 25 78-255 Main Frame 1 HLC-A-200 Loom Clamp 4 HSDPS-14-075 Stainless Steel Pan Head Drill Screw 1/4 x 3/4 4  26 78-281 Operator Control Panel 1 27 78-269 Right Brush Guard 1 28 78-313 Radiator Guard 1 HSDPS-14-075 Stainless Steel Pan Head Drill Screw 1/4 x 3/4 3 29 18-169 Adapter 3/8 SAE 2 30 76-242-02 Clevis Pin with Clip (part of 78-225) 2	20		Lug Nut 1/2 - 20 (part of 78-216)	
HW-12       Washer ¹/₂       4         HNTL-12-13       Lock Nut ¹/₂ - 13       4         22       78-270       Left Brush Guard       1         23       78-311       Handle Stop       1         HB-516-18-075       Bolt ⁵/₁6 - 18 x ³/₄       1         HNFL-516-18       Flange Whiz Lock Nut ⁵/₁6 - 18       1         15-020       Grip       1         24       78-240       Jack       1         25       78-255       Main Frame       1         HC-A-200       Loom Clamp       4         HSDPS-14-075       Stainless Steel Pan Head Drill Screw ¹/₄ x ³/₄       4         26       78-281       Operator Control Panel       1         27       78-269       Right Brush Guard       1         28       78-313       Radiator Guard       1         HSDPS-14-075       Stainless Steel Pan Head Drill Screw ¹/₄ x ³/₄       3         29       18-169       Adapter ³/₀ SAE       2         30       76-242-02       Clevis Pin with Clip (part of 78-225)       2				
HNTL-12-13				
22       78-270       Left Brush Guard       1         23       78-311       Handle Stop       1         HB-516-18-075       Bolt <sup>5</sup> / <sub>16</sub> - 18 x <sup>3</sup> / <sub>4</sub> 1         HNFL-516-18       Flange Whiz Lock Nut <sup>5</sup> / <sub>16</sub> - 18       1         15-020       Grip       1         24       78-240       Jack       1         25       78-255       Main Frame       1         HLC-A-200       Loom Clamp       4         HSDPS-14-075       Stainless Steel Pan Head Drill Screw <sup>1</sup> / <sub>4</sub> x <sup>3</sup> / <sub>4</sub> 4         26       78-281       Operator Control Panel       1         27       78-269       Right Brush Guard       1         28       78-313       Radiator Guard       1         4       HSDPS-14-075       Stainless Steel Pan Head Drill Screw <sup>1</sup> / <sub>4</sub> x <sup>3</sup> / <sub>4</sub> 3         29       18-169       Adapter <sup>3</sup> / <sub>8</sub> SAE       2         30       76-242-02       Clevis Pin with Clip (part of 78-225)       2			· <del>-</del>	
23       78-311       Handle Stop       1         HB-516-18-075       Bolt 5/16 - 18 x 3/4       1         HNFL-516-18       Flange Whiz Lock Nut 5/16 - 18       1         15-020       Grip       1         24       78-240       Jack       1         25       78-255       Main Frame       1         HLC-A-200       Loom Clamp       4         HSDPS-14-075       Stainless Steel Pan Head Drill Screw 1/4 x 3/4       4         26       78-281       Operator Control Panel       1         27       78-269       Right Brush Guard       1         28       78-313       Radiator Guard       1         HSDPS-14-075       Stainless Steel Pan Head Drill Screw 1/4 x 3/4       3         29       18-169       Adapter 3/8 SAE       2         30       76-242-02       Clevis Pin with Clip (part of 78-225)       2	22			
HB-516-18-075 Bolt <sup>5</sup> / <sub>16</sub> - 18 x <sup>3</sup> / <sub>4</sub> 1 HNFL-516-18 Flange Whiz Lock Nut <sup>5</sup> / <sub>16</sub> - 18 1 15-020 Grip 1 24 78-240 Jack 1 25 78-255 Main Frame 1 HLC-A-200 Loom Clamp 4 HSDPS-14-075 Stainless Steel Pan Head Drill Screw <sup>1</sup> / <sub>4</sub> x <sup>3</sup> / <sub>4</sub> 4 26 78-281 Operator Control Panel 1 27 78-269 Right Brush Guard 1 28 78-313 Radiator Guard 1 HSDPS-14-075 Stainless Steel Pan Head Drill Screw <sup>1</sup> / <sub>4</sub> x <sup>3</sup> / <sub>4</sub> 3 29 18-169 Adapter <sup>3</sup> / <sub>8</sub> SAE 2 30 76-242-02 Clevis Pin with Clip (part of 78-225) 2				
HNFL-516-18 Flange Whiz Lock Nut 5/16 - 18 1 15-020 Grip 1 24 78-240 Jack 1 25 78-255 Main Frame 1 HLC-A-200 Loom Clamp 4 HSDPS-14-075 Stainless Steel Pan Head Drill Screw 1/4 x 3/4 4 26 78-281 Operator Control Panel 1 27 78-269 Right Brush Guard 1 28 78-313 Radiator Guard 1 HSDPS-14-075 Stainless Steel Pan Head Drill Screw 1/4 x 3/4 3 29 18-169 Adapter 3/8 SAE 2 30 76-242-02 Clevis Pin with Clip (part of 78-225) 2	20		•	
15-020 Grip 1 24 78-240 Jack 1 25 78-255 Main Frame 1 HLC-A-200 Loom Clamp 4 HSDPS-14-075 Stainless Steel Pan Head Drill Screw ¹/₄ x ³/₄ 4 26 78-281 Operator Control Panel 1 27 78-269 Right Brush Guard 1 28 78-313 Radiator Guard 1 HSDPS-14-075 Stainless Steel Pan Head Drill Screw ¹/₄ x ³/₄ 3 29 18-169 Adapter ³/₅ SAE 2 30 76-242-02 Clevis Pin with Clip (part of 78-225) 2				
24       78-240       Jack       1         25       78-255       Main Frame       1         HLC-A-200       Loom Clamp       4         HSDPS-14-075       Stainless Steel Pan Head Drill Screw ¹/₄ x ³/₄       4         26       78-281       Operator Control Panel       1         27       78-269       Right Brush Guard       1         28       78-313       Radiator Guard       1         HSDPS-14-075       Stainless Steel Pan Head Drill Screw ¹/₄ x ³/₄       3         29       18-169       Adapter ³/₅ SAE       2         30       76-242-02       Clevis Pin with Clip (part of 78-225)       2			-	
25       78-255       Main Frame       1         HLC-A-200       Loom Clamp       4         HSDPS-14-075       Stainless Steel Pan Head Drill Screw ¹/₄ x ³/₄       4         26       78-281       Operator Control Panel       1         27       78-269       Right Brush Guard       1         28       78-313       Radiator Guard       1         HSDPS-14-075       Stainless Steel Pan Head Drill Screw ¹/₄ x ³/₄       3         29       18-169       Adapter ³/₅ SAE       2         30       76-242-02       Clevis Pin with Clip (part of 78-225)       2	24		·	
HLC-A-200       Loom Clamp       4         HSDPS-14-075       Stainless Steel Pan Head Drill Screw ¹/₄ x ³/₄       4         26       78-281       Operator Control Panel       1         27       78-269       Right Brush Guard       1         28       78-313       Radiator Guard       1         HSDPS-14-075       Stainless Steel Pan Head Drill Screw ¹/₄ x ³/₄       3         29       18-169       Adapter ³/₅ SAE       2         30       76-242-02       Clevis Pin with Clip (part of 78-225)       2				
HSDPS-14-075 Stainless Steel Pan Head Drill Screw ¹/₄ x ³/₄ 4  26 78-281 Operator Control Panel 1  27 78-269 Right Brush Guard 1  28 78-313 Radiator Guard 1  HSDPS-14-075 Stainless Steel Pan Head Drill Screw ¹/₄ x ³/₄ 3  29 18-169 Adapter ³/₅ SAE 2  30 76-242-02 Clevis Pin with Clip (part of 78-225) 2	25			
26       78-281       Operator Control Panel       1         27       78-269       Right Brush Guard       1         28       78-313       Radiator Guard       1         HSDPS-14-075       Stainless Steel Pan Head Drill Screw 1/4 x 3/4       3         29       18-169       Adapter 3/8 SAE       2         30       76-242-02       Clevis Pin with Clip (part of 78-225)       2				
27       78-269       Right Brush Guard       1         28       78-313       Radiator Guard       1         HSDPS-14-075       Stainless Steel Pan Head Drill Screw 1/4 x 3/4       3         29       18-169       Adapter 3/8 SAE       2         30       76-242-02       Clevis Pin with Clip (part of 78-225)       2	26			
28       78-313       Radiator Guard       1         HSDPS-14-075       Stainless Steel Pan Head Drill Screw 1/4 x 3/4       3         29       18-169       Adapter 3/8 SAE       2         30       76-242-02       Clevis Pin with Clip (part of 78-225)       2			•	
HSDPS-14-075 Stainless Steel Pan Head Drill Screw ¹/₄ x ³/₄ 3  18-169 Adapter ³/₅ SAE 2  30 76-242-02 Clevis Pin with Clip (part of 78-225) 2			•	
29 18-169 Adapter <sup>3</sup> / <sub>8</sub> SAE 2 30 76-242-02 Clevis Pin with Clip (part of 78-225) 2	20			
30 76-242-02 Clevis Pin with Clip (part of 78-225) 2	20			
• " ,			·	
31 78-345 Clear Lexan Window 1				
	31	10-343	Clear Lexan Willdow	I/



### **ENGINE AND CONTROLS DRAWING**





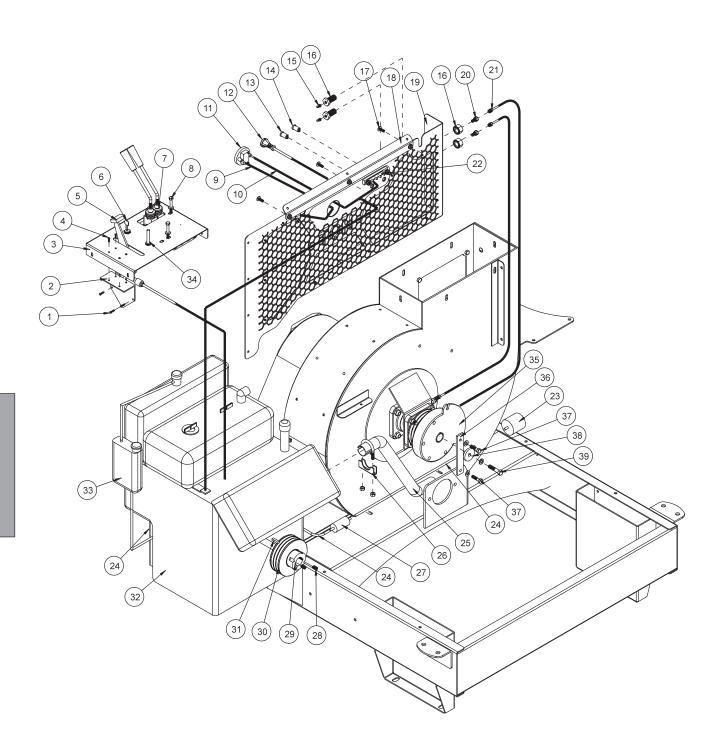
# ENGINE AND CONTROLS PARTS LIST

REF#	PART#	DESCRIPTION	QUANTITY
1	HSM-10-32-063	Machine Screw #10 - 32 x 5/8	4
	HWL-10	Lockwasher #10	4
	HN-10-32	Nut #10 - 32	4
2	34-159	Throttle Mounting Bracket	1
3	78-281	Operator Control Panel V62	1
	78-217	Decal, Operator Control Panel V62	1
	HST-14-20-075	Truss Head Machine Screw 1/4 - 20 x 3/4	4
	HNFL-14-20	Flange Whiz Lock Nut 1/4 - 20	4
4	HSM-8-32-050	Machine Screw # 8 - 32 x <sup>1</sup> / <sub>2</sub>	4
	HWL-8	Lockwasher #8	4
	HN-8-32	Nut # 8 - 32	4
5	78-337	Throttle	1
	HN-38-24	Nut <sup>3</sup> / <sub>8</sub> - 24	2
6	12-016	Ignition Switch	1
7	78-306	2-Bank Valve	1
	42-226	Bent Handle	2
8	HB-14-20-200	Bolt <sup>1</sup> / <sub>4</sub> - 20 x 2	2
	HW-14	Washer 1/4	2
	HNFL-14-20	Flange Whiz Lock Nut 1/4 - 20	2
9	78-342	Wire, Hour Meter to Ground	1
	HN-14-20	Nut <sup>1</sup> / <sub>4</sub> - 20	1
10	78-343	Wire, Hour Meter to Buss Bar	1
11	12-017	Hour Meter	1
12	11-086	Choke Cable	1
13	78-341	Temperature Light	1
14	78-340	Oil Light	1
15	HG-18-45	Grease Fitting <sup>1</sup> / <sub>8</sub> Pipe x 45°	2
16	18-339	Anchor Coupling	2
17	HST-14-20-075	Truss Head Machine Screw 1/4 - 20 x 3/4	8
	HNFL-14-20	Flange Whiz Lock Nut 1/4 - 20	8
18	78-317	Front Guard Mount	1
19	78-254	Front Guard	1
	78-307	Decal, Machine Control Panel V62	1
20	18-338	Male Connector	2
21	78-324	<sup>3</sup> / <sub>16</sub> Brake Line 20"	2
22	8935	Bus Bar	1
	HSM-8-32-075	Machine Screw #8 - 32 x 3/4	2
	HWL-8	Lock Washer #8	2
	HN-8-32	Nut #8 - 32	2
23		Electric Fuel Pump (part of engine)	1
24	8800-56	Fuel Hose 1/4 x 56"	1
	18-186	Hose Clamp	5
	HLC-A-58	Loom Clamp <sup>5</sup> / <sub>8</sub>	2
	HSDPS-14-075	Stainless Steel Pan Head Drill Screw 1/4 x 3/4	2

(Continued on next page)



### **ENGINE AND CONTROLS DRAWING**

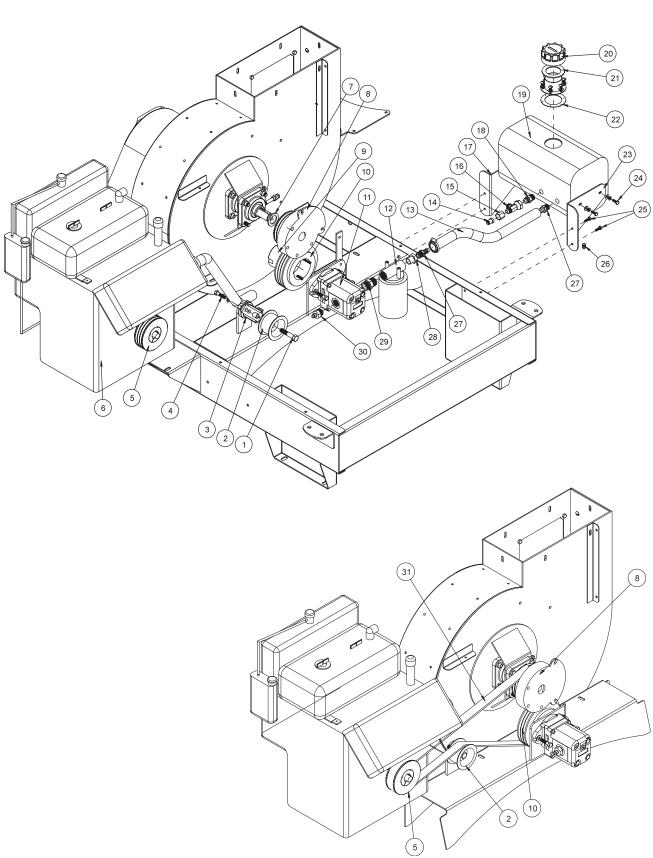




# ENGINE AND CONTROLS PARTS LIST

REF#	PART#	DESCRIPTION	QUANTITY
25	10-197	Exhaust Pipe	1
26	18-220	Muffler Clamp 1 <sup>1</sup> / <sub>4</sub>	1
27	50-403	In-line Fuel Filter	1
28	HSSHS-38-16-063	Set Screw <sup>3</sup> / <sub>8</sub> - 16 x <sup>5</sup> / <sub>8</sub> (part of 78-235)	2
29	78-235	Hub 1 <sup>1</sup> / <sub>8</sub>	1
30	78-332	Pulley	1
31	HKSQ-14-100	Machine Key 1/4 x 1/4 x 1	1
32	78-218	Engine, 22 HP Kawasaki	1
33	34-169	Coolant Tank Kit (part of engine)	1
34	15-314	Toggle Switch	1
	15-472	Switch Boot	1
35	78-368	Electric Clutch	1
36	76-340	Clutch Strap	1
37	HB-516-18-125	Bolt <sup>5</sup> / <sub>16</sub> - 18 x 1 <sup>1</sup> / <sub>4</sub>	2
	HW-516	Washer <sup>5</sup> / <sub>16</sub>	3
	HNTL-516-18	Lock Nut <sup>5</sup> / <sub>16</sub> - 18	2
38	78-370	Washer	1
39	HB-38-16-175	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 1 <sup>3</sup> / <sub>4</sub>	1
	HWL-38	Lockwasher 3/8	1







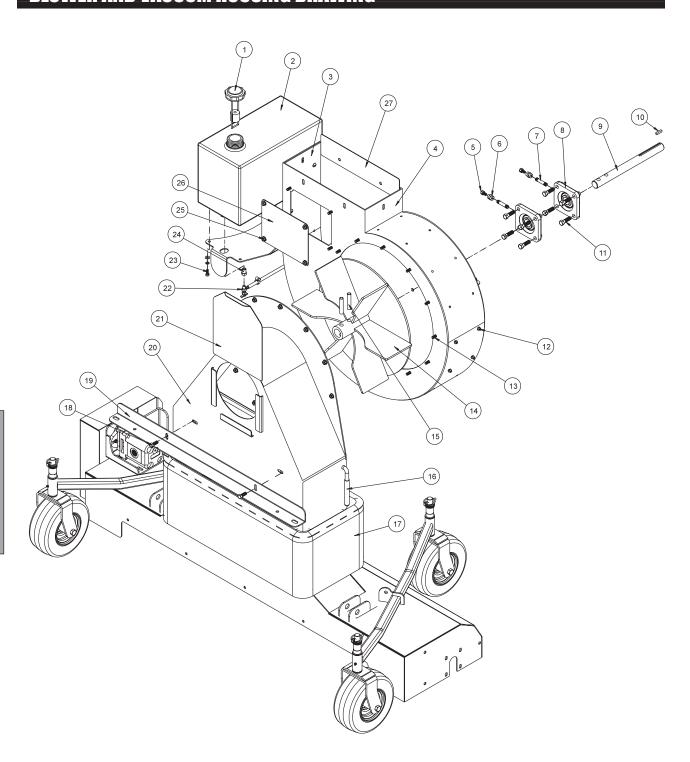
# PULLEY AND PUMP PARTS LIST

REF#	PART#	DESCRIPTION	QUANTITY
1	HB-12-13-250	Bolt $\frac{1}{2}$ - 13 x $2^{1}/_{2}$ (part of 78-224)	1
	HMB-12-14	Machine Bushing <sup>1</sup> / <sub>2</sub> - 14GA	2
	78-275	Spacer (part of 78-224)	1
	HNCL-12-13	Center Lock Nut 1/2 - 13 (part of 78-224)	1
2	16-013	Idler Pulley	1
3	78-224	Belt Tensioner	1
4	HB-38-16-100	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 1 (part of 78-224)	1
	HWL-38	Lockwasher <sup>3</sup> / <sub>8</sub> (part of 78-224)	1
5	78-232	Pulley	1
	78-235	Hub 1 <sup>1</sup> / <sub>8</sub>	1
	HSSHS-38-16-063	Set Screw <sup>3</sup> / <sub>8</sub> - 16 x <sup>5</sup> / <sub>8</sub> (part of 78-235)	2
6	78-218	Engine, 22 HP Kawasaki	1
7	HMB-114-10	Machine Bushing 11/4 x 10GA	1
8	78-368	Electric Clutch	1
9	78-236	Hub <sup>3</sup> / <sub>4</sub>	1
	HSSHS-12-13-100	Set Screw <sup>1</sup> / <sub>2</sub> - 13 x 1 (part of 78-236)	2
10	78-234	Pulley 3-Groove (pump)	1
11*	78-220	Hydraulic Pump	1
	HWK-316-063	Woodruff Key <sup>3</sup> / <sub>16</sub> x <sup>5</sup> / <sub>8</sub>	1
	78-220-01	Seal Kit Buna-N Compound (replacement part)	
	78-219-02	Drive Coupler (replacement Part)	
	HB-38-16-150	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 1 <sup>1</sup> / <sub>2</sub>	2
	HW-38	Washer <sup>3</sup> / <sub>8</sub>	4
40	HNTL-38-16	Lock Nut <sup>3</sup> / <sub>8</sub> - 16	2
12	23-006	Oil Filter	1
40	23-031	Replacement Filter Only	4
13	8917-14	Suction Hose 5/8 ID	1
4.4	18-222	Hose Clamp	2
14	34-128	Adapter	1
15 16	23-120	1/ <sub>2</sub> Tube Nut Run Tee	1
16 17	18-337	Front Oil Tank Bracket	1 1
18	78-278 23-121	Fitting	1
19	13-584	Oil Tank	1
20	13-586	Filter Breather	1
20	HSM-8-32-050	Machine Screw #8 - 32 x <sup>1</sup> / <sub>2</sub>	6
	HWS-8	Star Washer #8	6
21	13-586-01	Cap Gasket (part of 13-586)	1
22	13-586-02	Bottom Gasket (part of 13-586)	2
23	78-277	Rear Oil Tank Bracket	1
24	HB-14-20-075	Bolt <sup>1</sup> / <sub>4</sub> - 20 x <sup>3</sup> / <sub>4</sub>	4
27	HWL-14	Lockwasher <sup>1</sup> / <sub>4</sub>	4
	HW-14	Washer <sup>1</sup> / <sub>4</sub>	4
25	HB-14-20-075	Bolt <sup>1</sup> / <sub>4</sub> - 20 x <sup>3</sup> / <sub>4</sub>	4
20	HNFL-14-20	Flange Whiz Lock Nut 1/4 - 20	4
26	18-118	Pipe Plug <sup>1</sup> / <sub>8</sub>	1
27	23-139	Barb Fitting	2
28	18-008	Pipe Reducer	1
29	18-332	Adapter	1
30	18-331	Adapter	1
31	78-227	Belt	1

<sup>\*</sup> NO OTHER PARTS ARE REPLACEABLE FOR HYDRAULIC PUMP.



### **BLOWER AND VACUUM HOUSING DRAWING**

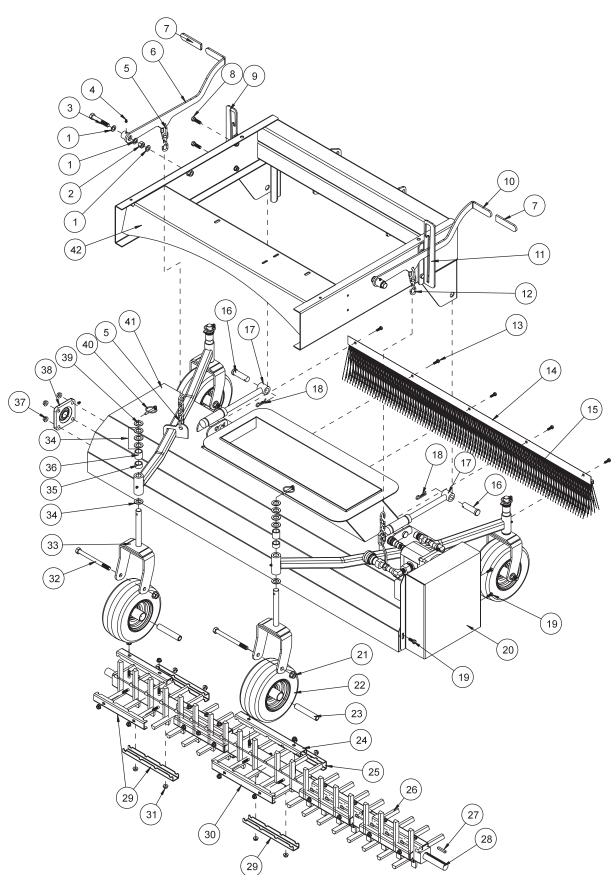




# **BLOWER AND VACUUM HOUSING PARTS LIST**

REF#	PART#	DESCRIPTION	QUANTITY
1	15-492	Cap w/ Gauge	1
2	15-491	Gas Tank, 5 Gallon w/ Insert	1
3	78-320	Blower Lining	1
4	78-256	Blower Housing	1
5	18-338	Male Connector	2
6	18-269	Coupling 1/8	2
7	18-027	Nipple <sup>1</sup> / <sub>8</sub> x 2	2
8	78-223	Mounted Bearing (11/8" Bore)	2
9	78-336	Vacuum Housing Shaft	1
10	HKSQ-14-100	Machine Key 1/4 x 1/4 x 1	1
11	HB-716-14-150	Bolt $^{7}/_{16}$ - 14 x $1^{1}/_{2}$	8
	HNTL-716-14	Lock Nut <sup>7</sup> / <sub>16</sub> - 14	8
12	HST-14-20-075	Truss Head Machine Screw 1/4 - 20 x 3/4	30
	HWF-14-150	Fender Washer, 1/4 x 11/2	30
	HNFL-14-20	Flange Whiz Lock Nut 1/4 - 20	30
13	HBF-516-18-075	Flange Bolt <sup>5</sup> / <sub>16</sub> -18 x <sup>3</sup> / <sub>4</sub>	12
	HNFL-516-18	Flange Whiz Lock Nut <sup>5</sup> / <sub>16</sub> - 18	12
14	78-301	Balanced Fan	1
15	78-347	Spiral Spring Pin	2
16	25-120	Handle Grip	1
17	78-243	Sweeper Boot	1
18	HB-38-16-100	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 1	2
	HNFL-38-16	Flange Whiz Lock Nut 3/8 - 16	2
19	78-276	Vacuum Housing Support	1
20	78-257	Vacuum Housing	1
	8803-80	Trim Black	1
21	78-293	Cover Plate	1
22	15-039	Fuel Valve	1
	8800-30	Fuel Hose 1/4 x 30"	1
	18-186	Hose Clamp	1
23	HB-14-20-075	Bolt <sup>1</sup> / <sub>4</sub> - 20 x <sup>3</sup> / <sub>4</sub>	4
	HWL-14	Lockwasher 1/4	4
	HW-14	Washer <sup>1</sup> / <sub>4</sub>	4
24	18-042	Reducer Bushing	1
25	HNFL-516-18	Flange Whiz Lock Nut 5/16 - 18	4
26	78-275	Access Panel	1
27	78-355	Splice	1





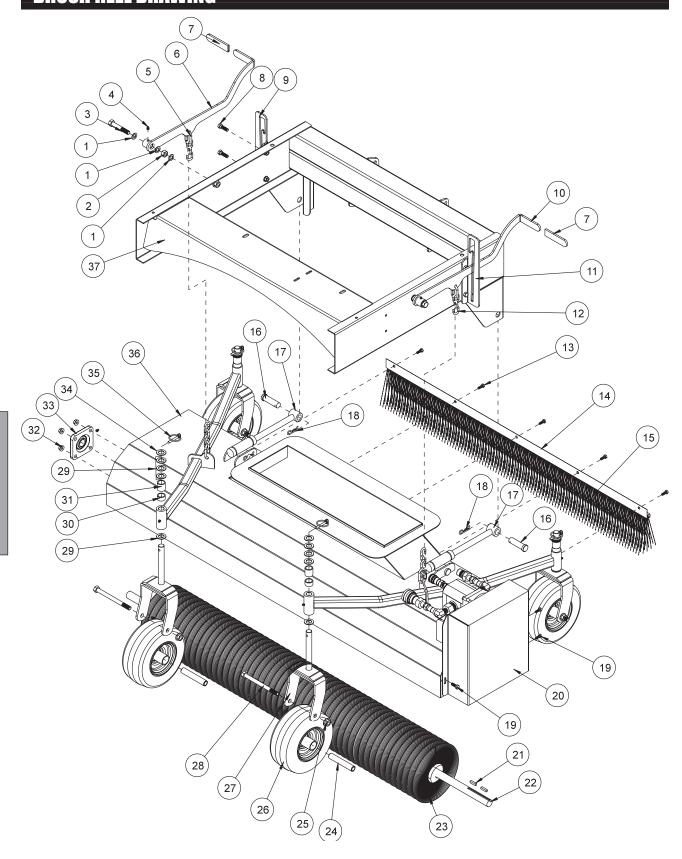


# FINGER REEL PARTS LIST

The color of the	D=="	DA D.T."	DECORIDEION	
2 HN-12-13 Nut ½- 13 x 3     HB-12-13-300 Bolt ⅓- 2-13 x 3     HNTL-12-13 Lock Nut ⅓- 13 2 4 HG-14-28-180 Grease Fitting ⅓- 28 x 180° 2 5 78-241 Chain Connector 4 6 78-284 Left Hand Deck Lift 1 7 15-020 Hand Grip 2 8 HB-38-16-125 Bolt ⅓- 16 x 1⅓- 4 HNTL-38-16 Lock Nut ⅓- 16 4 9 78-286 Left Hand Lift Arm Latch 1 10 78-283 Right Hand Deck Lift 1 11 78-285 Right Hand Lift arm Latch 1 12 8820-8 Machine Chain Straight Link 2 13 HB-14-20-075 Bolt ⅓- 20 x ⅓- 1 14 78-324 Strip Brush Holder (drilled) 1 15 78-322 Strip Brush Holder (drilled) 1 16 HCP-34-250 Clevis Pin ⅓- x 2½- 2 17 78-271 Reel Lift Rod 2 18 HHP-18 Bridge Pin ⅓- 18 x 1 19 HB-516-18-100 Bolt ⅓- 18 x 1 10 HNFL-1-12-13 Lock Nut ⅓- 13 20 78-309 Belt Guard 1 21 HNTT-12-13 Lock Nut ⅓- 13 22 42-202-01 Tire ŷ x 3 x 4 Ply 42-202-01 Tire ŷ x 3 x 4 Ply 42-202-01 Tire ŷ x 3 x 4 Ply 42-202-02 Wheel 42-202-01 Tire ŷ x 3 x 5 x 4 Ply 42-202-02 Wheel 42-202-01 Finger Clamp 10" 21 HNS-14-100 Machine Key ⅓- x ½- x 1 22 42-202 Tire û Wheel 42-202-01 Tire ŷ x 3 x 4 Ply 42-202-02 Wheel 42-202-01 Tire ŷ x 3 x 4 Ply 42-202-02 Wheel 42-202-01 Tire ŷ x 3 x 4 Ply 42-202-02 Wheel 42-202-01 Tire ŷ x 3 x 4 Ply 42-202-02 Wheel 42-202-01 Tire ŷ x 3 x 4 Ply 42-202-02 Wheel 42-202-01 Tire ŷ x 3 x 4 Ply 42-202-02 Wheel 42-202-01 Tire ŷ x 3 x 4 Ply 42-202-02 Wheel 42-202-01 Tire ŷ x 3 x 5 x 4 Ply 42-202-02 Wheel 42-202-01 Tire ŷ x 3 x 5 x 4 Ply 42-202-02 Wheel 42-202-01 Tire ŷ x 3 x 5 x 4 Ply 42-202-02 Wheel 42-202-01 Tire ŷ x 3 x 5 x 4 Ply 42-202-02 Wheel 42-202-01 Tire ŷ x 3 x 5 x 4 Ply 42-202-02 Wheel 42-202-01 Tire ŷ x 3 x 5 x 4 Ply 42-202-02 Wheel 42-202-01 Tire ŷ x 3 x 5 x 4 Ply 42-202-02 Wheel 42-202-01 Tire ŷ x 3 x 5 x 4 Ply 42-202-02 Wheel 42-202-01 Tire ŷ x 3 x 5 x 4 Ply 42-202-02 Wheel 42-202-01 Tire ŷ x 3 x 5 x 4 Ply 42-202-02 Wheel 42-202-0	REF#	PART#	DESCRIPTION Marking Production 1/2 and	QUANTITY
HB-12-13-300   Bolt ½ - 13 x 3   2			<u> </u>	
HNTL-12-13				
4 HG-14-28-180 Grease Fitting 1/4 - 28 x 180° 2 5 78-241 Chain Connector 4 6 78-284 Left Hand Deck Lift 1 7 15-020 Hand Grip 2 8 HB-38-16-125 Bolt 3/6 - 16 x 11/4 4 HNTL-38-16 Lock Nut 3/6 - 16 4 9 78-286 Left Hand Lift Arm Latch 1 10 78-283 Right hand Deck Lift 1 11 78-285 Right Hand Deck Lift 1 11 78-285 Right Hand Deck Lift 1 12 8820-8 Machine Chain Straight Link 2 13 HB-14-20-075 Bolt 1/4 - 20 x 3/4 5 HNFL-14-20 Flange Whiz Lock Nut 1/4 - 20 5 14 78-344 Strip Brush Holder (drilled) 1 15 78-322 Strip Brush Holder (drilled) 1 15 78-322 Strip Brush 1 16 HCP-34-250 Clevis Pin 3/4 x 21/2 4 17 78-271 Reel Lift Rod 2 18 HHP-18 Bridge Pin 1/6 4 19 HB-516-18-100 Bolt 3/6 - 18 x 1 19 HB-516-18-100 Bolt 3/6 - 18 x 1 20 78-309 Belt Guard 1 21 HNTL-12-13 Lock Nut 1/2 - 13 22 42-202 Tire 8 Wheel 4 42-202-01 Tire 9 x 3.5 x 4 Ply 42-202-02 Wheel 42-202-02 Wheel 42-202-02 Wheel 42-202-03 Finger Clamp 10.5° 1 28 42-213 Axle Bearing 4 27 78-287 Finger Clamp 10.5° 1 28 78-303 Finger Clamp 10.5° 1 29 78-297 Finger Clamp 10.7° 17 28 78-303 Finger Clamp 10.7° 17 28 78-304 HNFL-516-18 Flange Whiz Lock Nut 5/16 - 18 x 1 29 78-287 Finger Clamp 10.5° 1 30 78-306 Finger Clamp 10.7° 17 31 HNFL-516-18 Flange Whiz Lock Nut 5/16 - 18 x 1 32 HS-12-13-600 Bolt 1/2 - 13 x 1 33 42-214 Sweeper Finger Bar 1 34 78-287 Finger Clamp 10.7° 17 36 78-326 Finger Clamp 10.7° 17 37 78-327 Finger Clamp 10.5° 1 38 HB-14-13-60 Bolt 1/2 - 13 x 1 39 78-327 Finger Clamp 10.5° 1 30 78-326 Finger Clamp 10.7° 17 30 78-326 Finger Clamp 10.7° 17 30 78-326 Finger Clamp 10.8° 18 31 HNFL-516-18 Flange Whiz Lock Nut 5/16 - 18 32 HB-12-13-600 Bolt 1/2 - 13 x 6 42-215 Short Spacer 4 41 HMB-34-10 Machine Bushing 3/4 x 10GA 16 43 42-215 Short Spacer 4 41 HMB-34-10 Machine Bushing 3/4 x 10GA 16 41 78-258 Reel Housing 14	3			
5 78-241 Chain Connector 6 78-284 Left Hand Deck Lift 7 15-020 Hand Grip 2 Hand Grip 2 HB-38-16-125 Bolt <sup>3</sup> / <sub>16</sub> - 16 x 1 <sup>1</sup> / <sub>4</sub> 4 HNTL-38-16 Lock Nut <sup>3</sup> / <sub>6</sub> - 16 9 78-286 Left Hand Lift Arm Latch 1 78-283 Right Hand Lift Arm Latch 1 78-285 Right Hand Lift Arm Latch 1 1 78-285 Right Hand Lift arm Latch 1 1 8820-8 Machine Chain Straight Link 2 13 HB-14-20-075 Bolt <sup>1</sup> / <sub>4</sub> - 20 x <sup>3</sup> / <sub>4</sub> 5 HNFL-14-20 Flange Whiz Lock Nut <sup>1</sup> / <sub>4</sub> - 20 5 14 78-344 Strip Brush Holder (drilled) 1 5 78-322 Strip Brush 1 6 HCP-34-250 Clevis Pin <sup>3</sup> / <sub>4</sub> x x 2 <sup>1</sup> / <sub>2</sub> 1 8 HHP-18 Bridge Pin <sup>1</sup> / <sub>6</sub> 1 9 HB-516-18-100 Bolt <sup>3</sup> / <sub>16</sub> - 18 x 1 1 9 HB-516-18-100 Bolt <sup>3</sup> / <sub>16</sub> - 18 x 1 2 0 78-309 Belt Guard 2 1 HNTL-12-13 Lock Nut <sup>1</sup> / <sub>2</sub> - 13 2 42-202 Tire 8 Wheel 2 42-202-01 Tire 9 x 3.5 x 4 Ply 4 42-202-02 Wheel 4 42-202-01 Tire 9 x 3.5 x 4 Ply 4 42-202-02 Tire 9 x 3.5 x 4 Ply 4 42-203-14-1400 Machine Key <sup>1</sup> / <sub>14</sub> x <sup>1</sup> / <sub>14</sub> x 1 2 78-327 Finger Clamp 10.5" 1 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>16</sub> - 18 1 1 HNFL-516-18 Flange Whiz Lock Nut <sup>3</sup> / <sub>1</sub>	4			2
6 78-284 Left Hand Deck Lift 7 15-020 Hand Grip 2 18 HB-38-16-125 Bolt ³/s- 16 x 11/s 4 HNTL-38-16 Lock Nut ³/s- 16 9 78-286 Left Hand Lift Arm Latch 1 1 78-285 Right hand Deck Lift 11 78-285 Right Hand Deck Lift 11 78-285 Right Hand Lift arm Latch 11 78-285 Right Hand Lift arm Latch 12 8820-8 Machine Chain Straight Link 2 13 HB-14-20-075 Bolt ³/s- 20 x ³/s HNFL-14-20 Flange Whiz Lock Nut ¹/s- 20 5 HNFL-14-20 Flange Whiz Lock Nut ¹/s- 20 5 Strip Brush Holder (amiled) 1 5 78-322 Strip Brush 1 6 HCP-34-250 Clevis Pin ³/s x 2 ¹/s 17 78-271 Reel Lift Rod 2 2 Strip Brush 19 HB-516-18-100 Bolt ³/s- 18 x 1 19 HB-516-18-100 Bolt ³/s- 18 x 1 19 HNFL-516-18 Flange Whiz Lock Nut ⁵/s- 18 20 78-309 Belt Guard 21 HNTL-12-13 Lock Nut ¹/s- 13 22 42-202 Tire & Wheel 42-202-02 Wheel 42-202-02 Wheel 42-202-02 Wheel 42-202-03 Axle Bearing 44 42-202-02 478-287 Finger Clamp 10.5" 1 78-327 Finger Clamp 10.5" 1 78-327 Finger Clamp 10.5" 1 1 28 78-303 Finger Clamp 10.5" 1 1 28 78-303 Finger Clamp 10.5" 1 1 29 78-297 Finger Clamp 10" 1 78-327 Finger Clamp 10.5" 1 1 28 78-327 Finger Clamp 10.5" 1 29 78-242 Sweeper Finger 3 42-213 Finger Clamp 10.5" 1 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
7         15-020         Hand Grip         2           8         HB-38-16-125         Bolt ³/s - 16 x 1¹/s         4           HNTL-38-16         Lock Nut ³/s - 16         4           9         78-286         Left Hand Lift Arm Latch         1           10         78-283         Right Hand Deck Lift         1           11         78-285         Right Hand Lift Arm Latch         1           12         8820-8         Machine Chain Straight Link         2           13         HB-14-20-075         Bolt ¹/s - 20 x ³/s         5           HNFL-14-20         Flange Whiz Lock Nut ¹/s - 20         5           14         78-344         Strip Brush Holder (drilled)         1           15         78-322         Strip Brush Holder (drilled)         1           16         HCP-34-250         Clevis Pin ³/s x 2¹/₂         4           17         78-271         Reel Lift Rod         2           18         HHP-18         Bridge Pin ¹/s         4           19         HB-516-18-100         Bolt ³/s - 18 x 1         3           20         78-309         Belt Guard         1           21         HNTL-12-13         Lock Nut ¹/₂ - 13         4				
8 HB-38-16-125 Bolt ³/ <sub>8</sub> - 16 x 11/ <sub>4</sub> HNTL-38-16 Lock Nut ³/ <sub>8</sub> - 16 9 78-286 Left Hand Lift Arm Latch 10 78-283 Right hand Deck Lift 11 78-285 Right Hand Lift arm Latch 11 78-285 Right Hand Lift arm Latch 12 8820-8 Machine Chain Straight Link 2 HB-14-20-075 Bolt ¹/ <sub>4</sub> - 20 x ³/ <sub>4</sub> HNFL-14-20 Flange Whiz Lock Nut ¹/ <sub>4</sub> - 20 5 HNFL-14-20 Flange Whiz Lock Nut ¹/ <sub>4</sub> - 20 14 78-344 Strip Brush Holder (drilled) 15 78-322 Strip Brush 1 16 HCP-34-250 Clevis Pin ³/ <sub>4</sub> x 2¹/ <sub>2</sub> 17 78-271 Reel Lift Rod 2 Reel Lift Rod 2 Reel Lift Rod 2 Reel Lift Rod 3 HHF-18 Bridge Pin ¹/ <sub>6</sub> 19 HB-516-18-100 Bolt ³/ <sub>16</sub> - 18 x 1 HNFL-516-18 Flange Whiz Lock Nut ³/ <sub>16</sub> - 18 20 78-309 Belt Guard 21 HNTL-12-13 Lock Nut ¹/ <sub>2</sub> - 13 22 42-202 Tire & Wheel 42-202-01 Tire 9 x 3.5 x 4 Ply 42-202-02 Wheel 42-202-02 Wheel 42-202-01 Tire 9 x 3.5 x 4 Ply 42-202-02 Wheel 42-3 A42-887 Finger Clamp 13" 1 Finger Clamp 13" 1 Finger Clamp 10.5" 1 Tire Sweper Finger 3 R-327 Finger Clamp 10.5" 1 Tire Reel Bar 1 HKSQ-14-100 Machine Key ¹/ <sub>4</sub> x ¹/ <sub>4</sub> x 1 1 R-327 Finger Clamp 10.5" 1 Tire Reel Bar 1 HKSQ-14-100 Machine Key ¹/ <sub>4</sub> x ¹/ <sub>4</sub> x 1 1 R-326 Finger Clamp 10" 17 R-326 Finger Clamp 10" 17 R-327 Finger Clamp 10" 18 R-328 Finger Clamp 10" 19 R-326 Finger Clamp 10" 17 R-327 Finger Clamp 10" 18 R-328 Finger Clamp 10" 19 R-326 Finger Clamp 10" 10 R-326 Finger Clamp 10" 11 R-15-16-18 Flange Whiz Lock Nut ⁵/ <sub>16</sub> - 18 10 HNFL-516-18 Flange Whiz Lock Nut ⁵/ <sub>16</sub> - 18 10 HNFL-516-18 Flange Whiz Lock Nut ⁵/ <sub>16</sub> - 18 10 HNFL-516-18 Flange Whiz Lock Nut ⁵/ <sub>16</sub> - 18 10 HNFL-516-18 Flange Whiz Lock Nut ⁵/ <sub>16</sub> - 18 10 HNFL-38-16 Flange Whiz Lock Nut ⁵/ <sub>16</sub> - 18 10 HNFL-38-16 Flange Whiz Lock Nut ⁵/ <sub>16</sub> - 18 10 HNFL-38-16 Flange Whiz Lock Nut ⁵/ <sub>16</sub> - 18 10 HNFL-38-16 Flange Whiz Lock Nut ⁵/ <sub>16</sub> - 18 10 HNFL-38-16 Flange Whiz Lock Nut ⁵/ <sub>16</sub> - 18 10 HNFL-38-16 Flange Whiz Lock Nut ⁵/ <sub>16</sub> - 18 10 HNFL-38-16 Flange Whiz Lock Nut ⁵/ <sub>16</sub> - 18 10 HNFL-38-16 Flange Whiz Lock Nut ⁵/ <sub>16</sub> - 18 10 HNFL-38-16 Flange Whiz Lock Nut ⁵/ <sub>16</sub> - 18 10 HNFL-38-16 Flange Whiz Lock Nut ⁵/ <sub>16</sub>				
HNTL-38-16			•	
9 78-286 Left Hand Lift Arm Latch 10 78-283 Right Hand Deck Lift 11 78-285 Right Hand Lift arm Latch 12 8820-8 Machine Chain Straight Link 2 HB-14-20-075 Bolt "1- 20 x 3/4 5  HB-14-200 Flange Whiz Lock Nut "14- 20 5  14 78-344 Strip Brush Holder (drilled) 15 78-322 Strip Brush 1 16 HCP-34-250 Clevis Pin "1/4 x 21/2 4  17 78-271 Reel Lift Rod 2 18 HHP-18 Bridge Pin "1/6 4  19 HB-516-18-100 Bolt "1/6 - 18 x 1  19 HB-516-18-100 Bolt "1/6 - 18 x 1  20 78-309 Belt Guard 1  21 HNTL-12-13 Lock Nut "1/2 - 13  22 42-202 Tire & Wheel 4  42-202-01 Tire 9 x 3.5 x 4 Ply 4  42-202-02 Wheel 4  42-202-02 Wheel 4  42-202-01 Finger Clamp 13" 1  25 78-327 Finger Clamp 10.5" 1  26 78-242 Sweeper Finger 81  27 HKSQ-14-100 Machine Key "1/4 x 1/4 x 1 1  28 78-397 Finger Clamp 10.5" 1  29 78-297 Finger Clamp 12" 1  30 78-326 Finger Clamp 12" 1  31 HNFL-516-18 Flange Whiz Lock Nut \$\frac{6}{16} = 18 \tag{1} \tag{1} \tag{1} \tag{2} \tag{3} \tag{4} \tag{2} 2	8			
10	0			
11 78-285 Right Hand Lift arm Latch 12 8820-8 Machine Chain Straight Link 2 13 HB-14-20-075 Bolt 1/4 - 20 x 3/4 HNFL-14-20 Flange Whiz Lock Nut 1/4 - 20 5 HNFL-14-20 Flange Whiz Lock Nut 1/4 - 20 5 78-344 Strip Brush Holder (drilled) 1 1 15 78-322 Strip Brush 1 1 16 HCP-34-250 Clevis Pin 3/4 x 21/2 4 78-271 Reel Lift Rod 2 2 HR HHP-18 Bridge Pin 1/8 4 HHP-18 Bridge Pin 1/8 4 HNFL-516-18 Flange Whiz Lock Nut 5/16 - 18 20 78-309 Belt Guard 1 HNTL-12-13 Lock Nut 1/2 - 13 21 HNTL-12-13 Lock Nut 1/2 - 13 22 42-202 Tire 8 Wheel 42-202-01 Tire 9 x 3.5 x 4 Ply 42-202-02 Wheel 42-202-02 Wheel 42-202-03 Finger Clamp 13" 1 78-327 Finger Clamp 10.5" 1 78-327 Finger Clamp 10.5" 1 78-329 Finger Clamp 10.5" 1 78-320 Finger Clamp 10.5" 1 78-321 HKSQ-14-100 Machine Key 1/4 x 1/4 x 1 1 1 28 78-303 Finger Reel Bar 1 1 29 78-297 Finger Clamp 10" 17 78-326 Finger Clamp 10" 17 78-326 Finger Clamp 10" 30 78-326 Finger Clamp 10" 31 HNFL-516-18 Flange Whiz Lock Nut 5/16 - 18 40 41 HMB-34-10 Machine Bushing 3/4 x 10GA 41 HMB-34-10 Machine Bushing 3/4 x 10GA 42-214 Long Spacer 4 HHB-38-16-125 Bolt 1/2 - 13 x 6 4 42-2214 Long Spacer 4 HNFL-38-16 Flange Whiz Lock Nut 3/4 - 16 4 HB-38-16-125 Bolt 1/4 - 16 x 11/4 4 HMB-34-14 Machine Bushing 3/4 x 10GA 4 HMB-34-14 Machine Bushing 1/4 x 14GA 4 42-539 Lynch Pin 5/16 4 178-258 Reel Housing 1 10-025 Flange Bushing (part of 78-258) 8 803-80 Trim Black				
12   8820-8   Machine Chain Straight Link   2     13   HB-14-20-075   Bolt 1/a - 20 x 3/a   5     HNFL-14-20   Flange Whiz Lock Nut 1/a - 20   5     14   78-344   Strip Brush Holder (drilled)   1     15   78-322   Strip Brush   1     16   HCP-34-250   Clevis Pin 3/a x 2 1/2   4     17   78-271   Reel Lift Rod   2     18   HHP-18   Bridge Pin 1/a   4     19   HB-516-18-100   Bolt 5/1a - 18 x 1   3     HNFL-516-18   Flange Whiz Lock Nut 5/1a - 18   3     20   78-309   Belt Guard   1     21   HNTL-12-13   Lock Nut 1/2 - 13   4     22   42-202   Tire & Wheel   4     42-202-02   Wheel   4     42-202-02   Wheel   4     42-202-02   Wheel   4     42-202-03   Axle Bearing   4     24   78-287   Finger Clamp 13"   1     25   78-327   Finger Clamp 10.5"   1     26   78-242   Sweeper Finger   8     27   HKSQ-14-100   Machine Key 1/a x 1/a x 1   1     28   78-303   Finger Reel Bar   1     29   78-297   Finger Clamp 10"   17     30   78-326   Finger Clamp 10"   17     30   78-326   Finger Clamp 10"   17     31   HNFL-516-18   Flange Whiz Lock Nut 5/16 - 18   40     32   HB-12-13-600   Bolt 1/2 - 13 x 6   4     4   42-214   Long Spacer   4     34   HMB-34-10   Machine Bushing 3/4 x 10GA   16     35   42-214   Long Spacer   4     4   40   42-539   Lynch Pin 5/16   10     40   42-539   Lynch Pin 5/16   4     40   42-539   Lynch Pin 5/16   8     80   800-80   Trim Black   1			· ·	
13				
HNFL-14-20				
14 78-344 Strip Brush Holder (drilled) 15 78-322 Strip Brush 16 HCP-34-250 Clevis Pin 3/4 x 21/2 17 78-271 Reel Lift Rod 2 2 18 HHP-18 Bridge Pin 1/6 19 HB-516-18-100 Bolt \$\frac{1}{16} \cdot - 18 \cdot 18\tag{1} 19 HNFL-516-18 Flange Whiz Lock Nut \$\frac{1}{16} \cdot - 18\tag{2} 20 78-309 Belt Guard 21 HNTL-12-13 Lock Nut 1/2 - 13 22 42-202 Tire & Wheel 42-202-01 Tire 9 x 3.5 x 4 Ply 42-202-02 Wheel 23 42-213 Axle Bearing 24 78-287 Finger Clamp 13" 25 78-327 Finger Clamp 10.5" 26 78-242 Sweeper Finger 27 HKSQ-14-100 Machine Key 1/4 x 1/4 x 1 28 78-303 Finger Reel Bar 27 HKSQ-14-100 Machine Key 1/4 x 1/4 x 1 28 78-297 Finger Clamp 10" 17 30 78-326 Finger Clamp 10" 17 30 78-326 Finger Clamp 12" 1 1 31 HNFL-516-18 Flange Whiz Lock Nut \$\frac{1}{16} \cdot - 18\tag{2} 34 2-204 Castor Fork 4 42-204 Castor Fork 4 41 HMB-34-10 Machine Bushing \$\frac{3}{14} \times 10GA 35 42-214 Long Spacer 4 40 42-539 Lynch Pin \$\frac{1}{16} \times 11/2 \times 10GA 40 42-539 Lynch Pin \$\frac{1}{16} \times 11/2 \times 10GA 5 HB-32-58 Reel Housing 1 1 1 78-258 Reel Housing 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	13			
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16 HCP-34-250 Clevis Pin <sup>3</sup> / <sub>4</sub> x 2 <sup>1</sup> / <sub>2</sub> 4 17 78-271 Reel Lift Rod 2 18 HHP-18 Bridge Pin <sup>1</sup> / <sub>6</sub> 4 19 HB-516-18-100 Bolt <sup>5</sup> / <sub>16</sub> - 18 x 1 3 1 HNFL-516-18 Flange Whiz Lock Nut <sup>5</sup> / <sub>16</sub> - 18 3 20 78-309 Belt Guard 1 21 HNTL-12-13 Lock Nut <sup>1</sup> / <sub>2</sub> - 13 4 22 42-202 Tire & Wheel 4 42-202-01 Tire 9 x 3.5 x 4 Ply 42-202-02 Wheel 42-213 Axle Bearing 4 23 42-213 Axle Bearing 4 24 78-287 Finger Clamp 13" 1 25 78-327 Finger Clamp 10.5" 1 26 78-242 Sweeper Finger 81 27 HKSQ-14-100 Machine Key <sup>1</sup> / <sub>4</sub> x <sup>1</sup> / <sub>4</sub> x 1 1 28 78-303 Finger Reel Bar 1 29 78-297 Finger Clamp 10" 17 30 78-326 Finger Clamp 10" 17 30 78-326 Finger Clamp 12" 1 31 HNFL-516-18 Flange Whiz Lock Nut <sup>5</sup> / <sub>16</sub> - 18 40 32 HB-12-13-600 Bolt <sup>1</sup> / <sub>2</sub> - 13 x 6 4 33 42-204 Castor Fork 4 34 HMB-34-10 Machine Bushing <sup>3</sup> / <sub>4</sub> x 10GA 16 35 42-215 Short Spacer 4 37 HNFL-38-16 Flange Whiz Lock Nut <sup>3</sup> / <sub>4</sub> - 16 8 HB-38-16-125 Bolt <sup>3</sup> / <sub>4</sub> - 16 x 1 <sup>1</sup> / <sub>4</sub> & 8 38 78-222 Mounted Bearing (1" bore) 2 39 HMB-34-14 Machine Bushing <sup>3</sup> / <sub>4</sub> x 14GA 4 40 42-539 Lynch Pin <sup>5</sup> / <sub>16</sub> 18 803-80 Trim Black 1				
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18 HHP-18 Bridge Pin ¹/₅  19 HB-516-18-100 Bolt ⁵/₁₅ - 18 x 1  20 78-309 Belt Guard  21 HNTL-12-13 Lock Nut ¹/₂ - 13  22 42-202 Tire & Wheel  42-202-01 Tire 9 x 3.5 x 4 Ply  42-202-02 Wheel  23 42-213 Axle Bearing  4 4  24 78-287 Finger Clamp 13"  25 78-327 Finger Clamp 10.5"  26 78-242 Sweeper Finger  27 HKSQ-14-100 Machine Key ¹/₄ x ¹/₄ x 1  28 78-303 Finger Reel Bar  29 78-297 Finger Clamp 10"  10 78-326 Finger Clamp 10"  30 78-326 Finger Clamp 10"  31 HNFL-516-18 Flange Whiz Lock Nut ⁵/₁₅ - 18  40 HB-34-10 Machine Bushing ³/₄ x 10GA  34 HMB-34-10 Machine Bushing ³/₄ x 10GA  35 42-215 Short Spacer  4 HNFL-38-16 Flange Whiz Lock Nut ³/₄ - 16  36 42-214 Long Spacer  4 HB-38-16-125 Bolt ³/₄ - 16 x ¹/₄  38 78-222 Mounted Bearing (1" bore)  29 HMB-34-14 Machine Bushing ³/₄ x 14GA  40 42-539 Lynch Pin ⁵/₁₅  40 Filange Whiz Lock Nut ³/₄ - 16  41 Re-358 Reel Housing  41 HB-36-1005 Flange Whiz Lock Nut ³/₄ - 16  42 Flange Bushing (part of 78-258)  43 Reel Housing  44 HMB-34-14 Machine Bushing (part of 78-258)  45 B803-80 Trim Black				
19 HB-516-18-100 Bolt 5/16 - 18 x 1 HNFL-516-18 Flange Whiz Lock Nut 5/16 - 18  20 78-309 Belt Guard 1 HNTL-12-13 Lock Nut 1/2 - 13  21 HNTL-12-13 Lock Nut 1/2 - 13  22 42-202 Tire & Wheel 42-202-01 Tire 9 x 3.5 x 4 Ply 42-202-02 Wheel 23 42-213 Axle Bearing 24 78-287 Finger Clamp 13" 11 25 78-327 Finger Clamp 10.5" 11 26 78-242 Sweeper Finger 27 HKSQ-14-100 Machine Key 1/4 x 1/4 x 1 1 1 28 78-303 Finger Reel Bar 1 1 29 78-297 Finger Clamp 10" 17 30 78-326 Finger Clamp 10" 17 30 78-326 Finger Clamp 12" 11 31 HNFL-516-18 Flange Whiz Lock Nut 5/16 - 18 40 32 HB-12-13-600 Bolt 1/2 - 13 x 6 33 42-204 Castor Fork 44 34 HMB-34-10 Machine Bushing 3/4 x 10GA 35 42-215 Short Spacer 4 37 HNFL-38-16 Flange Whiz Lock Nut 3/4 - 16 38 78-222 Mounted Bearing (1" bore) 29 HMB-34-14 Machine Bushing 3/4 x 14GA 40 42-539 Lynch Pin 5/16 41 78-258 Reel Housing 10-025 Flange Bushing (part of 78-258) 8803-80 Trim Black				
HNFL-516-18 Flange Whiz Lock Nut <sup>5</sup> / <sub>16</sub> - 18 3  20 78-309 Belt Guard 1  21 HNTL-12-13 Lock Nut <sup>1</sup> / <sub>2</sub> - 13 4  22 42-202 Tire & Wheel 4  42-202-01 Tire 9 x 3.5 x 4 Ply 4  42-202-02 Wheel 4  23 42-213 Axle Bearing 4  24 78-287 Finger Clamp 13" 1  25 78-327 Finger Clamp 10.5" 1  26 78-242 Sweeper Finger 81  27 HKSQ-14-100 Machine Key <sup>1</sup> / <sub>4</sub> x <sup>1</sup> / <sub>4</sub> x 1 1  28 78-303 Finger Reel Bar 1  29 78-297 Finger Clamp 10" 17  30 78-326 Finger Clamp 10" 17  30 78-326 Finger Clamp 10" 17  31 HNFL-516-18 Flange Whiz Lock Nut <sup>6</sup> / <sub>16</sub> - 18 40  32 HB-12-13-600 Bolt <sup>1</sup> / <sub>2</sub> - 13 x 6 4  33 42-204 Castor Fork 4  34 HMB-34-10 Machine Bushing <sup>3</sup> / <sub>4</sub> x 10GA 16  35 42-215 Short Spacer 4  36 42-214 Long Spacer 4  37 HNFL-38-16 Flange Whiz Lock Nut <sup>3</sup> / <sub>4</sub> - 16 8  HB-38-16-125 Bolt <sup>3</sup> / <sub>4</sub> - 16 x 1 <sup>1</sup> / <sub>4</sub> 8  38 78-222 Mounted Bearing (1" bore) 2  39 HMB-34-14 Machine Bushing <sup>3</sup> / <sub>4</sub> x 14GA 4  40 42-539 Lynch Pin <sup>5</sup> / <sub>16</sub> 4  41 78-258 Reel Housing 10 Flange Bushing (part of 78-258) 8  803-80 Trim Black 1				
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22       42-202       Tire & Wheel       4         42-202-01       Tire 9 x 3.5 x 4 Ply       4         42-202-02       Wheel       4         23       42-213       Axle Bearing       4         24       78-287       Finger Clamp 13"       1         25       78-327       Finger Clamp 10.5"       1         26       78-242       Sweeper Finger       81         27       HKSQ-14-100       Machine Key ½ x ½ x ½ x 1       1         28       78-303       Finger Reel Bar       1         29       78-297       Finger Clamp 10"       17         30       78-326       Finger Clamp 12"       1         31       HNFL-516-18       Flange Whiz Lock Nut ⁵/₁6 - 18       40         32       HB-12-13-600       Bolt ½ - 13 x 6       4         33       42-204       Castor Fork       4         34       HMB-34-10       Machine Bushing ³/₄ x 10GA       16         35       42-215       Short Spacer       4         36       42-214       Long Spacer       4         37       HNFL-38-16       Flange Whiz Lock Nut ³/₄ - 16       8         HB-38-16-125       Bolt ³/₄ - 16 x 1¹/₄				
42-202-01       Tire 9 x 3.5 x 4 Ply       4         42-202-02       Wheel       4         23       42-213       Axle Bearing       4         24       78-287       Finger Clamp 13"       1         25       78-327       Finger Clamp 10.5"       1         26       78-242       Sweeper Finger       81         27       HKSQ-14-100       Machine Key <sup>1</sup> / <sub>4</sub> x <sup>1</sup> / <sub>4</sub> x 1       1         28       78-303       Finger Reel Bar       1         29       78-297       Finger Clamp 10"       17         30       78-326       Finger Clamp 12"       1         31       HNFL-516-18       Flange Whiz Lock Nut <sup>5</sup> / <sub>16</sub> - 18       40         32       HB-12-13-600       Bolt <sup>1</sup> / <sub>2</sub> - 13 x 6       4         33       42-204       Castor Fork       4         34       HMB-34-10       Machine Bushing <sup>3</sup> / <sub>4</sub> x 10GA       16         35       42-215       Short Spacer       4         36       42-214       Long Spacer       4         37       HNFL-38-16       Flange Whiz Lock Nut <sup>3</sup> / <sub>4</sub> - 16       8         HB-38-16-125       Bolt <sup>3</sup> / <sub>4</sub> - 16 x 1 <sup>1</sup> / <sub>4</sub> 8         38       78-222 <td></td> <td></td> <td></td> <td></td>				
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23       42-213       Axle Bearing       4         24       78-287       Finger Clamp 13"       1         25       78-327       Finger Clamp 10.5"       1         26       78-242       Sweeper Finger       81         27       HKSQ-14-100       Machine Key ½x 1¼x 1       1         28       78-303       Finger Reel Bar       1         29       78-297       Finger Clamp 10"       17         30       78-326       Finger Clamp 12"       1         31       HNFL-516-18       Flange Whiz Lock Nut ⁵/₁6 - 18       40         32       HB-12-13-600       Bolt ½-2-13 x 6       4         33       42-204       Castor Fork       4         34       HMB-34-10       Machine Bushing ³/₄ x 10GA       16         35       42-215       Short Spacer       4         36       42-214       Long Spacer       4         37       HNFL-38-16       Flange Whiz Lock Nut ³/₄ - 16       8         HB-38-16-125       Bolt ³/₄ - 16 x 1¹/₄       8         38       78-222       Mounted Bearing (1" bore)       2         39       HMB-34-14       Machine Bushing ³/₄ x 14GA       4         40				
24       78-287       Finger Clamp 13"       1         25       78-327       Finger Clamp 10.5"       1         26       78-242       Sweeper Finger       81         27       HKSQ-14-100       Machine Key ½ x ¼ x 1       1         28       78-303       Finger Reel Bar       1         29       78-297       Finger Clamp 10"       17         30       78-326       Finger Clamp 12"       1         31       HNFL-516-18       Flange Whiz Lock Nut ⁵/₁6 - 18       40         32       HB-12-13-600       Bolt ½ - 13 x 6       4         33       42-204       Castor Fork       4         34       HMB-34-10       Machine Bushing ³/₄ x 10GA       16         35       42-215       Short Spacer       4         36       42-214       Long Spacer       4         37       HNFL-38-16       Flange Whiz Lock Nut ³/₄ - 16       8         HB-38-16-125       Bolt ³/₄ - 16 x 1¹/₄       8         38       78-222       Mounted Bearing (1" bore)       2         39       HMB-34-14       Machine Bushing ³/₄ x 14GA       4         40       42-539       Lynch Pin ⁵/₁6       4         41 <td></td> <td></td> <td></td> <td></td>				
25       78-327       Finger Clamp 10.5"       1         26       78-242       Sweeper Finger       81         27       HKSQ-14-100       Machine Key ½ x ½ x 1       1         28       78-303       Finger Reel Bar       1         29       78-297       Finger Clamp 10"       17         30       78-326       Finger Clamp 12"       1         31       HNFL-516-18       Flange Whiz Lock Nut ⁵/16 - 18       40         32       HB-12-13-600       Bolt ½ - 13 x 6       4         33       42-204       Castor Fork       4         34       HMB-34-10       Machine Bushing ³/4 x 10GA       16         35       42-215       Short Spacer       4         36       42-214       Long Spacer       4         37       HNFL-38-16       Flange Whiz Lock Nut ³/4 - 16       8         HB-38-16-125       Bolt ³/4 - 16 x 1¹/4       8         38       78-222       Mounted Bearing (1" bore)       2         39       HMB-34-14       Machine Bushing ³/4 x 14GA       4         40       42-539       Lynch Pin ⁵/16       4         41       78-258       Reel Housing       1         10-025 <td></td> <td></td> <td></td> <td></td>				
26       78-242       Sweeper Finger       81         27       HKSQ-14-100       Machine Key ¹/₄ x ¹/₄ x 1       1         28       78-303       Finger Reel Bar       1         29       78-297       Finger Clamp 10"       17         30       78-326       Finger Clamp 12"       1         31       HNFL-516-18       Flange Whiz Lock Nut ⁵/₁6 - 18       40         32       HB-12-13-600       Bolt ¹/₂ -13 x 6       4         33       42-204       Castor Fork       4         34       HMB-34-10       Machine Bushing ³/₄ x 10GA       16         35       42-215       Short Spacer       4         36       42-214       Long Spacer       4         37       HNFL-38-16       Flange Whiz Lock Nut ³/₄ - 16       8         HB-38-16-125       Bolt ³/₄ - 16 x 1¹/₄       8         38       78-222       Mounted Bearing (1" bore)       2         39       HMB-34-14       Machine Bushing ³/₄ x 14GA       4         40       42-539       Lynch Pin ⁵/₁6       4         41       78-258       Reel Housing       1         10-025       Flange Bushing (part of 78-258)       8         803-80 <td></td> <td></td> <td></td> <td></td>				
27       HKSQ-14-100       Machine Key ¹/₄ x ¹/₄ x 1       1         28       78-303       Finger Reel Bar       1         29       78-297       Finger Clamp 10"       17         30       78-326       Finger Clamp 12"       1         31       HNFL-516-18       Flange Whiz Lock Nut ⁵/₁6 - 18       40         32       HB-12-13-600       Bolt ¹/₂ -13 x 6       4         33       42-204       Castor Fork       4         34       HMB-34-10       Machine Bushing ³/₄ x 10GA       16         35       42-215       Short Spacer       4         36       42-214       Long Spacer       4         37       HNFL-38-16       Flange Whiz Lock Nut ³/₄ - 16       8         HB-38-16-125       Bolt ³/₄ - 16 x 1¹/₄       8         38       78-222       Mounted Bearing (1" bore)       2         39       HMB-34-14       Machine Bushing ³/₄ x 14GA       4         40       42-539       Lynch Pin ⁵/₁6       4         41       78-258       Reel Housing       1         10-025       Flange Bushing (part of 78-258)       8         803-80       Trim Black       1				
28       78-303       Finger Reel Bar       1         29       78-297       Finger Clamp 10"       17         30       78-326       Finger Clamp 12"       1         31       HNFL-516-18       Flange Whiz Lock Nut <sup>5</sup> / <sub>16</sub> - 18       40         32       HB-12-13-600       Bolt <sup>1</sup> / <sub>2</sub> -13 x 6       4         33       42-204       Castor Fork       4         34       HMB-34-10       Machine Bushing <sup>3</sup> / <sub>4</sub> x 10GA       16         35       42-215       Short Spacer       4         36       42-214       Long Spacer       4         37       HNFL-38-16       Flange Whiz Lock Nut <sup>3</sup> / <sub>4</sub> - 16       8         HB-38-16-125       Bolt <sup>3</sup> / <sub>4</sub> - 16 x 1 <sup>1</sup> / <sub>4</sub> 8         38       78-222       Mounted Bearing (1" bore)       2         39       HMB-34-14       Machine Bushing <sup>3</sup> / <sub>4</sub> x 14GA       4         40       42-539       Lynch Pin <sup>5</sup> / <sub>16</sub> 4         41       78-258       Reel Housing       1         10-025       Flange Bushing (part of 78-258)       8         803-80       Trim Black       1			, ,	
29       78-297       Finger Clamp 10"       17         30       78-326       Finger Clamp 12"       1         31       HNFL-516-18       Flange Whiz Lock Nut <sup>5</sup> / <sub>16</sub> - 18       40         32       HB-12-13-600       Bolt <sup>1</sup> / <sub>2</sub> -13 x 6       4         33       42-204       Castor Fork       4         34       HMB-34-10       Machine Bushing <sup>3</sup> / <sub>4</sub> x 10GA       16         35       42-215       Short Spacer       4         36       42-214       Long Spacer       4         37       HNFL-38-16       Flange Whiz Lock Nut <sup>3</sup> / <sub>4</sub> - 16       8         HB-38-16-125       Bolt <sup>3</sup> / <sub>4</sub> - 16 x 1 <sup>1</sup> / <sub>4</sub> 8         38       78-222       Mounted Bearing (1" bore)       2         39       HMB-34-14       Machine Bushing <sup>3</sup> / <sub>4</sub> x 14GA       4         40       42-539       Lynch Pin <sup>5</sup> / <sub>16</sub> 4         41       78-258       Reel Housing       1         10-025       Flange Bushing (part of 78-258)       8         803-80       Trim Black       1				
30       78-326       Finger Clamp 12"       1         31       HNFL-516-18       Flange Whiz Lock Nut <sup>5</sup> / <sub>16</sub> - 18       40         32       HB-12-13-600       Bolt <sup>1</sup> / <sub>2</sub> -13 x 6       4         33       42-204       Castor Fork       4         34       HMB-34-10       Machine Bushing <sup>3</sup> / <sub>4</sub> x 10GA       16         35       42-215       Short Spacer       4         36       42-214       Long Spacer       4         37       HNFL-38-16       Flange Whiz Lock Nut <sup>3</sup> / <sub>4</sub> - 16       8         HB-38-16-125       Bolt <sup>3</sup> / <sub>4</sub> - 16 x 1 <sup>1</sup> / <sub>4</sub> 8         38       78-222       Mounted Bearing (1" bore)       2         39       HMB-34-14       Machine Bushing <sup>3</sup> / <sub>4</sub> x 14GA       4         40       42-539       Lynch Pin <sup>5</sup> / <sub>16</sub> 4         41       78-258       Reel Housing       1         10-025       Flange Bushing (part of 78-258)       8         803-80       Trim Black       1				
31       HNFL-516-18       Flange Whiz Lock Nut 5/16 - 18       40         32       HB-12-13-600       Bolt 1/2 -13 x 6       4         33       42-204       Castor Fork       4         34       HMB-34-10       Machine Bushing 3/4 x 10GA       16         35       42-215       Short Spacer       4         36       42-214       Long Spacer       4         37       HNFL-38-16       Flange Whiz Lock Nut 3/4 - 16       8         HB-38-16-125       Bolt 3/4 - 16 x 11/4       8         38       78-222       Mounted Bearing (1" bore)       2         39       HMB-34-14       Machine Bushing 3/4 x 14GA       4         40       42-539       Lynch Pin 5/16       4         41       78-258       Reel Housing       1         10-025       Flange Bushing (part of 78-258)       8         8803-80       Trim Black       1				
32       HB-12-13-600       Bolt ½ -13 x 6       4         33       42-204       Castor Fork       4         34       HMB-34-10       Machine Bushing ¾ x 10GA       16         35       42-215       Short Spacer       4         36       42-214       Long Spacer       4         37       HNFL-38-16       Flange Whiz Lock Nut ¾ - 16       8         HB-38-16-125       Bolt ¾ - 16 x 1¼ - 16       8         38       78-222       Mounted Bearing (1" bore)       2         39       HMB-34-14       Machine Bushing ¾ x 14GA       4         40       42-539       Lynch Pin ⅙ - 16       4         41       78-258       Reel Housing       1         10-025       Flange Bushing (part of 78-258)       8         8803-80       Trim Black       1				
33       42-204       Castor Fork       4         34       HMB-34-10       Machine Bushing ³/₄ x 10GA       16         35       42-215       Short Spacer       4         36       42-214       Long Spacer       4         37       HNFL-38-16       Flange Whiz Lock Nut ³/₄ - 16       8         HB-38-16-125       Bolt ³/₄ - 16 x 1¹/₄       8         38       78-222       Mounted Bearing (1" bore)       2         39       HMB-34-14       Machine Bushing ³/₄ x 14GA       4         40       42-539       Lynch Pin ⁵/₁6       4         41       78-258       Reel Housing       1         10-025       Flange Bushing (part of 78-258)       8         8803-80       Trim Black       1				
34       HMB-34-10       Machine Bushing ³/₄ x 10GA       16         35       42-215       Short Spacer       4         36       42-214       Long Spacer       4         37       HNFL-38-16       Flange Whiz Lock Nut ³/₄ - 16       8         HB-38-16-125       Bolt ³/₄ - 16 x 1¹/₄       8         38       78-222       Mounted Bearing (1" bore)       2         39       HMB-34-14       Machine Bushing ³/₄ x 14GA       4         40       42-539       Lynch Pin ⁵/₁6       4         41       78-258       Reel Housing       1         10-025       Flange Bushing (part of 78-258)       8         8803-80       Trim Black       1				
35       42-215       Short Spacer       4         36       42-214       Long Spacer       4         37       HNFL-38-16       Flange Whiz Lock Nut ³/4 - 16       8         HB-38-16-125       Bolt ³/4 - 16 x 1¹/4       8         38       78-222       Mounted Bearing (1" bore)       2         39       HMB-34-14       Machine Bushing ³/4 x 14GA       4         40       42-539       Lynch Pin ⁵/16       4         41       78-258       Reel Housing       1         10-025       Flange Bushing (part of 78-258)       8         8803-80       Trim Black       1				
36       42-214       Long Spacer       4         37       HNFL-38-16       Flange Whiz Lock Nut ³/4 - 16       8         HB-38-16-125       Bolt ³/4 - 16 x 1¹/4       8         38       78-222       Mounted Bearing (1" bore)       2         39       HMB-34-14       Machine Bushing ³/4 x 14GA       4         40       42-539       Lynch Pin ⁵/16       4         41       78-258       Reel Housing       1         10-025       Flange Bushing (part of 78-258)       8         8803-80       Trim Black       1			<u> </u>	
37 HNFL-38-16 Flange Whiz Lock Nut ³/4 - 16 8 HB-38-16-125 Bolt ³/4 - 16 x 1¹/4 8 38 78-222 Mounted Bearing (1" bore) 2 39 HMB-34-14 Machine Bushing ³/4 x 14GA 4 40 42-539 Lynch Pin ⁵/16 4 41 78-258 Reel Housing 1 10-025 Flange Bushing (part of 78-258) 8 8803-80 Trim Black 1			·	
HB-38-16-125 Bolt $\sqrt[3]{4}$ - 16 x 1 $\sqrt[1]{4}$ 8  38 78-222 Mounted Bearing (1" bore) 2  39 HMB-34-14 Machine Bushing $\sqrt[3]{4}$ x 14GA 4  40 42-539 Lynch Pin $\sqrt[5]{16}$ 4  41 78-258 Reel Housing 1  10-025 Flange Bushing (part of 78-258) 8  8803-80 Trim Black 1				
38       78-222       Mounted Bearing (1" bore)       2         39       HMB-34-14       Machine Bushing ³/₄ x 14GA       4         40       42-539       Lynch Pin ⁵/₁6       4         41       78-258       Reel Housing       1         10-025       Flange Bushing (part of 78-258)       8         8803-80       Trim Black       1	37			
39 HMB-34-14 Machine Bushing 3/4 x 14GA 4 40 42-539 Lynch Pin 5/16 4 41 78-258 Reel Housing 1 10-025 Flange Bushing (part of 78-258) 8 8803-80 Trim Black 1				
40       42-539       Lynch Pin 5/16       4         41       78-258       Reel Housing       1         10-025       Flange Bushing (part of 78-258)       8         8803-80       Trim Black       1				
41       78-258       Reel Housing       1         10-025       Flange Bushing (part of 78-258)       8         8803-80       Trim Black       1			<u> </u>	
10-025 Flange Bushing (part of 78-258) 8 8803-80 Trim Black 1				
8803-80 Trim Black 1	41			
42 78-255 Main Frame 1				
	42	78-255	Main Frame	1



### **BRUSH REEL DRAWING**



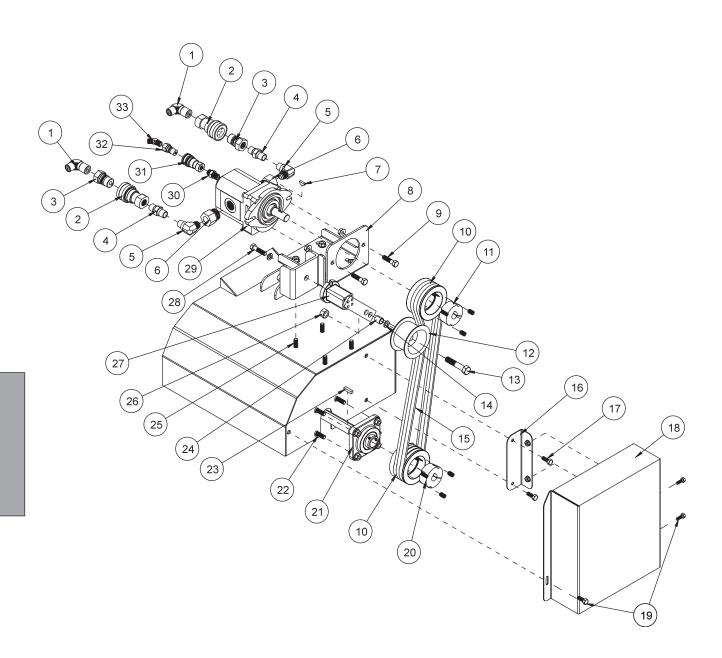


# BRUSH REEL PARTS LIST

REF#	PART#	DESCRIPTION	QUANTITY
1	HMB-12-14	Machine Bushing <sup>1</sup> / <sub>2</sub> x 14GA	6
2	HN-12-13	Nut <sup>1</sup> / <sub>2</sub> - 13	2
3	HB-12-13-300	Bolt <sup>1</sup> / <sub>2</sub> - 13 x 3	2
	HNTL-12-13	Lock Nut 1/2 - 13	2
4	HG-14-28-180	Grease Fitting <sup>1</sup> / <sub>4</sub> - 28 x 180°	2
5	78-241	Chain Connector	4
6	78-284	Left Hand Deck Lift	1
7	15-020	Hand Grip	2
8	HB-38-16-125	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 1 <sup>1</sup> / <sub>4</sub>	4
	HNTL-38-16	Lock Nut 3/8 - 16	4
9	78-286	Left Hand Lift Arm Latch	1
10	78-283	Right hand Deck Lift	1
11	78-285	Right Hand Lift arm Latch	1
12	8820-8	Machine Chain Straight Link	2
13	HB-14-20-075	Bolt <sup>1</sup> / <sub>4</sub> - 20 x <sup>3</sup> / <sub>4</sub>	5
	HNFL-14-20	Flange Whiz Lock Nut 1/4 - 20	5
14	78-344	Strip Brush Holder (drilled)	1
15	78-322	Strip Brush	1
16	HCP-34-250	Clevis Pin <sup>3</sup> / <sub>4</sub> x 2 <sup>1</sup> / <sub>2</sub>	4
17	78-271	Reel Lift Rod	2
18	HHP-18	Bridge Pin <sup>1</sup> / <sub>8</sub>	4
19	HB-516-18-100	Bolt <sup>5</sup> / <sub>16</sub> - 18 x 1	3
	HNFL-516-18	Flange Whiz Lock Nut 5/16 - 18	3
20	78-309	Belt Guard	1
21	HKSQ-14-100	Machine Key 1/4 x 1/4 x 1	2
22	78-348	Shaft Spiral Brush	1
23	78-321	Spiral Brush	1
24	42-213	Axle Bearing	4
25	HNTL-12-13	Lock Nut 1/2 - 13	4
26	42-202	Tire and Wheel	4
	42-202-01	Tire 9 x 3.5 x 4 Ply	4
	42-202-02	Wheel	4
27	42-204	Castor Fork	4
28	HB-12-13-600	Bolt <sup>1</sup> / <sub>2</sub> - 13 x 6	4
29	HMB-34-10	Machine Bushing <sup>3</sup> / <sub>4</sub> x 10GA	16
30	42-214	Short Spacer	4
31	42-215	Long Spacer	4
32	HNFL-38-16	Flange Whiz Lock Nut <sup>3</sup> / <sub>8</sub> - 16	8
	HB-38-16-125	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 1 <sup>1</sup> / <sub>4</sub>	8
33	78-222	Mounted Bearing (1" bore)	2
34	HMB-34-14	Machine Bushing 3/4 x 14GA	4
35	42-539	Lynch Pin <sup>5</sup> / <sub>16</sub>	4
36	78-258	Reel Housing	1
	8803-80	Trim Black	1
37	78-255	Main Frame	1



### **REEL & HYDRAULIC PUMP DRAWING**



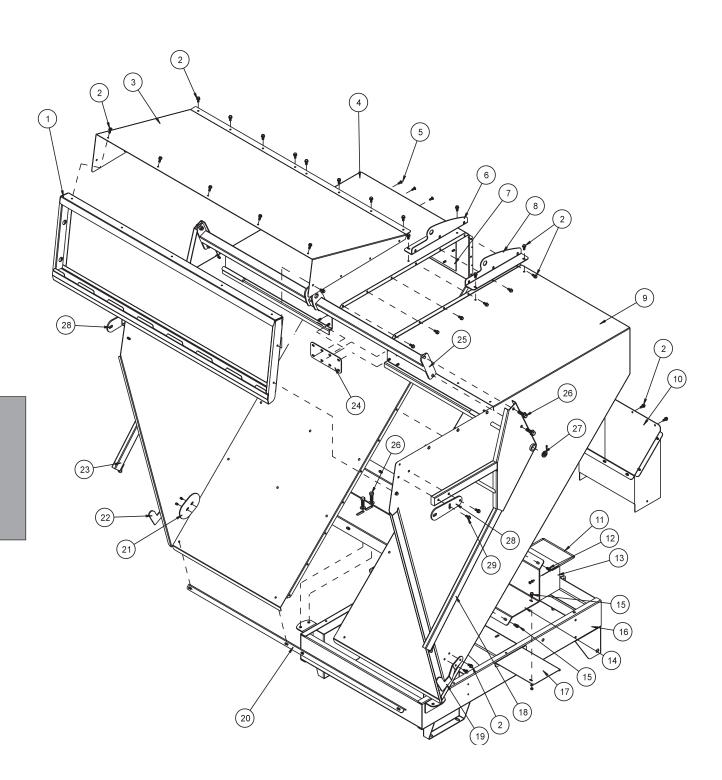


# REEL & HYDRAULIC PUMP PARTS LIST

REF#	PART#	DESCRIPTION	QUANTITY
1	18-246	Male Elbow	2
2	78-228	Coupler <sup>1</sup> / <sub>2</sub> "	2
3	78-229	Nipple <sup>1</sup> / <sub>2</sub> "	2
4	18-334	Nipple	2
5	18-009	Elbow	2
6	18-333	Adapter	2
7	HWK-316-063	Woodruff key 3/16 x 5/8	1
8	78-259	Hydraulic Motor Mount	1
9	HB-38-16-150	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 1 <sup>1</sup> / <sub>2</sub>	2
	HNFL-38-16	Flange Whiz Lock Nut <sup>3</sup> / <sub>8</sub> - 16	2
10	78-234	Pulley	2
11	78-237	Hub <sup>3</sup> / <sub>4</sub>	1
	HSSHS-38-16-063	Set Screw <sup>3</sup> / <sub>8</sub> - 16 x <sup>5</sup> / <sub>8</sub> (part of 78-237)	2
12	16-013	Idler Pulley	1
13	HB-12-13-250	Bolt $\frac{1}{2}$ - $13 \times 2^{1}/_{2}$ (part of 78-224)	1
14	HMB-12-14	Machine Bushing 1/2 x 14GA	2
15	78-226	Belt, Single	3
16	78-310	Belt Guard Mount	1
17	HB-14-20-075	Bolt <sup>1</sup> / <sub>4</sub> - 20 x <sup>3</sup> / <sub>4</sub>	2
	HNFL-14-20	Flange Whiz Lock Nut 1/4 - 20	2
18	78-309	Belt Guard	1
19	HB-516-18-100	Bolt <sup>5</sup> / <sub>16</sub> - 18 x 1	3
	HNFL-516-18	Flange Whiz Lock Nut <sup>5</sup> / <sub>16</sub> - 18	3
20	78-351	Hub 1"	1
	HSSHS-38-16-063	Set Screw <sup>3</sup> / <sub>8</sub> - 16 x <sup>5</sup> / <sub>8</sub> (part of 78-351)	2
21	78-222	Mounted Bearing (1" bore)	2
22	HB-38-16-125	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 1 <sup>1</sup> / <sub>4</sub>	8
	HNFL-38-16	Flange Whiz Lock Nut <sup>3</sup> / <sub>8</sub> - 16	8
23	HKSQ-14-100	Machine Key <sup>1</sup> / <sub>4</sub> x <sup>1</sup> / <sub>4</sub> x 1	1
24	76-275	Spacer (part of 78-224)	1
25	HB-38-16-100	Bolt <sup>3</sup> / <sub>8</sub> -16 x 1	4
20	HNFL-38-16	Flange Whiz Lock Nut <sup>3</sup> / <sub>8</sub> -16	4
26	HNCL-12-13	Center Lock Nut <sup>1</sup> / <sub>2</sub> - 13 (part of 78-224)	1
27	78-224	Belt Tensioner	1
28	HB-38-16-100	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 1 (part of 78-224)	1
20	HWL-38	Lockwasher <sup>3</sup> / <sub>8</sub> (part of 78-224)	1
29*	78-219	Hydraulic Motor	1
20	78-219-01	Seal Kit Buna-N Compound	'
	78-219-02	Drive Coupler	
30	18-335	Nipple	1
31	78-230	Coupler <sup>1</sup> / <sub>4</sub>	1
32	78-231	Nipple 1/4	1
33	17-054	Elbow 45°	
33	17-054	EIDUW 43	1

<sup>\*</sup> NO OTHER PARTS ARE REPLACEABLE FOR HYDRAULIC PUMP.





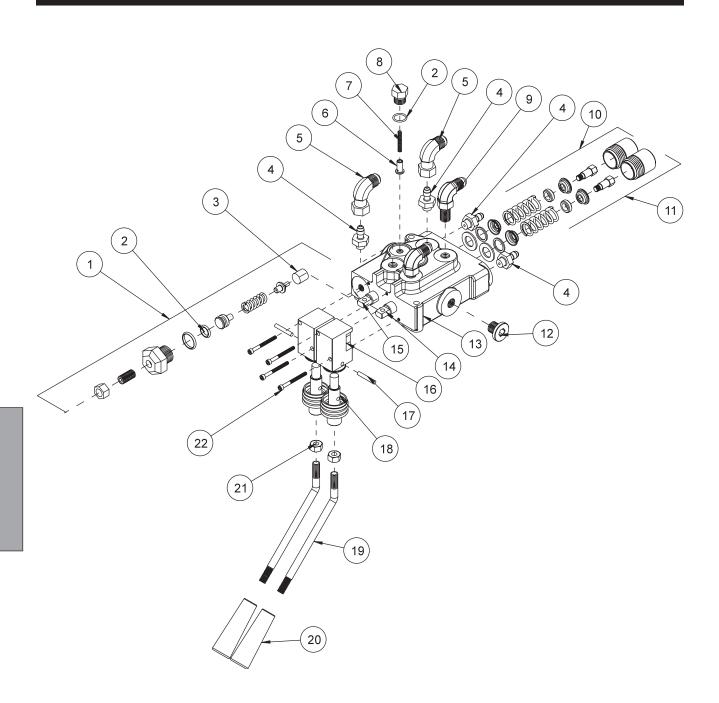


# **HOPPER PARTS LIST**

REF#	PART#	DESCRIPTION	QUANTITY
1	78-305	Filter Insert	1
2	HBFL-516-18-075	Flange Bolt <sup>5</sup> / <sub>16</sub> - 18 x <sup>3</sup> / <sub>4</sub>	72
	HNFL-516-18	Flange Whiz Lock Nut 5/16 - 18	72
3	78-272	Hopper Cover	1
4	78-261	Left Hopper	1
5	HST-14-20-075	Truss Head Machine Screw 1/4 - 20 x 3/4	12
	HNFL-14-20	Flange Whiz Lock Nut 1/4 - 20	12
6	78-280	Left Cylinder Plate	1
7	78-345	Clear Lexan Window	1
8	78-279	Right Cylinder Plate	1
9	78-260	Right Hopper	1
10	78-262	Chute	1
11	78-304	Battery Hold Down	1
	HWL-14	Lockwasher 1/4	2
	HN-14-20	Nut 1/4 - 20	2
12	HB-38-16-100	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 1	12
	HNFL-38-16	Flange Whiz Lock Nut 3/8 - 16	12
13	22-073	Battery	1
14	78-273	Hopper Mount	1
15	HB-14-20-075	Bolt <sup>1</sup> / <sub>4</sub> - 20 x <sup>3</sup> / <sub>4</sub>	2
	HWL-14	Lockwasher <sup>1</sup> / <sub>4</sub>	2
	HN-14-20	Nut 1/4 - 20	2
16	78-255	Main Frame	1
17	78-296	Battery Box	1
18	78-263	Right Door Arm	1
19	78-289	Right Lift Door Latch	1
20	78-282	Hopper Strap	1
21	78-292	Door :Latch Support	2
22	78-290	Left Lift Door Latch	1
23	78-264	Left Door Arm	1
24	78-291	Connecting Plate	1
25	78-265	Cross Bar	1
26	HB-12-13-150	Bolt <sup>1</sup> / <sub>2</sub> - 13 x 1 <sup>1</sup> / <sub>2</sub>	8
	HW-12	Washer 1/2	8
	HNTL-12-13	Lock Nut 1/2 - 13	8
27	HMB-34-10	Machine Bushing <sup>3</sup> / <sub>4</sub> x 10GA	4
	HP-18-150	Cotter Pin <sup>1</sup> / <sub>8</sub> x 1 <sup>1</sup> / <sub>2</sub>	2
28	78-319	Tailgate Adjustment	2
29	HB-38-16-175	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 1 <sup>3</sup> / <sub>4</sub>	4
	HNFL-38-16	Flange Whiz Lock Nut 3/8 -16	4



### 78-306 2-BANK VALVE DRAWING



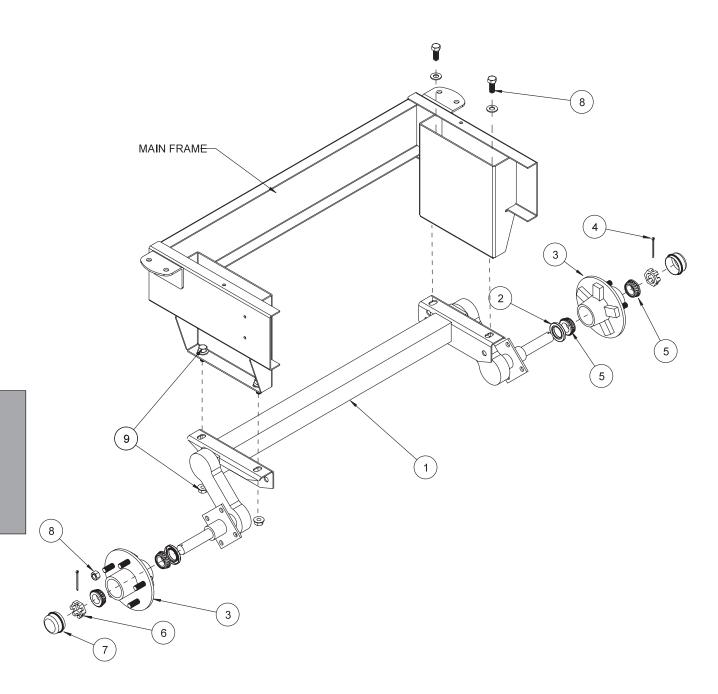


# 78-306 2-BANK VALVE PARTS LIST

REF#	PART#	DESCRIPTION	QUANTITY
1*	14-106	Relief Assembly Kit	1
2*	78-306-01	Seal Kit	1
3*	13-261-03	N.R. Plug	1
4	18-169	Adapter <sup>3</sup> / <sub>8</sub> SAE	4
5	18-202	Elbow	2
6*	13-261-07	Plunger	2
7*	13-261-06	Spring	2
8*	13-261-05	Plug	2
9	18-168	Elbow <sup>3</sup> / <sub>8</sub> Straight Thread	2
10*	78-306-02	Two Position Detent Kit	1
11*	14-203	Spring Centered Kit (tailgate bank)	1
12*	13-261-02	Plug	1
13*	42-220-01	2-Bank Housing	1
14*	14-088	Spool (tailgate bank)	1
15*	78-306-03	Spool Stem (reel bank)	1
16*†	42-220-04	Actuator Housing	2
17*†	42-220-05	Dowel Pin	2
18*†	42-220-03	Actuator Link	2
	42-220-07	Actuator Boot	2
19	42-226	Bent Handle (includes Ref# 20 and 21)	2
20	42-220-08	Tapered Knob	2
21	HNJ-516-18	Jam Nut <sup>5</sup> / <sub>16</sub> -18	2
22*	42-220-06	Socket Head Cap Screw	4
*	78-306	2-Bank Hydraulic Valve (includes all * items)	
†	42-220-09	Actuator Housing Assembly (includes all † items)	1 Per Bank



# 78-216 REAR AXLE DRAWING



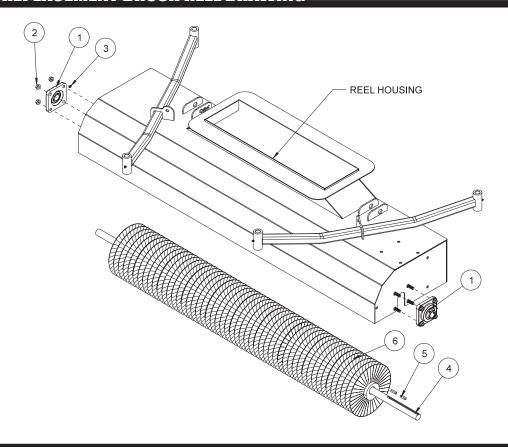


# 78-216 REAR AXLE PARTS LIST

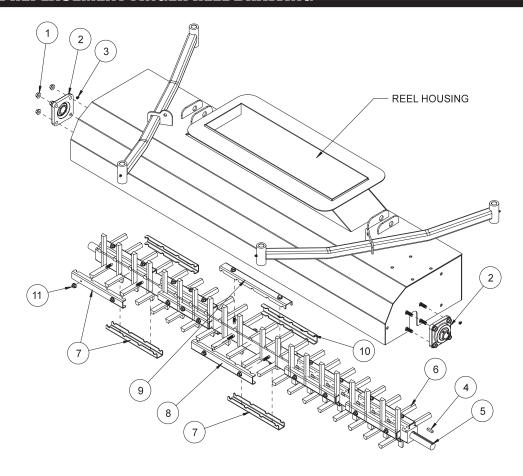
REF#	PART#	DESCRIPTION	QUANTITY
1	78-216	Axle Complete (includes all * items listed below)	1
2*	78-216-02	Grease Seal	2
3*	78-216-01	Hub Assembly	2
4*	HP-18-200	Cotter Pin <sup>1</sup> / <sub>8</sub> x 2	2
5*	78-119	Bearing Cup and Cone	4
6*	HNAR-100-14	Slotted Jam Nut 1-14	2
7*	80-167	Grease Cap	2
8*	HNL-12-20	Lug Nut 1/2 - 20	10
9	HB-12-13-150	Bolt <sup>1</sup> / <sub>2</sub> - 13 x 1 <sup>1</sup> / <sub>2</sub>	4
	HW-12	Washer <sup>1</sup> / <sub>2</sub>	4
	HNTL-12-13	Locknut 1/2 - 13	4



#### 78-201 REPLACEMENT BRUSH REEL DRAWING



### **78-202 REPLACEMENT FINGER REEL DRAWING**





### 78-201 REPLACEMENT BRUSH REEL PARTS LIST

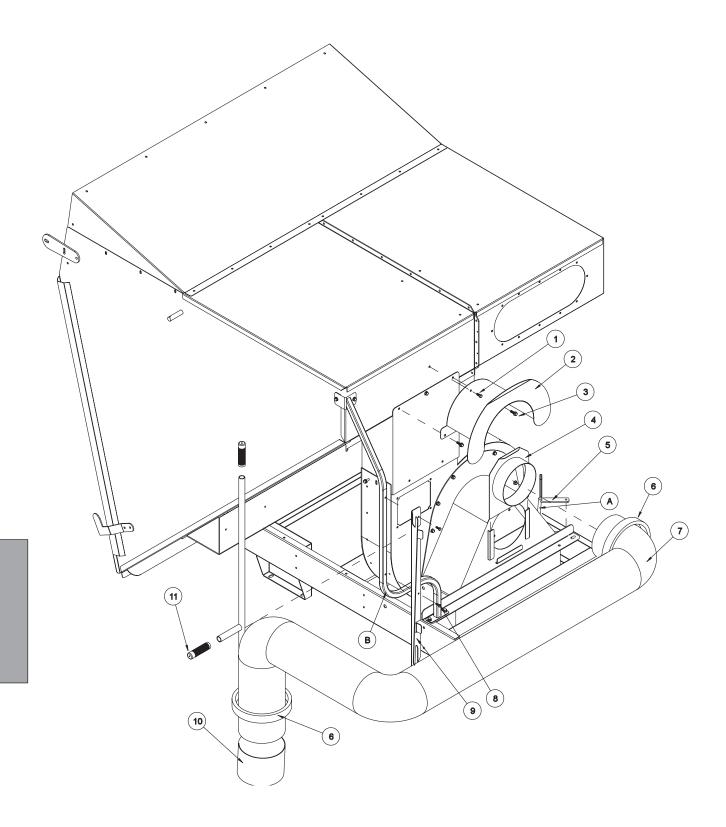
REF#	PART#	DESCRIPTION	QUANTITY
1	78-222	Mounted Bearing	2
2	HB-38-16-125	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 1 <sup>1</sup> / <sub>4</sub>	8
	HNFL-38-16	Flange Whiz Lock Nut <sup>3</sup> / <sub>8</sub> - 16	8
3	HG-14-28-180	Grease Fitting <sup>1</sup> / <sub>4</sub> -20 x 180° (comes with 78-222)	2
4	78-348	Spiral Brush Shaft	1
5	HKSQ-14-100	Machine Key 1/4 x 1/4 x 1	2
6	78-321	Spiral Brush	1

## 78-202 REPLACEMENT FINGER REEL PARTS LIST

REF#	PART#	DESCRIPTION	QUANTITY
1	HB-38-16-125	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 1 <sup>1</sup> / <sub>4</sub>	8
	HNFL-38-16	Flange Whiz Lock Nut <sup>3</sup> / <sub>8</sub> - 16	8
2	78-222	Mounted Bearing	2
3	HG-14-28-180	Grease Fitting $\frac{1}{4}$ -20 x 180° (comes with 78-222)	2
4	HKSQ-14-100	Machine Key 1/4 x 1/4 x 1	1
5	78-303	Finger Reel Bar	1
6	78-242	Sweeper Finger	81
7	78-297	Finger Clamp 10"	17
8	78-326	Finger Clamp 12"	1
9	78-287	Finger Clamp 13"	1
10	78-327	Finger Clamp 10.5"	1
11	HNFL-516-18	Flange Whiz Lock Nut 5/16 - 18	40



## **78-205 REMOTE VACUUM HOSE DRAWING**





#### **78-205 REMOTE VACUUM HOSE PARTS LIST**

REF#	PART#	DESCRIPTION	QUANTITY
1	HB-516-18-075	Bolt <sup>5</sup> / <sub>16</sub> - 18 x <sup>3</sup> / <sub>4</sub>	1
	HNFL-516-18	Flange Whiz Lock Nut 5/16 - 18	1
2	78-318	Hose Rack	1
3	HBFL-516-18-075	Flange Bolt <sup>5</sup> / <sub>16</sub> - 18 x <sup>3</sup> / <sub>4</sub> (part of machine)	2
	HNFL-516-18	Flange Whiz Lock Nut 5/16 - 18 (part of machine)	2
4	78-314	Remote Hose Connector	1
5	78-311	Handle Stop (part of machine)	1
6	18-340	Hose Clamp	2
7	8970-150	Vacuum Hose 8" x 150"	1
8	HB-14-20-150	Bolt <sup>1</sup> / <sub>4</sub> - 20 x 1 <sup>1</sup> / <sub>2</sub>	2
	HNTL-14-20	Lock Nut 1/4 -20	2
9	78-350	Handle Holder	1
	8803-17	Trim	1
10	78-354	Hose Handle	1
11	15-019	Round Grip	2

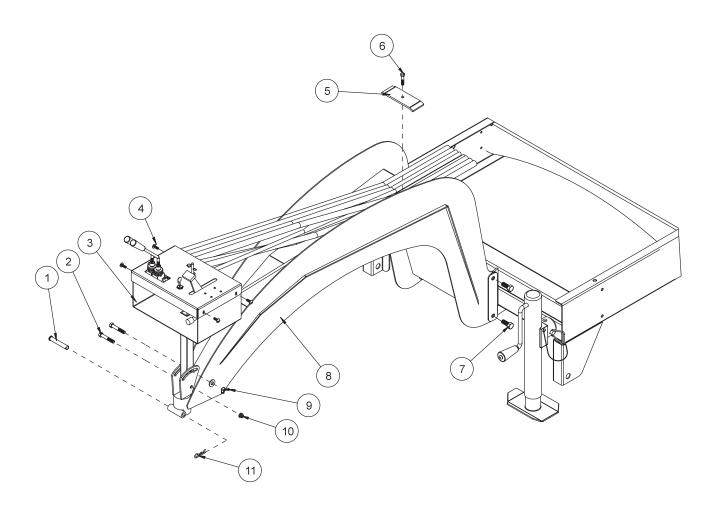
#### **INSTALLATION INSTRUCTIONS**

You will need two people and the tailgate open with an empty hopper. One person will have to be inside hopper. Be sure engine is off. You will need an  $^{11}/_{32}$  and  $^{9}/_{32}$  drill.

- 1. Remove the two bolts (Ref 3) from the chute. Bolt the hose rack (Ref 2) in place using the two bolts you removed from the chute. Using an  $^{11}/_{32}$  drill, drill through the hopper using the hose rack as a guide. Use the  $^{5}/_{16}$  -18 x  $^{3}/_{4}$  bolt and lock nut (Ref 1). The nut should be on the inside of the hopper. The person in the hopper can get out now.
- 2. Center the handle holder (Ref 9) between the bends on the brush guard (Ref B) with the handle holder flush on the inside of the brush guard. Mark the two holes and drill through the brush guard with a  $^9/_{32}$  drill. Use the two  $^1/_4$  20 x  $^11/_2$  bolts and lock nuts (Ref 8) to bolt handle holder to the brush guard. Cut and put trim into the two notches that hold the hose handle.
- 3. Connect the hose to the hose handle (Ref 10) with the hose on the same side as the long handle. Then put other end of hose to remote hose connector (Ref 4). Use the two hose clamps (Ref 6) to hold hose in place.
- 4. Remove cover plate from in front of the vacuum housing and place in pocket on chute. Place the remote hose connector into the pocket that the cover plate came out of. The cover plate and the remote hose connector must be switched depending which operation you are doing.
- 5. For storage, loop the vacuum hose over the hose rack (Ref 2) and place the hose handle (Ref 10) into the handle holder (Ref 9).
- 6. When you are going to operate the vacuum, pull handle stop (Ref 5) towards the front of machine and lift up handle (Ref A). While holding handle (Ref A) up, push handle stop (Ref 5) back so that it holds the handle (Ref A) up.
- 7. You may want to remove the hose handle, hose and remote hose connector if you are not going to use the vacuum for an extended amount of time.



### 78-204 5TH WHEEL HITCH DRAWING





#### 78-204 5™ WHEEL HITCH PARTS LIST

REF#	PART#	DESCRIPTION	QUANTITY
1	HCP-12-300	Clevis Pin <sup>1</sup> / <sub>2</sub> x 3	1
2	HB-38-16-225	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 2 <sup>1</sup> / <sub>4</sub>	2
3	78-352	Control Panel Mount	1
4	HST-14-20-075	Truss Head Machine Screw 1/4 - 20 x 3/4 (part of machine	ne) 4
	HNFL-14-20	Flange Whiz Lock Nut 1/4 - 20 (part of machine)	4
5	78-353	Hose Hold Down	1
6	HB-516-18-150	Bolt <sup>5</sup> / <sub>16</sub> - 18 x 1 <sup>1</sup> / <sub>2</sub>	1
	HNTL-516-18	Lock Nut <sup>5</sup> / <sub>16</sub> - 18	1
7	HB-12-13-125	Bolt $\frac{1}{2}$ - 13 x $\frac{1^{1}}{4}$	4
	HNTL-12-13	Lock Nut <sup>1</sup> / <sub>2</sub> - 13	4
8	78-302	Gooseneck	1
9	HNW-38-16	Wing Nut 3/8 - 16	1
	HW-38	Washer <sup>3</sup> / <sub>8</sub>	1
10	HNTL-38-16	Lock Nut 3/8 - 16	1
11	HHP-18	Bridge Pin <sup>1</sup> / <sub>8</sub>	1

#### **INSTALLATION INSTRUCTIONS**

Use two people to install hitches.

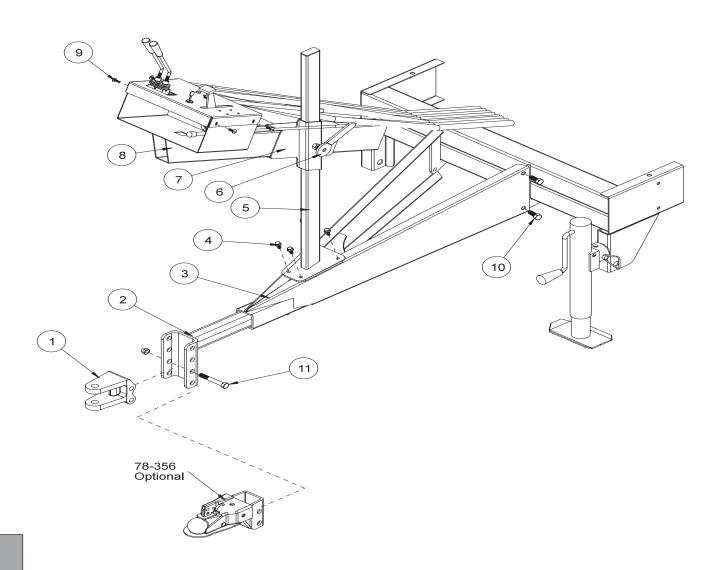
- 1. Block both wheels so machine does not roll.
- 2. Use the jack that is part of the sweeper to raise or lower sweeper to comfortable working height.
- 3. Slide the gooseneck (Ref 8) over the tabs on the front of the sweeper frame. Hitch must be on the outside. Use the four ½ 13 x 1¼ bolts (Ref 7) on the outside and four lock nuts on the inside. Tighten all four bolts.
- 4. Install the control panel mount (Ref 3) on the front of the gooseneck (Ref 8) as shown, using two <sup>3</sup>/<sub>8</sub> 16 x 2<sup>1</sup>/<sub>4</sub> bolts (Ref 2). On the bottom bolt use lock nut (Ref 9) and just tighten snug. On the top bolt use the <sup>3</sup>/<sub>8</sub> washer and wing nut (Ref 10). Tighten both after adjusting for the proper position.
- 5. The control panel has all hose, wiring and throttle cable connected to it and the sweeper. The control panel is wrapped and fastened to the front of the sweeper.
- 6. Remove the control panel from the sweeper, bring it forward with the hoses to the rear and the throttle on the left hand side.
- 7. Fasten the control panel to the control panel mount with the four truss head machine screws  $^{1}/_{4}$  20 x  $^{3}/_{4}$  (Ref 4) and four flange whiz lock nuts  $^{1}/_{4}$  20.
- 8. Put the two handles onto the valve and tighten the lock nuts with the handles pointing forward.
- 9. Lay the hoses, wiring and throttle cable on top of the gooseneck and place the hose hold-down (Ref 5) over the top. At the rear most hole on top of the gooseneck fasten the hose hold-down with <sup>5</sup>/<sub>16</sub> -18 x 1<sup>1</sup>/<sub>2</sub> bolt and lock nut (Ref 6).



Do not tow on public roads.



## **78-206 CLEVIS HITCH DRAWING**





#### **78-206 CLEVIS HITCH PARTS LIST**

REF#	PART#	DESCRIPTION	QUANTITY
1	78-244	<sup>3</sup> / <sub>4</sub> " Clevis	1
2	78-268	Hitch Insert	1
3	78-267	Tongue	1
4	HBFL-516-18-075	Flange Bolt <sup>5</sup> / <sub>16</sub> -18 x <sup>3</sup> / <sub>4</sub>	4
	HNFL-516-18	Flange Whiz Lock Nut 5/16 -18	4
5	78-299	Adjustment Slide	1
6	78-295	Adjustment Lock	2
	15-020	Hand Grip	2
7	78-298	Control Panel Adjustment	1
8	78-312	Control Panel Mount	1
9	HST-14-20-075	Truss Head Machine Screw 1/4 - 20 x 3/4 (part of mach	ine) 4
	HNFL-14-20	Flange Whiz Lock Nut 1/4 -20 (part of machine)	4
10	HB-12-13-125	Bolt <sup>1</sup> / <sub>2</sub> - 13 x 1 <sup>1</sup> / <sub>4</sub>	4
	HNTL-12-13	Lock Nut <sup>1</sup> / <sub>2</sub> - 13	4
11	HB-12-13-350	Bolt $\frac{1}{2}$ - 13 x $3^{1}/_{2}$ (part of 78-244)	2
	HNTL-12-13	Lock Nut <sup>1</sup> / <sub>2</sub> - 13 (part of 78-244)	2

#### **INSTALLATION INSTRUCTIONS**

Use two people to install hitches.

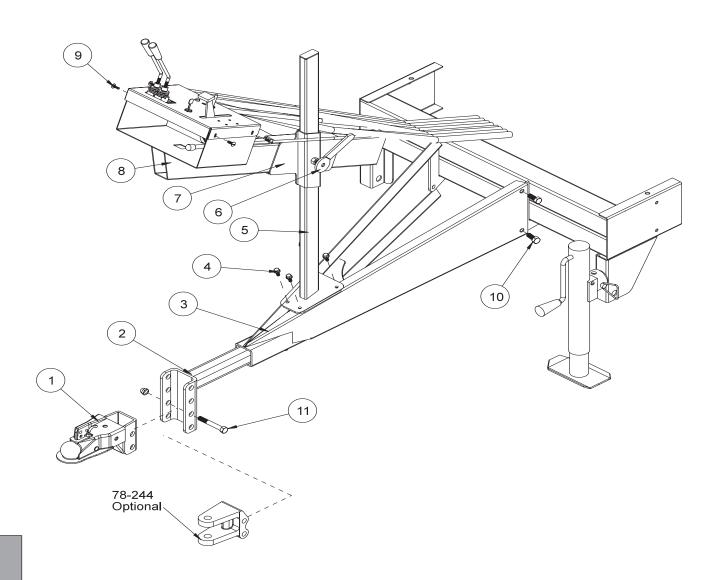
- 1. Block both wheels so machine does not roll.
- 2. Use the jack that is part of the sweeper to raise or lower sweeper to comfortable working height.
- 3. Slide the tongue (Ref 3) over the tabs on the front of the sweeper frame. Hitch must be on the outside. Use the four  $^{1}/_{2}$  13 x  $^{11}/_{4}$  bolts (Ref 10) on the outside and four lock nuts on the inside. Tighten all four bolts.
- 4. Install adjustment slide (Ref 5) to tongue (Ref 3) using the four flange bolts  $^{1}/_{4}$  20 x  $^{3}/_{4}$  and four flange whiz lock nuts  $^{1}/_{4}$  20 (Ref 4).
- 5. Loosen adjustment locks (Ref 6) on control panel adjustment (Ref 7) and put control panel adjustment onto the adjustment slide.
- 6. Tighten one adjustment lock (Ref 6).
- 7. Slide the control panel mount (Ref 8) through the control panel adjustment (Ref 7) and tighten the other adjustment lock (Ref 6).
- 8. The control panel has all the hoses, wiring and throttle cable connected to it and to the sweeper. The control panel is wrapped and fastened to the front of the sweeper.
- 9. Remove the control panel from the sweeper, bring it forward with the hoses to the rear and the throttle on the left hand side.
- 10. Fasten the control panel to the control panel mount with the four truss head machine screws  $^{1}/_{4}$  20 x  $^{3}/_{4}$  and four flange whiz lock nuts  $^{1}/_{4}$  20 (Ref 9).
- 11. Put the two handles onto the valve and tighten the lock nuts with the handles pointing forward.
- 12. Place three hoses and the throttle cable on the left hand side of the adjustment slide.



Do not tow on public roads.



## 78-209 BALL HITCH DRAWING





#### **78-209 BALL HITCH PARTS LIST**

REF#	PART#	DESCRIPTION	QUANTITY
1	78-356	2" Ball Coupler	1
2	78-268	Hitch Insert	1
3	78-267	Tongue	1
4	HBFL-516-18-075	Flange Bolt <sup>5</sup> / <sub>16</sub> -18 x <sup>3</sup> / <sub>4</sub>	4
	HNFL-516-18	Flange Whiz Lock Nut 5/16 -18	4
5	78-299	Adjustment Slide	1
6	78-295	Adjustment Lock	2
	15-020	Hand Grip	2
7	78-298	Control Panel Adjustment	1
8	78-312	Control Panel Mount	1
9	HST-14-20-075	Truss Head Machine Screw 1/4 - 20 x 3/4 (part of machine	ne) 4
	HNFL-14-20	Flange Whiz Lock Nut 1/4 -20 (part of machine)	4
10	HB-12-13-125	Bolt <sup>1</sup> / <sub>2</sub> - 13 x 1 <sup>1</sup> / <sub>4</sub>	4
	HNTL-12-13	Lock Nut 1/2 - 13	4
11	HB-12-13-350	Bolt <sup>1</sup> / <sub>2</sub> - 13 x 3 <sup>1</sup> / <sub>2</sub>	2
	HNTL-12-13	Lock Nut <sup>1</sup> / <sub>2</sub> - 13	2

#### **INSTALLATION INSTRUCTIONS**

Use two people to install hitches.

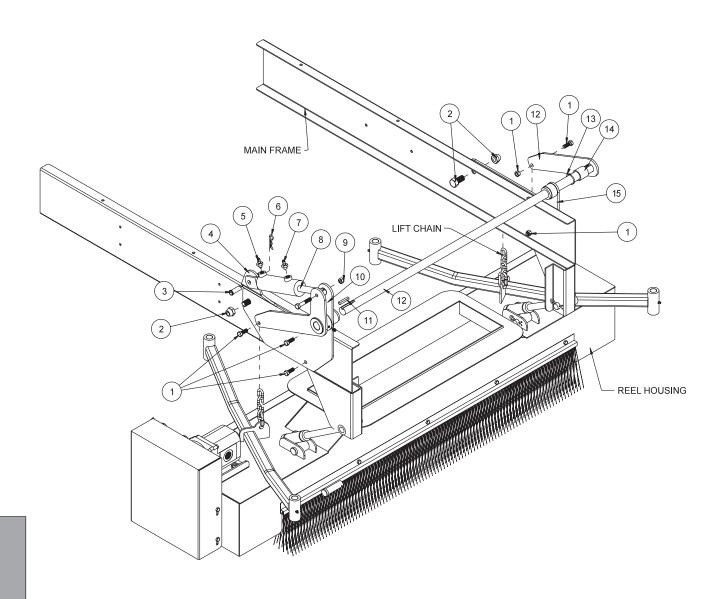
- 1. Block both wheels so machine does not roll.
- 2. Use the jack that is part of the sweeper to raise or lower sweeper to comfortable working height.
- 3. Slide the tongue (Ref 3) over the tabs on the front of the sweeper frame. Hitch must be on the outside. Use the four  $^{1}/_{2}$  13 x  $^{11}/_{4}$  bolts (Ref 10) on the outside and four lock nuts on the inside. Tighten all four bolts.
- 4. Install adjustment slide (Ref 5) to tongue (Ref 3) using the four flange bolts  $^{1}/_{4}$  20 x  $^{3}/_{4}$  and four flange whiz lock nuts  $^{1}/_{4}$  20 (Ref 4).
- 5. Loosen adjustment locks (Ref 6) on control panel adjustment (Ref 7) and put control panel adjustment onto the adjustment slide.
- 6. Tighten one adjustment lock (Ref 6).
- 7. Slide the control panel mount (Ref 8) through the control panel adjustment (Ref 7) and tighten the other adjustment lock (Ref 6).
- 8. The control panel has all the hoses, wiring and throttle cable connected to it and to the sweeper. The control panel is wrapped and fastened to the front of the sweeper.
- 9. Remove the control panel from the sweeper, bring it forward with the hoses to the rear and the throttle on the left hand side.
- 10. Fasten the control panel to the control panel mount with the four truss head machine screws  $^{1}/_{4}$  20 x  $^{3}/_{4}$  and four flange whiz lock nuts  $^{1}/_{4}$  20 (Ref 9).
- 11. Put the two handles onto the valve and tighten the lock nuts with the handles pointing forward.
- 12. Place three hoses and the throttle cable on the left hand side of the adjustment slide.



Do not tow on public roads.



#### **78-207 HYDRAULIC LIFT KIT DRAWING**



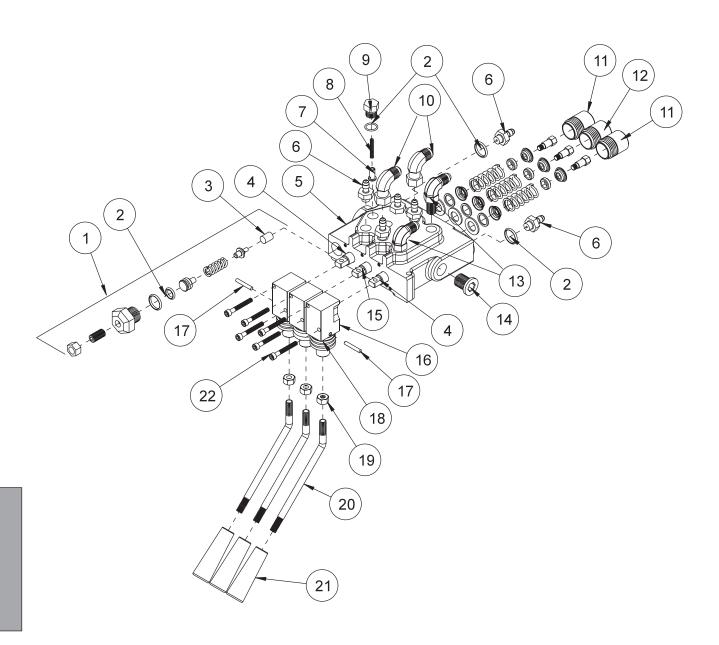


# 78-207 HYDRAULIC LIFT KIT PARTS LIST

REF#	PART#	DESCRIPTION	QUANTITY
1	HB-38-16-100	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 1	6
	HNFL-38-16	Whiz Lock Nut 3/8 - 16	6
2	HB-58-18-125	Bolt <sup>5</sup> / <sub>8</sub> - 18 x 1 <sup>1</sup> / <sub>4</sub>	2
	HNTL-58-18	Lock Nut <sup>5</sup> / <sub>8</sub> - 18	2
3	HCP-12-150	Clevis Pin <sup>1</sup> / <sub>2</sub> x 1 <sup>1</sup> / <sub>2</sub>	1
4	78-357	Right Hydraulic Lift Mount	1
	18-223	Flange Bushing (part of 78-357)	1
	HMB-100-10	Machine Bushing 1 x 10GA	1
5	78-365	Adapter with Orifice	1
	78-364	Hydraulic Hose	1
6	HHP-18	Bridge Pin <sup>1</sup> / <sub>8</sub>	1
7	18-169	Adapter <sup>3</sup> / <sub>8</sub>	1
	78-364	Hydraulic Hose	1
8*	13-292	Hydraulic Cylinder	1
9	HB-38-16-200	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 2	1
	HW-38	Washer <sup>3</sup> / <sub>8</sub>	2
	HNTL-38-16	Lock Nut 3/8 - 16	1
10	78-258	Chain Lift	1
	HSSHS-38-16-063	Set Screw <sup>3</sup> / <sub>8</sub> - 16 x <sup>5</sup> / <sub>8</sub> (comes with 78-358)	2
11	HKSQ-14-150	Machine Key 1/4 x 1/4 x 11/2	2
12	78-360	Lift Pivot	1
13	HMB-100-10	Machine Bushing 1 x 10GA	1
14	78-366	Spacer	1
15	78-361	Left Hydraulic Lift Mount	1
	18-223	Flange Bushing (part of 78-361)	1
*	14-253	Seal Kit for cylinders with part number stamp	ed on cylinder and a
		retaining ring on rod end.	
*	14-267	Seal Kit for cylinders with part number stamper spanner nut on the rod end.	ed on cylinder and a
		spanner nut on the rou enu.	



#### 78-363 3 - BANK HYDRAULIC VALVE DRAWING



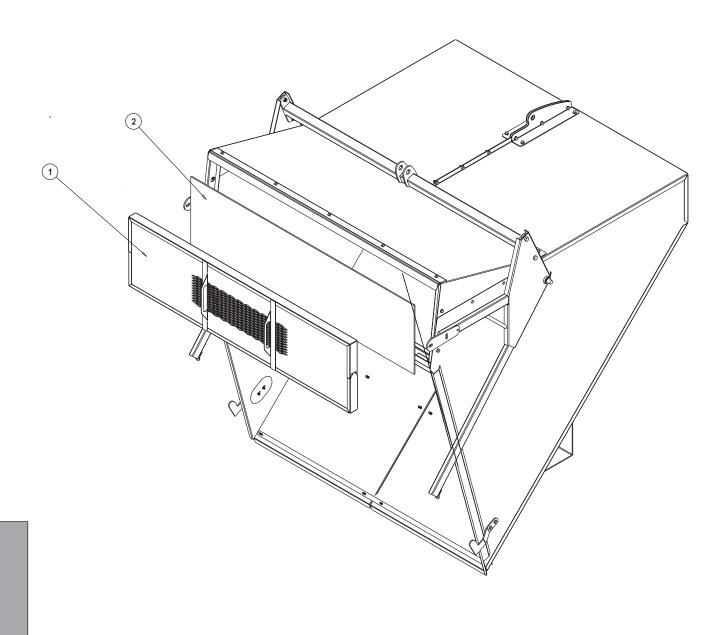


## 78-3633-BANK HYDRAULIC VALVE PARTS LIST

REF#	PART#	DESCRIPTION	YTITNAUÇ
1*	14-106	Relief Assembly Kit	1
2*	14-205	Seal Kit	1
3*	13-261-03	N.R. Plug	1
4	14-088	Spool	2
5	42-227-01	3-Bank Housing	1
6	18-169	Adapter <sup>3</sup> / <sub>8</sub> SAE (4 come from 2-bank valve)	6
7*	13-261-07	Plunger	3
8*	13-261-06	Spring	3
9*	13-261-05	Plug	3
10	18-202	Elbow (part of 2 bank valve)	2
11*	14-203	Spring Centered Kit	2
12*	78-306-02	Two Spring Detent Kit	1
13	16-186	Elbow <sup>3</sup> / <sub>8</sub> Straight Thread (part of 2-bank valve)	2
14*	13-261-02	Plug	1
15*	78-306-03	Spool Stem (reel bank)	1
16*	42-220-04	Actuator Housing	3
17*	42-220-05	Dowel Pin	3
18*	42-220-03	Actuator Link	3
19	HNJ-516-18	Jam Nut <sup>5</sup> / <sub>16</sub> - 18 (part of 42-226)	3
20	42-226	Bent Handle (includes Ref 19 and 21; 2 come with 2 bank va	ılve) 3
21	42-220-08	Tapered Knob (part of 42-226)	3
22*	42-220-06	Socket Head Cap Screw 10 - 32 x 1 <sup>1</sup> / <sub>2</sub>	6
*	78-363	3-Bank Hydraulic Valve (includes all * items)	



## 78-208 FILTER SYSTEM DRAWING



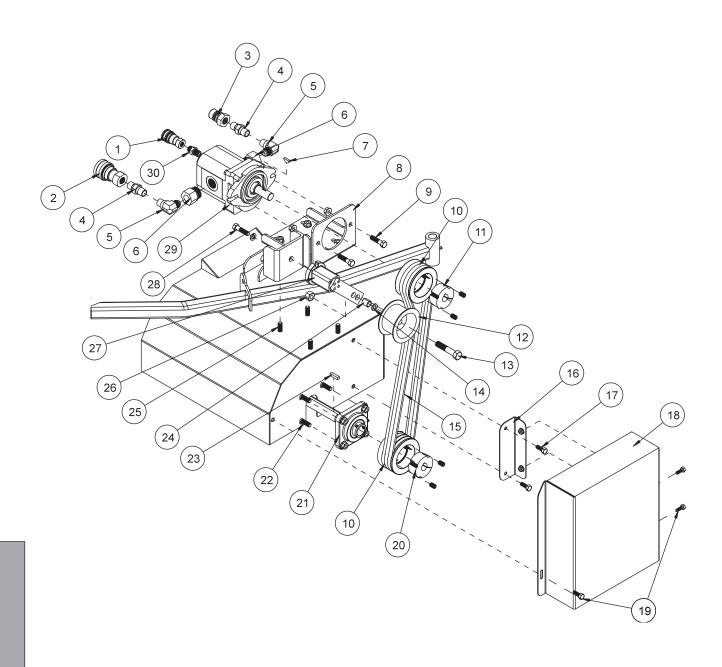


# 78-208 FILTER SYSTEM PARTS LIST

REF#	PART#	DESCRIPTION	QUANTITY
1	78-288	Filter Case	1
2	78-328	Filter	1



### 78-210 &78-211 REEL AND HYDRAULIC PUMP DRAWING





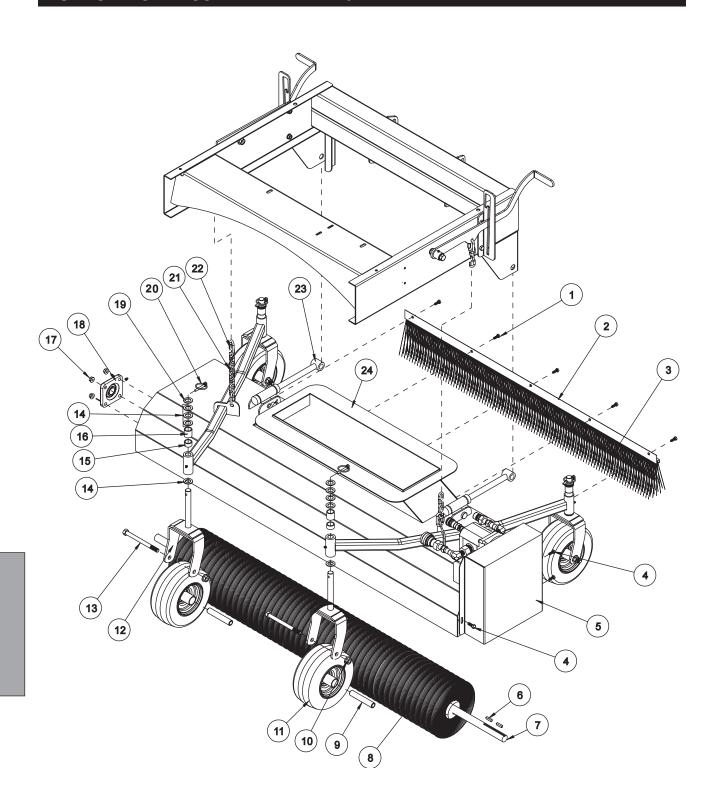
## 78-210 &78-211 REEL AND HYDRAULIC PUMP DRAWING

REF#	PART#	DESCRIPTION	QUANTITY
1	78-230	Coupler 1/4	1
2	78-228	Coupler 1/2"	1
3	78-229	Nipple <sup>1</sup> / <sub>2</sub> "	1
4	18-334	Nipple	2
5	18-009	Elbow	2
6	18-333	Adapter	2
7	HWK-316-063	Woodruff key 3/16 x 5/8	1
8	78-259	Hydraulic Motor Mount	1
9	HB-38-16-150	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 1 <sup>1</sup> / <sub>2</sub>	2
	HNFL-38-16	Flange Whiz Lock Nut 3/8 - 16	2
10	78-232	Pulley	2
11	78-237	Hub <sup>3</sup> / <sub>4</sub>	1
	HSSHS-38-16-063	Set Screw <sup>3</sup> / <sub>8</sub> - 16 x <sup>5</sup> / <sub>8</sub> (part of 78-237)	2
12	16-013	Idler Pulley	1
13	HB-12-13-250	Bolt <sup>1</sup> / <sub>2</sub> - 13 x 2 <sup>1</sup> / <sub>2</sub> (part of 78-224)	1
14	HMB-12-14	Machine Bushing <sup>1</sup> / <sub>2</sub> x 14GA	2
15	78-226	Belt, Single	3
16	78-310	Belt Guard Mount	1
17	HB-14-20-075	Bolt <sup>1</sup> / <sub>4</sub> - 20 x <sup>3</sup> / <sub>4</sub>	2
	HNFL-14-20	Flange Whiz Lock Nut 1/4 - 20	2
18	78-309	Belt Guard	1
19	HB-516-18-100	Bolt <sup>5</sup> / <sub>16</sub> - 18 x 1	3
	HNFL-516-18	Flange Whiz Lock Nut 5/16 - 18	3
20	78-351	Hub 1"	1
	HSSHS-38-16-063	Set Screw <sup>3</sup> / <sub>8</sub> - 16 x <sup>5</sup> / <sub>8</sub> (part of 78-351)	2
21	78-222	Mounted Bearing (1" bore)	2
22	HB-38-16-125	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 1 <sup>1</sup> / <sub>4</sub>	8
	HNFL-38-16	Flange Whiz Lock Nut 3/8 - 16	8
23	HKSQ-14-100	Machine Key ¹/₄ x ¹/₄ x 1	1
24	76-275	Spacer (part of 78-224)	1
25	HB-38-16-100	Bolt <sup>3</sup> / <sub>8</sub> -16 x 1	4
	HNFL-38-16	Flange Whiz Lock Nut 3/8 -16	4
26	HNCL-12-13	Center Lock Nut $1/2$ - 13 (part of 78-224)	1
27	78-224	Belt Tensioner	1
28	HB-38-16-100	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 1 (part of 78-224)	1
	HWL-38	Lockwasher 3/8 (part of 78-224)	1
29*	78-219	Hydraulic Motor	1
	78-219-01	Seal Kit Buna-N Compound	
	78-219-02	Drive Coupler	
30	18-335	Nipple	1

<sup>\*</sup> NO OTHER PARTS ARE REPLACEABLE FOR HYDRAULIC PUMP.



#### **78-210 NYLON BRUSH HEAD DRAWING**



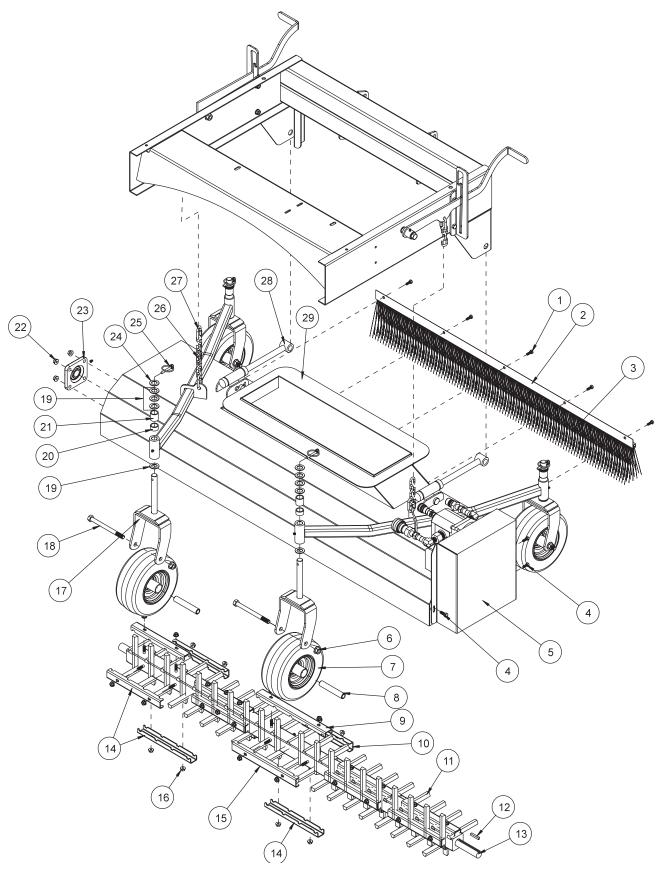


# 78-210 NYLON BRUSH HEAD PARTS LIST

REF#	PART#	DESCRIPTION	QUANTITY
1	HB-14-20-075	Bolt <sup>1</sup> / <sub>4</sub> - 20 x <sup>3</sup> / <sub>4</sub>	5
	HNFL-14-20	Flange Whiz Lock Nut 1/4 - 20	5
2	78-344	Strip Brush Holder (drilled)	1
3	78-322	Strip Brush	1
4	HB-516-18-100	Bolt <sup>5</sup> / <sub>16</sub> - 18 x 1	3
	HNFL-516-18	Flange Whiz Lock Nut <sup>5</sup> / <sub>16</sub> - 18	3
5	78-309	Belt Guard	1
6	HKSQ-14-100	Machine Key 1/4 x 1/4 x 1	2
7	78-348	Shaft Spiral Brush	1
8	78-321	Spiral Brush	1
9	42-213	Axle Bearing	4
10	HNTL-12-13	Lock Nut 1/2 - 13	4
11	42-202	Tire and Wheel	4
	42-202-01	Tire 9 x 3.5 x 4 Ply	4
	42-202-02	Wheel	4
12	42-204	Castor Fork	4
13	HB-12-13-600	Bolt <sup>1</sup> / <sub>2</sub> - 13 x 6	4
14	HMB-34-10	Machine Bushing <sup>3</sup> / <sub>4</sub> x 10GA	16
15	42-214	Short Spacer	4
16	42-215	Long Spacer	4
17	HNFL-38-16	Flange Whiz Lock Nut <sup>3</sup> / <sub>8</sub> - 16	8
	HB-38-16-125	Bolt <sup>3</sup> / <sub>8</sub> - 16 x 1 <sup>1</sup> / <sub>4</sub>	8
18	78-222	Mounted Bearing (1" bore)	2
19	HMB-34-14	Machine Bushing <sup>3</sup> / <sub>4</sub> x 14GA	4
20	42-539	Lynch Pin ⁵/₁6	4
21	8820-8	Machine Chain Straight Link	2
22	78-241	Chain Connector	4
23	78-271	Reel Lift Rod	2
	HCP-34-250	Clevis Pin <sup>3</sup> / <sub>4</sub> x 2 <sup>1</sup> / <sub>2</sub>	2
	HHP-18	Bridge Pin <sup>1</sup> / <sub>8</sub>	2
24	78-258	Reel Housing	1
	8803-80	Trim Black	1



#### **78-211 RUBBER FINGER HEAD DRAWING**





## 78-211 RUBBER FINGER HEAD PARTS LIST

REF#	PART#	DESCRIPTION	QUANTITY
1	HB-14-20-075	Bolt <sup>1</sup> / <sub>4</sub> - 20 x <sup>3</sup> / <sub>4</sub>	5
	HNFL-14-20	Flange Whiz Lock Nut 1/4 - 20	5
2	78-344	Strip Brush Holder (drilled)	1
3	78-322	Strip Brush	1
4	HB-516-18-100	Bolt <sup>5</sup> / <sub>16</sub> - 18 x 1	3
	HNFL-516-18	Flange Whiz Lock Nut 5/16 - 18	3
5	78-309	Belt Guard	1
6	HNTL-12-13	Lock Nut <sup>1</sup> / <sub>2</sub> - 13	4
7	42-202	Tire & Wheel	4
	42-202-01	Tire 9 x 3.5 x 4 Ply	4
	42-202-02	Wheel	4
8	42-213	Axle Bearing	4
9	78-287	Finger Clamp 13"	1
10	78-327	Finger Clamp 10.5"	1
11	78-242	Sweeper Finger	81
12	HKSQ-14-100	Machine Key 1/4 x 1/4 x 1	1
13	78-303	Finger Reel Bar	1
14	78-297	Finger Clamp 10"	17
15	78-326	Finger Clamp 12"	1
16	HNFL-516-18	Flange Whiz Lock Nut <sup>5</sup> / <sub>16</sub> - 18	40
17	42-204	Castor Fork	4
18	HB-12-13-600	Bolt <sup>1</sup> / <sub>2</sub> -13 x 6	4
19	HMB-34-10	Machine Bushing <sup>3</sup> / <sub>4</sub> x 10GA	16
20	42-215	Short Spacer	4
21	42-214	Long Spacer	4
22	HNFL-38-16	Flange Whiz Lock Nut <sup>3</sup> / <sub>4</sub> - 16	8
	HB-38-16-125	Bolt <sup>3</sup> / <sub>4</sub> - 16 x 1 <sup>1</sup> / <sub>4</sub>	8
23	78-222	Mounted Bearing (1" bore)	2
24	HMB-34-14	Machine Bushing 3/4 x 14GA	4
25	42-539	Lynch Pin <sup>5</sup> / <sub>16</sub>	4
26	8820-8	Machine Chain Straight Link	2
27	78-241	Chain Connector	4
28	78-271	Reel Lift Rod	2
-	HCP-34-250	Clevis Pin <sup>3</sup> / <sub>4</sub> x 2 <sup>1</sup> / <sub>2</sub>	2
	HHP-18	Bridge Pin <sup>1</sup> / <sub>8</sub>	2
29	78-258	Reel Housing	1
	8803-80	Trim Black	1



# NOTES



## **DECAL LIST**

This is a list of decals on the Sweep Star V62. Part numbers, description, and location will help in reordering decals.

16-088	Decal, Moving Parts/Hot	Top Reel Belt Guard & Left Side Frame
17-128	Decal, Radiator Coolant	Radiator Shield
25-004	Decal, Serial #	Left Front Main Frame
25-277	Decal, Battery Warning	Above Battery
25-286	Decal, Pinch Point	2 Ea. Side Tailgate
25-307	Decal, Refueling w/ Gasoline	Above Gas Tank
25-344	Decal, 3" Star	Right Side Belt Guard
25-355	Decal, Tire Pressure (18 psi)	Rear Wheels
25-356	Decal, Tire Pressure (20 psi)	Castor Forks
25-359	Decal, Smithco (3.25 x 17.312)	Front Chute & Rear Tailgate
27-093	Decal, Hydraulic Oil	Front Oil Tank Bracket
76-305	Decal, Rotating Parts	2 Blower Housing
78-217	Decal, Operator Control Panel	Operator Control Panel
78-369	Decal, Sweep Star V62	2 Hopper Sides
78-307	Decal, Machine Control Panel	Machine Control Panel



#### **QUICK REFERENCE**

#### REPLACEMENT FILTERS

23-031 Hydraulic Oil Filter Element

50-403 In-Line Fuel Filter

34-112-01 Engine Oil Filter Element Kawasaki# 49065-2071 34-112-02 Air Filter Element Assembly Kawasaki# 11029-2005

#### **REPLACEMENT BELTS**

34-112-03 Fan Belt (Engine) Kawasaki# 59011-2056

78-227 Belt, 3-Band (Engine To Blower & Pump)
78-226 Belt, Single (3 Req'd) (Hydraulic Motor To Reel)

**SEAL KITS** 

78-219 Hydraulic Motor

78-219-01 Seal Kit Buna N Compound

78-219-02 Drive Coupler

78-220 Hydraulic Pump

78-220-01 Seal Kit Buna N Compound

78-219-02 Drive Coupler

78-331 Tailgate Cylinder

76-242-01 Seal Kit

78-306 2-Bank Hydraulic Valve

78-306-01 Seal Kit

**OTHER PARTS** 

Spark Plug NGK BMR 6A or equivalent Gap .024-.028 in. (.6-.7 mm)

Torque 12 Ft. Lbs. (17 Nm)

**FLUIDS** 

Engine Oil SAE 10W-40 API Service SJ or higher Motor Oil SAE 10W-40 API Service SJ or higher Motor Oil Coolant Permanent Type Antifreeze for Aluminum Engine and

Radiator Green. 50% Solution of Ethylene Glyco.

