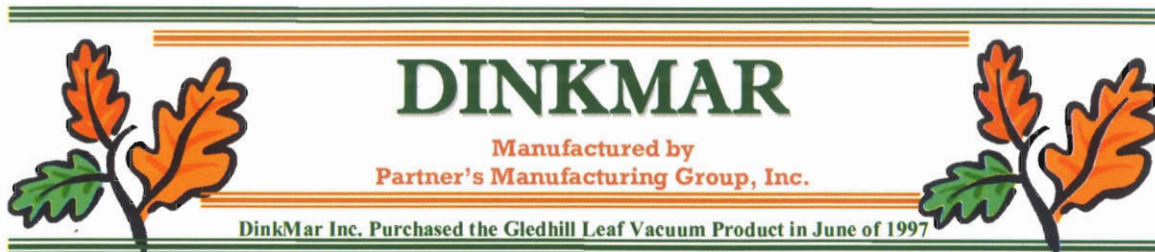


Master Index **For** **Leaf Loader Manual**

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Directional Control Valve Information.....	2
Leaf Vacuum Engine Operation (Safety Tips).....	3
Instructions for Ordering Parts.....	4
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Galion-Godwin Body and Hoist	
ViBCO (VIBRATOR)	
Trailer Lights, Axles, and Misc.	

Issue #1



ONE YEAR GUARANTEE

Unconditional Guarantee

DinkMar stands behind its leaf collection equipment 100%. For one year from date of shipment, DinkMar will replace, repair, and retrain for the original purchaser, free of charge any part or parts pick-up or returned to our factory, transportation charges prepaid, and found to be defective under normal use and service because of defects in material or workmanship. This guarantee is not effective if the product has been subjected to misuse, negligence or accident. Charges for field service, labor or other expense not previously authorized and approved by us in writing will not be accepted.

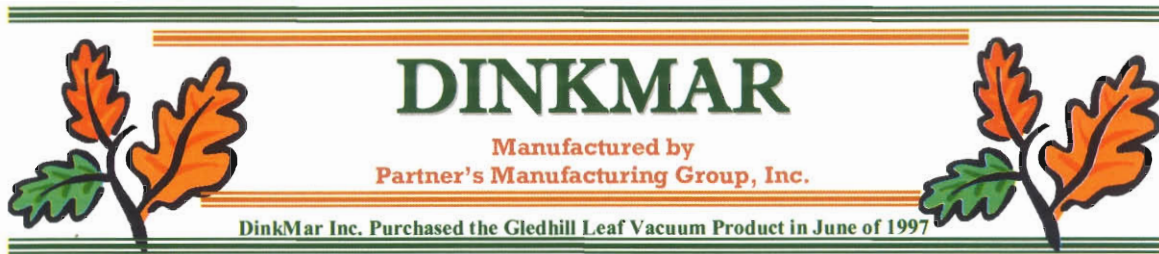
We do not guarantee components (Purchase Items) furnished by other manufacturers such as; pumps, valves, power take offs, controls, motors, engines, etc., used with our products. They are, for the most part, guaranteed by those manufacturer warranties. The terms, conditions and period of their guarantees are not necessarily identical with ours and while we will assist the customer, if necessary, we do not underwrite their guarantee. (Component manufacturers' guarantee available upon request.)

If the purchaser should use or allow to be used on our products, parts not made or supplied by us (Partners Mfg Group, Inc- DBA-DinkMar), this guarantee shall become void.

This guarantee applies only to products made and/or supplied by us and does not apply to other products not made or supplied by us to which our product may be attached, such as trucks. We accept no responsibility for damages to such other products even if our product contributed to the damage of the other product. We are not responsible to any purchaser of our products for any representation or guarantee made by dealers, or anyone other than us, beyond those herein stipulated.

Reserved Rights

DinkMar, Inc. reserves the right to make changes or improvements on its products without incurring any liability or obligation whatsoever and without being required to make corresponding changes or improvements on products heretofore manufactured or sold.



DIRECTIONAL CONTROL VALVE INFORMATION

SC-Mule Machines

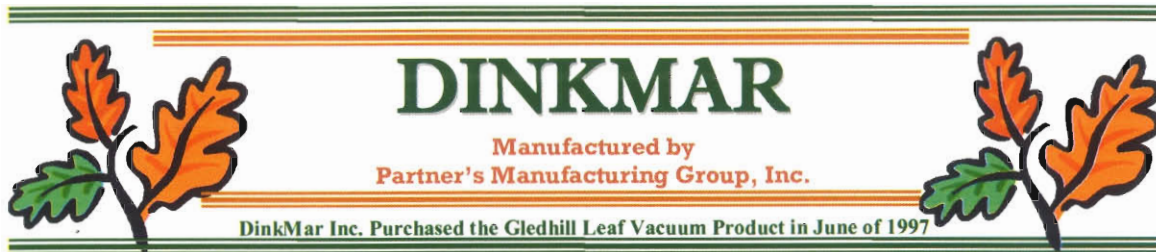
The manufacture of our valves has main relief valve preset at 2500psi.that work the best in our hydraulic system. Relief setting is more than adequate to operate any equipment manufactured by Partners Mfg Group, Inc and should be sufficient to raise most dump bodies unless the dump body has been overloaded and/or the dump body hoist cylinder is of marginal capacity.

Indiscriminate increasing of the pressure relief setting can seriously damage or destroy many of the components of your hydraulic system. Therefore, the acorn nut covering the relief setting adjusting screw has been wired and fixed in place with a lead seal.

Cutting of this wire and/or removal of the lead seal by anyone other than an authorized employee of Partners Mfg Group, Inc. or authorized dealer will void the guarantee covering the hydraulic components of your hydraulic system and may very well void the guarantee covering some of the structural members of your equipment.

SC-Mule Machines, Leaf Master Power Swing Arm

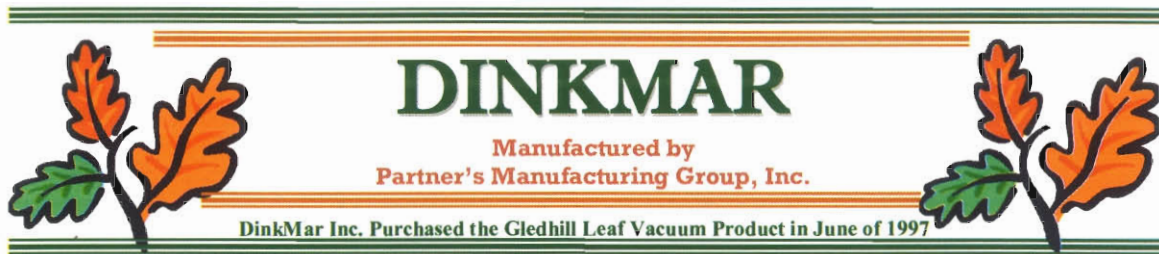
The manufacture of our valves has main relief valve preset at 2500psi.that work the best in our hydraulic system. Relief setting is more than adequate to operate any equipment manufactured by Partners Mfg Group, Inc. The Joystick control valve has preset fittings from the manufacturer, Partners Mfg Group, Inc. for the safety of the equipment and operators. Changing the relief pressure setting will cause for over heating of the valve and a safety issue for the operator. Partners Mfg Group or authorized dealers well help make the preset fitting adjustment of the Power Swing Arm. This also will work with all Electric/Hydraulic control valve systems for Leaf Master, SC Mules, and Truck Mount units.



All Vacuums ENGINE OPERATION (SAFETY TIPS)

Safety should be of prime concern and the Leaf Vacuum engine should be operated with care and knowledge. The following safety tips are a reminder of some of the precautions, which should be observed when operating or working on the Leaf Vacuum engine.

1. Become familiar with all controls and instruments before starting engine.
2. Don't smoke or allow open flame near battery, battery gas is highly flammable.
3. Disconnect battery ground before working on the Leaf Vacuum; accidental short-circuiting can cause major problem, sin burns or eye injury.
4. Never use an open flame to test for leaks anywhere around the Leaf Vacuum Machine like hydraulic leaks or diesel fuel leaks.
5. Use care when refueling engine, always start the day with a full tank. (40 Gallon)
6. Avoid loose clothing, long sleeves or any accessory, which could catch in moving parts. **These are Posted with NO Hand Sign**
7. Never work on the engine when in operation, except to make adjustments which cannot be made otherwise. Adjustments to the drive belt are easy and close the belt guard door back in place before starting engine. **Posted with NO Hand Sign**
8. Never take off In-take hose while the Leaf Vacuum unit is running. Wait till the unit stop and undo the hose straps for inspection, cleaning, or repair. If this not done right, possibly of bodily injury could happen. **Read Warning Signs**
9. Avoid excessive use of cold weather starting fluid; this can result in serious backfiring or crankcase explosion. **Read Engine Warning Signs**
10. This information is not intended to replace any safety codes, insurance requirements, federal, state or local laws, rules and regulations.
11. Partners Mfg Group, Inc. would to keep everyone safe and health. The posted warning sign are for the operator/operators of the equipment. Partners Mfg Group keeps adding new warning signs, along with other product manufactures.



INSTRUCTIONS FOR ORDERING PARTS

Always specify the name of the product, the model number and serial number stamped on the nameplate of the product requiring parts.

Furnish complete description and quantity of parts required, using part descriptions and part numbers listed in the parts list.

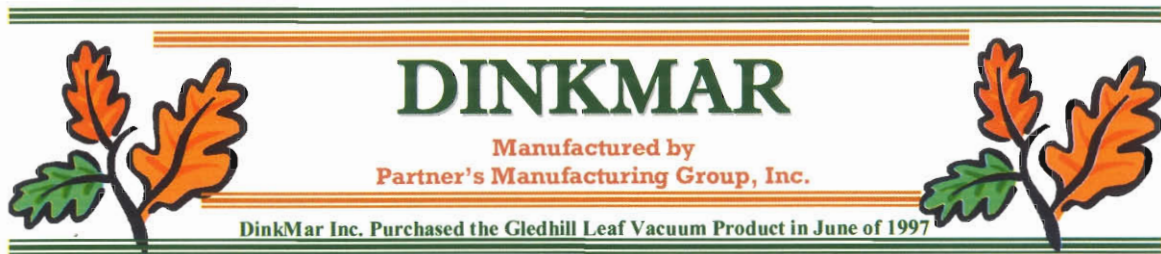
Give exact shipping instructions, such as how to ship, name and address. Confirm telephone orders by letter or fax. A Purchase Order number is required when the order is placed, unless the product is under warranty. Unless claims for shortages and errors are made immediately upon receipt of goods, claims may be difficult to satisfy.

When damaged goods are received, a full description of the damage should be made by the delivering carrier's agent on the freight bill and signed by them, so damages may be collected from the transportation company. All shipments leaving our plant are inspected by the carrier and judged properly packed and protected. From this point, our responsibility ceases and is borne by the carrier.

All prices are F.O.B. our factory and subject to change without notice. In case of change, orders will be filled at current prices.

A part order form is included in this manual (see page 17) for your convenience and/or reference. Returned Material (Warranty/Non-Warranty) form is also included in this manual (see page 18) for your convenience and/or reference.

Note: Please contact Dink-Mar, Inc. for an RMA (Returned Material Authorization) number prior to the shipping of any returned product.



HYDRAULIC SYSTEM MAINTENANCE

General

Your hydraulic system includes the finest hydraulic components available to the mobile equipment industry. However, it should be remembered the degree of performance and life of this system will depend on the maintenance it receives.

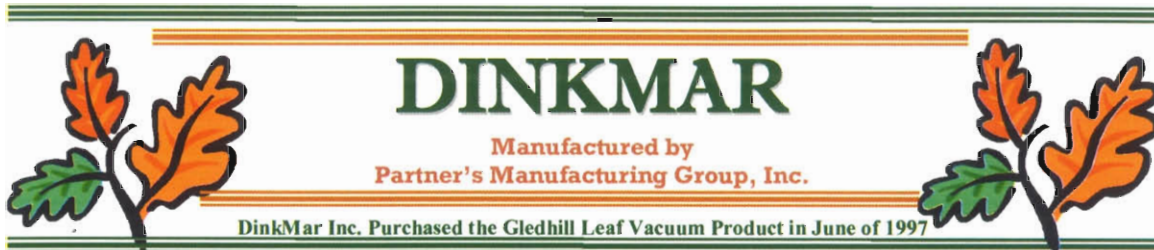
Causes of System Damage or Failure

1. Dirt, water, sludge, welds splatter or slag, decomposed packing or rust in the system.
2. Insufficient fluid in the reservoir.
3. Use of the wrong type or viscosity of oil.
4. Air in the system, often caused by pump cavitation.
5. Physical damage to the hydraulic components.

Maintenance Tips

Always remember the pump is the heart of your hydraulic system. Take care of it by following these suggestions.

1. It is imperative that only clean, filtered oil be used since dirt and water are the most common causes of hydraulic system problems. Use a clean, dry container when filling the reservoir.
2. Change the oil and clean the system at the beginning and the end of each season or every six (6) months.
3. Periodic checks of fluid levels and components should be made to detect any small discrepancy or malfunction before they become serious.
4. If the pump becomes noisy or if the pump required excessive speed to operate equipment under normal loads, there is probably internal wear in the pump or dirt under the relief valve seat. Have it corrected immediately. It may be necessary to return the pump/valve for factory repair or rebuild.
5. Many of our customers buy a second pump to have on hand to eliminate down time, if it should be necessary to return the original pump to the factory.



HYDRAULIC SYSTEM MAINTENANCE (CONTINUED)

Troubleshooting

1. Equipment does not operate:

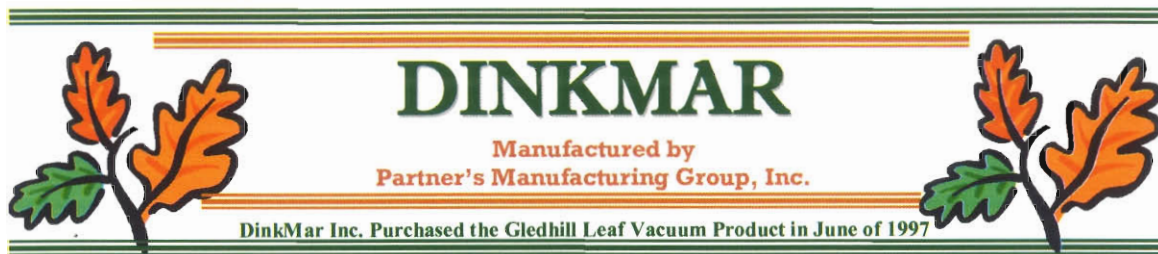
- a. PTO not engaged.
- b. Pump drive shaft broken/low on oil.
- c. Restricted travel or binding of valve spool preventing spool from opening to full operating position. **(Spring in Valves)**
- d. Inlet oil not getting to pump. Check for restrictions, low oil, or kink in suction hose.
- e. Low oil level in tank—always check oil level after the first operation of all hydraulic components. Make sure all double acting cylinders are in the closed position and pump is not operating, and then add oil to within one (1) inch of the top of the reservoir.
- f. Relief valve stuck in open position—clean and readjust.
- g. Relief valve improperly adjusted for system pressure requirements allowing oil to bypass back to the reservoir—see page 2 “Directional Control Valve Information”.
- h. Pump wear plates worn, heat scored, gouged or cracked—rebuild or replace pump.

2. Erratic operation:

- a. Air in system—bleed cylinders, check for foaming oil, tighten all loose fittings and hose connections. (Must after first 50 hours)
- b. Low oil level
- c. Dirty hydraulic lines not passing past the preset fitting

3. Equipment creeps down:

- a. Valve spool not centered—check positioning of valve lever.
- b. New valve/valves keep creeping down (Check Cylinder then the valve. The parking jack is problem area and can install a check valve if needed.)
- c. Valve spool worn—replace with new valve (Spool section and housing are match machined.)
- d. Worn cylinder packing or cups—replace worn parts.
- e. This goes for swing arm moving out by itself. (Packing gone)
- f. All Hoist Cylinder has a throttle fitting install from cylinder



HYDRAULIC SYSTEM MAINTENANCE (CONTINUED)

4. Noisy hydraulic system:

- a. Relief valve chattering—clean or replace.
- b. Joystick valve chattering for the relief is close down
- c. Low oil level—can cause pump capitation and pump noise.
- d. Pump bolts to tight and the gear are rubbing
- e. Worn pump—bearings, wear plates and body interior may be worn.
- f. 12 volt power system motor is burning up or sticking
- g. 12 volt power system pump is noisy and worn

Hydraulic Oil Fluids

The following fluids are recommended:

All-purpose Hydraulic Oil	Tractor Supplies Company
All-purpose Hydraulic Oil	Sam's Club
All-purpose Hydraulic Oil	NAPA Brand
All-purpose Hydraulic Oil	Advance Auto

LUBRICATION INSTRUCTIONS FOR FAN BEARINGS

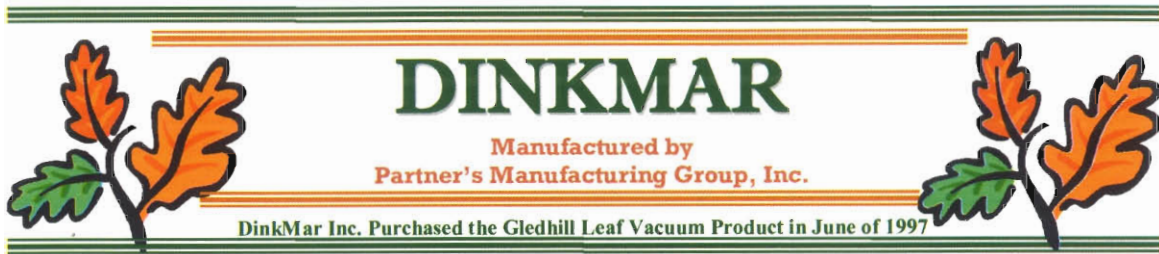
In general, grease is recommended as the lubricant for fans shaft equipped with anti-friction bearings grease. Partner Mfg. Group, Inc. would like to see those Pillow Block Bearing grease 3 times a day. (Am Break, Noon, End of Day) The engine clutch assembly has 2 grease points for grease once every other day. (1-2 Pumps)

Machines that have Kraft Trans Fluid need the outer bearing grease everyday with 2-3 pumps. Remember that this bearing is enclosed in the fluid drive system

The Leaf Master Swing Arm joint has grease fittings for greasing everyday.

The SC Mule HCN Swing Arm joint has grease fittings for greasing everyday and the Slide-out system has 4 greasing points.

The SC Mule under body hoist and hinge assembly needs grease at least 3-4 times per season.



PART ORDER FORM

The following information is needed before your order can be placed with DinkMar

<u>P/N – Model #</u>	<u>Description</u>	<u>Qty.</u>	<u>Req. Del. Date</u>	<u>Price Each</u>	<u>Total Price</u>

Today's Date: _____
 Serial Number of Unit (if applicable): _____

Your P.O. #: _____

Company Name: _____

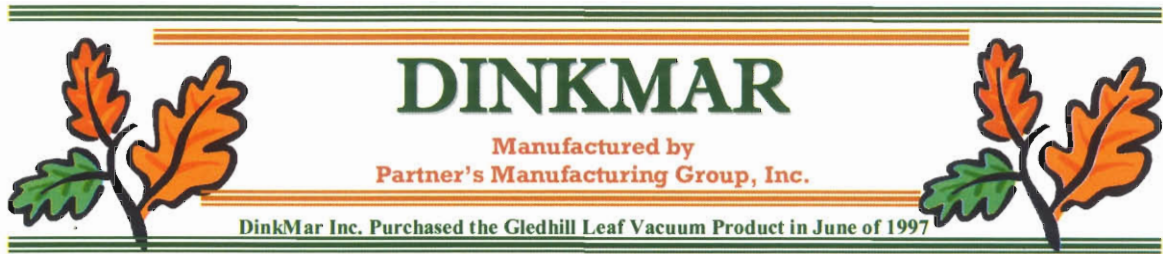
Address: _____

Tel. No.: _____ FAX No.: _____

E-Mail : _____ Contact: _____

Ship Via: _____

Ship To Address: _____



PART ORDER FORM

The following information is needed before your order can be placed with DinkMar

<u>P/N – Model #</u>	<u>Description</u>	<u>Qty.</u>	<u>Req. Del. Date</u>	<u>Price Each</u>	<u>Total Price</u>

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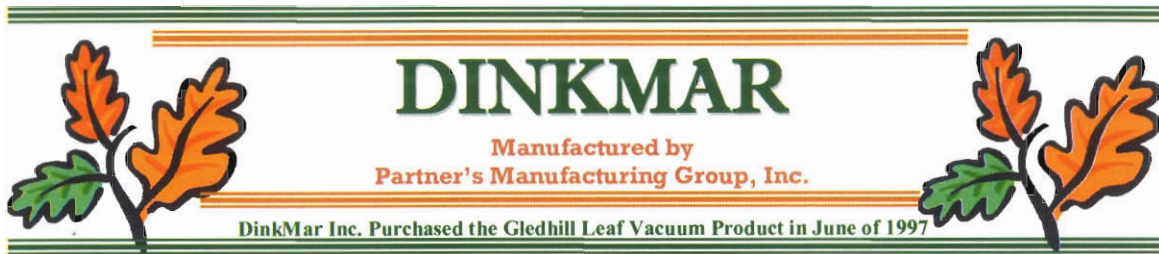
Address: _____

Tel. No.: _____ FAX No.: _____

E-Mail : _____ Contact: _____

Ship Via: _____

Ship To Address: _____



PART ORDER FORM

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Today's Date: _____
 Serial Number of Unit (if applicable): _____

Your P.O. #: _____

Company Name: _____

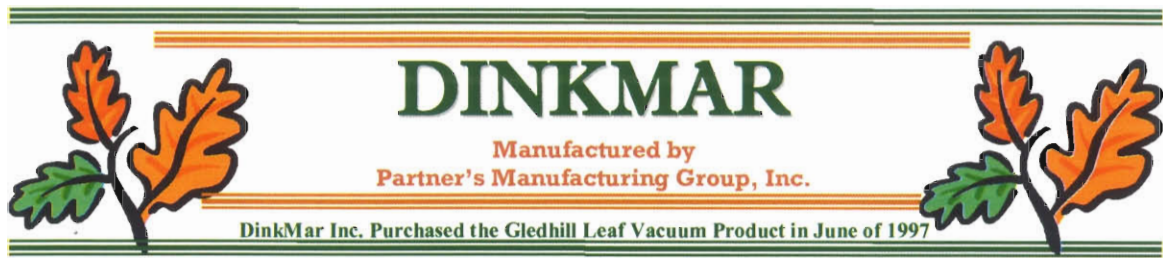
Address: _____

Tel. No.: _____ FAX No.: _____

E-Mail : _____ Contact: _____

Ship Via: _____

Ship To Address: _____



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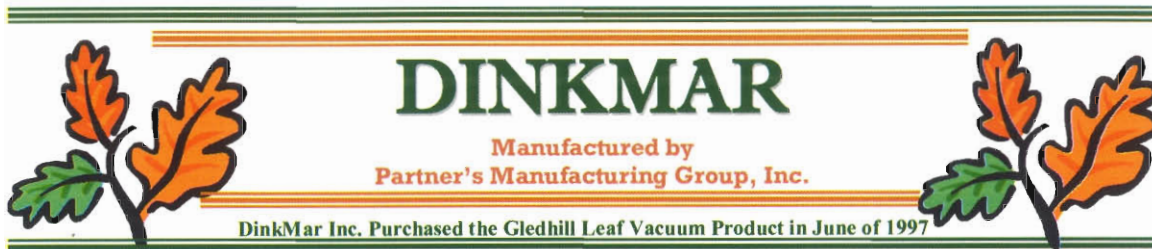
Address: _____

Tel. No.: _____ FAX No.: _____

E-Mail: _____ Contact: _____

Ship Via: _____

Ship To Address: _____



WARRANTY/NON-WARRANTY RETURNED MATERIAL FORM

Please supply Dink-Mar with the following information for warranty or non-warranty return of product. **Please contact us before shipping material for an RMA (Returned Material Authorization) number.**

Today's Date: _____

RMA# _____ (Dink-Mar to pre-assign)

Model/Part No.: _____ Serial #: _____

P/N Description: _____

Qty.: _____ Warranty _____ Non-Warranty _____

Reason for Return: _____

Your P.O. No. (if out of two year warranty): _____

Customer: _____

Contact Name: _____

Tel. No.: _____ FAX: _____

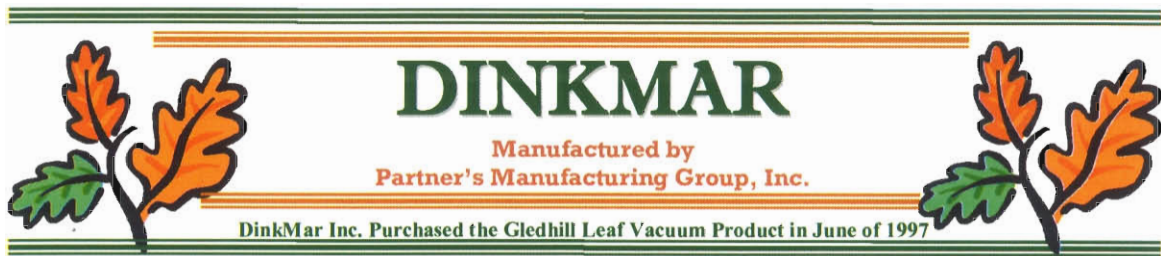
E-Mail Address: _____

Address: _____

Requested Product Return Date: _____ Ship Via: _____

Ship To Address: _____

Please include RMA # on all shipping paperwork for product returned to Dink-Mar.



WARRANTY/NON-WARRANTY RETURNED MATERIAL FORM

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Qty.: _____ Warranty _____ Non-Warranty _____

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Your P.O. No. (if out of two year warranty): _____

Customer: _____

Contact Name: _____

Tel. No.: _____ FAX: _____

E-Mail Address: _____

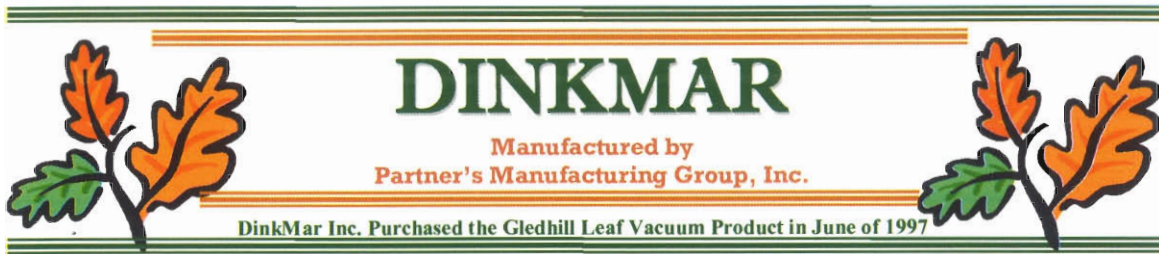
Address: _____

Requested Product Return Date: _____ Ship Via: _____

Ship To Address: _____

Please include RMA # on all shipping paperwork for product returned to Dink-Mar.

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Today's Date: _____

RMA# _____ (Dink-Mar to pre-assign)

Model/Part No.: _____ Serial #: _____

P/N Description: _____

Qty.: _____ Warranty _____ Non-Warranty _____

Reason for Return: _____

Your P.O. No. (if out of two year warranty): _____

Customer: _____

Contact Name: _____

Tel. No.: _____ FAX: _____

E-Mail Address: _____

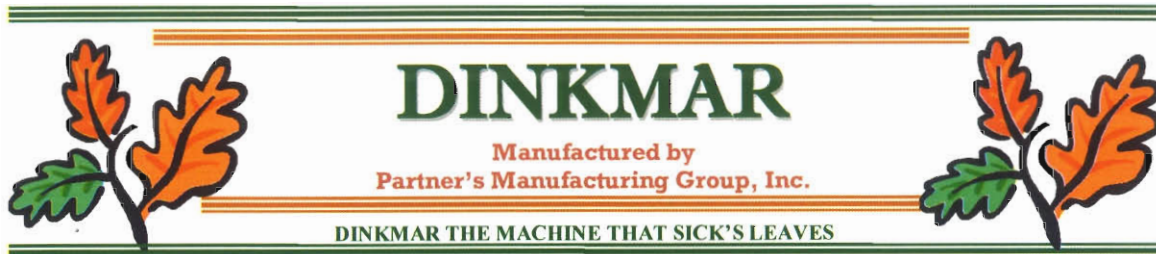
Address: _____

Requested Product Return Date: _____ Ship Via: _____

Ship To Address: _____

Please include RMA # on all shipping paperwork for product returned to Dink-Mar.

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CAUTION

CHECK ALL LUG NUTS AFTER THE FIRST 100 MILES.

- A. TORQUE FOR CLAMP NUTS 190-210 #-FT**
- B. TORQUE FOR FLANGE NUTS 275-325 #-FT**
- C. CHECK ALL SPRING BOLTS AND NUT AFTER EACH SEASON FOR STRESS FROM TURNING**
- D. GREASE ALL AXLES WITH BEARING**
- E. CHECK ALL AXLES WITH OIL HUBS**
- F. CHECK AIR PRESSURE EACH DAY**
- G. CHECK ELECTRIC BRAKES, BRAKE AWAY, & WIRE**

DINKMAR HYDRAULIC SYSTEM MANUAL/ELECTRIC

- A. CHANGE HYDRAULIC OIL FILTER EACH SEASON**
- B. CHECK HYDRAULIC OIL LEVEL EACH DAY**
- C. CHECK ALL HYDRAULIC HOSES AND FITTINGS**
- D. CHECK IN-LINE OIL FILTER (ELECTRIC VALVE)**
- E. CHECK OIL LEVEL IN OIL TANK (WEEKLY)**
- F. CHECK JOY-STICK FOR PROPER TIGHTNESS**
- G. CHECK ALL OTHER LEVER FOR STRESS**
- H. CHECK POWER CORD FOR 12-VOLT SYSTEM**
- I. CHECK POWER CORD FOR HAND CONTROL**
- J. CHECK BATTERY FOR HAND CONTROL**
- K. CHECK PLUGS ENDS THAT ARE CLEAN**
- L. DINKMAR STANDARD FARM HYDRAULIC OIL**



DINKMAR

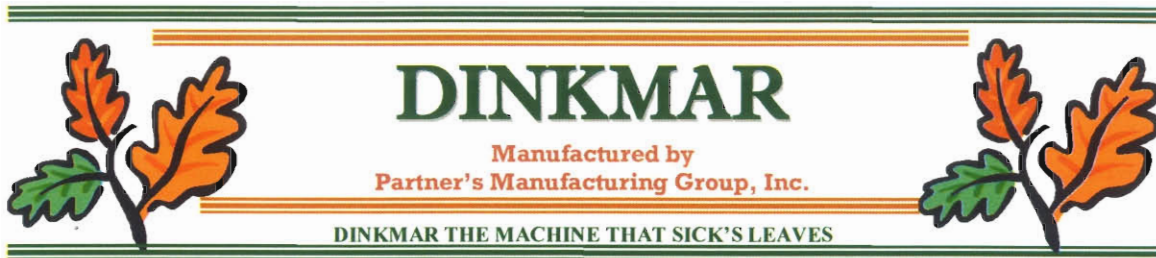
Manufactured by
Partner's Manufacturing Group, Inc.

DINKMAR THE MACHINE THAT SICK'S LEAVES



MOTOR MAINTAINS AND SERVICE

- A. CHANGE OIL AFTER FIRST 100 HOURS SERVICE**
- B. CHANGE FUEL FILTER AFTER EVERY SEASON**
- C. CHECK FUEL TANK SUCTION SIDE FOR DIRT
SMALL LEAF FLAKES FROM THE FUEL TANK**
- D. KEEP THE RADITATOR CLEAN AND BLOW OUT
CLEAN THE RADITATOR AFTER EACH SEASON SO
THE MATERIAL WILL NOT GET HARD AND CAUSE
MORE PROBLEM IN YEARS TO COME**
- E. CHECK THE AIR CLEANER EVERYDAY AND
REMEMBER THERE ARE 2 FILTER TO BE CHECK**
- F. DINKMAR HAS FILTER FOR ALL ENGINES**
 - 1. JOHN DEERE MOTOR 5030T, 4045D, & 4045T**
 - 2. KUBOTA MOTOR 3300T, 3800T**
 - 3. PERKINS MOTOR 5034**
 - 4. CAT. MOTOR 5034**
 - 5. CUMMINS MOTOR 3.3 LITER & 4.5 LITER**
- G. DINKMAR OFFER FULL LINE OF SERVICE ON
ALL ENGINES USED ON DINKMAR MACHINE.**
- H. DINKMAR DOES OFFER UP DATE ENGINE CONTROL
PANEL FOR OTHER LEAF VACUUM MACHINES.**
- I. CHECK MACHINE BELT AND PULLEY BEFORE
EACH SEASON (CRACKS IN BELT)**

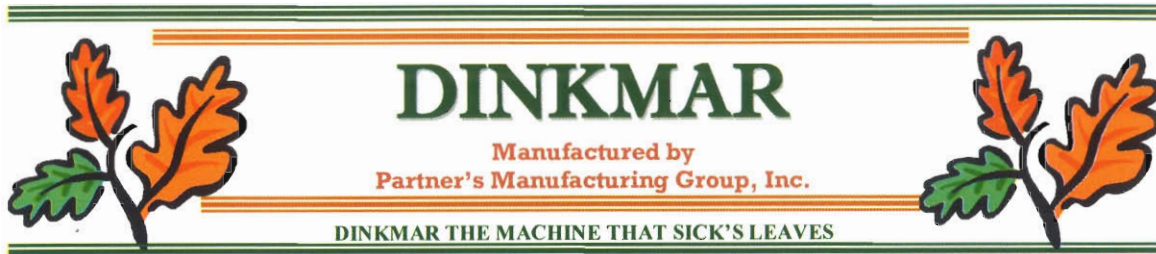


IMPORTANT SAFETY INSTRUCTIONS (VIBRATOR)

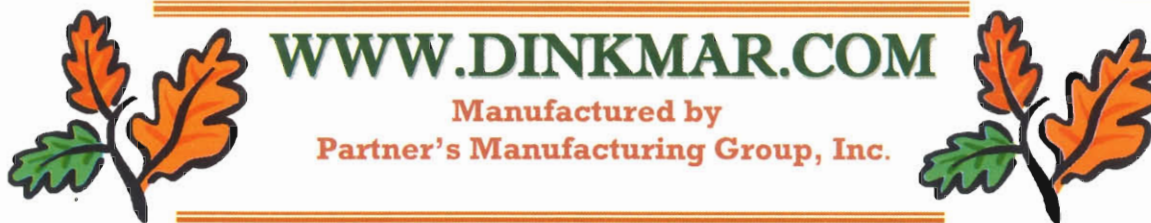
- A. MAKE SURE SAFETY CHAIN OR CABLE TO HANDLE AND IS CHECK WHILE RUNNING THE HOIST UP AND DOWN.**
- B. RETIGHTEN BOLT'S AFTER 4-5 TIMESS OF RUNNING VIBRATOR (DO THIS PERIODICALLY)**
- C. DO NOT OPERATE WITH COUNTERWEIGHT GUARD REMOVED. IF COVERS ARE REMOVEED MAKE SURE POWER IS TURNED OFF & LOCKED SO IT CAN'T BE TURNED ON ACCIDENTALLY.**
- D. MAKE SURE GROUND CONNECTIONS IS COMPLETED. DISCONNECTED ELECTRIC SUPPLY BEFORE WORKING ON UNIT.**
- E. MODEL DC3500 IS RATED FOR INTERMITTENT DUTY ONLY. MAXIMUM RUN TIME = 30 SEC. WITH MINIMUM ONE (1) MINUTE OFF TIME**
- D. FOR MORE INFORMATION WWW.VIBCO.COM**

Running DinkMar Leaf Vacuum Machines

- A. DRY LEAVES PICK-UP THE MACHINE SHOULD RUN AT 1500 TO 1700 RPM FOR DUST CONTROL**
- B. IF THE LEAVES ARE DAMP AND LITTLE HEAVY MACHINE RUN AT 1800 TO 2300 RPM FOR DUST CONTROL**
- C. IF THE LEAVES ARE WET AND FROZEN DOWN THE MACHINE SHOULD BE RUN 2300 RPM FOR MAX. PICK-UP**



- D. NEVER RIDE ON THE LEAF MASTER SEAT FROM THE SHOP TO THE LEAF PILES.**
- E. NEVER RIDE ON THE SC-MULE HCN SEAT FROM THE SHOP TO THE LEAF PILES**
- F. ALWAYS ROTATE 16" X 10' IN-TAKE HOSE FOR EVEN WEAR ON THE HOSE. (IF THIS PROCESS IS NOT DONE, IT WILL CAUSE HOLES IN HOSE)**
- G. GREASE PILLOW BLOCK EVERYDAY 2-3 TIMES**
- H. CHECK SAFTEY CHAIN AND SAFTEY HOCK LATCH**
- I. CHECK FOR VIBERION FROM FAN BEING OUT OF BALANCE. (DINKMAR CAN REBALANCE FANS)**
- J. DECAL IMPORTANCE PART OF SAFTEY ON DINKMAR MACHINES. DINKMAR WILL SEND NEW DECAL WITH NO ADDED COST FOR REPLACEMENT.**



New 2013 Replacement Parts List

Curb Runner-Leaf Master–SC Mule Machine Hydraulic

- A. DP-7001 Complete Filter Assembly
- B. DP-7001-Element
- C. DP-7002 3-Spool Valve for 3 Axis Machine
- D. DP-7003 Joy-Stick Assembly
- E. DP-7004 LH Pump Assembly
- F. DP-7005 Single Spool Valve
- G. DP-7006 Single Spool Valve W/Float (Leaf Master)
- H. DP-7007 2-Spool Valve
- I. DP-7008 Curb Runner Electric/Hydraulic System
- J. DP-7017 RH Pump Assembly (JD5530, Cummins, & Perkins)
- K. DP-7023 New 4 Spool Electric Valve System
- L. DP-7024 Autec and Valve Assembly Complete
- M. DP-7025 New Autec Control System
- N. DP-7027-A 7-Gallon Oil Tank Kit Assembly
- O. DP-7027-B 5-Gallon Oil Tank Assembly
- P. DP-1760 Welded 2" x 16" Cylinder (Swing Arm, Parking Jack, Up/Down, 3rd Axis, and Slide In/Out)
- Q. DP-1760-5 Welded Cylinder Swing Arm W/5" Sleeve
- R. DP-1760-9 Welded Cylinder Swing Arm W/9" Sleeve
- S. DP-1761 Welded 2" x 16" Cylinder (Float Cylinder)
- T. DP-7019-T Tie Rod Cylinder 2" x 10" (Exhaust Float Cylinder)
- U. DP-7021-T Tie Rod Cylinder 2" x 16" (Parking Jack, Up/Down, 3rd Axis, and Slide In/Out)

Curb Runner-Leaf Master–SC Mule Machine Hydraulic



WWW.DINKMAR.COM

Manufactured by
Partner's Manufacturing Group, Inc.



- V. DP-7020 In-Line Throttle for SC-Mule Only
- W. DP-7026 Front Parking Jack Locking Valve
- X. DP-9003 1/16" Orifice Fitting Control (Manual Control)
- Y. DP-9018 1/32" Orifice Fitting Control (Electric Control)
- Z. DP-9005 Hose Fitting for DP-1760 Cylinder
- AA. DP-9020 Pump In-Let Fitting
- BB. DP-9012 Pump Out-Let Fitting
- CC. DP-1619 Seal Kit for Prince Valve
- DD. DP-17001 Seal Kit For Prince Pump
- EE. All fitting are stock items and standard size

Common Replacement Parts for Curb Runner-Leaf Master

- A. DP-252-B-30 Standard 30" Fan Assembly
- B. DP-252-B-32 Standard 32" Fan Assembly
- C. DP-252-B-34 Standard 34" Fan Assembly (London, Ohio)
- D. DP-5018 Q3-2 3/16" Bushing
- E. DP-163-B Standard Fan Shaft
- F. DP-6884 Old Gledhill Part Number for Fan Shaft
- G. DP-5008 Standard Pillow Block 2 3/16" Assembly
- H. DP-5014 Double Rolling Pillow Block 2 3/16" Assembly
- I. DP-505-B Liner Assembly with Hardware Kit
- J. DP-3001-C 45 Degree Scroll Assembly (Big Six Machine)

Common Replacement Parts Curb Runner-Leaf Master

- K. DP-3002-B Exhaust Tube Assembly (Big Six Machine)
- L. DP-3003-B Exhaust End Square to 16" Round (Big Six Machine)
- M. DP-497-B Standard Front Scroll Assembly Only
- N. DP-126-B2 Standard Front Cover Assembly 16" Hose

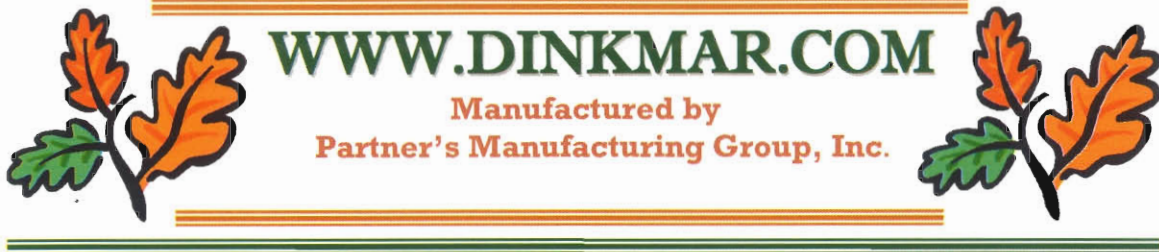


WWW.DINKMAR.COM

Manufactured by
Partner's Manufacturing Group, Inc.



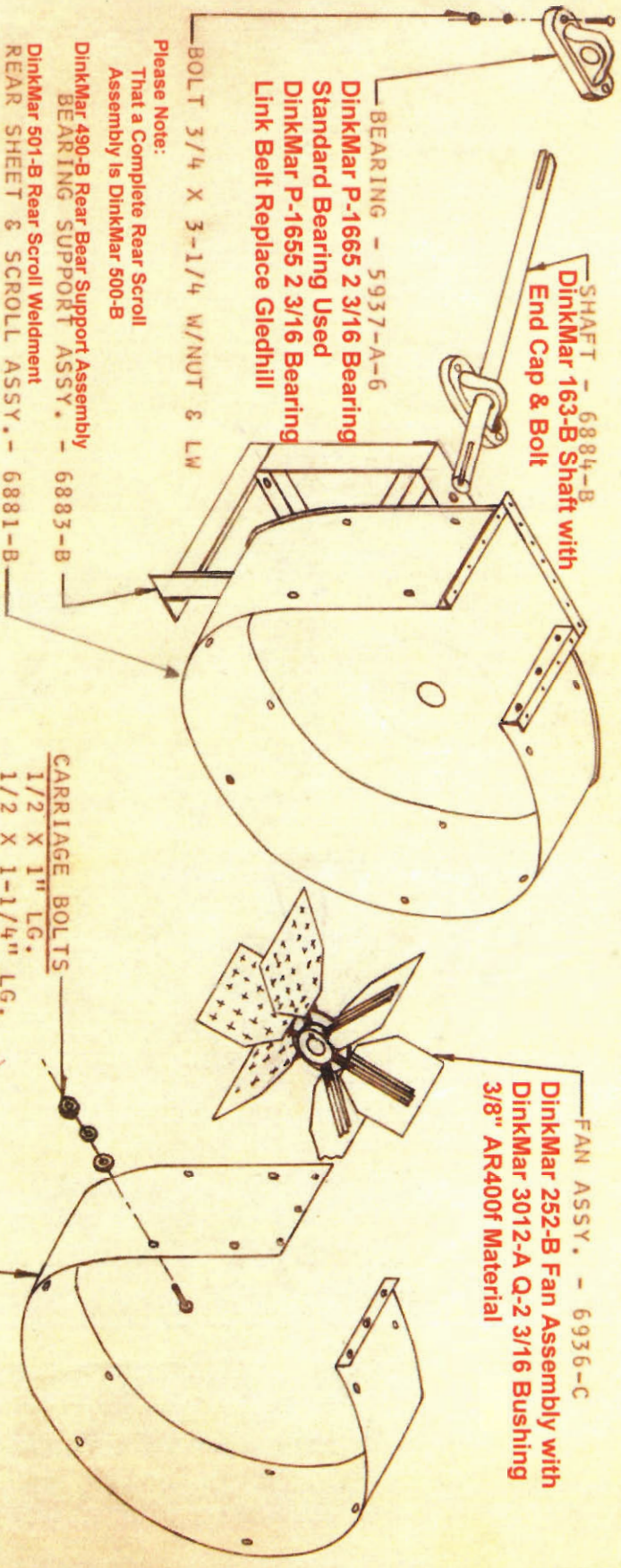
- O. DP-501-B Standard Rear Scroll Assembly
- P. DP-485-B Standard Turn Table Base
- Q. DP-7651-C 360 Degree Elbow Assembly Only
- R. DP-7551-CK Elbow Kit Assembly (Elbow, Turn Table, Clamps, 2" x 16" Cylinder, and Hardware)
- S. DP-108-B Standard Turn Table Assembly
- T. DP-3013-B Standard Turn Table W/Cylinder Mounting Bracket
- U. DP-346-B Standard Square Exhaust Tube
- V. DP-529-B Standard 16" Round Exhaust Tube
- W. DP-484-B Standard Exhaust Tube Frame Assembly
- X. DP-231-B Turn Table Clamp 2" Front
- Y. DP-350-B Turn Table Clamp 3" Side and Back
- Z. DP-446-B Key Stock for Drive Pulley
- AA. DP- 3007-B Hose Support Boom with Snap Hook
- BB. DP-520-B Intake Nozzle Boot Complete
- CC. DP-293-B Support Ring Assembly Less Tire
- DD. DP-483-B Drive Shaft Guard
- EE. DP- 306-B Belt Guard Assembly
- FF. DP-451-b HCN Arm Rest Assembly
- GG. DP-291-B-16 Intake Nozzle Assembly (2 Axis)
- HH. DP-291-B-16 Intake Nozzle Assembly (3 Axis)
- II. DP-293-B1 16" Replacement Bottom Ring
- JJ. DP-142-B Power Parking Jack Less Wheel
- KK. DP-3004-B Swing Arm Brackets Assembly
- LL. DP-221-B Weld-on Washer AR Material
- MM. DP-423-B Cylinder Pivot Bearing Bracket
- NN. DP-423-1A Press Fit Steel Bushing
- OO. DP-423-B Swing Arm Pivot Bearing Bracket
- PP. DP-3006-B 2-Axis Swing Arm Assembly (Only)
- QQ. DP-3006-B 3-Axis Swing Arm Assembly (Only)



- RR. DP-158-B Engine Adjustment Bolts Assembly
- SS. DP-3010-B Slide-In Hitch Assembly (Old & New)

Common Replacement Parts Self-Contain Mule

- A. DP-252-30-PTO CCW Hand Fan Assembly PTO Clutch
- B. DP-252-32-PTO CCW Hand Fan Assembly PTO Clutch
- C. DP-SC-30-F CCW Hand Fan Assembly Fluid Clutch
- D. DP-SC-32-F CCW Hand Fan Assembly Fluid Clutch
- E. DP-5019 Q3-2.25" Fan Bushing
- F. DP-446-B Fan Key Stock
- G. DP-3005-B Rear Scroll Cover
- H. DP-3011-B Front Scroll Cover with Front Cover Door
- I. DP- 505-B Liner Assembly with Hardware
- J. DP-296-B Over Head Boom Assembly
- K. DP-291-16 Intake Nozzle Assembly (3 Axis)
- L. DP-293-B1 Replacement Bottom Ring
- M. DP-520-B-16 Rubber Nozzle Boot
- N. DP-293-B Replacement Bottom Ring
- O. DP-451-B SC-HCN Arm Rest Assembly
- P. DP-3007-B SC-HCN Support Boom Assembly with Hook
- Q. DP-Kraft Trans Fluid Clutch Assembly
 - A. P-1753 Spherical Bearing (Outer Bearing)
 - B. P-1753-A #2 Housing Pilot Bearing
 - C. P-1754 Plugs
 - D. P-1755 Drive Shaft 2.25" Diameter
 - E. P-1756 #2 Housing Seal Kit
 - F. P-1757 #3 Housing Standard Seal Kit
- R. DP-1760-5 Swing Arm Cylinder
- S. DP-1760 Slide, Up & Down, Parking Jack, and 3 Axis Cylinder



Standard Parts list for Gledhill Leaf Loader

The machines that was built till 1995

List of Common parts for Gledhill & DinkMar

A. Fan Shaft

B. Carriage Bolts

C. Liner Assembly

2 3/16" Link Belt Pillow Has been Replace with

2 3/16" Brownies for all DinkMar Machine

2 3/16" Hub City for all Recon. & Econo Line

DinkMar fan Assembly is 252-B 3/8" AR400

Size from 25" to 34"

ALWAYS REFER TO SERIAL NUMBER WHEN ORDERING REPAIR PARTS

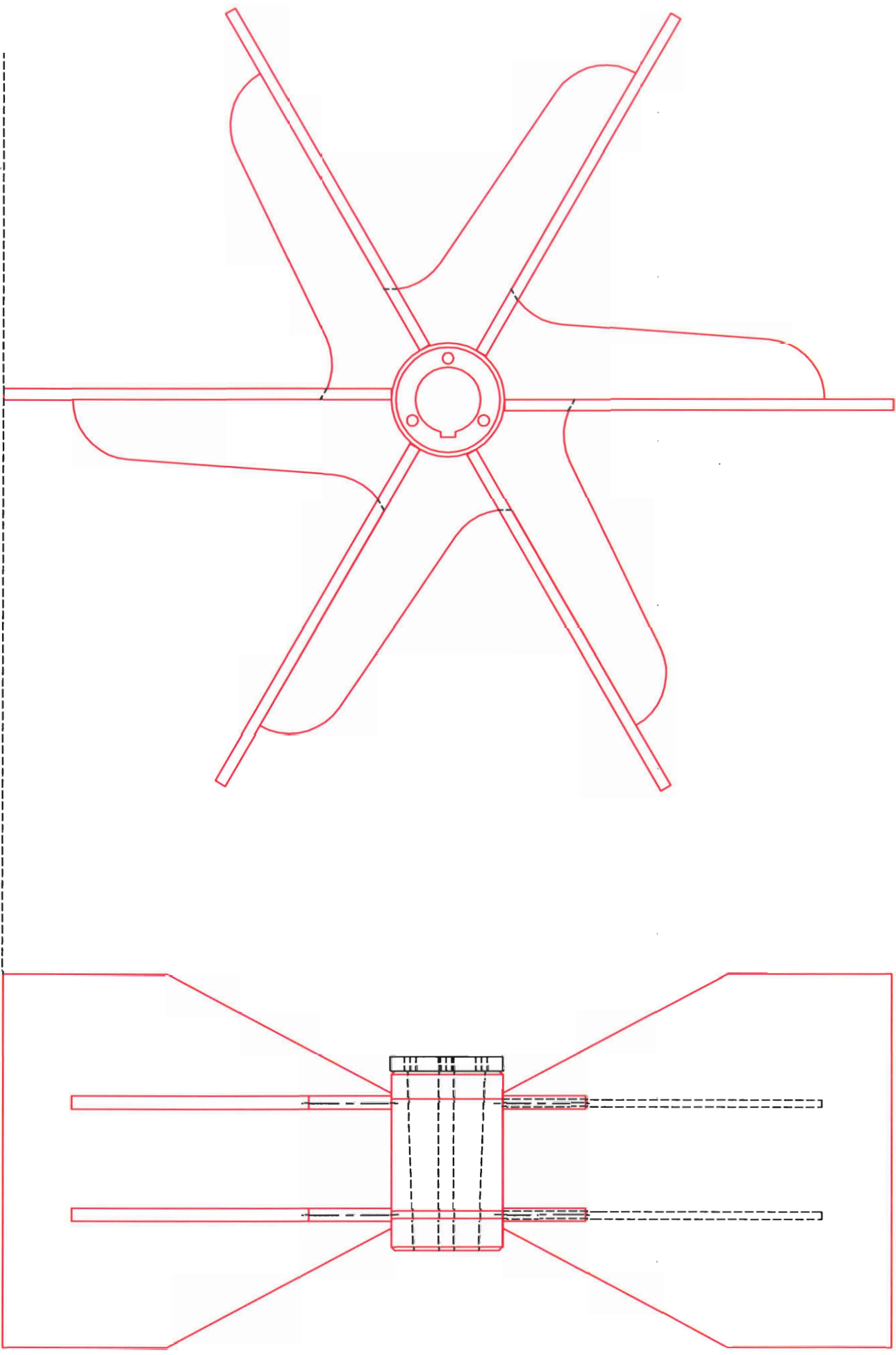
Please Note that the DinkMar

Also can Produce parts for

other make and model of Leaf

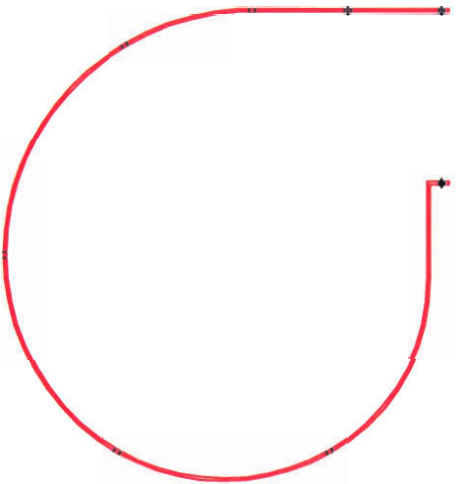
Loader machine that will meet

your needs and service cost



DINKMAR STANDARD FAN ASSEMBLY

DP-252-30-INCLUDE Q3-2.1875" BUSHING
DP-252-32-INCLUDE Q3-2.1875" BUSHING



DP-505-B-KIT HAS ALL THE HARDWARE WITH THE LINER
ASSEMBLY 6 SET 3/8" HARDWARE & 14 SET OF 1/2" HARDWARE

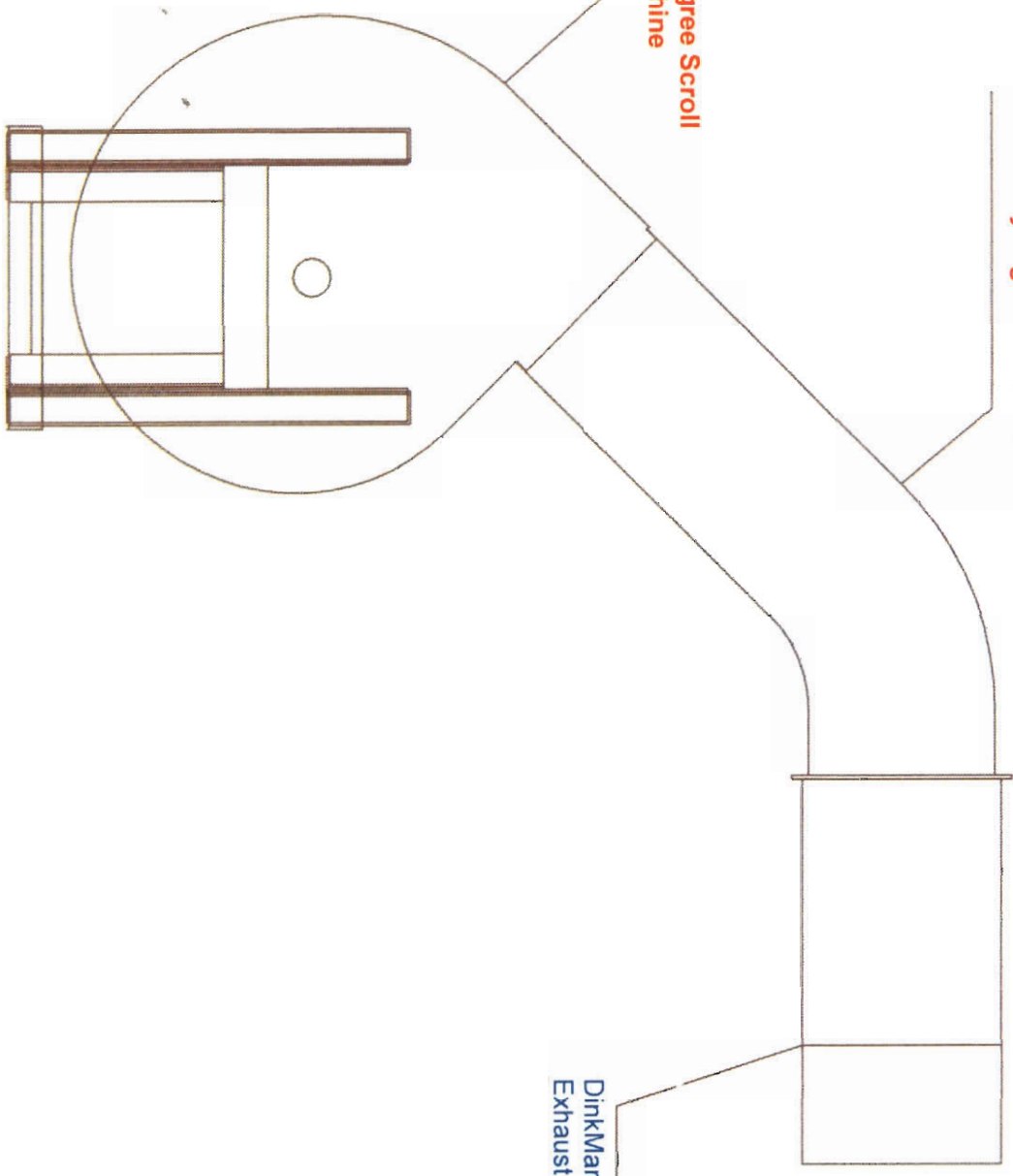
REF: LINER PN: 6880-D1

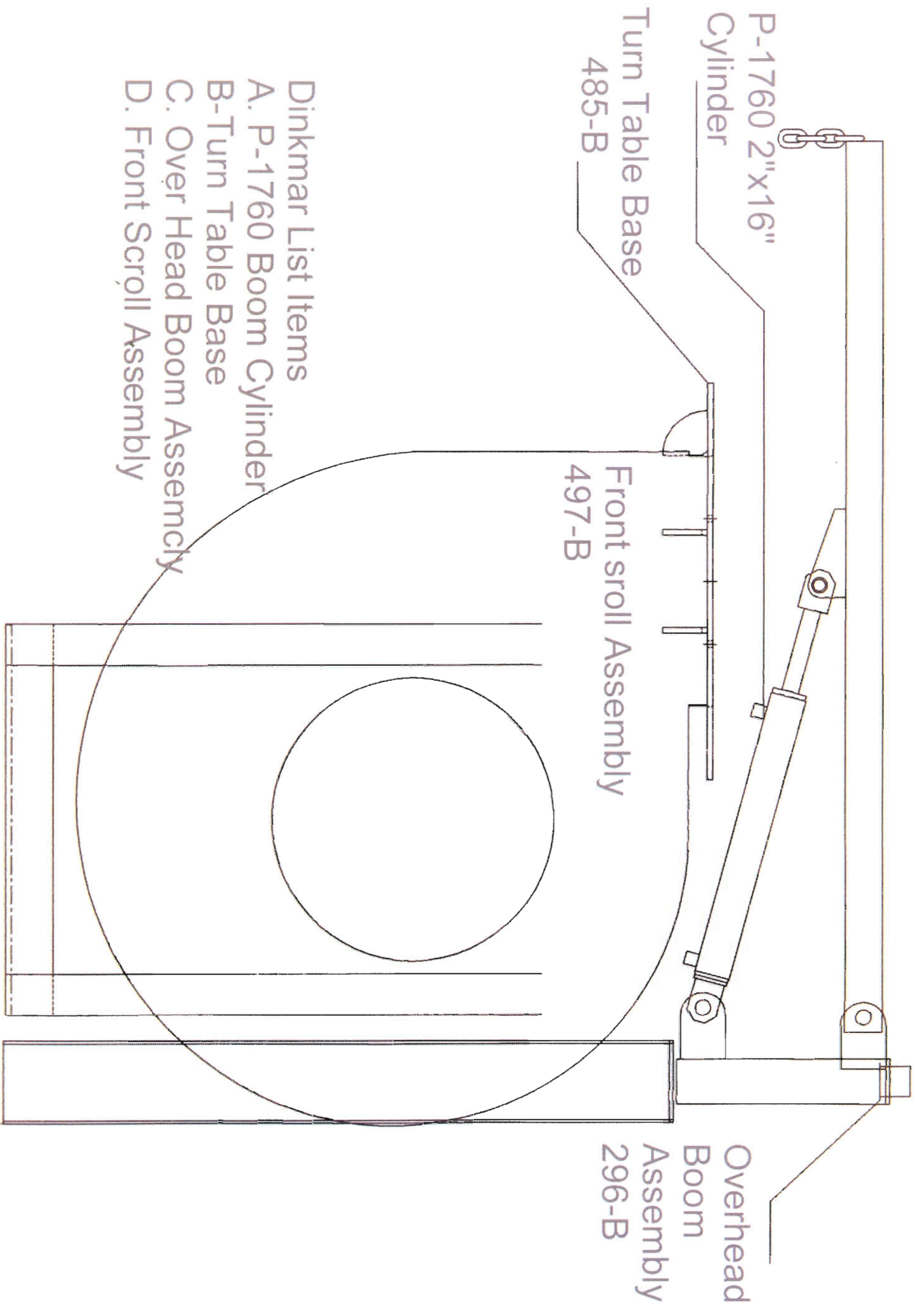
DINKMAR INC.			
GALION, OHIO 44833			
SCALE: NTS	APPROVED BY:		DRAWN BY:
DATE: 02-24-87			
LINER ASSEMBLY FOR SCROLL			
MFG'D BY PARTNERS MANUFACTURING GROUP INC.			DRAWING NUMBER: 505-B

DinkMar 3002-B Exhaust Elbow
Assembly Big Six Machine

DinkMar 3001-C 45 Degree Scroll
Assembly Big Six Machine

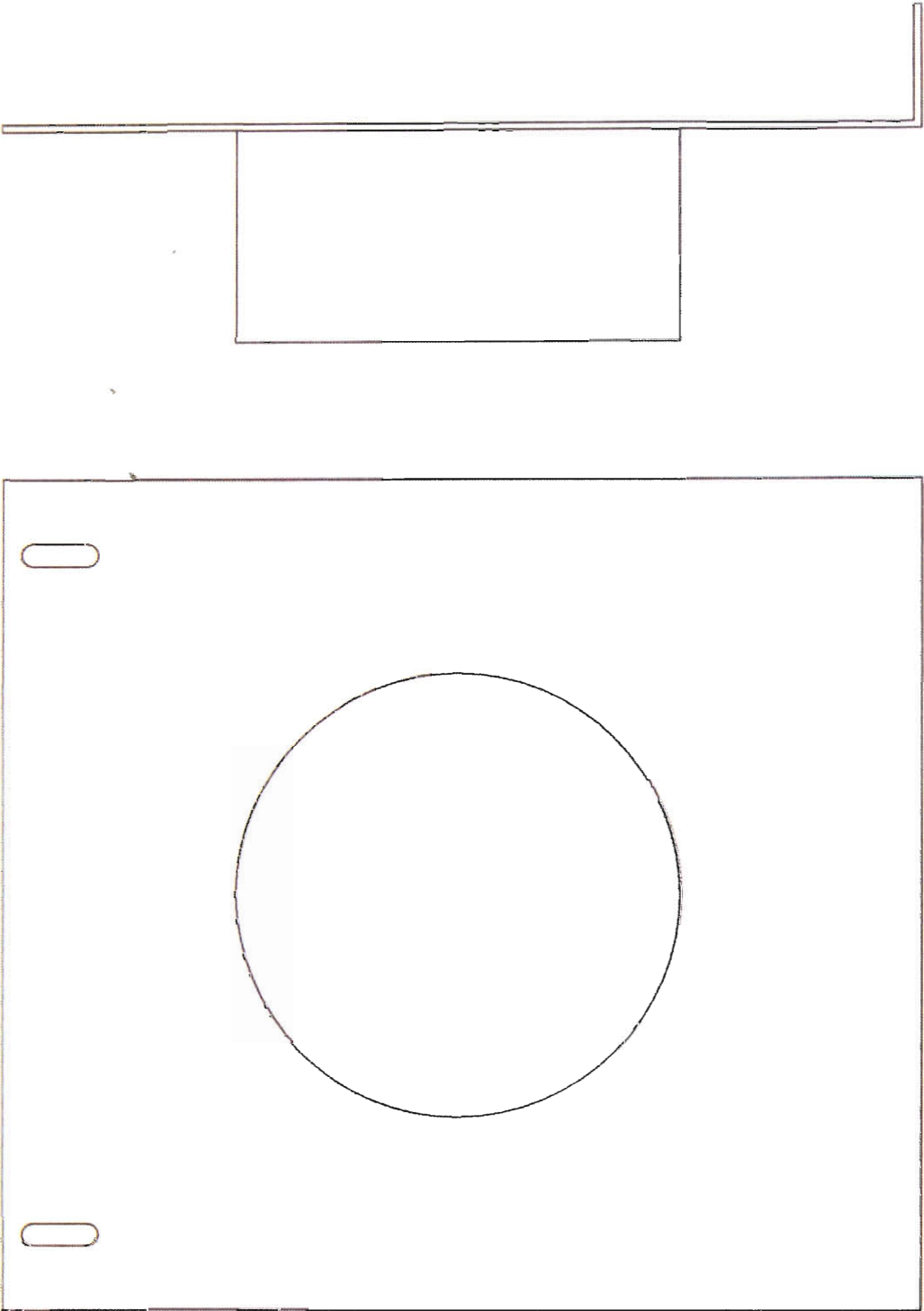
DinkMar 3003-B Square to Round
Exhaust Bix Six Machine



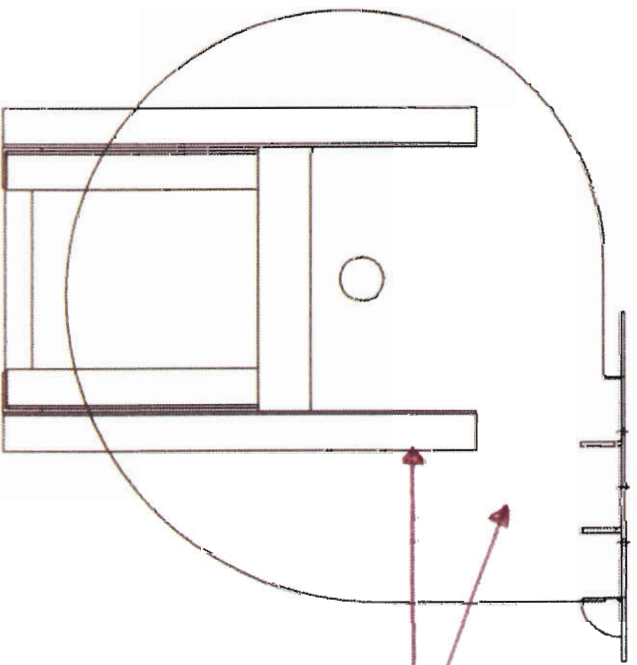
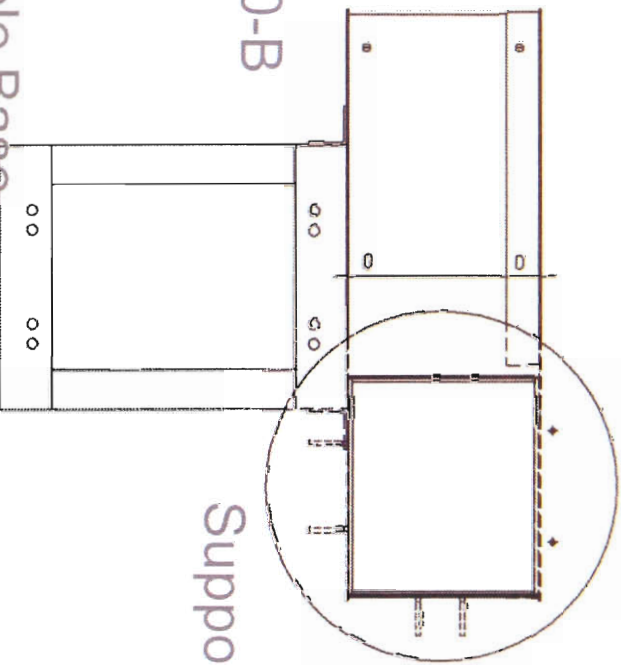
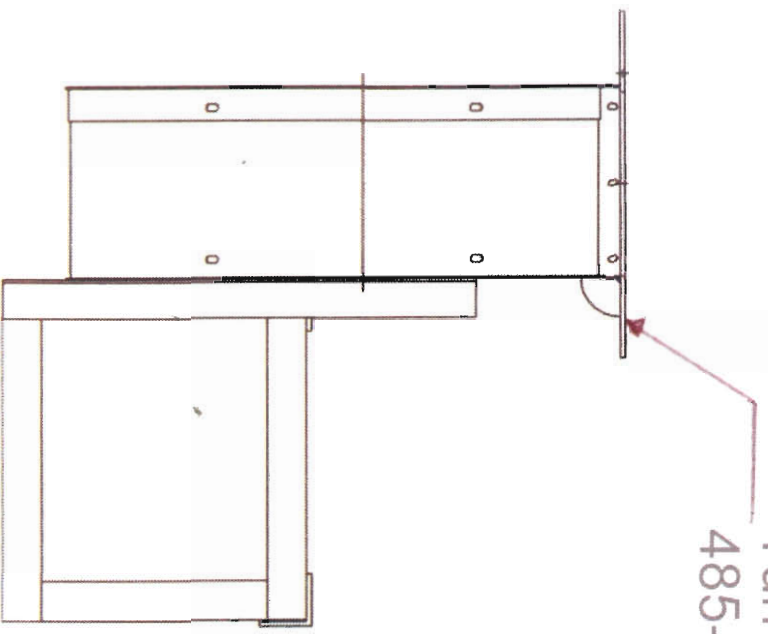


- Dinkmar List Items
- A. P-1760 Boom Cylinder
 - B-Turn Table Base
 - C. Over Head Boom Assesmcty
 - D. Front Scroll Assembly

OPTIONAL TUBE DIAMETERS		
PART NO.	PLATE HOLE DIA	HOSE DIA
126-B1	11-7/8"	12"
126-B2	15-7/8"	16"
126-B3	17-7/8"	18"



Dinkmar Rear Scoll Assembly 500-B
 Rear Scoll 501-B
 Bearing Support 490-B
 Support Gussett 485-B1
 Turn Table 485-B



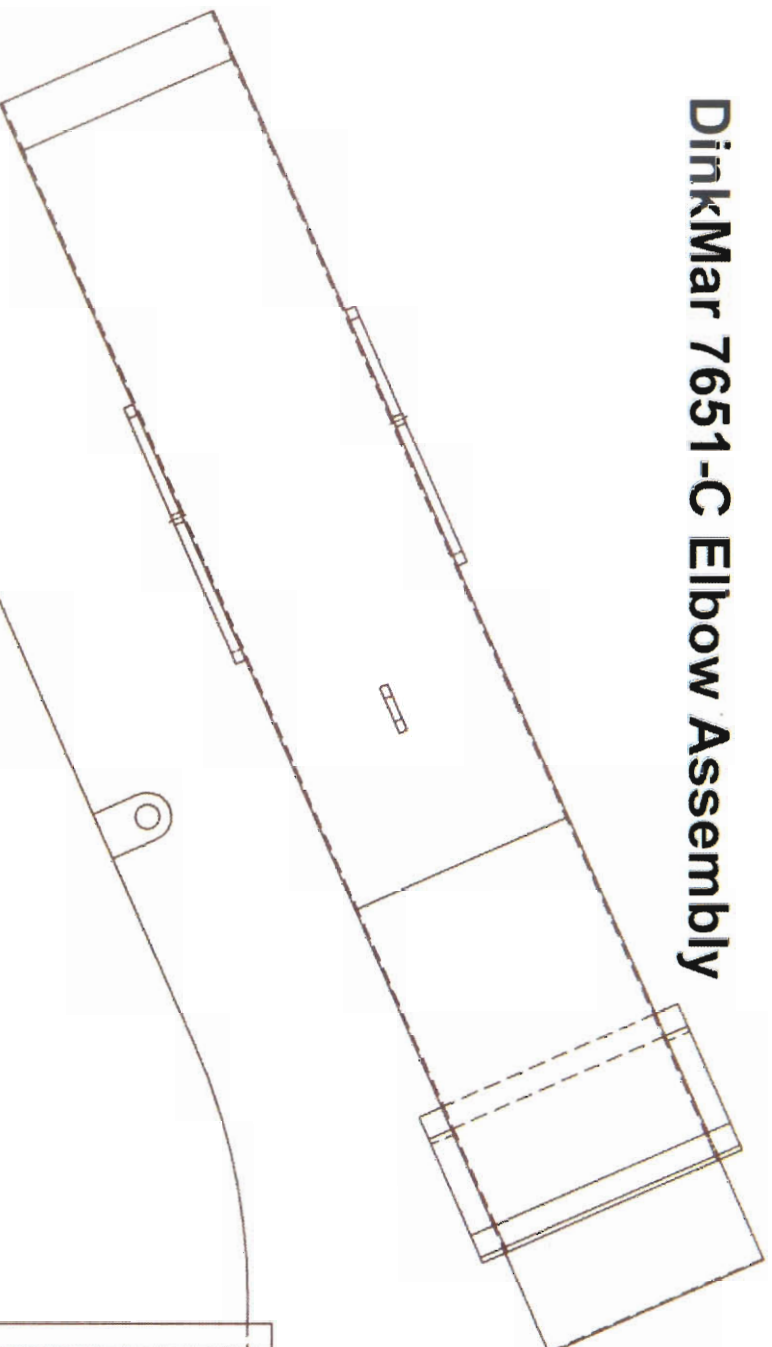
Bearing Support
 and Rear Scoll

DP-485-B

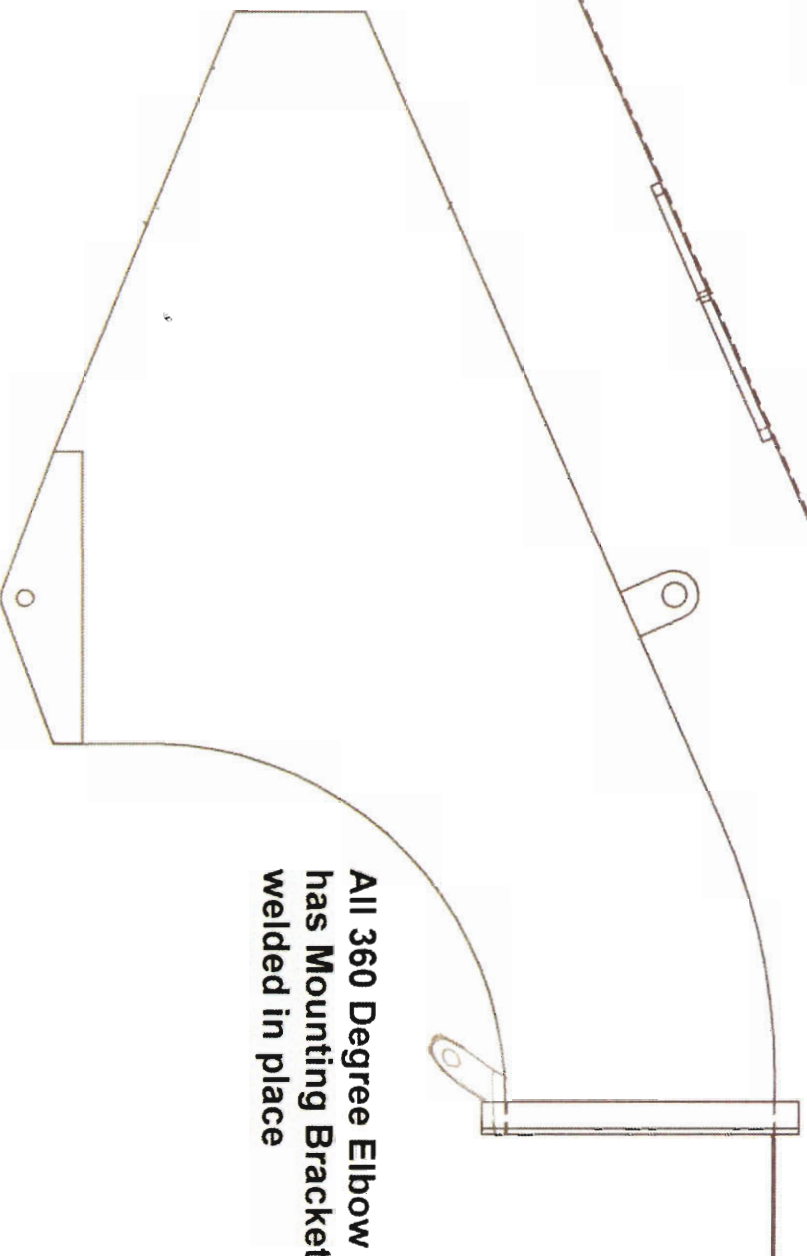
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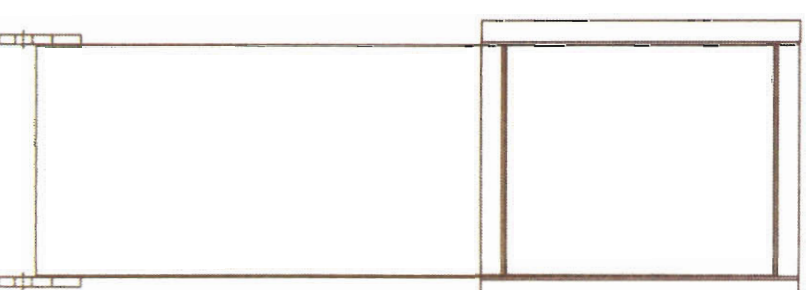
DinkMar 7651-C Elbow Assembly

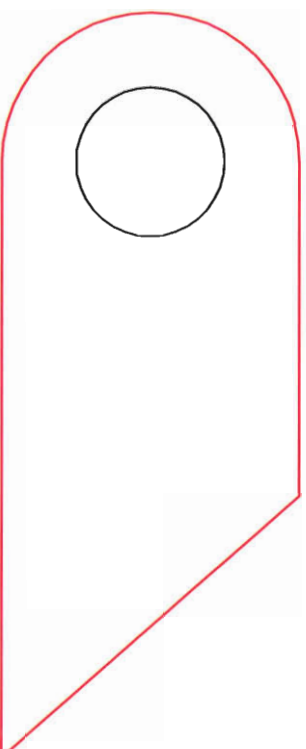


K-7651-C Elbow Kit Assembly
A. 7651-C Elbow
B.108-B Turn Table
C.P-1761 Cylinder
D.Hardware



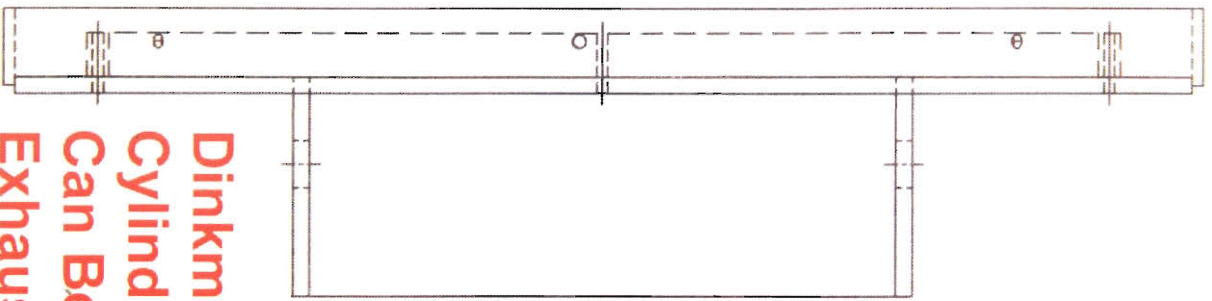
All 360 Degree Elbow
has Mounting Bracket
welded in place



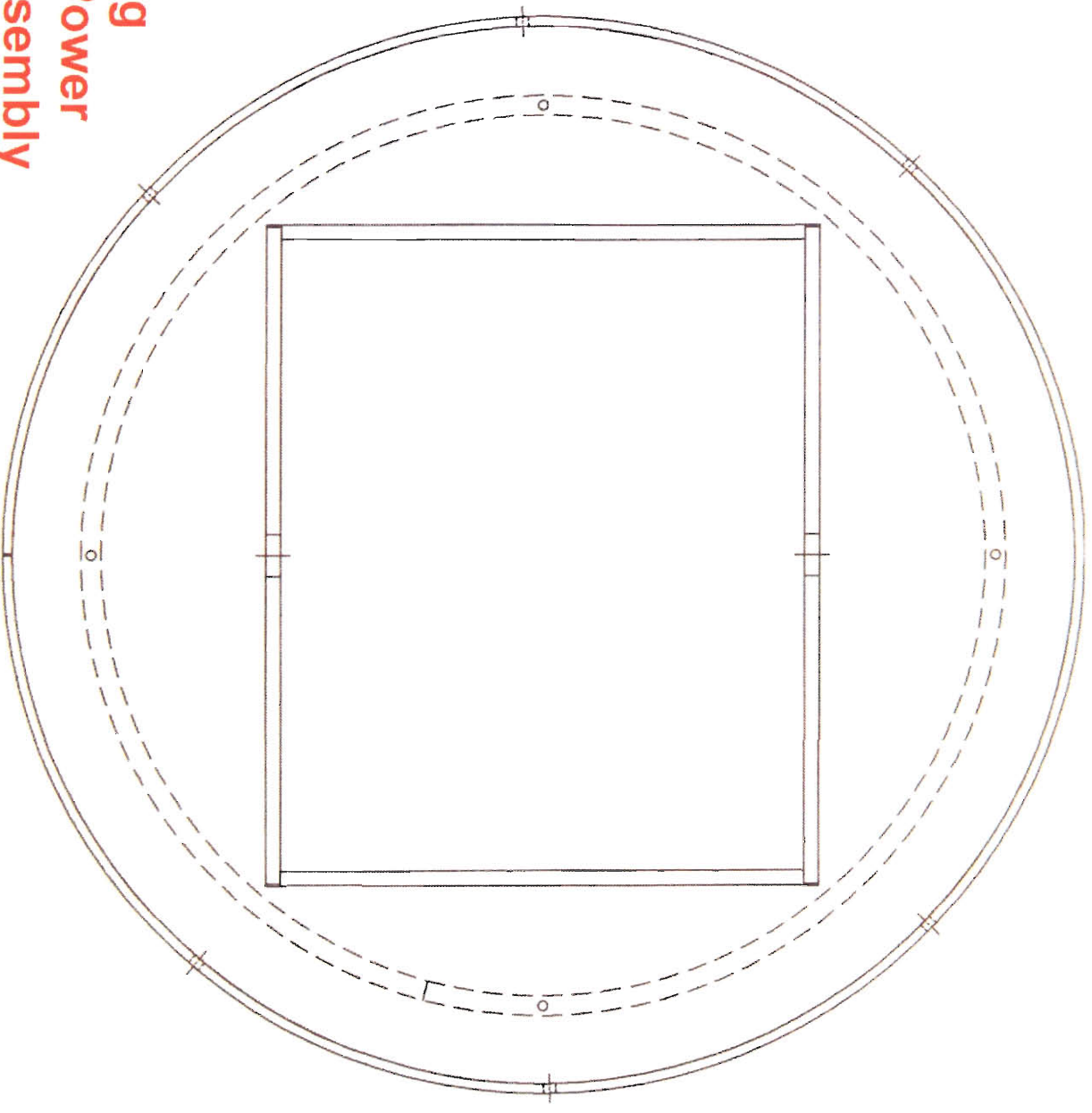


Leaf Box Hinge Assy and
Roller Assy
Cylinder Mount for 360
Degree Elbow

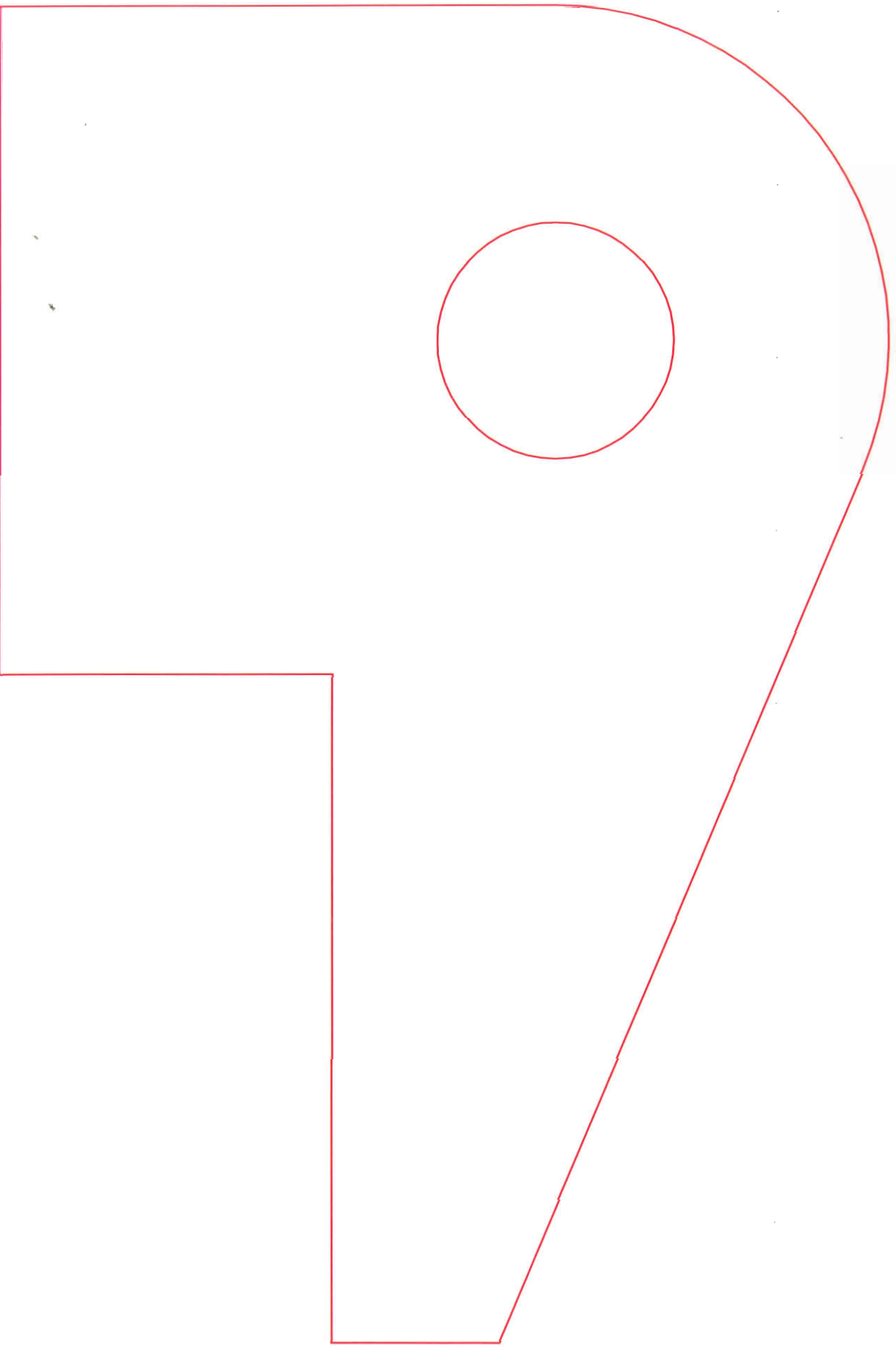
Please Note:
This parts is blank.
Hole Size – 13/16”
Hole Size – 1”1/16”



**Dinkmar 3013-B
Cylinder Mounting
Can Be Add for Power
Exhaust Tube Assembly**

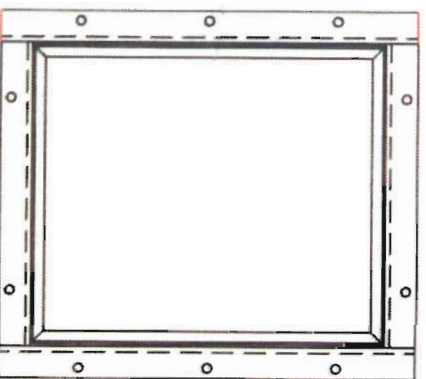


DimkMar Turn Table Assembly 108-B

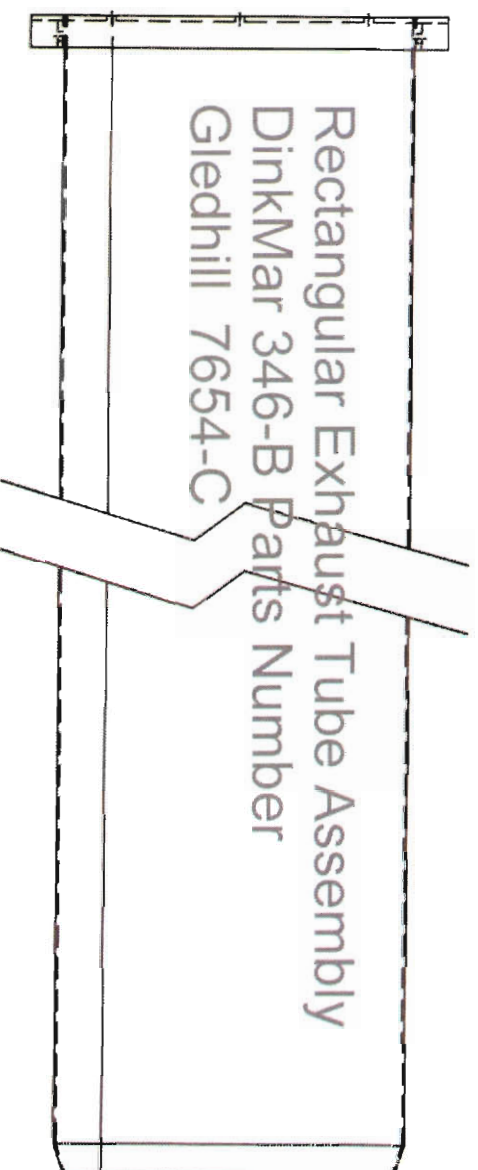


3013 Bracket for Cylinder Mount 360 Degree Elbow

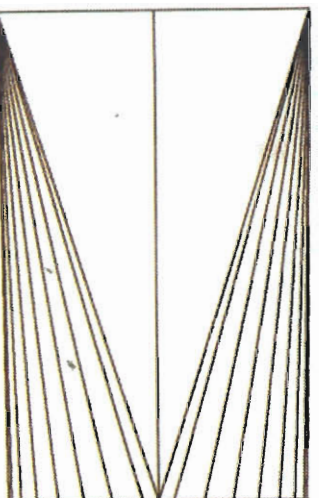
Square Frame Weldment DinkMar 484-B



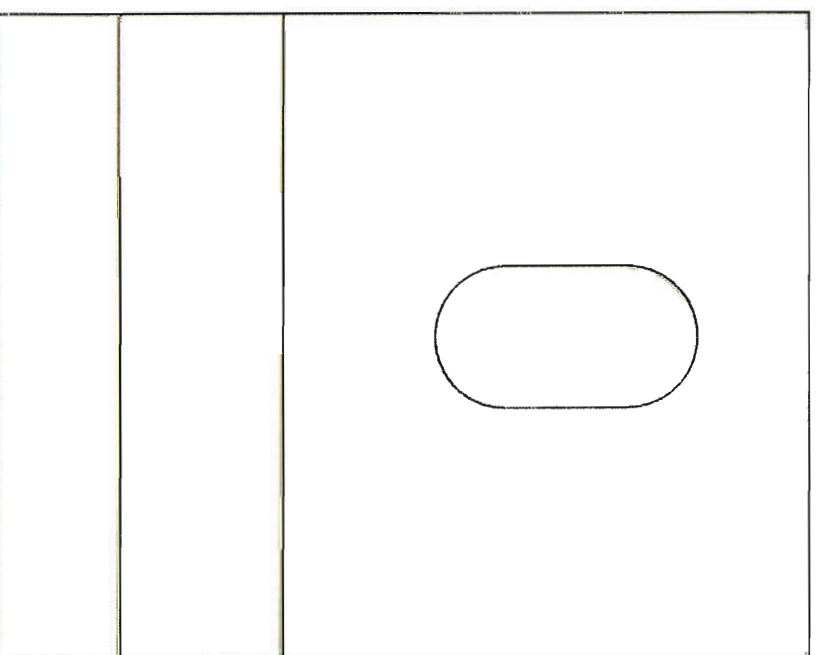
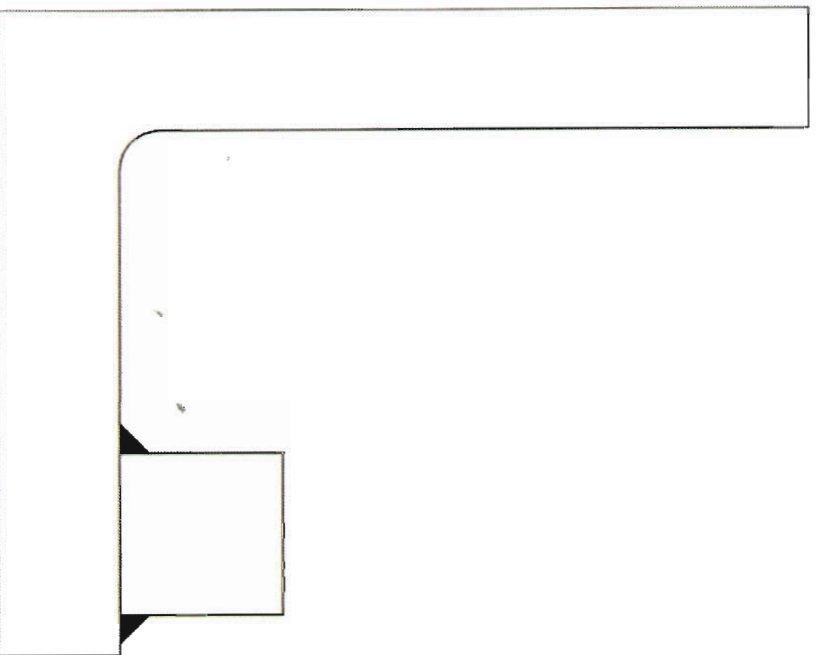
Dinkmar Steel Exhaust Tube
Standard length is Seven (7) feet long
Power Cylinder Mount is Standard
Any other Size will be a Special Order



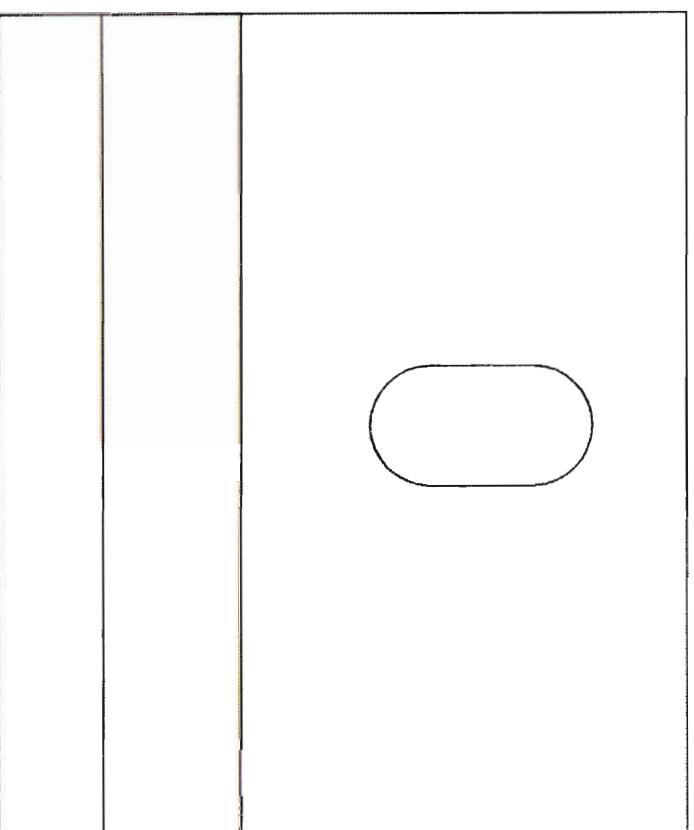
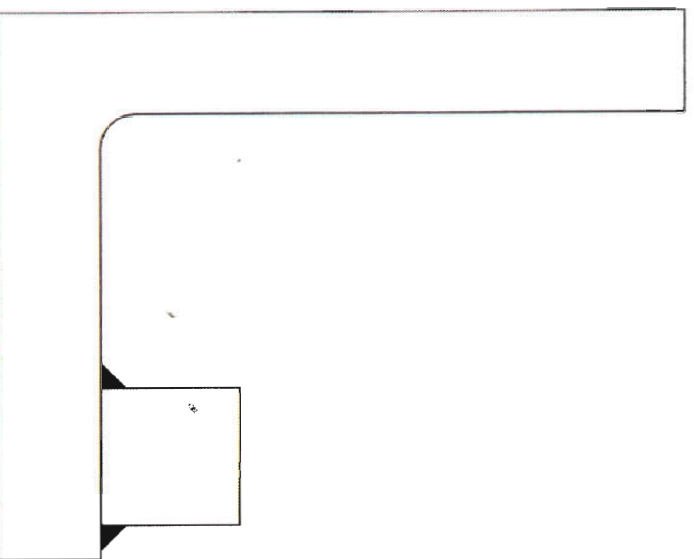
Steel Round Exhaust Tube Assembly
Dinkmar 12" Round 529-B
Dinkmar 16" Round 531-B
Dinkmar 18" Round 533-B



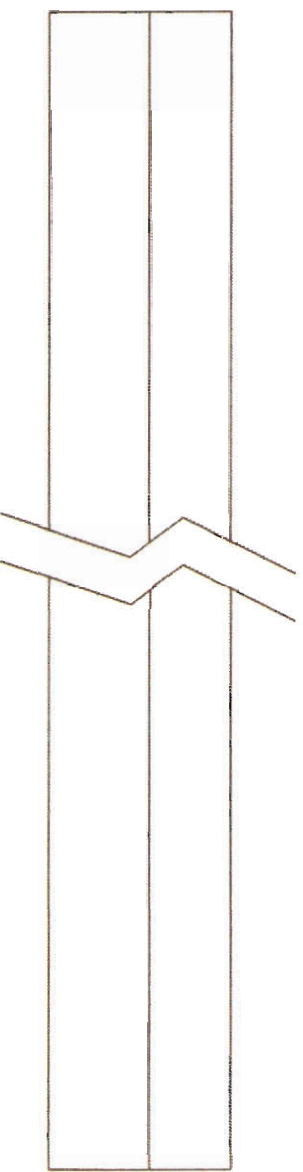
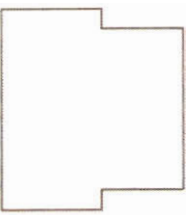
Dinkmar Turn Table Hold Down Clamps
This Item is Located on the Side and Front
Part #231-B 4 parts per Turn Table

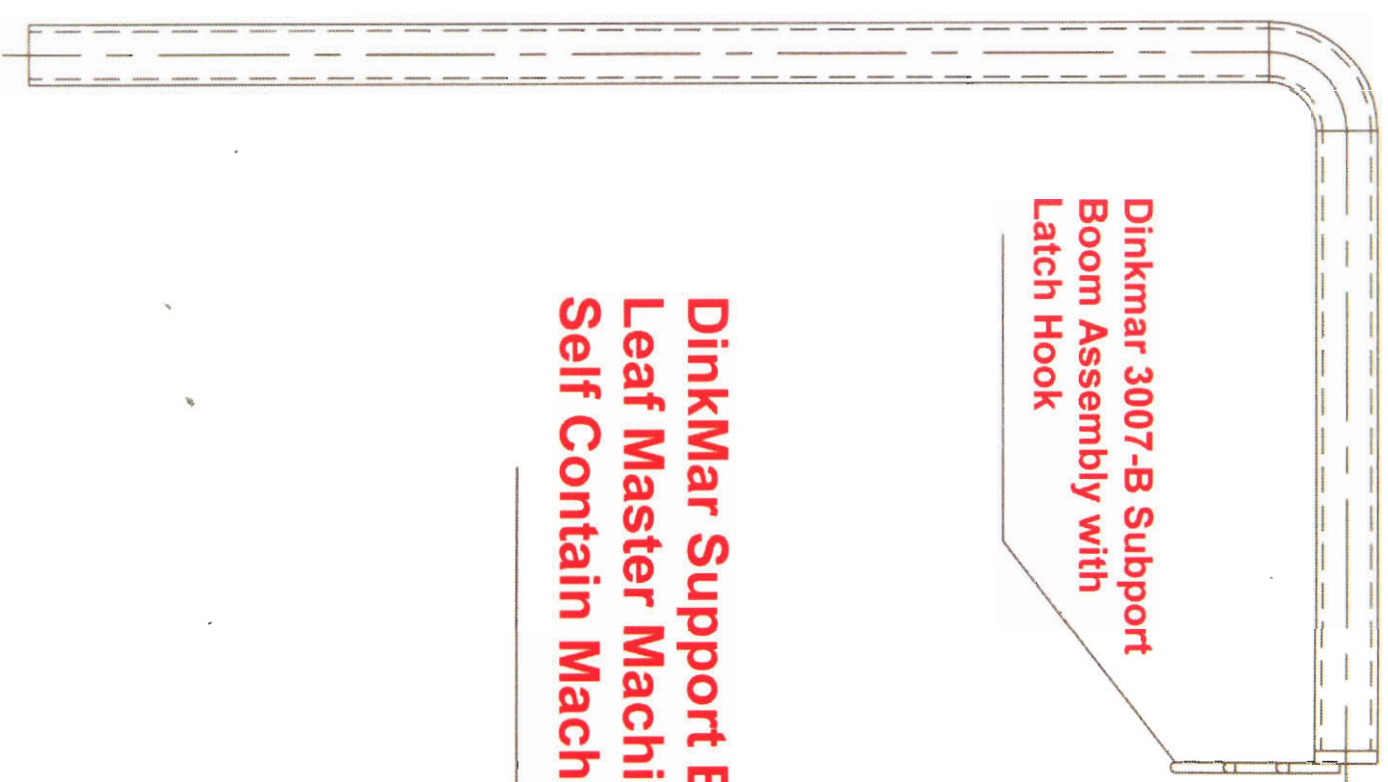


Dinkmar Turn Table Hold Down Clamps
This Item Is Located On The Back Side
Part #350-B 2 parts per Turn Table



Dinkmar 446-B used for Pulley Assembly Located motor shaft and also used on old style Gledhill fan.



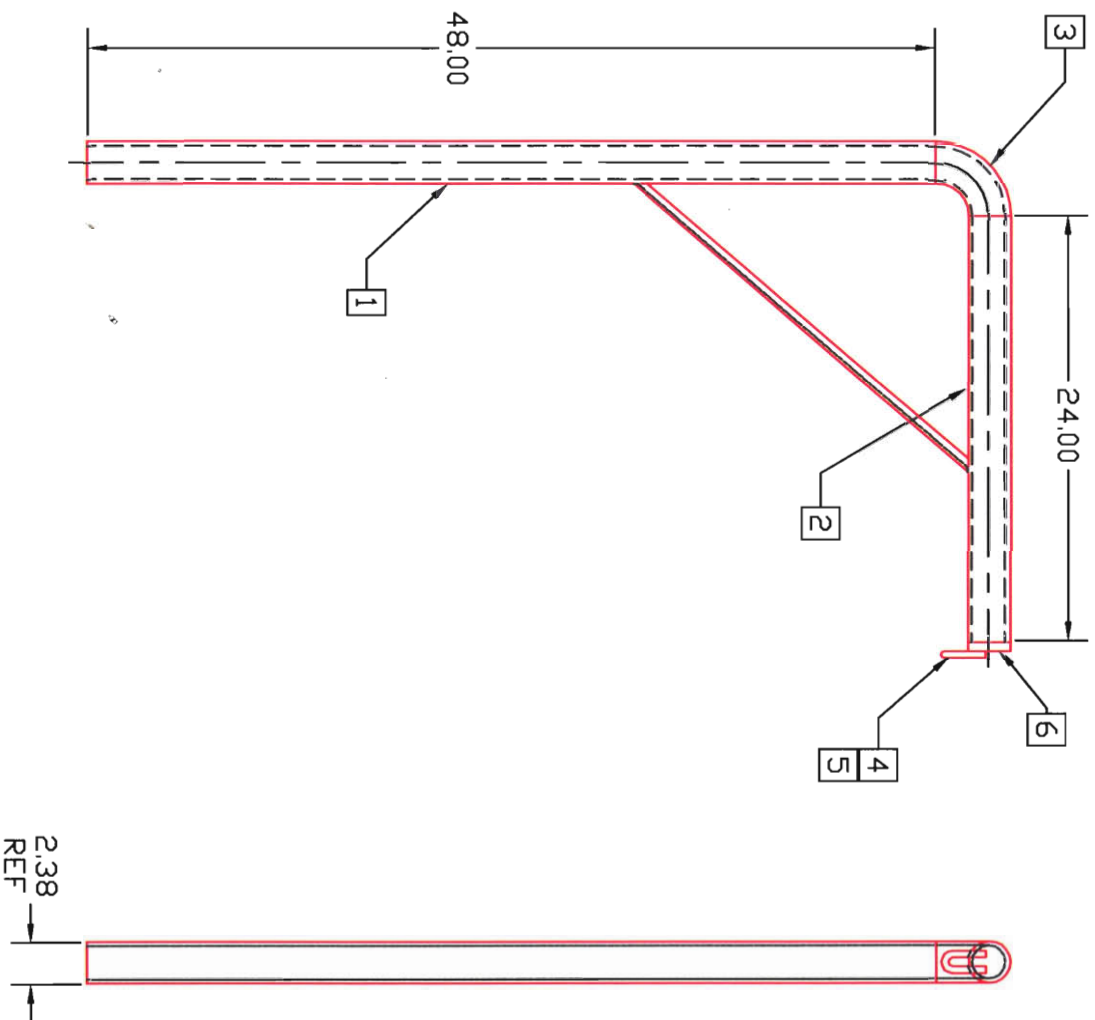


The diagram shows a boom assembly with a latch hook. It consists of a long horizontal section on the left, a vertical section in the middle, and a curved section on the right. A dashed line runs along the top of the horizontal and vertical sections. A small rectangular component is attached to the bottom of the vertical section. A label points to this component.

**Dinkmar 3007-B Support
Boom Assembly with
Latch Hook**

**DinkMar Support Boom Used on
Leaf Master Machine
Self Contain Machine Mule HCN**





2.38
REF

7	1	.25' Angle x 1.5' x 1.5' x 24'	
6	1	COVER PLATE 2-3/8 DIA X 1/2'	
5	1	3/8' SNAP HOOK	
4	1	3/8 PRODF COIL CHAIN LINK	
3	1	2' SCH 40 WELD ELBOW	
2	1	2' SCH 40 PIPE X 36'	
1	1	2' SCH 40 PIPE X 48'	
ITEM	QTY	DESCRIPTION	REMARKS

DINKMAR INC.

GALION, OHIO 44833

SCALE: NTS

APPROVED BY:

DRAWN BY:
B MACKAY

DATE: 07-30-01

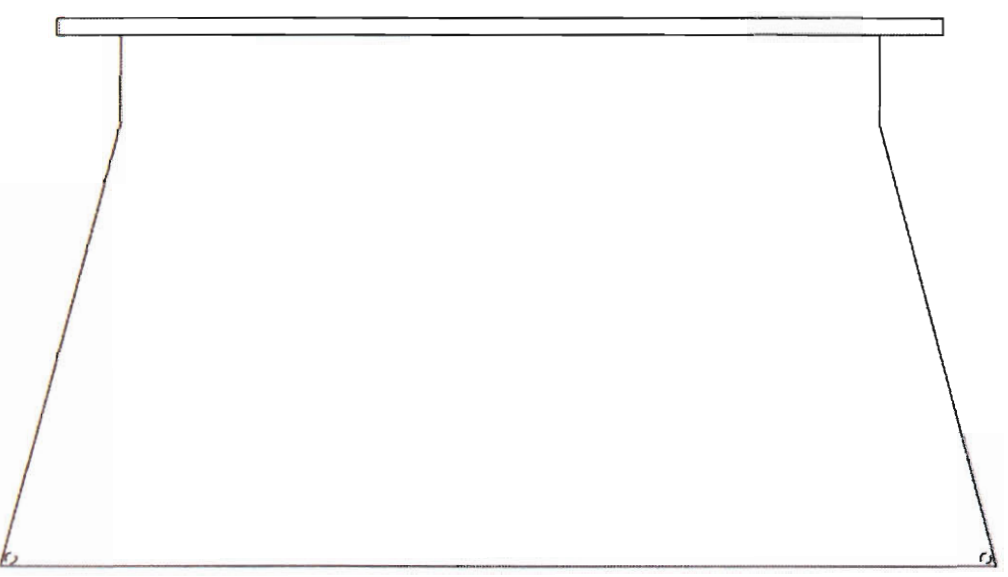
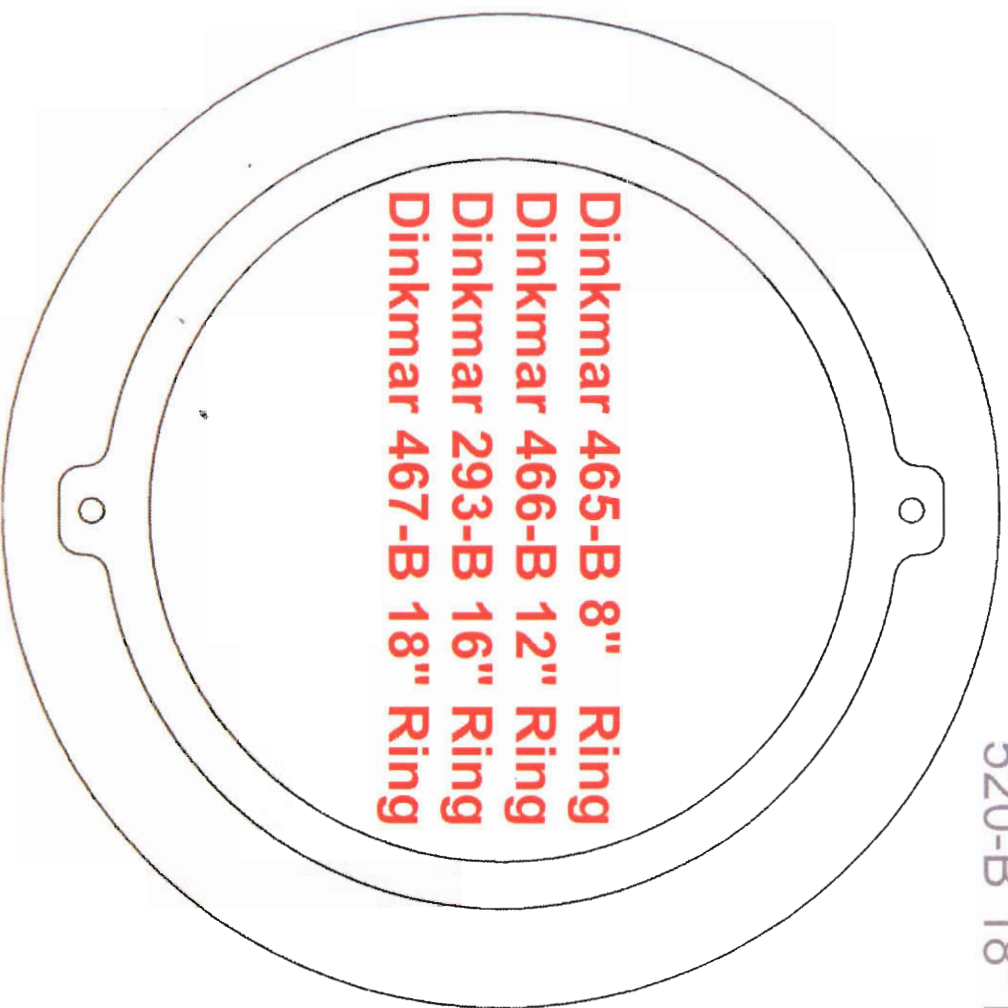
OVERHEAD HOSE SUPPORT HCN

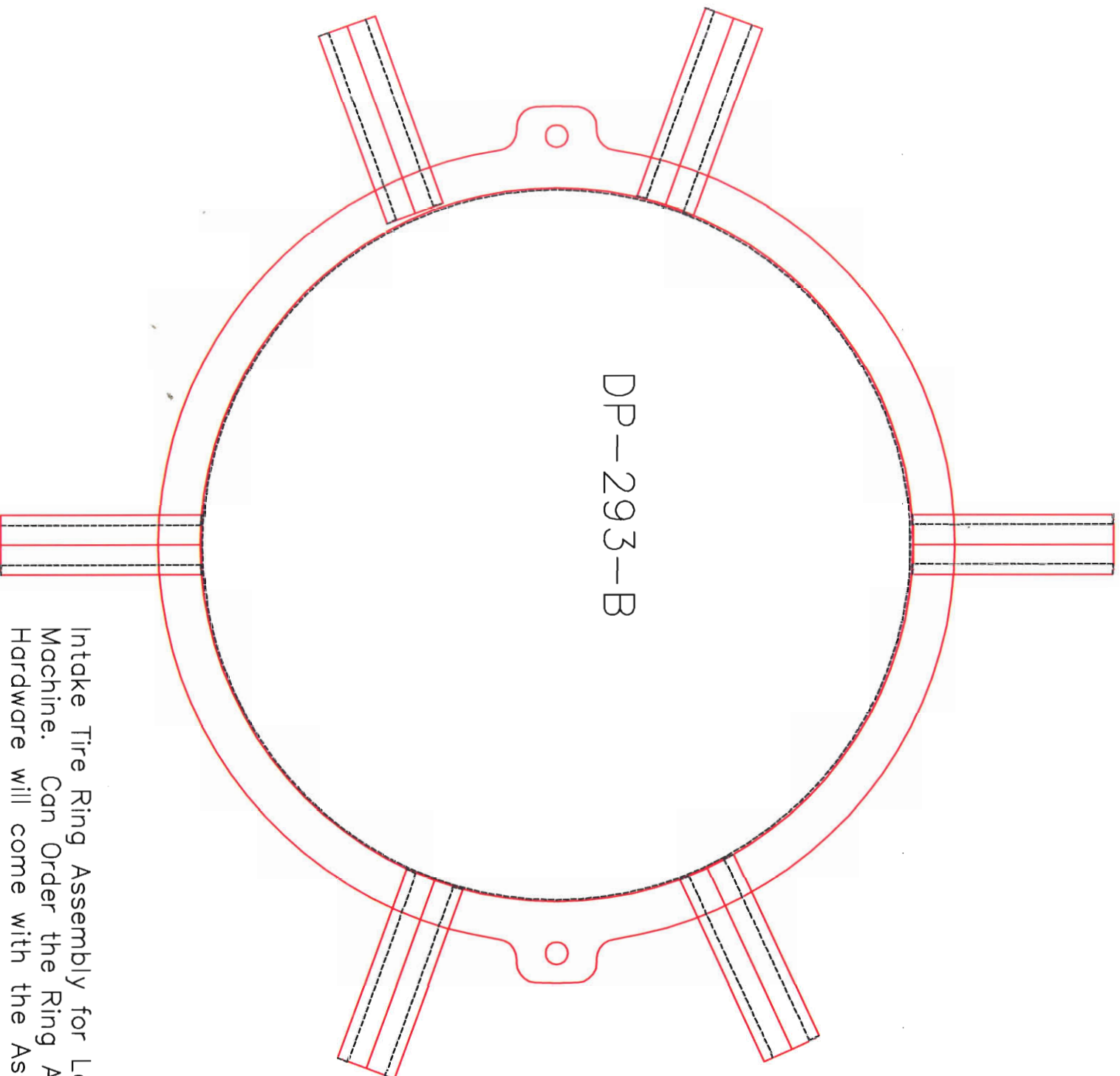
MFGD BY PARTNERS MANUFACTURING GROUP INC.

DRAWING NUMBER:
296-B

Dinkmar Rubber Nozzel Boot
520-B 16" Steel
520-B 16" Rubber
520-B 18" Rubber

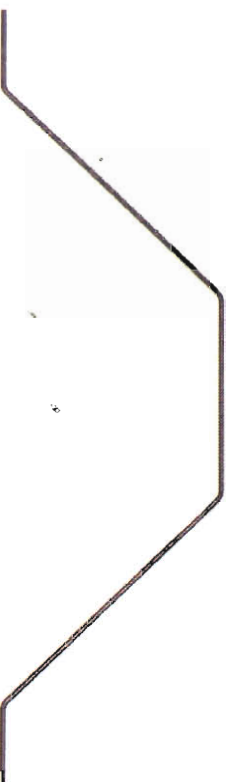
Dinkmar 465-B 8" Ring
Dinkmar 466-B 12" Ring
Dinkmar 293-B 16" Ring
Dinkmar 467-B 18" Ring





Intake Tire Ring Assembly for Leaf Master and SC-Mule HCN Machine. Can Order the Ring Assembly or Complete Assembly Hardware will come with the Assembly

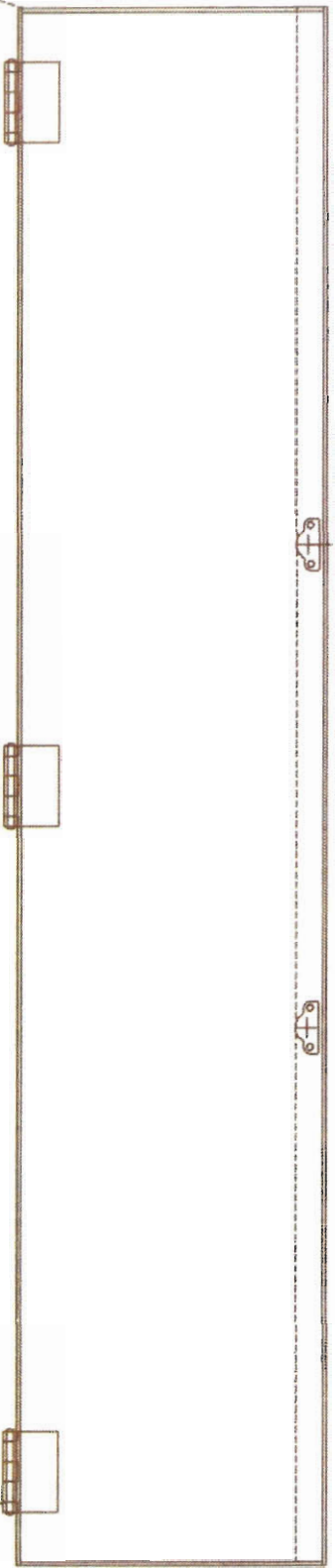
Dinkmar Drive Shaft Guard
483-B For The Guard only
483-B1 For The Guard and Hardware
3/8" Thread Rod, Washers, and Lock Nuts



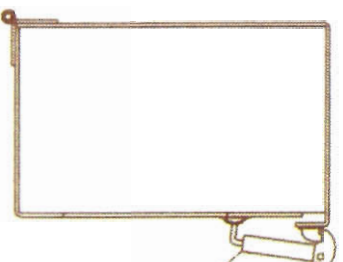
				
				

**DinkMar Belt Guard Assembly for all Machine
Produce since 1997. Gledhill machine can
be change to new belt guard**

P-1713 Keeper Assembly



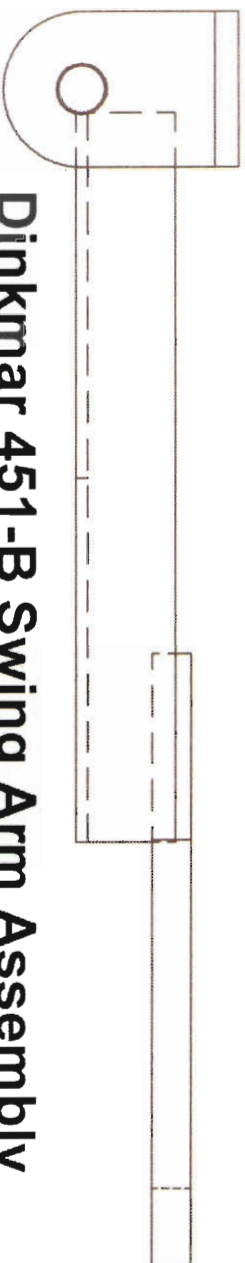
DinkMar 306-B Belt Guard Assembly



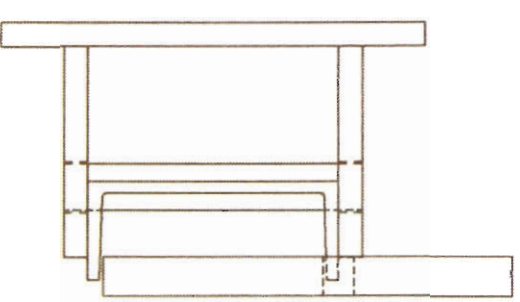
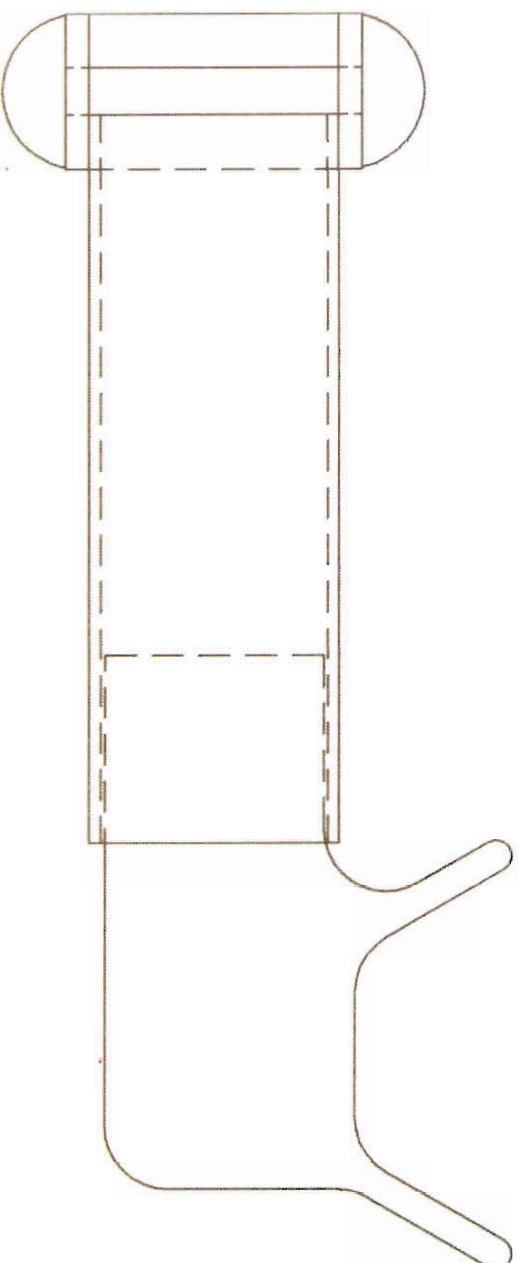
P-1712 Latch Assembly

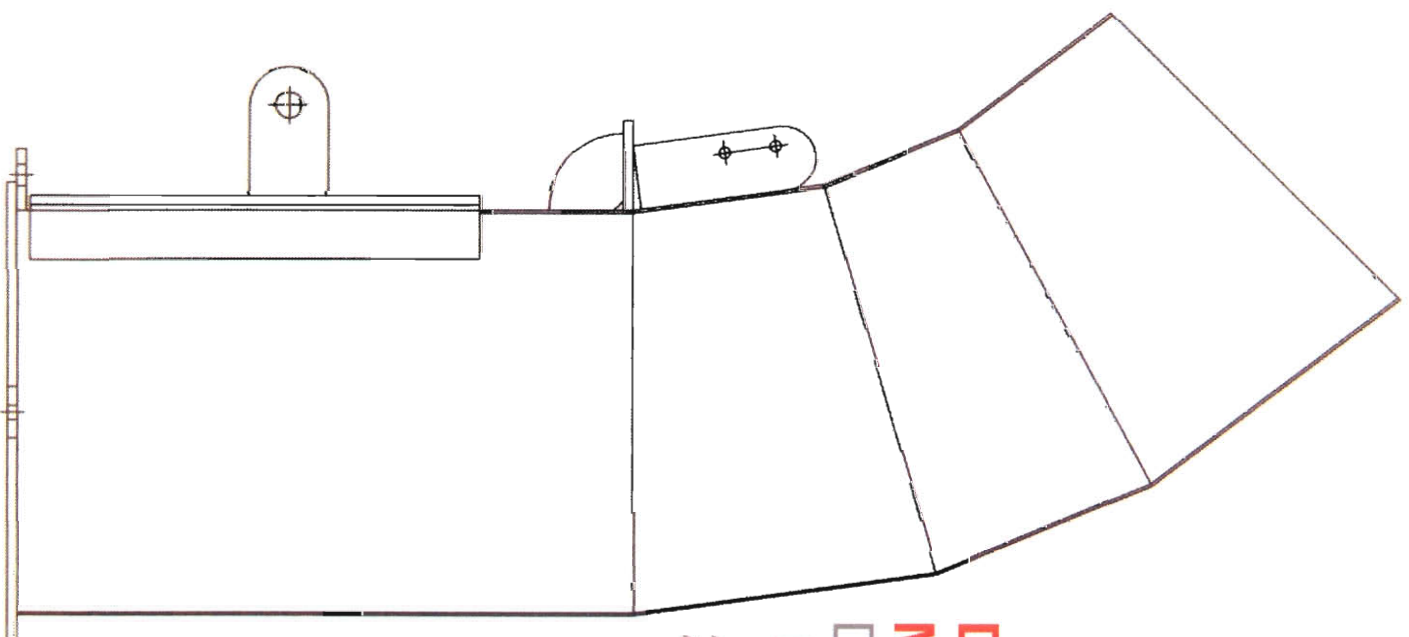
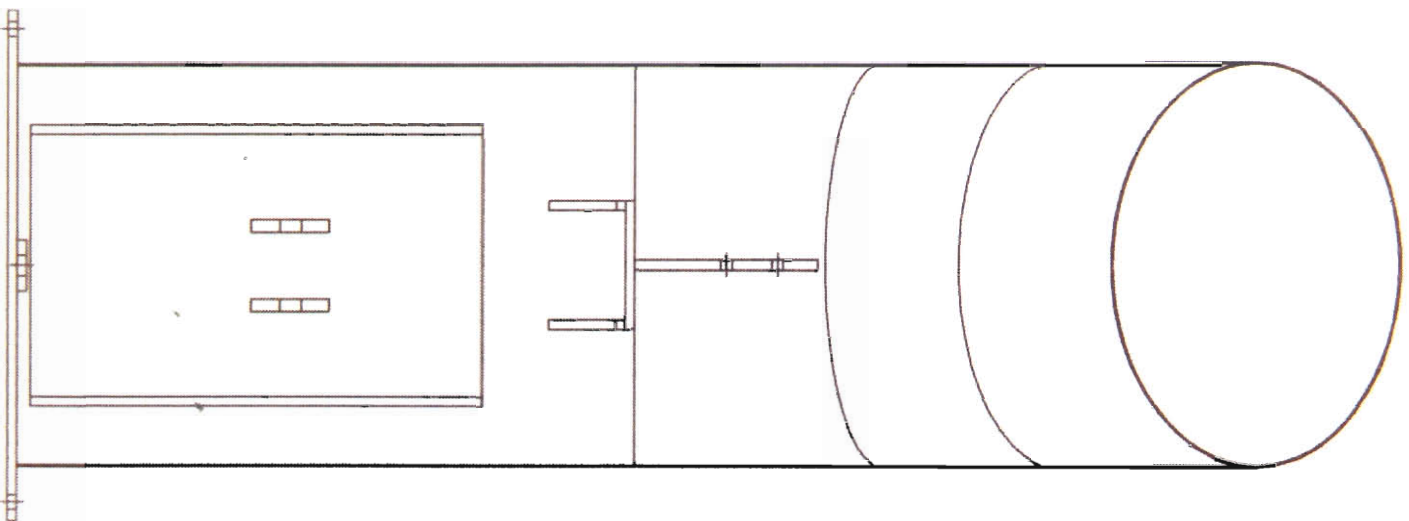
**P-16715A-14 Hinge
Assembly**



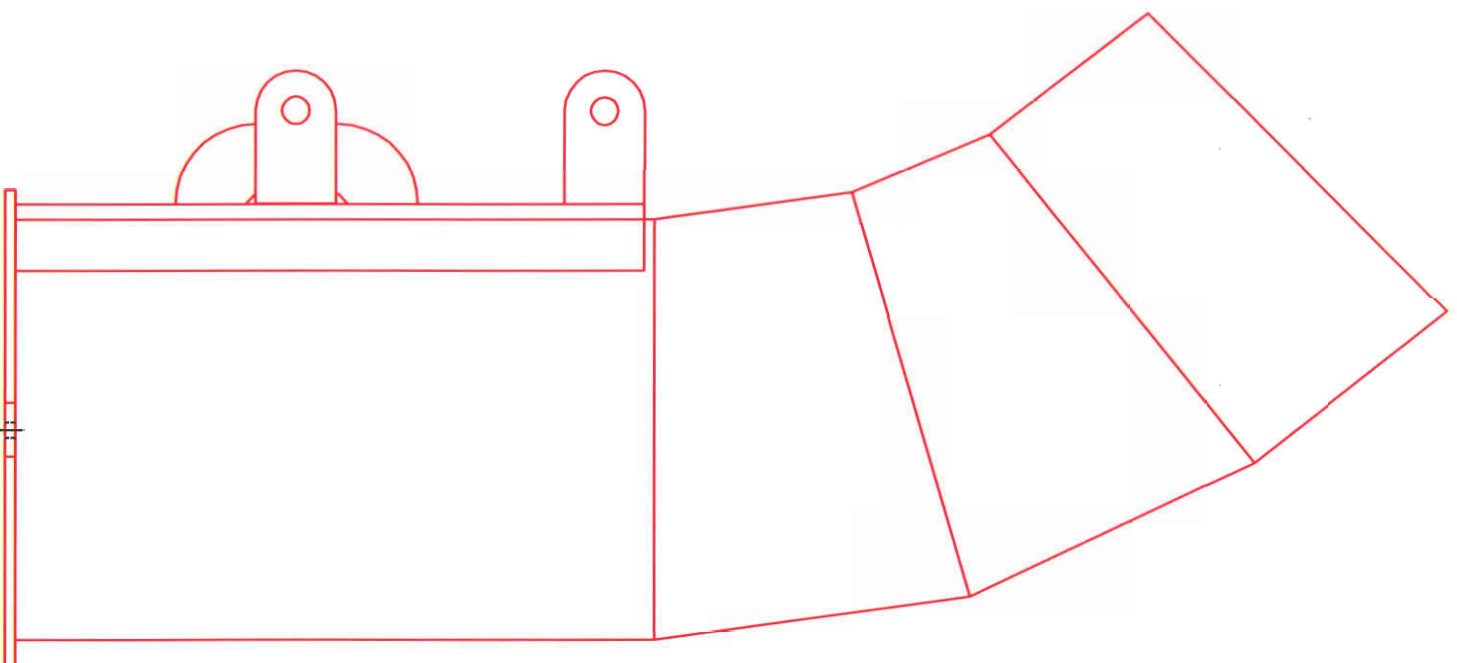
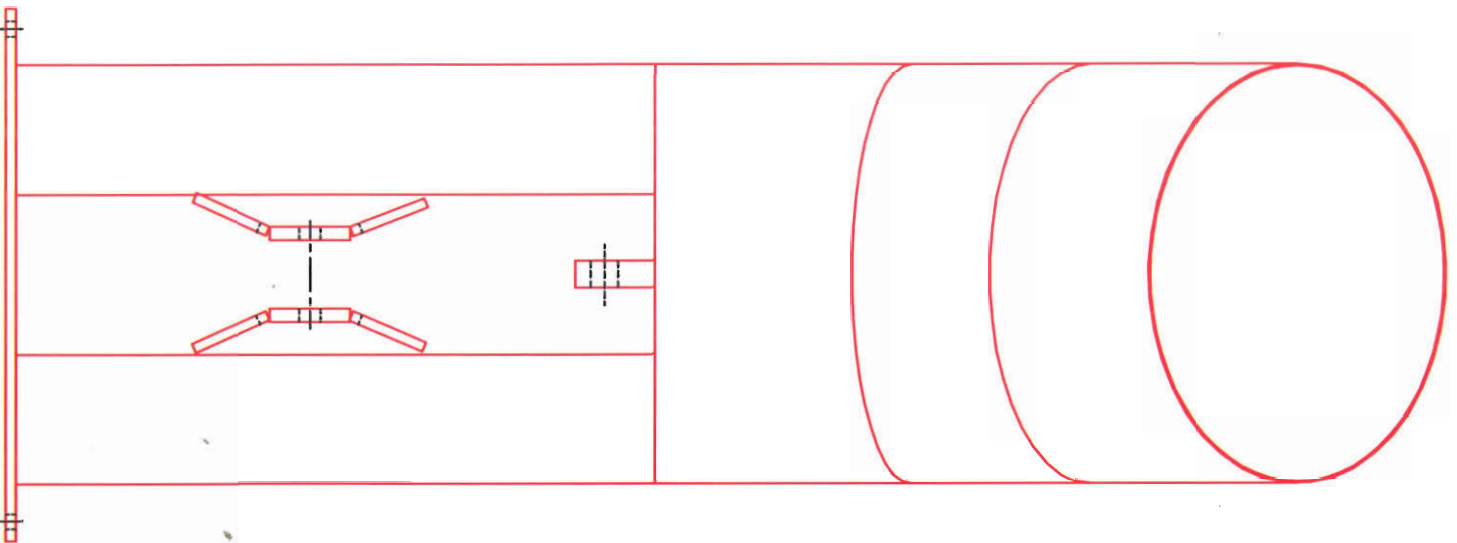


Dinkmar 451-B Swing Arm Assembly





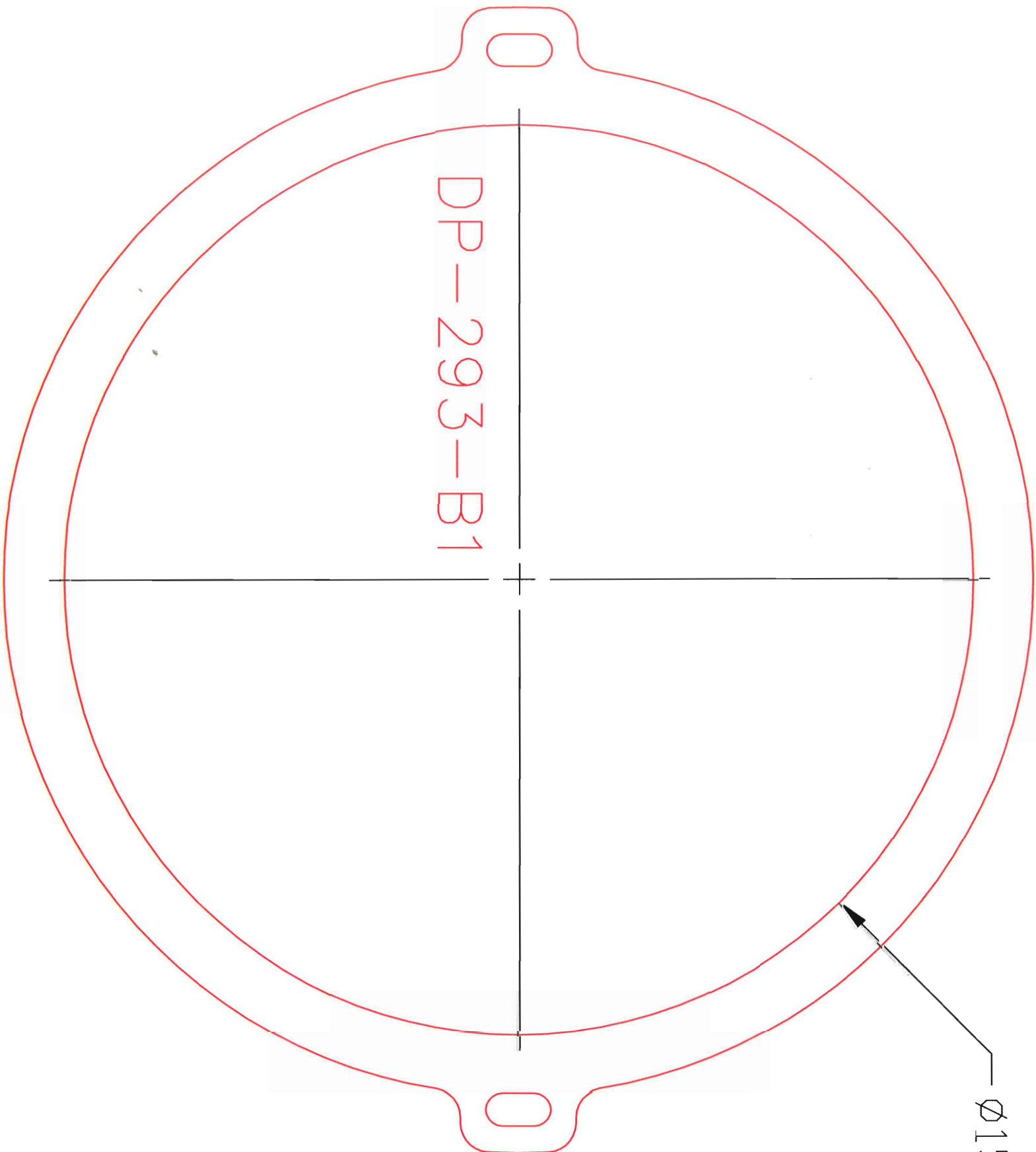
**Dinkmar Self-Contain
Mule HCN**
DinkMar Leaf Master
Intake Nozzel
291-B 12" Hose
291-B 16" Hose
291-B 18" Hose



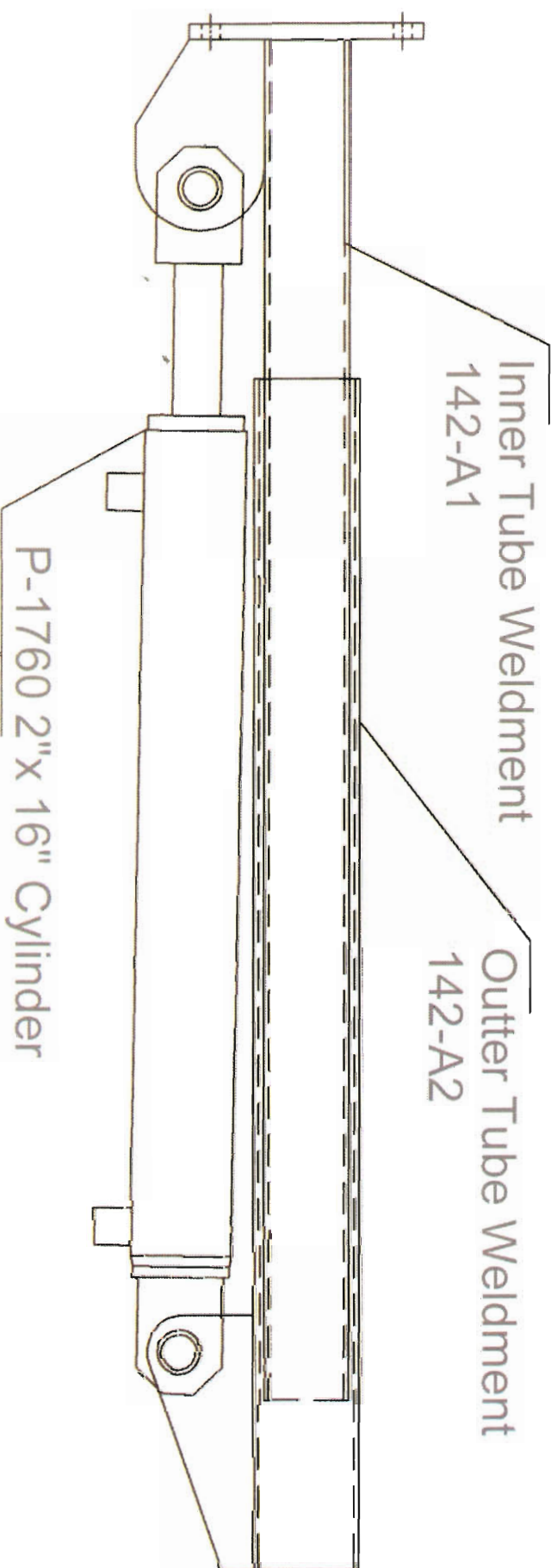
DINKMAR LEAF MASTER/SC-MULE HCN
IN-TAKE NOZZLE (NEW STYLE 3 AXIS)
DP-291-B-12" HOSE
DP-291-B-16" HOSE
DP-291-B-18" HOSE

DP-293-B1

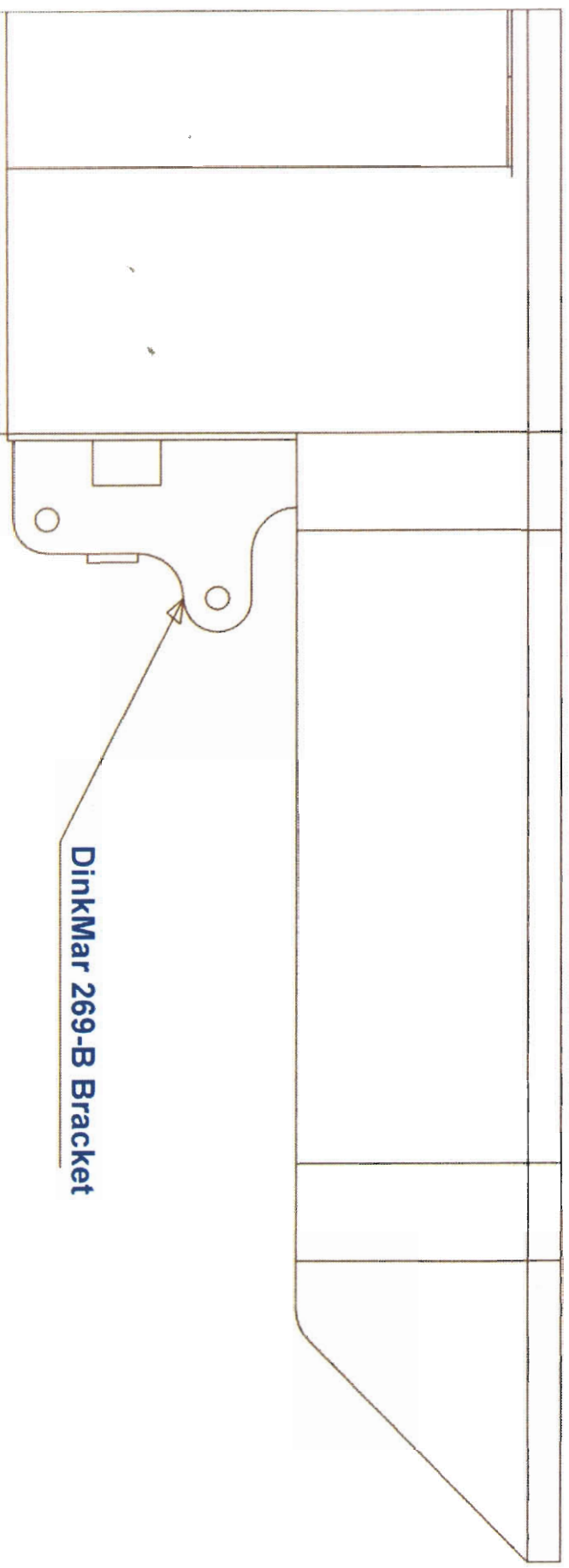
Ø15.90

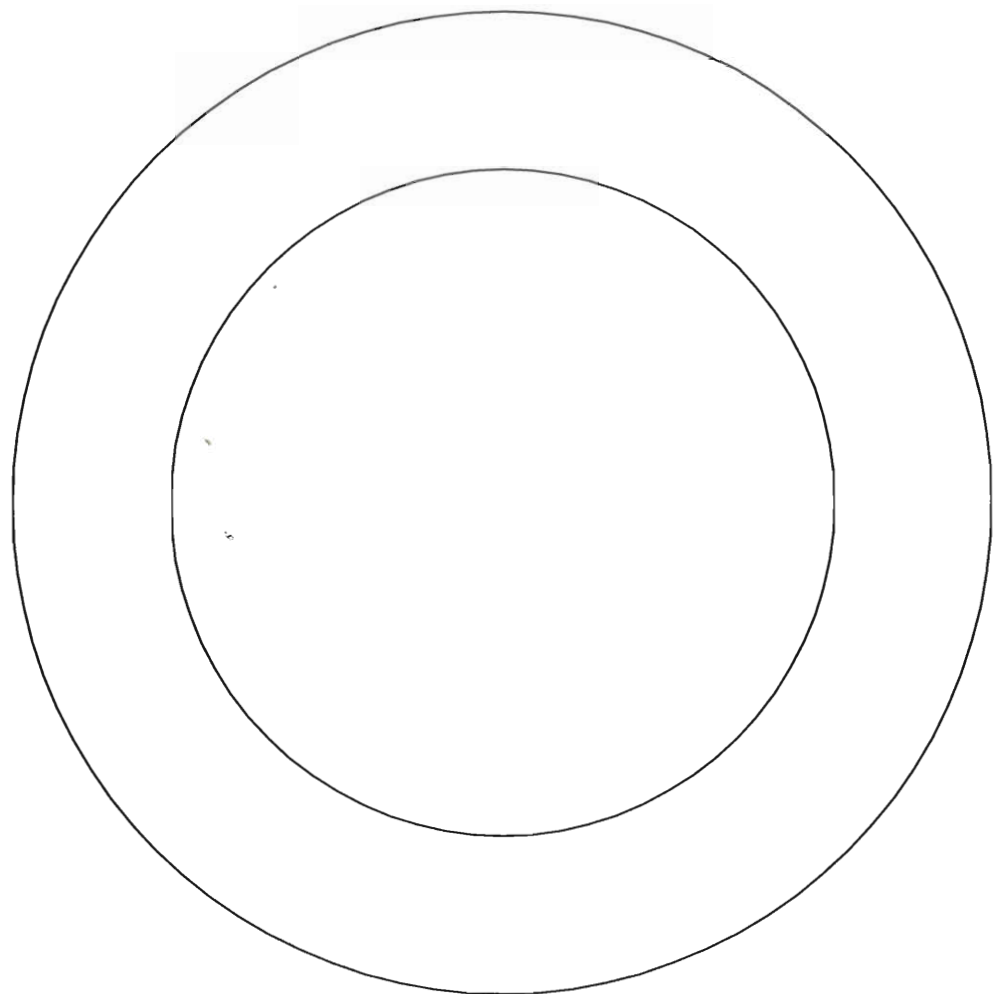


Power Parting Jack Assembly
Complete Less Jack Wheel
Part #142-B



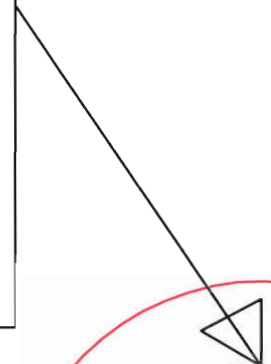
DinkMar 3004-B Swing Arm Bracket Assembly
Leaf Master Machine
Self-Contain Machine Mule HCN



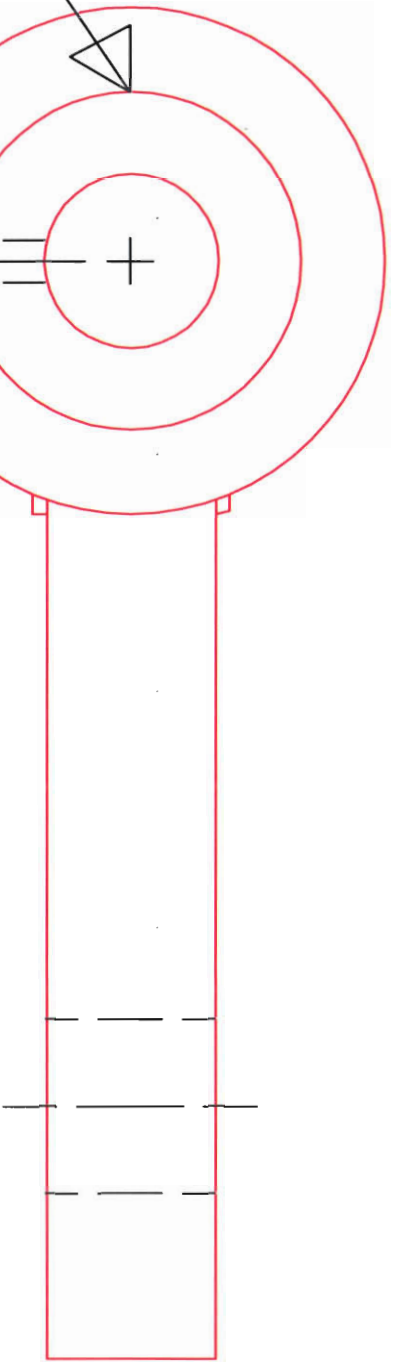
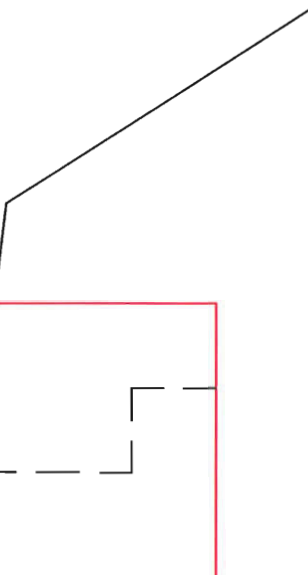


DP-221-B AR
400 Washer for
Leaf Master
SC-Mule HCN
Machines (6
parts per
machine)

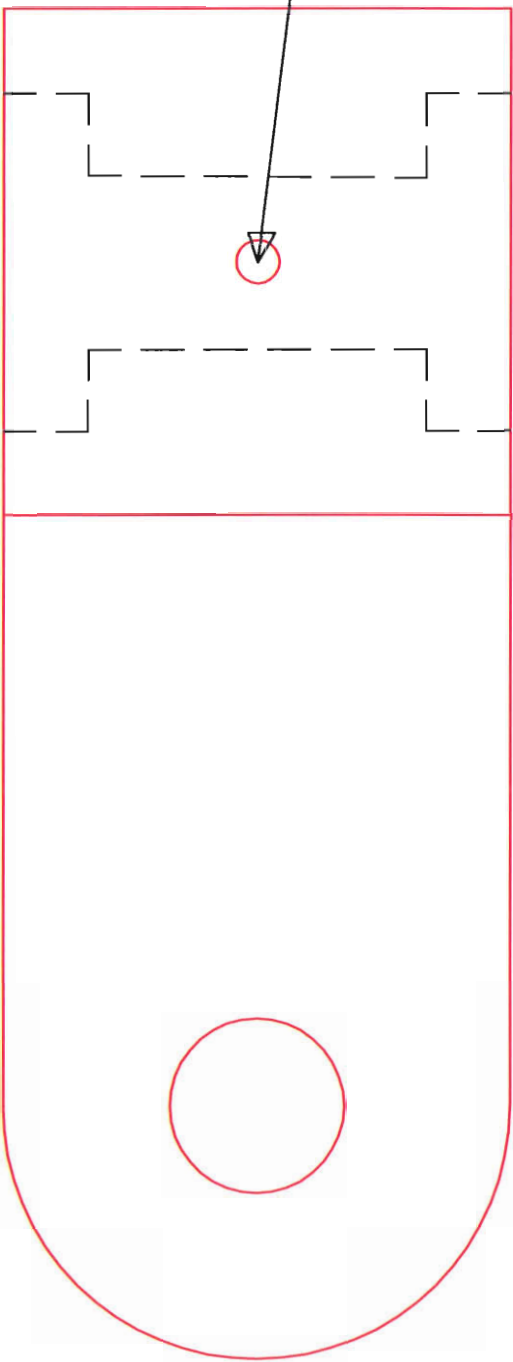
DP-423-1A BUSHING



1/8" GREASE ZERK



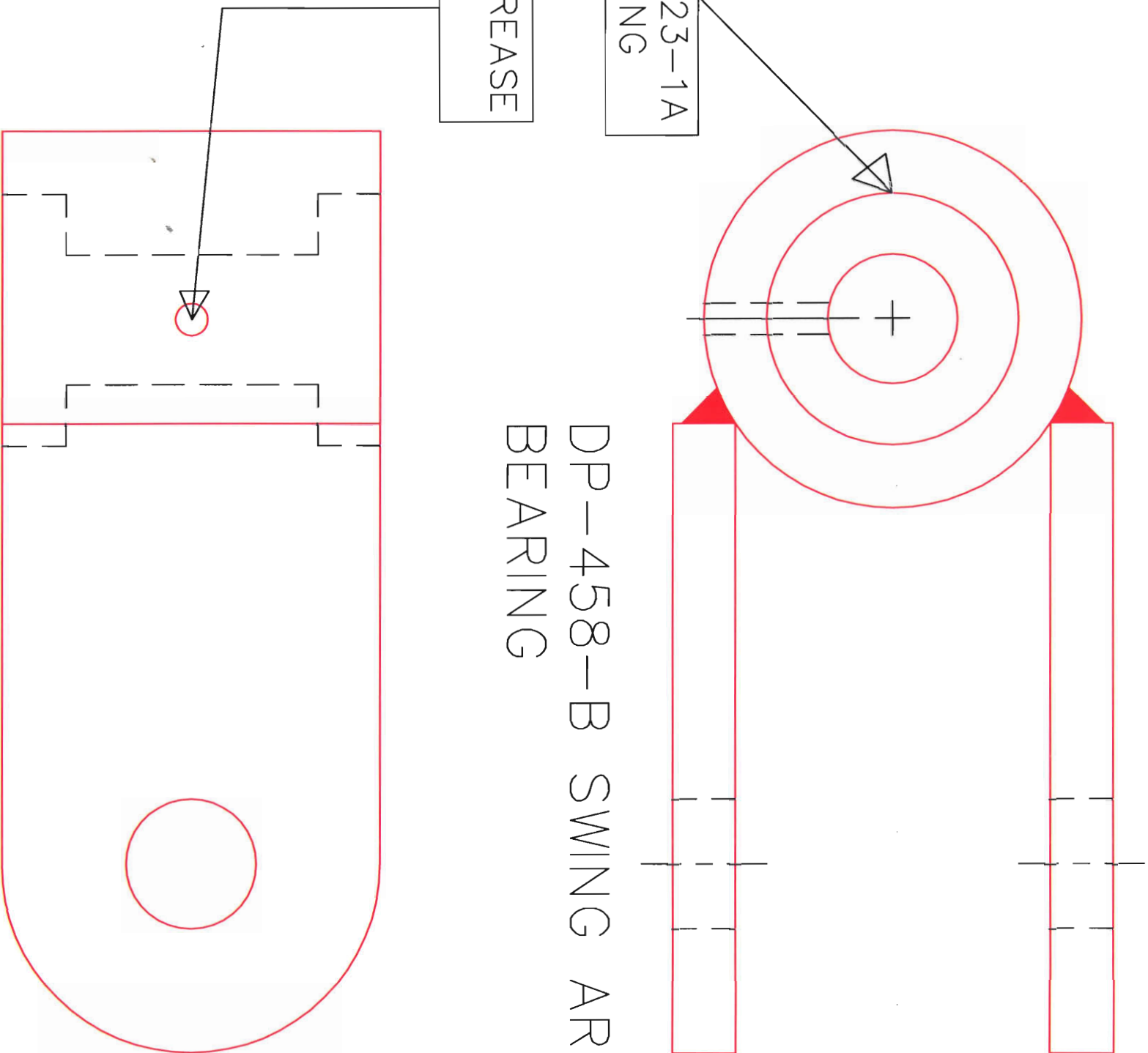
DP-423-B
PIVOT BEARING
BRACKET



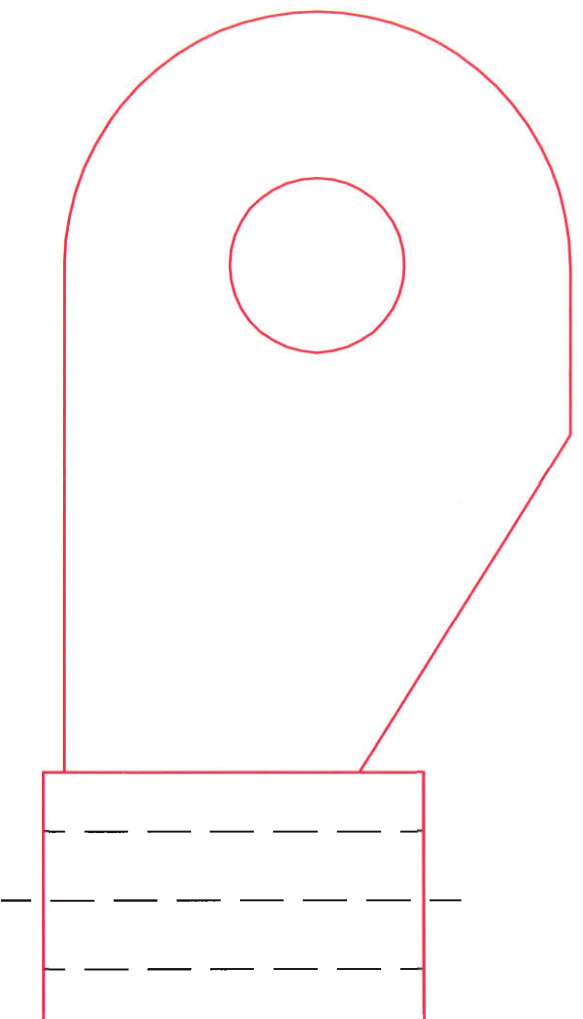
DP-423-1A
BUSHING

1/8" GREASE
ZERK

DP-458-B SWING ARM
BEARING

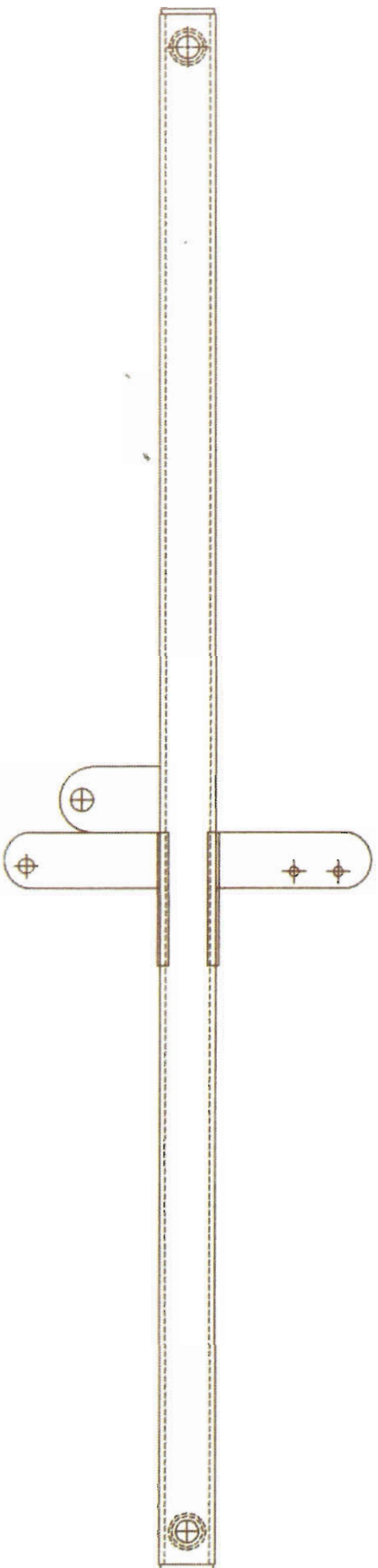
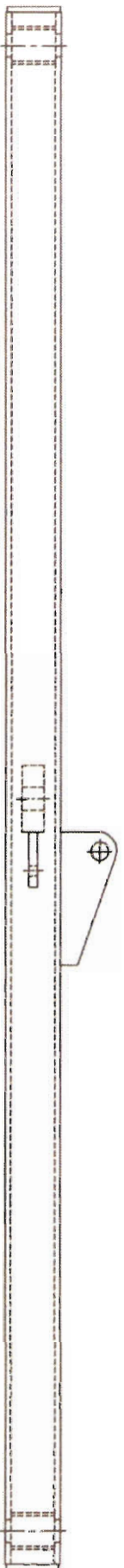


DINKMAR DP-235-B SWING ARM PIVOT BRACKET

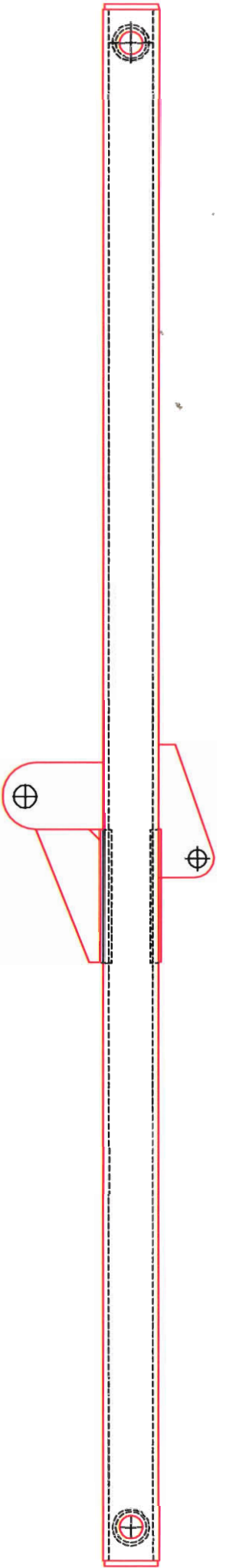
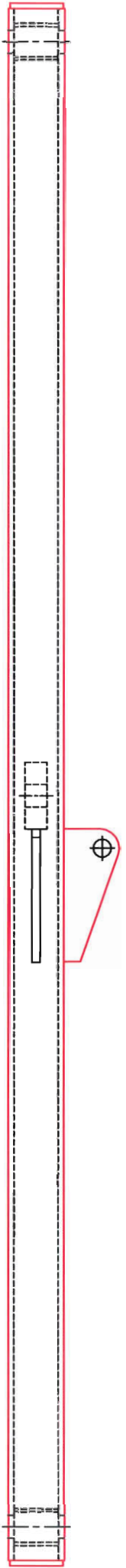


PLEASE NOTE: KEEP THIS BRACKET LOOSE AND EASY TO MOVE. IF BRACKET TO TIGHT WILL CAUSE PROBLEM WITH SWING CYLINDER.

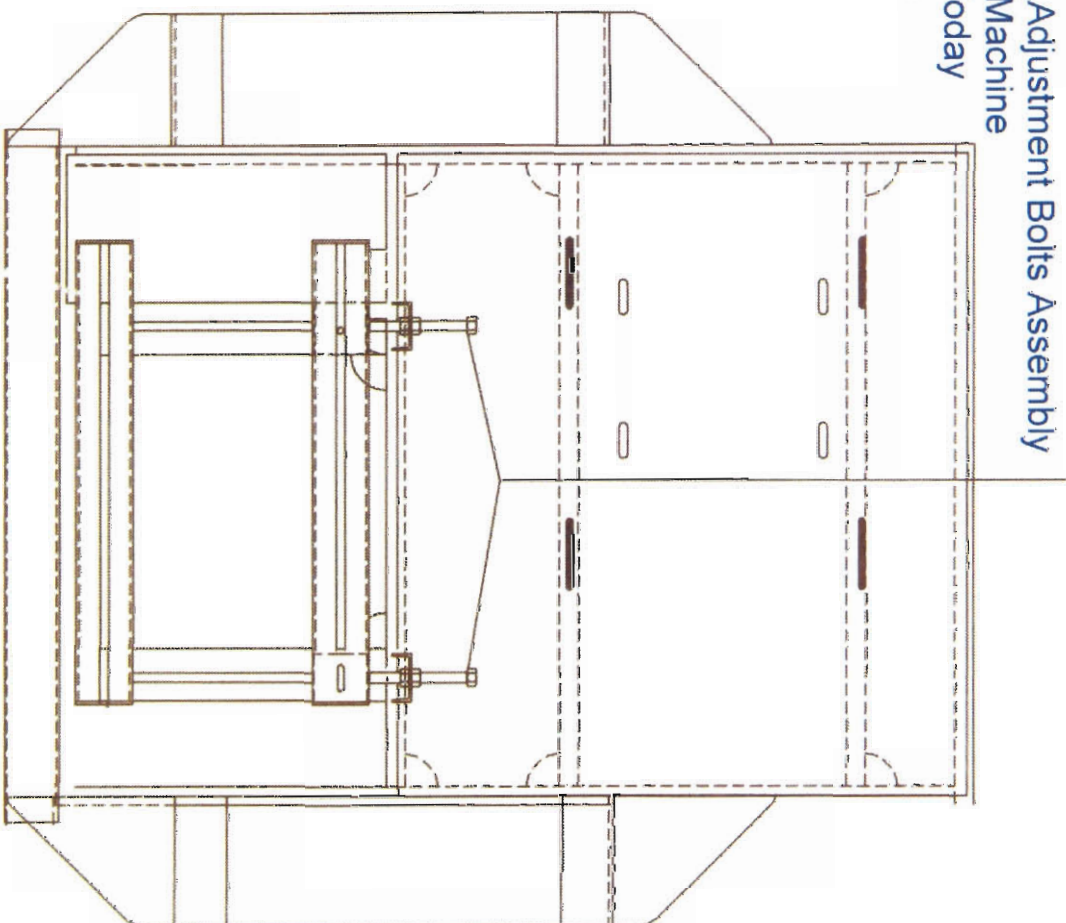
**DinkMar 3006-B Swing Arm Assembly
Leaf Master Machine
Self-Contain Mule HCN**



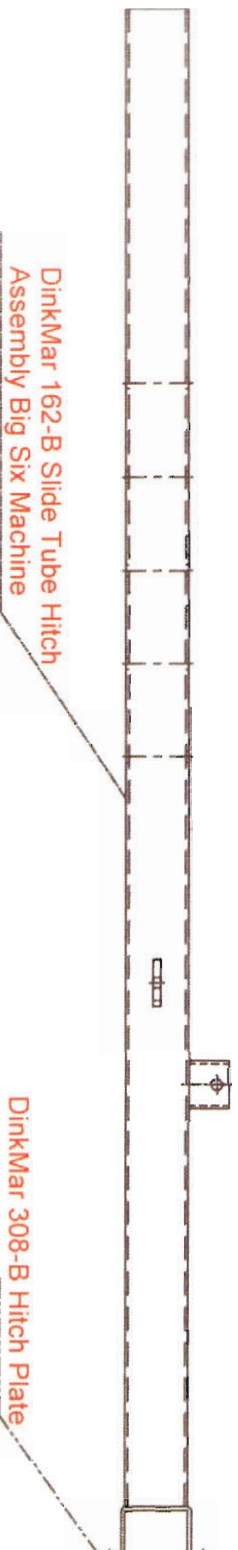
DinkMar 3006-B 3 Axis Swing Arm Assembly
Leaf Master & SC-Mule HCN Machines



DinkMar **158-B** Adjustment Bolts Assembly
Assembly for all Machine
DinkMar 1997- Today
Gledhill Machine



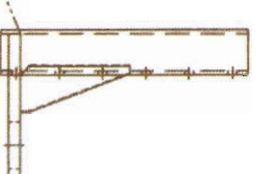
DinkMar 3010-B Slide Tube for the Bix Six Machine
DinkMar 3008-B Inner Tube for A-Frame and Leaf Master
DinkMar 3009-B Hitch Assembly is Used on all Machine

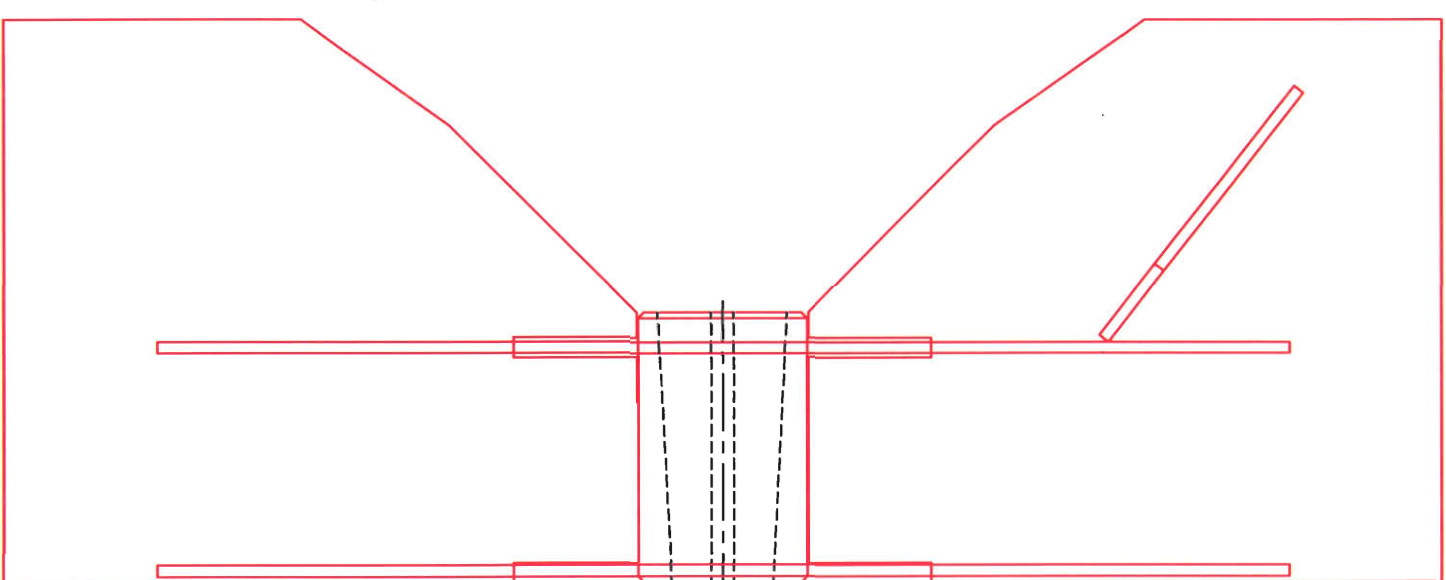
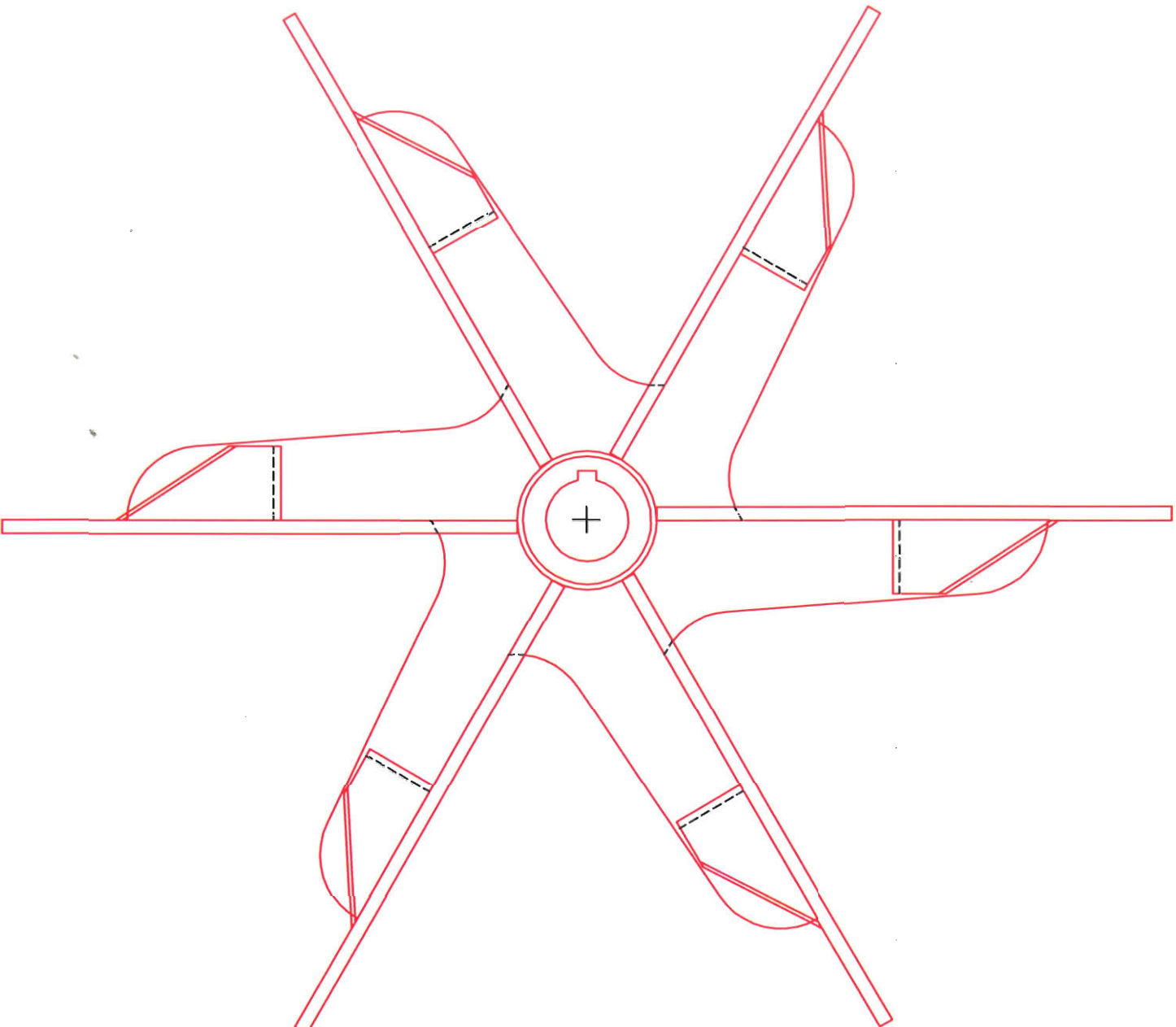


DinkMar 3008-B Inner Tube for A-Frame

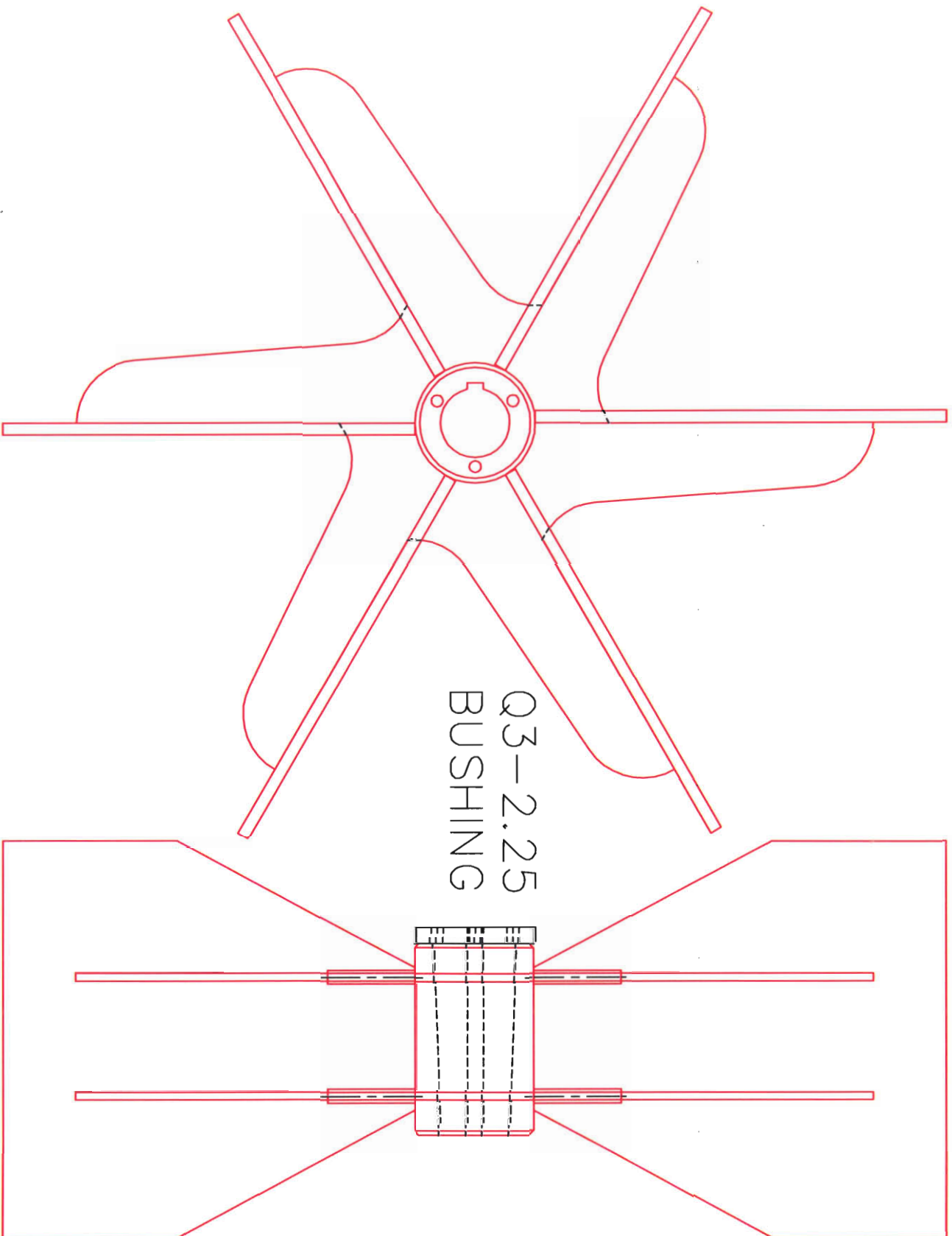


DinkMar 3009-B Hitch Assembly
Standard on all Machine



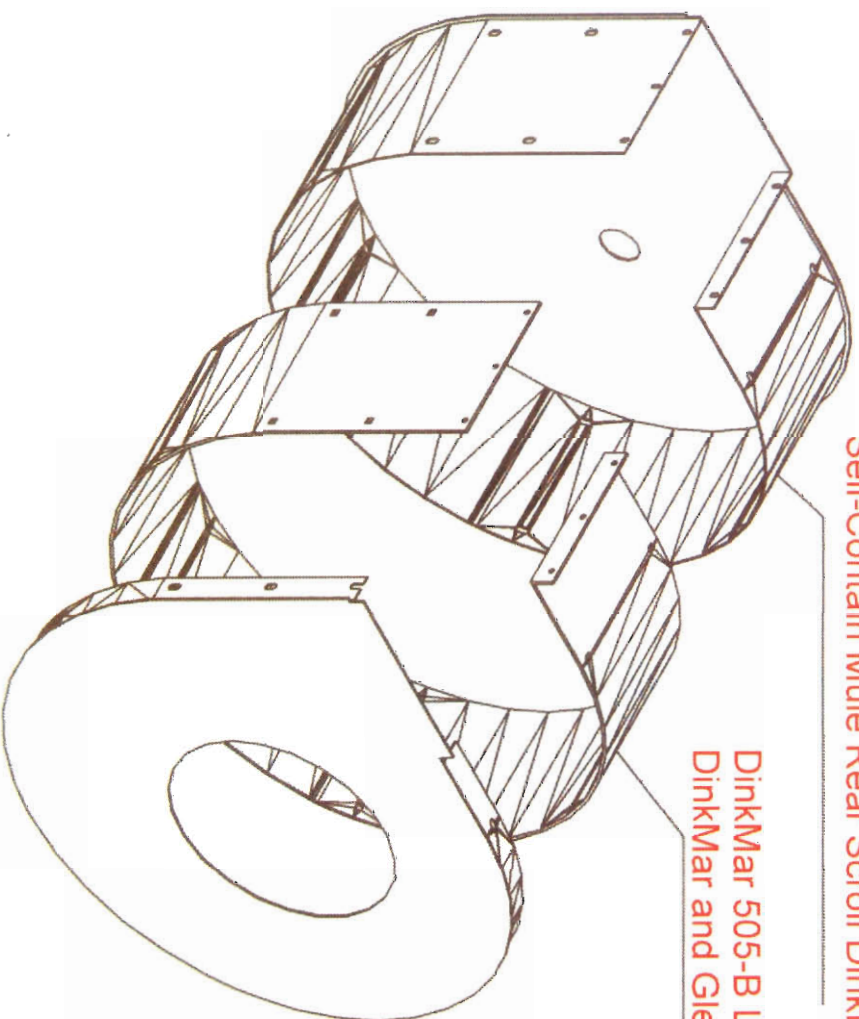


SC-MULE 30" AND 32" FAN ASSEMBLY
FOR FLUID COUPLER SYSTEM CCW



Q3-2.25
BUSHING

DINKMAR SC -MULE FAN ASSEMBLY
DP-252-30-PTO INCLUDE Q3-2.25" BUSHING
DP-252-32-PTO INCLUDE Q3-2.25" BUSHING

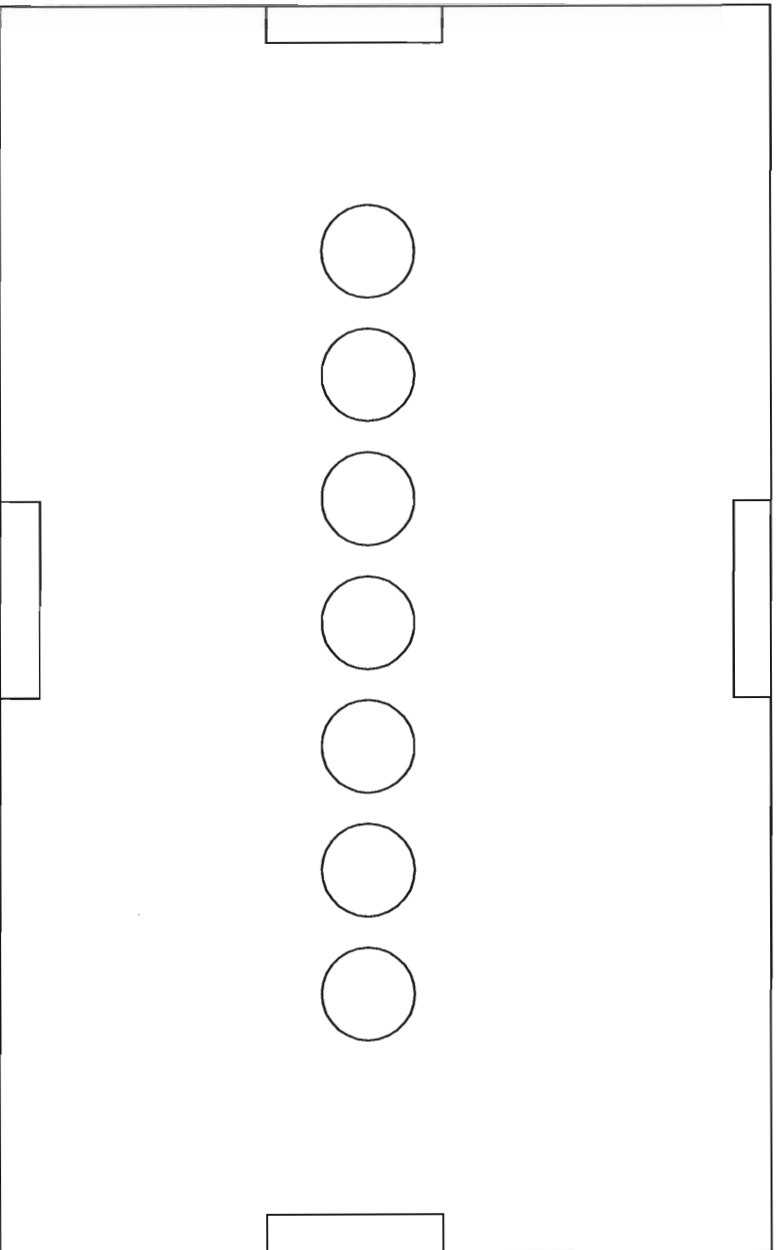


Self-Contain Mule Rear Scroll DinkMar 3005-B

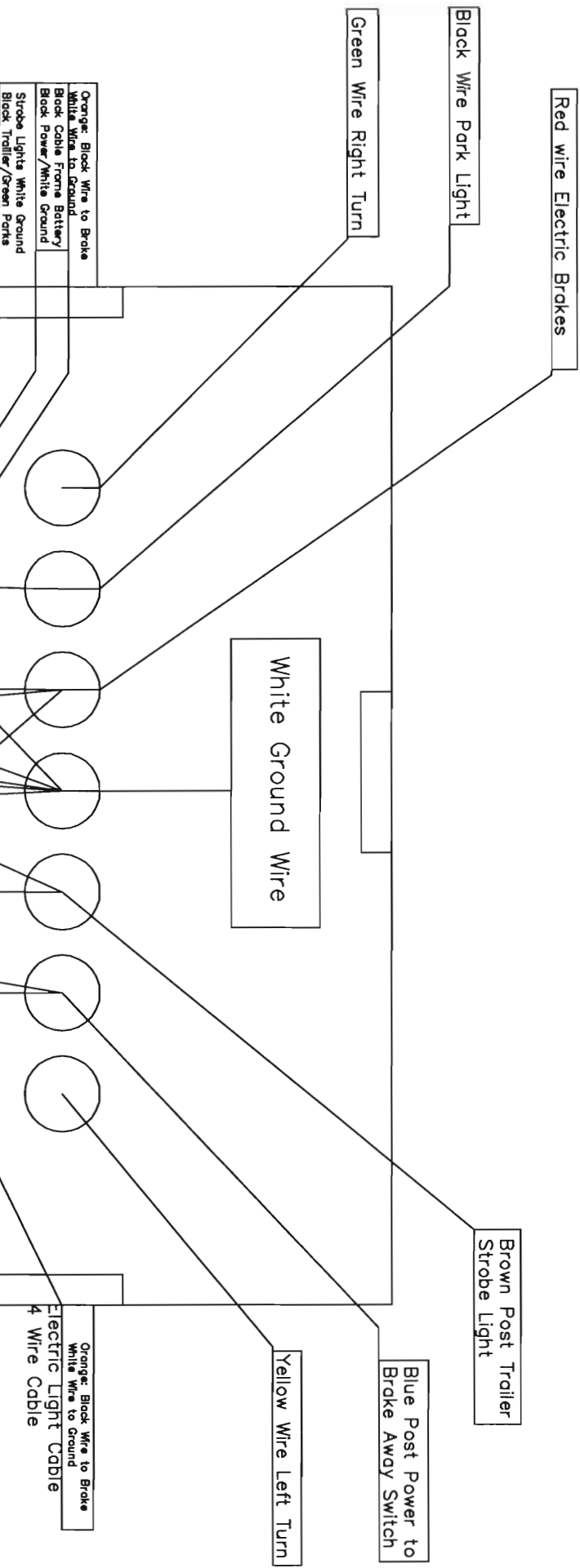
DinkMar 505-B Liner Used In
DinkMar and Gledhill Machine

Self-Contain Mule Front Scroll
DinkMar 3011-B With Front Door Weldment

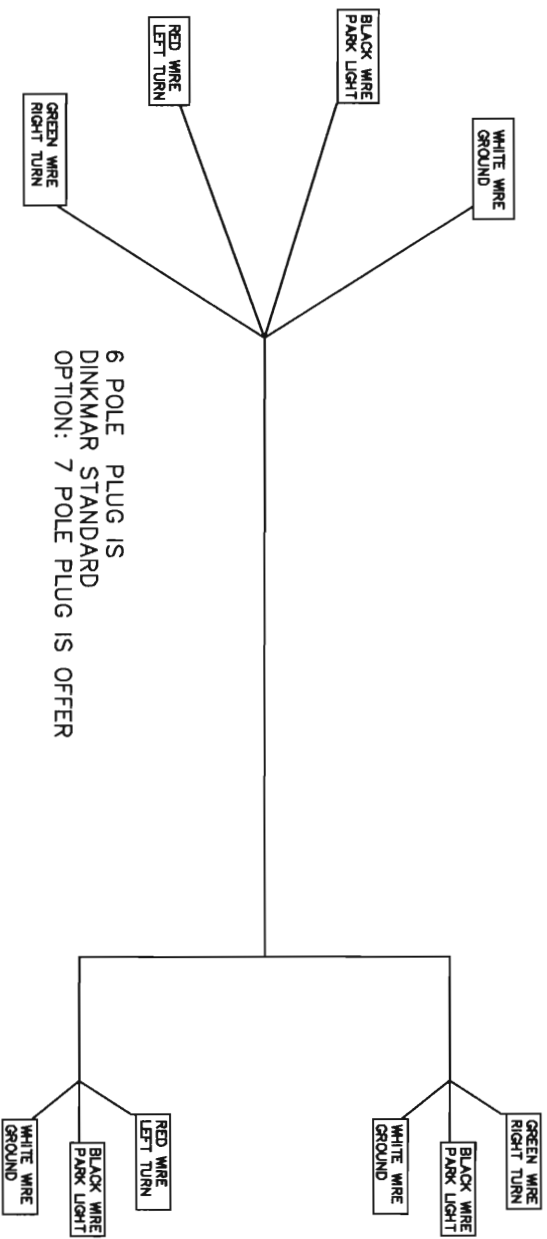
Please Note:
Liner Kit with all hardware
can be purchase as DinkMar
505-B1 Kit



The Box Has Color Code;
Red—Brake, Black—Trailer Light,
White—Ground, Yellow—Left Turn,
Green—Right Turn, Brown and Blue—
Brake Away Switch



DINKMAR INC.			
DATE	REVISED BY	DATE	REVISION
10/18/2018	10/18/2018	10/18/2018	10/18/2018
7 Post Electric Control Box			
WETD BY PARTNERS MANUFACTURING GROUP INC. Service Branch			



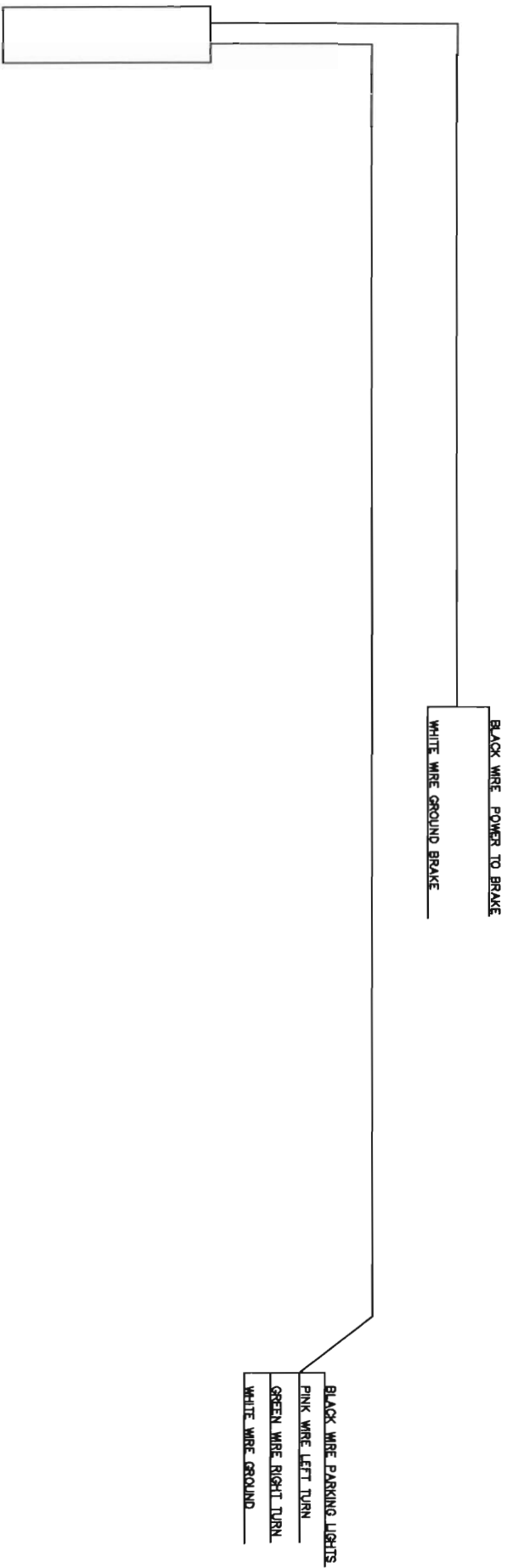
BLACK WIRE PARK LIGHTS
WHITE WIRE GROUND
YELLOW WIRE LEFT TURN
GREEN WIRE RIGHT TURN

4 WIRE BLACK CABLE

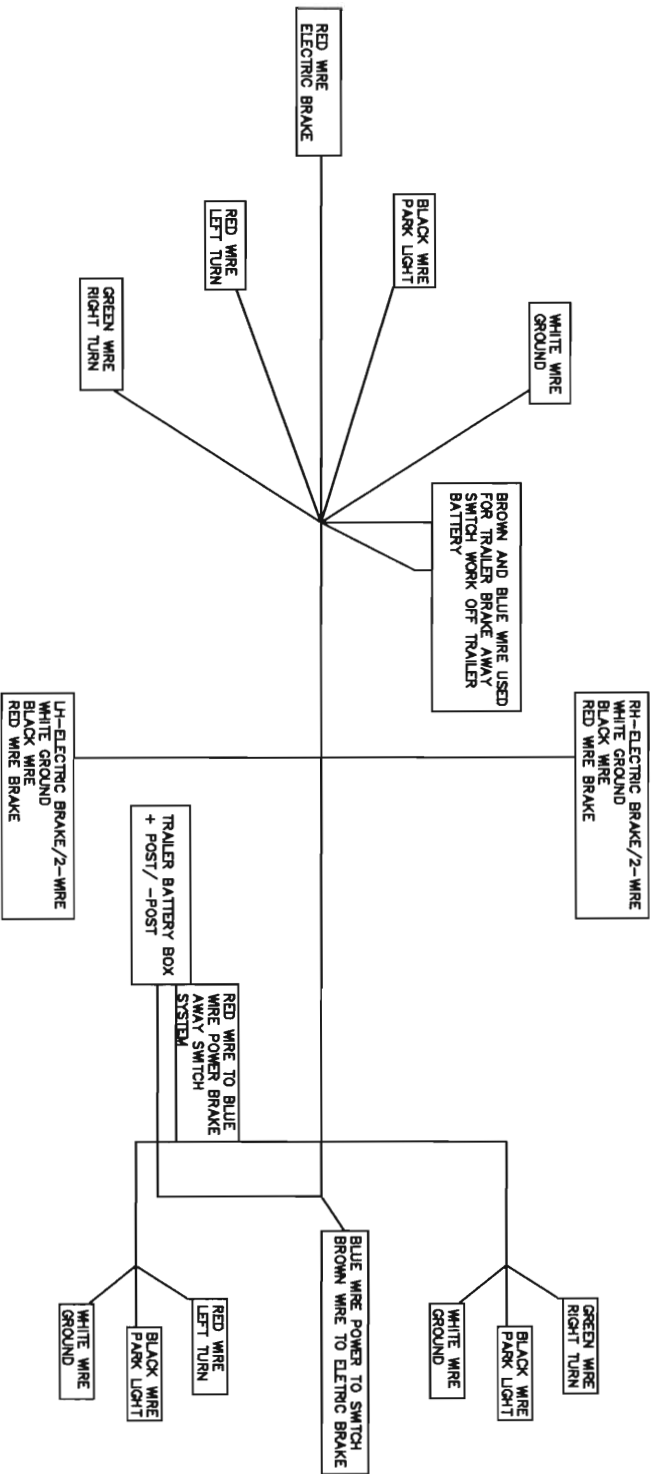
GREEN WIRE LEFT TURN
BLACK WIRE PARKING LIGHTS
WHITE WIRE GROUND

PINK WIRE LEFT TURN
BLACK WIRE PARKING LIGHTS
WHITE WIRE GROUND

DINKMAR INC.			
DATE	APPROVED BY	DATE	APPROVED BY
DATE	DATE	DATE	DATE
Standard Trailer Wiring			
Wired by HANSON MANUFACTURING GROUP, INC. Standard Trailer			



DINKMAR INC.
 500 W. 10th St.
 Minneapolis, MN 55402
 Tel: 612-338-2611
 Telex: 270727
 Fax: 612-338-2611
 7 Post Electric Control Box



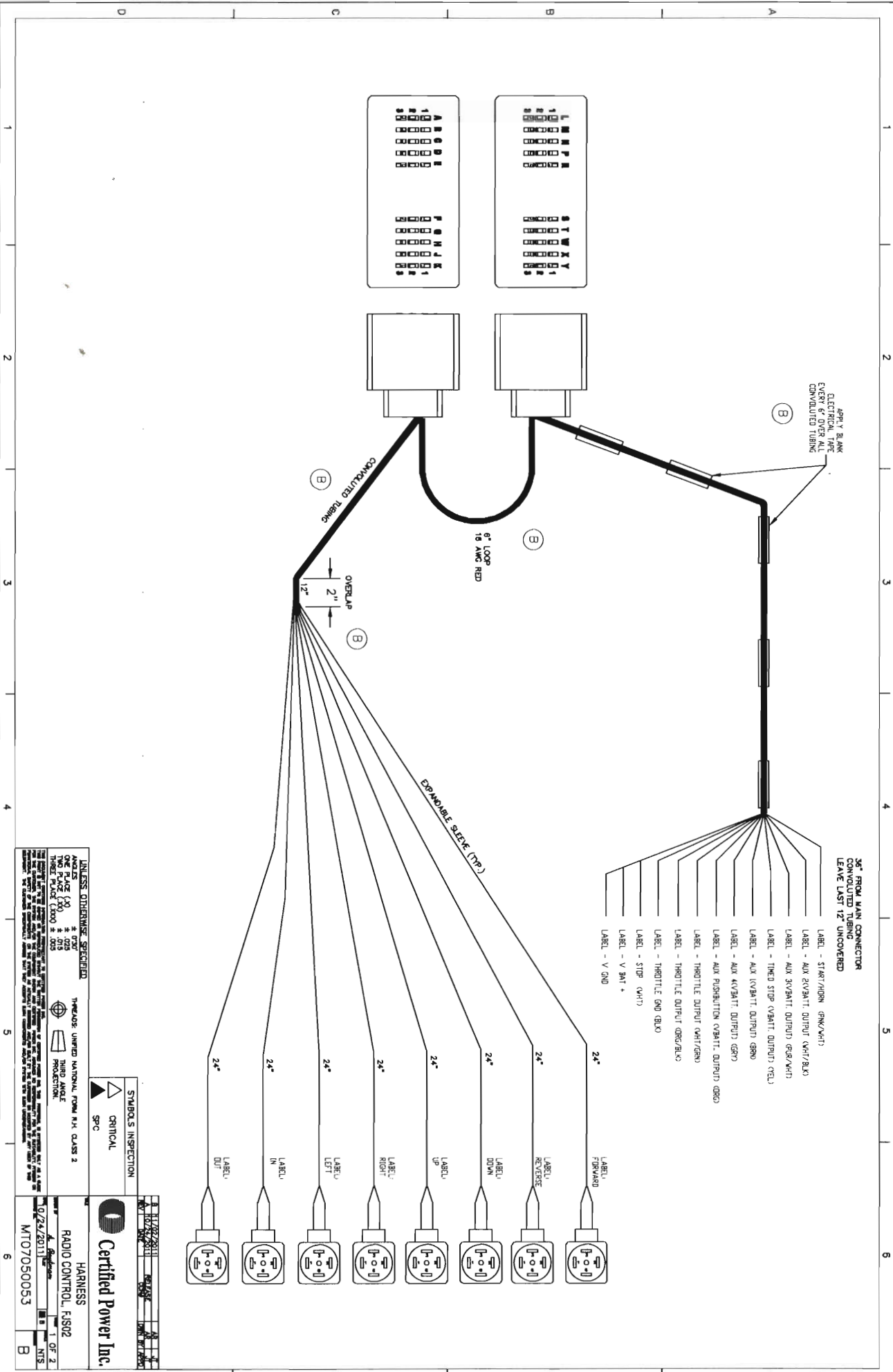
6 POLE PLUG IS
DINKMAR STANDARD
OPTION: 7 POLE PLUG IS OFFER

CONTROL CABLE HARDNESS

ENGINE KILL SWITCH	BLACK GROUND WIRE
ENGINE KILL SWITCH	RED POWER WIRE
POWER WIRE	PURPLE MURPHY SWITCH
GROUND WIRE	ORANGE GROUND KILL SWITCH
GROUND WIRE THROTTLE	GROUND BROWN/WHITE
POWER WIRE SWITCH	POWER RED/BLACK SWITCH
GROUND WIRE SWITCH	GROUND GREEN SWITCH

ENGINE CONTROL PANEL

DINKMAR INC.			
GALLON, OHIO 44833			
SCALE: NTS	APPROVED BY:	DRAWN BY:	
DATE: 03-21-2012	DAVID DINKEL	DAVID DINKEL	
WIRE CONTROL PANEL			
MFG'D BY PARTNERS MANUFACTURING GROUP INC.			
DRAWING NUMBER: CONTROL PANEL			



UNLESS OTHERWISE SPECIFIED
 ONE PLACE (X) 0.050
 TWO PLACE (XX) 0.015
 THREE PLACE (XXX) 0.005

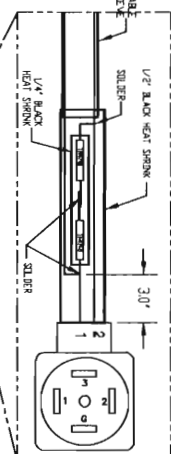
THREADED UNFED NATIONAL FORM P-H CLASS 2
 THIRD ANGLE
 PROJECTION

HARNESS
 RADIO CONTROL FS02
 1 OF 2
 MTO7050053

Certified Power Inc.

STANDARD INSPECTION
 CRITICAL
 SPEC

REV. 10/24/2011
 DATE
 BY
 CHECKED
 APPROVED

[illegible][illegible]

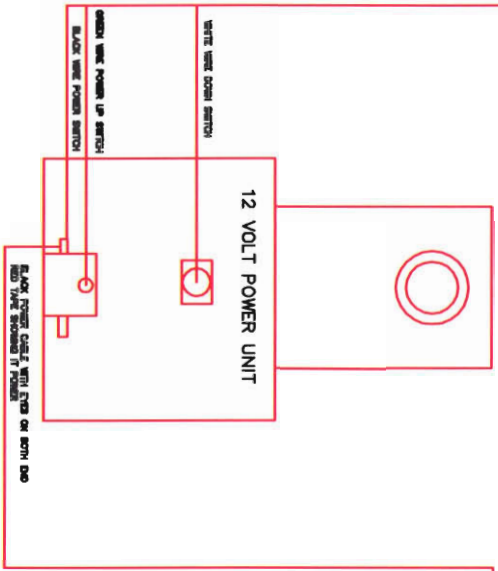
STRIP WIRE 0.20" AND INSTALL TERMINAL BEFORE INSERTING WIRE INTO CONNECTOR

[illegible]

3	11/22/2011	15	2
A	10/24/2011	16	2
1	10/24/2011	17	2
2	10/24/2011	18	2
3	10/24/2011	19	2
4	10/24/2011	20	2
5	10/24/2011	21	2
6	10/24/2011	22	2
7	10/24/2011	23	2
8	10/24/2011	24	2
9	10/24/2011	25	2
10	10/24/2011	26	2
11	10/24/2011	27	2
12	10/24/2011	28	2
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15	10/24/2011	31	2
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83	10/24/2011	99	2
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86	10/24/2011	102	2
87	10/24/2011	103	2



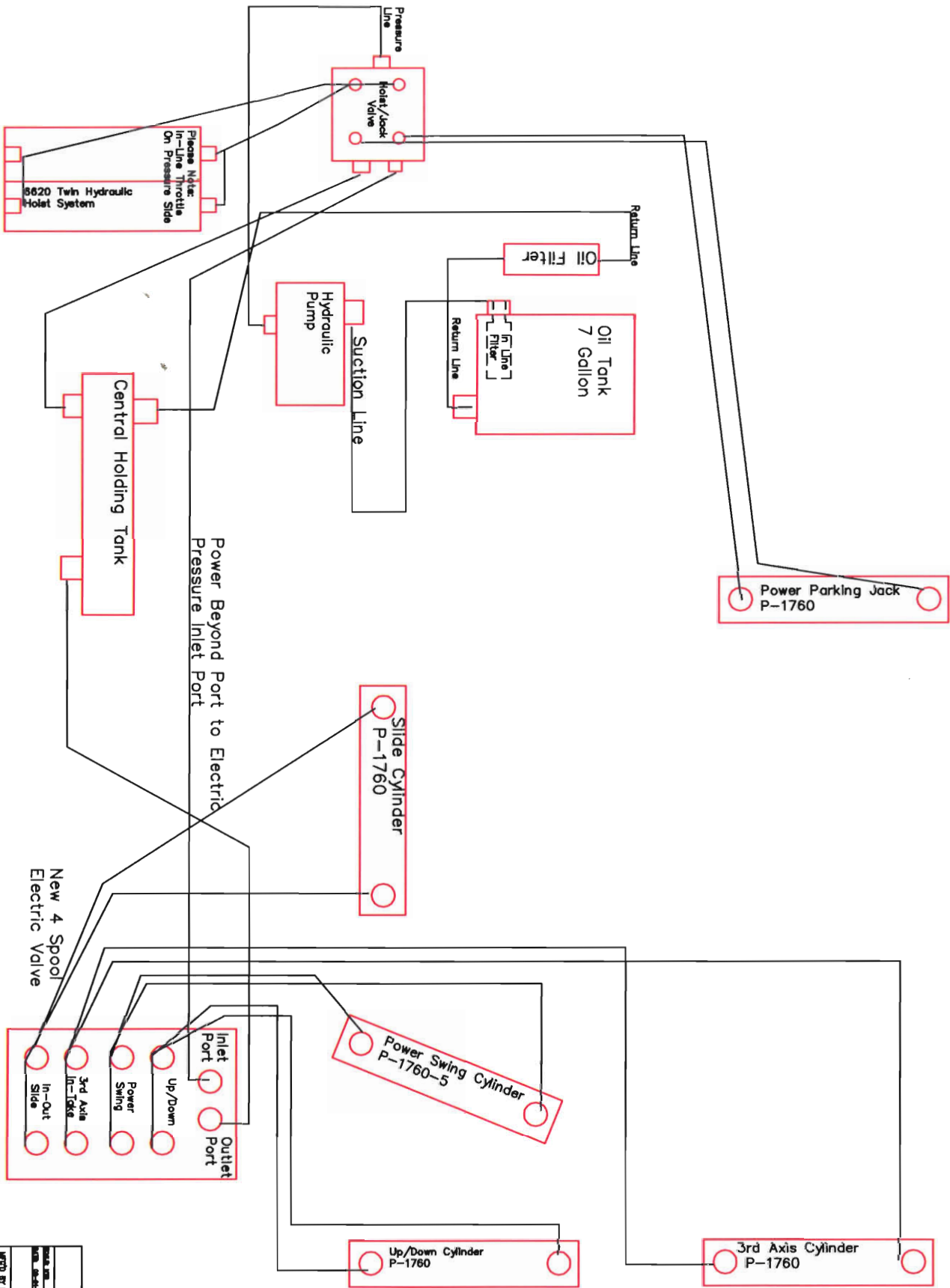
THREE WIRE BLACK CABLE



Ground Wire To Motor and Sub-Frame



DINKMAR INC.		GALION, OHIO 44833	
SCALE: NTS	APPROVED BY:	DRAWN BY:	
DATE: 03-18-2012	DAVID DINKEL	DAVID DINKEL	
12 VOLT POWER UNIT WIRING			
MFGD BY PARTNERS MANUFACTURING GROUP INC.			DRAWING NUMBER: 12 VOLT WIRE



100U Dump Body

*A continued tradition
since the early 1900's*

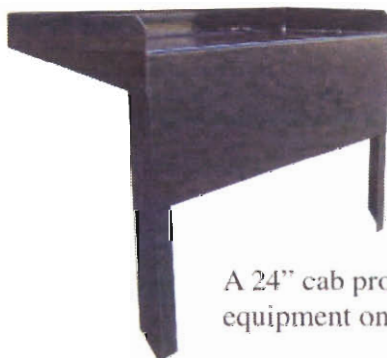


Tough & Versatile

The Galion® 100U body is designed for superior service on 9900 - 19500 GVWR cab/chassis'. It features all 10 gauge high tensile steel floors, tailgate, head sheets and double wall sides. Front corner posts, two intermediate side braces, full depth rear corner posts and boxed "material-shedding" top rails are also standard.



- Available in lengths of 8' to 11'
- Material-shedding boxed top rails
- Double acting tailgate
- 10 gauge high tensile construction
- 3" crossmember understructure
- 3-panel tailgate
- Tarp-friendly upper gate hardware
- Quick release tailgate



A 24" cab protector is standard equipment on the 100U

Visit Galion and all affiliated companies on the world wide web.
www.galiongodwin.com

Galion®

100U Specifications:

General Dimensions:

Available in inside lengths from 8' through 11', 84" inside width with 13" sides and 19" gate or 18" sides and 22" gate.

Sides:

10 Gauge high tensile steel with double wall sides, material shedding boxed top rails, full depth 10" rear corner post, front side brace, two intermediate vertical side braces and 6" front and rear board extension pockets.

Floor:

10 gauge high tensile steel, with 2" radius floor to side radius.

Front Bulkhead:

10 gauge high tensile steel construction with two bend top flange.

Tailgate:

10 gauge high tensile steel with full perimeter box bracing, two intermediate vertical box braces, double acting design with long chains and two sets of banjo eyes.

Tailgate Hardware:

Heavy duty cast quick release top hardware and cast overshoot lower hardware with manual release handle.

Lights:

Meets all requirements of FMVSS108 with oval stop/tail/turn lights recessed in rear post. All lighting is recessed, shock mounted, complete with factory wiring harness.

Understructure:

Stacked design utilizing 6" structural longitudinals gusseted to 3" structural channel crossmembers on 12" centers, lubricated front and rear cross shaft and full width rear bolster.

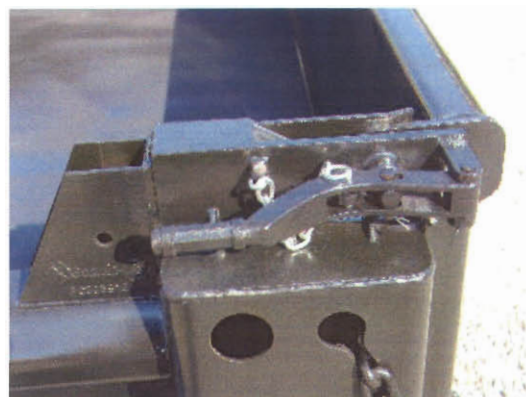
Safety Features:

All Galion 100U bodies are shipped with a "body up" warning light and OSHA required back up alarm.

Options:

Aluminum construction
304 #4 stainless steel construction
Coal door in gate
Fold down sides
Sleek cab protector (with or without window)
Integral cab protector (with or without window)
Bolt on spreader apron

FULL FACTORY WARRANTY
complete parts and service available
through nationwide authorized distributors



Pictured is a close view of the upper quick release hardware of the standard 100U body. This hardware makes it easy to quickly remove and reinstall the tailgate as needed.



Pictured is a close view of the full-depth rear corner post with integrated chain adjusters and 9" deep 10 gauge high tensile steel rear bolster.

Galion-Godwin Truck Body Co. LLC.
7415 Peabody-Kent Rd. Winesburg OH. 44690 P.O. Box 208
(877) 450-4794 Fax (330) 359-5660

Galion-Godwin is an affiliate of  Dunn, N.C.

PLD Dump Body

*A continued tradition
since the early 1900's*



Tough & Versatile

The Galion® PLD body is designed for superior service on 12000 - 26000 GVWR cab/chassis'. It features all 10 gauge high tensile steel floors, tailgate, head sheets and single V brace sides. 10" full depth rear corner posts and boxed "material-shedding" top rails are also standard. The PLD is designed to operate with scissor type conversion hoists.



- Available in lengths of 12', 14' and 16'
- Material-shedding boxed top rails
- Double acting tailgate
- 10 gauge high tensile construction
- 3" crossmember understructure
- 3-panel tailgate
- Horizontal V braced sides
- Quick release upper hardware



A 24" cab protector is Optional equipment on the PLD

Visit Galion and all affiliated companies on the world wide web.
www.galiongodwin.com

Galion®

PLD Specifications:

General Dimensions:

Available in inside lengths of 12', 14' and 16' inside width with 18" sides, 42" front and 24" gate.

Sides:

10 Gauge high tensile steel sides with horizontal pressed V brace, material shedding boxed top rails, full depth 10" rear corner post and 6" front and rear board extension pockets.

Floor:

10 gauge high tensile steel, with 2" radius floor to side radius.

Front Bulkhead:

10 gauge high tensile steel construction with two bend top flange and horizontal V brace.

Tailgate:

10 gauge high tensile steel with full perimeter box bracing, two intermediate vertical box braces, double acting with long chains and two sets of banjo eyes.

Tailgate Hardware:

Heavy duty cast quick release top hardware and cast overshoot lower hardware with manual release handle.

Lights:

Meets all requirements of FMVSS108 with oval stop/tail/turn lights recessed in rear post. All lighting is recessed, shock mounted, complete with factory wiring harness.

Understructure:

Stacked design utilizing 7" structural longitudinals gusseted to 3" structural channel crossmembers on 12" centers, lubricated front and rear cross shaft and full width rear bolster.

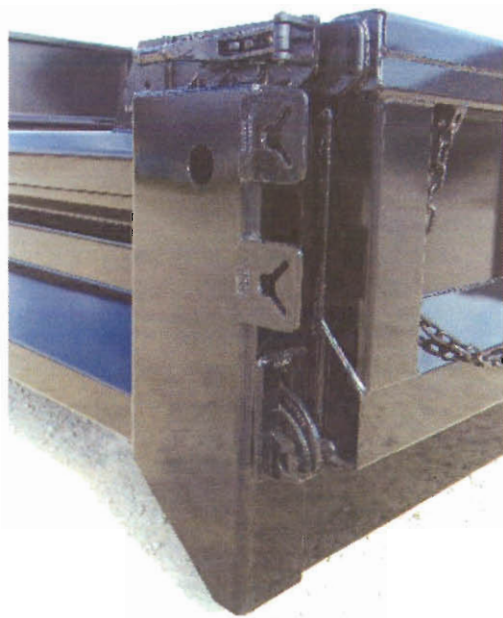
Safety Features:

All Galion PLD bodies are shipped with a "body up" warning light and OSHA required back up alarm.

Options:

Aluminum construction
304 #4 stainless steel construction
Coal door in gate
Fold down sides
Sleek cab protector
Integral cab protector
Bolt on spreader apron

FULL FACTORY WARRANTY
complete parts and service available
through nationwide authorized distributors



Pictured is a close view of the upper quick release hardware and banjo eyes of the standard PLD body. This hardware makes it easy to quickly remove and reinstall the tailgate as needed.



Pictured is a view of the 12' PLD drop side option. With the release of the two independent spring latches the side folds down below the floor. The 14' and 16' dropsides are split. (two sections each side)

Galion-Godwin Truck Body Co. LLC.
7415 Peabody-Kent Rd. Winesburg OH. 44690 P.O. Box 208
(877) 450- 4794 Fax (330) 359-5660

Galion-Godwin is an affiliate of  The Godwin Group Dunn, N.C.

MAXIM™ DS Small DC Power Units



Custom Power Units Built To Your Specs!

Customize a power unit to your needs. If you have a unit in mind for your application, use our Quote Matrix below to spec it out. It's simple, fast and intuitive. Most quotes can be supplied within a day. Call 1-800-800-1810 and dial '5' or email us at powerunits@baileynet.com.

Fill in your selection with the **BOLD KEY** letters or numbers from the charts below:

GPM Range	Pressure Range
08 = 0.8 - 0.4	1000-4000
12 = 1.1 - 0.6	1200-4000
16 = 1.4 - 0.8	1200-3500
21 = 1.9 - 1.2	800-2800
25 = 2.2 - 1.5	800-2100
27 = 2.4 - 1.6	800-1900
37 = 3.3 - 2.0	500-1500
50 = 4.4 - 3.0	400-1100

Motor Pump Circuit Tank Relief

DS A S

HP A = 2

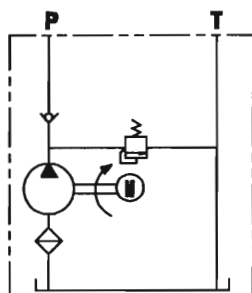
Volt 1 = 12v
2 = 24

Duty S = Standard

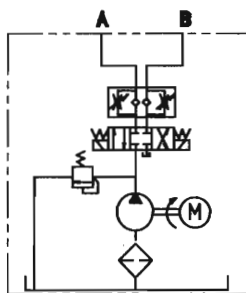
S H

In 100s of psi

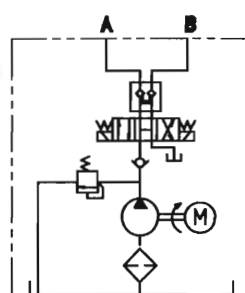
Material	Qt. Size	Position
S = Steel	02 = 1/2	H = Horiz.
	03s = 3/4 slim	
	03f = 3/4 fat	
	05s = 1.2 slim	
	05f = 1.2 fat	
	06 = 1 1/2	
	08 = 2	
	10 = 2.5	
	12 = 3	
	16 = 4	
	20 = 5	



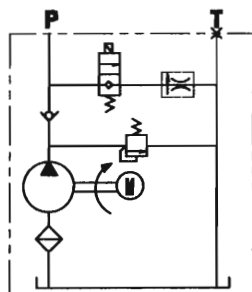
01
Pumping Station
Adjustable relief
SAE #6 ports



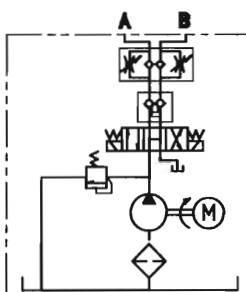
04
Double Acting Power Unit
D03, closed center valve
Adj flow control on both ports
Adjustable relief
SAE #6 ports Short term load holding



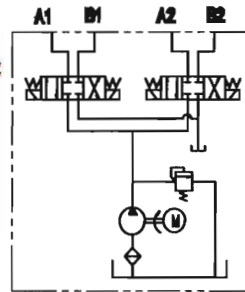
07
Double-acting Power Unit
D03, open center valve
PO checks on both ports
Adjustable relief
SAE #6 ports Long term load holding



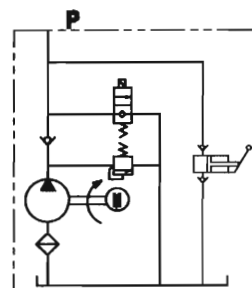
02
Single-acting Power Unit
Adjustable relief
SAE #6 ports



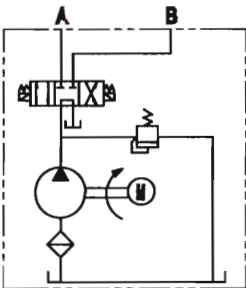
05
Double-acting Power Unit
D03, open center valve
Adj flow control on both ports
PO checks on both ports
Adjustable relief
SAE #6 ports Long term load holding



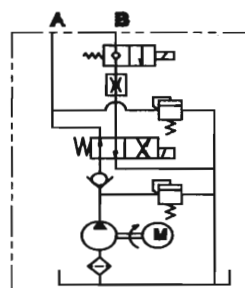
08
Double Acting Power Unit
Two, D03, closed center valves
Adjustable relief
SAE #6 ports Short term load holding



03
Single-acting Power Unit
Redundant Manual Backup
Adjustable relief
SAE #6 ports



06
Double-acting Power Unit
D03, tandem center valve
Adjustable relief
SAE #6 ports Non load holding



09
Double Acting Power Unit
Cartridge control valves
Two, adjustable reliefs
SAE #6 ports Long term load holding

This page can be used as a faxable work order sheet or call us with the numbers you filled in and we will do the rest.

Date: _____

Customer Information

www.Baileynet.com

Name: _____

Phone: _____

Company: _____

E-mail: _____



Call 1-800-800-1820 or Fax 1-800-800-1811

In the United States and Canada
8am - 6pm Monday - Friday, EST



Axle Assemblies

We stock a large selection of standard axle assemblies, replacement parts and running gear to fit small to large trailers. We also specialize in custom assemblies.

Axles	Informational
2,000 lbA-6	How to Select Axles and Running GearA-2
2,200 lb / 3,500 lb SquareA-8	How to Order Tubular Axle AssembliesA-3
3,500 lbA-10	How to Determine Correct Axle PositionA-3
4,400 lbA-12	The Protective Wiring Connector.....A-4
6,000 lb Regular DutyA-14	ABS by Dexter AxleA-4
6,000 lb Heavy DutyA-16	Nev-R-Lube®.....A-5
7,000 lbA-18	E-Z Lube®A-5
7,200 lbA-20	Axle Measurements - TubularA-28
8,000 lbA-21	Axle Measurements - Torflex®A-29
9,000 lbA-22	Rubber Torsion AxlesA-30
10,000 lb General Duty.....A-23	How to Select / Order Torflex® Axles.....A-31
10,000 lb Heavy DutyA-24	How to Read Torflex® Articulation DimensionsA-46
12,000 lb Heavy DutyA-25	
15,000 lb Heavy DutyA-26	
22,500 lb - 27,500 lb.....A-27	
#8 Torflex®A-32	
#9 Torflex®A-34	
#10 Torflex®A-36	
#11 Torflex®A-38	
#12 & #12V Torflex®.....A-40	
#13 Torflex®A-42	
#10K Torflex®A-44	

All charts and diagrams are for illustration purposes only. Call for more information.



TRANSFLUID

trasmissioni industriali

NORME D'INSTALLAZIONE E MANUTENZIONE

PRIMA DI MONTARE E METTERE IN FUNZIONE IL PRODOTTO, LEGGERE ATTENTAMENTE TUTTE LE ISTRUZIONI SULLA SICUREZZA ED IL FUNZIONAMENTO RIPORTATE NEL PRESENTE MANUALE.

SEGUIRE SEMPRE TUTTE LE AVVERTENZE ED ASSICURARSI CHE GLI OPERATORI PRESENTI IN PROSSIMITA' DELL'APPARECCHIATURA INDOSSINO TUTTI I DISPOSITIVI DI PROTEZIONE RICHIESTI PER LA SICUREZZA NELL' AMBIENTE DI LAVORO.

NON UTILIZZARE L'APPARECCHIATURA SE LE PRESENTI ISTRUZIONI NON DOVESSERO RISULTARE CHIARE, E CONTATTARE IMMEDIATAMENTE IL COSTRUTTORE O IL DISTRIBUTORE PER L'ASSISTENZA NECESSARIA.

IL PRODOTTO DEVE ESSERE PROTETTO DA UNA COPERTURA ADEGUATA PER EVITARE DANNI ALLE PERSONE.

LO SCHERMO DEVE SEMPRE PREVEDERE APERTURE ASSIALI E RADIALI PER LA VENTILAZIONE DEL GIUNTO.

SE FOSSE MONTATO IL TAPPO FUSIBILE, LE SUDETTE APERTURE NON DEVONO ESSERE ORIENTATE VERSO GLI OPERATORI, PARTI CALDE O COLLEGAMENTI ELETTRICI.

INSTALLATION AND MAINTENANCE

BEFORE ASSEMBLING AND OPERATING THE PRODUCT, CAREFULLY READ ALL THE SAFETY AND OPERATING INSTRUCTIONS REPORTED IN THIS MANUAL.

ALWAYS FOLLOW ALL THE INSTRUCTIONS AND ASSURE THAT ALL THE OPERATORS STANDING BY THE MACHINERY ARE WEARING ALL THE PROTECTIVE EQUIPMENT NECESSARY FOR THE JOB TYPE AND APPLICATION BEING PERFORMED.

DO NOT USE THE MACHINERY IF YOU DO NOT UNDERSTAND THESE INSTRUCTIONS, AND IMMEDIATELY REFER TO THE MANUFACTURER OR THE CUSTOMER SERVICE DESK FOR ASSISTANCE.

THE PRODUCT MUST BE PROTECTED BY A CONVENIENT COVER GUARD TO AVOID PERSONAL INJURY TO PEOPLE.

AXIAL AND RADIAL VENTILATION OPENINGS SHOULD BE INCORPORATED IN THE GUARD FOR HEAT EXCHANGE.

IF THE PRODUCT IS FITTED WITH FUSIBLE PLUGS, THE SAID OPENINGS SHOULD NOT BE DIRECTED TOWARDS OPERATORS OR ANY HOT OR ELECTRICAL INSTALLATION.

GIUNTI IDRODINAMICI
FLUID COUPLINGS

13 KFBD

drive with us

Questo manuale contiene le istruzioni per l'installazione, l'avviamento, l'uso e la manutenzione del giunto idrodinamico tipo KFBD. **CONSIGLIAMO CHE I RESPONSABILI DELL'USO E DELLA MANUTENZIONE DEL KFBD, VENGANO DOTATI DEL PRESENTE MANUALE. IL NON RISPETTO DELLE REGOLE CITE IN QUESTO MANUALE, PROVOCA IL DECADERE DELLA GARANZIA.** Ricordiamo che, per ordinare le parti di ricambio, e' importante specificare, oltre al numero di dettaglio e quantita' richiesta, anche: TIPO - N° di SPECIFICA - N° di SERIE del KFBD, che si trovano stampigliati sulla targhetta di identificazione a bordo macchina.

This manual contains instructions for installation, start up, working, and maintenance of KFBD fluid coupling.

WE SUGGEST THAT ANY PERSON WHO IS RESPONSIBLE FOR USE AND/OR MAINTENANCE, SHOULD BE PROVIDED WITH THIS MANUAL. THE RESPECT OF RULES, CONTAINED IN THIS MANUAL, IS MANDATORY FOR WARRANTY VALIDITY.

We recall that, for spare parts order, it is important to provide, besides detail number and quantity, even:

TYPE - SPECIFICATION Nr. - SERIAL Nr. of KFBD that are stamped on identification metal plate.

DESCRIZIONE

Il KFBD e' un giunto idrodinamico la cui parte esterna, motrice, e' collegata al volano di un motore endotermico mediante un giunto elastico ed il cui albero di uscita e' supportato da un cuscinetto orientabile a rulli, lubrificato ad olio, alloggiati in una campana di supporto flangiata al coprivolano del motore. Un secondo cuscinetto, alloggiato nel volano, sostiene l'albero di uscita dal lato motore. Il KFBD e' adatto per applicazioni con puleggia od i linea.

DESCRIPTION

KFBD is a fluid coupling having the outer driving impeller connected to the internal combustion engine flywheel through an elastic coupling. The output shaft is supported by a spherical roller bearing, oil lubricated, fitted in a cover flanged to the engine flywheel housing. Another bearing, fitted into the flywheel, supports the output shaft at the engine side. The KFBD is suitable for pulley or in line applications.

Prima di iniziare il montaggio del KFBD sul motore, e' bene verificare che il volano rientri nelle tolleranze SAE. Questo e' importante soprattutto per il buon funzionamento del giunto elastico.(Vedere TF6217-B Fig.1)

Before KFBD be mounted onto the engine, it is recommended to check that flywheel be within SAE tolerances. This is very important for elastic coupling good working.(see TF6217-B Fig.1)

INSTALLAZIONE (vedere TF6217-B)

- 1 Montare l'anello di trascinamento del giunto elastico sul volano del motore.
- 2 Montare il cuscinetto pilota, ingrassato a vita, sull'albero del KFBD.
- 3 Montare la flangia SAE 3 sul coprivolano.
- 4 Posizionare il gruppo completo, osservando con cura l'allineamento dell'albero nel cuscinetto pilota e dei blocchetti del giunto elastico con l'anello di trascinamento montato sul volano. La campana esterna deve essere orientata in modo da avere l'apertura per il riempimento dell'olio a circa 60° dalla verticale, in senso orario guardando il volano del motore. Così montato, si avra' l'apertura di drenaggio dell'olio in basso. Infine fissare il gruppo con le apposite viti sulla flangia esterna.
- 5 Riempimento olio giunto (vedere tabella olii consigliati). Togliere il coperchio che protegge il tappo di carico. Ruotare il giunto sino a portare il tappo in corrispondenza del segno di riferimento X sulla verticale (X-1-2-3-4 dipende dall'applicazione). Togliere il tappo e riempire fino allo sbocco dal foro (13KFBD X=5,2 lt.), quindi chiudere utilizzando del sigillante sul filetto. La coppia di serraggio e' 30 Nm per tappo 3/8". Rimontare il coperchio di protezione.
- 6 Riempimento grasso (vedere tabella grassi consigliati). Mediante l'apposito ingrasatore, riempire la camera di lavoro del cuscinetto fino a far fuoriuscire il grasso attorno all'albero.
- 7 Dare alcuni colpi, con un martello non metallico, sull'estremita' dell'albero onde eliminare ogni eventuale tensione sui cuscinetti dovuta alla resistenza offerta dal cuscinetto pilota, quando esso viene montato forzato nella sede del volano. Al primo avviamento, far girare il gruppo innestato, per almeno
- 8 10 minuti, con il motore alla meta' dei giri massimi.

INSTALLATION (see sheet.TF6217-B)

- 1 Mount elastic coupling driving ring, onto engine flywheel.
- 2 Mount pilot bearing, greased for life, onto KFBD shaft.
- 3 Mount SAE 3 flange onto flywheel housing.
- 4 Install complete group paying attention at alignment between shaft and pilot bearing as well as alignment between rubber blocks and driving ring.
*External housing must be orientated to get the oil fill opening at about 60° clockwise from vertical line, looking at the flywheel.
In such a way, the oil drain opening will be downwards. Therefore tighten screws of external flange.*
- 5 Fluid coupling oil filling (see recommended oil table). Remove cover.
*Turn fluid coupling until X mark be on vertical line (X-1-2-3-4 depends on application). Remove plug and fill until oil overflows (13KFBD fill X=5,2 lt.).
Therefore fit the plug using sealant on thread.
Tightening torque is 30 Nm for 3/8" plug .Fit again the cover.*
- 6 Grease filling (see recommended grease table).
Through the grease filler, fill grease until it comes out around the shaft.
- 7 Rap the shaft on the end to relieve any preloading that may result due to the resistance of pilot bearing when being pressed into the flywheel.
- 8 At first start up, run the unit engaged and engine at half of max speed for not less than 10 minutes.

MANUTENZIONE

- Controllare, ogni 3 mesi, il livello dell'olio nel giunto.
Cambiare l'olio ogni 4000 ore di funzionamento oppure una volta all'anno.
- Ingrassare il cuscinetto dell'albero di uscita ogni settimana.
- Controllare, periodicamente, lo stato dei blocchetti in gomma del giunto elastico.
- E' consigliabile, ogni 4000 ore di funzionamento, cambiare tutti gli anelli di tenuta rotante e controllare lo stato dei cuscinetti.
- Controllare, periodicamente, che la taratura del termostato, se installato, sia uguale al valore originariamente impostato (vedere certificato di collaudo e TF5941-O).
- Pulire periodicamente la sonda del termostato, se installato.

MAINTENANCE

- Check, every 3 months, the fluid coupling oil level. Change oil every 4000 working hours or once a year, whichever occurs first.
- Grease output shaft bearing every week.
- Check, periodically, elastic coupling rubber blocks condition.
- It is advisable, every 4000 working hours, to change all rotating seals and to check bearings condition.
- Check, periodically, that temperature switch whether installed, set value be the same as originally adjusted (see test certificate and TF5941-O).
- Clean periodically the temperature switch bulb, whether installed.

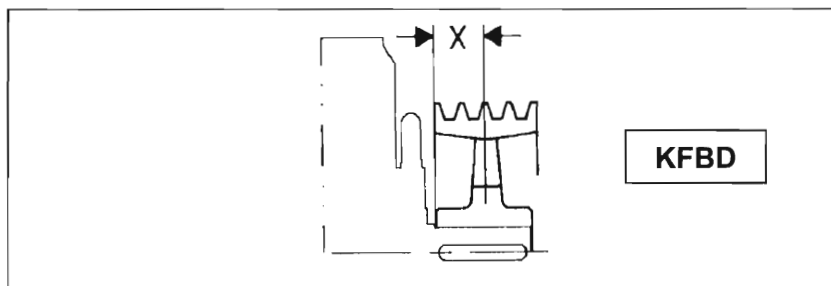
TABELLA INCONVENIENTI

SINTOMO	CAUSA	RIMEDIO
Scarse prestazioni.	Livello olio.	Controllare il livello (olio freddo) ed aggiungere se necessario. Controllare la macchina condotta. Controllare i giri del motore.
	Tipo olio.	Utilizzare olio indicato in tabella.
Surriscaldamento.	Scorrimento eccessivo.	Controllare il livello olio. Verificare l'installazione. Controllare i giri del motore.
	Scarsa ventilazione.	Pulire le aperture per la ventilazione.
	Cuscinetto non lubrificato.	Verificare il livello olio ed eventualmente aggiungere.
	Cuscinetto in uscita danneggiato.	Sostituire.
	Carico radiale eccessivo.	Ridurre la tensione delle cinghie.
Perdita olio lato motore.	Tappo conico.	Rimontare con sigillante per filetti.
	Anello OR.	Sostituire.
	Tenuta rotante.	Sostituire. Controllare l'usura sull'albero.
Perdita olio lato uscita.	Tappo conico.	Rimontare con sigillante per filetti.
	Tappo fusibile se installato.	Sostituire.
	Anelli OR.	Sostituire.
Rumore.	Tenuta Rotante.	Sostituire. Controllare l'usura sull'albero.
	Rottura cuscinetto.	Sostituire.
	Olio con troppa schiuma.	Controllare il livello ed il tipo di olio.
	Usura eccessiva giunto elastico (vibrazioni torsionali?, temperatura eccessiva?, disallineamento?, olio.).	Smontare e sostituire i blocchetti od il giunto elastico completo.
	Usura della dentatura tra albero uscita mozzo, girante interna.	Smontare e sostituire le parti usurate.
Intervento termostato.	Alta temperatura olio.	Vedere "surriscaldamento".
	Errata taratura termostato.	Vedere certificato di collaudo e TF 5941-O.

TROUBLE SHOOTING

SYMPTOM	CAUSE	REMEDY
Poor performances.	Oil level.	Check level (cold oil) and add as necessary. Check driven machine. Check engine rpm.
	Oil type.	Use recommended oil (see table).
Overheating.	High slip.	Check oil level. Check installation. Check engine rpm.
	Low ventilation.	Clean ventilation openings.
	No lubricated bearing.	Check oil level. Add oil if required.
	Damaged output bearing.	Replace.
	Too high radial load.	Decrease belt tension.
Oil leakage at engine side.	Taper plug.	Remount using thread sealant.
	O-ring.	Replace.
	Rotating seal.	Replace. Check shaft wear.
Oil leakage at output side.	Filling plug.	Remount using thread sealant.
	Fusible plug, whether installed.	Replace.
	O-ring.	Replace.
	Rotating seal.	Replace. Check shaft wear.
Noise.	Bearing failure.	Replace.
	Too much oil foam.	Check oil level and type.
	Elastic coupling wear. (Torsional vibration? high temperature? misalignment? oil ?).	Dismantle and replace rubber blocks or complete elastic coupling.
	Spline wear between output shafthub, inner impeller.	Dismantle and replace worn components.
	High oil temperature.	See "overheating".
Temperature switch intervention.	Wrong switch setting.	See test certificate and TF 5941-O.

- Calculated bearings life over 10.000 hours.
- Engine speed over those listed, needs approval by Transfluid.
- Pulley diameter is the minimum permissible. (Over 35 m/s, dynamic balancing is recommended).
- Belts nr. is maximum permissible (about belt width: 8V > SPC > 5V).
- Timing belts must be approved by Transfluid.
- "X" distance is according to belts type & number.
- Side load includes 2.5 belt tensioning factor.
- Pilot bearing speed = 5% of max. input speed.



TRANSMITTABLE POWER CRITERIA: slip < 3%
f.c. oil temperature < 50 °C over ambient

13 (pilot brg: dia 30 mm – 33500 N)

Up to kW/rpm	Max "X" (mm) Max load (N)	Max belts nr Type - Min pulley Ø
90 / 2600	65 / 8300	7 x 5V - 200 mm

15 (pilot brg: dia 30 mm – 33500 N)

Up to kW/rpm	Max "X" (mm) Max load (N)	Max belts nr Type - Min pulley Ø
130 / 2400	92 / 13000	10 x 5 V - 200 mm

17-19 (pilot brg: dia 35 mm – 40500 N)

Up to kW/rpm	Max "X" (mm) Max load (N)	Max belts nr Type - Min pulley Ø
200 / 2200	110 / 22000	12 x 5 V - 200 mm
		6 x 8V - 315 mm
		7 x SPC - 315 mm
280 / 2200	130 / 22000	14 x 5 V - 280 mm
		8 x 8V - 315 mm
		9 x SPC - 315 mm

21-24 (pilot brg: dia 45 mm – 58500 N)

Up to kW/rpm	Max "X" (mm) Max load (N)	Max belts nr Type - Min pulley Ø
370 / 2000	150 / 28000	10 x 8V - 315 mm
	170 / 25000	13 x SPC - 355
500 / 2000	177 / 29800	12 x 8V - 400 mm
	195 / 26500	15 x SPC - 450 mm

ASK TRANSFLUID FOR ANY APPLICATION DIFFERENT THAN ABOVE.

GARANZIA BASE, TERMINI E CONDIZIONI

TF 6401-I - rev. 0

1) Premessa

TRANSFLUID garantisce che i propri prodotti, al momento della spedizione, sono conformi alle specifiche pubblicate nei propri cataloghi o documenti tecnici validi al momento della spedizione stessa e che sono esenti da difetti nei materiali e nella fabbricazione. Questi termini di garanzia sostituiscono tutte le altre garanzie, anche legali, espresse o implicite, comprese, a titolo esemplificativo e non esaustivo, le garanzie di commerciabilità e di idoneità ad un uso particolare (e qualsiasi garanzia implicita che sorga nel corso delle prestazioni, nel corso delle trattative o dell'uso commerciale). Fatti salvi i casi di dolo e colpa grave, in nessun caso TRANSFLUID sarà responsabile per danni diretti, indiretti, consequenziali, fortuiti od extracontrattuali basati su una richiesta d'indennizzo da parte del Compratore per violazione di garanzia, violazione di contratto, responsabilità oggettiva. In nessun caso il risarcimento da parte di TRANSFLUID potrà superare l'importo che il Compratore ha pagato per il prodotto fornito da TRANSFLUID.

2) Durata e limiti della garanzia

a) La durata della garanzia è pari a diciotto (18) mesi dalla messa in servizio del prodotto fornito da TRANSFLUID e comunque non oltre ventiquattro (24) mesi dalla data di spedizione del prodotto originale dallo stabilimento TRANSFLUID.

b) I prodotti, se inutilizzati e stoccati a lungo termine, devono essere immagazzinati e trattati in accordo alle linee guida redatte da TRANSFLUID per tipologia di prodotto che sono rese disponibili su richiesta.

c) La garanzia per le parti la cui usura o deterioramento è fortemente legata alle condizioni di impiego (tensionamento delle cinghie, condizioni ambientali, urti e sovraccarichi non previsti), alla sensibilità dell'operatore (utilizzo entro i limiti approvati), ad eventi esterni (inceppamenti della macchina condotta), non opera se tali parti sono state utilizzate (non sono nuove), o se non viene chiaramente dimostrato dal Compratore un eventuale difetto di fabbricazione riconducibile a TRANSFLUID.

Tipiche parti soggette ad usura o deteriorabili sono:

- filtri, tenute e guarnizioni
- molle, viti, tappi
- interruttori e fusibili
- materiali e superfici di attrito
- cinghie e catene
- lubrificanti in genere

d) L'installazione e la manutenzione dei prodotti TRANSFLUID deve essere eseguita in conformità a quanto indicato nel manuale di installazione, uso e manutenzione che viene sempre fornito a corredo di ogni prodotto.

e) In caso di fornitura di componenti sfusi/disassemblati, la garanzia copre solo ed esclusivamente eventuali difetti dei componenti stessi, relativamente al materiale o alle lavorazioni meccaniche effettuate da TRANSFLUID.

f) La garanzia decade nei casi in cui:

- il prodotto venga utilizzato oltre i limiti indicati nei cataloghi o manuali di installazione o in applicazioni non approvate da TRANSFLUID;
- la rottura derivi da abuso, negligenza, omissione o inadeguata manutenzione, mancato collegamento o controllo dei dispositivi di protezione o a seguito di incidenti;
- il prodotto venga modificato o disassemblato senza approvazione scritta di TRANSFLUID.

3) Prestazioni incluse/escluse nella garanzia

a) Eventuali prodotti o componenti i cui difetti, ad insindacabile giudizio di TRANSFLUID, sono coperti da garanzia, saranno riparati o sostituiti senza alcun addebito, salvo quanto stabilito ai punti successivi. Le parti sostituite saranno coperte dal residuo periodo della garanzia originale che resta in vigore sul prodotto inizialmente fornito (non decorrerà quindi un nuovo termine di garanzia).

BASIC GUARANTEE, TERMS AND CONDITIONS

TF 6401-GB - rev. 0

1) Preamble

TRANSFLUID guarantees that at the time of dispatch, its products comply with the specifications published in its catalogues or technical documents, which were valid at the time of dispatch, and that the products are free from defects in material and workmanship. These terms of guarantee substitute all other guarantees, including legal, expressed or implicit guarantees, including but not limited to, guarantees of saleability and suitability for a particular use (and any other implicit guarantee arising during the course of the services, negotiations or commercial use). Except in the event of serious negligence and fraud, under no circumstances will TRANSFLUID be held liable for direct, indirect, consequential, fortuitous or extra contractual damage based upon claims for compensation by the Buyer for violation of the guarantee, contract or objective responsibility. Under no circumstances can the compensation by TRANSFLUID exceed the amount paid by the Buyer for the product supplied by TRANSFLUID.

2) Duration and limits of the guarantee

a) The duration of the guarantee is equal to eighteen (18) months from the time the product supplied by TRANSFLUID is commissioned, and nonetheless, no more than twenty-four (24) months from the date of dispatch of the original product from TRANSFLUID's plant.

b) Product that are not used and stored for a long period must be kept and handled in keeping with the guidelines, which are available upon request, drawn up by TRANSFLUID according to product type.

c) The wear or tear of parts, which is particularly due to conditions of use (tension of the belts, environmental conditions, unforeseen knocks and overloading), or to the sensitivity of the operator (use within the approved limits) or to external circumstances (jamming of the machine), is not covered by the guarantee if these parts have been used (are not new), unless the Buyer can clearly prove the manufacturing defect, which is ascribable to TRANSFLUID.

Typical parts subject to wear or tear include:

- filters, seals and gaskets
- springs, screws, plugs
- switches and fuses
- material and friction surfaces
- belts and chains
- lubricants in general

d) Installation and maintenance of TRANSFLUID products must be carried out following the installation, use and maintenance manual, which is always supplied with each product.

e) With regard to the supply of loose/disassembled parts, the guarantee solely and exclusively covers faults of the components themselves, related to the material or mechanical workmanship carried out by TRANSFLUID.

f) The guarantee is no longer valid when:

- the product is used exceeding the limits stated in the catalogues or installation manuals, or in applications that are not approved by TRANSFLUID;
- breakage results from abuse, negligence, omission or inadequate maintenance, failed connection or control of the protection devices or as a result of accidents;
- the product is modified or disassembled without TRANSFLUID'S written approval.

3) Services included/excluded in the guarantee

a) In TRANSFLUID'S final decision, products or components, whose faults are covered by the guarantee, will be repaired or replaced at no extra cost, with the exception of the subsequent points. The replaced parts will be covered from the remaining period of the original guarantee, which stays in force for the product initially supplied (a new guarantee period will therefore not come into effect).

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- b) Sono esclusi dalla garanzia, e pertanto restano a carico del Compratore, costi derivanti da:
 - rimozione del prodotto TRANSFLUID dal macchinario in cui è inserito e relativa rimessa in servizio;
 - adeguato imballaggio ed oneri derivanti da trasporti di andata e ritorno del materiale;
 - ripristino di lubrificanti in genere, tubazioni, cofanature insonorizzanti, carter, ecc;
 - qualsiasi altro costo non espressamente approvato per iscritto da TRANSFLUID.
- c) Per le operazioni di smontaggio/reinstallazione/messa in servizio del prodotto, il Compratore potrà richiedere il supporto di un tecnico specializzato inviando un regolare ordine di acquisto. L'intervento sarà fatturato da TRANSFLUID applicando le correnti tariffe ASSIOT (Associazione Italiana costruttori organi di trasmissione, affiliata EUROTRANS).
- d) TRANSFLUID non potrà essere ritenuta responsabile per mancati o minori profitti, costi per macchinari sostitutivi, fermi macchina, danni ad apparecchiature o proprietà causati da un eventuale malfunzionamento dei propri prodotti.

4) Modalità di richiesta di prestazioni in garanzia

- a) Il Compratore, qualora intenda avvalersi della garanzia, dovrà informare TRANSFLUID per iscritto, entro 7 (sette) giorni dal momento in cui si è evidenziato un difetto, comunicando:
 - descrizione del prodotto;
 - numero di serie (ove previsto), numero di specifica o codice articolo;
 - riferimento alla data ed al documento di acquisto o consegna;
 - ragionevole prova che il difetto rientri nelle condizioni di garanzia completata da una descrizione dettagliata dell'anomalia o malfunzionamento ed eventualmente supportata da fotografie.
 In caso di malfunzionamento occorso dopo la messa in servizio del prodotto, dovranno essere comunicati inoltre:
 - tipo di applicazione;
 - potenza e giri del motore (in caso di motore endotermico anche marca e modello);
 - diametro, tipo, numero gole e posizione puleggia (se l'applicazione lo prevede);
 - ore di funzionamento.
- b) In base al prodotto coinvolto, al malfunzionamento segnalato, all'urgenza di intervento, TRANSFLUID indicherà se il prodotto stesso dovrà essere consegnato o spedito in porto franco ad un centro autorizzato o direttamente presso la propria sede.
- c) Una volta ricevuto il prodotto, TRANSFLUID o il distributore autorizzato provvederanno ad una approfondita analisi; se il prodotto sarà ritenuto coperto da garanzia:
 - TRANSFLUID riparerà o sostituirà gratuitamente le parti necessarie al ripristino della piena e sicura funzionalità;
 se il prodotto NON sarà ritenuto coperto da garanzia, TRANSFLUID:
 - invierà un rapporto tecnico motivando la decisione;
 - stilerà un preventivo di riparazione;
 - solo dopo aver ottenuto l'ordine dal Compratore, procederà con la riparazione.
- d) I prodotti riparati saranno restituiti al Compratore in porto assegnato, utilizzando lo stesso mezzo di trasporto con cui sono pervenuti (a meno che non sia diversamente specificato).
- e) Qualora il Compratore decida di non accettare il preventivo di riparazione, dovrà comunicare per iscritto la propria decisione chiedendo esplicitamente la rottamazione o la restituzione delle parti che saranno spedite nello stato in cui si trovano.

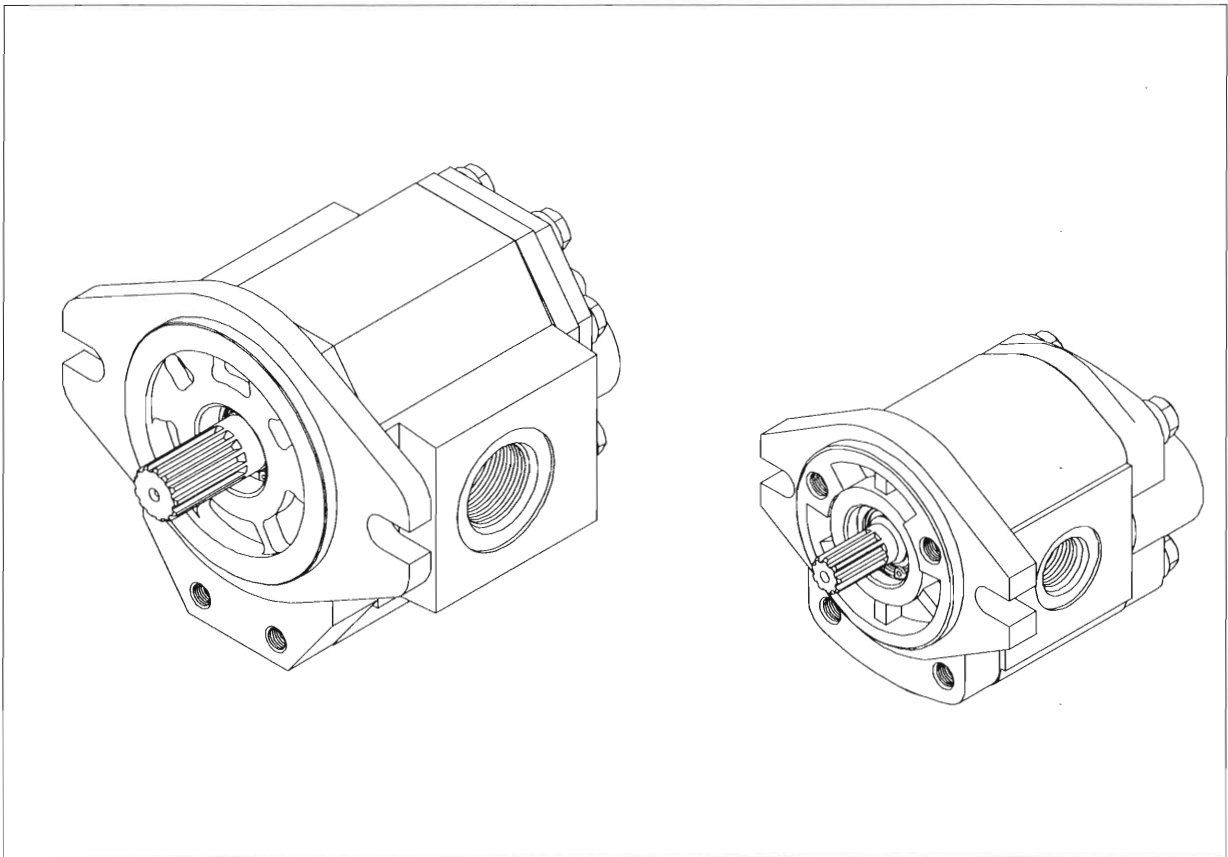
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- b) Excluded from the guarantee and remaining at the Buyer's expense are the costs resulting from:
 - removal of the TRANSFLUID product from the machinery onto which it is fitted, and recommissioning;
 - suitable packing and charges resulting from the return transport of the material;
 - restoration of lubricants in general, piping, sound proof canopies, guards, etc.;
 - all other costs not expressly approved in writing by TRANSFLUID.
- c) The Buyer can request the support of a specialised technician to disassemble/re-install/recommission the product by sending a standard purchase order. TRANSFLUID will invoice the work, applying the current ASSIOT rates (Italian Association of Gears and Transmission Elements Manufacturers, a member of EUROTRANS).
- d) TRANSFLUID cannot be held liable for lost or reduced profit, costs for replaced machinery, still machinery, damage to equipment or property caused by failure of its products.

4) Conditions for requesting services under guarantee

- a) If the Buyer intends to take advantage of the guarantee, he must inform TRANSFLUID in writing within 7 (seven) days of discovering a fault, stating:
 - product description;
 - series number (where foreseen), specification number or article code;
 - reference to the date and document of purchase or delivery;
 - reasonable proof that the fault falls within the conditions of guarantee, together with a detailed description of the irregularity or failure and where possible, supported by photographs.
 In the event of failure after commissioning the product, the following must also be communicated:
 - type of application;
 - power and engine rpm (stating also the make and model for endothermic engines);
 - diameter, type, number of races and position of pulley (if foreseen by the application);
 - hours of operation.
- b) TRANSFLUID will indicate whether the product must be delivered or sent free port to an authorised centre or directly to its own plant depending on the product concerned, the failure indicated and the urgency of the intervention.
- c) On receiving the product, TRANSFLUID or the authorised distributor will carry out a thorough analysis; if the product is deemed to be covered by the guarantee:
 - TRANSFLUID will repair or replace the parts needed to restore full and safe working at no cost;
 If the product is NOT deemed to be covered by the guarantee, TRANSFLUID:
 - will send a technical report explaining its decision;
 - will draw up an estimate for the repair;
 - will carry out the repair upon receipt of the order from the Buyer.
- d) The repaired products will be returned to the Buyer freight collect, by the same means of transport that was used for the arrival (unless stated otherwise).
- e) Should the Buyer decide not to accept the estimate for the repair, he must communicate his decision in writing, explicitly asking for the parts to be scrapped or returned; the parts will be sent in their current state.

SP20B AND SP25A SERIES PUMP PARTS MANUAL

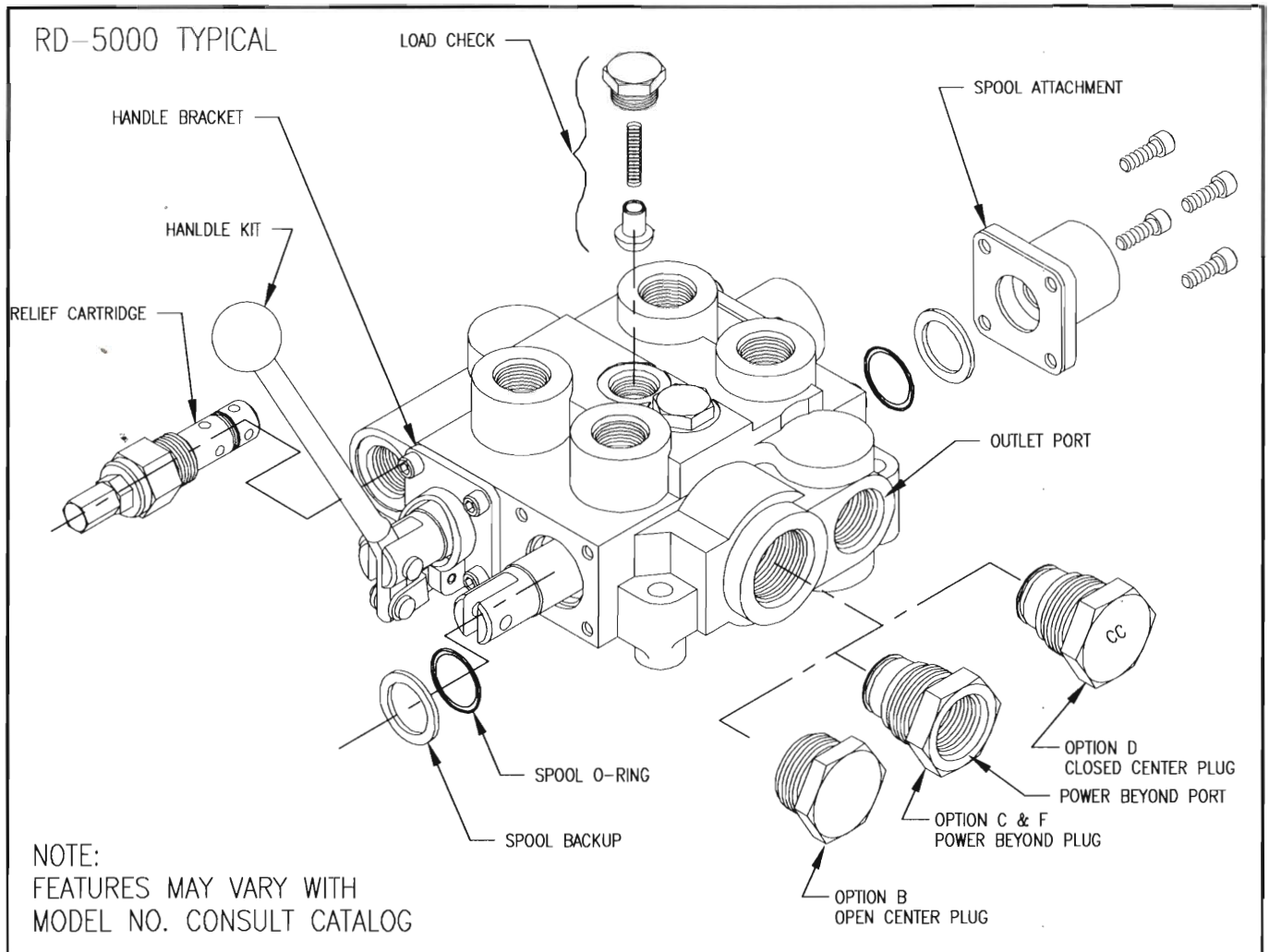


PRINCE MFG. CORP.



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RD-5200 2 SPOOL MONO-BLOCK VALVE. RD-5100 & RD-5300 ARE SIMILAR.

CLOSED CENTER PLUG OPTION D

This option provides for closed center operation. This is typically used with a variable displacement pressure compensated pump or in a system with an unloading valve. When the spools are in neutral the inlet port is blocked. The power beyond plugs can be used for closed center conversion by plugging the power beyond port. PLEASE NOTE it may be necessary to increase relief pressure above pump compensator setting.

POWER BEYOND PLUG WITH 3/4 NPTF / #12 SAE OPTION C AND F

This option provides for a high pressure power beyond port. This would be used if a valve is to be added downstream. PLEASE NOTE The outlet must be connected to tank. When spools are in neutral the inlet is connected to power beyond port.

3 WAY SPOOLS OPTION 'A'

Have the 'A work port' plugged. Connect 'B work port' to cylinder.

LOAD CHECK:

The load check feature is standard on all RD-5000 series valves. Each spool has a separate load check. The load check will prevent the fall of a cylinder as the spool is shifted. It also prevents the backflow of oil from the work port to the inlet. The pump must build up enough pressure to overcome the pressure on the work port caused by the weight of the load before the cylinder can move.

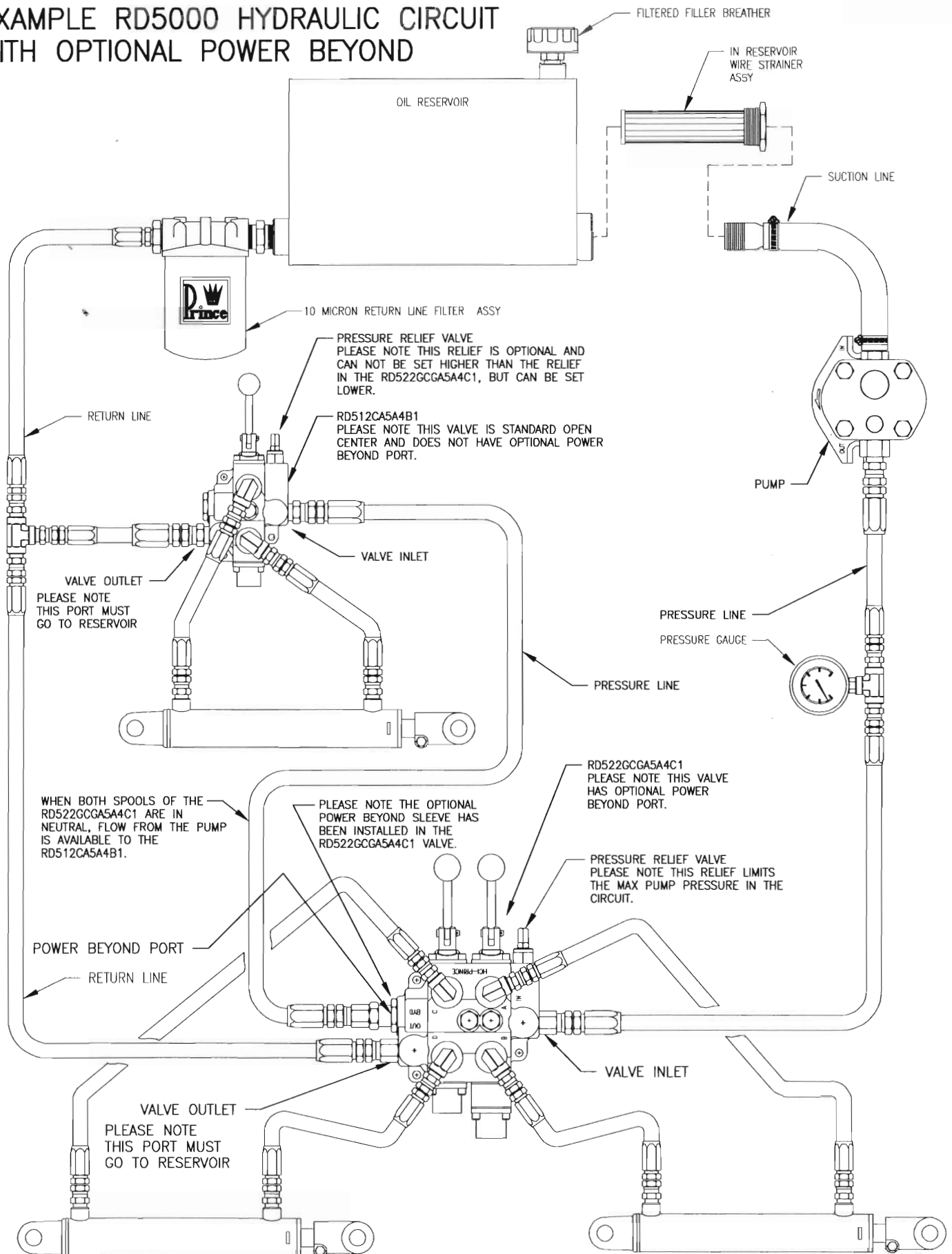
PLEASE NOTE: The load check has nothing to do with how well the valve will hold up a cylinder with the spool in neutral. The load check is functional only when the spool is shifted.

RD-5000 KITS AND CARTRIDGES

PART NO.	DESCRIPTION
660551001	RD-5100 SEAL KIT (1 SPOOL)
660552001	RD-5200 SEAL KIT (2 SPOOL)
660553001	RD-5300 SEAL KIT (3 SPOOL)
660150015	LOAD CHECK KIT
660150004	STANDARD HANDLE KIT (HANDLE, KNOB & PINS)
660150039	COMPLETE HANDLE KIT
660150022	PIN KIT
660350001	HANDLE BRACKET
660150012	JOYSTICK HANDLE KIT (BENT)
660150011	JOYSTICK HANDLE KIT (STRAIGHT)
660150001	SPRING CENTER KIT
660150002	3 POSITION DETENT KIT
660150003	FRICTION DETENT KIT
660150014	SPRING CENTER W/FLOAT DETENT KIT (REPAIR ONLY)
660150018	1 POSITION DETENT SPOOL OUT SPRING CENTER KIT
660150020	2 POS. DETENT SPOOL IN AND OUT SPRING CENTER KIT
660150023	1 POSITION DETENT SPOOL IN SPRING CENTER KIT
660312003	CONVERSION PLUG (OPTION B)
660312004	3/4 NPTF POWER BEYOND PLUG (OPTION C)
660312008	#12 SAE POWER BEYOND PLUG (OPTION F)
660312005	CLOSED CENTER CONVERSION PLUG (OPTION D)
660250006	NO RELIEF PLUG (OPTION 1)
660250003	ADJUSTABLE RELIEF 500-1500 (OPTION 4)
660250002	ADJUSTABLE RELIEF 1500-3000 (OPTION 5)
	RELIEF: STANDARD SETTING OPTION 3 & 5 2000 PSI
	STANDARD SETTING 2 & 4 1000 PSI

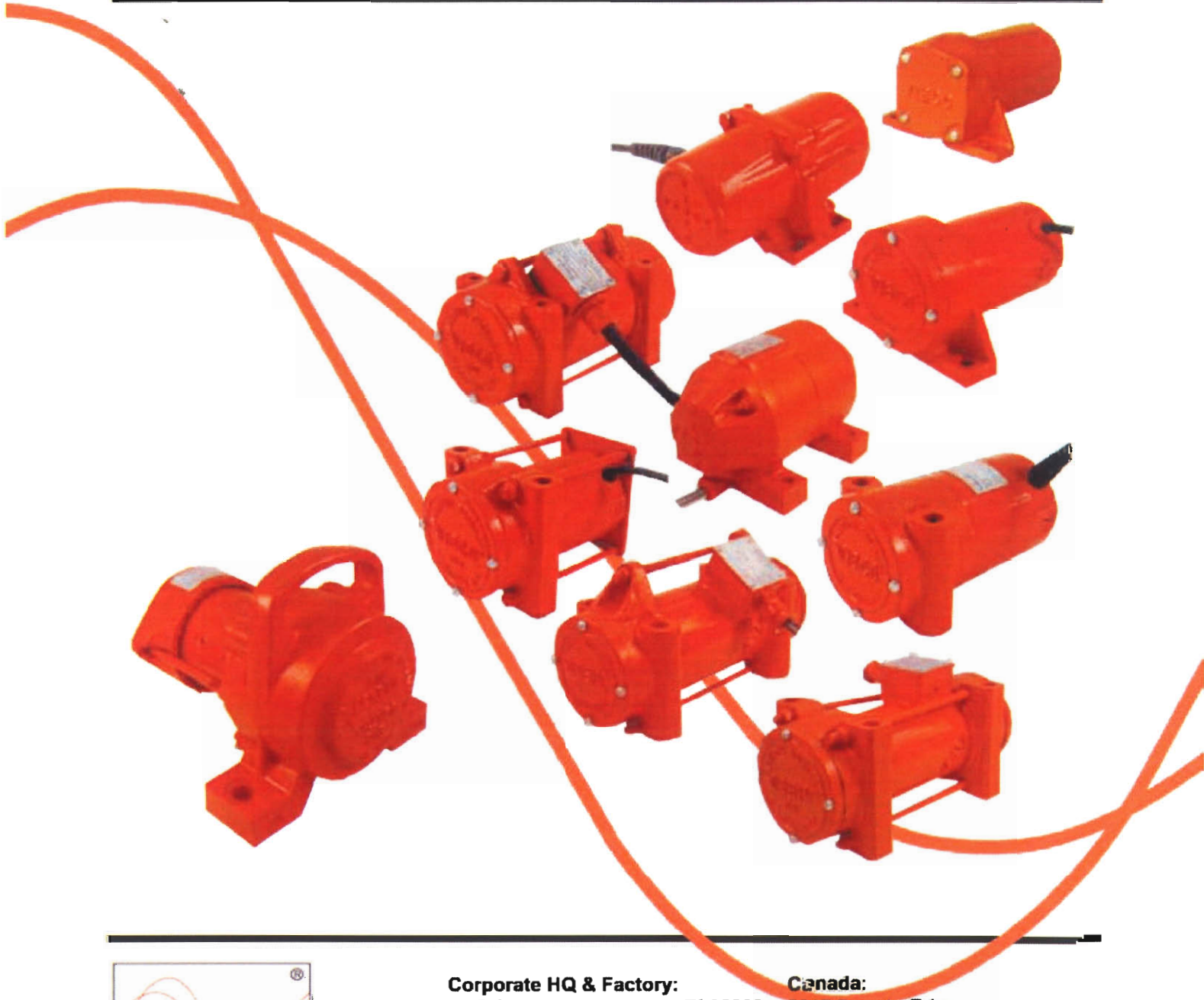
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EXAMPLE RD5000 HYDRAULIC CIRCUIT WITH OPTIONAL POWER BEYOND



Model DC 12 & 24 Volt Battery Operated

Specifications • Mounting Instructions • Operating Instructions
Parts List • Dimensions • Maintenance • Technical Data



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