# Supplement For Compressor Lubrication (All Season Select<sup>®</sup> & XL-740HT<sup>®</sup> Synthetic Lubricants)



# DESCRIPTION

All Season Select and XL-740HT are diester-based synthetic lubricants designed for certain Ingersoll Rand reciprocating air compressors. Synthetic lubricants eliminate carbon build-up and residue formation, thereby increasing compressor efficiency and significantly decreasing maintenance and downtime. Synthetic lubricants have extended drain intervals with the environmental benefit of less oil waste.

## APPLICATION

All Season Select is recommended for Type 30 standard single stage and two stage reciprocating air compressors. It provides more consistent viscosity and protection in high and low operating temperatures. It also provides faster splash lubrication to moving parts and less cranking resistance at operating temperatures below 40°F (4.4°C).

XL-740HT provides more consistent viscosity and protection in high operating temperatures. It is recommended for high pressure and 6R reciprocating air compressors. It is also recommended for T30 standard single-stage and two-stage reciprocating compressors operating in high ambient temperature conditions of 90°F (32°C) or above.

All Season Select and XL-740HT are not approved for vacuum pumps, CNG, non-lube, or aluminum models.

## NOTICE

Synthetic lubricants have a detergent action and may dissolve or break loose existing deposits in used compressors and compressed air systems. You must be certain that the downstream components of your compressed air system will not be damaged by the action of synthetic lubricants, as synthetic lubricants are not compatible with certain materials.

Please refer to the material compatibility table. If there are any materials present downstream in your compressed air system that are not included in the material compatibility table, we urge you to contact your local Ingersoll Rand distributor for information.

## **BREAK-IN PROCEDURES**

#### Type 30 standard single stage and two stage models):

- 1. Fill the crankcase with All Season Select synthetic lubricant. Refer to your instruction manual for crankcase capacity.
- 2. On used compressors that have been converted to synthetic lubricant, operate the compressor for approximately 200 hours, then inspect. If necessary, clean the compressor inlet and discharge valves.

#### High pressure and 6R models:

- 1. Fill the crankcase with XL-300<sup>™</sup> petroleum-based lubricant. Refer to your instruction manual for crankcase capacity.
- 2. Run the compressor for 100 hours.
- 3. Drain the break-in oil completely.
- 4. Fill the crankcase with XL-740HT synthetic lubricant.
- On used compressors that have been converted to synthetic lubricant, operate the compressor for approximately 200 hours, then inspect. If necessary, clean the compressor inlet and discharge valves.

## NOTICE

- Used compressors must be decarbonized before converting to synthetic lubricant.
- For revised valve maintenance and lubricant change intervals, refer to Table 2.

## **COLD WEATHER STARTING**

While providing exceptional lubrication at normal and high operating temperatures, synthetic lubricants are formulated for use in low operating temperatures as well. When using All Season Select or XL-740HT in temperatures below 30°F (-1.1°C), always follow these starting procedures.

- 1. Release all pressure from receiver and all associated tubing and components.
- 2. Pull the rings on all relief valves.
- 3. Start the compressor.

If the compressor has difficulty starting, crankcase heaters may be required. Contact your nearest Ingersoll Rand Full Service Distributor for more details.



#### Table 1. Synthetic Lubricant Material Compatibility.

Suitable	Not Recommended			
• Viton <sup>®</sup>	Neoprene			
• Teflon <sup>®</sup>	Natural Rubber			
Epoxy (Glass Filled)	SBR Rubber			
Oil Resistant Alkyd	Acrylic Paint			
Fluorosilicone	Lacquer			
Fluorocarbon	Varnish			
Polysulfide	Polystyrene			
2-Component Urethane	PVC			
Nylon	ABS			
• Delrin <sup>®</sup>	Polycarbonate			
• Celcon <sup>®</sup>	Cellulose Acetate			
<ul> <li>High Nitrile Rubber (Buna N. NBR more than 36% Acrylonitrile)</li> </ul>	Low Nitrile Rubber (Buna N. NBR less than 36% Acrylonitrile)			
Polyurethane	• EPDM			
Polyethylene	Ethylene Vinyl Acetate			
Epichlorohydrin	Latex			
Polyacrylate	• EPR			
Melamine	Acrylics			
Polypropylene	Phenoxy			
Baked Phenolics	Polysulfones			
• Ероху	Styrene Acrylonitrile (San)			
Modified Alkyds	• Butyl			
Indicates trademark of DuPont Corporation)				

#### Table 2. Synthetic Lubricant Routine Maintenance Schedule.

		Maintenance Procedures & Intervals		
Model	Recommended		Inspect & Clean	
	Synthetic Lubricant	Change Lubricant	Valves	Replace Air Filter
Type 30 single and two stage cast iron	All Season Select	2000 HR / 1 YR	2000 HR / 1 YR	2000 HR / 1 YR
High pressure	XL-740HT *	1500 HR / 1 YR	1500 HR / 1 YR	1500 HR / 1 YR
6R	XL-740HT *	100 HR / 6 MO	1500 HR / 1 YR	100 HR / 6 MO

\* - 100-hour break-in with petroleum-based lubricant (XL-300) required.

# NON-SYNTHETIC (PETROLEUM) LUBRICANTS

Single-viscosity petroleum-based lubricants may be used in most Type-30 model compressors provided they are premium-quality, non-detergent lubricants containing only rust, oxidation, and anti-foaming inhibitors. Substitute lubricants must have a flashpoint of 440°F (227°C) or higher and an auto-ignition point of 650°F (343°C) or higher.

Temperature Range	Lubricant Viscosity Required (ISO Grade)		
40°F (4°C) & below	32		
40°F (4°C) to 80°F (26°C)	100		
80°F (26°C) to 125°F (51°C)	150 (XL-300)		

When using a petroleum lubricant, change the lubricant and inspect/clean compressor valves every 500 hours or 90 days, whichever occurs first.

# A WARNING



## Fire or explosion hazard!

Do not use alternate lubricants that fail to meet minimum flashpoint and auto-ignition temperature requirements.

Use of improper lubricants result in coking (carbon deposits) which can block heat exchangers, discharge lines, compressor valves, safety/relief valves and control lines and result in a fire or explosion which can cause severe injury or death.

# ALL SEASON SELECT EXTENDED WARRANTY

A two-year warranty is available for eligible cast iron bare compressor pumps that run solely on All Season Select from start-up through an entire two-year period. See Table 3 for eligible models.

Eligible models that are operated solely on All Season T30 Select brand synthetic lubricant will have their bare compressor pump (ONLY THE PUMP) warranted for a period of twenty-four (24) months from the date of initial operation or thirty (30) months from the date of shipment, whichever shall occur first. The extended warranty applies only to eligible bare compressor pumps. Motors, receivers and any other package components do not qualify for extended warranty.

# NOTE: Proof of All Season Select purchase may be required with warranty claim.

#### Table 3. Models Eligible for Extended Warranty.

	Single stage				Two-stage			
٠	P1IU-A9	•	SS3		•	2340	٠	TS4
•	P1.5IU-A9	•	SS5		•	2475	•	TS5
					•	2545	•	TS51
					•	7100	•	TS7
							•	TS10
							•	TS15