

&

OPERATIONS MANUAL



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NOTICE

EZE TURN PRODUCTS CO IS NOT RESPONSIBLE FOR CUSTOMER MODIFICATION OF TOOLS FOR APPLICATIONS ON WHICH EZE TURN PRODUCTS CO WAS NOT CONSULTED. REPAIRS SHOULD BE MADE ONLY BY AUTHORIZED TRAINED PERSONNEL.

WARNING

IMPORTANT SAFETY INFORMATION ENCLOSED.
READ THIS MANUAL BEFORE OPERATING TOOLS.
IT IS THE RESPONSIBILITY OF THE EMPLOYER TO PLACE THIS MANUAL INTO THE HANDS OF THE OPERATOR.
FAILURE TO OBSERVE THESE WARNINGS COULD RESULT IN INJURY.



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Safety And Warnings

PLACING THE TOOL IN SERVICE

- Always operate, inspect and maintain this tool in accordance with American National Standards Institute Safety Code for Portable Air Tools.
- For safety, top performance, and maximum durability of parts, operate this tool at 100 psig maximum air pressure at the inlet with 3/4" inside diameter air supply hose.
- Always turn off the air supply and disconnect the air supply hose before installing, removing, or adjusting any accessory on this tool, or before performing any maintenance on this tool.
- Do not use damaged frayed or deteriorated air hoses and fittings.
- Be sure all hoses and fittings are the correct size and are tightly secured. See picture on next page for typical piping arrangement.
- Always use clean, dry air at 100 psig maximum air pressure. Dust, corrosive fumes and/or excessive moisture can ruin the motor of an air tool.
- Do not lubricate tools with flammable or volatile liquids such as kerosene, diesel or jet fuel.
- Do not remove any labels. Replace any damaged label.
- Check the head connection nut before every use. Tighten if loose.

USING THE TOOL

- Always wear eye protection when operating or performing maintenance on this tool.
- Always wear hearing protection when operating this tool.
- Keep hands, loose clothing and long hair away from rotating end of tool.
- Note the position of the reversing lever before operating the tool so as to be aware of the direction of rotation when operating the throttle.
- Anticipate and be alert for sudden changes in motion during start up and operation of any power tool.
- Keep body stance balanced and firm.
 Do not overreach when operating this
 tool. High reaction torques can occur
 at or below the recommended air
 pressure.
- Tool accessories may continue to rotate briefly after throttle is released.
- This tool is not insulated against electric shock.
- Do not use tool as a crow bar to open rusty valves.
- Do not leave the tool while operating.
- Do not tape or wire the tool throttle lever or speed control.



Maintenance And Troubleshooting

Oil ~ Ingersoll-Rand pneumatic lube light oil no. 10 or equivalent

Before starting the tool and after each two or three hours of operation, unless the air line lubricator is used, detach the air hose and inject approximately 2.5 cc of the recommended oil into the air supply bushing below the speed control.

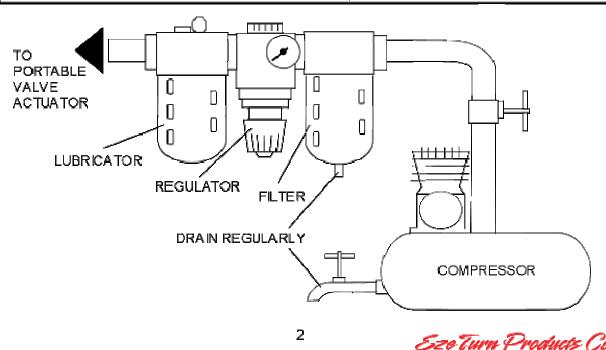
Grease ~ For gear & bearing use Ingersoll-Rand lubricant no. 28 or equivalent.

After each 48 hours of operation inject 1 cc of gear lubricate into gear case grease fitting and head grease fitting (Part No. 3, Pg 6).

Operate the actuator using a 3/4" inside diameter air supply hose.

Regularly check and tighten the head connection nut (Part No. 2, pg 6).

Trouble	Probable Cause	Solution
Low power or low free speed	Low air pressure	Check the air pressure at the inlet. The pressure must not exceed 100 psig.
	Plugged Inlet Bushing Screen or Air Strainer Screen	Clean the screen in a clean, suitable, cleaning solution. If it cannot be cleaned, contact vendor.
	Wom or broken Vanes	Contact vendor.
	Improper lubrication or dirt build-up in the motor	Lubricate the wrench as intructed above. If lubrication does not result in satifactory operation, contact vendor.



Actuator Specifications

Dimensions:

Length	46 1/2"
Diameter Of Opening Through Head	2 1/8"
Width Across Flats Of Angle Head	2 3/8"
Air Inlet	1/2" NPT
Weight	27 lbs

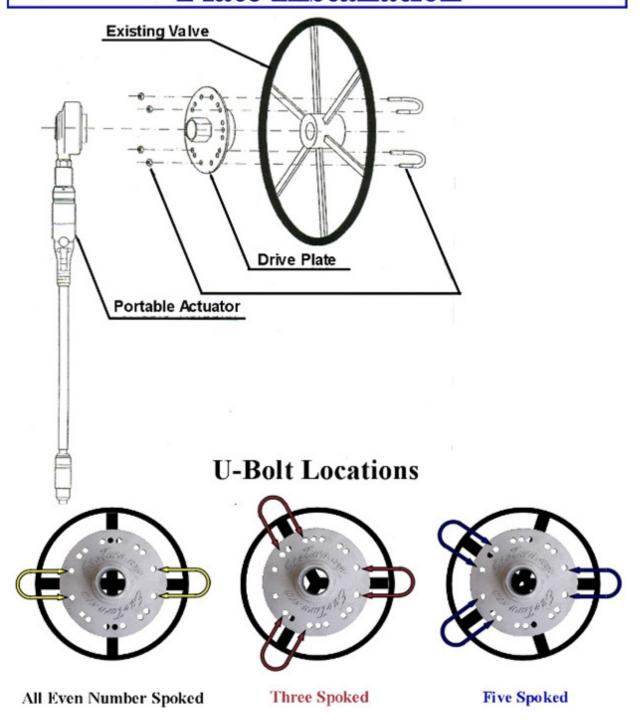
Performance:

Air Demand	65 CFM	
Safe Recommended Air Pressure	90 PSI	
Speed Without Load	75 RPMs	
Torque At Recommended Air Pressure	340 ft lbs	

Materials:

Head	17/4 ph SS
Motor	Ingersoll-Rand
Extension Arm	316 SS
Throttle Assembly	316 SS / Bronze

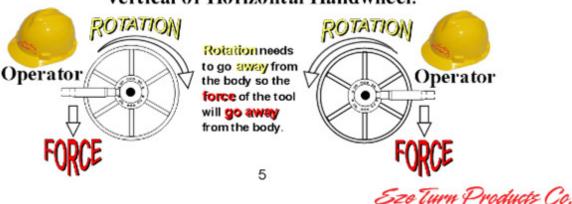
Plate Installation



Portable Air-driven Valve Actuator Operations

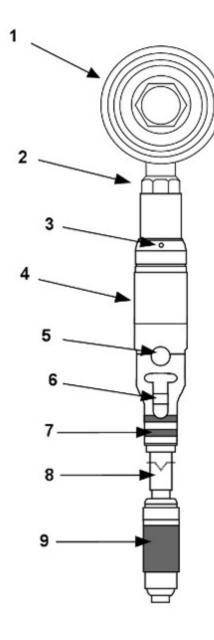
- Install A Drive Plate To Each Valve To Be Operated. (See Page 4)
- Clear Plant Air Hose And Connect To Filter, Regulator, Lubricator.
- Insure Lubricator Is Filled With Light Lube Oil No.-10 or inject 2.5 CC's into PVA Air Inlet Fitting.
- Clear Tail Hose Air Hose From Filter, Regulator, Lubricator And Connect To Actuator.
- Turn On Plant Air And Adjust Regulator To Desired Pressure. Lower Pressure Settings May Provide Excellent Results With Reduced Operator Strain. It is Recommended to Start Operations @ 70 - 80 psi With 100 PSI Max.
- Break Valve Off Seat Manually Prior To Operation Making Sure Valve Wheel Is
 Free and Is Unobstructed And Determine Desired Valve Rotation.
- Turn Forward/Reverse Switch To Desired Rotation Direction. Forward will Turn The Handwheel In The Clockwise Direction With Reverse Turning Counter-Clockwise. (See Page 6)
- 8. Determine Best Location For Operator. (See Diagram Below)
- 9. Place Actuator Hex Onto Drive Plate Hex Ensuring Proper Fit.
- Keep Body Balanced And Firm.
- 11. Pull Throttle And Ease Into Speed Control.
- 12. As Valve Comes To Near Closed Or Open Position Ease Off Of Speed Control.
- 13. Do Not Wire Or Tape Throttle Or Speed Control Open!

Vertical or Horizontal Handwheel:



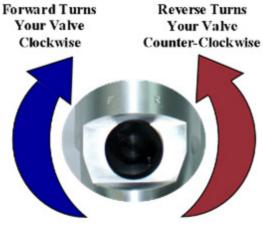
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Actuator Parts



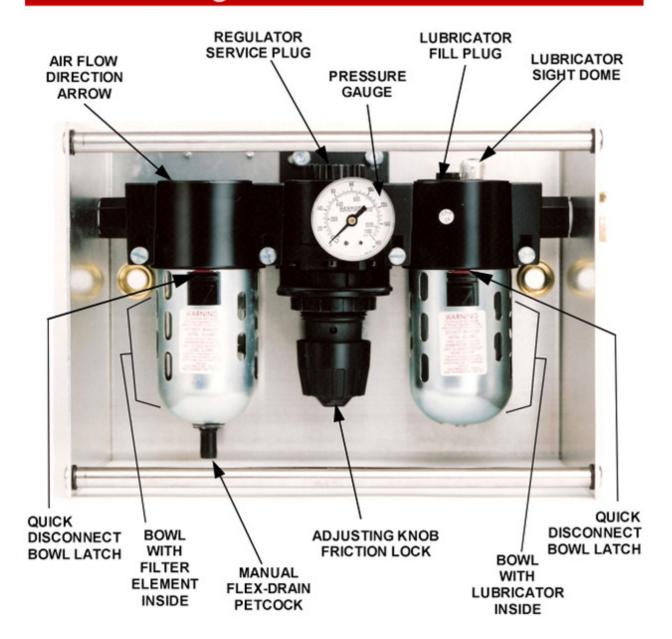
Description

- 1. Angle Head
- 2. Head Connection Nut
- 3. Gear Grease Fitting
- 4. Air Motor
- Foward / Reverse Switch (on opposite side)
- 6. Throttle Lever
- 7. Internal Screen
- 8. Handle
- 9. Speed Control



Forward / Reverse Switch #5 From Opposite Side

Filter, Regulator, Lubricator Parts



NOTICE

FRL uses metal bowl guards that must remain in place for the protection of underlying polycarbonate plastic bowls. Certain compressor oils, chemicals, household cleaners, solvents, paints and furnes will attack plastic bowls and cause bowl failure. Do not use near these materials.

Part Specifications and Descriptions

FILTER

Pipe Size - 1/2" NPT Bowl Size - 10 oz. SCFM Flow Rate - 138*

*Flow rating is at 90 psig inlet pressure with a 5 psi pressure drop.

Bowl - P7830

Integral plastic bowl and metal bowl guard with flexible manual drain.

Filter Element - P7833

This is our standard element rated for 5 micron filtration. Permanent gaskets are molded on the filter element so the filter cannot be reassembled without gaskets or with filter element upside down. The rigid filter element is made of impregnated felt fibers.

Flex-Drain - P7710

Simply pushing the rubber tip to one side will drain the bowl. If the filter is in an "under-the-bench" installation just push the flex-drain with a probe from any direction. It drains; then shuts off automatically when the probe is removed.

REGULATOR

Pipe Size - 1/2" NPT SCFM Flow Rate - 200*

*Airflow capacity when at 100 psig inlet pressure, and 80 psig outlet pressure conditions.

Pressure Gauge - P7844

Standard pressure gauge indicates adjusted pressures from 0 to 160 psi (0 to 11 bar) for use on regulators with standard-pressure springs.

LUBRICATOR

Pipe Size - 1/2" NPT Bowl Size - 10 oz. SCFM Flow Rate - 102

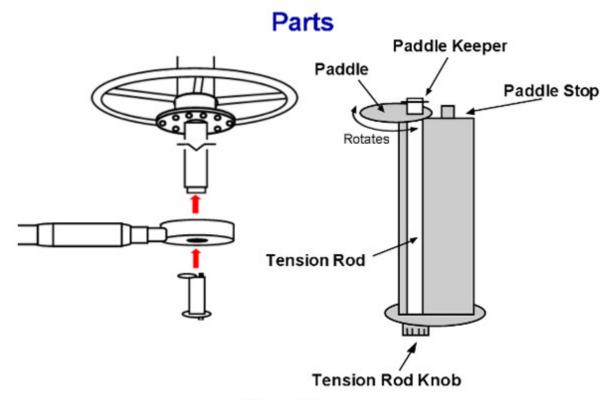
*Flow rating is at 90 psig inlet pressure with a 5 psi pressure drop.

Bowl - P7848

Integral Plastic bowl and metal bowl guard with manual drain.



Retention Adaptor



Directions

- Turn Tension Rod Knob Counter Clockwise until Paddle Locks Against the Paddle Stop and and is Snug Against Paddle Keeper.
- 2) Place Actuator onto Drive Plate.
- 3) Slide Retention Adaptor Through Actuator and into the Drive Plate.
- 4) Push Rod Upwards to Engage Paddle Against Inside of Drive Plate.
- 5) Turn Tension Rod Knob Clockwise Until Paddle Rests Against Stop.
- 6) Continue Turning Until Snug.
- To Remove, Turn Tension Rod Knob Counter Clockwise Until Paddle Locks Against the Paddle Stop Again and Pull Adaptor Out.



EZE TURN PRODUCTS CO WARRANTY

EZE TURN PRODUCTS CO products are warranted to be free from defects in material and workmanship, under proper use, installation, application and maintenance in accordance with EZE TURN's written recommendations and specifications, for a period of 180 days from the date of shipment from the factory. EZE TURN's obligation under this warranty is limited to, and the sole remedy for any such defect shall be, the repair or replacement (at EZE TURN's option) of unaltered products returned to EZE TURN and proven to have such defect, provided such defect is promptly reported to EZE TURN within said 180 day period.

THIS IS THE ONLY AUTHORIZED EZE TURN WARRANTY AND IS IN LIEU OF ALL OTHER EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANT ABILITY OR FITNESS, OR OF ANY OTHER OBLIGATIONS ON THE PART OF EZE TURN. Warranty claims must be submitted and shall be processed in accordance with EZE TURN's established warranty claim procedure. In no event will EZE TURN be liable for business interruptions, loss of profits, personal injury, costs of delay or any other special, indirect, incidental or consequential losses, cost or damages.