ENGLISH
System Manual

AME INTL.

Rhino II Jack

Lifting Capacity 100 - 200 Ton

Thank You for Purchasing The

Rhino II Jack

Rhino II Jack Models

RJ2-10027	100 Ton Capacity
RJ2-10038	100 Ton Capacity
RJ2-15027	150 Ton Capacity
RJ2-15038	150 Ton Capacity
RJ2-20027	200 Ton Capacity
RJ2-20038	200 Ton Capacity

• Specifically designed for the mining industry, the Rhino II 100, 150, 200 ton heavy-duty hydraulic jacks are the result of modern technology and are your best bet when servicing and maintaining large off-road vehicles and equipment.

• Trouble free and safe, they operate on the universally accepted electric/hydraulic or air/hydraulic systems.

• The Rhino II jack lifts from the lowest lift point of your vehicle. If necessary, the cylinder extension will give you ample elevation to raise your vehicle from its highest point. The total lifting procedure involves only one operator and can lift a large mining vehicle in minutes.

• Rhino II Jacks are fitted with 5.30x12 tires on tapered roller bearings so that accurate positioning can be achieved quickly and safely.

• The jack will operate from the standard 90 – 160 psi shop air supply. Electric jacks can be suited to meet your power requirements. All Rhino II Jacks are built with mobility and transportability in mind.

NOTES REGARDING MANUAL

This manual is not intended to teach basic principles of hydraulics and although some explanations of functions are given, a certain level of expertise on the part of the reader is assumed. This manual is intended to help explain the operation of the system in an easy-to-understand language. It should prove useful for personal to aid in trouble shooting.

WARRANTY CLAUSES

• AME International warrants the jacks sold by it to be free from defects in material and workmanship for a period of six (6) months from the date of sale. This warranty is exclusive in lieu of all other warranties, whether written, or oral.

• AME International warranty shall be limited to repair or exchange, FOB the factory, except when at the request of AME International, the buyer shall make the units available for inspection by AME International personnel at a place designated by AME International in such a request.

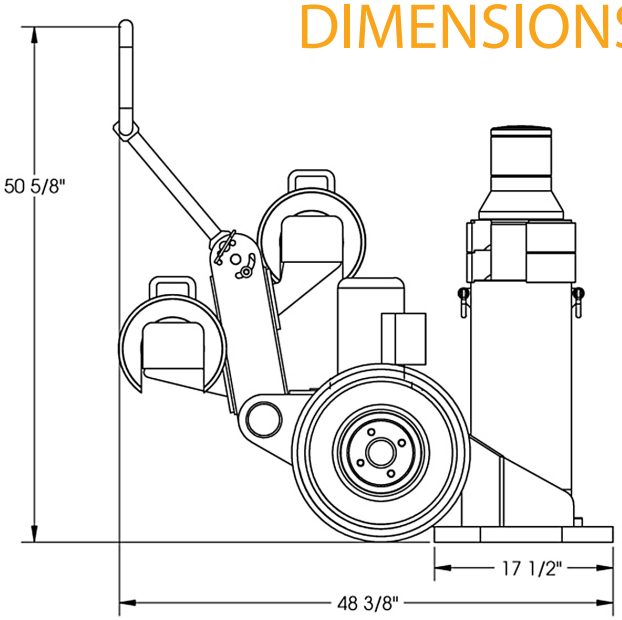
• Units repaired under this warranty and returned to the buyer shall be warranted for the remainder of the original warranty period.

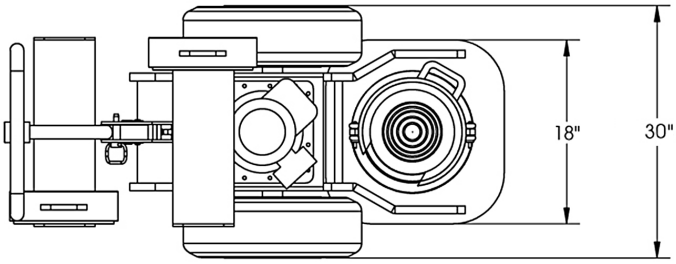
• When conditions are such that a warranty claim is refused, our written warranty provides that the unit be held for no more than thirty (30) days from the date of such notification, pending disposition by you, the buyer in absence of any further instructions from you, the unit will be returned to the original shipper (collect) and any liability by the factory will be cease.

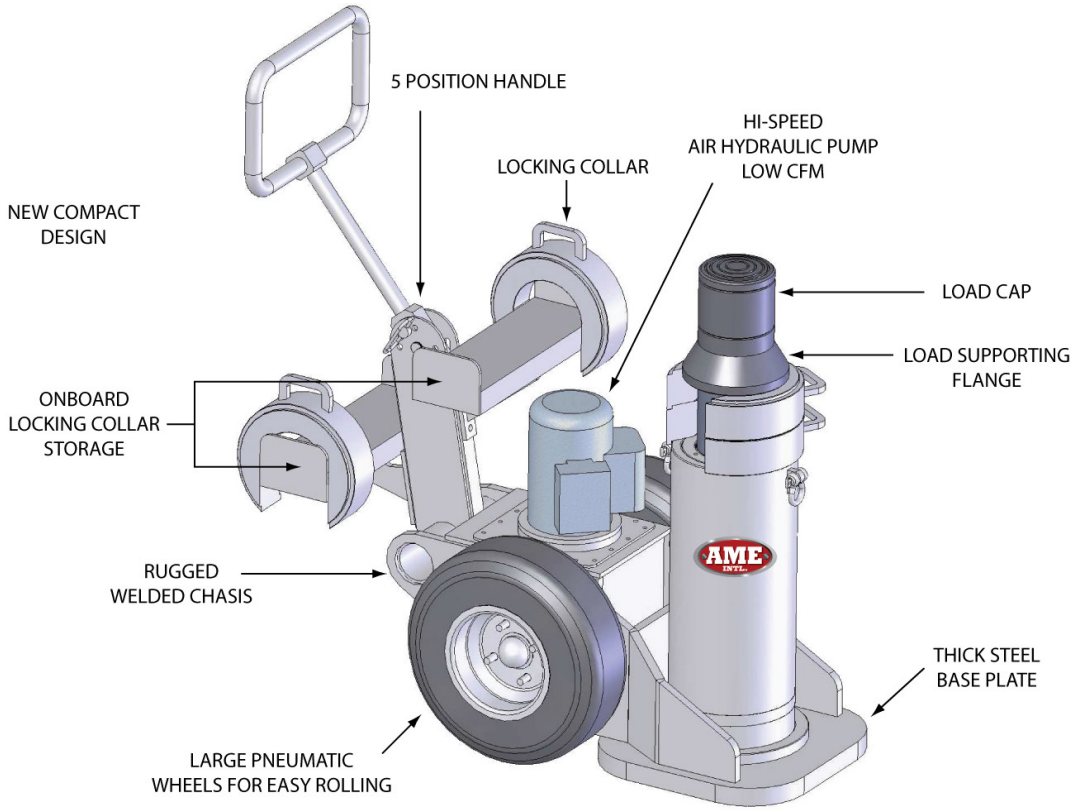
• The above warranty does not cover conditions over which we have no control, including but not limited to, foreign materials in the fluid system, pressure and speed in excess of published and recommend maximum, and products damaged, or subjected to accident abuse, or misuse after shipment from the factory. Products altered or repaired by any one not authorized by AME International are not covered.

• There will be no acceptance of any charges of labor and/or parts incidental to the removal and remounting of products repaired or replaced under this warranty. AME International will in no event be liable for any special or consequential damage or penalties.

RHINO II JACK
DIMENSIONS & SPECIFICATIONS







HYDRAULIC SYSTEM MANUAL

START-UP PROCEDURES

IMPORTANT Warranties are not valid unless proper starting and maintenance procedures are followed.

1. Please read the maintenance manual over carefully before proceeding with start-up of the system. In particular, familiarize yourself with the location of oil shut off valve and the air inlet valve.

2. Visually check the equipment for any possible shipping damage. Should any evidence of this be detected, please report it immediately.
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3. Familiarize yourself with the controls of the jack.

4. Check the oil level, remove oil fill vent, oil level should be easy to see. If oil can't be seen, top off with antiwear hydraulic oil AW32 or similar. Oil level should always be full.

5. Ensure control valve is in the middle position prior to starting.

6. Connect the air supply, and turn the top valve handle to begin the flow of air to the unit and the pump will be ready to operate.

7. Position 'B' to the right will allow the cylinder to pump up while position 'A' to the left will allow the cylinder to pump down. To lower a load, the pump must be in position 'A'.

8. Airline lubricators are required for use with this pump.

LIFTING PROCEDURE

• Insure you have finished the start-up procedures.

• Rhino II jacks are designed to lift on a concrete surface.

• Move the jack under the lifting point of the equipment your lifting, the cylinder has a removable end cap this can be removed and a Rhino II extension can be inserted to achieve the proper starting point. (Extra extensions can be ordered to fit different equipment).

Use only original equipment extension for SAFETY due to the heavy loads.
Never lift without either end cap or extension in place.

• Once the load is lifted turn off the air supply to the jack.

• The jacks are designed to be pumped up and down.

• All Rhino II jacks are designed with our patented Safety valve and will present overload, over stroke, load lock or any failure due to a hydraulic fluid loss.

• Important: always use either the extension or the end cap on the jack or damage to the cylinder rod will occur.

MAINTENANCE PROCEDURES

DAILY

• Make a visual walk-around to check for leaks and damage to hoses, fittings at the start of each shift.

• Make sure the top of the cylinder is free of debris to insure proper fit of cap and extensions.

• Familiarize yourself with the water separators beside the right tire, if your model does not include auto-drain, drain daily.

• Operate the jack forward and back also fully extend and retract the ram at the start of each day. Check the chrome rod for damage.

MONTHLY

• Check the oil level in the down position
(AW32 Hydraulic Oil).

• Check air pressure in tires
(not foam filled tires).

• Check overall condition of jack.

• Inspect cylinder rod for damage.

• Insure the vented fill plug is venting (blow through it).

• Pressure wash.

6 MONTHS

• Filter changes every 6 months is recommended.

YEARLY

• Change oil and clean the tank and strainer annually or as environment dictates.

NOTE: To ensure product safety and reliability, it is recommended that you repair or replace any broken parts when found.

TROUBLE SHOOTING

Symptom	Possible Cause	Possible Remedy
Excessive Noise	Air Trapped in System Low oil level Air Leaks	Remove trapped air by cycling the pump several times Add hydraulic oil Inspect lines for leaks and repair
Overheating Oil	Low oil Level Oil viscosity is too high	Add hydraulic oil Drain oil and replace with lower viscosity hydraulic oil
Oil leaking from the cylinder	Cyliner Seals are worn Cracked Top Gland	Replace seals with an RWP seal kit Inspect Cylinder for cracks
Jack starts lifting but stops while the pump continues pumping	Low oil level Valve closed Load exceed maximum	Add hydraulic oil Ensure valve is open Ensure that the load being lifted does not exceed the posted tonnage
Jack is difficult to manouver or loses mobility	Low tire pressure Bearings need lubrication Excessive dirt or debris	Add air if low to 90 psi Apply grease to bearings Remove all dirt and debris from hub and bearings
Pump fails to run	Moisture in air Clogged muffler or motor	Be sure compressed air is dry and clean Check oil level in airline lubricator and ensure proper oil is being used Clean muffler
Sporadic Cylinder Action	Air Trapped in System Cylinder Seals are worn Low oil level	Remove trapped air by cycling the pump several times Replace seal with an RWP seal kit Add hydraulic oil

PARTS LIST

Cylinder Replacement Parts

Top cap	JR150-TOPCAP
Seal Kit	SK-JR-150-5

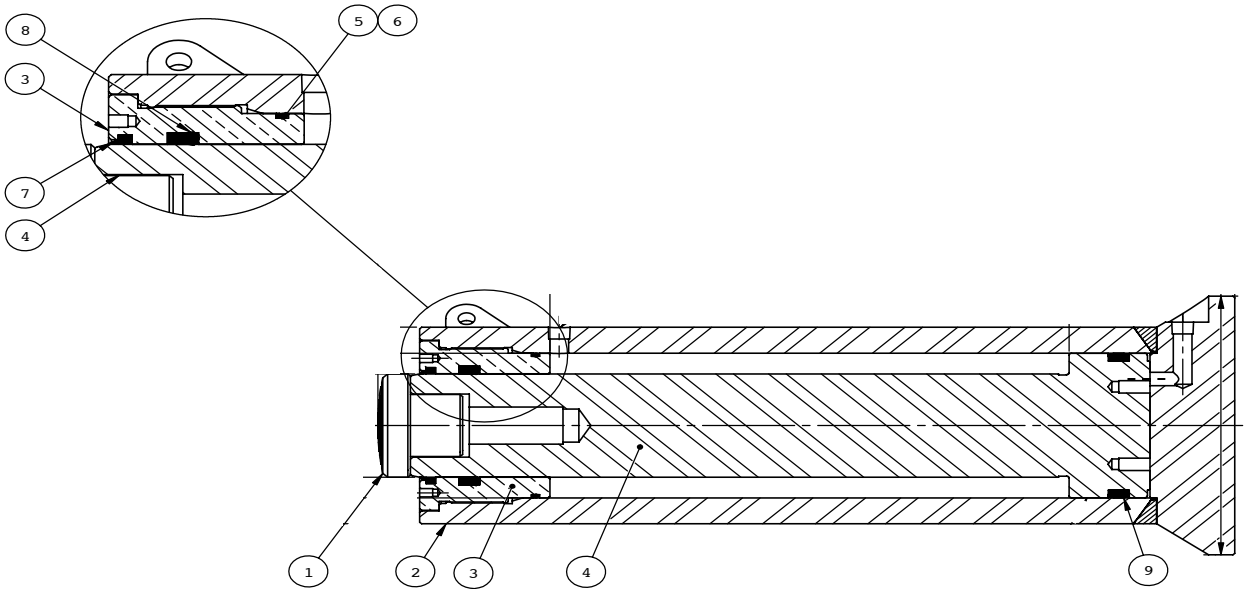
Miscellaneous Replacement Parts

Complete Block	SBV2-JR
Air Water Separators	AW-HR-RW-P5

Pump

Complete Pump	HR-RW-P5
Muffler	MF-HR-RW-P5
Control Valve	CV-HR-RW-P5
Pressure Gauge	PG-HR-RW-P5

CYLINDER



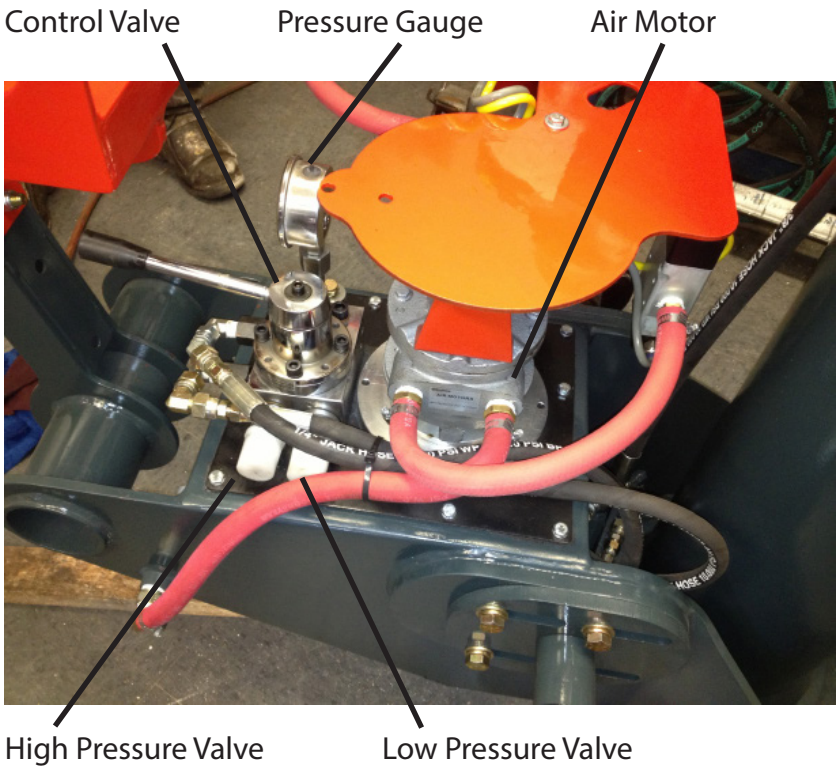
Item #	Desc ri ptio n
1	Rod End Pad
2	Barrel Weldment
3	Gland
4	Rod
5	O-Ring
6	Back-up Ring
7	Rod Wiper
8	Cylinder Seal
9	Cylinder Seal

SEAL KIT # SK-JR-150-5

INCLUDES ITEMS: 6, 7, 8, 12, 13, 14, 15, 16

150T JACK CYLINDER
ROD: 5”

HR-RW-P-5 Pneumatic Pump



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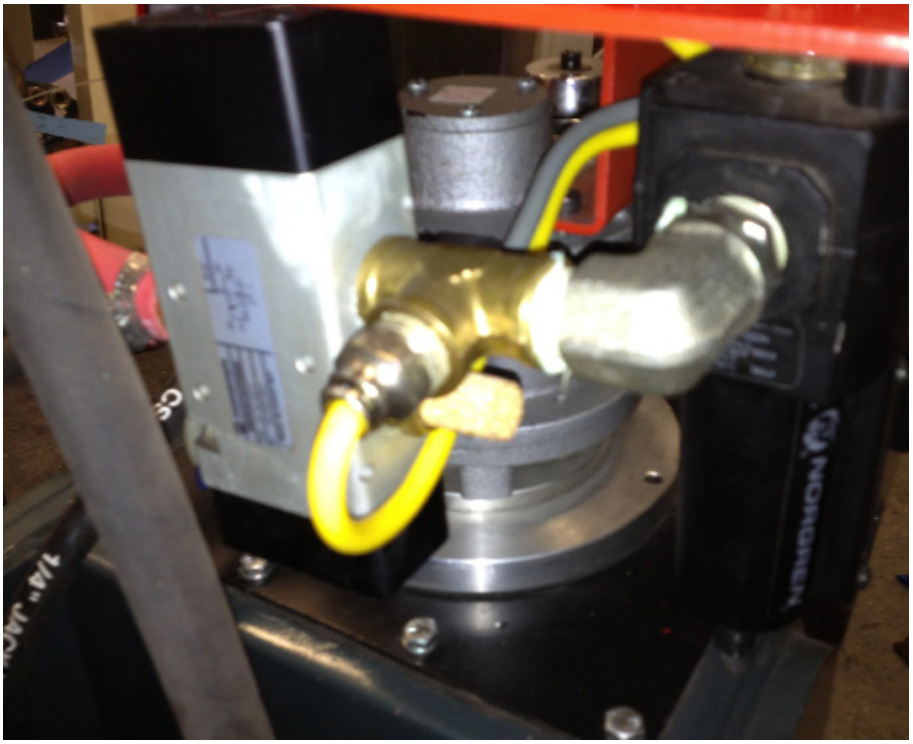

Maximum Operating Pressure	70 Mpa		10156 Psi
Minimum Operating Pressure	2 Mpa		290 Psi
High Flow Relief	0.7 L/Min		.19 G/Min
Low Flow Relief	2.4 L/Min		.63 G/Min
Air Motor Pressure	.6 Mpa	87 Psi	