



## IRONHORSE® MOTOR REPLACEMENT PARTS INSTALLATION

- · Please read this instruction sheet thoroughly before installing these motor parts.
- The contents of this instruction sheet may be changed without prior notice. Please check the AutomationDirect website for the latest version: <a href="https://www.automationdirect.com">www.automationdirect.com</a>

#### Installation Instructions



REPAIRS TO BE PERFORMED BY A QUALIFIED INDUSTRIAL ELECTRICAL TECHNICIAN.

DISCONNECT ALL POWER TO THE MOTOR AND LOCK OUT THE POWER SOURCE

BEFORE PERFORMING ANY REPAIRS.

#### Drive End (DE) End Bell or C-Face Installation / Replacement

- 1) Disconnect power and lock out the power source.
- 2) Remove the woodruff key from the output shaft and remove the existing end bell or C-face from the drive end by removing the four (4) through-bolts.
- 3) Remove the drive end bearing from the existing c-face or end bell and install in the c-face.
- 4) Secure the drive end bearing with the bearing retainer and secure the retainer with the two (2) bolts supplied with the kit.
- 5) Install the c-face on to the drive end of the motor, seating the c-face against the motor frame.
- 6) Secure the c-face to the motor frame using the four (4) through-bolts supplied with the c-face kit.
- 7) If included with the c-face kit, (250, 280 & 320 frame motors only), install the grease fitting and pipe plug and grease the c-face bearing.

#### OPPOSITE DRIVE END (ODE) END BELL REPLACEMENT

- 1) Disconnect power and lock out the power source.
- 2) Remove the four (4) through-bolts securing the end bells at the drive end and opposite drive end of the motor. Leave the end bell at the drive end in place. Retain the through-bolts as they will be reused.
- 3) Remove the end bell on the opposite drive end from the motor. With the end bell removed, support the rotor to avoid damage.
- 4) Remove the bearing from the end bell at the opposite drive end and transfer the bearing to the new end bell.
- 5) Install the end bell opposite the drive end, seating the end bell against the motor frame.
- 6) Secure the end bell to the motor frame using the four (4) existing through-bolts.
- 7) If included with the end bell, (250, 280 & 320 frame motors only), install the grease fitting and pipe plug and grease the bearing.

#### JUNCTION BOX REPLACEMENT

- 1) Disconnect power and lock out the power source.
- 2) Remove the existing junction box cover and gasket.
- 3) Disconnect the motor wiring.
- 4) Remove the existing junction box base and gasket.
- 5) Install the new junction box base and gasket.
- 6) Reconnect the motor wiring.
- 7) Install the new junction box cover and gasket

### Parts Included in These Instructions

Iron	Horse MTDP Ope	n Drip P	roof Motor I	Replacem	ent Parts	
Part	Part #	Motor Frame	Motor Type	Includes	Photo	
	MTADP-JBOX-140	143, 145				
Junction Box	MTADP-JBOX-180	182, 184		gasketed base & cover assembly, base gasket, base bolts		
	MTADP-JBOX-210	213				
	MTADP-JBOX-250	254				
	MTADP-JBOX-280	284				
	MTADP-JBOX-320	324				
C-Face	MTADP-CFACE-140TC	143, 145		"C-Face, bearing retainer, thru bolts, lock washers, nuts* (*140 frame only)"		
	MTADP-CFACE-180TC	182, 184				
	MTADP-CFACE-210TC	213				
	MTADP-CFACE-250TC	254				
	MTADP-CFACE-280TC	284	]			
	MTADP-CFACE-320TC	324	MTDP Open Drip Proof			
	MTADP-DEB-140	143, 145	T-frame and TC-frame	End Bell, thru bolts, lock washers, nuts, grease fitting, pipe		
	MTADP-DEB-180	182, 184	1C-IIaille			
End Bell-Drive	MTADP-DEB-210	213				
End	MTADP-DEB-250	254				
	MTADP-DEB-280	284			33/	
	MTADP-DEB-320	324		plug		
"End Bell- Opposite Drive End	MTADP-OEB-140	143, 145		"End Bell, Grease fitting*, pipe plug* (* 250 ~ 320 frame)"	133	
	MTADP-OEB-180	182, 184				
	MTADP-OEB-210	213				
	MTADP-OEB-250	254			283	
	MTADP-OEB-280	284				
	MTADP-OEB-320	324				



## FASTENER INFORMATION

Fastener Information									
Model #	Junction Box MTADP-JBOX-XXX			ace FACE-XXXX	Drive End -End Bell	Opposite Drive End - End Bell			
	Cover	Base	C-Face	Bearing Retainer	MTADP-DEB- XXX	MTADP-OEB- XXX			
140(TC)	(4) M4 x 0.8 x 8mm	(4) M5 x 0.8 x 8mm	(4) M5 x 0.8 x 215mm*	(2) M5 x 0.8 x 10mm	(4) M5 x 0.8 x 235mm*	N/A			
180(TC)	(4) M4 x 0.8 x 8mm	(4) M5 x 0.8 x 8mm	(4) M8 x 1.25 x 285mm**	(2) M6 x 0.8 x 10mm	(4) M8 x 1.25 x 305mm*	N/A			
210(TC)	(4) M5 x 0.8 x 8mm	(4) M8 x 1.0 x 10mm	(4) M10 x 1.5 x 330mm**	(2) M6 x 1.0 x 10mm	(4) M10 x 1.5 x 330mm*	N/A			
250(TC)	(4) M5 x 0.8 x 8mm	(4) M8 x 1.25 x 10mm	(4) M10 x 1.5 x 412mm**	(2) M6 x 1.0 x 45mm**	(4) M10 x 1.5 x 412mm*	***			
280(TC)	(4) M6 x 1.0 x 15mm	(4) M6 x 1.0 x 20mm	(4) M10 x 1.5 x 463mm**	(2) M6 x 1.0 x 45mm**	(4) M10 x 1.5 x 463mm*	***			
320(TC)	(4) M6 x 1.0 x 20mm	(4) M8 x 1.5 x 15mm	(4) M10 x 1.5 x 514mm**	(2) M6 x 1.0 x 50mm**	(4) M10 x 1.5 x 514mm*	***			

<sup>\*</sup> w/nuts & lockwashers

Fastener Torque Specifications										
Model#	Junction Box Cover		Junction Box Base		Thru-bolts C-Face		Bolts Bearing Retainer		Thru-bolts Drive End-End Bell	
	Size	Torque N.M	Size	Torque N.M	Size	Torque N.M	Size	Torque N.M	Size	Torque N.M
140(TC)	M4	2.8	M5	5.6	M5	5.6	M6	9.8	M5	5.6
180(TC)	M4	2.8	M5	5.6	M8	24.5	М6	9.8	M8	24.5
210(TC)	M5	5.6	M8	24.5	M10	44.1	M6	9.8	M10	44.1
250(TC)	M5	5.6	M8	24.5	M10	44.1	M6	9.8	M10	44.1
280(TC)	M6	9.8	M6	9.8	M10	44.1	M6	9.8	M10	44.1
320(TC)	M6	9.8	M8	24.5	M10	44.1	M6	9.8	M10	44.1

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<sup>\*\*</sup> w/lockwashers

<sup>\*\*\* 1/8&</sup>quot; npt grease fitting & pipe plug

# IronHorse® Motor Replacement Parts Installation

