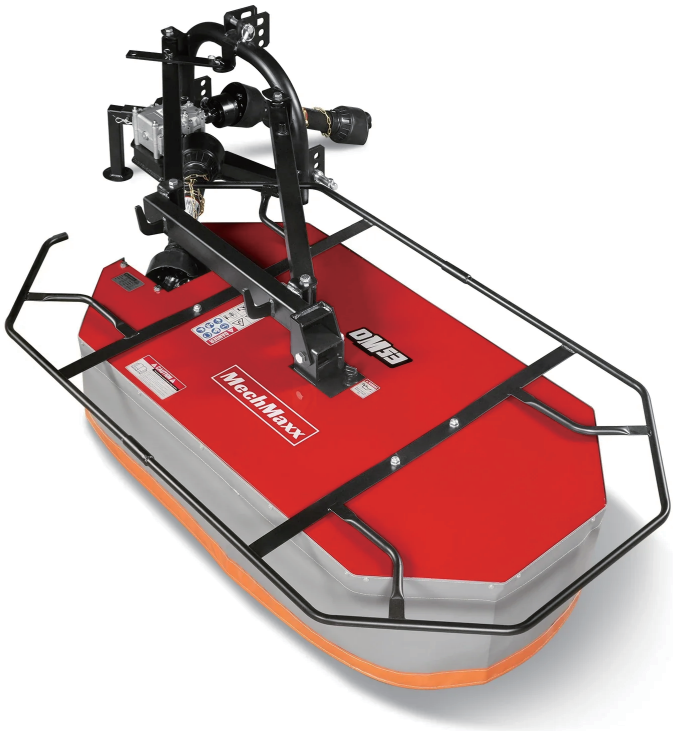
MechMaxx
RELIABLE EFFICIENT VALUE

3-POINT DRUM MOWER

SKU	150235
Model	**DM53**



OPERATOR'S MANUAL

This manual contains important safety precautions. Read and understand this manual carefully before using the product. Failure to follow these instructions may result in serious injury.

The specifications, descriptions, and illustrations in this manual are as accurate as possible at the time of publication, but are subject to change without notice.

Keep this manual with the product for future reference.

INTRODUCTION

Before operating the machine, please read this manual carefully and make sure you understand all safety warnings, assembly instructions, operating procedures, maintenance requirements, and troubleshooting information. Proper assembly, safe operation, and regular maintenance will help ensure reliable performance, extend the service life of the machine, and reduce the risk of personal injury or equipment damage.

The illustrations and specifications in this manual are for reference only. The actual product may vary slightly due to model configuration, production updates, or technical improvements. If you have any questions during assembly, operation, or maintenance, stop using the machine and contact your dealer or service representative for assistance.

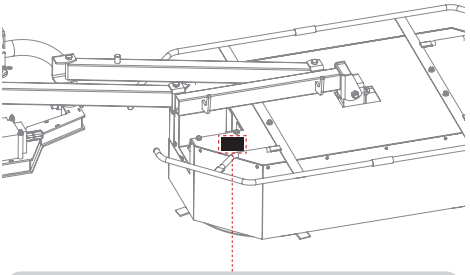
This machine is designed for specific applications only. We strongly recommend that this machine not be modified or used for any application other than its intended purpose. If you have any questions regarding a particular application, DO NOT use the machine until you have contacted us to determine whether the application can or should be performed with this product.

Ordering Parts

Use only genuine MechMaxx parts when servicing or repairing this machine. Replacement parts manufactured by other companies may fit this machine, but they may present potential safety hazards. Replacement parts can be purchased from your authorized MechMaxx dealer.

- The serial number of your machine
- The part number
- The part description
- The quantity needed

SCAN THE QR CODE TO CONTACT US



MechMaxx
RELIABLE EFFICIENT VALUE

DRUM MOWER

Model:		Cutting width:	
Tractor Power Required:		NO. Of Blades:	
PTO Speed:		NO. Of Drums:	
Serial No.:			

www.mechmaxx.com

Safety Definitions

⚠ DANGER!

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ WARNING!

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION!

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

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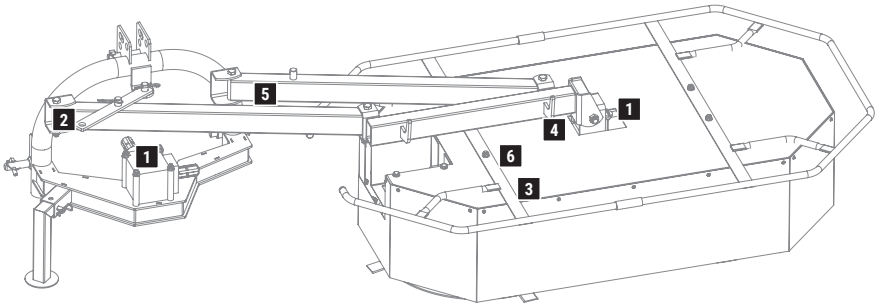
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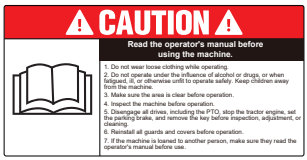
SPECIFICATIONS

Model	DM53
Tractor Power Required	25-40 HP
Working Width	53 in
Avg. Cutting Height	2 in
Number Of Drums	2
Number Of Blades	8
Working Capacity	3.34 acre/h
PTO Shaft RPM	540 RPM
Driveline Shaft Length	T2S-720-RA1; 28.3-34.2 in
Spline End	1.375 in, Z6
3-Point Hitch	CAT 1
Gear Fluid Capacity Of Gear Box	0.72 gal
Gearbox Oil Type	SAE 85W-90 API GL-5
Dimensions (L x W x H)	98 x 27 x 39 in
Finish	Powder Coat Paint / Galvanized Steel
Warranty	1 Year
Shipping Box	57 x 38 x 23 in
Weight (N.W./G.W.)	408 / 474 lbs

SAFETY SIGNS

The SAFETY SYMBOL alerts you to a potential personal injury hazard. When you see this symbol, be alert and carefully read the message that follows it. In addition to equipment design and configuration, hazard control and accident prevention depend on the awareness, care, judgment, and proper training of personnel involved in the operation, transport, maintenance, and storage of the equipment.



	LABEL	MEANING
1		WARNING! Oil must be added before first use.
2		WARNING! The PTO driveline MUST be measured and cut, if required, according to the Owner's Manual. Failure to do so may damage both the tractor and the implement.
3		CAUTION! Read and understand the operator's manual before use. Wear proper clothing and do not operate the machine when intoxicated, fatigued, ill, or pregnant. Keep children away from the machine. Check the surrounding area and inspect the machine before operation. Before inspection, adjustment, or cleaning, disengage all drives, including the PTO, and stop the engine. Reinstall all guards and covers before use. When lending the machine to others, ensure they read the manual carefully before operating.

	LABEL	MEANING
4		DANGER! Read the manual before operation. Keep hands, feet, and bystanders away from moving parts. Wear proper personal protective equipment.
5		CAUTION! To avoid injury or machine damage, operate only with a 540 rpm PTO.

These safety signs and symbols are designed to help you operate the Drum Mower safely.

1. Keep all safety labels clean and legible.
2. Replace any damaged or missing safety labels.
3. When replacing a component that carries a safety label, install the correct replacement label specified by MechMaxx. When ordering replacement components, make sure the required safety labels are included.

IMPORTANT SAFETY INFORMATION

Safety Always

Thoroughly read and understand the instructions given in this manual before operation. Refer to the "Safety Decal", read all instructions noted on them.

Do not allow anyone to operate this equipment who has not fully read and comprehended this manual and who has not been properly trained in the safe operation of the equipment.

1. Operator should be familiar with all functions of the unit. Operate implement from the driver's seat only.

2. Make sure all guards and shields are in place and secured before operating the implement.

3. Do not leave tractor or implement unattended with engine running.

4. Dismounting from a moving tractor could cause serious injury or death.

5. Do not stand between the tractor and implement while the tractor is moving or the engine is running. Before entering the hitch area, set the parking brake, stop the engine, and remove the key.

6. Keep hands, feet, and clothing away from power-driven parts.

7. Wear snug fitting clothing to avoid entanglement with moving parts.

8. Watch out for wires, trees, etc., when raising implement. Make sure all persons are clear of working area.

9. Avoid excessively sharp turns, especially with the PTO engaged. Excessive driveline angles or contact between the mower and tractor may cause equipment damage or serious injury.

Transport Machinery Safely

1. Comply with state and local laws.

2. Maximum transport speed for implement is 18 mph. Do not exceed. Never travel at a speed which does not allow adequate control of steering and stopping. Some rough terrain requires a slower speed.

3. Disengage the PTO and allow all rotating parts to stop before raising the mower to the transport position.

4. Raise and secure the mower in the transport position. Maintain adequate ground clearance and reduce speed on rough, uneven, or hilly terrain.

Practice Safe Maintenance

1. Understand the procedure before performing any work. Use the proper tools and equipment. Refer to the Operator's Manual for additional information.

2. Work in a clean dry area.

3. Lower the implement to the ground, put tractor in park, turn off engine, and remove key before performing maintenance.

4. Allow implement to cool completely.

5. Inspect all parts. Make sure parts are in good condition and installed properly.

6. Remove buildup of grease, oil or debris.

7. Remove all tools and unused parts from implement before operation.

8. Prepare for emergencies

9. Be prepared if a fire starts.

10. Keep a first aid kit and fire extinguisher handy.

11. Keep emergency numbers for doctor, ambulance, hospital and fire department near phone.

Wear Protective Equipment

1. Protective clothing and equipment should be worn.

2. Wear clothing and equipment appropriate for the job. Avoid loose fitting clothing.

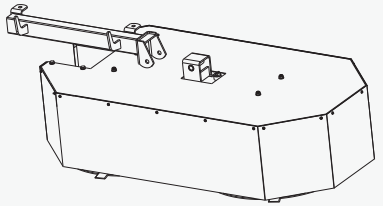
3. Prolonged exposure to loud noise can cause hearing impairment or hearing loss. Wear suitable hearing protection such as earmuffs or earplugs.

4. Operating equipment safely requires the full attention of the operator. Avoid wearing radio headphones while operating machinery.

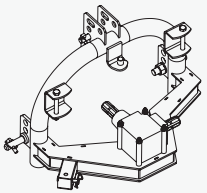
Always remain alert and follow safe operating practices, even if certain precautions are not specifically covered in this manual. Operate the machine only as instructed.

CONTENTS SUPPLIED

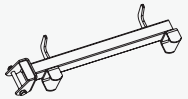
Before assembling the Drum Mower, verify that all parts and hardware are included and that the quantities are correct.



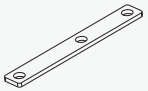
Main Frame **X1**



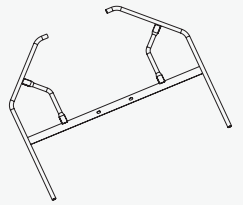
Hitch Assembly **X1**



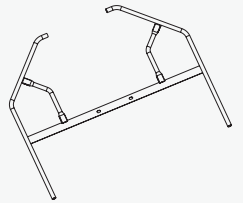
Swing Arm **X1**



Adjusting Plate **X1**



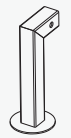
Right Guard Cover **X1**



Left Guard Cover **X1**



Vertical Arm **X2**



Parking Leg **X1**

*If any parts are missing or damaged, please contact us.

ASSEMBLY INSTRUCTIONS

Assembly procedures vary by model. If assembly is required, use appropriate lifting equipment and follow safe handling practices. Loosely assemble components first, align parts, and then tighten hardware to final torque.

The exploded views and complete parts lists are provided in the Parts Diagrams and Parts Lists section at the end of this manual. The figures in this section are for assembly reference only.

Preparation Before Assembly

- Park the tractor and implement on a firm, level surface. Set the parking brake, shut off the engine, and remove the key.
- Check all parts and hardware against the parts lists before assembly.
- Do not place hands, feet, or any part of the body under unsupported components.
- Loosely assemble components first, then tighten hardware after all parts are aligned. All pins, lock pins, retaining clips, and lynch pins must be fully inserted and secured.
- Some bolts, nuts, pins, or washers may be shipped pre-installed in the corresponding holes. Remove and reinstall them as required during assembly.

Note: All required bolts and fasteners are pre-installed on the machine at the factory. Remove them as needed during assembly and reinstall them according to the following instructions.

Protective Cover Assembly

1. Align the tubes of the left and right guard covers.
2. Insert the Right Guard Cover into the Left Guard Cover, as shown in the figure. (See Figure 1)

A	**Hex lock nut M10**	**X4**	**C**	**Hex bolt M10 X 50mm**	**X4**
B	**Flat washer 10**	**X8**			

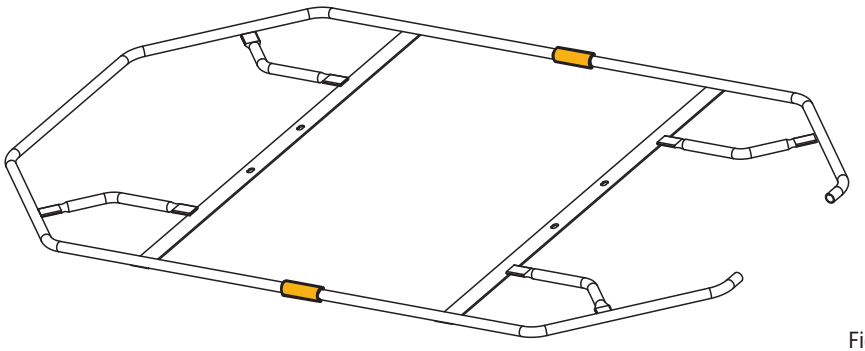


Figure 1

3. Align the four holes on the guard cover with the holes on the Main Frame.

4. Secure the cover to the hood using Hex Lock Nuts M10, Flat Washers 10, and Hex Bolts M10 × 50 mm. The heads of the four bolts should be positioned under the hood, while the lock nuts should be positioned on top of the guard cover. (See Figure 2)

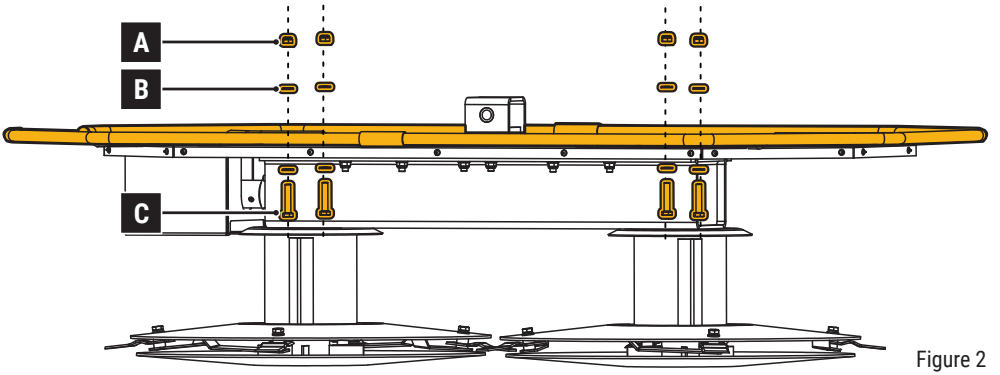


Figure 2

Swing Arm Assembly

1. Align the two holes on the Swing Arm with the outside of the lugs on the Main Frame.
2. Secure it using Hex Bolt M16 × 120 mm and Hex Lock Nut M16. (See Figure 3)

A	**Hex lock nut M16**	**X1**	
B	**Hex bolt M16 X 120mm**	**X1**	

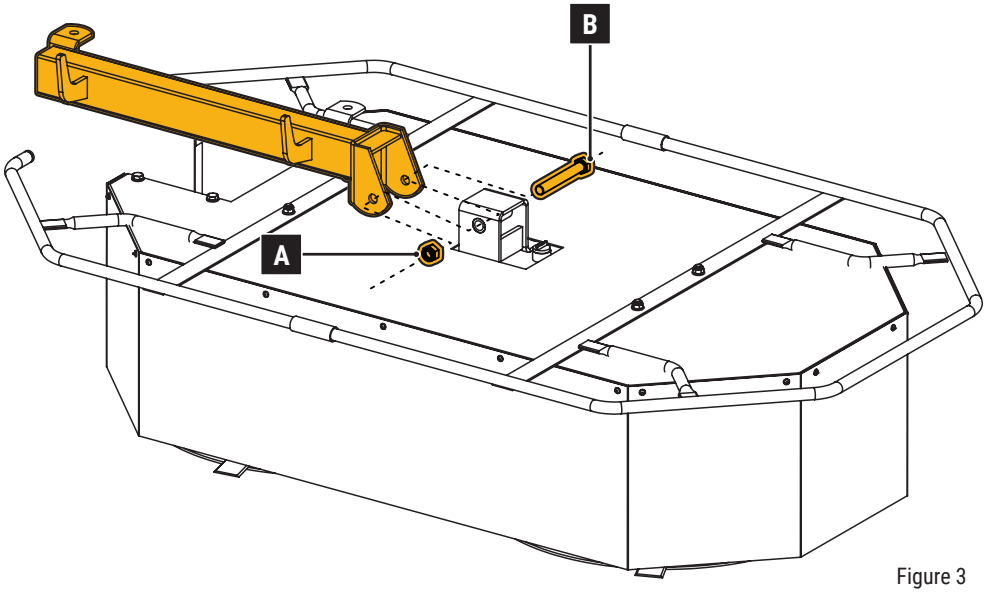


Figure 3

Vertical Arm Assembly

1. Align the two holes on the Vertical Arm with the lugs on the Swing Arm.
2. Secure the Vertical Arm to the inside of the lugs using Flat Washers 14, Hex Lock Nuts M14, and Hex Bolts M14 × 120 mm. (See Figure 4)

The bolts should pass through the Vertical Arm and the lug seat from top to bottom.

A	**Hex lock nut M14**	**X2**	**C**	**Hex bolt M14 X 120mm**	**X2**
B	**Flat washer 14**	**X2**			

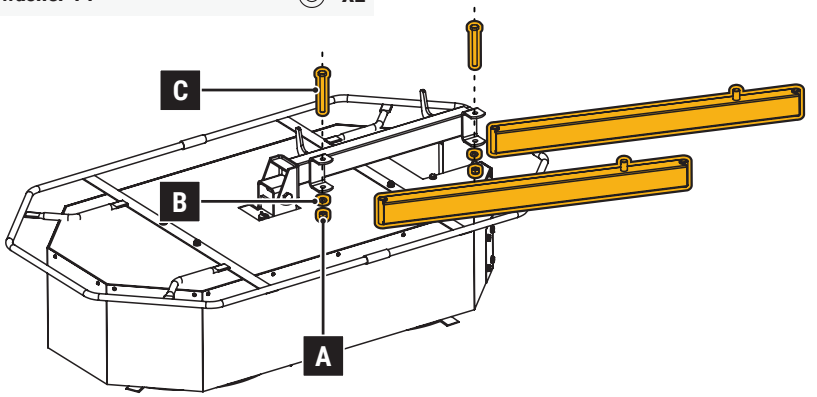


Figure 4

Installing the Hitch Assembly

1. Adjust the positions of the two Vertical Arms so that they fit into the openings of the Hitch Assembly connecting plates.
2. Align the four holes on the Hitch Assembly with the holes on the Vertical Arms.
3. Secure the Vertical Arms to the inside of the lugs using Flat Washers 14, Hex Lock Nuts M14, and Hex Bolts M14 × 120 mm. (See Figure 5)

A	**Hex lock nut M14**	**X2**	**C**	**Hex bolt M14 X 120mm**	**X2**
B	**Flat washer 14**	**X2**			

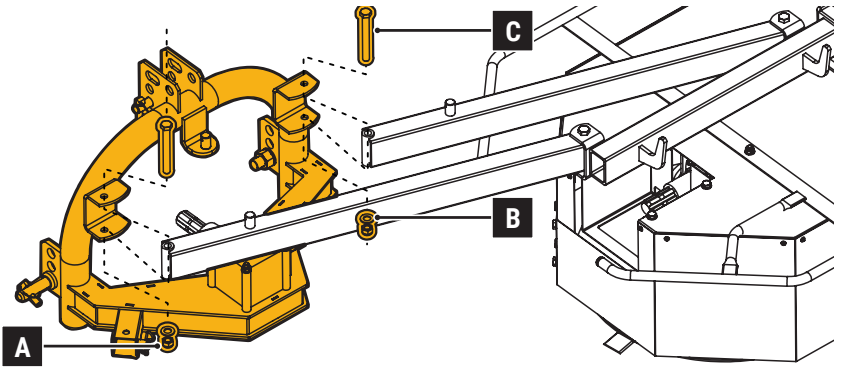


Figure 5

Parking Leg Assembly

1. Align the tube of the Parking Leg with the mounting position on the Hitch Assembly.
2. Insert the Pin Shaft 12×70 through the holes and secure it with the Type B Pin M3.5×75.
3. Insert the Adjusting Plate into the slot of the Vertical Arm and secure it with the Type B Pin M3.5 x 75. (See Figure 6)

Two positions are available for adjustment.

A	**Pin Shaft 12X70**	**X1**	
C	**Type B Pin M3.5X75**	**X3**	

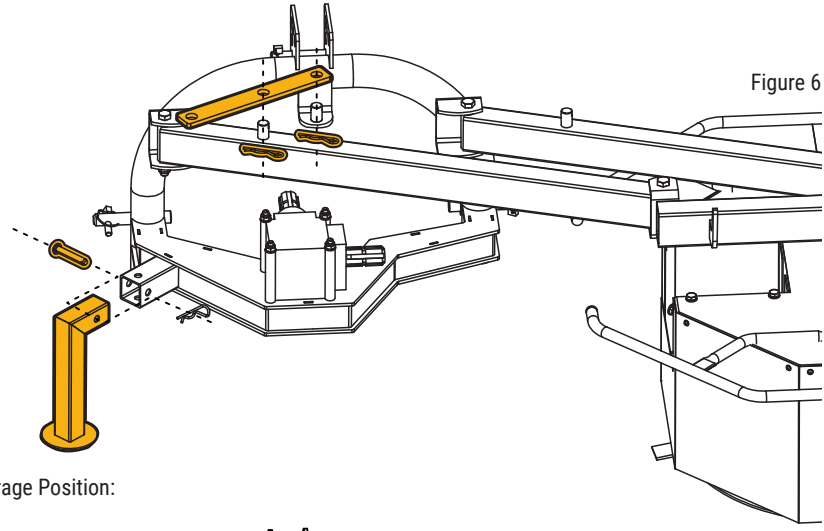
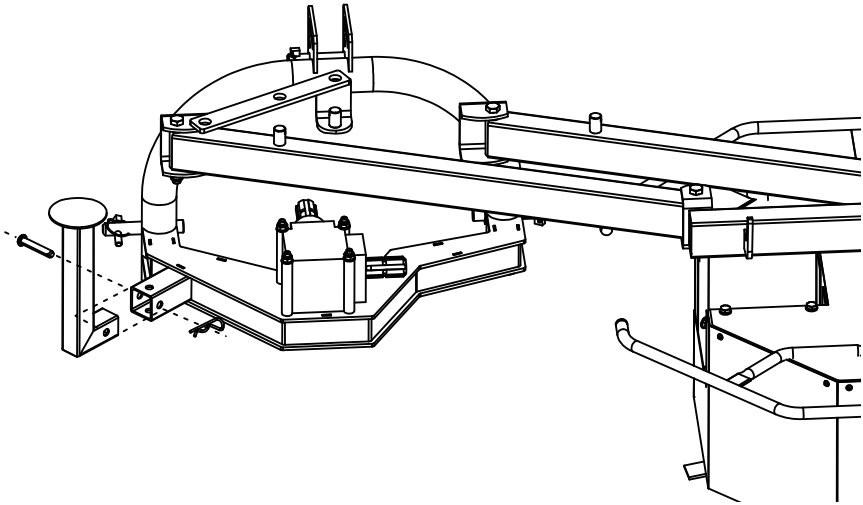


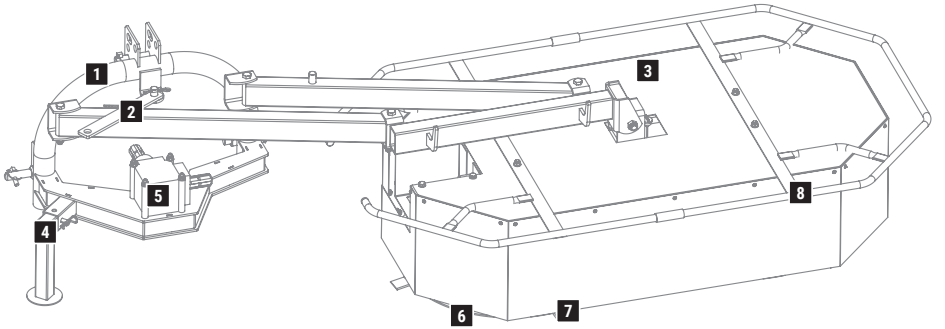
Figure 6

Transport and Storage Position:



KNOW YOUR MACHINE

Before operating the Drum Mower, read this operator's manual carefully. Become familiar with the location and function of all controls and features. Keep this manual for future reference.



1. **Drawbar**: Connects the mower to the tractor and supports the mower during operation and transport.
2. **Shaft Locking Bracket:** Secures the PTO shaft when it is disconnected or not in use.
3. **Hood:** Covers the cutting area and helps contain grass, debris, and other material thrown by the rotating blades.
4. **Parking Leg:** Supports the mower in a stable position when it is disconnected from the tractor.

5. Speed-Increaser Gearbox: Increases the input speed and transfers power from the PTO driveline to the cutting system.

6. Blade Disc: Rotates at high speed and carries the cutting blades for mowing grass and vegetation.

7. Blade: Cuts grass and vegetation as the blade disc rotates.

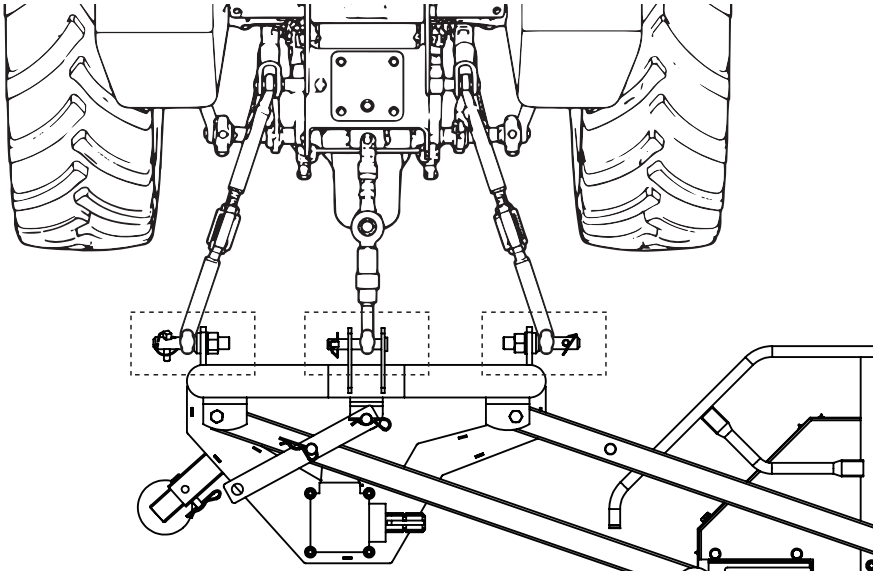
8. Guard Cover: Shields moving components and helps prevent accidental contact with the cutting system.

CONNECTION TO THE TRACTOR

⚠WARNING!

- Only the operator is allowed within 50 m (164 ft)of the machine.
- The operator must remain near the machine until all connection operations are complete.
- Never step over or cross a PTO shaft. Never enter the area between the tractor and mower while the tractor is moving or the engine is running. Before entering the hitch area, set the parking brake, stop the engine, and remove the key.
- For safety, always connect the machine on level ground.
- After completing the connection, keep the machine on level ground.

1. Align the lower hitch arms with the implement hitch pins and secure them with locking pins.
2. Attach the upper link in the same way.
3. Start the tractor and slowly raise the rear hitch to lift the mower.
4. Move the spreader pins on both sides to the top position and secure them in the last holes.
5. To disconnect the implement, follow the steps above in reverse order.



⚠CAUTION!

After connecting the mower to the tractor, make sure the locking/retaining pins are installed and secured on all three hitch pins.

6. When the mower is set to the lateral operating position, install the Adjusting Plate as shown in Figure 7 and secure it with the Type B Pin M3.5 x 75.

7. Raise and secure the Parking Leg before operation.

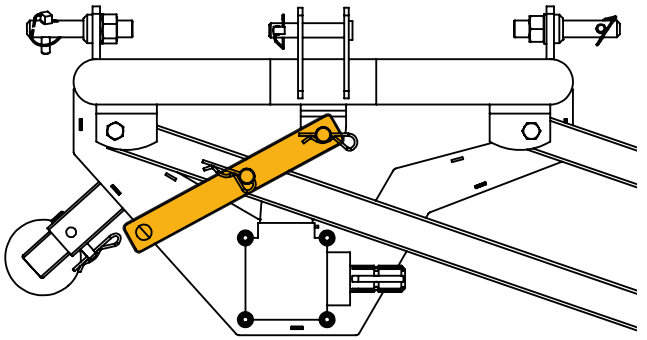


Figure 7

PTO Driveline Installation

Listed below are common practices that may or may not be applicable to the products described in this manual.

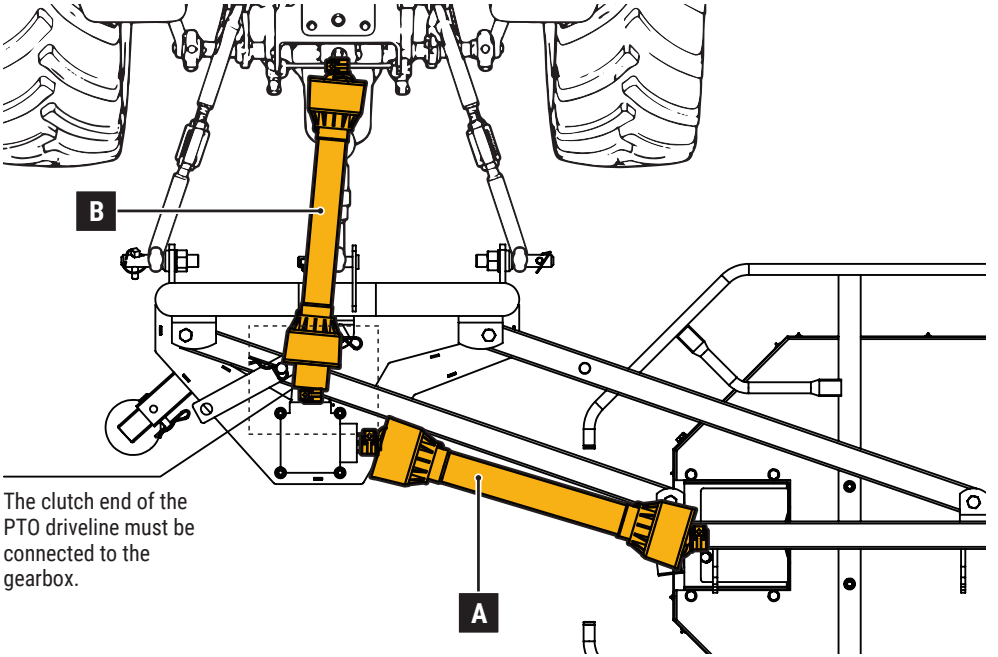
⚠WARNING!

Do not engage the tractor PTO while connecting or disconnecting the PTO driveline. Never stand near a rotating PTO driveline. Body parts or clothing can become entangled, causing serious injury or death.

Do not use a power take-off adapter. The adapter will increase strain on the tractor's power take-off shaft causing possible damage to shaft and PTO driveline. It will also defeat the purpose of the tractor's power take-off shield.

Make certain PTO driveline yokes are securely fastened at each end. A loose yoke can work free allowing the PTO driveline to rotate uncontrollably.

- After shutting off the tractor engine, install the PTO driveline onto the splined shaft of the implement and connect it to the tractor PTO driveline. Refer to the label attached to the PTO driveline for the connection point and direction of rotation.
- The PTO driveline without clutch between the two gearboxes (A) must be installed first, followed by the PTO driveline with clutch connecting the machine to the tractor (B).
- After installation, check to make sure the PTO driveline operates properly and is not obstructed.



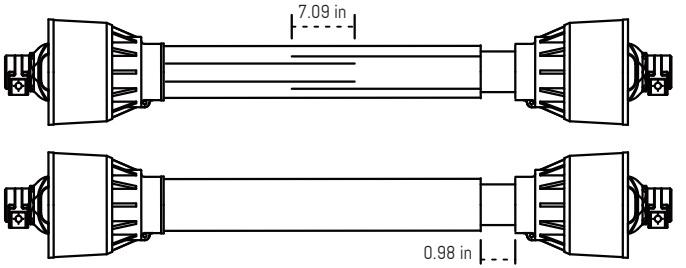
The clutch end of the PTO driveline must be connected to the gearbox.

Shortening the PTO driveline

Before operating the mower, ensure that the PTO driveshaft length is suitable. The driveshaft supplied with the machine is a standard length; therefore, it may need to be shortened or adjusted depending on the tractor used with the mower.

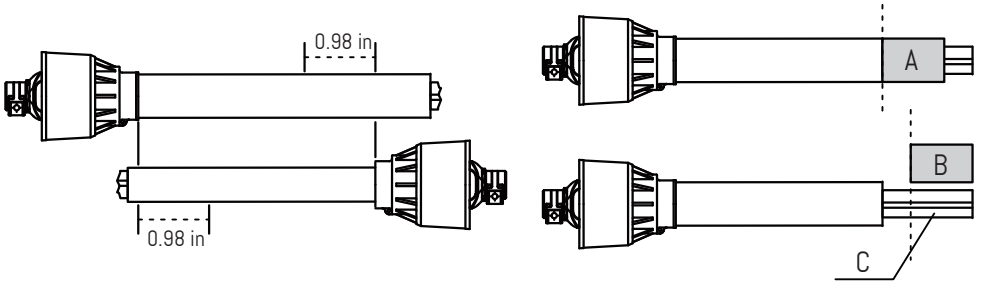
NOTICE: When checking the minimum PTO driveline length, make sure the tractor PTO driveline and gearbox input shaft are aligned and level. An excessively long PTO driveline may damage the tractor and implement.

In all operating positions, the minimum overlap of the PTO driveline must be at least 7.09 in. (180 mm). At the maximum coupling position, the PTO driveline must have a minimum clearance of 0.98 in. (25 mm).



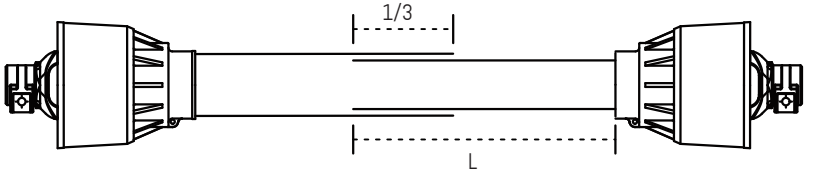
Adjusting the PTO driveline

1. Position the machine as close as possible to the tractor. Secure the tractor, shut off the engine, and remove the ignition key.
2. Separate the two halves of the PTO driveline. Install the female half onto the tractor PTO and the male half onto the machine PTO, making sure they are correctly positioned and secured with the locking pins.
3. Place the two shaft halves parallel to each other, as shown in Figure 1.
4. Mark the points where the two shaft halves need to be shortened. Measure 0.98 in. (25 mm) from the starting point of each half, as shown in Figure 1.
5. Cut the guard cover (A), then use the cut section (B) as a reference to cut the splined shaft (C).
6. Repeat the same procedure for the other half of the shaft.



7. Before reassembling the shaft, clean both ends by removing burrs and beveling the two splined shafts. Remove all chips and cuttings.
8. Join the two halves of the shaft together.
9. Install the PTO driveline and check that it meets the required operating dimensions described in the previous section.

NOTE: Make sure the inner and outer splined profiles overlap by at least one-third of the total length (L).



Note: If you have any problems during assembly or operation, please contact us for technical support.

OPERATION

Checklist Before Operation

⚠WARNING!

Hazard control and accident prevention depend on the awareness, care, good judgment, and proper training of personnel involved in the operation, transport, storage, and maintenance of the mower.

Therefore, no one should operate this machine without first reading, fully understanding, and becoming familiar with the Operator's Manual.

Make sure all operators have completed the checklist below before operating the mower.

Before operating the machine, carefully inspect the following items:

1. Before starting the machine, check and lubricate all grease points on the machine and PTO driveshaft. Check the oil level in the gearbox and add oil if necessary.
2. Use only an agricultural tractor with horsepower within the specified range for the implement.
3. Make sure the machine is properly attached to the tractor. Ensure that retainers are installed on all mounting pins.
4. Make sure front ballast weights are installed on the tractor if required.
5. Check that the tractor PTO shaft rotates freely and that the machine driveline telescopes smoothly.
6. Check the blades. Make sure they are not damaged or broken and can swing freely in their mounts. Repair or replace them if necessary.
7. Check and tighten the blade bolts.
8. Check all rotating parts for entangled material and remove any debris.
9. Install and secure all guards, hooks, and covers before starting the machine.
10. Before installing the PTO shaft, make sure the engine is stopped and the PTO shaft is in safe working condition.
11. Keep all bystanders away from the area before engaging tractor power.
12. Before cleaning, repairing, or lubricating the machine, stop the engine and remove the ignition key.
13. When the PTO shaft is not connected to the tractor, support it on the frame to keep it from lying in the dirt.
14. Do not approach the machine while it is operating.
15. Before transport, make sure the Adjusting Plate (A) is installed in the second hole and move the Parking Leg (B) to the transport/storage position. See Figure 12.
16. During operation, adjust the lateral offset/working position of the mower using the holes in the Adjusting Plate.

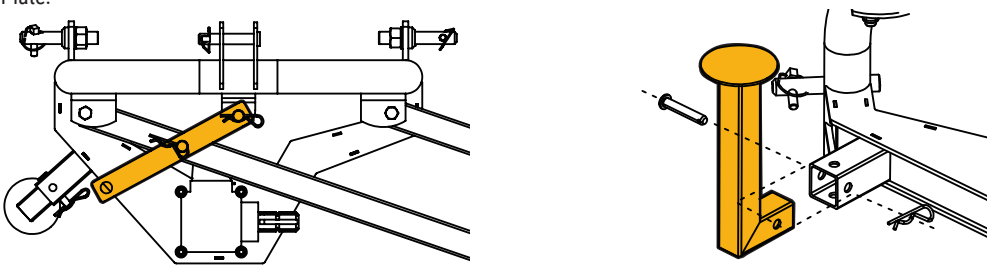


Figure 12

Leveling Adjustment

Leveling adjustments are made using the tractor's 3-point lower lift arms and top center link.

1. Park the tractor and mower on a flat, level surface.
2. Slowly raise the mower with the tractor's 3-point hydraulic lift until the unit is approximately 1 to 2 in. above the ground.
3. Make sure the lower lift arms are stabilized to prevent excessive side-to-side movement.
4. Place a spirit level on the top cover from left to right. Adjust one of the lower 3-point lift arms up or down until the mower is level from side to side.
5. Adjust the tractor's top center link so that the upper hitch pin is vertically above, or slightly behind, the lower hitch pins.
6. Slowly operate the tractor's 3-point hydraulic control up and down to check for clearance between the tires, frame, and drawbar.

SERVICE AND MAINTENANCE

General Service

The recommended maintenance intervals are based on normal operating conditions. Severe or unusual operating conditions may require more frequent service.

Every 4 Hours of Operation

- Check and tighten all nuts and bolts.
- Inspect for oil leaks around the housing, seals, flanges, and fittings. Check beneath the gearbox for oil accumulation.

After the First 50 Hours of Operation

- Drain and replace the gearbox oil after the first 50 hours of operation.
- After the initial oil change, replace the gearbox oil every 250 hours.

Gearbox Maintenance

Drain the oil from the gearbox completely. Check and clean the gearbox, then fill it with new gear oil to the specified oil level. For the recommended gearbox oil capacity and oil type, see Specifications.

The draining procedure is as follows:

1. Remove the drain plug from the oil outlet and allow the oil to drain completely.
2. After the oil has drained, reinstall the drain plug.
3. Remove the inspection port bolt and sealing ring.
4. Fill the gearbox with gear oil until the oil begins to overflow from the inspection port, then stop filling.
5. Reinstall the inspection port bolt and sealing ring.

PTO Shaft Maintenance

During heavy use, it is recommended to lubricate the PTO shaft with multi-purpose grease every 8 to 10 hours of operation.

The PTO shaft is designed to telescope to accommodate dimensional changes as the machine moves through its operating range. A tubular guard encloses the drive components and is designed to rotate independently of them. The shaft should telescope smoothly, and the guard should rotate freely on the shaft at all times.

Annual disassembly, cleaning, and lubrication are recommended to ensure that all components function properly.

To maintain the PTO shaft, follow these steps:

1.Remove the PTO shaft from the machine.

2.Pull the shaft apart.

3.Use a screwdriver to pry the tabs out of the sleeves on each end.

4.Pull the shaft out of the plastic tubular guard.

5.Use solvent to clean the male and female telescoping sections.

6.Apply a light coat of grease to each section.

7.Clean the grooves on each end where the tabs are located, and clean each tab as well.

8.Apply a light coat of grease to each groove.

9.Insert the shaft into its corresponding guard and align the slots with the groove.

10.Insert the tabs through the slots and seat them in the groove.

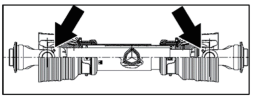
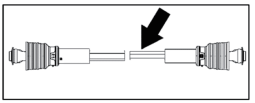
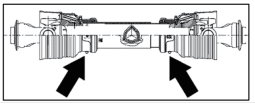
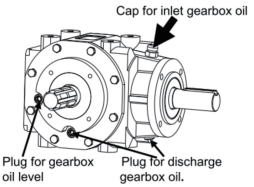
11.Check that each guard rotates freely on the shaft.

12.Reassemble the shaft.

13.Check that the shaft telescopes smoothly.
14.Replace any damaged or worn components.
15.Install the PTO shaft on the machine.

Lubrication Parts

Lubrication parts list:

INTERVAL	TYPE	NAME	PARTS IMAGE	REMARK
25 HOURS	Multi-purpose Grease	Driveline Shaft U Joints		Quantity - 4 to 8 Pumps
		Driveline Profiles		Quantity - Clean & coat inner profile tube of driveline with a light film of grease and then reassemble.
		Inner Tube Bearings		Quantity - As Required
AS REQUIRED	Type of Lubrication: 85w/90	Gearbox		Do not overfill! If the gearbox requires service, contact an authorized MechMaxx dealer or service center.
25 HOURS	Multi-purpose Grease	Other parts	If the GREASE labels ( ) are posted on the machine, you need to lubricate it regularly. Recommended lubrication interval: every 25 hours.	

Tightening Torque

The tables shown below give correct torque values for various bolts and cap screws. Tighten all bolts to the torques specified unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace fasteners only with fasteners of the same size, thread pitch, length, and property class or grade.

TORQUE VALUES CHART FOR COMMON BOLT SIZES

Bolt Size (Inches) in-tpi[1]	Bolt Head Identification					
	 Grade 2		 Grade 5		 Grade 8	
	N.m[2]	ft-lb[3]	N.m	ft-lb	N.m	ft-lb
1/4"-20	7.4	5.6	11	8	16	12
1/4"-28	8.5	6	13	10	18	14
5/16"-18	15	11	24	17	33	25
5/16"-24	17	13	26	19	37	27
3/8" -16	27	20	42	31	59	44
3/8" -24	31	22	47	35	67	49
7/16" -14	43	32	67	49	95	70
7/16"-20	49	36	75	55	105	78
1/2" -13	66	49	105	76	145	105
1/2" -20	75	55	115	85	165	120
9/16"-12	95	70	150	110	210	155
9/16"-18	105	79	165	120	235	170
5/8" - 11	130	97	205	150	285	210
5/8" -18	150	110	230	170	325	240
3/4" -10	235	170	360	265	510	375
3/4" -16	260	190	405	295	570	420
7/8" -9	225	165	585	430	820	605
7/8" -14	250	185	640	475	905	670
1"-8	340	250	875	645	1230	910
1"-12	370	275	955	705	1350	995
1-1/8"-7	480	355	1080	795	1750	1290
1-1/8" -12	540	395	1210	890	1960	1440
1-1/4"-7	680	500	1520	1120	2460	1820
1-1/4" -12	750	555	1680	1240	2730	2010
1-3/8"-6	890	655	1990	1470	3230	2380
1-3/8" -12	1010	745	2270	1670	3680	2710
1-1/2" -6	1180	870	2640	1950	4290	3160
1-1/2" -12	1330	980	2970	2190	4820	3560

Bolt Size (Inches) mm x pitch[4]	Bolt Head Identification					
	 Class 5.8		 Class 8.8		 Class 10.9	
	N.m	ft-lb	N.m	ft-lb	N.m	ft-lb
M5X0.8	4	3	6	5	9	7
M6X1	7	5	11	8	15	11
M8X 1.25	17	12	26	19	36	27
M8X1	18	13	28	21	39	29
M10X 1.5	33	25	52	39	72	53
M10X0.75	39	29	61	45	85	62
M12X 1.75	58	42	91	67	125	93
M12X 1.5	60	44	95	70	130	97
M12X1	90	66	105	77	145	105
M14 X2	92	68	145	105	200	150
M14 X 1.5	99	73	155	115	215	160
M16X2	145	105	225	165	315	230
M16X 1.5	155	115	240	180	335	245
M18 X 2.5	195	145	310	230	405	300
M18 X 1.5	220	165	350	260	485	355
M20 X 2.5	280	205	440	325	610	450
M20 X 1.5	310	230	650	480	900	665
M24X3	480	355	760	560	1050	780
M24 X2	525	390	830	610	1150	845
M30 X 3.5	960	705	1510	1120	2100	1550
M30×2	1060	785	1680	1240	2320	1710
M36 X3.5	1730	1270	2650	1950	3660	2700
M36X2	1880	1380	2960	2190	4100	3220

[1] in-tpi = nominal thread diameter in inches-threads per inch

[2] N.m= newton-meters

[3] ft-lb= foot pounds

[4]mm x pitch = nominal thread diameter in millimeters x thread pitch

Torque tolerance +0%,-15% of torquing values. Unless otherwise specified use torque values listed above.

- This chart is an approximate estimate of torque values.
- Always tighten hardware to these values unless a different torque value or tightening procedure is listed for a specific application.
- Fasteners must always be replaced with the same grades as specified in the manual.
- Always use the proper tool for tightening hardware; SAE for SAE hardware and Metric for Metric hardware.
- Make sure that fastener threads are clean and that you properly start thread engagement.

Replacing the Blade

Frequently check the drum to make sure they are in good working condition and properly secured to the blade disc.

Replace any worn or damaged blades with new ones.

⚠ CAUTION!

Make sure replacement blades are of the same weight as the original blades to maintain proper blade disc balance during operation.

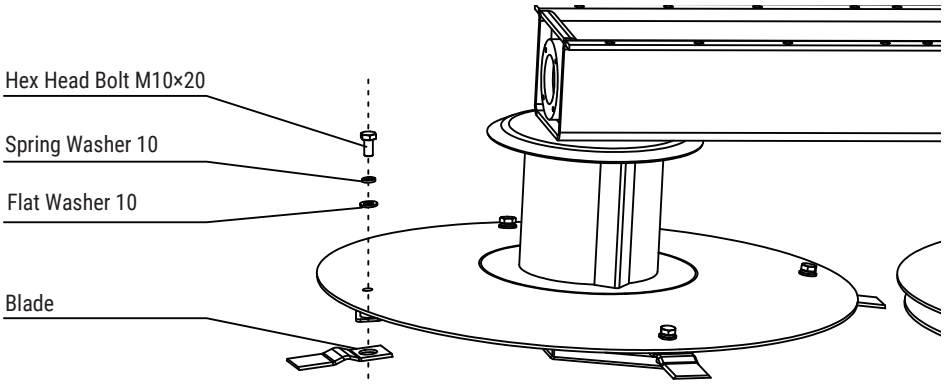
Use original factory replacement blades whenever possible.

Frequently inspect the blades and blade discs to make sure they are in good condition and properly secured. Replace any worn, bent, cracked, or damaged blades. Replacement blades must match the original blades in size and weight to maintain proper blade-disc balance. Use only genuine or manufacturer-approved replacement blades.

Replacement Steps

1. Remove the full-thread hex head bolt M10×20, spring washer 10, and flat washer 10.
2. Replace the worn blade with a new one.
3. Reinstall the bolt and tighten it to the specified torque.

Note: It is recommended to apply thread-locking compound to the bolt before installation.



Note: If the images shown in the figure above differ from the actual machine, please refer to the actual machine.

STORAGE AND TRANSPORT

Storage

Before storing the implement, follow the steps below:

1. Remove any dirt and grease that may have accumulated on the mower and moving parts. Scrape off compacted dirt from under the hood. Clean the machine inside and out to help prevent corrosion.
2. Check the blade discs/drums, blades, blade mounting points, and blade fasteners for wear or damage. Replace damaged parts as necessary.
3. If cleaning the machine with a high-pressure washer, do not spray water directly onto the rolling bearings.
4. Check and clean the PTO driveline universal joints and guards. Lubricate the required points and replace any worn or damaged components.
5. Repaint any scratched or damaged surfaces to prevent corrosion.
6. Store the machine in a dry, level area.

Transport

⚠WARNING!

Always disengage the PTO before raising the mower to the transport position.

When traveling on public roads, make sure all required tractor/implement lighting, reflectors, and slow-moving vehicle identification are installed, clean, visible, and used as required by applicable law.

Always comply with all applicable federal, state, and local laws.

Before transporting the implement, follow the steps below:

1. When raising the mower to the transport position, make sure the driveline does not contact the tractor or mower. If necessary, adjust and set the tractor 3-point lift height to limit mower movement and protect the driveline.
2. Reduce tractor ground speed when turning. Allow enough clearance to prevent the mower from contacting obstacles such as buildings, trees, fences, or other objects.
3. Select a safe travel speed when transporting the mower from one area to another. When traveling on roadways, operate in a manner that allows faster-moving vehicles to pass safely.
4. When traveling over rough or hilly terrain, shift the tractor to a lower gear.
5. In the transport position, the safety plate must be inserted into place, as shown in Figure 13.

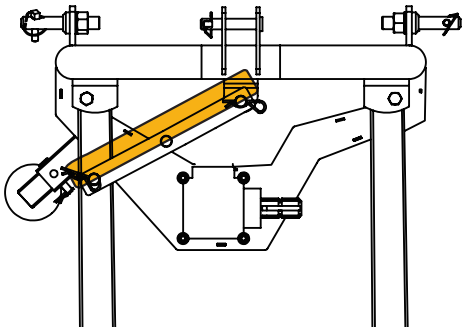


Figure 13

TROUBLESHOOTING

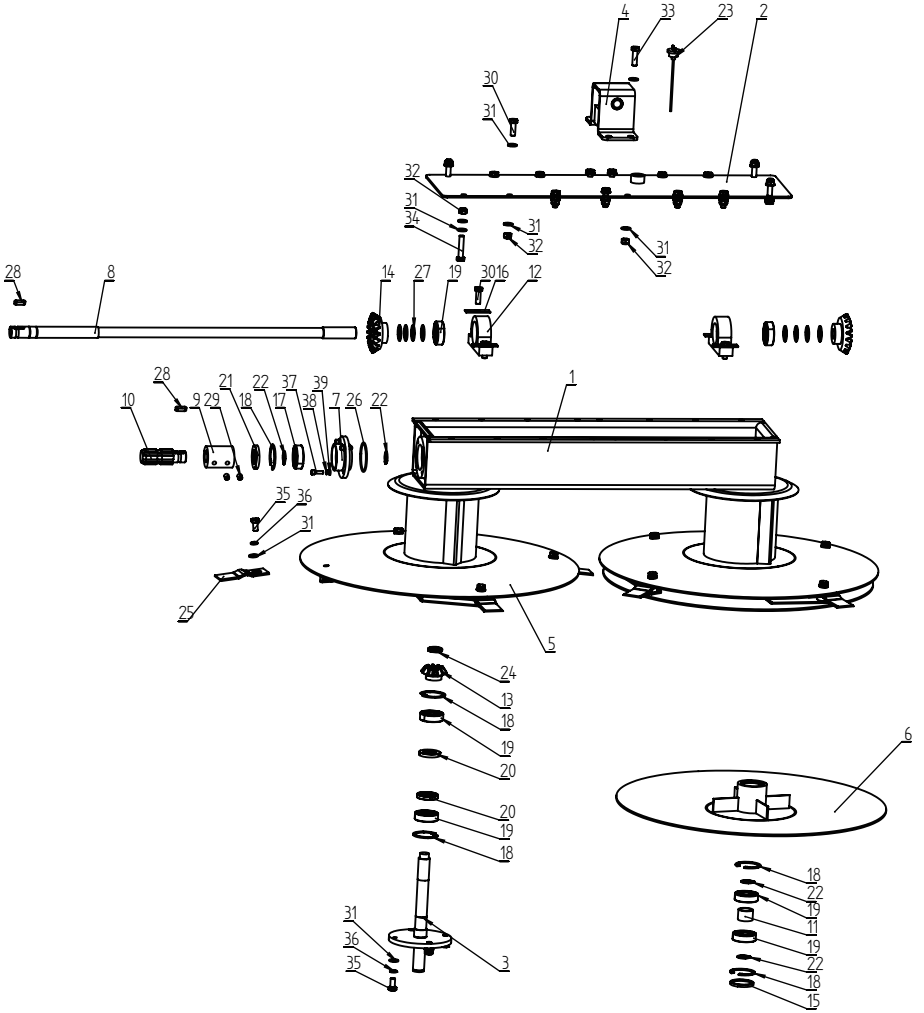
The troubleshooting list below includes common problems that may or may not apply to the machine described in this manual.

If you encounter a problem that is not covered in this list, please contact us for technical support.

MALFUNCTION	POSSIBLE CAUSE	SOLUTION
Significant machine vibration	Worn blades	Replace the blades
	Missing	
	Broken blades	
	Worn blade-disc/drum support bearings	Replace the bearings.
	Blade discs/drums fouled with debris	Remove debris and clean the cutting assembly.
	Loose parts	Tighten bolts and fasteners
	Incorrect power take-off speed	Select correct tractor power take-off speed
Excessively rapid blade wear	Blades touching the ground	Check and, if necessary, adjust cut height.
Blades tear rather than cut, shredded material not distributed evenly	Ground speed too high	Reduce the speed
	Cut height too low	Adjust cut height
	Excessive build-up of material under the head	Clean under the hood and remove accumulated material from the cutting area.
	Clogging	Clean the machine to remove accumulated debris
Excessive driveline noise	Insufficient greasing	Apply grease as indicated in the Maintenance section
	Worn trunnion bearing	Replace bearings
	Exceeds 25 degrees	Do not exceed 25 degrees
Driveline wear	Insufficient greasing	Apply grease as indicated in the Maintenance section
	Operating angle incorrect	Reduce the operating angle
	Overloading	Avoid overloading and do not start the machine when loaded

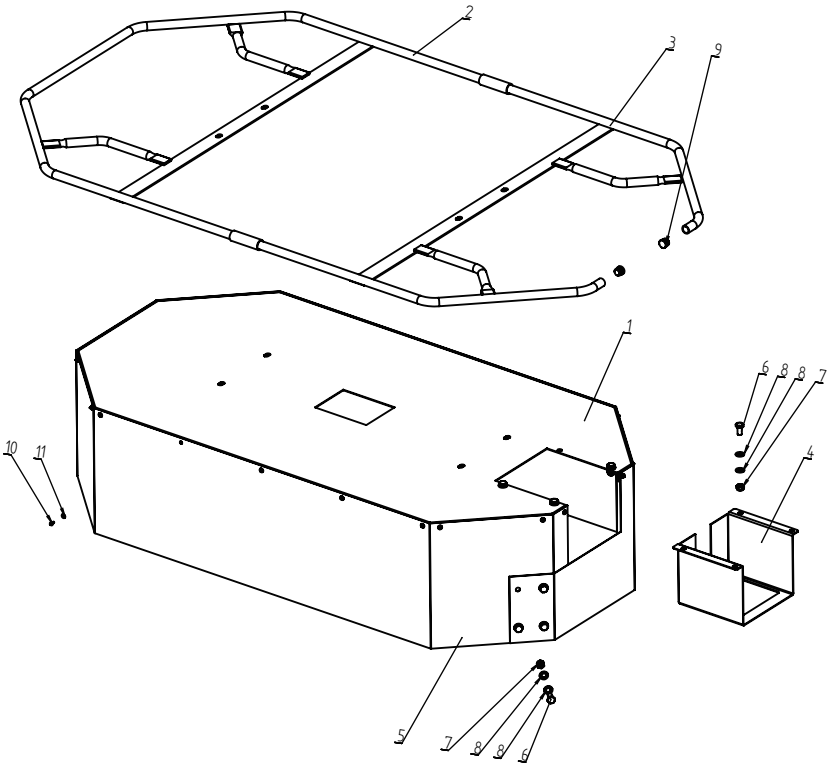
MALFUNCTION	POSSIBLE CAUSE	SOLUTION
Breakage or deformation of the driveline	Overloading	Avoid overloading and do not start the machine when loaded
	Operating angle incorrect	Reduce the operating angle
Gearbox overheating	Low gearbox oil level	Check for leaks and damaged seals/gaskets. Repair as necessary and refill to the specified oil level.
	Incorrect oil type	Replace with the prescribed type of oil
	Excessive oil	Restore correct oil level
	Overloading	Observe the prescribed speed and power conditions

PARTS DIAGRAM

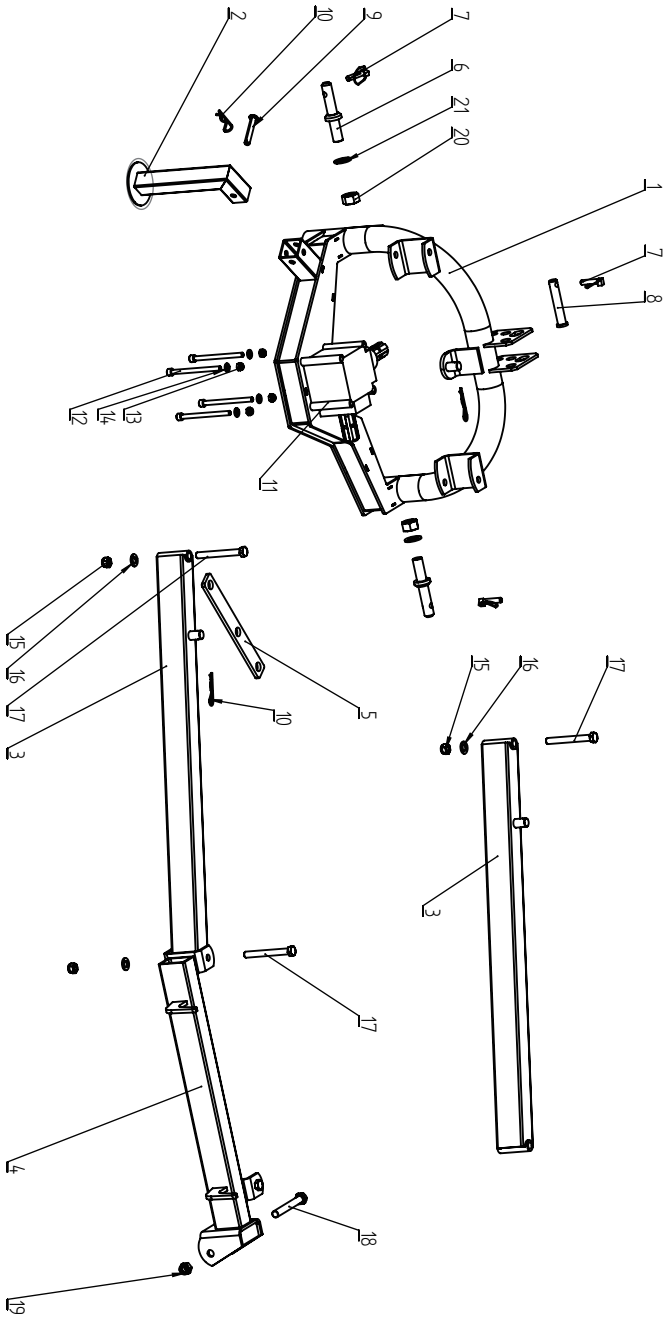


NO.	DESCRIPTION	QTY.
1	Gearbox Weldment	1
2	Gearbox Top Plate Weldment	1
3	Pivot Shaft Weldment	2
4	Lug Weldment	1
5	Turntable Weldment	2
6	Bottom Turntable Weldment	2
7	Bearing Housing	1
8	Drive Shaft	1
9	Coupling	1
10	Drive Shaft Head	1
11	Spacer	2
12	Bearing Seat	2
13	Bevel Gear M5 Z10	2
14	Bevel Gear M5 Z17	2
15	Plug Cap	2
16	Locking Washer	4
17	Cylindrical Roller Bearing	1
18	Circlip for Hole 52	9
19	Deep Groove Ball Bearing	10
20	Skeleton Oil Seal	4
21	Skeleton Oil Seal	1
22	Circlip for Shaft 25	6
23	Oil Dipstick	1
24	Nylon Insert Lock Nut	2
25	Blade	8
26	O-Ring	1
27	Adjusting Shim	8
28	Parallel Key	2
29	Hex Socket Set Screw with Dog Point, M10×12	2
30	Hex Head Bolt, Fully Threaded, M10×30	12
31	Flat Washer 10	48
32	Hexagon Thin Lock Nut with Non-Metallic Insert, M10	16
33	Hex Head Bolt, Fully Threaded, M10×35	4
34	Hex Head Bolt, Fully Threaded, M10×50	4

NO.	DESCRIPTION	QTY.
35	Hex Head Bolt, Fully Threaded, M10×20	16
36	Spring Washer 10	16
37	Hex Socket Head Cap Screw, M6×20	4
38	Spring Washer 6	4
39	Flat Washer 6	4



NO.	DESCRIPTION	QTY.
1	Top Guard Weldment	1
2	Guardrail Weldment 1	1
3	Guardrail Weldment 2	1
4	Guard	1
5	Skirt	1
6	Hex Head Bolt, Fully Threaded, M10×20	8
7	Hexagon Lock Nut with Non-Metallic Insert, M10	8
8	Flat Washer 10	16
9	Round Tube Plug	2
10	Rivet	22
11	Flat Washer 5	22


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NO.	DESCRIPTION	QTY.
1	Hitch Weldment	1
2	Parking Leg	1
3	Linkage Weldment 1	2
4	Linkage Weldment 2	1
5	Adjusting Plate	1
6	Drawbar Pin	2
7	Ring Cotter Pin	3
8	Pin Shaft, 16×105	1
9	Pin Shaft, 12×70	1
10	Type B Pin, M3.5×75	3
11	Gearbox	1
12	Hex Socket Head Cap Screw, Half Thread, M10×130	4
13	Hexagon Lock Nut with Non-Metallic Insert, M10	4
14	Flat Washer 10	4
15	Hexagon Lock Nut with Non-Metallic Insert, M14	4
16	Flat Washer 14	4
17	Hex Head Bolt, Fully Threaded, M14×120	4
18	Hex Head Bolt, M16×120	1
19	Hexagon Lock Nut with Non-Metallic Insert, M16	1
20	Hexagon Lock Nut with Non-Metallic Insert, M22	2
21	Flat Washer 22	2

MechMaxx
RELIABLE EFFICIENT VALUE

Our company is committed to continuous product improvement. The actual product may differ from the pictures or descriptions in this manual. Specifications and design are subject to change without prior notice.

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