

Energy Efficiency Program for Business

2024 Chiller Tune-Up Checklist

This checklist is used to document the data required for your chiller tune-up applications. Please complete this document and include manufacturer's specification sheets, a screenshot of nominal tonnage, or nameplate verification.

If more than eight chillers are tuned-up, please use additional copies of this form.

To access this document and apply online, go to <u>mienergyrebates.com</u>

Contact Us

phone: 866.796.0512 (option 3) email: dtesaveenergy@dnv.com apply: mienergyrebates.com web: dteenergy.com/equipment-rebates

Chiller Tune-Up #1 (HE-50)

Select One: \Box Space Cooling \Box Process Cooling

Select All That Apply:

\Box Inspect and correct oil level and pressure at full load operation	Check and repair evaporator condition
Clean the air-cooled condenser coil	Validate compressor amp draw
Check and adjust the system pressure	Validate supply motor amp draw
Inspect and/or replace filter	Validate condenser fan(s) amp draw
Inspect and/or replace belt	Check liquid line temperature
Check and repair the electrical contactors	Check suction pressure and temp
Check refrigerant temperature and pressure	Validate low-pressure controls
Validate high pressure controls	Validate crankcase heater operation
Clean water cooled chiller condenser tubes	\Box Clean water cooled chiller evaporator tubes (if performance warrants)
Check and repair economizer operation	Validate sub-cooling and superheat
Validate suction temperature and pressure	Inspect all refractory
Patch and wash coat as required	Check safety controls
□ Check for proper venting	Lubricate all motors and check coupling alignment

Chiller Information:

Manufacturer	Technician Performing Tune-Up
Model Number	Annual Hours of Operation
Serial Number	Unit Size (Tons)

Chiller Tune-Up #2 (HE-50)

Select One:
Space Cooling
Process Cooling

Select All That Apply:

□ Inspect and correct oil level and pressure at full load operation	Check and repair evaporator condition
Clean the air-cooled condenser coil	Validate compressor amp draw
\Box Check and adjust the system pressure	Validate supply motor amp draw
Inspect and/or replace filter	Validate condenser fan(s) amp draw
Inspect and/or replace belt	Check liquid line temperature
\Box Check and repair the electrical contactors	\Box Check suction pressure and temp
Check refrigerant temperature and pressure	□ Validate low-pressure controls
Validate high pressure controls	Validate crankcase heater operation
Clean water cooled chiller condenser tubes	\Box Clean water cooled chiller evaporator tubes (if performance warrants)
Check and repair economizer operation	Validate sub-cooling and superheat
Validate suction temperature and pressure	□ Inspect all refractory
Patch and wash coat as required	Check safety controls
\Box Check for proper venting	Lubricate all motors and check coupling alignment

Manufacturer	Technician Performing Tune-Up
Model Number	Annual Hours of Operation
Serial Number	Unit Size (Tons)



Chiller Tune-Up #3 (HE-50)

Select One: \Box Space Cooling \Box Process Cooling

Select All That Apply:

\Box Inspect and correct oil level and pressure at full load operation	Check and repair evaporator condition
Clean the air-cooled condenser coil	Validate compressor amp draw
Check and adjust the system pressure	Validate supply motor amp draw
Inspect and/or replace filter	Validate condenser fan(s) amp draw
Inspect and/or replace belt	Check liquid line temperature
Check and repair the electrical contactors	\Box Check suction pressure and temp
Check refrigerant temperature and pressure	□ Validate low-pressure controls
Validate high pressure controls	Validate crankcase heater operation
Clean water cooled chiller condenser tubes	\Box Clean water cooled chiller evaporator tubes (if performance warrants)
Check and repair economizer operation	Validate sub-cooling and superheat
Validate suction temperature and pressure	Inspect all refractory
Patch and wash coat as required	Check safety controls
□ Check for proper venting	Lubricate all motors and check coupling alignment

Chiller Information:

Manufacturer	Technician Performing Tune-Up
Model Number	Annual Hours of Operation
Serial Number	Unit Size (Tons)

Chiller Tune-Up #4 (HE-50)

Select One:
Space Cooling
Process Cooling

Select All That Apply:

□ Inspect and correct oil level and pressure at full load operation	Check and repair evaporator condition
Clean the air-cooled condenser coil	Validate compressor amp draw
\Box Check and adjust the system pressure	Validate supply motor amp draw
Inspect and/or replace filter	Validate condenser fan(s) amp draw
Inspect and/or replace belt	Check liquid line temperature
\Box Check and repair the electrical contactors	\Box Check suction pressure and temp
Check refrigerant temperature and pressure	□ Validate low-pressure controls
Validate high pressure controls	Validate crankcase heater operation
Clean water cooled chiller condenser tubes	\Box Clean water cooled chiller evaporator tubes (if performance warrants)
Check and repair economizer operation	Validate sub-cooling and superheat
Validate suction temperature and pressure	□ Inspect all refractory
Patch and wash coat as required	Check safety controls
\Box Check for proper venting	Lubricate all motors and check coupling alignment

Manufacturer	Technician Performing Tune-Up
Model Number	Annual Hours of Operation
Serial Number	Unit Size (Tons)



Chiller Tune-Up #5 (HE-50)

Select One: \Box Space Cooling \Box Process Cooling

Select All That Apply:

\Box Inspect and correct oil level and pressure at full load operation	Check and repair evaporator condition
Clean the air-cooled condenser coil	Validate compressor amp draw
Check and adjust the system pressure	Validate supply motor amp draw
Inspect and/or replace filter	Validate condenser fan(s) amp draw
Inspect and/or replace belt	Check liquid line temperature
Check and repair the electrical contactors	\Box Check suction pressure and temp
Check refrigerant temperature and pressure	□ Validate low-pressure controls
Validate high pressure controls	Validate crankcase heater operation
Clean water cooled chiller condenser tubes	\Box Clean water cooled chiller evaporator tubes (if performance warrants)
Check and repair economizer operation	Validate sub-cooling and superheat
Validate suction temperature and pressure	Inspect all refractory
Patch and wash coat as required	Check safety controls
□ Check for proper venting	Lubricate all motors and check coupling alignment

Chiller Information:

Manufacturer	Technician Performing Tune-Up
Model Number	Annual Hours of Operation
Serial Number	Unit Size (Tons)

Chiller Tune-Up #6 (HE-50)

Select One:
Space Cooling
Process Cooling

Select All That Apply:

\Box Inspect and correct oil level and pressure at full load operation	Check and repair evaporator condition
Clean the air-cooled condenser coil	Validate compressor amp draw
\Box Check and adjust the system pressure	\Box Validate supply motor amp draw
Inspect and/or replace filter	Validate condenser fan(s) amp draw
Inspect and/or replace belt	Check liquid line temperature
\Box Check and repair the electrical contactors	\Box Check suction pressure and temp
Check refrigerant temperature and pressure	□ Validate low-pressure controls
Validate high pressure controls	Validate crankcase heater operation
Clean water cooled chiller condenser tubes	\Box Clean water cooled chiller evaporator tubes (if performance warrants)
Check and repair economizer operation	Validate sub-cooling and superheat
Validate suction temperature and pressure	□ Inspect all refractory
Patch and wash coat as required	Check safety controls
\Box Check for proper venting	□ Lubricate all motors and check coupling alignment

Manufacturer	Technician Performing Tune-up
Model Number	Annual Hours of Operation
Serial Number	Unit Size (Tons)



Chiller Tune-Up #7 (HE-50)

Select One: \Box Space Cooling \Box Process Cooling

Select All That Apply:

\Box Inspect and correct oil level and pressure at full load operation	Check and repair evaporator condition
Clean the air-cooled condenser coil	Validate compressor amp draw
\Box Check and adjust the system pressure	Validate supply motor amp draw
Inspect and/or replace filter	Validate condenser fan(s) amp draw
Inspect and/or replace belt	Check liquid line temperature
\Box Check and repair the electrical contactors	Check suction pressure and temp
Check refrigerant temperature and pressure	Validate low-pressure controls
Validate high pressure controls	Validate crankcase heater operation
Clean water cooled chiller condenser tubes	\Box Clean water cooled chiller evaporator tubes (if performance warrants)
Check and repair economizer operation	Validate sub-cooling and superheat
Validate suction temperature and pressure	Inspect all refractory
Patch and wash coat as required	Check safety controls
□ Check for proper venting	Lubricate all motors and check coupling alignment

Chiller Information:

Manufacturer	Technician Performing Tune-Up
Model Number	Annual Hours of Operation
Serial Number	Unit Size (Tons)

Chiller Tune-Up #8 (HE-50)

Select One:
Space Cooling
Process Cooling

Select All That Apply:

□ Inspect and correct oil level and pressure at full load operation	Check and repair evaporator condition
Clean the air-cooled condenser coil	Validate compressor amp draw
\Box Check and adjust the system pressure	Validate supply motor amp draw
Inspect and/or replace filter	Validate condenser fan(s) amp draw
Inspect and/or replace belt	Check liquid line temperature
\Box Check and repair the electrical contactors	\Box Check suction pressure and temp
Check refrigerant temperature and pressure	□ Validate low-pressure controls
Validate high pressure controls	Validate crankcase heater operation
Clean water cooled chiller condenser tubes	\Box Clean water cooled chiller evaporator tubes (if performance warrants)
Check and repair economizer operation	\Box Validate sub-cooling and superheat
Validate suction temperature and pressure	□ Inspect all refractory
Patch and wash coat as required	Check safety controls
\Box Check for proper venting	\Box Lubricate all motors and check coupling alignment

Manufacturer	Technician Performing Tune-Up
Model Number	Annual Hours of Operation
Serial Number	Unit Size (Tons)

