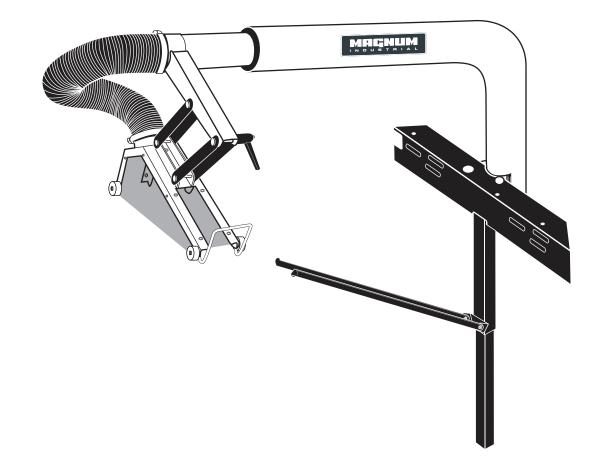


## **MODEL NO.: MI-52100**



# **OPERATING MANUAL**

## RULES for SAFE OPERATION MAGNUM INDUSTRIAL MI-52100 10" OVERARM BLADE GUARD

To help ensure safe operation, please take a moment to learn the how to operate the machine and understand its applications and limitations, as well as potential hazards. KMS Tools and Equipment disclaims any real or implied warranty and holds itself harmless for any injury that may result from the improper use of its equipment.

- Read and follow all warnings and safety guidelines supplied with your table saw and dust collector.
- Do not operate machinery when tired, distracted or under the effects of drugs, alcohol or any medication that impairs reflexes or alertness.
- Ensure your working area is well lit and free of debris.
- Keep safety guards in place and in working order.
- Do not use power tools in wet or damp locations.
- Keep children and visitors at a safe distance. Do not permit them to operate machinery.
- Prevent unauthorized or unsupervised use by child proofing and tamper proofing your shop and all machinery with locks, master electrical switches and switch keys.
- Stay alert! Give your work your undivided attention. Even a momentary distraction can lead to serious injury.
- Fine particulate dust is a carcinogen that can be hazardous to health. Work in a well-ventilated area, wear a dust mask and use a dust collector.
- Do not wear loose clothing, gloves, bracelets, necklaces or other jewelry when machinery is in operation.
- Always wear face, eye, ear, respiratory and body protection devices.
- Remove adjusting wrenches, tools and other clutter from the machine and the table surface before using the machine.
- Keep hands well away from the blade and all moving parts. Use a brush, not hands, to clear away chips and dust.
- Do not work on long stock without adequate support on the outfeed end of the table.
- Do not push or force stock. The tool performs better and more safely when working at the rate for which it was designed.
- Avoid working from awkward or off balance positions. Do not overreach and keep both feet on floor.
- Keep guards in place and in working order. If a guard must be removed for maintenance or cleaning, properly re-attach it before using the tool again.
- Never leave machinery unattended while it is running or with the power on.
- Never stand on machinery. Serious injury could result if the tool is tipped over or if the cutting tool is unintentionally contacted.
- Always disconnect machinery from the power source before servicing or changing accessories such as blades, or before performing any maintenance or cleaning, or if the machine will be left unattended.
- Do not use this blade guard for any purpose other than its intended use. If used for other purposes, KMS Tools and Equipment disclaims any real or implied warranty and holds itself harmless for any injury that may result from that use.

### TOOL OVERVIEW MAGNUM INDUSTRIAL MI-52100 10" OVERARM BLADE GUARD



The Magnum Industrial 10" overarm blade cover features a telescoping boom design that fits most table saws easily. It is compatible with saws equipped with riving knives and it connects to your dust collection system for efficient dust collection at the source. With very little modification, the MI-52100 fits most 10" table saws.

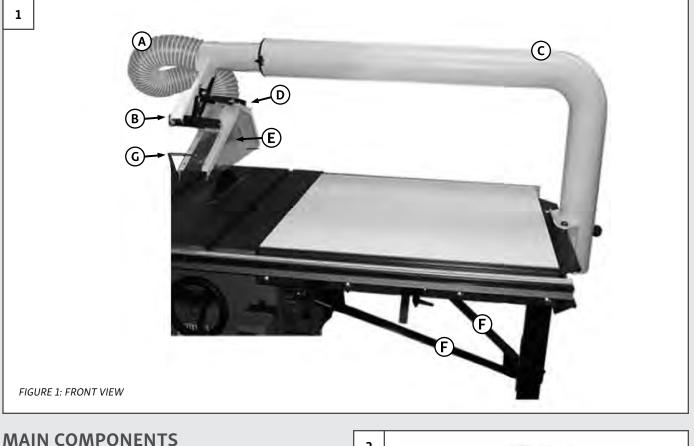
- Replaceable Plexiglas plates allow great visibility and provide excellent protection
- Swings in and out to allow quick access to table insert and blade arbor
- Connects to your dust control system to efficiently remove sawdust and debris at the source

#### **MI-52100 Specifications:**

Maximum blade size:	10"
Boom diameter:	4" (102 mm)
Range of boom:	39-3/4" to 69-5/8" (1,010–1,770 mm)
Boom height (above table):	13-3/8" (340 mm)
Boom height (above floor):	33-3/4"-48-1/2" (860-1,230 mm)
Blade cover dimensions:	3-1/8" x 17" (80 x 432 mm)
Weight:	58 lbs (26.5 kg)

### TOOL OVERVIEW MAGNUM INDUSTRIAL MI-52100 10" OVERARM BLADE GUARD

#### **IDENTIFICATION OF MAIN COMPONENTS**



- (A) DUST HOSE
- (B) SWING ARM
- (C) BOOM ASSEMBLY
- (D) HOOD FRAME
- (E) LENSES
- (F) DIAGONAL BRACES
- (G) BUMPER HANDLE
- (H) BOOM MOUNT CHANNEL
- (I) EXTENSION LEG



- Before you assemble your blade guard, review the parts breakdown and keep it ready for reference.
- Start by removing the parts from the packaging.
- Carefully check the packaging for small pieces before you continue.
- Lay out the parts on a large, clear and unobstructed area and ensure that all parts are accounted for.
- If you have any questions or require further information, please contact the KMS Tools Service Department at 604.395.4134 or email repairs@kmstools.com



FIGURE 3: CONTENTS

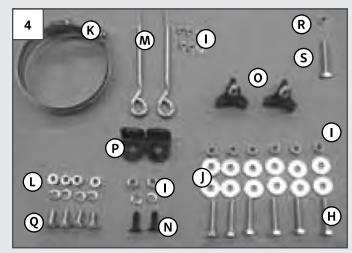


FIGURE 4: HARDWARE BAG CONTENTS

#### **TOOLS FOR SET UP**

- Drill with drill bits
- 5/16", 7/16" and 9/16" wrenches or socket set
- Flathead and Phillips screwdrivers
- Pencil
- 1/8" Allen key

#### LIST OF CONTENTS

Carefully unpack and remove the guard and its components from the box. Ensure the box includes the following:

- HOOD ASSEMBLY (A)
- INNER AND OUTER BOOMS (B)
- DUST HOSE (C)
- EXTENSION LEG (D)
- DIAGONAL BRACES (E)
- BOOM MOUNT CHANNEL (F)
- HARDWARE BAG (G)

Hardware bag contains the following:

- 6 x 1/4"-20 X 1 1/2" L BOLTS (H)
- 16 × 1/4"-20 HEX NUTS (I)
- 12 x 1/4" WASHERS (J)
- 2 × 3" HOSE CLAMPS (K)
- 8 × 1/4" SPLIT LOCK WASHERS (L)
- 2 × 1/4"-20 X 4" EYEBOLTS (M)
- 2 x 1/4"-20 X 3/4" FLAT HEAD BOLTS (N)
- 2 × LOCK KNOBS (O)
- 2 x ANGLE BRACKETS (P)
- 4 × 1/4"-20 X 1/2" L SCREWS (Q)
- 1 × 5/16" NUT (R)
- 1 × 5/16" X 1-1/2" HEX BOLT (S)

#### **BASIC FUNCTIONS**

The MI-52100 is a blade cover and dust collection hood. It's intended for use on 10" table saws and is compatible with saws equipped with riving knives.

Connecting to any 4" dust collection hose, this blade guard removes dust directly above the blade. The boom mounts to the end of your table saw extension table and allows the blade cover to swing out of the way or be removed when needed.

To install the boom without modification, you need at least 39-3/4" between the edge of your extension table and the table saw blade. The maximum distance between the blade and table edge is 69-5/8". For a secure fit, your extension table must a have apron of at least 3". See Figure 5.

## INSTALLING THE HOOD ASSEMBLY TO THE INNER BOOM

Slide the **HOOD ASSEMBLY (A)** over the end of the **INNER BOOM (B)**. Leave approximately 1<sup>"</sup> of the **INNER BOOM** protruding past the mount. See Figure 6.

Insert one 1/4" x 1-1/4" **BUTTON HEAD BOLT (C)** through the two holes on the underside of the hood assembly. See Figure 7. Thread on a 1/4" **LOCK NUT (D)** and tighten.

#### **INSTALLING THE DUST HOSE**

Connect the dust collection hose to the hood and the inner boom using the two supplied **HOSE CLAMPS (E)**. See Figure 8.

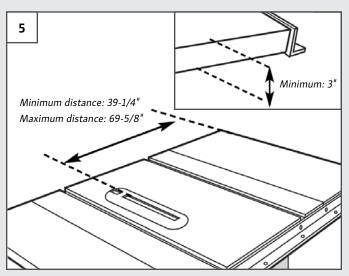
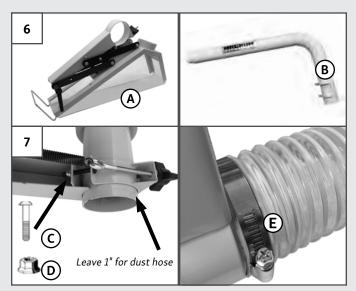


FIGURE 5: REQUIRED TABLE DIMENSIONS



FIGURES 6 and 7: INSTALLING THE HOOD ASSEMBLY

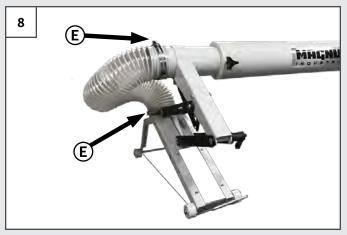


FIGURE 8: CONNECTING THE DUST HOSE

#### ASSEMBLING DIAGONAL BRACES

To assemble the diagonal braces, follow these steps:

- 1. Spin a **1/4" HEX NUT (B)** onto each **EYEBOLT (A)**. See Figure 9.
- Pass one EYEBOLT through the hole in the bent end of each DIAGONAL BRACE (C). Secure the EYEBOLTS to the DIAGONAL BRACES with a LOCK WASHER (D) and another 1/4" HEX NUT (C). Allow the EYEBOLT to protrude 3/4" past the second 1/4" HEX NUT. See Figure 10.
- Fasten a brace mount ANGLE BRACKET (E) to each eyebolt with a 1/4" X 3/4" FLAT HEAD BOLT (F), LOCK WASHER (G) and HEX NUT (H). See Figure 11 for order of assembly. Construct the two brace assemblies so they mirror each other. See Figure 12.

Once you've built the brace assemblies, you can set them aside.

#### INSTALLING BOOM MOUNT ASSEMBLY

- 1. Insert the EXTENSION LEG (I) into the UPPER LEG (J) of the boom mount channel. See Figure 13.
- Using the two supplied LOCK KNOBS (K), secure the extension leg in the upper leg at the desired height. See Figure 14.

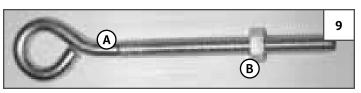


FIGURE 9: THREADING HEX NUT ONTO EYEBOLT

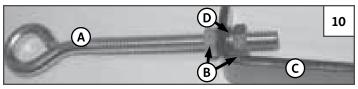
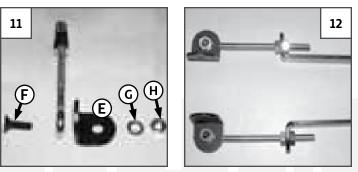
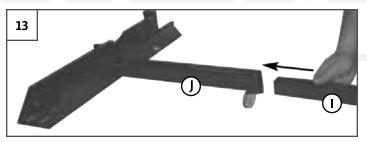


FIGURE 10: INSTALLING EYEBOLT IN BRACE



FIGURES 11 and 12: BRACE ASSEMBLY INSTALLATION ORDER



FIGURES 13: BOOM MOUNT ASSEMBLY

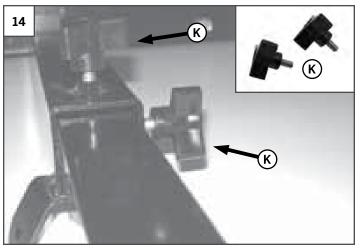


FIGURE 14: LOCK KNOB INSTALLATION

#### INSTALLING THE BOOM MOUNT CHANNEL

 Set the boom mount channel against the edge of your extension table, lining up the **MOUNTING PIN (A)** on the boom mount with the centre of the **BLADE (B)**. See Figure 15.

The **MOUNTING SLOTS (C)** in the boom mount channel are elongated to allow for fine-tune adjustments. Perfect alignment is not critical at this stage.

2. With a pencil, mark the hole placement in the table apron at the centre of each **MOUNTING SLOT (C)** in the boom mount channel. See Figure 16.

If your current extension table includes corner support legs, the legs may need to be removed if they interfere with the hole placement for the boom mount channel.

3. Set aside the boom mount channel and drill holes through the extension table apron at the locations you marked in Step 2.

#### WARNING!

For ideal installation, use bolts in all six mounting slots. Using fewer than four slots (two at each end) is not recommended and can lead to system failure and serious personal injury.

 Secure the boom mount channel to the extension table using the supplied **MOUNTING HARDWARE (D)**. Follow the order shown in Figure 17.

*The supplied mounting hardware fits table aprons up to 3/4" thick. For thicker aprons, longer bolts (not supplied) may be required.* 

#### **INSTALLING DIAGONAL BRACES**

- Attach the straight end of each diagonal brace to the TABS (E) at the lower end of the boom mount support leg. Secure it with two 1/4" x 1/2" BOLTS (F), two LOCK WASHERS (G) and two HEX NUTS (H). See Figure 18.
- 2. Swing the diagonal braces into position beneath the extension table. Mark the holes with a pencil and drill holes to accommodate bolts or screws (not included).
- 3. Fasten the braces to the underside of the table.

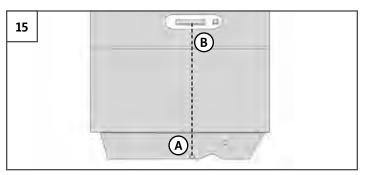


FIGURE 15: ALIGNING THE BOOM MOUNT CHANNEL

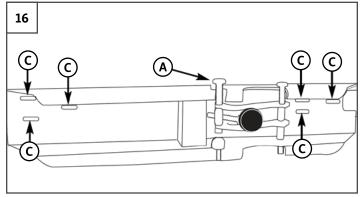


FIGURE 16: MOUNTING SLOT LOCATIONS

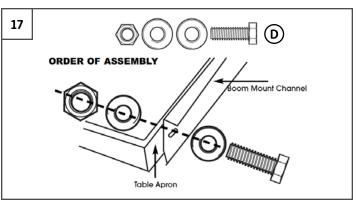


FIGURE 17: BOOM MOUNT CHANNEL INSTALLATION

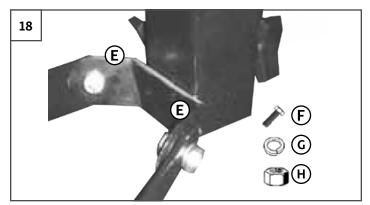
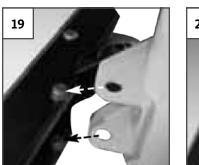
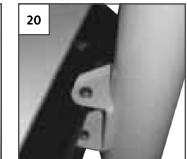


FIGURE 18: DIAGONAL BRACE INSTALLATION

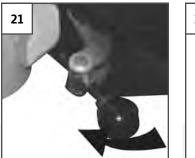
## ATTACHING THE BOOM TO THE BOOM MOUNT CHANNEL

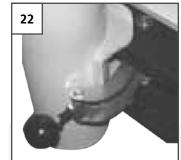
- Place the boom and hood assembly on the pivot pins located on the boom mount channel. See Figures 19 and 20. Swing the arm over the table.
- Secure the locking pin to hold the boom in position. See Figures 21 and 22.
- 3. Loosen the **BOOM CLAMP LOCK KNOB (A)** and extend the boom to position the hood assembly over the blade. See Figure 23
- Lower the hood assembly over the blade. See Figure
  23. Then adjust the boom mount channel position to roughly centre the hood assembly over the blade.
- Tighten the mounting bolts and secure the boom mount channel in position on the extension table. See Figures 24 and 25.
- If you notice sag or if the extension table is not level with the main table, adjust the height of the support leg to support the added weight of the boom/hood assembly. See inset of Figure 26.
- 7. You can adjust the diagonal braces. Tighten or loosen the nuts on the eyebolts as needed to level the boom assembly. See Figure 26.





FIGURES 19 and 20: ATTACHING THE BOOM





FIGURES 21 and 22: SECURING THE BOOM

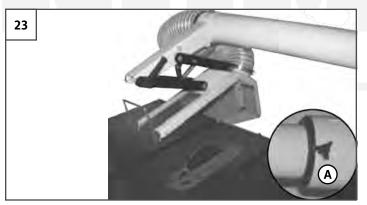
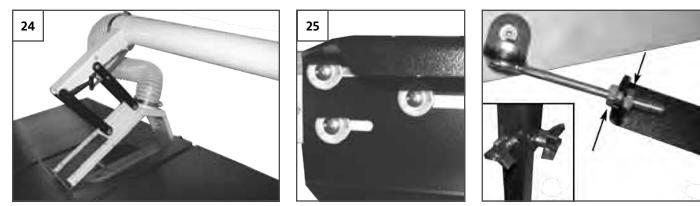
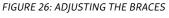


FIGURE 23: POSITIONING THE BOOM

26



FIGURES 24 and 25: POSITIONING THE BOOM





## ADJUSTING THE ASSEMBLY MAGNUM INDUSTRIAL MI-52100 10" OVERARM BLADE GUARD

#### ADJUSTING THE BLADE GUARD ASSEMBLY

You can adjust the resistance or balance of the swing arm assembly by turning the **SPRING KNOB (A)** located at the rear of the swing arm assembly. See Figure 27.

You can lock the hood in any position by tightening the **HOOD LOCK HANDLE (B)** located at the right side of the hood. See Figure 27.

It's best to lock the hood in the upper position when removing or swinging the boom and hood assembly from the saw.

Adjust the length of the telescoping boom by loosening the **BOOM CLAMP KNOB (C)** and sliding the inner boom in or out as required. See Figure 28.

*Do not over-tighten the clamp knob. It takes only a little pressure to clamp the boom securely.* 

Adjust the bottom lock knob on the boom mount channel by loosening the **LOCK NUT (D)** on the threaded lock pin and turn the handle in the desired direction to tighten or loosen the lock. The pin needs to swing just past centre to lock properly. See Figure 29.

To remove the boom assembly from the saw, release the lock pin, swing the boom assembly back and lift it off the pivot pins. See Figures 30 and 31.

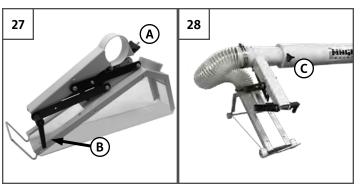
#### ADJUSTING THE PARALLEL BOOM

Move the **HEX HEAD STOP BOLT (E)** in or out as needed to align the boom so it's parallel to the front and back edges of the saw. When the boom is aligned, tighten the **NUT (F)** to secure the bolt. See Figure 32.

#### CONNECTING TO A DUST COLLECTOR

Before starting the table saw, connect to a dust collection system. Connect a 4" dust hose (not included) from your dust collector to the bottom of the boom assembly. See Figure 33.

Check that all connections are sealed tightly to minimize airborne dust. Always turn on the dust collector before starting the table saw and always stop the table saw before turning off the dust collector.



FIGURES 27 and 28: ADJUSTING THE BLADE GUARD AND BOOM

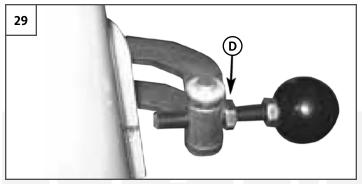
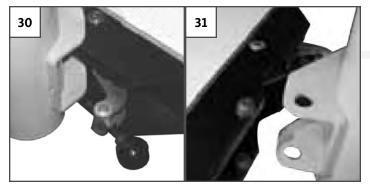


FIGURE 29: ADJUSTING THE BOTTOM LOCK KNOB



FIGURES 30 and 31: REMOVING THE BOOM ASSEMBLY

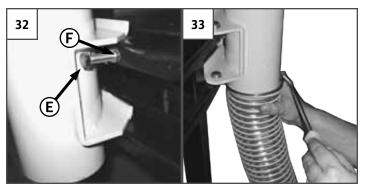
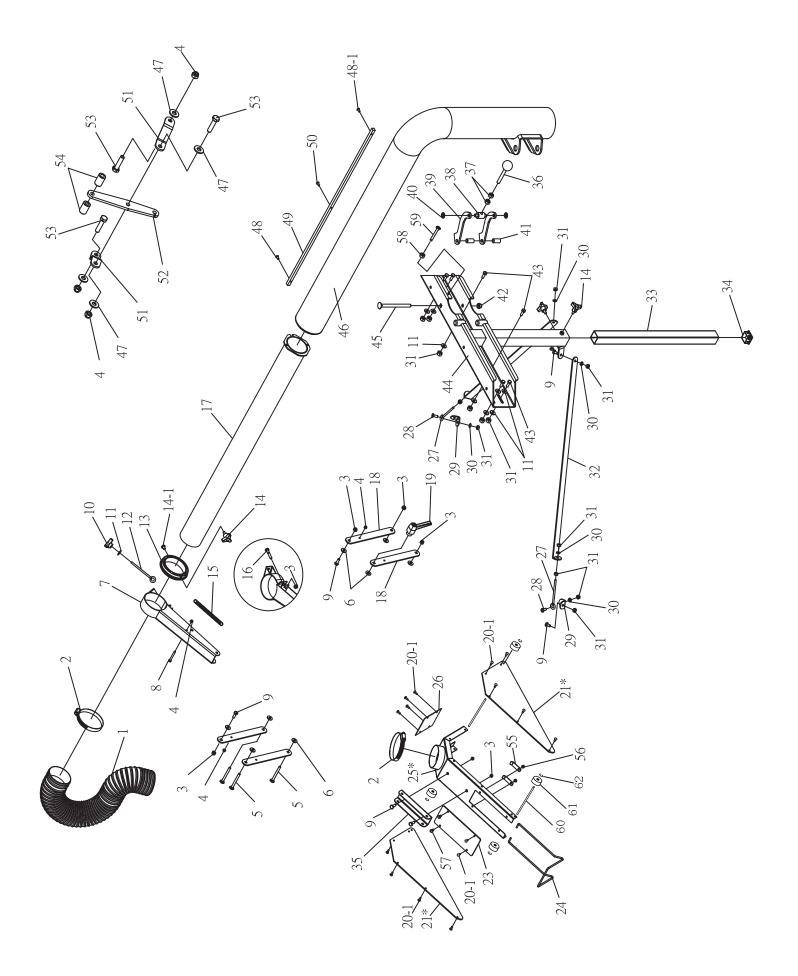


FIGURE 32: ADJUSTING THE BOOM ASSEMBLY FIGURE 33: CONNECTING A DUST COLLECTOR HOSE





#### PARTS LIST MI-52100 & MI-52150

	PARTS LIST MI-52100 & I		
PART NO.	DESCRIPTION	SPECIFICATION	QTY
MI-52100-1	HOSE	3"*720MM	1
MI-52100-2	HOSE CLAMP	3.5"	2
MI-52100-3		1/4"*5MM	7
MI-52100-4		M5	4
MI-52100-5	CARRIAGE BOLT	1/4"*2-1/4"	3
MI-52100-6	PLASTIC WASHER		8
MI-52100-7	SWING ARM		1
MI-52100-8	HEX.HEAD BOLT	M5*45MM	1
MI-52100-9	HEX.HEAD BOLT	1/4"*1/2"	8
MI-52100-10	LOCK KNOB	1/4"	1
MI-52100-11	WASHER	1/4"*18MM	13
MI-52100-12	EYE BOLT		1
MI-52100-13	BOOM CAP		1
MI-52100-14	LOCK KNOB	1/4"*1/2"	3
MI-52100-14-1	PHILLIPS HEAD SCREW	1/4"*3/8"	1
MI-52100-15	SPRING		1
MI-52100-16	HEX.HEAD BOLT	1/4"*1-1/2"	1
MI-52100-17	INNER BOOM	3"	1
MI-52100-18	CONNECTING PLATE		4
MI-52100-19	LOCK HANDLE	1/4"	1
MI-52100-20-1	RIVET		16
MI-52100-21	SIDE LENS		2
MI-52150-21*	SIDE LENS(12" ONLY)		2
MI-52100-23	TOP LENS		1
MI-52100-24	BUMPER HANDLE		1
MI-52100-25	HOOD FRAME		1
MI-52150-25*	HOOD FRAME(12" ONLY)		1
MI-52100-26	REAR LENS		1
MI-52100-27	EYE BOLT		2
MI-52100-28	BUTTON HEAD BOLT	1/4"*3/4"	2
MI-52100-29	BRACE MOUNT ANGLE BRACKET		2
MI-52100-30	LOCK WASHER	1/4"	8
MI-52100-31	NUT	1/4"	16
MI-52100-32	DIAGONAL BRACES		2
MI-52100-33	EXTENSION LEG	32*32MM	11
MI-52100-34	CAP	32MM	11
MI-52100-35	HOOD MOUNT		1
MI-52100-36	BOOM CLAMP KNOB		1
MI-52100-37	NUT	3/8"	2
MI-52100-38	HANDLE PIVOT		1
MI-52100-39	SWIVEL PLATE		2
MI-52100-40	NUT		2
MI-52100-41	SPACER/BUSHING		2
MI-52100-42	LOCK NUT	3/8"*7MM	1

#### PARTS LIST MI-52100 & MI-52150

PARTS LIST WII-52100 & WII-52150				
PART NO.	DESCRIPTION	SPECIFICATION	QTY	
MI-52100-43	HEX.HEAD BOLT	1/4"*1-1/2"	6	
MI-52100-44	BOOM MOUNT CHANNEL		1	
MI-52100-45	CARRIAGE BOLT	1/4"*4"	1	
MI-52100-46	OUTER BOOM		1	
MI-52100-47	WASHER	M5*16*1.0T	4	
MI-52100-48-1	BUTTON HEAD BOLT	M5*25MM	1	
MI-52100-48	BUTTON HEAD BOLT	M5*12MM	1	
MI-52100-49	KEY	5/16"*5/16"*710MM	1	
MI-52100-50	BUTTON HEAD BOLT	M5 X 10MM	1	
MI-52100-51	CONNECTING PLATE		2	
MI-52100-52	HANGER		1	
MI-52100-53	HEX. HEAD BOLT	M5 X 10MM	3	
MI-52100-54	PLASTIC TUBE		2	
MI-52100-55	BUMPER HANDLE PLATE		2	
MI-52100-56	LOCK NUT M4		2	
MI-52100-57	SCREW	M4X10	2	
MI-52100-58	NUT	5/16"	1	
MI-52100-59	HEX. BOLT	5/16" X 1-1/2"	1	
MI-52100-60	FRONT AXLE		2	
MI-52100-61	GUARD WHEEL		4	
MI-52100-62	AXLE CLIP		4	
			-	