

# ARTS2486

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## 5W\_bck`YX[ Ya YbhcZ7ci bHfm

I B GK `5fngž8Yg][ b`UbX`5fWk]HfWfi fY? Ybg]b[ hcb`UbX`DUXX]b[ hcb`Wla di gYg`UfY`Vi ]hcb`5Vcf][ ]bU`  
@UbXg"K Y`dUmci f`fYgdYWtg`hc`hY`6]X][ U`UbX`; UX][ U`dYcd`Yg`k`c`UfY`hY`7i`gfcX]Ubg`cZ`hY`gY`UbXg"  
K Y`UW\_bck`YX[ Y`hY`5Vcf][ ]bU`UbX`Hc`fYg`G`fU]h`g`UbXYf`dYcd`Ygž`hY`; ]fgh5i`gfcU`Ubgžk`c`gY`UbXgž  
k ]bXg`UbX`k`UHf`g`k`Y`U`bck`g`UfYž`UbX`dUm`fYgdYWfi`hc`hY]f`i`b]ei`Y`j`U`i`Ygž`UbX`hY]f`V`b`h]bi ]b[ `UbX  
YbXi`f]b[ `W`h`fYg`k`\\W`XYYdYb`UbX`Ybf]W`hY`Z`cZci`f`bU`h]cb`UbX`W`a`a`i`b]h]Yg"

U[ Y`W`ci`fH`gmicZ`hY`C`Z]W`cZ`hY`D`fc`J`]W!7`UbW`cf`bX][ Ybci`g`[L`B`G`K`f\]`bX\]\[ Ybci`g`g`f`U`H`\[`m](#)

7ci fgY'8YHJ]`g

I b]hg'cZ7 fYX]h\*`

Gi a a UfmicZ\hY'7ci fgY

h`h]g`Wci fgYz`ghi XYbhg`k ]`^Uj Y`hY`cddcfh b]hmc`X]gWc`j Yf`hY`W`bhfU`]hmcZ`hY` : fYbW`Ub[ i U[ Y`]b  
ZUa ]b[ : fYbW`]XYbh]mz`UbX`hc`YI d`cfY`hY`W`ffYbhghU`h g`cZ`hY` : fYbW`Ub[ i U[ Y`]b`gcW`Y`h]Yg`UbX  
]bgh]h h`cbg`Ufci bX`hY`k`cfX`"H\]g`Wci fgY`k ]`dfcj ]XY`ghi XYbhg`k ]h`Ub`cj Yfj ]Yk`cZ`hY`^]g`hcfm`cZ`hY`  
: fYbW`Ub[ i U[ Y`Z`ca` ]hg`cfj[ ]b`hc`hY`W`cbh`a`dcfUfmdYfj`cX`fY`Z`cfhg`hc`W`X]Z`h`hY`"Ub[ i U[ Y`k ]`fY`W`j ] Y  
dUfh]W`Uf`U`hY`bh]cb`l`z`UbX`k ]h`Ub`cj Yfj ]Yk`cZ`hY`U`W`h`U`X`j Yfg]hmcZ` : fYbW`]b` : fUbW`UbX`Ufci bX`hY`  
k`cfX`f]b`hY`5a`Yf]W]g`z`]b`5Z]W]UbX`]b`9i`fcdY`l`z`]bW`X]b[ `hY`DU`W]Z]W]UbX`h`X]Ub`C`W`Ub`fY[ ]cbg`f`c`Z]W]U`  
dc`]W]Y`g`hc`UggY`fh`hY`g`hU`h`g`cZ` : fYbW`]b`hY`k`cfX`k ]`fY`W`j ] Y`dUfh]W`Uf`U`hY`bh]cb`l`5`j`Uf]Y`hmcZ`k`f]hY`b  
UbX`Ui`X]c!j ]gi`U`a`U`hY`f]U`g`k ]`VY`i`gYX`hc`]`i`ghfU`h`hY`"Y`W`h`fY`g"

H\]g`Wci fgY`]g`hU[ ]`h]b`9b[ ]`g`UbX`k ]h`fYUX]b[ g`]b`9b[ ]`g`h`"

7ci fgY`@YUfb]b[ `Ci hWca Yg

%`%`"8YgW]VY`hY`a`U]b`g`hU[ Yg`cZ`hY`^]g`hcf]W]`Yj`c`i`h`cb`cZ` : fYbW`  
&`&`"F`Y`W`c`]b`hY`hY`j`Uf]ci`g`Z`fa`g`cZ` : fYbW`h`U`h`UfY`W`ffYbhimgdc`\_Yb`]b`hY`k`cfX`  
'`"``"I`gY`U`g`Y`h`cZ`W`bW`d`hg`gd`Y`W]Z]W]h`c`hY`X]g]W]d`]b`Y`gi`W`U`g`G`h`U`b`X`U`f`X` : fYbW`z`W`Y`c`Y`UbX`X][`c`gg]U  
(`("8]gW`gg`UbX`fYZY`W`h`c`b`^`ck`h`hY`Y`j`c`i`h`cb`UbX`h`hY`W`ffYbhghU`h`g`cZ` : fYbW`Ub[ i U[ Y`fY`U`hY`g`hc`  
gcW]c`dc`]h]W]`]ggi`Y`g  
)`)"`7ca`dUfY`h`Y`gY`d`Y`bca`Y`b`U`k ]h`h`hY`g]h`U`h`cb`cZ`m`i`f`ck`b`Ub[ i U[ Y`

HYUW]b[ `GhfUH[ ]Yg`

H`Y`W`ci`fgY`]g`X`Y`g][`b`Y`X`hc`Z]W]`]hU`h`hY`X`Y`j`Y`c`da`Y`b`h`c`Z`U`g`W`c`U`f`m`U`b`X`W`]h]W]`i`b`X`Y`f`g`h`U`b`X]b[ `c`Z`h`Y`  
Y`j`c`i`h`cb`z`Y`I`d`U`b`g]c`b`UbX`W`ffYbhghU`h`g`cZ` : fYbW`]b`hY`k`cfX`"H`Y`W`cb`h`Y`bh]g`f]W]`]b`]b`Z`ca`U`h`cb`U`V`ci`h`  
h`hY`"Ub[ i U[ Y`UbX`]h`U`X`X`f`Y`g`g`Y`g`W`cb`h`a`dcfUfmgc`W]Y`hU`]ggi`Y`g`cZ`f`Y`j`UbW`Z`cf` : fYbW`gh`XY`bhg`]b`  
dfcZ`Y`gg]cb`U`UbX`X]g]W]d`]b`U`f`m`Z]Y`X`g"

h`W`i`g]j`Y`h`U`W]b[ `ghfU`h[ ]Y`g`z`U`i`X]c!j ]gi`U`gi`ddcfh`UbX`d`Y`Y`f`W`"U`V`c`f`U`h`cb`U]a`U`h`Y`b[ U[ ]b[ `gh`XY`bhg`]b`  
`Y`U`fb]b[ `h`hY`gY`W`cb`h`Y`bhg]"5`f`Ub[ Y`cZ`U`gg`Y`g`ga`Y`b`h`f`U`g`\_`U`f`Y`g`Y`h`c`gi`ddcfh`h`hY`U`W]Y`j`Y`a`Y`b`h`c`Z`\_`Y`m`

# 5ggYgga Ybh

5ggYgga YbhUg_	K Y][ \h	8i Y'8UHŸ	7ci fgY'@YUfb]b[ Ci hWca Yg'5ggYggYX
%"·HYgh	&\$i	&\$#\$* #&\$&&fK YY_( Ł	%ž"
&"·C fU`X]gW gg]cb	&\$i	8]gW gg]cb`Xi f]b[ `h hcf]U`g. VYtk YYb`k YY_`&`UbX`) ž 7 f]h]WU`fYZYW]cb`Xi Y`Vm) da `cb`hY`XUmcZHY`h hcf]U` X]gW gg]cb"	' ž(
' " ; fci d`dfYgYbhU]cb	&\$i	F YWcfXYX`j ]XYc`dFYgYbhU]cb Xi Y`Vm) `da `hk c`XUm]fcb K YXbYgXUmŁ VYžcfY`hY h hcf]U`X]gW gg]cb`cZHY j ]XYc`dFYgYbhU]cb`Xi f]b[ h hcf]U`g.`k YY_g`,`hc`%\$"	&ž(
(": ]bU`YggUm	( \$i	%) #\$, #&\$&&\$) .\$\$`DA	( ž)

## 5ggYgga Ybh%`HYgh

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8i Y`XUHŸ. `&\$#\$\* #&\$&&fK YY\_( Ł

C bY`]b!WUgg`ei ]n`Wc] Yf]b[ `hY`WcbhYbhcZHY`Wci fgY`k ]`hU\_Y`d`UW`Xi f]b[ `hY`YWh fYgž`WU"() `a ]bi hYg"

: YYXVUW\_ j ]U`]b!WUgg`X]gW gg]cb`UbX`WcfYW]cb`cZHYgh`

H\]g`]g`bchU`Hi fb]h]b`Ugg][ ba Ybh

## 5XX]h]cbU`XYHJ]`g

H\Y`HYghVUgYX`cb`hY`WcbhYbhcZHY`a UHf]U`Wc] YfYX`k ]`VY`XcbY`cb`]bY`j ]U`U`h]a YX`A ccX`Y`E`i ]n  
Xi f]b[ `hY`žfgh`ci`f`cZHY`YWh`fY"

## 5ggYgga Ybh&`C fU`X]gW gg]cb

5ggYgga Ybh`Yb[ h. `\* \$\$`k cfXg

8i Y`XUHŸ. `8]gW gg]cb`Xi f]b[ `h hcf]U`g. `VYtk YYb`k YY\_`&`UbX`) ž7 f]h]WU`fYZYW]cb`Xi Y`Vm) `da `cb`hY`XUm  
cZHY`h hcf]U`X]gW gg]cb"

Gh XYbh]dFYgYbhU`W]h]WU`UbU`ng]g`cZcbY`Ufh]WY`#cd]WždfYdUFY`ei Ygh]cbg`hc`YUX`U`h hcf]U`X]gW gg]cbž  
UbX`k f]h]U`W]h]WU`fYZYW]cb`fWU`\* \$\$`k cfXgŁ"

: YYXVUW\_ j ]U`]b!WUgg`X]gW gg]cbž`Ug`k Y`Ug`k f]h]b`ZYXVUW\_`cb`a`Uf\_g`YYh`

H\]g'Ugg][ ba Ybh]g'gi Va ]hX'h'fci [ \ 'Hi fb]hb'UbX'ghi XYbhg'Xc'bcHgYY'Hi fb]hb'gja ]'Uf]mfYdcfrg"

5XX]h]cbU'XYHJ]g

H\Y'hi hcf]U''YUXYfg\]d'X]gW'gg]cbg'k ]''hU\_Y'd'UW'Xi f]b[ 'hY'hi hcf]U''fVYtk'YYb'k'YY\_'&'UbX') E''H\Y  
[ fci d]b[ g'k ]''VY'W'cbgh]h'YX'Xi f]b[ 'k'YY\_'%'H\Y'Ufh]WYg'k ]''VY'Uj U]'UV'Y'j ]U'A'ccX'Y"

5ggYgga Ybh' . : ; fci d'dfYgYbhU]h]cb

5ggYgga Ybh'Yb[ h\ . : ; fci d'dfYgYbhU]h]cb. ) 'a ]bi h'g'dYf'ghi XYbh  
Gi Va ]gg]cb'bc'hYg. 'Gi Va ]gg]cb'cZj ]XYc'j ]U'A'ccX'Y  
8i Y'XUHY. 'F YW'fXYX'j ]XYc'dfYgYbhU]h]cb'Xi Y'Vm) 'da' 'tk'c'XUmg'f'cb'K'YXbYgXUmt'VYZc'fY'h\Y'hi hcf]U'  
X]gW'gg]cb'cZ'h\Y'j ]XYc'dfYgYbhU]h]cb'Xi f]b[ 'hi hcf]U'g.'k'YY\_'g', 'hc'%'\$"

Gh XYbhg'k ]''YUW'W'cbf]Vi h'hc'U'%) 'a ]b[ fci d'dfYgYbhU]h]cb'cb'U'hd]WfY'Yj Ubh'hc'h\Y'W'ci fgY'z'gi [ [ YghYX  
Vm'h\Y'W'cb] Ybcf"

: YYXVUW\_j ]U'j]!WUgg'X]gW'gg]cbz'fi Vf]Wg'UbX'j]bX] ]Xi U'k f]hY'b'W'ca a Ybhg'cb'U'a Uf\_g\YYH'

H\]g'g'bcU'Hi fb]hb'Ugg][ ba Ybh

5XX]h]cbU'XYHJ]g

H\Y'%) 'a ]b''[ fci d'cfU'dfYgYbhU]h]cb'fUVCi h) 'a ]b''dYf'ghi XYbh'k ]''VY'gi Va ]hX'j ]U'j'c]WYH\YUX'j]b'h\Y  
Zc'fa'cZU'j ]XYc'dfYgYbhU]h]cb'fi gi U''m]b'h\Y'Zc'fa'cZU'bUffUHY'X'dck Yfdc]b'hc'h\Y'fYW'fX]b[ 'f]b'a d( 'cf  
Yei ]j U'Yb'hc'hc'VY'gi Va ]hX'Vm) da' 'tk'c'XUmg'VYZc'fY'h\Y'hi hcf]U'XUmf]'Y"z'gi Va ]gg]cb'cb'K'YXbYgXUmz  
) da E/U''gh'XYbhg'g'ci 'X'k'UHW'h\Y'j ]XYc'dfYgYbhU]h]cbg'UbX'dfYdUfY'ei Ygh]cbg'Zc'f'h\Y'X]gW'gg]cb'UVci h  
h\Y'dfYgYbhU]h]cb'Xi f]b[ 'h\Y'hi hcf]U'cb': f]XUm'A'cfY'cb'A'ccX'Y"

5ggYgga Ybh( . : ; ]bU'YggUm

5ggYgga Ybh'Yb[ h\ . : ;&\$\$\$'k'cfXg  
8i Y'XUHY. %) #\$, #&\$&&'\$) . \$\$'DA

: ]bU'YggUmcZW''&\$\$\$'k'cfXg'z'k ]h'Uddfcdf]UHY'fYZ'fYbV]b[ z'gi Va ]hX'cb'Hi fb]hb"

: YYXVUW\_j ]U'F i Vf]Wg'UbX'k f]hY'b'W'ca a Ybhg'cb'Hi fb]hb"

H\]g'Ugg][ ba Ybh]g'gi Va ]hX'h'fci [ \ 'Hi fb]hb'UbX'ghi XYbhg'Xc'bcHgYY'Hi fb]hb'gja ]'Uf]mfYdcfrg"

5XX]h]cbU'XYHJ]g

H\Y'YggUm]g'Xi Y'cb'9I Ua 'k'YY\_'A'cfY'j]bZc'cb'A'ccX'Y"

5hYbXUbW'F Yei ]fYa YbHg






	5ggYgga Ybh	CF5@DF9G9BH5H€B'f&\$i Ł!K 99? -; FCI DG 8]gW gg]cb'Xi f]b[ 'h hcf]U`g
K YY_`%\$.`%5i [i gh!`) 5i [i gh	@YWi fY	7i ffYbh]ggi Yg'UbX`WkU`Yb[ Yg. : fYbWk`]b`h\Y [ `cVU`U[ Y 7cbWi g]cb
	F YUX]b[	5XUa gcbžF "f&\$\$+Ł"@Ub[ i U[ Y`UbX`]XYbh]m'Ł. H\Y`XYZYbW`cZ: fYbWk. U`Ub[ i U[ Y`]b`W]g]g3'fd" %)`!%*\$Łž7`Yj YXcb. A i `h]b[ i U`A UhtYfg"
	5ggYgga Ybh	CF5@DF9G9BH5H€B'f&\$i Ł!K 99?`%\$ ; FCI DG 8]gW gg]cb'Xi f]b[ 'h hcf]U`g

F Ygci fWg

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Gi Va ]gg]cb`cZ5ggYgga YbhiHUg\_g

Hi fb]h]b`Gi Va ]gg]cb

≠mci`YbWci bHYf`U`dfcV`Ya`k` \Yb`UH`Ya` dh]b[`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybhi`h`fci`[`\`Hi`fb]h]b`z`d`Y`Ug`Y`  
HY`Yd`cb`Y`9I`HY`fb`U`Gi`ddc`fh`cb`-`,`)`"``"``%`cf`Ya`U]`h`Ya`i`cb`YI`HY`fb`U`HY`hgi`ddc`fh`4`i`bgk`"YXi`"Ui`""Gi`ddc`fh`  
`l`ci`fg`UfY`,`.\$\$Ua`-`-%\$.\$\$da`i`cb`k`YY`XUmg`UbX`-`.\$\$Ua`-`).\$\$da`i`cb`k`YY`YbXg`fI`\*)`XUmg`U`mY`UfI`"≠mci`  
UfY`i`bUV`Y`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybhi`Xi`Y`hc`U`Zi`h`k`]h`Hi`fb]h]b`mci`i`a`Um`Udd`m`Zc`f`Ub`YI`HY`bg]cb`z`Vi`hmc`i`  
a`i`gh`fY`h]b`mci`f`h]W`Y`hbi`a`VY`f`Z`ca`9I`HY`fb`U`Gi`ddc`fh`f`U`cb[`k`]h`Ub`mich`Y`f`fY`Yj`Ub`h`Xc`W`a`Y`b`hg`L`hc`  
]b`Wi`XY`Ug`Yj`]XY`b`W`hc`gi`ddc`fh`mci`f`YI`HY`bg]cb`Udd`]W`h]cb`"≠mci`Ya`U]`9I`HY`fb`U`Gi`ddc`fh`mci`k`]"`  
Ui`hca`U`h]W`m`f`Y`W`]j`Y`U`h]W`Y`hbi`a`VY`f`z`Vi`h]Z`mci`HY`Yd`cb`Y`mci`k`]"`b`Y`Y`X`hc`gd`Y`W`Z]W`m`Ug`\_`Zc`f`cb`Y`"  
Hi`fb]h]b`U`gc`d`fcj`]XY`gi`d`XU`HY`g`cb`h`Y]f`gm`gh`Ya`i`gh`U`h`g`cb`Hk`]h`Y`f`"

;`Yb`Y`f`U`m`z`Ugg`Y`gga`Yb`hi`U`g`\_`g`a`i`gh`V`Y`gi`Va`]h`Y`X`Y`Y`W`f`cb]W`m`j`]U`Y`]h`Y`f`Hi`fb]h]b`c`f`U`A`cc`X`Y`  
Ugg][`ba`Yb`h`i`h`]b`gh`U`b`W`g`k` \Y`fY`h`l`g`]g`b`ch`id`cgg]V`Y`z`]h`k`]"`V`Y`g`h`U`H`X`i`cb`mci`f`W`ci`fg`Y`g`A`cc`X`Y`g`]h`k`]h`  
U`HY`fb`U`h]`Y`gi`Va`]gg]cb`X`Y`h]g`"

:`cf`]b`Z`c`fa`U`h]cb`cb`l`ck`hc`gi`Va`]h`Ugg][`ba`Yb`hg`cb`]b`Y`j`]U`A`cc`X`Y`.\`h`d`g`#`gh`XY`b`h`i`bgk`"YXi`"Ui`#`ck`!  
gi`Va`]h`Ugg][`ba`Yb`h`a`cc`X`Y`"

5 WUXYa ]W< cbYgmiUbX`D`U[ ]Uf]ga

D`U[ ]Uf]ga `]g`i`g]b[ `h`Y`k`c`f`X`g`c`f`]X`Y`U`g`c`Z`c`h`Y`f`g`i`U`b`X`d`f`Y`g`Y`b`h]b[ `h`Y`a` `U`g`m`c`i`f`c`k`b`" `#`W`b`h`U`\_`Y`a` `U`b`m`  
Z`c`f`a`g`Z`Z`c`a` `X`Y`]V`Y`f`U`h`Y` `W`X`Y`U`h]b[ `h`c` `U`W`W`Y`X`Y`b`h`U` `m`i`W`c`d`m]b[ `Z`c`a` `U`g`c`i`f`W`k`]h`c`i`h`U`W`b`c`k` `Y`X[ `Y`a` `Y`b`h`

