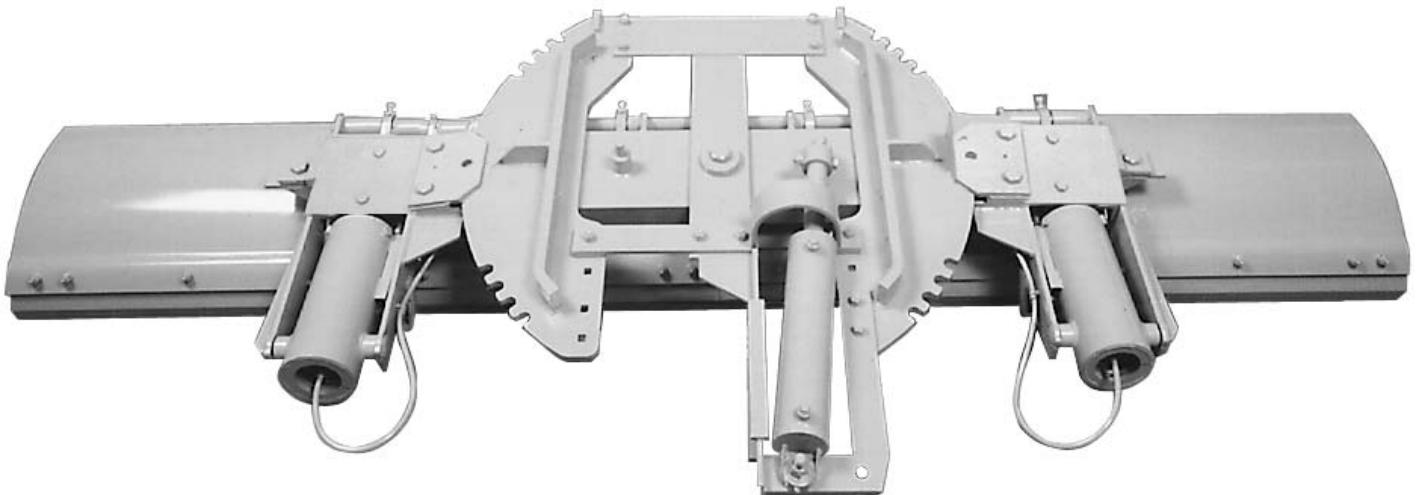




# MS55 SCRAPER

## Installation and Parts Manual



**MONROE TRUCK EQUIPMENT**  
1051 W. 7th Street  
Monroe, WI 53566  
Phone: 608-328-8127  
Fax: 608-329-8369

05050781  
10071999



# TABLE OF CONTENTS

<b>SAFETY INSTRUCTIONS</b>	<b>Page 2</b>
<b>MAINTENANCE INSTRUCTIONS</b>	<b>Page 3</b>
<b>INSTALLATION INSTRUCTIONS &amp; DIAGRAMS</b>	<b>Page 4-7</b>
<b>GENERAL INFORMATION</b>	<b>Page 8</b>
<b>HOW TO ORDER PARTS</b>	<b>Page 9</b>
<b>RETURN POLICY</b>	<b>Page 9</b>
<b>REPLACEMENT PARTS</b>	<b>Page 10-26</b>
<b>WARRANTY REGISTRATION</b>	<b>Page 27</b>

## **SAFETY INSTRUCTIONS**

- Read all installation, safety and maintenance instructions completely before operating this equipment.
- Keep all personnel clear of moving parts while scraper is being operated.
- Lower the scraper blade to full down position, apply emergency brake and stop engine before leaving the vehicle to inspect scraper.
- Do not operate truck in reverse with scraper blade in down position!
- Do not operate a scraper in need of maintenance! Repair immediately!
- While operating this equipment use common sense, use caution, be alert and be safety-conscious.

***"IF IT CAN'T BE DONE SAFELY, DON'T DO IT!"***

Monroe Truck Equipment safety slogan

## MAINTENANCE INSTRUCTIONS

### In Season:

- Check for loose bolts and nuts daily, and re-torque before use. (Failure to inspect equipment on a daily basis may seriously affect safety and/or efficiency.)
- Check all hydraulic fittings for tightness on a regular basis.
- Check cutting edge for wear. Do not let cutting edge wear closer than  $\frac{1}{2}$ " to  $\frac{3}{8}$ " from moldboard.
- Due to the nature of use and environment this scraper is operating in, damage and wear may occur at anytime. Therefore, **Monroe Truck Equipment** recommends the end user establish and follow a daily inspection routine before using this scraper.

### Off Season: *(If Applicable)*

- Use care when disconnecting hydraulic lines to assure that no dirt or foreign objects enter the hydraulic system. Use caps to cover hydraulic hose fittings and insert plugs into hydraulic ports.
- Hydraulic cylinders should be fully retracted when stored during the off season to prevent damage or corrosion. The remaining exposed shaft surface should be coated with a thick grease to prevent corrosion, which must be removed before returning to regular service.
- Check mounting bolts for wear and/or damaged threads and replace

## INSTALLATION INSTRUCTIONS

**NOTICE:** This "Safety Check" ✓ symbol is a reminder to follow all safety messages and precautions involved when installing or operating the MS55 Scraper. It means to be **CAREFUL, ALERT** and **SAFETY CONSCIOUS!!!**

1. Clear the truck frame for mounting space necessary for scraper. You will need 24" of ground clearance for the entire area where the moldboard travels, and 3" clearance above the circle.
2. **FOR 2-PIECE CIRCLE ONLY** - Take the left-hand and right-hand circle pieces and lay them out with flat side on a level floor. (The front of the circle is the end with two holes.) Put the "T" bar in between the two circle assemblies, making sure the leg with the big hole is level on the floor with the circle assemblies. That puts the other leg of the "T" on top of the circle assemblies. Put four of the flat head bolts through the holes, so the head is on the bottom of the circle assemblies.  
**DO NOT TIGHTEN YET.**

At this point, choose which side the power reverse cylinder fits into best. If both sides are open it is best to mount cylinder on the same side it discharges to. Install the circle crossbar (Manual Reverse uses a flat piece of metal, Power Reverse has a radius in one end). The radius points up and goes on the same side as the reverse cylinder. All the bolts for attaching the "T" bar on the circle assemblies must be flat head bolts. Measure holes across and diagonally to check for squareness and level accuracy - **TIGHTEN BOLTS.**

3. Slide the assembled circle under the truck and raise it into position. The distance from the bottom of the circle assembly to the ground should be approximately 20" (Figure 1). Be sure to square it off the truck frame, not the ground, as some truck frames are not parallel to the ground. ✓ **Stay clear of area beneath circle until it is safely and securely supported. Use Caution!**
4. Move the circle hanger brackets into position. *Note:* The mounting brackets on the circle assembly for the hanger brackets are spaced at 34". Any frame width more than 34" will require the shims we provide. These shims are to be installed between the mounting bracket on the circle assembly and the hanger brackets (Figure 2).
5. Bolt the hanger brackets (and shims if needed) onto the circle mounting bracket.
6. Locate the hanger brackets on the frame in the proper position for the length of the moldboard you have (Figure 3).
7. Check all measurements to make sure scraper is located correctly. *Note:* Be sure to square circle assembly off the frame and not off the ground!
8. Drill and bolt the circle hangers into place.

## INSTALLATION INSTRUCTIONS

9. Raise the hangerboard/moldboard assembly into place. Bolt the circle clamps in place, and install the center bolt. Tighten the center bolt until the hangerboard/moldboard assembly swings freely through its entire arc. Install the cotter pin through the castellated nut. Warning: It is very important that the hangerboard/moldboard assembly swings freely through its entire arc. If everything is mounted level and square, this is easily achieved. If there is a slight problem, a small amount of adjustment in most bolt holes is available. ✓ **Stay clear of area beneath hangerboard/moldboard assembly until it is safely and securely supported. Use Caution!**
9. After everything is installed and adjusted so that the hangerboard/moldboard assembly swings freely, install the swing cylinder(s) and plumb (Figure 4). Fasten the rear portion of the cylinder support bracket to the frame or a cross-member. (2 straps and a gusset, tack-welded together, are furnished.)

The proper valve for the power angle cylinder is a three position, four-way valve, which requires a hold position in neutral. A single reversing cylinder would require a manual pin lock kit, spring lock kit, or hydraulic lock kit to hold the scraper in the angled position and relieve the reversing cylinder of additional stress. The valve for the curl or blade lift is also a three position, four-way.

Operate all the functions on the scraper, check for oil leaks. ✓ **Stay clear of area beneath and near hangerboard/moldboard assembly while performing these operating tests. Use Caution!**

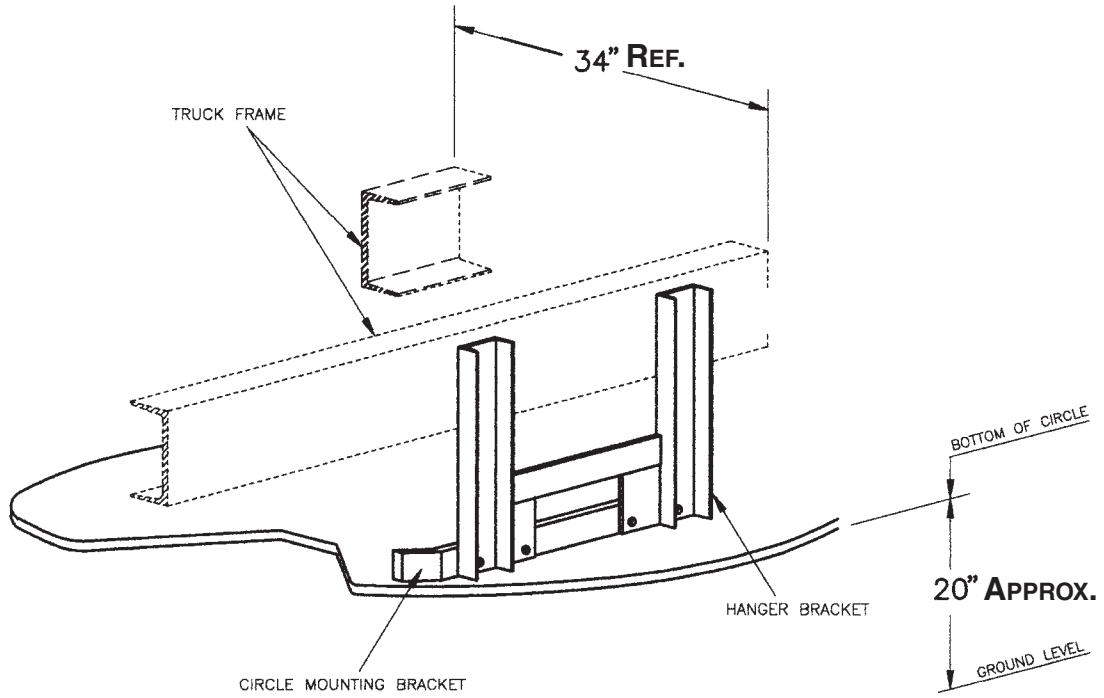
These mounting instructions are intended as a guide to aid you in the installation of your Monroe Scraper. All dimensions noted in the instructions are approximate and may vary due to: make and model of chassis, tire size, type of suspension, spring deflection, customer preference, and interference caused by immovable attachments such as a transfer case. Ideally, the scraper should be mounted to get full usage of the cutting edge without wearing into the moldboard. **Monroe Truck Equipment** assumes no responsibility for improper installation, unless installed at an MTE location. Mounting location should be discussed by the end-user and the installer prior to installation in order to achieve the best possible installation.

### CYLINDER OPERATING SAFETY PROCEDURES

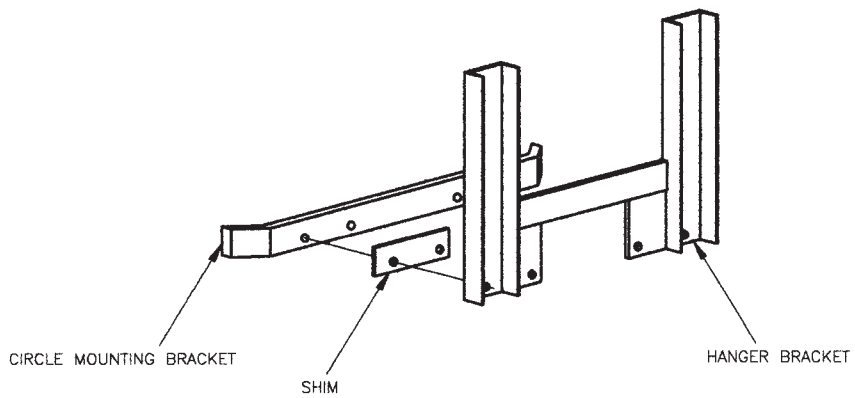
- ✓ Operating pressure on the **down side** of the curl or raise/lower cylinders should not exceed 400 psi. The relief valve we furnish is factory preset. It must be installed on the down side of all scrapers. **Changing the pressure may cause damage to the cylinder, possible injury, and will void the warranty.**
- ✓ System pressure should not exceed 1000 psi for the power reverse cylinder(s) or 1850 psi for the upside of the curl cylinders. High pressure systems require additional relief valves (not furnished). **Exceeding these pressures may cause damage to the cylinder, possible injury, and will void the warranty.**

# INSTALLATION DIAGRAMS

**Figure 1**



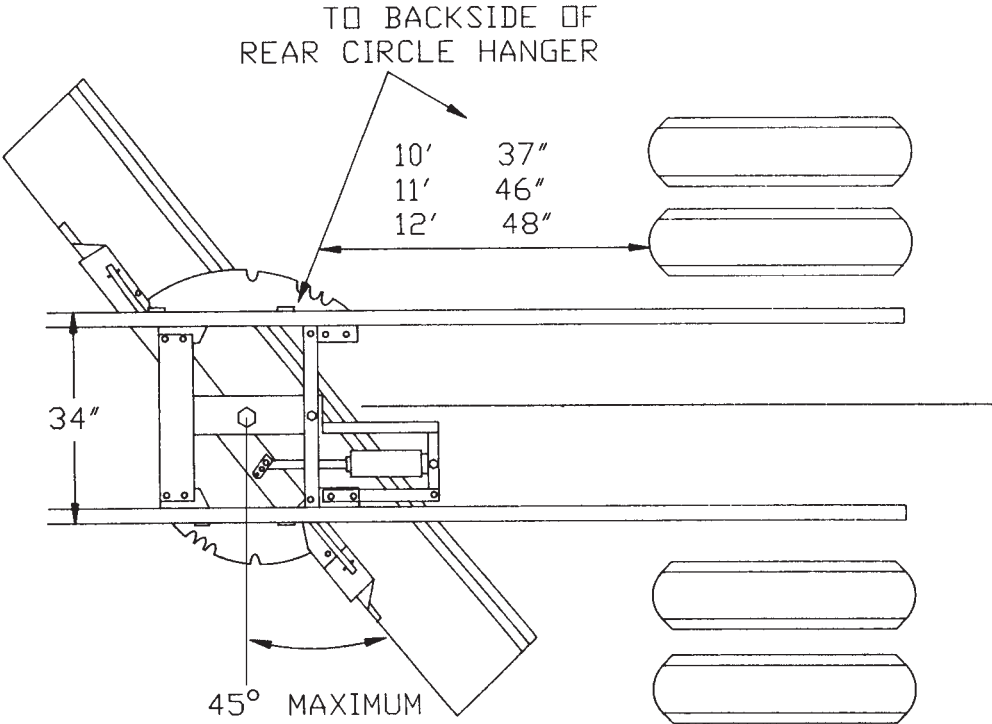
**Figure 2**



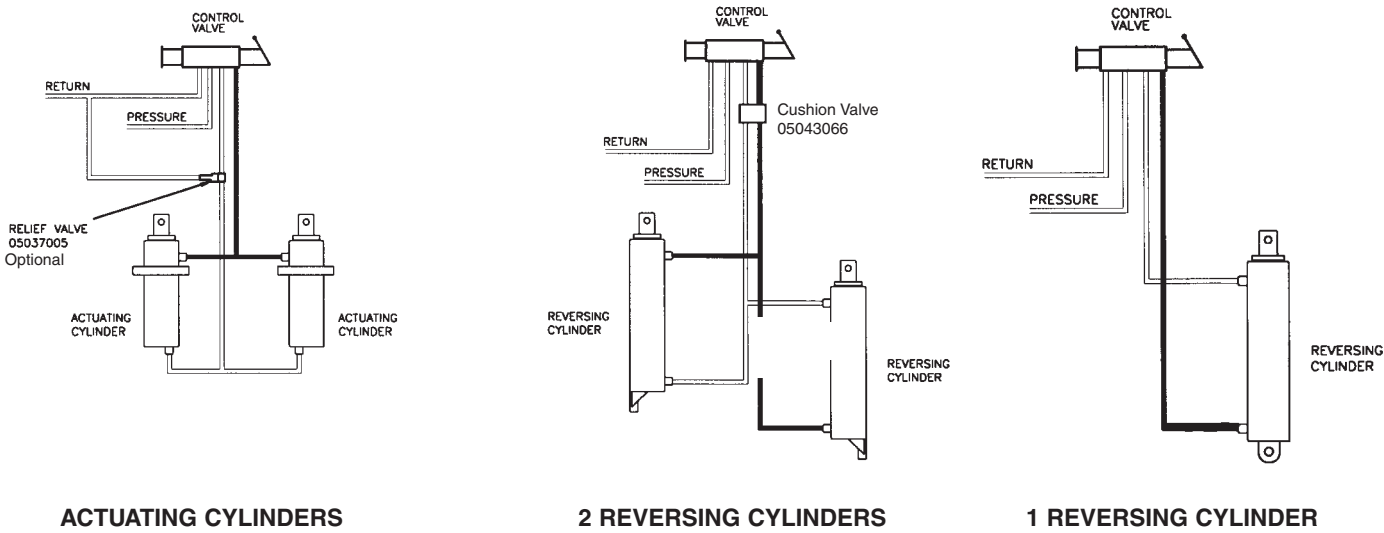


# INSTALLATION DIAGRAMS

**Figure 3**






**Figure 4**



## GENERAL INFORMATION

- Location descriptions are noted in direction of travel. (i.e. front, rear, left and right.)
- Delivery of replacement parts is subject to our sales delivery terms.
- Use only **Monroe Truck Equipment** O.E.M. replacement parts. Failure to do so will void warranty.
- Replacement parts listed in this manual reflect our most common MS55 Scraper items. If you do not find the part you require, please call your distributor.
- **Monroe Truck Equipment** reserves the right to make revisions or alterations to this parts manual.

## TORQUE CHART

SIZE	 GRADE 2	 GRADE 5	 GRADE 8
1/4-20	50 IN-LBS	75 IN-LBS	9 FT-LBS
3/8-16	15 FT-LBS	23 FT-LBS	35 FT-LBS
1/2-13	35 FT-LBS	55 FT-LBS	80 FT-LBS
5/8-11	75 FT-LBS	110 FT-LBS	170 FT-LBS
3/4-10	130 FT-LBS	200 FT-LBS	280 FT-LBS
1-8	190 FT-LBS	480 FT-LBS	680 FT-LBS
1 1/4-7	380 FT-LBS	840 FT-LBS	1360 FT-LBS

## HOW TO ORDER PARTS

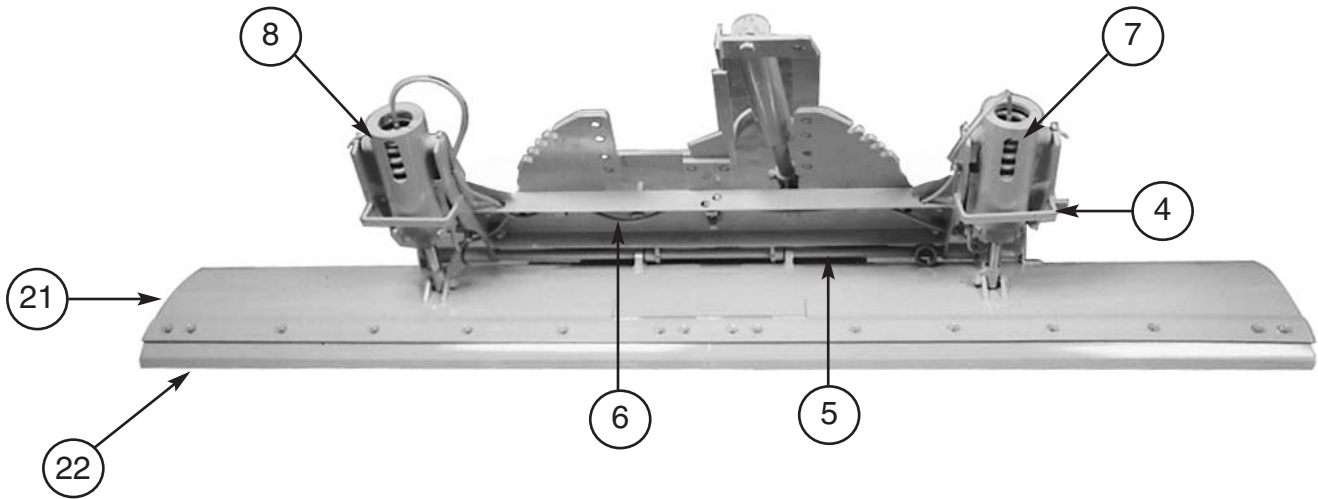
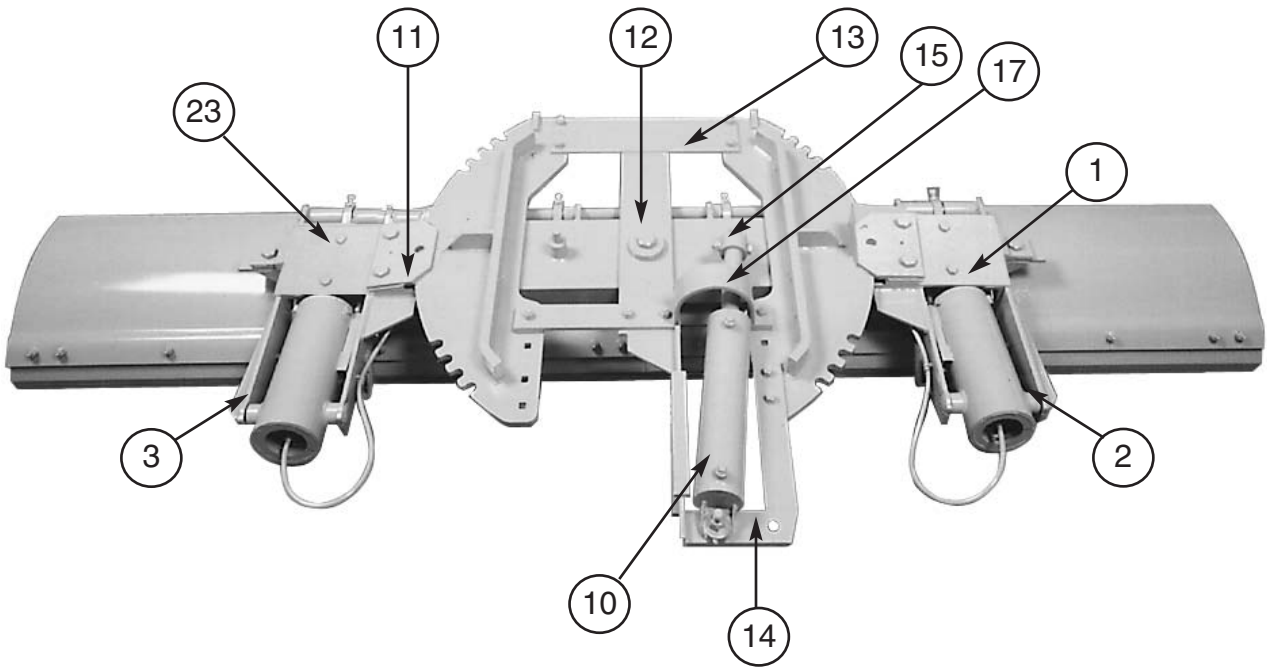
To order or inquire about replacement parts, please contact the **distributor** or **store** that the product was purchased through. To speed the information flow, please have the following information ready:

- Model Number
- Serial Number
- Part Number and/or description as per the parts manual
- Quantity needed

For further information about **Monroe Truck Equipment** replacement parts, please call 800-880-0109 and ask for **Snow & Ice Parts Sales**.

## RETURN POLICY

Merchandise returned to **Monroe Truck Equipment** must have a Warranty Service Request (WSR) form filled out completely and signed by authorized personnel. To get your WSR form, call 800-880-0109. For whole goods ask for **Snow & Ice Sales**. For replacement parts, ask for **Snow & Ice Parts Sales**. All returned items are subject to a 15% restocking fee and must be sent freight prepaid!



18 Manual Lock Kit is standard on this scraper, however, this scraper is shown equipped with spring locks and covers.

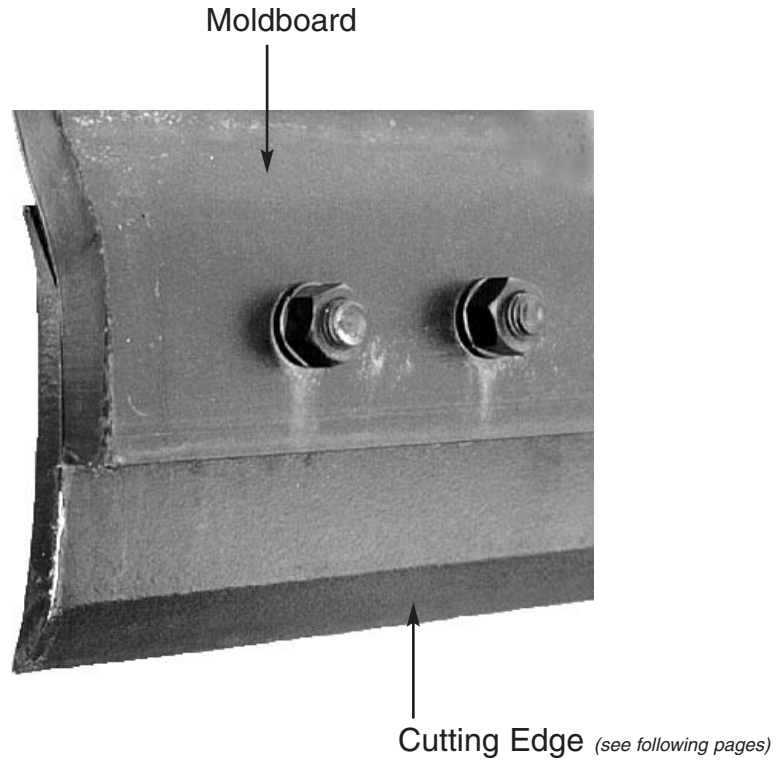
## MS55 SCRAPER PARTS LIST

ITEM	QTY	DESCRIPTION	SEE PAGE
1	1	Hangerboard Assembly	17
2	1	Canister Arm Kit, Outer, RH	17
3	1	Canister Arm Kit, Outer, LH	17
4	2	Canister Arm Support Kit	17
5	1	Hinge Shaft Kit	17
6	1	Hose Kit	17
7	1	Canister/Cylinder Kit, RH	18
8	1	Canister/Cylinder Kit, LH	18
*9	2	Hanger Bracket Kit, 4" Channel	23
	2	Hanger Bracket Kit, 4" Bar (Standard)	23
	2	Hanger Bracket Kit, 8" Bar	24
10	1	Cylinder Kit, Reversing	29
11	2	Hold Down Kit, 3/4" Circle	30-37
	2	Hold Down Kit, 1" Circle	30-37
12	1	Center Bolt Kit, 3/4" Circle	30-37
	1	Center Bolt Kit, 1", Circle	30-37
13	1	Circle Assembly, 3/4", 2 pc. (Standard)	20
	1	Circle Assembly, 1", 2 pc.	20
	1	Circle Assembly, 1", Two Arm, 1 pc.	21
	1	Circle Assembly, 1", One Arm, 1 pc.	21
14	1	Cylinder Bracket Kit, Single	22
15	1	Clevis Kit	30-37
*16	1	Bracket Assembly, Cylinder Support	22
17	1	Cylinder Guard Kit	22
18	2	Lock Kit, Manual	30-37
*19	1	Relief Valve	30-37
21	1	Moldboard, 10'	12
	1	Moldboard, 11'	12
	1	Moldboard, 12'	12
22	1	Cutting Edge Kit - 5/8" x 6" x 10'	13
	1	Cutting Edge Kit - 5/8" x 6" x 11'	14
	1	Cutting Edge Kit - 5/8" x 6" x 12'	15
	1	Cutting Edge Kit - 5/8" x 8" x 10'	13
	1	Cutting Edge Kit - 5/8" x 8" x 11'	14
	1	Cutting Edge Kit - 5/8" x 8" x 12'	15
	1	Cutting Edge Kit - 1/2" x 6" x 10'	13
	1	Cutting Edge Kit - 1/2" x 6" x 11'	14
	1	Cutting Edge Kit - 1/2" x 6" x 12'	15
<i>These items are options &amp; are not shown on the assembly on page 10.</i>	2	Spring Kit	27
	2	Hydraulic Lock Pin Kit, 3/4" Circle	
	2	Hydraulic Lock Pin Kit, 1" Circle	
	2	Locking Cylinder Kit, Hydraulic	28

*\*Items are not shown on assembly and are shipped loose.*

These part numbers refer to our *standard* MS55 scraper. For more information about the parts or their alternatives refer to the appropriate page noted above.

## MOLDBOARD SUB-ASSEMBLY



ITEM	QTY	PART #	DESCRIPTION
1	1	00060292	Moldboard, 1/2" x 10'
2	1	00060293	Moldboard, 1/2" x 11'
3	1	00060294	Moldboard, 1/2" x 12'

## 10' Cutting Edge Kits

### CUTTING EDGE KIT ½ X 6 X 10'

ITEM	QTY	PART #	DESCRIPTION
1	2	05031113	Cutting Edge, ½" x 6" x 5', DBC
2	14	05014551	Bolt, ⅝" - 11 x 2½, G8, Dome Head, Plain
3	14	05020270	Nut, ⅝" - 11, G8, Hex, Zinc
4	14	05021383	Washer, ⅝", Heavy, Spring Lock, Zinc

### CUTTING EDGE KIT ⅝" X 8 X 10'

ITEM	QTY	PART #	DESCRIPTION
1	2	05031003	Cutting Edge, ⅝" x 8" x 5' DBC
2	14	05014551	Bolt, ⅝" - 11 x 2½, G8, Dome Head, Plain
3	14	05020270	Nut, ⅝" - 11, G8, Hex, Zinc
4	14	05021383	Washer, ⅝", Heavy, Spring Lock, Zinc

### CUTTING EDGE KIT ¾ X 6 X 10'

ITEM	QTY	PART #	DESCRIPTION
1	2	05031046	Cutting Edge, ¾" x 6" x 5' DBC
2	14	05014551	Bolt, ⅝" - 11 x 2½, G8, Dome Head, Plain
3	14	05020270	Nut, ⅝" - 11, G8, Hex, Zinc
4	14	05021383	Washer, ⅝", Heavy, Spring Lock, Zinc

### CUTTING EDGE KIT 10' CARBIDE

ITEM	QTY	PART #	DESCRIPTION
1	2	05031005	Cutting Edge, ⅞" x 5" x 5' DBC
2	14	05014551	Bolt, ⅝" - 11 x 2½, G8, Dome Head, Plain
3	14	05020270	Nut, ⅝" - 11, G8, Hex, Zinc
4	14	05021383	Washer, ⅝", Heavy, Spring Lock, Zinc

## 11' Cutting Edge Kits

### CUTTING EDGE KIT ½ X 6 X 11'

ITEM	QTY	PART #	DESCRIPTION
1	1	05031113	Cutting Edge, ½" x 6" x 5', DBC
2	1	05031114	Cutting Edge, ½" x 6" x 6', DBC
3	15	05014551	Bolt, ⅝" - 11 x 2½, G8, Dome Head, Plain
4	15	05020270	Nut, ⅝" - 11, G8, Hex, Zinc
5	15	05021383	Washer, ⅝", Heavy, Spring Lock, Zinc

### CUTTING EDGE KIT ⅝" X 6 X 11'

ITEM	QTY	PART #	DESCRIPTION
1	1	05031003	Cutting Edge, ⅝" x 6" x 5', DBC
2	1	05031004	Cutting Edge, ⅝" x 6" x 6', DBC
3	15	05014551	Bolt, ⅝" - 11 x 2½, G8, Dome Head, Plain
4	15	05020270	Nut, ⅝" - 11, G8, Hex, Zinc
5	15	05021383	Washer, ⅝", Heavy, Spring Lock, Zinc

### CUTTING EDGE KIT ¾ X 6 X 11'

ITEM	QTY	PART #	DESCRIPTION
1	1	05031046	Cutting Edge, ¾" x 6" x 5', DBC
2	1	05031047	Cutting Edge, ¾" x 6" x 6', DBC
3	15	05014551	Bolt, ⅝" - 11 x 2½, G8, Dome Head, Plain
4	15	05020270	Nut, ⅝" - 11, G8, Hex, Zinc
5	15	05021383	Washer, ⅝", Heavy, Spring Lock, Zinc

### CUTTING EDGE KIT 11' CARBIDE

ITEM	QTY	PART #	DESCRIPTION
1	1	05031107	Cutting Edge, ⅞" x 5" x 3', Carbide, DBC
2	2	05031007	Cutting Edge, ⅞" x 5" x 4', Carbide, DBC
3	17	05014551	Bolt, ⅝" - 11 x 2½, G8, Dome Head, Plain
4	17	05020270	Nut, ⅝" - 11, G8, Hex, Zinc
5	17	05021383	Washer, ⅝", Heavy, Spring Lock, Zinc



## 12' Cutting Edge Kits

### CUTTING EDGE KIT ½ X 6 X 12'

ITEM	QTY	PART #	DESCRIPTION
1	2	05031114	Cutting Edge, ½" x 6" x 6', DBC
2	16	05014551	Bolt, ⅝-11 x 2½, G8, Dome Head, Plain
3	16	05020270	Nut, ⅝-11, G8, Hex, Zinc

### CUTTING EDGE KIT ⅝ X 8 X 12'

ITEM	QTY	PART #	DESCRIPTION
1	2	05031004	Cutting Edge, ⅝" x 6" x 6', DBC
2	16	05014551	Bolt, ⅝-11 x 2½, G8, Dome Head, Plain
3	16	05020270	Nut, ⅝-11, G8, Hex, Zinc
4	16	05021383	Washer, ⅝, Heavy, Spring Lock, Zinc

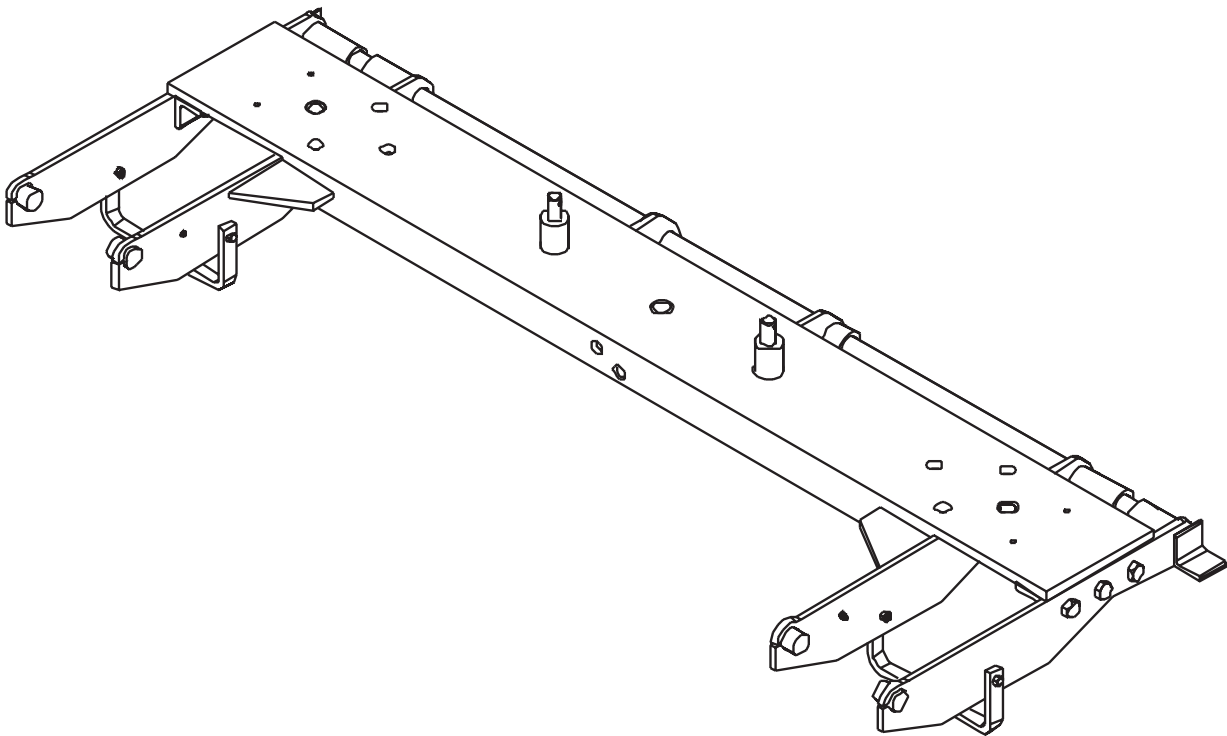
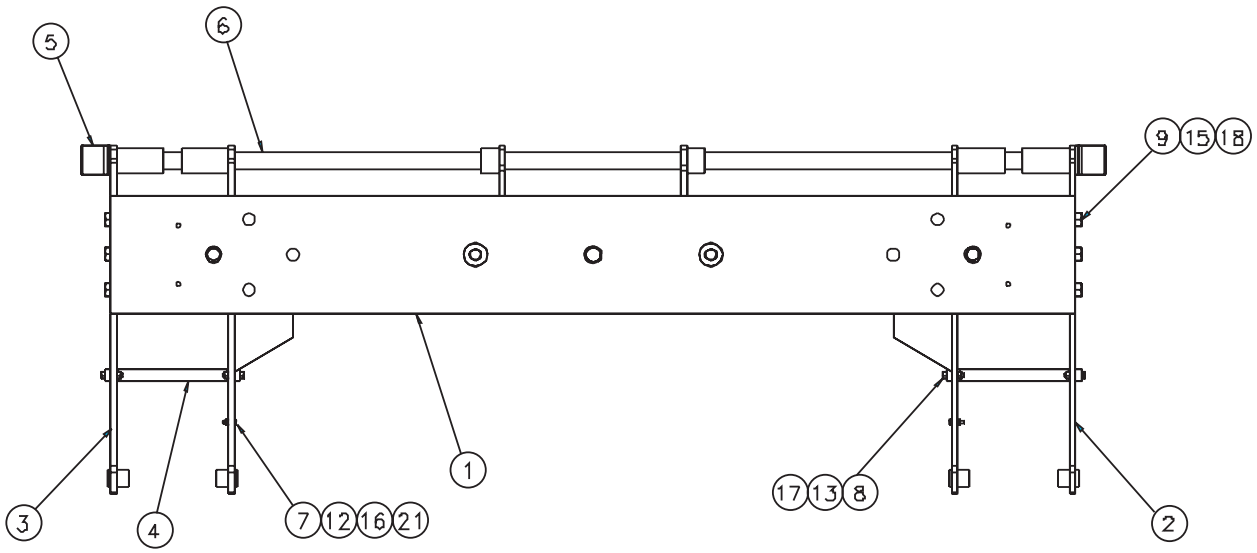
### CUTTING EDGE KIT ¾ X 6 X 12'

ITEM	QTY	PART #	DESCRIPTION
1	2	05031047	Cutting Edge, ¾" x 6" x 6', DBC
2	16	05014551	Bolt, ⅝-11 x 2½, G8, Dome Head, Plain
3	16	05020270	Nut, ⅝-11, G8, Hex, Zinc
4	16	05021383	Washer, ⅝, Heavy, Spring Lock, Zinc

### CUTTING EDGE KIT 12' CARBIDE

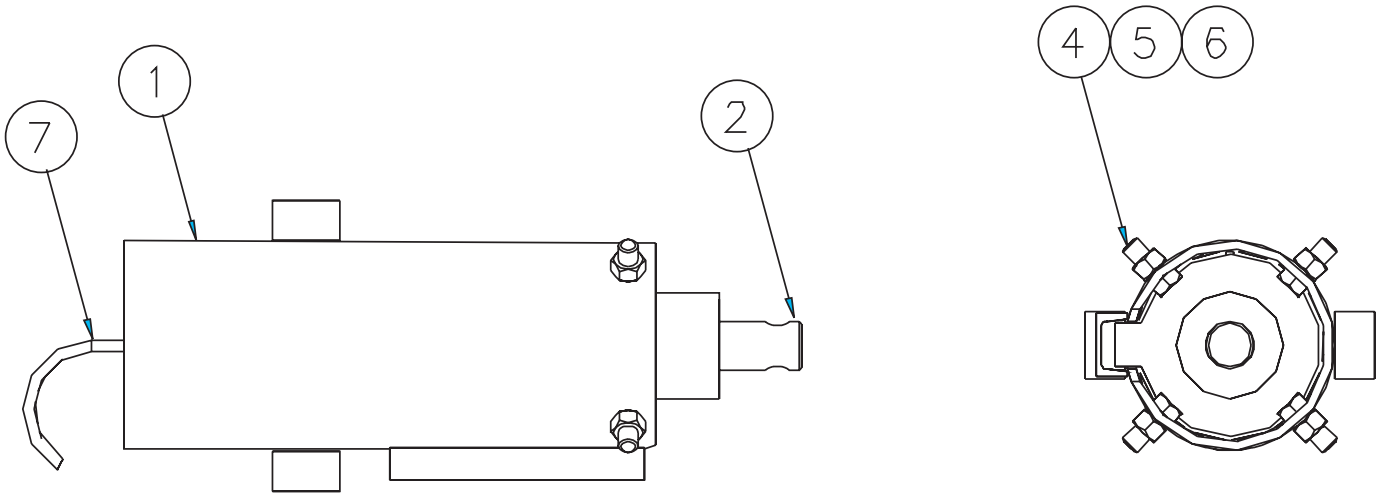
ITEM	QTY	PART #	DESCRIPTION
1	2	05031007	Cutting Edge, ⅞" x 6" x 6', DBC
2	16	05014551	Bolt, ⅝-11 x 2½, G8, Dome Head, Plain
3	16	05020270	Nut, ⅝-11, G8, Hex, Zinc
4	16	05021383	Washer, ⅝, Heavy, Spring Lock, Zinc

# 10',11' & 12' HANGERBOARD ASSEMBLY



ITEM	QTY	PART #	DESCRIPTION
1	1	00060267	Hangerboard Weldment, MS55
2	1	00060279	Arm Weldment, Canister, Outer, RH
3	1	00060280	Arm Weldment, Canister, Outer, LH
4	2	00060276	Arm Support, Canister
5	2	00060197	Shaft Angle, Hinge
6	1	00060284	Shaft, Hinge
7	2	05010593	Bolt, ¼ - 20 x 1, G8, HHCS, Zinc
8	4	05010646	Bolt, ⅜ - 16 x 1.75, G8, HHCS, Zinc
9	6	05010765	Bolt, ¼ - 10 x 2.25, G8, HHCS, Zinc
10	2	05010772	Bolt, ¼ - 10 x 4, G8, HHCS, Zinc
11	4	05015197	Screw, ⅝ - 11 x 1½, Square Head Set Screw
12	2	05020899	Nut, ¼ - 20, GC, Top Lock
13	4	05020898	Nut, ⅜ - 16, GC, Top Lock
14	4	05020122	Nut, ⅝ - 11, G2, Jam, Zinc
15	8	05020849	Nut, ¼ - 10, GC, Top Lock
16	2	05021305	Washer, ¼, Flat, Zinc
17	8	05021307	Washer, ⅜, Flat, Zinc
18	16	05021384	Washer, ¼, Flat, Mil-Carb, SAE
19	2	05037023	Hose Assembly
20	2	05037098	Tee Adapter, Swivel, ⅜ - 18 Male
21	2	05050164	Clamp, Loom, #8

## Canister Kit



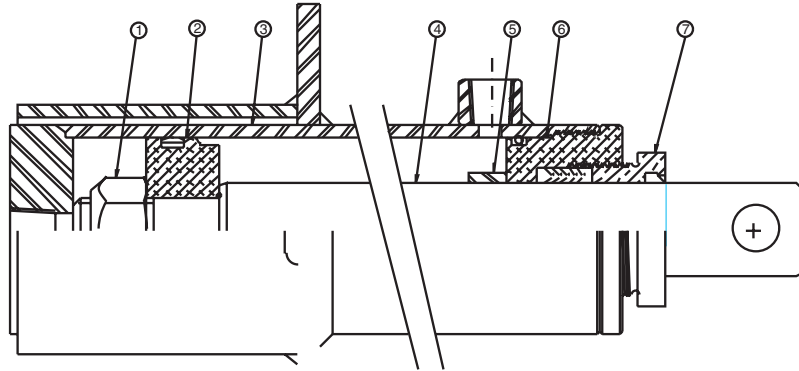
### 00060908 CANISTER ASSEMBLY, RH, 3X8

ITEM	QTY	PART #	DESCRIPTION
1	1	00060287	Canister Weldment, RH
2	1	05001000	Cylinder, 3 x 8, D.A.
3	1	05035065	Spring, Compression, $\frac{1}{16}$ x $5\frac{5}{8}$ x $18\frac{1}{2}$ " Long
4	4	05010736	Bolt, $\frac{5}{8}$ - 11 x $1\frac{1}{4}$ , G8, HHCS, Zinc
5	4	05020270	Nut, $\frac{5}{8}$ - 11, G8, Hex, Zinc
6	4	05021383	Washer, $\frac{5}{8}$ , Lock, Heavy, Zinc
7	1	05037024	Hose Assembly, 68"
8	1	05037045	Adapter, STR Swivel, $\frac{3}{8}$ - 18, Male
9	1	05037096	Adapter, 90-Swivel, $\frac{3}{8}$ - 18, Male

### 00060909 CANISTER ASSEMBLY, LH, 3X8

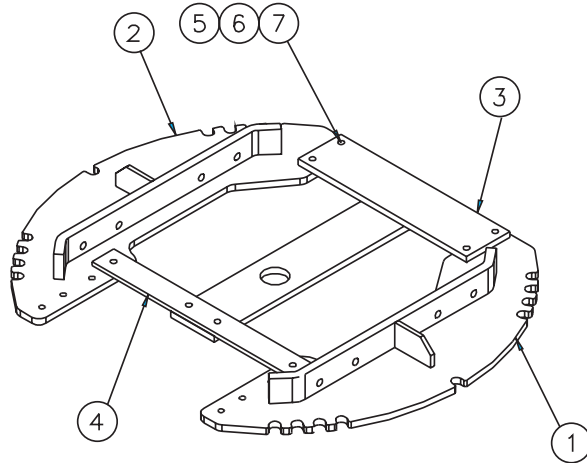
ITEM	QTY	PART #	DESCRIPTION
1	1	00060288	Canister Weldment, LH
2	1	05001000	Cylinder, 3 x 8, D.A.
3	1	05035065	Spring, Compression, $\frac{1}{16}$ x $5\frac{5}{8}$ x $18\frac{1}{2}$ " Long
4	4	05010736	Bolt, $\frac{5}{8}$ - 11 x $1\frac{1}{4}$ , G8, HHCS, Zinc
5	4	05020270	Nut, $\frac{5}{8}$ - 11, G8, Hex, Zinc
6	4	05021383	Washer, $\frac{5}{8}$ , Lock, Heavy, Zinc
7	1	05037024	Hose Assembly, 68"
8	1	05037045	Adapter, STR Swivel, $\frac{3}{8}$ - 18, Male
9	1	05037096	Adapter, 90-Swivel, $\frac{3}{8}$ - 18, Male

# 05001000 CYLINDER, 3 X 8 , DA



ITEM	QTY	DESCRIPTION
1	1	Lock Nut
2	1	Piston Uniring
3	1	Case Weldment
4	1	Rod
5	1	Spacer
6	1	Head V-Stack
7	1	Pack Nut
8	2	Plug
9	1	Seal Kit

## CIRCLE ASSEMBLY, 2-PIECE



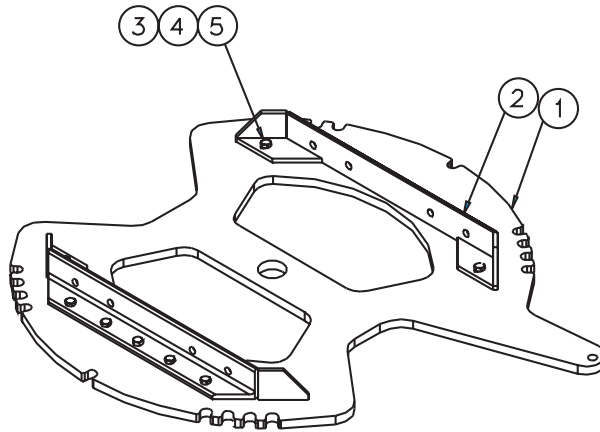
### CIRCLE ASSEMBLY 3/4 X 52" , TWO PIECE

ITEM	QTY	PART #	DESCRIPTION
1	1	00060046	Circle Weldment, 3/4 x 52", RH, MS
2	1	00060047	Circle Weldment, 3/4" x 52", LH, MS
3	1	00060055	Bracket, Circle, 3/4" x 52", 2 piece
4	1	00060103	Cross Member, Circle, 2 piece
5	8	05014549	Bolt, 5/8-11 x 2, G8, Dome Head, Plain
6	8	05020270	Nut, 5/8-11, G8, Hex, Zinc
7	8	05021383	Washer, 5/8, Lock, Heavy, Zinc

### CIRCLE ASSEMBLY 1 X 52" , TWO PIECE

ITEM	QTY	PART #	DESCRIPTION
1	1	00060064	Circle Weldment, 1 x 52", RH, MS
2	1	00060065	Circle Weldment, 1 x 52", LH, MS
3	1	00060069	Bracket, Circle, 1 x 52", 2 piece
4	1	00060103	Cross Member, Circle, 2 piece
5	8	05014549	Bolt, 5/8- 11 x 2, G8, Dome Head, Plain
6	8	05020270	Nut, 5/8- 11, G8, Hex, Zinc
7	8	05021383	Washer, 5/8, Lock, Heavy, Zinc

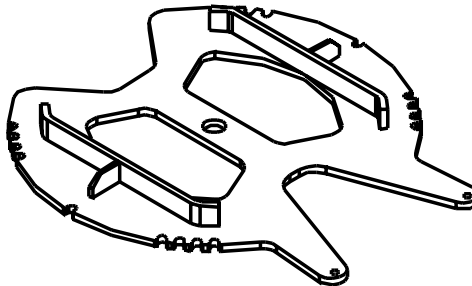
## CIRCLE ASSEMBLY, 1-PIECE



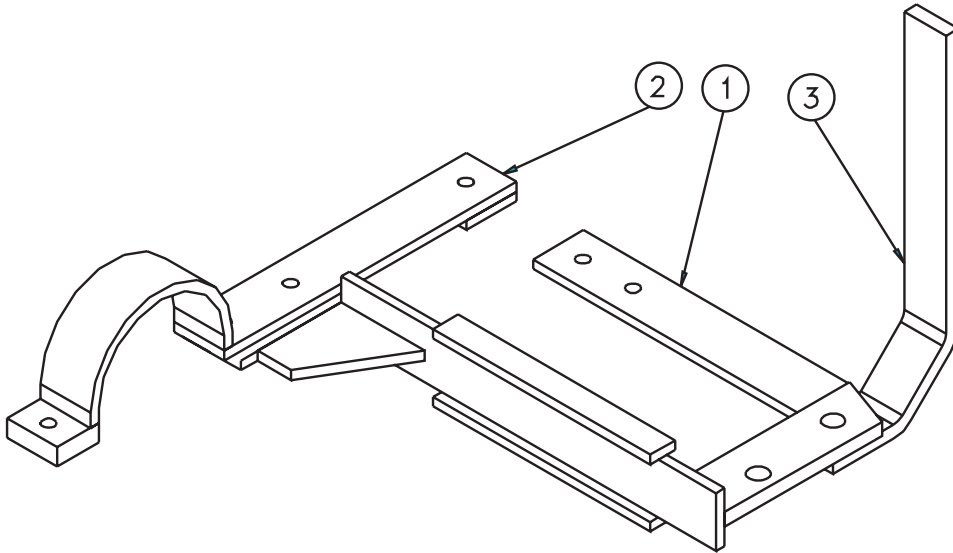
### CIRCLE ASSEMBLY 1 X 52", SINGLE-ARM

ITEM	QTY	PART #	DESCRIPTION
1	1	00060089	Circle Weldment, 1 x 52", MS
2	2	00060085	Bracket Weldment, Mounting, Circle
3	14	05010738	Bolt, $\frac{5}{8}$ - 11 x 1 $\frac{3}{4}$ , G8, HHCS, Zinc
4	14	05021383	Washer, $\frac{5}{8}$ , Lock, Heavy, Zinc
5	14	05021017	Washer, $\frac{5}{8}$ , Flat, MIL-CARB SAE

### 00060979 CIRCLE WELDMENT 1 X 52", DOUBLE-ARM



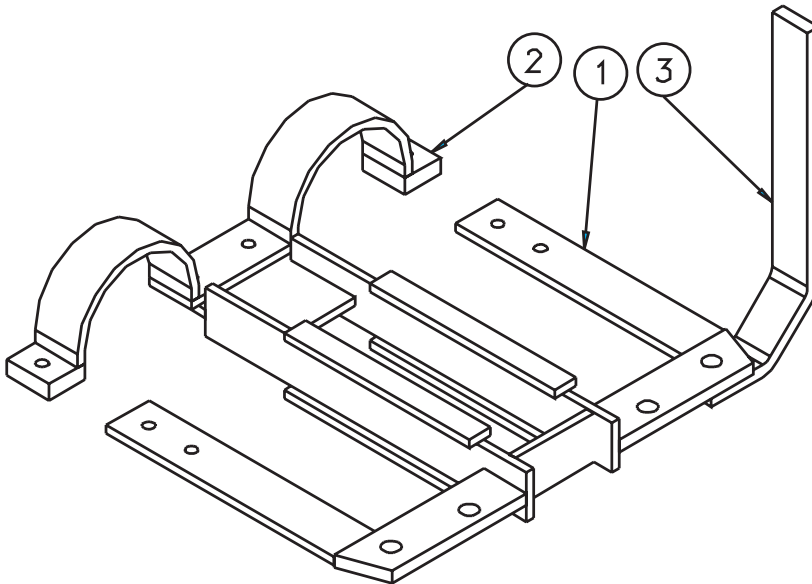
## Reversing Kit



### REVERSING KIT, CIRCLE, SINGLE, 2-PIECE

ITEM	QTY	PART #	DESCRIPTION
1	1	00060113	Bracket, Single, Reversing Cylinder, 2 piece
2	1	00060107	Cross Member Weldment, Single, Reversing Cylinder
3	1	00060097	Bracket, Circle Support, Rear Scraper

*\*\*For old Style Cylinder Bracket Assembly, use part number 015-00034-500 (36" Single), 00031200 (36" Double).*



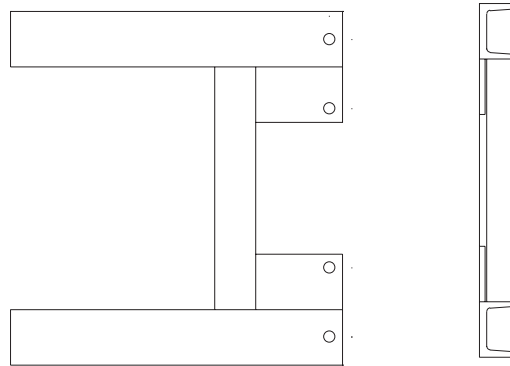
### REVERSING KIT, CIRCLE, DOUBLE, 2 PIECE

ITEM	QTY	PART #	DESCRIPTION
1	1	00060126	Bracket, Double, Reversing Cylinder, 2 piece
2	1	00060123	Cross Member Weldment, Double Reversing Cylinder
3	1	00060097	Bracket, Circle Support, Rear Scraper

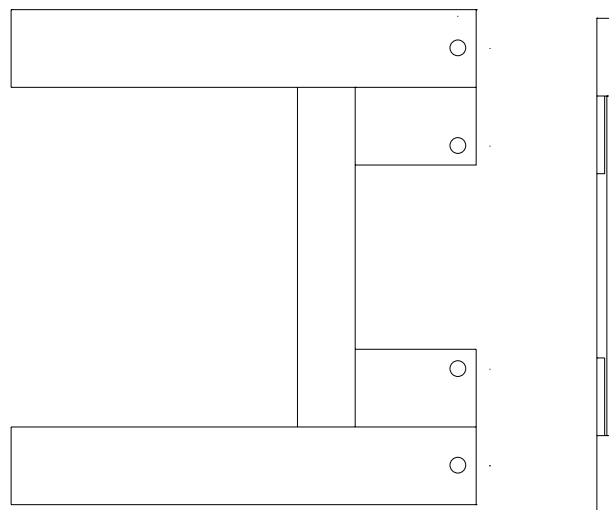


# HANGER BRACKET WELDMENT

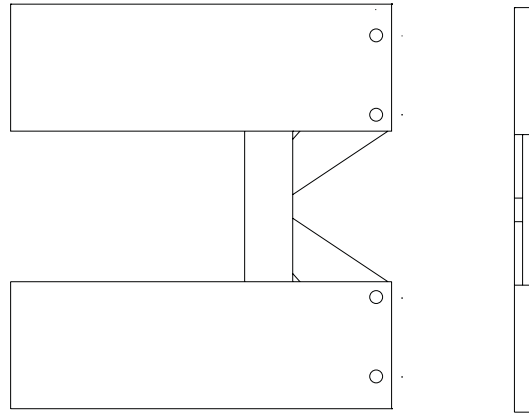
00060254 HANGER BRACKET WELDMENT, CHANNEL, 4 X 24 SCRAPER



00060260 HANGER BRACKET WELDMENT, BAR 4 X 24 SCRAPER



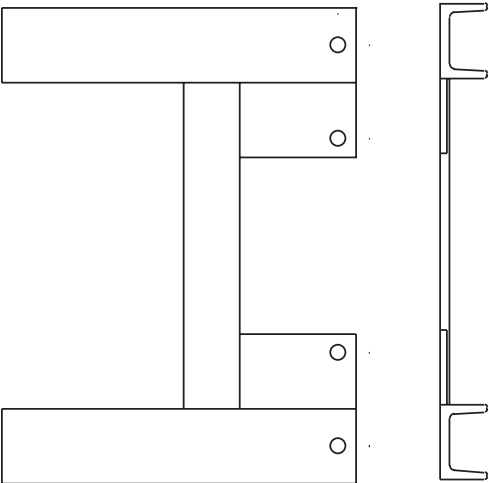
**00060263 HANGER BRACKET WELDMENT, BAR 8 X 24 SCRAPER**



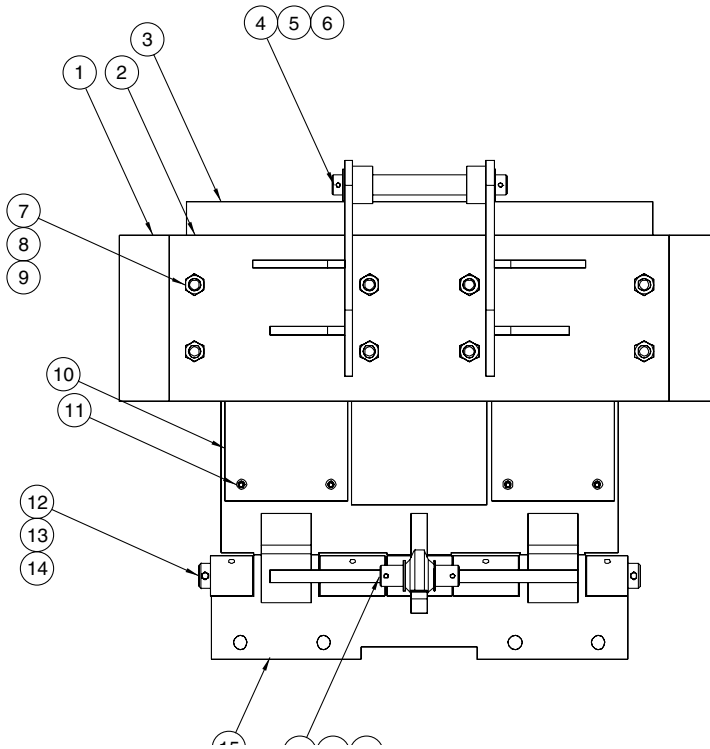
**00060870 HANGER BRACKET, PLATES, 18"**  
**00011595 HANGER BRACKET, PLATES, 28"**



00012290 HANGER BRACKET WELDMENT,CHANNEL, 4 X 19



## HANGER BRACKET, ASSEMBLY, OSCILLATING SCRAPER



ITEM	QTY	PART #	DESCRIPTION
1	1	00011233	Mounting Bracket Weldment
2	1	00011228	Hanger Bracket Weldment, Outer
3	1	00011213	Side Plate Weldment
4	1	00022507	Pin, 1½ DIA x 10¼
5	4	05022007	Pin, ¼ x 2½, Cotter
6	4	05021204	Bushing, 1½ OD x 1¼ ID
8	8	05010770	Bolt, ¾ - 10 x 3½, G8, HHCS, Zinc
9	8	05020271	Nut, ¾ - 10, G8, Hex, Zinc
10	8	05021384	Washer, ¾, Heavy, Locking
11	4	00011221	Insert, POLY
12	24	05016095	Screw, ⅝ - 18 x ¾, Flat Head, MACH
13	1	00011220	Pin, 1½ DIA x 26½
14	2	05010597	Bolt, ¼ - 20 x 2, G8, HHCS, AC
15	2	05020536	Nut, ¼ - 20, Nylon, Lock, Zinc
16	1	00011223	Hinge Weldment, Oscillating Hanger Bracket
17	1	00022506	Pin, 1¼ DIA x 4¾
18	1	00022538	Cylinder, 4 x 4, D.A. (see page 27)

**SPRING LOCK ASSEMBLY**

<b>ITEM</b>	<b>QTY</b>	<b>PART #</b>	<b>DESCRIPTION</b>
1	2	00060322	Cover Weldment, Spring Lock
2	2	00060584	Spring Attachement Bracket
3	2	00060328	Spring Weldment, 17.0
4	2	00060590	Pin, Push-Up
5	4	05010644	Bolt, $\frac{3}{8}$ - 16 x 1 $\frac{1}{4}$ , G8, HHCS, Zinc
6	2	05010768	Bolt, $\frac{3}{4}$ - 10 x 3, G8, HHCS, Zinc
7	2	05010812	Bolt, 1 - 8 x 2 $\frac{1}{2}$ , G8, HHCS, Zinc
8	4	05020266	Nut, $\frac{3}{8}$ - 16, G8, Hex, Zinc
9	2	05020271	Nut, $\frac{3}{4}$ - 10, G8, Hex, Zinc
10	2	05020273	Nut, 1 - 8, G8, Hex, Zinc
11	4	05021365	Washer, $\frac{3}{8}$ , Lock, Zinc
12	2	05021384	Washer, $\frac{3}{4}$ , Lock, Heavy, Zinc
13	2	05021385	Washer, 1, Lock, heavy, Zinc

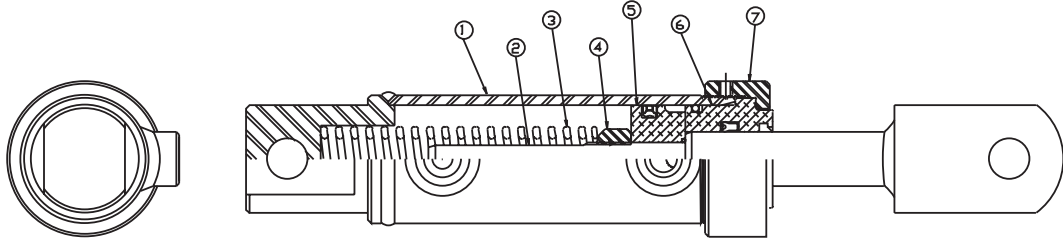
**HYDRAULIC LOCK, 3/4" CIRCLE**

ITEM	QTY	PART #	DESCRIPTION
1	2	00060581	Cylinder Attachment Bracket
2	2	00060309	Slide Weldment, Lock, 3/4 Circle
3	2	05010768	Bolt, 3/4 - 10 x 3, G8, HHCS, Zinc
4	2	05020271	Nut, 3/4 - , G8, HHEX, Zinc
5	2	05021384	Washer, 3/4 - , G8, Hex, Zinc
3	2	05002567	Cylinder, 2 x 2, SA, Lock, (see page 29)
4	4	05022032	Pin, 3/4 x 2 3/4, Clevis, Zinc
5	4	05022021	Pin, 1/2 x 1, Cotter
6	1	05037047	Adapter, STR, Swivel, 1/16 -18, ORB x 3/8-18, Female
7	1	05037096	Adapter, 90° - Swivel, 3/8 -18, Male x 1/4-18, Female
8	2	05037097	Adapter, 90° - Swivel, 1/16 - 18, ORB x 3/8-18, Female
9	1	05037143	Valve, Shuttle, 1/16 - ORB, Porting
10	1	05037158	Tee Adapter, 3/8" Female, (all 3)
11	3	05037159	Tee Adapter, Male Run 3/8" x (2) 3/8" Female
12	1	05037177	Valve, Flow Control Adjustable
13	2	05051419	Breather, 1/4", Pipe Thread

**HYDRAULIC LOCK, 1" CIRCLE**

ITEM	QTY	PART #	DESCRIPTION
1	2	00060581	Cylinder Attachment Bracket
2	2	00060642	Slide Weldment, Lock, 1" Circle
3	2	05010768	Bolt, 3/4 - 10 x 3, G8, HHCS, Zinc
4	2	05020271	Nut, 3/4 - 10, G8, HHEX, Zinc
5	2	05021384	Washer, 3/4 - 10, G8, Hex, Zinc
3	2	05002567	Cylinder, 2 x 2, SA, Lock, (see page 29)
4	4	05022032	Pin, 3/4 x 2 3/4, Clevis, Zinc
5	4	05022021	Pin, 1/2 x 1, Cotter
6	1	05037047	Adapter, STR, Swivel, 1/16 -18, ORB x 3/8-18, Female
7	1	05037096	Adapter, 90° - Swivel, 3/8 -18, Male x 1/4-18, Female
8	2	05037097	Adapter, 90° - Swivel, 1/16 - 18, ORB x 3/8-18, Female
9	1	05037143	Valve, Shuttle, 1/16 - ORB, Porting
10	1	05037158	Tee Adapter, 3/8" Female, (all 3)
11	3	05037159	Tee Adapter, Male Run 3/8" x (2) 3/8" Female
12	1	05037177	Valve, Flow Control Adjustable
13	2	05051419	Breather, 1/4", Pipe Thread

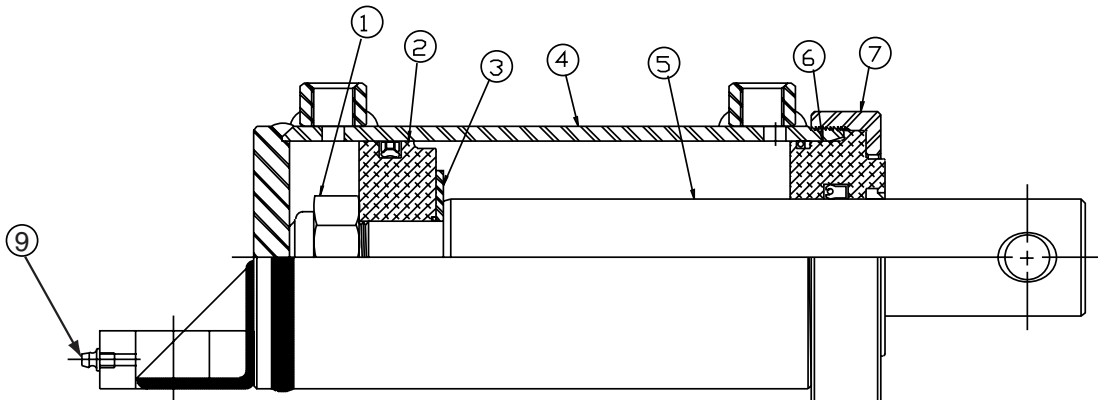
## 05002567 CYLINDER 2 X 2, SA, LOCK



ITEM	QTY	DESCRIPTION
1	1	Case Weldment
2	1	Rod Weldment
3	1	Spring
4	1	Lock Nut
5	1	Piston
6	1	Head
7	1	Thread Cap
8	2	Plug
9	1	Set Screw
10	1	Seal Kit

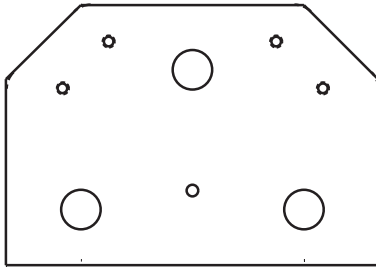
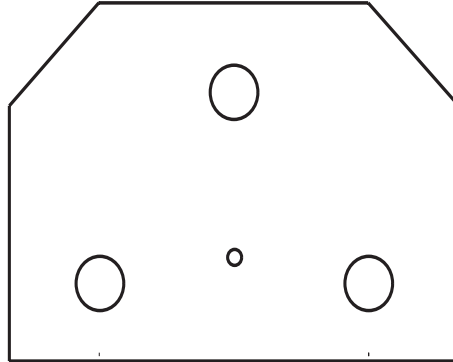
## 05002566 REVERSING CYLINDER

ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	05000022	NUT, 1/4-12, LOCK
2	1	05002625	PISTON
3	1	05002222	WASHER, PISTON
4	1	05002682	CASE WELDMENT
5	1	05002683	ROD WELDMENT
6	1	05002628	HEAD
7	1	05002196	CAP, THREAD
8	1	05002648	SCREW, 1/4-20, SET
	1	05002508	SEAL KIT



# HOLD DOWN ASSEMBLY

00060398 HOLD DOWN SCRAPER, 3/4 X 10, 3.0  
 00060399 HOLD DOWN SCRAPER, 1 X 10, 3.0



## HOLD DOWN SCRAPER, 3/4 X 10, POLY

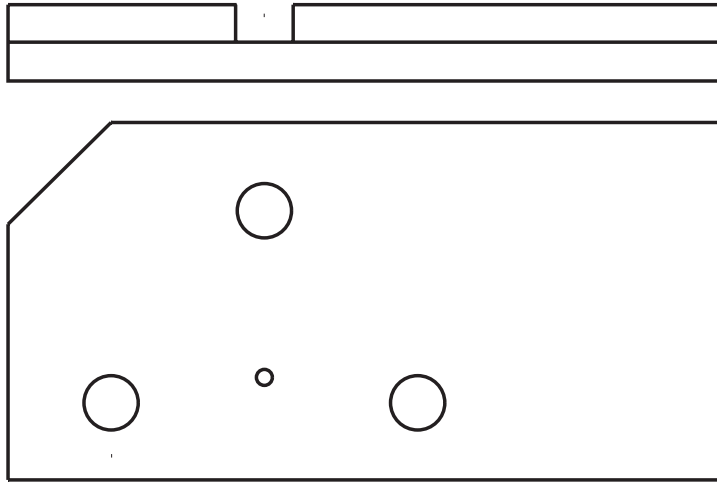
ITEM	QTY	PART #	DESCRIPTION
1	1	00060919	Hold Down, 3/4 x 10, POLY
2	1	00060976	Insert
3	4	05016095	Screw, 5/16 - 18 x 3/4, Flat Head, Zinc

## HOLD DOWN SCRAPER, 1 X 10, POLY

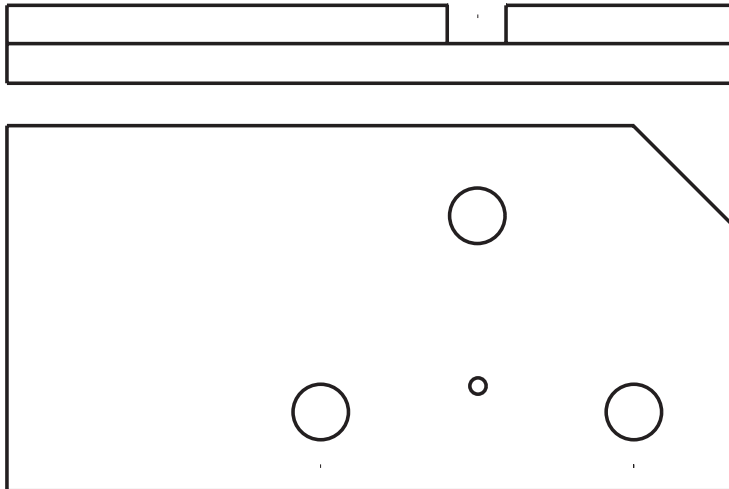
ITEM	QTY	PART #	DESCRIPTION
1	1	00060920	Hold Down, 1x10, POLY
2	1	00060976	Insert
3	4	05016095	Screw, 5/16 - 18 x 3/4, Flat Head, Zinc

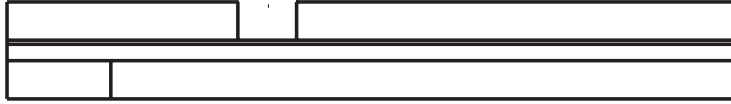


00060923 HOLD DOWN SCRAPER, 3/4 X 14, RH  
00060925 HOLD DOWN SCRAPER, 1 X 14, RH



00060924 HOLD DOWN SCRAPER, 3/4 X 14, LH  
00060926 HOLD DOWN SCRAPER, 1 X 14, LH



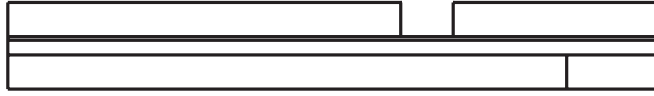


**HOLD DOWN SCRAPER, 3/4 X 14, RH, POLY**

ITEM	QTY	PART #	DESCRIPTION
1	1	00060931	Hold Down, 3/4 x 14, POLY
2	1	00060972	Insert, RH
3	6	05016095	Screw, 5/16-18 x 3/4, Flat Head, Zinc

**HOLD DOWN SCRAPER, 1 X 14, RH, POLY**

ITEM	QTY	PART #	DESCRIPTION
1	1	00060933	Hold Down, 1 x 14, POLY
2	1	00060972	Insert, RH
3	6	05016095	Screw, 5/16-18 x 3/4, Flat Head, Zinc



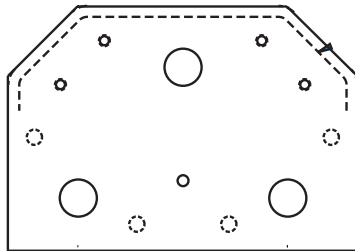
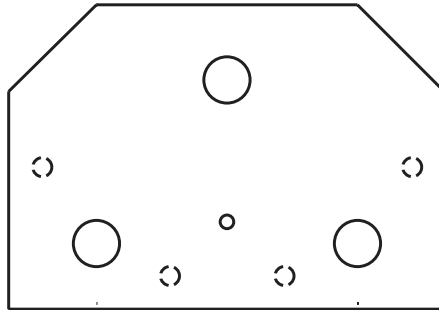
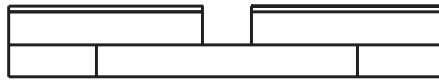
**HOLD DOWN SCRAPER, 3/4 X 14, LH**

ITEM	QTY	PART #	DESCRIPTION
1	1	00060932	Hold Down, 3/4 x 14, POLY
2	1	00060973	POLY Insert, LH
3	6	05016095	Screw, 5/16 -18 x 3/4, Flat Head, Zinc

**HOLD DOWN SCRAPER, 1 X 14, LH**

ITEM	QTY	PART #	DESCRIPTION
1	1	00060934	Hold Down, 1 x 14, POLY
2	1	00060973	POLY Insert, LH
3	6	05016095	Screw, 5/16 -18 x 3/4, Flat Head, Zinc

00060073 HOLD DOWN SCRAPER, 3/4 X 10, 6.0  
 00060074 HOLD DOWN SCRAPER, 1 X 10, 6.0



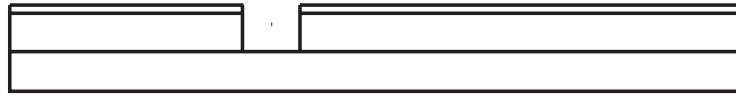
**HOLD DOWN SCRAPER, 3/4 X 10, 6.0**

ITEM	QTY	PART #	DESCRIPTION
1	1	00060921	Hold Down, 3/4 x 10, POLY
2	1	00060976	Insert
3	4	05016095	Screw, 5/16 -18 x 3/4, Flat Head, Zinc (not shown)

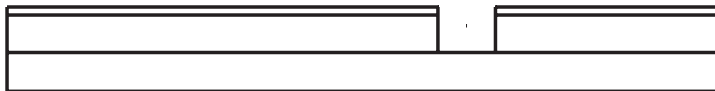
**HOLD DOWN SCRAPER, 1 X 10, 6.0**

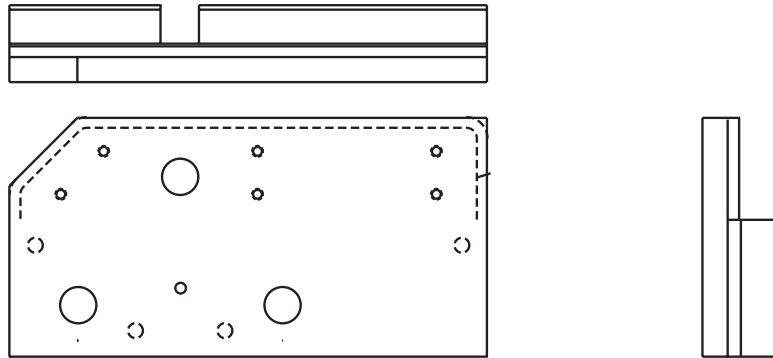
ITEM	QTY	PART #	DESCRIPTION
1	1	00060922	Hold Down, 1x10, POLY
2	1	00060976	Insert
3	4	05016095	Screw, 5/16 -18 x 3/4, Flat Head, Zinc (not shown)

00060927 HOLD DOWN SCRAPER,  $\frac{3}{4}$  X 14, RH  
00060929 HOLD DOWN SCRAPER, 1 X 14,RH



00060928 HOLD DOWN SCRAPER,  $\frac{3}{4}$  X 14, LH  
00060930 HOLD DOWN SCRAPER, 1 X 14,LH





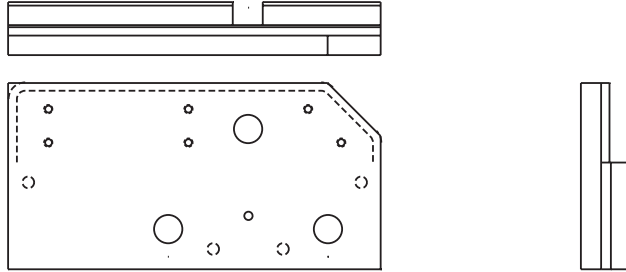
**HOLD DOWN SCRAPER, 3/4 X 14, RH, POLY**

ITEM	QTY	PART #	DESCRIPTION
1	1	00060935	Hold Down, 3/4 x 14, POLY
2	1	00060972	POLY Insert, RH
3	6	05016095	Screw, 5/16 - 18 x 3/4, Flat Head, Zinc (not shown)

**HOLD DOWN SCRAPER, 1 X 14, RH, POLY**

ITEM	QTY	PART #	DESCRIPTION
1	1	00060937	Hold Down, 1 x 14, POLY
2	1	00060972	POLY Insert, RH
3	6	05016095	Screw, 5/16 - 18 x 3/4, Flat Head, Zinc (not shown)

## HOLD DOWN ASSEMBLY,POLY,14



### HOLD DOWN SCRAPER, ¼ X 14, LH, POLY

ITEM	QTY	PART #	DESCRIPTION
1	1	00060936	Hold Down, ¼ x 14, POLY
2	1	00060973	POLY Insert, LH
3	6	05016095	Screw, ⅙ - 18 x ¼, Flat Head, Zinc

### HOLD DOWN SCRAPER, 1 X 14, LH, POLY

ITEM	QTY	PART #	DESCRIPTION
1	1	00060938	Hold Down, 1 x 14, POLY
2	1	00060973	POLY Insert, LH
3	6	05016095	Screw, ⅙ - 18 x ¼, Flat Head, Zinc

## Mounting Kits

### MOUNTING KIT, SCRAPER ¾, MANUAL REVERSE, MANUAL LOCK

ITEM	QTY	PART #	DESCRIPTION
1	16	05010768	Bolt, ¾ -10 x 3½, G8, HHCS, Zinc
2	16	05020849	Nut, ¾ -10, GC, Top Lock
3	16	05021018	Washer, ¾, Flat, Mil-Carb
4	1	05037005	Valve, Relief, Gresen, JL50-400 (Optional)
5	1	05010820	Bolt, 1-8 x 5, G8, HHCS, Zinc
6	4	05020834	Nut, 1-8, GC Top Lock
7	4	05021314	Washer, 1, Flat
8	4	00060258	Shim, Scraper, Hanger Bracket
9	2	00060298	Shim, Scraper, Hold Down
10	1	05050036	Bushing, ¾ Flange, 30 OD x 1¼ID
11	1	05010853	Bolt, 1¼ -7 x 4½, G8, HHCS, Zinc
12	1	05020835	Nut, 1¼ -7,GC, Toplock, C&W
13	2	05022145	Pin, ⅝ DIA x 5¼, with Handles
14	2	05010595	Bolt, ¼ - 20 x 1½, G8, HHCS, Zinc
15	2	05020899	Nut, ¼ - 20, GC, Top Lock
17	2	05021305	Washer, ¼, Flat, Zinc

### MOUNTING KIT, SCRAPER 1, MANUAL REVERSE, MANUAL LOCK

ITEM	QTY	PART #	DESCRIPTION
1	16	05010768	Bolt, ¾ -10 x 3½, G8, HHCS, Zinc
2	16	05020849	Nut, ¾ -10, GC, Top Lock
3	16	05021018	Washer, ¾, Flat Mil-Carb
4	1	05037005	Valve, Relief, Gresen, JL50-400 (Optional)
5	1	05010820	Bolt, 1 - 8 x 5, G8, HHCS, Zinc
6	4	05020834	Nut, 1 - 8, GC Top Lock
7	4	05021314	Washer, 1, Flat
8	4	00060258	Shim, Scraper, Hanger Bracket
9	2	00060298	Shim, Scraper, Hold Down
10	1	05050035	Bushing, 1Flange, 30 OD x 1¼ID
11	1	05010853	Bolt, 1¼ -7 x 4½, G8, HHCS, Zinc
12	1	05020835	Nut, 1¼ - 7,GC, Toplock, C&W
13	2	05022145	Pin, ⅝ DIA x 5¼, with Handles
14	2	05010595	Bolt, ¼ - 20 x 1½, G8, HHCS, Zinc
15	2	05020899	Nut, ¼ -20, GC, Top Lock
17	2	05021305	Washer, ¼, Flat, Zinc



**MOUNTING KIT, SCRAPER ¾-2 PIECE X 1, 1 CYLINDER**

ITEM	QTY	PART #	DESCRIPTION
1	16	05010768	Bolt, ¾ -10 x 3, G8, HHCS, Zinc
2	17	05020849	Nut, ¾ -10, GC, Top Lock
3	17	05021018	Washer, ¾, Flat, Mil-Carb
4	1	05037005	Valve, Relief, Gresen, JL50-400 (Optional)
5	1	05010820	Bolt, 1 - 8 x 5, G8, HHCS, Zinc
7	4	05021314	Washer, 1, Flat
8	4	00060258	Shim, Scraper, Hanger Bracket
9	2	00060298	Shim, Scraper, Hold Down
10	1	00060093	Clevis Weldment, Scraper, Reversing Cylinder
11	1	05022026	Pin, ¼ x 2, Roll, Zinc
12	3	05021202	Bushing, 1½ x 1 x 10GA, Zinc
13	1	05010773	Bolt, ¾-10 x 4½, G8 HHCS, Zinc
14	1	05010716	Bolt, 1 - 8 x 3½, G8, HHCS, Zinc
15	5	05020834	Nut, 1 - 8 GC, Toplock, C&W
16	2	05050006	Bushing, 1DIA
17	1	05050036	Bushing, ¾, Flange, 30 OD x 1¼ ID
18	1	05010853	Bolt, 1¼-7 x 4½, G8, HHCS, Zinc
19	1	05020835	Nut, 1¼- 7GC, Toplock, C&W
20	2	05014549	Bolt, ⅝- 11 x 2, G8, Dome Head, Plain
21	2	05020837	Nut, ⅝- 11, GC, Top Lock
22	2	05021311	Washer, ⅝, Flat

**MOUNTING KIT, SCRAPER 1-2-PIECE X1, 1 CYLINDER**

ITEM	QTY	PART #	DESCRIPTION
1	16	05010768	Bolt, ¾-10 x 3, G8, HHCS, Zinc
2	17	05020849	Nut, ¾-10, GC, Top Lock
3	17	05021018	Washer, ¾, Flat, Mil-Carb
4	1	05037005	Valve, Relief, Gresen, JL50-400 (Optional)
5	1	05010820	Bolt, 1 - 8 x 5, G8, HHCS, Zinc
7	4	05021314	Washer, 1, Flat
8	4	00060258	Shim, Scraper, Hanger Bracket
9	2	00060298	Shim, Scraper, Hold Down
10	1	00060093	Clevis Weldment, Reversing Cylinder
11	1	05022026	Pin, ¼ x 2, Roll, Zinc
12	3	05021202	Bushing, 1½ x 1 x 10 GA, Zinc
13	1	05010773	Bolt, ¾-10 x4½,G8, HHCS, Zinc
14	1	05010716	Bolt, 1 - 8 x 3½, G8, HHCS, Zinc
15	5	05020834	Nut, 1 - 8 GC, Toplock, C&W
16	2	05050006	Bushing, 1 DIA
17	1	05050035	Bushing, 1 Flange, 30 OD x 1¼ ID
18	1	05010853	Bolt, 1¼ - 7 x 4½, G8, HHCS, Zinc
19	1	05020835	Nut, 1¼- 7 GC, Toplock, C&W
20	2	05014551	Bolt, ⅝- 11 x 2½, G8, Dome Head, Plain
21	2	05020837	Nut, ⅝- 11, GC, Top Lock
22	2	05021311	Washer, ⅝, Flat

**MOUNTING KIT, SCRAPER ¾SC X 1, 1 CYLINDER REVERSING**

ITEM	QTY	PART #	DESCRIPTION
1	16	05010768	Bolt, ¾ -10 x 3, G8, HHCS, Zinc
2	17	05020849	Nut, ¾ - 10, GC, Top Lock
3	17	05021018	Washer, ¾, Flat, Mil-Carb
4	1	05037005	Valve, Relief, Gresen, JL50-400 (Optional)
5	1	05010819	Bolt, 1 - 8 x 5, G8, HHCS, Zinc
7	4	05021314	Washer, 1, Lock, Heavy, Zinc
8	4	00060258	Shim, Scraper, Hanger Bracket
9	2	00060298	Shim, Scraper, Hold Down
11	1	00060093	Clevis Weldment, Scraper, Reversing Cylinder
12	1	05022026	Pin, ¼ x 2, Roll, Zinc
13	3	05021202	Bushing, 1½x 1 x 10 GA, Zinc
14	1	05010773	Bolt, ¾ - 10 x 4½, G8, HHCS, Zinc
15	1	05010819	Bolt, 1 - 8 x 4, G8, HHCS, Zinc
16	5	05020834	Nut, 1 - 8GC, Toplock, C&W
17	2	05050006	Bushing, 1DIA
18	1	05050036	Bushing, ¾ Flange, 30 OD x 1¼ ID
19	1	05010853	Bolt, 1¼ - 7 x 4½, G8, HHCS, Zinc
20	1	05020835	Nut, 1¼ - 7 GC, Toplock, C&W

**MOUNTING KIT, SCRAPER 1SC X 1, 1 CYLINDER REVERSING**

ITEM	QTY	PART #	DESCRIPTION
1	16	05010768	Bolt, ¾ -10 x 3, G8, HHCS, Zinc
2	17	05020849	Nut, ¾ - 10, GC, Top Lock
3	17	05021018	Washer, ¾, Flat, Mil-Carb
4	1	05037005	Valve, Relief, Gresen, JL50-400 (Optional)
5	1	05010820	Bolt, 1 - 8 x 5, G8 HHCS, Zinc
7	4	05021314	Washer, 1, Flat
8	4	00060258	Shim, Scraper, Hanger Bracket
9	2	00060298	Shim, Scraper, Hold Down
10	1	00060093	Clevis Weldment, Scraper, Reversing Cylinder
11	1	05022026	Pin, ¼ x 2, Roll, Zinc
12	3	05021202	Bushing, 1½x 1 x 10 GA, Zinc
13	1	05010773	Bolt, ¾ - 10 x 4½, G8, HHCS, Zinc
14	1	05010819	Bolt, 1 - 8 x 4, G8, HHCS, Zinc
15	5	05020834	Nut, 1 - 8GC, Toplock, C&W
16	2	05050006	Bushing, 1DIA
17	1	05050035	Bushing, 1, Flange, 30 OD x 1¼ ID
18	1	05010853	Bolt, 1¼ -7 x 4½, G8, HHCS, Zinc
19	1	05020835	Nut, 1¼ - 7GC, Toplock, C&W

**MOUNTING KIT, SCRAPER ¾ - 2PC, 2 CYLINDER**

ITEM	QTY	PART #	DESCRIPTION
1	16	05010768	Bolt, ¾ - 10 x 3½, G8, HHCS, Zinc
2	17	05020849	Nut, ¾ - 10, GC, Top Lock
3	17	05021018	Washer, ¾, Flat, Mil-Carb
4	1	05037005	Valve, Relief, Gresen, JL50-400 (Optional)
5	1	05010820	Bolt, 1 - 8 x 5, G8, HHCS, Zinc
7	4	05021314	Washer, 1, Flat
8	4	00060258	Shim, Scraper, Hanger Bracket
9	2	00060298	Shim, Scraper, Hold Down
11	2	00060093	Clevis Weldment, Scraper, Reversing Cylinder
12	2	05022026	Pin, ¼ x 2, Roll, Zinc
13	6	05021202	Bushing, 1½ x 1 x 10 GA, Zinc
14	2	05010773	Bolt, ¾ - 10 x 4½, G8, HHCS, Zinc
15	2	05010816	Bolt, 1 - 8 x 3½, G8, HHCS, Zinc
16	6	05020834	Nut, 1 - 8GC, Toplock, C&W
17	4	05050006	Bushing, 1DIA
18	1	05050036	Bushing, ¾ Flange, 30 OD x 1¼ ID
19	1	05010853	Bolt, 1¼ - 7 x 4½, G8, HHCS, Zinc
20	1	05020835	Nut, 1¼ - 7 GC, Toplock, C&W
21	4	05014549	Bolt, ⅝ - 11 x 2, G8, Dome Head, Plain
22	4	05020837	Nut, ⅝ - 11, GC, Top Lock
23	4	05021311	Washer, ⅝, Flat
24	1	05043066	Valve, Cushion Relief, ½NPT

**MOUNTING KIT, SCRAPER 1 - 2PC, 2 CYLINDER**

ITEM	QTY	PART #	DESCRIPTION
1	16	05010768	Bolt, ¾ - 10 x 3, G8, HHCS, Zinc
2	18	05020849	Nut, ¾ - 10, G8, Hex, Zinc
3	18	05021018	Washer, ¾, Flat, Mil-Carb
4	1	05037005	Valve, Relief, Gresen, JL50-400
5	1	05010820	Bolt, 1 - 8 x 5, G8, HHCS, Zinc
7	4	05021314	Washer, 1, Flat
8	4	00060258	Shim, Scraper, Hanger Bracket
9	2	00060298	Shim, Scraper, Hold Down
11	2	00060093	Clevis Weldment, Scraper, Reversing Cylinder
12	2	05022026	Pin, ¼ x 2, Roll, Zinc
13	6	05021202	Bushing, 1½ x 1 x 10 GA, Zinc
14	2	05010773	Bolt, ¾ - 10 x 4½, G8, HHCS, Zinc
15	2	05010716	Bolt, 1 - 8 x 3½, G8, HHCS, Zinc
16	6	05020834	Nut, 1 - 8 GC, Toplock, C&W
17	4	05050006	Bushing, 1 DIA
18	1	05050035	Bushing, 1, Flange, 30 OD x 1¼ ID
19	1	05010853	Bolt, 1¼ - 7 x 4½, G8, HHCS, Zinc
20	1	05020835	Nut, 1¼ - 7 GC, Toplock, C&W
21	4	05014549	Bolt, ⅝ - 11 x 2, G8, Dome Head, Plain
22	4	05020837	Nut, ⅝-11, GC, Top Lock
23	4	05021311	Washer, ⅝, GC Top Lock
24	1	05043066	Valve, Cushion Relief, .875-14 ORB

**MOUNTING KIT, SCRAPER ¾SC X 2, 2 CYLINDER**

ITEM	QTY	PART #	DESCRIPTION
1	16	05010768	Bolt, ¾ -10 x 3, G8, HHCS, Zinc
2	18	05020849	Nut, ¾ - 10, GC, Top Lock
3	18	05021018	Washer, ¾, Flat, Mil-Carb
4	1	05037005	Valve, Relief, Gresen, JL50-400 (Optional)
5	1	05010820	Bolt, 1 - 8 x 5, G8, HHCS, Zinc
7	4	05021314	Washer, 1, Flat
8	4	00060258	Shim, Scraper, Hanger Bracket
9	2	00060298	Shim, Scraper, Hold Down
11	2	00060093	Clevis Weldment, Scraper, Reversing Cylinder
12	2	05022026	Pin, ¼ x 2, Roll, Zinc
13	6	05021202	Bushing, 1½ x 1 x 10 GA, Zinc
14	2	05010773	Bolt, ¾ - 10 x 4½, G8, HHCS, Zinc
15	2	05010815	Bolt, 1 - 8 x 4½, G8, HHCS, Zinc
16	6	05020834	Nut, 1 - 8GC, Toplock, C&W
17	4	05050006	Bushing, 1DIA
18	1	05050036	Bushing, ¾ Flange, 30 OD x 1¼ ID
19	1	05010853	Bolt, 1¼ - 7 x 4½, G8, HHCS, Zinc
20	1	05020835	Nut, 1¼ - 7 GC, Toplock, C&W

**MOUNTING KIT, SCRAPER 1SC X 2, 2 CYLINDER**

ITEM	QTY	PART #	DESCRIPTION
1	16	05010768	Bolt, ¾ -10 x 3, G8, HHCS, Zinc
2	18	05020849	Nut, ¾ - 10, GC, Top Lock
3	18	05021018	Washer, ¾, Flat, Mil-Carb
4	1	05037005	Valve, Relief, Gresen, JL50-400 (Optional)
5	1	05010820	Bolt, 1-8 x 5, G8 HHCS, Zinc
7	4	05021314	Washer, 1, Flat
8	4	00060258	Shim, Scraper, Hanger Bracket
9	2	00060298	Shim, Scraper, Hold Down
10	1	05051395	Cardboard, Box 12x8x7
11	2	00060093	Clevis Weldment, Scraper, Reversing Cylinder
12	2	05022026	Pin, ¼x2, Roll, Zinc
13	6	05021202	Bushing, 1½x1x10GA, Zinc
14	2	05010773	Bolt, ¾-100x4½, G8, HHCS, Zinc
15	2	05010716	Bolt, 1-8x3½, G8, HHCS, Zinc
16	6	05020834	Nut, 1-8GC, Toplock, C&W
17	4	05050006	Bushing, 1DIA
18	1	05050035	Bushing, 1, Flange, 30 OD x 1¼ ID
19	1	05010853	Bolt, 1¼-7x4½, G8, HHCS, Zinc
20	1	05020835	Nut, 1¼-7GC, Toplock, C&W

**MOUNTING KIT, SCRAPER ¾ - 2PIECE X1,1 CYLINDER**

ITEM	QTY	PART #	DESCRIPTION
1	16	05010768	Bolt, ¾ - 10 x 3, G8, HHCS, Zinc
2	17	05020849	Nut ¾ - 10, GC, Top Lock
3	17	05021018	Washer, ¾, Flat, Mil-Carb
4	1	05037005	Valve, Relief, Gresen, JL50-400 (Optional)
5	1	05010820	Bolt, 1 - 8 x 5, G8, HHCS, Zinc
7	4	05021314	Washer, 1, Flat
8	4	00060258	Shim, Scraper, Hanger Bracket
9	2	00060298	Shim, Scraper, Hold Down
10	1	00060093	Clevis Weldment, Scraper, Reversing Cylinder
11	1	05022026	Pin, ¼ x 2, Roll, Zinc
12	3	05021202	Bushing, 1½ x 1 x 10 GA, Zinc
13	1	05010773	Bolt, ¾ - 100 x 4½, G8 HHCS, Zinc
14	1	05010816	Bolt, 1 - 8 x 3½, G8, HHCS, Zinc
15	5	05020834	Nut, 1 - 8 GC, Toplock, C&W
16	2	05050006	Bushing, 1 DIA
17	1	05050036	Bushing, ¾, Flange, 30 OD x 1¼ ID
18	1	05010853	Bolt, 1¼ - 7 x 4½, G8, HHCS, Zinc
19	1	05020835	Nut, 1¼ - 7 GC, Toplock, C&W
20	2	05014549	Bolt, ⅝ - 11 x 2, G8, Dome Head, Plain
21	2	05020837	Nut, ⅝ - 11, GC, Top Lock
22	2	05021311	Washer, ⅝, Flat
23	2	05022145	Pin, ⅝ DIA x 5¼, with Handle
24	2	05010595	Bolt, ¼ - 20 x 1½, G8, HHCS, Zinc
25	2	05020899	Nut, ¼ - 20, GC, Top Lock
27	2	05021305	Washer, ¼, Flat, Zinc

**MOUNTING KIT, SCRAPER 1 - 2PIECE X1,1 CYLINDER**

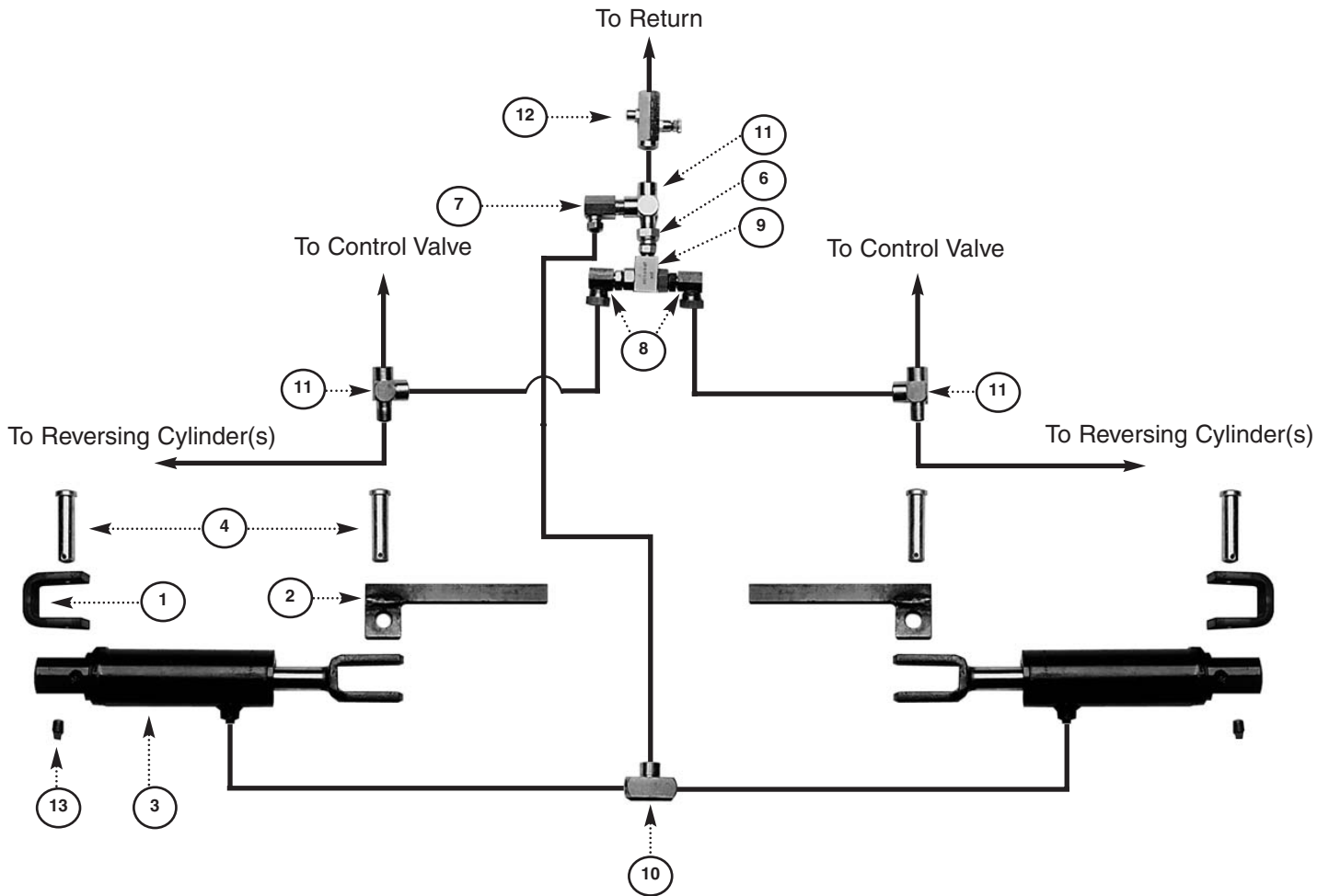
ITEM	QTY	PART #	DESCRIPTION
1	16	05010768	Bolt, 3/4 - 10 x 3, G8, HHCS, Zinc
2	17	05020849	Nut 3/4 - 10, GC, Top Lock
3	17	05021018	Washer, 3/4, Mil-Carb
4	1	05037005	Valve, Relief, Gresen, JL50-400 (Optional)
5	1	05010820	Bolt, 1 - 8 x 5, G8, HHCS, Zinc
7	4	05021314	Washer, 1, Flat
8	4	00060258	Shim, Scraper, Hanger Bracket
9	2	00060298	Shim, Scraper, Hold Down
10	1	00060093	Clevis Weldment, Scraper, Reversing Cylinder
11	1	05022026	Pin, 1/4 x 2, Roll, Zinc
12	3	05021202	Bushing, 1 1/2 x 1 x 10 GA, Zinc
13	1	05010773	Bolt, 3/4 - 100 x 4 1/2, G8 HHCS, Zinc
14	1	05010816	Bolt, 1 - 8 x 3 1/2, G8, HHCS, Zinc
15	5	05020834	Nut, 1 - 8 GC, Toplock, C&W
16	2	05050006	Bushing, 1DIA
17	1	05050036	Bushing, 3/4, Flange, 30 OD x 1 1/4 ID
18	1	05010853	Bolt, 1 1/4 - 7 x 4 1/2, G8, HHCS, Zinc
19	1	05020835	Nut, 1 1/4 - 7 GC, Toplock, C&W
20	2	05014549	Bolt, 5/8 - 11 x 2, G8, Dome Head, Plain
21	2	05020837	Nut, 5/8 - 11, GC, Top Lock
22	2	05021311	Washer, 5/8, Flat
23	2	05022145	Pin, 7/8 DIA x 5 1/4, with Handle
24	2	05010595	Bolt, 1/4 - 20 x 1 1/2, G8, HHCS, Zinc
25	2	05020899	Nut, 1/4 - 20, GC, Top Lock
27	2	05021305	Washer, 1/4, Flat, Zinc

**MOUNTING KIT, SCRAPER 3/4" SC X 1, 1 CYLINDER REVERSING**

ITEM	QTY	PART #	DESCRIPTION
1	16	05010768	Bolt, 3/4" - 10 x 3, G8, HHCS, Zinc
2	17	05020849	Nut, 3/4" - 10, GC, To Lock
3	17	05021018	Washer, 3/4", Flat
4	1	05037005	Valve, Relief, Gresen, JL50-400 (Optional)
5	1	05010820	Bolt, 1 - 8 x 5, G8, HHCS, Zinc
7	4	05021314	Washer, 1, Flat
8	4	00060258	Shim, Scraper, Hanger Bracket
9	2	00060298	Shim, Scraper, Hold Down
11	1	00060093	Clevis Weldment, Scraper, Reversing Cylinder
12	1	05022026	Pin, 1/4" x 2, Roll, Zinc
13	3	05021202	Bushing, 1 1/2" x 1 x 10 GA, Zinc
14	1	05010773	Bolt, 3/4" - 100 x 4 1/2", G8, HHCS, Zinc
15	1	05010819	Bolt, 1 - 8 x 3 1/2", G8, HHCS, Zinc
16	5	05020834	Nut, 1 - 8GC, Toplock, C&W
17	2	05050006	Bushing, 1DIA
18	1	05050036	Bushing, 3/4" Flange, 30 OD x 1 1/4" ID
19	1	05010853	Bolt, 1 1/4" - 7 x 4 1/2", G8, HHCS, Zinc
20	1	05020835	Nut, 1 1/4" - 7 GC, Toplock, C&W
21	4	05014549	Bolt, 5/8" - , G8, Dome Head, Plain
22	4	05020837	Nut, 5/8" - 11, GC, Top Lock
23	4	05021311	Washer, 5/8", Flat
24	1	05043066	Valve, Cushion Relief, .875-14 ORB

# HYDRAULIC LOCK KIT

## Plumbing Diagram & Parts List

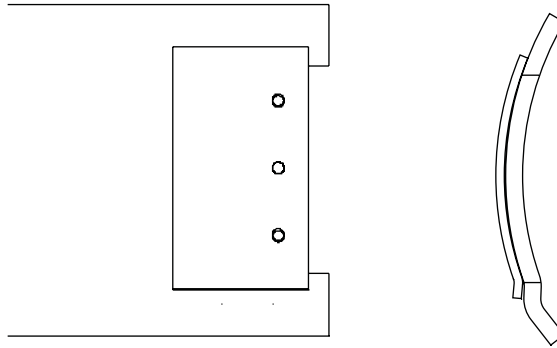


### HYDRAULIC LOCK KIT

ITEM	QTY	PART #	DESCRIPTION
1	2	00060639	Cylinder Attachment Bracket
2	2	00060309	Slide Weldment, Lock, ¼ Circle
3	2	05010768	Bolt, ¼ - 10 x 3, G8, HHCS, Zinc
4	2	05020271	Nut, ¼ - 10, G8, HHEX, Zinc
5	2	05021384	Washer, ¼-10, G8, Hex, Zinc
3	2	05000090	Cylinder, 2 x 2, SA, Lock, (see page xx)
4	4	05022032	Pin, ¼ x 2¾, Clevis, Zinc
5	4	05022021	Pin, ½ x 1, Cotter
6	1	05037047	Adapter, STR, Swivel, ⅙ - 18, ORB x ⅙ - 18, Female
7	1	05037096	Adapter, 90° - Swivel, ⅙ - 18, Male x ¼ - 18, Female
8	2	05037097	Adapter, 90° - Swivel, ⅙ - 18, ORB x ⅙ - 18, Female
9	1	05037143	Valve, Shuttle, ⅙ - ORB, Porting
10	1	05037158	Tee Adapter, ⅜" Female, (all 3)
11	3	05037159	Tee Adapter, Male Run ⅜" x (2) ⅜" Female
12	1	05037177	Valve, Flow Control Adjustable
13	2	05051419	Breather, ¼", Pipe Thread

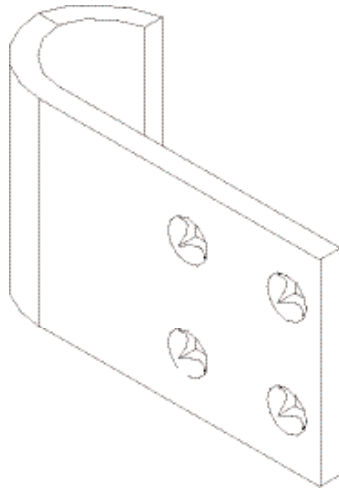


# OPTIONS



**00039631 MOLDBOARD END BIT ASSEMBLY, RH**  
**00039632 MOLDBOARD END BIT ASSEMBLY, LH**

ITEM	QTY	PART #	DESCRIPTION
1	1	00039633	Scraper, Moldboard Weldment, End Bit, RH
	1	00039634	Scraper, Moldboard Weldment, End Bit, LH
2	1	05051265	End Bit, Carbon, Pacal
3	3	05014549	Bolt, $\frac{5}{8}$ - 11 x 2, G8, DH, Plain
4	3	05020270	Nut, $\frac{5}{8}$ - 11, G8, Hex, Zinc
5	3	05021383	Washer, $\frac{5}{8}$ , Lock, Heavy, Zinc



**00039621 CURB GUARD ASSEMBLY**

ITEM	QTY	PART #	DESCRIPTION
1	1	05050000	Guard, 5/8 x 6
2	2	05014555	Bolt, 5/8 - 11 x 3 1/2, Dome Head Plain
3	2	05021383	Washer, 5/8, Lock, Zinc
4	2	05020284	Nut, 5/8 - 11, G8, Hex, Plain

**05037005 CUSHION VALVE**



*Down pressure relief is required on all Monroe underbody scrapers. A 500PSI relief can be incorporated into the truck hydraulic system or a down pressure relief valve can be purchased with the underbody scraper. The relief valve must be installed to prevent premature failure of the actuating cylinders and/or the underbody scraper.*

## HOW TO ORDER PARTS

To order or inquire about replacement parts, please contact the distributor or store that the product was purchased through. To speed the information flow, please have the follow information ready:

- Model Number
- Serial Number
- Part Number and/or description as per the parts manual
- Quantity needed

For further information about **Monroe Truck Equipment** replacement parts, please call 800-880-0109 and ask for **Snow & Ice Parts Sales**.

## RETURN POLICY

Merchandise returned to **Monroe Truck Equipment** must have a Warranty Service Request (WSR) form filled out completely and signed by authorized personnel. To get your WSR form, call 800-880-0109. For whole goods, ask for **Snow & Ice Sales**. For replacement parts, ask for **Snow & Ice Parts Sales**. All returned items are subject to a 15% restocking fee and must be sent freight prepaid!

## MONROE TRUCK EQUIPMENT, INC. WARRANTY SNOW & ICE CONTROL PRODUCTS

**Monroe Truck Equipment, 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 original installation, and is returned to us within 30 days of the discovered defect, we will (at our option) repair or replace the defective part. This warranty does not apply to damage resulting from misuse, neglect, accident, improper installation, normal wear items or lack of maintenance. This warranty is exclusive and supersedes all other warranties, whether expressed or implied. **Monroe Truck Equipment, 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.

All engines, pumps, motors, cylinders and valves are warranted by their manufacturer and not by **Monroe Truck Equipment, Inc.**. The manufacturer's warranty will apply to these parts. Electrical and hydraulic components are not to be disassembled without the express written permission of Monroe Truck Equipment. Use of replacement parts other than original equipment voids this warranty.

All defective parts returned must be accompanied by the model number, serial number, date installed, date of defect, description of defect, and the name of the distributor from whom it was purchased. All warranty claims must have prior written approval from **Monroe Truck Equipment, Inc.**

***Please return the warranty registration card that accompanies this manual to confirm receipt of this parts catalog and acknowledge the information contained within. Failure to return the attached card may result in a voided warranty.***



1051 West 7<sup>th</sup> Street  
Monroe, WI 53566  
608-328-8127 ~ Fax: 608-328-4278

## Warranty Policy

### Uninstalled Parts and Equipment Provided by Monroe Truck Equipment

Monroe Truck Equipment will provide the following limited warranty for a period of one year to the original purchaser of all uninstalled goods provided by Monroe Truck Equipment:

**LIMITED WARRANTY:** All goods provided by Monroe Truck Equipment (MTE) will be free from defects in material and workmanship for a period of one year from the date of purchase by the original purchaser. This limited warranty shall be the sole and exclusive remedy for any such product found to be defective. This limited warranty supercedes all previous warranties and is exclusive and in lieu of all other warranties, whether expressed or implied.

This limited warranty applies only to parts or accessories manufactured by MTE and/or provided by same. Except with respect to title, this limited warranty does not pertain to parts or accessories not manufactured and/or provided by MTE, regardless of whether such parts or accessories were selected and/or recommended by MTE. MTE will, as a service to the buyer, pass on any warranties received from the original manufacturer of MTE provided parts and/or accessories.

MTE will not under any circumstances be liable for any incidental or consequential damages whether in tort, contract, or otherwise, for any bodily injury, death, property damage, loss of use, or loss of income resulting from or in any way arising out of any goods provided by MTE, or their sale, use, or manufacture.

Any warranty claim deemed to be arising from the result of misuse, abuse, neglect, accident, improper installation, lack of maintenance, act of war (whether declared or otherwise), or act of God will be denied. Any repair or modification by the buyer or any third party, without the prior written consent of MTE, will void any possible warranty compensation. Any damage deemed to be the result of abnormal operation will not be compensated by this warranty.

Normal or special maintenance items such as fuels, fluids, tires, belts, hoses, filters, air cleaners, light bulbs, and any other items subject to normal wear and tear that are supplied in connection with goods provided by MTE are not allowed under this warranty.

All engines, pumps, cylinders, valves, and motors are warranted by their manufacturer and not by Monroe Truck Equipment. The manufacturer's warranty will apply to these parts. Electrical and hydraulic components are not to be disassembled without the express written consent of MTE. Any disassembly of MTE provided components without prior authorization will void the applicable warranty.

Monroe Truck Equipment shall be the sole and final determining authority as it applies to the administration of this warranty policy. Purchaser acknowledges receipt of Monroe Truck Equipment Warranty Policy and agrees to be bound by same.



GLOBAL SOLUTIONS  
ARMORED VEHICLES ~ SPORT TRUCK CONVERSIONS  
MUNICIPAL SNOW & ICE CONTROL ~ FIRE APPARATUS  
PICKUP TRUCK ACCESSORIES ~ TRUCK EQUIPMENT/MODIFICATIONS





1051 West 7<sup>th</sup> Street  
Monroe, WI 53566  
608-328-8127 ~ Fax: 608-328-4278

Any and all warranty claims must be forwarded to MTE within 10 days of defect discovery. A copy of the original Monroe Truck Equipment invoice as well as the manufacturer's model number, serial number, and date of installation must accompany all correspondence regarding said claims. MTE will, at their option, choose whether to repair or replace the defective part unless otherwise specified by the original manufacturer of said part.

### **Procedures for Warranty Claims Notification**

For submission of any warranty claim please contact Monroe Truck Equipment – Warranty Department at 800-356-8134

The following documentation will be needed when you call for initial warranty authorization:

1. A copy of the original MTE invoice.
2. Make, Model, and VIN or Serial Number of the equipment involved.
3. Part number and serial number of the part in question.
4. A complete description of the problem.

The following must accompany any claim submitted to Monroe Truck Equipment:

1. Documented photographs of any physical damage.
2. Inspection notes by MTE personnel or MTE authorized 3<sup>rd</sup> party.
3. Authorization number issued by Monroe Truck Equipment – Warranty Department.

**Defective parts must be returned to Monroe Truck Equipment (freight prepaid) within 30 days of issuance of Authorization Number.**

**Monroe Truck Equipment reserves the right to void any warranty for failure to comply with Monroe Truck Equipment Warranty Policy.**

**This policy is effective October 11, 2012**

