

## GURU® DL 2.1 CH & CHS

WATER COOLED COMPRESSOR HEAD FREEZE PROTECTION



### BENEFITS

- Will not trip or dump while locomotive is running
- Fully automatic - it never forgets to activate freeze protection
- Completely mechanical - No electrical or air connections
- Not affected by air flow or air temperature surrounding valve - releases only when cooling water reaches set point
- Rapid draining
- Easy system refill
- Models available to convert existing freeze protection
- Easily tested in field
- Slotted actuator feature prevents nuisance dumps when refilling cooling system with cold water
- Unit automatically rearms after filling and reheating
- Optional domed anti tamper cap eliminates ability to tamper with the valve resetting stem



GURU® CH



GURU® CH ANTI-TAMPER



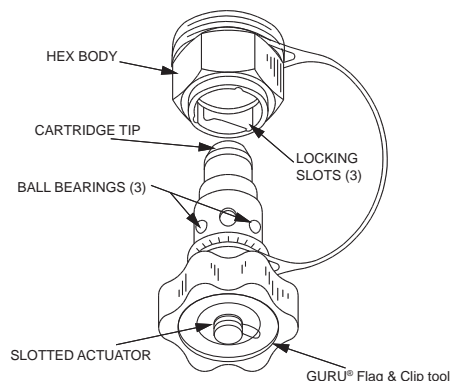
GURU® CHS



GURU® CHS ANTI-TAMPER

### DESIGN FEATURES

- Easily retrofits into water cooled air compressor heads.
- Flanged and 2" NPT threaded styles.
- Actuator sensing surface is the only wetted part.
- Long service life: All moving parts are stainless steel.
- Design excludes cooling water chemicals and other debris from moving parts.
- Easy maintenance.
- Paint mask minimizes accidental paint-ins.
- Knob on cartridge for easy installation and removal even in awkward locations.
- Choice of release temperatures: 35°F or 40°F.



### OPERATION

The GURU® CH & CHS may be thought of as an automatic freeze-out plug with one important difference: The stainless steel GURU® Cartridge releases itself from its body at a pre-set water temperature (35°F or 40°F), rather than being forced out by the tremendous pressure of expanding ice. This provides almost a full one inch bore to rapidly drain the typical compressor before damage can occur.

Resetting and rearming the GURU® Plug is easily accomplished by simply reheating the cartridge and utilizing our GURU® Flag and Clip tool with slotted actuator feature. This feature prevents the GURU® Plug from triggering open again while refilling the cooling system with cold water.

### APPLICATIONS

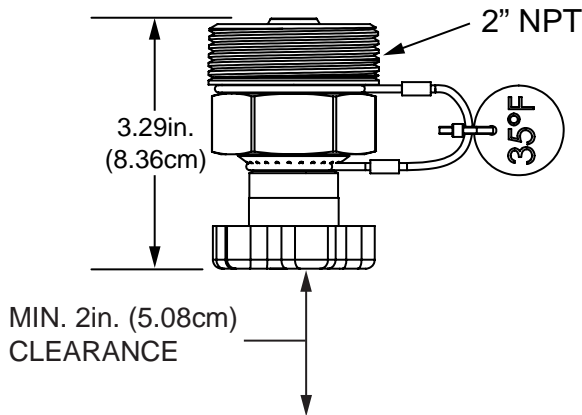
- Both are used for water cooled air compressor head freeze protection.
- The GURU® CHS adapts to Gardner Denver's compressor set cooling systems. Most common on EMD's SD70 locomotives.

# GURU® DL 2.1 CH & CHS

WATER COOLED COMPRESSOR HEAD FREEZE PROTECTION



## GURU® DL 2.1 TYPE CHS

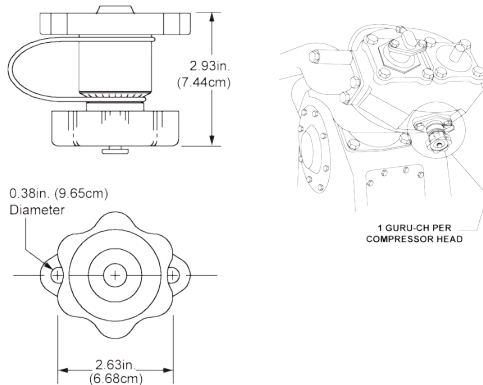


## COMPRESSOR HEAD CLEANING TOOL

- Inserts into any GURU® CH or CHS body.
- Clear compressor heads of dirt and foreign matter.
- Protects cooling jacket from blockage.
- Connects to any water source for cleaning.



## GURU® DL 2.1 TYPE CH



## FLAG AND CLIP (SINGLE LANYARD)

## ANTI-TAMPERING (3 LANYARDS)



- Allows refilling of locomotive with cool water without tripping of GURU® valves.
- Alerts to the presence of deactivated GURU® Plugs.
- Minimizes risks of deactivated GURU® Plug.
- Can be used with Magnum and DL 2.1 Plugs.

## ORDERING INFORMATION

PART NUMBER		DESCRIPTION	NOTES
35°	40°		
475-010110-035	NA	CARTRIDGE 35°F: ANTI-TAMPER	
475-006110-035	NA	DL2.1 TYPE-CH 35°F: ANTI-TAMPER	
475-007110-035	NA	DL2.1 TYPE-CHS 35°F: ANTI-TAMPER	
481-04-82-CART	481-04-81-CART	DL2.1 TYPE CARTRIDGE	REPLACEMENT GURU® CH OR CHS CARTRIDGE
484-04-88	484-04-84	DL2.1 TYPE CH	
485-04-88	485-04-87	DL2.1 TYPE CHS	
04-066		ANTI-TAMPERING ASSEMBLY, WITH STROBE LIGHT	PREVENTS NUISANCE DUMPS WHEN REFILLING
04-052		FLAG AND CLIP WITH STROBE LIGHT	PREVENTS NUISANCE DUMPS WHEN REFILLING
484-04-84-CHCT		COMPRESSOR HEAD CLEANING TOOL	QUICKLY CLEANS WATER COOLED COMPRESSORS

The suitability of the valve for the intended application is the responsibility of the end user. GURU® CH and CHS valves are covered by a 1-year warranty.

