# Terrco®, Inc.

Model 2000LP



OPERATING INSTRUCTIONS

MAINTENANCE INSTRUCTIONS

ILLUSTRATED PARTS LIST

Terrco<sup>®</sup>, Inc.

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# Terrco® Model 2000



HP/KW	25 HP ENGINE	
SWEEP OF DISCS	22-1/2" (571,5 mm)	
ABRASIVE PRESSURE	650 lbs (295 kg)	
WIDTH OF MACHINE	24" (610 mm)	
LENGTH OF MACHINE	67-1/2" (1715 mm)	
HEIGHT OF MACHINE	48" (1219 mm)	
NET WEIGHT	865 lbs (392 kg)	
SHIPPING WEIGHT	1040 lbs (472 kg)	
WATER TANK	20 GALLON (75,7 L)	
LP TANK	#33 HORIZONTAL	

## Optimal for jobs exceeding 5000 sq. ft.

- Easily operated by a single person
- Great machine for residential contractors
- Mild Steel or Stainless Steel Guards
- Stainless Steel Water Tank
- Wet/Dry Setup

## **Production Rates**

- Mastic removal rate of 450 sq. ft. per hour
- Thin-Set removal rates of 500 sq. ft. per hour
- Thin-Mil coatings removal of 350 sq. ft. per hour
- Concrete polishing rates of 1500 sq. ft. per polishing pad

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## SAFETY PRECAUTIONS WHEN RUNNING TERRCO GRINDERS

- A.Have a qualified electrician hook up correct power to the machine, grounded properly, with correct breakers at electrical source.
- B.When breaking down machine to change stones or to check machine <u>always</u> disconnect power to the machine.
- C.Check for wear to ensure no exposed wires.
- D. When grinding wet, employees must wear proper footwear.
- E.Always wear appropriate safety protection such as eyewear, hearing and if needed respiratory protection.
- F. When grinding, watch for problems on the floor such as bad joints, electrical covers, studs that can cause injury to operator or machine.
- G.Keep machines clean so any potential problems are visible.
- H.When using base machines, use guards for wet or dry grinding.
- I. Also when using base machines, operate with flexible shaft and housing as parallel to motor as possible to avoid kinks. Keep flex-shaft greased.

## **Operating Instructions**

## **INTRODUCTION:**

This manual has been prepared to assist you in the proper operation and maintenance of your machine. Please bear in mind that your TERRCO® 2000 is a precision piece of machinery manufactured to exacting standards. In order for you to obtain maximum use of your TERRCO® 2000, we suggest that you read this manual completely and thoroughly before attempting to operate your machine. A parts diagram and parts reference sheet are included to assist you in ordering the proper parts. Always give the machine number and model number when ordering repair parts.

## PLELIMINARY PROCEDURES TO FOLLOW BEFORE PUTTING THE 2000 IN OPERATION FOR THE FIRST TIME.

## A. Delivery of the Machine

1. On delivery, the contractor should very carefully examine the shipping crate 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 Freight Bill before signing. TERRCO® WILL NOT honor any claims for broken, damaged, or missing parts that may have occurred in shipment, as each machine is checked and inspected for the same, before leaving our plant.

## B. <u>Installation and Replacement of Grinding Stones</u>

- 1. Move the counterbalancing weights to the upper weight baskets.
- 2. Tilt machine back so that the caster wheel rests on the floor.
- 3. Clean mounting surface both on plug stone and stone holder. On 2" or 3" diameter plug stone, push stone in the hole and give the stone a slight twist to be certain it is securely in place.
- 4. Grasp machine handle and lower machine to the floor slowly so that all stones are resting on the floor. Make certain no stones have fallen or loosened while lowering the machine to the floor.

## C. Transport of Machine

1. With counterbalancing weights in the upper weight baskets, tilt the machine so that the caster wheel is firmly on the floor. You can push from gear case side.

#### D. To operate the 2000

- 1. Disconnect electrical source.
- 2. Install stones per instructions in #1B.
- 3. After stones are installed, lower the machine until it is in operating position. CAUTION Never attempt to start the machine while lowering machine to the floor, as rear stones will strike on corners resulting in thrown stones and possible damage to the machine.
- 4. Before plugging into the electrical system, check the voltage at the source. The minimum acceptable voltage is (208 Volt, 60 HZ, single phase), (210/420 Volt, 60 HZ, 3 phase), or (380 Volt, 50 HZ, 3 Phase). Anything lower than this can result in blown heaters and possible motor burnout.
- 5. If the machine is to operate in an area more than 100 feet from the source, it will be necessary to use the next larger size cable (#4-4) from the source to the 100 feet of #6-4 wire cable that was furnished with the machine.
- 6. After you have the cable in place, relieve pressure on the stones by applying your weight on the handle and push the start button on the starter switch, then releasing pressure on the handle to lower the machine to the floor.
- 7. We recommend that the first pass over the floor be made with the weights in the upper weight baskets. After the floor is "roughed" out, move the weights to the weight baskets located on the gear case for maximum abrasive pressure.
- 8. Be sure to periodically check stone wear, to prevent grinding with the steel plugs, rather than the stones.

## General Maintenance for your TERRCO® 2000

#### A. The Lubrication of the Machine

- 1. The lubrication of the main gear case
  - a. The main gear case contains Mobilith AW-1 grease.
  - b. Gear case grease level must be checked once a month. The level of grease in the gear case should be up to half the thickness of the helical gears. (Ref. No. 20 on the parts diagram).
- 2. The Lubrication of the Wheel Bearings.
  - a. Use grease gun and grease once a month 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 the grease fittings.
  - a. Four fittings on bearing caps on top of gear case (Ref. No. 10). Lubricate these fittings with Mobilith AW-1 or equivalent.

## 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.
  - c. Clean all grease fittings.
- 2. Do not let any cake-up of cement grinding paste occur as this could create an overload on your machine as well as more weight to push.
- C. Replacement of worn, damaged, or missing parts.
  - 1. Advantages
    - a. If worn parts (bearings, 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<sup>®</sup> parts as our warranty will not apply if other than factory authorized TERRCO<sup>®</sup> parts are used.

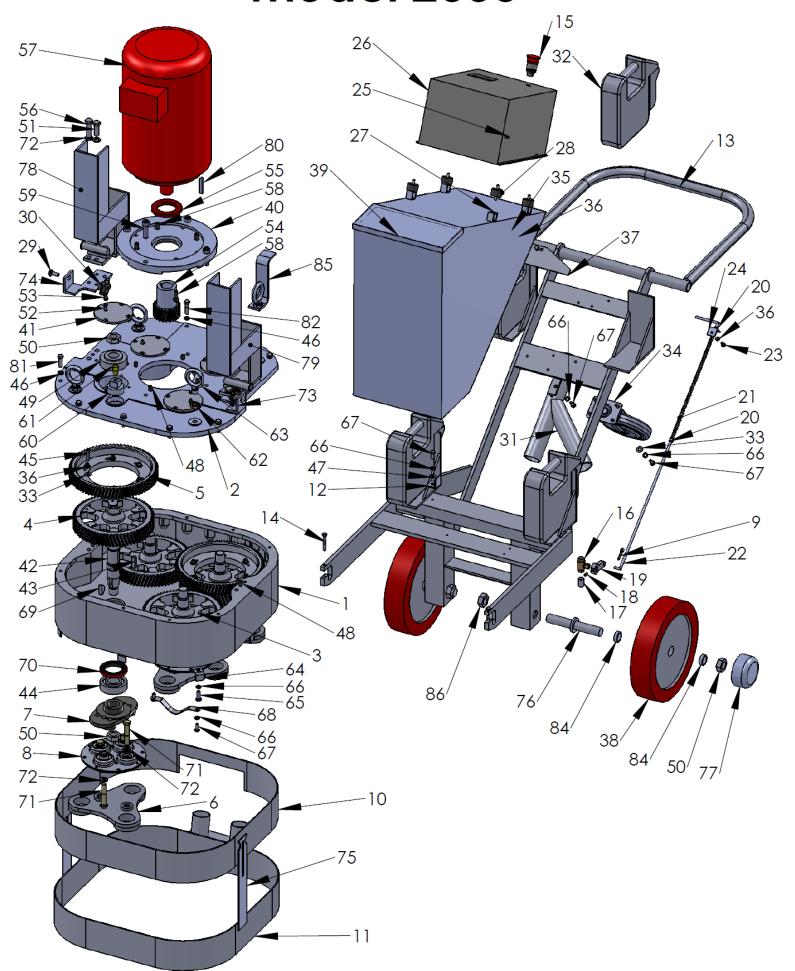
## D. Morflex Flexible Couplings

- 1. Bolts (Ref. No. 32) 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. 41) should be changed a minimum of once a year whether you use you 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 plugs and the operator may be grinding with the steel stone spiders.

# **Model 2000**



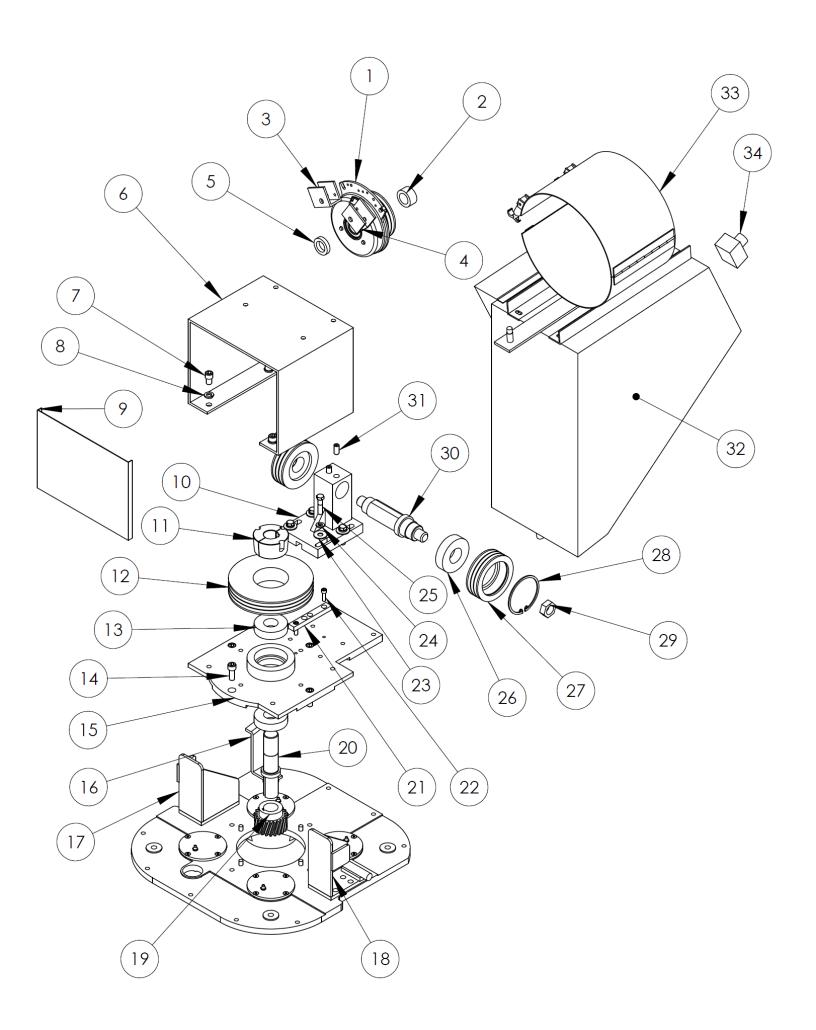
ITEM NO.	PART NUMBER	DESCRIPTION	QTY
1	FL 1	Lower Gear Case	1
2	FL 3	Gear Case Lid	1
3	FL 5L	Helical Gear - Left Hand	2
4	FL 5R	Helical Gear - Right Hand	2
5	FL 6	Drive Gear	2
6	FL 4C	Plug Stone Holder	4
	FL 130	Speed Shift Plate	4
	FL 121	Universal Tool Plate	4
7	SM 500	Drive Plate	4
8	SM 088	Morflex Coupling	4
9	T2082	Cotter Pin	1
10	FL 122	Stationary Guard	1
11	FL 123	Adjustable Guard	1
12	FE 133-SS	Water Tank Clip	2
13	FLN 009A	Handle Bar	1
14	Z02-1330	Capscrew	2
15	LW 076	Emergency Stop Button	1
16	SM 174	Water Valve	1
17	SM 175	Pipe Nipple	1
18	T3007	Set Screw	1
19	SM 170X	Water Valve Lever	1
20	SM 186	Lock Collar	2
21	SM 182	Compression Spring	1
22	FL 114	Water Lever	1
23	T2122	Capscrew	1
24	FD 043	Water Lever Guide	1
25	05-5010-9	Hex Head Nut	4
26	FE 277	Variable Speed Drive, 20 HP	1
	FE 283	Variable Speed Drive, 15 HP	1
	SM 091C	Manual Start - 10 HP, 1 PH, 230 V	1
	SM 091D	Manual Start - 10 HP, 3 PH, 230 V	1
	SM 091D-460	Manual Start - 10 HP, 3 PH, 460 V	1
27	X-84	Switch Box Mounting Bracket	4
28	FE 251	Vibration Mounts	4
29	T2029	Carriage Bolt	2
30	SM 537	Hand Knob	2
31	SM 457	Y-Pipe	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY
32	FE 246	Pocket Weight 42 lbs.	4
33	T3015	Washer	16
34	HB 088A	Caster	1
35	T1031	Capscrew	2
36	T1030	Lock Washer	15
37	FE 074	Water Tank Bracket	1
38	DS 007	Wheel	2
39	FE 031B-SS	Water Tank - Stainless Steel	1
40	FL 012	Motor Plate	1
41	FE 027	Bearing Cap	4
42	SM 016	Helical Gear Shaft	4
43	SM 072	Gear Key	4
44	SM 037, SM 036	Bearing and Bearing Cone	4
45	T1089	Capscrew	12
46	T1022	Lock Washer	9
47	T2148	Washer	2
48	FD 040	Dowel Pin	6
49	SM 043, SM 036	Bearing and Bearing Cone	4
50	T2008	Nylon Lock Nut	10
51	T1009	Capscrew	4
52	T3011	Socket Flat Head	16
53	170	Grease Zerk	4
54	FL 011	Motor Pinion	1
55	FL 118	Motor Plate Seal	1
56	T1024	Capscrew	4
57	FL 124	10 HP, 3 PH, 230/460 V, 60 Hz Motor	1
	X-99	10 HP, 1 PH, 230 V, 1800 RPM	1
	FL 115	15 HP, 3 PH, 230/460 V, 1800 RPM	1
58	T2111	Capscrew	4
59	T3048	Capscrew	4
60	X 100	Gear Case Plug	1
61	DS 184	Breather Cap	1
62	T3050	Jam Nut	4
63	X 16	Lift Ring	4
64	SM 028	Stationary Guard Bracket	9
65	T2013	Capscrew	9
66	T1007	Lock Washer	18
67	T2130	Capscrew	9
68	SM 172	Hose Clamp	1

ITEM NO.	<b>PART NUMBER</b>	DESCRIPTION	QTY
69	T2012	Woodruff Key	4
70	SM 169	Seal	4
71	SM 171	Capscrew	16
72	T1012	Lock Washer	24
73	X 118L	Guard Bracket - Left Hand	1
74	X 118R	Guard Bracket - Right Hand	1
75	FL 133	Guard Strap	2
76	FE 020B	Wheel Shaft	2
77	T 2007	Jam Nut	2
78	DS 005	Wheel Cap	2
79	X 120R	Weight Saddle - Right Hand	1
80	X 120L	Weight Saddle - Left Hand	1
81	FE 114	Motor Key	1
82	T1025	Capscrew	7
83	T2004	Capscrew	2
84	T2141	Wheel Bearing Spacer	4
85	FL 134	Tilt Stop	1
86		Jam Nut	2

## **NOT PICTURED**

PART NUMBER	DESCRIPTION	QTY
DS 135	6-3 Cable (1 PH Input)	100'
DS 134	6-4 Cable (3 PH Input)	100'
SM 420	MALE PLUG, 50A, 1 PH	1
SM 421	FEMALE PLUG, 50A, 1 PH	1
SM 424	MALE PLUG, 50A, 3 PH	1
SM 425	FEMALE PLUG, 50A, 3 PH	1
FE 207	VACUUM HOSE	
LW 078	BRUSH STRIP	
FL 030	DUST SEAL	1
SM 173	36" Water Hose	1
X 94	Reducer Bushing	1
X 97	Straight Cord Connector	2
X 90	Connector Lock Nut	2
LW 086	Hose Clamp - Booster	1
SM 176	Hose Clamp - Water Hose	2
T1065	Grease Zerk Cap	6
T1104	4" Cable Tie	2



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	FL 141	CLUTCH	1
2	FL 144	CLUTCH SPACER	1
3	FL 140R	CLUTCH MOUNTING BRACKET - RH	1
4	FL 140L	CLUTCH MOUNTING BRACKET - LH	1
5	FL 143	CLUTCH SPACER - ENGINE SIDE	1
6	FL 146	ENGINE MOUNT	1
7	T2151	SOCKET HEAD CAPSCREW	4
8	T1012	LOCK WASHER	4
9	FL 138	FRONT BELT GUARD	1
10	FL 148	IDLER BRACKET	1
11	FD 133	TAPER LOCK BUSHING	1
12	FE 052	PINION SHEAVE	1
13	FD 115	BEARING	2
14	X-34	SOCKET HEAD CAPSCREW	4
15	FL 136	MOUNTING PLATE	1
16	FL 134	TILT STOP	1
17	FL 151L	WEIGHT BASKET	1
18	FL 151R	WEIGHT BASKET	1
19	FL 011-MODIFIED	PINION	1
20	FL 135	PINION SHAFT	1
21	FD 100	KEY	1
22	T2081	SOCKET HEAD CAPSCREW	2
23	T2149	FLAT WASHER	4
24	SM 255	LOCK WASHER	4
25	T2150	HEX HEAD CAPSCREW	4
26	FE 215	IDLER BEARING	2
27	FD 129A	SHEAVE	2
28	FE 216	snap ring	2
29	T 2008	LOCK NUT	2
30	FE 213	IDLER SHAFT	1
31	T3021	SET SCREW	2
32	FE 300	WATER TANK - LP	1
33	FEN 14A	LP TANK BRACKET	1
34	FL 145	CLUTCH SWITCH	1

PART NUMBER	DESCRIPTION	QUANTITY
FL 142	25 HP ENGINE	1
FL 139	REAR BELT GUARD	1
FL 147	BELT	1

## 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

## II. Mechanical

- A. Contact your Terrco® 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.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRATNIES EXPRESSED OR IMPLIED INCLUDING THE WARRANTIES OR MERCHANTABILITLY AND FITNESS FOR USE AND ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF TERRCO<sup>®</sup>, INC. AND WE NEITHER ASSUME OR AUTHORIZE ANY OTHER PERSON TO ASSUME FOR US, ANY OTHER LIABILITY IN CONNECTION WITH THE SALE IF THIS EQUPIMENT. SOME STATES DO NOT ALLOW THE EXCLUSIONS OR LIMITATIONS ON IMPLIED WARRANTIES OR DO NOT ALLOW THE EXCLUSION OF LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE EXCLUSIONS OR LIMITAIONS MAY NOT APPLY TO YOU. THIS WARRANTY SHALL NOT APPLY TO ANY EQUIPMENT OR PART THEREOF WHICH HAS BEEN SUBJECT TO ACCIDENT, NEGLIGENCE, ALTERATIONS, ABUSE, MISUSE, OR IMPROPER MAINTENANCE. TERRCO®, INC. MAKES NO WARRANTIES WHATSOEVER IN RESPECT TO ACCESSORIES OR PARTS NOT MANUFACTURED OR SUPPLIED BY US.