

# OWNER'S MANUAL Model Number

700725 Subframe 700726 PTO Drive mechanism 700727 Brackets Kit for TYM T254 Tractor 700738 Driveline for Compact tractor with mid PTO 1-15 Splines



# **BERCO Subtrame & Drive Mechanism**for TYM T254 COMPACT TRACTORS

- \* ASSEMBLY
- \* REPAIR PARTS
- \* OPERATION
- \* MAINTENANCE

#### **CAUTION:**

READ & FOLLOW ALL SAFETY RULES & INSTRUCTIONS BEFORE OPERATING YOUR EQUIPMENT

#### LIMITED WARRANTY

#### **Conditions and Products Covered:**

BERCOMAC guarantees any part of the product or accessory manufactured by BERCOMAC and found in the reasonable judgment of BERCOMAC to be defective in material and or workmanship will be repaired or replaced by an authorized dealer without charge up to our maximum labor rates and preestablished times. For replacement parts only standard ground freight services are covered. This warranty extends to the original retail purchaser only and is not transferable to any subsequent purchasers. This warranty applies to the products bought and used in North America.

#### **Warranty Period**

(from date of the original retail purchase)

Residential or semi-commercial use: <u>1 year</u>
Commercial, industrial or rental use: <u>90 days</u>

**Exceptions Noted Below;** the following items are guaranteed by the original manufacturer and have their own warranty, conditions and limited time:

- Tire Chains:
  - 90 days residential or semi-commercial use
  - No warranty on other application
- Engines: Will vary as per the manufacturer
   Please refer to the engine manufacturer's warranty statement included with the unit. BERCOMAC is not authorized to handle warranty adjustments on engines.

#### Items and Conditions NOT Covered:

This warranty does not cover the following:

- Pick-up or delivery charges or in-home services fees.
- Any damage or deterioration of the unit, parts and or finish of these due to normal use, wear and tear, or exposure.
- Cost of regular use or maintenance service or parts, such as gas, oil, lubricants, tune-up parts, and adjustments.
- Any part or accessory which has been altered, modified, misused, neglected, accidentally damaged or not properly installed, maintained, stored or repaired not in accordance with the instructions in the owner's manual.
- Repair due to normal wear and or any wear items such as shear pins, bolts, belts, winch cable, cutting edge, skid shoes, etc.
- Expedited freight fee services for replacement parts.
- Shear bolts and shear pins are to be considered as a preventive measure not as an assured protection, any damages resulting from the lack of shear bolts breakage are not covered.
- Damages due to product being installed on vehicle other than stipulated in the owner's manual.

NOTE: All warranty work must be performed by an authorized dealer using original (manufacturer) replacement parts.

#### Owner's Responsibilities:

BERCOMAC's defective equipment or part must be returned to an authorized dealer within the warranty period for repairs. In the event that defective merchandise must be returned to manufacturer for repairs, freight fees are prepaid and a written authorization from BERCOMAC must be obtained by dealer prior to the shipment. This warranty extends only to equipment operated under normal conditions. To validate a warranty claim, it is the user's responsibility to maintain and service the unit as specified in the owner's manual or to have the unit serviced at their dealer at their expense.

#### **General Conditions:**

The sole liability of BERCOMAC with respect to this warranty shall be strictly and exclusively repair and replacement as mentioned herein. BERCOMAC shall not have any liability for any other costs, loss or damage, including but not limited to, any incidental or consequential loss or damage.

Taking advantage of the warranty does not in any way extend the length or renewal of the warranty.

In particular, without being limited to, BERCOMAC shall have no liability or responsibility for:

- Travel time, overtime, after hours time or other extraordinary repair charges or relating to repairs and or replacements outside of normal business hours.
- Rental of like or similar replacement equipment during the period of any, repair or replacement work.
- Any communicating or travel charges.
- Loss or damage to person or property other than that covered by the terms of this warranty.
- Any claims for lost revenue, lost profit or any similar costs as a result of damage or repair.
- Attorney's fees.

BERCOMAC's responsibility in respect to claims is limited to making the required repairs or replacement without charge up to our maximum labor rates and pre-established times and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any product or accessory. In no event shall recovery of any kind be greater than the amount of the purchase price of the product sold.

This warranty gives you specific legal rights. You may also have other rights, which vary from state to state.

**NOTE:** Bercomac reserves the right to change or improve the design of any part or accessory without assuming any obligation to modify any product previously manufactured.

#### **Instructions for Obtaining Warranty Services:**

Contact dealer where equipment was purchased or any other BERCO service dealer to arrange service at their dealership. To locate a dealer convenient to you, access our website at <a href="https://www.bercomac.com">www.bercomac.com</a>. Don't forget to bring your proof of purchase (sales receipt) to the BERCO dealer.

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#### INTRODUCTION

#### **TO THE PURCHASER**

This new accessory was carefully designed to give years of dependable service. This manual has been provided to assist in the safe operation and servicing of your attachment.

**NOTE:** All photographs and illustrations in the manual may not necessarily depict the actual models or attachment, but are intended for reference only and are based on the latest product information available at the time of publication.

Familiarize yourself fully with the safety recommendations and operating procedures before putting the machine to use. Carefully read, understand and follow these recommendations and insist that they be followed by those who will use this attachment.



THIS SAFETY ALERT SYMBOL IDENTIFIES AN IMPORTANT SAFETY MESSAGE IN THIS MANUAL THAT HELPS YOU AND OTHERS AVOID PERSONAL INJURY OR EVEN DEATH. DANGER, WARNING, AND CAUTION ARE SIGNAL WORDS USED TO IDENTIFY THE LEVEL OF HAZARD. HOWEVER, REGARDLESS OF THE HAZARD, BE EXTREMELY CAREFUL.

DANGER: Signals an extreme hazard that will cause serious injury or death if recommended precautions

are not followed.

WARNING: Signals a hazard that may cause serious injury or death if the recommended precautions are

not followed.

CAUTION: Signals a hazard that may cause minor or moderate injury if the recommended precautions are

not followed.

Record your attachment serial number and purchase date in the section reserved below (there is no serial number on the subframe). Your dealer requires this information to give you prompt, efficient service when ordering replacement parts. Use only genuine parts when replacements are required.

If warranty repairs are required please present this registration booklet and original sales invoice to your selling dealer for warranty service.

This manual should be kept for future reference.

Please check if you have received all the parts for your kit with the list of the bag and the list of the box.

SERIAL NUMBER : (IF APPLICABLE)	
MODEL NUMBER:	
MODEL NOMBER.	
PURCHASE DATE :	



#### **SAFETY PRECAUTIONS**



Careful operation is your best insurance against an accident. Read this section carefully before operating the vehicle and accessory. This accessory is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury. All operators, no matter how experienced they may be, should read this and other manuals related to the vehicle and accessory before operating. It is the owner's legal obligation to instruct all operators in safe operation of the accessory.

#### **GLOSSARY:**

In this manual, right and left sides are determined by sitting on the seat of the vehicle facing forward.

In this manual, "accessories" means attachments (snowblower, rotary broom, blade etc.) that you install on the vehicle (lawn tractors, A.T.V. s etc).

#### TRAINING:



This symbol, "Safety Alert Symbol", is used throughout this manual and on the accessory's safety labels to warn of the possibility of serious injury. Please take special care in reading and understanding the safety precautions before operating the vehicle and accessory.

- 1. Read this owner's manual carefully. Be thoroughly familiar with the controls and proper use of the vehicle and accessory. Know how to stop the unit and disengage the controls quickly.
- 2. Never allow children to operate the vehicle nor the accessory. Never allow adults to operate the vehicle nor the accessory without proper instructions.
- 3. No one should operate the vehicle nor the accessory while intoxicated or while taking medication that impairs the senses or reactions.
- Keep the area of operation clear of all people, particularly small children and pets.
- 5. Never start or operate the accessories except from the operator's station on the power unit except if this is impossible.

#### PREPARATION:

- Thoroughly inspect the area where the accessory is to be used and remove door mats, all foreign objects and the like.
- 2. For motorized accessories, disengage all clutches and shift into neutral before starting engine.
- Do not operate the accessory without wearing adequate winter outer garments. Avoid loose fitting clothing that can get caught in moving parts. Wear footwear that will improve footing on slippery surfaces.

- 4. Handle fuel with care, it is highly flammable.
  - a) Use approved fuel container.
  - b) Never add fuel to a running engine or hot engine.
  - Fill fuel tank outdoors with extreme care. Never fill fuel tank indoors.
  - d) Never fill containers inside a vehicle, or on a truck or a trailer bed with a plastic liner. Always place containers on the ground, away from your vehicle, before filling.
  - e) When practical, remove gas-powered equipment from the truck or trailer and refuel it on the ground. If this is not possible, then refuel such equipment on a trailer with a portable container, rather than from a gasoline dispenser nozzle.
  - f) Keep the nozzle in contact with the rim of the fuel tank or container opening at all times, until refueling is complete. Do not use a nozzle lockopen device.
  - g) Replace fuel cap securely and wipe up spilled fuel.
  - h) If fuel is spilled on clothing, change clothing immediately.
- 5. Never attempt to make any adjustments while the engine (motor) is running (except when specifically recommended by manufacturer).
- 6. Let the vehicle and accessory adjust to outdoor temperatures before using.
- 7. Never use an accessory without proper guards, plates, or other safety protective devices in place
- 8. Always make sure to wear the appropriate safety equipment required (glasses, muffs, mask...) for each type of product. See operation section.
- 9. Always make sure of having safe traction on the vehicle by using the recommended accessories (chains, A.T.V. tracks, counterweights...). See operation section.
- 10. Always make sure all components are correctly installed. (driveline securely attached and locked at both ends, belts properly installed...)
- 11. If applicable, always handle the winch cable with thick leather gloves.
- 12. Never modify the accessory or any part without the written consent from the manufacturer.



#### **SAFETY PRECAUTIONS**



#### **OPERATION:**

- Do not put hands or feet near, under or inside rotating parts.
- 2. Exercise extreme caution when operating on or crossing gravel drives, walks or roads. Stay alert for hidden hazards or traffic. Do not carry passengers.
- After striking a foreign object, stop the engine (motor), disconnect the wire from the spark plug(s) and keep wire away to prevent accidental starting. Thoroughly inspect the accessory for any damage and repair damage before restarting and using the accessory.
- 4. If the unit should start to vibrate abnormally, stop the engine (motor) and check immediately for the cause. Vibration is generally a warning of trouble.
- Take all possible precautions when leaving the vehicle unattended. Disengage the power take-off, lower the attachment, place the transmission into neutral, set the parking brake, stop the engine and remove the ignition key.
- Do not run the engine indoors, except when starting the engine and for transporting in or out of the building. Do not operate or let motor run in a storage area without ventilation because gas contains carbon monoxide which is odorless, colorless and can cause death.
- Never use the accessories across the face of slopes, go from top to bottom. Exercise extreme caution when using equipment on slopes. Do not attempt to clear a steep slope.
- 8. Never tolerate bystanders in the working zone. Never use an accessory in the direction of bystanders, it might throw gravel or debris that can hurt people or damage property.
- Never operate the accessory at high transport speeds on slippery surfaces. Use care when backing up.
- 10. Do not carry passengers.
- 11. Disengage power to the accessory when it is transported or not in use.
- 12. Never operate the accessory without good visibility or light.
- 13. Keep the accessory away from heat sources or flames.
- If applicable, never handle the winch cable or hook while in tension.

#### MAINTENANCE AND STORAGE

- When cleaning, repairing or inspecting the vehicle and accessory: stop the engine, set brake, remove ignition key, and wait that all moving parts have stopped. For gasoline engine, disconnect wire from the spark plug(s) and keep wire away to prevent accidental starting.
- Check all the bolts and components at frequent intervals to make sure that they are properly tightened.
- Never store a motorized accessory with fuel in the fuel tank inside a building where ignition sources are present such as hot water and space heaters, clothes dryers, and the like. Allow the engine to cool before storing in any enclosure.
- 4. Always refer to the owner's manual when you store the accessory and vehicle for a prolonged or an unspecified length of time.
- Maintain or replace safety and instruction labels, as necessary.
- 6 For winter accessories, (if applicable), let the engine run for a few minutes after clearing snow in order to prevent the rotary parts from freezing.
- Inspect the vehicle's and accessory's air filter (if applicable) every day. Clean it or replace it as necessary. Change the oil more often when working in dusty conditions. See the vehicle's and accessory's owner's manual.

#### **TRANSPORT**

- 1. Review Transport Safety instructions in vehicle manual before moving.
- Check with local authorities regarding transport on public roads. Obey all applicable laws and regulations.
- Make sure all lights and reflectors that are required by the local highway and transport authorities (exemple : SMV (Slow Moving Vehicle)) are in place, are clean, and can be seen clearly by all overtaking and oncoming traffic.
- 4. Never have the equipment in operation during transport.
- 5. Always travel at a safe speed.



#### **SAFETY DECALS**



# REPLACE IF DECALS ARE DAMAGED SEE PARTS BREAKDOWN FOR DECAL LOCATION

Symbol Description		
Decal #105946  A CAUTION  100946  A ATTENTION	To avoid serious injury: Keep all parts of the body away from moving components.	
Decal #105852  A DANGER  A DANGER	To avoid serious injury: Keep people and clothing away. Do not operate without all driveline, tractor and equipment shields in place, nor without the drivelines securely attached at both ends.	

#### **ASSEMBLY INSTRUCTIONS**

IMPORTANT: UNLESS OTHERWISE SPECIFIED TORQUE ALL BOLTS ACCORDING TO TORQUE SPECIFICATION TABLE (SEE TABLE OF CONTENTS) WHEN STATED: TIGHTEN FIRMLY. REFER TO PARTS BREAKDOWN SECTION FOR PART IDENTIFICATION.

**NOTE:** In this manual, the right and left side is determined by sitting on the seat of the vehicle facing toward.

Remove the components from the shipping crate.

#### Before starting the installation:

- Read and understand the instructions
- Please sort and identify all the hardware with the packing lists.



#### WARNING



When installing and operating the accessory, the front loader must be removed from the vehicle.

#### **WARNING**



THIS ACCESSORY IS HEAVY! (more than 50 pounds)

To avoid risk of strain injury, NEVER lift the accessory by hand alone when handling the components or assembly. Use proper lifting device or seek assistance.

When accessory is off the ground, NEVER be underneath the accessory. Serious injury including possibility of death could occur if accessory were to drop suddenly.

Always wear protective shoes and appropriate gloves when manipulating or using this equipment.

#### **TOOLS REQUIRED**

Ratchet

Socket: 7/16", 1/2", 3/4", 22mm, 24mm.

Wrench: 7/16", 1/2", 3/4", 24mm

Allan Key: 1/8", 3/16"

# STEP 1 TRACTOR PREPARATION

The front loader must be removed from the vehicle. The mower deck front support brackets must be removed.

#### **BRACKETS**

Temporarily remove the front bumper (item 1) along with its hardware (items a).

The bumper's hardware will be used to re-install the bumper.

Temporarily remove the bumper's brackets (left and right sides) (item 2) along with its hardware (items b). This hardware will be replaced.

#### Use Bracket Kit #700727

As illustrated:

Slide the bracket of the bumper into the slot of the support plate (item 1).

Secure, to the tractor's frame, the support plate over the bumper's bracket using 2 hex bolts M16 x 2.00 x 50 (item 2) and 2 nylon insert nuts M16 x 2.00 (item 5).

Insert the lock washer 9/16" (item 4) on the hex bolt M14 x 2.00 x 40 (item 3).

Screw the hex bolt M14 x  $2.00 \times 40$  (item 3) with the lock washer (item 4).

Repeat operation on other side.

#### Do not tighten yet

**Note**: tighten bolts ONLY when you are at the appropriate step when the snowblower will be attached and lifting evenly.



#### **WARNING**

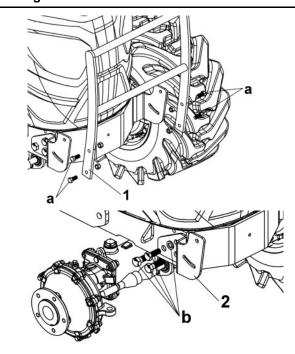


TO PREVENT INJURIES:

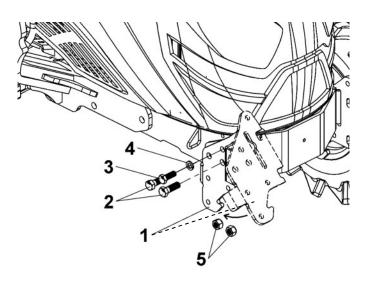
Park the vehicle on a flat surface in a well ventilated area.

Disengage the <u>Power Take Off (P.T. O.)</u>
Apply parking brake.

Stop the engine and remove the ignition key. Wait until all moving parts have stopped before leaving the driver's seat.



Temporarily remove the bumper's brackets

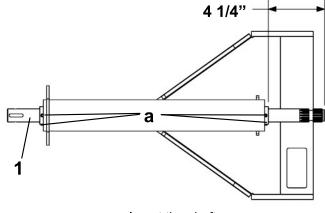


Install the support plates

# STEP 2 DRIVE MECHANISM PREPARATION:

#### Use drive mechanism #700726.

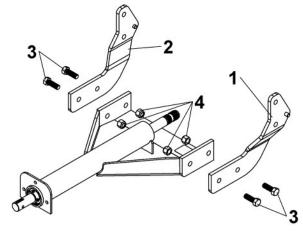
As illustrated, insert the shaft (item 1) in the bearings at the appropriate distance. Tighten firmly the 4 set screws (item a).



Insert the shaft

Position, as illustrated, and install the drive mechanism's brackets (items 1 and 2) on the shaft support assembly using 2 hex bolts  $\frac{1}{2}$  x 1  $\frac{1}{2}$ " (item 3) and 2 nylon insert nuts  $\frac{1}{2}$ " (item 4).

#### Do not tighten.



Install the drive brackets

# STEP 3 DRIVELINE INSTALLATION :

#### Use driveline #700738.

As illustrated:

Insert the key (item 1) on the shaft (a)

Insert the driveline (item a) on the shaft (item b).

Align the holes together.

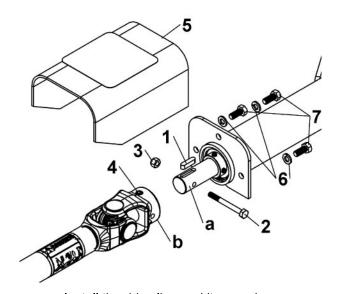
Insert the hex bolt  $\frac{1}{4}$ " x 2  $\frac{1}{2}$ " (item 2) and secure with a nylon insert nut  $\frac{1}{4}$ " (item 3). **Tighten in place.** 

**Tighten firmly** the set screw (item **4**) to maintain key in place.

Install the driveline shield (item **5**) using three hex bolts 5/16" x 3/4" (item **7**) and three lock washers 5/16" (item **6**).

#### Tighten firmly.

**Important:** Before each use, make sure the shield is well secured in place.



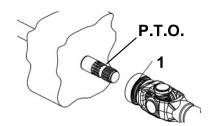
Install the drive line and its guard

#### STEP 4 P.T.O. CONNECTION :

Center the drive mechanism assembly under the vehicle.

Attach the quick coupler fork (item 1) to the P.T.O. of the tractor.

Make sure the fork is well inserted to the tractor's P.T.O.



#### **DANGER**



# ANY CONTACT WITH THE ROTATING DRIVELINE MAY CAUSE DEATH NEVER ACCESS WITHOUT:

- Vehicle well parked on a flat surface.
- Parking brake well applied.
- Engine stopped and ignition key removed.
- All moving parts are stopped.

#### **KEEP AWAY AND NEVER OPERATE WITHOUT:**

- All extension guards for the tractor and the driveline in place.
- The driveline securely attached at both ends.

Attach the driveline to the P.T.O. of the tractor.

# STEP 5 SUBFRAME PREPARATION:



#### **CAUTION**

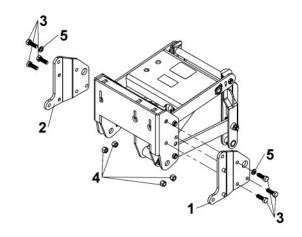


Ask for help or use a hoist for this operation, the subframe is heavy (more than 50lbs.)

#### Use subframe #700725.

Install the attaching plates (items 1 and 2) on the subframe assembly using six hex bolts  $\frac{1}{2}$ " x 1  $\frac{1}{2}$ " (item 3) (three on each side), four nylon insert nuts  $\frac{1}{2}$ " (item 4) and two lock washers  $\frac{1}{2}$ " (item 5).

Make sure that the left and right plates are parallel to the subframe then **tighten firmly** all six bolts and four nuts.



Install the hitch plates

# STEP 6 SUBFRAME INSTALLATION:



#### **CAUTION**

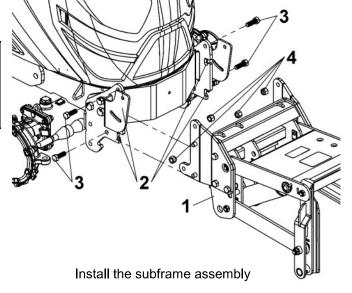


Ask for help or use a hoist for this operation, the subframe is heavy (more than 50lbs.)

Insert the subframe assembly (item 1) in the top and bottom slots (item 2) on the support plates.

**Tighten firmly** in place as illustrated with the four hex bolts  $\frac{1}{2}$ " x 1  $\frac{1}{2}$ " (two on each side) (item 3) and nylon insert nuts  $\frac{1}{2}$ " (item 4).

**Tighten firmly** the support plates previously installed on the vehicle (six bolts and four nuts).

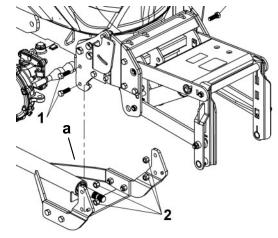


# STEP 7 DRIVE MECHANISM INSTALLATION:

Install the shaft support assembly (item a) between the support plates as illustrated.

Secure as illustrated using 4 hex bolts  $\frac{1}{2}$ " x 1  $\frac{1}{2}$ " (2 on each side) (item 1) and nylon insert nuts  $\frac{1}{2}$ " (item 2).

#### Do not tighten.



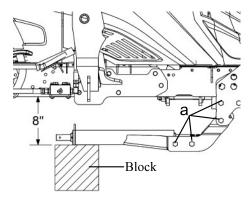
Install the drive mechanism

Position the shaft support assembly so that it is parallel to the frame of the tractor.

TIP: Use a block underneath the support assembly to maintain in place.

**NOTE:** This precaution will avoid having the shaft support assembly too close to the ground. Measure approximately 8" between the top of the block used for support and the bottom of the tractor as illustrated.

**Tighten firmly** the left and right brackets of the drive mechanism using the eight bolts and nuts (items a).



Position and tighten the shaft support assembly

# STEP 8 HYDRAULIC HOSES INSTALLATION:

Plug the hydraulic adaptors to the hoses of the subframe.

Follow the instructions in the adaptor kit corresponding to your vehicle (700740).

**NOTE:** Please refer to the owner's manual of the tractor for the appropriate positioning of the hoses.

<u>Route</u> the hoses making sure to place them at the appropriate spots on the side of the vehicle.

<u>Plug</u> the hoses to the couplers of the hydraulic valves on the tractor.

<u>Secure</u> the hoses to the vehicle and the subframe to limit their movement.

Use the Velcro cable ties included with the subframe.

**IMPORTANT:** Verify that the hoses are well plugged.

Pull the tractor's hydraulic lift lever.

The attachment should raise from the ground. If not, reverse the hoses.



#### **WARNING**



#### TO PREVENT INJURIES:

If you suspect an oil leak in the hoses NEVER use your hand to locate it. Use a piece of cardboard or a piece of wood.

#### IMPORTANT:

\*Make sure that the hoses between the front guard and the hydraulic actuator are long enough to follow the movements of the subframe.

\*It is the user / or the person who does the installation's responsibility to install the hoses in such a manner that they do not come into contact with any mobile elements of the vehicle (the wheels, subframe, ...), any sharp edge, any hot surface, if not this could lead to damages.

**TIP**: Use any available location on the side of the vehicle as mounting brackets, front bumper, loader's brackets,...

Route, plug and secure hydraulic hoses

Continue the installation using the instructions included with the attachment.

#### **VERIFY TIRE PRESSURE:**

Refer to the vehicle's owner manual for tire pressure. Tire pressure must be even on both sides of vehicle.

#### **OPERATION & MAINTENANCE**



#### **CAUTION**



The subframe kit is to be used only to lift and

SEE EACH ATTACHMENT'S OWNER'S MANUAL FOR THEIR MAINTENANCE & OPERATION.

#### **ACCESSORY OPERATION:**

operate the snowblower.

Use the joystick for the loader to lift or lower the accessory.



#### WARNING



#### **TO PREVENT INJURIES:**

Never leave the driver seat without disengaging the accessory, stopping the engine, applying the parking brakes and removing the ignition key. Never operate on slopes of more than 10°.



#### **WARNING**



#### TO PREVENT INJURIES:

Lower the accessory when the vehicle is parked. Temperature changes could change the hydraulic pressure, causing the accessory to drop unexpectedly, damaging the hydraulic components. Failure to do this could result in serious personal injury.

#### **MAINTENANCE**

- a) Check mounting bolts at frequent intervals for proper tightness in order to prevent costly repairs. Make sure your accessory is in safe working condition.
- b) Provide adequate blocking before working under the accessory when in raised position.

#### IMPORTANT:

\*It is the user / or the person who does the installation's responsibility to install the hoses in such a manner that they do not come into contact with any mobile elements of the vehicle (the wheels or the subframe), sharp edge, hot surface if not, this could lead to damages.

\*Make sure that the hoses between the front support and the side support are long enough to follow the movements of the subframe.



#### WARNING



Before maintenance,

**TO PREVENT INJURIES:** 

Park the vehicle on a flat surface in a well ventilated area.

Disengage the P.T. O.

Apply parking brake.

Stop the engine and remove the ignition key.

Wait until all moving parts have stopped before leaving the driver's seat.



#### WARNING



#### **TO PREVENT INJURIES:**

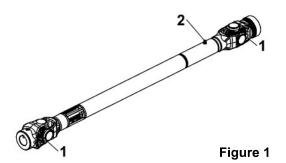
If you suspect an oil leak in the hoses NEVER use your hand to locate it. Use a piece of cardboard or a piece of wood.

#### **LUBRICATION**

#### Driveline:

Lubricate every **250 hours** of operation all the following points in Figure 1:

Crosses (items 1) and shaft (item 2).



#### **DANGER**



# ANY CONTACT WITH THE ROTATING DRIVELINE MAY CAUSE DEATH

#### **NEVER ACCESS WITHOUT:**

- Vehicle well parked on a flat surface.
- Parking brake well applied.
- Engine stopped and ignition key removed.
- All moving parts are stopped.

#### **KEEP AWAY AND NEVER OPERATE WITHOUT:**

- All extension guards for the tractor and the driveline in place.
- The driveline securely attached at both ends.

#### **DISMOUNTING & STORAGE**

#### SUBFRAME DISMOUNTING

Follow the assembly steps backwards in the Installation section.



#### **WARNING**



#### **TO PREVENT INJURIES:**

Park the vehicle on a flat surface in a well ventilated area.

Disengage the P.T. O.

Apply parking brake.

Lift the accessory

Wait until all moving parts have stopped before leaving the driver's seat.

Use wheel chocks.

**ATTENTION:** Always install the protective covers on the ends of the hydraulic hoses when the are disconnected. This is to prevent any pollutants from entering the vehicle's accessory's hydraulic system. **ATTENTION:** Clean up all oil spills to prevent accidents.

#### **END OF SEASON STORAGE**

- a) Clean the components thoroughly and repaint all parts from which paint has worn.
- b) List the replacement parts that will be needed for the next season.
- c) Store the components in a dry place.
- d) Follow the instructions in the Lubrication section.

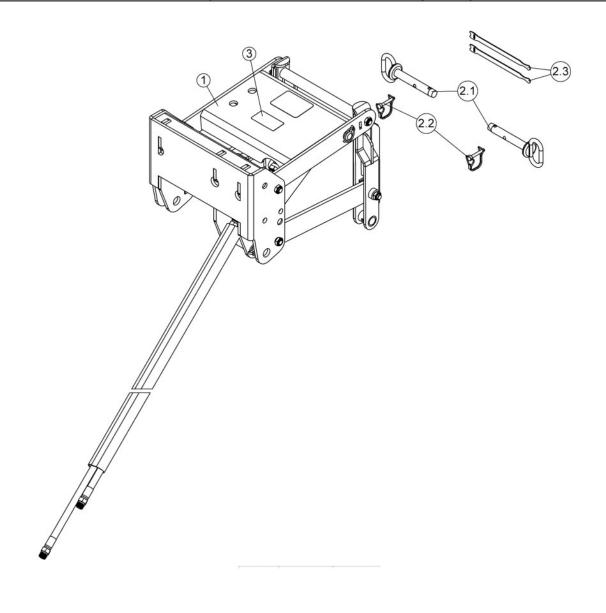
#### **TROUBLESHOOTING**

\* Please refer to parts breakdown section for parts identification.

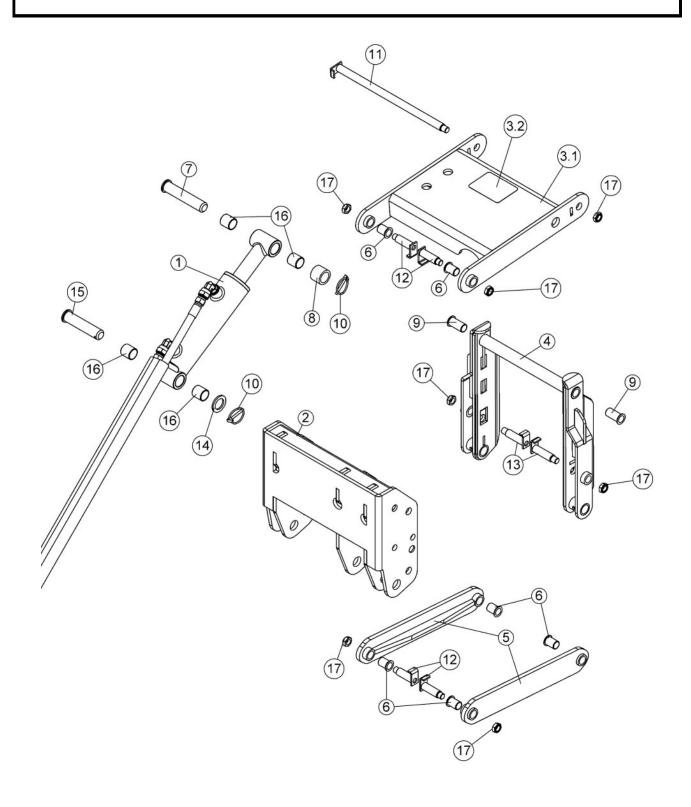
PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
Accessory raises or lowers too slowly.	Dirt in the oil.	Change the hydraulic oil.
	Damaged bushing	Replace the bushing.

#### PARTS BREAKDOWN & PARTS LIST SUBFRAME #700725

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Subframe assembly	Sous-châssis assemblé	1	501005
2	Hardware bag	Sac de quincaillerie	1	107436
2.1	Pin	Goupille	2	107404
2.2	Lock pin	Tige de verrouillage	2	106962
2.3	Hook-it cable ties	Attache câble auto-grippante	2	104408
3	Model number	Numéro de modèle	1	REF.



# PARTS BREAKDOWN SUBFRAME ASSEMBLY #501005

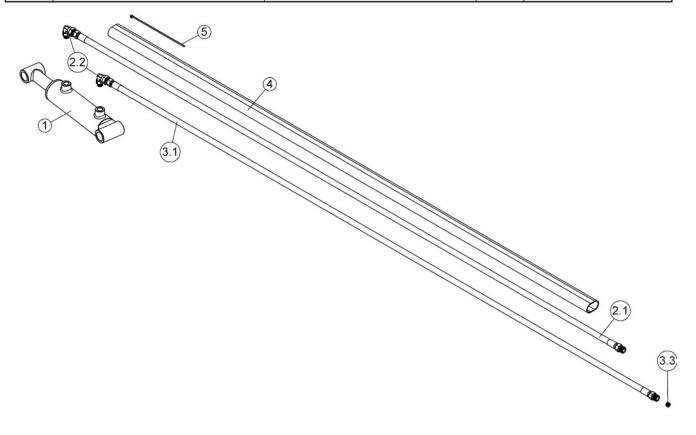


# PARTS LIST SUBFRAME ASSEMBLY #501005

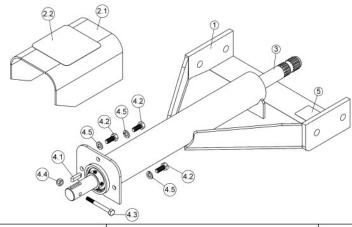
REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Hydraulic cylinder with hoses	Vérin hydraulique avec flexibles	1	501002
2	Hitch	Attache	1	107399
3	Superior lift arm #107400 with safety decal	Bras de rel. sup. #107400 a/ déc. de sécurité	1	107424
3.1	Superior lift arm	Bras de relevage supérieur	1	107400
3.2	Decal pinch point	Décalque point de pincement	1	105946
4	Male hitch	Attache mâle	1	107401
5	Lift arm	Bras de relevage	2	107402
6	Bushing	Coussinet	6	107403
7	Pin	Goupille	1	107405
8	Spacer	Espaceur	1	107406
9	Bushing	Coussinet	2	104376
10	Lynch pin	Goupille à anneau	2	104481
11	Pivot pin	Goupille de pivot	1	105857
12	Pivot pin	Goupille de pivot	4	107407
13	Pivot pin	Goupille de pivot	2	105862
14	Special flat washer	Rondelle plate spéciale	1	106338
15	Pin	Goupille	1	106534
16	Bushing	Coussinet	4	106535
17	Nylon insert lock nut 1/2" n.c. (thin)	Écrou à garniture de nylon 1/2" n.c. (mince)	7	O/L (336NC.P_1-2)

# PARTS BREAKDOWN & PARTS LIST HYDRAULIC CYLINDER WITH HOSES #501002

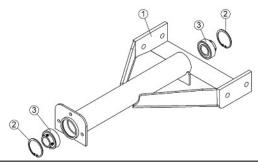
REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Cylinder	Vérin	1	106527
2	Hydraulic hose assembly	Flexible hydraulique assemblé	1	106538
2.1	Hydraulic hose	Flexible hydraulique	1	106551
2.2	Elbow	Coude	1	106464
3	Hydraulic hose assembly	Flexible hydraulique assemblé	1	106549
3.1	Hydraulic hose	Flexible hydraulique	1	106552
3.2	Elbow	Coude	1	106464
3.3	Flow control orifice	Orifice calibré	1	106550
4	Nylon sleeving	Gaine de nylon	1	106459
5	Tie wrap 8"	Attache de nylon 8"	1	O/L (tiewrap_8)



# PARTS BREAKDOWN & PARTS LIST DRIVE MECHANISM #700726



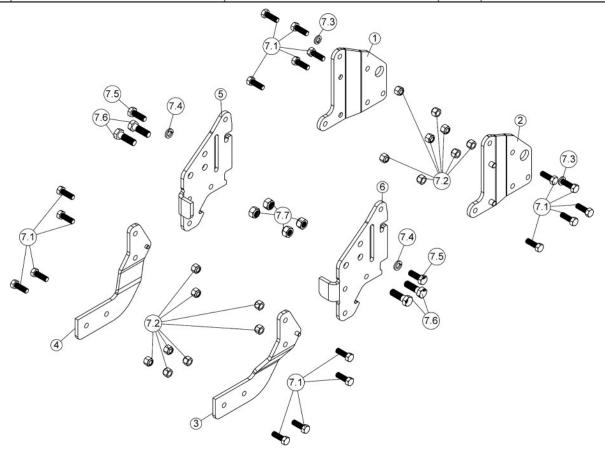
REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Shaft support assembly	Support d'arbre assemblé	1	501006
2	Driveline guard #107411 with safety decal	Garde de l'arbre à cardan #107411 a/ déc. séc.	1	107422
2.1	Driveline guard	Garde de l'arbre à cardan	1	107411
2.2	Decal PTO	Décalque PTO	1	105852
3	Shaft	Arbre	1	107409
4	Hardware bag	Sac de quincaillerie	1	107410
4.1	Key 1/4" x 1/4" x 1.000"	Clé 1/4" x 1/4" x 1.000"	1	102017
4.2	Hex. bolt 5/16" n.c. x 3/4" GR5	Boulon hex. 5/16" n.c. x 3/4" GR5	3	O/L (300NC.5P_5-16x3-4)
4.3	Hex. bolt 1/4" n.c. x 2 1/2" GR5	Boulon hex. 1/4" n.c. x 2 1/2" GR5	1	O/L (300NC.5P_1-4x2-1-2)
4.4	Nylon Insert lock Nut 1/4" n.c.	Écrou à garniture de nylon 1/4" n.c.	1	O/L (335NC.P_1-4)
4.5	Lock washer 5/16"	Rondelle de blocage 5/16"	3	O/L (362.P_5-16)
5	Model number	Numéro de modèle	1	REF.



	Support d'arbre assemblé #501006 Shaft support assembly #501006						
REF.	REF. ENGLISH DESCRIPTION DESCRIPTION FRANÇAISE QTY. PART#						
1	Shaft support	Support d'arbre	1	107408			
2	Retaining ring	Bague de retenue	2	103243			
3	Bearing with set screw	Roulement à billes avec vis à pression	2	103242			

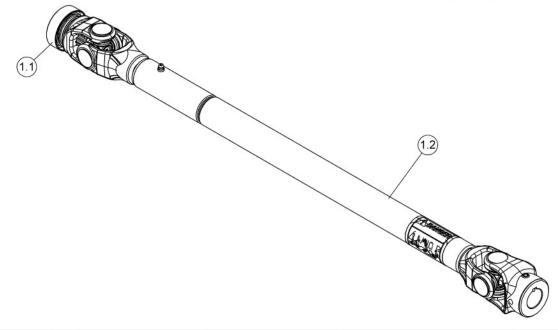
# PARTS BREAKDOWN & PARTS LIST BRACKETS KIT FOR TYM T254 TRACTOR #700727

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Left hitch plate	Plaque d'attache gauche	1	107412
2	Right hitch plate	Plaque d'attache droite	1	107413
3	Right drive bracket	Fixation droite du méc. d'ent.	1	107414
4	Left drive bracket	Fixation gauche du méc. d'ent.	1	107416
5	Left support plate	Plaque de support gauche	1	107423
6	Right support plate	Plaque de support droite	1	107415
7	Hardware bag	Sac de quincaillerie	1	107417
7.1	Hex. bolt 1/2" n.c. x 1 1/2" GR5	Boulon hex. 1/2" n.c. x 1 1/2" GR5	18	O/L (300NC.5P_1-2x1-1-2)
7.2	Nylon Insert lock Nut 1/2" n.c.	Écrou à garniture de nylon 1/2" n.c.	16	O/L (335NC.P_1-2)
7.3	Lock washer 1/2"	Rondelle de blocage 1/2"	2	O/L (362.P_1-2)
7.4	Lock washer 9/16"	Rondelle de blocage 9/16"	2	O/L (362.P_9-16)
7.5	Hex. bolt M14 x 2.00 x 40 GR10.9	Boulon hex. M14 x 2.00 x 40 GR10.9	2	O/L (310.10.9P_M14X2X40)
7.6	Hex. bolt M16 x 2.00 x 50 GR10.9	Boulon hex. M16 x 2.00 x 50 GR10.9	4	O/L (310.10.9P_M16X2X50)
7.7	Nylon Insert lock Nut M16 x 2.00 GR10.9	Écrou à garniture de nylon M16 x 2.00 GR10.9	4	O/L (352.P_M16X2.00)

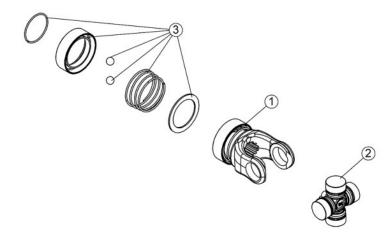


# PARTS BREAKDOWN & PARTS LIST DRIVELINE FOR COMPACT TRACTOR WITH MID PTO 1-15 SPLINES #700738

REF.	ENGLISH DESCRIPTION	DESCRIPTION FRANÇAISE	QTY.	PART#
1	Telescopic Driveline with Set Screw	Arbre à Cardan avec Vis à Pression	1	107372
1.1	Half Driveline	Demi Arbre à Cardan	1	107370
1.2	Half Telescopic Driveline with Set Screw	Demi Arbre à Cardan avec Vis à Pression	1	107371



	Nécessaire de réparation Repair kit					
REF.	REF. ENGLISH DESCRIPTION DESCRIPTION FRANÇAISE QTY. PART#					
1	Quick disconnect yoke ass.	Fourche à désengagement rapide	1	102158		
2	Universal Joint Kit	Croix de Joint Universel	1	107445		
3	Spring lock repair kit for PTO	Nécessaire de réparation pour PDF	1	102159		



#### **TORQUE SPECIFICATION TABLE**

## GENERAL TORQUE SPECIFICATION TABLE USE THE FOLLOWING TORQUES WHEN SPECIAL TORQUES ARE NOT GIVEN

**NOTE:** These values apply to fasteners as received from supplier, dry or when lubricated with normal oil. They do not apply if special graphited or moly disulphide greases or other extreme pressure lubricants are used. This applies to both UNF and UNC threads.

\* Thick nuts must be used with grade 8 bolts

SEE Grade No.		2				5			8 *				
BOLT HEAD IDENTIFICATION MARKS AS PER GRADE NOTE MANUFACTURING MARKS WILL VARY		TORQUE				TORQUE				TORQUE			
BOLT SIZE		FOOT POUNDS NEW TON-METER			IETERS	FOOT POUNDS NEW TON-METERS			FOOT POUNDS NEW TON-METERS				
Inches	Millimetre	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min. Max.	Max.	Min. Max.	Max.
1/4"	6.35	5	6	6.8	8.13	9	11	12.2	14.9	12	15	16.3	30.3
5/16"	7.94	10	12	13.6	16.3	17	20.5	23.1	27.8	24	29	32.5	39.3
3/8"	9.53	20	23	27.1	31.2	35	42	47.5	57	45	54	61	73.2
7/16"	11.11	30	35	40.7	47.4	54	64	73.2	86.8	70	84	94.9	113.9
1/2"	12.7	45	52	61	70.5	80	96	108.5	130.2	110	132	149.2	179
9/16"	14.29	65	75	88.1	101.6	110	132	149.2	179	160	192	217	260.4
5/8"	15.88	95	105	128.7	142.3	150	180	203.4	244.1	220	264	298.3	358
3/4"	19.05	150	185	203.3	250.7	270	324	366.1	439.3	380	456	515.3	618.3
7/8"	22.23	160	200	216.8	271	400	480	542.4	650.9	600	720	813.6	976.3
1"	25.4	250	300	338.8	406.5	580	696	786.5	943.8	900	1080	1220.4	1464.5

METRIC BOLT TORQUE SPECIFICATIONS										
			COARSE THRE	AD	FINE THREAD					
Size Screw	Grade No.	Pitch (mm)	Foot Pounds	Newton-Meters	Pitch (mm)	Foot Pounds	Newton-Meters			
M 6	4T	1.00	3.6 - 5.8	4.9 - 7.9	-	-	-			
	7T	]	5.8 - 9.4	7.9 - 12.7	]		-			
	8T	,	7.2 - 10	9.8 - 13.6		-	-			
M8	4T	1.25	7.2 - 14	9.8 - 19	1.00	12 - 17	16.3 - 23			
	7T		17 - 22	23 - 29.8		19 - 27	25.7 - 36.6			
	8T		20 - 26	27.1 - 35.2		22 - 31	29.8 - 42			
M10	4T	1.50	20 - 25	27.1 33.9	1.25	20 - 29	27.1 39.3			
	7T		34 - 40	46.1 - 54.2		35 - 47	47.4 - 63.7			
	8T	,	38 - 46	51.5 62.3	Ì	40 - 52	54.2 - 70.5			
M12	4T	1.75	28 - 34	37.9 - 46.1	1.25	31 - 41	42 - 55.6			
	7T		51 - 59	69.1 - 79.9		56 - 68	75.9 - 92.1			
	8T		57 - 66	77.2 - 89.4		62 - 75	84 - 101.6			
M14	4T	2.00	49 - 56	66.4 75.9	1.50	52 - 64	70.5 - 86.7			
	7T		81 - 93	109.8 - 126		90 - 106	122 - 143.6			
	8T		96 - 109	130.1 - 147.7		107 - 124	145 - 168			
M16	4T	2.00	67 - 77	90.8 - 104.3	1.50	69 - 83	93.5 - 112.5			
	7T		116 - 130	157.2 - 176.2		120 - 138	162.6 - 187			
	8T	,	129 - 145	174.8 - 196.5	Ì	140 - 158	189.7 - 214.1			
M18	4T	2.00	88 - 100	119.2 - 136	1.50	100 - 117	136 - 158.5			
	7T		150 - 168	203.3 - 227.6		177 - 199	239.8 - 269.6			
	8T		175 - 194	237.1 - 262.9		202 - 231	273.7 - 313			
M20	4T	2.50	108 - 130	146.3 - 176.2	1.50	132 - 150	178.9 - 203.3			
	7T		186 - 205	252 - 277.8	]	206 - 242	279.1 - 327.9			
	8T		213 - 249	288.6 - 337.4		246 - 289	333.3 - 391.6			



# WHEN PERFORMANCE & DEPENDABILITY ARE NON NEGOTIABLE!

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