

# GASOLINE IMPACT WRENCH

# **OPERATOR'S MANUAL**

COVERS PART NUMBER 0012601





### Welcome to Trak-Star®

Congratulations on your purchase of the Trak-Star<sup>®</sup> Gasoline Impact Wrench. Your model is designed to create higher fastening torque quickly and efficiently. Through constant innovation and development, Trak-Star<sup>®</sup> is committed to provide you with tools and products that lead the industrial world.

Before attempting to operate your new Gasoline Impact Wrench, please read all instructions first. These include the Operators Manual and Warning Labels on the unit itself. With proper use, care, and maintenance, your model will provide you with years of effective performance. Once again, thank you for selecting our product and welcome to Trak-Star<sup>®</sup>.

0012601 - 1" Gasoline Impact Wrench

### **SPECIFICATIONS**

Engine	Two Stroke, Gas 46.5cc
Ignition	Electronic
Capacity	.1-5/8" (41mm) Bolt Diameter
Net Weight	.39.6 lbs. (18kgs) Without Fuel

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SAFETY FIRST



Read to fully understand and observe the following safety precautions and warnings. Careless or improper use of tool may cause serious or fatal injury.



**WARNING!** Indicates instant possibility of severe personal injury or loss of life, if instructions are not followed.



Always wear eye, head and ear protectors when using this tool.



**CAUTION!** Indicates possibility of personal injury or equipment damage, if instructions are not followed.

# **IMPORTANT SAFETY INSTRUCTIONS**



WARNING: Read and understand all instructions. Failure to follow all instructions listed below, may result in electrical shock, fire and/or serious personal injury.

#### Work Area

Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents

Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which many ignite the dust or fumes.

Keep bystanders, children, and visitors away while operating a power tool. Distractions can cause you to loose control.

### **Operator Safety**

- · Always wear a safety face shield or goggles.
- · Always wear heavy, long pants, boots and gloves. Do not wear loose clothing, jewelry, short pants, sandals or go barefoot. Secure hair so it is above shoulder length.
- Do not operate the tool when you are tired, ill or under the influence of alcohol, drugs or medication.
- · Never let a child or inexperience person operate the machine.
- Wear hearing protection.
- Never start or run the engine inside a closed room or building. Breathing exhaust fumes can kill.
- · Keep handles free of oil and fuel.
- · Keep hands away from anvil.
- · Do not grab or hold the unit by rotating anvil.
- · Hold the handles firmly with both hands and make sure to stand on a firm base or ground.
- Do not touch spark plug or high voltage cord during operation as it may cause electric shock.
- · To avoid burn do not touch those places like engine, muffler and exhaust. These parts get very hot during use, even after engine is stopped.
- · When operation is prolonged, take a break from time to time, so that you may avoid possible whitefinger disease. This is caused by vibration.

### **Tool Safety**

- Inspect the entire tool before each use. Replace damaged parts. Check for fuel leaks and make sure all fasteners are in place and securely fastened.
- · Replace parts that are cracked, chipped or damaged in any way before using the tool.
- · Keep others away when making carburetor adjustments.
- · Use only accessories as recommended for this tool by the Manufacturer.



### WARNING

Never modify the tool in any way. Do not use your tool for any job except that for which it is intended.

### **Fuel Safety**

- · Mix and pour fuel outdoors and where there are no sparks or flames
- Use a container approved for fuel.
- · Do not smoke or allow smoking near fuel or the tool or while using the tool.
- · When filling up fuel, stop engine and make sure engine is cool and choose a well ventillated place where no flamables are present.

- · Wipe up all fuel spills before starting engine.
- · Move at least 3m away from fueling site before starting engine.
- Stop engine before removing fuel cap.
- Empty the fuel tank before storing the tool. It is recommended that the fuel be emptied after each use. If fuel is left in the tank, store so fuel will not leak.
- Store tool and fuel in area where fuel vapors cannot reach sparks or open flames from water heaters, electric motors, switches and furnaces, etc.



### WARNING

Antivibration systems do not guarantee that you will not sustain whitefinger disease or carpal tunnel syndrome. Therefore, conitinual and regular users should monitor closely the condition of their hands and fingers. If any of the above symptoms appear, seek medical advice immediately.

### **Maintenance Safety**

- Maintain the tool according to recommended procedures.
- Disconnect the spark plug before performing maintenance except for carburetor adjustments.
- · Keep others away when making carburetor adjustments. Use only genuine replacement parts as recommended by the manufacturer.

### **Transport and Storage**

- · Carry the tool by hand with the engine stopped and the muffler away from your body.
- · Allow the engine to cool, empty the fuel tank, and secure the tool before storing or transporting in a vehicle.
- Empty the fuel tank before storing the tool. It is recommended that the fuel be emptied after each use. If fuel is left in tank, store so fuel will not leak.
- Store tool out of reach of children.
- · Clean the unit carefully and store in a dry place.
- · Make sure engine switch is off when transporting or storing.

If situations occur which are not covered in this manual, take care and have a good judgement. Contact your dealer if you need assistance.

#### Service

Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.

When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

### **INTRODUCTION**

The Trak-Star Gasoline Engine Impact Wrench is a high quality tool with a self-contained, heavy duty, high power two cycle engine. It's unique design, combining an impact mechanism, pneumatic B-Hammer and small high powered 46.5 cc gas engine, produces an ultra light-weight 39.6 lbs. (18kg), impact wrench that can produce high fastening torque.

Because of the self-contained, high power two cycle engine, it is very easy to carry by one man to any construction sites in the rain forest, hill, desert or remote areas where electricity supply, air compressor or generator are not available.

The capacity of this tool is 1-5/8" (41mm) bolt size and is ideal for fastening and loosening bolts of wood sleepers at railroad construction sites and many more applications.

	-	
ENGINE	Туре	Iwo Stroke, Forced, Air Cooled, Single Cylinder
	Displacement	46.5cc, 44 x 34mm (Inner bore size by stroke)
	Fuel Tank Capacity	1 Liter
	Fuel Mixture Ratio	25:1 (gasoline : 2 cycle oil)
	Revolution (Idling)	≤ 2700 rpm; Engagement Speed: ≥ 3400
	Revolution (Loaded, Impact)	7120 rpm
	Revolution (Non loaded, max)	8500 rpm
	Maximum Output	2.03 Ps/6500 rpm
	Maximum Torque	0.34 kg-m/5500 rpm
	Compression Rate	7.4 : 1
	Fuel Consumption Rate	520g/kWh
IGNITION	Туре	Electronic
	Spark Plug Type	L8RTC
CARBURETOR	Туре	Diaphragm
IMPACT	Square Drive Size	1" (25.4mm)
	Fastening Torque Range	550 - 1700 N.m (406 - 1250 ft. lbs.)
	Free Speed	1200 rpm
CAPACITY	Bolt Diameter	1-5/8" (41mm)
WEIGHT	Without Fuel	39.6 lbs. (18kg)
OVERALL	Length	25-1/2"
DIMENSIONS	Height	10-3/4"
	Width	15"
ACCESSORIES	Hex Key Wrench	5mm (1 pc)
		6mm (1 pc)
		8mm (1 pc)
	Spark Plug Wrench	(1 pc)
	Spanner	10 - 13mm (1 pc)
	Sound Pressure Level (LPA,d)	101 dB (A)
	Sound Power Level (LWA,d)	112 dB (A)
	Vibrations (m/s2)	8.0 m/s2

Noise emission with and without load according to prEN ISO 15744. DECLARED SINGLE-NUMBER NOISE EMISSION VALUES in accordance with ISO 4871. Vibration level is measured at the handle with load according to ISO8662-7 Declared vibration emission value accordance with EN 12096. **NOTE:** To improve the performance, the specifications are subject to change without notice.

# GO EVERYWHERE, NO ELECTRICITY & NO AIR POWER REQUIRED



### **OPERATING INSTRUCTIONS**

### **IMPORTANT NOTICE**

Read all Safety Instructions listed at the beginning of this Operators Manual before operating the Gasoline Imapct Wrench.

- 1. Carefully read the instructions before operating.
- 2. Use only sockets and adapters, which are in good condition and are intended for use with power tools.
- 3. Adopt a suitable posture to counteract unexpected movement of the power tool.
- 4. If using a suspension device, ensure that the power to is securely fixed.
- 5. Release the start and stop device in the case of an interruption of the energy supply.
- 6. The operator should have enough strength to hold the tool stably when using the tool.
- 7. Use #10 lubricant, thick machine oil is not recommended.

### FUEL

- Use only quality two cycle oil with gasoline at a mixture ratio of 25:1 (Gasoline : Two cycle oil) (Fig. 3)
- · Never use gasoline only as engine will burn.



### WARNING

Do not smoke and keep all other fire away from the fuel tank during filling fuel as it causes fire it can burn yourself. (Fig. 3-1)



### CAUTION

Wipe up all fuel spills before starting engine.

### START UP ENGINE

- 1. Place the tool on a firm stand or solid floor.
- 2. Set gear change lever to neutral (N) position. (Fig. 3-2)
- 3. Slide stop switch to upward as shown. (Fig. 3-3)
- 4. Press priming bulb several times so that fuel slows through bulb into carburetor. (Fig. 3-4)
- 5. Turn Choke lever to closed position. (Fig. 3-5)
- 6. Pull recoil starter handle strongly, taking care to keep the handle in your grasp and not allow to withdraw rope until the end. (Fig.3-6)



### CAUTION

Return recoil starter rope gently to its original position.







# **OPERATING INSTRUCTIONS**



- 7. After initial fire, engine will continue to run, return choke lever slowly to open position.
- 8. If engine stops after a few fires by procedure (7), return choke lever to open position and pull recoil starter handle strongly again.
- 9. If engine does not start by procedure (8), repeat procedures from (5).
- 10. After starting engine, return throttle lever to idle position for slow engine. Then allow the engine about 2-3 minutes to warm up before use. (Fig. 3-6).



### WARNING

- Once engine is started, do not leave tool alone. Always hold handle tightly so that tool will not move around on the stand or floor.
- Before and during operation, always take a firm stance and keep safety position from slipping or falling down.



#### WARNING

- 1. Power tools shall not be used in potentially explosive atmospheres unless specially designed for that purpose.
- 2. Unexpected tool movement due to reaction forces or breakage of inserted tool may cause injuries.
- Power tools shall be isolated from the energy source before changing or adjusting the inserted tools.
- 4. Avoid the risk of being injured, keep hands away from the nut runner socket.
- 5. Avoid the danger to persons from high-speed splinters being emitted from impact wrenches in the case of nut runner socket failure.
- 6. Unexpected direction of inserted tool movement can cause a hazardous situation.
- 7. Avoid inhaling the dust and ejected particles when operating the tool.
- 8. Continued use over prolonged periods of time can injure hands. If hands numb, ache or shows white skin, operator should stop tool use and immediately seek medical attention.

#### **OPERATION**

- 1. Select R (for clockwise direction) or L (counter clockwise direction) gear for fastening or loosening bolts and nuts.
- 2. Always release throttle lever to allow slow engine for idling and turn gear change lever. DO NOT change gear when engine is accelerating.
- 3. Squeeze throttle lever for high speed to tighten or loosen bolts and nuts and control engine speed with throttle lever.
- 4. Once bolts or nuts are fastened, release throttle lever for idling and not allow driving shaft to turn. Remove socket from bolt of nut.

#### **STOPPING ENGINE**

- 1. Release throttle lever to decrease engine speed.
- 2. Return stop switch to stop position (Fig. 3-7)
- 3. Place the tool on firm stand or solid floor and turn gear change lever to N (neutral) position.



# TROUBLE SHOOTING

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
ENGINE DOES NOT START	<ul><li>FUEL SYSTEM</li><li>Empty fuel or shortage</li><li>Wet spark plug due to too much intake of fuel</li></ul>	<ul> <li>Fill up fuel at mixture ration 25 gal : 1 two cycle oil</li> <li>1. Remove spark plug</li> <li>2. Exhaust exceeded fuel by pulling recoil starter handle 5-6 times</li> <li>3. Install spark plug</li> <li>4. Turn choke lever to open position and pull recoil starter handle</li> </ul>
	<ul> <li>Bent or disconnection of fuel pipe</li> <li>Poor function of carburetor</li> </ul>	Repair • Air leak from carburetor • Incorrect carburetor adjustment • Bad diaphragm in carburetor • Incorrect carburetor valve hinge height adjust.
	<ul> <li>ELECTRICAL SYSTEM</li> <li>Ignition stop switch in stop position</li> <li>No spark</li> <li>Short circuit of stop switch lead wire</li> <li>Dirty plug</li> </ul>	Turn to "on" position 1. Bad connection/Ignition coil 2. Incorrect air gap/Ignition coil 3. Bad ignition coil Repair or replace Clean up or replace
	<ul> <li>Wider spark plug gap</li> <li>Poor connection of high voltage cord in ignition with spark plug</li> </ul>	Adjust correct gap to 0.6mm Correct connection
ENGINE WILL STOP SOON AFTER STARTING OR IS LIKELY TO STOP	FUEL SYSTEM  • Shortage of fuel  • Choke lever in closed position  • Air goes through to fuel system  • Poor function of carburetor  ELECTRICAL SYSTEM	<ul> <li>Fill up fuel at mixture ratio 25 gal : 1 two cycle oil</li> <li>Turn to "open" position</li> <li>Check for cracks on pipe or connector and pipe is securely fixed.</li> <li>Air leak from carburetor</li> <li>Incorrect carburetor adjustment</li> <li>Bad diaphragm in carburetor</li> <li>Incorrect carburetor valve hinge height adjust.</li> </ul>
	<ul><li>ваd spark plug</li><li>Bad ignition coil</li></ul>	Replace

# TROUBLE SHOOTING

SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
ENGINE	Bad mixture ratio of fuel	Fill up correct mixture ratio 25 gal : 1 two cycle oil
OVERHEATS	Wrong selection of spark plug	Replace. Use pure and instructed parts only
	Clogged cylinder with dirt	Clean up
	Clogged cooling duct with dirt	Clean up
NON-REVOLUTION OF ANVIL SHAFT	Gear change lever in neutral	Turn to R (clockwise direction) or L (counter clockwise direction) position
	• Worn out drum shoe on clutch arm	Replace
OUTPUT POWER	Dirty air cleaner element	Clean up
REDUCTION	<ul> <li>Carbon deposits in muffler exhaust port on cylinder</li> </ul>	Clean up
	<ul> <li>Poor cylinder pressure due to worn piston, piston ring or cylinder</li> </ul>	Replace
	Worn out Anvil	Replace
	Worn out clutch	Replace
	Worn out cam plate	Replace
	Worn out hammer	Replace
	Broken return spring	Replace

## **MAINTENANCE INSTRUCTIONS**

### MAINTENANCE / CHECK-UP / REPAIRING

It is recommended to practice regular check-ups and maintenance in accordance with usage frequency to keep your tool in its best condition and prolong life, reducing total running costs. This practice also protects you from serious injury. Before maintenance, please release the start and stop device.

- Only use #10 lubricant, the tool should be lubricated at tool inlet.
- Do not replace the component or change the construction and design.
- If the component used is not the same as the original component supplied by the manufacturer, the manufacturer shall not take responsibility.
- Keep the tool in a dry place when not in use.

### DAILY CHECK-UP

- Check that all nuts and screws are securely tightened.
- Check fuel level. When filling up with fresh fuel, wipe up all spills and clean fuel tank.

### WEEKLY MAINTENANCE

- · Check the starter, especially the cord and return spring.
- Clean the exterior of the spark plug.
- Remove the spark plug and check the electrode gap. Adjust it to 0.6mm, or change the spark plug.
- Clean the cooling fins on the cylinder and check that the air intake at the starter is not clogged.
- Clean the air filter.

### MONTHLY MAINTENANCE

- Rinse the fuel tank with gasoline.
- Clean the exterior of the carburetor and the space around it.
- Clean the fan and the space around it.
- 1. CARBURETOR ADJUSTMENT
  - 1. When the engine is tested at the factory, the carburetor is properly adjusted. Do not try to touch it.
  - 2. When idle speed is higher or lower (engine will stop), adjust to correct speed by idle adjustment screw. Turn clockwise for higher idle. Turn counter clock wise for lower idle. (Fig. 5-1).
  - 3. How to adjust the volume of inhaled oil (higher speed fuel adjustment) Full open throttle lever, turn idle adjustment screw to right or left to look for the peak idle speed. From this position, return adjustment screw to left 1/8-1/4 turn.
- 2. CHECK-UP SPARK CONDITION
  - 1. Remove spark plug and touch it to metal part except spark plug mounting thread.



### WARNING

Never touch spark plug to the area at spark plug mounting thread since remaining gas might exploded.

2. Pull recoil starter handle.



WARNING

When pulling recoil starter handle, do not touch the metal part of spark plug or you will get an electric shock. Wipe and clean up fuel around spark plug area.

3. When in normal condition, you see a spark.

#### IDLE ADJUSTMENT SCREW



VOLUME OF INHALED OIL

# **MAINTENANCE INSTRUCTIONS**

### 3. SPARK PLUG (Fig. 5-2)

- 1. Use only recommended type of spark plug.
- In best operating condition, electrodes on the spark plug are dark brown. Keep spark plugs dry. If the spark plug is dirty, clean it and check electrode gap. If readjustment is necessary, the correct gap is 0.6mm.
  - The spark plug condition is influenced by the following factors:
  - An incorrect carburetor setting.
  - Wrong fuel mixture (too much oil in gasoline).
  - A dirty air filter.
  - Hard running conditions (cold weather operations).

The spark plug should be replaced after 100 operation hours or earlier if the electrodes are badly eroded.

### 4. AIR FILTER (FIG. 5-3)

- 1. When the air filter gets dirty and closed with dust, it will cause various troubles:
  - Carburetor malfunctions.
  - Starting problems.
  - Engine power reduction.
  - Unnecessary wear on engine parts.
  - Abnormal fuel consumption.
- 2. Cleaning the air filter

Air filter must be cleaned from dust and dirt regularly and damaged filter must be replaced with a new one.

- Remove the air filter cover and the filter.
- Rinse it in warm soapy water and wring tight. Let dry before re-assembly.
- Damaged air filter must be replaced with a new one.

### 5. FUEL FILTER (Fig. 5-4)

- 1. If fuel filter is clogged with impurities in the fuel, fuel will not flow into carburetor and it will make the engine malfunction. Regular check-ups is recommended.
  - Drain all fuel from fuel tank and pull out fuel filter line from tank.
  - Pull filter element out of holder assembly and rinse element in warm water with detergent.
  - Rinse thoroughly until all traces of detergent are eliminated.
  - Squeeze, but do not wring and let dry.
  - If element is too dirty, replace.

### 6. MUFFLER (Fig. 5-5)

1. Engine power reduction might be caused by carbon accumulation around the exhaust port on cylinder, muffler inlet or outlet in the long use. Regular clean-up is recommended.

• Remove the muffler and clean up any excess carbon from the exhaust port or muffler inlet every 100 hours of operation.

• When cleaning up, remove carbon carefully to not damage piston. cylinder and do not let carbon into crank case.



0.6mm

AIR FILTER (Cleaner Sponge) (FIG. 5-2)





### **MAINTENANCE INSTRUCTIONS**

### 7. IMPACT MECHANISM

- 1. When contact places of anvil and hammer become worn-out by percussion, the tool becomes susceptible to damage and can lead to breakage of parts.
  - Empty all oil in the gear box and remove hammer housing completely and check the degree of worn-out on anvil and hammer at least once every month. Grease around hitting area.

### 8. ADDING GREASE

1. Use of the correct grease is essential, this unit requires a heavy duty calcium sulphonate grease. We recommended Citgo Supergard Marine Plus for gearbox maintenance.

### 9. STORAGE

- 1. Clean each part and apply two cycle oil on the metal part to prevent corrosion.
- 2. To keep tool for a long time (more than 3 weeks), drain fuel from fuel tank and keep running engine without load until the engine will stop and exhaust all remaining fuel in the carburetor.
- 3. Remove spark plug and pure two cycle oil into cylinder and pull recoil starter handle several times to spread oil.
- 4. Stop the recoil starter handle when you feel engagement.
- 5. Damaged parts should be repaired before storage.
- 6. Keep the tool in a place without dust or humidity, also the temperature below 50° C.
- 7. Store tool out of reach of children.
- 8. Keep fuel in a safety container in a cool room or a place where not flammable. Do not use stale fuel as it cause engines troubles.

# **ENGINE - EXPLODED VIEW**



Item	Part #	Description	Qty
1	07615	Spark Plug Boot	1
3	07617	Spark Plug BPMR6A	1
4	07621	Complete Motor Assembly	1
5	07622	Ignition Coil Complete	1

### **ENGINE COMPONENTS - EXPLODED VIEW**



# ENGINE COMPONENTS - PARTS LIST

ltem	Part #	Description	Qty
45	07748	Hex Bolt	1
46	07631	Muffler Protector	1
50	07632	Muffler Set	1
58	07603	Motor Vent Guard	1
59	07734	Hex Hole Bolt	2
60	07749	Hex Hole Bolt	1
63	07777	Intake Manifold Gasket	1
64	07775	Muffler Cover	1
65	07635	Carb. Insulator Set	1
66	07750	Hex Hole Bolt	2
67	07776	Carb Gasket	1
68	07636	Carburetor Set	1
73	07639	Cleaner Body	1
74	07640	Cleaner Sponge	1
76	07642	Blow Over Check Board	1
79	07644	Cleaner Cover Bolt	1
80	07751	Screw	2
81	07752	S. Washer	2
89	07651	Fuel Pipe Ass'y	1
91	07652	Pump Filter Body Ass'y	1
93	07653	Tank Cap D Ass'y	1
94	07654	Cushion Rubber	1
95	07655	Tank Holding Metal Complete	1
96	07754	Hex Hole Bolt	2
97	07656	Fuel Tank, Vermilion	1
98	07657	Adjust Spring	1
99	07658	Throttle Wire Complete	1

ltem	Part #	Description	Qty
101	07442	Washer	2
102	07614	Adjust Lever Ass'y	1
105	07660	Stop Switch Ass'y	1
107	07661	Handle Ass'y	1
109	07662	Handle Bracket	2
110	07663	Handle Holder	2
111	07664	Cleaner Cap	1
112	07665	Connector Case Ass'y	1
115	07666	Combi. Box Spanner 10x19	1
120	07667	Recoil Starter Body Ass'y	1
121	10558	SCR-BHC 10-32x1	2
122	07601	Guard - Switch	1
123	07600	Guard - Strap	1
131	07668	Auto-vibration Rubber	1
132	07669	Four Sides Handle Holder	4
133	07756	U-nut M6	20
134	07757	Washer Spring M6	20
135	07758	Hex Cap Bolt	16
136	07759	Hex Cap Bolt	4
137	07670	Kickstand	1
250	07767	Washer, Spring	6
251	07772	Hex Cap Bolt	6
252	07759	Hex Cap Bolt	4
253	07744	Washer, Jagged Spring	4
254	07756	U-nut	4

# **IMPACT UNIT & GEARBOX - EXPLODED VIEW**



# IMPACT UNIT & GEARBOX - PARTS LIST

ltem	Part #	Description	Qty
171	07671	Hammer Housing Complete	1
172	07672	Oil Seal	1
173	07673	Bushing	1
174	07760	Washer 2H-M8, Jagged Spring	4
175	07761	Washer M8, Spring	3
176	07762	Hex Cap Bolt	3
177	07763	U-nut M8, Hammer Housing	3
178	07764	Hex Cap Bolt M8x50	1
180	07675	Front Handle Assembly	1
184	07765	Hex Cap Bolt M6x45	4
185	07766	U-nut M6, Anti-vibration Handle	4
186	07767	Washer M6, Spring	8
188	07678	Anvil Complete	1
190	07679	O-ring P18, Retainer Ring	1
194	07683	Hammer Complete	1
203	07691	Gasket, Hammer Housing	1
204	07692	Ring Flange Complete	1
205	07693	Oil Seal	1
206	07694	Ball Bearing 6007VV	1
207	07695	Ball Bearing 6006	1
208	07696	Gasket, Ring Flange	1
209	07697	Gear Case Complete	1
210	07698	Oil Pot Port PF3/8-19	1
211	07699	Transmission Complete	1
215	07702	Shaft, Selector	1
216	07703	Gear Cluster Assembly	1

ltem	Part #	Description	Qty
218	07704	Shaft, Bearing Complete	1
220	07706	Gear Cluster	1
221	07707	Planetary Gear Complete	1
225	07711	Gear Selector Complete	1
226	07712	Spiral Pin 5x26, Gear Selector	1
227	07713	O-ring N14, Gear Selector	1
228	07714	Gear Flange	1
229	07715	Packing, Gear Flange	1
230	07768	Hex Cap Bolt M5x10	3
231	07743	Washer 2H-M5, Jagged Spring	3
232	07745	Washer WW-16, Spring	1
233	07716	Lever, Gear Change	1
234	07717	Retainer Spring S3.8x7x0.6x6	1
235	07718	Steel Ball 4	1
236	07769	Washer M6, Spring	1
238	07719	Gasket, Gear Case	1
239	07720	Pin 4x13.8	2
240	07770	Washer 2H-M6, Jagged Spring	6
241	07771	Hex Cap Bolt M6x25	6
245	07723	Ball Bearing 6907	1
248	07725	Clutch Ring & Support	1
250	07767	Washer, Spring	6
251	07772	Hex Cap Bolt M6x12	6
253	07744	Washer 2H-M6, Jagged Spring	4
255	07773	Washer 2H-M6, Jagged Spring	4
257	07774	Screw M6	4

### **OZAT SOCKETS & AUGER BITS**



Trak-Star sell OZAT 8 poimt impact sockets with a 1" square drive. OZAT sockets are superior to other sockets in the market because of their less-stress<sup>™</sup> socket configuration, Each socket is made with a state of the art electro-chemical machining process. OZAT sockets will result in longer socket and fastener life

Part No.	Description
07100	1-1/4" OZAT Socket
07101	1-5/16" OZAT Socket
07102	1-3/8" OZAT Socket
07103	1-7/16" OZAT Socket
07104	1-1/2" OZAT Socket
07105	1-9/16" OZAT Socket
07106	1-5/8" OZAT Socket
07107	1-11/16" OZAT Socket
07108	1-3/4 OZAT Socket
07109	1-13/16" OZAT Socket
07110	1-7/8" OZAT Socket
07111	2" OZAT Socket
07112	2-1/8" OZAT Socket
07113	2-3/16" OZAT Socket
07114	2-1/4" OZAT Socket
07115	2-3/8" OZAT Socket
07116	2-1/2" OZAT Socket
07117	Retaining O-Ring
07118	Retaining Pin



Socket Accessories		
07850	Universal Joint	
07851	13" Extension	
07852	10" Extension	
07854	70mm x 1" sq Drive Torx Bit Socket	
07855	7/8" x 1-1/8" Rectangle x 1" sq Drive	
07880	Quick-Release Auger Adapter x 1" Square Drive	



Quickly drill holes in ties with the Trak-Star Auger Bits. The bits feature a quick release shank and are designed for the Trak-Star Gas Impact Wrench.

Part No.	Description
07880	Quick-Release Auger Adapter x 1" Square Drive
08026	9/16" x 18" L Auger Bit
08027	5/8" x 18" L Auger Bit
08028	11/16" x 18" L Auger Bit
08029	3/4" x 18" L Auger Bit
08032	15/16" x 18" L Auger Bit



All-in-one retaining ring and pin provides quick and secure socket mounting. Three sizes available depending on socket shank diameter. (\*Individual sizes sold in 10 packs only)

Part No.	Description
08355	1-3/4" Dia. Retainer Pin*
08356	2" Dia. Retainer Pin*
08357	2-1/8" Dia. Retainer Pin*
08372	Variety Pack - 4 ea of the above sizes



Modern, high speed railways and welded rails call for modern, high precision rail equipment. Through our continual commitment, we now offer additional products that will be beneficial to your specific applications.



Model RM42 Power Feed Hydraulic Drill



Model HS16 Hydraulic Rail Saw



Model BD17 Electric Bonding Drill



Model RB30 Portable Gas Bonding Drill



Model K1270 Portable Gas Rail Saw



### Commercial / Industrial Limited Warranty

Hougen Manufacturing, Inc. warrants its Portable Magnetic Drills, Trak-Star Rail Drills, Hydraulic Rail Saw and Tornado II Paint Shakers for two (2) years, Electro-Hydraulic Hole Punchers for one (1) year, and it's Husqvarna Saw and other products for ninety (90) days from date of purchase against defects due to faulty material or workmanship and will repair or replace (at its option) without charge any items returned. This warranty is void if the item has been damaged by accident or unreasonable use, neglect, improper service, or other causes not arising out of defects in material or workmanship. No other expressed warranty is given or authorized. Hougen Manufacturing, Inc. disclaims any implied warranty of Merchantability or fitness for any period beyond the expressed warranty and shall not be liable for incidental or consequential damages. Some states do not allow exclusion of incidental or consequential damages or limitation on how long an implied warranty lasts and, if the law of such a state governs your purchase, the above exclusion and limitation may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

To obtain warranty service, return the item(s), transportation prepaid to your nearest Factory Authorized Warranty Service Center, or to Hougen Manufacturing, Inc., 3001 Hougen Drive, Swartz Creek, MI 48473.

This warranty is in lieu of any other warranty, expressed or implied, including any warranty of merchantability or fitness for a particular purpose.

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### FACTORY AUTHORIZED WARRANTY REPAIR CENTERS

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