



FIXED DISCHARGE UNDERBODY SCRAPER MANUAL
SERIAL NUMBERS 1046 & UP

REV 111418

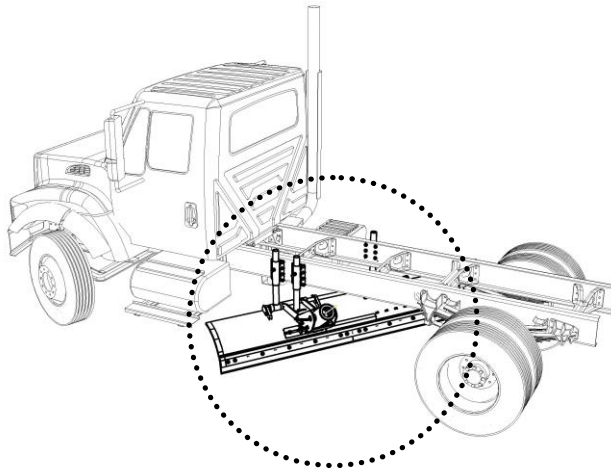


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**When ordering parts, please refer to the
Model number of your Bonnell Underbody Scraper.**

They are on the back cover of this manual.

SAFETY FIRST

Please read this manual before attempting to install or operate this equipment.



The symbol at left means ALERT. Any time you see this symbol, you are being warned that your safety is in danger! Please be careful!

GUIDELINES TO FOLLOW:

1. Turn off all power including truck engine when servicing or installing equipment.
2. Follow all recommended operation procedures.
3. Follow a regular maintenance schedule so that your equipment is kept in good operating condition at all times. Improper maintenance can lead to failure during operation, which makes for unsafe conditions.
4. Recognize and avoid hazardous situations during the installation, operation, maintenance, and servicing of equipment.
5. Please pay attention to, and respect, safety decals. They are there to protect you from injury.

AVOID ACCIDENTS

Most accidents, whether they occur in industry, on the farm, at home, or on the highway, are caused by failure of some individual to follow simple and fundamental safety rules or regulations. For this reason, most accidents can be prevented by recognizing the real cause and doing something about it before the accident occurs.

Regardless of the care used in the design and construction of any type of equipment, there are many conditions that cannot be completely safeguarded against without interfering with reasonable accessibility and efficient operation.

A careful operator is the best insurance against an accident. The complete observance of one simple rule would prevent many thousand serious injuries each year. That rule is:

***NEVER ATTEMPT TO CLEAN, OIL, OR ADJUST
A MACHINE WHILE IT IS IN MOTION.***

NATIONAL SAFETY COUNCIL

PLEASE, ALWAYS THINK SAFETY FIRST!

The purpose of this manual is to inform the person using the unit with the necessary information to properly install, operate, and maintain this unit. These instructions cannot replace the fundamental knowledge that a person must possess in order to safely and adequately operate this unit. The person must be qualified and possess the clear thinking necessary to install and operate this equipment. Since the life of any machine depends largely upon the care it is given, we suggest that this manual be read thoroughly and referred to regularly by anyone working on or around this unit. If for any reason you do not understand the instructions, please call your authorized service center or our office at (815) 284-3819. It has been our experience that by following these installation and maintenance instructions, and by observing the operation of this equipment, you will have sufficient understanding of how to troubleshoot and correct all normal problems that you may encounter during the life of the equipment.

THE NEED FOR SAFETY CANNOT BE STRESSED ENOUGH. WE URGE YOU TO MAKE SAFETY YOUR TOP PRIORITY WHEN OPERATING THIS UNIT OR ANY OTHER EQUIPMENT.

**ACCIDENTS HURT!
ACCIDENTS COST!
ACCIDENTS CAN BE AVOIDED!**

GENERAL SCRAPER MAINTENANCE GUIDELINES



CAUTION – THE FOLLOWING ITEMS MUST BE CHECKED BEFORE INITIAL START-UP OF THE NEW SCRAPER.

INITIAL SERVICING:

- Check all bolts for tightness. Torque as required if loose.
- Check for missing or broken cotter pins.
- Grease all fittings as required.
- Verify all hydraulic fittings are tight and not leaking.
- Check all hydraulic lines for damage or kinks.

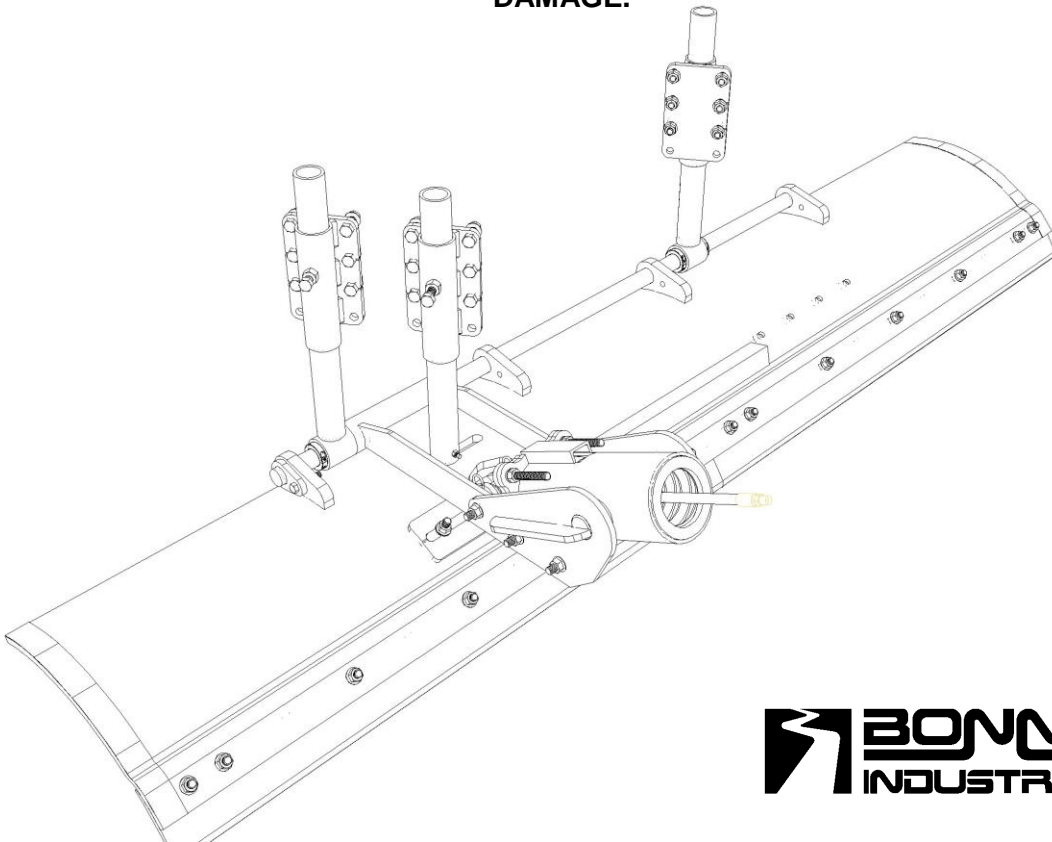
AFTER FIRST HOUR OF OPERATION AND EVERY 8 HOURS THEREAFTER:

- Check all bolts for tightness. Torque as required if loose.
- Check for missing or broken cotter pins.
- Verify all hydraulic fittings are tight and not leaking.
- Check cutting edge wear.



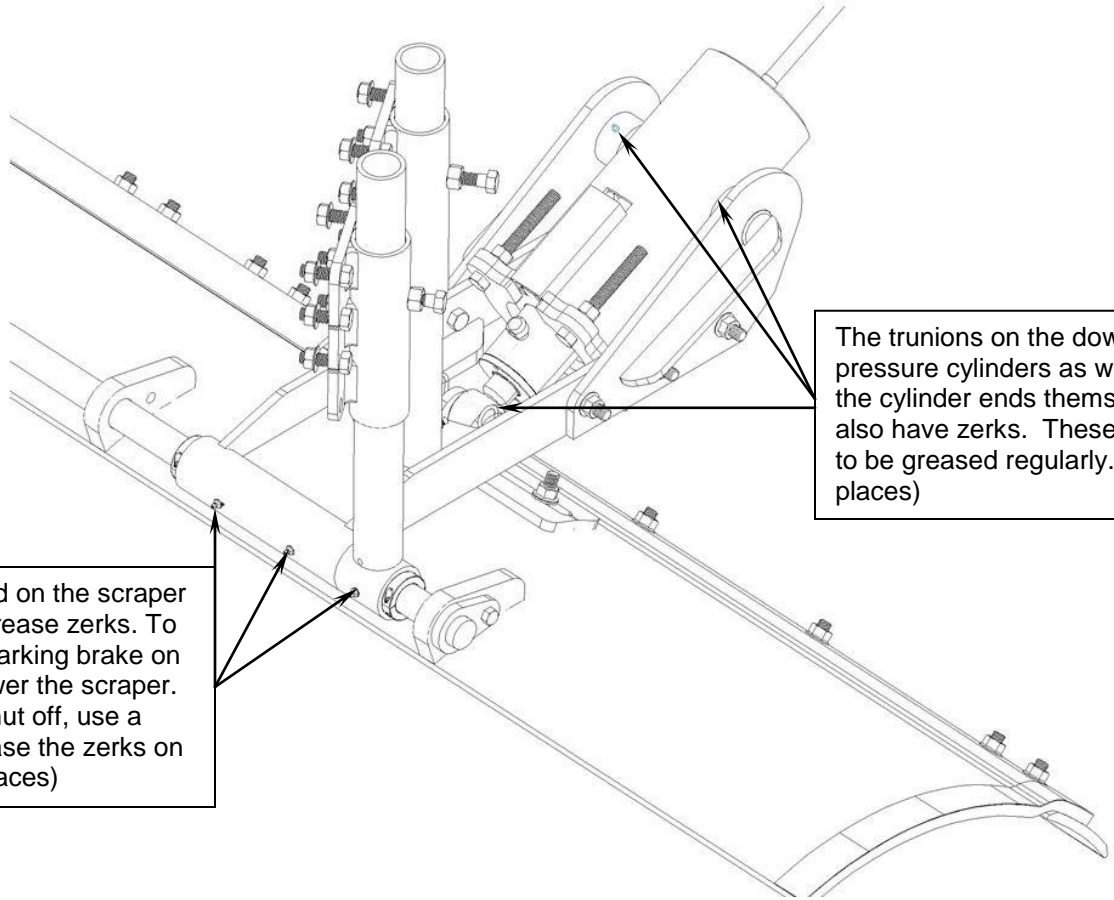
CAUTION – FAILURE TO CHECK AND REPLACE WORN CUTTING EDGES WILL RESULT IN DAMAGE TO SCRAPER!

POWER WASH YOUR SCRAPER AFTER EACH USE TO PREVENT CORROSION DAMAGE.



BONNELL
INDUSTRIES INC.

LUBRICATION:



The main hinge rod on the scraper is equipped with grease zerks. To lubricate, set the parking brake on the vehicle and lower the scraper. With the vehicle shut off, use a grease gun to grease the zerks on the hinge rod (4 places)

The trunnions on the down pressure cylinders as well as the cylinder ends themselves also have zerks. These need to be greased regularly. (3 places)

DOWN PRESSURE SPRING REPLACEMENT:



If possible, have your bonnell dealer service the canisters for you. They are under extreme pressure, and special tools may be required to remove and reassemble the spring assembly.

GENERAL OPERATING INSTRUCTIONS

Special note: this manual is intended for use as a supplement to your specific municipal guidelines in scraper operation, and is not intended to be a “*complete snow plowing guide*”. Proper training is the key to safe and proper operation of this equipment.

Transport:

Note: depending on moldboard width, the scraper may protrude out from the side of the truck. Always have the moldboard raised fully in the transport position. Use caution and good judgment – always know where the ends of the moldboard are.

Make sure the moldboard is fully retracted before transporting.

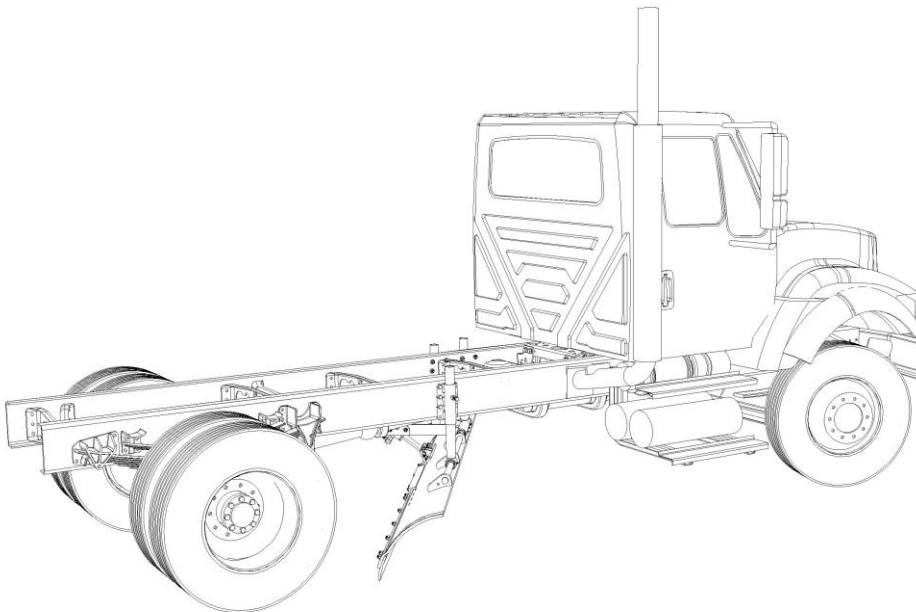
Scraping:

The scraper down pressure can be varied, depending on what the conditions are. The higher the pressure, the more scraping action.

Note: a pressure relief set at 500 psi maximum is required on the down pressure circuit. Always verify that the relief is working properly before operating the scraper.



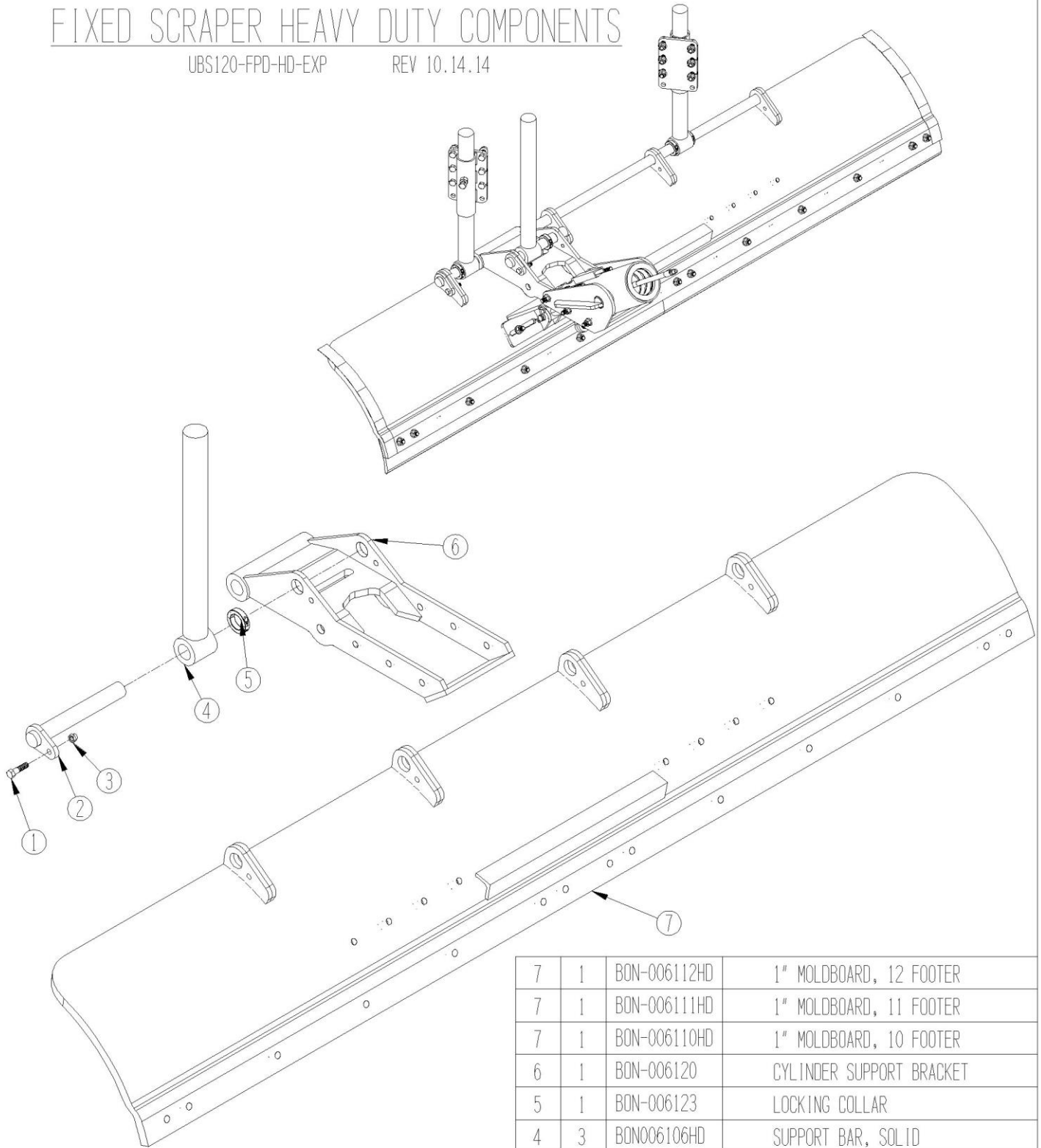
CAUTION – ALWAYS LIFT THE SCRAPER WHEN GOING OVER A RAILROAD CROSSING.



FIXED SCRAPER HEAVY DUTY COMPONENTS

UBS120-FPD-HD-EXP

REV 10.14.14



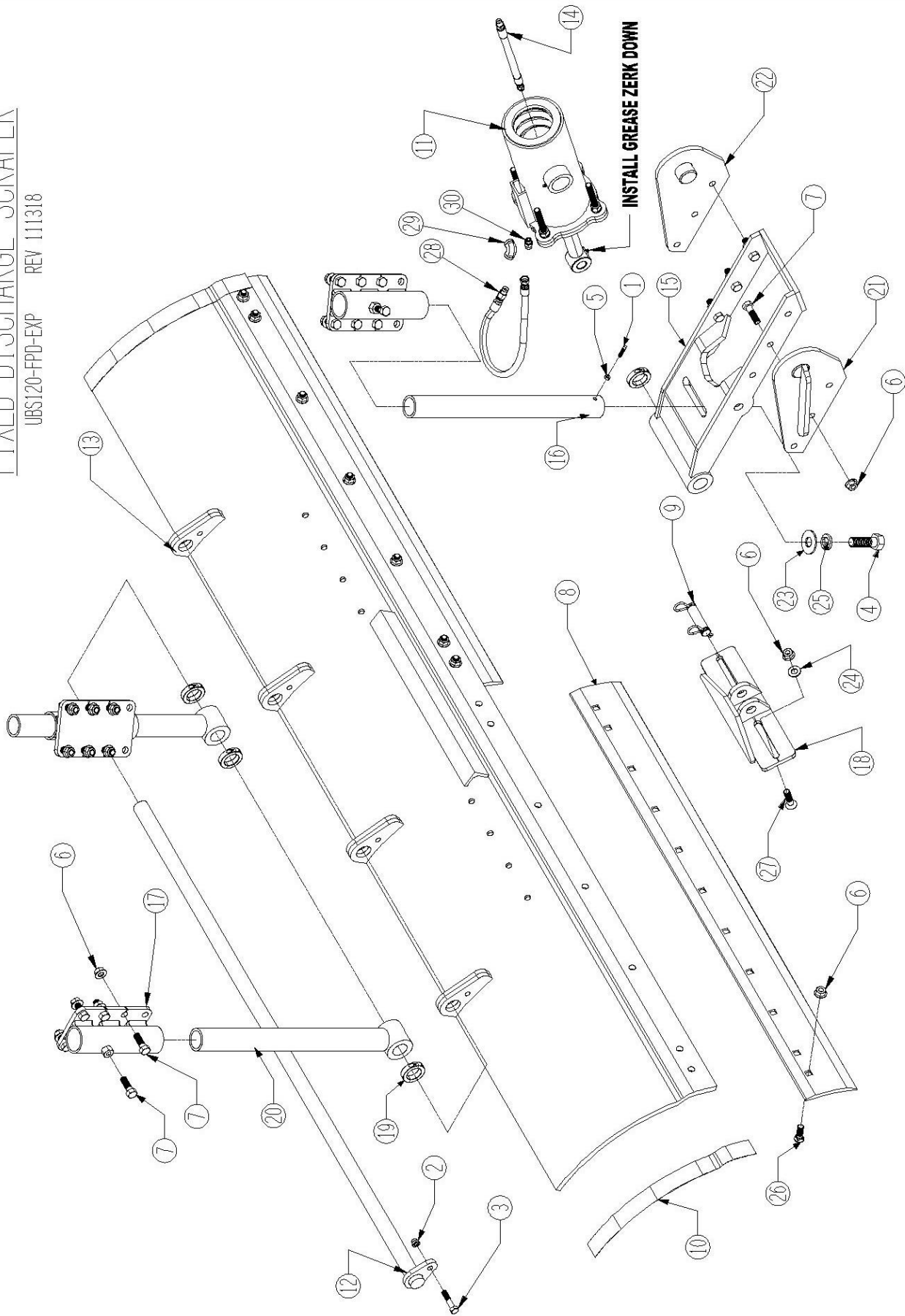
7	1	BON-006112HD	1" MOLDBOARD, 12 FOOTER
7	1	BON-006111HD	1" MOLDBOARD, 11 FOOTER
7	1	BON-006110HD	1" MOLDBOARD, 10 FOOTER
6	1	BON-006120	CYLINDER SUPPORT BRACKET
5	1	BON-006123	LOCKING COLLAR
4	3	BON006106HD	SUPPORT BAR, SOLID
3	1	BON-000321	1/2" LOCK NUT
2	1	BON-006121	SUPPORT BAR MTG. PIN
1	1	BON-000122	1/2X2 HEX BOLT
ITEM	QTY	PART #	DESCRIPTION



DIXON, ILLINOIS
PHONE: 800-851-9664

FIXED DISCHARGE SCRAPER

UBS120-FPD-EXP REV 111318



DIXON, ILLINOIS
PHONE: 800-851-9664



SCRAPER ASSEMBLY

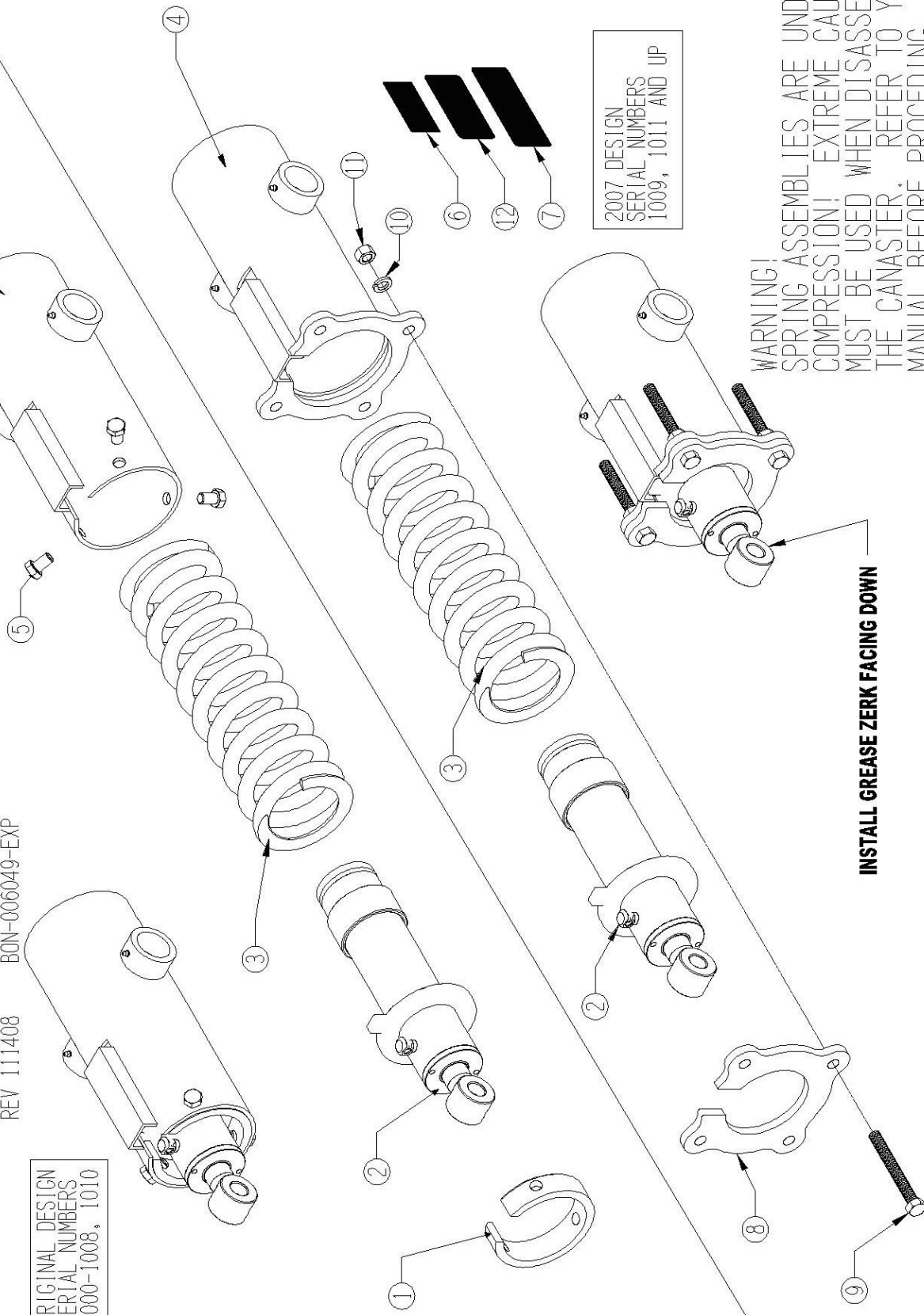
ITEM #	PART #	QTY.	DESCRIPTION
1	*5/16 SET SCREW	1	5/16 X 1-1/2 SQUARE HEAD SET SCREW
2	BON-000321	1	1/2 HEX LOCK NUT
3	BON-000111	1	1/2 X 2-1/2 HEX BOLT GRADE 8
4	BON-000234	1	1 X 3 HEX BOLT GRADE 5
5	BON-000302	1	5/16 HEX LOCK NUT
6	BON-000307F	40	5/8 HEX FLANGE LOCK NUT
7	BON-000153	27	5/8 X 2 HEX BOLT GRADE 8
8	BON-000741	AS REQ'D	5/8"X6"X6' CURVED CUTTING EDGE
8	BON-000740.6	AS REQ'D	5/8"X6"X5' CURVED CUTTING EDGE
9	PMC-190400004	1	CLEVIS PIN
10	981-326EES	4 FT.	CONSPICUITY TAPE
11	BON-006049	1	DOWN PRESSURE CYLINDER ASSEMBLY
12	BON-006122	1	HINGE SHAFT, 1-9/16"
13	BON-006110	1	10' MOLDBOARD
13	BON-006111	1	11' MOLDBOARD
13	BON-006112	1	12' MOLDBOARD
14	BON-006118	1	CYLINDER HOSE
15	BON-006103	1	CYLINDER SUPPORT FRAME
16	BON-006105	1	CYLINDER SUPPORT TUBE
17	BON-006107	3	FRAME MOUNTING BRACKET
18	BON-006113	1	CYLINDER MOLDBOARD HINGE BRACKET
19	BON-006123	4	SET COLLAR, STAINLESS STEEL
20	BON-006106	2	SUPPORT LEG
21	BON-006104L	1	LEFT HAND TRUNION BRACKET
22	BON-006104R	1	RIGHT HAND TRUNION BRACKET
23	BON-000345	1	1" FLAT WASHER
24	BON-000341SAE	2	5/8 SAE FLAT WASHER
25	BON-000359	1	1" LOCK WASHER
26	BON-000659	1	5/8 X 2 PLOW BOLTGRADE 8
27	BON-006119	2	5/8 X 2-1/2 FLAT HEAD ALLEN BOLT
28	BON-006078	1	SCRAPER DOWN PRESSURE HOSE
29	25UJ 06	1	FEM. X FEM. 90 DEG. 3/8 NPT
30	848TTO 06X06	1	O-RING FACE SEAL ADAPTER MALE 11/16"-16 X 9/16"-18 ORB STRT

UNDERBODY SCRAPER DOWNPRESSURE CYLINDER ASSEMBLIES

REV 111408 B0N-006049-EXP

ORIGINAL DESIGN
SERIAL NUMBERS
1000-1008, 1010

NO LONGER AVAILABLE



2007 DESIGN
SERIAL NUMBERS
1009, 1011 AND UP

WARNING!
SPRING ASSEMBLIES ARE UNDER
COMPRESSION! EXTREME CAUTION
MUST BE USED WHEN DISASSEMBLING
THE CANASTER. REFER TO YOUR
MANUAL BEFORE PROCEEDING

INSTALL GREASE ZERK FACING DOWN



DIXON, ILLINOIS
PHONE: 800-851-9664

DOWN PRESSURE CYLINDER ASSEMBLY

ITEM #	PART #	QTY.	DESCRIPTION
1	BON-006031	1	RETAINER RING
2	BON-006043	1	CYLINDER
3	BON-006048	1	SPRING
4	BON-006047	1	CYLINDER HOUSING
5	BON-000149	3	5/8X1 BOLT GRADE 8
6	BON-003838	1	DECAL - DANGER SPRINGS UNDER TENSION
7	PMC-230010631	1	DECAL - WARNING, PINCH POINT
8	BON-006063	1	RETAINER PLATE
9	BON-006064	4	5/8" X 6" HEX BOLT, GRADE 5, FULL THREAD, PLATED
10	BON-000356	4	5/8" SPLIT LOCK WASHER
11	BON-000307	4	5/8" HEX NUT



WARRANTY

Issued: January 1, 1998

Bonnell Industries, Inc. warrants to the original purchaser that if any part of the product proves to be defective in workmanship or material within one year of the date of original installation and is returned to us freight prepaid within 30 days after such defect is discovered and notification thereof is provided Bonnell, we will either replace or repair the defective part (our option). This warranty does not apply to damage resulting from neglect, misuse, accident or improper installation or maintenance. Charges for field service, labor, or other expenses not previously authorized and approved in writing by Bonnell Industries, Inc. will not be accepted. This warranty is exclusive and in lieu of all other warranties whether expressed or implied. Bonnell Industries, Inc. neither assumes nor authorizes anyone to assume for it any other obligation or liability in connection with this warranty, and will not be liable for consequential damages. This warranty applies only to products made and/or supplied by Bonnell Industries, Inc. and does not apply to other products not made or supplied by us and to which our products may be attaches, such as trucks. We accept no responsibility for damages to such other products, even if our product is alleged to have contributed to the damage of the other product.

Hydraulic, electrical, or other components furnished by other manufacturers and used with our products are warranted by that manufacturer and not by Bonnell Industries, Inc. the manufacturer's own warranty will apply to these parts. Hydraulic or electrical components are not to be disassembled without the express written permission of Bonnell Industries, Inc.

All defective parts returned from an end user must include the unit model, serial number, date installed, and dealer from whom purchased.

Bonnell Industries, Inc. reserves the right to make changes or improvements to its products without incurring any liability or obligation and without being required to make corresponding changes or improvements to products manufactured or sold prior to those changes or improvements.

The Bonnell Industries, Inc. Warranty Policy is subject to change without notice.

Product Information

When ordering parts, please refer to the information below.

INSTALLATION DATE:

Certificate of Origin

This product was manufactured at Bonnell Industries, Inc.,
located at 1385 Franklin Grove Rd.,
in the city of Dixon, Illinois, U.S.A.

MADE IN THE USA 