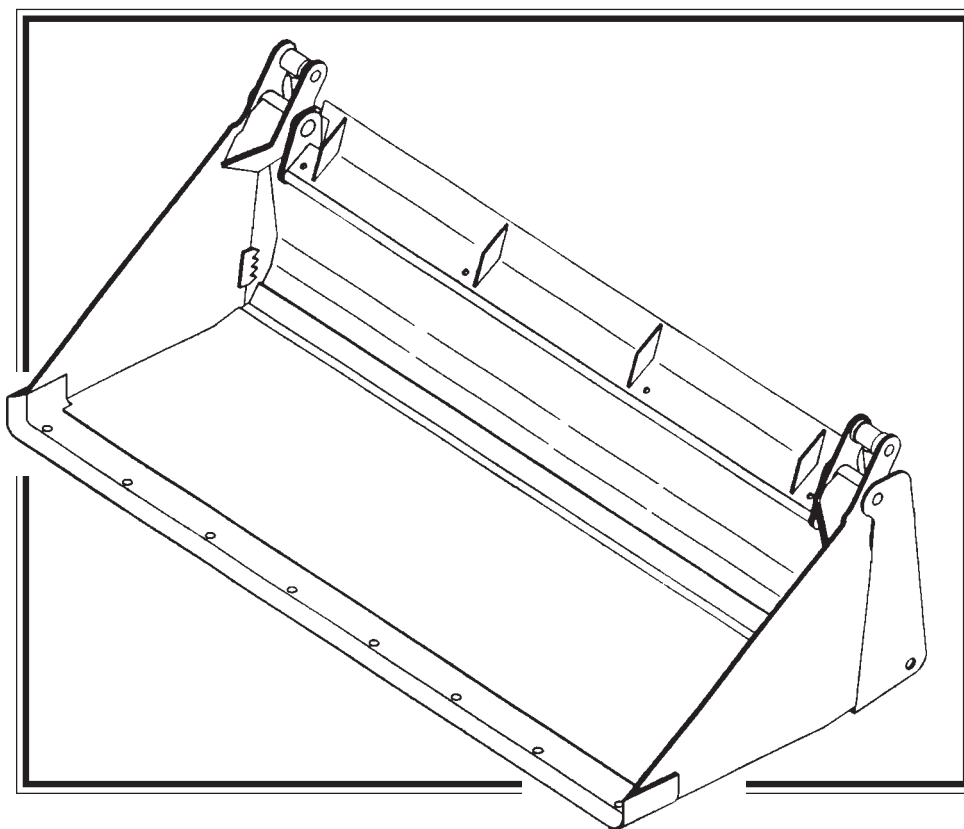


SERVICE PARTS AND INSTRUCTIONS
FOR
BRADCO®

MP66 & MP73
4-IN-1 MULTI-PURPOSE BUCKETS



76068
REV. 3

BRADCO®
P.O. Box 266 · Delhi, Iowa 52223 USA
(563) 922-2981 · (800) 922-2981
Fax 563-922-2130

6928
11-10-04-3



SAFETY PRECAUTIONS

This is the "Safety Alert Symbol" used by this industry.



Remember, when you see this symbol it means: ATTENTION BECOME ALERT! YOUR SAFETY IS INVOLVED! This symbol with its appropriate warnings are scattered throughout these instructions. Be sure all operators read them before using the 4-IN-1 Multi-Purpose Bucket.

TO THE PURCHASER

Congratulations on your purchase of a BRADCO 4-IN-1 bucket. Please read these instructions carefully to familiarize yourself with the safe installation and operation of this unit. A properly installed bucket should prove to be a productive attachment requiring little maintenance.

Parts lists are located in the back for identifying replacement parts for the 4-IN-1 bucket you have purchased.

These instructions contain safety precautions and general operating instructions for the BRADCO 4-IN-1 bucket and do not attempt to cover any major repairs. This equipment is carefully designed, engineered and manufactured to give good performance if properly maintained and operated.

When servicing this unit, remember to use only manufacturer replacement parts. Substitute parts may not meet the standards required for safe, dependable operation.

To facilitate parts ordering, record the model and serial number of your bucket in the space provided on this page. This information can be obtained from the identification plate located on the back of the bucket.

MODEL NUMBER _____

SERIAL NUMBER _____

SAFETY PRECAUTIONS



To insure skid-steer stability and to prevent tipping, always observe the following safety rules.

SAFETY PRECAUTIONS (CONTINUED)



Before operating the skid-steer, read the operating and safety instructions provided by the manufacturer. Observe all warnings and cautions, particularly those which describe the use of seat belts and other operator restraints and those which describe the proper way of carrying loads as close to the ground as possible.



Before operating the unit with a 4-IN-1 bucket, be sure to install the maximum counterweight package the skid-steer is designed to use.



Never heap load heavy material where the combined weight of the bucket and the material could exceed the rated capacity of the loader.




WARNING


AVOID INJURY OR DEATH
DO NOT EXCEED RATED
OPERATING CAPACITY OF
LOADER. TIPPING CAN RESULT





When using the 4-IN-1 bucket, be sure that the load does not stick out too far in front of the bucket and be sure that the weight of the load is not too heavy. A light load sticking out too far can have the same tipping effect of the loader as a heavy load carried in close.


SAFETY PRECAUTIONS (CONTINUED)


 Never operate the clam (front jaw) of the bucket when people are nearby and could be injured by the hydraulic action of the clam.

 Do NOT obstruct your vision when traveling or working. Carry the bucket LOW for maximum stability and visibility while traveling.

 Operate at speeds slow enough so that you have complete control at all times. Travel slowly over rough or slippery ground and on hillsides.

 Stay in gear when traveling downhill. Do not shift into neutral. Maintain engine RPM to provide steering and braking functions. Use the same gear range for traveling down a grade as you would for traveling up the grade.

 Avoid steep slopes or unstable surfaces. If you must drive on a slope, keep the load low and proceed with extreme caution. Do not drive ACROSS a steep slope under any circumstances. Drive straight up and down the slope.

 Avoid turning on an incline, if at all possible. If it is necessary, use extreme caution and make the turn wide and SLOW with the bucket carried low.



**IF YOU CAN'T SEE WHERE YOU ARE GOING
STOP!**

SKID-STEER LOADER SAFETY

1. READ THE ENTIRE SKID-STEER LOADER OPERATOR'S MANUAL BEFORE EVER ATTEMPTING TO USE THE SKID-STEER LOADER. THIS KNOWLEDGE IS NECESSARY FOR SAFE OPERATION.

2. Follow all safety decals on the skid-steer loader. Keep them clean and replace them if they become worn and hard to read.

3. Know the limitation of your equipment. Do not use equipment for anything other than what it was originally designed for.

4. Pay attention to the job at hand. Do not let your mind lose concentration on what you are doing.

5. Use your seat belt and R.O.P.S. (Roll-Over Protective Structure) when operating this skid-steer loader. Keep belt and ROPS in good repair. Do not modify the ROPS or seat belt. Do not remove ROPS or seat belt. Over turning the skid-steer loader without proper ROPS and seat belt can result in death.

6. Fasten your seat belt before and during skid-steer loader operation. Remain seated at all times.

7. Do not take passengers on the skid-steer loader or bucket. There is no safe place for a passenger.

8. Use handholds when getting on/off the skid-steer loader. Failure to do so could cause a fall.

9. Inspect the skid-steer loader before you try to operate the unit. Check for needed maintenance or repairs and have them done before using the equipment.

10. Never leave the skid-steer loader running unattended. Always lower lift arms, set parking brake, turn off engine, and remove key.

11. Wear appropriate clothing such as safety glasses, ear plugs, etc. Do not wear loose fitting clothing, it may catch on the equipment. Always wear a hard hat when operating a skid-steer loader to prevent head injury.

12. When driving on public roads use safety lights, reflectors, Slow Moving Vehicle signs, etc., to prevent accidents. Check with local governments for regulations that may affect you.

13. Turn off skid-steer loader before performing maintenance. If lift arms must be left raised for any reason use a positive lift arm lock to secure arms in place. Serious damage or personal injury could result from lift arms accidentally lowering.

14. Reduce speed when driving on rough terrain, slopes, or turning, to avoid overturning the skid-steer loader.

15. Do not smoke when refueling the skid-steer loader. Allow room in the gas tank for expansion. Wipe up any spilled fuel. Secure cap tightly when done.

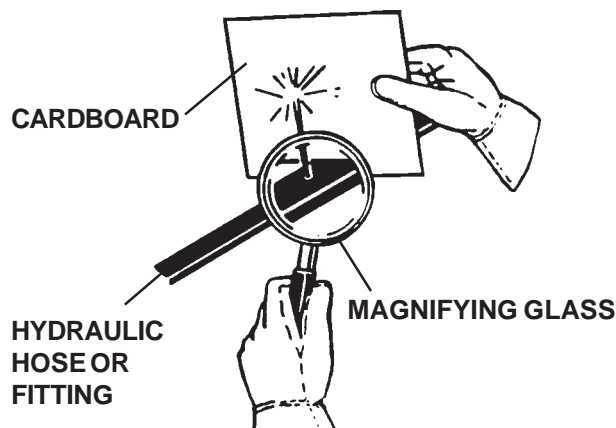
WARNING!



Escaping fluid under pressure can have sufficient force to penetrate the skin causing serious personal injury. Fluid escaping from a very small hole can be almost invisible. Use a piece of cardboard or wood, rather than hands to search for suspected leaks.

Keep unprotected body parts, such as face, eyes, and arms as far away as possible from a suspected leak. Flesh injected with hydraulic fluid may develop gangrene or other permanent disabilities.

If injured by injected fluid, see a doctor at once. If your doctor is not familiar with this type of injury, ask him to research immediately to determine proper treatment.



INSTALLATION

Your 4-IN-1 Multi-Purpose Bucket is shipped complete with the appropriate mounting for your specific skid-steer and the hydraulic hoses already installed.

1. Install hydraulic couplers (supplied by your dealer) onto the 4-IN-1 bucket hoses.

2. Install the bucket by following your skid-steer operator's manual instructions for installing an attachment.

WARNING!



To Avoid Serious Personal Injury make sure the bucket is securely latched to the skid-steer toolbar. Failure to do so could result in separation of the bucket from the skid-steer.

3. Connect the bucket hydraulic couplers to the skid-steer auxiliary hydraulics. Route hoses in such a fashion as to prevent chafing and pinching.

4. Start engine and slowly cycle bucket cylinders several times to purge system of air and check for proper hydraulic connection, hose routing and hose length.

5. Inspect for proper assembly and check for leaks by operating the loader and opening and closing the clam (front jaw).

DETACHING BUCKET FROM LOADER

1. On firm level ground, close clam (front jaw).

2. Lower boom arms completely down on loader frame until level bucket is about two inches off the ground.

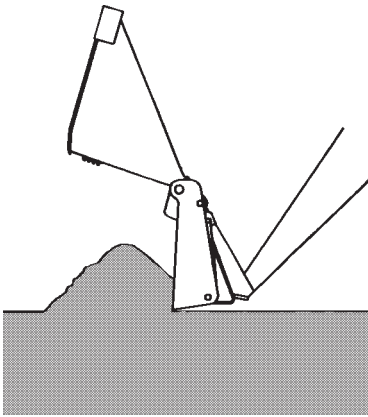
3. Turn off engine. Move control lever back and forth several times to relieve pressure in line, then disconnect quick couplers between bucket and loader auxiliary hydraulic oil lines.

NOTE: Connect hydraulic couplers together to prevent contaminants from entering the bucket hydraulic system.

4. Follow your skid-steer operator's manual instructions for detaching (removing) an attachment.

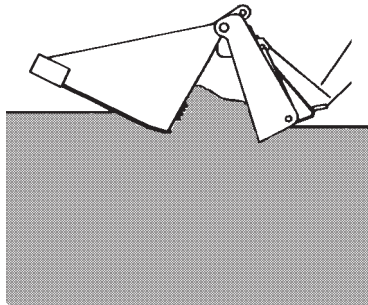
NOTE: Frequent lubrication of grease fittings at each end of the cylinders and at pivot points (with multi-purpose grease) will greatly increase life of product.

4-IN-1 MULTI-PURPOSE BUCKET APPLICATIONS



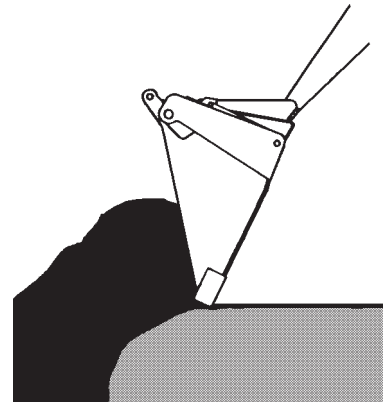
BULLDOZING

For all industry uses: road maintenance, clean up, grading, etc.



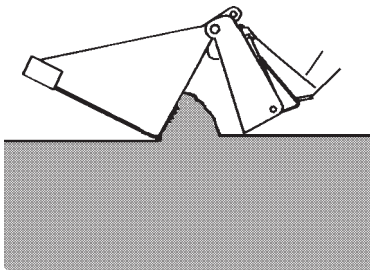
CLAM

Handles the hard to pick up material with ease. Complete control of loading.



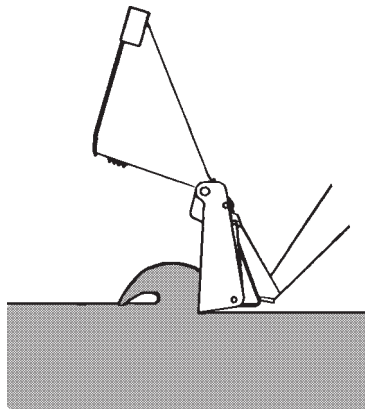
BACKFILLING

Backfilling is no problem.



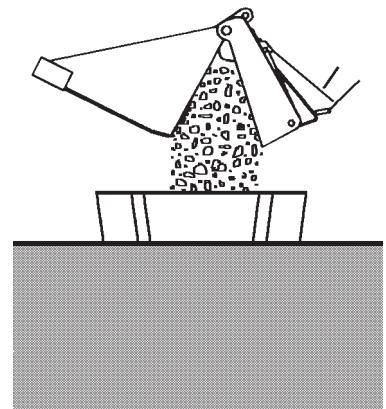
BACKDRAG

For working in close quarters such as between buildings and among trees.



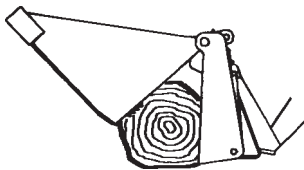
SCRAPING

Cleaning yards, leveling lawns: a landscaper's bucket.



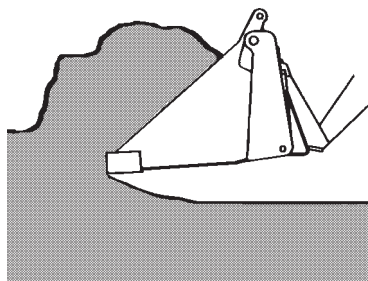
BOTTOM DUMPING

Ideal for trench filling or dumping into a container.



GRAB

Handles all undesirable loading: brush, timbers and all bulky materials.



DIGGING

Same as all conventional buckets.

SPECIFICATIONS

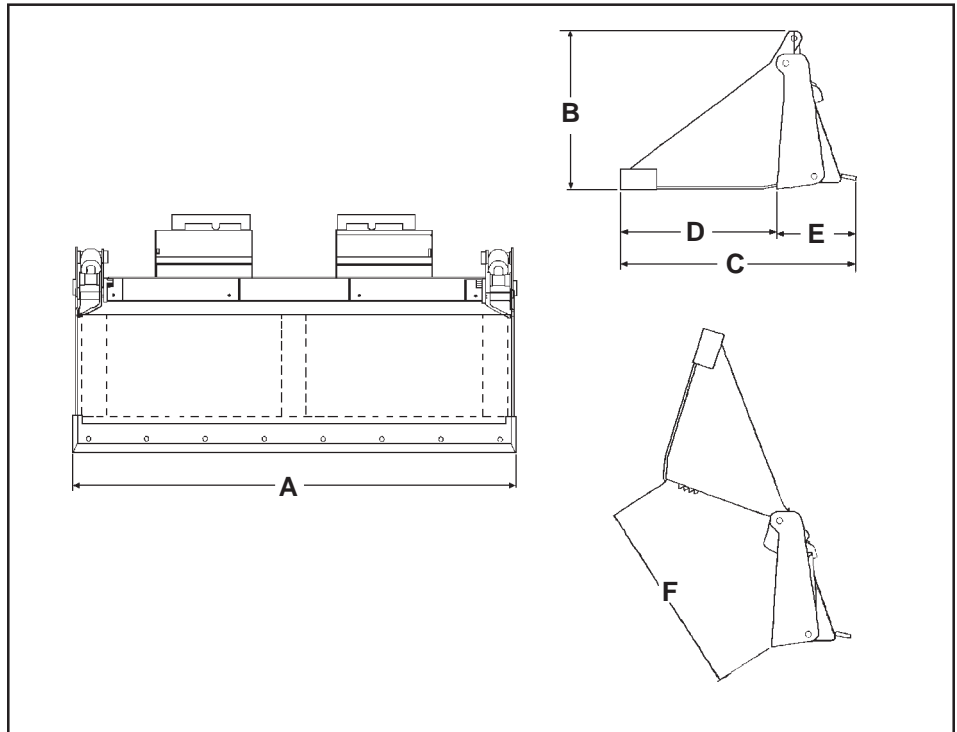
BRADCO 4-IN-1 BUCKETS

FEATURES & BENEFITS

BRADCO'S versatile 4-in-1 buckets

- Conventional or bottom dump bucket allows the operator to dump into high side board trucks.
- Opening the bucket allows it to be used as a dozer, for backfilling or clean-up.
- Long-Nose design allows the operator to see the cutting edge for maximum accuracy when grading.
- The bucket can be used as a grapple for clean-up around a building site or loading odd sized materials like barrels or small poles.
- The front half of the bucket can be used as a guage shoe allowing the operator to use the bucket like a box scraper.
- Bucket can be used as a clamshell for final clean-up.
- Easily removable spill plate when not required.

SPECIFICATIONS



MODEL

- A Overall Width
- B Height
- C Overall Length
- D Length / Front
- E Length / Rear
- F Grapple Opening

66"

- 67.50"
- 26.80"
- 39.11"
- 25.87"
- 13.24"
- 32.00"

73"

- 73.50"
- 26.80"
- 39.11"
- 25.87"
- 13.24"
- 32.00"

Weight

710#

740#

Capacity (Max.)

15.5 cf

17.1 cf

OPTIONS

Bolt on reversible cutting edge for long wear when used on asphalt or concrete. Bolt on tooth bar for tough digging.

Specifications and design are subject to change without notice and without liability.
Whenever applicable specifications are in accordance with SAE standards.

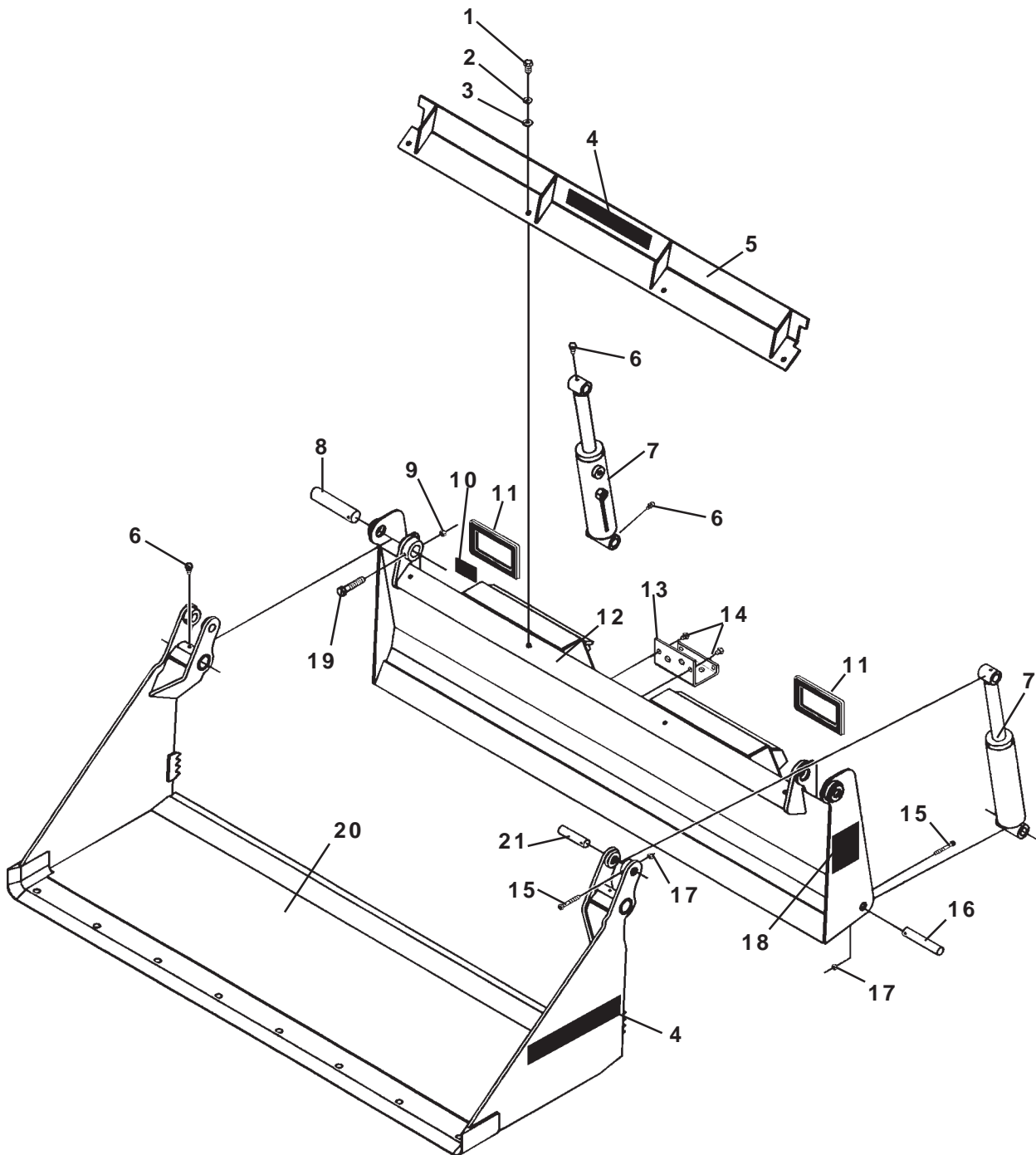
BRADCO

A Division of Paladin Brands · PO Box 266 · Delhi, Iowa 52223
Phone (563) 922-2981 / (800) 922-2981 · Fax (563) 922-2700

4-IN-1 BUCKET ASSEMBLY

ASSEMBLIES #83343, #83344, #83345, #83346

UP TO SERIAL NUMBER 105925



4-IN-1 BUCKET ASSEMBLY

ASSEMBLIES #83343, #83344, #83345, #83346

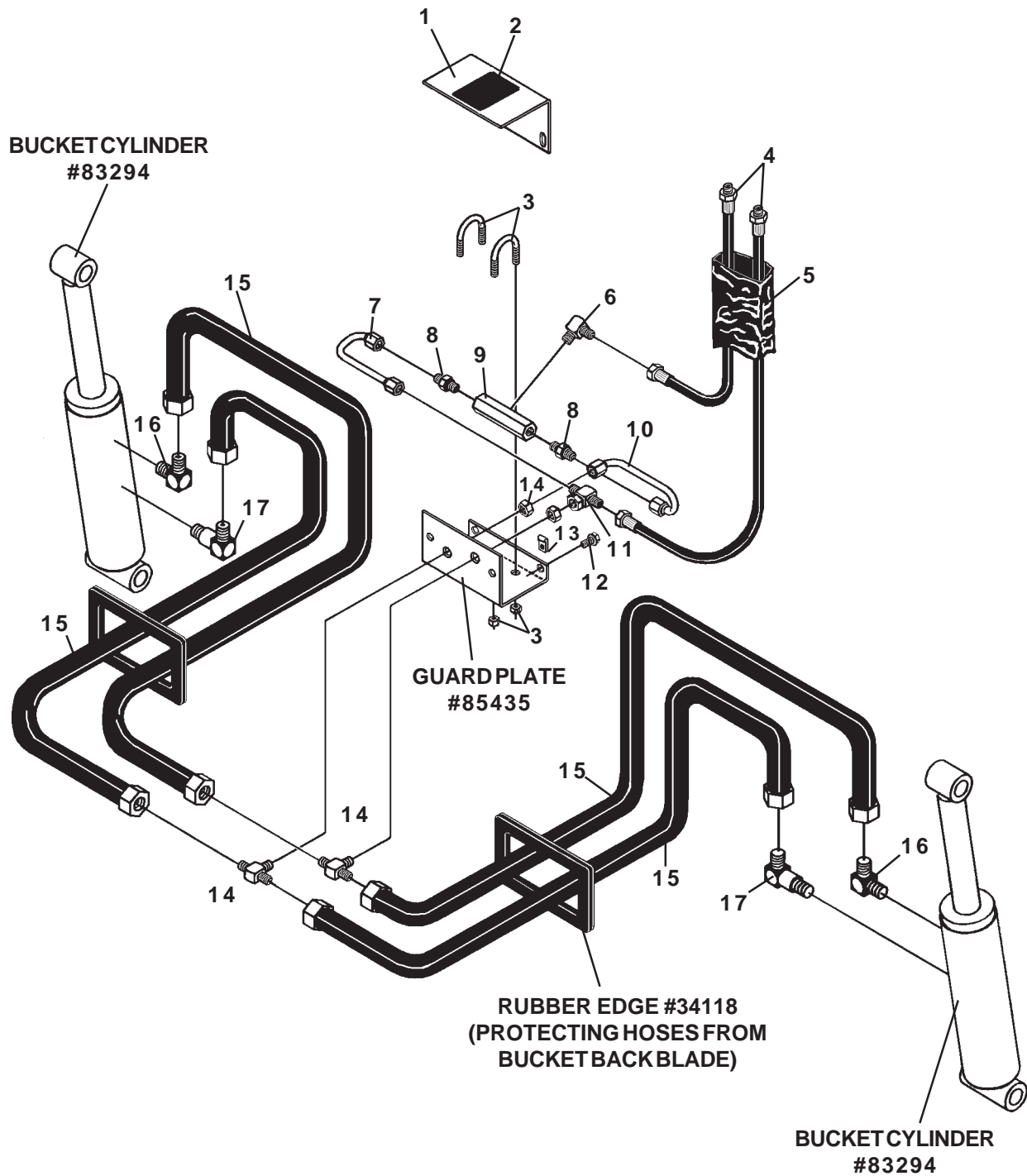
UP TO SERIAL NUMBER 105925

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	4	1087	.50" UNC X .75" Hex Capscrew
2	4	1505	.50" Lock Washer
3	4	1516	.50" Flat Washer
4	3	40092	Bradco Logo
5	1	83724	66" Top Spill Guard
	1	83725	73" Top Spill Guard
6	6	6616	Grease Zerk
7	2	83294	Bucket Cylinder
8	2	86031	Pivot Pin - Clam
9	2	1753	.31" UNC Nylock Nut
10	-	----	Serial Number Tag Decal
11	2	34118	Rubber Edge - 10"
12	1	84078	Back Blade for 66" Assembly #83343 (Includes Danger Decal)
	1	84079	Back Blade for 66" Assembly #83344 (Includes Danger Decal)
	1	84080	Back Blade for 73" Assembly #83345 (Includes Danger Decal)
	1	84081	Back Blade for 73" Assembly #83346 (Includes Danger Decal)
13	1	85435	Guard Plate
14	2	1896	.31" UNC X .75" Self Tapping Screw
15	4	1009	.25" UNC X 2.50" Hex Capscrew
16	2	86030	Pivot Pin
17	4	1629	.25" UNC Nylock Nut
18	2	40149	Decal - Danger! Pinch Points
19	2	1030	.31" UNC X 3.00" Hex Capscrew
20	1	83689	66" Clam Weldment
	1	83665	73" Clam Weldment
21	2	83753	Pivot Pin

4-IN-1 BUCKET ASSEMBLY

ASSEMBLIES #83343, #83344, #83345, #83346

UP TO SERIAL NUMBER 105925



4-IN-1 BUCKET ASSEMBLY

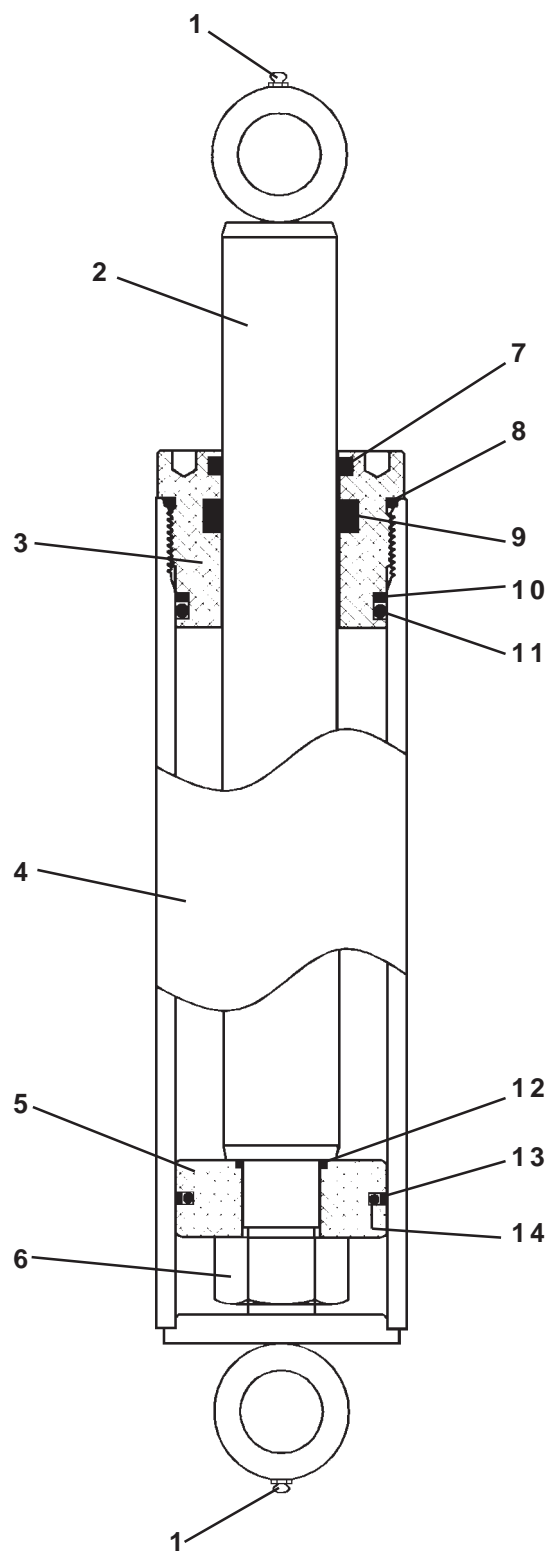
ASSEMBLIES #83343, #83344, #83345, #83346

UP TO SERIAL NUMBER 105925

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	85436	Cover Plate
2	1	40151	Warning Decal - High Pressure Fluid
3	2	83910	Clamp Assembly
4	2	37663	Hose .38" X 65" 8MP x 6FJX
5	1	34119	Hose Sock 2" X 64"
6	1	3001	90° Adapter
7	1	85438	Hydraulic Tube - 90°
8	2	3137	Straight Adapter
9	1	52798	Pilot Operated Check Valve
10	1	85437	Hydraulic Tube - Check Valve
11	1	30031	Tee 6MJ-6FJX-6MJ
12	2	1930	.31" UNC X .75" Flange Head Capscrew
13	2	1756	.31" J Type Cage Nut
14	2	3498	Bulkhead Tee 6MJ-6MJ-6MJ (Includes Nut)
15	4	35695	Hose .25" X 36" (SAE 100R2-2Wire) 6FJX x 6FJX
16	2	3002	90° Adapter 6MP-6MJ
17	2	3436	90° Long Adapter 6MP-6MP

CYLINDER ASSEMBLY

BUCKET CYLINDER ASSEMBLY #83294



CYLINDER ASSEMBLY

BUCKET CYLINDER ASSEMBLY #83294

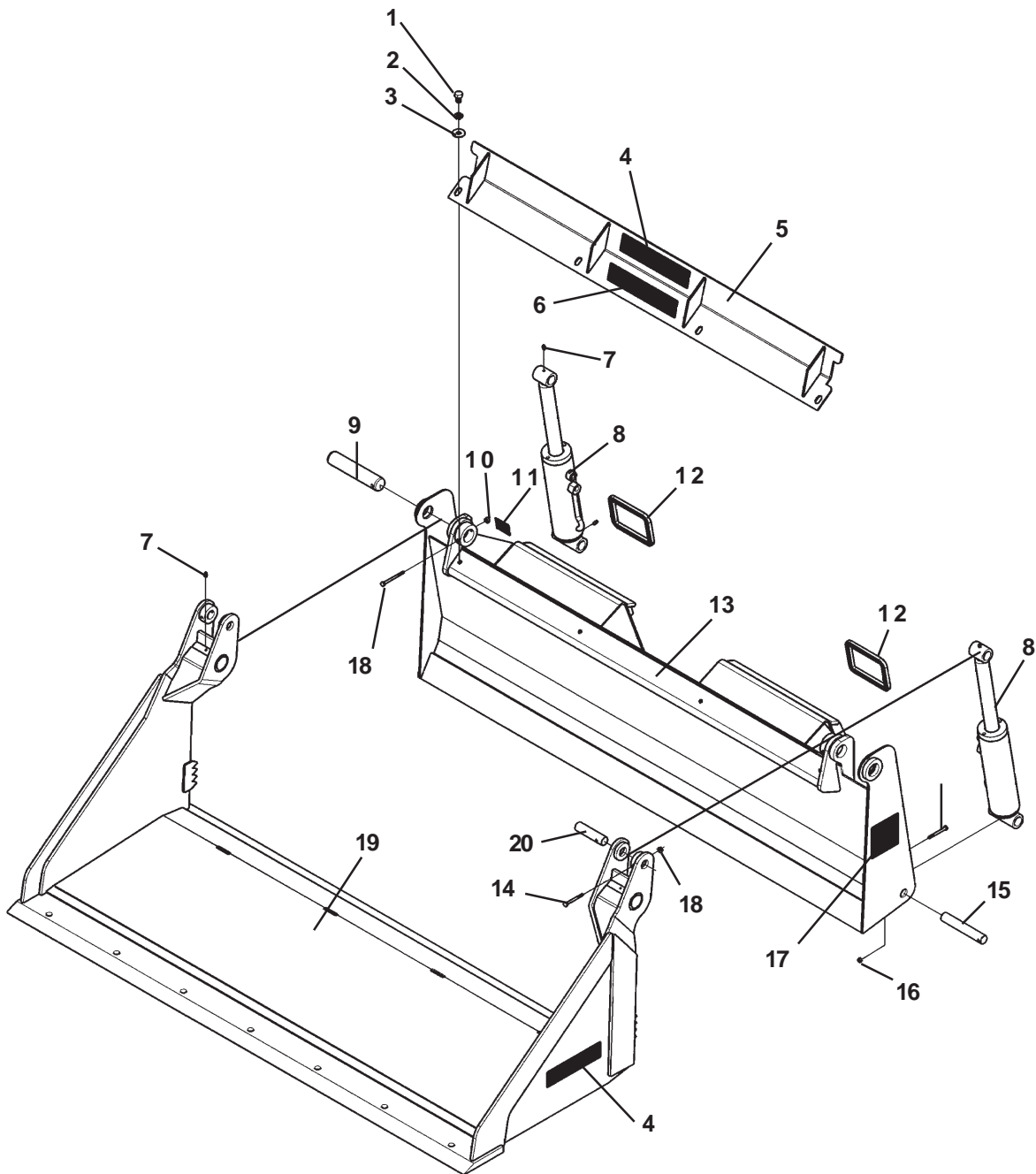
<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	2	6616	Grease Zerk (Not Included in Assembly)
2	1	83296	Cylinder Rod
3	1	82449	Cylinder Gland
4	1	83295	Cylinder Tube
5	1	64525	Piston
6	1	1483	Hex Nut
7	1	45372*	Cylinder Rod Wiper
8	1	4570*	O-Ring
9	1	45225*	Polypak Seal
10	1	45249*	Back-Up Washer
11	1	45557*	O-Ring
12	1	4641*	O-Ring
13	1	45251*	Piston Ring
14	1	45250*	O-Ring

NOTE: Seal Kit #45618 includes all parts marked with an asterisk (*).
Parts are not sold separately.

4-IN-1 BUCKET ASSEMBLY

ASSEMBLIES #83343, #83344, #83345, & #83346

SERIAL NUMBER 105926 AND UP



4-IN-1 BUCKET ASSEMBLY

ASSEMBLIES #83343, #83344, #83345, & #83346

SERIAL NUMBER 105926 AND UP

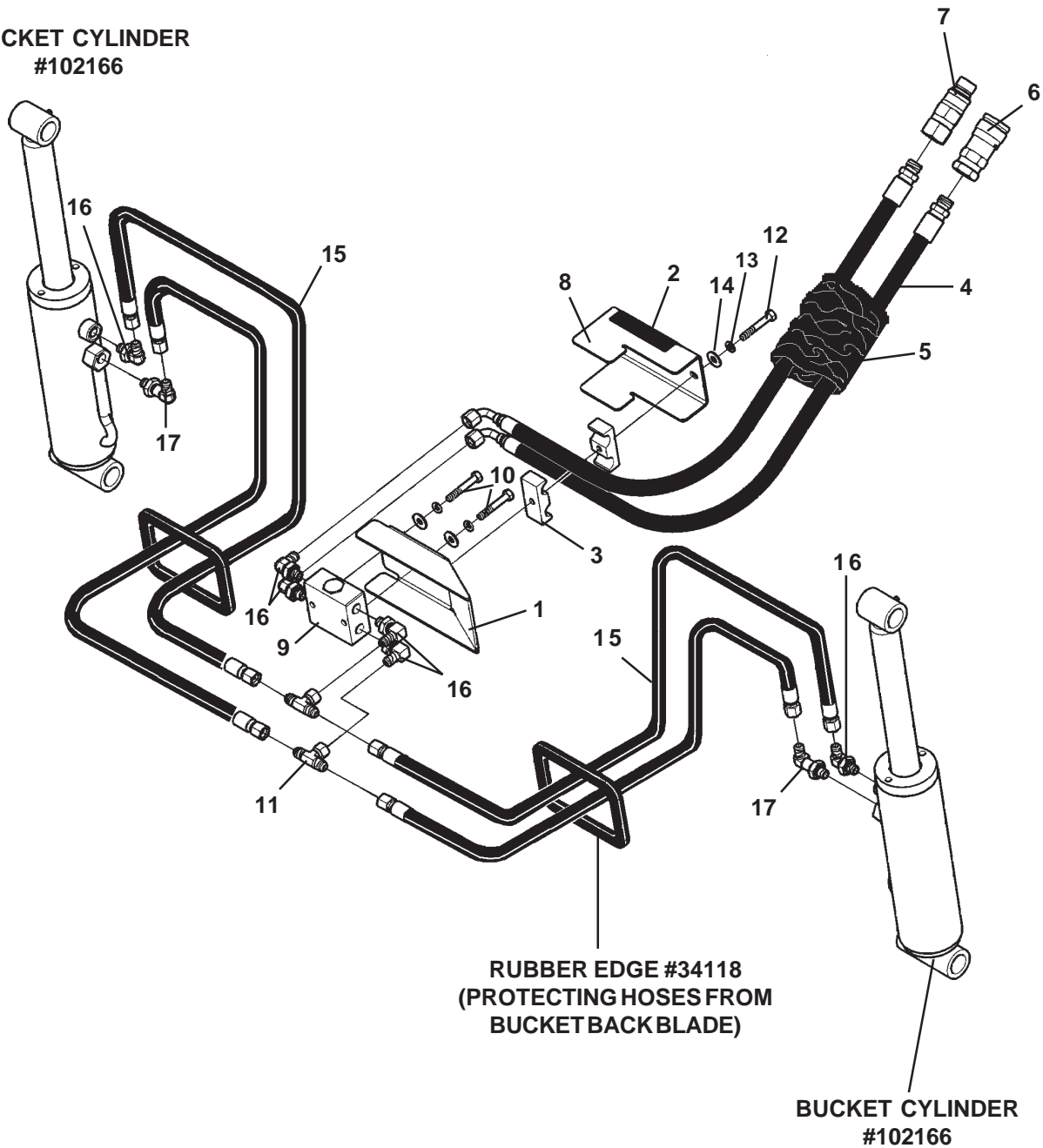
<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	4	1087	.50" UNC X .75" Hex Capscrew
2	4	1505	.50" Lock Washer
3	4	1516	.50" Flat Washer
4	3	40092	Bradco Logo
5	1	83724	66" Top Spill Guard
	1	83725	73" Top Spill Guard
6	1	40824	MP66 Model Number (66" Bucket)
	1	40825	MP73 Model Number (73" Bucket)
7	6	6616	Grease Zerk
8	2	102166	Bucket Cylinder
9	2	86031	Pivot Pin - Clam
10	2	1753	.31" UNC Nylock Nut
11	-	----	Serial Number Tag Decal
12	2	34118	Rubber Edge - 10"
13	1	84078	Back Blade for 66" Assembly #83343 (Includes Danger Decal)
	1	84079	Back Blade for 66" Assembly #83344 (Includes Danger Decal)
	1	84080	Back Blade for 73" Assembly #83345 (Includes Danger Decal)
	1	84081	Back Blade for 73" Assembly #83346 (Includes Danger Decal)
14	4	1009	.25" UNC X 2.50" Hex Capscrew
15	2	86030	Pivot Pin
16	4	1629	.25" UNC Nylock Nut
17	2	40149	Decal - Danger! Pinch Points
18	2	1030	.31" UNC X 3.00" Hex Capscrew
19	1	83689	66" Clam Weldment
	1	83665	73" Clam Weldment
20	2	83753	Pivot Pin

4-IN-1 BUCKET ASSEMBLY

ASSEMBLIES #83343, #83344, #83345, #83346

SERIAL NUMBER 105926 AND UP

BUCKET CYLINDER
#102166



RUBBER EDGE #34118
(PROTECTING HOSES FROM
BUCKET BACK BLADE)

BUCKET CYLINDER
#102166

4-IN-1 BUCKET ASSEMBLY

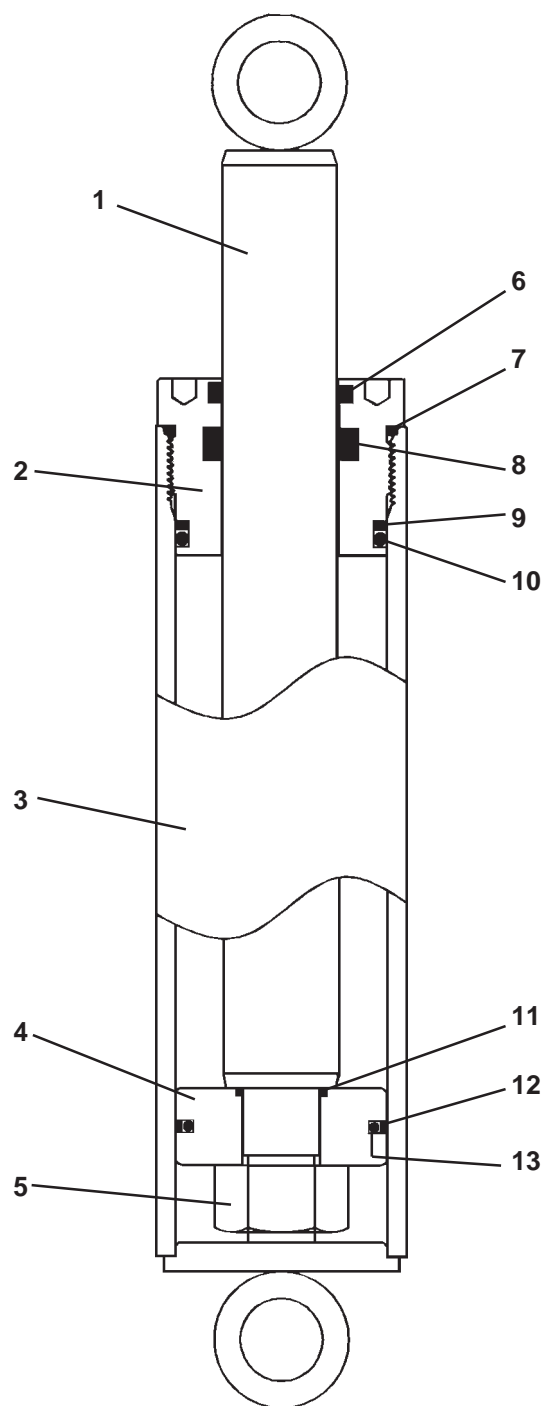
ASSEMBLIES #83343, #83344, #83345, #83346

SERIAL NUMBER 105926 AND UP

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	102051	Cover Plate
2	1	40151	Warning Decal - High Pressure Fluid
3	2	81358	Clamp Assembly
4	2	38272	Hose .38" X 65" 8MBo x 6FJX 90°
5	1	34119	Hose Sock 2" X 64"
6	1	14175	Female Coupler
7	1	19628	Male Coupler (Connect Under Pressure)
8	1	101658	Top Cover Plate
9	1	88536	Pilot Operated Check Valve
10	2	1027	.31" UNC X 2.25" Hex Capscrew
11	2	30031	Tee 6MJ-6FJX-6MJ
12	1	1026	.31" UNC X 2.00" Hex Capscrew
13	3	1502	.31" Lock Washer
14	3	1513	.31" Flat Washer
15	4	35695	Hose .25" X 36" (SAE 100R2-2Wire) 6FJX x 6FJX
16	6	3434	90° Adapter 6MBo-6MJ
17	2	30140	90° Long Adapter 6MBo-6MP

CYLINDER ASSEMBLY

BUCKET CYLINDER ASSEMBLY #102166



CYLINDER ASSEMBLY

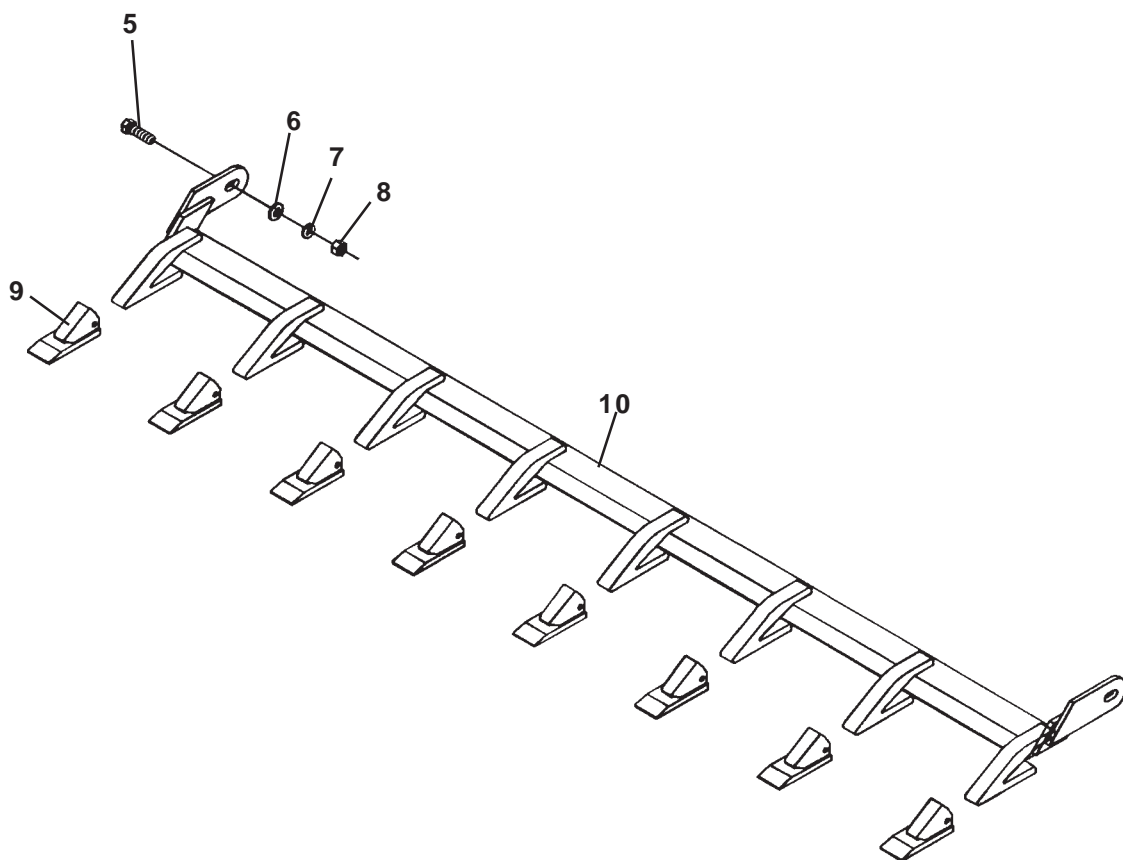
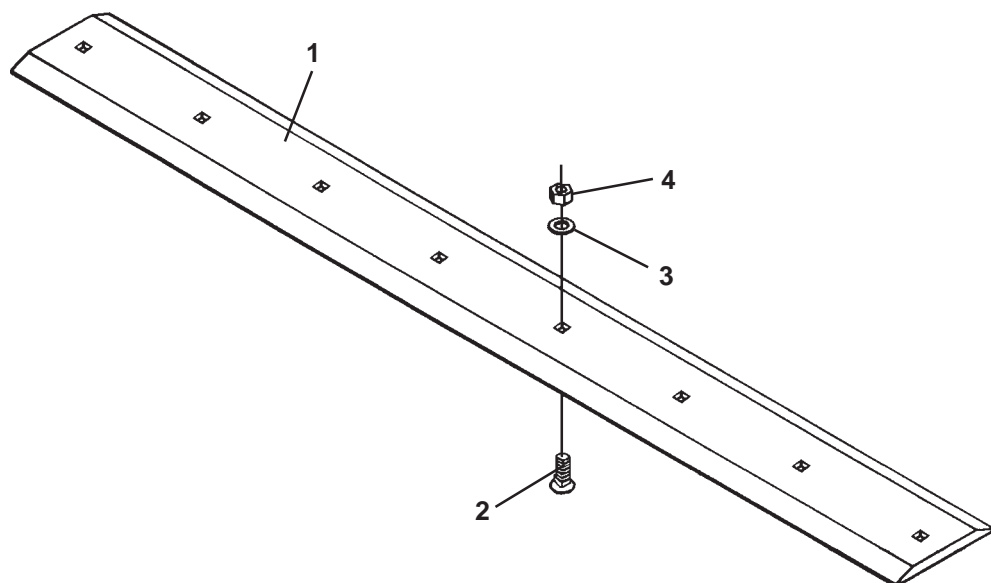
BUCKET CYLINDER ASSEMBLY #102166

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	83296	Cylinder Rod
2	1	82449	Cylinder Gland
3	1	102165	Cylinder Tube
4	1	64525	Piston
5	1	1483	Hex Nut
6	1	45372*	Cylinder Rod Wiper
7	1	4570*	O-Ring
8	1	45225*	Polypak Seal
9	1	45249*	Back-Up Washer
10	1	45557*	O-Ring
11	1	4641*	O-Ring
12	1	45251*	Piston Ring
13	1	45250*	O-Ring

NOTE: Seal Kit #45618 includes all parts marked with an asterisk (*).
Parts are not sold separately.

4-IN-1 BUCKET ASSEMBLY

OPTIONS



4-IN-1 BUCKET ASSEMBLY

OPTIONS

UP TO SERIAL NUMBER #105925

66" BOLT ON CUTTING EDGE - ASSEMBLY #83661

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	83756	66" Wear Blade
2	7	1937	.75-10 UNC X 2.50 Plow Bolt
3	7	1649	.75" Hard Flat Washer
4	7	1936	.75-10 UNC Deformed Lock Nut

73" BOLT ON CUTTING EDGE - ASSEMBLY #83662

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	83757	73" Wear Blade
2	8	1937	.75-10 UNC X 2.50 Plow Bolt
3	8	1649	.75" Hard Flat Washer
4	8	1936	.75-10 UNC Deformed Lock Nut

SERIAL NUMBER #105926 AND UP

66" BOLT ON CUTTING EDGE - ASSEMBLY #102235

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	102237	66" Wear Blade
2	7	1937	.75-10 UNC X 2.50 Plow Bolt
3	7	1649	.75" Hard Flat Washer
4	7	1936	.75-10 UNC Deformed Lock Nut

73" BOLT ON CUTTING EDGE - ASSEMBLY #102236

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	102238	73" Wear Blade
2	7	1937	.75-10 UNC X 2.50 Plow Bolt
3	7	1649	.75" Hard Flat Washer
4	7	1936	.75-10 UNC Deformed Lock Nut

66" TOOTH BAR KIT - ASSEMBLY #83663

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
5	2	1090	.50" UNC X 1.50" Hex Capscrew
6	2	1516	.50" Flat Washer
7	2	1505	.50" Lock Washer
8	2	1228	.50" UNC Hex Nut
9	7	6397	Tooth Point
10	1	83717	66" Tooth Bar

73" TOOTH BAR KIT - ASSEMBLY #83664

<u>NO</u>	<u>REQ'D</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
5	2	1090	.50" UNC X 1.50" Hex Capscrew
6	2	1516	.50" Flat Washer
7	2	1505	.50" Lock Washer
8	2	1228	.50" UNC Hex Nut
9	8	6397	Tooth Point
10	1	83716	73" Tooth Bar