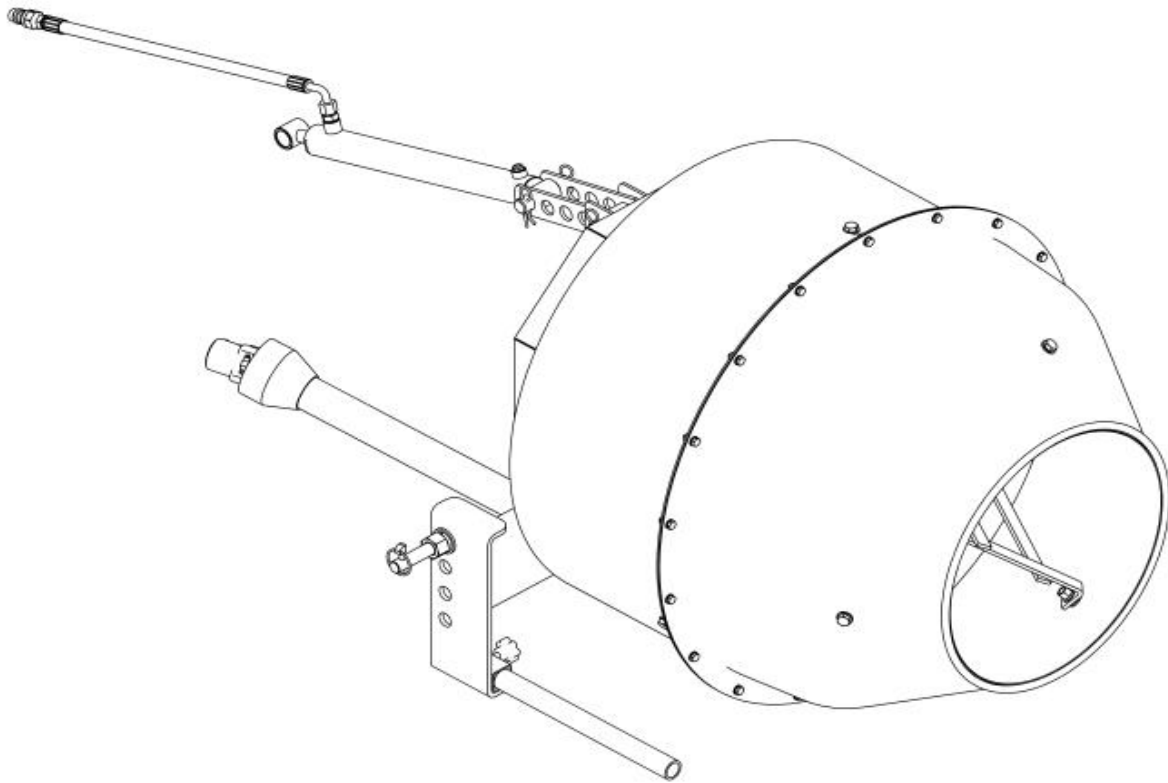
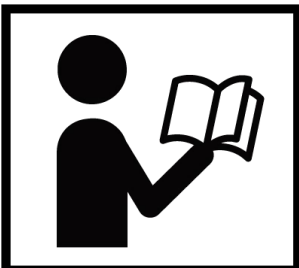


3-POINT HITCH 5 CU-FT CEMENT MIXER



⚠ WARNING



- Please read and understand the product manual completely before assembly
 - Check against the parts list to make sure all parts are received
 - Wear proper safety goggles or other protective gears while in assembly
- Do not return the product to dealer. They are not equipped to handle your requests.

Missing parts or questions on assembly?

Please call: 1-877-761-2819 or email: cs@tmgindustrial.com

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IMPORTANT SAFETY INFORMATION

WARNING:

- Read and understand all instructions. Failure to follow all instructions may result in serious injury or property damage.
- The warnings, cautions, and instructions in this manual cannot cover all possible conditions or situations that could occur. Exercise common sense and caution when using this tool. Always be aware of the environment and ensure that the cement mixer is used in a safe and responsible manner.
- Do not allow persons to operate or assemble the cement mixer until they have read this manual and have developed a thorough understanding of how it works.
- Do not modify this cement mixer in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the cement mixer. There are specific applications for which the product was designed.
- Use the right tool for the job. DO NOT attempt to force small equipment to do the work of larger industrial equipment. There are certain applications for which this equipment was designed. It will be safer and do a job better at the capacity for which it was intended. DO NOT use this equipment for a purpose for which it was not intended.
- Industrial or commercial applications must follow OSHA requirements.

WORK AREA SAFETY

WARNING:

- Inspect the work area before each use. Keep work area clean, dry, free of clutter, and well lit. Cluttered, wet, or dark work areas can result in injury. Using the cement mixer in confined work areas may put you dangerously close to other cutting tools and rotating parts.
- Do not allow the cement mixer to come into contact with an electrical source. The cement mixer is not insulated and contact will cause electrical shock .
- Keep children and bystanders away from the work area while operating the cement mixer. Do not allow children to handle the cement mixer.
- Be aware of all power lines, electrical circuits, water pipes, and other mechanical hazards in your work area. Some of these hazards may be hidden from your view and may cause personal injury and/or property damage if contacted.

PERSONAL SAFETY

- Stay alert, watch what you are doing, and use common sense when operating the cement mixer.
Do not use the cement mixer while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating the tool may result in serious personal injury.
- Dress properly. Do not wear loose clothing, dangling objects, or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts. Air vents on the tool often cover moving parts and should be avoided.
- Wear the proper personal protective equipment when necessary. Use ANSI Z87. 1 compliant safety goggles (not safety glasses) with side shields, or when needed, a face shield. Use a dust mask in dusty work conditions. Also use non-skid safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate. This applies to all persons in the work area.
- Do not overreach. Keep proper footing and balance at all times.
- Remove keys or wrenches before connecting the tool to an air supply, power supply, or turning on the tool. A wrench or key that is left attached to a rotating part of the tool may cause personal injury.
- Secure the work with clamps or a vise instead of your hand when practical. This safety precaution allows for proper tool operation using both hands.

PRODUCT USE AND CARE

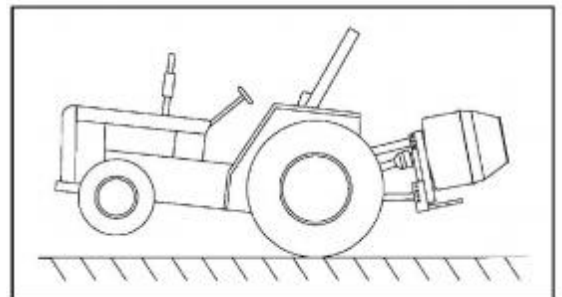
- Do not force the cement mixer. Products are safer and do a better job when used in the manner for which they are designed. Plan your work, and use the correct product for the job.
- Check for damaged parts before each use. Carefully check that the cement mixer will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the cement mixer with a damaged part.
- Store the cement mixer when it is not in use. Store it in a dry, secure place out of the reach of children. Inspect the tool for good working condition prior to storage and before re-use.
- Use only accessories that are recommended by the manufacturer for use with your cement mixer.
- Accessories that may be suitable for one product may create a risk of injury when used with another tool. Never use an accessory that has a lower operating speed or operating pressure than the tool itself.
- Keep guards in place and in working order. Never operate the cement mixer without the guards in place.

SPECIFIC OPERATION WARNINGS

WARNING:

To prevent serious injury or death:

- Read and understand this Owner's Manual before operating, servicing, or repairing equipment.
- Wear ANSI Z87. 1 compliant goggles while operating.
- Stop the engine, remove the key, and set the brake before dismounting the tractor.
- Operate from the tractor's seat only.
- DO NOT reach into the mixer while the barrel is rotating.
- Turn the PTO off before dumping the mixer.
- DO NOT exceed a dumping angle of 25 degrees at the PTO shaft U-joint.
- Never allow riders on the equipment.
- Never place hands or hand held tools (shovels) into the mixer drum while it is turning.
- Keep bystanders at least 25 feet away while operating.
- DO NOT operate or transport on steep inclines.
- DO NOT use if the implement is damaged. Repair before continuing use.
- Park and store on a hard, level surface.
- Store out of reach of children. Not for use by or around children.
- 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 signs on your equipment. Observe all safety signs and practice the instruction on them .
- A heavy load can cause instability in driving a tractor. Make sure the front of the tractor is properly counterbalanced with weights. Always drive slowly – especially around turns. An unstable tractor could steer badly and possibly tip over, causing injury or death.
- Never exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question, DO NOT TRY IT.
- Do not modify the equipment in any way. Unauthorized modifications may impair the function and/or safety and could affect the life of the equipment.



HIGH PRESSURE HYDRAULIC OIL HAZARD

- Wear ANSI Z87. 1 compliant safety goggles and hand protection while operating.
- Check for leaks with cardboard; never use hands.
- Lower load, release pressure, and be sure oil is cool before servicing or adjusting.
- Consult a physician immediately if skin penetration occurs.

ENTANGLEMENT HAZARD

To prevent serious injury or death from rotating driveline:

- DO NOT operate without guards in place and in good condition.
- DO NOT operate higher than 540 RPM.
- Keep hands, feet, clothing, and hair away from moving parts.
- DO NOT operate without driveline securely attached at both ends.
- DO NOT operate without driveline shields that turn freely on driveline.

Before servicing:

- Stop the engine, remove the key and set the brake before dismounting the tractor.
- Disengage the PTO.

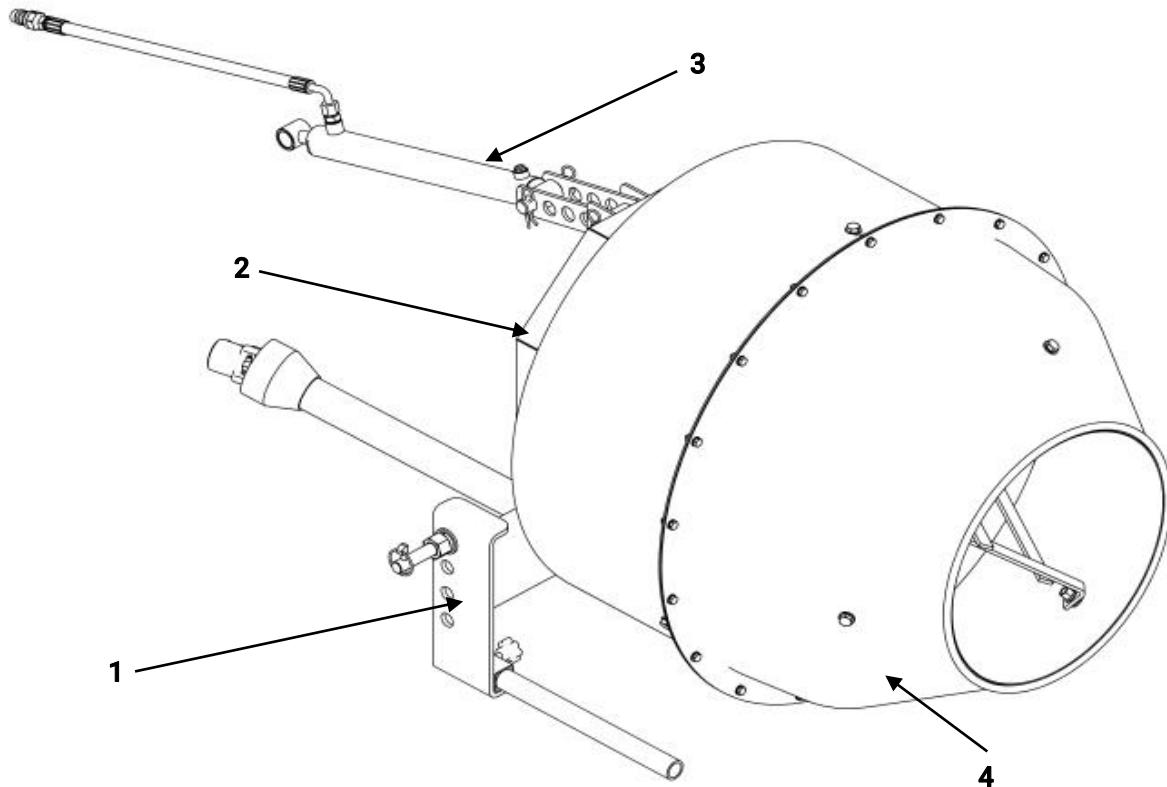
Machine starting and Stopping

- Be certain the tractor is in neutral or park position before starting engine.
- Do not leave the tractor or the implement unattended with the engine running.
- 3 Pt. Mixer operating power is supplied form tractor PTO. Refer to your tractor manual for PTO engagement and disengagement instructions. Always operate the PTO in the 540 rpm rang. Know how to stop tractor and mixer quickly in case of an emergency.
- Mixer should be lifted off the ground before engaging PTO and be sure that no one is near the machine. When engaging PTO ,the RPM should always be low.
- Never engage PTO driver with the mixer in the dump position. Engaging PTO with mixer in dump position can cause damage to the PTO driveline. This damage could cause the driveline to come apart causing possible injury or death.
- When raising mixer with the 3 point hitch, check that the PTO driveline does not go into sharp angles (more than 15 °).

PRODUCTS SPECIFICATIONS

Model	TMG-TCM5
Empty drum volume	5 CU-FT
Drum opening	18"
Max. drum rotary speed	70 RPM
Tractor horsepower	20~30 HP
PTO speed	540 RPM
Power From	PTO shaft
Type of drive	Chain drive
Drive Ratio	7.6:1
Blade No	3
Hitch type	CAT 1
Weight (empty)	128 Kg
Packing Size	1050*930*700 mm

PARTS DESCRIPTION AND FUNCTION



1. RACK COMPONENTS

Connect tractor and cement mixer, it is also a cement mixer support mechanism.

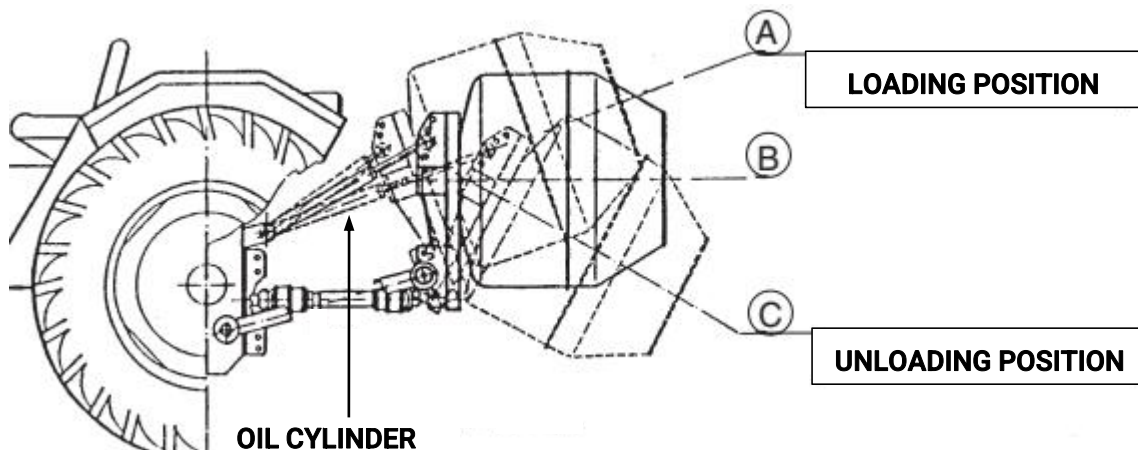
2. Transmission components

Mainly including active sprocket shaft, driven sprocket, chain, spindle, PTO driven shaft and so on.

PTO for type 1 drive shaft, tractor PTO gear selection rod 540 RPM. Transmission ratio: 10/1. Driven sprocket drives the mixing barrel to rotate, so that the cement mixture meets the requirements of use.

3. Hydraulic components

Including cylinders, tubing and connector. The cylinder uses oil from the tractor hoist. The movement of the oil cylinder makes the position of the mixing barrel change in loading and unloading to meet the requirements of use.



4. Mixing drum components

Mainly including the upper barrel welding, the lower barrel, stirring knife welding composition. The three stirring knives rotate along with the low barrel to stir the cement mixture.

PRODUCTS SAFETY DECALS



DANGER

KEEP BACK

Entanglement in rotating driveline can cause serious injury or death. Keep all shields in place at all times. Avoid contact with rotating parts.

TMG-GNRL-0021

MAX PTO 540 RPM

TMG-GNRL-0023

WARNING

Before servicing the machine, disengage the PTO, engage the parking brake or place the transmission in "park", shut off the tractor and remove the key. Keep clear of rotating parts; stay on tractor seat until all motion has stopped. Do not get under machine to make adjustments without securely blocking implement first.

TMG-MACH-4037

WARNING

When attaching PTO yoke to tractor PTO shaft, it is important that spring activated locking pin or balls operate freely and are seated in groove on PTO shaft. A loose shaft could slip off and result in personal injury or damage to equipment.

TMG-MACH-4038

WARNING

Never place hands or hand held tools (shovel), into the mixer drum while it is turning. It could catch on the mixer paddles and whip around, possibly injuring the operator.

TMG-MACH-4039

CAUTION

THE FOLLOWING SAFETY PRECAUTIONS SHOULD BE THOROUGHLY UNDERSTOOD BEFORE ATTEMPTING TO BEGIN ASSEMBLING THIS MACHINE

- 1) Select an area for assembly that is clean and free of any debris which might cause persons working on the assembly to trip.
- 2) Do not lift heavy parts or assemblies. Use crane, jack, tackle, fork trucks or other mechanical devices.
- 3) Never put hands, or any part of body, under blocked up assemblies if at all possible.
- 4) After completing assembly, thoroughly inspect the machine to be sure that all nuts, bolts or any other fastened assemblies have been thoroughly tightened.
- 5) Before operating equipment. If you have any questions regarding the proper assembly or operation, contact your dealer or the manufacturer.

TMG-MACH-4040

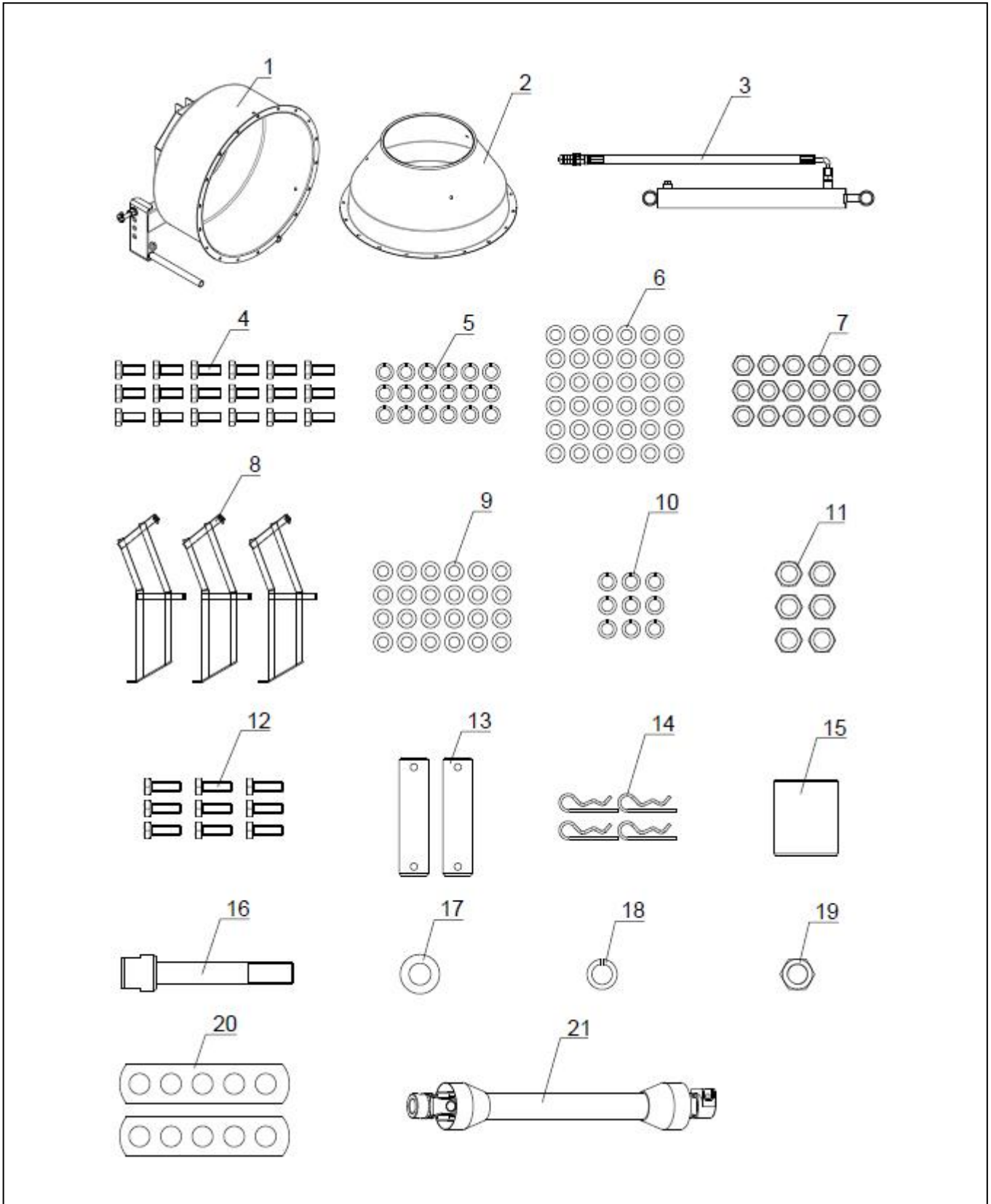
CAUTION

TURN PTO OFF
Before Dumping Mixer
Never Exceed 25° Angle At
The PTO Shaft U-Joint.

TMG-MACH-4041

UNPACKING & ASSEMBLY

1. After unpacking, check the following components



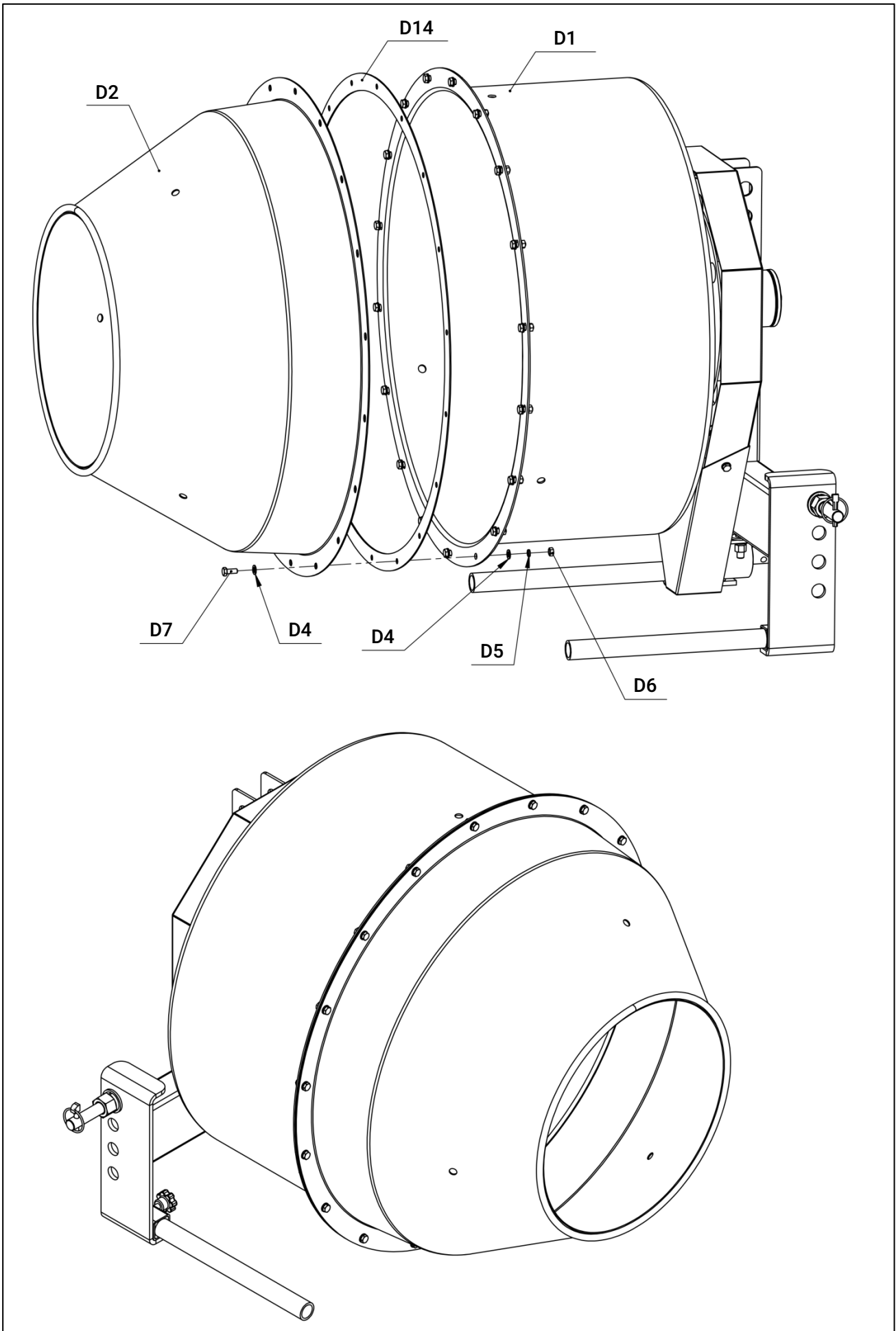
*. All numbers are not part numbers in the drawings. For correct part numbers, see explosive diagram.

NO.	DESCRIPTION	QTY	NO.	DESCRIPTION	QTY
1	Main drum weldment	1	12	Hexagon bolt M12X35	9
2	Cone drum weldment	1	13	Cylinder pin	2
3	Hydraulic components	1	14	R pin	4
4	Hexagon bolt M8x20	18	15	Bushing	1
5	Spring washer Ø8	18	16	Safety pin	1
6	Flat washer Ø8	36	17	Flat washer Ø10	1
7	Hex nut M8	18	18	Spring washer Ø10	1
8	Stirrer Welding	3	19	Hex nut M10	1
9	Flat washer Ø12	24	20	Cylinder connecting plate	2
10	Spring washer Ø12	9	21	Transmission shaft T1-700	1
11	Hex nut M12	6			

TOOLS FOR INSTALLATION				
NO	DESCRIPTION	SPECIFICATION	CONDITIONS OF USE	QTY
1	Open End Wrench	13/16/18	M8, M10, M12 bolt tightening	2
2	Air Gun	1280t	Tighten the bolt with the corresponding socket instead of the Wrench	1
3	Hammer			1
4	Torque Wrench	10-220N·m	Measuring torque	1

After the parts are confirmed to be correct and the tools for installation are ready, start the assembly. The specific operation steps are described below.

2. Install cone drum weldment



Installation steps:

Align the CONE DRUM WELDMENT (D2) with the mounting holes on the MAIN DRUM WELDMENT (D1), place the SEAL PACKING (D14) between the two, insert the M8 BOLT (D7), and use the FLAT WASHER (D4), SPRING WASHER (D5) and HEXAGON NUT (D6) Lock it.

Importance: All bolts are locked in place without shaking.



WARNING: Once the assembly bolts are not fastened in place, there will be abnormal noises when the machine is working.

PART NO.	DESCRIPTION	QTY
D1	Main drum weldment	1
D2	Cone drum weldment	1
D4	Flat washer Ø8	36
D5	Spring washer Ø8	18
D6	Hexagon nut M8	18
D7	Full-thread hexagon bolt M8x20	18
D14	Seal packing	1

3. Install the paddle weldment

Installation steps:

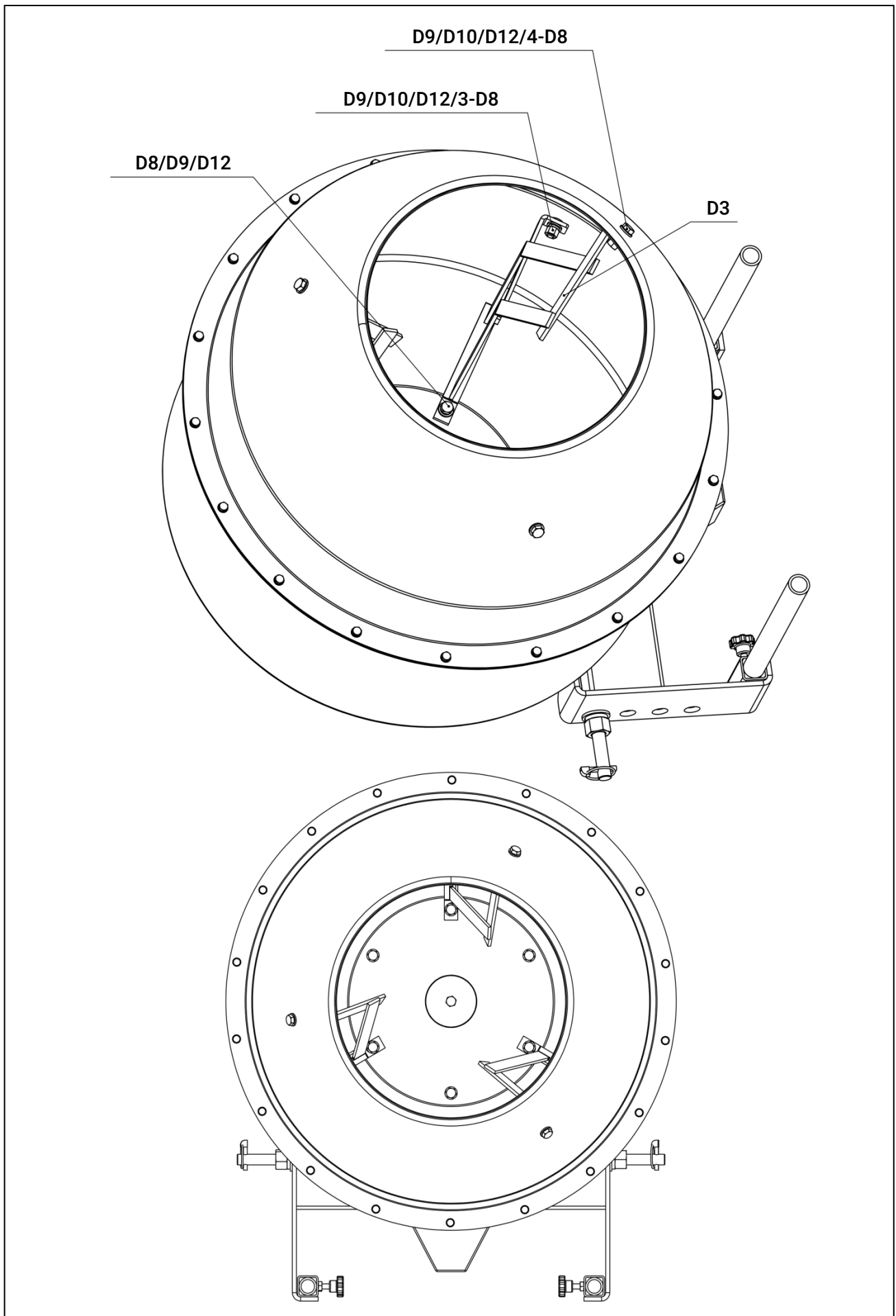
Align the PADDLE WELDMENT parts (D3) with the mounting holes of the upper and lower mixing buckets, as shown in the figure above. Next, install FLAT WASHER (D8), HEXAGON NUT (D9), and FULL-THREAD HEXAGON BOLTS M12x35 (D12) in sequence without tightening; then align the other two holes and insert the D12 bolts. The installation order of the rightmost hole parts is D12, D8, the upper mixing tank, D8, D8, D3, D8, D9, D10, and the installation order of the left hole parts is D12, D8, the lower mixing tank, D8, D3, D8, D9, D10, the washer between the mixing barrel and D3 is an adjustment washer, which can be increased or decreased according to the actual situation to ensure that the mixing paddle and the mixing barrel fit together, and all bolts are tightened after they are installed.

Importance: All bolts are locked in place without shaking.

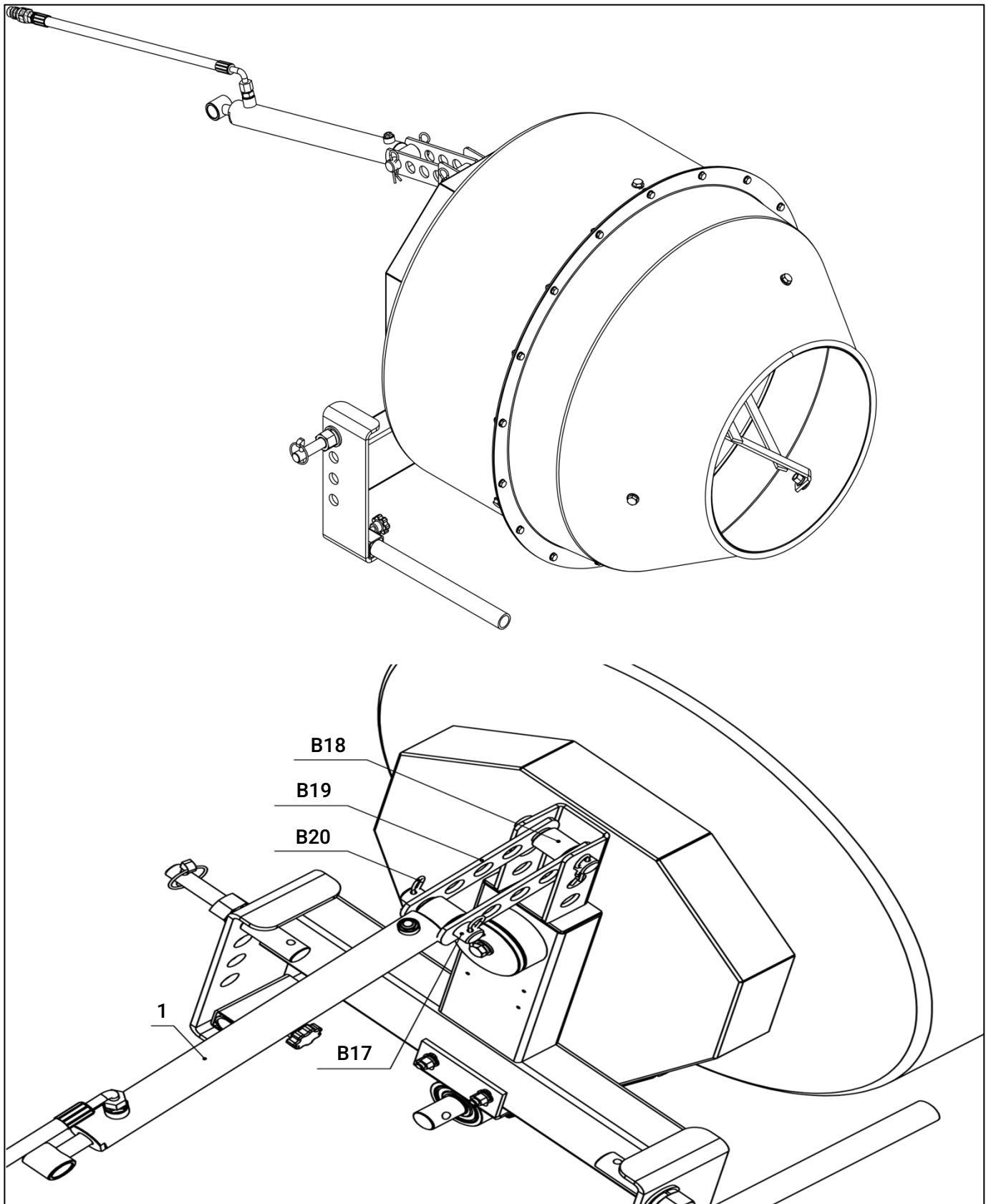


WARNING: Once the assembly bolts are not fastened in place, there will be abnormal noises when the machine is working.

PART NO.	DESCRIPTION	QTY
D3	Paddle weldment	3
D8	Flat washer Ø12	24
D9	Hexagon nut M12	9
D10	Spring washer Ø12	6
D12	Full-thread hexagon bolts M12x35	9



4. Install hydraulic components



Installation steps:

First insert the CYLINDER PIN (B17) on the right into the position shown in the figure above, insert B19, B18,B19 in sequence, insert 2 R PINS (20) on the CYLINDER PIN(B17), then align the HYDRAULIC COMPONENTS(1) with the mounting hole on the CYLINDER CONNECTING PLATE(B19), and insert CYLINDER PINS(B17), and finally insert 2 more R PINS(B20).

PART NO.	DESCRIPTION	QTY
1	Hydraulic components	1
B17	Cylinder pin	2
B18	Bushing	1
B19	Cylinder connecting plate	2
B20	R pin	4

5. Install PTO components

Installation steps:

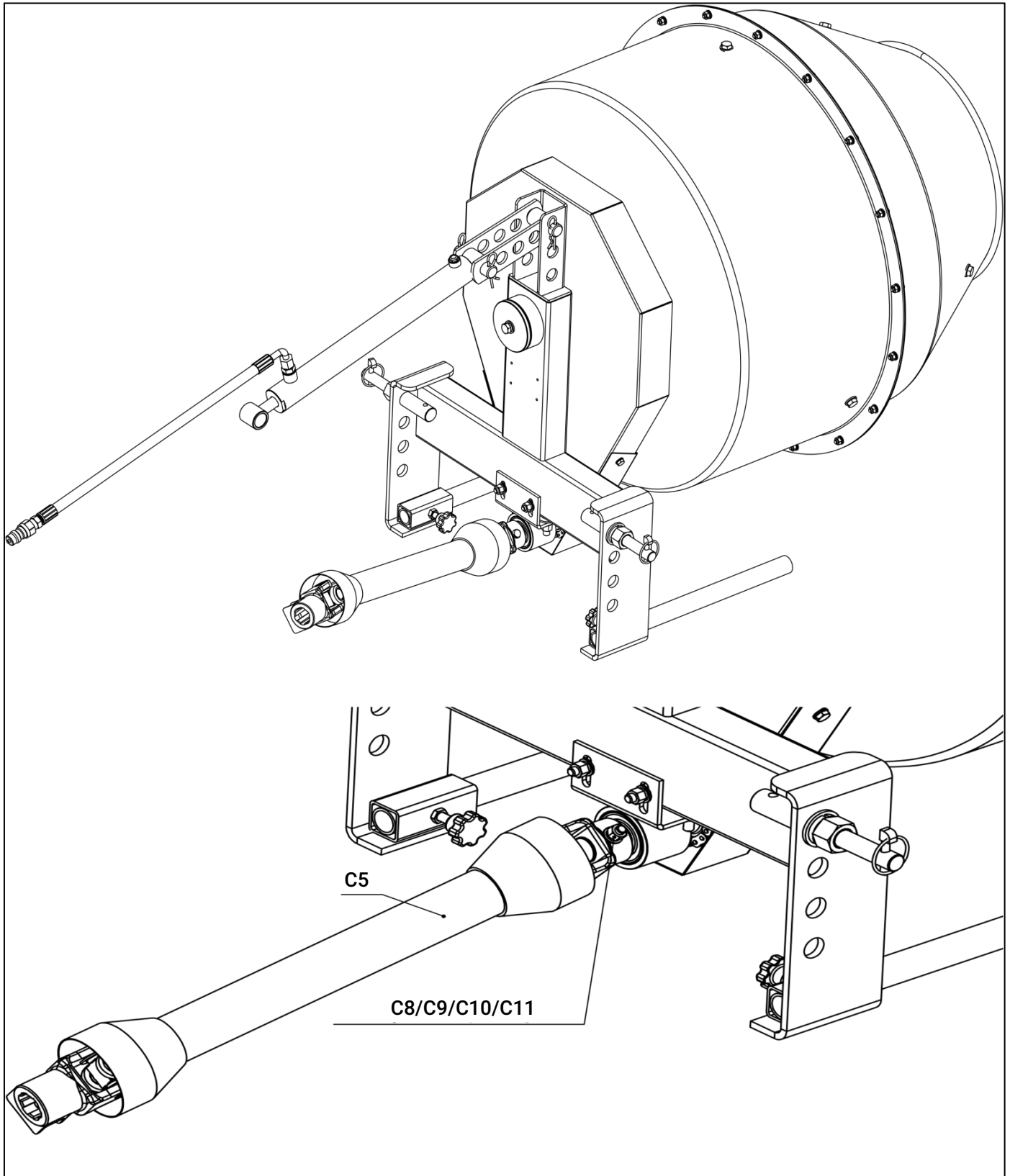
Place the PTO TRANSMISSION SHAFT(C5) in the position shown in the figure, align the mounting hole on the shaft, insert the SAFETY PIN(C8), and lock it with the FLAT WASHER(C9), SPRING WASHER(C10) and NUT(C11).

Importance: All bolts are locked in place without shaking.



WARNING: Once the assembly bolts are not fastened in place, there will be abnormal noises when the machine is working.

PART NO.	DESCRIPTION	QTY
C5	PTO transmission shaft T1-700	1
C8	Safety pin	1
C9	Flat washer Ø10	1
C10	Spring washer Ø10	1
C11	Hexagon nut M10	1



CONNECTING TRACTOR

1. Three-point linkage

WARNING !

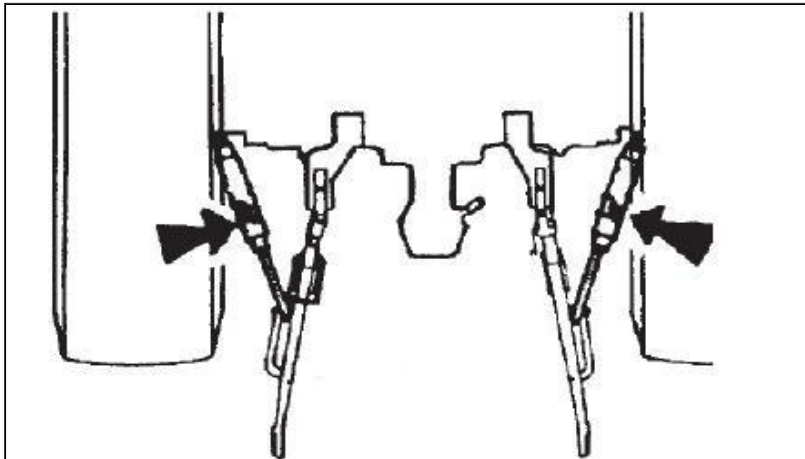
In the process of connection, when the tractor is moving, if there is people between the tractor and working machine, it may cause injury accident. Be sure no people stand between the tractor and working machine during the tractor moving.

LOWER LIFTING PIN TYPES	
TMG-TCM5	CAT1

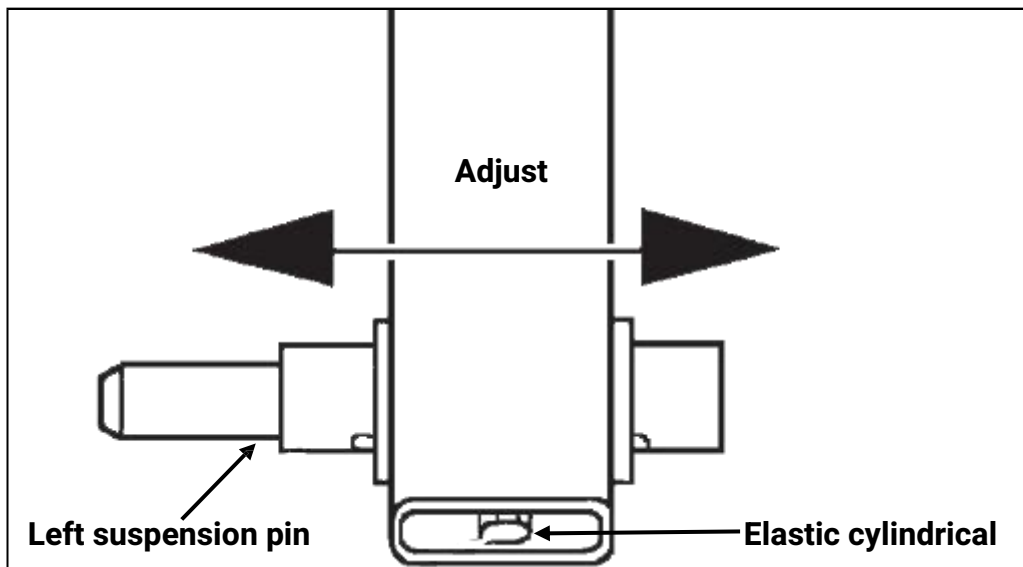
2. Connection and adjustment

CAUTION ! Make sure the tractor is fixed in the process of connection

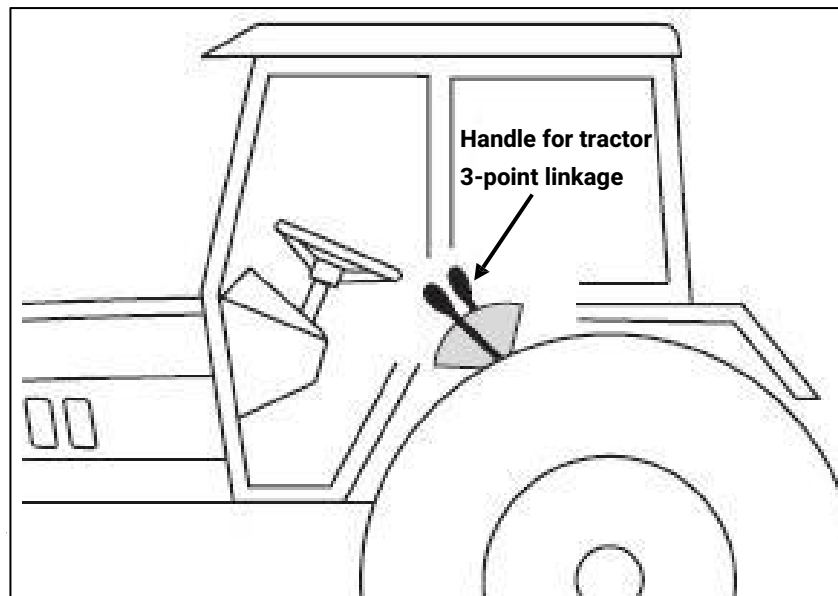
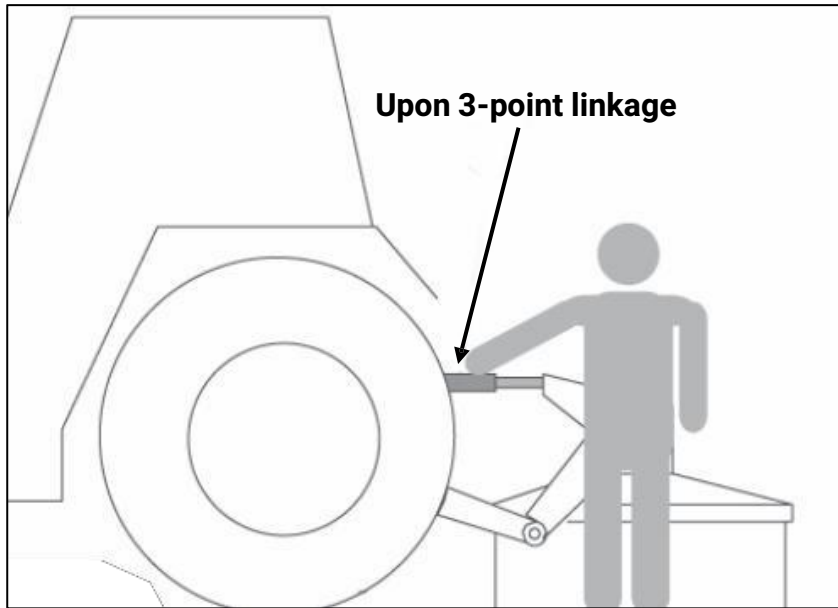
- Start the tractor engine, tractor and machine head lower link under suspension corresponds to the position of the pin, rewind, stop, stop the engine, put up parking stalls.
- Connect Left towing arm, the left arm on the tractor towing the working machine is left hanging inserted pin, the locking detent. Right arm pulling the same way.
- Adjust the towing arms in the same height, as shown below:



If the magnitude of the tractor towing arms is too narrow, adjust the left suspension pin inward as below:



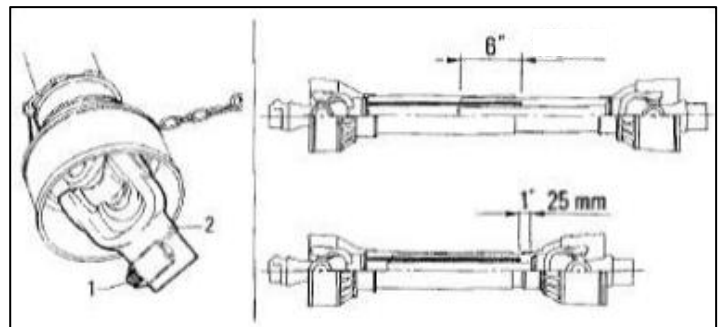
d. Adjust angle, to obtain the most appropriate cutting angle, adjust the upon 3-point linkage suspension to ensure the suitable cutting angle.



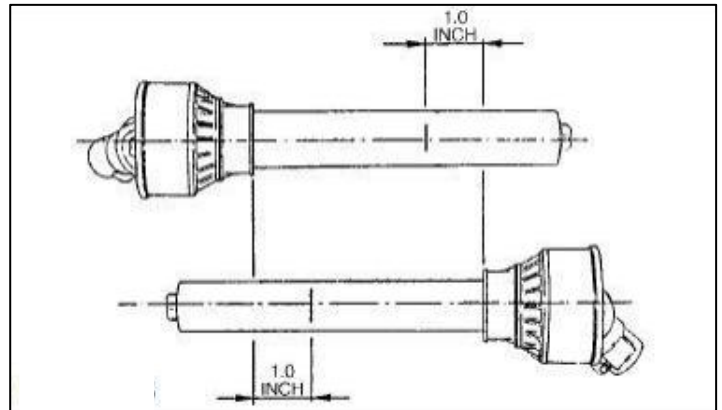
3.PTO Installation

In some cases it will be necessary to shorten the PTO assembly to match your particular tractor. The following procedure should be used:

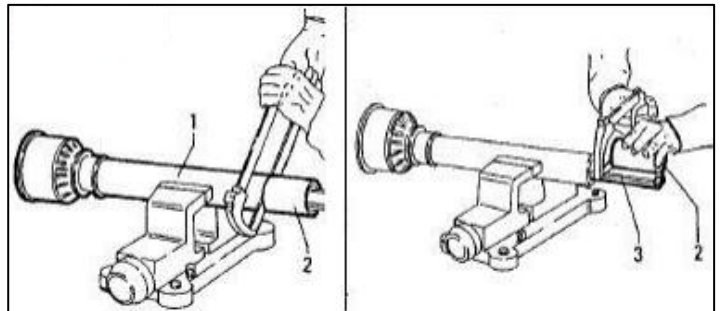
1. Check that the driveline is the correct length .
The minimum coupling length (overlap) must be no less than 150mm (6 inches) in each work position. The driveline travel must still be about 25mm (1 inch) in the maximum coupling (overlap) position .



2. Always couple the two end yokes of the driveline, check that they are locked in place. To achieve this condition, completely insert the latch pin into the groove in the PTO shaft on the tractor. Install the bolt through the yoke and input the shaft on the mixer. An unlocked shaft will slip out of position, causing notable mechanical damage and serious injury to anyone nearby. If the driveline is too long, it should be shortened in the following way:



- Set the machine PTO input shaft at a minimum distance from the tractor PTO stub shaft, then set the tractor brakes, and switch the engine off.
- Separate the two halves of the driveline. Install the female part into the tractor PTO and the male part on the machine PTO, checking that the position is correct by means of the latch pin.
- Place the two halves of the driveline together, keeping them parallel. Using a felt-tip pen, mark the place where the two halves must be shortened, measuring 1.0 inch from the beginning of each half, as shown in Figure. Double check before making any cuts. Cut PTO drivelines cannot be returned.
- Raise and lower the mixer to determine the position with the greatest distance between the PTO shaft and mixer input shaft. Shut the tractor off, leaving the mixer in the position of greatest distance between shafts. **SECURELY BLOCK THE MIXER IN POSITION.**
- Hold the driveline sections parallel to each other and check for a minimum of 6" (15cm) overlap. If the driveline has been marked for cutting, the overlap will be the distance between the two marks. If the driveline has less than the minimum overlap, do not use it. Contact an authorized dealer.
- If the driveline must be cut to a shorter length, it in a well-padded vise to prevent the shield. Cut off the shield where Using the removed sections of the cut off the same amount from
- Repeat the procedure on the other driveline half. Remove all burrs and cuttings.
- Apply multi-purpose grease to the inside of the outer (female) driveline section. Assemble the driveline and install on the tractor and the mixer. Pull on each driveline section to be sure the yokes lock into place. Make certain the driveline shielding is in place and in good condition.



WARNING !

When attaching the PTO yoke to the tractor PTO shaft, it is important that spring-activated locking pins or balls operate freely and are seated in the groove on the PTO shaft. A loose shaft could slip off and result in personal injury or damage to equipment.

- Carefully raise and lower the mixer and check to be sure the PTO assembly does not jam . If it does, cut equal amounts from each half of the PTO assembly. If the PTO driveline assembly contacts the swinging drawbar, damage will occur to the driveshaft shield and possibly the driveshaft itself (NOT covered under warranty) .
- Check the swinging drawbar of the tractor and make sure the PTO driveline assembly will not contact. The swinging drawbar can be moved forward on some tractors or it can be removed.

Note: This type of damage is NOT covered under warranty, as it is totally under the control and the responsibility of the operator.

BEFORE EACH USE

PRE-OPERATION CHECKLIST

Review and follow the safety rules and safety signs .

Check that the mixer is properly and securely attached to the tractor.

- Make sure the driveline spring-activated locking pin or locking balls operate freely and are seated firmly in the tractor's PTO spline groove.
- Lubricate all grease fitting locations. Make sure the PTO shaft slip joint is lubricated.
- Check that all hardware is properly installed.
- Check that all shields and guards are properly installed and in good condition.
- Place the tractor's PTO and transmission in neutral before starting the engine.
- Set the tractor's PTO gear select lever for 540 RPM operation.
- Check that no one enters the area of machine operation. Always work at a safe distance from people, pets, and livestock .
- Know your controls and how to stop the tractor, the engine and the PTO quickly in an emergency. READ THIS MANUAL AND THE ONE PROVIDED WITH YOUR TRACTOR.
- To avoid accident or injury, do not allow anyone to operate this equipment without proper instructions. Any person who operates this equipment must be instructed in and be capable of the safe operation of the tractor, implement, and all controls.

OPERATING INSTRUCTIONS

WARNING !

Before servicing:

- Stop the engine, remove the key and set the brake before dismounting the tractor.
- Disengage the PTO.

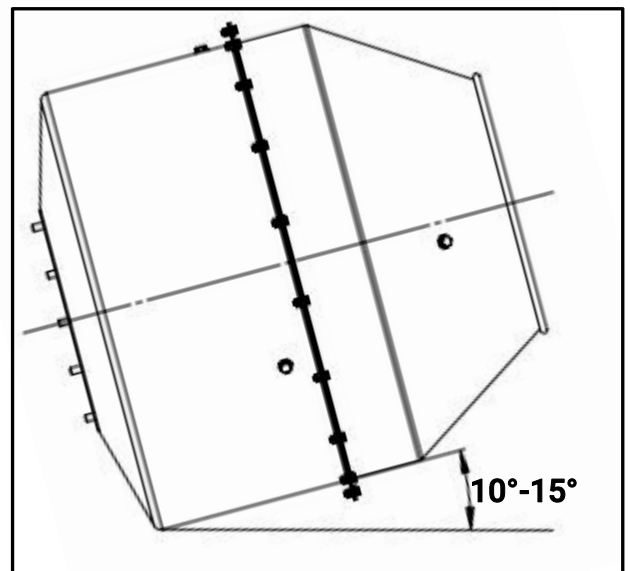
For best mixing, the drum should be inclined upward 10° to 15° .

(See Figure 5) Add some water before any cement, sand, or aggregate is put in the drum .

Note: ONLY LOAD THE MIXER WHILE THE DRUM IS TURNING.

The amount of water used per sack of cement is the key to quality concrete. Use 5, 6, or 7 gallons of water per sack of cement with dry sand and dry aggregate, depending on the strength of the concrete required. The less water you use, the stronger the concrete will be, and we suggest that you deduct approximately 1 gallon if the material is wet and approximately 1 1/2 gallons if it's very wet.

We suggest mixing a trial batch to determine the exact proportions you will want to use. If it's too wet, add more sand and aggregate. If it's too stiff, reduce the amount of sand and aggregate in the next batch, but never add more water to a batch once you have established the correct proportions to use.



After the concrete is poured, it is screeded or struck off with a straight edge, like a 2 x 4, and it should then be floated to smooth it. Further troweling or finishing should be delayed until the water sheen has disappeared from the surface. The concrete should be cured at least five days.

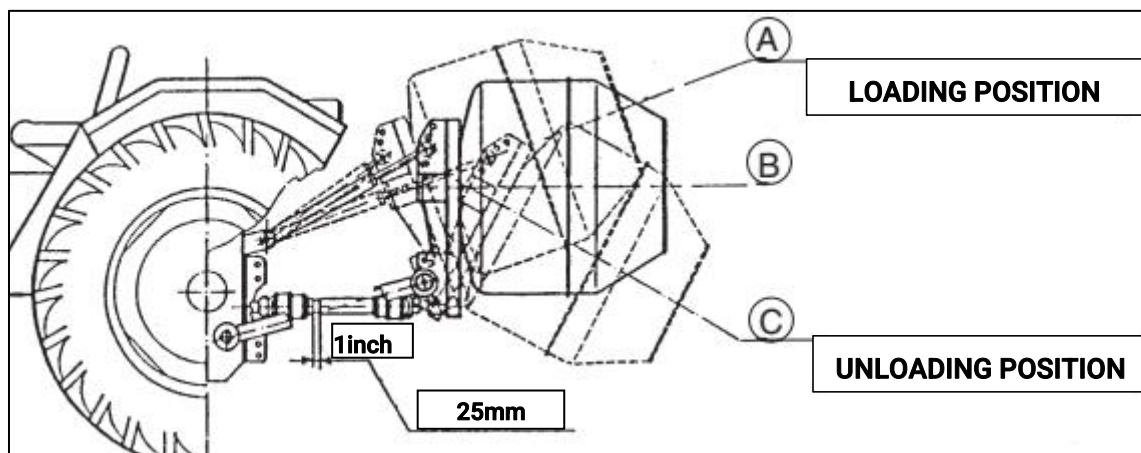
To prevent evaporation of mixing water, cover with burlap or straw and keep it damp or cover it with a vapor sealing material to seal in the water and prevent evaporation.

WARNING !

Never place hands or hand held tools (like a shovel) into the mixer drum while it is turning. It could catch on the mixer paddles and whip around, possibly injuring the operator.

1. Attentions during in use

1. When start job, the empty drum should be inclined upward 10° to 15°(see Fig.1). Drum is turning, add some water before cement, sand or aggregate is put in drum.



2. Within the job, disengage the PTO before dumping. Never attempt to dump the mixer the mixer running – PTO damage will result. Always dump the mixer slowly to avoid splashing the mixer. Be careful not to let the mixer dump too far and bind the hydraulic cylinder. Use a shovel to remove the last of mixer.
3. After working, flush the mixing drum with water so that the concrete does not solidify on the drum. Should maintenance the machine, check the connection fastening case and the driver chain, adjust with the tighten.

2. Cement mixer adjustment

The frame is designed to allow attachment of the mixer to tractors equipped with 3 -point hydraulic lift system (1st Category).

1. Once attached to the tractor it is necessary to remove the blocking knobs from the support legs and place these legs in the position indicated in the design shown on the adhesive decals.
2. Place the mixer as shown in "Position B" indicated in the diagram in this booklet, block the lift bars of the hydraulic lift so that the PTO Shaft remains as nearly as possible horizontal with respect to the power take-off of the tractor and the input shaft of the cement mixer. There upon carry out the link-up to the hydraulic system of the tractor and verify - without rotating the mixer tub - that the PTO Shaft is in no way subjected to forcing especially when in the " position C" of the diagram. N.B. Ensure that in all positions, and especially in "position C" (the shortest), there is at least 25 mm (1 ins) axial play in the PTO Shaft itself.
3. Start the power take-off of the tractor at the lowest r.p.m. and rotate the mixer tub for a short period empty. During this test ensure once again that the PTO Shaft does not force at the cross-pieces either in "position A" or "position C" of the diagram.

Noted. Ensure that the shaft never operates at an angulation of more than 25° as illustrated in the diagram and also in the decals attached to the machine.

3. Dumping

Disengage the PTO before dumping. Never attempt to dump the mixer with the mixer running – PTO damage will result. Always dump the mixer slowly to avoid splashing the mixture. Be careful not to let the mixer dump too far and bind the hydraulic cylinder. Use a shovel to remove the last of the mixture.

4. Transporting

When traveling on public roads, whether at night or during the day, use accessory light and devices for adequate warnings to operators of other vehicles. Comply with all federal, state and local laws.

- Be sure to reduce tractor ground speed when turning; and, leave enough clearance so the mixer does not contact obstacles such as buildings, trees or fences.
- Select a safe ground travel speed when transporting from one area to another. When traveling on roadways, transport in such a way that faster moving vehicles may pass you safely.
- When traveling over rough or hilly terrain, slow down and use extra care.
- Read all the safety warnings in the front of the manual.

OPERATING FINISH

Seiri and check after operating

1. After working, flush the mixing drum with water so that the concrete does not solidify on the drum.
2. After using , Mixer should be careful to check some of the parts , including main and driven sprockets, bearings, suspension pins ,locking pins, chains. If damaged, must be replaced or adjusted, the chain must be checked for tension.
3. Before servicing the machine, disengage the PTO, engage the parking brake or place the transmission in "Park", shut off the tractor and remove the key. Keep clear of rotating parts; stay on tractor seat until all motion has stopped. Do not get under machine to make adjustments without securely blocking implement first.

Separate from the tractor

1. The PTO drive shaft ends will be removed from the tractor and mixer end.
2. Set support legs , separate the tractor suspension with 3-point hitch from mixer.

Storage

1. Store mixer in a dry location. If mixer must be stored outside, place drum so that the mouth of the drum is down to prevent water from accumulating in the drum.
2. Make sure the hydraulic toplink cylinder has the rod end fully retracted into the cylinder body and that the breather hole on the cylinder body is positioned where water cannot enter.
3. Collapse driver shaft as far as possible and store it to prevent ground contact.
4. Sand areas where paint is chipped or worn and repaint to prevent rust.
5. Always store in a safe place away from children or livestock.

MAINTENANCE

WARNING !

Before servicing the machine, disengage the PTO, engage the parking brake or place the transmission in park, shut off the tractor, and remove the key. Keep clear of rotating parts; stay on the tractor seat until all motion has stopped. Do not get under the machine to make adjustments without securely blocking the implement first.

If work is required while the mixer is attached to the tractor, the mixer must be blocked securely. NEVER trust the tractors' hydraulic system . After mixing concrete, or any material that clings to the side of the drum, be sure to clean thoroughly when finished. When mixing concrete, if there are lapses between batches, it is a good idea to add some water and rinse so that the concrete will not set in the drum . Thoroughly clean the grease zerks before servicing. Dirt mixed with lubricant will rapidly wear parts and destroy bearings. Check the drive chain and if necessary, adjust with the tightener. Carefully check and replace any worn or damaged parts.

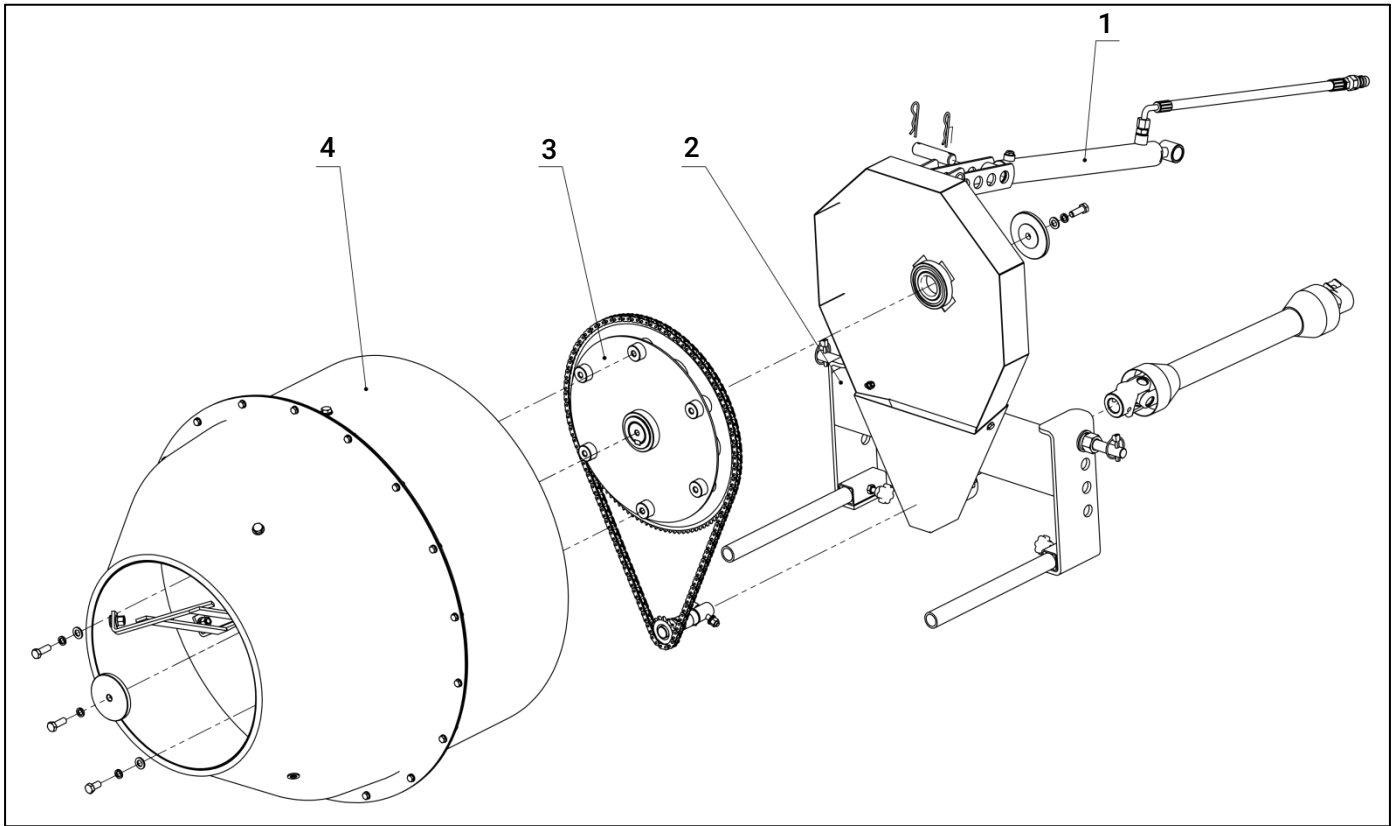
Inspection unit list	Inspection time
Paddle welding	Before the job
Chain tension	Weekly
Paddle wearing	Monthly
Chain wearing	Monthly
Bolts or nuts loose	1 hour in the new use

TROUBLESHOOTING

PROBLEM	PROBABLE CAUSE	SOLUTION
Mixer dumps and won't come back to load position	<ol style="list-style-type: none"> 1. Hydraulic hose from cylinder not connected to tractor hydraulic remote outlet. 2. Hydraulic top link cylinder on mixer is single acting and is incompatible with tractor remote outlet valve-check manual and tractor dealer to see if different valve is Available. 3. Low oil in tractor reservoir . 4. Front of tractor is headed downhill and oil level in Reservoir is low. 	<ul style="list-style-type: none"> --- Coupling hydraulic tubing --- Add oil
Mixer will not dump	<ol style="list-style-type: none"> 1. Hydraulic top link not connected properly to tractor hydraulic outlet. 2. Tractor hydraulic valve not working properly. 3. Low oil level in tractor hydraulic reservoir. 	<ul style="list-style-type: none"> --- Coupling hydraulic tubing --- Check tractor valve --- Check oil level
Mixer will not tilt enough when dumping	<ol style="list-style-type: none"> 1. Geometry of pull pin location and top link is not correct. 2. Low profile tractor being used. 3. Tractor front end is positioned downhill at dumping site. 	<ul style="list-style-type: none"> --- Chang location of top link connection to mixer and location of pull pins --- Use different tractor --- Dump mix on level ground into wheelbarrow and Transport to actual dump site
Drive chain breaks	<ol style="list-style-type: none"> 1. Loading mixer while drum is stationary s and then trying to start a loaded drum to turn. 2. Using a tractor without live PTO and having to stop/start mixer drum when shifting tractor gears. 3. Too much load for mixer. 4. Drive chain not properly tightened. 5. Drive chain is rusted and has been setting outside. 6. Tractor engine RPM too high when engaging PTO. 	<ul style="list-style-type: none"> --- Always load into a turning mixer --- Use another tractor or mix less material for less load --- Reduce amount of material --- Adjust chain for proper tensioning force --- Replace chain and lubricate regularly --- Slow engine RPM when engaging or disengaging PTO
Mixer shakes excessively	<ol style="list-style-type: none"> 1. Stabilizer straps not attached to tractor 3 PT. hitch lift Arms. 2. Mixer too dry and has formed a clump. 3. Material has large chunks. 4. Tractor engine idle too slow. 5. PTO driveline is operating at a sever angle. 	<ul style="list-style-type: none"> --- Install stabilizer --- Add water --- Break up material before putting in mixer drum --- Increase engine RPM slightly --- Raise or lower 3 PT. hitch so driveline is operating with mini-mum Angle

EXPLODED VIEW & PARTS LIST

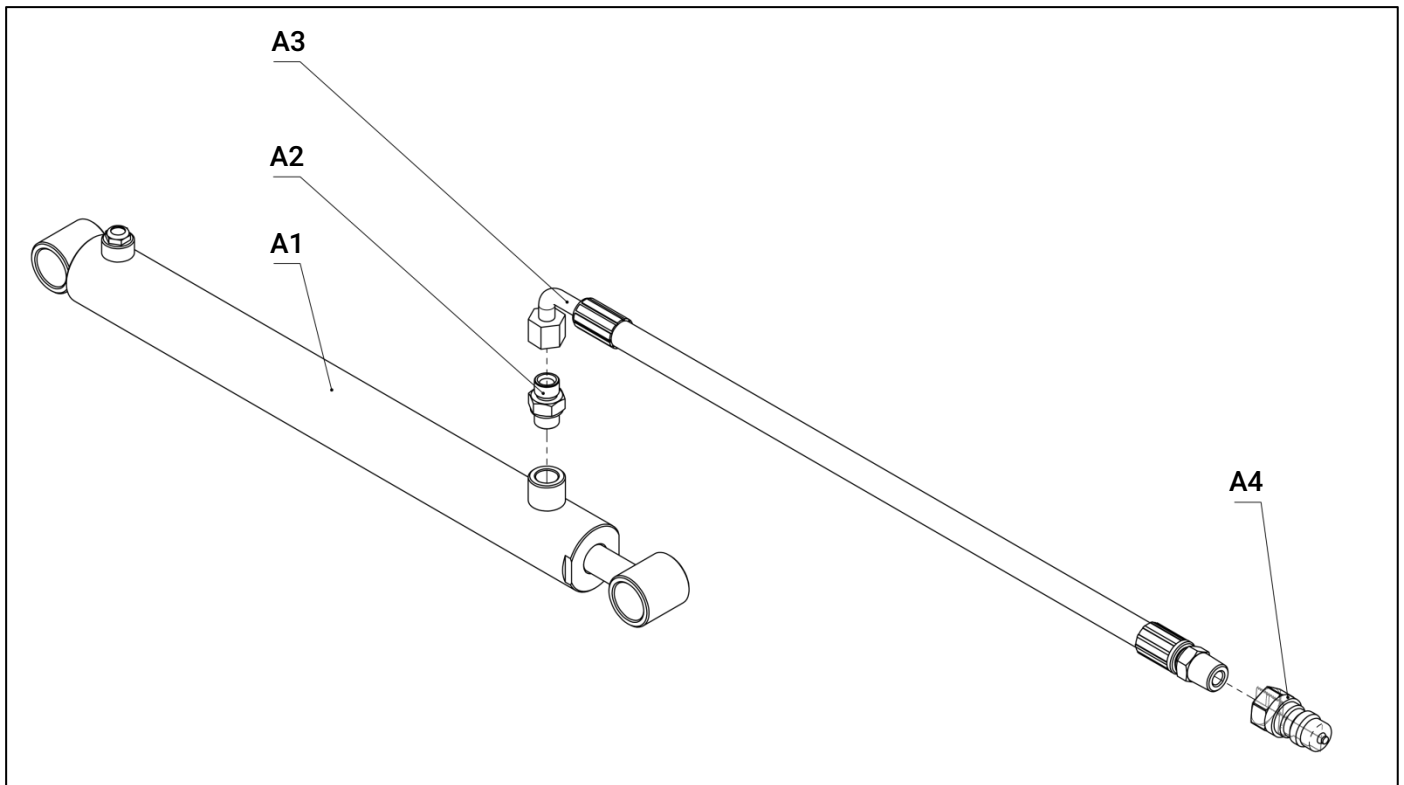
1. Main-frame assembly



PARTS LIST

PART NO.	DESCRIPTION	QTY
1	Hydraulic components	1
2	Rack components	1
3	Transmission components	1
4	Mixing drum components	1

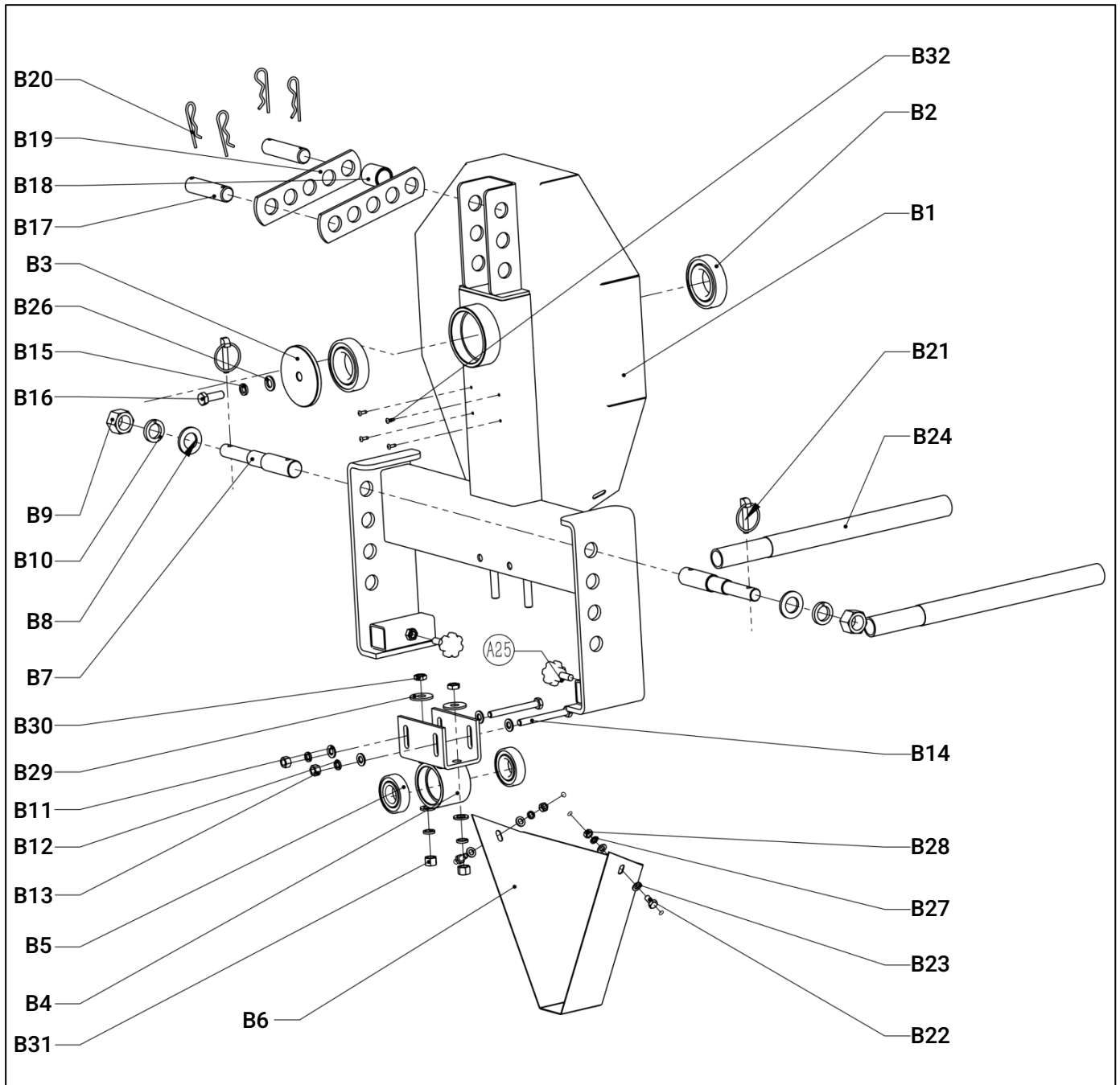
2. Hydraulic components



PARTS LIST

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
A1	Hydraulic cylinder	1	A3	Hydraulic hose 3/4"x59" 1/2NPT fitting	1
A2	Transition joints	1	A4	Hollow bolt 1/2NPT	1

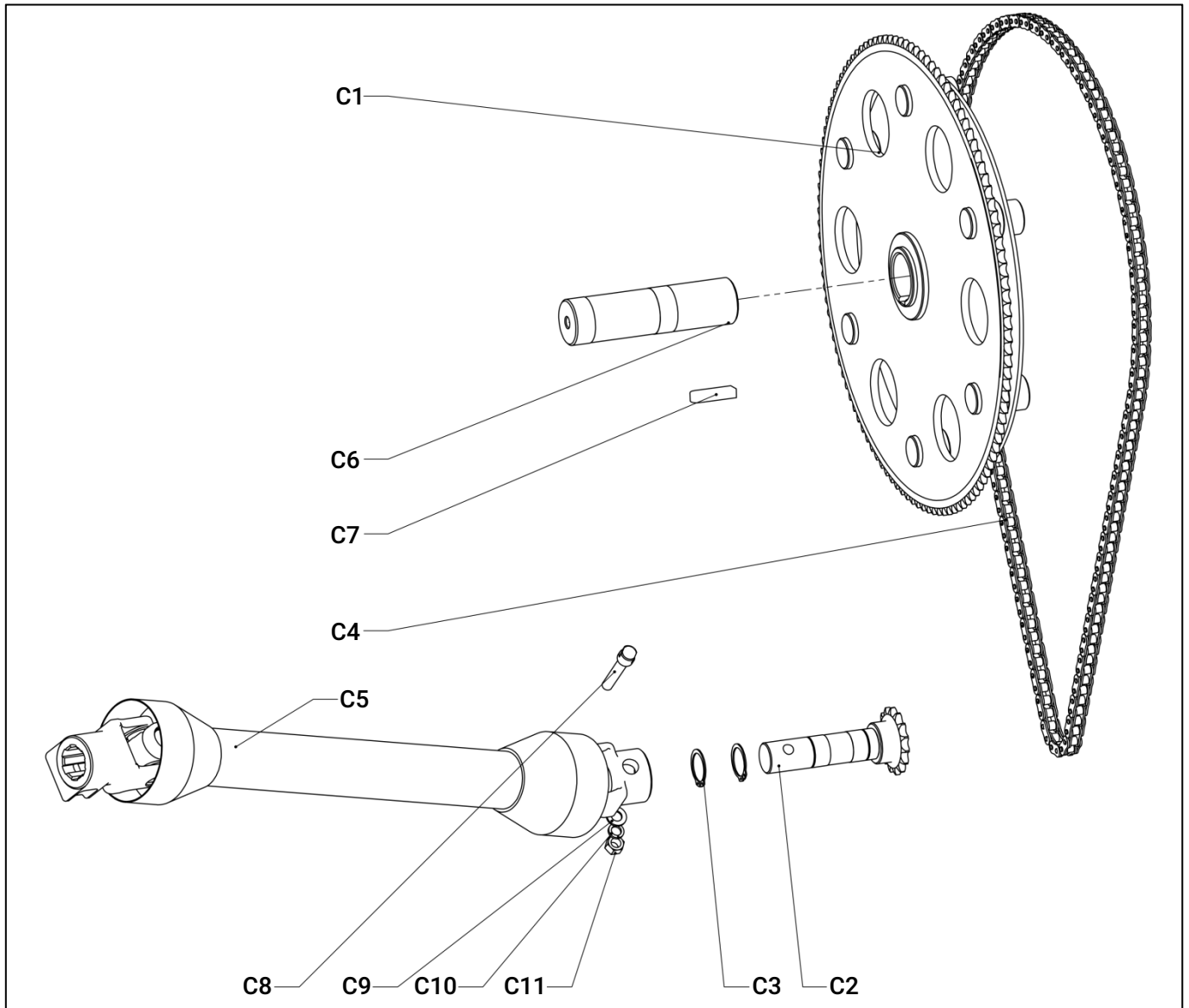
3. Rack components



PARTS LIST

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
B1	Frame welded	1	B17	Oil cylinder pin	2
B2	Deep groove ball bearing 6209-2RZ	2	B18	Bush	1
B3	Bearing cap	1	B19	Cylinder connecting plate	2
B4	Adjusting seat welding	1	B20	R Pin Din11024	4
B5	Deep groove ball bearing 6206-2RZ	2	B21	Lock Pin Ø8	2
B6	Shield 2	1	B22	Full-thread hexagon bolts M8×16	2
B7	Articulated pin	2	B23	Plain washer Ø8	4
B8	Plain washer Ø24	2	B24	Support the circular tube	2
B9	Hexagon Nuts M24	2	B25	Rubber Φ40×M10×25	2
B10	Spring washer Ø24	2	B26	Plain washer Ø12	3
B11	Plain washer Ø10	4	B27	Spring washer Ø8	2
B12	Spring washer Ø10	2	B28	Hexagon Nuts M8	2
B13	Hexagon Nuts M10	2	B29	Large plain washer Ø12	2
B14	Hexagon head bolts M10×95	2	B30	Hexagon thin nut M12	2
B15	Spring washer Ø12	3	B31	Hexagon nuts M12	2
B16	Full-thread hexagon bolts M12×35	1	B32	Open end Oind rivets 4×10	4

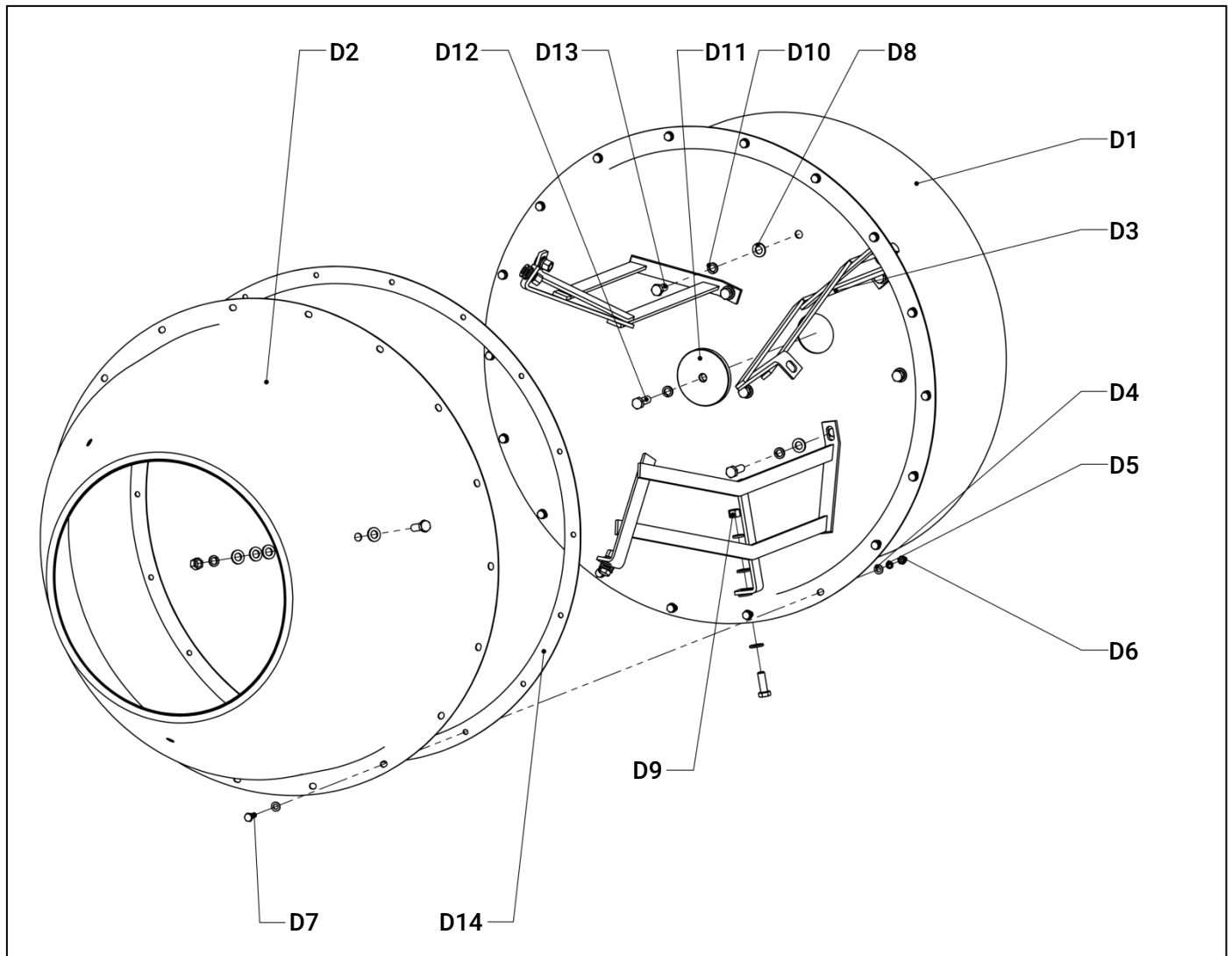
4. Transmission components



PARTS LIST

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
C1	Driven sprocket welding	1	C7	Square and rectangular keys C14×9×45	1
C2	Main shaft welding	1	C8	Safety pin	1
C3	Retaining rings for shaft Ø30	2	C9	Plain washer Ø10	1
C4	Chain 08B-1×144	1	C10	Spring washer Ø10	1
C5	PTO transmission shaft T1-700	1	C11	Hexagon Nuts M10	1
C6	Spindle	1			

5.Mixing drum components



PARTS LIST

PART NO.	DESCRIPTION	QTY	PART NO.	DESCRIPTION	QTY
D1	Main drum weldment	1	D8	Plain washer Ø12	27
D2	Cone drum weldment	1	D9	Hexagon nuts M12	6
D3	Paddle weldment	3	D10	Spring washer Ø12	13
D4	Plain washer Ø8	36	D11	Big washer	1
D5	Spring washer Ø8	18	D12	Full-thread hexagon bolts M12×35	10
D6	Hexagon Nuts M8	18	D13	Full-thread hexagon bolts M12×25	3
D7	Full-thread hexagon bolts M8×20	18	D14	Seal packing	1