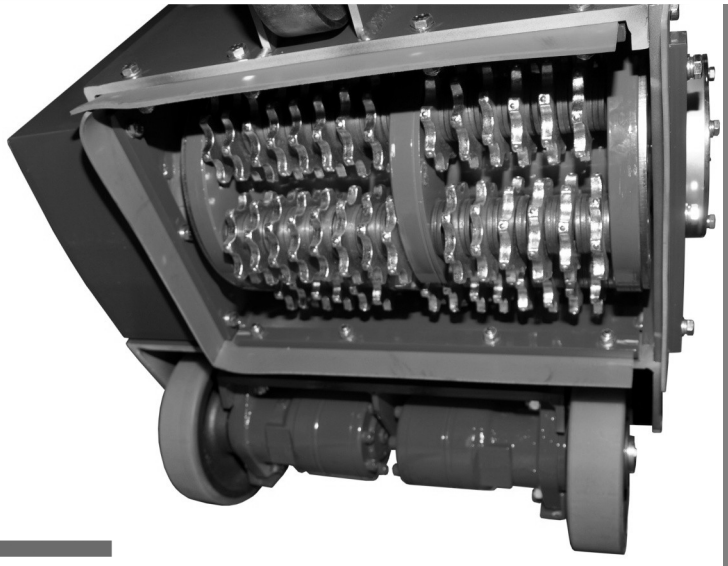
TFP320 PROFESSIONAL FLOOR PLANER

OPERATION & MAINTENANCE



TRELAWNY™

SURFACE PREPARATION TECHNOLOGY

www.trelawnyspt.com

OPERATION

Foreword

Thank you for your purchase of the TRELAWNY TFP320 Professional use Floor Planer.

This manual contains the necessary maintenance information for you to ensure proper operation and care for this machine.

See also the manual that is supplied by the engine manufacturer.

It is essential for you to read through these manuals thoroughly.

In the unlikely event that you experience problems with your TFP320, please do not hesitate to contact your local Trelawny dealer or agent. We always welcome feedback and comments from our valued customers.

General Information

Before operating, performing maintenance or repairing the TFP320 FLOOR PLANER this manual must be read and understood by the operator, if in any doubt, ask your supervisor before using this equipment.

Local safety regulations must be followed at all times. Failure to follow these instructions could result in damage to the TFP320 and/or personal injury.

Trelawny SPT Limited disclaims all responsibility for damage to persons or objects arising as a consequence of incorrect handling of the machine, failure to inspect the machine for damage or other faults that may influence the operation prior to starting work, or failure to follow the safety regulations listed or applicable to the job site.

This machine is primarily designed for the removal of paint, resins, the removal of laitance and for the reduction of concrete from floor areas. It can be used both indoors and out.
This machine must not be used in a fixture.

SAFETY

VERY IMPORTANT
Do not place the drive levers into reverse if there is a wall or objects close behind you, there is a very real risk of the operator being crushed or severely injured.

Failure to follow these instructions could result in damage to the machine and/or personal injury or **death**.

WEAR SAFETY BOOTS, FACE MASK, SHATTERPROOF GLASSES, HELMET, GLOVES and any other personal protective equipment required for the working conditions.

Avoid loose clothing; this may become trapped in moving parts and cause serious injury.

TO AVOID NUISANCE DUST, connect an industrial vacuum cleaner (minimum 3000watts or equivalent) to the 50mm (2”) vacuum port situated on the right hand side of the machine.

ENSURE THAT THE WORK PLACE IS WELL VENTILATED.

Avoid operating any engine-powered machines, generators etc, in an enclosed area, since engine exhaust gases are very poisonous.

BE VERY CAREFUL WITH HOT COMPONENTS.

The cutters and drum will get hot during operation and can remain hot for some time after shutdown.

DO NOT OPERATE IN WET CONDITIONS.

CAUTION THIS MACHINE IS HEAVY.

It weighs around (Wt 340 kg (750 lbs)) dependent on power unit.

Do not attempt to lift this machine manually.

Service of electrical and hydraulic components must only be carried out by qualified personnel.

Risk of Hand-arm Vibration injury

These tools may cause Hand-arm Vibration Syndrome injury if their use is not adequately managed.

We advise you to carry out a risk assessment and to implement measures such as; limiting exposure time.

[i.e. actual trigger time, not total time at work]

Ensuring the tools are used correctly.

Ensuring the tools are maintained according to our recommendations.

And ensuring that the operators wear personal protective equipment [PPE] particularly gloves and clothing to keep them warm and dry.

Employers should consider setting up a programme of health surveillance to establish a benchmark for each operator and to detect early symptoms of vibration injury.

We are not aware of any PPE that provides protection against vibration injury by attenuating vibration emissions.

See ‘Specifications’ section for vibration emission data.

Further advice is available from our Technical Department.

We strongly advise you to visit the Health & Safety Executive website http://www.hse.gov.uk/vibration

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OPERATION

Cutter types & Applications

T.C.T.

Hardened steel cutter with tungsten carbide inserts. For all general cleaning applications, including concrete texturing, Scabbling, the grooving of concrete, removal of embedded roof chippings, brittle coatings from steel work. Use T.C.T. Cutters on heavy applications, for longer life and higher output.

Produces "tramlines" on concrete and small indentations on steelwork.

BEAM

Heat-treated steel cutters used for the removal of Paint and coatings from floor areas, but with a shorter life span that T.C.T. Cutters. Can be used for the general removal of dirt and paint deposits.

Produces a fine texture on concrete surfaces and slight marking on steelwork.

MILLING

Flat tungsten carbide cutters for the removal of thermo-plastic road and runway markings.
Very efficient and cost effective with none of the problems associated with burning off. These can also be used for the removal of bituminous and rubber deposits. Very effective for the removal of two part epoxy floor paint, may require finishing with beam cutters or the Trelawny floor grinder to achieve the required finish.

Produces a "strip" on concrete and tarmac, is not recommended on steelwork unless used for "braking up" coatings.

Note: Care must be taken with milling cutters to ensure that the Drum and its Cutters are is fitted the correct way round, the tungsten carbide tips must face towards the vacuum port at the bottom as the drum rotates, otherwise the tips will be damaged in use.

Warning

An out of balance drum can be very dangerous and will also dramatically increase the vibration emissions.

Pre-Start Check (Daily):

Check all electrical connections and cables.
Check RCD protection is fitted and working.
Check all leads, pipes and hoses for damage.
Check all bolts and screws for tightness.
Ensure that all fittings are secure.
Check condition of Cutter Drum Assembly and replace components as required.
Check hydraulic oil level.
Clean any debris from the drum enclosure and ensure that the drum rotates freely.

Pre-start check:

Ensure power supply is correct. TFP320 requires a 380/415v 32amp supply from the mains or a minimum of 25kva on 50 cycles from a generator.

Always use the shortest possible length of extension cable. To avoid voltage drop the cable must be a minimum of 6mm. Maximum length of cable can then be up to 75 metres.

The motor is fitted with thermal overload protection. Should the thermal trip be activated then it must be allowed to cool and reset.

Almost without exception if a motor trips out it is an indicator of a fault elsewhere either on the machine or with the power supply or simply that the machine is being overloaded.

Please note:
The thermal trip on the motor is a fail safe device and is not intended to be continuously reset.

If the motor repeatedly cuts out then it will be damaged.

Possible causes are:

1. An inadequate or faulty power supply.
2. Overloading of the machine.
3. Mechanical fault on the machine e.g. bearing or cutter drum failure.

The machine can only be overloaded by setting the depth of cut too deep.

When overloaded the machine can vibrate which will in turn damages the electrical switches and components.

This will also increase the total vibration emission the operator is exposed to.

The electric control panel is fitted with two safety devices which further protect the motor from damage.

The switches inside the control box are set by the manufacturer and under no circumstances be adjusted.

DUST CONTROL:

To control any dust created by the operation connect an industrial dust collector or vacuum to the 50mm (2") port at the right hand side of the machine. We recommend the Trelawny A45 Dust Collector for almost 100% air borne dust containment.

In the absence of a dust control unit it is acceptable to spray water onto the surface or to feed water down the vacuum port.

Cutter drum assembly life is increased by around 10% when operating the machine in this way.

(Note: Electrical motors and switches are not waterproof, take care to protect them from inclement weather, splashes, etc.)

SAFETY

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OPERATION

Machine Operation:

STARTING the electric motor, switch on the main red isolator switch (2). The red light will illuminate on the panel.

BEFORE starting the machine ensure the cutter drum assembly is clear of the ground.

If not adjust using the hand wheel and also ensure the hydraulic lift lever (7) is in the 'up' position.

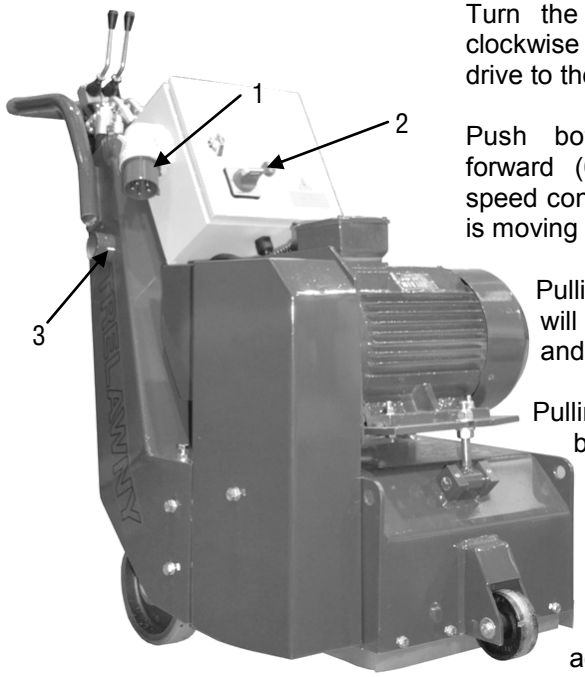
ENSURE the drive control levers (6) are in the 'non-drive/neutral' (central) position and speed control knob (8) is turned to the 'OFF' position.

Press the green button (11) on top of the electric panel to start the motor.

Check that the three phase power supply is phased to suit the machine.

The electric motor should be turning in direction of arrow on the motor cooling fan cover i.e. clockwise when viewed from the non drive side of machine.

If the electric motor is turning in the wrong direction the hydraulic pump will be in reverse and the hydraulic drive system will <u>not</u> operate.

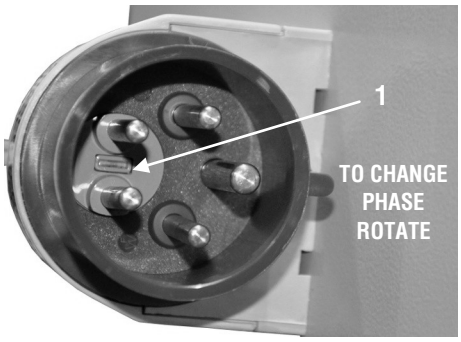


PHASE REVERSING

If the electrical motor is turning in the wrong direction and the hydraulic drive system is not working, the power supply to your TFP320 is incorrectly phased.

To correct, carry out the following:

1. Isolate power supply (2).
2. Remove plug from machines socket (1).
3. Use a screwdriver to turn phase reverse pins to the opposite position (see picture below).



WARNING

The TFP320 machine should always be moved by its own powered hydraulic drive system.

Pushing the machine continually around by hand could result in internal damage to the hydraulic motor and pump system.

Turn the speed control knob (8) clockwise to ensure that there is no drive to the wheels.

Push both drive control levers forward (6) and slowly open the speed control knob (8) until machine is moving at a satisfactory speed.

Pulling the left lever backwards will make the machine turn left and the right one turn right.

Pulling both the levers fully backwards reverses the machine.

Neutral is with both levers in the middle position.

Once you have become accustomed to its operation you can make the first cut.

Operate the hydraulic lift/lower lever (7) to the left of the hand wheel allowing the machine to fall to its lowest position.

Disengage the hand wheel locking pin (10) and SLOWLY rotate the hand wheel (5) until the cutters just make contact with the surface to be treated.

Push both drive control levers (6) forward and slowly open the speed control knob (8) until machine is moving at a satisfactory speed.

Adjust hand wheel (5) to desired cutting depth and re-engage hand wheel locking pin (10).

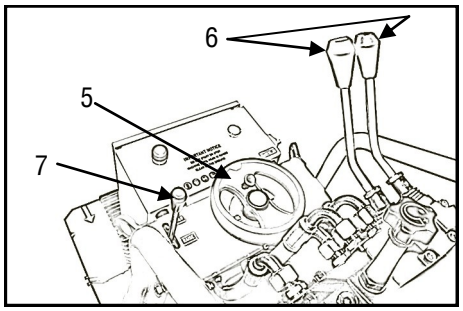
To raise machines cutters use hydraulic lift lever (7).

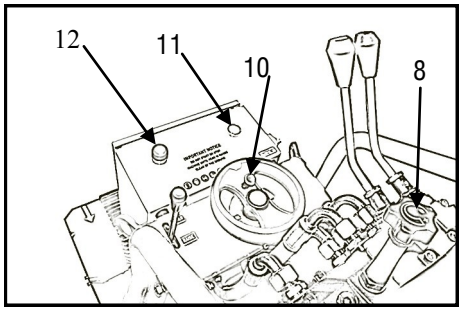
To turn machine around at end of run raise out of cut, reduce forward speed and pull either of drive control lever back through neutral and into reverse.

It is essential that the cutters are not lowered too far and too hard onto the surface as serious damage could be caused to the machine and cutter drum assembly.

The cutters must be allowed to "float" on the cutter shafts without excessive downward pressure.

This floating action allows the cutters to perform as the designer intended i.e. as cutters rather than as grinders or picks.





OPERATION & MAINTENANCE

Machine Operation continued:

Do not pull the control levers into reverse when cutting as this could result in the machine reversing quickly in an uncontrolled manner.

The machine should operate smoothly with a minimum of vibration.

When the depth of cut is correctly set very little effort should be required to operate the machine.

EXCESSIVE downward pressure on the cutters may marginally improve the work rate/finish but the negative result will be a definite increase the wear rates on the cutter drum assembly and machine components.

Remember two light passes are quicker and more cost effective than one slow pass with a heavy cut.

Tests have proven conclusively that heavy downward pressure reduces cutter and drum life by over 50%.

The TFP320 should only be operated in a forward direction when making a cut.

The operator varies the speed of travel to determine the final finish having already pre-set the depth control.

It is recommended that you do not operate the machine in reverse whilst the cutters are in contact with the surface, this could be dangerous.

When lifting the cutter drum from the work surface it is not necessary to turn the hand wheel - raise the cutters by simply operating the hydraulic lift lever.

Never leave the TFP320 unattended while in use.

Always stop the motor and raise the height adjustment fully up before leaving the machine and disconnect all power leads.

MAINTENANCE

PRIOR TO ANY MAINTENANCE OR ADJUSTMENT SWITCH OFF THE POWER SUPPLY AT THE MACHINES CONTROL BOX AND DISCONNECT FROM THE MAINS.

After use:
Clean the machine to remove all build up of dust and surface residues.

If using a hose pipe or pressure washer take care that water is not directed onto electrical components and switches.

Note: Motors and switches are not waterproof

Drum Removal:

Remove bolts on side plate and then screw two bolts back into the two tapped holes in the side plate.

Continue winding in and this will push side plate off dowel pins.

Remove the side plate and the key from shaft. Pull out cutting drum.

Fitting a new cutter head is simply a reversal of the above procedure, a little care must be taken to align the drive shaft, cutter drum and support end drive bush.

EXCESSIVE FORCE SHOULD NOT BE NEEDED TO REFIT THE CUTTER DRUM.

Cutter Drum Maintenance:
When changing cutter drum always check that the flail shafts are not worn with pronounced grooves and also that the centres of cutters and spacers are not elongated and beginning to "mushroom".

The drum assembly is hitting concrete with great force 3900 times every minute! Expenditure on consumables must be expected and built into all job costing.

While changing the drum the condition of the drive shaft and side plate bearings should be checked.

If any roughness, side play or leakage of grease is detected then new bearings should be fitted.

Lightly oil the drive shaft to prevent a build up of rust which could cause difficulty when trying to removing the drum later.

At the same time check belt tension and condition also checking the pulley grooves are clean and undamaged.

The drive shaft is manufactured from high quality steel to produce the special properties required.

The shaft is extremely strong and virtually unbreakable when used as intended.

If however sideways pressure is exerted on the shaft while it is not supported by the side plate bearing it can be bent.

With the drum removed check that the vacuum port is free from blockages and that the dust skirts are in good condition.

Remove all build up and deposits of material from the under side of the drum housing.

On certain applications, e.g. the removal of damp self levelling compounds, it may be necessary to clean away deposits hourly!

Failure to do so could result in overload of the drum assembly, drive motor and drive belts.

SAFETY

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Do not place the drive levers into reverse if there is a wall or objects close behind you, there is a very real risk of the operator being crushed or severely injured.

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SERVICING continued

Height Adjustment Maintenance:

Ensure the height screw thread is cleaned and then lightly oiled.

Periodically it should be removed and the female threaded section cleaned out and oiled.

At the same time the self-aligning bearing should be greased.

The clevis pin should be oiled regularly to maintain a light, smooth height adjustment.

TFP320 Cutter Drum Adjustment:

Should the machine be cutting more heavily on one side.

Stop machine and isolate power supply, adjust lock nut/bolt assembly on top of right hand side of chassis.

By adjusting up or down the cutting action can be reset level again. Retighten all bolts and check the belt tension.

Test on sample area and if required reset until cutting correctly.

Great care should be taken to ensure belts have correct tension and also correct alignment.
Serious damage could be caused to the drive shaft, drive shaft bearings and drive motor if the belts are excessively tight.

Note: Never operate the TFP320 without belt guard fitted

Basic maintenance/ check list

DAILY: (or every 8hrs to 10hrs)
Check cutters
Check flail shafts
Check all bolts and nuts for tightness
Check belt tension
Check plugs/cables
Check hydraulic oil level.
Clean any debris from drum enclosure and ensure drum turns freely.

WEEKLY:
All the above with following:-
Grease all moving parts on height adjustment mechanism
Remove side plate
Check drum/bushes
Check side plate bearing
Check drive bushes
Check drive shaft
Check support wheels
Check hydraulic drive system

MONTHLY:
All previous checks along with following:-
Change hydraulic oil.
Strip down fully winding mechanism.
Clean all threads and re-grease.

Machine Storage

<u>Short period storage: up to 3months.</u>
Clean outside of machine, remove drum and inspect for wear, replace any worn parts as required.

Remove any build up of material from inside of drum housing area; spray drum with a light coating of suitable anti rust agent.

Cover the machine to protect it:
Store the Planer in a dry place.

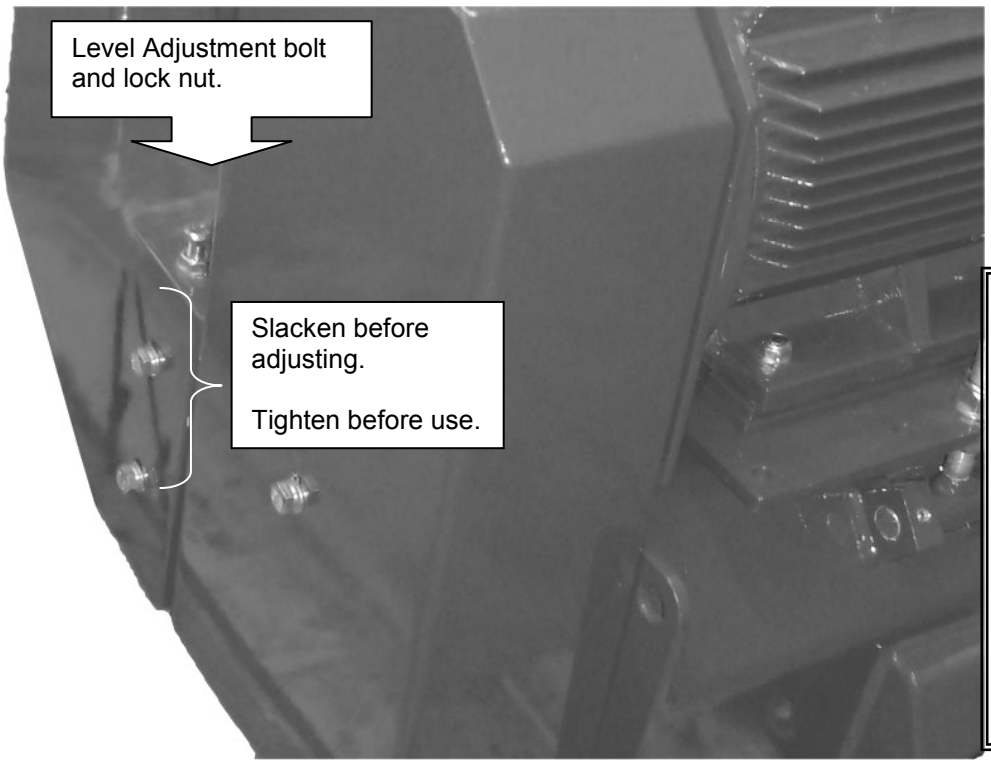
<u>Long period storage: over 3months</u>
Clean outside of machine, remove drum and inspect for wear, replace any worn parts as required.

Remove any build up of material from inside of drum housing area; spray drum with a light coating of suitable anti rust agent.

Electric Motors, protect plug and motor against corrosion and moisture.

Cover the machine to protect it:
Store the Planer in a dry place.

Be sure to check security of all fastenings after any lay up period.



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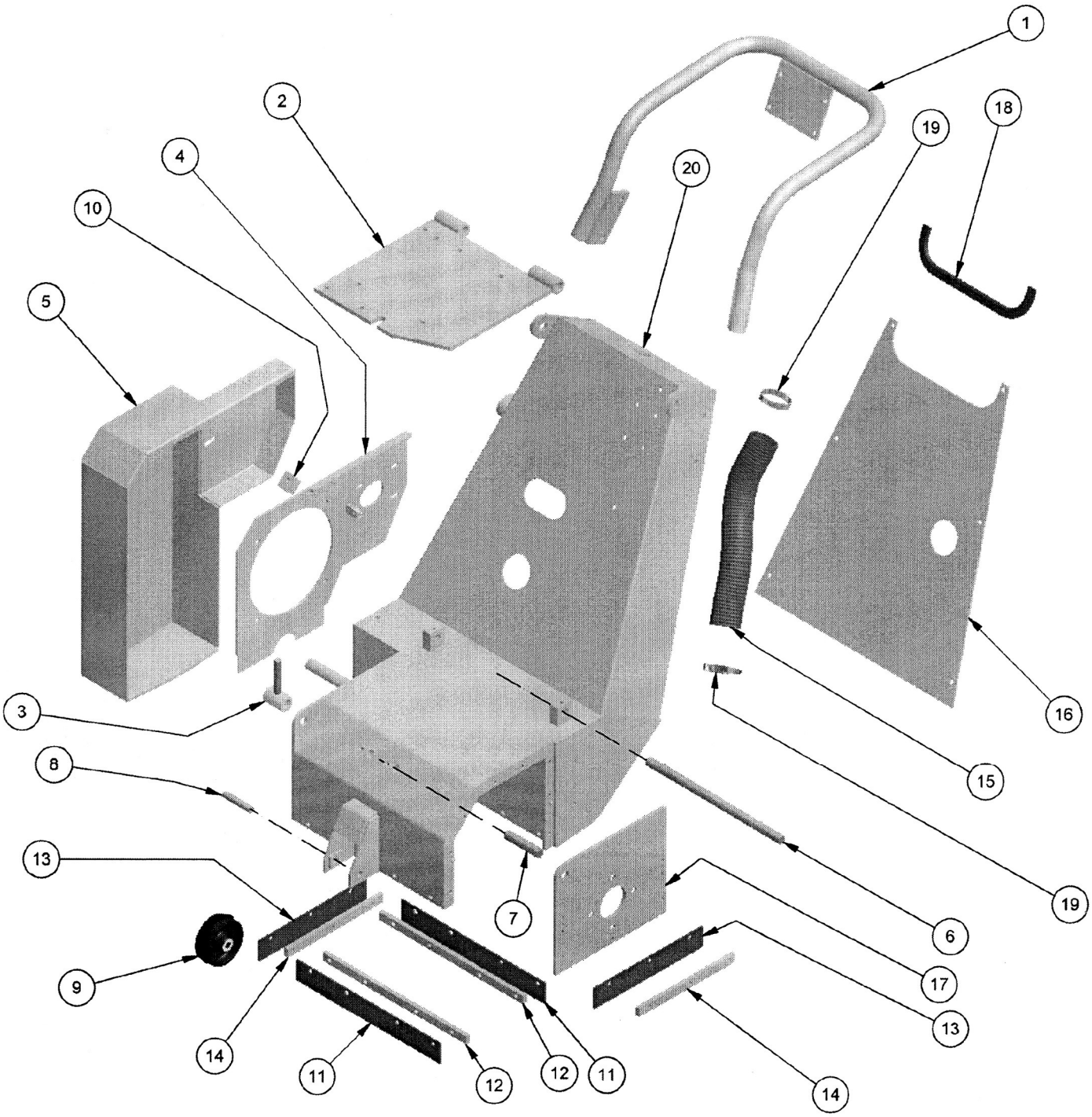

Part List			
ITEMS	**QTY**	**PART NUMBER**	**DESCRIPTION**
1	1	332.9103	Handle
2	1	332.9102	Motor Mounting Plate
3	1	332.9150	T-Bar
4	1	332.9130	Pump Mounting Plate
5	1	332.9138	Belt Guard
6	1	332.9152	Swivel Pin
7	1	332.9153	Swivel Pin (T-Bar)
8	1	332.9107	Axle
9	1	332.9161	Front Wheel
10	1	332.9163	Guard Support Bracket
11	2	332.9107A	Front/Rear Seal
12	2	332.9106A	Front/Rear Retaining Bar
13	2	332.9107B	Side Seal
14	2	332.9106B	Retaining Bar
15	1	332.9108	Vac Hose
16	1	332.9109	Back Plate
17	1	332.9101	Side Plate
18	1	332.9136	Edging Strip
19	2	812.2005	Hose Clip
20	1	332.9100	Main Chassis

CHASSIS COMPONENTS

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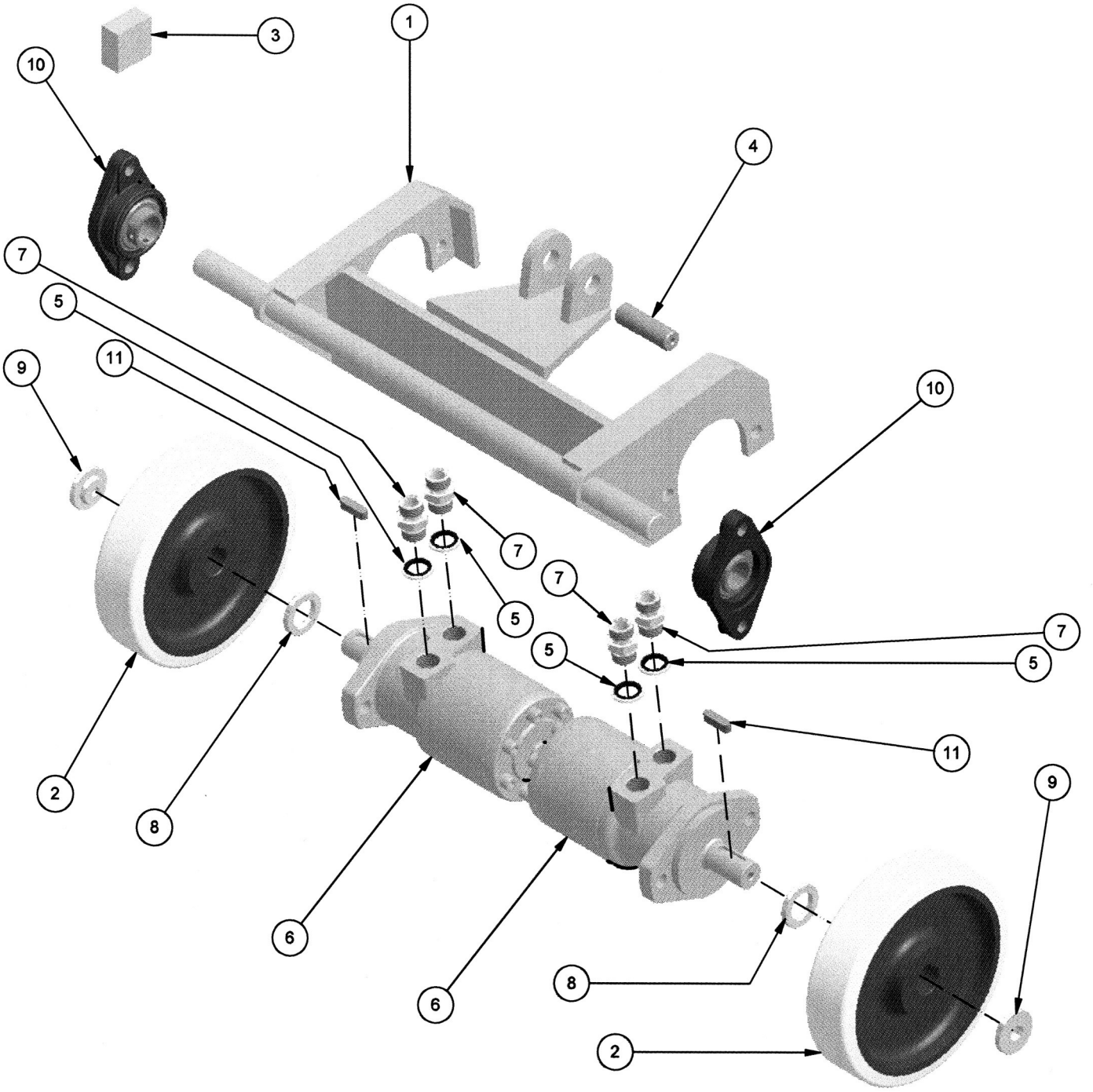

PARTS LIST			
ITEM	**QTY**	**PART NUMBER**	**DESCRIPTION**
1	1	332.9110	Rear Wheel Bracket
2	2	332.9160	Wheel
3	1	332.9111	Bearing Block
4	1	332.9143	Hyd. Ram Pin
5	4	810.9001	½" Dowty Washer
6	2	332.9141	Wheel Motor
7	4	332.8050	½" m-m Hyd. Adaptor
8	2	332.9120	Spacer Washer
9	2	332.9121	Hub Cap
10	2	332.9138A	Flange Bearing
11	2	350.9153	8x30 Parallel Key

UNDER CARRIAGE COMPONENTS

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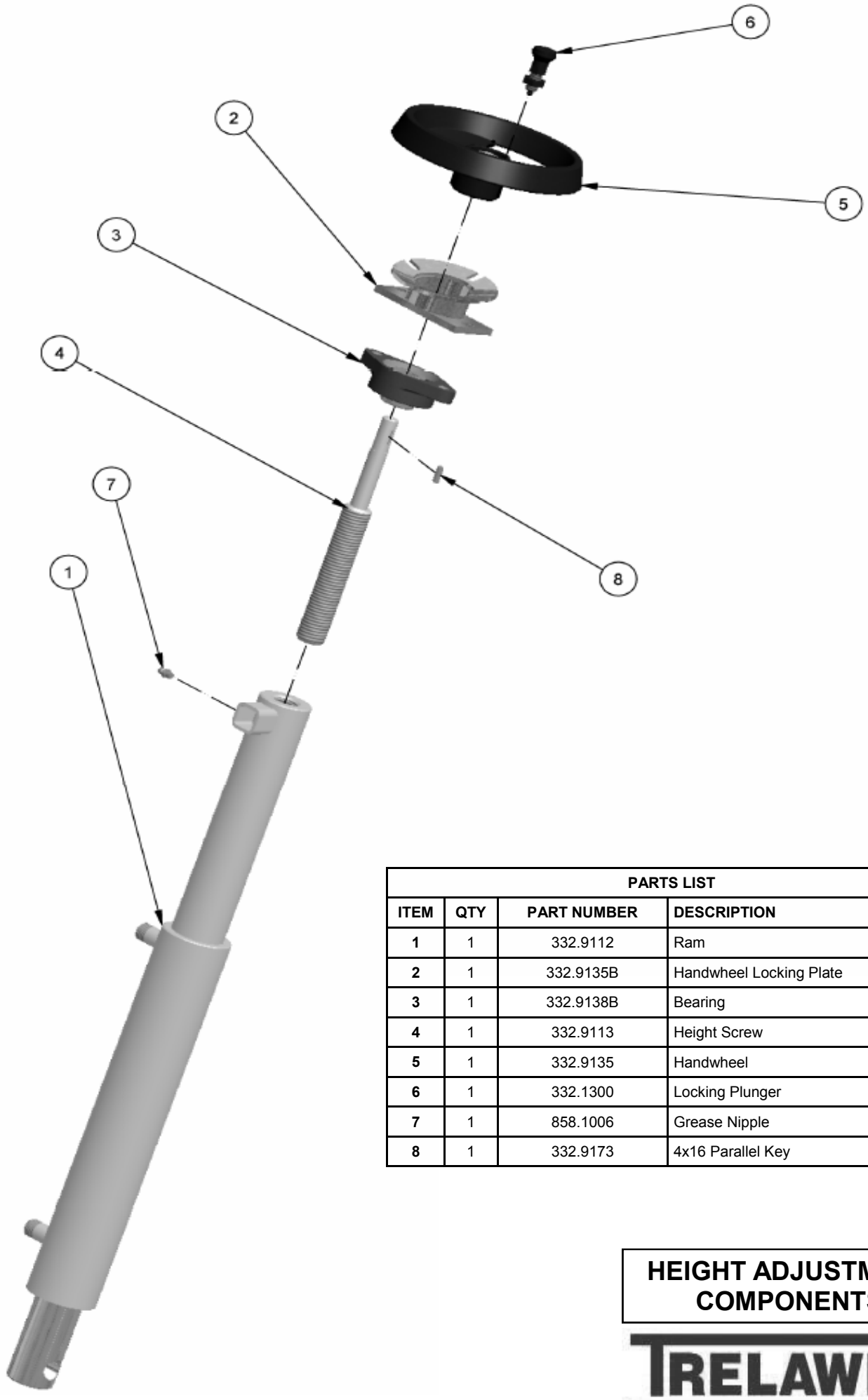

PARTS LIST			
ITEM	**QTY**	**PART NUMBER**	**DESCRIPTION**
1	1	332.9112	Ram
2	1	332.9135B	Handwheel Locking Plate
3	1	332.9138B	Bearing
4	1	332.9113	Height Screw
5	1	332.9135	Handwheel
6	1	332.1300	Locking Plunger
7	1	858.1006	Grease Nipple
8	1	332.9173	4x16 Parallel Key

HEIGHT ADJUSTMENT COMPONENTS

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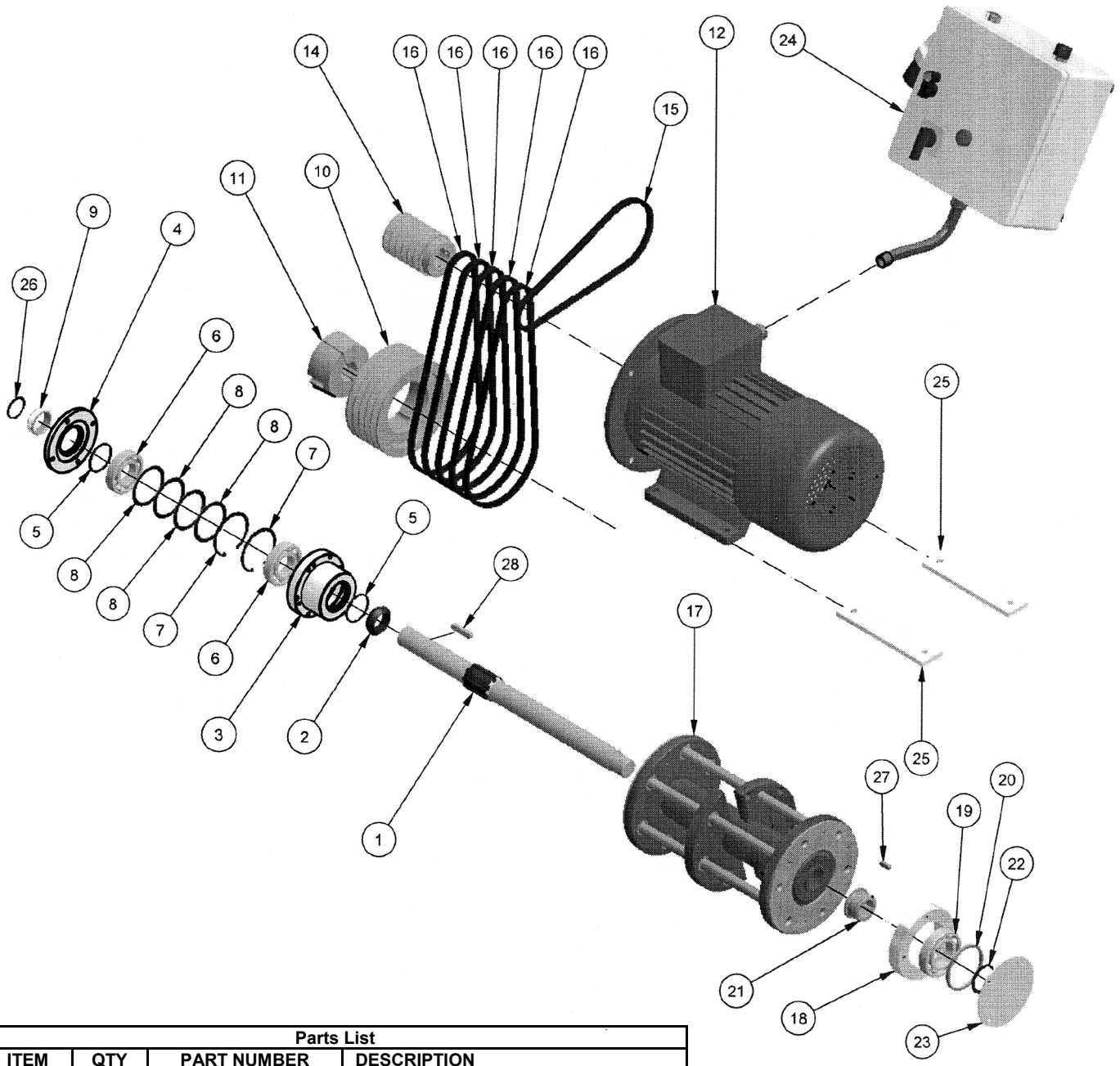

Parts List			
ITEM	**QTY**	**PART NUMBER**	**DESCRIPTION**
1	1	332.3036A	Drive Shaft
2	1	332.9151	Washer
3	1	332.9116	Bearing Housing
4	1	332.9116A	Bearing Top
5	2	332.9116B	Lipped Seal
6	2	332.9165	Bearing
7	2	332.3210	Int Circlip
8	4	332.9118	Adjusting Washer - Flat
9	1	332.9117	Washer
10	1	332.9128	Pulley
11	1	332.9129	Taper Lock Bush [3020 – 38mm]
12	1	332.9185	Electric Motor
13	1	332.9174	6x39 Parallel Key
14	1	332.9126	Drive Pulley
15	1	332.9137A	Drive Belt (Hyd pump)
16	5	332.9137	Drive Belt (was 332.3026)
17	1	332.000H	Drum c/w Flail Shafts (was 332.000H)
18	1	332.9115	Bearing Housing
19	1	332.9166	Bearing
20	1	332.9125	Support Side Spacer
21	1	332.9114	Bearing Insert
22	1	332.9133	Ext. Circlip
23	1	332.9115A	Bearing Housing End Plate
24	1	332.9147	Electric Panels Asmy
25	2	332.9150	Motor Spacer
26	1	332.9132	Ext. Circlip
27	1	332.9175	8x25 Parallel Key
28	1	332.9176	10x50 Parallel Key

DRUM
DRIVE COMPONENTS

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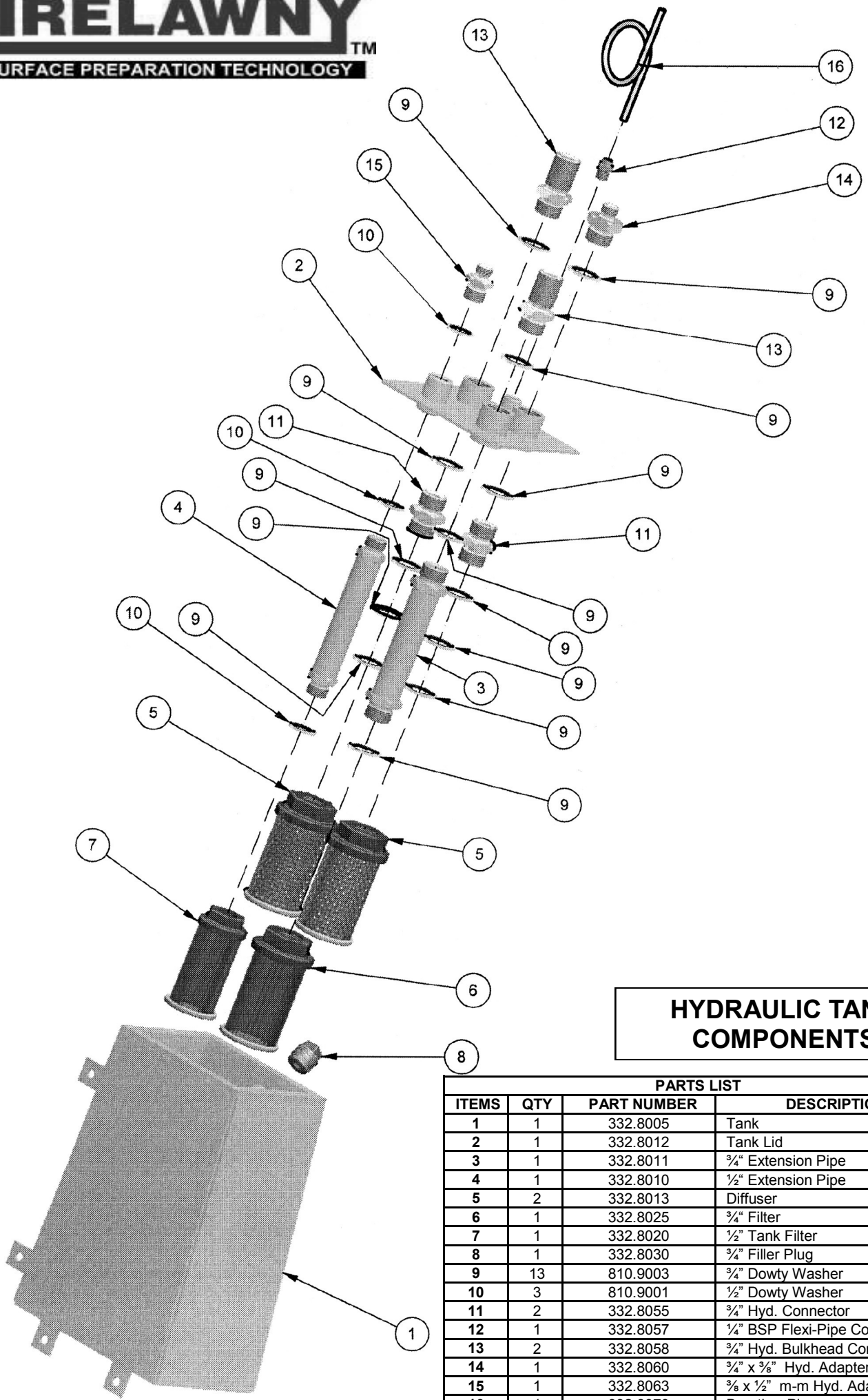
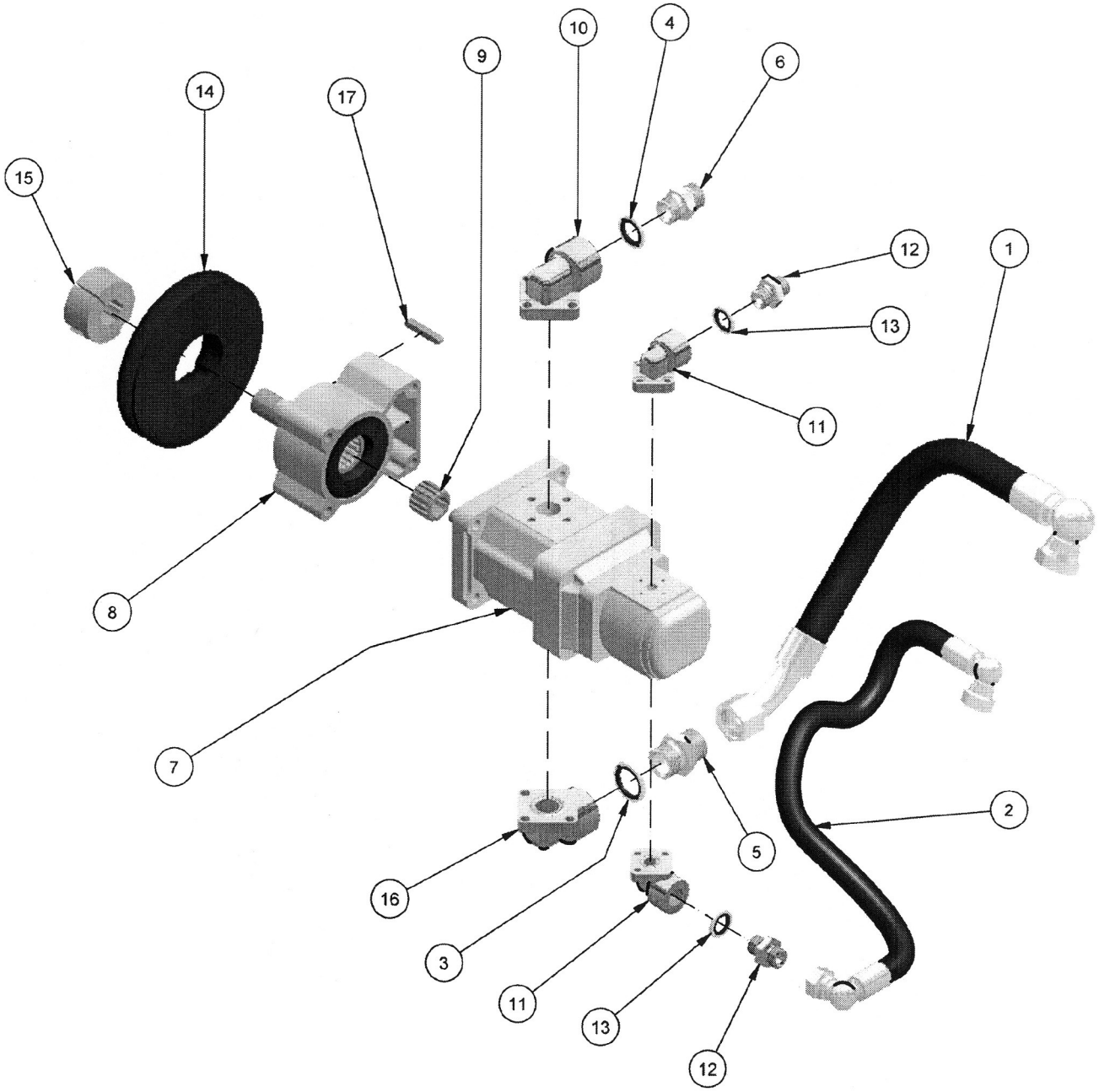


HYDRAULIC TANK COMPONENTS

PARTS LIST			
ITEMS	**QTY**	**PART NUMBER**	**DESCRIPTION**
1	1	332.8005	Tank
2	1	332.8012	Tank Lid
3	1	332.8011	¾“ Extension Pipe
4	1	332.8010	½“ Extension Pipe
5	2	332.8013	Diffuser
6	1	332.8025	¾“ Filter
7	1	332.8020	½” Tank Filter
8	1	332.8030	¾” Filler Plug
9	13	810.9003	¾” Dowty Washer
10	3	810.9001	½” Dowty Washer
11	2	332.8055	¾” Hyd. Connector
12	1	332.8057	¼” BSP Flexi-Pipe Connector
13	2	332.8058	¾” Hyd. Bulkhead Connector
14	1	332.8060	¾” x ⅜” Hyd. Adapter
15	1	332.8063	⅜ x ½” m-m Hyd. Adaptor
16	1	332.8070	Breather Pipe



PARTS LIST			
ITEMS	**QTY**	**PART NUMBER**	**DESCRIPTION**
1	1	332.8120	Hyd. Pipe, Tank to Pump
2	1	332.8125	Hyd. Pipe, Tank to Pump
3	1	810.9003	¾" Dowty Washer
4	1	810.9001	½" Dowty Washer
5	1	332.8055	¾" Hyd. Connector
6	1	332.8065	½" m-m Hyd Adaptor
7	1	332.8137	Tandem Pump
8	1	332.8167A	Load Adaptor
9	1	332.8167B	Splined Drive
10	1	332.8167C	½" Port Connector c/w O-Ring
11	2	332.8167D	⅜" Port Connector c/w O-Ring
12	2	332.8064	⅜" m-m Hyd. Adaptor
13	2	810.9000	⅜" Dowty Washer
14	1	332.9123	Driven Pulley
15	1	332.9126A	Taper Lock Bush [1610 – 22mm]
16	1	332.8167E	¾" Port Connector c/w O-Ring
17	1	332.9174	6x39 Parallel Key

HYDRAULIC DRIVE COMPONENTS

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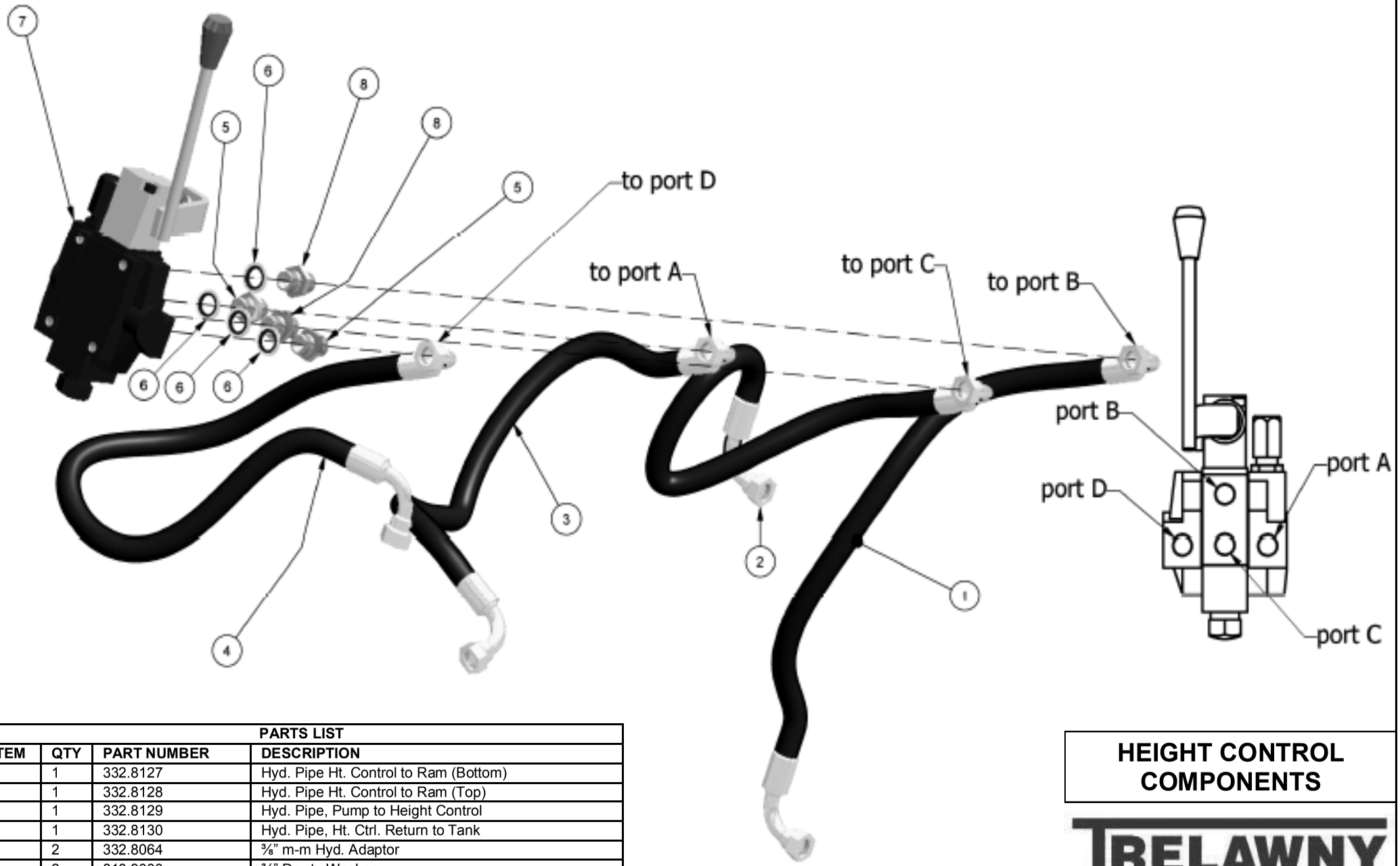
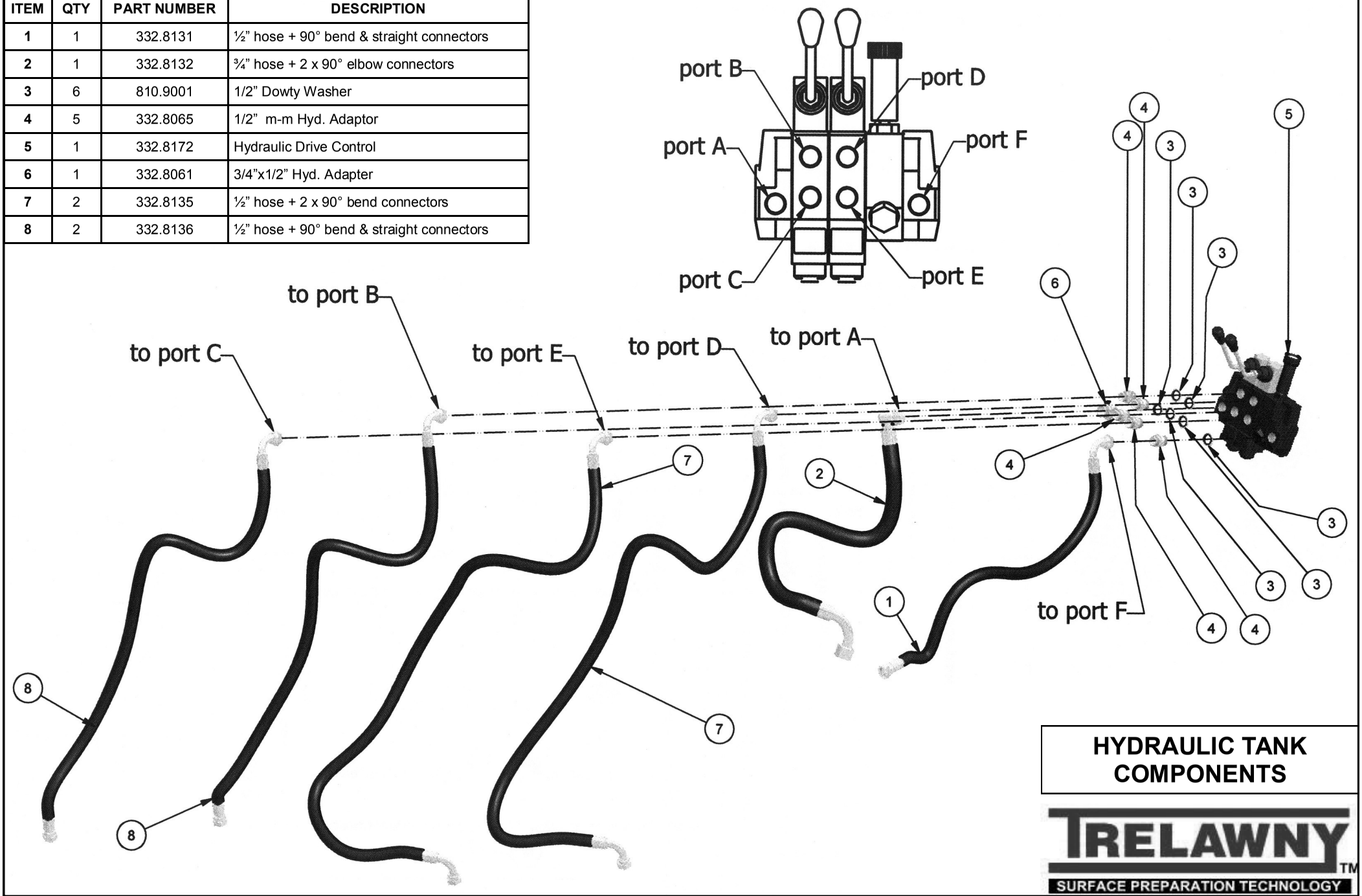


PARTS LIST			
ITEM	**QTY**	**PART NUMBER**	**DESCRIPTION**
1	1	332.8127	Hyd. Pipe Ht. Control to Ram (Bottom)
2	1	332.8128	Hyd. Pipe Ht. Control to Ram (Top)
3	1	332.8129	Hyd. Pipe, Pump to Height Control
4	1	332.8130	Hyd. Pipe, Ht. Ctrl. Return to Tank
5	2	332.8064	⅜" m-m Hyd. Adaptor
6	2	810.9000	⅜" Dowty Washer
7	2	332.8170	Hydraulic Ram Control
8	4	332.8067	⅜" Flow Restrictor

HEIGHT CONTROL COMPONENTS

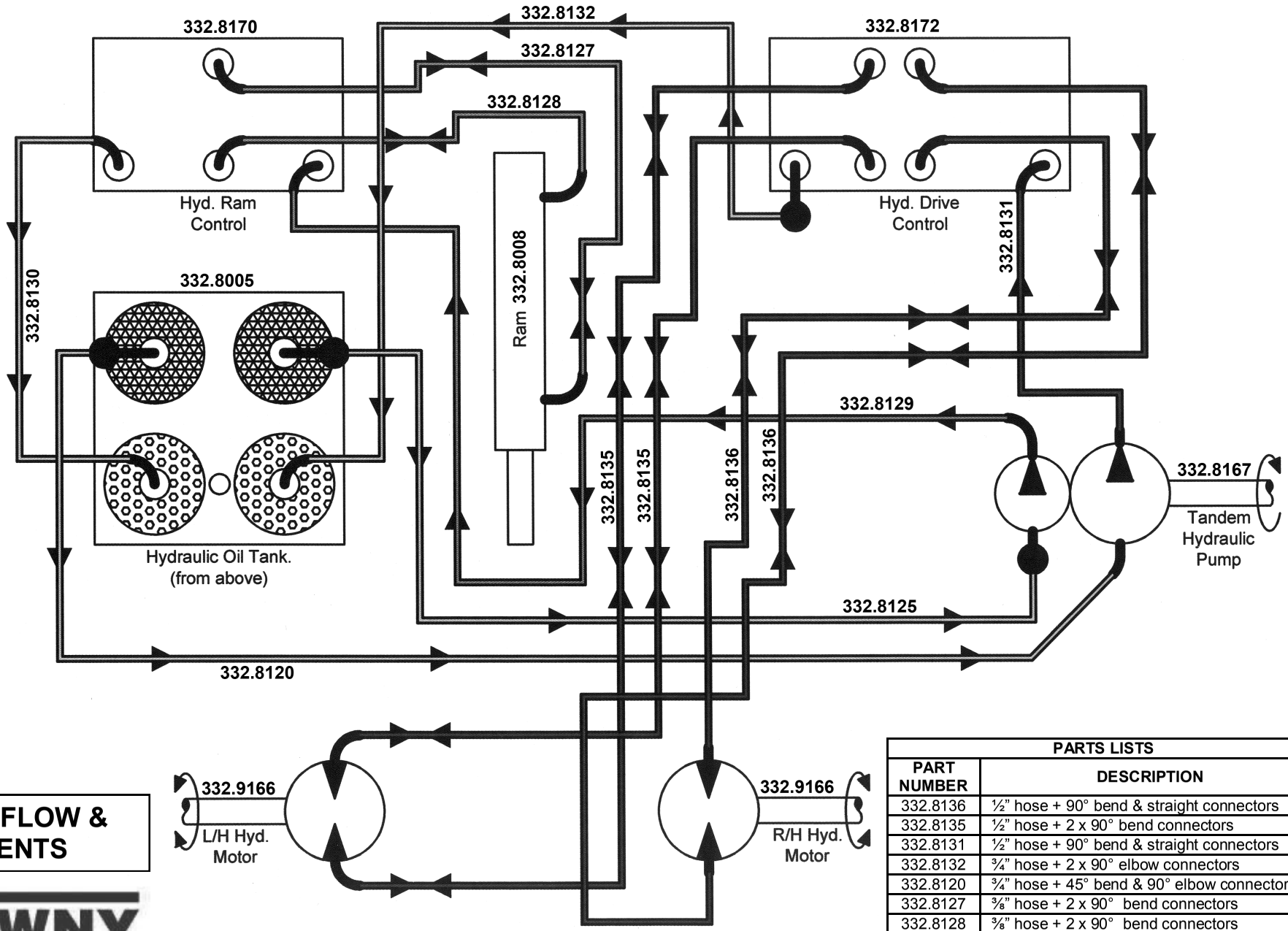
TRELAWNY™
SURFACE PREPARATION TECHNOLOGY

PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	332.8131	½" hose + 90° bend & straight connectors
2	1	332.8132	¾" hose + 2 x 90° elbow connectors
3	6	810.9001	1/2" Dowty Washer
4	5	332.8065	1/2" m-m Hyd. Adaptor
5	1	332.8172	Hydraulic Drive Control
6	1	332.8061	3/4"x1/2" Hyd. Adapter
7	2	332.8135	½" hose + 2 x 90° bend connectors
8	2	332.8136	½" hose + 90° bend & straight connectors



HYDRAULIC TANK COMPONENTS

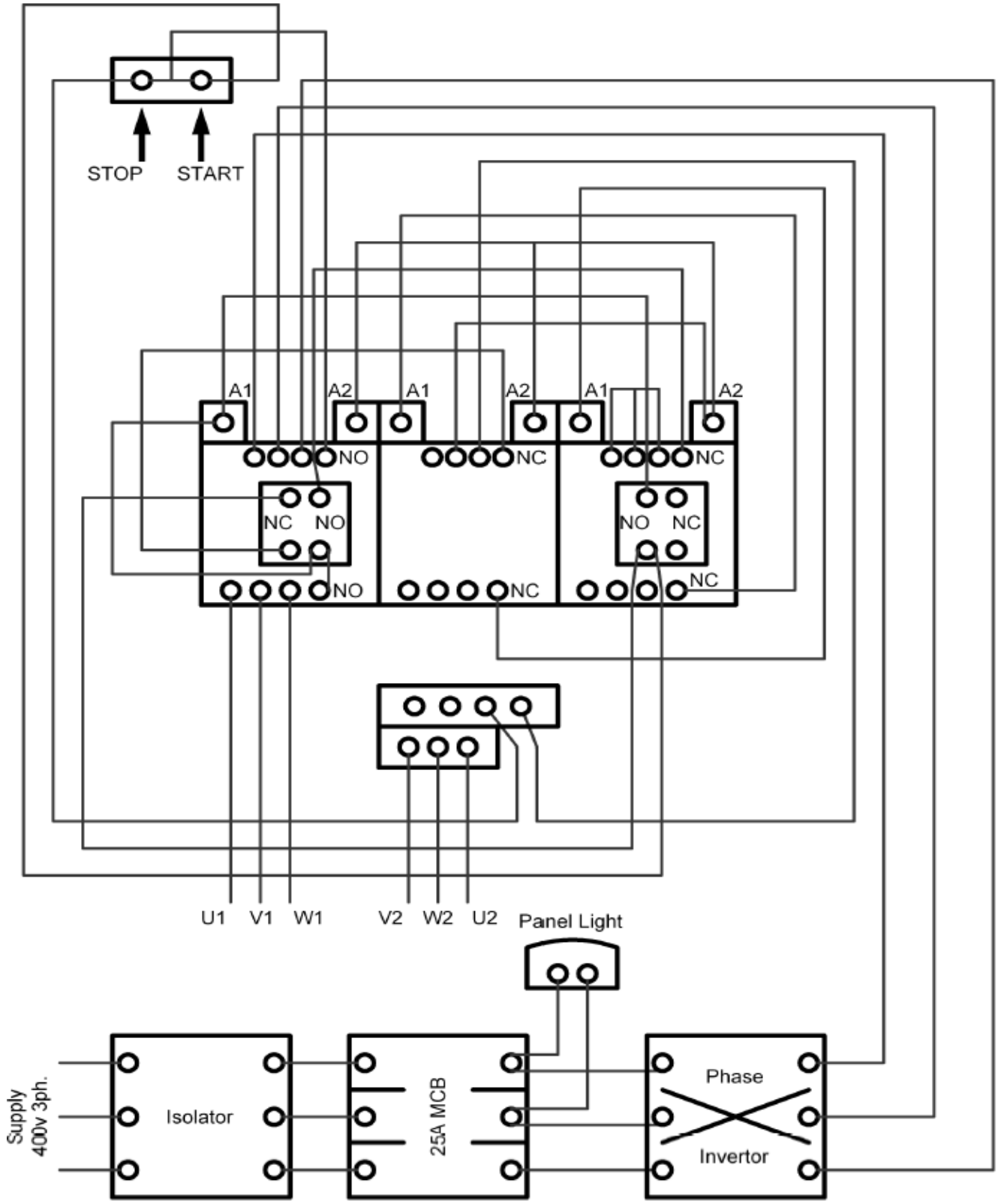
TRELAWNY™
SURFACE PREPARATION TECHNOLOGY



HYDRAULIC FLOW & COMPONENTS

TRELAWNY™
SURFACE PREPARATION TECHNOLOGY

PARTS LISTS	
PART NUMBER	**DESCRIPTION**
332.8136	½" hose + 90° bend & straight connectors
332.8135	½" hose + 2 x 90° bend connectors
332.8131	½" hose + 90° bend & straight connectors
332.8132	¾" hose + 2 x 90° elbow connectors
332.8120	¾" hose + 45° bend & 90° elbow connectors
332.8127	⅜" hose + 2 x 90° bend connectors
332.8128	⅜" hose + 2 x 90° bend connectors
332.8129	⅜" hose + 2 x 90° bend connectors
332.8130	⅜" hose + 2 x 90° bend connectors
332.8125	⅜" hose + 2 x 90° elbow connectors



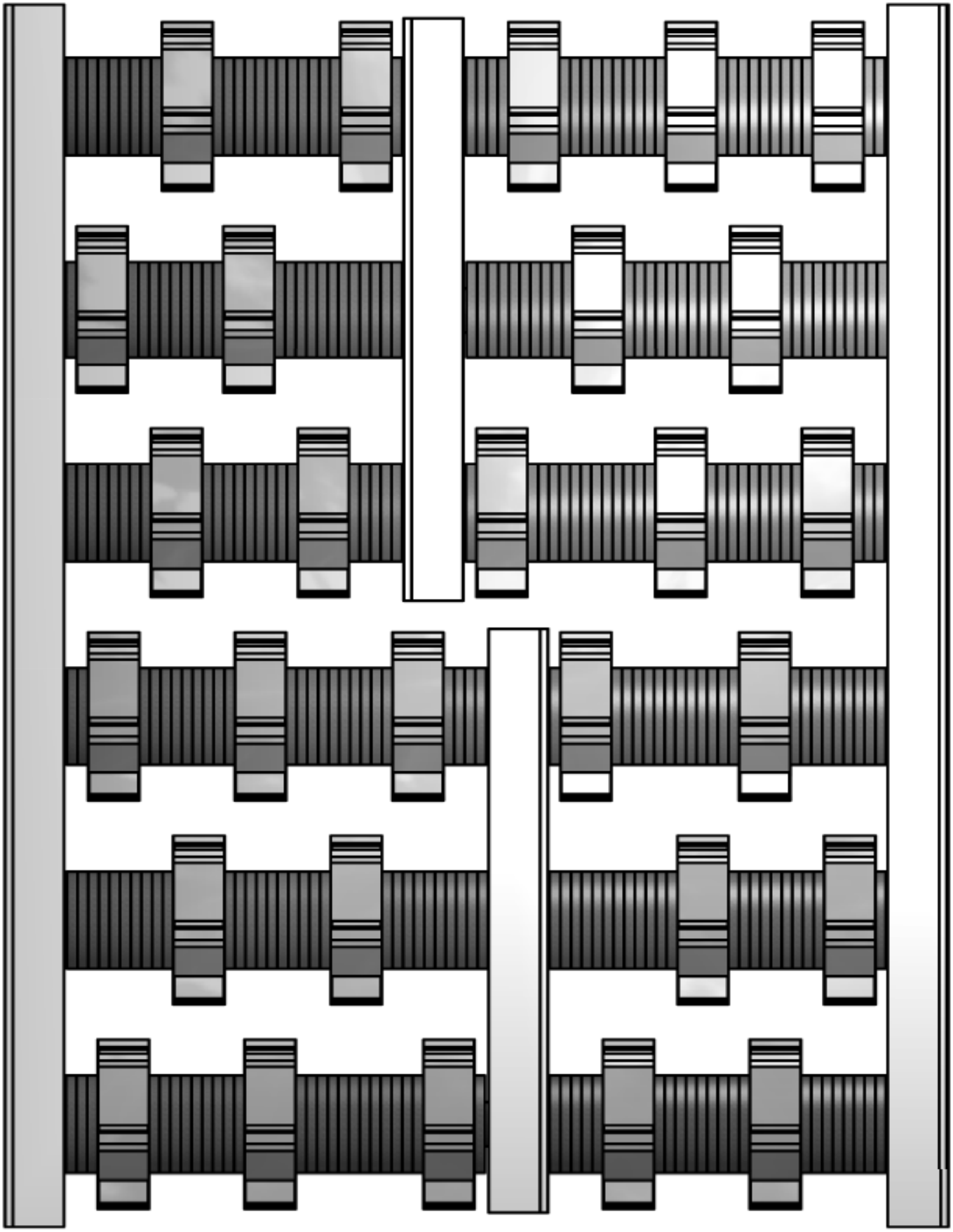
TFP320 (B) TYPE PANEL ASSEMBLY				
PART No	**DESCRIPTION**		**PART No**	**DESCRIPTION**
332.7010	Panel inc Back Plate		332.7062	Panel lamp
332.7050	Overload		332.7070	Isolator 40amp
332.7020	Star/Delta Start Unit		332.7075	Trip
332.7030	Switch block		332.7080	32amp 4pin surface mtd plug
332.7032	Switch block		332.7085	Switch
332.7040	Start button		332.7015	Gland
332.7042	Stop button		332.7012	Brass bush. Nut
332.7060	Panel light lens		332.7011	Rubber mounts

WIRING DIAGRAM

TRELAWNY™
SURFACE PREPARATION TECHNOLOGY

TFP320 (B) TYPE PANEL ASSEMBLY (PART No 332.3079B)

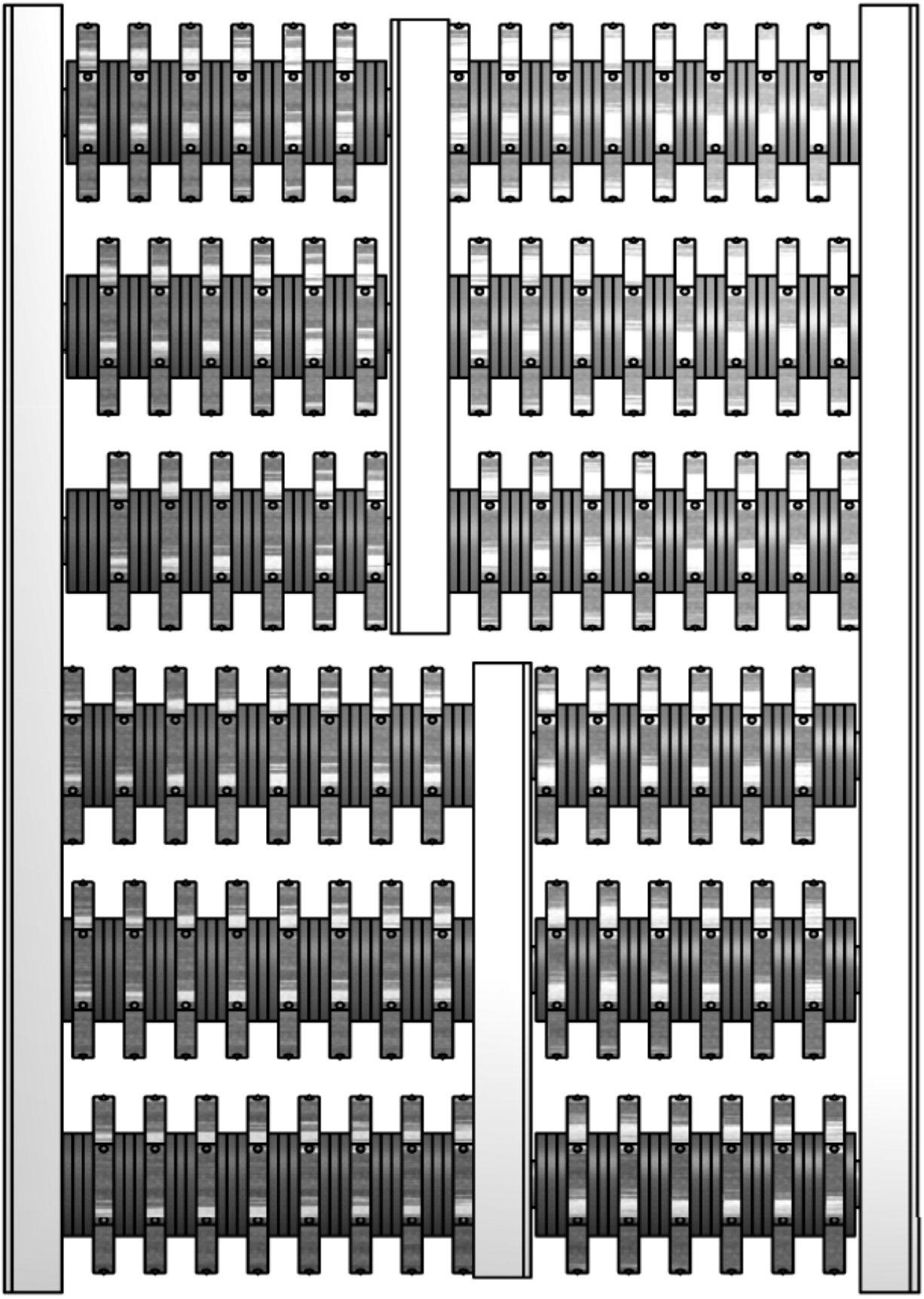
Qty	Description	Part Number
1	Panel including Back Plate (Overload Pano)	332.7010
1	Overload	332.7050
1	Star Delta Start Unit	332.7020
1	Switch Block (Telemec)	332.7030
1	Switch Block (Telemec)	332.7032
1	Start Button (Telemec)	332.7040
1	Panel Light Lens (Telemec)	332.7042
1	Panel Lamp	332.7062
1	Isolator 40amp (Pettereins)	332.7070
1	Trip (Chint)	332.7075
1	32A 4Pin Surface mounted Plug (Walther)	332.7080
1	Switch	332.7085
1	Gland	332.7015
1	Brass Bush. Nut	332.7012
1	Rubber Mounts	332.7011



DRUM MILLING CUTTER CONFIGURATION

PARTS LIST		
QTY	PART NUMBER	DESCRIPTION
292	320.4141	Spacer
28	332.5600	Milling Cutter

TRELAWNY™
SURFACE PREPARATION TECHNOLOGY

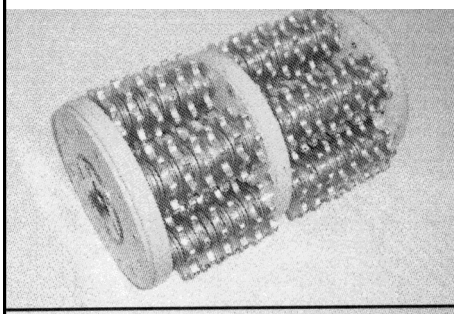
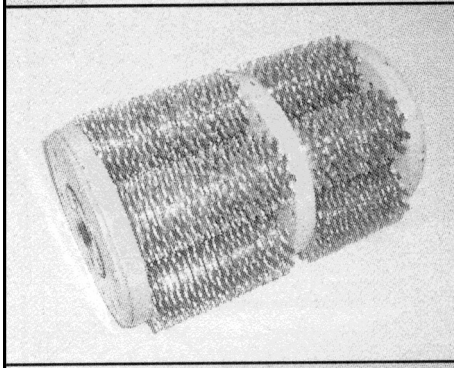
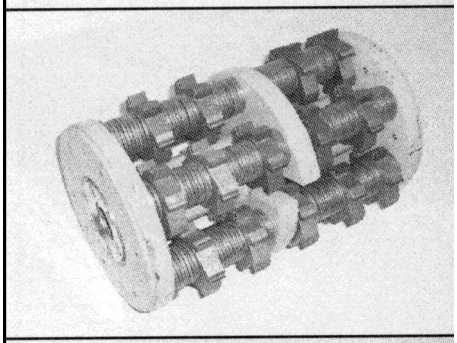
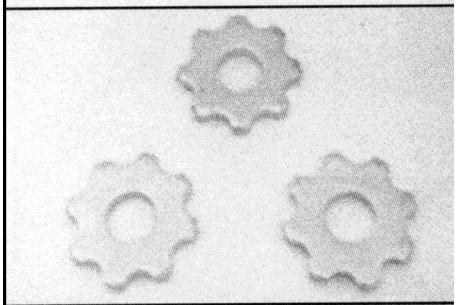
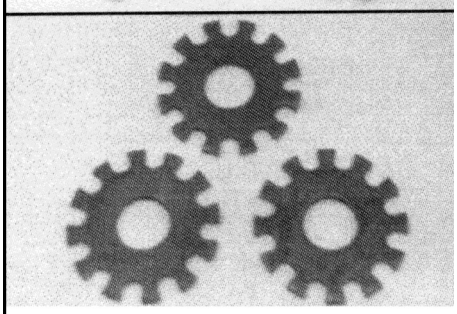


DRUM TCT CUTTER CONFIGURATION

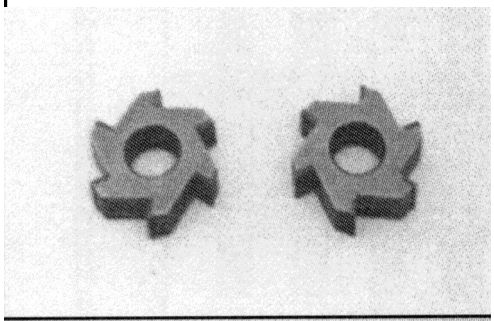
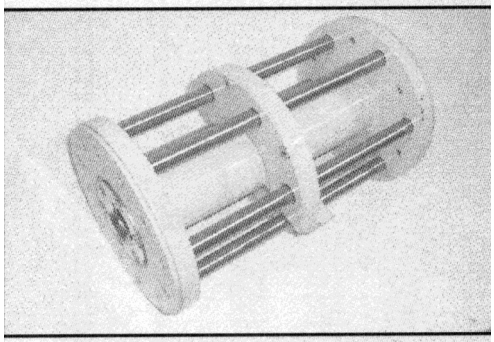
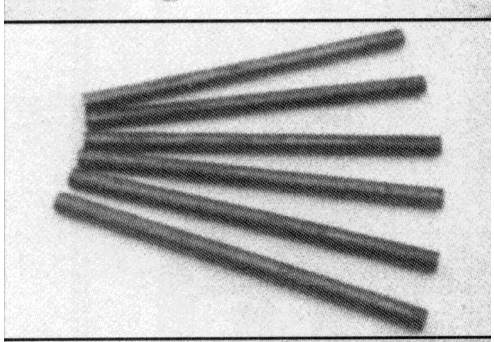
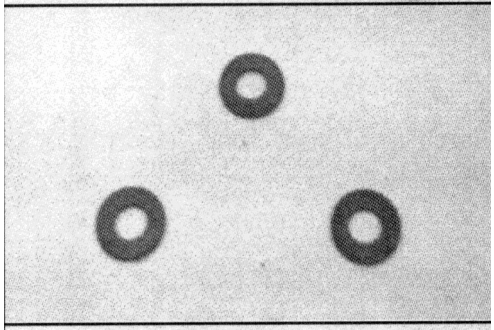
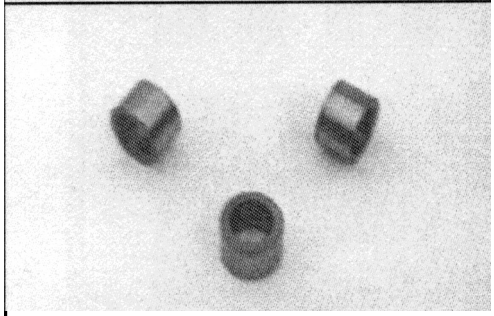
PARTS LIST		
QTY	PART NUMBER	DESCRIPTION
258	320.4141	Spacer
84	320.7008	TCT Cutter

TRELAWNY™
SURFACE PREPARATION TECHNOLOGY

ACCESSORIES

	332.1010ST	Heavy Duty Drum complete with TCT Cutters and Spacers	Hardened Steel Cutter with tungsten inserts, for all concrete texturing, scabbling, planning and grooving applications. Removal of bridge deck and car park membranes, heavy industrial contamination, epoxy coatings and road marking. Use on heavy applications and for longer life and higher output.
	332.1010SB	Heavy Duty Drum complete with Beam Flails.	Heat treated Steel Cutters for the removal of paint coatings and latience from new floors. Also used for removing compacted dirt from forklift trucks runs, ice deposits and light scabbling of concrete when a fine textured surface is required.
	332.1010SM	Heavy Duty Drum complete with Milling Cutters and Spacers.	For the removal of thermoplastic road/runway markings. Very effective and cost effective with none of the problems associated with the burning off thermoplastics. Also for the removal of bituminous materials and rubber deposits.
	320.7008	T.C.T Cutter: 8 point hardened steel Cutter with Tugsten Carbide inserts.	For all concrete texturing scabbling, planning applications. Removal of bridge deck and car park membranes, heavy industrial contamination, epoxy coatings and road markings. Use on heavy applications for longer life and a higher output.
	332.5190	Beam Cutter: Heat treated Steel Cutter	For the removal of paint coatings and latience from new floors. Also used for removing compacted dirt from forklift trucks runs, ice deposits and light scabbling of concrete when a fine textured surface is required.

ACCESSORIES

	20mm 332.5690	Milling Cutter: Tipped with Tungsten Carbide	For removal of thermoplastic road/ runway markings, rubber based deposits and cold plastic coatings from asphalt and concrete.
	332.000H	Heavy Duty Drum complete with flail shafts.	For use with various Cutter configurations.
	332.0020	Heavy Duty Flail Shaft	Hardened Cutter Shaft
	320.4141	Spacing Washer	Hardened Spacing Washer
	332.0020A	Hardened Bush	Hardened Drum Insert to carry Flail Shafts.

TECHNICAL SPECIFICATIONS

Technical Specifications

POWER OUTPUT (HP)	15
VOLTAGE	380/415
CYCLES	50
CUTTERHEAD SPEED (RPM)	650
STARTER	STAR / DELTA
TRAVEL SPEED mtr/min	0 -12
LENGTH	1230
PLUG SIZE	32amp / 5pin
MAXIMUM CABLE LENGTH (6mm)	75 Meters
GENERATOR	25kVA
HYDRAULIC OIL	HM46
HYDRAULIC OIL TANK CAPACITY	6 Litres
WIDTH	590
WEIGHT (Kg) with drum	339
CUTTING WIDTH (mm)	320
WORKING DISTANCE FROM WALL (mm)	40
NOISE L_{wa}	97.2
In accordance with ISO15744:2008 $L/_{Aeq\ t}$	79.2
VIBRATION (Handle) Aeq m/s^2 (K)*	2.337

VIBRATION

* (k) Equals the factor of uncertainty, which allows for variations in measurement and production.

Vibration Data figures are tri-axial, which gives the total vibration emission.

Because of various factors, the range of vibration from these tools may vary between 2.337m/s^2 & 3.3m/s^2. The vibration is dependent on the task, the operators grip and feed force employed etc.

NOTE: The above vibration levels were obtained from tri-axial measurements to comply with the requirements of "The Control of Vibration at Work Regulations 2005*" and the revisions to the (8662) now EN ISO 28927:2012 and EN ISO 20643:2005 series of standards.

These values are at least 1.4 times larger than the values obtained from single axis measurements.

Based on European Union Council Directive 2002/44/EC (Physical Agents (Vibration) Directive)

This tool has been designed and produced in accordance with the following directives: 2006/42/EC Machinery Directive

If your company has any problem with our products or would like to discuss the possibility of an improvement being made to them, then please do not hesitate to contact us.
Your comments are both important and appreciated.

Trouble Shooting

FAULT	CAUSE	ACTION
Electric motor stops suddenly	Blown electrical supply fuse.	Replace fuse.
	Motor overload protection activated, caused by to heavier cut being made.	Disconnect electricity supply at mains and reset button inside starter box, reduce depth of cut.
	RCD protection tripped	Investigate cause, rectify and reset RCD protection.
Planer is slow or erratic	Drive Belts slack or failed.	Replace Belts or adjust tension.
	Worn Drum Cutters	Replace Cutters.
	Failed cutter shaft	Inspect drum inserts, replace inserts and cutter shaft as required.
No drive to rear wheels	Incorrect electrical phase	See page 6 for rectification method.
	Insufficient hydraulic fluid in tank.	Rectify hydraulic leak and refill with correct hydraulic oil.
	Hydraulic drive belt slack or failed	Tighten or replace drive belt
If problem has not been cured by above actions, contact your local Trelawny agent or engine manufacturer for advice or rectification.		

INVESTORS IN PEOPLE

bcas Member

TRELAWNY
SURFACE PREPARATION TECHNOLOGY

ISO 9001 BUREAU VERITAS Certification

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