

Parts & Service Manual for FMB Scraper



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General Information

- Use only Monroe Truck Equipment O.E.M. replacement parts. Failure to do so will void the warranty.
- 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.
- Replacement parts listed in this manual reflect the most common items for this
 product. 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 the parts manual at any time.

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 available:

- Model Number
- Serial Number
- Part Number and/or Description of the Part
- Quantity Needed

For further information about Monroe Truck Equipment replacement parts, please call 877-834-9049.

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 for whole goods, call Snow & Ice Sales at 800-880-0109.

To get your WSR form for replacement parts, call Snow & Ice Warranty/Returns at 608-329-8544.

All returned items are subject to a 15% restocking fee and *must be sent freight pre-paid*.

Safety Instructions

- Read all safety, installation and maintenance instructions completely before operating this equipment.
- Keep all personnel clear of moving parts while equipment 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 the 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.
- When installing a scraper, be sure to use a hoist with a proper load rating.

Scraper Weights:

FMB-3510	1,800 lbs.
FMB-3511	1,850 lbs.
FMB-3512	1,900 lbs.

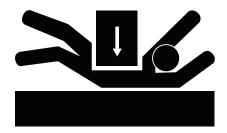
 Before installation of this scraper, or before performing maintenance to the scraper, be sure to set the parking brake, chock the rear wheels and remove the key from the ignition switch.

Cylinder Operating Safety Procedures

- Down pressure relief is required on all Monroe Underbody Scrapers. A 500 PSI 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.
- System pressure should not exceed 1,850 PSI for the power reverse cylinder(s) or 1,850 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, cause possible injury, and will void the warranty.



Maintenance Instructions



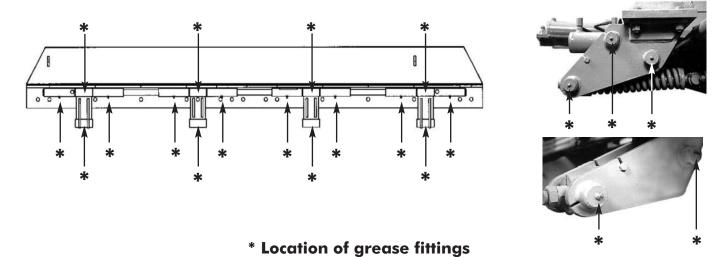
WARNING: Before working under the vehicle or around the scraper, lower the moldboard to the ground, shut off the truck engine and remove the keys from the ignition. Prevent accidental startup and operation of the scraper to avoid personal injury.

In Season:

- Re-torque all fasteners after the first 8 house of use.
- Check for loose, damaged and missing fasteners before each use.
- Inspect and re-torque all fasteners at the beginning of each plowing season.
- Lubricate grease fittings every 10 hours during normal use and more often during heavy use. See page 5 for grease fitting locations.
- Tighten all hydraulic fittings after the first 8 hours of use.
- Inspect hydraulic fittings for leaks every week and tighten as required. If a hydraulic fitting continues to leak after being tightened, replace the fitting as soon as possible.
- Check the cutting edge for wear after each use. Replace the cutting edge when it wears to within ½" of the moldboard.
- Check the operation of the scraper before each use:
 - Verify that the moldboard has full up and down travel.
 - Verify that the hydraulic down pressure for the moldboard relieves at 400-500 PSI. The down pressure on the moldboard must not be able to unload the front or rear axle to an unsafe degree.
 - Verify that the moldboard rotates freely from stop to stop. Check for broken stops that could allow the moldboard to over-travel and make contact with tire.
 - If the hydraulic valves are operated by cables, verify that the lever(s) and cables operate smoothly and easily and that the lever(s) snap back to center when released.
- Inspect the hydraulic hoses and any electrical wiring for wear or damage every month. Check hoses and wiring attached to moving components closely.
- At the end of each storm event, pressure-wash the underside of the chassis and the horizontal surfaces of the scraper. Removing salt and other chemicals regularly will prolong the life of all components.
- Due to the harsh operating conditions of an underbody scraper, regular inspection and maintenance is critical to safe operation and durability of the scraper. The owner or end user of the scraper must create and enforce the use of an inspection and maintenance schedule.

Maintenance Instructions (Continued)

Grease Fitting Locations



Off Season:

- If the scraper will not be used during the summer, the moldboard can be removed and stored.
- Before disconnecting the hydraulic hoses, raise the moldboard and chain it in the up position. If the moldboard drops unexpectedly, it can cause severe injury to feet and hands.
- When quick-disconnects are separated, cover and cap the ends to prevent the entry of contaminants into the hydraulic system and possible impact damage to the ends.
- The exposed areas on hydraulic cylinder rams should be covered with grease during the storage period. Remove the grease before returning the scraper to service.
- If possible, store the scraper indoors to reduce rusting and UV damage to the hoses.
- Inspect the moldboard and the mounting components on the truck. Make any required repairs immediately so that the scraper is ready to be reinstalled and used at the start of the next winter season.
- When reinstalling the scraper, replace any damaged fasteners and follow the fastener torqueing guidelines for in-season use.
- If the scraper is used for shoulder work during the summer season, continue to follow the inspection and maintenance guidelines given for the in-season period.

Assembly Instructions

NOTICE: This "Safety Check" ✓ symbol is a reminder to follow all safety messages and precautions involved when installing or operating the FMB 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.

Assembly 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!
- 10. 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 crossmember. (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 mechanical lock system is required to prevent cylinder damage. 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.

Figure 1

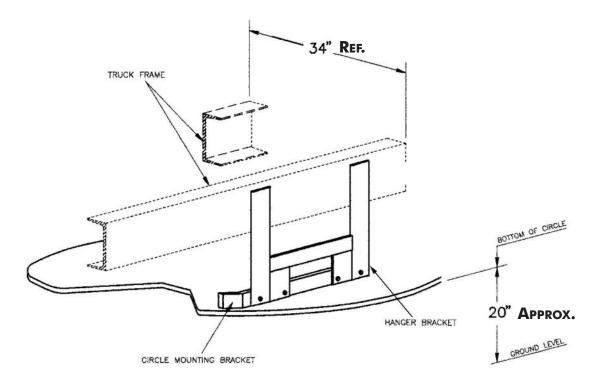


Figure 2

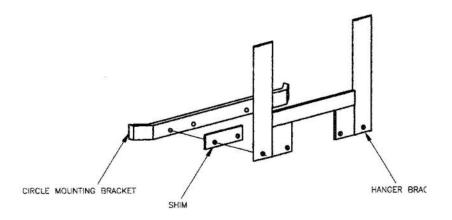


Figure 3 Installation Instructions - MS3500 Reversible

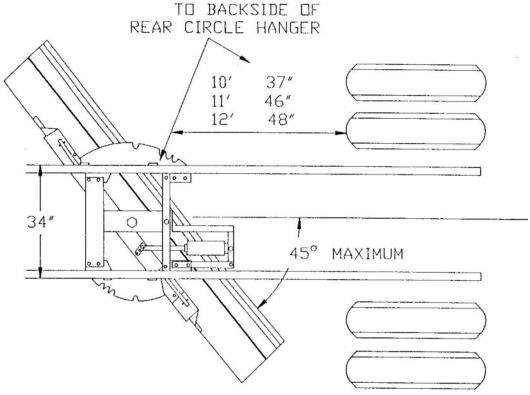
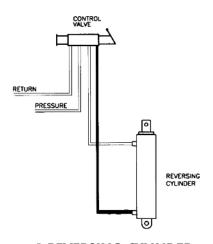
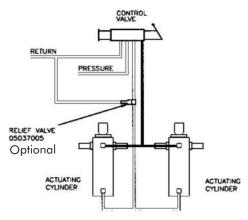


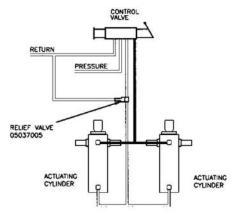
Figure 4



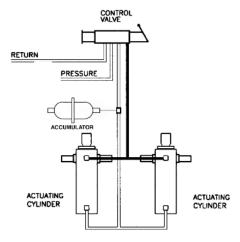
1 REVERSING CYLINDER



ACTUATING CYLINDERS



2 REVERSING CYLINDEFS



ACTUATING CYLINDERS W/ OPTIONAL ACCUMULATOR

Torque Chart

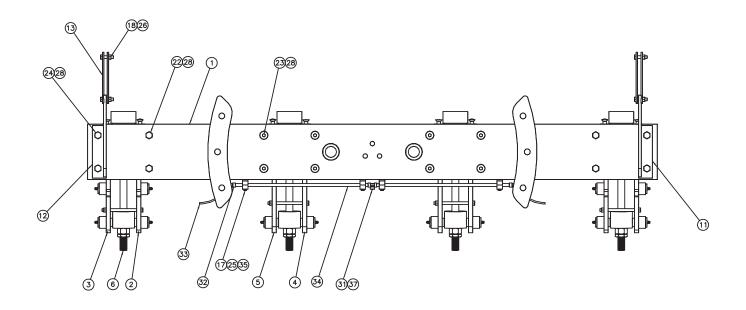
SIZE	GRADE 2	GRADE 5	GRADE 8
1/4-20	50 IN-LBS	75 IN-LBS	9 FT-LBS
3/8-16	15 FT-LBS	23 FT-LBS	35 FT-LBS
1/2-13	35 FT-LBS	55 FT-LBS	80 FT-LBS
5/8-11	75 FT-LBS	110 FT-LBS	170 FT-LBS
3/4-10	130 FT-LBS	200 FT-LBS	280 FT-LBS
1-8	190 FT-LBS	480 FT-LBS	680 FT-LBS
1 1/4-7	380 FT-LBS	840 FT-LBS	1,360 FT-LBS
1		l	

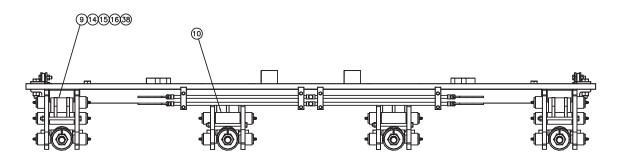
	00100676 SCRAPER, FMB3510, 1X52, DOUBLE, PR2, 4, MS				
ITEM	QTY	PART NUMBER	DESCRIPTION		
1	1	00100678	HGRBD MLDBD ASSY,FMB3510	See page 12	
2	1	00031249-A	CIRCLE WLDMT,1.0x52,DBL,5.0	See page 17	
3	2	05002875	CYLINDER,4x12,DA,SOCATRI	See page 23	
4	2	00060870	HANGER,PL,.75x22,SCPR	See page 18	
5	1	00100679	MTG BOX,SCPR,FMB3510	See page 19	

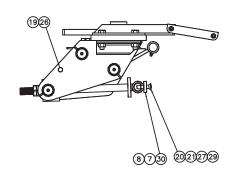
	00055839 SCRAPER, FMB3512, 1X52, DOUBLE, PR2, 5 MS					
ITEM	QTY	PART NUMBER	DESCRIPTION			
1	1	00107338	HGRBD MLDBD ASSY,FMB3512	See page 13		
2	1	00031249-A	CIRCLE WLDMT,1.0x52,DBL,5.0	See page 17		
3	2	05002875	CYLINDER,4x12,DA,SOCATRI	See page 23		
4	2	00060870	HANGER BRKT PL,.750x22.0x25.50	See page 18		
5	1	00018032	MTG BOX,SCPR,FMB12-MI,1.0SCx2	See page 20		

	00100678 HANGERBOARD MOLDBOARD ASSEMBLY, FMB3510			
ITEM	QTY	PART NUMBER	DESCRIPTION	
1	1	00071061	HGRBD KIT,FMB35 See page 15	
2	1	00041872	MLDBD WLDMT,SCPR,FMB10	
3	1	05032045	MLDBD,SCPR,FMB10,.75x10A572-50	
4	2	05002840	CYLINDER,3x4,DA,NIT,POLYPAK See page 24	
5	1	00041822	CE KIT,10',.5x6,DBC See page 16	
6	20	05014701	BOLT .625-11 x 2.00 FSHCS ZC	
7	20	05021113	NUT .625-11 G5 TOPLOCK	
8	17	05021017	WASHER .625 FLAT MIL-CARB SAE	
9	8	05050003	GREASE FITTING .125 NPT STR	
10	1	05050095	TAG,SERIAL NUMBER,STANDARD	

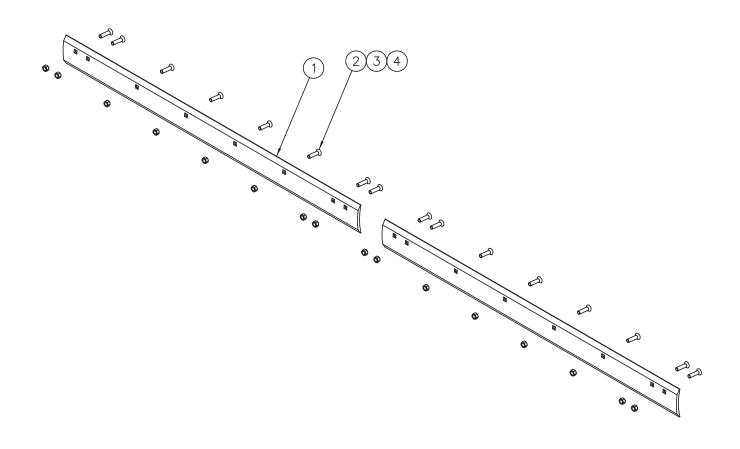
	00107338 HANGERBOARD MOLDBOARD ASSEMBLY, FMB3512				
ITEM	QTY	PART NUMBER	DESCRIPTION		
1	1	00071061	HGRBD KIT,FMB35	See page 15	
2	1	00041874	MLDBD WLDMT,SCPR,FMB12		
3	1	05032046	MLDBD,SCPR,FMB12,.75x10A572-50		
4	2	05002840	CYLINDER,3x4,DA,NIT,SCPR,FMB	See page 24	
5	1	00041824	CE KIT,12 ¹ ,.5x6,DBC	See page 16	
6	22	05014701	BOLT .625-11 x 2.00 FSHCS		
7	22	05021113	NUT .625-11 G5 TOPLOCK		
8	17	05021017	WASHER .625 FLAT MIL-CARB SAE		
9	8	05050003	GREASE ZERK,. 125 NPT STR		
10	1	05050095	TAG,SERIAL NUMBER,1.25x3.5SS		







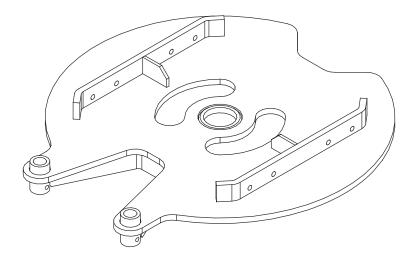
	00071061 HANGERBOARD KIT, FMB35				
ITEM	QTY	PART NUMBER	DESCRIPTION		
1	1	00045815	HGRBD WLDMT,FMB35		
2	2	00060665	BRACKET WLDMT,SPRING,OUTER,RH		
3	2	00060666	BRACKET WLDMT,SPRING,OUTER,LH		
4	2	00060671	BRACKET WLDMT,SPRING,INNER,RH		
5	2	00060672	BRACKET WLDMT,SPRING,INNER,LH		
6	4	00060674	SPRING ASSY,SCPR,FMB		
7	4	00060703	PIN 1.500 DIA x 4.750		
8	4	00060678	SPRING ATTACHMENT BRACKET		
9	2	00041861	LINKAGE WLDMT,OUTER FMB		
10	2	00060660	LINKAGE WLDMT,INNER,SCPR,FMB		
11	1	00060683	BRACKET,LINKAGE,RH,FMB SCRAPER		
12	1	00060684	BRACKET,LINKAGE,LH,FMB SCRAPER		
13	4	00060687	LINKAGE,MLDBD,SCPR,FMB		
14	2	05022000	PIN 1.00 x 3.50 ROUND HEAD ZC		
15	2	05022100	PIN .188 x 1.500 COTTER		
16	4	00060701	RND,MS,1.500 DIAx8.000		
17	8	05010626	BOLT .313-18 x 3.00 G8 HHCS ZC		
18	4	05010693	BOLT .500-13 x 2.00 G8 HHCS ZC		
19	4	05010707	BOLT .500-13 x 7.00 G8 HHCS ZC		
20	4	05014701	BOLT .625-11 x 2.00 FSHCS ZC		
21	4	05014553	BOLT .625-11 x 3.00 DH PLN		
22	4	05010766	BOLT .750-10 x 2.50 G8 HHCS ZC		
23	8	05014710	BOLT .750-10 x 2.50 FSHCS ZC		
24	4	05010768	BOLT .750-10 x 3.00 G8 HHCS ZC		
25	8	05020909	NUT .313-18 GC TOPLOCK C&W		
26	8	05020847	NUT .500-13 GC TOPLOCK C&W		
27	8	05021113	NUT .625-11 G5 TOPLOCK		
28	16	05020849	NUT .750-10 GC TOPLOCK C&W		
29	8	05021383	WASHER .625 LOCK HVY ZC		
30	4	05022007	COTTER PIN, .250x2.500		
31	2	05037158	TEE ADAPTER,.375"FEMALE,ALL 3		
32	4	05037075	FITTING,45-DEG SWIVEL,.375FNPT		
33	4	05037073	HOSE ASSY,.375"ID,22"OAL,2-WR,		
34	4	05050087	PIPE,HYD CROSS,.375x23.5",XH,		
35	4	05050008	CLAMP		
36	4	05039930	FITTING,90DEG,.563-18ORB x .375		
37	2	05038092	FITTING,PLUG,.375"NPT,BLK PIPE		
38	2	05021202	BUSHING 1.50 x 1.00 x 10GA ZC		



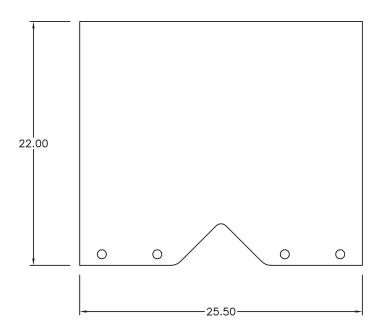
	00041822 CUTTING EDGE KIT, .5 X 6 X 10', DBC				
ltem	Qty	Part Number	Description		
1	2	05031113	Cutting Edge, .5 x 6 x 5', DBC, 1084		
2	14	05014551	Bolt, .625-11 x 2.5, G8, DH, Plain		
3	14	05020270	Nut, .625-11, G8, Hex, Zinc		
4	14	05021383	Washer, .625, Lock, Heavy, Zinc		

	00041824 CUTTING EDGE KIT, .5 X 6 X 12', DBC				
Item	Qty	Part Number	Description		
1	2	05031114	Cutting Edge, .5 x 6 x 6', DBC, 1084		
2	16	05014551	Bolt, .625-11 x 2.5, G8, DH, Plain		
3	16	05020270	Nut, .625-11, G8, Hex, Zinc		
4	16	05021383	Washer, .625, Lock, Heavy, Zinc		

00031249-A CIRCLE WELDMENT, 1 X 52, DOUBLE EAR, MS



00060870 HANGER BRACKET, STANDARD



	00100679 MOUNTING BOX, FMB3510				
ITEM	QTY	PART NUMBER	DESCRIPTION		
1	8	05010768	BOLT .750-10 x 3.00 G8 HHCS ZC		
2	19	05020849	NUT .750-10 GC TOPLOCK C&W		
3	4	05010737	BOLT .625-11 x 1.50 G8 HHCS ZC		
4	4	05010747	BOLT .625-11 x 4.00 G8 HHCS ZC		
5	4	05021383	WASHER .625 LOCK HVY ZC		
6	4	05020837	NUT .625-11 GC TOPLOCK C&W		
7	4	00131692	PIN,REV CYLINDER,MS3500,2.0DIA		
8	4	00031243	retainer,reversing cylinder		
9	4	00060258	Shim,hanger		
10	1	5051715	manual, Scraper, Fmb		
11	1	05051395	CARDBOARD,BOX,12"x8"x7" FOL		
12	2	00045820	SHIM,HOLD DOWN,FMB W/MS3500		
13	2	00045817	HOLD DOWN,FMB,W/MS3500 CIRCLE		
14	2	00045818	SPACER,HOLD DOWN,FMB,W/MS3500		
15	1	05051011	PIN,CENTER,SCPR,5.00		
16	3	05016960	BOLT .750-10 x 3.50 G8 HH TAP		
17	4	05010818	BOLT 1.00-8 x 4.00 G8 HHCS ZC		
18	2	05010820	BOLT 1.00-8 x 5.00 G8 HHCS ZC		
19	6	05020834	NUT 1.00-8 GC TOPLOCK C&W		
20	1	05043066	VALVE,CUSHION,.875-14ORB,30GPM		
21	8	05010766	BOLT .750-10 x 2.50 G8 HHCS ZC		
22	1	00053218	DECAL KIT,SCPR See page 21		

	00018032 MOUNTING BOX, SCRAPER, FMB12				
ITEM	QTY	PART NUMBER	DESCRIPTION		
1	8	05010768	BOLT .750-10 x 3.00 G8 HHCS ZC		
2	19	05020849	NUT .750-10 GC TOPLOCK C&W		
3	4	05010737	BOLT .625-11 x 1.50 G8 HHCS ZC		
4	4	05021383	WASHER .625 LOCK HVY ZC		
5	4	05010747	BOLT .625-11 x 4.00 G8 HHCS ZC		
6	4	05020837	NUT .625-11 GC TOPLOCK C&W		
7	4	00131692	PIN,REV CYLINDER,MS3500,2.0DIA		
8	4	00031243	retainer,reversing cylinder		
9	4	00060258	Shim,hanger		
10	1	05090113	MANUAL,SCPR,FMB35		
11	1	05051395	CARDBOARD,BOX,12"x8"x7" FOL		
12	2	00045820	SHIM,HOLD DOWN,FMB W/MS3500		
13	2	00045817	HOLD DOWN,FMB,W/MS3500 CIRCLE		
14	2	00045818	SPACER,HOLD DOWN,FMB,W/MS3500		
15	1	05051011	PIN,CENTER,SCPR,5.00		
16	3	05016960	BOLT .750-10 x 3.50 G8 HHCS ZC		
17	4	05010818	BOLT 1.00-8 x 4.00 G8 HHCS ZC		
18	2	05010820	BOLT 1.00-8 x 5.00 G8 HHCS ZC		
19	6	05020834	NUT 1.00-8 GC TOPLOCK C&W		
20	1	05043066	VALVE,CUSHION,.875-14ORB,30GPM		
21	8	05010766	BOLT .750-10 x 2.50 G8 HHCS ZC		
22	1	00053218	DECAL KIT,SCPR		

00053218 DECAL KIT					
ltem	Qty	Part Number	Description		
1	1	05052547	Decal, Warning Springs Under Tension		
2	1	05052311	Decal, Quality Check		
3	1	05052628	Deal, Warning, Tighten Fastener		



AWARNING

Springs under tension!
If spring releases while
performing maintenance,
serious injury or death
could result. Use caution
when working in area.

IF DEFACED - ORDER PART NO. 05052547

AWARNING

Possible serious injury and equipment damage from loosening of equipment fasteners.

Fasteners on snow and ice removal equipment may loosen due to vibration and repetitive movements.

Retighten all equipment mounting fasteners after the first 8 hours of use, then check tightness weekly after that. Use a torque wrench when specific torque values are given in the installation manual.

If fasteners need to be replaced, be certain to use the correct size, grade and type to prevent failure.

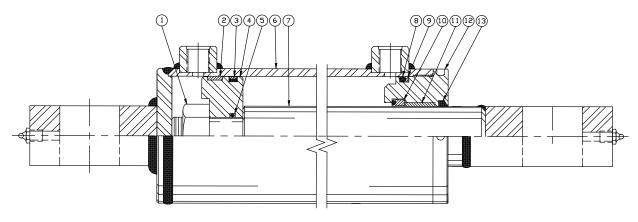
0505262

SNOW & ICE CONTROL
QUALITY CHECK
Inspected by:
05052311

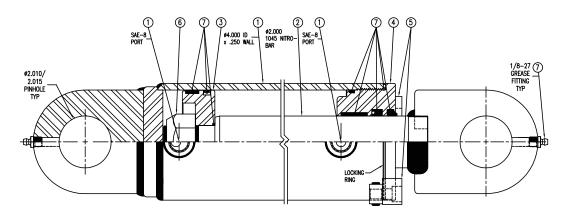
Cylinders

05002875 CYLINDER, 4X12, DA, SOCATRI, REVERSE, SCRAPER

BEST METAL	ITEM	QTY	PART #	DESCRIPTION
	1	1		CASTLE NUT
	2	1	05002955	WEAR RING
	3	1	05002956	PSP SEAL
	4	1	05002856	PISTON (STEEL)
	5	1	05002957	O-RING
	6	1		JACKET ASSEMBLY
	7	1		PISTON ROD
	8	1	05002958	O-RING
	9	1	05002959	BACKUP WASHER
	10	1	05002525	POLY PAK, TYPE B
	11	1		BRONZE LINER
	12	1	05002930	HEADSTOCK
	13	1	05002527	ROD WIPER
			05002855	SEAL KIT (Includes items 2,3,5,8,9,10 & 13)

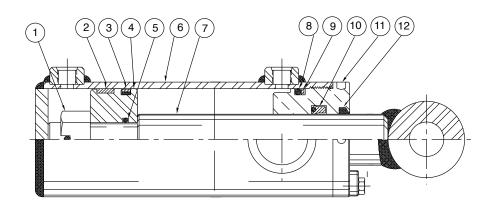


DIREKT FORCE	ITEM	QTY	PART #	DESCRIPTION
	1	1		BODY SUB ASSEMBLY
	2	1		ROD ASSEMBLY
	3	1	05003364	PISTON
	4	1	05003240	GLAND
	5	1	05003365	GLAND LOCK
	6	1		HARDWARE KIT
	7	1	05003265	SEAL KIT, 4.0 BORE, 2.0 ROD

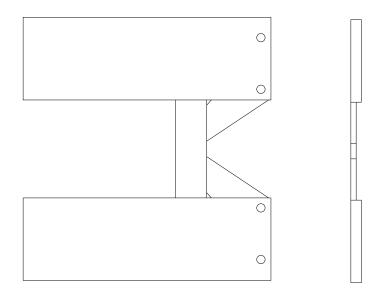


05002840 CYLINDER, 3X4, DA, NIT, POLYPAK

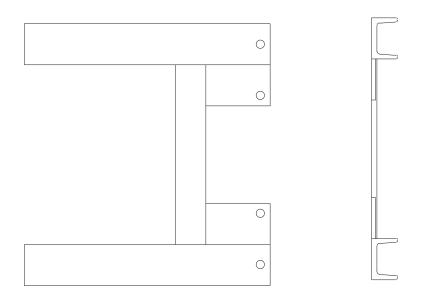
BEST METAL	ITEM	QTY	PART #	DESCRIPTION
	1	1		SLOTTED NUT
	2	1		WEAR RING
	3	1		PSP SEAL
	4	1		PISTON
	5	1		O-RING
	6	1		JACKET ASSEMBLY
	7	1	05003173	PISTON ROD
	8	1		O-RING
	9	1		BACKUP WASHER
	10	1		POLYPAK
	11	1	05003212	GLAND NUT
	12	1		ROD WIPER
		1	05002851	SEAL KIT



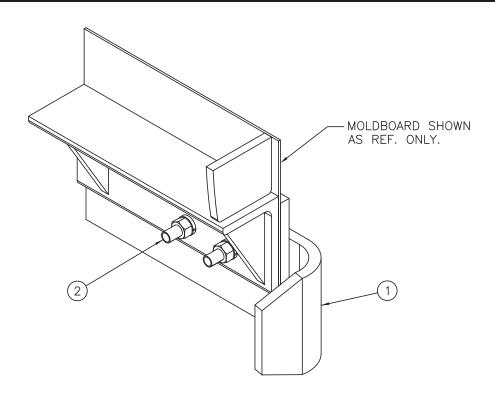
00060263 HANGER BRACKET WELDMENT, 8" X 24



00060254 HANGER BRACKET WELDMENT, 4" X 24" CHANNEL



Optional Equipment



		00039621	CURB GUARD KIT, WRAP AROUND, .625 X 6
Item	Qty	Part Number	Description
1	1	05050000	Guard, Curb, .625 x 6
2	2	05014555	Bolt, .625-11 x 3.5, Dome Head, Plain

Optional Equipment

05037005 RELIEF VALVE, ADJUSTABLE (IN-LINE RELIEF SET AT 500 PSI)



Down pressure relief is required on all Monroe Underbody Scrapers. A 500 psi 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.

Snow & Ice Control Product Warranty







1051 W. 7th Street • Monroe, WI 53566 800-880-0109 • 608-329-8105 • FAX 608-328-8390 E-mail: snowandicecontrol@monroetruck.com • Website: www.monroetruck.com

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 with **ONE YEAR** of the original installation, and is returned to us with 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, Inc.** 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 7th 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



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Uninstalled Parts & Equipment Warranty







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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 3rd 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