



# INSTRUCTIONS

## FOR

# SINGLE DRUM TUMBLER

MODEL NO.

**STS-5501**

SERIAL NO.



PPE Drum Tumblers are manufactured and sold direct by Plastic Process Equipment, Inc. We are not associated with any other manufacturer except Budget Molder's Supply, Inc. Always specify genuine PPE or Budget Machinery! Do not accept substitutes.

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**PLASTIC PROCESS EQUIPMENT, INC.**

www.ppe.com • e-mail: sales@ppe.com

**PPE WEST**

6385 Montessouri Street, Las Vegas, Nevada 89113  
702-433-6385 • 800-258-8877 • Fax: 702-433-6388

**PPE SOUTH**

11218 Challenger Avenue, Odessa, Florida 33556  
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8303 CORPORATE PARK DRIVE, MACEDONIA (Cleveland), OHIO 44056, USA

216-367-7000 • Toll Free: 800-321-0562 • Fax: 216-367-7022 • Order Fax: 800-223-8305

Toll Free: USA, Canada & Mexico  
**800-362-0706**

Thank you for buying a Drum Tumbler from Plastic Process Equipment, Inc. These instructions are intended as a guide for your new product. If you have any additional questions, contact PPE at 800-321-0562.

## RECEIVING & INSTALLATION

Please thoroughly inspect your tumbler and report any damage to the motor freight carrier before uncrating for setup. Select a suitable location away from all traffic, preferably close to a stationary wall. Position your tumbler to allow for easy access for loading and unloading drum holders.

## OSHA SAFETY

Fasten your tumbler base **securely** to the floor with the lag bolts provided. This must be done to avoid tipping or walking of the machine. The drum tumbler **must** be installed in a safety enclosure to keep all personnel away from the tumbling machine during operation. Mount start-stop switch or PPE control panel outside enclosure and preferably in a remote location. Keep drum safety chain fastened while tumbling drum.

## DRUM CAPACITY

**DANGER, STAY WITHIN THE RECOMMENDED DRUM WEIGHT CAPACITY 275 lbs PER DRUM!** Overloading drums will cause premature wear on gears, shafts, bearings, and motor increasing the risk of damaging the machine. It will also negatively affect your color blending due to reduced head space.

## ELECTRICAL

All tumblers are prewired and tested prior to shipping. Wire units for the voltage in your plant per the wiring diagram located on the motor. We insist you mount your motor starter and fused disconnect in a suitable location **away** from the tumbler which will allow complete control without approaching the machine. A complete drum tumbler control panel is available from PPE. Part # DTCP-01

## LUBRICATION: BEARINGS & GEARS

All PPE tumbler drive gears are lubricated, operated, and inspected at our factory prior to shipment. We suggest you lubricate the pillow block bearings and drive gears once each four to six months. We recommend using **MOLY 29 OPEN GEAR COMPOUND** for the drive gears.

## LUBRICATION: WORM GEAR REDUCERS

For normal operating conditions where surrounding temperatures are within the limits of 50°F to 120°F, we recommend the use of **AMGA Lubricant #8 Comp, 8EP**, or similar oil of equal viscosity and composition. Below 50° F, the oil recommended is **AMGA Lubricant #7 Comp, 7EP**.

The maximum efficiency of worm gear reducers is obtained after a "Run-In" period. The length of time required will depend on the load applied. At full rated load, the "Run-In" period will take approximately 24 hours. At reduced loads this time will increase considerably.

**Overloading the unit will not decrease the "Run-In" period and may cause damage to internal components.** During the "Run-In" period, higher than normal current consumption and temperatures can be expected, as well as lower efficiency and output torque.

Fill units only up to oil level and maintain this level. After the first 500 hours or 4 weeks of operation, and after each succeeding 2500 hours or every 6 months of thereafter (which ever occurs first), drain the oil, flush out the case, and refill to the proper level using the recommended oil or equivalent.

## CAUTION

Both primary and secondary reducers have individual oil reservoirs. Each unit must be filled to, and maintained at its individual oil level. See below for listing of typical manufacturer's worm and worm gear reducer oils meeting AGMA standards 250.04 Sept. 1981.

FOR OPERATIONS IN 15 to 50°F ambient	FOR OPERATIONS IN 50 to 120°F ambient
<b>Chevron Oil</b> NL Gear Guard COMP 220	<b>Chevron Oil</b> NL Gear Comp 620
<b>Exxon Petroleum</b> Spartan EP 220	<b>Exxon Petroleum</b> Spartan EP 680
<b>Mobil Oil Company</b> Mobilgear 630	<b>Mobil Oil Company</b> Mobilgear 636
<b>Shell Oil Company</b> Omala 71	<b>Shell Oil Company</b> Omala 81
<b>Texaco Oil Company</b> Meropa 220	<b>Texaco Oil Company</b> Meropa 680
<b>Phillips Petroleum</b> All purpose gear oil SAE 90	<b>Phillips Petroleum</b> All purpose gear oil SAE 140

## LUBRICATION: MITER AND BEVEL GEARBOXES

For normal operating temperatures within the limits of 40° to 120° F we recommend multipurpose gear oil, SAE 90W. Temperatures below 40° F, use 80W or contact factory.

### APPROVED LUBRICANTS

<b>Texaco</b>	Multigear EP90
<b>American</b>	Multipurpose gear lubricant
<b>Gulf</b>	Transgear EP
<b>Exxon</b>	Gear oil GP
<b>Shell</b>	Spirax EP
<b>Mobil</b>	Mobilube EP
<b>Chevron</b>	RPM Multiservice
<b>Phillips</b>	Philube all purpose gear oil
<b>Conaco</b>	Polar start 600 GM (for amb. temp. below 15°F)

Or any oil that meets MIL-L-2105B and GL5 specifications

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## **WARRANTY**

All PPE machinery is warranted to be free of defective material and workmanship for a minimum period of 1 YEAR from date of sale. Some machinery components may carry longer warranties per our suppliers policies, which are passed on to our customers. (i.e., our drier compressors, conveyor motors, etc.)

## **SPECIFICATIONS:**

Motor-right angle gear head type,  
1750 RPM x 60:1 29.1 RPM output shaft T.E.N.V.  
1 HP 230/460/60/3 3.4 amps @ 230V  
1.7 amps @ 460V  
Tumbling speed - 22.6 RPM  
Bearings - 2 1/4" Pillow block ball bearings  
Floor space required with drums in holders:  
60" wide x 72" deep  
Gross weight 1000 lbs.



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SOUTH**

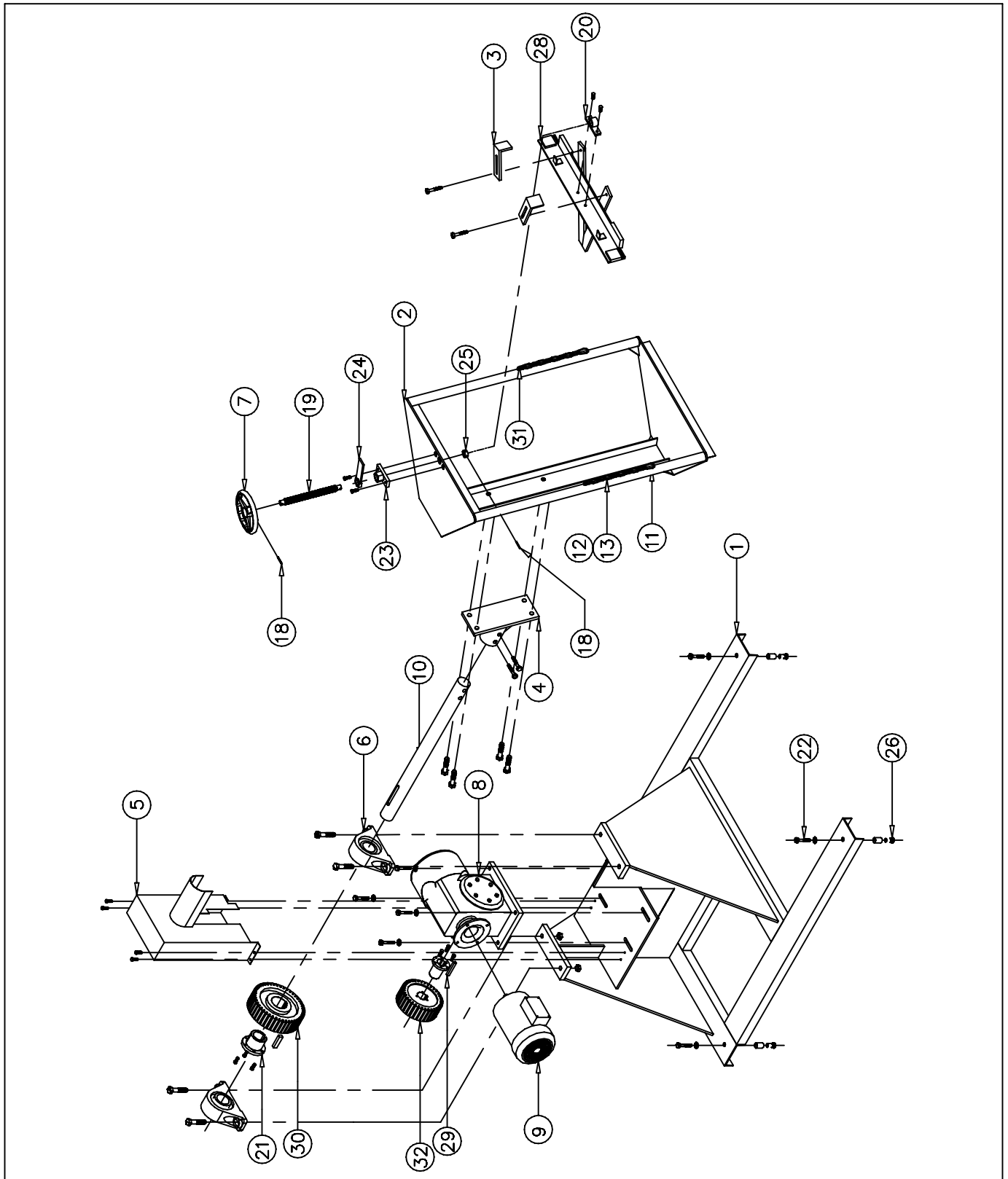
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# SINGLE DRUM TUMBLER PARTS



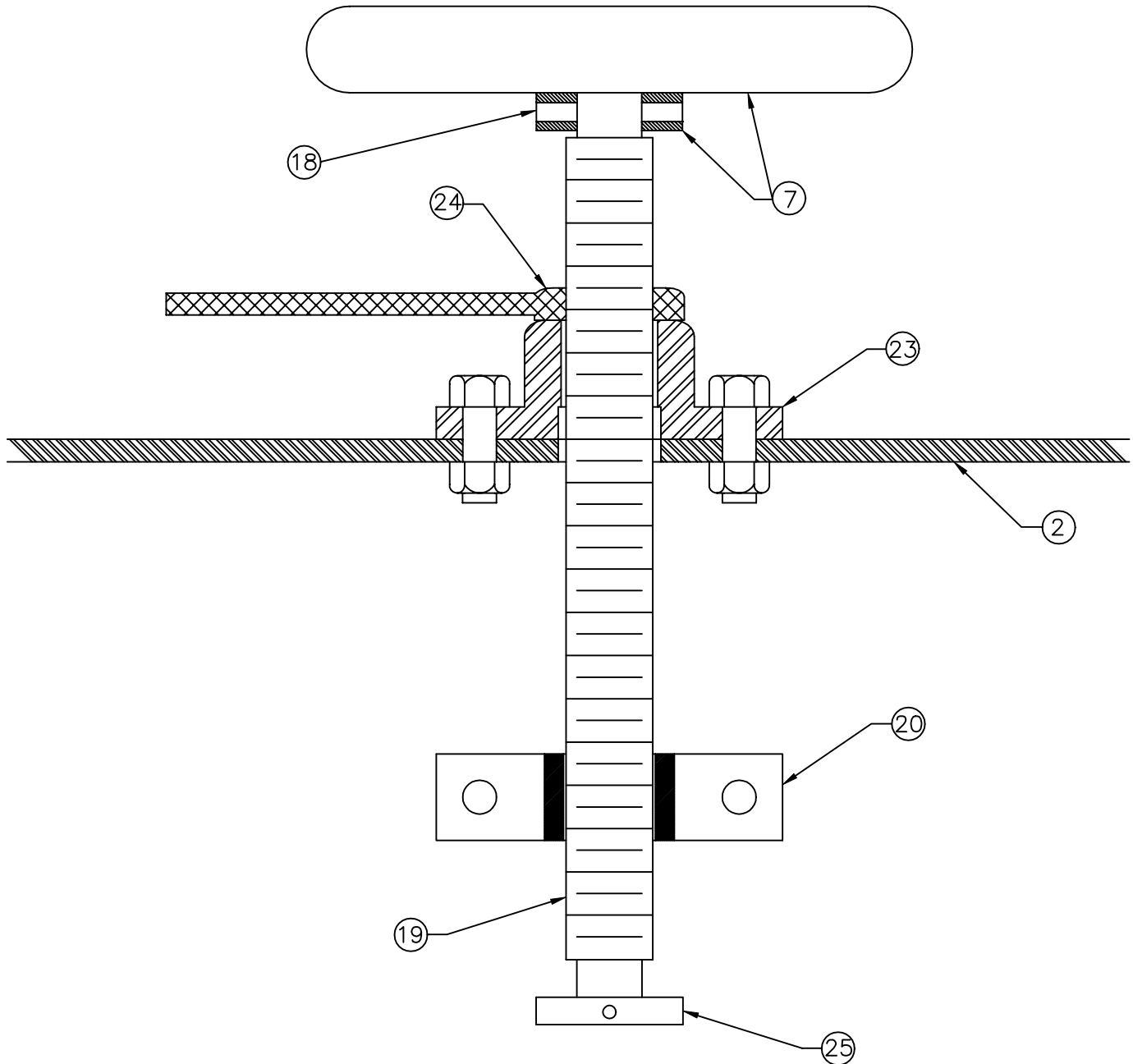
## PLASTIC PROCESS EQUIPMENT, INC.

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# DRUM TUMBLER HANDWHEEL ASSEMBLY



## PLASTIC PROCESS EQUIPMENT, INC.

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# SINGLE DRUM TUMBLER

09/17/15 PARTS LIST

ID NUMBER	PART NUMBER	DESCRIPTION	UOM
1	D-1234	BASE FOR STS	EA
2	D-1205	DRUM HOLDER FRAME	EA
3	A-7377	DRUM EAR CLAMP (each)	EA
4	B-1199K	DRUM HOLDER HUB KIT (WITH HARDWARE)	EA
5	C-1690	GEAR GUARD	EA
6	PB251	2-1/4 PILLOW BLOCK BEARINGS	EA
7	A-1744	HAND WHEEL H3192	EA
8	HLZ11772S	BOSTON GEAR SPEED REDUCER	EA
9	120024	1HP MOTOR FOR STS	EA
10	2143138	B-1221 2-1/4X31-3/8" DRIVE SHAFT	EA
11	3885T11	3/16" CHAIN SNAP HOOK	EA
12	2400-1150	3/16 CHAIN FOR DRUM TUMBLER (PER FOOT, 3' NEEDED)	EA
13	206-1620	3FT LENGTH CLEAR CHAIN LINK COVER 1-1/4" OD.	EA
14	OSHA-7	GEAR WARNING TAG	EA
15	PPETAG	PPE SERIAL NO. TAG	EA
17	OSHA-6	CAUTION TAG	EA
18	1/4X2SP	SPLIT PIN 1/4 X 2	EA
19	A-1194-C	1"-6 X 11 ACME SCREW	EA
20	A-1193	SCREW BUSHING	EA
21	Q1X2-1/4	2-1/4 BUSHING FOR DRIVEN GEAR	EA
22	1/2LB	1/2-13 X 2-1/2" LAG BOLTS	EA
23	A-1192	ACME NUT BRACKET INCLUDING PAINT	EA
24	A-1191	LOCK LEVER, INCLUDING ORANGE POWDERCOAT	EA
25	A-1195	3/4" SCREW COLLARS	EA
26	1/2MA	1/2-13 MACHINE SCREW ANCHORS	EA
27	1/2LB	1/2-13 X 2-1/2" LAG BOLTS	EA
28	D-1227	V-BRACKET ONLY FOR DRUM TUMBLER	EA
29	P2X1-5/8	1-5/8 BUSHING FOR DRIVE GEAR	EA
30	YCS5Q45	SPUR GEAR 45 TOOTH	EA
31	3579T71	LAP LINK-HOLDS CHAIN TO DRUM HLDR	EA
32	YSS5P35	SPUR GEAR 35 TOOTH	EA
33	1/4x11/2SP	SPLIT PIN 1/4 X 1 1/2	EA