GILMORE-TATGE

MANUFACTURERS OF FARM AND INDUSTRIAL EQUIPMENT
PHONE 913 632-2151 · CLAY CENTER, KANSAS 67432

MODEL 570

OPERATORS MANUAL & PARTS CATALOG

JANUARY 1978

INTRODUCTION

Your Tox-O-Wik Grain Dryer is one of the finest grain dryers ever built; designed to give you excellent service for many years. The information and suggestions found in this owners manual will help you achieve this.

Your Tox-O-Wik Grain Dryer dealer is well trained and equipped to give you complete service when and if the need should arise.

We would also like to take this opportunity to thank you for choosing Tox-O-Wik and to assure you of our continuing interest in your complete satisfaction.

TABLE OF CONTENTS

GENERAL INFORMATION

Mechanical drying of grain is a relatively new process; therefore, emphasis must be placed on proper operation of grain drying equipment. Your GT Tox-O-Wik Dryer was designed and engineered to retain grain quality, and to dry grain as rapidly as possible at the lowest cost consistent with retention of quality grain. Study and follow this manual so you too may enjoy the additional profits derived from drying.

THEORY OF DRYING

The theory of drying has two basic stages: (1) diffusing of internal moisture to the surface of the kernel, and (2) removal of external moisture by air flowing around the kernel. Vapor pressure is increased inside the kernel which causes moisture to diffuse through the micropores of the seed coat. The grain temperature largely establishes this rate of diffusion and hence must be controlled to not exceed a maximum rate which would result in a ruptured kernel.

Removal of the exterior moisture for a given air flow is dependent upon the air temperature. These two stages must be balanced to produce quality dried grain.

This balance is accomplished quite simply in the GT Tox-O-Wik Grain Dryer with its uniform circulation, regulated heat, and controlled air flow.

RATE OF DRYING

In addition to the kind and variety of grain, the drying rate is controlled by atmospheric conditions. Hard and fast rules cannot be set forth because of these variables. It will be necessary to dry several batches to determine the exact dryer settings in a specific area. A chart for recording necessary information for later use is included in the back of this manual.

WHEN GRAIN IS MATURE

Grain is mature at 30% to 35% moisture. While some grain may be harvested easily at 30%, others do not harvest well above 20%. Therefore, grain should be harvested as soon as possible after maturity, as long as grain damage is at a minimum and gleaning is thorough.

STORAGE MOISTURE LEVELS

To properly store grain, the grain moisture content must be compatible with the length of time the grain will be in storage, and with the grain's intended use. This moisture content will vary due to locale.

GRAIN	1 YEAR STORAGE (% Moisture)
Corn	13%
Wheat	13-14%
Barley	13%
Rice	12%
Oats	13%
Rape Seed	10.5%
Grain Sorghum	12%
Flax	9%
Soybeans	11%
Edible Beans	14-16%
Sunflower Seed (Oil Type)	10%
Sunflower Seed (Bird Seed Type)	12%

Corn may be stored at 15% moisture if moved before warm spring weather. For long time storage — up to 5 years, or for grain stored as seed stock, moisture level should be 2% lower than shown above.

MOISTURE TESTING

Since grain must go into storage at not more than specified moisture content, it is necessary to use a reliable tester to determine moisture content. When marketing grain from the dryer, it should be only dry enough to eliminate moisture discounts. The moisture tester may also be profitably used to determine when to harvest.

COOLING OF GRAIN

It is very important to cool grain. Grain being put in storage should be cooled after drying to within 20 degrees F of atmospheric temperature or, 10 degrees F of grain already in the storage bin. Moisture migration from the air to grain will occur if the grain is not cooled to these limits.

PREPARING DRYER FOR OPERATION

1. INSTALLATION OF EQUIPMENT

The equipment shall be installed in accordance with the installation code for gas burning appliances and equipment, Canadian Standard's Association B 149, or applicable state or Provincial Regulations for the class. Instructions should be carefully followed in all cases. Authorities having jurisdiction should be consulted before installations are made.
NOTE: Natural Gas Fired Dryers are not approved for CSA operation.

2. PLACING MACHINE FOR OPERATION

Select a site as level as possible, 25 ft. from inflammable buildings. Set machine, if possible, with fan into prevailing winds. Lower the supporting legs (4 on Model's 270, 370 and 6 on Model 570) and insert pins. If machine is being set on a level concrete slab, no additional blocking will be necessary. However, if being set on dirt, at least 2" x 8" x 12" Board or equivalent should be placed under each leg for additional flotation. Add any additional blocking material necessary to bring machine level. Use a level on main frame to determine this.

3. INSTALLING TOP SECTION OF AUGER AND ADJUST FOR UNLOADING

When installing the top section of auger, it may be necessary to jack the lower flight up to allow the bolt holes in the connecting shaft to align. The weight of the complete auger should be supported by the top auger bearing when in proper adjustment.

By removing bolts through mounting flanges which hold the upper and lower auger tubes together, the upper tube may be rotated to provide unloading at several points. It should be also noted that when unloading spout is set for unloading one direction, it will also unload in the opposite direction. One-fourth turn, of unloading spout, relocates the auger head to recirculating position. When unloading or recirculating, the unloading spout must rest in holders provided at top of bin. These holders may be relocated by drilling bin wall and rebolting holders. Should use of both unloading positions be desired, an additional holder may be obtained through your dealers parts department. Be sure that the openings in the upper auger tube and the auger head are properly aligned to insure good circulation.

4. LOCATING PROPANE GAS SUPPLY TANK

Location of the Propane Gas Supply Tank must be in accordance with local, state or provincial regulation. It should also be approved by the insurance company. A minimum distance of twenty-five (25) ft. is recommended for safety and will allow room for maneuvering grain hauling equipment.

Tox-O-Wik Propane Gas fired dryers are equipped with Vaporizers and must be connected to the supply tank for LIQUID withdrawal. It is recommended that rubber hose specifically made for Propane gas be used as a supply line connecting tank to dryer. Specifications for the line are: (1) minimum working pressure 250 psi, (2) minimum bursting strength 1,250 psi, and (3) 3/8" minimum inside diameter for Model 270 and 370, or ½" minimum inside diameter for Model 570. Tank pressure is used at the dryer; therefore, it is not necessary to install a pressure regulator at the tank.

DANGER

All lines and fittings should be checked periodically for leaks before and during operation. Check for leaks with liquid detergent suds or comparable substance, but NEVER with flame.

CAUTION

Do not use storage tanks that have been used to store Anhydrous Ammonia. This causes corrosion to the gas line controls.

Always protect gas supply line against vehicle or animal damage.

5. NATURAL GAS

Specifications for Natural Gas connections are available from the gas supplier and must be adhered to. The Model 270, 370 and 570 dryers will require up to 20 psi, depending on locality. Pressure shown is at the dryer.

6. ELECTRICAL CONNECTIONS

Power take Off machines have as standard equipemnt, an electrical system that may be used either on 6 volts or 12 volts; a switch is provided in the control box for the change. This must be in the proper position for tractor battery voltage. The red clip is to be connected to hot side of battery and black is to be grounded. Electric drive machine controls are for use with 110 volts only.

7. LUBRICATION

Use a high—low temperature grease or equivalent made especially for ball and roller bearings in extreme temperatures. Frequency of lubrication as follows:

DAILY – PTO Tumbler U–Joints and bottom auger bearing.
EVERY 4 HOURS – Auger belt idlers.
EVERY 50 HOURS – Agitator drive gearbox top bearing (Add additional grease through top zerk), and agitator drive chain (Recommended to use a dry film molybdenum – disulfide lubricant commercially available in aerosol form).
EVERY 100 HOURS – Fan shaft bearings, top auger bearing, and PTO drive shaft bearings.
Once per year or every 50,000 bushels – Agitator Drive Gearbox (remove top cap and check level of grease – should be one half full of EP90 transmission grease). The top bearing only is lubricated by adding gun grease through the top zerk. Add only enough grease to lubricate bearing.

NOTE: A small amount of grease at more frequent intervals is preferred to a large amount at less frequent intervals.

When performing the 100 hour lubrication, check to see that set screws in bearings are tight.

IMPORTANT

In extremely cold weather, it may be necessary to operate the dryer at a low RPM for a short period of time to allow the grease in the bearings to warm up.

8. SERVICING AND CARE OF AGITATOR

It is important that the agitator be inspected before and after the first load. Then after each 100 hours of operation.

A. The tapered agitator rollers must support the plate sprocket so there is no horizontal movement of sprocket.

Models 270, 370 and 570 for 1973 and newer, have four rollers mounted on the agitator sprocket so each roller supports an equal load. These rollers are tapered so all horizontal and vertical slack may be taken up.

B. Adjusting Rollers

1. Secure the cam nut and loosen the bolt.

2. Rotate the cam nut counter-clockwise (when looking down into the cam nut) while holding the bolt stationary.

3. Secure the cam nut and tighten the bolt.

4. All cam nuts must be rotated an equal amount so the agitator sprocket remains true.

5. Rotate agitator arms by hand and check clearance.

NOTE: Agitator drive chain is provided with a spring loaded idler, however, it is necessary to periodically check the chain slack.

CAUTION

Do not open inspection door or enter machine while in operation.

9. BELT TENSION

With machine running at normal speed, belts should be tight enough to keep out the slack. Keep belts tight to prolong life.

10. VAPORIZER

The vaporizer is designed for year around operation. However, the temperature of the vapor controls can be adjusted. Move the burner toward the vaporizer 1" to 2" to cool the controls or away from the vaporizer to heat the controls. The vapor plumbing, under normal conditions, should be operated at a temperature of approximately 120 degrees to 150 degrees. The temperature may be determined by placing your hand on the plumbing and will range from warm to hot to the bare hand.

If the vaporizer has been overheated causing possible rupture you will be unable to control plenum temperature. In some extreme cases a smaller orifice should be used to reduce vaporizer temperature and still have sufficient operating pressure. Check Propane tank for liquid withdrawal. Vapor withdrawal will cause over-heating of vaporizer and possible damage to gas controls.

11. CHECK OUT – BEFORE LOADING

All piping and burners have been checked and test fired at the factory. However, due to transportation it is possible for damage or some of the connections being loosened. After connecting supply tank to dryer all connections should be tested under pressure with gas pressure on. Tractor can be started and dryer test run before loading with grain.

12. LOADING THE BIN

When the loading attachment is not used, overhead bins or a conventional farm type elevator or auger may be used. In using any method of filling from the top, make delivery of grain into dryer as near to center as possible. Start machine, without burner, at the same time loading begins. This helps keep bin loaded evenly. Bin will fill to rim and pyramid evenly to auger outlet.

DO NOT LEAVE EXTREMELY WET GRAIN IN DRYER OVERNIGHT

13. STARTING THE BURNER (PROPANE)

Fan should be at operating speed, approximately 2200 RPM for Model 270 and Model 570, 2600 RPM for Model 370. These speeds can be obtained by approximately 525 RPM P.T.O. speed. However, a lower fan & P.T.O. speed is recommended in some conditions. For initial starting, the modulating valve handle should be screwed all the way in, and the grain and plenum temperature controls checked for proper setting. Turn screw handle of High Pressure Regulator counter-clockwise, out, until screw turns freely, thus closing regulator. Open quick acting valve. Move switch to "ON" position. Depress and hold momentary contact start switch, and at same time turn regulator screw clockwise until burner lights and pressure gauge shows approximately 3 psi. Hold start switch depressed until flame detector is activated, usually 20 to 30 seconds. Should frost appear on gas lines, reduce pressure slightly. Allow vaporizer to heat 2 to 3 minutes then increase pressure until plenum temperature is obtained.

STARTING THE BURNER (Natural Gas Operation)

NOTE: Natural gas fired dryers are not approved for CSA operation.

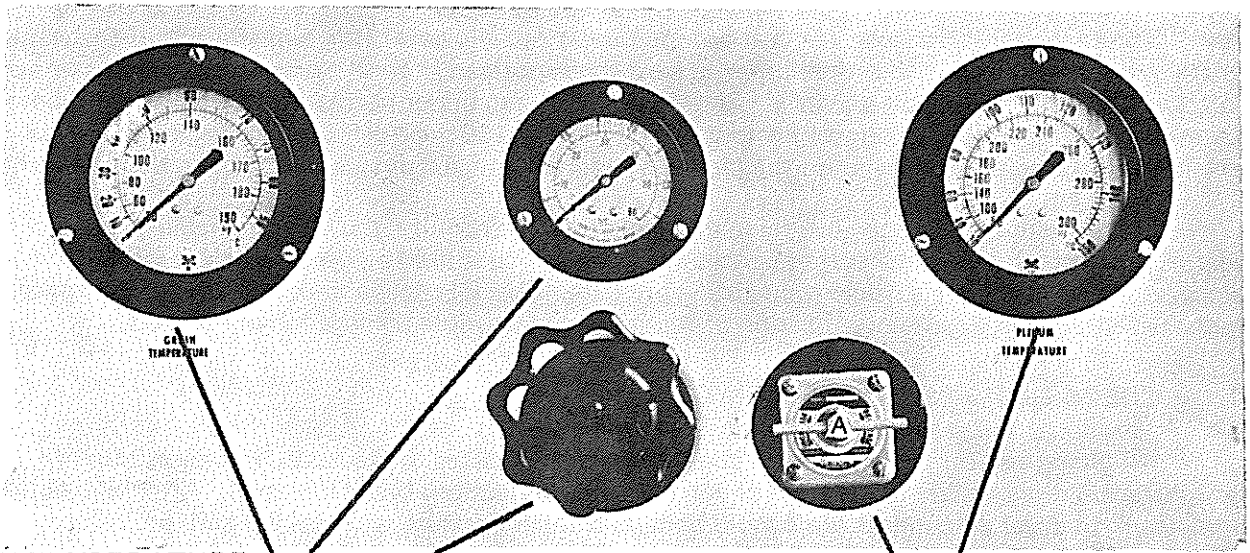
Fan should be at operating speed approximately 2200 RPM for Model 270 and 570, 2600 for Model 370.

Move circuit switch to "ON" position. Depress and hold start switch, and at same time slowly open hand valve (counter-clockwise) until burner lights. The pressure gauge will show approximately 3 psi. Slowly increase gas pressure until desired plenum temperature is obtained.

14. ADJUSTMENT OF FUEL – AIR MIXTURE

Your burner is factory set for correct air input for various pressures. Burner will not operate properly unless fan is at the approximate recommended operating speed.

15. ASSEMBLY OF CONTROLS



ADJUSTMENT AND USE OF MODULATING VALVES

For initial starting, the handle of the modulating valve (A) should be screwed all the way in before starting the burner. Start the loaded machine and bring plenum chamber heat up to 10 degrees above desired drying temperature and allow a few minutes for heat to stabilize. In extreme temperature changes, it may be necessary to go more than 10 degrees above the desired plenum temperature. Note the pressure required for this temperature as a reference for restarting the dryer. Turn the handle (A) very slowly counter-clockwise until pressure begins to drop. After pressure drops slightly allow plenum temperature to stabilize. Continue adjustment in this manner until desired plenum temperature is reached. Once the modulating valve is set, it is not necessary to change the setting unless a different plenum temperature is desired. When restarting the dryer use the pressure regulator only — starting at a low pressure and then turning the pressure up to the setting that was needed on the initial starting.

16. PLENUM TEMPERATURE RANGES FOR DRYING

Seed, all types	140° to 180° F	Soybeans	180° to 200° F
Corn	200° to 230° F	Barley	180° to 200° F
Milo	230° to 250° F	Oats	200° to 230° F
Wheat	150° to 180° F	Rice	140° to 160° F
Rape Seed	140° to 160° F	Flax	140° to 160° F
Sunflower Seed (oil type)	110° to 150° F	Edible Beans	10° to 15° above outside air temp.
Sunflower Seed (Bird seed type)	110° to 150° F		

ADJUSTING HIGH LIMIT CONTROL

The high limit control safeguards against excessive plenum temperatures. Recommended setting is 50° above the desired plenum drying temperature. If for some reason this control becomes out of calibration it can be recalibrated by loosening the two screws inside the adjustment knob and moving the dial plate.

17. ADJUSTING GRAIN TEMPERATURE CONTROLS

The grain temperature control is located inside control panel and serves to prevent over-heating of grain. If for some reason this control becomes out of calibration it can be recalibrated by loosening the two screws inside the adjustment knob and moving the dial plate. Check periodically. Refer to chart under maximum temperature of grain.

This control will serve as an indicator as to degree of dryness, but settings must be ascertained at user level. For recording temperatures used, a sheet is provided in back of this manual. Each batch should be tested to be sure the proper moisture level is reached.

GRAIN DRYING INFORMATION

MAXIMUM TEMPERATURE FOR GRAIN WHEN CROP IS USED AS CHART INDICATES

GRAIN	MALT OR SEED	COMMERCIAL USE	ANIMAL FEED
Shelled Corn	110° F	130° F	140° F
Wheat	105° F	120° F	140° F
Grain Sorghum	110° F	140° F	140° F
Barley	105° F	120° F	140° F
Oats	105° F	140° F	140° F
Rye	105° F	140° F	140° F
Soybeans	105° F	120° F	140° F
Rough Rice	110° F	110° F	110° F
Flax	110° F	120° F	
Rape Seed	110° F	120° F	
Edible Beans		Does not apply	
Sunflower Seed (oil type)		100° F	
Sunflower Seed (bird seed)		90° F	

18. WHEN TO TURN OFF BURNER

The burner can be extinguished either manually by the Off—On switch or automatically by the grain temperature control when the grain reaches the desired dryness. This can be determined by use of a moisture tester. Allow the fan to run until the grain cools to about 20^{o} above the outside temperature or 10^{o} above grain in storage. Grain will dry as much as 1% during the cooling period, depending on the relative humidity.

19. UNLOADING

After grain has cooled, swing the unloading spout to the unloading position.

20. DRYER NOT IN USE

When dryer is not in use, the hand valve under the control panel must be in "off" position. The supply line should be shut off at the tank also. If location is such as to permit traffic or livestock between dryer and supply tank, protection of supply line is a must.

21. GENERAL OPERATING MAINTENANCE

(1) Keep area clean of shucks, chaff and other combustible foreign material.

(2) Keep Fan Screen cleaned.

(3) Check Spark Plug for ignition periodically.

(4) All controls should be cycled and checked periodically.

(5) Screen in supply line strainer checked and cleaned periodically.

(6) Check all belts for tension.

(7) Lubricate bearings as outlined.

REMEMBER ! ! ! An ounce of prevention is worth a pound of cure.

PREPARING DRYER FOR STORAGE

(a) Open clean out door in bottom well, clean out all grain, leave door open.

(b) With masking tape or equivalent, seal holes in air switch tube, burner orifice and any other openings in fuel system.

(c) Remove belts, store in cool dry place.

(d) Brush protective coating of oil on agitator roller, chains, and belt surfaces of pulleys.

(e) Lubricate all bearings.

(f) Inspect for worn or damaged parts which should be replaced before being used again.

PREPARING DRYER FOR USE – OUT OF STORAGE

(a) Remove masking tape covering openings.

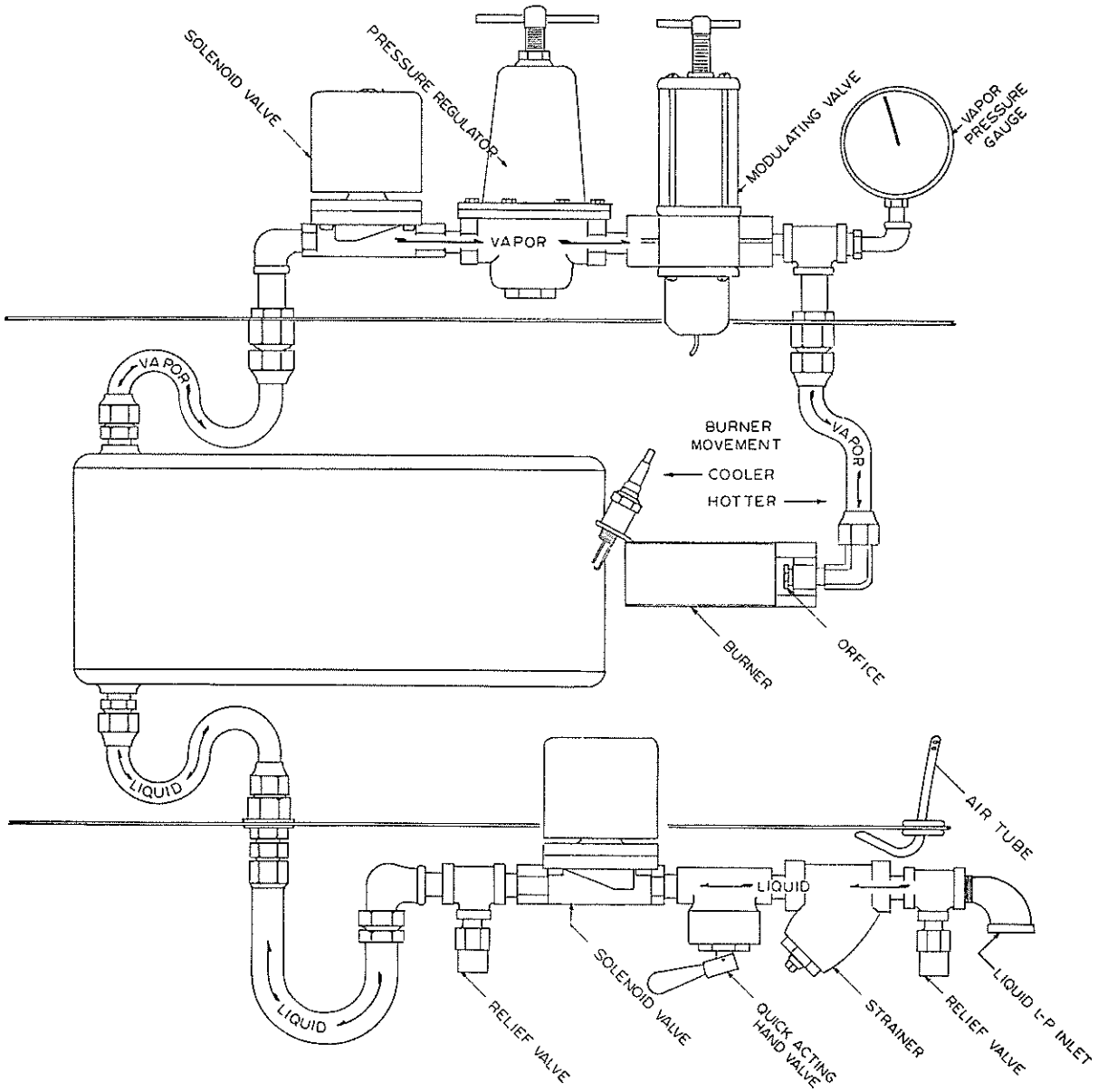
(b) Clean pulley surfaces, replace belts.

(c) Lubricate all bearings.

(d) Close clean out door just prior to using.

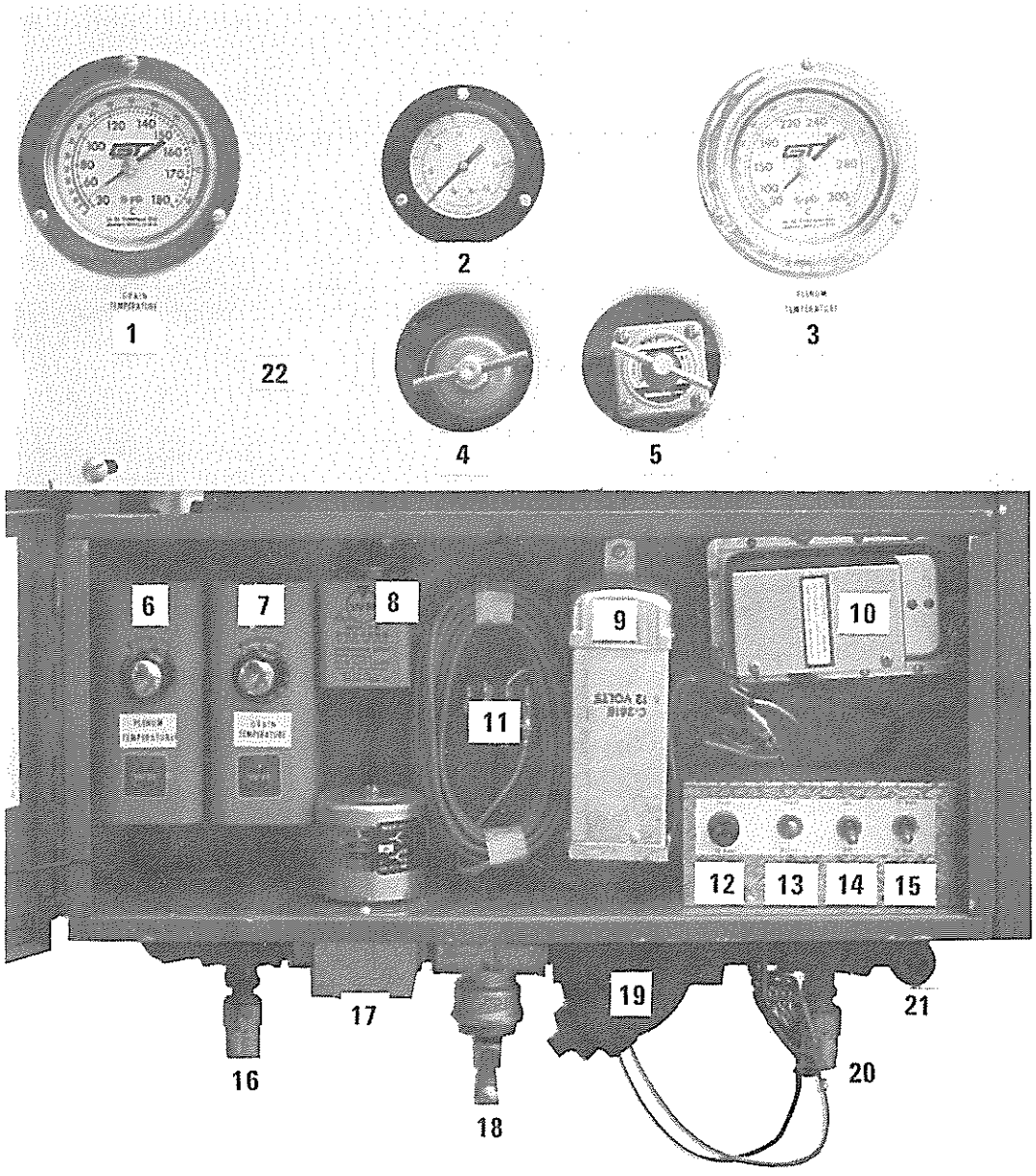
(e) Close plenum access door.

MAINTENANCE SERVICE AND TROUBLE SHOOTING FOR TOX–O–WIK GRAIN DRYERS



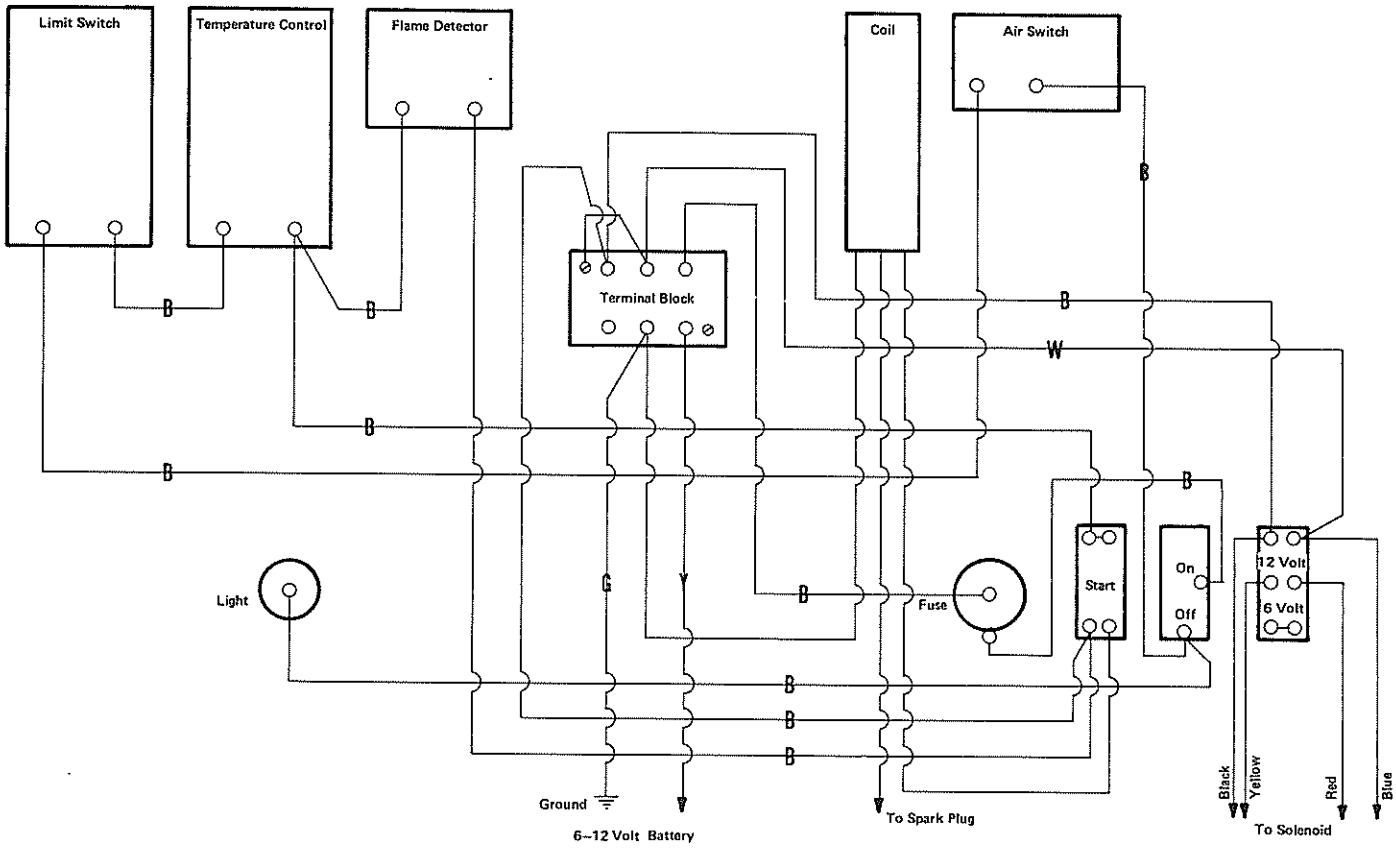
THIS PICTURE SHOWS ALL COMPONENTS OF THE CONTROL SYSTEM OF THE TOX-O-WIK DRYER. ALL PARTS ARE NUMBERED AND IDENTIFIED BY DESCRIPTION. THE FOLLOWING PAGES OF THIS MAINTENANCE AND SERVICE BULLETIN REFER TO THE INFORMATION CONTAINED HEREIN.

STUDY THIS INFORMATION. IT WILL GREATLY ASSIST YOU IN THE OPERATION OF YOUR DRYER.

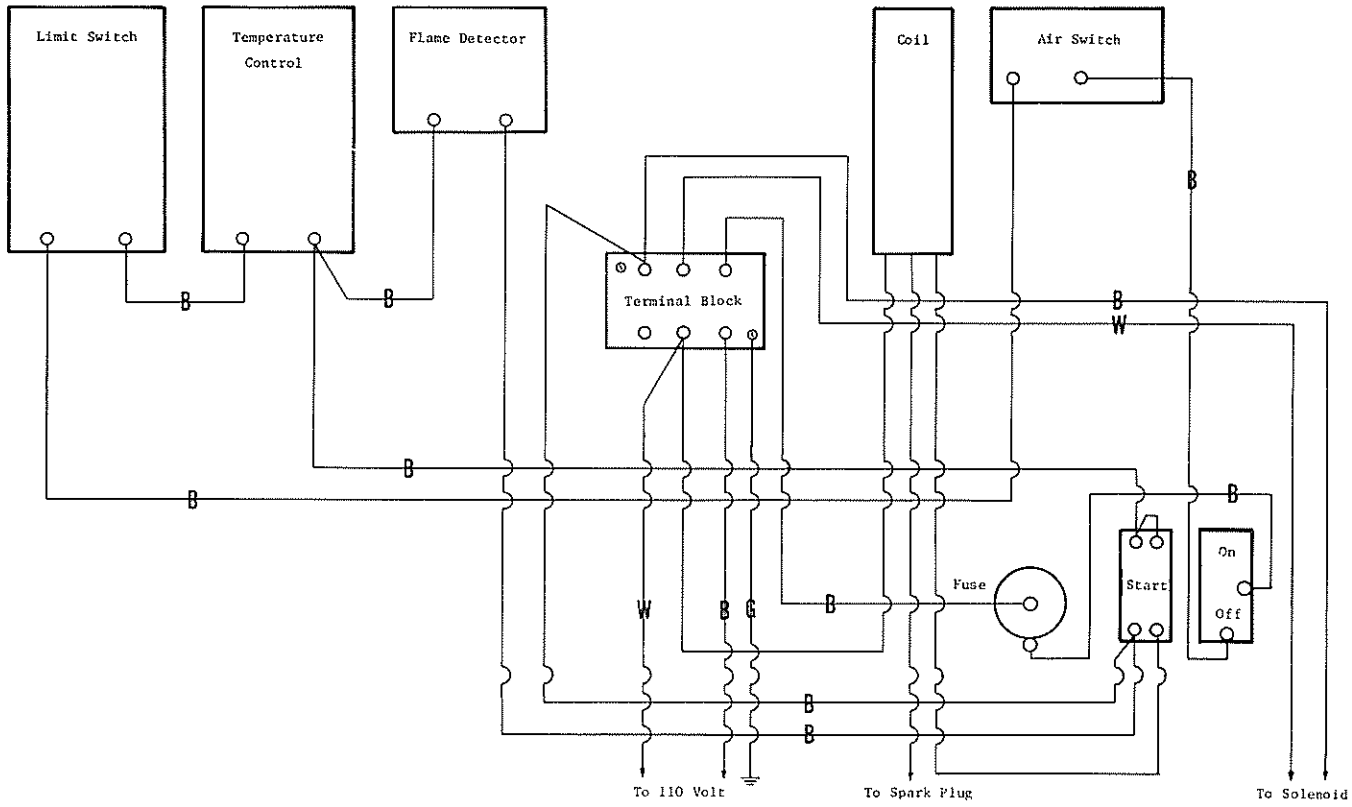


1. Thermometer — Grain Temp.
2. Pressure Gauge
3. Thermometer — Plenum Temp.
4. Pressure Regulator
5. Modulating Valve
6. Control, High Limit
7. Control, Grain Temperature
8. Flame Detector
9. Coil, Ignitor for burner
10. Air Switch
11. Terminal Block
12. Fuse
13. Starter Switch (Burner)
14. Power Switch (Control system)
15. 6 — 12 Volt Switch
16. Pressure Relief Valve (Liquid)
17. Solenoid Valve (Liquid)
18. Valve, L.P. Gas Manual Shut — Off
19. Strainer
20. Pressure Relief Valve (Liquid)
21. Inlet, L.P. Gas "Liquid" to System
22. Solenoid Valve (Vapor) (Located directly behind panel)

WIRING DIAGRAM 6 OR 12 VOLT



WIRING DIAGRAM 110 VOLT CONTROL PANEL



MAINTENANCE HINTS

Problem A. BURNER WILL NOT LIGHT

Probable Cause

1. Are both tank and dryer fuel valves open?
2. Is power supply properly connected? Switch must be set on proper voltage for tractor battery voltage. Check for power at terminal block. A test light should be used on 110 V. panels.
3. Check fuse.
4. Is grain temperature above control setting?
5. Is high limit control set 50° above plenum temperature?
6. Check both solenoids by using a sounding rod or by placing your hand over the solenoid to feel it open.

⚠ CAUTION: Caution should be exercised when checking 110 volt control panel.

7. Air switch and other controls may be checked by using a volt meter or test light. If air switch is not making contact remove and clean or replace air switch tube.
8. Check for plugged orifice.
9. Possible loose wire connection.
10. Check coil for spark.
11. Check spark plug and wire.
12. Check fuel filter.

Problem B. BURNER LIGHTS BUT PRESSURE WILL NOT EXCEED 5 TO 6 POUNDS AND/OR HAS EXCESSIVE FLUTTERING.

Probable Cause

1. Vapor solenoid valve malfunctioning.
   Solution:
   Disassemble solenoid valve body and remove diaphragm. If diaphragm is oily or dirty, wipe clean and replace. If diaphragm is ruptured replace with new diaphragm.
2. Pressure regulator malfunctioning.
3. Modulating valve malfunctioning.

Problem C. BURNER WON'T STAY LIT WHEN START BUTTON IS RELEASED.

Probable Cause

1. Sensing bulb of flame detector may not be properly adjusted (½" of tip red hot) in flame or may be, through extended use, swelled to the extent that the flame detector will not be activated.

Problem D. BURNER IGNITES BUT GOES OUT DURING OPERATION.

Probable Cause

1. High limit control set below plenum temperature.
2. Grain temperature exceeds control setting.
3. Electrical connections may be loose.
4. Excess flow valve at fuel tank may be closing.
5. Check for stoppage in air switch tube.

Problem E. UNCONTROLLABLE HEAT.

Probable Cause

1. Cracked Vaporizer.
2. Ruptured gas line.

Problem F. TRASH OR GRAIN FIRE

Probable Cause

1. Excessive plenum temperature.
2. Trash build-up in plenum.
3. Poor circulation due to agitator being out of operation or adjustment.
4. Ruptured gas line or vaporizer.
5. Improper burner and baffle adjustment.

   Solution:

   1. Shut off gas supply.
   2. Stop dryer and roll off fan belts.
   3. With fan belts removed start machine and continue to circulate or empty machine if necessary.

Problem G. GAS WILL NOT SHUT OFF

Probable Cause

1. Perforated Diaphragm in vapor solenoid valve.
2. Plunger upside down in vapor solenoid valve.
3. Lack of diaphragm in vapor solenoid valve.

Problem H. AGITATOR DRIVE CHAIN OFF

 DANGER Do Not open inspection door or enter machine when in operation.

Probable Cause

1. Roller stuck — seized bearing — may be flat on one side.
2. Too much horizontal play between agitator race and rollers.
3. Agitator drive sprocket out of line.
4. Too slack a chain.
5. Excess feeding of loading auger causing grain level to rise above agitator.

Problem I. AUGER STOPPAGE

Probable Cause

1. Slack belt.
2. Block of wood or rock lodged between auger flight and housing.
3. Extremely wet grain standing over night.
4. Bottom auger bearing frozen

Problem J. EXCESSIVE DRYING TIME

Probable Cause

1. Too low plenum temperature for conditions.
2. Poor circulation of grain
3. Incorrect fan speed.
4. Adverse weather conditions.

Problem K. POOR GRAIN CIRCULATION

Probable Cause

1. Fan Speed may be to fast.
2. Build up of foreign material, especially in bottom section of dryer.
3. Improper adjustment of flame deflector. Flame deflector should be centered in the flame and should be adjusted forward or backward to redistribute flame. Improper adjustment may cause heat to go to one spot and cause grain to stick.
4. Improper flame adjustment. Check that all incoming fuel is being vaporized. Burner must have sufficient fuel pressure and the proper sized orifice.

GRAIN SHRINK

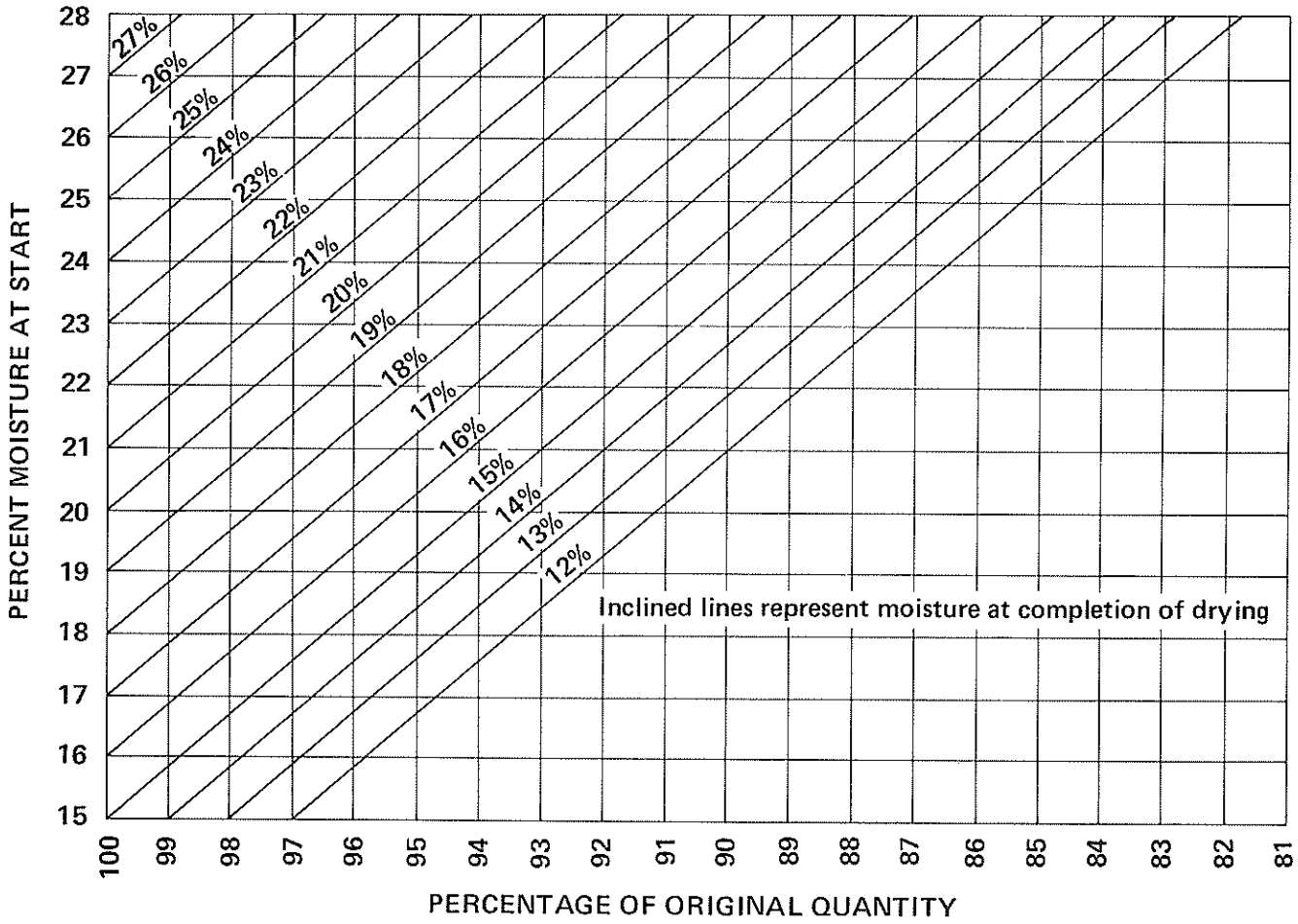
Grain "shrink" is the weight loss which occurs when grain is dried. The dry matter of grain does not change, consequently when a percentage of water is removed the "shrink" percentage is greater than the percentage of water removed. For example, if you dried a bushel of corn from 27% down to 15%, the corn loses 14.2% of its weight and the moisture content was dropped 12% (27%–15%). To find this weight loss from the chart below, follow the horizontal line (27% moisture at start) across until it intersects the 15% inclined line (moisture at completion of drying).

The final weight of any amount of grain can be figured from this formula:

$$\text{Original Weight} \times \frac{100 - \text{Moisture content of Wet Grain}}{100 - \text{Moisture content of Drying Grain}} = \text{Final Weight}$$

Example: 100 bushel of corn weighing 6200 pounds at 25% moisture content dried to 15%.

$$6200 \text{ pounds} \times \frac{100 - 25\%}{100 - 15\%} = 5471 \text{ pounds}$$



WHY CROP DRYING PAYS

SOME GRAINS ARE FULLY MATURED AT 35% MOISTURE ———then, quality begins to deteriorate. Corn drying reduces field losses up to 95%:

1½ % Loss @ 30% moisture — in field
4 % Loss @ 20% moisture — in field
15% Loss @ 15% moisture — in field

USDA SAYS UP TO 20% CAN BE LOST AFTER NOVEMBER 15TH.

HARVEST EARLY! AND DRY TO AVOID EXCESSIVE LOSSES!

FIELD SHELLING AND DRYING ON THE FARM:

1. Reduces Labor
2. Less Grain Handling
3. Grain Ready for Immediate Marketing or Storing in Less Space.
4. Earlier Harvesting
5. Less Field Loss
6. No Dockage For Moisture
7. Higher Grade Grain
8. Earlier Plowing After Harvest

HARVEST EARLIER AND HARVEST MORE —

because you beat: Rain, Wind, Hail, Insects and Rodents. Many crops are totally lost by waiting on Mother Nature to dry in field. Less labor, cribbing eliminated and shelling from crib eliminated.

SAVE 10% BASED ON 180 ACRES OF PLANTED CROPS

100 Acres Corn @ 100 bu. per Acre	10,000 bu.
40 Acres Oats @ 60 bu. per Acre	2,400 bu.
40 Acres Beans @ 30 bu. per Acre	1,200 bu.

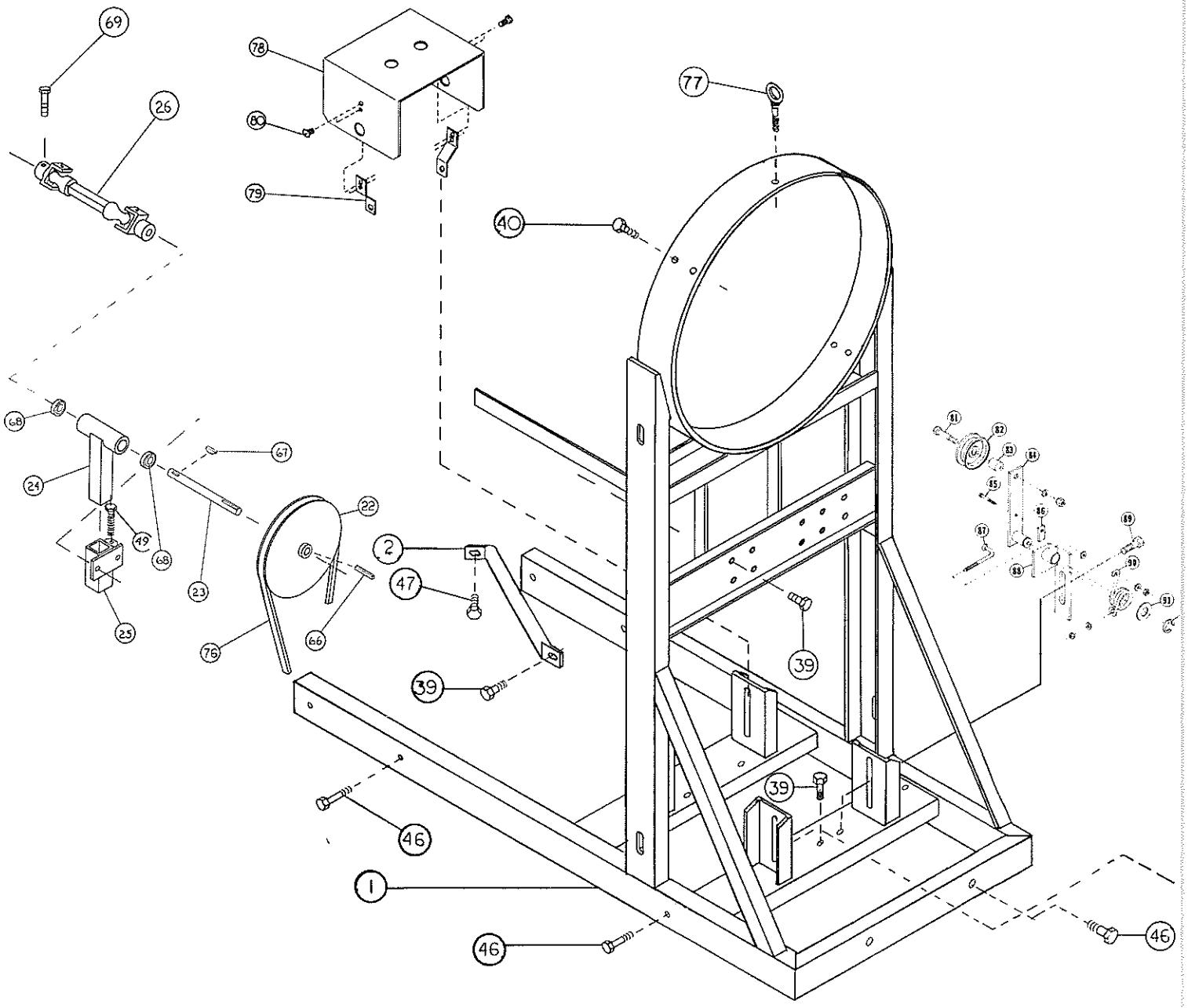
SAVE 10% FIELD LOSS:

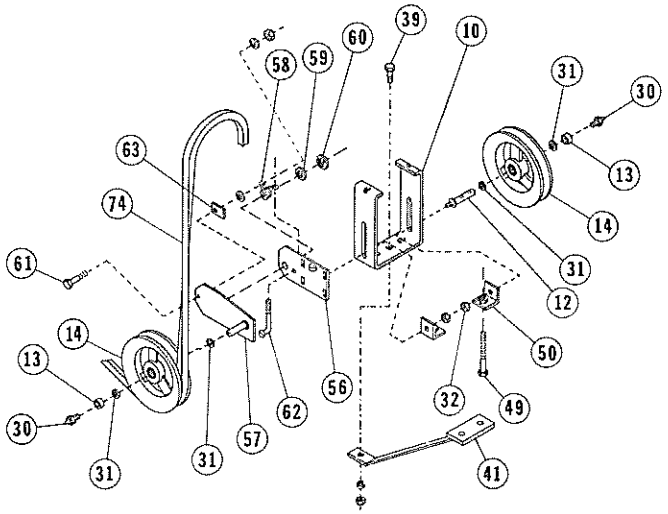
On 100 Acres Corn, 10% or 1,000 bu. @ 2.80	$ 2,800.00
On 40 Acres Oats, 10% or 240 bu. @ 1.68	403.20
On 40 Acres Beans, 10% or 120 bu. @ 5.00	600.00
You gain for 1 year	$ 3,803.20
Based on 360 Acres and ten years — 10% saved	$ 76,064.00

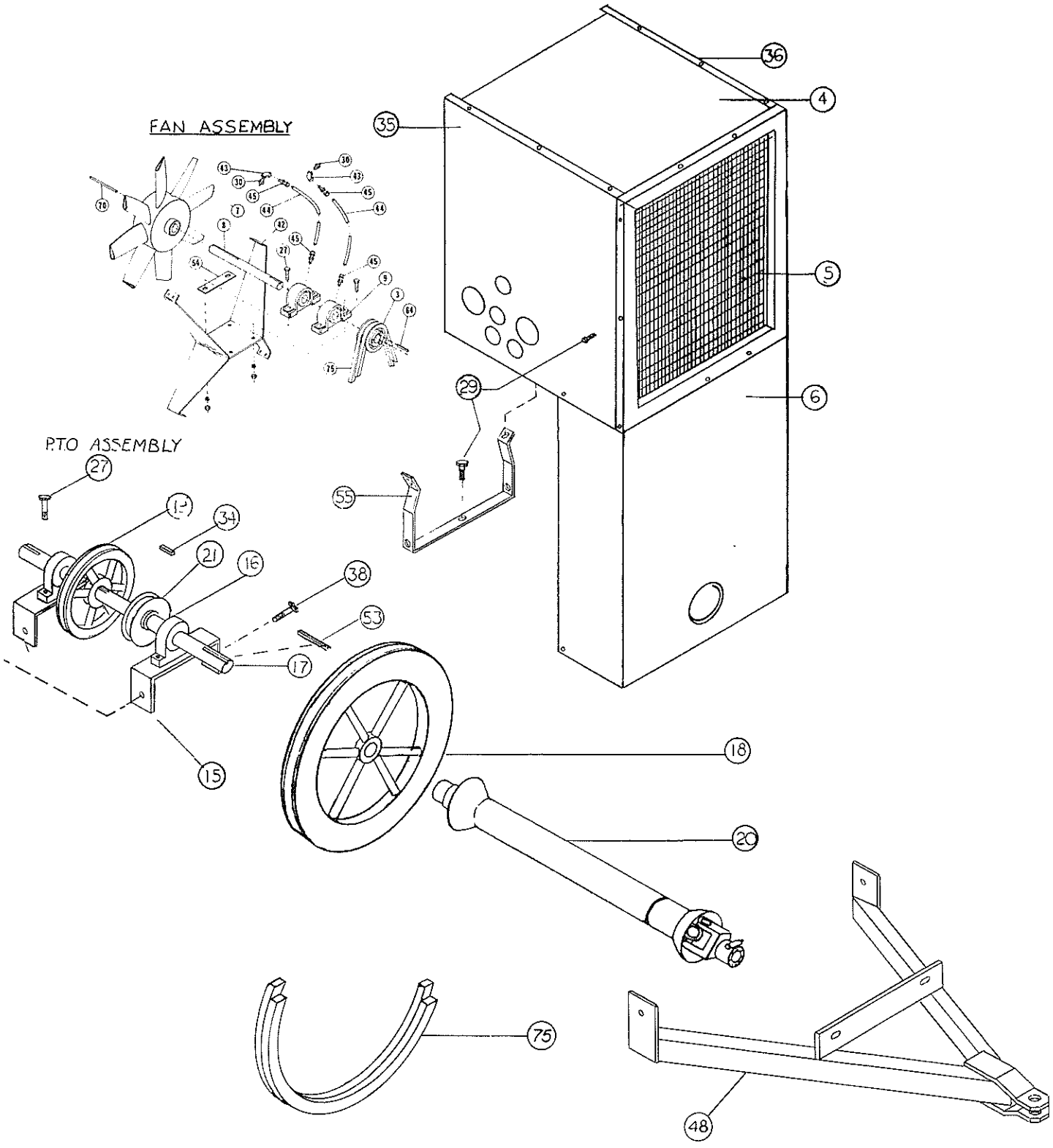
IT PAYS TO HARVEST EARLY AND DRY GRAIN —

once over and it's all over—out of the field up to 2 months earlier, ready for market up to 6 months earlier and plow earlier, early plowing is worth up to $20.00 per acre in some places.

POWER UNIT – MODEL 570






FAN ASSEMBLY
P.T.O ASSEMBLY
36
4
35
5
6
29
55
27
14
34
21
16
38
53
17
15
18
20
75
48

REF. NO.	PART NO.	NO.REQ'D	DESCRIPTION
1	D52014	1	Frame, Power
2	D52021	2	Brace
3	76006	1	Sheave, Fan Driven (2B 5.6)
	76008	1	Hub, Fan Driven Sheave
4	D52041	1	Guard, Top Fan
5	D52051	1	Grill, Fan Guard
6	D52061	1	Guard, Belt
7	D52070	1	Fan
8	D52080	1	Shaft, Fan
9	D52090	2	Bearing, Fan Shaft
10	D52101	1	Support, Idler
12	D22120	1	Shaft, Idler
13	D22130	2	Collar, Idler Shaft
14	D52140	2	Sheave, Idler w/Bearing (1C9)
	73257		Sheave, Idler (Only)
	D22110		Bearing, Idler Sheave (Only)
15	D22150	2	Mount, Bearing
16	D22090	2	Bearing, Power Shaft
17	D22160	1	Shaft, Power
18	D22170	1	Sheave, Fan Drive (2B 24)
19	D22180	1	Sheave, Auger Drive (1C9)
20	D52192	1	Tumbler, PTO Drive (See page 21 for parts)
21	D22780	1	Sheave, Agitator Drive (1B4)
22	D22790	1	Sheave, Agitator Driven (1B16)
23	D22850	1	Jackshaft, Agitator
24	D22861	1	Housing, Agitator Bearing w/o Bearings
24	D22866	1	Agitator Bearing Housing w/Bearings
25	D22871	1	Mount, Agitator Bearing Housing
26	D58250	1	Tumbler, Agitator Drive (see page 20 for parts)
27	71107	8	Cap Screw, ½" x 2¼"
29	71823	28	Machine Screw, ¼" – 20 x ½" Slotted Head
30	42-16127	4	Grease Fitting, 1/8 NPT
31	72591	4	Machine Bushing, 7/8"
32	72255	2	Nut, 5/8" Jam
34	73411	2	Key, 3/8" sq. x 1½" lg.
35	D52661	1	Guard, Right Fan
36	D52670	1	Guard, Left Fan
38	71129	3	Cap Screw, 5/8" x 1½"
39	71103	9	Cap Screw, ½" x 1¼"
40	71053	8	Cap Screw, 3/8" x 1¼"
41	D52631	1	Brace, Idler Support
42	D52690	1	Brace, Fan Shaft Support
43	72840	2	Elbow, 1/8 NPT x 90°
44	D52705	2	Grease Line, Fan Bearing (36")
45	73109	4	Compression Fitting, 3/16" Tube to 1/8 NPT
46	71111	8	Cap Screw, ½" x 3½"
47	71113	1	Cap Screw, ½" x 4½"
48	D52461	1	Hitch
49	71957	3	Cap Screw, ½" x 5" Full Thread
50	D22260	2	Tightener
53	73415	1	Key, 3/8" sq. x 4¼"
54	D22099	As Req'd	Spacer
55	D52740	1	Brace, Side Panel
	D22104	1	Assembly, Spring Loaded Idler Bracket (includes items 56-63 inclusive)

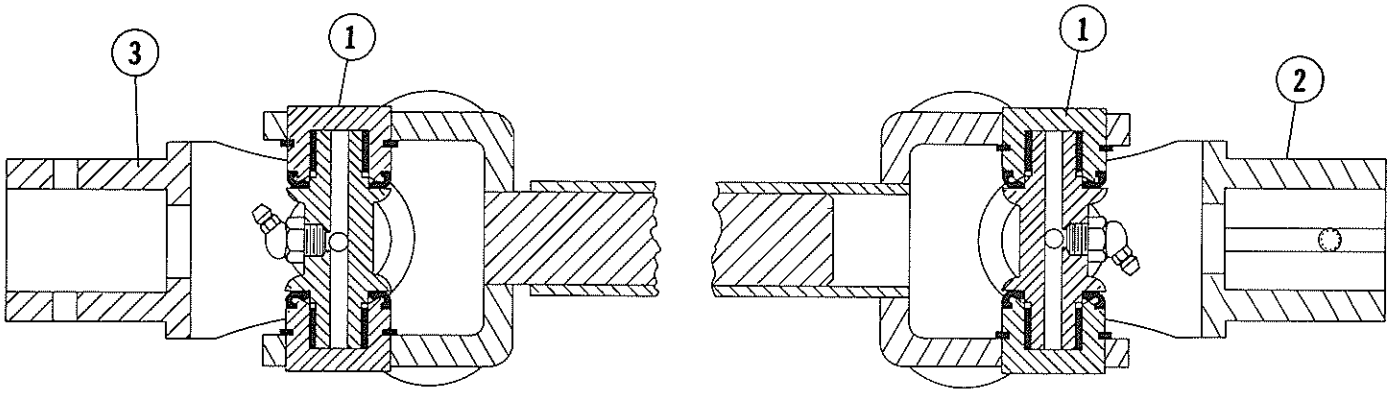
NOTE: For nuts, washers and lockwashers see page 47.

REF.NO.	PART NO.	NO.REQ'D	DESCRIPTION
56	D22801	1	Fixed Member, Spring Loaded Idler
57	D22811	1	Pivot Member, Spring Loaded Idler
58	73308	1	Spring
59	D22820	1	Washer
60	73231	1	Ring, Retaining
61	71028	1	Cap Screw, 5/16" x 1¼"
62	D22840	1	L–Bolt
63	D22830	1	Stop, Pivot
64	73410	1	Key, 5/16" x 3/8" x 1½"
66	73400	1	Key, ¼" sq. x 1¼"
67	42-18282	1	Key, 808 Woodruff
68	42-16334	2	Bearing, Agitator Jackshaft
69	73508	1	Cap Screw, 3/8" x 2½" H.T.
70	73420	1	Key, 3/8" sq. x 6-3/8"
74	D52620	1	Belt, Auger Drive (C255)
75	D52270	2	Belt, Fan Drive (B144)
76	42-16125	1	Belt, Agitator Drive (B85)
77	71941	1	Eyebolt, ½" x 1½"
78	D22651	1	Guard, Power Shaft
79	D22661	2	Bracket, Power Shaft Guard
80	71825	4	Machine Screw, ¼" – 20 x ¾" Slotted Head
	D52920	1	Assembly, Agitator Belt Tightener (includes items 81-92 inclusive)
81	71108	1	Capscrew, ½" x 2½"
82	42-16335	1	Pulley, Idler
83	D22927	1	Spacer, Idler
84	D22926	1	Arm, Idler
85	71029	1	Capscrew, 5/16" x 1½"
86	D22830	1	Stop, Pivot
87	D22840	1	L-Bolt
88	D52925	1	Mount, Idler
89	71130	1	Capscrew, 5/8" x 1¾"
90	73308	1	Spring
91	D22820	1	Washer
92	73231	1	Ring, Retainer

NOTE: For nuts, washers and lockwashers see page 47.

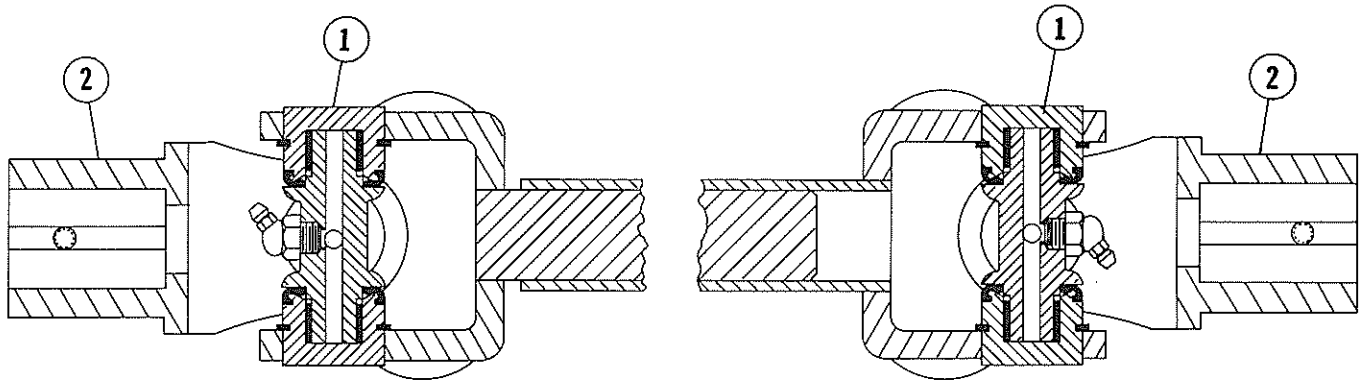
AGITATOR DRIVE TUMBLER
D58250

REF. NO.	PART NO.	NO. REQ'D	DESCRIPTION
1	42-16181	2	U-Joint Kit
2	42-16182	1	Yoke w/Keyway
3	73596	1	Yoke w/Pin Hole



LOADING AUGER TUMBLER
D59343

REF. NO.	PART NO.	NO.REQ'D	DESCRIPTION
1	42-16181	2	U-Joint Kit
2	42-16182	2	Yoke w/Keyway

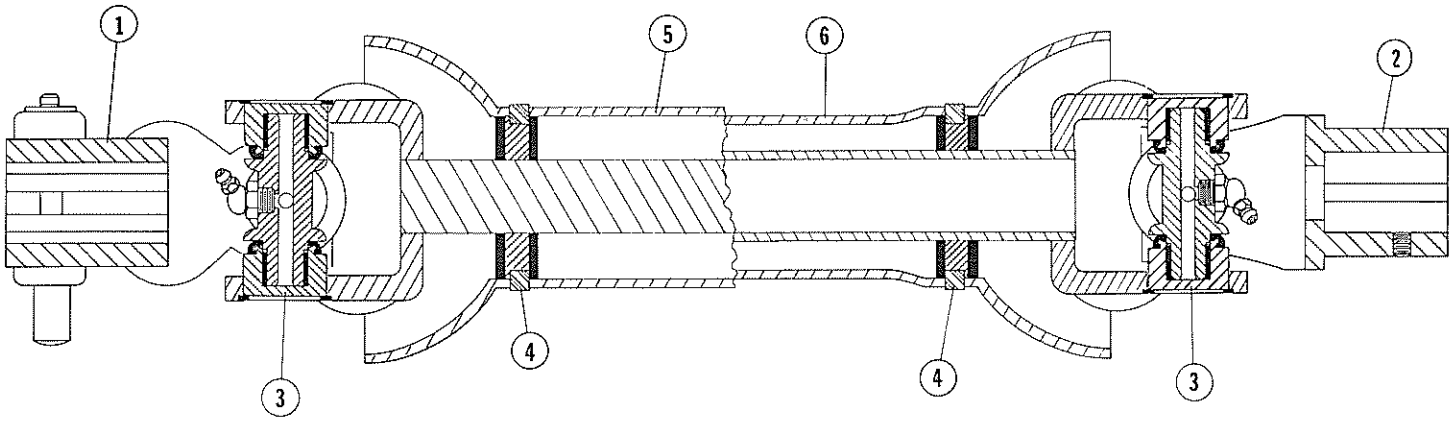


NOTE: For nuts, washers and lockwashers see page 47.

PTO DRIVE TUMBLER
D52192
REX TUMBLER

REF. NO.	PART NO.	NO. REQ'D	DESCRIPTION
1	73549	1	Yoke w/Spline
2	73550	1	Yoke w/Keyway
3	73548	2	U-Joint Kit
4	73547	2	Nylon Bearing
5	73554	1	Safety Shield, Outer
6	73555	1	Safety Shield, Inner
	D52195	1	Tractor ½ of Tumbler
	D52196	1	Implement ½ of Tumbler

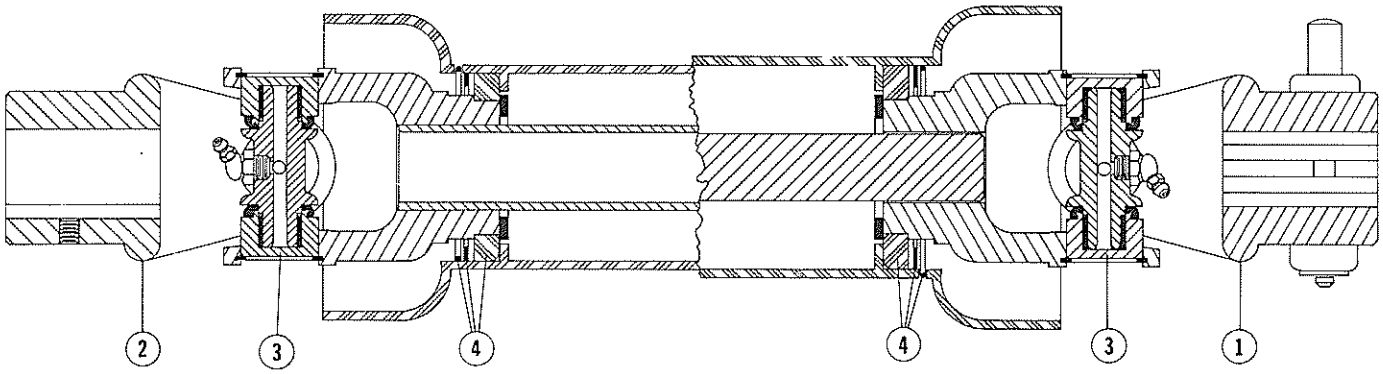
TUMBLER IDENTIFICATION — On Rex Tumbler, the shield on the tractor half of the tumbler goes on the outside.



PTO DRIVE TUMBLER
D52192
G & G TUMBLER

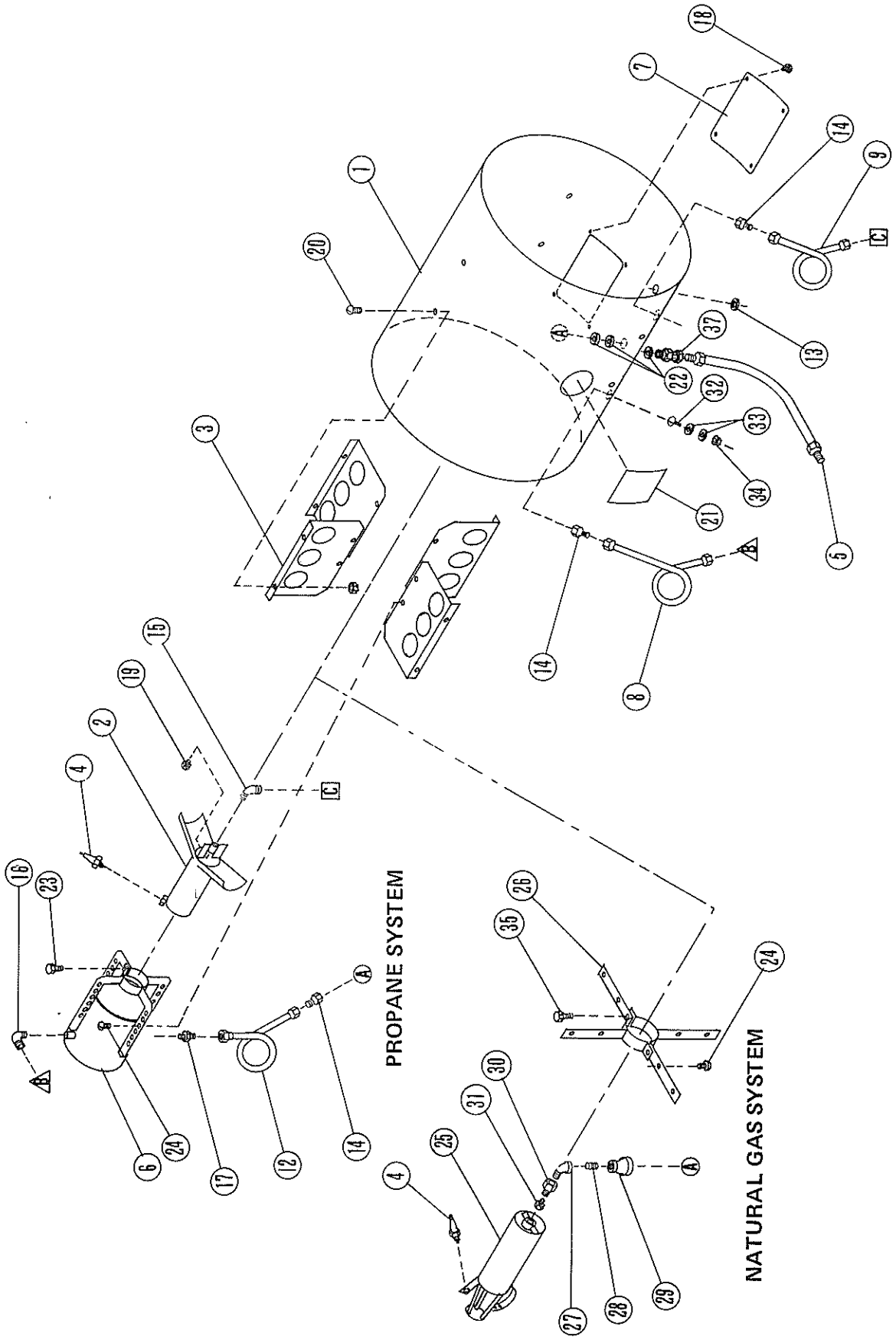
REF. NO.	PART NO.	NO. REQ'D	DESCRIPTION
1	73549	1	Yoke w/Spline
2	73550	1	Yoke w/Keyway
3	73548	2	U-Joint Kit
4	73573	2	Shield Bearing Kit
	73566	1	Tractor ½ of Tumbler
	73567	1	Implement ½ of Tumbler
	73575	1	Shield Set, Plastic

TUMBLER IDENTIFICATION — On G & G Tumbler, the plastic shield on the tractor half of the tumbler goes on the outside.



NOTE: For nuts, washers and lockwashers see page 47.

BURNER ASSEMBLY – MODEL 570



BURNER ASSEMBLY – MODEL 570

REF. NO.	PART NO.	NO. REQ'D	DESCRIPTION
1	D52292	1	Tube, Burner
2	D52300†	1	Burner, Propane
3	D52310	4	Fin
4	D22320	1	Plug, Spark
5	D22440†	1	Hose, Propane ½" x 30"
	D52440*	1	Hose, Nat. Gas 1" x 30"
6	D52340†	1	Vaporizer
7	D52351	1	Inspection Door
8	D52362†	1	Tube, Front Copper
9	D52372†	1	Tube, Rear Copper
12	D52452†	1	Tube, Bottom Copper
13	73271	1	Grommet, ¼" Rubber
14	73071†	3	Fitting, ½" to ½" Female Coupling Flare
15	73100†	1	Fitting, ½" to 3/8" Male Elbow Flare
16	73101†	1	Fitting, ½" to ½" Male Elbow Flare
17	73086†	1	Fitting ½" to ½" Half Union Flare
18	72095	4	Metal Screw, No. 10 x ½"
19	D52400†	1	Orifice, Propane
20	71825	8	Machine Screw, ¼" - 20 x ¾" Slotted Truss Head
21	D22462	1	Window
22	72552†	5	Bushing, 7/8" x 14 ga. Machinery
23	71001†	1	Capscrew, ¼" x ¾"
24	71823	8	Machine Screw, ¼" - 20 x ½" Slotted Truss Head
25	D52420*	1	Burner, Nat. Gas
26	D52430*	1	Bracket, Burner
27	72859*	1	Elbow, ¾" x 90° Street
28	72680*	1	Nipple ¾" Close
29	72904*	1	Reducer, ¾" x 1" Bell
30	74021*	1	Holder, Orifice ¾"
31	D52410*	1	Orifice, Nat. Gas
32	71823*	3	Machine Screw, ¼" - 20 x ½" Slotted Head
33	72520*	6	Washer, ¼" Fender
34	72382*	3	Nut, ¼" Whiz Lock
35	71002*	2	Capscrew, ¼" x 1"
	73278	1	Grommet, ½" Rubber
	A55030		Kit, Propane to Nat. Gas Conversion
	DA52040		Assembly, Propane Burner & Vaporizer
	DA52050		Assembly, Nat. Gas Burner
37	73171†	1	Connector, ½" Swivel
	73179*	1	Connector, 1" Swivel

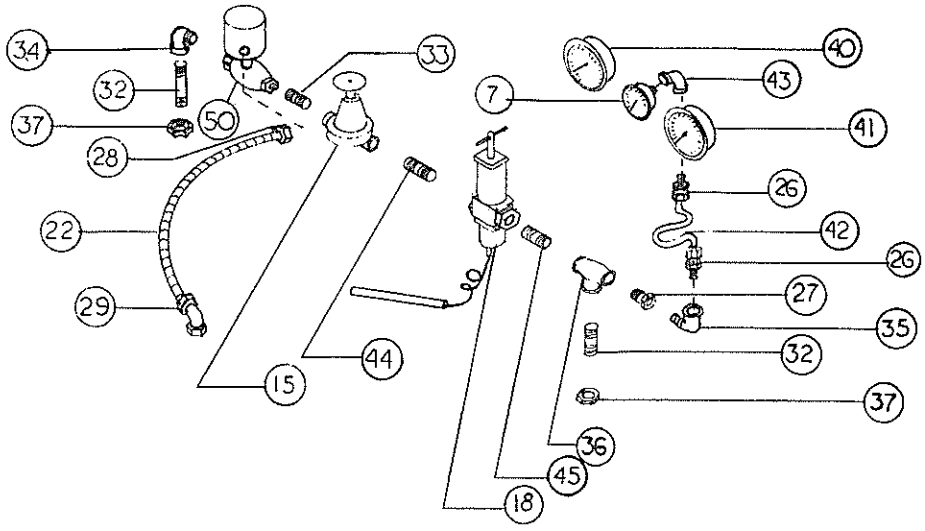
* Natural Gas Only

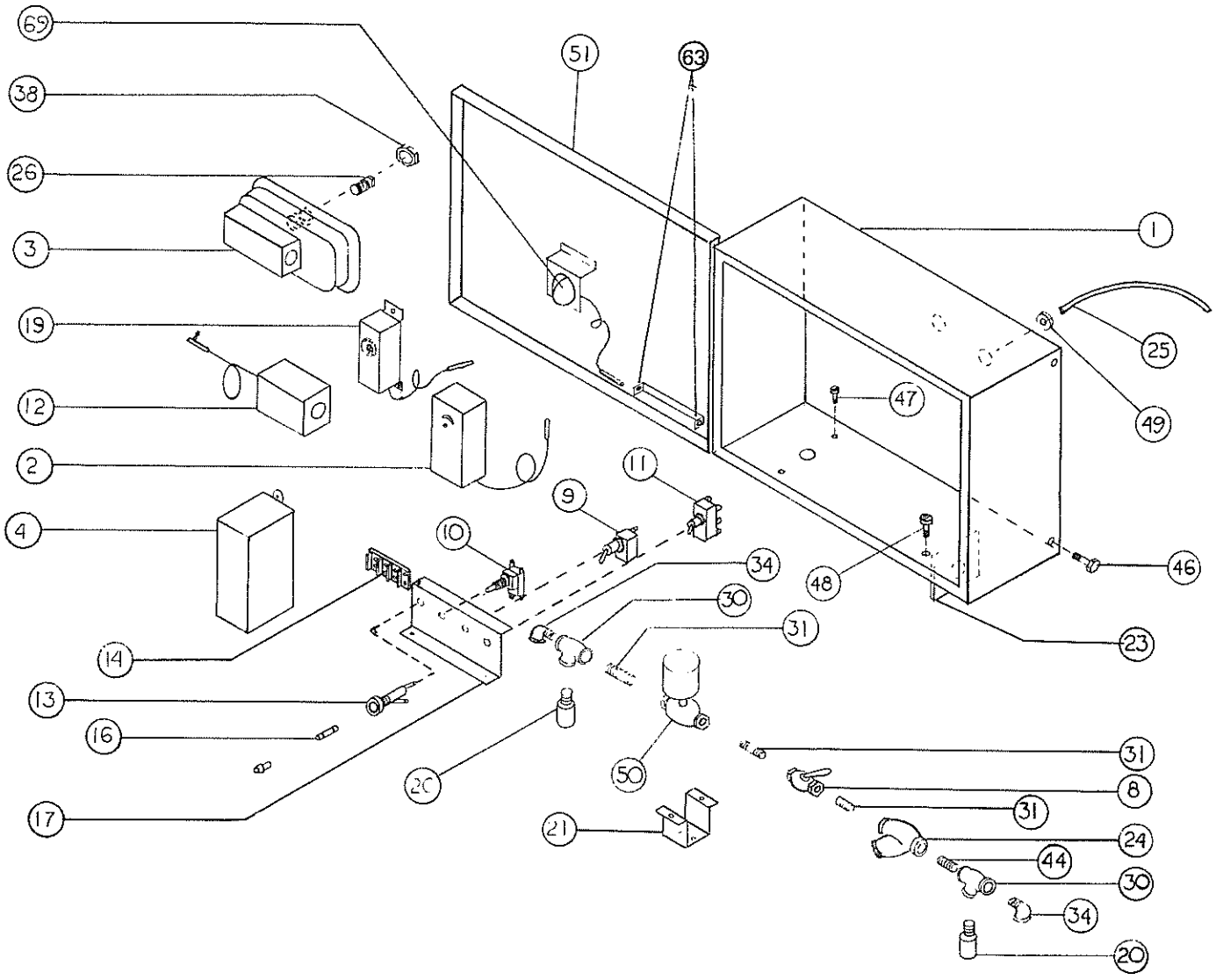
† Propane Only

NOTE: For nuts, washers and lockwashers see page 47.

NATURAL GAS FIRED DRYERS ARE NOT CSA APPROVED.

PROPANE CONTROL CABINET ASSEMBLY – MODEL 570



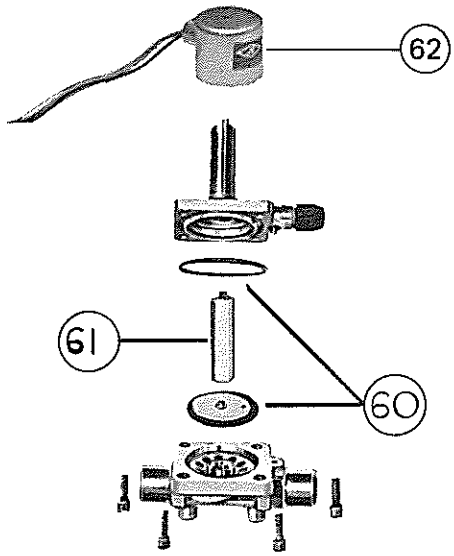


PROPANE CONTROL CABINET ASSEMBLY – MODEL 570

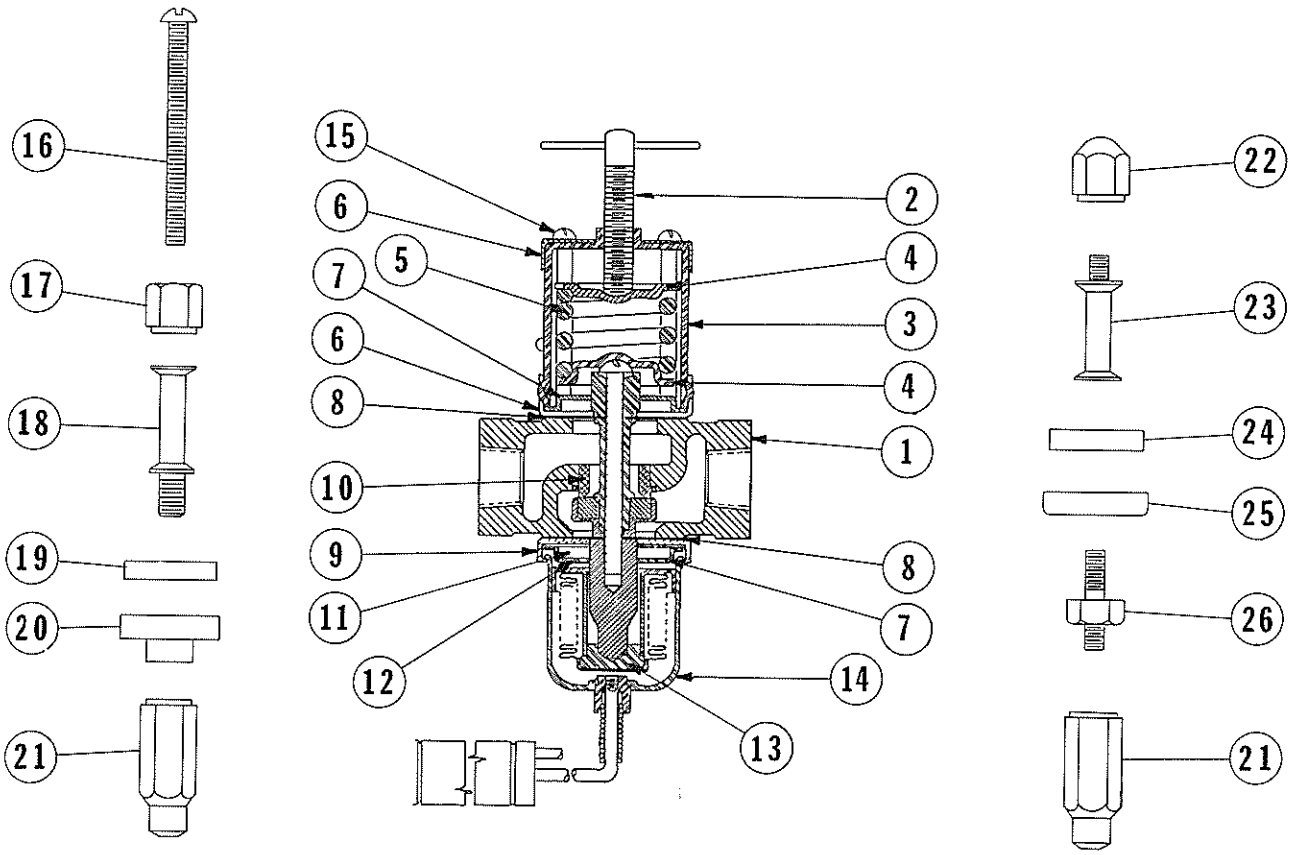
REF. NO.	PART NO.	NO. REQ'D	DESCRIPTION
1	D25501	1	Cabinet
2	D25020	1	Thermostat, Grain Temperature
3	K25030	1	Switch, Air
4	K55055	1	Coil, 6/12 Volt Ignition
4	K55050	1	Coil, 115 Volt Ignition
7	D25102	1	Guage, Pressure
8	D55120	1	Valve, ½" Quick Acting
9	D25130	1	Switch, On-Off
10	D25140	1	Switch, Start
11	D25150	1	Switch 6/12 Volt
12	D25160	1	Pilot, Automatic
13	D25170	1	Assembly, Fuse Holder
14	D25180	1	Block, Terminal
15	D25191	1	Regulator, ½" Pressure
	74072	1	Stem Seat Disc and Retainer Assy.
	74071	1	Diaphragm Yoke Assy.
	74070	1	Adjusting Screw
16	D25200	1	Fuse
17	D25210	1	Bracket, Switch
18	D25220	1	Valve, ½" Modulating
19	D25230	1	Switch, Plenum High Limit
20	D25240	2	Valve, Relief
21	D55250	1	Bracket, Solenoid
22	D55260	1	Conduit
23	D55270	1	Bracket, Pipe
24	D55280	1	Strainer
25	D52320	1	Tube, Air
26	73110	3	Fitting, ¼" to ¼" Compression Connector
27	72894	1	Bushing, ½" to ¼" reducing
28	73157	1	Connector, Liquid Tight Straight
29	73159	1	Connector, Liquid Tight 90°
30	72885	2	Tee, ½" x ½" x ¼"
31	72790	3	Nipple, ½" Close XH
32	72796	2	Nipple, ½" x 4" XH
33	72791	1	Nipple, ½" x 1½" XH
34	72858	3	Elbow, ½" x 90° Street
35	72856	1	Elbow, ¼" x 90° Street
36	72886	1	Tee, ½" x ½" x ½"
37	72675	2	Nut, ½" Pipe Lock
38	72279	1	Nut, 1" N.F. Hex Jam
40	D24122	1	Thermometer, Grain Temperature
41	D24032	1	Thermometer, Plenum Temperature
42	D55310	1	Line, Pressure Gauge
43	72841	1	Elbow, ¼" x 90°
44	72792	2	Nipple, ½" x 2" XH
45	72794	1	Nipple, ½" x 3" XH
46	71001	2	Capscrew, ¼" x ¾"
47	71682	6	Machine Screw, 10-24 x 3/8" Slotted Round Head
48	71683	1	Machine Screw, 10-24 x ½" Slotted Round Head
49	73278	1	Grommet, Rubber
50	73210	2	Body (only) ½" Solenoid Valve
51	D25510	1	Door (only), Cabinet
69	73223	1	Light, Utility
	73256	4	3-Way Electrical Connector
	D22200	1	Lead Wire, 6–12 Volt (to tractor)
	D22205	1	Lead Wire, 115 Volt
	73600	2	Clamp, Battery

NOTE: For nuts, washers and lockwashers see page 47.

SOLENOID VALVE – MODEL 570



MODULATING VALVE – MODEL 570



SOLENOID VALVE – MODEL 570

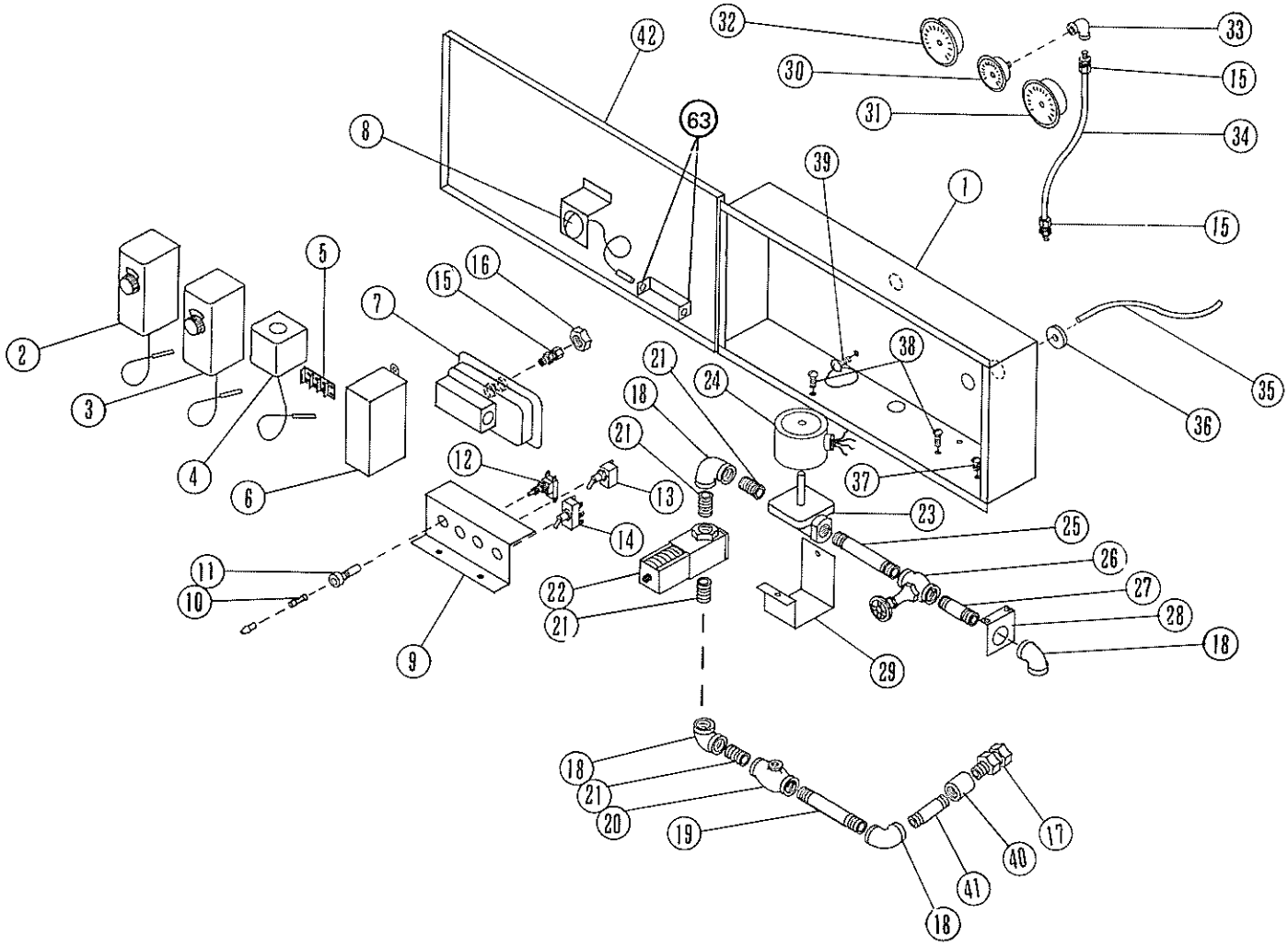
REF. NO.	PART NO.	NO. REQ'D	DESCRIPTION
60	73202		Kit, ½" Solenoid Valve Diaphragm Repair
61	73208		Plunger, Solenoid Valve
62	D55490		Coil, 6/12 Volt Solenoid Valve, 30" leads w/Bullets
62	D55495		Coil, 115 Volt Solenoid Valve, 30" Leads w/Bullets

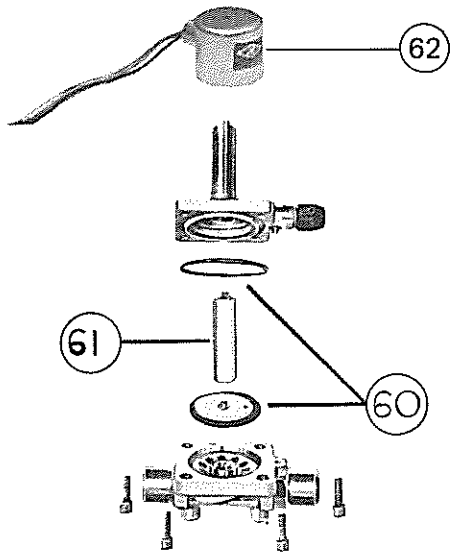
MODULATING VALVE – MODEL 570

REF. NO.	PART NO.	NO.REQ'D	DESCRIPTION
1	74035	1	Valve Body
2	74010	1	Adjusting Screw
3	74011	1	Spring Housing
4	74015	2	Spring Guide
5	74016	1	Range Spring
6	74032	2	Upper Diaphram Press Plate
7	74034	2	Diaphram Guide Plate
8	74024	4	Diaphram, Rubber
9	74014	1	Lower Diaphram Press Plate
10	74029	1	Valve Seat
13	74012	1	Bellows Reinforcing Plate
14	74008	1	Temperature Element
15	74033	4	Spring Housing Screw
21	74013	1	Bellows Push Rod
27	74036	1	Diaphram & Stem Repair Kit (Kit includes ref. no's. 8, 10, 11, 12, 22,23,24,25 & 26)

NOTE: For nuts, washers and lockwashers see page 47.

NATURAL GAS CONTROL PANEL ASSEMBLY – MODEL 570





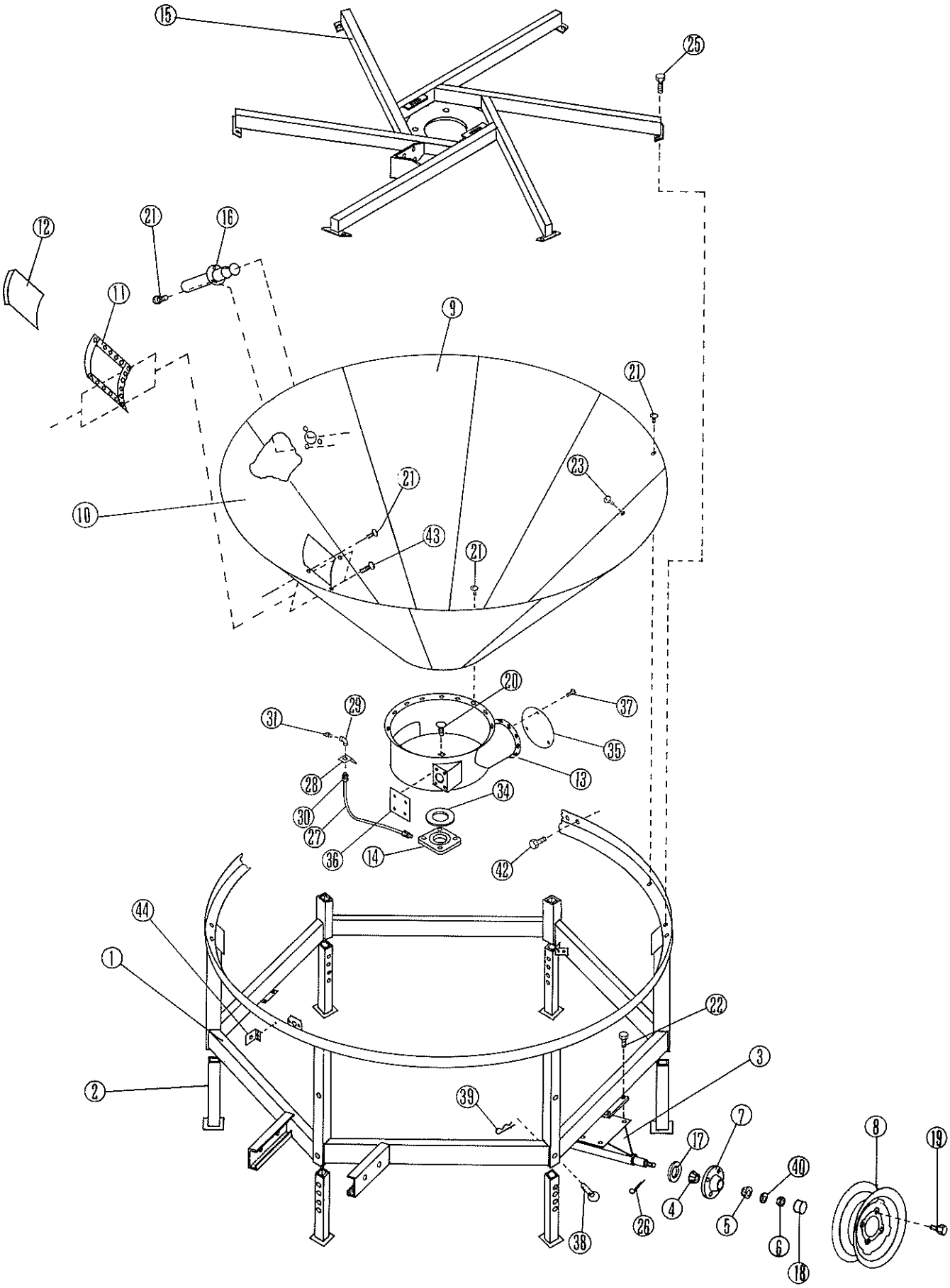
NATURAL GAS CONTROL PANEL ASSEMBLY – MODEL 570

REF. NO.	PART NO.	NO. REQ'D	DESCRIPTION
1	D25501	1	Cabinet
2	D25230	1	Switch, Plenum High Limit
3	D25020	1	Thermostat, Grain Temperature
4	D25160	1	Pilot, Automatic
5	D25180	1	Block, Terminal
6	K55055	1	Coil, 6/12 Volt Ignition
6	K55050	1	Coil, 115 Volt
7	K25030	1	Switch, Air
8	73223	1	Light, Utility
9	D25210	1	Bracket, Switch
10	D25200	1	Fuse
11	D25170	1	Assembly, Fuse Holder
12	D25140	1	Switch, Start
13	D25130	1	Switch, On–Off
14	D25150	1	Switch, 6/12 Volt
15	73110	3	Fitting, ¼" x ¼" Compression Connector
16	72279	1	Nut, 1" N.F. Hex Jam
17	73179	1	Swivel, 1"
18	72845	4	Elbow, 1" x 90°
19	72712	1	Nipple, 1" x 7"
20	72973	1	Tee, 1" x 1" x ¼"
21	72700	4	Nipple, 1" Close
22	D55320	1	Valve, 1" Modulating
23	73199	1	Body, (only) 1" Solenoid Valve
24	D55490	1	Coil, Solenoid Valve 6/12 Volt w/30" Leads, Bullet Terminals
24	D55495	1	Coil, Solenoid Valve 115 Volt w/30" Leads, Bullet Terminals
25	72707	1	Nipple, 1" x 4½"
26	73185	11	Valve, 1" Gate
27	72703	1	Nipple, 1" x 2½"
28	D55460	1	Bracket, Pipe
29	D55450	1	Bracket, Solenoid
30	D25102	1	Gauge, Pressure
31	D24032	1	Thermometer, Plenum Temperature
32	D24122	1	Thermometer, Grain Temperature
33	72841	1	Elbow, ¼" x 90°
34	D55315	1	Tube, Pressure Gauge
35	D52320	1	Tube, Air
36	73278	1	Grommet, Rubber
37	71682	1	Machine Screw, 10–24 x 3/8" Slotted Round Head
38	71683	3	Machine Screw, 10–24 x ½" Slotted Round Head
39	71823	1	Machine Screw ¼" - 20 x ½" Slotted Truss Head
40	72717	1	Coupling, 1" Pipe
41	72710	1	Nipple, 1" x 6"
42	D25510	1	Door (only), cabinet
60	73204	1	Kit, 1" Solenoid Diaphragm Repair
61	73208	1	Plunger, Solenoid Valve
62	D55490	1	Coil, Solenoid Valve 6/12 Volt w/30" Leads, Bullet terminals
62	D55495	1	Coil, Solenoid Valve 115 Volt w/30" Leads, Bullet terminals
63	73271	2	Grommet, Rubber
	D22200		Lead Wire 6/12 (to tractor)
	D22205	1	Lead Wire 115 Volt
	A55030	1	Kit, Propane to Natural Gas Conversion
	73600	2	Clamp, Battery

NATURAL GAS FIRED DRYERS ARE NOT CSA APPROVED.

NOTE: For nuts, washers and lockwashers see page 47.

FRAME ASSEMBLY – MODEL 570

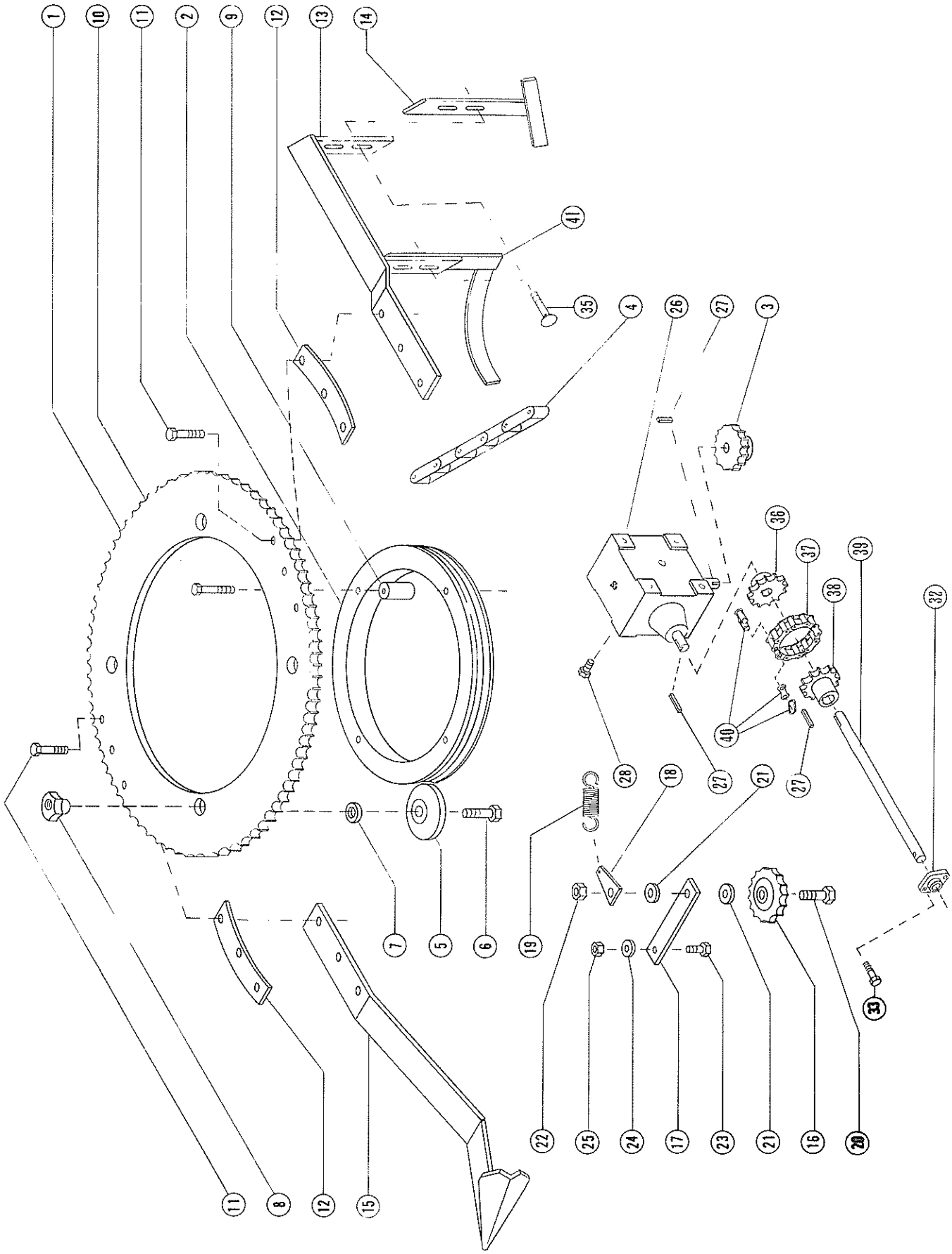


FRAME ASSEMBLY – MODEL 570

REF. NO.	PART NO.	NO. REQ'D	DESCRIPTION
1	D51013	1	Main Welded Frame Less Hitch
2	D21021	6	Jack
	D21022	6	Adjustable Jack (Optional)
3	D51032	2	Axle Assembly
4	42-110149	4	Inner Bearing
5	D21050	4	Outer Bearing
6	D21060	4	Nut
7	D21075	4	Hub With Bearing Cups
8	D21080	4	Wheel Rim 15"
	D21085	4	Tire, Tube & Rim (Mounted)
9	D51101	9	Bin Bottom Sheet
	D53311	9	Bin Bottom Sheet Fine Perforated
10	D51111	1	Bin Bottom Sheet w/Access Hole
	D53321	1	Bin Bottom Sheet w/Access Hole Fine Perforated
11	D21122	1	Access Door Frame
12	D21132	1	Access Door
13	D51142	1	Bin Bottom Well w/Boot
14	D21161	1	Bottom Auger Bearing
15	D51172	1	Spider
16	D21181	1	Grain Sampler
17	D21190	4	Seal
18	D21200	4	Cap
19	42-16053	16	Lug Bolt
20	71329	4	Carriage Bolt ½" x 1½"
21	71823	129	¼" - 20 x ½" Slotted Hd Machine Screw
22	71103	8	½" x 1¼" Capscrew
23	71822	150	¼" - 20 x 3/8" Slotted Hd Machine Screw
25	71053	20	3/8" x 1¼" Capscrew
26	73527	4	5/32" x 1¼" Cotter Pin
27	D51190	1	Lower Auger Bearing Grease Line
28	D21220	1	Grease Line Bracket
29	72840	1	1/8" x 90° Elbow
30	73109	2	1/8" Compression Fittings
31	42-16127	1	1/8" Grease Zerk
34	73276	1	Neoprene Seal
35	42-28102	1	Rear Boot Cover
36	D21260	1	Front Boot Cover
37	71027	3	5/16" x 1" Capscrew
38	73586	6	Pin
39	73587	6	Clip
40	72474	4	¾" Washer
42	71054	2	3/8" x 1½" Capscrew
43	71825	2	¼" - 20 x ¾" Slotted Head Machine Screw
44	D22491	1	Bracket, Conduit

NOTE: For nuts, washers and lockwashers see page 47.

AGITATOR ASSEMBLY – MODEL 570



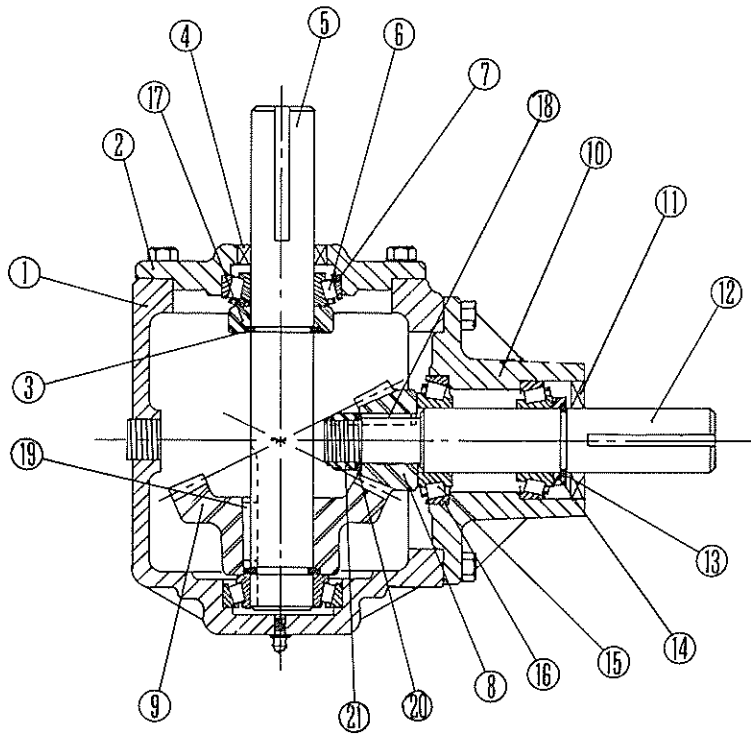
AGITATOR ASSEMBLY – MODEL 570

REF. NO.	PART NO.	NO.REQ'D	DESCRIPTION
1	D28032	1	Sprocket, No. 60, 112 Teeth
2	D28260	1	Race, Agitator
3	42-68011	1	Sprocket, No. 60, 13 Teeth
4	D28141	1	Chain, No. 60 Roller 128 Pitches
5	D28161	4	Roller, Agitator w/Bearings
	D28300	8	Bearing (only) – Agitator Roller
6	73521	4	Capscrew, ¾" x 2¾" HT
7	72522	4	Washer
8	D28204	4	Nut, Cam
9	D28270	4	Spacer
10	73519	4	Capscrew, 7/16" x 5" HT
11	73504	6	Capscrew, 7/16" x 2½" HT
12	D28081	2	Spacer, Agitator Arm
13	D58211	1	Arm, Horiz. Sect. Vertical Agitator
14	D58221	1	Paddle, Opt. Vertical Agitator (Outer)
15	D58063	1	Arm, Horizontal Agitator
16	D28172	1	Sprocket, No. 60 Idler 15 Teeth
17	D28181	1	Arm, Idler
18	D28280	1	Tab, Spring
19	D28190	1	Spring
20	71132	1	Capscrew, 5/8" x 2¼"
21	72413	2	Washer, 5/8"
22	72376	1	Nut, 5/8" Lock
23	71103	1	Capscrew, ½" x 1¼"
24	72412	1	Washer, ½"
25	72379	1	Nut, ½" Lock
26	D58240	1	Gearbox
27	73400	3	Key, ¼" Square x 1¼" Lg.
28	71103	4	Capscrew, ½" x 1¼"
32	D28290	1	Bearing w/Collar
33	71029	2	Capscrew, 5/16" x 1½"
35	71331	4	Bolt, ½" x 2" Carriage
	D58131	1	Coupler, Chain (Complete)
36	D58332	1	Coupler Half, 60B 12 x 1¼"
37	D58331	1	Chain, No. 60 Roller 11 Pitch
38	D58330	1	Coupler Half, 60 B 12 x 1
39	D58123	1	Shaft, Agitator
40	73368	1	Link, No. 60 Roller Chain Connecting
41	D58230	1	Paddle, STD Vertical Agitator Arm (Inner)

NOTE: For nuts, washers and lockwashers see page 47.

GEARBOX ASSEMBLY – MODEL 570

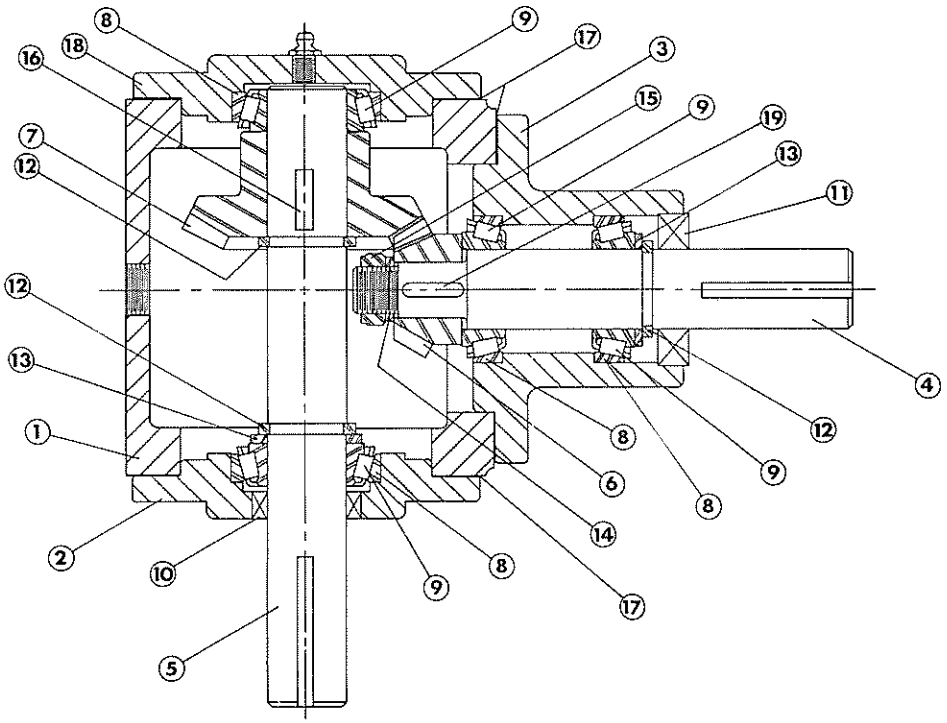
Identification No. 909507 is located on a metal tag under cap bolt.



Parts Reference for "A Model 413RS with 2:1 ratio"

REF. NO.	PART NO.	DESCRIPTION
1	77420	Housing
2	42-68185	Cap
3	42-110151	Retaining Ring
4	42-68186	Seal
5	77421	Shaft
6	42-110149	Bearing Cone
7	42-110150	Bearing Cup
	42-110152	Sems Cap Screw
8	77422	Gear
9	77423	Gear
10	42-68188	Cap
11	42-68189	Seal
12	77425	Shaft
13	42-68190	Retaining Ring
14	42-68191	Collar
15	42-68192	Bearing Cone
16	42-68193	Bearing Cup
	42-110155	Gasket (.015)
	42-110156	Gasket (.005)
17	42-110161	Collar
18	77424	Key
19	42-110154	Key
	72924	Relief Valve
	42-110163	Shim (.002)
	42-110164	Shim (.005)
	42-110165	Shim (.010)
	42-110162	Red.
20	77426	Washer
21	77410	Locknut

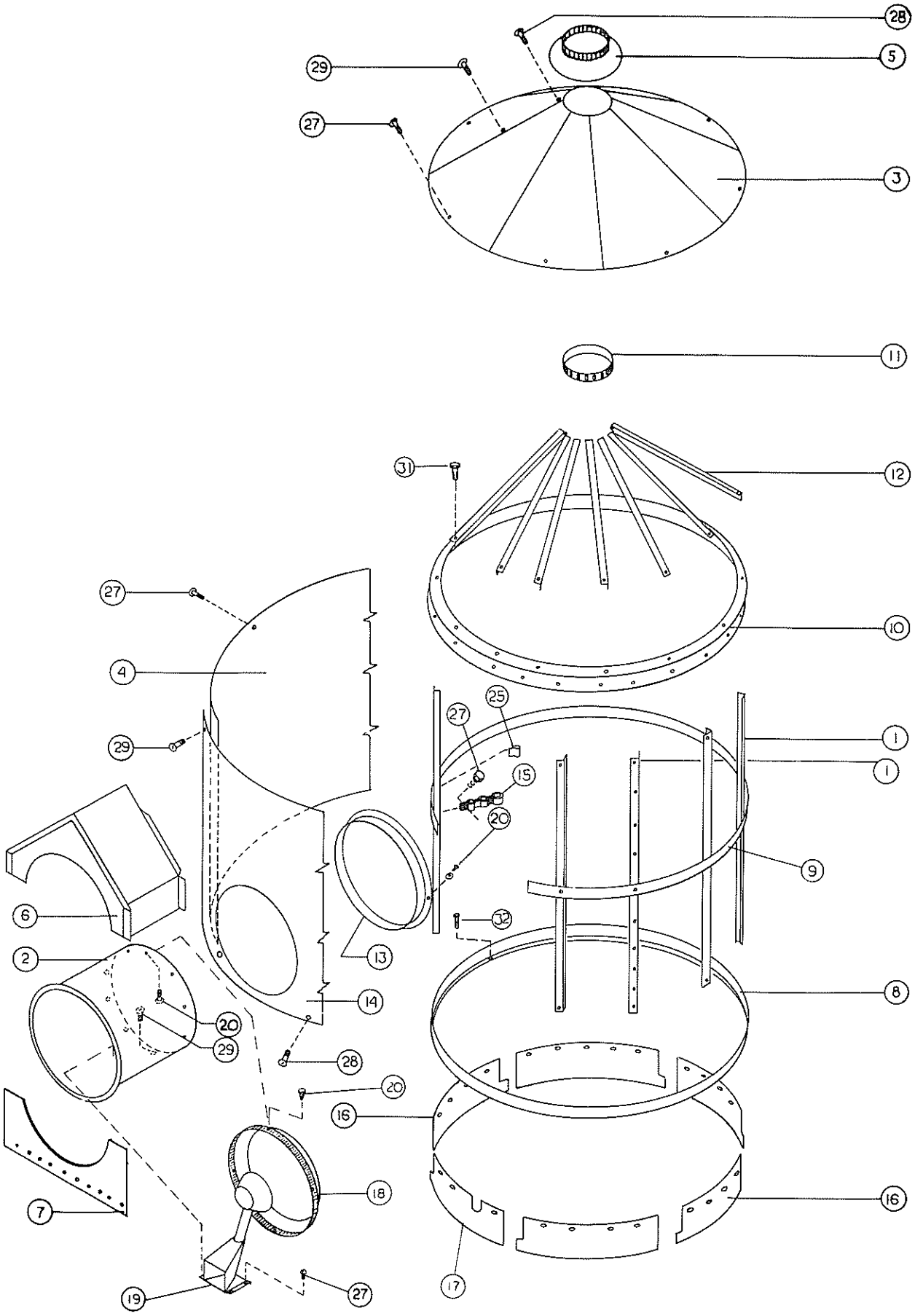
570 DRYER GEARBOX
GT D58240



This emblem is identification mark for Hub City Gearbox.

REF. NO.	PART NO.	NO.REQ'D	DESCRIPTION
1	77440	1	Case
2	77441	1	Open End Cap
3	77442	1	Pinion Housing
4	77443	1	Pinion Shaft
5	77444	1	Cross Shaft
6	77445	1	Pinion Gear
7	77446	1	Output Gear
8	42-110150	4	Bearing Cap
9	42-110149	4	Bearing Cone
10	77447	1	Seal
11	77455	1	Seal
12	77448	3	Snap Ring (1/8" Thick)
13	77449	2	Spacer Washer (1/8" x 1¼" x 1¾")
14	77450	1	Pinion Washer (1/8" x 25/32" x 13/32"
15	77451	1	Pinion Nut, ¾"
16	42-18282	1	Woodruff Key
17	77453	As Needed	Gasket
18	77454	1	Closed End Cap
19	77452	1	Key, 3/16" sq. x 1" lg.

PLENUM ASSEMBLY – MODEL 570

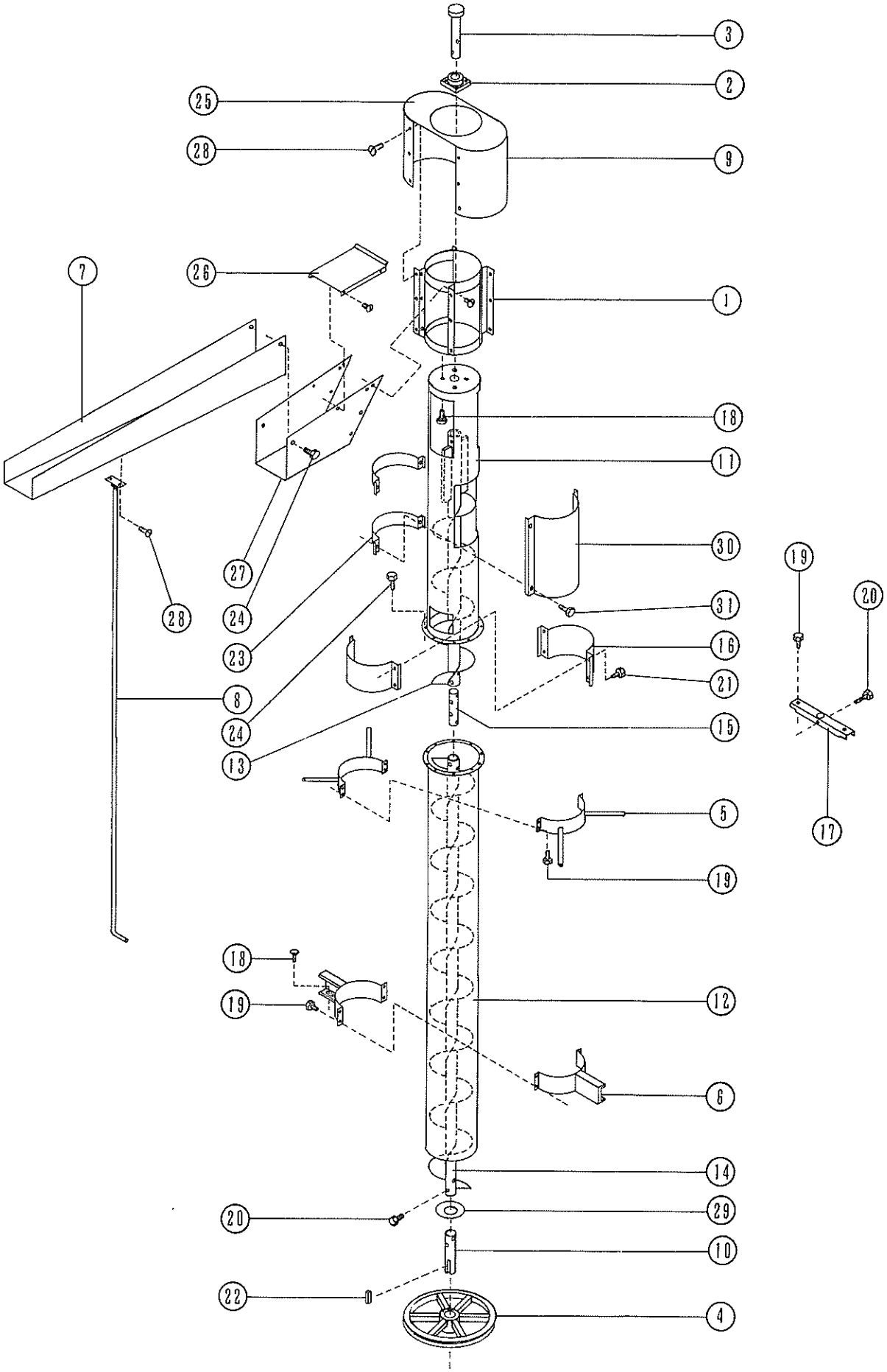


PLENUM ASSEMBLY – MODEL 570

REF.NO.	PART NO.	NO.REQ'D	DESCRIPTION
1	D53010	31	Plenum Frame Angle, W/Joggle
	D33010	31	Plenum Frame Angle, Straight
2	D53020	1	Connecting Tube
3	D53030	7	Lid Sheet
	D53340	7	Lid Sheet Fine Perforated
4	D53040	5	Side Sheet Without Connecting Tube Hole
	D53350	5	Side Sheet w/o Connecting Tube Hole-Fine Perf.
5	D23051	1	Cone Cap
6	D53060	1	Saddle
7	D53070	1	Front Enclosure
8	D53080	1	Lower Frame Band
9	D53090	1	Center Band, 1/4" Thick
	D53091	1	Center Band, 1/8" Thick
10	D53100	1	Transition Band
11	D53110	1	Top Ring
12	D53120	35	Lid Frame Angles
13	D53130	1	Connecting Tube Trim Ring
14	D53140	1	Sheet With Connecting Tube Hole
	D53360	1	Sheet With Connecting Tube Hole-Fine Perf.
	D53150	1	Side Sheet (Narrow Strip)
	D53330	1	Side Sheet (Narrow Strip) Fine Perf.
15	D23161	2	Thermometer Support Bracket
16	D53171	5	Skirt
17	D53180	1	Skirt With Slot
18	D52520	1	Flame Deflector Ring
19	D52511	1	Flame Deflector Scoop
20	71942	11	No. 14 x ¾" Self Tapping Screw
25	D23210	2	Push on Clip
27	71823	85	¼" - 20 x ½" Slotted Hd Machine Screw
28	71825	108	¼" - 20 x ¾" Slotted Hd Machine Screw
29	71822	100	¼" - 20 x 3/8"Slotted Hd Machine Screw
31	71001	35	¼" x ¾" Capscrew
32	72155	6	5/16" x ¾" Self-tapping Hex Hd. Screw

NOTE: For nuts, washers and lockwashers see page 47.

AUGER ASSEMBLY – MODEL 570

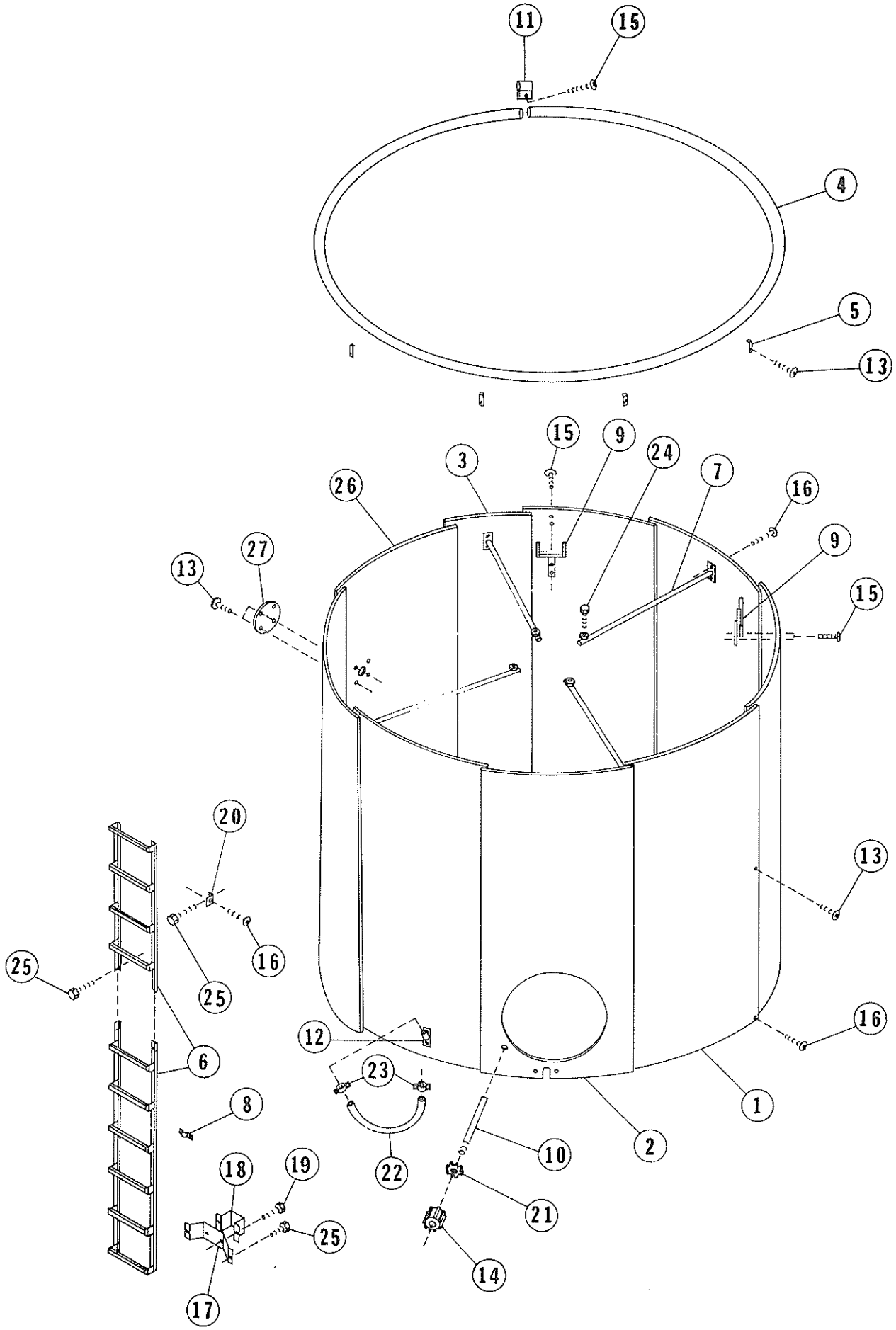


AUGER ASSEMBLY – MODEL 570

REF. NO.	PART NO.	NO.REQ'D	DESCRIPTION
1	D26013	1	Swivel Head
2	D21161	1	2" Flange Bearing Serial No.5395 Up
3	D26020	1	Upper Stub Shaft
4	D26030	1	Sheave 1C 18"x 2"
5	D56055	2	Clamp, Brace
6	D26065	2	Clamp, Support (at Spider)
7	D36071	1	Spout
8	D36081	1	Spout Control Handle
9	D26091	1	Head Baffle, Side
10	D26101	1	Lower Stub Shaft
11	D36112	1	Auger Tube (Top Section) Serial No. 5395 Up
12	D36120	1	Auger Tube (Bottom Section)
13	D36131	1	Flighting (Top Section)
14	D36141	1	Flighting (Bottom Section)
15	D26150	1	Stub Connecting Shaft
16	D26162	2	Inspection Hole Cover
17	D26170	1	Split Auger Support
18	71329	6	½" x 1½" Carriage Bolt
19	71056	8	3/8" x 2" Capscrew
20	73520	8	5/8" x 3½" Capscrew H.T.
21	71001	4	¼" x ¾" Capscrew
22	73417	1	½" x ½" x 1½" Key
23	D41030	2	Cleaning Attachment Band
24	71052	12	3/8" x 1" Capscrew
25	D26180	1	Head Baffle, Top
26	D26190	1	Head Baffle, Spout Cover
27	D26200	1	Head Baffle, Spout
28	71825	26	¼" - 20 x ¾" Slotted HD Machine Screw
29	72424	1	2" Washer
30	D26220	1	Grain Cleaner Hole Cover
31	71054	4	3/8" x 1½" Capscrew
	DA26000	1	Includes Item Numbers 1, 9, 25, 26, 27 Assembled
	DA36040	1	Flight Assy. w/stub (This number should be used when ordering any replacement flight.)
	73180	1	Flighting Repair Section, 12" O.D. x ½" x 20" Lg.

NOTE: For nuts, washers and lockwashers see page 47.

OUTSIDE SKIN ASSEMBLY – MODEL 570

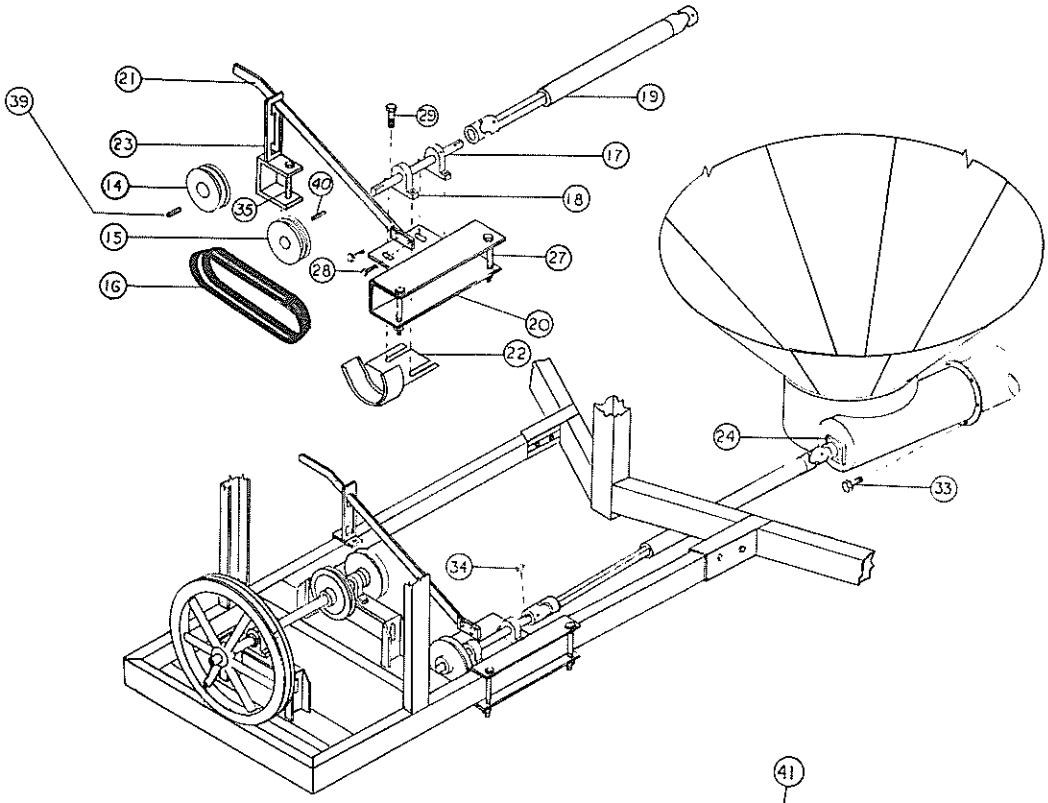


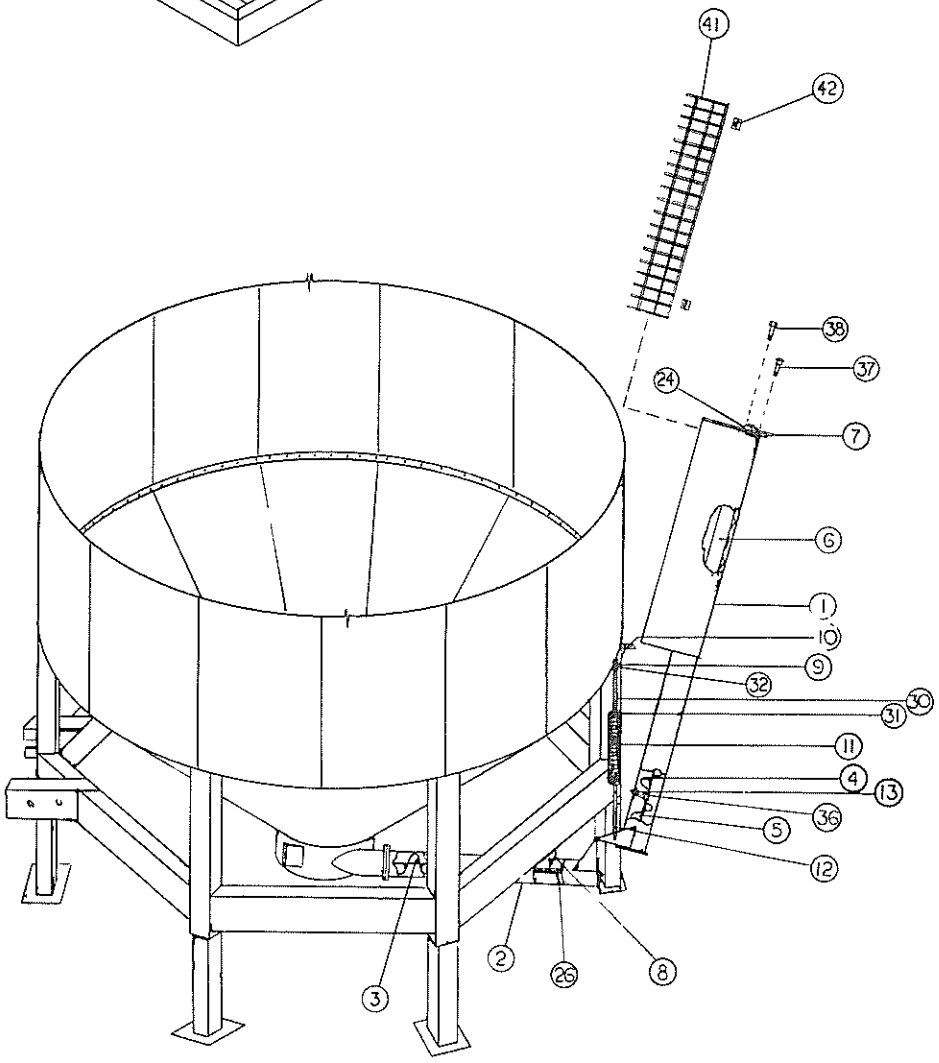
OUTSIDE SKIN ASSEMBLY – MODEL 570

REF. NO.	PART NO.	NO.REQ'D	DESCRIPTION
1	D54010	6	Outside Sheet
	D53380	6	Outside Sheet Fine Perforated
2	D54021	1	Outside Sheet With Hole
	D53391	1	Outside Sheet With Hole Fine Perforated
3	D54090	1	Outside Sheet 34" Wide
	D53400	1	Outside Sheet 34" Wide Fine Perforated
4	D54040	1	Cap Ring
5	D24050	8	Ring Holder
6	D34061	1	Ladder
7	D54070	4	Auger Brace
8	D24080	1	Spout Control Catch
9	D24090	2	Spout Support
10	D24140	1	Pipe Support For Capillary Tube
11	D24110	1	Rim Connector
12	D24131	1	Grain Temperature Capillary Support Bracket
13	71822	220	¼" - 20 x 3/8" Slotted Hd Machine Screw
14	72839	1	1" Pipe Nut
15	71825	12	¼" - 20 x ¾" Slotted Hd Machine Screw
16	71823	113	¼" - 20 x ½" Slotted Hd Machine Screw
17	D54160	1	Ladder Bracket, Lower
18	D54170	1	Ladder Bracket, Clamp
19	71027	2	5/16" x 1" Capscrew
20	D24150	8	Ladder Bracket, Upper
21	73167	1	Conduit Drive Nut
22	D54190	1	Liquitite Conduit
23	73263	2	¾" Two Screw Connector
24	71052	4	3/8" x 1" Capscrew
25	71001	20	¼" x ¾" Capscrew
26	D54200	1	Outside Sheet w/Hole for Grain Cleaner
	D54220	1	Outside Sheet w/Hole for Grain Cleaner -Fine Perf.
27	D24210	1	Cover Plate

NOTE: For nuts, washers and lockwashers see page 47.

LOADING AUGER ASSEMBLY – MODEL 570



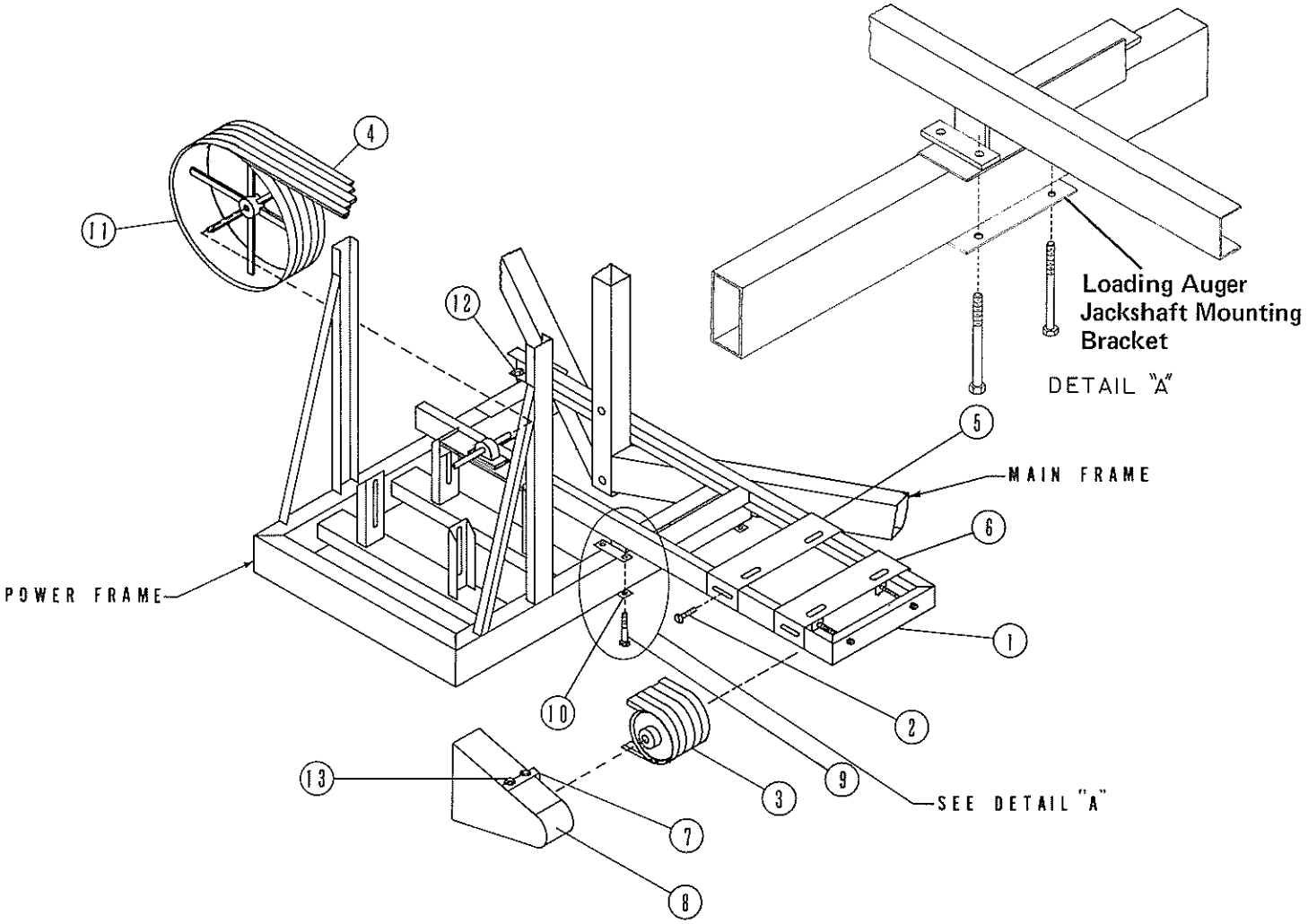


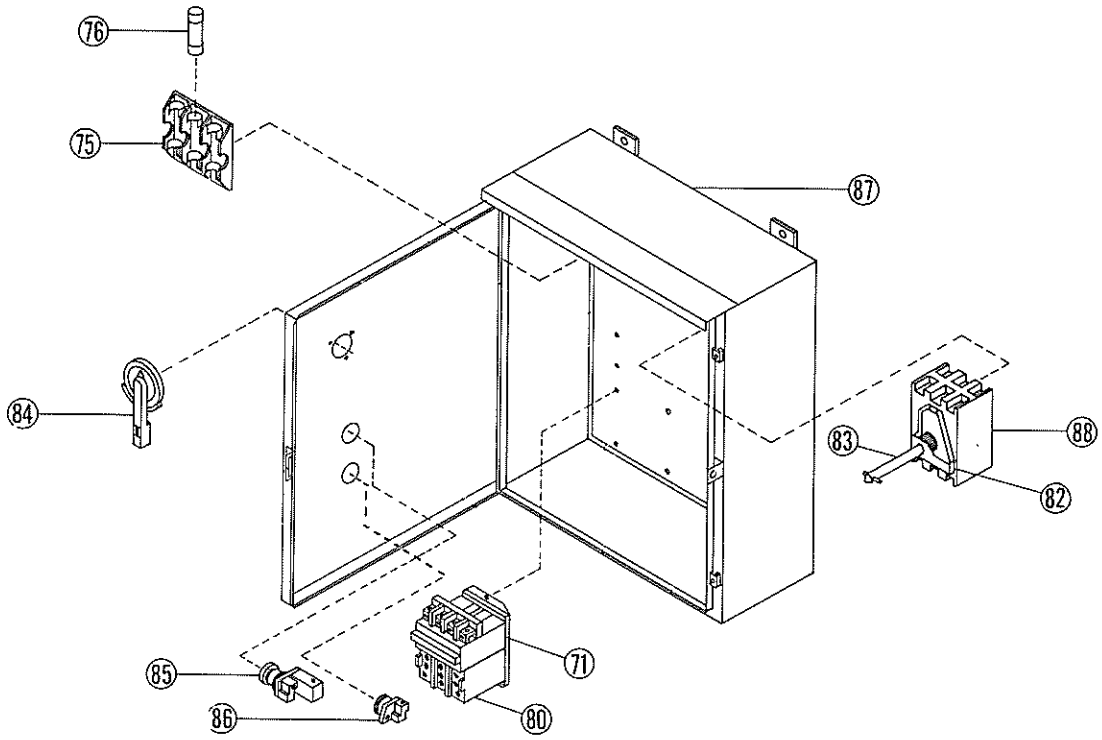
LOADING AUGER ASSEMBLY – MODEL 570

REF. NO.	PART NO.	NO.REQ'D	DESCRIPTION
1	D29012	1	Hopper
2	D59031	1	Front Auger Tube
3	D59053	1	Front Auger
4	D29042	1	Long Section of Rear Auger
5	D59391	1	Short Section of Rear Auger
6	D59150	1	Grain Flow Regulator
7	D59160	1	Hopper Stand
8	D59141	1	Tube Mount
9	D29191	2	Spring Bracket
10	D59182	1	Hopper Latch
11	73300	2	Lift Spring w/Plug
11	73307	2	Lift Spring (only)
12	D59171	2	Spring Connecting Rod
13	42-98080		Bearing and Casting
	42-18183		Bearing Only
	42-66087		Bolt with Zerk
	71127		5/8" x 1" Capscrew
	72413		5/8" Wrought Washer
	72443		5/8" Lockwashers
14	D59301	1	2B 6.6 P.D. 1½" I.D. Pulley
15	D59311	1	2B 6.6 P.D. 1" I.D. Pulley
16	42-66015	2	Belt B-58
17	D22850	1	Jackshaft
18	D28040	2	1" Pillow Block Bearing
19	D59343	1	Tumbler (See page 20 for parts)
20	D59351	1	Jack Shaft Mounting Bracket
21	D59361	1	Handle
22	D59371	1	Belt Guard
23	D59381	1	Clutch Handle Bracket
24	42-66022	2	Flange Bearing 1"
26	71054	4	3/8" x 1½" Capscrew
27	71066	2	3/8" x 6" Capscrew
28	71103	4	½" x 1¼" Capscrew
29	71080	4	7/16" x 1¾" Capscrew
30	71957	2	½" x 5" Full Thread Capscrew
31	D29450	2	½" Spring Plug Nut
32	72212	2	Hex Nut
33	71027	5	5/16" x 1" Capscrew
34	42-18282	2	No. 808 Woodruff Key
35	71067	1	3/8" x 6½" Capscrew
37	71276	2	3/8" x ¾" Carriage Bolt
38	71053	4	3/8" x 1¼" Capscrew
39	73411	1	3/8" x 3/8" x 1½" Key
40	42-66057	1	¼" x ¼" x 1½" Key
41	D29470	1	Grill, Hopper
42	42-55086	4	Clip, Grill

NOTE: For nuts, washers and lockwashers see page 47.

CONTROL PANEL – SIDE MOUNT – MODEL 570



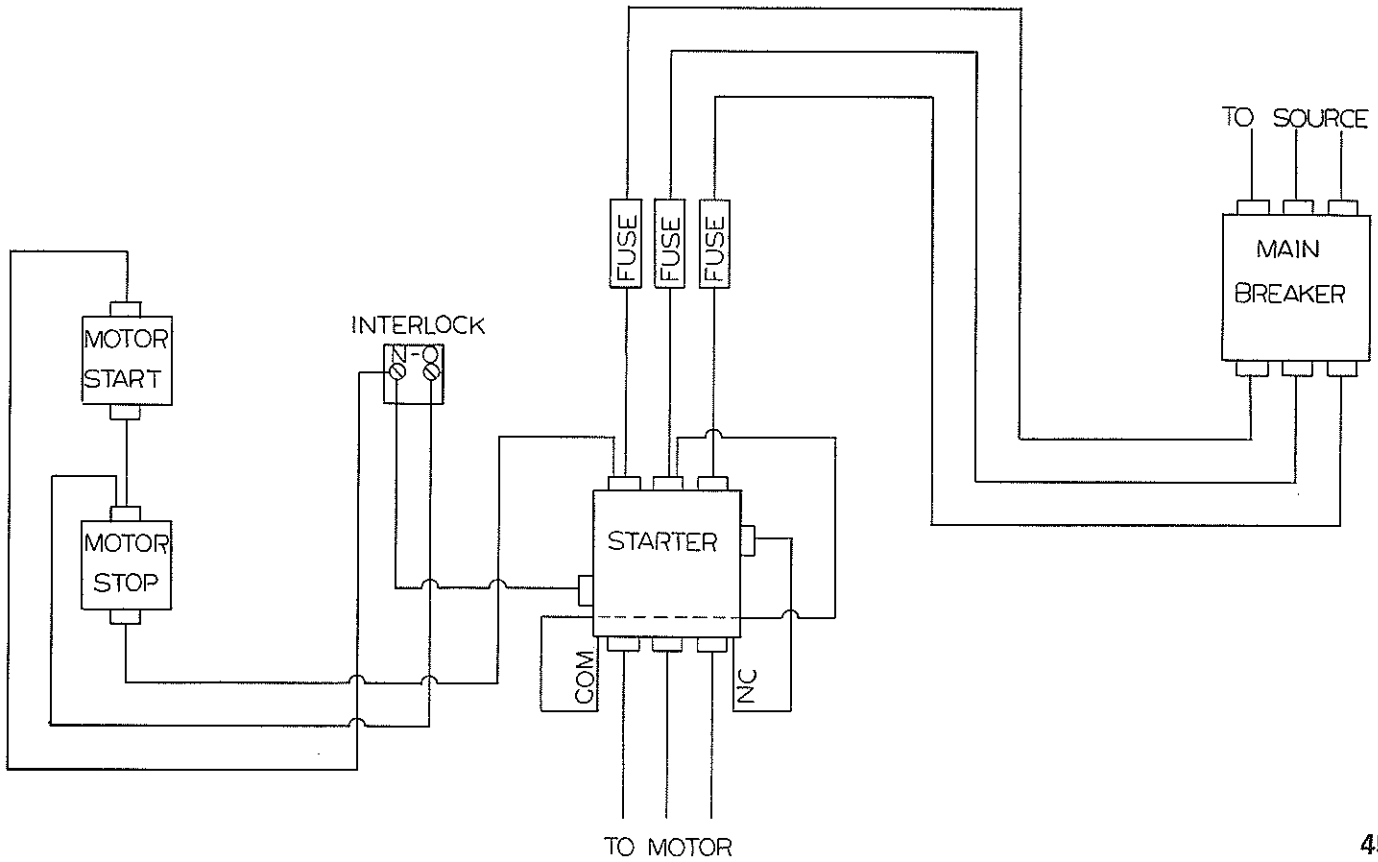


CONTROL PANEL – SIDE MOUNT – MODEL 570

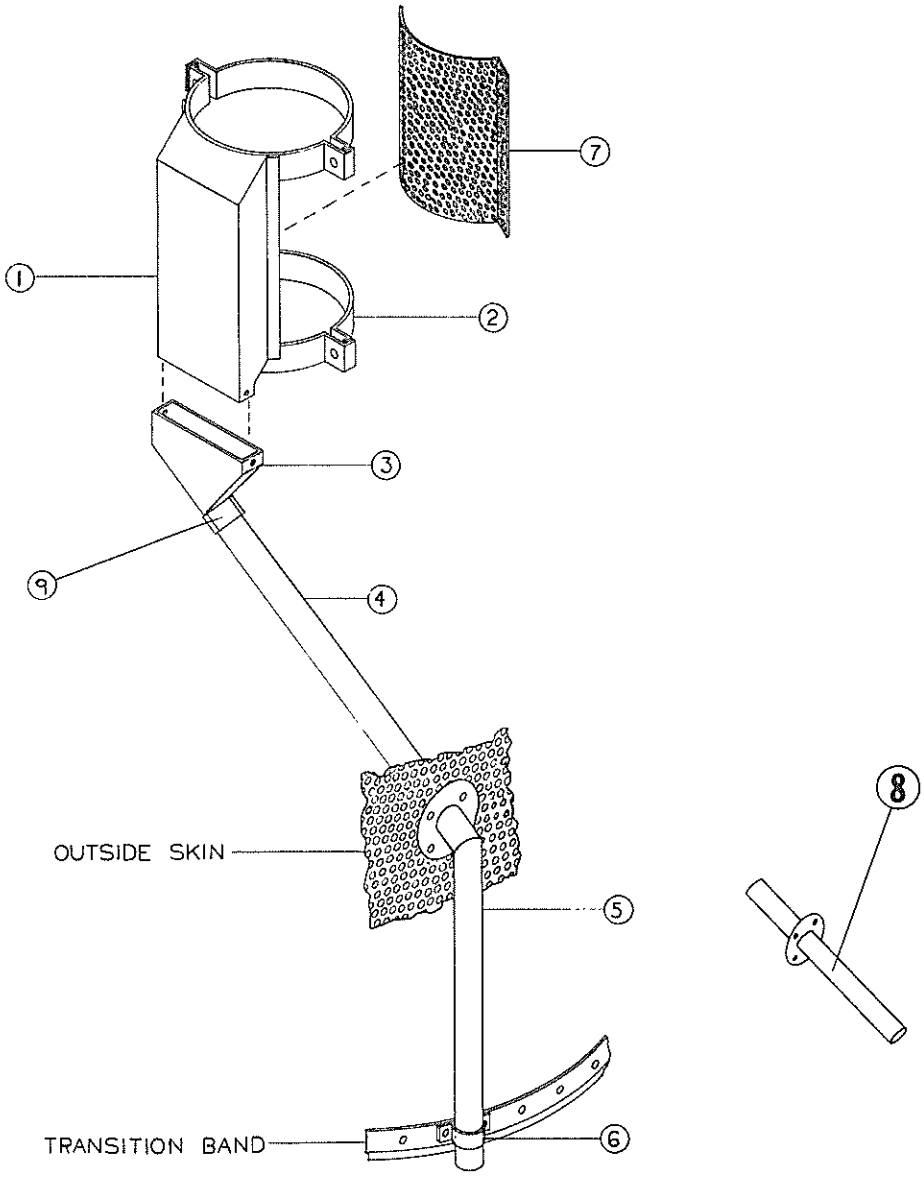
REF. NO.	PART NO.	NO.REQ'D	DESCRIPTION
1	D52911	1	Frame
2	71103	4	Capscrew, ½" x 1¼" Lg. Hex
3	76010	1	Sheave, Motor 5B 5.2"
	76009	1	Hub, SD 1-7/8"
4	D52280	5	Belt B112
5	D52913	1	Mount, Motor w/o Bracket
6	D52912	1	Mount, Motor w/Bracket
7	D59440	2	Bracket, Belt Guard
8	D59430	1	Guard, Belt
9	71120	4	Capscrew, ½"x 7½"
10	D52910	4	Strap
11	76013	1	Sheave, Power Shaft 5B 18.4"
	76015	1	Hub, SF 1½"
12	71121	4	Capscrew, ½" x 8" Lg. Hex
13	71001	4	Capscrew, ¼" x ¾" Lg. Hex
71	73563	1	No. 3 Magnetic Starter
75	73707	1	No. 2525 Porcelain Cutout Base
76	73732	3	80 amp Fuse
80	73710	3	No. 85 Heaters
82	73700	1	Vari-Depth Mechanism
83	73702	1	Shaft
84	73701	1	Handle, Operating
85	77052	1	Push Buttom Operator – Green Start
86	77051	1	Push Button Operator – Red Stop
87	77027	1	Control Cabinet
88	74004	1	Circuit Breaker
	D52391	1	25 HP, 1750 RPM, 3P TEFC

NOTE: For nuts, washers and lockwashers see page 47.

WIRING DIAGRAM – MODEL 570



GRAIN CLEANING ATTACHMENT



REF. NO.	PART NO.	NO. REQ'D	DESCRIPTION
	A41010	1	Grain Cleaning Attachment
1	D41020	1	Cleaning Attachment Body
2	D41030	2	Cleaning Attachment Bands
3	D41080	1	Cleaning Attachment Transition
4	D41050	1	Cleaning Attachment Top Tube
5	D41060	1	Cleaning Attach. Lower Tube & Elbow
6	D41070	1	Cleaning Attach. Tube Bracket
7	A41100	1	Cleaning Attachment Screen (Corn, Sunflower)
7	A41110	1	Cleaning Attachment Screen (Wheat, Oats, Barley Milo)
7	A41120	1	Cleaning Attachment Screen (Soybeans)
7	A41130	1	Cover Plate (To replace screen)
7	A41105	1	Cleaning Attachment Screen (Flax)
8	A41030	1	Optional Straight Discharge Spout
9	D41081	1	Band, Transition ½

NUTS, WASHERS AND LOCK WASHERS

PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
72208	¼" Nut	72438	¼" Lock Washer
72209	5/16" Nut	72439	5/16" Lock Washer
72210	3/8" Nut	72440	3/8" Lock Washer
72211	7/16" Nut	72441	7/16" Lock Washer
72212	½" Nut	72442	½" Lock Washer
72213	5/8" Nut	72443	5/8" Lock Washer
72408	¼" Washer	72380	¼" Lock Nut
72409	5/16" Washer	72379	½" Lock Nut
72410	3/8" Washer	72375	¾" Lock Nut
72411	7/16" Washer	72382	¼" Whiz Lock Nut
72412	½" Washer	72334	¼" Tinnerman Nut
72413	5/8" Washer		

GRAIN	USED FOR	PLENUM TEMP.	GRAIN TEMP.	DRYING TIME	COOLING TIME