

Operator's Manual

FEED PROCESSORS
Models 425/500/600/700/900T
Pull Type Units



Supreme
INTERNATIONAL
LIMITED

Introduction

Congratulations on your selection of the Supreme Feed Processor! We believe you have exercised excellent judgment in the purchase of the Supreme. It is our endeavor to show our gratitude by giving you the best service you deserve.

Supreme International Limited has been in the agricultural equipment business since 1953. Our motto "Through service and specialization we grow" has guided us throughout the years.

We are proud of our Supreme Feed Processor and ask you to **READ THIS OPERATOR'S MANUAL BEFORE OPERATING THE MACHINE.** By fully understanding the operation of the Supreme you will get **MAXIMUM BENEFITS** with minimum effort. Failure to follow our guidance in the care of your machine might reduce the extent of our warranty towards the product.

Respectfully yours,



George Hunerfauth
Chief Executive Officer
SUPREME INTERNATIONAL LIMITED

**Box 6450, 6010-47 street
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T9A 2G2**

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**** PLEASE CONTACT YOUR LOCAL DEALER IF YOU HAVE ANY QUESTIONS OR CALL OUR OFFICE.**

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Safety

SUPREME
FEED PROCESSORS



WARNING

-NEVER CLIMB INTO OR REACH INSIDE MIXING TUB OR SECOND CUTTER WITHOUT TURNING OFF THE TRACTOR IGNITION AND DISCONNECTING THE PTO DRIVE LINE FROM THE TRACTOR!

-NEVER RIDE ON PLATFORM OR HANG ON LADDER WHILE UNIT IS BEING TOWED!

-STAY CLEAR OF PTO SHAFT AND THE SECOND CUTTER WHEN UNIT IS RUNNING!

Safety



- Understand **safety words** and **symbols**

This safety alert symbol means **ATTENTION!** Become **ALERT!** Read and understand all pages in this manual that bear this safety symbol and work safely.

Three signal words are used **with corresponding colors** to indicate hazard intensity. Definitions are as follows:

Caution: is used to direct attention to unsafe practices, and uses the color **yellow**.

Warning: denotes a specific potential hazard, and uses the color **yellow** or **orange**.

Danger: denotes a most serious potential hazard, and uses the color **red**.

- Read the **operator's manual**

Any person who will be operating or maintaining this equipment must be instructed in and be capable of the safe operation and maintenance of this equipment. It is the **owner's responsibility** to provide this safety information to operators and/or employees.

Any person who does not understand the safety and operation instructions contained in this manual should not be considered qualified to operate this equipment.

- Operating **Safety Precautions**



When the Supreme Feed Processor is in operation it has **moving parts, which could cause death or severe injury** to persons coming in contact with these parts. To prevent and control serious injury or property damage, the **following guidelines should always be followed.**

1. Be sure all **safety shielding** is in good condition and properly installed before operating, including **driveline shields**.
2. Before starting your vertical feed processor, be sure that **no one** is **inside the tub**. **Never** allow anyone to position himself/herself **over or near the top of the vertical feed processor while it is in operation**. The rotating vertical screw or the rotor of the second cutter will cut or sever; resulting in death or severe injury to anyone who should come in contact with the vertical screw while the machine is in operation.
3. **Never** allow anyone to **ride on the ladder or platform while the feed processor is being towed**. You should **descend from the ladder** the same way you climbed on, which means **facing it**.
4. **Do not allow inexperienced or unqualified persons to operate** equipment. Keep **bystanders** away from equipment while it is in operation. Keep **children** and **pets** a **safe distance away**. Operators of the vertical mixer must use common sense at all times.
5. **Do not wear loose or floppy clothing** while operating the vertical feed processor. Loose clothing may become entangled in moving parts or moving machinery.
6. Should a problem occur during operation of the vertical feed processor, **always turn off tractor ignition and disconnect PTO driveline before working in the machine**.
7. Use caution when working around the **discharge area**. Never reach in, around, or over the discharge door(s). Discharge door(s) could quickly open or close, causing injury to operator or bystanders.

- Transporting **Safety Precautions**

1. **Do not** allow anyone to **ride on or in the Supreme Feed Processor**.
2. Do not exceed **15kph** or **10mph** when **traveling over smooth dry areas**. Reduce speed when traveling loaded and/or over **rocky, wet, or soft terrain**. Use caution **on side slopes and when turning corners**.
3. Avoid operating the vertical feed processor **when making sharp turns, or towing over uneven ground**.
4. When **working on slopes/inclines, traveling uphill/downhill**, keep the tractor transmission in gear.
5. **When unhitching** vertical feed processor from the tractor, stop on level ground and block tires.
6. If vertical feed processor is to be towed on a public road, a **light kit** must be installed on the machine. This is **in addition to the tractor's flashing lights**.
7. Makes sure the SMV (**Slow Moving Vehicle**) **sign/decals and reflectors** are clean and properly maintained so they can be seen clearly by all overtaking traffic.
8. Whenever **towing** any equipment and especially when towing on public roads, **a safety tow chain with an ultimate strength equal to or greater than the gross weight of the equipment should be used**.

- Safety and **Operational Decals**

Safety decals are **placed** on the equipment **for the protection** of the operator or any person near the unit.

1. Be sure everyone who operates the vertical Supreme Feed Processor **understands all the information, warning, caution and danger decals**.
2. **Keep** the decals **clean** so they are legible. This applies to all caution, warning and danger decals.
3. Ensure **all safety decals** are **installed** and **in good condition** and replace damaged or missing safety decals immediately.
4. The **part numbers for the decals** are **located in the lower RH corner of decal** as indicated on the following pages.
5. **When replacing decals**, be sure the surface area is clean and dry, peel the backing off the decal, and apply to the appropriate location. Use a clean cloth to rub out all the air bubbles to ensure a good seal. Ideally decals should be applied in temperatures of 10 degrees (C) or 50 Degrees (F) or warmer.

Safety decals can be ordered through your dealer or directly from Supreme International Limited **at the following address:**

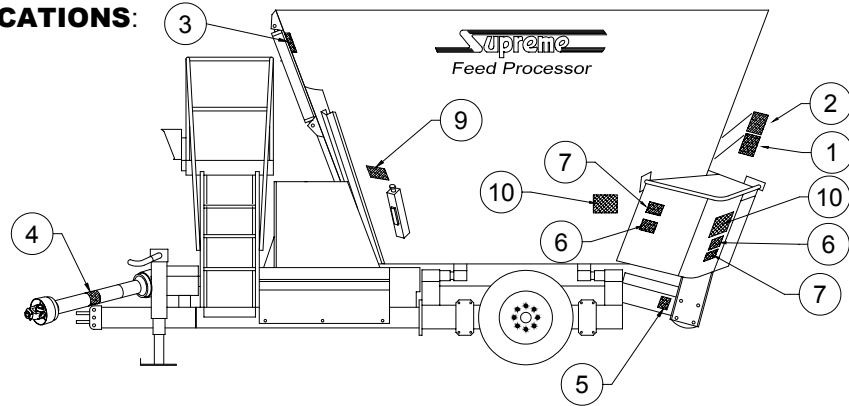
Supreme International Limited

P.O.Box 6450
Wetaskiwin, Alberta
T9A 2G2

Phone: (780) 352-6061

Fax: (780) 352-6056

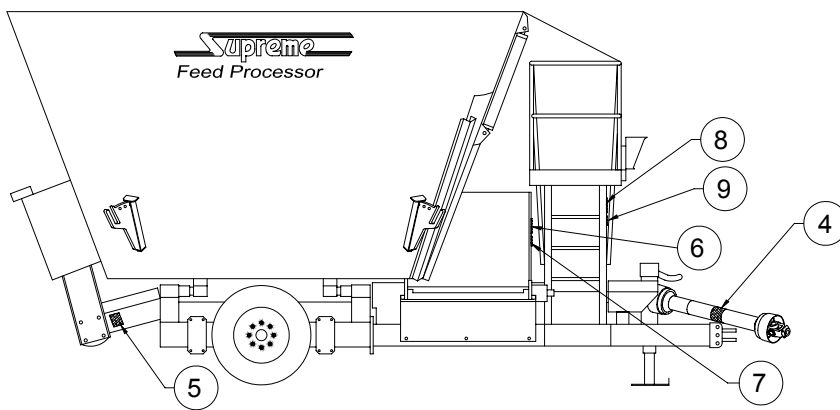
SAFETY DECAL LOCATIONS:
Left-hand side view

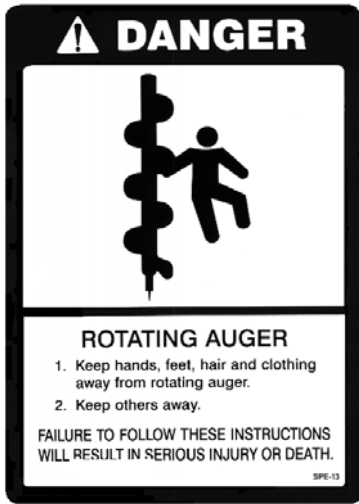
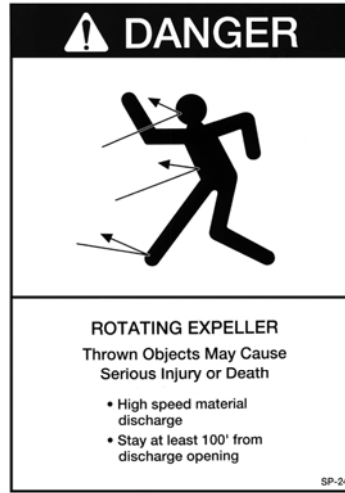
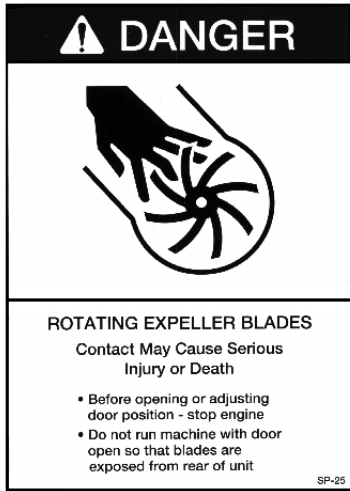


See **page 7** for details 1, 2, 3, 4

See **page 8** for details 5, 6, 7, 8, 9

SAFETY DECAL LOCATIONS:
Right-hand side view



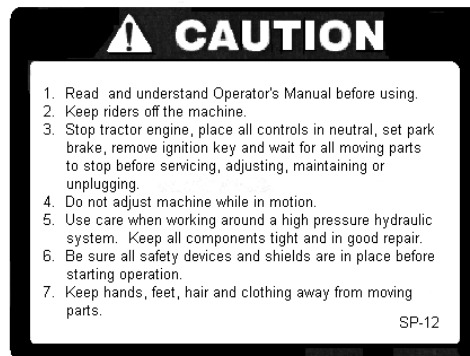


DANGER: Serious Potential Hazard
WARNING: Specific Potential Hazard
CAUTION: Attention to unsafe practices

See page 6 for location



5



8



9



6



10



7

DANGER: Serious Potential Hazard
WARNING: Specific Potential Hazard
CAUTION: Attention to unsafe practices

See page 6 for location

Pre- Delivery Inspection



WARNING: Always turn off tractor ignition and disconnect PTO driveline before working on the machine.

Failure to do so could result in very serious damage to scale and costly repairs.

IMPORTANT: If welding is required at any time, it is absolutely necessary to disconnect the two cables to the indicator read out box.

Before operating the Supreme please check the following:

- A. Check and adjust the PTO length (page 14)
- B. Adjust hitch setting; machine has to operate in a level position (page 15).
- C. Check oil level daily (pages 32 – 42).
- D. Grease machine as indicated (pages 29 – 31)
- E. Connect electronic scale and adjust to pounds or kilograms (pages 55, 56), charge battery or connect to tractor 12volt system for consistent power.
- F. Assemble elevator (pages 17, 25, 26).

Operating Instructions

INTRODUCTION:

The operation of the Supreme Feed Processor **varies greatly with climatic conditions and various feed components**. However, there are **basic rules and steps to follow** to obtain the desired processed feed samples. It may be necessary to make **two or three trial** loads of a given mixture before the ideal mixture sample is achieved. The operation of the Supreme Feed Processor is very easy, providing a few but very important instructions are followed.

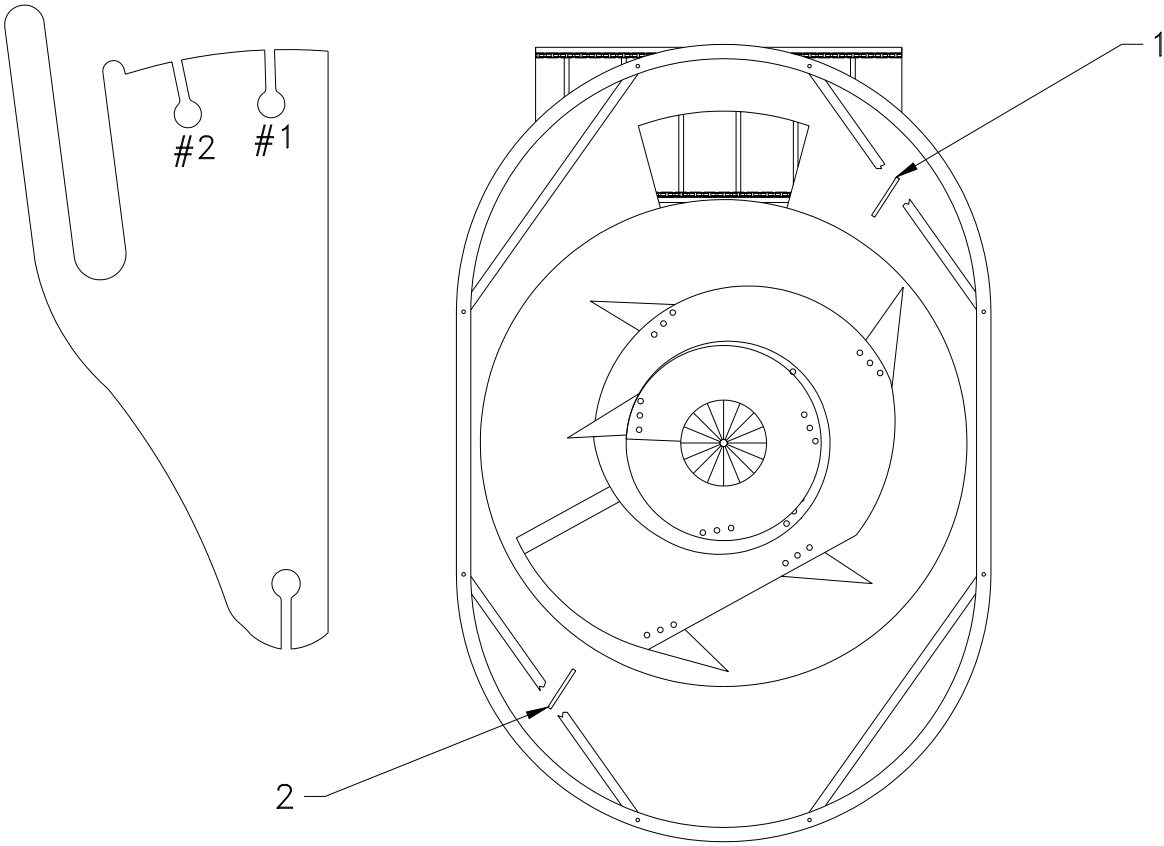
CATEGORIES OF HAY:

We differentiate hay into two categories, i.e. alfalfa baled hay on one side and on the other mixed grasses, wheat hay, slough grass, coastal grasses, Bermuda grasses, green feed, silage bales and any other grasses not mentioned above.

CUTTING LENGTH OF HAY:

The position of the restrictor plates and length of cutting time determines the length of cut of the hay.

RESTRICTOR PLATES/STANDARD SETTING:



PLATES LOCATIONS

The function of the restrictor plates is to slow down the rotation of the material in the tub, thereby regulating the cut length of the forage.

STANDARD SETTING:

IMPORTANT: We recommend to use only #1 and #2 restrictor plates, pin and lock at Hole #2. This is the standard setting **for most TMR loads**.

Machine Setting:

- Tub Door Closed.
- Pin & Lock #1 & #2 restrictor plates at hole #2

Operation:

- Connect machine to tractor with adequate size hitch pin.
- Connect PTO shaft (be sure lock pins are in groove of tractor shaft).
- Start tractor PTO.
- Remove twine and load bale into tub.

This setting can be left unchanged during the complete cutting/mixing cycle – the **forage** will be **cut in approximately 4-6 inch lengths**.

NOTE: The cutting of forage will continue when other commodities have been loaded into the tub and are mixed with the coarse cut forage(s).

The standard setting is recommended for both alfalfa and other forage previously listed. *If* the *cut length* of the forage is *too short*, use only one restrictor plate: Restrictor Plate #1. **You will have to experiment with the various settings on restrictor plates until the desired length of cut is achieved.**

If the Supreme Feed Processor has the **second cutter option**, you may only require the use of one Restrictor plate, because the second cutter protrudes into the tub thereby causing resistance to the material in the tub. (**See Second Cutter Options – Setting and Operating Instructions, pages 20-24**).

When you process and mix forages there may be some **spillage** over the side of the tub. To **remedy** this problem:

- Check #2 restrictor plate, retract and lock out #2 restrictor plate if not previously locked out.
- Adjust or withdraw #1 restrictor plate to less aggressive settings.

If spillage still occurs: reduce the tractor PTO speed, which in turn will reduce or lower the speed the crew is turning. When the screw is turning slower, less horsepower is required to operate the machine.

IMPORTANT: When the desired setting for a particular mixture and length of cut is achieved, you may want to insert a pin in the desired hole so that the machine is operator-friendly and every mix is consistent.

VERY IMPORTANT: It is an **absolute must that dry forages are loaded and coarsely cut first.** Other ingredients such as silage, haylage, wet Brewer's grain or other heavier feed ingredients must always follow the dry forages!

Once the dry forage is coarsely cut, other feed commodities can be added while the machine is running.

Small and large square bales require very little break-up or initial cutting time. **Large round bales** of tougher grasses such as Bermuda or Coastal hay and green feed may require a longer initial cutting time to achieve a coarse cut.

NOTE: The forage will continue to be cut when heavier ingredients or commodities are added and the restrictor plates are in a fixed position.

As a general rule, when all the ingredients/commodities are completely loaded, the final mixing period can vary from 2 to 7 minutes for the ideal mix.

IMPORTANT: If in the final mixed sample, the forage is **cut too short**, either **reduce the initial breaking up or cutting time** and/or **adjust the setting of the restrictor plates** so they do not reach as far into the mixing chamber. If the length of cut is **still too short**, **use only one restrictor plate, restrictor plate #2.**

HORSEPOWER REQUIREMENTS:

The horsepower requirements vary greatly depending on the feed mixture being processed. For instance, mixtures with silage and grain require less horsepower than mixtures with silage and large quantities of hay.

Please also consider adequate horsepower to transport loads in difficult ground conditions.

- **Tractor Operating Speed**

When the mixture consists of a HIGH PERCENTAGE OF HAY, A SLOWER PTO SPEED IS RECOMMENDED if tractor horsepower is sufficient! Also, when working with large quantities of hay, a lower tractor PTO speed reduces the chances of spillage.

- **Stopping the Mixing Screw when Fully Loaded**

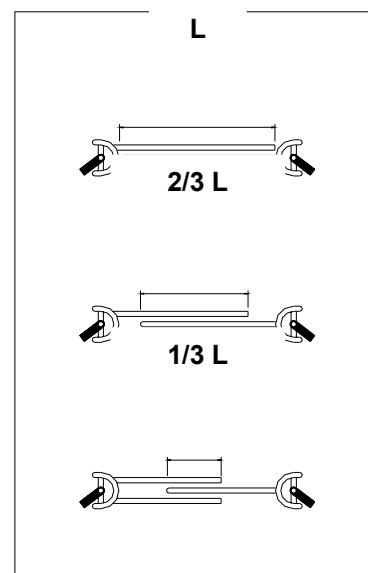
It is recommended to AVOID STOPPING THE MIXING SCREW WHEN FULLY LOADED if at all possible. If a fully loaded tub is left sitting for long periods of time, or if the machine has to travel over very rough terrain for unloading purposes, the mixed ration will settle in the tub and on the flighting of the screw. The HORSEPOWER REQUIREMENT TO RESTART the screw with the tub fully loaded is MUCH HIGHER and causes MORE STRESS ON THE TRACTOR PTO CLUTCH.

PTO LENGTH

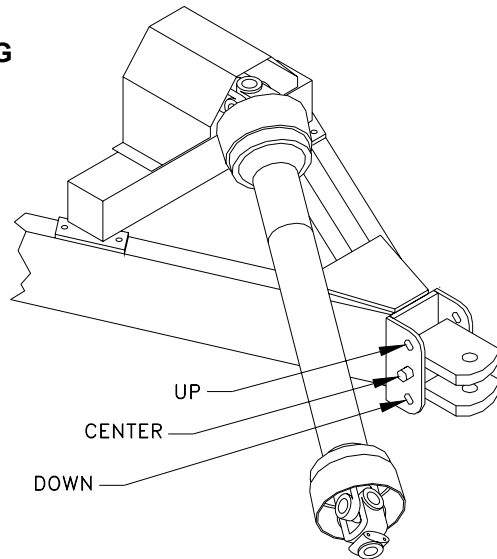
- **Telescopic drive shaft overlap:**

- **Suggested PTO working length:**

Please note the above drawing for minimum and maximum overlap of the telescopic drive shaft. For optimum safety, stay as close as possible to the “**2/3 L**” under normal working conditions.



HITCH SETTING



NOTE:

When attaching Supreme tub to tractor, the hitch clevis must be adjusted to the up, down or center position **to level the tub.**

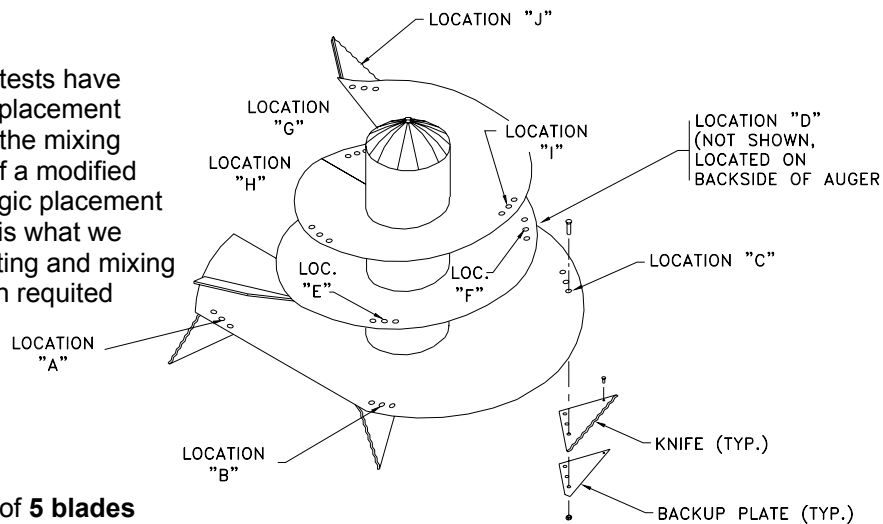
CUTTING KNIVES:

- Knives Placement:

Please Note:

In the past few months, tests have been conducted on the placement of the cutting blades on the mixing screw. A combination of a modified screw design and strategic placement of the blades has given us what we think is the optimum cutting and mixing action with a reduction in required horsepower.

With this in mind, we have reduced the number of blade supplies with each machine to a total of **5 blades on orders placed after April 1/95;** no additional "loose" blades will be included. If additional blades are required, they may be purchased as spare parts as listed in the unit price list



Scale Instructions

DIGISTAR EZ MODELS CONVERSION:

- **To change from pounds to kilograms:**

1. Turn on
2. Press “zero” key with one finger; while holding “zero”, press “on” key with another finger; hold both “zero” and “on” keys until display reads “setup”, then release.
3. Set up number should be displayed as follows:
 - 146040 in pounds for Supreme Models 500,500T, 600, 700, 700T and 900T.
 - 147063 for Supreme Models 1000,1200 and 1400.

NOTE THAT THE LAST DIGIT WILL BE FLASHING.

4. Press and release “tare” key intermittently until the number “1” flashes.
5. Press and release “Net/Gross” key intermittently to change the “1” to a “5”.
6. Press and release “on” key intermittently until the scale starts “test mode”.

When test is finished...you are done.

- **To change from kilograms to pounds:**

1. Turn on.
2. Press “zero” key with one finger; while holding “zero”, press “on” key with another finger; hold both “zero” and “on” keys until display reads “setup”, then release.
3. Set up number should be displayed as follows:
 - 546018 in pounds for Supreme Models 500,500T, 600, 700, 700T and 900T.
 - 547028 for Supreme Models 1000,1200 and 1400.

NOTE THAT THE LAST DIGIT WILL BE FLASHING

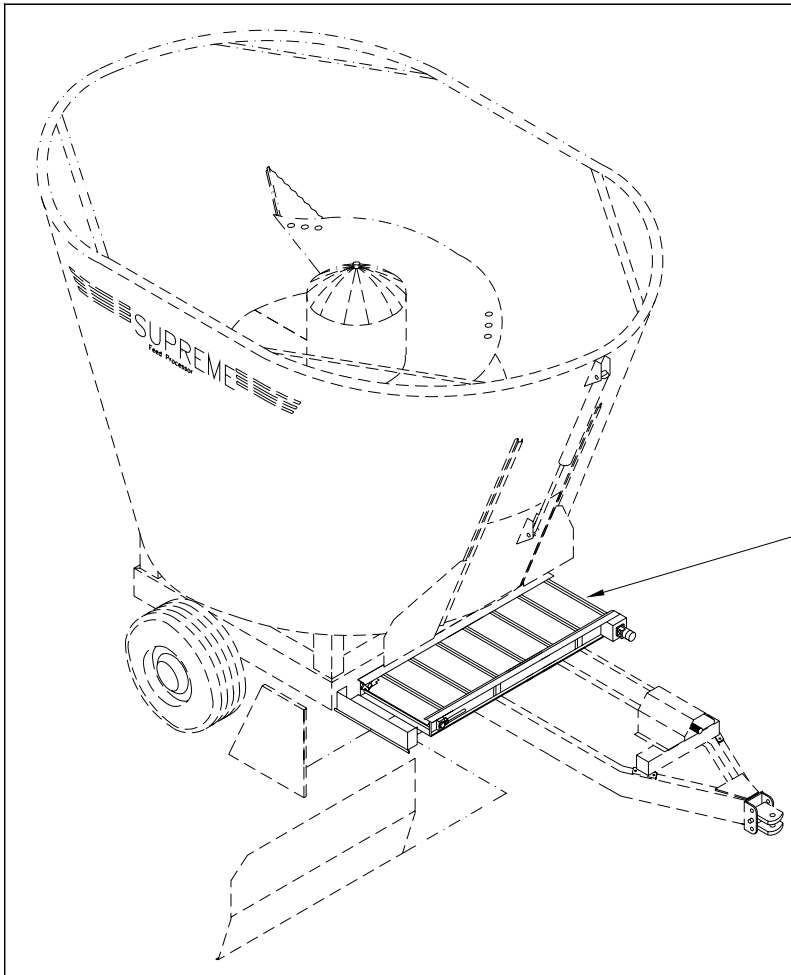
4. Press and release “tare” key intermittently until the number “5” flashes
5. Press and release “Net/gross” key intermittently to change the “5” to a “1”.
6. Press and release “on” key intermittently until the scale starts “test mode”

When test is finished...you are done.

FOR MORE DETAILS, REFER TO APPENDIXES

Conveyors

STANDARD FLAT CONVEYOR:



**ONE WAY
CONVEYOR**

- FLAT CONVEYOR:**
- Discharge height of approximately 26"

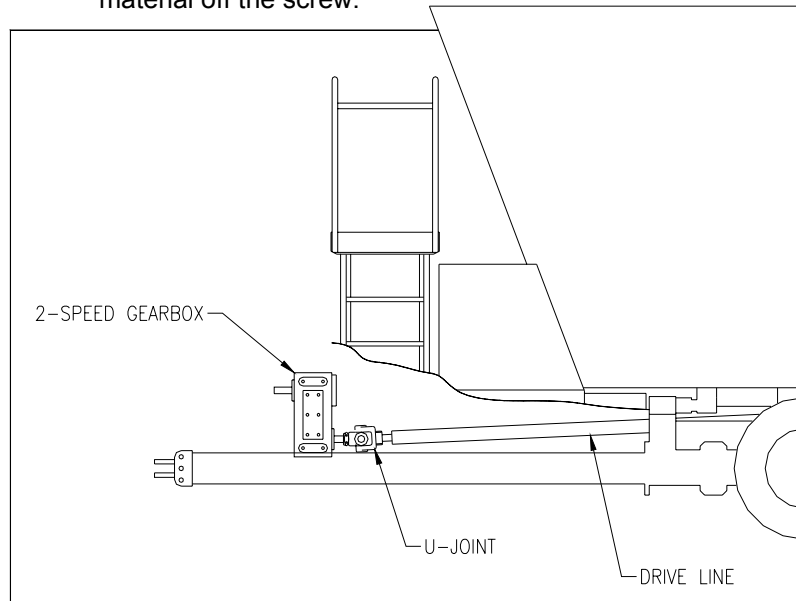
Optional Equipment

TWO-SPEED GEARBOX:

ADVANTAGE: The two-speed gearbox **reduces the speed of the screw, thereby reducing the horsepower requirements** (approximately 20% HP.). If the horsepower of the tractor is too low the two-speed gearbox reduces the turning speed of the screw. The lower the turning speed of the screw, the less horsepower is required to turn the screw.

IMPORTANT: Due to the lower turning speed of the screw, material may accumulate on the screw when unloading. **To clear material left on the screw:**

- 1) Stop tractor PTO.
- 2) Shift two-speed gearbox to high-speed setting.
- 3) Re-start PTO drive. The turning speed will be back to normal and will clear material off the screw.



SECOND CUTTER:

INTRODUCTION: The Supreme Feed Processor second cutter option is **the biggest breakthrough in feed mixer technology.**

The second cutter **speeds up the cutting and mixing** of forage and hard to cut commodities substantially.

The capabilities of the second cutter is very **similar to a tub grinder** however, it not only cuts forage very quickly but **cuts forage in very short lengths 2–2.5 inches (2.54 – 3.81 cm)** if required, and **even shorter while mixing.**

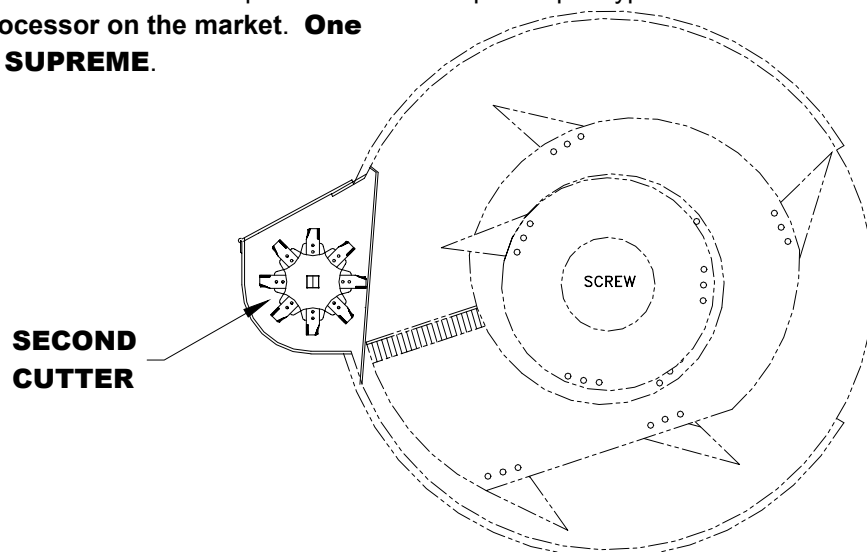
The Supreme second cutter option is **ideal when only a portion of a whole round forage bale is required** for a load or ration and the excess amount can be discharged from the tub and stockpiled for later use. The second cutter **can perform the function of a tub grinder** and forage bales can be cut on a continuous basis and stockpiled.

The second cutter **reduces the cutting and mixing time substantially.** The forage is cut by the second cutter and is directed back into the tub for further cutting and mixing and this cycle is repeated on a continuous basis. This application is **ideal for large feedlot or dairy operations.**

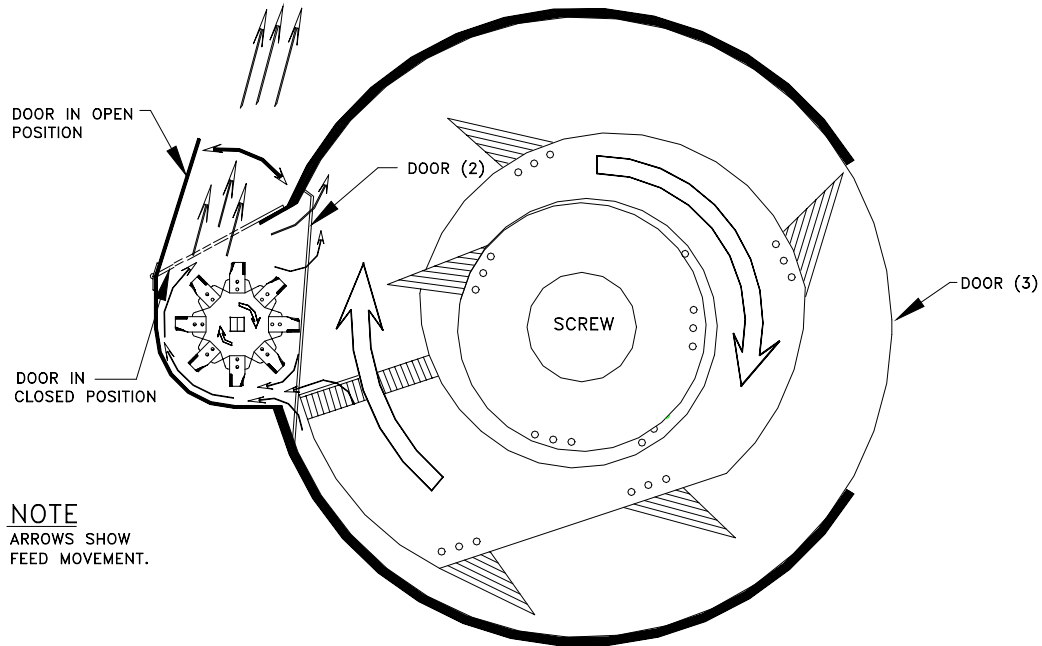
The second cutter is **ideal for cutting and spreading straw or other hard to cut commodities** such as cornstalks or sorghum for bedding purposes or for cutting and mixing back into the ration.

Typical hard to cut stem grasses can be **cut with ease into very short lengths** if required for easy mixing into a ration.

The Supreme Feed Processor second cutter option makes the Supreme pull-type models **the most efficient vertical feed processor on the market. One machine does it all – SUPREME.**



FEED MOVEMENT: SECOND CUTTER



SETTING AND OPERATING INSTRUCTIONS:

1. Second cutting **whole round dry roughage bale** and discharging or expelling excess amount from the tub.

IMPORTANT: Remember, the second cutter is running all the time **following the discharge of the excess material, close door #2, then immediately close door #1.**

- **Machine setting:**

- Outside **door #1 open**
- Inside **tub door #2 closed**
- **Tub door #3 closed**
- **Outside shielding** in spreading position

- **Operation:**

- **Start tractor PTO**
- **Remove twine and load bale** into the tub.
- Very slowly, **open door #2, monitor tractor engine power** (when low H.P. tractor is used, open door #2 only as much as tractor can handle).
- **Different types of forage bales** have **different horsepower requirements.**
- **Discharging** or expelling will start immediately.
- **Increase tractor PTO speed** once the bale is broken up.
- **Watch electronic scale monitor and close inside door #2** when desired amount or weight of roughage is left in the tub.
- **Close door #1**

- **Operation (Alternative Method)**

- **When a short length of cut is required** for the ration or bedding, the cutting time can be reduced substantially by using the second cutter in the “**batch**” mode (See illustration on page 21). In such mode, the material circulates in the tub, enters the second cutter, and then re-enters the tub for further cutting and mixing. Door #1 is closed; door #2 is open.
 - **Operate in the above mode until** the desired length of cut is achieved, **close door #2**.
 - **Open door #1, re-open door #2** for discharge.
 - **Watch electronic scale monitor and close inside door #2**, when desired amount or weight of roughage is left in the tub.
 - **Close door #1**.
 - **Remember** the roughage will continue to be cut when heavier commodities are added to the load.
2. Cutting and spreading **roughage as long cut bedding material**. (Straw, cornstalks, sorghum, etc., ideal for dairy or beef operations.

IMPORTANT: Bedding cut in longer lengths is easier to spread than bedding cut in short lengths because it is heavier.

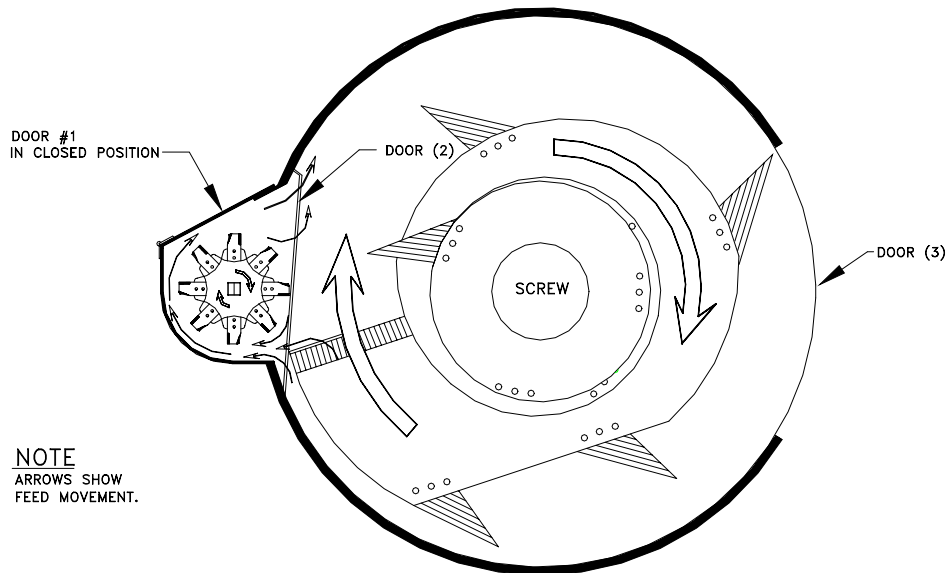
- **Machine setting:**

- Outside **door #1 open**.
- Inside **tub door #2 closed**.
- **Tub door #3 closed**.
- **Outside shielding** in spreading position.

- **Operation:**

- **Start tractor PTO**.
- **Remove twine and load** bale into the tub.
- Very slowly, **open door #2, monitor tractor engine power**. (When low HP tractor is used open door #2 only as much as tractor can handle).
- **Different types of forage bales have different horsepower requirements**.
- **Spreading** will start immediately.
- **We recommend** cutting the bedding in longer lengths, just so it leaves the second cutter, resulting in better bedding that can be thrown or spread farther.
- **Bedding can be cut and spread on ongoing basis** by continuously adding bales without stopping the tractor PTO.

“BATCH” MODE



3. Cutting and spreading roughage as shortcut bedding material.

Short cut bedding can be processed when using the second cutter in the “batch” mode, which means the material circulates in the tub, enters the second cutter and then re-enters the tub for further cutting and mixing.

IMPORTANT: Bedding cut in short lengths will be harder to spread than bedding cut in long lengths because it is lighter.

- **Machine setting:**

- Outside door#1 closed.
- Inside tub door #2 closed.
- Tub door #3 closed.
- Outside shielding in spreading position.

- **Operation:**

- Start tractor PTO.
- Remove twine and load bale into the tub.
- Very slowly, open door #2, monitor tractor engine power. (When low HP tractor is used open door #2 only as much as tractor can handle).
- Different types of forage bales have different horsepower requirements.
- Operate in the above mode until the desired length of cut is achieved. Close door #2.
- You may not see the shorter material reaching the surface at the top of tub but the shorter material will show up.

SPREADING SHORT CUT BEDDING: Make sure no one is near spreading area, open door #1, check position of outside shielding, then re-open door #2.

4. Cutting and mixing short cut roughage.

Short cut roughage can be processed when using the second cutter in the “**batch**” mode, which means the material circulates in the tub, enters the second cutter and then re-enters the tub for further cutting and mixing. (See page 20).

IMPORTANT: always cut and mix light roughage bales first. Do not put wet, high moisture material (material with more than 20% moisture) through the second cutter.

- **Machine setting:**

- **Outside door #1 closed.**
- **Inside tub door #2 closed.**
- **Tub door #3 closed.**
- Set **deflecting plates** for method of feeding as required (e.g. Ground windrow feeding).

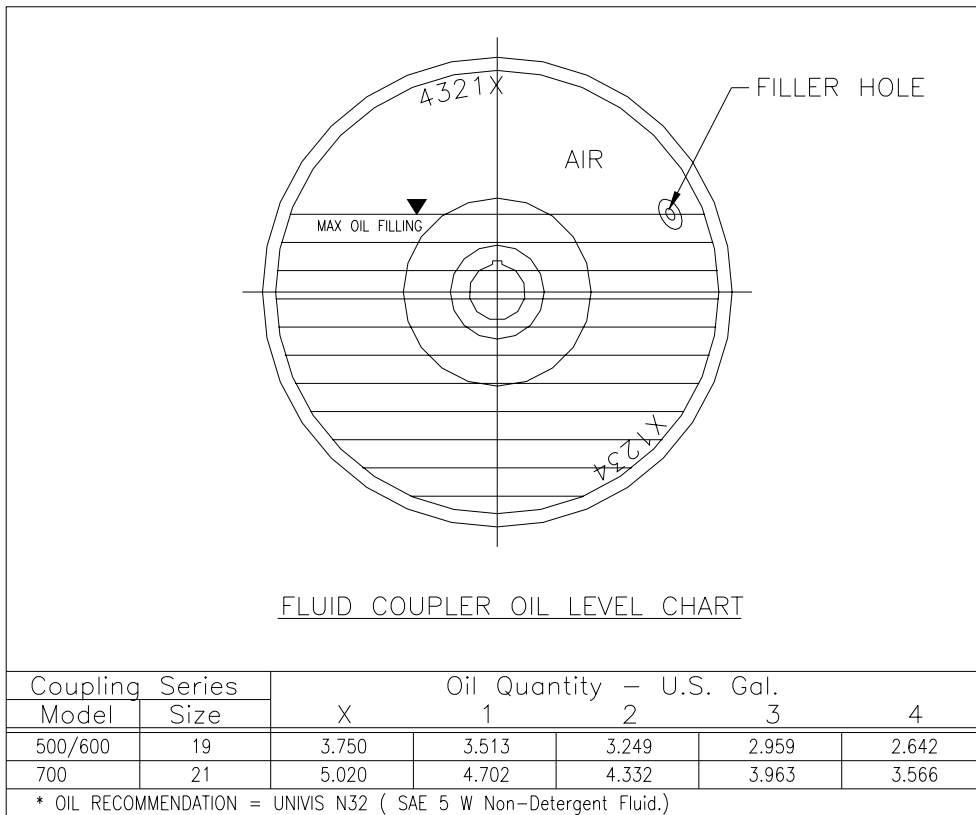
- **Operation:**

- **Start tractor PTO.**
- **Remove twine and load bale into the tub.**
- Very slowly, **open door #2, monitor tractor engine power** (When low HP tractor is used open door #2, only as much as tractor can handle).
- **Different types of forage bales have different horsepower requirements.**
- **Hay and other dry forage material** can be cut and mixed as required; **operate in the above mode until** the desired length of cut is achieved. Close door #2.
- **Ground windrow feeding:** set the **deflecting plates** of the second cutter, open door #1 and open door #2. When using this setting, a large quantity of feed can be unloaded quickly and evenly.

SOFT START FLUID COUPLER – 1000 PTO ONLY:

ADVANTAGE: If stopping the mixing screw when fully loaded is unavoidable, the soft start fluid coupler **makes the restart of the mixing screw much easier and reduces the stress to the tractor PTO clutch.**

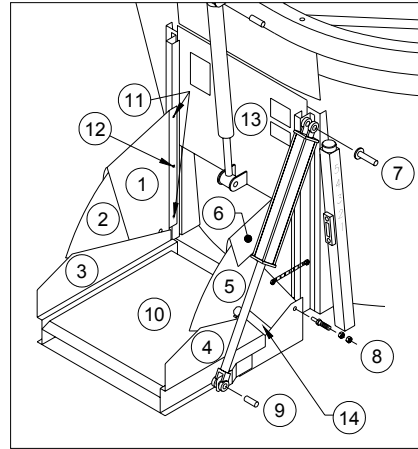
The **PTO drive speed** has to be at **1000rpm at all times**. A soft start fluid coupler does not engage the PTO's full horsepower instantly, but softens the engagement by a gradual acceleration of the drive speed to mixing screw.



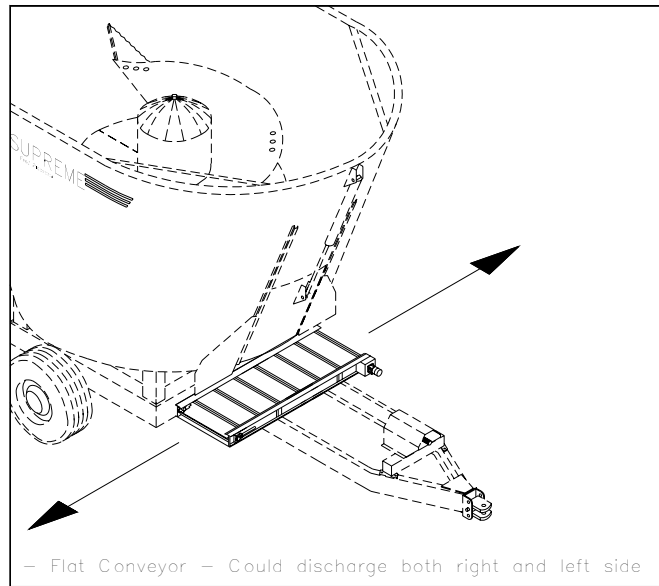
SIDE DISCHARGE – ALL MODELS:

- **Assembly Instructions:**

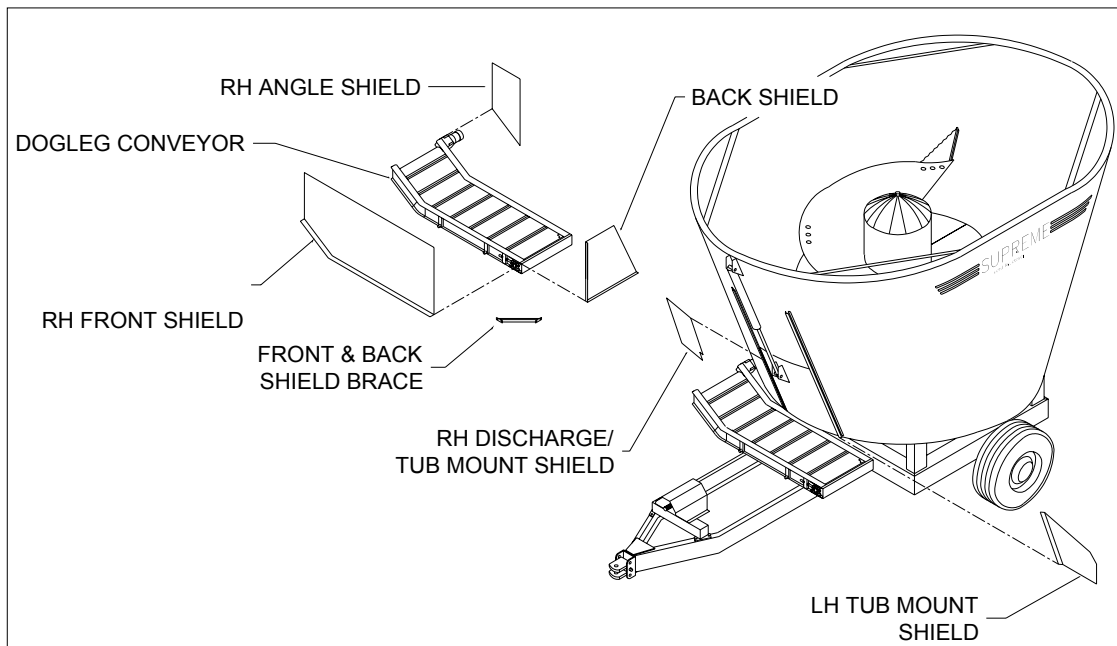
1. Using two 3/4" x 2" bolts, mount the **elevator (10)** onto the tub.
2. Mount **shields (2), (5)** to the pins on the **bolts (8)**.
3. Mount **shields (1), (6)** to the side of the tub with four 3/8" x 2 3/4" bolts and two 3/8" x 3" bolts.
NOTE: Shields (2), (5) must slide in the folds of shields (1), (6). Shields (2), (5) must also be positioned outside of shields (3), (4).
4. **Connect the chain from shields (2), (5) to bolt (12)** on either side.
5. Bolt **shields (3), (4)** to the top of the elevator with 3/8" x 3/4" bolts.
6. **Adjust arm (14)** to minimize clearance between **shields (2), (3), (4)** and **(5)**.
7. **Pin the ram to bolt (9)**.
8. **Bolt door gauge** to the elevator door using the 2 3/8" x 3/4" bolts. **NOTE: The door gauge is a T-Shape metal piece 3" x 12"**.



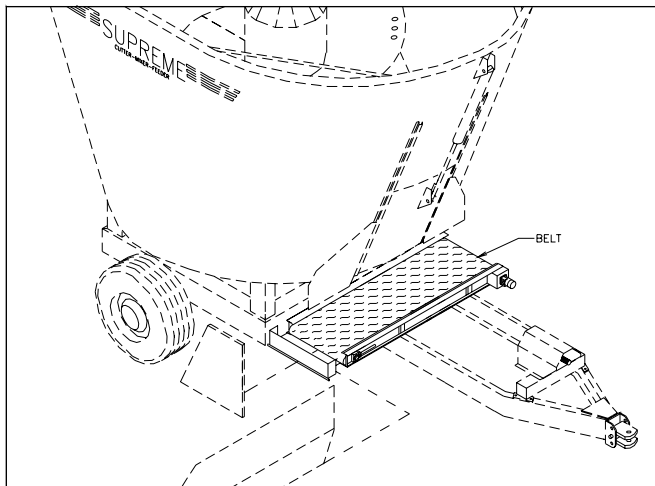
TWO WAYS DISCHARGE CONVEYOR:



DOGLEG CONVEYOR:



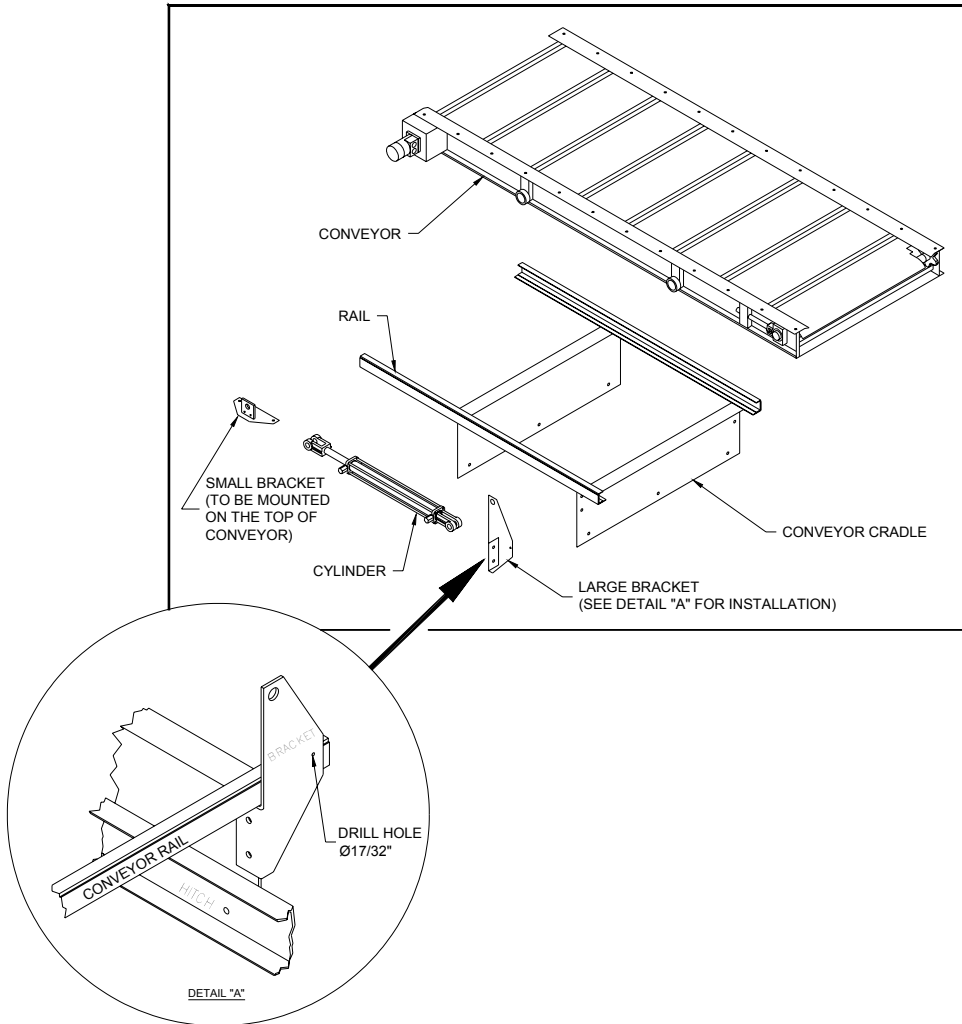
BELT CONVEYOR IN LIEU OF STANDARD CHAIN CONVEYORS:



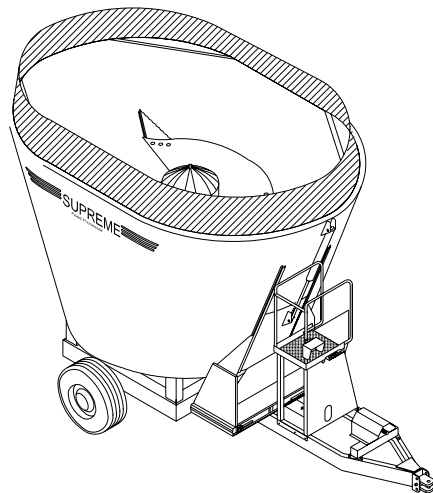
ADVANTAGE: If the premixing of certain commodities with concentrates or supplements is required in the ration formula, the **belt surface allows** the fine particles of supplements to be **discharged** evenly and quickly in the ration when loading.

The **belt elevator will allow** other ingredients and commodities to be discharged evenly and quickly as long as there is **not a high percentage of dry forage (hay)** in the ration.

HYDRAULIC EXTENDER KIT:



RUBBER TUB EXTENSION:

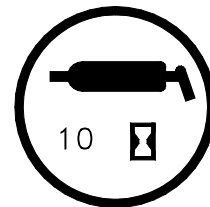


Maintenance

- 1) Always ensure that the **BATTERY** is **CHARGED** in order to avoid incorrect scale readings, or damage to the scale indicator.
- 2) Check **OIL LEVELS** for the **PLANETARY DRIVE** daily and the **GEARBOX** every 3 months. We recommend **SAE 80/90 GEAR LUBE OIL** (use in mild climate regions) – or **SAE 70/80 GEAR LUBE OIL** (use in cold climate regions) for both the right angle drive and planetary. The **OIL** in the **PLANETARY DRIVE** and **RIGHT ANGLE GEARBOX** must be changed every 1500 hours of operation or once a year, whichever comes first.

Damage caused by operating machine with low oil levels will **not** be **covered by warranty**.

- **Planetary**
 - Oil reservoir filler on the side of the tub (breather cap), fill to level on sight gauge (pages 37– 42)
 - **Right Angle Drive**
 - Check safe oil level by removing oil level plugs as per gearboxes. (pages 37 – 42)
- 3) **GREASE UNIVERSAL JOINTS ON PTO DRIVE** regularly (do not forget PTO universal joint, which is underneath the machine by the planetary drive (pages 29 – 31).
 - 4) **GREASE** unloading elevator **BEARING** periodically (pages 29 – 30).
 - 5) **ADJUST ELEVATOR CHAIN TENSION** at the take up bearing, located at the lower end of the elevator.
 - 6) **IMPORTANT: TOWER BUSHING GREASING POINT**, located on side of machine (in front of wheel – connected to copper tube) must be **GREASED** every 10 hours, as indicated by grease gun decal (See location on pages 29 – 30).
*Applies to models 500/600/700

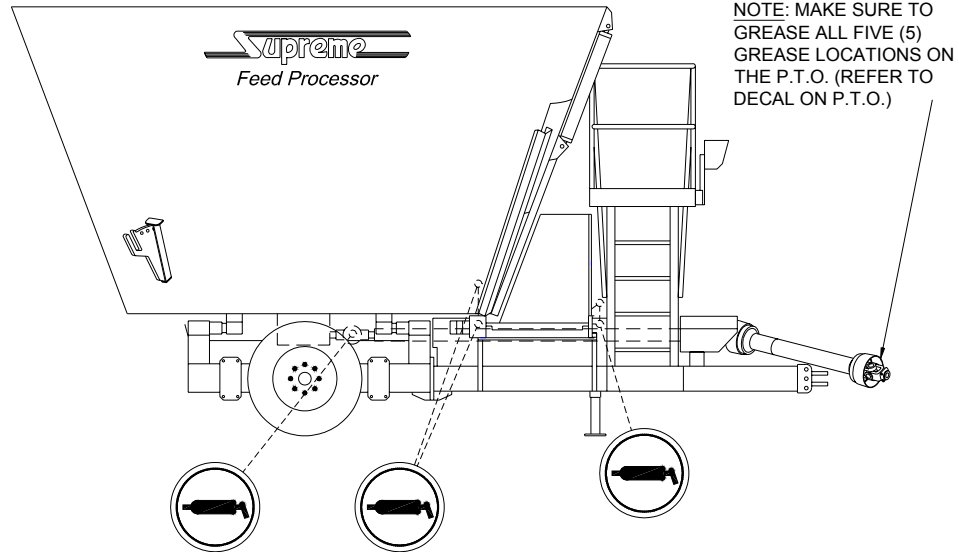


WARNING:



AGAIN, WE REMIND YOU, NEVER ENTER, REACH INTO, OR PUT ANY FOREIGN OBJECTS OR IMPLEMENTS INTO THE MIXING CHAMBER. KEEP CHILDREN A SAFE DISTANCE FROM THE MACHINE!

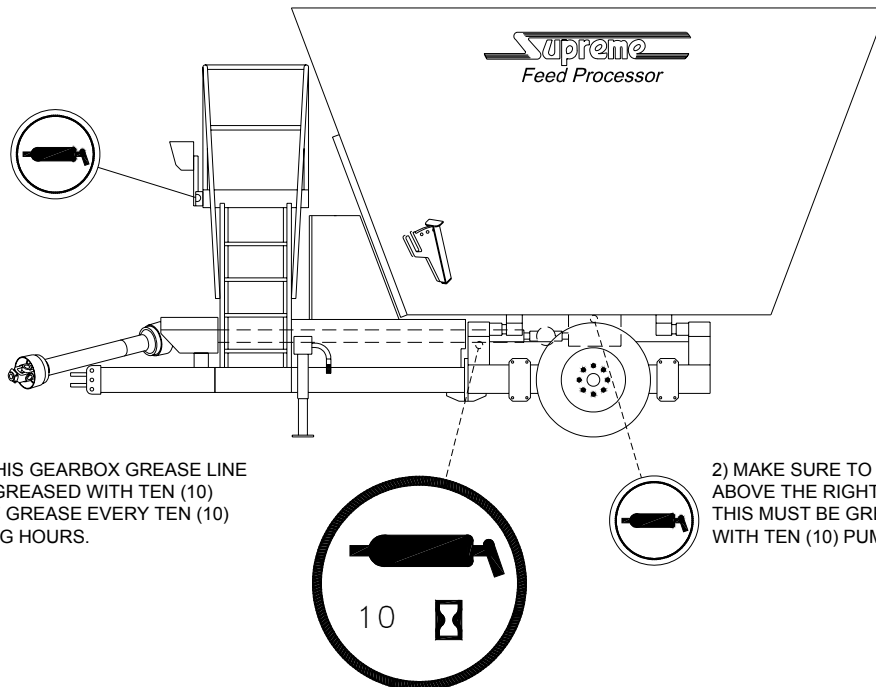
SUPREME STANDARD UNIT: GREASE LOCATIONS



NOTE: MAKE SURE TO GREASE ALL FIVE (5) GREASE LOCATIONS ON THE P.T.O. (REFER TO DECAL ON P.T.O.)

RIGHT-HAND SIDE VIEW

NOTE: THERE ARE A TOTAL OF 13 GREASE LOCATIONS ON THIS UNIT!

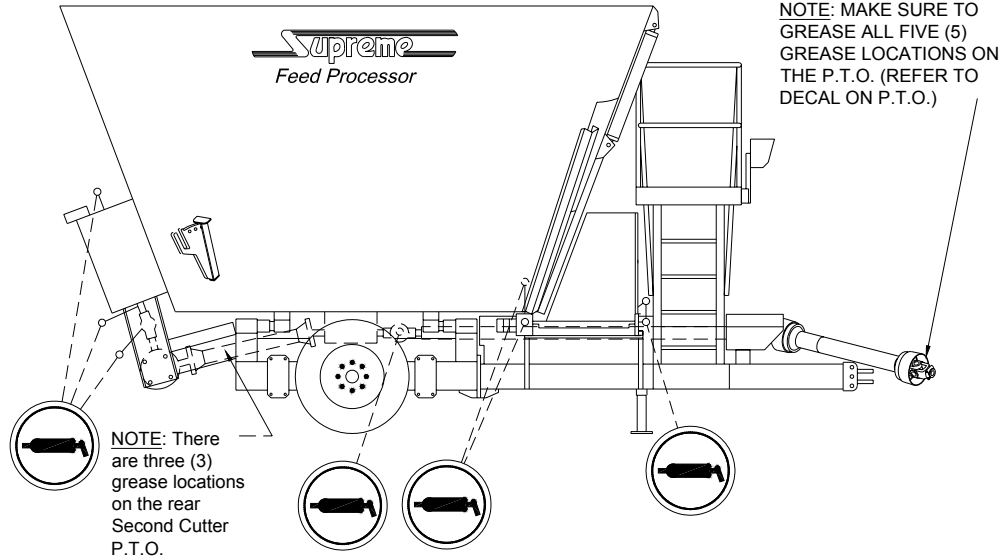


NOTE: 1) THIS GEARBOX GREASE LINE MUST BE GREASED WITH TEN (10) PUMPS OF GREASE EVERY TEN (10) OPERATING HOURS.

2) MAKE SURE TO GREASE NIPPLE ABOVE THE RIGHT ANGLE GEARBOX, THIS MUST BE GREASED ONCE A YEAR WITH TEN (10) PUMPS OF GREASE.

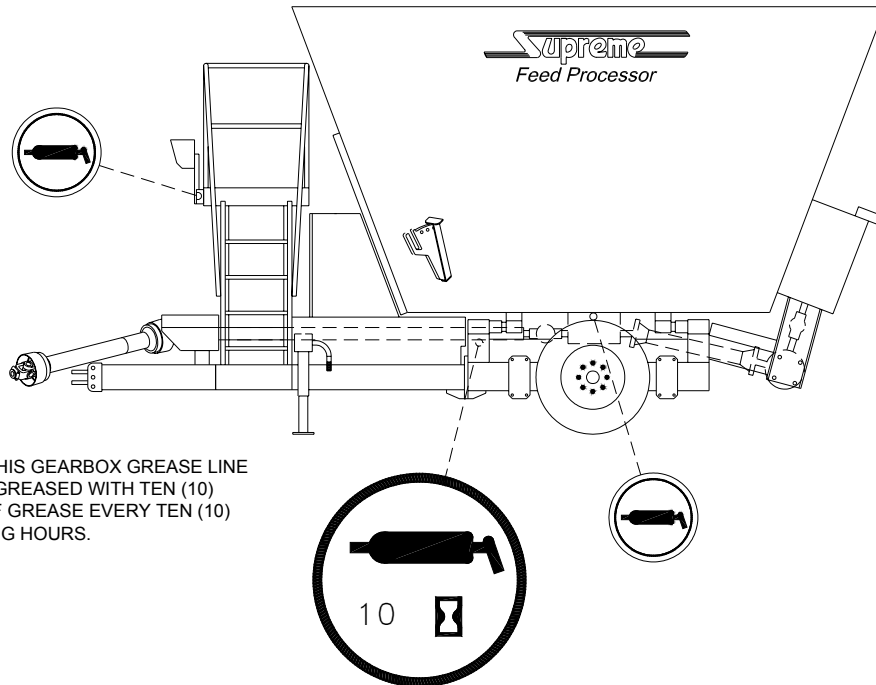
LEFT-HAND SIDE VIEW

SUPREME WITH/SECOND CUTTER: GREASE LOCATIONSSUPREME



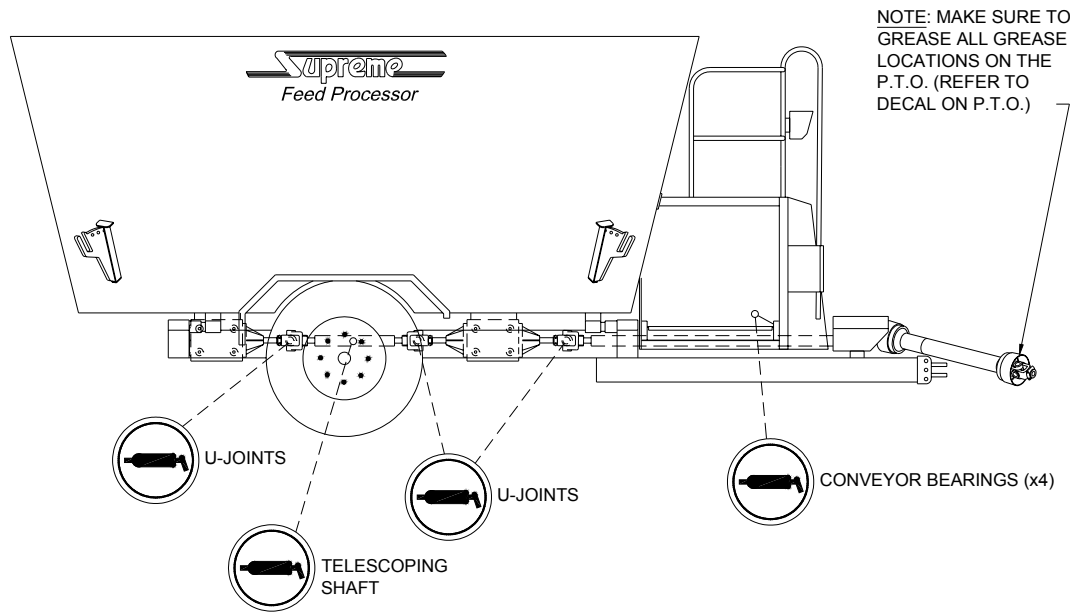
RIGHT-HAND SIDE VIEW

NOTE: THERE ARE A TOTAL OF 19 GREASE LOCATIONS ON THIS UNIT!

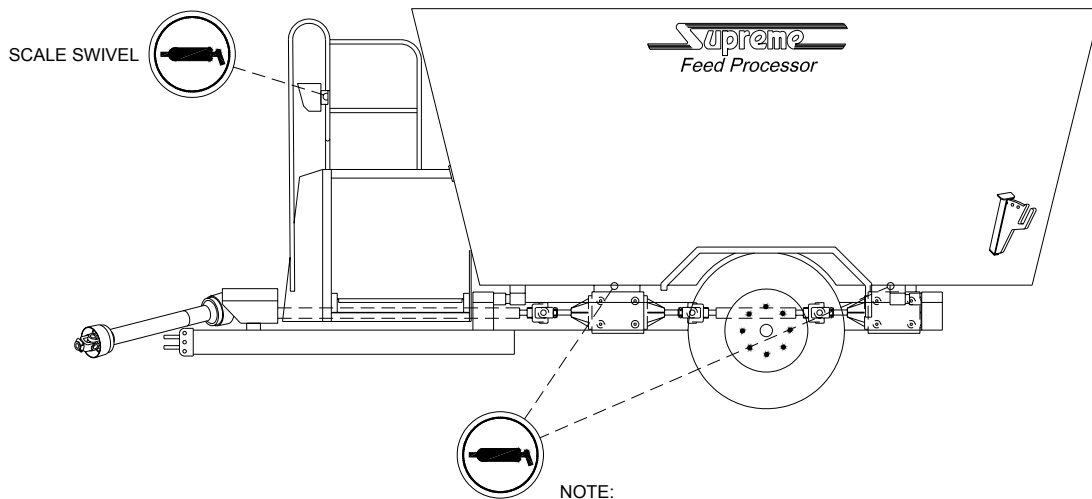


LEFT-HAND SIDE VIEW

SUPREME MODEL 900T: GREASE LOCATIONS



RIGHT-HAND SIDE VIEW



LEFT-HAND SIDE VIEW

PLANETARY DRIVE/RIGHT ANGLE GEARBOX:

■ **OIL CHANGING / FILLING INSTRUCTIONS:**

IMPORTANT: the oil in the planetary drive and right angle gearbox, must be **changed every 1500 hours of operation or once a year**, whichever occurs first.

USE SAE 80/90 GEAR OIL IN **MILD CLIMATE REGIONS

USE SAE 70/80 GEAR OIL IN **COLD CLIMATE REGIONS

A. PLANETARY DRIVE – OIL CHANGING / FILLING INSTRUCTIONS – MODELS 425/500/600/700

SAE 80/90 GEAR OIL or SAE 70/80 GEAR OIL

See illustrations on pages 37, 38

- 1) Remove both supply lines “A” from oil reservoir and allow reservoir and planetary gearboxes to drain completely (waste oil amount should equal oil capacity amount, see below).
- 2) To refill, force oil into one supply line “A” with mechanical pump until oil circulates through and comes out bottom hole of reservoir.
- 3) Connect this line “A” to oil reservoir.
- 4) Top up oil in reservoir to bottom half of sight glass.

**OIL CAPACITY for PLANETARY IS APPROXIMATELY:
4.5 IMPERIAL GALLONS, or 5.5 US GALLONS or 20 LITERS**

B. RIGHT ANGLE GEARBOX - OIL CHANGING/FILLING INSTRUCTIONS - MODELS 425/500/600/700

SAE 80/90 GEAR OIL or SAE 70/80 GEAR OIL

For models 425/500/600, see illustration “GEARBOX T269” on page 37

For model 700, see illustration “GEARBOX T301” on page 38

The right angle gearbox on each of the previous models is detachable from the two stage planetary gearbox by four (4) bolts and therefore has an independent lubricating system.

- 1) Remove drain plug to allow right angle gearbox to drain completely (waste oil amount should equal oil capacity amount, see below).
- 2) Replace drain plug.
- 3) Remove fill plug and oil level plug.
- 4) Add oil in fill plug until oil runs out of the oil level plughole.
- 5) Replace and tighten plugs.

OIL CAPACITY for RIGHT ANGLE GEARBOXES IS APPROXIMATELY:
 - **GEARBOX T269: 4.4 IMPERIAL PINTS, or 5.3 US PINTS, or 2.5 LITERS**
 - **GEARBOX T301: 8 IMPERIAL PINTS, or 9.5 US PINTS, or 4.5 LITERS**

TORQUE SPECIFICATIONS – ALL MODELS

- 1) Planetary gearbox to floor-150 ft/lbs.
- 2) Screw right angle gearbox to planetary-175 ft/lbs.
- 3) Top plate to planetary output (3 bolts)-90ft/lbs

IMPORTANT: the oil in the planetary drive and right angle gearbox / tee gearbox, must be changed every 1500 hours of operation or once a year, whichever occurs first.

USE SAE 80/90 GEAR OIL IN **MILD CLIMATE REGIONS
 USE SAE 70/80 GEAR OIL IN **COLD CLIMATE REGIONS

A. PLANETARY DRIVE - OIL CHANGING/FILLING INSTRUCTIONS - MODEL 900T

SAE 80/90 GEAR OIL or SAE 70/80 GEAR OIL

**OIL CAPACITY for EACH PLANETARY IS APPROXIMATELY:
 4.5 IMPERIAL GALLONS, or 5.5 US GALLONS or 20 LITERS**

See illustrations on page 39

- 1) Remove both supply lines “A” from oil reservoir and allow reservoir and planetary gearboxes to drain completely (waste oil amount should equal oil capacity amount, see above).
- 2) To refill, force oil into one supply line “A” with mechanical pump until oil circulates through and comes out bottom hole of reservoir.
- 3) Connect this line “A” to oil reservoir.
- 4) Repeat steps 2 & 3 for the other planetary. Top up oil in reservoir to bottom half of sight glass.

B. **RIGHT ANGLE GEARBOX & TEE GEARBOX** - OIL CHANGING/FILLING INSTRUCTIONS
- **MODEL 900T**

SAE 80/90 GEAR OIL or SAE 70/80 GEAR OIL

OIL CAPACITY for **RIGHT ANGLE & TEE GEARBOXES** IS APPROXIMATELY:
GEARBOX T269: 4.4 IMPERIAL PINTS, or 5.3 US PINTS, or 2.5 LITERS

See illustrations on page 39

The right angle gearbox and tee gearbox are detachable from the planetary gearbox and therefore have an independent lubricating system.

- 1) Remove drain plug to allow right angle gearbox to drain completely (waste oil amount should equal oil capacity amount, see above).
- 2) Replace drain plug.
- 3) Remove fill plug and oil level plug.
- 4) Add oil in fill plug until oil runs out of the oil level plughole.
- 5) Replace and tighten plugs.
- 6) Repeat steps 1 through 5 for the tee gearbox.

TORQUE SPECIFICATIONS – ALL MODELS

- 1) Planetary gearbox to floor-150 ft/lbs.
- 2) Screw right angle gearbox to planetary-175 ft/lbs.
- 3) Top plate to planetary output (3 bolts)-90ft/lbs.

IMPORTANT: the oil in the planetary drive and right angle gearbox must be **flushed** and **cleaned** if:

- 1) The same oil has been used for 2000 hours or more
- OR**
- 2) Routine oil changes have not been made every 1500 hours of operation or once a year, whichever occurs first.

IMPORTANT: oil will break down from overuse, resulting in sludge building up in the planetary drive and right angle gearbox. **Flushing** is **required** to remove this sludge.

After flushing planetary and right angle gearbox with hydraulic oil, refill with the **following gear oil:**

USE SAE 80/90 GEAR OIL IN **MILD CLIMATE REGIONS

USE SAE 70/80 GEAR OIL IN **COLD CLIMATE REGIONS

MODEL 900TE (Stationary) EQUIPPED WITH PLANETARY OIL COOLER

IMPORTANT: the oil in the planetary drive and right angle gearbox / tee gearbox, must be changed every **1500 hours of operation** or **once a year**, whichever occurs first.

USE SAE 80/90 GEAR OIL IN **MILD CLIMATE REGIONS

USE SAE 70/80 GEAR OIL IN **COLD CLIMATE REGIONS

A. **PLANETARY DRIVE** - OIL CHANGING / FILLING INSTRUCTIONS – **MODEL 900TE**

See illustrations on page 42

- 1) Remove supply line “A” from oil filter outlet and oil pump inlet. Allow reservoir and planetary gearbox to drain completely (waste oil amount should equal oil capacity amount, see below).
- 2) Install new oil filter element.
- 3) Reconnect the line to the oil pump inlet. Reconnect line “A” to oil filter outlet.
- 4) Disconnect the return lines “B” at the tee.
- 5) Add oil to the reservoir.
- 6) Fill the front and back planetaries separately. Plug one return line; then energize the oil circulation pump to transfer the oil to the planetary. Top up the oil reservoir as required.
- 7) Repeat step 6 to fill the other planetary.
- 8) Reconnect the return lines “B” to the tee. Check for leaks in the system.
- 9) Top up oil in reservoir to bottom half if sight glass.

OIL CAPACITY for **PLANETARY SYSTEM** IS APPROXIMATELY:
11 IMPERIAL GALLONS, or 13.2 US GALLONS, or 50 LITRES

B. **RIGHT ANGLE GEARBOX & TEE GEARBOX** - OIL CHANGING/FILLING INSTRUCTIONS - **MODEL 900TE**

See illustrations on page 42

The right angle and tee gearbox are detachable from the two stage planetary gearbox by four (4) bolts and therefore have an independent lubricating system.

- 1) Remove drain plug to allow gearboxes to drain completely (waste oil amount should equal oil capacity amount, see below).
- 2) Replace drain plug.
- 3) Remove fill plug and oil level plug.
- 4) Add oil in fill plug until oil runs out of the oil level plughole.
- 5) Replace and tighten plugs.

TORQUE SPECIFICATIONS – ALL MODELS

OIL CAPACITY for **EACH GEARBOX** IS APPROXIMATELY:
GEARBOX T269: 7 IMPERIAL PINTS, or 8.5 US PINTS, or 4 LITRES

- 1) Planetary gearbox to floor-150 ft/lbs.
- 2) Screw right angle gearbox to planetary-175 ft/lbs.
- 3) Top plate to planetary output (3 bolts)-90ft/lbs.

■ **OIL FLUSHING INSTRUCTIONS:**

A. PLANETARY DRIVE – OIL FLUSHING INSTRUCTIONS – MODELS 425/500/600/700

See illustrations on page 40, 41

- 1) Run the planetary for 1 hour or more under normal operating conditions.
- 2) Remove supply line “A” from oil reservoir and allow reservoir and planetary to drain completely (waste oil amount should equal oil capacity amount, see below).
- 3) To refill, force **hydraulic oil** into supply line “A” with mechanical pump until oil circulates through and comes out bottom hole of reservoir.
- 4) Connect line “A” to oil reservoir.
- 5) Top up oil in reservoir to bottom half of sight glass.
- 6) Run the planetary for 30 minutes with mixing tub empty.
- 7) Repeat step 2. Repeat step 3 using SAE70/80 GEAR OIL or SAE 80/90 GEAR OIL.
- 8) Repeat steps 4 & 5.

**OIL CAPACITY for PLANETARY IS APPROXIMATELY:
4.5 IMPERIAL GALLONS, or 5.5 US GALLONS, or 20 LITERS**

**B. RIGHT ANGLE GEARBOX – OIL FLUSHING INSTRUCTIONS – MODELS
425/500/600/700**

SAE 80/90 GEAR OIL or SAE 70/80 GEAR OIL

FLUSHING INSTRUCTION: same as oil changing / filling instructions steps 1 through 5 on pages 32, 33.

For models 425/500/600, see illustrations “**GEARBOX T269**” on page 37

For model 700, see illustration “**GEARBOX T301**” on page 38

**C. RIGHT ANGLE GEARBOX & TEE GEARBOX – OIL FLUSHING INSTRUCTIONS
–MODELS 900T**

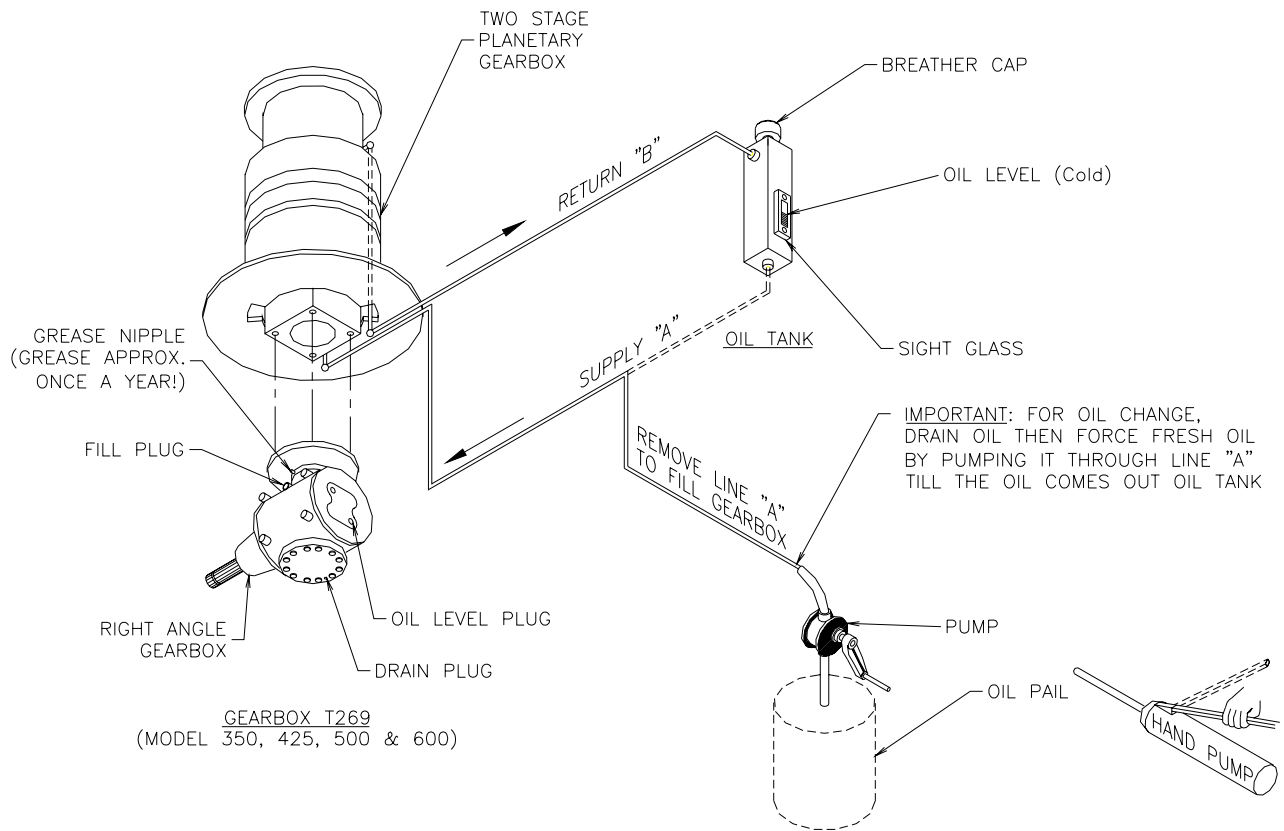
SAE 80/90 GEAR OIL or SAE 70/80 GEAR OIL

FLUSHING INSTRUCTION: same as oil changing / filling instructions steps 1 through 6 on pages 34.

For model 900T, see illustrations “**GEARBOX T269**” on page 39

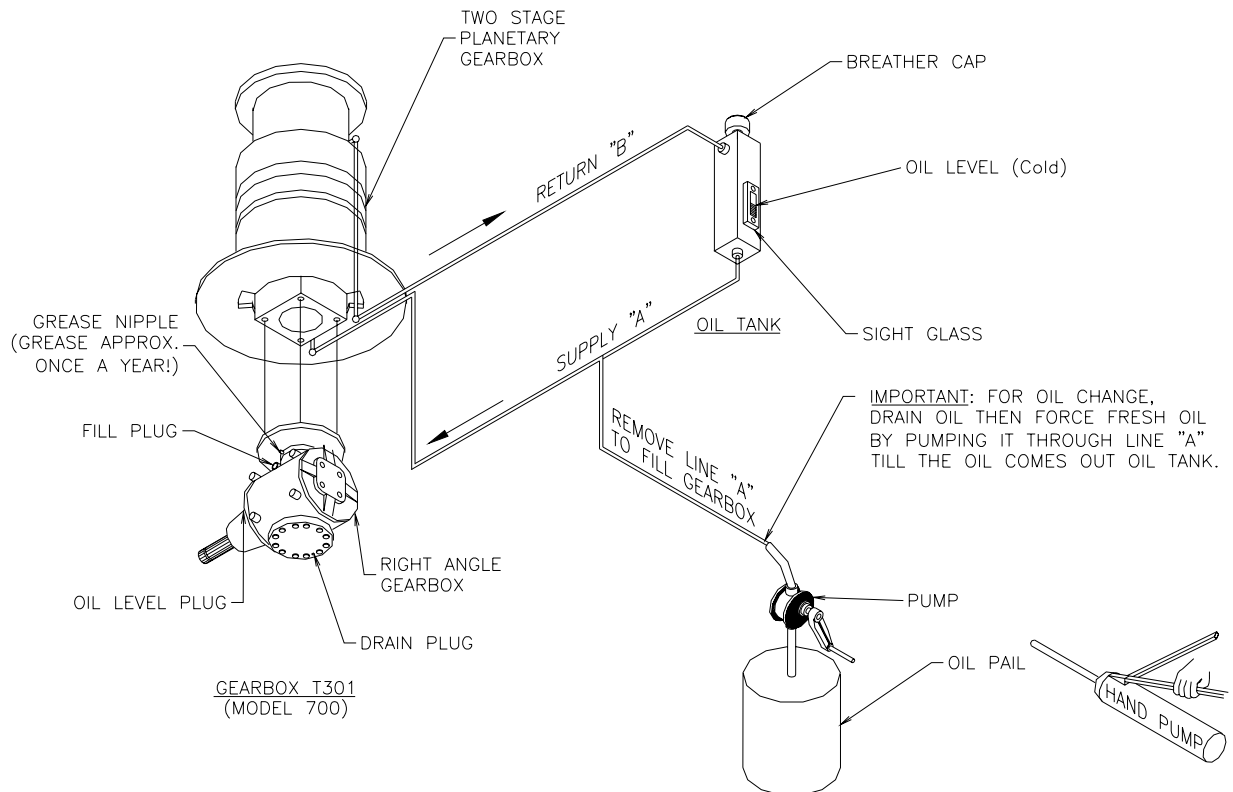
SUPREME FEED PROCESSOR

- **Planetary drive & right angle gearbox and/or tee gearbox - Oil Changing->**
GEARBOX T269 (Models 425/500/600)



*Refer to pages 32, 33 for instructions.

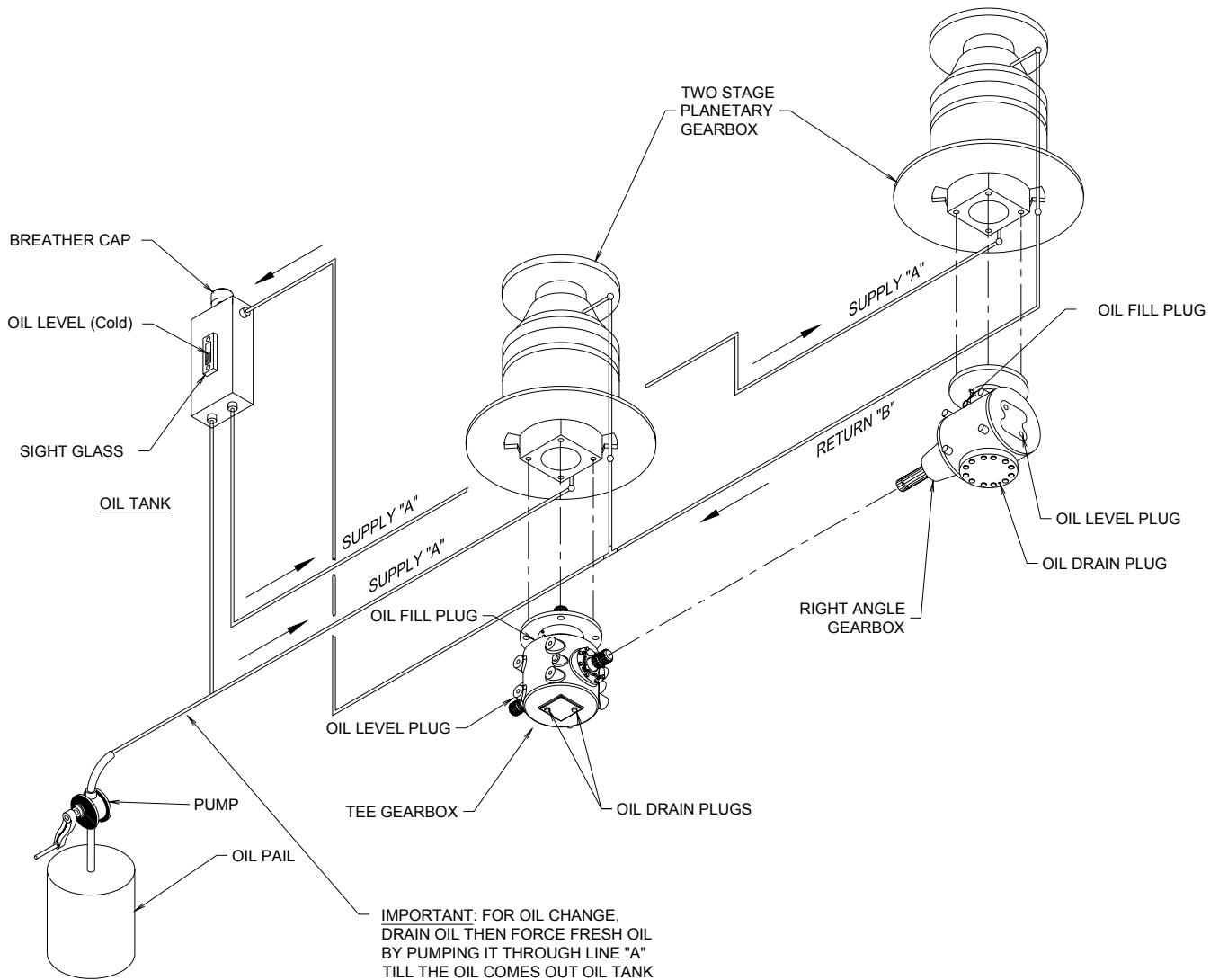
- **Planetary drive & right angle gearbox and/or tee gearbox - Oil Changing->**
GEARBOX T301 (Model 700)



*Refer to pages 32, 33 for instructions.

SUPREME FEED PROCESSOR

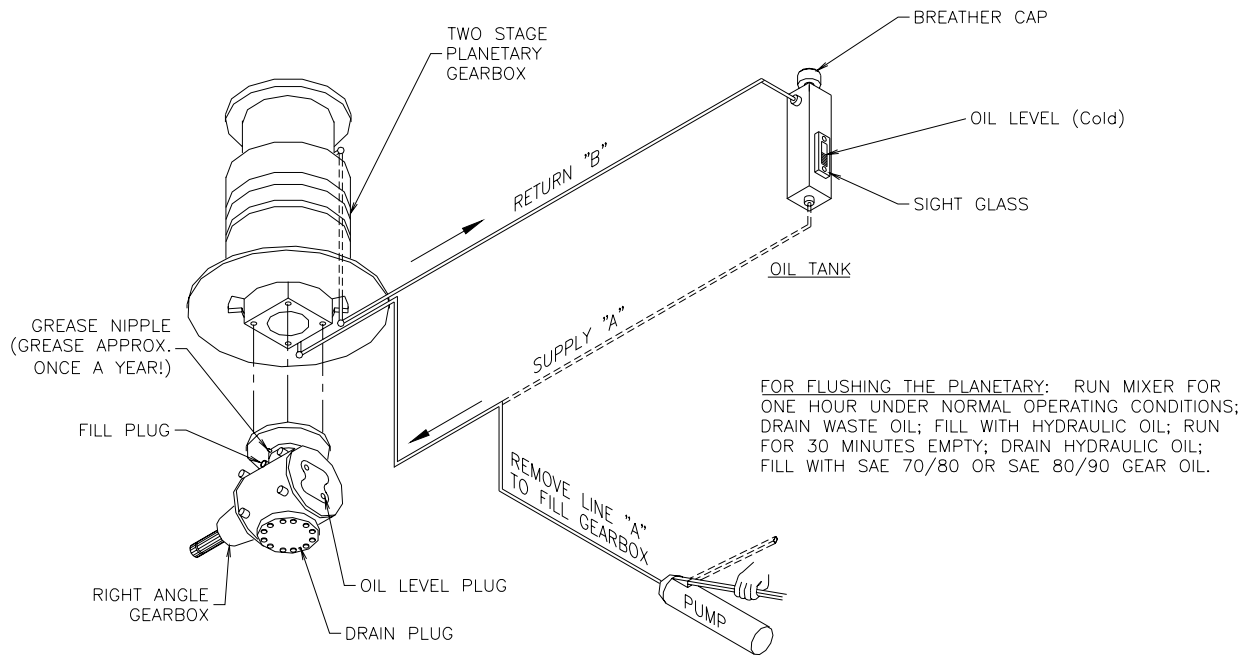
- Planetary drive & right angle gearbox and/or tee gearbox - Oil Changing/Oil Flushing →
(Model 900T)



*Refer to pages 33, 34 for instructions.

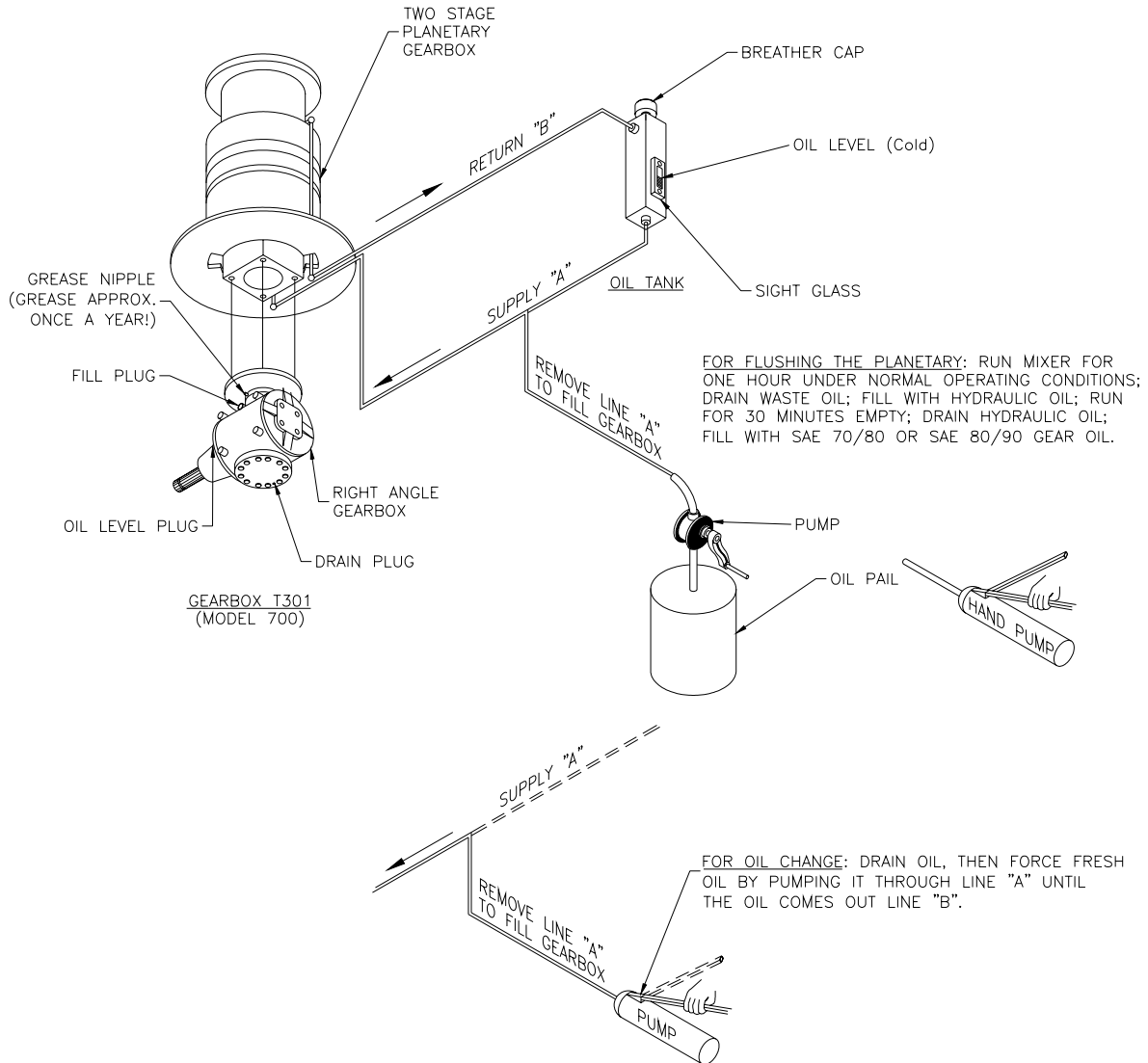
SUPREME FEED PROCESSOR

- **Planetary drive & right angle gearbox - Oil Flushing – GEARBOX T269** (Models 425/500/600)



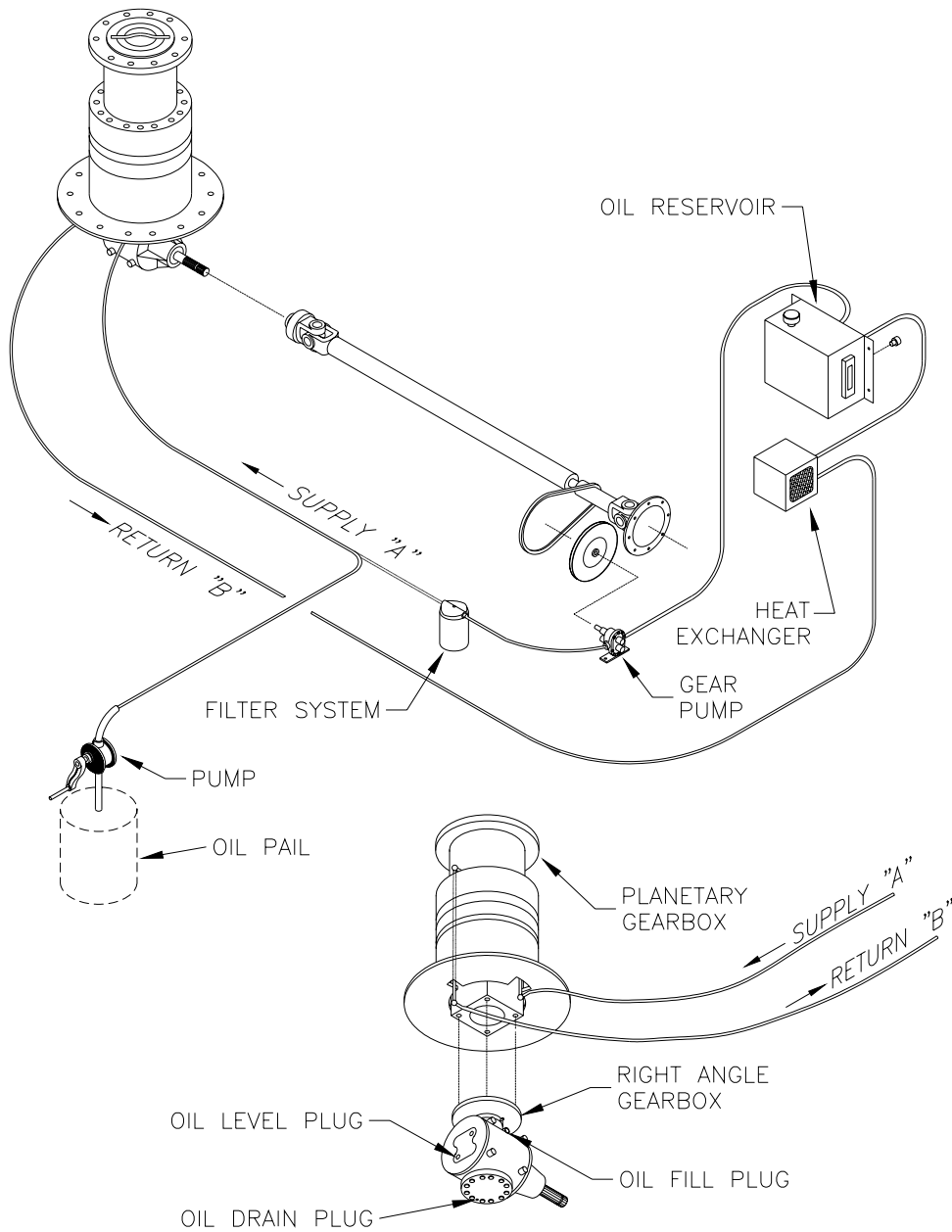
*Refer to page 36 for instructions.

Planetary drive & right angle gearbox - Oil Flushing →
GEARBOX T301 (Model 700)



*Refer to page 36 for instructions

Planetary drive & right angle gearbox - Oil Change ->
 (Stationary Model)



*Refer to page 35 for instructions

Supreme International Limited

Feed Processor

Warranty

Supreme International Limited offers a standard (1) one year parts and labor warranty on the complete feed processor unit, against defects in materials and workmanship under normal use when used and maintained in accordance with the operator's manual or instructions, from the date the unit is delivered to the original purchaser.

Supreme International Limited further warrants the major driveline components of Mechanical Drive Units, i.e. Planetary gear sets and 90 degree and through shaft "T" gearbox assemblies, for a period of (3) years against defects in materials and workmanship under normal use when unit is delivered to the original purchaser. ***This supplemental warranty is condition upon submission of oil samples.***

Supreme International Limited further warrants the major components on Truck Mount hydrostatic motors and pumps, for a period of (3) years against defects in material and workmanship under normal use when used and maintained in accordance with the operator's manual or instructions, from the date the unit is delivered to the original purchaser. ***This supplemental warranty is conditional upon submission of oil samples.***

During the warranty period, Supreme International Limited, will at its discretion, repair or replace defective parts which are returned by prepaid freight, to Supreme International Limited, at the factory in Wetaskiwin, Alberta, Canada.

Neither Supreme International Limited nor the Selling Dealer shall be liable for loss of the use of the product, loss of time, inconvenience, commercial loss, or consequential damages.

The remedy of repair or replacement of a defective part during the warranty period specified shall be the purchaser's exclusive remedy.

Supreme International Limited has the exclusive rights to make changes, improvements, or modification in specifications without obligation to install the same on those products previously manufactured.

TERMS AND CONDITIONS

1. Supreme International Limited will warrant the repair or replacement of defective parts by an authorized Supreme Dealer and it will be done free of charge for both parts and labor providing the replacement parts are approved Supreme parts.
2. The Selling Supreme Dealer must perform repairs or replacements. If the Selling Supreme Dealer is not available, any other authorized Supreme Dealer may perform the repair or replacement.
3. It is the responsibility of the Selling Dealer to review the warranty provisions with the purchaser prior to the retail sale and ensure compliance with Supreme International Limited policy requirements.
4. The Selling Dealer must receive written notice of any defect within 30 days from the time the Buyer first has knowledge.
5. The Buyer will not attempt or perform corrective work without the Selling Dealer's prior written consent resulting in any out of pocket expense.
6. Warranty will not apply on items such as tires, tubes and attachments that might be warranted direct by the manufacturer.
7. Warranty will not apply if the unit has been used under operating conditions for which it was not designed including abuse, misuse, negligence of proper maintenance or any other negligence, fire or accident.
8. Warranty will not apply if parts or attachments other than those made or marketed by Supreme International Limited have been used in connection with the unit, and in the opinion of Supreme International Limited has affected the performance, stability or reliability of the unit.
9. Warranty will not apply if the unit has been altered or repaired outside of a Supreme Dealership in a manner that, in the opinion of Supreme International Limited, affects the performance, stability, or reliability of the unit.
10. Supreme International Limited will not be held responsible for costs related to any travel time or delivery of the unit to or from a Dealer's service shop for repair.
11. Supreme International Limited will not be held responsible for units sold beyond the specified coverage period.
12. Supreme International Limited will not be held responsible for any damage caused by environment, such as exposure to corrosive material or weather.
13. Supreme International Limited will not pay any out of pocket expenses for damages resulting in down time requiring the Buyer to rent other equipment.
14. Warranty will not apply for normal wear and tear, such as exposure to exterior finish, or for replacement of parts which can be deemed as normal wear on items such as cutting knives, chains, oil or other parts, or wear after damage is done.
15. Supreme International Limited will not be responsible for any damage or repairs to the tractor used to operate the unit.
16. Warranty does not apply to the truck, cab, chassis (for Truck Mounted Units), which may be covered under the truck manufacturer's warranty, where applicable.

RIGHT TO MAKE DESIGN CHANGES:

Company reserves the right to make changes, improvements, or modification in specifications without obligation to install the same on those products previously manufactured.

Sample Requirement Schedule:

Model	Sample Schedule (required sample submission dates from date of sale)	Required Bottles (over 3 year period)
350	9, 18, 27 Months	3
425	9, 18, 27 Months	3
500	9, 18, 27 Months	3
600	9, 18, 27 Months	3
700	6, 12, 18, 24, 30 Months	5

Model	Sample Schedule	Required Bottles
500T	9, 18, 27 Months	6 (1 sample per planetary)
700T	6, 12, 18, 24, 30 Months	10 (1 sample per planetary)
900T	6, 12, 18, 24, 30 Months	10 (1 sample per planetary)
1000T	6, 12, 18, 24, 30 Months	10 (1 sample per planetary)
1200T	6, 12, 18, 24, 30 Months	10 (1 sample per planetary)
1400T	6, 12, 18, 24, 30 Months	10 (1 sample per planetary)

- **IN ORDER FOR WARRANTY TO BE IN EFFECT, SAMPLES MUST BE SUBMITTED ON REQUIRED DATES.**

Supreme International Limited

Instructions For Oil

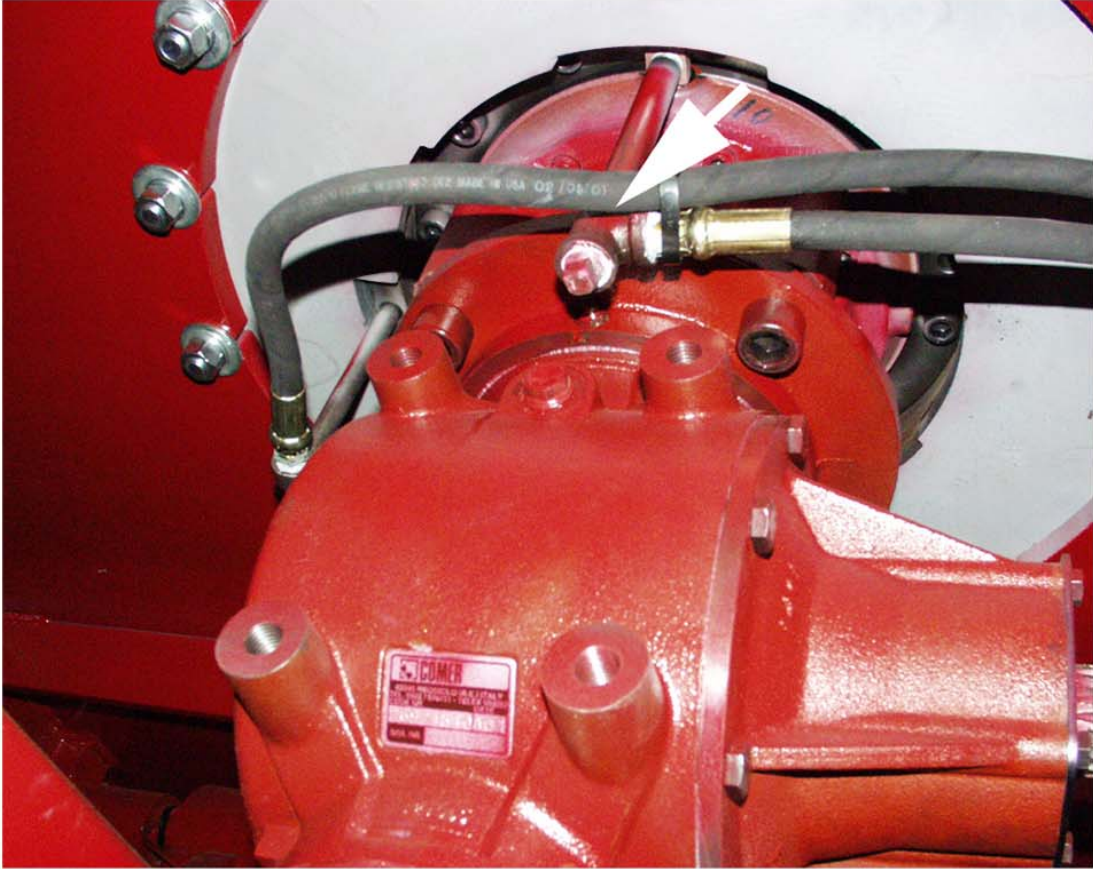
Sample Kits

- Pull Type Units

Oil samples must be taken when the oil is warm; within 30 minutes after a minimum of 1 – 2 hours of loaded running time.

1. Have the appropriate test kits available. Keep sample bottle sealed until you are ready to fill with the oil sample.
2. Have the under side of planetary oil fitting area washed or brushed clean of all dirt and debris.
3. Park the Supreme Feed Processor on a clean surface protected from wind or blowing debris.
4. Locate the oil drain plug for each planetary drive (see attached illustration). Confirm exterior of fitting is clean.
5. Have the sealed sample bottle, oil catch pan and clean rags handy. Loosen oil drain plug but do not remove yet. Locate catch pan below fitting to catch lost oil. Keeping the lid protected from dirt, open the sample bottle.
6. Carefully remove plug. Allow a small amount of oil to run out into catch pan to flush the fitting clean. Then position sample bottle to fitting and fill the bottle with oil.
7. Replace drain plug and put lid on sample bottle. For twin-screw models, indicate on the label: front or rear planetary.
8. Ensure all fittings and plugs are tightened and wiped clean. Top up oil reservoir. Run unit and check for leaks and proper oil reservoir level.
9. Please complete **ONLY** the bottom section of the Wear check Data sheet. With multiple samples, ensure the correct location matches the sample and please ship the bottles together. Keep your file stub from the data sheet with your shipping receipt for future reference.

For help with oil sampling please call quality control at 1-800-563-2038



**OIL SAMPLE LOCATION FOR PULL
TYPE UNITS.**

Troubleshooting Guide

SUPREME OPERATION AND INSTRUCTION GUIDE

▪ **General Information**

The Supreme was designed and field-tested to work in all cattle feeding conditions. Because conditions and commodities vary from operation to operation it is important to remember that time frames for processing, horsepower requirement, loading procedures and operation of the Supreme will vary from operation to operation.

▪ **Loading order of commodities**

It is important to remember that the order of which commodities are loaded has a direct impact on the performance of the machine. Lighter or dryer commodities should be loaded first, with heavier more dense commodities being loaded after. We recommend that under normal conditions commodities should be loaded in the following order.

- 1) Lighter and/ or dryer commodities such as hay or straw.
- 2) Minerals and/ or supplements
- 3) Grains
- 4) Liquids
- 5) Heavier commodities or commodities containing higher concentration of moisture, such as, silage and haylage.

▪ **Restrictor Plate Positioning**

Restrictor plates are the yellow handles that are positioned on the back and front corners of the tub. Restrictor plates are designed to speed the cutting of dry forage commodities by restricting the flow of the commodity in the tub subsequently giving the knife a solid base to cut against. Restrictor plates are used mainly when cutting dry forage commodities or, more fibrous forage commodities that tend to be difficult to cut. Restrictor plates should never be in more than one notch and never more than one restrictor in at a time. **WARNING: Restrictor plates positioned into the tub more than one notch will cause dry forage feeds to push up causing spillage of the commodity.**

▪ **Auger Knife Positioning**

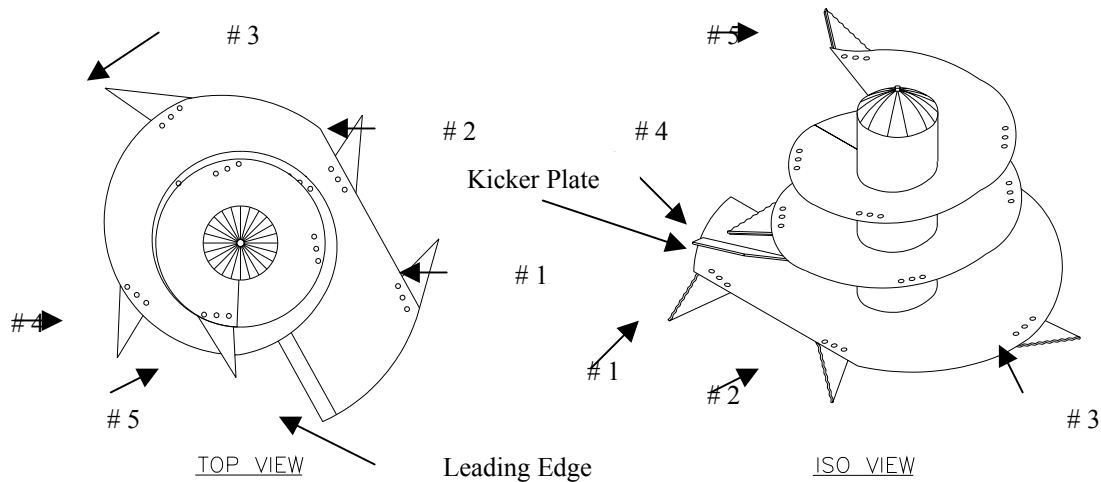
Supreme Feed Processors are designed to cut forage commodities to lengths from 1" to 6". The units are designed so that majority of the cutting action happens on the bottom 24" of the tub; therefore, the knives are positioned on the bottom flighting. Supreme Feed Processors come standard with the following amount of knives per screw.

All models come standard with 5 knives (per screw)

Knives are strategically positioned for optimal cutting and mixing action. The top knife (see knife #5 in illustration) is positioned at the very top of the auger and is designed to cut bales into smaller chunks that enable them to fall down the sides to the bottom of the tub. . The remaining knives are positioned, starting at the very bottom of the auger and working up. (see Illustration knives #1, #2, #3, #4) These knives are positioned so that as feed falls to the bottom it is cut into shorter lengths by knives numbered 1 through 4.

Illustration I

Auger and knife location diagram for all models.



Adding and Removing Knives

WARNING: ADDING MORE THAN 2 KNIVES WILL IMPEDE THE CUTTING / MIXING PROCESS.

It is important to remember the following guidelines when adding or removing knives.

ADDING KNIVES: Too many knives will impede the cutting mixing process. If the process to cut forage commodities is too slow, adding one or two knives, for a maximum total of seven, can increase it. Any more than seven knives will prevent the feed from falling to the bottom of the tub and subsequently slow down the cutting mixing process.

Where on the auger should the knives be added?

If the problem is that the forage bale is too slow to come apart, or, the core will not come apart, then the additional knife should be added at the top of the auger one notch below the top knife (see illustration knife #5). If the problem is that the bale is coming apart but it is too slow to cut into smaller lengths, then the additional knife should be added at the bottom working up one notch from the last knife or, #4 knife.

REMOVING KNIVES: Removing knives will slow down the cutting process. If ration is being cut faster than it is mixed, removing knife #4, and/, or #3 can even out the process.

The following are some examples of problems that can arise during the **CUTTING/ MIXING PROCESS** and **TROUBLESHOOTING tips on how to correct those problems.**

CONDITION	CAUSE	CORRECTION
Hay boils over top of tub	Unit overloaded	Decrease dry roughage
“	Restrictor plates set in to far	Check yellow restrictor plates on tub. Restrictor plates that are in too far can cause lighter commodities to push up in the tub instead of falling down to the bottom. You may have to pull the restrictor plates all way out.
Hay floats on top of mix	Hay was not loaded first	Make sure to load dry light commodities first
“	Bale not processed enough before adding other commodities	Process dry commodity long enough to make sure core comes apart
“	Restrictor plates in to far	Check yellow restrictor plates on tub. They should be in no more than one notch. If restrictor plates are already in one notch then pull restrictor all way out.
Uneven Mix	Has not had sufficient time to mix	May have to run unit a little longer
“	Restrictor plates in too far	
Forage lengths are too short	Over processing of forage	Faster loading of commodities
“	“	Decrease tractor PTO speed
“	“	Remove knife #4 and /or #3 from auger
Forage lengths are too long	Under processing of forage	Adjust restrictor plates in one notch

The following are some examples of problems that can arise during the **CUTTING/ MIXING PROCESS** and **TROUBLESHOOTING tips on how to correct those problems. (cont'd)**

CONDITION	CAUSE	CORRECTION
Forage lengths are too long	Under processing of forage	Increase tractor PTO speed
“	“	Make sure dry forage is added first.
“	“	Let forage process longer before adding other commodities
“	“	Add one more knife to auger

The following are some examples of problems that can arise during the **FEEDING PROCESS** and **TROUBLESHOOTING tips on how to correct those problems.**

CONDITION	CAUSE	CORRECTION
Uneven feeding into bunk or windrow	Conveyor chain is turning too fast	Slow conveyor speed to match flow of feed out door
“	Tub door is not open enough	Check and open door for better feed flow
“	High roughage content in ration	With longer cut or dry roughage mixes, adding water or moisture to ration will deter feed from hanging up in door.

The following are some **TROUBLESHOOTING** tips for Supreme Feed Processors that have been in use for a longer period and are now experiencing problems.

CONDITION	CAUSE	CORRECTION
It takes longer to cut my dry forage now, than when it was new.	Knives worn	Check Knives. Dull knives will lengthen cutting time
The machine takes more HP than it did when new.	Knives worn	Check knives. Dull knives can act as a brake and therefore require more tractor HP.
There is a dead spot in the tub. (feed moves slower or not at all in one spot)	Auger leading edge worn (see illustration)	Check leading edge of auger for wear. (see illustration) Is leading edge worn away from tub wall? Worn away edge will not pull feed away from tub wall consequently feed will hang up in one spot.
“	Auger Kicker plate worn (see illustration)	Check kicker plate for wear. Worn off kicker plate will not direct feed into the auger consequently slowing down mix.

Specifications

Pull Type Models

	EMPTY WEIGHT		HEIGHT*		W/10" EXTENSION		OVERALL WIDTH**		OVERALL LENGTH**		MIN. H.P. REQ.***	CAPACITY (STRUCK LEVEL)		CAPACITY W/10" EXTENSION		
	lbs.	kgs.	in.	cm	in.	cm	in.	cm	in.	cm		cu.ft.	cu.m	cu.ft.	cu.m	
Twin																
500T	8,200	3,727	102	259	112	284	96	244	224	569	65	435	12.3	374	10.6	
700T	11,700	5,318	111	282	121	307	102	259	243	617	90	659	18.4	568	16.1	
900T	16,000	7,273	116	295	126	320	120	305	272	691	130	849	24.1	739	20.9	
1000T	18,350	8,341	109	277	119	302	102	259	310	787	170	906	25.7	789	22.3	
1200T	19,850	9,023	116	295	126	320	120	305	313	795	180	1072	30.4	933	26.4	
Single																
425	6,550	2,977	97	246	107	272	96	244	171	434	70	305	8.6	260	7.4	
500	9,750	4,432	103	262	113	287	102	259	222	564	80	462	13.1	398	11.3	
600	10,500	4,773	113	287	123	312	102	259	225	572	90	537	15.2	469	13.3	
700	12,000	5,455	118	300	128	325	110	279	233	592	110	649	18.4	570	16.1	

Stationary **Models**: Contact factory office for specifications. Units are custom designed due to power available for hook-up etc.; therefore electrical/power packages are very specific to meet customer's requirements.

- * **Height** for Pull-Type Model 500 Twin equipped with aircraft tires.
- * **Height** for Pull-Type Models 500,600 & 700 equipped with standard aircraft tires.
- * **Height** for Model 900T Twin equipped with truck tires.

** **Overall width and length** dependent on style of conveyor/discharge and options ordered (dogleg conveyor adds 4" of width to Models 500,600 & 700).

*** **Horsepower** requirements dependent on weight and commodity mix.

Due to continuing improvements in the design and manufacturing of equipment, specifications and technical data are subject to change without incurring any obligation on goods purchased.

Scale

Instructions

DIGISTAR EZ MODELS

CONVERSION:

EZ 2000

- **To change from pounds to kilograms:**

1. Turn on
 2. Press “zero” key with one finger; while holding “zero”, press “on” key with another finger; hold both “zero” and “on” keys until display reads “setup”, then release.
 3. Set up number should be displayed as follows:
 - 146040 in pounds for Supreme Models 500, 500T, 600, 700, 700T and 900T.
 - 147063 for Supreme Models 1000, 1200 and 1400.
- NOTE THAT THE LAST DIGIT WILL BE FLASHING.**
4. Press and release “tare” key intermittently until the number “1” flashes.
 5. Press and release “Net/Gross” key intermittently to change the “1” to a “5”.
 6. Press and release “on” key intermittently until the scale starts “test mode”.

When test is finished...you are done.

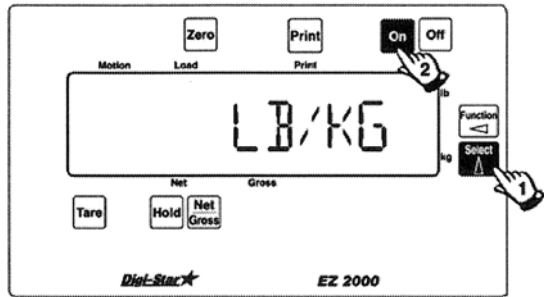
- **To change from kilograms to pounds:**


1. Turn on.
 2. Press “zero” key with one finger; while holding “zero”, press “on” key with another finger; hold both “zero” and “on” keys until display reads “setup”, then release.
 3. Set up number should be displayed as follows:
 - 546018 in pounds for Supreme Models 500, 500T, 600, 700, 700T and 900T.
 - 547028 for Supreme Models 1000, 1200 and 1400.
- NOTE THAT THE LAST DIGIT WILL BE FLASHING**
4. Press and release “tare” key intermittently until the number “5” flashes.
 5. Press and release “net/gross” key intermittently to change the “5” to a “1”.
 6. Press and release “on” key intermittently until the scale starts “test mode”.


When test is finished...you are done.

EZ 3200, EZ 3500

LB-KG (Weight Unit Setup)



Press the  key to choose to display weight values in lbs (pounds) or kg (kilograms).

Press the  key to enter selection and proceed to the next menu option.

FOR MORE DETAILS, REFER TO APPENDIXES