



**California Institute of Technology  
Massachusetts Institute of Technology**

# Document Change Notice (DCN)

DCN No. E030373-00-E

Sheet 1 of 2

DOCUMENT No. (DOC-REV-GP.ID)	TITLE DCN HEPI Quiet Hydraulic Actuator Assembly	NEW REV
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**CHANGE DESCRIPTION (FROM/TO):**

- D020367-B Manifold Large Plug** Added broach for Standard 5/16 Allen Wrench Hex; Changed groove to fit size 15 O-ring (from size 16) to avoid slip during installation.
- D020285-B Actuation Plate** Raised position of pin valve from .537 to .57 to avoid interference with inside edge; Added weld insert for bleed tube; Chamfered holes for tripod posts for easy installation and reduced diameter from .453 to .32 to fit 5/16 bolt.
- D020300-B Manifold** Added weld insert for actuator bleed tube.
- D020371-B Tripod Base** Reduced hole diameter from .453 to .32 to fit 5/16 bolt; Chamfered holes.
- D020371-B Tripod Vertical Post** Tapered upper end for easy installation into tripod base; Reduced bolt diameter from 7/16 to 5/16 as suggested by Kern.
- D020359-B Small Pin Valve** Extended length of pin valve from .776 to .826 to ensure sufficient seal; Added maximum broach depth to .150 as suggested by Kern.
- D020359-B Actuator Plate Plug** Added broach for Standard 3/16 Allen Wrench Hex; Changed groove to fit size 11 O-ring (from size 12) to avoid slip during installation.

**ACTION:**       Incorporate Change       Attach DCN to Drawings       Other Action (specify):

DISPOSITION OF HARDWARE (IDENTIFY SERIAL NUMBERS)	DCN DISTRIBUTION																	
<input type="checkbox"/> No hardware was affected (record change only):	<table style="width:100%; border: none;"> <tr><td style="width:33%;">Barish</td><td style="width:33%;">Zucker</td><td style="width:33%;">Coyne</td></tr> <tr><td>Lazzarini</td><td>Lindquist</td><td>Sanders</td></tr> <tr><td>Shoemaker</td><td></td><td>Tyler</td></tr> <tr><td>Weiss</td><td>Whitcomb</td><td>Matherny</td></tr> <tr><td>Raab</td><td>Lantz</td><td>Kern</td></tr> </table>	Barish	Zucker	Coyne	Lazzarini	Lindquist	Sanders	Shoemaker		Tyler	Weiss	Whitcomb	Matherny	Raab	Lantz	Kern		
Barish		Zucker	Coyne															
Lazzarini		Lindquist	Sanders															
Shoemaker			Tyler															
Weiss		Whitcomb	Matherny															
Raab		Lantz	Kern															
<input type="checkbox"/> List S/Ns which comply already:																		
<input type="checkbox"/> List S/Ns to be reworked/scrapped:																		
<input checked="" type="checkbox"/> List S/N's to be built with this change: - all production units for LLO																		
<input type="checkbox"/> List S/Ns to be retested per this change:																		
<input type="checkbox"/>																		

**SAFETY, COST, SCHEDULE, REQUIREMENTS IMPACT?**       NO       YES (If YES, enter CR (CCB) or TCP (TRB) #)

APPROVALS:	DATE	OTHER APPROVALS (SPECIFY)	DATE
<b>ORIGINATOR:</b> Hammond / Spjeld	7/16/03		
<b>TASK LEADER:</b> Kern			
<b>GROUP LEADER:</b> Mason	6/9/08		

**DCC RELEASE:**



# Document Change Notice (DCN)

## CHANGE DESCRIPTION (FROM/TO):

### Drawings Only

D020286-B	Actuator Diaphragm	Removed flatness callout according to R/L by Kern.
D020291-B	Top Bellow Slug & Cap	Added missing dimension for thickness .250 for Cap.
D020293-B	Bottom Bellow Slug & Cap	Added missing dimension for thickness .250 for Cap.
D020300-B	Manifold	Added surface finish symbol and machining area for valve mount.
D020301-B	Manifold Weld Caps	Reduced dimensions from .XXX to .XX according to R/L by Kern.
D020302-B	Bellows Shield	Changed slit dimension from 0.005 to 0.015, optional wire EDM or slitting saw according to R/L suggestion by Kern.
D020303-B	Oil Catch	Reduced dimensions from .XXX to .XX according to R/L by Kern.
D020284-B	Actuator General View	Updated list of drawings and referring sheet numbers.

### For All Assembly Drawings:

Replaced callouts with part no., description and sheet no. with item no. balloons and bill of materials list.

D020286-B Actuator Exploded Assembly; D020360-B Bellows Sub-Assembly;  
D020361-B Top Foundation Plate Assembly; D020362-B Bottom Foundation Plate Assembly;  
D020363-B Side Foundation Plate Assembly; D020364-B Back Foundation Plate Assembly;  
D020365-B Manifold Assembly; D020368-B Tripod Assembly.