

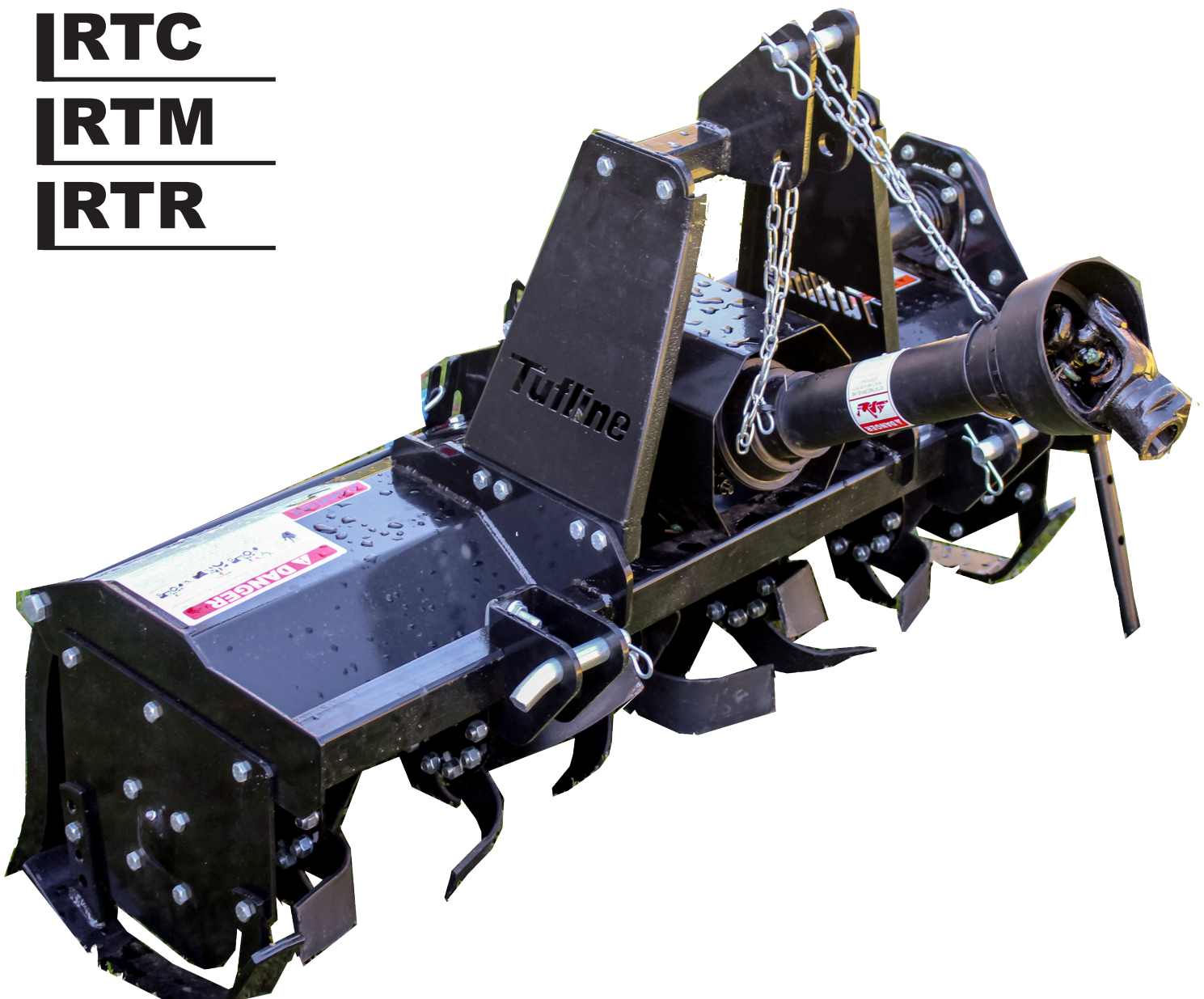
# OPERATOR'S MANUAL

## ROTARY TILLERS

**RTC**

**RTM**

**RTR**



**Tufline**<sup>®</sup>

[www.monroetufline.com](http://www.monroetufline.com)

# TABLE OF CONTENTS

SPECIFICATIONS .....	2
INTRODUCTION .....	3
SAFETY.....	3
SAFETY SIGNAL WORDS .....	4
GENERAL SAFETY GUIDELINES .....	4
SAFETY DECAL CARE.....	5
BEFORE OPERATION .....	6
DURING OPERATION .....	6
HIGHWAY AND TRANSPORT OPERATIONS .....	7
OPERATION .....	8-9
FOLLOWING OPERATION.....	10
PREFORMING MAINTENANCE.....	10
MAINTENANCE .....	10
PARTS BREAKDOWN - RTC . .....	11-14
PARTS BREAKDOWN - RTM .. .....	15-20
PARTS BREAKDOWN - RTR FRONT SHIELDING .....	21
PTO BREAKDOWN .....	22
WARRANTY.....	23-24

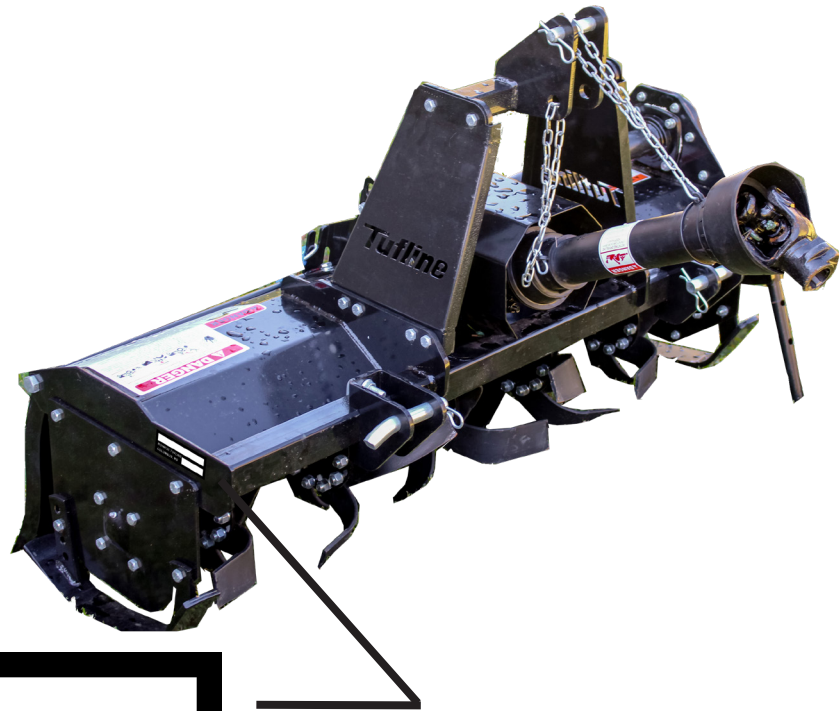
# SPECIFICATIONS

## RTC SERIES

MODEL	RTC 40	RTC 48	RTC 60
Working Width	39"	48"	57"
HP	15-30	15-30	18-30
Blades	24	30	36
Flanges	4	5	6
Weight	330#	365#	395#

## RTM SERIES / RTR SERIES

MODEL	RTM 50	RTM 60	RTM 66	RTM 72	RTM 84	RTR 60	RTR 72
Working Width	49"	57"	65"	73"	81"	57"	73"
Time Rotation	Forward	Foward	Foward	Foward	Foward	Reverse	Reverse
HP	30-50	30-50	30-50	30-50	30-60	20-50	30-50
Blades	36	42	48	54	60	42	54
Flanges	6	7	8	9	10	7	9
Weight	570#	646#	679#	722#	973#	646#	722#



MONROE TUFLINE   
 COLUMBUS, MS

# INTRODUCTION

Thank you for purchasing your Monroe Tufline Tiller . Your rotary tiller is designed to be used on 540 rpm tractors. It is important to properly maintain and keep in place all safety guards and shields that came with your tiller.

## SAFETY

Read and understand this manual and all safety signs before operating and maintaining. Review the safety instructions and precautions annually.

**TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULTS**



**THIS SYMBOL MEANS  
ATTENTION!  
BECOME ALERT!  
YOUR SAFETY IS INVOLVED!**



# SAFETY SIGNAL WORDS



Note the use of the signal words DANGER, WARNING and CAUTION with the safety messages. The appropriate signal word for each has been selected using the following guidelines



**DANGER:** Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes, cannot be guarded.



**WARNING:** Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices



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

## GENERAL SAFETY GUIDELINES

Safety of the operator is one of the main concerns in designing and developing a new piece of equipment. Designers and manufacturers build in as many safety features as possible. However, every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury, study the following precautions and insist those working with you, or for you, follow them.

Replace any **CAUTION, WARNING, DANGER** or instruction safety decal that is not readable or is missing. Location of such decals is indicated in this booklet.

Do not attempt to operate this equipment under the influence of drugs or alcohol.

Review the safety instructions with all users annually.

This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible adult familiar with farm machinery and trained in this equipment's operations. Do not allow persons to operate or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and of how it works.

To prevent injury or death, use a tractor equipped with a Roll Over Protective System (ROPS). Do not paint over, remove or deface any safety signs or warning decals on your equipment. Observe all safety signs and practice the instructions on them.

Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question - **DON'T TRY IT.**



# Safety Decal Care

- Keep safety signs clean and legible at all times
- Replace safety signs that are missing or all have become illegible
- Replaced Parts that displayed a safety sign should also display current sign
- Safety signs are available from your Distributor or Dealer Parts Department or the factory.

## How to Install Safety Signs

- Be sure that the installation area is clean and dry.
- Decide on the exact position before you remove the backing paper
- Remove the smallest portion of the split backing paper.
- Align the decal over the specified area and carefully press the small portion with the exposed sticky backing in place.
- Slowly peel back the remaining paper and carefully smooth the remaining portion of the decal in place
- Small air pockets can be pierced with a pin and smoothed out using the piece of decal backing paper.

## **DANGER**

FAILING TO FOLLOW SAFETY MESSAGES AND OPERATING INSTRUCTIONS CAN CAUSE SERIOUS BODILY INJURY OR EVEN DEATH TO OPERATOR AND OTHERS IN THE AREA.



1. READ OPERATOR'S MANUAL CAREFULLY AND PAY ATTENTION TO SAFETY DECALS FOR TRACTOR AND TILLER THOROUGHLY TO AVOID MISUSE, ABUSE AND ACCIDENTS. PRACTICE BEFORE OPERATING.
2. OPERATE ONLY WITH ROPS AND FASTENED SEAT BELT TO AVOID INJURY AND POSSIBLE CRUSHING DEATH FROM OVERTURNING. DO NOT ALLOW RIDERS ON TRACTOR OR TILLER. FALLING OFF CAN CAUSE SERIOUS INJURY OR DEATH BY BEING RUN OVER BY TRACTOR OR TILLER OR BY BEING CUT BY THE ROTATING TILLER BLADES. DO NOT ALLOW CHILDREN ON OR NEAR TILLER OR TRACTOR.
3. TO AVOID INJURY FROM FALLING OBJECTS WEAR HARD HAT, SAFETY GLASSES AND SHOES.
4. BLOCK UP OR SUPPORT MACHINE SECURELY BEFORE PUTTING HANDS OR FEET UNDER, OR WORKING UNDERNEATH LIFTED PARTS TO AVOID CRUSHING INJURY OR EVEN DEATH FROM SUDDEN, INADVERTENT DROPPING. MAKE SURE AREA IS CLEAR BEFORE LOWERING.
5. BEFORE TRANSPORTING, PUT LIFT LEVER IN LIFT (DETENT) POSITION AND FOLLOW TRAFFIC CODES. SLOW DOWN AT NIGHT IN TURNS AND ON HILLSIDES.
6. MAKE SURE THAT SMV SIGN, WARNING LIGHTS AND REFLECTORS ARE CLEARLY VISIBLE.
7. NEVER OPERATE WITH TILLER RAISED OFF GROUND TO REDUCE POSSIBILITY OF INJURY FROM OBJECTS THROWN UNDER TILLER STRUCTURE.
8. BEFORE DISMOUNTING, SECURE TILLER IN TRANSPORT POSITION OR LOWER TO GROUND, STOP PTO, PUT TRACTOR IN PARK OR SET BRAKE, STOP ENGINE AND REMOVE KEY. NEVER MOUNT OR DISMOUNT MOVING VEHICLE TO PREVENT POSSIBLE CRUSHING INJURY OR DEATH.



## **WARNING**



### TO PREVENT SERIOUS INJURY OR DEATH

- Keep hands and body out of hitch area when attaching mower to tractor.
- Keep body clear of crush point between tractor and mower.

RT1005

## **WARNING**

### To prevent serious injury or death:

si no lee ingles, pida ayuda a alguien que si lo lea para que le traduzca las medidas de seguridad

- Read and understand Operator's Manual before using. Review annually.
- Do not permit riders on the tractor or tiller including children.
- Do not allow children to operate tiller.
- Operate only with guards installed and in good working condition.
- Keep away from moving parts.
- Operate only with tractor equipped with ROPS and seatbelts.
- Use extra care with operating on rough terrain or when rocks or debris are present.
- Do not operate in a raised position.
- Stop engine, lower tiller, set brake and wait for all moving parts to stop before dismounting.
- Support tiller securely before working beneath out.
- Transport with clean reflectors. SMV and working lights as required by Federal, State, and local laws.
- Keep yourself, others, and clothing away from rotating PTO.
- Operate only at a safe distance from bystanders.
- Do not stand between tractor and tiller.
- Be careful on uneven terrain. Decrease speed when turning.
- Locate underground utility lines before tilling
- Do not exceed a safe transport speed.

RT1004

## **DANGER**



### ROTATING TINES HAZARD

- Keep away from rotating tines.
- Rotating tines may cause serious injury or death.

RT1006



# Before Operation

- Carefully study and understand this manual
- Do not wear loose-fitting clothing, which may catch in moving parts.
- Always wear protective clothing and substantial shoes.
- Assure that all tires are inflated evenly.
- Give the unit a visual inspection for any loose bolts, worn parts or cracked welds, and make necessary repairs. Follow the maintenance safety instructions included in this manual.
- Be sure that there are no tools lying on or in the equipment.
- Do not use the unit until you are sure that the area is clear, especially children and animals
- Don't hurry the learning process or take the unit for granted. Ease into it and become familiar with your new equipment.
- Practice operation of your equipment and its attachments. Completely familiarize yourself and other operators with its operation before using.
- Use a tractor equipped with a Roll Over Protective System (ROPS) and fasten your seat belt prior to starting the engine.
- The manufacturer does not recommend usage of tractor with ROPS removed.
- Securely attach to towing unit. Use a high strength, appropriately sized hitch pin with a mechanical retainer and attach safety chain.
- Do not allow anyone to stand between the tongue or hitch and the towing vehicle when backing up to the equipment.
- The manufacturer does not recommend usage of tractor with ROPS removed.
- Move tractor wheels to the widest recommended settings to increase stability.



# DURING OPERATION

- Children should not be allowed on the product.
- Clear the area of small children and bystanders before moving the tiller.
- If using a towing unit, securely attach tiller by using a hardened 3/4" pin, a metal retainer, and safety chains if required. Shift towing unit to a lower gear before going down steep downgrades, thus using the engine as a retarding force. Keep towing vehicle in gear at all times. Slow down for corners and rough terrain.
- Make sure you are in compliance with all local and state regulations regarding transporting equipment on public roads and highways. Lights and slow moving signs must be clean and visible by overtaking or on-coming traffic when tiller is transported.
- Beware of bystanders, **particularly children!** Always look around to make sure that it is safe to start the engine of the towing vehicle or move the unit. This is particularly important with higher noise levels and quiet cabs, as you may not hear people shouting.
- **NO PASSENGERS ALLOWED** - Do not carry passengers anywhere on, or in, the tractor or equipment, except as required for operation.
- Keep hands and clothing clear of moving parts.
- Do not clean, lubricate or adjust your equipment while it is moving.
- When halting operation, even periodically, set the tractor or towing vehicle brakes, disengage the PTO, shut off the engine and **remove the ignition key**.
- Be especially observant of the operating area and terrain - watch for holes, rocks or other hidden hazards. Always inspect the area prior to operation.
- **DO NOT** operate near the edge of drop-offs or banks.
- **DO NOT** operate on steep slopes as overturn may result.
- Operate up and down (not across) intermediate slopes. Avoid sudden starts and stops.



# HIGHWAY AND TRANSPORT OPERATIONS

- Adopt safe driving practices:
- Keep the brake pedals latched together at all times. **NEVER USE INDEPENDENT BRAKING WITH MACHINE IN TOW AS LOSS OF CONTROL AND/OR UPSET OF UNIT CAN RESULT.**
- Always drive at a safe speed relative to local conditions and ensure that your speed is low enough for an emergency stop to be safe and secure. Keep speed to a minimum.
- Reduce speed prior to turns to avoid the risk of overturning.
- Avoid sudden uphill turns on steep slopes.
- Always keep the tractor or towing vehicle in gear to provide engine braking when going downhill. Do not coast.
- Do not drink and drive!
- Comply with state and local laws governing highway safety and movement of farm machinery on public roads.
- Use approved accessory lighting flags and necessary warning devices to protect operators of other vehicles on the highway during daylight and night time transport. Various safety lights and devices are available from your dealer.
- The use of flashing amber lights is acceptable in most localities. However, some localities prohibit their use. Local laws should be checked for all highway lighting and marking requirements.
- When driving the tractor and equipment on the road or highway under 40 kph (20 mph) use flashing amber warning lights and a slow moving vehicle (SMV) identification emblem.
- Plan your route to avoid heavy traffic.
- Be a safe and courteous driver. Always yield to oncoming traffic in all situations, especially narrow bridges, intersections, etc.
- Be observant of bridge loading ratings. Do not cross bridges rated lower than the gross weight as which you are operating.
- Watch for obstructions overhead and to the side while transporting.
- Always operate equipment in a position to provide maximum visibility at all times. Make allowances for increased length and weight of the equipment when making turns, stopping the unit, etc.
- Pick the most level possible route when transporting across fields. Avoid the edges of ditches or gullies and steep hillsides.
- Be extra careful when working on inclines.
- Maneuver the tractor or towing vehicle at safe speeds.
- Avoid overhead wires or other obstacles. Contact with overhead lines could cause serious injury or death.
- Avoid loose fill, rocks and holes; they can be dangerous for equipment operation or movement.
- Allow for unit length when making turns.
- Operate the towing vehicle from the operator's seat only.
- Never attempt to start engine and/or operate machine while standing alongside of the unit.
- Never leave running equipment attachments unattended.
- As a precaution always recheck the hardware on equipment following every 100 hours of operation. Correct all problems. Follow the maintenance safety procedures.

## *7 Highway and Transport Operations*





# OPERATIONS

**Before attaching the rotary tiller to the tractor, check the unit to ensure there is oil in the top and side gearbox. See Maintenance section for lubricant specifications.**

**Before beginning operation, check oil and grease points**

Oil level: Top gearbox 1 1/2" from the end of the dip stick.

When sitting slightly tilted forward, oil should be at the bottom of the drain plug on the side gearbox cover.

Grease: Right rotor bearing, PTO shaft Cross & Bearings

**Attaching to the tractor**

Before attaching to the tractor, be sure the lower hitch blocks are mounted so the hitch blocks are pointed forward and not upwards on the cross bar.

1. With the Rotary Tiller on a level surface, back the Cat. 1 tractor so the tractor lift arms are even with the unit's lower hitch pins. Lower or raise the tractor hitch arms until the 7/8" bushing in the arm is inside the clevis of lower hitch points. Be sure nothing is between the tractor and the tiller before backing up.



2. Insert the lower hitch pin through the lower hitch blocks and the tractor arm. The RTM and RTR series tillers have adjustable lower hitch blocks that can slide to facilitate usage on larger tractors.

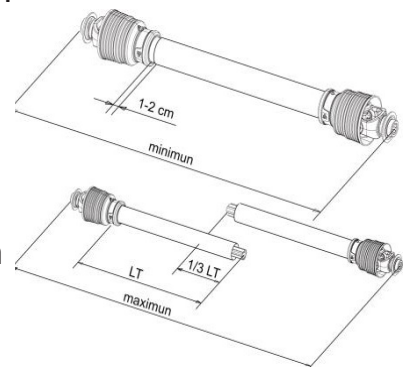
3. Secure the lift arm in place by using a 7/16" lynch pin or other fastener.

4. Repeat with the other arm.

5. Connect the driveline to the tractor's PTO output shaft. Secure it in place.

6. Connect the tractor top link to the upper hitch point of the rotary tiller.

7. Start the tractor and slowly raise the tiller. Check for drawbar interference. Be sure that the PTO driveline does not bottom out when lifting the machine to its maximum height. If it does appear that it could bottom out, it is necessary to shorten the PTO driveline. (See Shortening a PTO Driveline section). Ensure that in the working position there is an overlap of a minimum of 1/3 the length of each profile.



## Shortening a PTO Driveline

With the implement attached to the tractor's three point hitch, and the PTO driveline not installed, separate the PTO driveline. Attach the implement end to the implement and the other end to the tractor PTO input shaft.

2. Raise the implement by using the tractor's hydraulic 3-point hitch to its maximum lift height.

3. Hold the half shafts next to each other and mark them so each end is approximately 1/2" from hitting the end of the telescopic profiles.

4. Shorten the inner and out guard tubes equally.

5. Shorten the inner and outer profiles by the same length as the guard tubes. Using a rattle file, round off all sharp edges and burrs. Grease the telescopic profile generously before reassembling.



**Do not shorten too much, the proper overlap is a minimum of 1/3 the length of each profile.**



**Caution: Slip Clutches may become hot. Do Not Touch. Keep the slip clutch area clear of any material that may catch fire. Slip clutches have adjustable torque settings. The torque setting varies with the different compression of each spring. All the springs should have an equal amount of compression.**

**IMPORTANT: Do not over-tighten the compression nuts as this may impair performance or cause premature wearing of the slip clutch.**

## ***Slip Clutch adjustments***

Slip Clutch must be adjusted before first use or after a storage period.

1. Using a marker, scribe a line across the exposed edges of the clutch plate and friction discs.
2. Back off compression nuts to free friction discs by turning each nut **exactly** 2 revolutions.
3. Start the tractor and run the driveline at a low idle to slip the friction discs. This will remove the dirt, corrosion and surface floss from the clutch plate faces.
4. Disengage PTO, shut down tractor and wait for all components to come to a complete stop.
5. Inspect the clutch and ensure that the scribed markings on the disc and plates have changed position. If any two marks are still aligned, this is an indication that these discs have not slipped. It may be necessary to completely disassemble the clutch to free them up.
6. After ensuring all discs are free, tighten the compression nuts, uniformly, **exactly** 2 revolutions to reset the clutch at its original pressure, where the springs are 1 1/4" compressed length."

## **Working Depth Adjustment**

The working depth is controlled by raising or lowering the side skids.

If the skids are raised the working depth increases.

By lowering the skids the tilling depth will decrease.

## **Tailgate adjustment**

The tailgate can be adjusted to help smooth and compact the tilled ground. Release the chain and secure to the desired height.

## **Start up**

After making the necessary adjustments, lower the rotary tiller until the blades are a couple of inches from the ground.

Engage the PTO and slowly lower the tiller to begin working.



## **Removal and Storage**

After finishing, remove the rotary tiller from the tractor.

1. Put the PTO driveline in a safe location so it will not become damaged.
2. Clean and dry the equipment.
3. Replace any damaged or worn parts.
4. Check all bolts and nuts for tightness.
5. Lubricate and protect the machine from the elements.





## FOLLOWING OPERATION

- Following operation, or when unhitching, stop the tractor or towing vehicle, set the brakes, disengage the PTO and all power drives, shut off the engine and **remove the ignition keys**.
- Store the unit in an area away from human activity.
- Do not park equipment where it will be exposed to livestock for long periods of time. Damage and livestock injury could result.
- Do not permit children to play on or around the stored unit.
- Make sure all parked machines are on a hard, level surface and engage all safety devices.
- Wheel chocks may be needed to prevent unit from rolling.

## PERFORMING MAINTENANCE

- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
- Make sure there is plenty of ventilation. Never operate the engine of the towing vehicle in a closed building. The exhaust fumes may cause asphyxiation.
- Be certain all moving parts on attachments have come to a complete stop before attempting to perform maintenance.
- Always use the proper tools or equipment for the job at hand.
- Use extreme caution when making adjustments.
- Never replace hex bolts with less than grade five bolts unless otherwise specified.
- After servicing be sure all tools, parts and service equipment are removed.
- Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. The manufacturer will not claim responsibility for use of unapproved parts and/or accessories and other damages as a result of their use.
- If equipment has been altered in any way from original design, the manufacturer does not accept any liability for injury or warranty.

## MAINTENANCE

### 8 hours

Grease the Rotor support (**GP grease**)  
Grease PTO shaft cross & bearings (**GP grease**)  
Check Hardware for tightness

### 16 hours

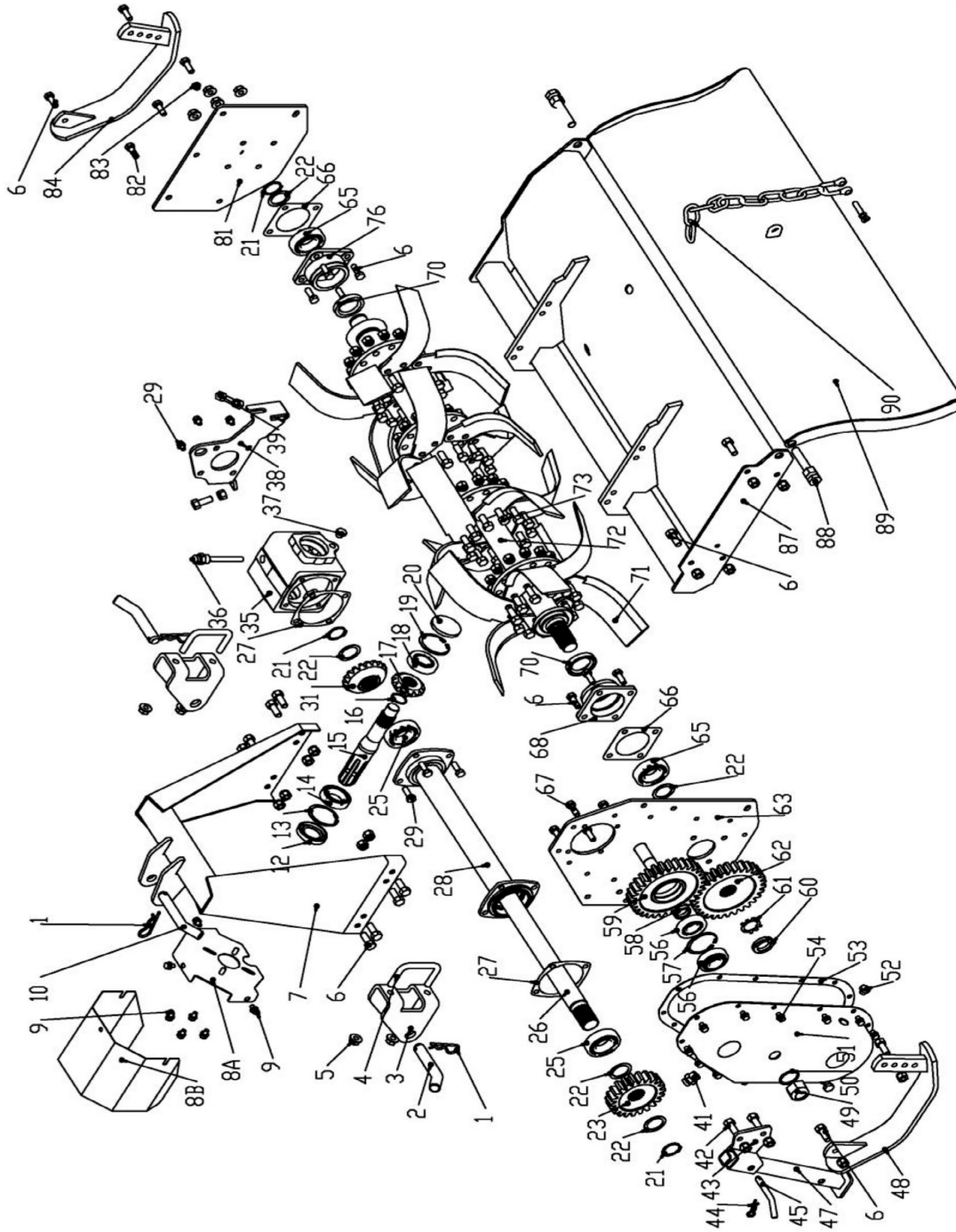
Check oil level in center gearbox (**90wt**)  
Check oil level in side gearbox (**140wt**)  
Check Hardware for tightness

### 200 hours

Replace oil in center gearbox (**90wt**)  
Replace oil in side gearbox (**140wt**)  
Check Hardware for tightness  
Replacing Blades

In order for the tiller to perform optimally, make sure the tiller blades are in good working condition and their bolts and nuts are tight. Always replace the blades with the bolt head against the blade and the washer and nut on the flange side to help prevent the blades from loosening.

**Monroe Tufline  
RTC 40 - RTC 48 - RTC 60**

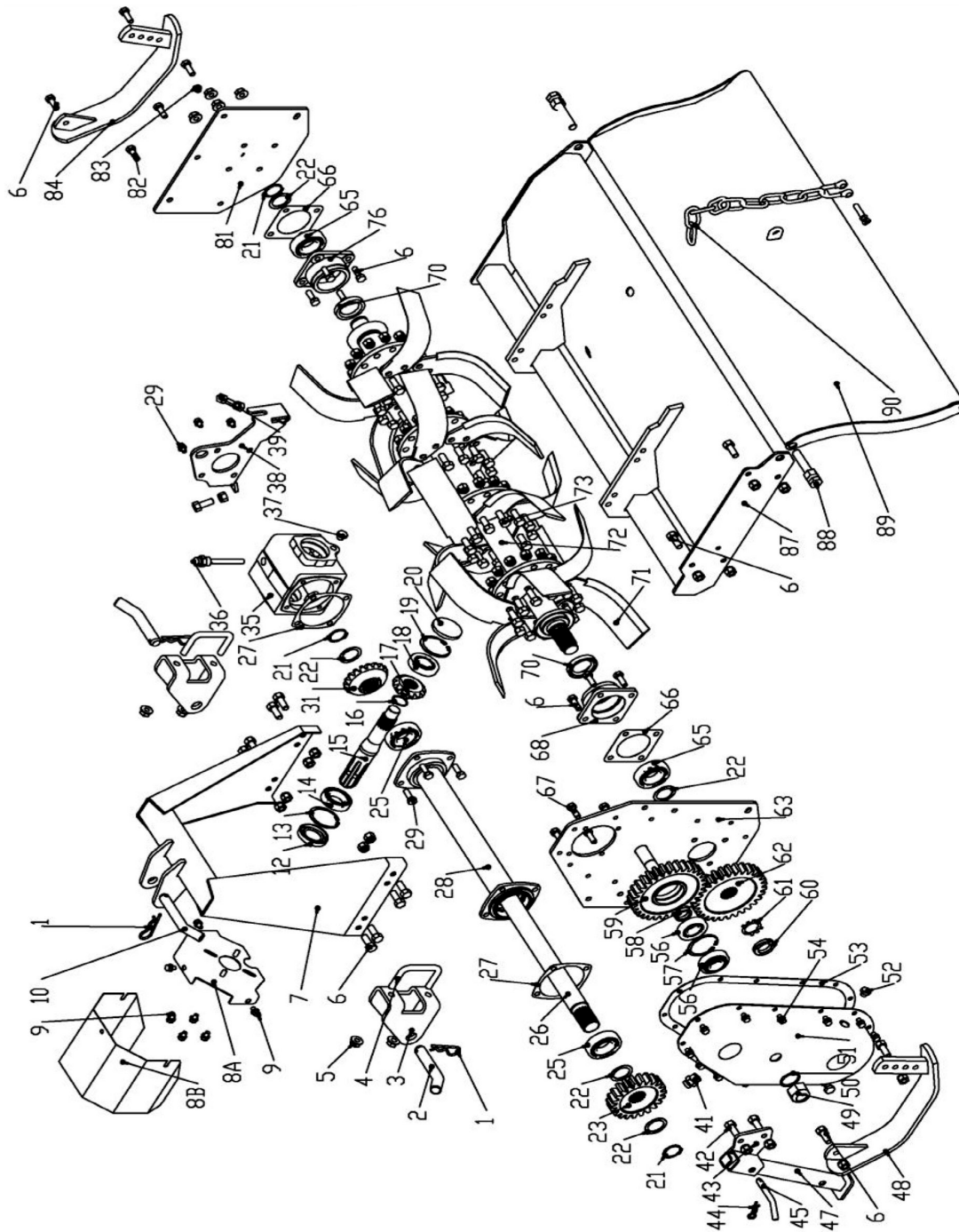


11 Parts Breakdown RTC

**Monroe Tufline  
RTC 40 - RTC 48 - RTC 60**

POSITION	PART #	DESCRIPTION	QTY
1	MTRC400000	"R CLIP 4MM	2
2	MTYT1066010204	HITCH PIN	2
3	MTTX0202	LOWER HITCH BRACKET	2
4	MTTX0203	"U" BOLT, LOWER HITCH BRACKET	2
5	MTNM120000	HEX NUT 12MM	4
6	MTBM101530	BOLT 10 X 30	8
7	MTTX0101	A FRAME	1
8A	MTTX030402	SUPPORT-GEARBOX SHEILD	1
8B	MTTX030401	GEARBOX SHIELD	1
9	MTBM812516	BOLT 8 X 1.25 X 16	4
10	MTYT1066010202	TOP HITCH PIN	1
12	MTOS356210	OIL SEAL 35.62.10	1
13	MTSRI62000	SNAP RING D.30 INTERNAL	1
14	MTB6007000	BEARING 6007	1
15	MTTX0307	INPUT SHAFT	1
16	MTSRE30000	SNAP RING D.30 EXTERNAL	1
17	MTTX0303	PINION GERA Z-13	1
18	MTB30305	BEARING 30305	
19	MTSRI62000	SNAP RING D.62 INTERNAL	1
20	MTTX0309	GEARBOX CAP (DIA 62.)	1
21	MTSRE34000	SNAP RING D.34 EXTERNAL	1
22	MTTX0402	SHIM 2MM	1
23	MTTX0507	GEAR DRIVE	1
25	MTB62072RS	BEARING 6207-2RS	-
26	MTTX0304-40	DRIVE SHAFT RTC-040	-
	MTTX0304-50	DRIVE SHAFT RTC-050	-
	MTTX0304-60	DRIVE SHAFT RTC-060	1
27	MTTX0306	GASKET-DRIVE SHAFT 112 X 96 X 9 X 0.5	1
28	MTTX0301-40	DRIVE SHAFT TUBE HOUSING RTC-040	-
	MTTX0301-50	DRIVE SHAFT TUBE HOUSING RTC-050	-
	MTTX0301-60	DRIVE SHAFT TUBE HOUSING RTC-060	-
29	MTBM101525	BOLT 10 X 25	4
31	MTTX0304	RING GEAR Z19	1
35	MTTX0302	HOUSING-GEAR BOX	1
36	MTYT10660303000	GEARBOX OIL PLUG	1
37	MTOP1212500	OIL PLUG 12 X 1.25	1
38	MTTX0301	LIFTING HOOK	1
41	MTDP1615000V	BREATHER CAP M16 X 1.5 VENTED	1
42	MTBM101525	BOLT 10 X 25	2
43	MTYT1066050200	STAND BRACKET	1

**Monroe Tufline  
RTC 40 - RTC 48 - RTC 60  
CONT.**



*13 Parts Breakdown RTC*

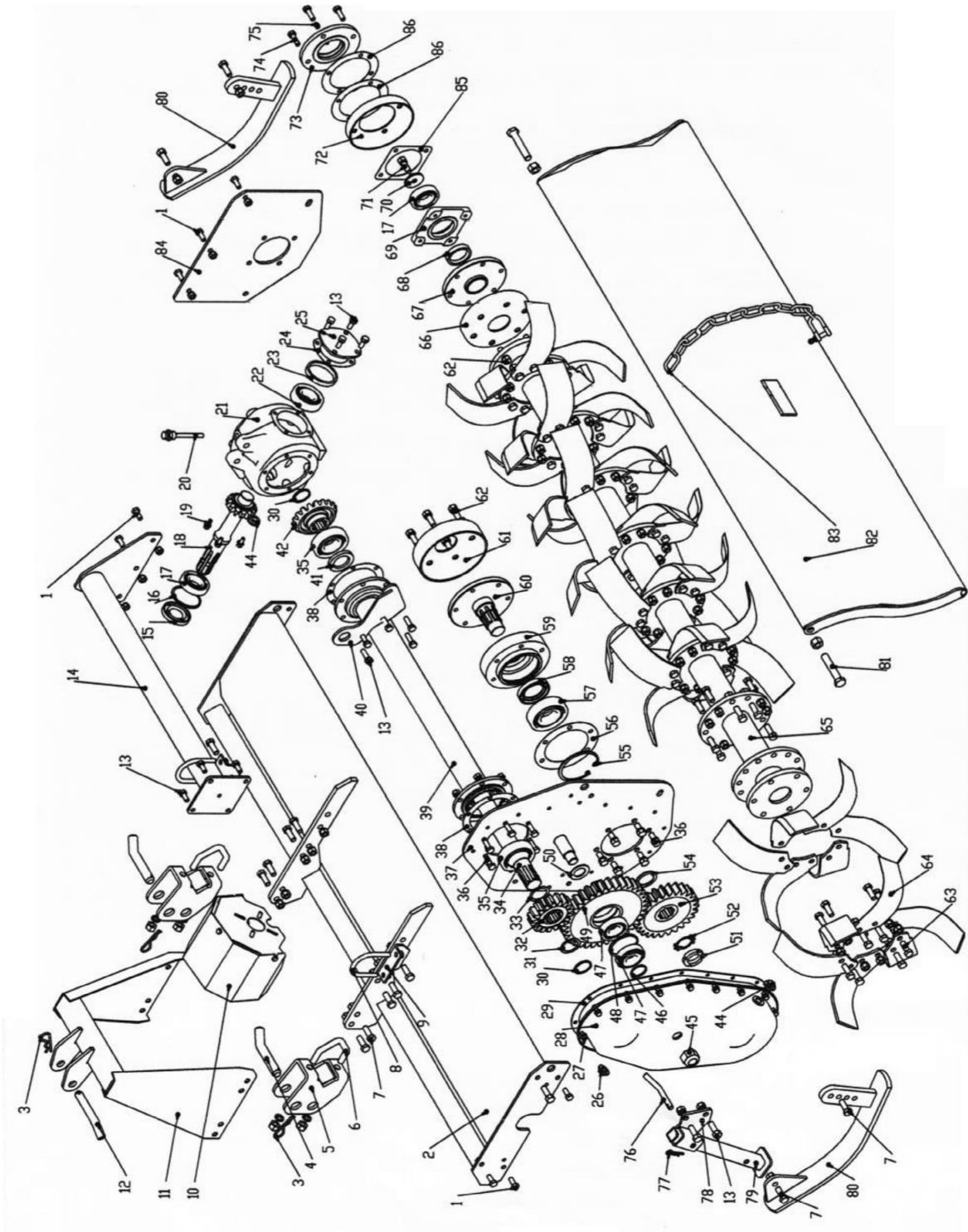
**Monroe Tufline  
RTC 40 - RTC 48 - RTC 60  
CONT.**

44	MTRC300000	R-CLIP 3MM	1
45	MTYT10660501	PIN STAND	1
47	MTYT1066050100	STAND LEG	1
48	MTTX601	SKID WELDMENT LEFT	1
49	MTNM24150	NUT 24 X 1.5	1
50	MTOR253	O RING -25. X 3	1
51	MTTX0501	SIDE GEAR COVER	1
52	MTOP1212500	OIL PLUG 12 X 1.25	1
53	MTTX0500	GASKET-SIDEGEAR/CHAIN CASE	1
54	MTBM812500	BOLT 8 X 1.25 X 20	13
56	MTB3030500	BEARING 30305	1
57	MTSRI62000	SNAP RING 62 INTERNAL	1
58	MTTX0511	SPACER	1
59	MTTX0508	IDLER GEAR	1
60	MTNM30150	NUT-ROTOR 30 X 1.5	1
61	MTSW3000	STAR WASHER -ROOTER	1
62	MTTX0509	GEAR-BOTTOM	1
63	MTTX0305	SIDE PANNEL-LEFT	1
65	MTB6207000	BEARING 6207	1
66	MTTX0406	GASKET ROTOR 102 X 73 X 0.5	1
67	MTBM101525	BOT 10 X 25	4
68	MTTX0403	BEARING SUPPORT	1
70	MTOS406210	OIL SEAL 40 X 62 X 10	1
71	MTTX0404	BLADE-LEFT	-
	MTTX0405	BLADE-RIGHT	-
72	MTTX0401-40	ROTOR-RTC 40	-
	MTTX0401-50	ROTOR-RTC 50	-
	MTTX0401-60	ROTOR-RTC 60	-
73	MTBM1212535	BLADE BOLT-12 X 35 FINE THREAD	-
	MTNM120001	NUT 12MM FINE THREAD	-
	MTLW12000	LOCK WASHER 12MM	-
76	MTTX0403	BEARING SUPPORT	1
81	MTTX0201	SIDE PANEL-RIGHT	1
82	MTBM101525	BOLT 10 X 25	3
83	MTGN06100	GREASE NIPPLE 6MM	1
84	MTTX0602	SKID WELDMENT-RIGHT	1
87	MTTX02-40	FRAME WELDMENT RTC 040	-
	MTTX02-50	FRAME WELDMENT RTC 050	-
	MTTX02-60	FRAME WELDMENT RTC 060	-
88	MTBM1690	BOLT 16 X 90	2
	MTNM16000	NUT M16	-
89	MTTX07-40	TAILGATE RTC 040	-
	MTTX07-50	TAILGATE RTC 050	-
	MTTX07-60	TAILGATE RTC 060	-
90	MTTX01	TAILGATE CHAIN ASSEMBLY	1
	MTTXGBC1001	GEARBOX COMPLETE	1

*Parts Breakdown RTC 14*



**Monroe Tufline  
RTM 50 - RTM 60 - RTM 66 - RTM 72 - RTM 84**



*15 Parts Breakdown RTM*

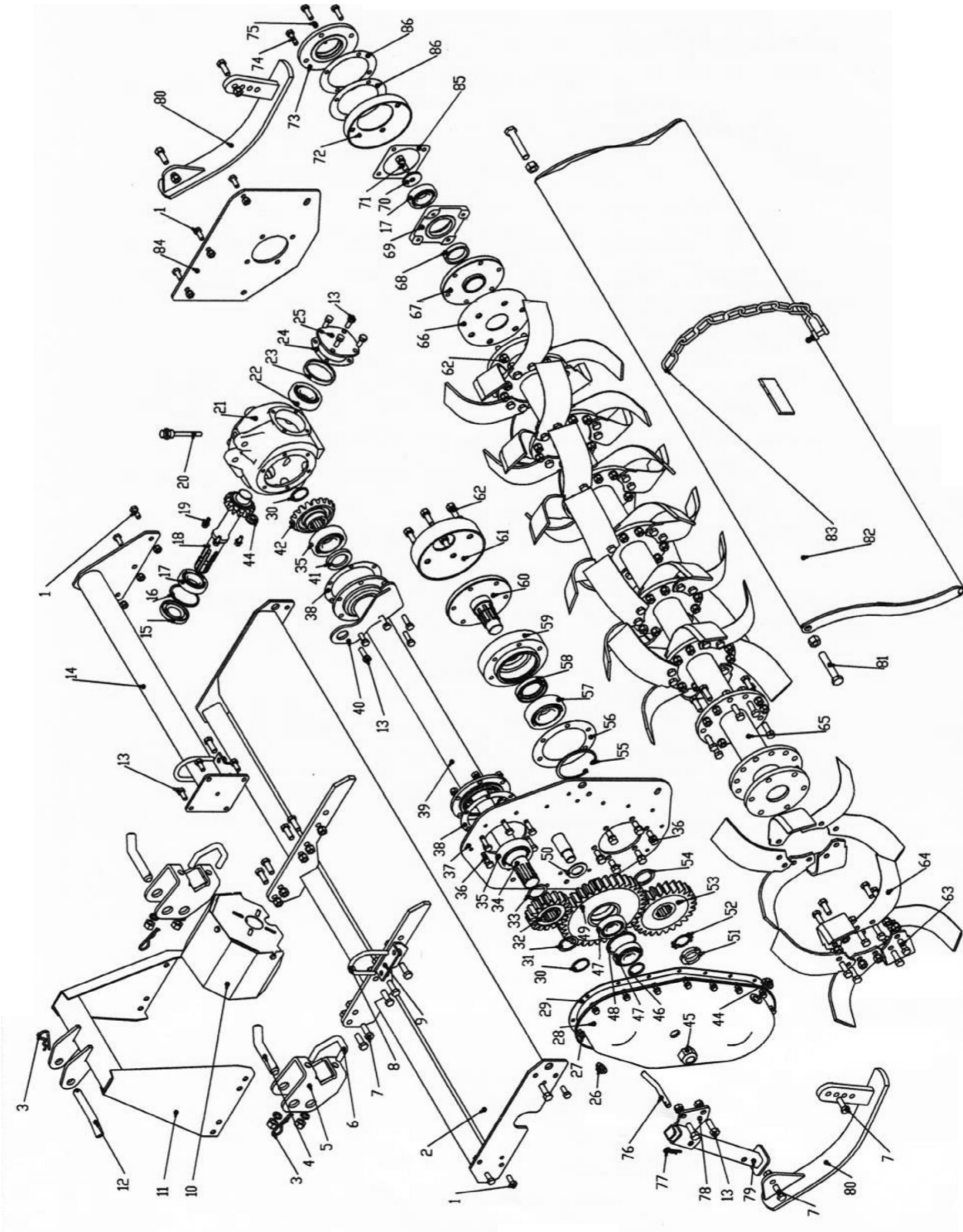


**Monroe Tufline**  
**RTM 50 - RTM 60 - RTM 66 - RTM 72 - RTM 84**

POSITION	PART #	DESCRIPTION	QTY
1	MTBM101525	BOLT 10 X 1.5 X 25	16
2	MTYT1050010100	RTM 50 MAIN FRAME	1
	MTYT1058010100	RTM 60 MAIN FRAME	1
	MTYT1066010100	RTM 66 MAIN FRAME	1
	MTYT1074010100	RTM 72 MAIN FRAME	1
	MTYT1082010100	RTM 84 MAIN FRAME	1
3	MTRC400000	"R" CLIP 4MM	3
4	MTYT1066010204	TOP HITCH PIN	1
5	MTYT106601020100	LOWER HITCH BRACKET	2
	MTYT108201020100	LOWER HITCH BRACKET-RTM 84	2
6	MTYT1066010201	U BOLT, HITCH	2
	MTLW14000	LOCK WASHER 14MM	-
	MTNM14000	NUT 14MM	-
	MTYT1082010201	BACKING PLATE W/BOLTS-RTM 84	2
7	MTBM1217535	BOLT 12 X 1.75 X 35	24
8	MTYT10660301	U BOLT, DRIVETUBE	1
9	MTYT160660302	SUPPORT -DRIVE TUBE	1
10	MTYT0304	PTO SHEILD-COMplete	1
11	MTYT106601030100	A FRAME	1
12	MTYT1066010202	HITCHPIN	2
13	MTBM101525	BOLT 10 X 1.5 X 25	4
14	MTYT10500400	GEARBOX SUPPORT TUBE RTM 50	1
	MTYT10580400	GEARBOX SUPPORT TUBE RTM 60	1
	MTYT10660400	GEARBOX SUPPORT TUBE RTM 66	1
	MTYT10740400	GEARBOX SUPPORT TUBE RTM 72	1
	MTYT10820400	GEARBOX SUPPORT TUBE RTM 84	1
15	MTOS357210	OIL SEAL 35 X 72 X 10PP	1
16	MTSR172000	SNAP RING DIA. 72-INTERNAL	-
17	MTB6207000	BEARING 6207	2
18	MTYT10660205	BEVEL PINION GEAR SHAFT Z=13	1
	MTYT10660205R	BEVEL PINION GEAR SHAFT REVERSE SERIES	1
19	MTBM816000	BOLT 8 X 16MM	3
20	MTYT1066020300	GEARBOX OIL PLUG	1
21	MTYT10660201	GEARBOX HOUSING	1
22	MTB6307000	BEARING 6307	1
23	MTYT10660204	SPACER	1
24	MTYT10660203	GASKET BEARING COVER	1
25	MTYT10660202	BEARING COVER	1
26	MTDP1615000V	BREATHER CAP M16 X 1.5 VENTED	1
27	MTBM812525	BOLT 8 X 1.25 X 25MM	15
28	MTYT1066080100	SIDE GEAR COVER	1
29	MTYT10660801	GASKET SIDE GEAR COVER	1
30	MTSRE40000	SNAP RING DIA. 40-EXTERNAL	2
31	MTYT10660103	SHIM 52 X 40 X 1	-
32	MTYT10660209	GEAR DRIVE 17-T	1
33	MTYT10660208	SHIM 52 X 40 X 1	-

*Parts Breakdown RTM 16*

**Monroe Tufline  
RTM 50 - RTM 60 - RTM 66 - RTM 72 - RTM 84  
CONT.**



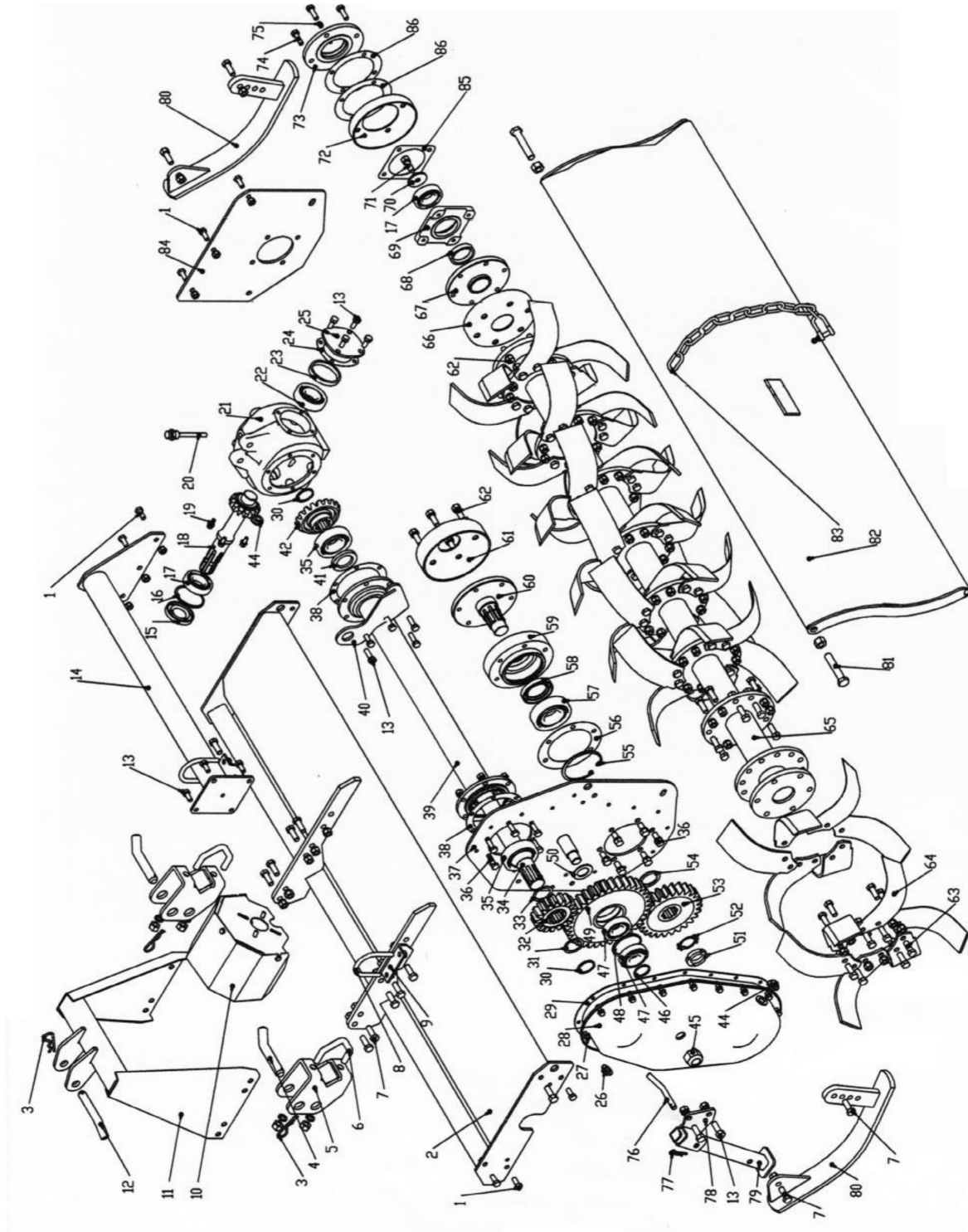
*17 Parts Breakdown RTM*

**Monroe Tufline**  
**RTM 50 - RTM 60 - RTM 66 - RTM 72 - RTM 84**  
**CONT.**

POSITION	PART #	DESCRIPTION	QTY
33	MTYT10660208	SHIM 52 X 40 X 1	-
34	MTYT10500210	DRIVE SHAFT RTM 50	1
	MTYT10580210	DRIVE SHAFT RTM 60	1
	MTYT10660210	DRIVE SHAFT RTM 66	1
	MTYT10740210	DRIVE SHAFT RTM 72	1
	MTYT10820210	DRIVE SHAFT RTM 84	1
35	MTB63082RS	BEARING 6308 2RS	1
36	MTBM101530	BOLT 10 X 1.5 X 30	12
37	MTYT1066010400	SIDE BOARD LEFT	1
38	MTYT10660207	GASKET DRIVESHAFT 151 X 115 X .05	2
39	MTYT1050020100	DRIVE SHAFT RTM 50	1
	MTYT1058020100	DRIVE SHAFT RTM 60	1
	MTYT1066020100	DRIVE SHAFT RTM 66	1
	MTYT1074020100	DRIVE SHAFT RTM 74	1
	MTYT1082020100	DRIVE SHAFT RTM 82	1
40	MTYT10660211	LIFTING HOOK	1
41	MTOS65408	OIL SEAL 65 X 40 X 8	1
42	MTYT10660206	OUTPUT GEAR	1
44	MTDP1415000	DRAIN PLUG M14 X 1.5	2
45	MTLNM2400	LOCK NUT 24 MM	1
46	MTOR253	O-RING	-
47	MTB3030600	BEARING 30306	2
48	MTSRI72000	SNAP RING DIA. 72 -INTERNAL	1
49	MTYT10660802	MIDDLE GEAR-SIDE DRIVE	1
50	MTYT10660803	IDDL GEAR SPACER 50 X 30.2 X 2	1
51	MTNM3515	NUT 35MM X 1.5	1
52	MTLWC35	CASTLE WASHER-35MM	1
53	MTYT10660804	GEAR-ROTOR	1
54	MTYT10660806	SHIM 55 X 40 X 2	1
55	MTSRI10000	SNAP RING DIA.100-INTERNAL	1
56	MTYT10660808	GASKET DRIVE ROTOR 168 X 115 X .05	1
57	MTB6309000	BEARING 6309	1
58	MTOS805012	OIL SEAL 80 X 50 X 12	1
59	MTYT10660805	ROTOR SUPPORT-SIDE DRIVE	1
60	MTYT10660807	ROTOR SHAFT SUPPORT	1
61	MTYT10660809	DUST SHEILDING	1
62	MTBM1217530	BOLT 12 X 1.75 X 30 MM	6
63	MTBM121235	BOLT 12 X 1.75 X 35 MM	84,96,108,120
	MTNM120001	HEX NUT 12MM	84,96,108,120
	MTLW12000	LOCK WASHER 12MM	84,96,108,120
64	MTYT1066090101	TILLER TINE-RIGHT	21,24,27,30
	MTYT1066090102	TILLER SINE -LEFT	21,24,27,30
65	MTYT105009010100	ROTOR SHFT- RTM 50	1
	MTYT106009010100	ROTOR SHAFT-RTM 60	1
	MTYT106609010100	ROTOR SHAFT-RTM 66	1
	MTYT107409010100	ROTOR SHAFT-RTM 72	1

*Parts Breakdown RTM 18*

**Monroe Tufline  
RTM 50 - RTM 60 - RTM 66 - RTM 72 - RTM 84  
CONT.**



19 Parts Breakdown RTM

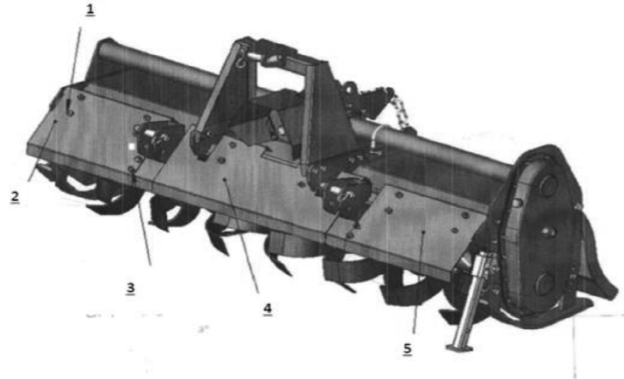
**Monroe Tufline**  
**RTM 50 - RTM 60 - RTM 66 - RTM 72 - RTM 84**  
**CONT.**

POSITION	PART #	DESCRIPTION	QTY
65	MTYT108209010100	ROTOR SHAFT-RTM 84	1
66	MTYT10660901	COVER	1
67	MTYT10660903	ROTOR SHAFT HEAD - RIGHT	1
68	MTOS456212	OIL SEAL 45 X 62 X 12	1
69	MTYT10660904	BEARING HOUSING	1
70	MTYT10660908	RETAINING WASHER	1
71	MTBM1217525	BOLT 12 X 1.75 X 25	1
72	MTYT10660902	INNER COVER-ROTOR SHAFT	1
73	MTYT10660907	END CAP	1
74	MTBM101535	BOLT 10 X 1.5 X 35MM	8
75	MTGN101500	GREASE NIPPLE	1
76	MTYT10660501	STAND BRACKET	1
77	MTRC300000	R-CLIP 3MM	1
78	MTYT1066050200	STAND BRACKET	1
79	MTYT1066050100	STAND LEG	1
80	MTYT10660600L	SKID WELDMENT-LEFT	1
80	MTYT10660600R	SKID WELDMENT RIGHT	1
81	MTBM162090	BOLT 16 X 2.0 X 90	2
82	MTYT1050070100	TAILGATE RTM 50	1
	MTYT1060070100	TAILGATE RTM 60	1
	MTYT1066070100	TAILGATE RTM 66	1
	MTYT1074070100	TAILGATE RTM 72	1
	MTYT1082070100	TAILGATE RTM 84	1
83	MTYT1066070200	CHAIN DRAG BOARD	1
84	MTYT10660101	SIDE PLATE -RIGHT	1
85	MTYT10660906	GASKET 119 X 95 X 0.5	1
86	MTYT10660905	GASKET 105 X 108 X .05	2
	MTYTGBC1001	GEAR BOX COMPLETE	-



## MONROE TUFLINE

### RTR 60 - RTR 72 FRONTSHIELDING

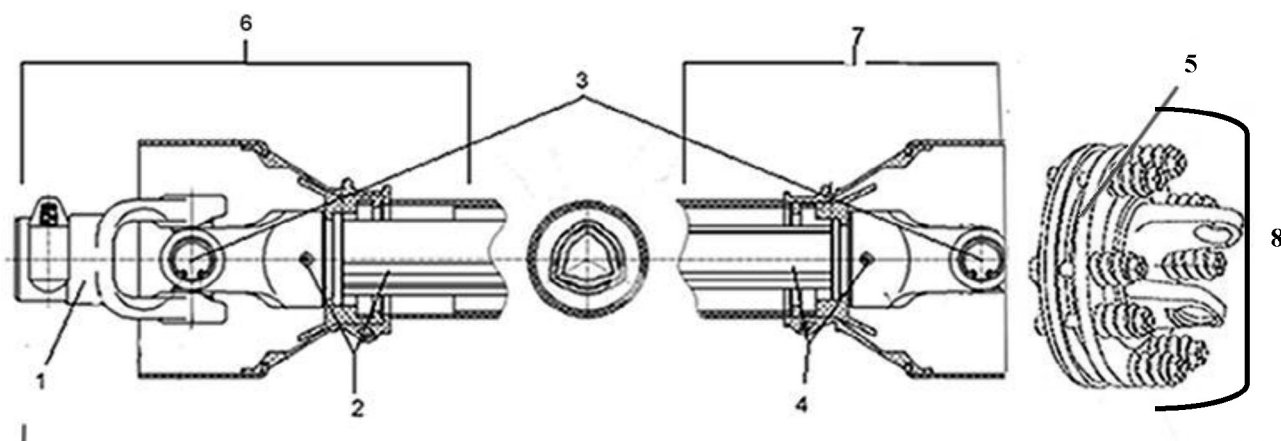


POSITION	PART #	DESCRIPTION	QTY
1	MTYT10660211	"U" BOLT 10MM W/NUTS	6
2	MTYT106075025R	PANEL-60" RIGHT	1
	MTYT107475025R	PANEL-72" RIGHT	1
3	MTBM1015025	BOLT 10 X 25MM	4
	MTNM1000	NUT 10MM	4
	MTLW1000	LOCK WASHER 10MM	4
4	MTYT106075025M	PANEL-60" AND 72"	1
5	MTYT106075025L	PANEL-60" LEFT	1
	MTYT107475025L	PANEL-72" LEFT	1
	MTYT106075025C	PANEL-60" COMPLETE	1
	MTYT107475025C	PANEL-72" COMPLETE	1

*21 Parts Breakdown RTR Front Shielding*



## PTO Shaft



POSITION	PART #	DESCRIPTION	QTY
1	MTDP1075-40	PTO YOKE-SERIES 40	1
2	MTDP1079-40	FEMALE YOKE AND TUBE(TRACTOR END)-SERIES 40	1
3	MTDP1076-40	CROSS AND BEARINGS -SERIES 40	2
4	MTDP1078-40	MALE YOKE AND TUBE(IMPLEMENT END)-SERIES 40	1
5	MT180-510-30	FRICION DISC-4 3/4" OD (RTC)	2-4
	MT180-510-40	FRICION DISC-5 1/2" OD (RTM)	2-4
6	MTDP1074F-40	COMPLETE FEMALE END PTO SHEILDING (TRACTOR END)-SERIES 20-40	1
7	MTDP1074M-40	COMPLETE MALE END PTO SHEILDING (IMPLEMENT END)-SERIES 20-40	1
8	MTDP1098-30	SLIP CLUTCH COMPLETE 150MM CLUTCH (2 DISC)(RTC)	1
	MTDP1098-40	SLIP CLUTCH COMPLETE 180MM CLUTCH (2 DISC)(RTM)	1
9	MT147120	COMPLETE PTO-SERIES 40-150MM SLIP CLUTCH(RTC)	1
	MT147122	COMPLETE PTO-SERIES 40-180MM SLIP CLUTCH(RTM)	1
	MT147120-H-IE	1/2 PTO SERIES 40-IMPLEMENT END(WITH SLIP CLUTCH AND SHEILDING)	1
	MT147122-H-IE	1/2 PTO SERIES 60-IMPLEMENT END(WITH SLIP CLUTCH AND SHEILDING)	1
	MT147120-H-TE	1/2 PTO SERIES 40-TRACTOR END (WITH SHEILDING)	1
	MT147122-H-TE	1/2 PTO SERIES 60-TRACTOR END(WITH SHEILDING)	1

## WARRANTY

Please enter information below and save for future reference:

Date Purchase: \_\_\_\_\_ From (Dealer): \_\_\_\_\_  
Model Number: \_\_\_\_\_ Serial Number: \_\_\_\_\_

Monroe-Tufline Manufacturing Co., Inc. ("Monroe-Tufline") warrants this product to be free from defect in material and workmanship. Except as otherwise set forth below, the duration of this Warranty shall be for TWELVE (12) MONTHS COMMENCING ON THE DATE OF DELIVERY OF THE PRODUCT TO THE ORIGINAL PURCHASER.

Under no circumstances will this Warranty apply in the event that the product, in the good faith opinion of Monroe-Tufline, has been subjected to improper operation, improper maintenance, misuse, or an accident. This Warranty does not apply in the event that the product has been materially modified or repaired by someone other than Monroe-Tufline, a Monroe-Tufline authorized dealer or distributor, and/or a Monroe-Tufline authorized service center. This Warranty does not cover normal wear or tear, or normal maintenance items. This Warranty also does not cover repairs made with parts other than those obtainable through Monroe-Tufline.

This Warranty is extended solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third party, this Warranty does not transfer to the third party purchaser in any way. There are no third party beneficiaries of this Warranty.

Monroe-Tufline makes no warranty, express or implied, with respect to cutting edges, shanks, tires or other parts or accessories not manufactured by Monroe-Tufline. Warranties for these items, if any, are provided separately by their respective manufacturers.

Monroe-Tufline's obligation under this Warranty is limited to, at Monroe-Tufline's option, the repair or replacement, free of charge, of the product if Monroe-Tufline, in its sole discretion, deems it to be defective or in noncompliance with this Warranty. Such parts shall be provided by the selling dealer to the user during regular working hours. **If requested, the product must be returned to Monroe-Tufline with proof of purchase within thirty (30) days after such defect or noncompliance is discovered or should have been discovered, routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid.** Monroe-Tufline shall complete such repair or replacement within a reasonable time after Monroe-Tufline receives the product. THERE ARE NO OTHER REMEDIES UNDER THIS WARRANTY. THE REMEDY OF REPAIR OR REPLACEMENT IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE OF THIS WARRANTY. MONROE-TUFLINE MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND MONROE-TUFLINE SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY AND/OR ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE (EXCEPT WHERE PROHIBITED BY LAW).

**Monroe-Tufline shall not be liable for any incident or consequential losses, damages or expenses, arising directly or indirectly from the product, whether such claim is based upon breach of contract, breach of warranty, negligence, strict liability in tort or any other legal theory.** Monroe-Tufline's obligation under this warranty, to the extent allowed by law, is in lieu of all warranties, implied or expressed for a particular purpose and any liability for incidental and consequential damages with respect to the sale or use of the items warranted. Such incidental and consequential damages shall include but not be limited to: transportation charges other than normal freight charges; loss of crops or any other loss of income; rental of substitute equipment, expenses due to loss, damage, detention or delay in the delivery of equipment or parts resulting from acts beyond the control of Monroe-Tufline.

This Warranty is subject to any existing conditions of supply which may directly affect Monroe-Tufline's ability to obtain materials or manufacture replacement parts.

No agent, representative, dealer, distributor, serviceperson, salesperson, or employee of any company, including without limitation, Monroe-Tufline, its authorized dealers, distributors, and service centers, is authorized to alter, modify, or enlarge this Warranty.

**This Warranty is subject to the warranty registration being submitted.** For warranty services, contact your selling dealer.

## WARRANTY FOR PARTS

Monroe-Tuflin Manufacturing Co., Inc. ("Monroe-Tuflin") warrants its parts to be free from defect in material and workmanship for a period of ninety (90) days from the date of delivery of the part(s) to the original purchaser.

Replacement or repair parts installed in the equipment covered by warranty are warranted for ninety (90) days from date of purchase of such part or to the expiration of the applicable new equipment warranty period, whichever occurs later.

Under no circumstances will this Warranty apply in the event that the product the parts are installed in, in the good faith opinion of Monroe-Tuflin, has been subjected to improper operation, improper maintenance, misuse, or an accident. This Warranty does not cover normal wear or tear, or normal maintenance items.

This Warranty is extended solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third party, this Warranty does not transfer to a third party purchaser in any way. There are no third party beneficiaries of this Warranty.

Monroe-Tuflin's obligation under this Warranty is limited to, at Monroe-Tuflin's option, the repair or replacement, free of charge, of the product if Monroe-Tuflin, in its sole discretion, deems it to be defective or in noncompliance with this Warranty. The selling dealer shall provide such parts to the user during regular working hours. **If requested, the product must be returned to Monroe-Tuflin with proof of purchase within thirty (30) days after such defect or noncompliance is discovered or should have been discovered, routed through the dealer and distributor from whom the purchase was made, transportation charges prepaid.** Monroe-Tuflin shall complete such repair or replacement within a reasonable time after Monroe-Tuflin receives the product. THERE ARE NO OTHER REMEDIES UNDER THIS WARRANTY. THE REMEDY OF REPAIR OR REPLACEMENT IS THE SOLE AND EXCLUSIVE REMEDY UNDER THIS WARRANTY.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE OF THIS WARRANTY. MONROE-TUFLIN MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND MONROE-TUFLIN SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY AND/OR ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE (EXCEPT WHERE PROHIBITED BY LAW).

**Monroe-Tuflin shall not be liable for any incidental or consequential losses, damages or expenses, arising directly or indirectly from the product, whether such claim is based upon breach of contract, breach of warranty, negligence, strict liability in tort or any other legal theory.** Without limiting the generality of the foregoing, Monroe-Tuflin specifically disclaims any damages relating to (i) lost profits, business, revenues or goodwill; (ii) loss of crops; (iii) loss because of delay in harvesting; (iv) any expense or loss incurred for labor, supplies, substitute machinery or rental; or (v) any other type of damage to property or economic loss.

This Warranty is subject to any existing conditions of supply which may directly affect Monroe-Tuflin's ability to obtain materials or manufacture replacement parts.

No agent, representative, dealer, distributor, service person, salesperson, or employee of any company, including without limitation, Monroe-Tuflin, its authorized dealers, distributors, and service centers, is authorized to alter, modify, or enlarge this Warranty.

For warranty services, contact your selling dealer.

PART NO.  
16540

**Tufline**<sup>®</sup>