# Terrco®, Inc.

Model 7500



OPERATING INSTRUCTIONS

MAINTENANCE INSTRUCTIONS

ILLUSTRATED PARTS LIST

Terrco<sup>®</sup>, Inc.

222 1st Avenue NW • Watertown, SD 57201

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## **Model 7500 Specifications**

| Motor                                |
|--------------------------------------|
| Speed of Discs986 RPM                |
| Surface Feet Per Minute2672 SFPM     |
| Abrasive Pressure on Discs460 lbs.   |
| Sweep of Discs                       |
| Width of Machine21"                  |
| Length of Machine48-3/4"             |
| Machine Weight Ready to Use795 lbs.  |
| Machine Weight for Shipping865 lbs.  |
| Water Tank Capacity15 Gallons        |
| StonesFR-594 Plug Stone              |
| Electric Cable#6-3 with 50 Amp Plugs |

#### OPERATING AND MAINTENANCE INSTRUCTIONS

#### Introduction

This manual has been prepared to assist and instruct you in the proper maintenance and operation of your machine. Please bear in mind that you TERRCO® 7500 machine is a precision piece of machinery manufactured to exacting standards. In order for you to obtain maximum use of your machine, we suggest that you read this manual completely and thoroughly before attempting to operate your machine. When ordering parts always give the machine number and model number along with the part number to ensure you get the correct part.

### PRELIMINARY PROCEDURES TO FOLLOW BEFORE PUTTING THE MACHINE IN OPERATION FOR THE FIRST TIME

#### A. Delivery of Machine

- 1. On delivery the contractor should very carefully examine the shipping crate to see that is has not been mishandled. Before accepting the shipment, uncrate the machine and very carefully examine same to see that no part of the machine is damaged. If damage is noted, request an inspection immediately and request a copy of the claim report. When accepting the machine from the delivering carrier, note the damage on the bill of lading before signing same.
- 2. **TERRCO**<sup>®</sup> will not honor any claims for broken, damaged or missing parts that may have occurred in shipping, as each machine is checked and inspected for same before leaving our plant.
- B. It is not necessary to lubricate the machine as the machine is fully lubricated at the factory.

#### ON THE JOB INSTRUCTIONS

A. Installation Instructions

Stones and Clips

- 1. Remove the weights.
- 2. Using the flop handle, tip the machine back to the floor so that the handle lays on the floor.
- 3. Clean stone mounting surface.
- 4. To install the 2" diameter plug stones, push stone in hole and give the stone a twist to be certain it is securely in place. The diamond plug stones are installed the same way with the addition of inserting the safety clip.
- 5. After the stones are installed raise the machine until it is in operating position with all stones on the floor and replace the removable weights.
- 6. CAUTION! NEVER ATTEMPT TO START THE MACHINE WHILE LOWERING TO THE FLOOR, AS THE REAR STONES WILL STRIKE ON THE CORNERS RESULTING IN THROWN STONES AND POSSIBLE DAMAGE TO THE MACHINE.

#### B. Electric and Plug in Instructions

#### 1. General Instructions

- a. Always operate your machines with ground faults wired at the electrical source.
- b. Low voltage is a common occurrence on many terrazzo jobs, and hence it is necessary that the terrazzo contractor know his incoming voltage and amperage at the machine. We also recommend a good, reasonably priced voltammeter instrument for each con tractor and that he as well as his foreman know how to operate same.
- c. As a result of the low voltage and the use of a 230 Volt motor, Terrco® has installed a booster box with pre-wired plugs already connected to your machine.
- d. If the machine is to operate on an area more then 100 feet from the electrical source it will be necessary to use the next lower number (larger) size cable from the source to the 100 foot wire cable that was furnished with the machine.
- e. If additional cable is necessary, be sure all connections are of the proper size and that they are tight
- f. As a final step before starting the machine, we strongly recommend that a voltage reading is taken; this requires a very few minutes time and could save a great deal of trouble.

#### GENERAL MAINTENANCE AND REPAIR INSTRUCTIONS FOR YOUR TERRCO® 7500

#### A. The Lubrication of the Machine

- 1. The lubrication of the gear case.
  - a. The main gear case contains 15 lbs. of Mobilith AW-1 grease.
  - b. Gear case grease level must be checked once a week. The level of grease in the gear case should be up to half the thickness of the helical gears (Ref. No. 32 on the parts diagram).
- 2. The lubrication of the wheel bearings.
  - a. Use grease gun and grease once a month, (fitting Ref. No. 11 on the parts diagram) on each wheel with Mobilith AW-1 or equivalent.
  - b. Be sure to pump enough grease into the wheel bearing. Keep pumping until grease starts coming through shaft clearance in the inner bearing cap.
- 3. Location of other grease fittings.
  - a. Four fittings on bearing caps on top of gear case (Ref. No. 11). Lubricate these fittings with Mobilith AW-1 or equivalent monthly.

#### B. Keeping Machine Clean

- 1. Daily schedule after each day's grinding
  - a. Tilt machine back on handle.
  - b. Clean under carriage with water using garden hose and nozzle
- 2. Do not let any cake-up of cement grinding paste occur as this could create an overload on your machine.

#### C. Replacement of Worn, Damaged or Missing Parts

#### 1. Advantages

- a. If worn parts (bearing, gears, etc.) are not replaced promptly, serious damage to your machine could occur.
- b. Your machine will operate more efficiently with new Terrco® parts.
- 2. Use only authorized TERRCO® parts as our warranty will not apply if other than factory authorized TERRCO® parts are used.

#### D. Morflex Flexible Coupling

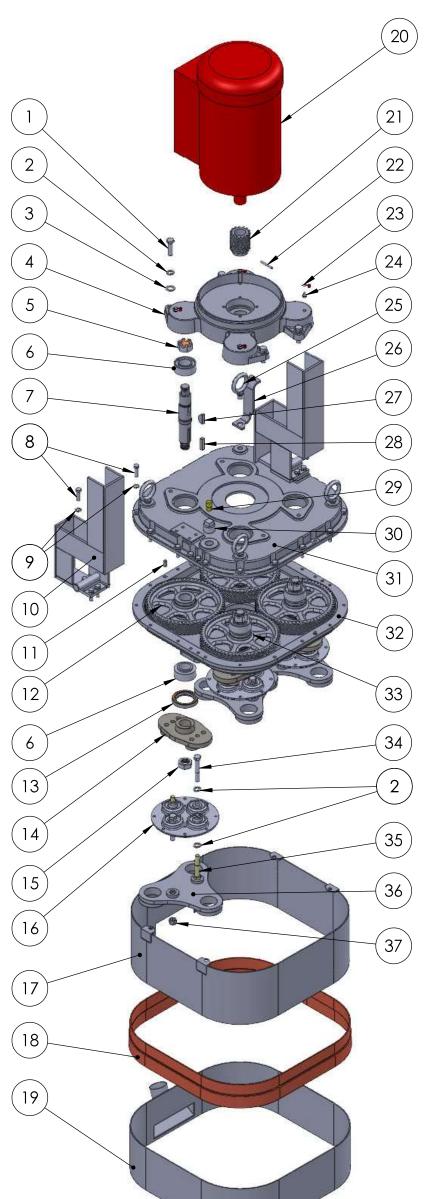
- 1. Bolts, (Ref. No. 44, 48), should be checked weekly for tightness. Loose bolts cause extreme vibration and premature failure of rubber inserts in the couplings.
- 2. Your flexible couplings (Ref. No. 46) should be changed a minimum of once a year whether you use your machine or not.

#### E. Stone Wear and Replacement

- 1. Check your stones for wear periodically, as the stones may be worn flush with stone holder lugs and the operator may be grinding with the steel stone spiders.
- 2. When changing stones it is recommended that you use 2" diameter plug stones.

# **7500 Parts List**

(Gear Case)



| ITEM NO. | PART NUMBER  | DESCRIPTION                         | QTY.  |
|----------|--------------|-------------------------------------|-------|
| 1        | T2006        | 1/2-13 X 1-3/4 LG HEX HEAD CAPSCREW | 4     |
| 2        | T1012        | 1/2" LOCK WASHER MEDIUM             | 20    |
| 3        | T2027        | 1/2" FLAT WASHER, ZINC PLATED       | 4     |
| 4        | X-03C        | MOTOR MOUNT FOR 7500                | 1     |
| 5        | T2008        | STOP NUT 1"-14 JAM                  | 4     |
| 6        | X-09, X-10   | BEARING CONE & CUP                  | 8     |
| 7        | X-05         | DRIVE SHAFT                         | 4     |
| 8        | T1025        | 3/8-16 X 1-1/4 LG HEX HEAD CAPSCREW | 28    |
| 9        | T1022        | 3/8 MEDIUM LOCKWASHER               | 28    |
| 10       | X-120R/L     | WEIGHT BASKETS (R/L)                | 1 ea. |
| 11       | LW 064       | DOWEL PIN 3/8" DIA X 3/4" LONG      | 2     |
| 12       | X-04L        | HELICAL GEAR, LH                    | 2     |
| 13       | X-19         | GREASE SEAL                         | 4     |
| 14       | SM 501-STEEL | DRIVE PLATE                         | 4     |
| 15       | T 2008       | LOCK NUT                            | 4     |
| 16       | SM 088       | COUPLING                            | 4     |
| 17       | X-14         | STATIONARY GUARD                    | 1     |
| 18       | X-29         | RUBBER DUST SEAL                    | 1     |
| 19       | X-18         | ADJUSTABLE SPLASH GUARD             | 1     |
| 20       | X-73-SLOW    | 7.5 HP, 1 PH, 230 V, 60 Hz MOTOR 1  | 1     |
| 21       | X-07         | PINION                              | 1     |
| 22       | X-33         | ROLL PIN, 1/4X1-3/4                 | 1     |
| 23       | T1065        | LUBRICAP                            | 4     |
| 24       | 000170       | GREASE FITTING 1/8" NPT STRAIGHT    | 4     |
| 25       | X-16         | LIFTING RING                        | 4     |
| 26       | X-13         | STOP BRACKET                        | 1     |
| 27       | T2012        | WOODRUFF KEY                        | 4     |
| 28       | SM 072       | HELICAL GEAR KEY                    | 4     |
| 29       | DS 184       | BREATHER CAP                        | 1     |
| 30       | T2011        | 1" SW PLUG PIPE SCREW               | 1     |
| 31       | X-01         | GEAR CASE COVER, TOP                | 1     |
| 32       | X-02         | GEAR CASE COVER, BOTTOM             | 1     |
| 33       | X-04R        | HELICAL GEAR, RH                    | 2     |
| 34       | T2021        | HEX HEAD CAPSCREW 1/2-13 X 3" LG    | 8     |
| 35       | SM 171       | MORFLEX COUPLING BOLT, ADV. J27B    | 8     |
| 36       | FL 004CX-6   | PLUG STONE HOLDER, 7500             | 4     |
|          | X-119        | SPEED SHIFT PLATE, 7500             | 4     |
| 37       | X-32         | 1/2-13 LOCKNUT                      | 8     |

| F | E 502 | CORD GRIP .688812                             | 2 |
|---|-------|---|---|
| F | E 504 | 1-1/4 NPT LOCK NUT                            | 2 |
| F | E 505 | V-RING FLINGER                                | 2 |
| F | E 508 | PIN AND SLEEVE PLUG - 60A, 2P3W, 250V         | 4 |
| F | E 509 | PIN AND SLEEVE CONNECTOR - 60A,<br>2P3W, 250V | 2 |
| S | M 173 | 36" WATER HOSE                                | 1 |
| Т | 2146  | #8-4 WIRE CABLE                               | 8 |
| Х | (-78  | PIN, SPLASH GUARD ADJUSTABLE                  | 2 |
| × | (-79  | STRAP, SPLASH GUARD                           | 2 |
| Х | (-87  | CLIP, HITCH PIN                               | 2 |
| Х | (-90  | 1" LOCKNUT                                    | 1 |

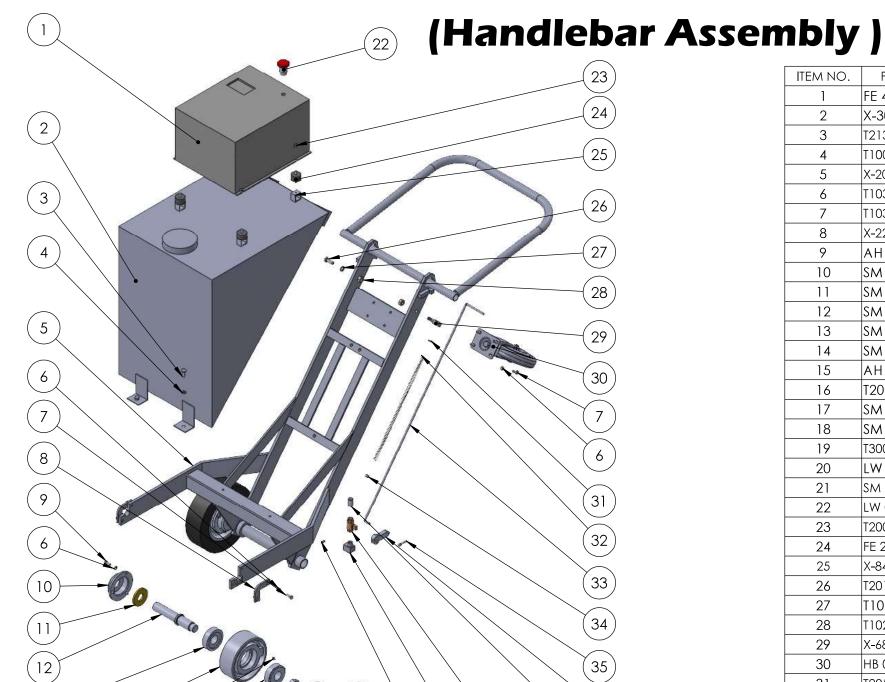


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# 7500 Parts List



| ITEM NO. | PART NUMBER    | DESCRIPTION                          | QTY. |
|----------|----------------|--------------------------------------|------|
| 1        | FE 491         | YASKAWA 230 VOLT, 56 AMP             | 1    |
| 2        | X-30-SS        | WATER TANK- STAINLESS STEEL          | 1    |
| 3        | T2130          | 5/16-18 X5/8 LG SOCKET HEAD CAPSCREW | 2    |
| 4        | T1007          | LOCK WASHER                          | 2    |
| 5        | X-20           | HANDLE ASSEMBLY                      | 1    |
| 6        | T1030          | LOCK WASHER                          | 8    |
| 7        | T1031          | 1/4-20 X 3/4 LG HEX HEAD CAPSCREW    | 8    |
| 8        | X-22           | PIVOT CLAMP                          | 2    |
| 9        | AH 017         | 1/4-20 X 5/8 LG FILLISTER HEAD       | 1    |
| 10       | SM 009         | INNER BEARING CAP                    | 2    |
| 11       | SM 012         | TRUCK WHEEL FELT WASHER              | 2    |
| 12       | SM 011         | TRUCK WHEEL SHAFT                    | 2    |
| 13       | SM 069, SM 070 | BEARING CONE & CUP                   | 4    |
| 14       | SM 008         | TRUCK WHEEL HUB                      | 2    |
| 15       | AH 026         | GREASE FITTING 1/4-28 STRAIGHT       | 2    |
| 16       | T2008          | LOCK NUT                             | 2    |
| 17       | SM 010         | OUTER BEARING CAP                    | 2    |
| 18       | SM 068         | TRUCK WHEEL TIRE                     | 2    |
| 19       | T3007          | 1/4-20 X 1-2 LG SOCKET SET SCREW     | 2    |
| 20       | LW 042         | STREET ELL                           | 1    |
| 21       | SM 174         | WATER TANK VALVE                     | 1    |
| 22       | LW 076         | EMERGENCY STOP SWITCH ASSEMBLY       | 1    |
| 23       | T2003          | HEX HEAD NUT 1/4-20                  | 4    |
| 24       | FE 251         | VIBRATION MOUNT                      | 4    |
| 25       | X-84           | MOUNTING CLIP, SWITCHBOX             | 4    |
| 26       | T2013          | 3/8-16 X 1" LG HEX HEAD CAPSCREW     | 1    |
| 27       | T1022          | 3/8 MEDIUM LOCKWASHER                | 1    |
| 28       | T1026          | 3/8-16 HEX NUT, FULL                 | 2    |
| 29       | X-68           | WATER HANDLE GUIDE FOR 7500          | 1    |
| 30       | HB 088A        | CASTER WHEEL                         | 1    |
| 31       | T2054          | 1/4" SAE FLAT WASHER                 | 1    |
| 32       | SM 182         | HANDLE SPRING, COMPRESSION           | 1    |
| 33       | X-31           | WATER TANK HANDLE - 7500             | 1    |
| 34       | SM 186         | HANDLE SPACER COLLAR                 | 1    |
| 35       | T2082          | COTTER PIN, 1/4 X 2 1/2              | 1    |
| 36       | SM 170X        | LEVER, WATER VALVE FOR 7500          | 1    |
| 37       | SM 175         | VALVE STEM                           | 1    |



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#### WARRANTY CLAIM PROCEDURE

Each new machine is covered by two separate, distinct warranties—one on the machine and one on the electric motor of gasoline engine. Read VERY CAREFULLY the Terrco® warranty covering the machine, as this will tell you whether you have a warranty claim or not. If your machine is under warranty and malfunctions, determine whether your problem is electrical or mechanical, and do the following:

#### I. Electrical.

- A. Consult the list of authorized motor repair stations sent with the machine and locate the station nearest you.
- B. Contact the repair station, giving them the following information:
  - 1. Complete nameplate date from the motor.
  - 2. Tell them that the machine is a terrazzo grinding and polishing machine.
  - 3. Give them a description or rundown of the trouble.
  - 4. Inform them of the voltage and amperage readings as outlined in paragraph II, B, 2 and 3, on page 2 of this manual.

#### II. Mechanical

- A. Contact your Terrco<sup>®</sup> Distributor giving them the following:
  - 1. Model and date purchased.
  - 2. Horsepower.
  - 3. Accurate description of the malfunction.
- B. If there is no Terrco<sup>®</sup> Distributor in your area call or write to us with the above information.

#### LIMITED ONE YEAR WARRANTY

TERRCO<sup>®</sup>, Inc. warrants the original purchaser of the Terrco<sup>®</sup> grinding equipment to be free from defects in materials and workmanship under normal use and service. Our obligation under this warranty shall be limited to the repair or exchange of any part or parts which may prove defective under normal use and service within one year from date or purchase by, the original purchaser, and which our examination shall disclose to our satisfaction to be defective.

All equipment returned for repairs or exchange must be returned to: TERRCO<sup>®</sup>, Inc., at the purchaser's expense and within the warranty period. All repaired or exchanged equipment will be shipped back to the purchaser F.O.B. Watertown, South Dakota.

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