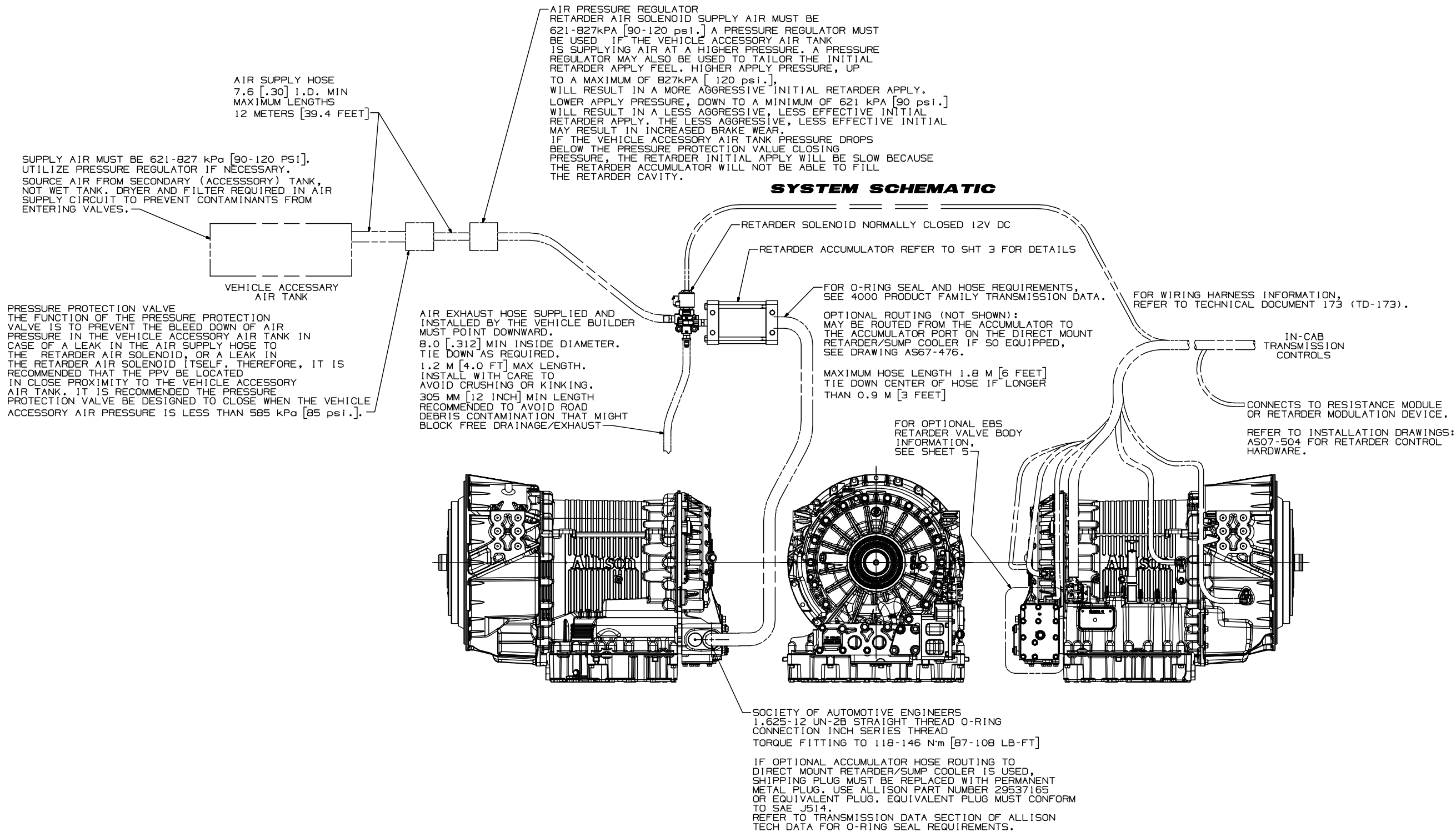


6-SPEED MODELS



SEALANT MAY BE APPLIED ON EXTERNAL THREADS OF AIR FITTINGS.
CARE MUST BE TAKEN TO PREVENT SEALANT FROM ENTERING THE
AIR SYSTEM (AVOID SEALANT ON THE FIRST THREAD)

TORQUES SHOWN ARE FOR PLAIN (NON-PLATED) FASTENERS AND OTHER
THREADED COMPONENTS SUPPLIED AND INSTALLED BY THE VEHICLE
BUILDER. TORQUE REQUIREMENTS SHOULD BE REVIEWED IF PLATED
FASTENERS WILL BE USED. CONSULT THE SUPPLIER.

PARTS SHOWN IN PHANTOM ARE SUPPLIED AND INSTALLED
BY THE VEHICLE BUILDER.

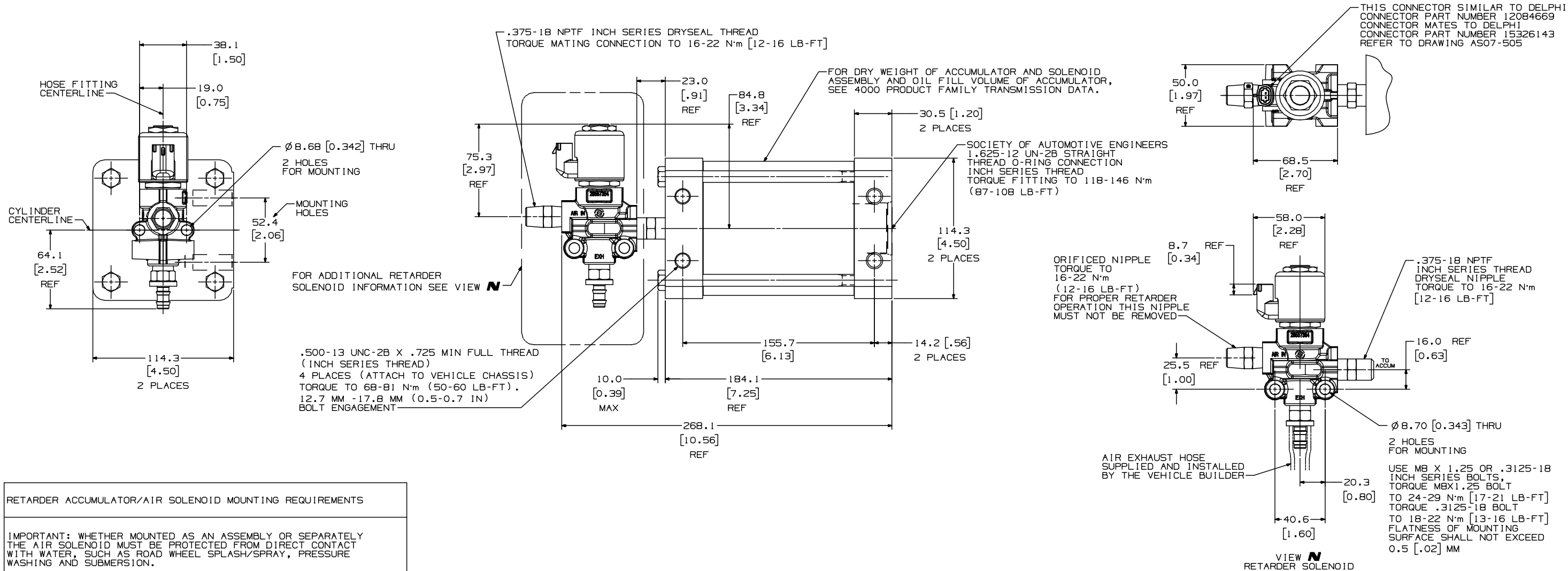
FOR TRANSMISSION DATA NOT SHOWN, SEE AS67-416 DRAWING.

DIMENSIONS SHOWN IN PARENTHESES ARE
IN INCHES, AND FOR REFERENCE ONLY

FR1 DWG. NO. AS67-418 LTR SH - 2

NX	REV	DESCRIPTION	DATE	CHK
	FR2	REVISED		
SPECIFIED DIMENSIONS HAVE PRECEDENCE OVER COMPUTER GENERATED DATA	DRAWN R. HIGGINS			
	DATE 15 JUN 14			
CHANGE RESTRICTED	CHECKED J. HALEY			
	DATE 11 OCT 16			
THIRD ANGLE	APPROVED			
	DATE			
THE INFORMATION CONTAINED HEREIN IS PROPRIETARY AND THE PROPERTY OF ALLISON TRANSMISSION, INC. AND MAY NOT BE REPRODUCED, DISCLOSED OR USED FOR ANY PURPOSE OTHER THAN A QUOTATION TO OR ON ORDER FROM ALLISON TRANSMISSION, INC. WITHOUT THE SPECIFIC WRITTEN AUTHORIZATION OF ALLISON TRANSMISSION, INC.	PROJ. ENGR. J. HALEY			
	DATE 11 OCT 16			
	APPL. ENGR. T. BROWN			
	DATE 11 OCT 16			
MODEL 4000 PRODUCT FAMILY				
SIZE	CAGE CODE	DWG NO		
R	73342	AS67-418		
SCALE NONE		SHEET 2		
CURRENT STATUS: RX-Released - EXP				

RETARDER ACCUMULATOR/SOLENOID ASSEMBLY



RETARDER ACCUMULATOR/AIR SOLENOID MOUNTING REQUIREMENTS

IMPORTANT: WHETHER MOUNTED AS AN ASSEMBLY OR SEPARATELY THE AIR SOLENOID MUST BE PROTECTED FROM DIRECT CONTACT WITH WATER, SUCH AS ROAD WHEEL SPLASH/SPRAY, PRESSURE WASHING AND SUBMERSION.

MOUNTED AS ASSEMBLY:

CHASSIS MOUNTING IS PREFERRED TO AVOID POWERPACK INDUCED VIBRATIONS. HOWEVER, TRANSMISSION/POWERPACK MOUNTING IS ALLOWED FOR PACKAGING CONVENIENCE.

MOUNT IN HORIZONTAL POSITION WITH AIR SOLENOID AIR EXHAUST POINTING DOWN WITHIN 10° OF VERTICAL

ACCUMULATOR CENTERLINE SHALL BE NO HIGHER THAN 13 INCHES ABOVE TRANSMISSION CENTERLINE

MOUNTED SEPARATELY:

CHASSIS MOUNTING OF THE AIR SOLENOID IS PREFERRED TO AVOID POWERPACK INDUCED VIBRATIONS. HOWEVER, TRANSMISSION/POWERPACK MOUNTING IS ALLOWED FOR PACKAGING CONVENIENCE. THE ACCUMULATOR MAY BE POWER PACK MOUNTED. A 7.6 MM (0.3 INCH) MIN I.D. AIR HOSE WITH A MAX LENGTH OF 1.5 METERS (5 FEET) MUST BE USED TO CONNECT THE SOLENOID TO THE ACCUMULATOR. OVERALL HOSE LENGTH FROM VEHICLE AIR TANK TO ACCUMULATOR NOT TO EXCEED 12 METERS (39.4 FEET). AIR SOLENOID MUST BE MOUNTED WITH THE AIR EXHAUST POINTING DOWN WITHIN 10° OF VERTICAL. MAINTAIN THE AIR SOLENOID ORIFICE NIPPLE PROVIDED WITH THE PART FROM ALLISON

THE ACCUMULATOR MAY BE MOUNTED HORIZONTAL OR VERTICAL WITH THE OIL PORT FACING HORIZONTAL OR UPWARD (BETWEEN 3 AND 9 O'CLOCK)

REFER TO NOTE ON SHEET 2 REGARDING THE USE OF SEALANT ON THE AIR FITTINGS.

DIMENSIONS SHOWN IN PARENTHESES ARE IN INCHES, AND FOR REFERENCE ONLY

FR1 DWG. NO. AS67-418 LTR SH - 3

NX	REV	DESCRIPTION	DATE	BY
	FR2	REVISED		
	SPECIFIED DIMENSIONS HAVE PRECEDENCE OVER COMPUTER GENERATED DATA			
	CHANGE RESTRICTED			
METRIC	THIRD ANGLE			
	THE INFORMATION CONTAINED HEREIN IS PROPRIETARY AND THE PROPERTY OF ALLISON TRANSMISSION, INC. AND MAY NOT BE REPRODUCED, DISCLOSED OR USED FOR ANY PURPOSE OTHER THAN A QUOTATION TO OR ON ORDER FROM ALLISON TRANSMISSION, INC. WITHOUT THE SPECIFIC WRITTEN AUTHORIZATION OF ALLISON TRANSMISSION, INC.			
	MODEL 4000 PRODUCT FAMILY			
	SCALE NONE			
FR1		DWG. NO.	AS67-418	LTR SH - 3
R		SIZE	73342	AS67-418
R		CAGE CODE	73342	AS67-418
R		SCALE	NONE	SHEET 3
R		CURRENT STATUS:	RX-Released - EXP	

AS67-418

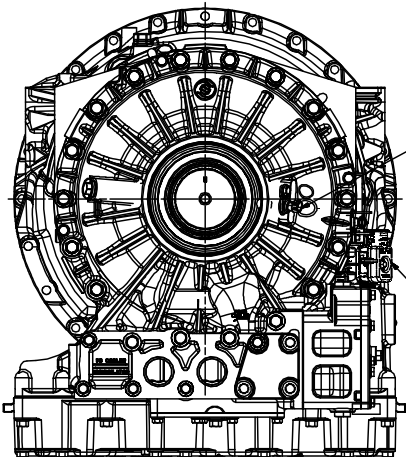
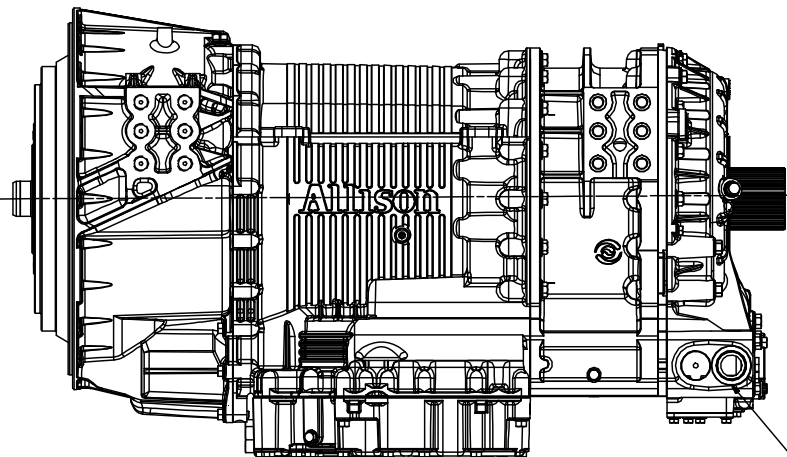
7-SPEED MODELS

FOR WIRING HARNESS INFORMATION
SEE TECHNICAL DOCUMENT 173 (TD-173)

IN-CAB
TRANSMISSION
CONTROLS

CONNECTS TO RESISTANCE MODULE
OR RETARDER MODULATION DEVICE.

REFER TO INSTALLATION DRAWING
AS07-504 FOR RETARDER CONTROL HARDWARE.

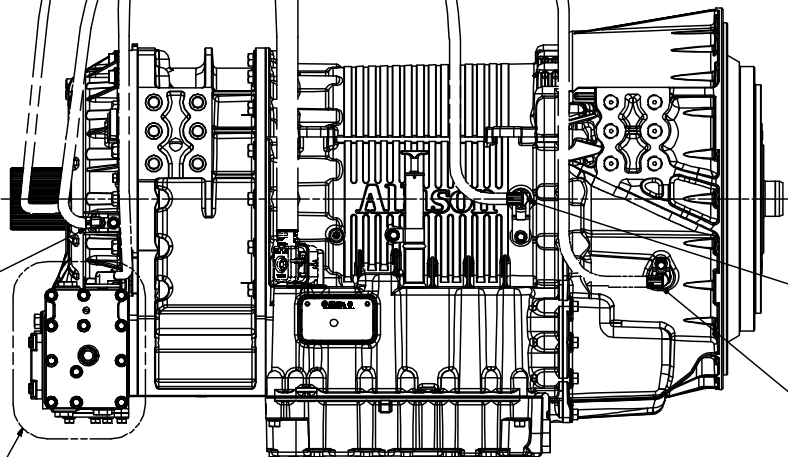


OUTPUT SPEED SENSOR

RETARDER
TEMPERATURE SENSOR

RETARDER MODULE
CONNECTION

FOR OPTIONAL EBS
RETARDER VALVE
BODY INFORMATION,
SEE SHEET 5



TURBINE SPEED
SENSOR

ENGINE SPEED
SENSOR

NOTE: RETARDER ACCUMULATOR IS
NOT USED WITH THESE MODELS.

TORQUE TO 118-146 N·m (87-108 LB-FT)
1.625-12 UN-2B (INCH SERIES THREAD)
SHIPPING PLUG MUST BE REPLACED WITH PERMANENT
METAL PLUG. USE ALLISON PART NUMBER 29537165 OR
EQUIVALENT PLUG. EQUIVALENT PLUG MUST CONFORM TO
SAE J514.
REFER TO TRANSMISSION DATA SECTION OF ALLISON
TECH DATA FOR O-RING SEAL.

PARTS SHOWN IN PHANTOM ARE SUPPLIED AND INSTALLED
BY THE VEHICLE BUILDER.

FOR TRANSMISSION DATA NOT SHOWN,
SEE DRAWINGS AS67-416 AND AS67-417.

DIMENSIONS SHOWN IN PARENTHESES ARE
IN INCHES, AND FOR REFERENCE ONLY



FR2

REV. 15 JUN 14
CHECKED J. HALEY
DATE 110C16
APPROVED
DATE 110C16
PROJ. ENGR. J. HALEY
DATE 110C16
APPL. ENGR. T. BROWN
DATE 110C16

METRIC

THIRD ANGLE



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QUOTATION TO OR ON ORDER FROM ALLISON TRANSMISSION, INC.
WITHOUT THE SPECIFIC WRITTEN AUTHORIZATION OF
ALLISON TRANSMISSION, INC.

DESCRIPTION		DATE	BY
REV. 15 JUN 14		15 JUN 14	J. HALEY
CHECKED J. HALEY		110C16	J. HALEY
APPROVED		110C16	J. HALEY
PROJ. ENGR. J. HALEY		110C16	J. HALEY
DATE 110C16		110C16	J. HALEY
APPL. ENGR. T. BROWN		110C16	T. BROWN
DATE 110C16		110C16	T. BROWN
Allison Transmission		Indianapolis, Indiana, USA	
INSTL DWG, RETARDER OPTION			
MODEL 4000 PRODUCT FAMILY			
SIZE	CAGE CODE	DWG NO	
R	73342	AS67-418	
SCALE NONE		SHEET 4	
CURRENT STATUS:			
RX-Released - EXP			

FR1

DWG. NO.
AS67-418

LTR

SH

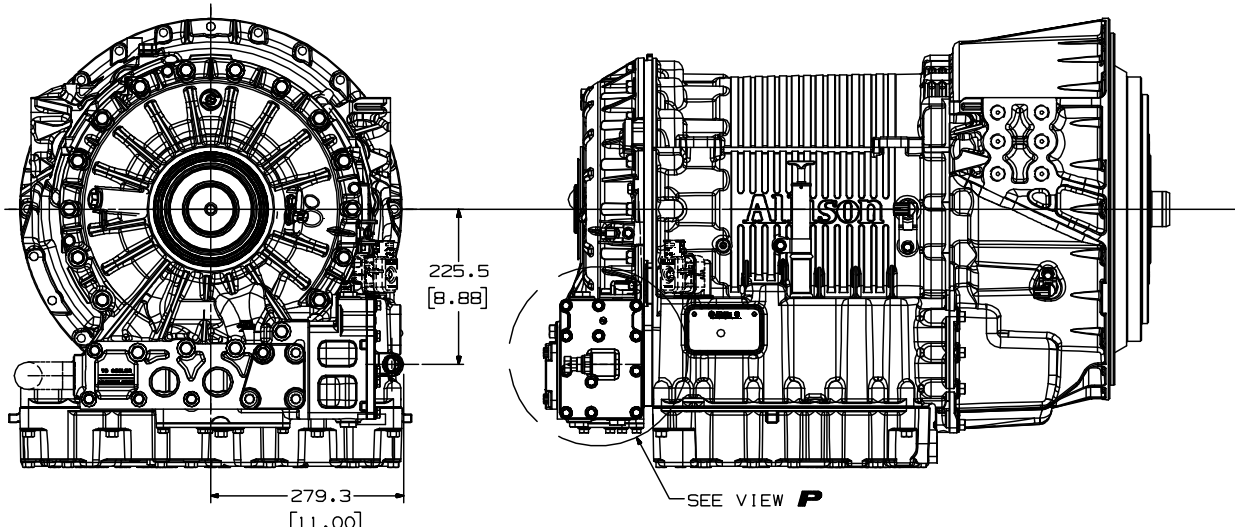
-

4

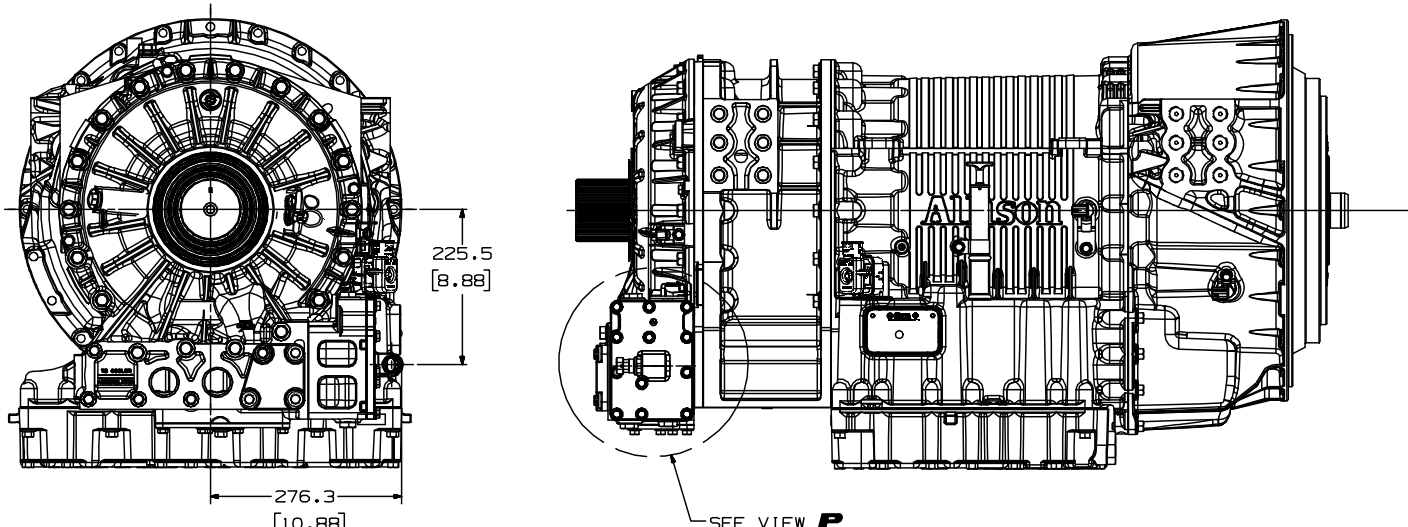
AS67-418

OPTIONAL EBS PROVISIONS

6-SPEED MODELS



7-SPEED MODELS



SUPPLIED AND INSTALLED BY
THE VEHICLE BUILDER.
PRESSURE SENSOR 29548995
TORQUE TO 20-25 N·m (15-18 LB-FT)
SHIPPED FROM FACTORY WITH ALLISON
P/N 29544825 PLUG

-LOCATION OF RETARDER CONNECTOR
VARIES ACCORDING TO TRANSMISSION
CONFIGURATION. SEE DRAWING AS67-431

M16 X 2.0-6H THREAD
228-266 N*m
(168-196 LB-FT)




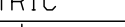
PRESSURE SENSOR PORT
SHOWN WITH PRESSURE
SENSOR REMOVED

-17.0
[.67]

VIEW

DIMENSIONS SHOWN IN PARENTHESES ARE
IN INCHES, AND FOR REFERENCE ONLY

FR1	DWG. NO. AS67-418	LTR	S
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		REV		DESCRIPTION		DATE		DWG NO	
		FR2		REVISIONS					
		SPECIFIED DIMENSIONS HAVE PRECEDENCE OVER CONFLICTING DIMENSIONS		DRAWN R. HIGGINS		 Allison Transmission. Indianapolis, Indiana, USA			
		CHANGE RESTRICTED		DATE 1/24/11					
METRIC				CHECKED J. HALEY					
				DATE 11/03/16					
THIRD ANGLE				APPROVED					
				DATE					
				PROJ. ENGR. J. HALEY				INSTL DWG, RETARDER OPTION	
				DATE 11/03/16					
				APPL. ENGR. T. BROWN					
				DATE 11/03/16					
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						SIZE CASE CODE		DWG NO	
						R 73342		AS67-418	
						SCALE NONE		SHEET 5	
						CURRENT STATUS:			

NG A567-418