



CHECKBALL BOOK

Import Volume I

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*Updated
October, 2003*

INTRODUCTION

IMPORT CHECKBALL BOOK VOLUME I

This booklet contains the checkball locations, screen locations, check valve locations, and relief valve locations, for the upper and lower valve bodies, and the accumulator housing if it contains one of the above. We have also covered any updated information and any changes that may have occurred in the many different model years. This booklet contains some of the Imported transmissions that we have seen in North America. Refer to the Index page for exact transmission models covered.

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*The information and part numbers contained in this booklet have
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CHECKBALL BOOK *Import Volume I*

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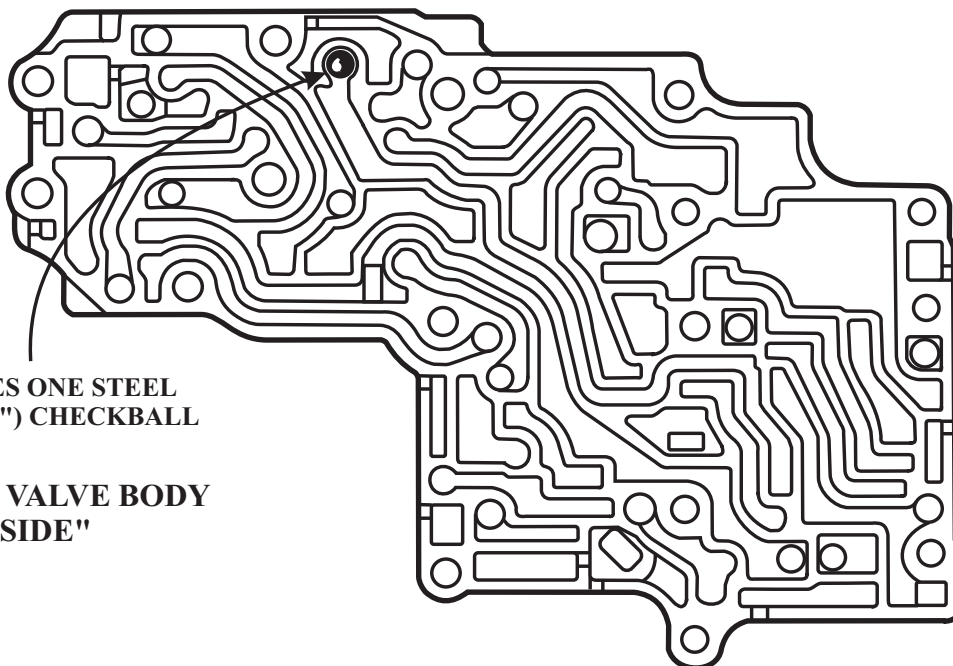
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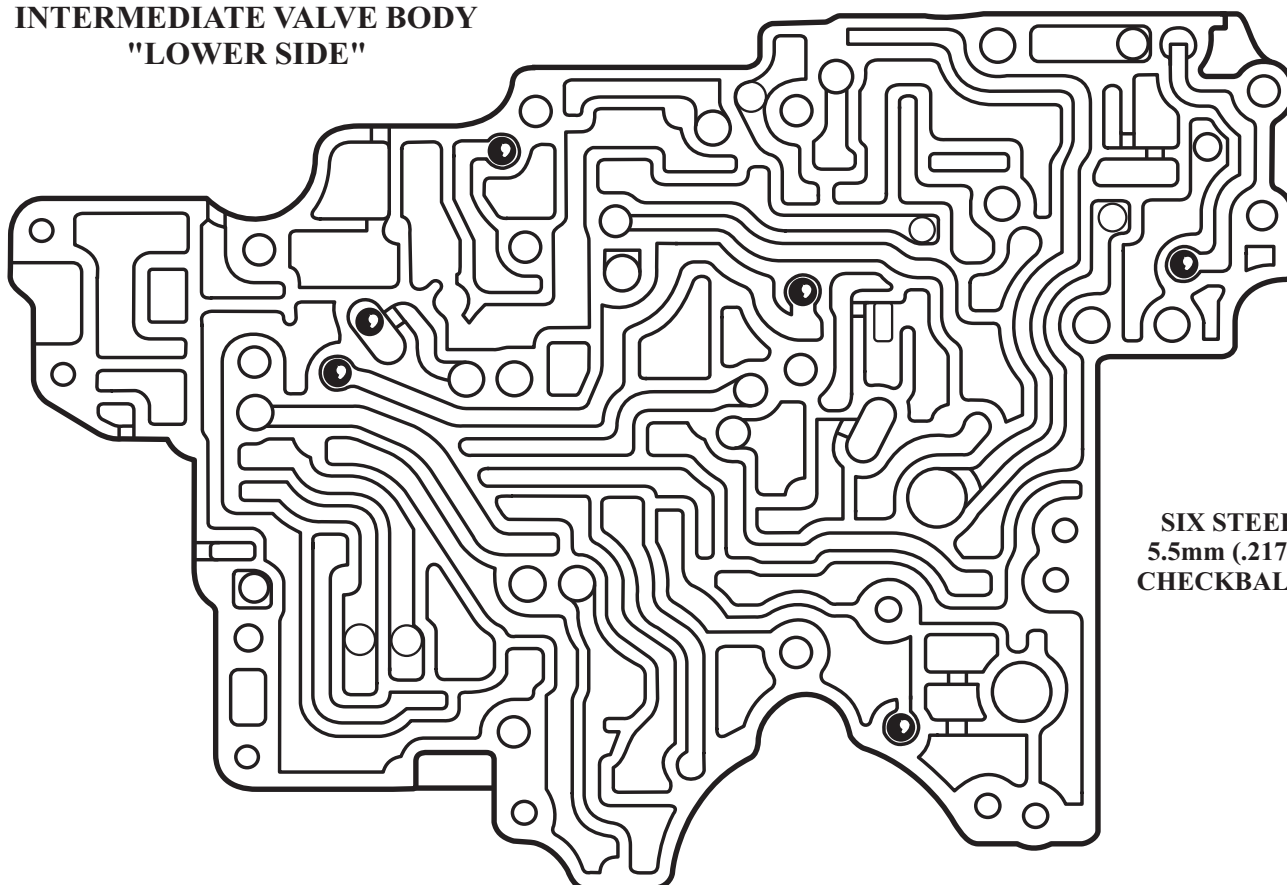
GEO STORM JF403E
INTERMEDIATE VALVE BODY



REQUIRES ONE STEEL
5.5mm (.217") CHECKBALL

INTERMEDIATE VALVE BODY
"UPPER SIDE"

INTERMEDIATE VALVE BODY
"LOWER SIDE"

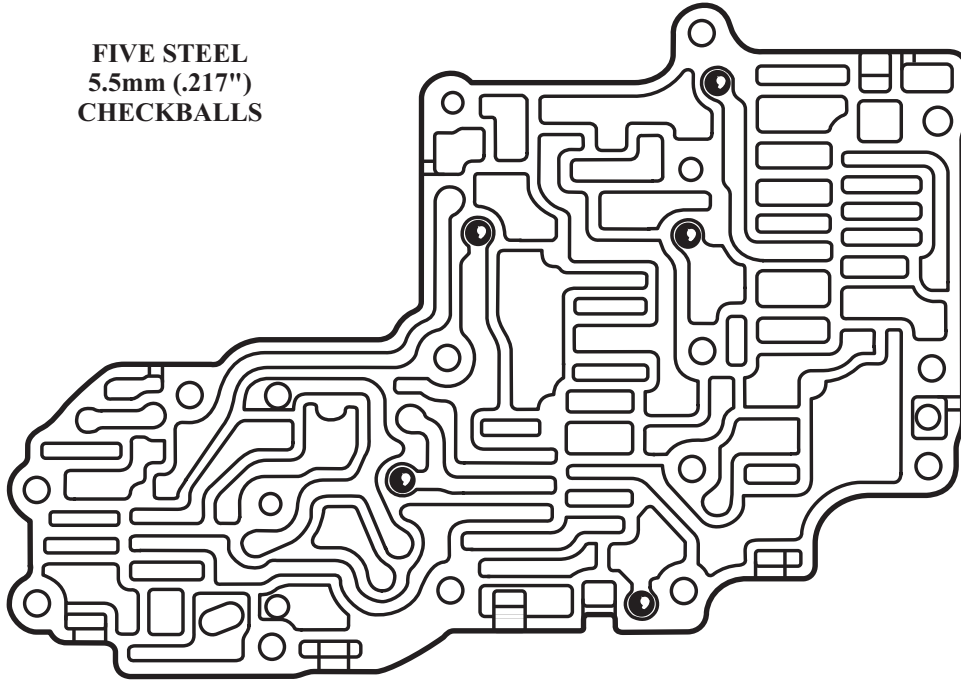


SIX STEEL
5.5mm (.217")
CHECKBALLS

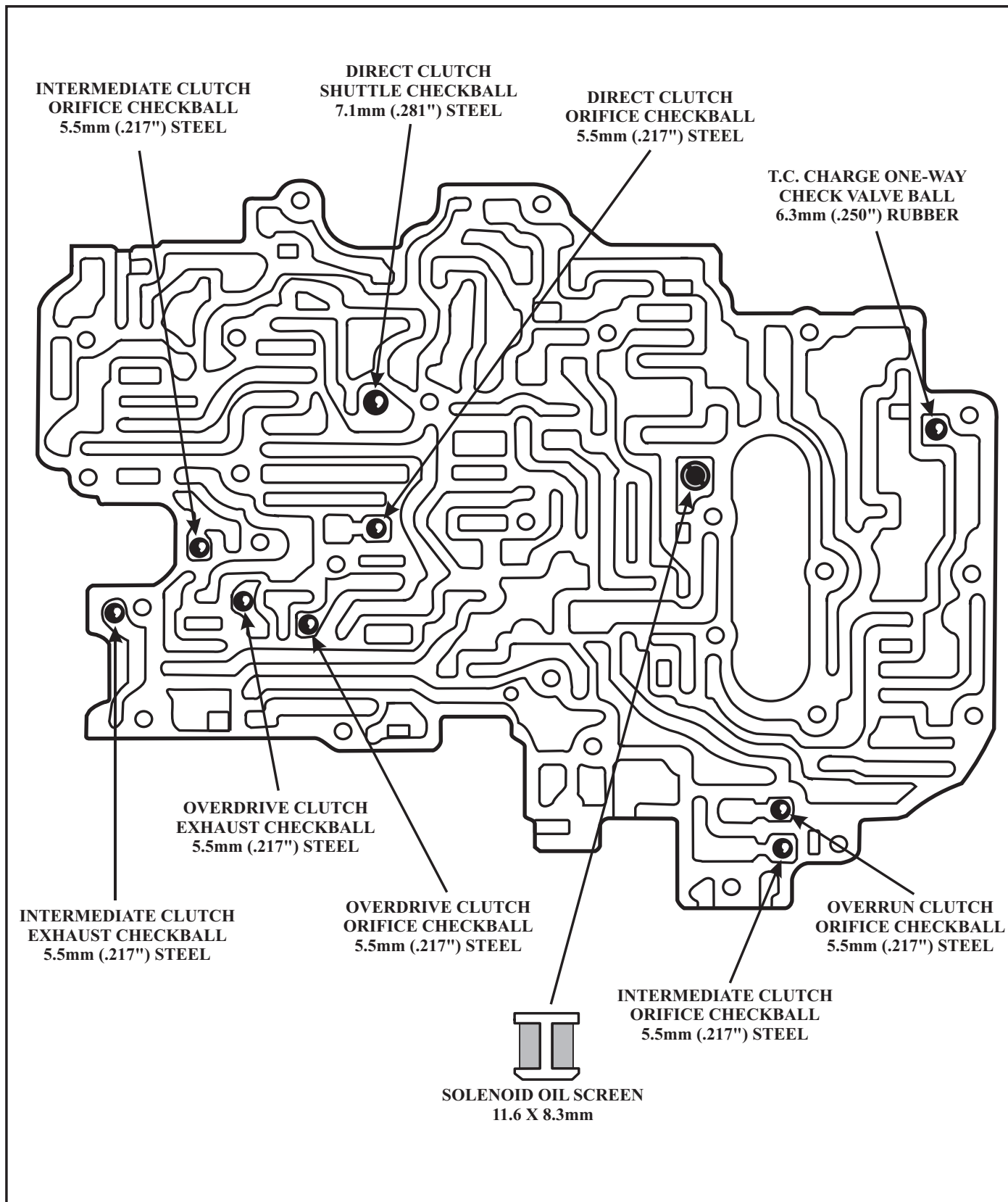
GEO STORM JF403E
UPPER VALVE BODY

UPPER VALVE BODY

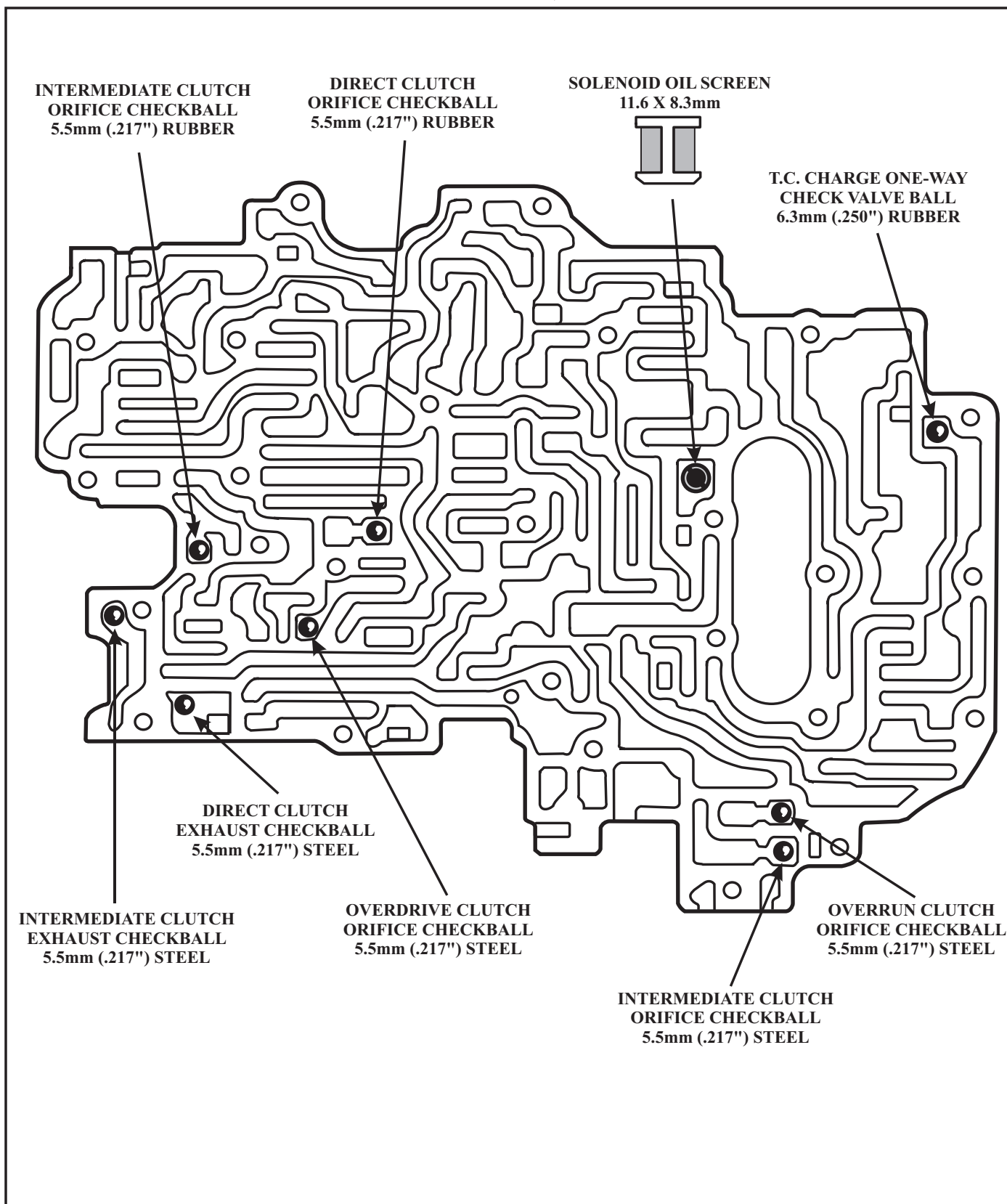
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5.5mm (.217")
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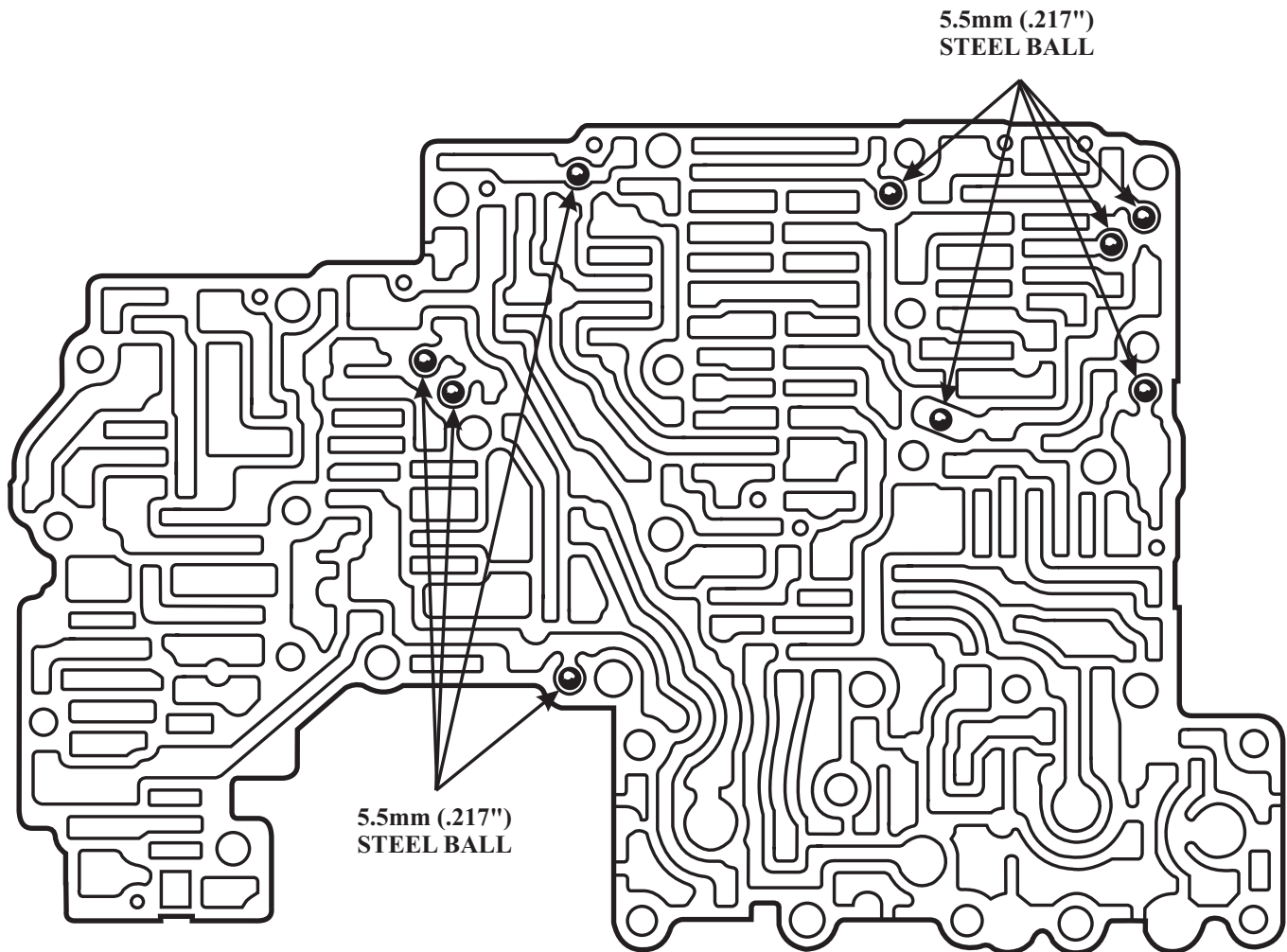


ISUZU TROOPER WITH AW-3080LE TRANSMISSION CHECKBALL LOCATIONS, 90-91 MODELS ONLY

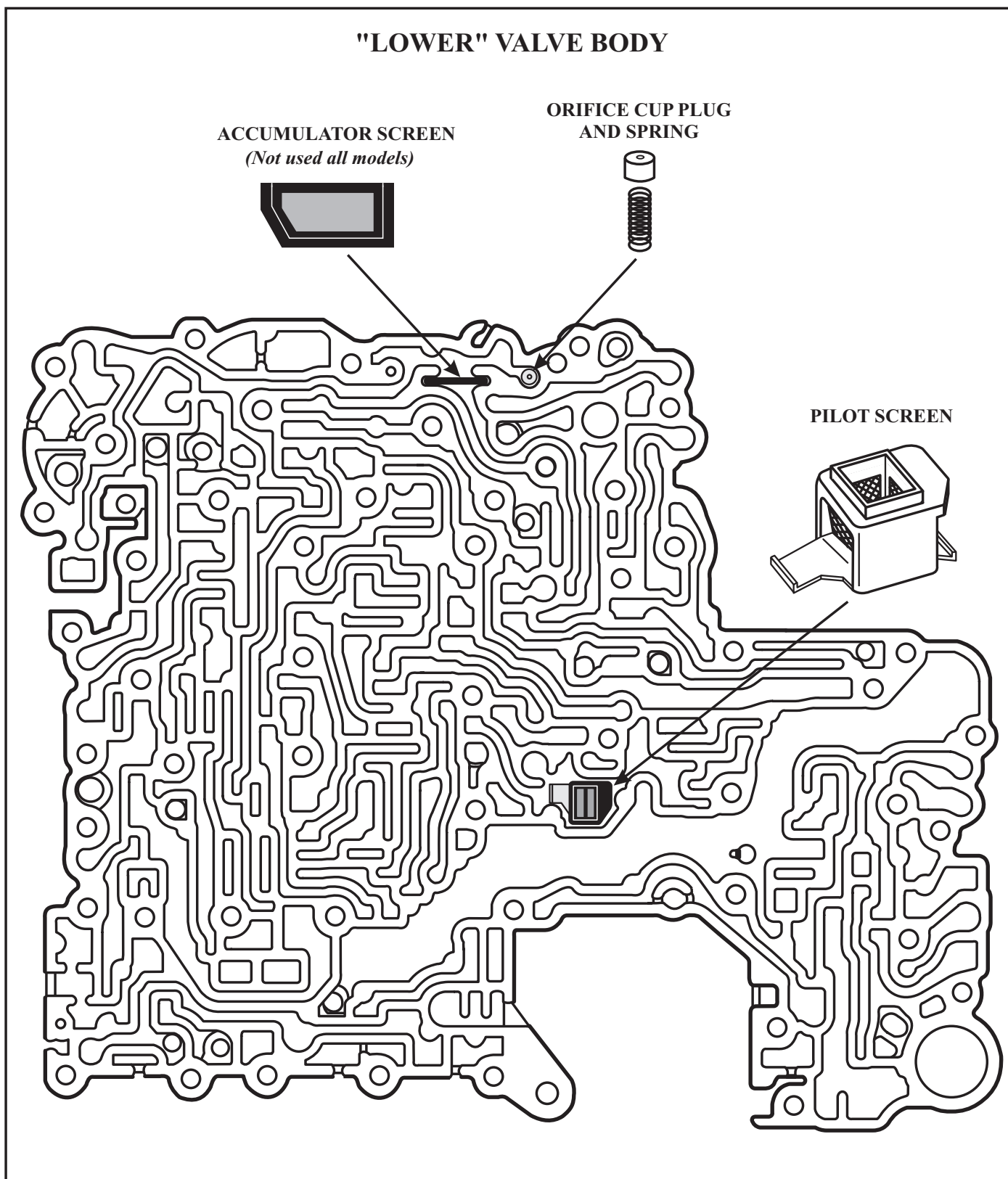


ISUZU AND G.M. TILTMETER TRUCKS
JR403-E CHECKBALL LOCATIONS

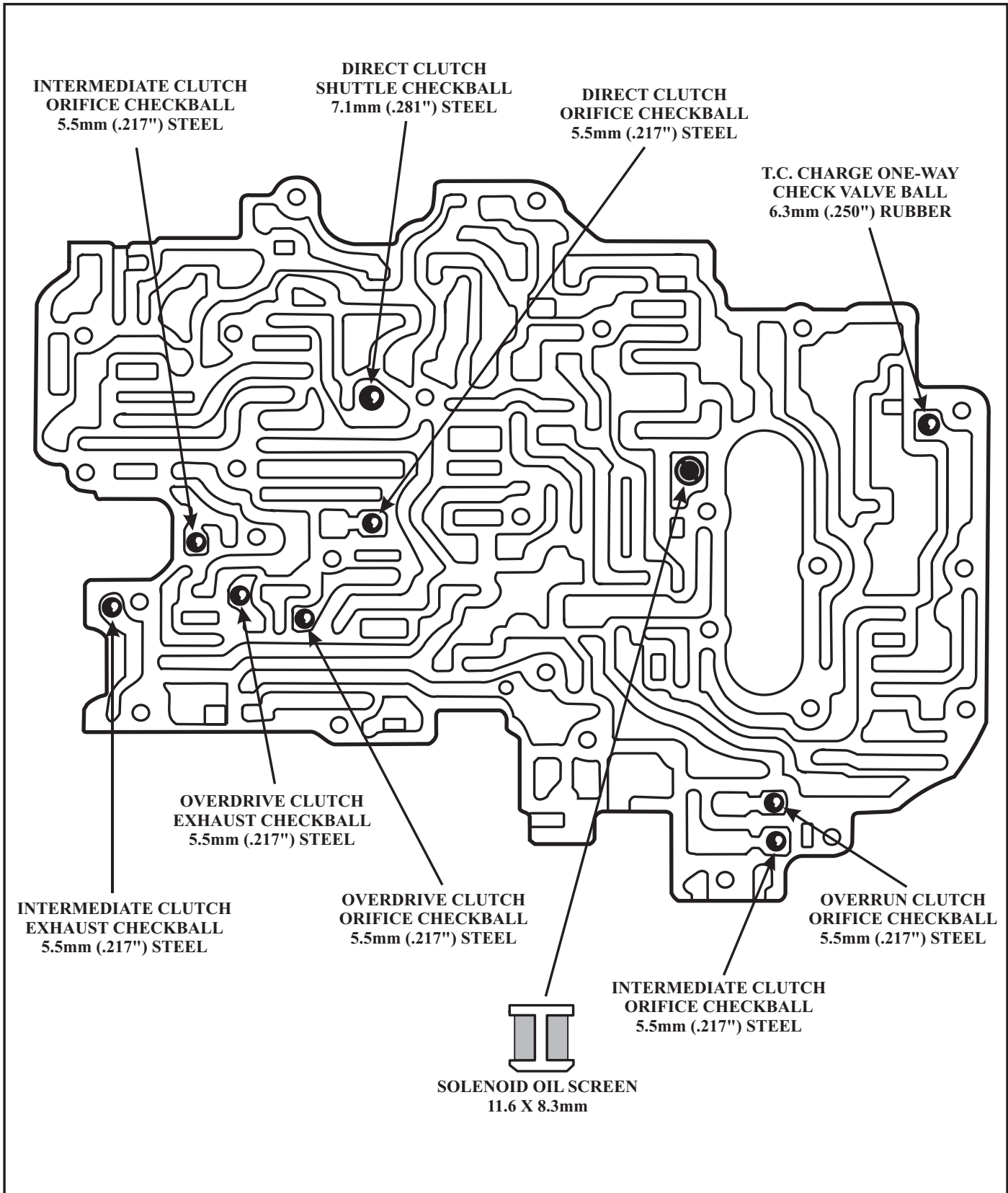
MAIN VALVE BODY
REQUIRES NINE CHECKBALLS



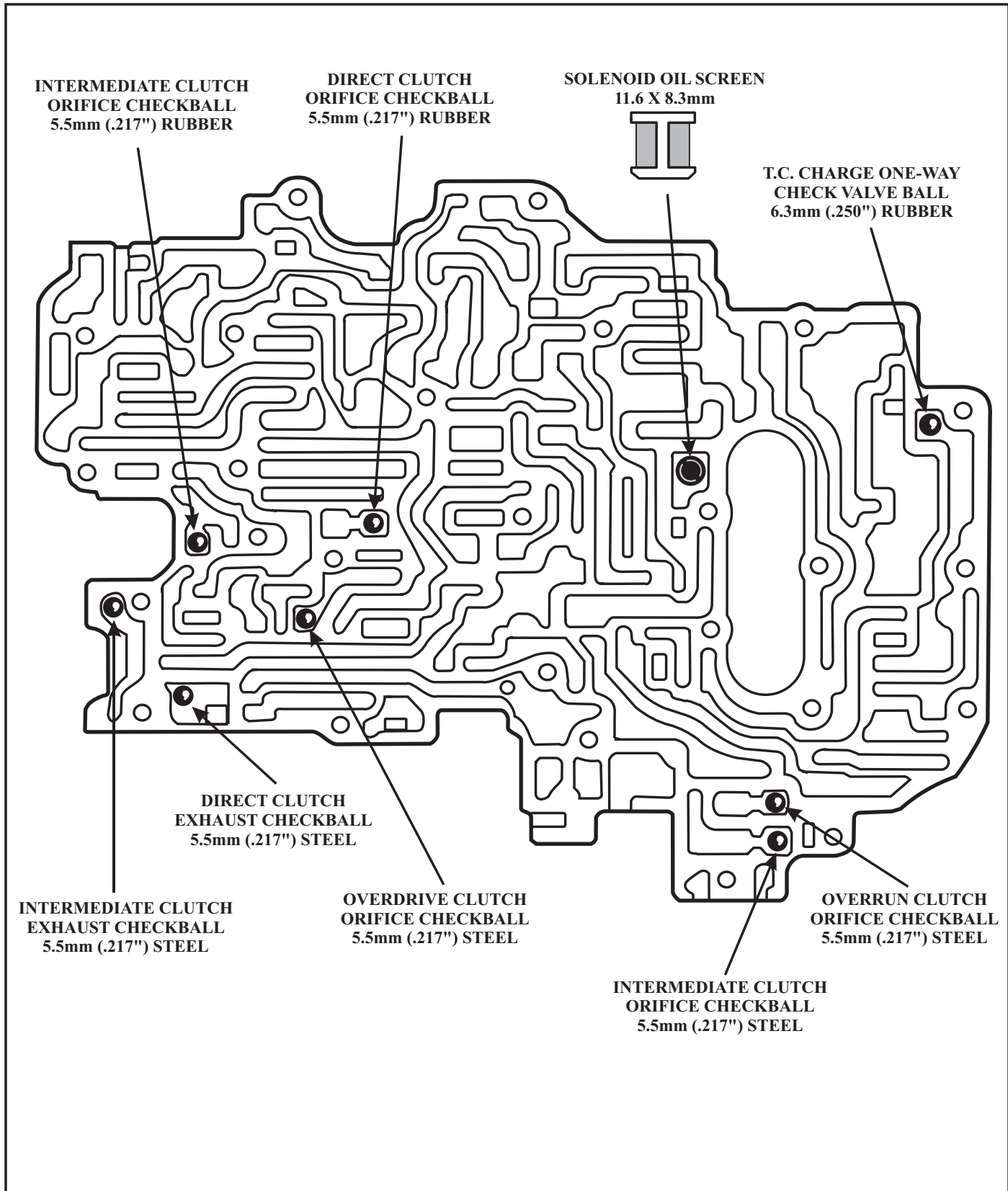
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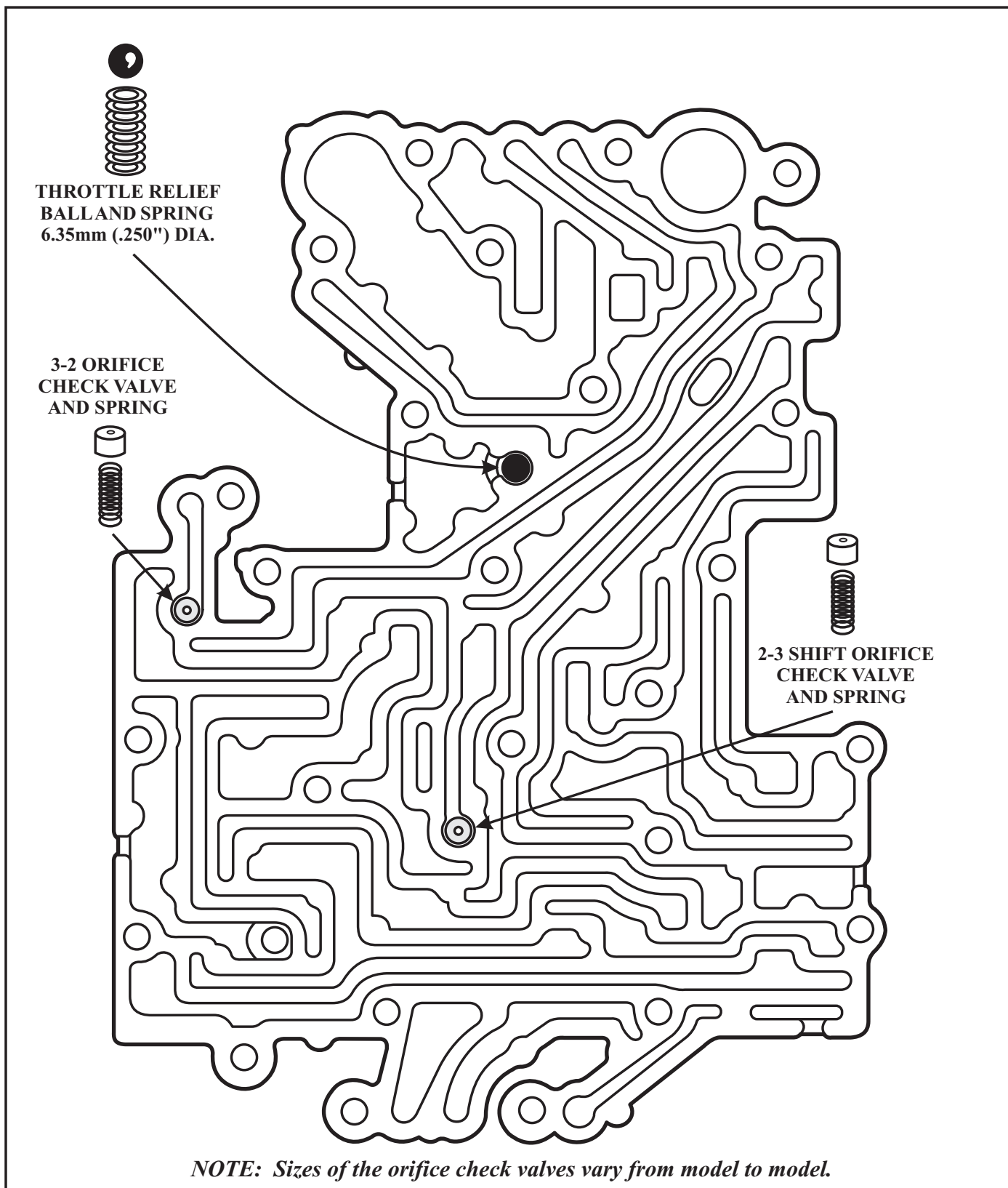
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JEEP CHEROKEE WITH AW-4 TRANSMISSION CHECKBALL LOCATIONS, 90-94 MODELS ONLY

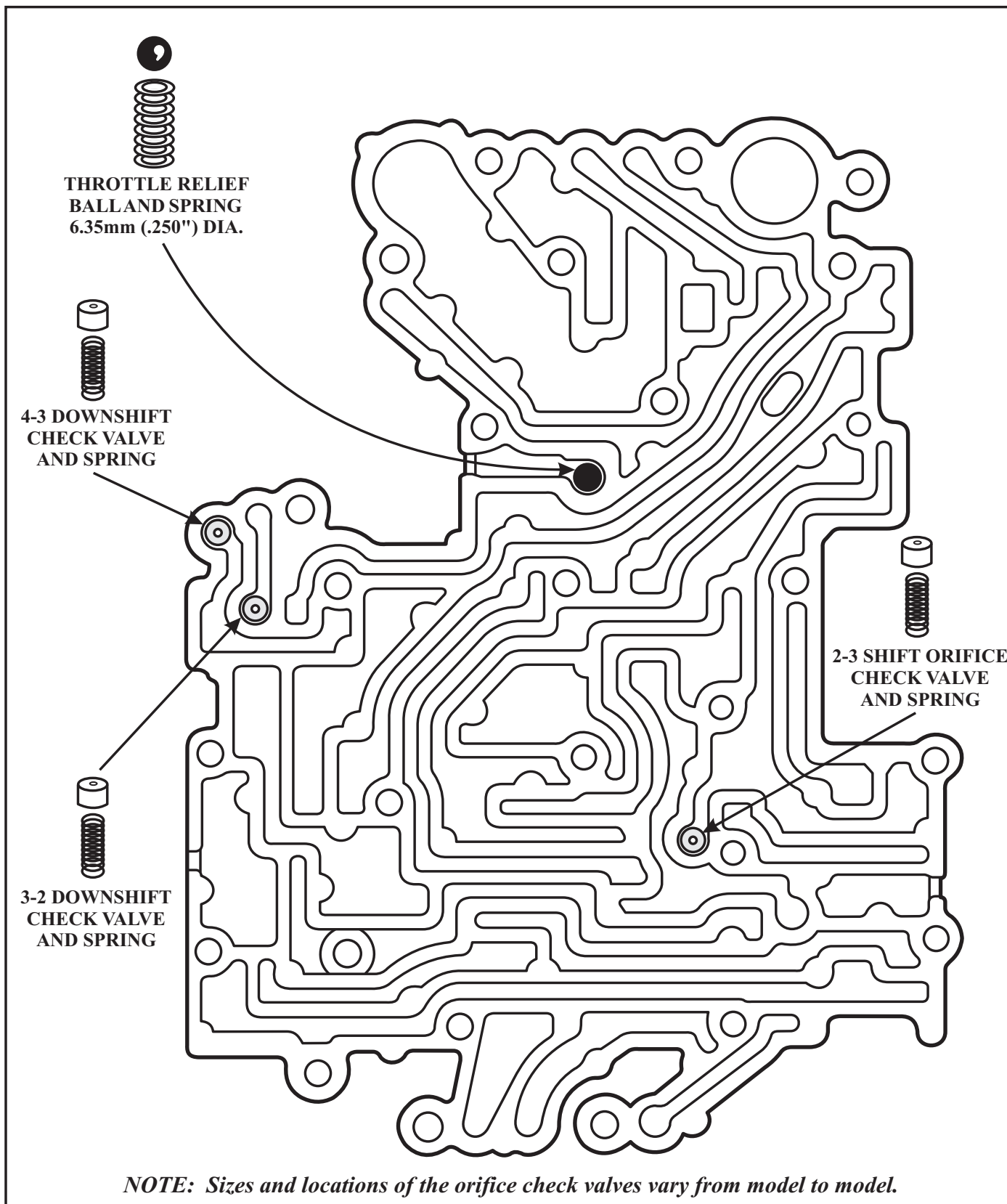


NISSAN AND FORD GRANADA 3N71B TRANSMISSION VALVE BODY CHECKBALL AND ORIFICE LOCATIONS



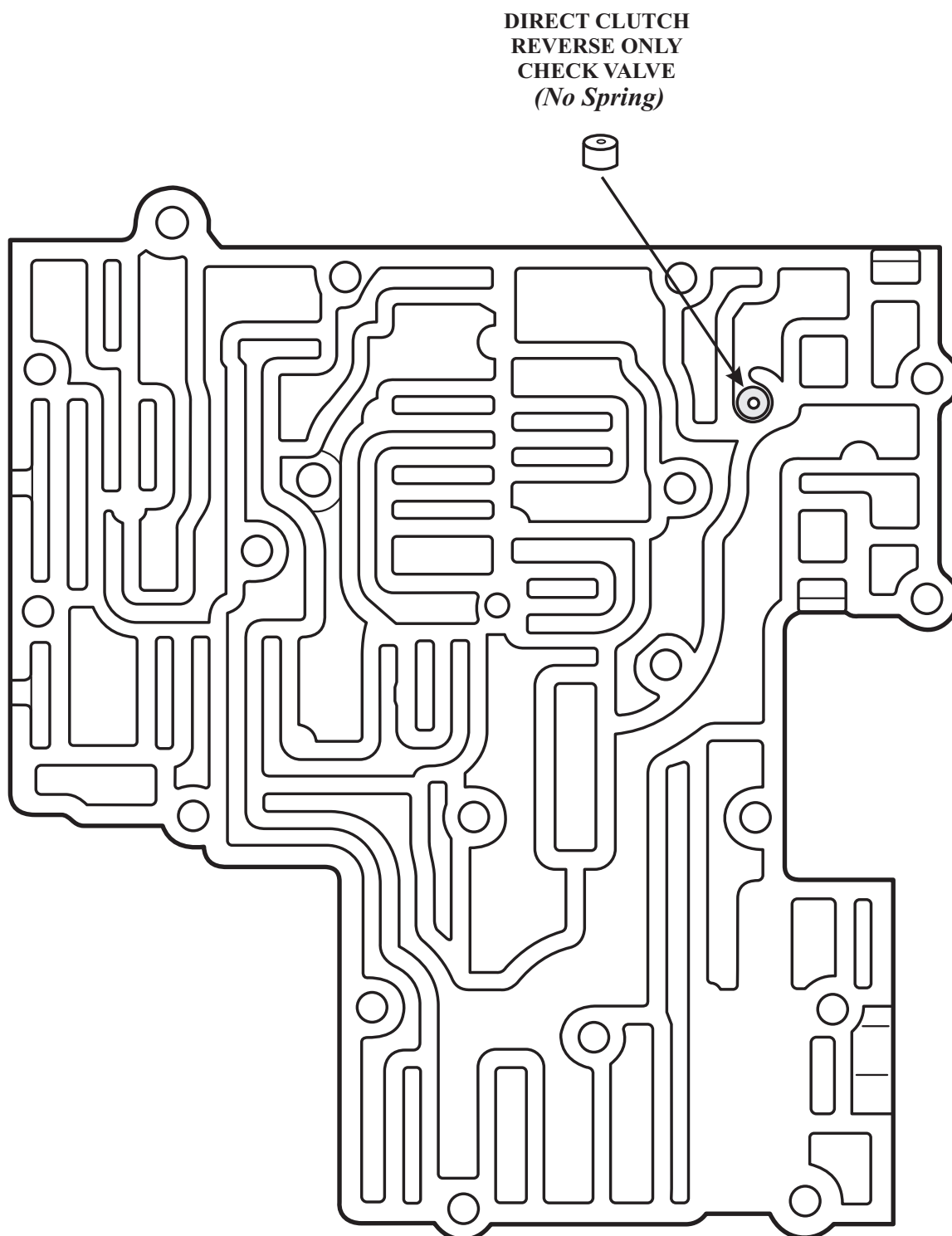
NISSAN 4N71B TRANSMISSIONS

VALVE BODY CHECKBALL AND ORIFICE LOCATIONS



NISSAN 4N71B TRANSMISSIONS

VALVE BODY CHECKBALL AND ORIFICE LOCATIONS

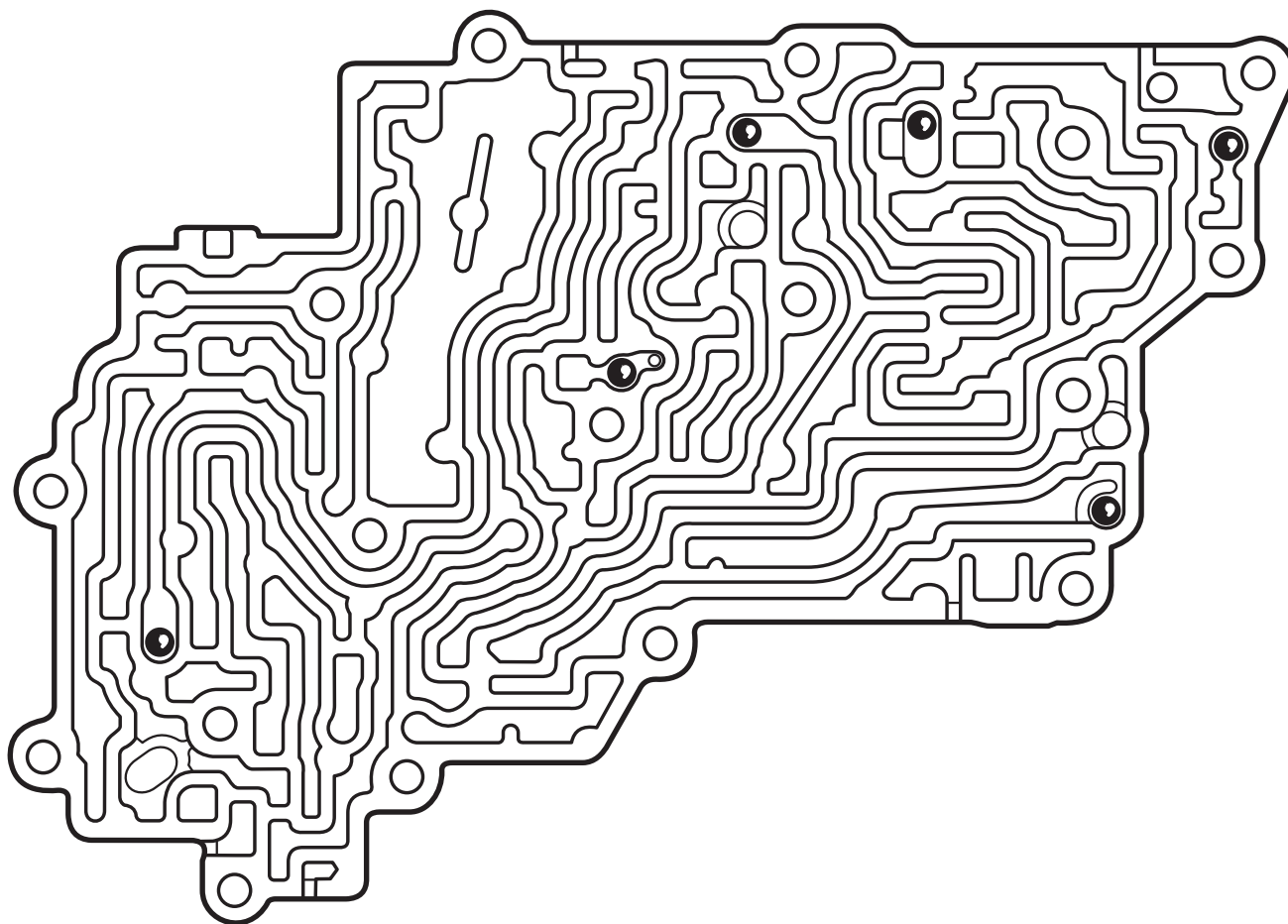


NOTE: Sizes of the orifice check valves vary from model to model.

NISSAN RL3FO1A, RN3FO1A TRANSMISSIONS

VALVE BODY CHECKBALL LOCATIONS

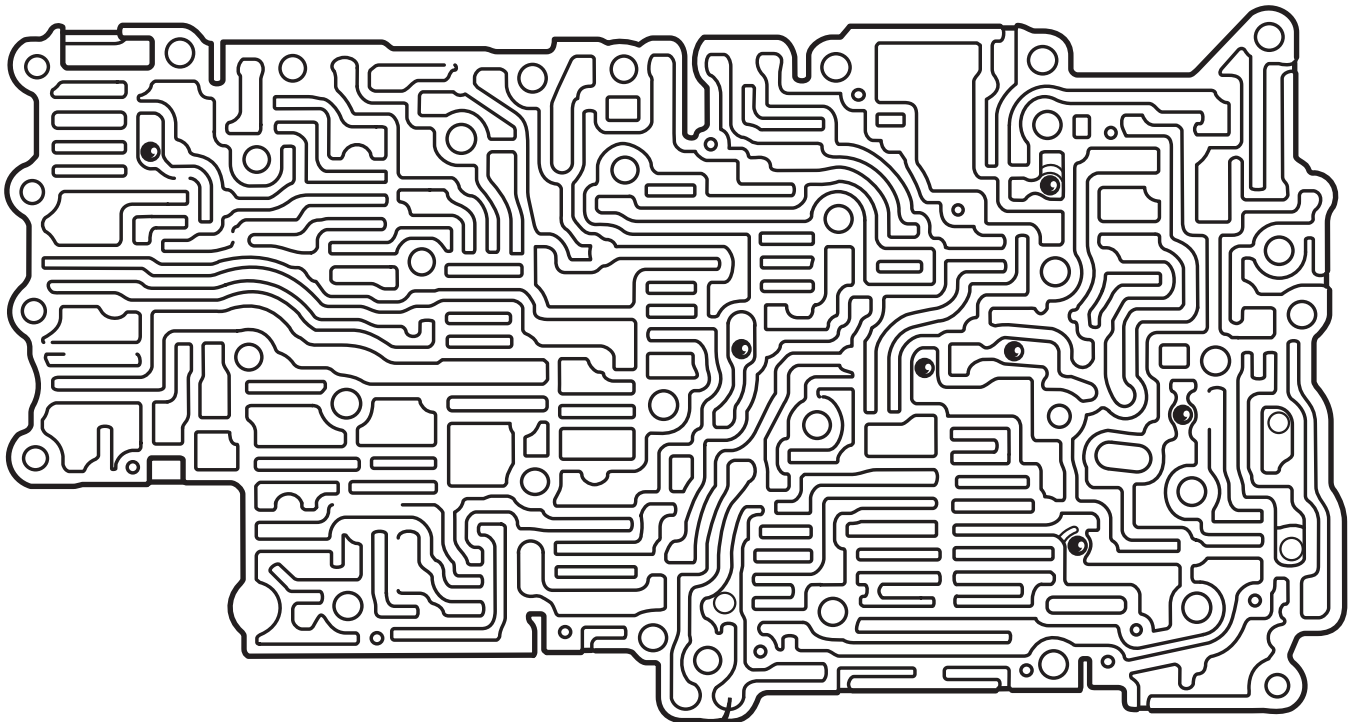
REQUIRES SIX (6) 5.5mm (.217")
DIAMETER STEEL CHECKBALLS
IN THE LOCATIONS SHOWN BELOW



NISSAN RL4F02A ALL MODELS CHECKBALL LOCATIONS

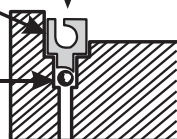
UPPER VALVE BODY

REQUIRES SEVEN .217" DIAMETER
STEEL CHECKBALLS IN THE
LOCATIONS SHOWN BELOW



RETAINER

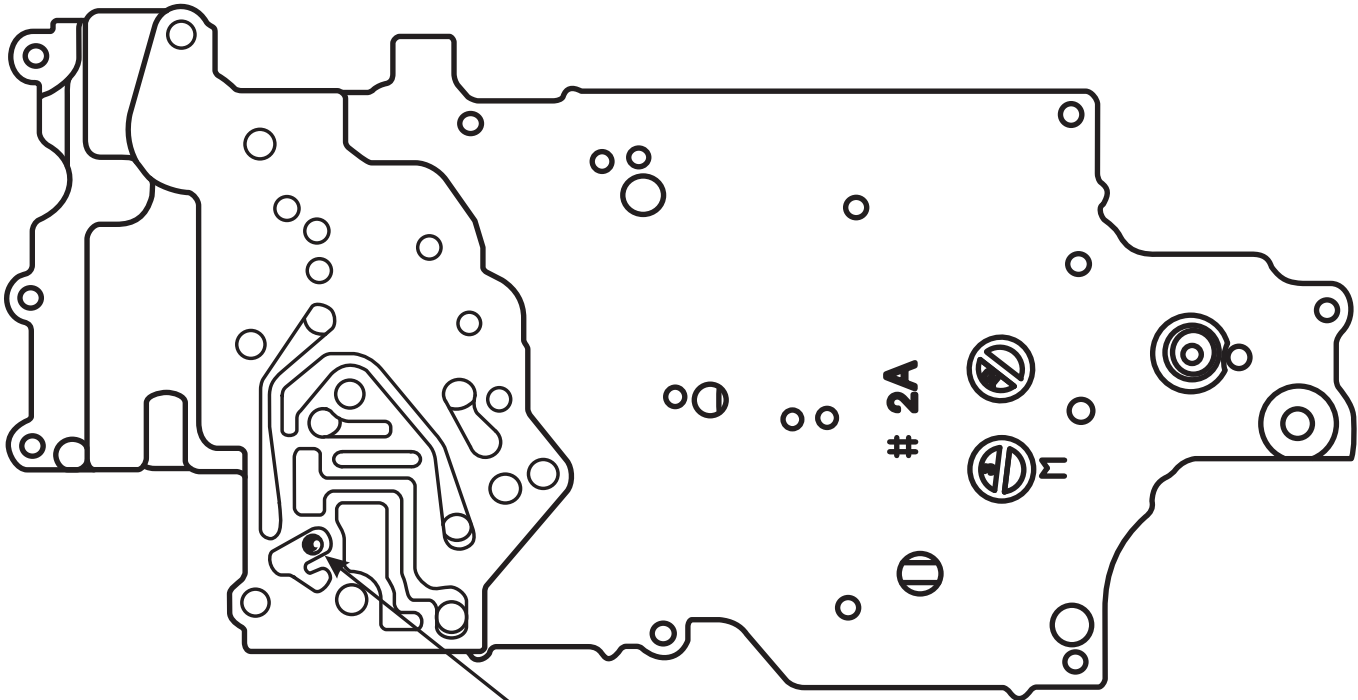
.186" STEEL
CHECKBALL



REQUIRES .186" DIAMETER
STEEL CHECKBALL HERE
AND RETAINER AS SHOWN

**NISSAN RL4F02A ALL MODELS
CHECKBALL LOCATIONS**

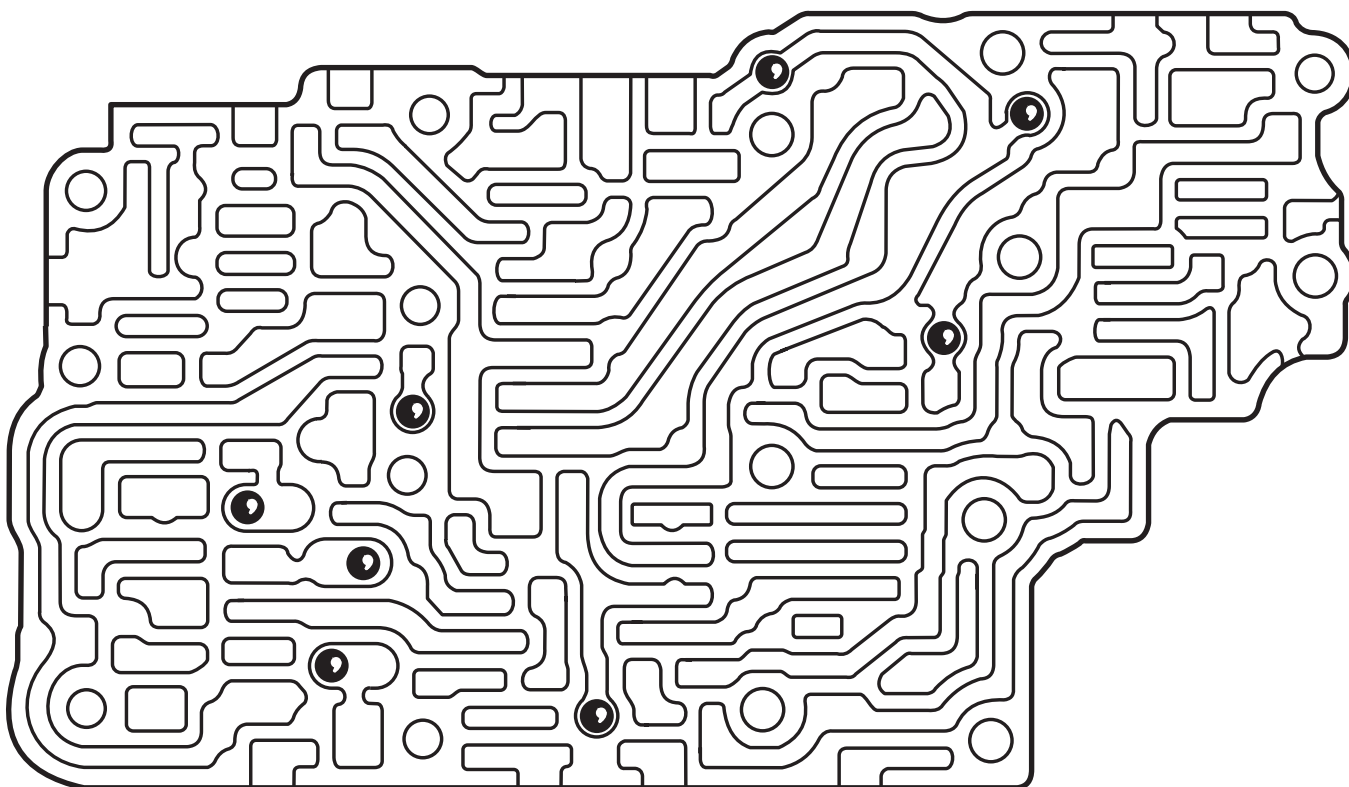
LOWER VALVE BODY



**REQUIRES ONE 5.5mm (.217")
DIAMETER STEEL CHECKBALL
IN LOCATION SHOWN ABOVE**

NISSAN RL4FO3A TRANSAXLE
"UPPER" VALVE BODY CHECKBALL LOCATIONS

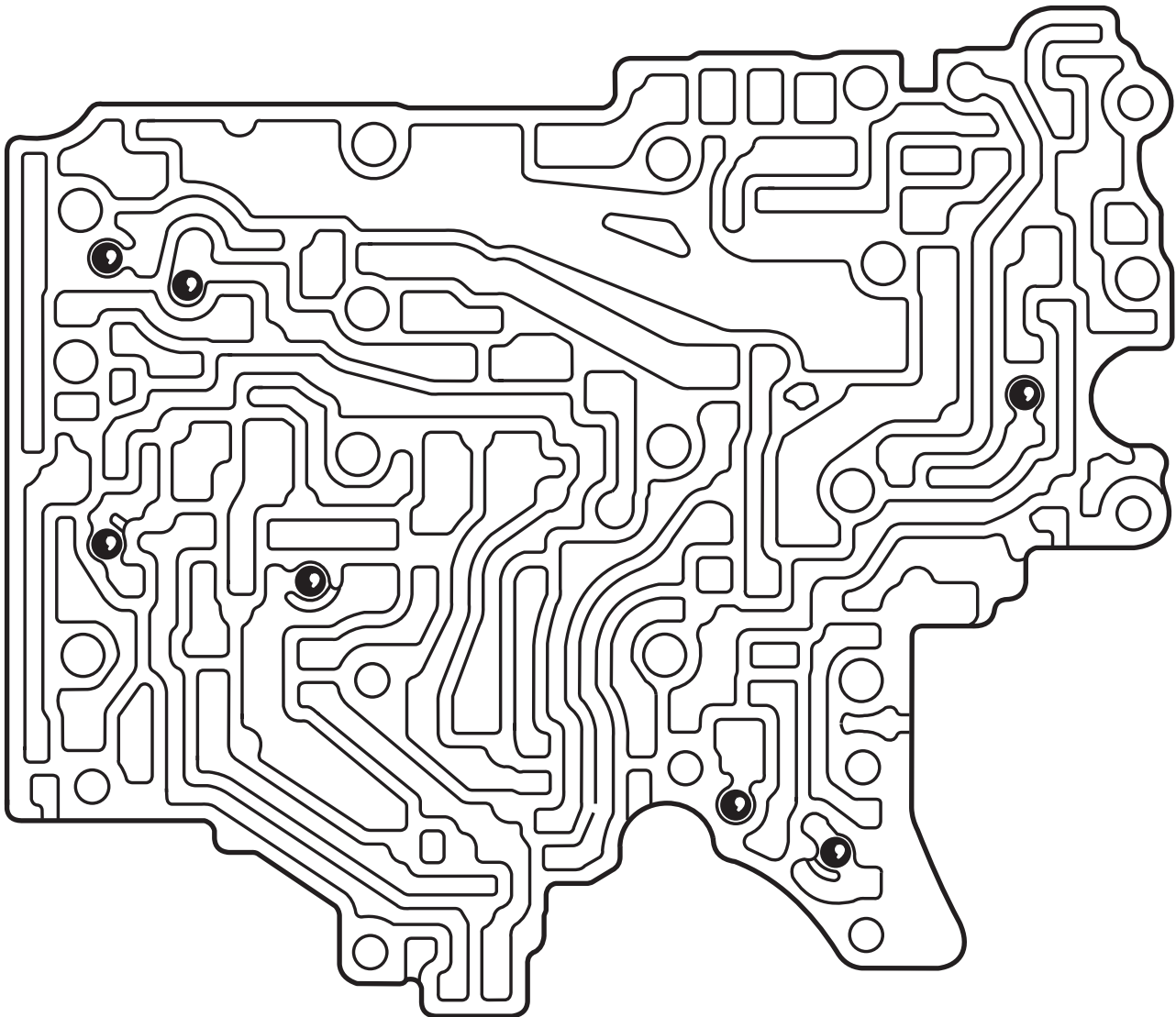
**REQUIRES EIGHT (8) STEEL
CHECKBALLS IN LOCATIONS SHOWN
5.5mm (.217") DIAMETER**



NISSAN RL4FO3A TRANSAXLE

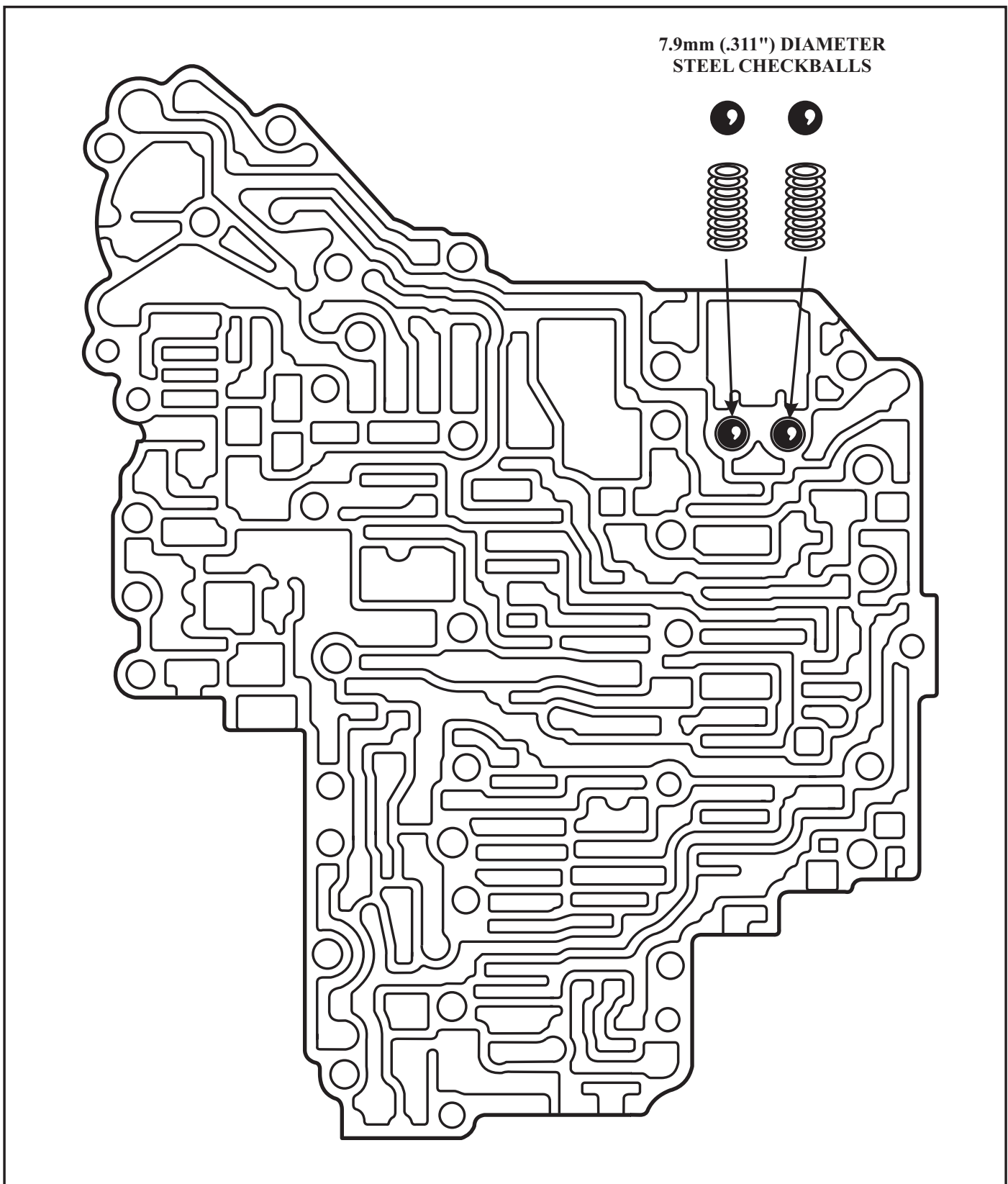
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**REQUIRES SEVEN (7) STEEL
CHECKBALLS IN LOCATIONS SHOWN
5.5mm (.217") DIAMETER**



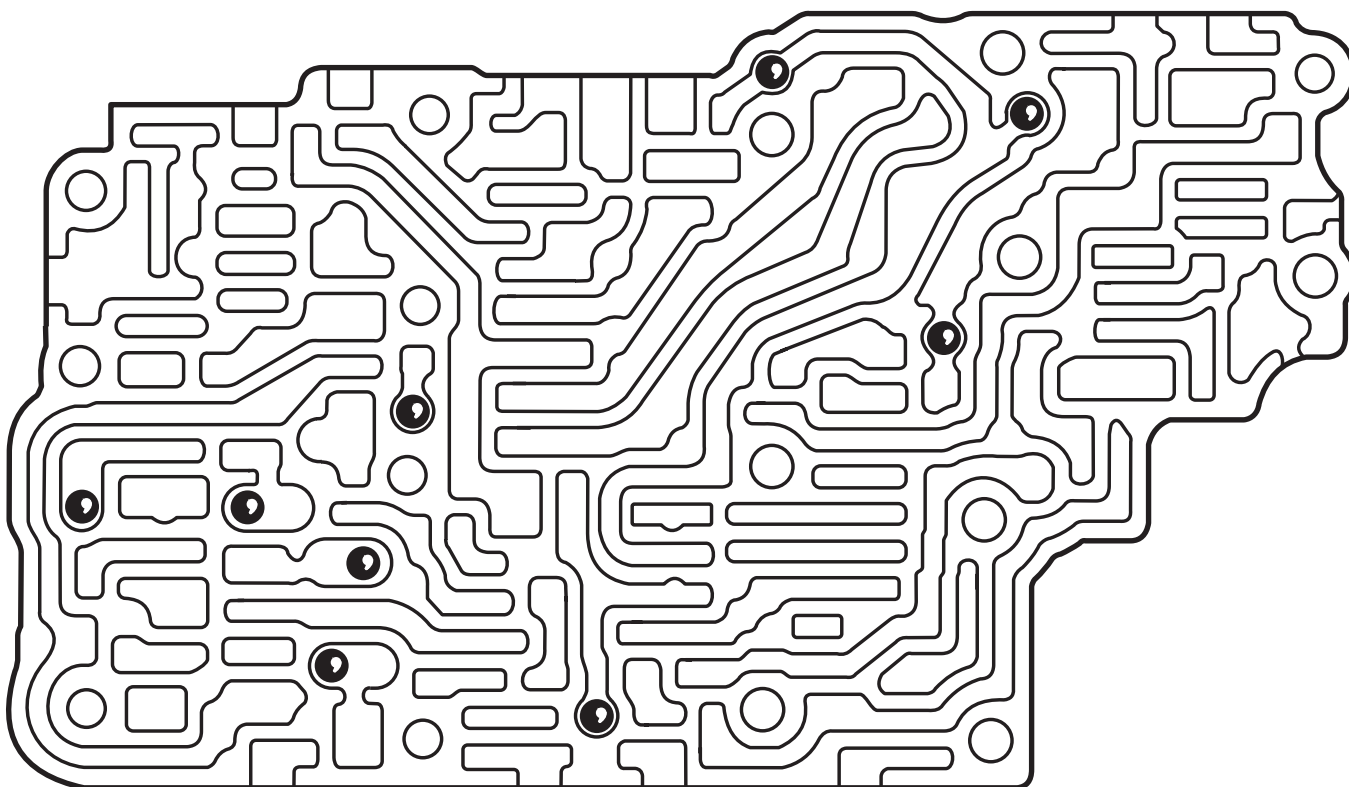
NISSAN RL4FO3A TRANSAXLE

"LOWER" VALVE BODY CHECKBALL LOCATIONS



NISSAN RL4FO3V TRANSAXLE
"UPPER" VALVE BODY CHECKBALL LOCATIONS

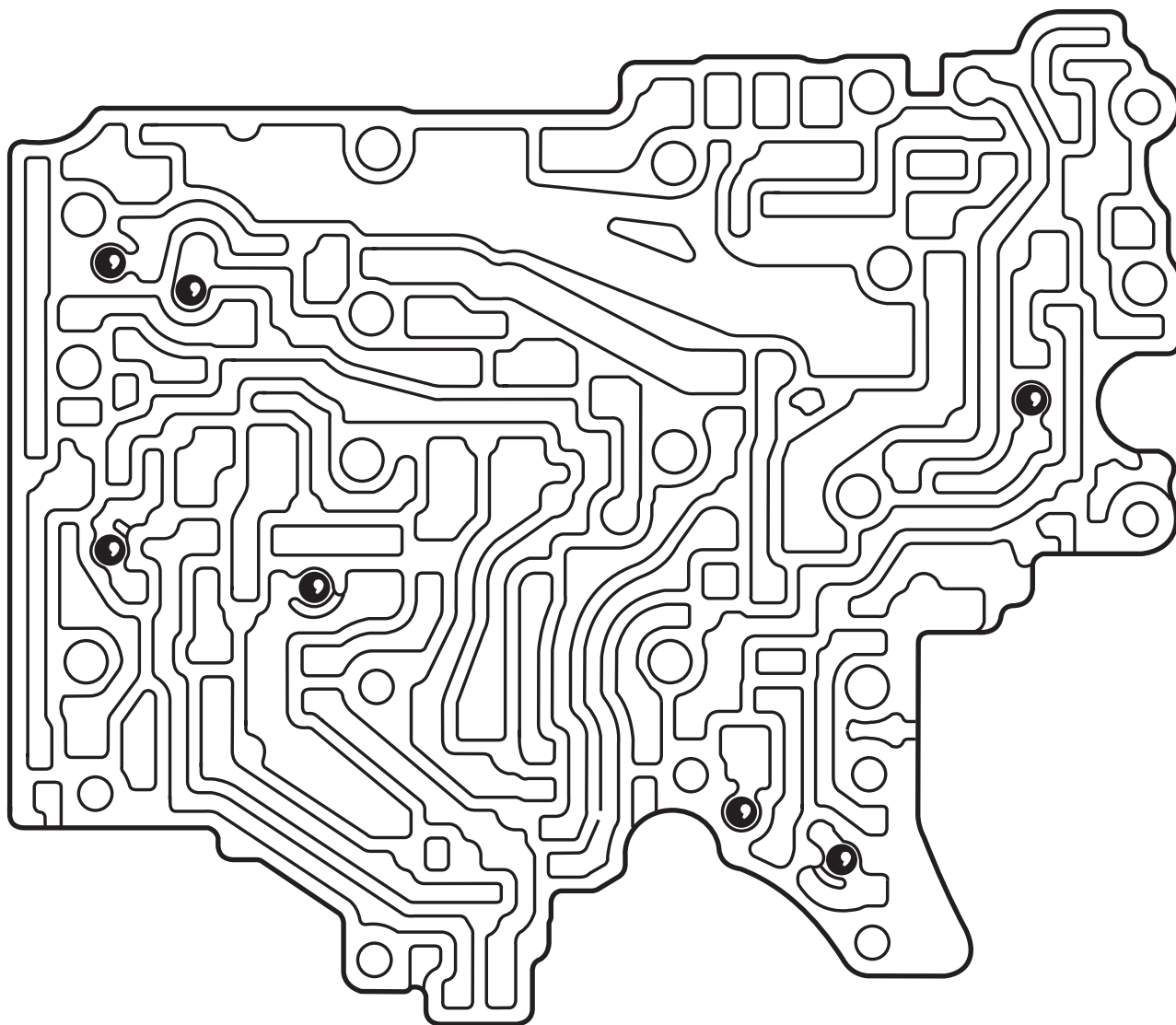
**REQUIRES NINE (9) STEEL
CHECKBALLS IN LOCATIONS SHOWN
5.5mm (.217") DIAMETER**



NISSAN RL4FO3V TRANSAXLE

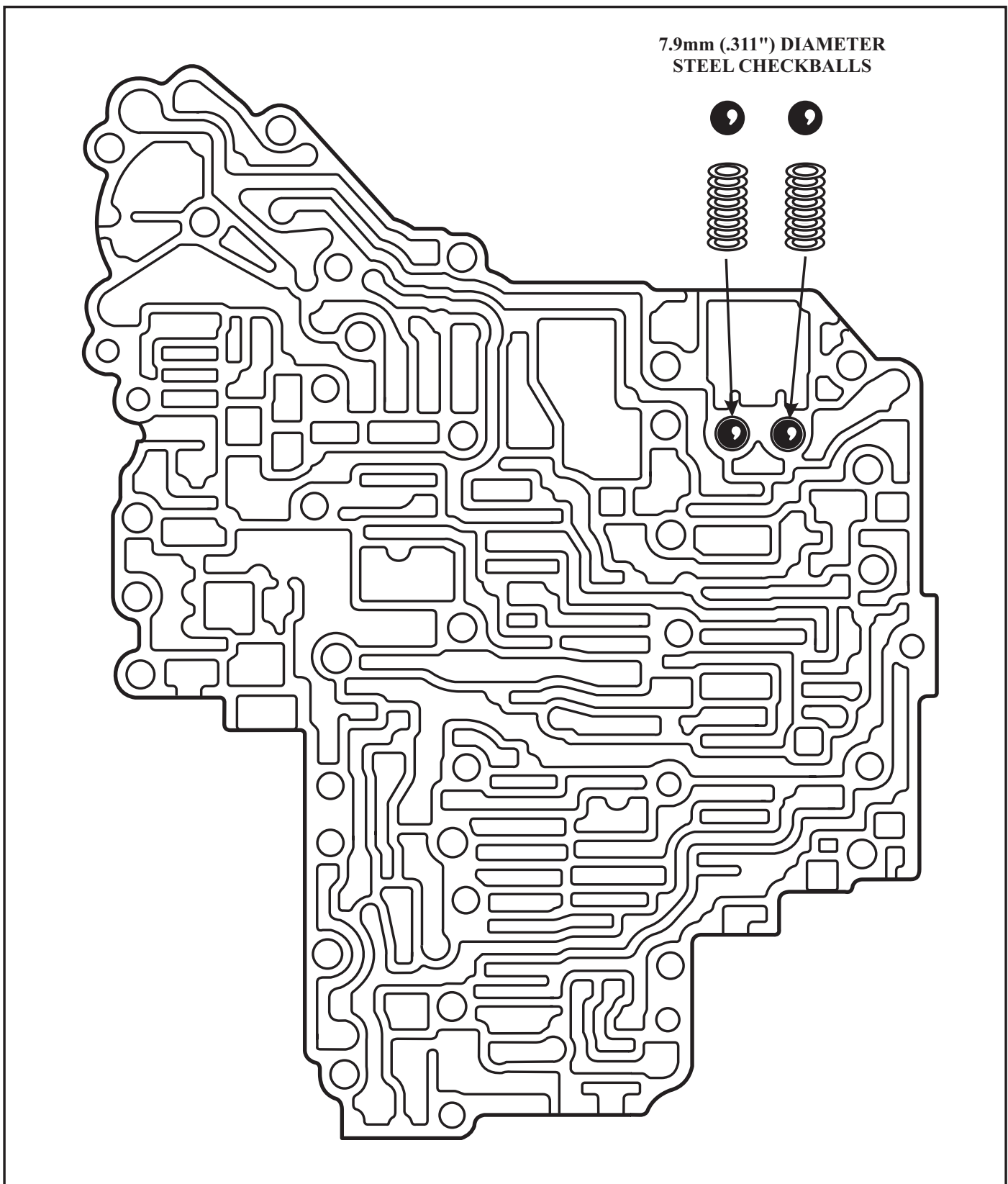
"INTERMEDIATE" VALVE BODY CHECKBALL LOCATIONS

**REQUIRES SEVEN (7) STEEL
CHECKBALLS IN LOCATIONS SHOWN
5.5mm (.217") DIAMETER**



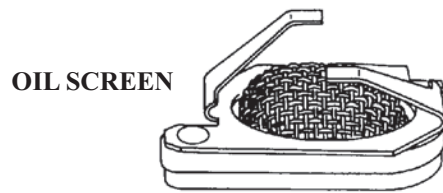
NISSAN RL4FO3V TRANSAXLE

"LOWER" VALVE BODY CHECKBALL LOCATIONS



NISSAN RE4F02A ALL MODELS CHECKBALL LOCATIONS

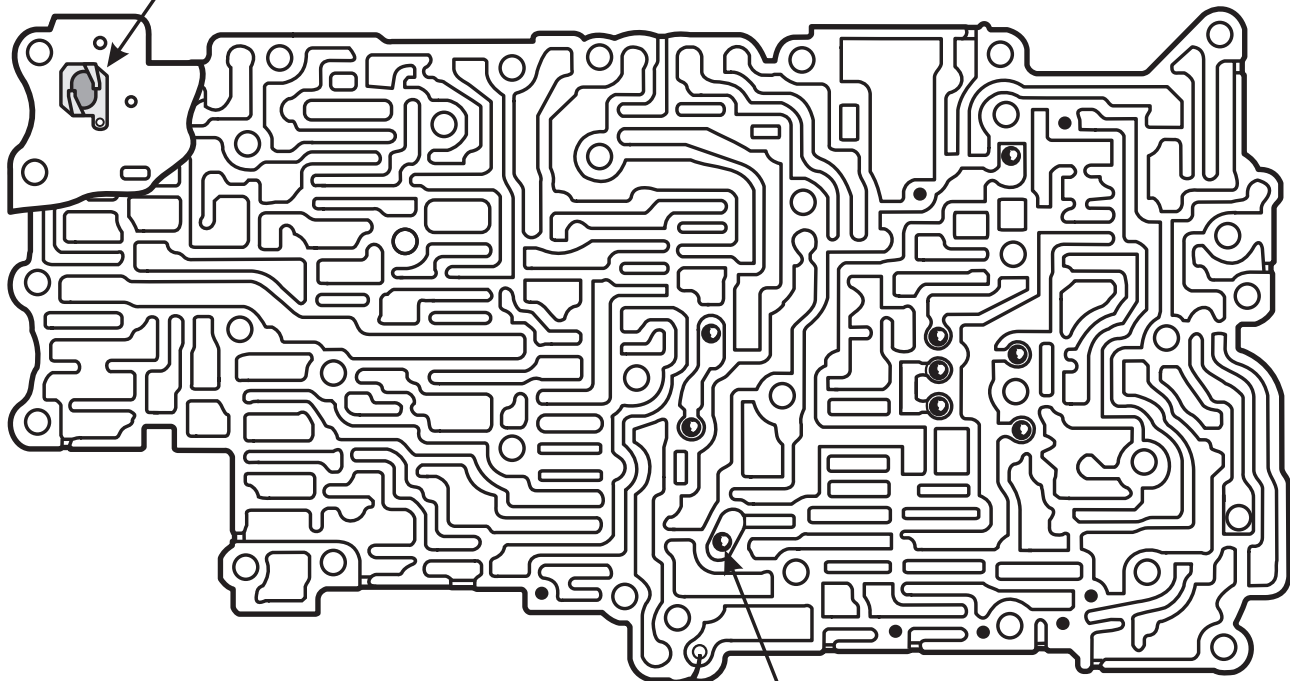
UPPER VALVE BODY



OIL SCREEN

REQUIRES NINE .217" DIAMETER
STEEL CHECKBALLS IN THE
LOCATIONS SHOWN BELOW

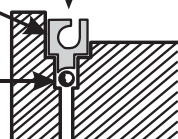
OIL SCREEN TO BE PLACED
ON SPACER PLATE WITH THE
LEGS FACING "UP", AS SHOWN



2 HOLES IN SPACER = BALL
1 HOLE IN SPACER = NO BALL

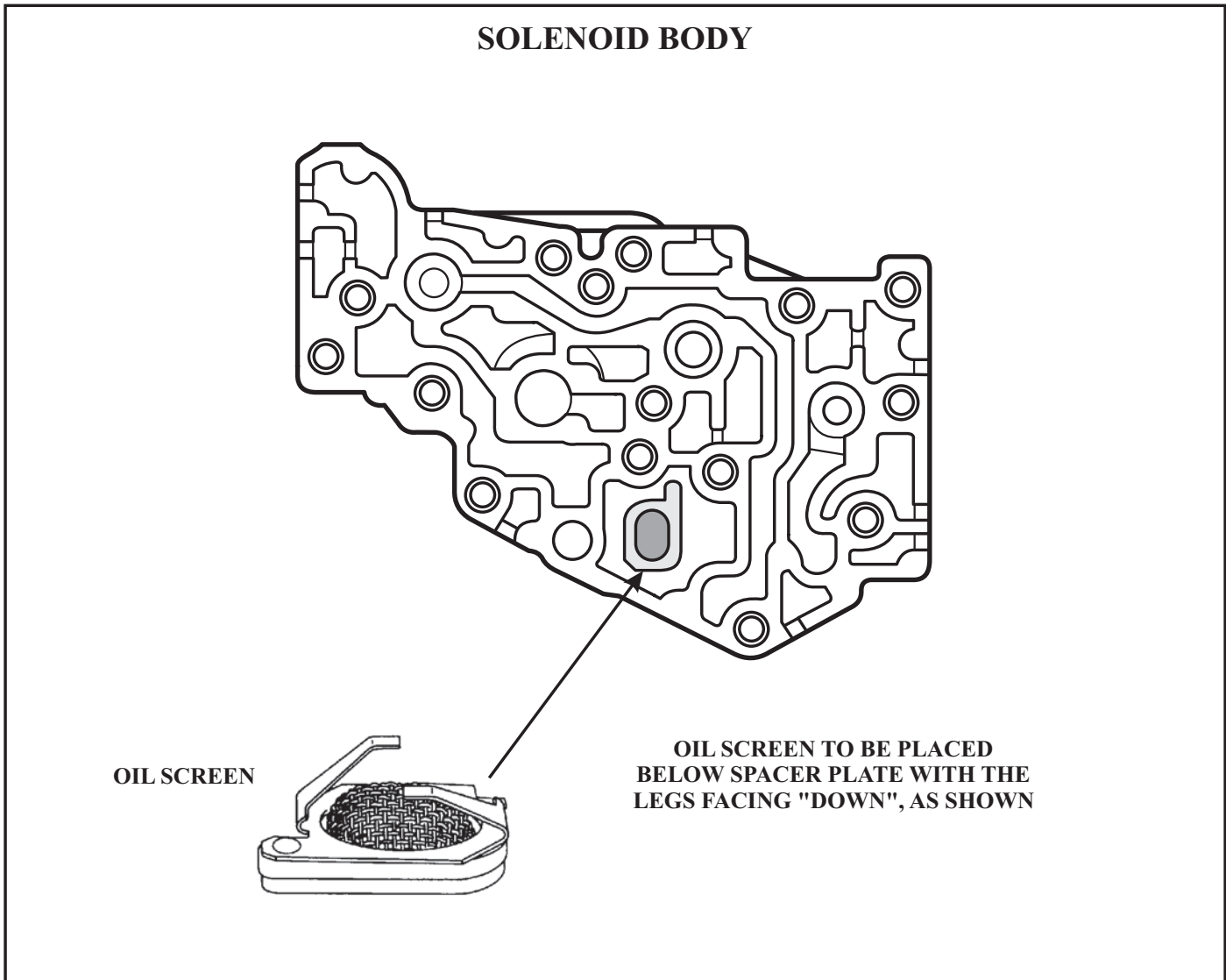
RETAINER

.186" STEEL
CHECKBALL



REQUIRES .186" DIAMETER
STEEL CHECKBALL HERE
AND RETAINER AS SHOWN

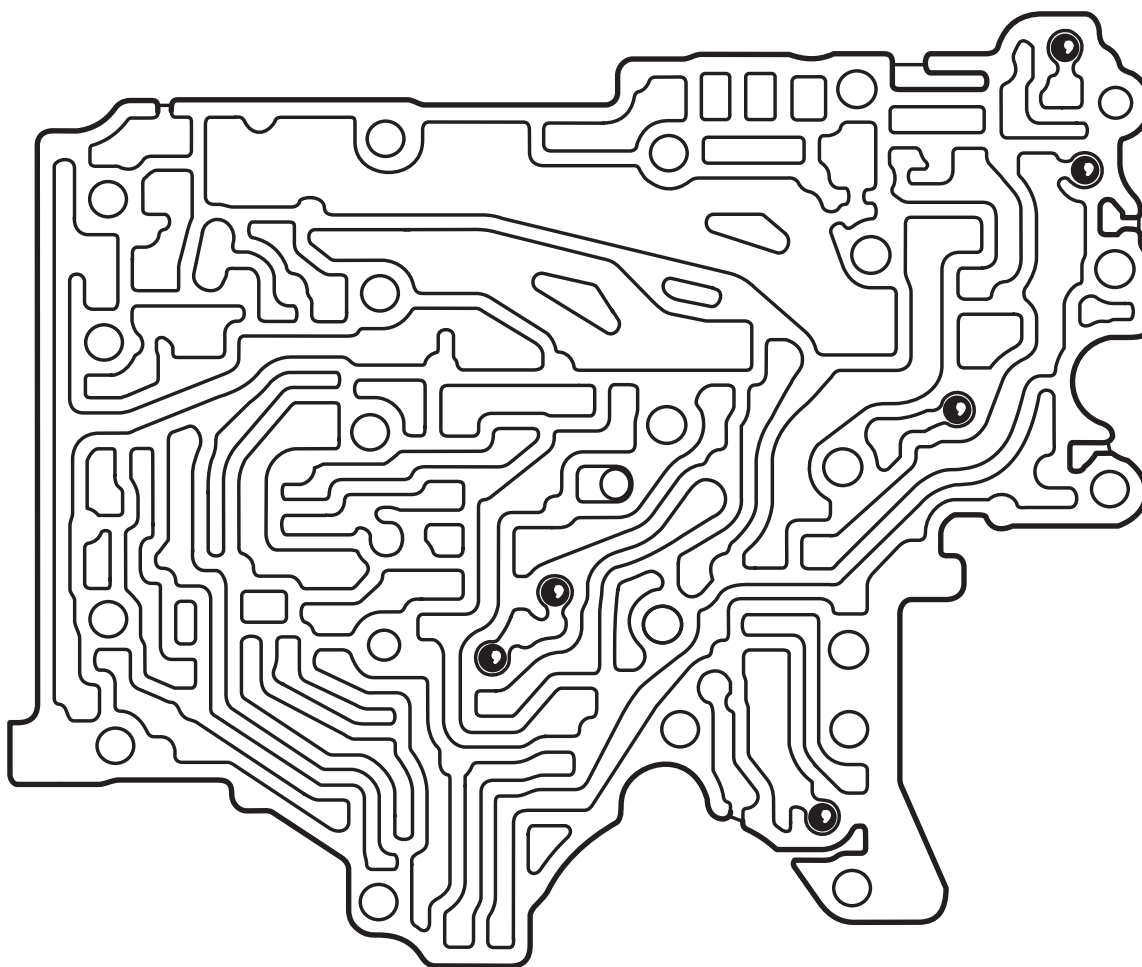
NISSAN RE4F02A ALL MODELS
SCREEN LOCATION



**NISSAN RE4F03A/V TRANSAXLES
NX AND SENTRA**

"INTERMEDIATE" VALVE BODY CHECKBALL LOCATIONS

**REQUIRES SIX (6) STEEL CHECKBALLS
5.5mm (.217") DIAMETER IN THE
LOCATIONS SHOWN BELOW**



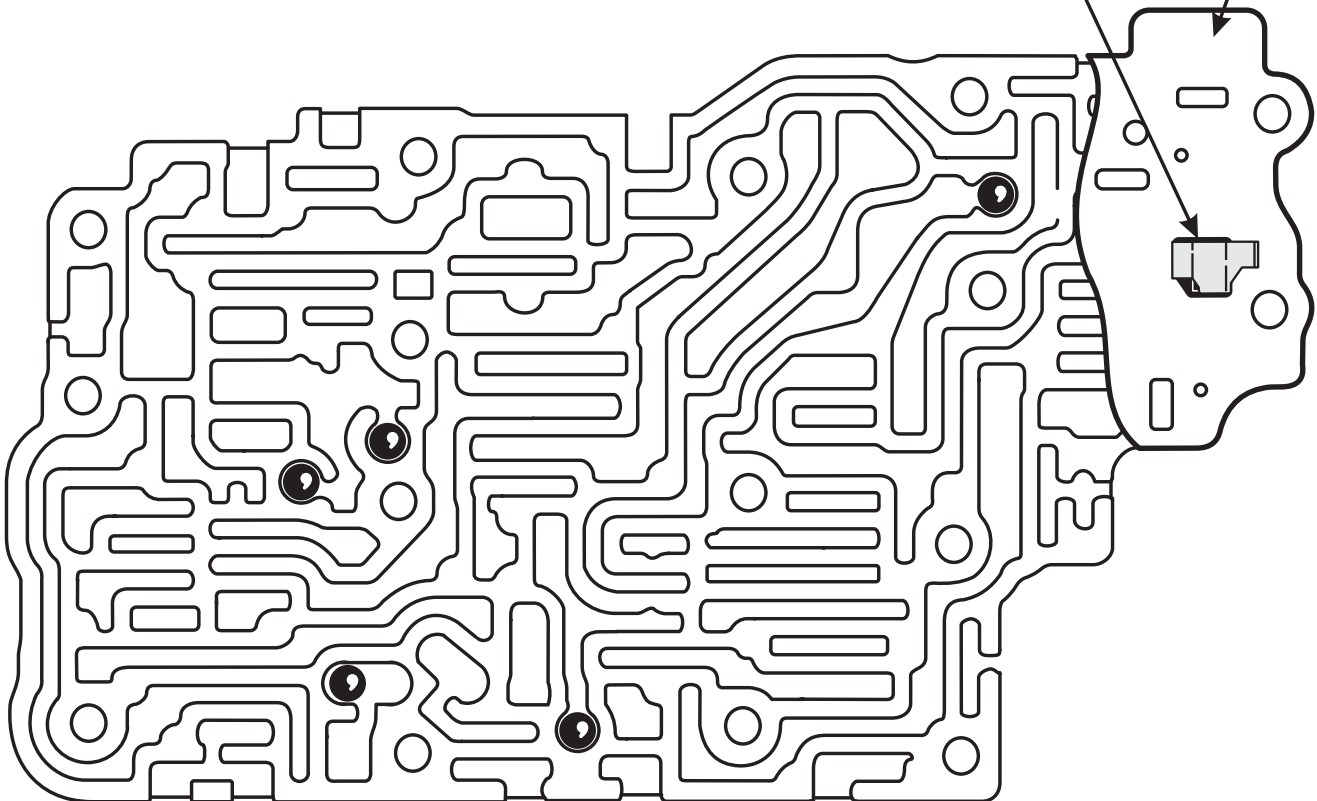
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REQUIRES FIVE (5) STEEL CHECKBALLS
5.5mm (.217") DIAMETER IN THE
LOCATIONS SHOWN BELOW

PILOT FILTER INSTALLED
ON SPACER PLATE WITH
LEGS UP AS SHOWN

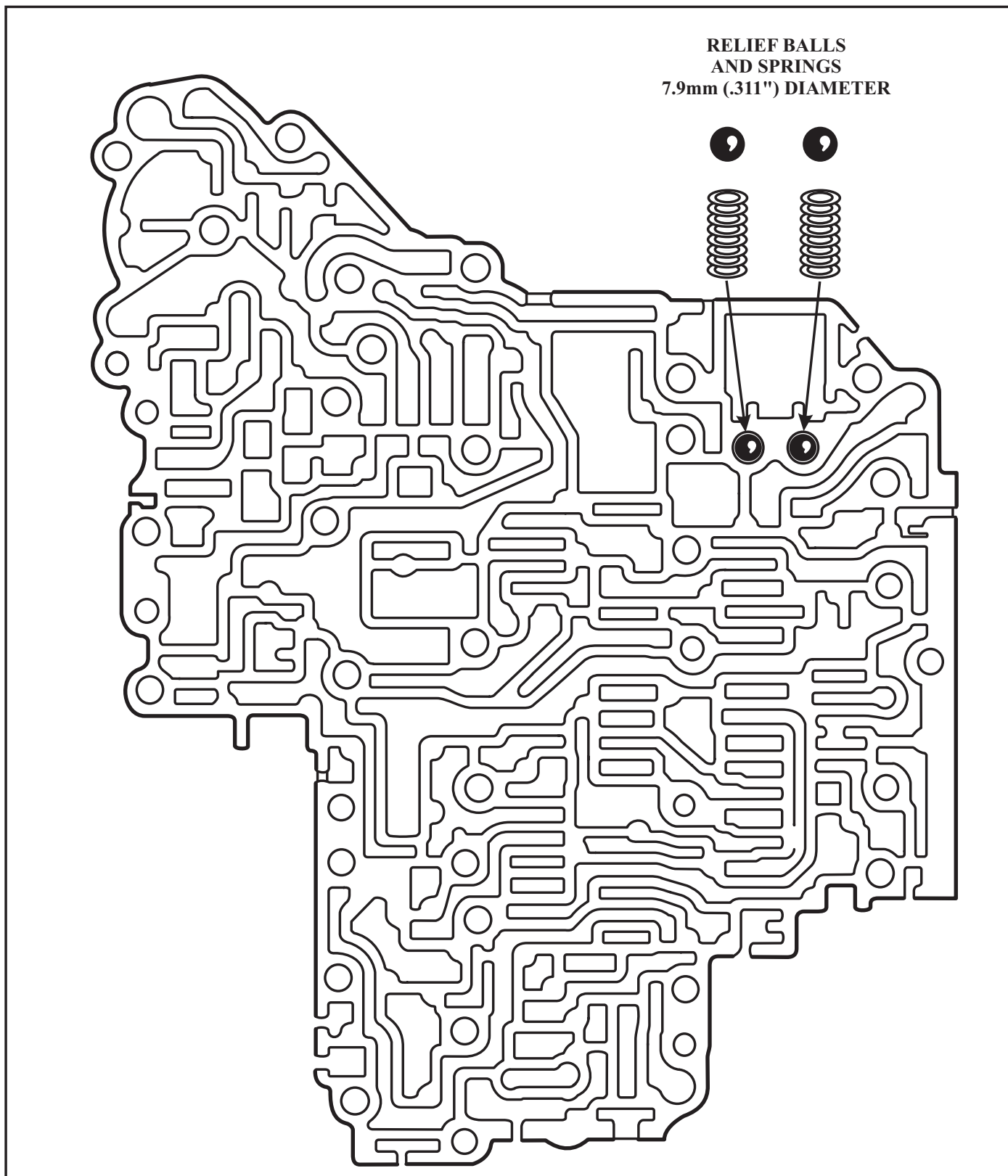


SPACER
PLATE



NISSAN RE4F03A/V TRANSAXLES NX AND SENTRA

"LOWER" VALVE BODY RELIEF BALL LOCATIONS

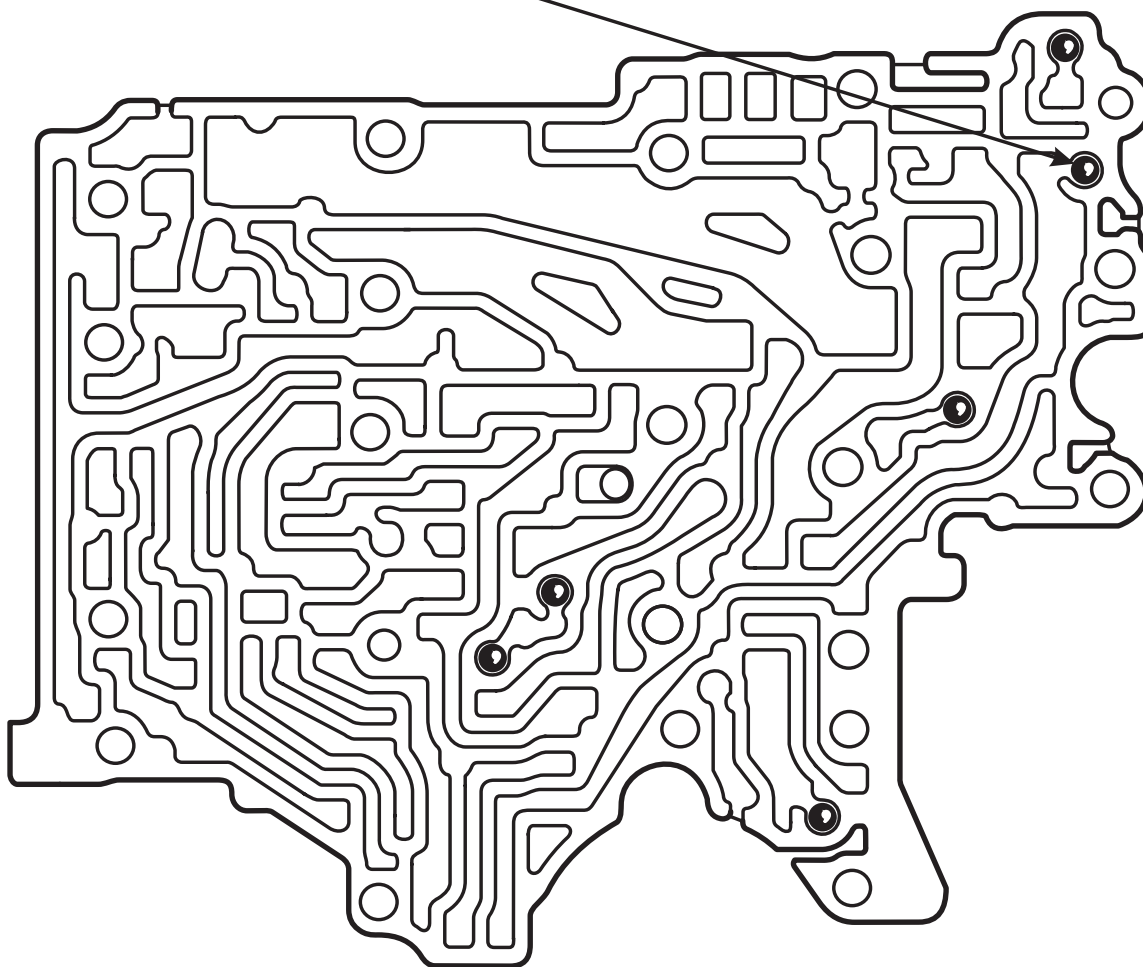


NISSAN RE4F04A TRANSAXLES

"INTERMEDIATE" VALVE BODY CHECKBALL LOCATIONS

**REQUIRES SIX (6) STEEL CHECKBALLS
5.5mm (.217") DIAMETER IN THE
LOCATIONS SHOWN BELOW**

*This Checkball Omitted
On 1995-Up Models*



NISSAN RE4F04A TRANSAXLES

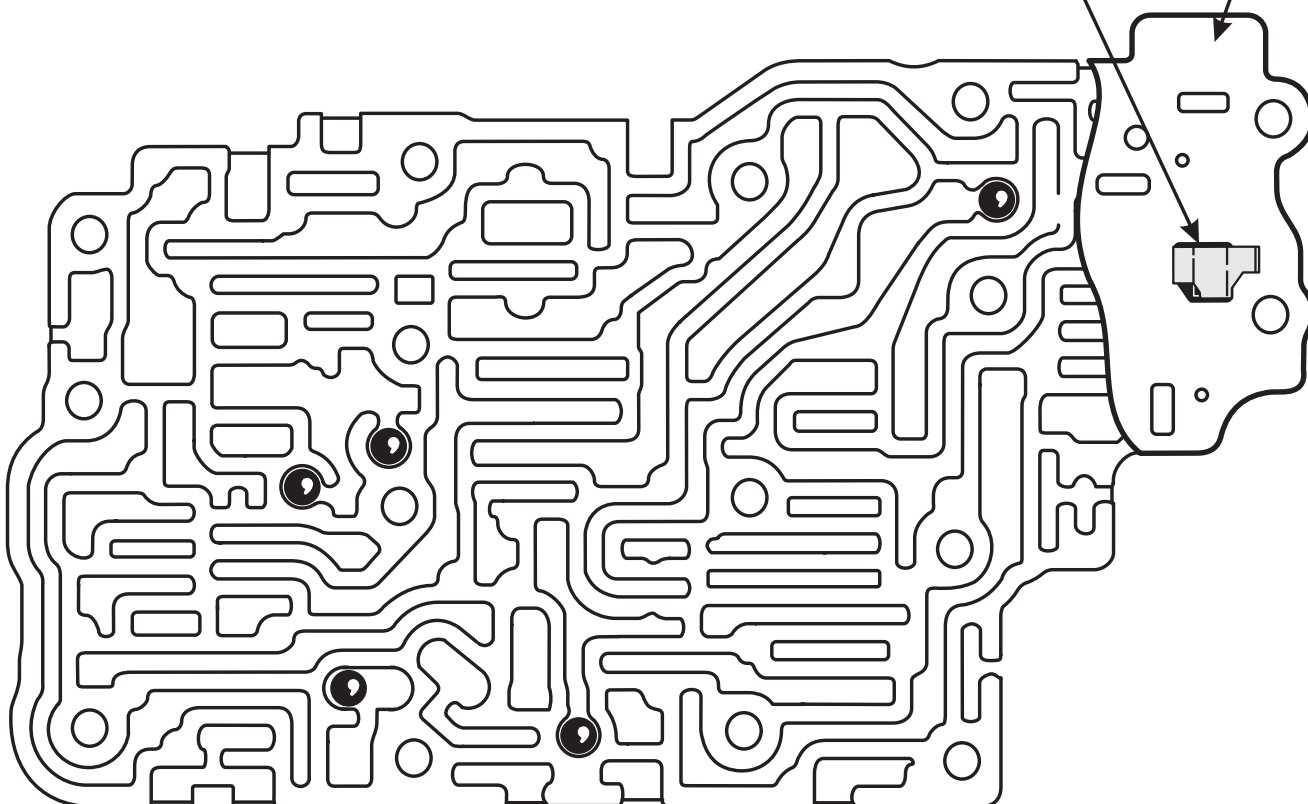
"UPPER" VALVE BODY CHECKBALL LOCATIONS

REQUIRES FIVE (5) STEEL CHECKBALLS
5.5mm (.217") DIAMETER IN THE
LOCATIONS SHOWN BELOW

PILOT FILTER INSTALLED
ON SPACER PLATE WITH
LEGS UP AS SHOWN

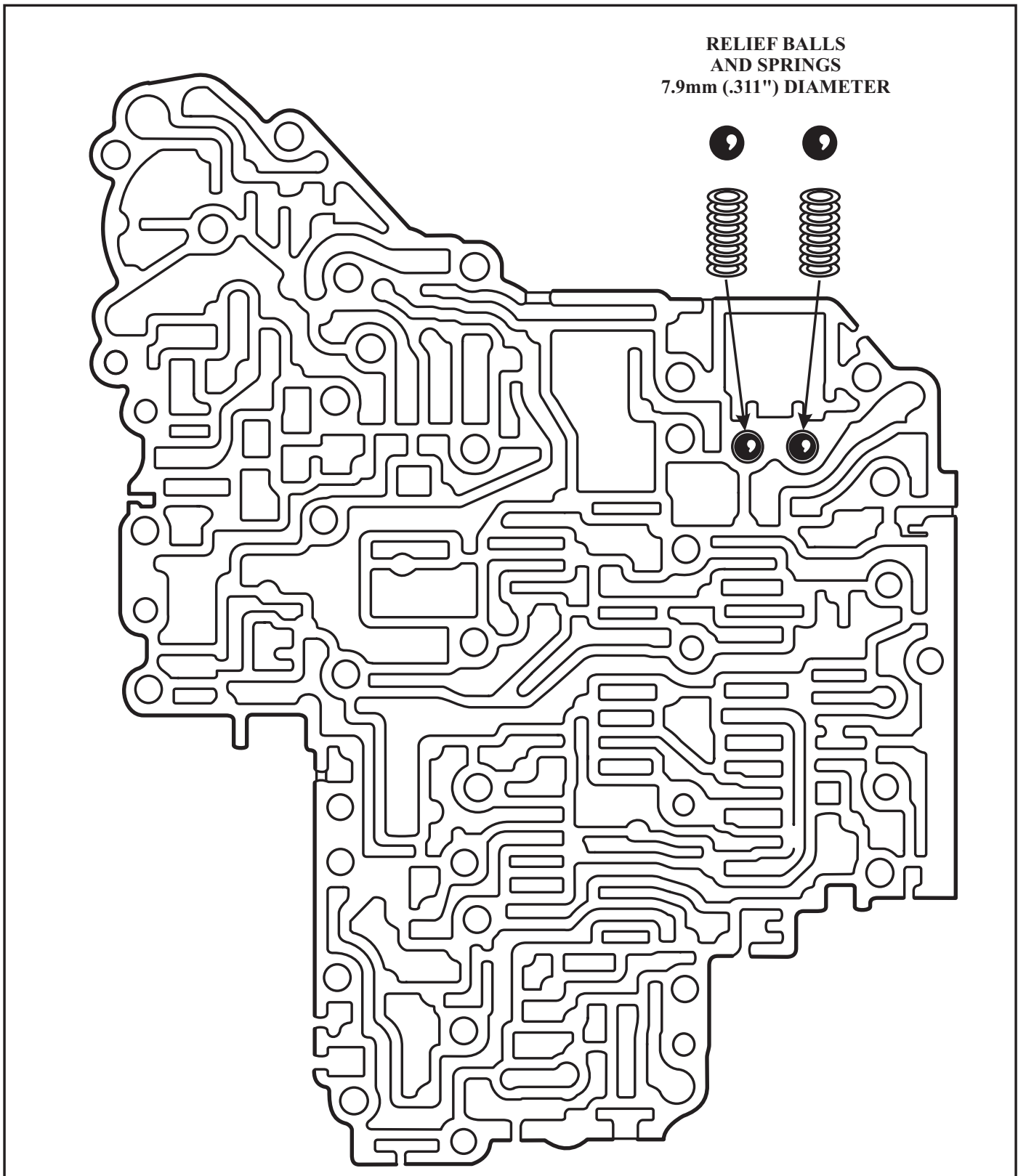


SPACER
PLATE



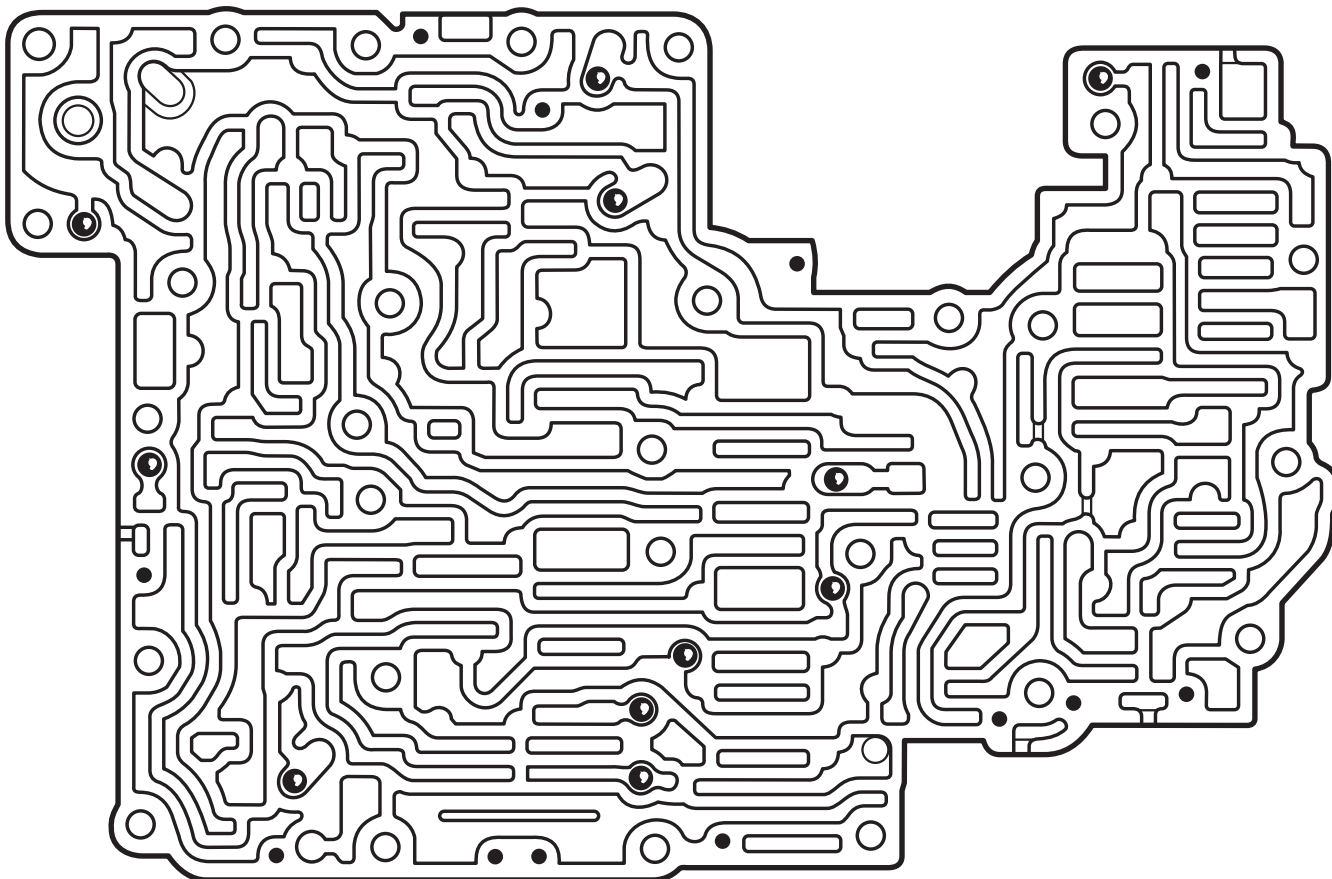
NISSAN RE4F04A TRANSAXLES

"LOWER" VALVE BODY RELIEF BALL LOCATIONS

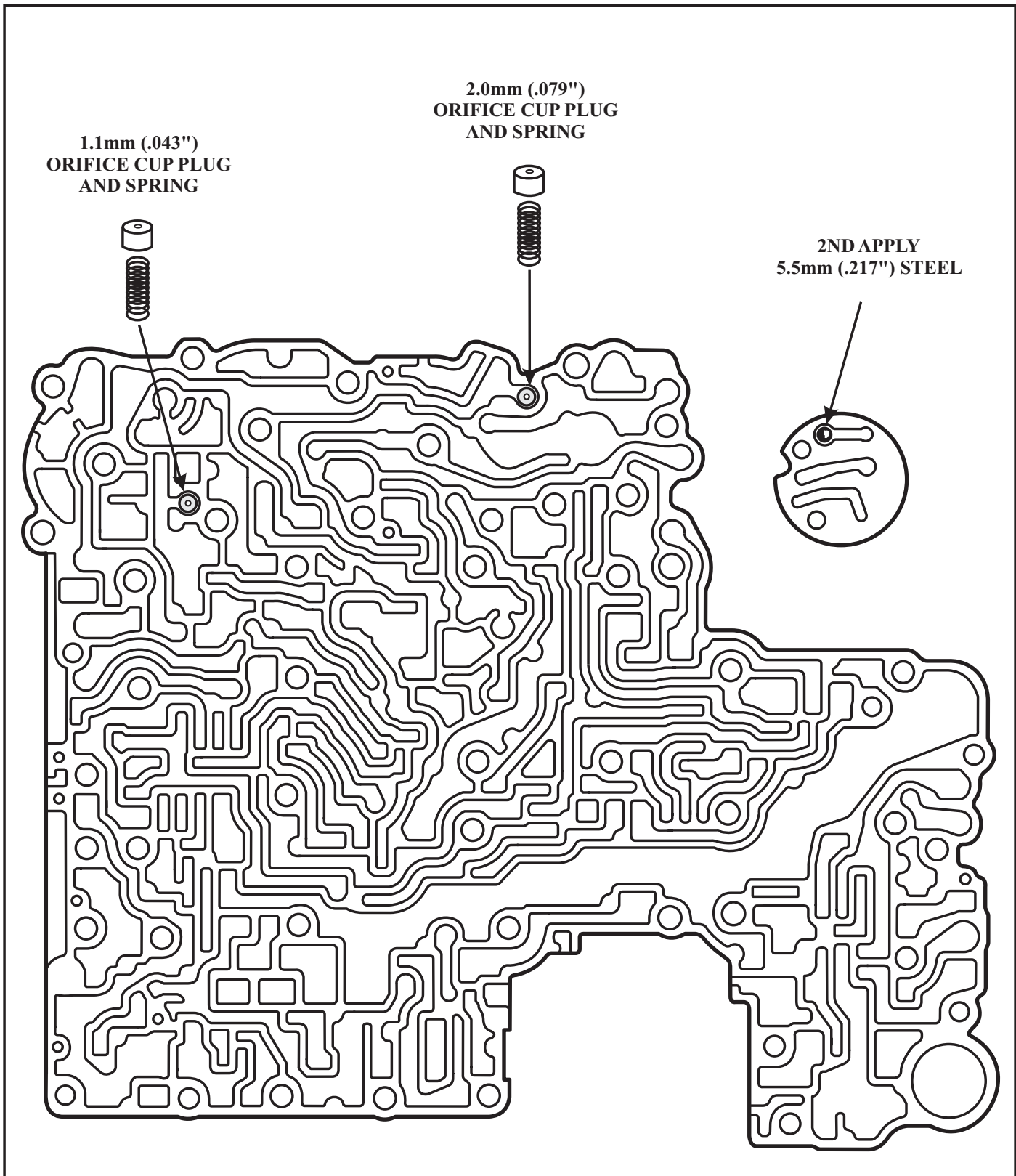


NISSAN RL4R01A
UPPER VALVE BODY CHECKBALL LOCATIONS

REQUIRES ELEVEN 5.5mm (.217") DIAMETER
STEEL CHECKBALLS IN LOCATIONS SHOWN

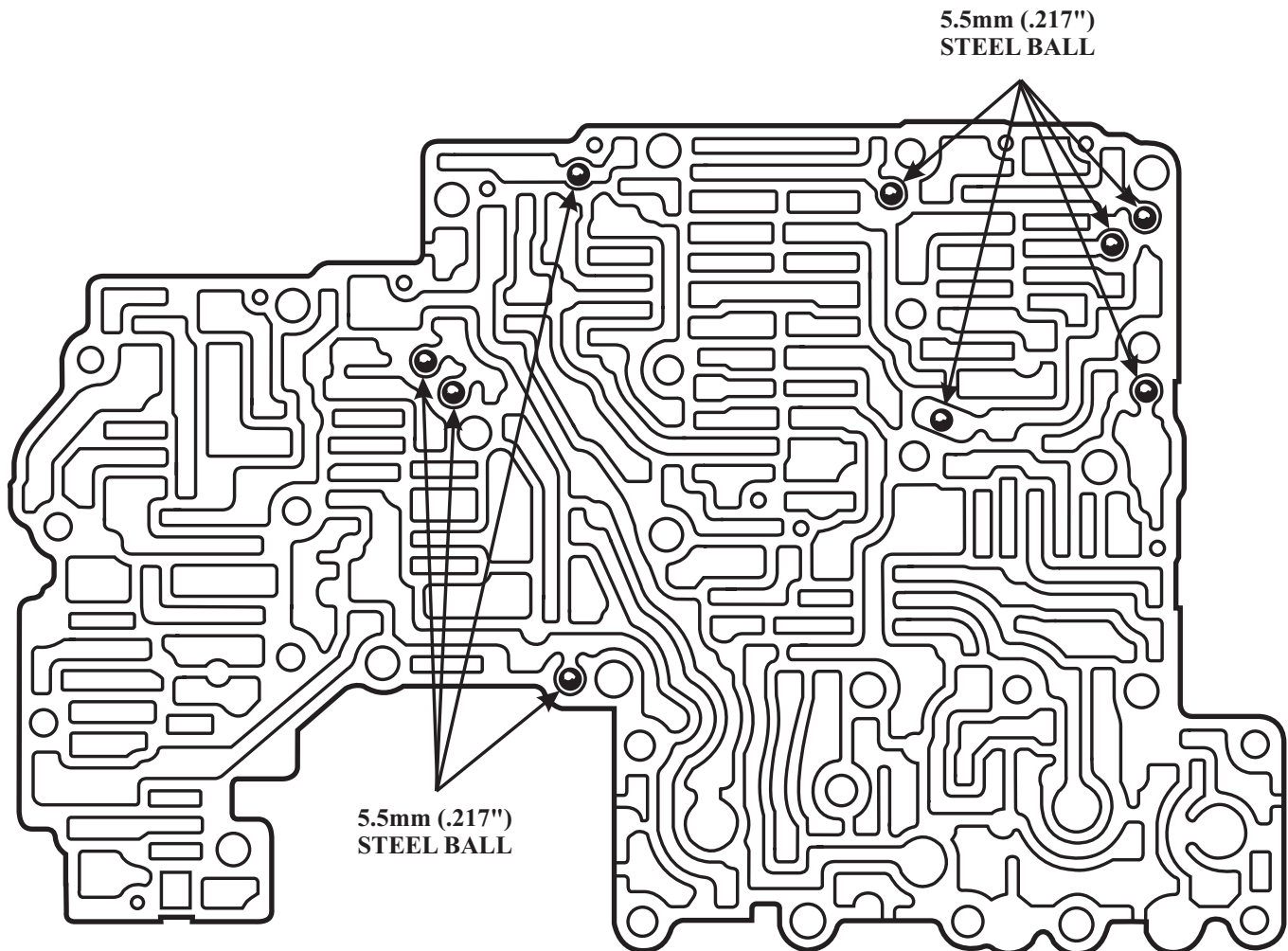


NISSAN RL4R01A LOWER VALVE BODY ORIFICE LOCATIONS

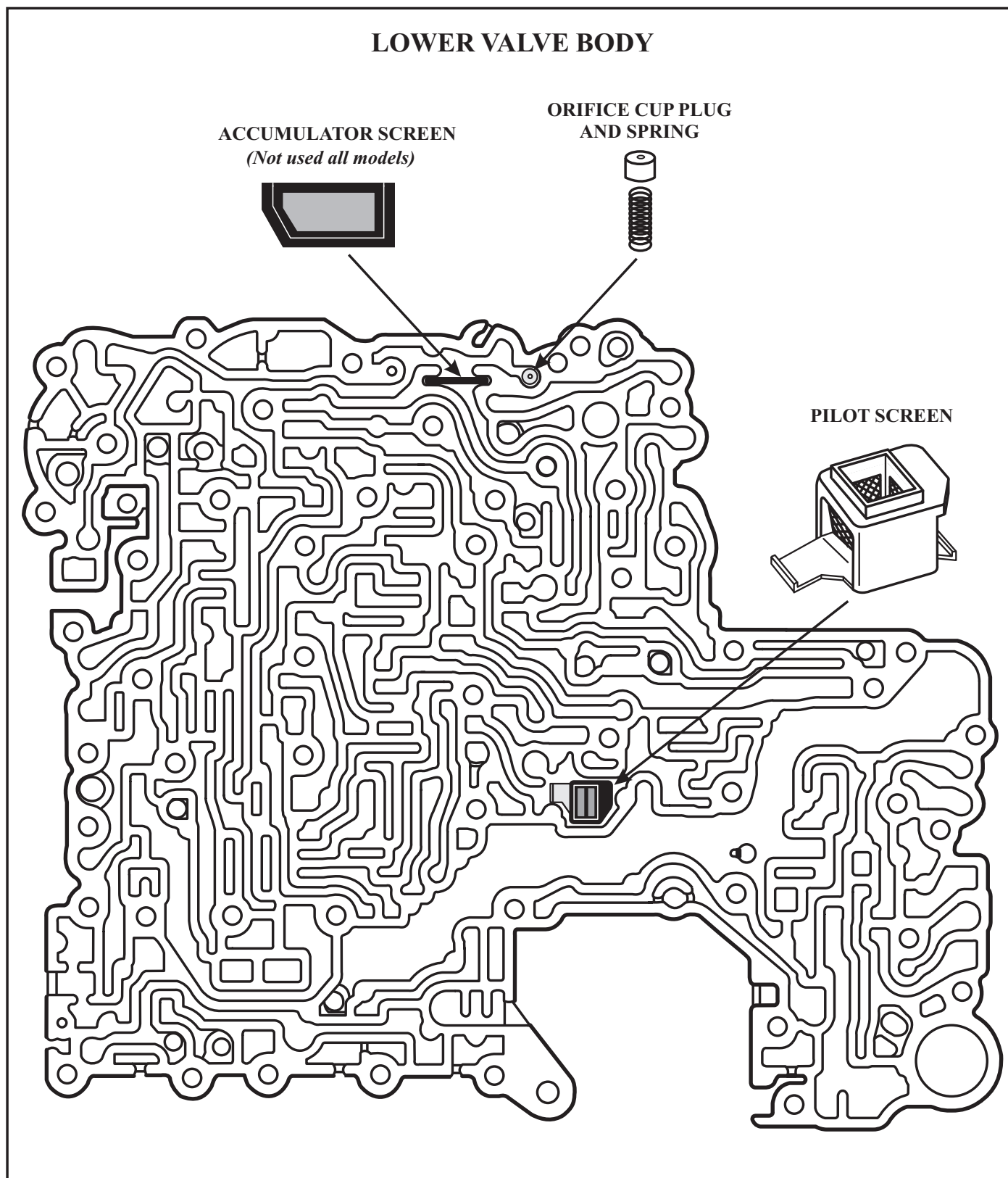


NISSAN RE4R01A ALL MODELS CHECKBALL LOCATIONS

**MAIN VALVE BODY
REQUIRES NINE CHECKBALLS**

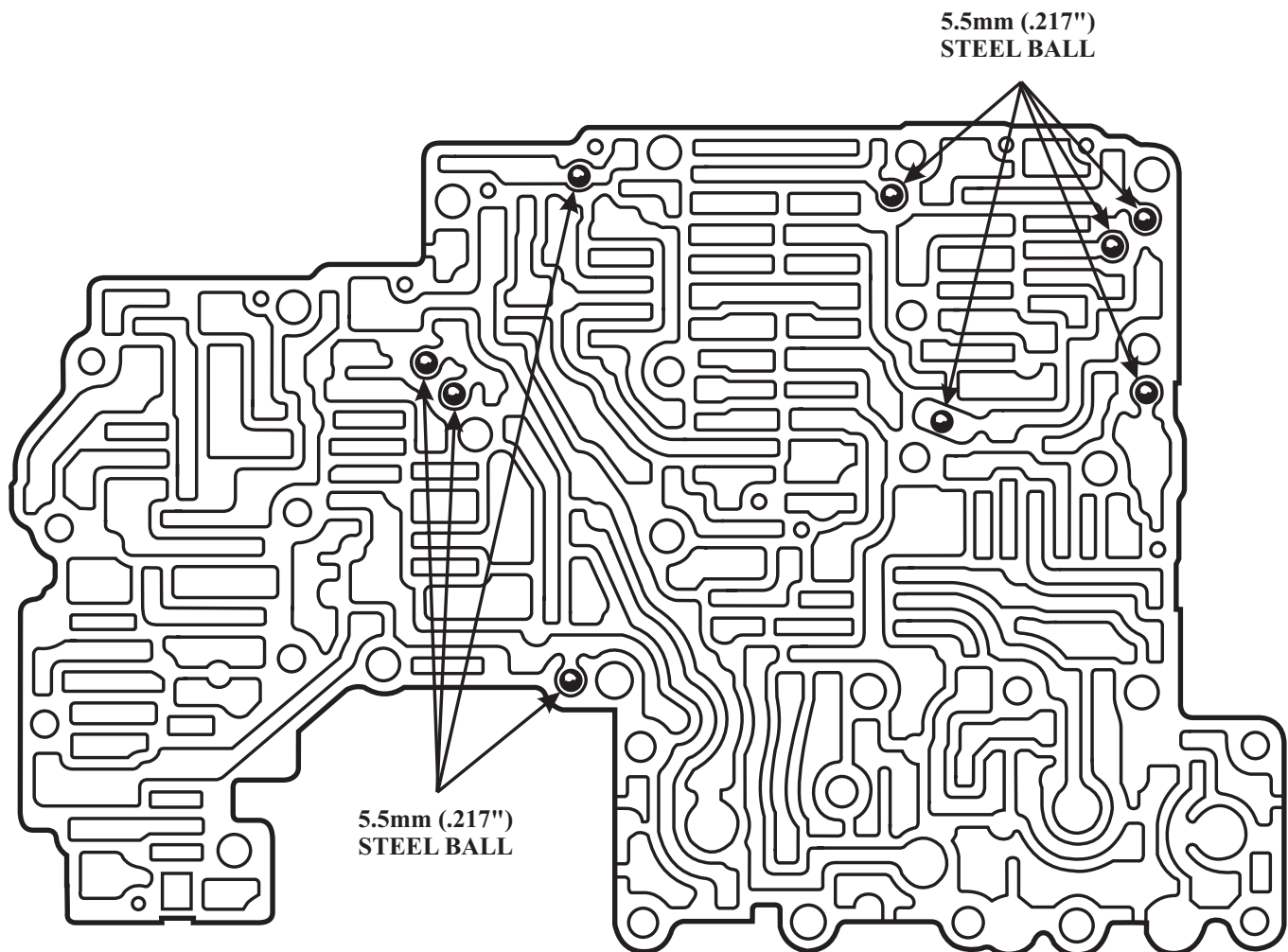


NISSAN RE4R01A ALL MODELS SCREEN AND ORIFICE LOCATIONS

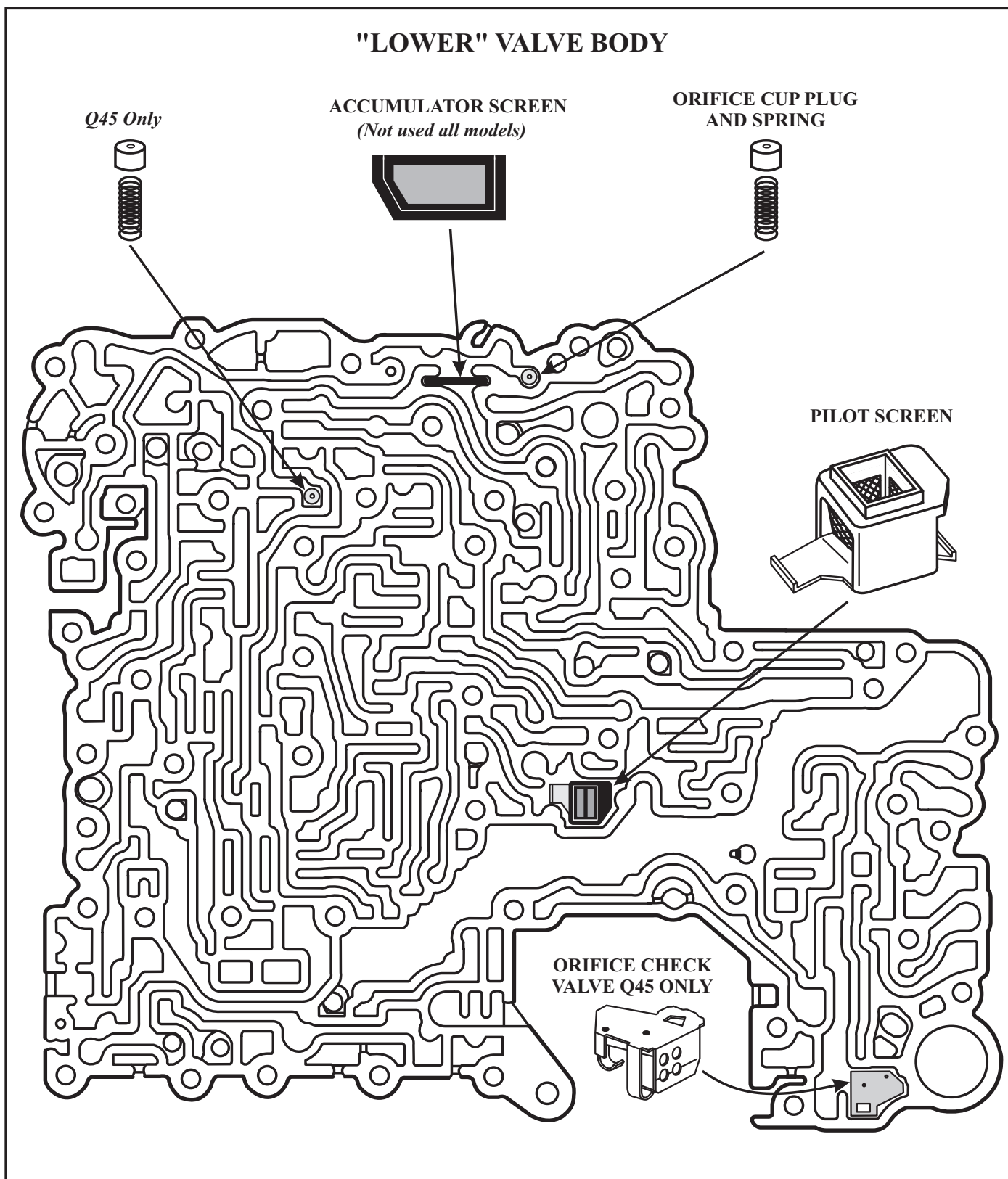


NISSAN RE4R03A TRANSMISSIONS 300ZX TWIN TURBO AND Q45 CHECKBALL LOCATIONS

**MAIN VALVE BODY
REQUIRES NINE CHECKBALLS**

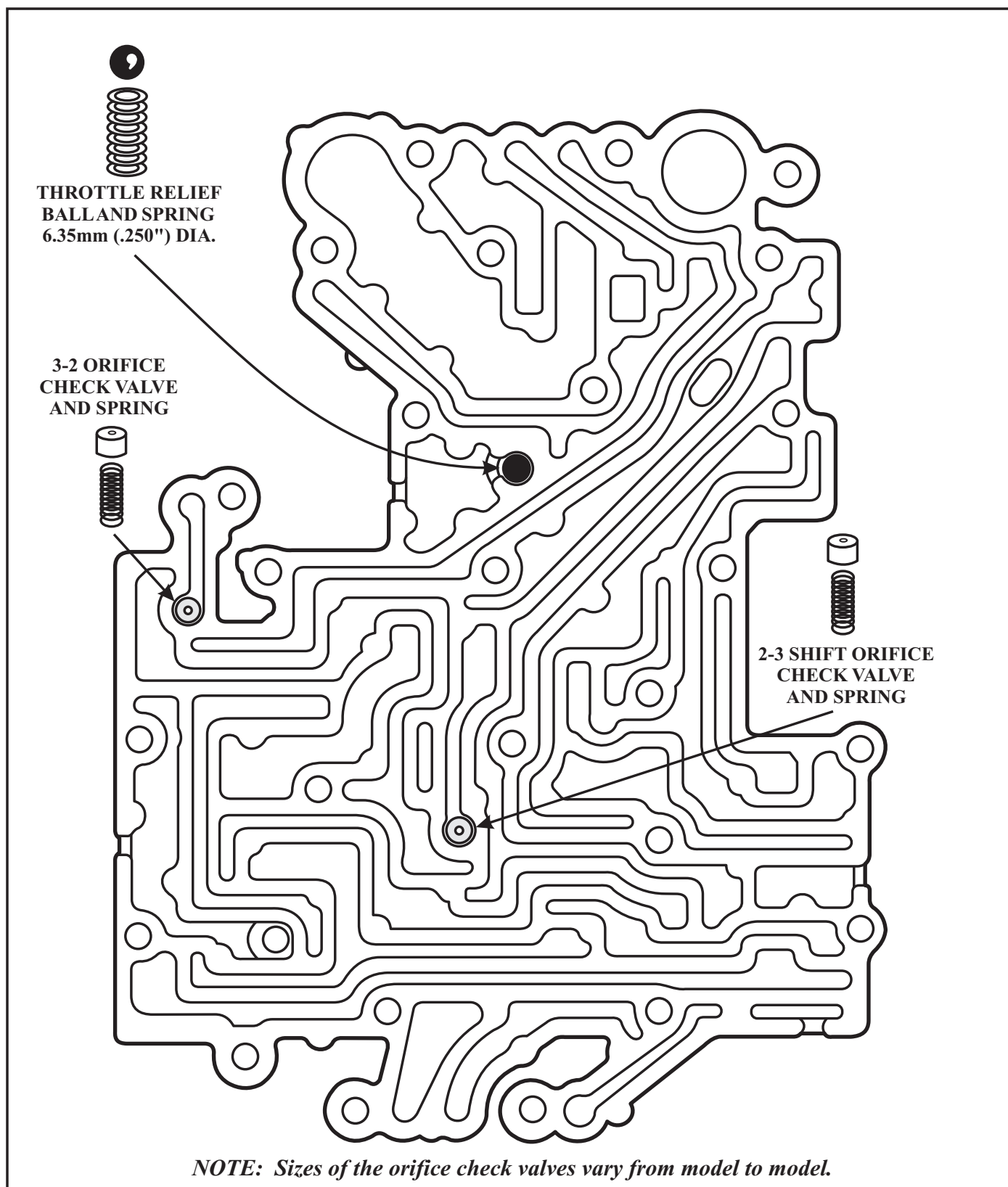


NISSAN RE4R03A TRANSMISSIONS 300ZX TWIN TURBO AND Q45 CHECKBALL LOCATIONS



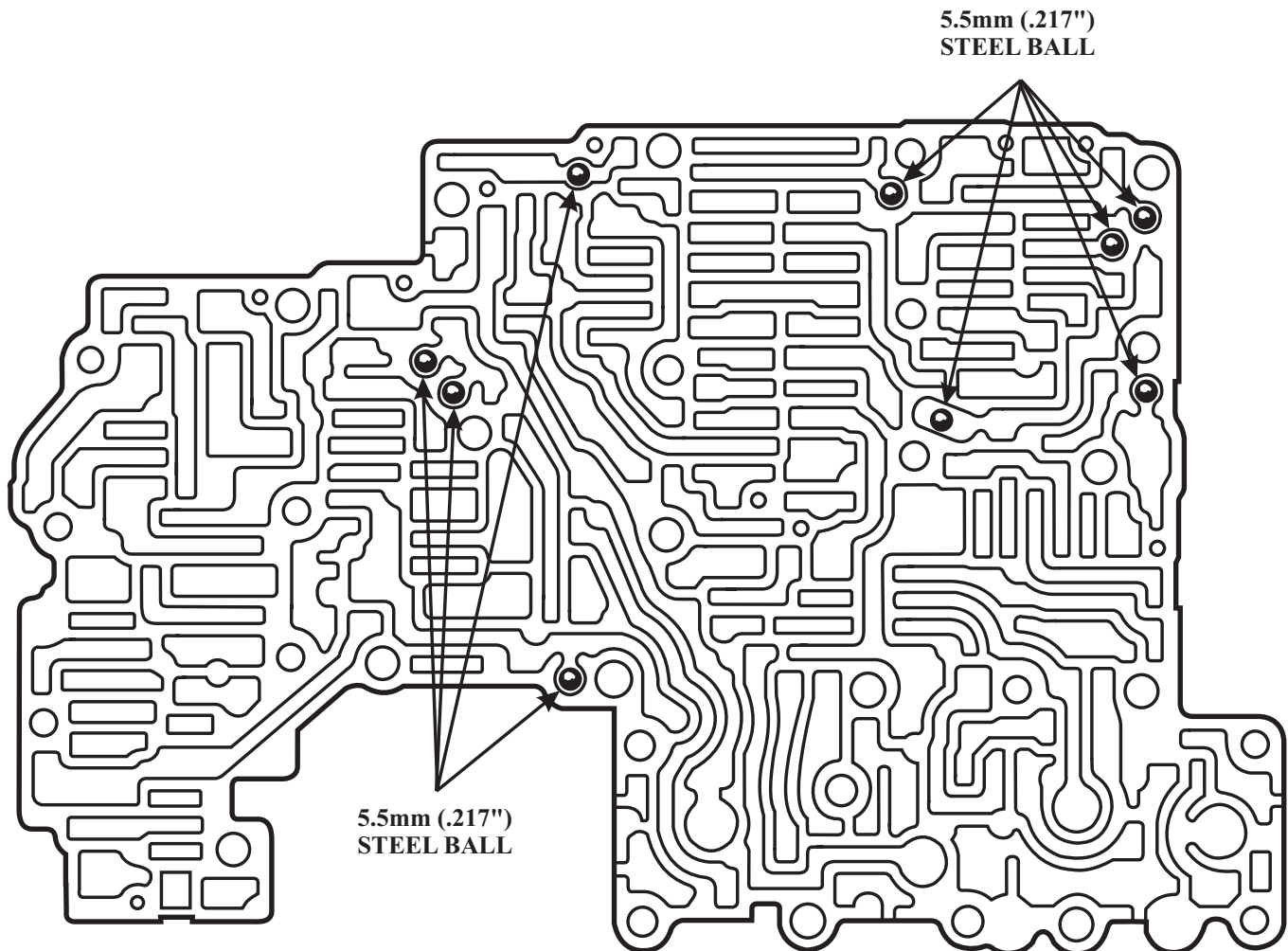
SUBARU 3-SPEED TRANSMISSION

VALVE BODY CHECKBALL AND ORIFICE LOCATIONS



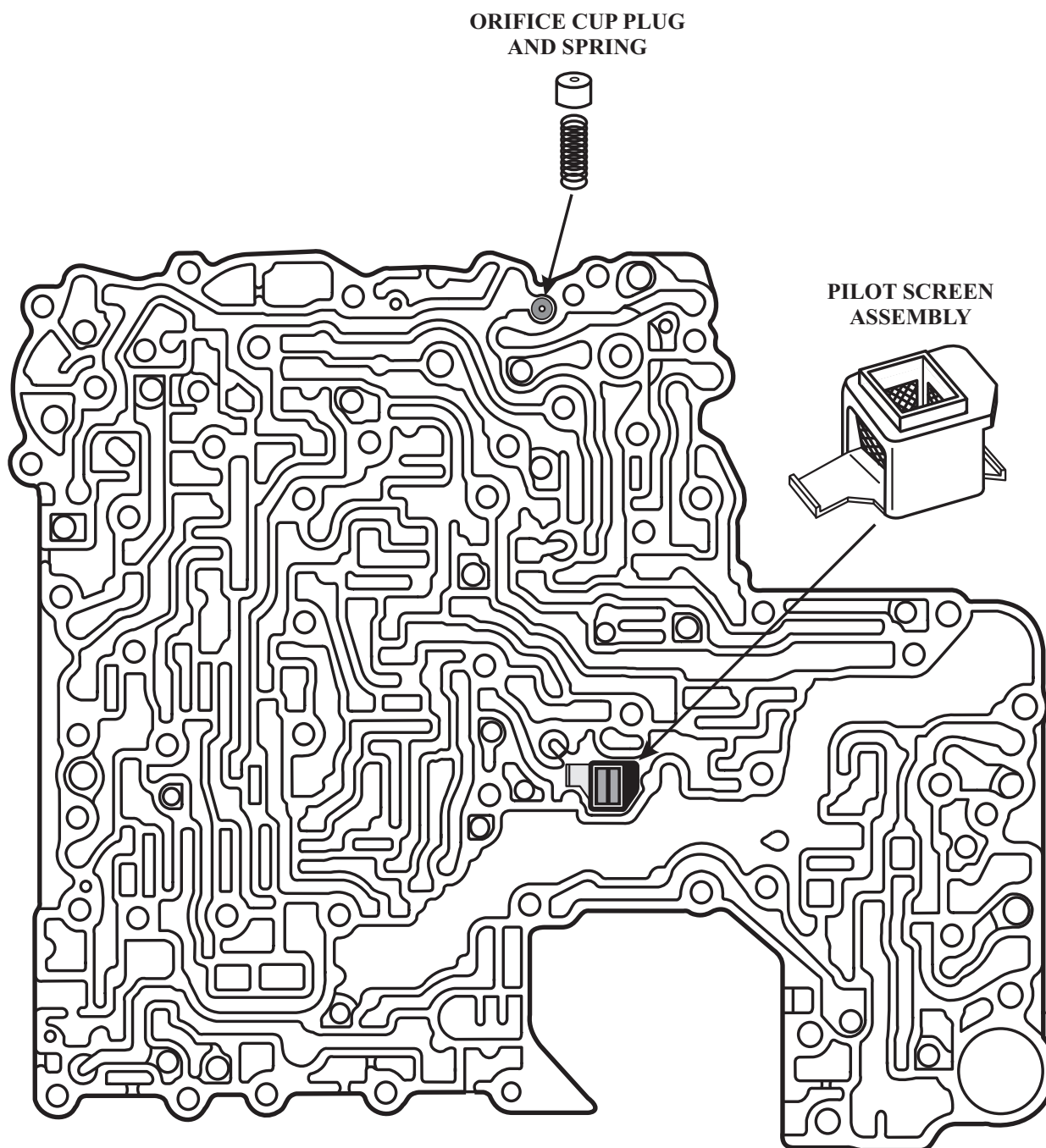
SUBARU 4-SPEED ALL MODELS
CHECKBALL LOCATIONS

MAIN VALVE BODY
REQUIRES NINE CHECKBALLS

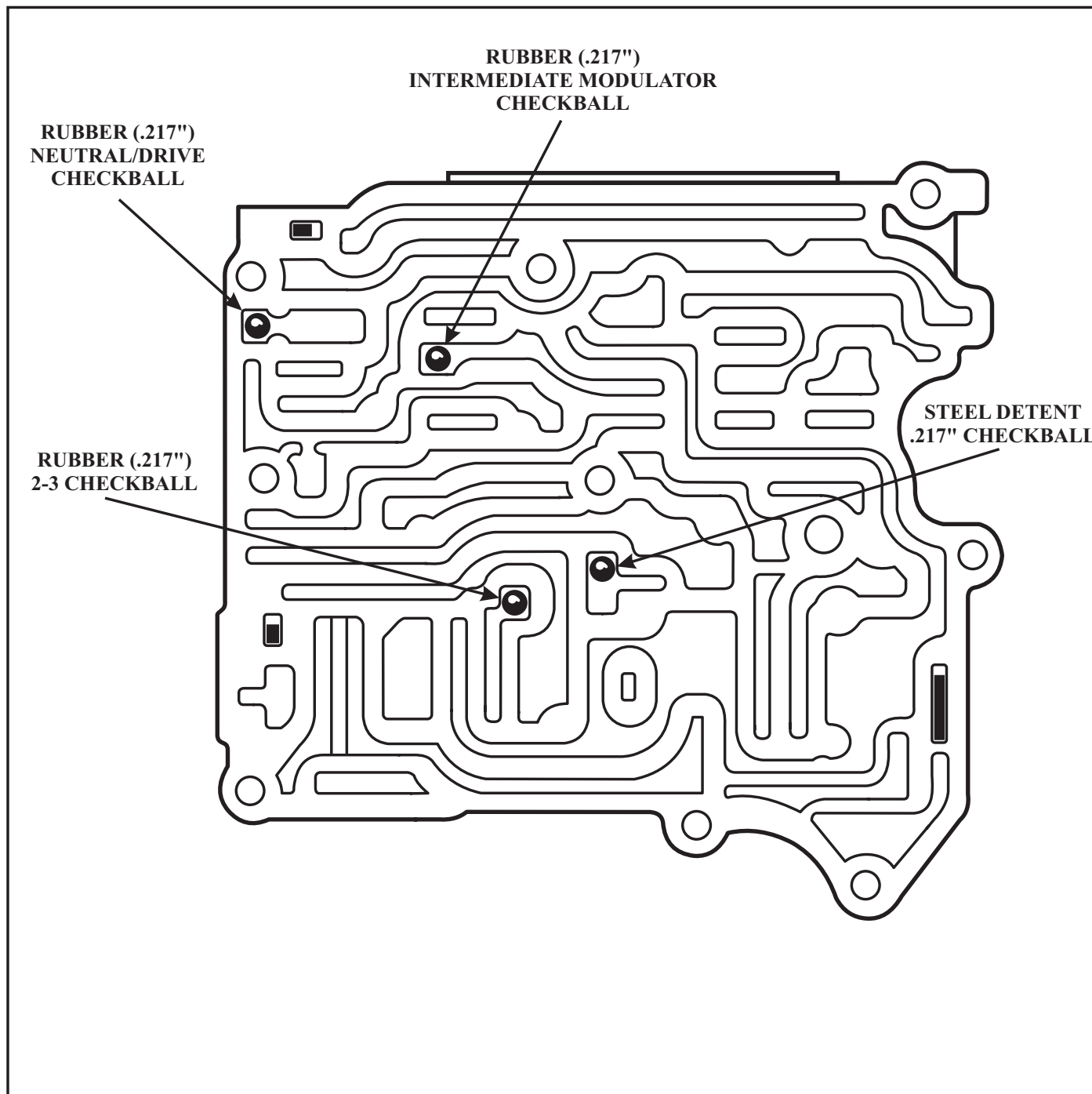


SUBARU 4-SPEED ALL MODELS SCREEN AND ORIFICE LOCATIONS

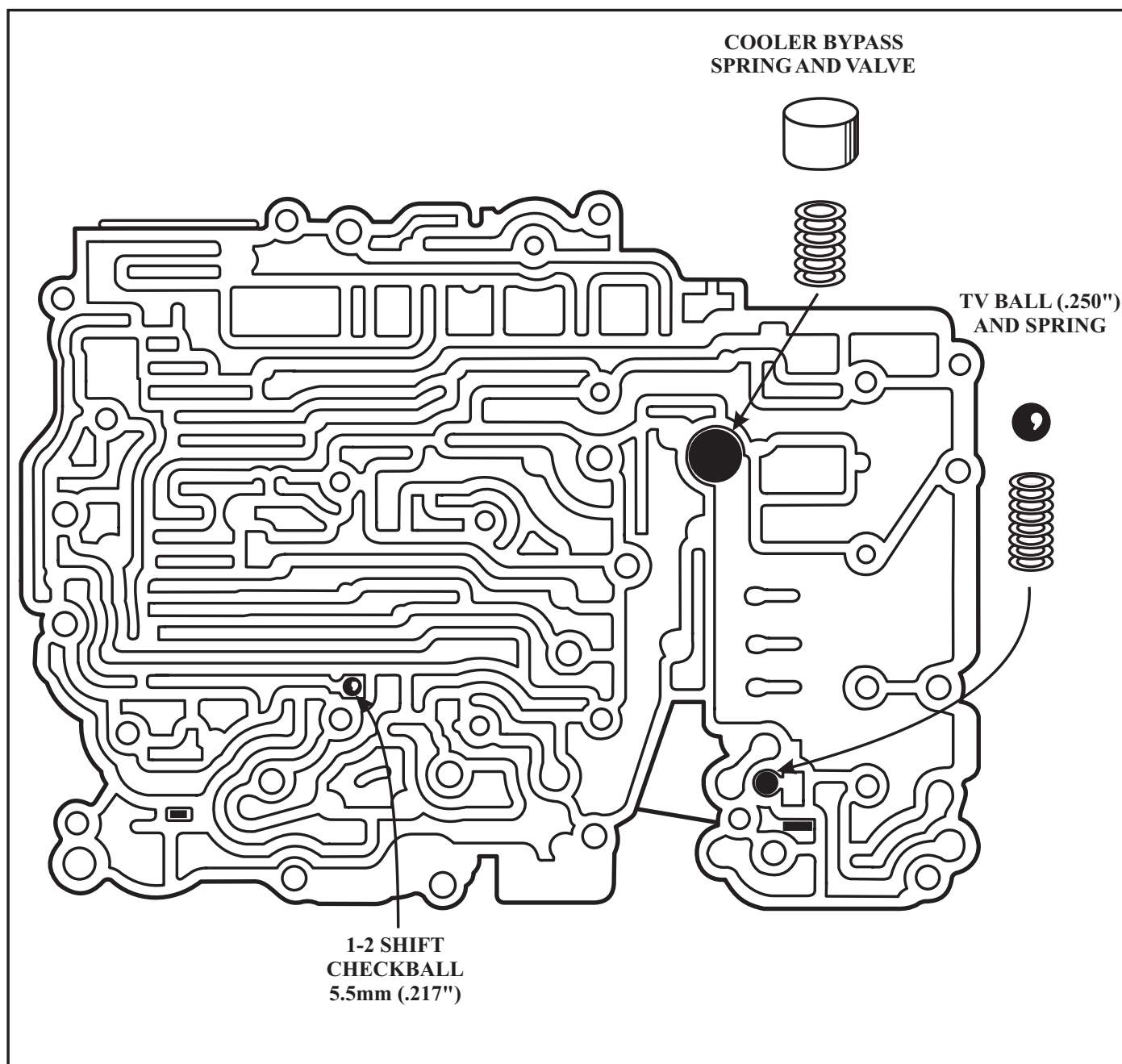
LOWER VALVE BODY



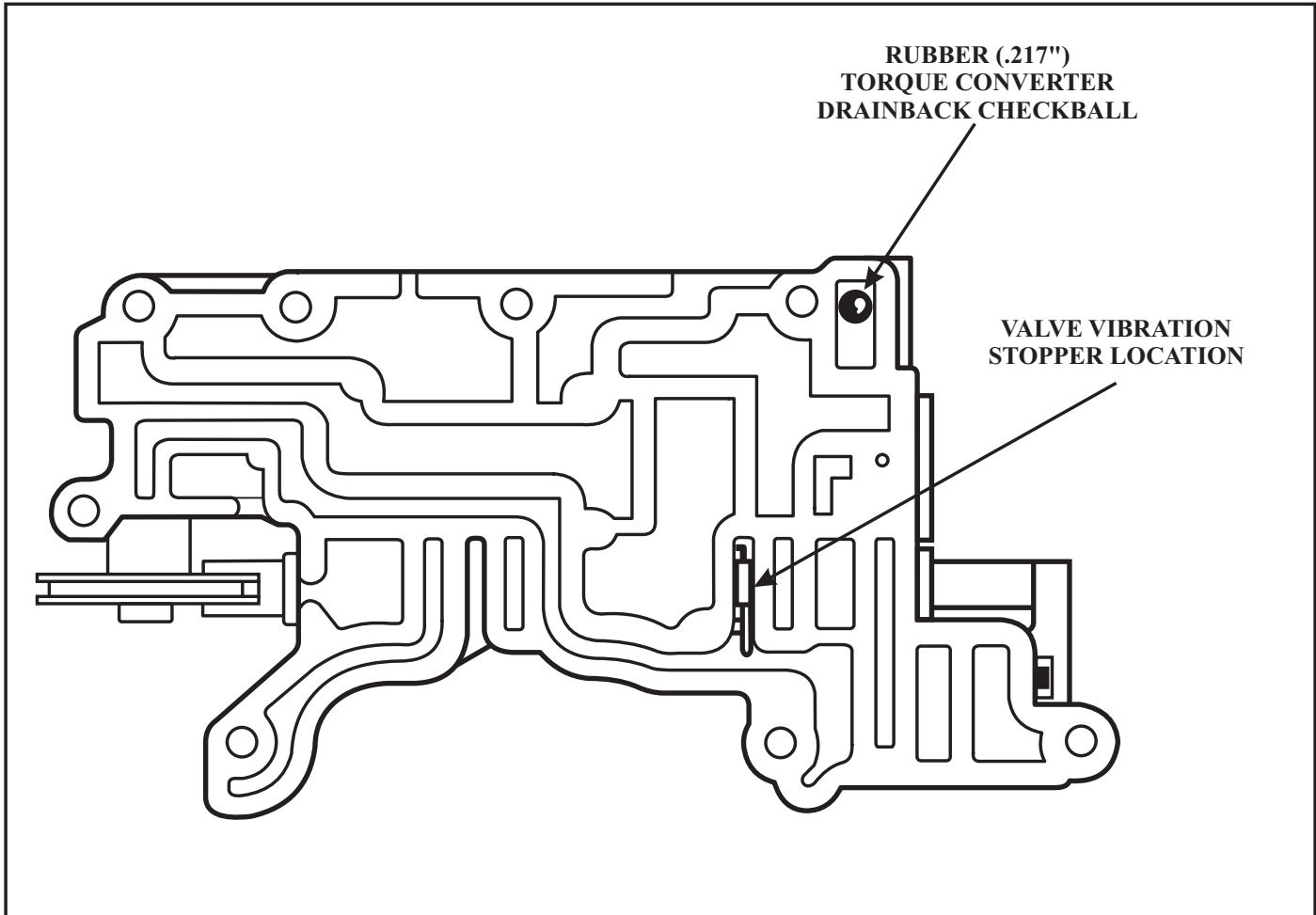
TOYOTA A40, A41, A43 "UPPER" VALVE BODY CHECKBALL LOCATION



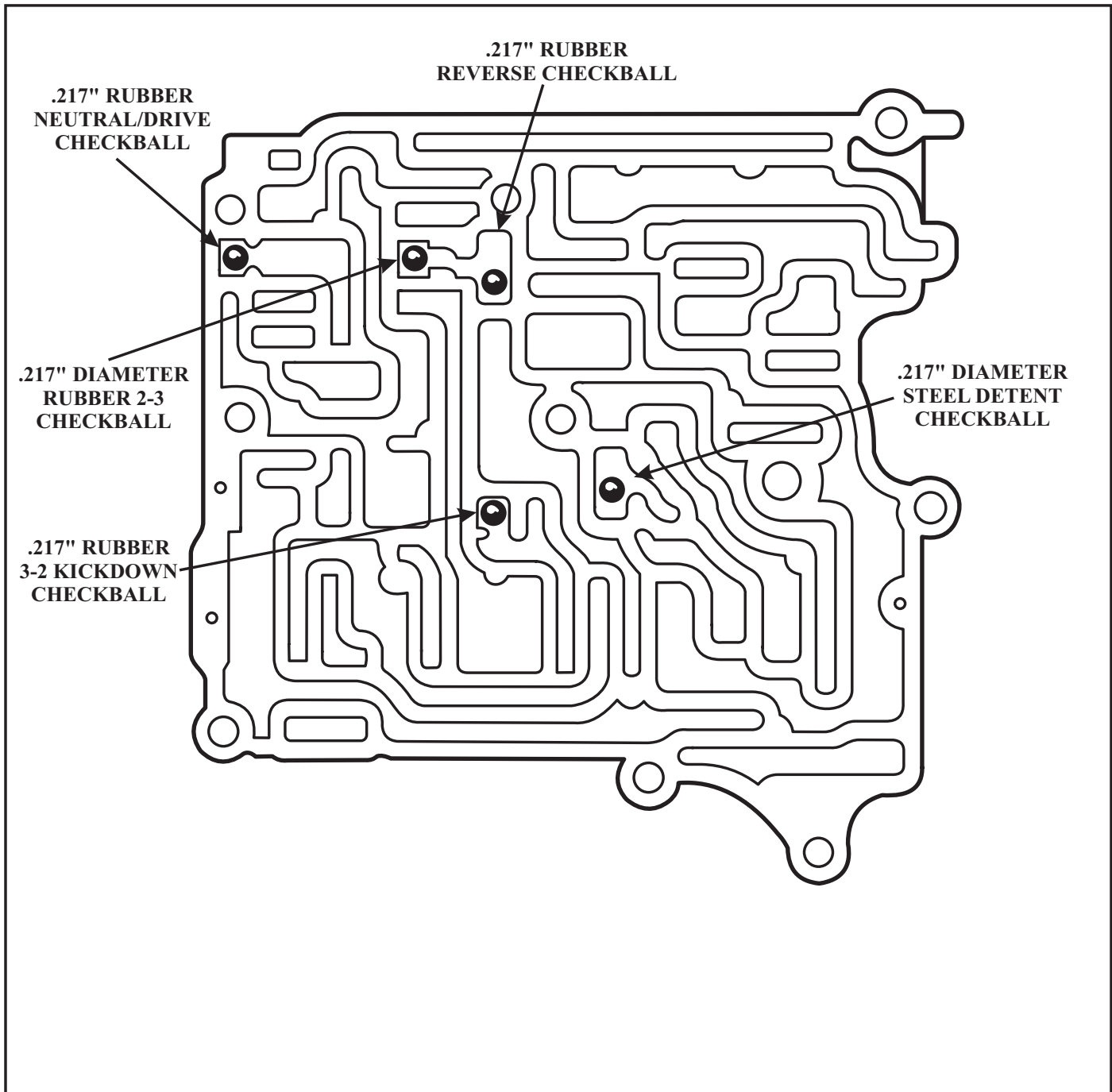
TOYOTA A40, A41, A43 'LOWER' VALVE BODY CHECKBALL AND VALVE LOCATIONS



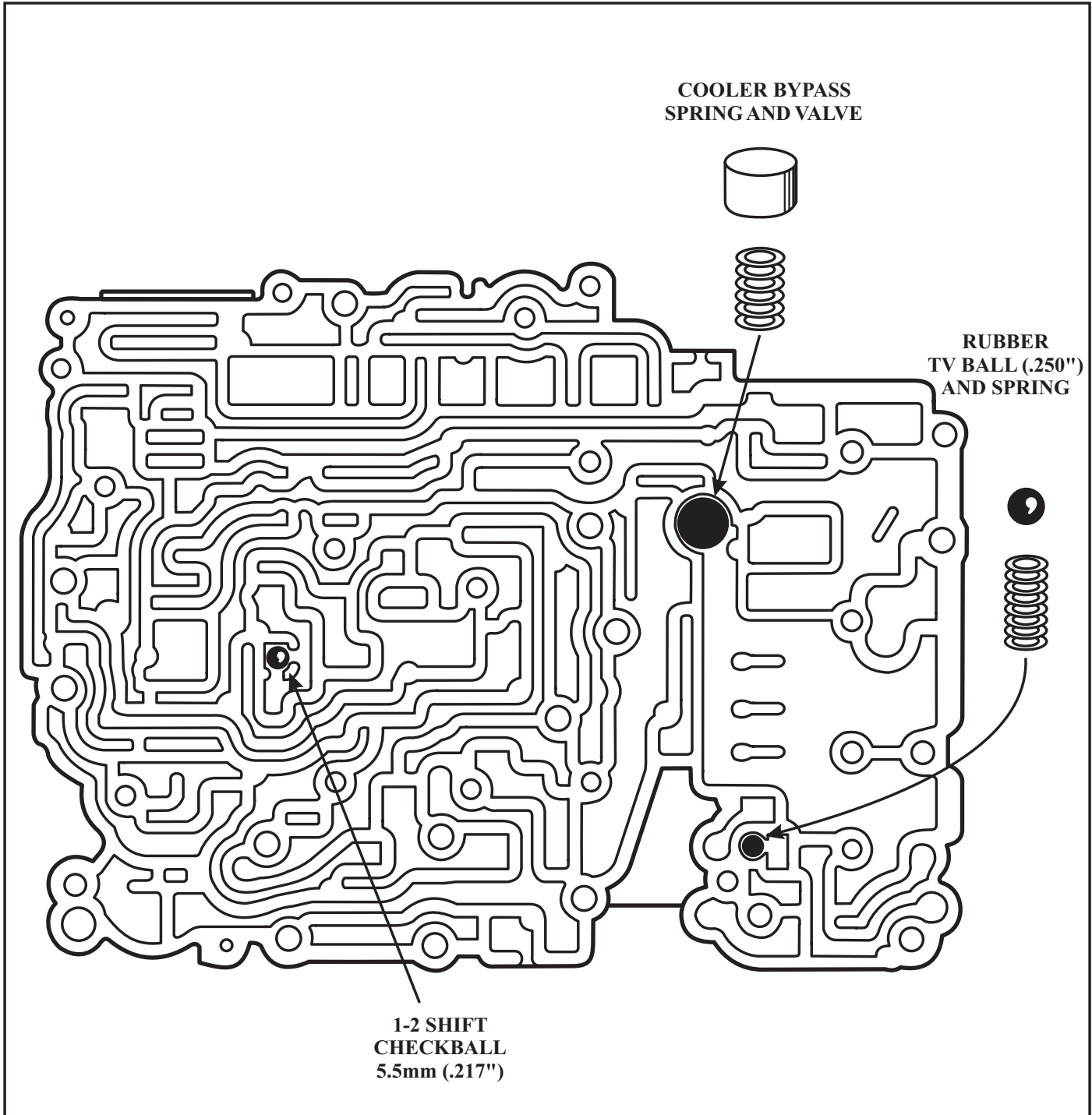
**TOYOTA A40, A41, A43 THROTTLE VALVE BODY
CHECKBALL LOCATION**



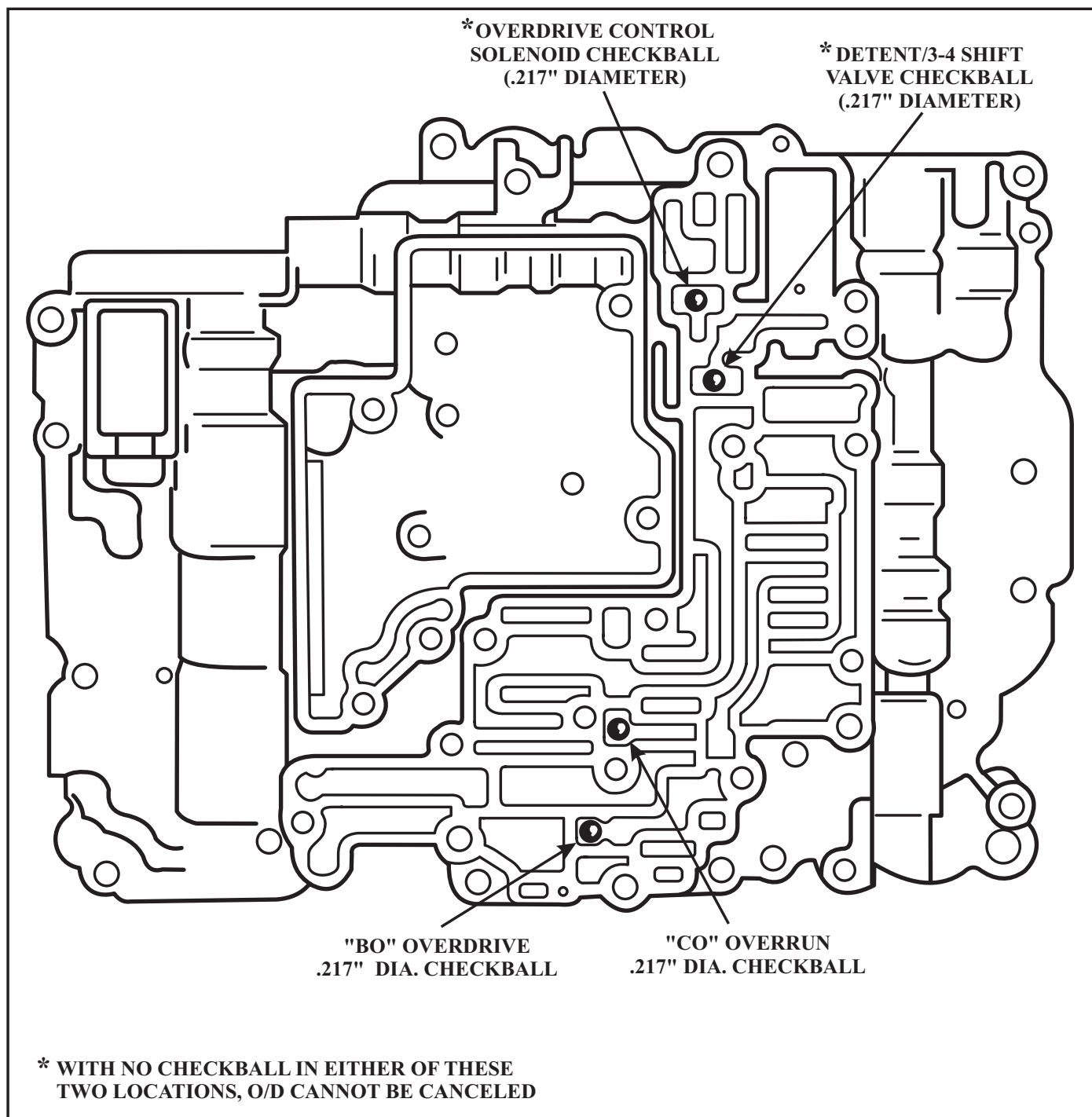
TOYOTA A40D "UPPER" VALVE BODY CHECKBALL LOCATION



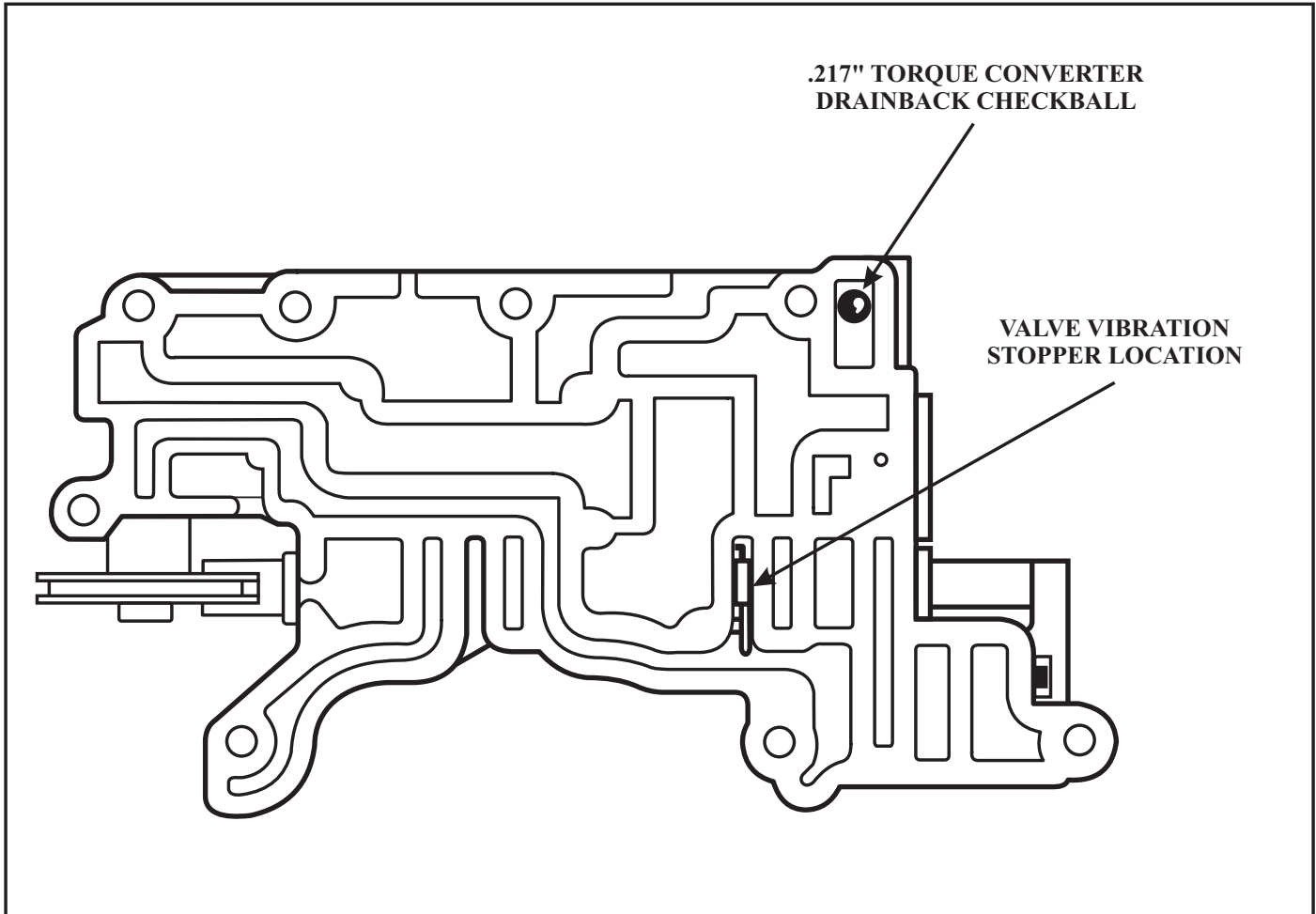
TOYOTA A40D "LOWER" VALVE BODY "CASE SIDE" CHECKBALL LOCATION



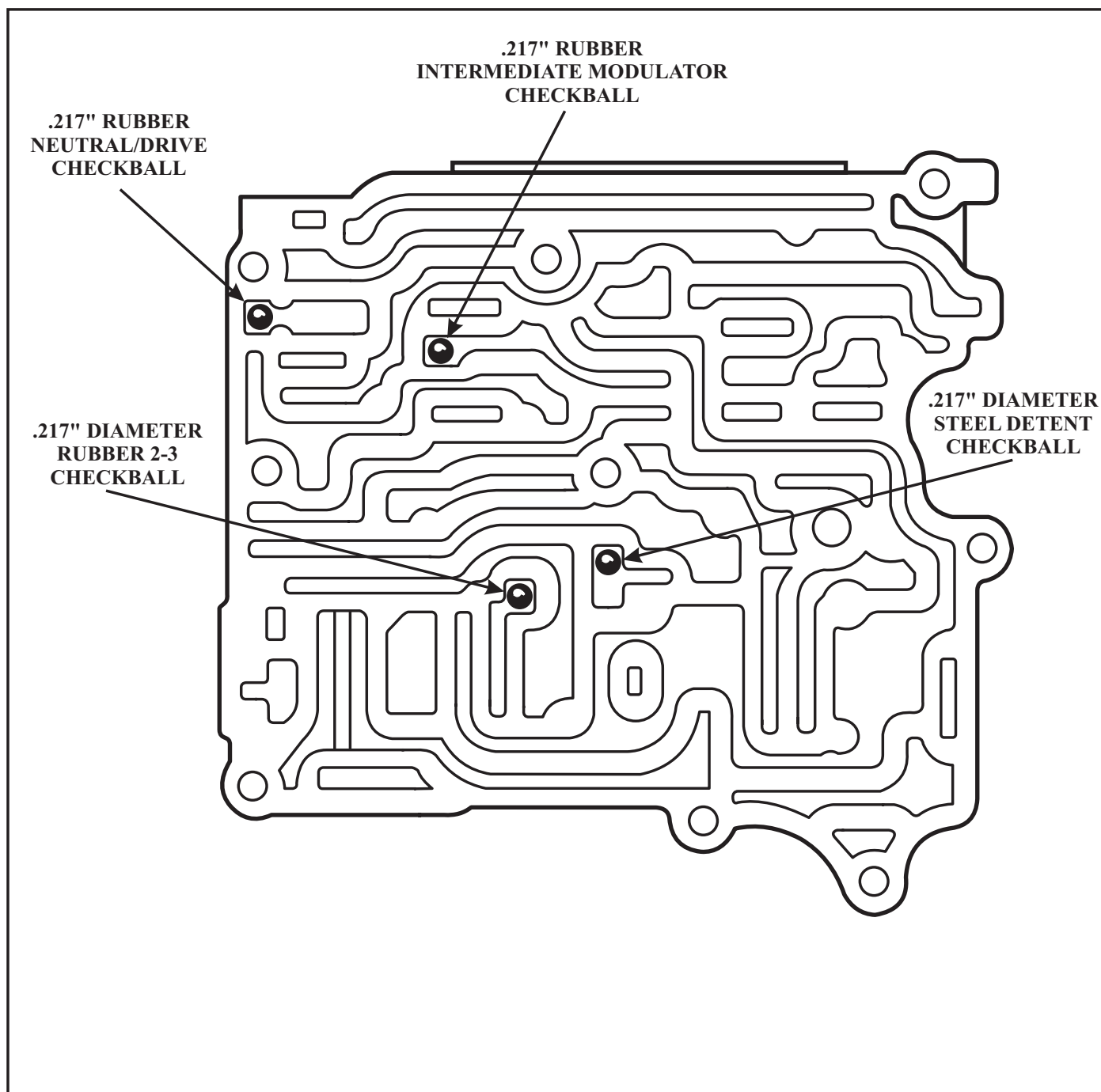
TOYOTA A40D "LOWER" VALVE BODY "FILTER SIDE" CHECKBALL LOCATION



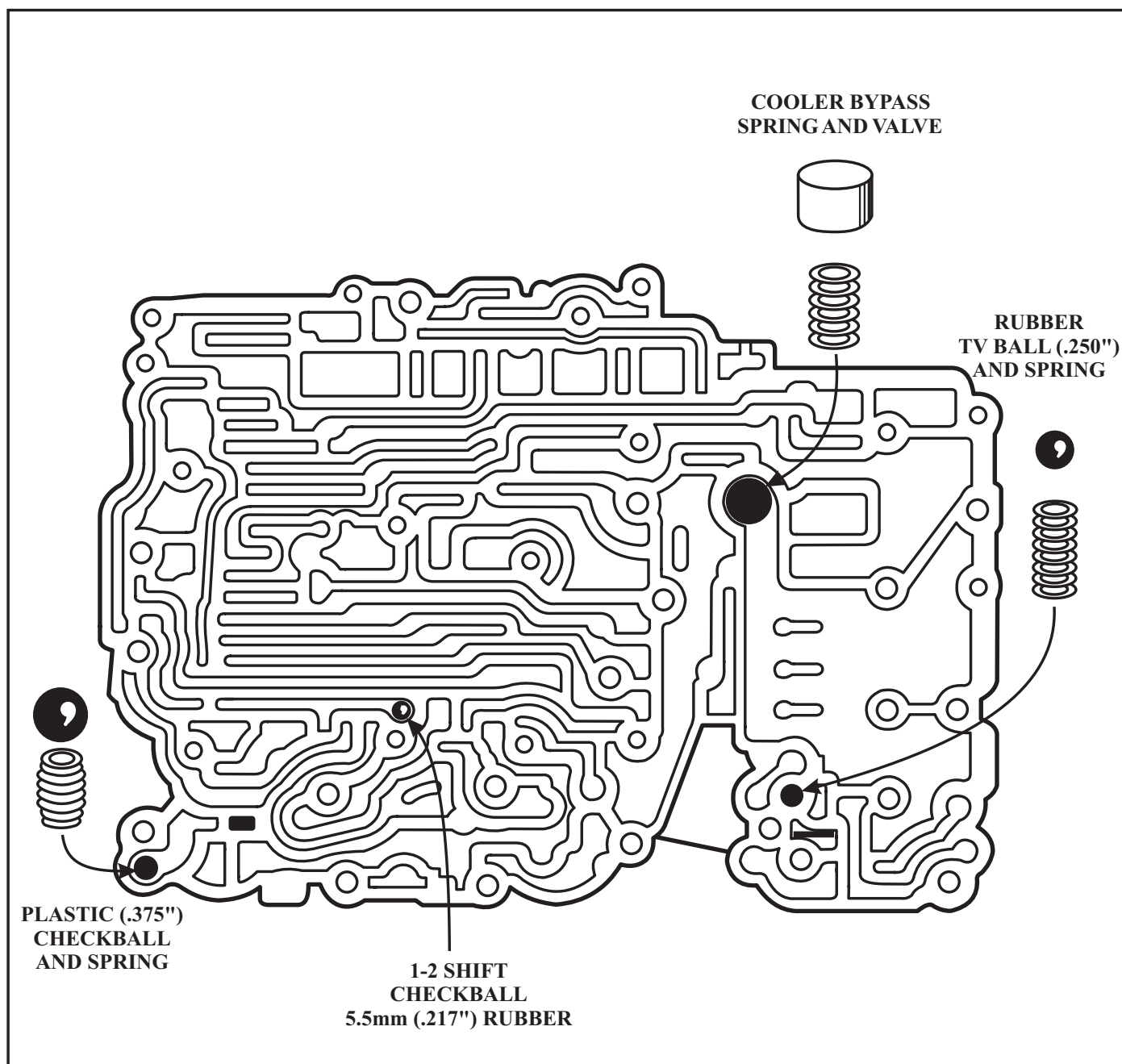
TOYOTA A40D THROTTLE VALVE BODY
CHECKBALL LOCATION



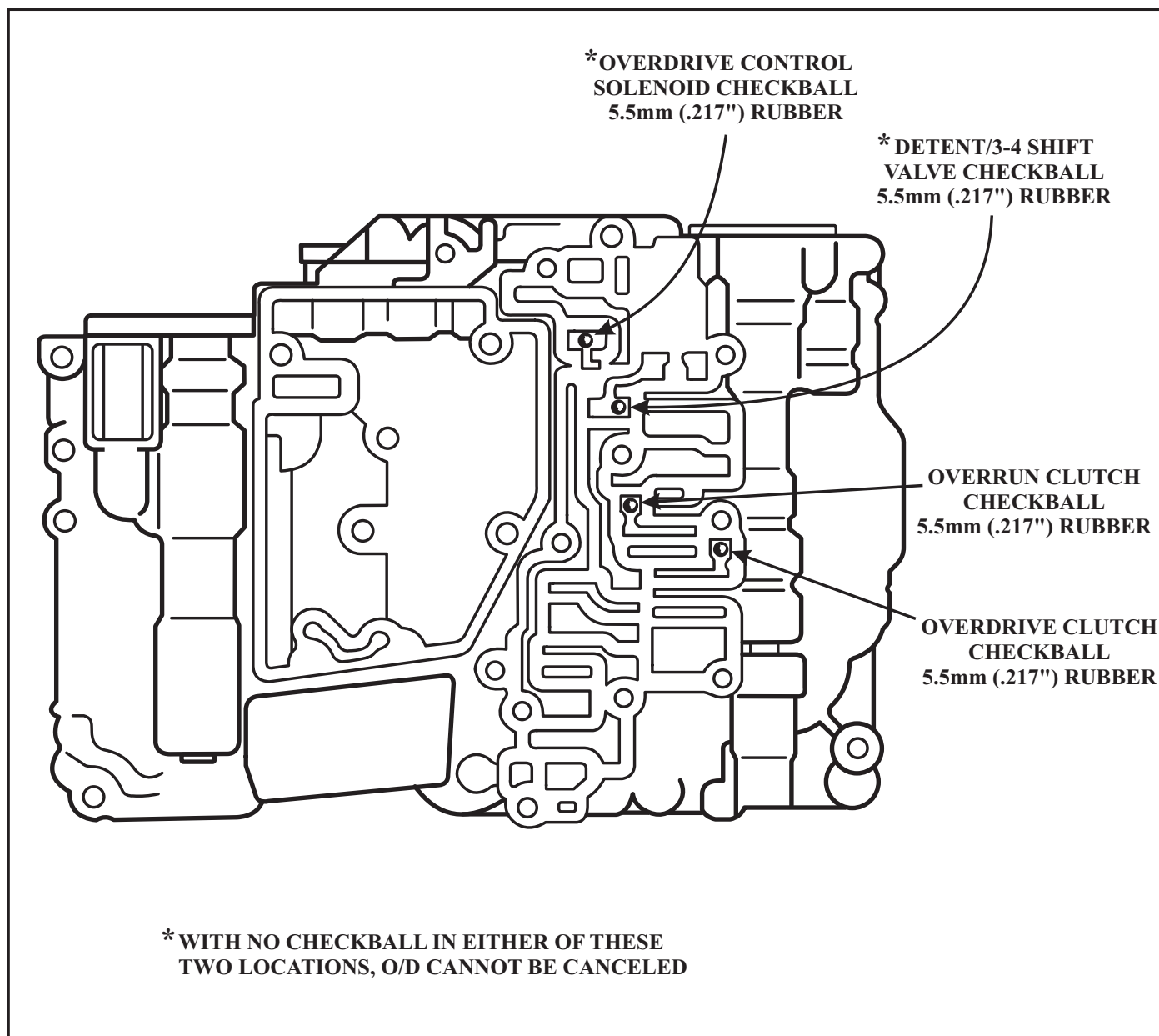
TOYOTA A42D, A43D, A44D "UPPER" VALVE BODY CHECKBALL LOCATION



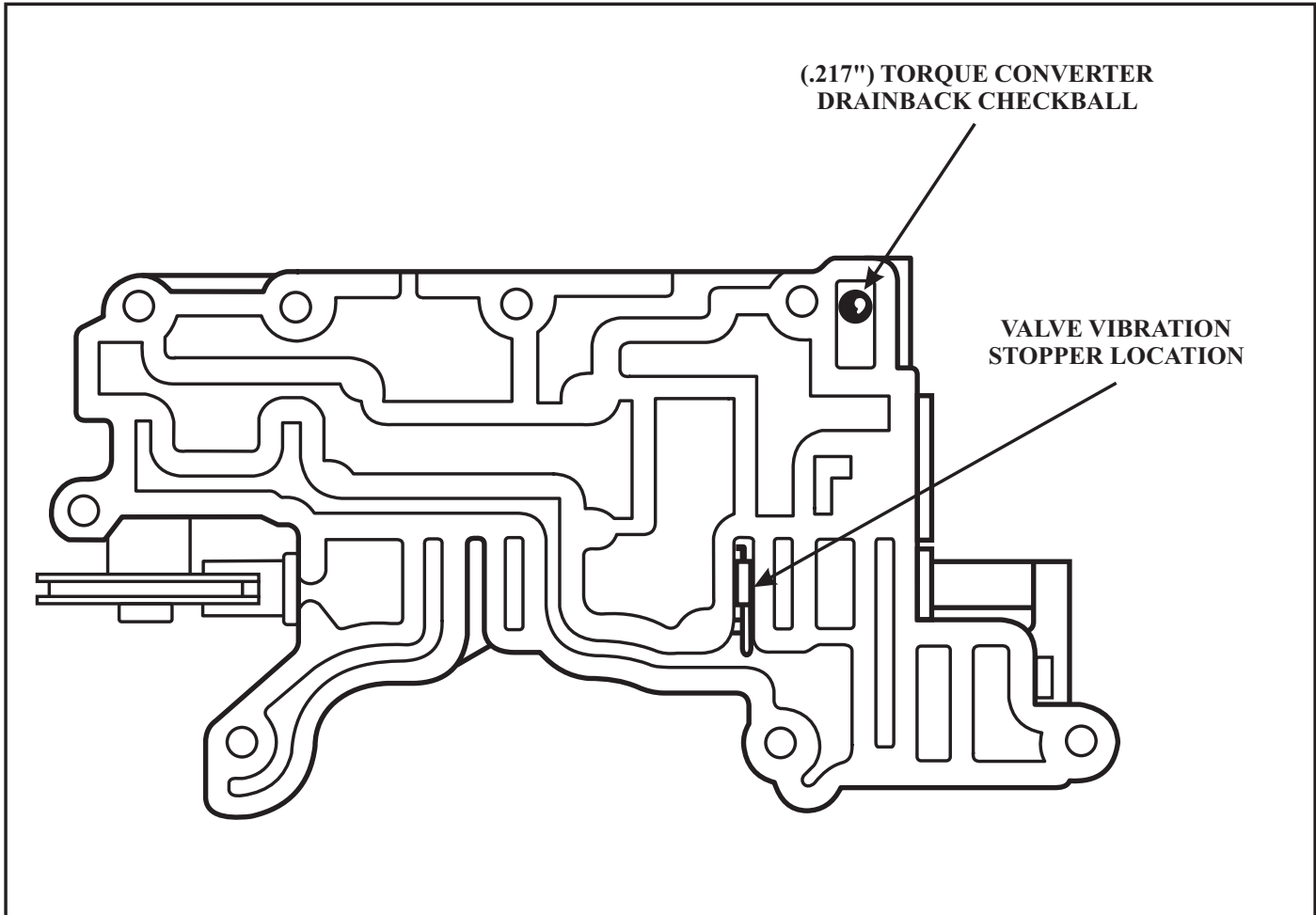
TOYOTA A42D, A43D, A44D "LOWER" VALVE BODY "CASE SIDE" CHECKBALL LOCATION



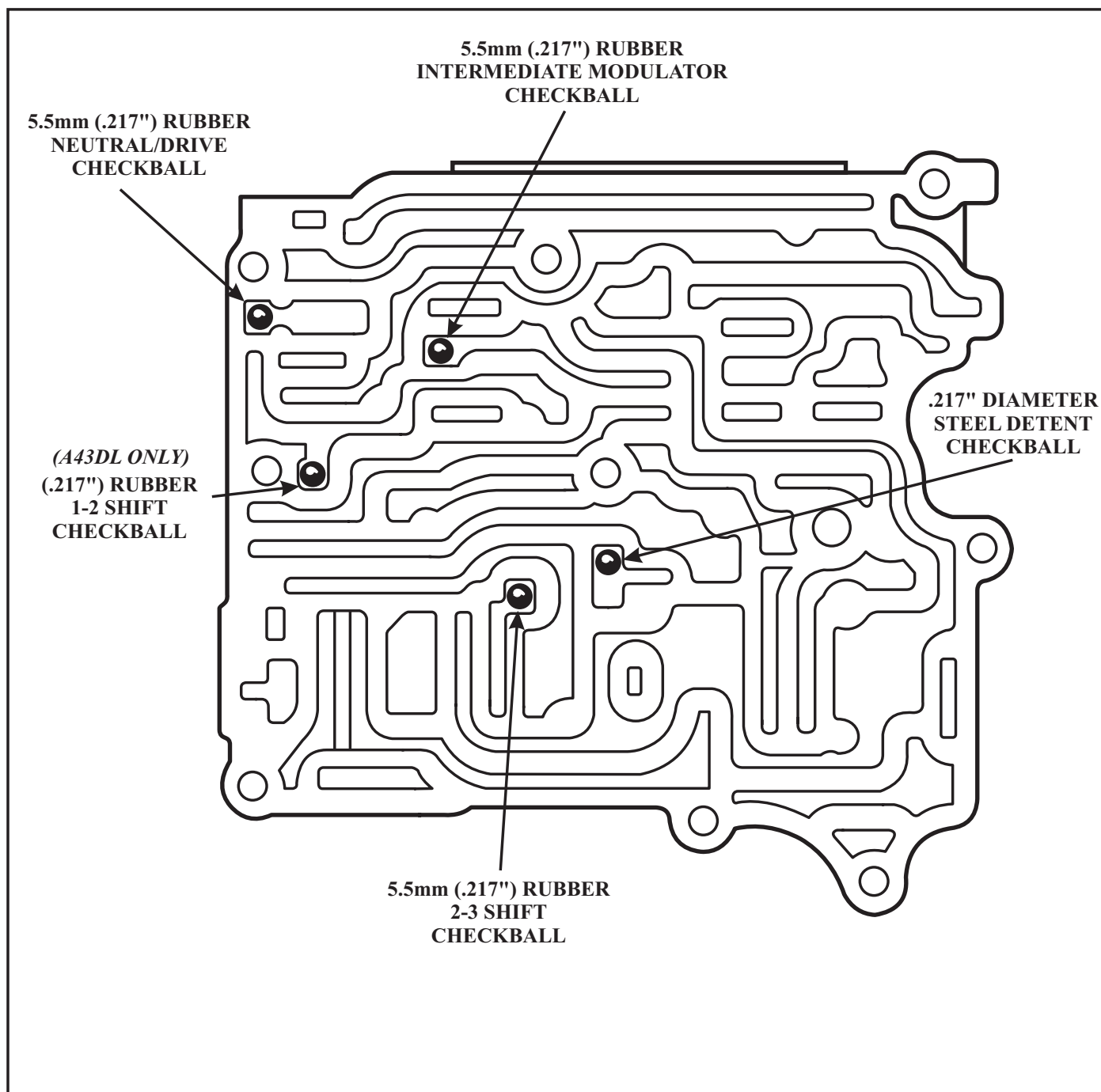
TOYOTA A42D, A43D, A44D "LOWER" VALVE BODY "FILTER SIDE" CHECKBALL LOCATION



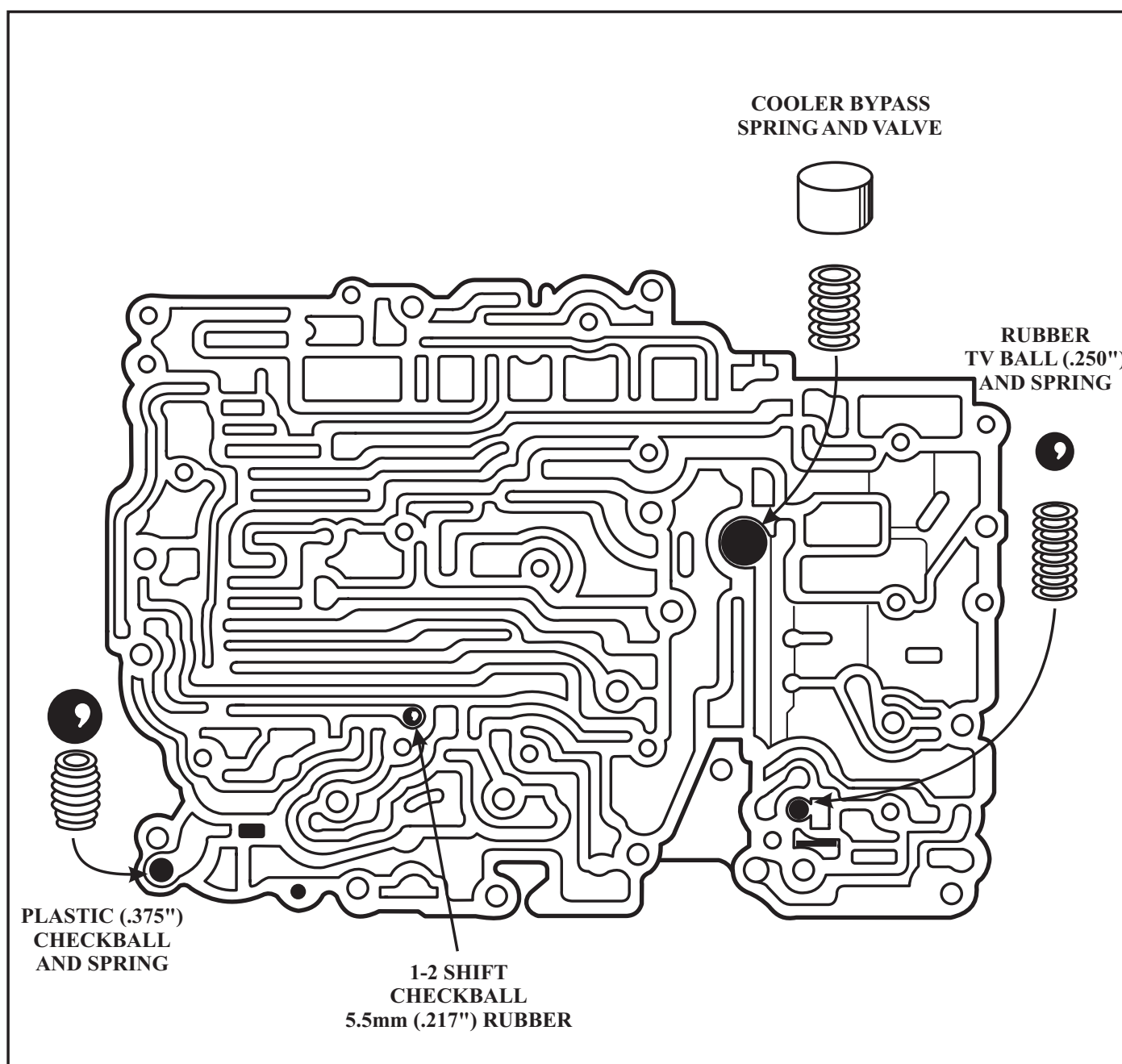
**TOYOTA A42D, A43D, A44D THROTTLE VALVE BODY
CHECKBALL LOCATION**



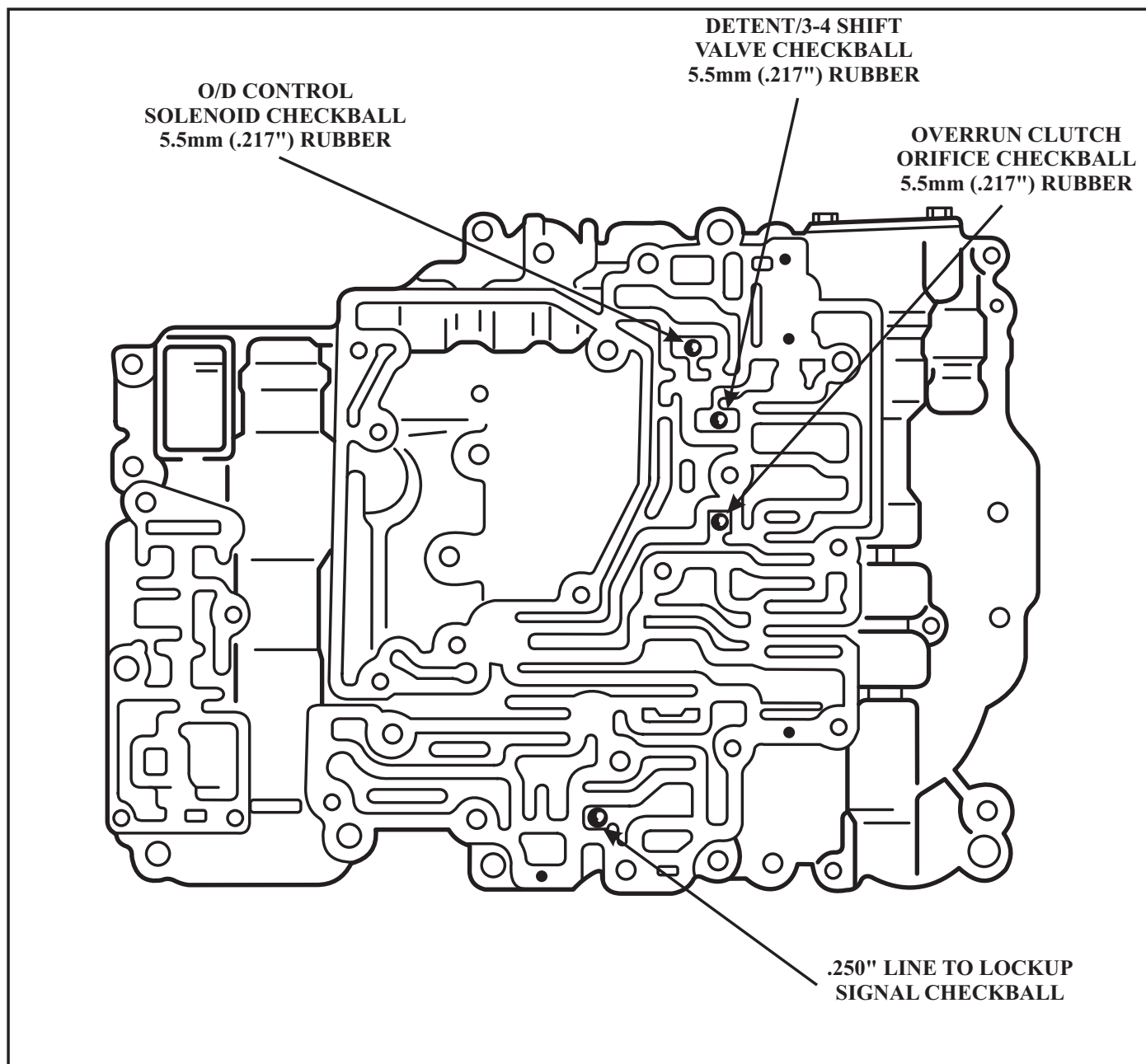
TOYOTA A43DL, A44DL, A45DL "UPPER" VALVE BODY CHECKBALL LOCATION



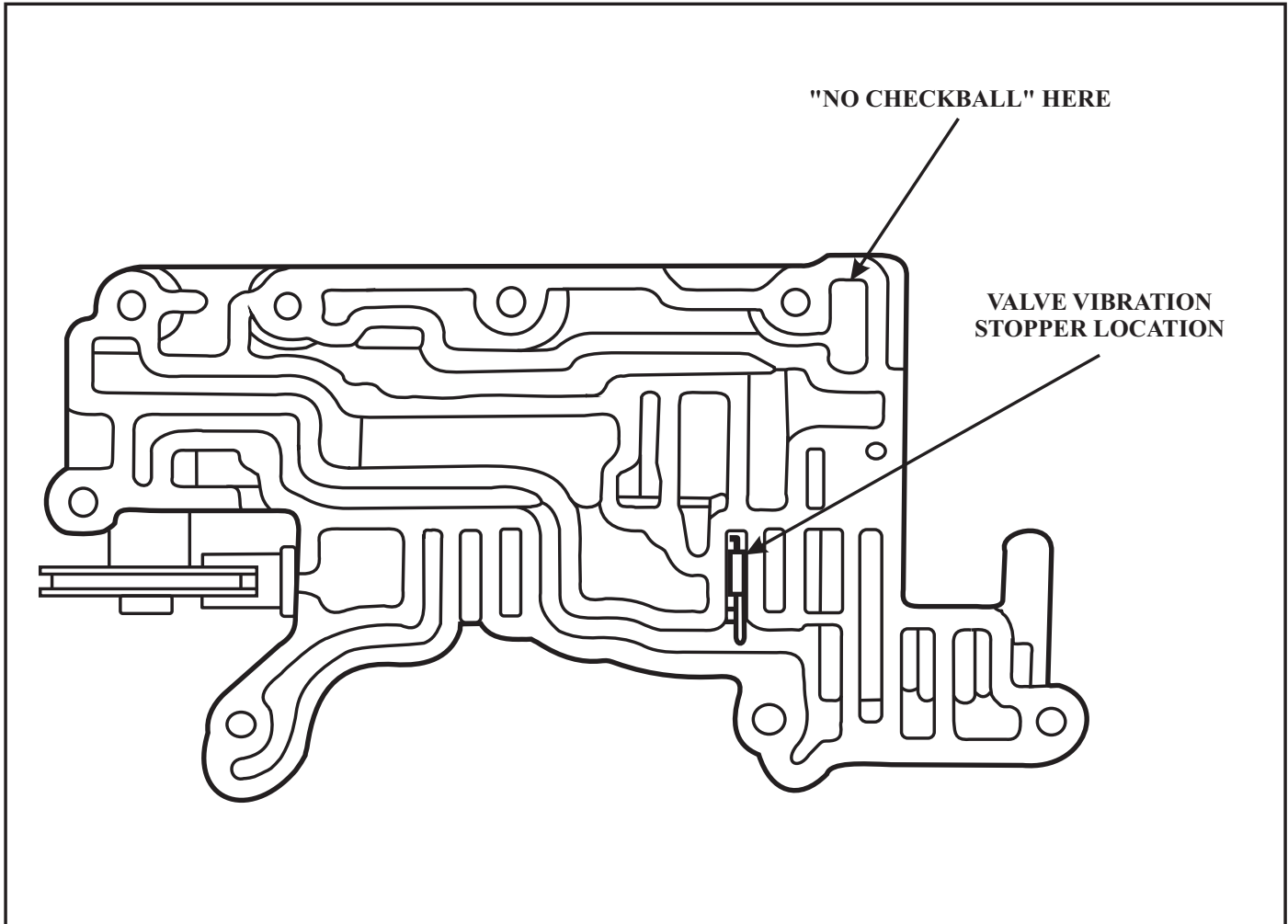
TOYOTA A43DL, A44DL, A45DL "LOWER" VALVE BODY "CASE SIDE" CHECKBALL LOCATION



TOYOTA A43DL, A44DL, A45DL "LOWER" VALVE BODY "FILTER SIDE" CHECKBALL LOCATION

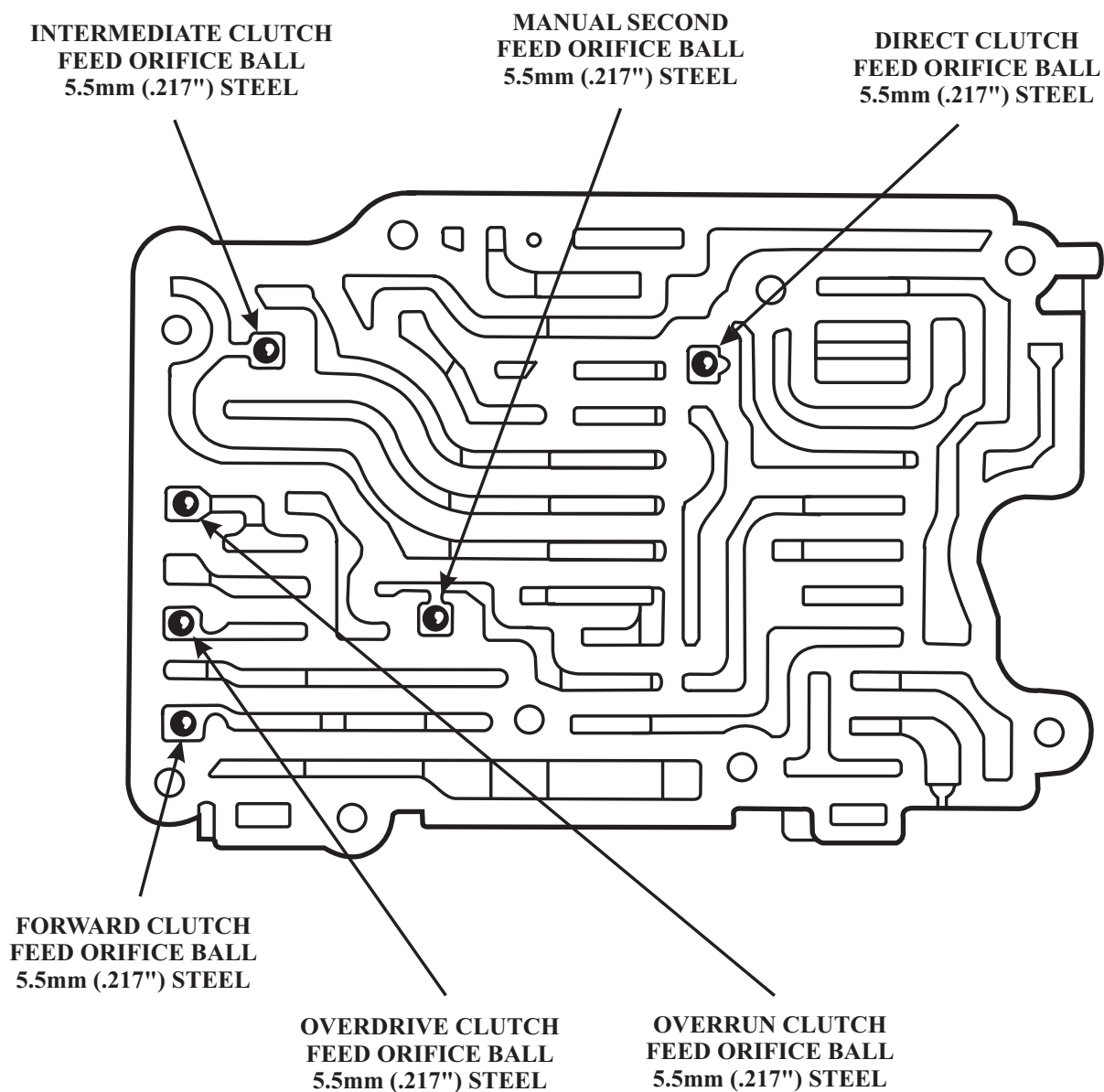


**TOYOTA A43DL, A44DL, A45DL THROTTLE VALVE BODY
CHECKBALL LOCATION**



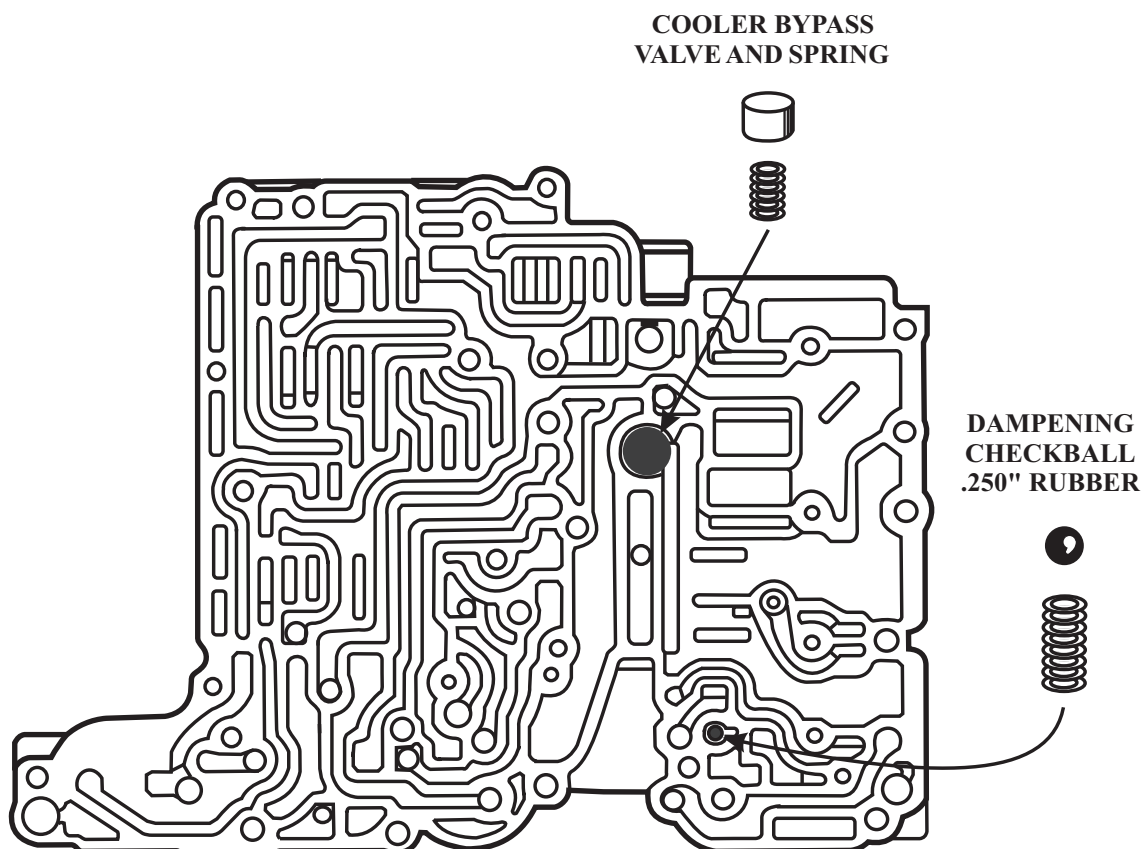
TOYOTA A43DE SERIES TRANSMISSION

"UPPER" VALVE BODY CHECKBALL LOCATIONS



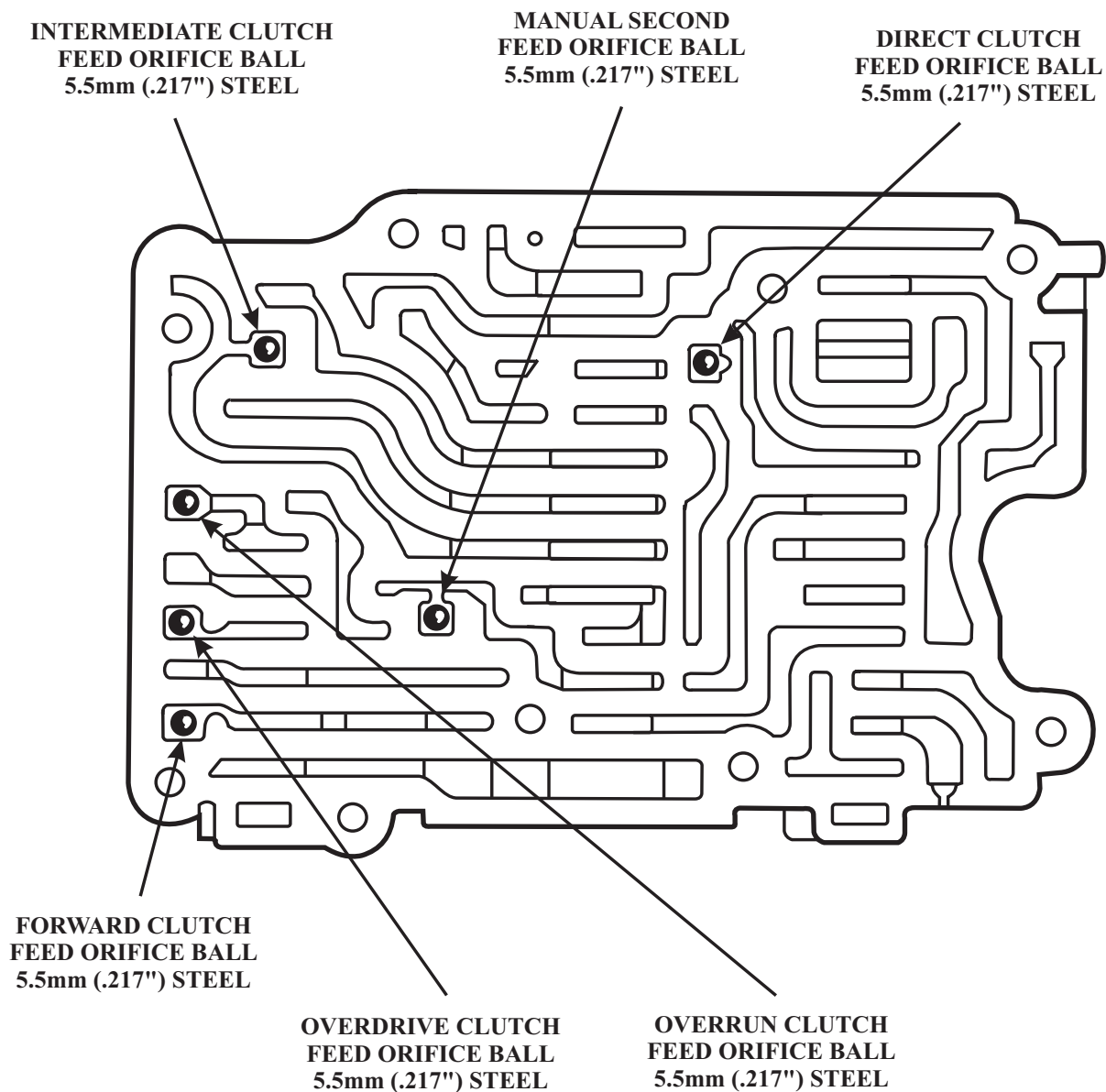
TOYOTA A43DE SERIES TRANSMISSION

"LOWER" VALVE BODY BALL AND VALVE LOCATIONS



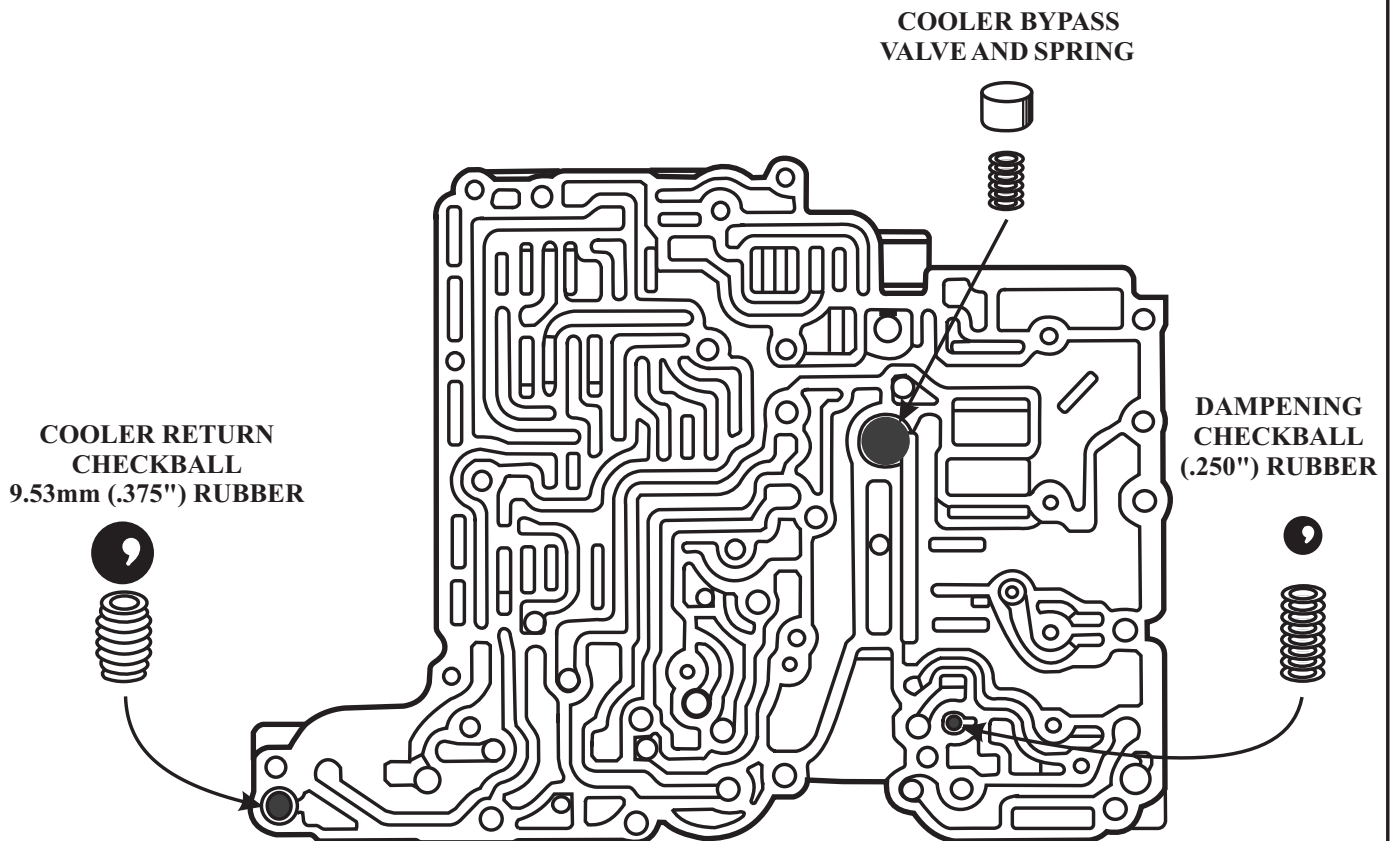
TOYOTA A46DE, A46DF SERIES TRANSMISSION

"UPPER" VALVE BODY CHECKBALL LOCATIONS



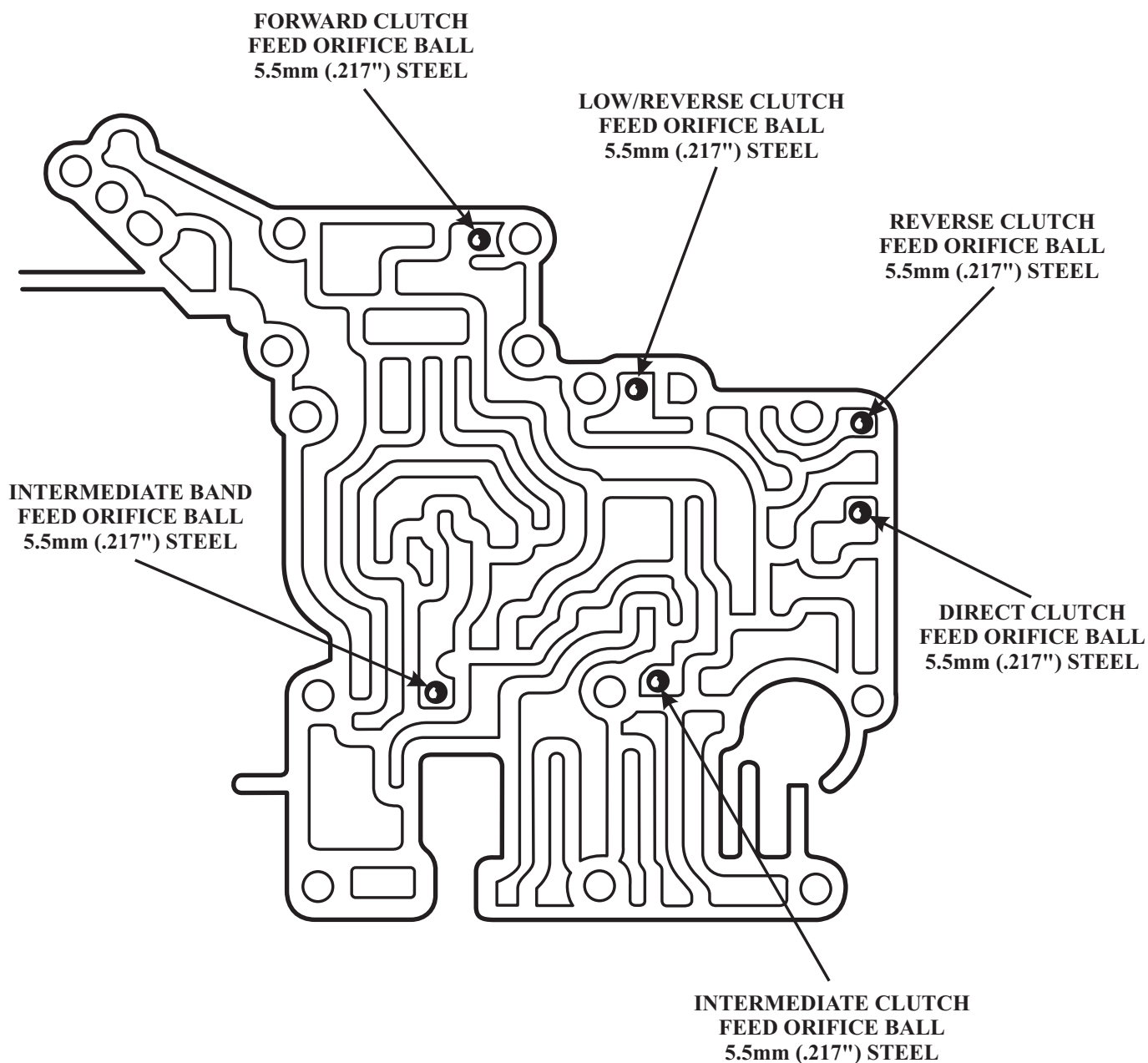
TOYOTA A46DE, A46DF SERIES TRANSMISSION

"LOWER" VALVE BODY BALL AND VALVE LOCATIONS



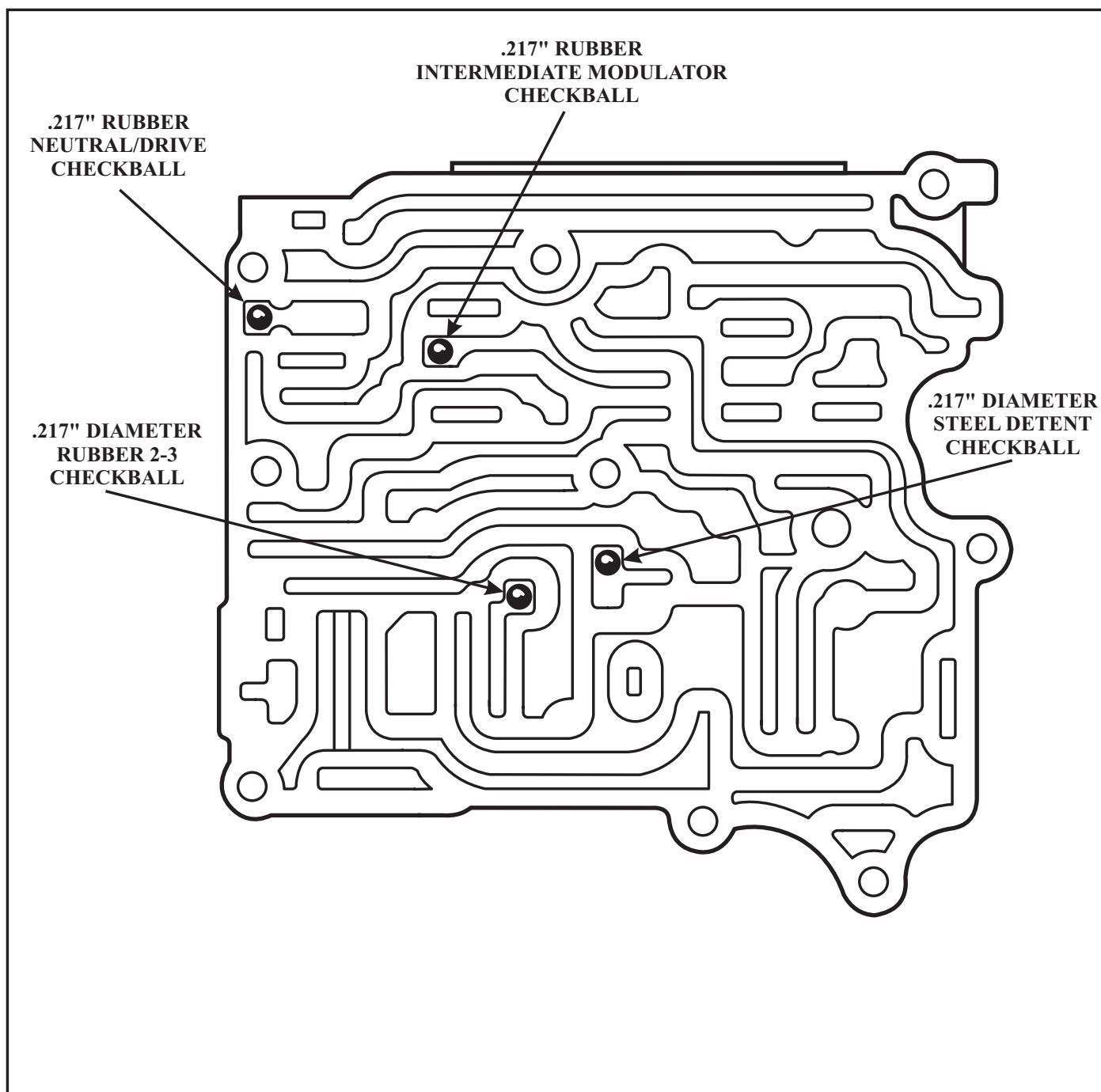
TOYOTA A55, A55F SERIES TRANSMISSIONS 1980-1988 TOYOTA TERCEL

CASE CHECKBALL LOCATIONS

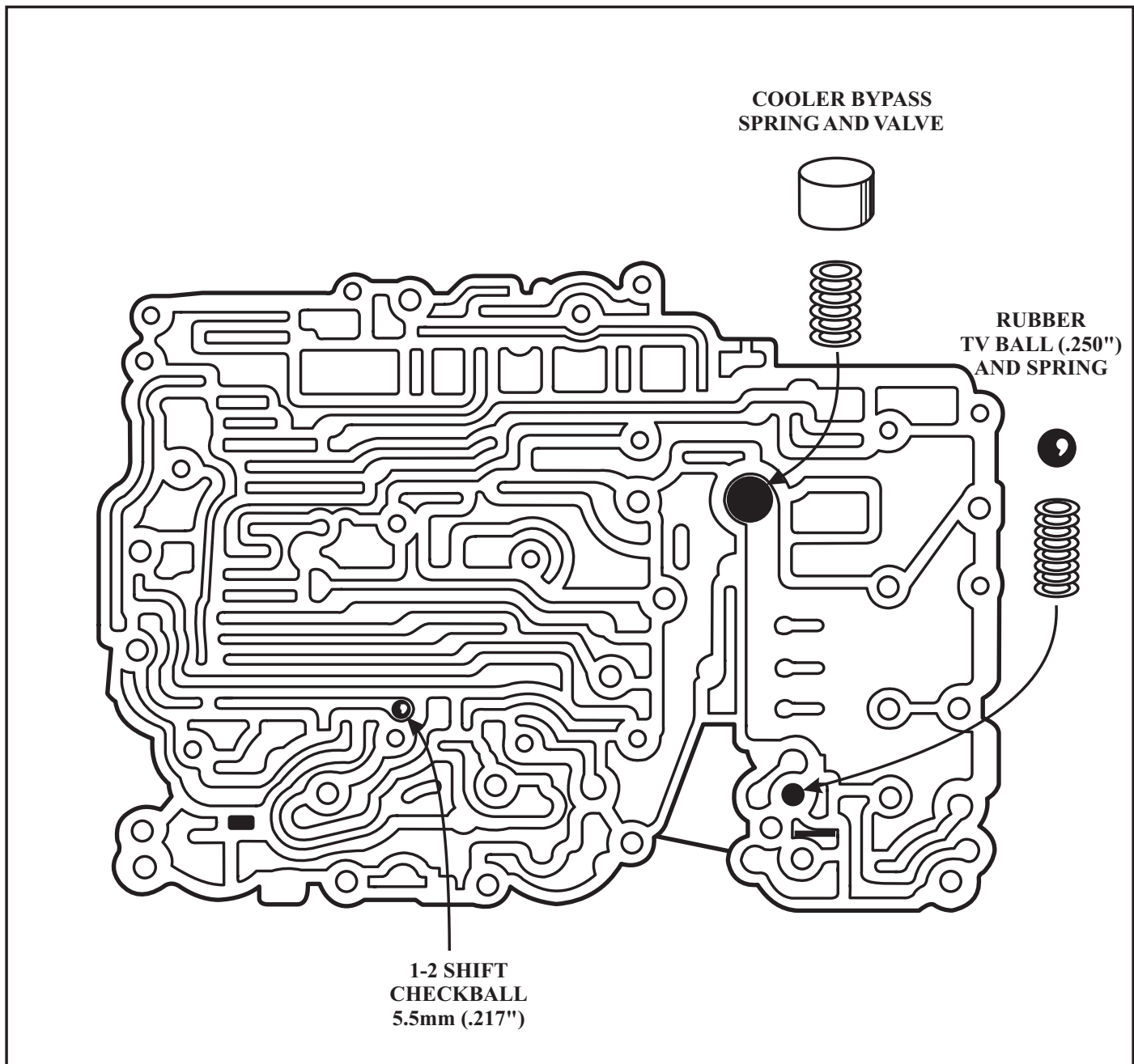


ad

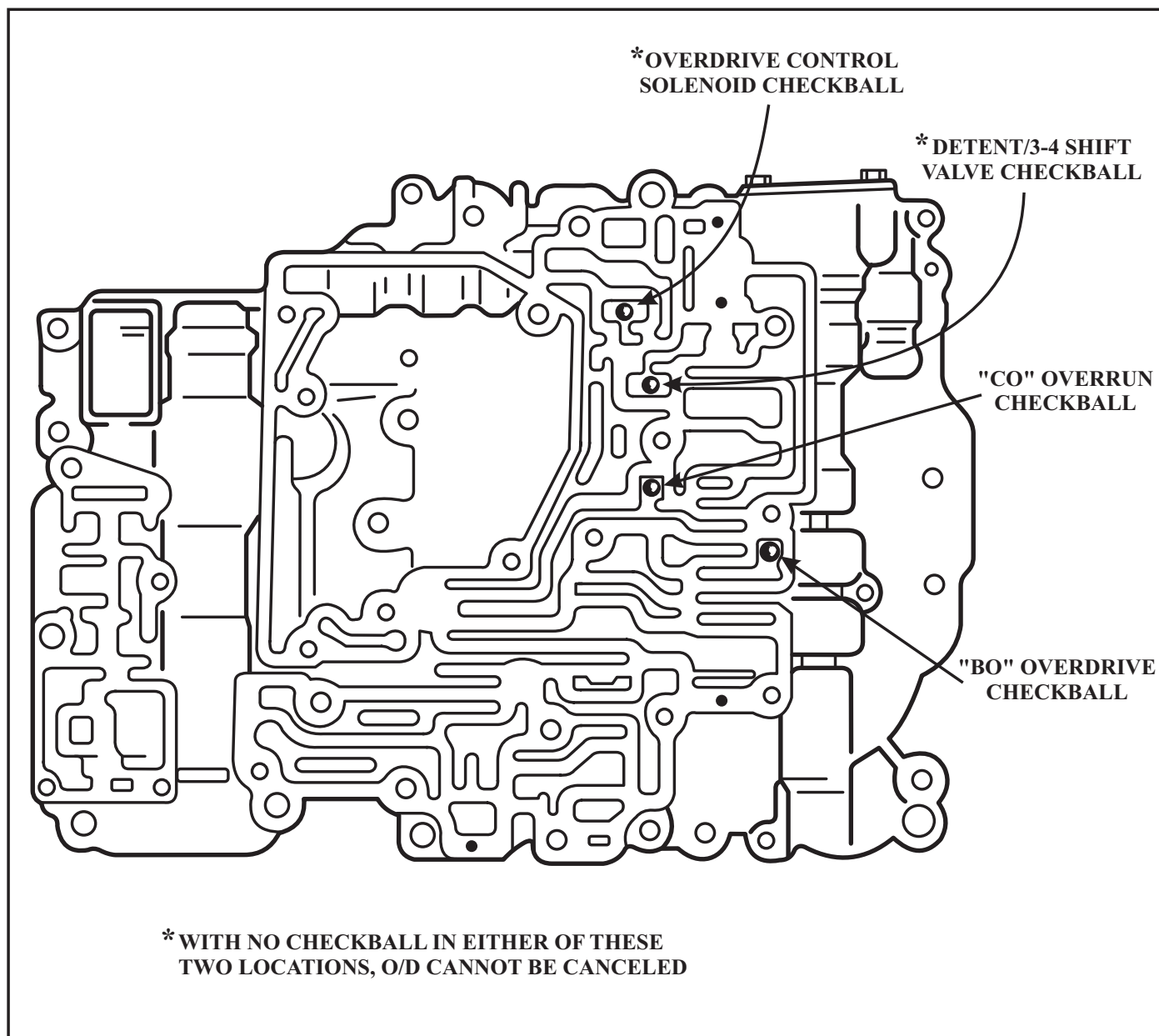
TOYOTA AW55, AW70, AW71 "UPPER" VALVE BODY CHECKBALL LOCATION



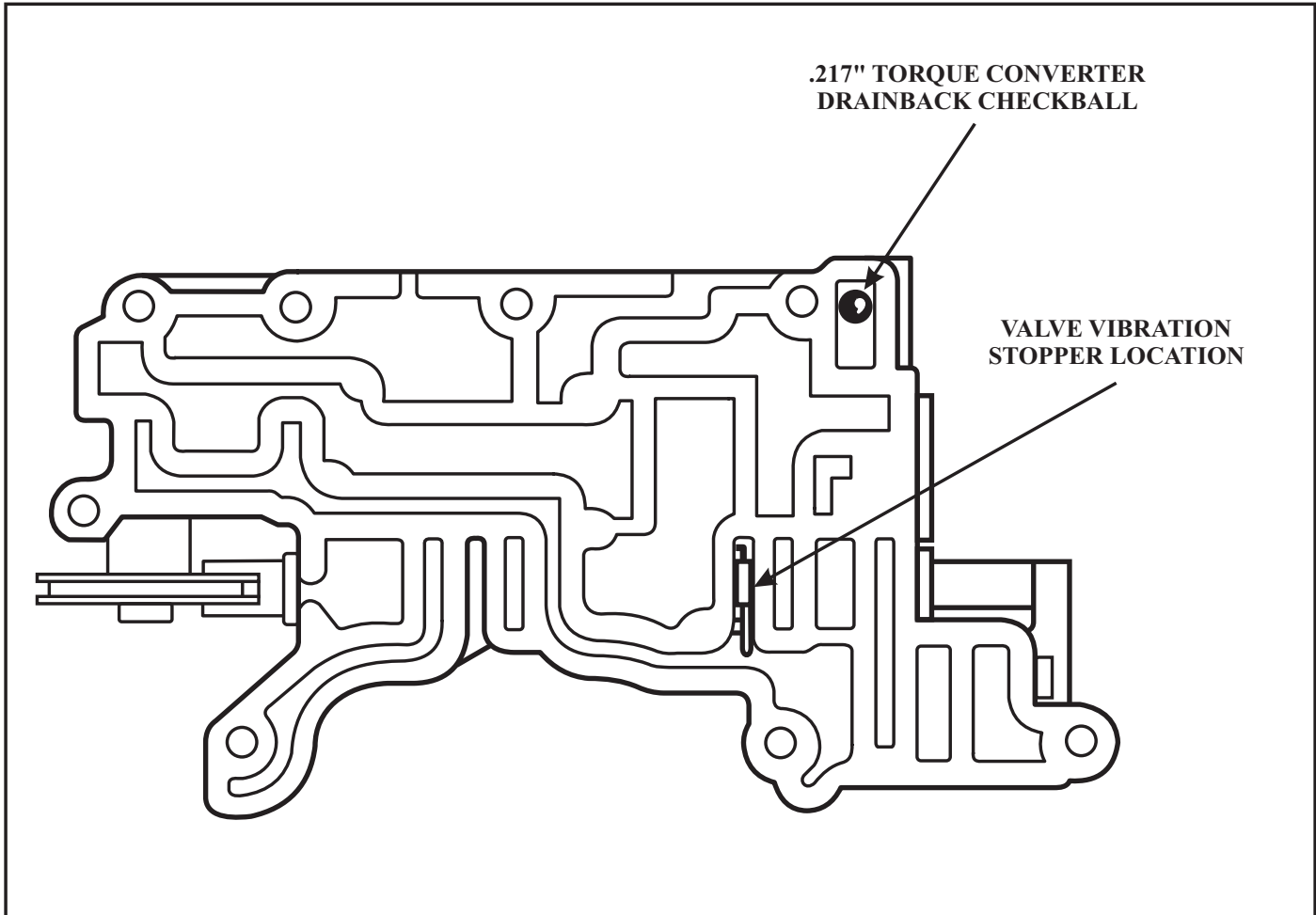
TOYOTA AW55, AW70, AW71 "LOWER" VALVE BODY "CASE SIDE" CHECKBALL LOCATION



TOYOTA AW55, AW70, AW71 "LOWER" VALVE BODY "FILTER SIDE" CHECKBALL LOCATION

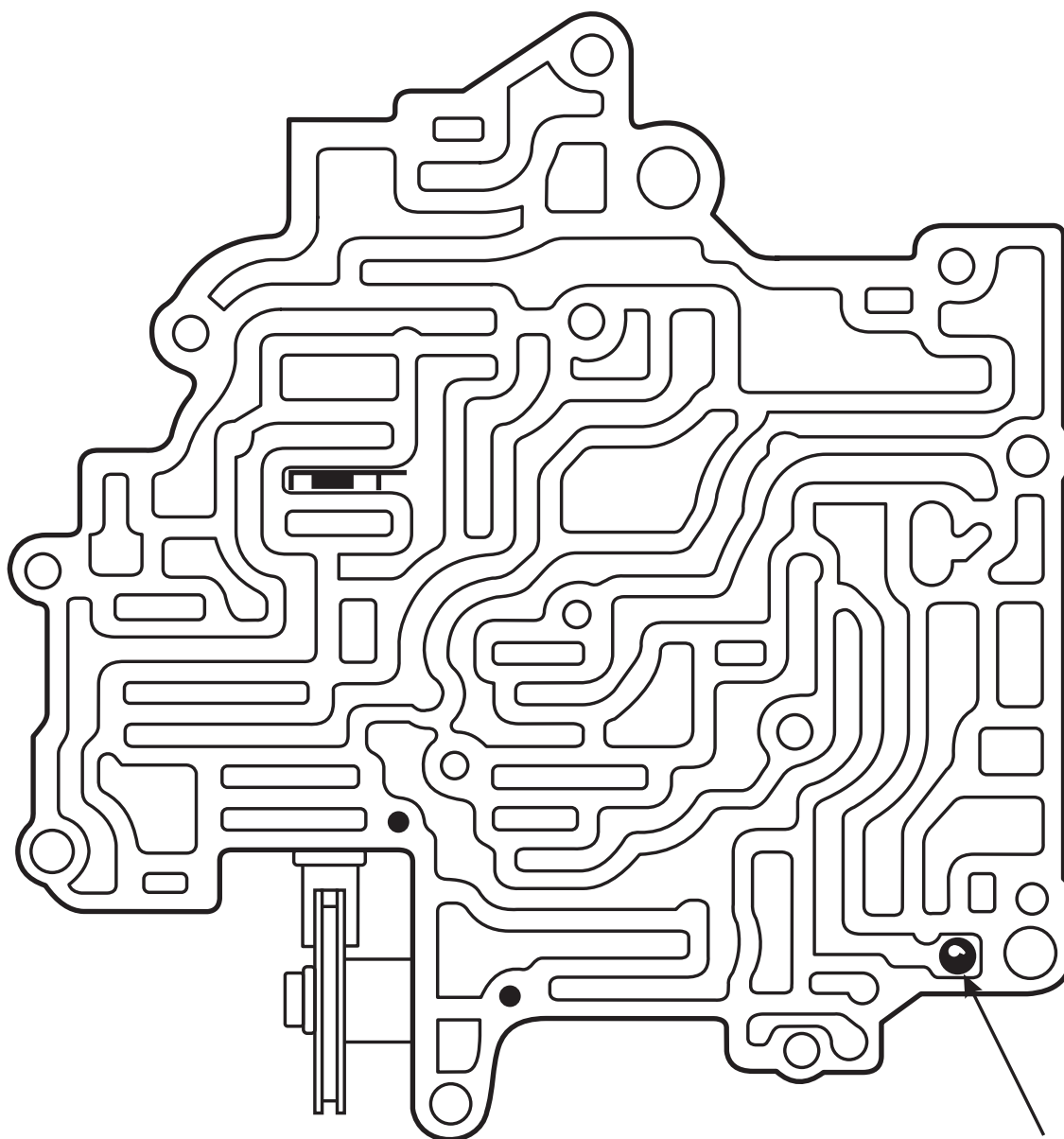


**TOYOTA AW55, AW70, AW71 THROTTLE VALVE BODY
CHECKBALL LOCATION**



TOYOTA A130L, A131L, A132L SERIES TRANSMISSIONS
COROLLA 1984-1995 1.6L AND TERCEL 1988-1995 1.5L

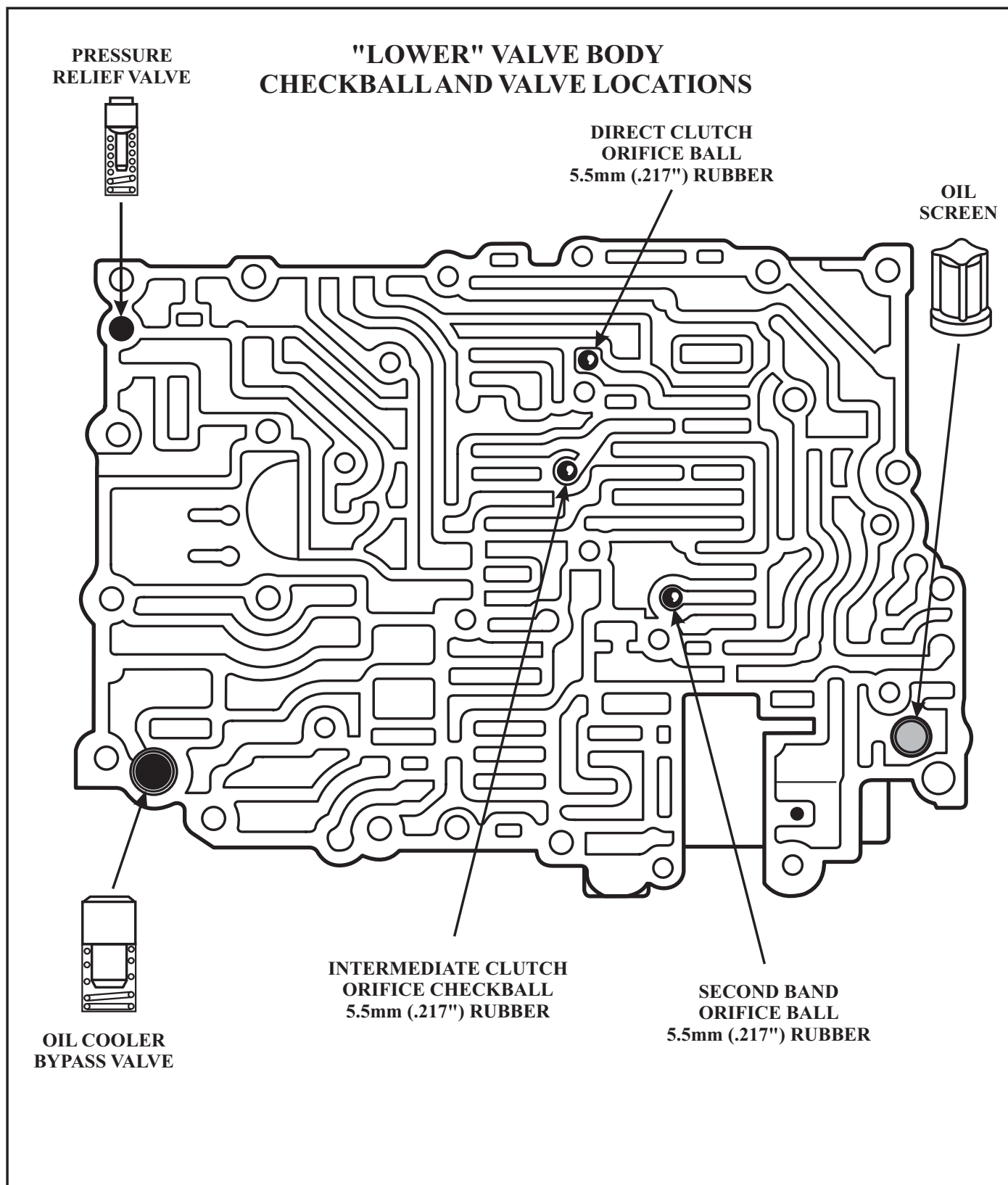
**"UPPER" VALVE BODY
CHECKBALL LOCATIONS**



**FORWARD CLUTCH
FEED ORIFICE
5.5mm (.217") RUBBER**

TOYOTA A130L, A131L, A132L SERIES TRANSMISSIONS

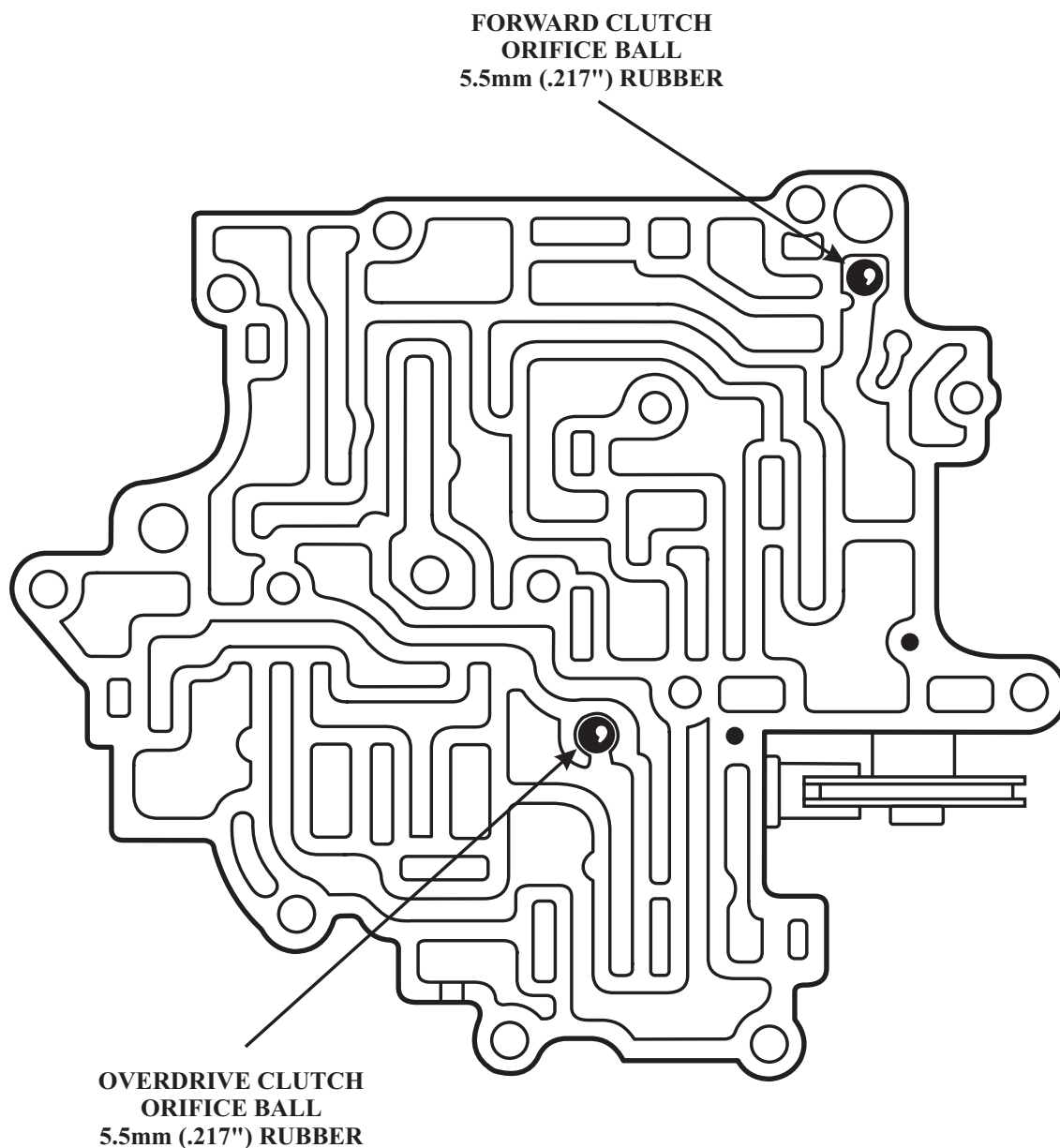
COROLLA 1984-1995 1.6L AND TERCEL 1988-1995 1.5L



TOYOTA A140L SERIES TRANSMISSIONS

CAMRY 1983-1993 AND CELICA 1986-1989

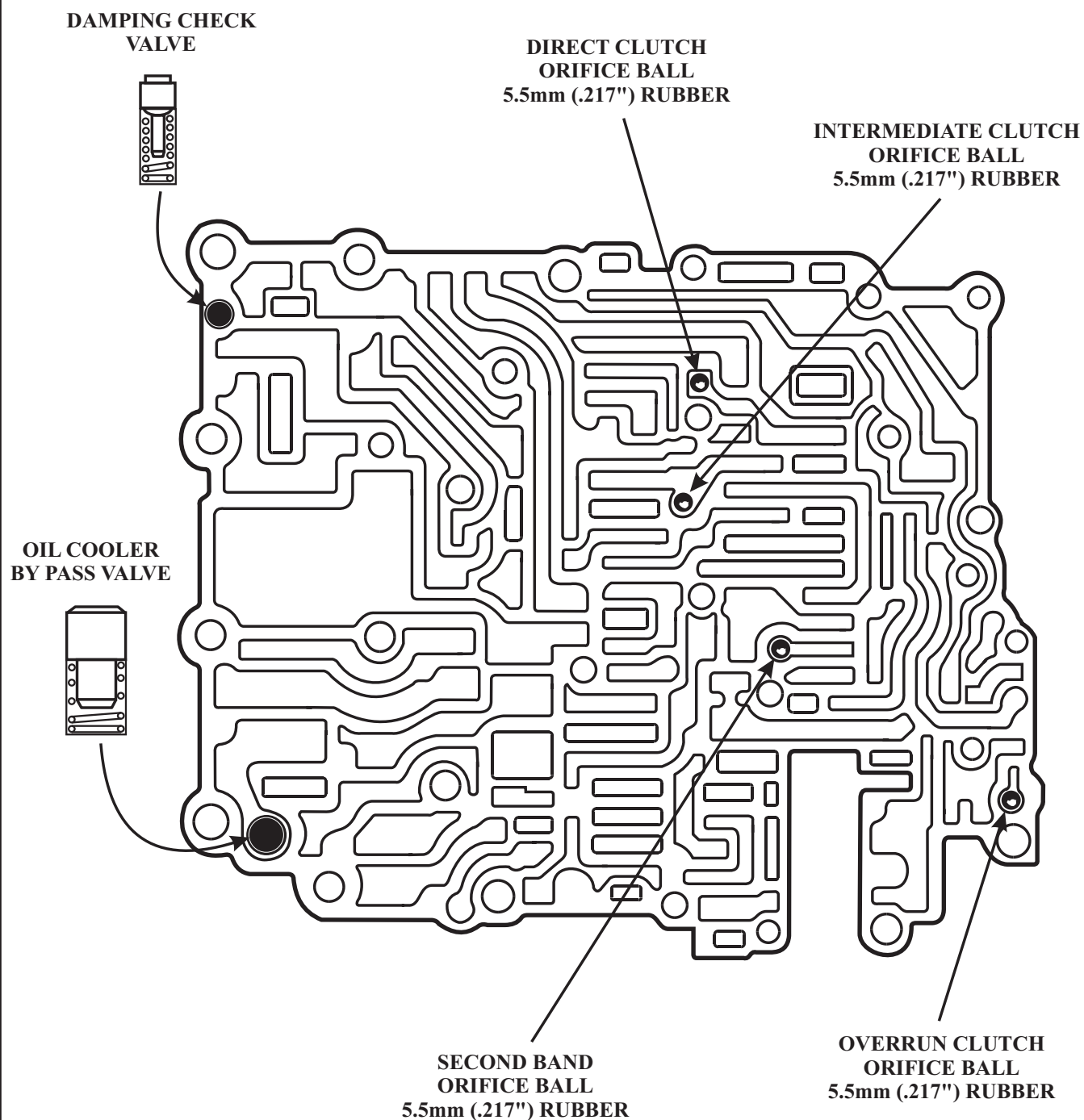
"UPPER" VALVE BODY CHECK BALL LOCATION



TOYOTA A140L SERIES TRANSMISSIONS

CAMRY 1983-1993 AND CELICA 1986-1989

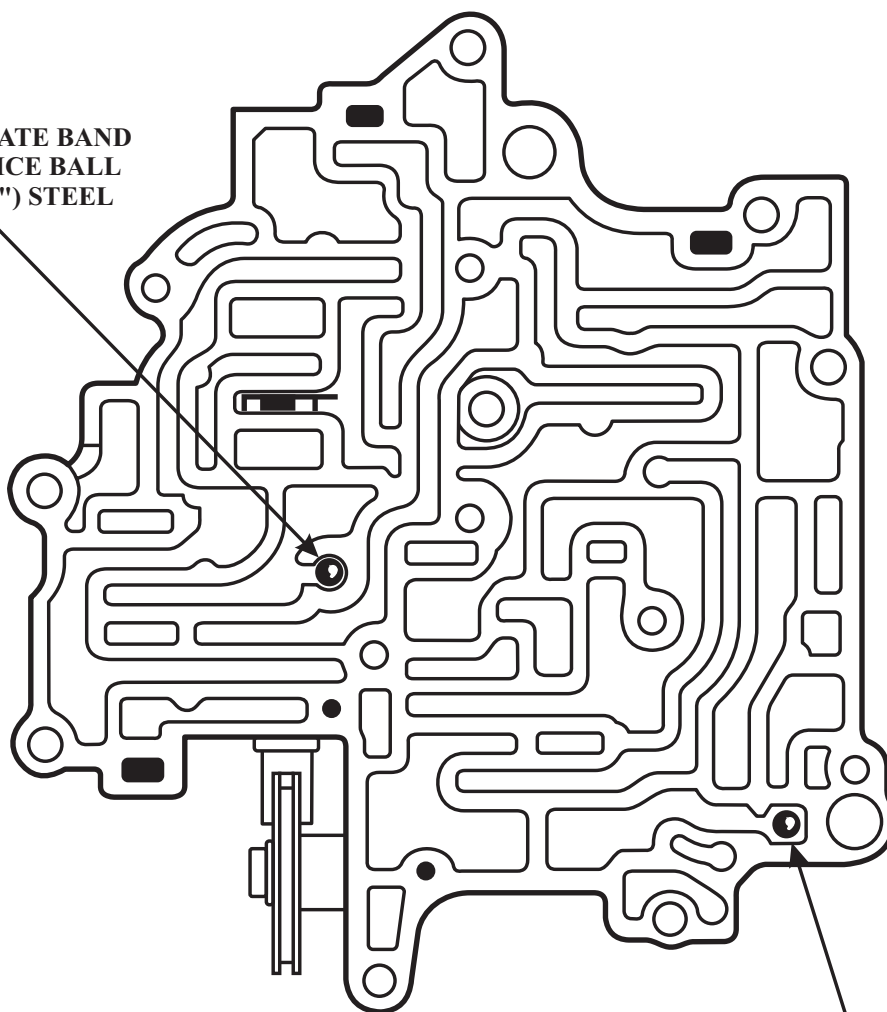
"LOWER" VALVE BODY CHECK BALL LOCATION



TOYOTA A140E, A141E SERIES TRANSMISSIONS
CAMRY 1983 - 1995

"UPPER" VALVE BODY
CHECKBALL LOCATIONS

**INTERMEDIATE BAND
FEED ORIFICE BALL**
5.5mm (.217") STEEL

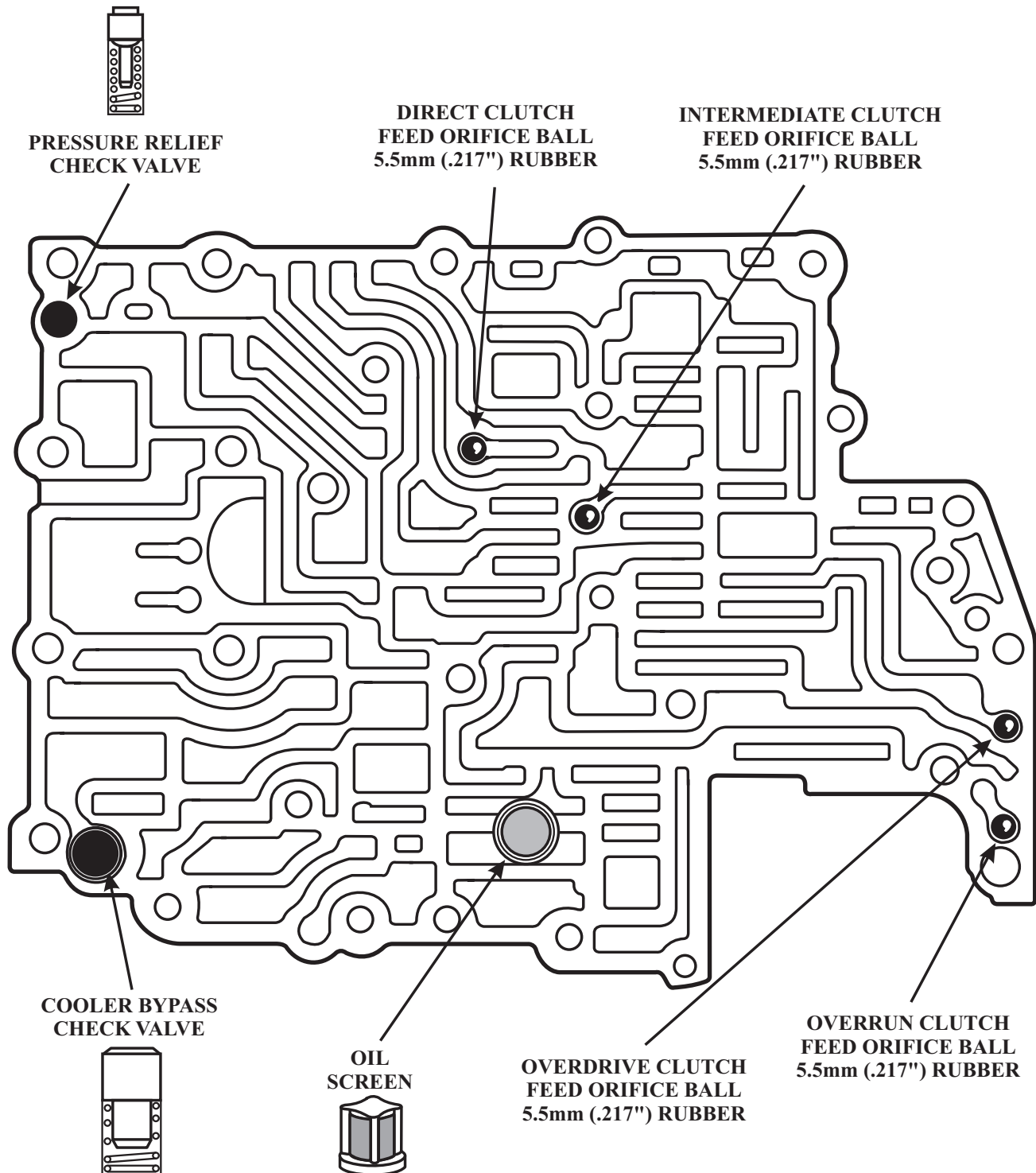


**FORWARD CLUTCH
FEED ORIFICE BALL**
5.5mm (.217") STEEL

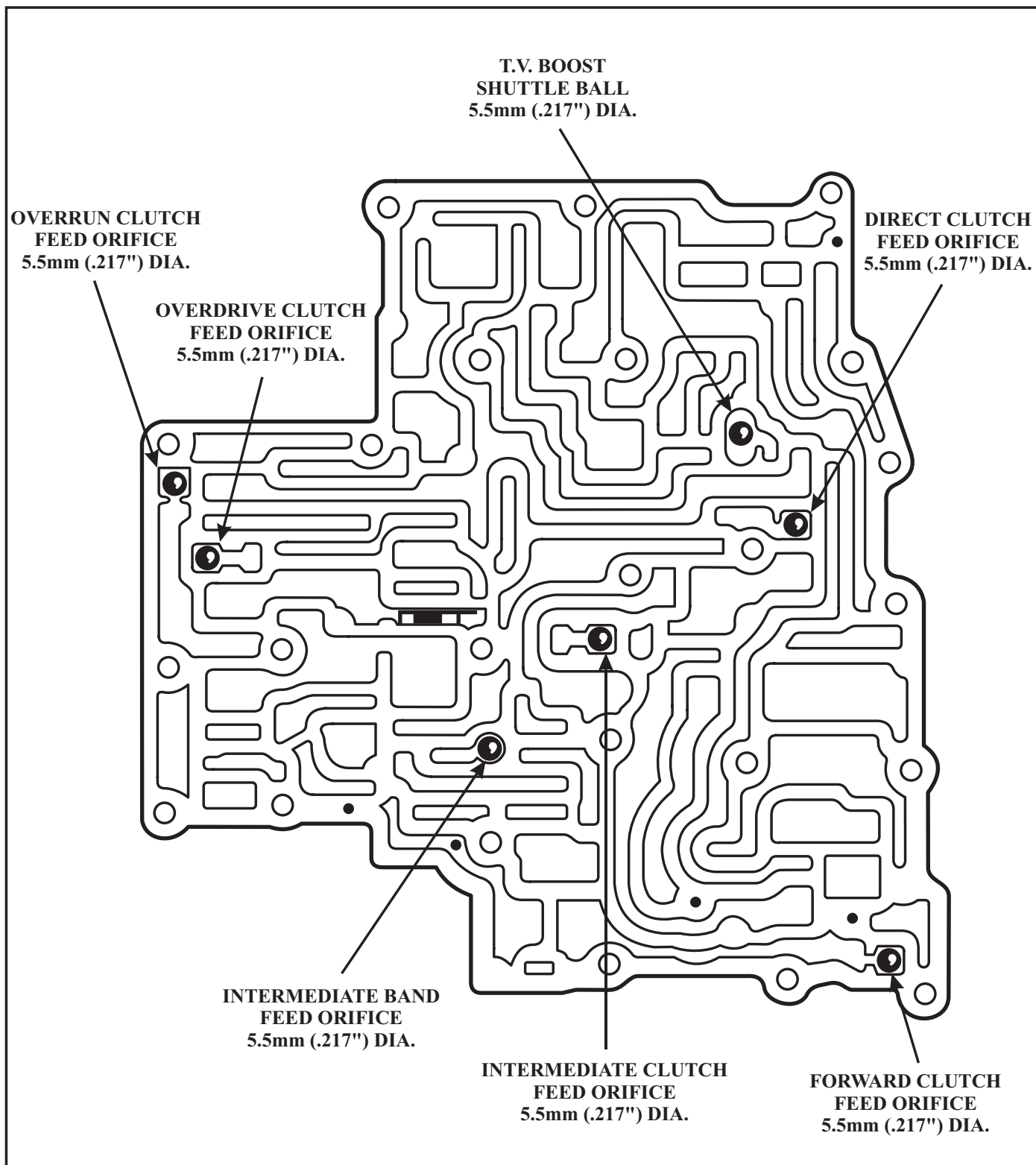
TOYOTA A140E, A141E SERIES TRANSMISSIONS

CAMRY 1983 - 1995

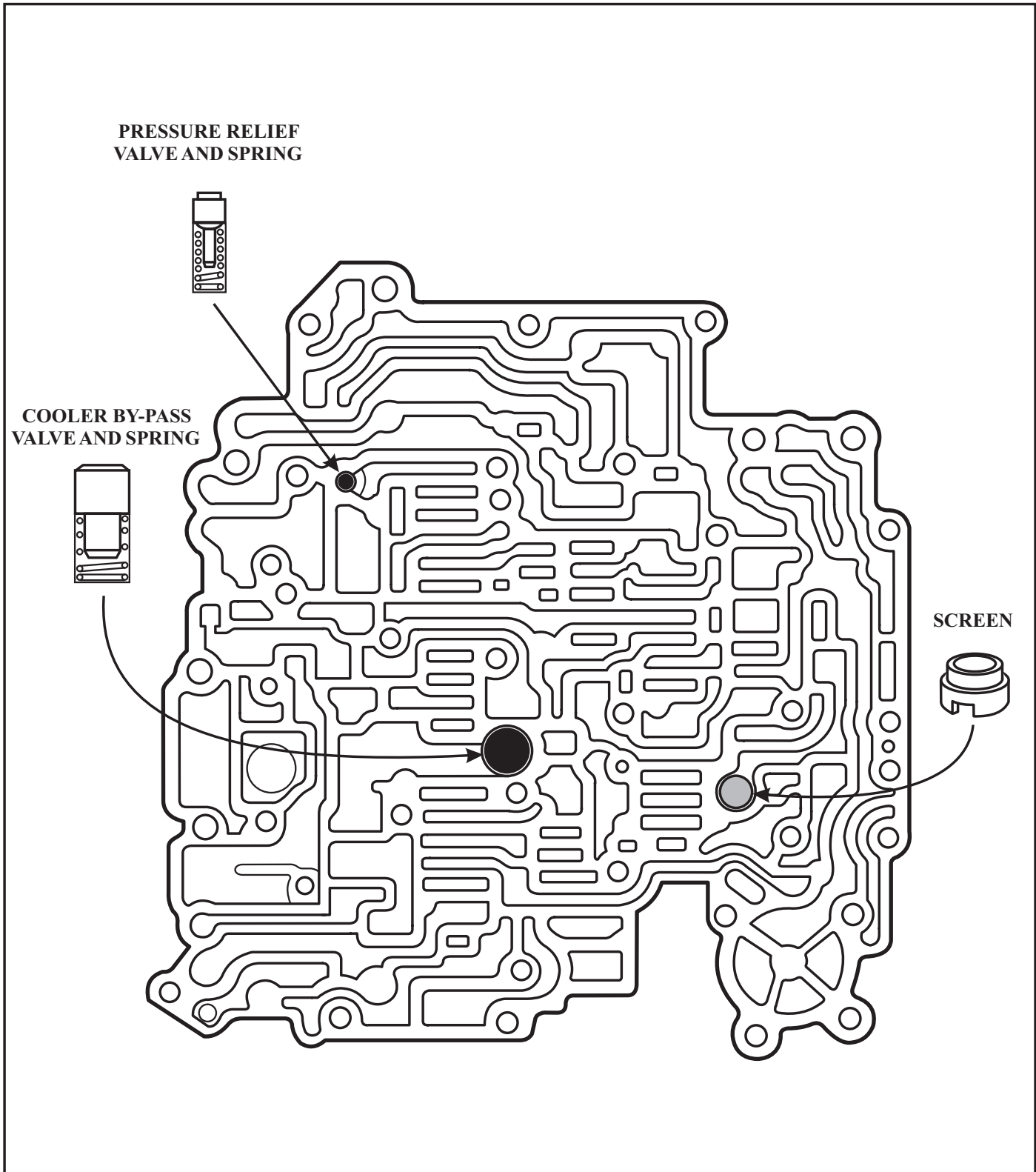
"LOWER" VALVE BODY CHECKBALL AND VALVE LOCATIONS



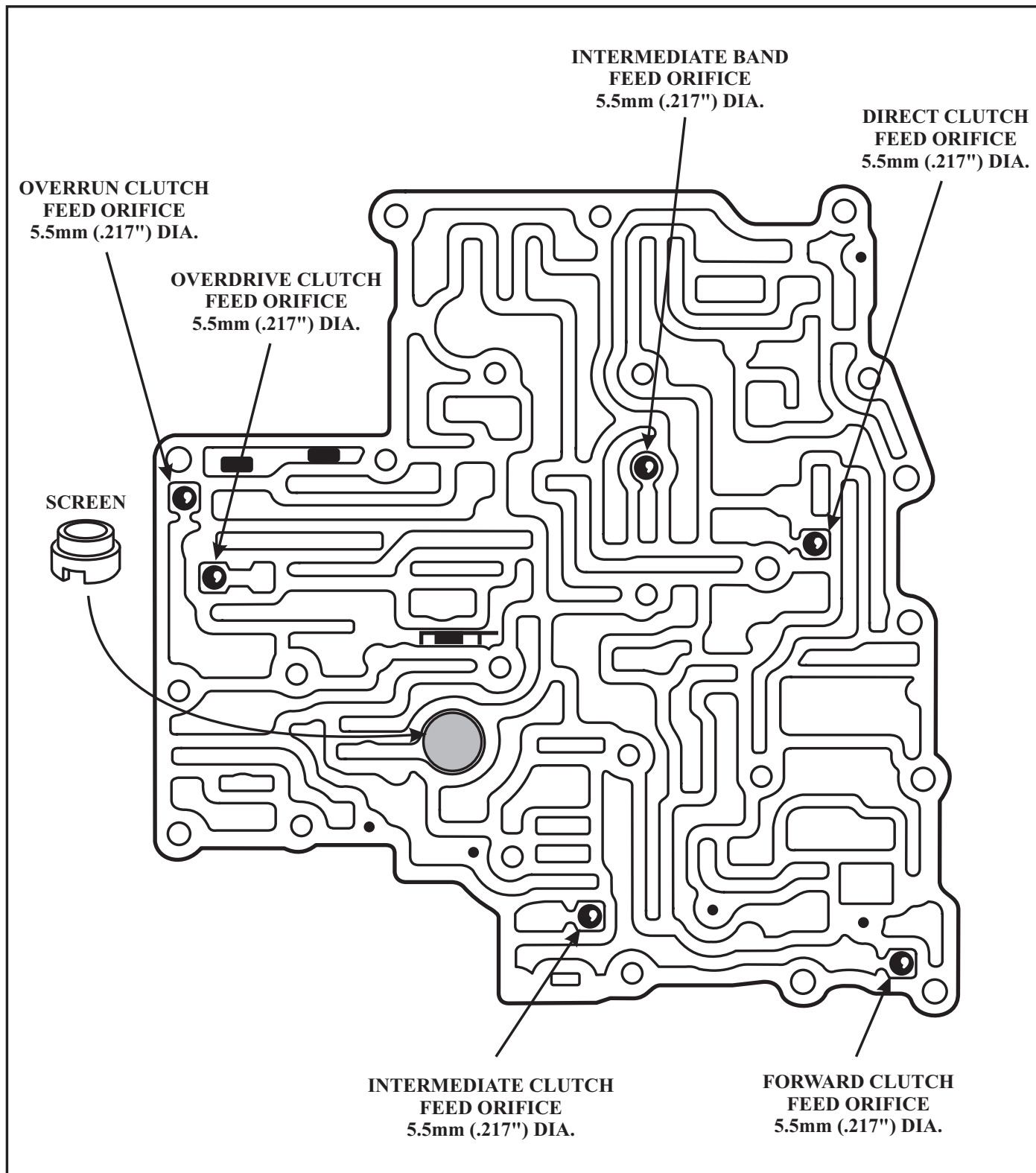
TOYOTA A240L, A243L TRANSMISSIONS "UPPER" VALVE BODY CHECKBALL LOCATIONS



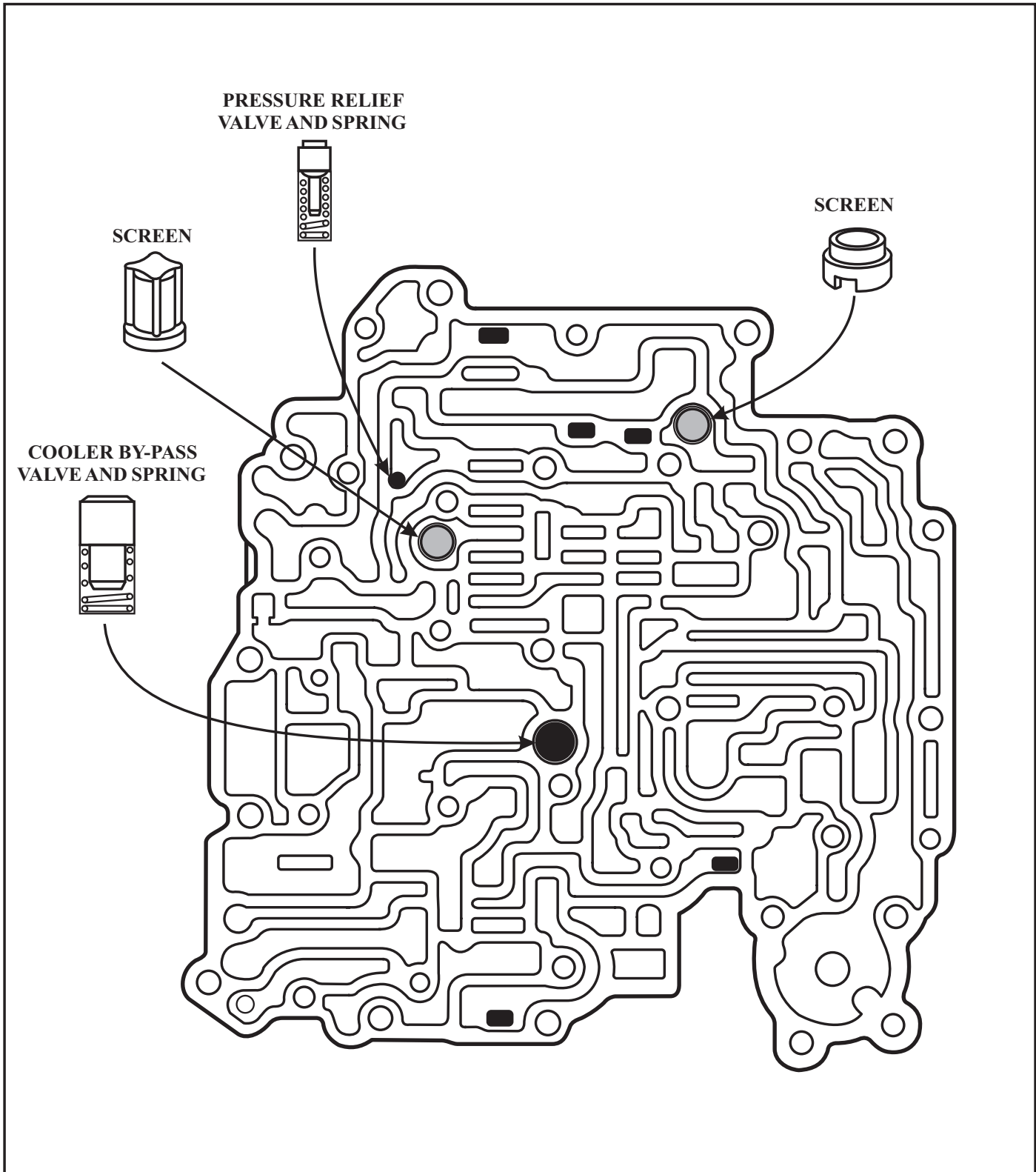
TOYOTA A240L, A243L TRANSMISSIONS CHECK VALVE AND SCREEN LOCATIONS FOR "LOWER" VALVE BODY



TOYOTA A241E, A244E TRANSMISSIONS "UPPER" VALVE BODY CHECKBALL LOCATIONS

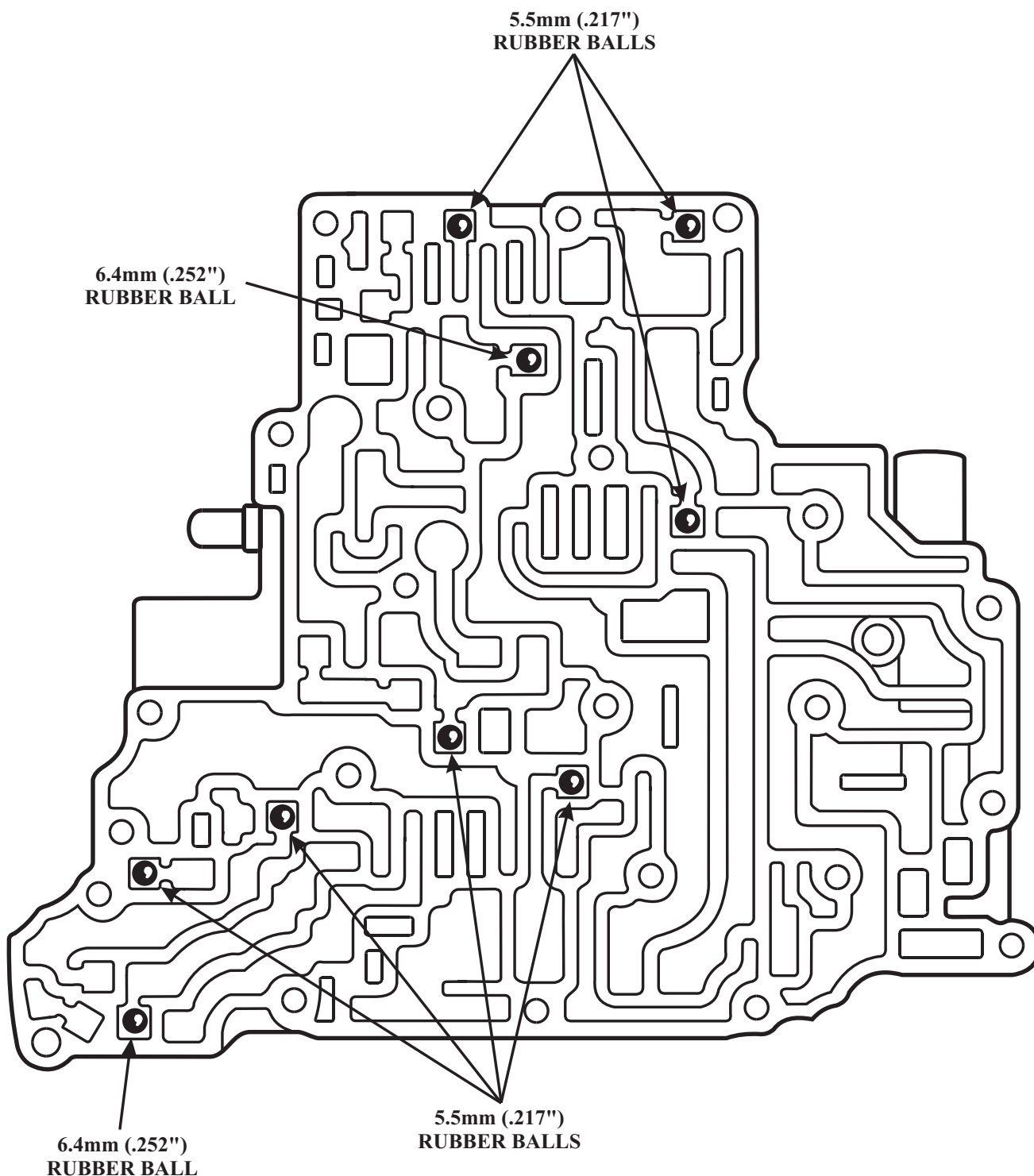


TOYOTA A241E, A244E TRANSMISSIONS CHECK VALVE AND SCREEN LOCATIONS FOR "LOWER" VALVE BODY

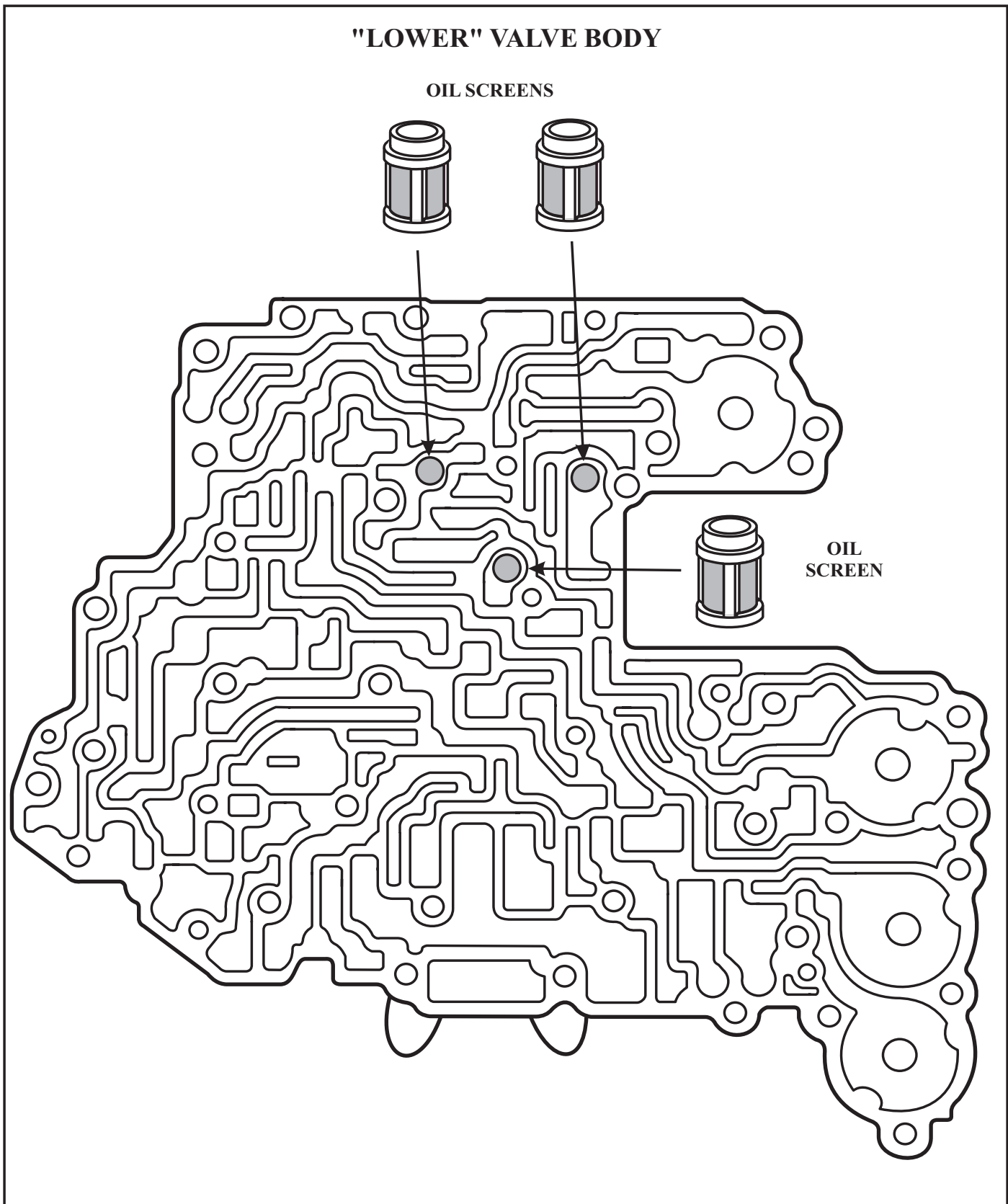


TOYOTA A245 SERIES TRANSAXLES

"UPPER" VALVE BODY



TOYOTA A245 SERIES TRANSAXLES



TOYOTA A340E SERIES "2WD" TRANSMISSIONS A340E "2WD" 4-RUNNER & TRUCK 1985-1989

"UPPER" VALVE BODY

See Page 86 for "Lower" Valve Body

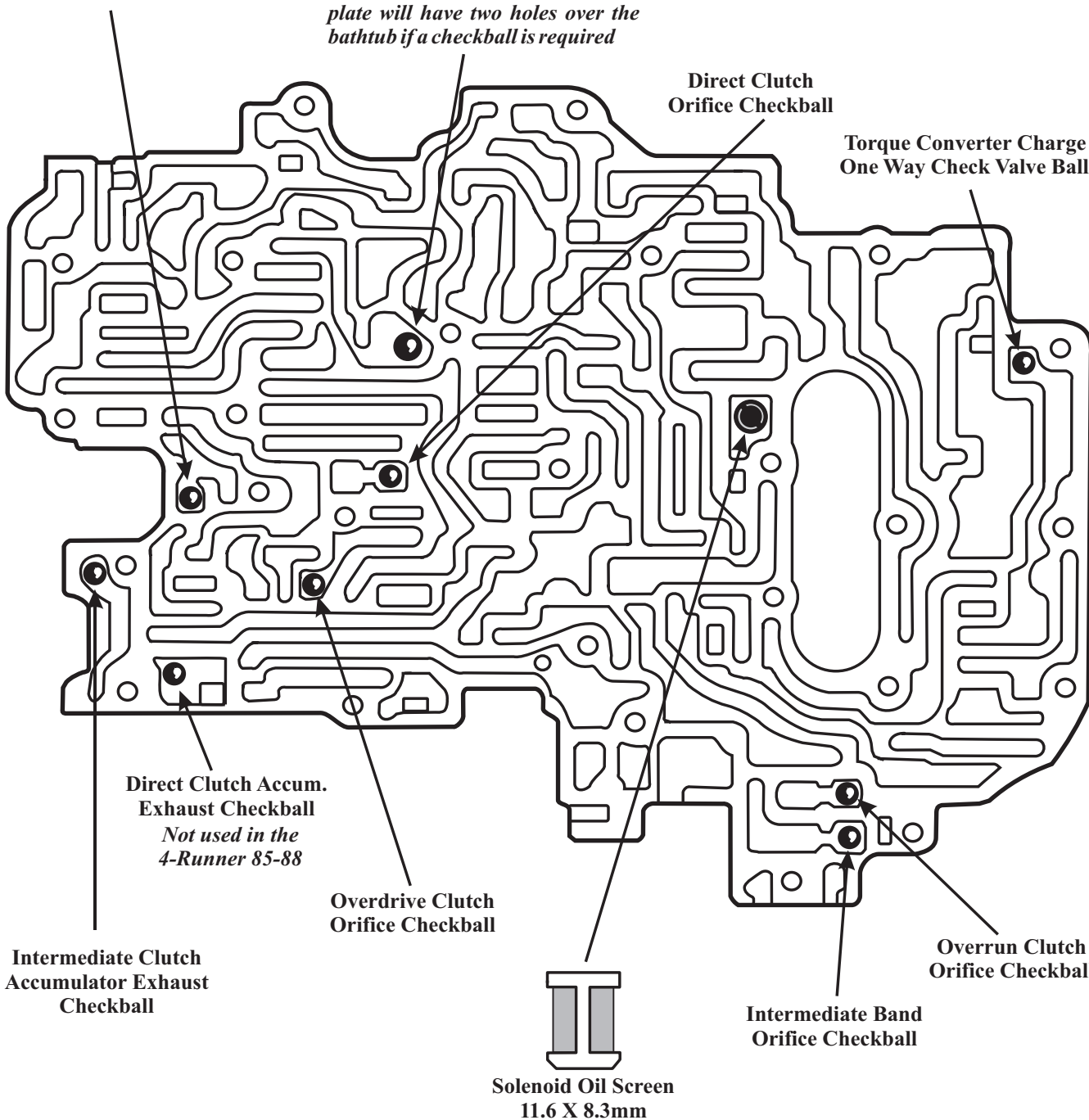
Direct Clutch Shuttle Ball

NOTE: Use of this ball when not required may cause premature direct clutch failure. The spacer plate will have two holes over the bathtub if a checkball is required

Intermediate Clutch
Orifice Checkball

Direct Clutch
Orifice Checkball

Torque Converter Charge
One Way Check Valve Ball



Direct Clutch Accum.
Exhaust Checkball
*Not used in the
4-Runner 85-88*

Overdrive Clutch
Orifice Checkball

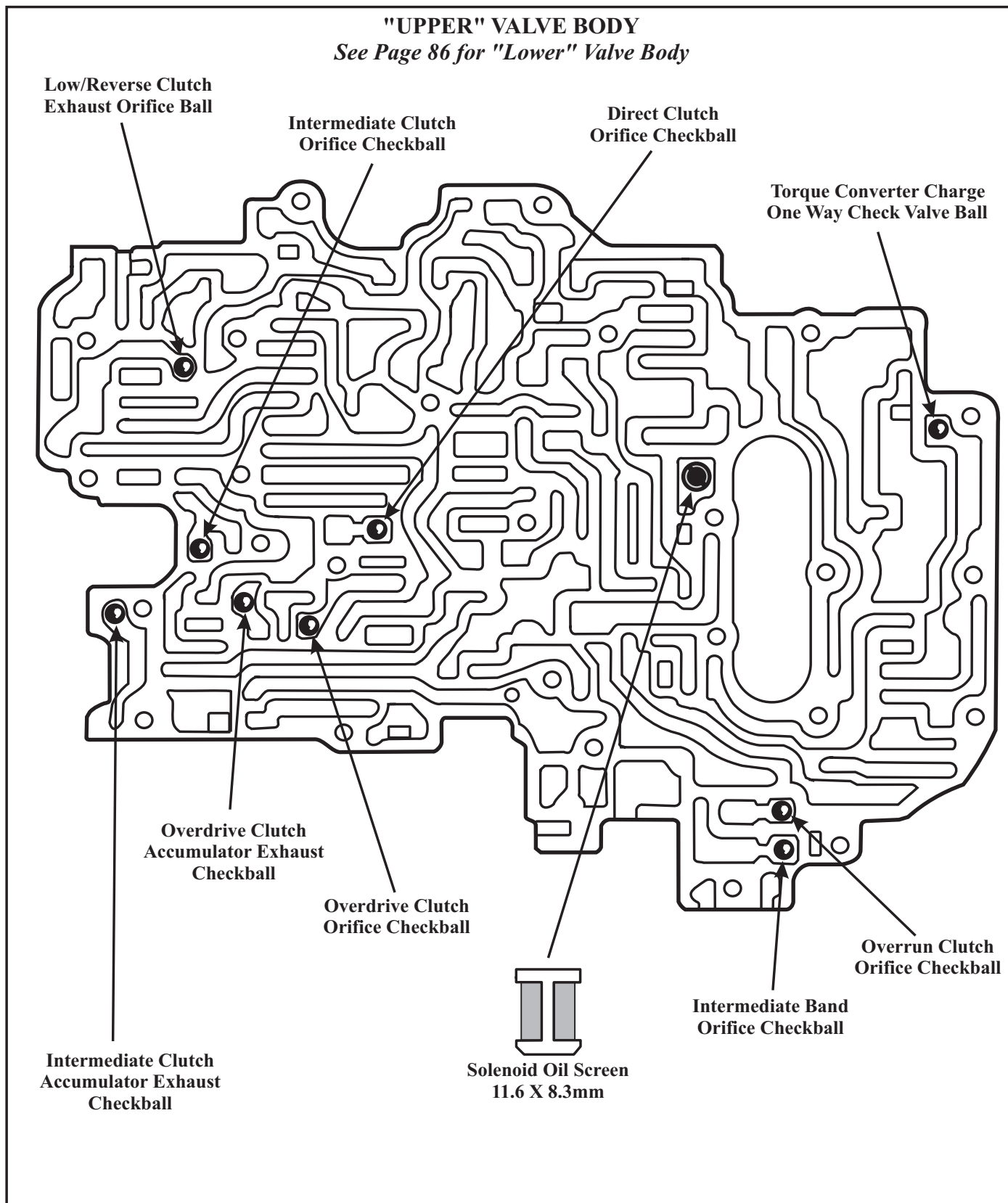
Intermediate Clutch
Accumulator Exhaust
Checkball

Solenoid Oil Screen
11.6 X 8.3mm

Intermediate Band
Orifice Checkball

Overrun Clutch
Orifice Checkball

TOYOTA A340E SERIES "2WD" TRANSMISSIONS A340E "2WD" 4-RUNNER & TRUCK 1990-1995



TOYOTA A340E SERIES "2WD" TRANSMISSIONS A340E "Except" 4-RUNNER & TRUCK 1985-1989

"UPPER" VALVE BODY

See Page 86 for "Lower" Valve Body

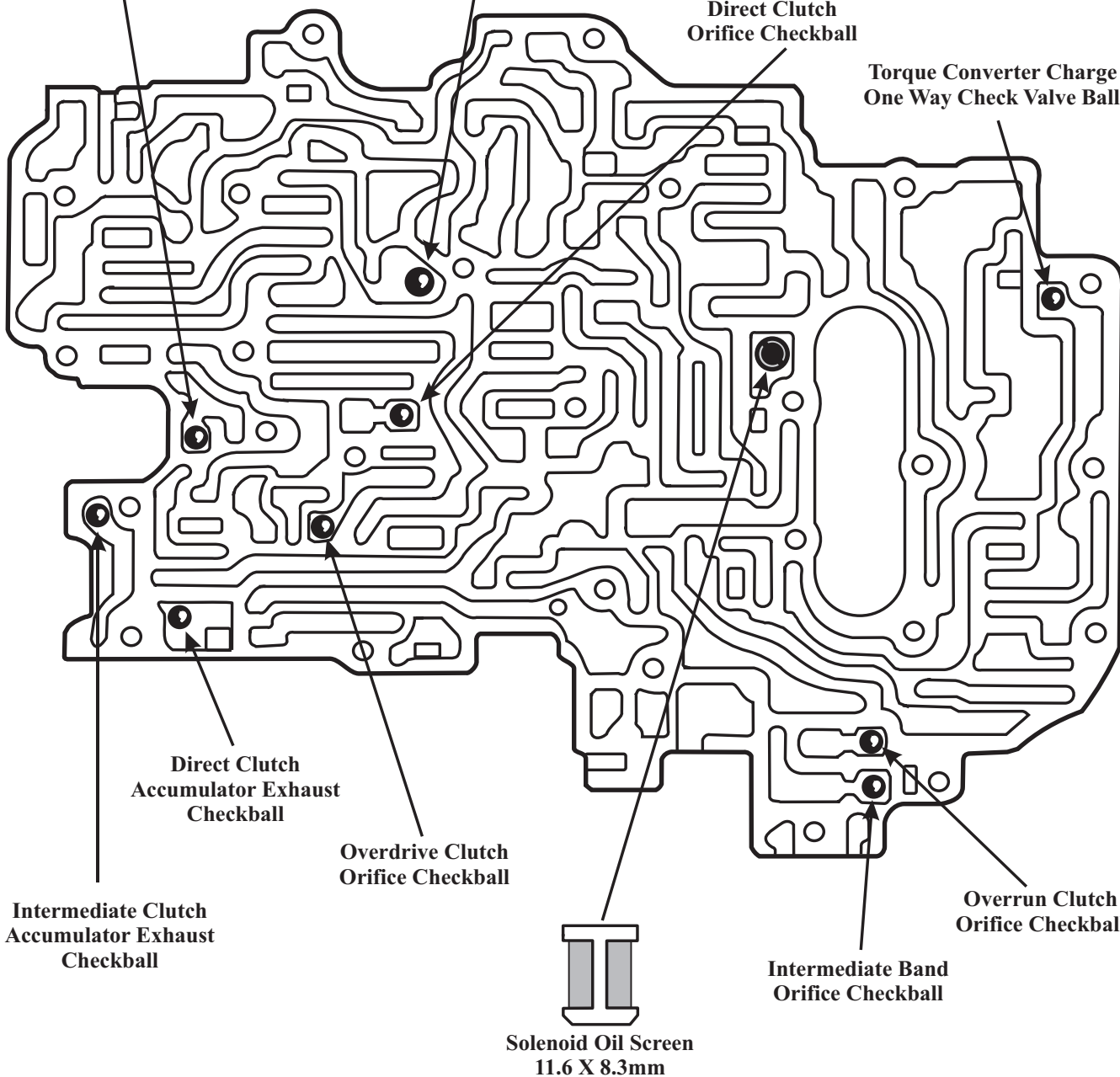
Direct Clutch Shuttle Ball

NOTE: Use of this ball when not required may cause premature direct clutch failure. The spacer plate will have two holes over the bathtub if a checkball is required

Intermediate Clutch
Orifice Checkball

Direct Clutch
Orifice Checkball

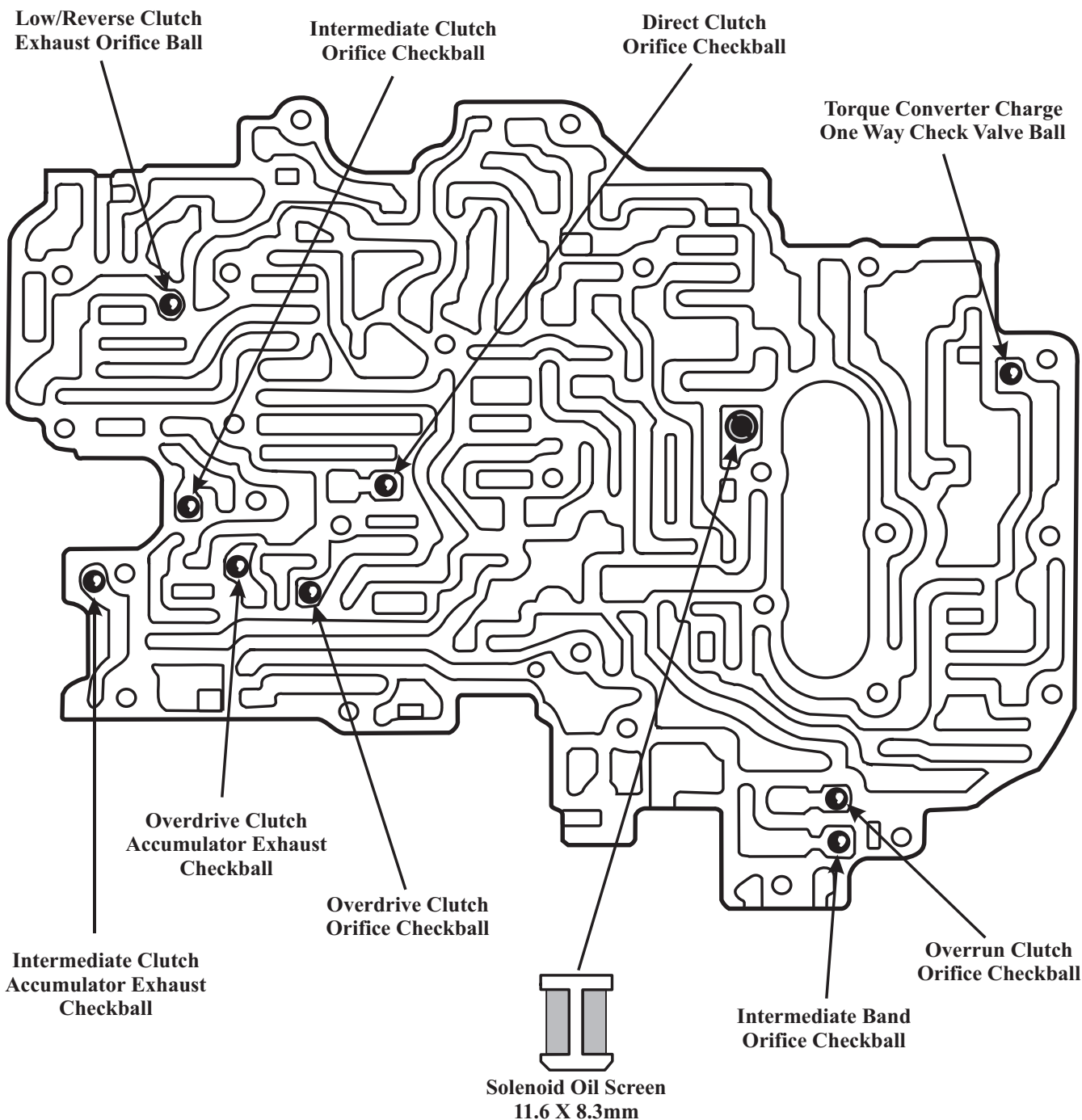
Torque Converter Charge
One Way Check Valve Ball



TOYOTA A340E SERIES "2WD" TRANSMISSIONS A340E "Except" 4-RUNNER & TRUCK 1990-1995

"UPPER" VALVE BODY

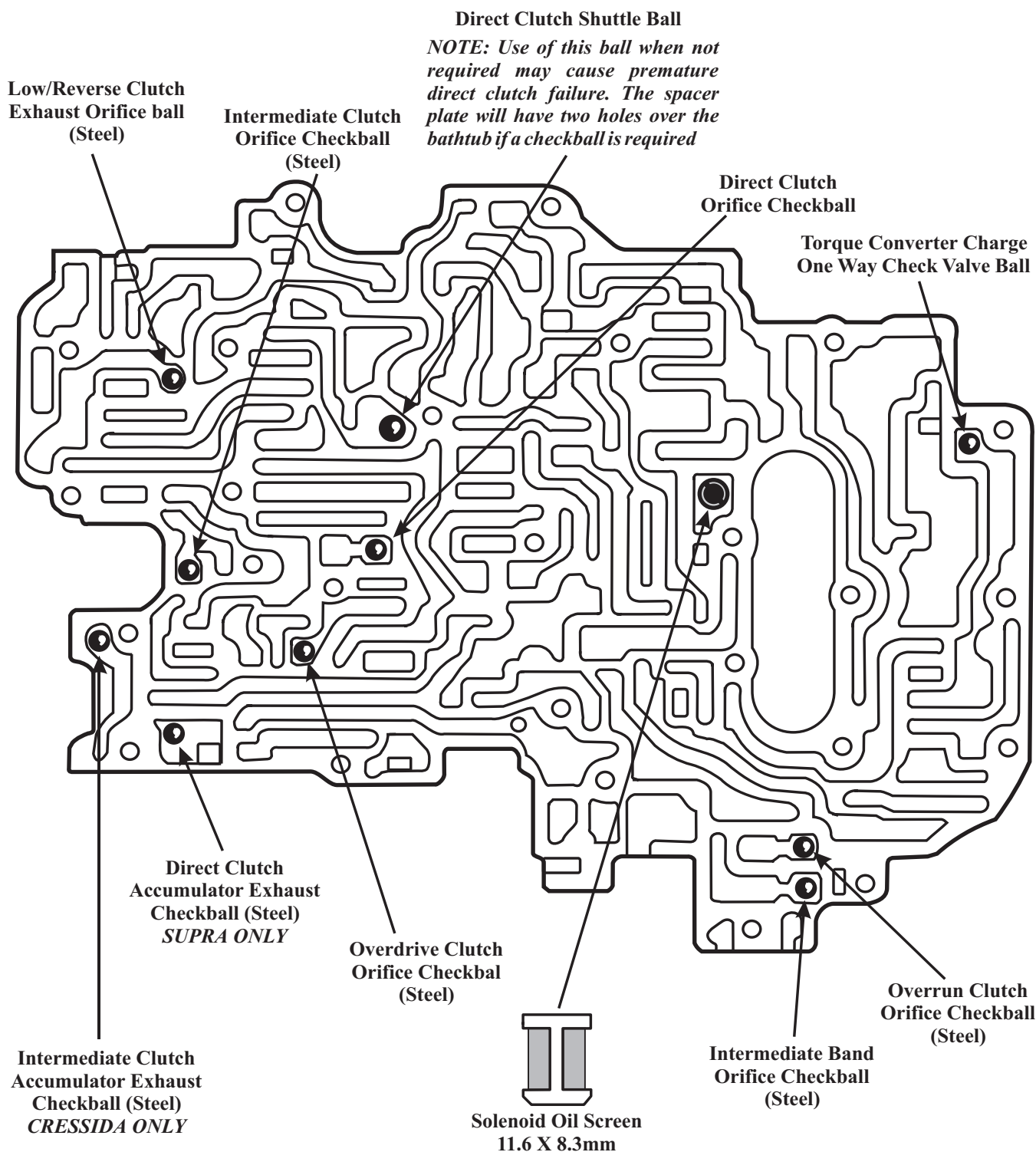
See Page 86 for "Lower" Valve Body



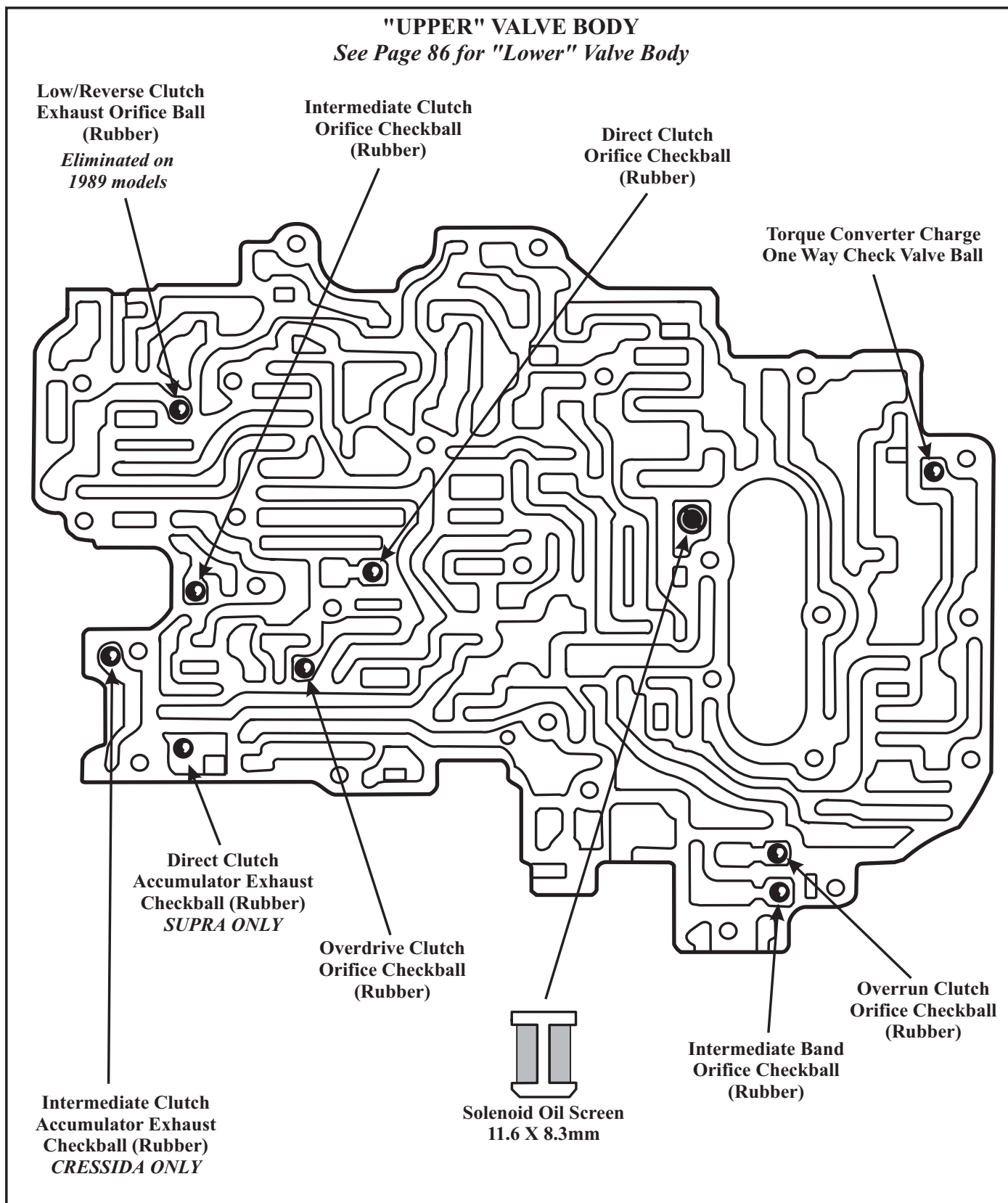
TOYOTA A340E SERIES "2WD" TRANSMISSIONS A340E CRESSIDA AND SUPRA 1985-1988

"UPPER" VALVE BODY

See Page 86 for "Lower" Valve Body



TOYOTA A340E SERIES "2WD" TRANSMISSIONS A340E CRESSIDA AND SUPRA 1989-1995



TOYOTA A340E SERIES 4WD TRANSMISSIONS A340H "4WD" 4-RUNNER & TRUCK 1985-1988

"UPPER" VALVE BODY

See Page 86 for "Lower" Valve Body

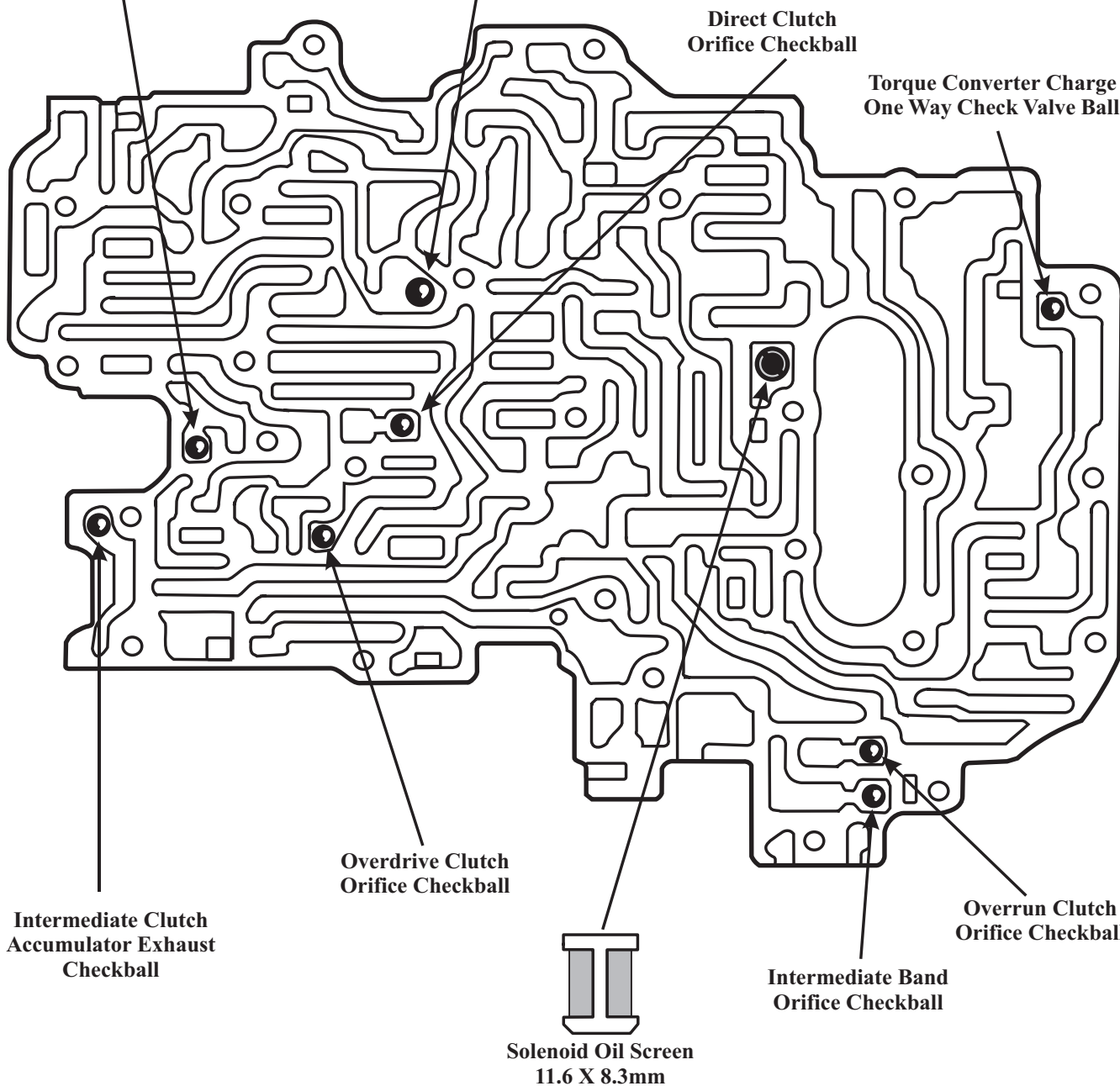
Direct Clutch Shuttle Ball

NOTE: Use of this ball when not required may cause premature direct clutch failure. The spacer plate will have two holes over the bathtub if a checkball is required

Intermediate Clutch
Orifice Checkball

Direct Clutch
Orifice Checkball

Torque Converter Charge
One Way Check Valve Ball



Intermediate Clutch
Accumulator Exhaust
Checkball

Overdrive Clutch
Orifice Checkball

Solenoid Oil Screen
11.6 X 8.3mm

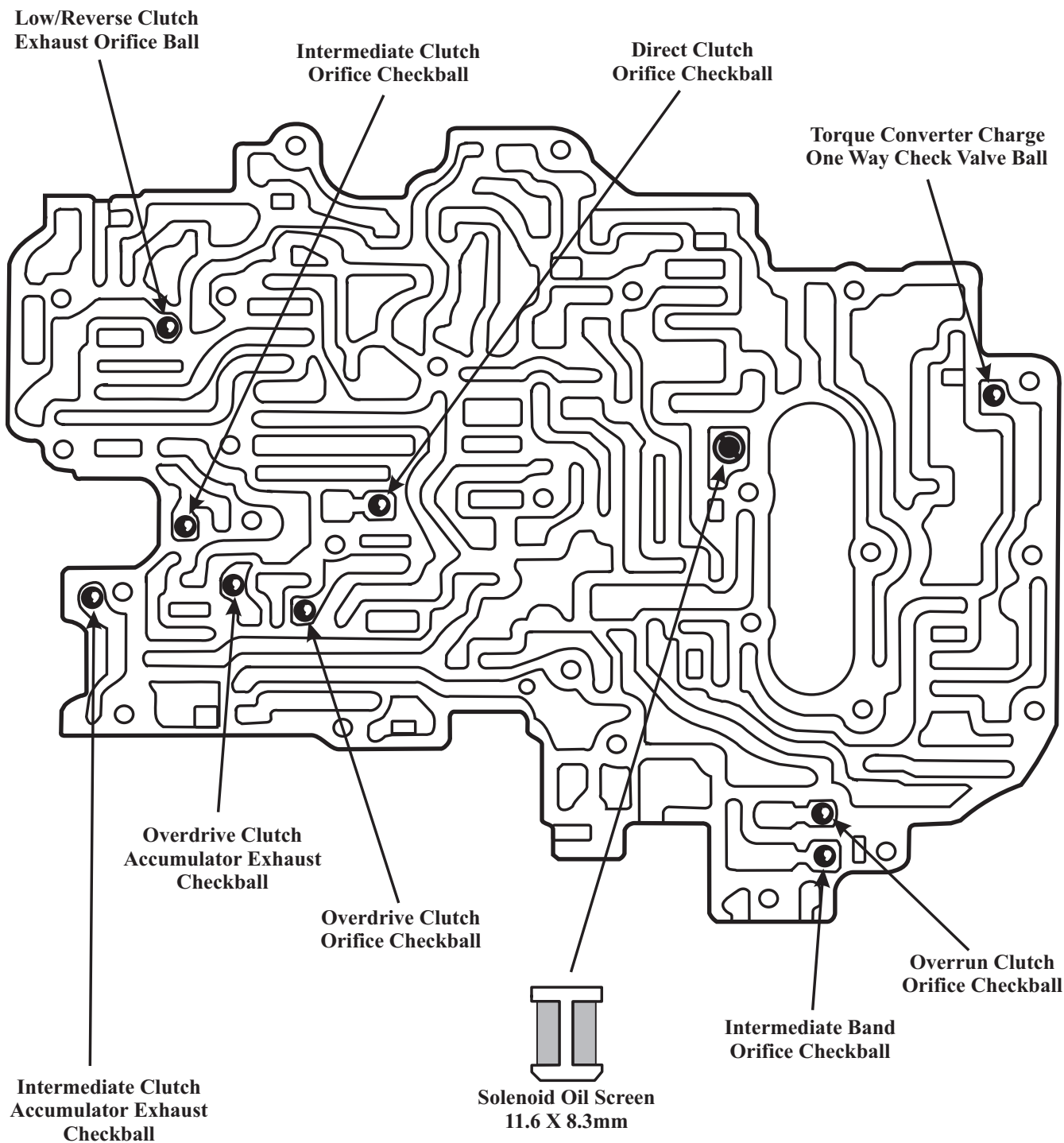
Intermediate Band
Orifice Checkball

Overrun Clutch
Orifice Checkball

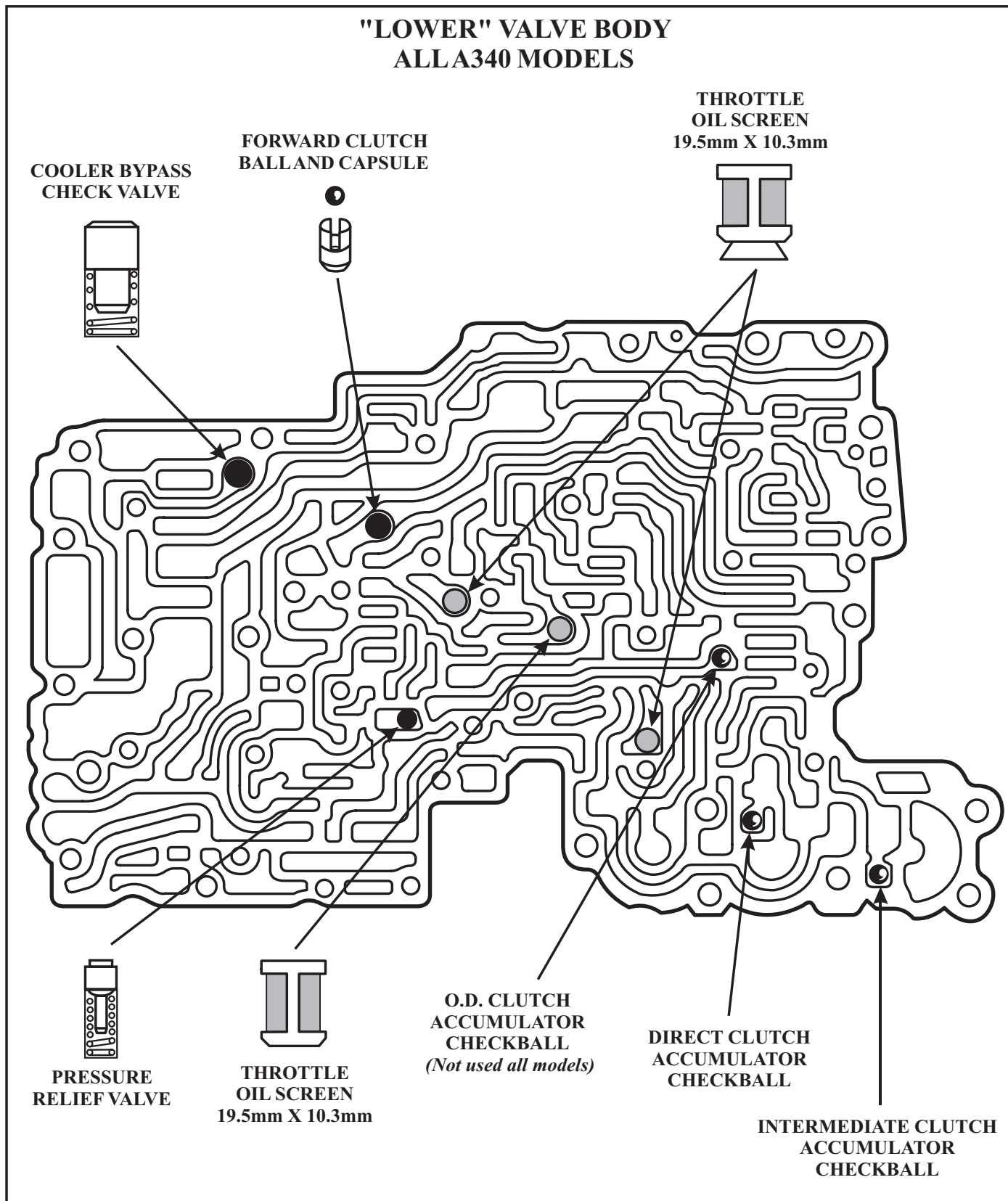
TOYOTA A340H SERIES 4WD TRANSMISSIONS

A340H "4WD" 4-RUNNER & TRUCK 1989-1995

"UPPER" VALVE BODY
See Page 86 for "Lower" Valve Body.

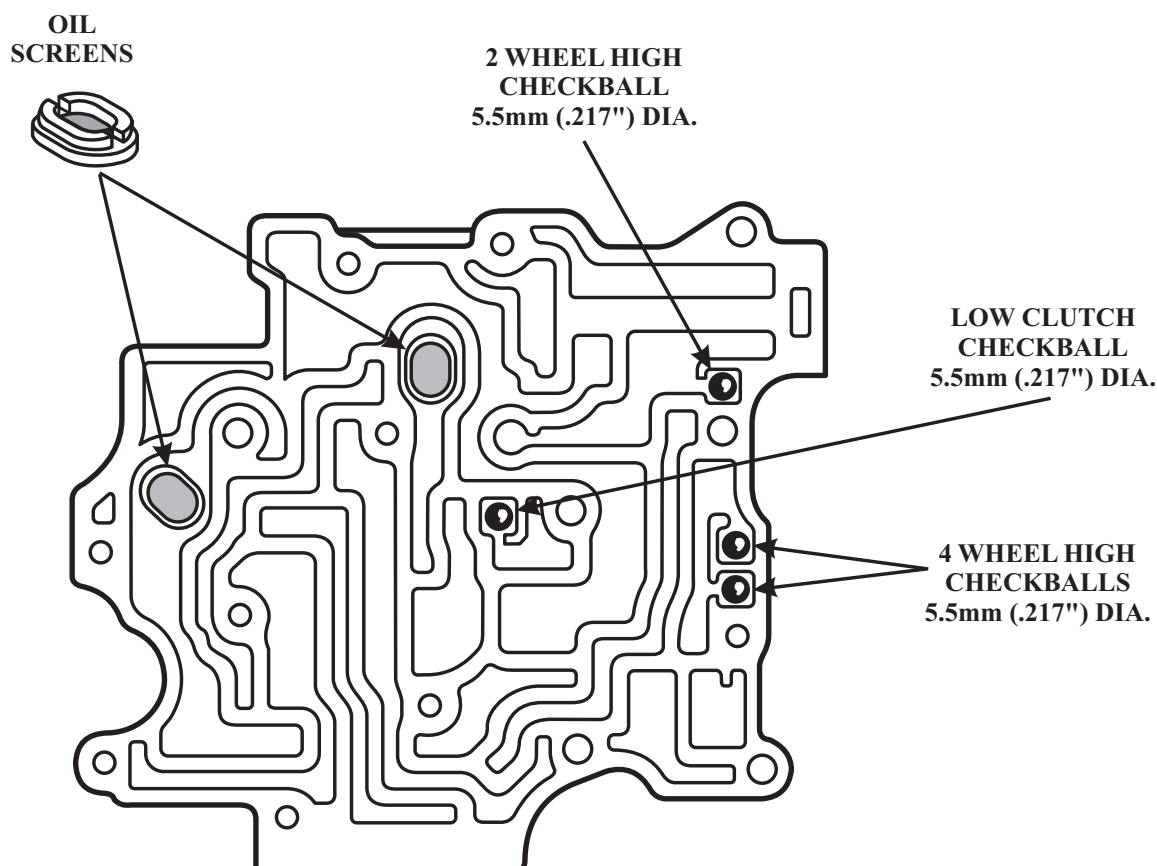


TOYOTA A340 SERIES TRANSMISSIONS



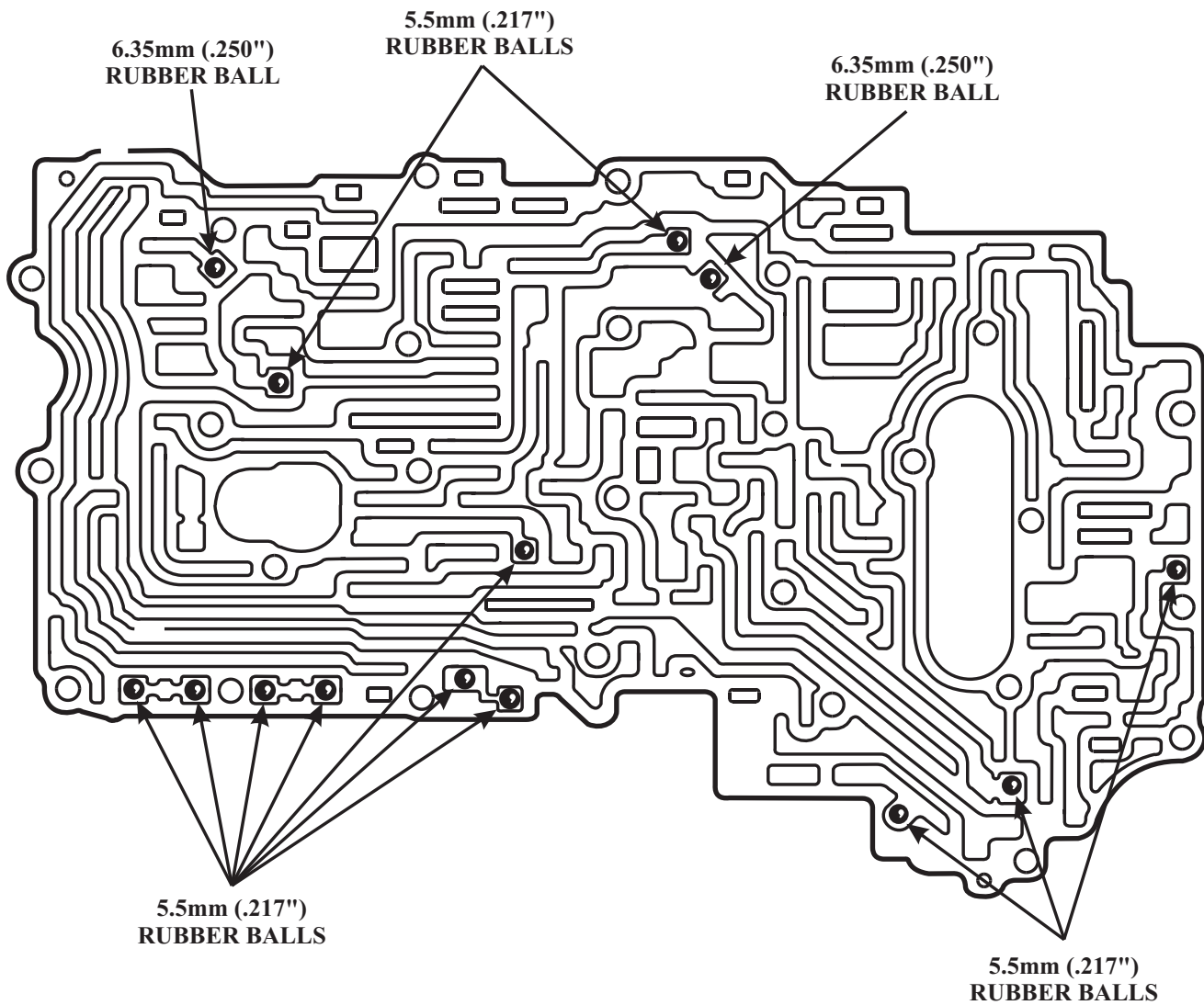
TOYOTA A340H TRANSFER CASE

CHECKBALL AND SCREEN LOCATIONS



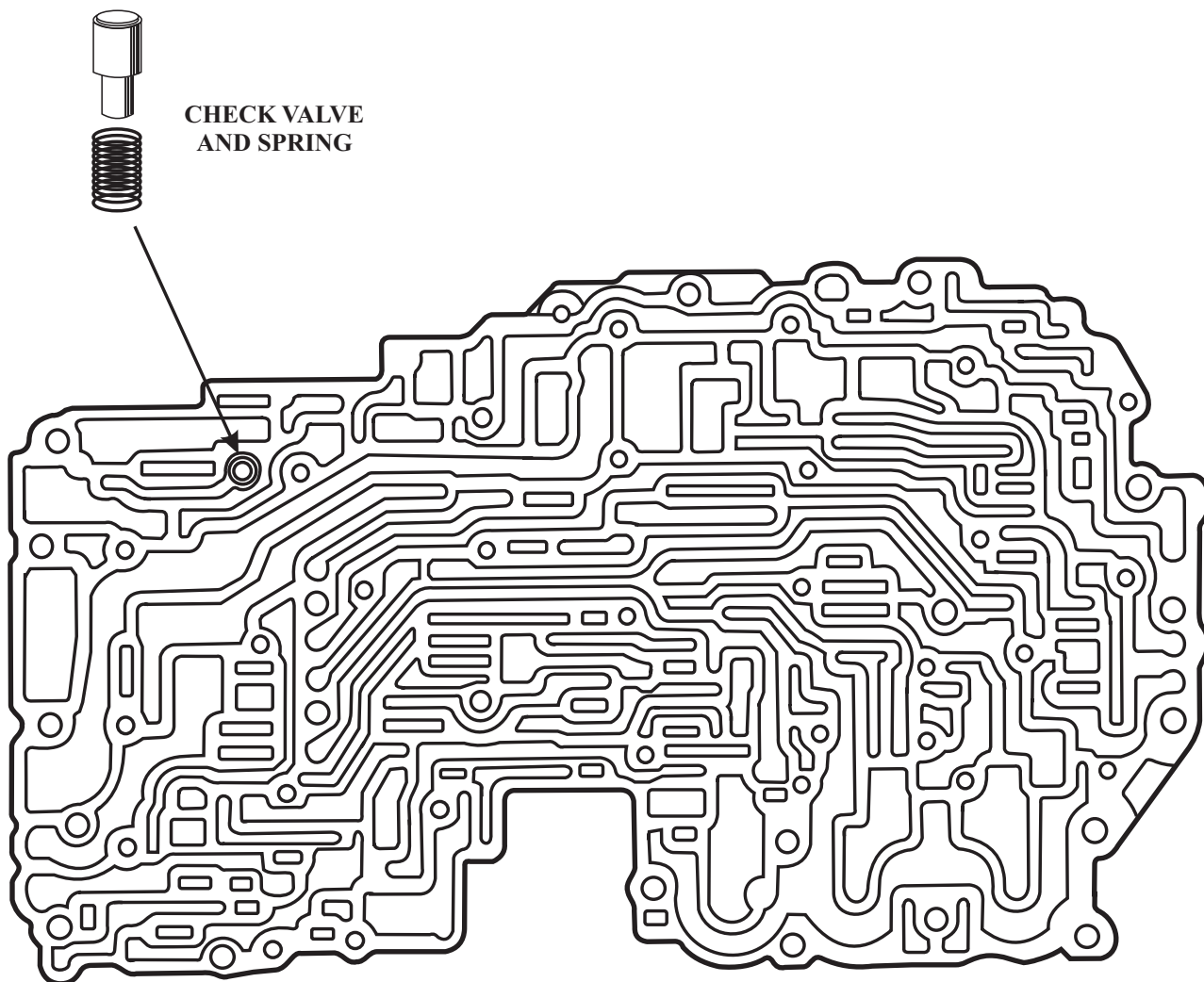
TOYOTA A341E SERIES TRANSMISSIONS A341E LEXUS AND 1993 AND UP SUPRA

"UPPER" VALVE BODY A341E MODELS



TOYOTA A341E SERIES TRANSMISSIONS
A341E LEXUS AND 1993 AND UP SUPRA

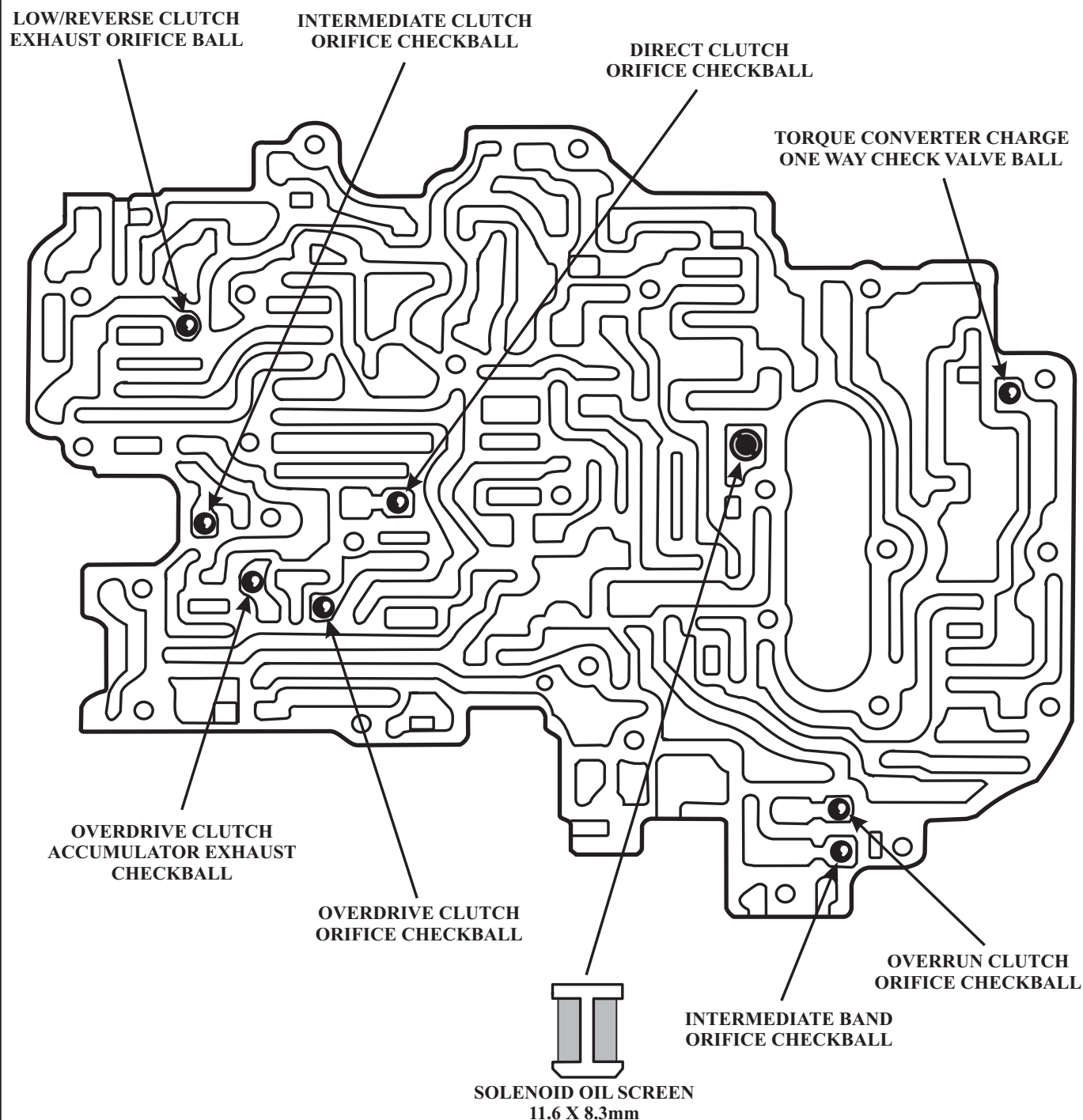
"LOWER" VALVE BODY A341E MODELS



TOYOTA A343F SERIES TRANSMISSIONS

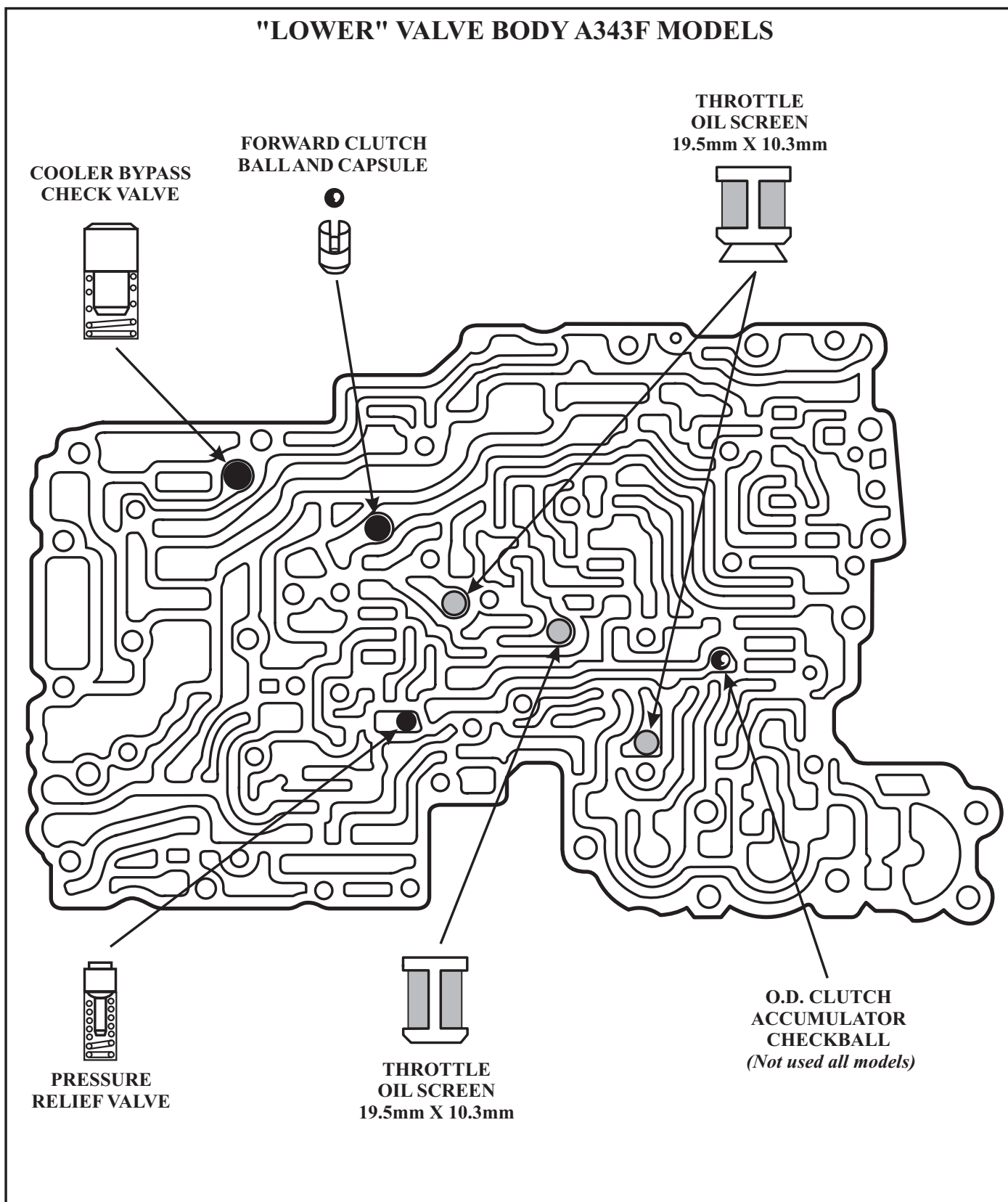
A343F TOYOTA LANDCRUISER 1995

"UPPER" VALVE BODY A343F MODELS



TOYOTA A343F SERIES TRANSMISSIONS A343F TOYOTA LANDCRUISER 1995

"LOWER" VALVE BODY A343F MODELS

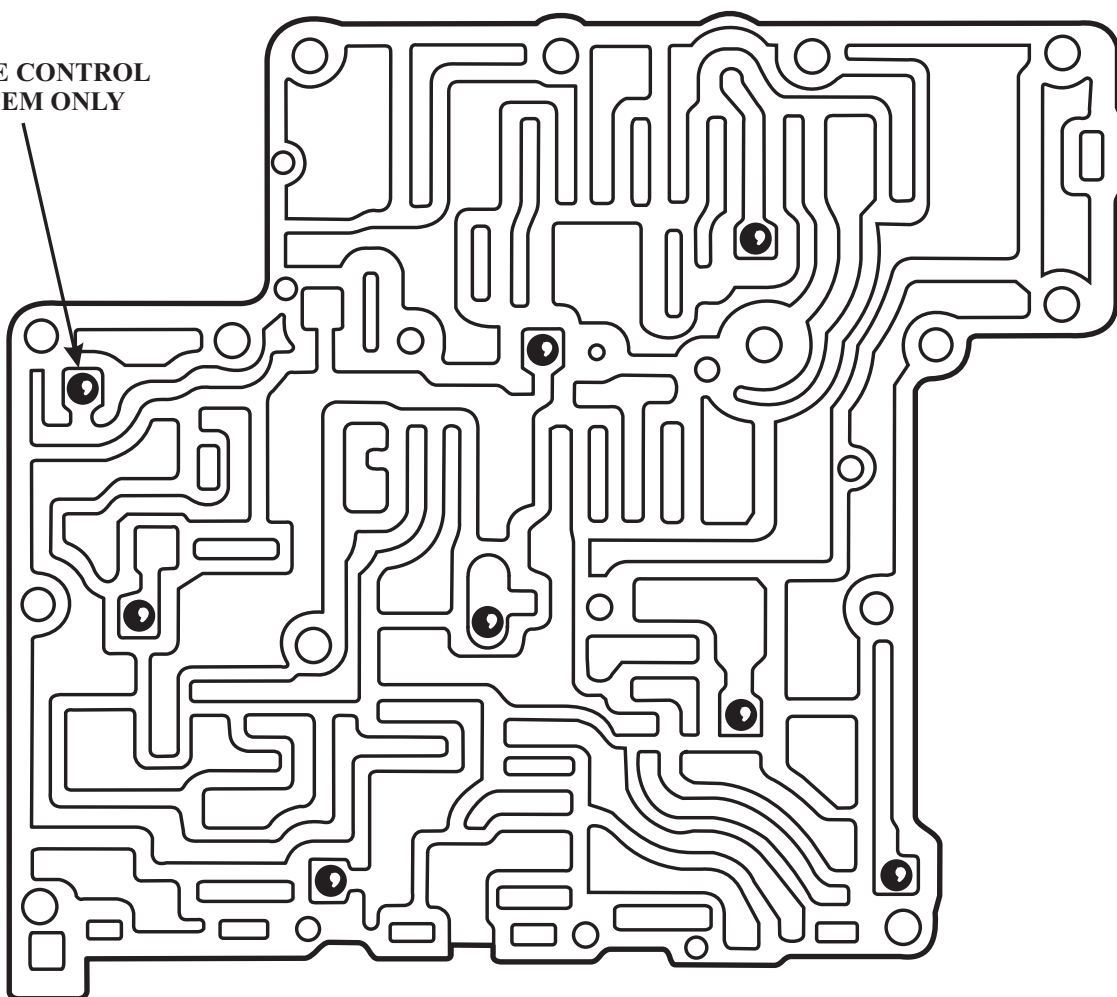


TOYOTA A440F TRANSMISSIONS

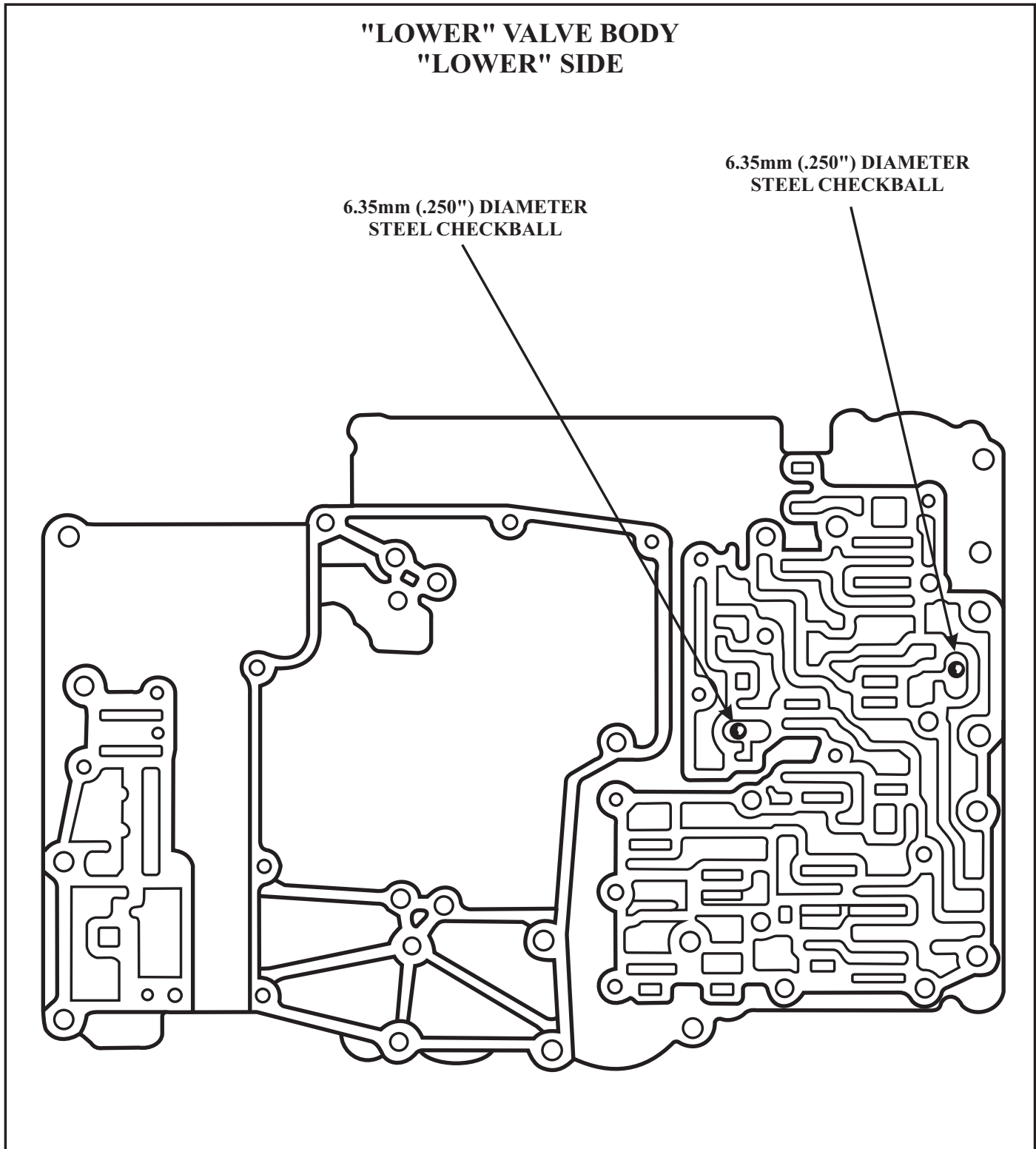
"REAR UPPER" VALVE BODY CHECKBALL LOCATIONS

REQUIRES SEVEN (7) CHECKBALLS
6.35mm (.250") DIAMETER ON MODELS
WITHOUT CRUISE CONTROL SYSTEM

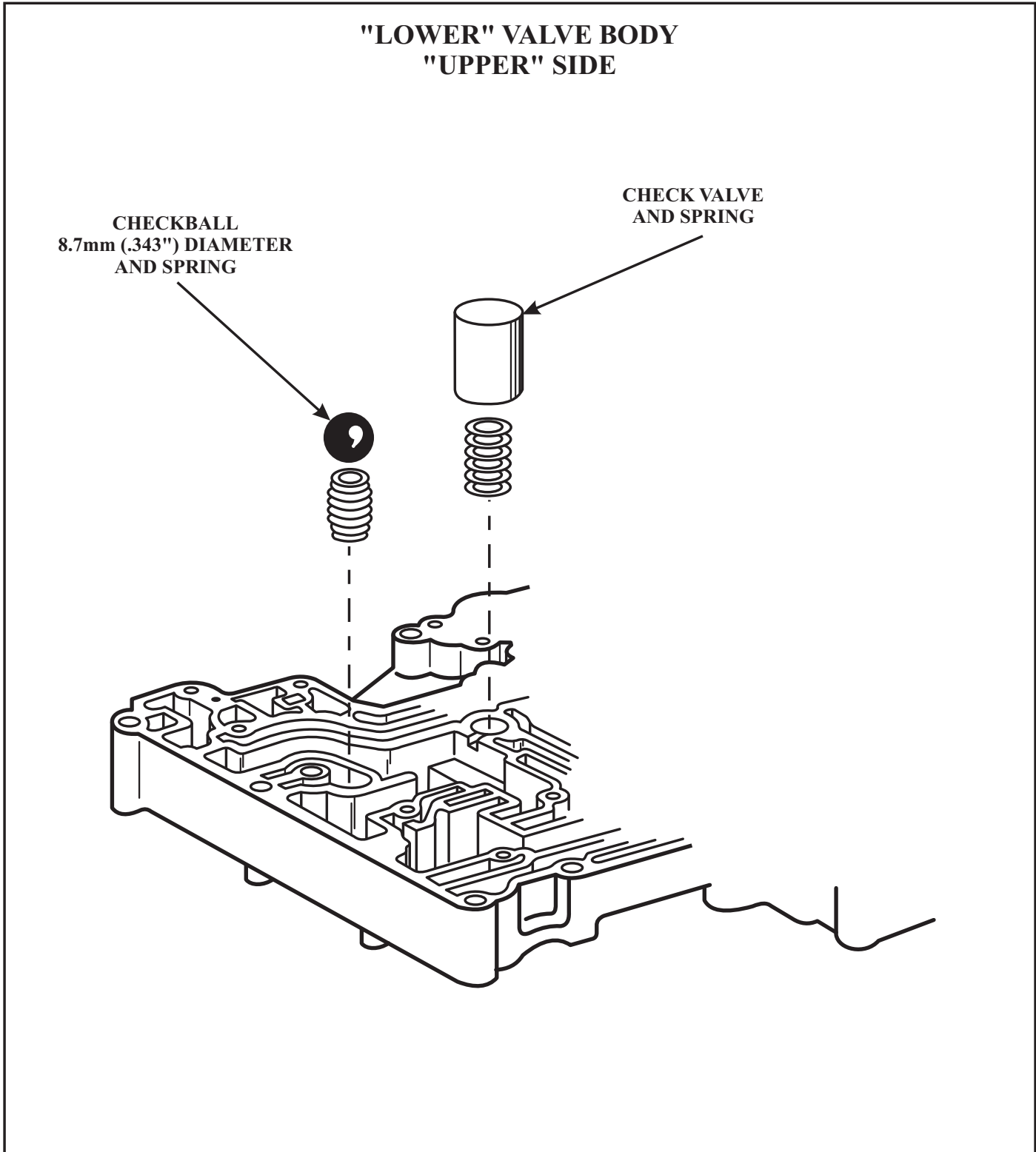
CRUISE CONTROL
SYSTEM ONLY



TOYOTA A440F TRANSMISSION CHECKBALL LOCATIONS



TOYOTA A440F TRANSMISSION CHECKBALL AND CHECK VALVE LOCATIONS



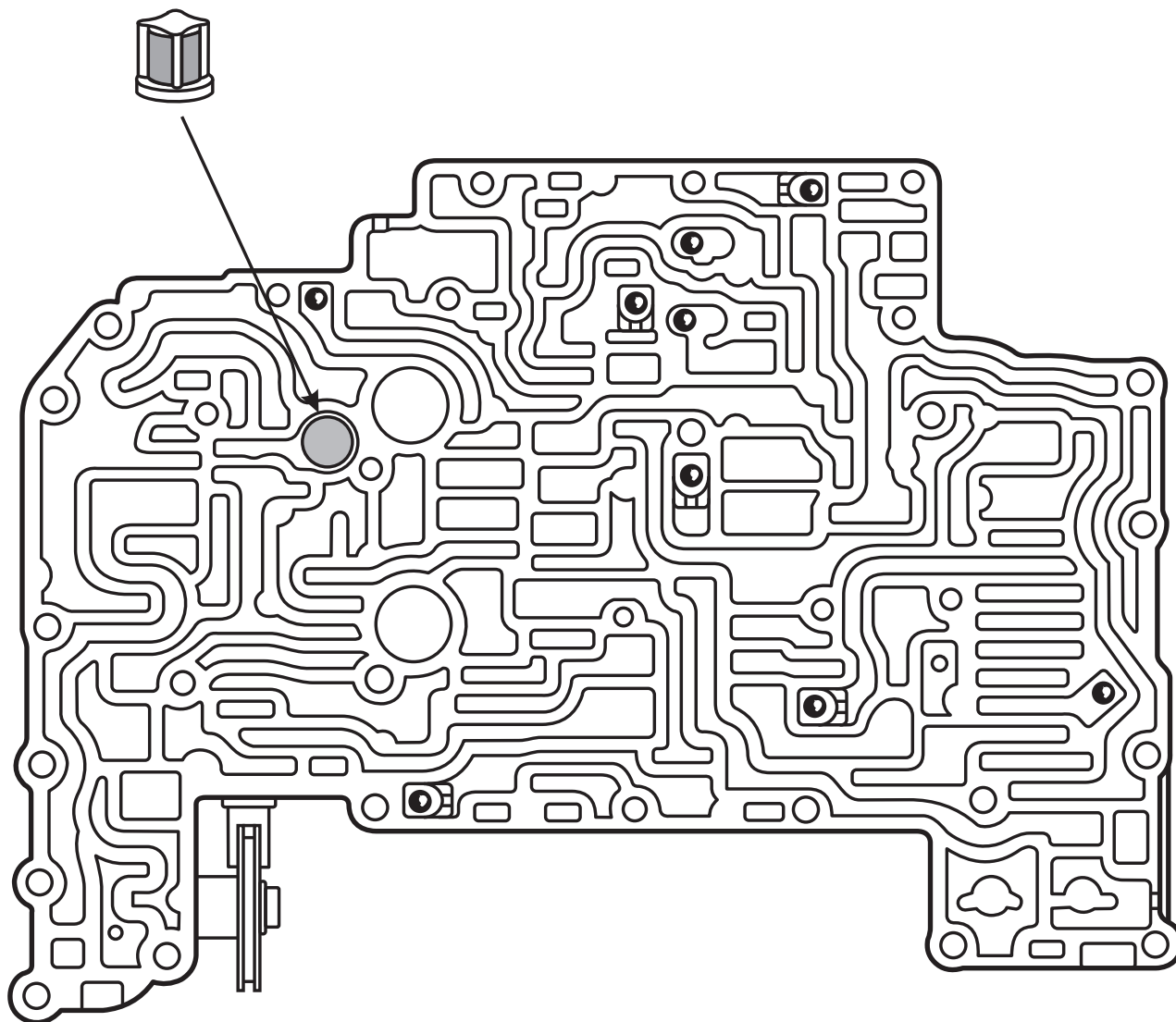
TOYOTA A442F TRANSMISSIONS

CHECKBALL LOCATIONS

"UPPER" VALVE BODY

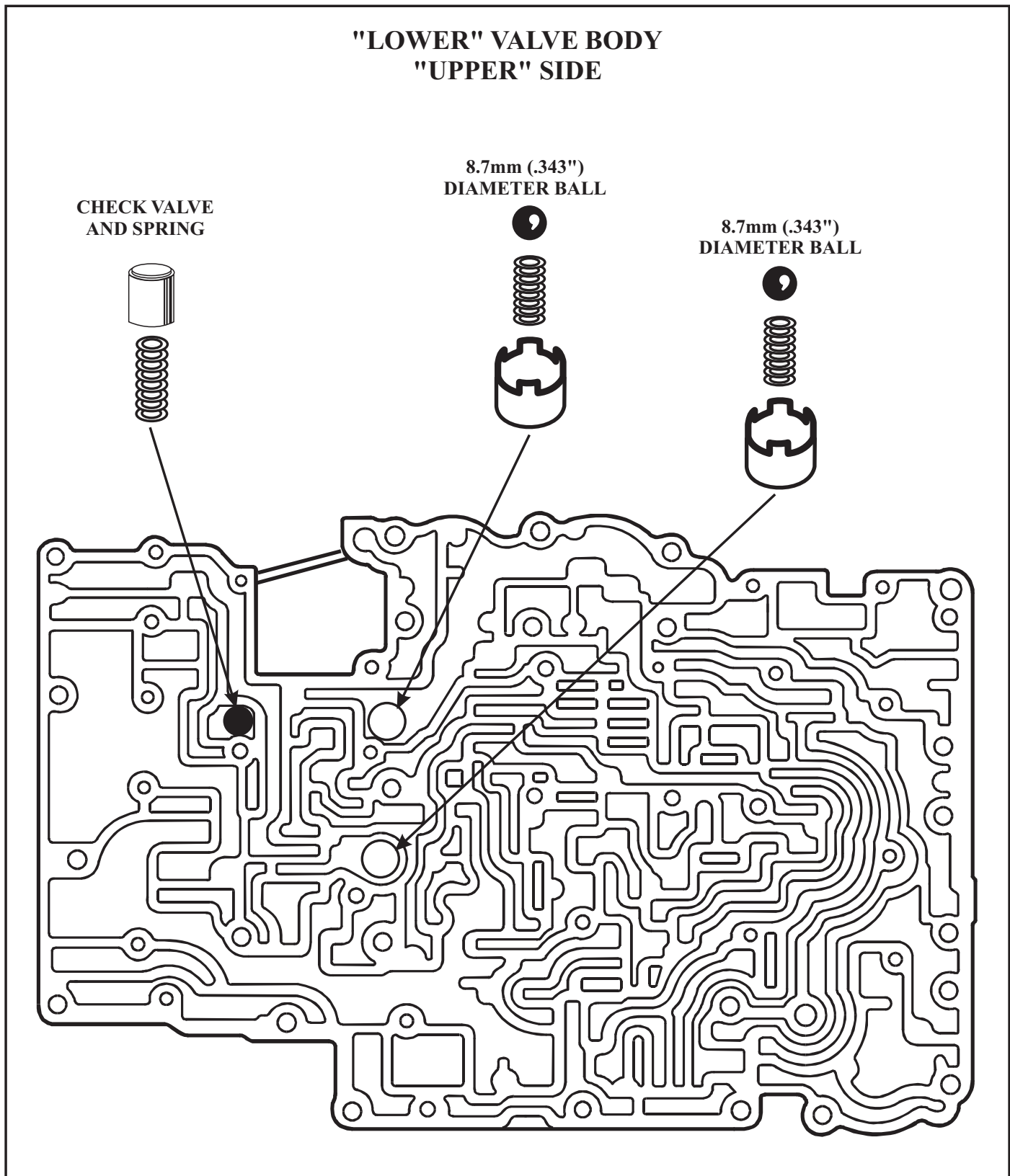
REQUIRES NINE (9) STEEL CHECKBALLS
6.35mm (.250") IN DIAMETER IN THE
LOCATIONS SHOWN BELOW

OIL SCREEN



TOYOTA A442F TRANSMISSIONS

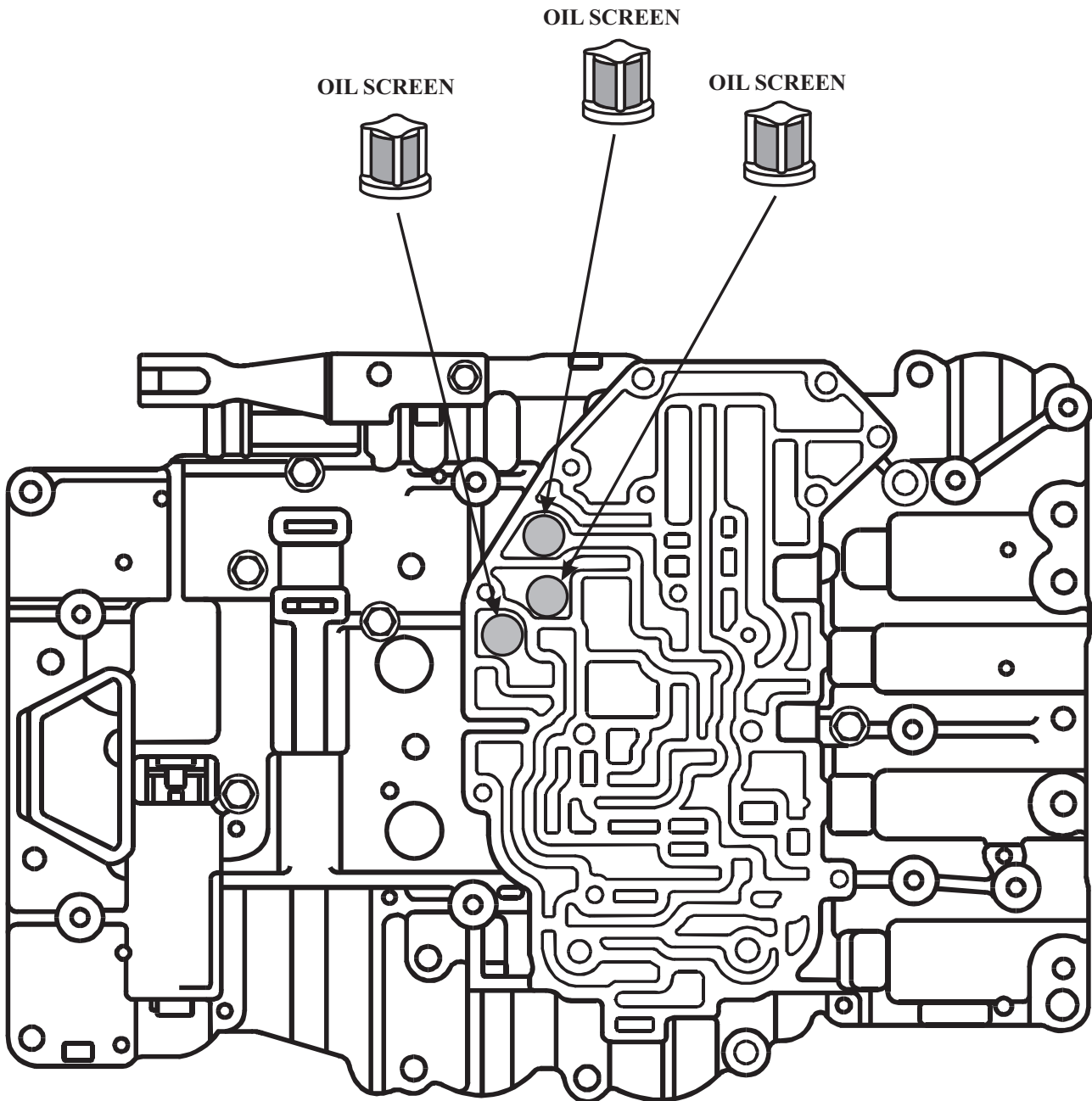
CHECKBALL AND CHECK VALVE LOCATIONS



TOYOTA A442F TRANSMISSIONS

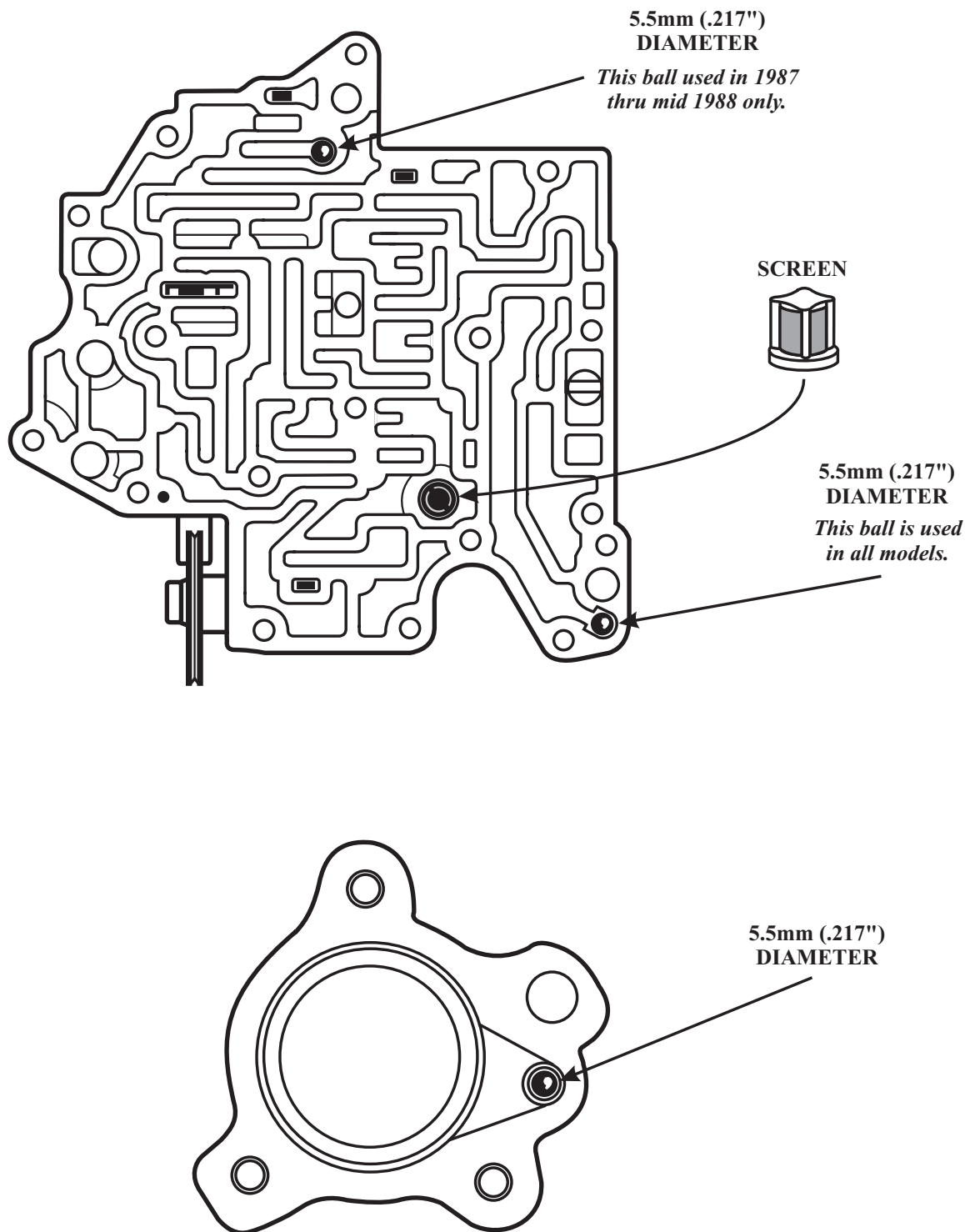
OIL SCREEN LOCATIONS

"LOWER" VALVE BODY
"LOWER" SIDE



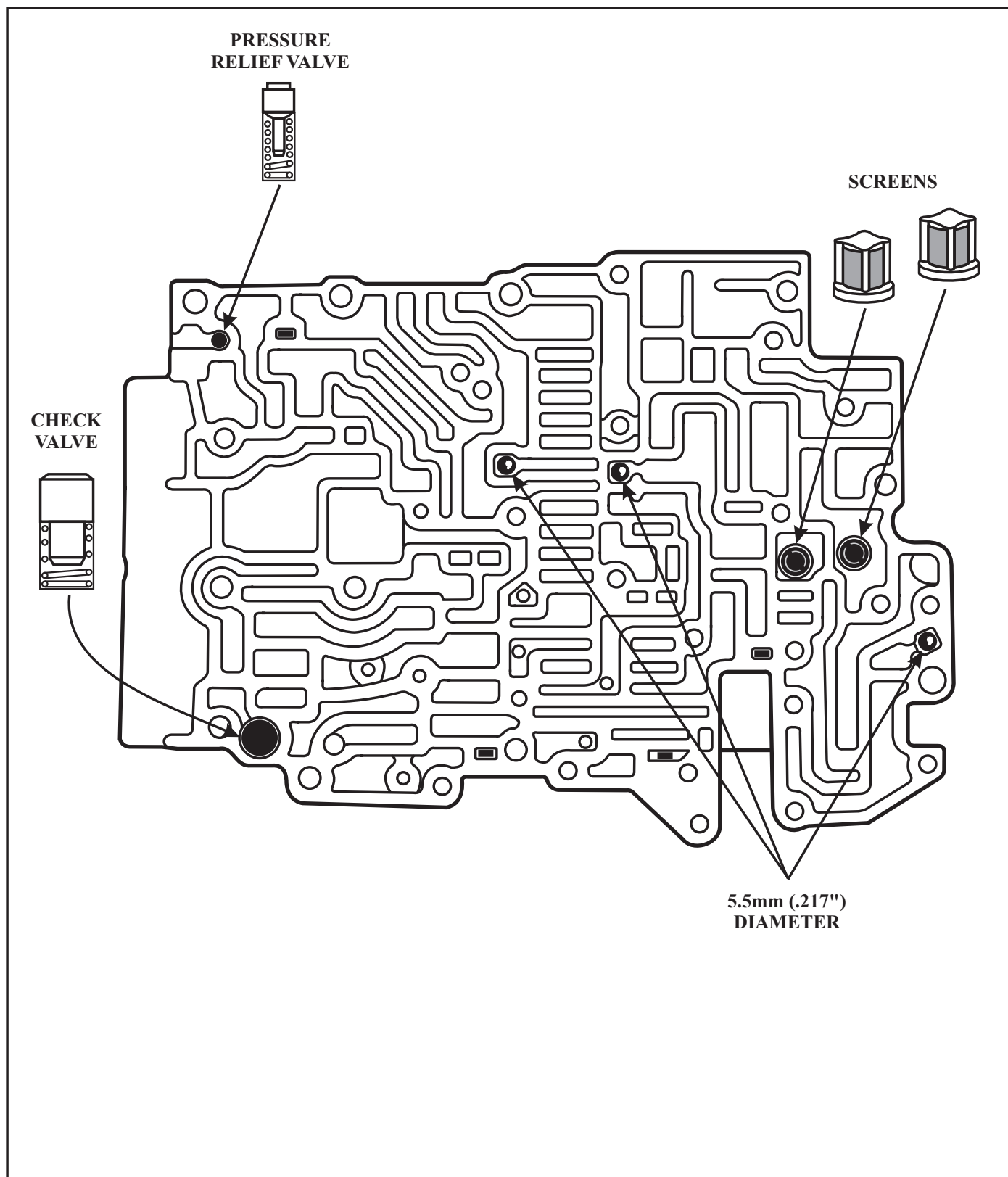
TOYOTA A540E TRANSMISSIONS

"UPPER" VALVE BODY AND ACCUMULATOR HOUSING

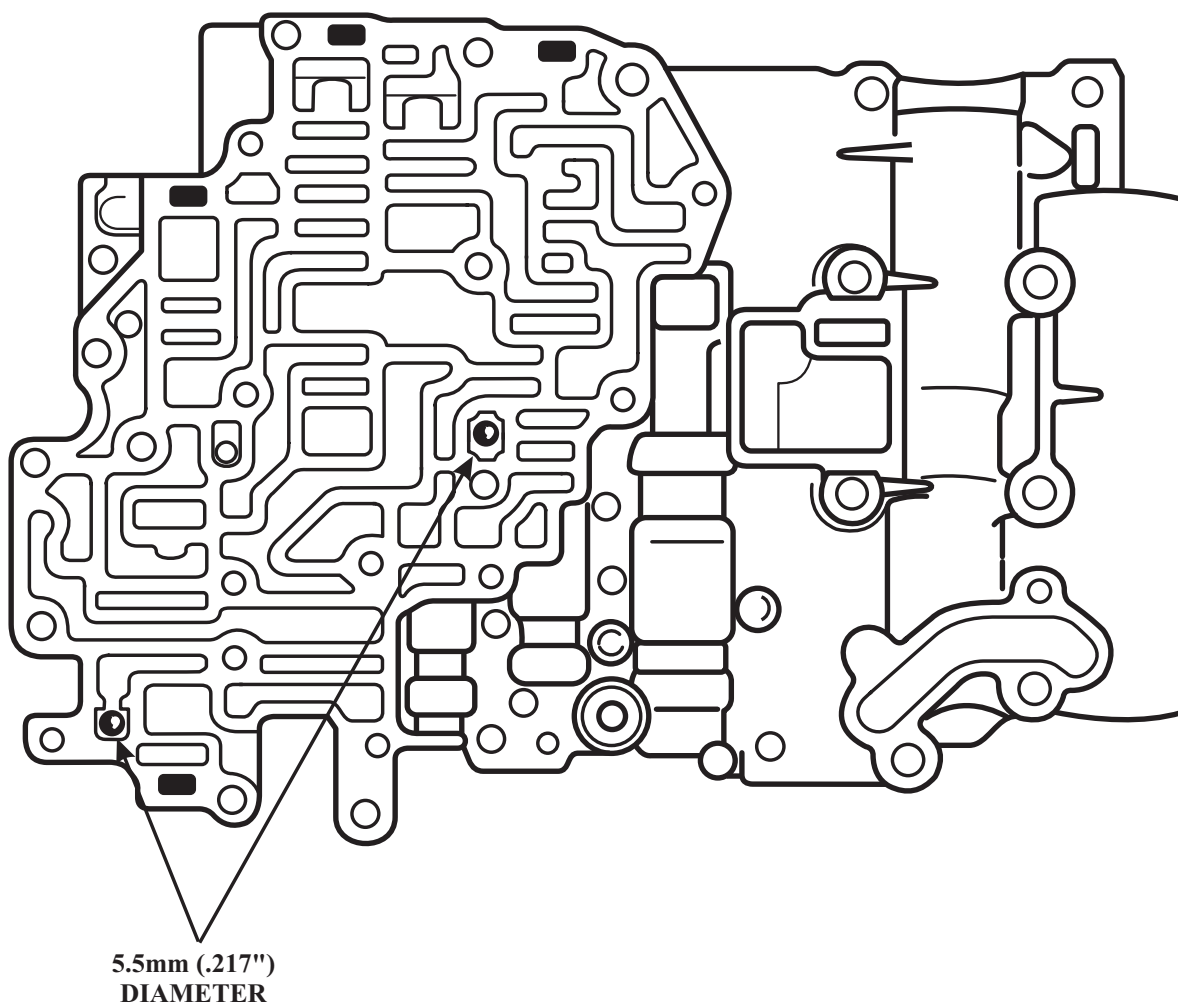


TOYOTA A540E TRANSMISSIONS

"LOWER" VALVE BODY, "CASE" SIDE

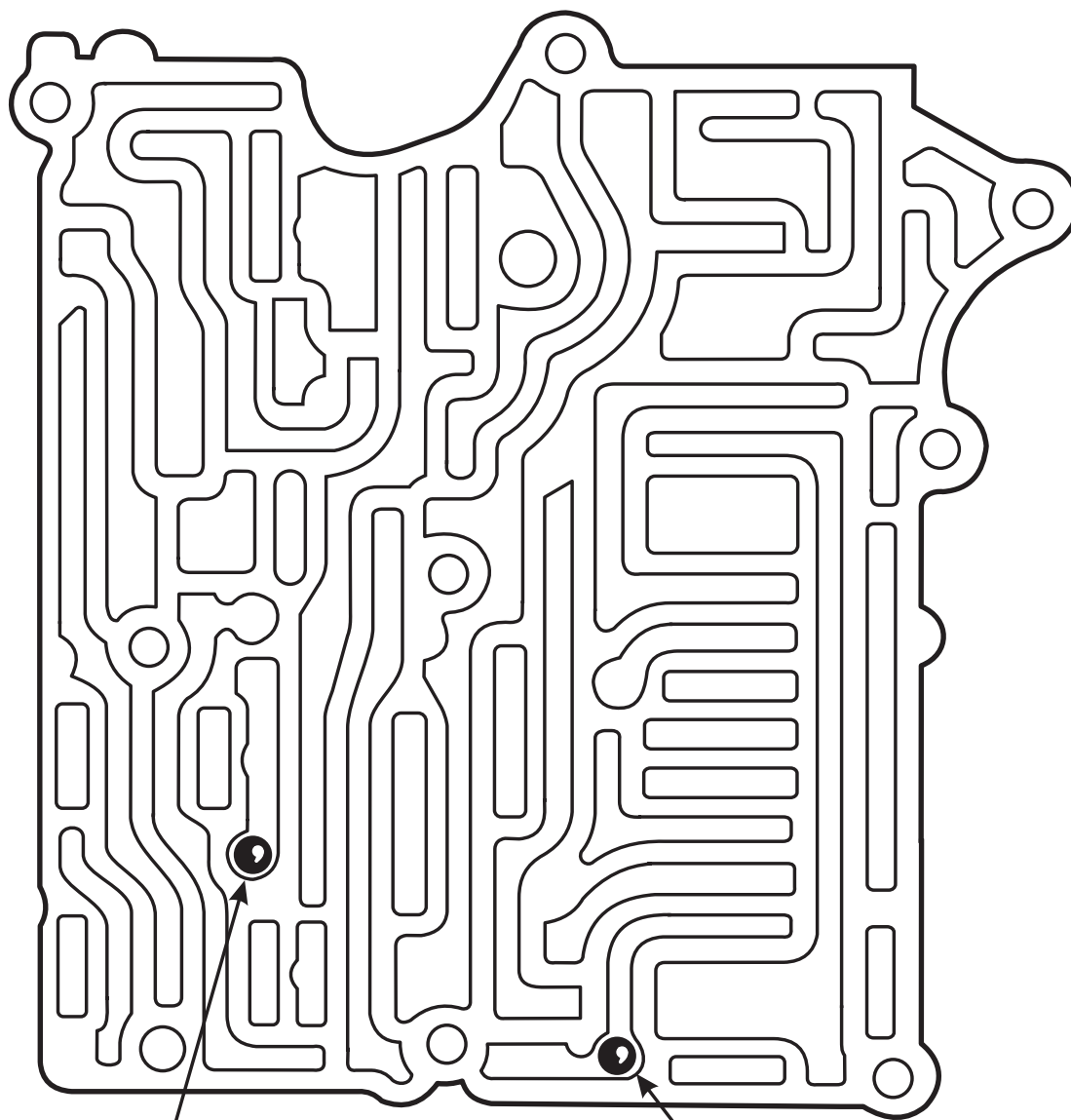


TOYOTA A540E TRANSMISSIONS
"LOWER" VALVE BODY, "FILTER" SIDE



VOLVO BW55 TRANSMISSIONS

"UPPER" VALVE BODY CHECKBALL LOCATIONS

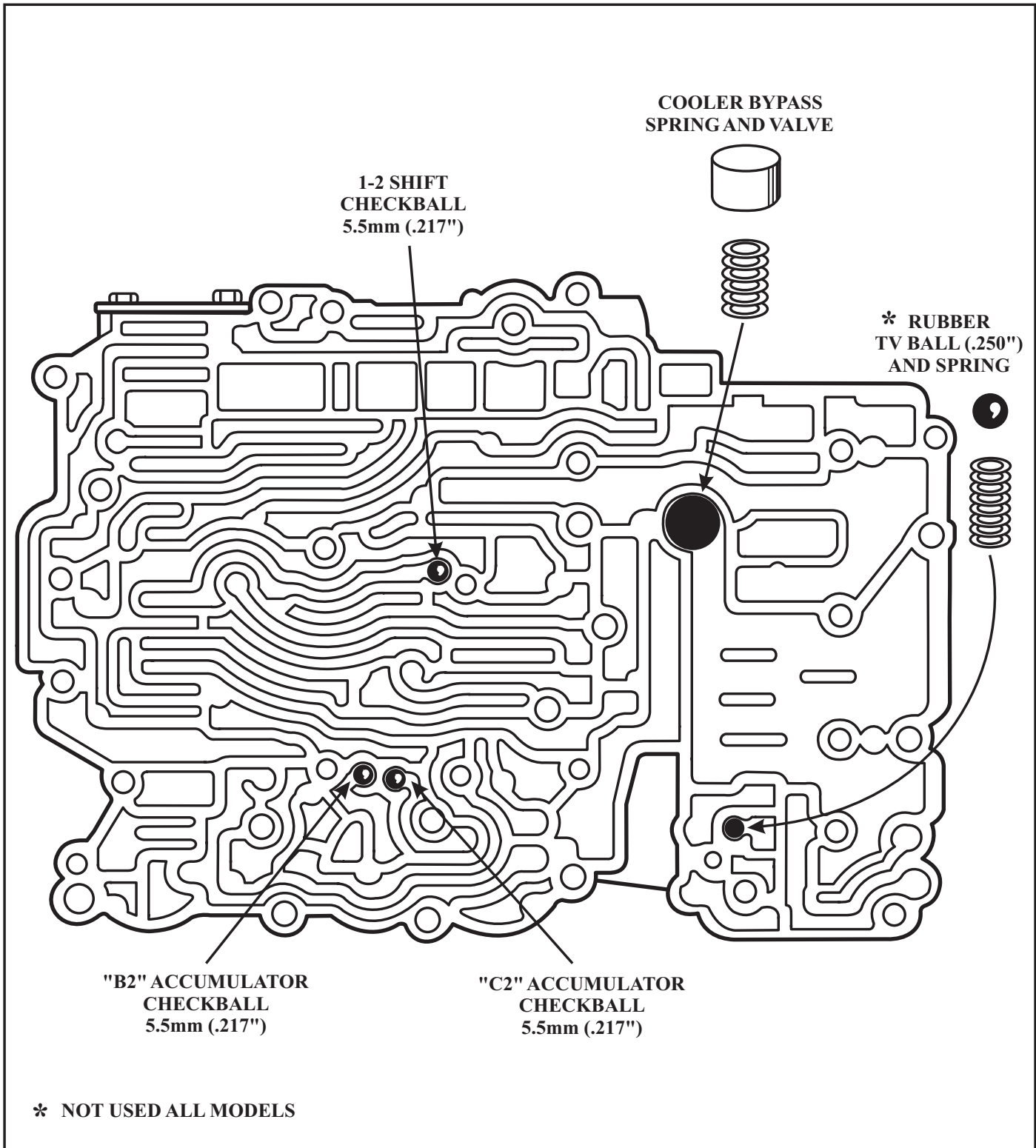


* .217" RUBBER
"B1" ACCUMULATOR
CHECKBALL

.217" RUBBER
"C1" ACCUMULATOR
CHECKBALL

* DELETED IN LATER MODELS

VOLVO BW55 "LOWER" VALVE BODY "CASE SIDE" CHECKBALL LOCATION



VOLVO BW55 THROTTLE VALVE BODY CHECKBALL LOCATION

