



M745 User Manual

Inspect your system carefully upon receipt.
Let us know right away of any damage you note.

- IMPORTANT ! -

**THIS MACHINE IS NOT
TO BE OPERATED BY
ANYONE UNTIL HAVING
CAREFULLY READ THIS
INSTRUCTION MANUAL
ON ITS USE.**

**IF ANYONE ELSE THAN
THE ORIGINAL BUYER
OF OUR EQUIPMENT IS
TO USE THE MACHINE,
THEN HE/SHE IS TO BE
FURNISHED WITH AN
INSTRUCTION MANUAL.**

To request new or additional
instruction manuals please
call us or download a copy
at MyTana.com



092421

**Manufacturers of Quality
Sewer & Drain Cleaning
Equipment since 1957**

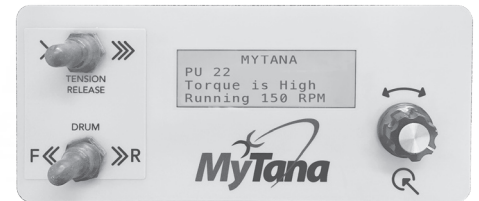
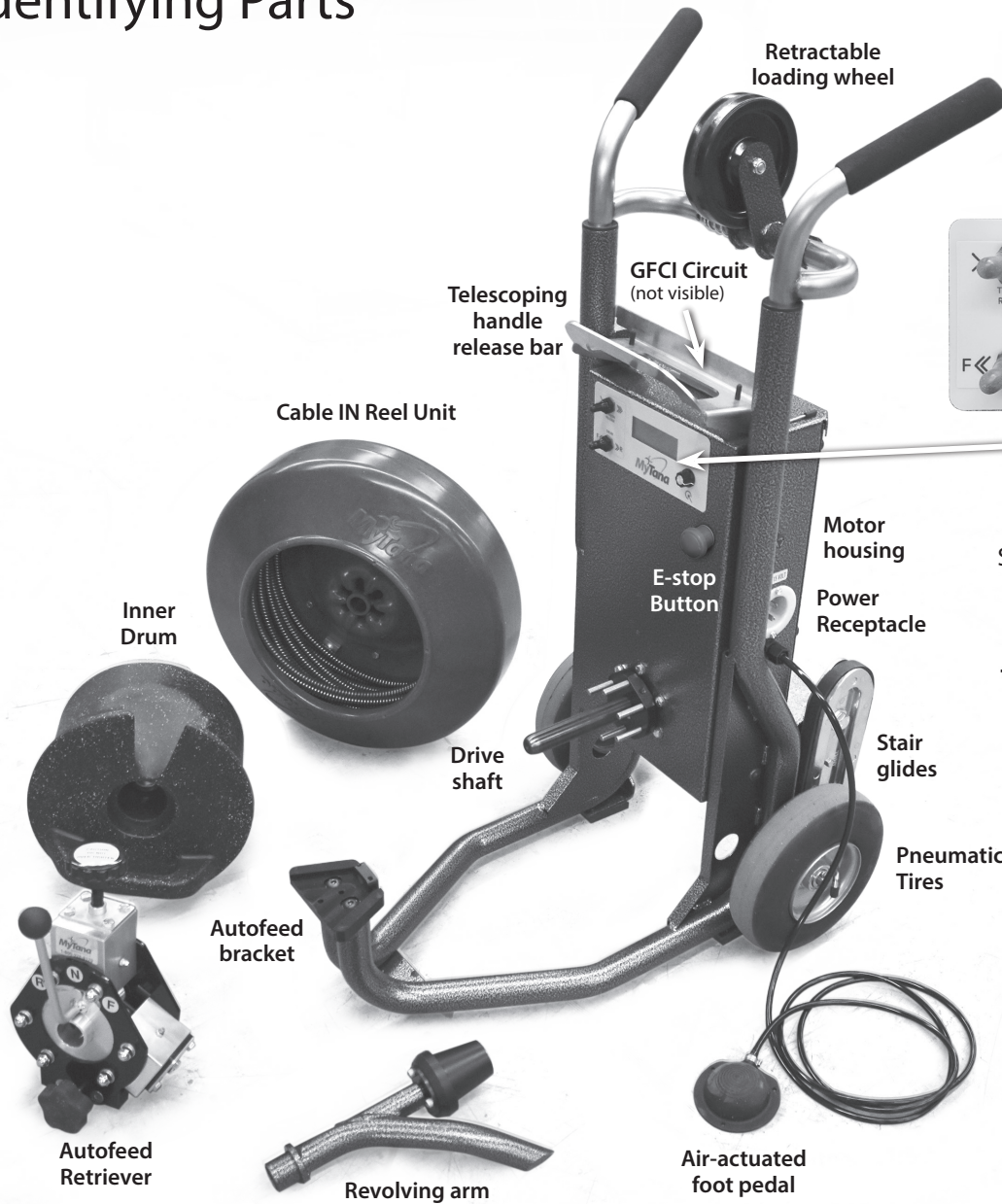
www.MyTana.com

746 Selby Ave • St. Paul, MN 55104
fax: (651) 222-1739

(800) 328-8170

Factory Direct Customer Service
M-F 7am – 5pm CST
Competent • Polite • Clear

Identifying Parts



SmartDrive Panel

You'll dial in your RPM and make torque selections on the SmartDrive panel. See page 4 -5.

Practice with the speed and torque selections on the SmartDrive panel BEFORE you go on a job

so you are comfortable using the panel as you work.



To Adjust the Handles

Lift up the handle release bar to raise or lower the telescoping handles. They will lock in to position either fully up or fully retracted.



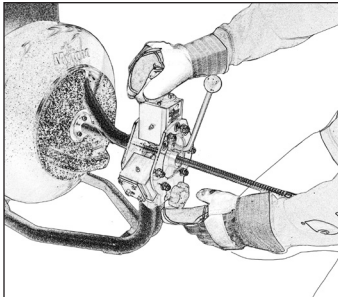
The optional SK 745 Sinkline Kit ships with 3/8" cable in a smaller reel, and a smaller revolving arm.

Assembly

The M745 should arrive completely assembled. Due to shipping constraints, if your reel arrives not mounted, refer the steps about loading the reel, below right.

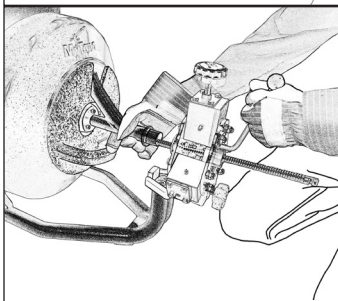
Changing Reels

Follow the steps below to change reels on the M745.

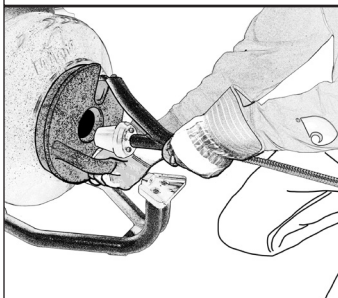


To remove a reel

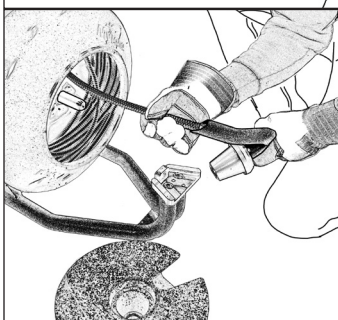
1 Loosen the knob on the bottom of the Autofeed.



2 Carefully slide the Autofeed off its bracket and off the cable

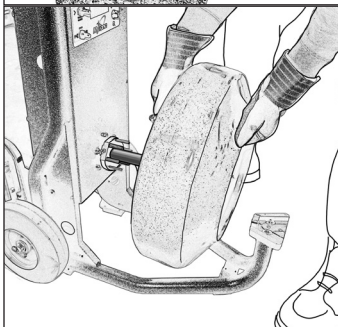


3 Pull out the Inner Drum and the Revolving Arm at the same time.



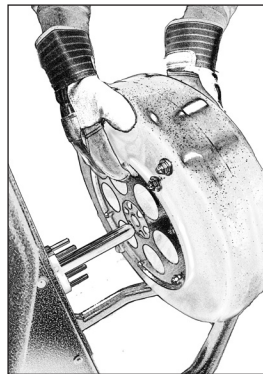
4 Pull the cable out of the Revolving Arm and feed it completely back in to the reel

TAKE CARE to not let the cable spring out of the reel

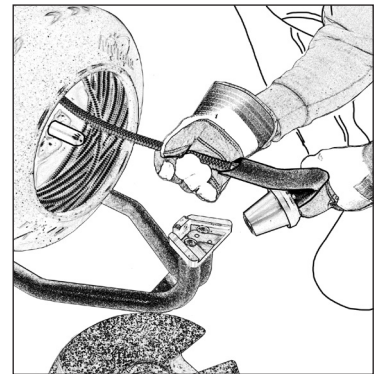


5 Slide the reel off the drive pins.

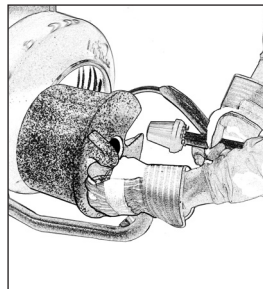
To load a reel



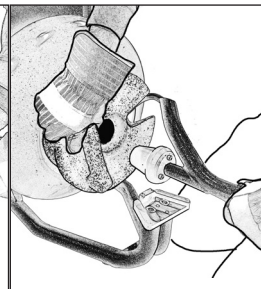
1 Line the drive pins up with the grooves on the reel. Slide the reel all the way in to bumper



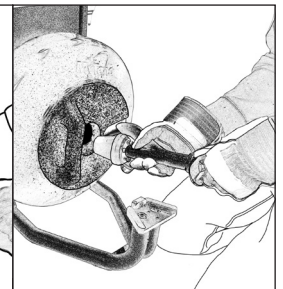
2 Feed cable through the Revolving Arm tube. Fittings between the leader and main cable may need an extra push. **TAKE CARE** to not let the cable spring out of the reel



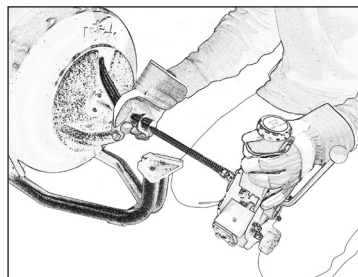
3 Fit the cable into the groove on the Inner Drum.



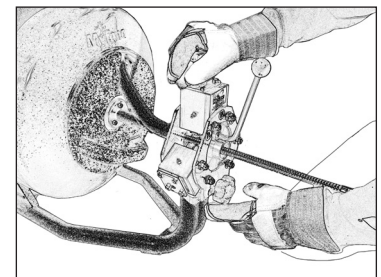
4 Slide the Inner Drum into the reel keeping the Rev Arm free and cable in the groove.



5 Fit the Rev Arm in to the Inner Drum



6 Insert the cable through the automatic feed



7 Slide the Autofeed on to its bracket and tighten the knob on the bottom side.

ALL OPERATORS

Read all instructions on these pages BEFORE operating equipment.

Getting Started

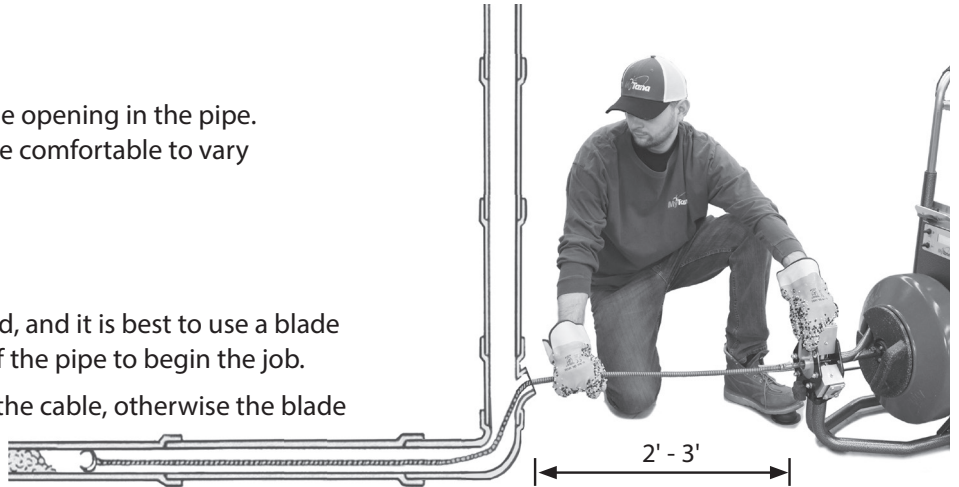
– Placement

Place the machine about 2-3 feet from the opening in the pipe. An experienced operator may find it more comfortable to vary the distance, but only slightly.

– Attach Blade

Any of the single-unit blades may be used, and it is best to use a blade much smaller than the inside diameter of the pipe to begin the job.

Attach the blade securely to the front of the cable, otherwise the blade could slip on the front of the cable.



– Feed cable and blade in to the line

Remove the clean-out plug, disengage Autofeed (by loosening screw knob on top cylinder) and insert the cable, with blade attached, into the pipe by hand with a twisting motion.

ALWAYS HAVE BLADE 5 OR 6 FT INTO PIPE AND FREELY MOVING BEFORE YOU START MOTOR

When you have passed the bend, continue to rotate and push the blade **about 5-6 ft into the pipe, making sure it is not caught or bound so that it can rotate freely.**

► **NEVER HAVE A SPINNING BLADE OUTSIDE THE CLEANOUT!**

Position the foot pedal so you can both hold the cable and adjust the dial on the SmartDrive panel while operating the pedal with your foot.

– Start up

Plug the M745 in and give a quick twist to the E-stop button until it pops out.

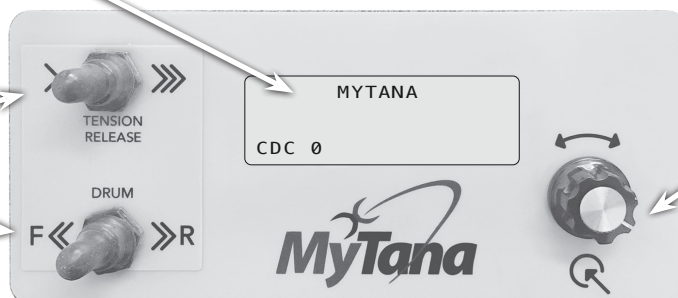
The SmartDrive screen will light up, flash MyTana's phone number, and then this screen.



On the SmartDrive Panel

Select your Tension Release choice: slow (>) or fast (>>>)

The Drum switch should be in the forward (F <<) position, even when retrieving the cable out of a line.



You will be able to select your torque and dial in the speed using the knob **AFTER** the reel is rotating. See next page.

CDC is "Cool Down Count". Should your motor overheat, the rotation will stop, and this will count down to when it is safe to start up again. This will rarely be an issue.

► **BEFORE STARTING** your first job, read the paragraph on “**Building up Torque**” (pg 7)

► **UNPLUG THE MACHINE WHEN NOT IN USE** – Never walk away from the machine when it is running

► **SAFETY** Operators should wear heavy-duty gloves when operating this machine. Tuck in any loose clothing and tie up long hair. Protective eyewear is recommended.

Operation

Start the reel rotation by pressing your foot on the foot pedal.

The first start up will spin at the factory default settings.

The next start ups will use the speed/torque settings that were in place at the last shut down.

– SmartDrive Selections

Once the reel is spinning, this screen will show. PU is number of PowerUps the machine has had.

MYTANA
PU 22
Torque is High
Running 150 RPM

To change the speed / rpm

- Rotate the knob to INCREASE or DECREASE the speed in 25rpm increments – or –
- Push the knob to INCREASE the speed in 25rpm increments

Note: Once the speed indicates 300 rpm, it will roll over to a new cycle starting at 100 rpm

When you stop the machine, SmartDrive will remember the last speed used, and the next start up will be at that rpm.



Select Torque

Stop the reel rotation to change the torque setting.

- Push the speed knob in for 1-2 seconds to enter User Program Mode

The next screens will appear with text toggling between “High” and “Low”

The torque setting will provide the audio alerts as torque builds in the cable. This will allow you to work your way through an obstruction, but the rotation will stop if the torque gets too high.

- Press the panel knob for a second or two once your torque preference is showing – the display will show the level and “OK”

We suggest selecting High for 9/16” cable, Low for 3/8” cable

User Program Mode
New Speed 175 RPM

Torque Level High

Torque Level Low

OK
Torque Level Low

Pressing the front knob while the system is idle will allow the user to enter a new speed. This new speed will be the default powerup speed.

MYTANA
PU 22
Torque is High
Running 150 RPM

Cleaning

As you operate the machine, place one hand on the cable close to the cleanout and one hand on the Autofeed to prevent any throwing of the cable.

Engage the Autofeed to feed the cable in to the line. Move the feed lever about 10 degrees toward the "F" and turn on your machine. Turn the screw knob on the top cylinder to the right until the cable starts to move forward. Do not tighten the knob more than is required to move the cable forward. Push lever fully into the forward position.



– Obstructions

When you hit obstructions or debris, the SmartDrive will beep indicating torque is building.

When the operator has had sufficient experience, his "touch" and learning the audio signals will tell him the extent of tension to allow to build in the cable before pulling back from the obstruction; however, inexperienced operators should be cautious and allow the cable only about 5 seconds to cut through.

If the blade doesn't release after a few seconds, move the Autofeed lever to the "R" (reverse) position, pull it away from the obstruction and try again. The freed blades spin rapidly when torque is released. Use this combined force of the reel rotation and cable torque/spinning blade to optimize your cutting power. This action will be more effective and will shorten the length of time on the job.

The audio alerts will help you avoid over-torquing the cable to the point of damaging the cable or blade, or causing injury to yourself. **BE AWARE!**

- If the cable doesn't pull back, see next section on "Difficulties"
- If you need to increase or decrease your speed follow SmartDrive instructions on previous page

Continue working through obstructions in this way until you have reached the end of the pipe.

After the first opening is made, turn on the nearest faucet so that water will flush the loosened debris. Be sure the water is draining and doesn't back up to the cleanout.

– Finishing up

When the obstruction is removed, place the Autofeed-Retriever fully in the "R" position until you hear the blade nearing the pipe opening. Disengage feed (by turning screw knob to the left).

DO NOT use the R position on the SmartDrive panel to rewind the cable.

SHUT OFF THE MOTOR and pull the blade out of the pipe opening. Remove the blade and stack the cable snugly against the outer diameter of the reel.

Follow the first opening with slightly larger blades until you can use a blade large enough to scrape the sidewalls of the pipe or sewer. Increasing the speed of the M745 will enhance this scraping action.

– IMPORTANT! NEVER LEAVE MOTOR RUNNING UNATTENDED

Difficulties

If the cable resists going forward or backward than one of several things is occurring:

- You are stuck in an obstruction (see below)
- However, if torque does not start to build, you may be at an elbow or the blade may be hitting an offset or break in the line. Apply some forward pressure manually to help you figure out what it is happening.
- The feed wheels are worn and need replacing
- There is debris hanging onto the end of cable and blade that is resisting retrieval. In this case manually help the Autofeed pull the cable back into the reel, clear blade of debris and run cable through line again to make sure all blockages are removed

If at any time the cutting blades become stuck and cannot be released, and the torque has reached its limit according to the setting you selected, SmartDrive will stop the reel rotation. Hold cable close to the Autofeed to prevent the cable from coming out of the reel.

The automatic Tension Release will spin the reel backwards, removing the strain on the cable. After the reel stops, spin it backwards a few more turns. This may release the obstructions that can be wrapped around the cutting blades.

You can also push in the e-stop button to cut power completely.

When the cable is released, pull the cable out of the pipe, clean off any obstruction accumulated on the blades or cable, and insert it into the sewer again, still using the smaller blades.

User Tips

Using the Autofeed-Retriever

Turn top knob only as far as needed to move cable back or forth – avoid turning down the screw knob on top cylinder of feed too tightly:

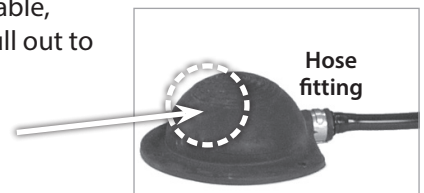
- It impedes the proper rotation of the cable through the auto feed
- It causes excessive wear on cable and bearings
- On retrieval, it causes the cable to stack loosely into the reel, rather than snugly against the outer walls as it should
- It can break the feed bearings

Do not run cable fittings (i.e. couplings, splicers, cable ends) through a tightened down auto feed. Again, this can break feed wheels. Release the feed, pull fittings through manually and then re-engage.

Foot Pedal

The foot pedal and hose may need to be replaced from time to time (parts are available, call us or visit MyTana.com). Loosen the pressure nut on the end of the hose and pull out to remove foot pedal unit from the pneumatic switch.

To help increase the longevity of your pedal/hose place your foot on pedal directly opposite the hose fitting.

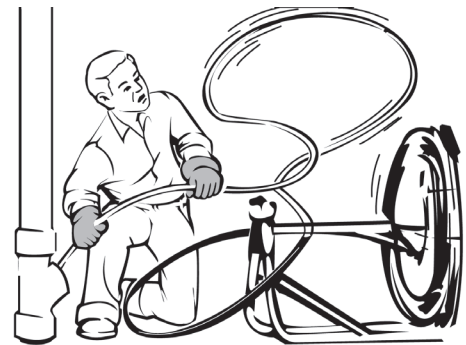


Building up Torque

As the reel revolves, it generates power and stores up energy in the cable, which when released, allows the blade to travel at a much higher rate of speed.

When the revolving blade comes in contact with an obstruction and it cannot cut through within about 5 seconds, or at all, the cable naturally continues to wind up with the rotation of the reel. This wind up builds up torque, or tension, which acts as a powerful spring motor. If too much tension is allowed in the cable, it will lash in the operator's hands or can whip widely and dangerously out of control (see below). The torque build up is an extremely powerful force and the operator must always be warned of its potential danger.

NEVER LET THIS HAPPEN



Maintenance

Occasionally remove the reel and lubricate the main drive shaft.

Cable care

If you are not using your machine every day, treating your cable with a cleaner / rust inhibitor will extend cable life dramatically. Our MT21 is a water based treatment called that also deodorizes.

You can also hose down the cable (remove reel from machine to do this). Remove the red drain plug on the back of the reel, and lay flat so water can drain out of the reel. Spray the cable with WD40 or any light oil.

Make sure that the cable stacks to the outermost part of the reel when returning cable to the reel. This helps prevent kinking or twisting inside the reel.

If a cable becomes kinked or wavy due to fatigue or over-stress, either repair the cable with splicing cores, or replace the cable.

Autofeed

It is essential to keep the Autofeed clean and properly lubricated.

- The feed unit has been greased at the factory. However, routinely continue to grease all housing equipped with zerks (grease fittings).
- Remove front disc periodically, clean and lubricate. Free movement of the front disc is crucial to proper movement of cylinders and drive wheels.
- If feed will not used for a period of time, lubricate before storage.

Watch for wear on drive wheels (bearings) and drive pins.

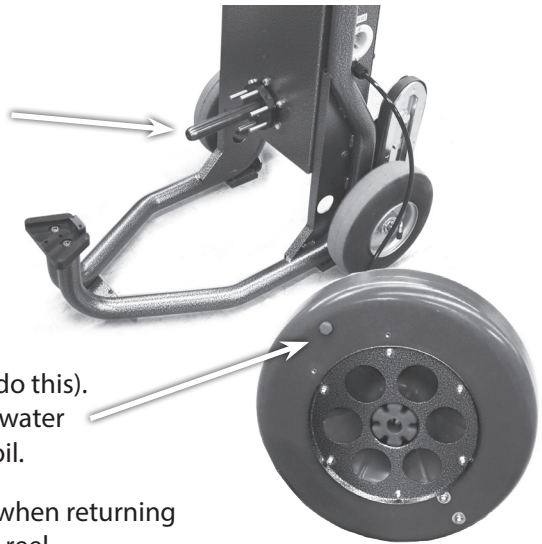
Make sure drive pins stay in designated slots on movement disc.

Remove debris (i.e. rags, string, hair) from cable before running through the feed. This kind of debris can clog up the feed wheels and movement parts rather quickly.

Replacing the Drive Wheels (Drive Bearings)

- Remove auto feed from machine
- Remove six acorn nuts and lock washers
- Remove front disc and movement assembly
- Slip cylinder housing (whichever one that needs new drive wheel) from hex bolts
- Remove piston from housing (it will lift out of housing)
- Remove clip spring that holds drive pin
- Carefully pull out drive pin
- Remove spacers and drive wheels
- Clean all parts in cleaning solvent before reversing procedure to install new drive wheel(s)

NOTE: While installing new drive wheels, take the time to clean up cylinder housing. There is a thrust bearing and two races at the bottom of each cylinder that need to be cleaned periodically. These parts can be accessed by removing the spacer plates and end cap at the bottom of the housing.



746 Selby Ave
St. Paul, MN 55104

(800) 328-8170
fax: (651) 222-1739

www.MyTana.com