

INSTRUCTION MANUAL

For MKS5000R/A-'xx'T

MAGNETIC ROAD/AIRFIELD SWEEPER



TABLE OF CONTENTS

Introduction	Page 2
Operation	Page 3
Cleaning	Page 3
Maintenance	Page 4
Parts List	Page 5
Parts Drawing	Page 6

SHIELDS COMPANY MAGNETICS INC.

MAGNETIC ROAD/AIRFIELD SWEEPER

MODEL #MKS5000R/A-'xx'T

Power – Convenience – Rugged durability. The MKS5000R/A series of Permanent Magnetic Sweepers are the ultimate tools for removing dangerous and damaging tramp metal from roads, airfields, and other large traffic areas. Featuring the largest and strongest permanent magnets available in any road sweeper, the MKS5000R/A Sweeper will allow the sweeping task to be completed quickly and effectively.

Available in configurations to meet practically any sweeping requirement, the MKS5000R/A Sweeper can be mounted on a trailer frame for towing, carried by a forklift, or mounted to a vehicle bumper or hydraulic carriage. Designed for operator convenience, the cleaning mechanism has no handle extensions, locks, or latches. A simple pull on the gas spring assisted release lever will release all attracted material and will hold the magnet open while the operator moves the sweeper away from the refuse pile.

Constructed of heavy steel components, and welded by certified welders, insures that the MKS5000R/A Sweeper will last through many years of demanding service.

OPERATION

Although the MKS5000R/A Sweeper is capable of attracting tramp metal from 6 inches away, that sweeping height should be used only in extreme situations to prevent the magnet housing from contacting the pavement or ground during the sweeping operation. A sweeping height should be selected that is as low as possible while leaving room for the collection of tramp iron on the magnet face. Remember – the lower the sweeping height, the faster the sweeping speed can be. General guidelines for sweeping height and speed are:

<u>Sweeping Height</u>	<u>Max. Speed</u>
2"	16 mph
3"	13 mph
4"	10 mph
5"	7 mph
6"	4 mph

CLEANING

The operator must be aware of the amount of material being collected by the magnet. It is possible to pick up so much tramp metal that it is impossible to open the magnet for easy cleaning. In that case, there is no choice but to manually remove attracted material until it becomes possible to open the magnet. Attempting to force the magnet open by using an extension on the release lever, or by any other forcible means, could damage the lever.

Under normal circumstances, cleaning is accomplished by pulling the gas spring assisted release lever at either end of the magnet housing to its full extent. Full extension of the release lever is necessary for positive release of tramp iron, and for the gas springs to hold the magnet in the open position. With the magnet opened the magnet is moved away from the discharged material. Moving the lever back to the upright position closes the magnet and the sweeping operation may continue.

MAINTENANCE

The MKS5000R/A Sweeper is practically maintenance-free. General maintenance should be performed as follows:

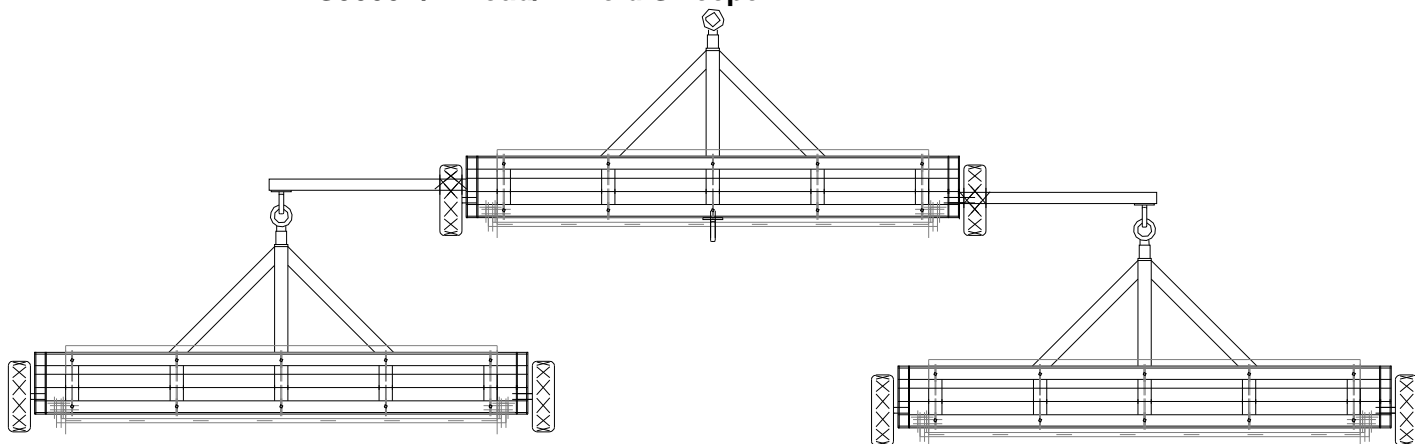
1. Tires should be checked for proper inflation and maintained according to the recommended pressure on the tire sidewall.
2. Wheel bearings should be packed on a regular basis.
3. Bolts securing the hub of each release lever to the magnet shaft should be checked periodically for tightness.
4. The gas springs will eventually wear out and require replacement. Cleaning the sweeper with the gas springs at less than their optimum strength could cause damage to sweeper components.
5. Paint scratches on the sweeper should be touched up as required to prevent rust.

MKS5000R/A-'xx'T

PARTS LIST – Trailer Mount Configuration

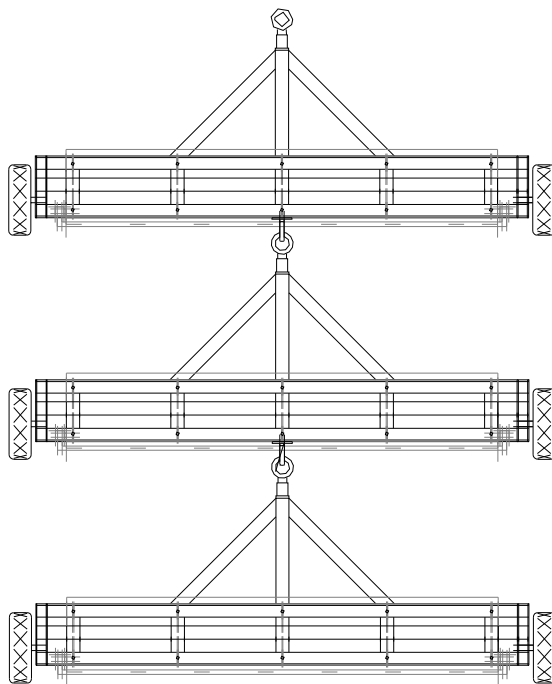
Part	Description	Qty	Part Number
1	Magnet Assembly	1	MKS5000R/A-'xx'
2	Release Lever (right)	1	MKS5000R/A-RLR
3	Release Lever (left)	1	MKS5000R/A-RLL
4	Grip	2	MKS5000R/A-G
5	Gas Spring (pair)	4	MKS5000R/A-'xx'-GST
6	Trailer	1	MKS5000R/A-'xx'-TR
7	Trailer tongue	1	MKS5000R/A-TT
8	Suspension Rod	8	MKS5000R/A-SR
9	Clevis	8	MKS5000R/A-C
10	Stand	1	MKS5000R/A-S
11	Tire	2	MKS5000R/A-T
12	Rim	2	MKS5000R/A-R
13	Hub Assembly	2	MKS5000R/A-HA

MKS5000R/A Road/Airfield Sweeper



MKS5000R/A

Shown in trailer-mount configuration. Center trailer is extended width model, allowing two additional sweepers to be towed by one vehicle. Maximum sweeping width - 24 feet.

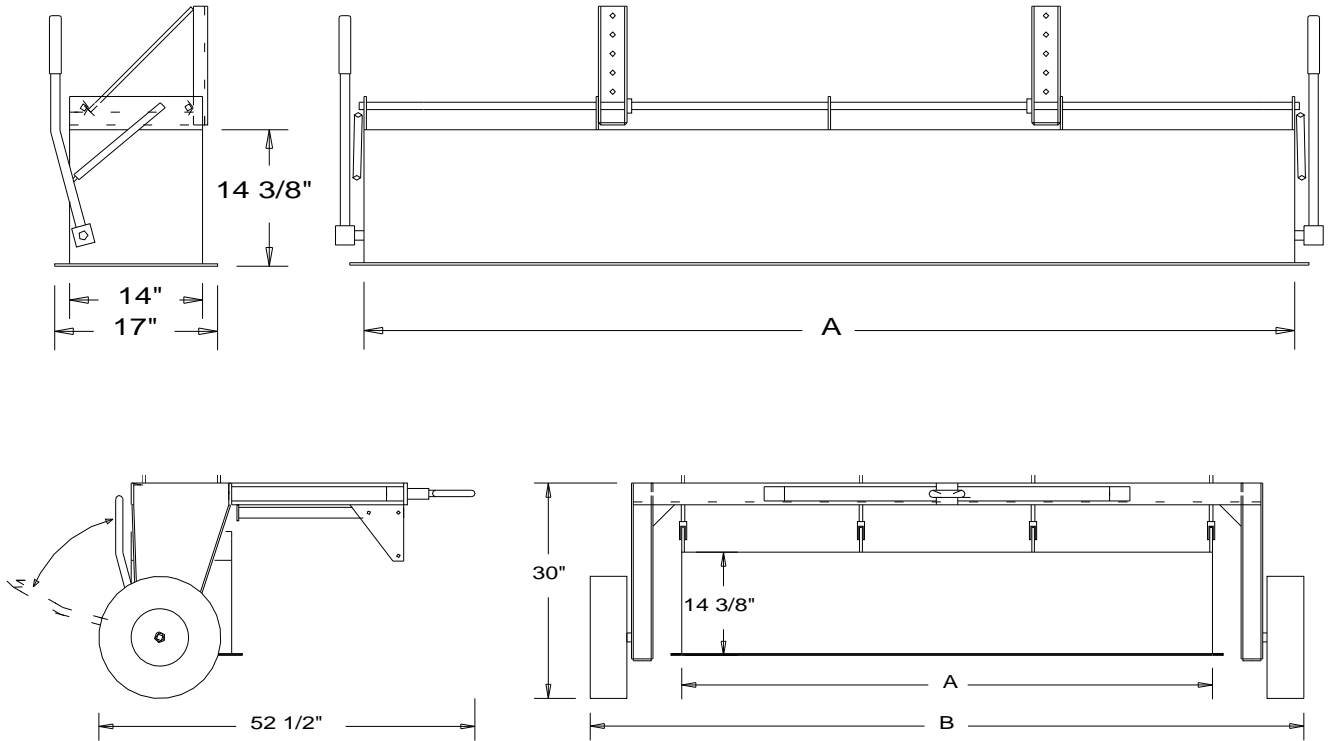


MKS5000R/A

Sweepers may be hitched inline when towing multiple sweepers to and from a job site.

MKS5000R/A Road/Airfield Sweeper

Forklift or Bumper Mount Configuration



Trailer Mount Configuration

	A	B
87 1/2"		
MKS5000R/A-72	72"	99 1/2"
MKS5000R/A-84	84"	111 1/2"
MKS5000R/A-96	96"	123 1/2"

Materials

Magnet Housing	12 Ga mild or stainless steel
Magnets	Hi-Power Ceramic 8A
Trailer	1/4" and 3/8" thick mild steel – fully welded
Coupling	2 1/2" ID tow ring or 2" ball coupling
Tires	4.80-8 2 ply nylon

Sweeping

Sweeping heights from 2" to 6" at speeds of 4 to 15 MPH.