

# CROMMELINS™ POWER TROWELS

## OPERATION & INSTRUCTION MANUAL

Thank you for your selection of a CROMMELINS™ Power Trowel. This Operation Manual explains its use, installation, checking and maintenance. We highly recommend that you retain this manual for ready reference regarding proper handling of the CROMMELINS™ Power Trowel.



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Thank you very much for purchasing a CROMMELINS™ POWER TROWEL.

This manual covers operation and maintenance of the CROMMELINS™ POWER TROWEL.

This CROMMELINS™ POWER TROWEL can be used in the mining, construction, hire industries and general use.

Please take a moment to familiarise yourself with the proper operation and maintenance procedures in order to maximise the safe and efficient use of this product.

Keep this owner's manual at hand, so that you can refer to it at anytime.

Due to constant efforts to improve our products, certain procedures and specifications are subject to change without notice.

When ordering spare parts please have handy your products model number and serial number. Record these numbers in the boxes below for future reference.

**MODEL NO.**

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**SERIAL NO.**

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This manual contains important information on how to use the following power trowel models CPT24S, CPT34R, CPT34RD, CPT40R, CPT40RD and CPT46S properly and safely. Please read through this manual before you attempt to operate this product.

## SAFETY PRECAUTIONS

Before operating this piece of equipment, the operator should read this manual. Whenever possible, he/she should be shown how to operate the unit by an experienced operator. It is dangerous for an inexperienced person to operate any machine. Trial and error is not the safe way to become familiar with a piece of equipment.

To prevent injury wear the following protective clothing: Gloves, hard hat, work boots, ear plugs, safety goggles and any other protective devices required by job conditions.



- Stay AWAY from blades during operation.
- Be cautious with the ventilation of work place. Avoid operating machine in closed area, since engine exhaust contains poisonous gases.
- Be careful with hot components. Mufflers and other parts of the engine are hot during operation and right after shutdown.
- Fasten fuel cap tightly and close fuel strainer cock during transportation.

## REFITTING HANDLE ASSEMBLY AND CABLE

For Packaging and Transport reasons you have received your CROMMELINS™ Power Trowel with the *Handle Assembly and Cable removed* from the machine and packaged on top.

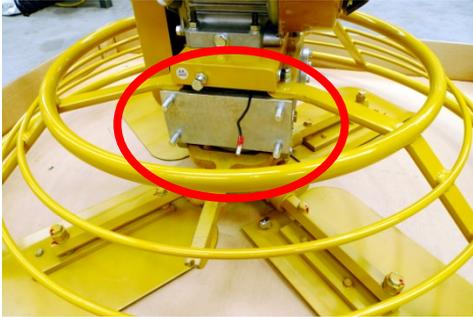
**IMPORTANT:** This machine has been factory set and run. DO NOT adjust any screws or cables during the handle assembly process.



**To refit the Handle Assembly please carry out the following procedure;**

**STEP 1** – Lift outer carton off Trowel Machine so that it is on the cardboard base only. Remove handle tie downs and packaging from the machine. DO NOT STRETCH or KINK any cables.

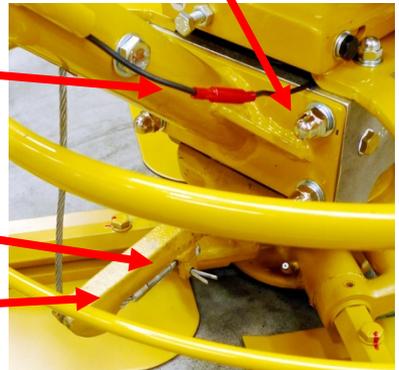
**STEP 2** – Remove the 4x Dome Nuts and Washers from the rear of the trowel gearbox.



**STEP 3** – Fit handle end onto the studs, re-fit the Flat Washers, Spring Washers, Dome Nuts and tighten securely.



**STEP 4** – Remove the split-pin under the yoke lever. Insert the screwed end of the steel cable into the slot, with the nut behind the block and re-fit the split-pin. Bend the ends of the split-pin, so that it cannot fall out.



**STEP 5** – Connect the two black wires back together at the red connection point.



**STEP 6** – Adjust the chrome handles to your comfortable working height.

**STEP 7** – To start the machine follow the STARTING procedure on page 5.



## BELT SETTING

**STEP 1** – Loosen engine base bolt (underneath engine) to allow engine-base movement.

**STEP 2** – Insert V-belt into clutch pulley and reducer pulley one at a time.

**STEP 3** – Adjust the engine position by moving engine-base to ensure v-belts are tight enough.

**IMPORTANT:** Normal slack should be approximately 10-15mm (1/2”) when the belts are forcibly depressed in the middle position between rotor pulley and clutch pulley.

Tighten all engine bolts and cover V-belt and pulley with belt cover, tighten cover bolts.

## PRE START-UP CHECKING

- Consult engine manual for detailed starting information.
- Check all bolts and screws for tightness. Loose bolts and screws may cause damage to the unit.
- Make sure that all dirt, mud, etc., are thoroughly removed from areas such as cooling air inlet of engine, carburettor, and air cleaner.
- Check V-belt tightness. The normal slack should be approximately 10-15mm (1/2”) when the belts are forcibly depressed in the middle position between two pulleys. To set belt tightness; refer to Belt Setting at page 3.
- Check fuel level and refill as required.
- Check engine oil level. If engine oil level is low, refill it with the correct engine oil as stated in the engine manual.

**CAUTION!** – Make sure nobody is in the vicinity of the trowel when starting the engine; it might move suddenly with force.

## STARTING (PETROL UNITS)

**STEP 1** – Open engine fuel cock.

**STEP 2** – Set throttle lever to starting position.

**STEP 3** – For cold engine starting, close carburettor choke lever.

**STEP 4** – Set engine switch to “ON”.

**STEP 5** – Pull recoil starter (**IMPORTANT:** Do not pull recoil starter rope to the end as it may cause damage. When the rope is pulled out, release the rope slowly. Do not let the rope snap back).

**STEP 6** – After engine starts, open the choke halfway and warm up the engine for 2-3 minutes with low speed position. The warm up procedure should particularly be followed during cold weather.

## STARTING (DIESEL UNITS)

**STEP 1** – Set speed control to low speed.

**STEP 2** – Pull recoil starter rope until resistance is felt.

**STEP 3** – Bracing foot against engine, pull recoil starter rope with both hands.

**IMPORTANT:** Do not pull recoil starter rope to the end as it may cause damage. When the rope is pulled out, release the rope slowly. Do not let the rope snap back.

## OPERATION

**CAUTION!** – Poisonous fumes. Start and operate only in a well-ventilated area. Be careful with hot components, mufflers and other engine parts are hot during operation. Do not touch them.

**STEP 1** – Adjust throttle lever to the desired speed.

**STEP 2** – Follow the pattern illustrated below during operation.

- Smooth partially set floor surface; operate the machine with blades fattened. For a luster finish, operate with the blades slightly tilted. Over tilted blades on unset floor with create a wavy surface.
- Floor that has completely set is difficult to smooth. If this is the case, tilt blades as high as possible. Sprinkle water on the floor beforehand.

## SHUTDOWN – PETROL UNIT

**STEP 1** – Move throttle lever to low speed position quickly and run engine for 2-3 minutes at low speed.

**STEP 2** – Turn of the stop switch, the engine stops completely.

**STEP 3** – Close engine fuel cock.

**STEP 4** – Cover the machine after the muffler has cooled off and keep the trowel in a dry place.

**EMERGENCY SHUTDOWN:** Move throttle lever to OFF and press engine stop button.

## SHUTDOWN – DIESEL UNIT

**STEP 1** – Move throttle lever to low speed position quickly and run engine for 2-3 minutes at low speed.

**STEP 2** – Move the throttle lever to the stop position.

**STEP 3** – Cover the machine after the muffler has cooled off and keep the trowel in a dry place.

## WARRANTY

Consult the CROMMELINS Machinery warranty leaflet (supplied with your new product) for full details and a list of service dealers for this product, also available online at [www.crommelins.com.au](http://www.crommelins.com.au).

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

## MAINTENANCE

### CAUTION!

**FLAMMABLE LIQUID.** When performing maintenance, stop engine and do not smoke in adjacent area.

**HIGH TEMPERATURE.** Allow machine and engine to cool down before performing maintenance. Contact with hot components can cause serious injury.

**MOVING PARTS.** Make sure engine is shutdown before maintenance. Contact with moving parts can cause serious injury.

### Daily Service

- Wash blades and rotary parts with water before any adhered concrete hardens. Then dry thoroughly and apply grease or oil on them.
- Constantly check for any loose screws, nuts and bolts; retighten any loose parts.
- Grease spider blade assembly (4 x nipples) with Castrol EPL2 or equivalent.

### Weekly Service (every 50 hours of operation)

- Refer to engine service manual.

### Reduction Gear Maintenance

- Lubricating oil in reduction gear should be changed after the first 50 hours and 250 hours of operation; and at every 1000 hours of operation thereafter.
- Following oil is recommended for reduction gear – **USE SAE 140 GEAR OIL.**
- Spray lubricant onto cable pulley and adjuster slide.

## STORAGE

### Storing for a long period

- Thoroughly drain the fuel from the fuel tank, fuel pipe and carburettor.
- Pour a few drops of motor oil into the cylinder by removing the spark plug. Rotate the engine several times by hand so that the cylinder interior is covered with oil.
- Clean the outer surface of the machine with an oil-moistened cloth. Cover the unit and store in a humidity-free, dust-free area.

## POWER TROWEL SPECIFICATION CHART

MODEL	CPT24RP	CPT34RP	CPT34YD
Weight (kg)	50kg	75kg	91kg
Engine Make	Subaru	Subaru	Yanmar
Engine	6.0hp EX17	6.0hp EX17	4.7hp L48N
Engine Features	OHC	OHC	
Fuel Type	Petrol	Petrol	Diesel
Fuel Tank	3.6L	3.6L	2.4L
Noise Level db@7m	66.0	66.0	94 at 1m
Manufacturers Warranty	2 yrs	2 yrs	2 yrs
Engine Warranty	3 yrs	3 yrs	See manual
Trowel Size	24" (610mm)	34" (860mm)	34" (860mm)
Overall WxLxH (mm)	660x1460x980	932x1700x1000	1080x1700x1000
Blade Diameter	610mm	860mm	1016mm
Blade Dimensions	225x120	195x325	200x376
Quantity of Blades	4	4	4
Blade Revolution (RPM)	50 - 100	50 - 100	50 - 100

## POWER TROWEL SPECIFICATION CHART

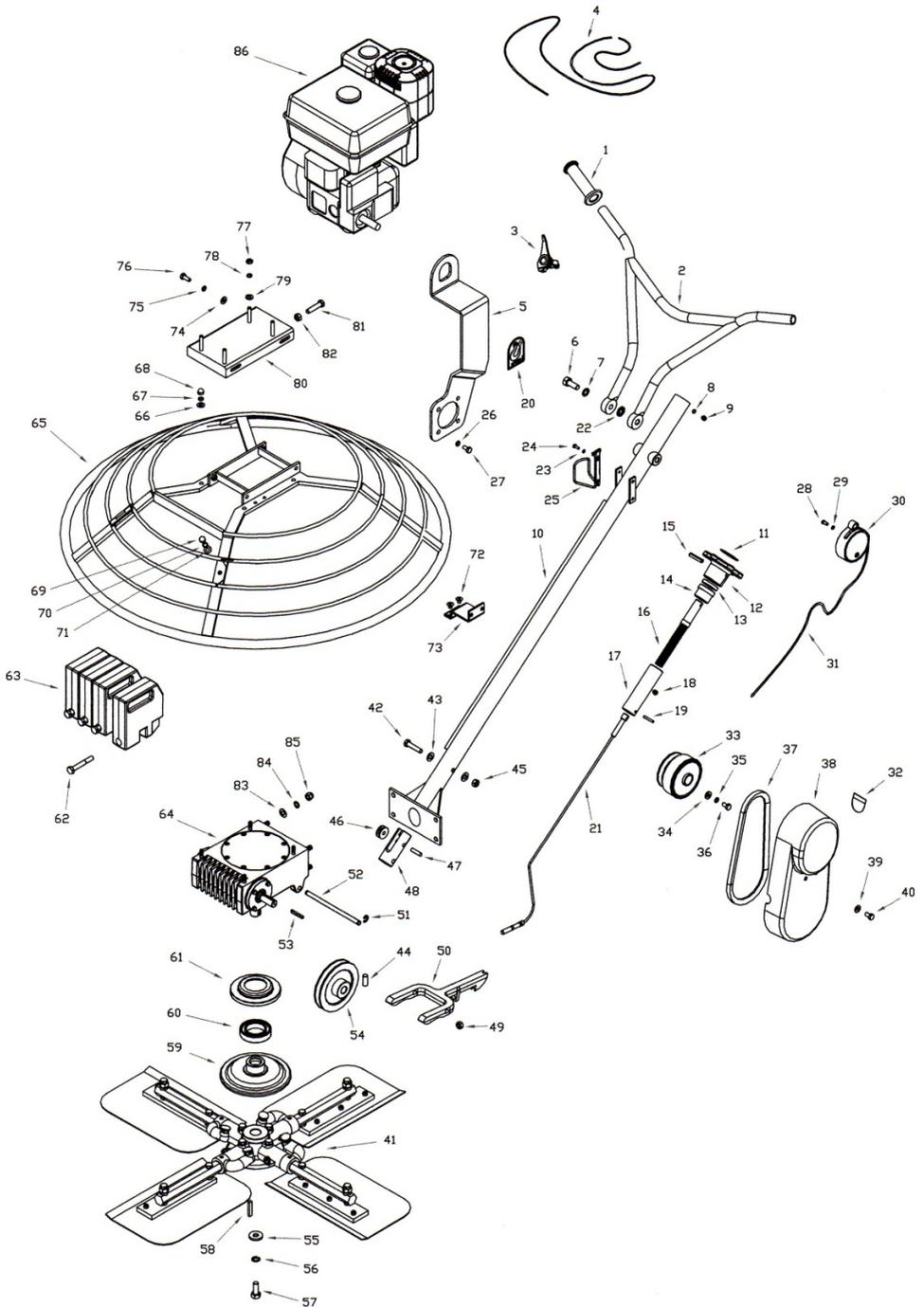
MODEL	CPT40RP	CPT40YD	CPT46RP
Weight (kg)	78kg	93kg	102kg
Engine Make	Subaru	Yanmar	Subaru
Engine	6.0hp EX17	4.7hp L48N	9.0hp EX27
Engine Features	OHC		OHC
Fuel Type	Petrol	Diesel	Petrol
Fuel Tank	3.6L	2.4L	6.1L
Noise Level db@7m	66.0	94 at 1m	70.0
Manufacturers Warranty	2 yrs	2 yrs	2 yrs
Engine Warranty	3 yrs	See manual	3 yrs
Trowel Size	40" (1016mm)	40" (1016mm)	46" (1170mm)
Overall WxLxH (mm)	1080x1700x1000	1080x1700x1000	1155x1775x1000
Blade Diameter (mm)	1016	1016	1170
Blade Dimensions (mm)	200x376	200x376	195x480
Quantity of Blades	4	4	4
Blade Revolution (RPM)	50 - 100	50 - 100	50 - 100

## TROUBLE SHOOTING GUIDE

If the power trowel malfunctions immediately shut the machine down. Following are some simple trouble shooting tips:

<b>PROBLEM</b>	<b>CAUSE</b>	<b>SOLUTION</b>
Engine stops suddenly or does not run	<ol style="list-style-type: none"><li>1. No fuel in the engine</li><li>2. Spark plug carbonised</li><li>3. Containment is being snagged up to fuel strainer</li></ol>	<ol style="list-style-type: none"><li>1. Refill Fuel</li><li>2. Clean spark plug</li><li>3. Clean fuel strainer</li></ol>
Machine is slow or erratic	<ol style="list-style-type: none"><li>1. Loose V-belt</li></ol>	<ol style="list-style-type: none"><li>1. Adjust V-Belt (refer to belt installation and setting)</li></ol>
Engine runs but the machine does not	<ol style="list-style-type: none"><li>1. Clutch slip</li></ol>	<ol style="list-style-type: none"><li>1. Disassemble clutch and clean it, then reassemble</li></ol>
IF THE FAULT PERSISTS, CONTACT YOUR LOCAL DEALER.		

# POWER TROWEL PARTS DIAGRAM

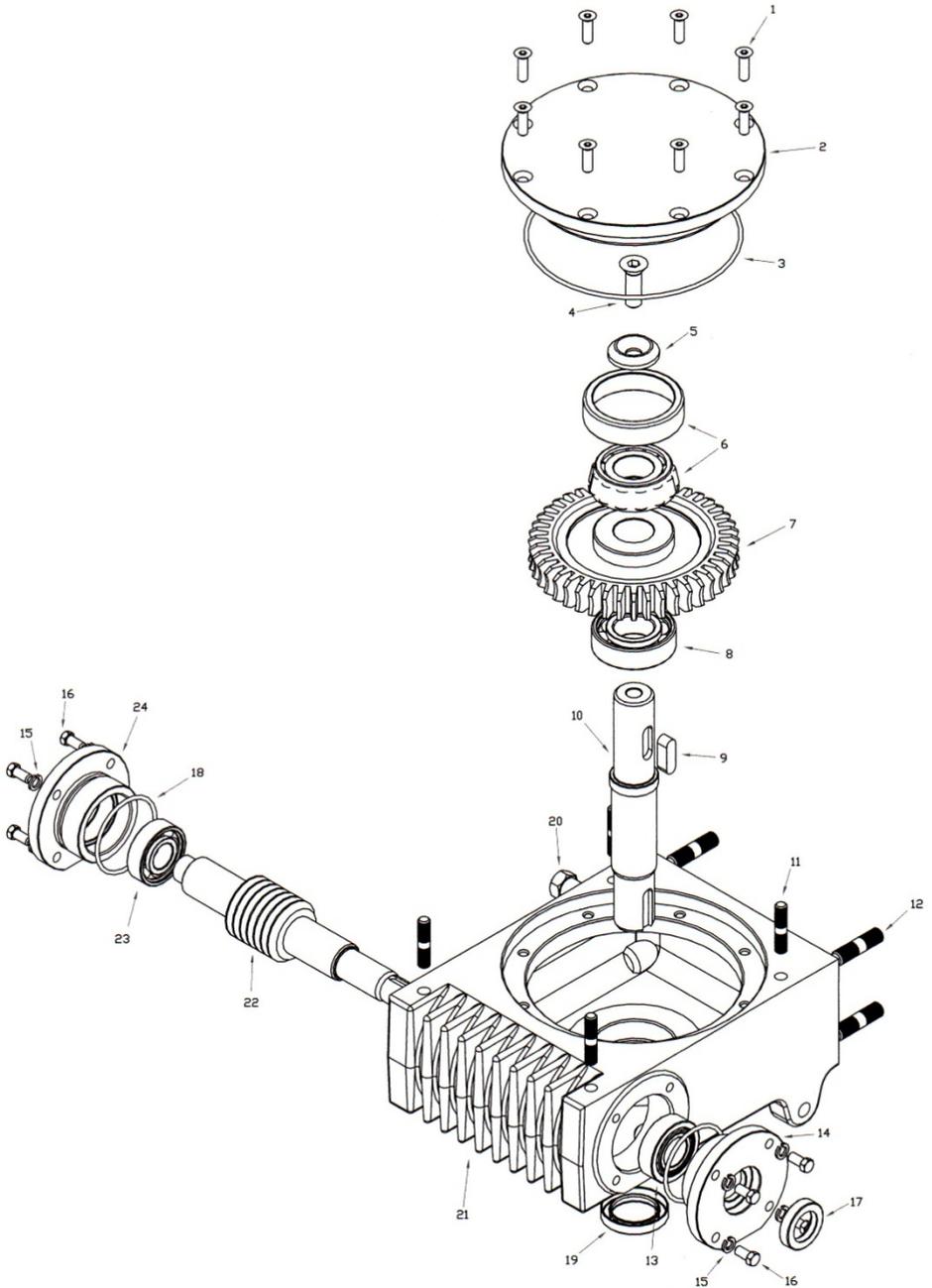


## POWER TROWEL PARTS LIST

Item no	Part no.	Part Description	Qty.
1	4920-00000	Rubber handle grip	2
2	700-019	Handle	1
3	4917-00021	Step adjust throttle lever (RH)	1
4	4916-01524	Throttle cable	1
5	7010-108	Lifting bar, short	1
6	4211-12030	Hex bolt M12x30L	2
7	4913-10012	Spring washer M12	2
8	4913-10006	Spring washer M6	1
9	4411-06010	Cap screw M6x10L	1
10	7010-024	Handle tube	1
11	7010-122	Knob plate	1
12	7010-059	Hand wheel	1
13	4100-51204	Thrust ball bearing 51204 (Grade 3)	1
14	7010-030	Bush	1
15	4909-00650	SLP M6x50L	1
16	7010-029	Slide bolt	1
17	7010-027	Slide block	1
18	7010-028	Cap screw	1
19	4909-00535	SLP M5x35L	1
20	4932-00000	Lifting label	1
21	7010-025	Wire cable set	1
22	4902-15012	M12 external overlap lock washer	2
23	4913-10005	Spring washer M5	2
24	4211-05010	Hex bolt M5x10L	2
25	4930-04001	Bottle holder	1
26	4913-10008	Spring washer M8	4
27	4211-08020	Hex bolt M8x20L	4
28	4411-06010	Soc. Head Cap Screw M6x10L	2
29	4913-10006	Spring washer M6	2
30	7010-501	Safety switch	1
31	4926-11028	1Cx28/0.26 Cable	1500L
32	4932-00001	Safety Label, Belt	1
33	4731109020	Clutch pulley 20mm	1
34	4902031023	Flat washer 3x10x23	1
35	4913-10008	Spring washer M8	1
36	4211-08025	Hex bolt M8x25L	1
37	4918-00028	V-Belt #A28, gates	1
38	7010-105	Belt cover	1
39	4913-10008	Spring washer M8	4
40	4211-08020	Hex bolt M8x20L	4
41	7010-504	34" Spider	1
42	4211-10055	Hex bolt M10x55L	1
43	4902-10010	Flat washer M10	2
44	4451-08012	Soc. Hd. Set screw stl plain M8x12L	1
45	4361-00010	Nylon nut M10	1

Item no	Part no.	Part Description	Qty.
46	7010-051	Roller	1
47	4909-10830	Dowel pin M8x30L	1
48	7010-053	Roller support	1
49	4361-00010	Nylon nut M10	1
50	7010-073	Yoke arm	1
51	4900-01008	E-clip stl zp M8	1
52	7010-075	Yoke pin	1
53	4906-50320	Key 3/16"x1-1/4"	1
54	4711-12518	Pulley A1x5", ID 18	1
55	4902053412	Flat washer stl 4.5x34x12	1
56	4913-10012	Spring washer stl zp M12	1
57	4211-12030	Hex. Bolt H.T 8.8 zp M12x30L	1
58	4906-18725	Key 8x7x25L	1
59	7010-078	Thrust plate	1
60	4102-06009	Bearing 6009 2RS (Grade 3)	1
61	7010-076	Plate cover bearing	1
62	4211-10065	Hex bolt M10x65L	4
63	7010-200	Weight block, 5kg	4
64	7010-503	Reducer	1
65	7010-008	34" guard ring	1
66	4902-10008	Flat washer M8	4
67	4913-10008	Spring washer M8	4
68	4371-00008	Dome nut M8	4
69	4211-08020	Hex bolt H.T 8.8 zp M8x20L	1
70	4913-10008	Spring washer stl zp M8	1
71	4902-10008	Flat washer stl zp M8	1
72	4436-08012	Soc. Csk cap screw HT12.9 zp M8x12L	2
73	7010-250	Pulley cover bracket	1
74	4902-10008	Flat washer stl zp M8	4
75	4913-10008	Spring washer stl zp M8	4
76	4211-08020	Hex bolt H.T 8.8 zp M8x20L	4
77	4311-00008	Hex nut M8	4
78	4913-10008	Spring washer M8	4
79	4902-10008	Flat washer M8	4
80	7010-005	Engine mounting plate	1
81	4211-08050	Hex bolt H.T8.8 zp M8x50L	1
82	4311-00008	Hex nut HT stl zp M8	1
83	4902-10010	Flat washer M10	4
84	4913-10010	Spring washer M10	4
85	4931-00010	Dome nut M10	4
86	5136	Robin Ex17-D engine	1

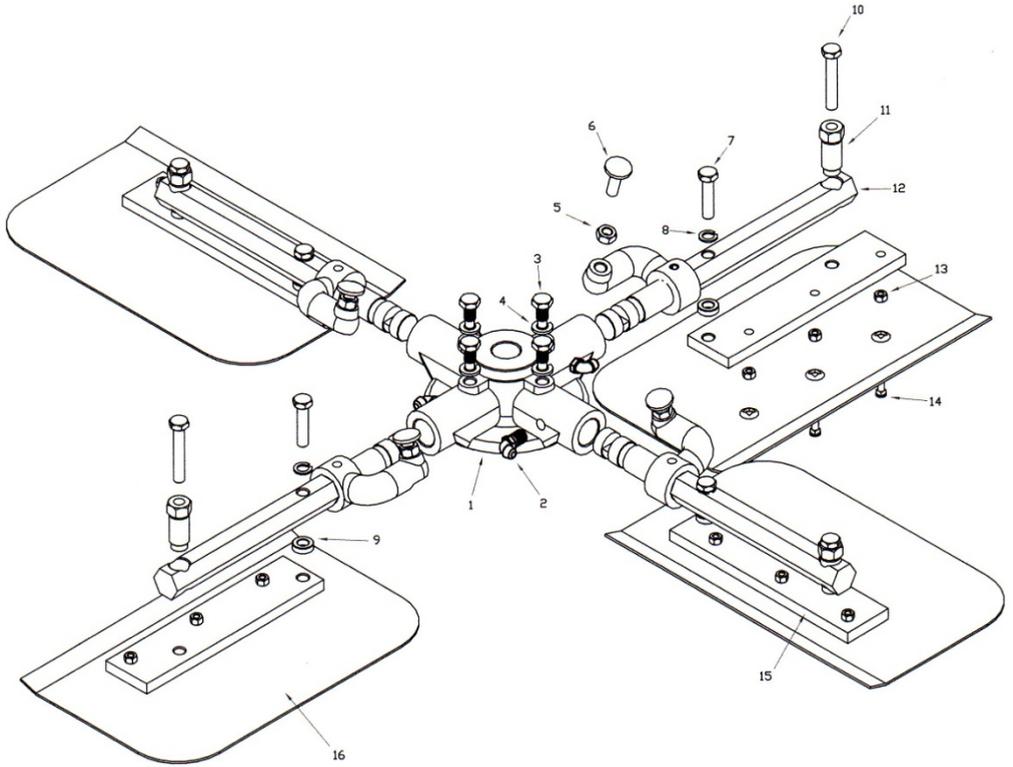
# POWER TROWEL REDUCER DIAGRAM



**POWER TROWEL REDUCER PARTS LIST**

<b>Item no</b>	<b>Part no.</b>	<b>Part Description</b>	<b>Qty.</b>
<b>1</b>	<b>4431-06020</b>	<b>C'sunk cap screw M6x20L</b>	<b>8</b>
<b>2</b>	<b>7010-037</b>	<b>Reducer top cover</b>	<b>1</b>
<b>3</b>	<b>4908-24127</b>	<b>O-ring #159</b>	<b>1</b>
<b>4</b>	<b>4434-06116</b>	<b>C'sunk cap screw 3/8"x1" BSW-LH</b>	<b>1</b>
<b>5</b>	<b>7010-040</b>	<b>Collar</b>	<b>1</b>
<b>6</b>	<b>4000-30305</b>	<b>Bearing 30305</b>	<b>1</b>
<b>7</b>	<b>7010-042</b>	<b>Worm gear</b>	<b>1</b>
<b>8</b>	<b>4000-32004</b>	<b>Bearing 32004</b>	<b>1</b>
<b>9</b>	<b>4906-18025</b>	<b>Key 8x7x25L, rounf</b>	<b>1</b>
<b>10</b>	<b>7010-044</b>	<b>Output shaft</b>	<b>1</b>
<b>11</b>	<b>7010-066</b>	<b>Stud bolt M8</b>	<b>4</b>
<b>12</b>	<b>7010-058</b>	<b>Stud bolt M10</b>	<b>4</b>
<b>13</b>	<b>4000-32004</b>	<b>Bearing 32004</b>	<b>1</b>
<b>14</b>	<b>7010-070</b>	<b>Reducer right cover</b>	<b>1</b>
<b>15</b>	<b>4913-10006</b>	<b>Spring washer M6</b>	<b>8</b>
<b>16</b>	<b>4211-06025</b>	<b>Hex bolt M6x25L</b>	<b>8</b>
<b>17</b>	<b>4700-20327</b>	<b>Oil seal TC 20x32x7</b>	<b>1</b>
<b>18</b>	<b>4908-25047</b>	<b>O-ring 2.5x47</b>	<b>2</b>
<b>19</b>	<b>4700-28427</b>	<b>Oil seal TC 28x42x7</b>	<b>1</b>
<b>20</b>	<b>4928-04019</b>	<b>Plug (PF 1/4"-19 TPI)</b>	<b>1</b>
<b>21</b>	<b>7010-067</b>	<b>Reducer housing</b>	<b>1</b>
<b>22</b>	<b>7010-064</b>	<b>Worm gear shaft</b>	<b>1</b>
<b>23</b>	<b>4000-06203</b>	<b>Bearing 6203</b>	<b>1</b>
<b>24</b>	<b>7010-061</b>	<b>Reducer left cover</b>	<b>1</b>
<b>-</b>	<b>-</b>	<b>Lubricant SAE #90</b>	<b>500ml</b>

# POWER TROWEL SPIDER DIAGRAM



## POWER TROWEL SPIDER PARTS LIST

Item no	Part no.	Part Description	Qty.
1	7010-079	Spider	1
2	4907-60002	Grease nipple 1/8" BSP 45'	4
3	7010-083	Lock bolt	4
4	4913-10010	Spring washer M10	4
5	4311-00010	Hex nut M10	4
6	4510-10035	Carriage bolt M10x35L	4
7	4214-06028	Hex bolt 3/8"x1-3/4" (H.T)	4
8	4913-10010	Spring washer M10	4
9	7010-092	Spacer	4
10	4214-06036	Hex bolt 3/8"x2-1/4" (H.T)	4
11	7010-095	Adjuster bolt	4
12	7010-019	34" support bar	4
13	4361-00006	Nylon nut M6	12
14	7010-100	Blade bolt	12
15	7010-098	34" blade support	4
16	7010-099	34" combination blade	4
-	4931-50707	Grease NLGI #2 LB/GC	5ml
16	CPT70140SET	40" Blade Set (Qty 4)	1
16	CPT70146SET	46" Blade Set (Qty 4)	1







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MACHINERY

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