

# MAINTENANCE

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# CHAPTER 3

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**ROUTINE MAINTENANCE**

A routine maintenance schedule should be developed for every IronHorse® motor installation based on the individual application. Motors installed in a harsh running environment should be serviced more frequently than those installed in a clean, climate controlled area. Use the following to create a schedule.

- 1) Clean the motor housing using a brush, soft cloth or compressed air. Pay special attention to the cooling ribs on cast iron motors. Remove any dirt and dust from the fan and fan cover vents.
- 2) Frequently monitor the bearing temperature on the motor. It should not exceed 60°C (140°F).
- 3) Have the insulation checked periodically by an authorized motor specialist.
- 4) (Applicable only for certain motors, per Note 1 of table shown below):  
Lubricate the bearings using the schedule shown below.
- 5) (Applicable only for certain motors, per Note 1 of table shown below):  
Purge the bearing grease at least every six months on all motors with serviceable bearings. Replace both the drive end and opposite drive end bearings at the end of their recommended running hour life. Motors used in belt drive applications have a bearing life expectancy of 50,000 hours. Direct coupled application motors have a bearing life expectancy of 100,000 hours.

<b>Bearing Lubrication Schedule</b>				
<b>HP(1)</b>	<b>Drive End Bearing Lubrication(2)</b>	<b>Grease Amount(3)</b>	<b>Opposite Drive End Bearing Lubrication(2)</b>	<b>Grease Amount(3)(4)</b>
15	9000	0.46 oz	9000	0.29 oz
20				
25	7500	0.64 oz		
30				
40	7000	0.75 oz	7500	0.64 oz
50				
60	6500	0.86 oz	7000	0.75 oz
75				
100	3000	1.22 oz	6500	0.86 oz
125	2500	1.47 oz	6500	
150				
200	2300	1.61 oz	2300	1.61 oz
250	2100	1.82 oz		
300				

1) Motors from 1/3 hp to 10 hp, and all MTSS stainless-steel motors have non-serviceable permanently-sealed bearings.  
 2) Running time in hours.  
 3) Use only Mobil POLYREX® EM Polyurea grease.  
 4) For MTCP2 motors, use only SKF LGHP2 grease.  
 5) For MTDP motors, use Multemp SRL grease or equivalent.

- 6) MTSS stainless-steel motor bearings should be replaced between 15,000 and 20,000 hours of use (depending upon the severity of use).

### BEARING SIZE INFORMATION

All IronHorse® cast-iron motors use premium name-brand bearings (NSK, NTN, or SKF). Below is a bearing size chart listing the type of bearings used in each frame size of IronHorse motors. The bearing types are also listed on the motor nameplate.

Bearing Size Chart											
Frame Size *	Drive End Bearing				Opposite Drive End Bearing						
	MTF Motors	Other IronHorse Motors (Except MTF)	MTF2	MTDP	MTF Motors	MTR2/MTRP /MTRJ Motors	MTCP2 Motors	MTF2	MTDP		
<b>56(H)C</b>		6203-ZZ or 6205				6203-ZZ	-		-		
<b>143T</b>	-	6205-ZZ	-	6205	-	-	6205-ZZ	-	6204		
<b>145T</b>				6205							6204
<b>182T</b>	6206-ZZ	6306-ZZ	6306	6306	6205-ZZ		6206-ZZ	6206-ZZ	6206	6305	
<b>184T</b>	6206-ZZ			6306	6306				6206-ZZ		6205
<b>213T</b>	-	6308-ZZ	-	6308	-		6207-ZZ	6207-ZZ		6306	
<b>215T</b>				6308					6308		6206
<b>254T</b>		6309		6309				6209	6209		6307
<b>256T</b>							6309				
<b>284T</b>		6311		6311				6309	6309		6310
<b>286T</b>							6311				
<b>324T</b>		6312		6314				6311	6311		6212
<b>326T</b>							6314				
<b>364T</b>	-	6313	-					6312	6312	-	
<b>365T</b>											
<b>404T</b>		NU316						6313	6313		-
<b>405T</b>											
<b>444T</b>		NU318									
<b>445T</b>											
<b>445/7T</b>		NU319									
<b>449T</b>		NU320					6320				

\* TC-frame motors have the same bearings as the comparable T-frame motors.

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